SWL FEB 12

PROJECT ID: 5992-08-79/82/86/87

COUNTY: DANE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Includes Erosion Control Plans)
Section No.	3	Estimate of Quantities
Section No.	3	Miscelloneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 932

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CITY OF MADISON, UNIVERSITY AVENUE

(ALLEN BOULEVARD - SEGOE ROAD) (SPRING HARBOR DRIVE INTERSECTION)

CTH MS CTH MS

DANE COUNTY DANE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5992-08-79	WISC 2012066	1
5992-08-82	WISC 2012067	1
5992-08-86	———	–
5992-08-87	———	–

STATE PROJECT NUMBER 5992-08-79

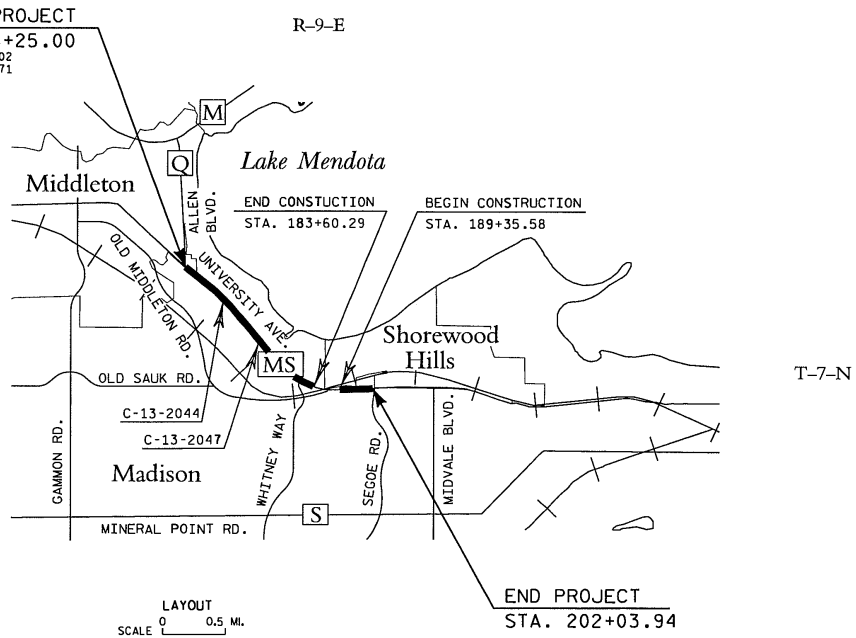
STATE PROJECT NUMBER 5992-08-86

STATE PROJECT NUMBER 5992-08-82

STATE PROJECT NUMBER 5992-08-87

N

BEGIN PROJECT
STA. 98+25.00
X = 793518.02
Y = 488715.71



LAYOUT
SCALE 0 0.5 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.857 MI.

Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Dane County, NAD 1983 (2007) Vertical Datum based on USGS (NAVD 88)

DESIGN DESIGNATION

A.A.D.T. (2012)	=	33,000-47,000
A.A.D.T. (2032)	=	45,400-64,800
D.H.V. (2032)	=	6,480
D.D.	=	50/50
T.	=	5.0%
DESIGN SPEED	=	40 MPH
ESALS	=	4,473,075

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ACCEPTED FOR DANE COUNTY HIGHWAY DEPARTMENT
7/22/11 DATE (HIGHWAY COMMISIONER)

ACCEPTED FOR CITY OF MADISON
8/10/11 DATE (CITY ENGINEER)

ACCEPTED FOR CITY OF MIDDLETON
7-20-11 DATE (CITY ENGINEER)

ACCEPTED FOR VILLAGE OF SHOREWOOD HILLS
7/20/11 DATE (VILLAGE ADMINISTRATOR)

ORIGINAL PLANS PREPARED BY

KL Engineering (A Better Experience)

WISCONSIN AARON S. STEGER 36097-006 VERONA, WI PROFESSIONAL ENGINEER

7/19/11 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KL ENGINEERING, INC.
Designer	KL ENGINEERING, INC.
Management Consultant	KJOHNSON ENGINEERS, INC.
C.O. Examiner	JANE ENGLEBRETSEN

APPROVED FOR THE DEPARTMENT
DATE: 8/15/11 (Signature)

E

FILE NAME : G:\Madison\MD2009035\DGN\010101_ti.dgn PLOT DATE : 7/19/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 10

ABBREVIATIONS

BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
BLDG.	BUILDING
CTR	CENTER
C/L	CENTERLINE
C.E.	COMMERCIAL ENTRANCE
CONC.	CONCRETE
CSW	CONCRETE SIDEWALK
CMCP	CORRUGATED METAL CULVERT PIPE
CP	CULVERT PIPE
CPCS	CULVERT PIPE CORRUGATED STEEL
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
EB	EASTBOUND
ELEC	ELECTRIC
EI	ELEVATION INVERT
EX.	EXISTING
FO	FIBER OPTIC
F.E.	FIELD ENTRANCE
GAS	GAS
HMA	HOT MIX ASPHALT
HSE.	HOUSE
LHF	LEFT HAND FORWARD
MH	MANHOLE
MAX.	MAXIMUM
MIN.	MINIMUM
NOR.	NORMAL
NTS	NOT TO SCALE
PLE	PERMANENT LIMITED EASEMENT
P.E.	PRIVATE ENTRANCE
P.L.	PROPERTY LINE
PRW	PROPOSED RIGHT-OF-WAY
RAD	RADIUS
R/L	REFERENCE LINE
RCCP	REINFORCED CONCRETE CULVERT PIPE
REQ'D.	REQUIRED
RHF	RIGHT HAND FORWARD
RWL	RIGHT-OF-WAY LINE
SAN	SANITARY SEWER
.SF	SQUARE FEET
SY	SQUARE YARD
S.D.D.	STANDARD DETAIL DRAWING
STA	STATION
SS	STORM SEWER
TEL	TELEPHONE
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
WAT	WATER
WB	WESTBOUND

ORDER OF DETAIL SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
EROSION CONTROL PLAN
STORM SEWER PLAN
SANITARY SEWER PLAN
WATER MAIN PLAN
PERMANENT SIGNING AND MARKING PLAN
LIGHTING PLAN
TEMPORARY TRAFFIC SIGNAL PLAN
TRAFFIC SIGNAL PLAN
TRAFFIC CONTROL AND CONSTRUCTION STAGING PLAN
ALIGNMENT AND CONTROL POINT DETAILS

UTILITY CONTACTS

ELECTRIC
BUTCH FROSCH
MADISON GAS & ELECTRIC CO.
P.O. BOX 1231
MADISON, WI 53701
(608) 252-7112
gfrosch@mge.com

SEWER
JOHN PODEBRADSKY
MADISON METRO
SEWERAGE DISTRICT
1610 MOORLAND ROAD
MADISON, WI 53713
(608) 222-1201
johnp@madsewer.org

STORM SEWER
GREG FRIES
CITY OF MADISON ENGINEERING
210 M. L. KING JR. BLVD. #115
MADISON, WI 53709
(608) 267-1199
gfries@cityofmadison.com

GAS
LARRY CAPPS
MADISON GAS & ELECTRIC CO.
133 S. BLAIR ST.
MADISON, WI 53703
(608) 252-7224
lcapps@mge.com

COMMUNICATIONS
GARIN MAYER
TDS METROCOM/ TDS TELECOM
525 JUNCTION ROAD (5TH FLOOR)
MADISON, WI 53705
(608) 664-4889
garin.mayer@tdstelecom.com

SANITARY SEWER & WATER
MIKE FREY
CITY OF MIDDLETON UTILITY MANAGER
7426 HUBBARD AVENUE
MIDDLETON, WI 53562
(608) 821-8375
mfrey@ci.middleton.wi.us

ELECTRIC
MICHAEL BRADLEY
AMERICAN TRANSMISSION CO.
2 FEN OAK COURT
MADISON, WI 53718
(608) 877-7056
mbradley@atcllc.com

COMMUNICATIONS
ANDY MADSEN
AT&T WISCONSIN
316 W. WASHINGTON AVE.
MADISON, WI 53703
(608) 252-2432
AM4171@att.com

SANITARY SEWER
COREY STELLJES
CITY OF MADISON ENGINEERING
210 M. L. KING JR. BLVD. #115
MADISON, WI 53709
(608) 266-4058
cstelljes@cityofmadison.com

COMMUNICATIONS
ROBERT SAMPSON
CENTURY TEL (Lightcore)
1151 CENTURY TEL DR. (BLDG. A)
WENTZVILLE, MO 63385
(636) 887-4751
robert.sampson@centurylink.com

COMMUNICATIONS
KIRK UPPERMAN
CHARTER COMMUNICATIONS
2701 DANIELS STREET
MADISON, WI 53718
(608) 274-3822 EXT. 6741
kirk.upperman@chartercom.com

SIGNALS & STREET LIGHTS
DAN DETTMANN
CITY OF MADISON ENGINEERING
210 M. L. KING JR. BLVD. #115
MADISON, WI 53709
(608) 266-6536
ddettmann@cityofmadison.com

WATER
DENNIS CAWLEY
CITY OF MADISON ENGINEERING
210 M. L. KING JR. BLVD. #115
MADISON, WI 53709
(608) 261-9243
dcawley@cityofmadison.com

Addendum No. 3
ID 5992-08-79
Revised Sheet 2
February 13, 2012

DANE COUNTY HIGHWAY

PAM DUNPHY, P.E.
2302 FISH HATCHERY ROAD
MADISON, WI 53703
(608) 266-4038
dunphy@co.dane.wi.us

DESIGN CONTACT

AARON STEGER, P.E.
KL ENGINEERING, INC.
5950 SEMINOLE CENTRE CT
SUITE 200
MADISON, WI 53711
(608) 663-1218
asteger@klengineering.com

DNR LIAISON

AMANDA CUSHMAN
DEPARTMENT OF NATURAL RESOURCES
DNR SOUTH CENTRAL REGION HEADQUARTERS
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
(608) 275-3485
amanda.cushman@wisconsin.gov

CITY OF MIDDLETON

SHAWN STAUSKE
7426 HUBBARD AVENUE
MIDDLETON, WI 53562
(608) 821-8381
sstauske@ci.middleton.wi.us

VILLAGE OF SHOREWOOD HILLS

KARL FRANTZ
810 SHOREWOOD BLVD
MADISON, WI 53705
(608) 267-2680
kpfrantz@shorewood-hills.org

CITY OF MADISON

GLEN YOERGER, P.E.
210 MARTIN LUTHER KING JR. BLVD
MADISON, WI 53703
(608) 261-9177
gyoerger@cityofmadison.com

GENERAL NOTES

ALL RADII DIMENSIONS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

ALL GRADES PROVIDED ALONG RADII ARE ALONG EDGE OF PAVEMENT.

EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADII POINTS IN THE CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES INSTALLATIONS AS SHOWN IN THE PLANS, ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

UTILITY REFERENCE LINES ON THE CROSS SECTIONS ARE FOR APPROXIMATE HORIZONTAL REFERENCE ONLY.

REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALT SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER.

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS AS NEEDED. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

NO TREES AND/OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

PIPE ELEVATIONS, LENGTHS, AND LOCATIONS AS SHOWN ON THE PLANS, MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

CONTRACTOR IS RESPONSIBLE FOR RESHAPING AND FINISHING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTRUBED BY THEIR OPERATION OUTSIDE THE NORMAL CONSTRUCTION LIMITS.

THE EXACT LOCTION OF DRIVEWAYS IS TO BE DETERMINED IN THE FIELD BY THE ENGINEEER. ALL DRIVEWAYS ARE TO BE REPLACED IN KIND.

SIDEROAD PAVEMENT STRUCTURE SHALL BE THE SAME AS THE MAINLINE UNLESS OTHERWISE NOTED.

HMA PAVEMENT, WHEN INDICATED ON THE PLANS, SHALL CONSIST OF COURSES AS FOLLOWS UNLESS OTHERWISE NOTED ON THE PLANS.

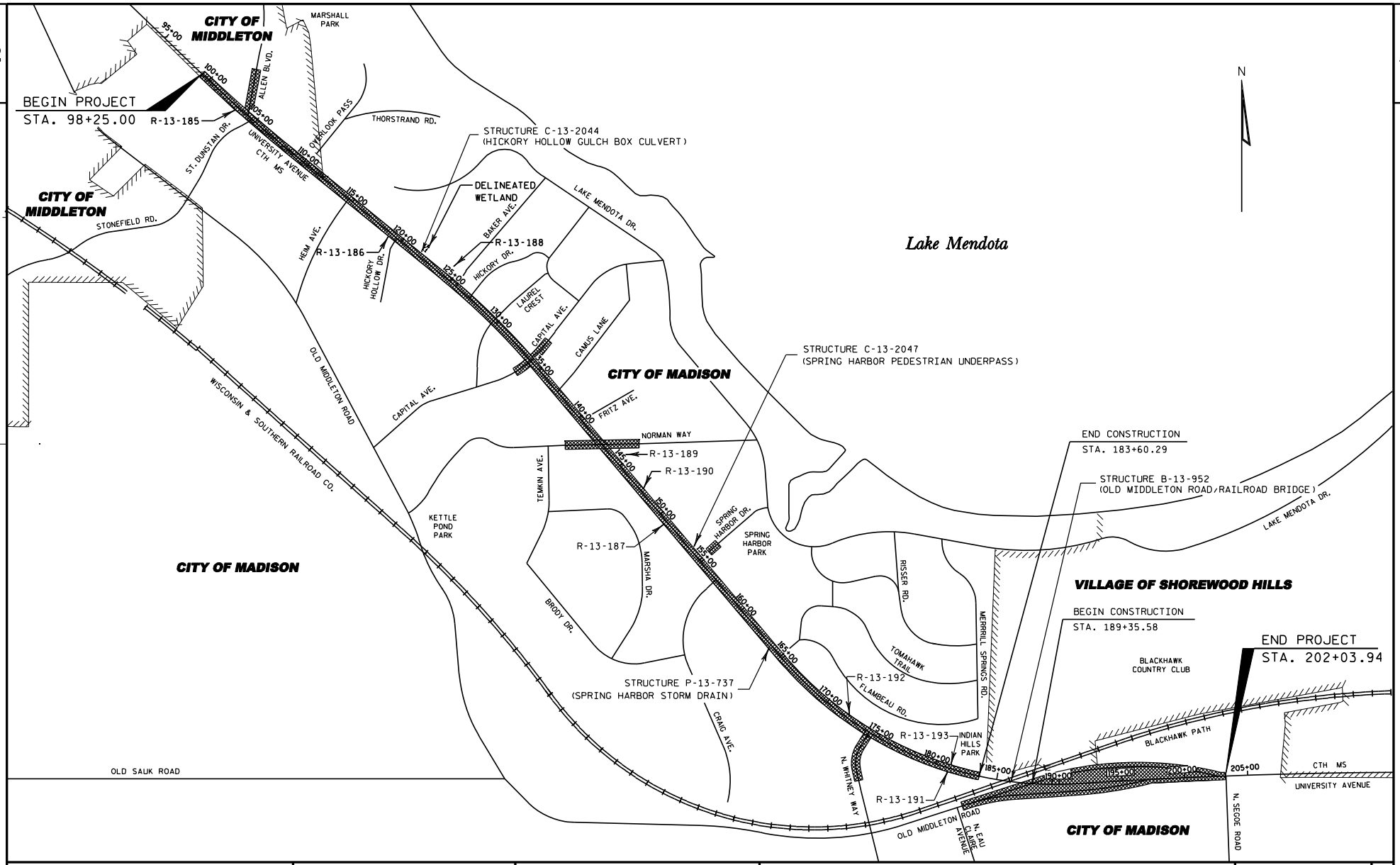
6" TOTAL DEPTH	TYPE	NOMINAL MAX SIZE GRADATION	PERFORMANCE GRADE
2¼" LOWER	E-10	19.0 mm	PG64-22
2" LOWER	E-10	12.5 mm	PG64-22
1¾" UPPER	E-10	12.5 mm	PG64-28

4¼" TOTAL DEPTH	TYPE	NOMINAL MAX SIZE GRADATION	PERFORMANCE GRADE
2½" LOWER	E-1	19.0 mm	PG64-22
1¾" UPPER	E-1	12.5 mm	PG64-28

3" TOTAL DEPTH	TYPE	NOMINAL MAX SIZE GRADATION	PERFORMANCE GRADE
3" UPPER	E-0.3	12.5 mm	PG58-28

THE CONTRACTOR'S HMA PAVING OPERATION SHALL BE CONSISTANT WITH THE TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

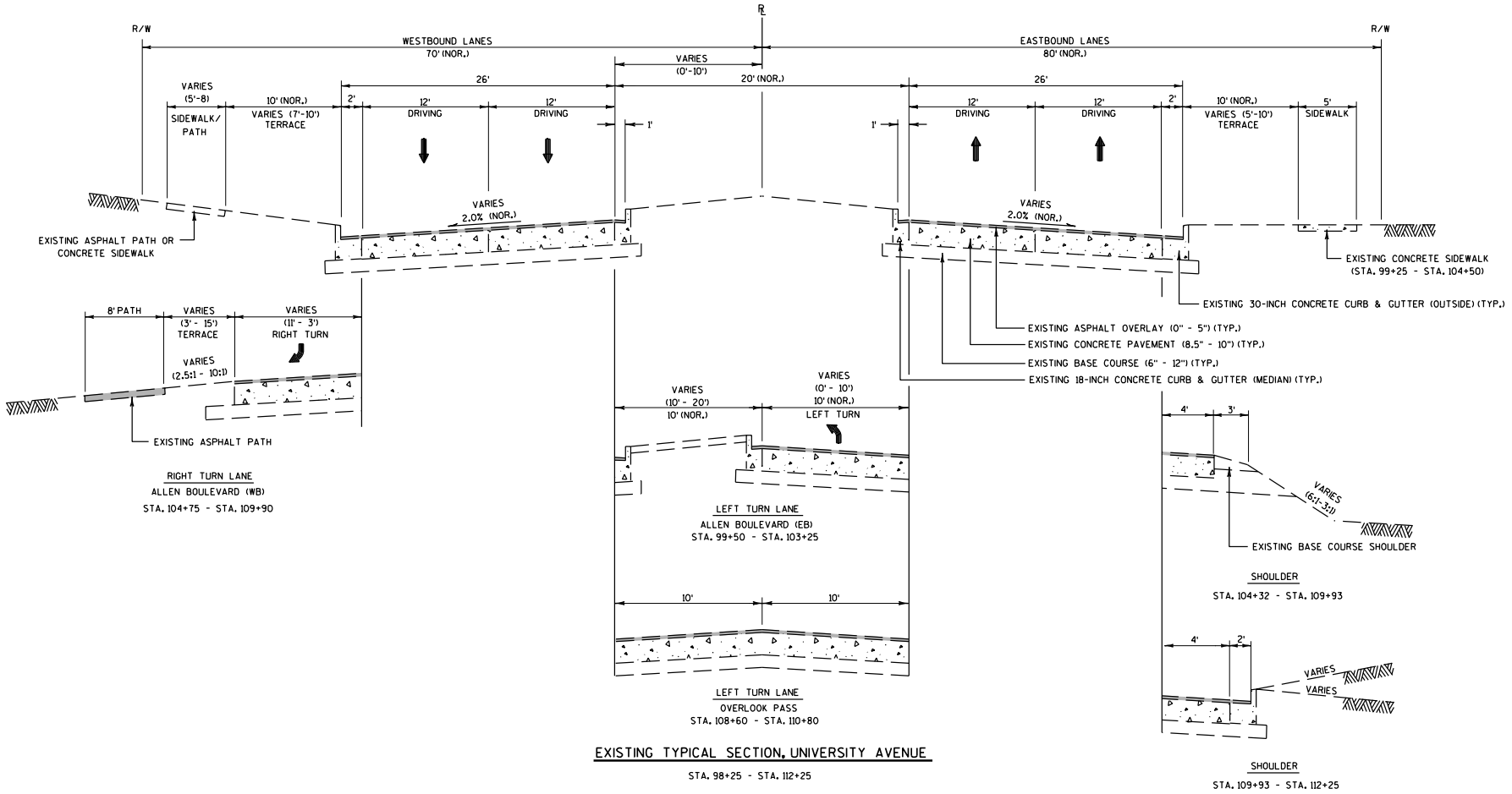
DIGGERS HOTLINE
Call 811 3 Work Days Before You Dig
Or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PROJECT OVERVIEW	SHEET 3 E

FILE NAME : g:\madison\md2009035\dgn\020201_po.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

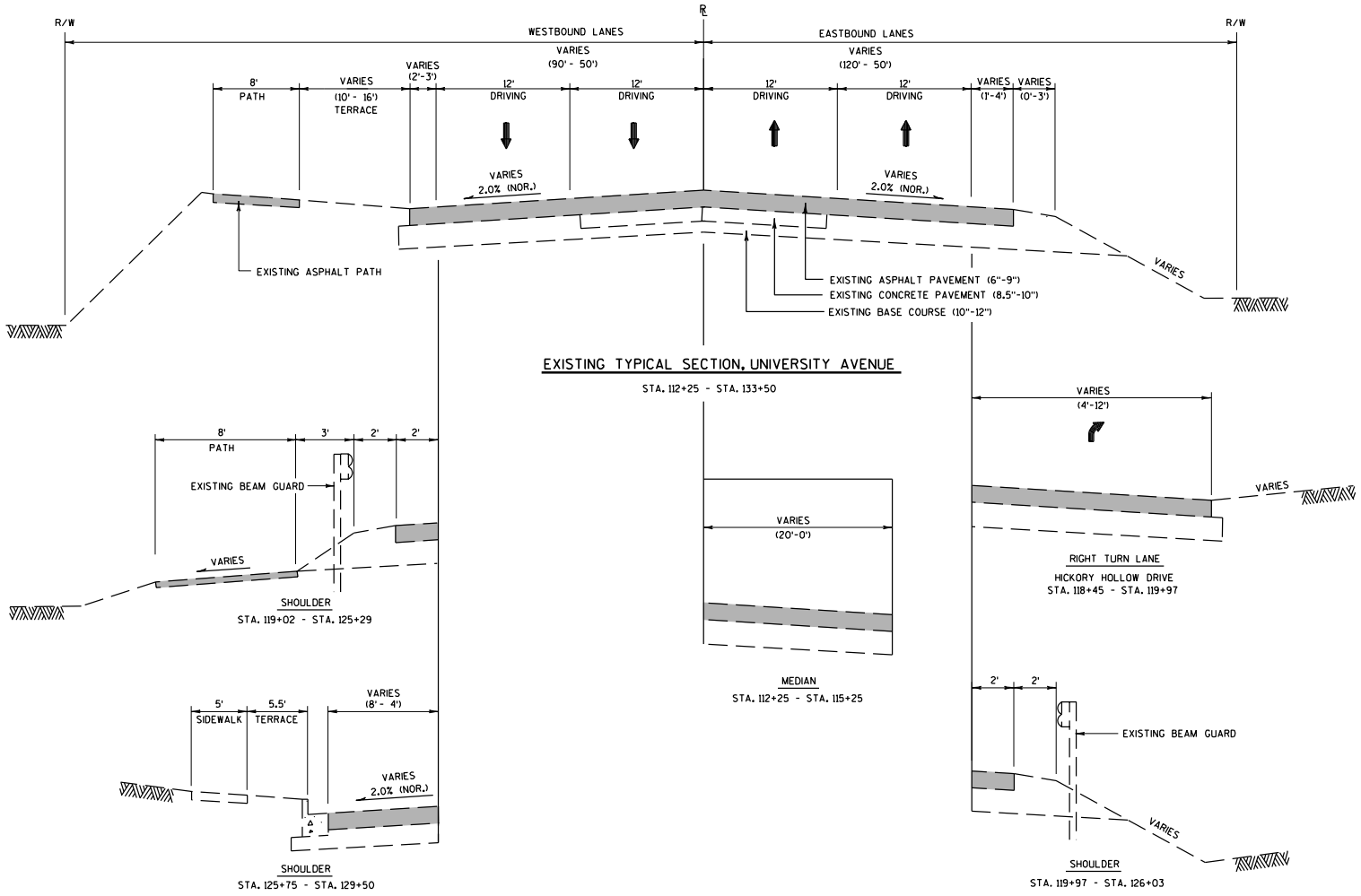


EXISTING TYPICAL SECTION, UNIVERSITY AVENUE

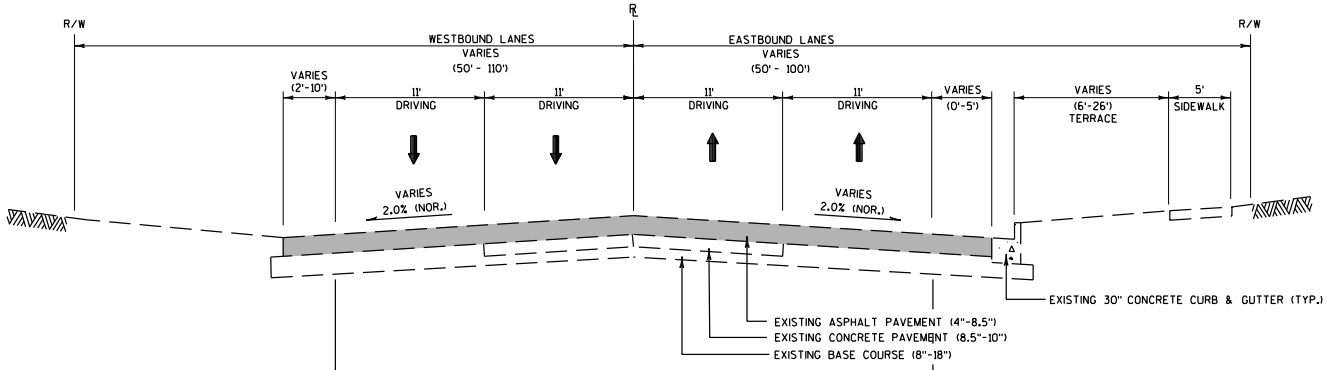
STA. 98+25 - STA. 112+25

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\020301_ts.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 5 E



EXISTING TYPICAL SECTION, UNIVERSITY AVENUE

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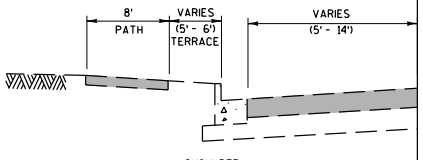
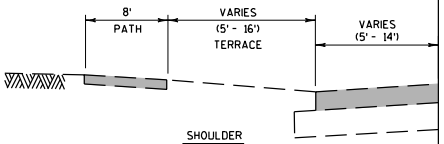
STA. 189+35.58 - STA. 193+00



SHOULDER
STA. 155+00 - STA. 156+75
STA. 165+00 - STA. 178+00



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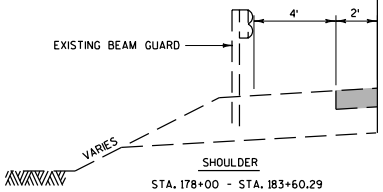

SHOULDER
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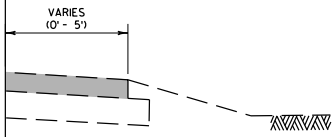
STA. 189+35.58 - STA. 193+00



SHOULDER
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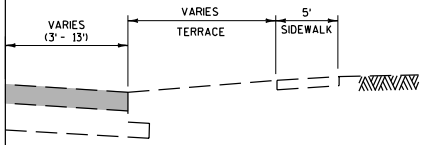
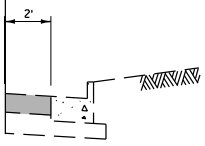
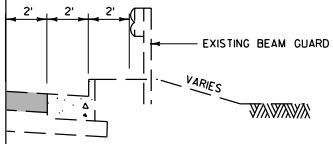
STA. 189+35.58 - STA. 193+00



SHOULDER
STA. 142+75 - STA. 145+86
STA. 153+02 - STA. 156+50
STA. 162+50 - STA. 172+50



SHOULDER
STA. 175+00 - STA. 176+40



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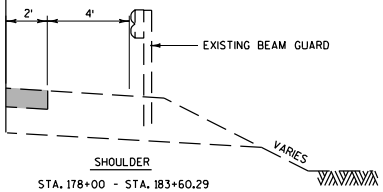
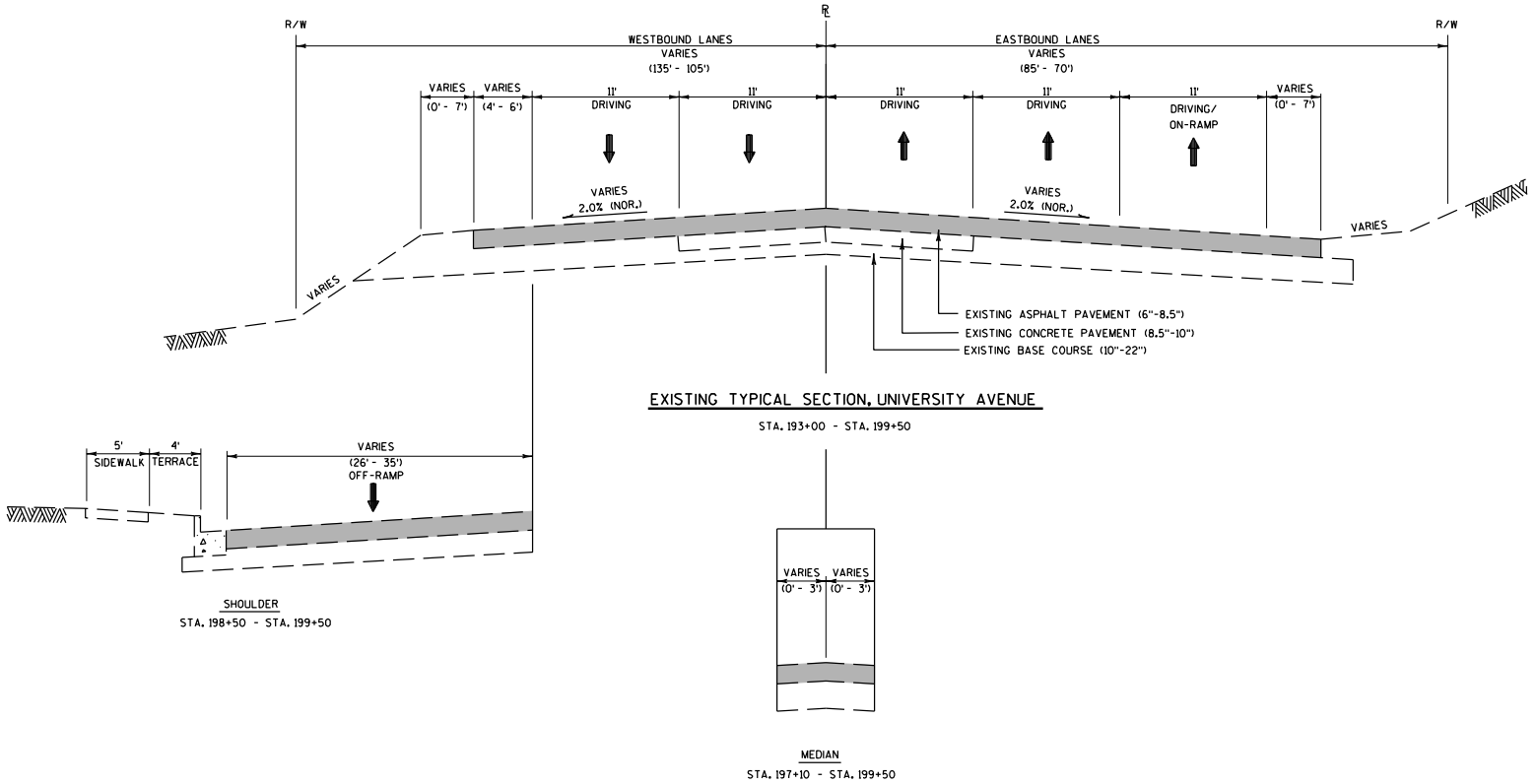
STA. 176+40 - STA. 178+00



SHOULDER
STA. 178+00 - STA. 183+60.29

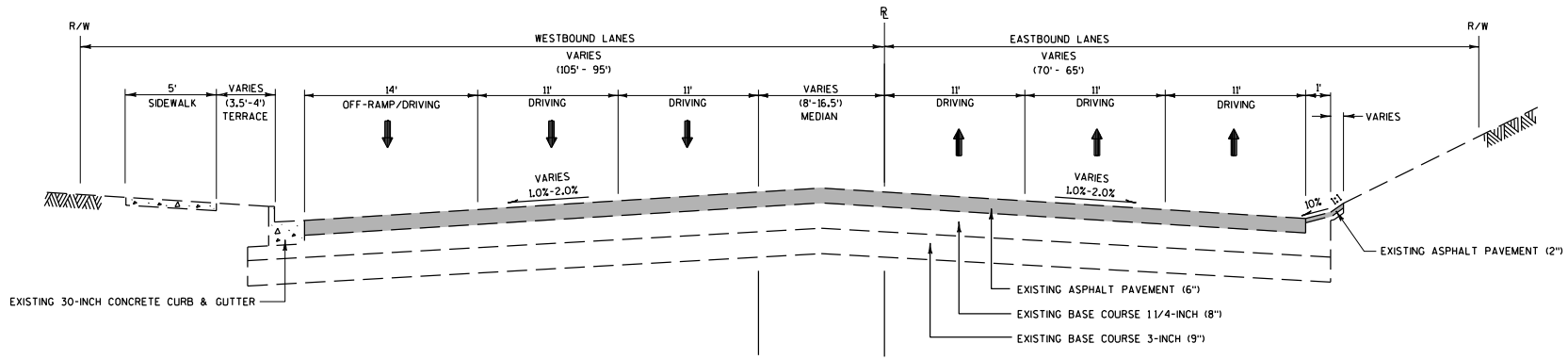
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 6	E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 7	E

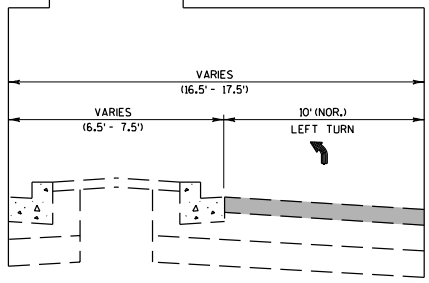
FILE NAME : G:\Madison\MD2009035\DGN\020301_ts.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION, UNIVERSITY AVENUE

STA. 199+50 - STA. 202+03.94

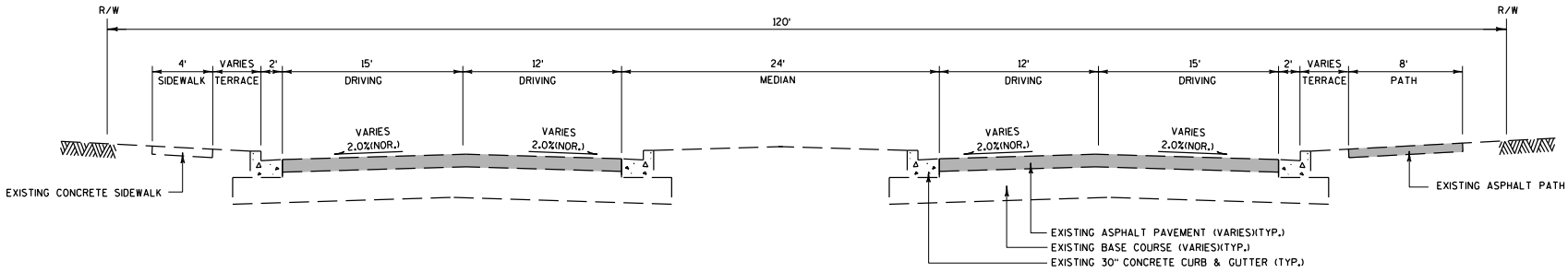


LEFT TURN LANE

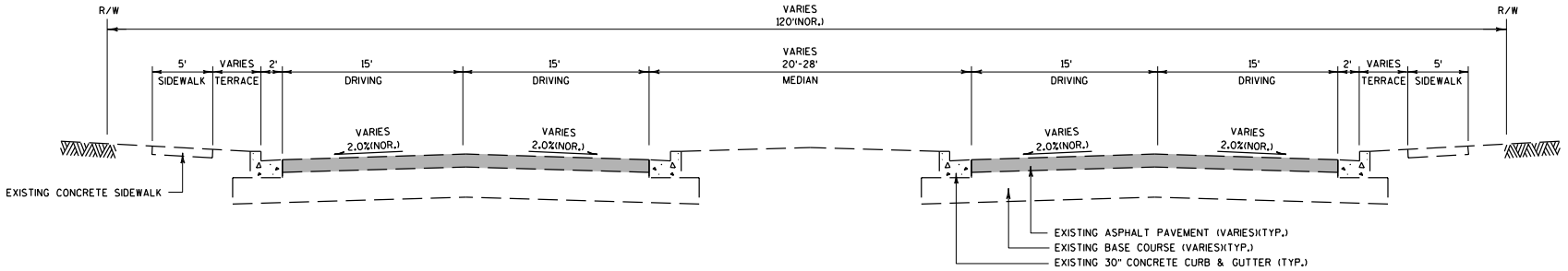
SEGOE ROAD (EB)

STA. 201+00 - STA. 202+03.94

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 8	E

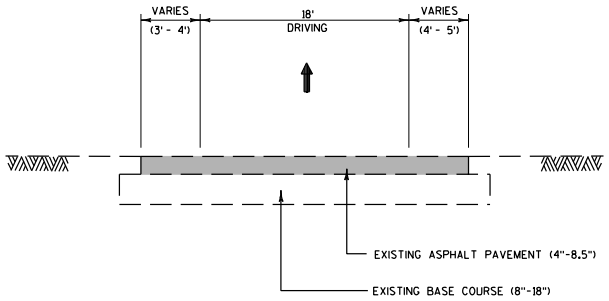


EXISTING TYPICAL SECTION, ALLEN BOULEVARD



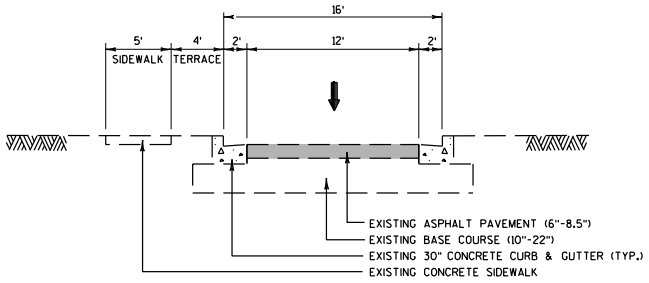
EXISTING TYPICAL SECTION, WHITNEY WAY

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 9	E



EXISTING TYPICAL SECTION, OLD MIDDLETON ROAD EB ON-RAMP

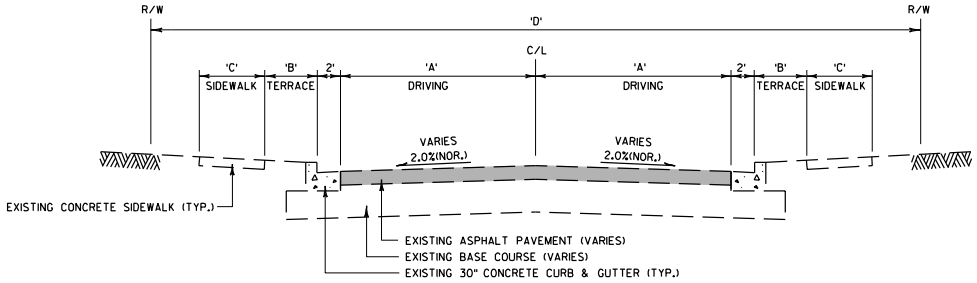
STA. 189+50 - STA. 192+00



EXISTING TYPICAL SECTION, OLD MIDDLETON ROAD WB OFF-RAMP

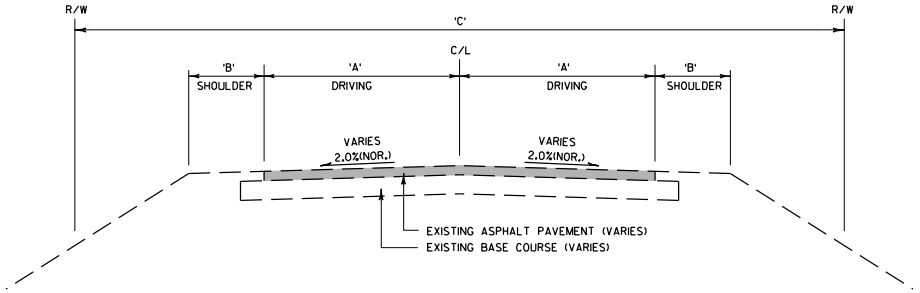
STA. 196+50 - STA. 198+50

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 10	E



EXISTING TYPICAL SECTION, SIDEROADS

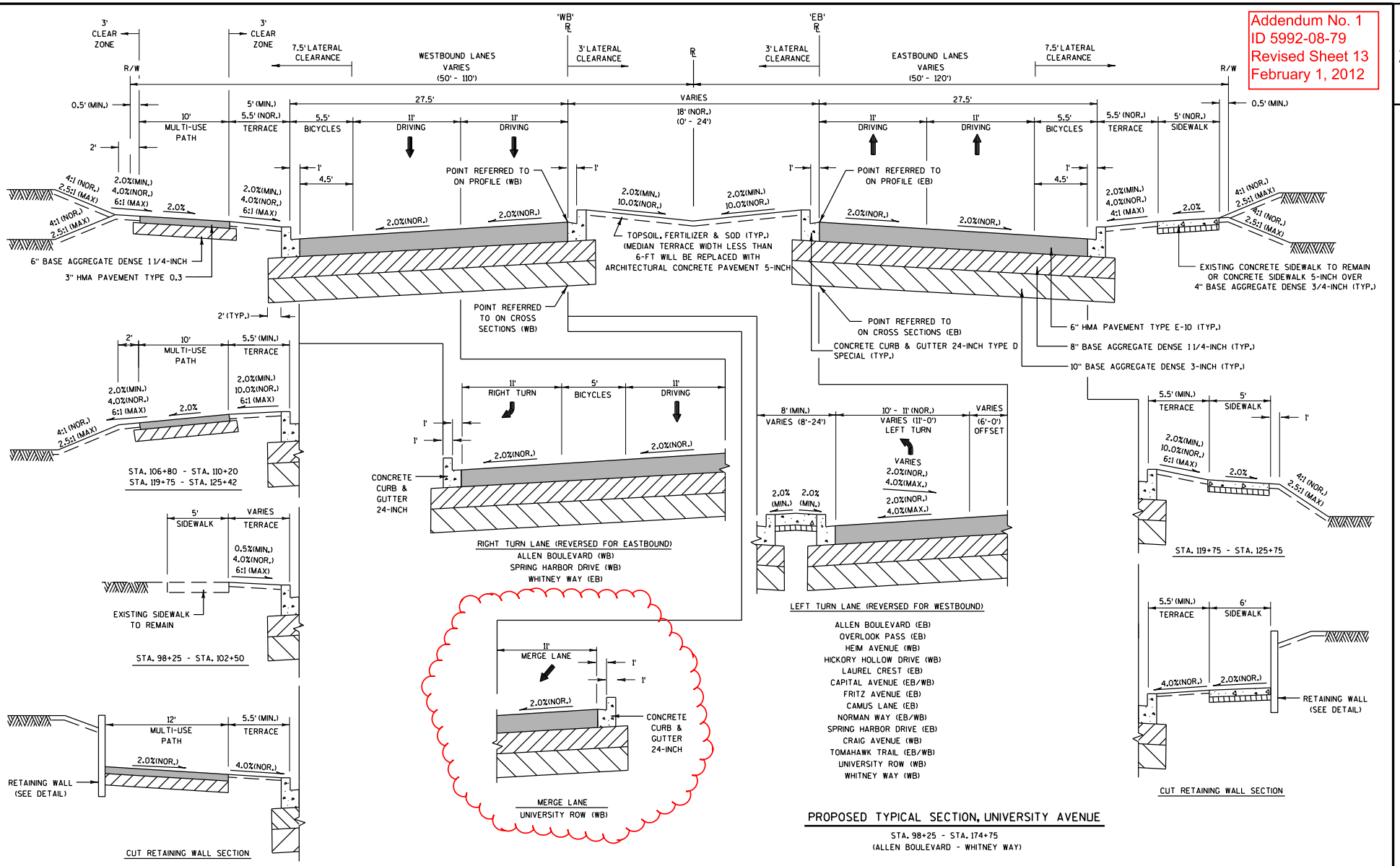
ROADWAY NAME	DRIVING LANE WIDTH 'A'	TERRACE WIDTH 'B'	SIDEWALK WIDTH 'C'	RIGHT-OF-WAY WIDTH 'D'	NOTES
OVERLOOK PASS	14'	N/A	N/A	VARIES	
HEIM AVENUE	14'	N/A	N/A	66'	
CAPITAL AVENUE (SOUTH)	16'	VARIES	5'	70'	
SPRING HARBOR DRIVE	16'	VARIES	5' LT N/A RT	66'	
CRAIG AVENUE	14'	VARIES LT 8.5' RT	5'	60'	
TOMAHAWK TRAIL	18'	N/A	N/A	70'	



EXISTING TYPICAL SECTION, SIDEROADS

ROADWAY NAME	DRIVING LANE WIDTH 'A'	SHOULDER WIDTH 'B'	RIGHT-OF-WAY WIDTH 'C'	NOTES
ST. DUNSTAN DRIVE	6'	VARIES	VARIES	
HICKORY HOLLOW DRIVE	14'	VARIES	VARIES	
BAKER AVENUE	11'	VARIES	60'	
HICKORY DRIVE	9'	VARIES	40'	
LAUREL CREST	11'	VARIES	50'	
CAPITAL AVENUE (NORTH)	17'-19'	VARIES	70'	
CAMUS LANE	13'	VARIES	50'	
FRITZ AVENUE	14'	VARIES	50'	
NORMAN WAY (WEST)	19'	VARIES	66'	5' SIDEWALK ON RT. SIDE
NORMAN WAY (EAST)	13'	VARIES	66'	

Addendum No. 1
ID 5992-08-79
Revised Sheet 13
February 1, 2012



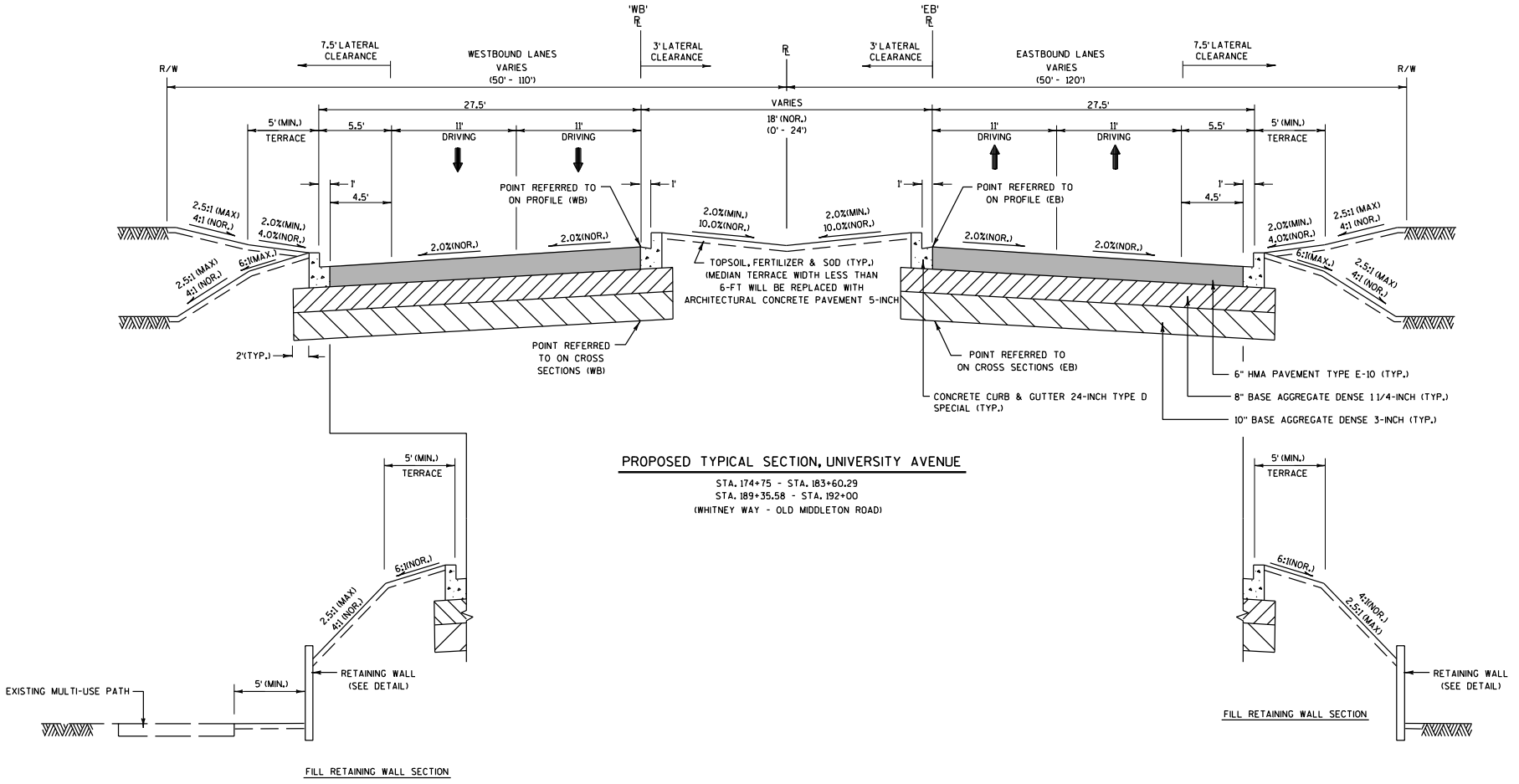
PROPOSED TYPICAL SECTION, UNIVERSITY AVENUE

STA. 98+25 - STA. 174+75
(ALLEN BOULEVARD - WHITNEY WAY)

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 13	E

FILE NAME : G:\Madison\MD2009035\DGN\020301_ts.dgn PLOT DATE : 1/26/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

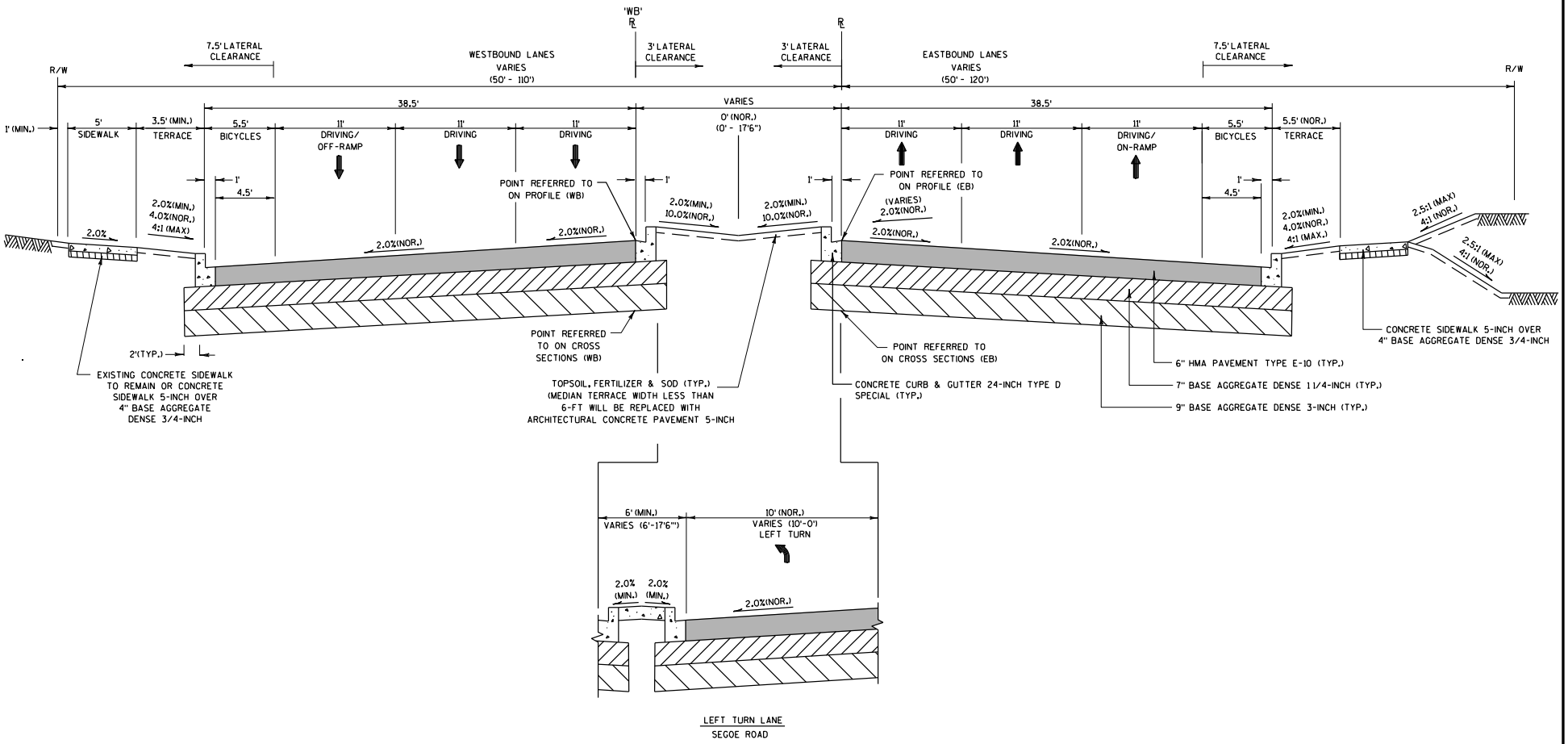
WISDOT/CADDS SHEET 42



PROPOSED TYPICAL SECTION, UNIVERSITY AVENUE

STA. 174+75 - STA. 183+60.29
STA. 189+35.58 - STA. 192+00
(WHITNEY WAY - OLD MIDDLETON ROAD)

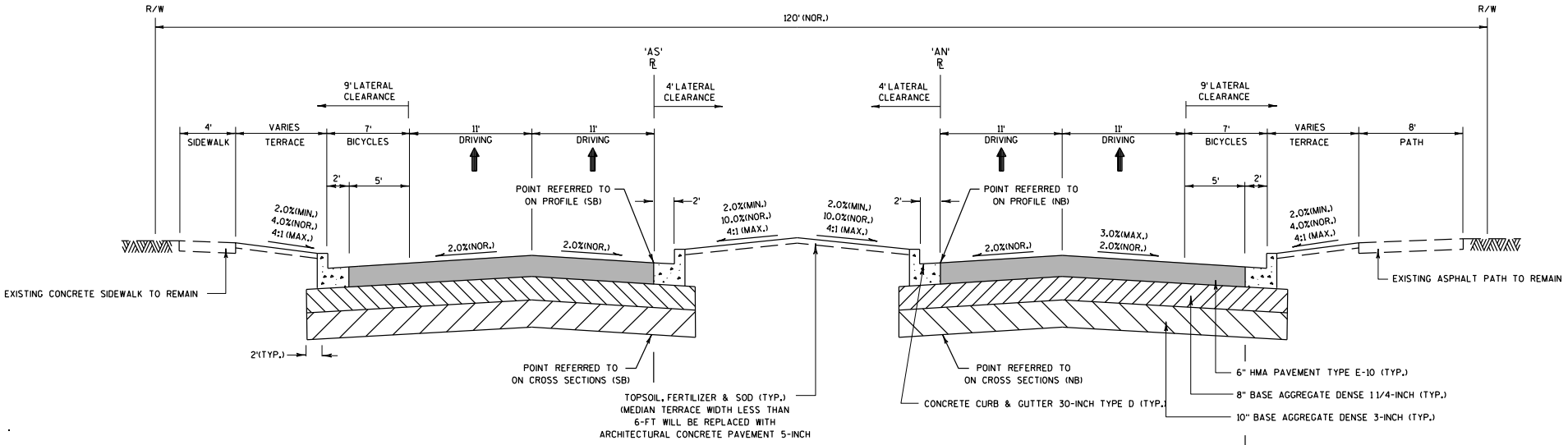
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 14 E



PROPOSED TYPICAL SECTION, UNIVERSITY AVENUE

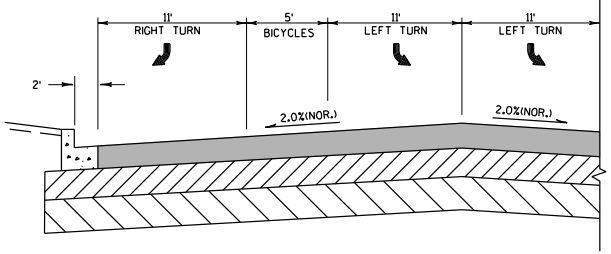
STA. 192+00 - STA. 202+03.94
(OLD MIDDLETON ROAD - SEGOE ROAD)

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 15 E

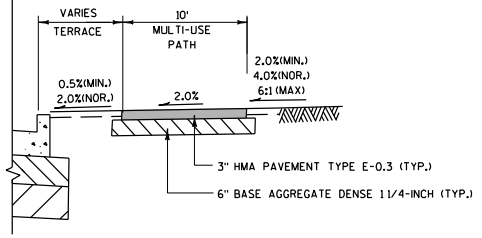


PROPOSED TYPICAL SECTION, ALLEN BOULEVARD

STA. 10'AS'+00 - STA. 15'AS'+25 (SB)
STA. 10'AN'+00 - STA. 12'AN'+75 (NB)

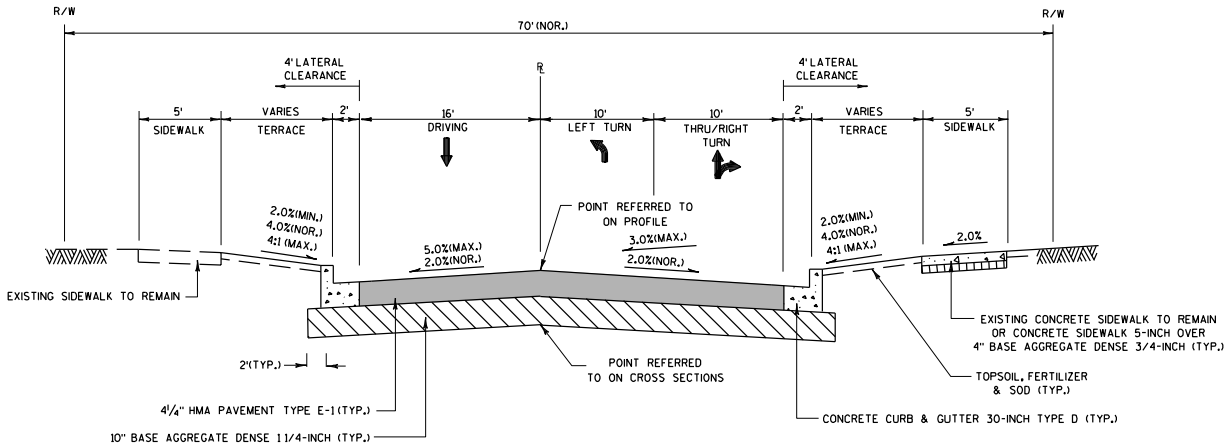


STA. 10'AS'+00 - STA. 12'AS'+79



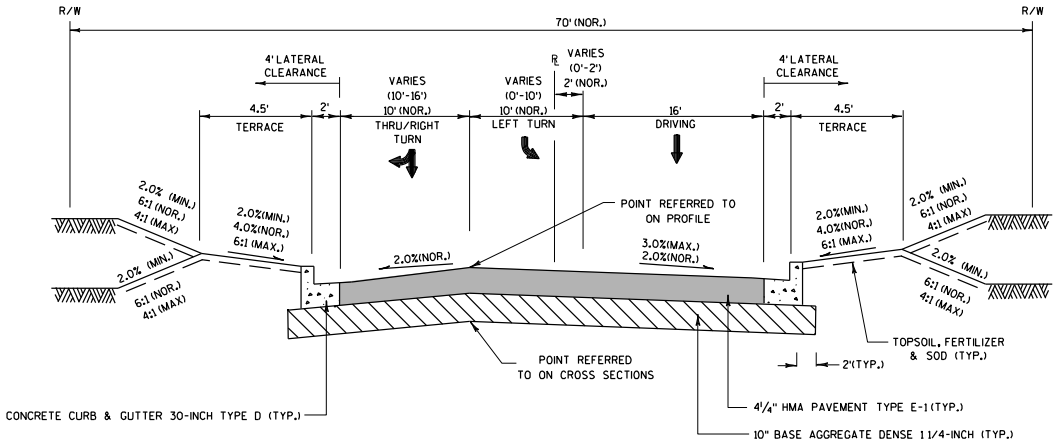
STA. 10'AN'+00 - STA. 11'AN'+72

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 16 E



PROPOSED TYPICAL SECTION, CAPITAL AVENUE

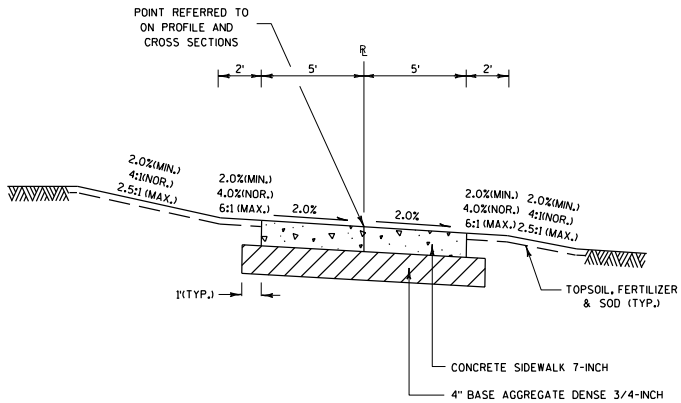
STA. 9+00 - STA. 10+00



PROPOSED TYPICAL SECTION, CAPITAL AVENUE

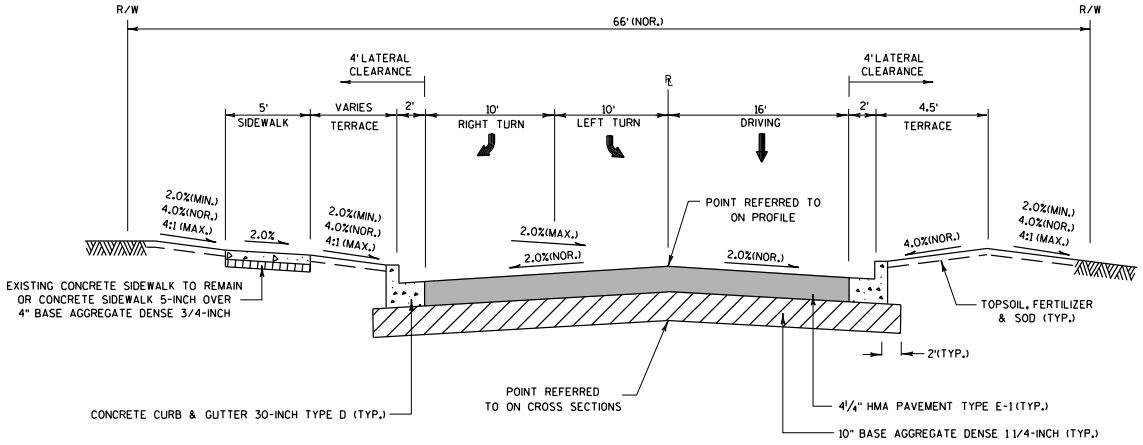
STA. 10+00 - STA. 12+25

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 17	E



PROPOSED TYPICAL SECTION, SPRING HARBOR PEDESTRIAN TUNNEL PATH

STA. 10+63 - STA. 11+90

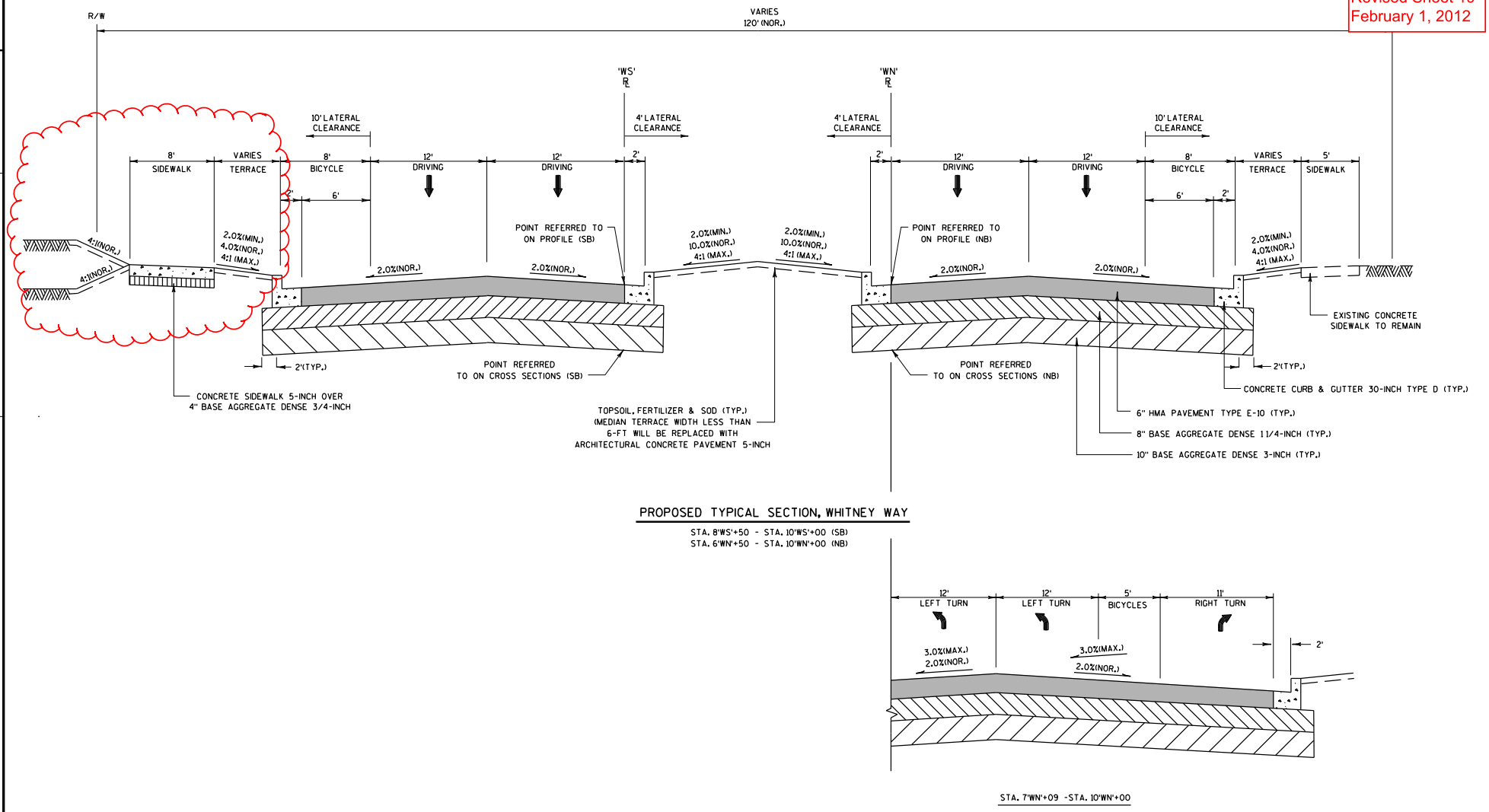


PROPOSED TYPICAL SECTION, SPRING HARBOR DRIVE

STA. 10+00 - STA. 12+15

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 18	E

Addendum No. 1
ID 5992-08-79
Revised Sheet 19
February 1, 2012



PROPOSED TYPICAL SECTION, WHITNEY WAY

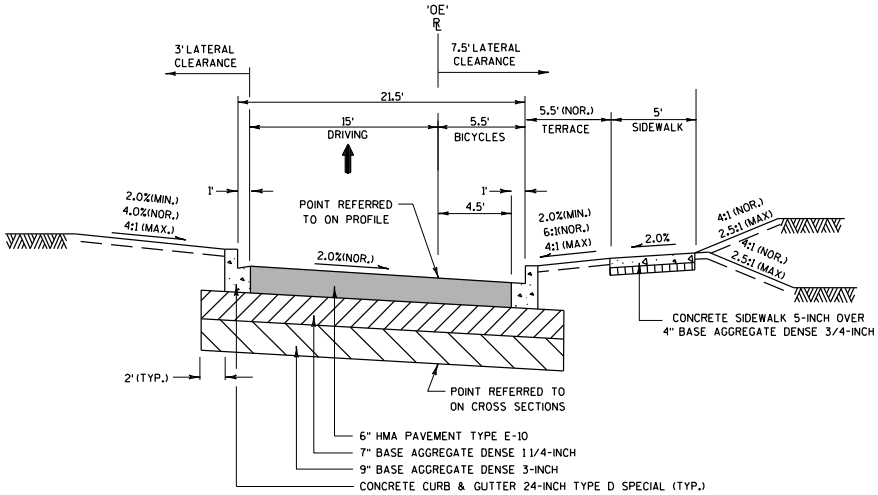
STA. 8'WS'+50 - STA. 10'WS'+00 (SB)
STA. 6'WN'+50 - STA. 10'WN'+00 (NB)

STA. 7'WN'+09 -STA. 10'WN'+00

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 19	E

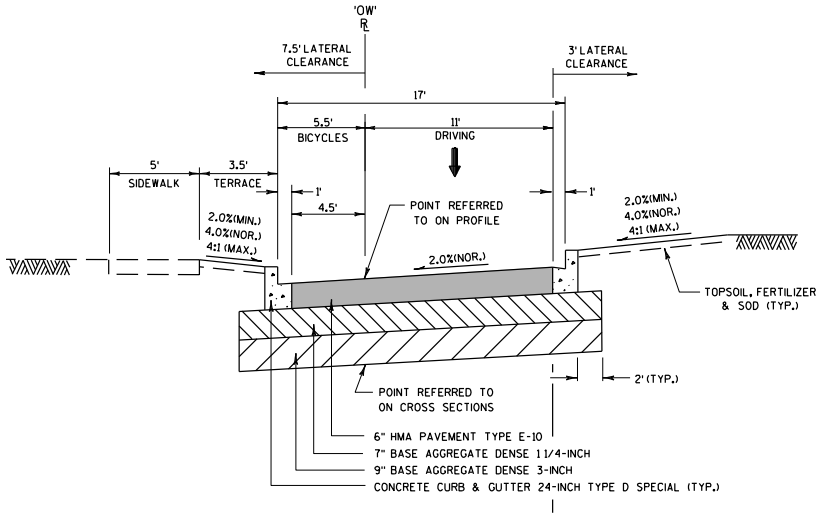
FILE NAME : G:\Madison\MD2009035\DGN\020301_ts.dgn PLOT DATE : 1/26/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



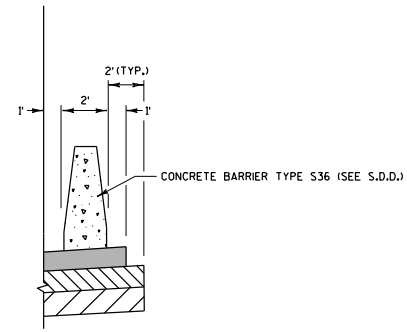
PROPOSED TYPICAL SECTION, OLD MIDDLETON ROAD EB ON-RAMP

STA. 183'0E'+89 - STA. 192'0E'+20



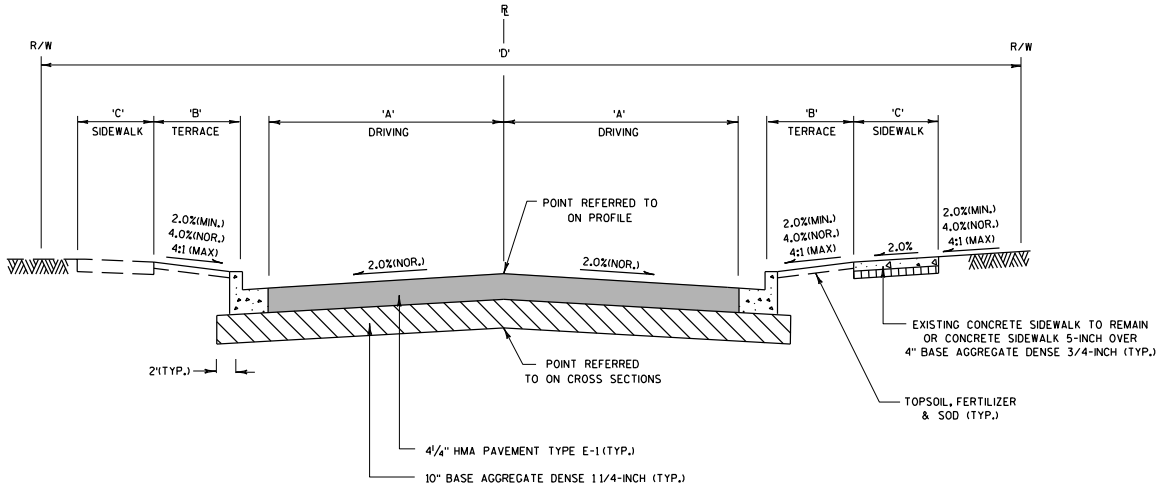
PROPOSED TYPICAL SECTION, OLD MIDDLETON ROAD WB OFF-RAMP

STA. 183'0W'+86 - STA. 199'0W'+15



STA. 186'0W'+88 RT - STA. 190'0W'+25 RT

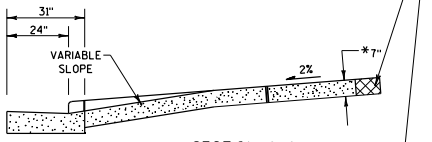
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL SECTIONS	SHEET 20	E



PROPOSED TYPICAL SECTION, SIDEROADS

ROADWAY NAME	DRIVING LANE WIDTH 'A'	TERRACE WIDTH 'B'	SIDEWALK WIDTH 'C'	RIGHT-OF-WAY WIDTH 'D'	CURB & GUTTER TYPE
ST. DUNSTAN DRIVE	6'	0'	0'	VARIES	24-INCH
OVERLOOK PASS	15'	0'	0'	VARIES	24-INCH
ASBURY-CRESS ACCESS	11' LT 11' TURN 11' RT	0'	0'	VARIES	24-INCH
HEIM AVENUE	14'	0'	0'	66'	30-INCH
HICKORY HOLLOW DRIVE	15'	0'	8' LT 0' RT	VARIES	24-INCH
BAKER AVEUNE	11'-14'	0'	0'	60'	24-INCH
HICKORY DRIVE	15' LT 11' RT	0'	0'	40'	24-INCH
LAUREL CREST (NORTH)	12' LT 10'-12' RT	0'	0'	50'	24-INCH
LAUREL CREST (SOUTH)	14' LT 14' RT	0'	0'	50'	24-INCH
CAMUS LANE	14'	0'	0'	50'	24-INCH
FRITZ AVENUE	16' LT 12' RT	0'	0'	50'	24-INCH
NORMAN WAY (WEST)	15' LT 11' TURN 11' RT	0' LT VARIES RT	0' LT 5' RT	66'	24-INCH
NORMAN WAY (EAST)	15'	0'	0'	66'	24-INCH
CRAIG AVENUE	14'	8'	5'	60'	30-INCH
TOMAHAWK TRAIL	18'	0'	0'	70'	30-INCH

THIS AREA TO BE REPLACED IN KIND
AS NOTED ON PLANS:
CONCRETE = CONCRETE DRIVEWAY 7-INCH OVER 6" BASE AGGREGATE DENSE 1¼"
ASPHALT = 3½" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
OVER 8" BASE AGGREGATE DENSE 1¼
GRAVEL = 6" BASE AGGREGATE DENSE ¾"



SECTION A-A

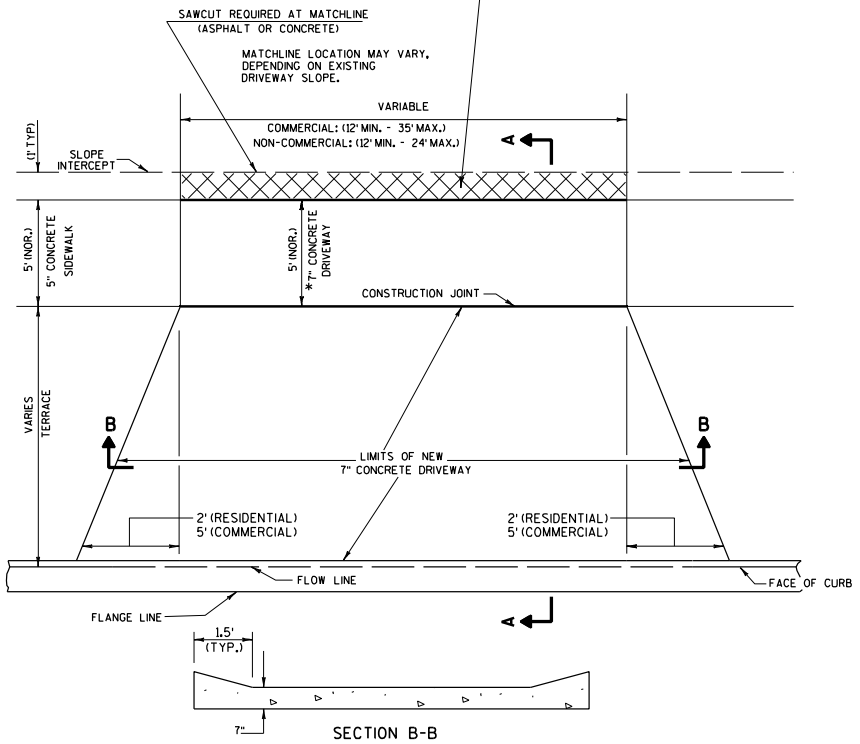
DRIVEWAY CONSTRUCTION NOTES:

——— HEAVY LINE INDICATES ½" EXPANSION JOINT MATERIAL.

WHEN MATCHING EXISTING CONCRETE DRIVEWAY INSTALL ½" EXPANSION JOINT MATERIAL BETWEEN NEW AND OLD DRIVEWAY.

* UNLESS OTHERWISE NOTED ON PLAN

PROVIDE CONTRACTION JOINT FOR CONCRETE DRIVEWAYS WIDER THAN 14 FEET

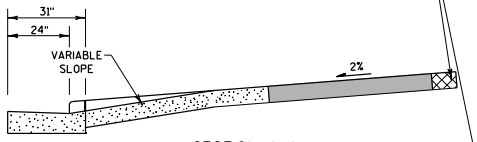


SECTION B-B

CONCRETE DRIVEWAY DETAIL

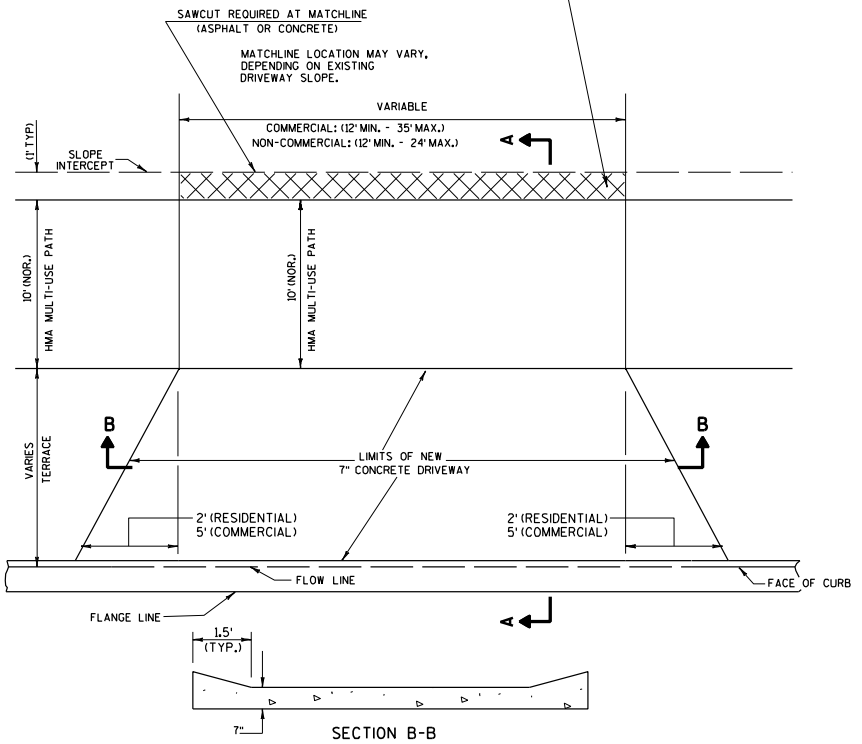
(ADJACENT TO SIDEWALK)

THIS AREA TO BE REPLACED IN KIND
AS NOTED ON PLANS:
CONCRETE = CONCRETE DRIVEWAY 7-INCH OVER 6" BASE AGGREGATE DENSE 1¼"
ASPHALT = 3½" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
OVER 8" BASE AGGREGATE DENSE 1¼
GRAVEL = 6" BASE AGGREGATE DENSE ¾"



SECTION A-A

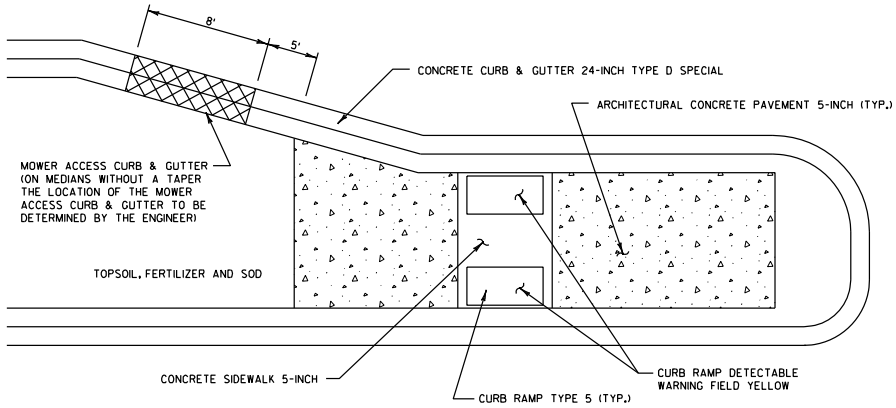
DRIVEWAY APRON CONSTRUCTION NOTES:
PROVIDE CONTRACTION JOINT FOR CONCRETE DRIVEWAYS WIDER THAN 14 FEET



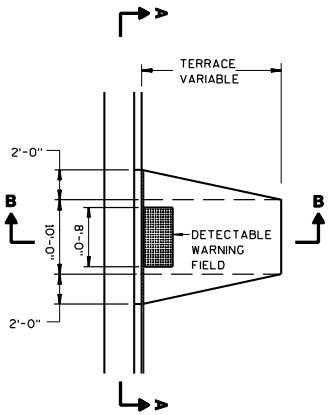
SECTION B-B

CONCRETE DRIVEWAY DETAIL

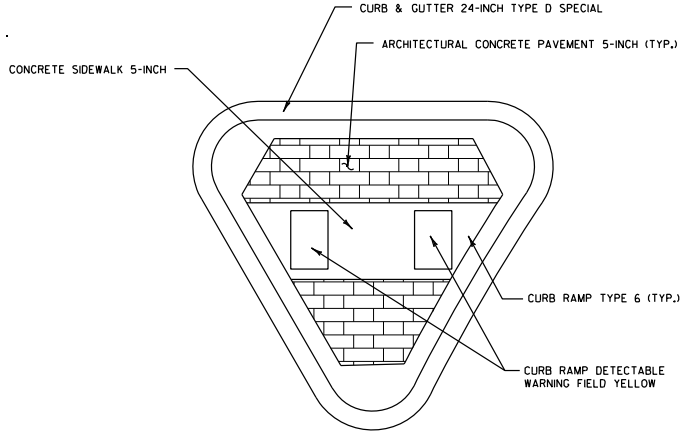
(ADJACENT TO MULTI-USE PATH)



MEDIAN DETAIL



PLAN VIEW



CONCRETE ISLAND DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

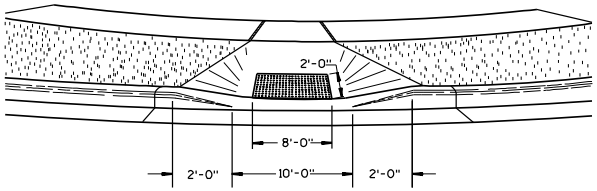
RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

BIKE PATH RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

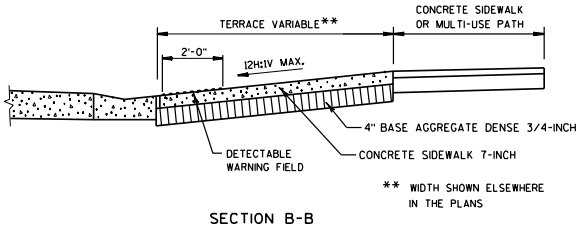
DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". ALL CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS CONSISTING OF CAST IRON AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD
IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.



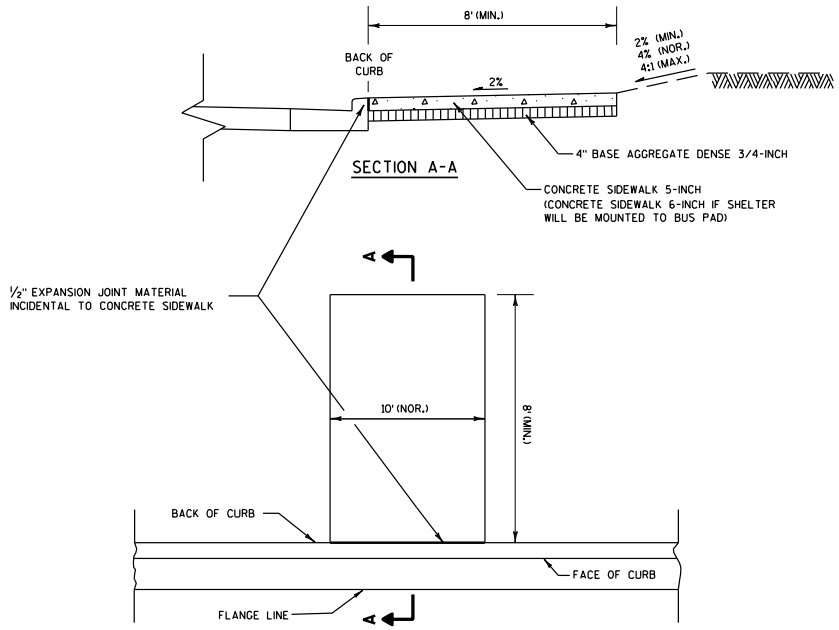
VIEW A-A



SECTION B-B

CURB RAMP BIKE PATH DETAIL

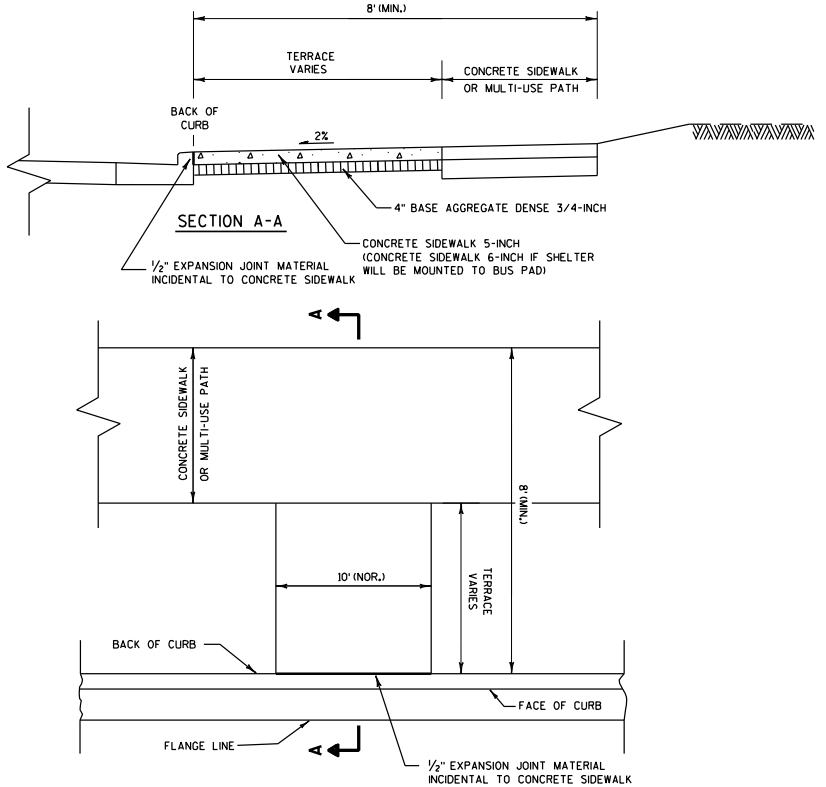
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 23 E



BUS STOP PAD DETAIL

WITHOUT ADJACENT SIDEWALK

(SEE PLAN DETAILS FOR LOCATIONS)



BUS STOP PAD DETAIL

WITH ADJACENT SIDEWALK

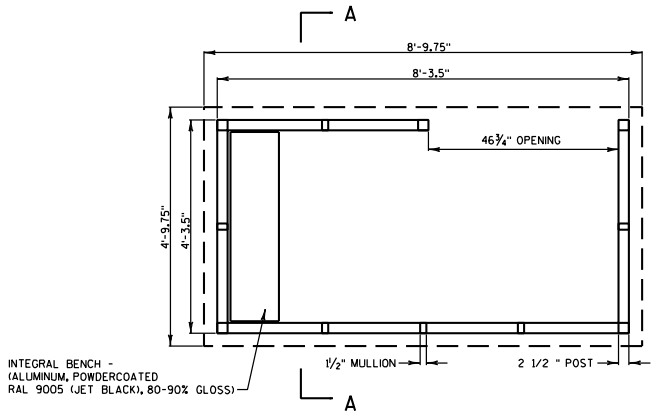
(SEE PLAN DETAILS FOR LOCATIONS)

2

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET	E

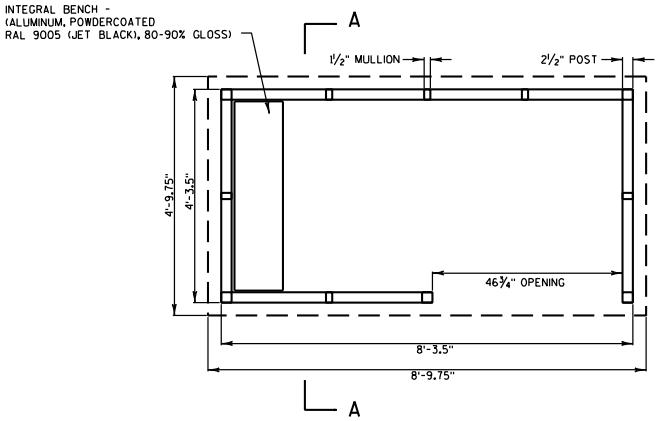
FILE NAME : G:\Madison\MD2009035\DGN\021001_cd.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

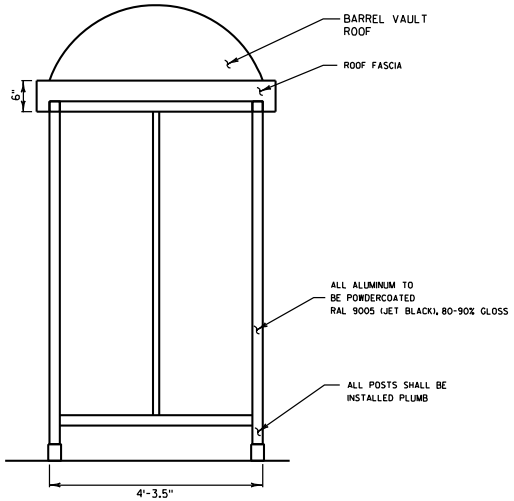


BUS SHELTER TYPE A- PLAN VIEW
(SHELTER MOUNTED IN TERRACE)

LOCATION OF BUS SHELTER ON CONCRETE PAD AND DIMENSIONS OF CONCRETE PAD SHALL BE AS REQUIRED BY CURRENT ADA ACCESSIBLE SHELTER GUIDELINES.

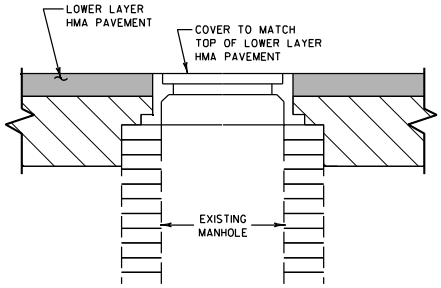


BUS SHELTER TYPE B- PLAN VIEW
(SHELTER MOUNTED BEHIND SIDEWALK)



BUS SHELTER - SECTION A-A

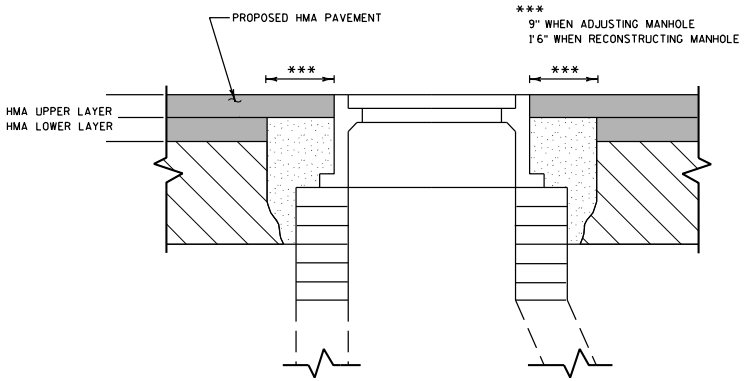
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 25	E



STEP 1

SET TO MATCH HMA PAVEMENT LOWER LAYER

(BACKFILL AND OTHER WORK TO BE DONE IN ACCORDANCE WITH ITEM - ADJUSTING MANHOLE COVERS)

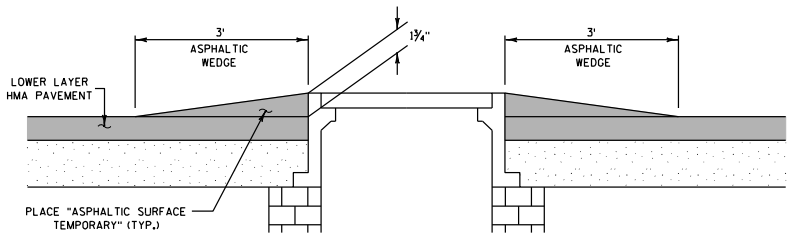


STEP 2

SET TO MATCH HMA PAVEMENT UPPER LAYER

ADJUSTING OR RECONSTRUCTING MANHOLE COVERS DETAIL (STORM SEWER MANHOLES)

WHEN NEW COVERS ARE PLACED, THE FIRST 6" OF ADJUSTMENT OR REPAIRING SHALL BE INCIDENTAL TO THE COST OF THE NEW COVER. ANY ADJUSTMENT OR REPAIR OF BRICKWORK BETWEEN 6" AND 12" WILL BE PAID AS ADJUSTING MANHOLE COVERS. REPAIRS GREATER THAN 12" WILL BE PAID AS RECONSTRUCTING MANHOLES.

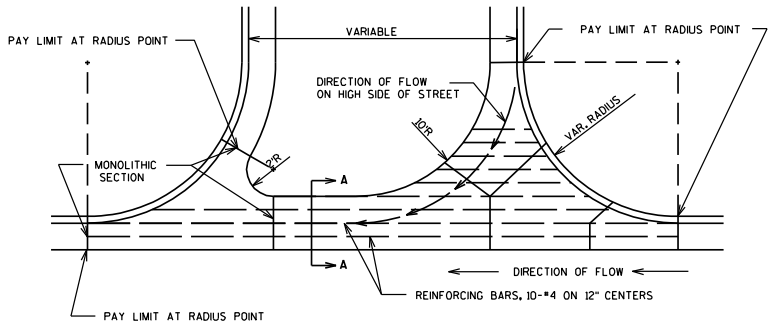


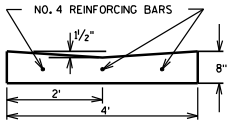
NOTE:

REMOVAL OF ASPHALTIC WEDGES WILL BE PAID FOR AS "REMOVING ASPHALTIC SURFACE BUTT JOINTS."

TEMPORARY WEDGES DETAIL (NON-STORM SEWER MANHOLES)

NOTE: PROVIDE ASPHALTIC WEDGES PRIOR TO OPENING LANE TO TRAFFIC





SECTION A-A

GENERAL NOTES:

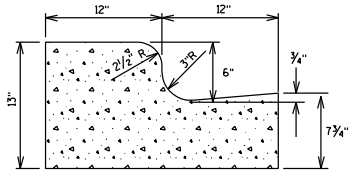
SPECIAL WATERWAY DETAIL SHALL BE USED WHEN SPECIFIED ON THE PLAN IN LIEU OF A SLOPE GUTTER AT STREET INTERSECTIONS

SPECIAL WATERWAY SHALL BE MEASURED AND PAID FOR BY THE SQUARE FOOT

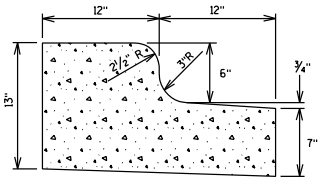
REINFORCING BARS SHALL BE EPOXY COATED AND INSTALLED IN THE SPECIAL WATERWAY AS SHOWN AND SHALL BE INCIDENTAL TO THE SPECIAL WATERWAY

SPECIAL WATERWAY CURB DETAIL

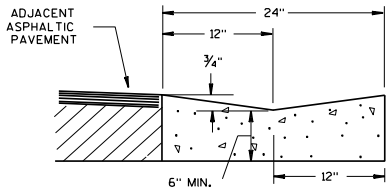
SEE PLAN DETAILS FOR LOCATIONS



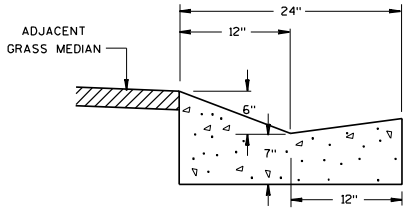
STANDARD
CURB & GUTTER



REJECT
CURB & GUTTER



DRIVEWAY
CURB & GUTTER



MOWER ACCESS
CURB & GUTTER

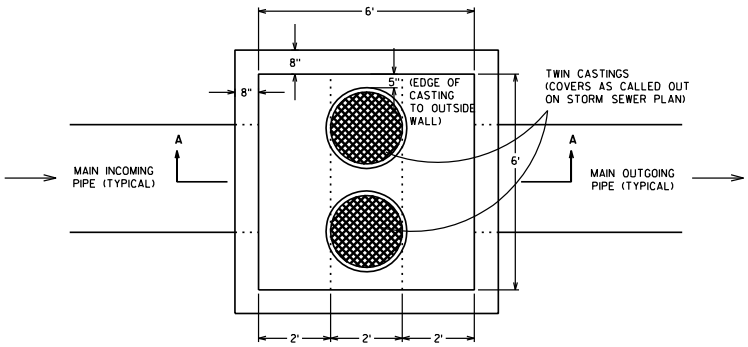
GENERAL NOTES:

LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15' NOR LESS THAN 6' IN LENGTH. THE JOINTS SHALL BE A MINIMUM OF 3" IN DEPTH

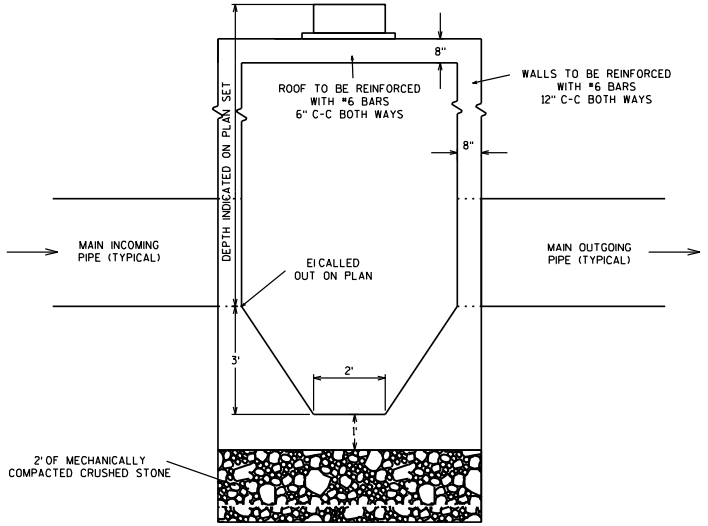
EXPANSION JOINTS SHALL BE PLACED TRANSVERSLY AT RADIUS POINTS ON CURVES OF RADIUS 200' OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER. THE EXPANSION JOINT SHALL BE A ONE PIECE ASPHALTIC MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE ½" THICK.

IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE

CONCRETE CURB & GUTTER 24-INCH TYPE A/D SPECIAL DETAIL



PLAN VIEW

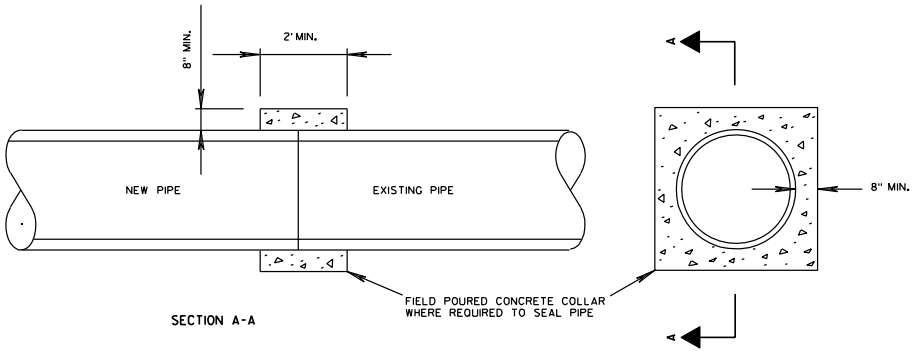


SECTION A-A

CATCH BASIN SPECIAL DETAIL

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\021001_cd.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42



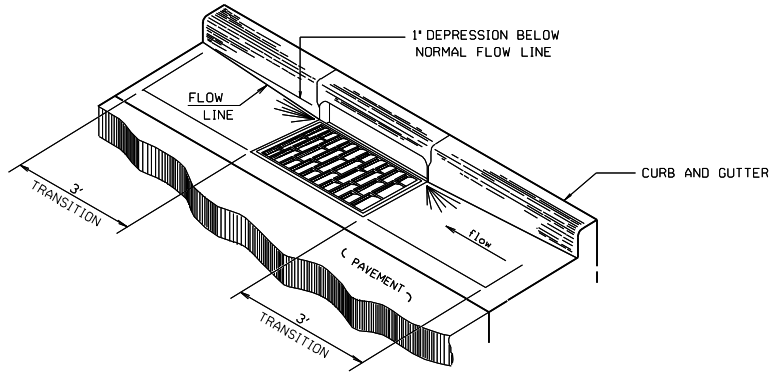
SECTION A-A

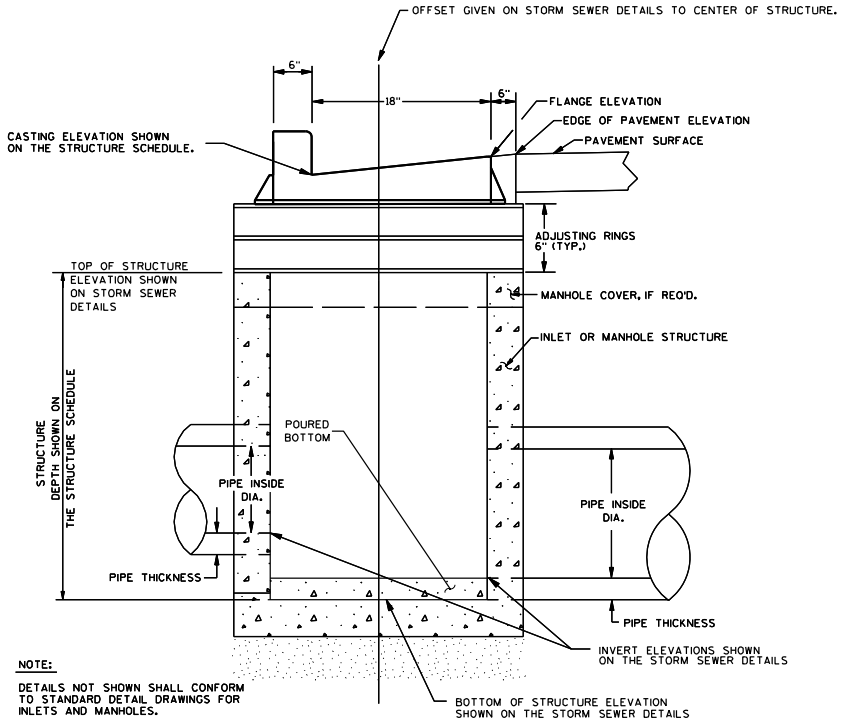
NOTE:

IF REQUESTED BY THE CONSTRUCTION ENGINEER, FIBER REINFORCED CONCRETE SHALL BE PROVIDED

CULVERT PIPE CONCRETE COLLAR DETAIL

SEE DETAILS FOR LOCATIONS
(INCIDENTAL TO STORM SEWER INSTALLATION)

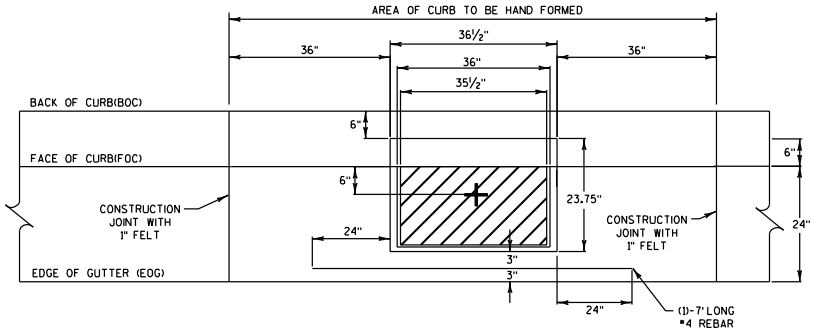




NOTE:

DETAILS NOT SHOWN SHALL CONFORM TO STANDARD DETAIL DRAWINGS FOR INLETS AND MANHOLES.

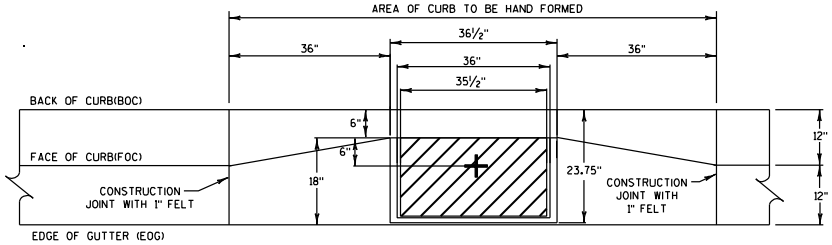
DETAIL OF INLET/MANHOLE W/CASTING



30-INCH TYPE D CURB & GUTTER

PLAN VIEW

\+ = CENTER OF STRUCTURE (STATION AND OFFSET AS INDICATED ON THE STORM SCHEDULE)

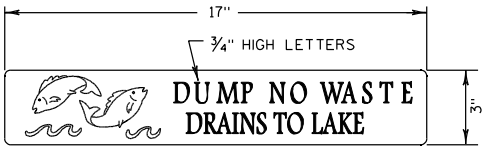


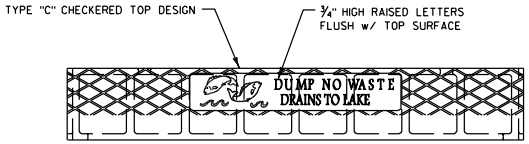
24-INCH TYPE D CURB & GUTTER

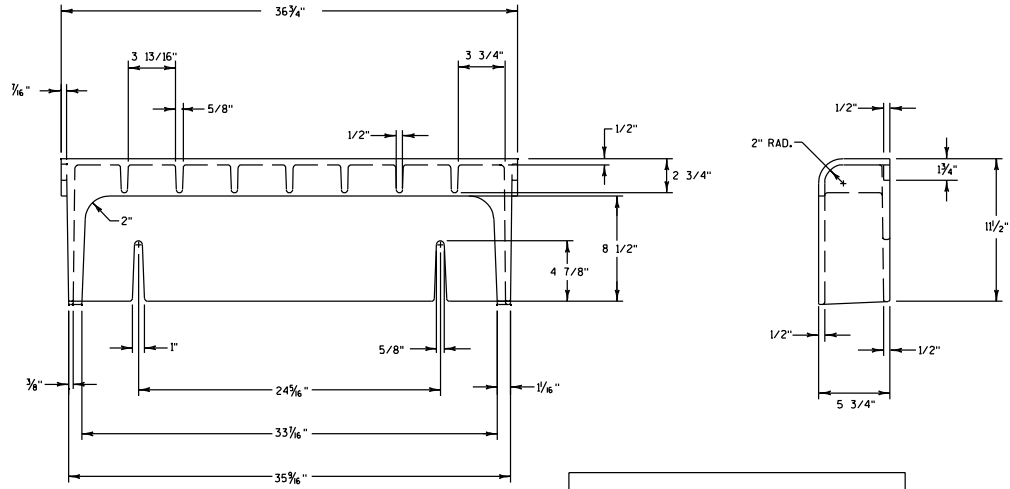
PLAN VIEW

INLET LOCATIONS IN VARIOUS TYPES OF CURB DETAIL

NOTE:
CASTING FLANGE (NOT SHOWN) PROTRUDES APPROXIMATELY 3.63" INTO THE PAVEMENT.
SEE S.D.D. FOR INLET FRAME DETAILS.

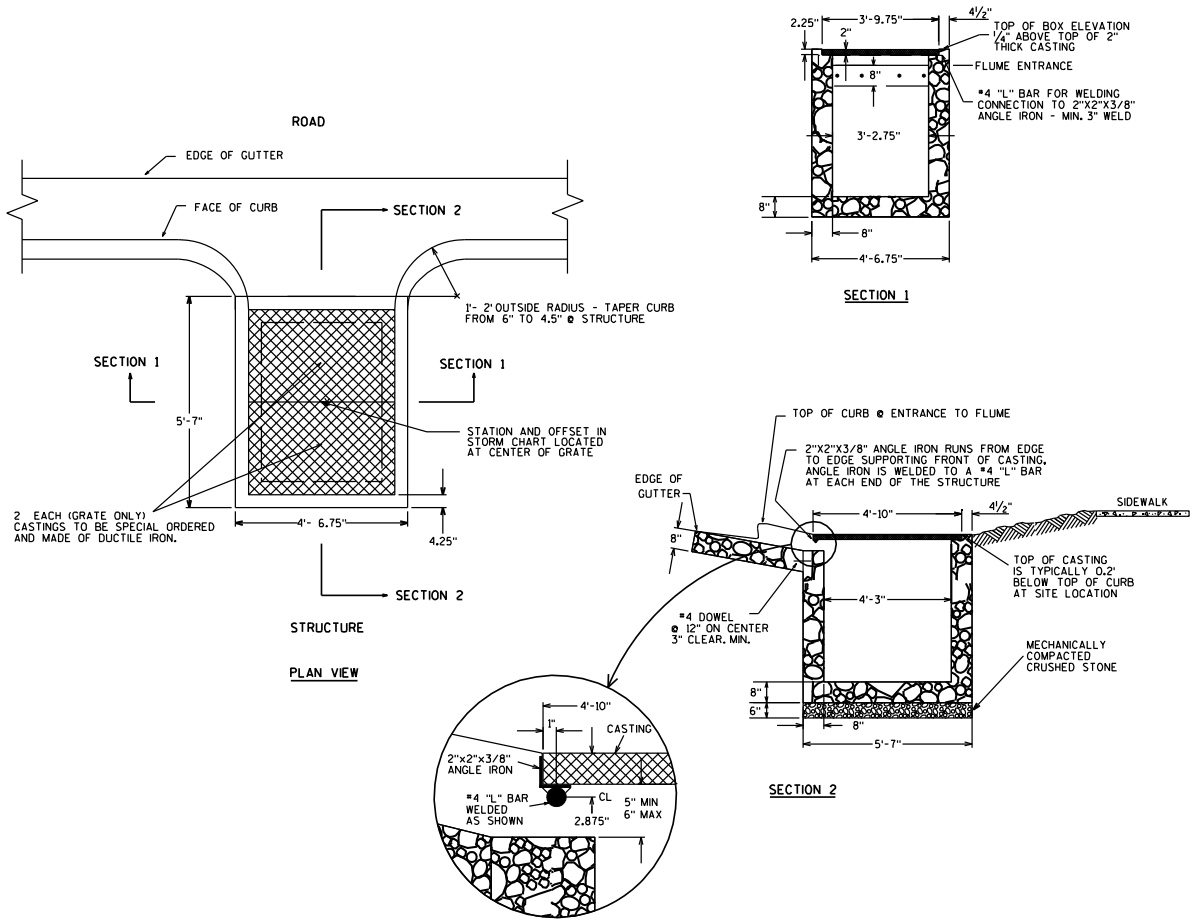




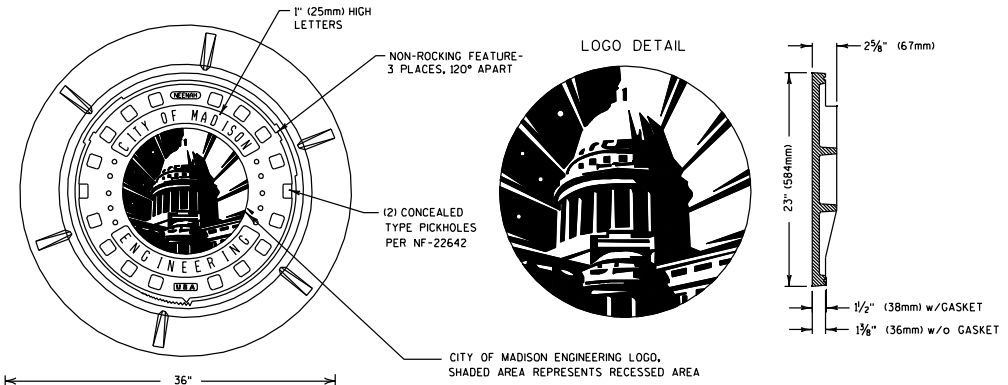


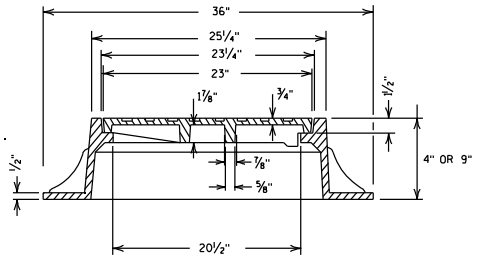
MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT
WEIGHT: 126#

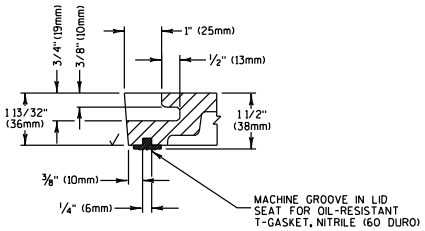
INLET COVER TYPE H SPECIAL DETAIL



TERRACE INLET TYPE 3 SPECIAL & INLET COVERS TERRACE TYPE 3 SPECIAL DETAIL







T-SEAL GASKET / CONCEALED PICK DETAIL

NOTES:

APPROXIMATE TOTAL WEIGHTS:
R-1550 w/ LOGO LID 1550-0054, 9" FRAME AND LID = 315 LBS.
R-1689 w/ LOGO LID 1550-0054, 4" FRAME AND LID = 279 LBS.

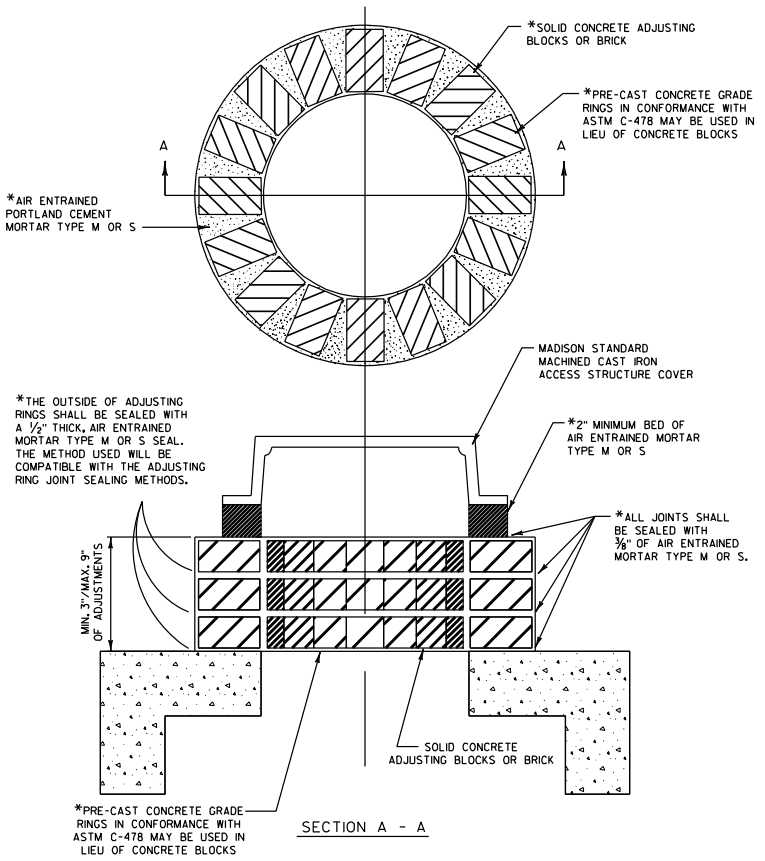
IF LOCKABLE LID IS NECESSARY, R-1920, 83/4" FRAME AND LID = 300 LBS
THERE IS NO CITY OF MADISON LOGO LID AVAILABLE FOR THIS FRAME AND CASTING.

THE FOLLOWING CASTINGS (OR EQUAL CASTINGS) SHALL BE ACCEPTABLE:

1. R-1550, 9" NON-ROCKING ACCESS STRUCTURE FRAME.
2. R-1689, 4" NON-ROCKING ACCESS STRUCTURE FRAME (WHEN REQUESTED BY THE CITY CONSTRUCTION ENGINEER).
3. R-1920, 83/4" ACCESS STRUCTURE FRAME WITH LOCKING LID, TYPE 'F' LOCKS, AND CONCEALED PICK HOLES. TO BE USED IN GREENWAYS AND EASEMENTS.
   1. FRAME AND COVER SHALL BE MACHINED AND FITTED SO THAT ROCKING AND CHATTERING WILL BE ELIMINATED.
   2. ALL LIDS SHALL BE SELF-SEALING EXCEPT FOR STORM SEWER.
   3. ALL LIDS SHALL HAVE CITY OF MADISON LOGO AS SHOWN IN DETAIL (R-1550-0054 OR EQUIV.)

LID NOTES: ALL DIMENSIONS SHOWN ARE IN ENGLISH AND (METRIC)
MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B

MANHOLE COVER TYPE J SPECIAL

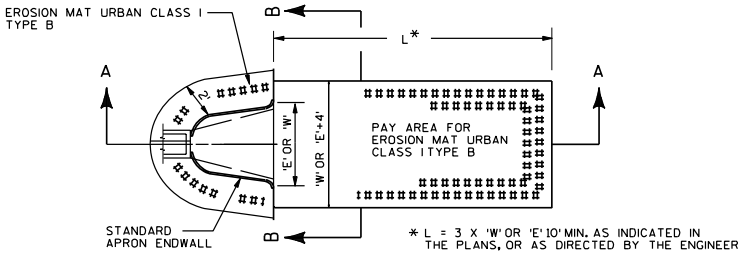


SECTION A - A

*NOTE:

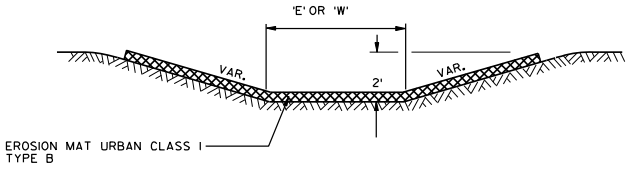
RUBBER ADJUSTMENT RINGS (CRETEX PRO-RING OR APPROVED EQUIV.) INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS WILL BE CONSIDERED AN ACCEPTABLE ALTERNATE TO PRECAST RINGS. IF RUBBER ADJUSTMENT RINGS ARE INSTALLED, THERE WILL BE NO NEED OR PAYMENT FOR AN INTERNAL CHIMNEY SEAL

ADJUSTING MANHOLE DETAIL



NOTES: REFER TO S.D.D. FOR 'E' OR 'W' DIMENSIONS

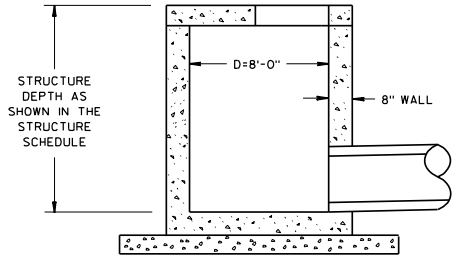
SECTION A-A



SECTION B-B

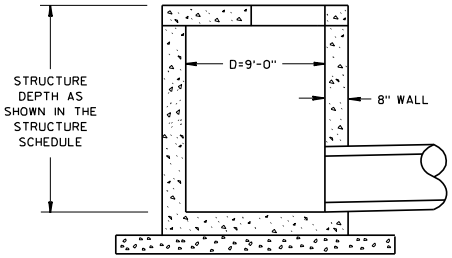
EROSION MAT TREATMENT AT PIPE ENDWALL DETAIL

SEE EROSION CONTROL PLAN FOR LOCATIONS



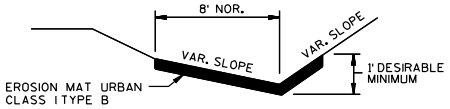
SEE S.D.D. "MANHOLES TYPE 2 & 3" FOR ADDITIONAL INFORMATION

MANHOLES, TYPE 8, SPECIAL



SEE S.D.D. "MANHOLES TYPE 2 & 3" FOR ADDITIONAL INFORMATION

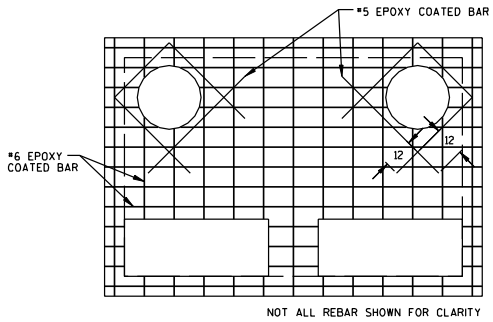
MANHOLES, TYPE 9, SPECIAL



EROSION MAT IN DITCHES DETAIL

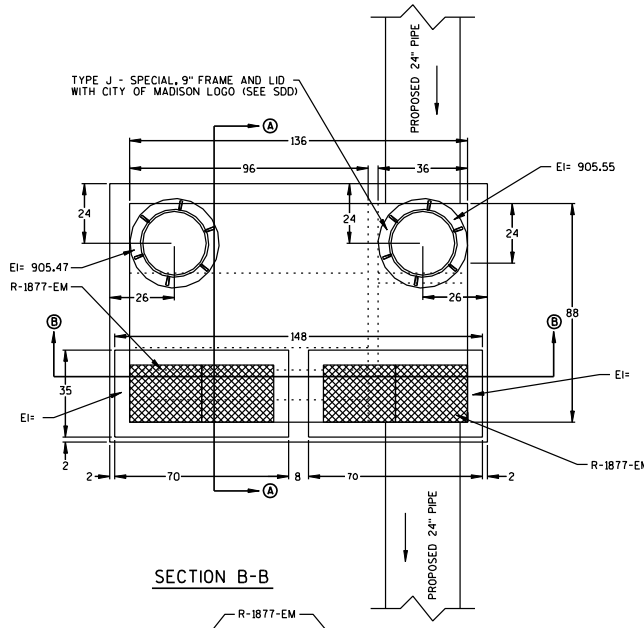
SEE EROSION CONTROL PLAN FOR LOCATIONS

ROOF REINFORCEMENT

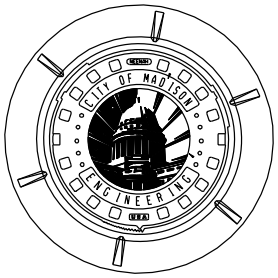


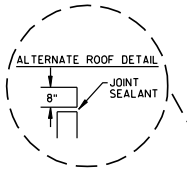
ROOF REINFORCEMENT NOTES:

1. EPOXY COATED REBARS SHALL BE USED IN ALL CASES
2. #6 REBARS PLACED ON 6" CENTERS
3. 3" CLEAR SHALL BE MAINTAINED
4. ROOF THICKNESS SHALL BE 8" MINIMUM

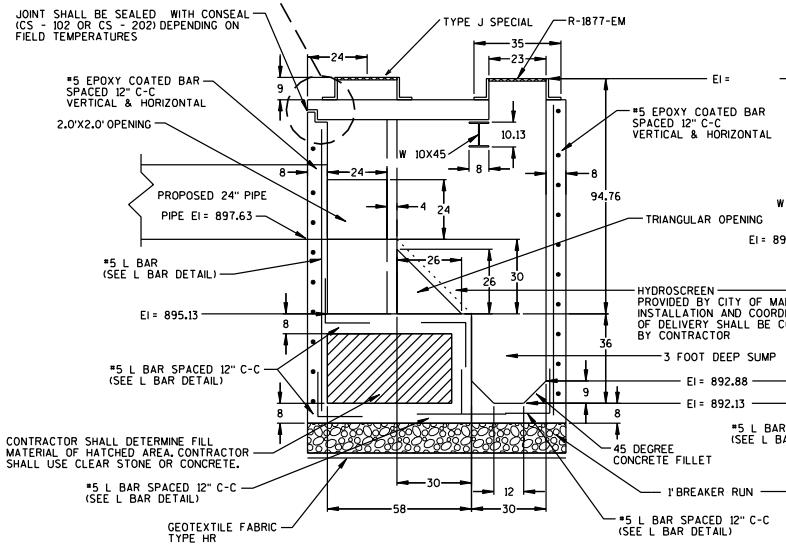


TYPE J SPECIAL

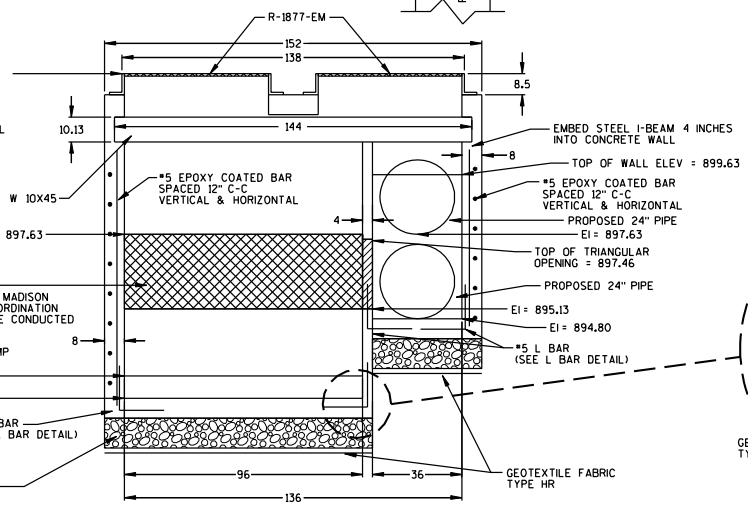




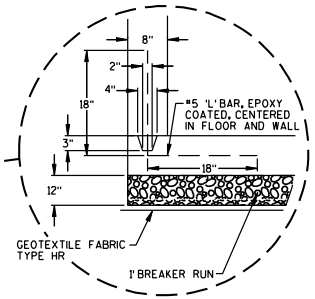
SECTION A-A



SECTION B-B



TYPICAL WALL & FLOOR CONNECTION TO BE CONSTRUCTED AT EACH JOINT
L BAR SHALL BE SPACE 12" C-C



NOTE:
DIMENSIONS ARE IN UNITS OF INCHES

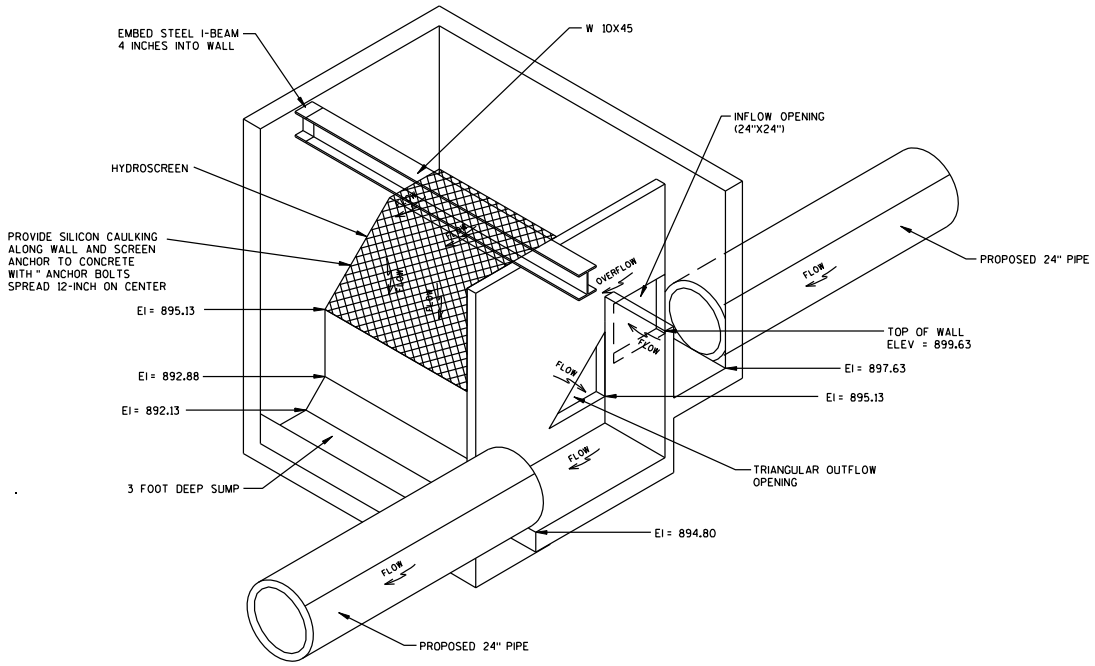
NOTE:
ALL MATERIALS SHOWN ARE INCIDENTAL TO CONSTRUCTION.

STORM SEWER TREATMENT STRUCTURE SPECIAL DETAIL

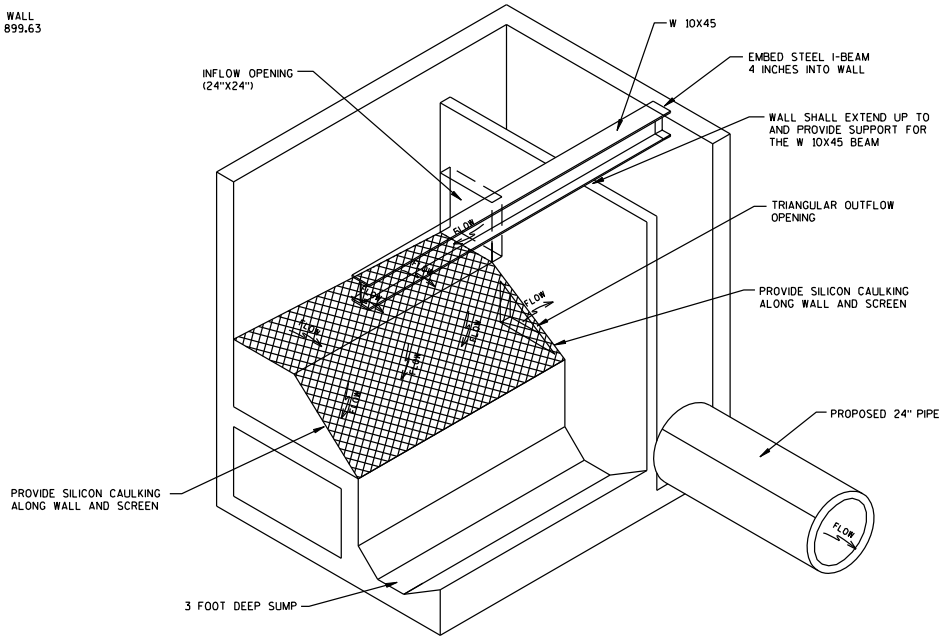
STRUCTURE 31.4

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 33 E

STRUCTURE 31.4 STORM TREATMENT STRUCTURE



NW ISOMETRIC VIEW (SIDEWALLS & ROOF NOT SHOWN)



NE ISOMETRIC VIEW (SIDEWALLS & ROOF NOT SHOWN)

STORM SEWER TREATMENT STRUCTURE SPECIAL DETAIL

STRUCTURE 31.4

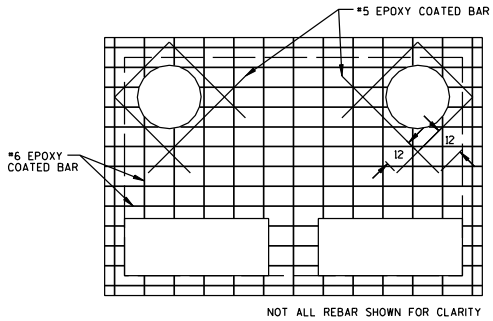
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\021001_cd.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 35
February 1, 2012

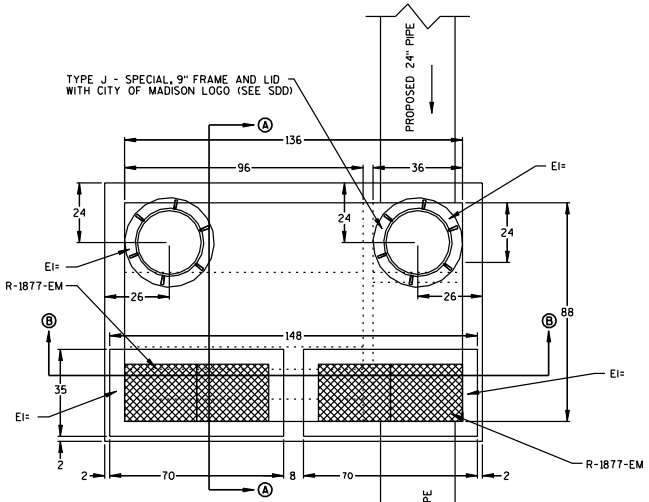
ROOF REINFORCEMENT



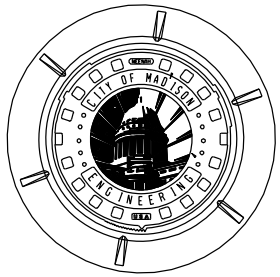
NOT ALL REBAR SHOWN FOR CLARITY

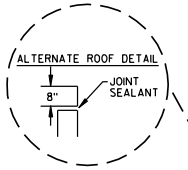
ROOF REINFORCEMENT NOTES:

1. EPOXY COATED REBARS SHALL BE USED IN ALL CASES
2. #6 REBARS PLACED ON 6" CENTERS
3. 3" CLEAR SHALL BE MAINTAINED
4. ROOF THICKNESS SHALL BE 8" MINIMUM



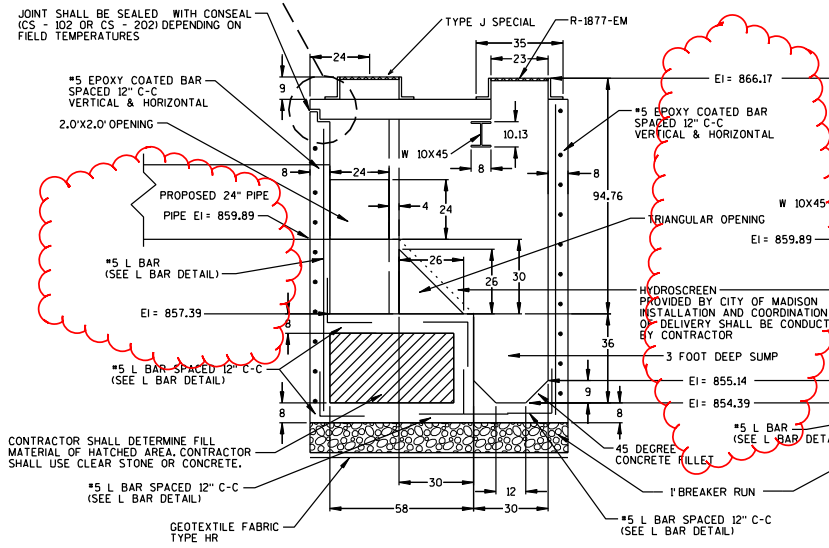
TYPE J SPECIAL



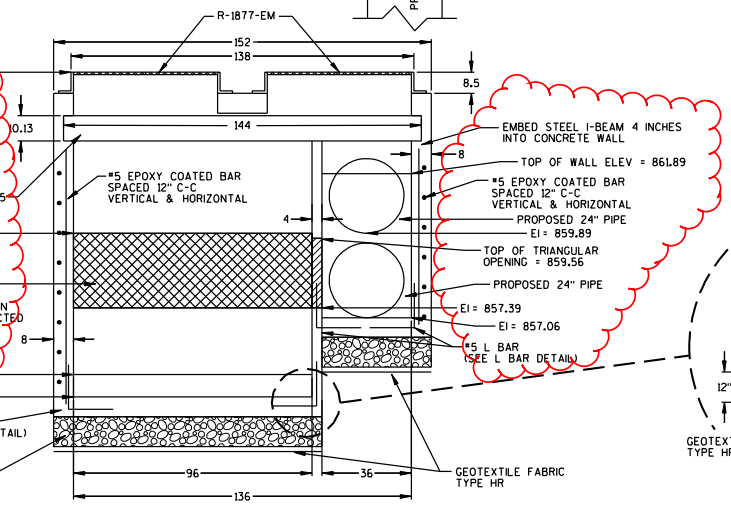


JOINT SHALL BE SEALED WITH CONSEAL (CS - 102 OR CS - 202) DEPENDING ON FIELD TEMPERATURES

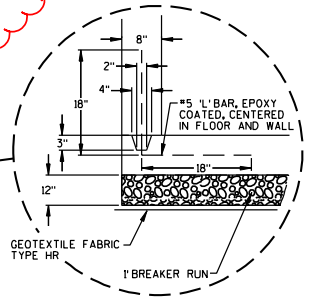
SECTION A-A



SECTION B-B



TYPICAL WALL & FLOOR CONNECTION TO BE CONSTRUCTED AT EACH JOINT
L BAR SHALL BE SPACE 12" C-C



NOTE:
ALL MATERIALS SHOWN ARE INCIDENTAL TO CONSTRUCTION.

NOTE:
DIMENSIONS ARE IN UNITS OF INCHES

STORM SEWER TREATMENT STRUCTURE SPECIAL DETAIL

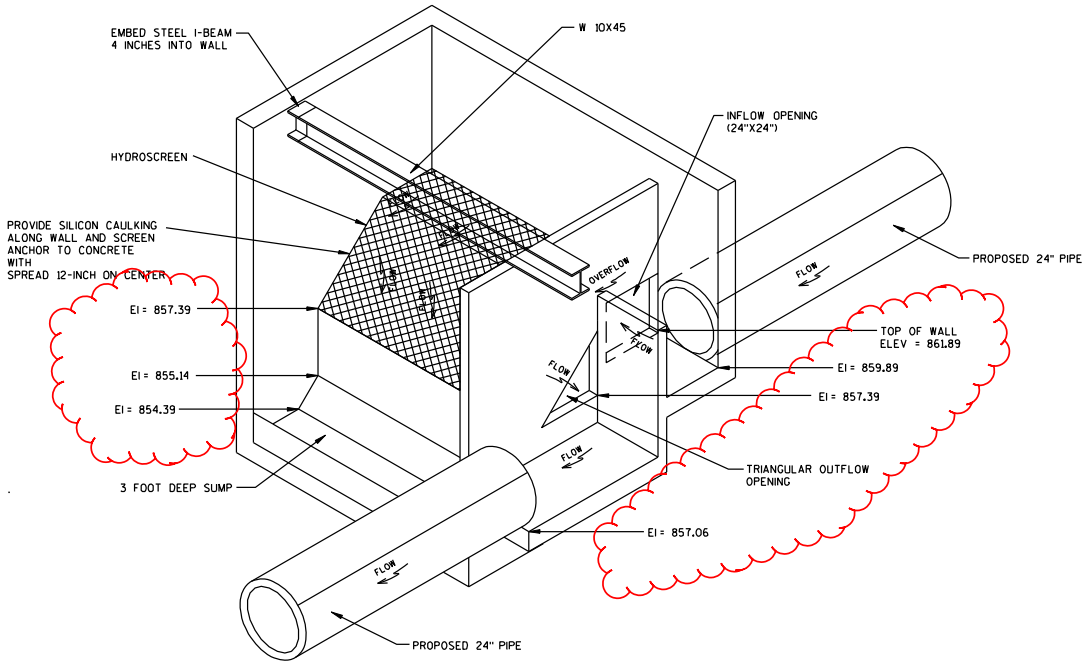
STRUCTURE 42.1

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 35	E

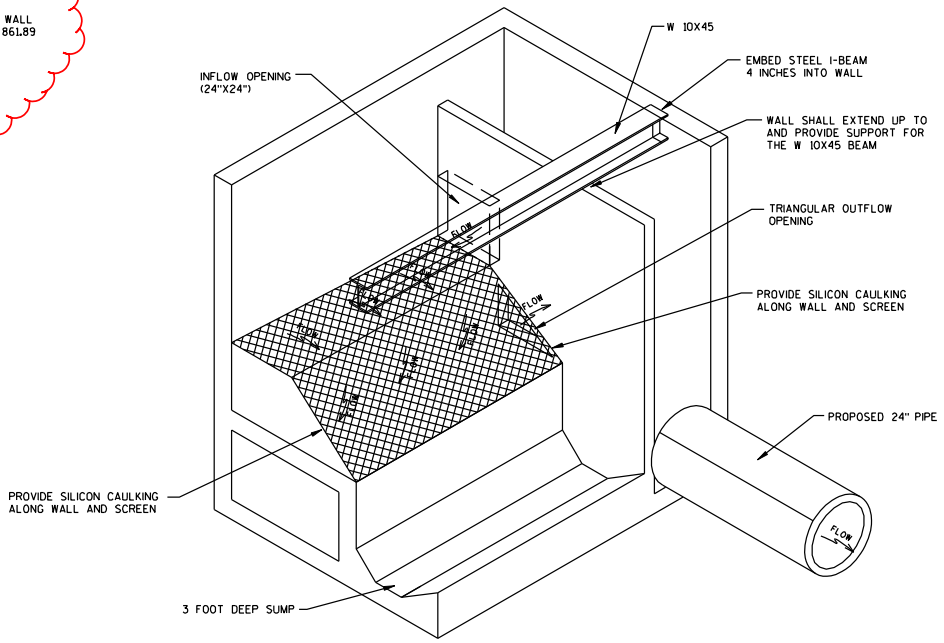
FILE NAME : G:\Madison\MD2009035\DGN\021001_cd.dgn PLOT DATE : 1/26/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 36
February 1, 2012



NW ISOMETRIC VIEW (SIDEWALLS & ROOF NOT SHOWN)



NE ISOMETRIC VIEW (SIDEWALLS & ROOF NOT SHOWN)

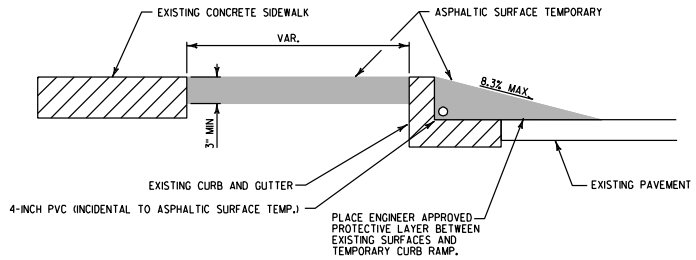
STORM SEWER TREATMENT STRUCTURE SPECIAL DETAIL

STRUCTURE 42.1

PROJECT NO:5992-08-79	HWY:CTH MS	COUNTY:DANE	CONSTRUCTION DETAILS	SHEET 36	E

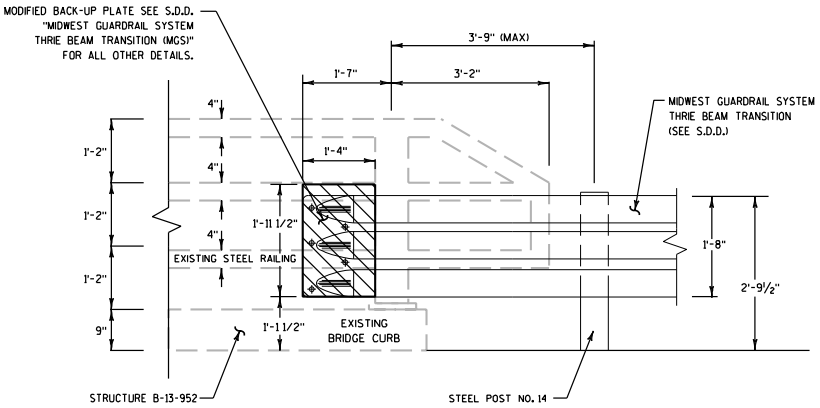
FILE NAME : G:\Madison\MD2009035\DGN\021001_cd.dgn PLOT DATE : 1/26/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



NOTE: REMOVAL IS INCIDENTAL TO CONSTRUCTION ITEMS

TEMPORARY CURB RAMP DETAIL



MODIFIED BACK-UP PLATE FOR THRIE BEAM CONNECTION TO EXISTING STEEL RAILING DETAIL

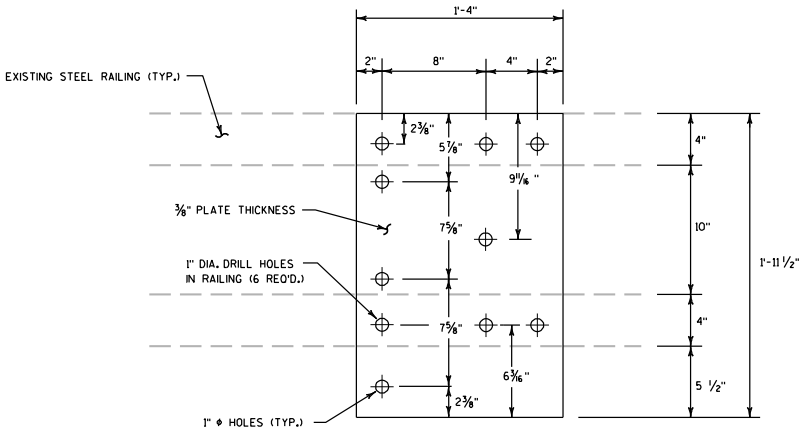
STRUCTURE B-13-952

NOTE:

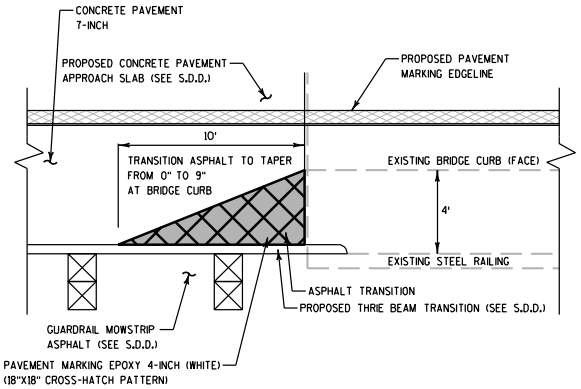
THE TYPICAL BACK-UP PLATE (1'4" WIDE X 1'8" HEIGHT) DOES NOT MATCH THE EXISTING NON-STANDARD STEEL RAILING, SO A MODIFIED BACK-UP PLATE (1'4" WIDE X 1'11½" HEIGHT) WILL BE REQUIRED FOR THE CONNECTION.

THE MODIFIED BACK-UP PLATE IS TO BE INCIDENTAL TO THE MGS THRIE BEAM TRANSITION ITEM.

BACK-UP PLATE DIMENSIONS AND BOLT HOLE LOCATIONS MUST BE FIELD VERIFIED PRIOR TO INSTALLATION.



BACK-UP PLATE DETAIL

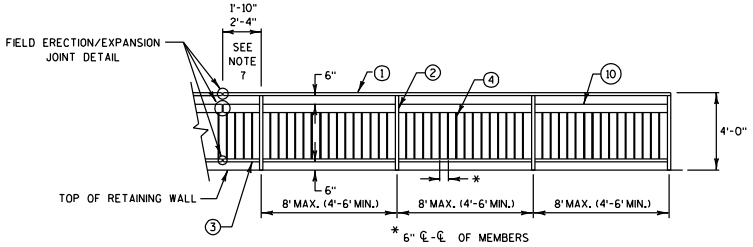


ASPHALT TRANSITION TO EXISTING BRIDGE CURB DETAIL

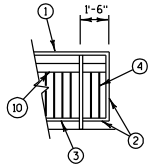
STRUCTURE B-13-952

NOTE: ASPHALT TRANSITION TO BE PAID AS HMA PAVEMENT TYPE E-10

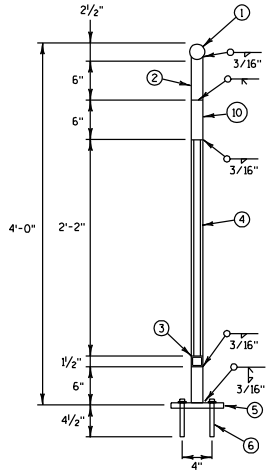
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 37 E



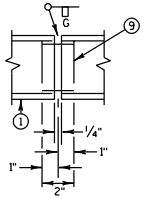
PIPE RAILING FOR RETAINING WALL ELEVATION



END SECTION

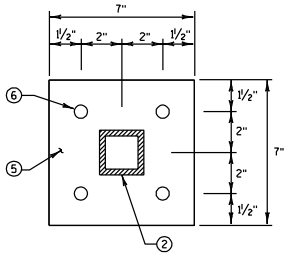


SECTION THRU RAILING

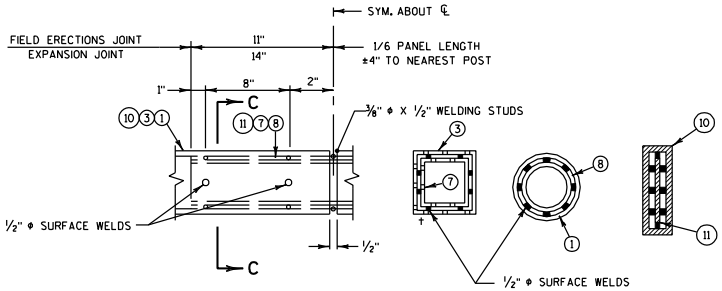


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



RAILING BASE PLATE



FIELD ERECTION JOINT DETAIL

† MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE

SECTION C-C

RAILING STEEL DETAIL

SEE RETAINING WALL PLANS FOR LOCATIONS ON WALLS
SEE PLAN DETAILS FOR LOCATIONS ADJACENT TO MULTI-USE PATH

LEGEND

1. 2½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.
2. TS 2" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO MATCH SLOPE OF TOP OF WALL. HOLD 1/16" ABOVE BASE PLATE TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON THE BASE PLATE.
3. TS 1½" X 1½" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
4. TS 1" X 1" X 0.125" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
5. BASE PLATE ½" X 7" X 7" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 9/16" HOLES FOR HEX BOLTS NO. 6, WELD TO NO. 2 AS SHOWN.
6. CONCRETE MASONRY ANCHORS, TYPE S, ⅝". PULLOUT STRENGTH SHALL BE 3.6 KIPS.
7. SQUARE SLEEVE FABRICATED FROM ½" COLD DRAWN STEEL ALLOY SQUARE CONFORMING TO ASTM A331 X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 3. PROVIDE ⅜" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.
8. 1½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE ⅜" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.
9. 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".
10. TS 6" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.
11. 1" X 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 X 2'-4" LONG AT EXPANSION JOINTS OR 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 10. PROVIDE ⅜" DIA. X ½" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

GENERAL NOTES

BID ITEM SHALL BE "RAILING STEEL" WHICH INCLUDES ALL ITEMS SHOWN INCLUDING GALVANIZED COATING.

RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.

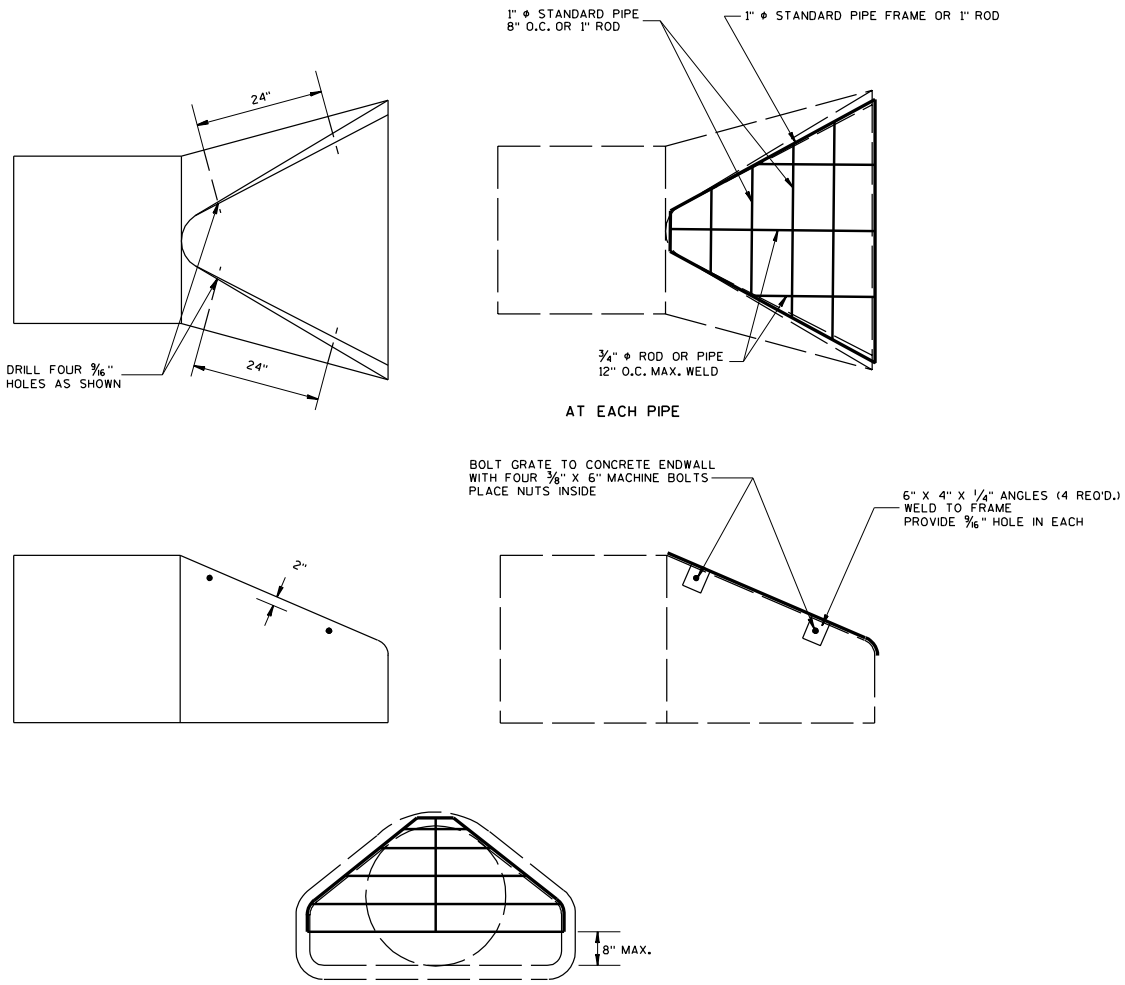
POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIALS EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.

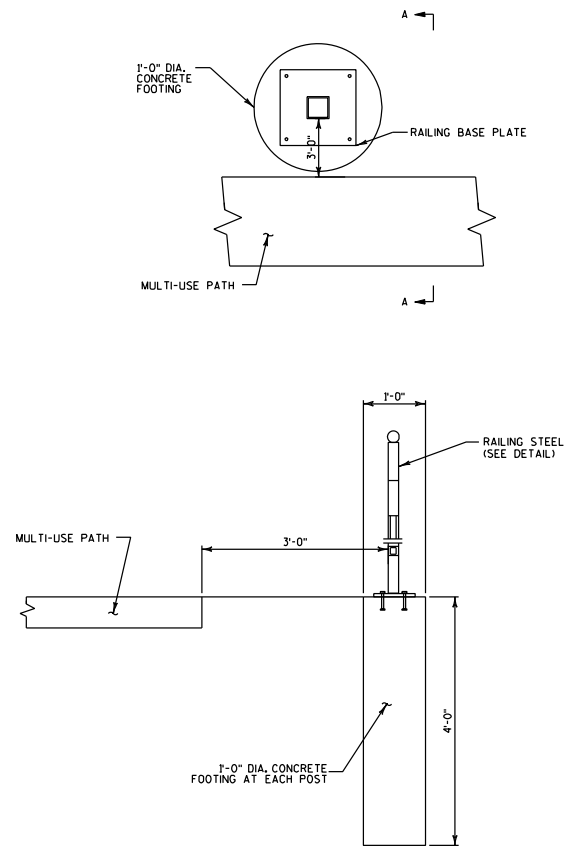
PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.

VERTICAL MEMBERS SHALL BE PLUMB.

HORIZONTAL MEMBERS SHALL PARALLEL GRADE.



PIPE GRATE DETAIL



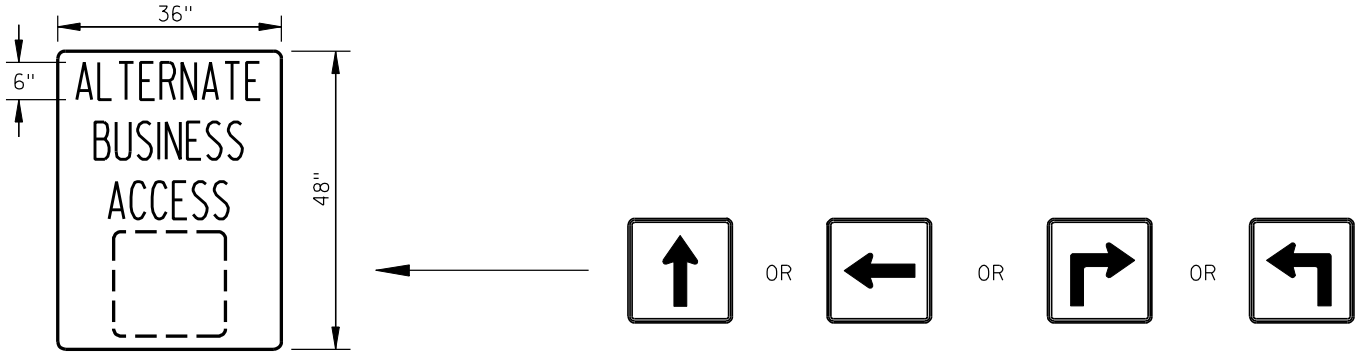
SECTION A-A

MOUNTING RAILING STEEL ADJACENT TO MULTI-USE PATH DETAIL

NOTE:

CONCRETE FOOTING CONSTUCTION IS INCIDENTAL TO RAILING STEEL ITEM CONSTRUCTION.

PROJECT NO:5992-08-79	HWY:CTH MS	COUNTY:DANE	CONSTRUCTION DETAILS	SHEET 39	E



NOTES:
1) ALTERNATIVE BUSINESS SIGNING TO BE PAID FOR AS TRAFFIC CONTROL SIGNS FIXED MESSAGE

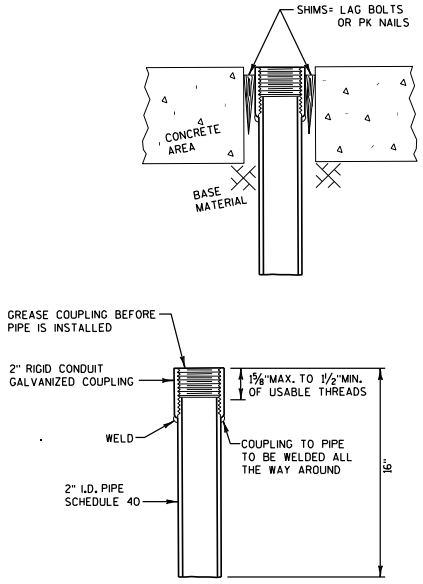
2) LEAVE ROOM BELOW SIGN ON POST FOR ATTACHMENT OF BUSINESS NAME SIGNS (PROVIDED BY OTHERS)

3) DO NOT MOUNT ON TO ANY EXISTING SIGN POST OR WITH ANY OTHER SIGN

4) SIGN SHALL BE BLACK LETTERS AND ARROWS ON WHITE BACKGROUND

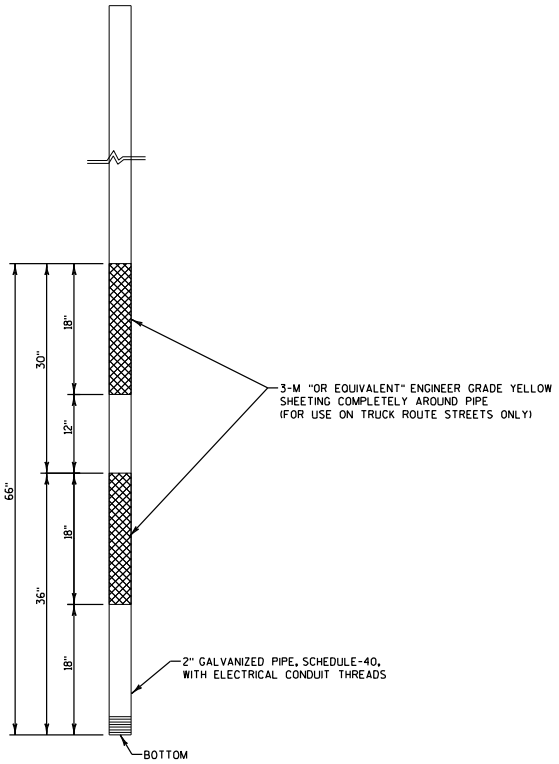
5) INSTALL SIGNS IN LOCATIONS AS DIRECTED BY THE ENGINEER ON A TEMPORARY SIGN SUPPORT AND MOVE SIGNS AS NECESSARY DURING STAGING CHANGES TO MAINTAIN VISIBILITY OF SIGN

TRAFFIC CONTROL SIGN FIXED MESSAGE DETAIL

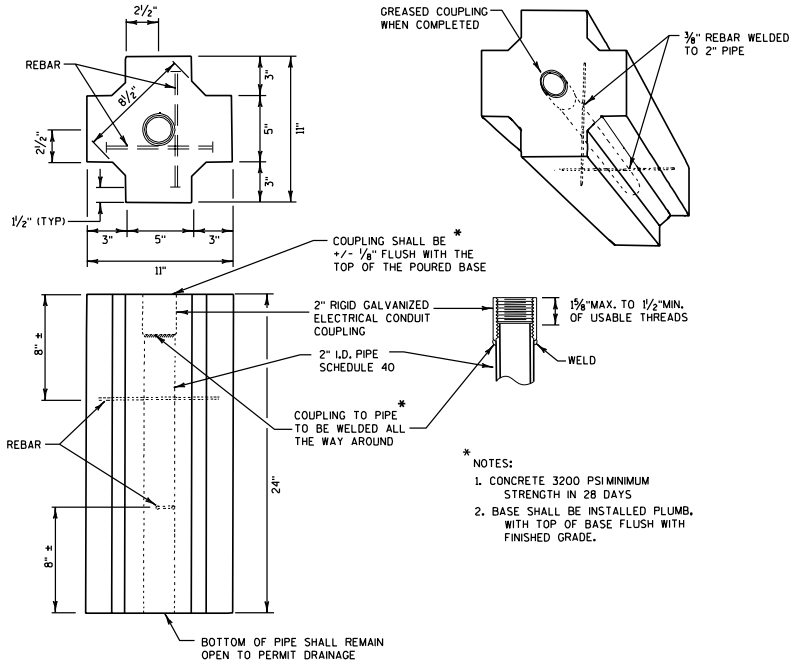


SIGN POST FOR CONCRETE INSTALLATION:
Drill or Coredrill 3" hole all the way through the concrete to the base material. With a temporary pipe 4 feet to 5 feet long, hand-tighten it into the insert (see Insert detail). Drive the insert into the base material at a level/plumb position, until the insert is flush with the top of the concrete. Now shim insert to a level/plumb position. Shims = different sizes of lag bolts or P.K. nails depend on level/plumb position of pipe. Also all shims must be set below the concrete/insert. Remove temporary pipe, replace with permanent pipe, tighten into insert with large pipe wrench until insert turns, then reset shims/or add shims until pipe no longer turns. Retighten pipe, recheck level/plumb/top of concrete with insert. Mix up a patch of Thorogrip® which is a waterproof anchoring cement for concrete. For the installation, Thorogrip should be mixed up in a liquid consistency, not a paste. Around the outside of the concrete hole, pour the Thorogrip until it is flush with the top of the insert. Recheck level/plumb/top of concrete with insert right away since Thorogrip is a fast-setting anchoring cement. May need to add more Thorogrip as it settles and no shims are showing when installation is complete. Installation needs to be level/plumb, solid and strong when completed.

SIGN POST BASE FOR CONCRETE INSTALLATION DETAIL

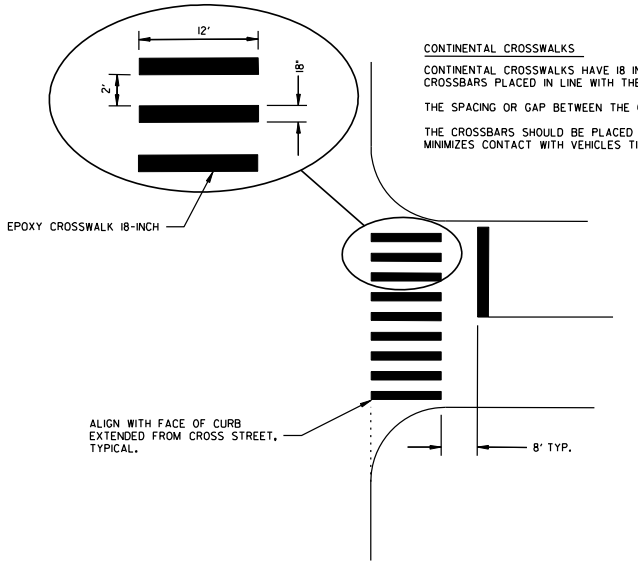


SIGN POST DETAIL



* NOTES:
1. CONCRETE 3200 PSI MINIMUM STRENGTH IN 28 DAYS
2. BASE SHALL BE INSTALLED PLUMB, WITH TOP OF BASE FLUSH WITH FINISHED GRADE.

PRECAST SIGN POST BASE DETAIL



CONTINENTAL CROSSWALKS

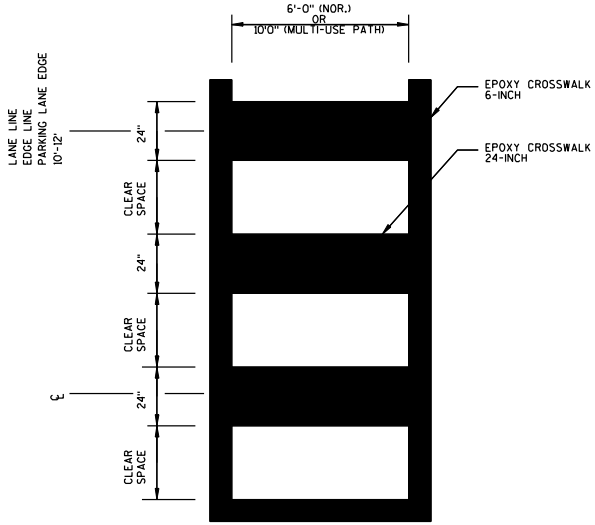
CONTINENTAL CROSSWALKS HAVE 18 INCH WIDE 12 FOOT LONG CROSSBARS PLACED IN LINE WITH THE TRAFFIC FLOW.

THE SPACING OR GAP BETWEEN THE CROSSBARS IS 24 INCHES

THE CROSSBARS SHOULD BE PLACED IN A MANNER THAT MINIMIZES CONTACT WITH VEHICLES TIRES.

CONTINENTAL CROSS WALK & STOP LINES DETAIL

SEE PAVEMENT MARKING PLANS FOR LOCATIONS



NOTE: CLEAR SPACE DIMENSION TO BE SELECTED BETWEEN 24"-48", AND APPLIED UNIFORMLY THROUGHOUT CROSSWALK.

CLEAR SPACE DIMENSION SELECTION SHALL ALLOW POSITION OF LONGITUDINAL MARKINGS ON CENTERLINE AND LANE LINES TO AVOID TYPICAL WHEEL PATHS.

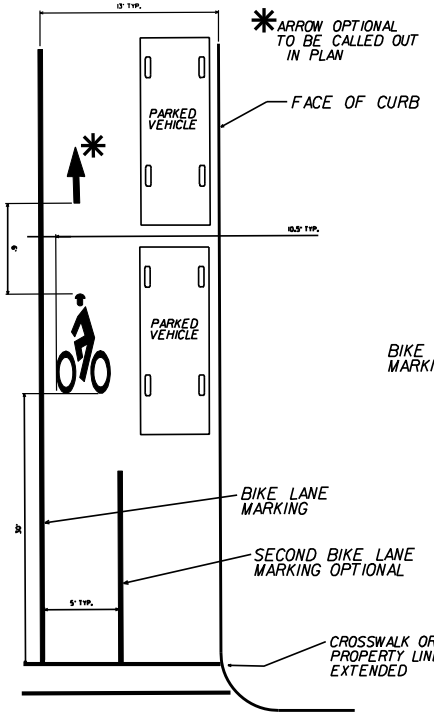
IN SKEWED CROSSWALKS, PLACE LONGITUDINAL MARKINGS (BLOCKS) IN THE DIRECTION OF VEHICLE MOVEMENT, NOT PERPENDICULAR TO TRANSVERSE LINES (EDGE OF CROSSWALK).

LADDER CROSS WALK DETAIL

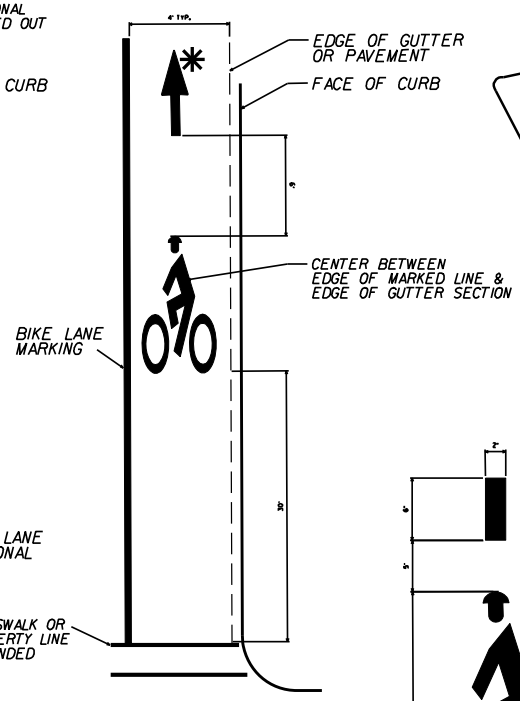
SEE PAVEMENT MARKING PLANS FOR LOCATIONS

2

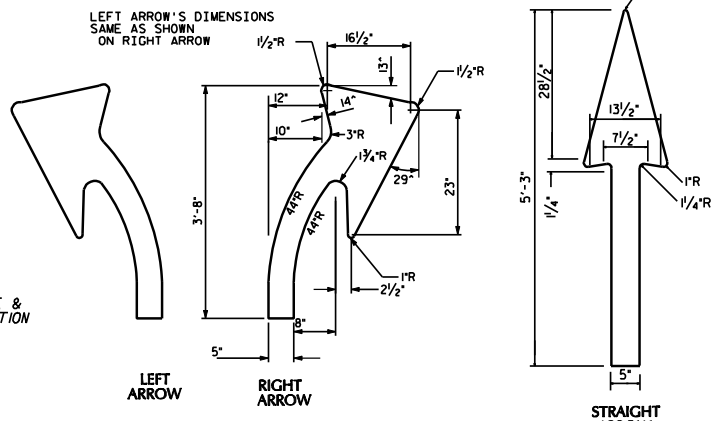
BIKE LANE MARKING DETAILS

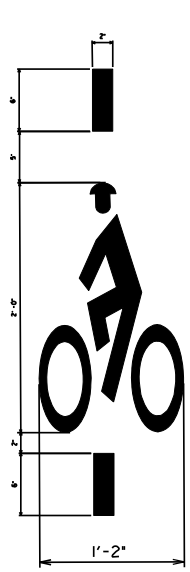


BIKE LANE SYMBOL & OPTIONAL ARROW LAYOUT —WITH PARKING LANE—

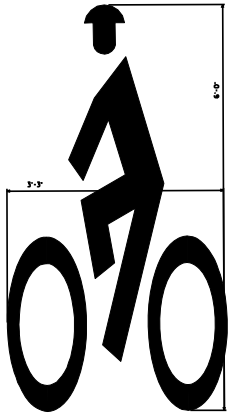


BIKE LANE SYMBOL & OPTIONAL ARROW LAYOUT —CURBSIDE—

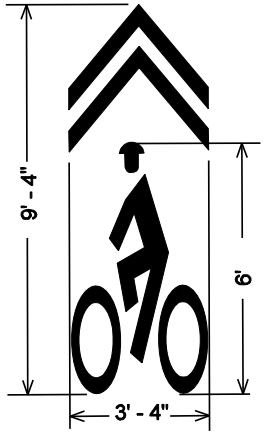




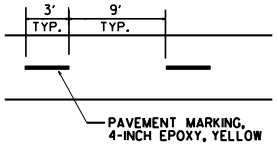
BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL FACING TRAFFIC LANE



SHAROW DETAIL

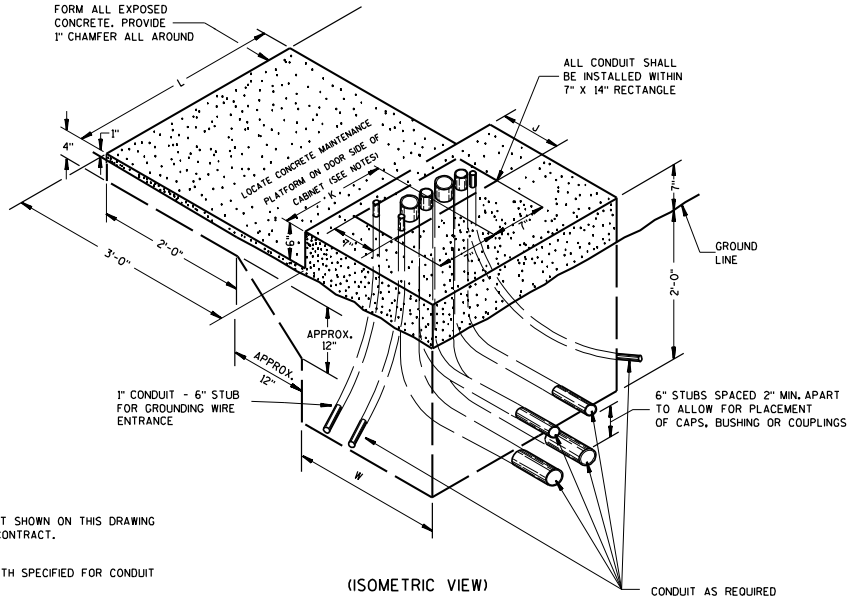


TYPICAL BIKE PATH PAVEMENT MARKINGS

FULL SIZE PATTERNS FOR ARROWS & WORD LEGENDS ARE AVAILABLE AT: CITY OF MADISON TRAFFIC ENGINEERING FIELD OPERATIONS FACILITY 1120 SAYLE ST. (608)266-4767

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 43	E

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	L	W	J	K	
TYPE M	40"	30"	12"	20"	.823
TYPE P	48"	30"	16"	24"	1.179
TYPE M MODIFIED	-	-	-	-	-
TYPE P MODIFIED	-	-	-	-	-
TYPE OTHER	-				-



(ISOMETRIC VIEW)

CONCRETE CONTROL CABINET BASES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL CONDUIT SHALL BE PVC, SCHEDULE 40

DEPTH OF CONDUIT EXITING THE BASE SHALL MATCH THE DEPTH SPECIFIED FOR CONDUIT INSTALLATION.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL.

MAINTENANCE PLATFORM SHALL NOT BE INSTALLED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

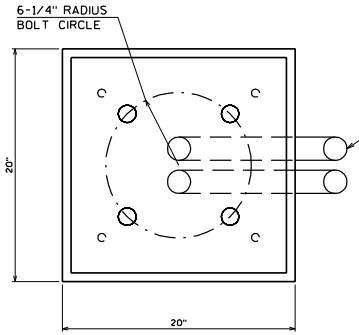
ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MINIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUITS SHALL EXIT THE BASE IN THE DIRECTION OF THE STRUCTURE IT IS TERMINATING INTO.

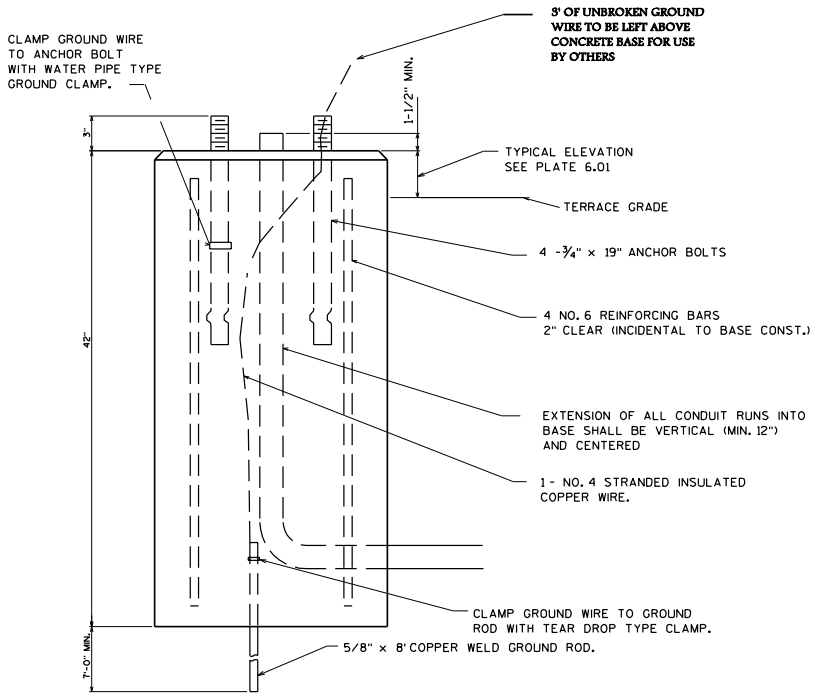
MAINTENANCE PLATFORM SIZE MAY VARY ON ACCOUNT OF CONDITIONS. VERIFY THE MAINTENANCE PLATFORM SIZE WITH ENGINEER PRIOR TO POURING BASE.

TYPE "M" & "P" CONTROLLER BASE DETAIL



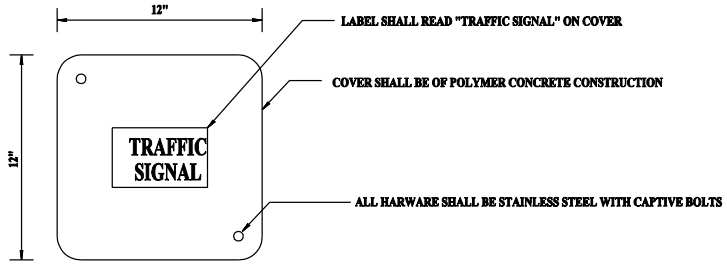
NOTE: FORMS SHALL BE OF SUFFICIENT DEPTH TO PROVIDE A MINIMUM OF 12" OF FORMED BASE BELOW GRADE ON THE LOW SIDE.

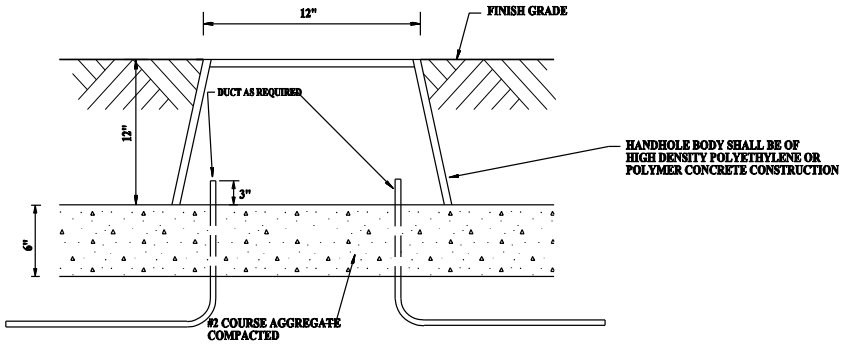
ALL CONDUIT AND ELBOWS SHOWN IN CONCRETE BASE TO BE INCLUDED IN UNIT PRICE FOR TYPE "G" TRAFFIC SIGNAL BASE .



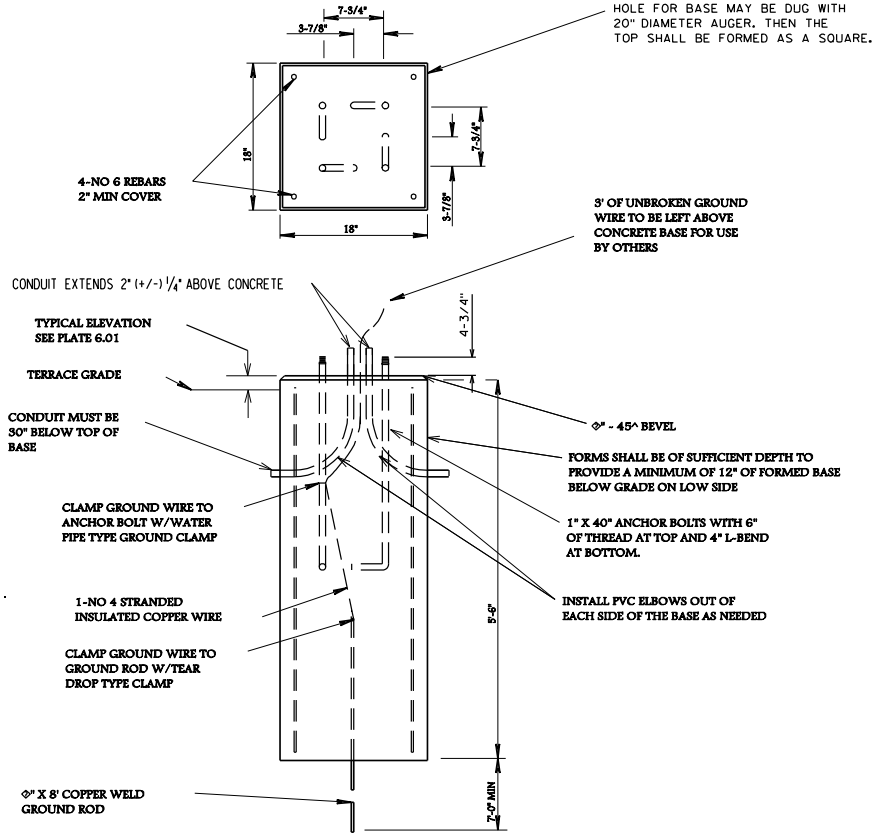
TYPE "G" BASE DETAIL

2

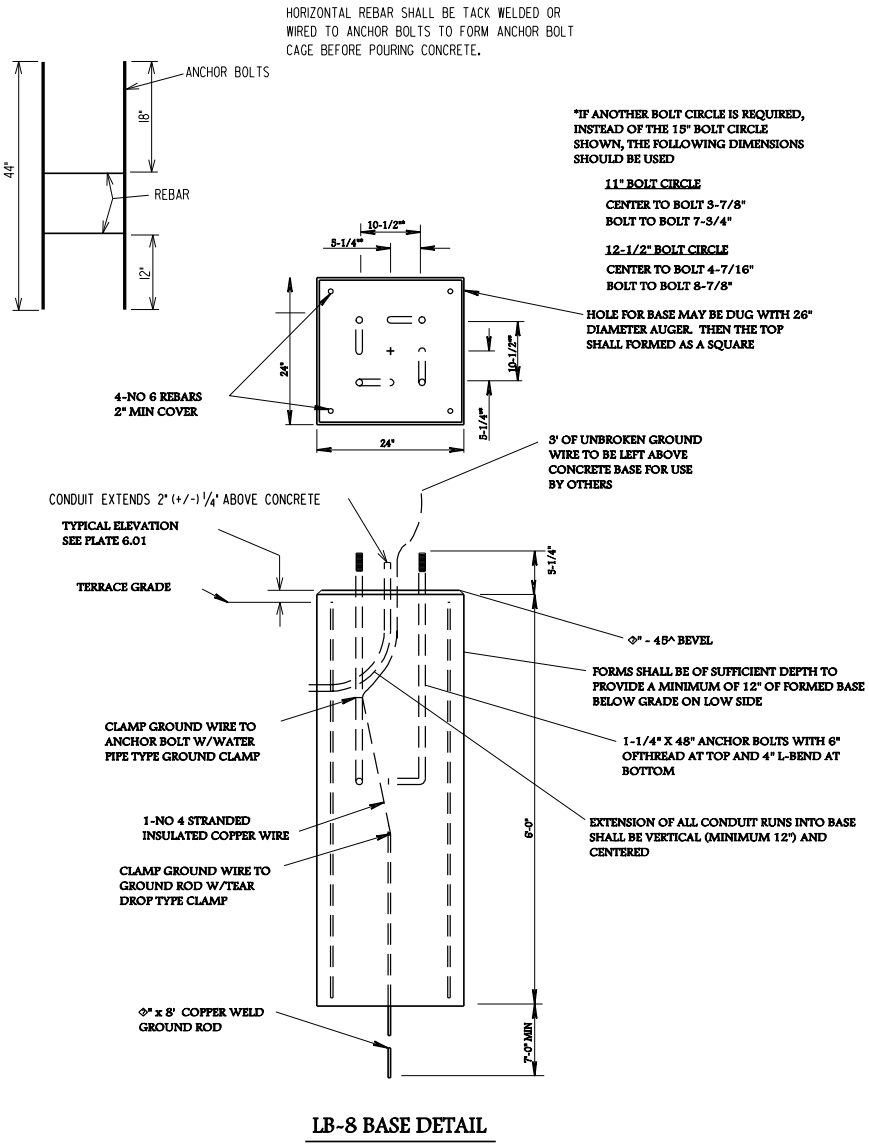




ELECTRICAL PULLBOX TYPE 3 DETAIL



LB-3 BASE DETAIL

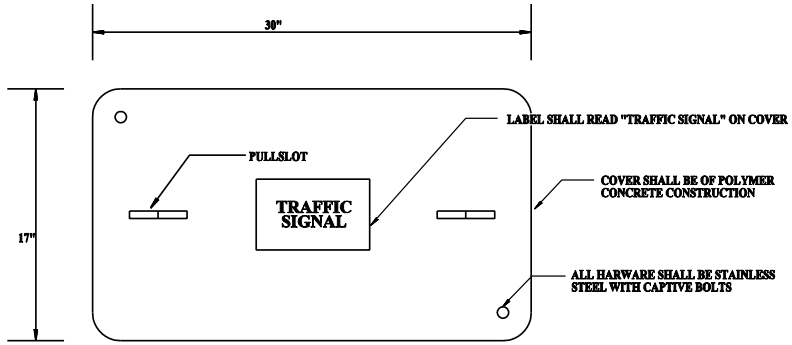


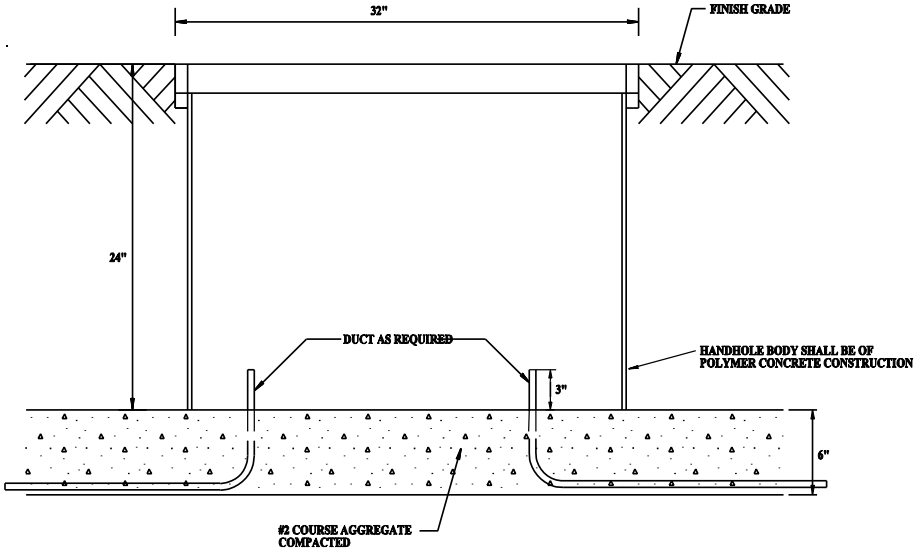
LB-8 BASE DETAIL

2

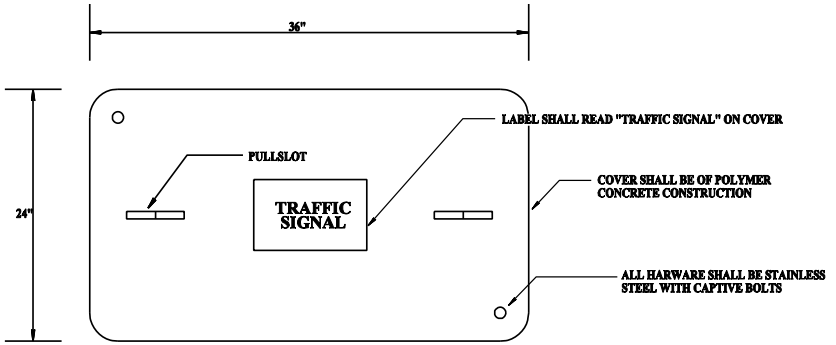
PROJECT NO:5992-08-79	HWY:CTH MS	COUNTY:DANE	CONSTRUCTION DETAILS	SHEET	E

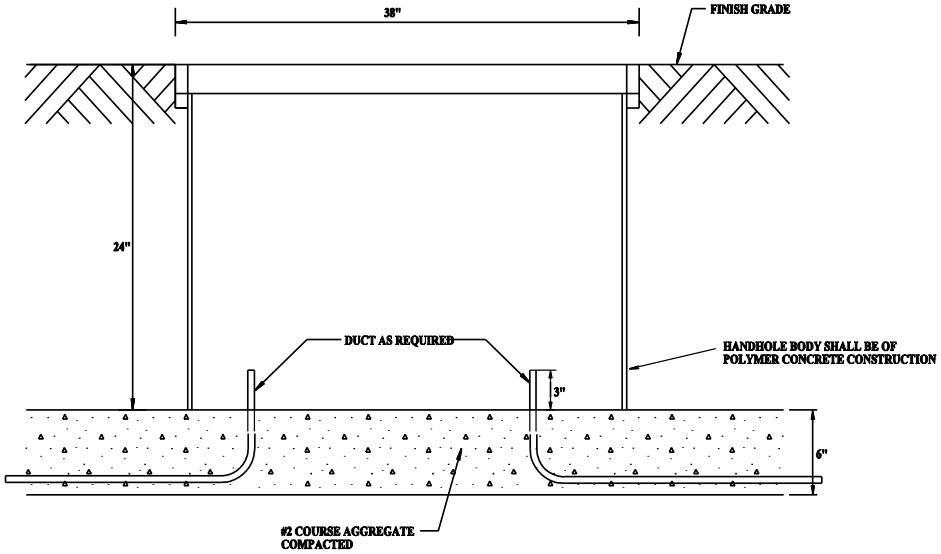
FILE NAME : G:\Madison\MD2009035\DGN\021001_cd.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42





ELECTRIC PULLBOX TYPE 1



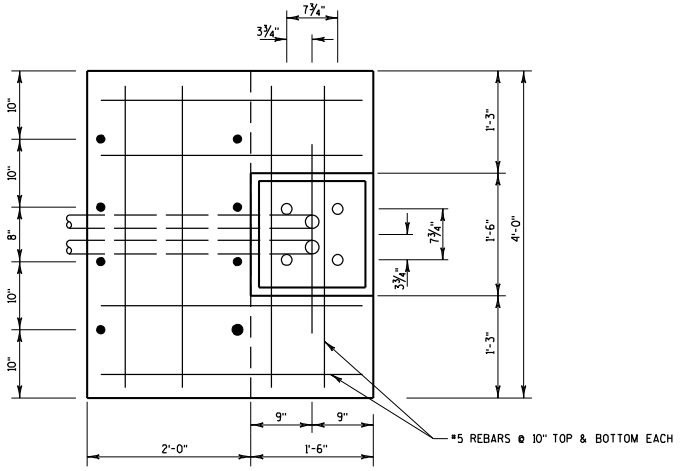


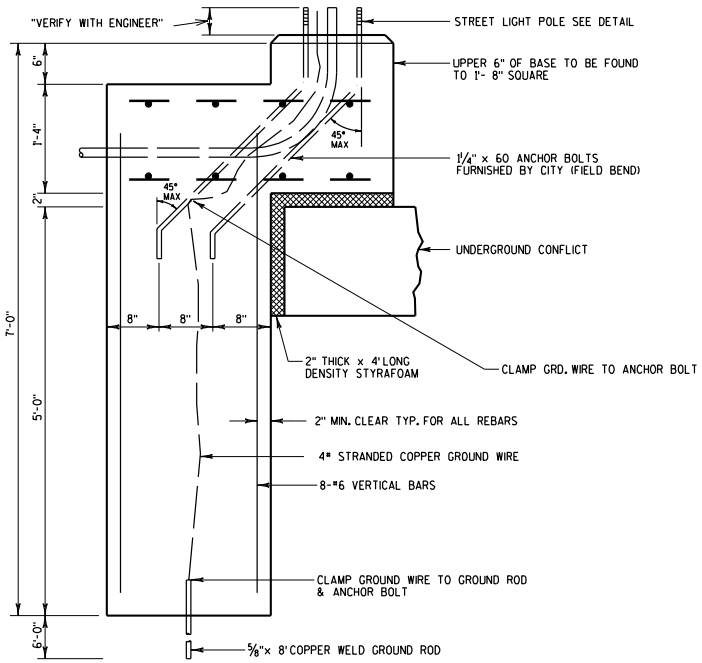
ELECTRIC PULLBOX TYPE 5

PROJECT NO:5992-08-79	HWY:CTH MS	COUNTY:DANE	CONSTRUCTION DETAILS	SHEET 47 E

FILE NAME : G:\Madison\MD2009035\DGN\021001_cd.dgn PLOT DATE : 12/4/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

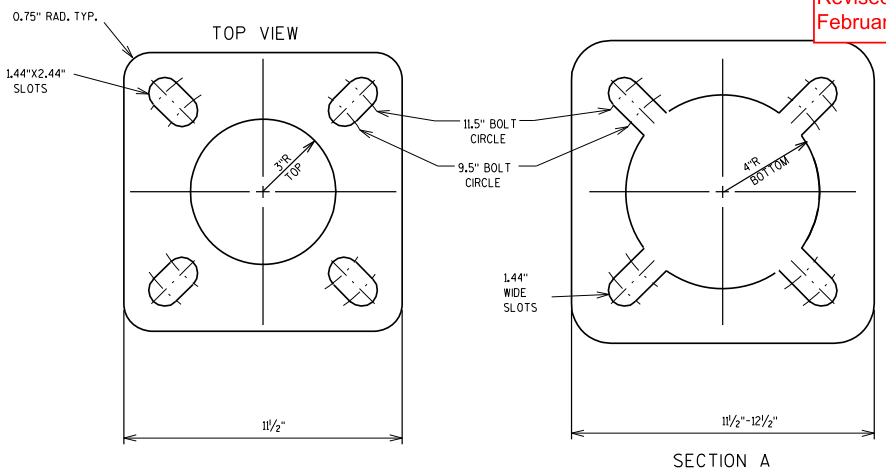
WISDOT/CADDS SHEET 42

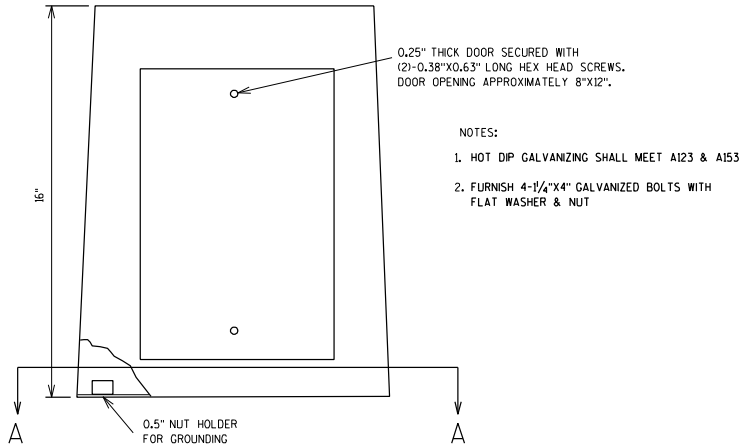




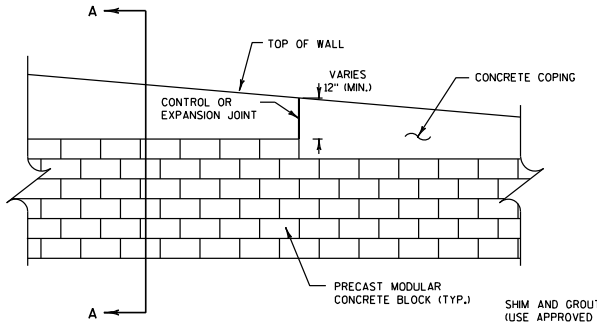
CONCRETE BASE OFFSET DETAIL

Addendum No. 1
ID 5992-08-79
Revised Sheet 48
February 1, 2012

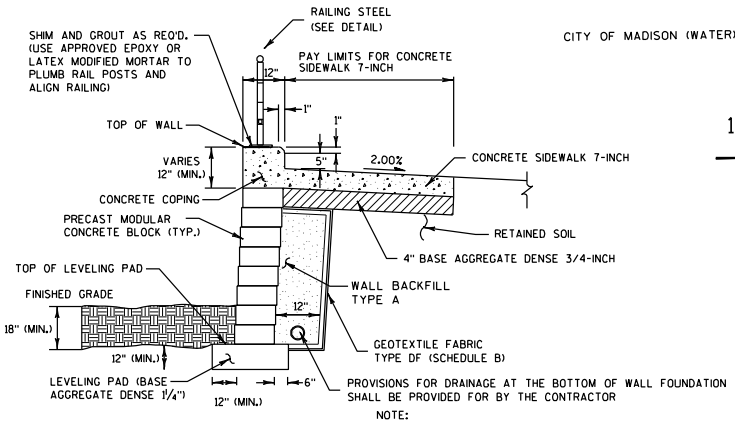




TRANSFORMER BASE 16-INCH STEEL DETAIL



FRONT VIEW



SECTION A-A

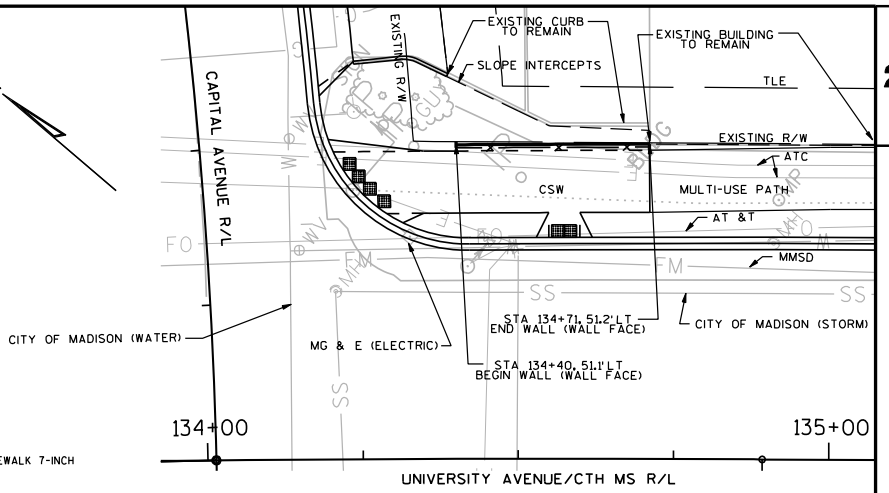
NOTE:

JOINTS TO BE PLACED EVERY 5-FEET
IN CONCRETE SIDEWALK

RETAINING WALL TYPICAL SECTION

NTS

STA 134+40 LT - STA 134+71 LT



RETAINING WALL PLAN VIEW

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE GRADES PROVIDED ON THIS DETAIL.

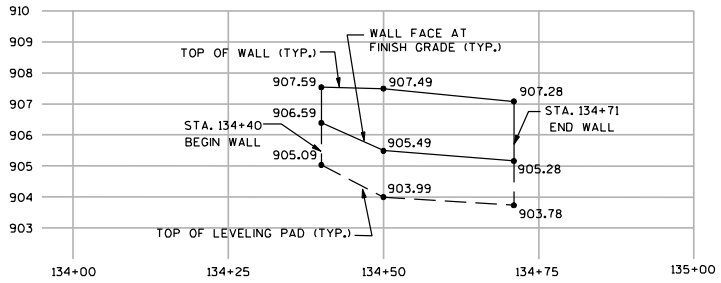
DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED SLOPE BEHIND THE WALL AS SHOWN ON THE CROSS SECTIONS.

WALL TO HAVE SPLIT BLOCK APPEARANCE AND BE TAN IN COLORATION.

ALLOWABLE SOIL BEARING CAPACITY = 2,500 PSF.

SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
GRANULAR FILL	125	30°	0



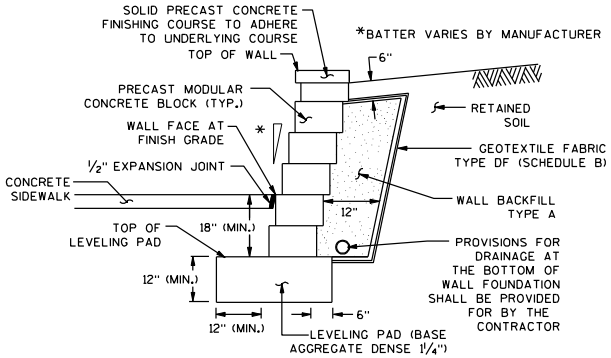
RETAINING WALL PROFILE VIEW

STA 134+40 LT - STA 134+71 LT

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 49	E

SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
GRANULAR FILL	125	30°	0

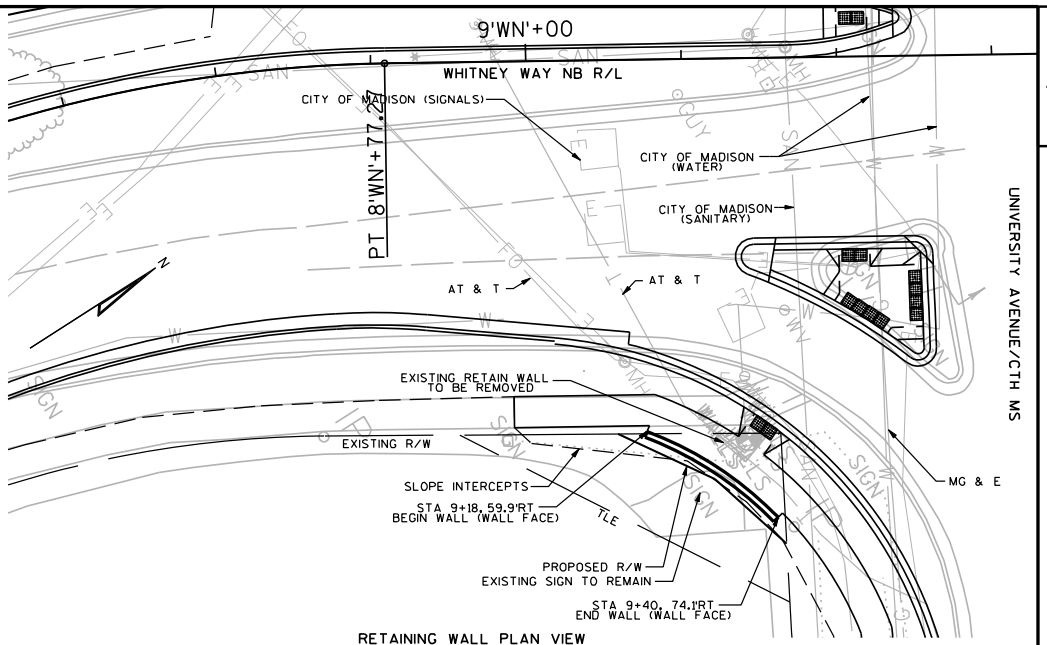


RETAINING WALL TYPICAL SECTION

NTS

STA. 9+18 RT - STA 9+40 RT

(WHITNEY WAY)



RETAINING WALL PLAN VIEW

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

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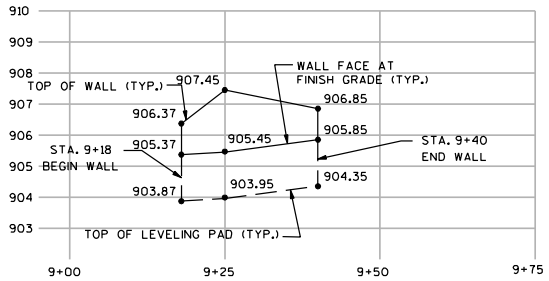
WALL TO HAVE SPLIT BLOCK APPEARANCE AND BE TAN IN COLORATION.

ALLOWABLE SOIL BEARING CAPACITY = 2,500 PSF.



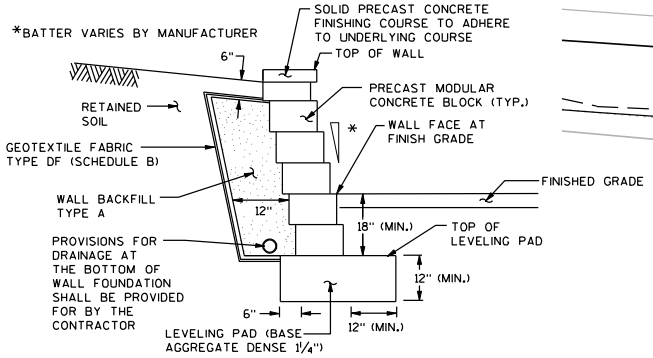
RETAINING WALL PROFILE VIEW

STA 9+18 RT - STA 9+40 RT

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 50	E

SOIL PARAMETERS

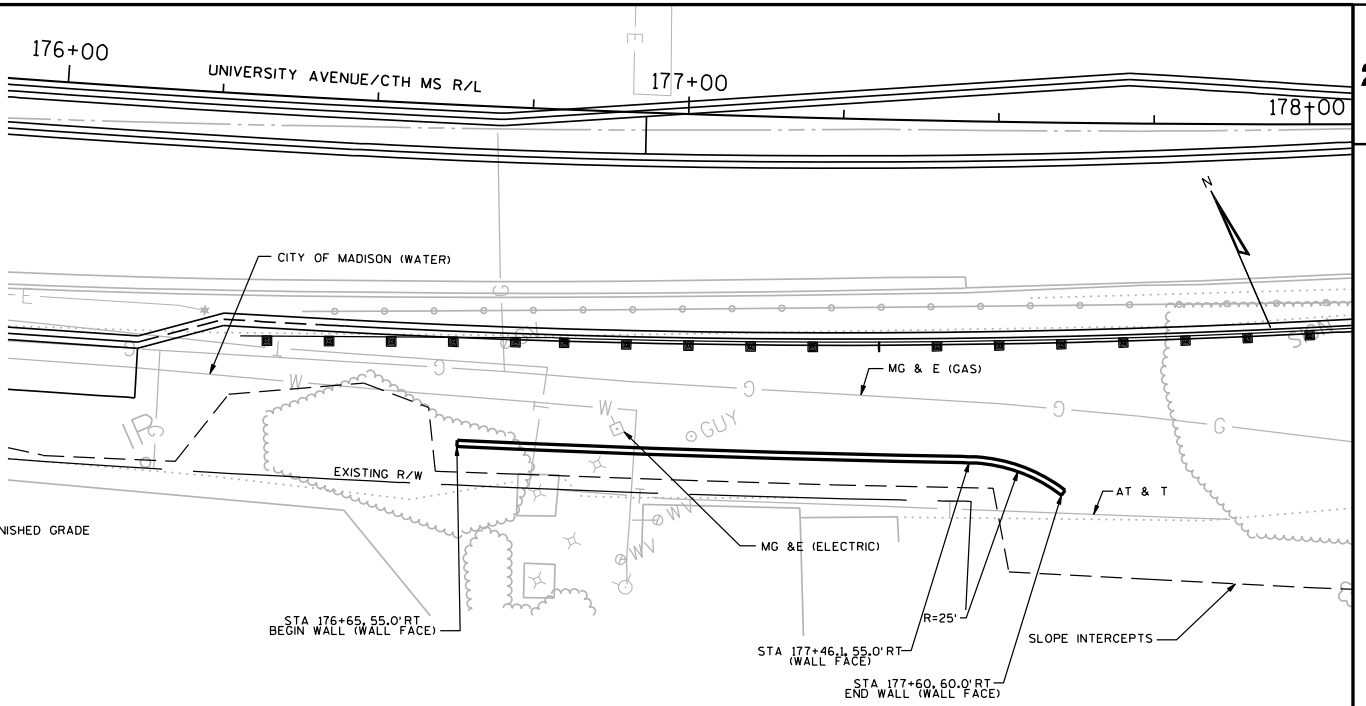
SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
GRANULAR FILL	125	30°	0



RETAINING WALL TYPICAL SECTION

NTS

STA. 176+65 RT - STA. 177+60 RT



RETAINING WALL PLAN VIEW

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

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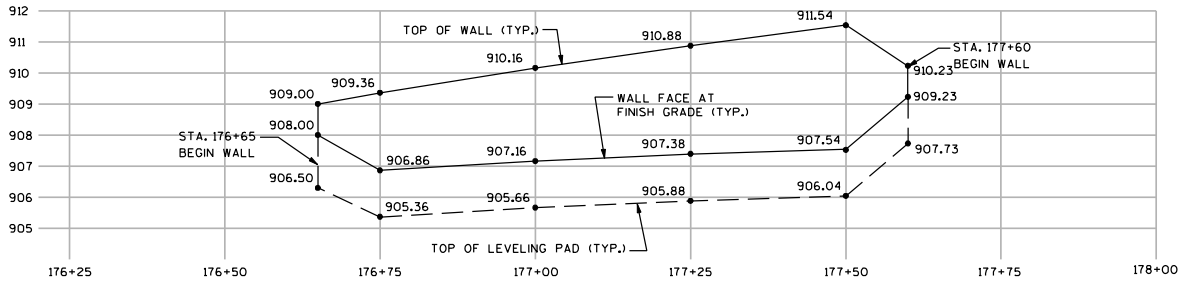
DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED SLOPE BEHIND THE WALL AS SHOWN ON THE CROSS SECTIONS.

WALL TO HAVE SPLIT BLOCK APPEARANCE AND BE TAN IN COLORATION.

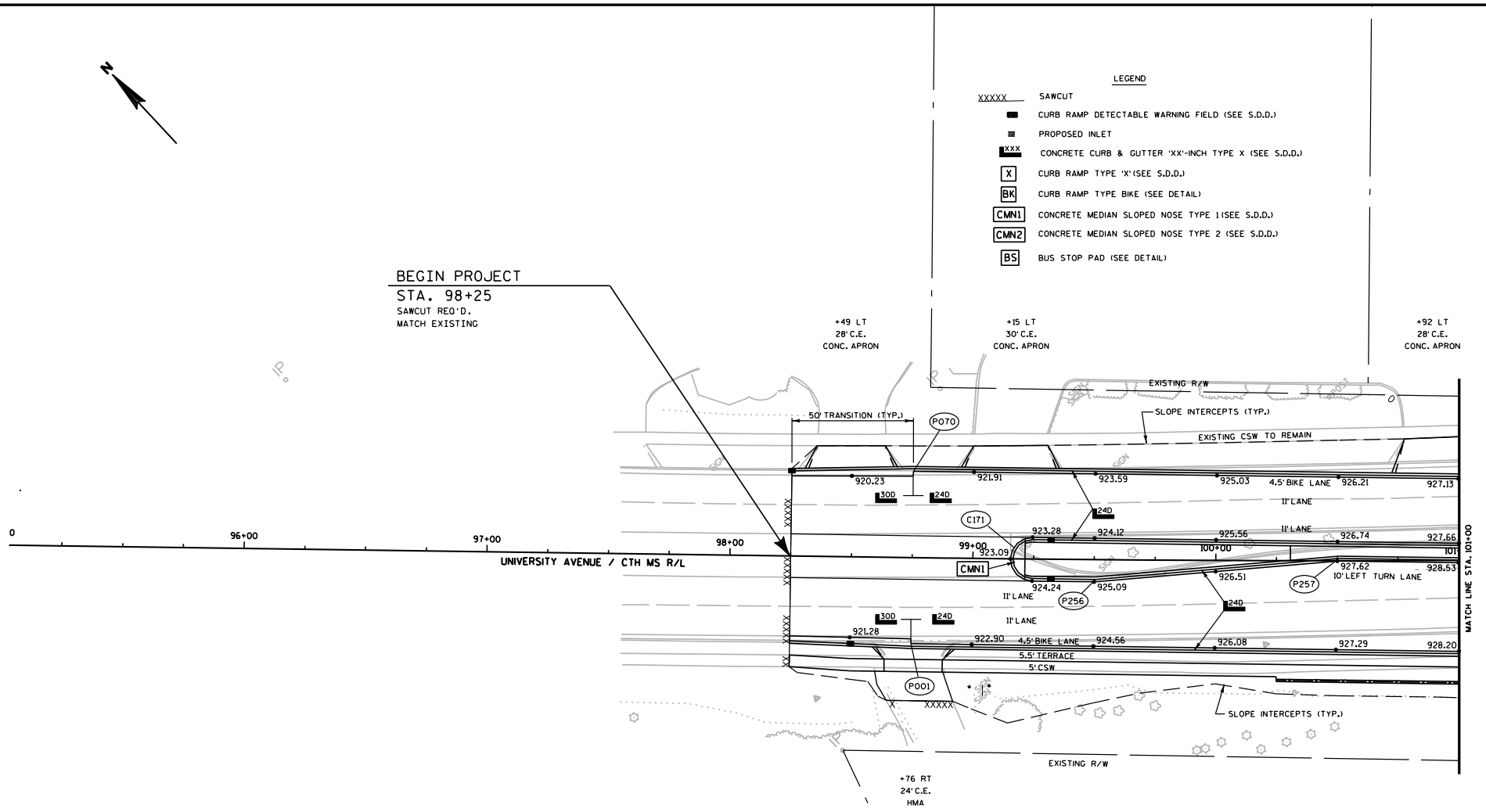
ALLOWABLE SOIL BEARING CAPACITY = 2,500 PSF.



RETAINING WALL PROFILE VIEW

STA 176+65 RT - STA 177+60 RT

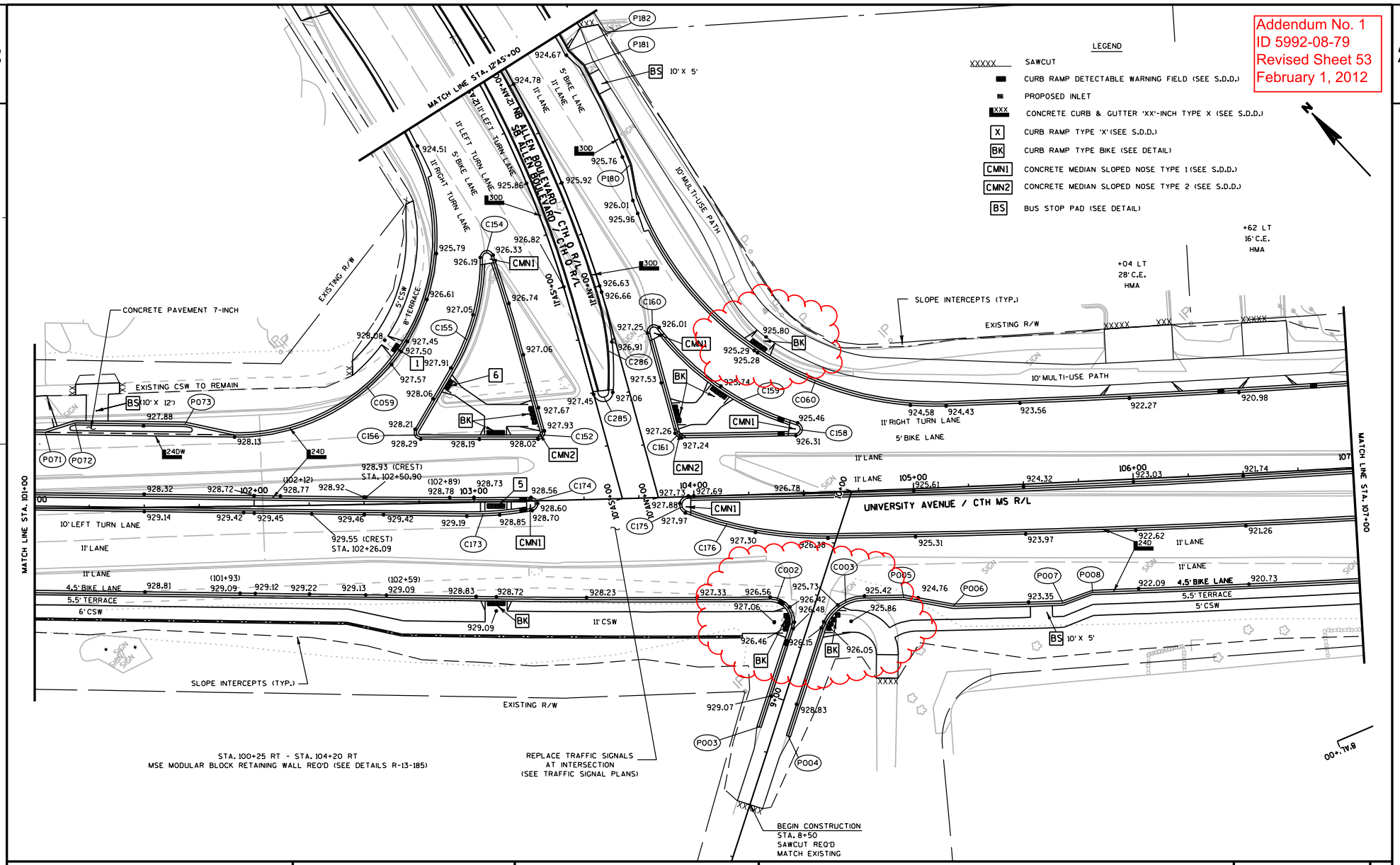
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 51 E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\021201_pd.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

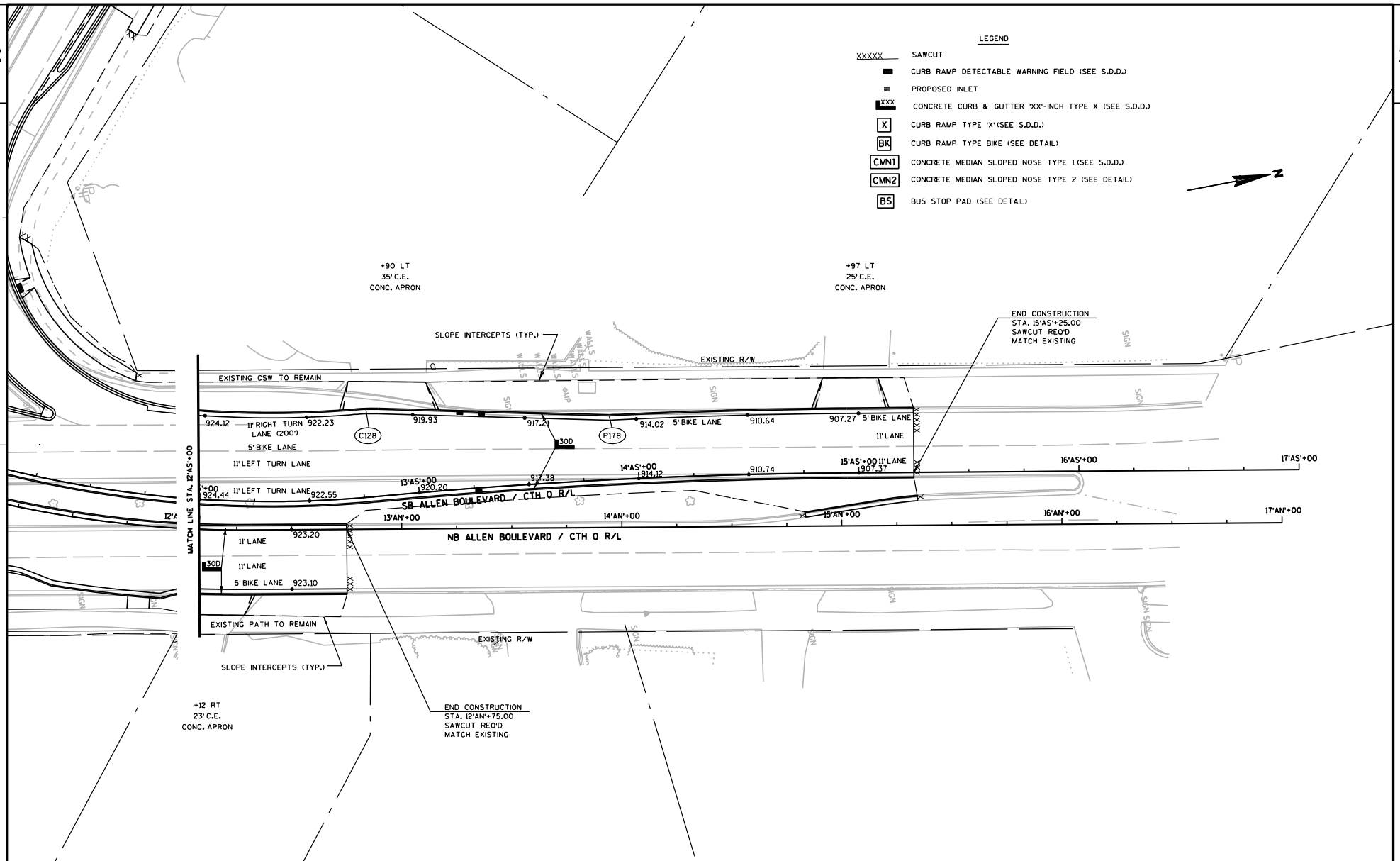
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 53	E

FILE NAME : G:\Madison\MD2009035\DGN\021202_pd.dgn PLOT DATE : 1/26/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

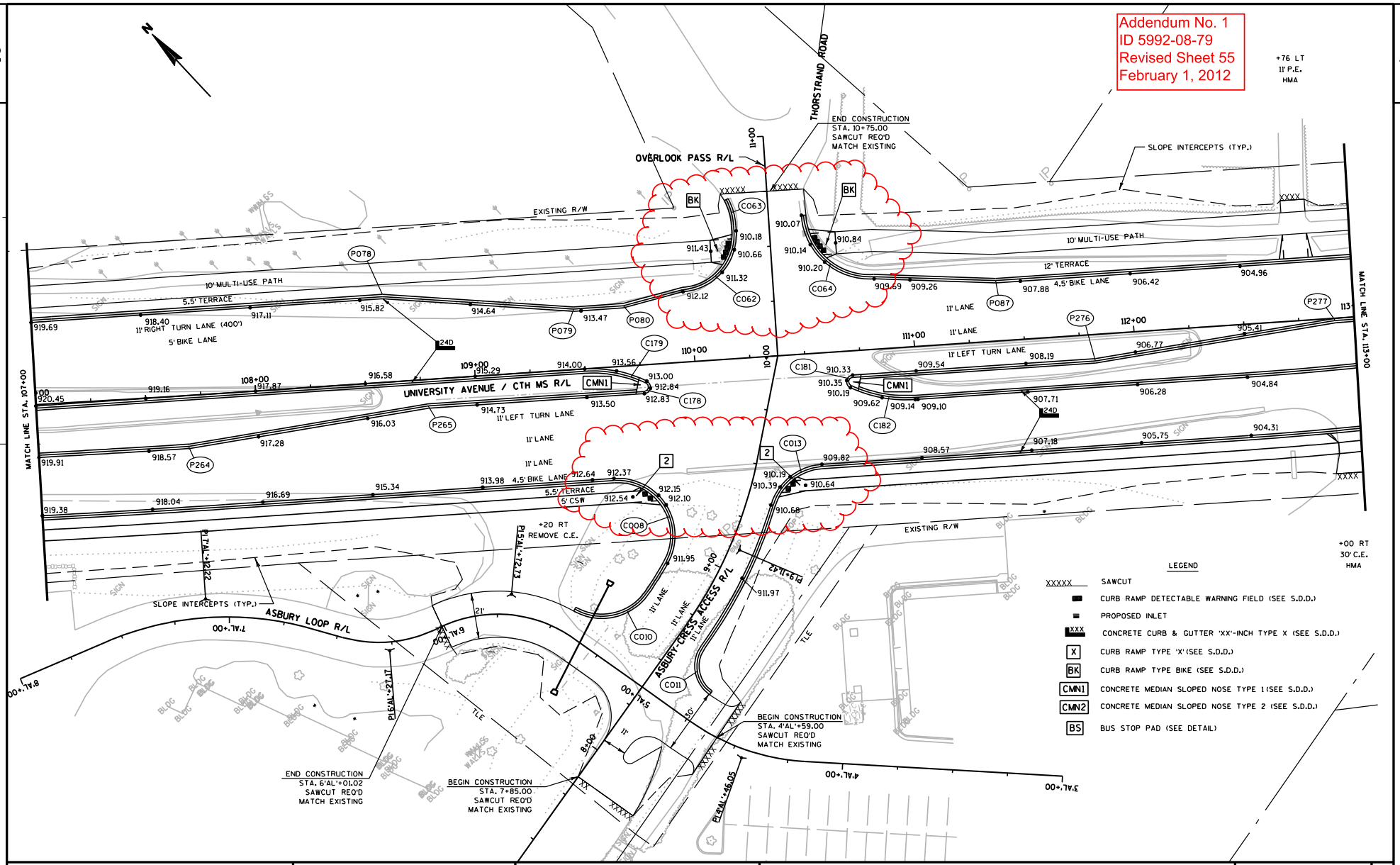
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (ALLEN BOULEVARD)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\021203_pd (allen).dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

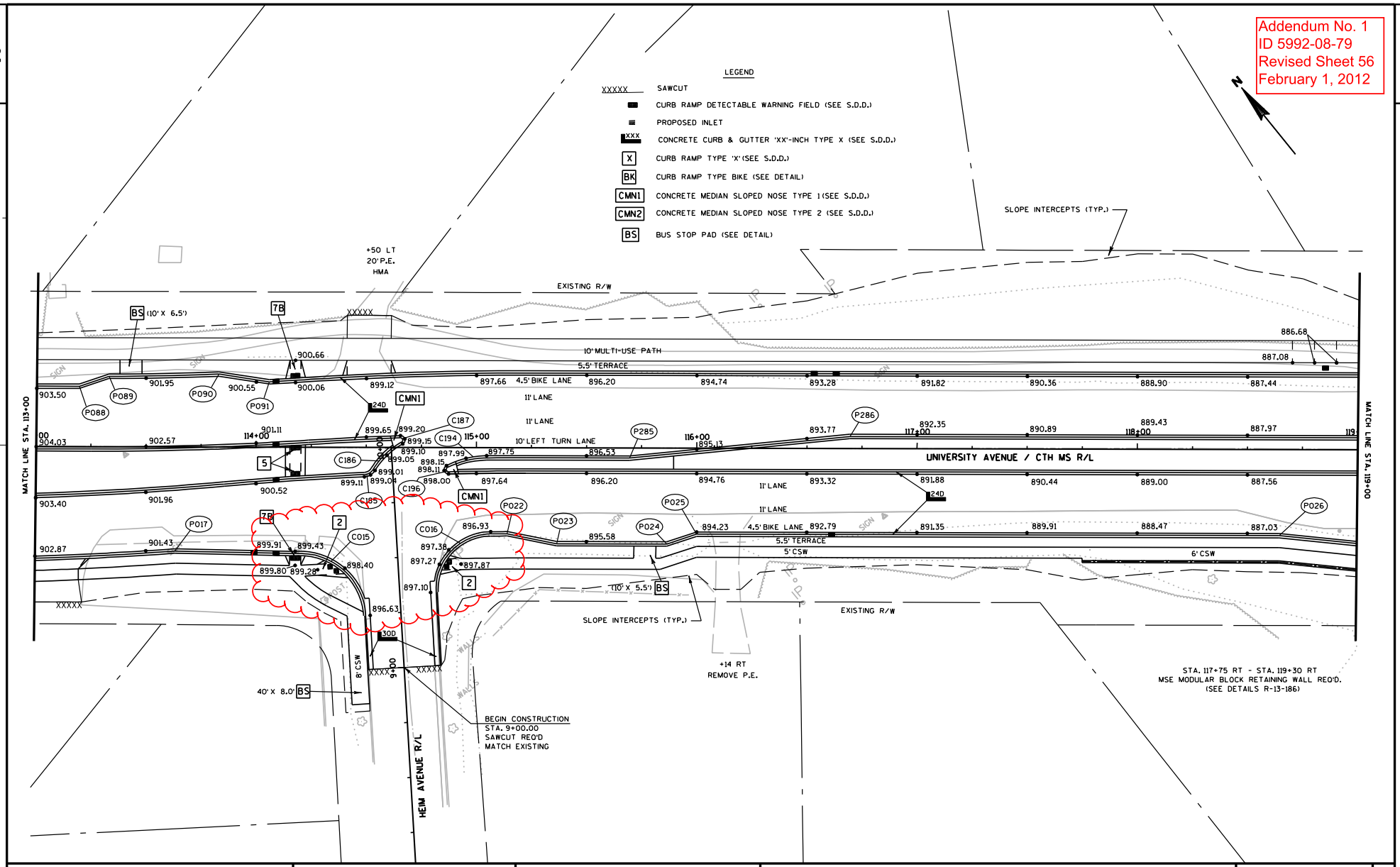


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 55	E

FILE NAME : G:\Madison\MD2009035\DGN\021204_pd.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

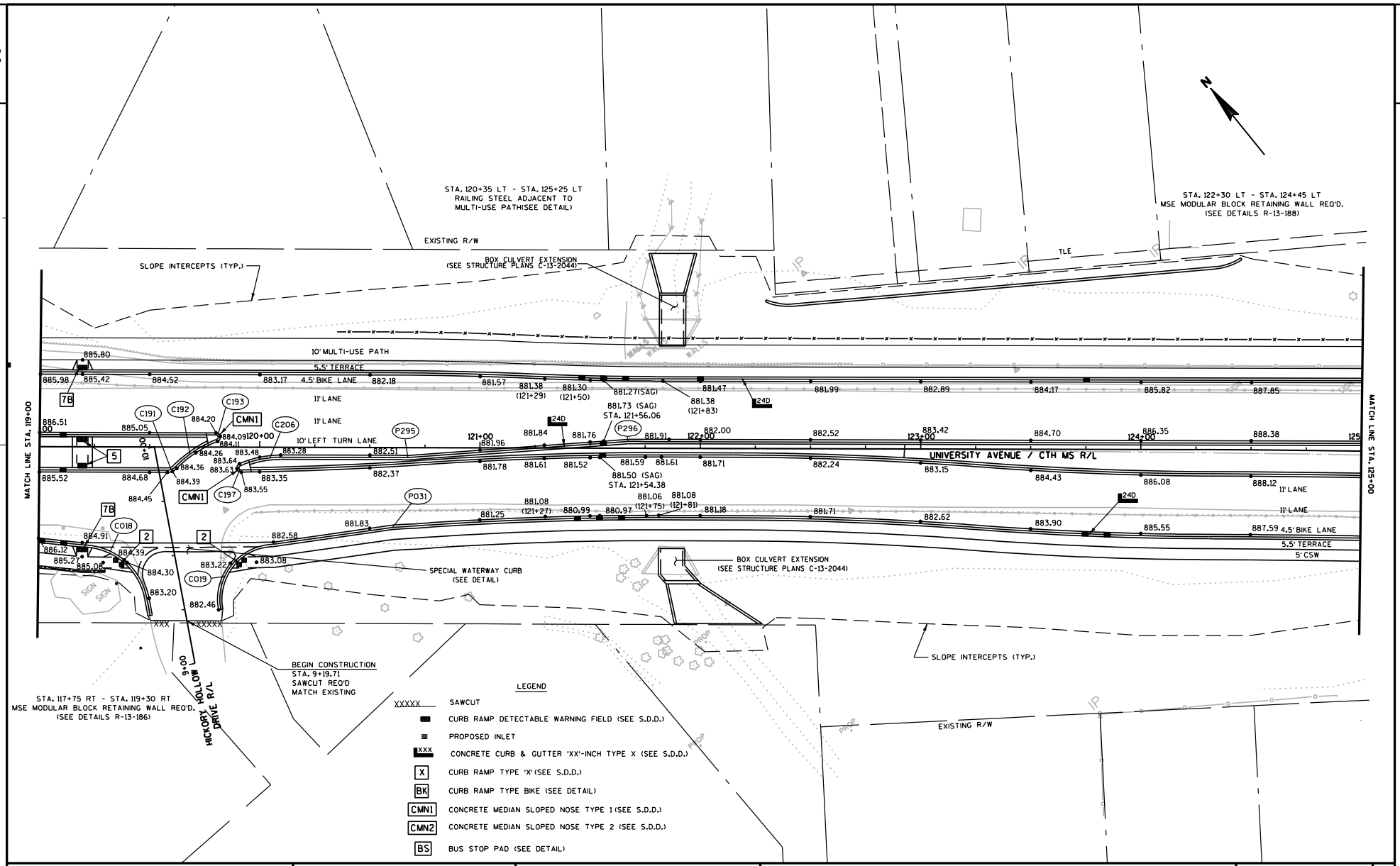
Addendum No. 1
ID 5992-08-79
Revised Sheet 56
February 1, 2012



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 56	E

FILE NAME : G:\Madison\MD2009035\DGN\021205_pd.dgn PLOT DATE : 1/26/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

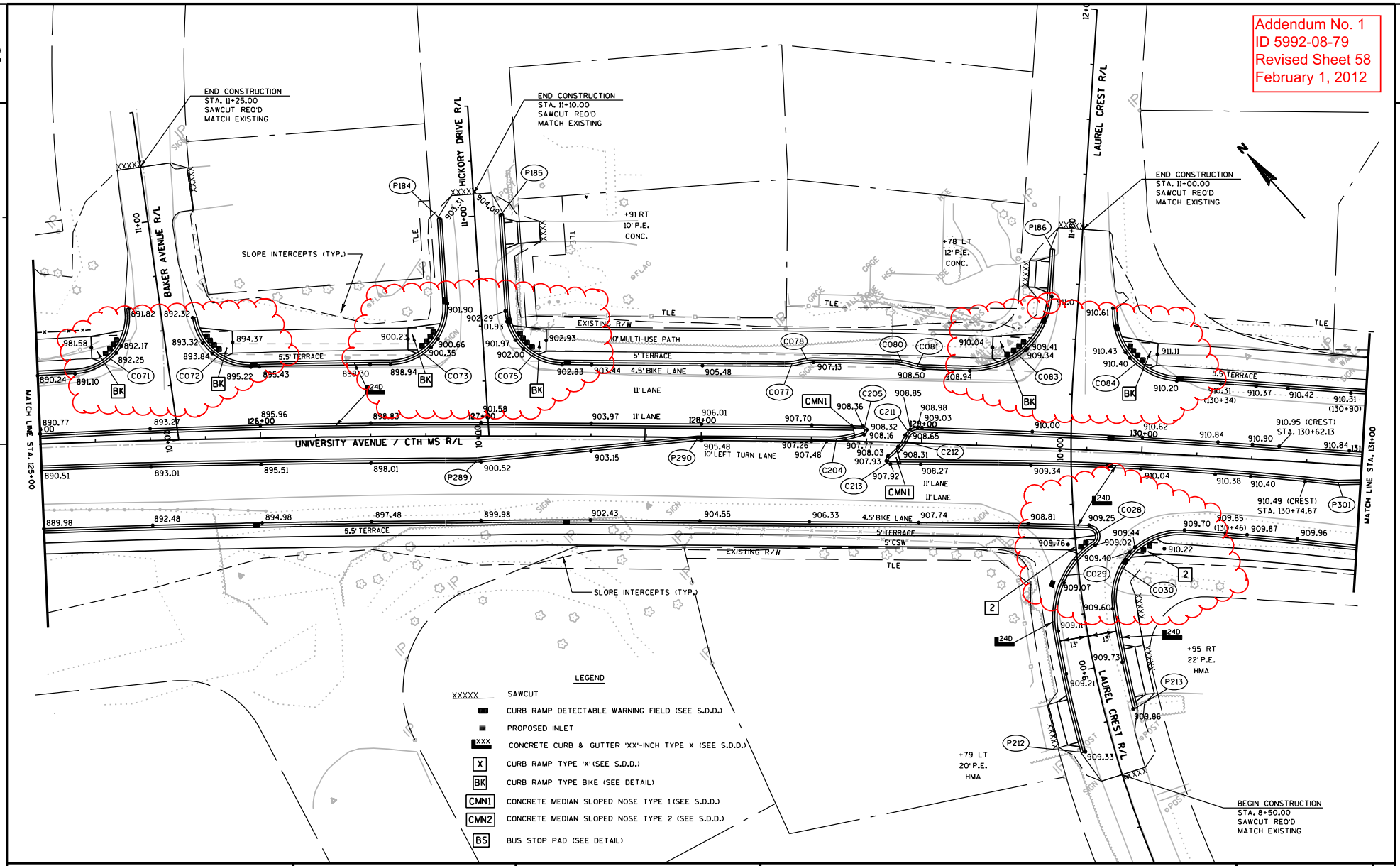


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\021206_pd.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

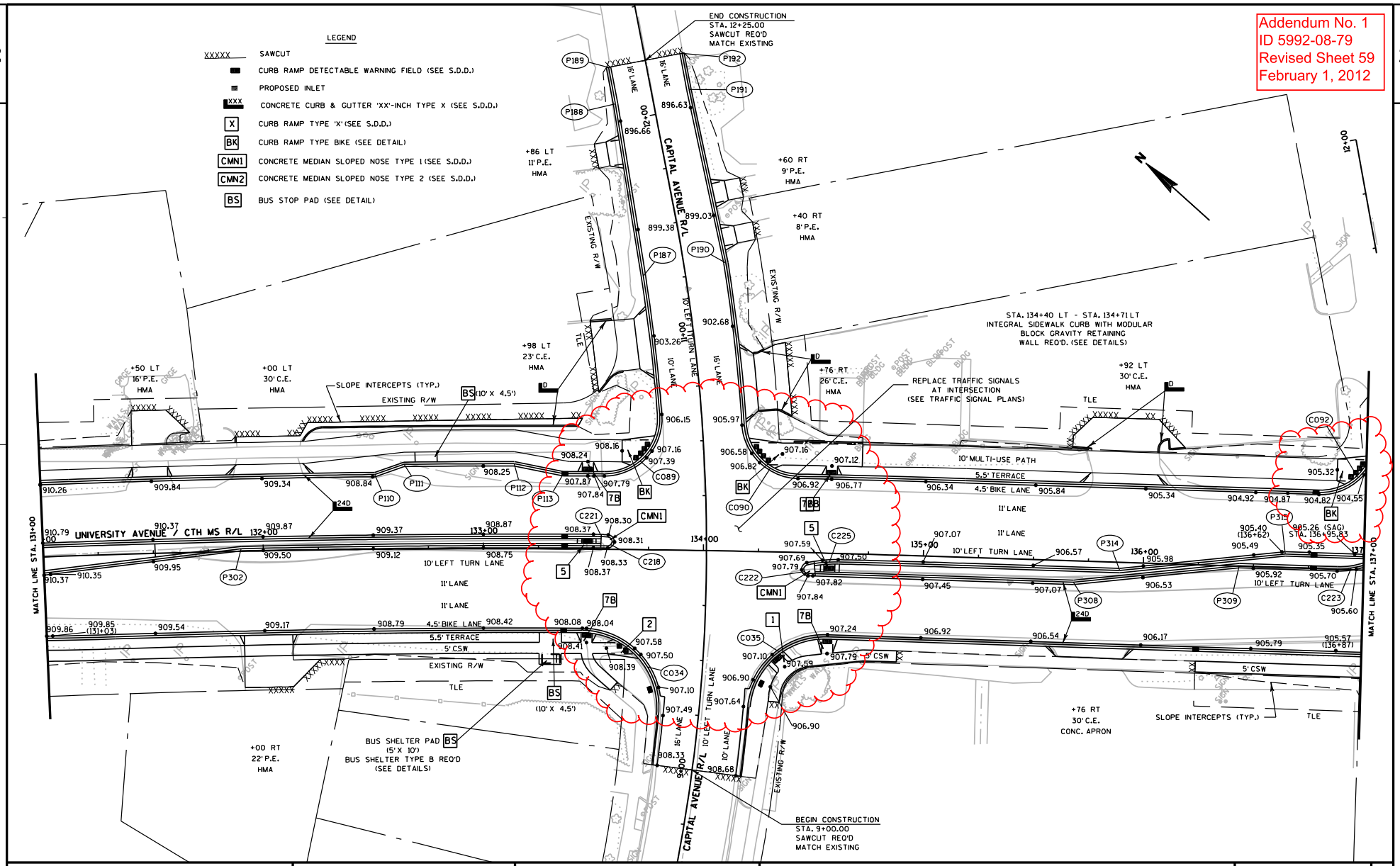
Addendum No. 1
ID 5992-08-79
Revised Sheet 58
February 1, 2012



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 58	E

FILE NAME : G:\Madison\MD2009035\DGN\021207_pd.dgn PLOT DATE : 1/26/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

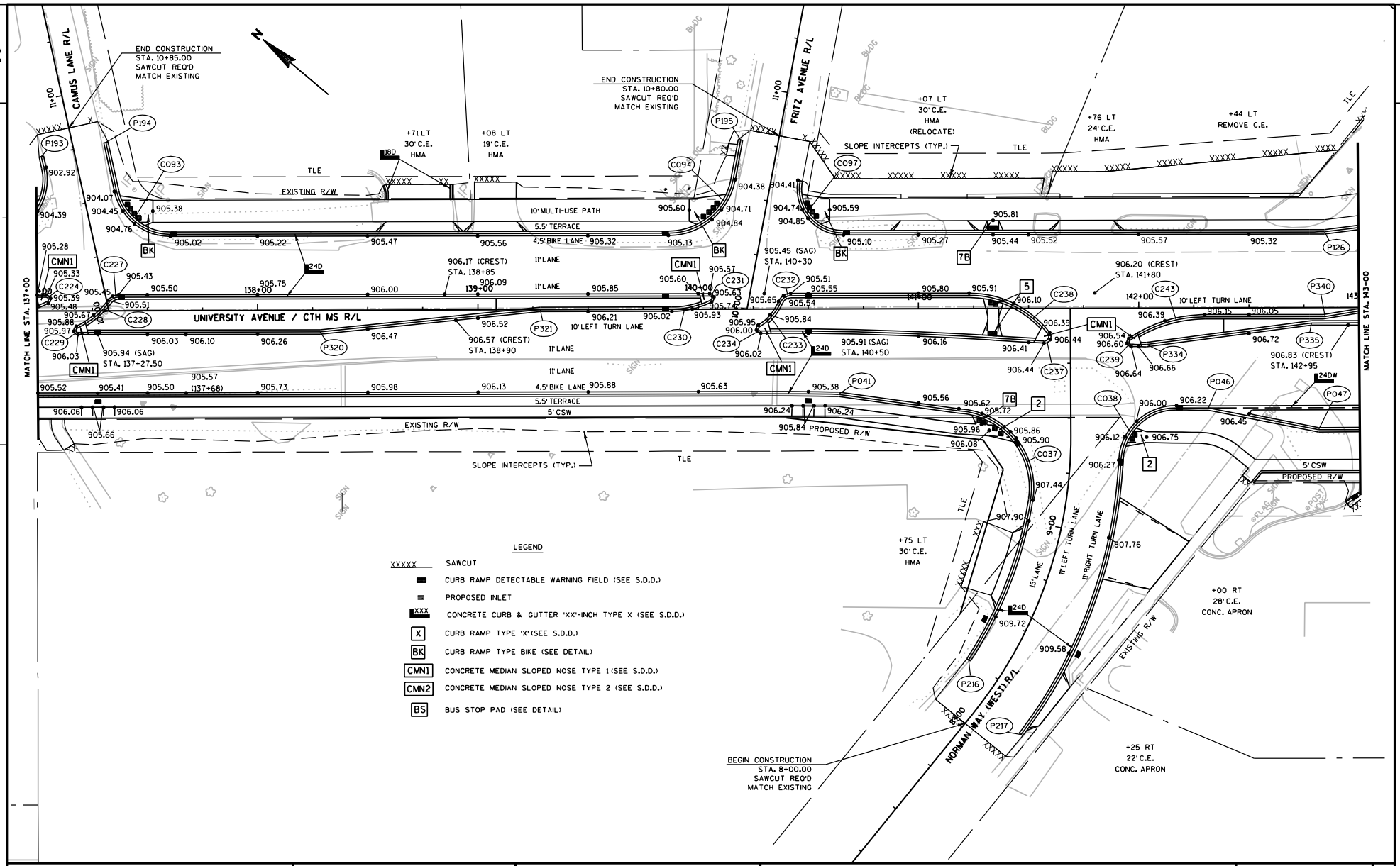
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 59	E

FILE NAME : G:\Madison\MD2009035\DGN\021208_pd.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

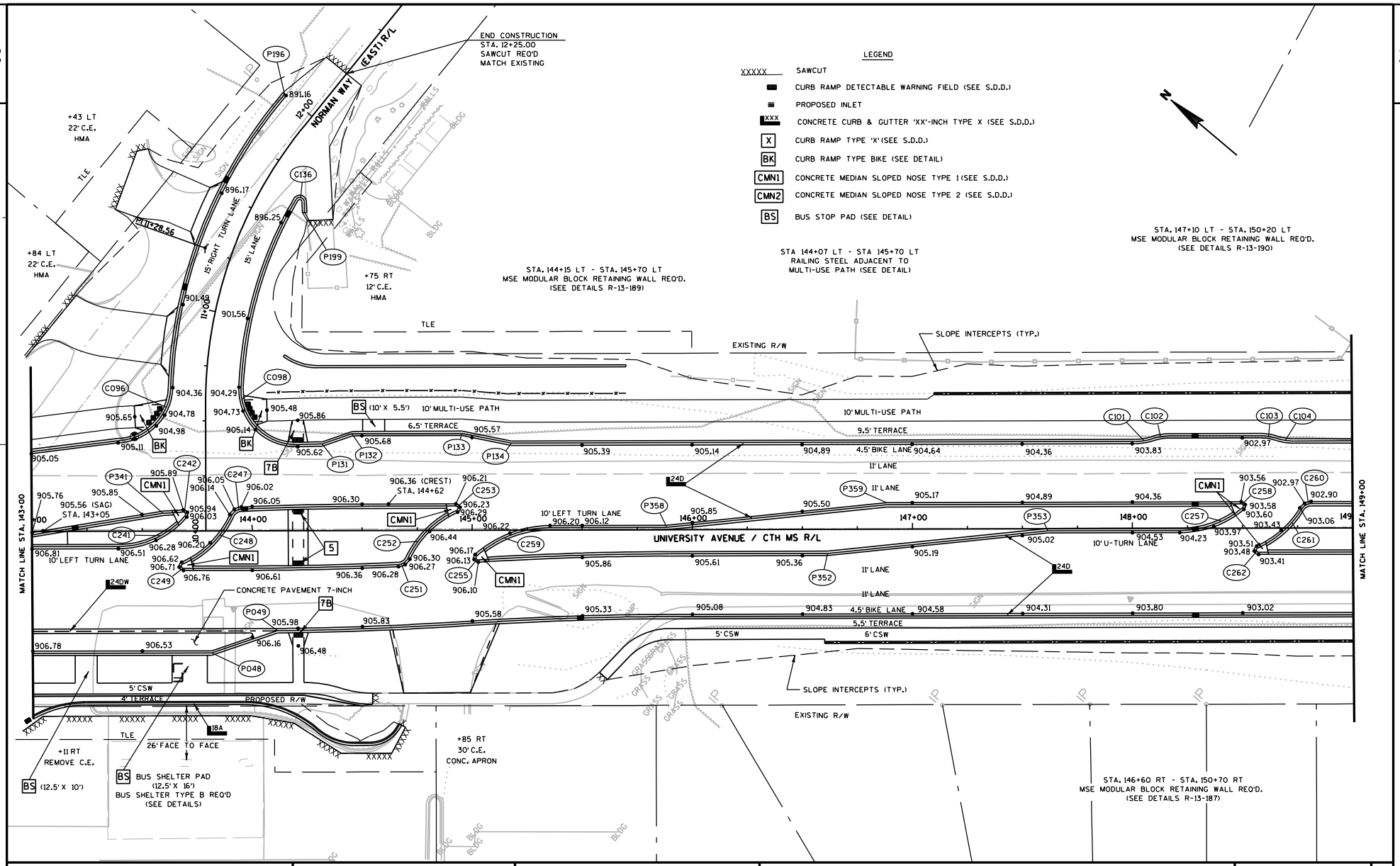
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 60	E

FILE NAME : g:\madison\md2009035\dgn\021209_pd.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

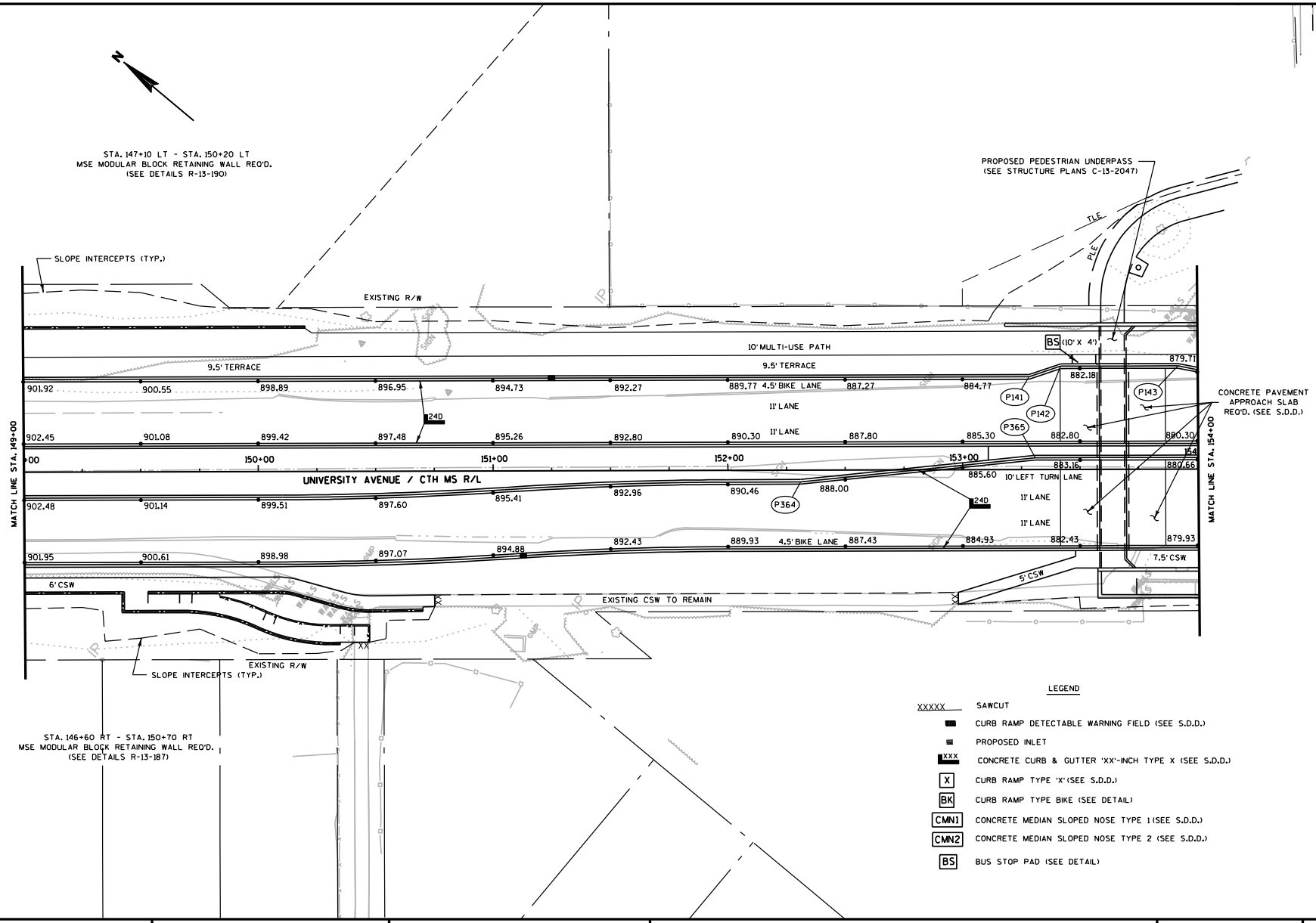
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 61	E

FILE NAME : G:\Madison\MD2009035\DGN\021210_pd.dgn PLOT DATE : 3/9/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

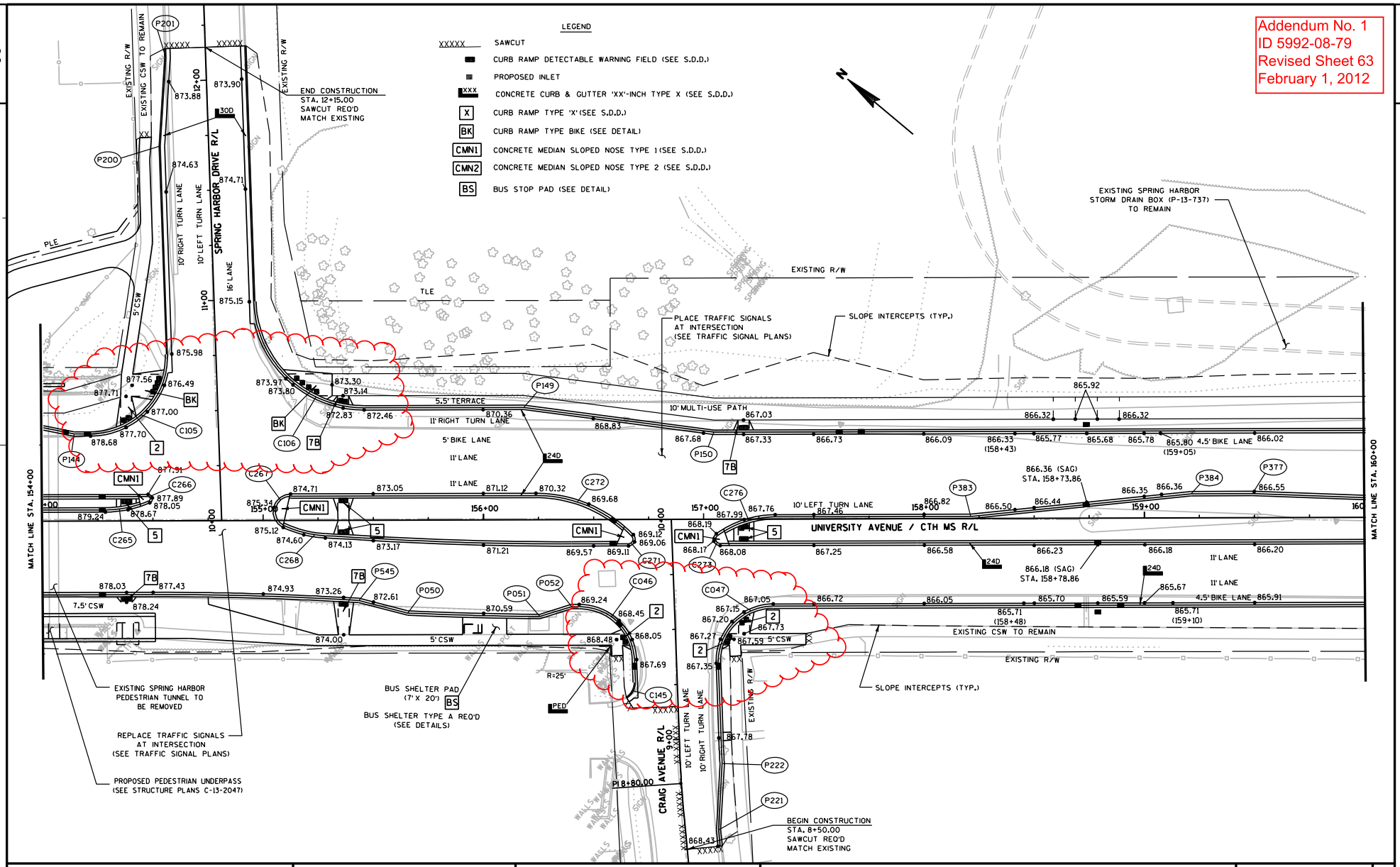
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 62	E

FILE NAME : G:\Madison\MD2009035\DGN\021211_pd.dgn PLOT DATE : 3/9/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

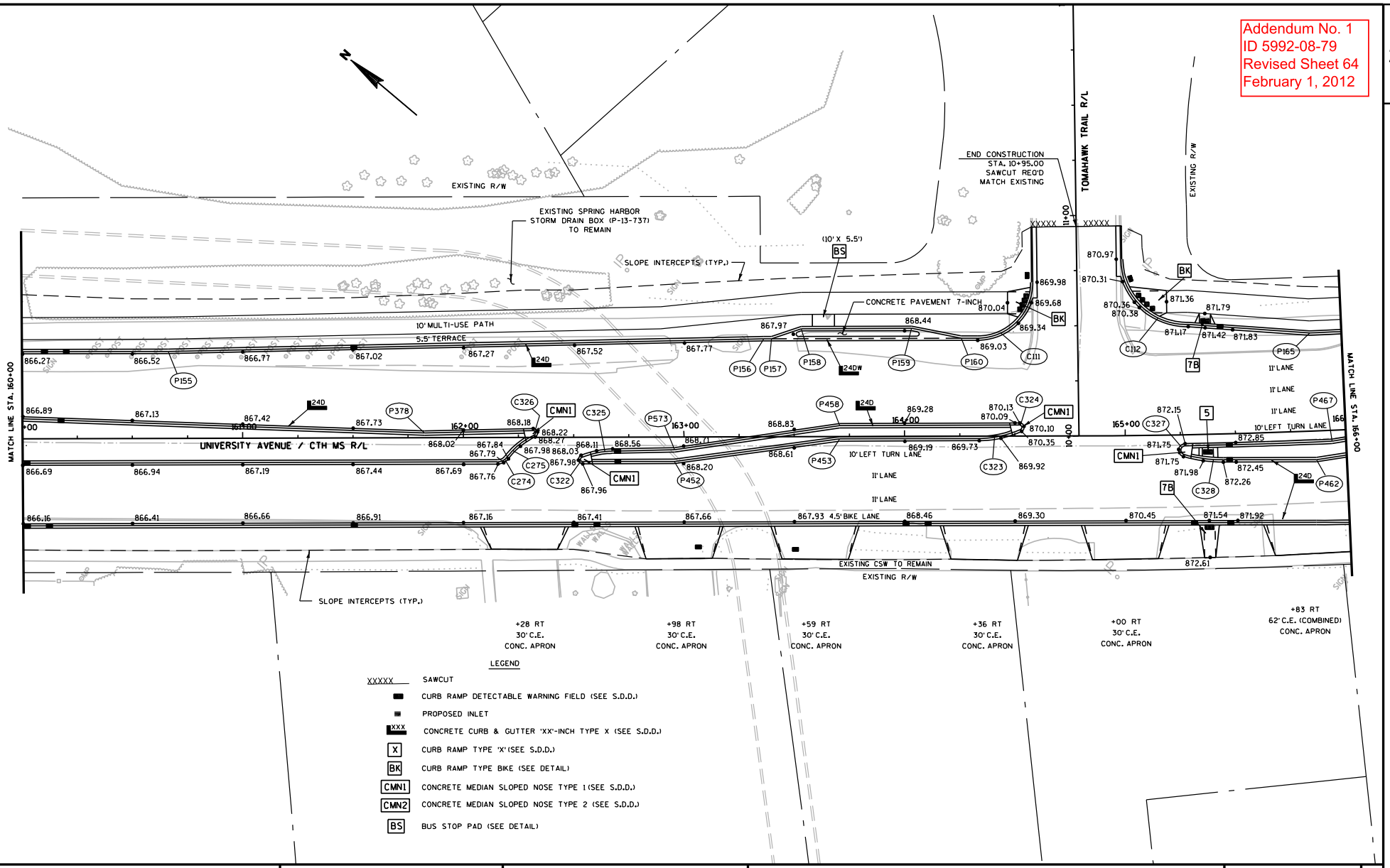


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 63	E

FILE NAME : G:\Madison\MD2009035\DGN\021212_pd.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 64
February 1, 2012

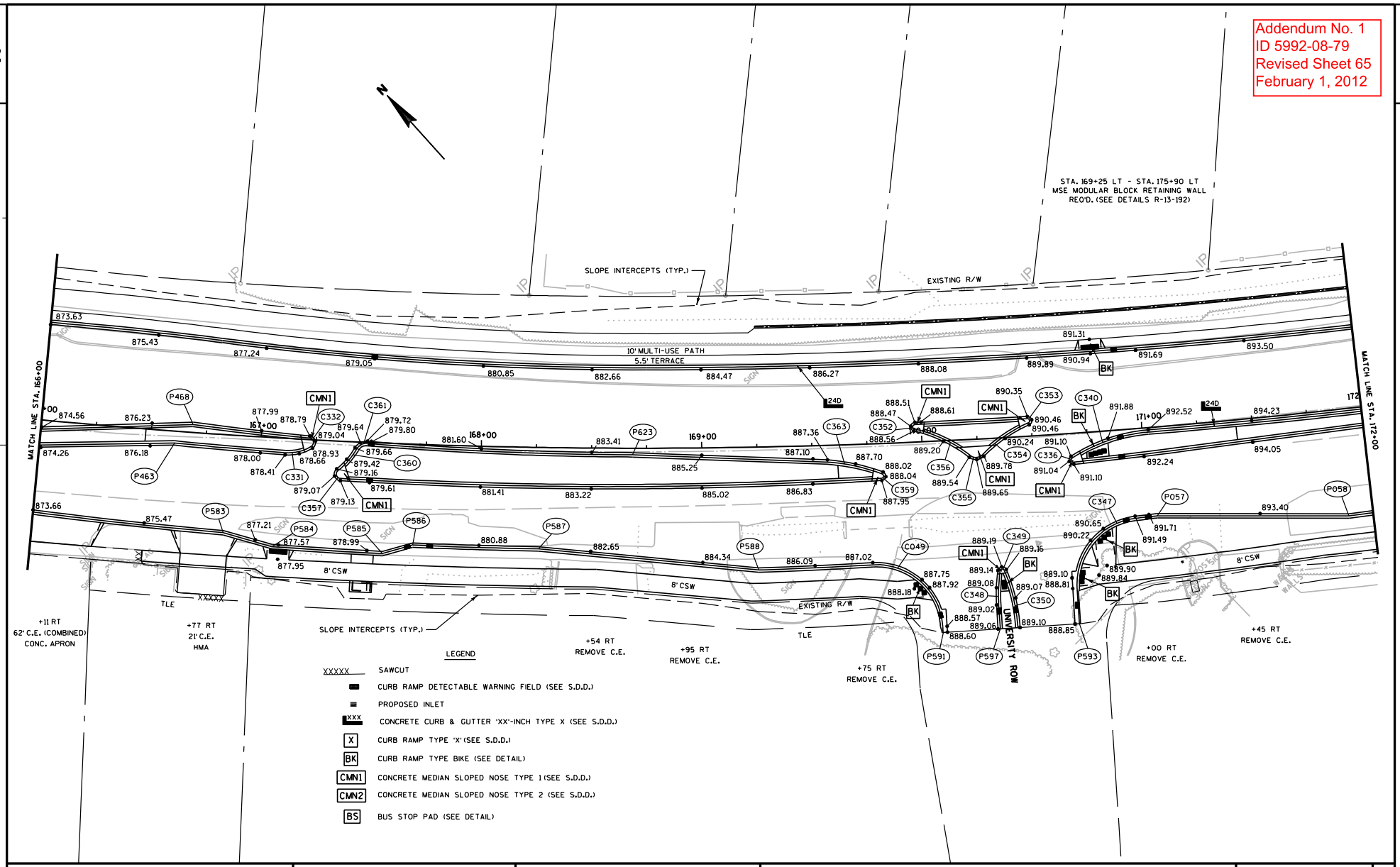


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 64	E

FILE NAME : G:\Madison\MD2009035\DGN\021213_pd.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

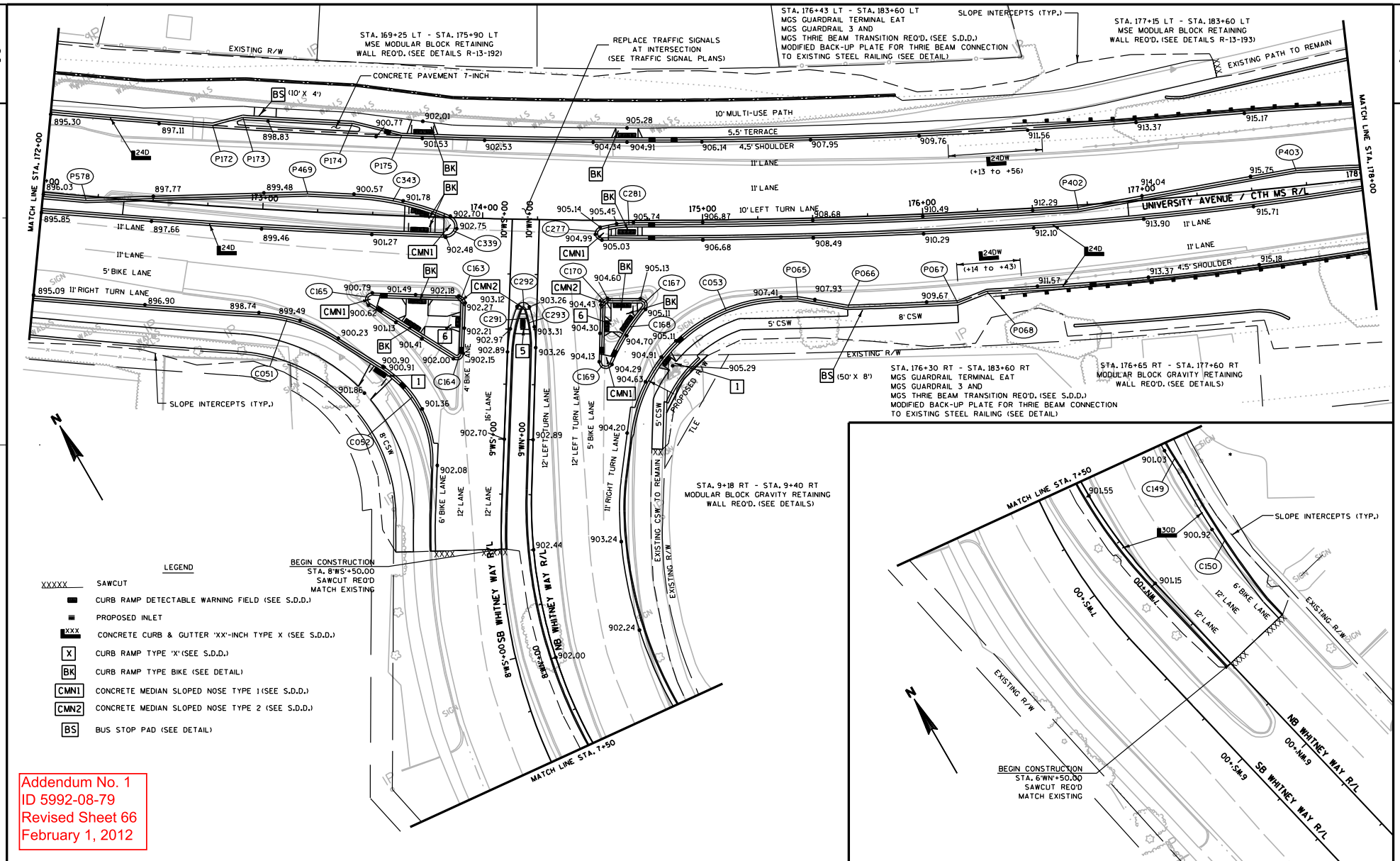
Addendum No. 1
ID 5992-08-79
Revised Sheet 65
February 1, 2012



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 65	E

FILE NAME : G:\Madison\MD2009035\DGN\021214_pd.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

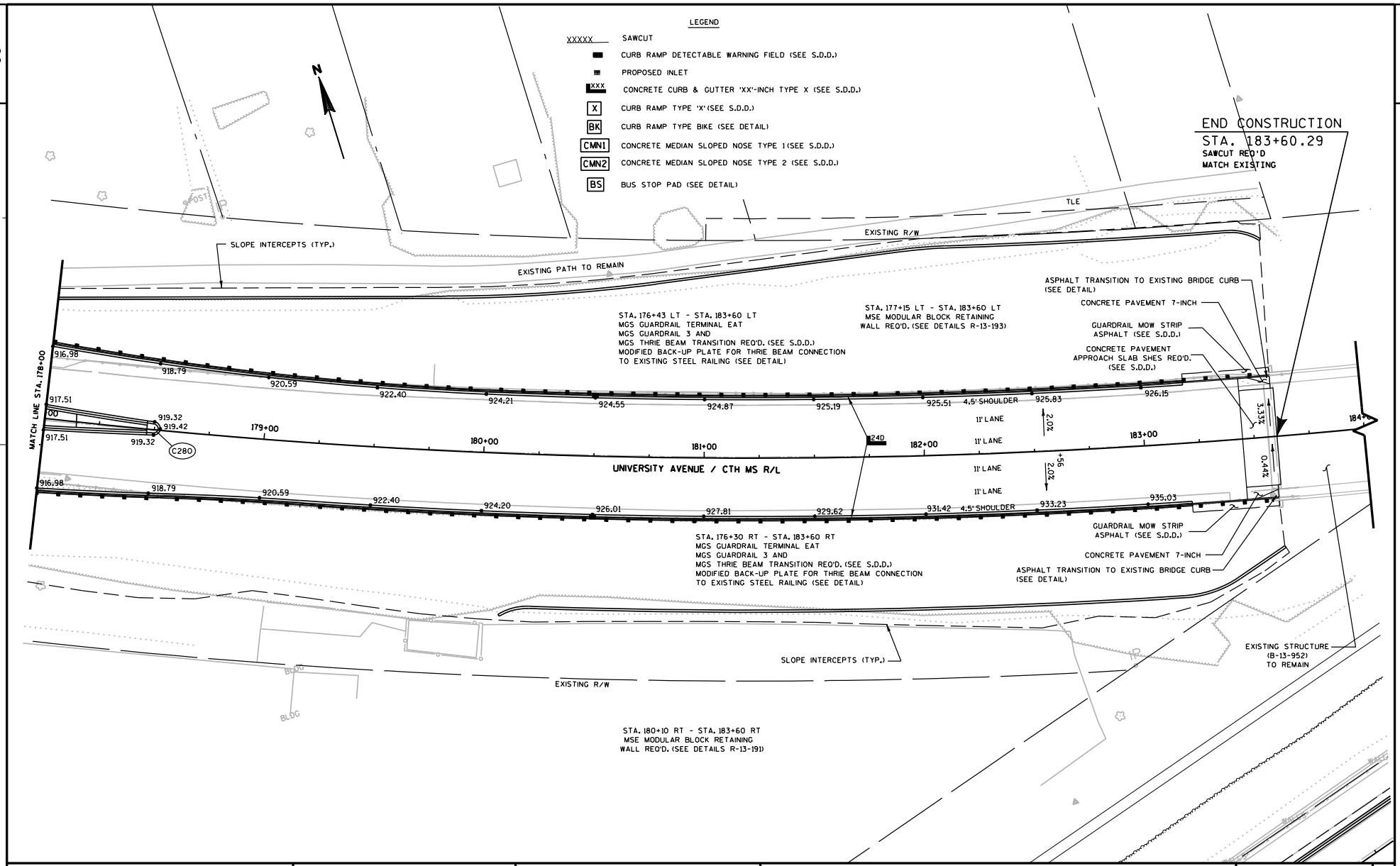
WISDOT/CADDS SHEET 42



Addendum No. 1
ID 5992-08-79
Revised Sheet 66
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 66	E

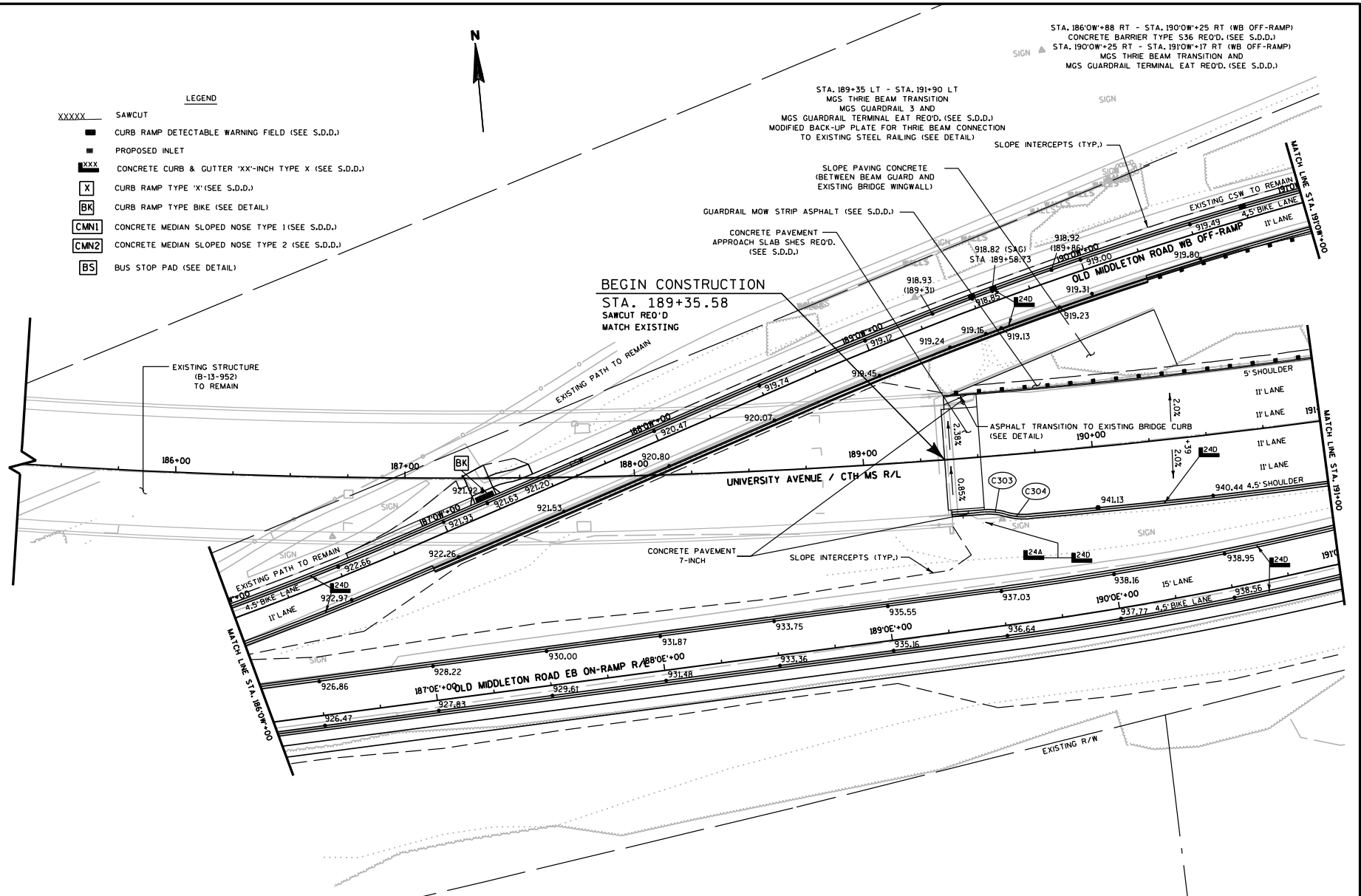
FILE NAME : G:\Madison\MD2009035\DGN\021215_pd.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\021216_pd.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

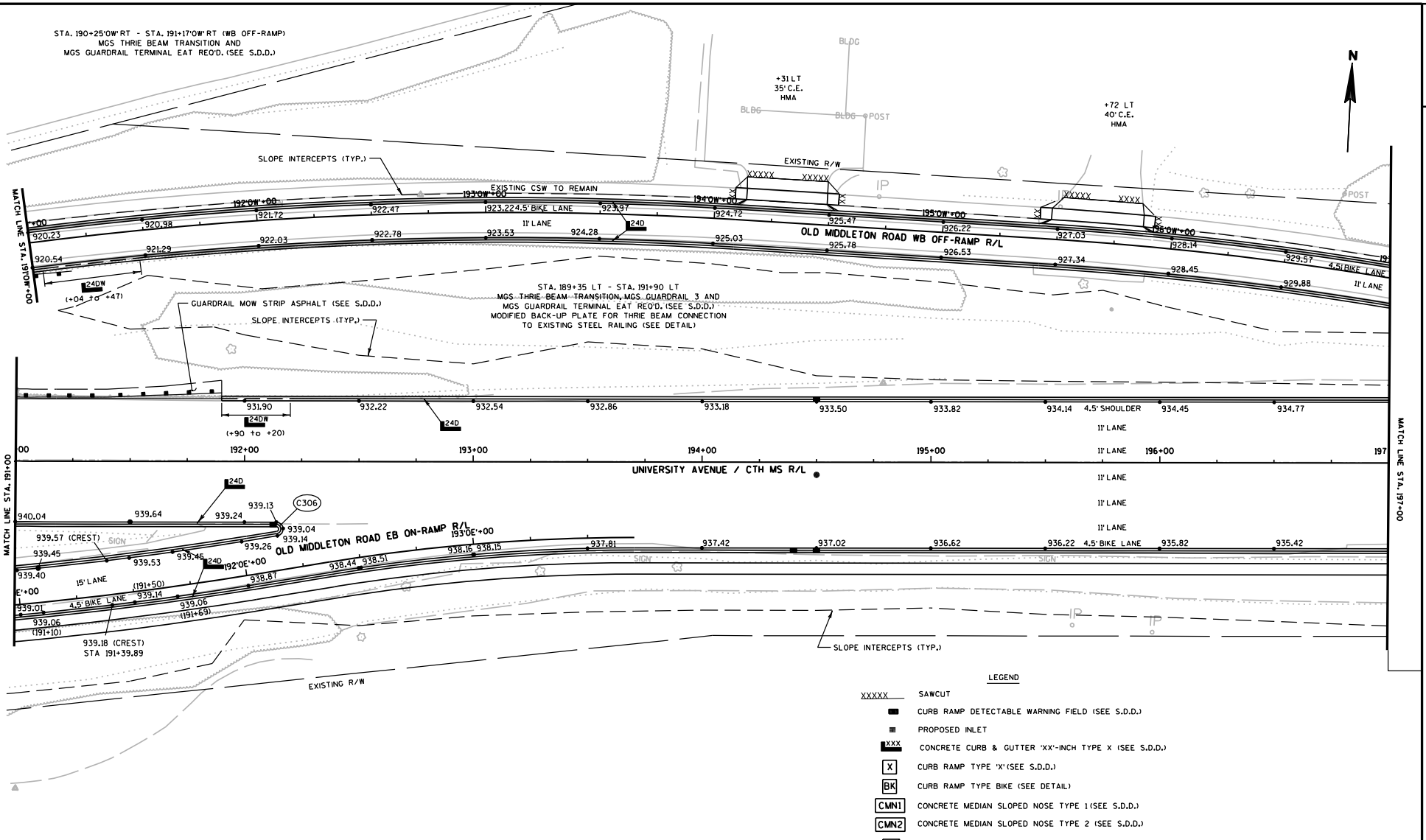
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 68	E

FILE NAME : g:\madison\md2009035\dgn\021217_pd.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

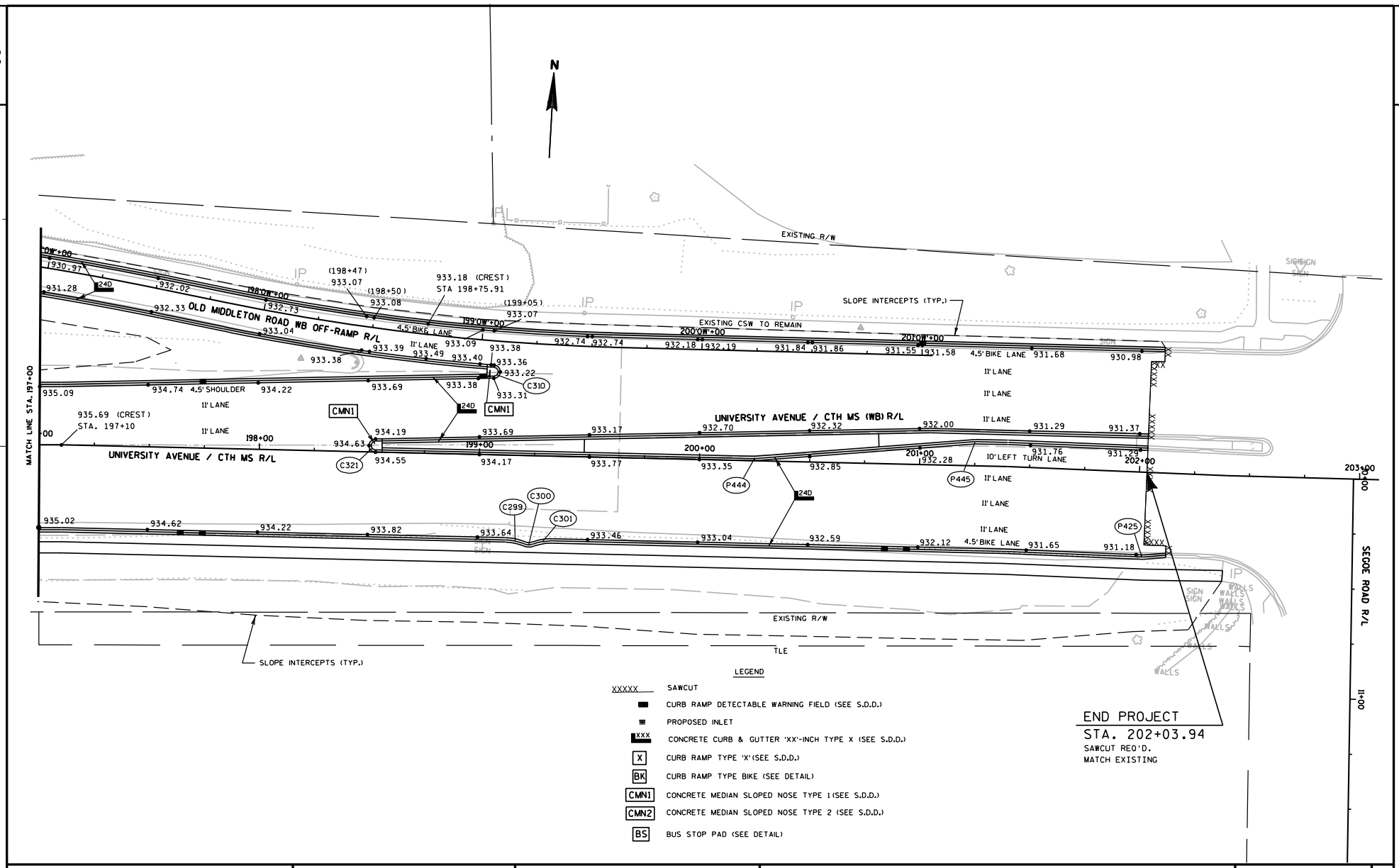
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET 69	E

FILE NAME : g:\madison\md2009035\dgn\021218_pd.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

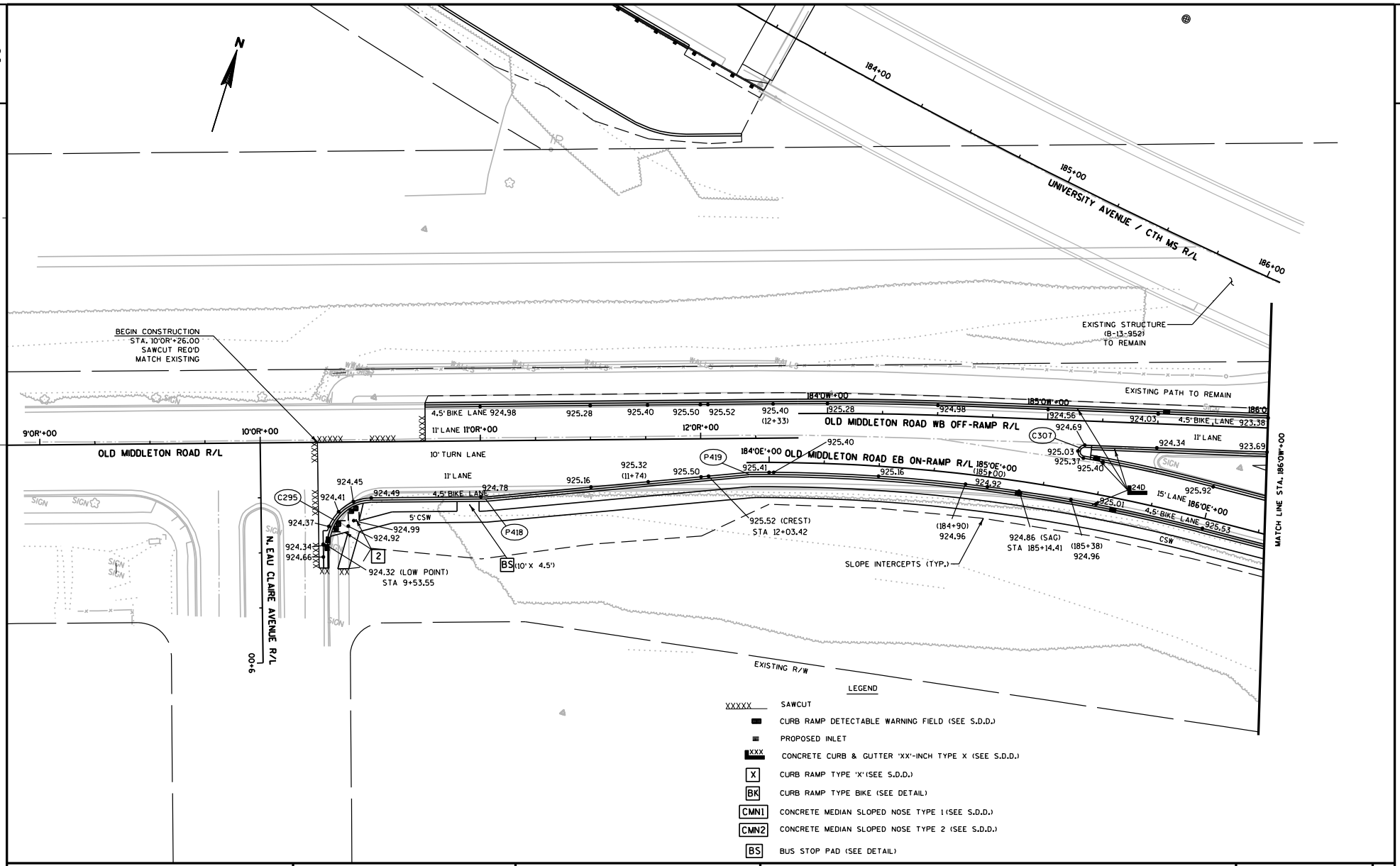
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (UNIVERSITY AVENUE)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\021219_pd.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN DETAILS (OLD MIDDLETON ROAD)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\021220_pd (omr).dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

POINT	STATION	OFFSET	COMMENT
P070	98+75.00	-36.50'	-
P001	98+75.00	36.50'	-
C171 (PT)	99+24.43	8.05'	-
C171 (PC)	99+24.48	-7.95'	-
C171 (CC)	99+24.48	0.05'	R=8.00'
P256	99+50.58	8.16'	BEGIN 10:1 TAPER
P257	100+50.64	-0.87'	END 10:1 TAPER
P071	101+05.10	-34.48'	BEGIN 3:1 TAPER
P072	101+18.73	-38.72'	END 3:1 TAPER
P073	101+68.89	-37.61'	BEGIN 5:1 TAPER
P178	101+75.36	-330.13'	END 10:1 TAPER
P178	13'AS'+87.98	-29.00'	END 10:1 TAPER
C059 (PC)	101+91.33	-32.54'	END 5:1 TAPER
C059 (PC)	10'AS'+74.76	-162.50'	END 5:1 TAPER
C059 (CC)	101+93.73	-122.51'	R=90.00'
C059 (CC)	11'AS'+87.80	-130.00'	R=90.00'
C128 (PT)	102+28.67	-238.78'	BEGIN 10:1 TAPER
C128 (PT)	12'AS'+84.78	-39.31'	BEGIN 10:1 TAPER
C128 (PC)	102+34.71	-229.54'	R=100.00'
C128 (PC)	12'AS'+73.47	-40.00'	R=100.00'
C156 (PC)	102+74.69	-33.27'	-
C156 (PC)	10'AS'+54.72	-81.84'	-
C059 (PT)	102+75.67	-161.90'	-
C059 (PT)	11'AS'+87.80	-40.00'	-
C156 (PT)	102+76.36	-30.23'	-
C156 (PT)	10'AS'+51.36	-80.98'	-
C156 (CC)	102+76.41	-32.23'	R=2.00'
C156 (CC)	10'AS'+53.29	-80.44'	R=2.00'
C155 (PT)	102+91.52	-60.74'	R=100.00'
C155 (PT)	10'AS'+77.24	-58.84'	R=100.00'
C173 (PC)	102+96.60	5.23'	R=150.00'
C154 (PT)/C155 (PC)	103+06.33	-111.41'	-
C154 (PT)/C155 (PC)	11'AS'+25.16	-30.89'	-
C154 (CC)	103+08.35	-111.38'	R=2.00'
C154 (CC)	11'AS'+24.45	-29.00'	R=2.00'
C154 (PC)	103+10.27	-112.01'	-
C154 (PC)	11'AS'+24.45	-27.00'	-
C174 (CC)	103+25.90	1.41'	R=2.00'
C174 (PT)	103+25.94	-0.59'	-
C173 (PT)/C174 (PC)	103+26.22	3.38'	-
C152 (PC)	103+29.85	-29.02'	-
C152 (PC)	10'AS'+37.18	-29.52'	-
C152 (CC)	103+29.89	-31.02'	R=2.00'
C152 (CC)	10'AS'+39.11	-29.00'	R=2.00'
C152 (PT)	103+31.84	-31.50'	-
C152 (PT)	10'AS'+39.11	-27.00'	-
P182	103+48.20	-204.30'	END 3:1 TAPER
P182	11'AS'+94.66	42.73'	END 3:1 TAPER
P181	103+55.06	-197.65'	BEGIN 3:1 TAPER
P181	11'AS'+86.48	45.93'	BEGIN 3:1 TAPER
C285 (PC)	103+57.66	-48.26'	-
C285 (PC)	10'AS'+49.21	2.00'	-
C286 (PT)	103+58.62	-93.73'	R=125.00'
C286 (PT)	10'AS'+92.98	13.83'	R=125.00'
C285 (CC)	103+60.09	-48.86'	R=2.50'
C285 (CC)	10'AS'+49.21	4.50'	R=2.50'
C285 (PT)/C286 (PC)	103+62.59	-48.62'	-
C285 (PT)/C286 (PC)	10'AS'+48.38	6.86'	-
P180	103+75.45	-151.86'	END 5:1 TAPER
P180	11'AS'+40.72	46.93'	END 5:1 TAPER

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

POINT	STATION	OFFSET	COMMENT
C060 (PC)	103+78.03	-136.15'	BEGIN 5:1 TAPER
C060 (PC)	11'AS'+26.35	44.22'	BEGIN 5:1 TAPER
C160 (PT)	103+82.08	-75.17'	-
C160 (PT)	10'AS'+69.56	32.00'	-
C160 (CC)	103+84.04	-75.64'	R=2.00'
C160 (CC)	10'AS'+69.56	34.00'	R=2.00'
C159 (PT)/C160 (PC)	103+85.67	-76.81'	R=125.00'
C159 (PT)/C160 (PC)	10'AS'+70.31	35.85'	R=125.00'
C161 (PC)	103+93.28	-29.37'	-
C161 (PC)	10'AS'+22.42	32.00'	-
C161 (PT)	103+95.20	-27.85'	-
C161 (PT)	10'AS'+20.49	33.50'	-
C161 (CC)	103+95.23	-29.85'	R=2.00'
C161 (CC)	10'AS'+22.42	34.00'	R=2.00'
C175 (PT)/C176 (PC)	103+96.27	6.46'	-
C175 (CC)	103+97.42	3.69'	R=3.00'
C175 (PC)	103+97.47	0.69'	-
P003	104+26.21	105.70'	-
C002 (CC)	104+32.82	57.85'	R=10.00'
C002 (PC)	104+33.06	47.85'	-
P004	104+39.25	110.46'	-
C002 (PT)	104+42.17	61.25'	-
C158 (PC)	104+47.36	-27.15'	-
C158 (PC)	10'AS'+07.65	83.93'	-
C158 (CC)	104+47.38	-29.15'	R=2.00'
C158 (CC)	10'AS'+09.59	84.41'	R=2.00'
C158 (PT)/C159 (PC)	104+48.02	-31.05'	-
C158 (PT)/C159 (PC)	10'AS'+11.29	85.47'	-
C003 (PC)	104+56.73	61.97'	-
C176 (PT)	104+60.29	19.98'	R=175.00'
C003 (CC)	104+75.41	68.82'	R=20.00'
C003 (PT)	104+75.83	48.83'	-
P005	104+93.55	49.19'	BEGIN 5:1 TAPER
P006	105+15.83	54.11'	END 5:1 TAPER
C060 (PT)	105+16.33	-38.07'	-
C060 (PT)	10'AS'+02.56	153.38'	-
C060 (CC)	105+17.17	-183.07'	R=145.00'
C060 (CC)	11'AS'+28.25	189.20'	R=145.00'
P007	105+65.59	54.90'	BEGIN 3:1 TAPER
P008	105+79.09	50.59'	END 3:1 TAPER
P264	107+68.04	23.10'	BEGIN 10:1 TAPER
P078	108+60.44	-39.00'	BEGIN 10:1 TAPER
P265	108+77.76	12.00'	END 10:1 TAPER
C010 (PT)	109+38.00	108.60'	-
P079	109+46.69	-27.50'	END 10:1 TAPER
C179 (PC)	109+49.84	1.00'	R=55.00'
C010 (CC)	109+51.72	87.70'	R=25.00'
C008 (PC)	109+59.77	51.50'	-
C008 (CC)	109+59.77	76.50'	R=25.00'
P080	109+69.26	-27.50'	BEGIN 5:1 TAPER
C010 (PC)	109+71.33	103.20'	-
C178 (CC)	109+76.16	10.00'	R=2.00'
C178 (PC)	109+76.16	12.00'	-
C178 (PT)/C179 (PT)	109+77.15	8.26'	-
C008 (PT)	109+80.71	90.16'	-
C063 (CC)	109+91.76	-60.34'	R=30.00'
C011 (PT)	109+95.02	129.56'	-
C062 (CC)	109+96.76	-58.00'	R=25.00'
C062 (PC)	109+96.76	-33.00'	END 5:1 TAPER
C011 (PC)	109+97.18	150.72'	-

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

POINT	STATION	OFFSET	COMMENT
C011 (CC)	110+06.62	139.06'	R=15.00'
C063 (PT)	110+19.22	-72.41'	-
C063 (PC)	110+21.76	-60.34'	-
C062 (PT)	110+21.76	-58.00'	-
C013 (PC)	110+31.02	67.74'	-
C064 (PC)	110+53.79	-63.02'	-
C013 (PT)	110+54.43	51.50'	-
C013 (CC)	110+54.43	76.50'	R=25.00'
C181 (PT)/C182 (PC)	110+70.19	15.76'	-
C181 (PC)	110+71.14	12.00'	-
C181 (CC)	110+71.14	14.00'	R=2.00'
C064 (CC)	110+83.79	-63.02'	R=30.00'
C064 (PT)	110+83.79	-33.02'	BEGIN 10:1 TAPER
C182 (PT)	110+98.76	23.00'	R=60.00'
P087	111+38.80	-27.50'	END 10:1 TAPER
P276	111+81.57	12.00'	BEGIN 10:1 TAPER
P277	112+91.57	1.00'	END 10:1 TAPER
P088	113+19.70	-27.50'	BEGIN 3:1 TAPER
P089	113+33.17	-32.02'	END 3:1 TAPER
P017	113+63.11	47.22'	BEGIN 10:1 TAPER
P090	113+83.13	-33.15'	BEGIN 5:1 TAPER
P091	114+05.93	-29.73'	END 5:1 TAPER
C015 (PC)	114+17.87	48.23'	END 10:1 TAPER
C015 (CC)	114+20.01	78.15'	R=30.00'
C185 (CC)	114+48.88	7.29'	R=5.00'
C185 (PC)	114+49.12	12.29'	-
C015 (PT)	114+49.95	76.33'	-
C185 (PT)/C186 (PC)	114+53.15	9.89'	R=35.00'
C187 (PT)	114+65.53	-4.42'	-
C187 (CC)	114+65.56	-3.42'	R=1.00'
C186 (PT)/C187 (PC)	114+66.05	-2.55'	-
C016 (PC)	114+81.86	65.60'	-
C196 (PC)/C194 (PT)	114+86.86	9.02'	-
C196 (CC)	114+87.31	9.91'	R=1.00'
C196 (PT)	114+87.34	10.91'	-
C194 (PT)	115+04.65	4.61'	R=40.00'
C016 (PT)	115+06.55	39.09'	-
C016 (CC)	115+06.81	64.08'	R=25.00'
P022	115+13.95	39.02'	BEGIN 5:1 TAPER
P023	115+36.54	43.50'	END 5:1 TAPER
P285	115+69.49	4.50'	BEGIN 10:1 TAPER
P024	115+86.54	43.50'	BEGIN 3:1 TAPER
P025	116+00.04	39.00'	END 3:1 TAPER
P286	116+69.49	-5.50'	END 10:1 TAPER
P026	118+64.52	39.00'	BEGIN 10:1 TAPER
C018 (PC)	119+19.52	44.50'	END 10:1 TAPER
C018 (CC)	119+19.53	74.50'	R=30.00'
C018 (PT)	119+49.00	68.90'	-
C191 (CC)	119+58.07	5.50'	R=5.00'
C191 (PC)	119+58.07	10.50'	-
C191 (PT)/C192 (PC)	119+61.64	9.00'	R=55.00'
C193 (PT)	119+80.14	-5.50'	-
C193 (CC)	119+80.14	-4.50'	R=1.00'
C192 (PT)/C193 (PC)	119+80.51	-3.57'	-
C019 (PC)	119+82.48	73.68'	-
C197 (PC)/C206 (PC)	119+91.24	8.40'	-
C197 (CC)	119+91.65	9.31'	R=1.00'
C197 (PT)	119+91.66	10.31'	-
C019 (PT)	120+06.41	44.02'	BEGIN 10:1 TAPER
C019 (CC)	120+07.04	69.01'	R=25.00'

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

POINT	STATION	OFFSET	COMMENT
C206 (PT)	120+09.56	4.50'	R=45.00'
P031	120+60.31	36.21'	END 10:1 TAPER
P295	120+67.35	4.53'	BEGIN 10:1 TAPER
P296	121+67.38	-3.05'	END 10:1 TAPER
C071 (CC)	125+16.39	-57.36'	R=25.00'
C071 (PC)	125+16.80	-32.36'	-
C071 (PT)	125+40.99	-60.08'	-
C072 (PC)	125+71.42	-55.37'	-
C072 (CC)	125+96.00	-58.33'	R=25.00'
C072 (PT)	125+96.20	-33.33'	-
C073 (CC)	126+59.28	-58.62'	R=25.00'
C073 (PC)	126+59.31	-33.62'	-
P184	126+81.64	-98.80	-
C073 (PT)	126+83.98	-60.10'	-
P289	126+98.33	10.92'	BEGIN 10:1 TAPER
P185	127+09.11	-100.57	-
C075 (PC)	127+11.97	-56.73'	-
C075 (PT)	127+36.63	-33.44'	-
C075 (CC)	127+36.66	-58.44'	R=25.00'
P290	127+98.45	0.27'	END 10:1 TAPER
C077 (PC)	128+36.94	-34.14'	R=25.00'
C077 (PT)/C078 (PC)	128+43.84	-35.21'	-
C078 (PT)	128+50.83	-36.29'	R=25.00'
C204 (PC)	128+56.88	-0.53'	R=45.00'
C205 (PT)	128+73.05	-5.97'	-
C205 (CC)	128+73.05	-4.97'	R=1.00'
C204 (PT)/C205 (PC)	128+73.44	-4.05'	-
C213 (PC)/C212 (PC)	128+85.54	7.07'	R=25.00'
C213 (CC)	128+86.15	7.86'	R=1.00'
C213 (PT)	128+86.17	8.86'	-
C080 (PC)	128+86.48	-36.56'	R=25.00'
C212 (PT)/C211 (PC)	128+93.41	-3.06'	-
C080 (PT)/C081 (PC)	128+93.49	-35.59'	-
C211 (PT)	128+97.99	-6.12'	-
C211 (CC)	128+98.01	-1.12'	R=5.00'
C081 (PT)	129+00.40	-34.63'	R=25.00'
C083 (CC)	129+20.56	-69.69'	R=35.00'
C083 (PC)	129+20.63	-34.69'	-
C083 (PT)	129+55.13	-68.83'	-
C029 (PT)	129+64.87	82.95'	R=40.00'
C028 (PC)	129+77.78	35.07'	-
C028 (CC)	129+77.94	39.07'	R=4.00'
P186	129+55.59	-90.29	-
P212	129+80.10	137.16'	-
C028 (PT)/C029 (PC)	129+80.34	42.28'	-
C084 (PC)	129+84.73	-64.81'	-
C030 (PC)	129+91.36	71.22'	-
P213	130+03.18	116.01'	-
C084 (PT)	130+14.15	-34.40'	-
C084 (CC)	130+14.39	-64.40'	R=30.00'
C030 (CC)	130+21.06	65.01'	R=30.00'
C030 (PT)	130+22.41	35.04'	-
P301	130+89.79	8.26'	BEGIN 10:1 TAPER
P302	131+89.90	-1.21	END 10:1 TAPER
P110	132+50.99	-34.00	BEGIN 3:1 TAPER
P111	132+64.24	-38.54	END 3:1 TAPER
P112	133+13.91	-38.67	BEGIN 5:1 TAPER
P113	133+36.17	-34.24	END 5:1 TAPER
C034 (PC)	133+45.22	36.95'	-
C034 (CC)	133+45.30	71.95'	R=35.00'

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

POINT	STATION	OFFSET	COMMENT
C221 (PC)	133+51.89	-5.78'	R=47.50'
C089 (CC)	133+54.64	-59.29'	R=25.00'
P189	133+54.95	-219.01	-
C089 (PC)	133+54.72	-34.29'	-
C218 (CC)	133+56.44	-3.57'	R=2.00'
C218 (PC)	133+56.44	-1.57'	-
C218 (PT)/C221 (PT)	133+56.63	-5.56'	-
P188	133+58.16	-202.51'	END 10:1 TAPER
P187	133+71.24	-124.32'	BEGIN 10:1 TAPER
C089 (PT)	133+79.29	-61.48'	-
C034 (PT)	133+80.62	75.10'	-
P192	133+87.02	-225.82'	-
P191	133+90.31	-209.35'	END 10:1 TAPER
P190	134+07.86	-130.84'	BEGIN 10:1 TAPER
C090 (PC)	134+17.40	-57.38'	-
C035 (PC)	134+21.61	70.69'	-
C090 (CC)	134+42.05	-59.60'	R=25.00'
C090 (PT)	134+42.14	-34.60'	-
C222 (PC)/C225 (PC)	134+47.31	5.52'	-
C222 (PT)	134+47.77	9.46'	-
C222 (CC)	134+47.78	7.46'	R=2.00'
C035 (CC)	134+56.97	73.03'	R=35.00'
C035 (PT)	134+57.19	38.03'	-
C225 (PT)	134+61.32	3.82'	R=60.00'
P308	135+68.52	9.69'	BEGIN 7.5:1 TAPER
P314	135+89.33	3.70'	BEGIN 7.5:1 TAPER
P309	136+43.53	-0.26'	END 7.5:1 TAPER
P315	136+64.33	-6.25'	END 7.5:1 TAPER
C092 (PC)	136+78.71	-34.74'	-
C092 (CC)	136+78.72	-59.74'	R=25.00'
C223 (PC)	136+88.09	-0.24'	R=35.00'
P193	137+02.05	-70.14'	-
C092 (PT)	137+03.16	-65.02'	-
C224 (PT)	137+04.09	-6.23'	-
C224 (CC)	137+04.09	-5.23'	R=1.00'
C223 (PT)/C224 (PC)	137+04.56	-4.34'	-
C228 (PC)/C229 (PC)	137+18.09	7.88'	R=40.00'
C229 (CC)	137+18.52	8.78'	R=1.00'
C229 (PT)	137+18.52	9.78'	-
P194	137+31.38	-76.48'	-
C227 (PC)/C228 (PT)	137+32.87	-4.21'	-
C093 (PC)	137+36.15	-54.41'	-
C227 (CC)	137+36.86	-1.21'	R=5.00'
C227 (PT)	137+36.87	-6.21'	-
C093 (PT)	137+60.57	-34.69'	-
C093 (CC)	137+60.58	-59.69'	R=25.00'
P320	138+28.35	9.85'	BEGIN 10:1 TAPER
P321	139+28.36	-0.09'	END 10:1 TAPER
C094 (PC)	139+86.57	-34.55'	-
C094 (CC)	139+86.59	-64.55'	R=30.00'
C230 (PC)	139+88.04	-0.05'	R=40.00'
C231 (PT)	140+05.25	-6.04'	-
C231 (CC)	140+05.25	-5.04'	R=1.00'
C230 (PT)/C231 (PC)	140+05.69	-4.14'	-
C094 (PT)	140+16.07	-58.98'	-
P195	140+19.44	-76.85'	-
C234 (PC)/C233 (PC)	140+27.82	8.13'	R=25.00'
C234 (CC)	140+28.35	8.97'	R=1.00'
C234 (PT)	140+28.35	9.97'	-
C232 (PC)/C233 (PT)	140+37.42	-3.02'	-

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

POINT	STATION	OFFSET	COMMENT
C232 (PT)	140+42.00	-6.02'	-
C232 (CC)	140+42.00	-1.02'	R=5.00'
C097 (PC)	140+46.46	-58.22'	-
P041	140+63.58	38.81'	BEGIN 10:1 TAPER
C097 (PT)	140+66.10	-34.50'	-
C097 (CC)	140+66.11	-54.50'	R=20.00'
C037 (CC)	141+16.12	81.44'	R=35.00'
C037 (PC)	141+18.17	46.50'	END 10:1 TAPER
P216	141+22.33	159.57'	-
C238 (PC)	141+23.03	-5.97'	R=45.00'
P217	141+46.03	193.47'	-
C037 (PT)	141+50.68	86.98'	-
C237 (PC)	141+57.00	14.84'	-
C237 (CC)	141+57.11	12.85'	R=2.00'
C238 (PT)/C237 (PT)	141+58.69	11.63'	-
C038 (PC)	141+91.72	69.10'	-
C239 (PC)/C243 (PC)	141+95.99	14.62'	-
C239 (PT)	141+96.53	16.44'	-
C239 (CC)	141+96.55	15.44'	R=1.00'
P334	142+03.39	16.61'	BEGIN 7.5:1 TAPER
C038 (CC)	142+16.68	70.36'	R=25.00'
C038 (PT)	142+17.02	45.36'	-
C243 (PT)	142+29.96	4.10'	R=60.00'
P046	142+31.44	45.49'	BEGIN 5:1 TAPER
P335	142+78.37	7.00'	END 7.5:1 TAPER
P047	142+81.44	55.50'	END 5:1 TAPER
P126	142+84.46	-34.38'	BEGIN 10:1 TAPER
P340	142+84.54	4.12'	BEGIN 7.5:1 TAPER
C096 (CC)	143+38.15	-66.10'	R=25.00'
C096 (PC)	143+39.18	-41.12'	END 10:1 TAPER
C241 (PC)	143+39.23	7.00'	R=40.00'
P341	143+59.52	-8.05'	END 7.5:1 TAPER
C096 (PT)	143+63.13	-65.20'	-
C249 (PT)/C248 (PC)	143+68.35	15.09'	R=45.00'
C242 (PT)	143+68.75	-8.58'	-
C249 (CC)	143+68.76	16.00'	R=1.00'
C249 (PC)	143+68.76	17.00'	-
C242 (CC)	143+68.81	-7.58'	R=1.00'
C241 (PT)/C242 (PC)	143+69.56	-6.93'	-
P048	143+81.44	55.50'	BEGIN 3:1 TAPER
C247 (PC)/C248 (PT)	143+90.77	-6.96'	-
C247 (PT)	143+95.10	-9.84'	-
C098 (PC)	143+95.16	-65.19'	-
C247 (CC)	143+95.30	-4.85'	R=5.00'
P049	144+11.38	45.46'	END 3:1 TAPER
P196	144+15.26	-198.38'	-
C098 (CC)	144+20.14	-64.13'	R=25.00'
C136 (PC)	144+20.29	-150.49'	-
C098 (PT)	144+20.68	-39.14'	-
C136 (CC)	144+22.01	-149.47'	R=2.00'
C136 (PT)	144+24.01	-149.57'	-
P199	144+24.26	-144.58'	-
P131	144+31.91	-39.34'	BEGIN 3:1 TAPER
P132	144+45.38	-43.98'	END 3:1 TAPER
C251 (CC)	144+66.20	10.54'	R=5.00'
C251 (PC)	144+66.42	15.53'	-
C251 (PT)/C252 (PC)	144+70.72	12.68'	R=45.00'
C253 (PT)	144+92.60	-11.00'	-
C253 (CC)	144+92.60	-10.00'	R=1.00'
C252 (PT)/C253 (PC)	144+93.01	-9.09'	-

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

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February 1, 2012

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POINT	STATION	OFFSET	COMMENT
P133	144+95.39	-44.00'	BEGIN 5:1 TAPER
C255 (PT)/C259 (PC)	145+01.97	11.79'	-
C255 (CC)	145+02.64	12.53'	R=1.00'
C255 (PC)	145+02.70	13.53'	-
P134	145+17.89	-39.50'	END 5:1 TAPER
C259 (PT)	145+35.36	-1.00'	R=50.00'
P358	145+88.38	-1.00'	BEGIN 10:1 TAPER
P352	146+61.48	11.00'	BEGIN 10:1 TAPER
P359	146+88.38	-11.00'	END 10:1 TAPER
P353	147+61.48	1.00'	END 10:1 TAPER
C101 (PC)	148+01.45	-39.50'	R=25.00'
C101 (PT)/C102 (PC)	148+09.25	-40.75'	-
C102 (PT)	148+17.06	-42.00'	R=25.00'
C257 (PC)	148+21.50	1.00'	R=45.00'
C258 (PT)	148+49.43	-11.00'	-
C258 (CC)	148+49.43	-10.00'	R=1.00'
C257 (PT)/C258 (PC)	148+50.06	-9.23'	-
C262 (PT)/C261 (PC)	148+56.85	9.09'	R=45.00'
C262 (CC)	148+57.26	10.00'	R=1.00'
C262 (PC)	148+57.26	11.00'	-
C103 (PC)	148+57.94	-42.00'	R=25.00'
C103 (PT)/C104 (PC)	148+65.75	-40.75'	-
C104 (PT)	148+73.55	-39.50'	R=25.00'
C261 (PT)/C260 (PC)	148+76.94	-8.60'	-
C260 (PT)	148+81.21	-11.00'	-
C260 (CC)	148+81.21	-6.00'	R=5.00'
P364	152+30.96	5.00'	BEGIN 10:1 TAPER
P141	153+28.30	-39.50'	BEGIN 3:1 TAPER
P365	153+30.96	-5.00'	END 10:1 TAPER
P142	153+41.80	-44.00'	END 3:1 TAPER
P143	153+91.80	-44.00'	BEGIN 5:1 TAPER
P144	154+14.30	-39.50'	END 5:1 TAPER
C105 (CC)	154+21.78	-74.50'	R=35.00'
C105 (PC)	154+21.78	-39.50'	-
C265 (PC)	154+28.41	-5.00'	R=50.00'
C266 (PT)	154+47.80	-11.00'	-
C266 (CC)	154+47.80	-10.00'	R=1.00'
C266 (PC)/C265 (PT)	154+48.20	-9.08'	-
P200	154+53.73	-170.06'	BEGIN 10:1 TAPER
P201	154+56.44	-210.17'	END 10:1 TAPER
C105 (PT)	154+56.76	-75.62'	-
C106 (PC)	154+96.02	-99.40'	-
C267 (PT)/C268 (PC)	155+09.55	2.33'	-
C267 (PC)	155+12.53	-11.00'	-
C267 (CC)	155+12.53	-4.00'	R=7.00'
C268 (PT)	155+28.25	7.03'	R=50.00'
P545	155+43.33	36.45'	BEGIN 5:1 TAPER
C106 (CC)	155+45.99	-101.00'	R=50.00'
C106 (PT)	155+45.99	-51.00'	-
P050	155+65.51	42.19'	END 5:1 TAPER
P149	156+18.45	-51.00'	BEGIN 7.5:1 TAPER
C272 (PC)	156+23.87	-11.00'	R=60.00'
P051	156+25.48	43.93'	BEGIN 15' TAPER
P052	156+39.89	39.50'	END 15' TAPER
C046 (PC)	156+43.40	39.50'	-
C046 (CC)	156+43.40	64.50'	R=25.00'
C145 (CC)	156+60.74	74.20'	R=8.00'
C145 (PT)	156+64.92	81.03'	-
C271 (CC)	156+65.87	9.00'	R=2.00'
C271 (PC)	156+65.87	11.00'	-

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

POINT	STATION	OFFSET	COMMENT
C271 (PT)/C272 (PT)	156+67.31	7.62'	-
C046 (PT)	156+68.39	63.65'	-
C145 (PC)	156+68.74	73.93'	-
P150	157+04.70	-39.50'	END 7.5:1 TAPER
C273 (PT)/C276 (PC)	157+06.29	7.37'	-
P221	157+06.37	141.00'	BEGIN 7.5:1 TAPER
C047 (PC)	157+06.47	65.35'	-
C273 (CC)	157+07.45	9.00'	R=2.00'
C273 (PC)	157+07.45	11.00'	-
P222	157+08.07	110.94'	END 7.5:1 TAPER
C047 (CC)	157+31.45	64.50'	R=25.00'
C047 (PT)	157+31.46	39.50'	-
C276 (PT)	157+32.43	-1.00'	R=45.00'
P383	158+21.21	-1.00'	BEGIN 10:1 TAPER
P384	159+21.21	-11.00'	END 10:1 TAPER
P377	159+49.12	-11.00'	-
P155	160+66.32	-39.50'	-
P378	161+82.48	-2.14'	-
C274 (PC)	162+15.65	11.00'	-
C274 (CC)	162+15.65	6.00'	R=5.00'
C275 (PC)/C274 (PT)	162+19.61	9.05'	-
C326 (PT)	162+31.74	-3.06'	-
C326 (CC)	162+31.76	-2.06'	R=1.00'
C275 (PT)/ C326 (PC)	162+32.19	-1.16'	R=35.00'
C322 (PT)/C325 (PC)	162+53.75	9.07'	-
C322 (CC)	162+54.11	10.00'	R=1.00'
C322 (PC)	162+54.11	11.00'	-
C325 (PT)	162+67.70	6.28'	R=40.00'
P452	162+95.59	11.00'	BEGIN 7.5:1 TAPER
P573	162+95.80	5.76'	BEGIN 7.5:1 TAPER
P156	163+36.31	-44.50'	-
P157	163+39.84	-44.50'	BEGIN 3:1 TAPER
P158	163+53.34	-49.00'	END 3:1 TAPER
P453	163+70.59	1.00'	END 7.5:1 TAPER
P458	163+70.59	-5.00'	END 7.5:1 TAPER
P159	164+03.34	-49.00'	BEGIN 5:1 TAPER
P160	164+25.84	-44.50'	END 5:1 TAPER
C111 (CC)	164+33.28	-69.50'	R=25.00'
C111 (PC)	164+33.28	-44.50'	-
C323 (PC)	164+33.87	1.00'	R=45.00'
C324 (PT)	164+52.20	-5.00'	-
C324 (CC)	164+52.20	-4.00'	R=1.00'
C323 (PT)/C324 (PC)	164+52.62	-3.09'	-
C111 (PT)	164+58.28	-69.76'	-
C112 (PC)	164+98.72	-80.05'	-
C327 (PT)/C328 (PC)	165+26.53	8.91'	-
C327 (PC)	165+27.11	5.00'	-
C327 (CC)	165+27.11	7.00'	R=2.00'
C112 (CC)	165+29.58	-80.00'	R=30.00'
C112 (PT)	165+29.58	-50.00'	BEGIN 10:1 TAPER
C328 (PT)	165+44.19	11.74'	R=65.00'
P165	165+85.43	-44.50'	END 10:1 TAPER
P462	165+86.19	13.00'	BEGIN 10:1 TAPER
P467	165+93.62	5.00'	BEGIN 10:1 TAPER
P463	166+61.01	5.38'	END 10:1 TAPER
P468	166+68.70	-3.61'	END 10:1 TAPER
P583	166+85.57	44.48	BEGIN 5:1 TAPER
P584	167+07.64	49.43	END 5:1 TAPER
C331 (PC)	167+11.24	6.49'	R=20.00'
C332 (CC)	167+21.81	1.34'	R=2.00'

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

POINT	STATION	OFFSET	
C332 (PT)	167+21.90	-0.66'	
C331 (PT)/C332 (PC)	167+22.93	2.99'	
C357 (PC)/ C360 (PC)	167+35.52	13.40'	
C357 (PT)	167+36.81	16.90'	
C357 (CC)	167+36.84	14.90'	R=2.00'
C360 (PT)/ C361 (PC)	167+43.58	3.14'	R=36.00'
C361 (CC)	167+47.99	5.48'	R=5.00'
C361 (PT)	167+48.19	0.49'	-
P585	167+57.04	50.16'	BEGIN 3:1 TAPER
P586	167+70.38	45.79'	END 3:1 TAPER
P587	168+26.58	46.05'	BEGIN 10:1 TAPER
P623	168+68.61	2.99'	-
P588	169+24.92	55.83'	END 10:1 TAPER
C363 (PC)	169+56.79	7.57'	R=85.00'
C049 (PC)	169+75.75	54.88'	-
C049 (CC)	169+76.40	84.87'	R=30.00'
C359 (CC)	169+81.08	14.74'	R=1.00'
C359 (PC)	169+81.11	15.74'	-
C363 (PT)/C359 (PT)	169+81.47	13.82'	-
C352 (PC)/ C356 (PC)	169+96.91	-6.04'	R=66.00'
C352 (PT)	169+97.18	-8.00'	-
C352 (CC)	169+97.18	-7.00'	R=1.00'
C049 (PT)	170+05.53	84.19'	-
P591	170+05.58	86.88'	-
C356 (PT)/ C355 (PC)	170+21.77	7.28'	-
C355 (CC)	170+24.38	4.25'	R=4.00'
C355 (PT)/ C354 (PC)	170+27.09	7.19'	R=66.00'
C348 (PC)	170+30.72	75.63'	R=74.00'
P597	170+30.81	86.53'	-
C348 (PT)/C349 (PC)	170+32.16	60.28'	-
C349 (CC)	170+33.12	60.48'	R=1.00'
C349 (PT)/C350 (PC)	170+34.04	60.14'	-
C350 (PT)	170+38.58	86.47'	R=80.00'
C353 (CC)	170+48.41	-7.00'	R=1.00'
C353 (PC)	170+48.41	-8.00'	-
C353 (PT)/ C354 (PT)	170+48.76	-6.06	-
P593	170+65.75	86.44'	-
C347 (PC)	170+65.81	70.33	-
C336 (PT)/C340 (PC)	170+67.57	11.22'	-
C336 (CC)	170+68.05	12.10'	R=1.00'
C336 (PC)	170+68.09	13.10'	-
C347 (PT)	170+93.91	40.61'	-
C347 (CC)	170+95.09	70.58'	R=30.00'
C340 (PT)	171+02.81	2.00'	R=74.00'
P057	171+03.76	40.20'	BEGIN 10:1 TAPER
P058	171+89.05	48.66'	END 10:1 TAPER
P578	172+19.70	2.00'	BEGIN 10:1 TAPER
P172	172+74.62	-36.50'	BEGIN 3:1 TAPER
P173	172+88.30	-41.00'	END 3:1 TAPER
C051 (PC)	173+01.06	48.00'	-
C051 (CC)	173+01.06	123.00'	R=75.00'
P469	173+20.02	-8.00'	END 10:1 TAPER
C052 (CC)	173+32.85	112.87'	R=50.00'
C052 (CC)	8'WN'+87.48	-95.18'	R=50.00'
C051 (PT)	173+36.60	57.57'	-
P174	173+38.92	-41.00'	BEGIN 5:1 TAPER
C343 (PC)	173+41.10	-8.00'	R=125.00'
C165 (PC)	173+50.37	40.23'	-
C165 (PC)	9'WN'+59.81	-75.98	-
C165 (PT)	173+51.35	36.50'	-

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

POINT	STATION	OFFSET	COMMENT
C165 (PT)	9'WN'+63.53	-74.93	-
C165 (CC)	173+51.35	38.50'	R=2.00'
C165 (CC)	9'WN'+61.53	-74.96	R=2.00'
C052 (PC)	173+56.92	69.47'	-
C052 (PC)	9'WN'+30.49	-69.67	-
P175	173+61.75	-36.50'	END 5:1 TAPER
C052 (PT)	173+80.96	112.70'	-
C052 (PT)	8'WN'+87.08	-45.18	-
C339 (CC)	173+83.48	4.00'	R=4.00'
C339 (PC)	173+83.48	8.00'	-
C343 (PT)/C339 (PT)	173+84.94	0.28'	-
C164 (PT)	173+89.02	63.21'	-
C164 (PT)	9'WN'+36.56	-36.79'	-
C164 (CC)	173+90.02	61.49'	R=2.00'
C164 (CC)	9'WN'+38.28	-35.77'	R=2.00'
C163 (PC)	173+90.21	36.50'	-
C163 (PC)	9'WN'+63.27	-35.58'	-
C163 (CC)	173+90.21	38.50'	R=2.00'
C163 (CC)	9'WN'+61.27	-35.58'	R=2.00'
C164 (PC)	173+91.98	61.50'	-
C164 (PC)	9'WN'+38.27	-33.77'	-
C163 (PT)	173+92.18	38.52'	-
C163 (PT)	9'WN'+61.25	-33.58'	-
C291 (PC)	174+14.52	60.38'	R=60.00'
C291 (PC)	9'WN'+39.50	-10.76'	R=60.00'
C291 (PT)/C292 (PC)	174+18.24	40.41'	-
C291 (PT)/C292 (PC)	9'WN'+59.50	-7.15'	-
C292 (CC)	174+19.17	40.76'	R=1.00'
C292 (CC)	9'WN'+59.16	-6.21'	R=1.00'
C293 (PT)/C292 (PT)	174+20.09	40.42'	-
C293 (PT)/C292 (PT)	9'WN'+59.52	-5.28'	-
C293 (PC)	174+23.12	58.26'	R=50.00'
C293 (PC)	9'WN'+41.71	-2.00'	R=50.00'
C277 (PT)/ C281 (PC)	174+53.71	4.08'	-
C277 (CC)	174+54.25	6.00'	R=2.00'
C277 (PC)	174+54.25	8.00'	-
C169 (PC)	174+54.35	64.27'	-
C169 (PC)	9'WN'+36.25	30.00'	-
C170 (PC)	174+54.93	38.45'	-
C170 (PC)	9'WN'+62.07	30.00'	-
C169 (CC)	174+56.31	64.31'	R=2.00'
C169 (CC)	9'WN'+36.25	32.00'	R=2.00'
C170 (PT)	174+56.90	36.50'	-
C170 (PT)	9'WN'+64.07	31.95'	-
C170 (CC)	174+56.90	38.50'	R=2.00'
C170 (CC)	9'WN'+62.07	32.00'	R=2.00'
C169 (PT)/C168 (PC)	174+58.11	65.09'	R=100.00'
C169 (PT)/C168 (PC)	9'WN'+35.52	33.86'	R=100.00'
C053 (PC)	174+67.82	96.82'	-
C053 (PC)	9'WN'+04.05	44.65'	-
C281 (PT)	174+68.52	2.00'	R=55.00'
C167 (PT)	174+71.76	36.50'	-
C167 (PT)	9'WN'+64.47	47.00'	-
C167 (CC)	174+71.76	38.50'	R=2.00'
C167 (CC)	9'WN'+62.47	47.05'	R=2.00'
C167 (PC)/C168 (PT)	174+73.27	39.79'	-
C167 (PC)/C168 (PT)	9'WN'+61.22	48.62'	-
C149 (PT)	174+92.76	229.63	R=100.00'
C149 (PT)	7'WN'+39.59	42.00'	R=100.00'
C150 (PT)/C149 (PC)	174+96.48	236.40'	-

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

POINT	STATION	OFFSET	COMMENT
C150 (PT)/C149 (PC)	7'WN'+29.94	41.52'	-
C150 (PC)	175+28.89	291.39'	R=400.00'
C150 (PC)	6'WN'+60.00	32.00'	R=400.00'
C053 (PT)	175+34.77	36.50'	-
C053 (PT)	9'WN'+67.00	110.76'	-
C053 (CC)	175+34.77	106.50'	R=70.00'
C053 (CC)	8'WN'+97.09	114.30'	R=70.00'
P065	175+42.30	36.50'	BEGIN 5:1 TAPER
P066	175+64.48	41.00'	END 5:1 TAPER
P067	176+13.88	41.00'	BEGIN 3:1 TAPER
P068	176+27.20	36.50'	END 3:1 TAPER
P402	176+70.68	2.00'	BEGIN 10:1 TAPER
P403	177+70.94	-7.07'	END 10:1 TAPER
C280 (CC)	178+49.70	-0.63'	R=2.00'
C280 (PT)	178+49.79	-2.63'	-
C280 (PC)	178+49.83	1.37'	-
C295 (PC)	182+94.00	305.29'	-
C295 (PC)	10'OR'+30.22	46.59'	-
C295 (PT)	183+00.16	277.77'	-
C295 (PT)	10'OR'+50.22	26.50'	-
C295 (CC)	183+09.49	294.93'	R=20.00'
C295 (CC)	10'OR'+50.22	46.50'	R=20.00'
P418	183+41.11	251.37'	BEGIN 12:1 TAPER
P418	11'OR'+02.16	26.50'	BEGIN 12:1 TAPER
P419	184+33.91	184.06'	END 12:1 TAPER
P419	12'OR'+22.16	16.50'	END 12:1 TAPER
C307 (PC)	185+58.15	105.11'	-
C307 (PC)	185'OW'+17.29	12.00'	-
C307 (PC)	185'OE'+40.45	-19.99'	-
C307 (CC)	185+58.91	106.95'	R=2.00'
C307 (CC)	185'OW'+17.29	14.00'	R=2.00'
C307 (CC)	185'OE'+40.72	-18.00'	R=2.00'
C307 (PT)	185+59.41	108.88'	-
C307 (PT)	185'OW'+17.01	15.98'	-
C307 (PT)	185'OE+40.72	-16.00'	-
C303 (PC)	189+51.03	24.00'	R=25.00'
C303 (PT)/C304 (PC)	189+60.06	25.74'	-
C304 (PT)	189+69.24	27.50'	R=25.00'
C306 (PC)	192+13.94	27.50'	-
C306 (CC)	192+13.94	29.50'	R=2.00'
C306 (PT)	192+14.27	31.47'	-
C321 (PC)	198+52.68	-5.00'	-
C321 (PT)	198+52.76	-1.00'	-
C321 (CC)	198+52.77	-3.00'	R=2.00'
C310 (CC)	199+05.63	-37.76'	R=2.00'
C310 (PC)	199+05.71	-35.76'	-
C310 (PT)	199+05.74	-39.76'	-
C299 (PC)	199+12.55	38.50'	R=25.00'
C299 (PT)/C300 (PC)	199+21.52	40.17'	-
C300 (CC)	199+23.32	35.50'	R=5.00'
C300 (PT)/C301 (PC)	199+25.11	40.17'	-
C301 (PT)	199+34.09	38.50'	R=25.00'
P444	200+25.00	-1.00'	BEGIN 10:1 TAPER
P445	201+25.00	-11.00'	END 10:1 TAPER
P425	202+03.35	38.50'	-

NOTE: CURVE & POINT NUMBERS ARE TO THE FACE OF CURB

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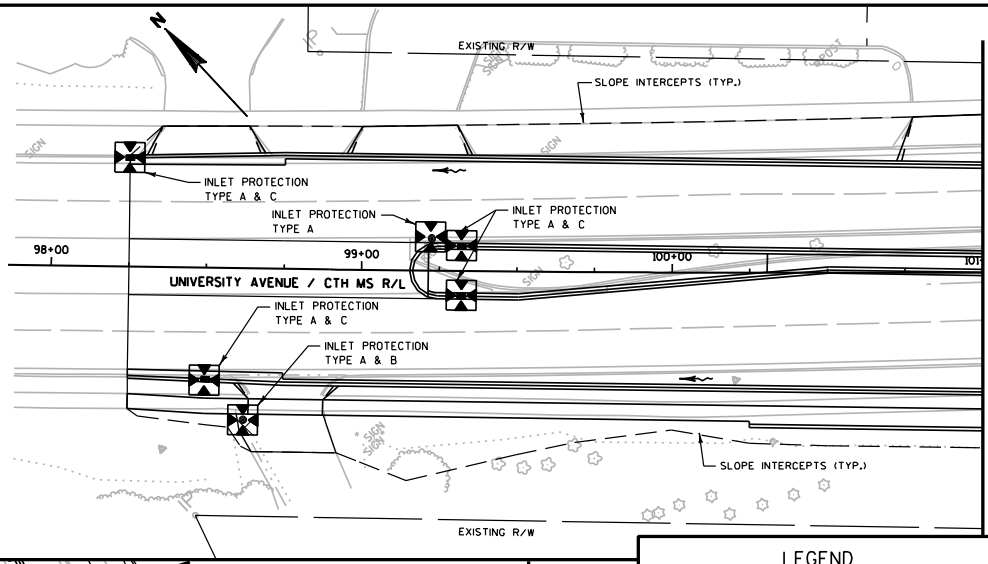
February 1, 2012

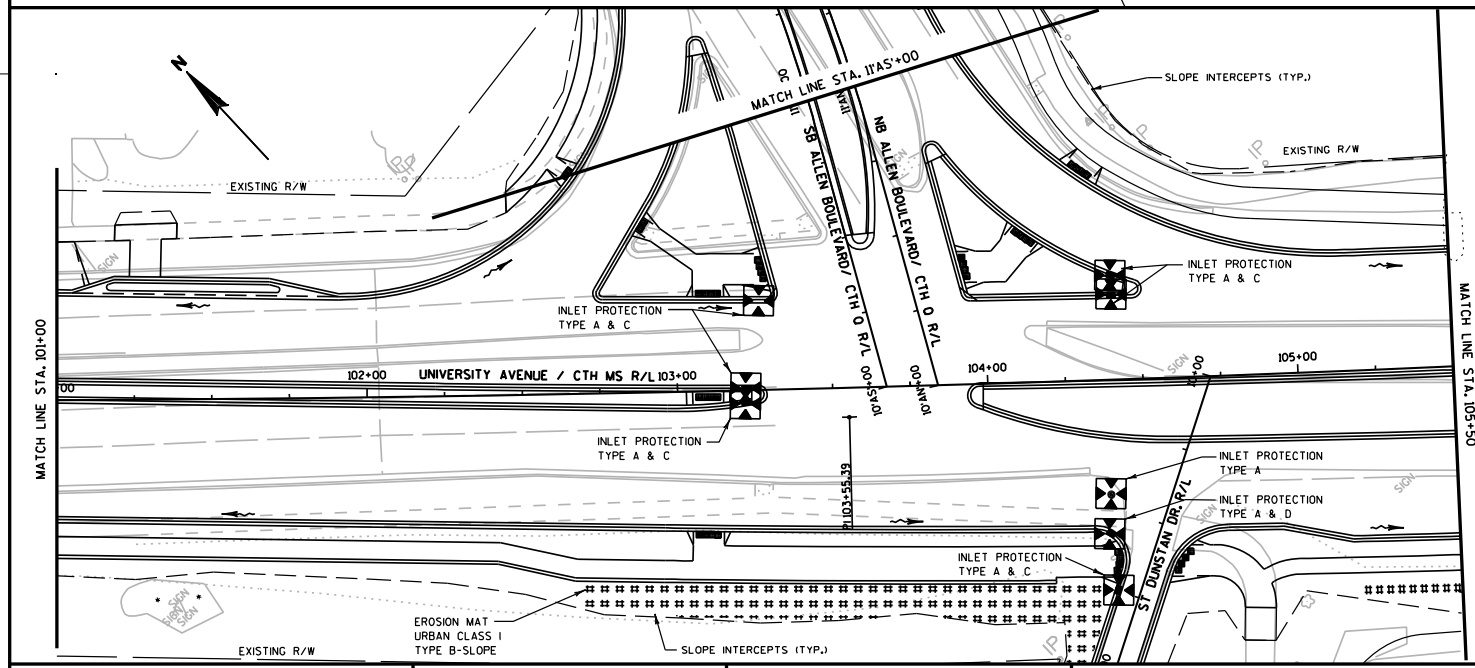
2

2

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 44.4 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 33.8 ACRES





LEGEND

- INLET PROTECTION (SEE S.D.D.)
- TEMPORARY DITCH CHECK (SEE S.D.D.)
- SILT FENCE (SEE S.D.D.)
- EROSION MAT URBAN CLASS I TYPE B W/NO MOW SEED
- DRAINAGE FLOW ARROW

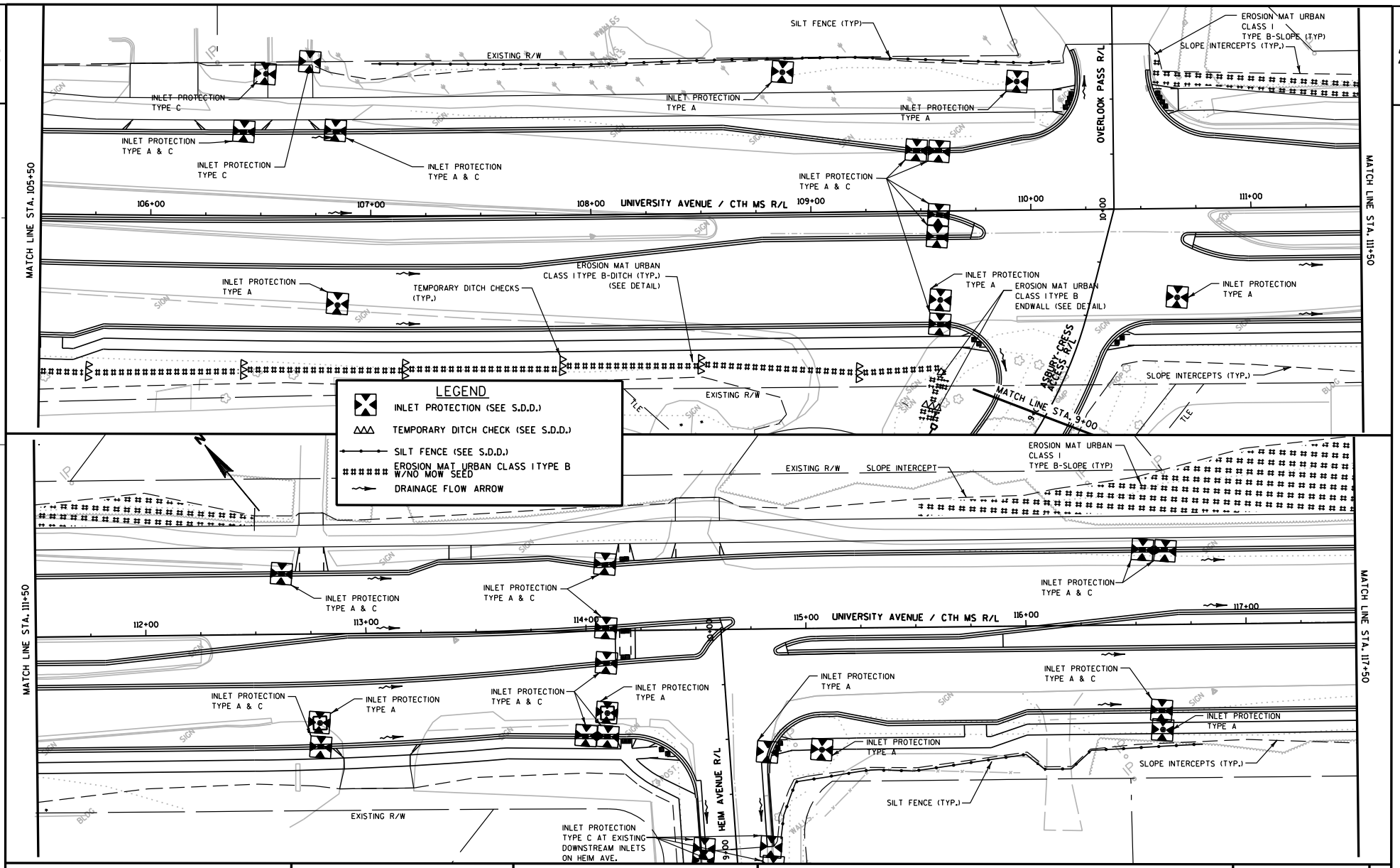
EROSION CONTROL GENERAL NOTES:

TOPSOIL GRADED AREAS IMMEDIATELY AFTER GRADING HAS BEEN COMPLETED AND PERFORM FINAL LANDSCAPING OF ALL TOPSOILED AREAS WITHIN 3 CALENDER DAY AFTER PLACEMENT OF TOPSOIL.

INLET PROTECTIONS TYPE A TO BE USED AFTER STRUCTURE IS PLACED AND PRIOR TO FINISHING (EITHER CURB & GUTTER OR TOPSOIL)

INLET PROTECTIONS TYPE B, C, & D TO BE USED AFTER FINISHING (EITHER CURB & GUTTER OR TOPSOIL) OR WITH EXISTING CURB AND GUTTER.

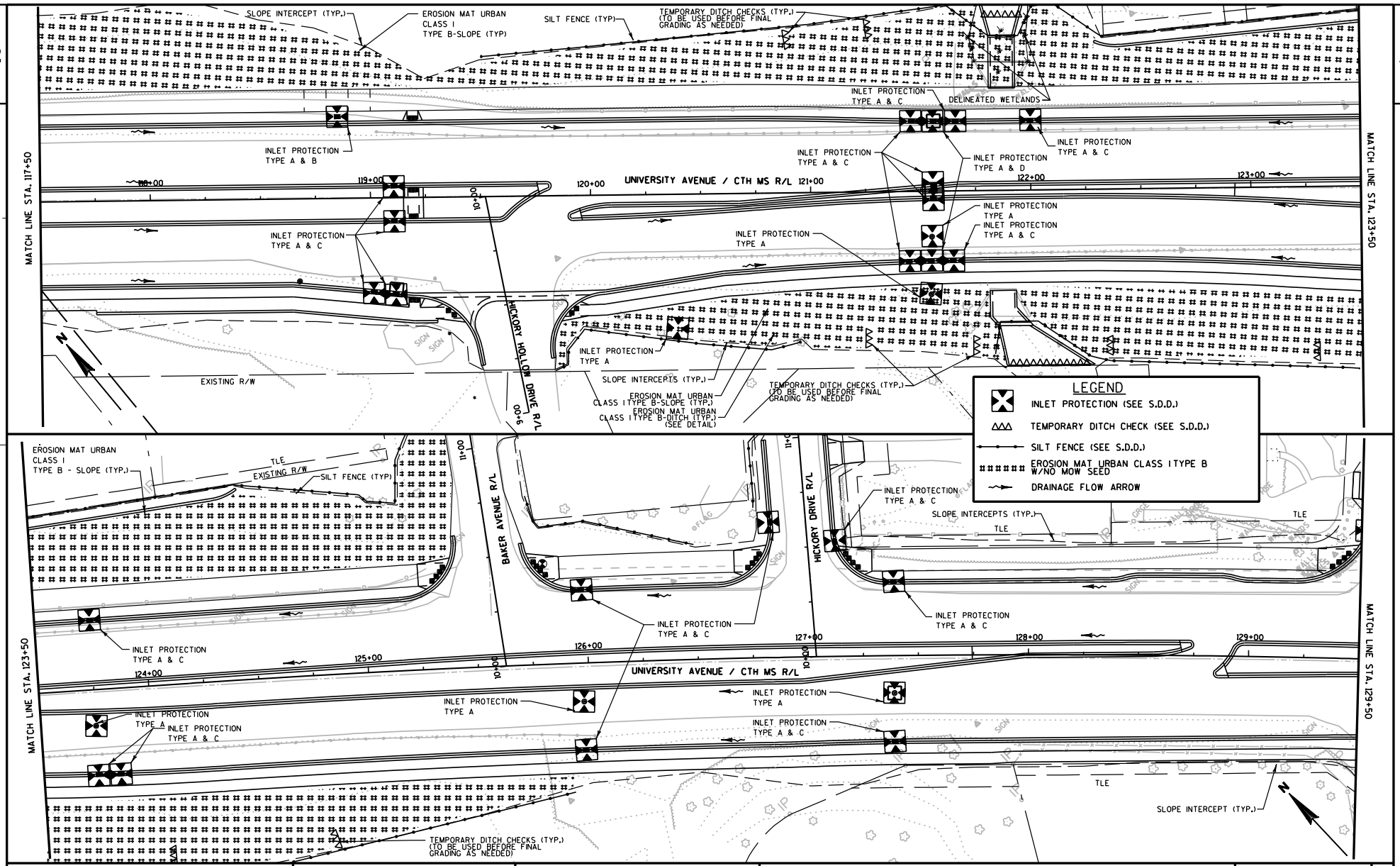
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET 76 E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET E

FILE NAME : g:\madison\md2009035\dgn\022002_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

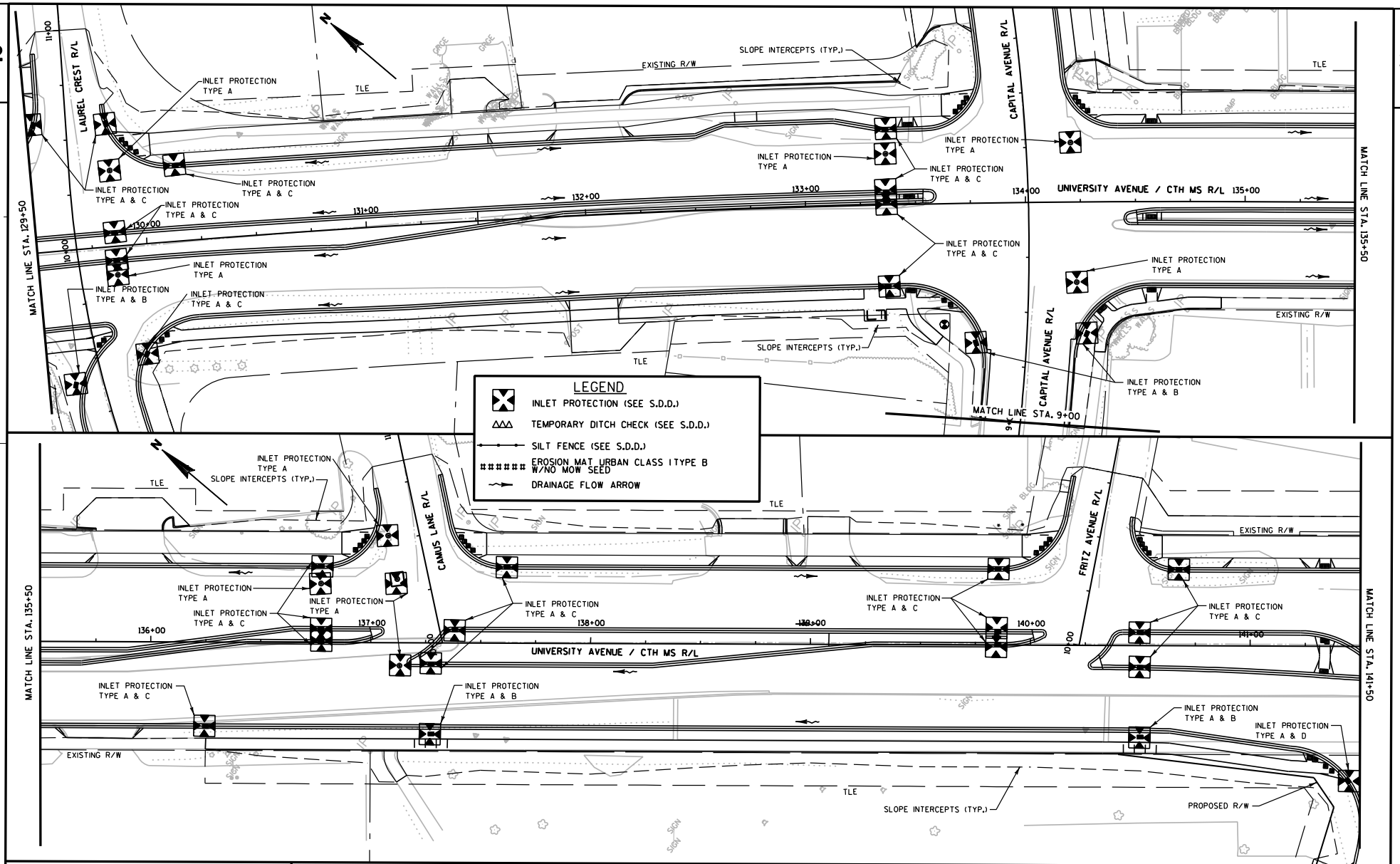
WISDOT/CADDS SHEET 42



PROJECT NO:5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET 78	E

FILE NAME : g:\madison\md2009035\dgn\022003_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

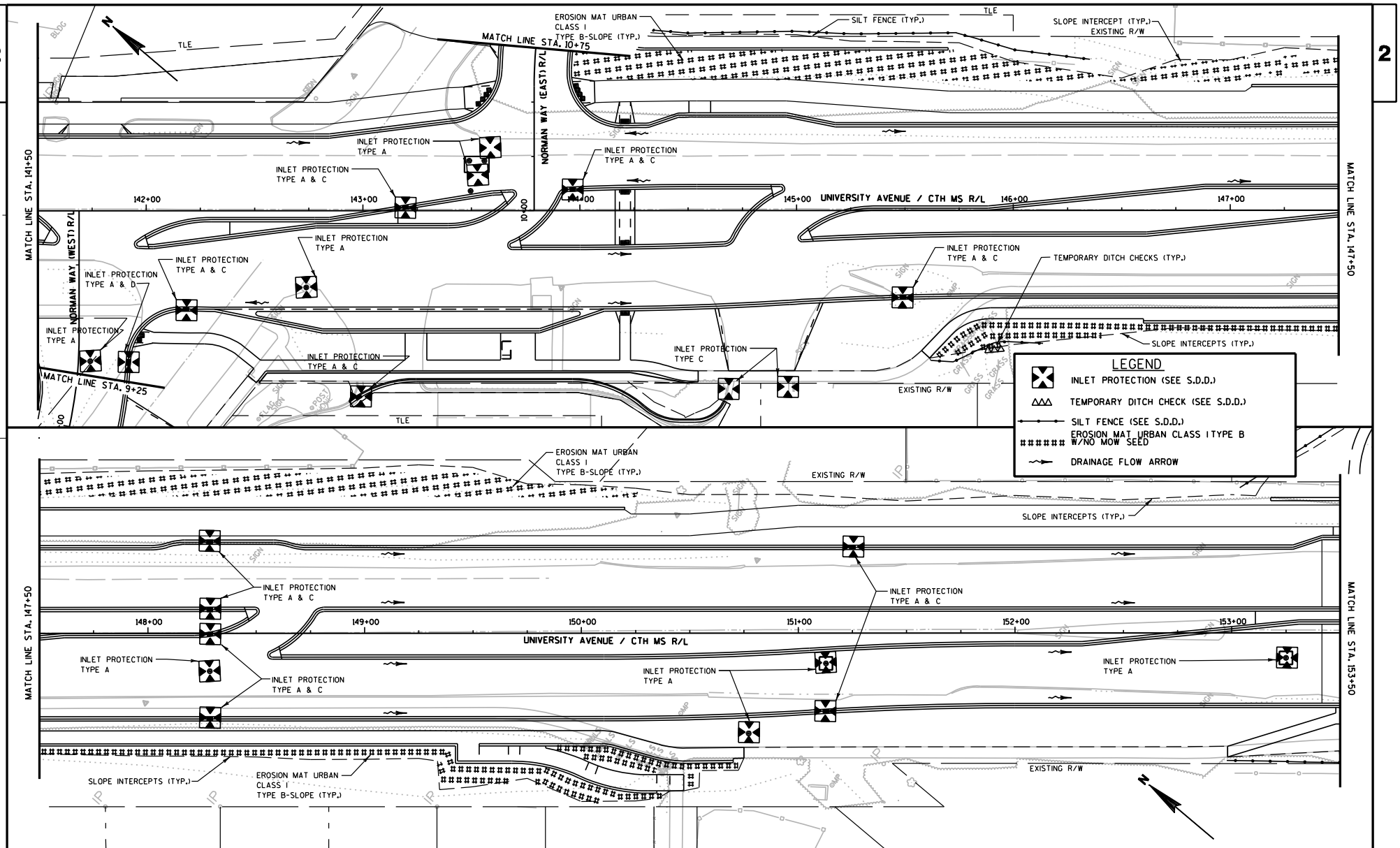
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET E

FILE NAME : g:\madison\md2009035\dgn\022004_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

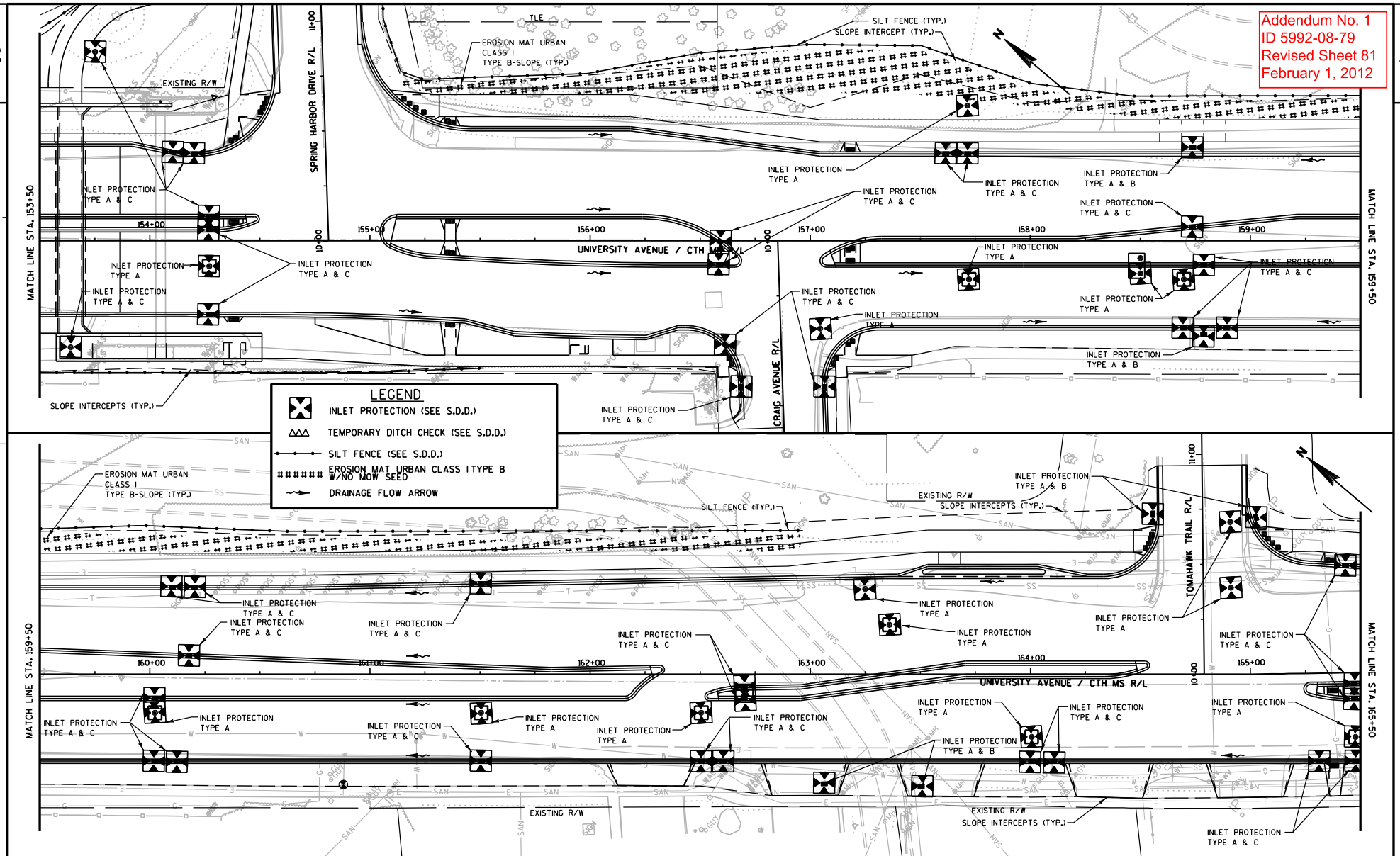


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET 80 E

FILE NAME : g:\madison\md2009035\dgn\022005_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 81
February 1, 2012

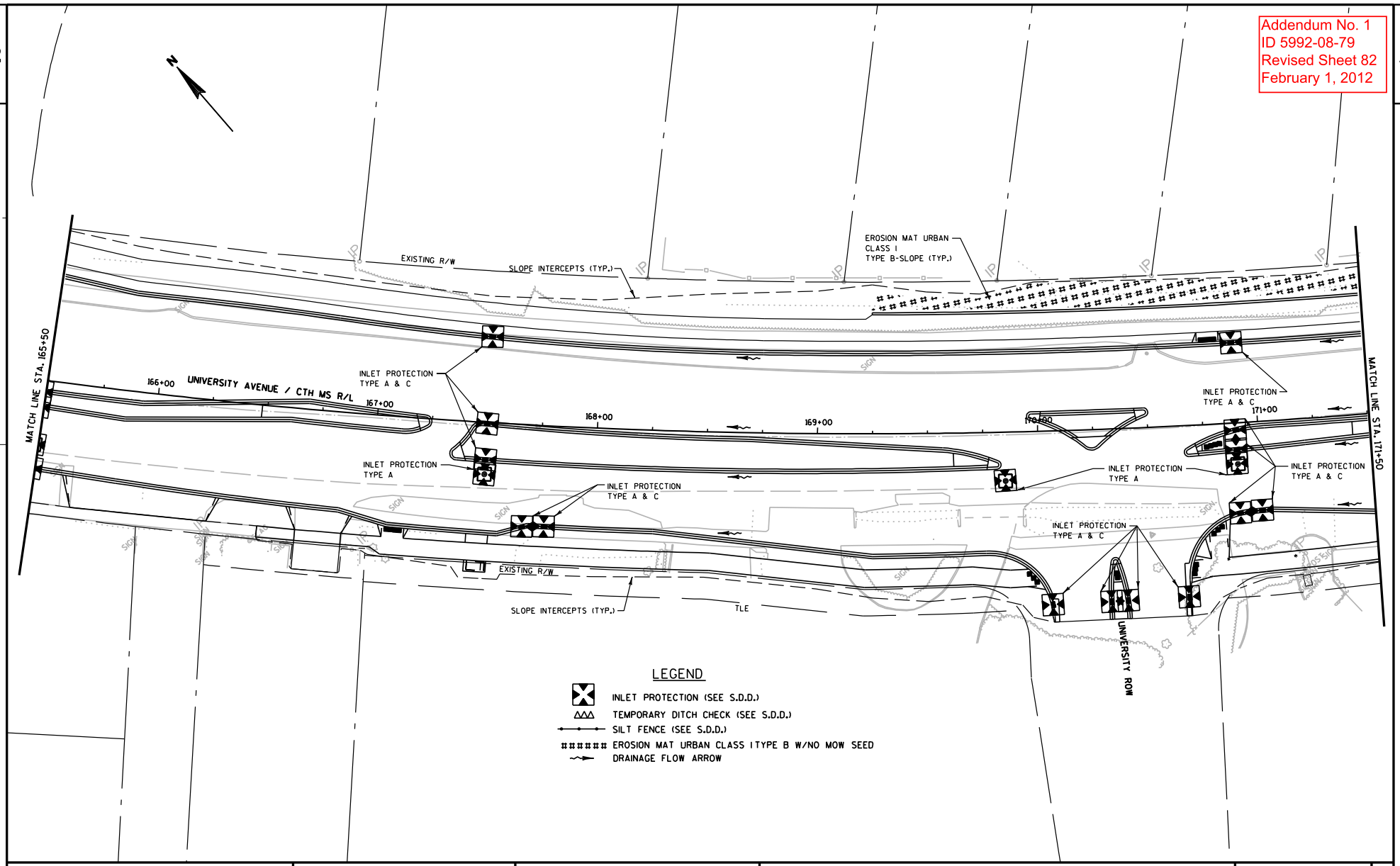


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET 81	E

FILE NAME : G:\Madison\MD2009035\DGN\022006_ec.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 82
February 1, 2012

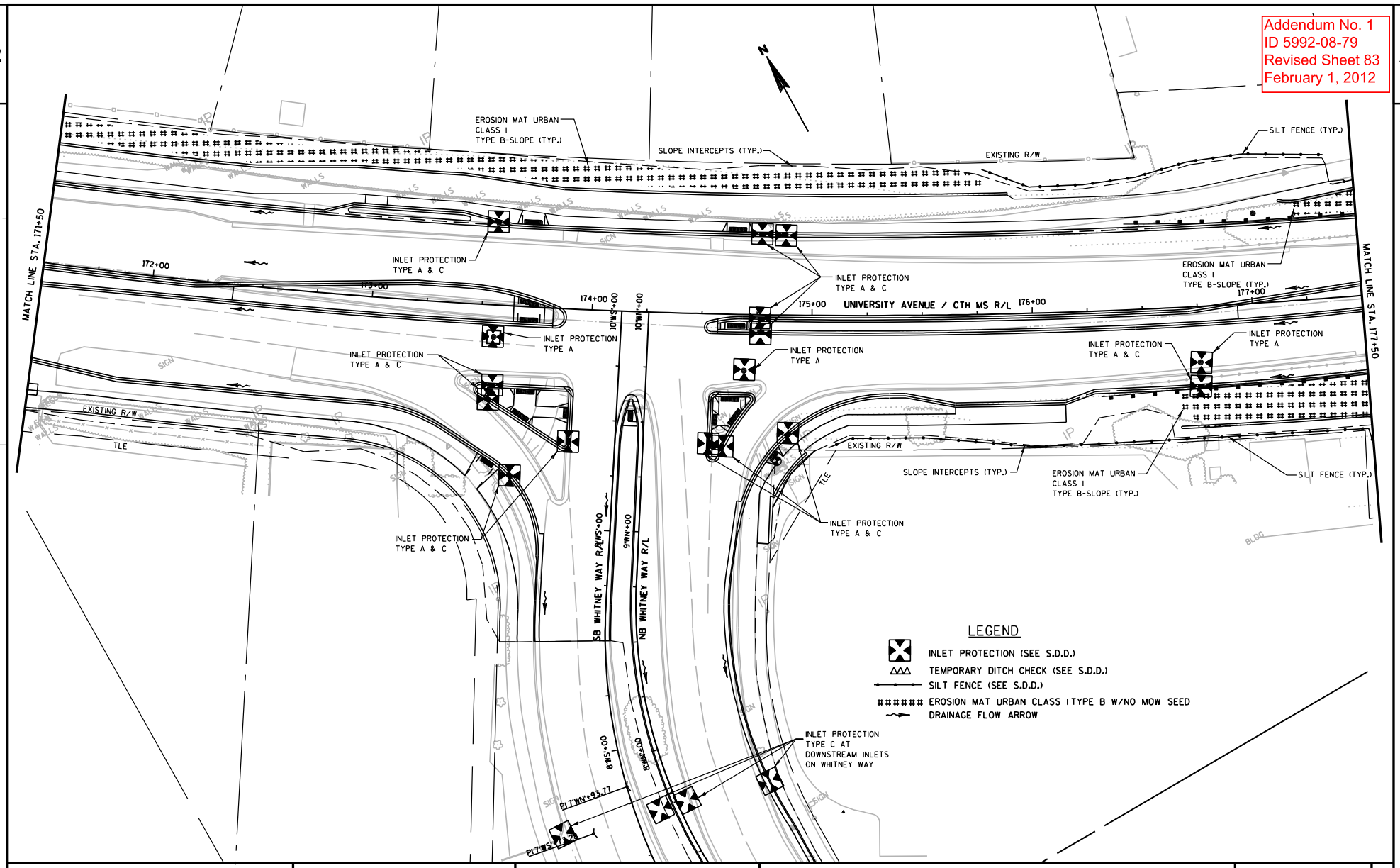


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET 82	E

FILE NAME : G:\Madison\MD2009035\DGN\022007_ec.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

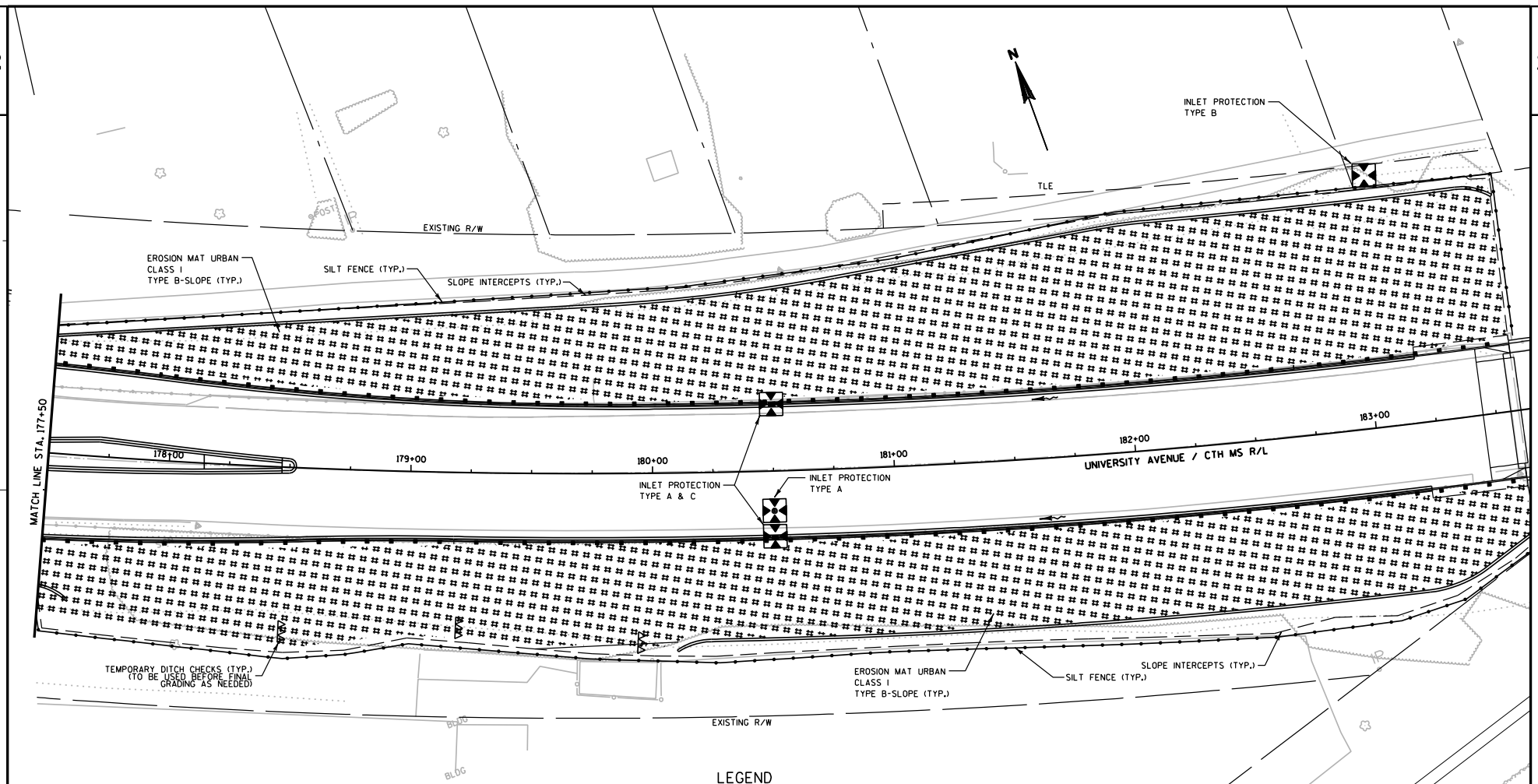
Addendum No. 1
ID 5992-08-79
Revised Sheet 83
February 1, 2012



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET 83	E

FILE NAME : G:\Madison\MD2009035\DGN\022008_ec.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

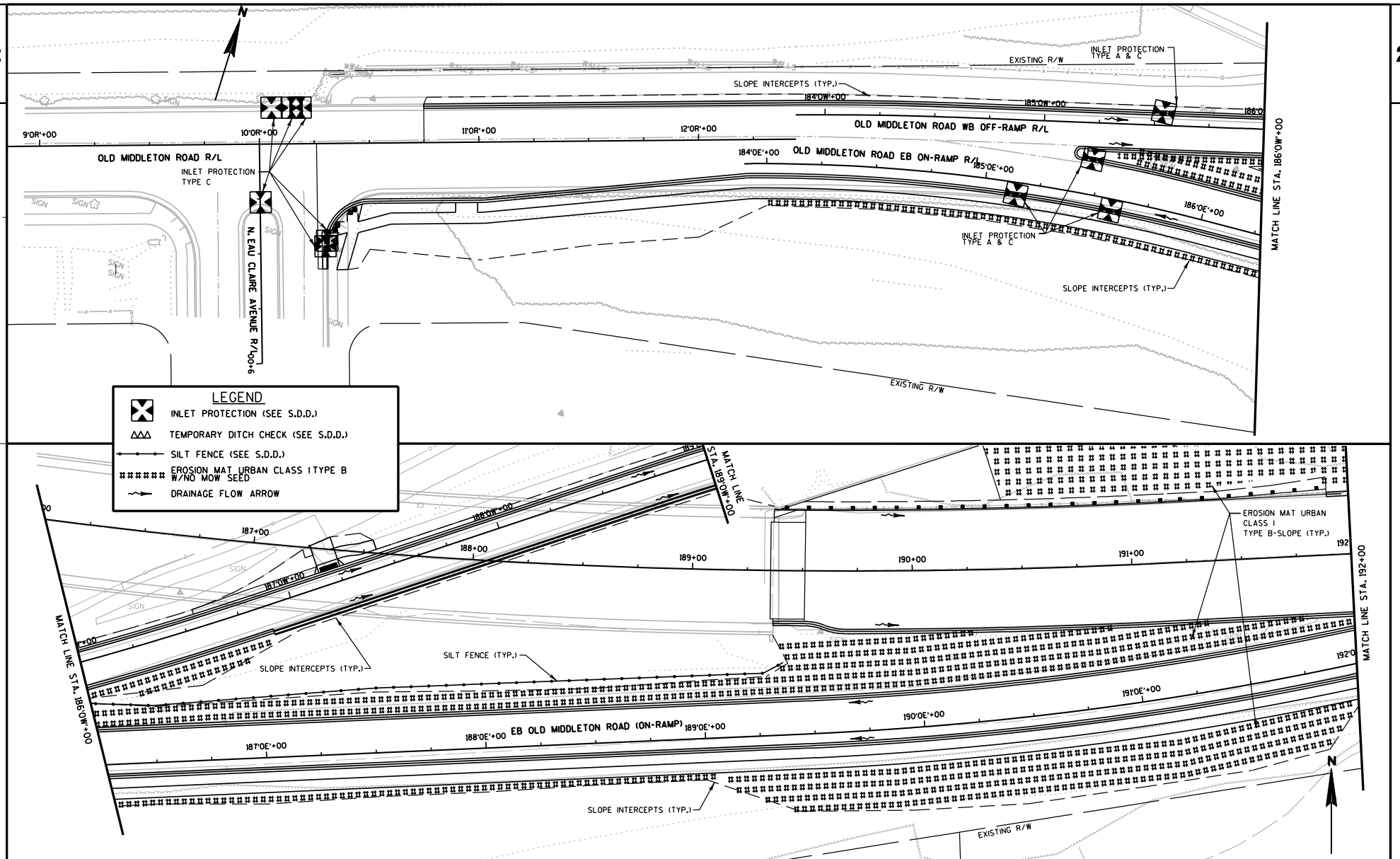
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\022009_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

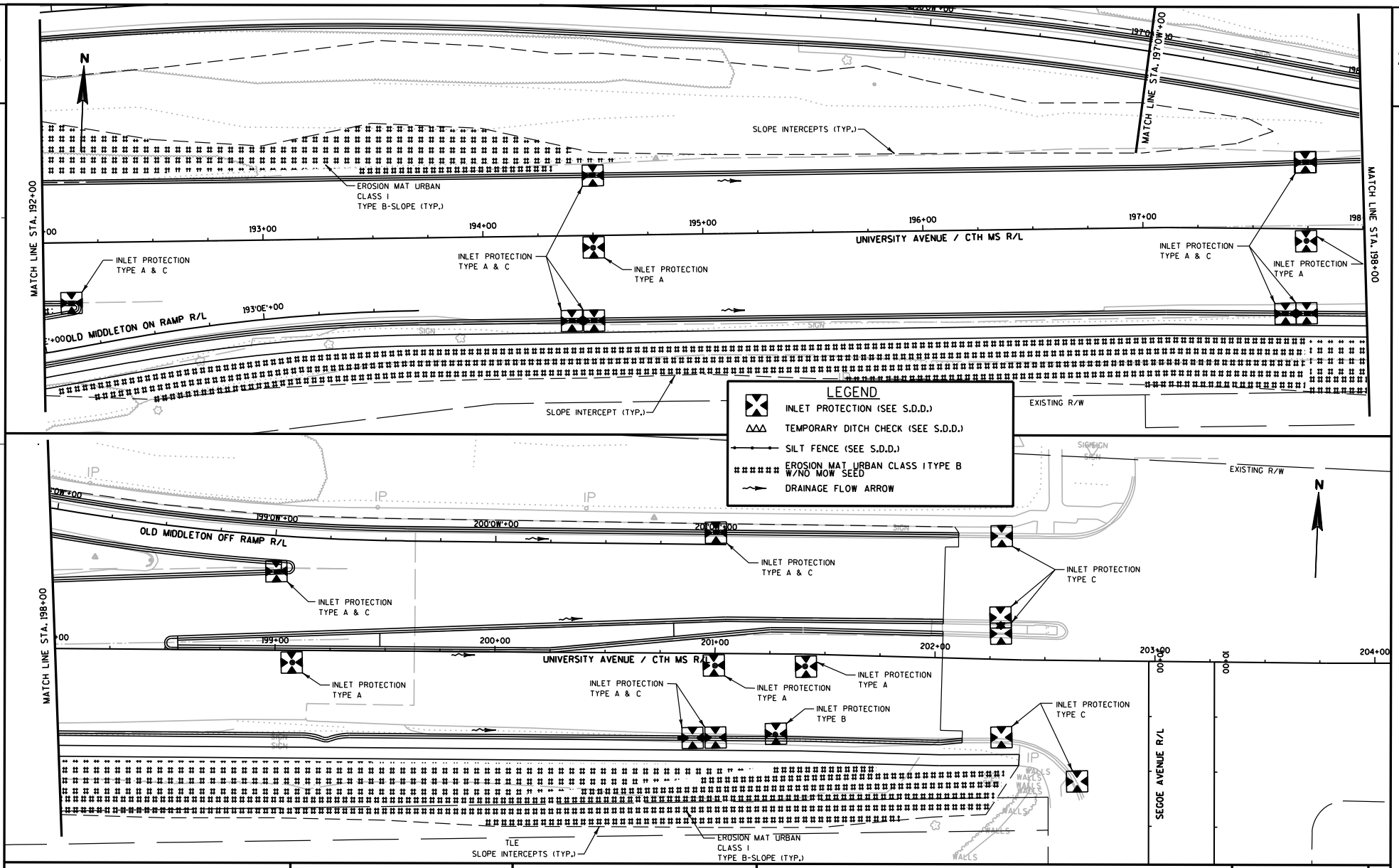
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\022010_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

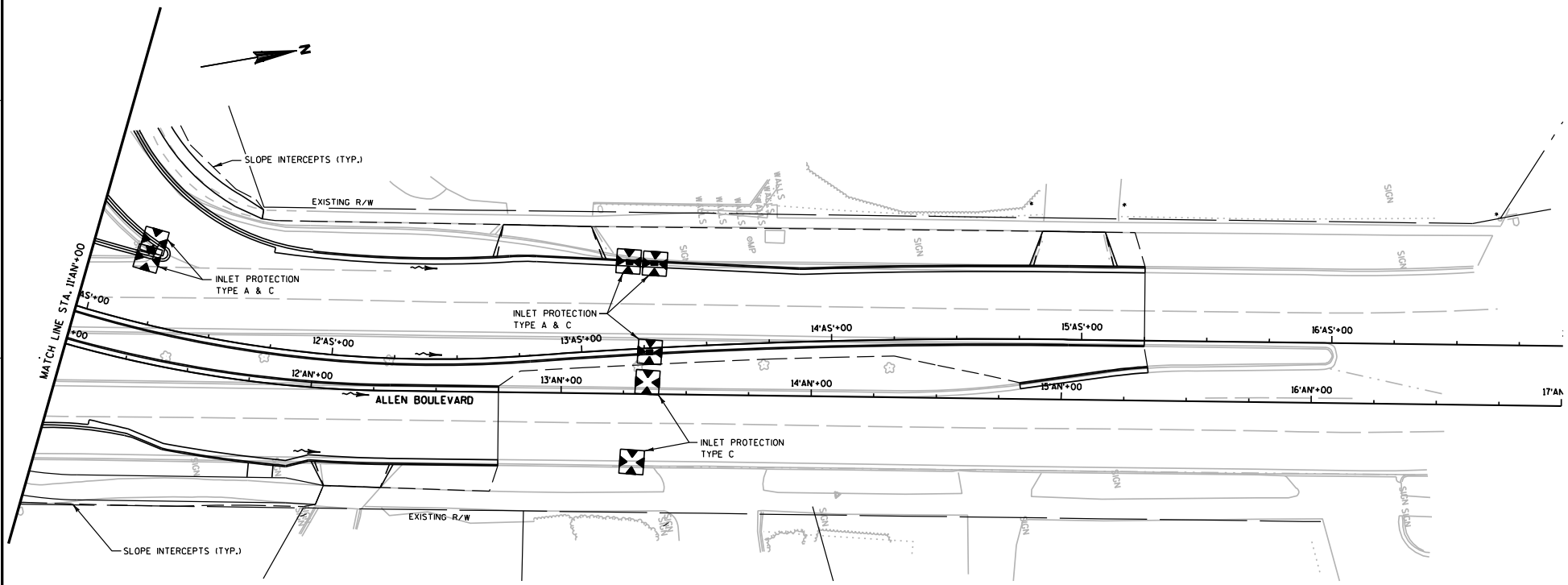


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET E

FILE NAME : g:\madison\md2009035\dgn\022011_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2



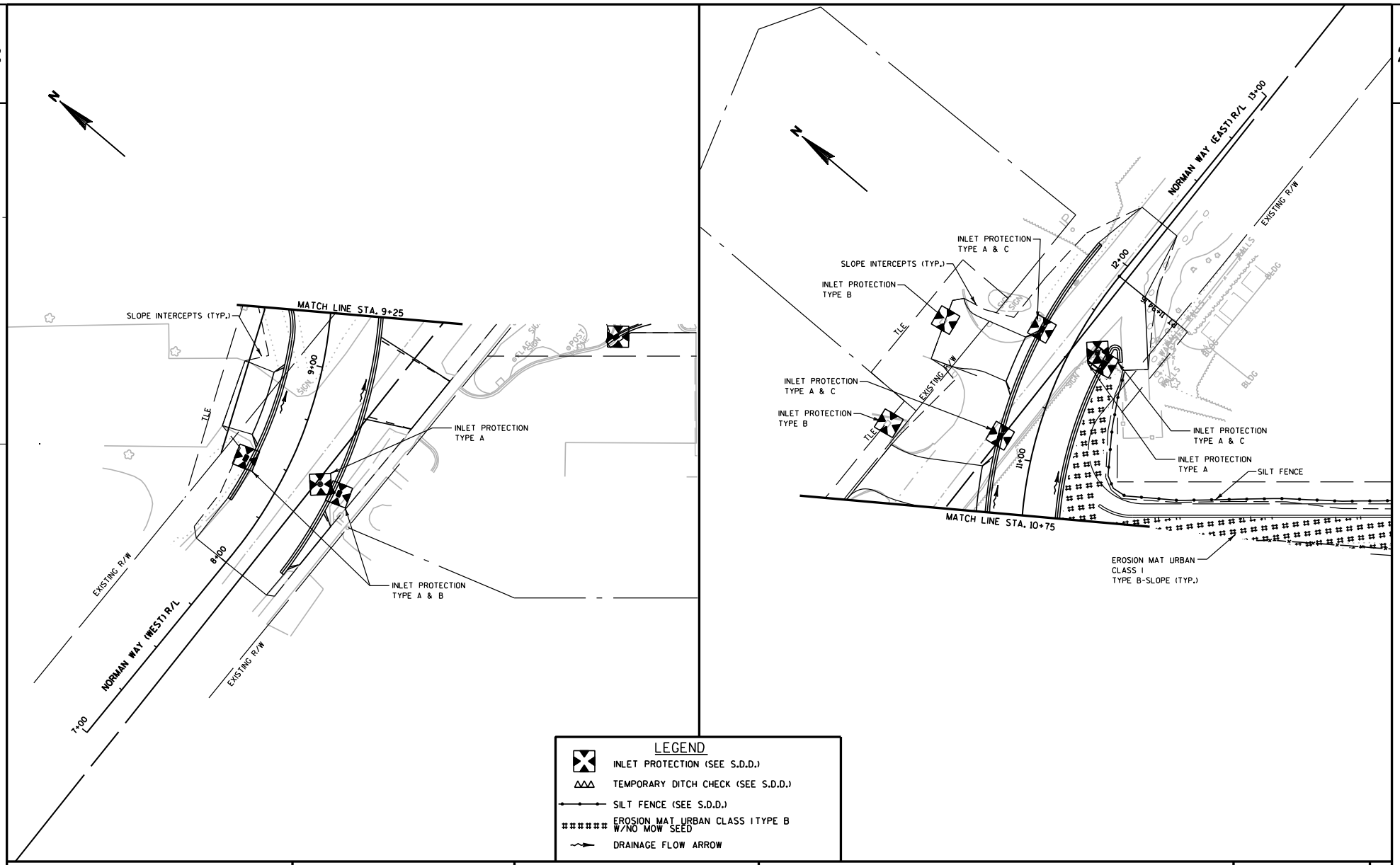
LEGEND

- INLET PROTECTION (SEE S.D.D.)
- TEMPORARY DITCH CHECK (SEE S.D.D.)
- SILT FENCE (SEE S.D.D.)
- ###### EROSION MAT URBAN CLASS I TYPE B W/NO MOW SEED
- DRAINAGE FLOW ARROW

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\022012_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

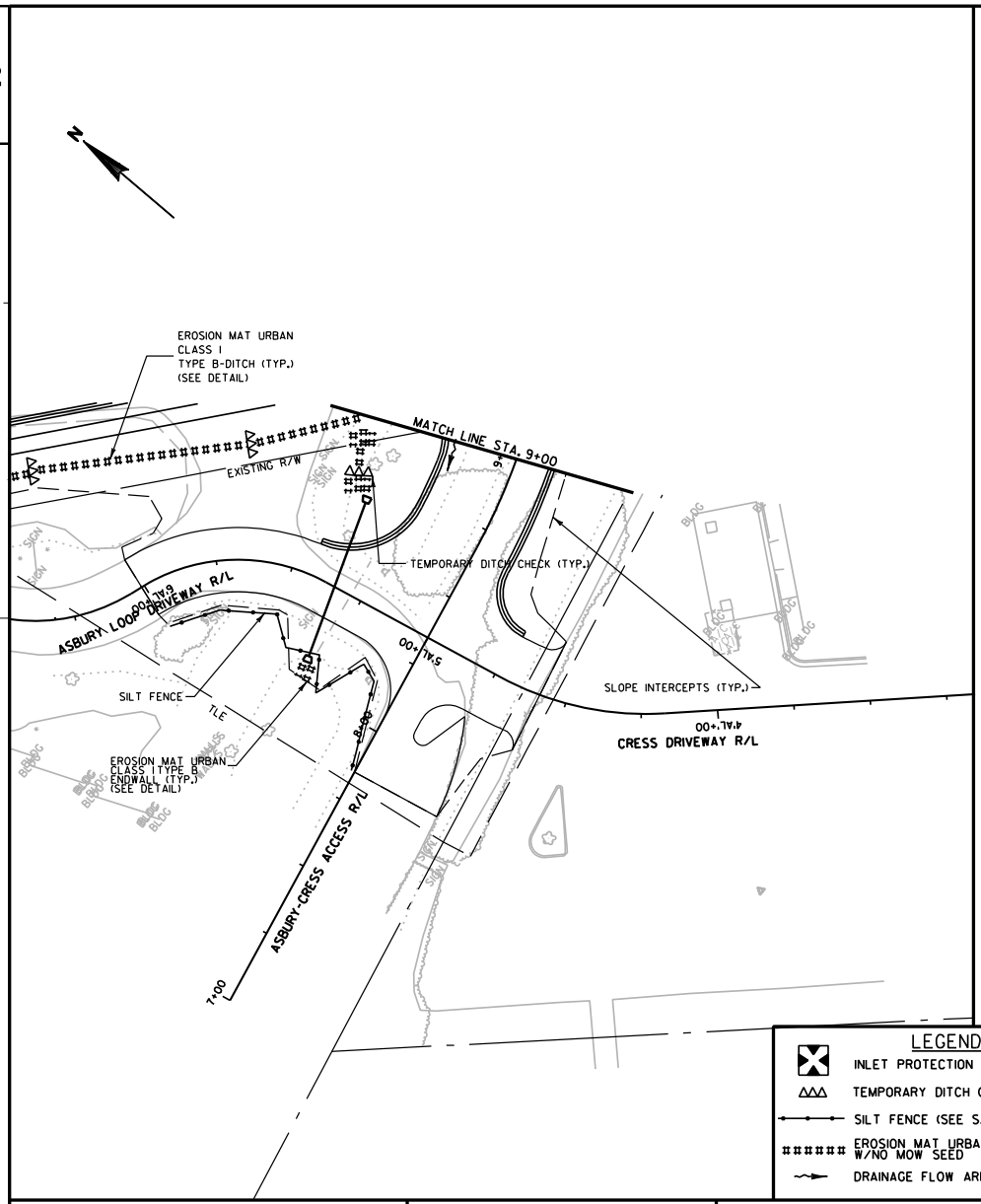
WISDOT/CADDS SHEET 42



PROJECT NO:5992-08-79	HWY:CTH MS	COUNTY:DANE	EROSION CONTROL PLAN	SHEET E

FILE NAME : g:\madison\md2009035\dgn\022013_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

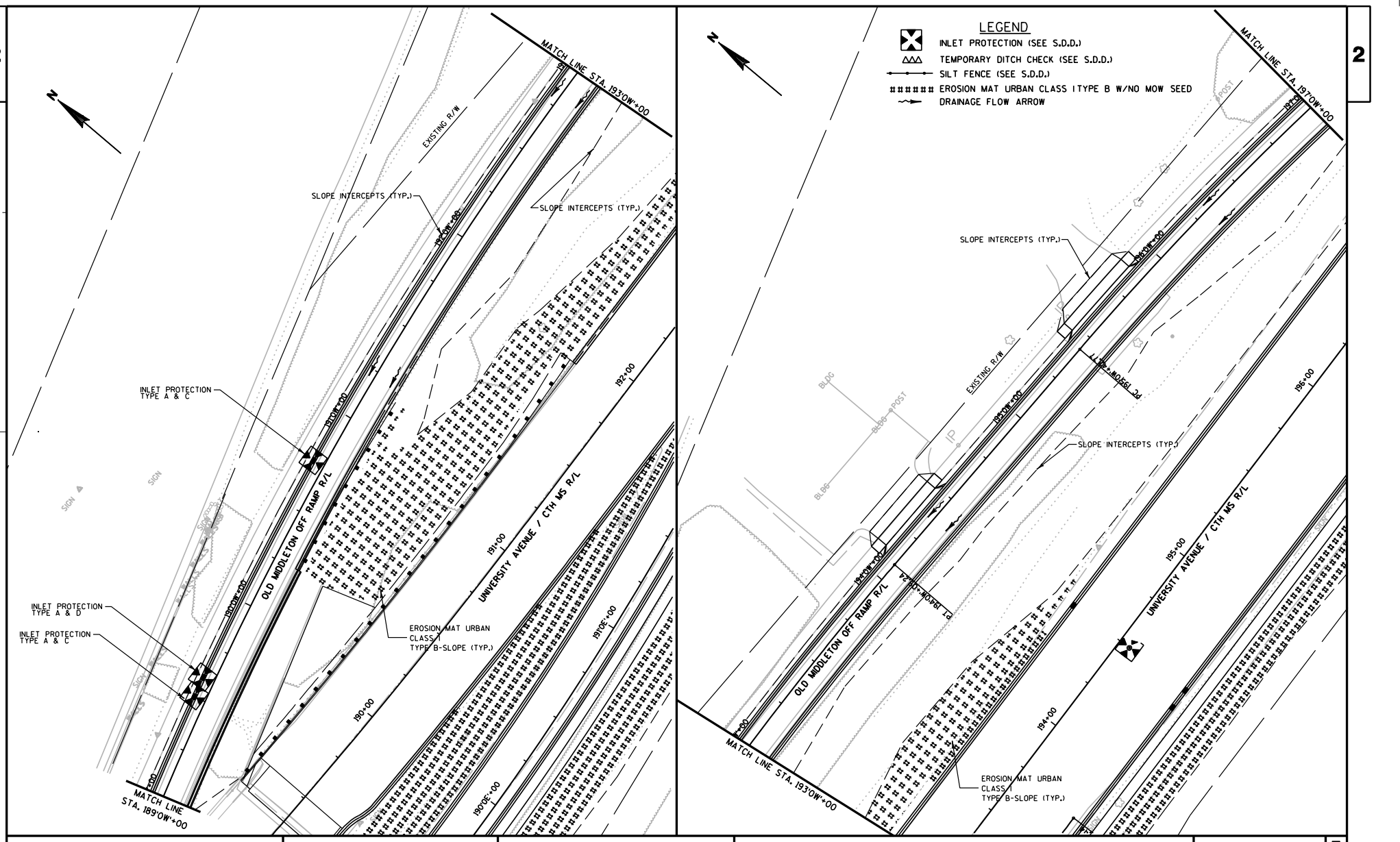
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EROSION CONTROL PLAN	SHEET E

FILE NAME : g:\madison\md2009035\dgn\022014_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

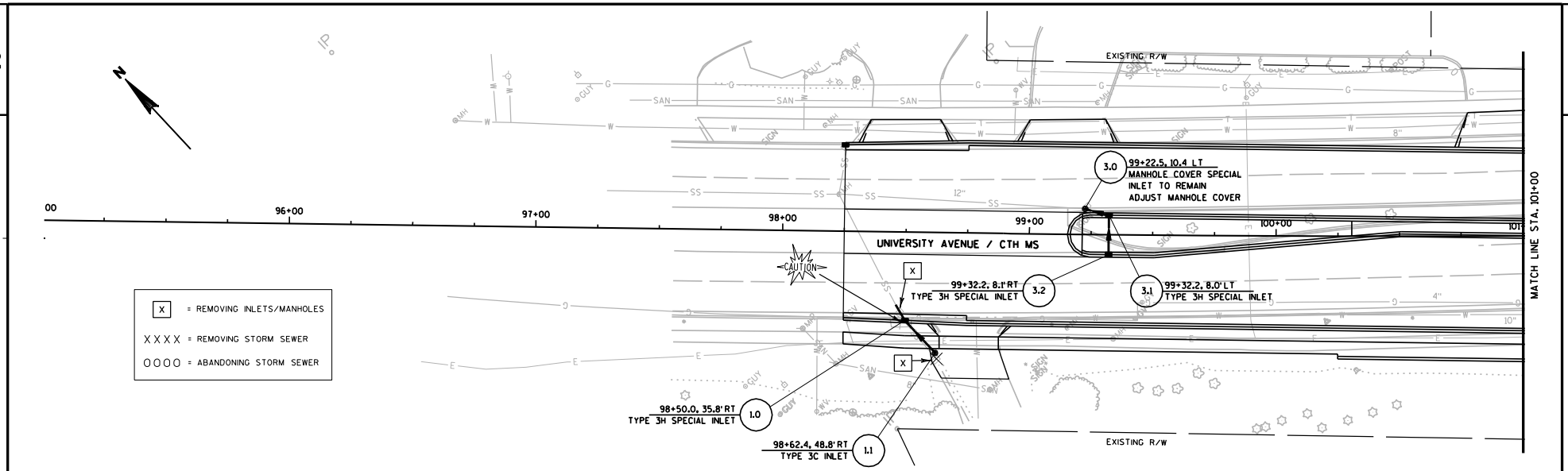
WISDOT/CADDS SHEET 42

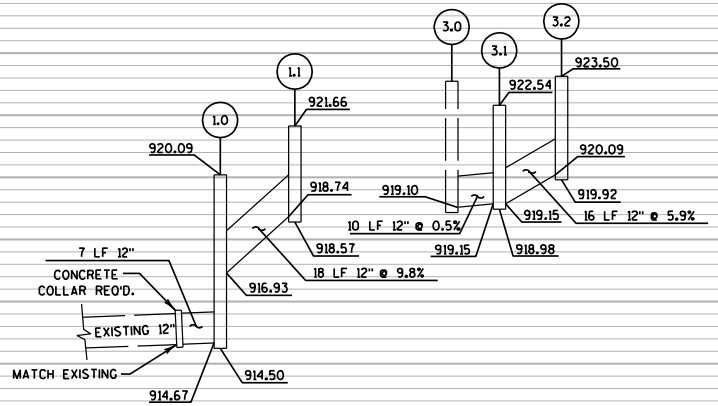


PROJECT NO:5992-08-79	HWY: CTH MS	COUNTY:DANE	EROSION CONTROL PLAN	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\022015_ec.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

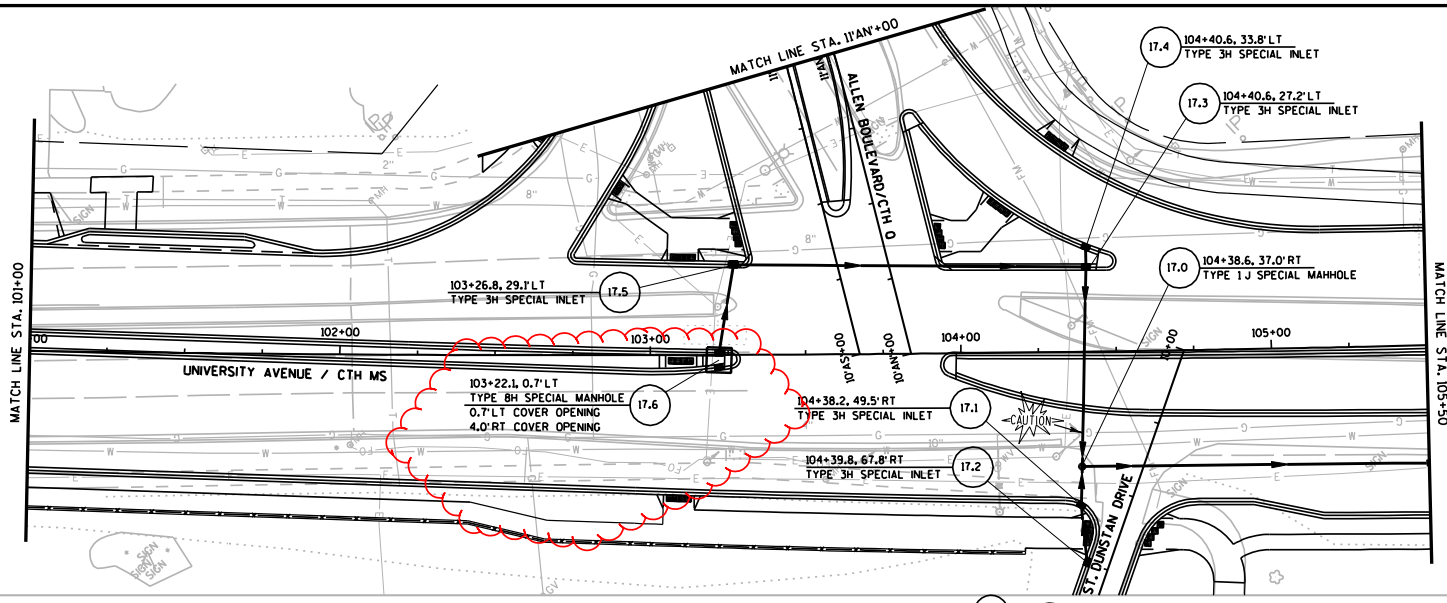




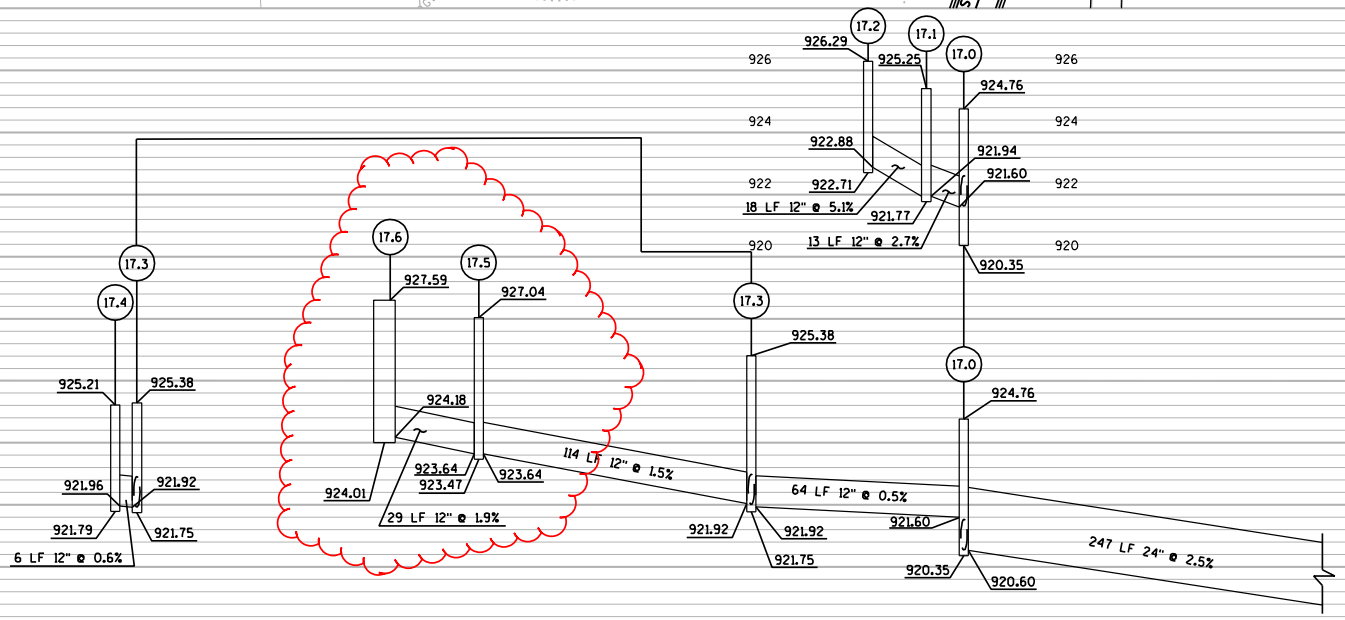
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\022501_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41



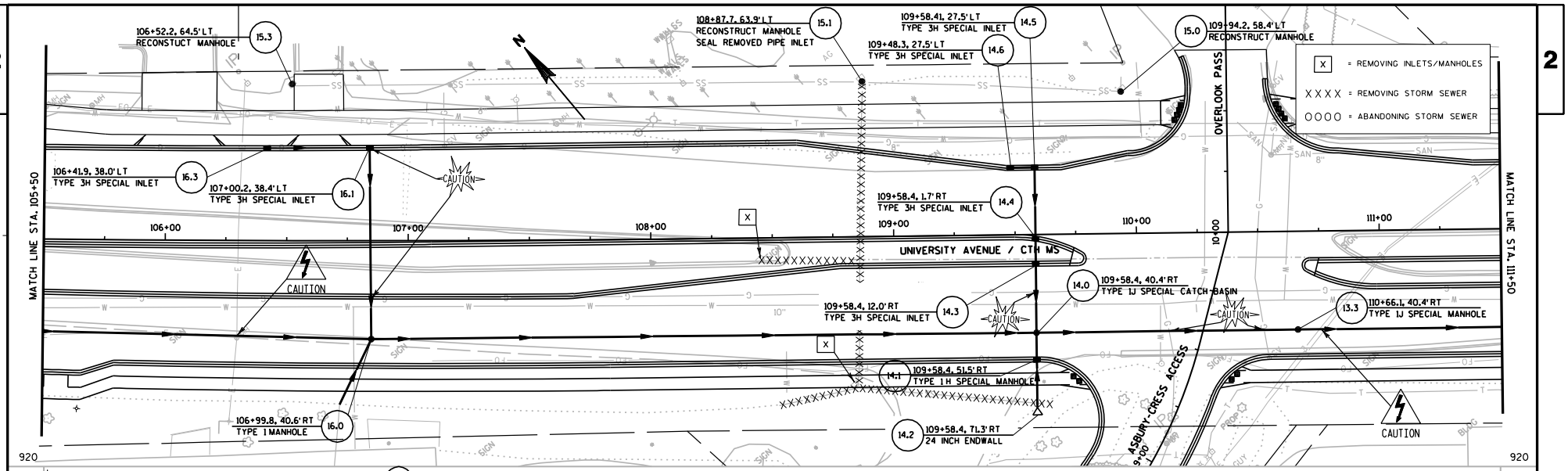
Addendum No. 1
ID 5992-08-79
Revised Sheet 92
February 1, 2012



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 92	E

FILE NAME : G:\Madison\MD2009035\DGN\022502_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

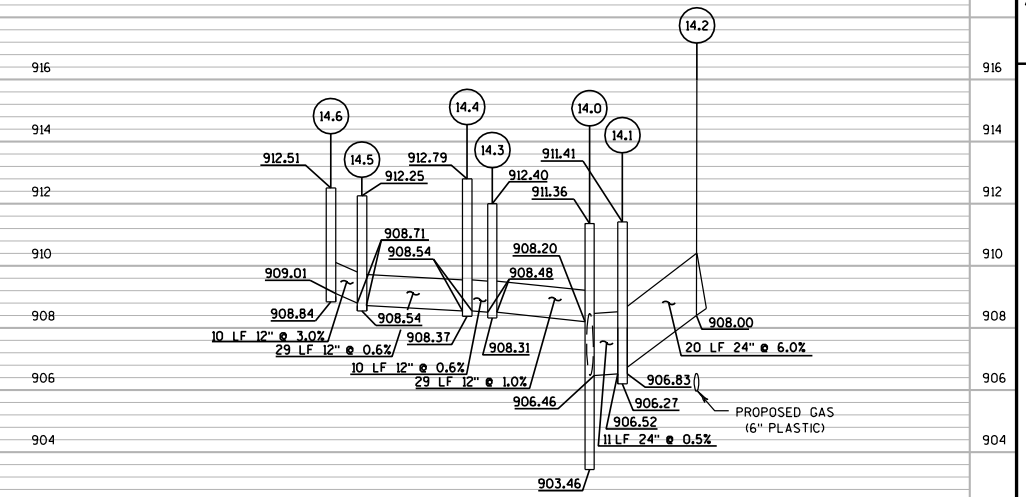
WISDOT/CADDS SHEET 41



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 93 E

FILE NAME : g:\madison\md2009035\dgn\022503_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

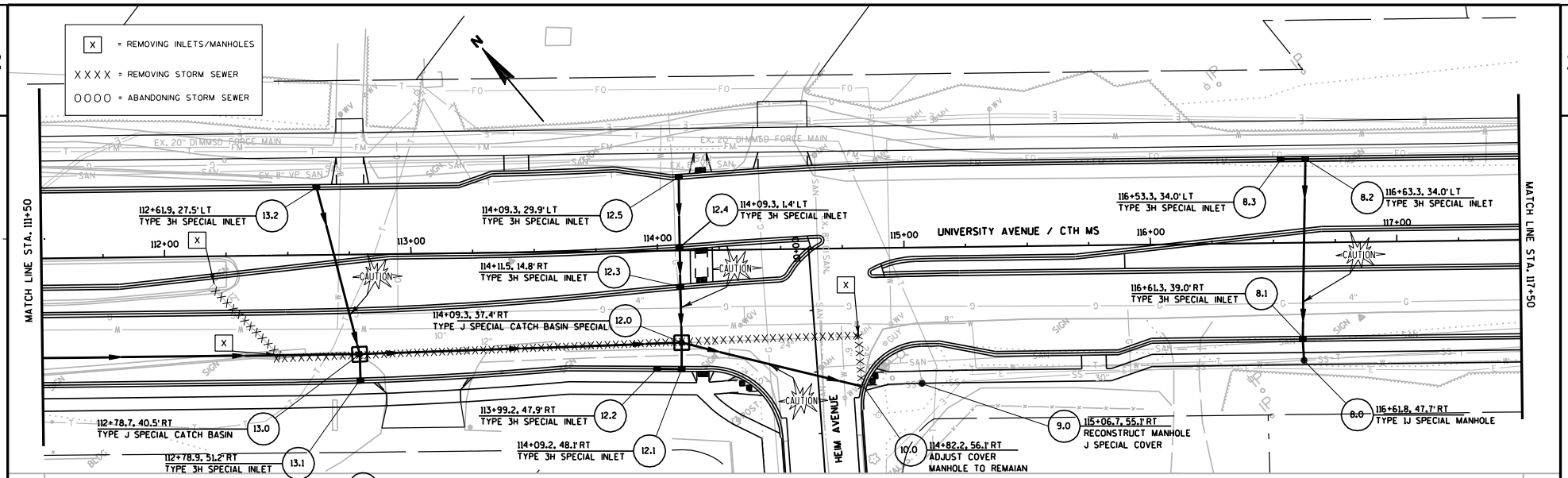
WISDOT/CADDS SHEET 41

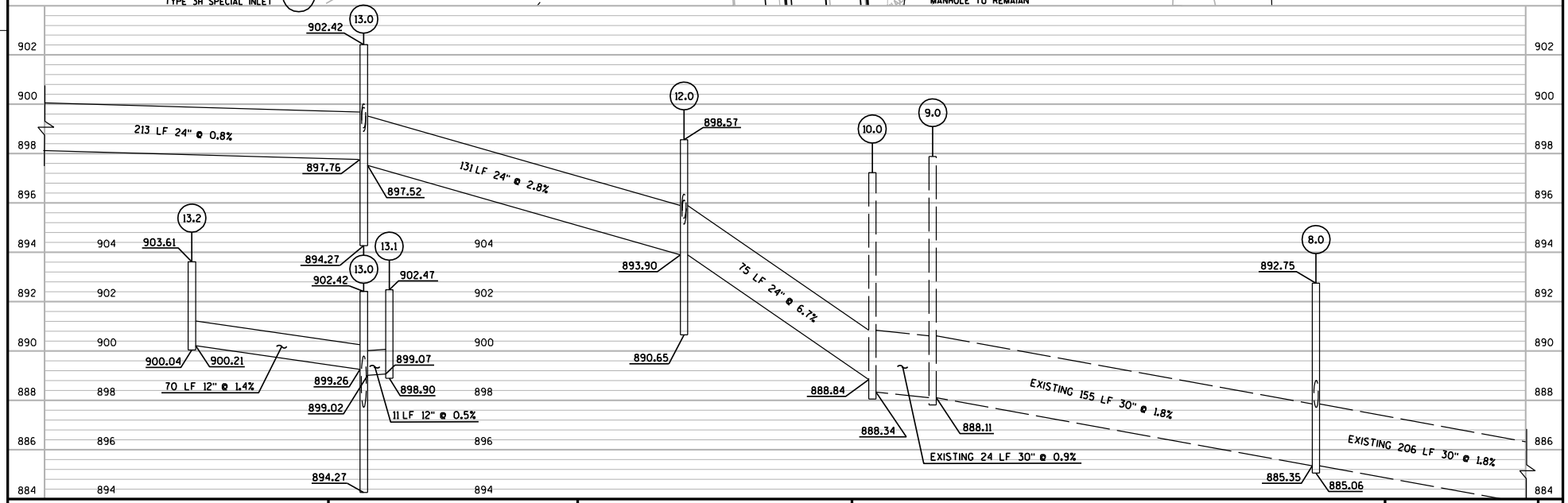


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\022503_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41

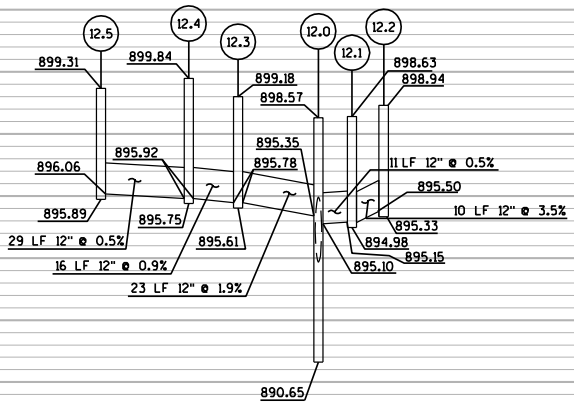


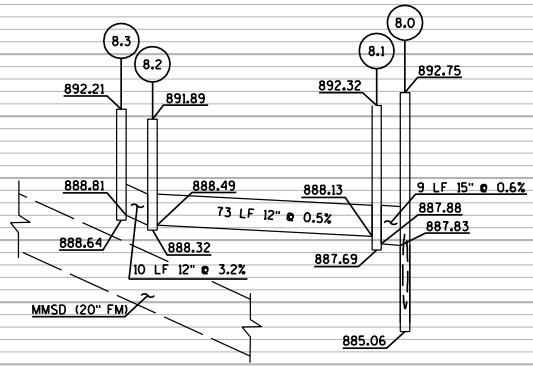


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\022504_ss.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41

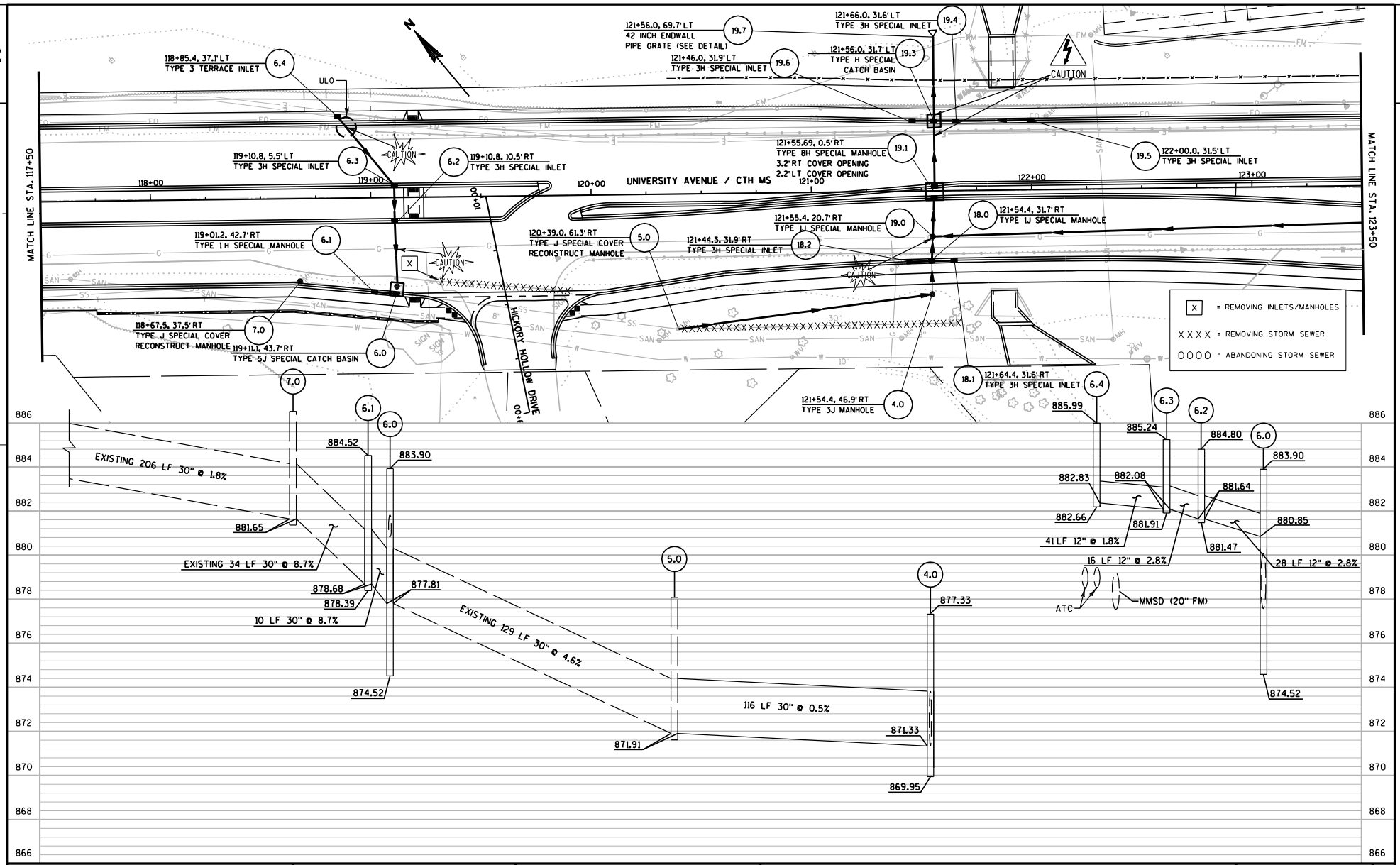




PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\022504_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\022505_ss.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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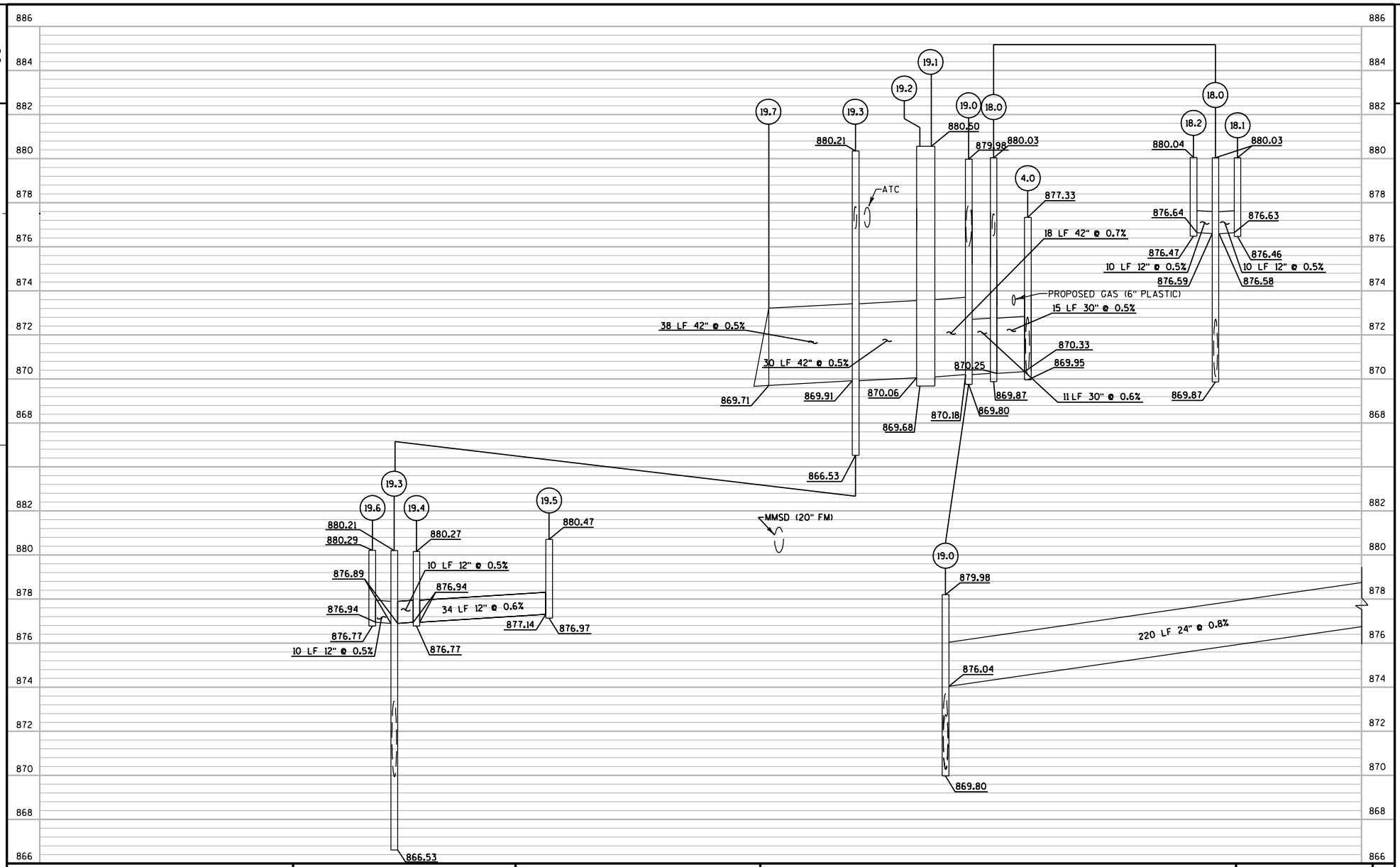
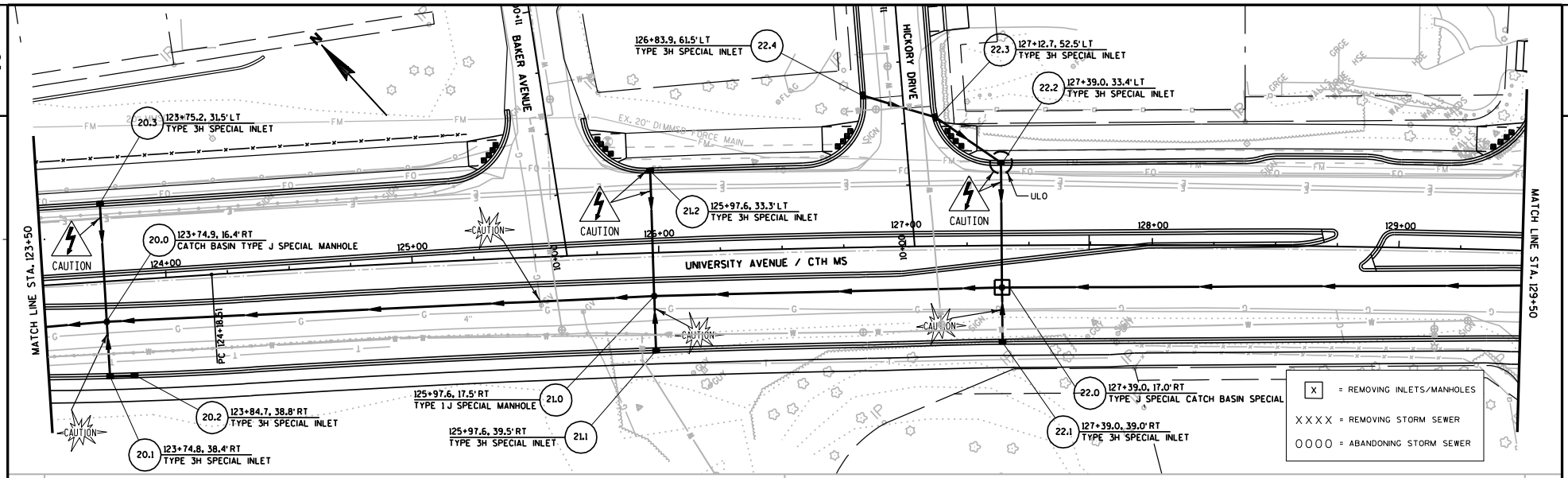
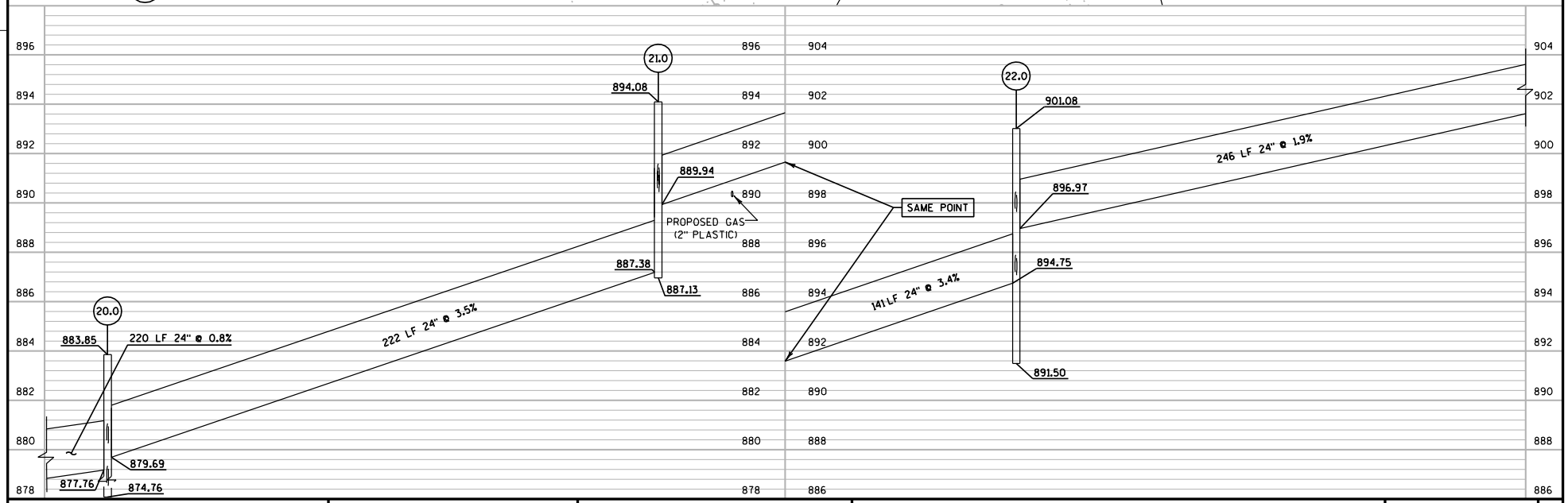


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET E

FILE NAME : g:\madison\md2009035\dgn\022505_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41



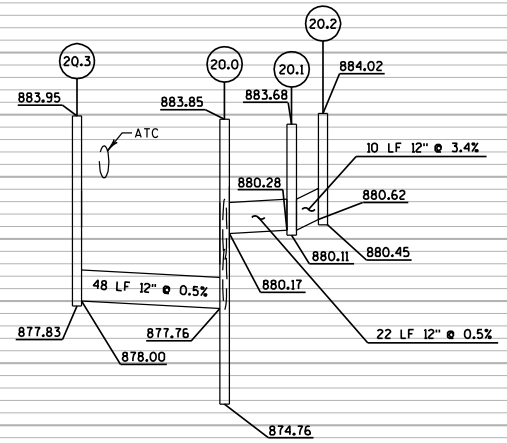


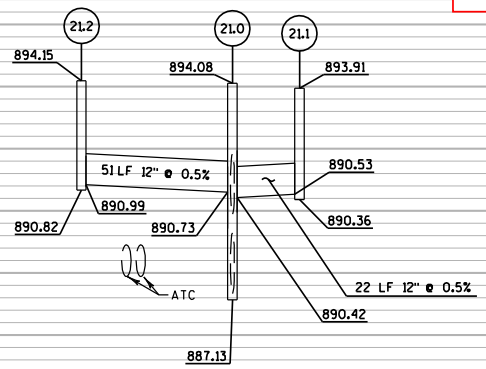
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 99 E

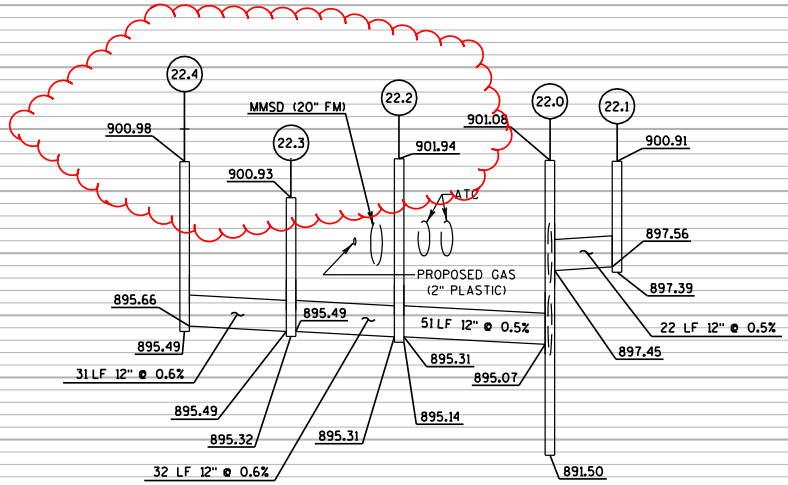
FILE NAME : G:\Madison\MD2009035\DGN\022506_ss.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41

Addendum No. 1
ID 5992-08-79
Revised Sheet 100
February 1, 2012



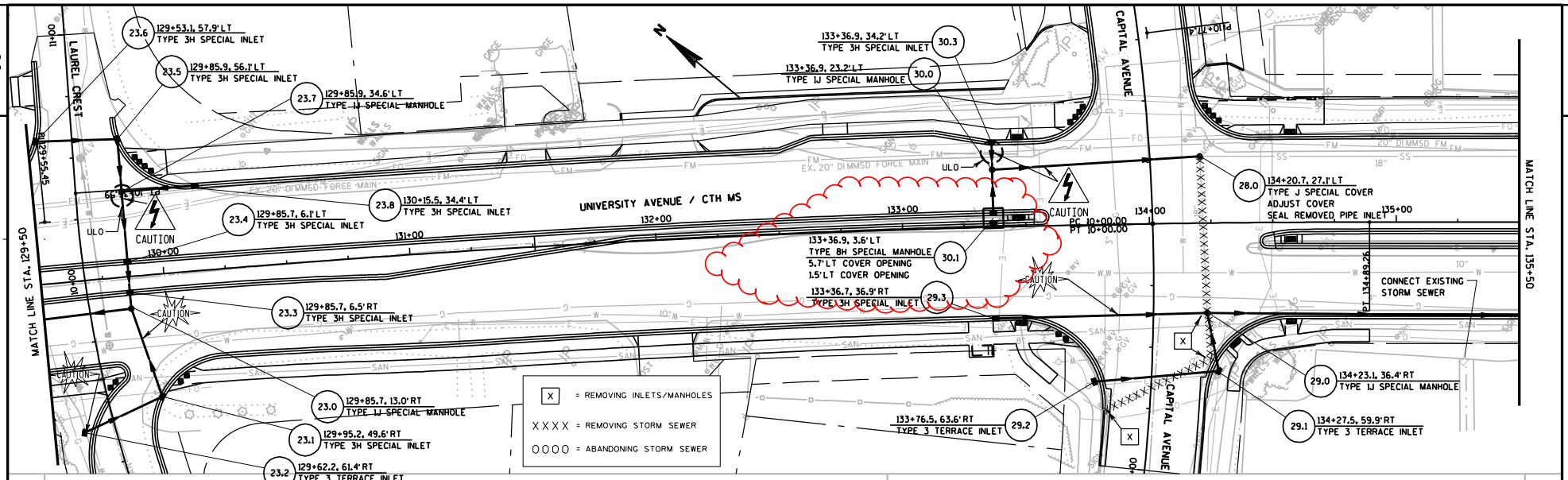


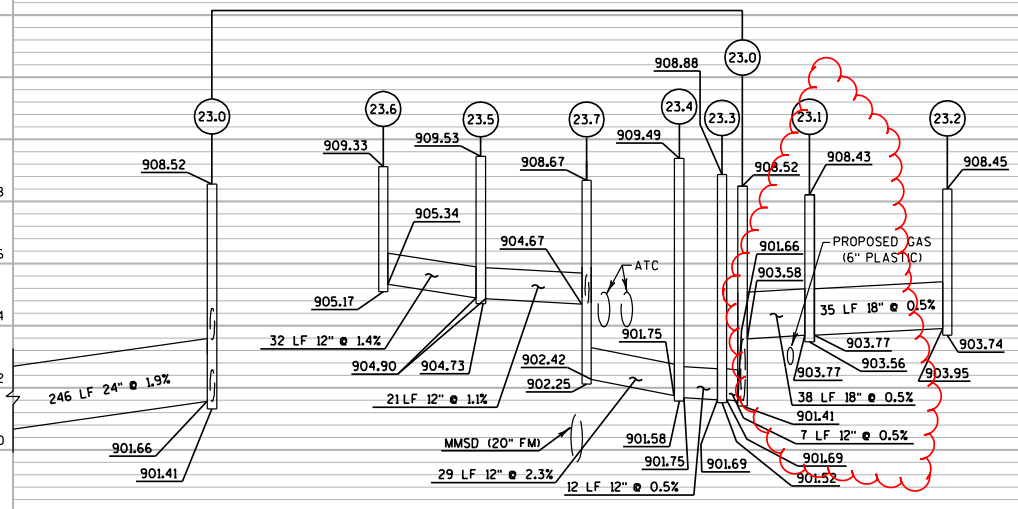


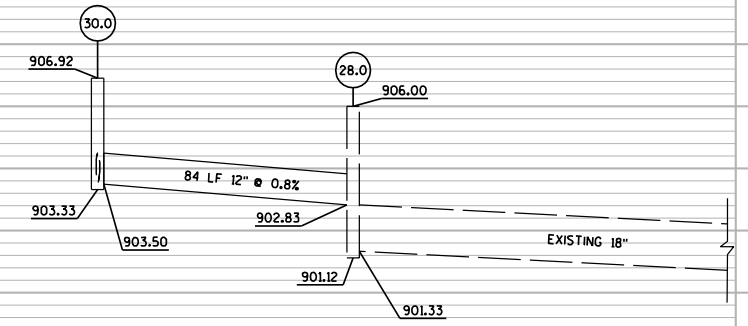
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 100	E

FILE NAME : G:\Madison\MD2009035\DGN\022506_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41







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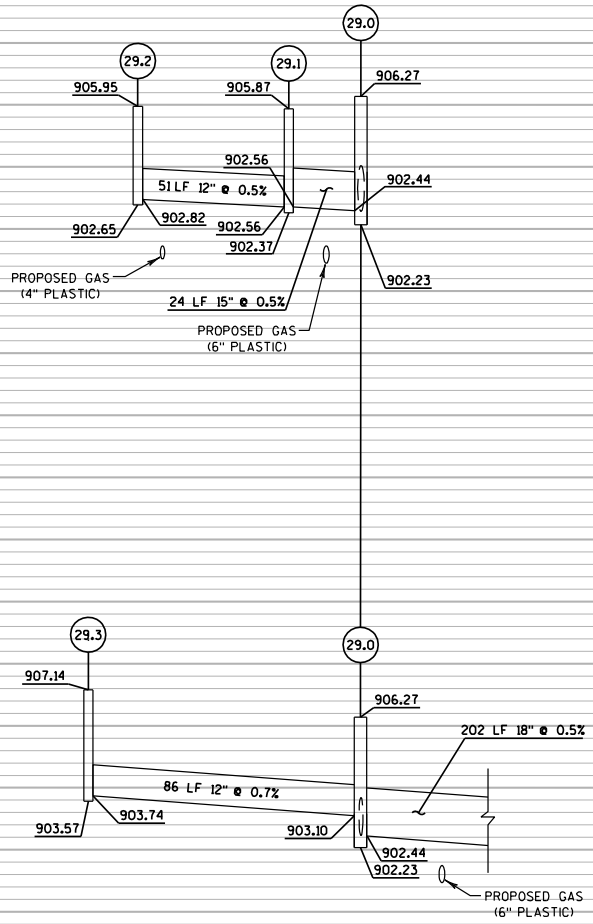
ID 5992-08-79
Revised Sheet 101
February 1, 2012

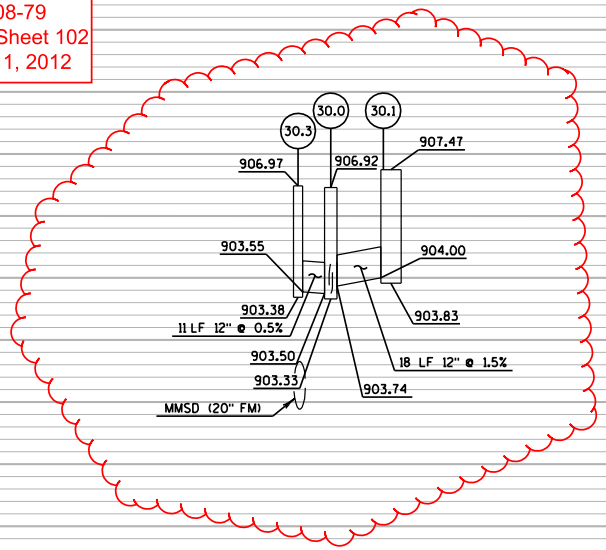
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 101	E

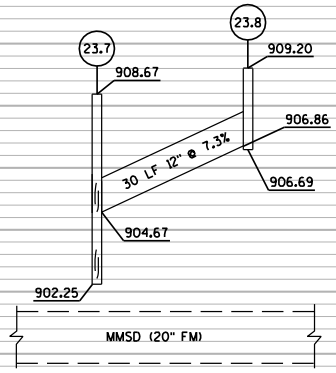
FILE NAME : G:\Madison\MD2009035\DGN\022507_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41

Addendum No. 1
ID 5992-08-79
Revised Sheet 102
February 1, 2012



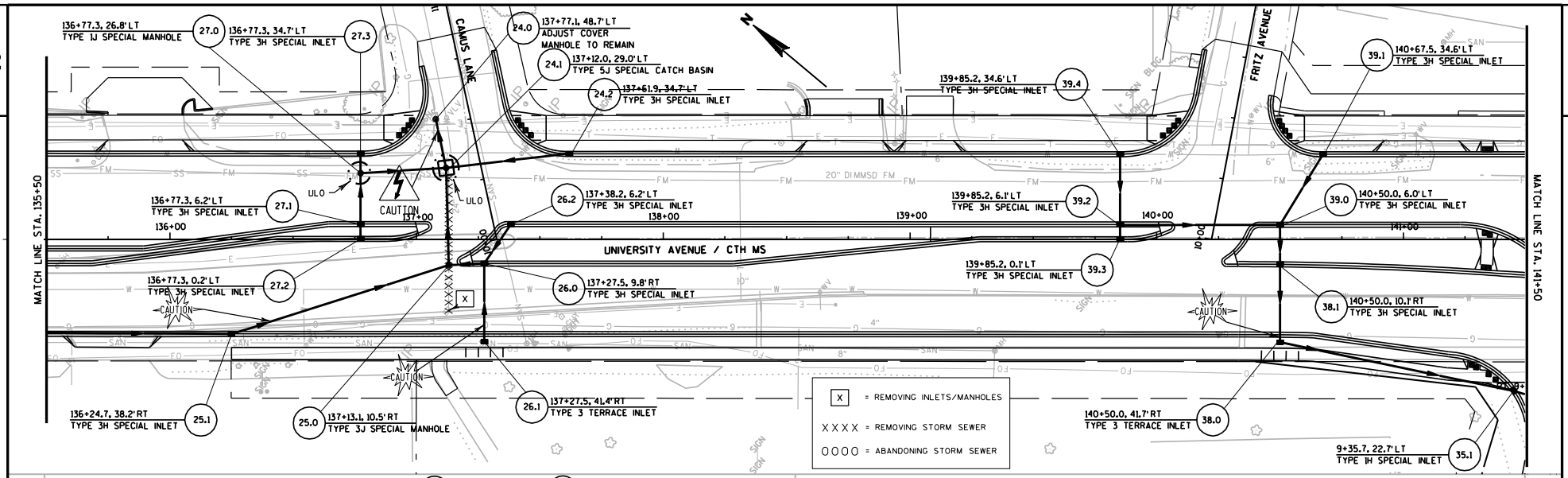


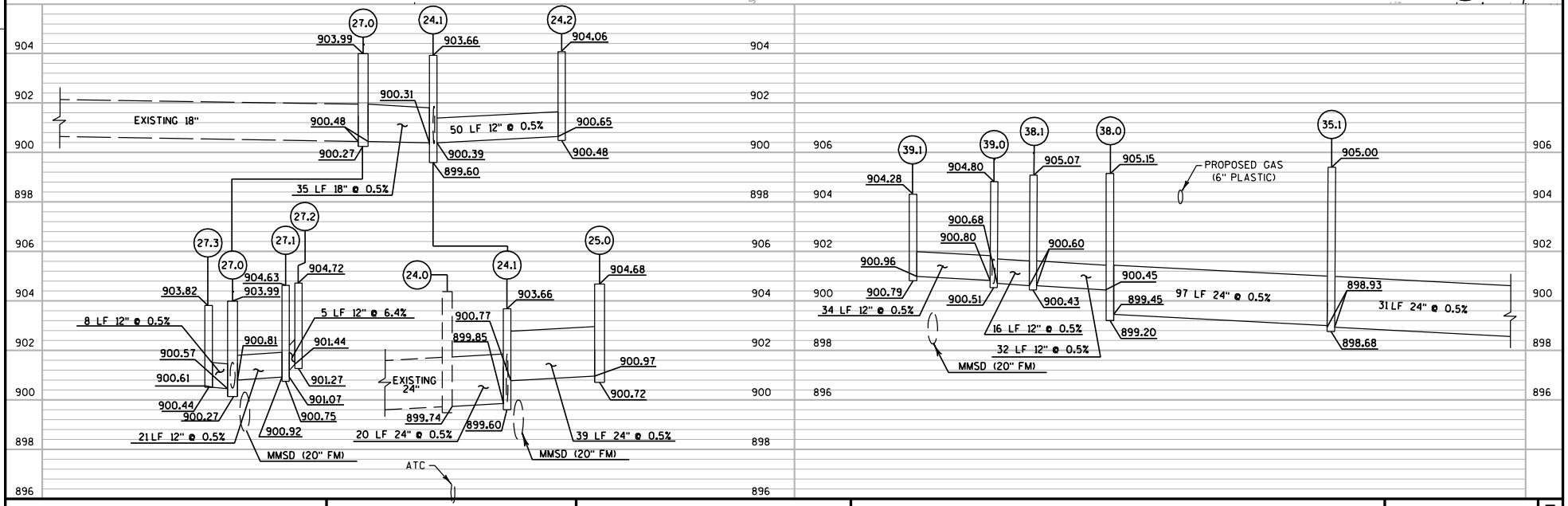


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 102	E

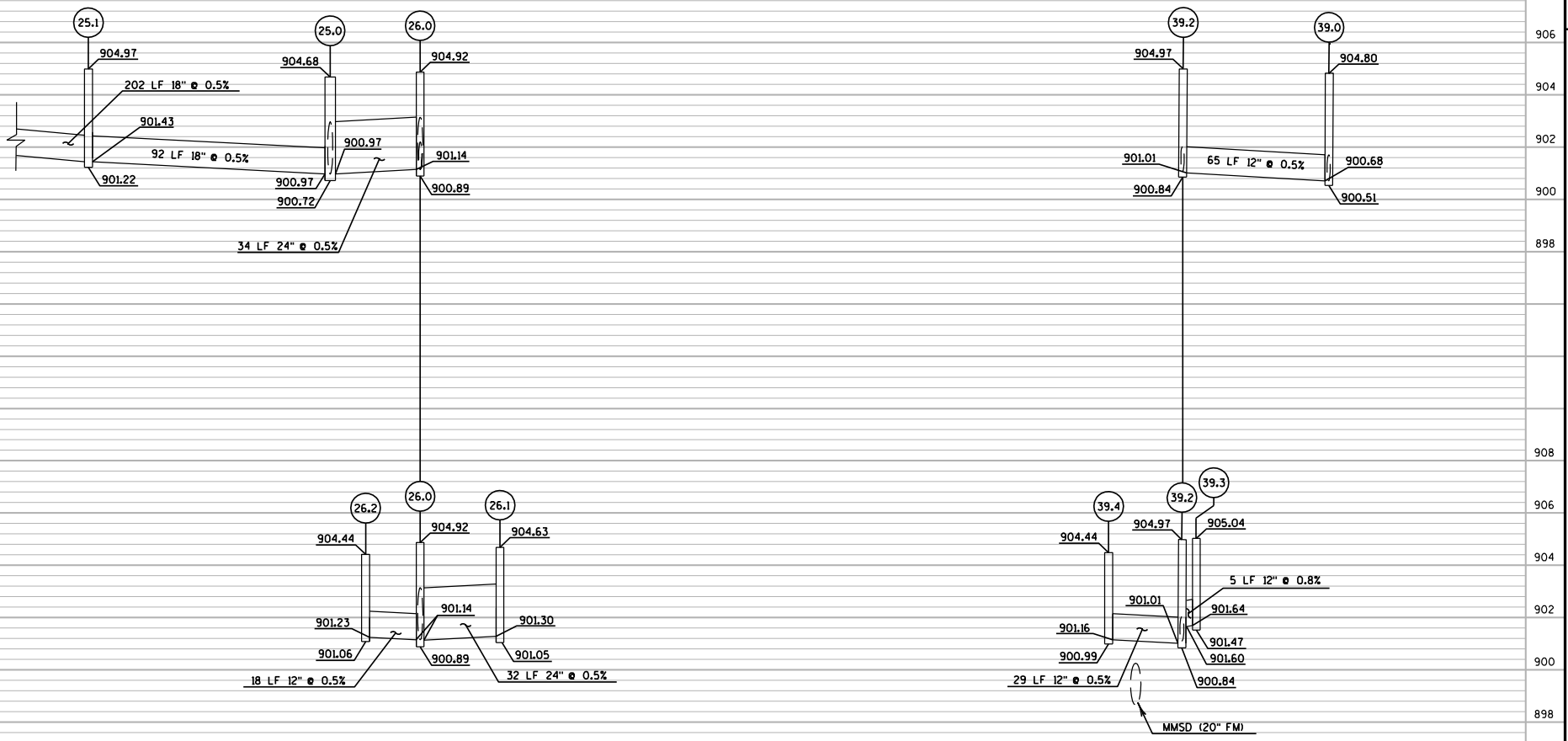
FILE NAME : G:\Madison\MD2009035\DGN\022507_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41





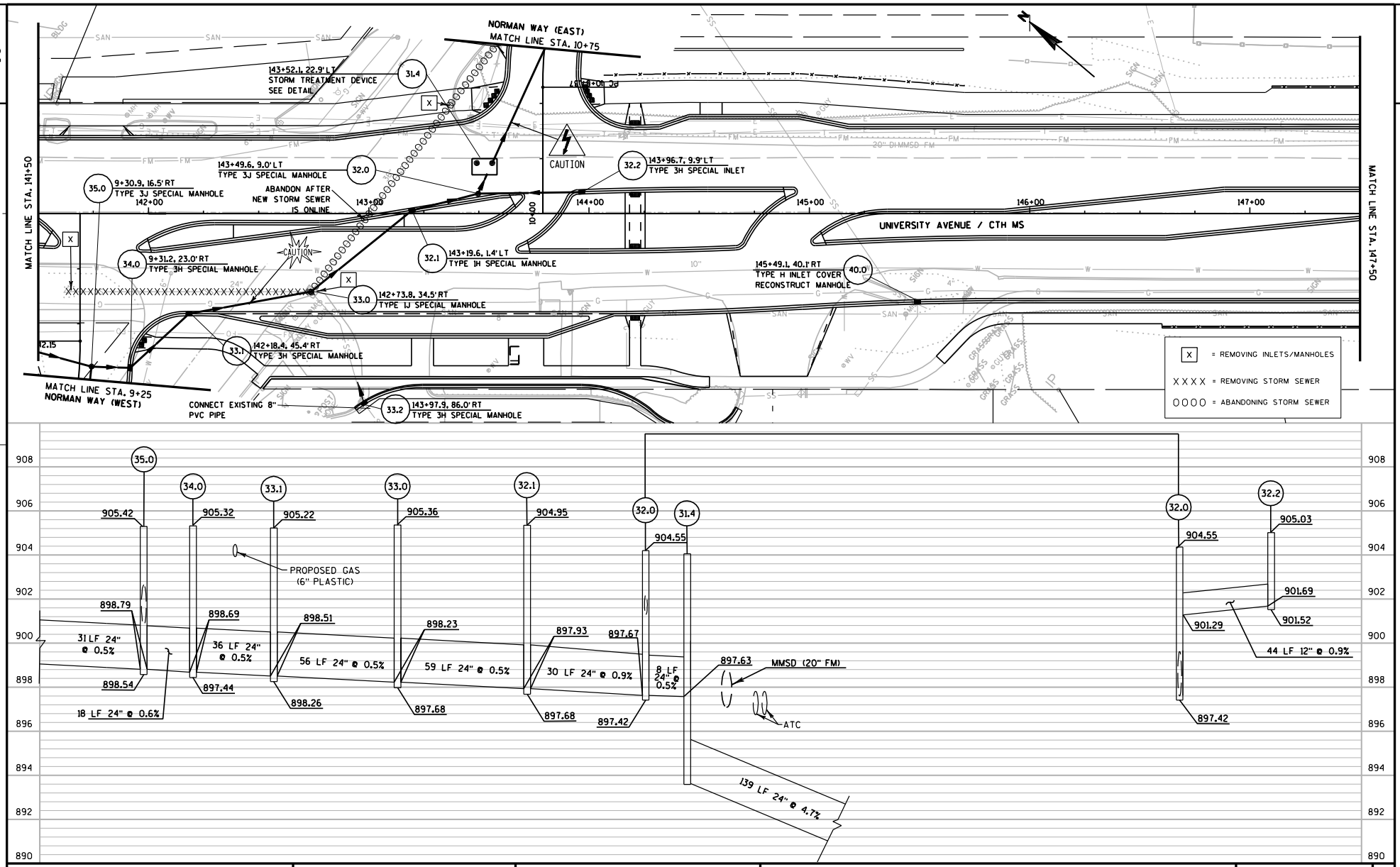
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 103 E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\022508_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

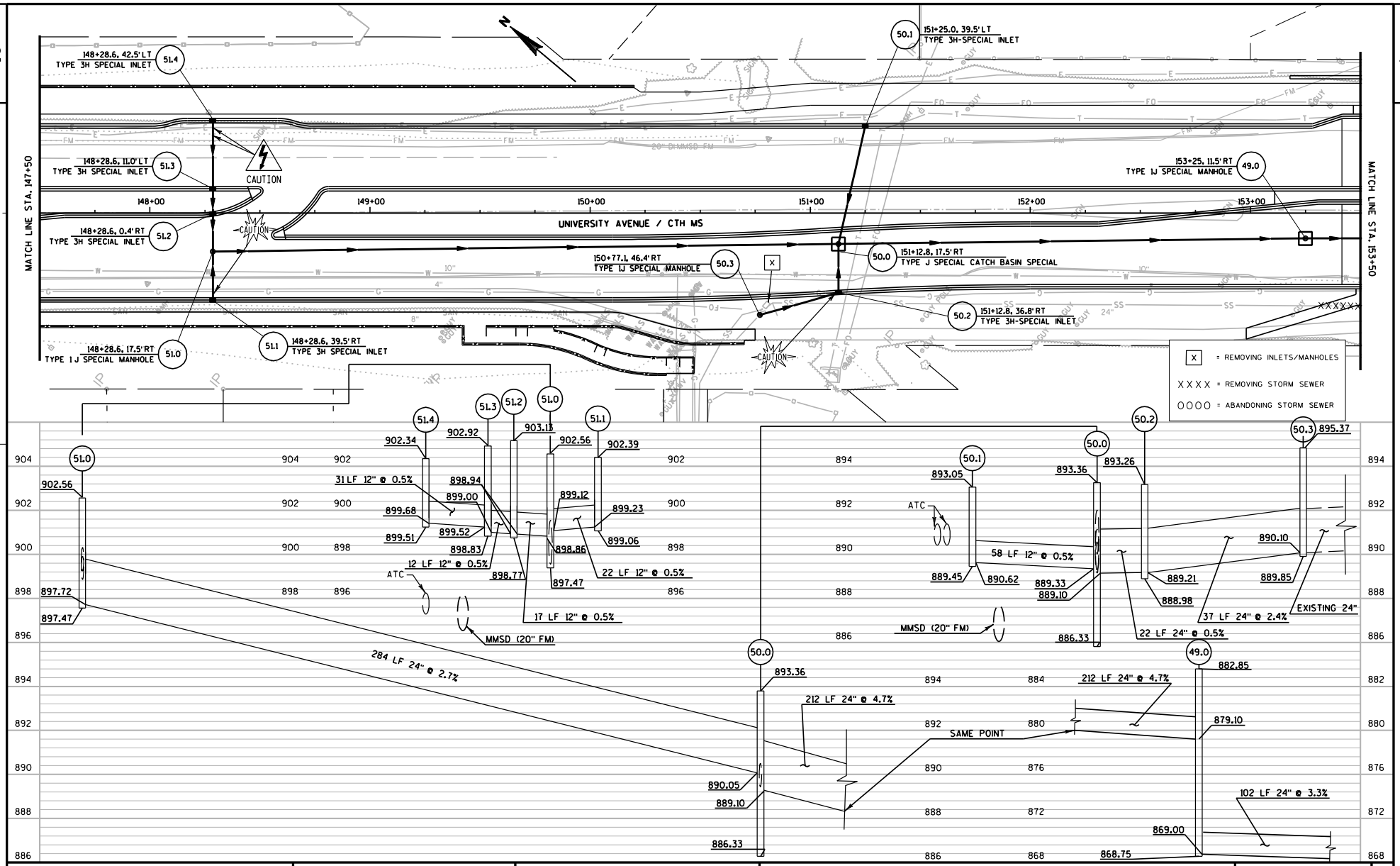
WISDOT/CADDS SHEET 41



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 105 E

FILE NAME : g:\madison\md2009035\dgn\022509_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

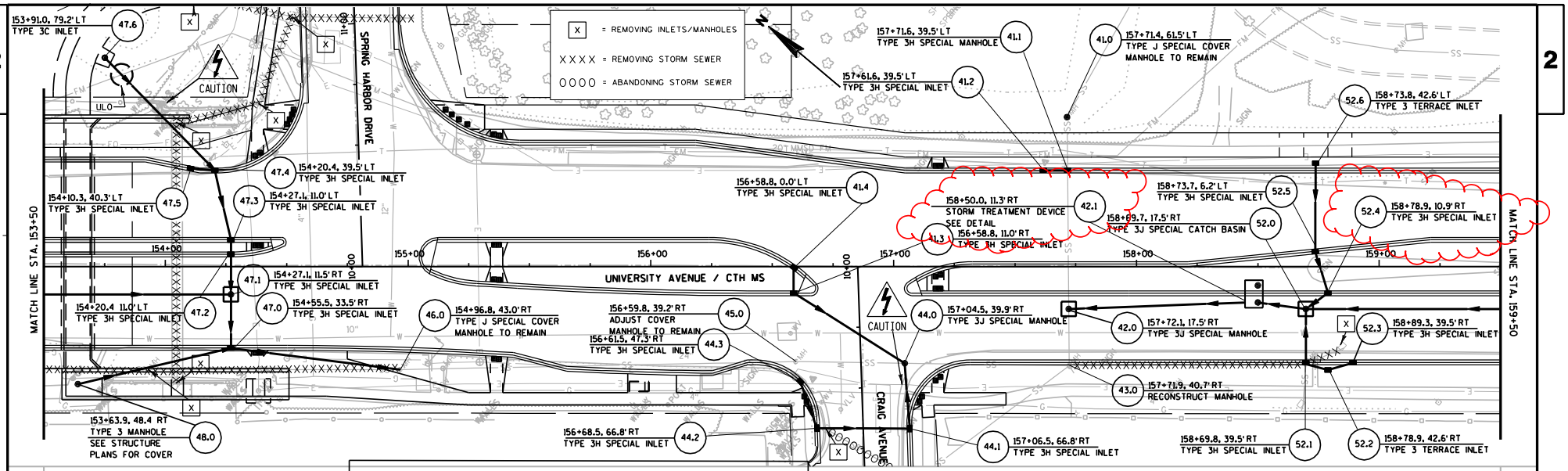
WISDOT/CADDS SHEET 41

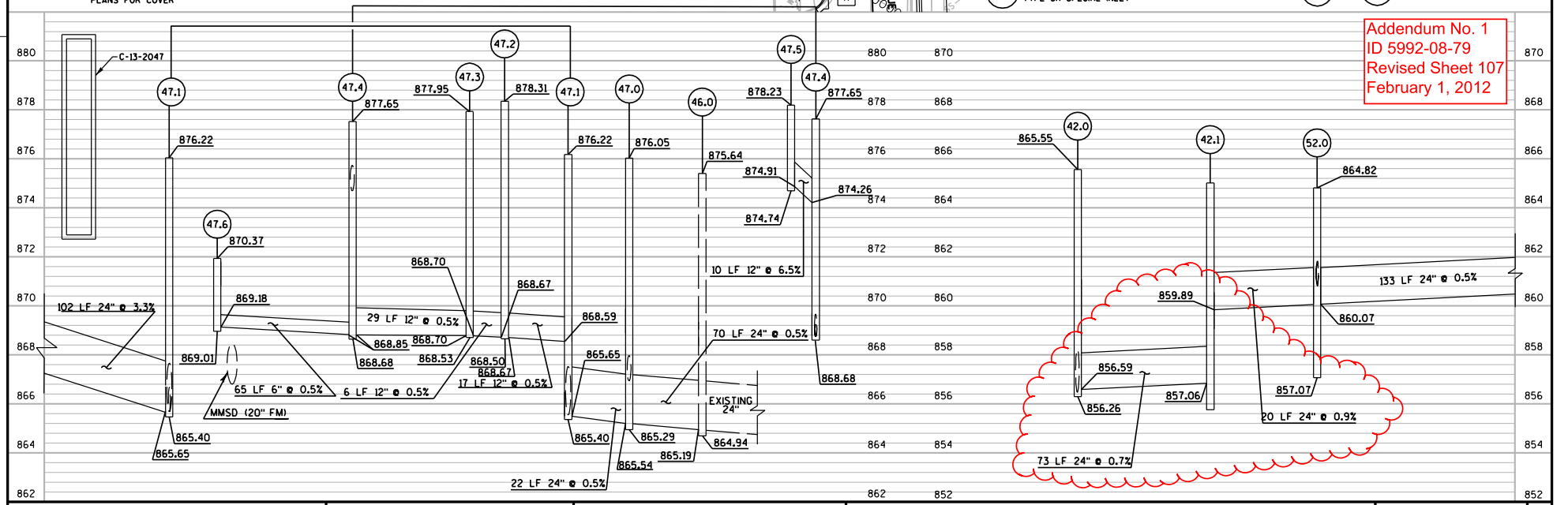


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\022510_ss.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41





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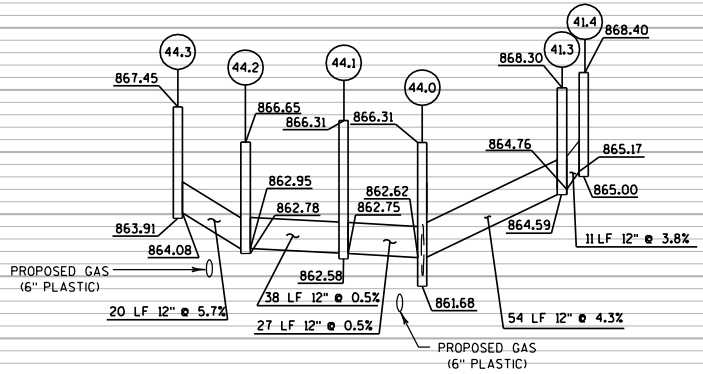
ID 5992-08-79
Revised Sheet 107
February 1, 2012

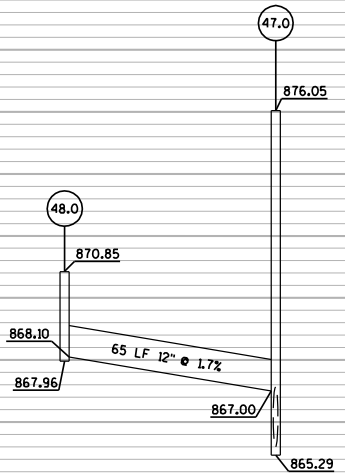
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 107

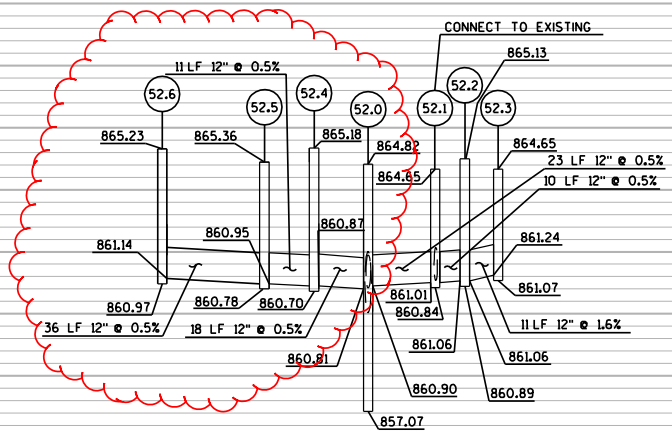
FILE NAME : G:\Madison\MD2009035\DGN\022511_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

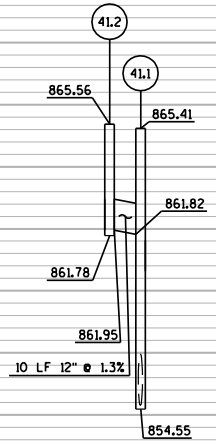
WISDOT/CADDS SHEET 41

Addendum No. 1
ID 5992-08-79
Revised Sheet 108
February 1, 2012





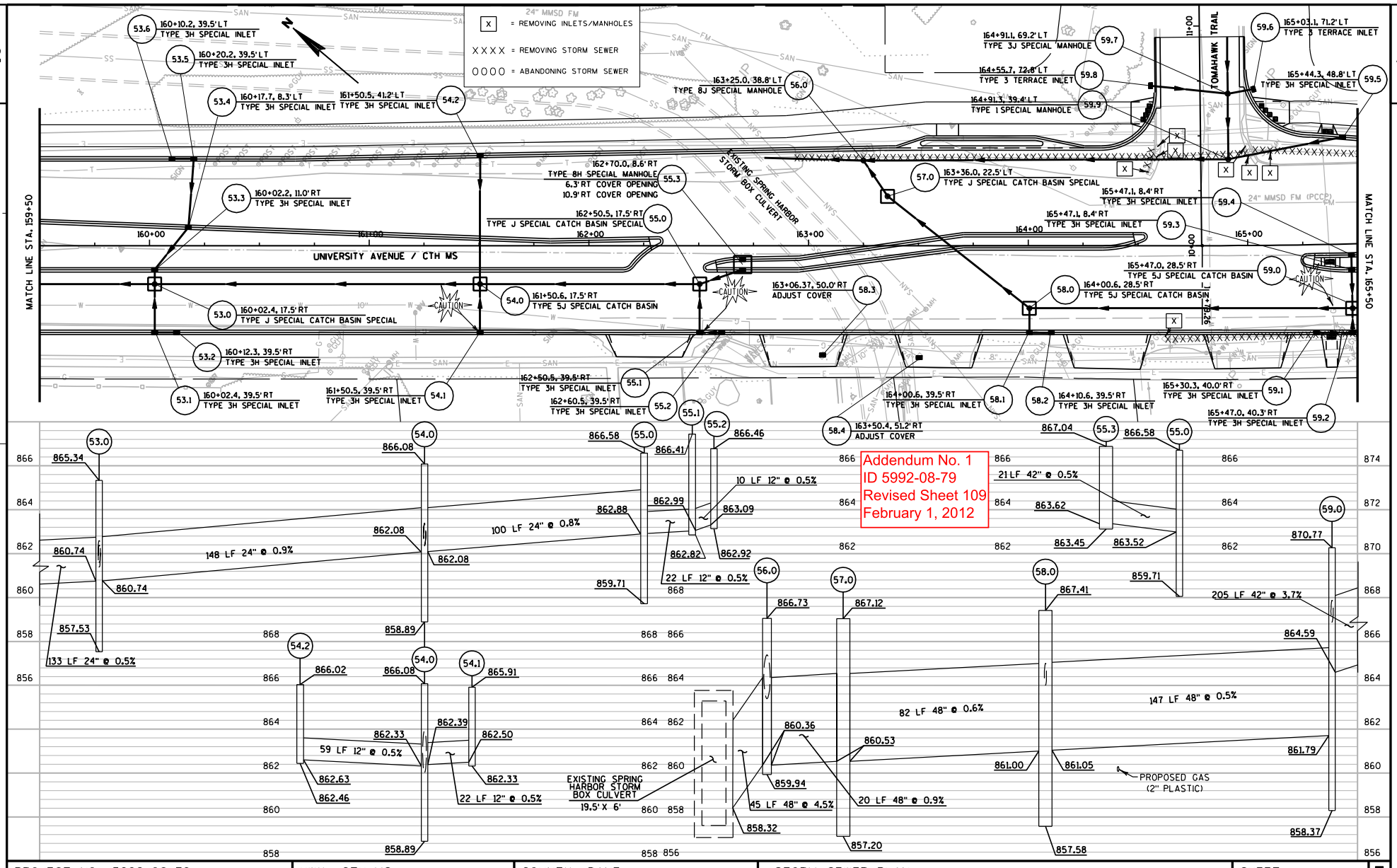




PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 108	E

FILE NAME : G:\Madison\MD2009035\DGN\022511_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

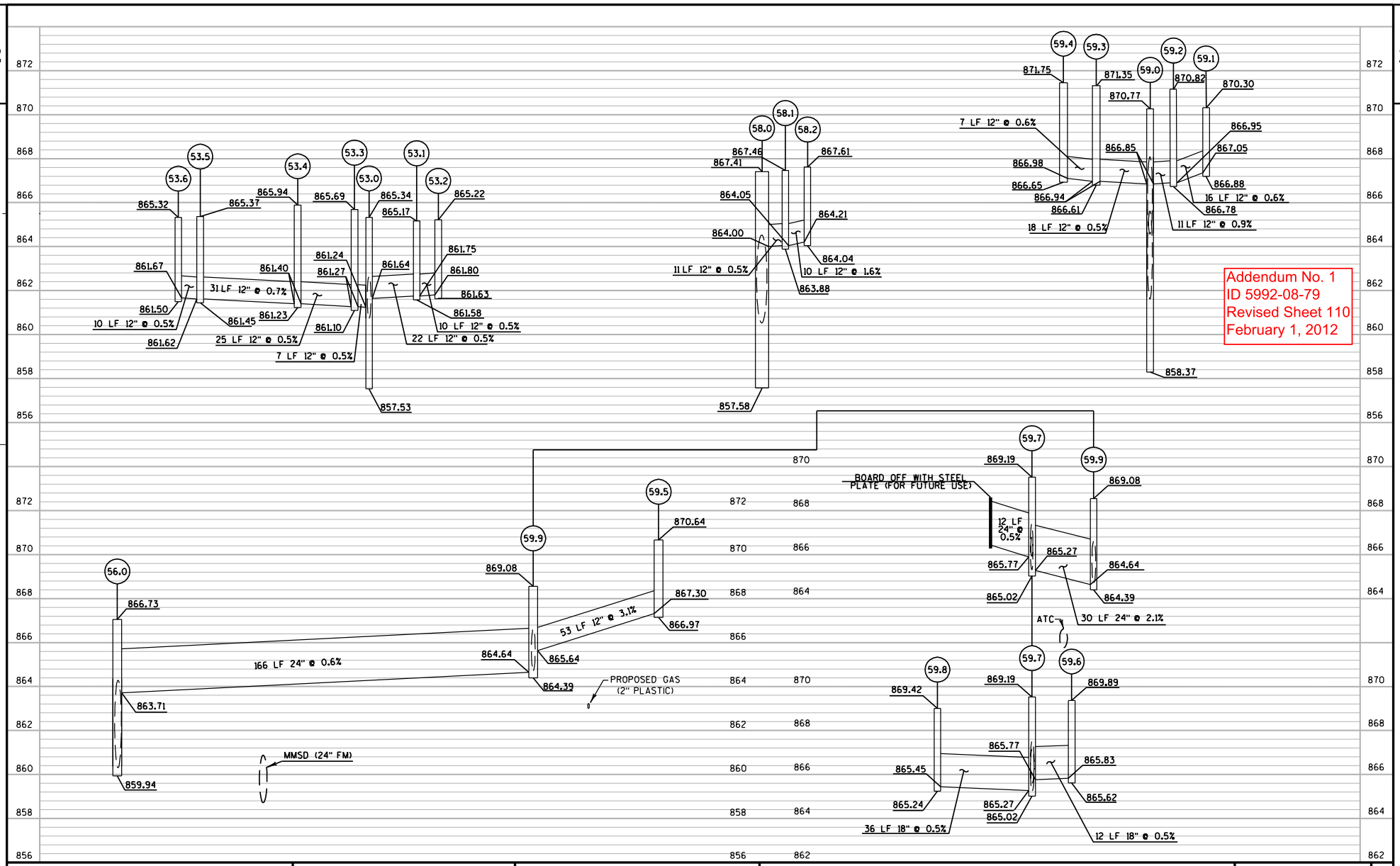
WISDOT/CADDS SHEET 41



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 109	E

FILE NAME : G:\Madison\MD2009035\DGN\022512_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

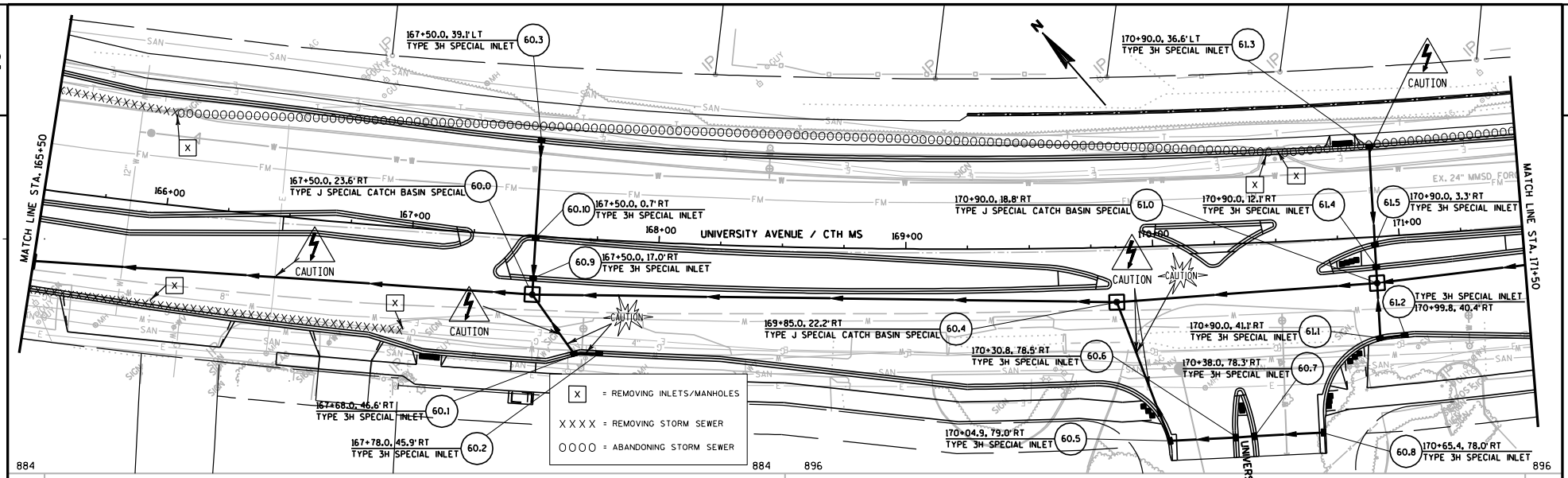
WISDOT/CADDS SHEET 41

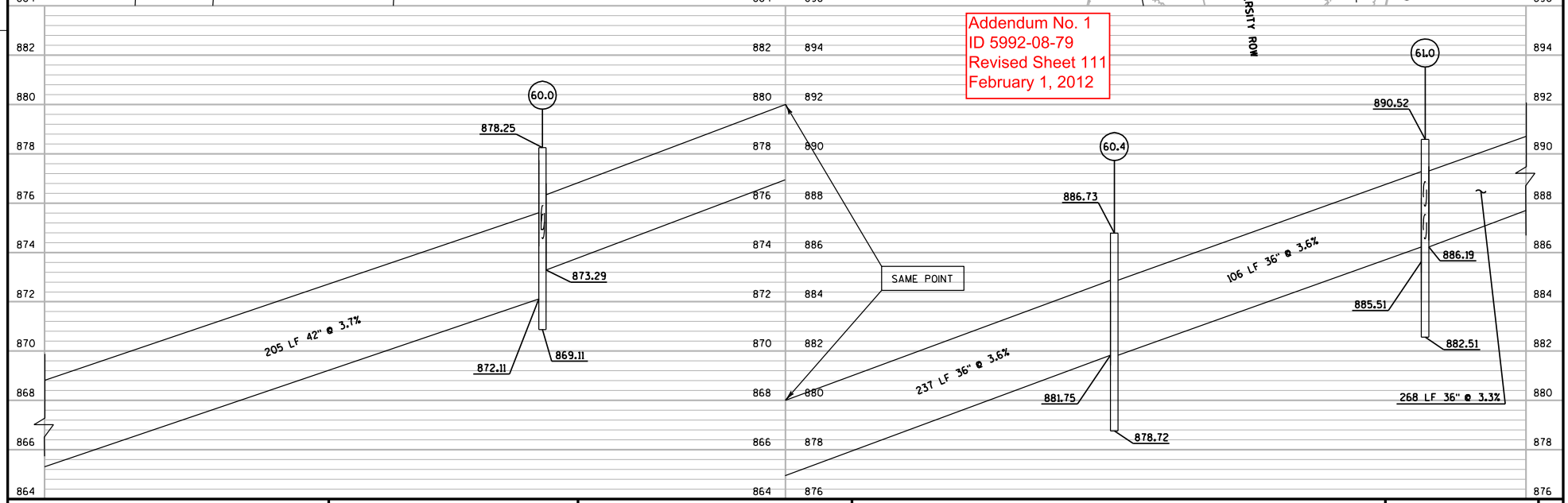


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 110	E

FILE NAME : G:\Madison\MD2009035\DGN\022512_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41





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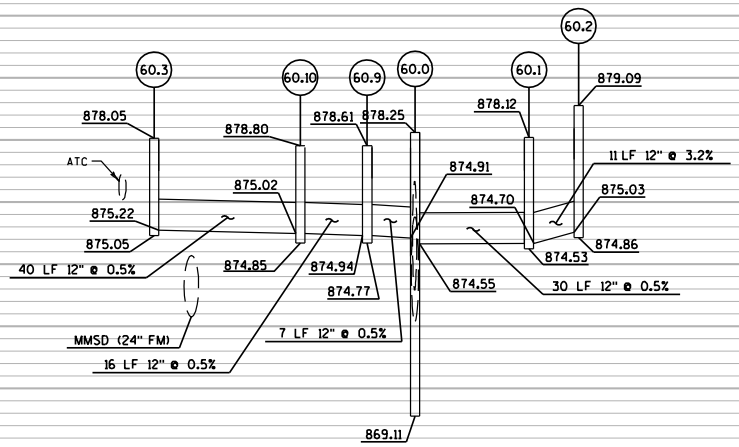
ID 5992-08-79
Revised Sheet 111
February 1, 2012

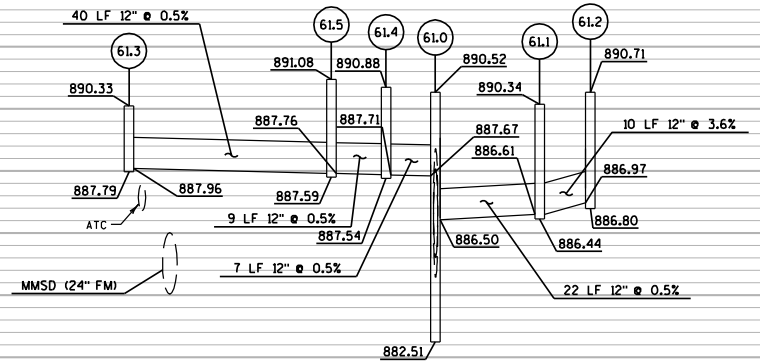
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 111	E

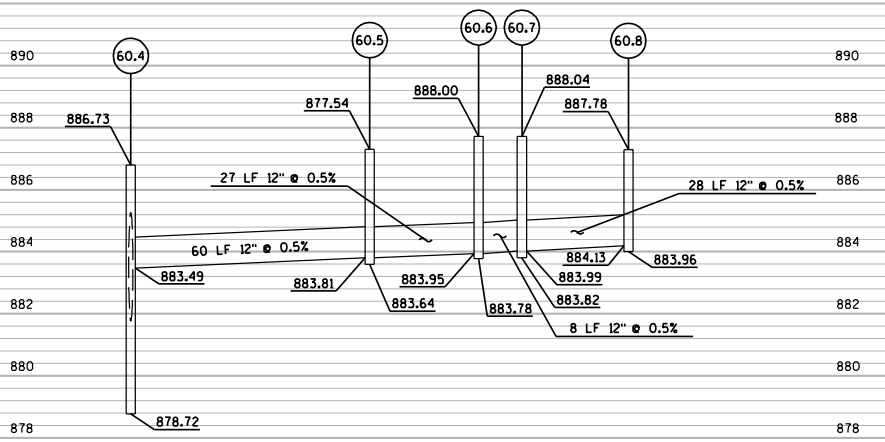
FILE NAME : G:\Madison\MD2009035\DGN\022513_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41

Addendum No. 1
ID 5992-08-79
Revised Sheet 112
February 1, 2012



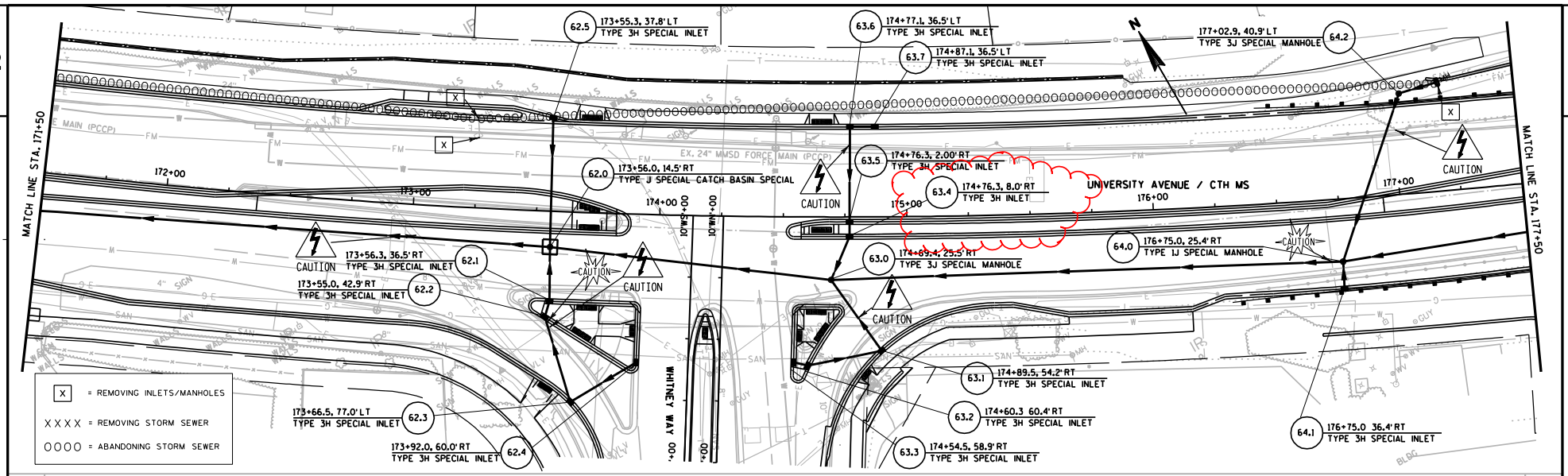


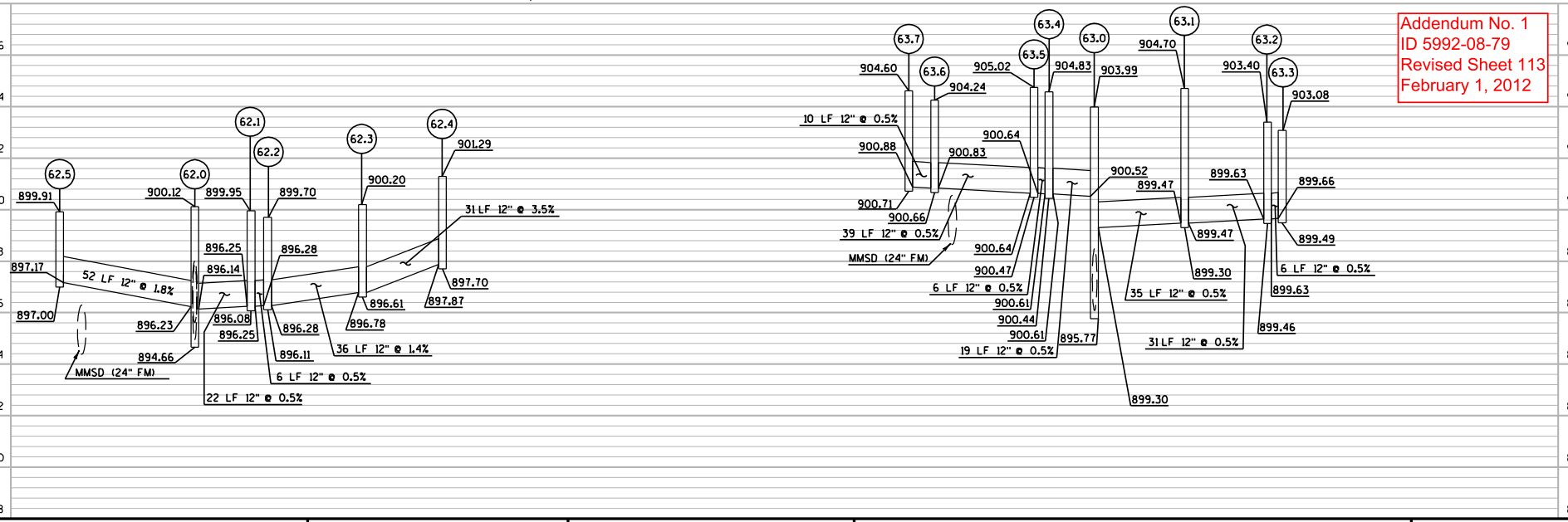


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 112	E

FILE NAME : G:\Madison\MD2009035\DGN\022513_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41



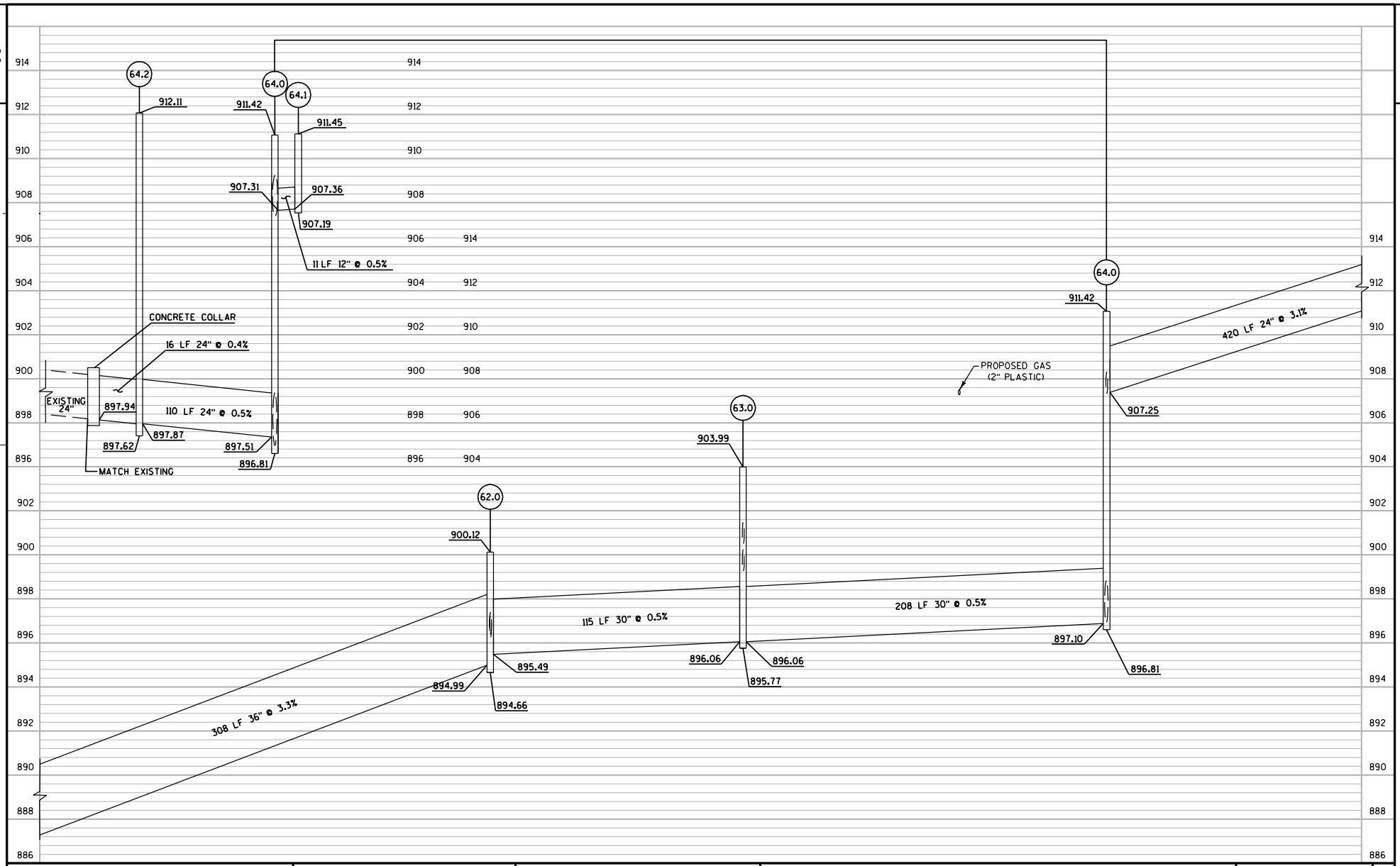


Addendum No. 1
ID 5992-08-79
Revised Sheet 113
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 113	E

FILE NAME : G:\Madison\MD2009035\DGN\022514_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

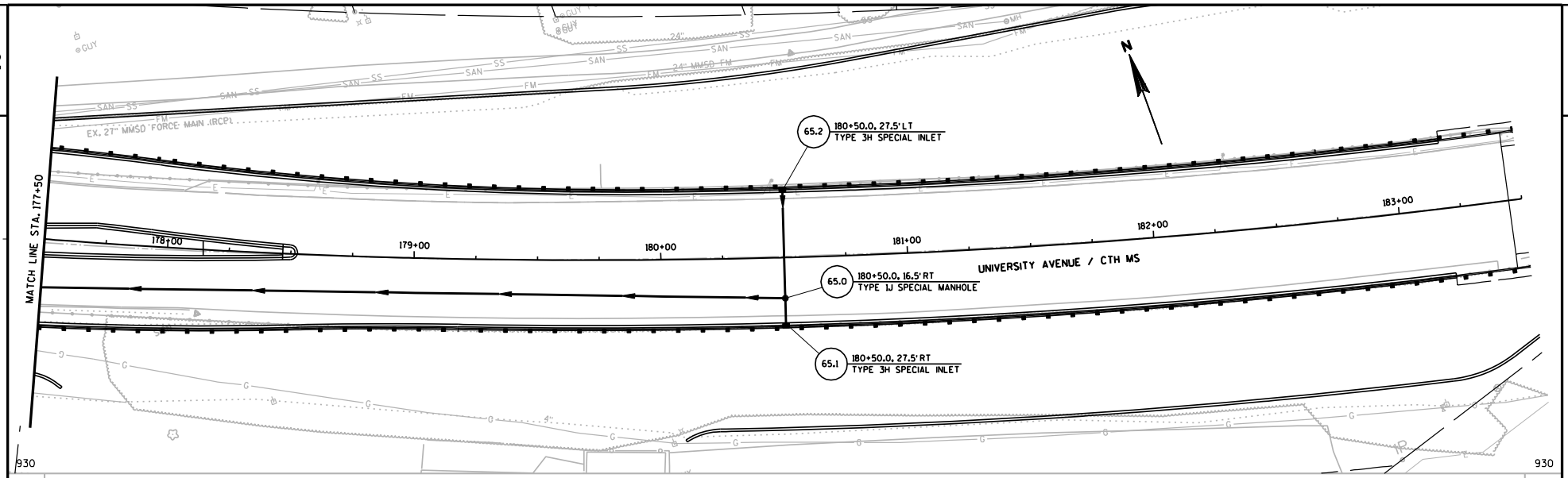
WISDOT/CADDS SHEET 41

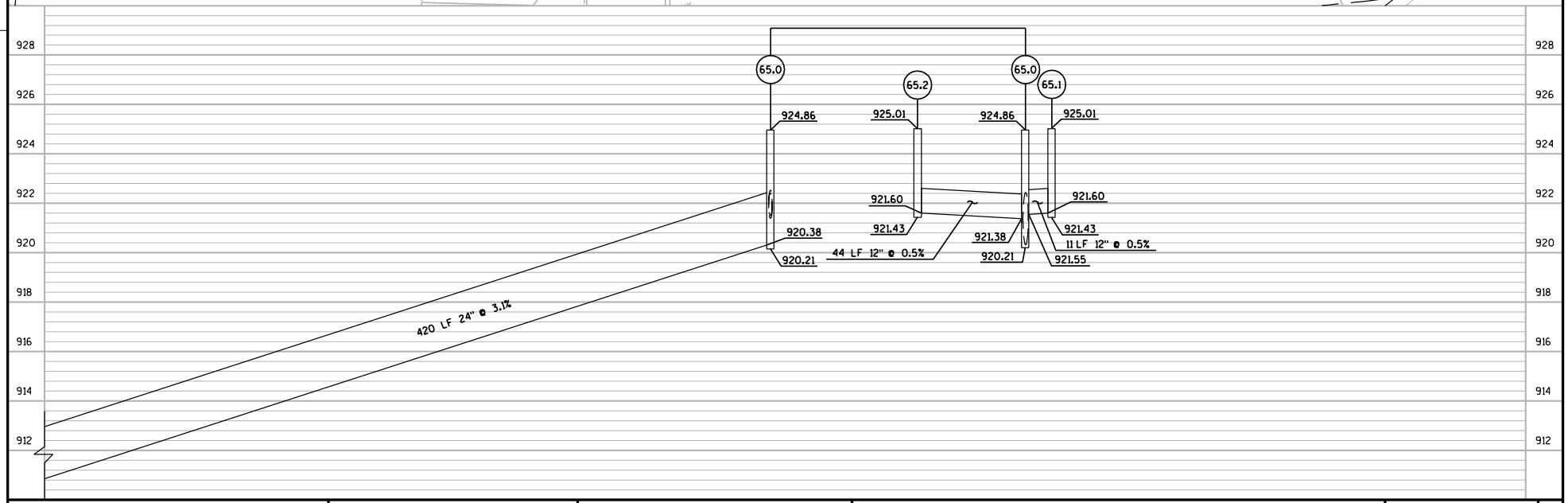


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\022514_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41

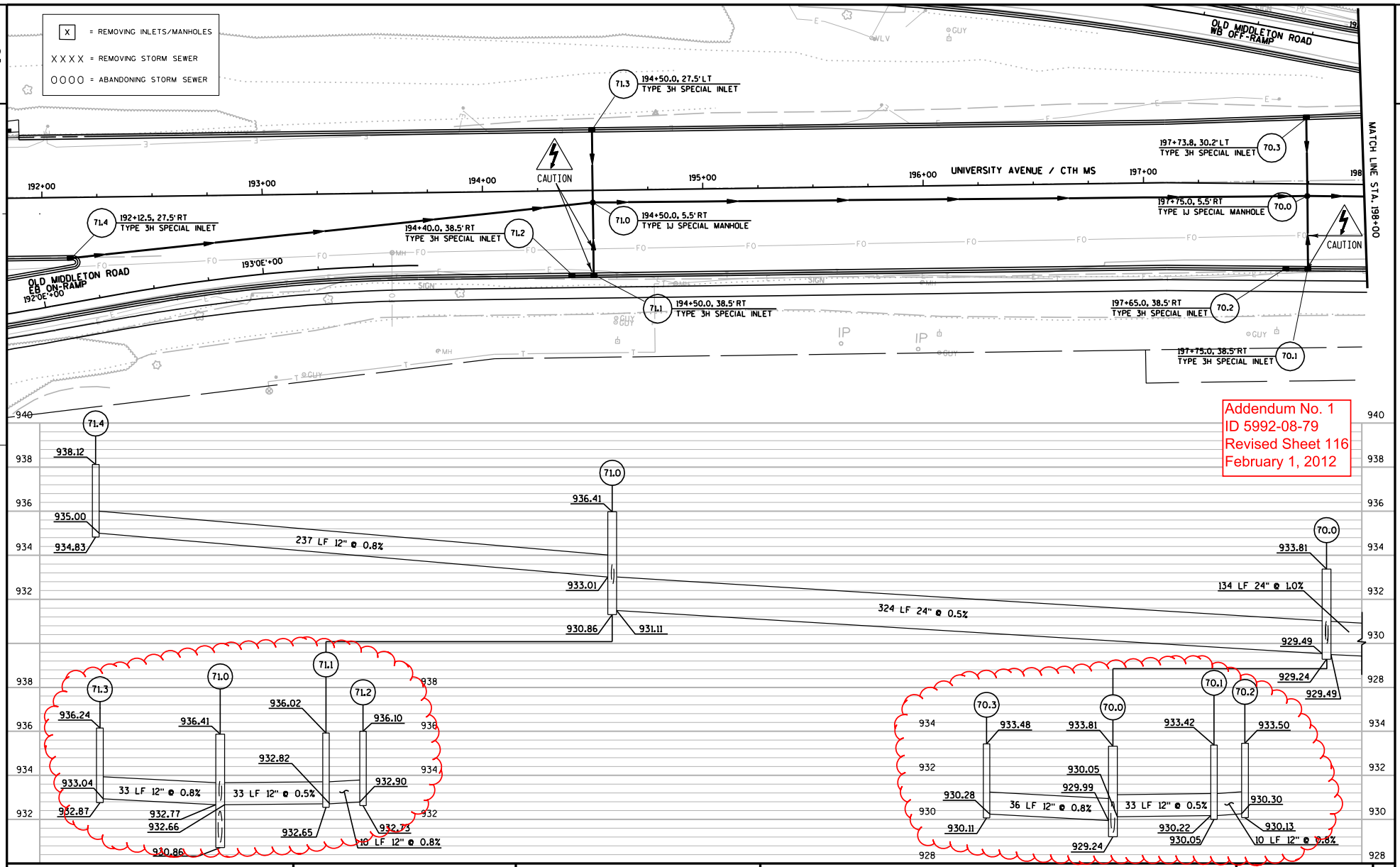




PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\022515_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41

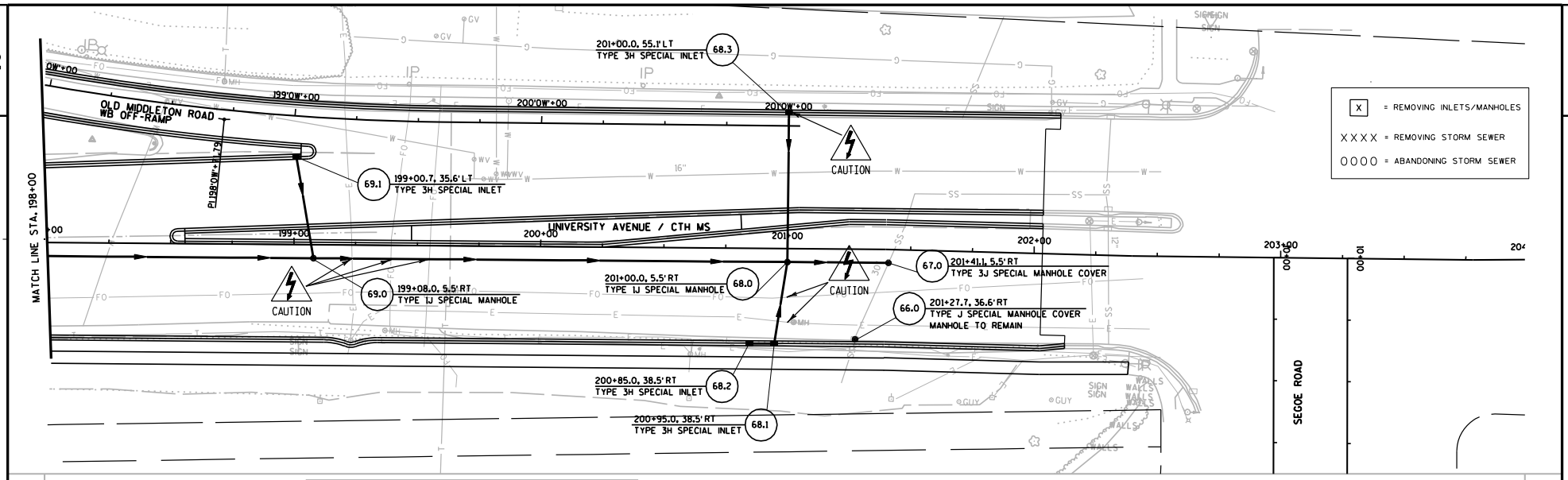


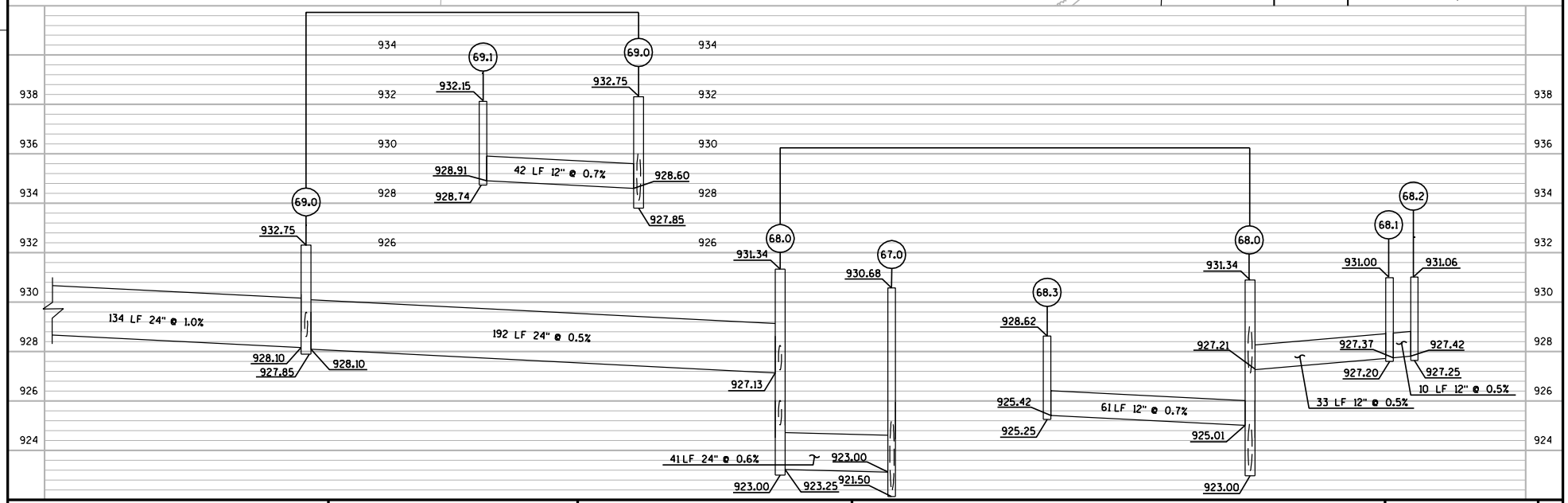
Addendum No. 1
ID 5992-08-79
Revised Sheet 116
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 116	E

FILE NAME : G:\Madison\MD2009035\DGN\022516_ss.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41

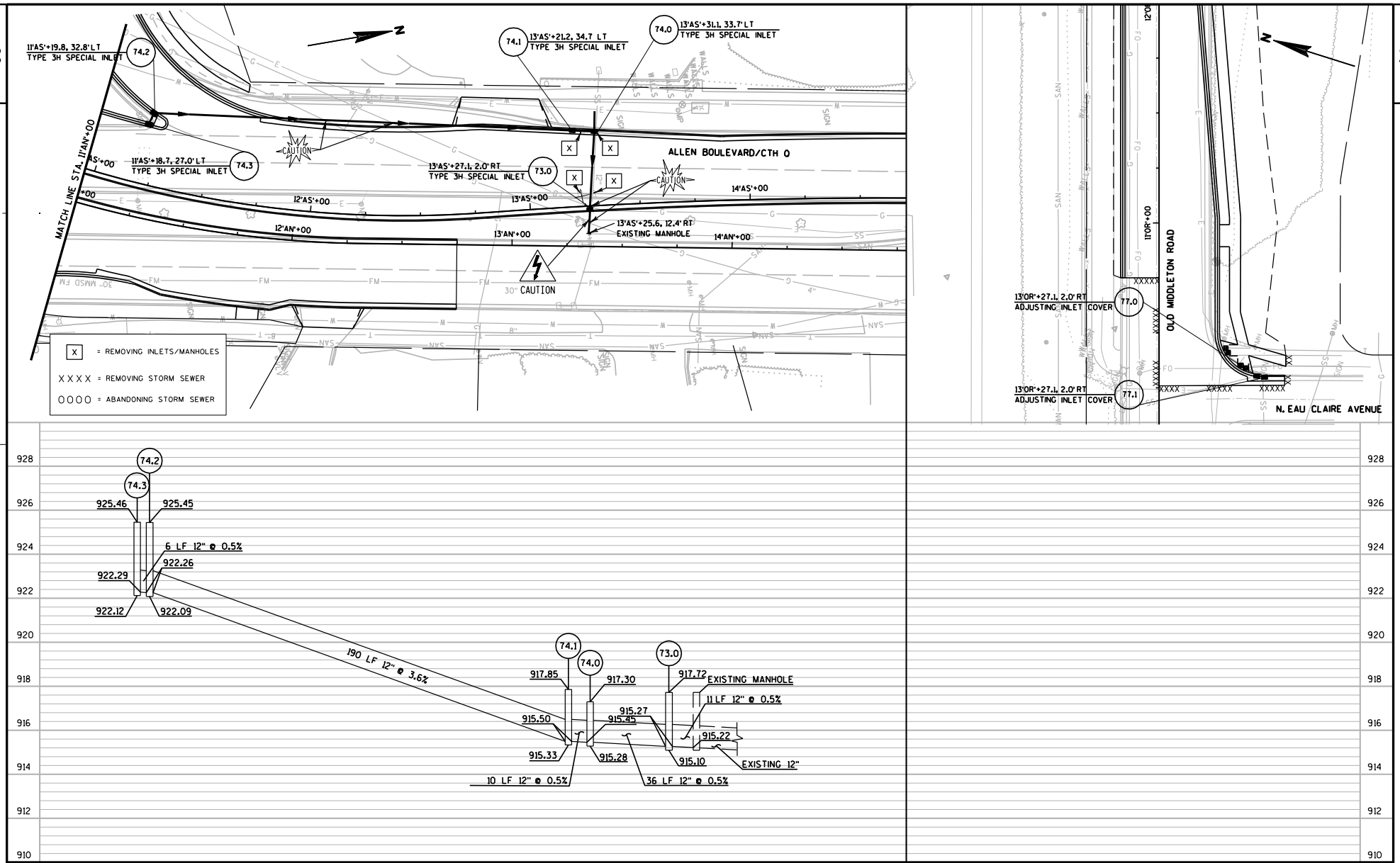




PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\022517_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41



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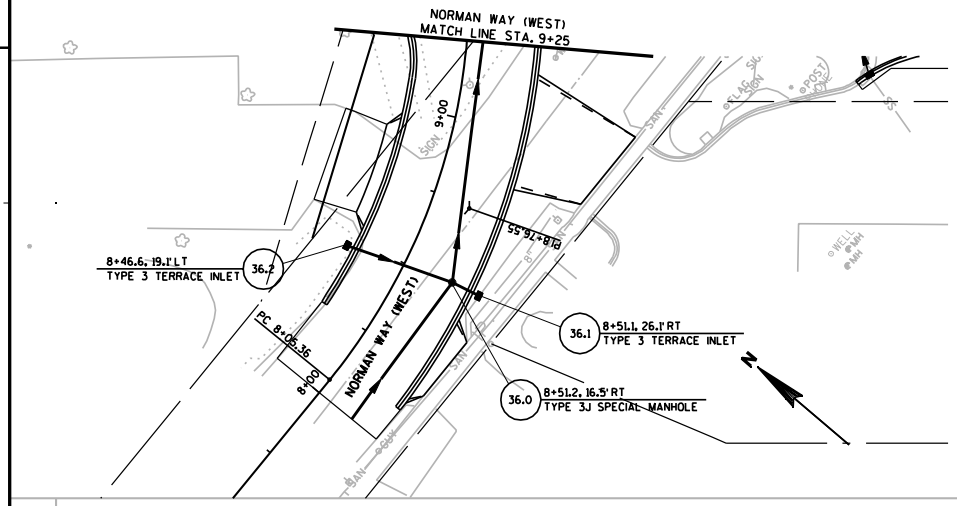
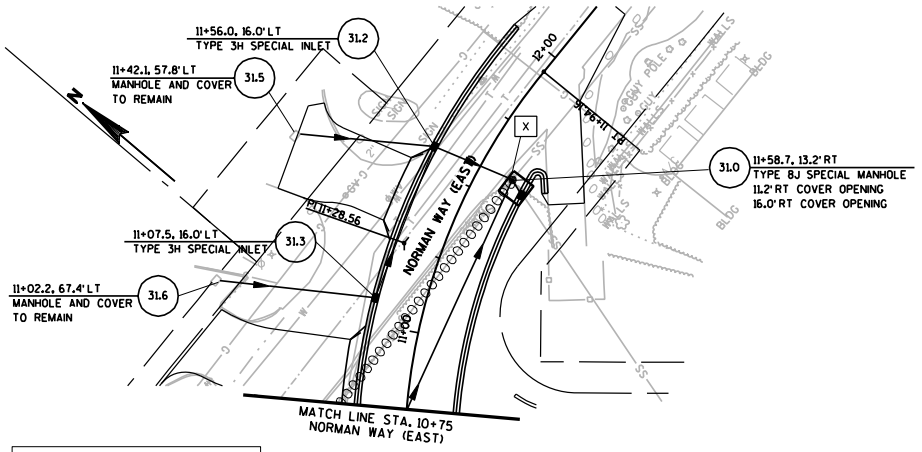
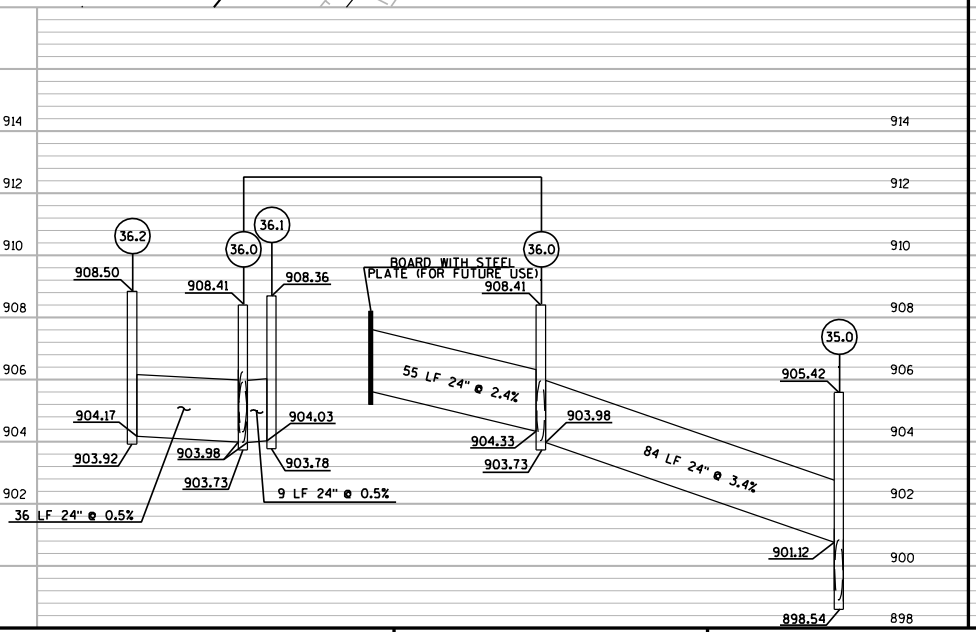


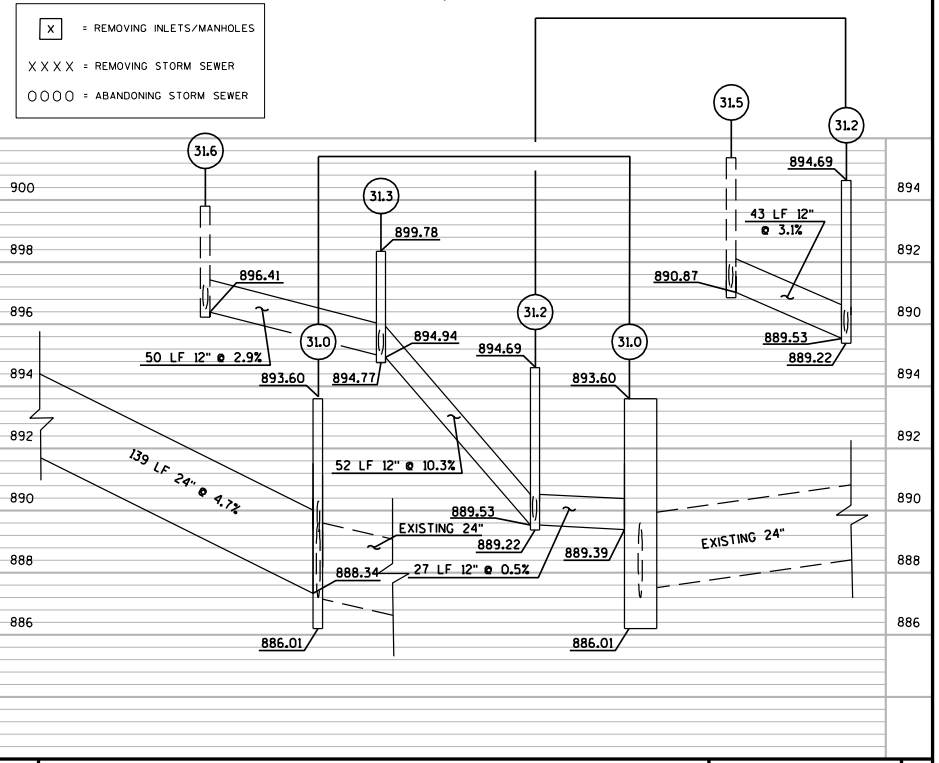


X = REMOVING INLETS/MANHOLES

XXXX = REMOVING STORM SEWER

OOOO = ABANDONING STORM SEWER





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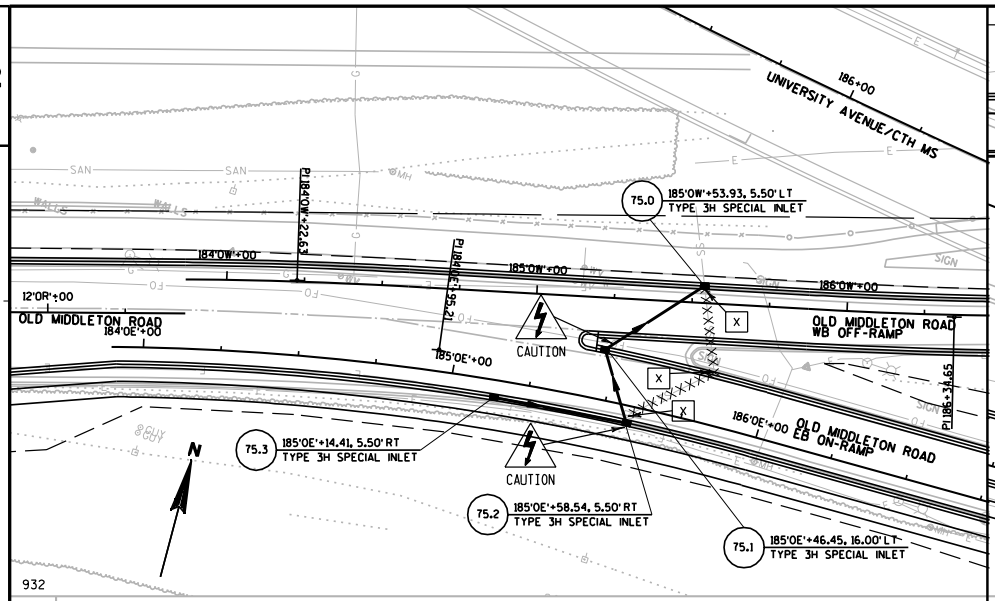

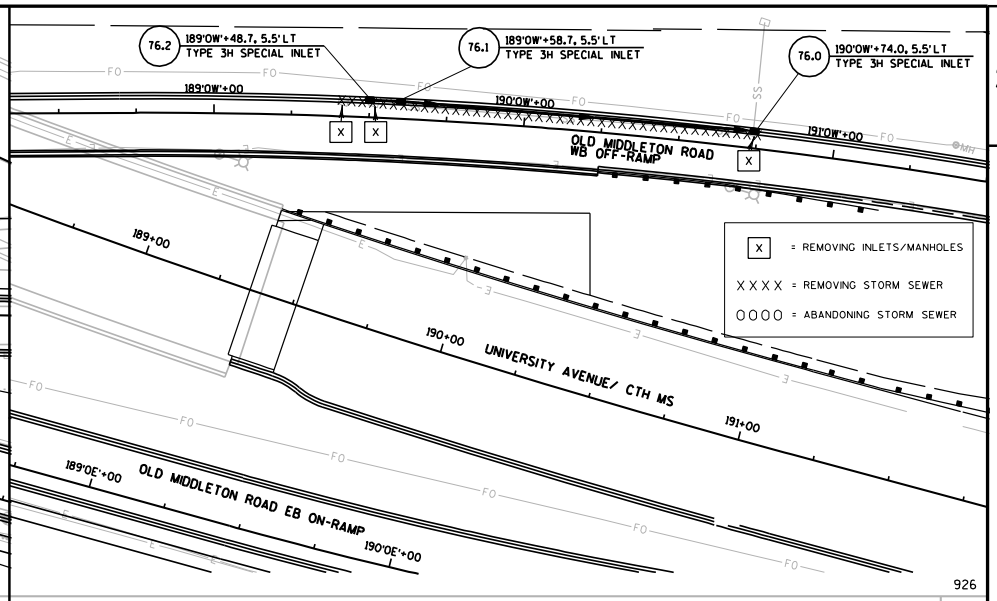

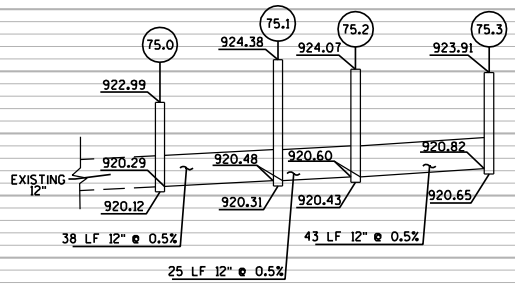

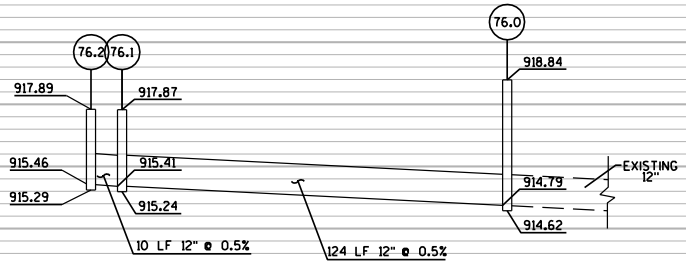

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	STORM SEWER PLAN	SHEET 120 E

FILE NAME : g:\madison\md2009035\dgn\022520_ss.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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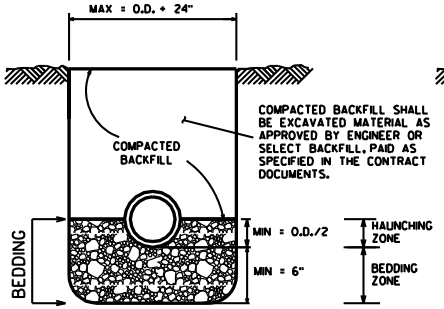
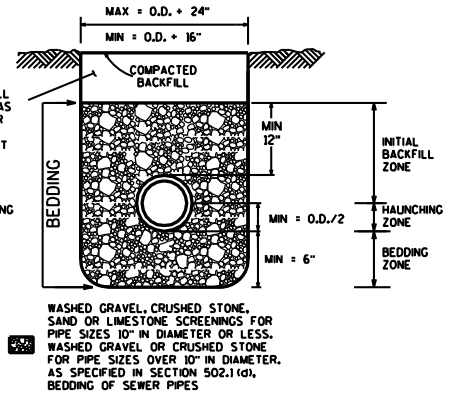


BEDDING FOR
REINFORCED CONCRETE
SEWER PIPES



BEDDING FOR
SANITARY SEWER PIPES
AS WELL AS METAL, ADS,
AND PVC STORM PIPES

NOTES:

UNLESS OTHERWISE SPECIFIED, ALL SANITARY AND STORM SEWER PIPES, INCLUDING LATERALS AND LEADS, SHALL BE INSTALLED WITH THE TYPE OF BEDDING SHOWN FOR THE TYPE AND SIZE OF PIPE INSTALLED.

THE COSTS OF BEDDING SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE PIPE.
FOR RCP, BEDDING INCLUDES THE HAUNCHING & BEDDING ZONES.
FOR PLASTIC PIPES, THE BEDDING INCLUDES THE HAUNCHING, BEDDING & INITIAL BACKFILL ZONES.
THE BEDDING SHALL BE INSTALLED & COMPACTED IN 6" MAXIMUM LIFTS.

ALL TRENCHES SHALL BE HAND BACKFILLED TO A POINT 12" ABOVE THE TOP OF THE PIPE. ALL BEDDING SHALL BE MECHANICALLY COMPACTED.

PAYMENT SHALL NOT BE MADE FOR BACKFILL WITH EXCAVATED MATERIAL, IF APPROVED. SELECT FILL, IF REQUIRED, SHALL BE PAID PER CONTRACT.

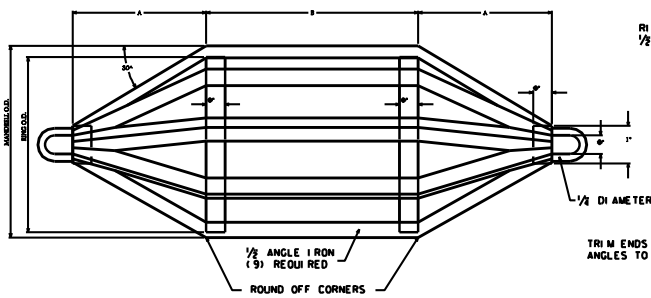
THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE O.D. + 24" AND MINIMUM OF OD + 16" AS SPECIFIED, AND SHALL APPLY FROM THE BOTTOM OF THE TRENCH TO A POINT 12" ABOVE THE TOP OF THE PIPE. WHERE THIS WIDTH IS EXCEEDED, THE CONTRACTOR SHALL FURNISH AND INSTALL A HIGHER TYPE OF BEDDING AT NO EXTRA COST. THE TYPE OF BEDDING SHALL BE DETERMINED BY THE ENGINEER.

O.D. EQUALS THE OUTSIDE DIAMETER OF THE PIPE.

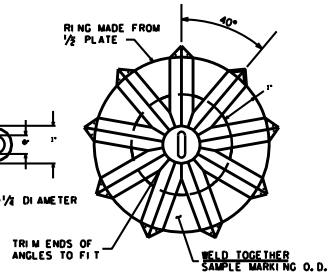
PIPE BEDDING AND BACKFILL

DRAWING NOT TO SCALE

(CITY OF MADISON S.D.D. 8.2.1)



SIDE VIEW



END VIEW

NOMINAL PIPE SIZE ID, in	DIMENSIONS A, in	B, in	MANDRELL O.D., in	RING O.D., in
6	4.0	4	5.61	4.90
8	5.3	6	7.36	6.65
10	6.7	6	9.21	8.50
12	8.0	8	11.06	10.35
15	10.0	9	13.82	13.11

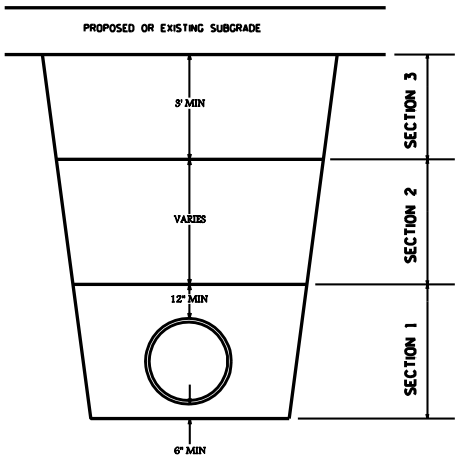
MANDREL FOR USE IN ALL P.V.C. SEWER PIPE

NOTE:

AFTER CONSTRUCTION IS COMPLETE, TRUE THE O.D. DIMENSION FOR THE FULL LENGTH OF "B" TO +/-0.010" BY TOOL AND LATHE OR GRINDING.

MANDREL DETAIL

(CITY OF MADISON S.D.D. 8.1.1)



TYPICAL TRENCH COMPACTION

ALL BACKFILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 12" BEFORE COMPACTION UNLESS AUTHORIZED BY THE ENGINEER DUE TO THE CHARACTER OF THE MATERIAL AND THE COMPACTING EQUIPMENT. EACH LIFT SHALL BE MECHANICALLY COMPACTED TO THE REQUIRED DENSITY PRIOR TO PLACING SUCCEEDING LIFTS OF BACKFILL MATERIAL.

IN COLD WEATHER, TRENCHES SHALL BE COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN SECTION 502.1(e), BACKFILLING EXCAVATIONS AND COMPACTION OF BACKFILL, OF THESE SPECIFICATIONS.

SECTION 1:

MECHANICALLY COMPACTED BEDDING AS REQUIRED BY THE SPECIFICATIONS. COMPACTION ACHIEVED WITH SMALLER PLATE COMPACTOR.

SECTION 2:

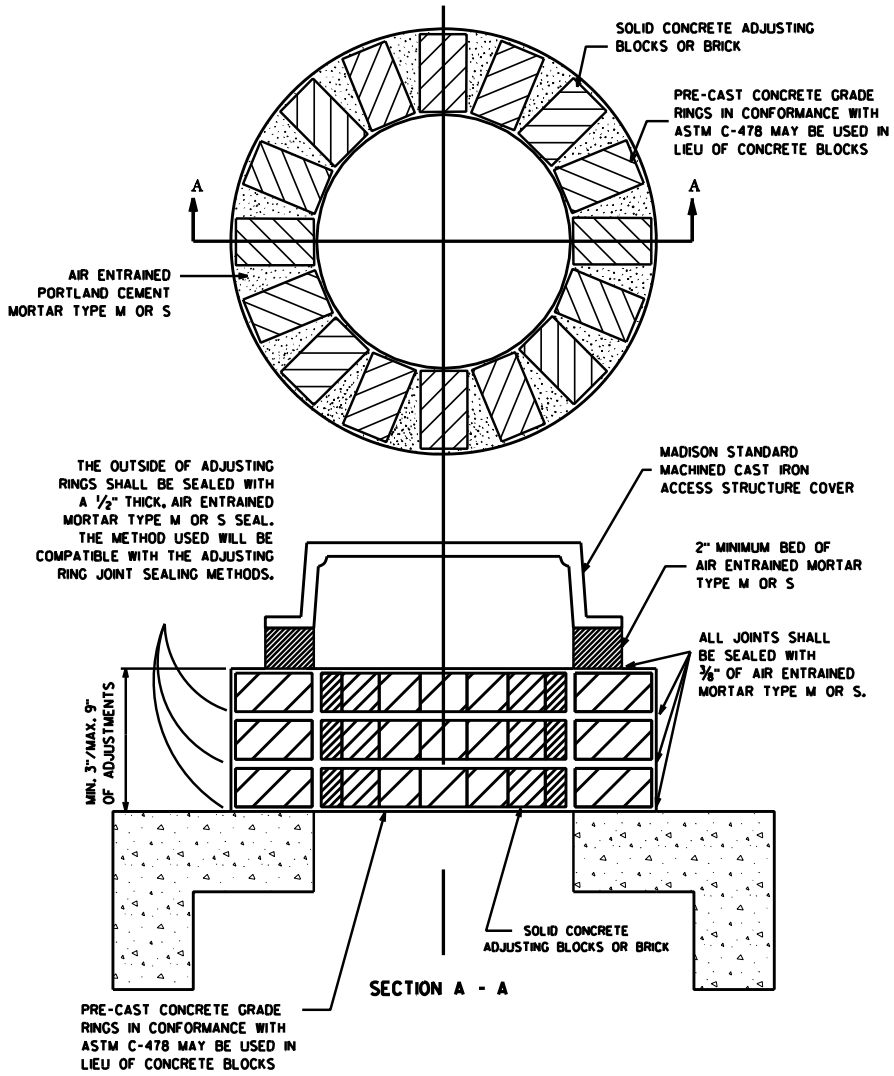
MINIMUM COMPACTION OF 90% MAXIMUM DENSITY. COMPACTION OF BACKFILL WITH BOMAG OR HOE-PAC SHALL NOT BEGIN UNTIL THE DEPTH OF BACKFILL MATERIAL IS TWO FEET ABOVE THE TOP OF PIPE.

SECTION 3:

MINIMUM COMPACTION OF 95% MAXIMUM DENSITY.

TYPICAL TRENCH COMPACTION

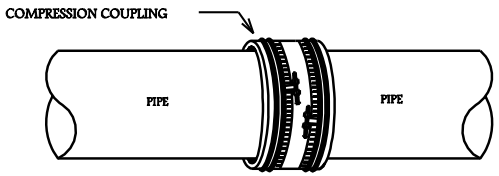
(CITY OF MADISON S.D.D. 5.2.2)

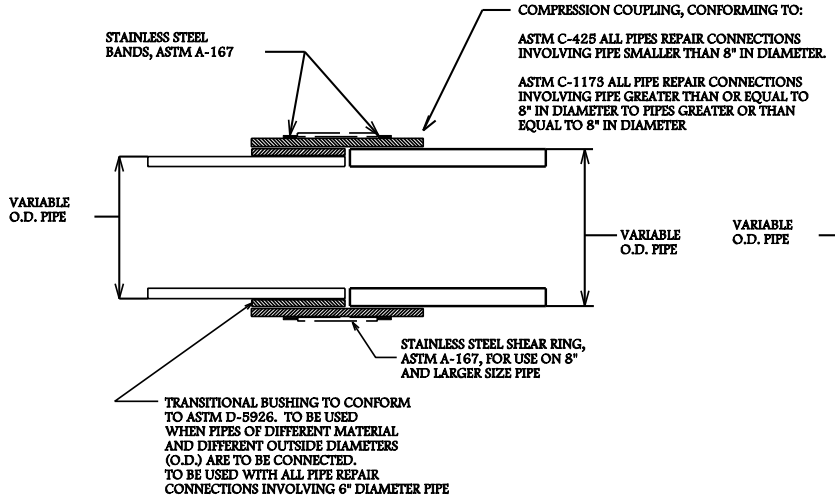


SAS CHIMNEY AND CASTING

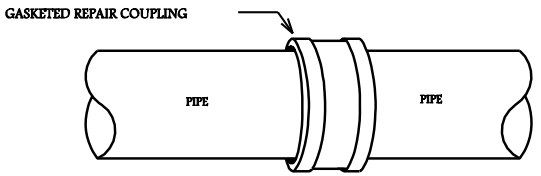
(CITY OF MADISON S.D.D. 5.7.15)

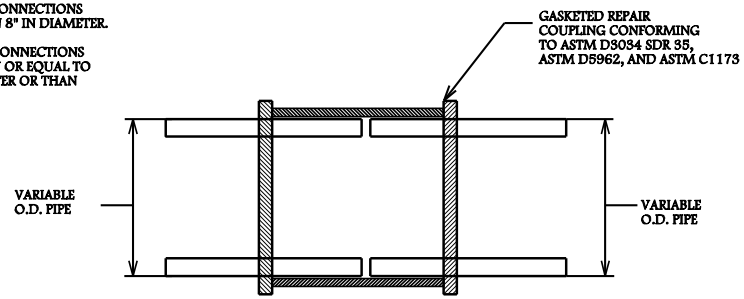
COMPRESSION COUPLING





GASKETED REPAIR COUPLING





ALL REPAIRS INVOLVING PIPE CONNECTIONS 8" IN DIAMETER TO 8" IN DIAMETER OR LARGER SHALL UTILIZE THE FERNCO RC STRONGBACK OR EQUIVALENT REPAIR COUPLING. (ASTM C1173).

COUPLING DETAILS

(CITY OF MADISON S.D.D. 5.3.3)

NOTES:

1) PRECAST S.A.S. SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-478.

2) THICKNESS OF BASE, "B":
   6" MIN. FOR 4' DIAMETER SAS
   8" MIN. FOR 5' AND 6' DIAMETER SAS

3) FOR CASTING DESIGNATION REFER TO STANDARD DETAIL DRAWING 5.7.16

4) CENTERED (CONCENTRIC) CONE SHALL BE INSTALLED UNLESS OTHERWISE DIRECTED.

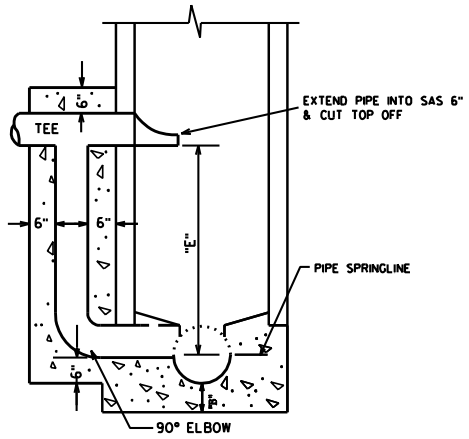
5) DROP INLET SHALL BE BUILT FOR ALL SEWER MAINS AND LATERALS WHEN "E" IS GREATER THAN 24". "E" SHOULD BE MEASURED FROM INVERT OF INCOMING PIPE TO THE SPRINGLINE OF THE OUTGOING SEWER. INSIDE DROP PER STANDARD DETAIL DRAWING 5.7.30 MAY BE INSTALLED FOR 4" AND 6" SERVICE CONNECTIONS WHERE OUTSIDE DROP INLET CONSTRUCTION IS INFEASIBLE. ENGINEER SHALL APPROVE INSIDE DROP INLET PRIOR TO INSTALLATION.

6) FLEXIBLE PIPE TO SAS CONNECTOR REQUIRED PER STANDARD DETAIL DRAWING 5.7.31

7) ALL BENCHES TO BE FIELD POURED CONCRETE WITH SMOOTH TROWEL FINISH. PRECAST BENCHES ONLY PERMITTED WITH PRIOR APPORVAL OF ENGINEER IN WRITING.

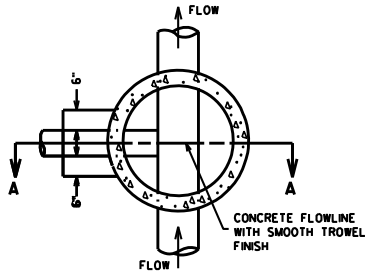
8) ALL JOINTS BETWEEN RINGS SHALL BE SEALED WITH ⅜" OF AIR-ENTRAINED TYPE M OR S MORTAR. THE OUTSIDE SURFACE OF THE ADJUSTING RINGS SHALL BE SEALED WITH A ½" THICK AIR-ENTRAINED MORTAR TYPE M OR S SEAL. THE METHOD USED FOR SEALING THE OUTSIDE SURFACE SHALL BE COMPATIBLE WITH THAT USED TO SEAL JOINTS BETWEEN THE RINGS.

9) PRECAST SANITARY SEWER ACCESS STRUCTURES FOR STREET RECONSTRUCTION PROJECTS AND FOR STREET EXCAVATION PERMITS REQUIRE PRECAST SHOP DRAWING APPROVAL FROM CITY ENGINEERING, PRIOR TO BEING FABRICATED BY THE MANUFACTURER NO PRECAST SHOP DRAWINGS ARE REQUIRED FOR NEW CONSTRUCTION IN SUBDIVISION DEVELOPMENTS.

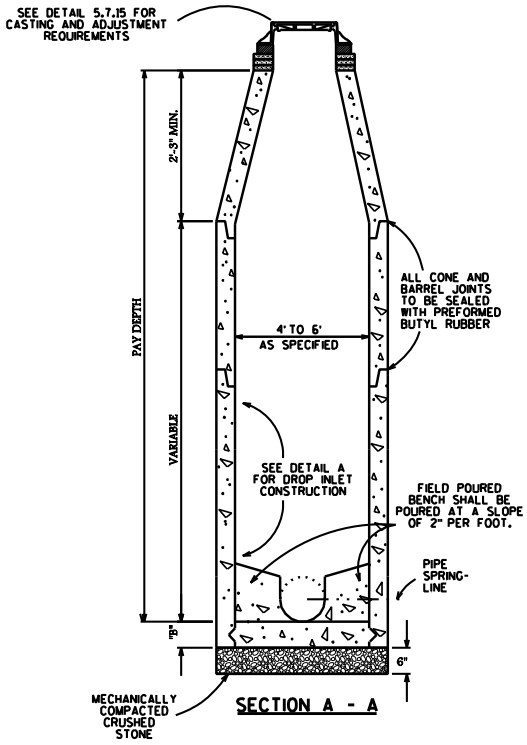


DETAIL A

SHOWING DROP INLET CONSTRUCTION FOR SANITARY SEWER MAINS & LATERALS



TOP VIEW

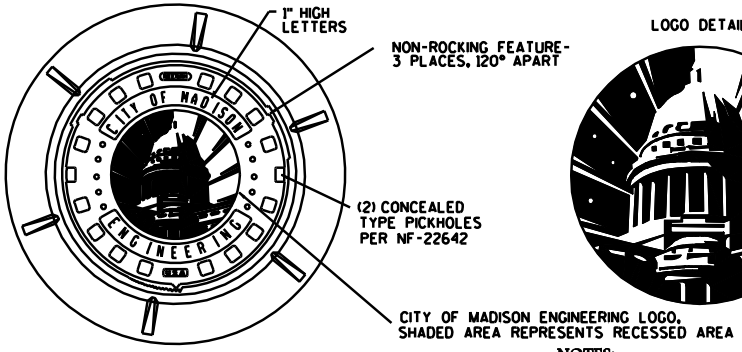


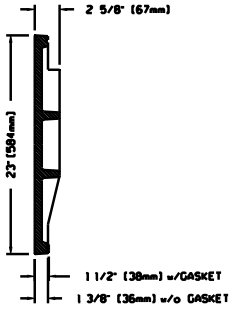
SECTION A - A

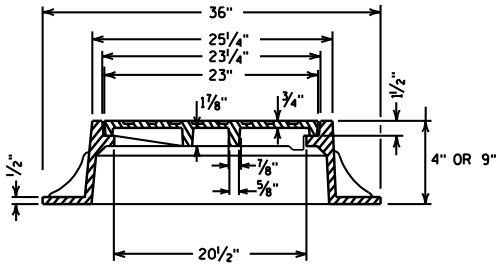
SANITARY SEWER PRECAST SAS

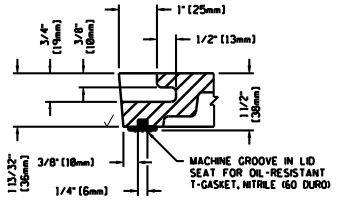
(CITY OF MADISON S.D.D. 5.7.2)

PROJECT NO: 5992-08-87	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS (SANITARY SEWER)	SHEET 124 E









T-SEAL GASKET / CONCEALED PICK DETAIL

NOTES:

APPROXIMATE TOTAL WEIGHTS:
R-1550 w/ LOGO LID 1550-0054, 9" FRAME AND LID = 265 LBS.
R-1689 w/ LOGO LID 1550-0054, 4" FRAME AND LID = 279 LBS.

IF LOCKABLE LID IS NECESSARY, R-1920, 83/4" FRAME AND LID = 300 LBS
THERE IS NO CITY OF MADISON LOGO LID AVAILABLE FOR THIS FRAME AND CASTING.

THE FOLLOWING NEENAH FOUNDRY CASTINGS (OR EQUAL CASTINGS) SHALL BE ACCEPTABLE:

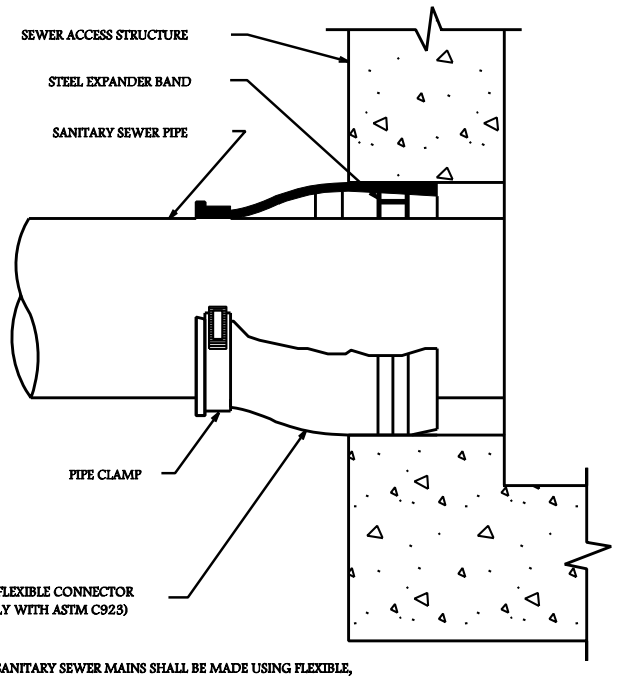
1. R-1550, 9" NON-ROCKING ACCESS STRUCTURE FRAME.
2. R-1689, 4" NON-ROCKING ACCESS STRUCTURE FRAME (WHEN REQUESTED BY THE CITY CONSTRUCTION ENGINEER).
3. R-1920, 83/4" ACCESS STRUCTURE FRAME WITH LOCKING LID, TYPE 'F' LOCKS, AND CONCEALED PICK HOLES. TO BE USED IN GREENWAYS AND EASEMENTS.

1. FRAME AND COVER SHALL BE MACHINED AND FITTED SO THAT ROCKING AND CHATTERING WILL BE ELIMINATED.
2. ALL LIDS SHALL BE SELF-SEALING EXCEPT FOR STORM SEWER.
3. ALL LIDS SHALL HAVE CITY OF MADISON LOGO AS SHOWN IN DETAIL (R-1550-0054 OR EQUIV.)

LID NOTES: ALL DIMENSIONS SHOWN ARE IN ENGLISH AND [METRIC]
MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B

SAS FRAME & COVER

(CITY OF MADISON S.D.D. 5.7.16)



NOTES:

1. S.A.S. CONNECTIONS FOR SANITARY SEWER MAINS SHALL BE MADE USING FLEXIBLE, WATERTIGHT CONNECTIONS SUCH AS KOR-N-SEAL I OR APPROVED EQUAL, UNLESS DIRECTED OTHERWISE BY ENGINEER.

2. ALL STAINLESS STEEL ELEMENTS OF CONNECTOR SHALL BE TOTALLY NON-MAGNETIC SERIES 304 STAINLESS, EXCLUDING THE WORM SCREW FOR TIGHTENING THE STEEL BAND AROUND THE PIPE WHICH SHALL BE SERIES 305 STAINLESS. THE WORM SCREW FOR TIGHTENING THE STEEL BAND SHALL BE TORQUED BY A BREAK-AWAY TORQUE WRENCH AVAILABLE FOR THE PRECAST S.A.S SUPPLIER AND SET FOR 60 - 70 INCH/LBS.

3. THE CONNECTOR SHALL BE INSTALLED IN THE S.A.S. WALL BY ACTIVATING THE EXPANDING MECHANISM IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE CONNECTOR MANUFACTURER.

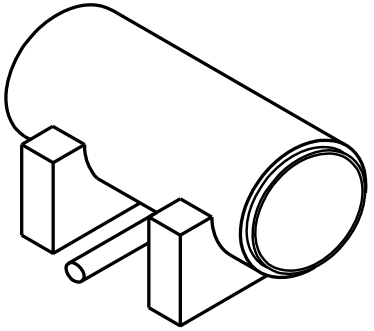
4. THE CONNECTOR SHALL BE OF A SIZE SPECIFICALLY DESIGNED FOR THE PIPE MATERIAL AND SIZE BEING UTILIZED ON THE PROJECT.

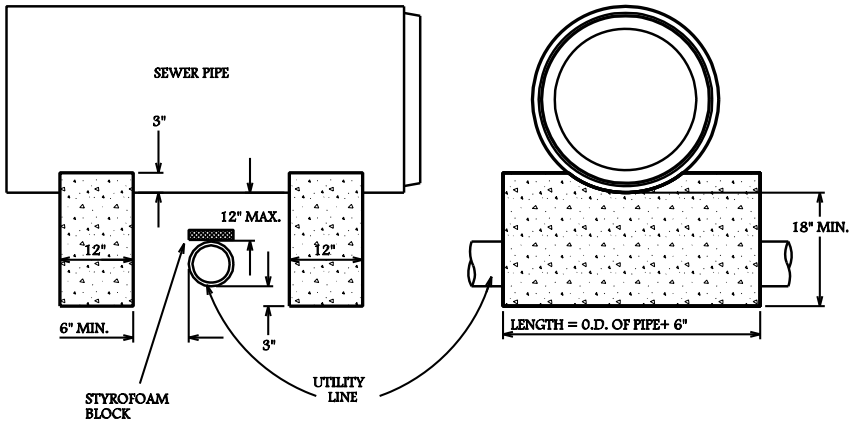
5. ALL COSTS SHALL BE CONSIDERED INCIDENTAL TO THE S.A.S. AND/OR PIPE. THE ENGINEER RESERVES THE RIGHT TO REQUIRE A "CONCRETE ENCASEMENT" CONNECTION AT NO ADDITIONAL EXPENSE IN THE EVENT OF DESIGN CHANGE.

6. FLEXIBLE, WATERTIGHT CONNECTIONS SHALL ALSO BE USED AS REQUIRED FOR STORM SEWER CONNECTIONS.

FLEXIBLE PIPE TO S.A.S. CONNECTOR

(CITY OF MADISON S.D.D. 5.7.3)



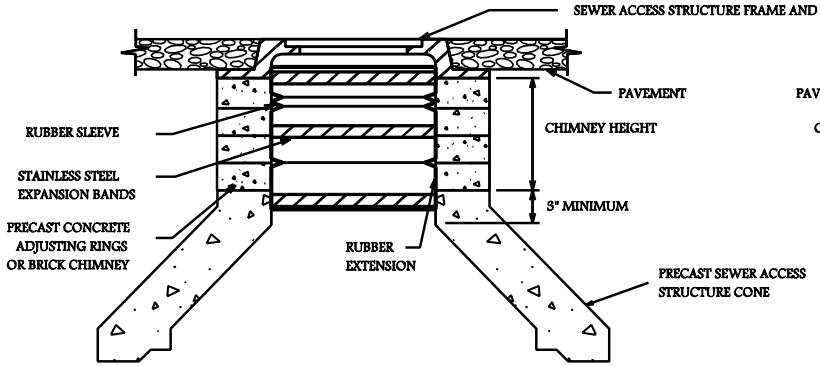


NOTE:

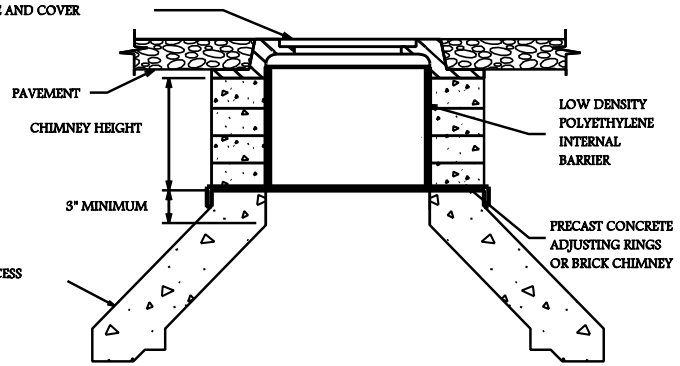
FIELD POURED, CONCRETE PIPE SUPPORTS SHALL BE INSTALLED FOR SEWERS OVER 10" IN DIAMETER WHEN CLEARANCE BETWEEN BOTTOM OF PIPE & TOP OF UTILITY LINE IS 12" OR LESS.

CONCRETE SUPPORTS

(CITY OF MADISON S.D.D. 5.8.)



FLEXIBLE INTERNAL RUBBER SLEEVE



LOW DENSITY POLYETHYLENE INTERNAL BARRIER

AN INTERNAL CHIMNEY SEAL WHERE NEEDED, SHALL BE INSTALLED TO COVER THE ENTIRE CHIMNEY AREA IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. FRAME SEALS SHALL CONSIST OF ONE OF THE FOLLOWING TYPES OF INTERNAL SEALS:

1) FLEXIBLE INTERNAL RUBBER SLEEVE

A FLEXIBLE INTERNAL RUBBER SLEEVE, INTERLOCKING EXTENSIONS AND STAINLESS STEEL EXPANSION BANDS AS MANUFACTURED BY CRETEX SPECIALTY PRODUCTS OR AN APPROVED EQUAL CONFORMING TO THE FOLLOWING REQUIREMENTS.

THE SEAL SHALL REMAIN FLEXIBLE THROUGHOUT A 25 YEAR DESIGN LIFE, ALLOWING REPEATED VERTICAL MOVEMENT OF THE FRAME OF NOT LESS THAN 2 INCHES AND/OR REPEATED HORIZONTAL MOVEMENTS OF NOT LESS THAN 1/2 INCH. THE SLEEVE PORTION OF THE SEAL SHALL BE EITHER DOUBLE OR TRIPLE PLEATED WITH A MINIMUM UNEXPANDED VERTICAL HEIGHT OF EITHER 8 INCHES OR 10 INCHES, RESPECTIVELY. THE SLEEVE AND EXTENSION SHALL HAVE A MINIMUM THICKNESS OF 3/16 INCHES AND SHALL BE MADE FROM A HIGH QUALITY RUBBER COMPOUND CONFORMING TO THE APPLICABLE REQUIREMENTS OF ASTM C-923, WITH A MINIMUM 1500 PSI TENSILE STRENGTH, A MAXIMUM 18% COMPRESSION SET AND A HARDNESS (DUROMETER) OF 48 +/- . THE BANDS SHALL BE FABRICATED FROM 16 GAUGE STAINLESS STEEL CONFORMING TO ASTM A-240, TYPE 304 AND SHALL HAVE A MINIMUM ADJUSTMENT RANGE OF 2 DIAMETER INCHES AND A POSITIVE LOCKING MECHANISM. ANY SCREWS, BOLTS OR NUTS USED FOR THIS MECHANISM SHALL BE STAINLESS STEEL CONFORMING TO ASTM F-593 AND 594, TYPE 304.

2) LOW DENISTY POLYETHYLENE INTERNAL BARRIER

A LOW DENSITY POLYETHYLENE INTERNAL BARRIER SHALL MAINTAIN THEIR ADHESION ALLOWING REPEATED HORIZONTAL MOVEMENT OF NOT LESS THAN 1 INCH. THE BARRIER SHALL HAVE A MINIMUM THICKNESS OF 1/4 INCH AND CONFORM TO THE REQUIREMENTS OF THE FOLLOWING STANDARDS:
ASTM D 790/1505, D 1238, D 638, D 790, D 648 AND D 1693.

INTERNAL CHIMNEY SEALS SHALL BE USED ON ALL SANITARY SEWER ACCESS STRUCTURES AT THE FOLLOWING LOCATIONS:
1) WITHIN 100' OF A STREET LOW POINT
2) ALL GREENWAYS
3) WHERE SPECIFIED BY THE ENGINEER

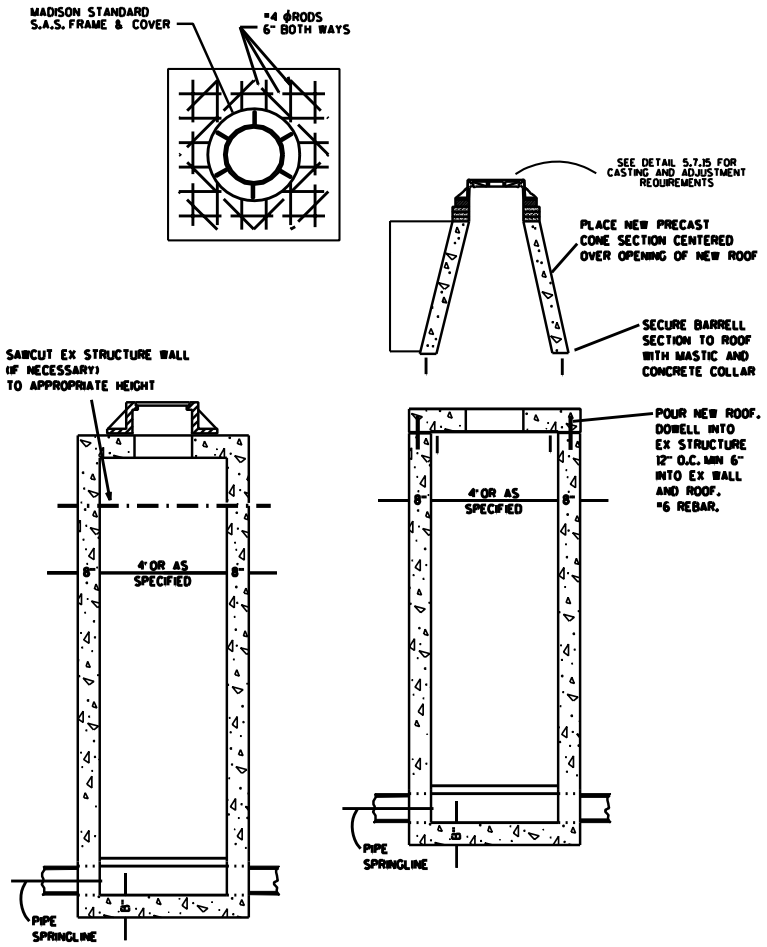
SAS INTERNAL CHIMNEY SEAL

(CITY OF MADISON S.D.D. 5.7.17)

PROJECT NO: 5992-08-87	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS (SANITARY SEWER)	SHEET 127	E

FILE NAME : G:\Madison\MD2009035\DGN\023000_san.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



NOTES:

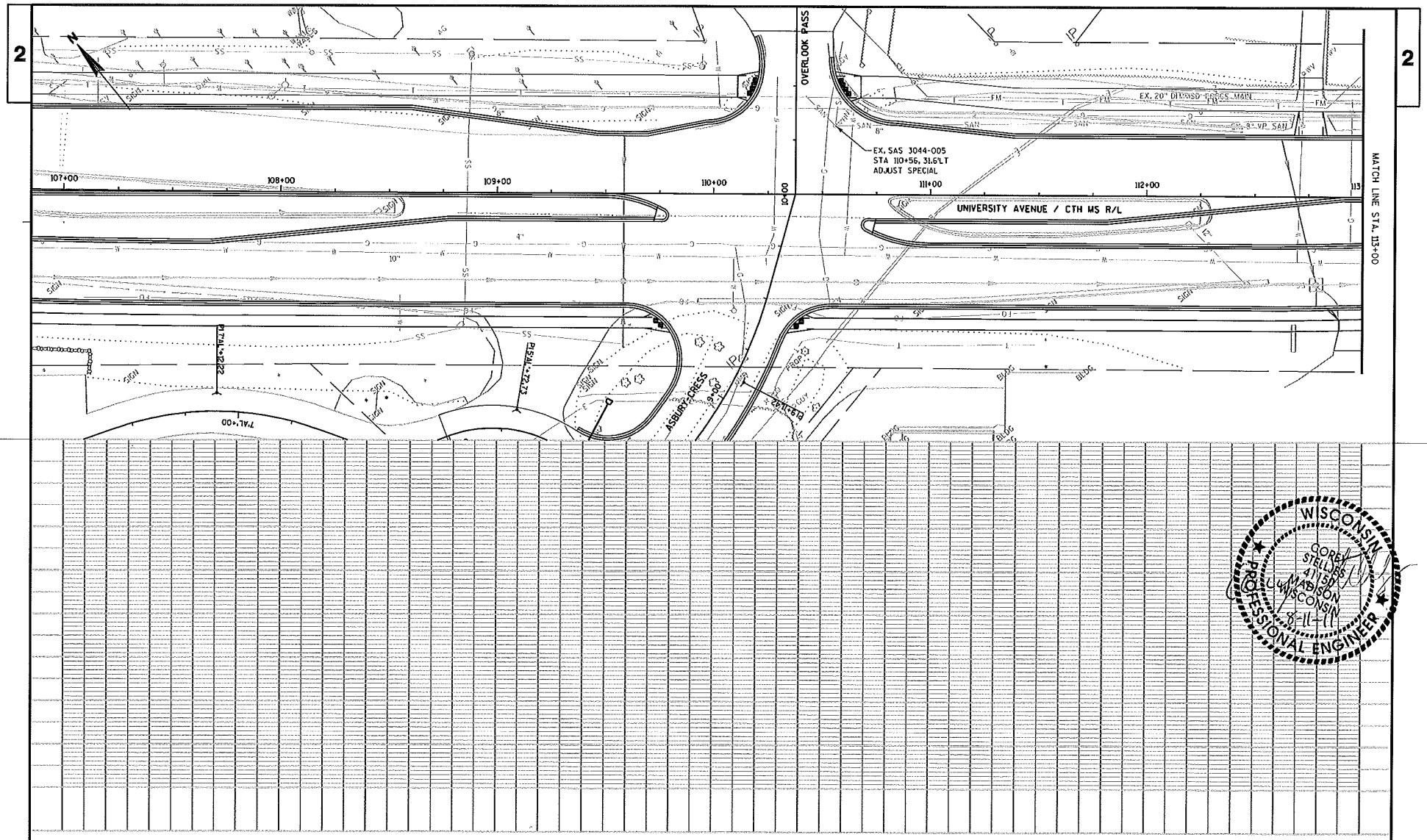
REFER TO STANDARD PLATE 5.7.16 "MADISON STANDARD FRAMES WITH NON-ROCKING COVER" FOR CASTING DESIGNATION.

ROOF THICKNESS SHALL BE 8" MINIMUM UNLESS SPECIFIED OTHERWISE.

ADJUST SANITARY SEWER STRUCTURE - SPECIAL P.I.P. STRUCTURES

(CITY OF MADISON S.D.D. 5.7.X)

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 128 E



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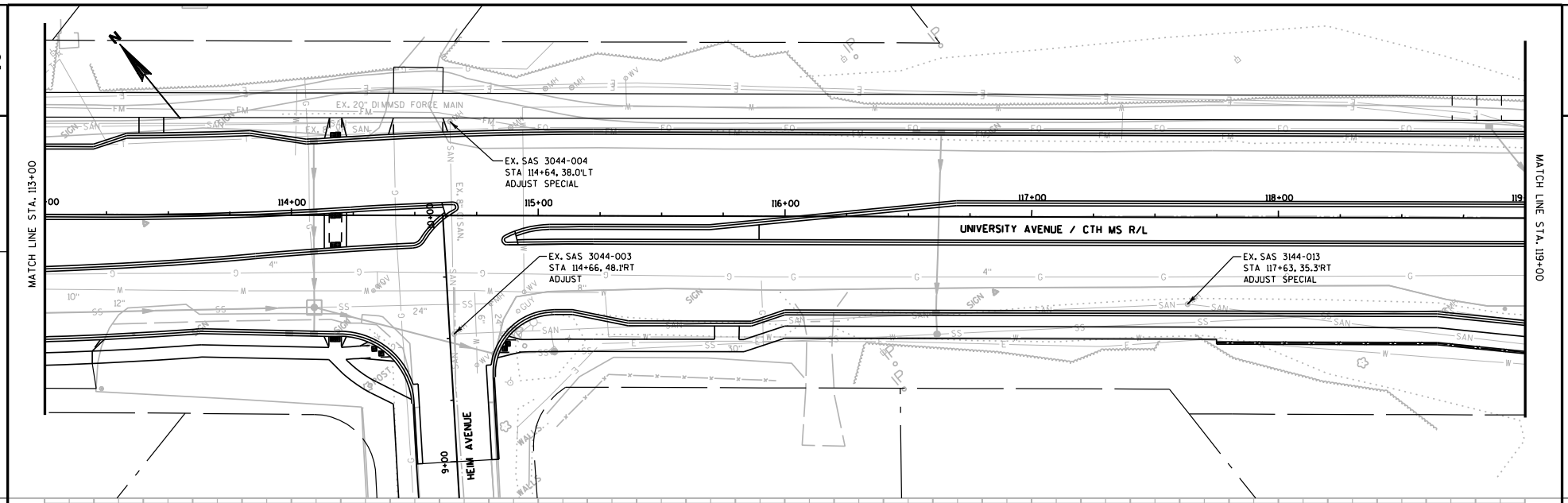
8-11-11
PROFESSIONAL ENGINEER

PROJECT NO: 5992-08-87	HWY: CTH MS	COUNTY: DANE	SANITARY SEWER PLAN & PROFILE	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023001_san.dgn PLOT DATE : 8/11/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

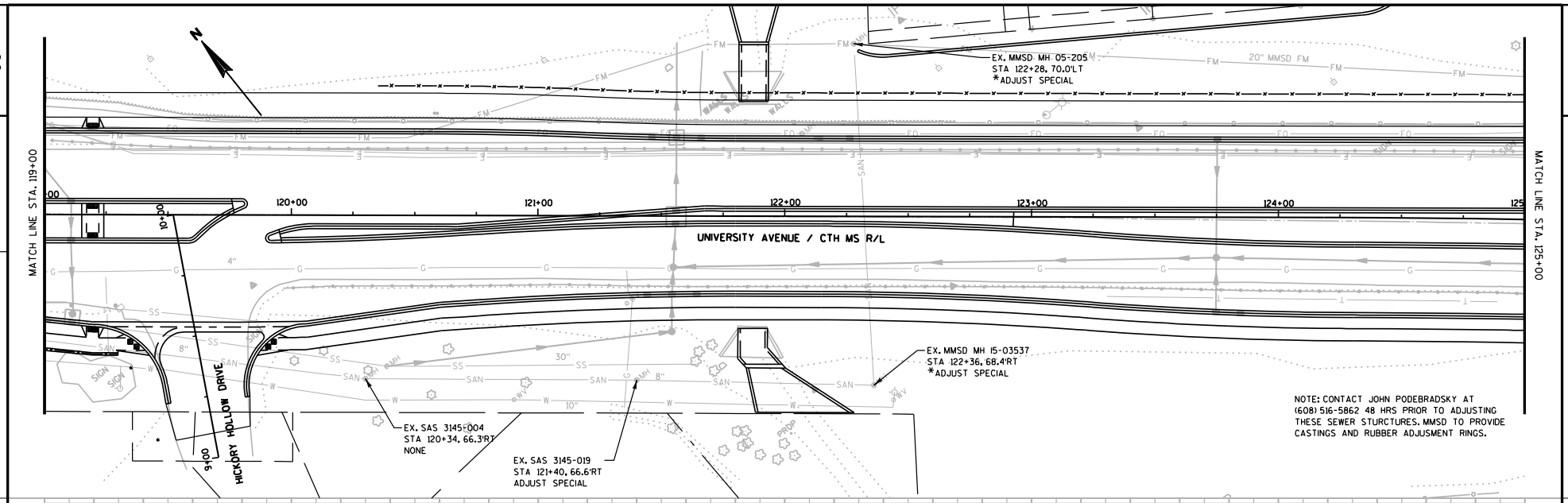
WISDOT/CADDS SHEET



PROJECT NO:5992-08-87	HWY: CTH MS	COUNTY: DANE	SANITARY SEWER PLAN & PROFILE	SHEET 130	E

FILE NAME : g:\madison\md2009035\dgn\023002_san.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

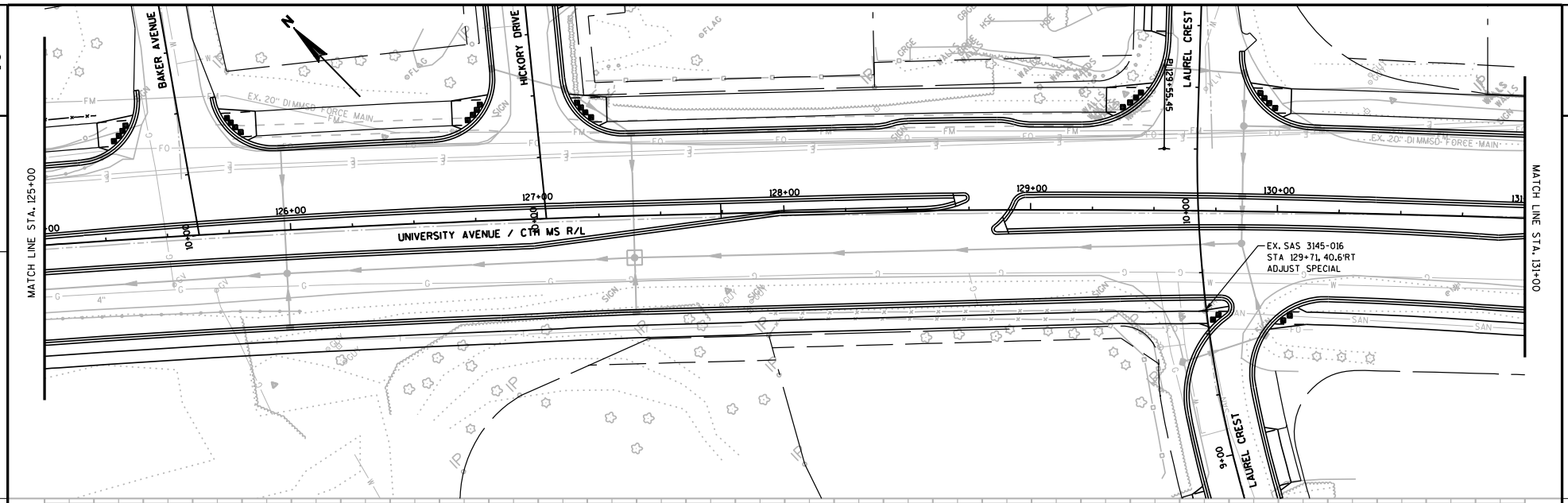
WISDOT/CADDS SHEET 41a



PROJECT NO: 5992-08-87	HWY: CTH MS	COUNTY: DANE	SANITARY SEWER PLAN & PROFILE	SHEET 131	E

FILE NAME : g:\madison\md2009035\dgn\023003_san.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

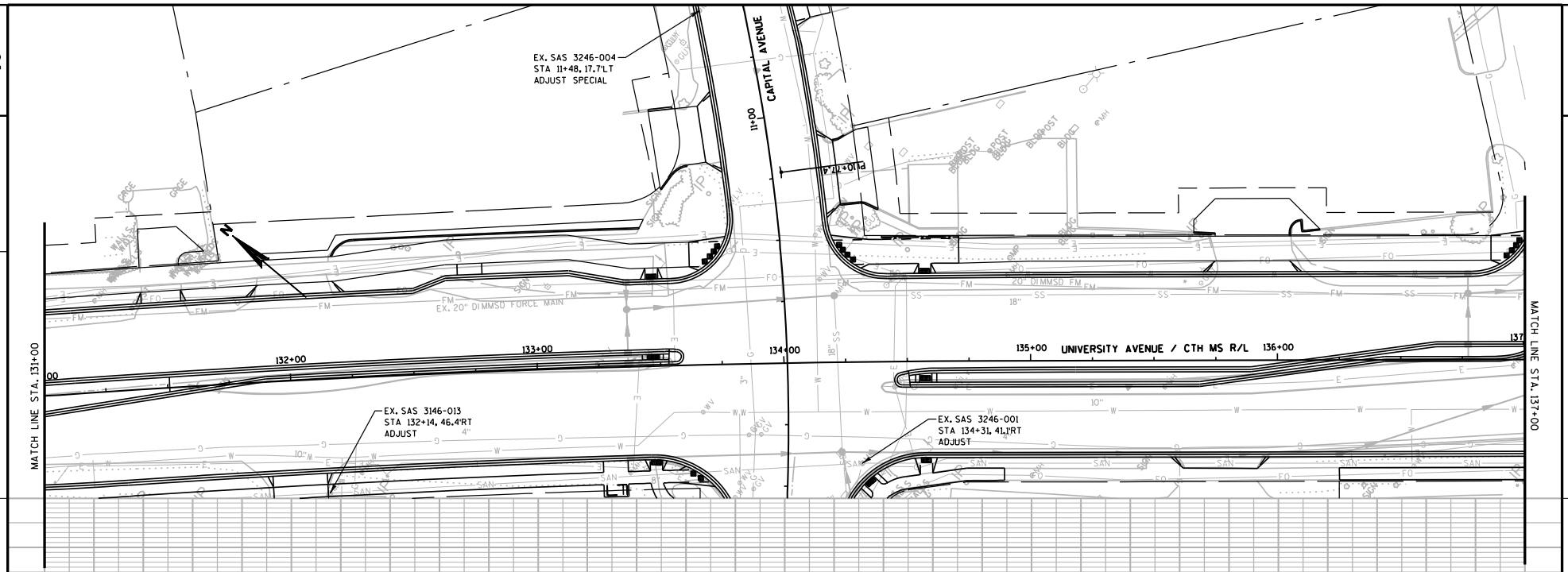
WISDOT/CADDS SHEET 41a



PROJECT NO:5992-08-87	HWY:CTH MS	COUNTY:DANE	SANITARY SEWER PLAN & PROFILE	SHEET 132 E

FILE NAME : g:\madison\md2009035\dgn\023004_san.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

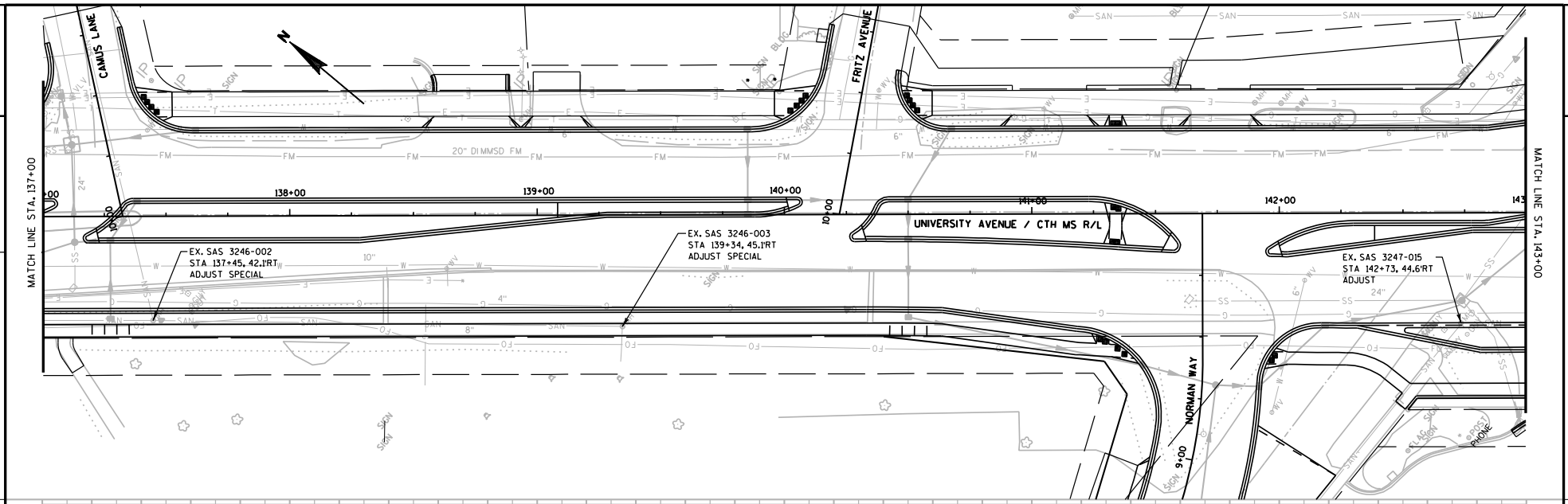
WISDOT/CADDS SHEET 41a



PROJECT NO: 5992-08-87	HWY: CTH MS	COUNTY: DANE	SANITARY SEWER PLAN & PROFILE	SHEET 133 E

FILE NAME : g:\madison\md2009035\dgn\023005_san.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

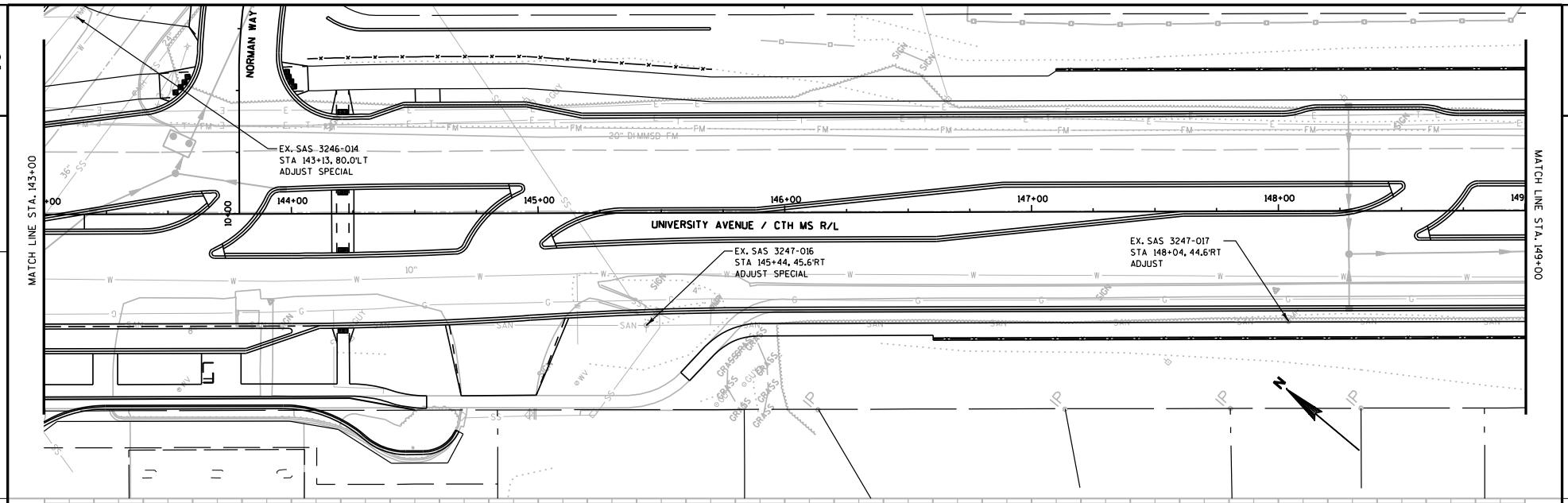
WISDOT/CADDS SHEET 41a



PROJECT NO:5992-08-87	HWY: CTH MS	COUNTY: DANE	SANITARY SEWER PLAN & PROFILE	SHEET 134 E

FILE NAME : g:\madison\md2009035\dgn\023006_san.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

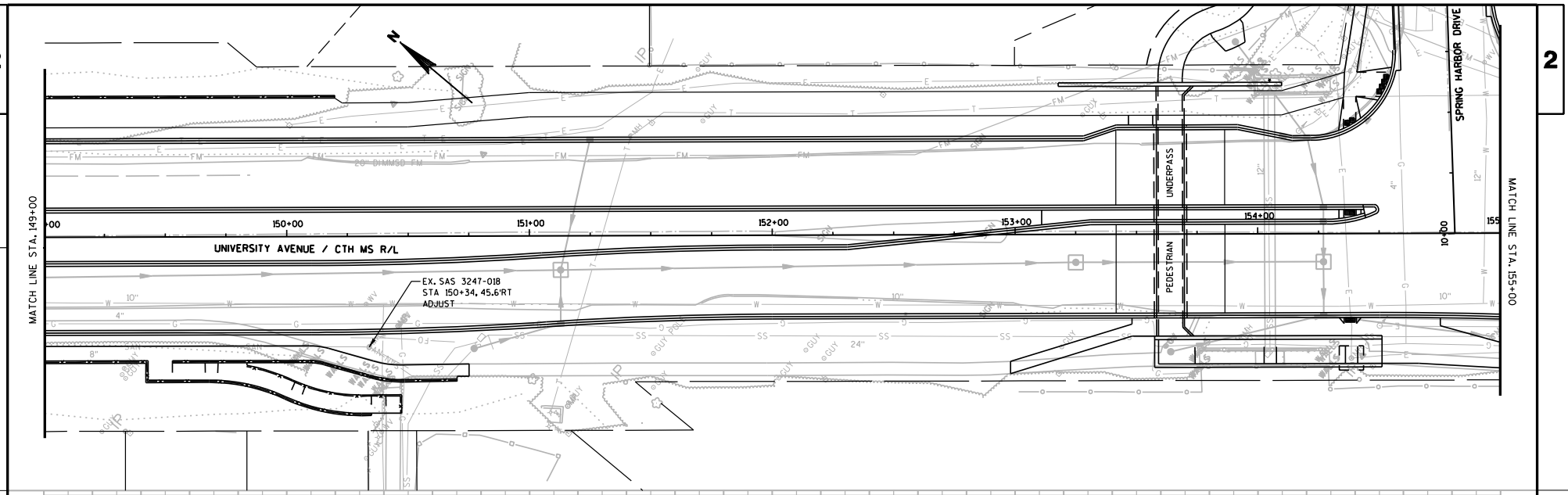
WISDOT/CADDS SHEET 41a



PROJECT NO:5992-08-87	HWY: CTH MS	COUNTY:DANE	SANITARY SEWER PLAN & PROFILE	SHEET 135	E

FILE NAME : g:\madison\md2009035\dgn\023007_san.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

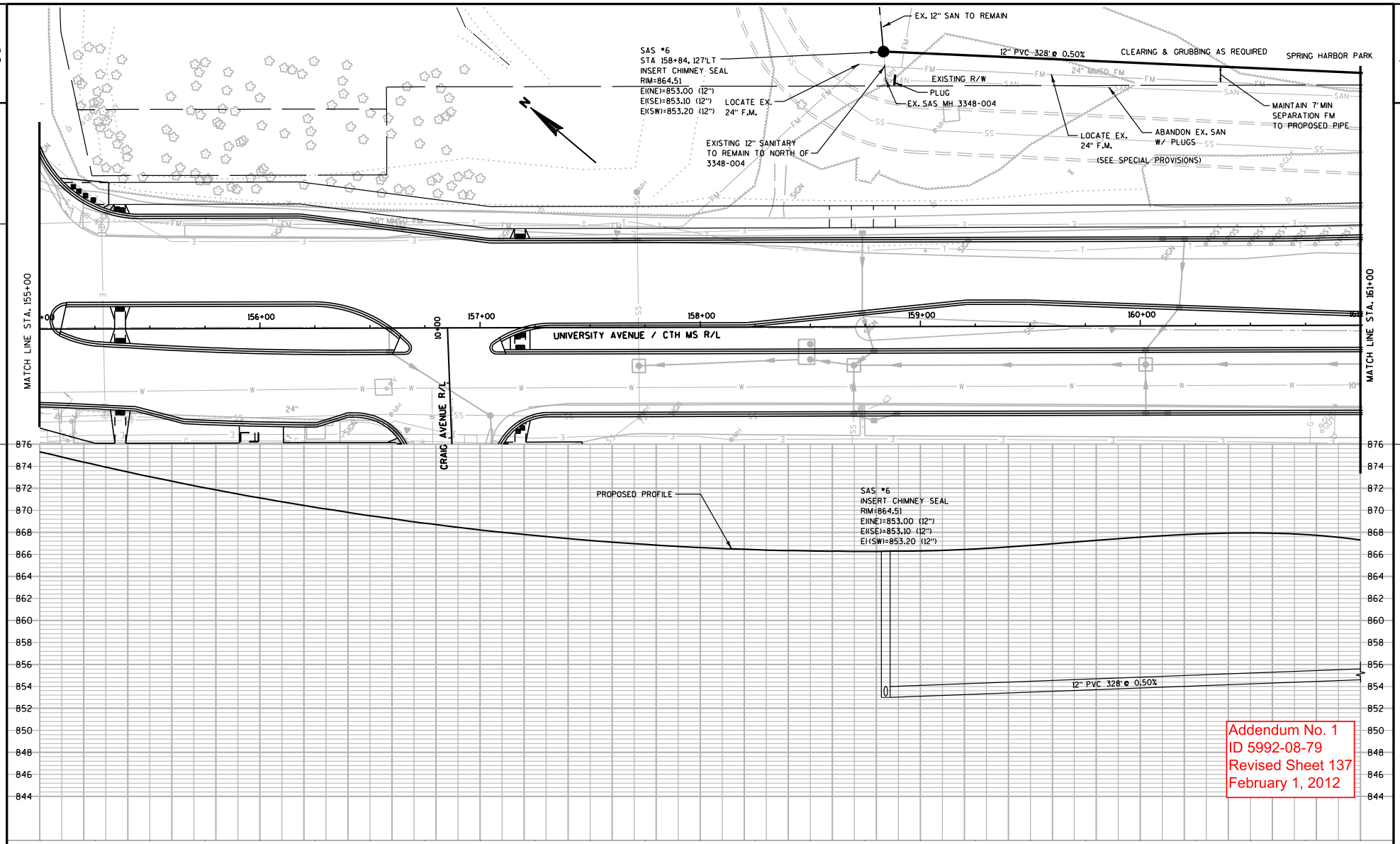
WISDOT/CADDS SHEET 41a



PROJECT NO:5992-08-87	HWY:CTH MS	COUNTY:DANE	SANITARY SEWER PLAN & PROFILE	SHEET 136 E

FILE NAME : g:\madison\md2009035\dgn\023008_san.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41a

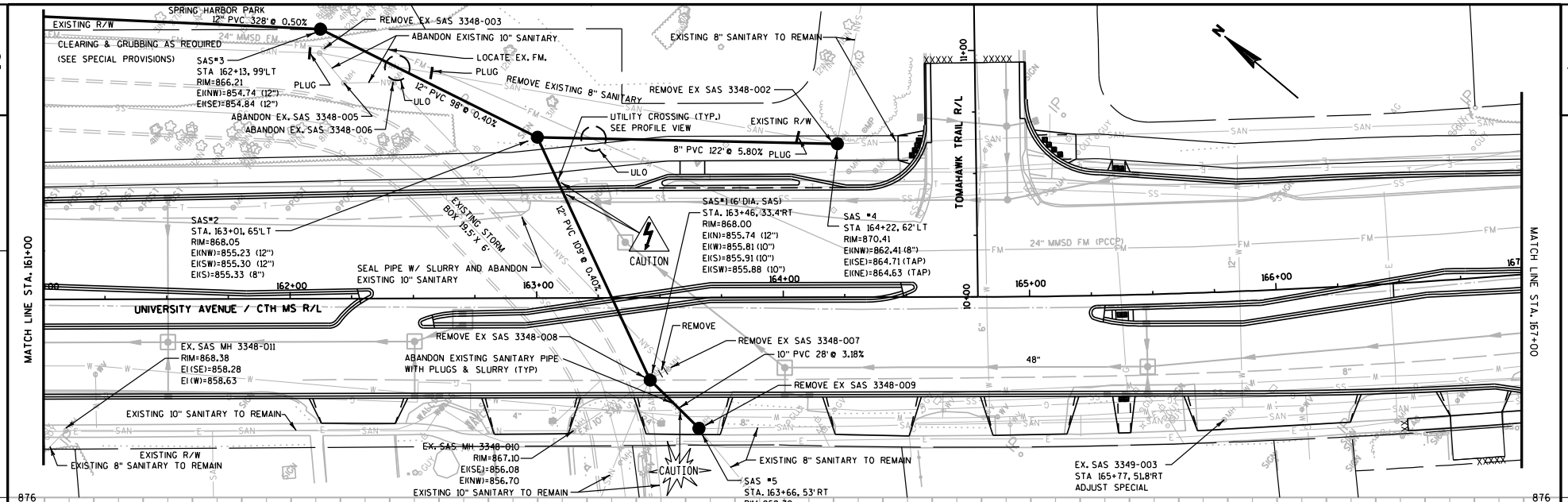


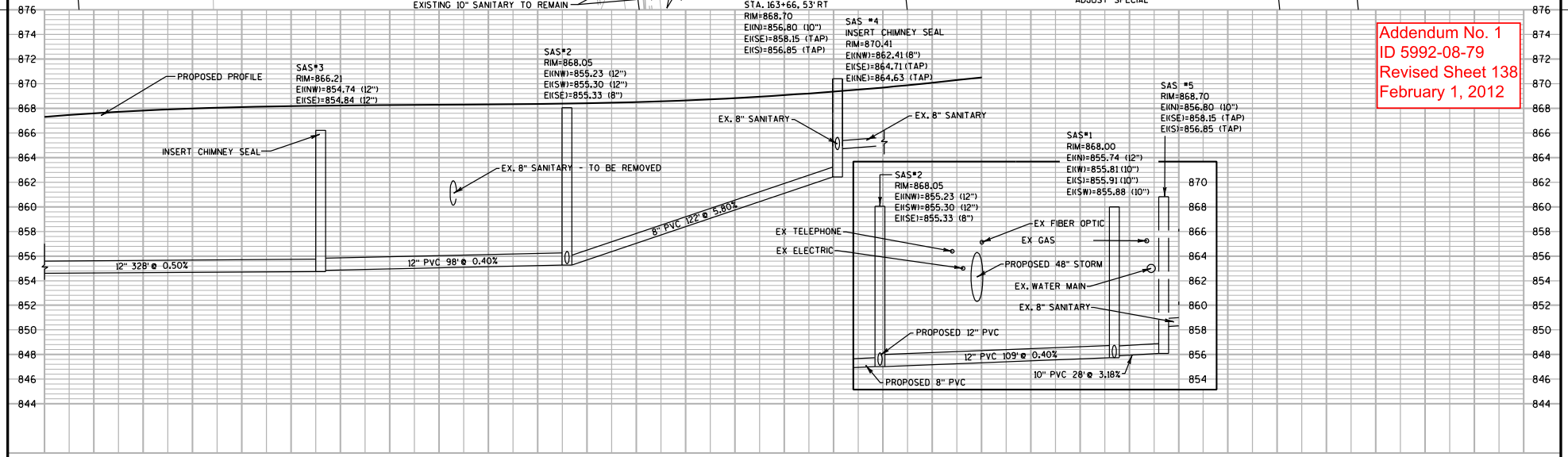
Addendum No. 1
ID 5992-08-79
Revised Sheet 137
February 1, 2012

PROJECT NO: 5992-08-87	HWY: CTH MS	COUNTY: DANE	SANITARY SEWER PLAN & PROFILE	SHEET 137	E

FILE NAME : G:\Madison\MD2009035\DGN\023009_san.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41a



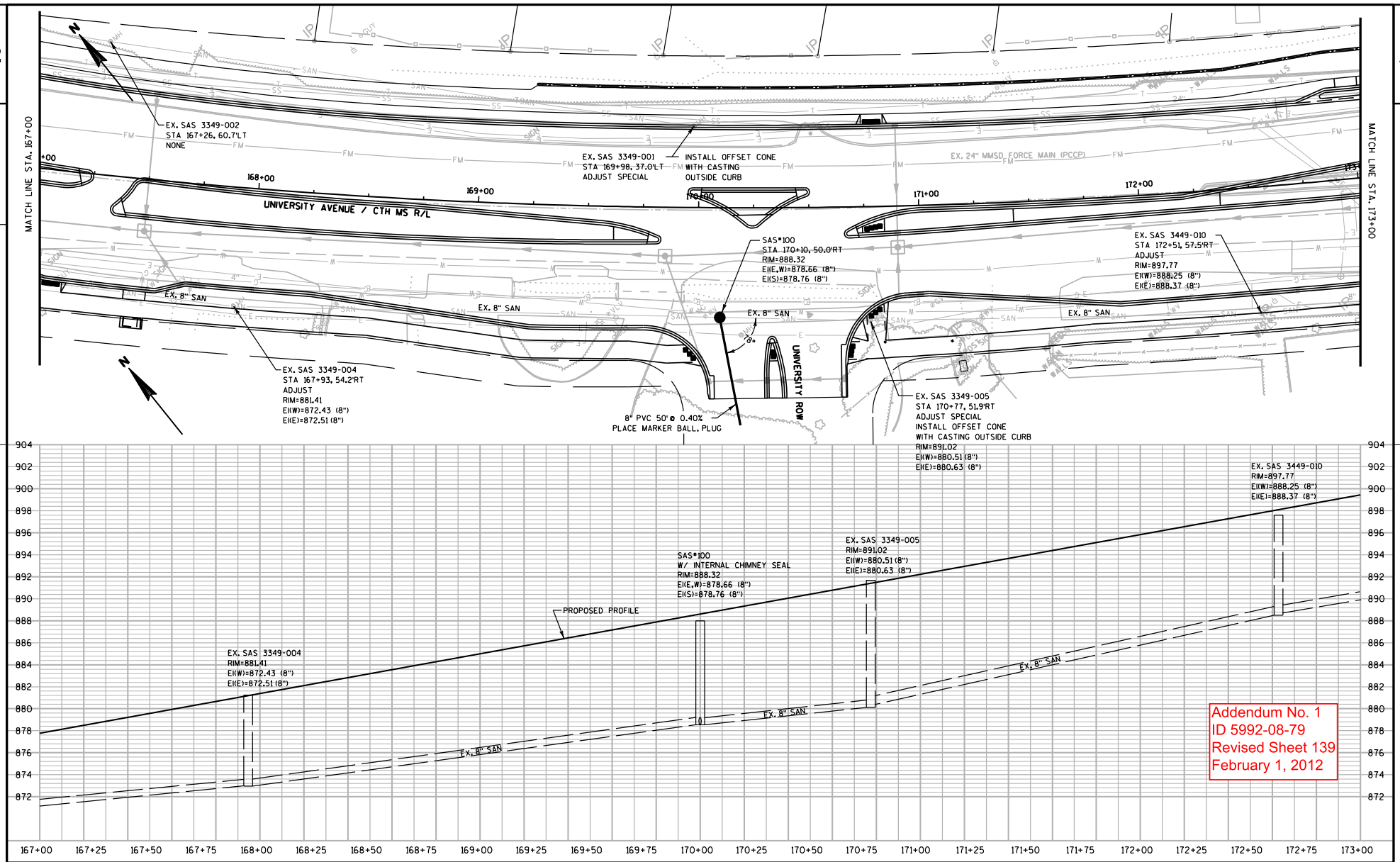


Addendum No. 1
ID 5992-08-79
Revised Sheet 138
February 1, 2012

PROJECT NO: 5992-08-87	HWY: CTH MS	COUNTY: DANE	SANITARY SEWER PLAN & PROFILE	SHEET 138	E

FILE NAME : G:\Madison\MD2009035\DGN\023010_san.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41a

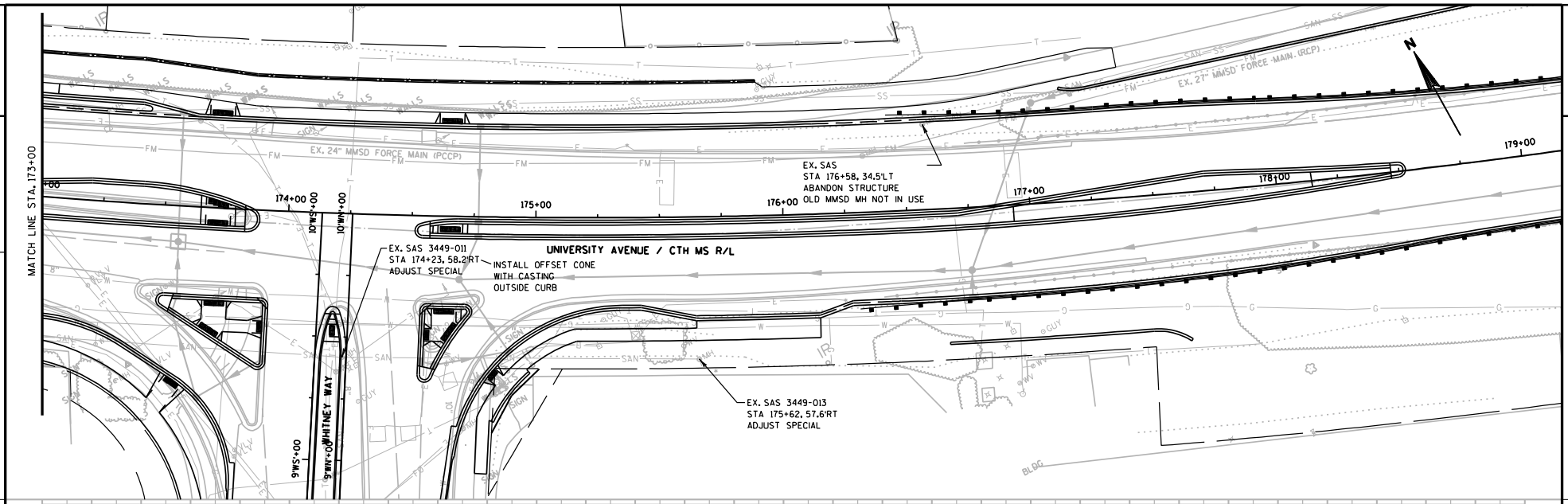


Addendum No. 1
ID 5992-08-79
Revised Sheet 139
February 1, 2012

PROJECT NO: 5992-08-87	HWY: CTH MS	COUNTY: DANE	SANITARY SEWER PLAN & PROFILE	SHEET 139	E

FILE NAME : G:\Madison\MD2009035\DGN\023011_san.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41a

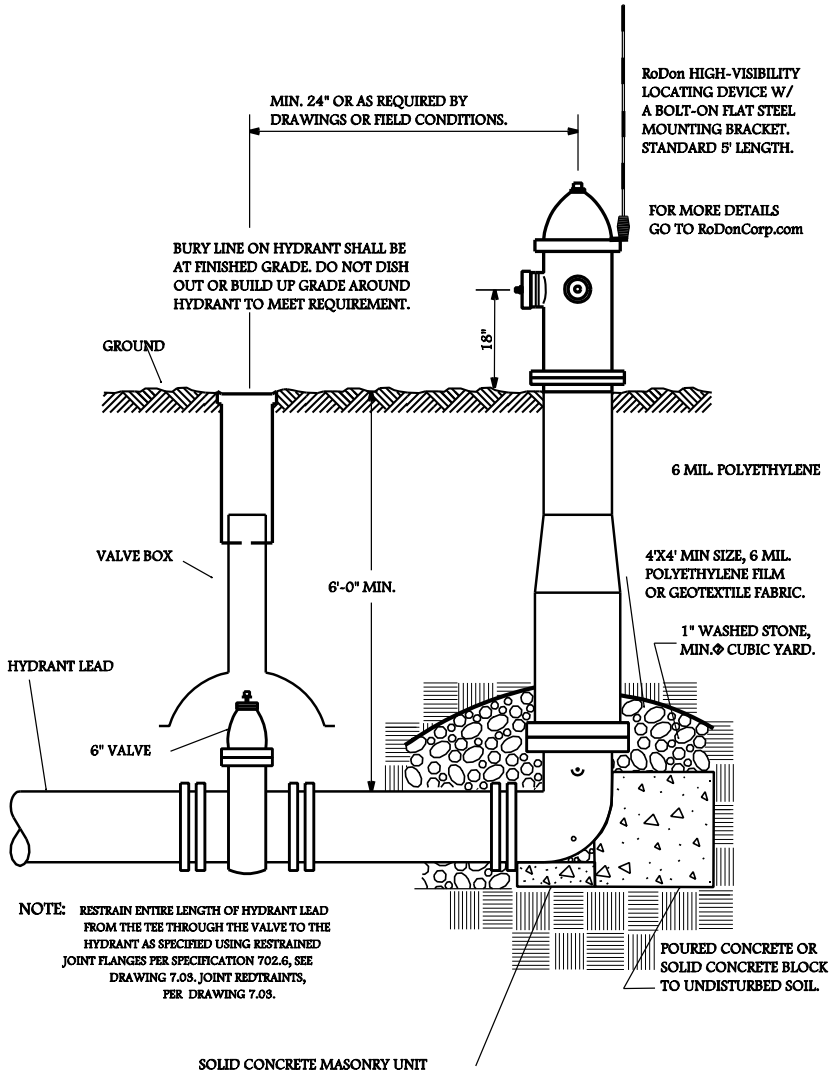


Addendum No. 1
ID 5992-08-79
Revised Sheet 140
February 1, 2012

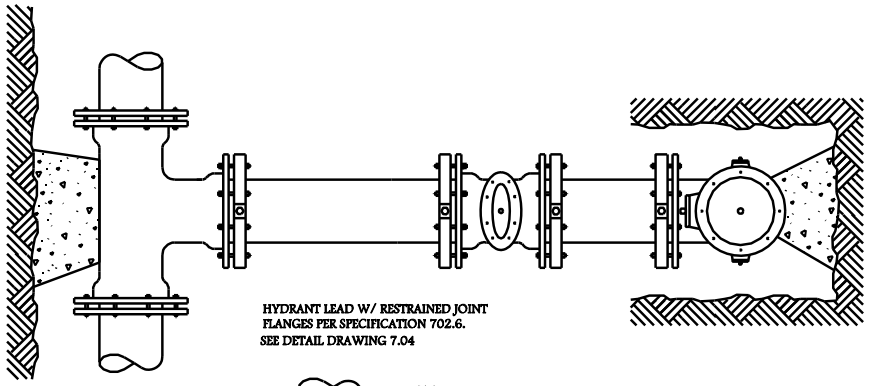
PROJECT NO:5992-08-87	HWY:CTH MS	COUNTY:DANE	SANITARY SEWER PLAN & PROFILE	SHEET 140	E

FILE NAME : G:\Madison\MD2009035\DGN\023012_san.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 41a

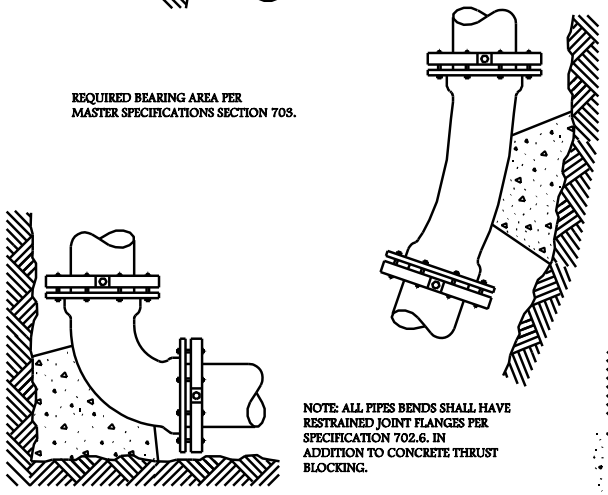


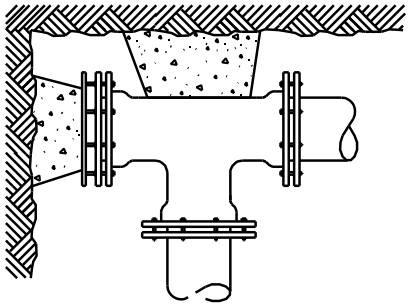
TYPICAL HYDRANT INSTALLATION



HYDRANT LEAD W/ RESTRAINED JOINT FLANGES PER SPECIFICATION 702.6. SEE DETAIL DRAWING 7.04

REQUIRED BEARING AREA PER MASTER SPECIFICATIONS SECTION 703.





NOTE: ALL PIPES BENDS SHALL HAVE RESTRAINED JOINT FLANGES PER SPECIFICATION 702.6. IN ADDITION TO CONCRETE THRUST BLOCKING.

DENOTES UNDISTURBED SOIL

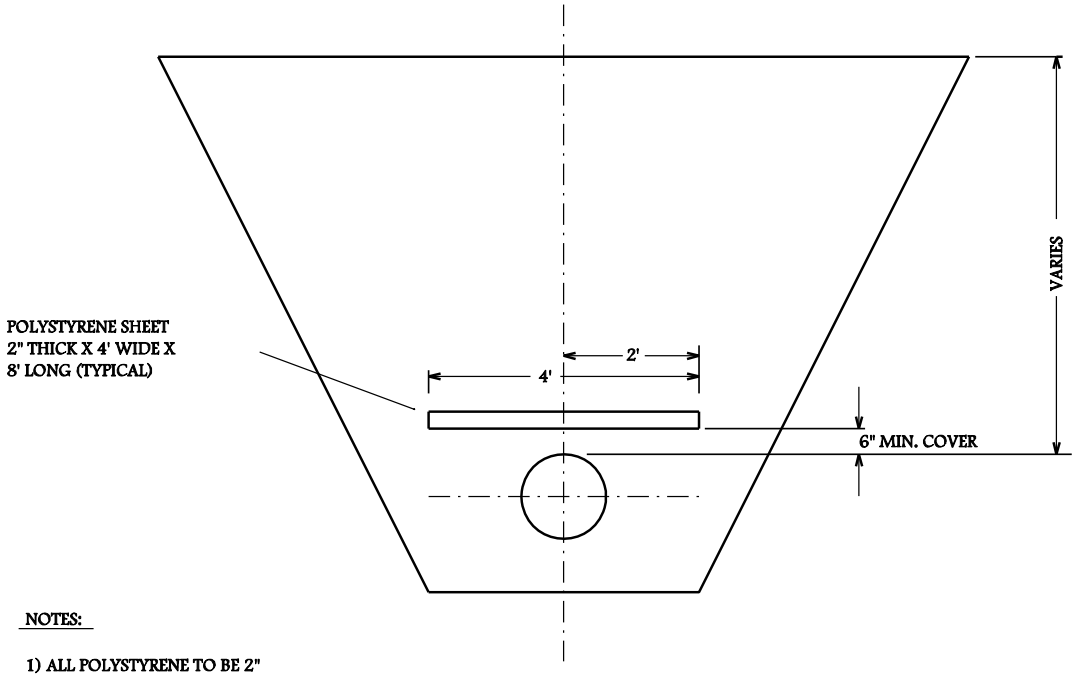
DENOTES POURED CONCRETE

STANDARD THRUST BLOCKING

PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS (WATER MAIN)	SHEET 142	E

FILE NAME : g:\madison\md2009035\dgn\023100_water.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



NOTES:

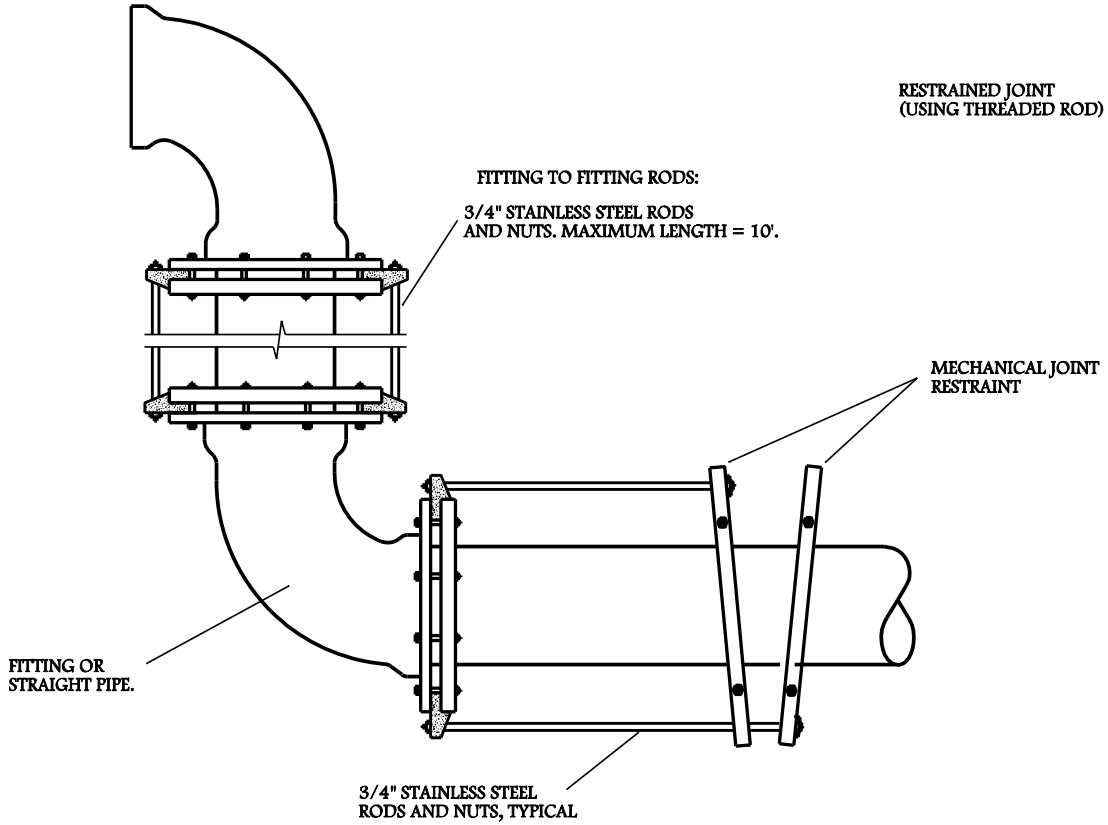
1) ALL POLYSTYRENE TO BE 2"
HIGH DENSITY POLYSTYRENE BOARD

TYPICAL POLYSTYRENE INSTALLATION

PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS (WATER MAIN)	SHEET 143	E

FILE NAME : g:\madison\md2009035\dgn\023100_water.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

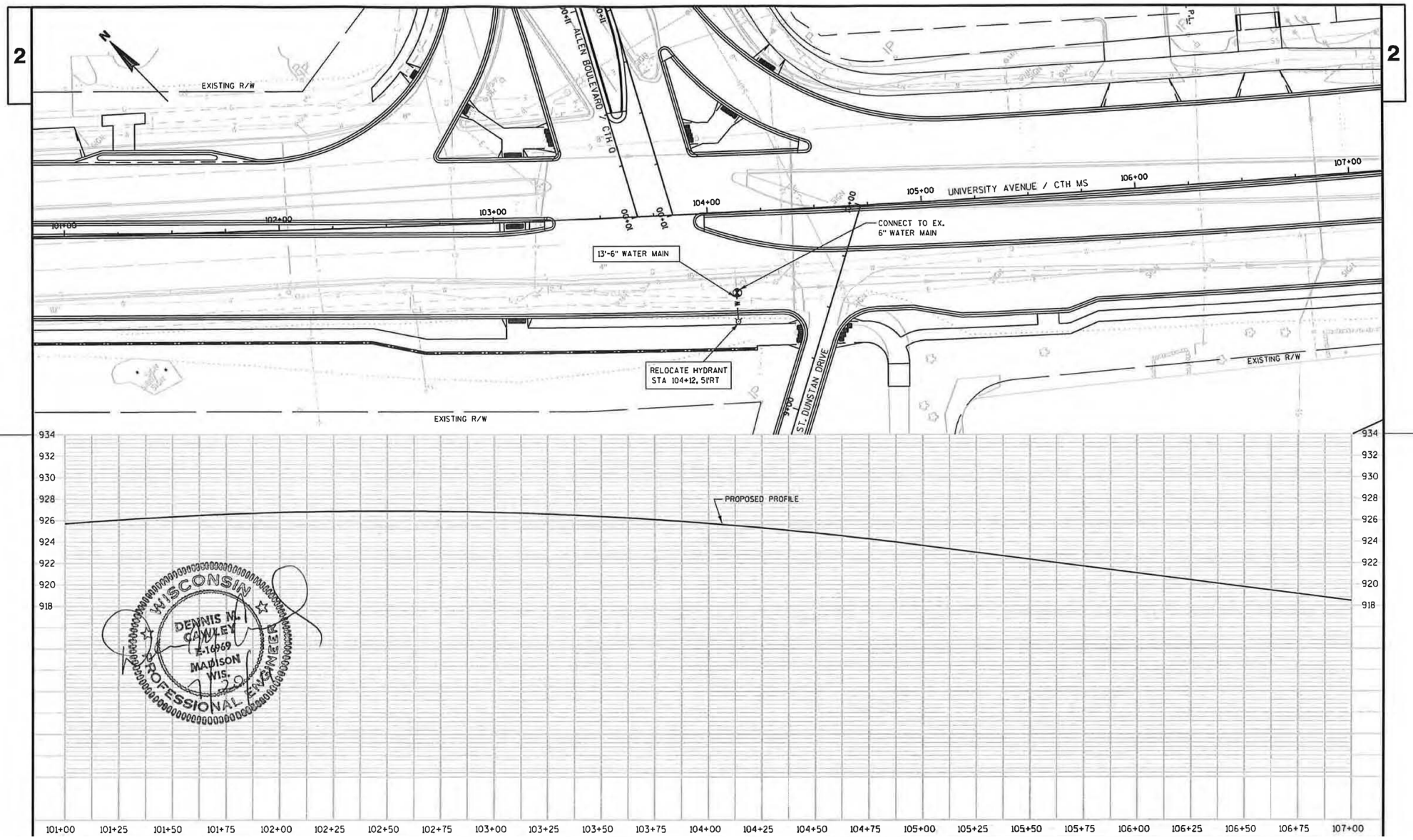


STANDARD THREADED RODS

PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	CONSTRUCTION DETAILS (WATER MAIN)	SHEET 144 E

FILE NAME : g:\madison\md2009035\dgn\023100_water.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



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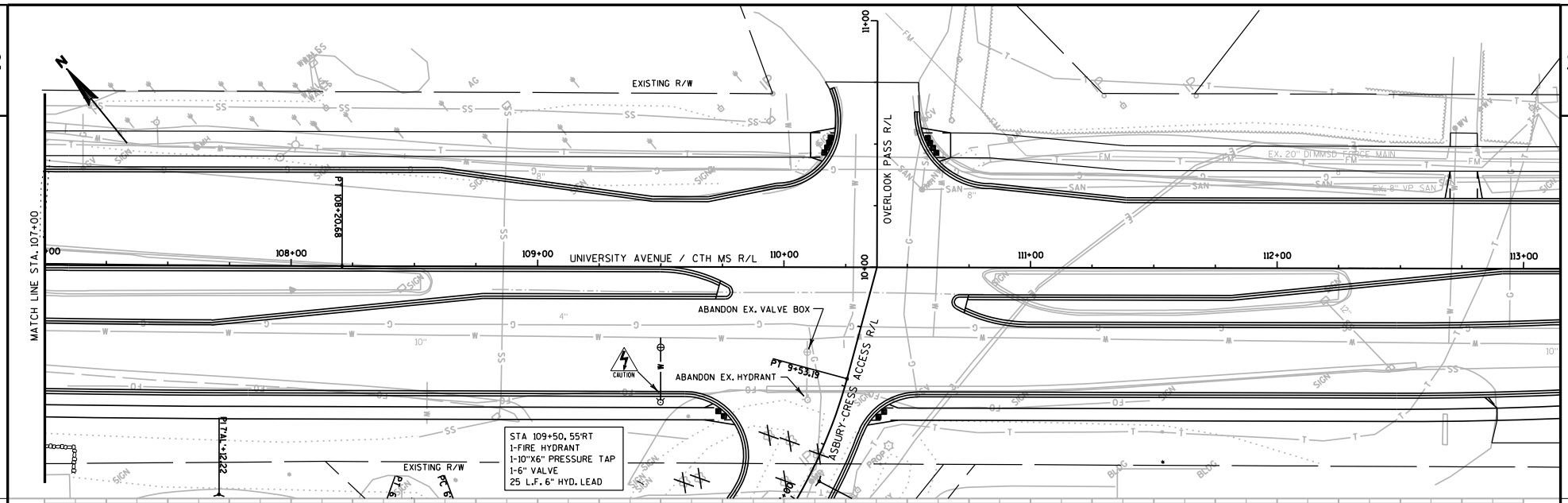
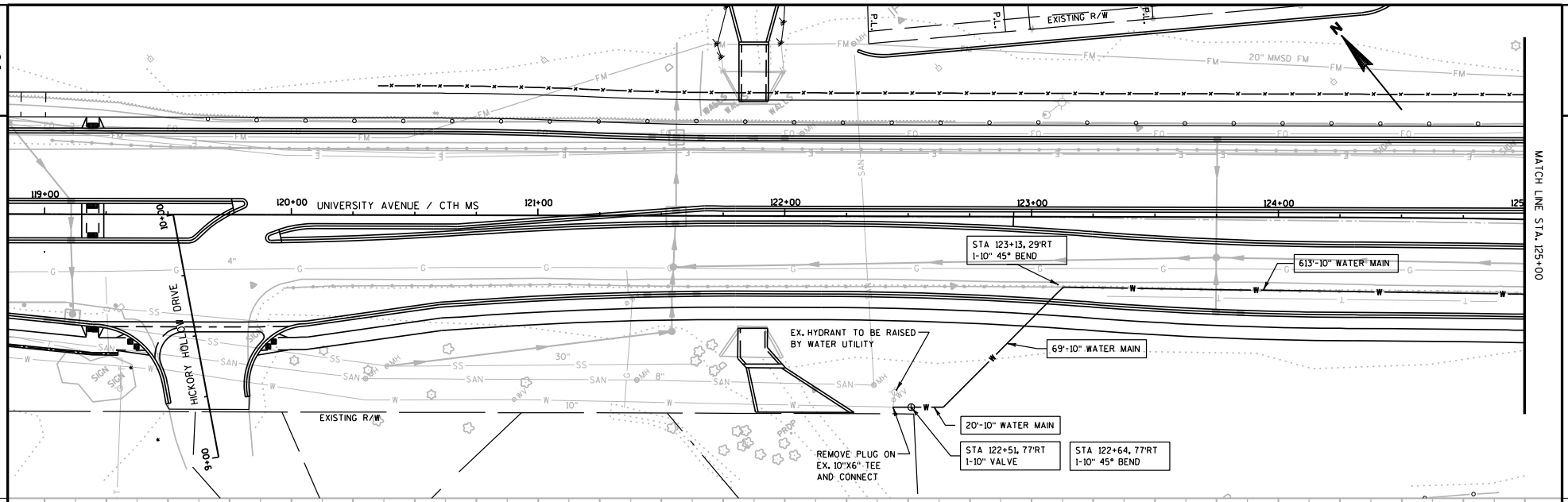
E-16969
MADISON
WIS.
PROFESSIONAL ENGINEER

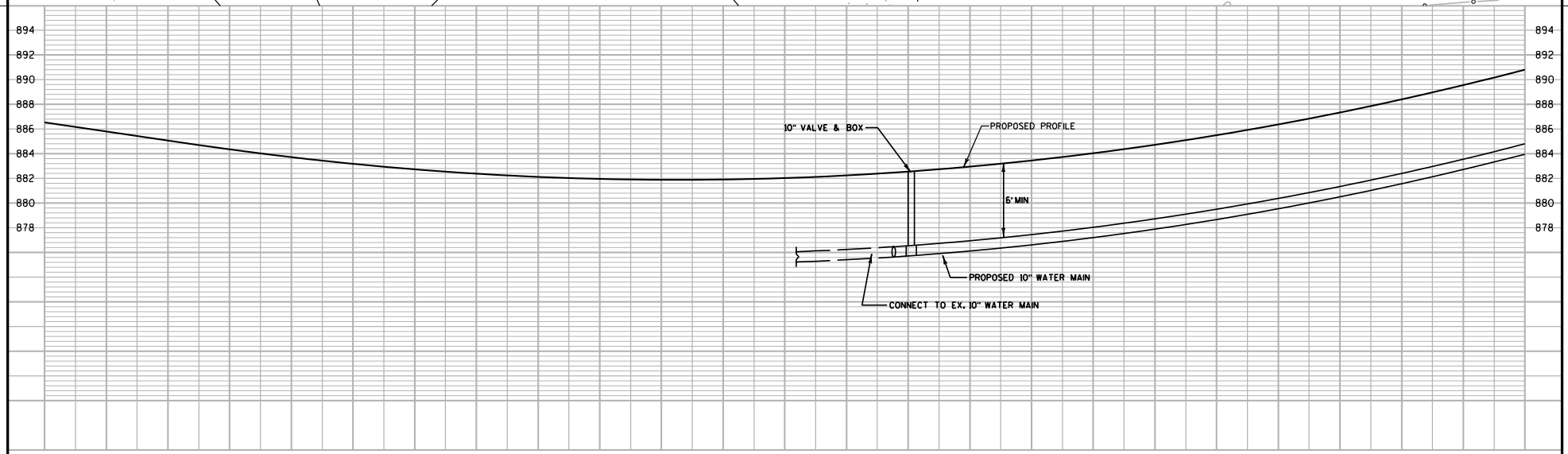


PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 146 E

FILE NAME : G:\Madison\MD2009035\DGN\023102_water.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30

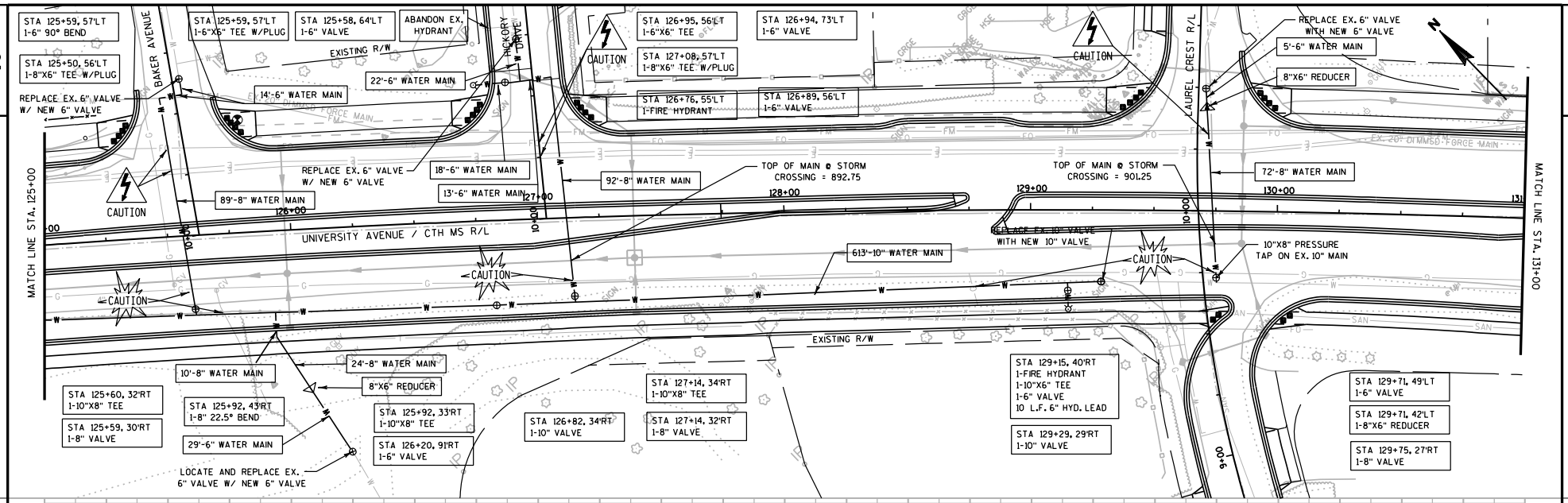


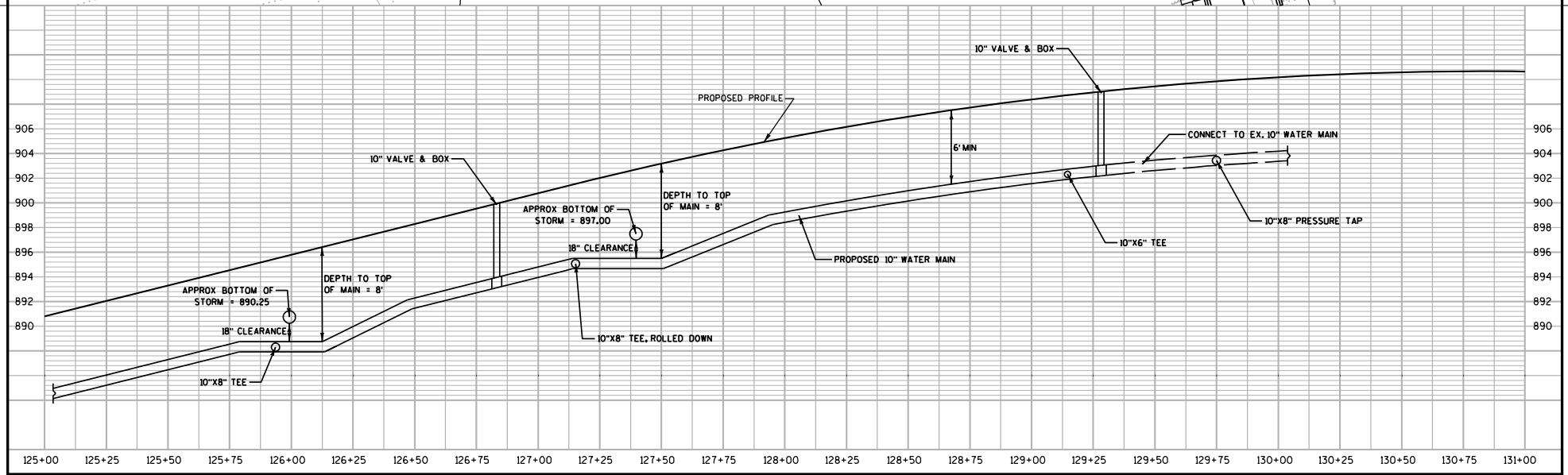


PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 147 E

FILE NAME : g:\madison\md2009035\dgn\023103_water.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30

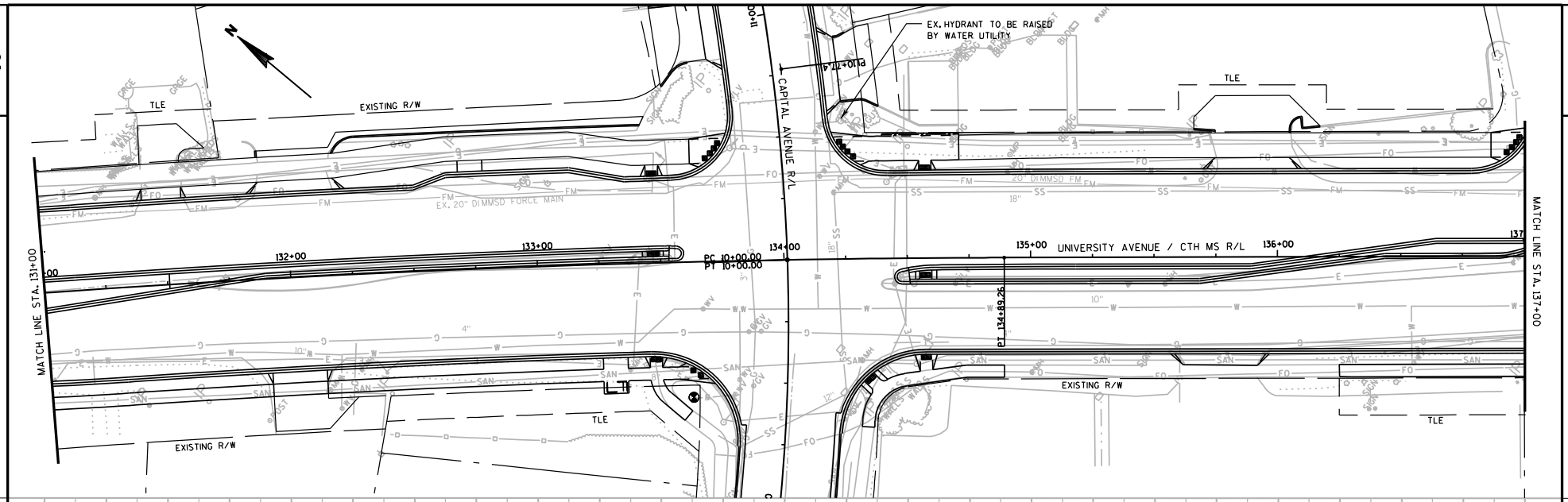


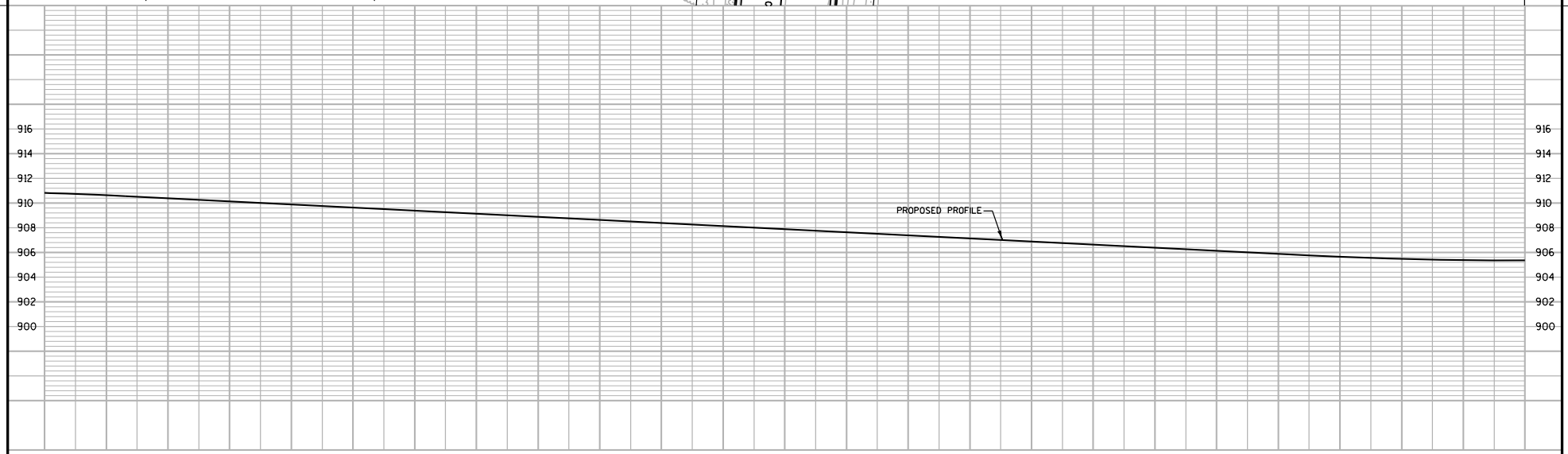


PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 148 E

FILE NAME : g:\madison\md2009035\dgn\023104_water.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30

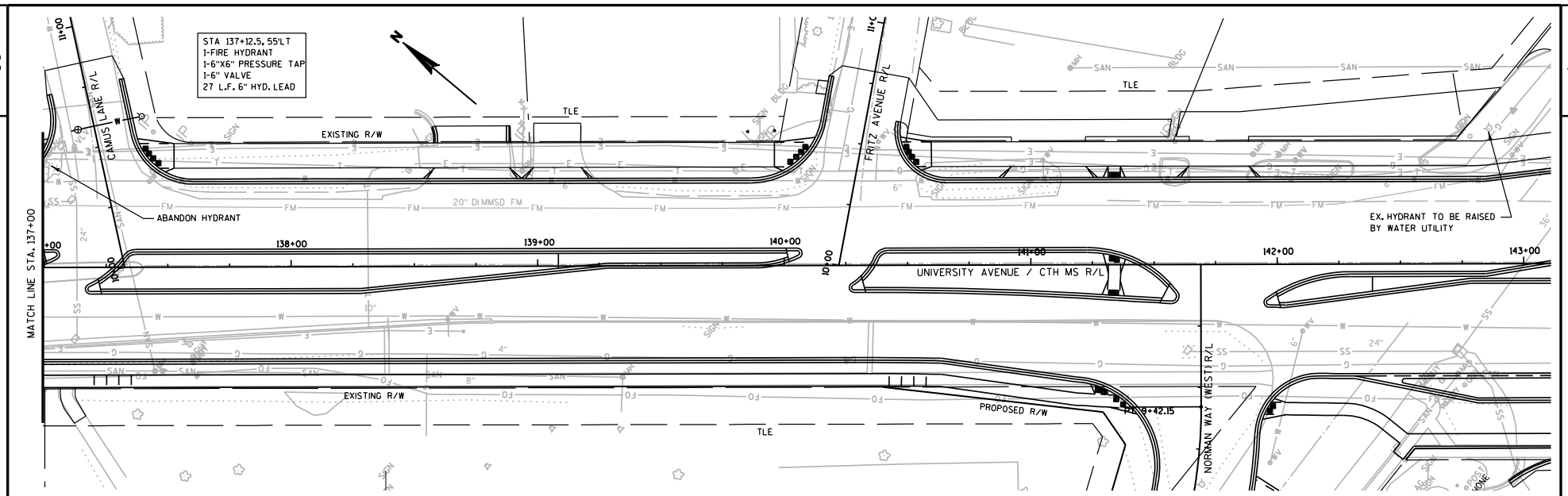


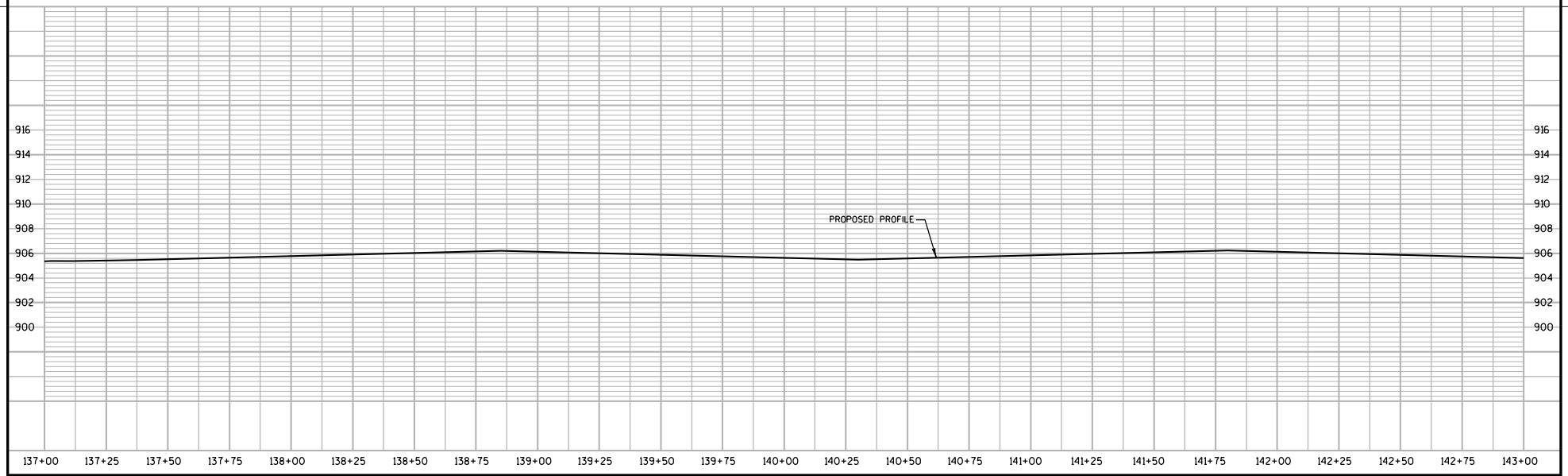


PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 149 E

FILE NAME : g:\madison\md2009035\dgn\023105_water.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30

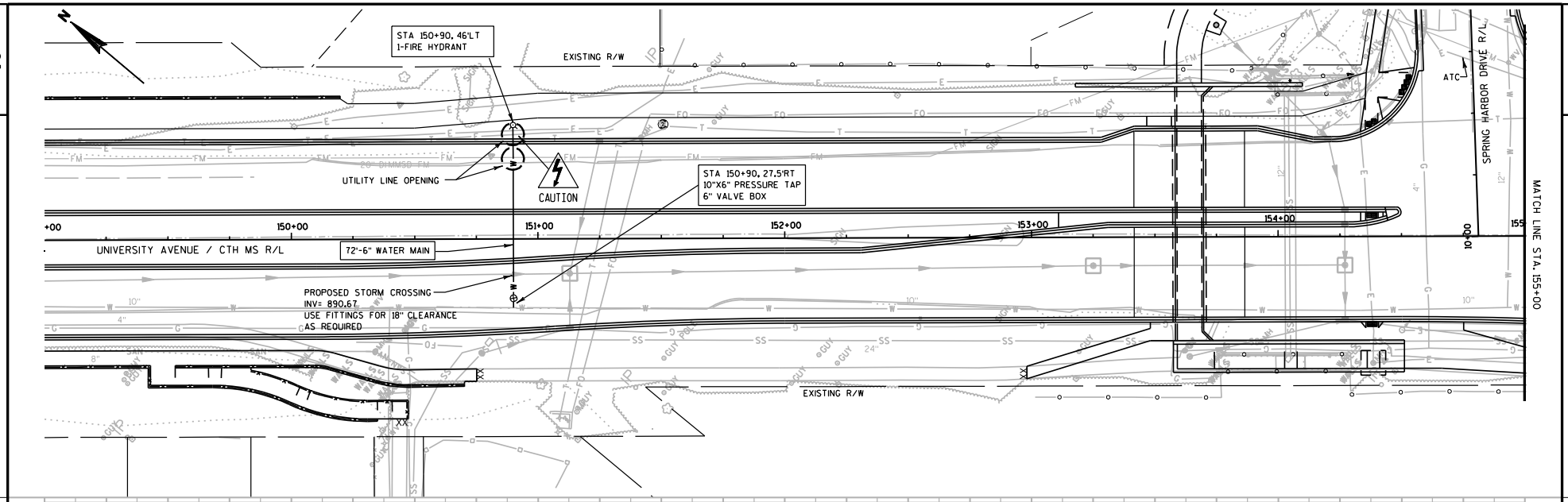


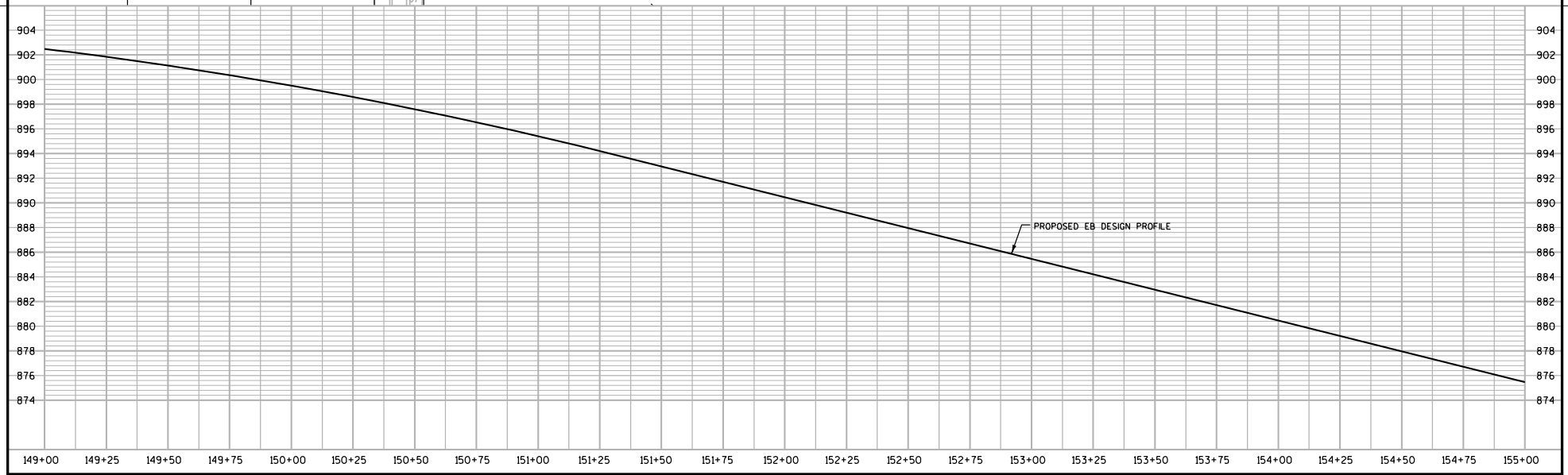


PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 150 E

FILE NAME : g:\madison\md2009035\dgn\023106_water.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30

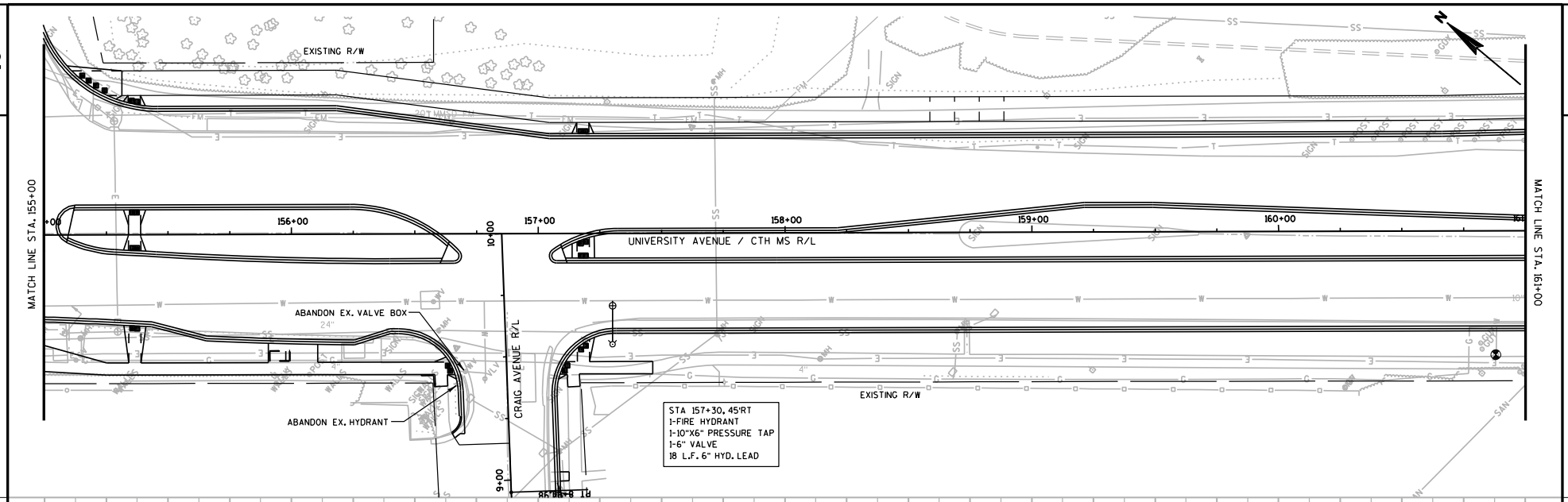


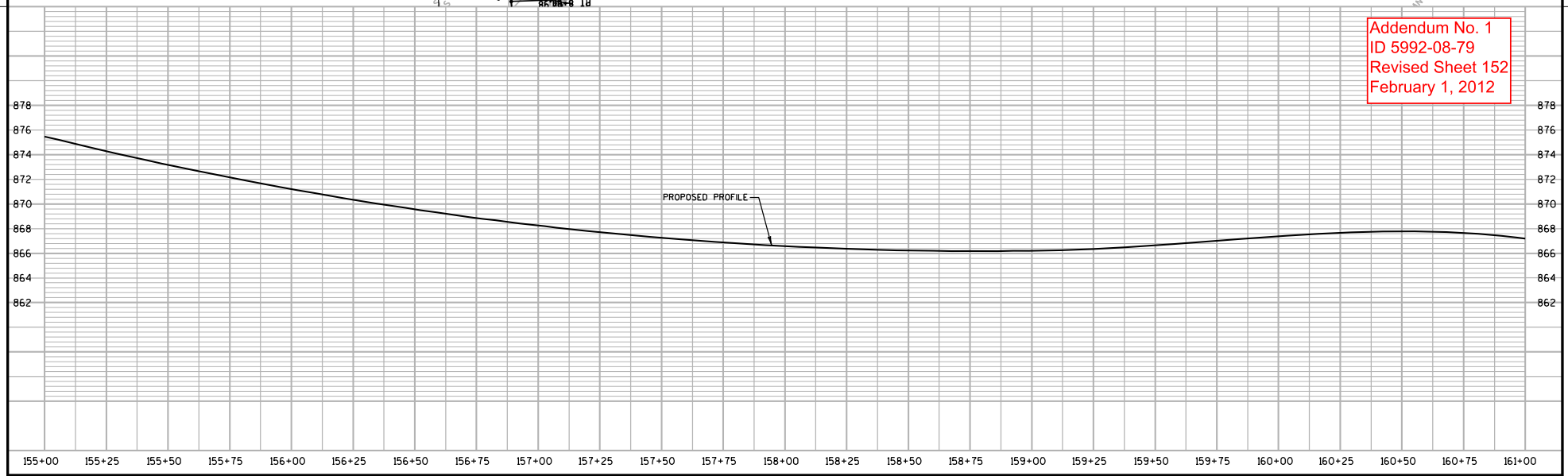


PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 151 E

FILE NAME : G:\Madison\MD2009035\DGN\023107A_water.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30



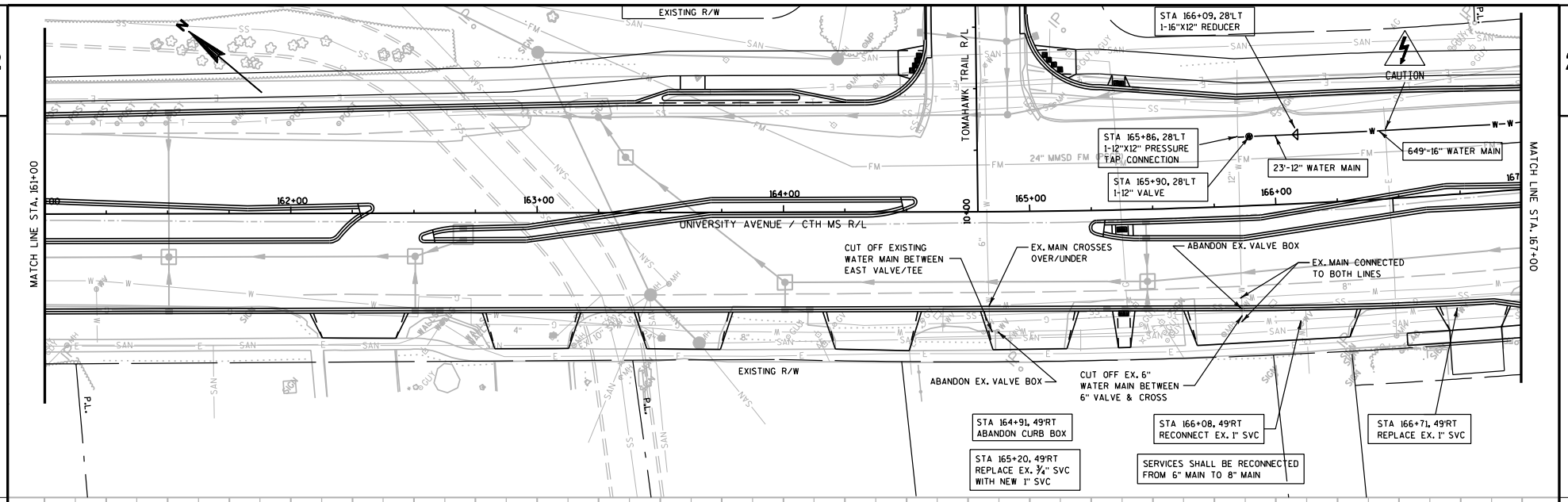


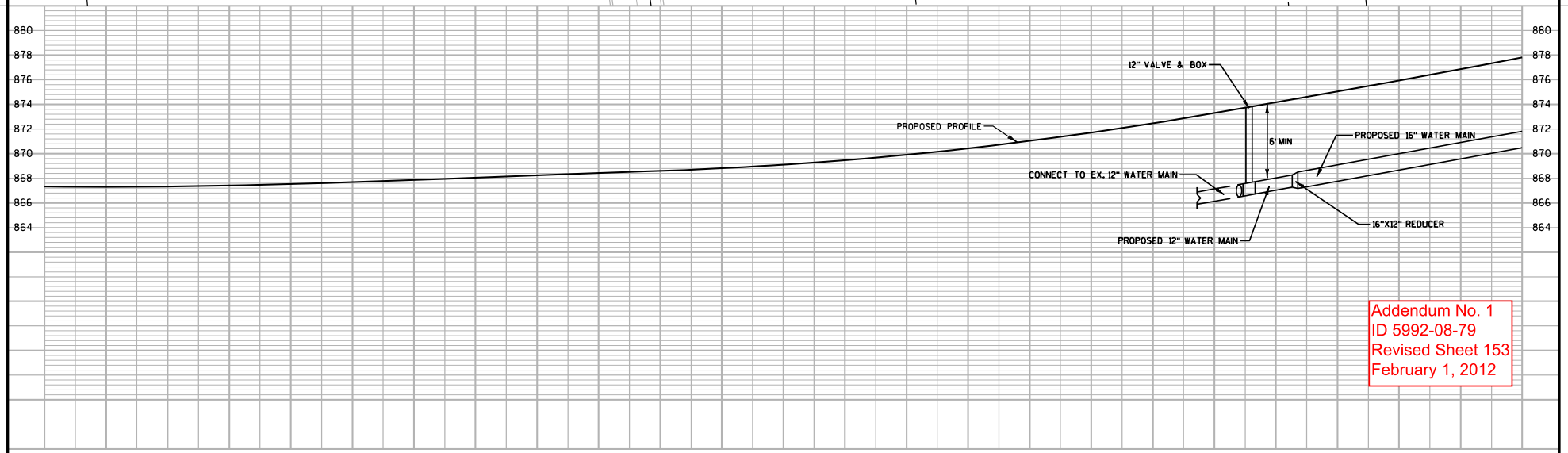
Addendum No. 1
ID 5992-08-79
Revised Sheet 152
February 1, 2012

PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 152	E

FILE NAME : G:\Madison\MD2009035\DGN\023107B_water.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30



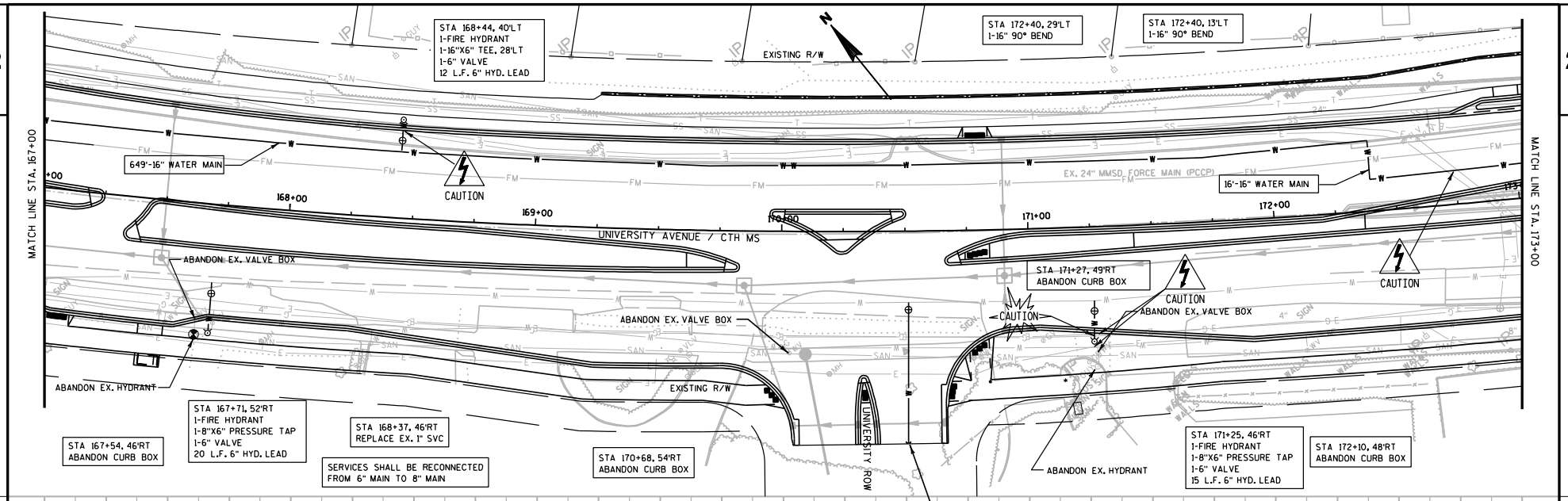


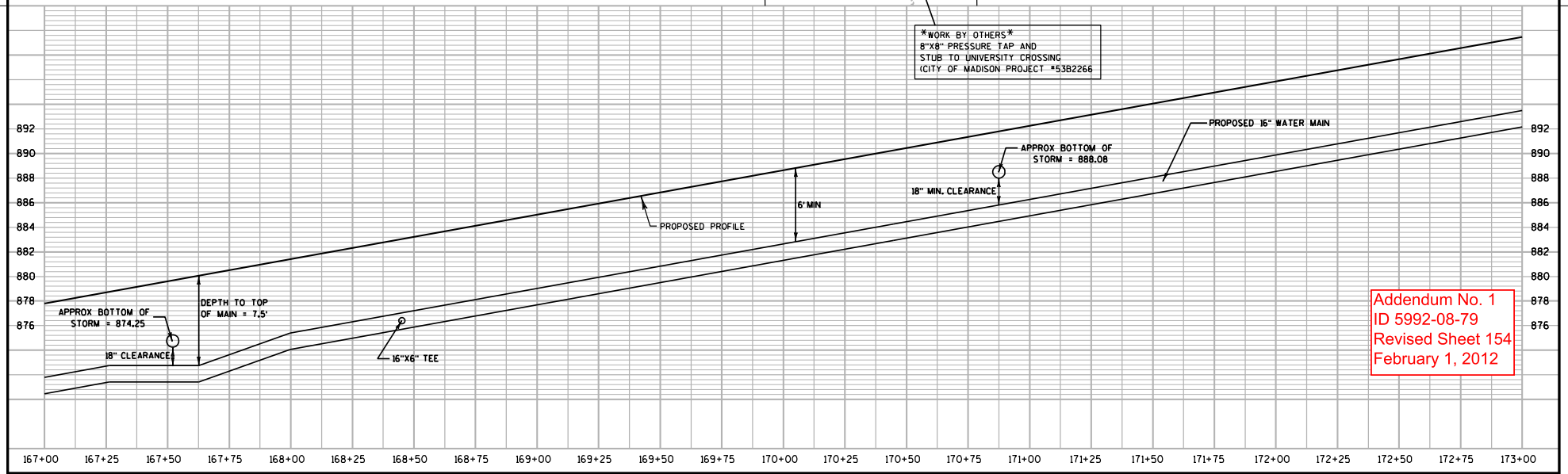
Addendum No. 1
ID 5992-08-79
Revised Sheet 153
February 1, 2012

PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 153	E

FILE NAME : G:\Madison\MD2009035\DGN\023108_water.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30



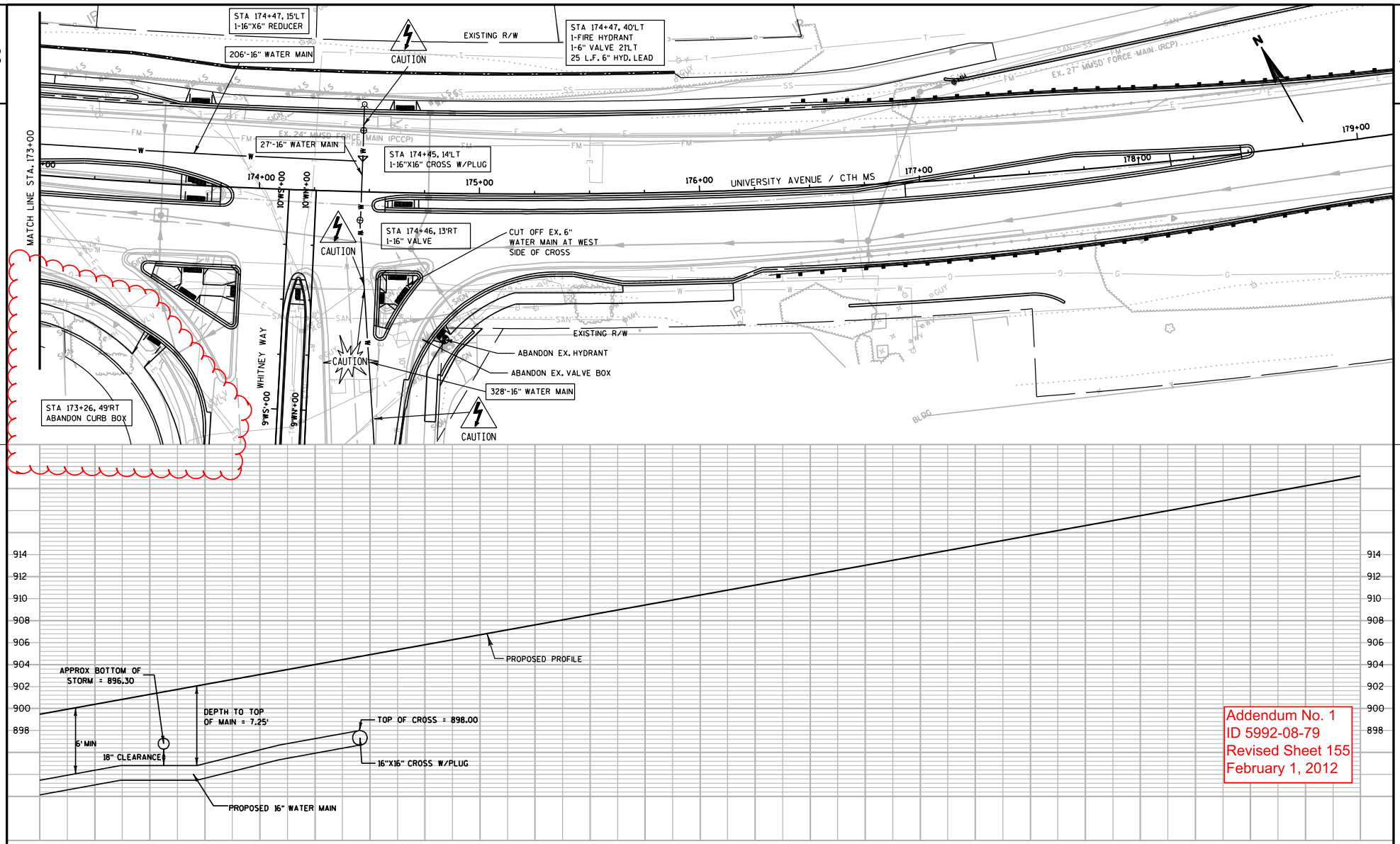


Addendum No. 1
ID 5992-08-79
Revised Sheet 154
February 1, 2012

PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 154	E

FILE NAME : G:\Madison\MD2009035\DGN\023109_water.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30

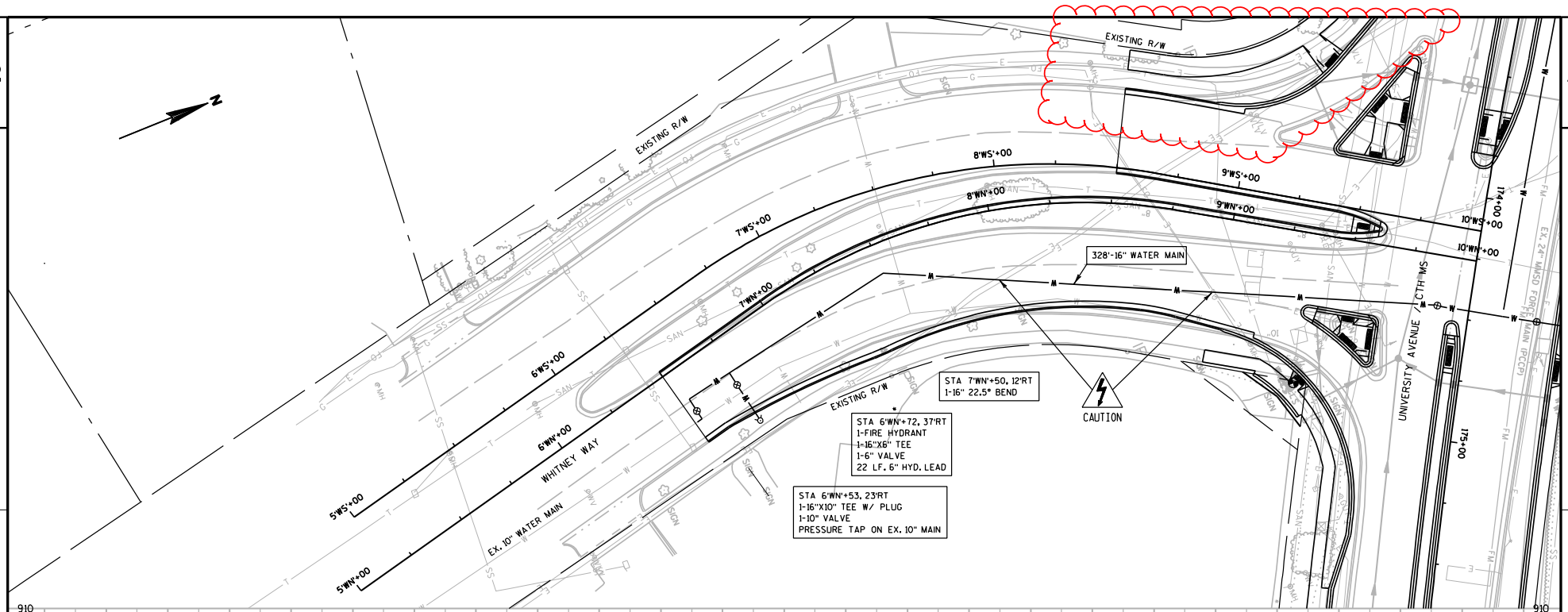


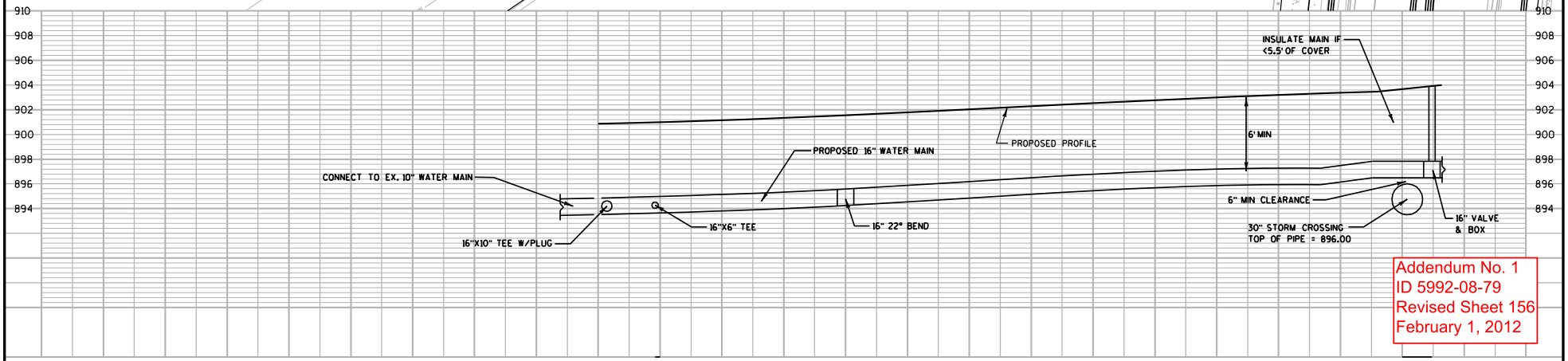
Addendum No. 1
ID 5992-08-79
Revised Sheet 155
February 1, 2012

PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 155	E

FILE NAME : G:\Madison\MD2009035\DGN\023110_water.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30



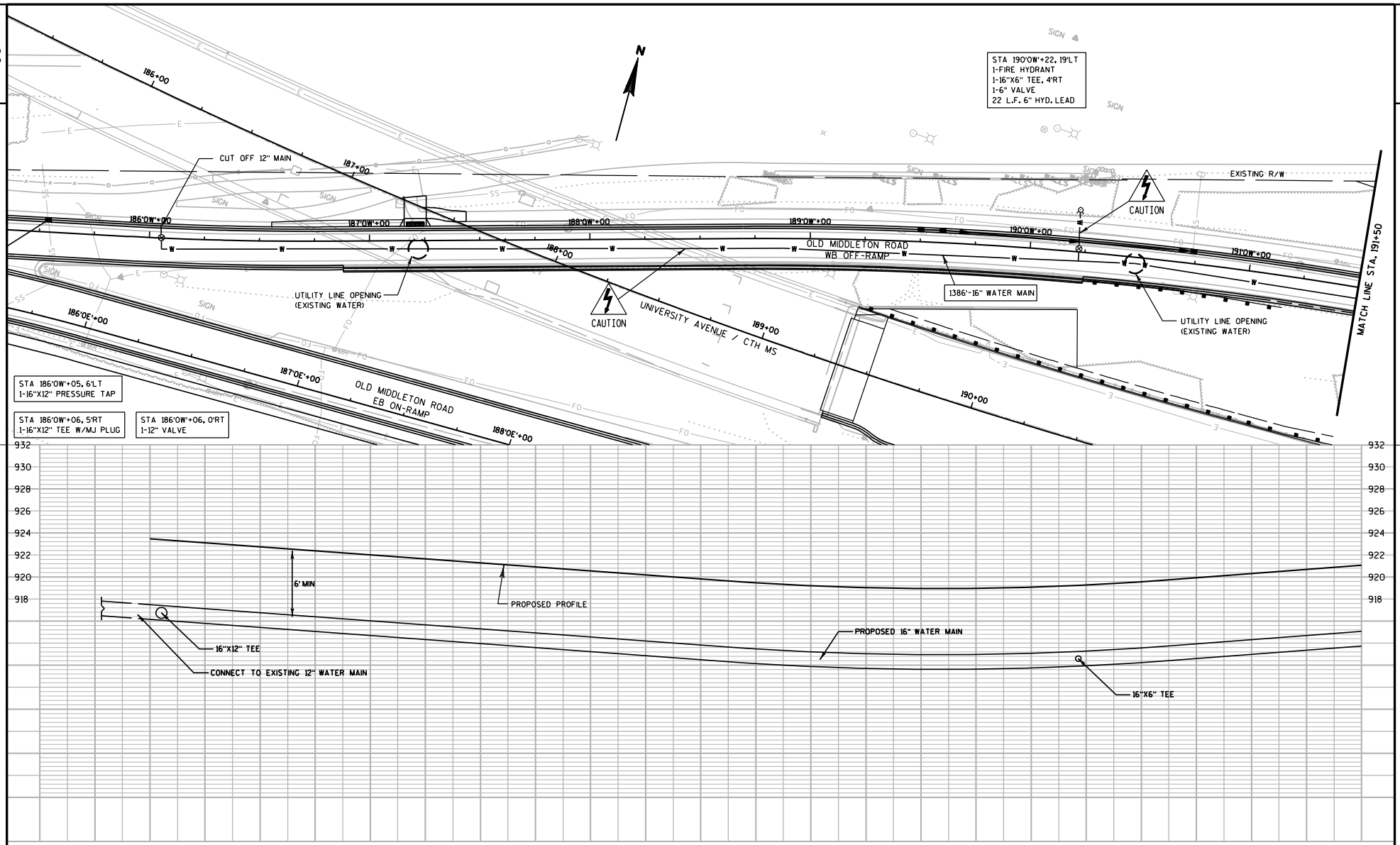


Addendum No. 1
ID 5992-08-79
Revised Sheet 156
February 1, 2012

PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 156	E

FILE NAME : G:\Madison\MD2009035\DGN\023111_water.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

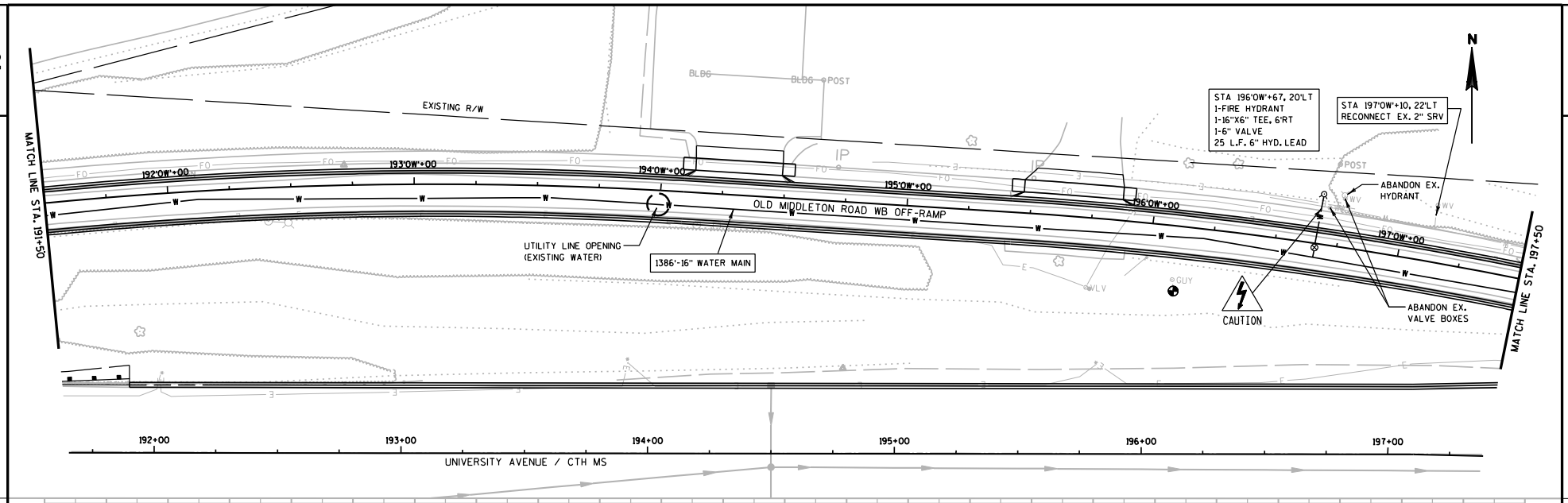
WISDOT/CADDS SHEET 30

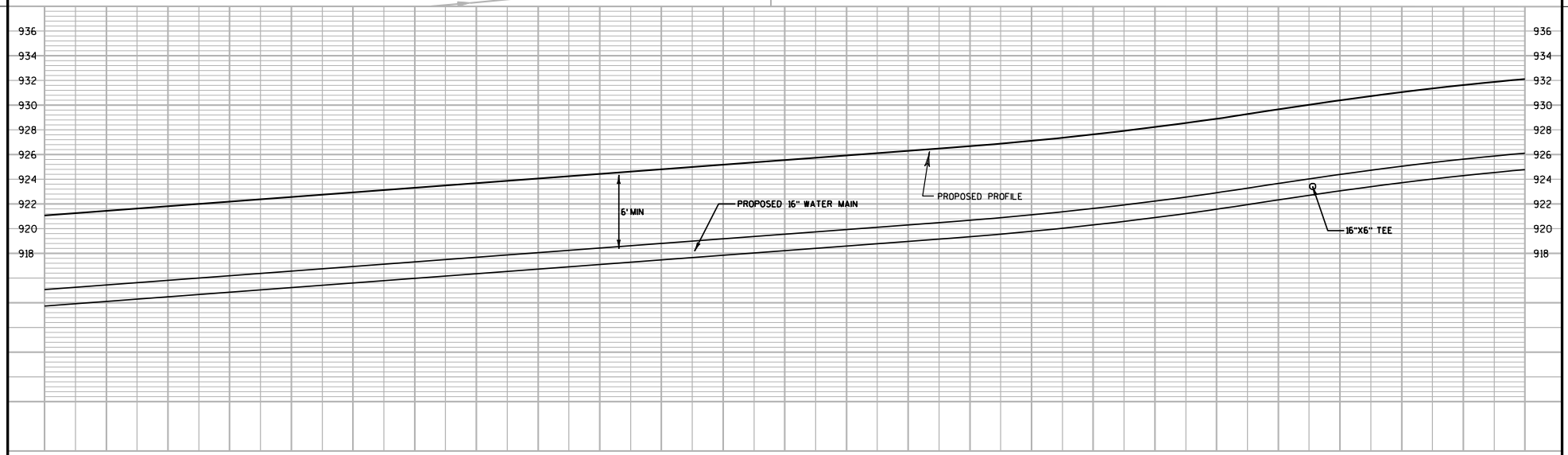


PROJECT NO:5992-08-86	HWY: CTH MS	COUNTY:DANE	WATER MAIN PLAN AND PROFILE	SHEET 157 E

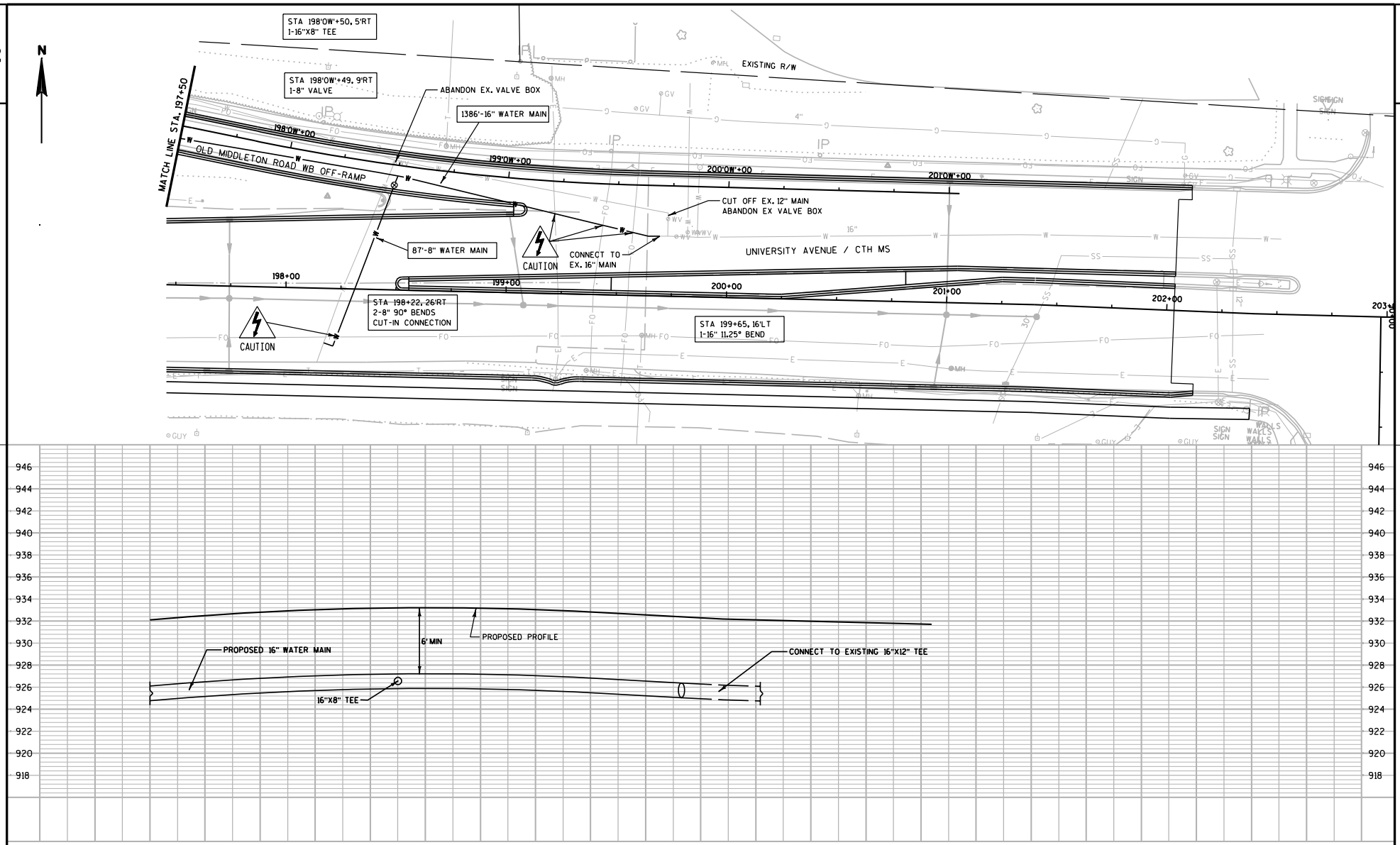
FILE NAME : g:\madison\md2009035\dgn\023112_water.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30





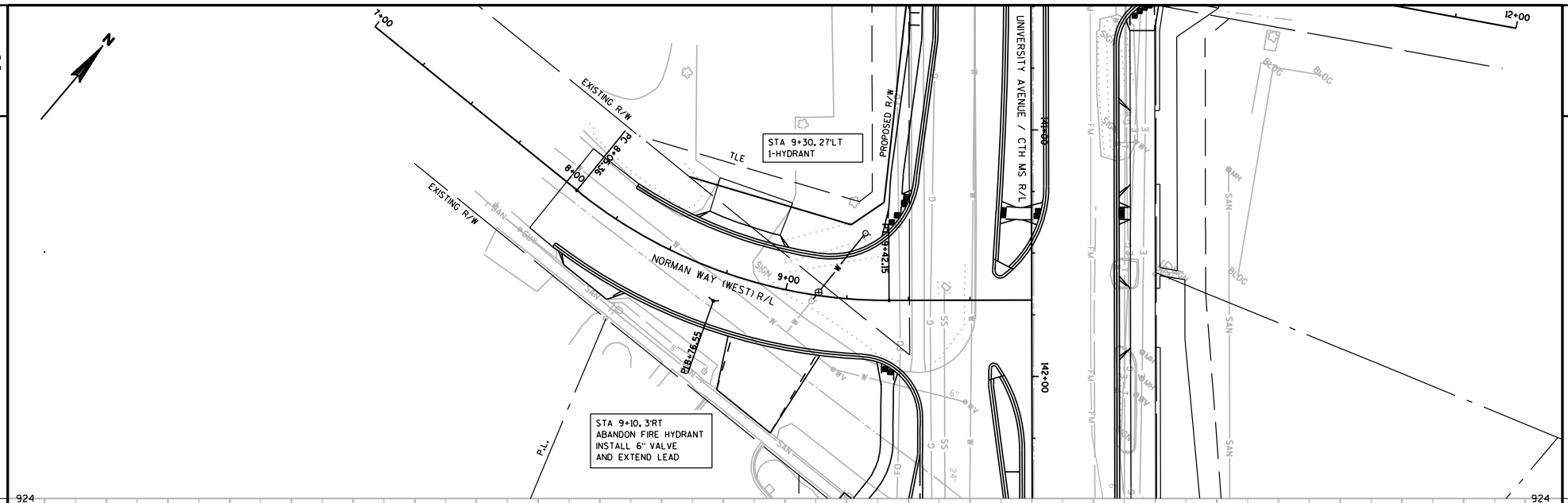
PROJECT NO:5992-08-86	HWY:CTH MS	COUNTY:DANE	WATER MAIN PLAN AND PROFILE	SHEET 158 E

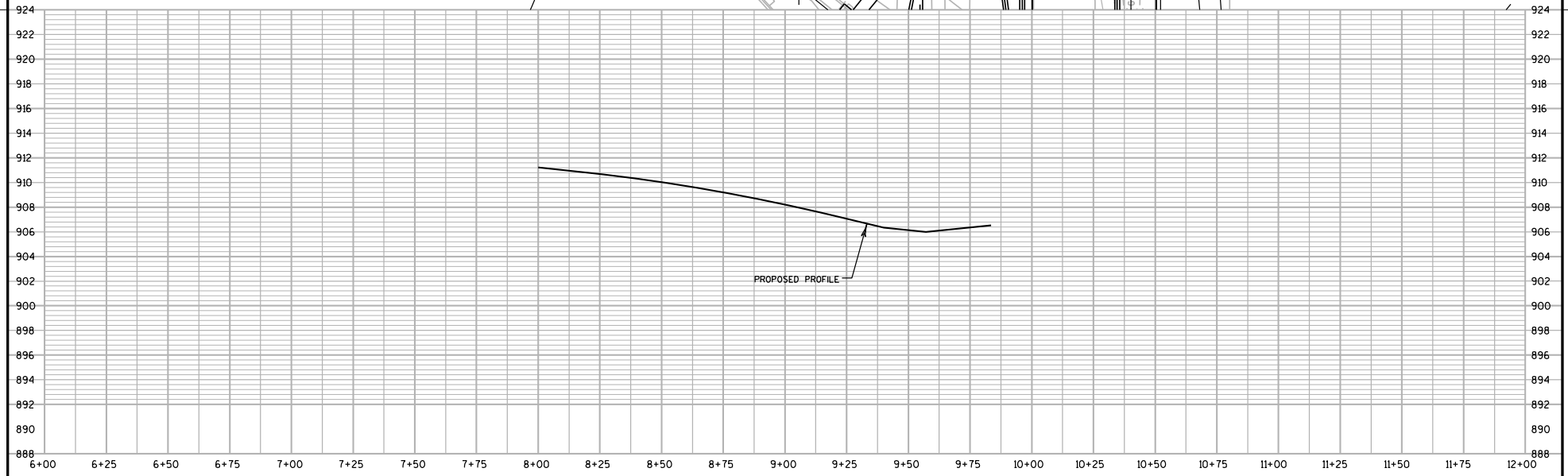


PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET 159 E

FILE NAME : g:\madison\md2009035\dgn\023114_water.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30





PROJECT NO: 5992-08-86	HWY: CTH MS	COUNTY: DANE	WATER MAIN PLAN AND PROFILE	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023115_water.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30

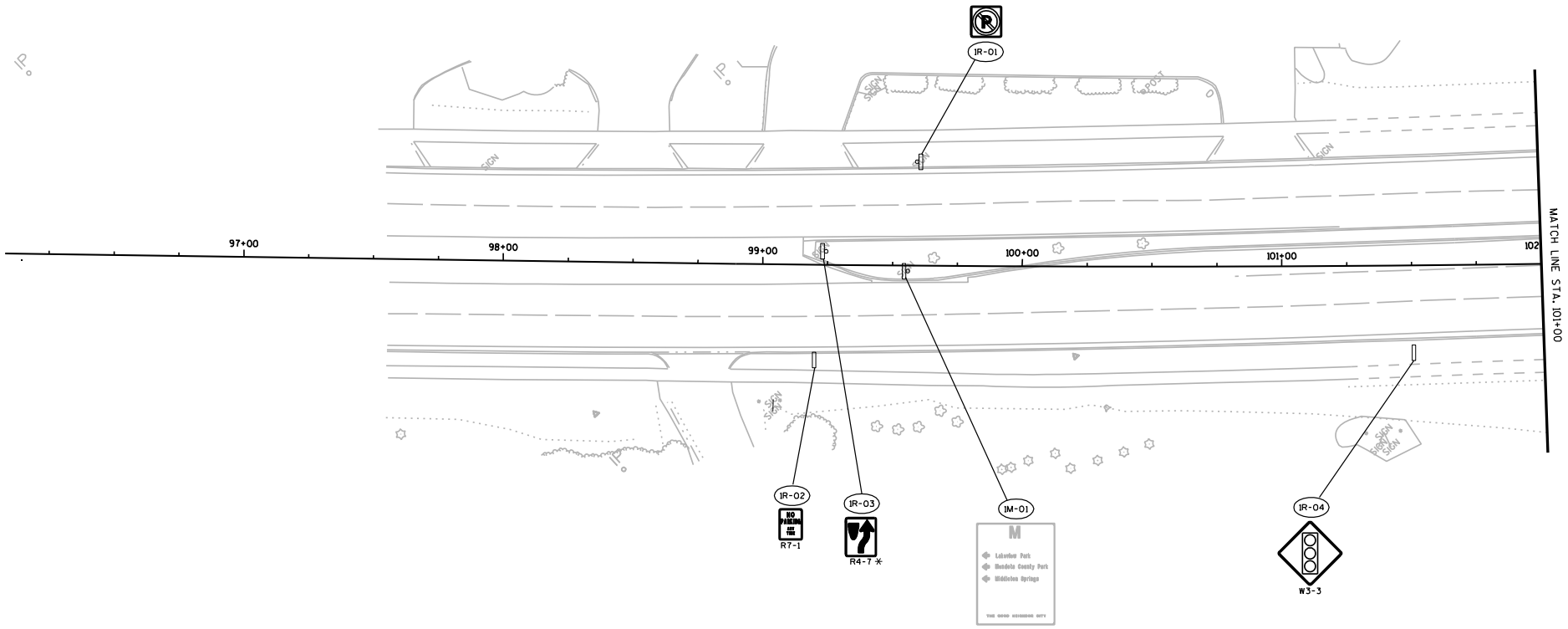
2

N

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE/ SIGN BRIDGE/ SIGNAL/ UTILITY POLE
- (XR-XX) DENOTES SIGN NUMBER TO BE REMOVED
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * DENOTES SIGN POST & SIGN TO BE REMOVED BY CITY OF MADISON, CONTRACTOR TO REMOVE BASE

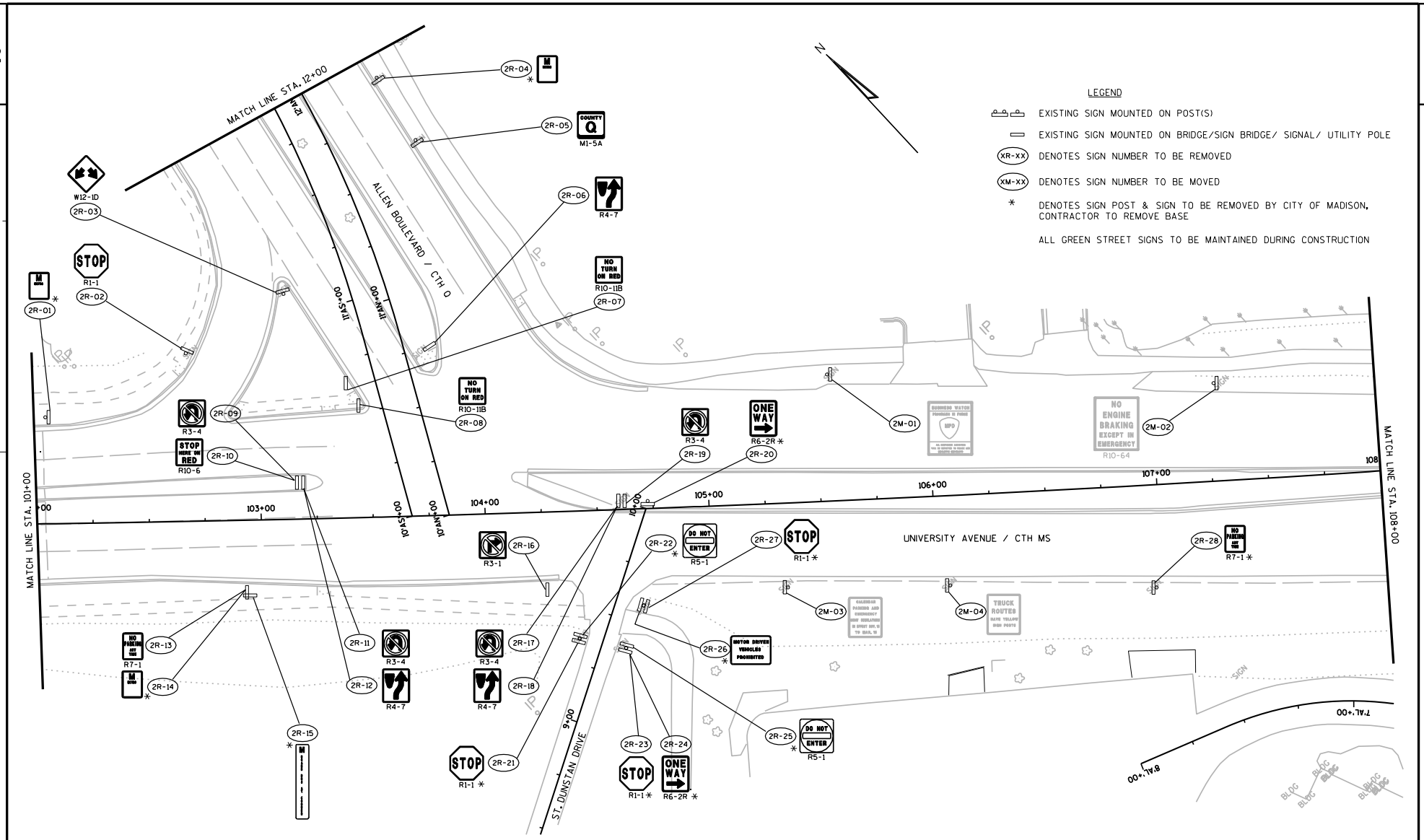
ALL GREEN STREET SIGNS TO BE MAINTAINED DURING CONSTRUCTION



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 1 OF 14	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023201_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

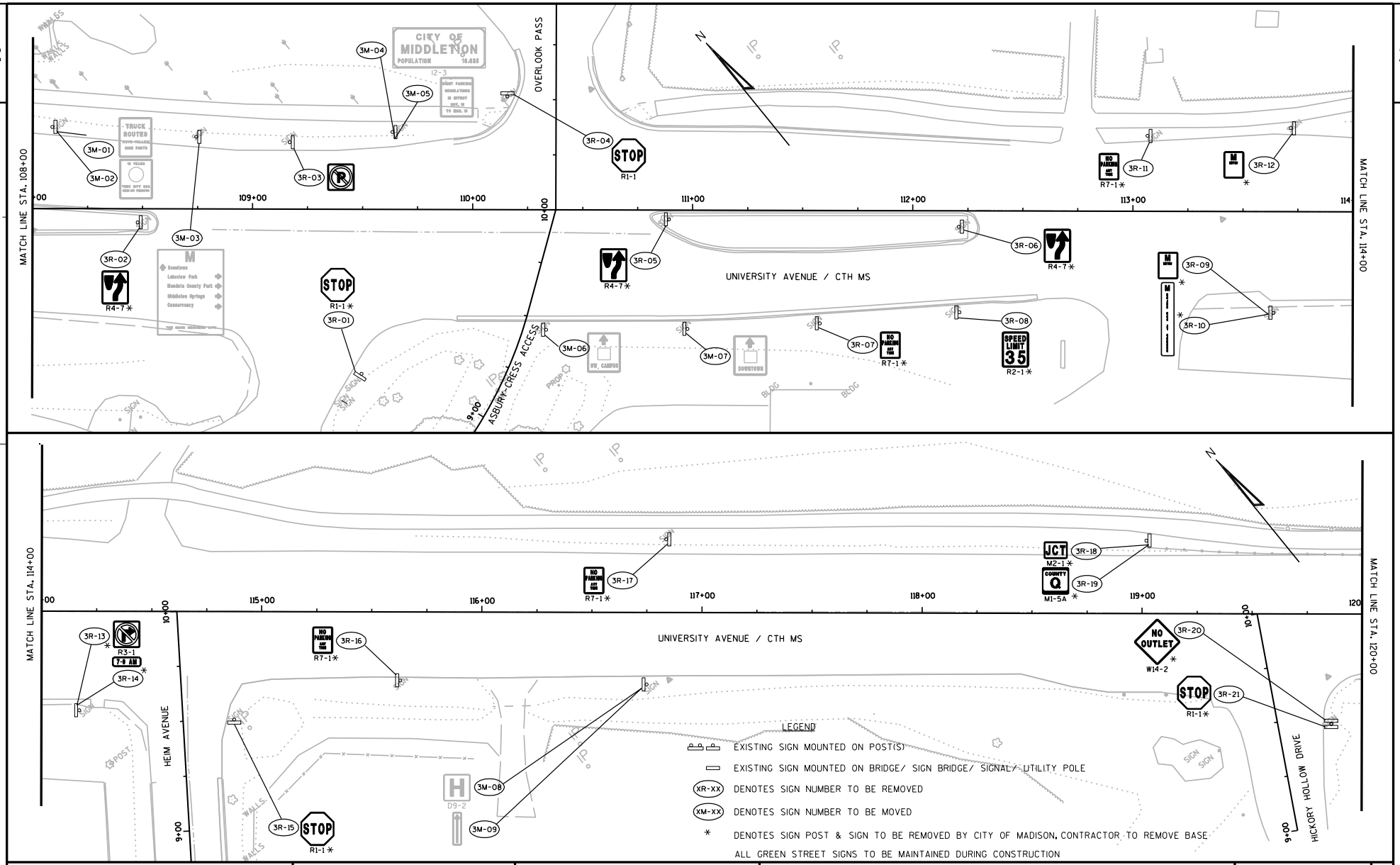
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 2 OF 14	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023202_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

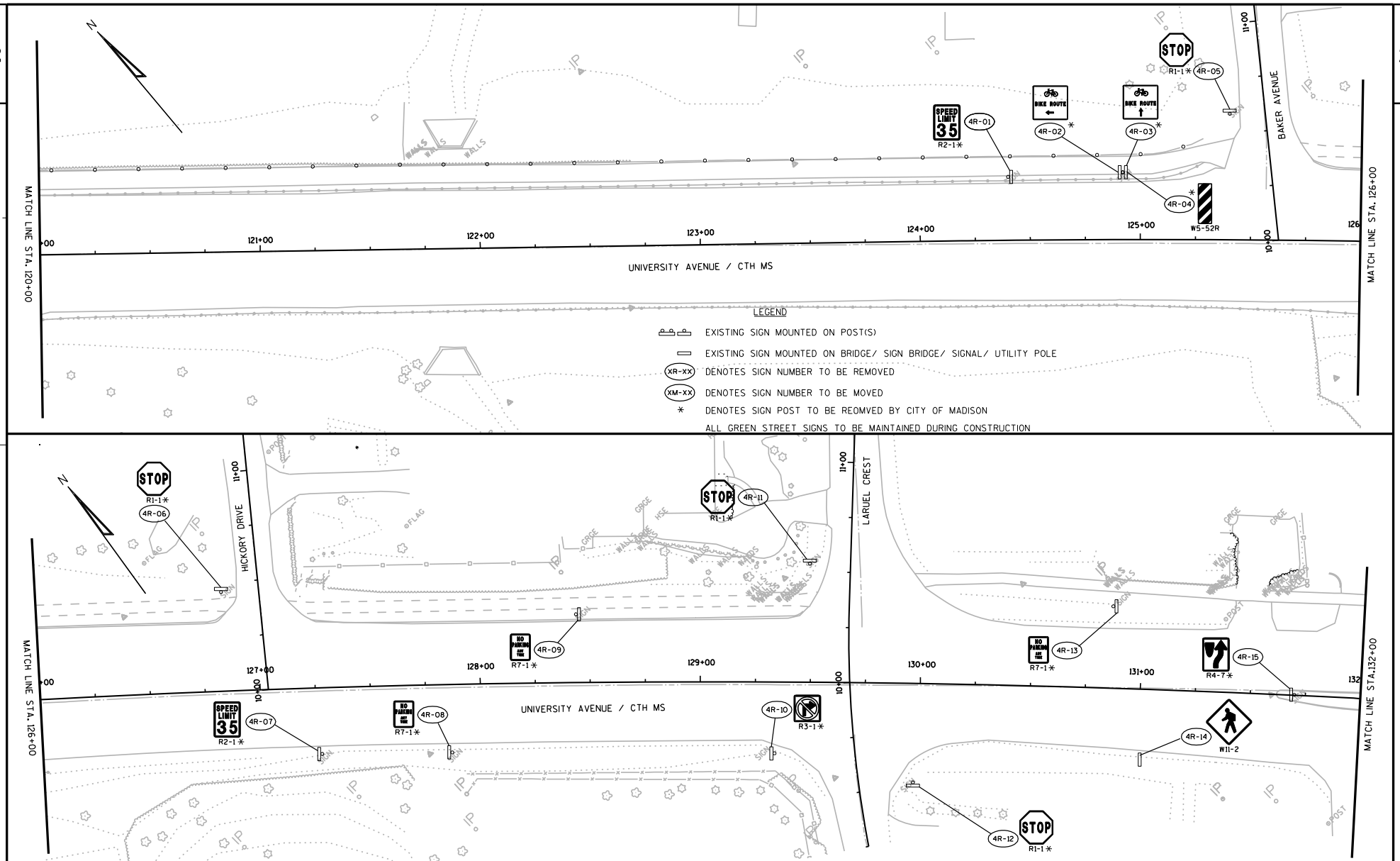
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 3 OF 14	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023203_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

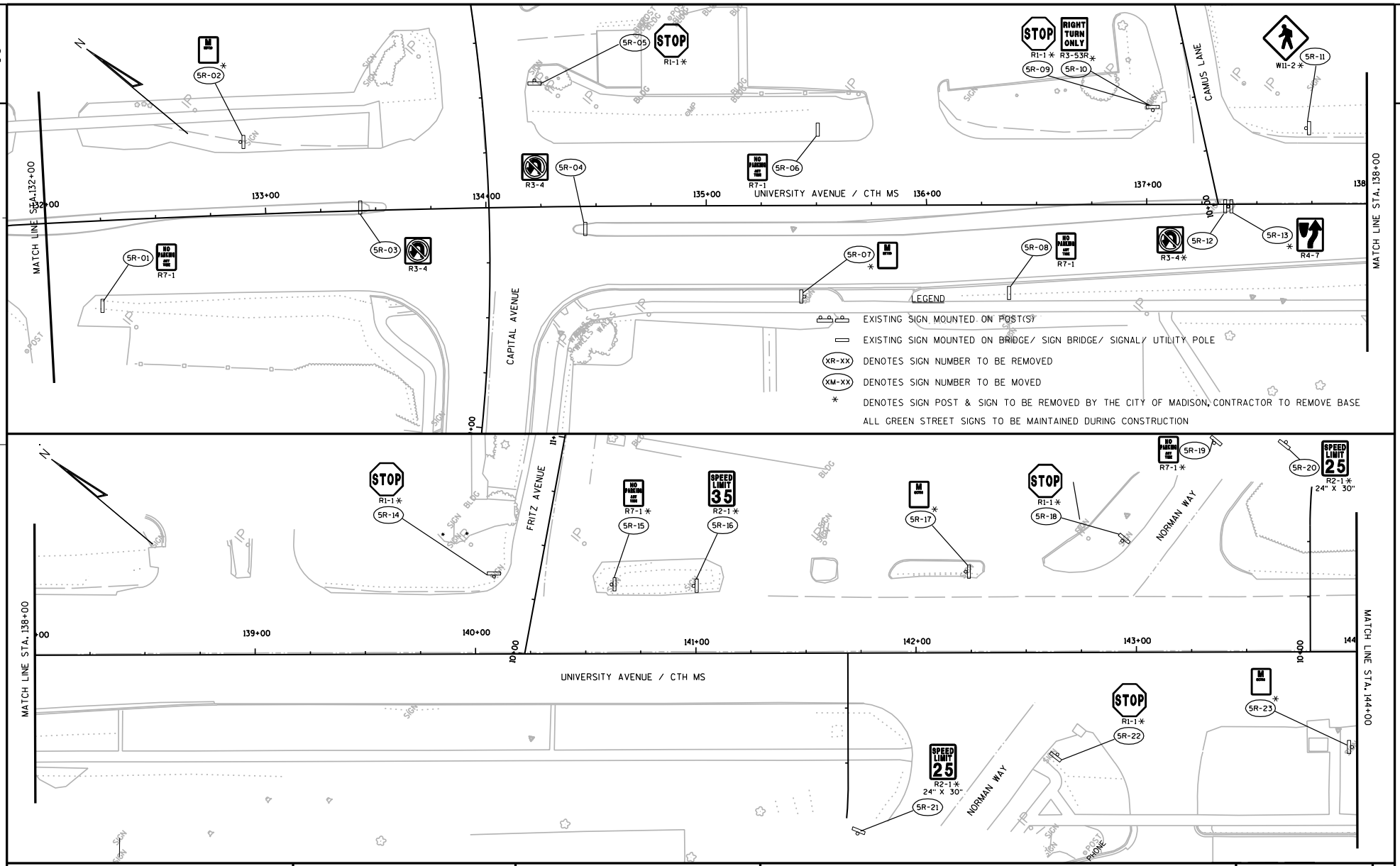
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 4 OF 14	SHEET E

FILE NAME : g:\madison\md2009035\dgn\023204_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

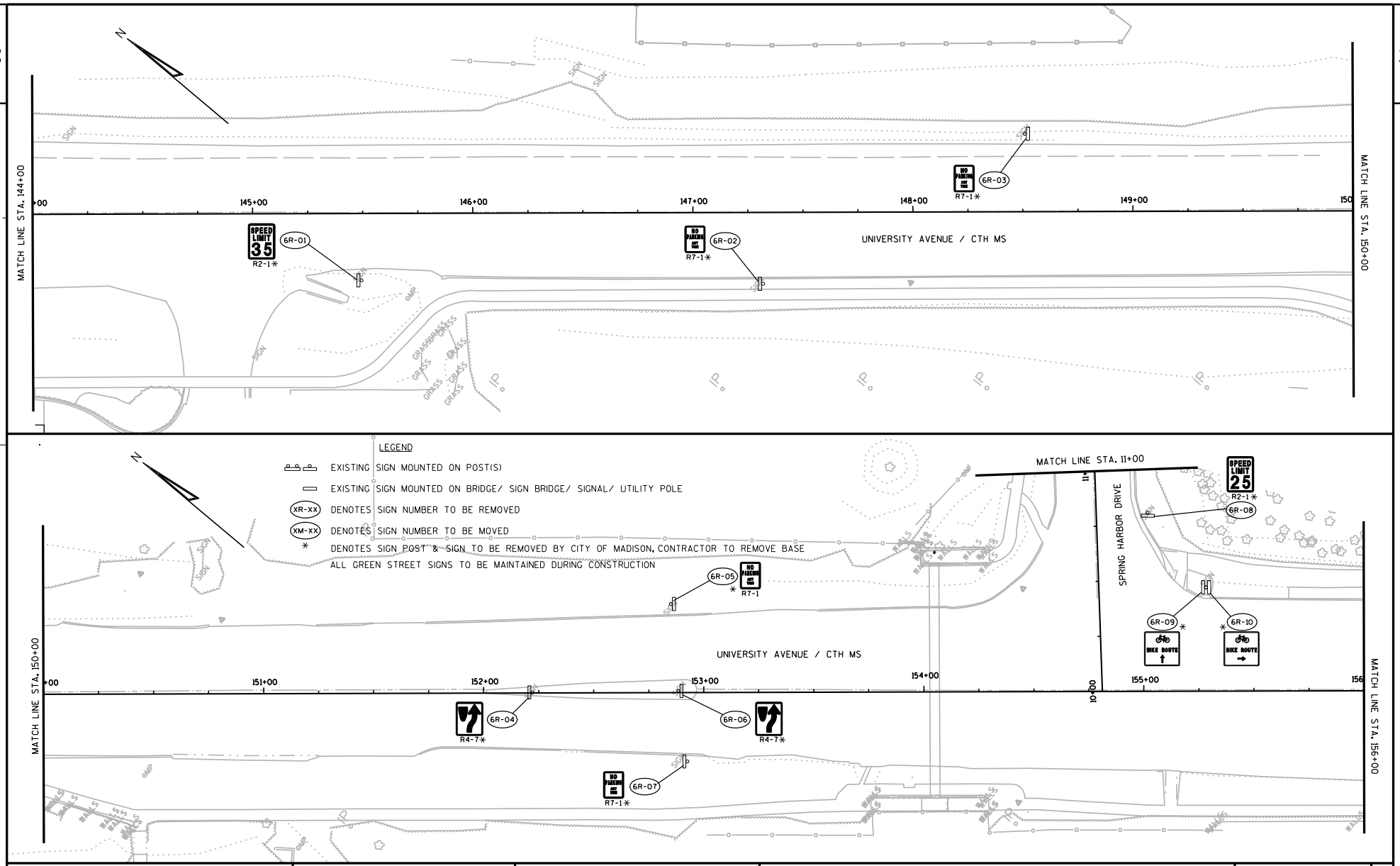
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 5 OF 14	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023205_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

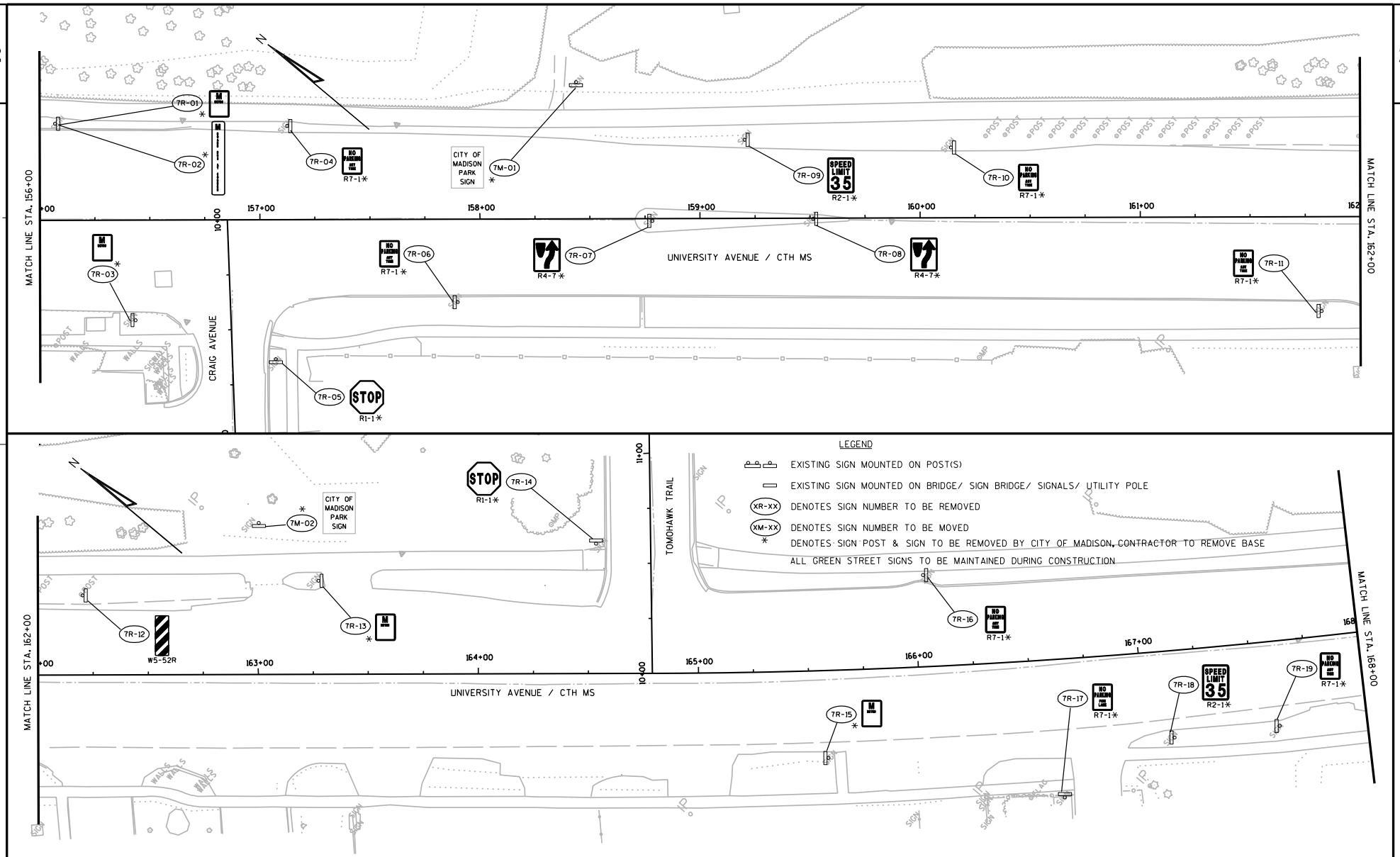
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 6 OF 14	SHEET E

FILE NAME : g:\madison\md2009035\dgn\023206_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

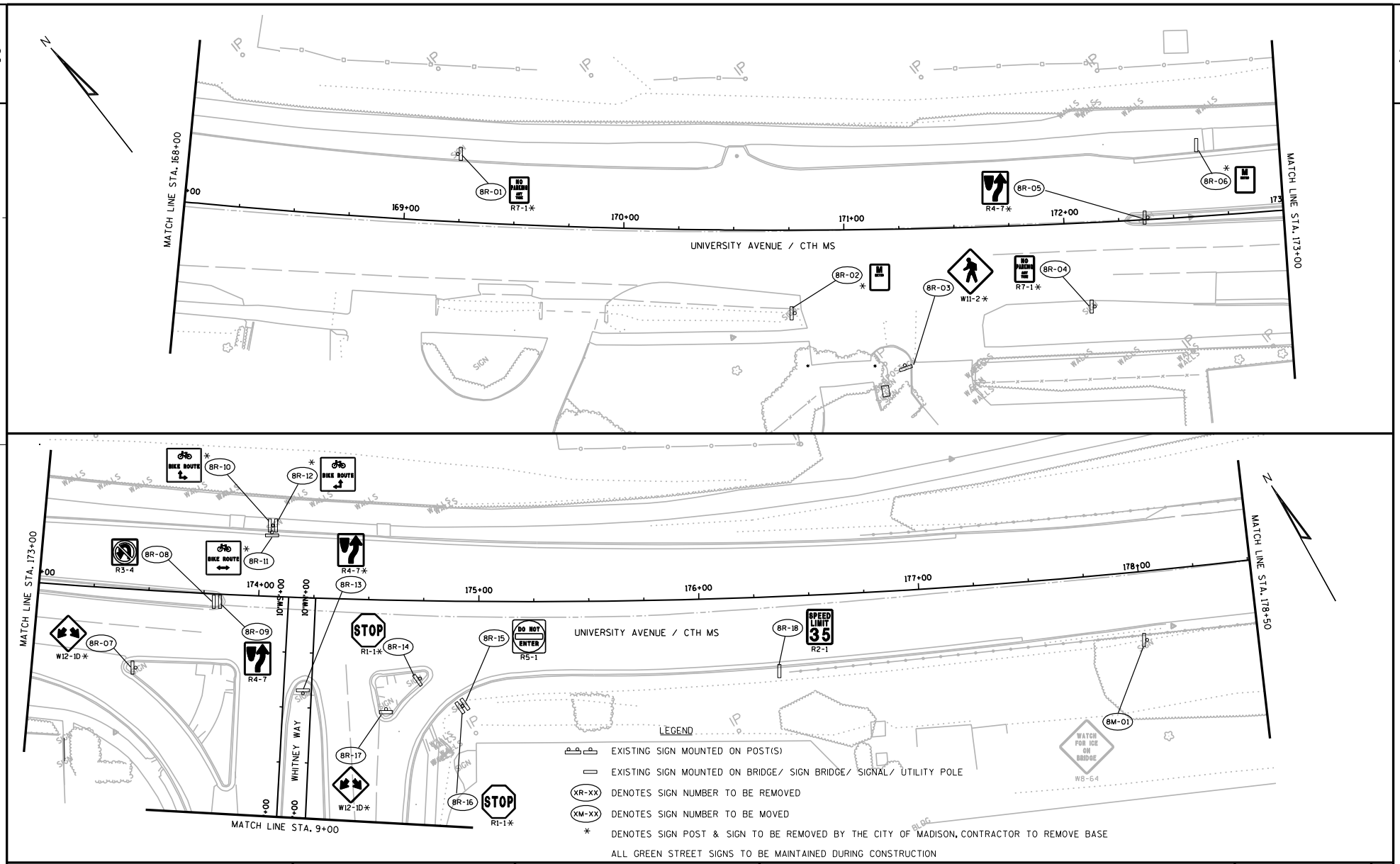
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 7 OF 14	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023207_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

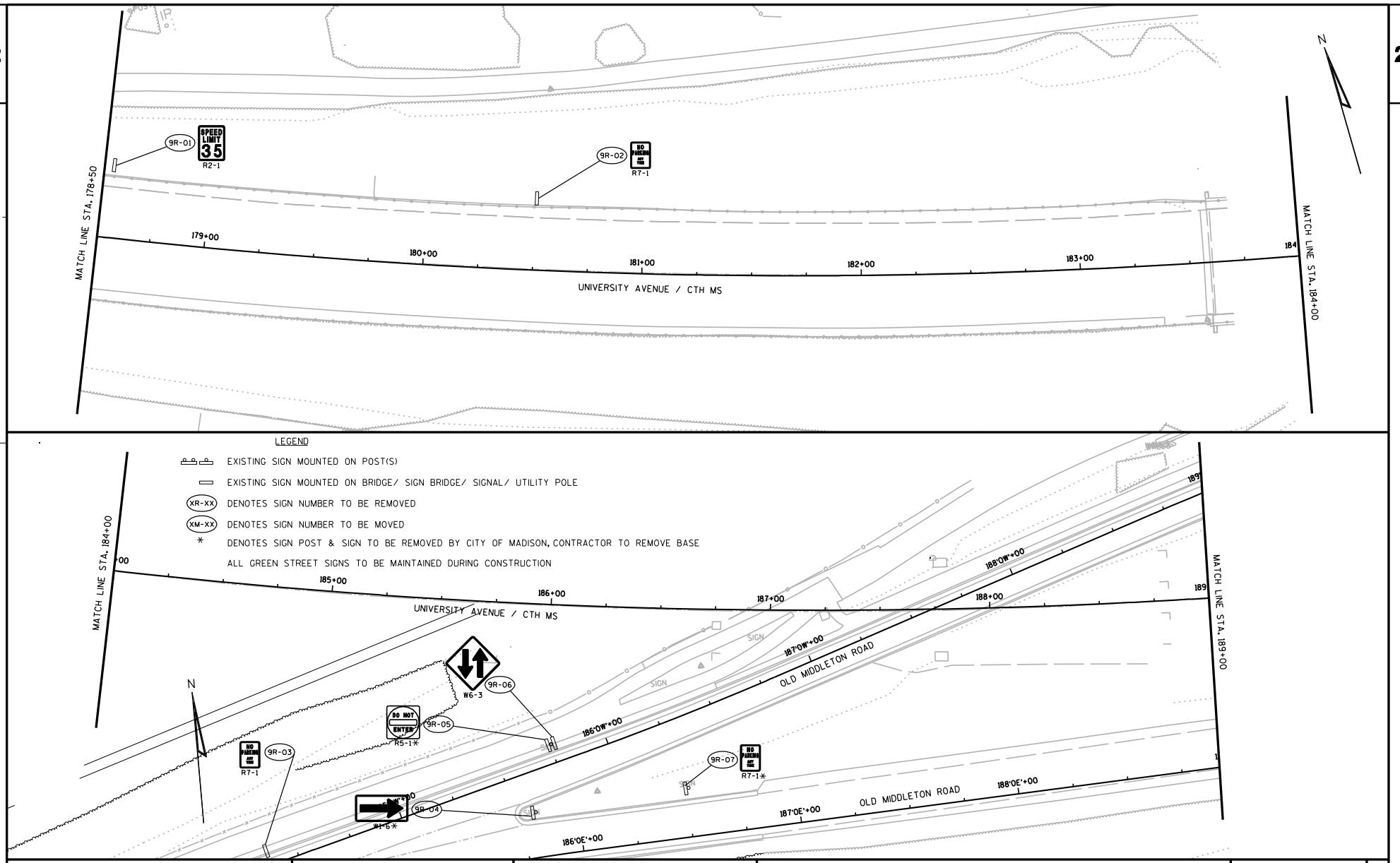
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 8 OF 14	SHEET E

FILE NAME : g:\madison\md2009035\dgn\023208_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

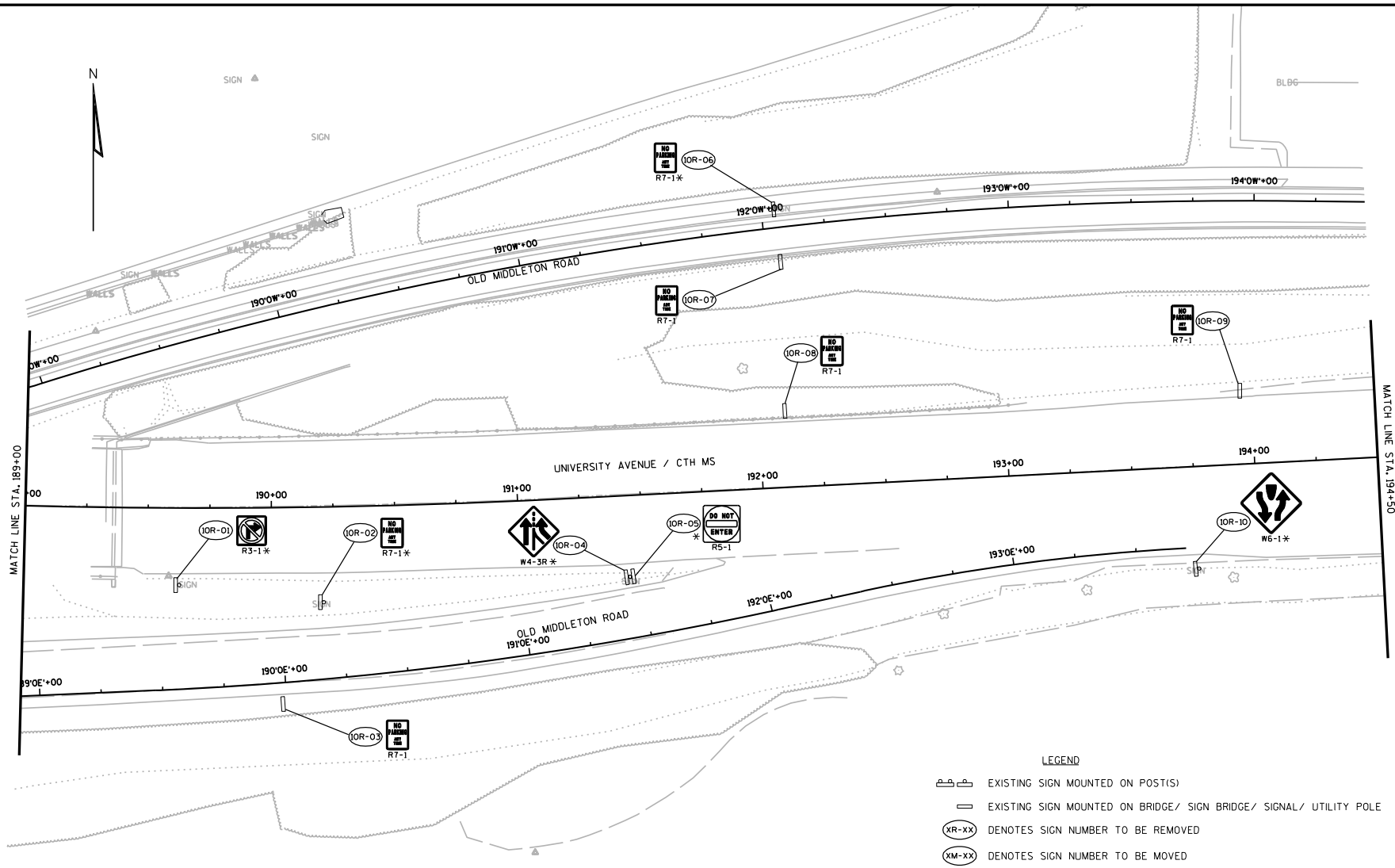
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 9 OF 14	SHEET E

FILE NAME : g:\madison\md2009035\dgn\023209_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 10 OF 14	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023210_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

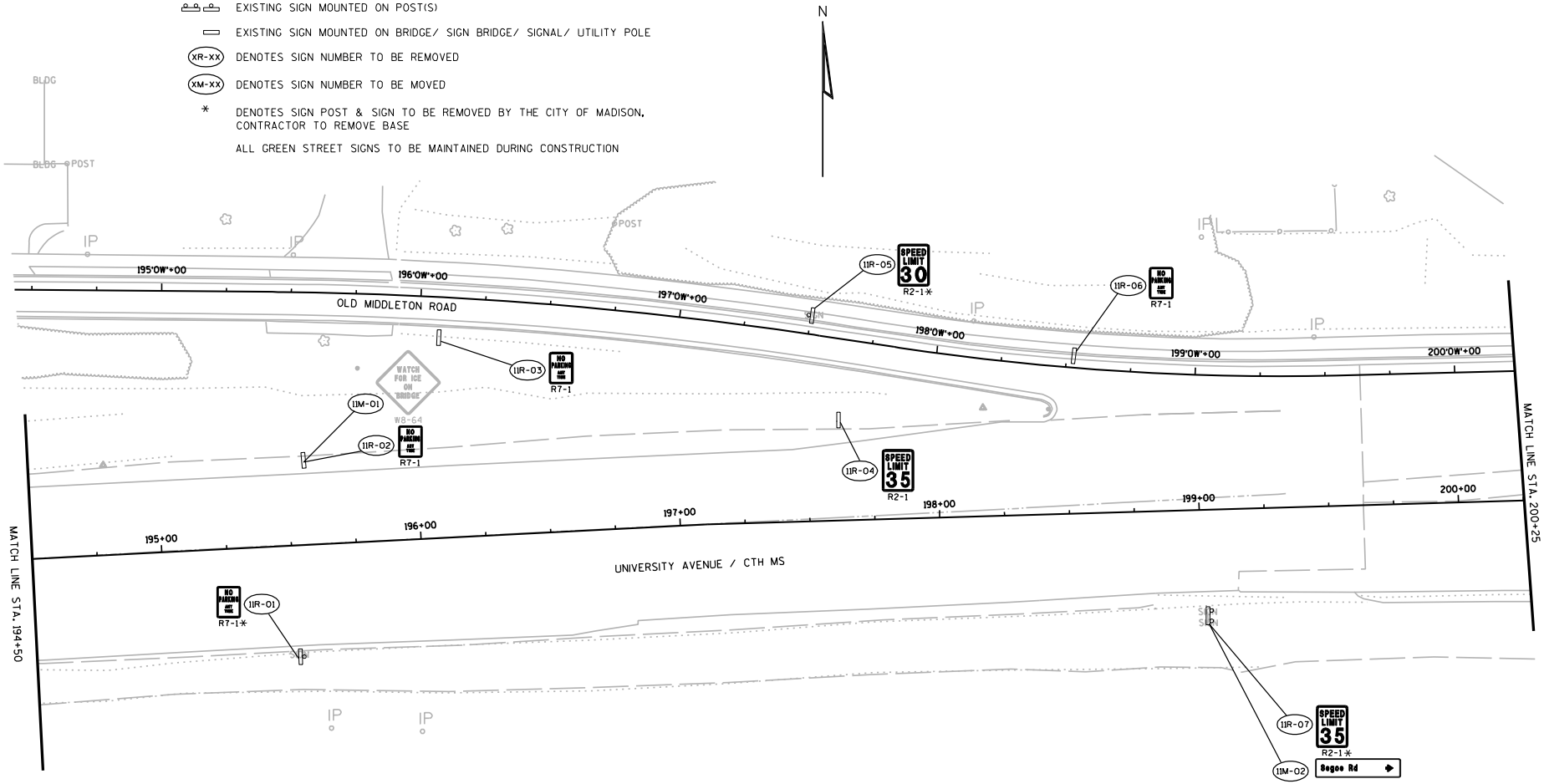
EXISTING SIGN MOUNTED ON BRIDGE/ SIGN BRIDGE/ SIGNAL/ UTILITY POLE

(XR-XX) DENOTES SIGN NUMBER TO BE REMOVED

(XM-XX) DENOTES SIGN NUMBER TO BE MOVED

* DENOTES SIGN POST & SIGN TO BE REMOVED BY THE CITY OF MADISON, CONTRACTOR TO REMOVE BASE

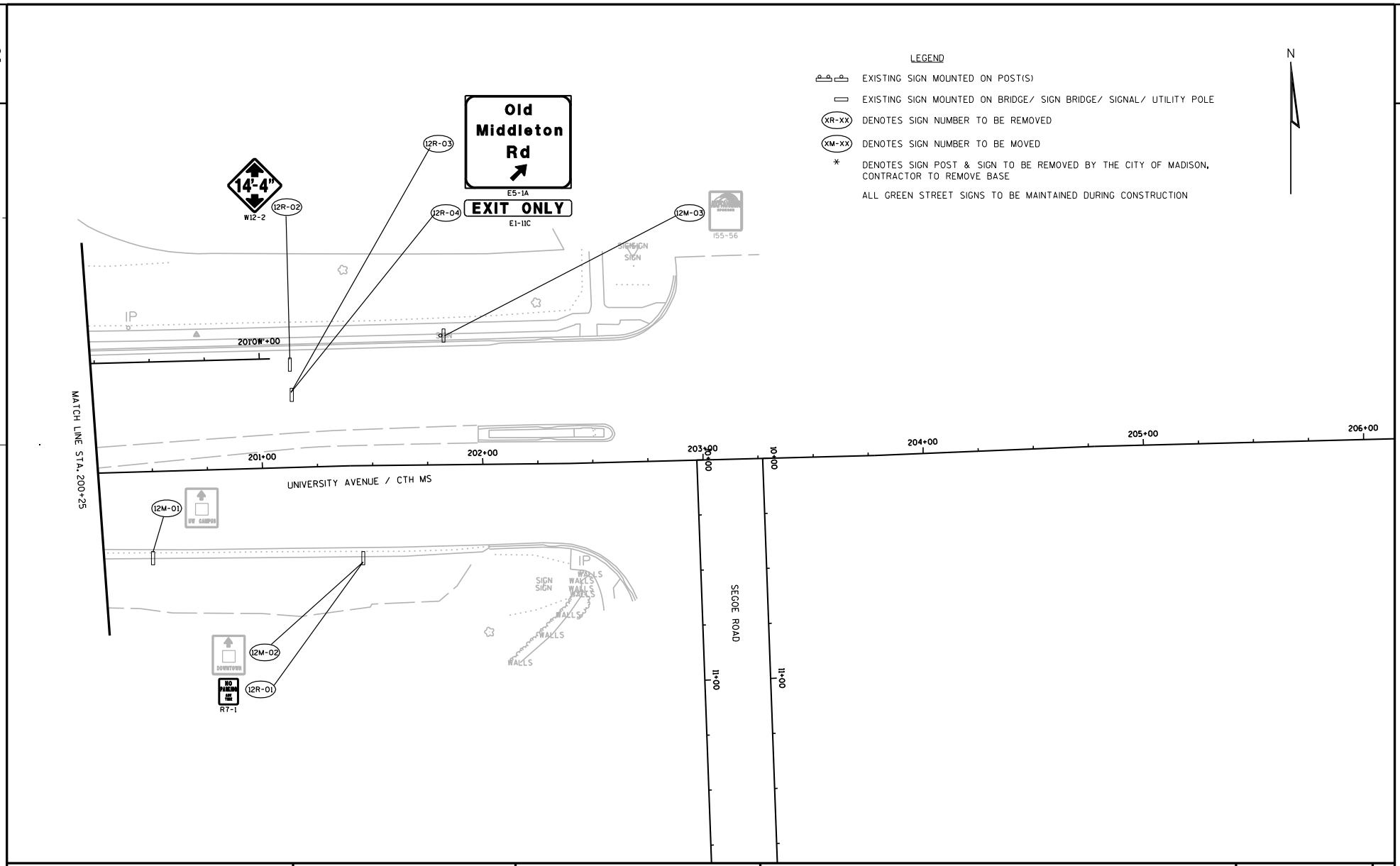
ALL GREEN STREET SIGNS TO BE MAINTAINED DURING CONSTRUCTION



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 11 OF 14	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023211_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

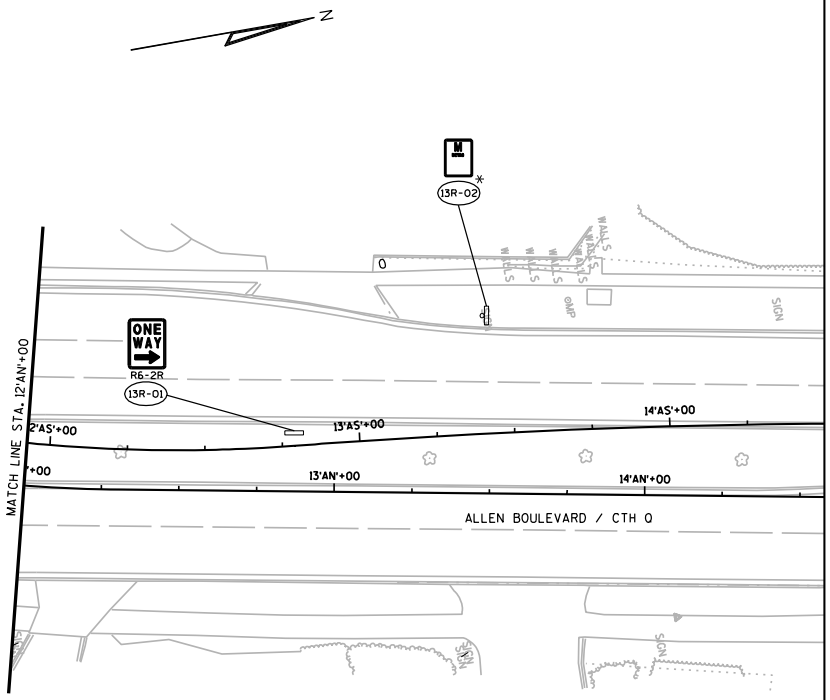
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS SHEET 12 OF 14	SHEET E

FILE NAME : g:\madison\md2009035\dgn\023212_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

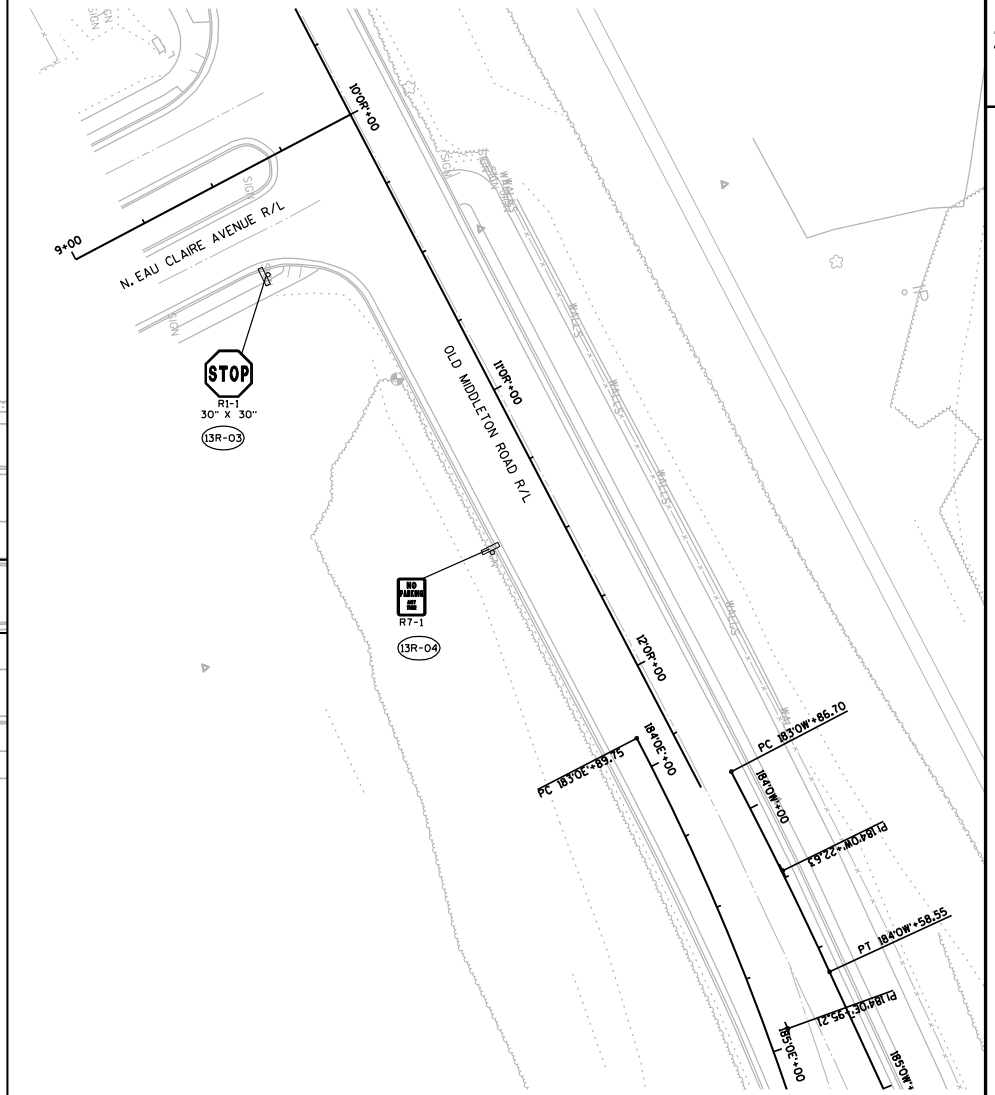
WISDOT/CADDS SHEET 42



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE/ SIGN BRIDGE/ SIGNAL/ UTILITY POLE
- (XR-XX) DENOTES SIGN NUMBER TO BE REMOVED
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * DENOTES SIGN POST & SIGN TO BE REMOVED BY THE CITY OF MADISON, CONTRACTOR TO REMOVE BASE

ALL GREEN STREET SIGNS TO BE MAINTAINED DURING CONSTRUCTION



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 13 OF 14	SHEET 173 E

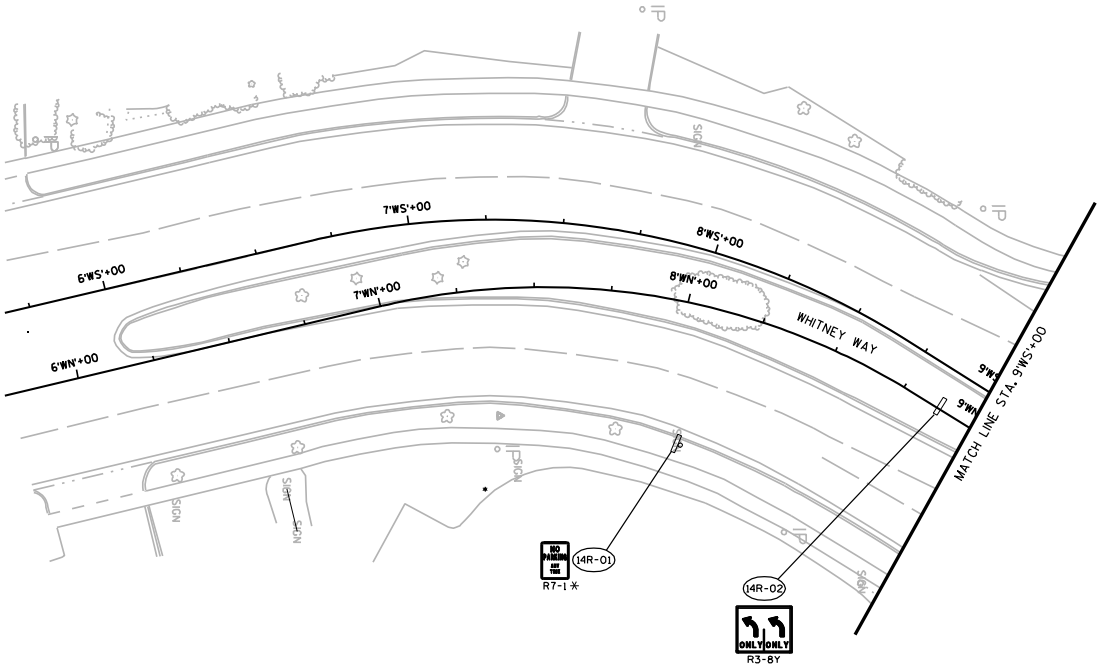
FILE NAME : g:\madison\md2009035\dgn\023213_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

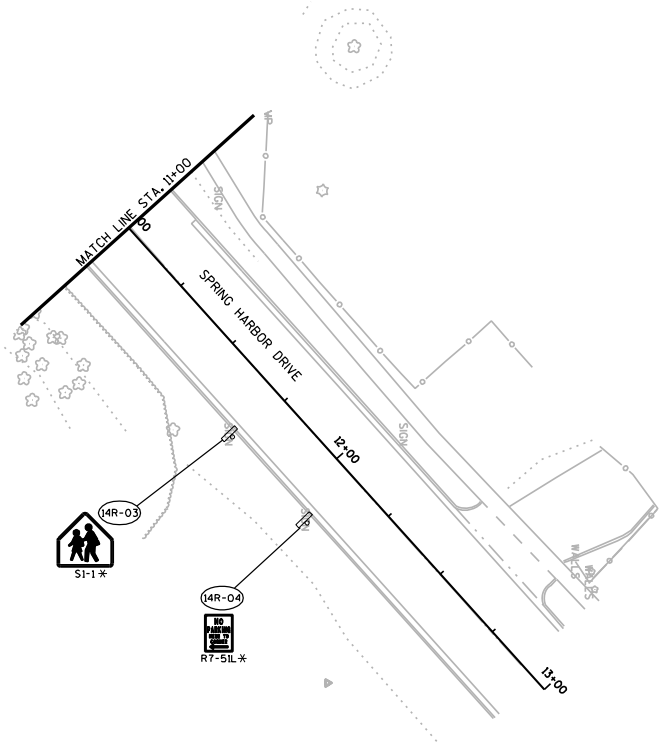
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE/ SIGN BRIDGE/ SIGNAL/ UTILITY POLE
- (XR-XX) DENOTES SIGN NUMBER TO BE REMOVED
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * DENOTES SIGN POST & SIGN TO BE REMOVED BY THE CITY OF MADISON, CONTRACTOR TO REMOVE BASE

ALL GREEN STREET SIGNS TO BE MAINTAINED DURING CONSTRUCTION





2

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING REMOVALS	SHEET 14 OF 14	SHEET E

FILE NAME : g:\madison\md2009035\dgn\023214_ps_rem.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

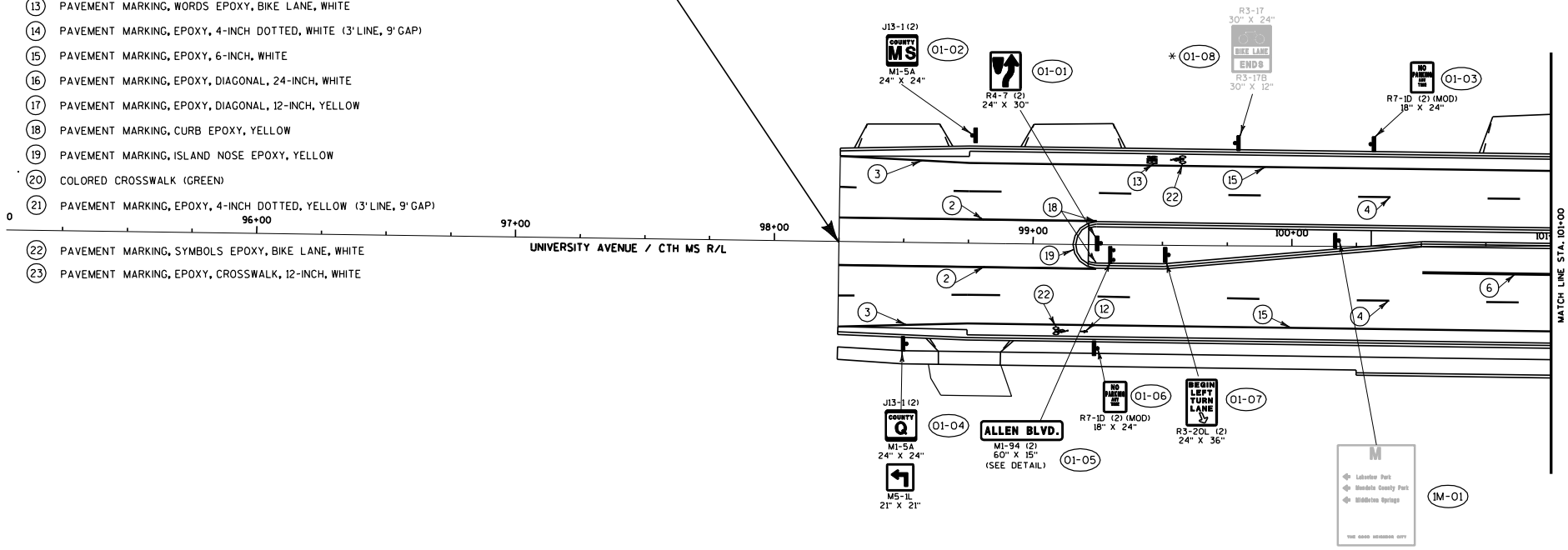
WISDOT/CADDS SHEET 42

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

SIGNING LEGEND

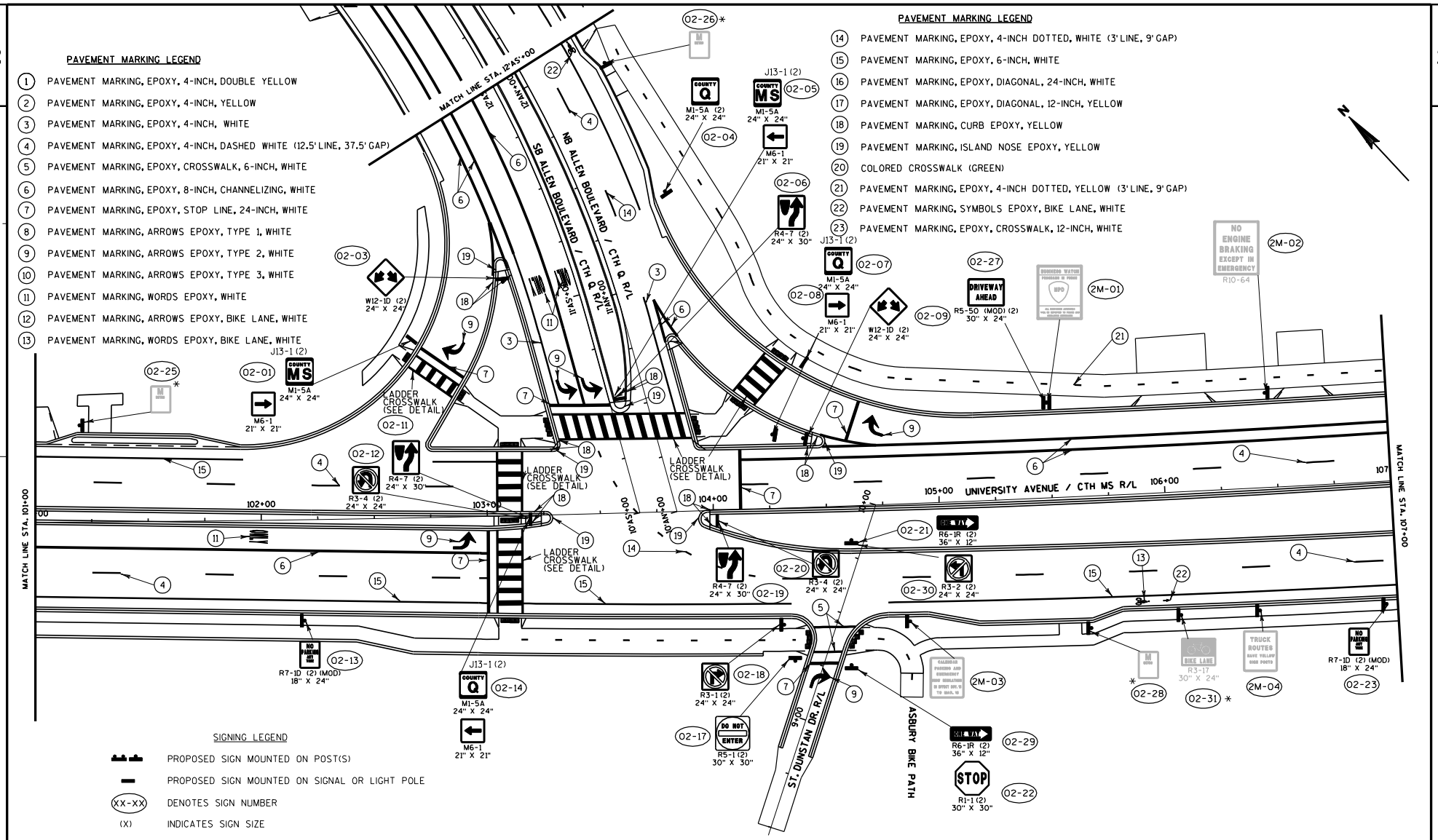
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (x) INDICATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 1 OF 21	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\024501_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING SHEET	SHEET 2 OF 21	SHEET

FILE NAME : g:\madison\md2009035\dgn\024502_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

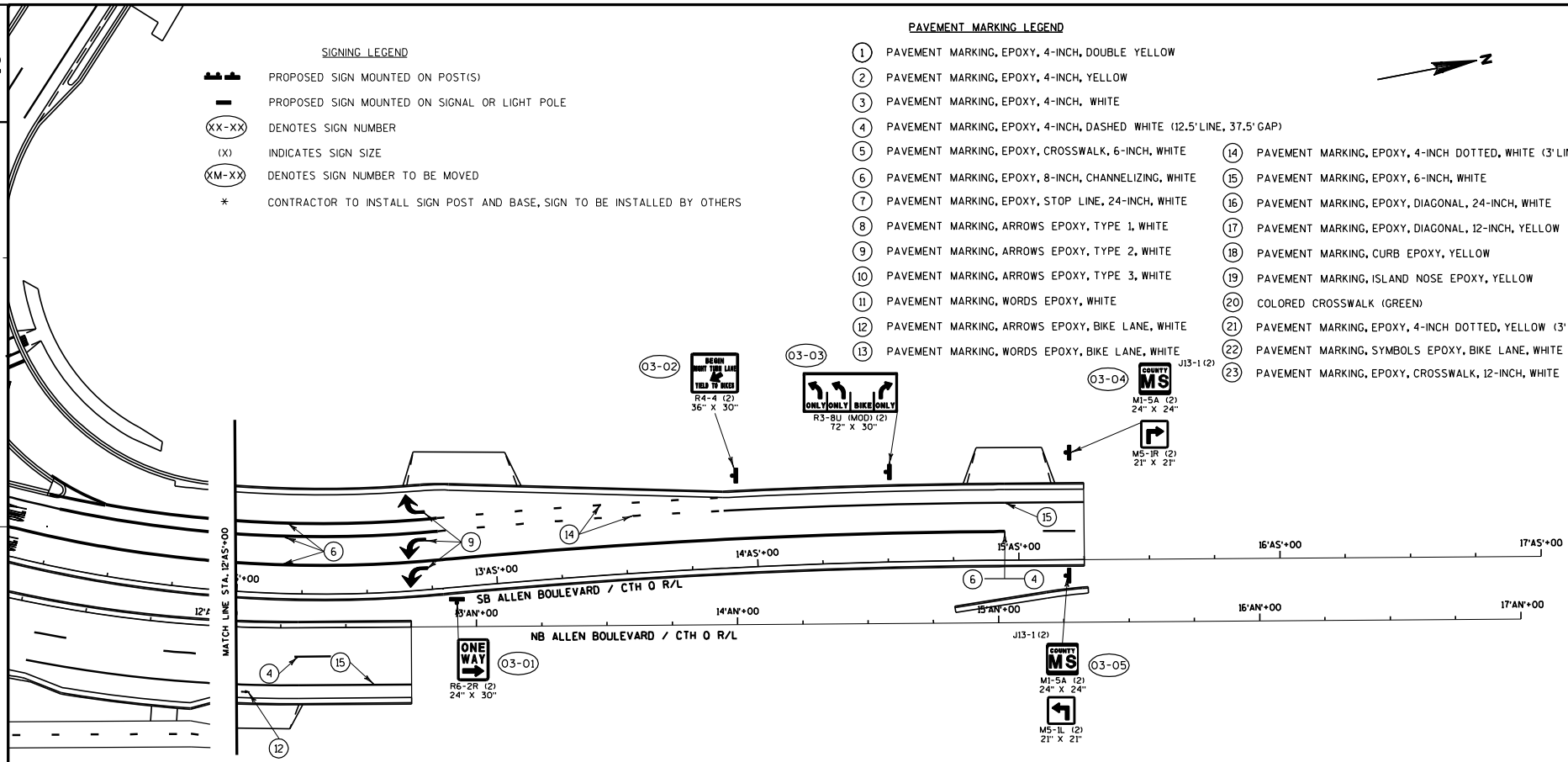
WISDOT/CADDS SHEET 42

SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE



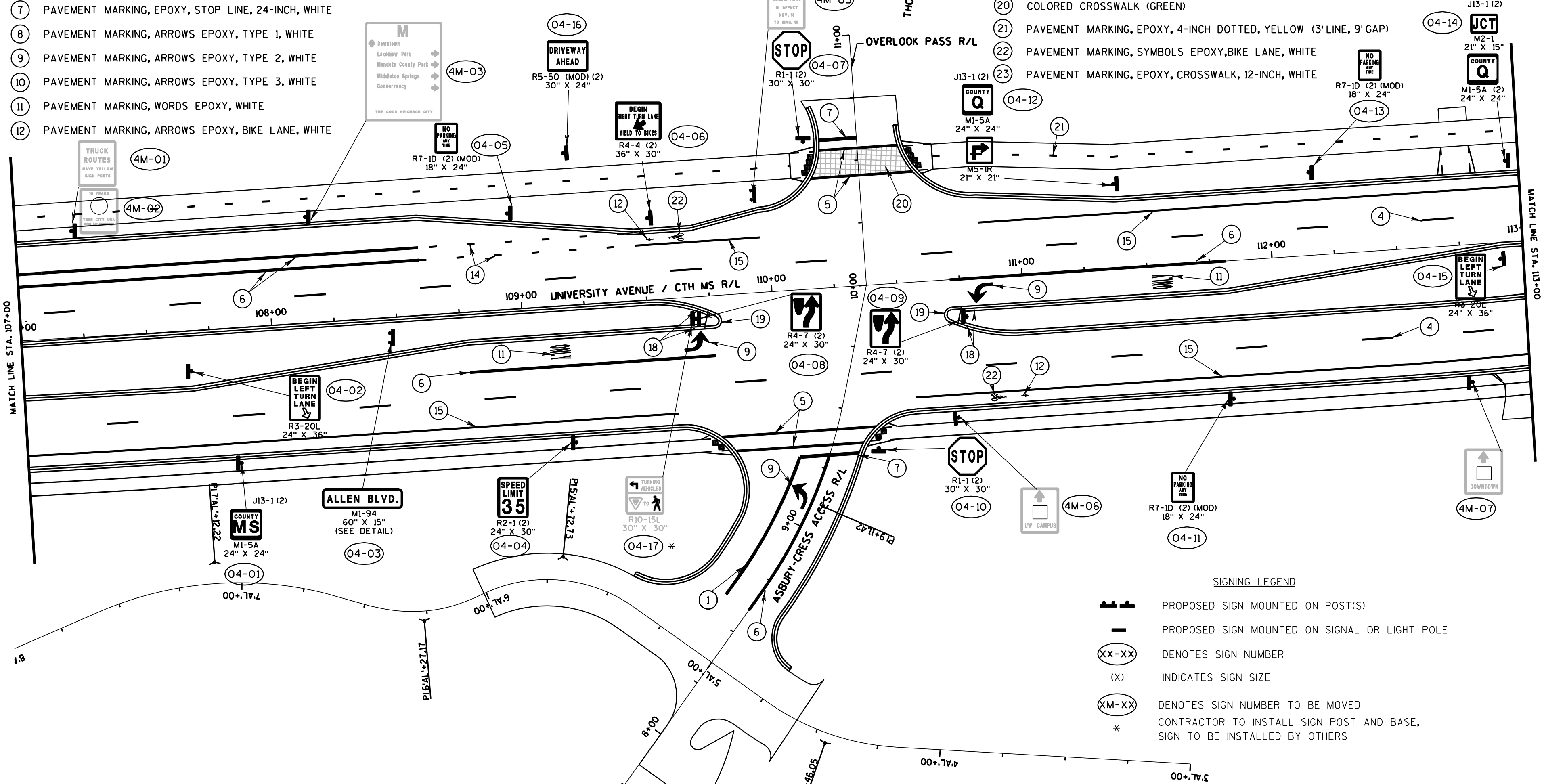
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 3 OF 21	SHEET 177 E

FILE NAME : g:\madison\md2009035\dgn\024503_pm (alien).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE



SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

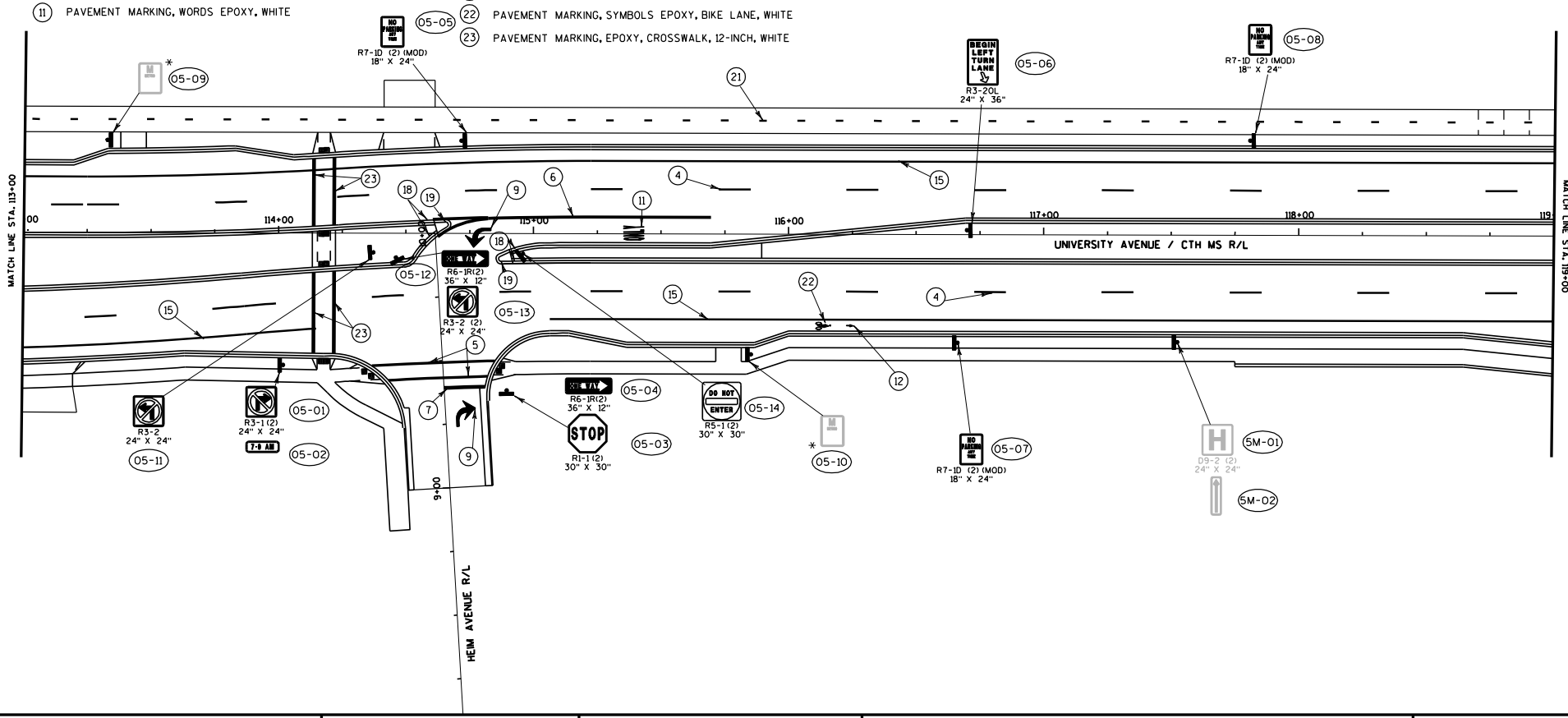
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING AND MARKING	SHEET 4 OF 21	SHEET 178	E

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 5 OF 21	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\024505_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

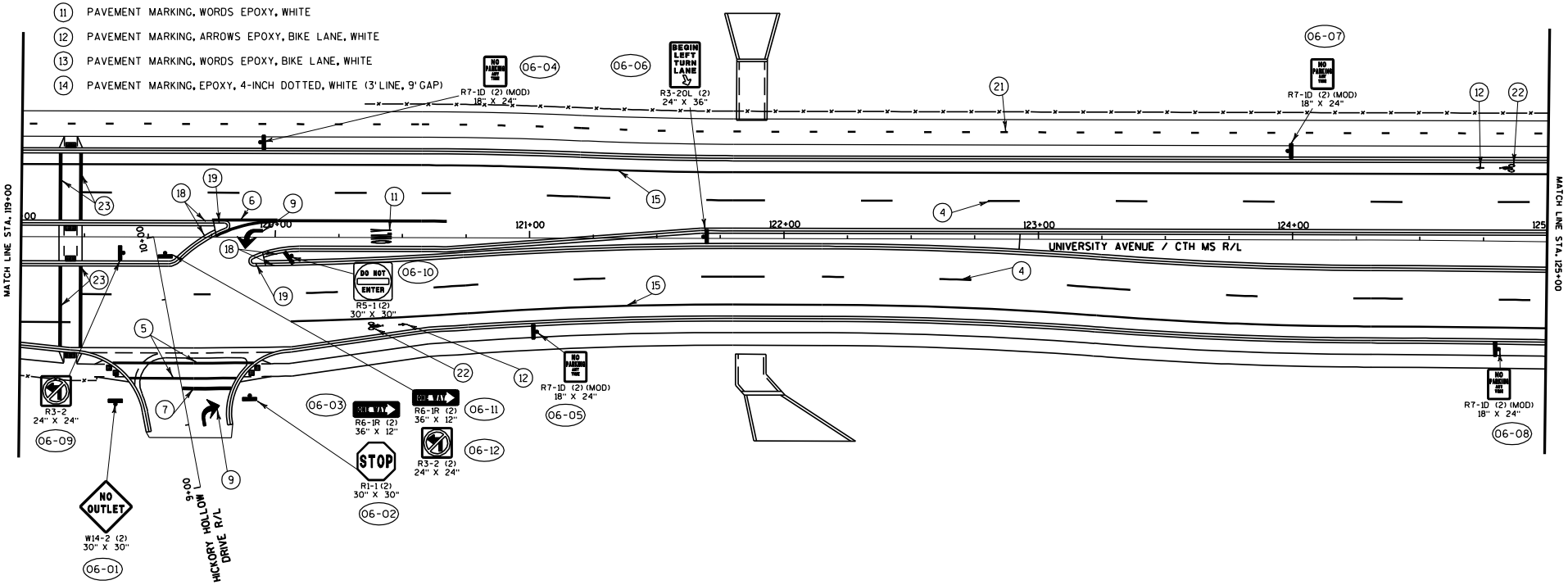
WISDOT/CADDS SHEET 42

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

SIGNING LEGEND

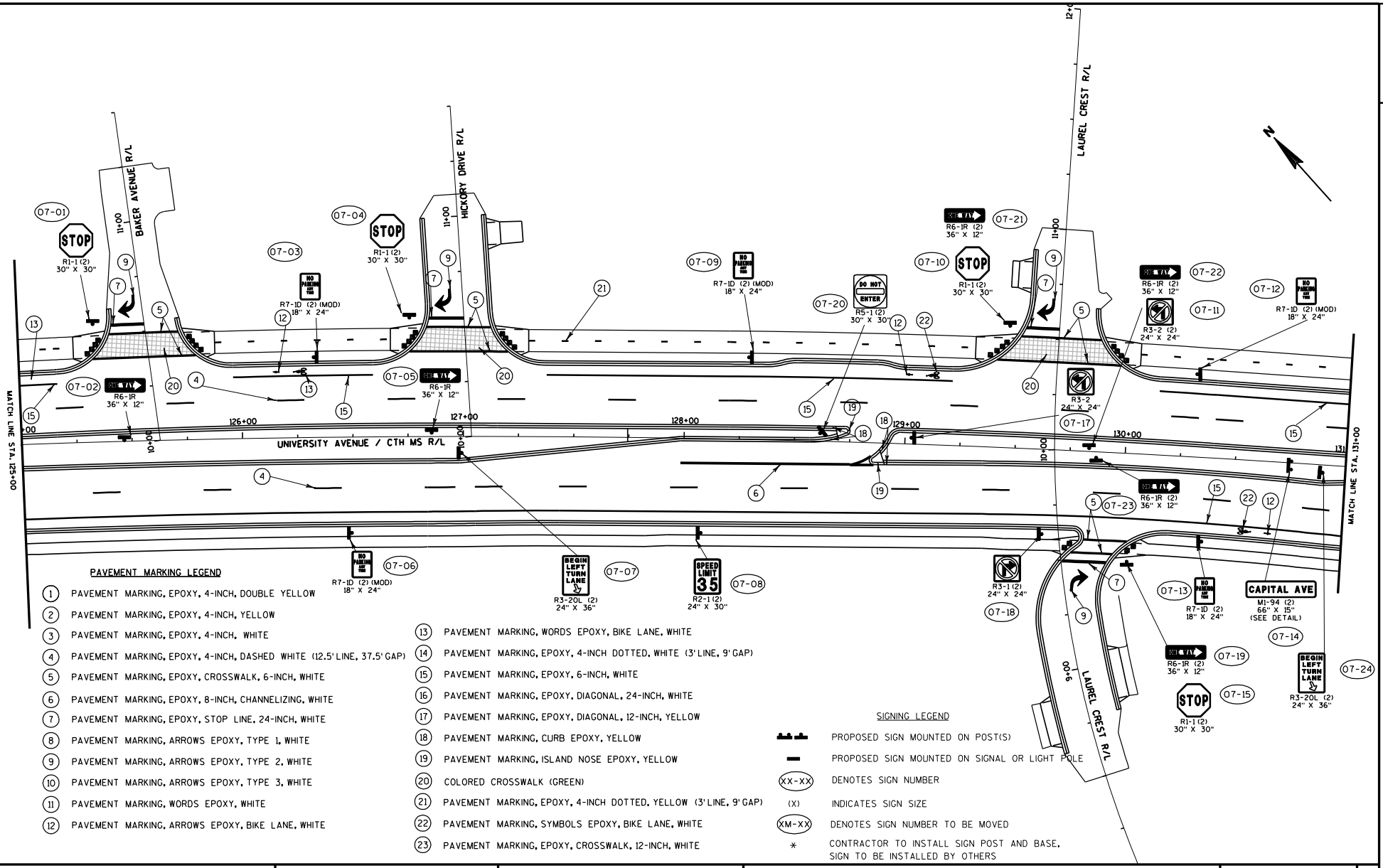
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE. SIGN TO BE INSTALLED BY OTHERS



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 6 OF 21	SHEET 180 E

FILE NAME : g:\madison\md2009035\dgn\024506_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE. SIGN TO BE INSTALLED BY OTHERS

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 7 OF 21	SHEET

E

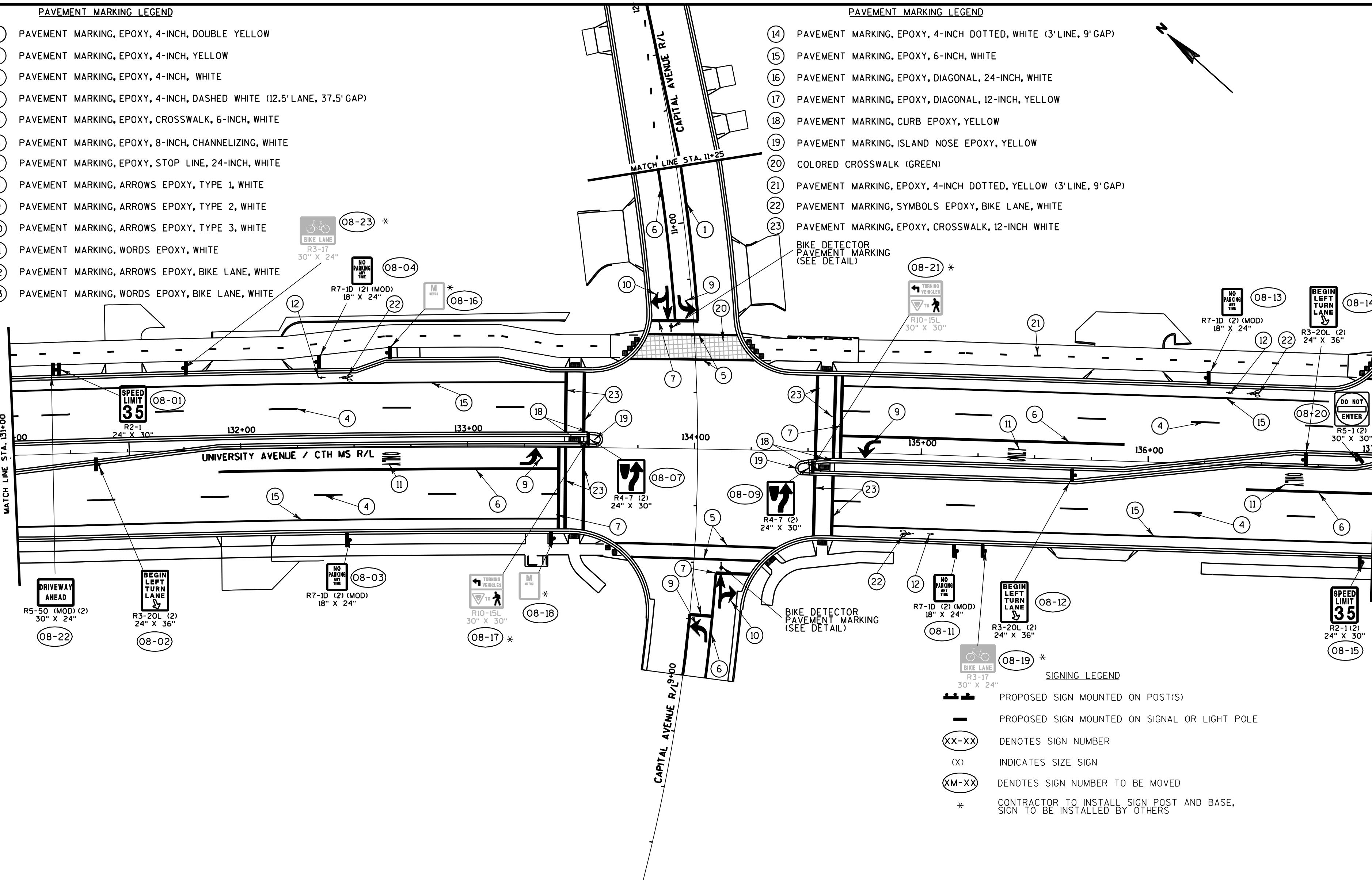
FILE NAME : g:\madison\md2009035\dgn\024507_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LANE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH WHITE



SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICATES SIZE SIGN
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 8 OF 21	SHEET 182	E

FILE NAME : g:\madison\md2009035\dgn\024508_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE : WISDOT/CADDS SHEET 42

2

2

2

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
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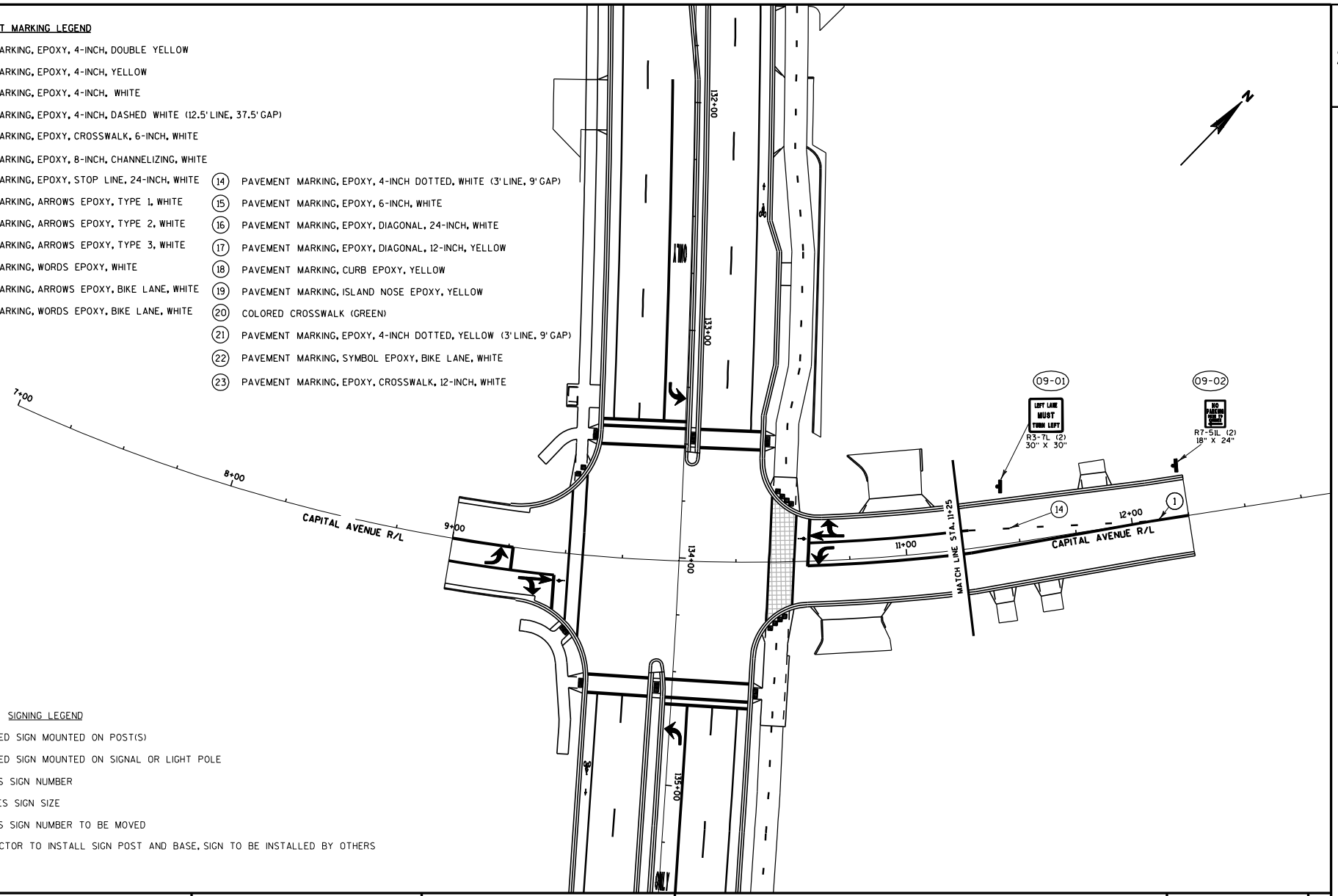
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOL EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE



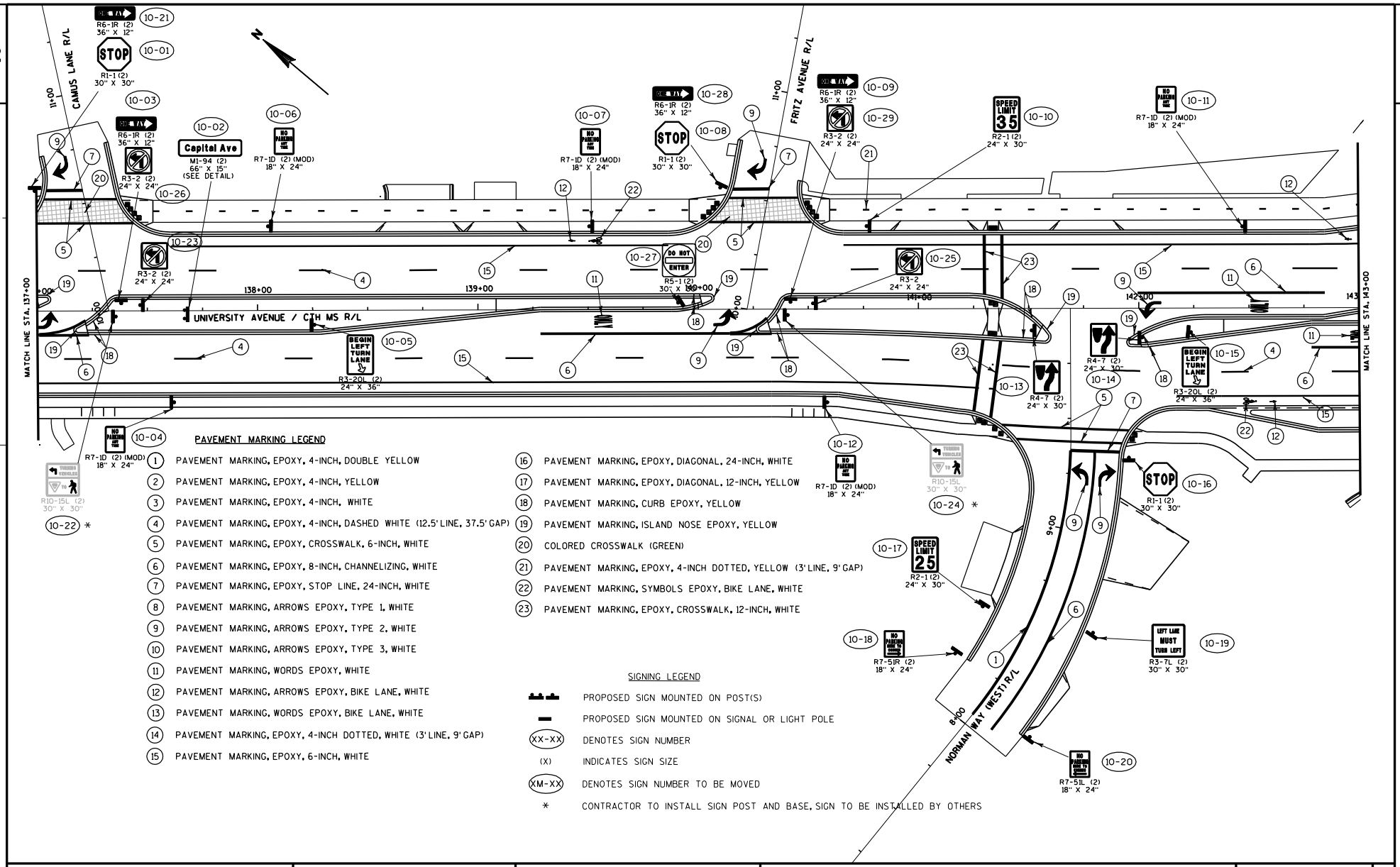
SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- XX-XX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- XM-XX DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 9 OF 21	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\024509_pm (capital).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

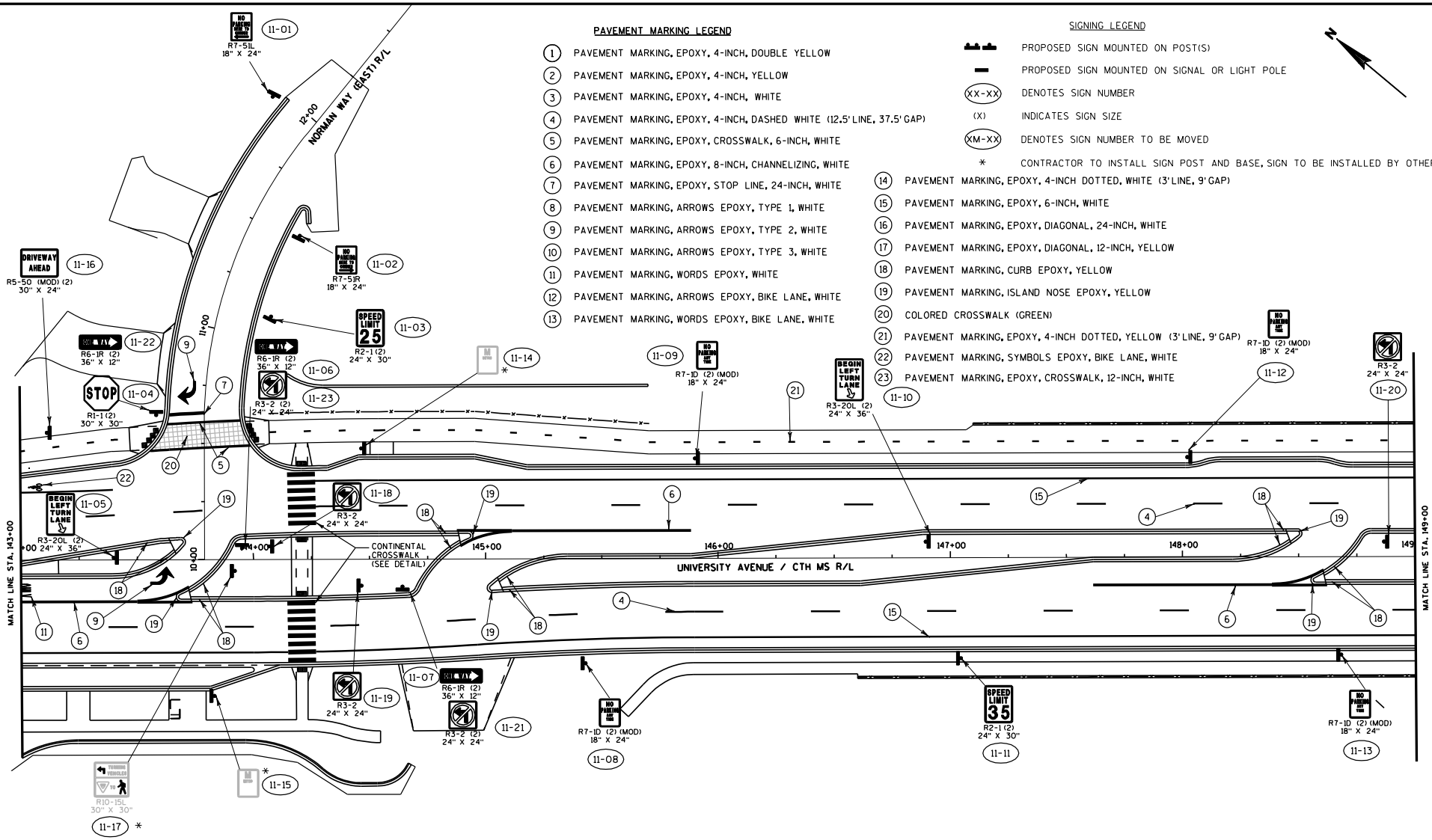
SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 10 OF 21	SHEET E

FILE NAME : g:\madison\md2009035\dgn\024510_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 11 OF 21	SHEET

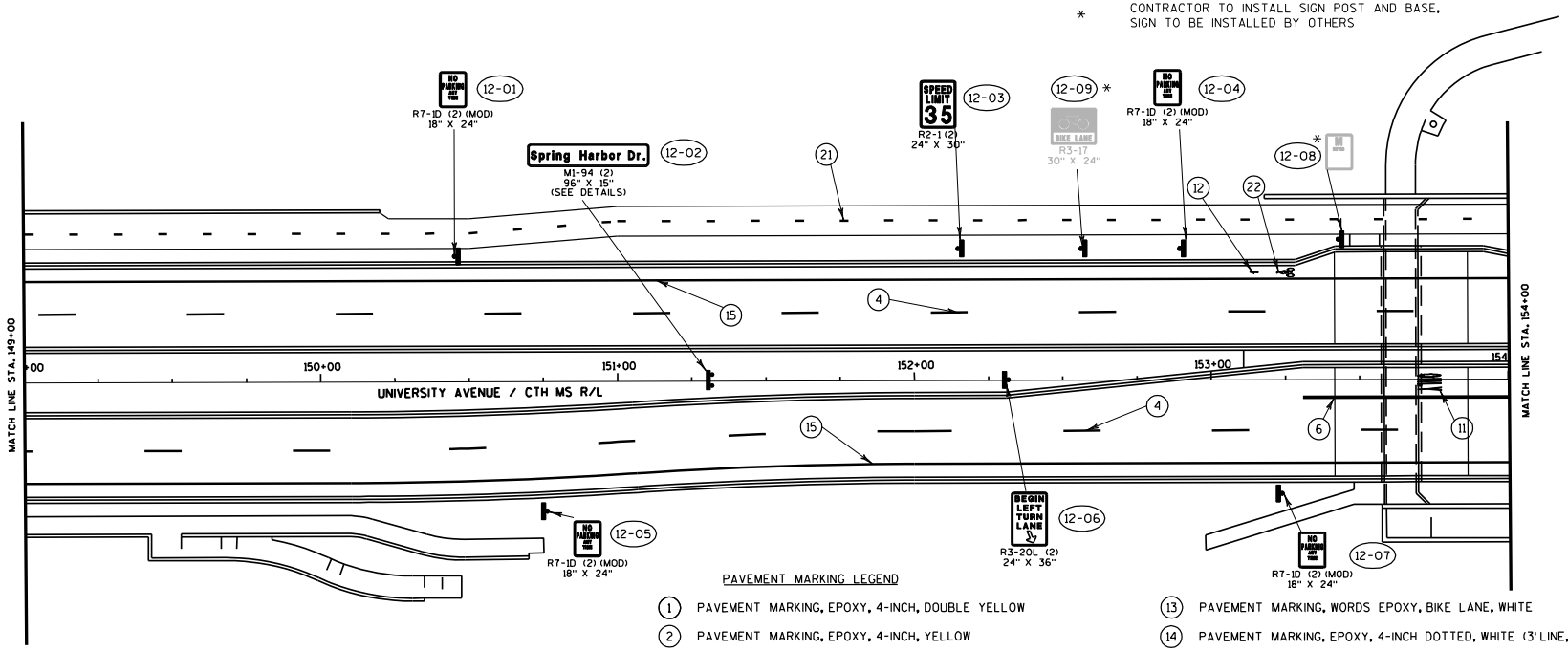
FILE NAME : g:\madison\md2009035\dgn\024511_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

SIGNING LEGEND

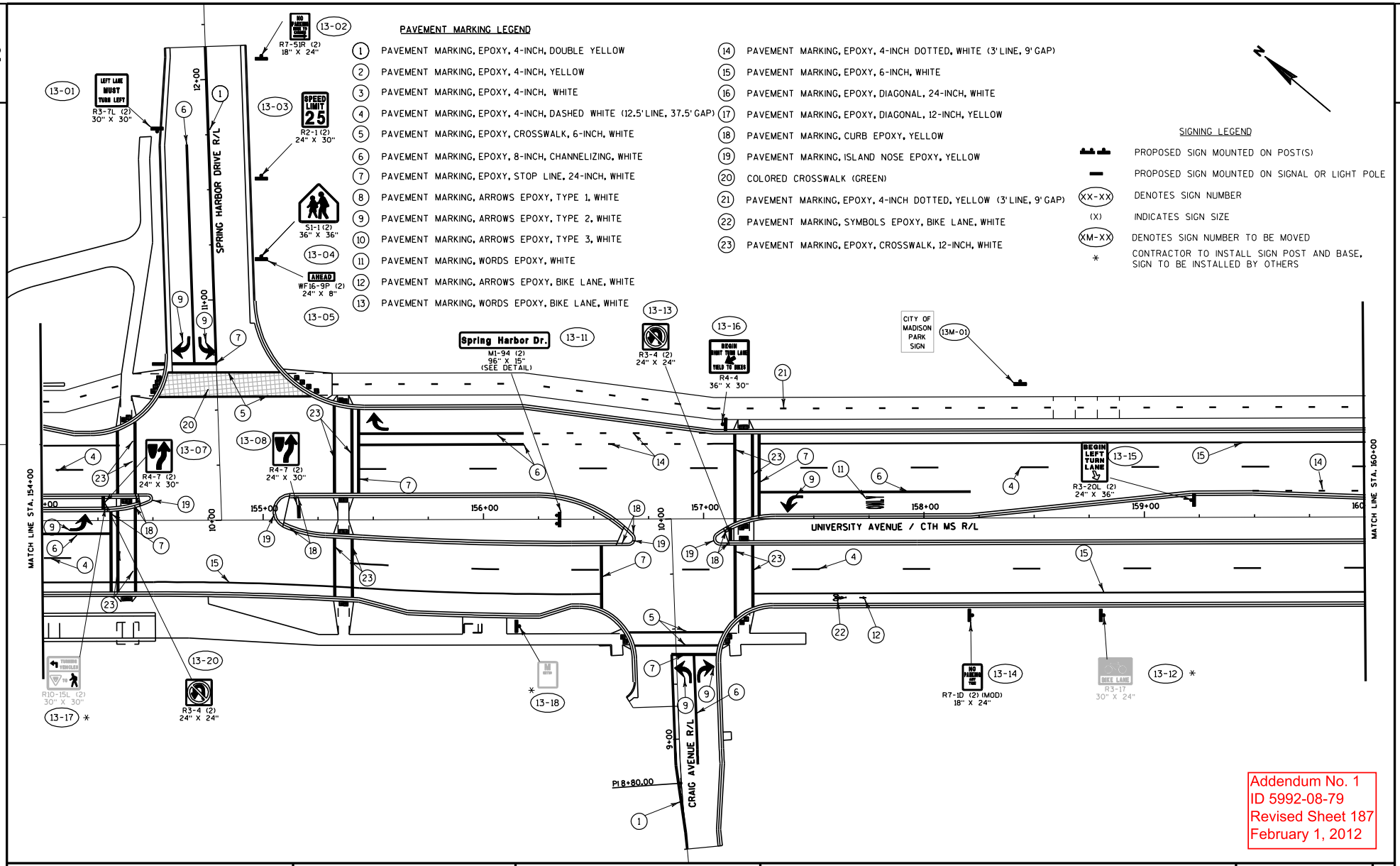
	PROPOSED SIGN MOUNTED ON POST(S)
	PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
XX-XX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE
XM-XX	DENOTES SIGN NUMBER TO BE MOVED
*	CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 12 OF 21	SHEET 186	E



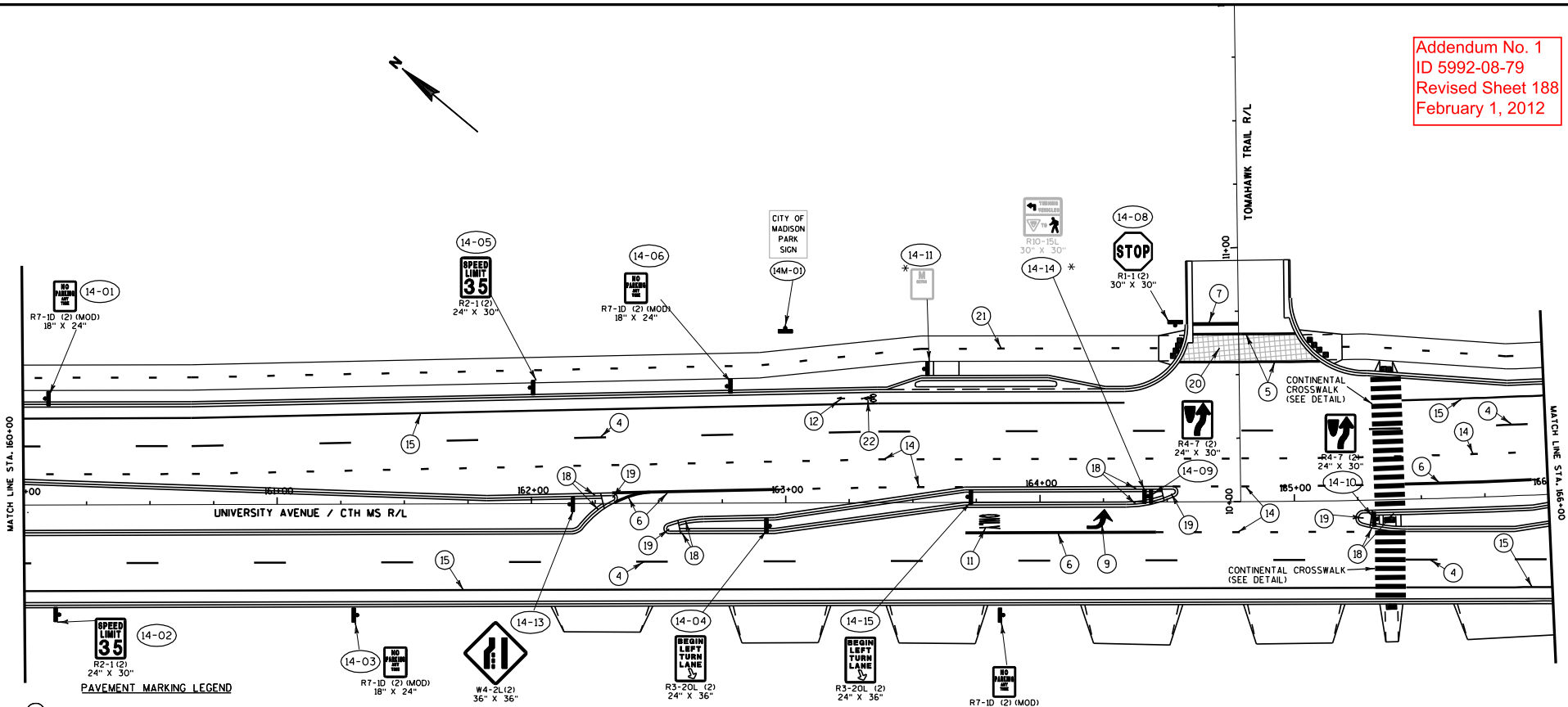
Addendum No. 1
ID 5992-08-79
Revised Sheet 187
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 13 OF 21	SHEET 187	E

FILE NAME : G:\Madison\MD2009035\DGN\024513_pm.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 188
February 1, 2012



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5', 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

SIGNING LEGEND

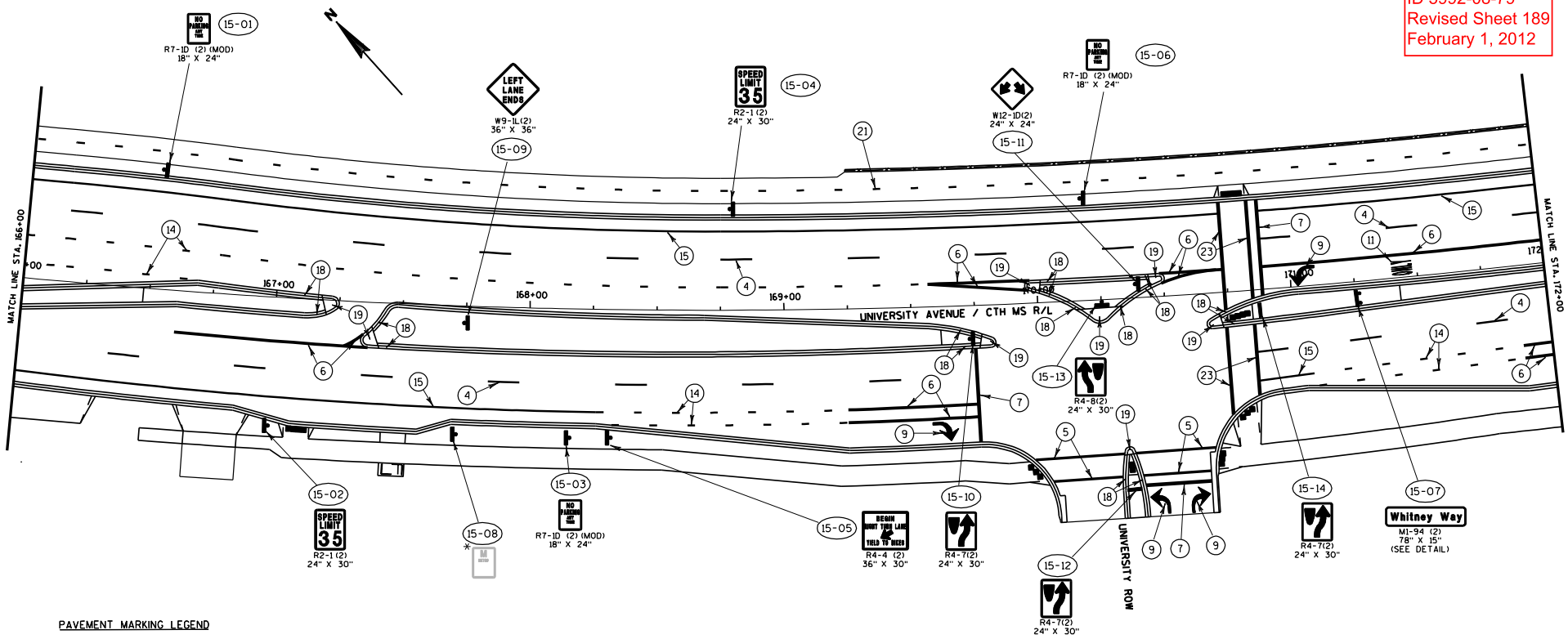
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- XX-XX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- XM-XX DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING AND MARKING	SHEET 14 OF 21	SHEET 188	E

FILE NAME : G:\Madison\MD2009035\DGN\024514_pm.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 189
February 1, 2012



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5'LINE, 37.5'GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3'LINE, 9'GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3'LINE, 9'GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

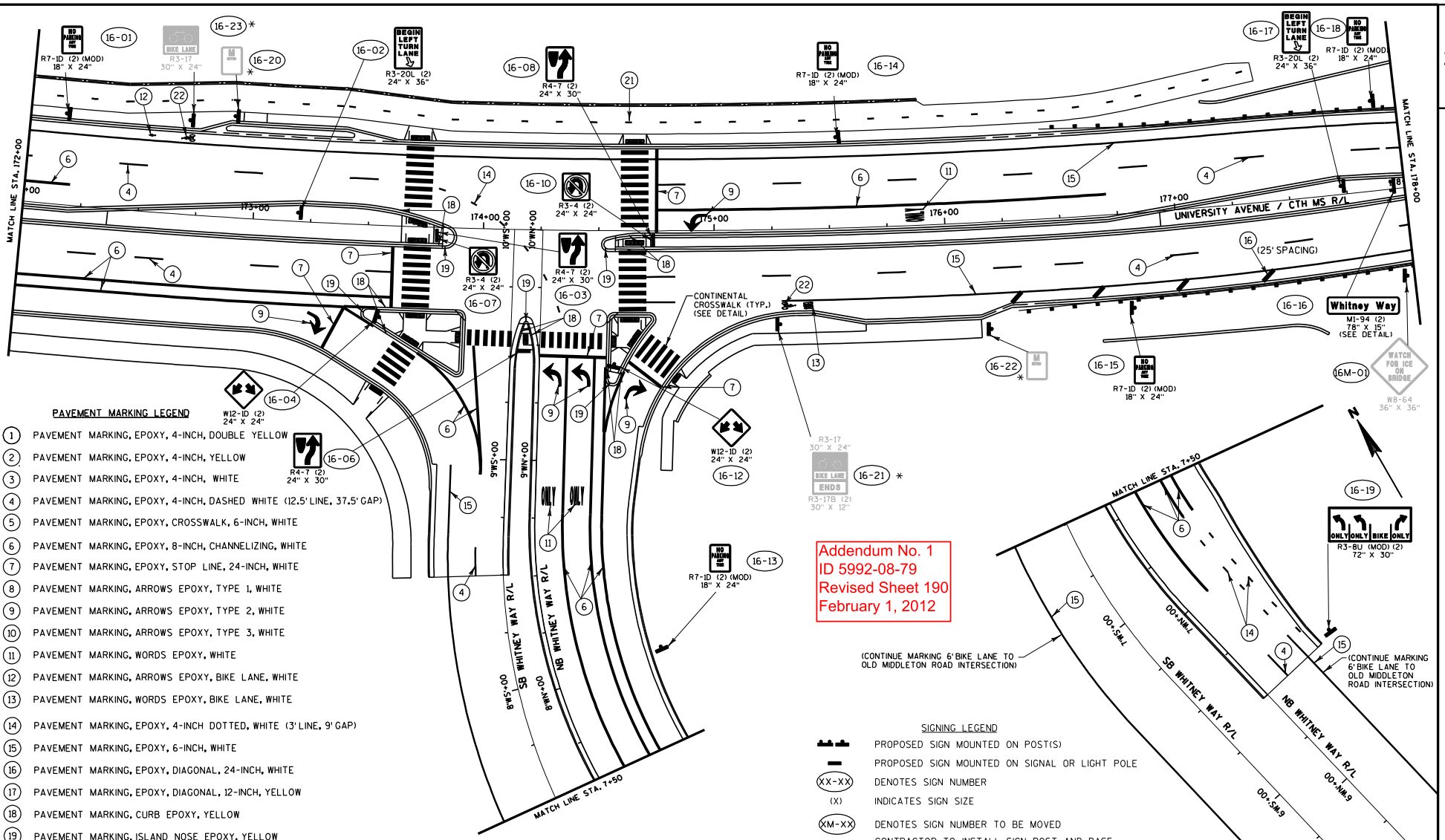
SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- XX-XX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- XM-XX DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 15 OF 21	SHEET 189	E

FILE NAME : G:\Madison\MD2009035\DGN\024515_pm.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

Addendum No. 1
ID 5992-08-79
Revised Sheet 190
February 1, 2012

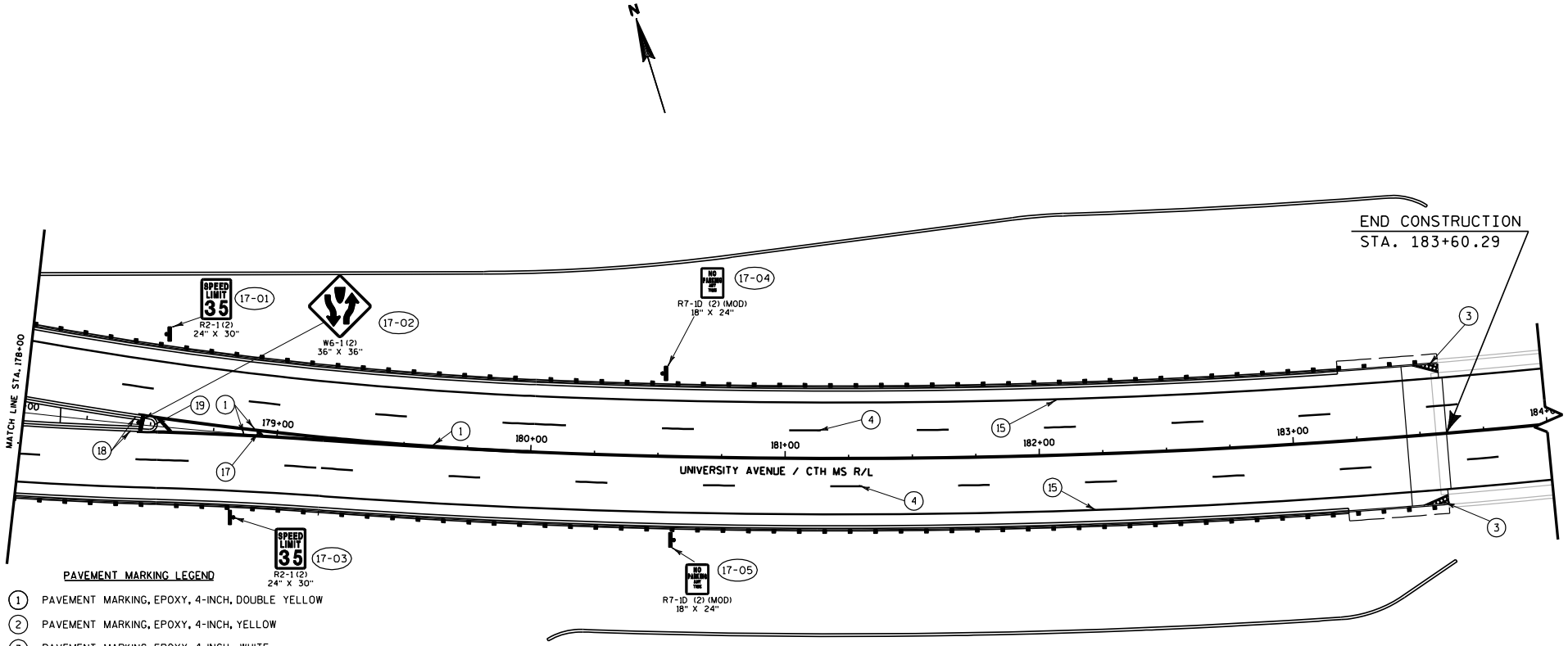
SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- XX-XX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- XM-XX DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 16 OF 21	SHEET 190	E

FILE NAME : G:\Madison\MD2009035\DGN\024516_pm.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 17 OF 21	SHEET 191 E

FILE NAME : g:\madison\md2009035\dgn\024517_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
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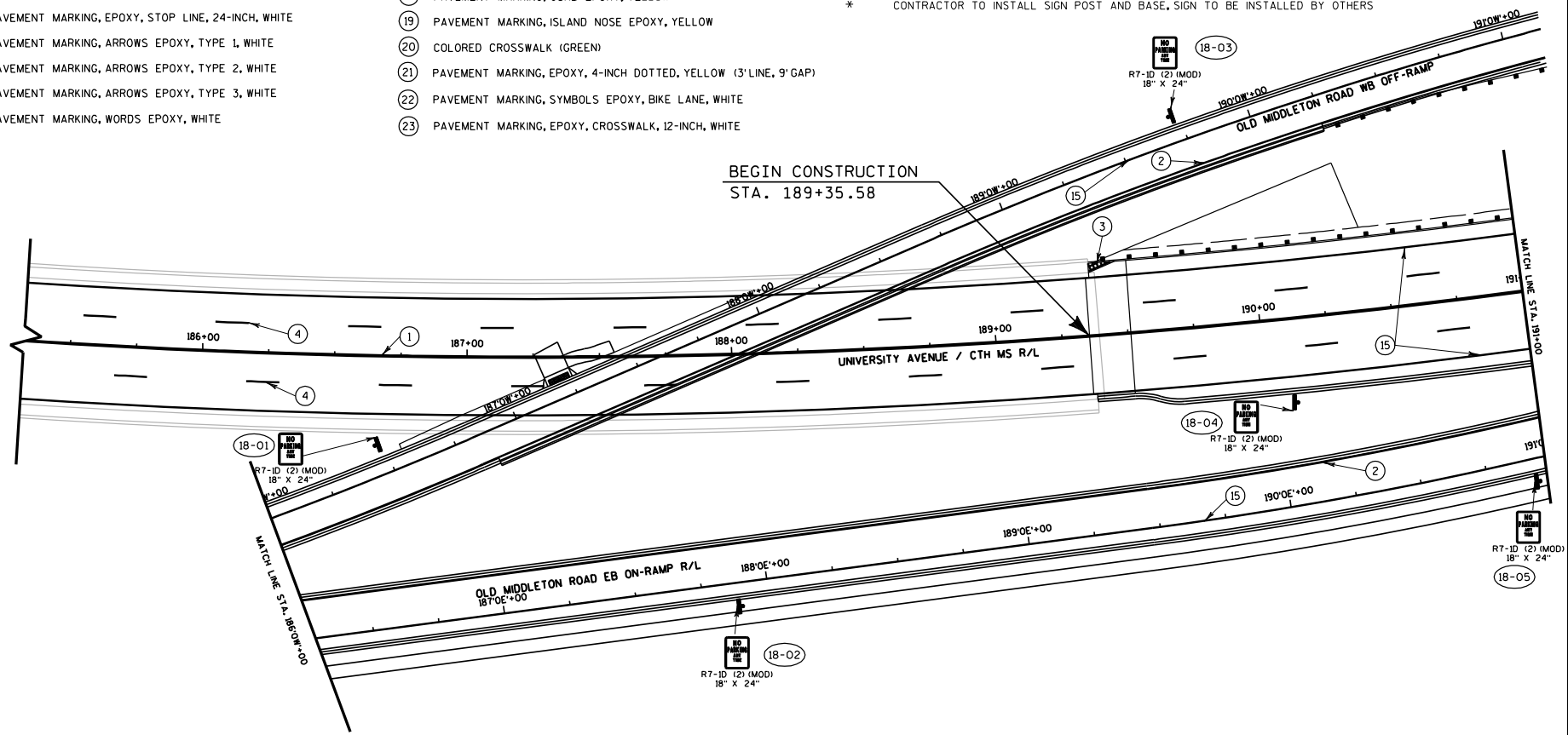
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICIATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

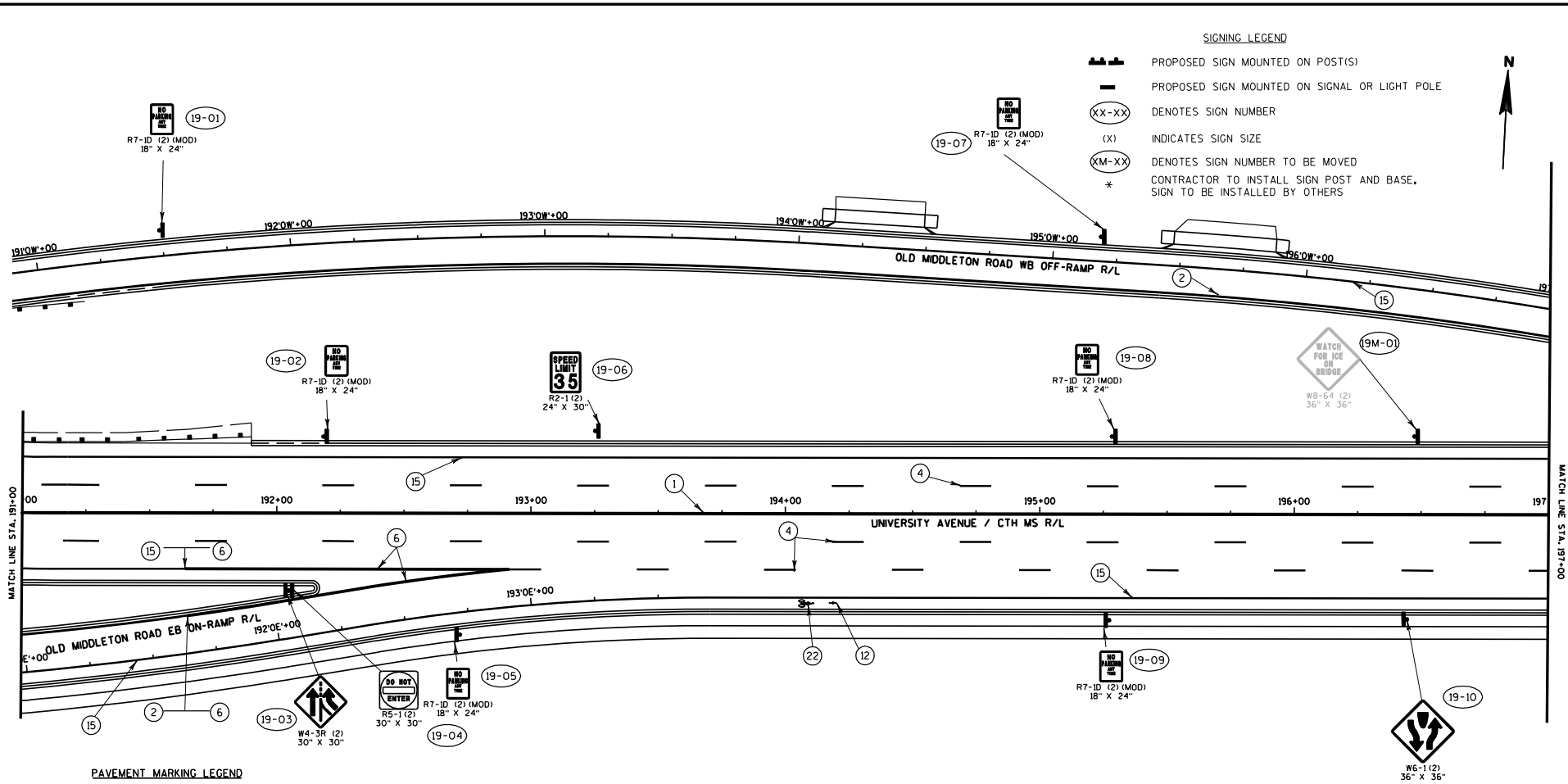


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 18 OF 21	SHEET

E

FILE NAME : g:\madison\md2009035\dgn\024518_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



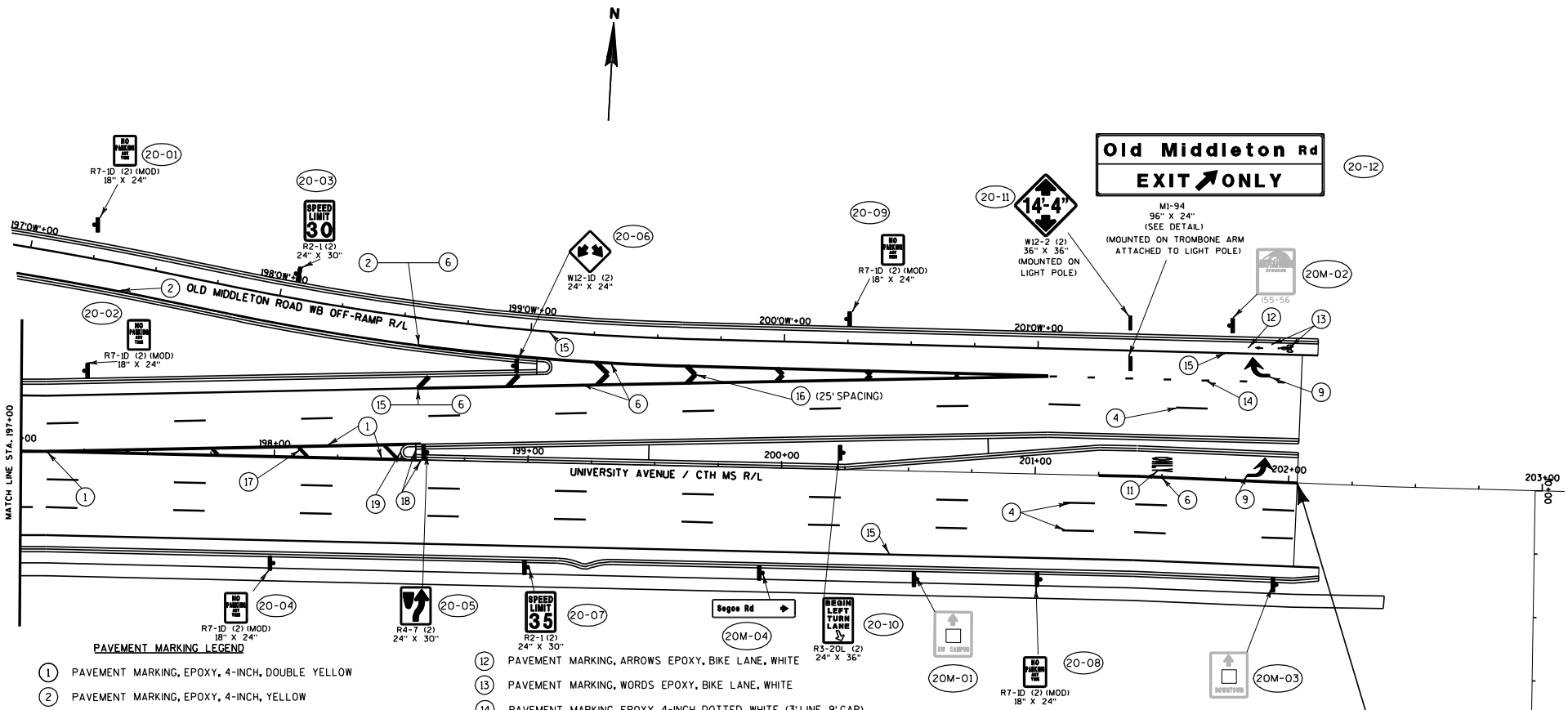
PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5'LINE, 37.5'GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3'LINE, 9'GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3'LINE, 9'GAP)
22. PAVEMENT MARKING, SYMBOL EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 19 OF 21	SHEET

FILE NAME : g:\madison\md2009035\dgn\024519_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE

SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (XX-XX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (XM-XX) DENOTES SIGN NUMBER TO BE MOVED
- * CONTRACTOR TO INSTALL SIGN POST AND BASE. SIGN TO BE INSTALLED BY OTHERS

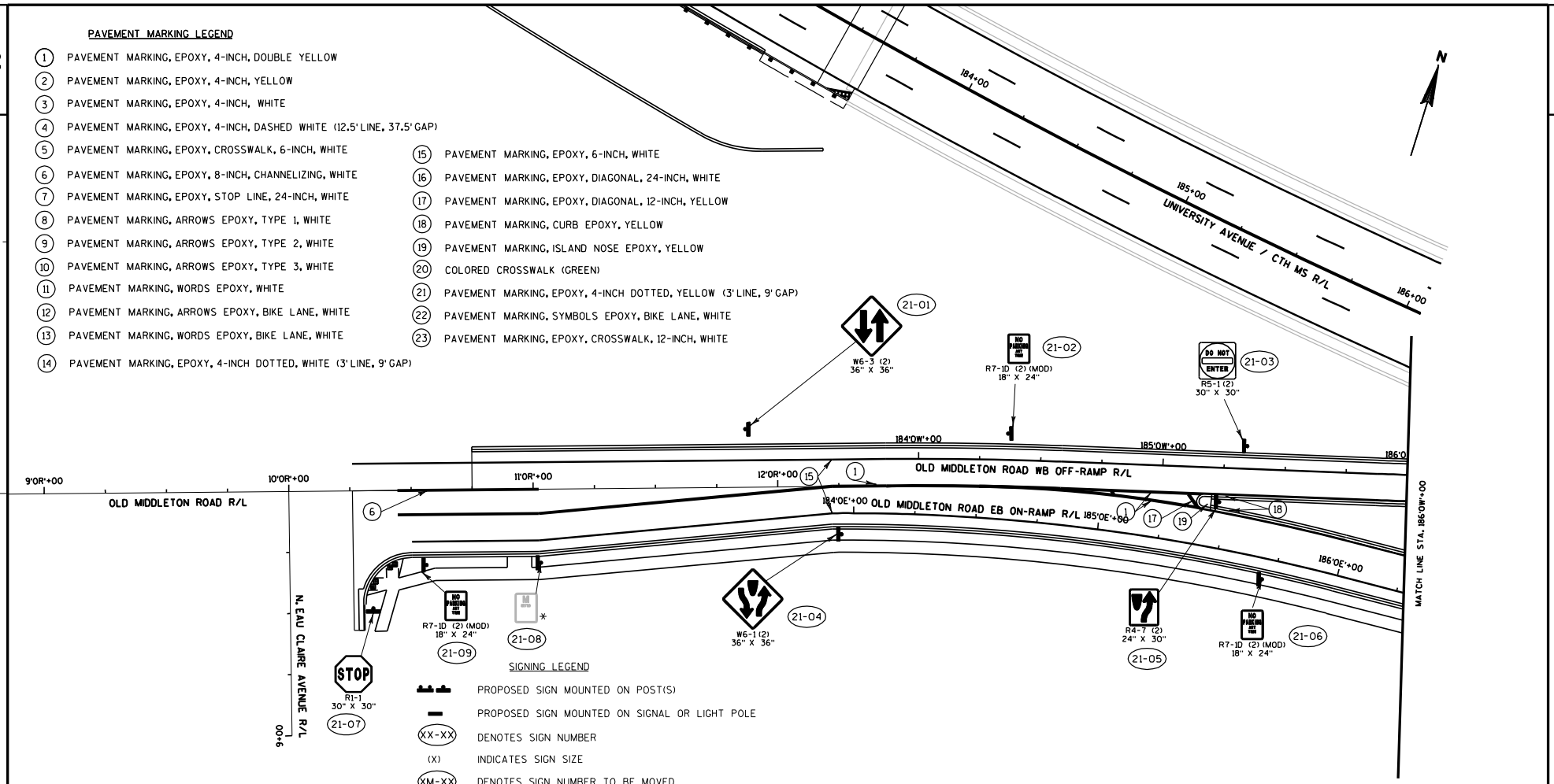
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 20 OF 21	SHEET

FILE NAME : g:\madison\md2009035\dgn\024520_pm.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING, EPOXY, 4-INCH, DOUBLE YELLOW
2. PAVEMENT MARKING, EPOXY, 4-INCH, YELLOW
3. PAVEMENT MARKING, EPOXY, 4-INCH, WHITE
4. PAVEMENT MARKING, EPOXY, 4-INCH, DASHED WHITE (12.5' LINE, 37.5' GAP)
5. PAVEMENT MARKING, EPOXY, CROSSWALK, 6-INCH, WHITE
6. PAVEMENT MARKING, EPOXY, 8-INCH, CHANNELIZING, WHITE
7. PAVEMENT MARKING, EPOXY, STOP LINE, 24-INCH, WHITE
8. PAVEMENT MARKING, ARROWS EPOXY, TYPE 1, WHITE
9. PAVEMENT MARKING, ARROWS EPOXY, TYPE 2, WHITE
10. PAVEMENT MARKING, ARROWS EPOXY, TYPE 3, WHITE
11. PAVEMENT MARKING, WORDS EPOXY, WHITE
12. PAVEMENT MARKING, ARROWS EPOXY, BIKE LANE, WHITE
13. PAVEMENT MARKING, WORDS EPOXY, BIKE LANE, WHITE
14. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, WHITE (3' LINE, 9' GAP)
15. PAVEMENT MARKING, EPOXY, 6-INCH, WHITE
16. PAVEMENT MARKING, EPOXY, DIAGONAL, 24-INCH, WHITE
17. PAVEMENT MARKING, EPOXY, DIAGONAL, 12-INCH, YELLOW
18. PAVEMENT MARKING, CURB EPOXY, YELLOW
19. PAVEMENT MARKING, ISLAND NOSE EPOXY, YELLOW
20. COLORED CROSSWALK (GREEN)
21. PAVEMENT MARKING, EPOXY, 4-INCH DOTTED, YELLOW (3' LINE, 9' GAP)
22. PAVEMENT MARKING, SYMBOLS EPOXY, BIKE LANE, WHITE
23. PAVEMENT MARKING, EPOXY, CROSSWALK, 12-INCH, WHITE



SIGNING LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- XX-XX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- XM-XX — DENOTES SIGN NUMBER TO BE MOVED
- * — CONTRACTOR TO INSTALL SIGN POST AND BASE, SIGN TO BE INSTALLED BY OTHERS

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNING & MARKING	SHEET 21 OF 21	SHEET

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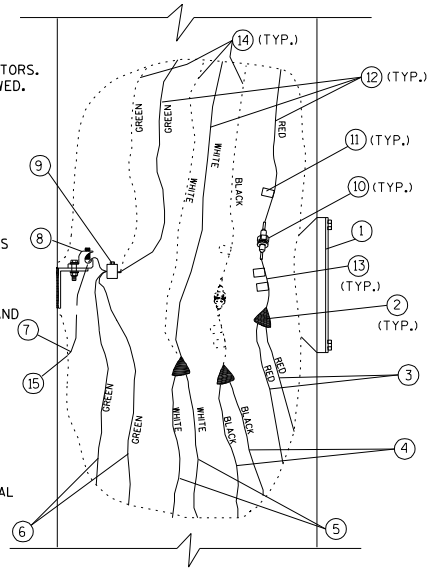
FILE NAME : g:\madison\md2009035\dgn\024521_pm (omr).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

SEE SDD'S "NON FREEWAY LIGHTING UNIT POLE WIRING" & "ELECTRICAL HANDHOLE WIRING" FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS DETAIL

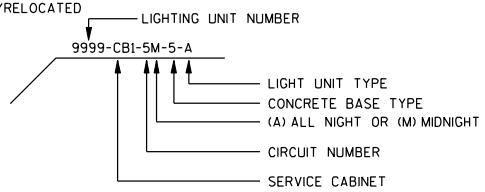
1. HANDHOLE AND COVER
2. APPROVED INSULATED MULTITAP TERMINAL BLOCK TYPE CONNECTORS. COMPRESSION, CRIMP OR WIRE NUT CONNECTORS ARE NOT ALLOWED.
3. INSULATED UNGROUNDED LIGHTING CKT CONDUCTORS FROM SYSTEM RACEWAY
4. ALTERNATE INSULATED UNGROUNDED LIGHTING CKT CONDUCTORS FROM SYSTEM RACEWAY PASSING THROUGH THIS POLE
5. LIGHTING CKT GROUNDED CONDUCTORS FROM SYSTEM RACEWAY
6. INSULATED LIGHTING SYSTEM EQUIPMENT GROUNDING CONDUCTORS
7. #4 BARE EQUIPMENT GROUNDING CONDUCTOR TO GROUND ROD (SEE S.D.D. FOR ADDITIONAL INFORMATION)
8. TYPICAL GROUNDING CONNECTION STAINLESS STEEL BOLT, NUT AND WASHERS 1/2" X 1 1/2" X 13 TPI
9. APPROVED MECHANICAL TYPE CONNECTOR FOR EQUIPMENT GROUNDING CONDUCTORS. COMPRESSION, CRIMP OR WIRE NUT CONNECTORS ARE NOT ALLOWED.
10. FUSE ASSEMBLY, (SEE S.D.D. FOR ADDITIONAL INFORMATION)
11. CIRCUIT TAG, BOTH SIDES OF ALL FUSES (TYP.)
12. #12 AWG CONDUCTORS TO LUMINAIRE(S) (SEE S.D.D. FOR ADDITIONAL INFORMATION)
13. 18" PIGTAIL BETWEEN SPLICE AND FUSE
14. ADDITIONAL CONDUCTORS TO TYPE A LIGHT UNITS (TYP.)
15. EXOTHERMICALLY WELDED TO GROUNDING ELECTRODE



POLE WIRING DETAIL
NO SCALE

LIGHTING PLAN LEGEND

- SIGNAL CONTROL CABINET
- SHARED SIGNAL SYSTEM HANDHOLES
- PROPOSED LIGHTING UNIT TYPE A
- PROPOSED LIGHTING UNIT TYPE B
- PROPOSED LIGHTING UNIT TYPE C
- EXISTING LIGHTING UNIT
- REM/REL — EXISTING LIGHTING UNIT TO BE REMOVED/RELOCATED
- ELECTRICAL PULLBOXES TYPE I
- LIGHTING CONTROL CABINET
- 9999 — END OF NEW LIGHTING CIRCUIT
- 9999 — END OF EXISTING LIGHTING CIRCUIT
- PROPOSED CONDUCTORS IN SHARED SIGNAL CONDUIT: 3#4 & 1#8 IN CONDUIT RIGID NONMETALLIC 2-INCH SCHEDULE 40. SCHEDULE 80 UNDER ROADWAYS (UNLESS NOTED OTHERWISE)
- PROPOSED CONDUCTORS IN CONDUIT: 3#4 & 1#8 IN CONDUIT RIGID NONMETALLIC 2-INCH SCHEDULE 40. SCHEDULE 80 UNDER ROADWAYS (UNLESS NOTED OTHERWISE)
- —OH— EXISTING AERIAL WIRING
- —E— EXISTING UNDERGROUND CONDUCTORS/CONDUIT



STREET LIGHTING GENERAL NOTES:

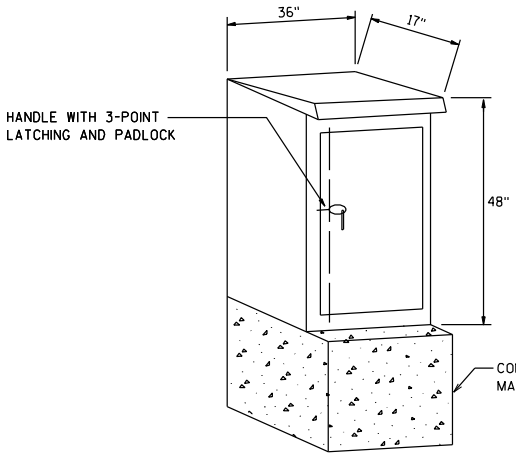
1. ALL PROPOSED LUMINAIRES SHALL BE LED, EXCEPT AS NOTED.
2. COORDINATE ALL MODIFICATIONS OF EXISTING LIGHTING CIRCUITS WITH THE OPERATING MUNICIPALITY OR UTILITY.
3. PERFORM CIRCUIT CONDUCTOR SPLICES IN PULLBOXES USING APPROVED SUBMERSIBLE MULTI-TAP TERMINAL BLOCK TYPE CONNECTORS. CONNECTORS SHALL BE CONSIDERED INCIDENTAL TO THE ELECTRICAL WIRE LIGHTING BID ITEM.
4. REMOVAL OF ALL AERIAL CABLE AND ABANDONMENT OF BELOW GRADE WIRING SHALL BE INCIDENTAL TO THE REMOVE STREET LIGHT & REMOVING CONCRETE BASES BID ITEMS.
5. CONTACT CITY FORESTRY 48-HOURS PRIOR TO INSTALLING STREET LIGHTS IF TREE TRIMMING IS NEEDED.
6. CHECK FOR OVERHEAD UTILITY CONFLICTS PRIOR TO CONSTRUCTING CONCRETE BASES.
7. REMOVE AND STORE LIGHTS MT05 & MT06 (ALLEN BLVD.) FOR REINSTALLATION ON NEW CONCRETE BASES.
8. INSTALL CONDUIT BY BORING WHEN CROSSING ROADWAYS ONLY IF NECESSARY. CONDUITS CROSSING ROADWAYS MAY BE INSTALLED BY TRENCHING IF THE ENGINEER DETERMINES BORING TO BE UNNECESSARY.
9. PLACE LIGHTING CONDUITS IN THE SAME TRENCH AS THE TRAFFIC SIGNAL CONDUITS WHEN POSSIBLE.
10. THE EXACT LOCATION OF THE LIGHTING CONTROL CABINETS SHALL BE DETERMINED IN THE FIELD BY THE CITY OF MADISON AND THE ENGINEER.
11. REFER TO STRUCTURE PLANS FOR ADDITIONAL ELECTRICAL WORK REQUIRED.
12. CLEARLY LABEL UNUSED CONDUCTORS AS "SPARE" IN ALL CONDUIT RUNS CONTAINING UNUSED CONDUCTORS.
13. REFER TO SPECIAL PROVISIONS FOR TEMPORARY LIGHTING REQUIREMENTS.

EXISTING STREET LIGHTING CIRCUITS WITHIN THE PROJECT LIMITS (WEST TO EAST):

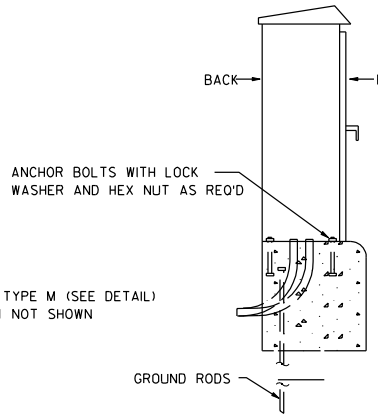
1. MT100 (CITY OF MIDDLETON/MG&E) / EXISTING LIGHTS ALONG THE SOUTH SIDE OF UNIVERSITY AVENUE WEST OF ALLEN BOULEVARD / ELECTRICAL SERVICE LOCATION UNKNOWN
2. MT200 (CITY OF MIDDLETON/MG&E) / EXISTING LIGHTS ALONG THE ALLEN BOULEVARD MEDIAN NORTH OF UNIVERSITY AVENUE / ELECTRICAL SERVICE LOCATION UNKNOWN
3. 6513 (CITY OF MADISON) / EXISTING LIGHTS AT THE UNIVERSITY AND ALLEN BOULEVARD INTERSECTION / ELECTRICAL SERVICE FROM TRAFFIC SIGNAL METER (115/230V)
4. 1496 (CITY OF MADISON) / EXISTING LIGHTS AT THE UNIVERSITY AND CAPITOL AVENUE INTERSECTION / ELECTRICAL SERVICE FROM TRAFFIC SIGNAL METER (115/230V)
5. 299 (CITY OF MADISON) / EXISTING LIGHTS AT THE UNIVERSITY AND SPRING HARBOR DRIVE INTERSECTION / ELECTRICAL SERVICE FROM TRAFFIC SIGNAL METER (120/240V)
6. 1436 (CITY OF MADISON) / EXISTING LIGHTS ON UNIVERSITY AVENUE FROM WHITNEY WAY TO SEGOE ROAD, INCLUDING OLD MIDDLETON ROAD AND RAMPS / ELECTRICAL SERVICE LOCATED BETWEEN WB UNIVERSITY AVENUE AND WB OFF RAMP TO OLD MIDDLETON ROAD (120/240V)
7. 1414 (CITY OF MADISON) / EXISTING LIGHTS ON UNIVERSITY AVENUE FROM SEGOE ROAD TO THE EAST / ELECTRICAL SERVICE LOCATED AT THE UNIVERSITY AVENUE AND SEGOE ROAD INTERSECTION (120/240V)
8. (CITY OF MADISON) / EXISTING LIGHTS ON EAU CLAIRE AVENUE FROM OLD MIDDLETON ROAD TO THE SOUTH / ELECTRICAL SERVICE LOCATED SOUTH OF OLD MIDDLETON AVENUE. THESE LIGHTS ARE NOT ANTICIPATED TO BE DISRUPTED; HOWEVER WORK WILL BE IN CLOSE PROXIMITY TO THIS SYSTEM.
9. (SHOREWOOD HILLS/MG&E) / EXISTING LIGHTS ALONG THE BIKE PATH EAST OF WHITNEY WAY SHALL NOT BE DISRUPTED BY PROJECT ACTIVITIES.

PROPOSED STREET LIGHTING CIRCUITS WITHIN THE PROJECT LIMITS (WEST TO EAST):

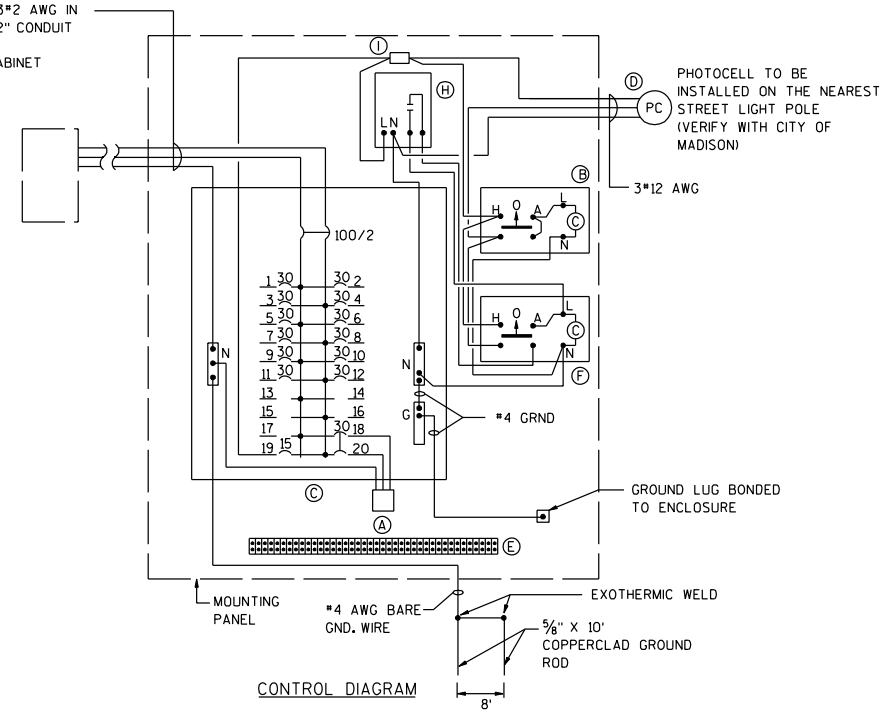
1. UA (CITY OF MADISON) / SERVICE AT UNIVERSITY AVENUE & ALLEN BOULEVARD
2. UC (CITY OF MADISON) / SERVICE AT UNIVERSITY AVENUE & CAPITOL AVENUE
3. US (CITY OF MADISON) / SERVICE AT UNIVERSITY AVENUE & SPRING HARBOR DRIVE
4. UW (CITY OF MADISON) / SERVICE AT UNIVERSITY AVENUE & WHITNEY WAY
5. 1414 (CITY OF MADISON) / SERVICE AT UNIVERSITY AVENUE & SEGOE ROAD



CABINET VIEW



SIDE VIEW



CONTROL DIAGRAM

NOTES:

ALL CONTROL WIRING SHALL BE COLOR CODED #12 AWG, XLP UNLESS OTHERWISE NOTED.

ALL POWER AND CONTROL WIRING SHALL BE NEATLY ROUTED, LABELED AND SUPPORTED.

THE LIGHTING CONTROL CABINET SHALL BE COMPLETELY WIRED UP TO THE FIELD WIRING TERMINATION STRIP IN THE CONTRACTOR'S SHOP AND TESTED PRIOR TO THE INSTALLATION AT SITE.

A COPY OF THIS SHEET WITH AS-BUILT (RECORD) CONDITIONS SHALL BE PUT IN A PLASTIC PROTECTOR IN THE CABINET.

THE CONTRACTOR SHALL COMPLY WITH LOCAL UTILITY INSTALLATION REQUIREMENTS.

USE #10 AWG XLP CONDUCTORS FROM THE 30A CB'S TO THE FIELD WIRING TERMINATION STRIP. PROVIDE A GROUND WIRE AND NEUTRAL WIRE TO FIELD WIRING TERMINATION STRIP FROM PANELBOARD FOR EACH UNDERGROUND CABLE RUN TO LIGHTING UNITS AS REQUIRED.

SEE PLANS FOR TIME CLOCK CONTROLLED CIRCUIT NUMBERS.

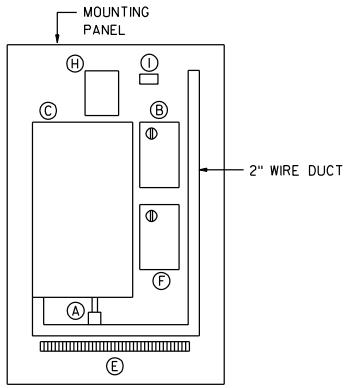
THE TIME CLOCK SHALL BE SET AS THE CITY OF MADISON DIRECTS.

CABINET SHALL NOT OVERLAP THE CONCRETE BASE.

CABINET FEEDER AND PHOTOCELL WIRING TO CABINET TO BE INCIDENTAL TO LIGHTING CONTROL CABINET BID ITEM.

EQUIPMENT

- (A) SURGE ARRESTOR
- (B) 8 POLE, 30A 600V ELECTRICALLY HELD "ALL NIGHT" CONTACTOR, 120V CONTROL COIL, H-O-A SWITCH, NEMA 1 ENCLOSURE
- (C) 100A MCB. 120/240V, 1PH. 3W. 20CKT., PANELBOARD WITH BOLT-ON BRANCH BREAKERS, 22000 A RMS INTERRUPTING CAPACITY.
- (D) BUTTON TYPE PHOTOCELL, 120V.
- (E) FIELD WIRING TERMINATION STRIP (30 BLOCKS MIN.)
- (F) 8 POLE, 30A 600V ELECTRICALLY HELD "MIDNIGHT" CONTACTOR, 120V CONTROL COIL, H-O-A SWITCH, NEMA 1 ENCLOSURE.
- (G) NOT USED
- (H) ASTRONOMIC TIME CLOCK, 120V
- (I) CONTROL TERMINAL BLOCK



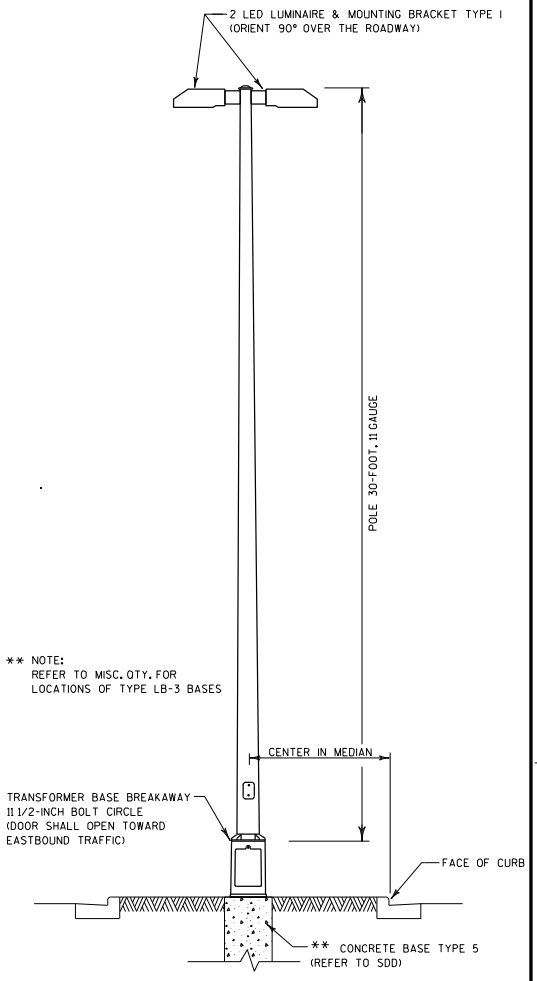
EQUIPMENT LAYOUT

LIGHTING CONTROL CABINET
NO SCALE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN DETAILS	SHEET 197 E

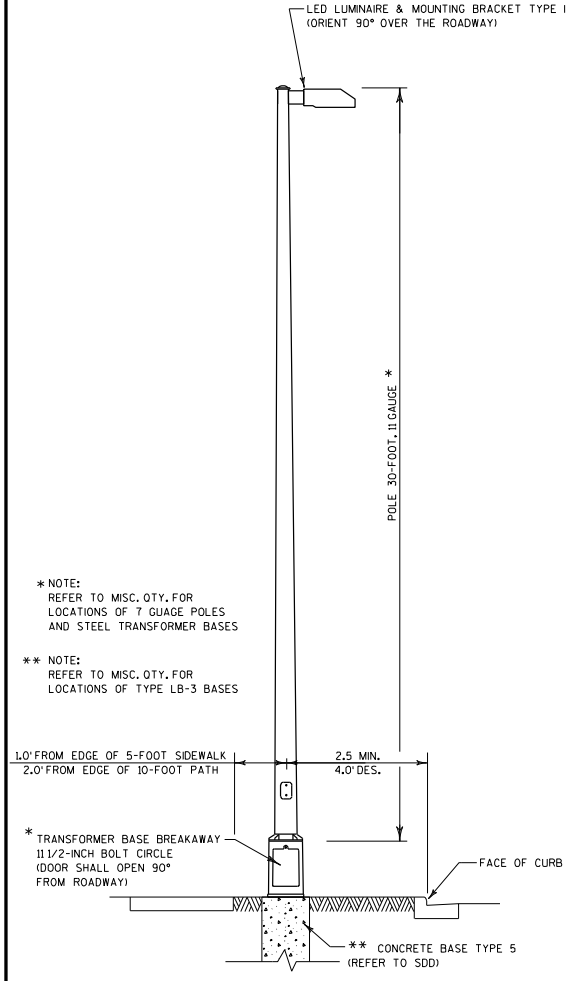
NOTE:

LOCATION INFORMATION LISTED IN MISC. QUANTITY TABLES SHALL BE VERIFIED. USE THE INSTALLATION DETAIL INFORMATION FOR DETERMINING THE EXACT LOCATION IN THE FIELD.



LIGHTING UNIT - TYPE A

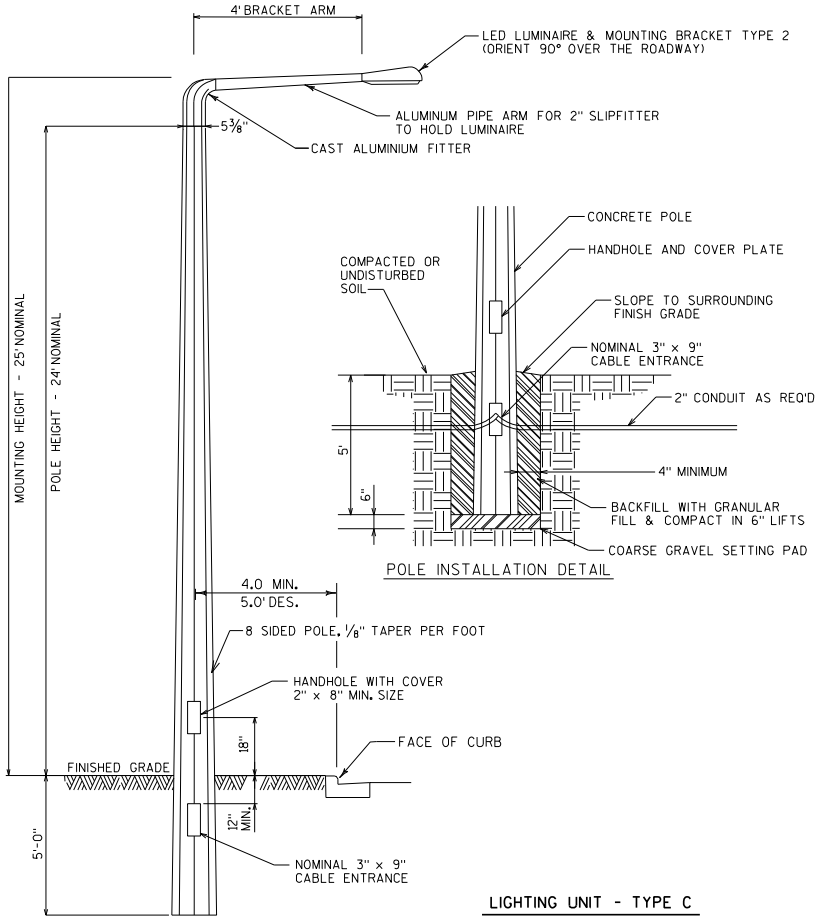
NO SCALE



LIGHTING UNIT - TYPE B

NO SCALE

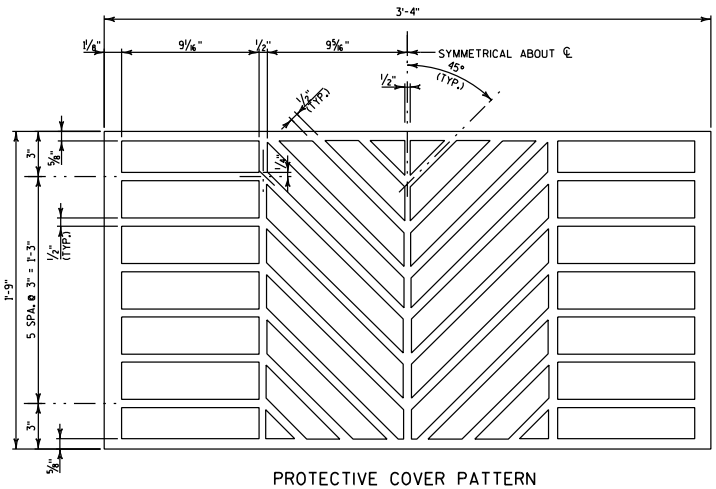
NOTE: ALL ITEMS SHOWN SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE STREET LIGHT POLE AND ALUMINUM ARM BID ITEM



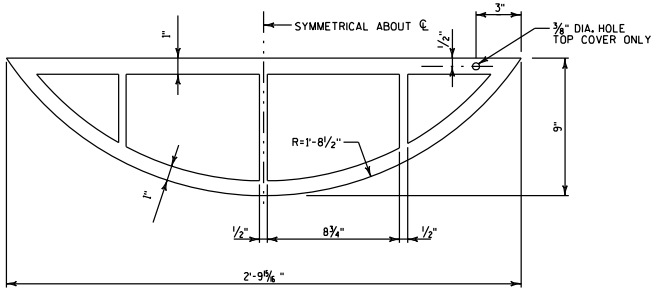
LIGHTING UNIT - TYPE C

NO SCALE

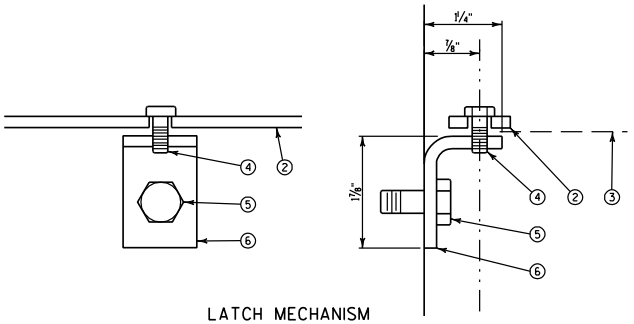
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN DETAILS	SHEET 198 E



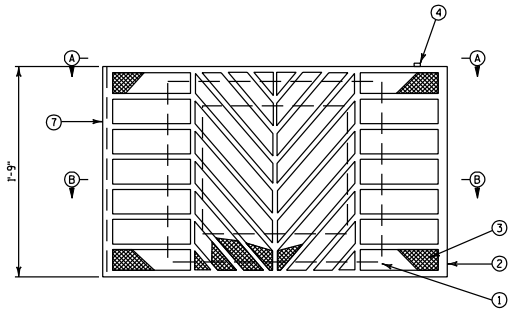
PROTECTIVE COVER PATTERN



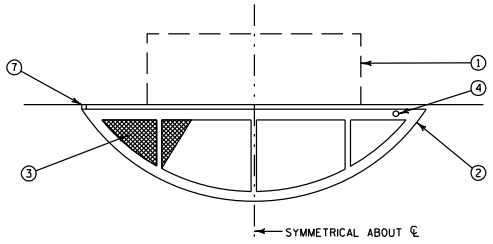
TOP & BOTTOM COVER PATTERN



LATCH MECHANISM

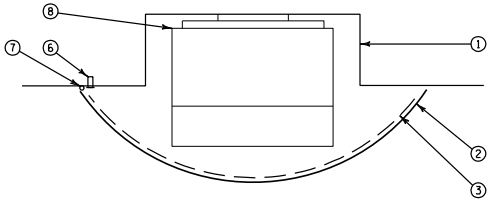


ELEVATION



SECTION A-A

TOP COVER SHOWN; BOTTOM COVER IDENTICAL EXCEPT FOR LATCH



SECTION B-B

NOTES

FABRICATE LIGHT COVER FROM STAINLESS STEEL (TYPE 304). USE CONTINUOUS WELDS AT SEAMS AND GRIND EXPOSED WELDS SMOOTH.

FASTENERS AND ANCHORS SHALL BE STAINLESS STEEL.

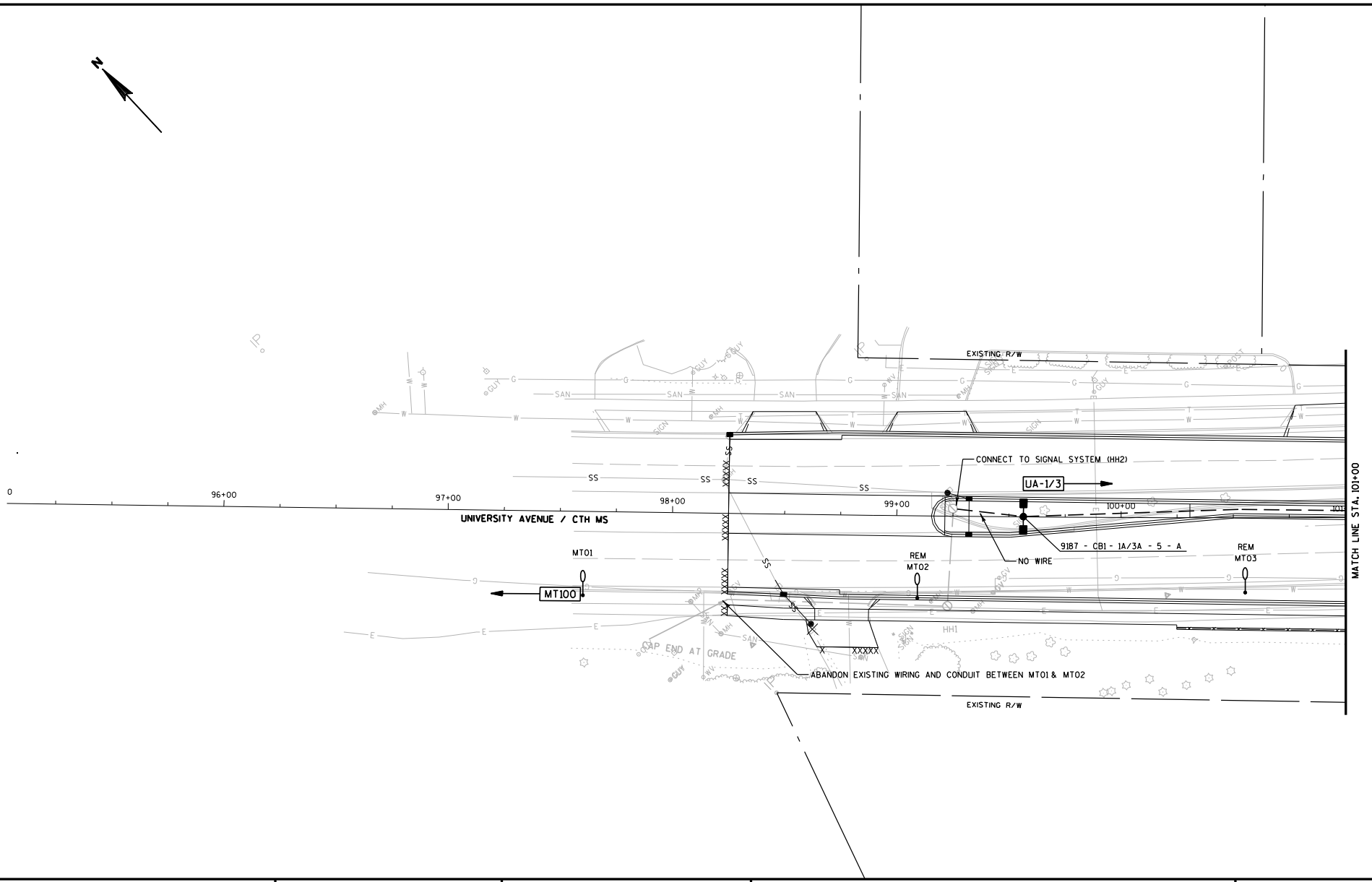
LIGHT COVERS SHALL NOT BE PAINTED.

LEGEND

1. RECESSED CONCRETE FOR LIGHT FIXTURES. SEE STRUCTURE PLANS FOR DIMENSIONS AND LOCATIONS.
2. ⅜" THICK STAINLESS STEEL DECORATIVE PLATE
3. STAINLESS STEEL ¾" × #13 EXPANDED STEEL
4. ¼" STAINLESS STEEL MACHINE SCREW
5. ⅜" DIA. WEDGE ANCHOR. 3 REQ'D AT PIANO HINGE AND 1 REQ'D AT LATCH (4 TOTAL FOR EACH LIGHT COVER).
6. ⅜" × 1¼" BENT PLATE. TAP FOR NO 4.
7. 0.060" PIANO HINGE. WELD TO NO. 2.
8. WALL PACK LUMINAIRE LED (NOT TO SCALE)

DECORATIVE LIGHT COVER
NO SCALE

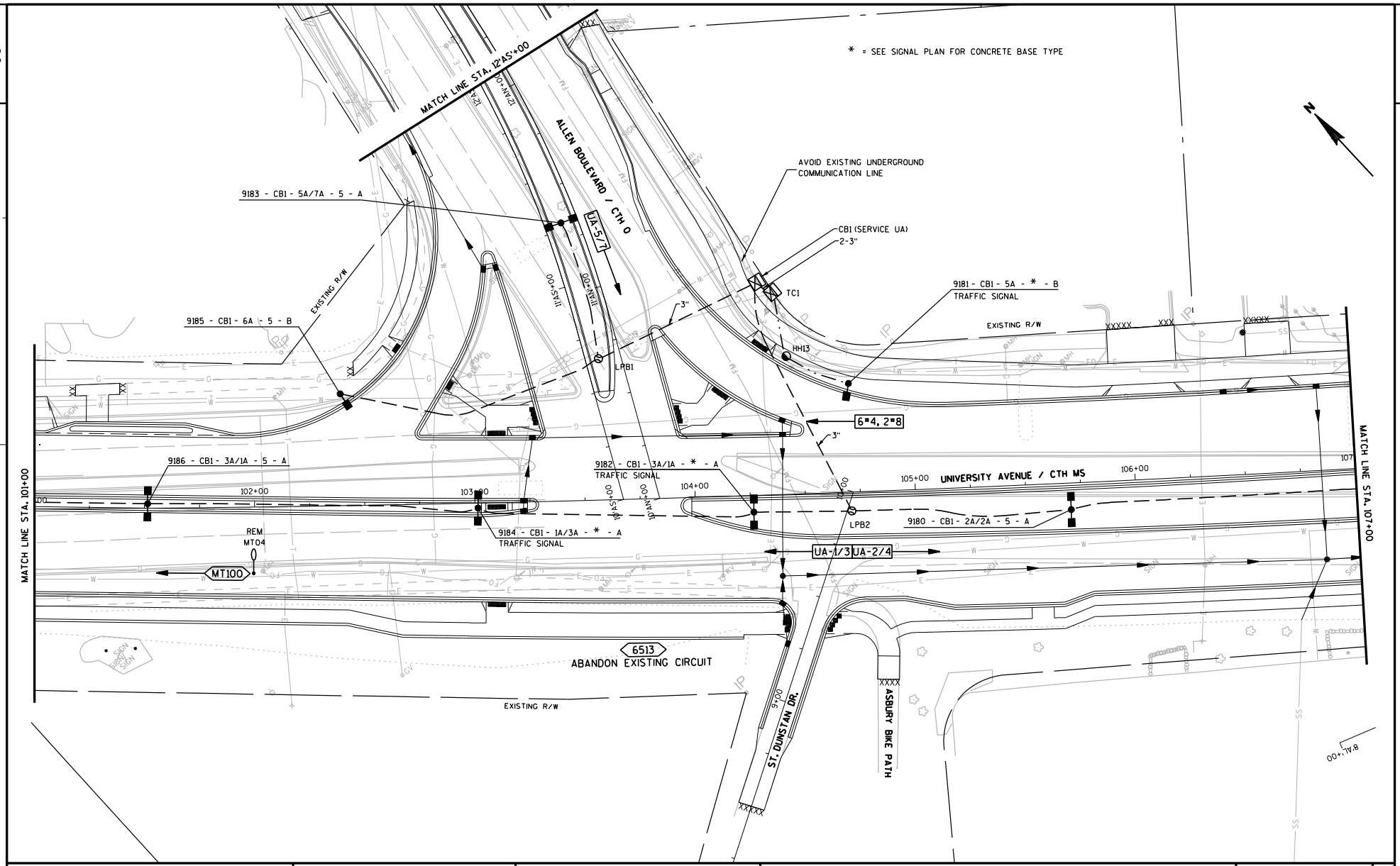
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN DETAILS	SHEET 199 E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 200	E

FILE NAME : g:\madison\md2009035\dgn\023501_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

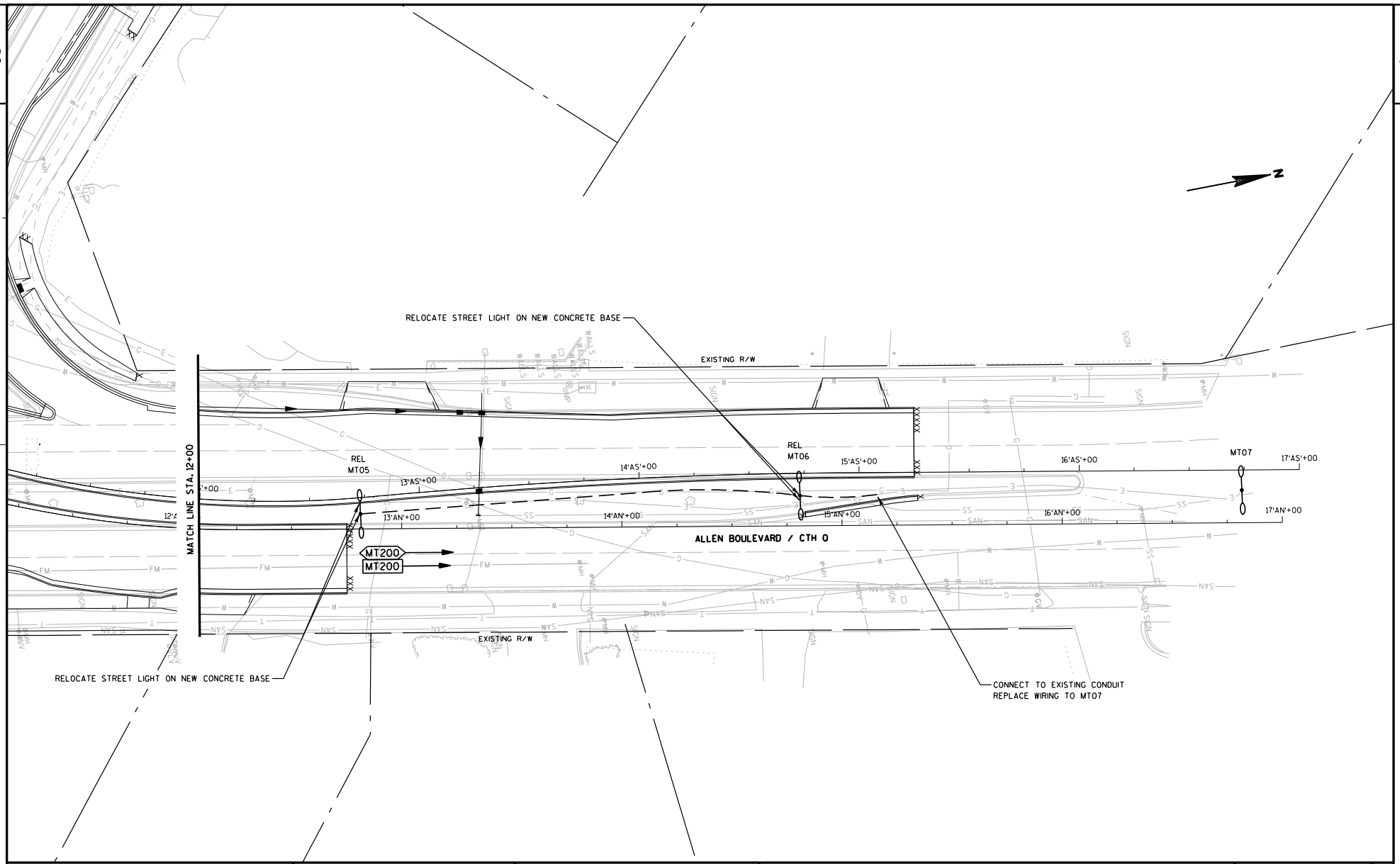
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 201	E

FILE NAME : g:\madison\md2009035\dgn\023502_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

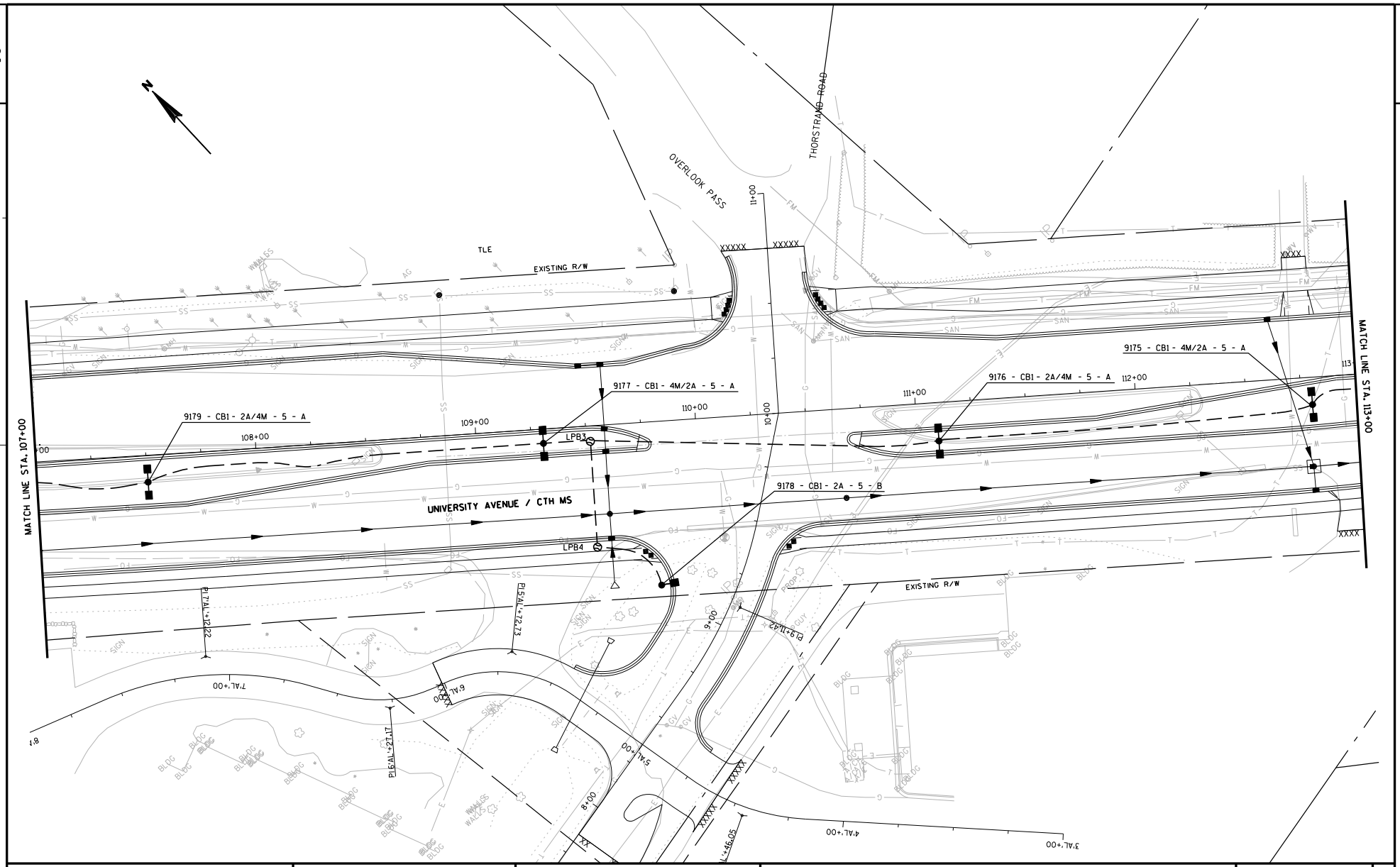
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (ALLEN BOULEVARD)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023503_lp (allen).dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

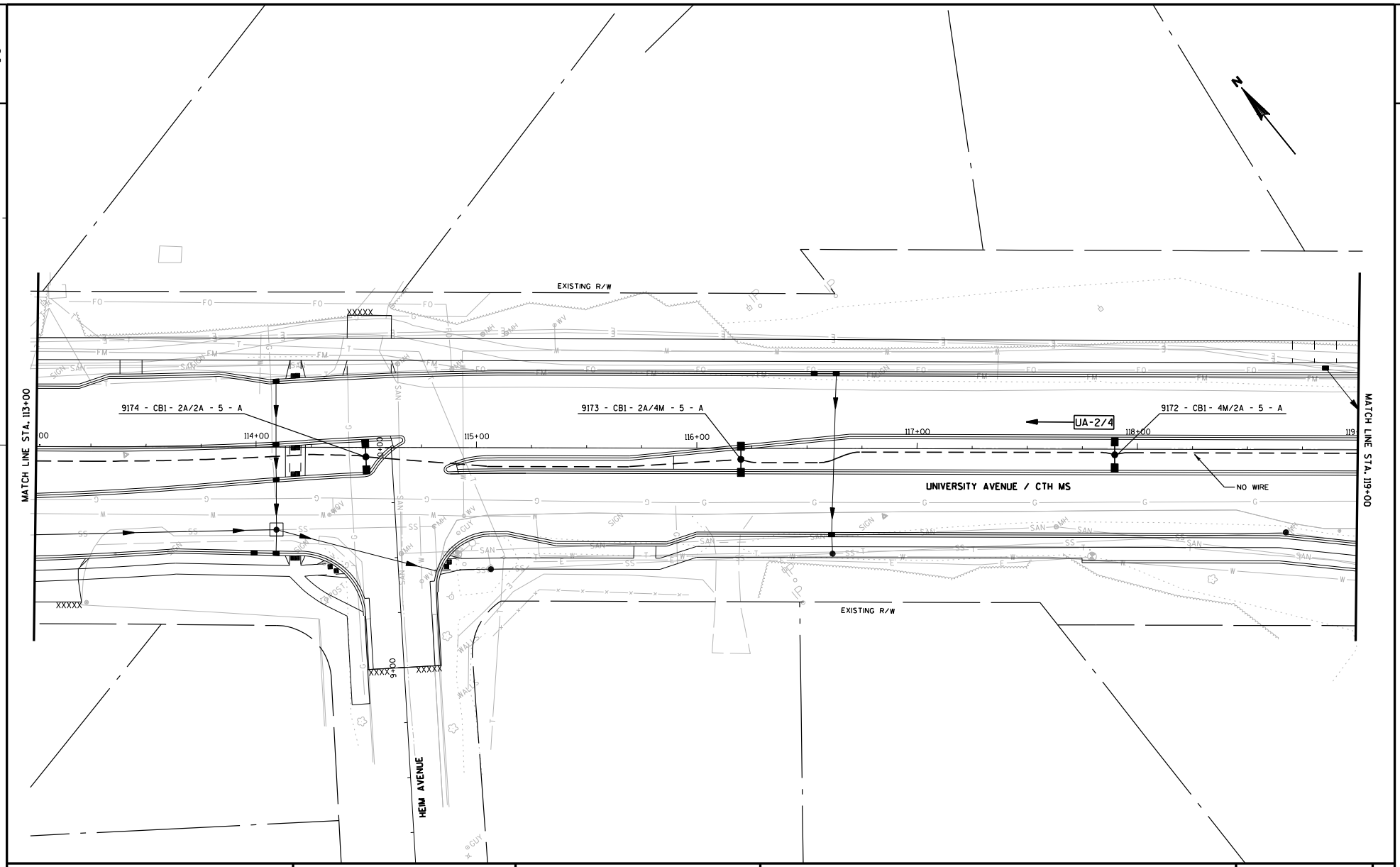
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 203 E

FILE NAME : g:\madison\md2009035\dgn\023504_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

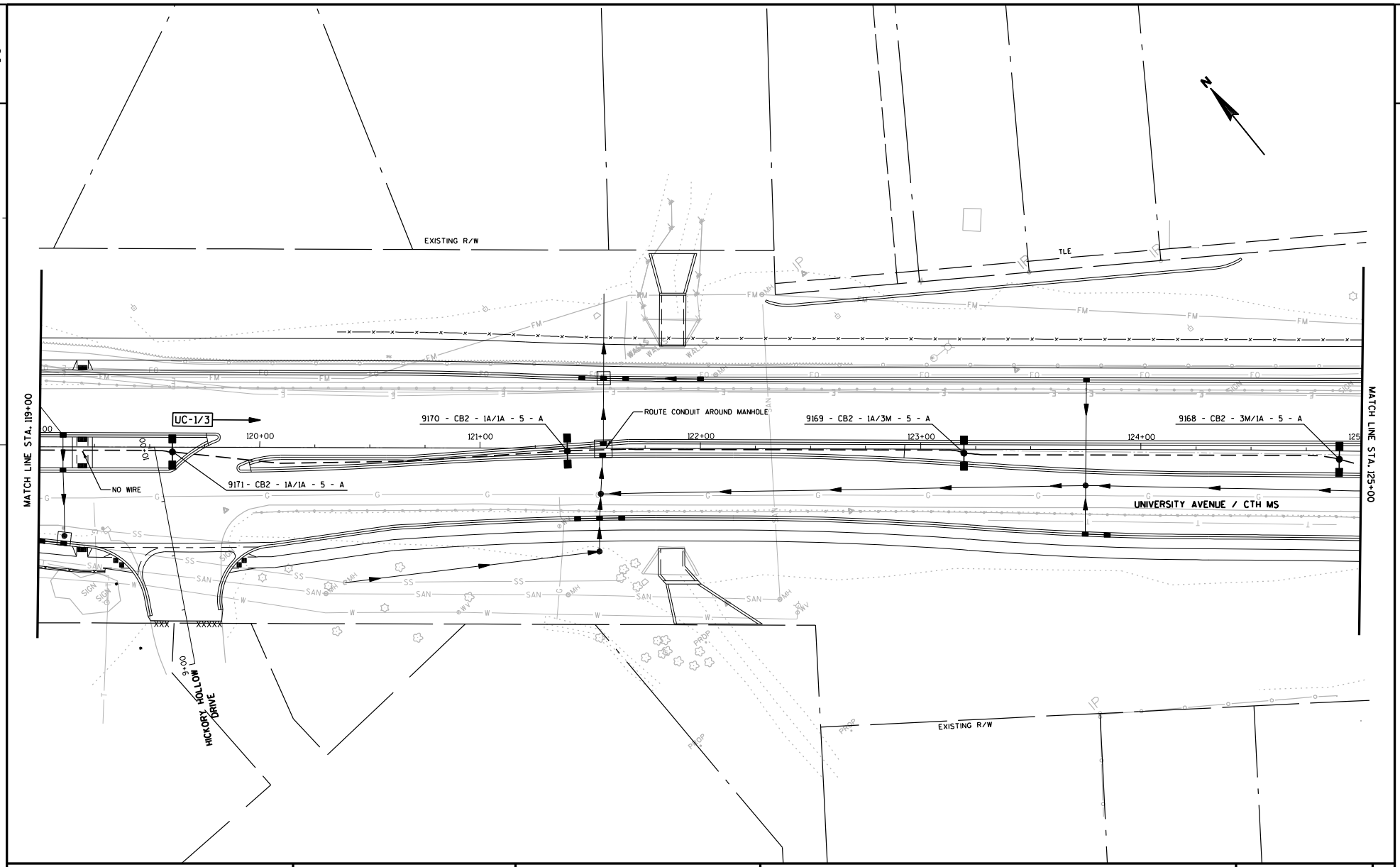
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\023505_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

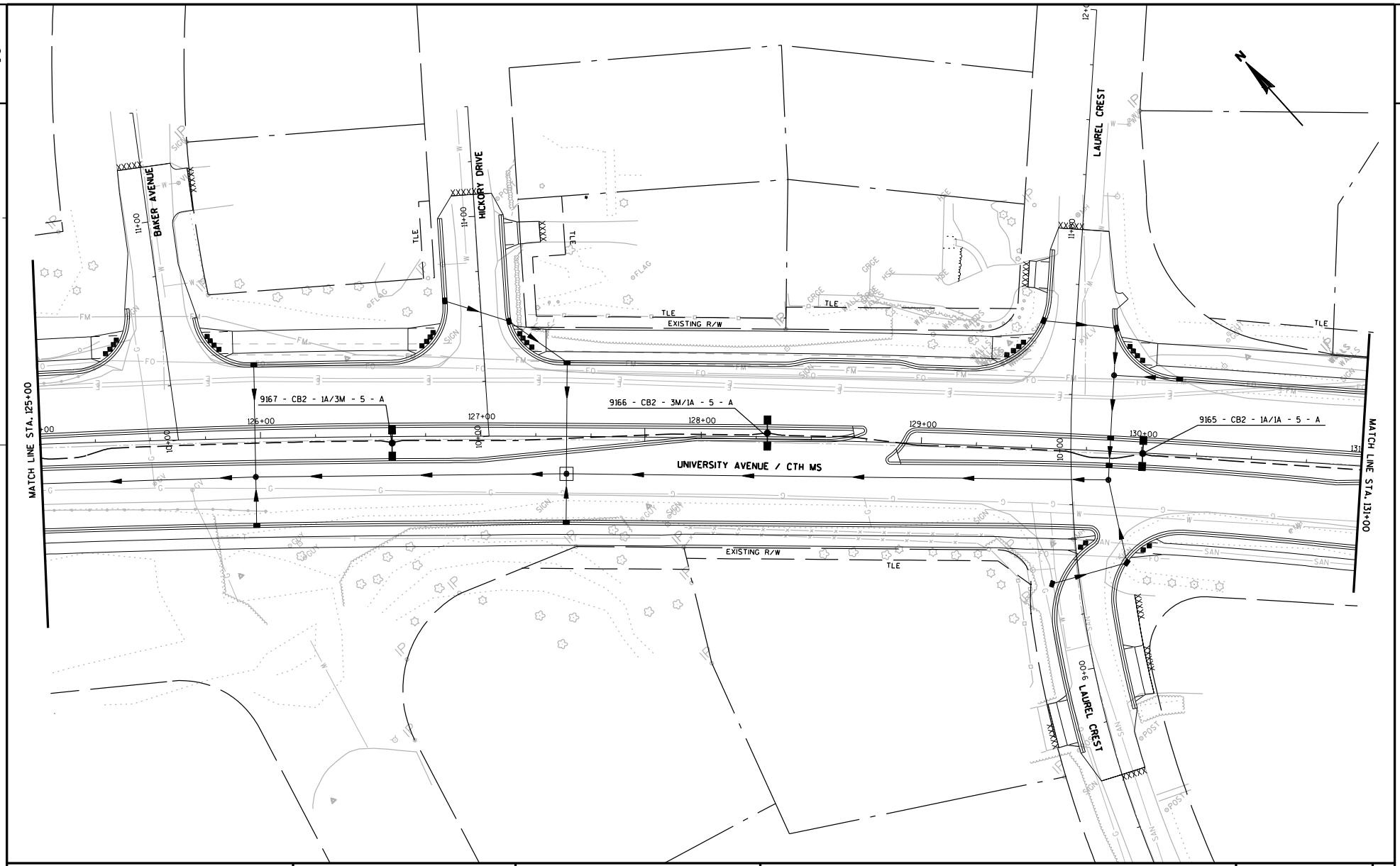
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023506_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

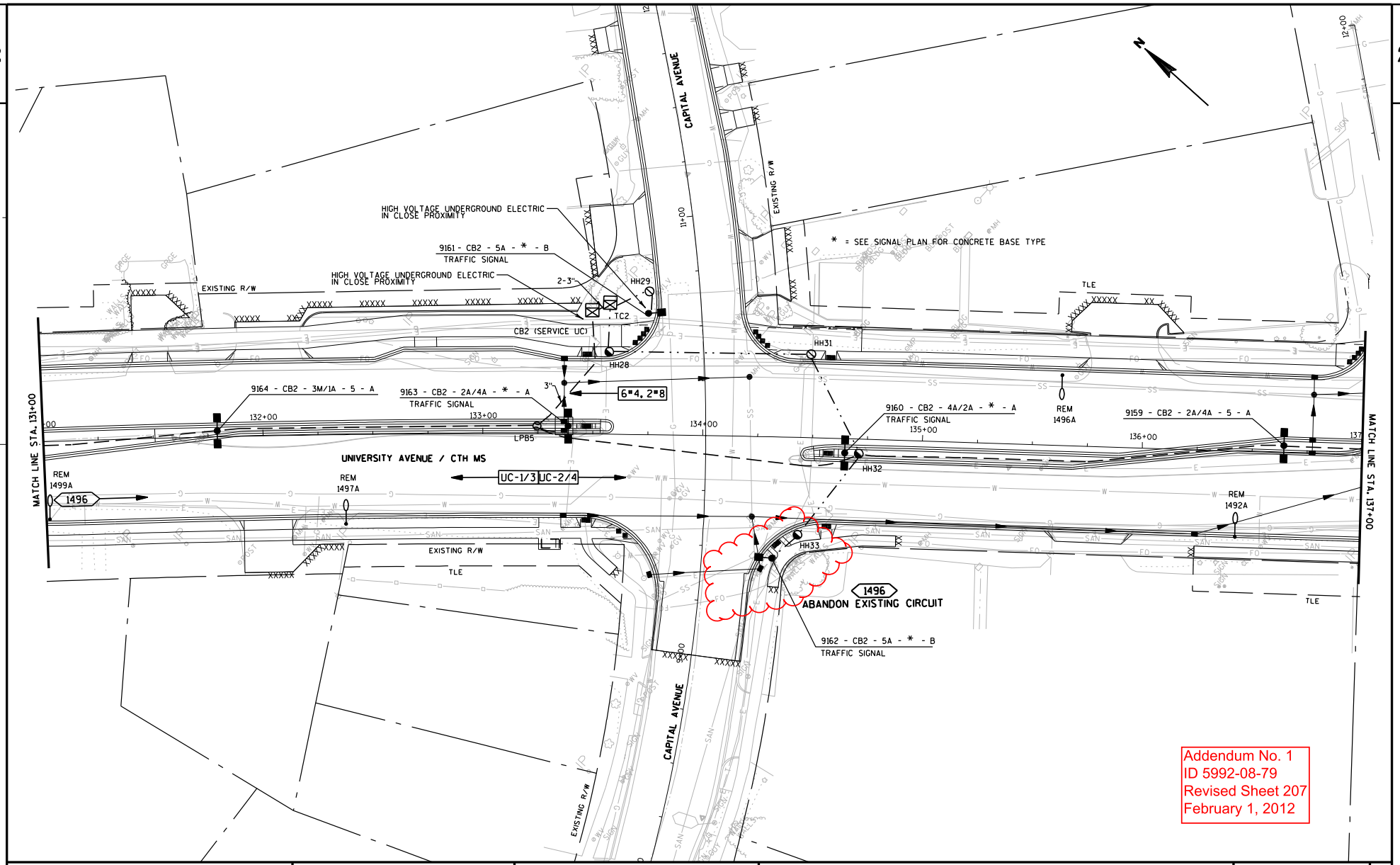
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 206 E

FILE NAME : g:\madison\md2009035\dgn\023507_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

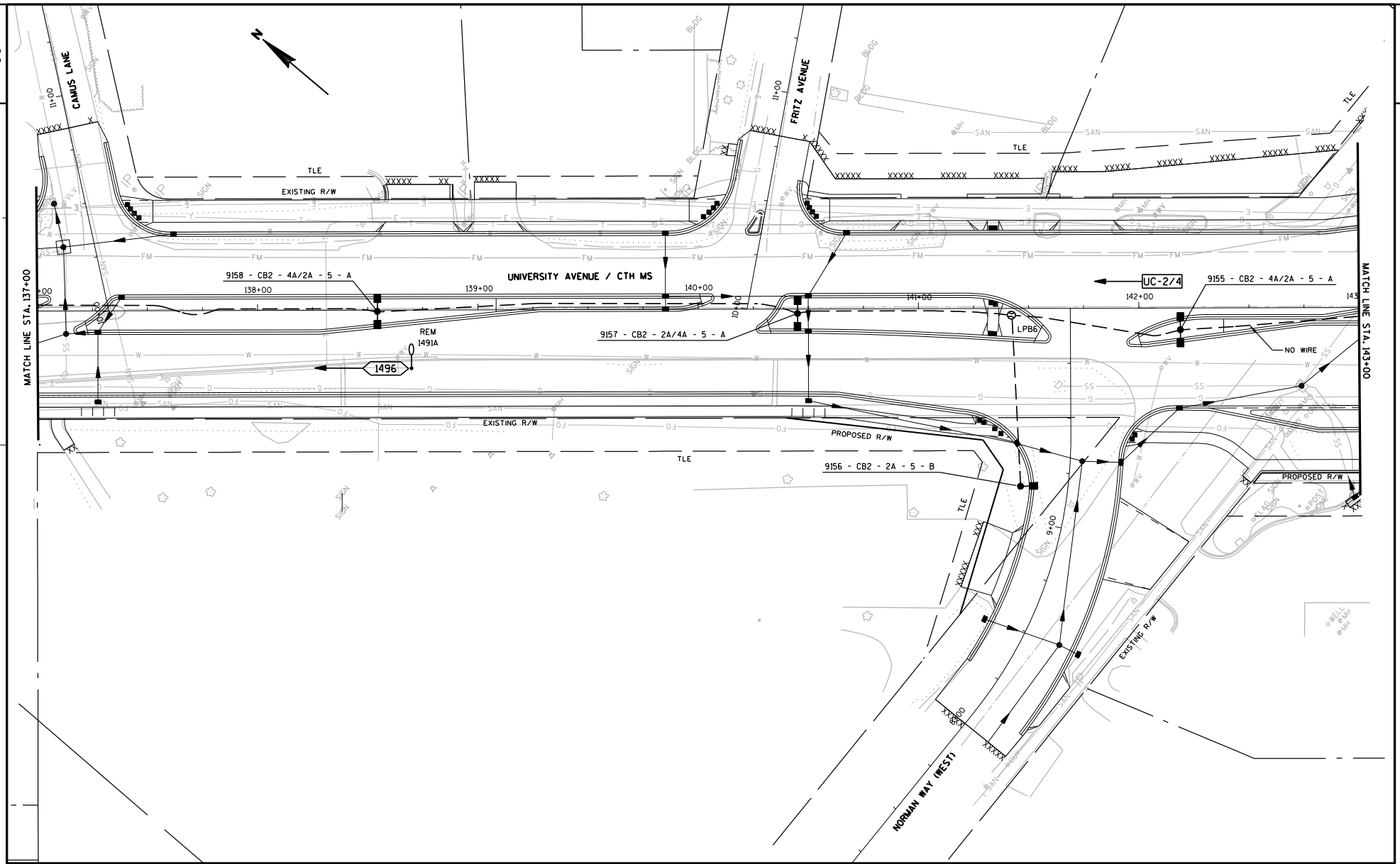
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 207	E

FILE NAME : G:\Madison\MD2009035\DGN\023508_lp.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

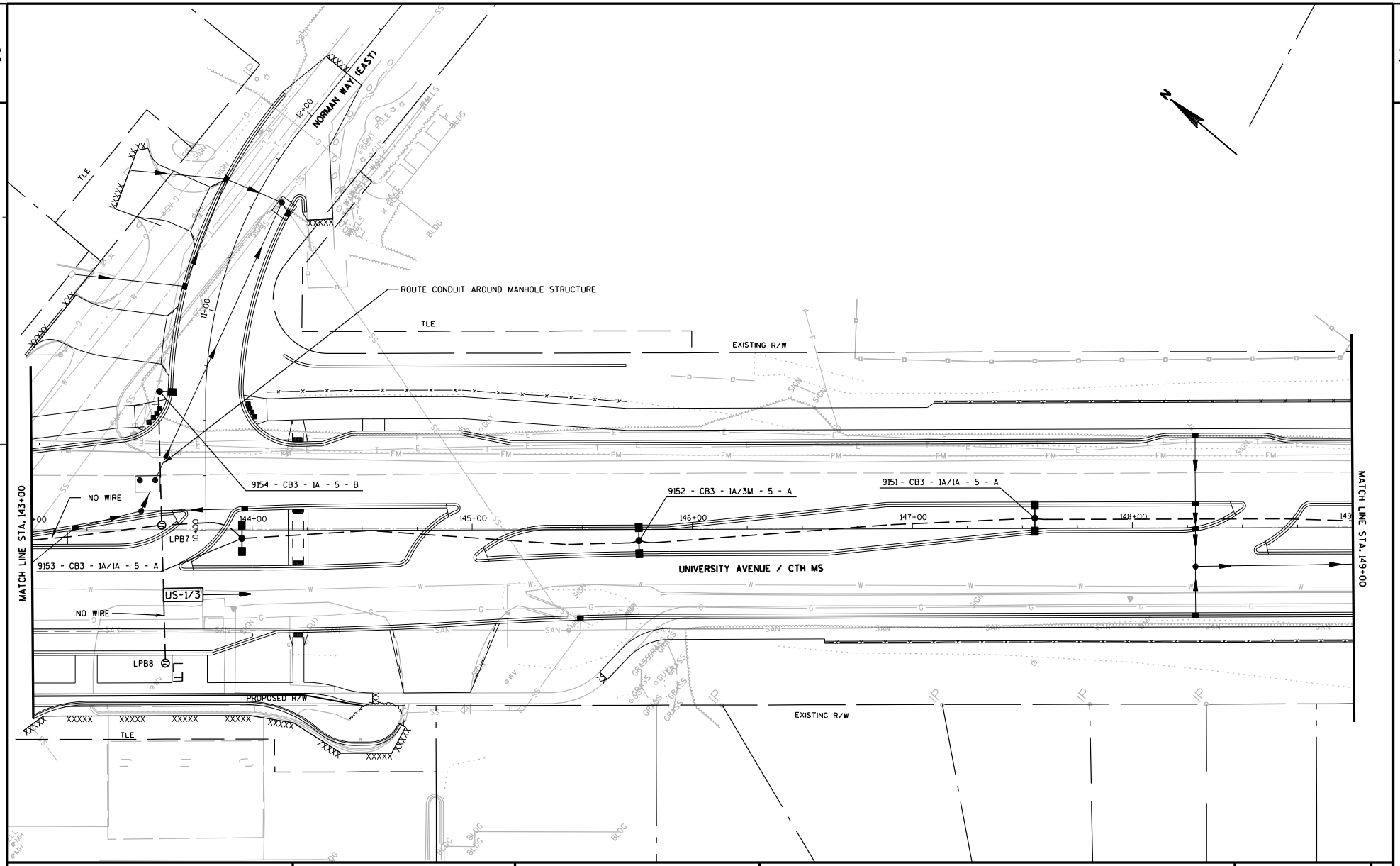
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 208 E

FILE NAME : g:\madison\md2009035\dgn\023510_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

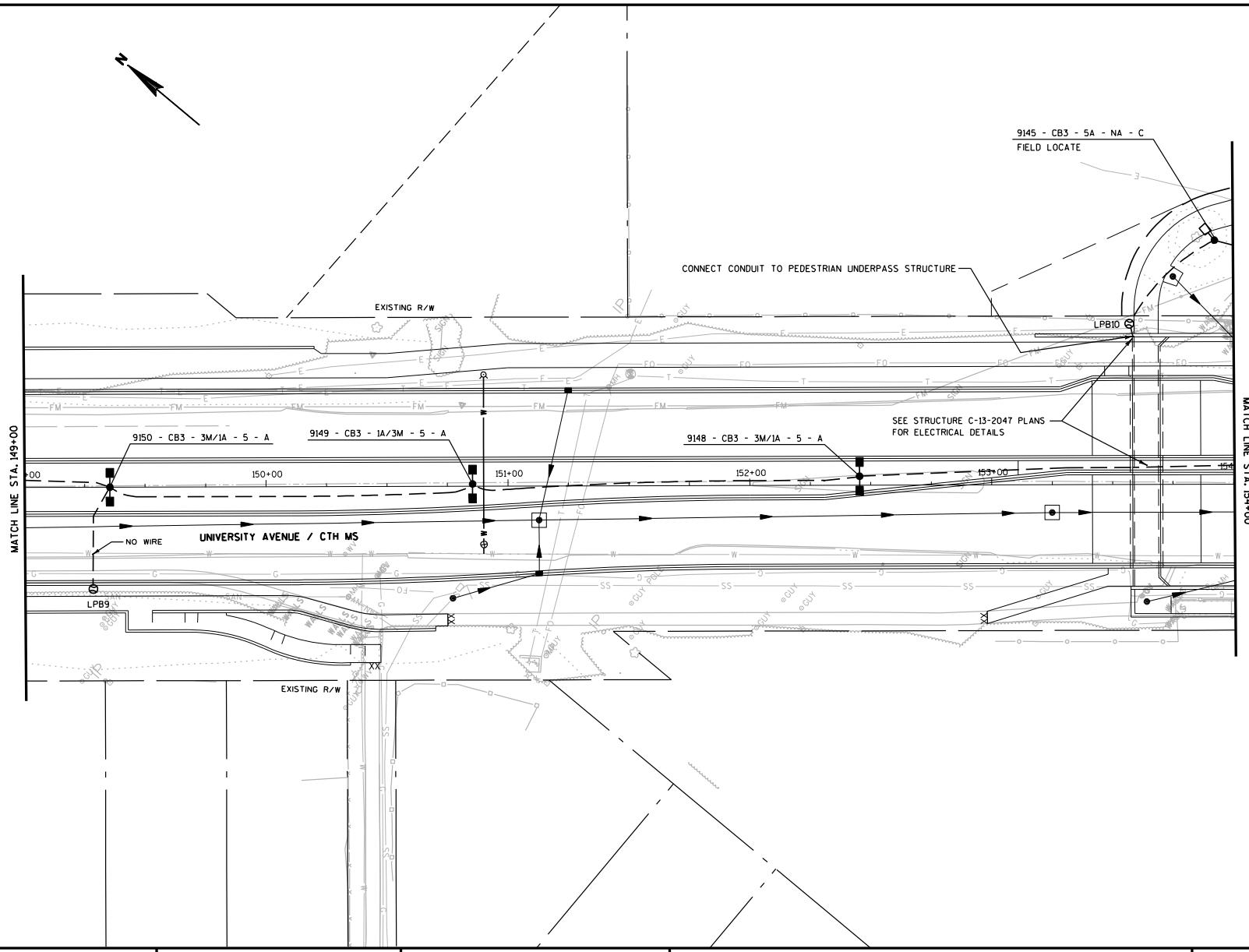
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023511_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

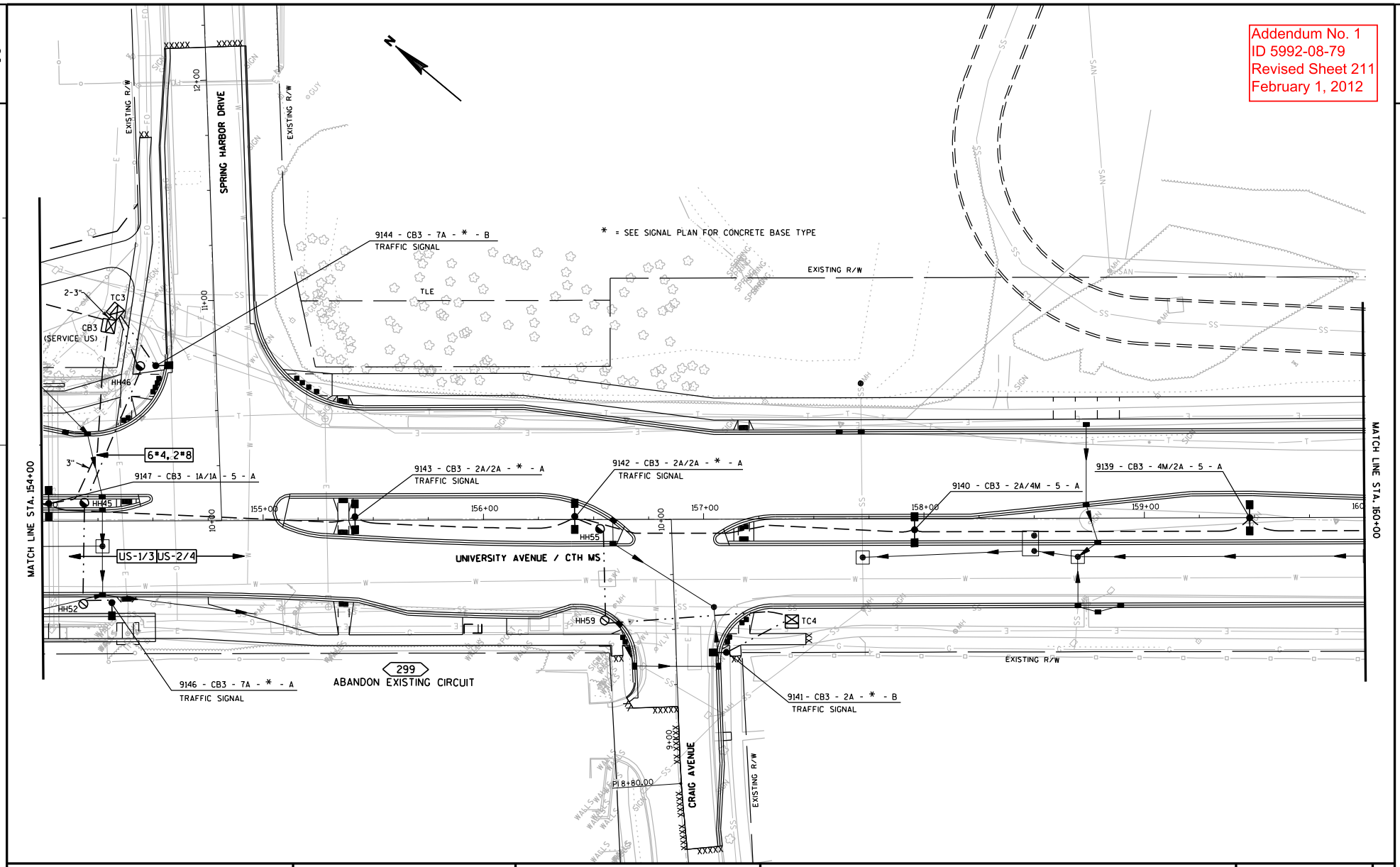


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\023512_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 211
February 1, 2012

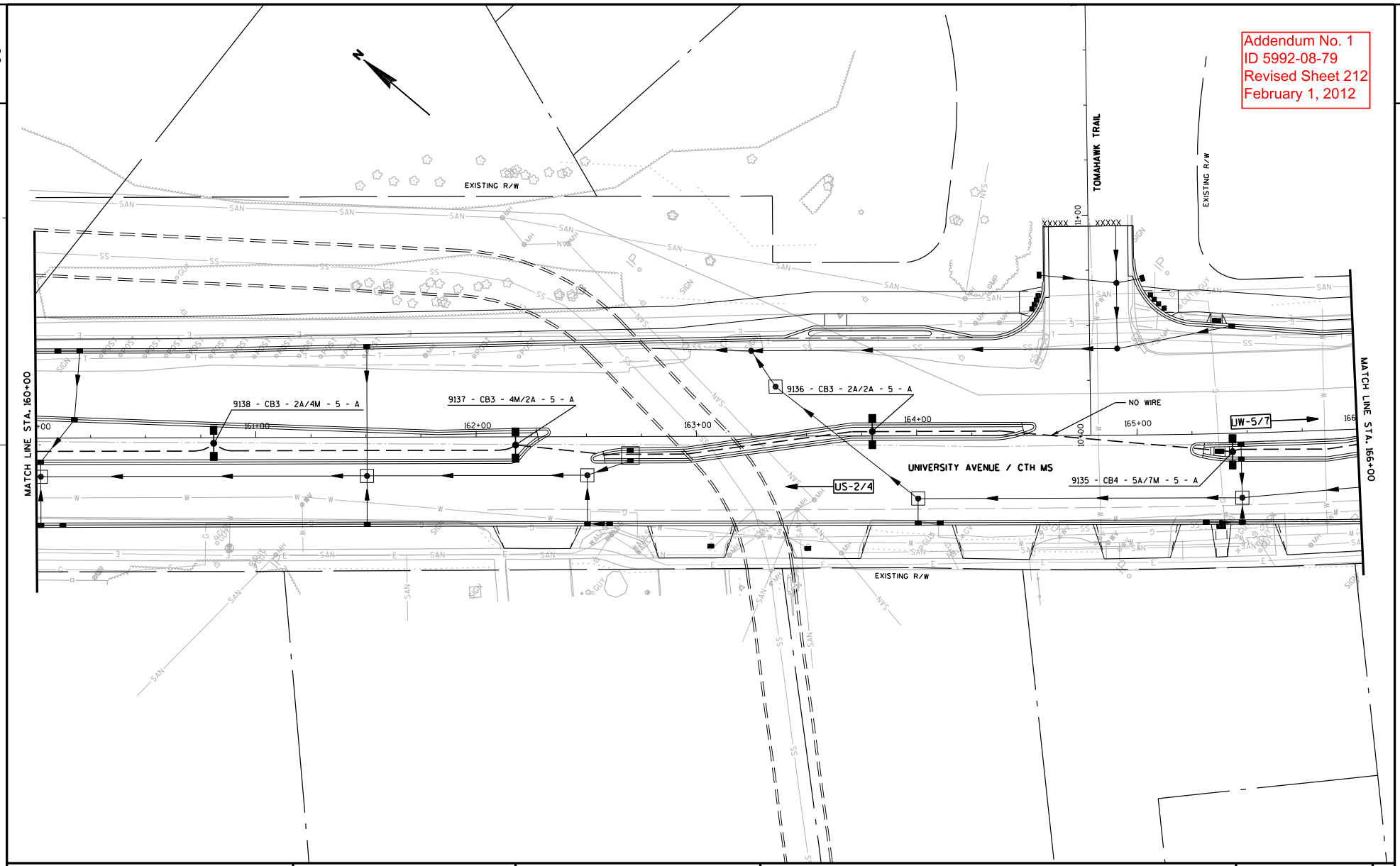


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 211	E

FILE NAME : g:\madison\md2009035\dgn\023513_lp.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 212
February 1, 2012

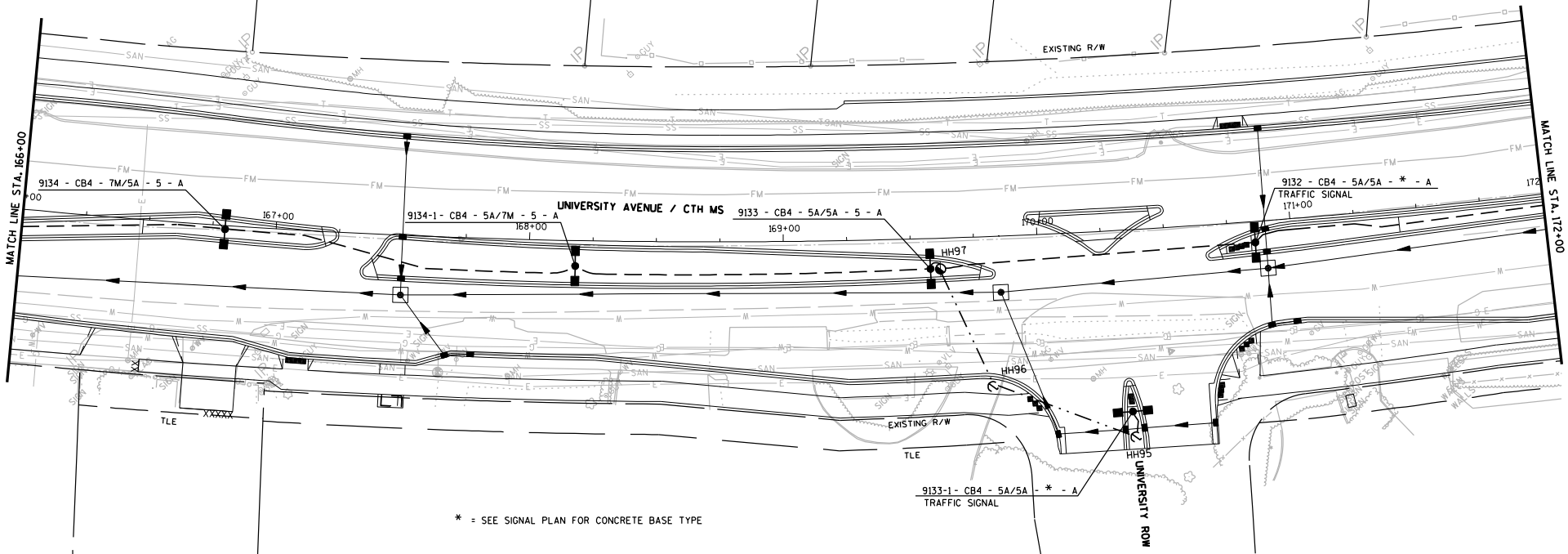


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 212	E

FILE NAME : g:\madison\md2009035\dgn\023514_lp.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

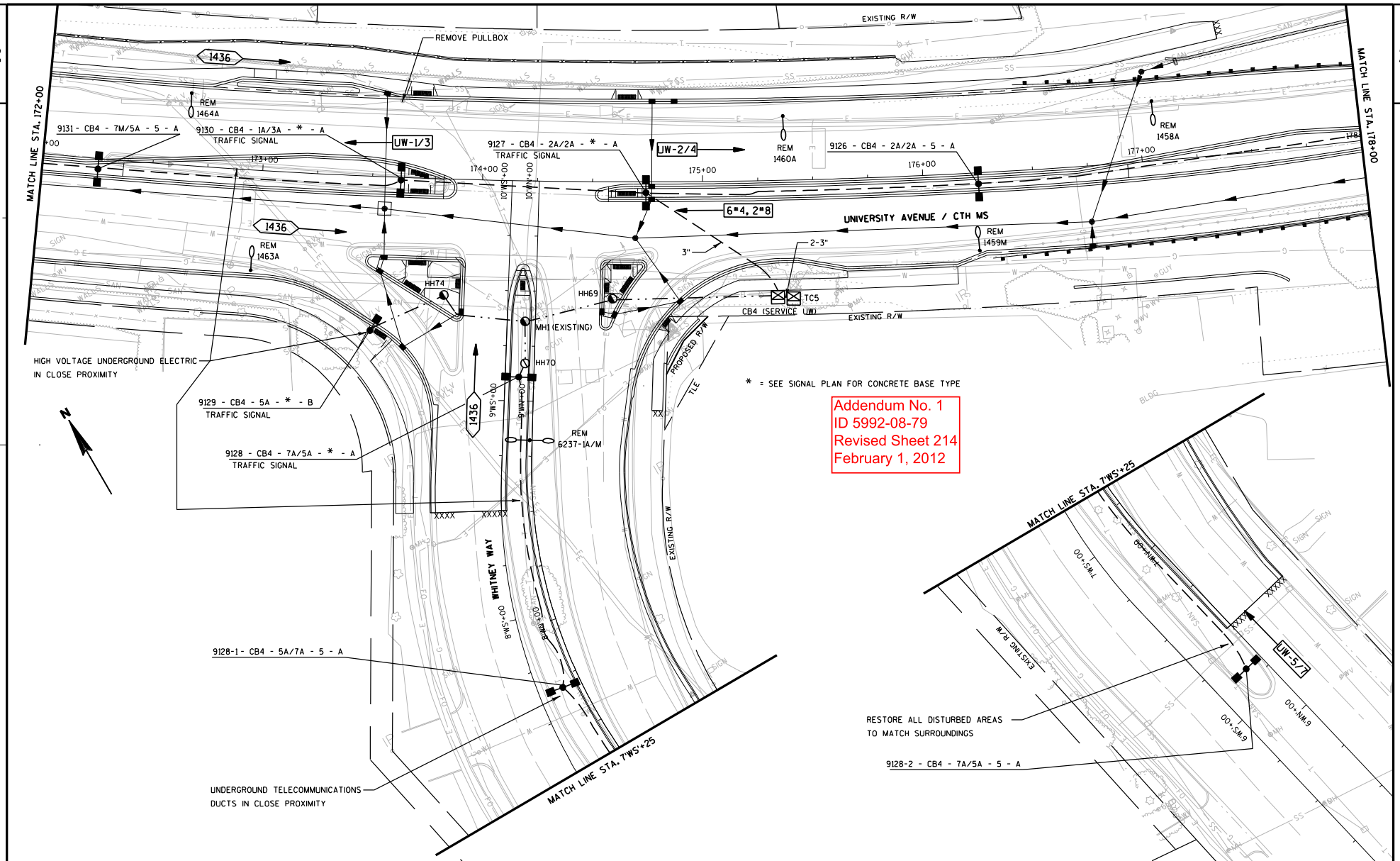
Addendum No. 1
ID 5992-08-79
Revised Sheet 213
February 1, 2012



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 213	E

FILE NAME : G:\Madison\MD2009035\DGN\023515_lp.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

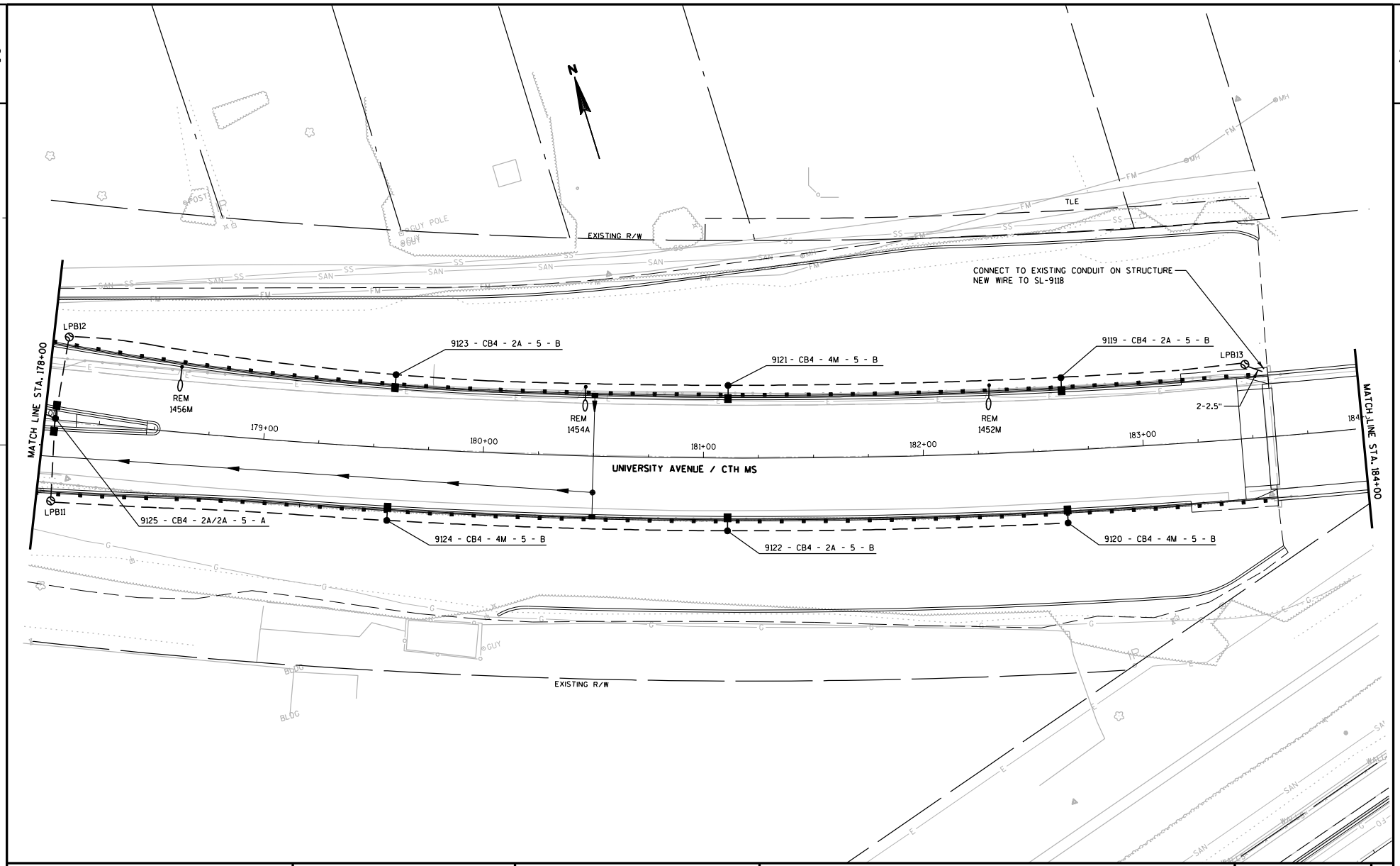
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 214	E

FILE NAME : g:\madison\md2009035\dgn\023516_lp.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

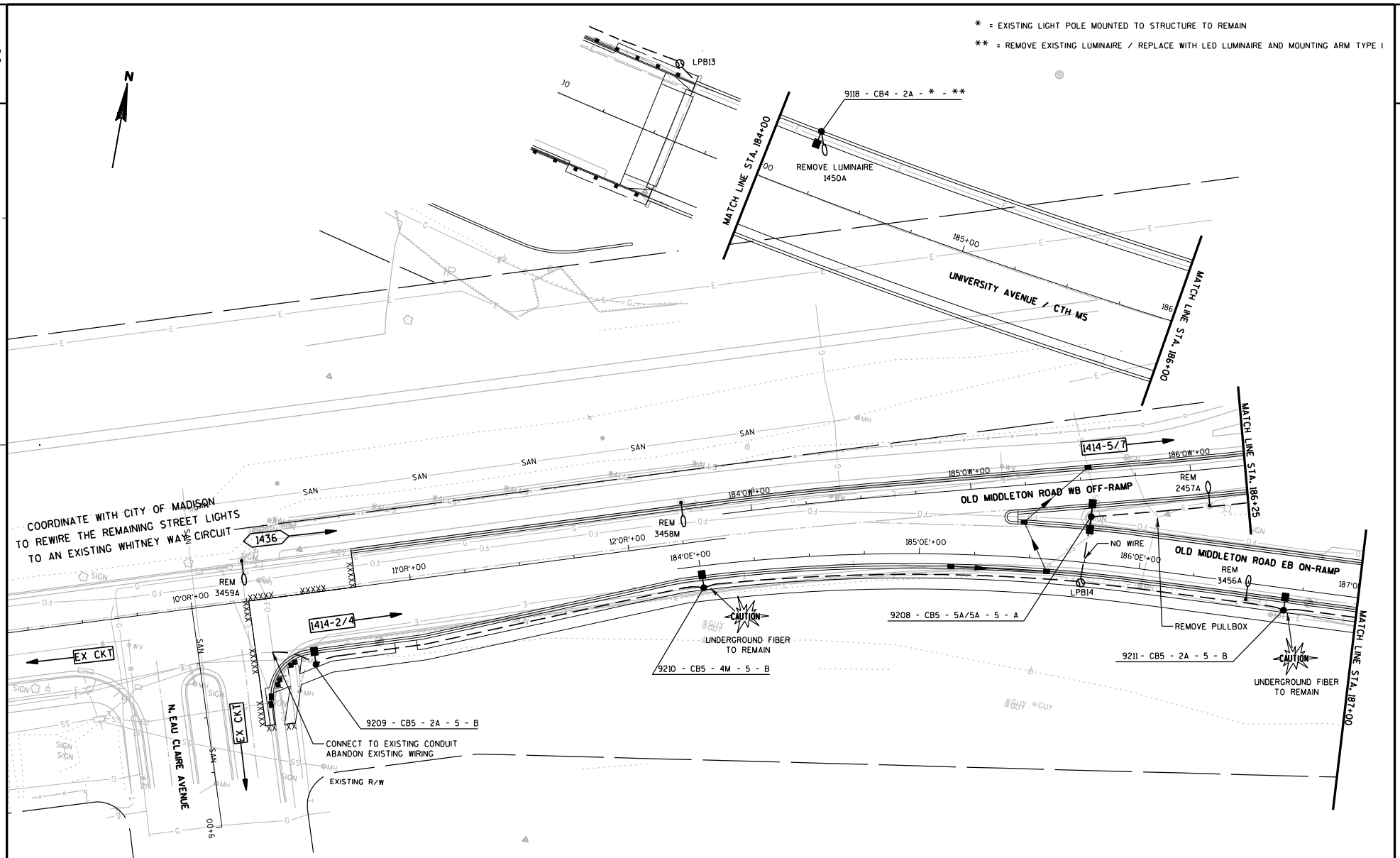
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 215 E

FILE NAME : g:\madison\md2009035\dgn\023517_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



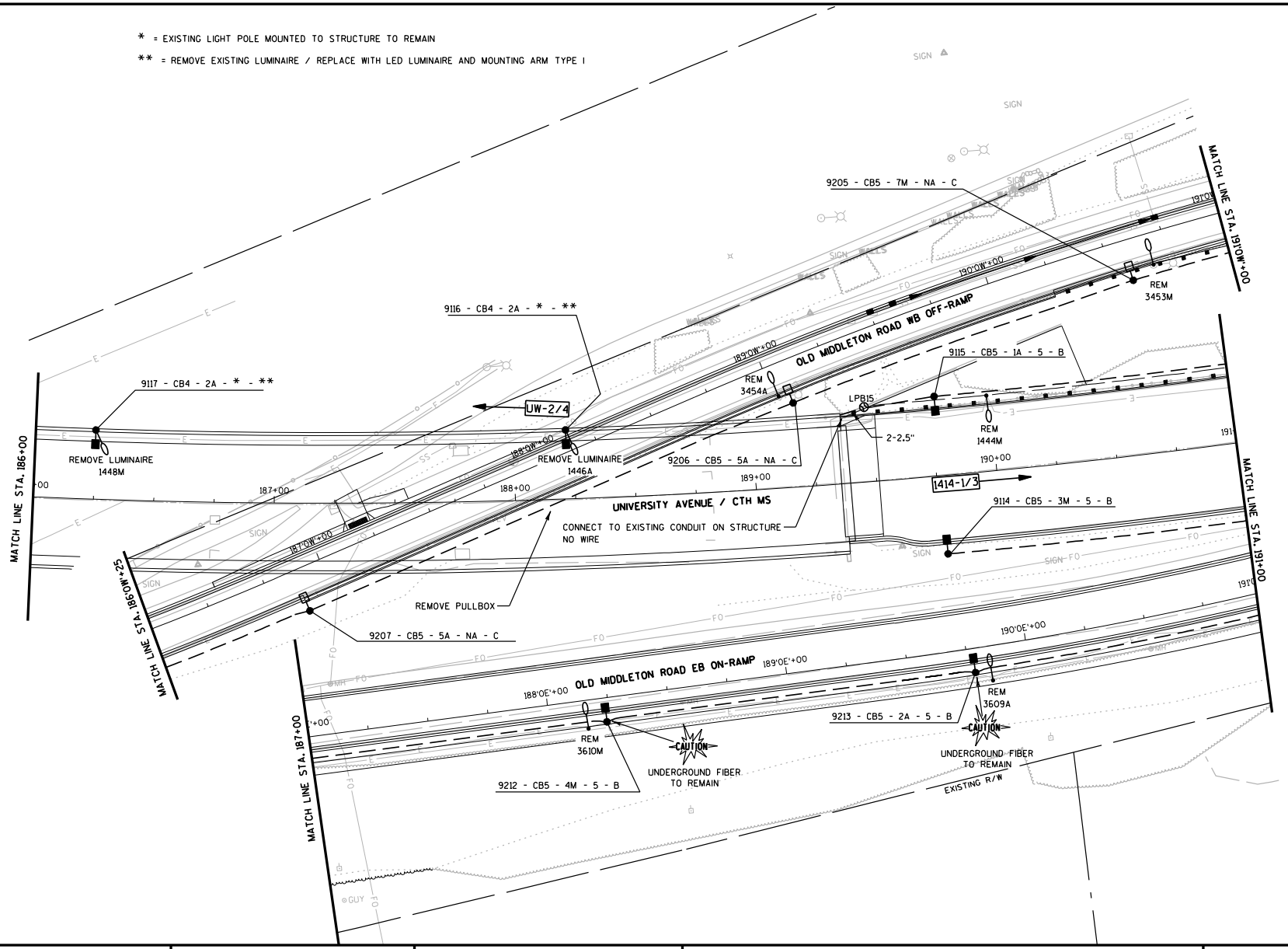
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 216 E

FILE NAME : g:\madison\md2009035\dgn\023518_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

* = EXISTING LIGHT POLE MOUNTED TO STRUCTURE TO REMAIN

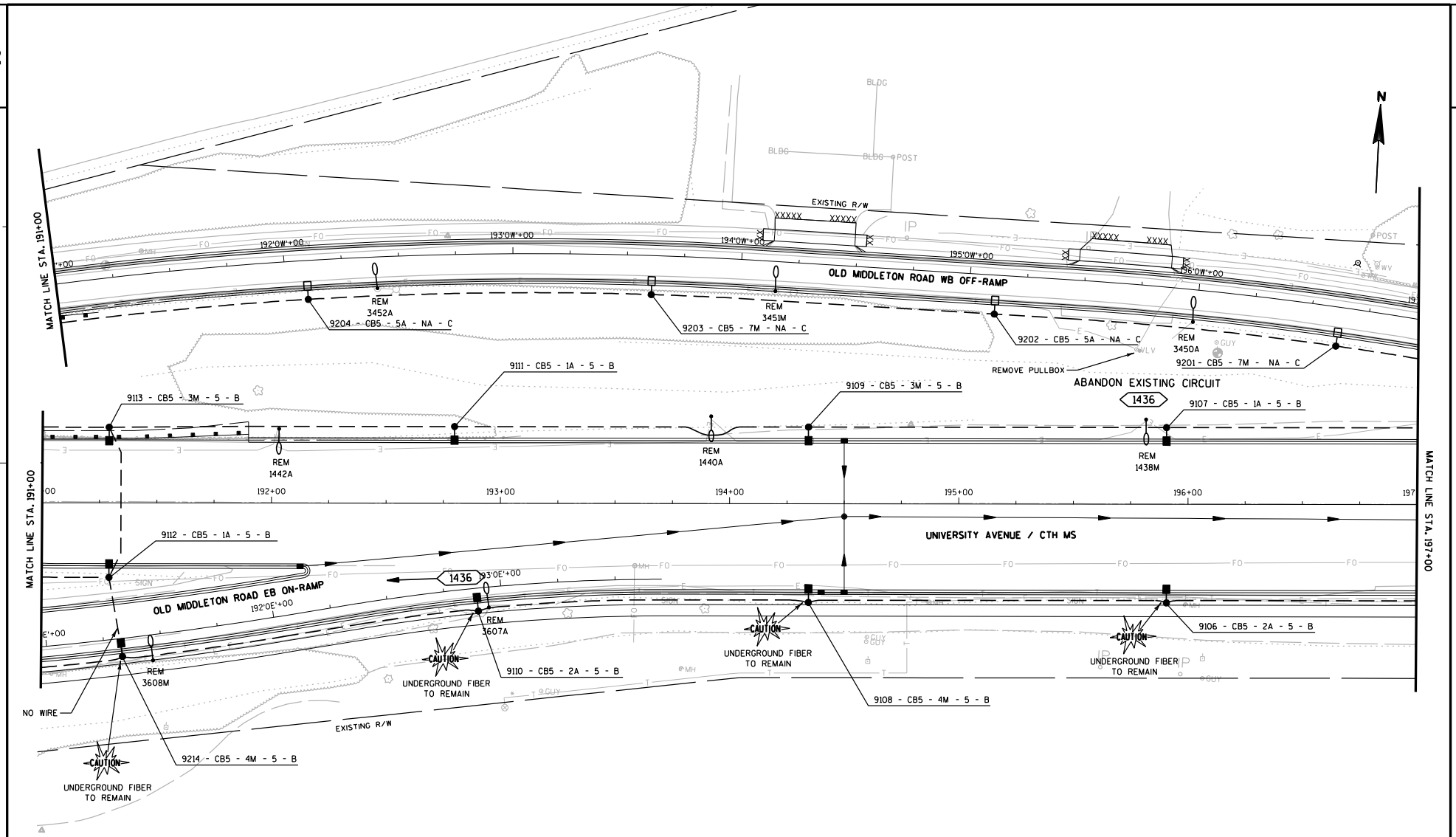
** = REMOVE EXISTING LUMINAIRE / REPLACE WITH LED LUMINAIRE AND MOUNTING ARM TYPE I



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 217 E

FILE NAME : g:\madison\md2009035\dgn\023519_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

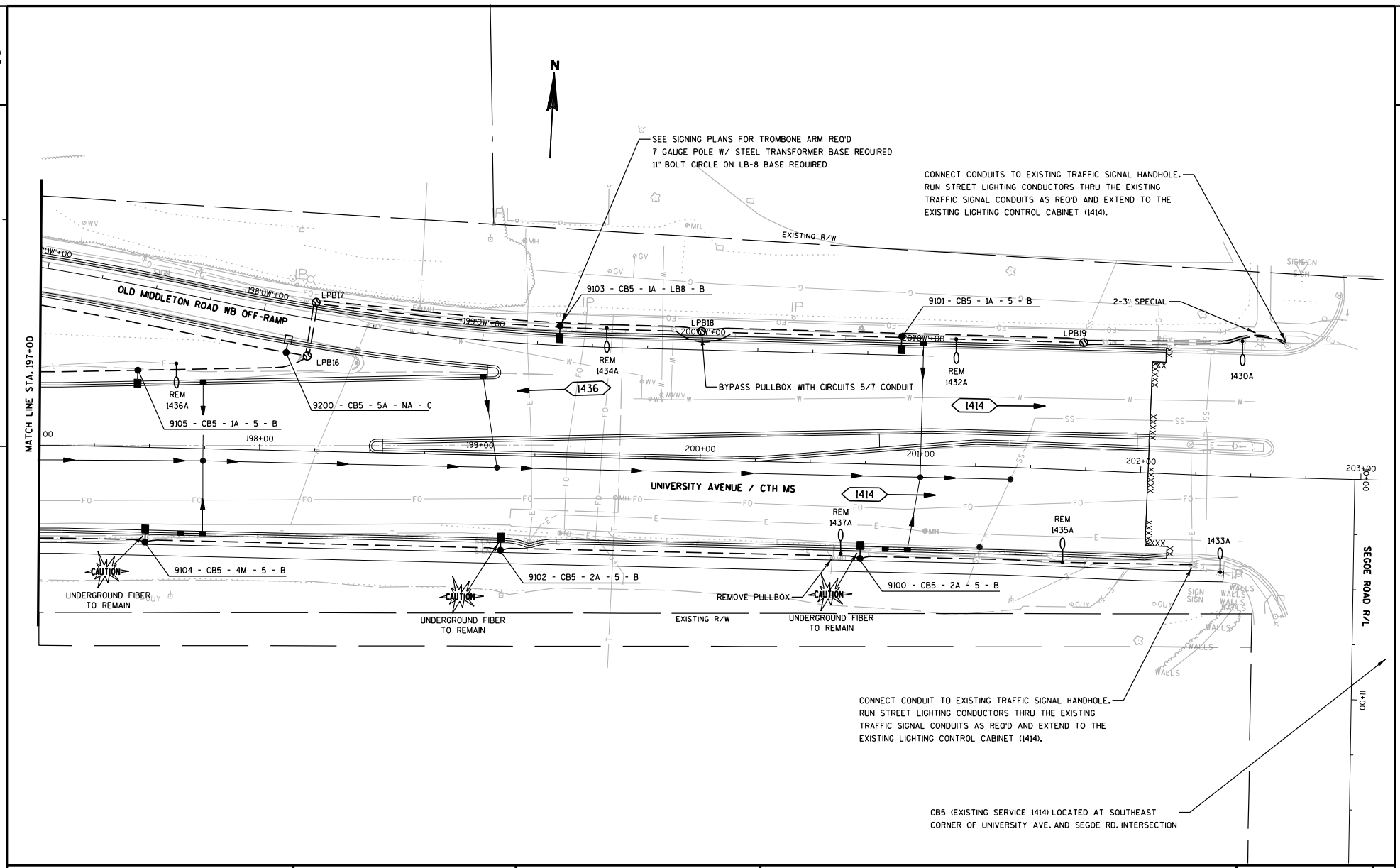
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 218 E

FILE NAME : g:\madison\md2009035\dgn\023520_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

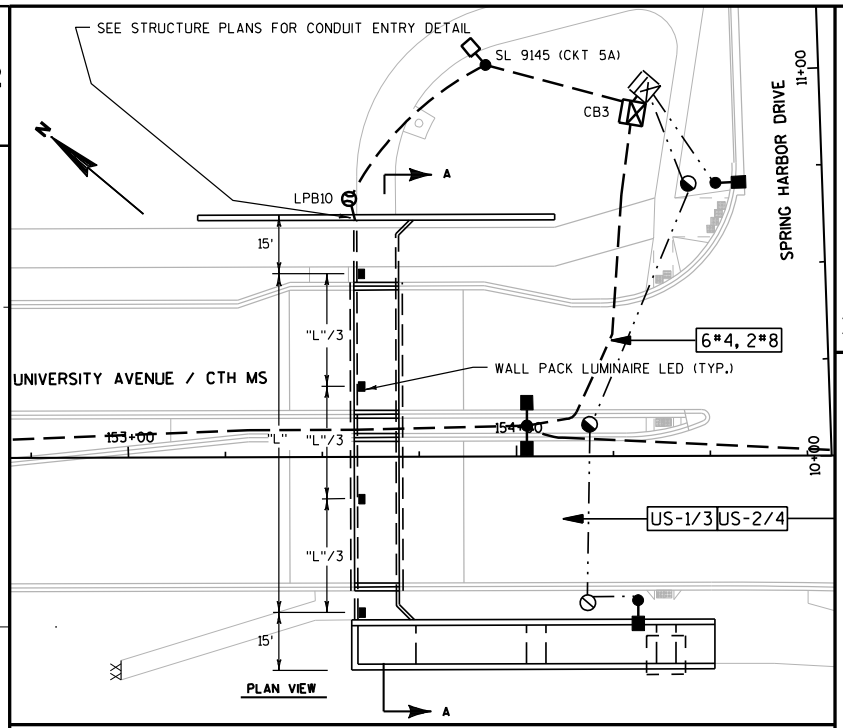
WISDOT/CADDS SHEET 42



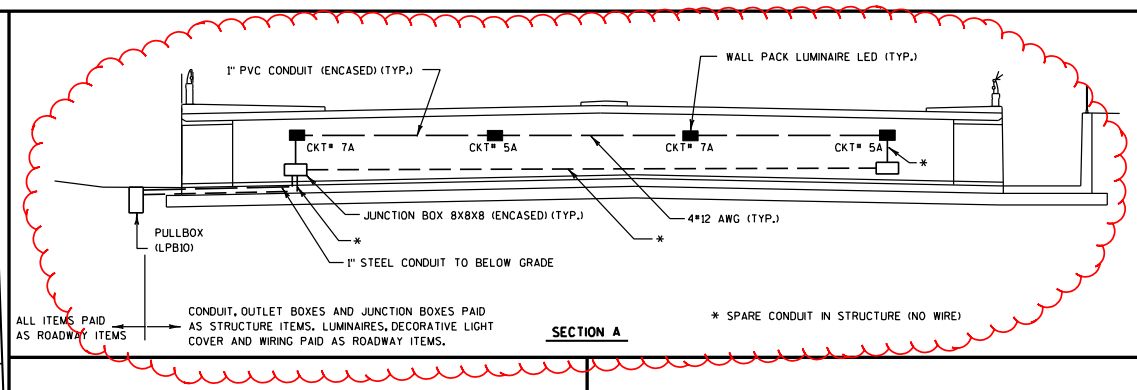
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	LIGHTING PLAN (UNIVERSITY AVENUE)	SHEET 219 E

FILE NAME : G:\Madison\MD2009035\DGN\023521_lp.dgn PLOT DATE : 12/21/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

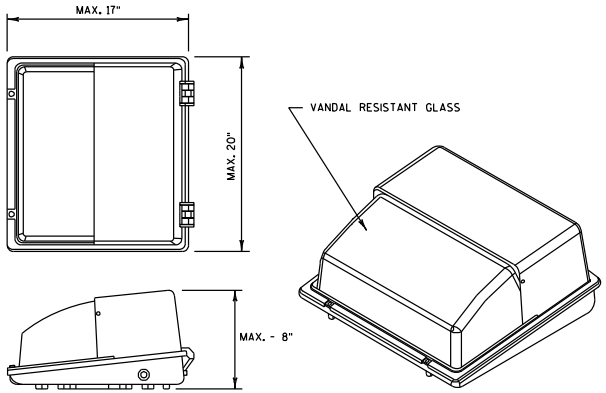
WISDOT/CADDS SHEET 42



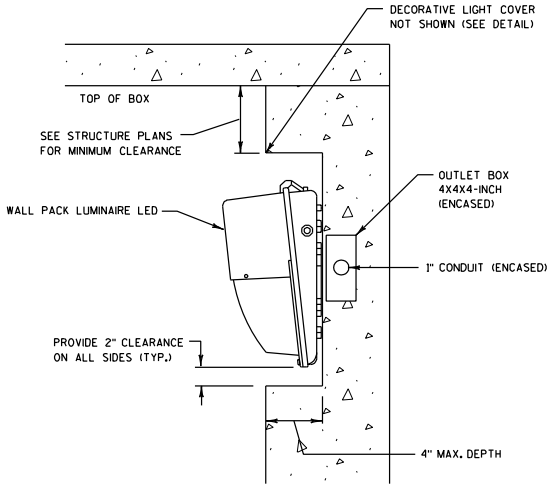
PLAN VIEW



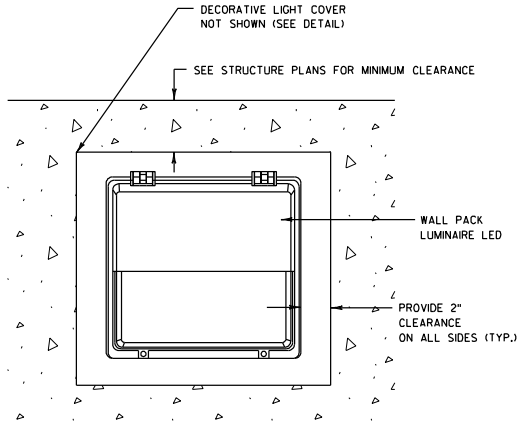
SECTION A



WALL PACK LUMINAIRE LED



CROSS SECTION



FACING VIEW

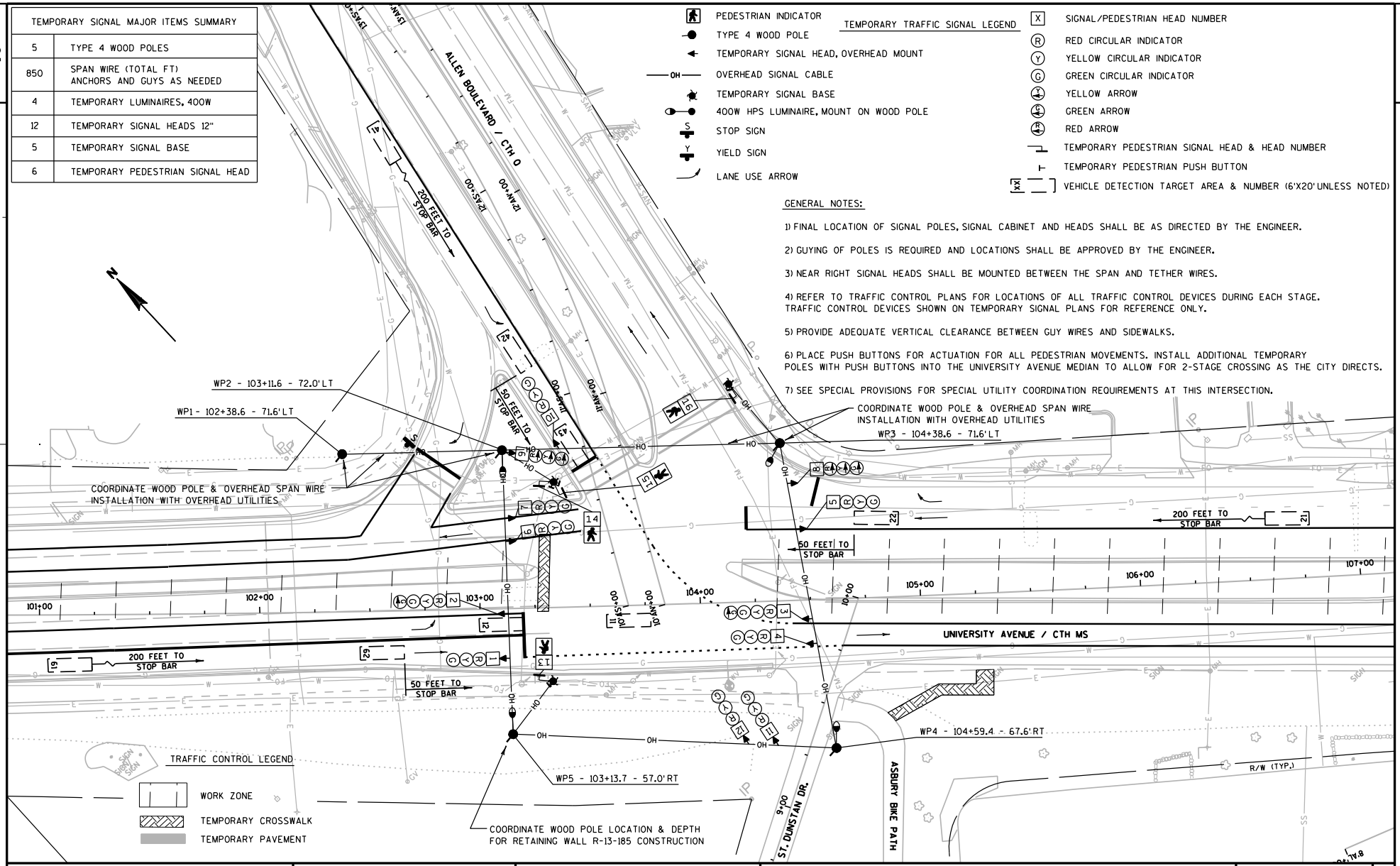
Addendum No. 1
ID 5992-08-79
Revised Sheet 220
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PEDESTRIAN TUNNEL LIGHTING	SHEET 220	E

FILE NAME : G:\Madison\MD2009035\DGN\023550_lp.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

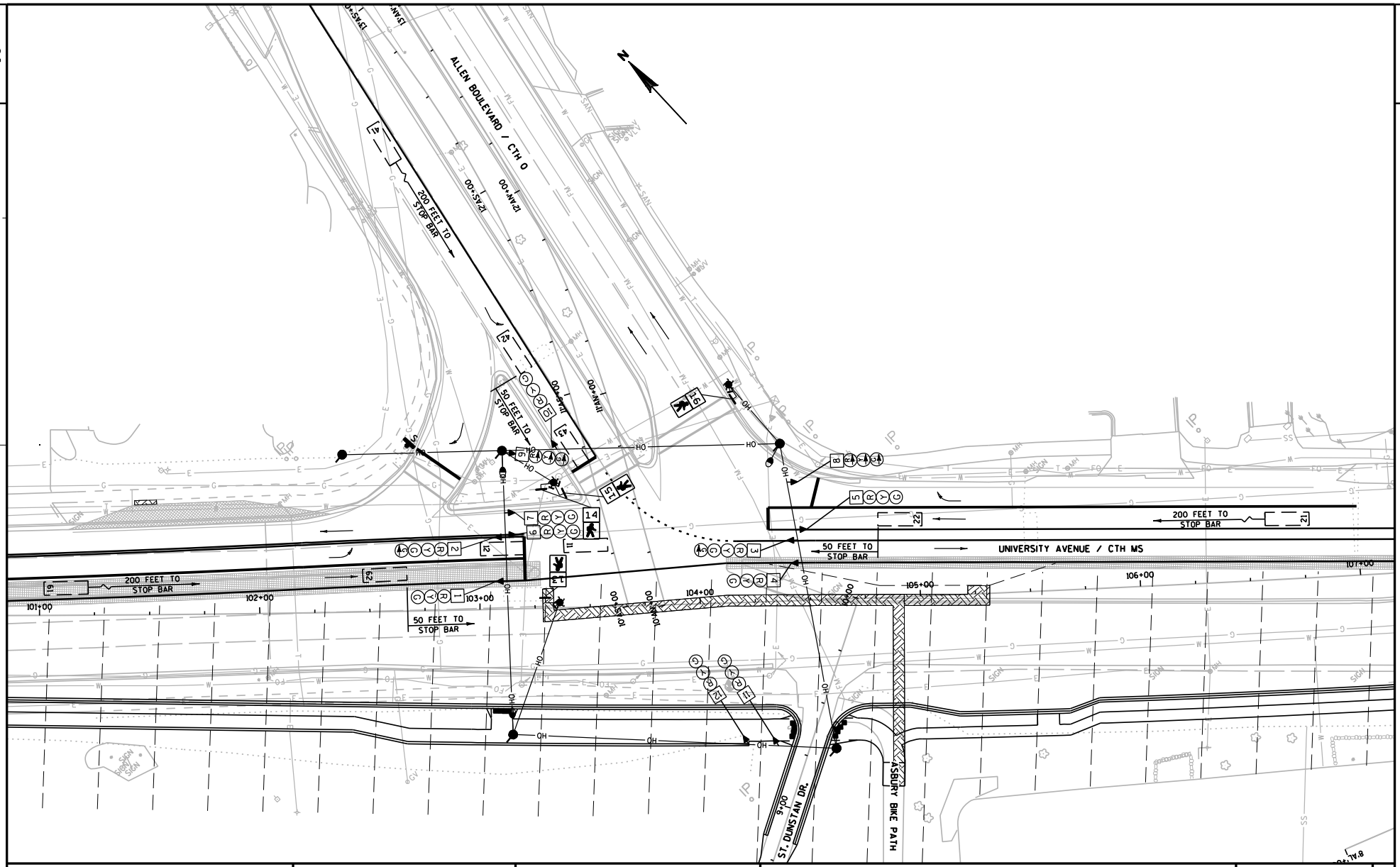
TEMPORARY SIGNAL MAJOR ITEMS SUMMARY	
5	TYPE 4 WOOD POLES
850	SPAN WIRE (TOTAL FT) ANCHORS AND GUYS AS NEEDED
4	TEMPORARY LUMINAIRES, 400W
12	TEMPORARY SIGNAL HEADS 12"
5	TEMPORARY SIGNAL BASE
6	TEMPORARY PEDESTRIAN SIGNAL HEAD



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 1	SHEET 221 E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024001_tsp_stage 1 (allen).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

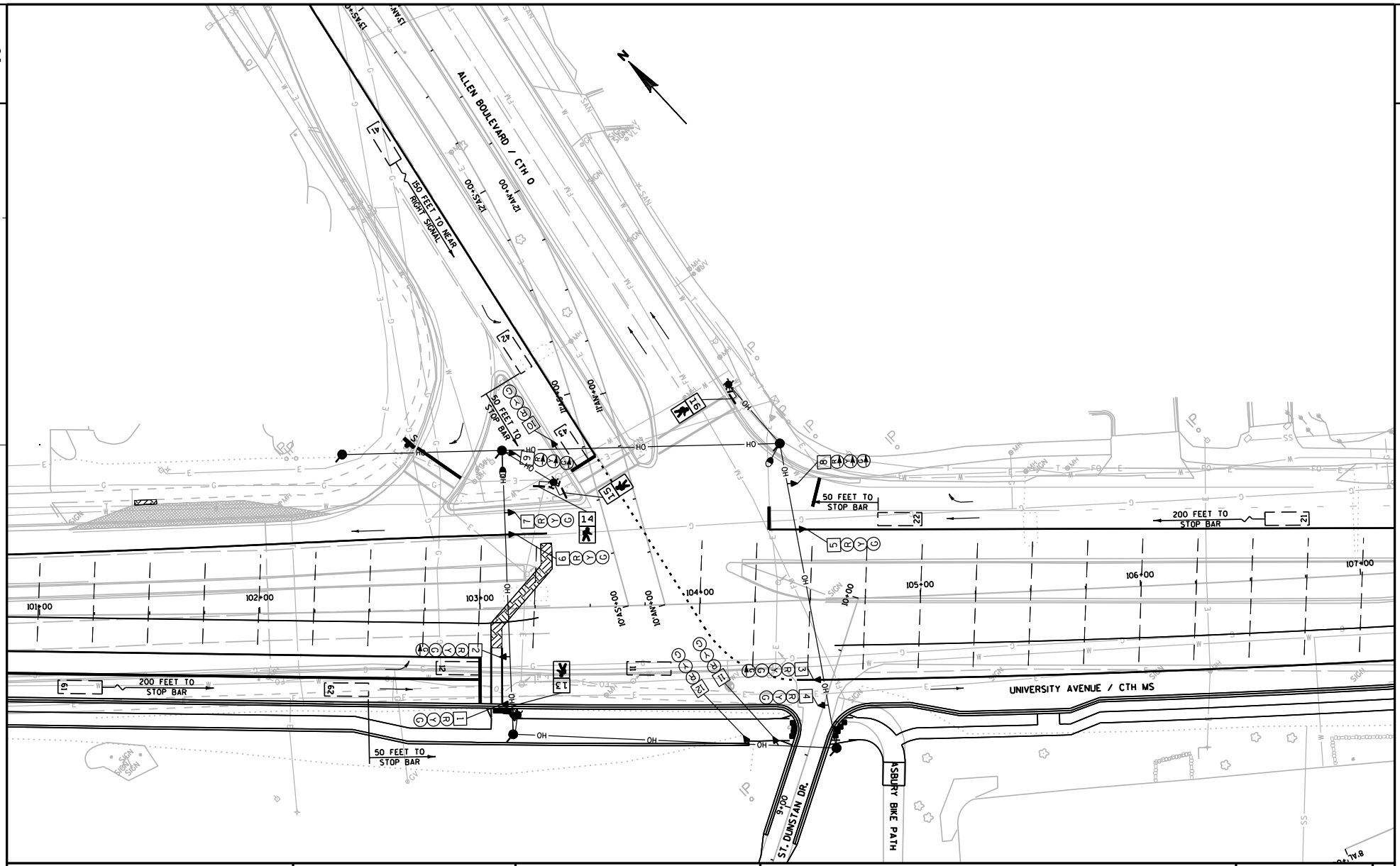
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 2A & 2B	SHEET E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024001_tsp_stage 2 (allen).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

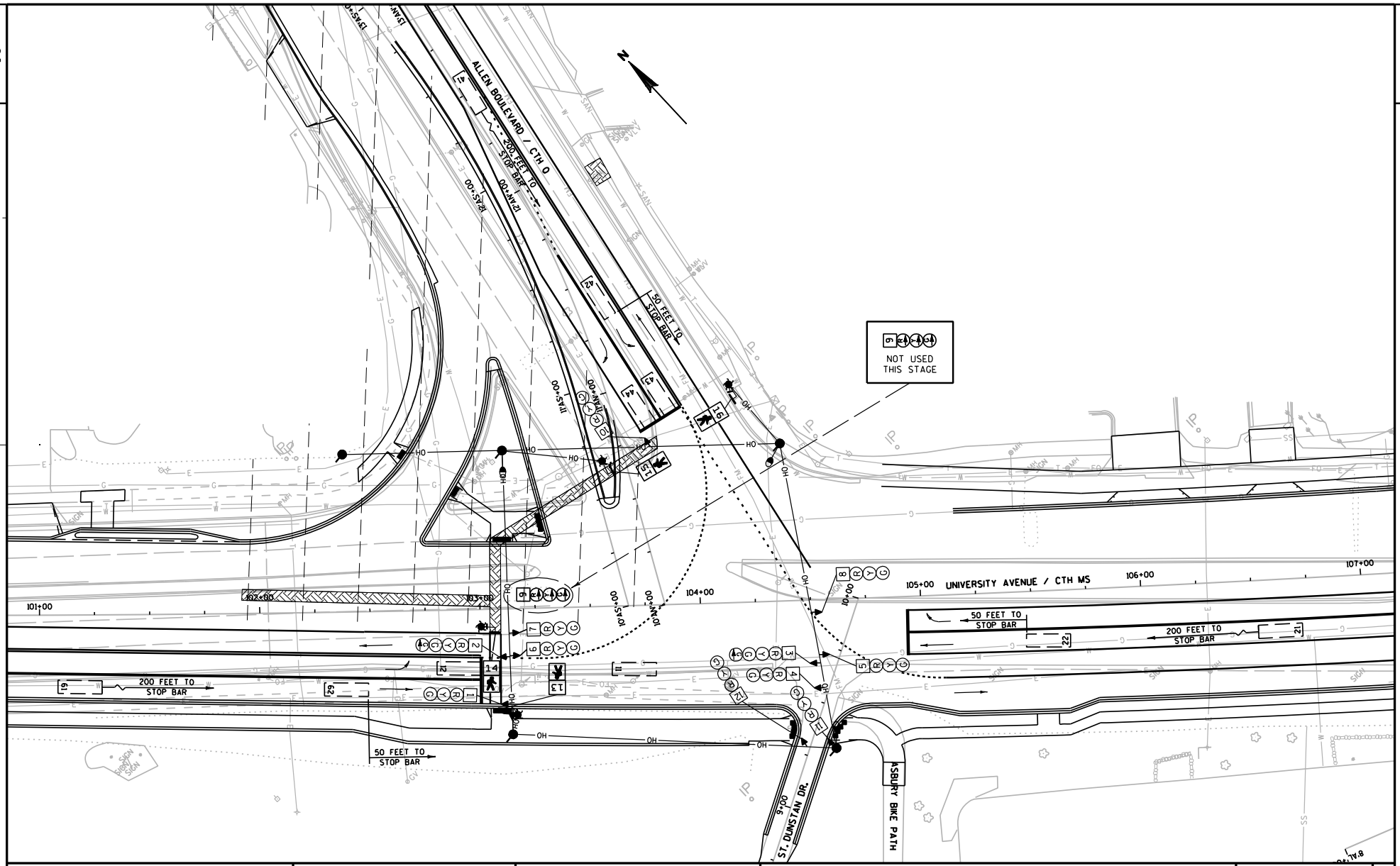
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 3A & 3B	SHEET 223 E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024001_tsp_stage 3 (allen).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

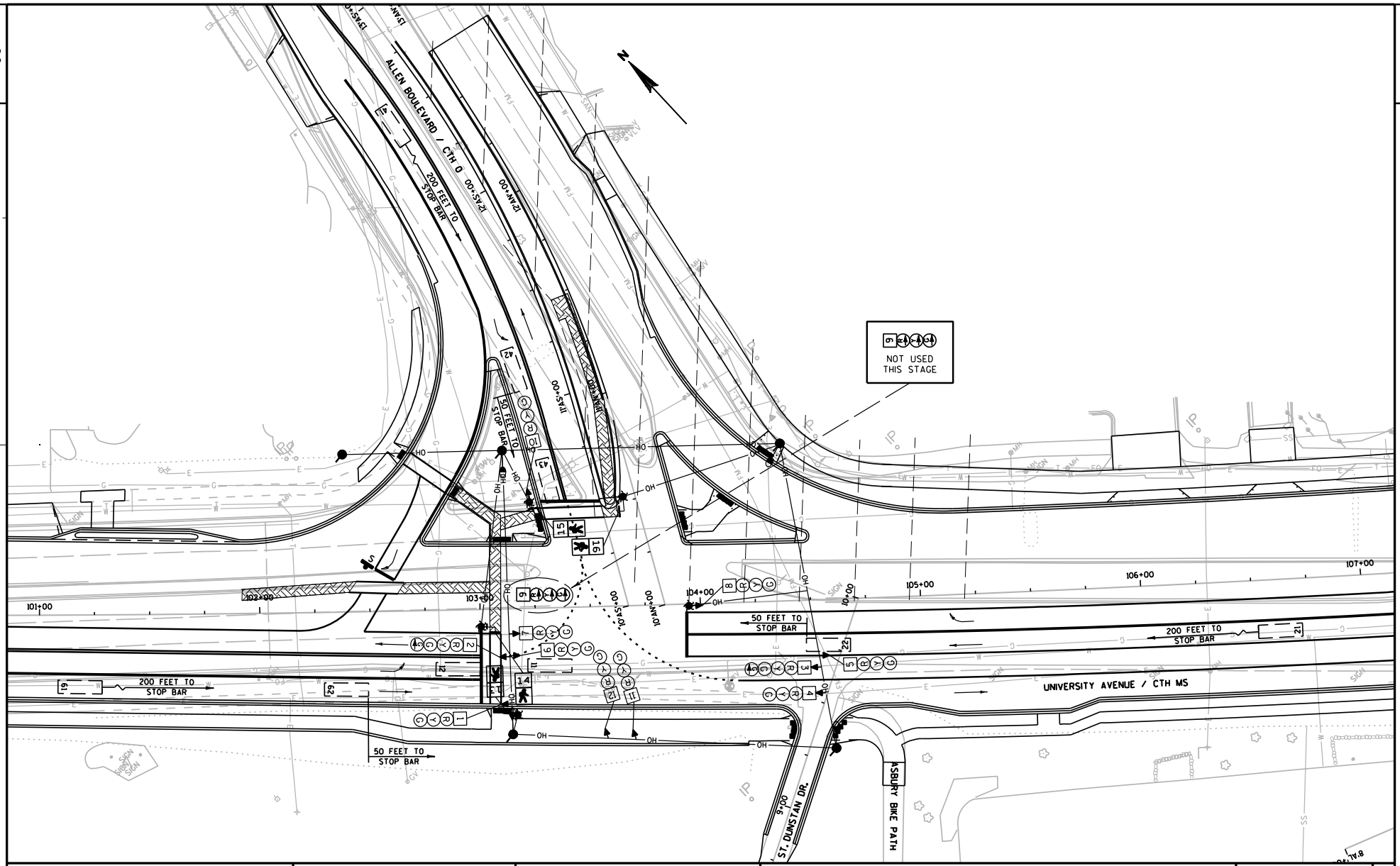
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 4A	SHEET E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024001_tsp_stage 4A (allen).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

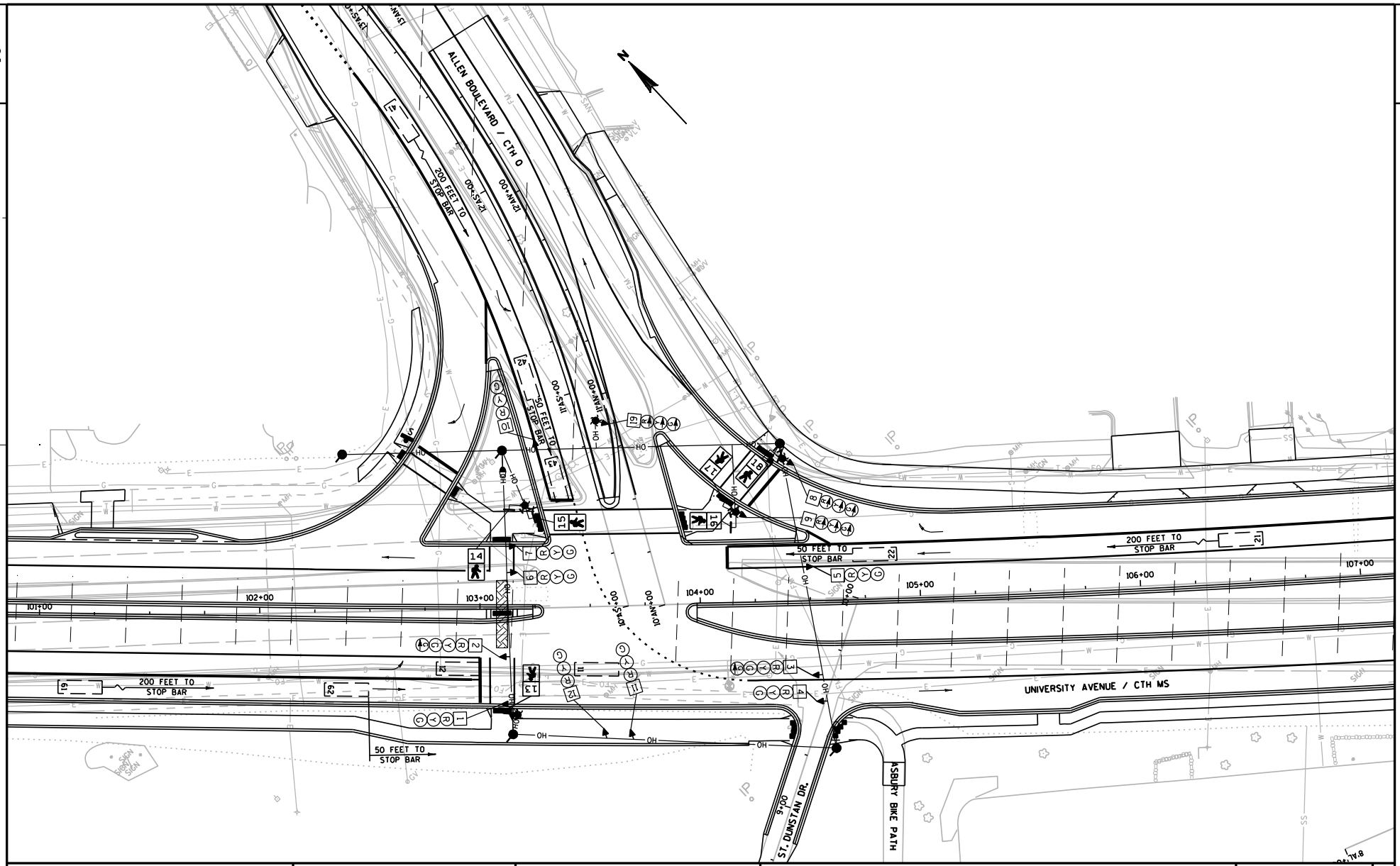
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 4B	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024001_tsp_stage 4B (allen).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 5A & 5B	SHEET E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024001_tsp_stage 5 (allen).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION

		HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO	Ø2 R/W	Ø2 CLEAR TO	Ø3 R/W	Ø3 CLEAR TO	Ø4 R/W	Ø4 CLEAR TO	FLASH
****	Ø1	2,3	G	- -	-	- -			-	- -	-
	Ø2	5,6,7	R	R R	G	Y R			R	R R	Y
	Ø3										
	Ø4	10,11,12	R	R R	R	R R			G	Y R	R
RING 1	Ø5										
	Ø6	1,2,3,4	R	R R	R	R R			R	R R	Y
	Ø7										
	Ø8										
***	Ø2P	15,16,17,18	D	D D	*	D D			D	D D	
	Ø4P	13,14	D	D D	D	D D			*	D D	
	Ø6P										
	Ø8P										
	ØLA	8,9,19	R	R R	G	Y R G G			G	Y R G G	R

		HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO	Ø6 R/W	Ø6 CLEAR TO	Ø7 R/W	Ø7 CLEAR TO	Ø8 R/W	Ø8 CLEAR TO
****	Ø1	2,3			-	- -				
	Ø2	5,6,7			R	R R				
	Ø3									
RING 2	Ø4	10,11,12			R	R R				
	Ø5									
	Ø6	1,2,3,4			G	Y R				
	Ø7									
	Ø8									
***	Ø2P	15,16			D	D D				
	Ø4P	13,14			D	D D				
	Ø6P									
	Ø8P									
	ØLA	8,9,19			R	R R				

BARRIER

**** PHASE 1 NOT ACTIVE DURING STAGE 4

*** DISABLE OVERLAP A DURING PHASE 2 PEDESTRIAN ACTUATIONS.

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	6	2,4
2	6	1,4
3		
4		1,2,6
5		
6	1,2	4
7		
8		

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	1	X			1	1				6X20	
12	1	X			1	1				6X20	
21	2	X			2	2				6X20	
22	2	X			2	2				6X20	
41	3	X			4	4				6X20	
42	3	X			4	4				6X20	
43	4	X			4	4				6X20	
44	4	X			4	4				6X20	
61	5	X			6	6				6X20	
62	5	X			6	6				6X20	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1	X			X
2	X	6	MIN.	X
3				
4	X			X
5				
6	X	2	MIN.	X
7				
8				

OVERLAPS

O.L. "A" = Ø2 & Ø4
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF INTERCONNECT COMMUNICATION	
NONE	x
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	x
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	x
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)

CTH 'MS' & CTH 'O'
CITY OF MADISON
DANE COUNTY

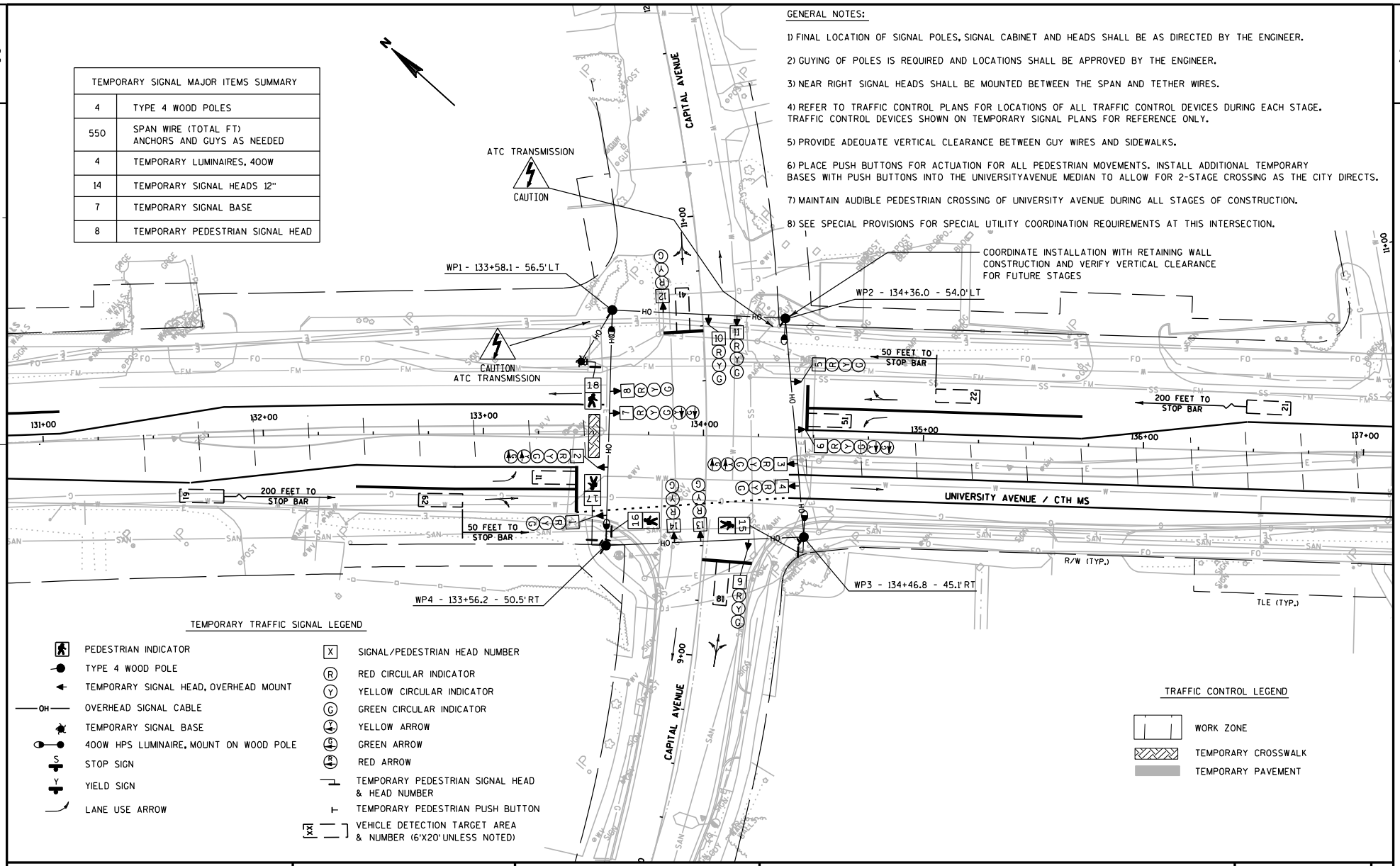
SIGNAL NO.

CONTROLLER TYPE: TEMP

DATE

PAGE NO. 1 OF 1

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SEQUENCE OF OPERATIONS	SHEET 227 E



TEMPORARY SIGNAL MAJOR ITEMS SUMMARY	
4	TYPE 4 WOOD POLES
550	SPAN WIRE (TOTAL FT) ANCHORS AND GUYS AS NEEDED
4	TEMPORARY LUMINAIRES, 400W
14	TEMPORARY SIGNAL HEADS 12"
7	TEMPORARY SIGNAL BASE
8	TEMPORARY PEDESTRIAN SIGNAL HEAD

GENERAL NOTES:

1) FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET AND HEADS SHALL BE AS DIRECTED BY THE ENGINEER.

2) GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.

3) NEAR RIGHT SIGNAL HEADS SHALL BE MOUNTED BETWEEN THE SPAN AND TETHER WIRES.

4) REFER TO TRAFFIC CONTROL PLANS FOR LOCATIONS OF ALL TRAFFIC CONTROL DEVICES DURING EACH STAGE. TRAFFIC CONTROL DEVICES SHOWN ON TEMPORARY SIGNAL PLANS FOR REFERENCE ONLY.

5) PROVIDE ADEQUATE VERTICAL CLEARANCE BETWEEN GUY WIRES AND SIDEWALKS.

6) PLACE PUSH BUTTONS FOR ACTUATION FOR ALL PEDESTRIAN MOVEMENTS. INSTALL ADDITIONAL TEMPORARY BASES WITH PUSH BUTTONS INTO THE UNIVERSITYAVENUE MEDIAN TO ALLOW FOR 2-STAGE CROSSING AS THE CITY DIRECTS.

7) MAINTAIN AUDIBLE PEDESTRIAN CROSSING OF UNIVERSITY AVENUE DURING ALL STAGES OF CONSTRUCTION.

8) SEE SPECIAL PROVISIONS FOR SPECIAL UTILITY COORDINATION REQUIREMENTS AT THIS INTERSECTION.

TEMPORARY TRAFFIC SIGNAL LEGEND

- PEDESTRIAN INDICATOR
- TYPE 4 WOOD POLE
- TEMPORARY SIGNAL HEAD, OVERHEAD MOUNT
- OH — OVERHEAD SIGNAL CABLE
- TEMPORARY SIGNAL BASE
- 400W HPS LUMINAIRE, MOUNT ON WOOD POLE
- S — STOP SIGN
- Y — YIELD SIGN
- LANE USE ARROW
- X — SIGNAL/PEDESTRIAN HEAD NUMBER
- (R) — RED CIRCULAR INDICATOR
- (Y) — YELLOW CIRCULAR INDICATOR
- (G) — GREEN CIRCULAR INDICATOR
- (Y) — YELLOW ARROW
- (G) — GREEN ARROW
- (R) — RED ARROW
- TEMPORARY PEDESTRIAN SIGNAL HEAD & HEAD NUMBER
- TEMPORARY PEDESTRIAN PUSH BUTTON
- [xx] — VEHICLE DETECTION TARGET AREA & NUMBER (6'X20' UNLESS NOTED)

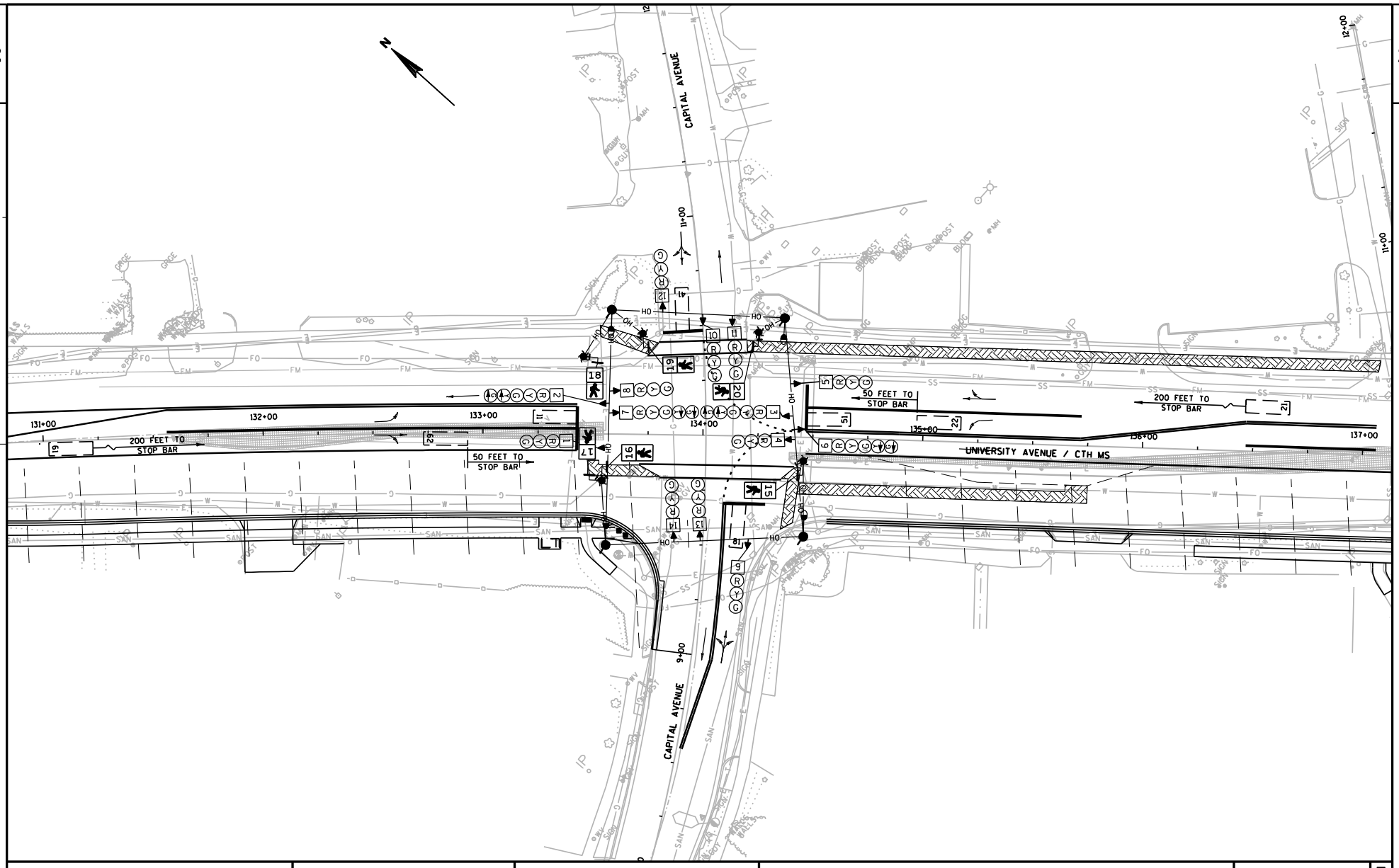
TRAFFIC CONTROL LEGEND

- WORK ZONE
- TEMPORARY CROSSWALK
- TEMPORARY PAVEMENT

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 1	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024002_tsp_stage 1 (capitol).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

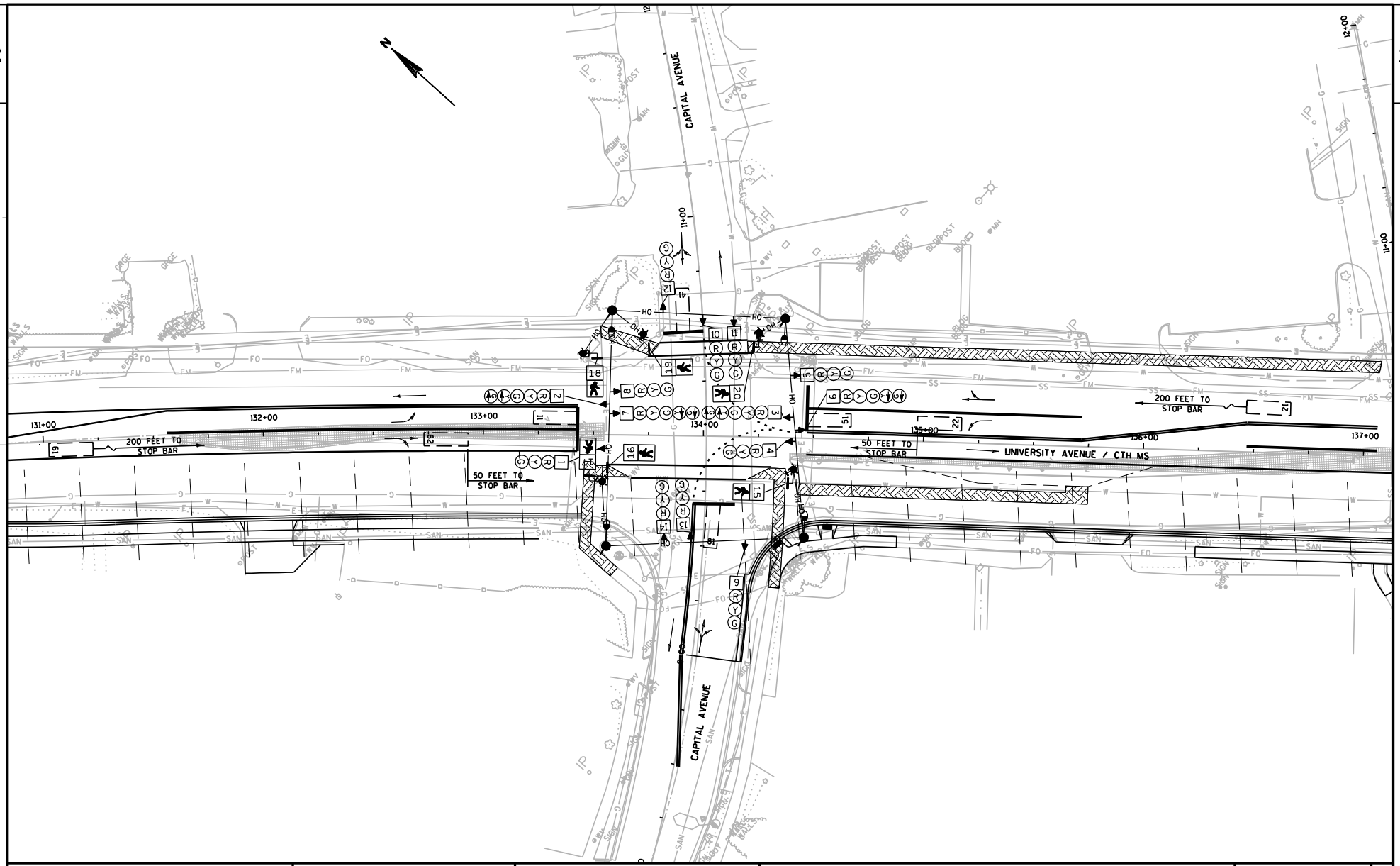
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 2A	SHEET 229 E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024002_tsp_stage 2A (capital).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

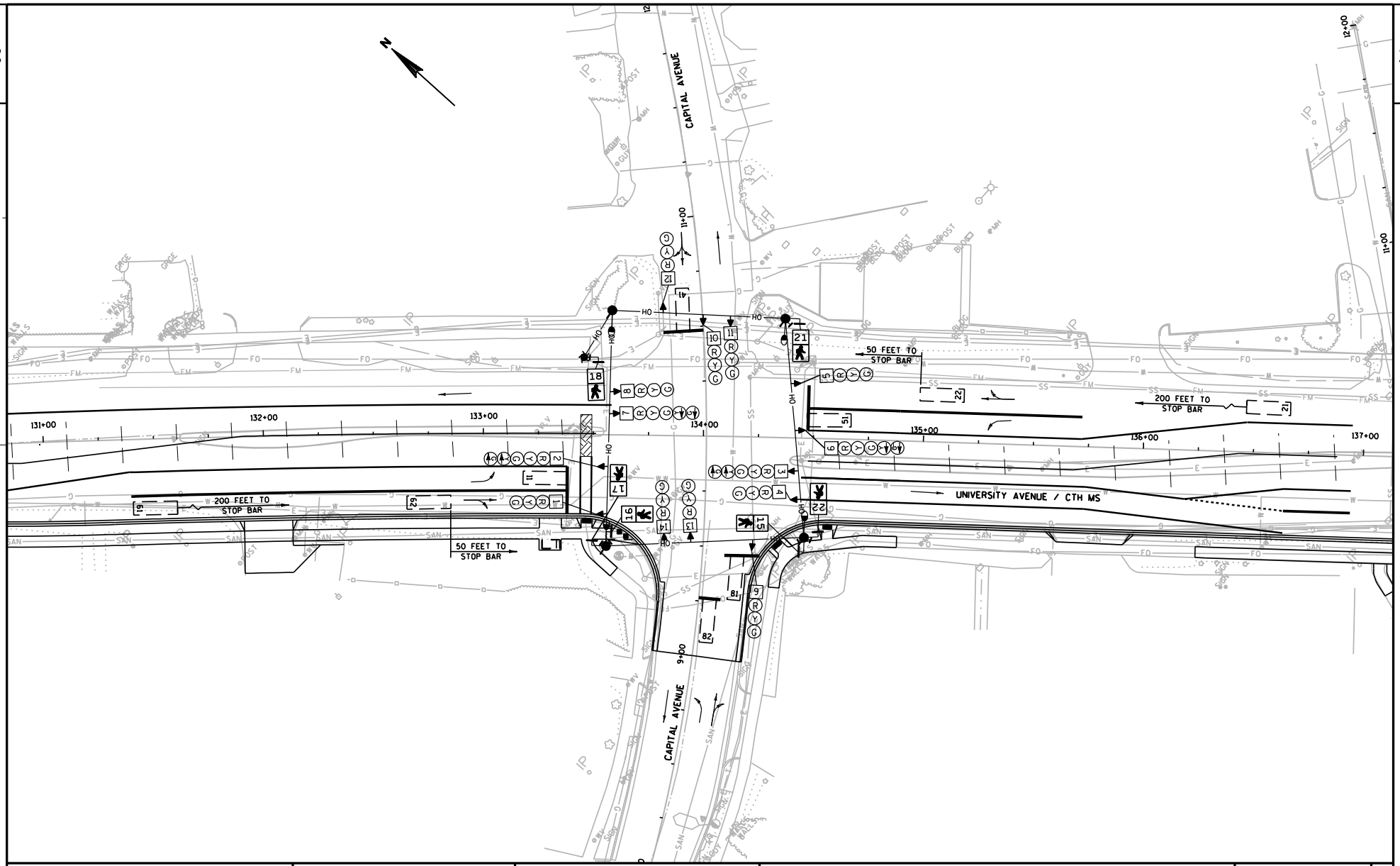
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 2B	SHEET 230 E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024002_tsp_stage 2B (capital).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

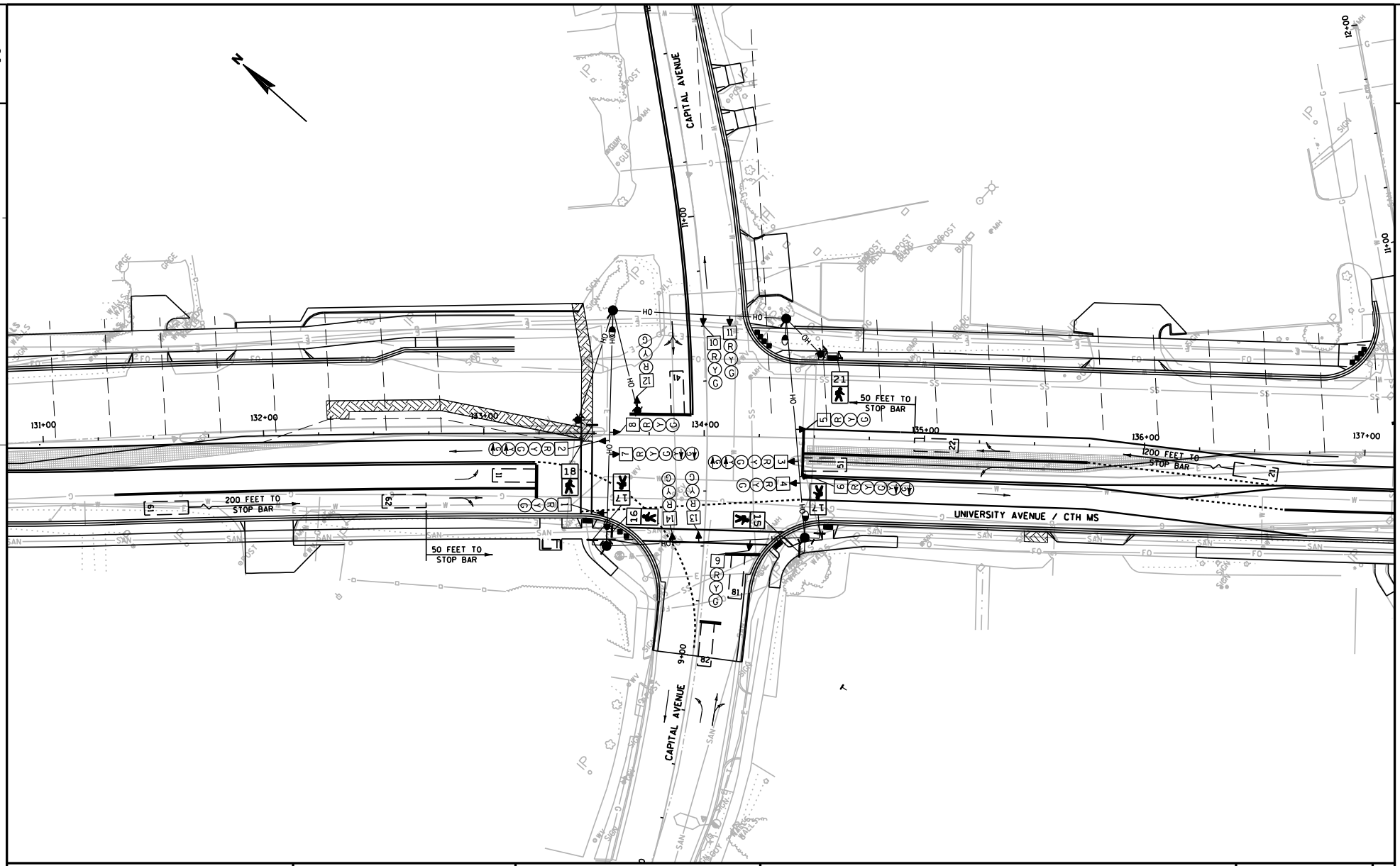
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 3A & 3B	SHEET 231 E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024002_tsp_stage 3 (capitol).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

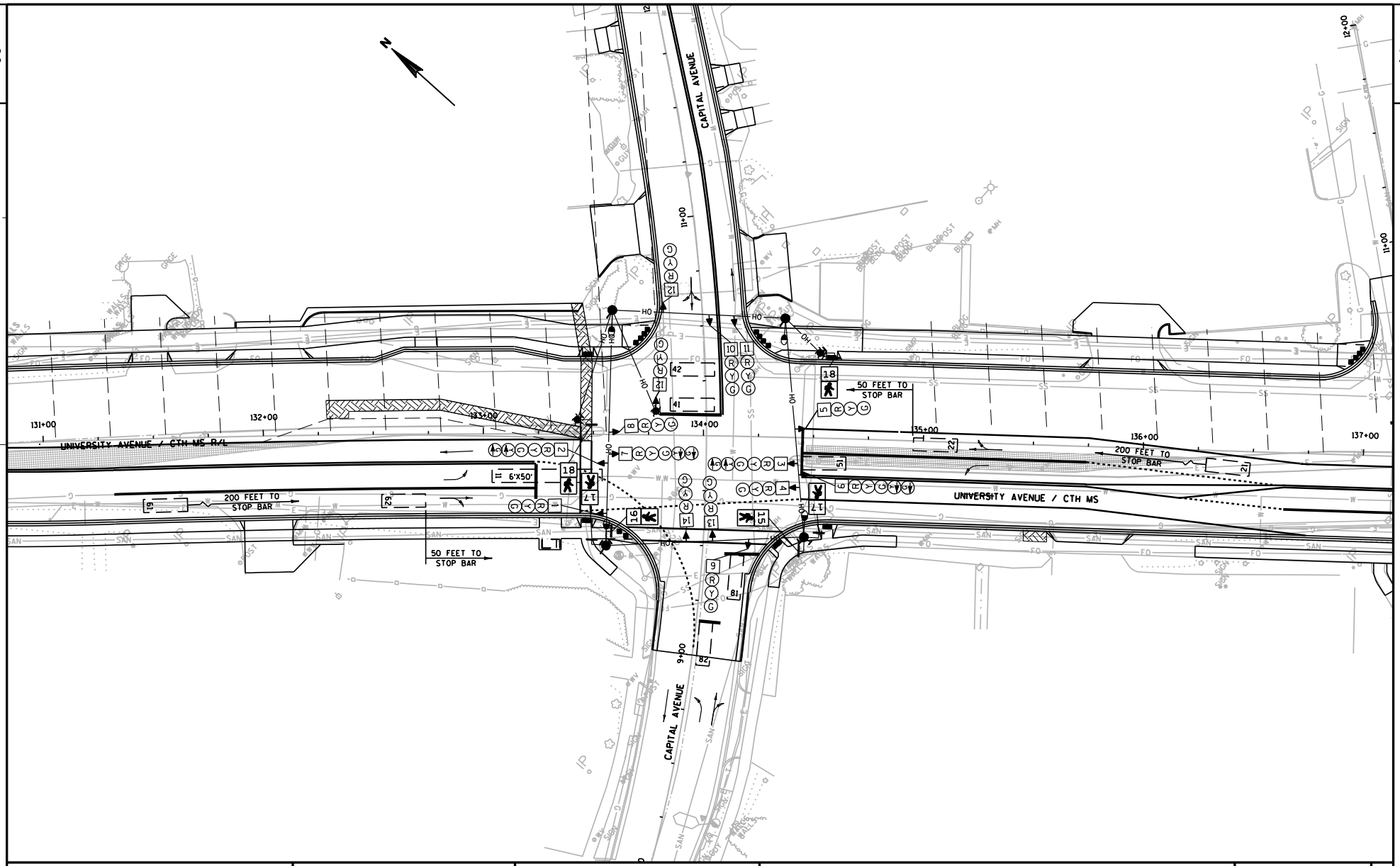
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 4A	SHEET E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024002_tsp_stage 4A (capital).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

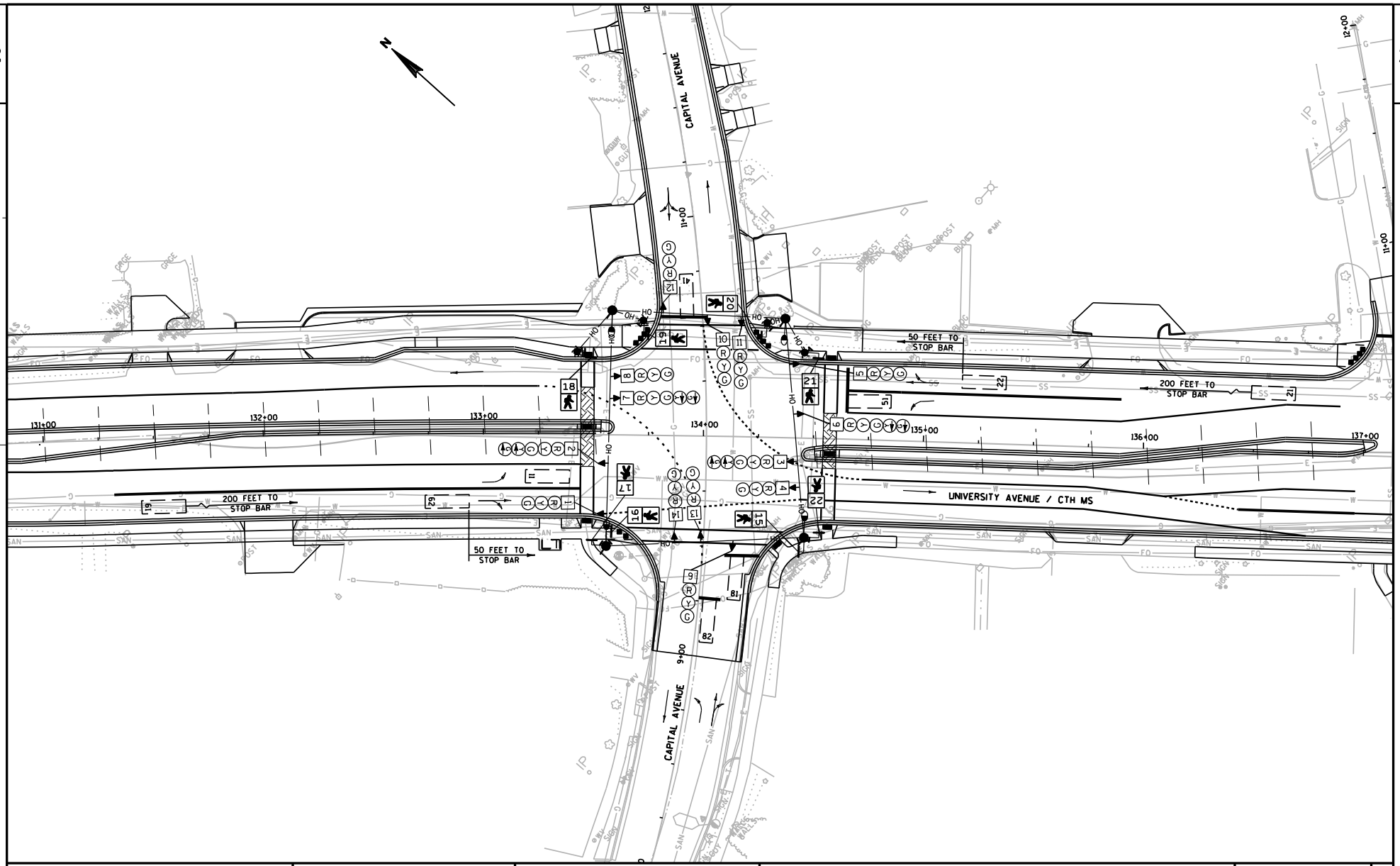
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 4B	SHEET 233	E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024002_tsp_stage 4B (capital).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

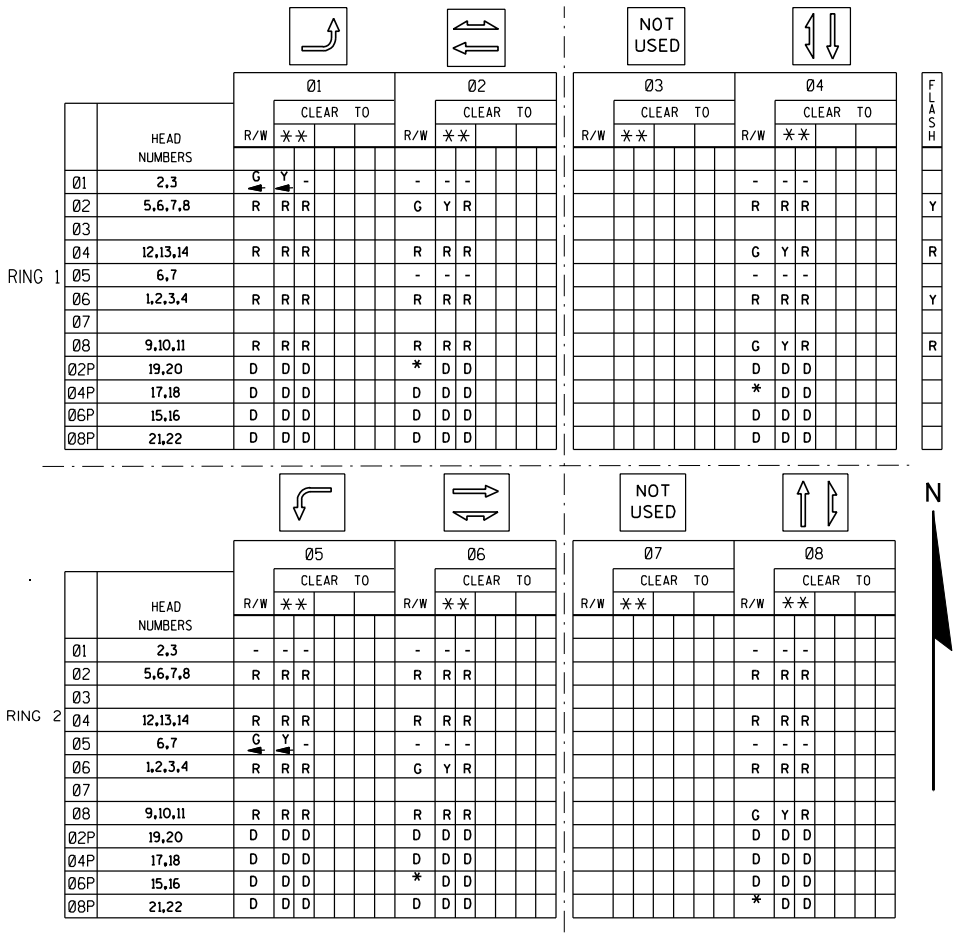


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 5A & 5B	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024002_tsp_stage 5 (capitol).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION



	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
01	2,3	G	Y -	-	- -			-	- -	
02	5,6,7,8	R	R R	G	Y R			R	R R	Y
03										
04	12,13,14	R	R R	R	R R			G	Y R	R
05	6,7			-	- -			-	- -	
06	1,2,3,4	R	R R	R	R R			R	R R	Y
07										
08	9,10,11	R	R R	R	R R			G	Y R	R
02P	19,20	D	D D	*	D D			D	D D	
04P	17,18	D	D D	D	D D			*	D D	
06P	15,16	D	D D	D	D D			D	D D	
08P	21,22	D	D D	D	D D			D	D D	

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
01	2,3	-	- -	-	- -			-	- -
02	5,6,7,8	R	R R	R	R R			R	R R
03									
04	12,13,14	R	R R	R	R R			R	R R
05	6,7	G	Y -	-	- -			-	- -
06	1,2,3,4	R	R R	G	Y R			R	R R
07									
08	9,10,11	R	R R	R	R R			G	Y R
02P	19,20	D	D D	D	D D			D	D D
04P	17,18	D	D D	D	D D			D	D D
06P	15,16	D	D D	*	D D			D	D D
08P	21,22	D	D D	D	D D			*	D D

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2,4,8
2	5 OR 6	1,4,8
3		
4	8	1,2,5,6
5	1 OR 2	4,6,8
6	1 OR 2	4,5,8
7		
8	4	1,2,5,6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	1	X			1	1				6X20	
21	2	X			2	2				6X20	
22	2	X			2	2				6X20	
41	3	X			4	4				6X20	
51	4	X			5	5				6X20	
61	5	X			6	6				6X20	
62	5	X			6	6				6X20	
81	6	X			8	8				6X20	
82	6	X			8	8				6X20	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1	X			X
2	X	6	MIN.	X
3				
4	X			X
5	X			X
6	X	2	MIN.	X
7				
8	X			X

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)

CTH 'MS' & CAPITAL AVENUE
CITY OF MADISON
DANE COUNTY

SIGNAL NO.

CONTROLLER TYPE: TEMP

DATE

PAGE NO. 1 OF 1

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SEQUENCE OF OPERATIONS	SHEET 235	E

GENERAL NOTES:

1) FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET AND HEADS SHALL BE AS DIRECTED BY THE ENGINEER.

2) GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.

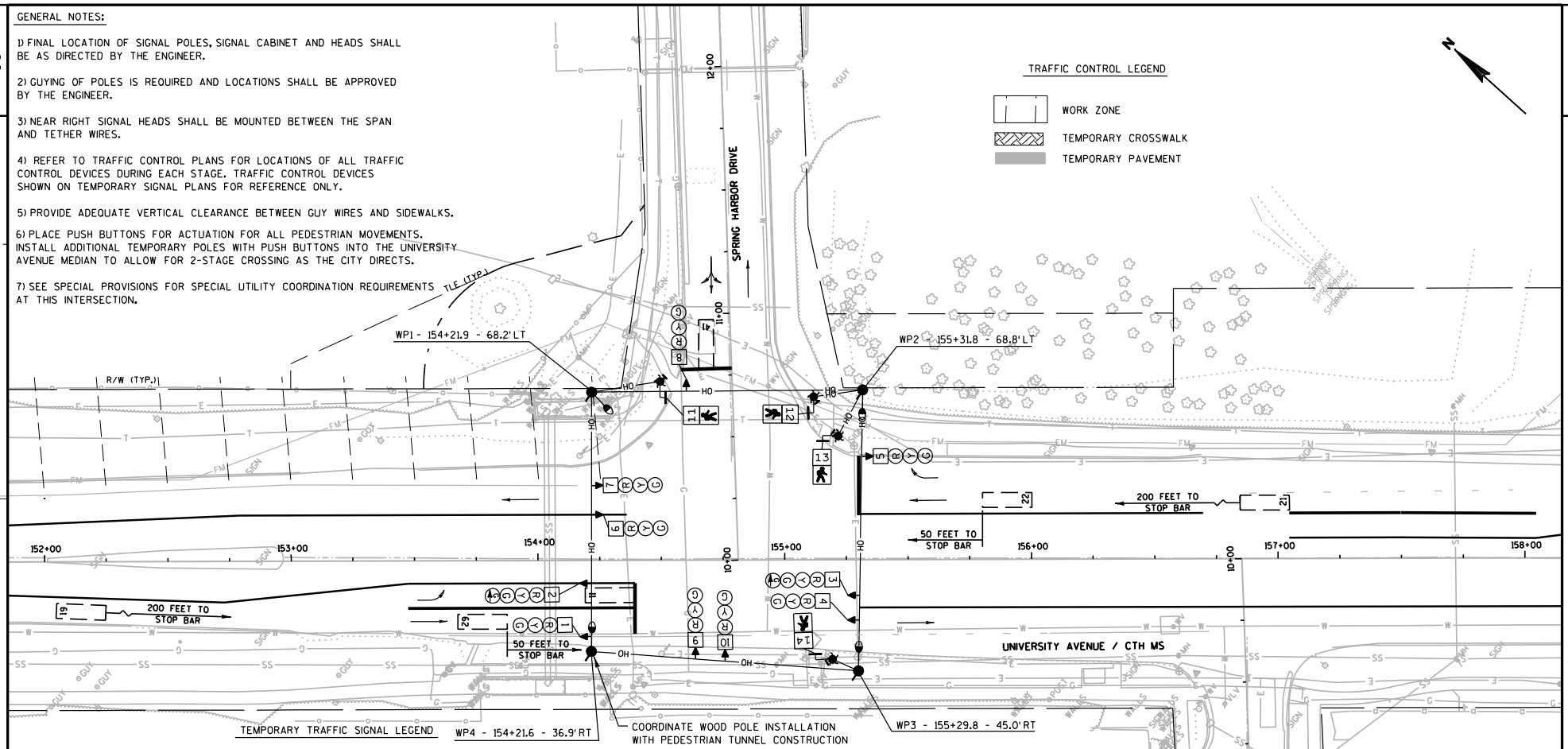
3) NEAR RIGHT SIGNAL HEADS SHALL BE MOUNTED BETWEEN THE SPAN AND TETHER WIRES.

4) REFER TO TRAFFIC CONTROL PLANS FOR LOCATIONS OF ALL TRAFFIC CONTROL DEVICES DURING EACH STAGE. TRAFFIC CONTROL DEVICES SHOWN ON TEMPORARY SIGNAL PLANS FOR REFERENCE ONLY.

5) PROVIDE ADEQUATE VERTICAL CLEARANCE BETWEEN GUY WIRES AND SIDEWALKS.

6) PLACE PUSH BUTTONS FOR ACTUATION FOR ALL PEDESTRIAN MOVEMENTS. INSTALL ADDITIONAL TEMPORARY POLES WITH PUSH BUTTONS INTO THE UNIVERSITY AVENUE MEDIAN TO ALLOW FOR 2-STAGE CROSSING AS THE CITY DIRECTS.

7) SEE SPECIAL PROVISIONS FOR SPECIAL UTILITY COORDINATION REQUIREMENTS AT THIS INTERSECTION.



TEMPORARY TRAFFIC SIGNAL LEGEND

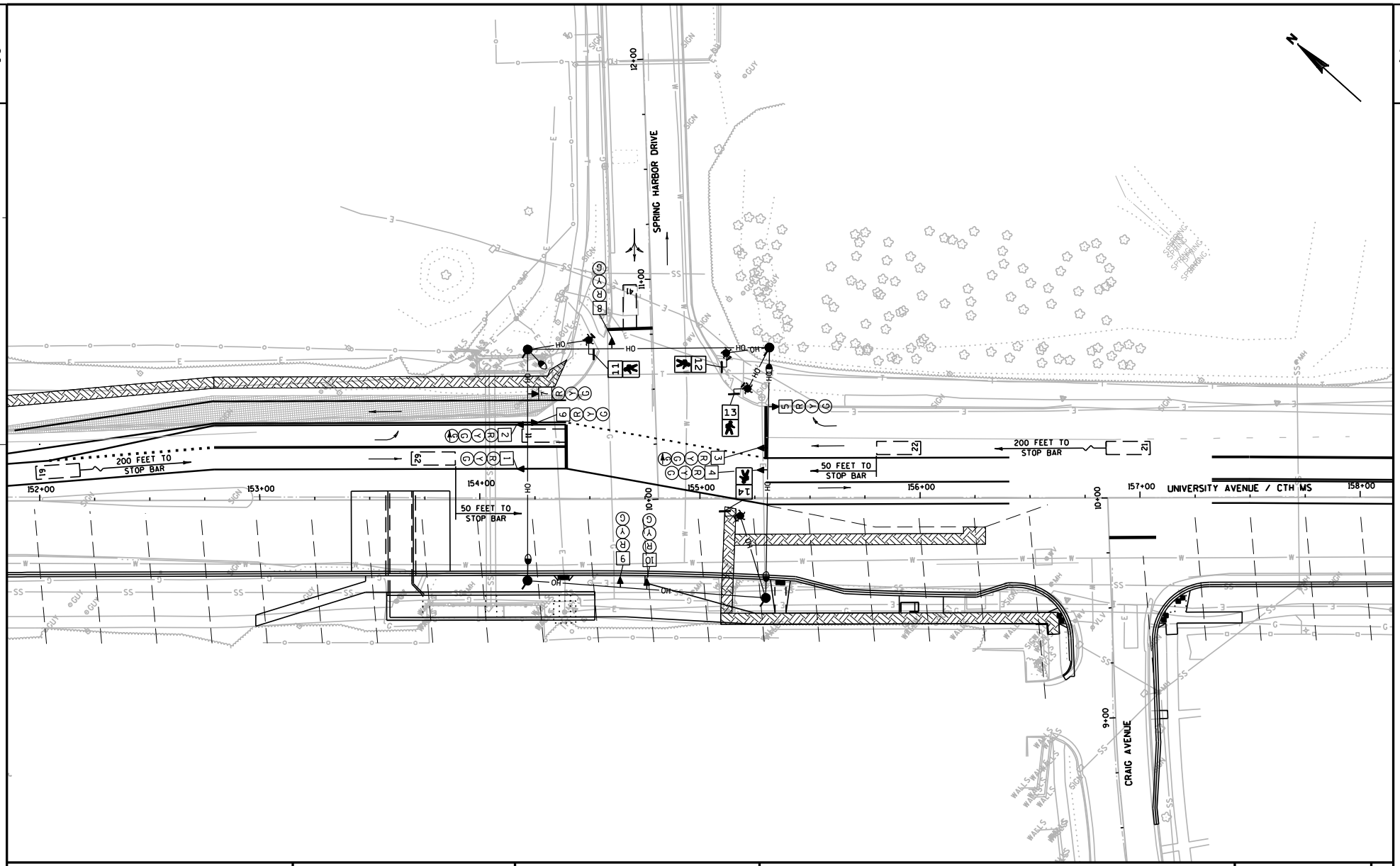
- PEDESTRIAN INDICATOR
- TYPE 4 WOOD POLE
- TEMPORARY SIGNAL HEAD, OVERHEAD MOUNT
- OH — OVERHEAD SIGNAL CABLE
- TEMPORARY SIGNAL BASE
- 400W HPS LUMINAIRE, MOUNT ON WOOD POLE
- S — STOP SIGN
- Y — YIELD SIGN
- LANE USE ARROW
- X — SIGNAL/PEDESTRIAN HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- RED ARROW
- TEMPORARY PEDESTRIAN SIGNAL HEAD & HEAD NUMBER
- TEMPORARY PEDESTRIAN PUSH BUTTON
- XX — VEHICLE DETECTION TARGET AREA & NUMBER (6'X20' UNLESS NOTED)

TEMPORARY SIGNAL MAJOR ITEMS SUMMARY	
4	TYPE 4 WOOD POLES
650	SPAN WIRE (TOTAL FT) ANCHORS AND GUYS AS NEEDED
4	TEMPORARY LUMINAIRES, 400W
10	TEMPORARY SIGNAL HEADS 12"
5	TEMPORARY SIGNAL BASE
6	TEMPORARY PEDESTRIAN SIGNAL HEAD

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 1	SHEET 236 E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024003_tsp_stage 1(spring harbor).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

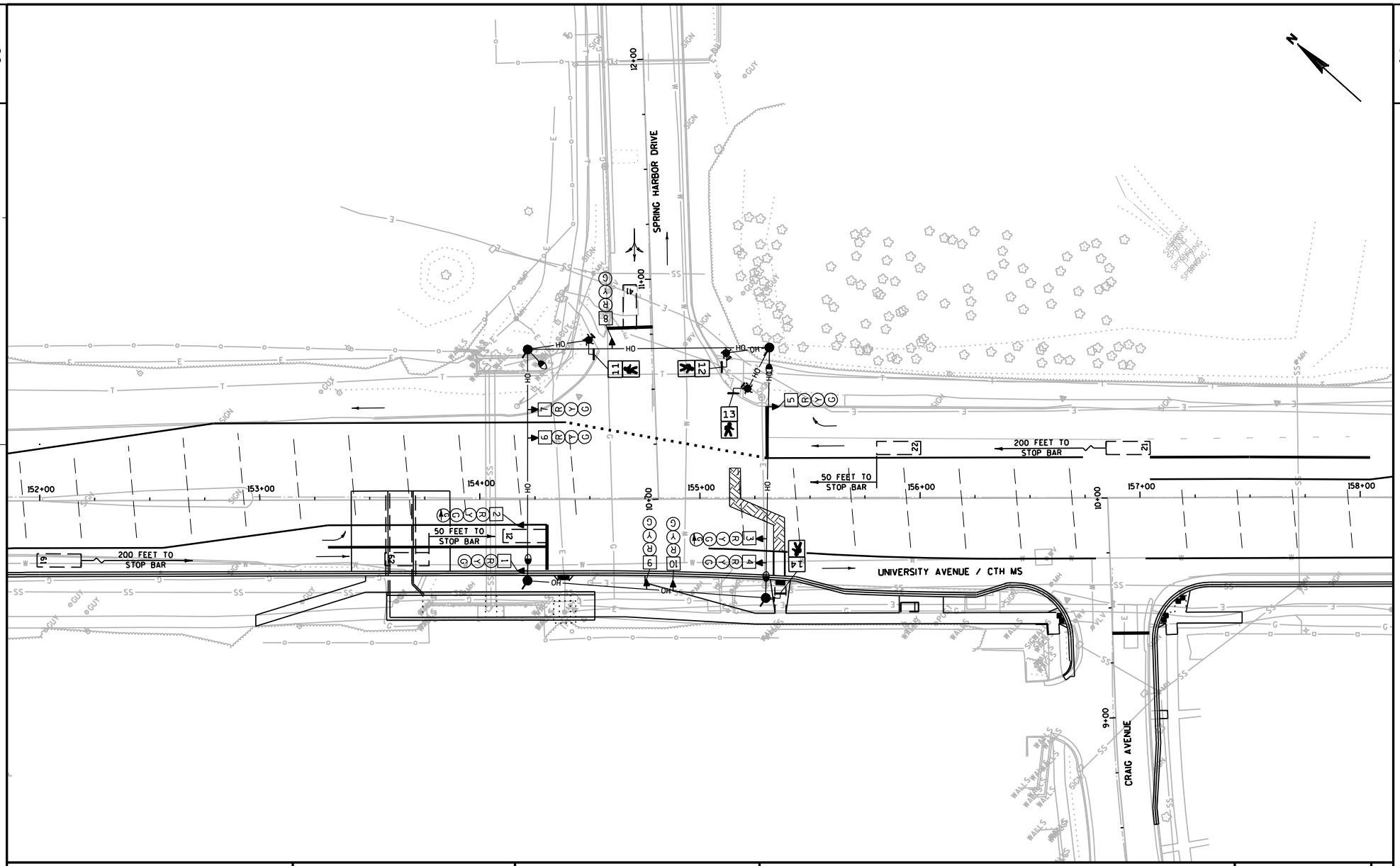
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 2A & 2B	SHEET 237 E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024003_tsp_stage 2 (spring harbor).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

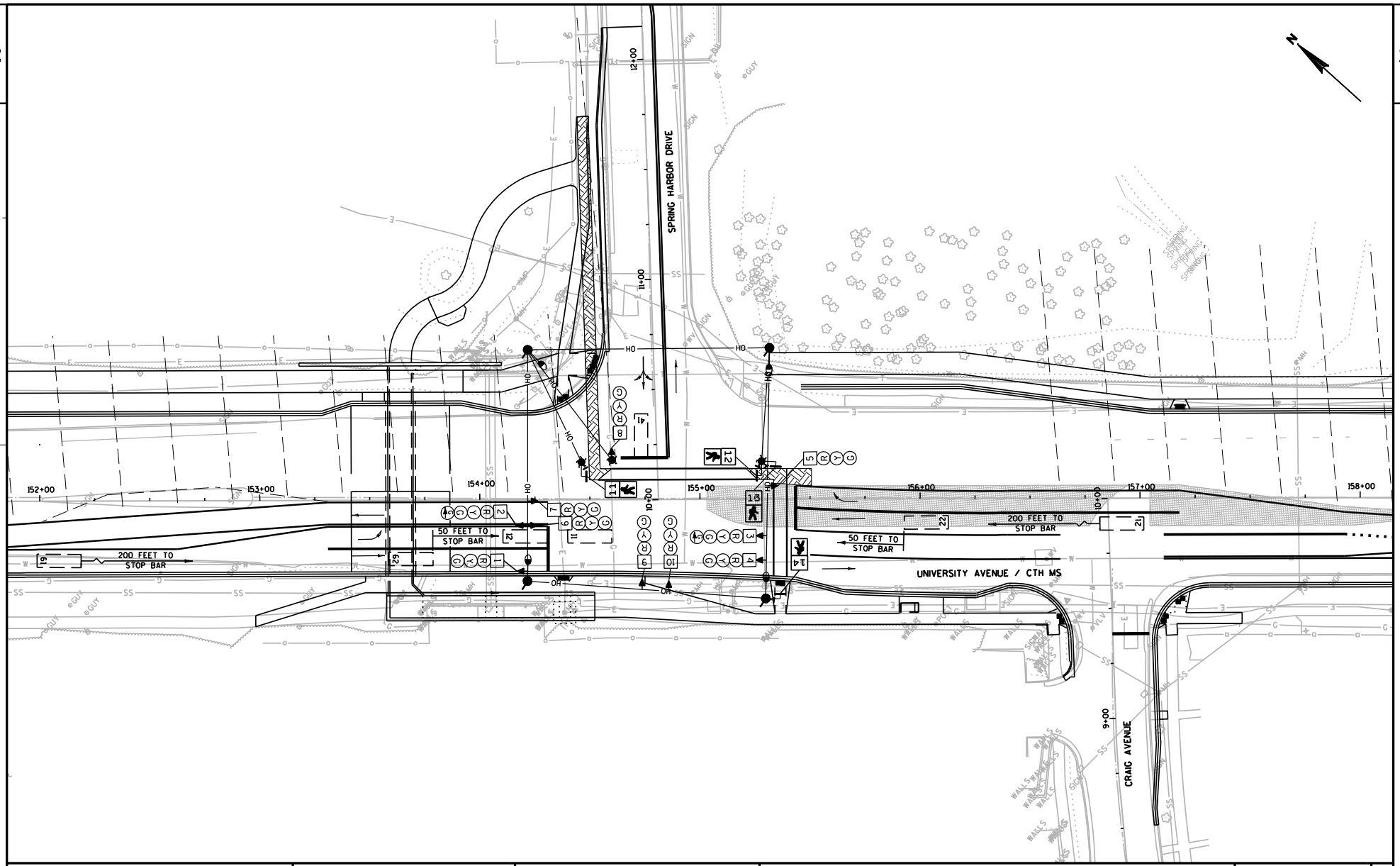
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 3A & 3B	SHEET E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024003_tsp_stage 3 (spring harbor).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

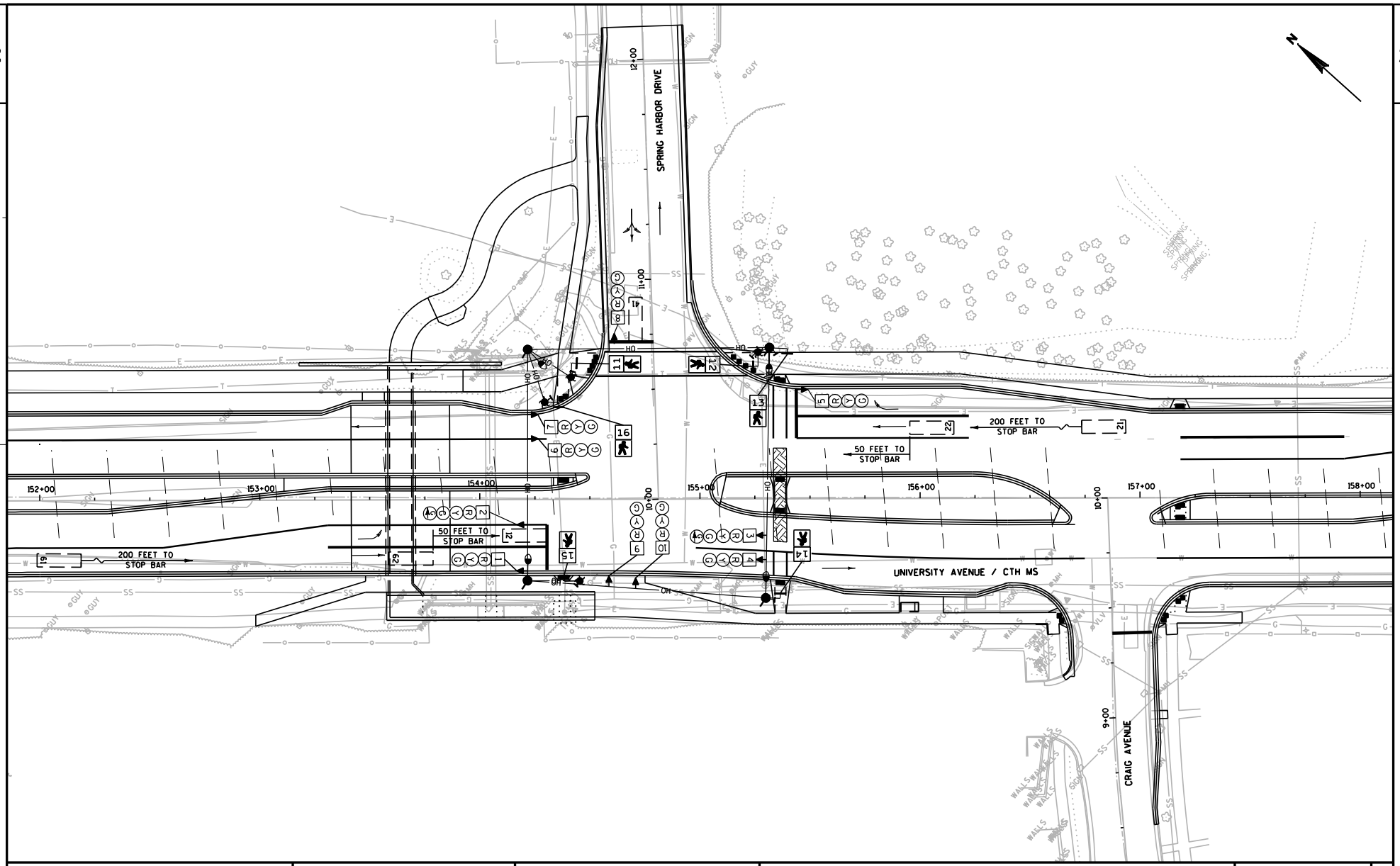
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGES 4A & 4B	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024003_tsp_stage 4(spring harbor).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

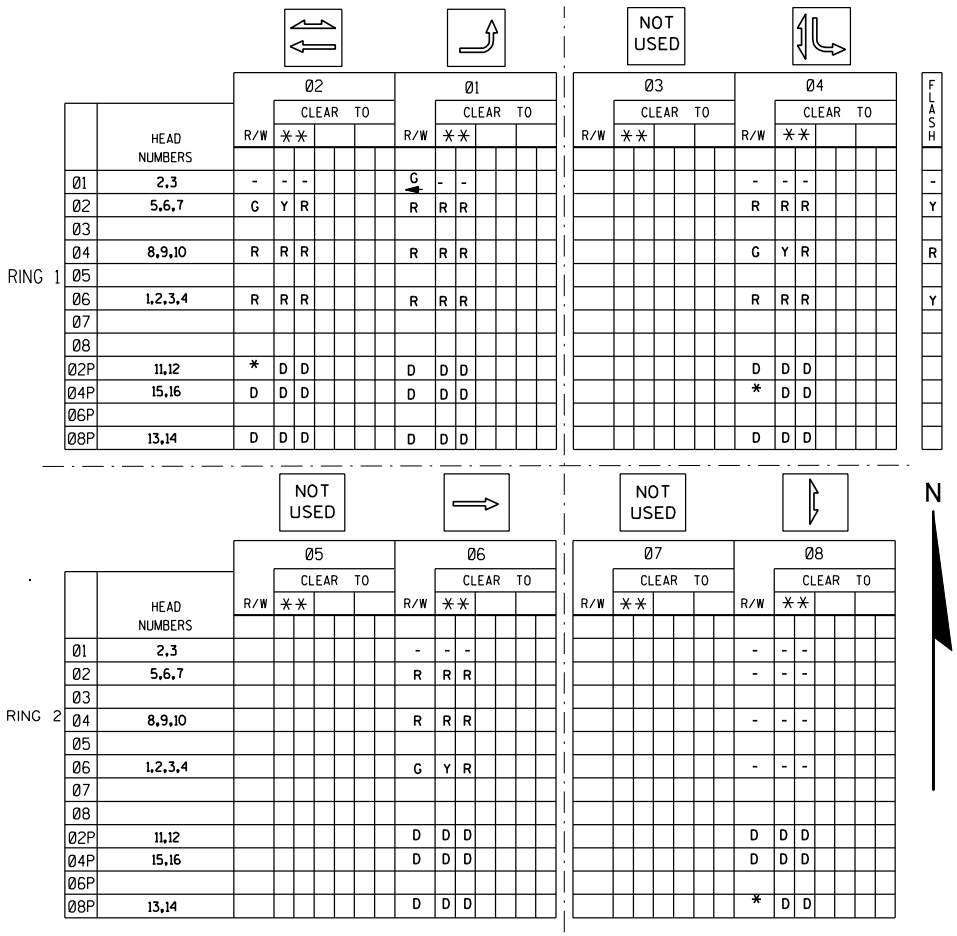


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 5A & 5B	SHEET 240 E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024003_tsp_stage 5 (spring harbor).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION



	HEAD NUMBERS	02 R/W	02 **	01 R/W	01 **	03 R/W	03 **	04 R/W	04 **	FLASH
01	2,3	-	- -	G	- -			-	- -	-
02	5,6,7	G	Y R	R	R R			R	R R	Y
03										
04	8,9,10	R	R R	R	R R			G	Y R	R
05										
06	1,2,3,4	R	R R	R	R R			R	R R	Y
07										
08										
02P	11,12	*	D D	D	D D			D	D D	
04P	15,16	D	D D	D	D D			*	D D	
06P										
08P	13,14	D	D D	D	D D			D	D D	

	HEAD NUMBERS	05 R/W	05 **	06 R/W	06 **	07 R/W	07 **	08 R/W	08 **
01	2,3			-	- -			-	- -
02	5,6,7			R	R R			-	- -
03									
04	8,9,10			R	R R			-	- -
05									
06	1,2,3,4			G	Y R			-	- -
07									
08									
02P	11,12			D	D D			D	D D
04P	15,16			D	D D			D	D D
06P									
08P	13,14			D	D D			*	D D

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	6	2,4
2	6	1,4
3		
4		1,2,6
5		
6	1 OR 2	4
7		
8		

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	1	X			1	1				6X20	
12	1	X			1	1				6X20	
21	2	X			2	2				6X20	
22	2	X			2	2				6X20	
41	3	X			4	4				6X20	
61	4	X			6	6				6X20	
62	4	X			6	6				6X20	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1	X			X
2	X	6	MIN.	X
3				
4	X			X
5				
6	X	2	MIN.	X
7				
8				

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)

CTH 'MS' & SPRING HARBOR DR.
CITY OF MADISON
DANE COUNTY

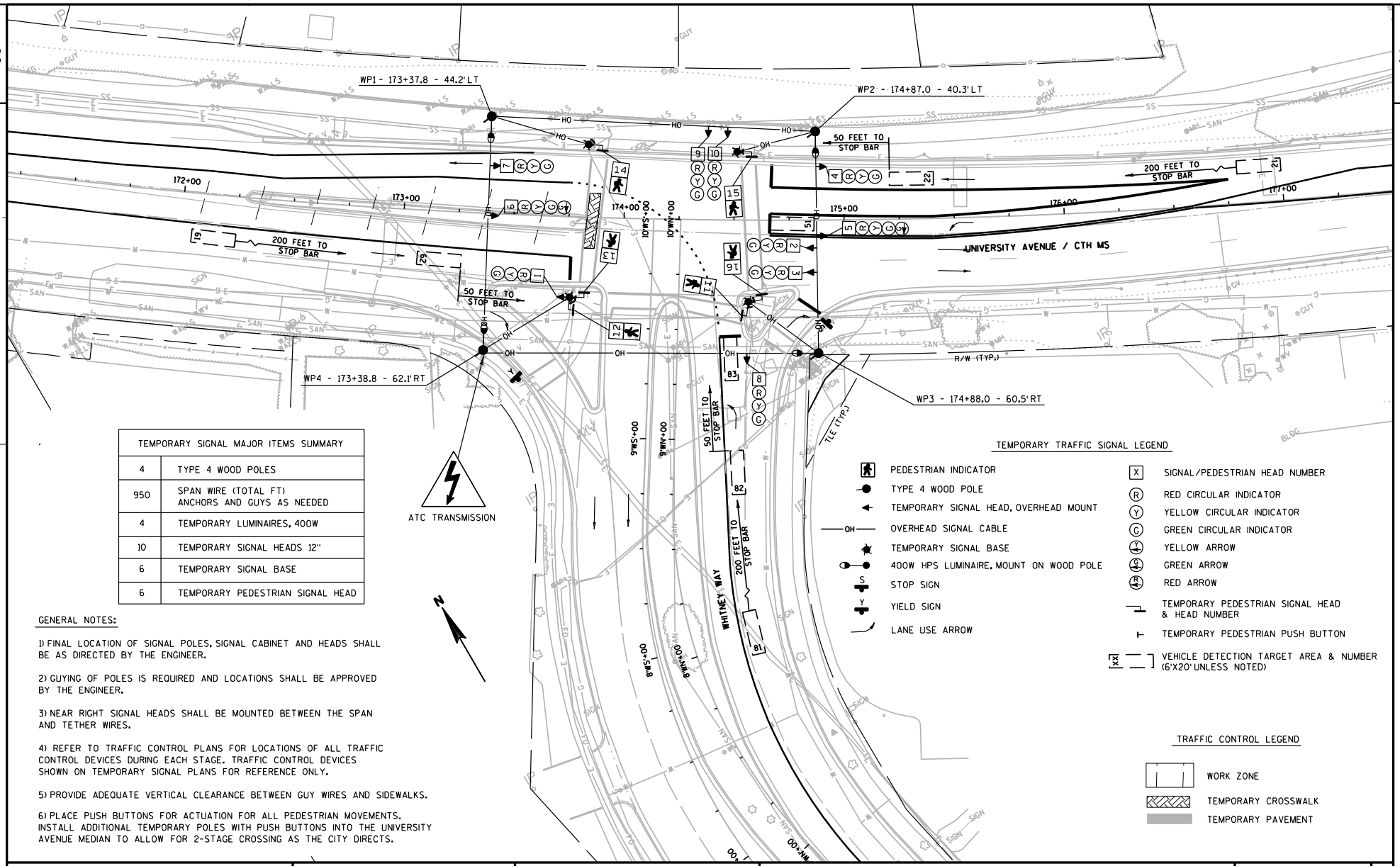
SIGNAL NO.

CONTROLLER TYPE: TEMP

DATE

PAGE NO. 1 OF 1

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SEQUENCE OF OPERATIONS	SHEET 241 E



TEMPORARY SIGNAL MAJOR ITEMS SUMMARY	
4	TYPE 4 WOOD POLES
950	SPAN WIRE (TOTAL FT) ANCHORS AND GUYS AS NEEDED
4	TEMPORARY LUMINAIRES, 400W
10	TEMPORARY SIGNAL HEADS 12"
6	TEMPORARY SIGNAL BASE
6	TEMPORARY PEDESTRIAN SIGNAL HEAD

TEMPORARY TRAFFIC SIGNAL LEGEND

- PEDESTRIAN INDICATOR
- TYPE 4 WOOD POLE
- TEMPORARY SIGNAL HEAD, OVERHEAD MOUNT
- OVERHEAD SIGNAL CABLE
- TEMPORARY SIGNAL BASE
- 400W HPS LUMINAIRE, MOUNT ON WOOD POLE
- STOP SIGN
- YIELD SIGN
- LANE USE ARROW
- SIGNAL/PEDESTRIAN HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- RED ARROW
- TEMPORARY PEDESTRIAN SIGNAL HEAD & HEAD NUMBER
- TEMPORARY PEDESTRIAN PUSH BUTTON
- VEHICLE DETECTION TARGET AREA & NUMBER (6'X20' UNLESS NOTED)

TRAFFIC CONTROL LEGEND

- WORK ZONE
- TEMPORARY CROSSWALK
- TEMPORARY PAVEMENT

GENERAL NOTES:

1) FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET AND HEADS SHALL BE AS DIRECTED BY THE ENGINEER.

2) GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.

3) NEAR RIGHT SIGNAL HEADS SHALL BE MOUNTED BETWEEN THE SPAN AND TETHER WIRES.

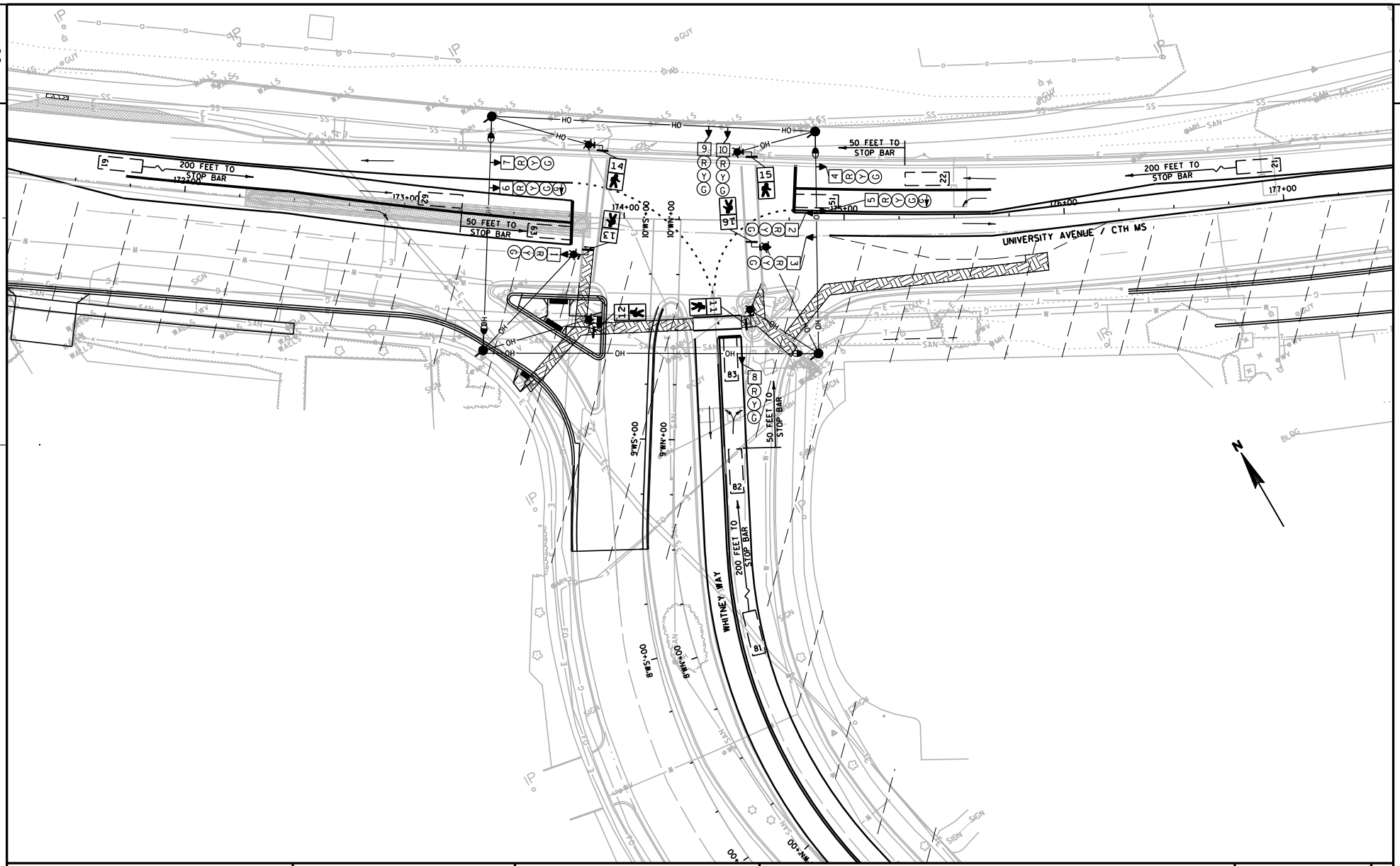
4) REFER TO TRAFFIC CONTROL PLANS FOR LOCATIONS OF ALL TRAFFIC CONTROL DEVICES DURING EACH STAGE. TRAFFIC CONTROL DEVICES SHOWN ON TEMPORARY SIGNAL PLANS FOR REFERENCE ONLY.

5) PROVIDE ADEQUATE VERTICAL CLEARANCE BETWEEN GUY WIRES AND SIDEWALKS.

6) PLACE PUSH BUTTONS FOR ACTUATION FOR ALL PEDESTRIAN MOVEMENTS. INSTALL ADDITIONAL TEMPORARY POLES WITH PUSH BUTTONS INTO THE UNIVERSITY AVENUE MEDIAN TO ALLOW FOR 2-STAGE CROSSING AS THE CITY DIRECTS.

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 1	SHEET E

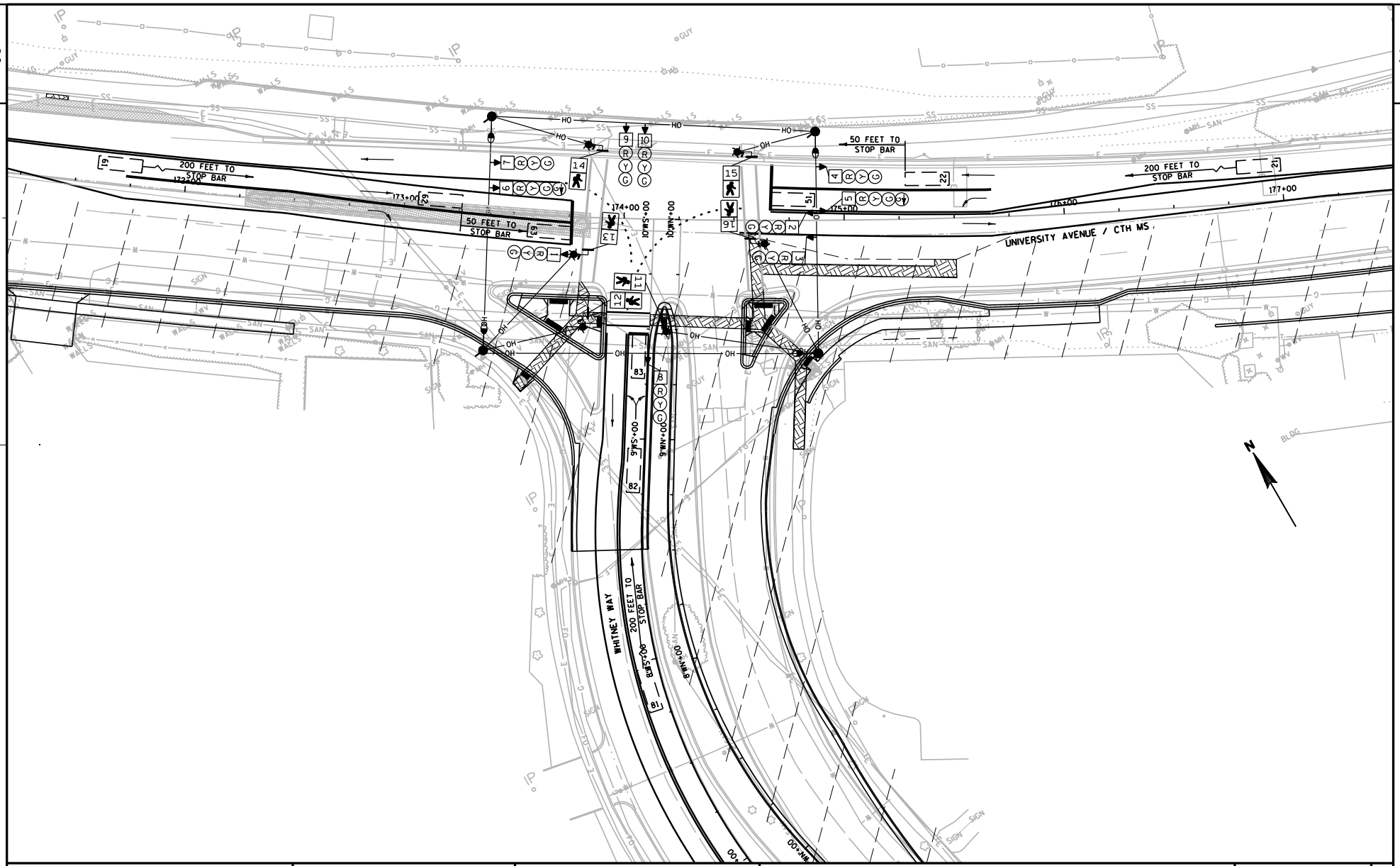
FILE NAME : g:\madison\md2009035\dgn\temp signals\024004_tsp_stage 1 (whitney way).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 2A	SHEET E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024004_tsp_stage 2A (whitney way).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

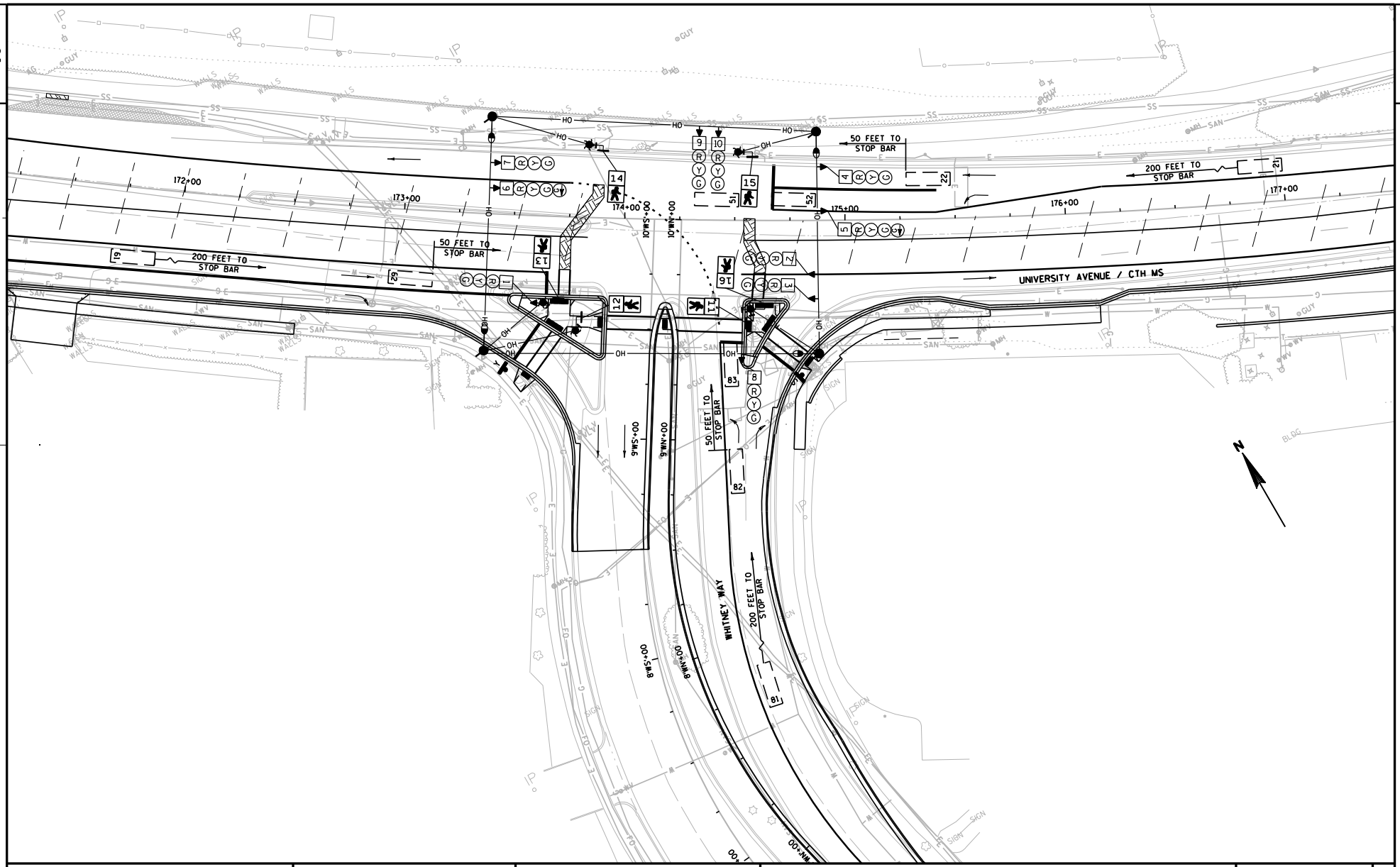
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 2B	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024004_tsp_stage 2B (whitney way).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

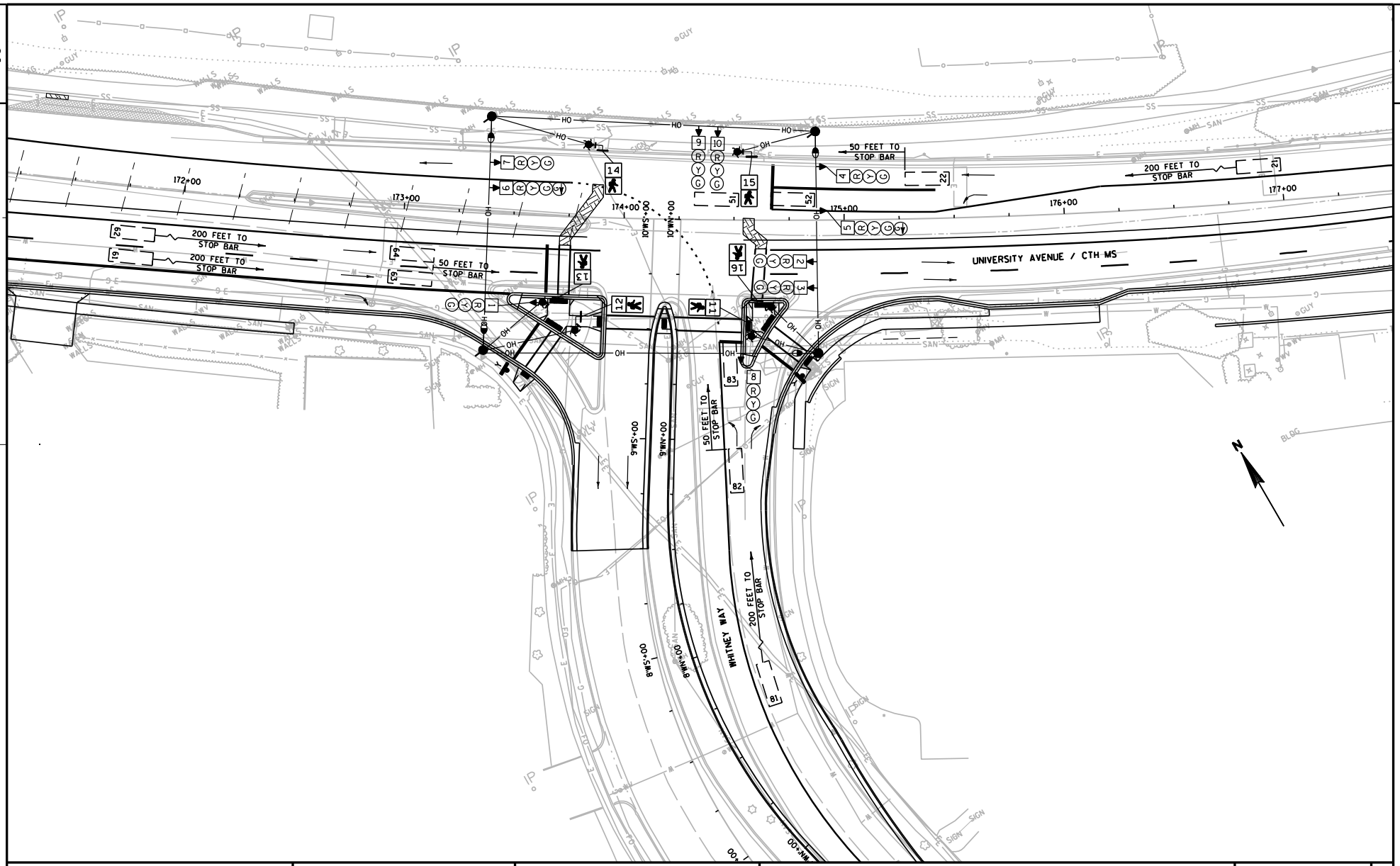
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 3A	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024004_tsp_stage 3A (whitney way).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

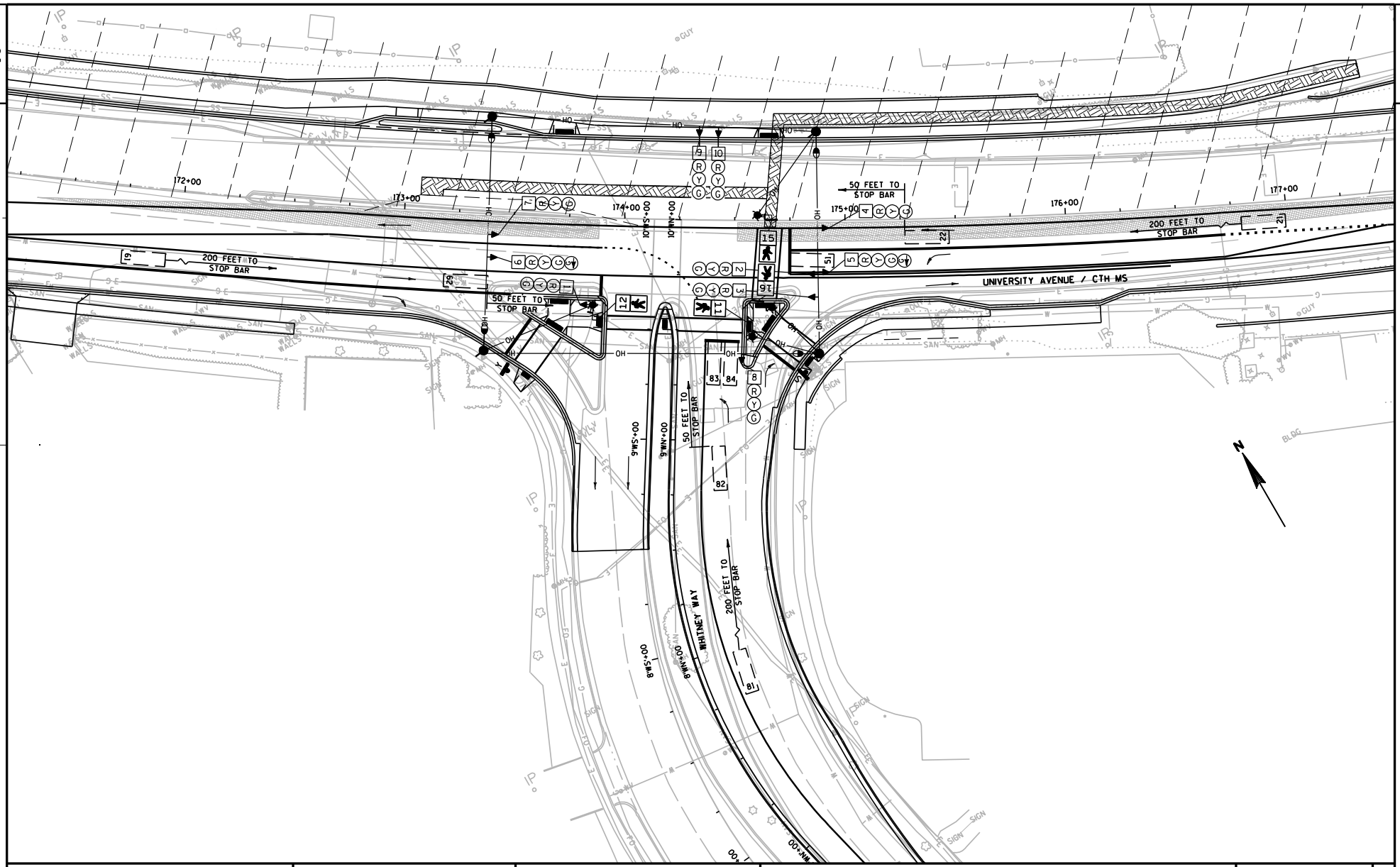
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 3B	SHEET E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024004_tsp_stage 3B (whitney way).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

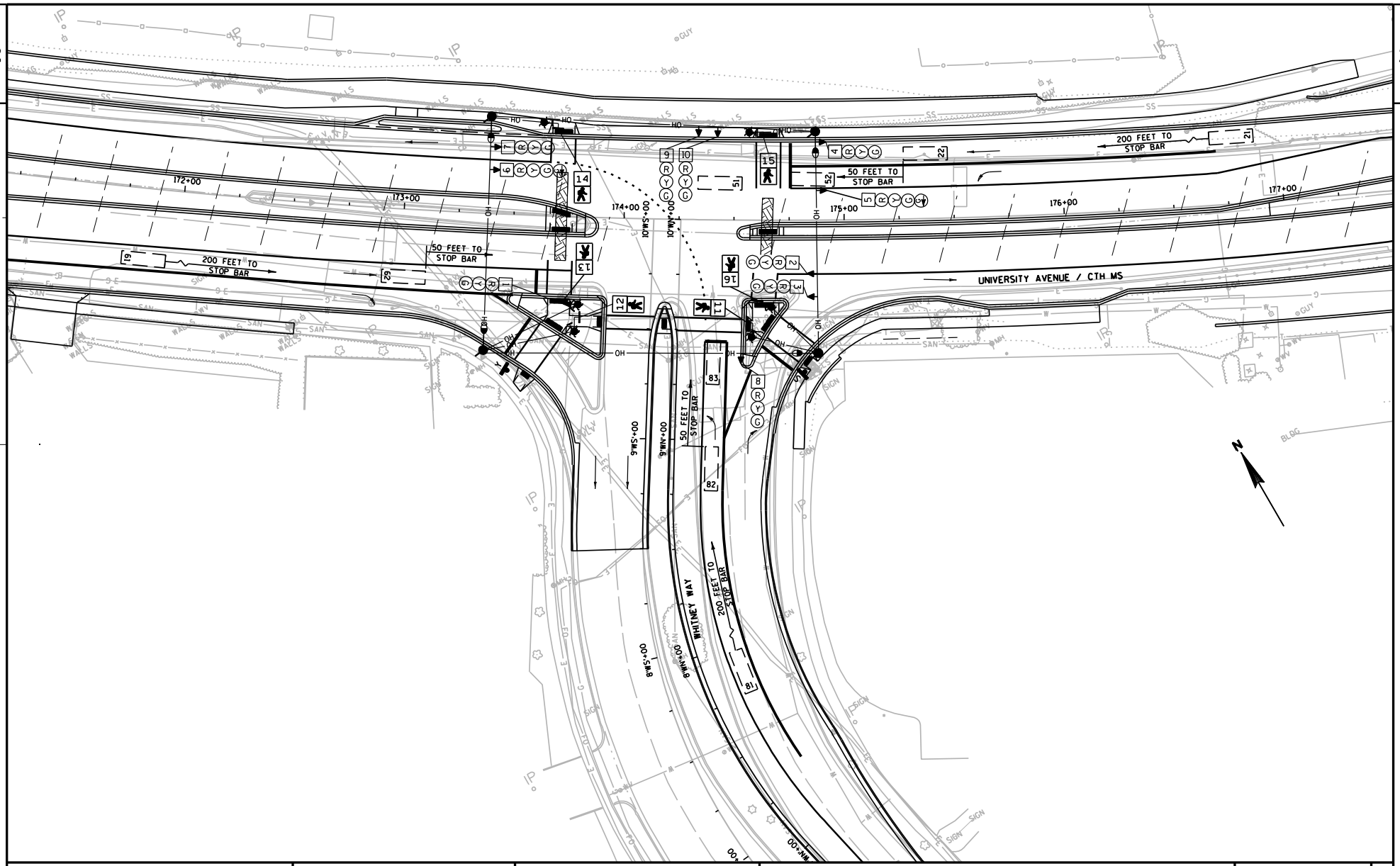
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 4A & 4B	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024004_tsp_stage 4 (whitney way).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TEMPORARY SIGNAL PLANS - STAGE 5A & 5B	SHEET E

FILE NAME : g:\madison\md2009035\dgn\temp signals\024004_tsp_stage 5 (whitney way).dgn PLOT DATE : 10/20/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
		NOT USED		⇦		NOT USED		NOT USED		
01										
02	4,5,6,7			G Y R				- - -		Y
03										
04										
RING 1 05	5,6			- - -				- - -		-
06	1,2,3			R R R				- - -		Y
07										
08	8,9,10			R R R				- - -		R
02P										
04P	13,14			D D D				* D D		
06P	11,12			D D D				D D D		
08P	15,16			D D D				D D D		

	HEAD NUMBERS	Ø6 R/W	Ø6 CLEAR TO **	Ø5 R/W	Ø5 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
		⇨⇦		⇩		NOT USED		⇧⇩	
01									
02	4,5,6,7	R R R		R R R				R R R	
03									
RING 2 04									
05	5,6	- - -		C - -				- - -	
06	1,2,3	G Y R		R R R				R R R	
07									
08	8,9,10	R R R		R R R				G Y R	
02P									
04P	13,14	D D D		D D D				D D D	
06P	11,12	* D D		D D D				D D D	
08P	15,16	D D D		D D D				* D D	

BARRIER

N

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1		
2	5 OR 6	8
3		
4		
5	2	6,8
6	2	5,8
7		
8	-	2,5,6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
21	1	X			2	2				6X20	
22	1	X			2	2				6X20	
51	2	X			5	5				6X20	
52	2	X			5	5				6X20	
61	3	X			6	6				6X20	
62	3	X			6	6				6X20	
63	4	X			6	6				6X20	
64	4	X			6	6				6X20	
81	5	X			8	8				6X20	
82	5	X			8	8				6X20	
83	6	X			8	8				6X20	
84	6	X			8	8				6X20	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN.	X
3				
4				
5	X			X
6	X	2	MIN.	X
7				
8	X			X

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	
CLOSED LOOP TWISTED PAIR*	x
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC	
RADIO	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	x
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	x
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)

CTH 'MS' & WHITNEY WAY
CITY OF MADISON
DANE COUNTY

SIGNAL NO.

CONTROLLER TYPE: TEMP

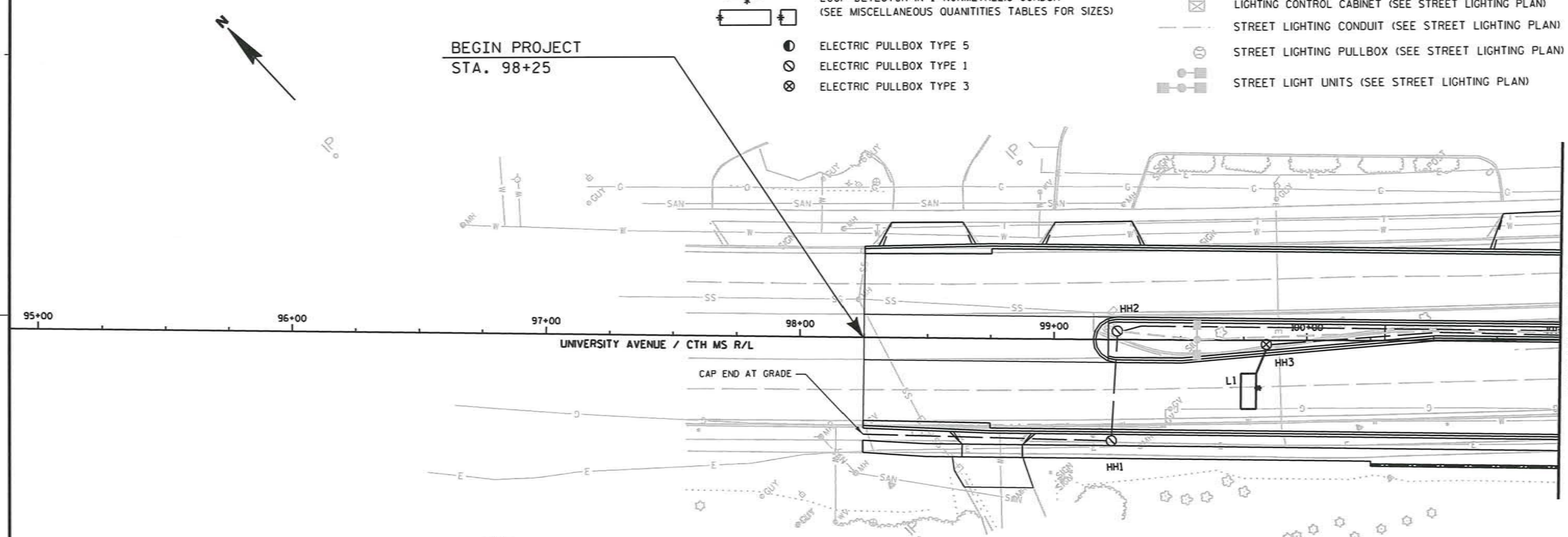
DATE

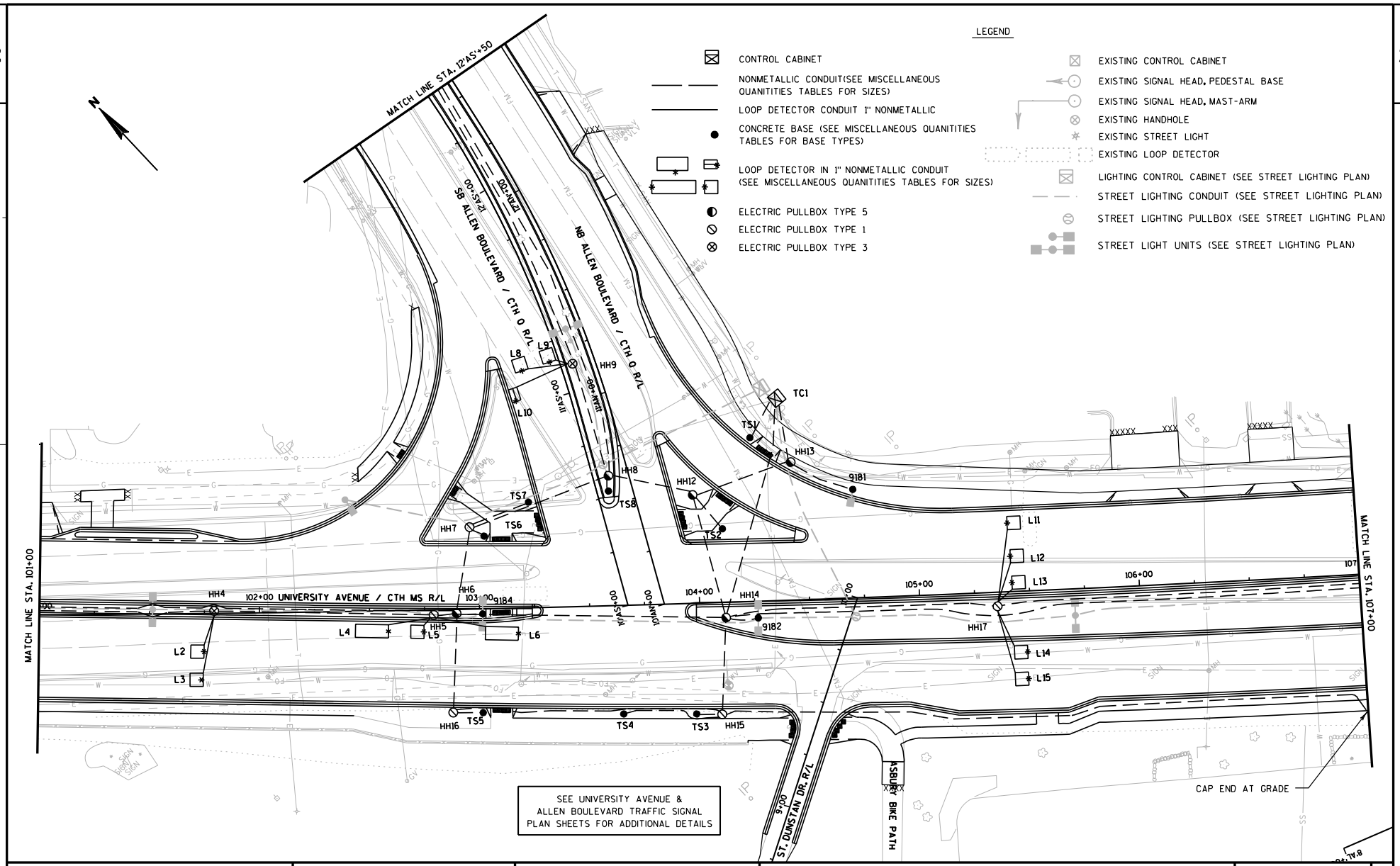
PAGE NO. 1 OF 1

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SEQUENCE OF OPERATIONS	SHEET 249 E

LEGEND

CONTROL CABINET	EXISTING CONTROL CABINET
NONMETALLIC CONDUIT(SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)	EXISTING SIGNAL HEAD, PEDESTAL BASE
LOOP DETECTOR CONDUIT 1" NONMETALLIC	EXISTING SIGNAL HEAD, MAST-ARM
CONCRETE BASE (SEE MISCELLANEOUS QUANITITIES TABLES FOR BASE TYPES)	EXISTING HANDHOLE
	EXISTING STREET LIGHT
	EXISTING LOOP DETECTOR
LOOP DETECTOR IN 1" NONMETALLIC CONDUIT (SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)	LIGHTING CONTROL CABINET (SEE STREET LIGHTING PLAN)
	STREET LIGHTING CONDUIT (SEE STREET LIGHTING PLAN)
ELECTRIC PULLBOX TYPE 5	STREET LIGHTING PULLBOX (SEE STREET LIGHTING PLAN)
ELECTRIC PULLBOX TYPE 1	STREET LIGHT UNITS (SEE STREET LIGHTING PLAN)
ELECTRIC PULLBOX TYPE 3	





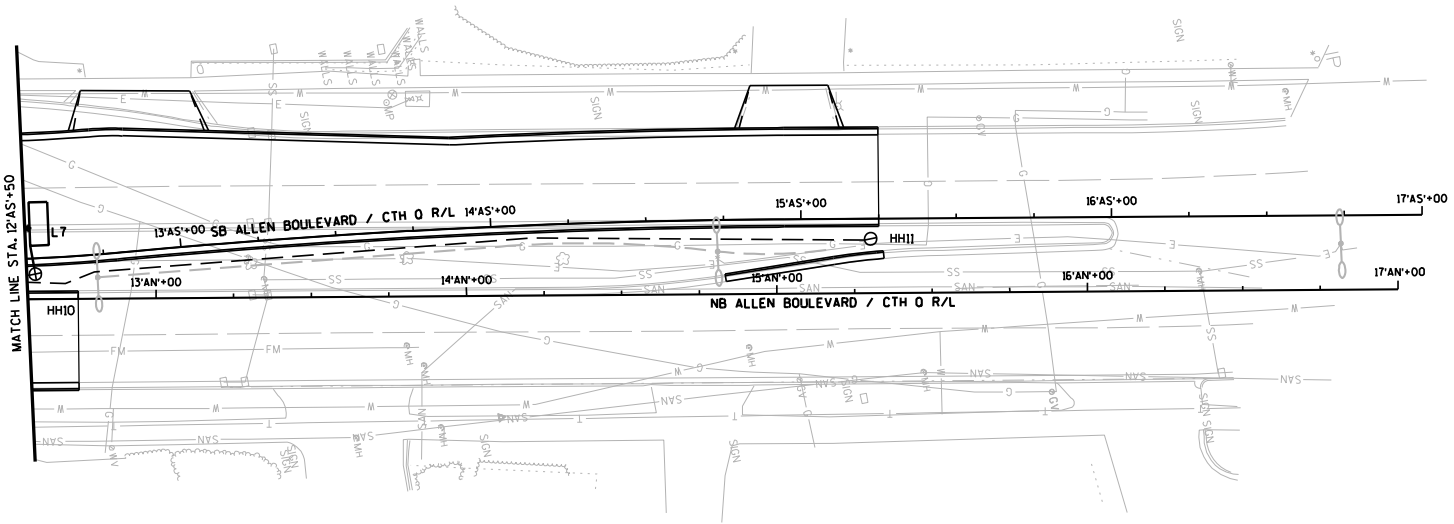
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET E

FILE NAME : g:\madison\md2009035\dgn\024102_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

LEGEND

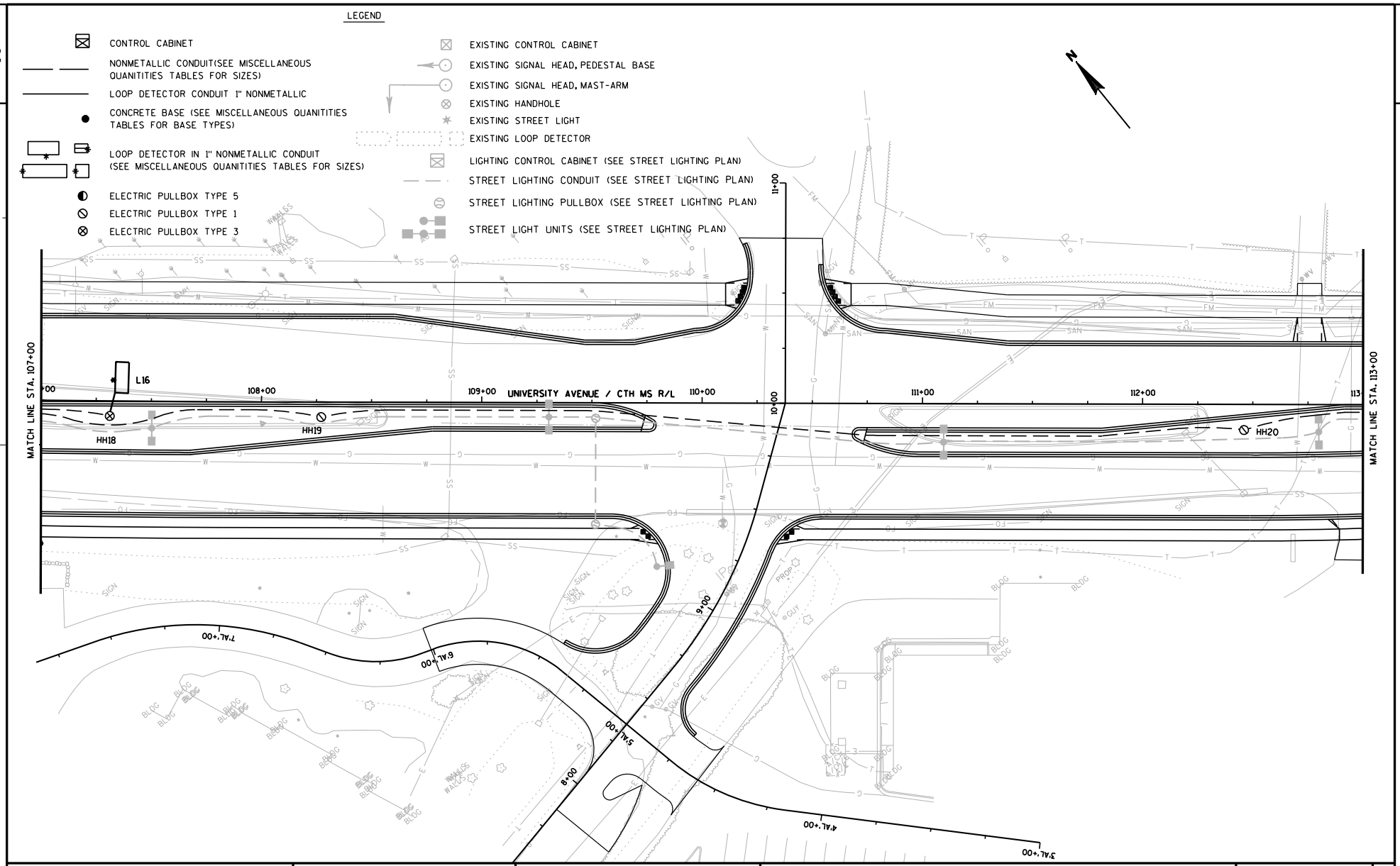
- CONTROL CABINET
- NONMETALLIC CONDUIT(SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- CONCRETE BASE (SEE MISCELLANEOUS QUANITITIES TABLES FOR BASE TYPES)
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT (SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- ELECTRIC PULLBOX TYPE 5
- ELECTRIC PULLBOX TYPE 1
- ELECTRIC PULLBOX TYPE 3
- EXISTING CONTROL CABINET
- EXISTING SIGNAL HEAD, PEDESTAL BASE
- EXISTING SIGNAL HEAD, MAST-ARM
- EXISTING HANDHOLE
- EXISTING STREET LIGHT
- EXISTING LOOP DETECTOR
- LIGHTING CONTROL CABINET (SEE STREET LIGHTING PLAN)
- STREET LIGHTING CONDUIT (SEE STREET LIGHTING PLAN)
- STREET LIGHTING PULLBOX (SEE STREET LIGHTING PLAN)
- STREET LIGHT UNITS (SEE STREET LIGHTING PLAN)



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 252 E

FILE NAME : g:\madison\md2009035\dgn\024103_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



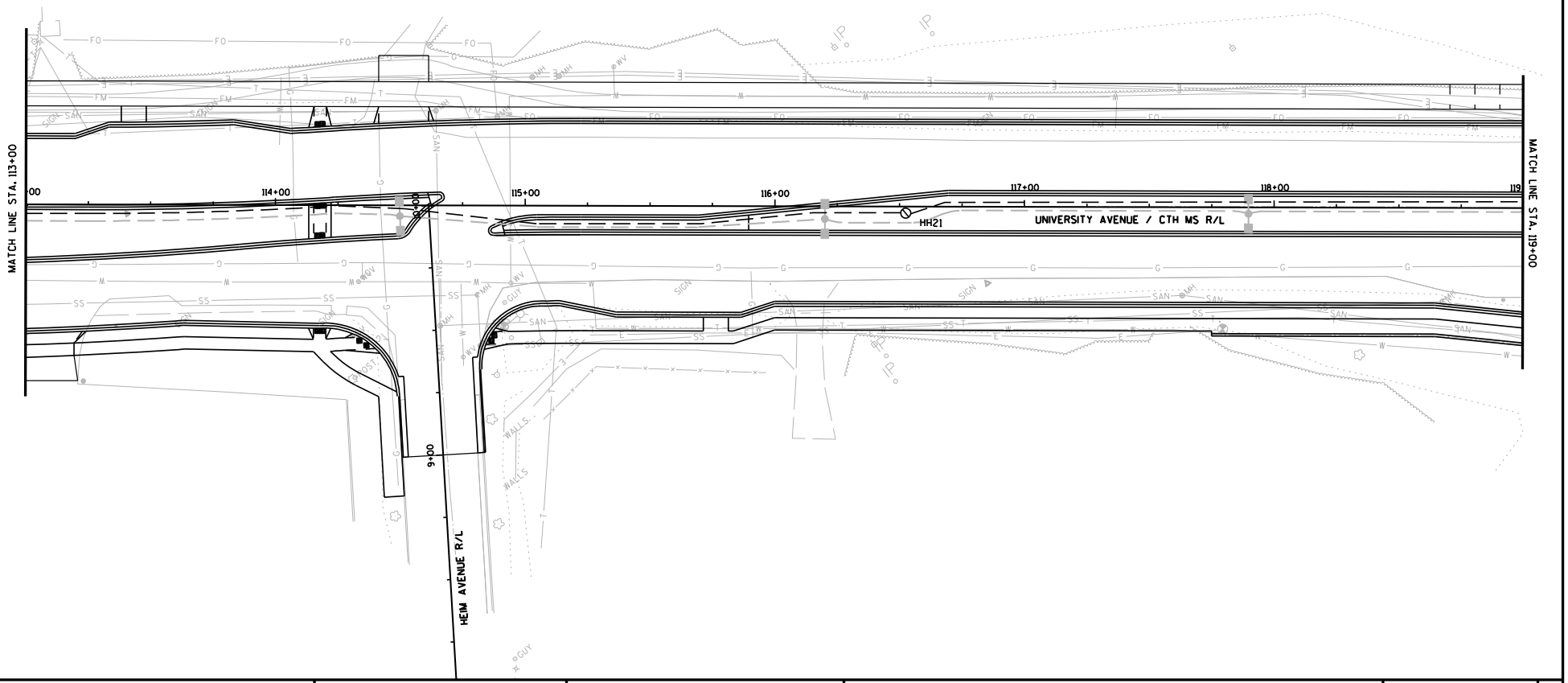
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 253	E

FILE NAME : g:\madison\md2009035\dgn\024104_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT(SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- CONCRETE BASE (SEE MISCELLANEOUS QUANITITIES TABLES FOR BASE TYPES)
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT (SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- ELECTRIC PULLBOX TYPE 5
- ELECTRIC PULLBOX TYPE 1
- ELECTRIC PULLBOX TYPE 3
- EXISTING CONTROL CABINET
- EXISTING SIGNAL HEAD, PEDESTAL BASE
- EXISTING SIGNAL HEAD, MAST-ARM
- EXISTING HANDHOLE
- EXISTING STREET LIGHT
- EXISTING LOOP DETECTOR
- LIGHTING CONTROL CABINET (SEE STREET LIGHTING PLAN)
- STREET LIGHTING CONDUIT (SEE STREET LIGHTING PLAN)
- STREET LIGHTING PULLBOX (SEE STREET LIGHTING PLAN)
- STREET LIGHT UNITS (SEE STREET LIGHTING PLAN)



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 254 E

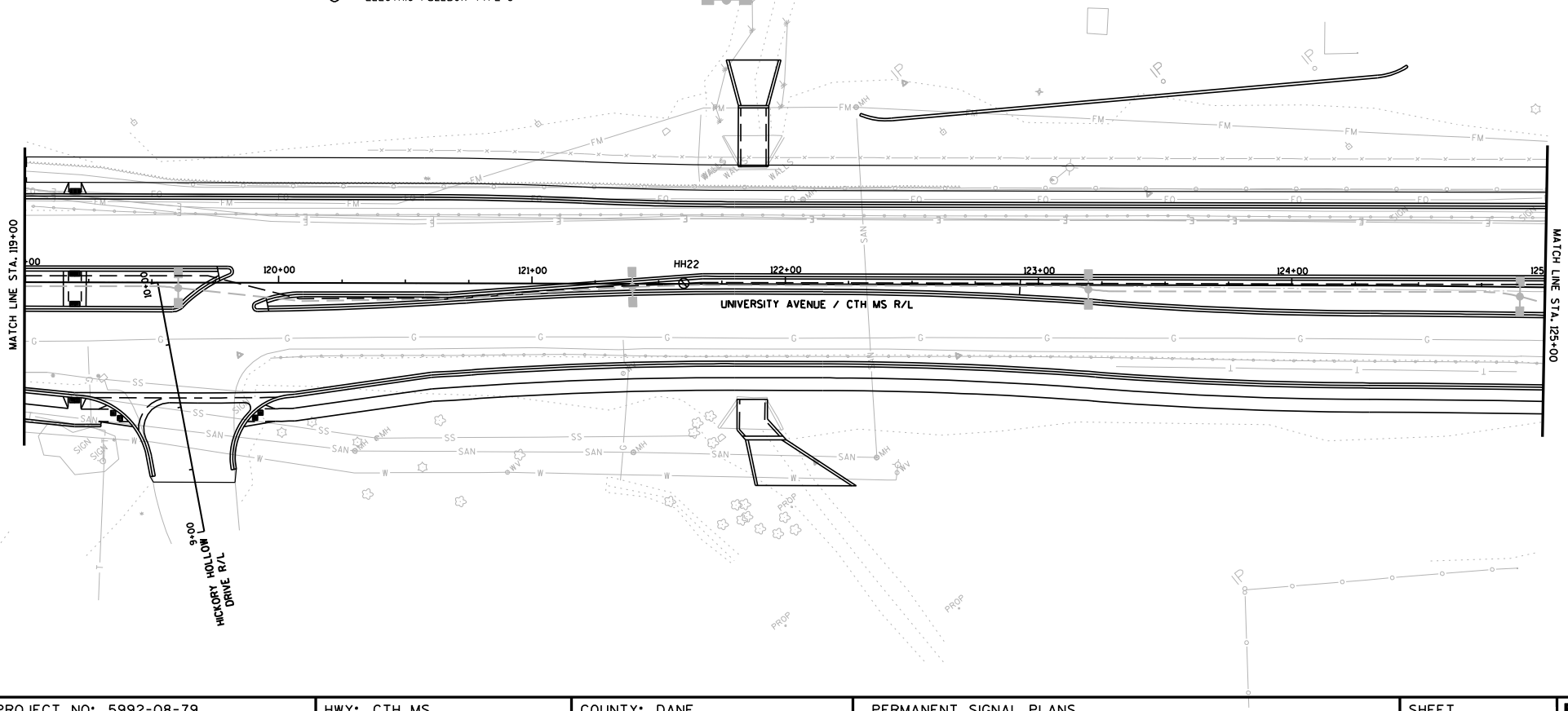
FILE NAME : g:\madison\md2009035\dgn\024105_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

LEGEND

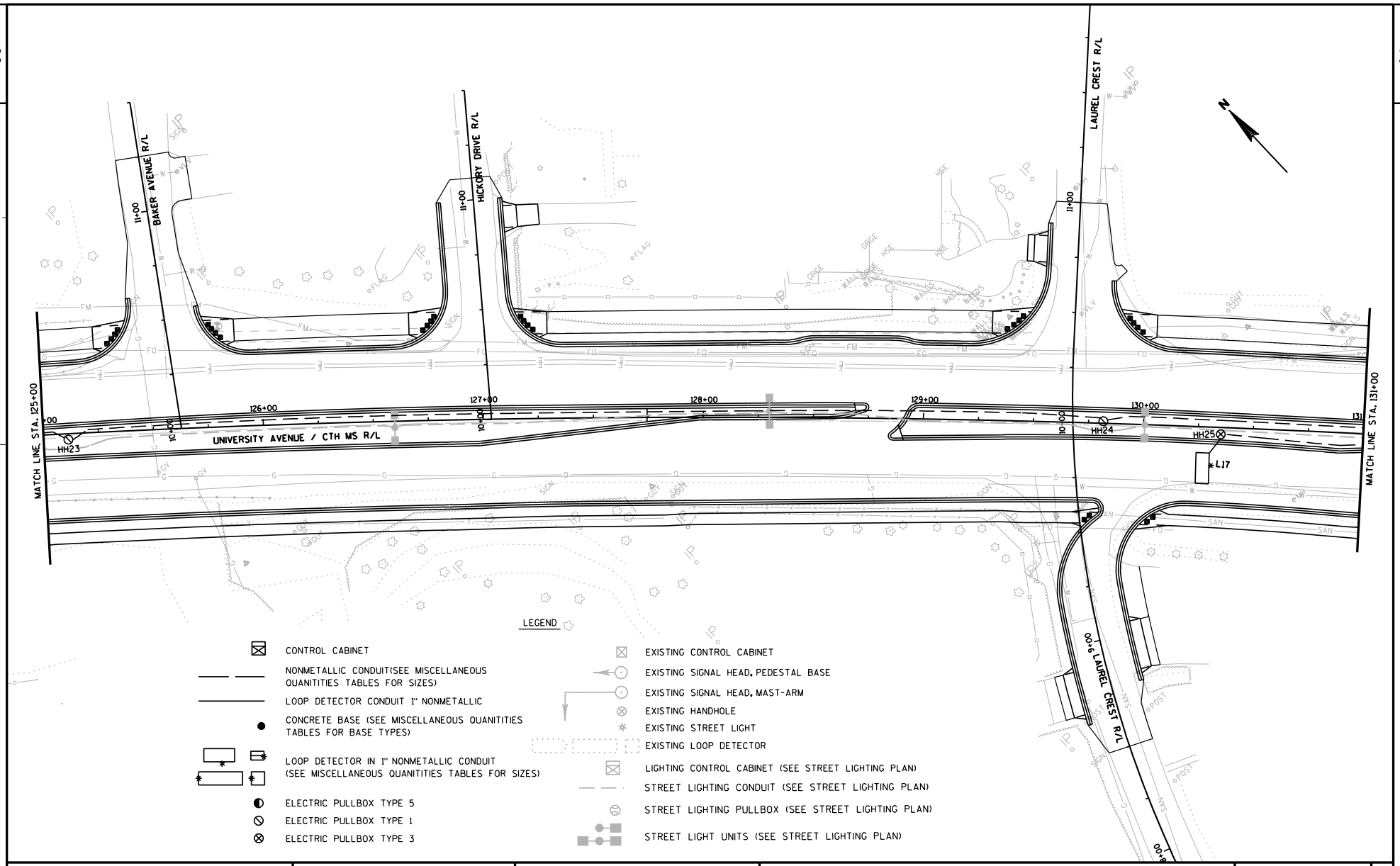
- CONTROL CABINET
- NONMETALLIC CONDUIT(SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- CONCRETE BASE (SEE MISCELLANEOUS QUANITITIES TABLES FOR BASE TYPES)
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT (SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- ELECTRIC PULLBOX TYPE 5
- ELECTRIC PULLBOX TYPE 1
- ELECTRIC PULLBOX TYPE 3
- EXISTING CONTROL CABINET
- EXISTING SIGNAL HEAD, PEDESTAL BASE
- EXISTING SIGNAL HEAD, MAST-ARM
- EXISTING HANDHOLE
- EXISTING STREET LIGHT
- EXISTING LOOP DETECTOR
- LIGHTING CONTROL CABINET (SEE STREET LIGHTING PLAN)
- STREET LIGHTING CONDUIT (SEE STREET LIGHTING PLAN)
- STREET LIGHTING PULLBOX (SEE STREET LIGHTING PLAN)
- STREET LIGHT UNITS (SEE STREET LIGHTING PLAN)



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\024106_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

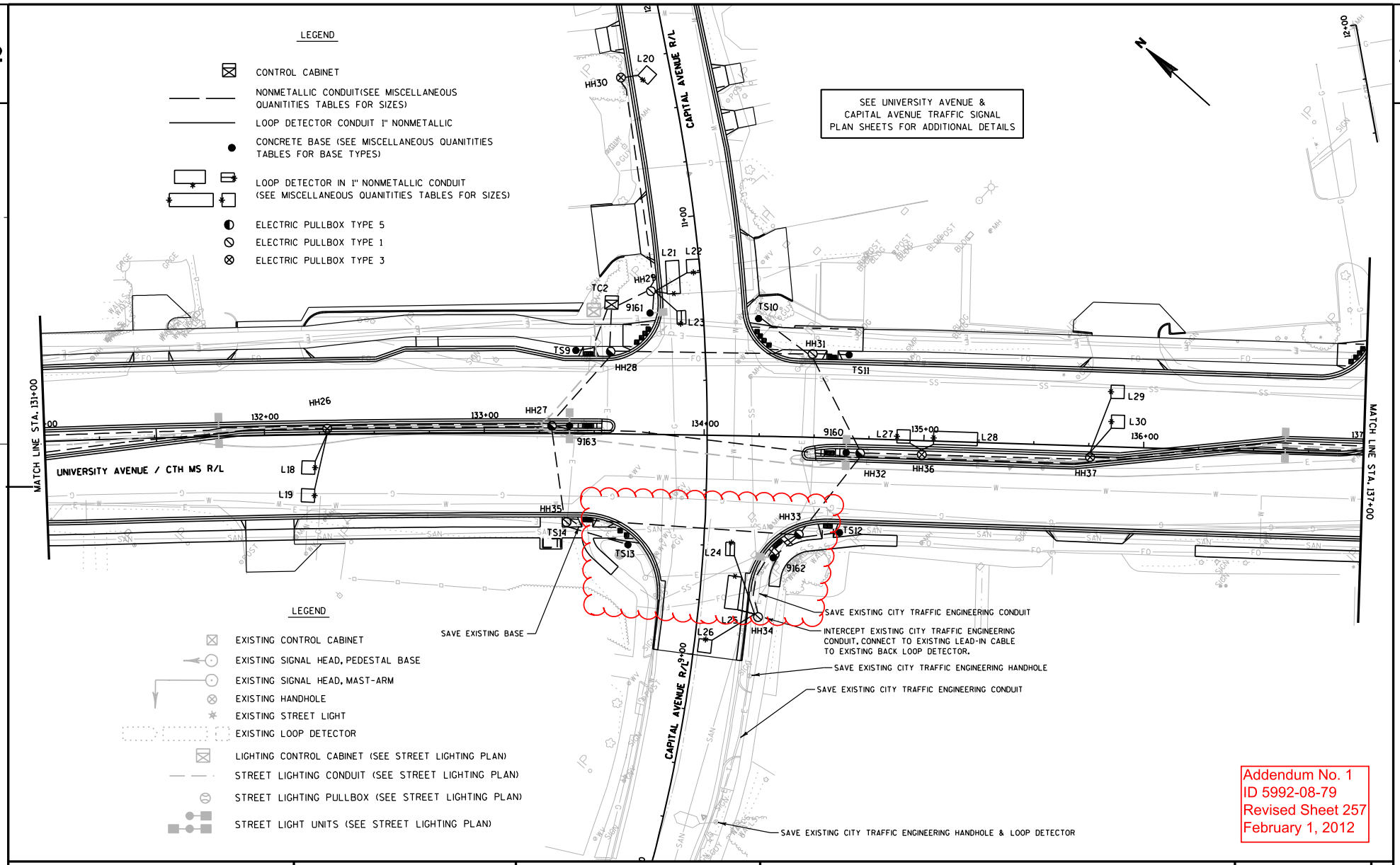
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\024107_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

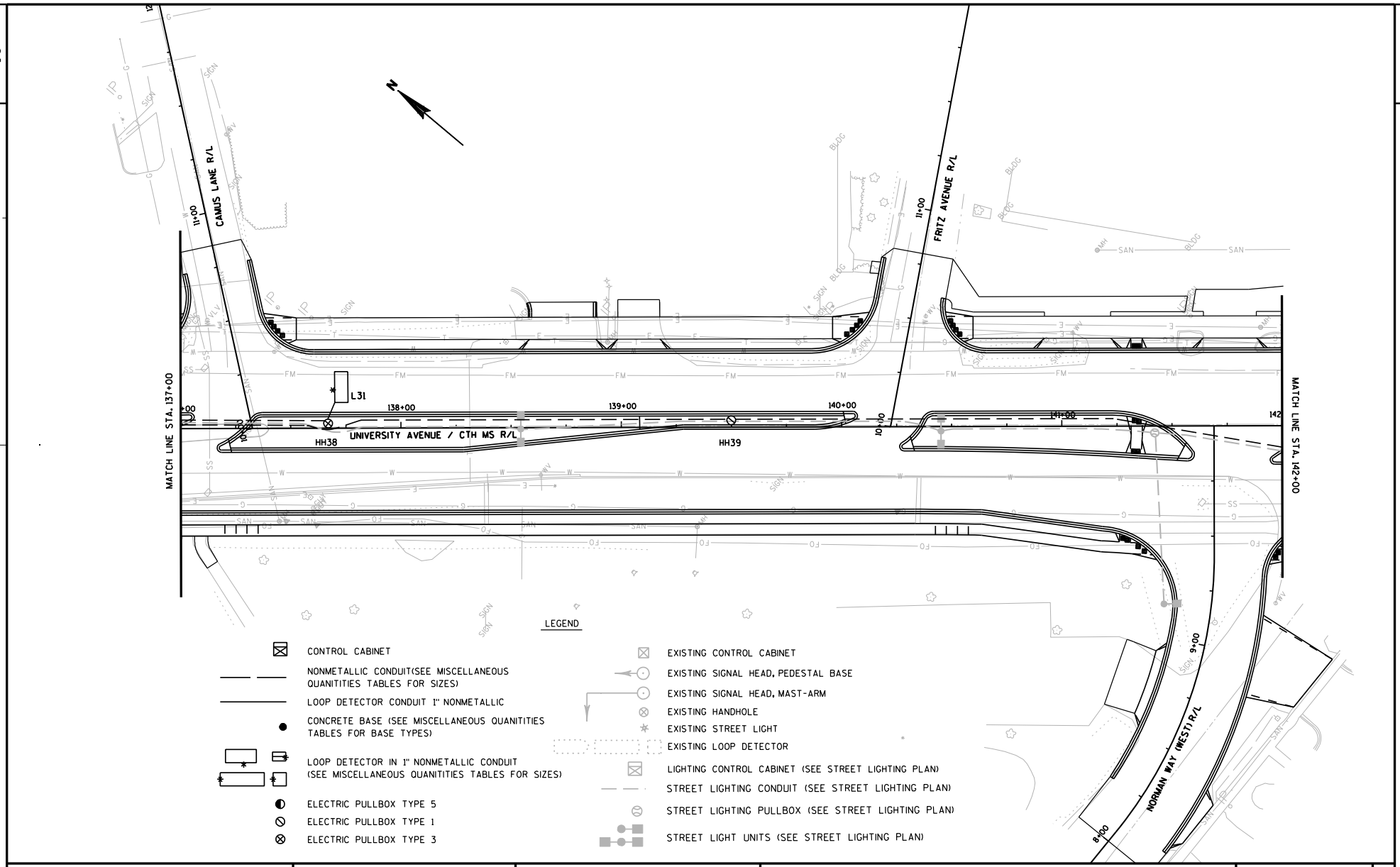


Addendum No. 1
ID 5992-08-79
Revised Sheet 257
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 257 257	E

FILE NAME : g:\madison\md2009035\dgn\024108_sp.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

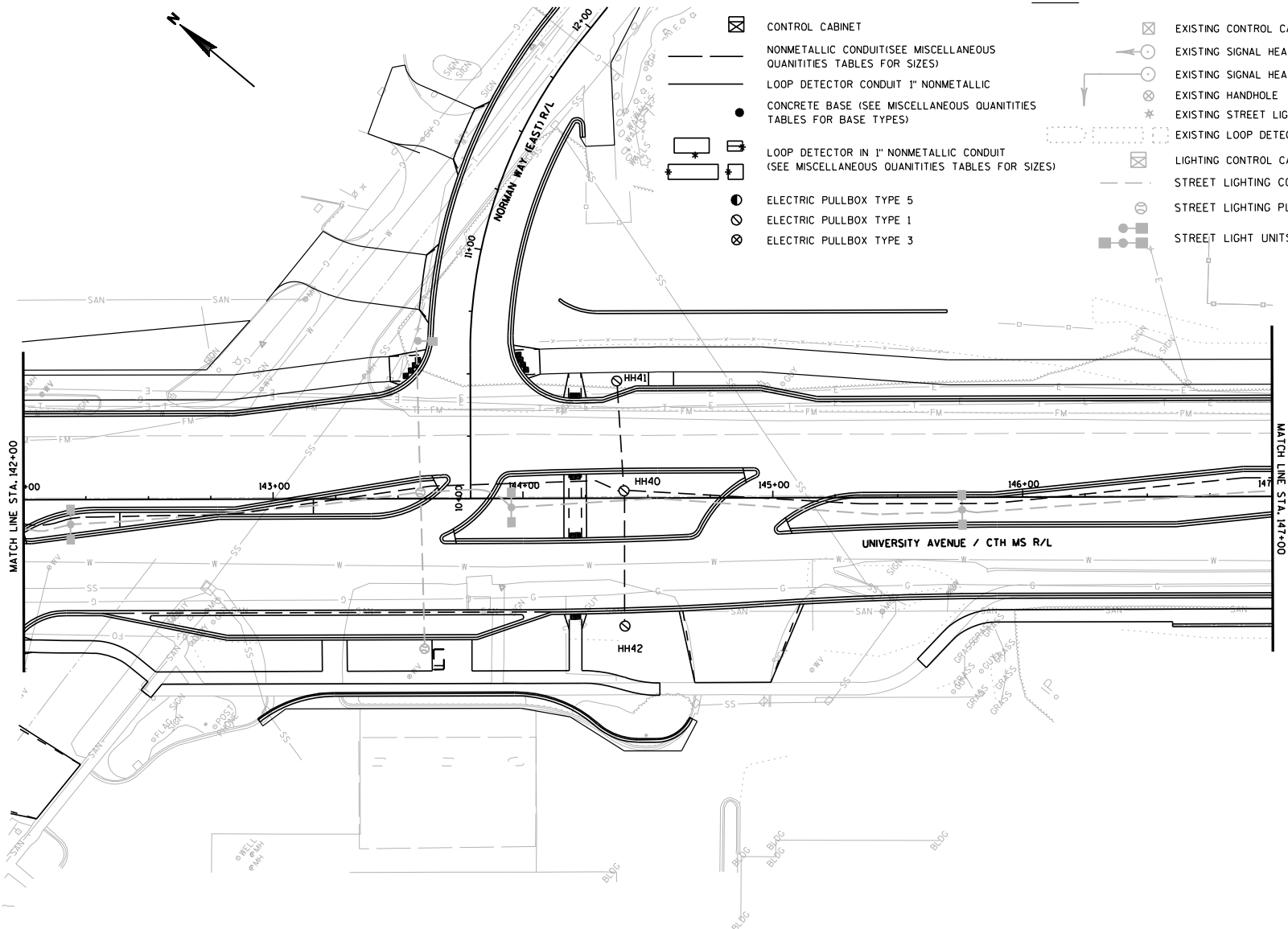
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\024109_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET	E

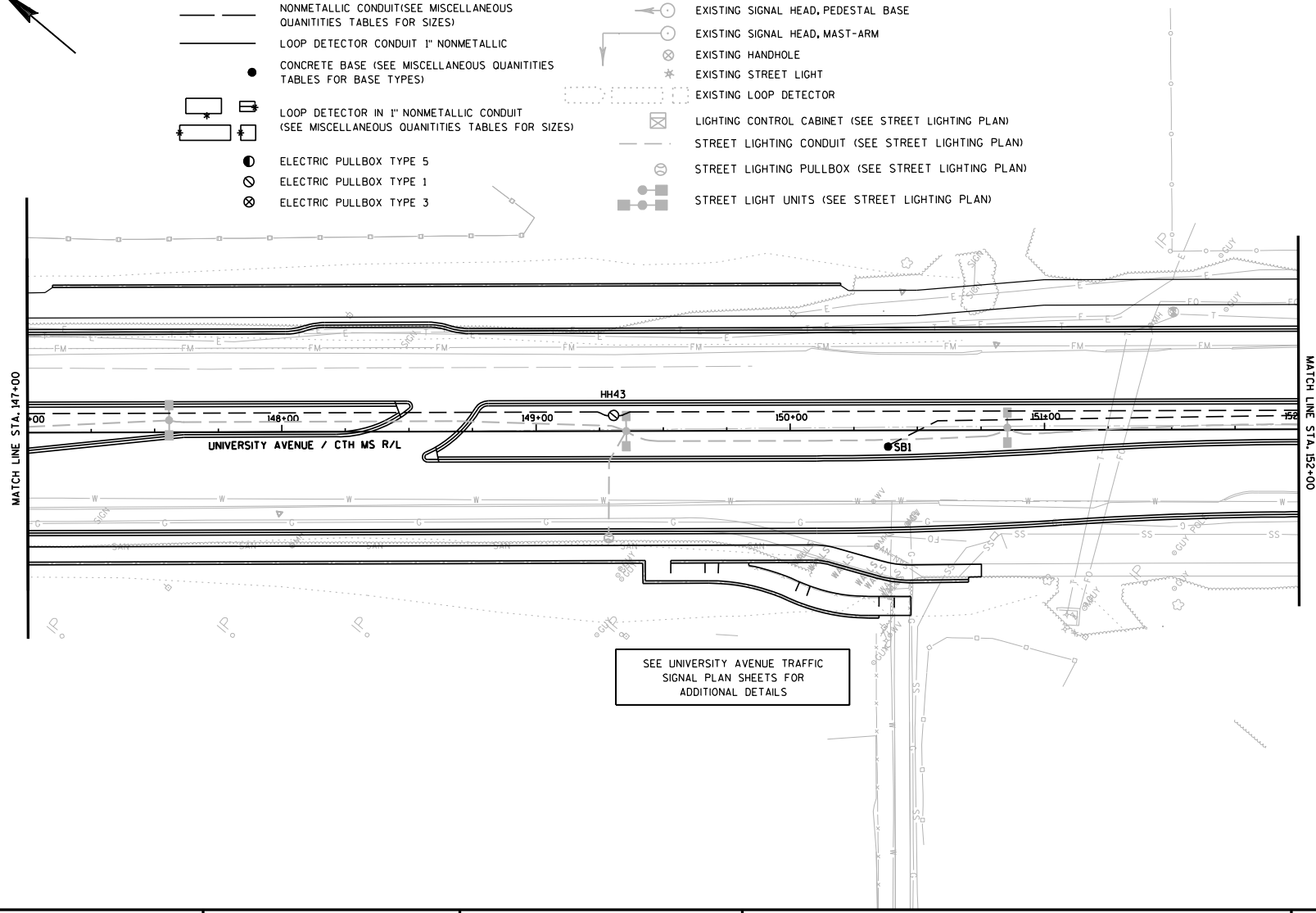
FILE NAME : g:\madison\md2009035\dgn\024110_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

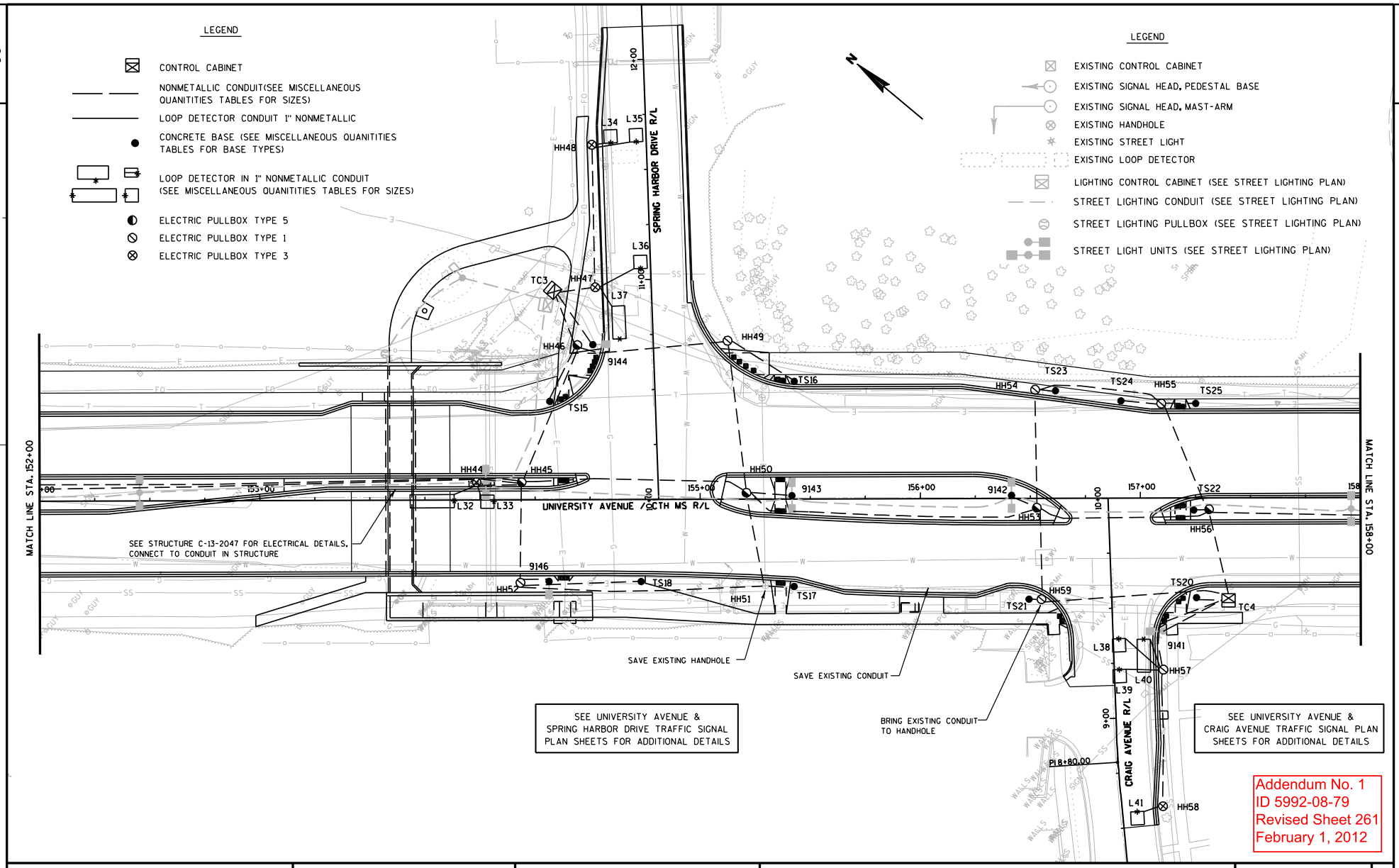
2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT(SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- CONCRETE BASE (SEE MISCELLANEOUS QUANITITIES TABLES FOR BASE TYPES)
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT (SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- ELECTRIC PULLBOX TYPE 5
- ELECTRIC PULLBOX TYPE 1
- ELECTRIC PULLBOX TYPE 3
- EXISTING CONTROL CABINET
- EXISTING SIGNAL HEAD, PEDESTAL BASE
- EXISTING SIGNAL HEAD, MAST-ARM
- EXISTING HANDHOLE
- EXISTING STREET LIGHT
- EXISTING LOOP DETECTOR
- LIGHTING CONTROL CABINET (SEE STREET LIGHTING PLAN)
- STREET LIGHTING CONDUIT (SEE STREET LIGHTING PLAN)
- STREET LIGHTING PULLBOX (SEE STREET LIGHTING PLAN)
- STREET LIGHT UNITS (SEE STREET LIGHTING PLAN)



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 260 E

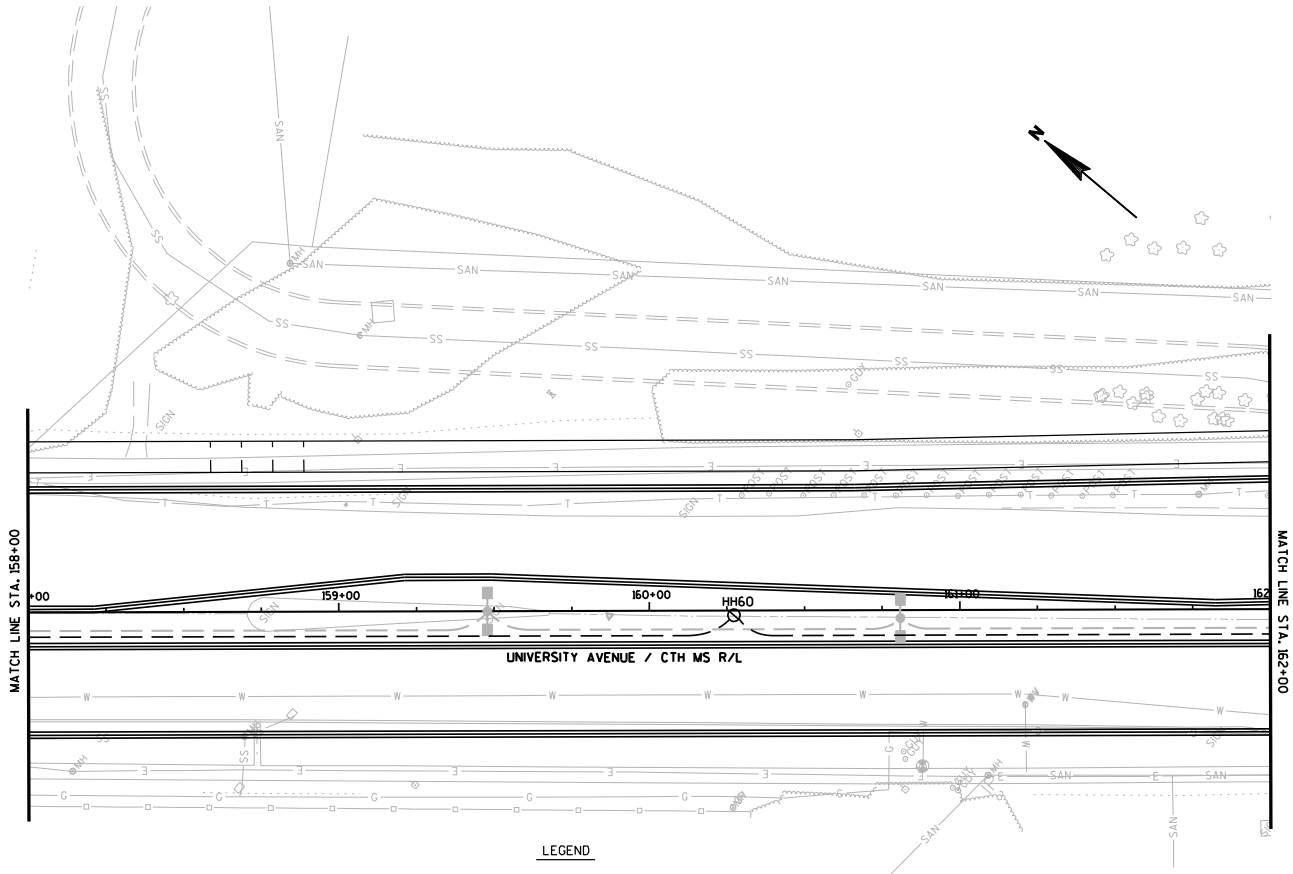


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 261	E

FILE NAME : g:\madison\md2009035\dgn\024112_sp.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2



LEGEND

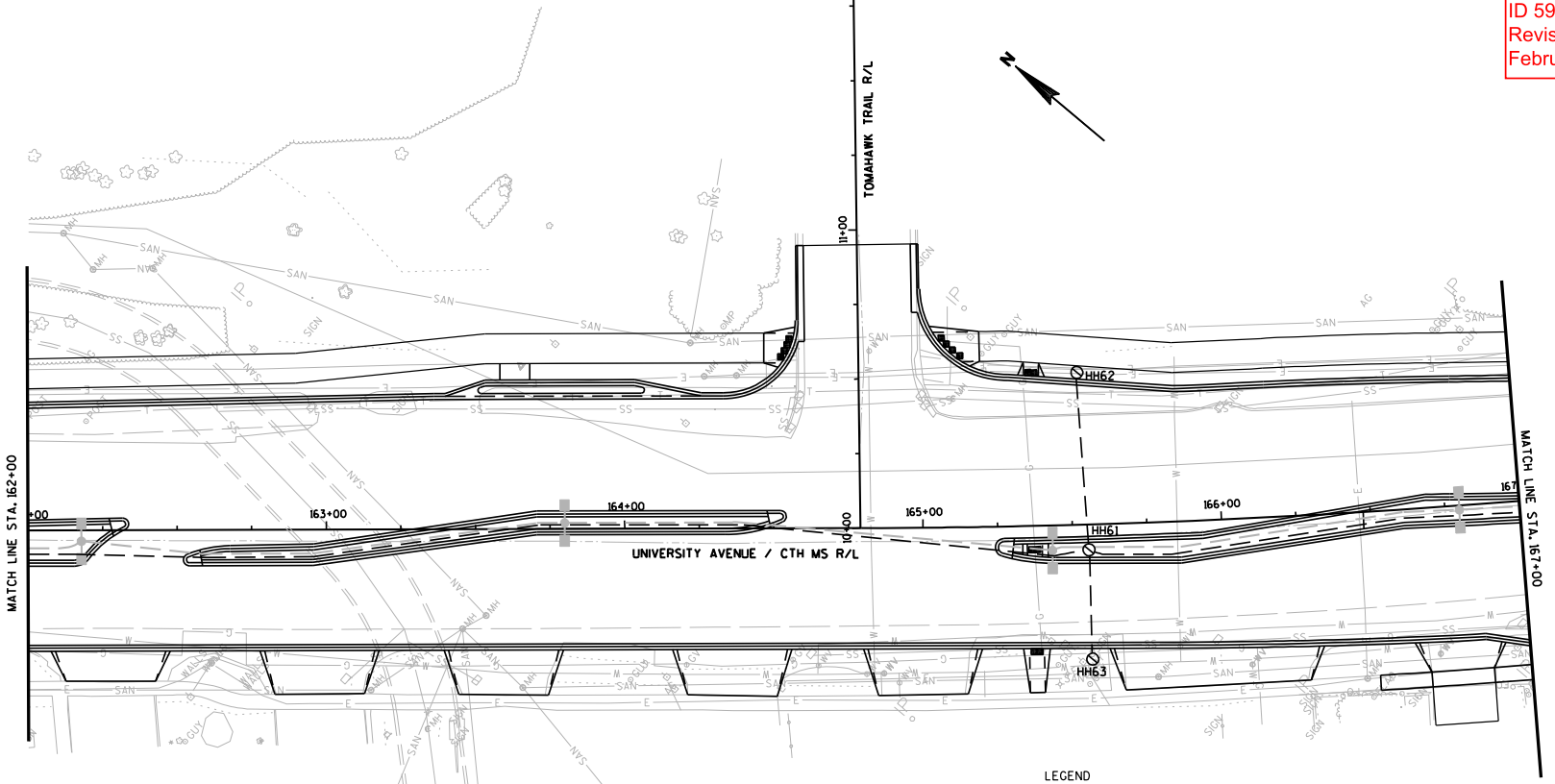
- CONTROL CABINET
- NONMETALLIC CONDUIT(SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- CONCRETE BASE (SEE MISCELLANEOUS QUANITITIES TABLES FOR BASE TYPES)
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT (SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- ELECTRIC PULLBOX TYPE 5
- ELECTRIC PULLBOX TYPE 1
- ELECTRIC PULLBOX TYPE 3
- EXISTING CONTROL CABINET
- EXISTING SIGNAL HEAD, PEDESTAL BASE
- EXISTING SIGNAL HEAD, MAST-ARM
- EXISTING HANDHOLE
- EXISTING STREET LIGHT
- EXISTING LOOP DETECTOR
- LIGHTING CONTROL CABINET (SEE STREET LIGHTING PLAN)
- STREET LIGHTING CONDUIT (SEE STREET LIGHTING PLAN)
- STREET LIGHTING PULLBOX (SEE STREET LIGHTING PLAN)
- STREET LIGHT UNITS (SEE STREET LIGHTING PLAN)

Addendum No. 1
ID 5992-08-79
Revised Sheet 262
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 262	E

FILE NAME : g:\madison\md2009035\dgn\024113_sp.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

Addendum No. 1
ID 5992-08-79
Revised Sheet 263
February 1, 2012



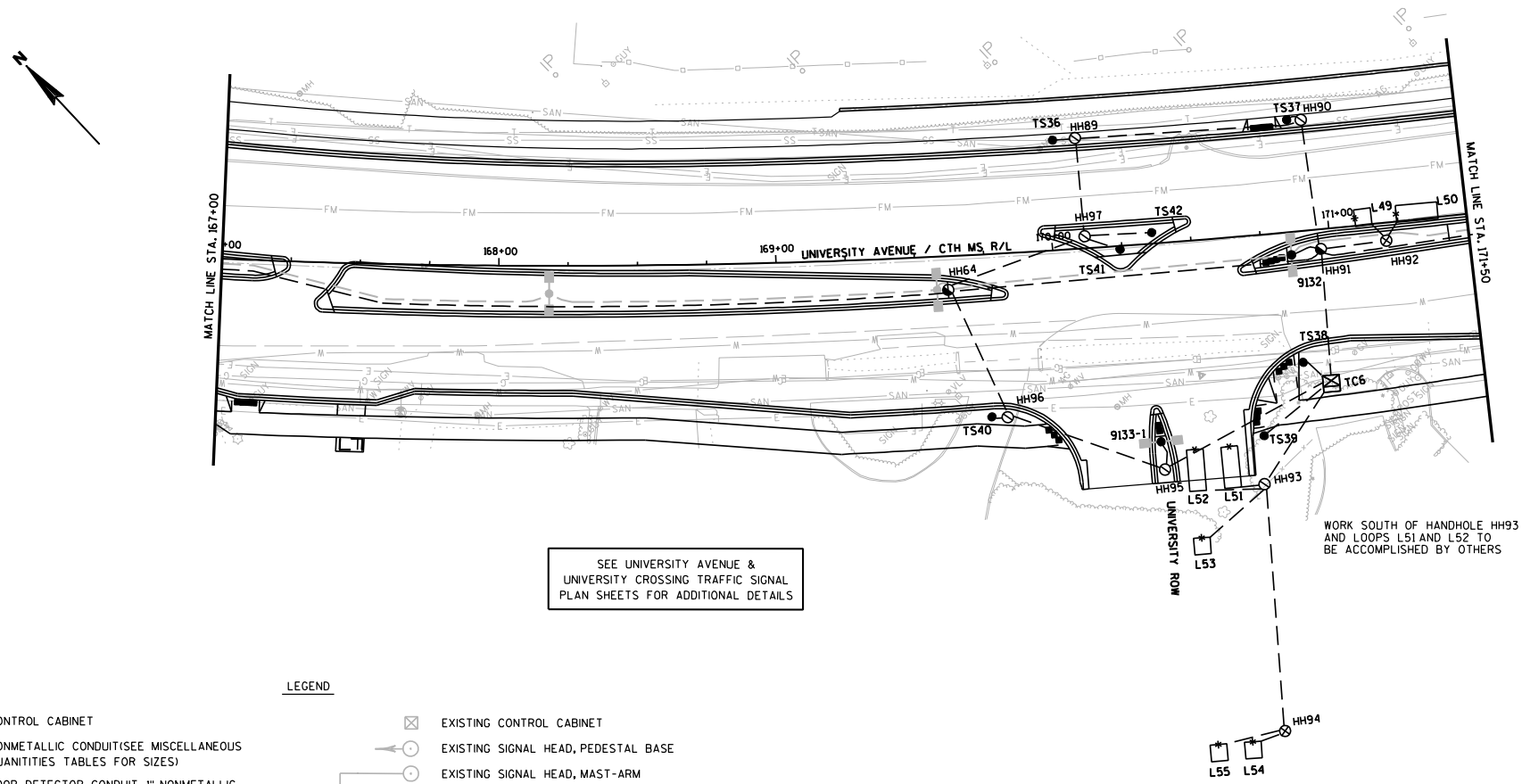
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT(SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- CONCRETE BASE (SEE MISCELLANEOUS QUANITITIES TABLES FOR BASE TYPES)
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT (SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- ELECTRIC PULLBOX TYPE 5
- ELECTRIC PULLBOX TYPE 1
- ELECTRIC PULLBOX TYPE 3
- EXISTING CONTROL CABINET
- EXISTING SIGNAL HEAD, PEDESTAL BASE
- EXISTING SIGNAL HEAD, MAST-ARM
- EXISTING HANDHOLE
- EXISTING STREET LIGHT
- EXISTING LOOP DETECTOR
- LIGHTING CONTROL CABINET (SEE STREET LIGHTING PLAN)
- STREET LIGHTING CONDUIT (SEE STREET LIGHTING PLAN)
- STREET LIGHTING PULLBOX (SEE STREET LIGHTING PLAN)
- STREET LIGHT UNITS (SEE STREET LIGHTING PLAN)

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 263	E

FILE NAME : g:\madison\md2009035\dgn\024114_sp.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

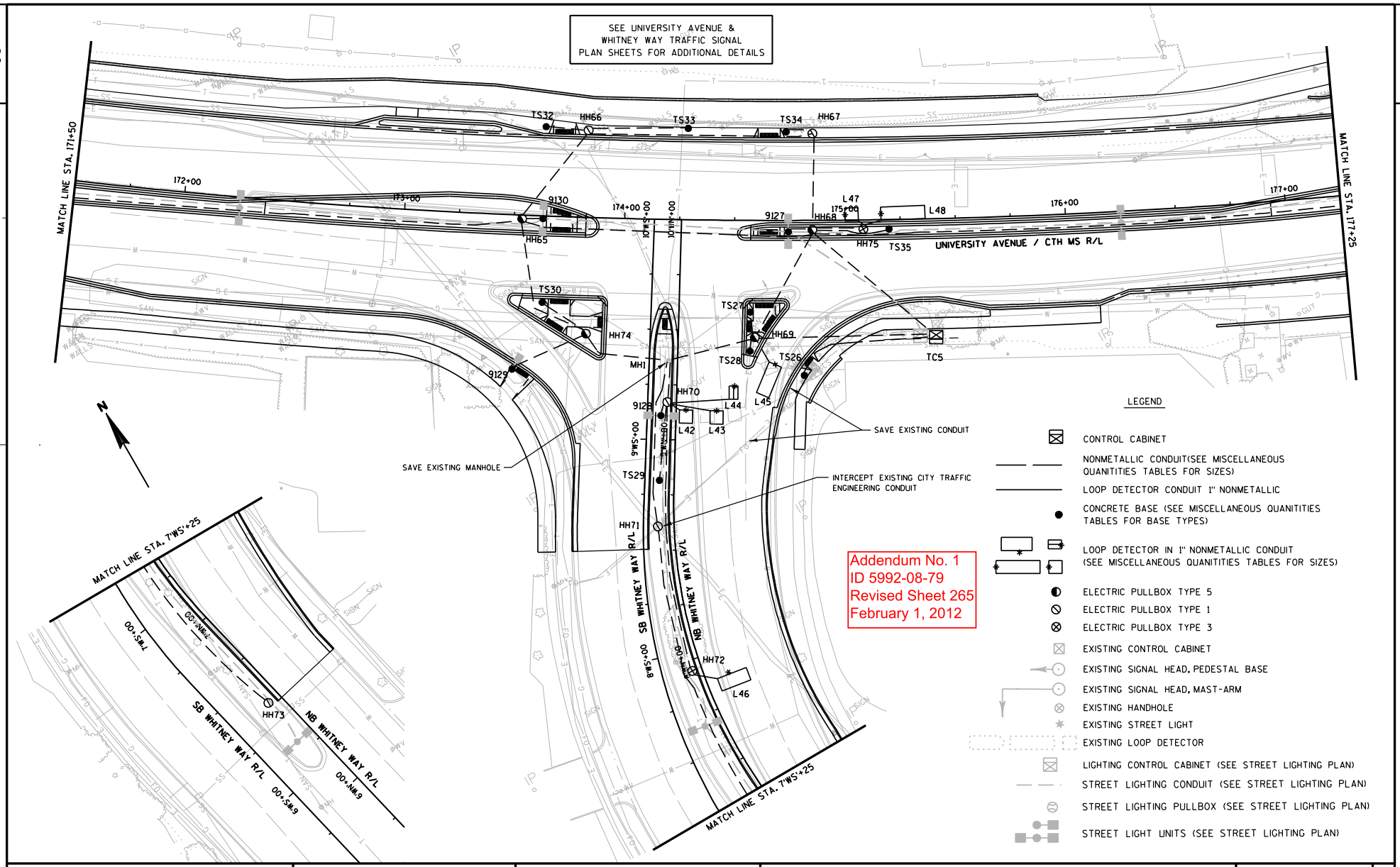
- CONTROL CABINET
- NONMETALLIC CONDUIT(SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- CONCRETE BASE (SEE MISCELLANEOUS QUANITITIES TABLES FOR BASE TYPES)
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT (SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- ELECTRIC PULLBOX TYPE 5
- ELECTRIC PULLBOX TYPE 1
- ELECTRIC PULLBOX TYPE 3
- EXISTING CONTROL CABINET
- EXISTING SIGNAL HEAD, PEDESTAL BASE
- EXISTING SIGNAL HEAD, MAST-ARM
- EXISTING HANDHOLE
- EXISTING STREET LIGHT
- EXISTING LOOP DETECTOR
- LIGHTING CONTROL CABINET (SEE STREET LIGHTING PLAN)
- STREET LIGHTING CONDUIT (SEE STREET LIGHTING PLAN)
- STREET LIGHTING PULLBOX (SEE STREET LIGHTING PLAN)
- STREET LIGHT UNITS (SEE STREET LIGHTING PLAN)

Addendum No. 1
ID 5992-08-79
Revised Sheet 264
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 264	E

FILE NAME : G:\Madison\MD2009035\DGN\024115_sp.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

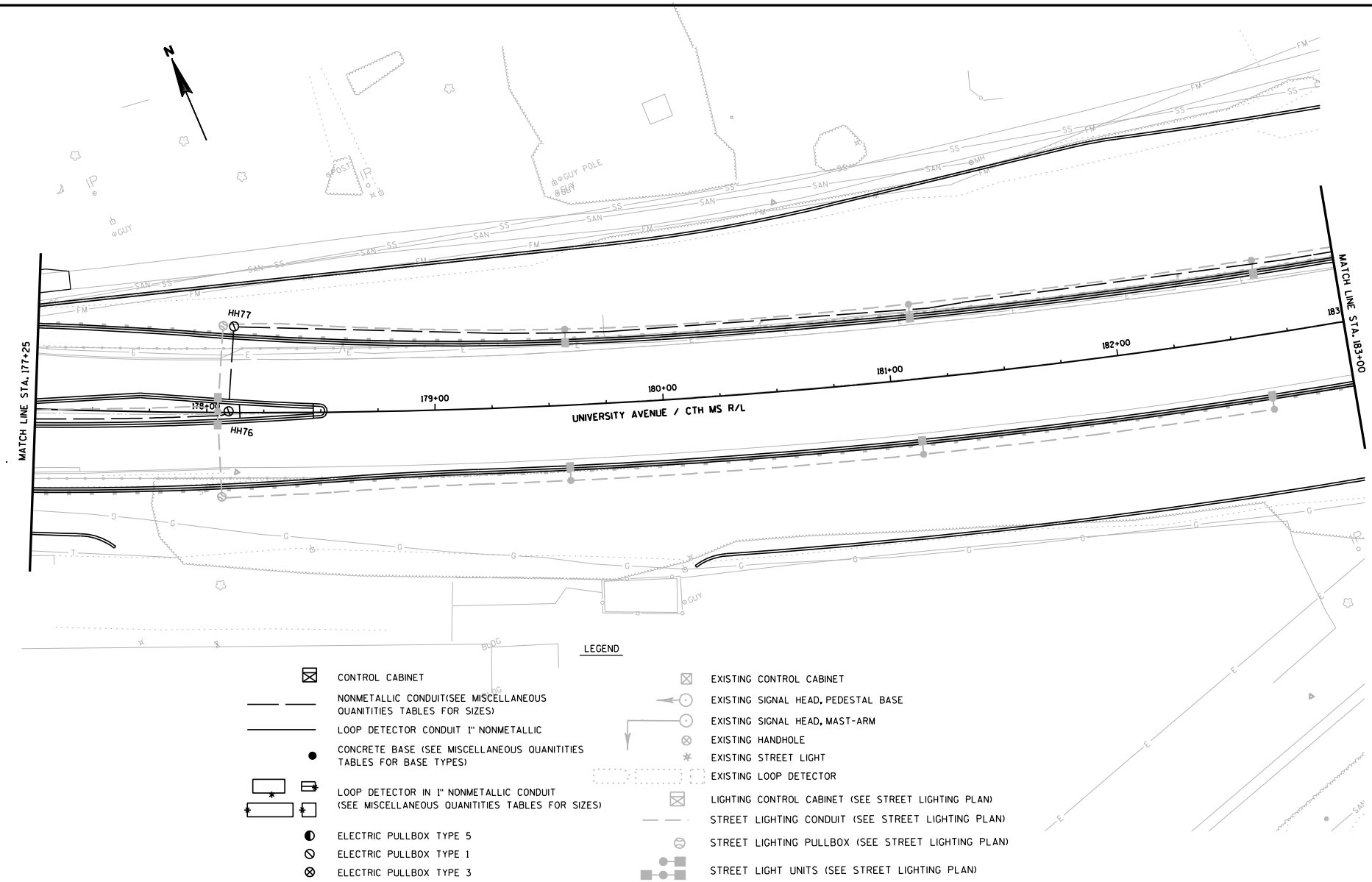
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 265	E

FILE NAME : g:\madison\md2009035\dgn\024116_sp.dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

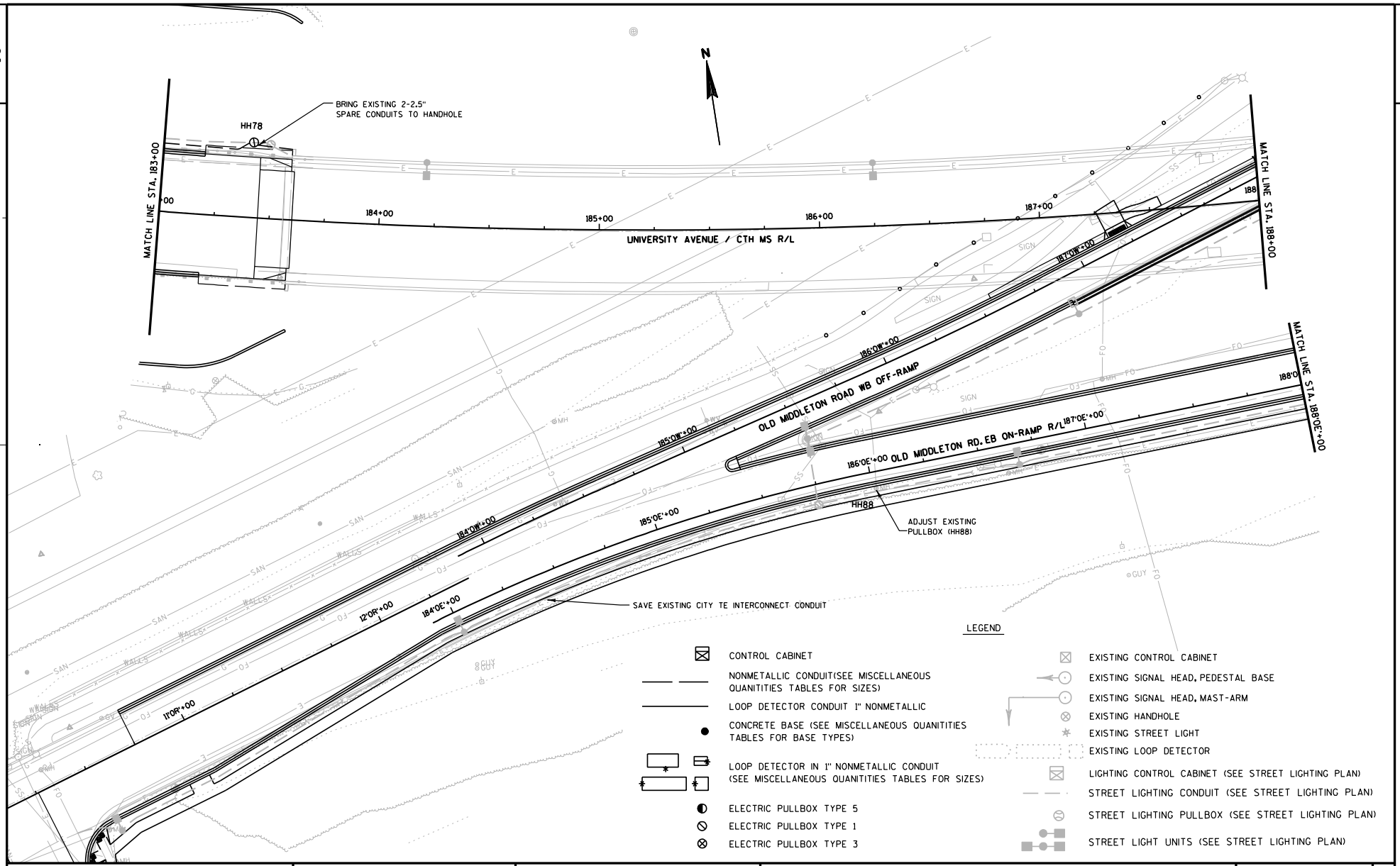
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 266 E

FILE NAME : g:\madison\md2009035\dgn\024117_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

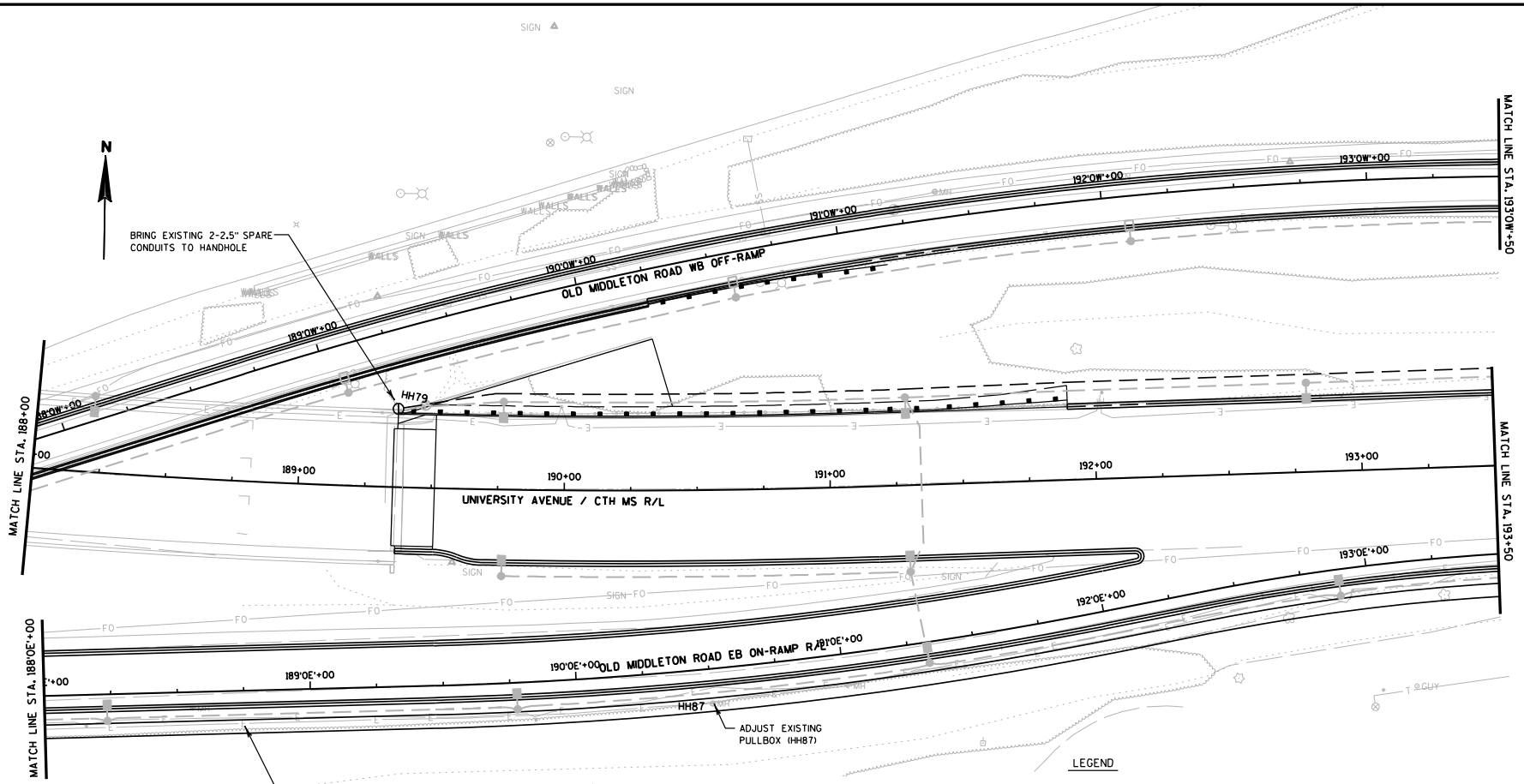
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 267 E

FILE NAME : g:\madison\md2009035\dgn\024118_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

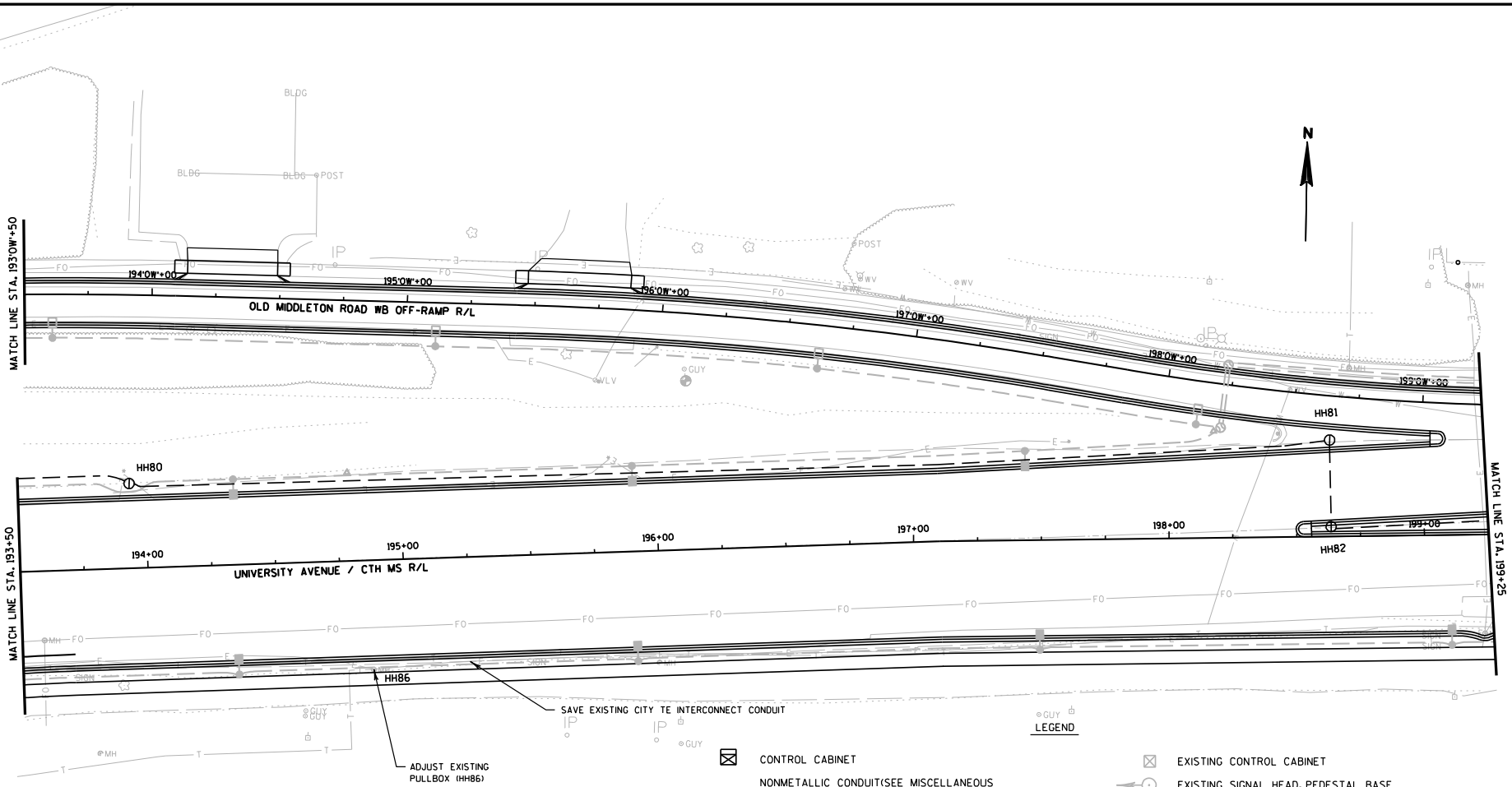
WISDOT/CADDS SHEET 42



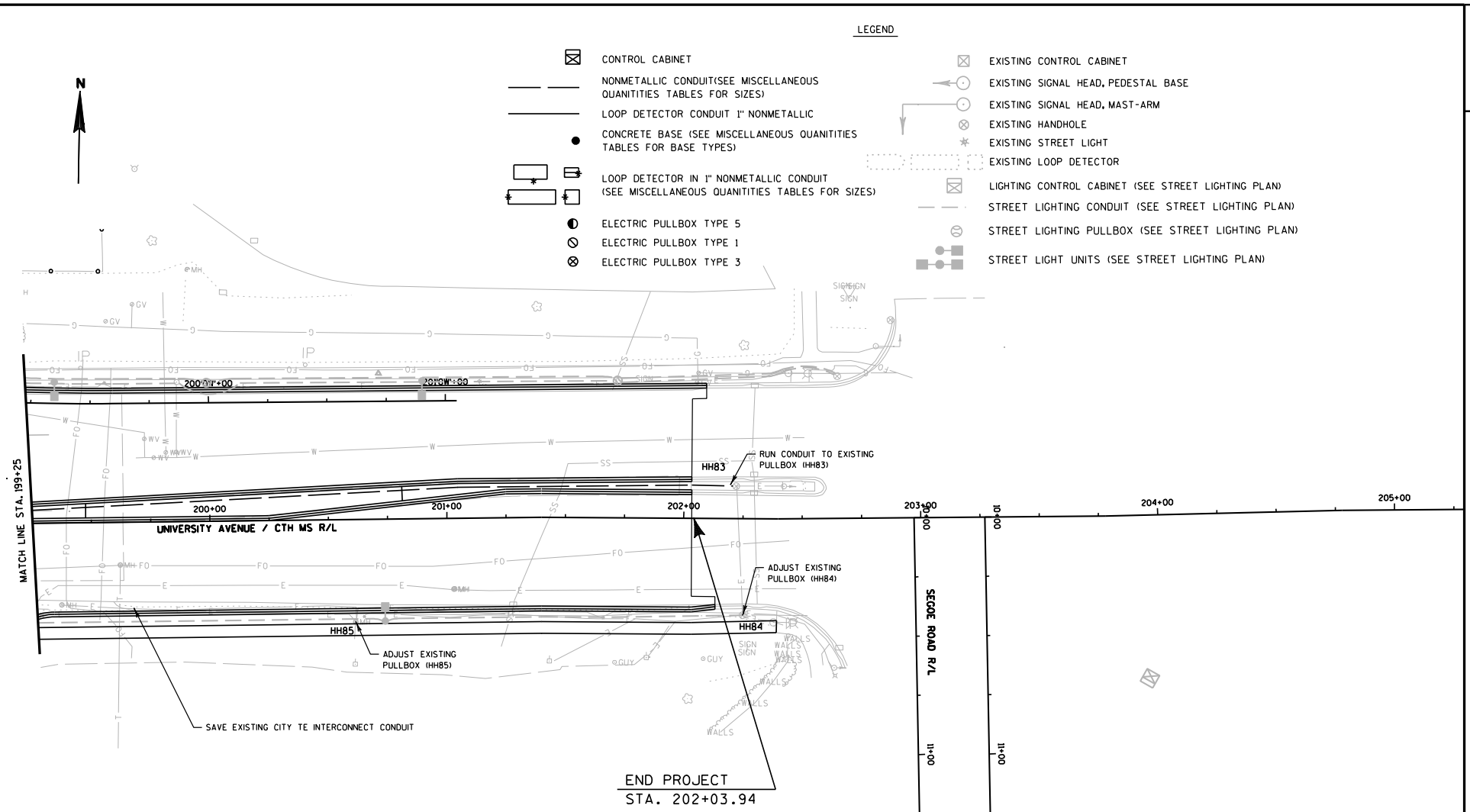
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 268 E

FILE NAME : g:\madison\md2009035\dgn\024119_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



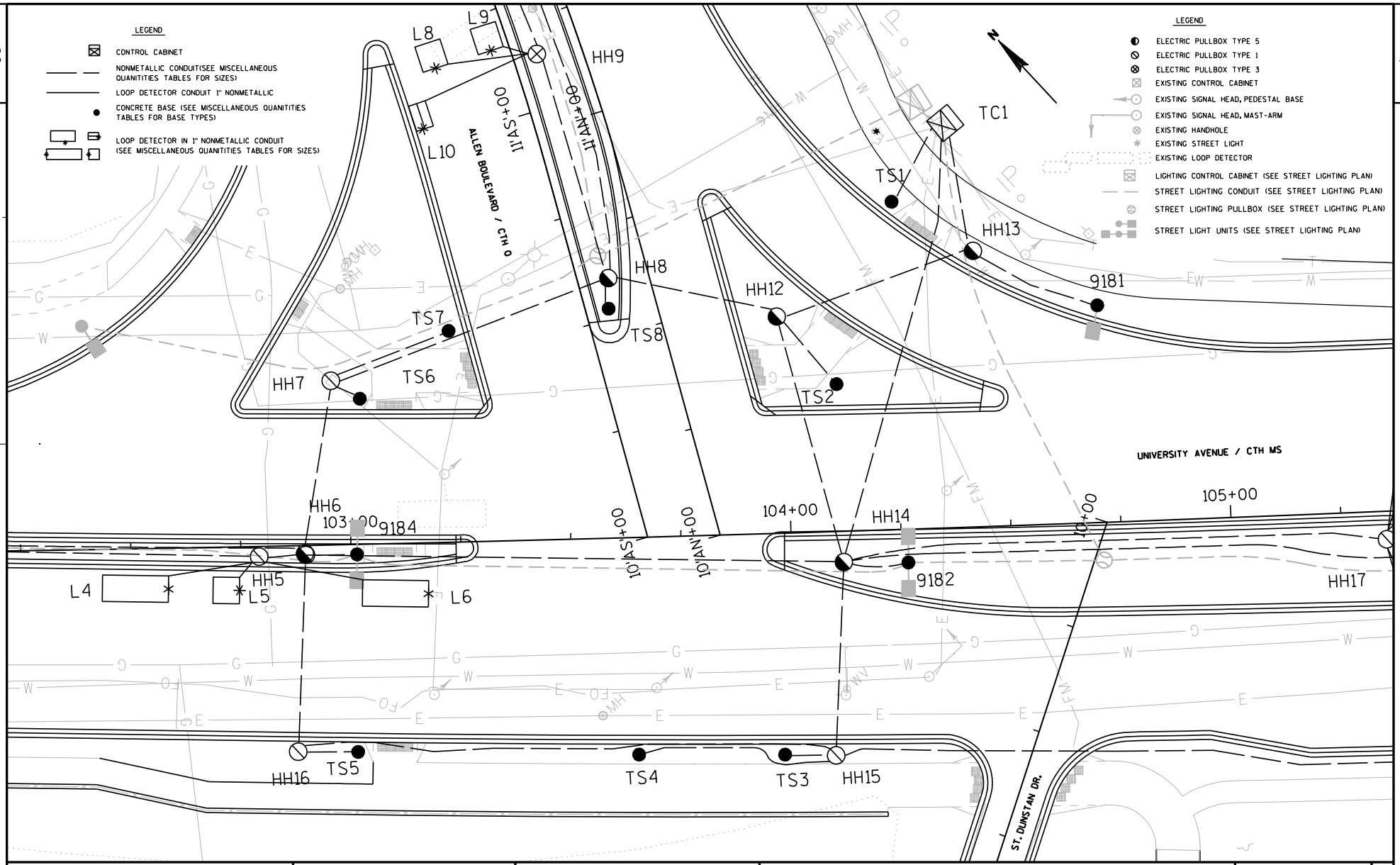
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET 269 E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\024121_sp.dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

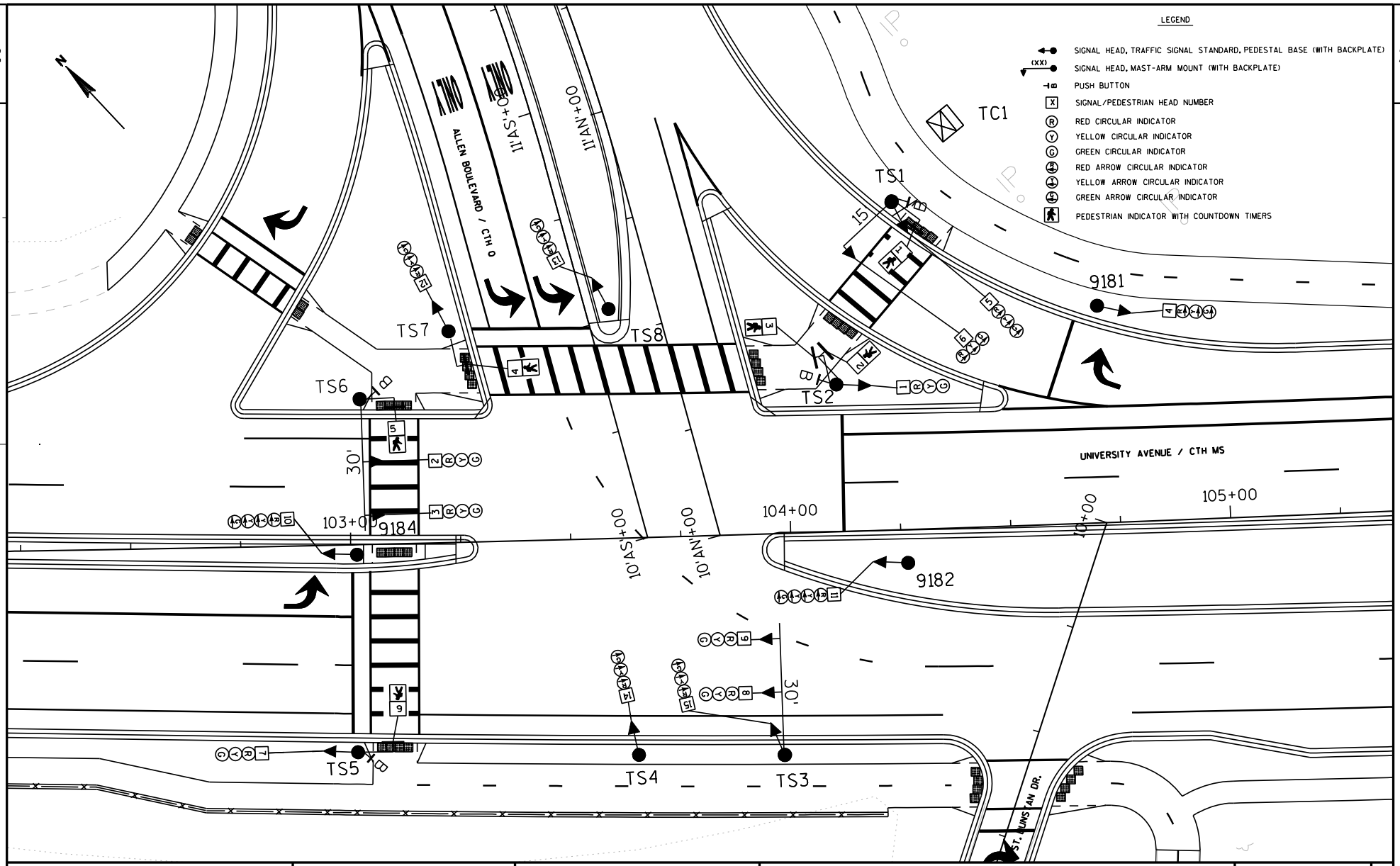
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS (UNIVERSITY AVE/ ALLEN BLVD)	SHEET 271 E

FILE NAME : g:\madison\md2009035\dgn\024122_sp (allen ps).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

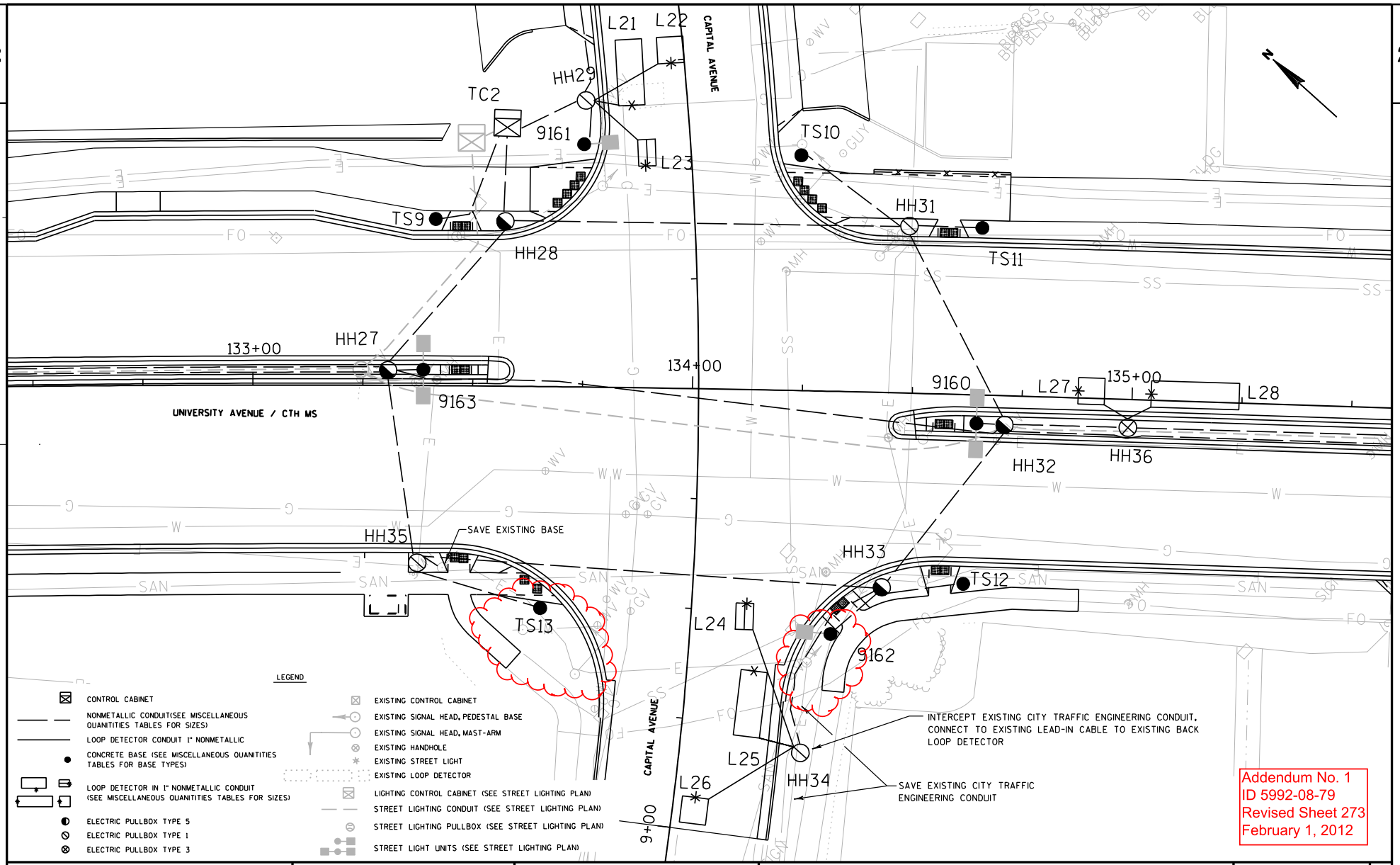
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC SIGNAL HEADS (UNIVERSITY AVE/ ALLEN BLVD)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\024123_sp (allen sh).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

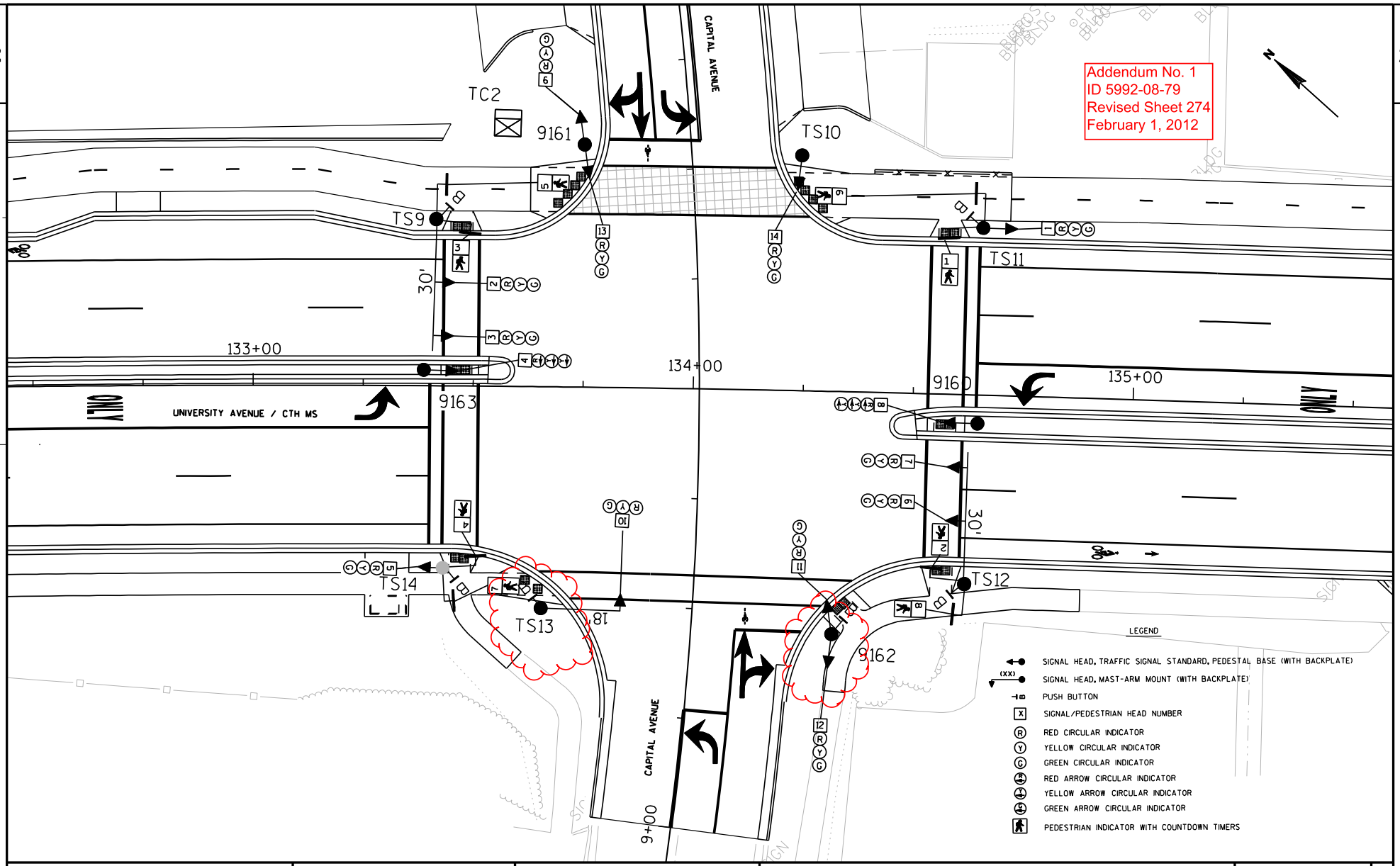
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS (UNIVERSITY AVE/ CAPITAL AVE)	SHEET 273	E

FILE NAME : g:\madison\md2009035\dgn\024124_sp (capital ps).dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC SIGNAL HEADS (UNIVERSITY AVE/ CAPITAL AVE)	SHEET 274	E

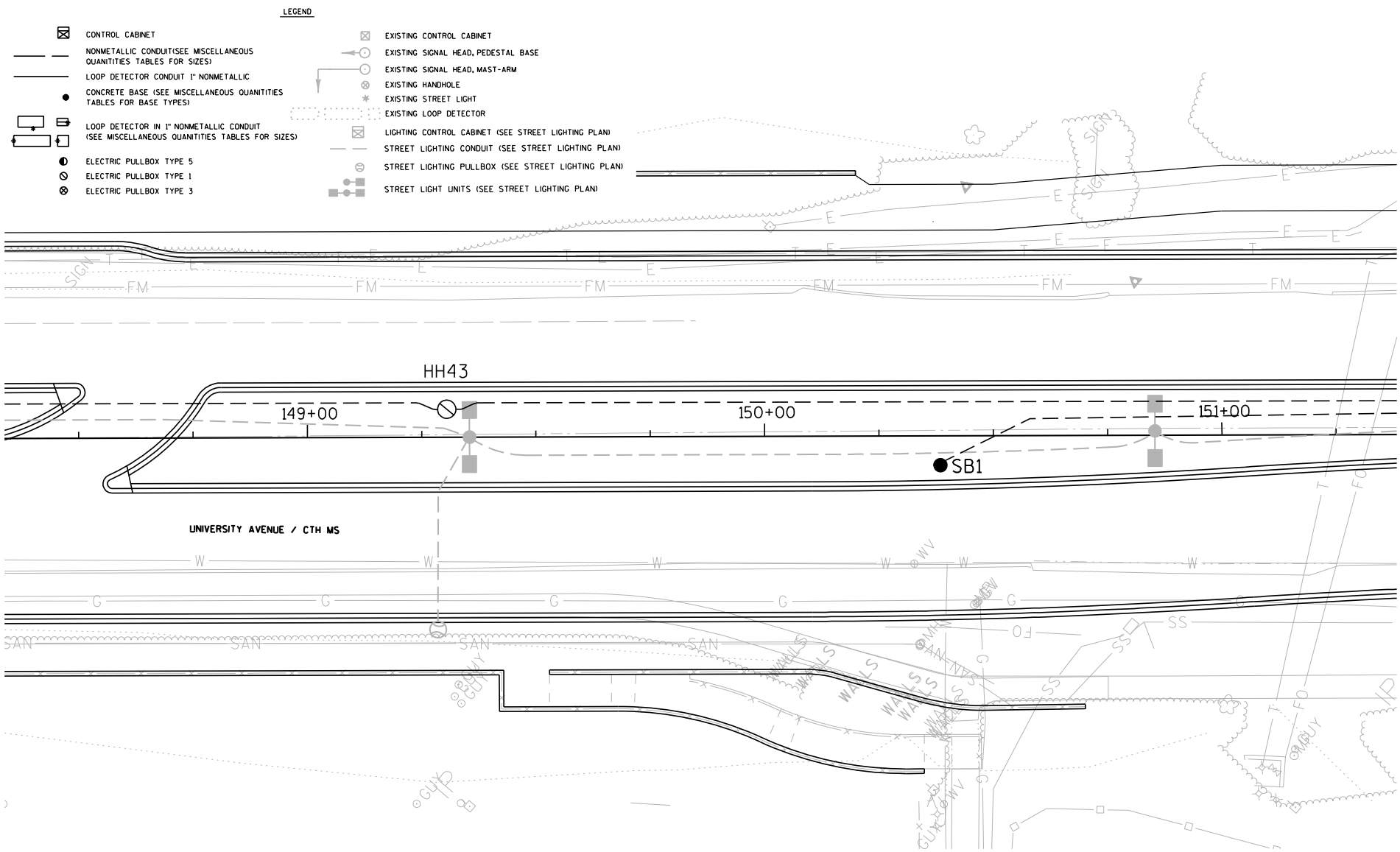
FILE NAME : g:\madison\md2009035\dgn\024125_sp (capital sh).dgn PLOT DATE : 1/27/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT(SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- CONCRETE BASE (SEE MISCELLANEOUS QUANITITIES TABLES FOR BASE TYPES)
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT (SEE MISCELLANEOUS QUANITITIES TABLES FOR SIZES)
- ELECTRIC PULLBOX TYPE 5
- ELECTRIC PULLBOX TYPE 1
- ELECTRIC PULLBOX TYPE 3
- EXISTING CONTROL CABINET
- EXISTING SIGNAL HEAD, PEDESTAL BASE
- EXISTING SIGNAL HEAD, MAST-ARM
- EXISTING HANDHOLE
- EXISTING STREET LIGHT
- EXISTING LOOP DETECTOR
- LIGHTING CONTROL CABINET (SEE STREET LIGHTING PLAN)
- STREET LIGHTING CONDUIT (SEE STREET LIGHTING PLAN)
- STREET LIGHTING PULLBOX (SEE STREET LIGHTING PLAN)
- STREET LIGHT UNITS (SEE STREET LIGHTING PLAN)



2

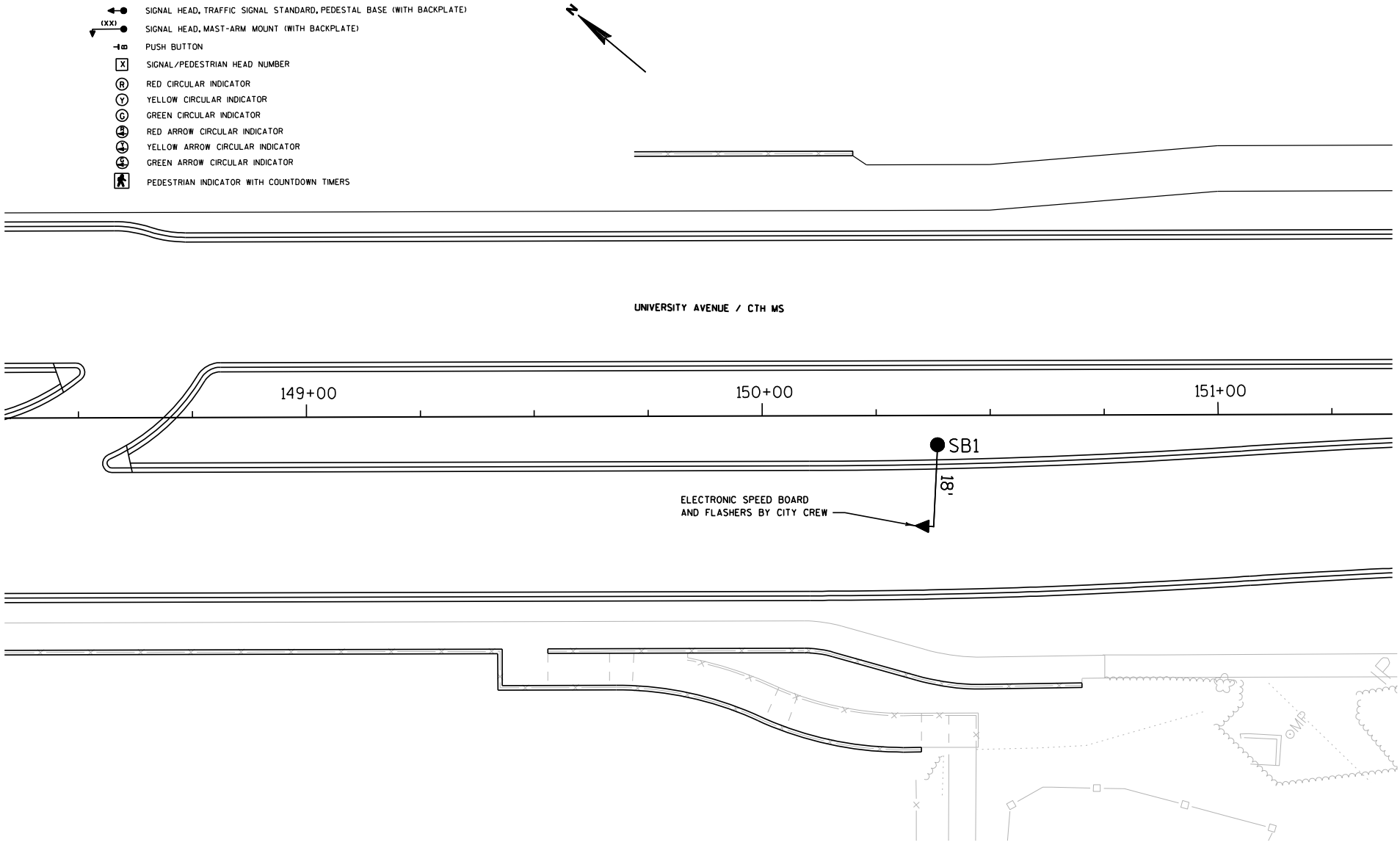
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS (UNIVERSITY AVE)	SHEET 275	E

FILE NAME : g:\madison\md2009035\dgn\024126_sp (university ps).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

LEGEND

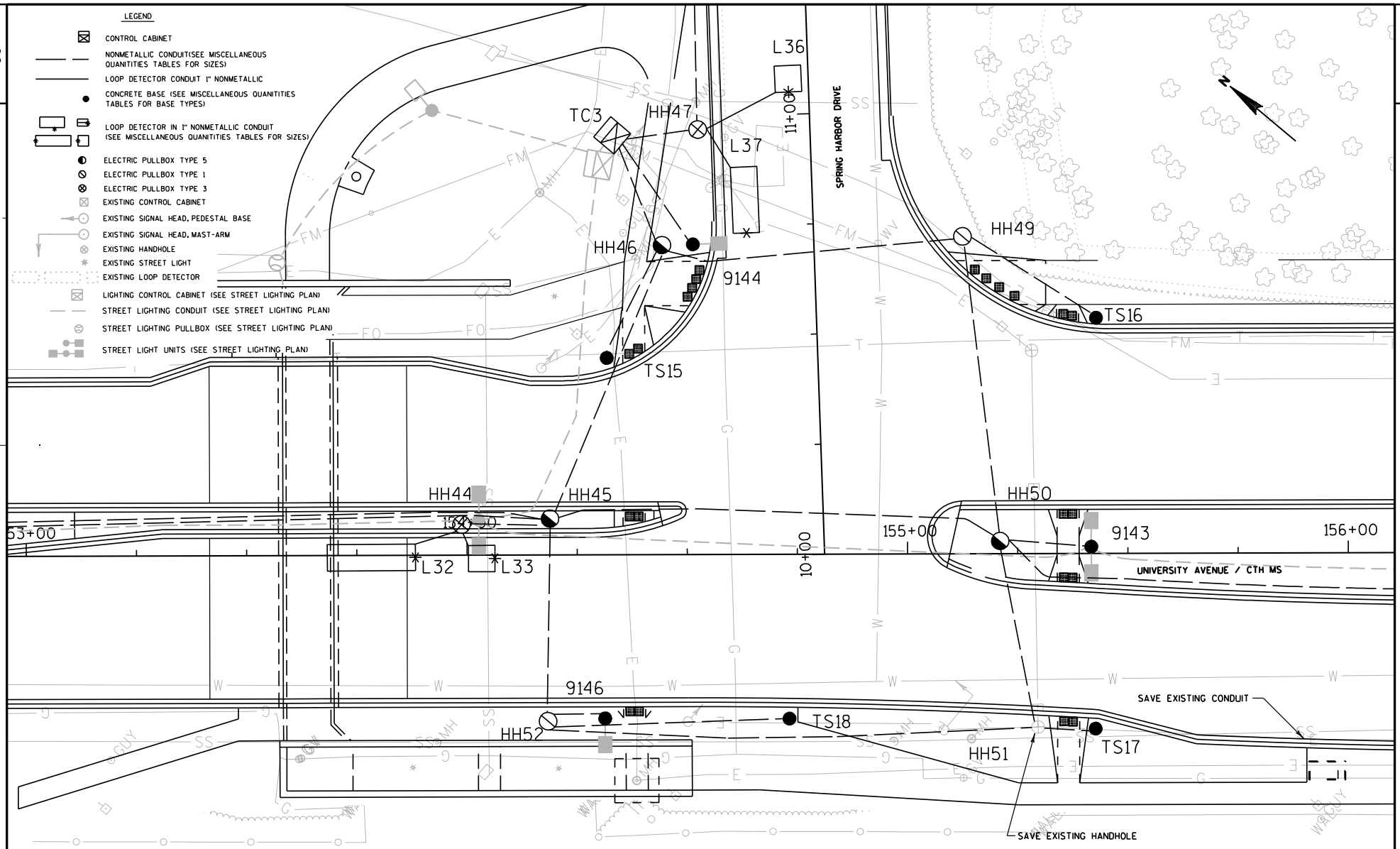
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE (WITH BACKPLATE)
- (XX) SIGNAL HEAD, MAST-ARM MOUNT (WITH BACKPLATE)
- PUSH BUTTON
- [X] SIGNAL/PEDESTRIAN HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW CIRCULAR INDICATOR
- YELLOW ARROW CIRCULAR INDICATOR
- GREEN ARROW CIRCULAR INDICATOR
- PEDESTRIAN INDICATOR WITH COUNTDOWN TIMERS



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC SIGNAL HEADS (UNIVERSITY AVE)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\024127_sp (university sh).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

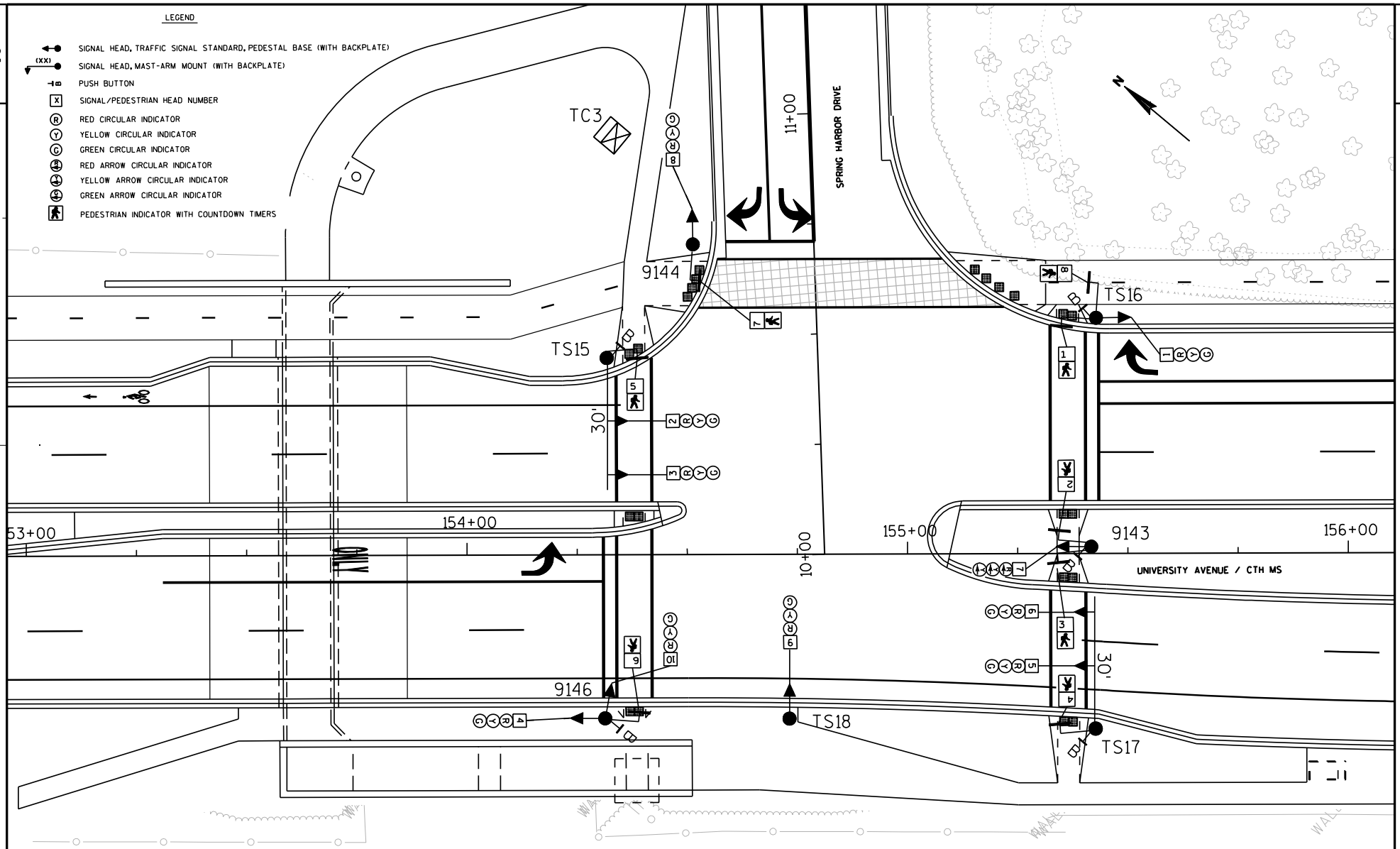
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS (UNIVERSITY AVE/ SPRING HARBOR DR)	SHEET 277 E

FILE NAME : g:\madison\md2009035\dgn\024128_sp (spring harbor ps).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

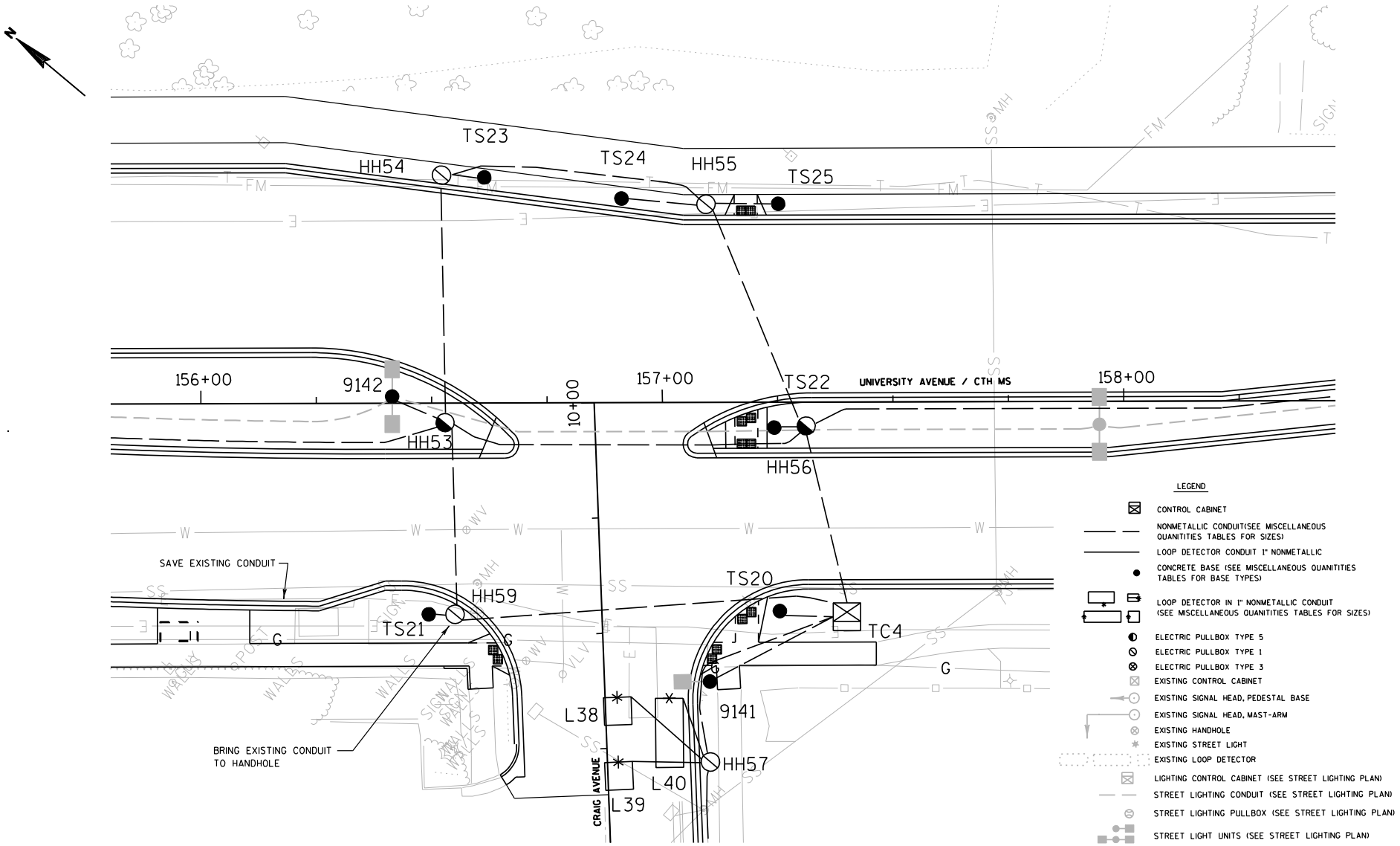
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC SIGNAL HEADS (UNIVERSITY AVE/ SPRING HARBOR DR)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\024129_sp (spring harbor sh).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

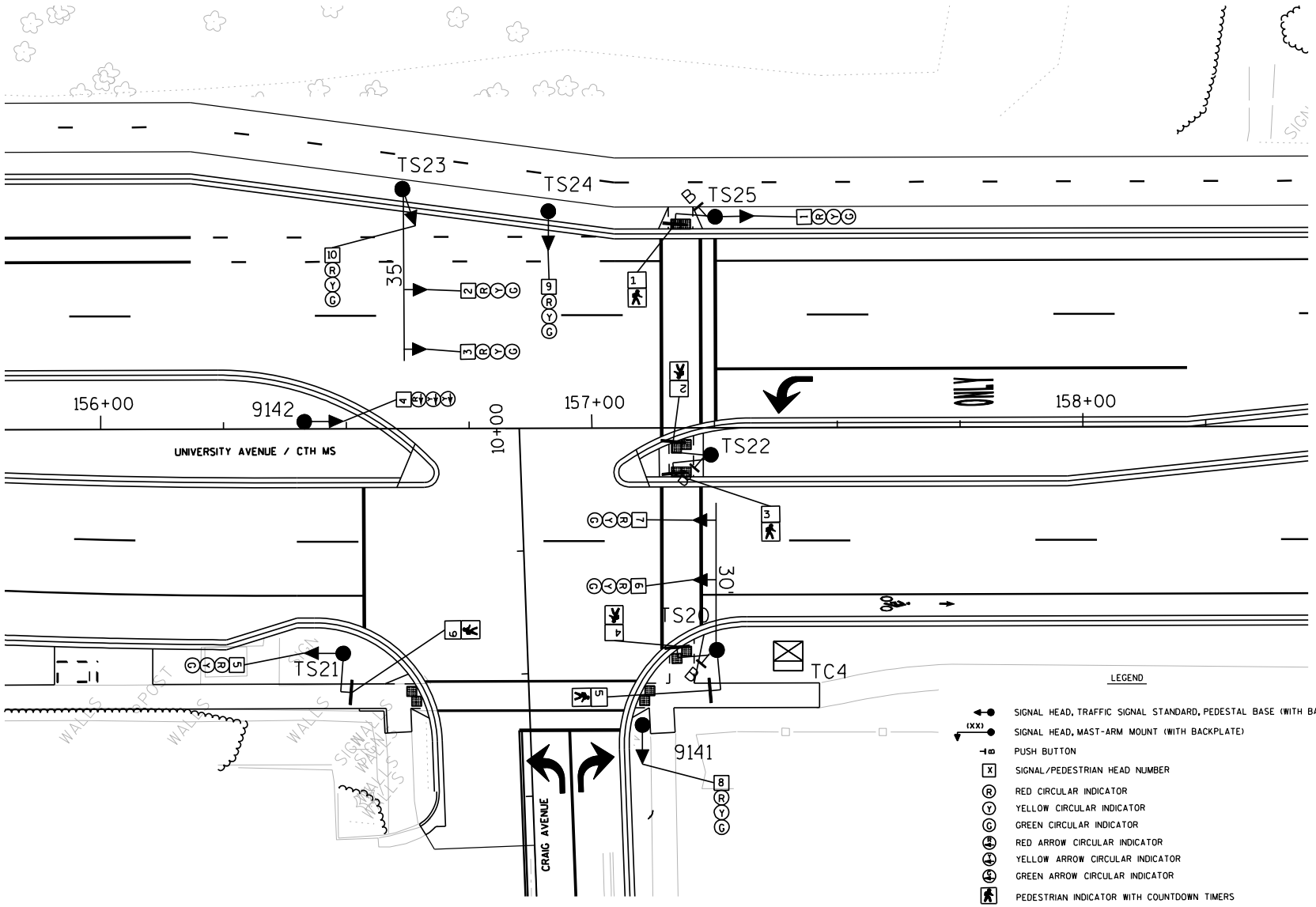
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS (UNIVERSITY AVE/ CRAIG AVE)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\024130_sp (craig ps).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

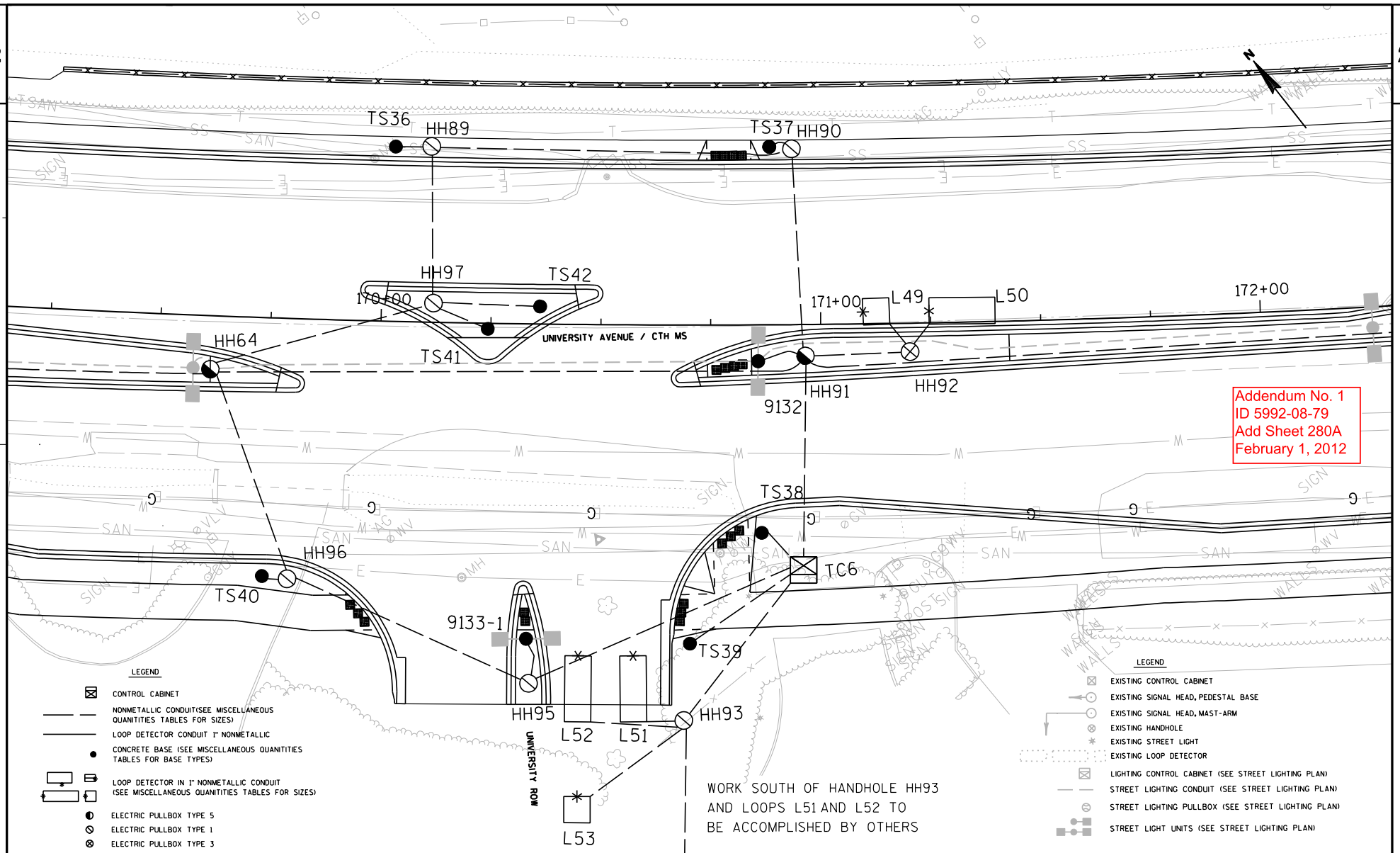
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC SIGNAL HEADS (UNIVERSITY AVE/ CRAIG AVE)	SHEET 280 E

FILE NAME : g:\madison\md2009035\dgn\024131_sp (craig sh).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

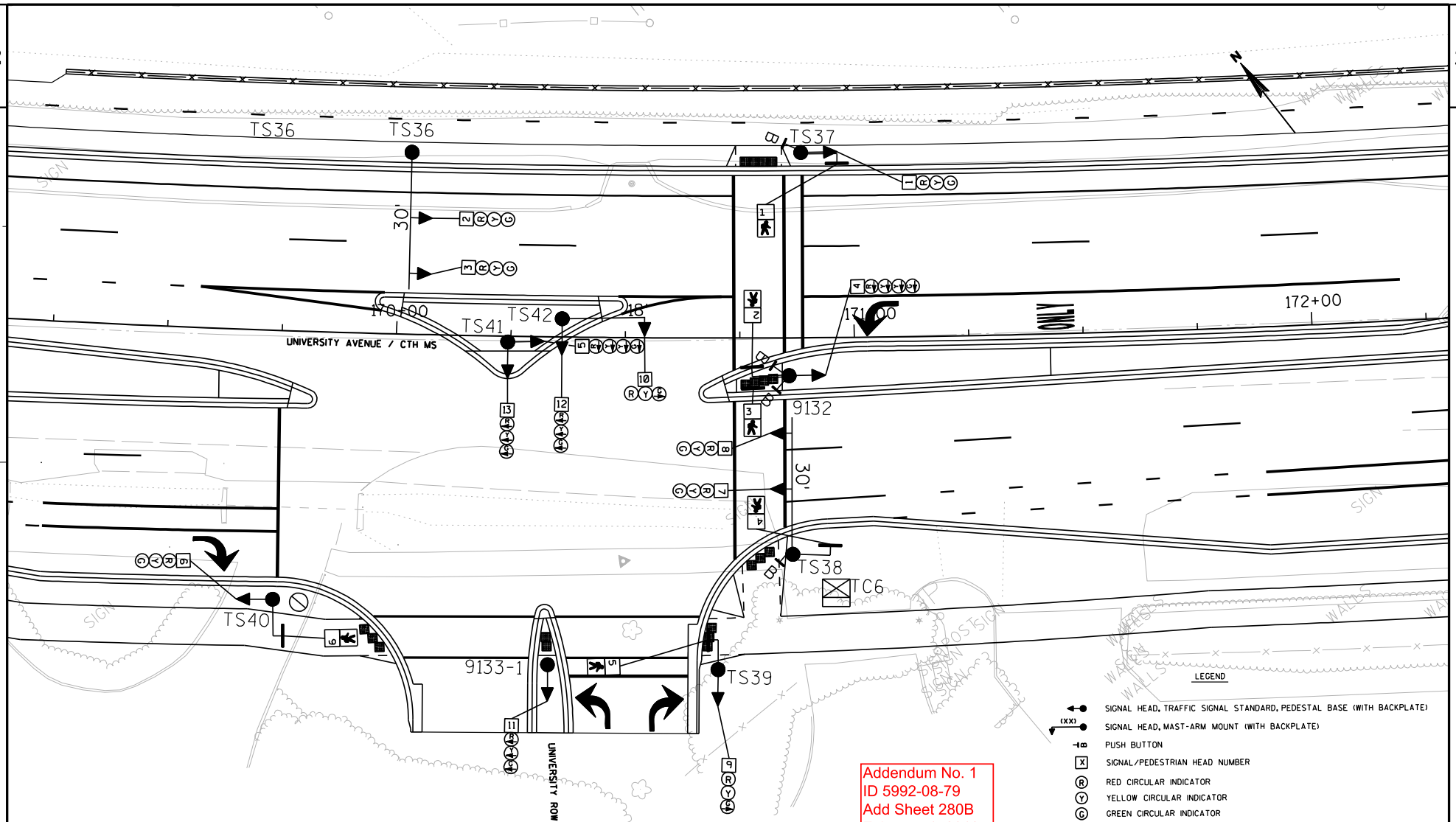
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS (UNIVERSITY AVE / UNIVERSITY ROW)	SHEET 280A	E

FILE NAME : G:\Madison\MD2009035\DGN\024134_sp (university row ps).dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

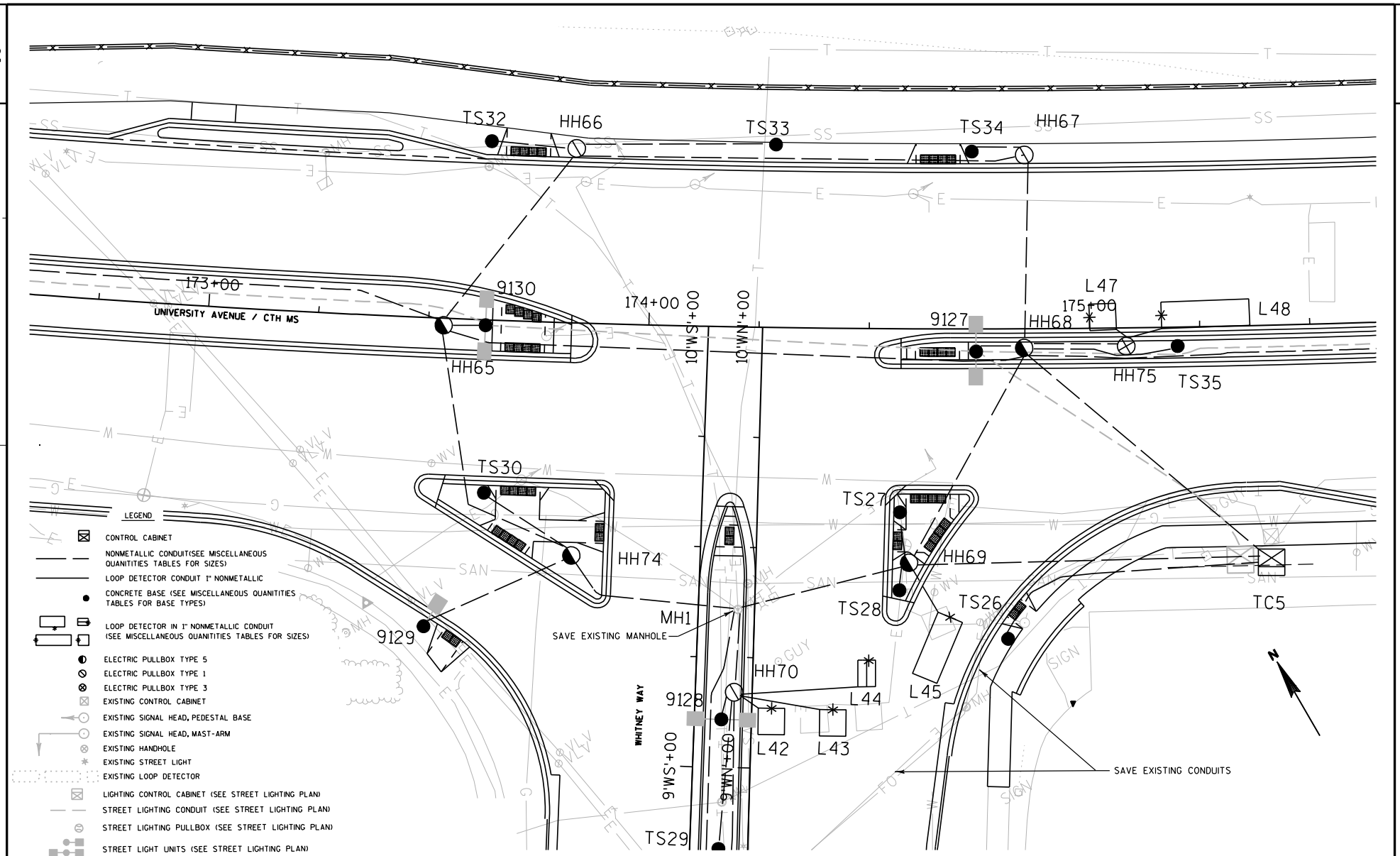
WISDOT/CADDS SHEET 42



Addendum No. 1
ID 5992-08-79
Add Sheet 280B
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC SIGNAL HEADS (UNIVERSITY AVE / UNIVERSITY ROW)	SHEET 280B	E

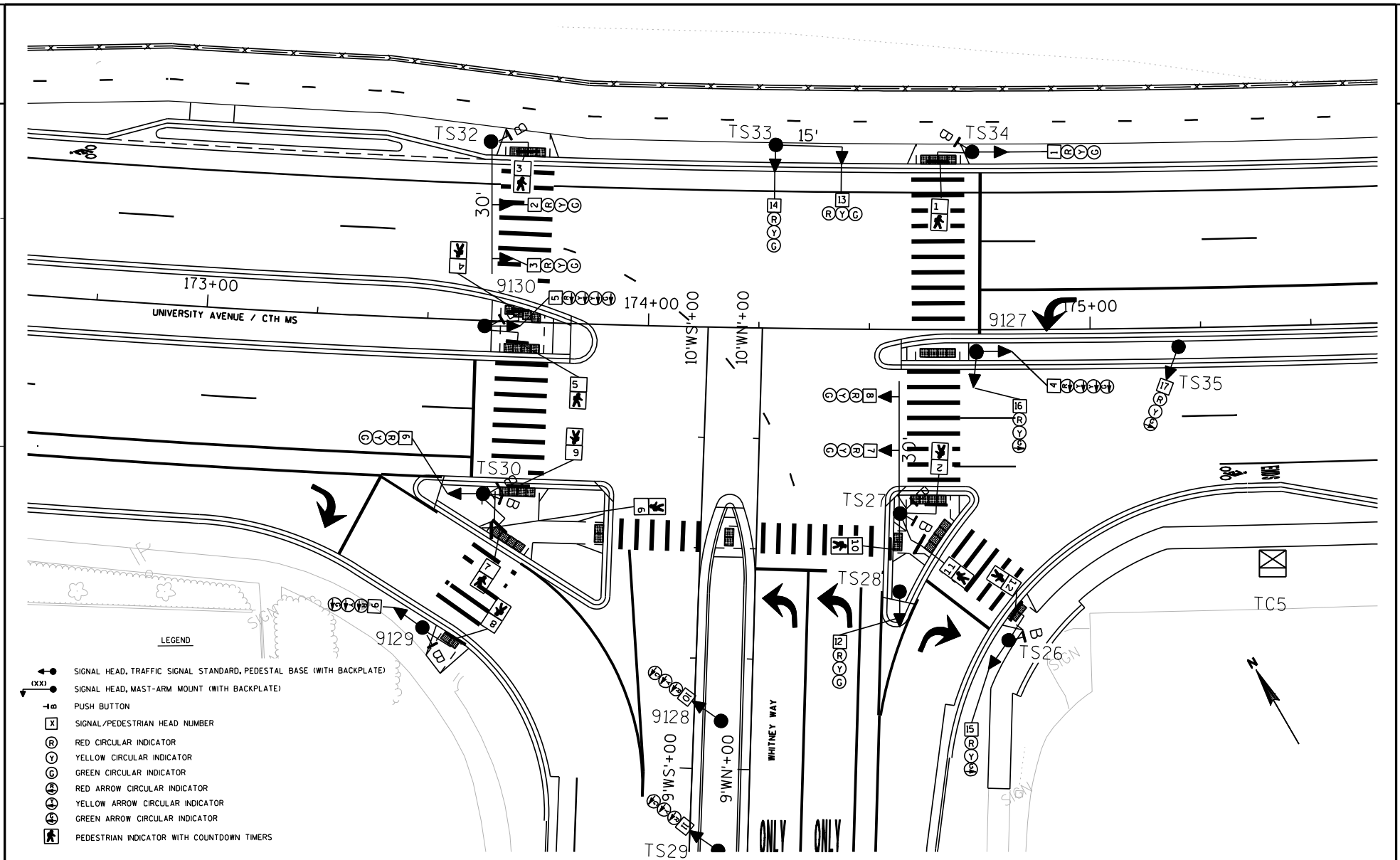
FILE NAME : G:\Madison\MD2009035\DGN\024135_sp (university row sh).dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PERMANENT SIGNAL PLANS (UNIVERSITY AVE/ WHITNEY WAY)	SHEET 281 E

FILE NAME : g:\madison\md2009035\dgn\024132_sp (whitney way ps).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

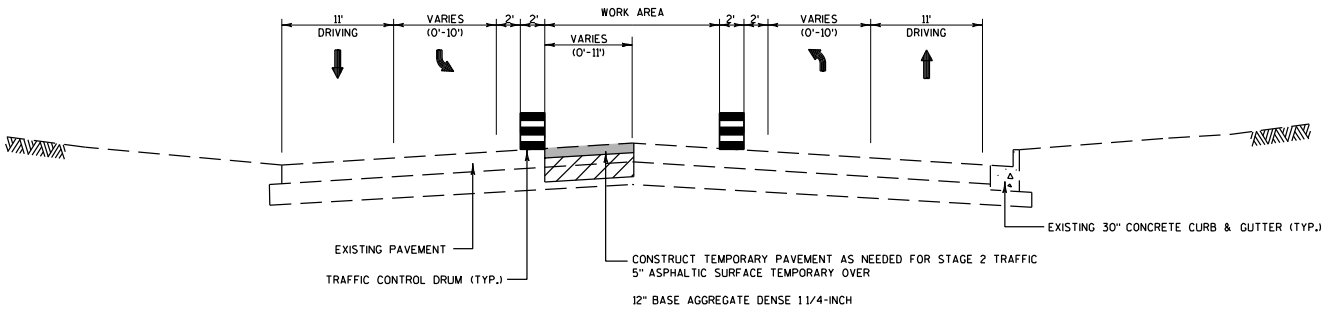
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC SIGNAL HEADS (UNIVERSITY AVE/ WHITNEY WAY)	SHEET 282 E

FILE NAME : g:\madison\md2009035\dgn\024133_sp (whitney way sh).dgn PLOT DATE : 12/5/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



TYPICAL SECTION - STAGE 1 CONSTRUCTION

UNIVERSITY AVENUE

TRAFFIC CONTROL GENERAL NOTES:

ADJUST THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES TO FIT FIELD CONDITIONS AND FOLLOW THE CURRENT EDITION OF THE MUTCD AS APPROVED BY THE ENGINEER.

ADJUST THE SPACING BETWEEN SIGNS TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 250' (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS NOTED.

"WO" IS THE "W" EXCEPT THE BACKGROUND IS ORANGE.

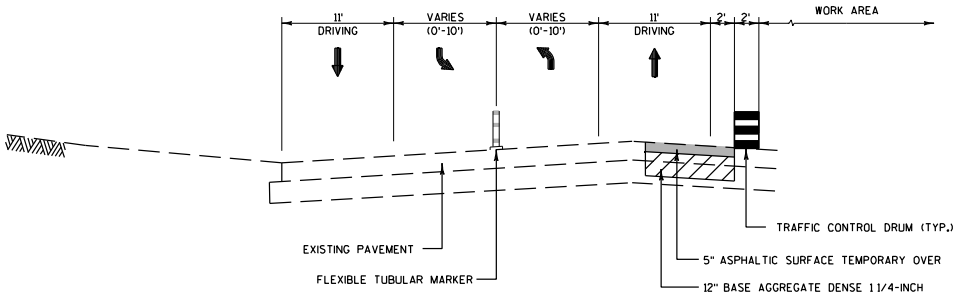
REMOVE OR COVER ANY SIGN TEMPORARY OR EXISTING, WHICH CONFLICTS WITH THE TRAFFIC CONTROL "IN USE", AS NEEDED AND APPROVED BY THE ENGINEER.

IMMEDIATELY RE-ESTABLISH ANY STOP SIGNS WHICH ARE REMOVED FOR A CONSTRUCTION OPERATION

REMOVE PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH "IN USE".

POSTED SPEED LIMIT IS 35 MPH.

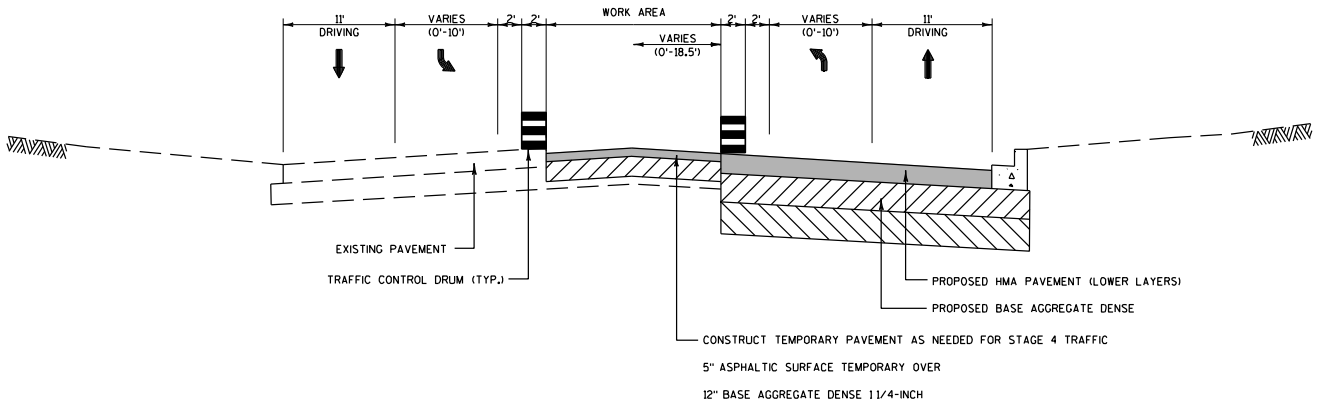
PROVIDE A TEMPORARY EMERGENCY PULLOUT ON EACH BLOCK IN EACH DIRECTION OF UNIVERSITY AVENUE FOR THE DURATION OF THE PROJECT. THE TEMPORARY EMERGENCY PULLOUT SHALL BE LOCATED CLEAR OF TRAFFIC LANES, SHALL BE APPROXIMATELY 10-FEET WIDE X 20-FEET LONG AND SHALL BE ON EXISTING GRADE, PROPOSED GRADE, BASE COURSE OR PAVEMENT. LOCATIONS AND DIMENSIONS SHALL BE APPROVED BY THE ENGINEER AND COORDINATED AT THE WEEKLY PROSECUTION AND PROGRESS MEETINGS.



TYPICAL SECTION - STAGE 2 CONSTRUCTION

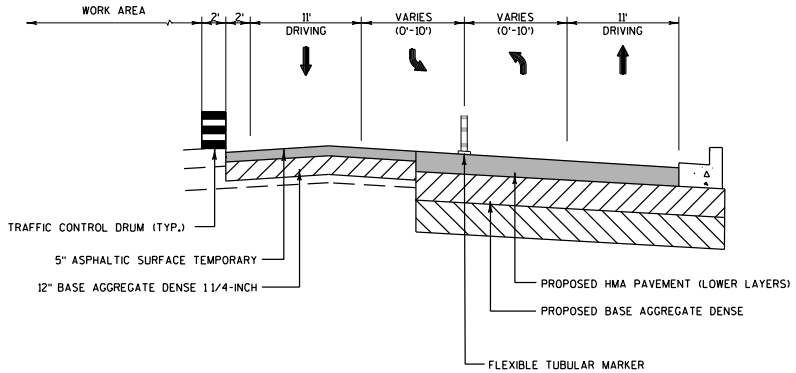
UNIVERSITY AVENUE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL CONSTRUCTION SECTIONS	SHEET 283	E



TYPICAL SECTION - STAGE 3 CONSTRUCTION

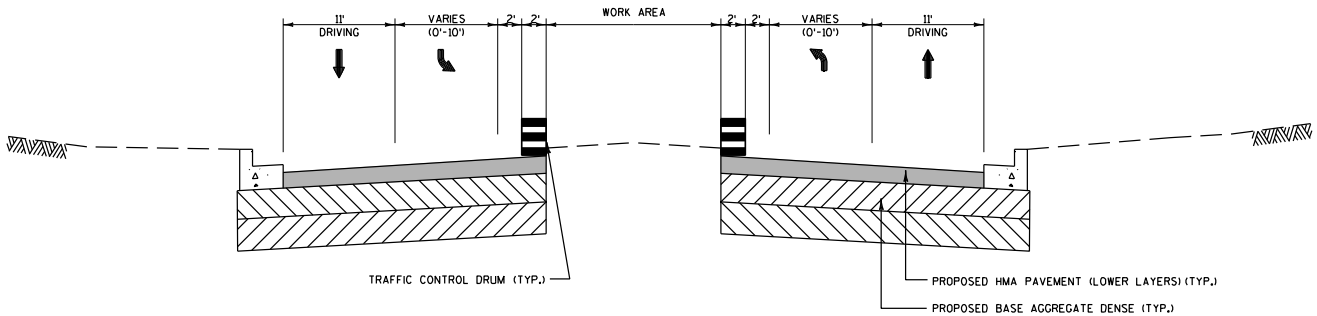
UNIVERSITY AVENUE



TYPICAL SECTION - STAGE 4 CONSTRUCTION

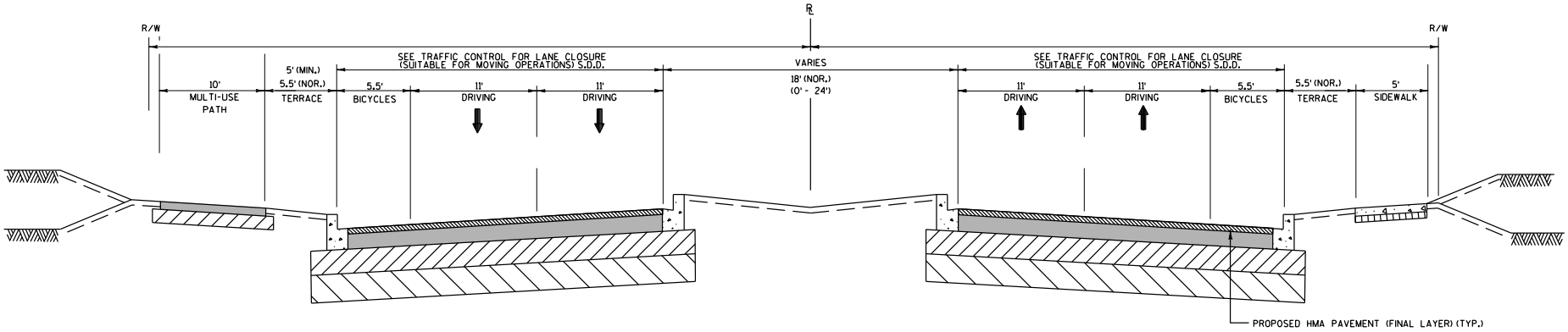
UNIVERSITY AVENUE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL CONSTRUCTION SECTIONS	SHEET 284 E



TYPICAL SECTION - STAGE 5 CONSTRUCTION

UNIVERSITY AVENUE



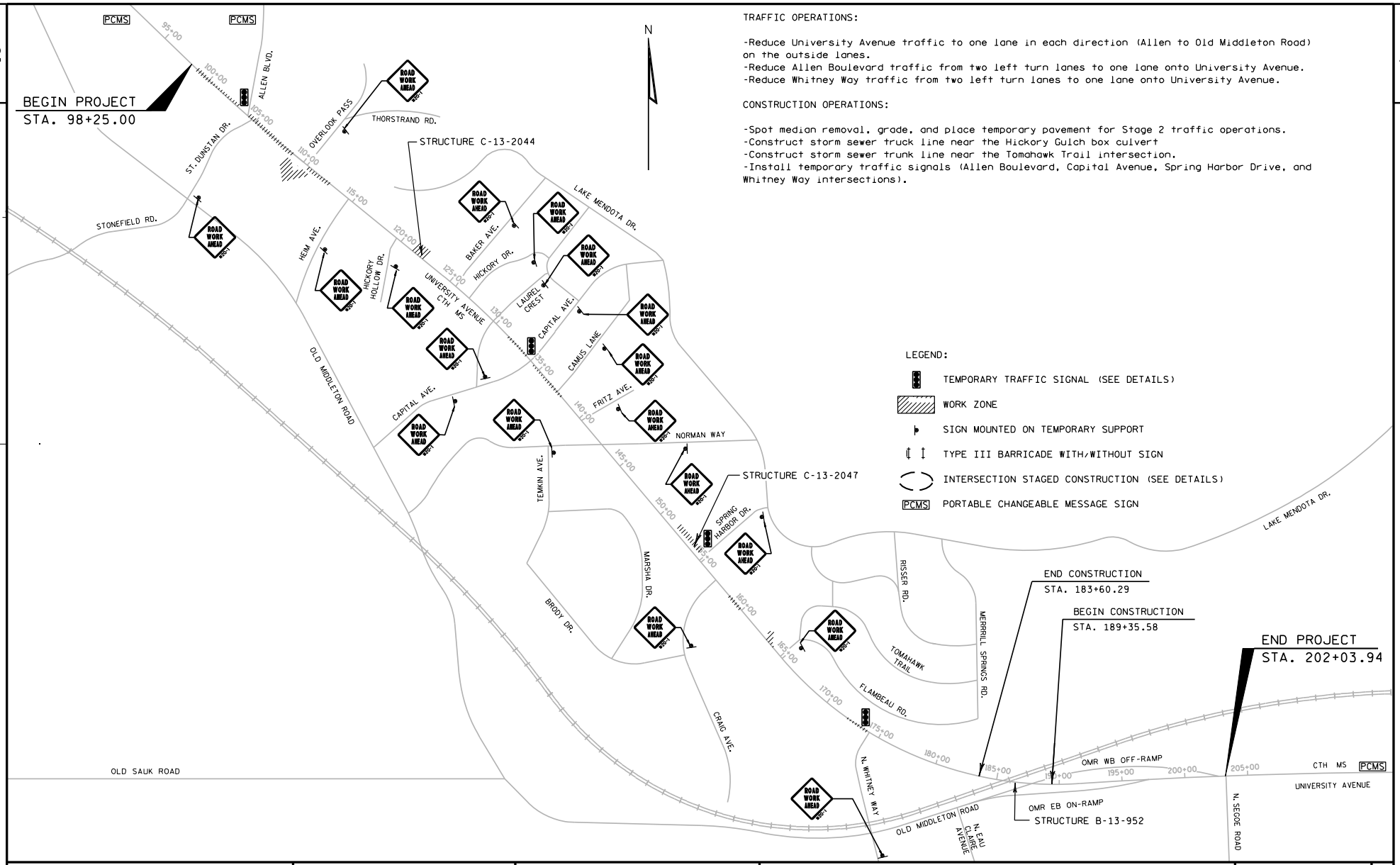
TYPICAL SECTION - STAGE 6 CONSTRUCTION

UNIVERSITY AVENUE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TYPICAL CONSTRUCTION SECTIONS	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\026000_tc.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



TRAFFIC OPERATIONS:

-Reduce University Avenue traffic to one lane in each direction (Allen to Old Middleton Road) on the outside lanes.
-Reduce Allen Boulevard traffic from two left turn lanes to one lane onto University Avenue.
-Reduce Whitney Way traffic from two left turn lanes to one lane onto University Avenue.

CONSTRUCTION OPERATIONS:

-Spot median removal, grade, and place temporary pavement for Stage 2 traffic operations.
-Construct storm sewer truck line near the Hickory Gulch box culvert
-Construct storm sewer trunk line near the Tomahawk Trail intersection.
-Install temporary traffic signals (Allen Boulevard, Capital Avenue, Spring Harbor Drive, and Whitney Way intersections).

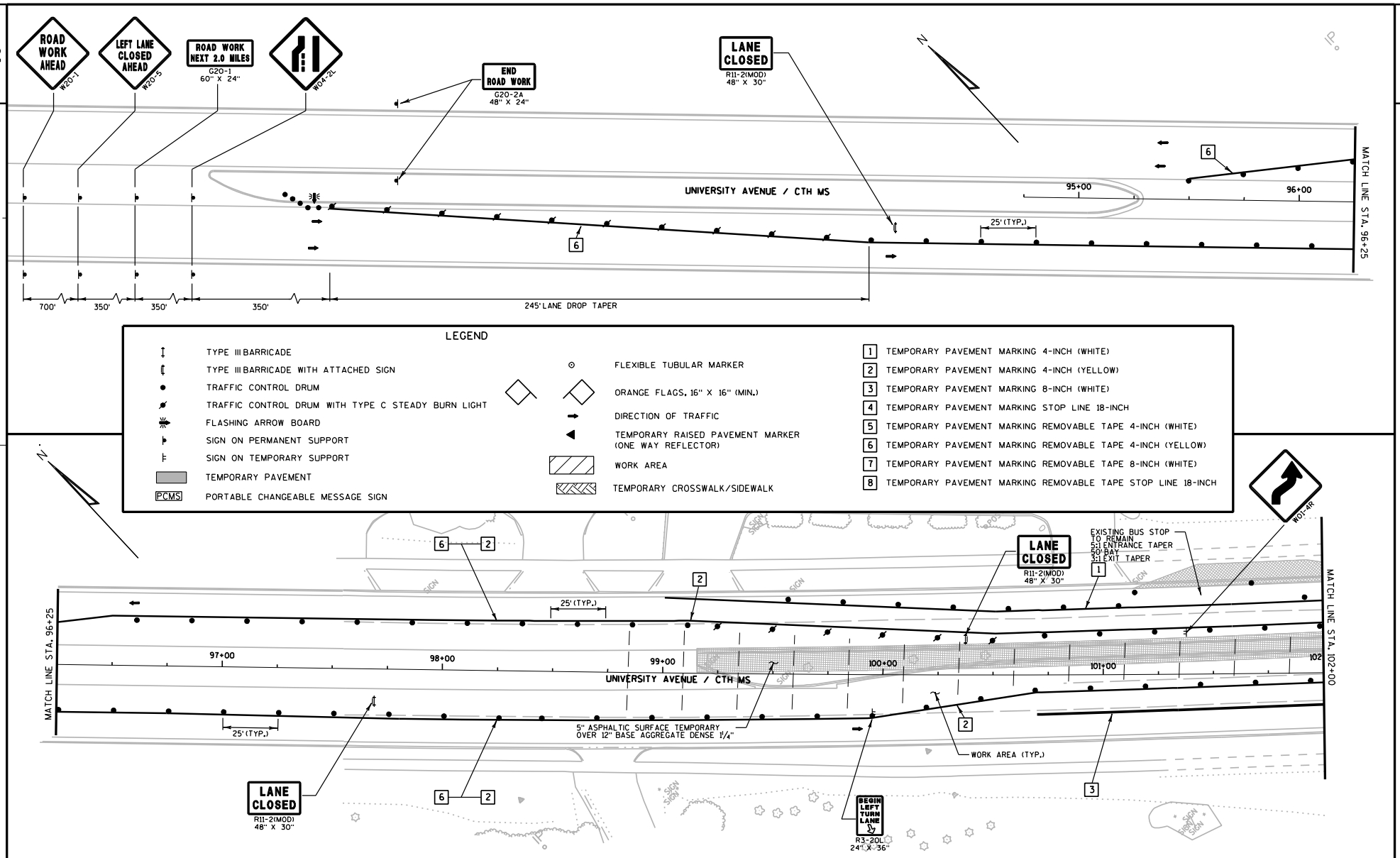
LEGEND:

- TEMPORARY TRAFFIC SIGNAL (SEE DETAILS)
- WORK ZONE
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- INTERSECTION STAGED CONSTRUCTION (SEE DETAILS)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL OVERVIEW (STAGE 1)	SHEET 286 E

FILE NAME : g:\madison\md2009035\dgn\026100_tc_s1.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

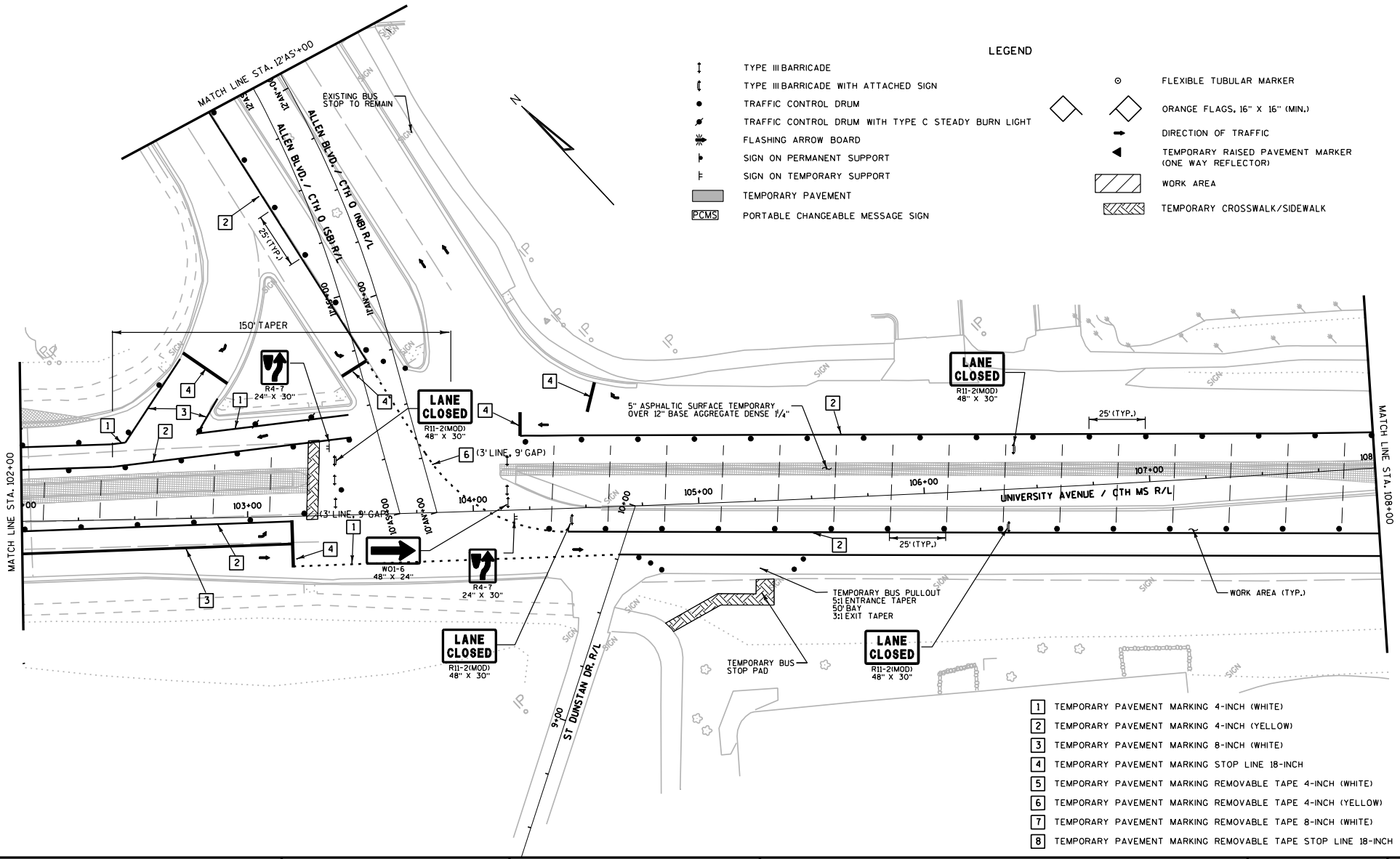
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 287 E

FILE NAME : g:\madison\md2009035\dgn\026101_tc_s1.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

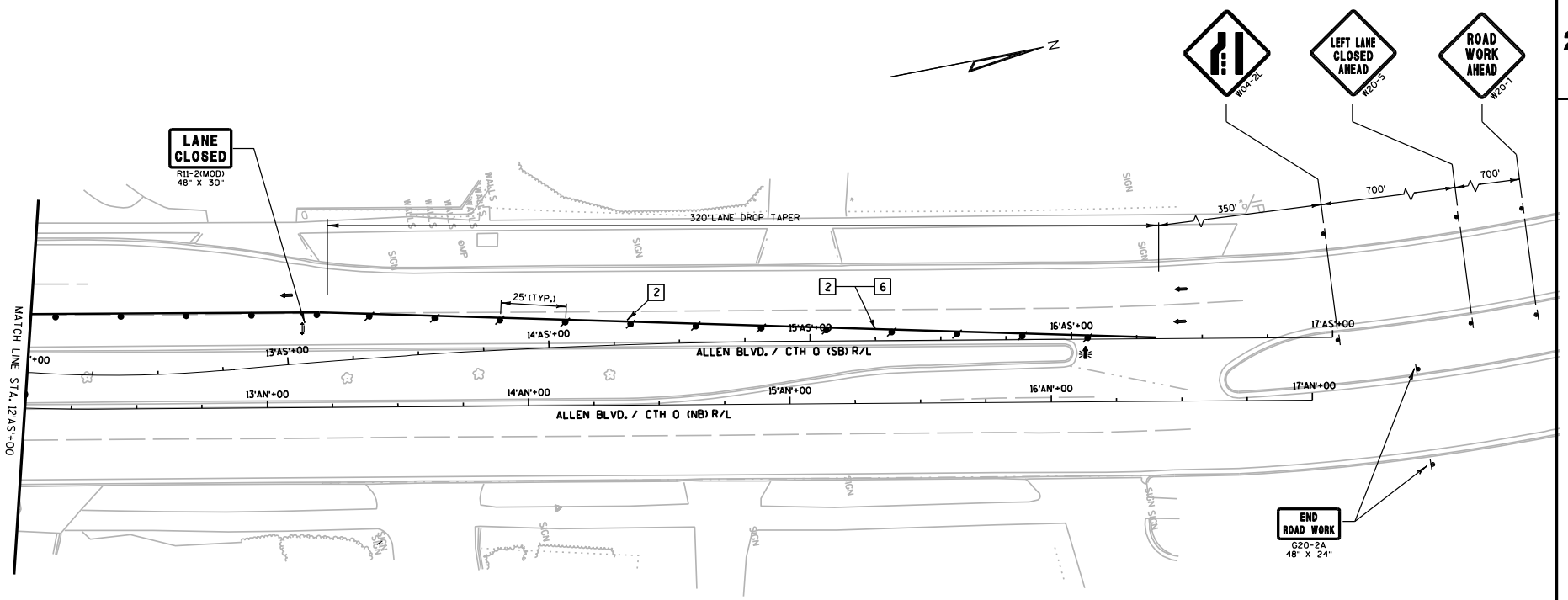
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026102_tc_s1.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

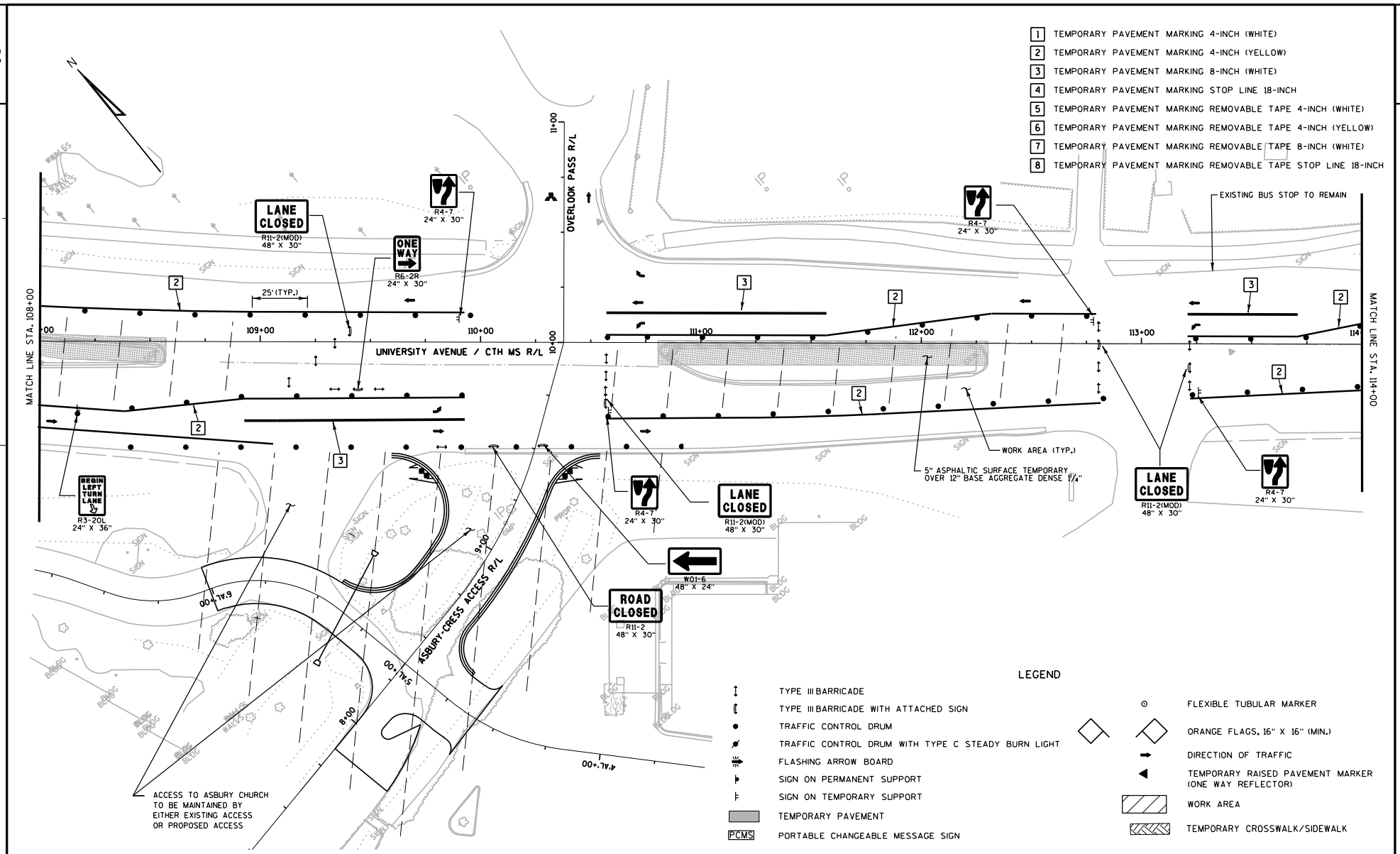
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 289 E

FILE NAME : g:\madison\md2009035\dgn\026103_tc_s1 (allen).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

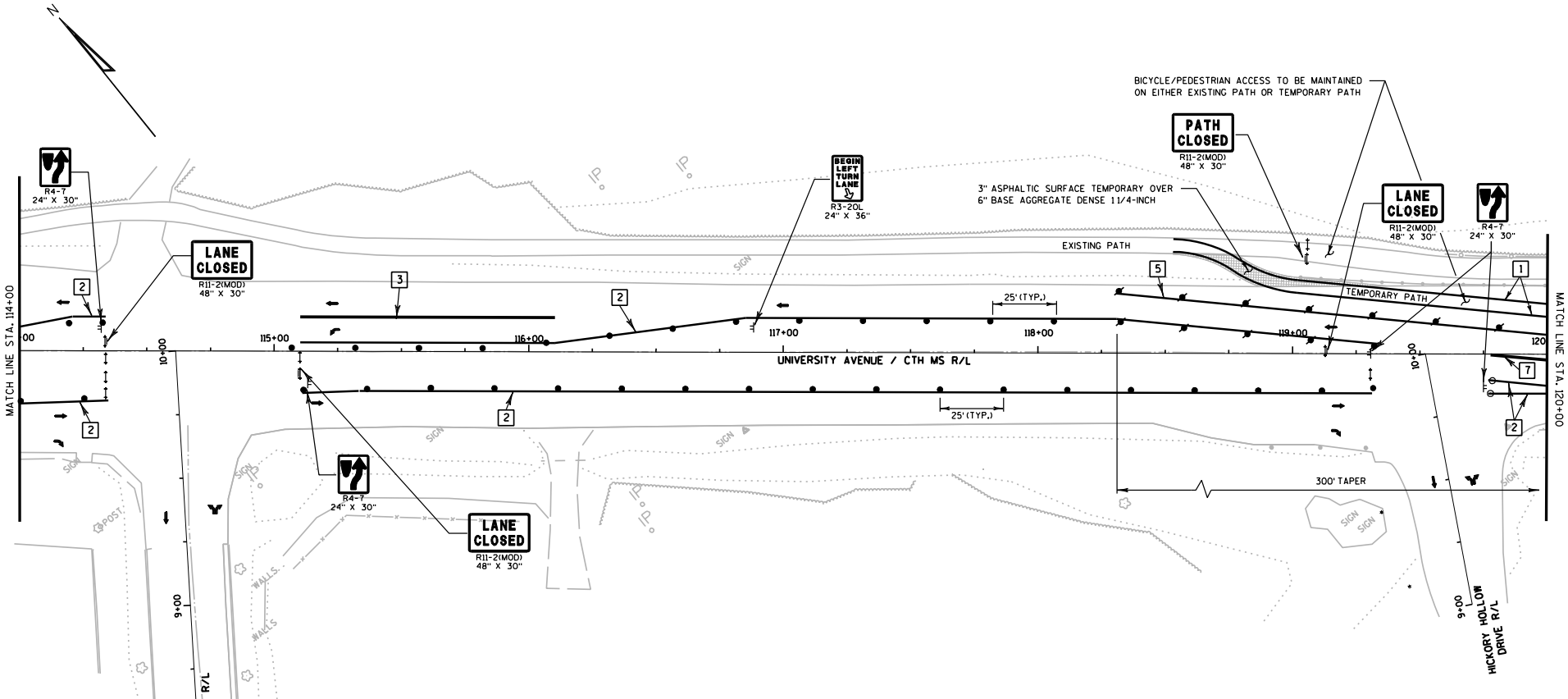
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 290 E

FILE NAME : G:\Madison\MD2009035\DGN\026104_tc_s1.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 291 E

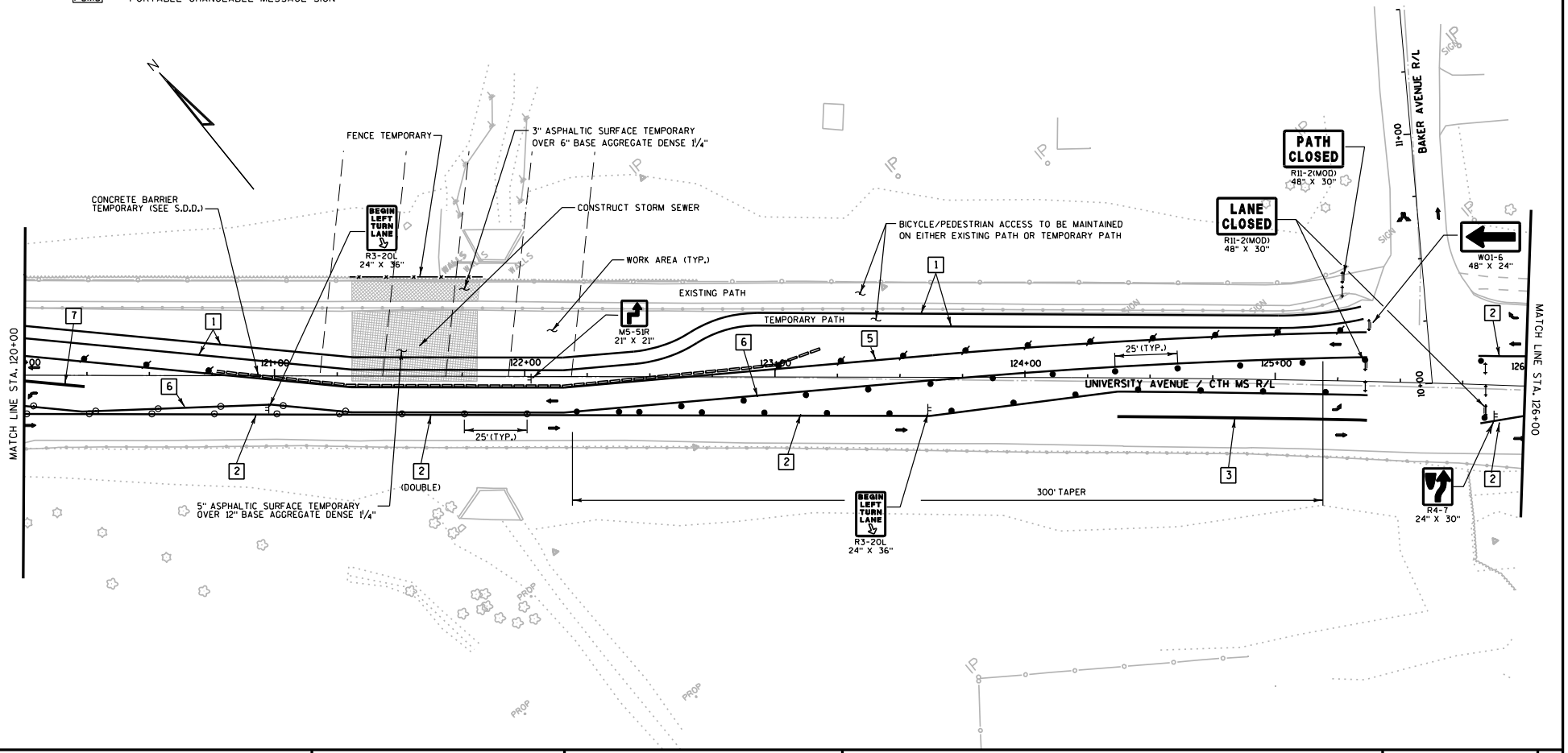
FILE NAME : g:\madison\md2009035\dgn\026105_tc_s1.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

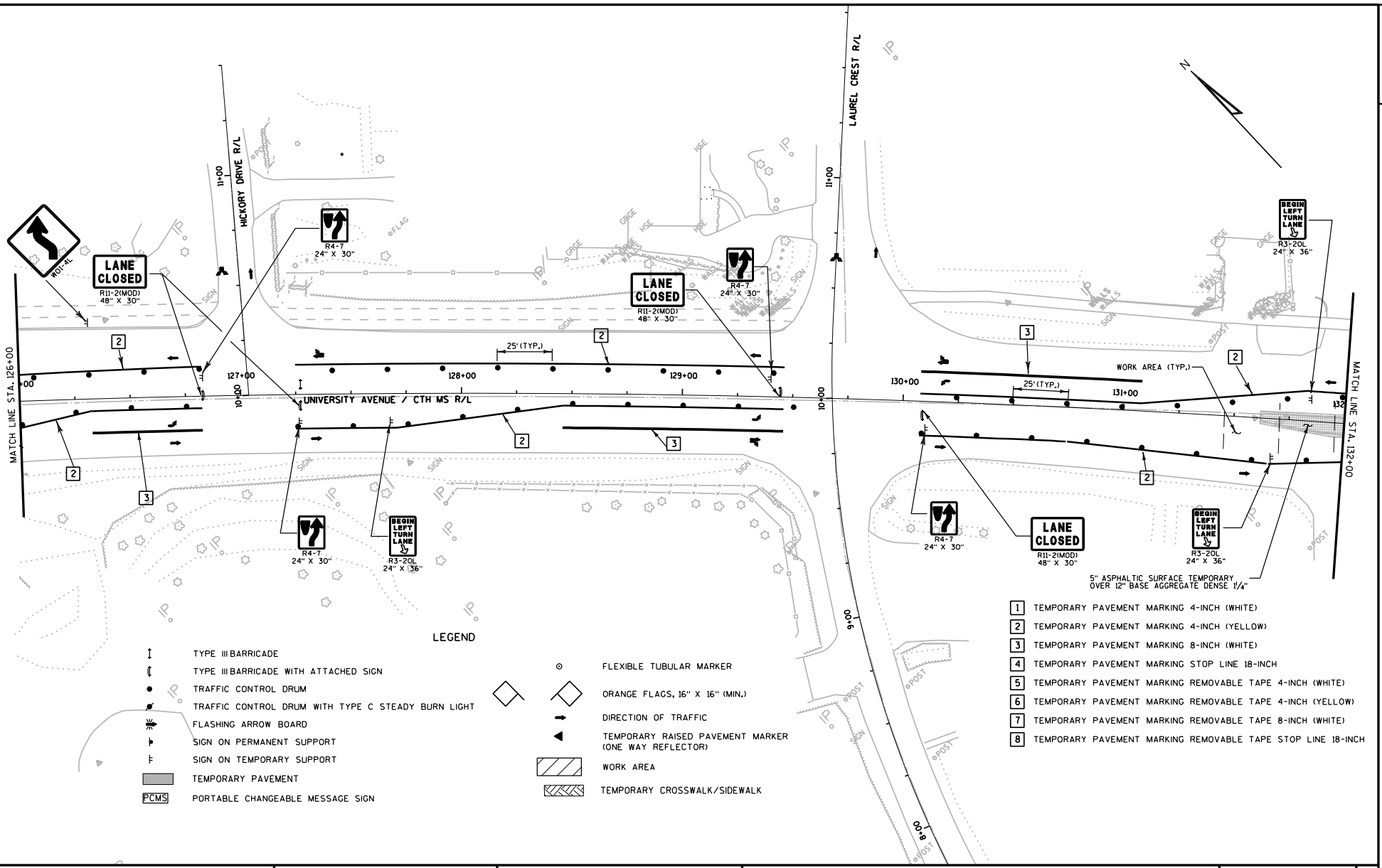
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 292 E

FILE NAME : g:\madison\md2009035\dgn\026106_tc_s1.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

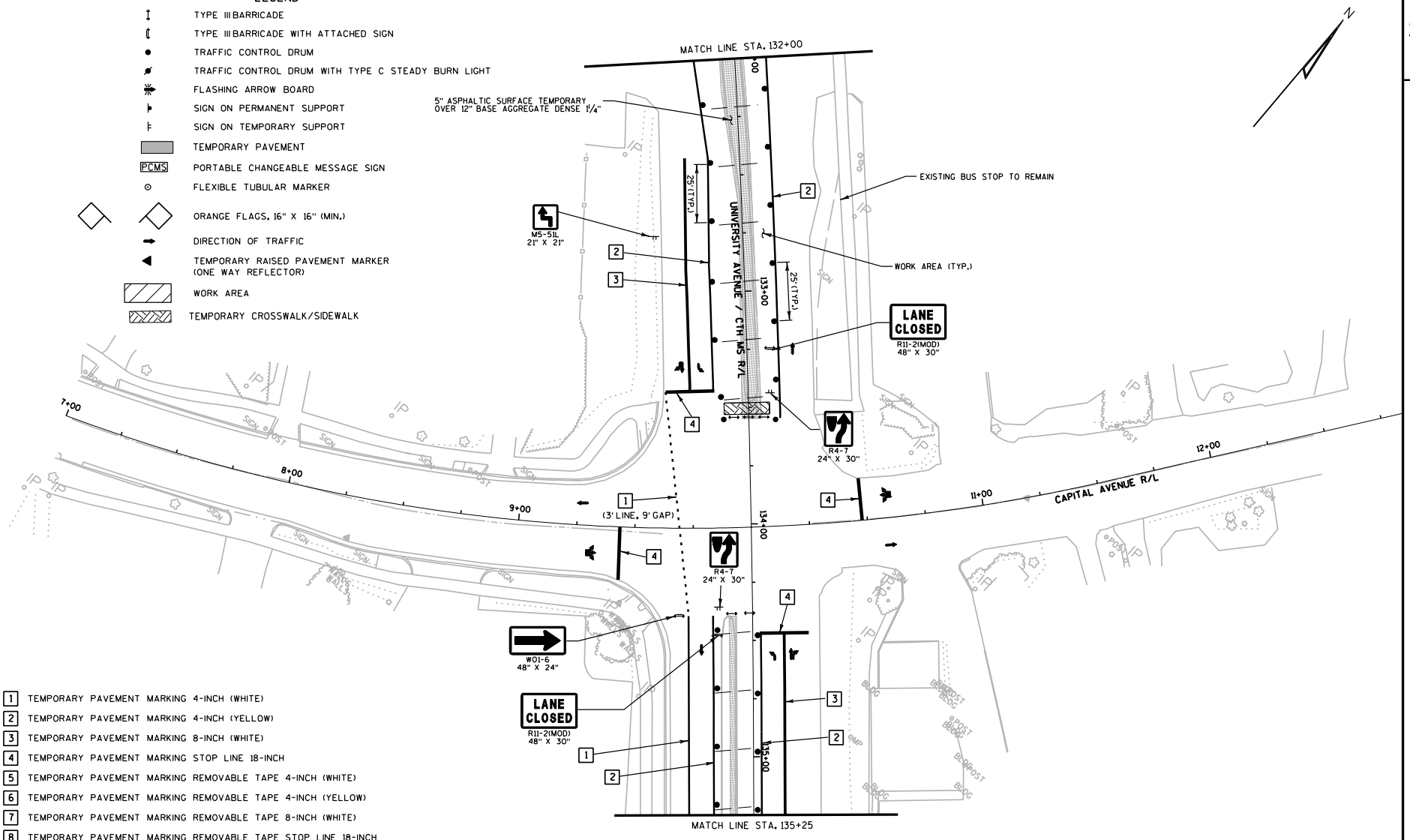
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 293 E

FILE NAME : g:\madison\md2009035\dgn\026107_tc_s1.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

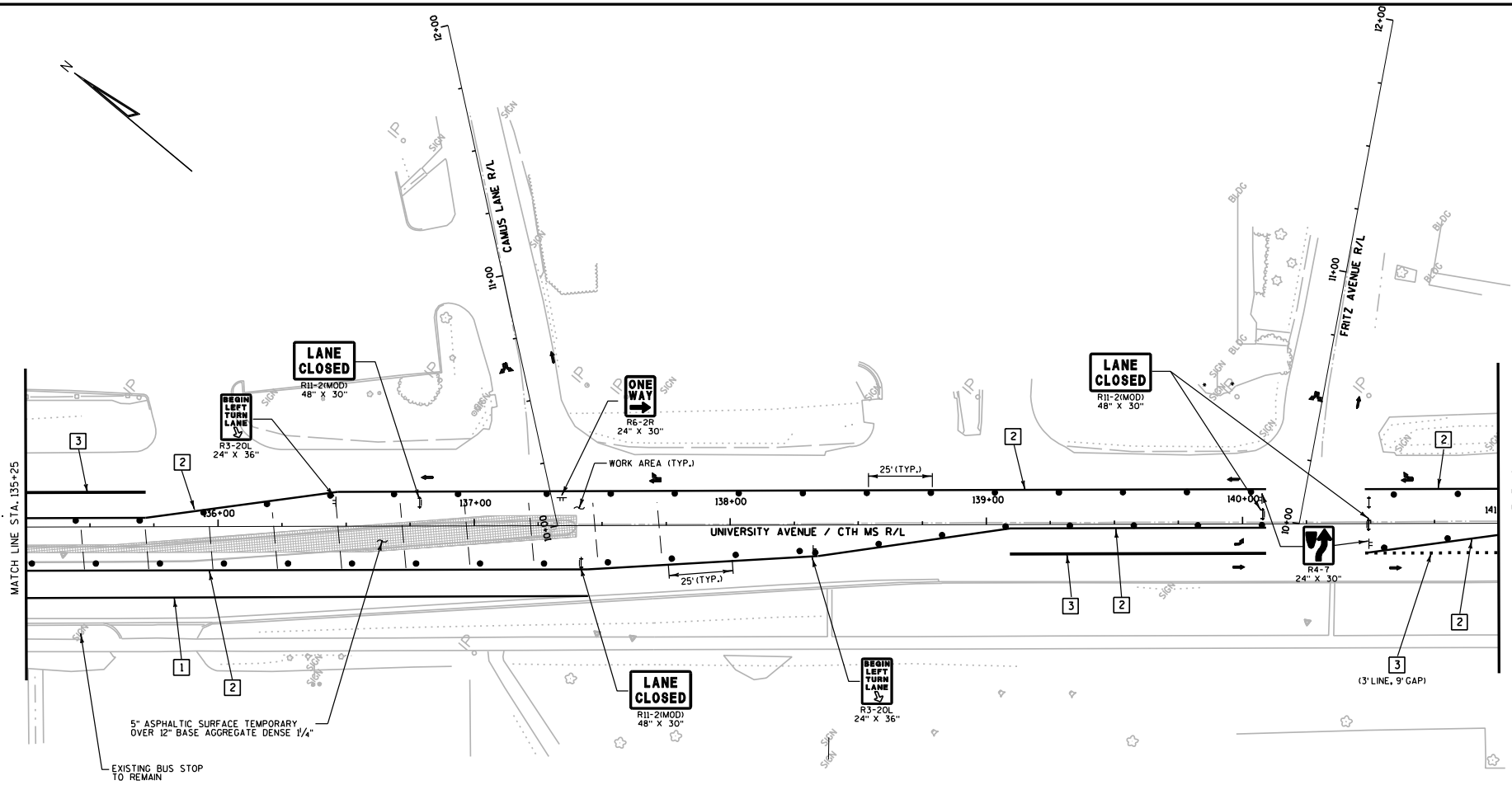
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026108_tc_s1.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

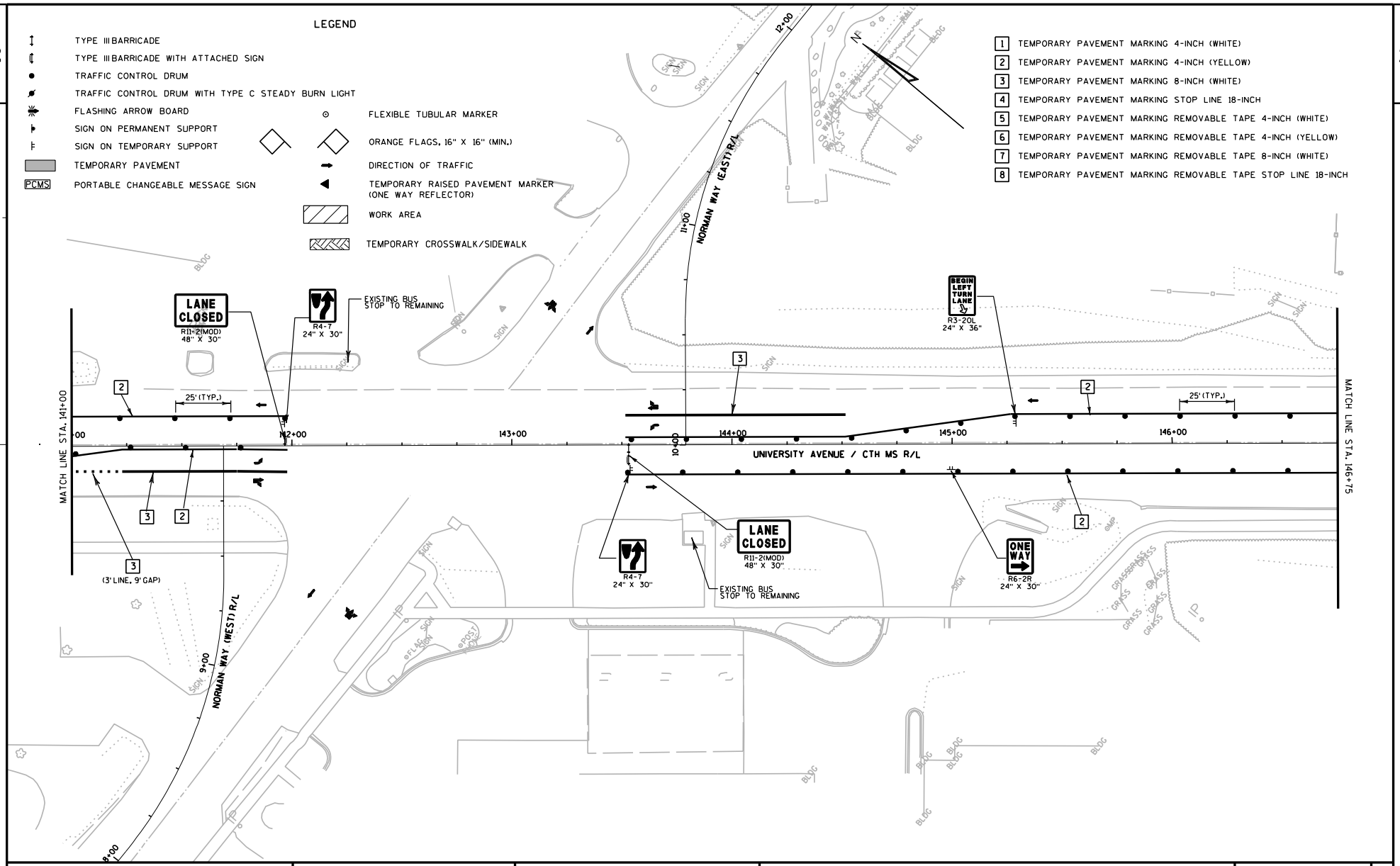
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026109_tc_s1.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

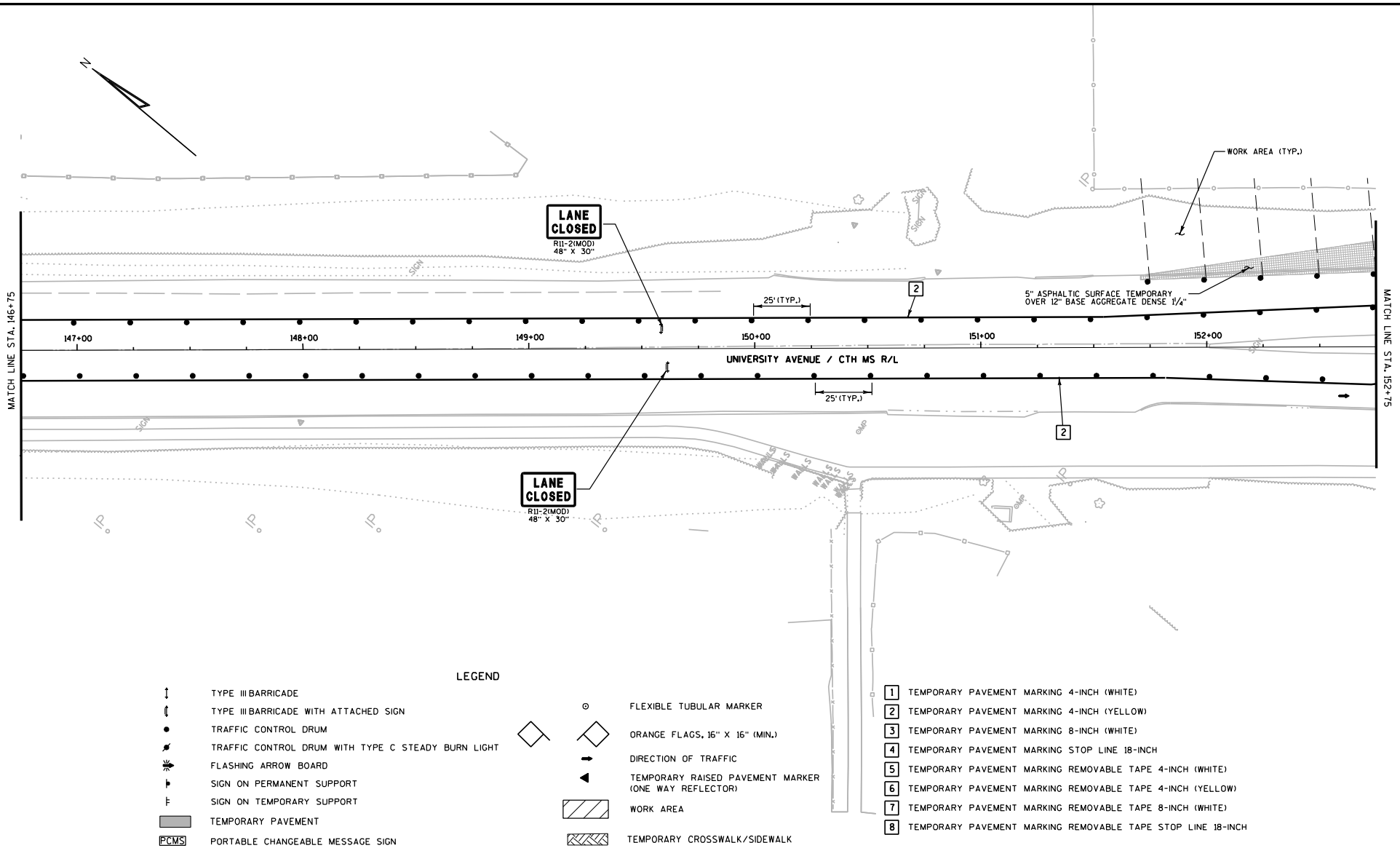
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026110_tc_s1.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

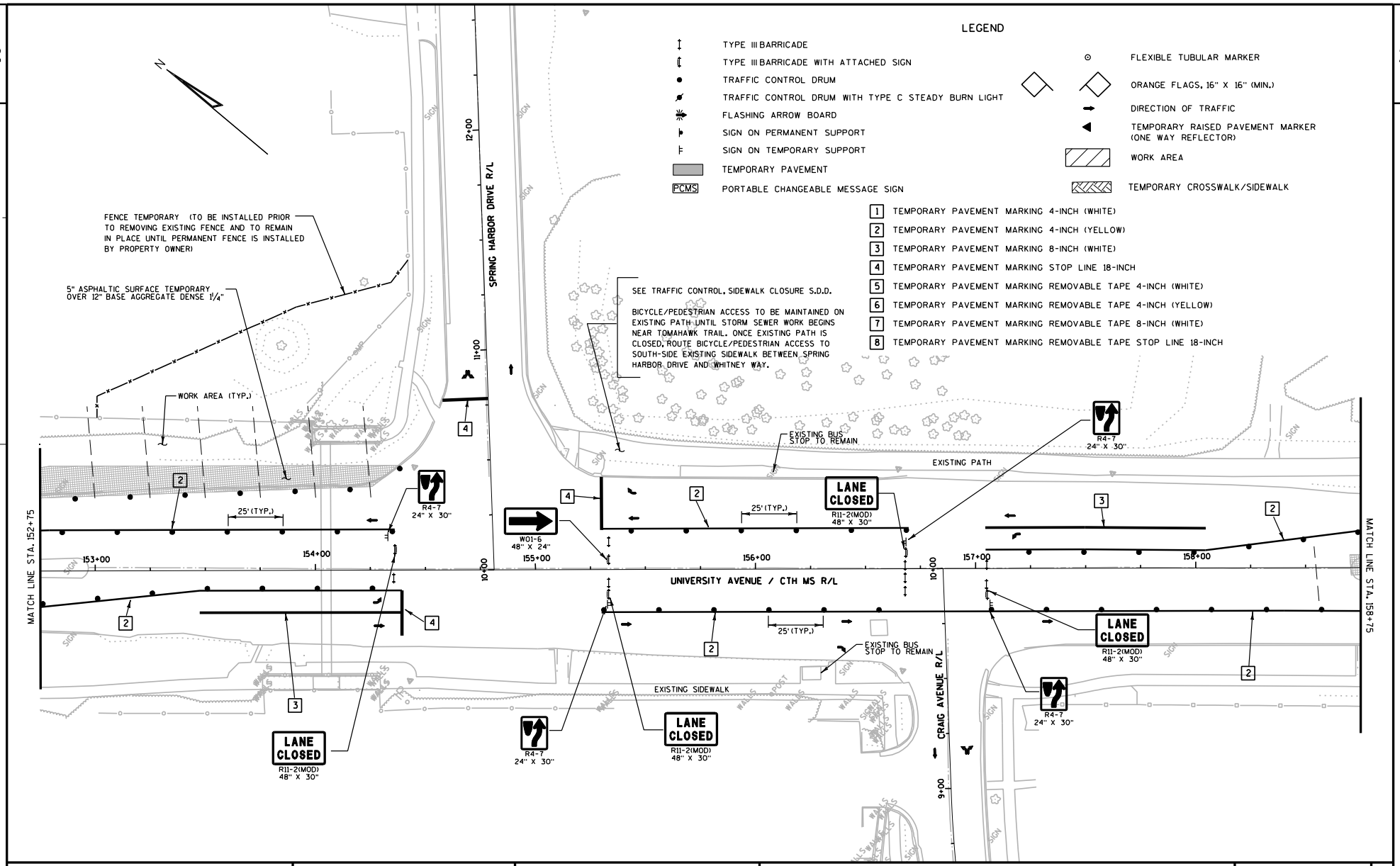
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 297 E

FILE NAME : g:\madison\md2009035\dgn\026111_tc_s1.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

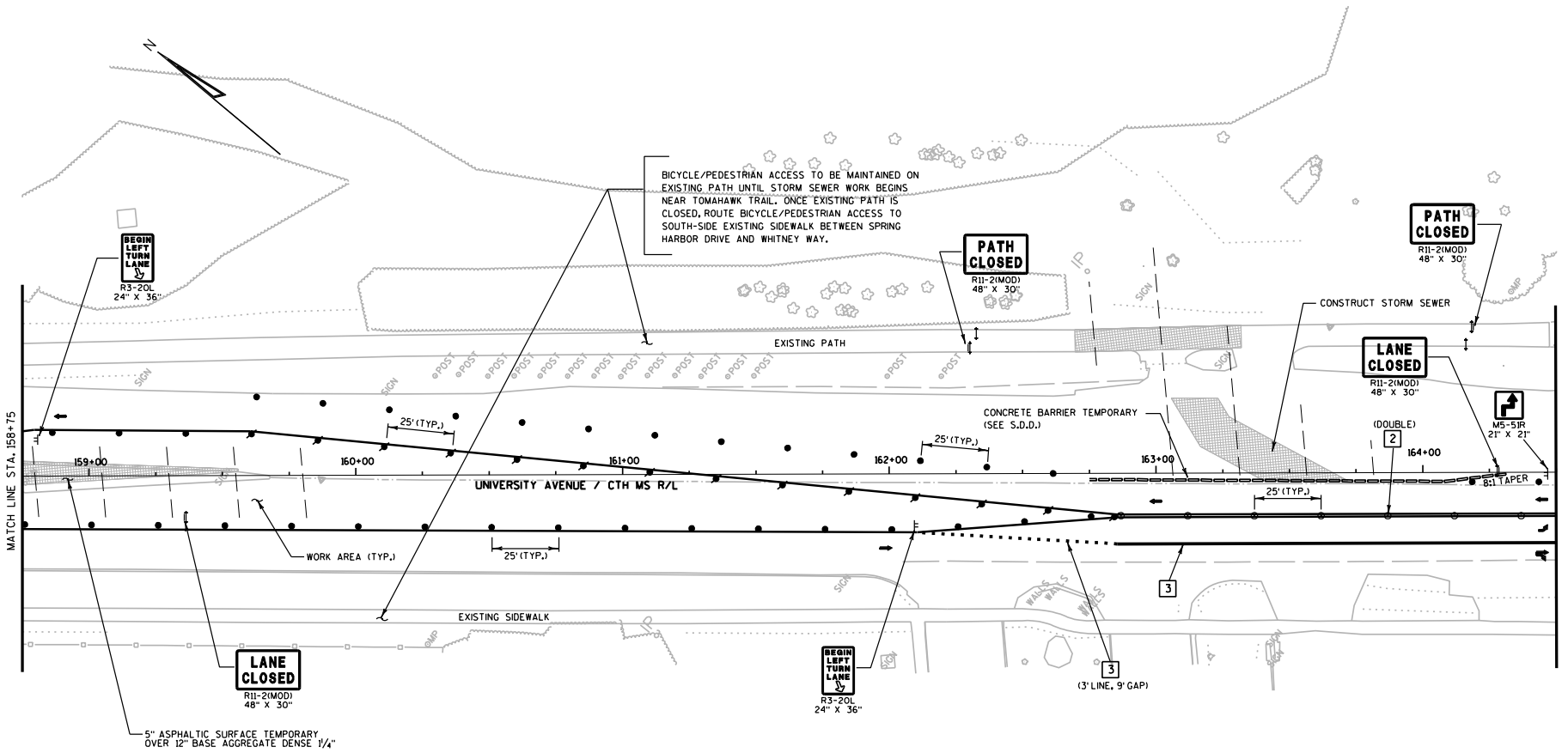
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 298 E

FILE NAME : g:\madison\md2009035\dgn\026112_tc_s1.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026113_tc_s1.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

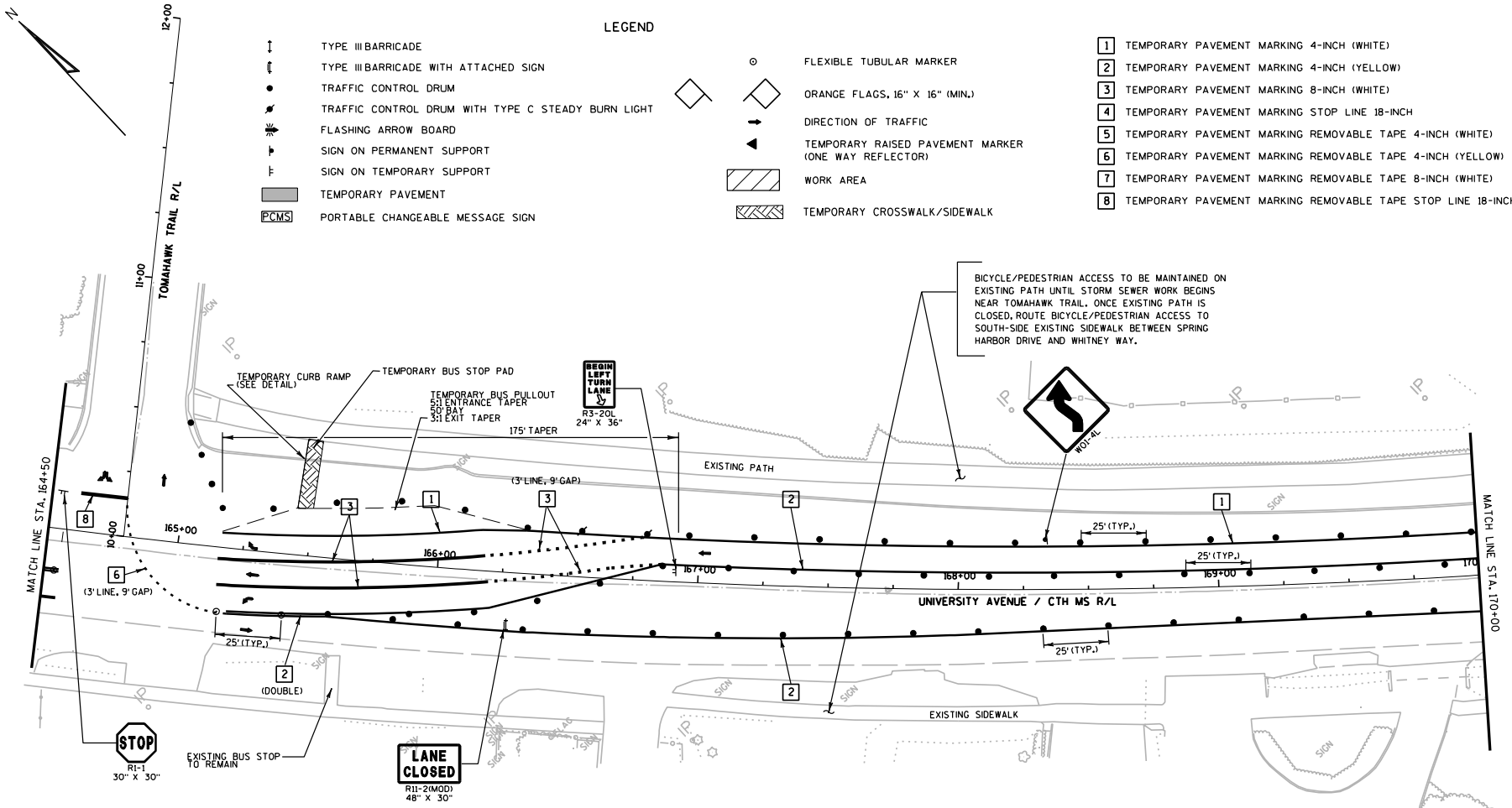
WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

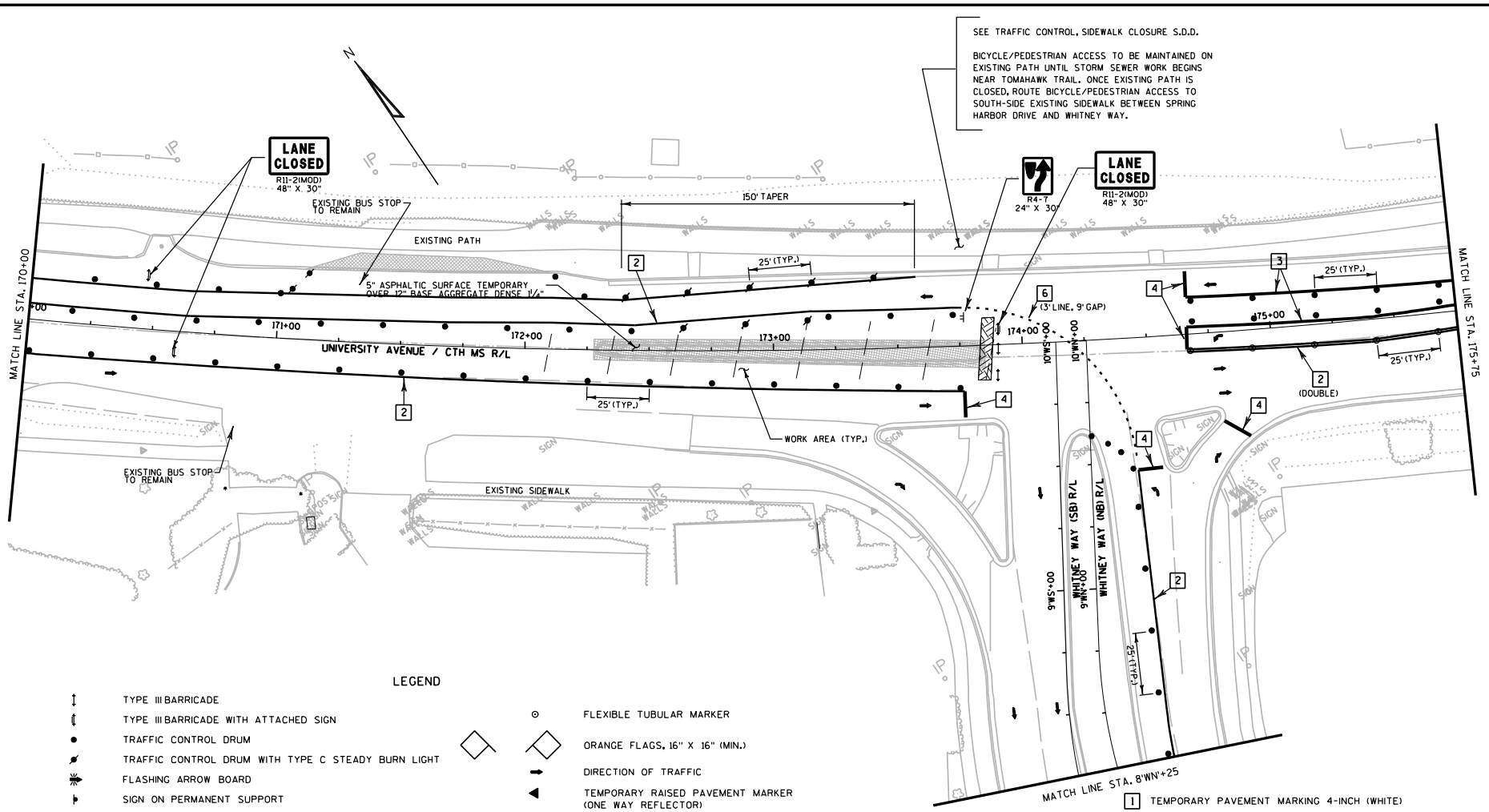
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 300	E

FILE NAME : g:\madison\md2009035\dgn\026114_tc_s1.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

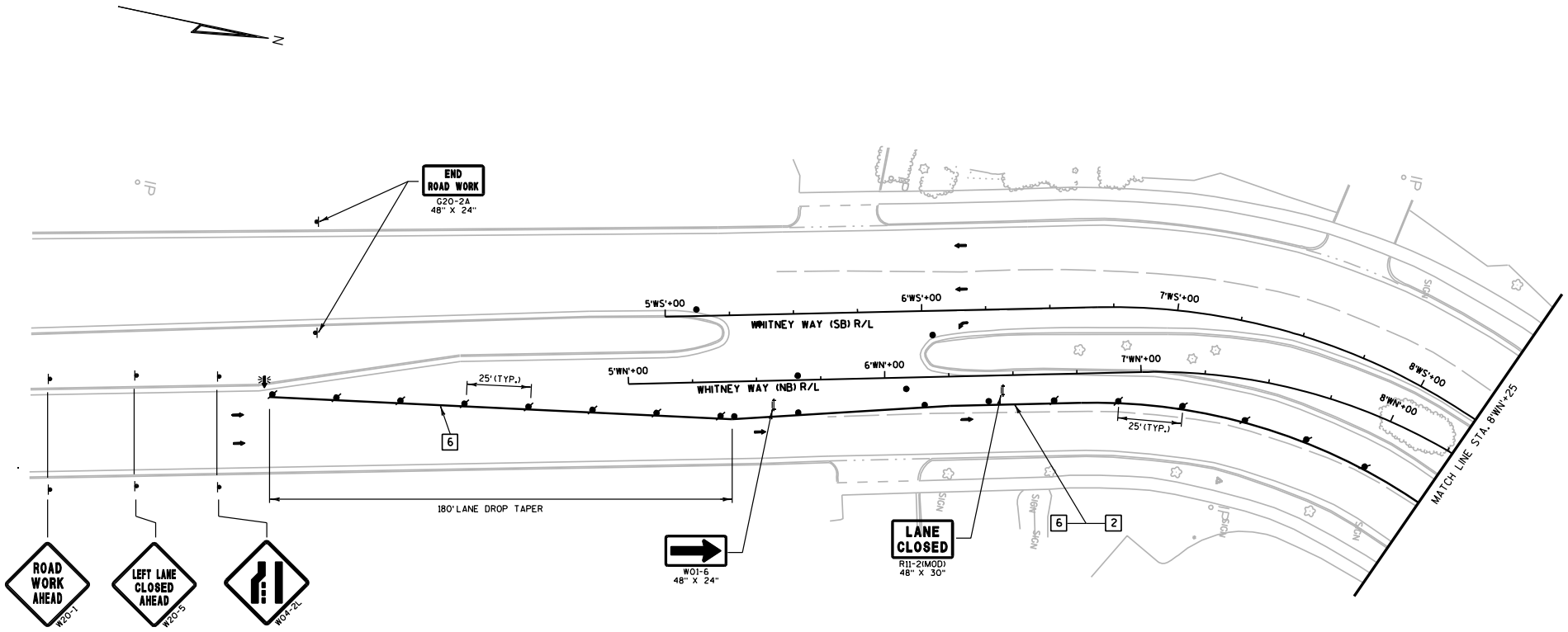
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 301 E

FILE NAME : g:\madison\md2009035\dgn\026115_tc_s1.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

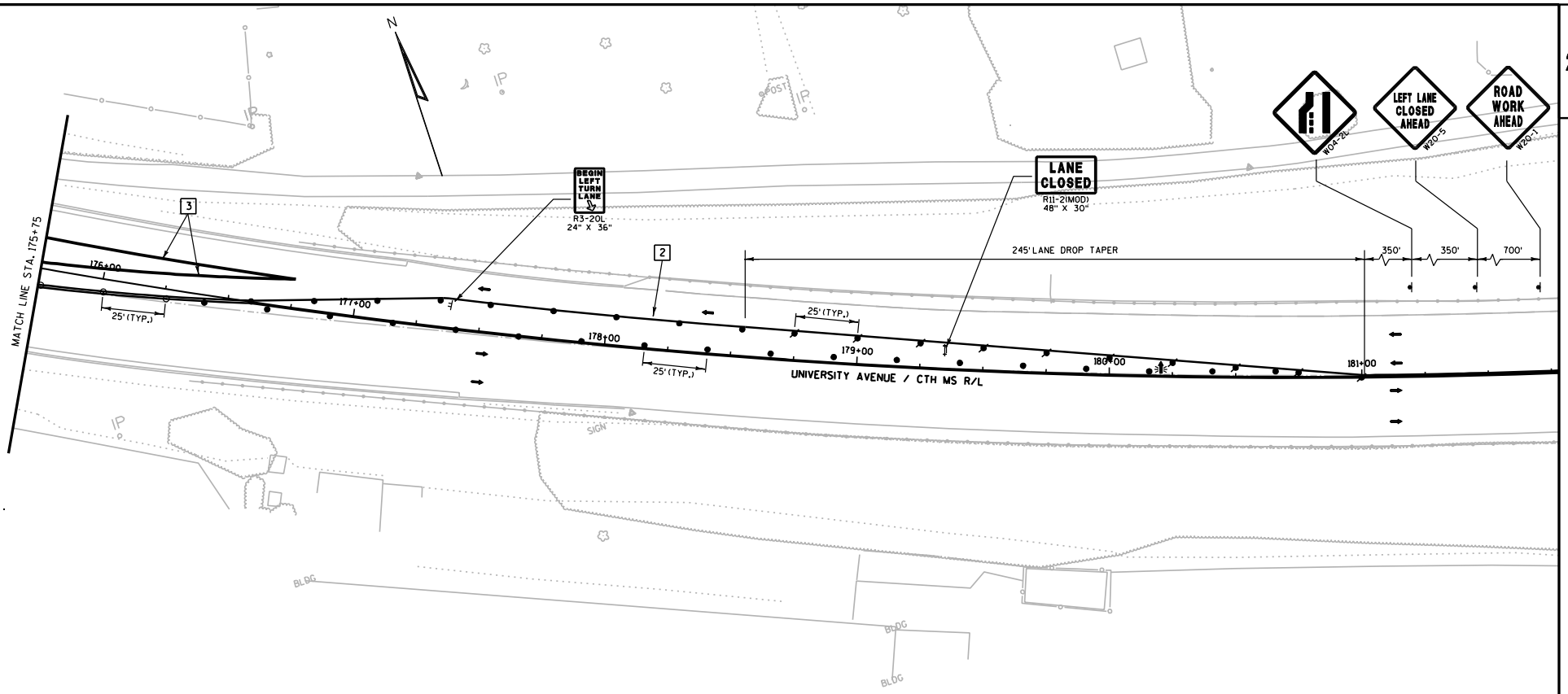
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026116_tc_s1 (whitney).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

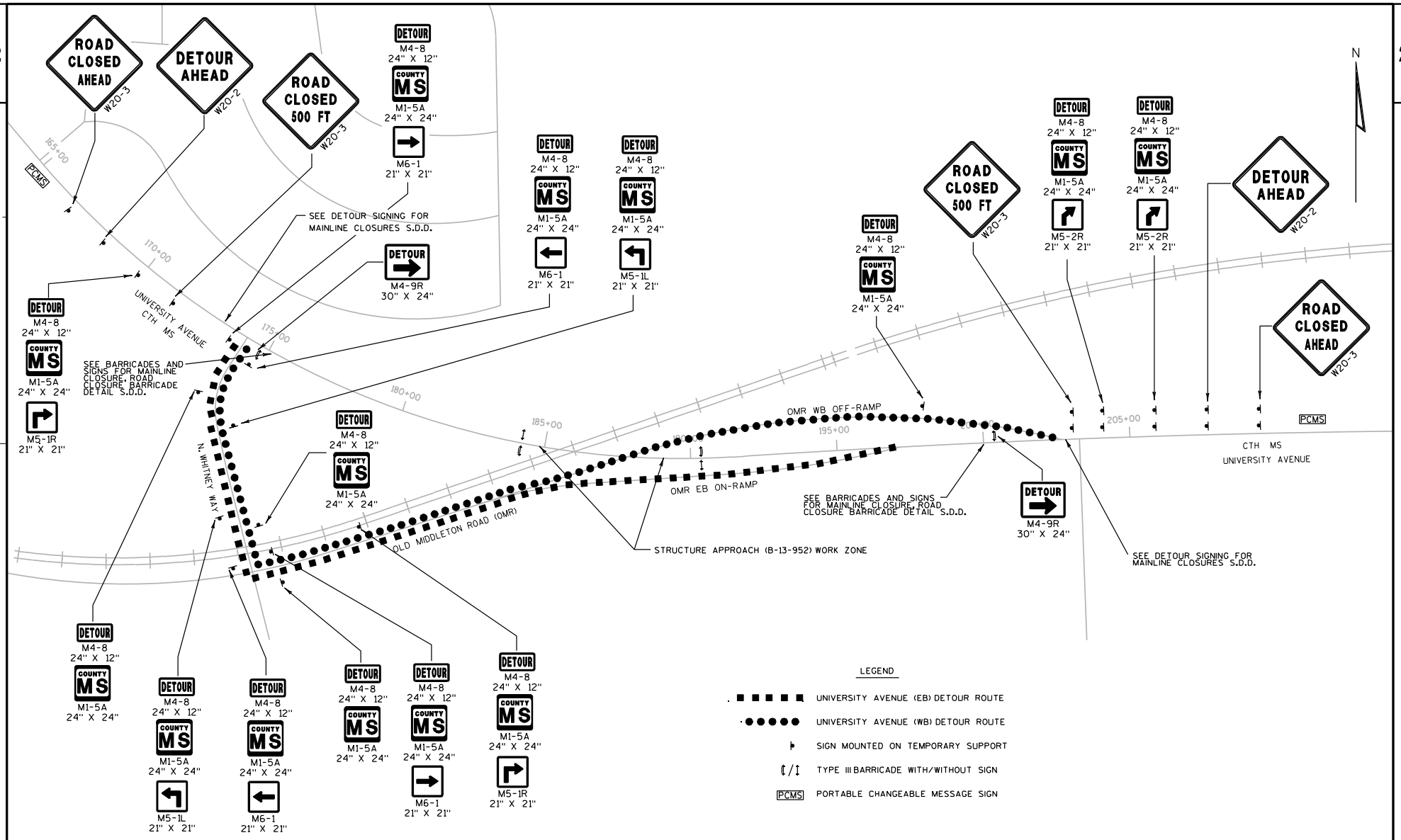
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026117_tc_s1.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

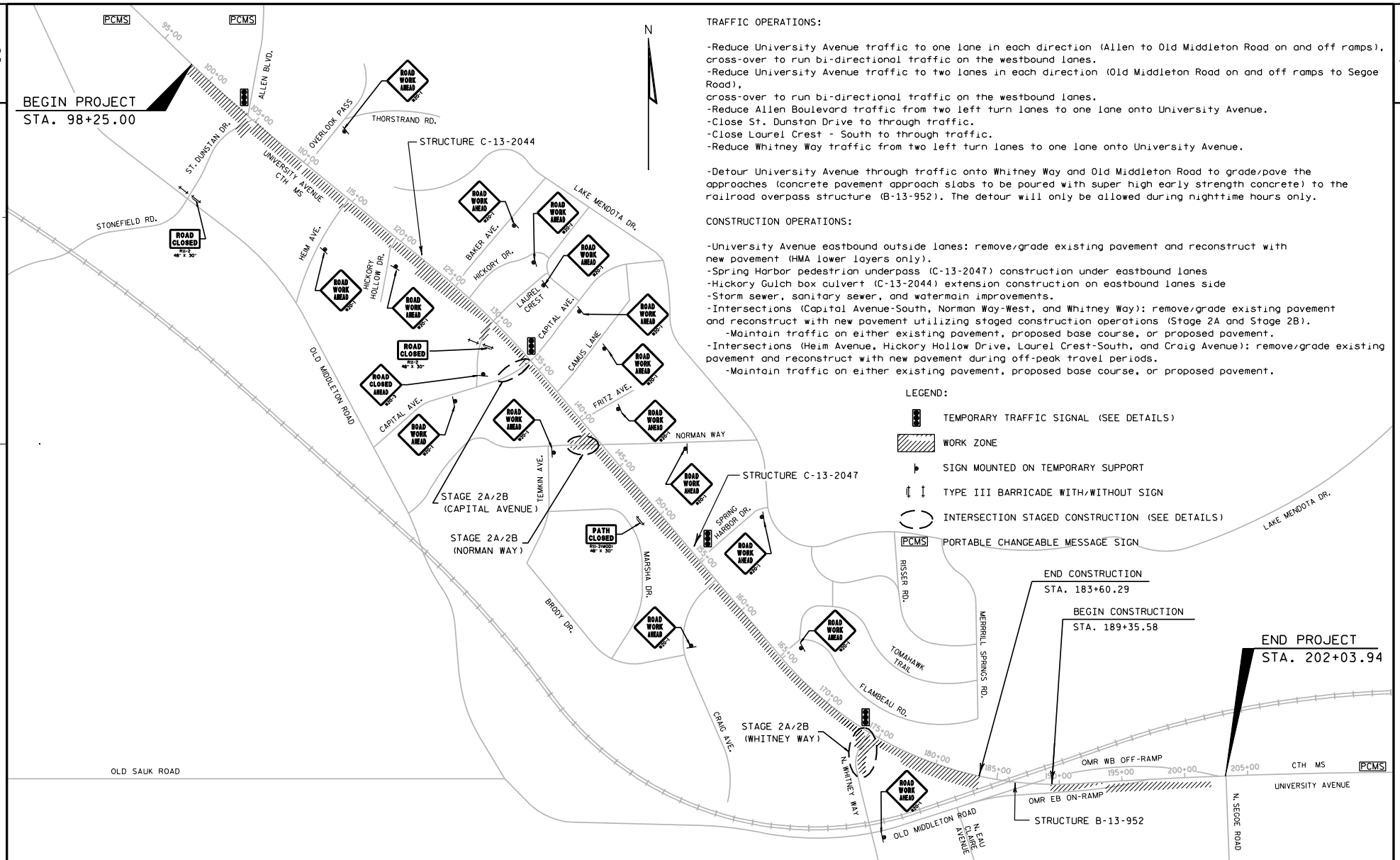
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL NIGHTTIME DETOUR DETAIL (STAGE 2)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026200_tc_s2 detour.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



TRAFFIC OPERATIONS:

-Reduce University Avenue traffic to one lane in each direction (Allen to Old Middleton Road on and off ramps), cross-over to run bi-directional traffic on the westbound lanes.
-Reduce University Avenue traffic to two lanes in each direction (Old Middleton Road on and off ramps to Segoe Road), cross-over to run bi-directional traffic on the westbound lanes.
-Reduce Allen Boulevard traffic from two left turn lanes to one lane onto University Avenue.
-Close St. Dunstan Drive to through traffic.
-Close Laurel Crest - South to through traffic.
-Reduce Whitney Way traffic from two left turn lanes to one lane onto University Avenue.

-Detour University Avenue through traffic onto Whitney Way and Old Middleton Road to grade/pave the approaches (concrete pavement approach slabs to be poured with super high early strength concrete) to the railroad overpass structure (B-13-952). The detour will only be allowed during nighttime hours only.

CONSTRUCTION OPERATIONS:

-University Avenue eastbound outside lanes: remove/grade existing pavement and reconstruct with new pavement (HMA lower layers only).
-Spring Harbor pedestrian underpass (C-13-2047) construction under eastbound lanes
-Hickory Gulch box culvert (C-13-2044) extension construction on eastbound lanes side
-Storm sewer, sanitary sewer, and watermain improvements.
-Intersections (Capital Avenue-South, Norman Way-West, and Whitney Way): remove/grade existing pavement and reconstruct with new pavement utilizing staged construction operations (Stage 2A and Stage 2B).
  -Maintain traffic on either existing pavement, proposed base course, or proposed pavement.
-Intersections (Heim Avenue, Hickory Hollow Drive, Laurel Crest-South, and Craig Avenue): remove/grade existing pavement and reconstruct with new pavement during off-peak travel periods.
  -Maintain traffic on either existing pavement, proposed base course, or proposed pavement.

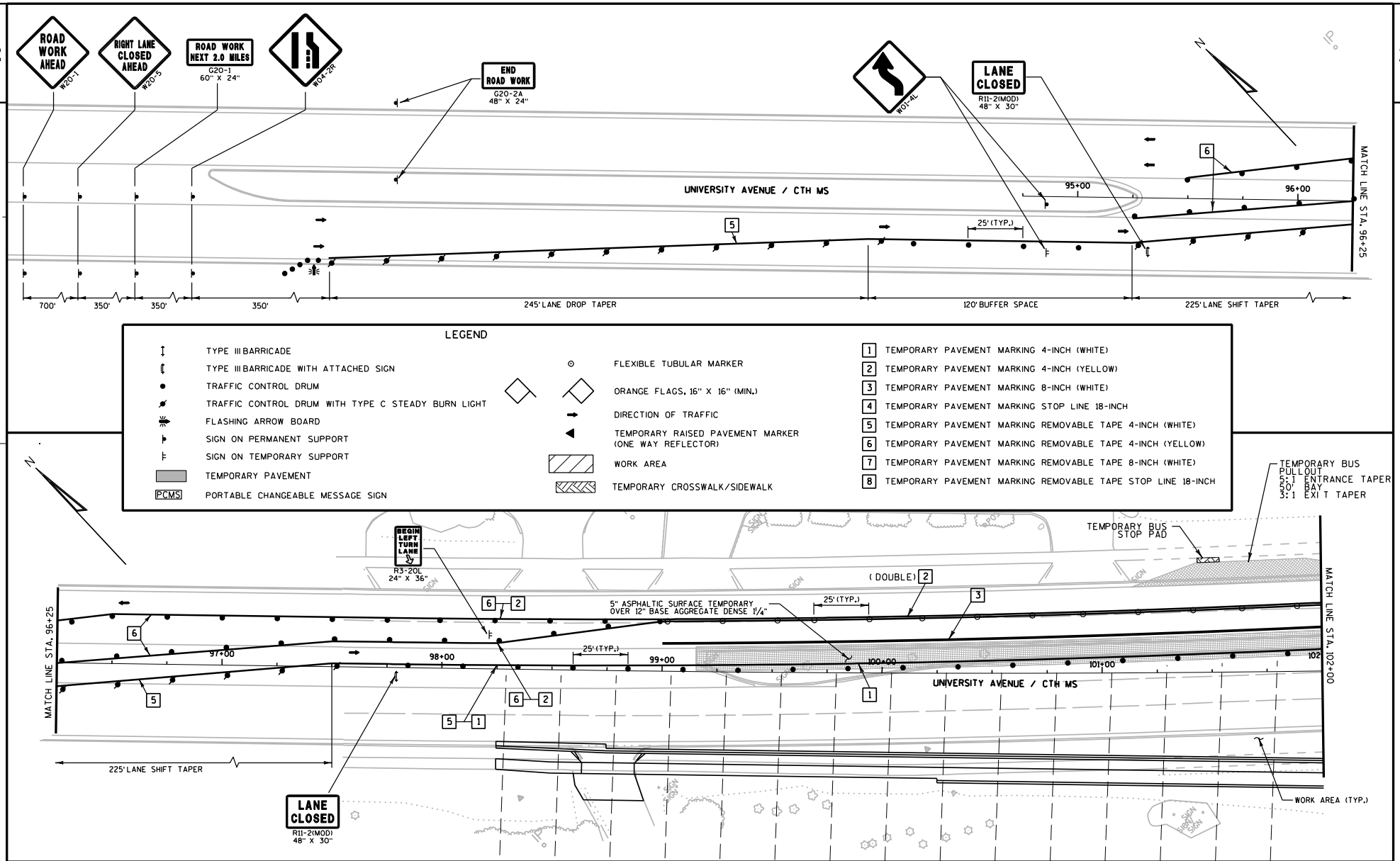
LEGEND:

- TEMPORARY TRAFFIC SIGNAL (SEE DETAILS)
- WORK ZONE
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- INTERSECTION STAGED CONSTRUCTION (SEE DETAILS)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL OVERVIEW (STAGE 2)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026200_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

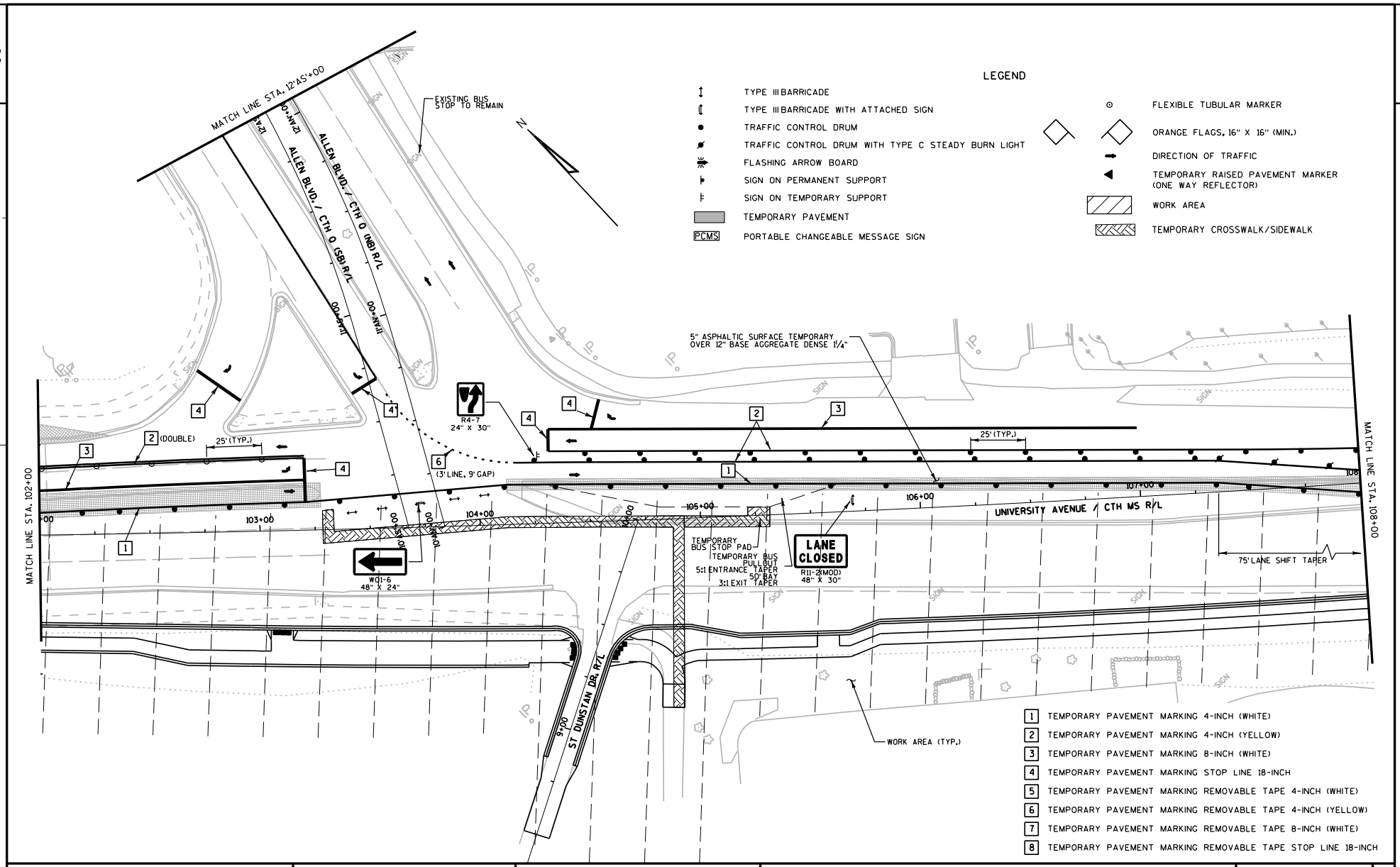
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026201_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

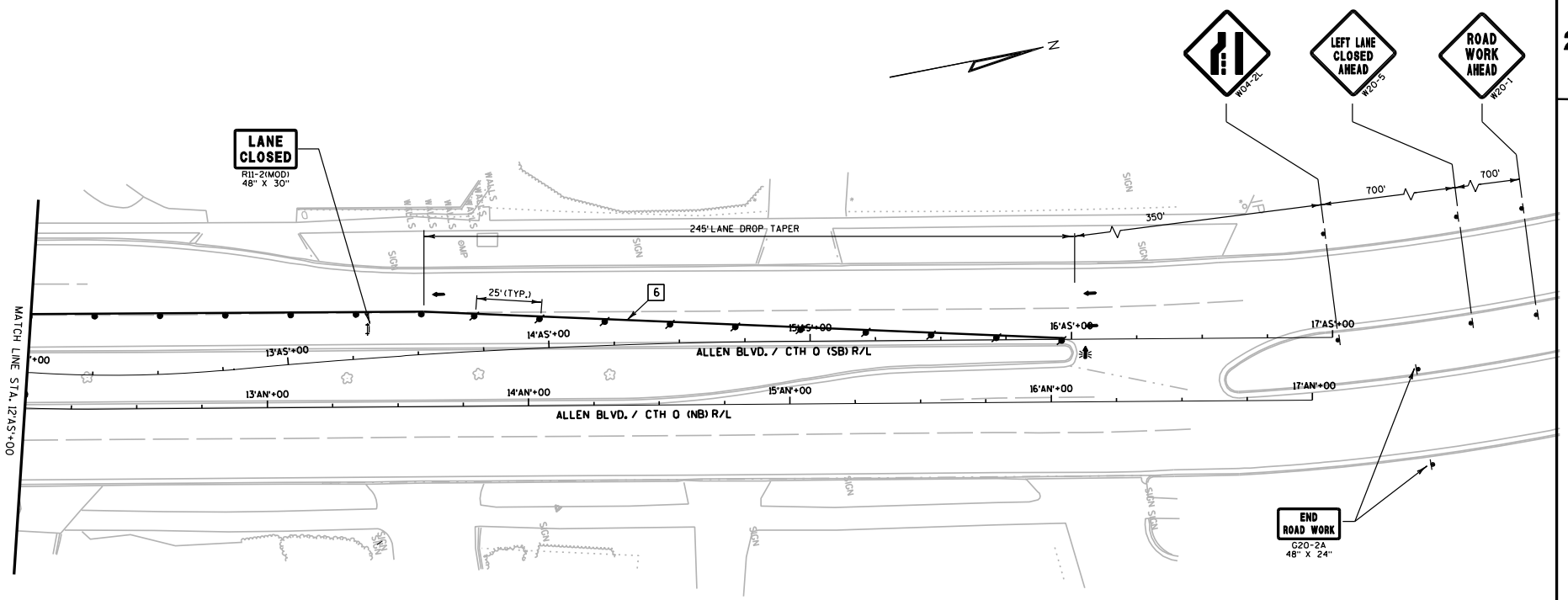
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026202_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

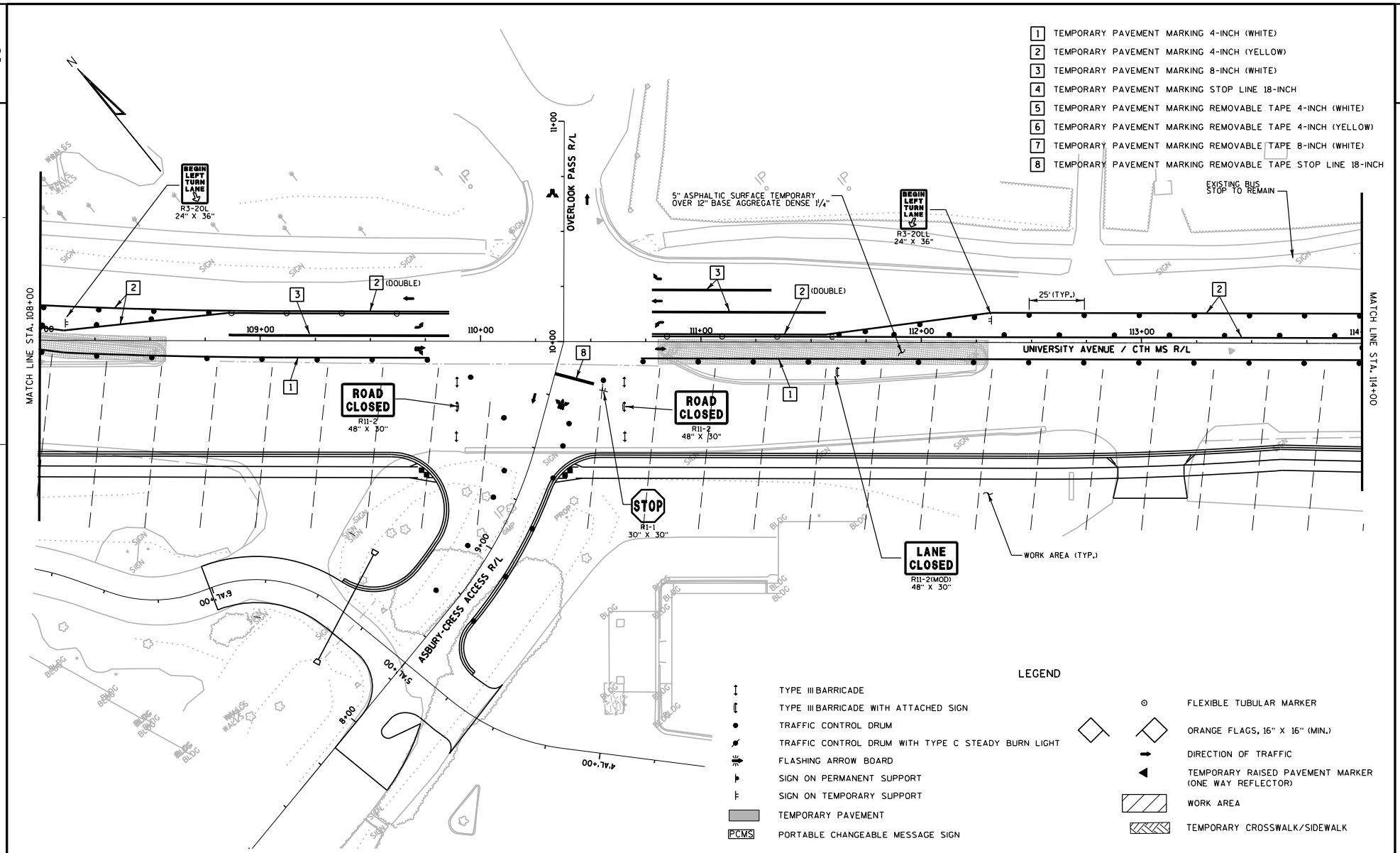
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 308 E

FILE NAME : g:\madison\md2009035\dgn\026203_tc_s2 (allen).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

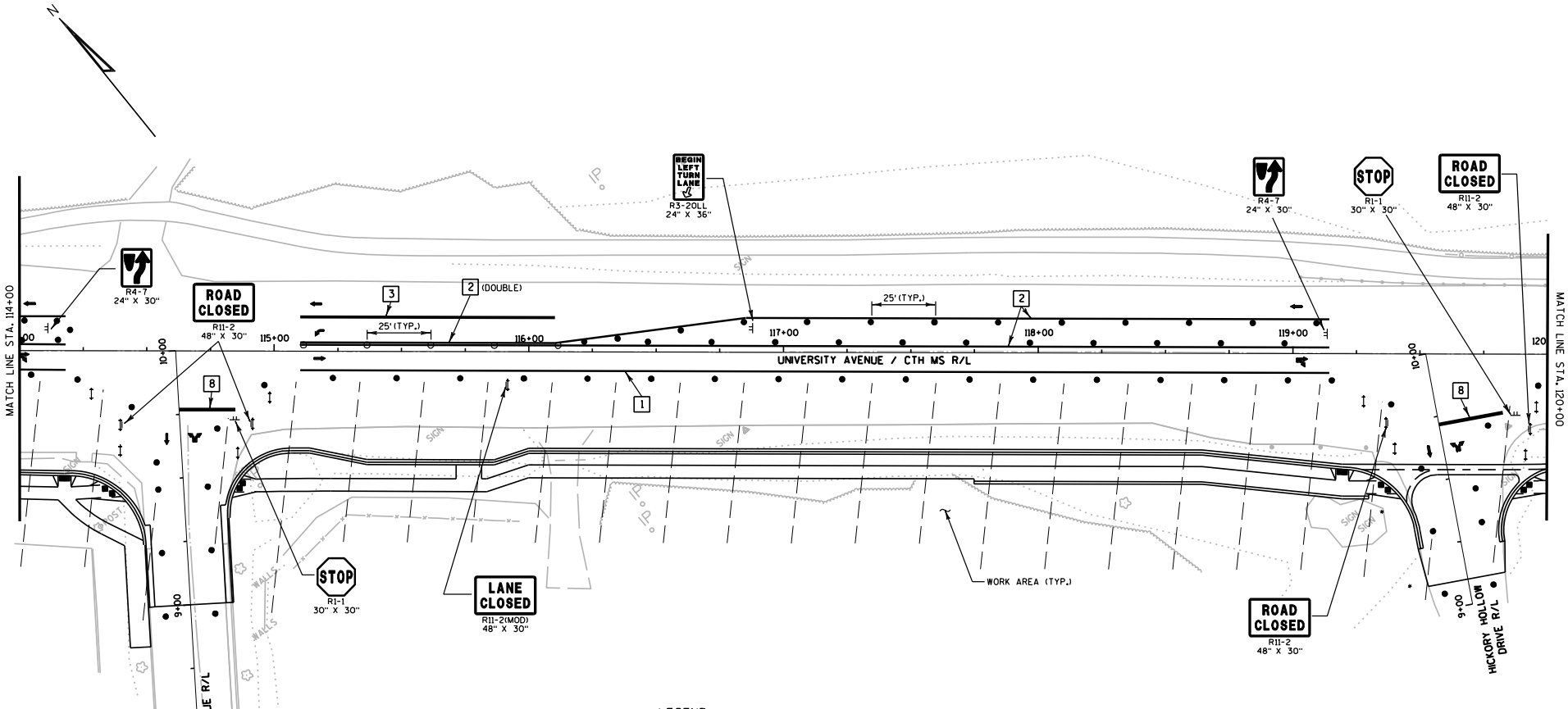
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 309 E

FILE NAME : g:\madison\md2009035\dgn\026204_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 310	E

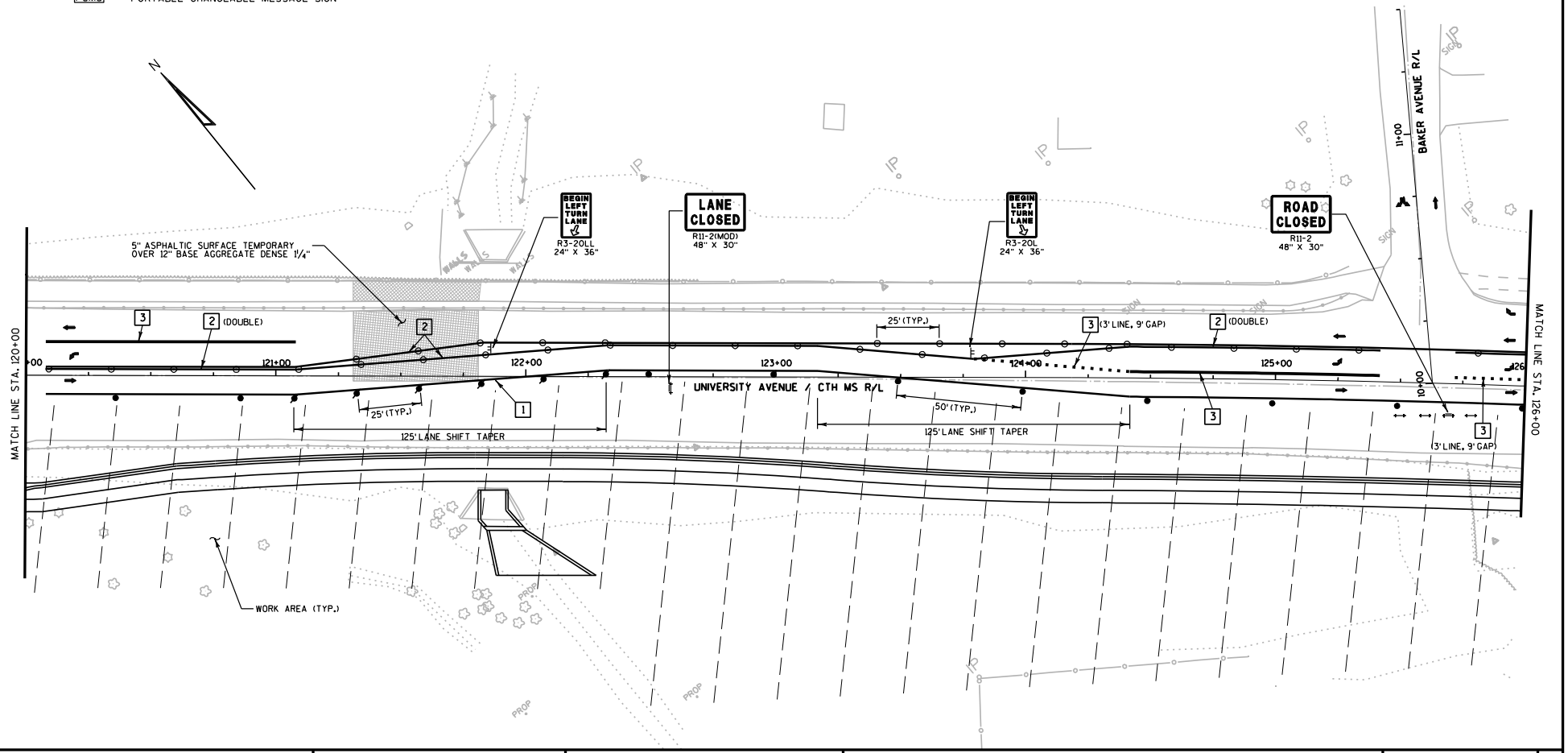
FILE NAME : g:\madison\md2009035\dgn\026205_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

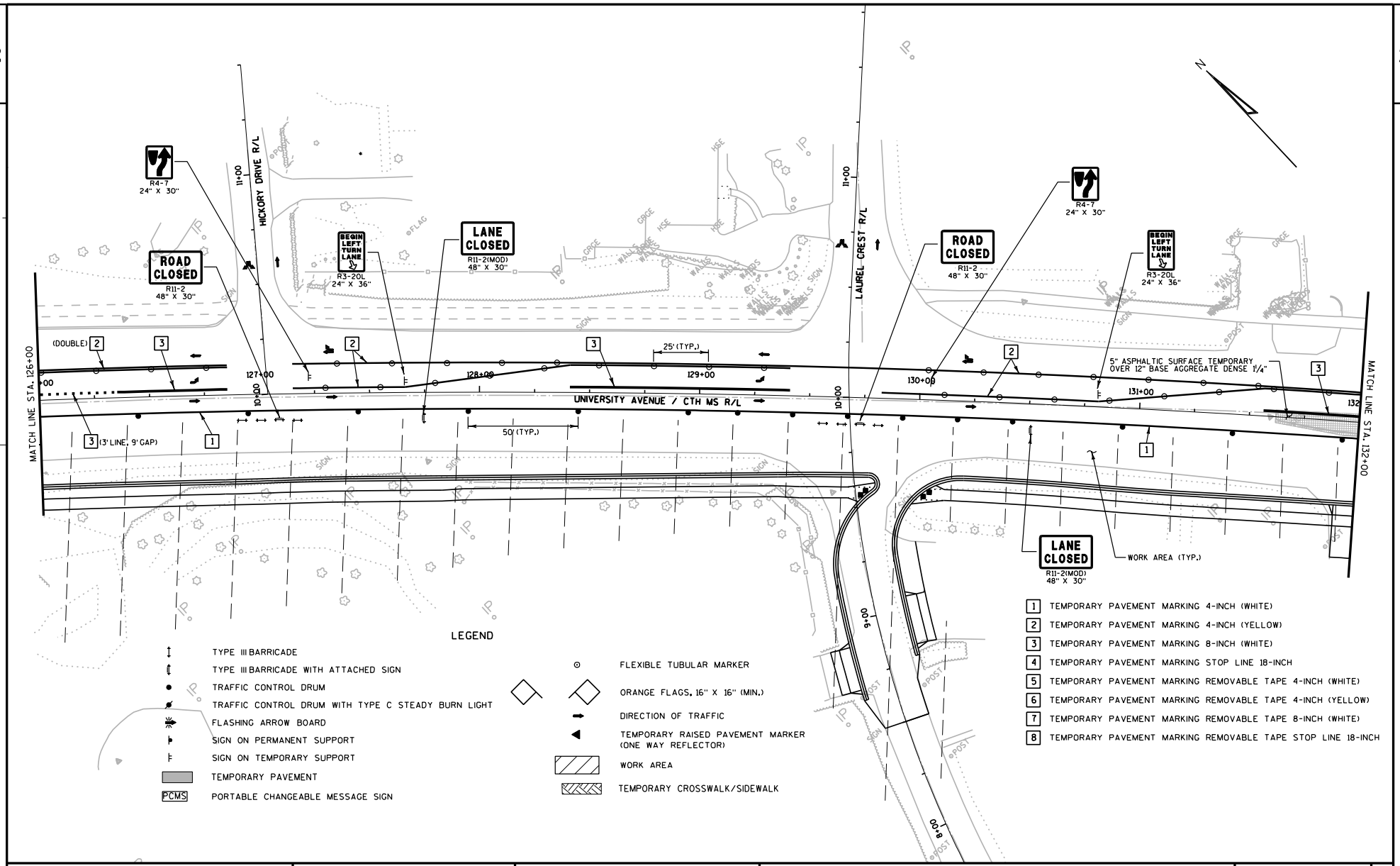
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026206_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

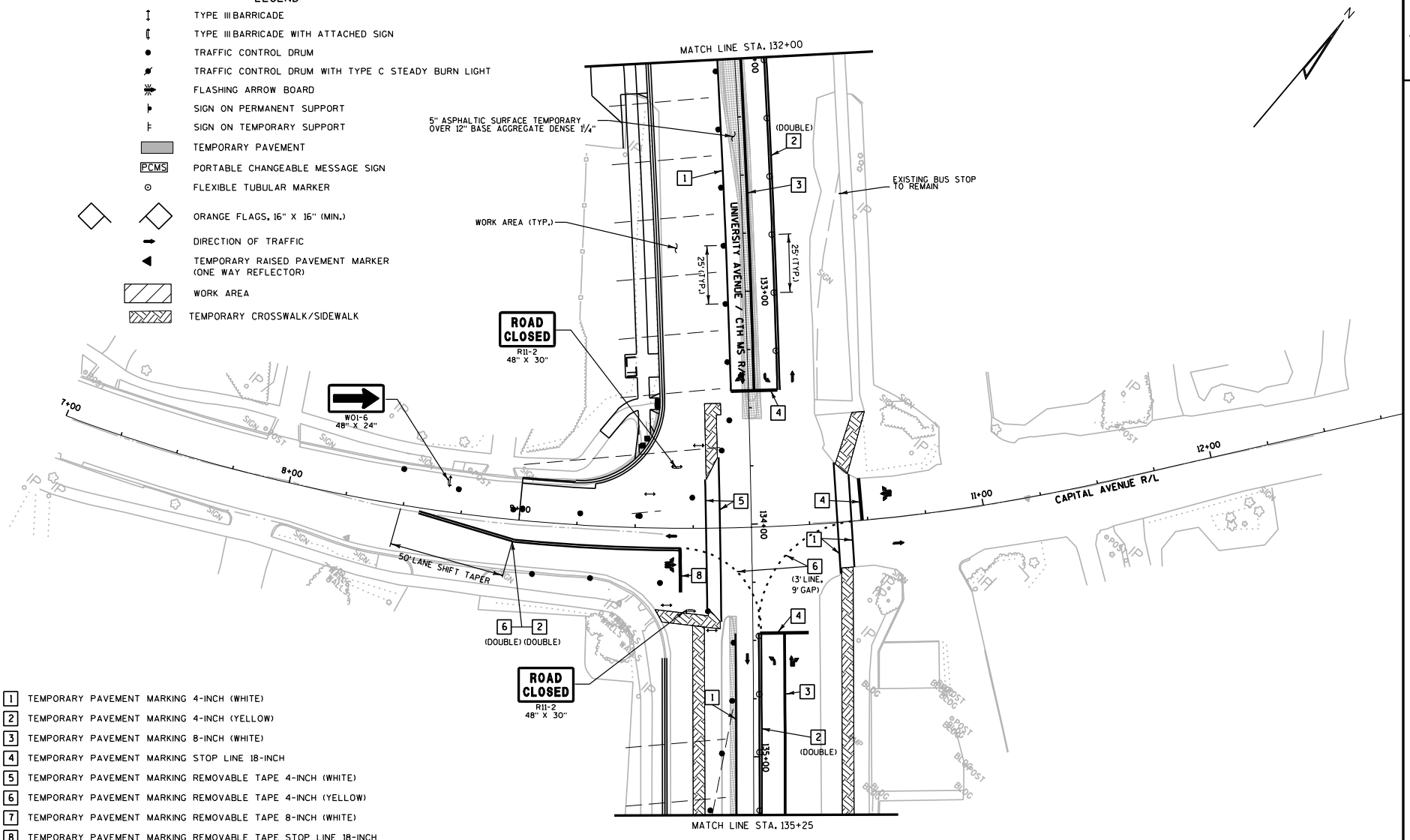
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026207_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

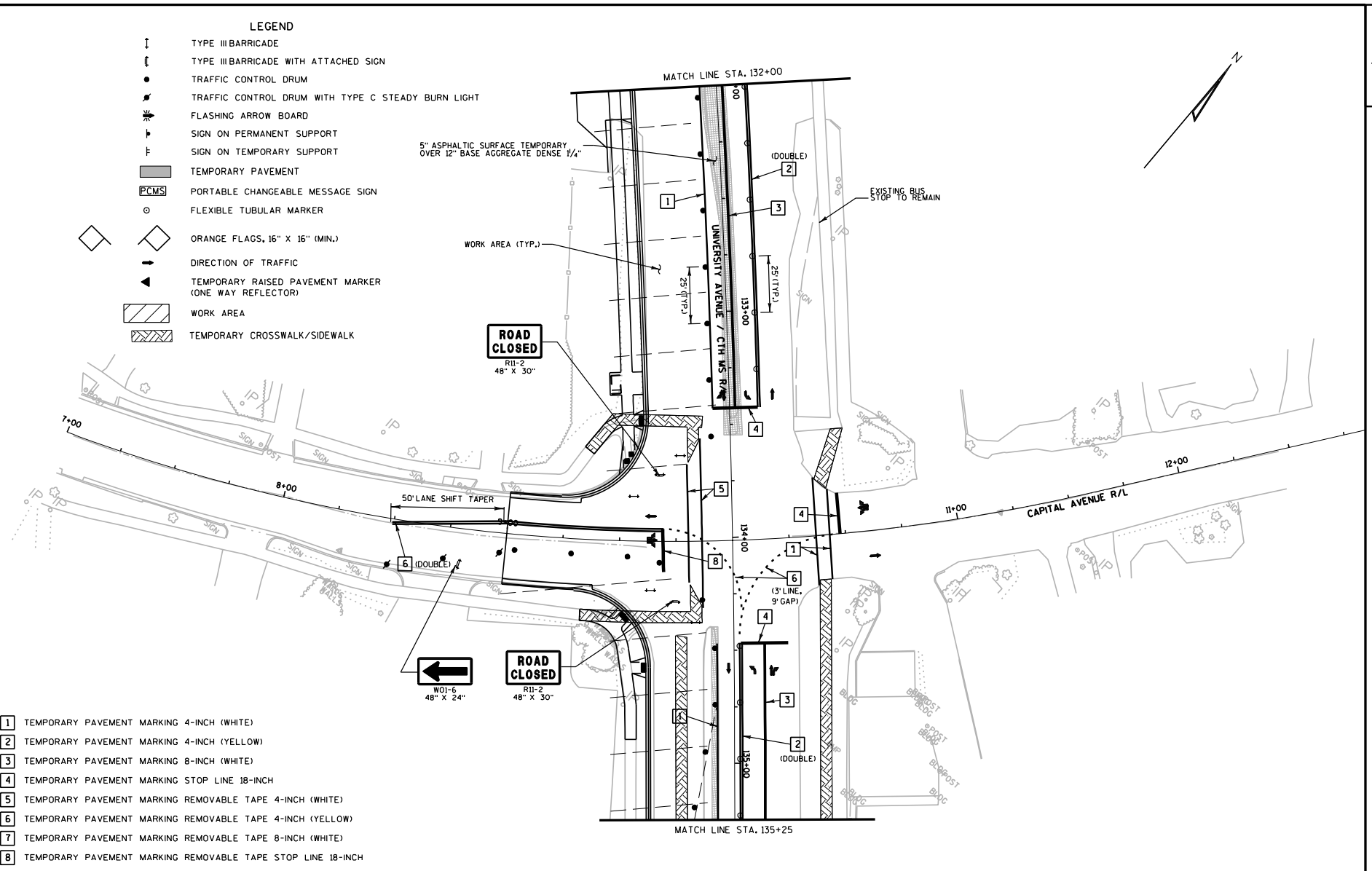
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2A	SHEET 313 E

FILE NAME : g:\madison\md2009035\dgn\026208_tc_s2a.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

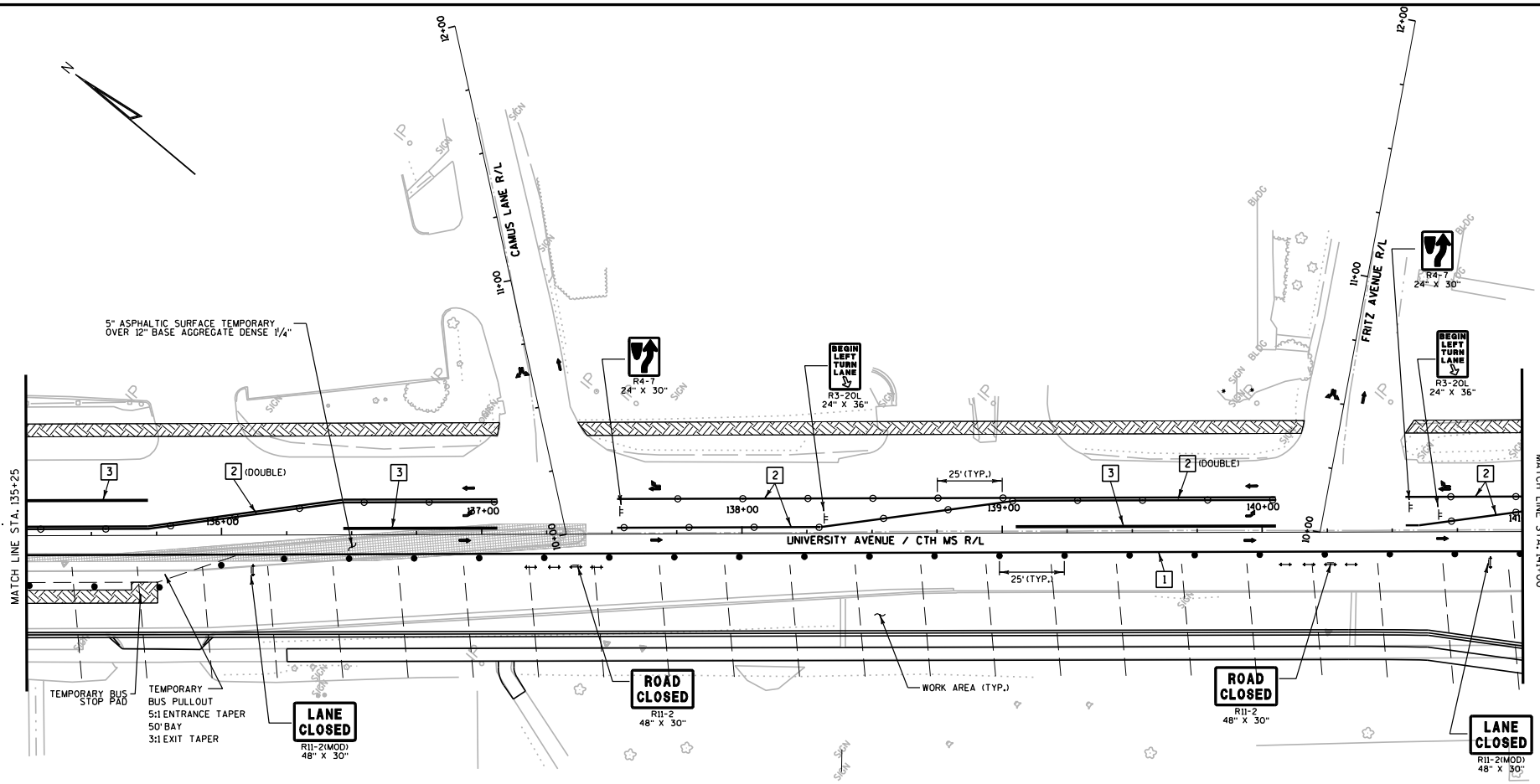
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2B	SHEET 314 E

FILE NAME : g:\madison\md2009035\dgn\026208_tc_s2b.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



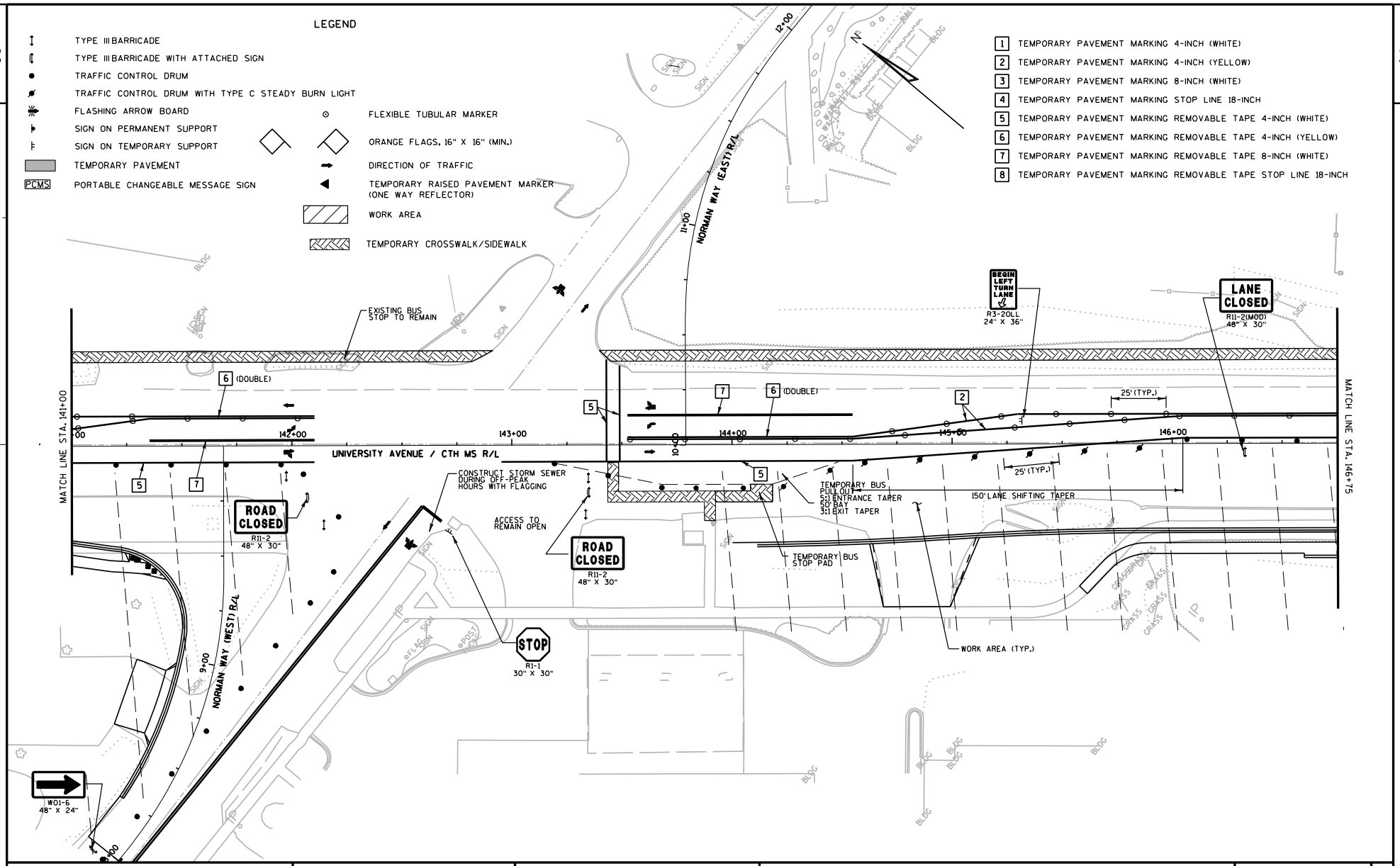
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET E

FILE NAME : G:\Madison\MD2009035\DGN\026209_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2A	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026210_tc_s2a.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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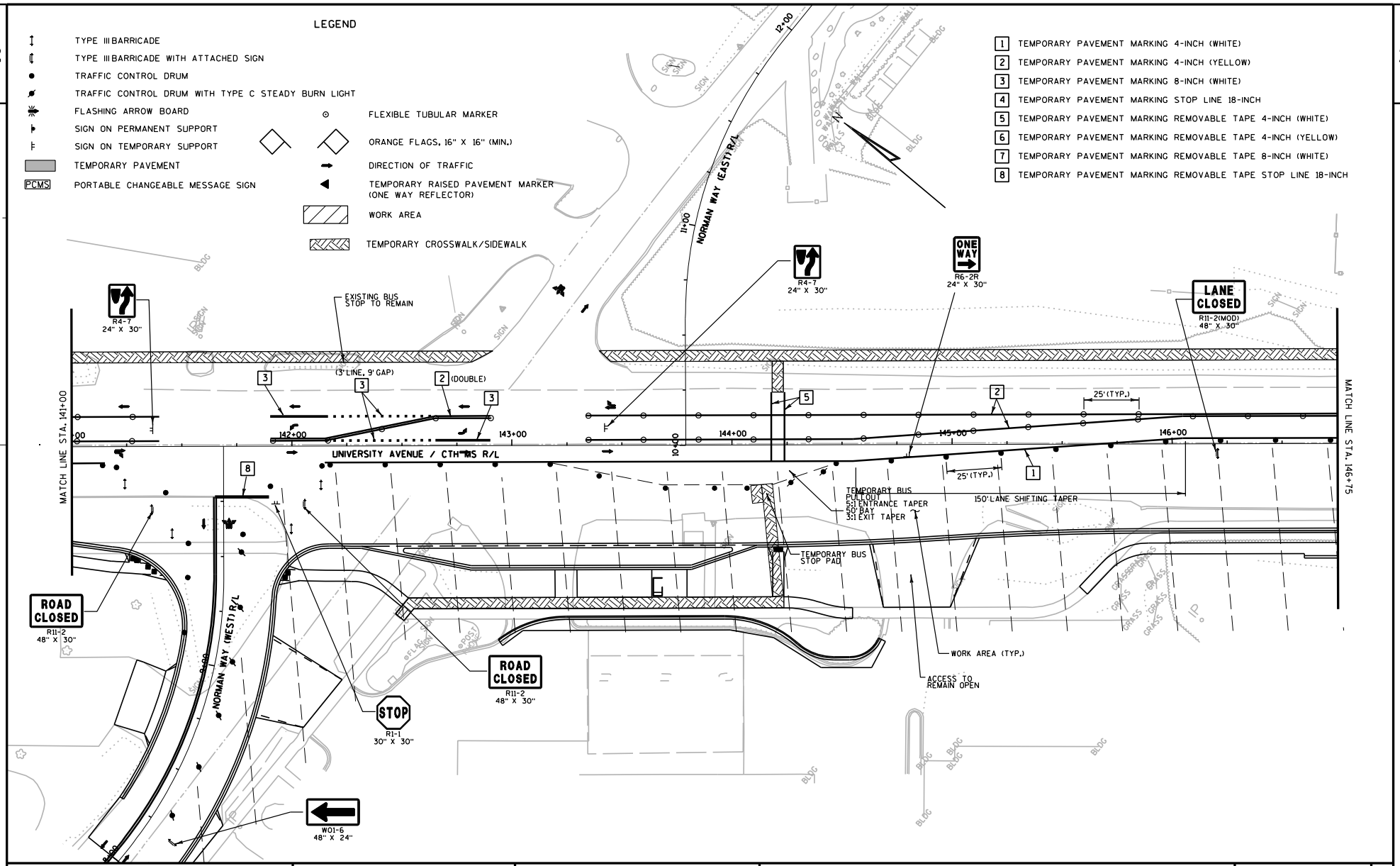
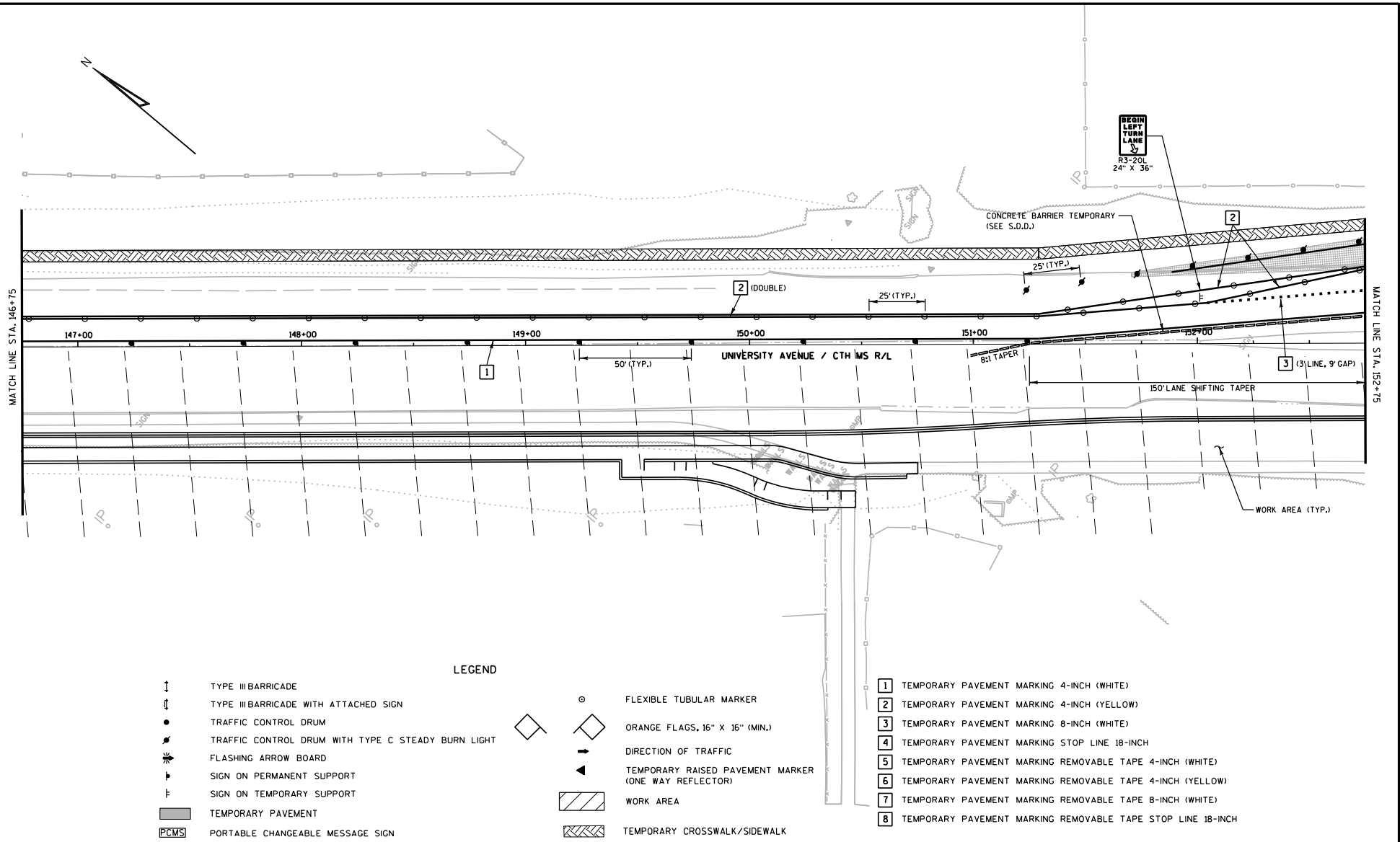


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2B	SHEET 317 E

FILE NAME : g:\madison\md2009035\dgn\026210_tc_s2b.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

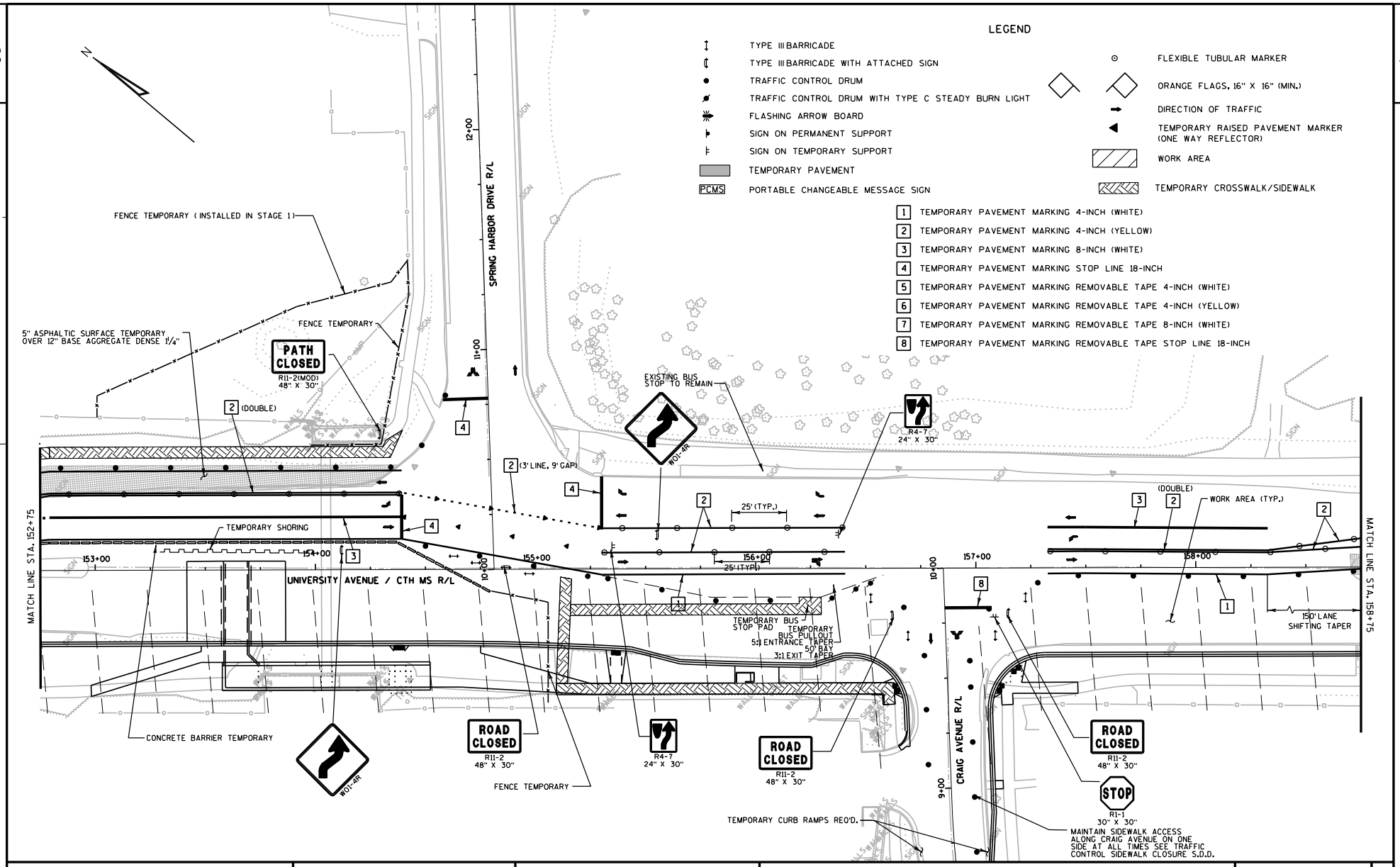
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET	E

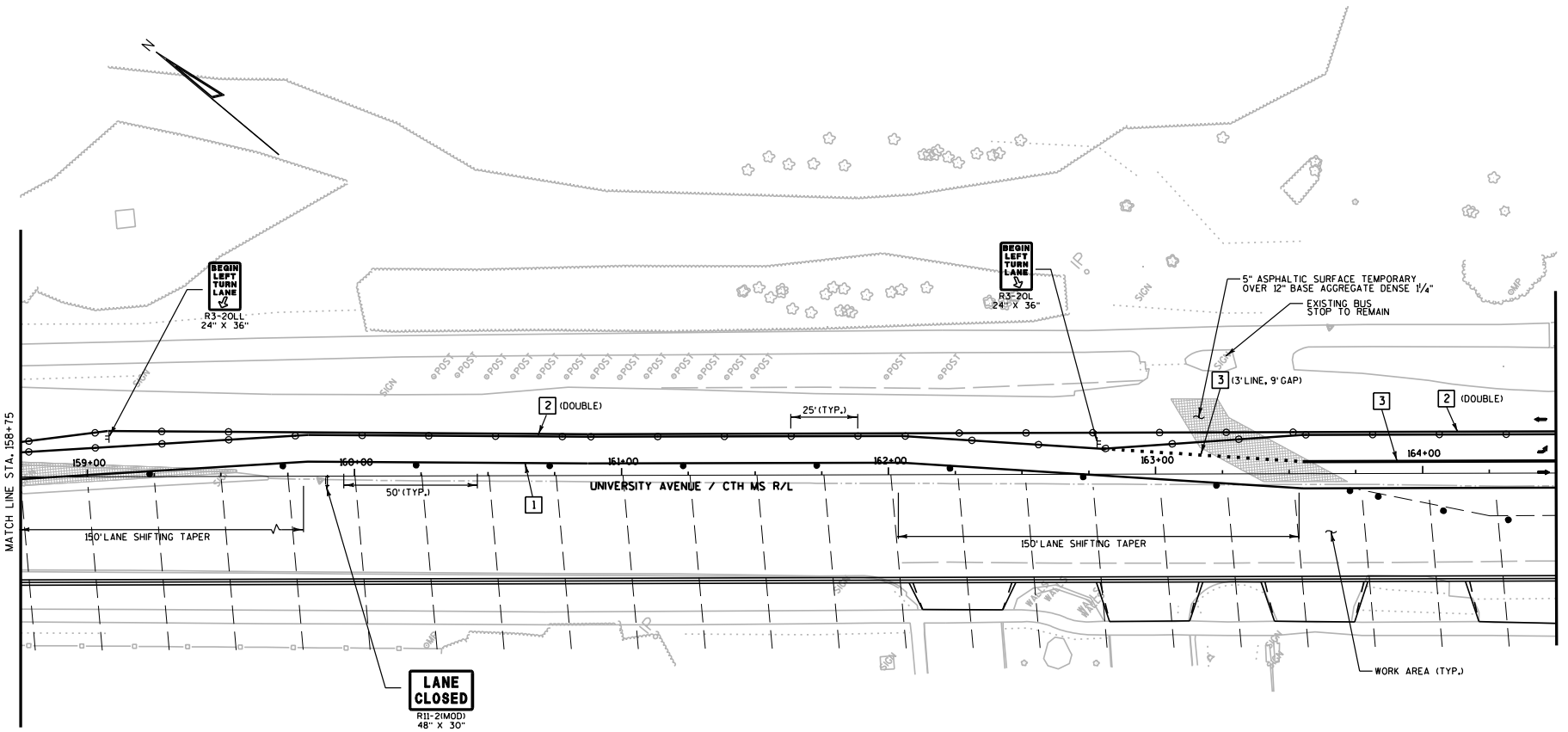
FILE NAME : g:\madison\md2009035\dgn\026211_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET E

FILE NAME : G:\Madison\MD2009035\DGN\026212_tc_s2.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :



LEGEND

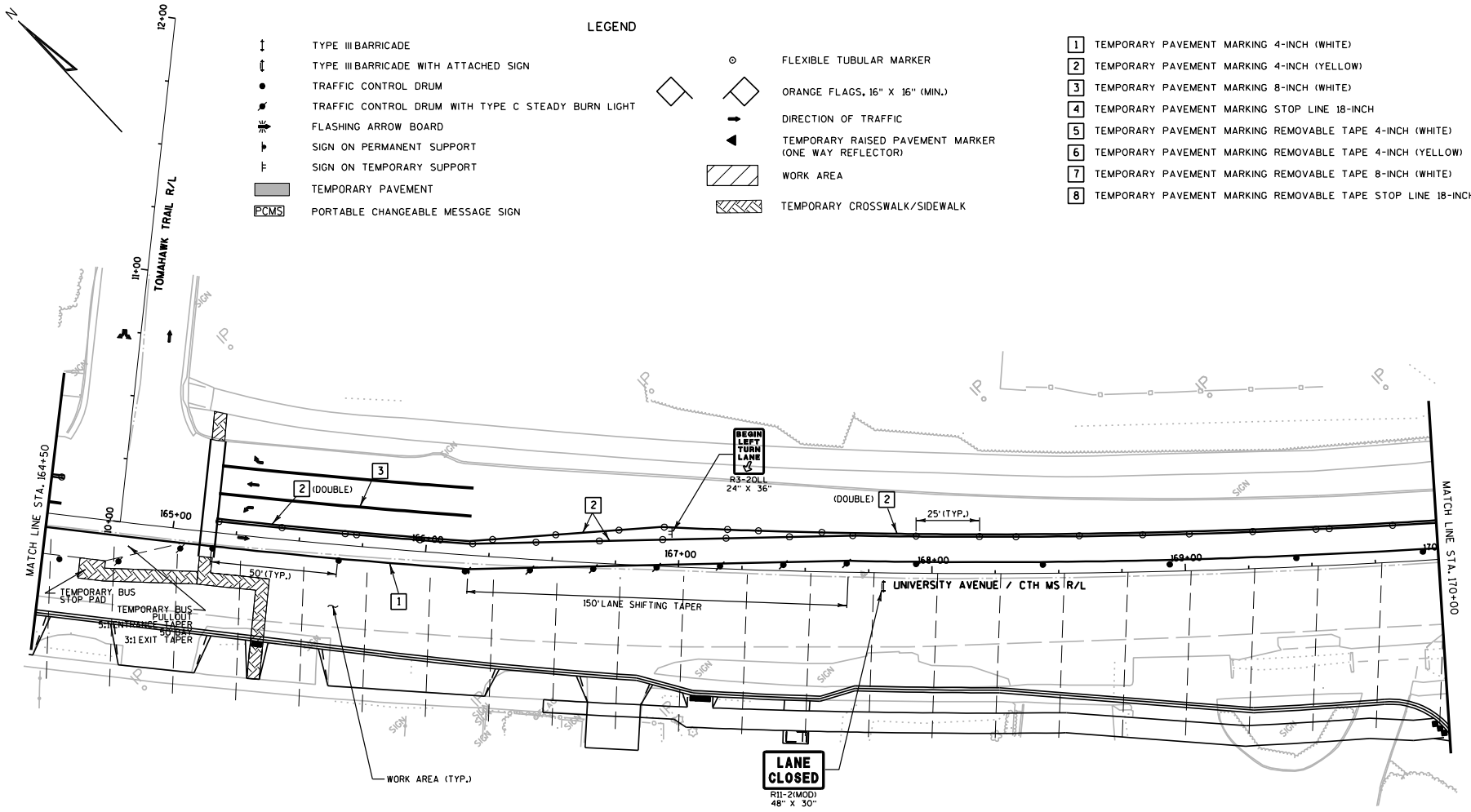
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 320 E

FILE NAME : g:\madison\md2009035\dgn\026213_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



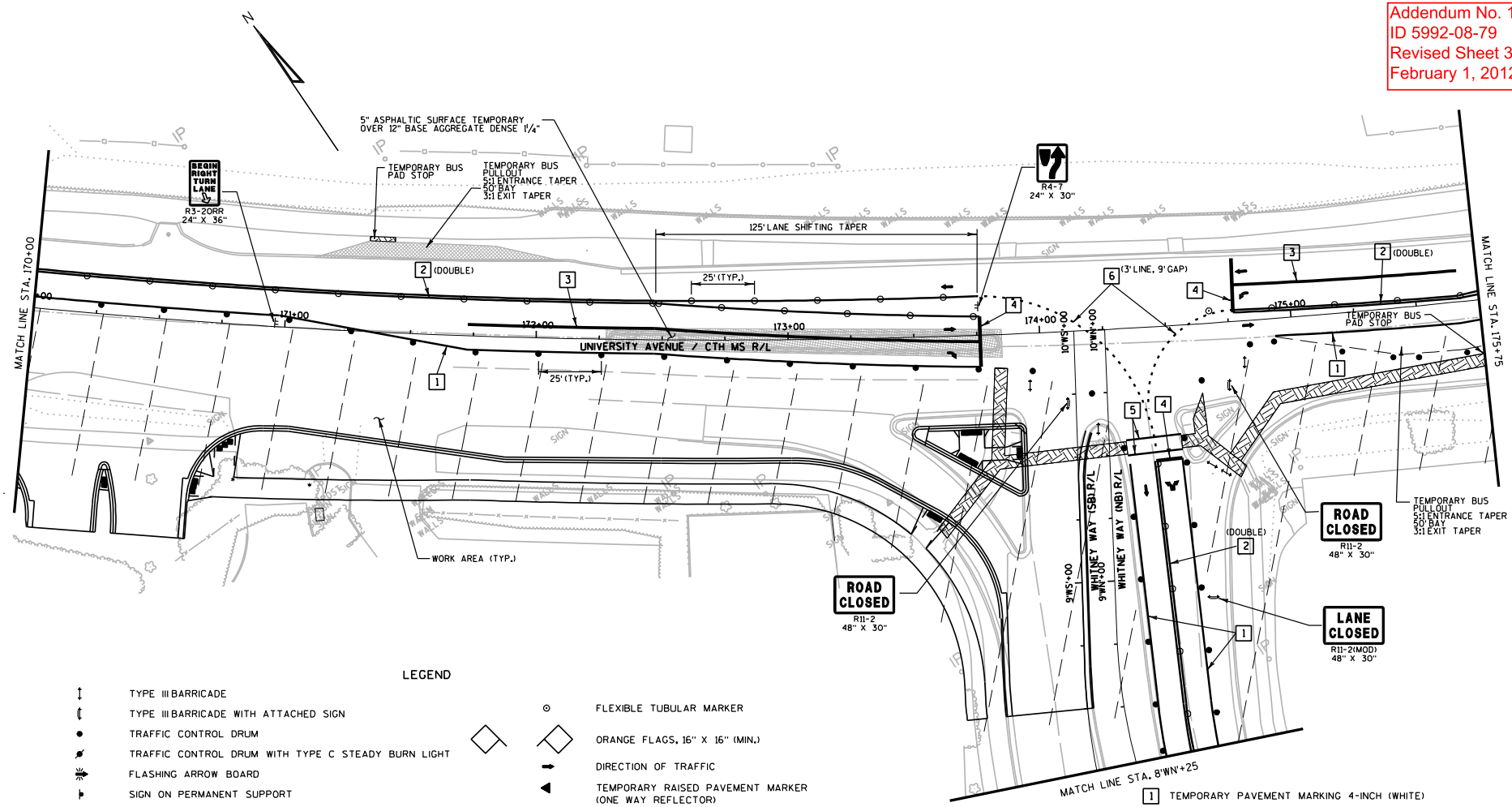
Addendum No. 1
ID 5992-08-79
Revised Sheet 321
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 321	E

FILE NAME : G:\Madison\MD2009035\DGN\026214-tc_s2.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 322
February 1, 2012



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

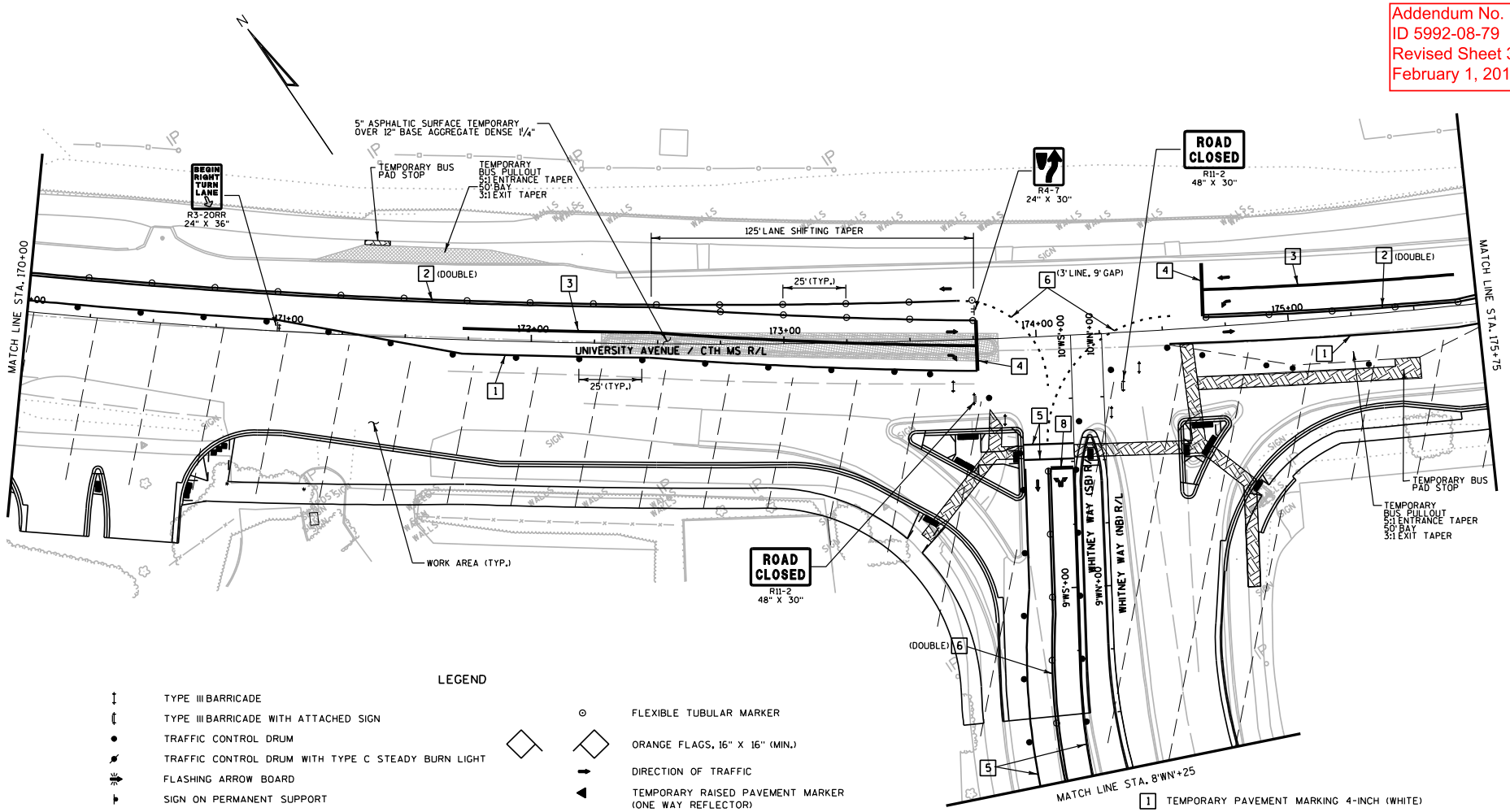
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2A	SHEET 322	E

FILE NAME : G:\Madison\MD2009035\DGN\026215_tc_s2a.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 323
February 1, 2012



LEGEND

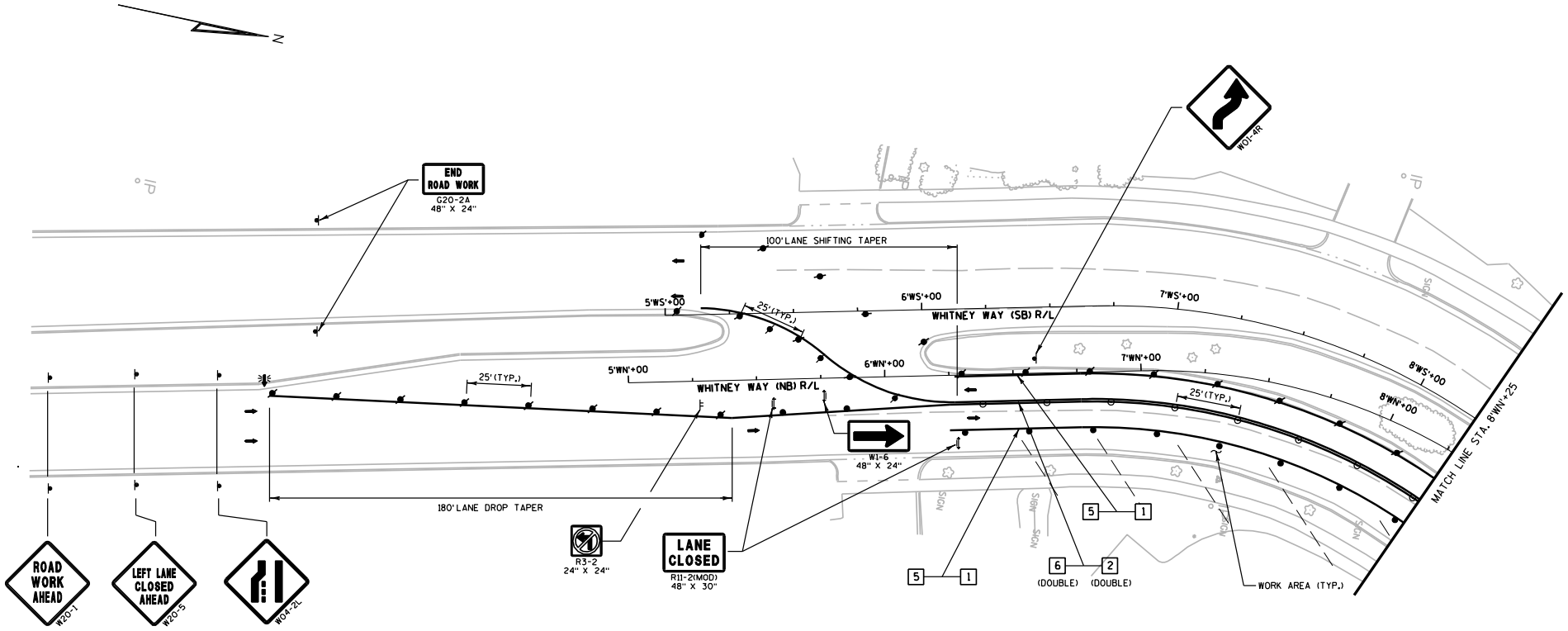
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2B	SHEET 323	E

FILE NAME : G:\Madison\MD2009035\DGN\026215_tc_s2b.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
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- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

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4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
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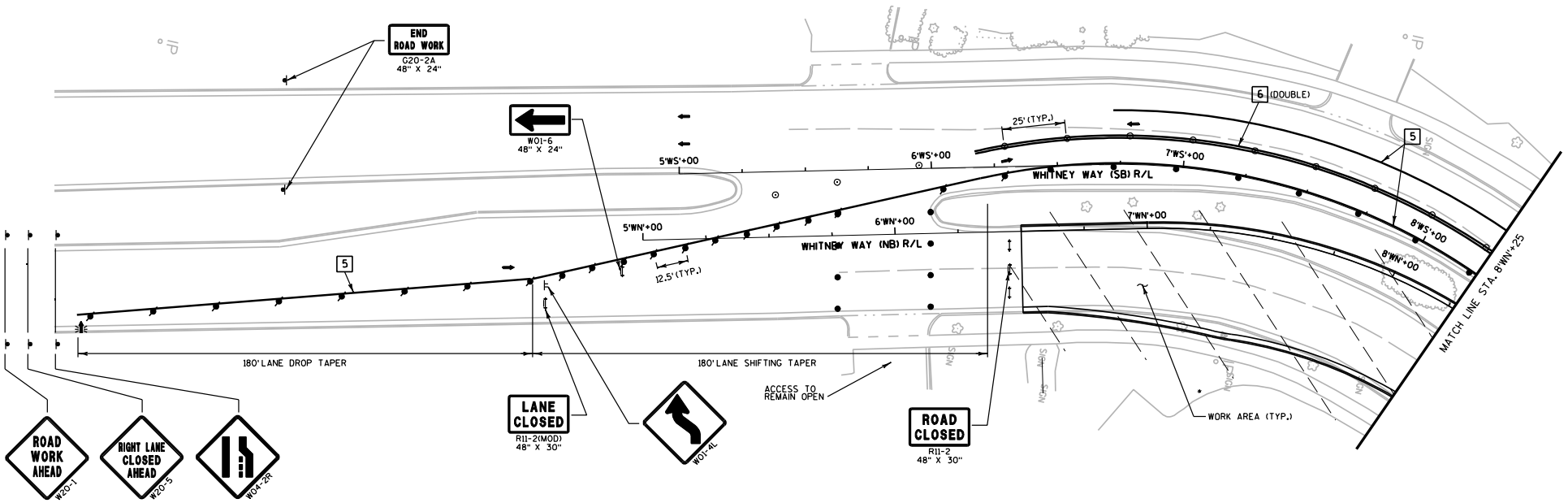
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2A	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026216_tc_s2a (whitney).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
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- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

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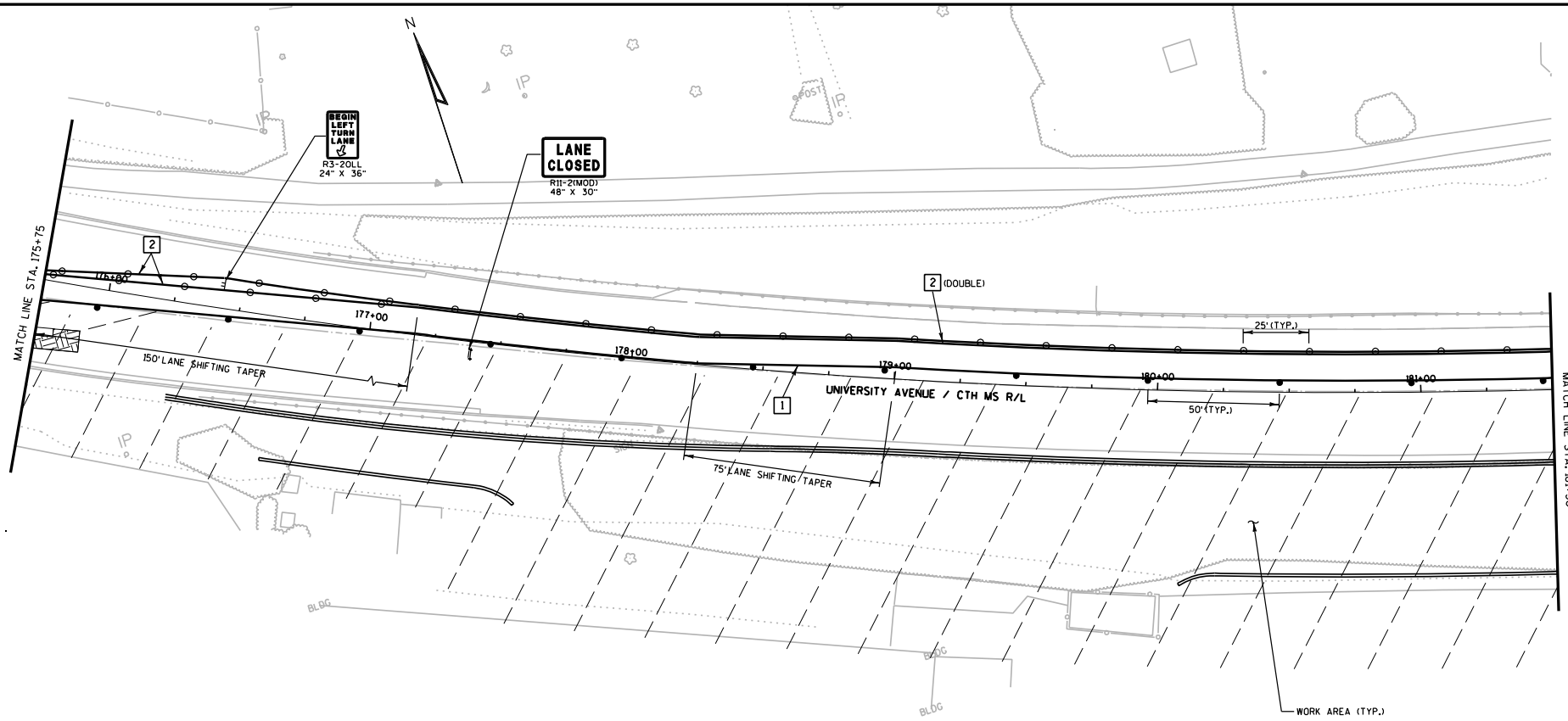
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2B	SHEET 325 E

FILE NAME : g:\madison\md2009035\dgn\026216_tc_s2b (whitney).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
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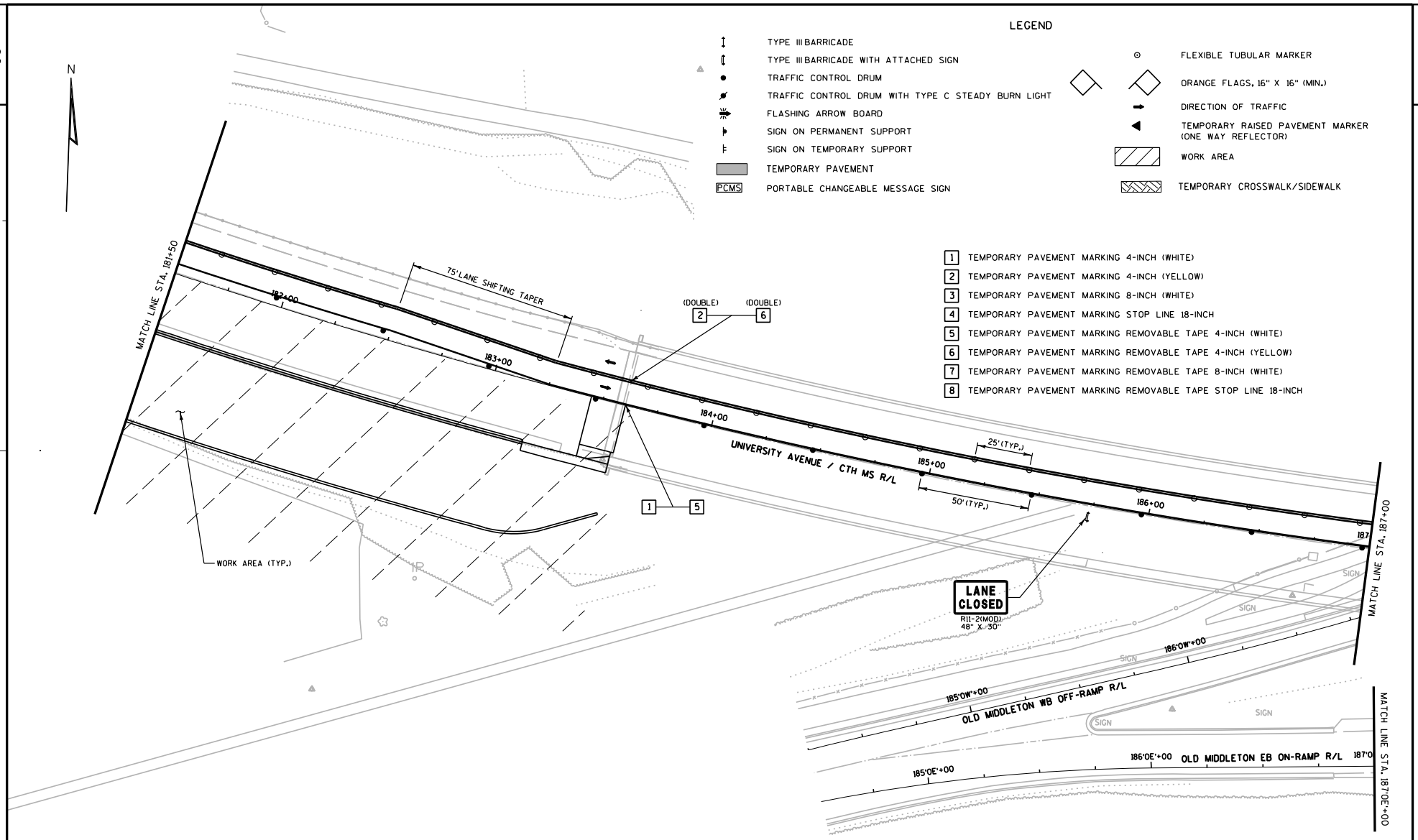
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 326 E

FILE NAME : G:\Madison\MD2009035\DGN\026217_tc_s2.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET E

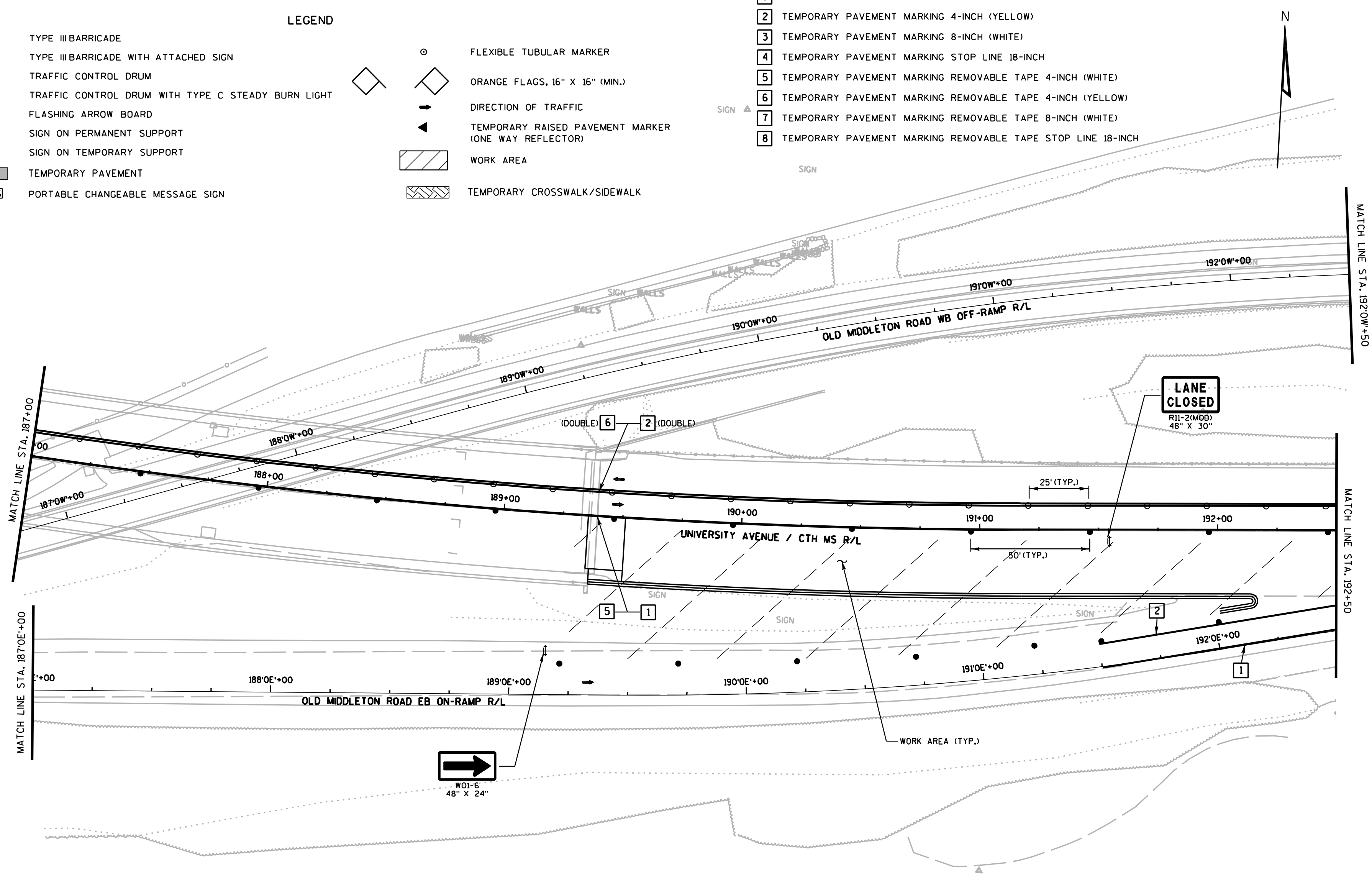
FILE NAME : g:\madison\md2009035\dgn\026218_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

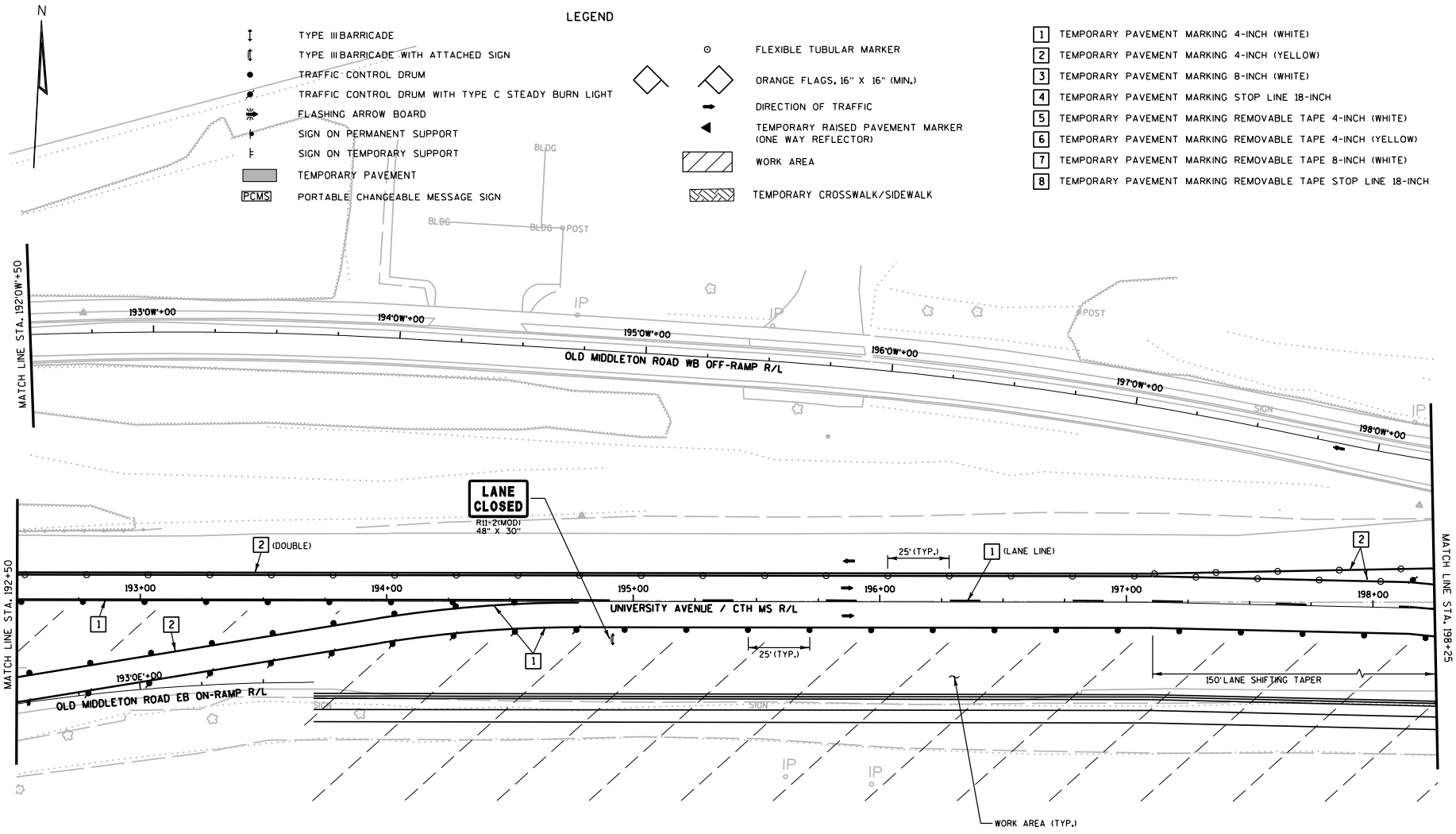
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 328	E

FILE NAME : g:\madison\md2009035\dgn\026220_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE : WISDOT/CADDS SHEET 42

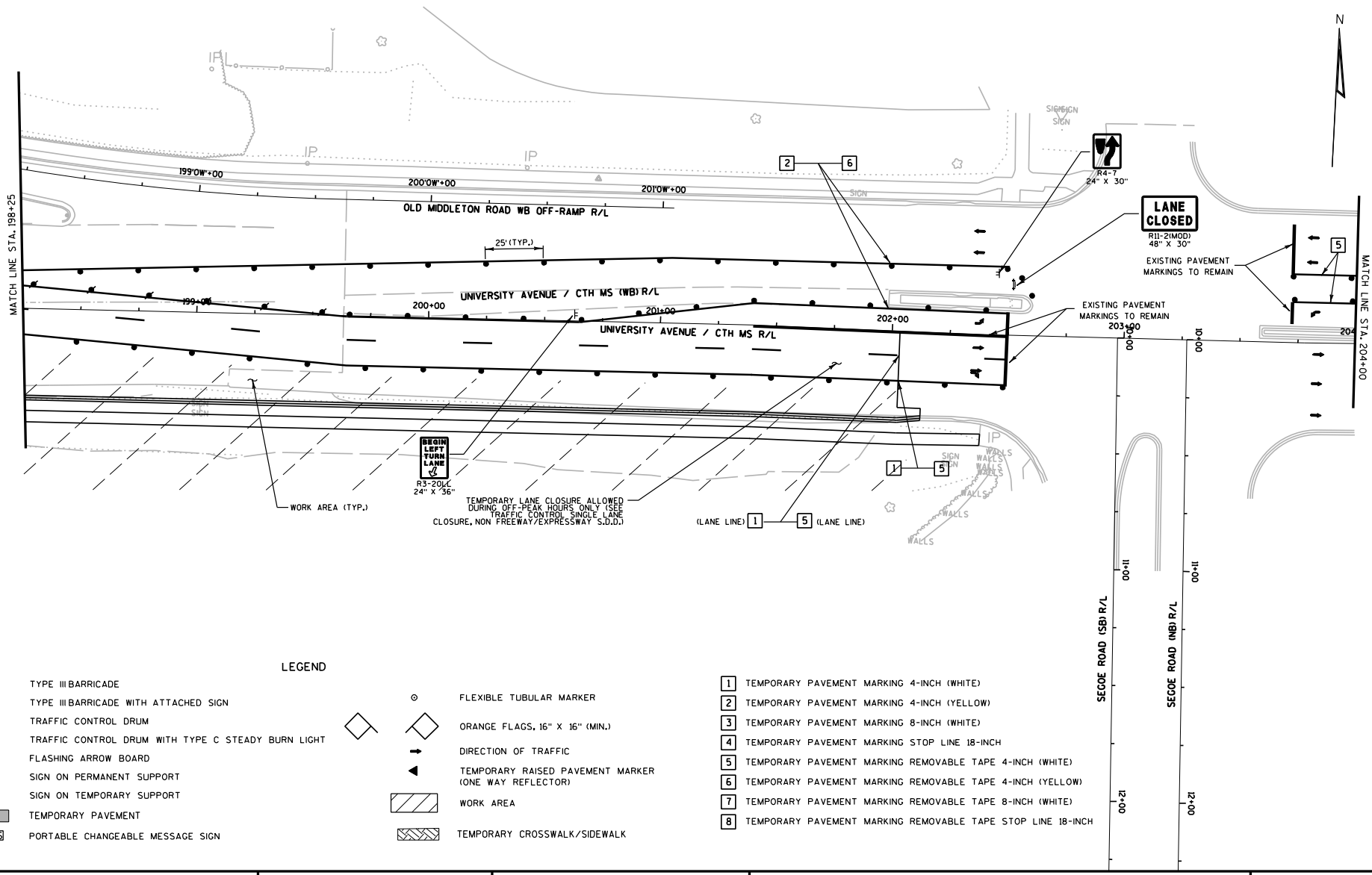
2



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026221_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
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4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
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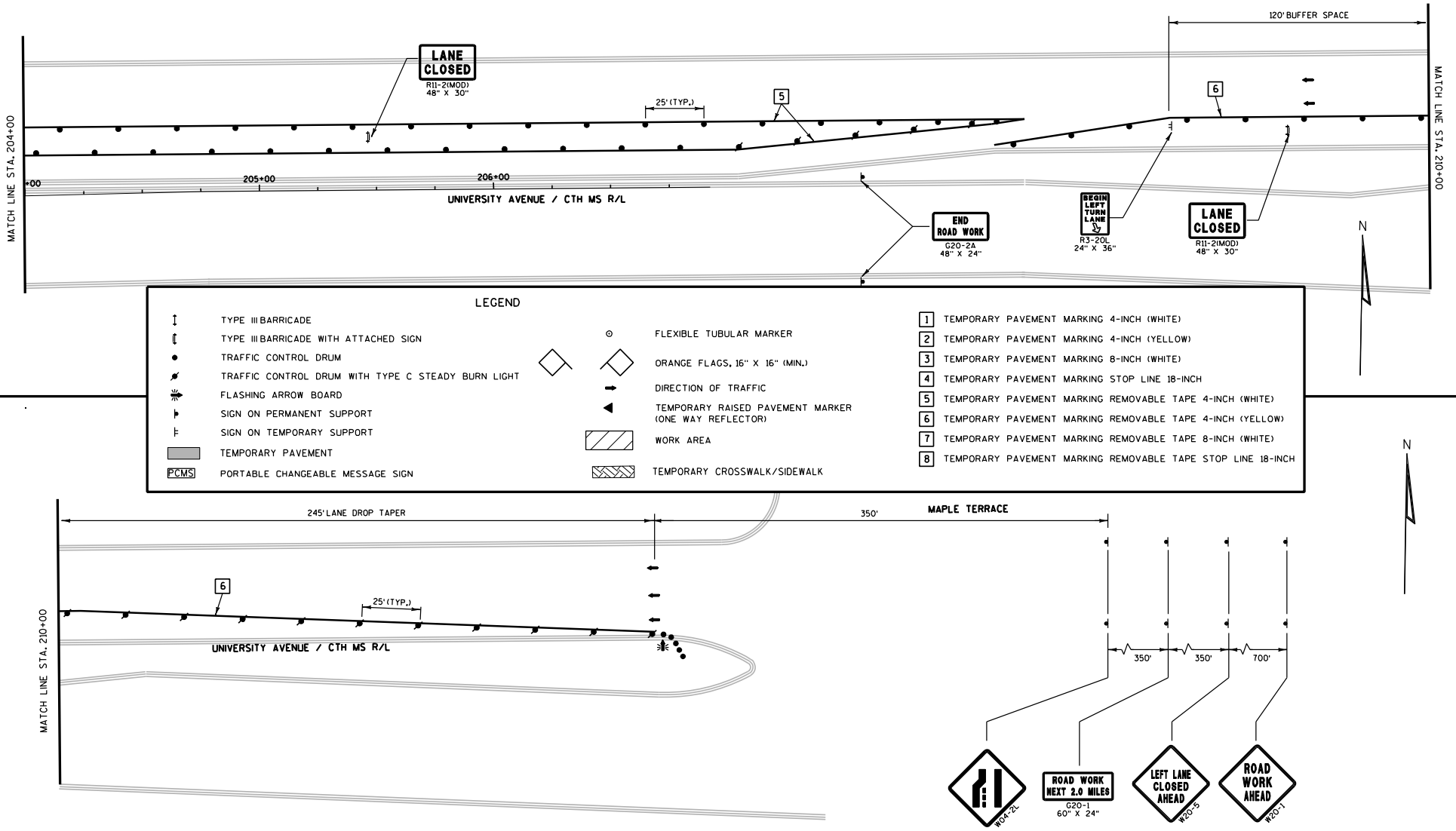
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 330 E

FILE NAME : g:\madison\md2009035\dgn\026222_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

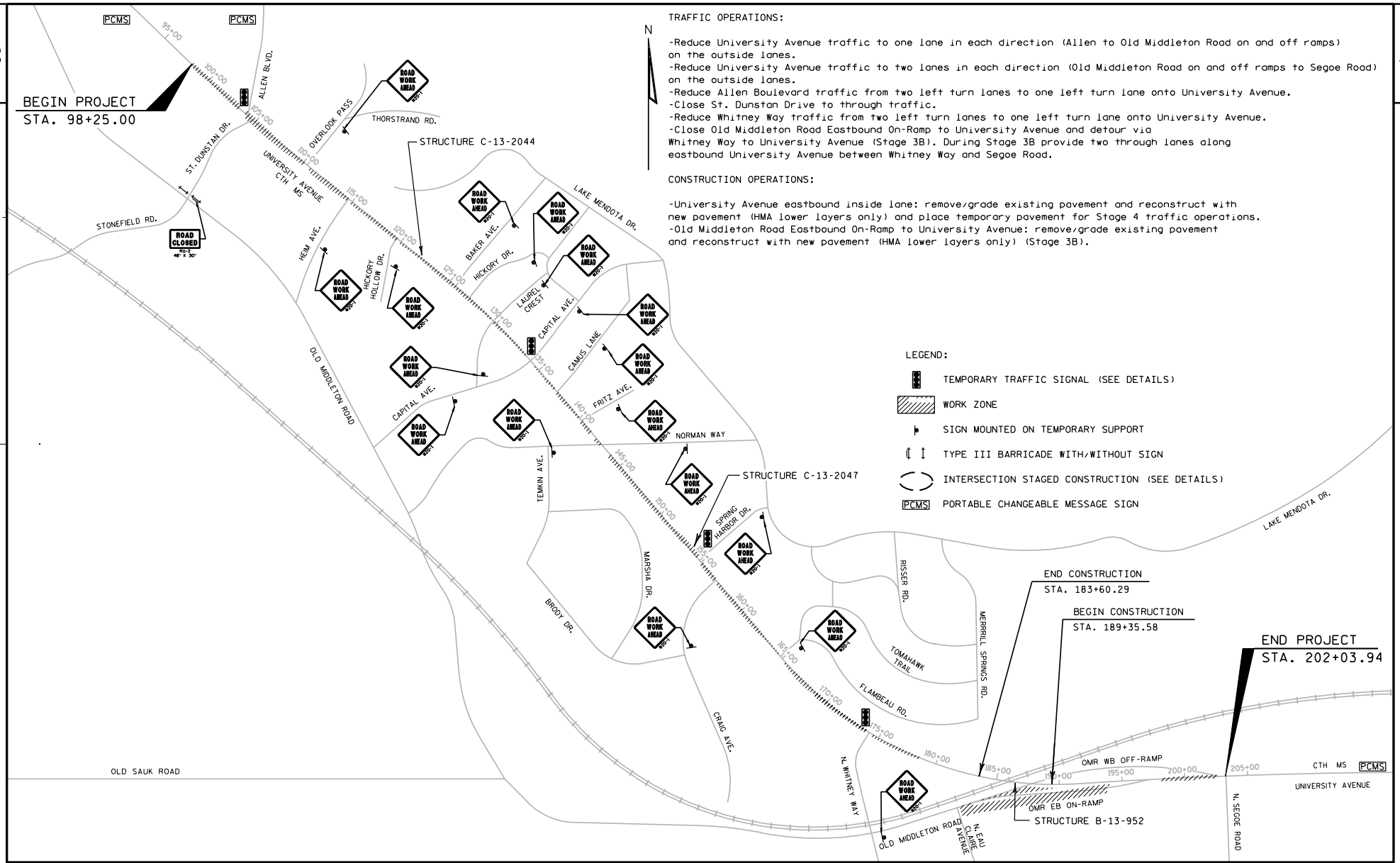
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026223_tc_s2.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



TRAFFIC OPERATIONS:

-Reduce University Avenue traffic to one lane in each direction (Allen to Old Middleton Road on and off ramps) on the outside lanes.
-Reduce University Avenue traffic to two lanes in each direction (Old Middleton Road on and off ramps to Segoe Road) on the outside lanes.
-Reduce Allen Boulevard traffic from two left turn lanes to one left turn lane onto University Avenue.
-Close St. Dunstan Drive to through traffic.
-Reduce Whitney Way traffic from two left turn lanes to one left turn lane onto University Avenue.
-Close Old Middleton Road Eastbound On-Ramp to University Avenue and detour via Whitney Way to University Avenue (Stage 3B). During Stage 3B provide two through lanes along eastbound University Avenue between Whitney Way and Segoe Road.

CONSTRUCTION OPERATIONS:

-University Avenue eastbound inside lane: remove/grade existing pavement and reconstruct with new pavement (HMA lower layers only) and place temporary pavement for Stage 4 traffic operations.
-Old Middleton Road Eastbound On-Ramp to University Avenue: remove/grade existing pavement and reconstruct with new pavement (HMA lower layers only) (Stage 3B).

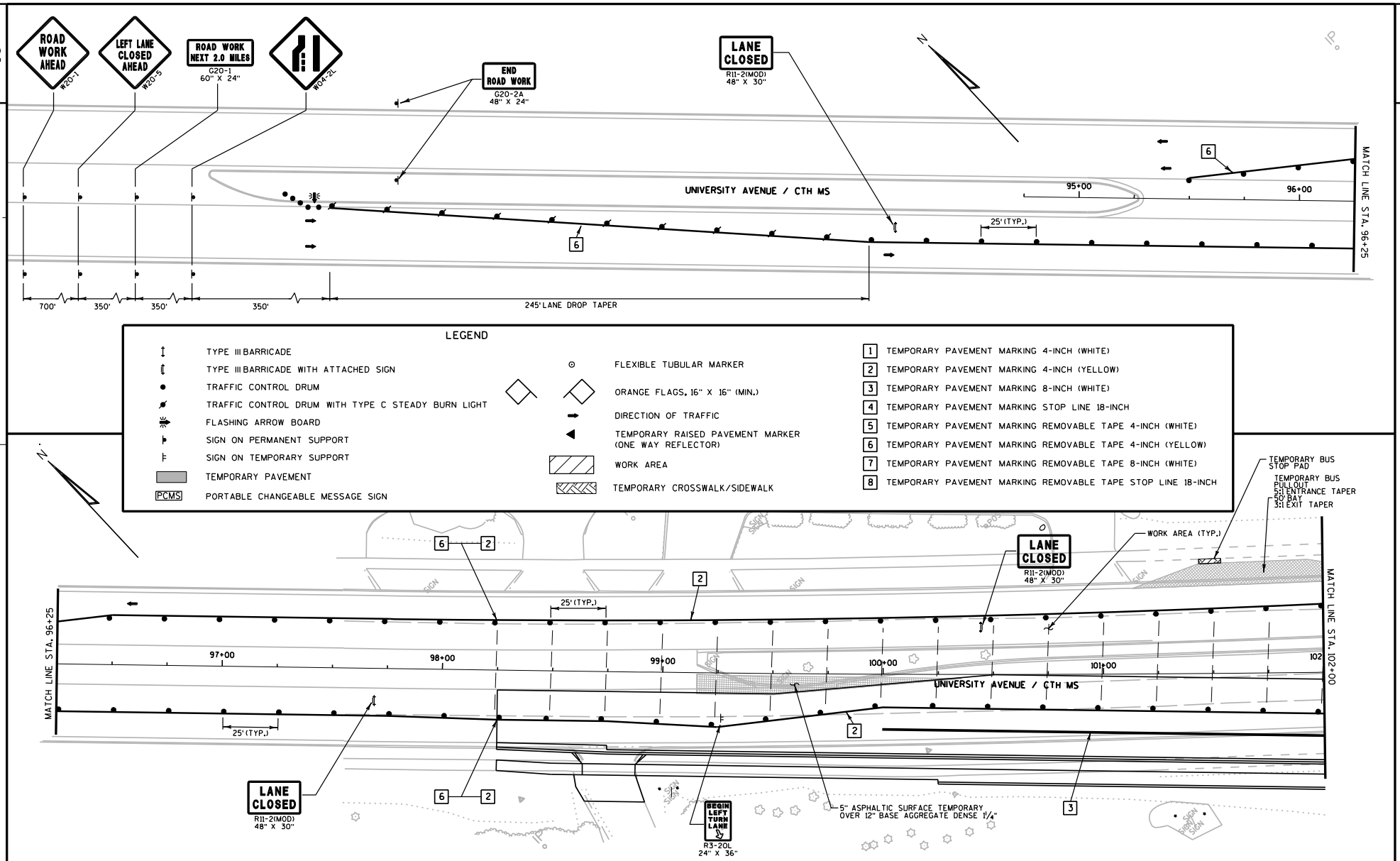
LEGEND:

- TEMPORARY TRAFFIC SIGNAL (SEE DETAILS)
- WORK ZONE
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- INTERSECTION STAGED CONSTRUCTION (SEE DETAILS)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL OVERVIEW (STAGE 3)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026300_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

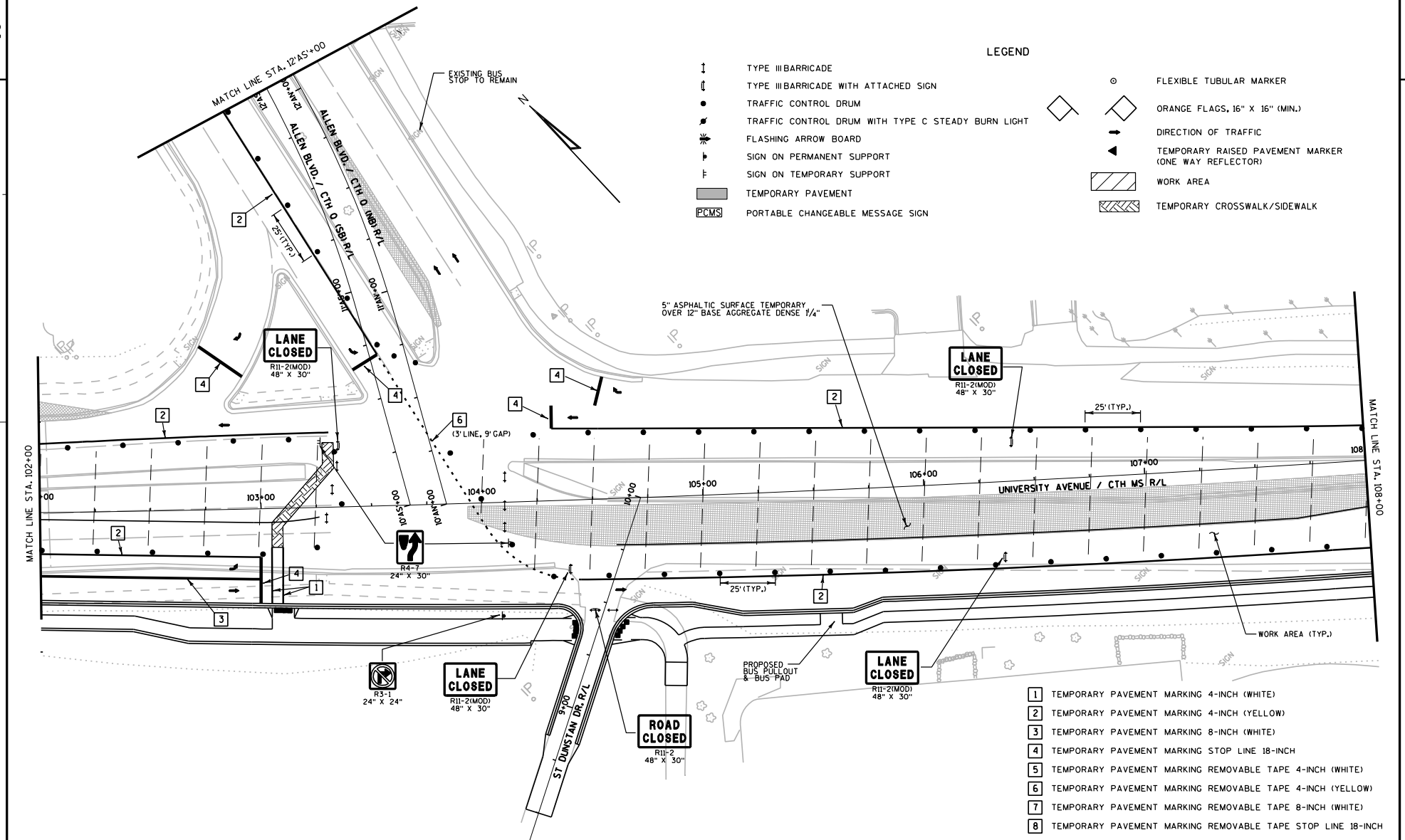
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 333	E

FILE NAME : G:\Madison\MD2009035\DGN\026301_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

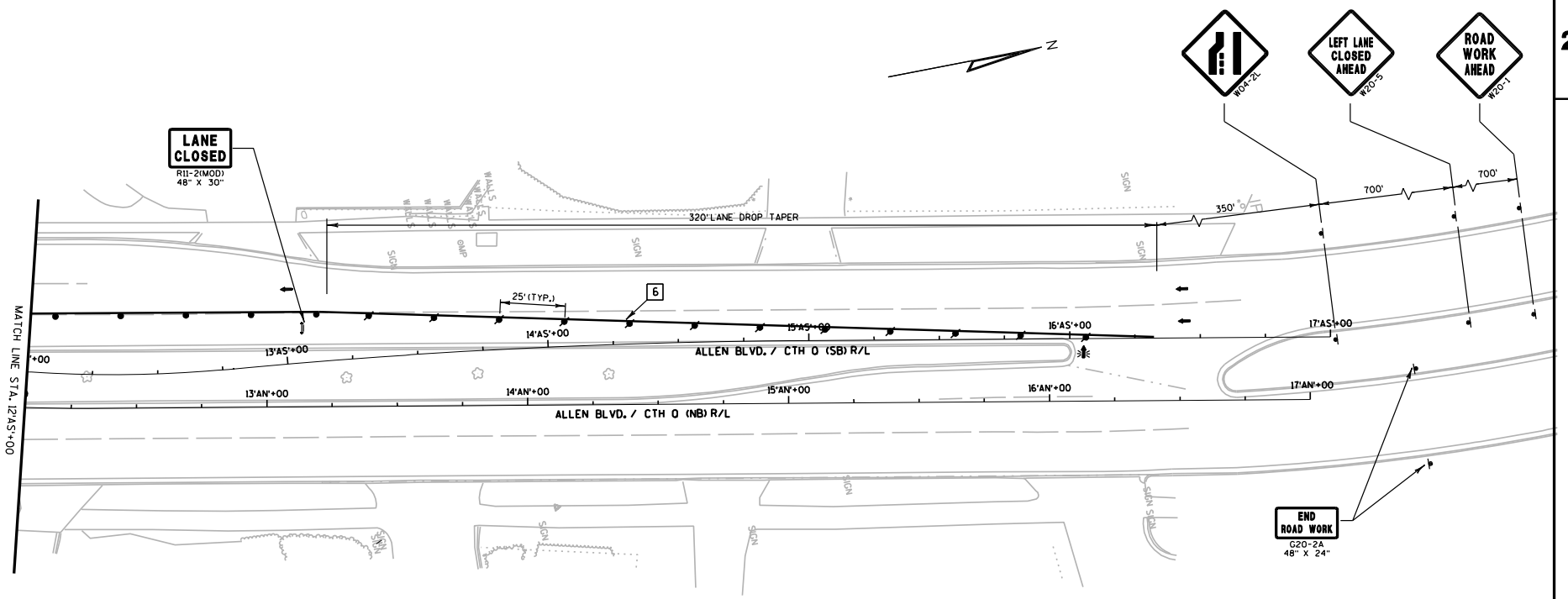
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET E

FILE NAME : G:\Madison\MD2009035\DGN\026302_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
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- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
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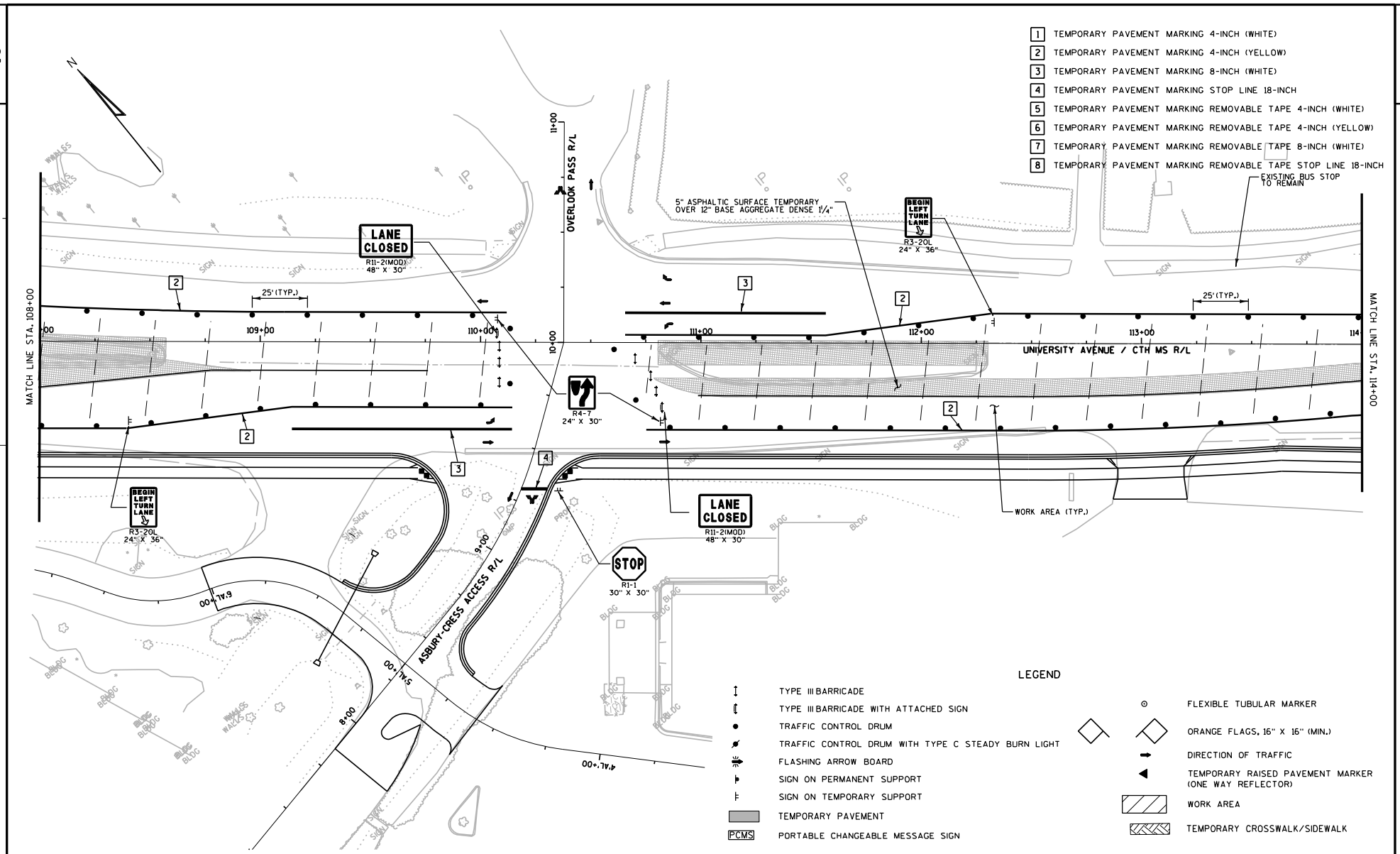
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 335	E

FILE NAME : g:\madison\md2009035\dgn\026303_tc_s3 (allen).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

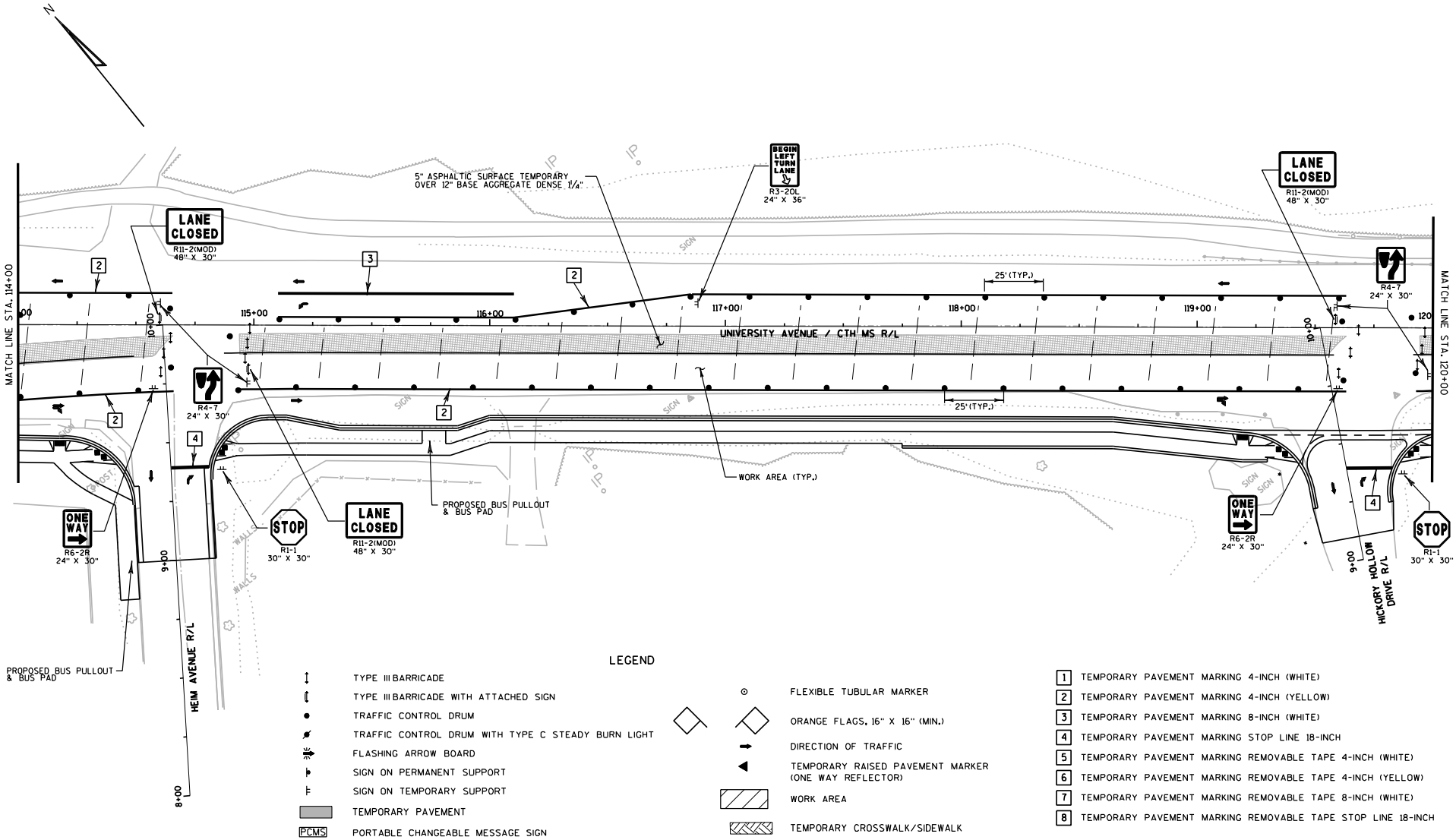
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026304_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
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7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 337	E

FILE NAME : g:\madison\md2009035\dgn\026305_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
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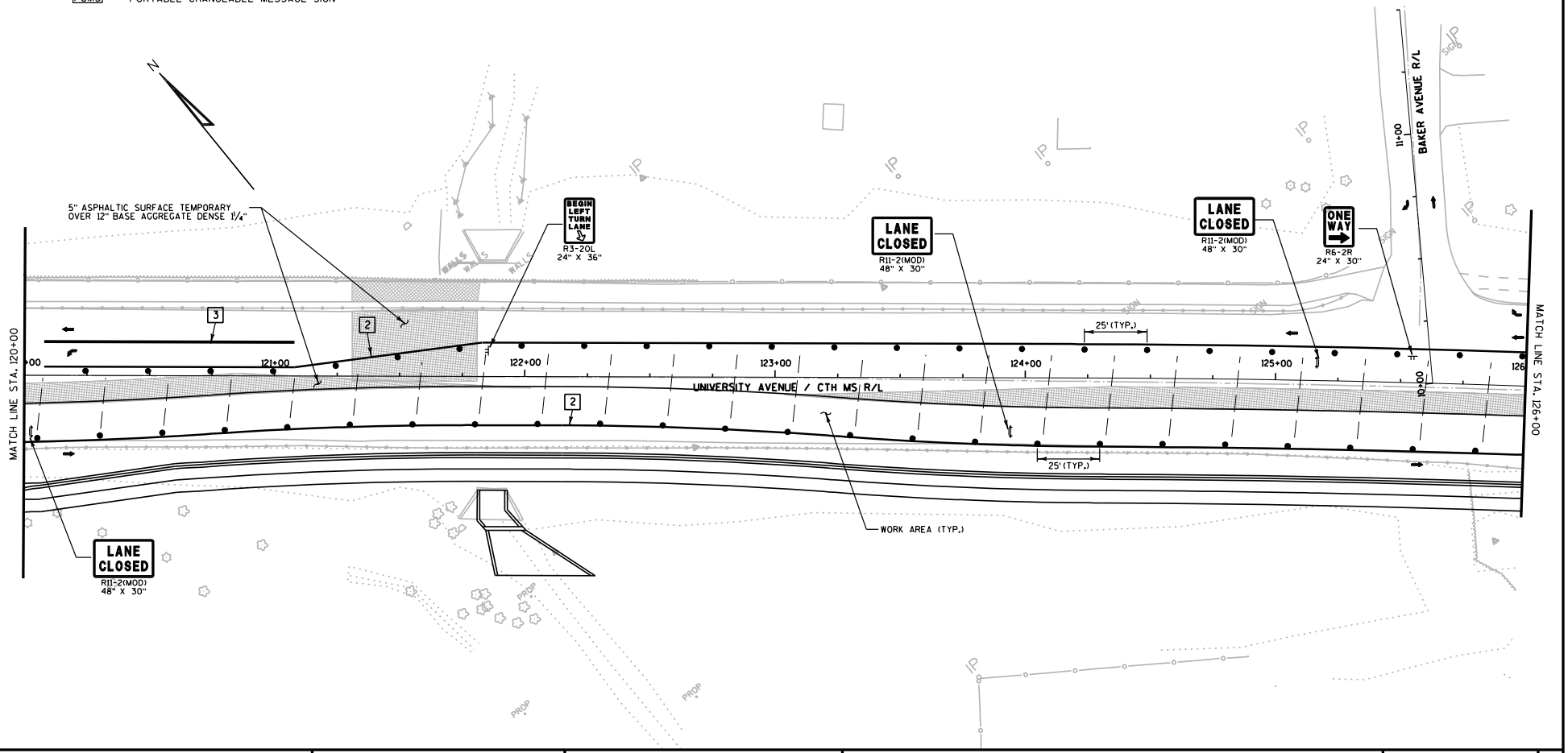
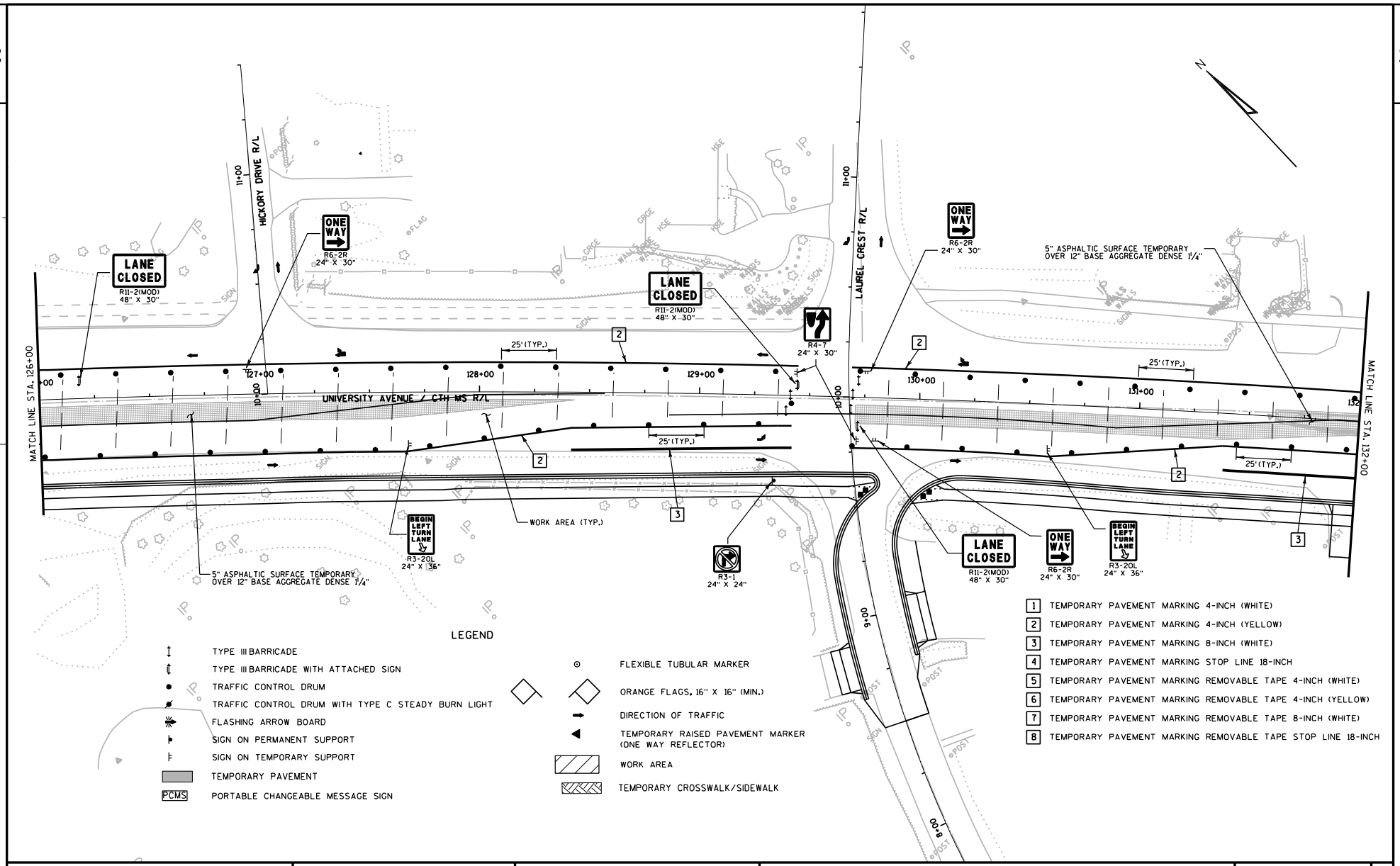
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026306_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

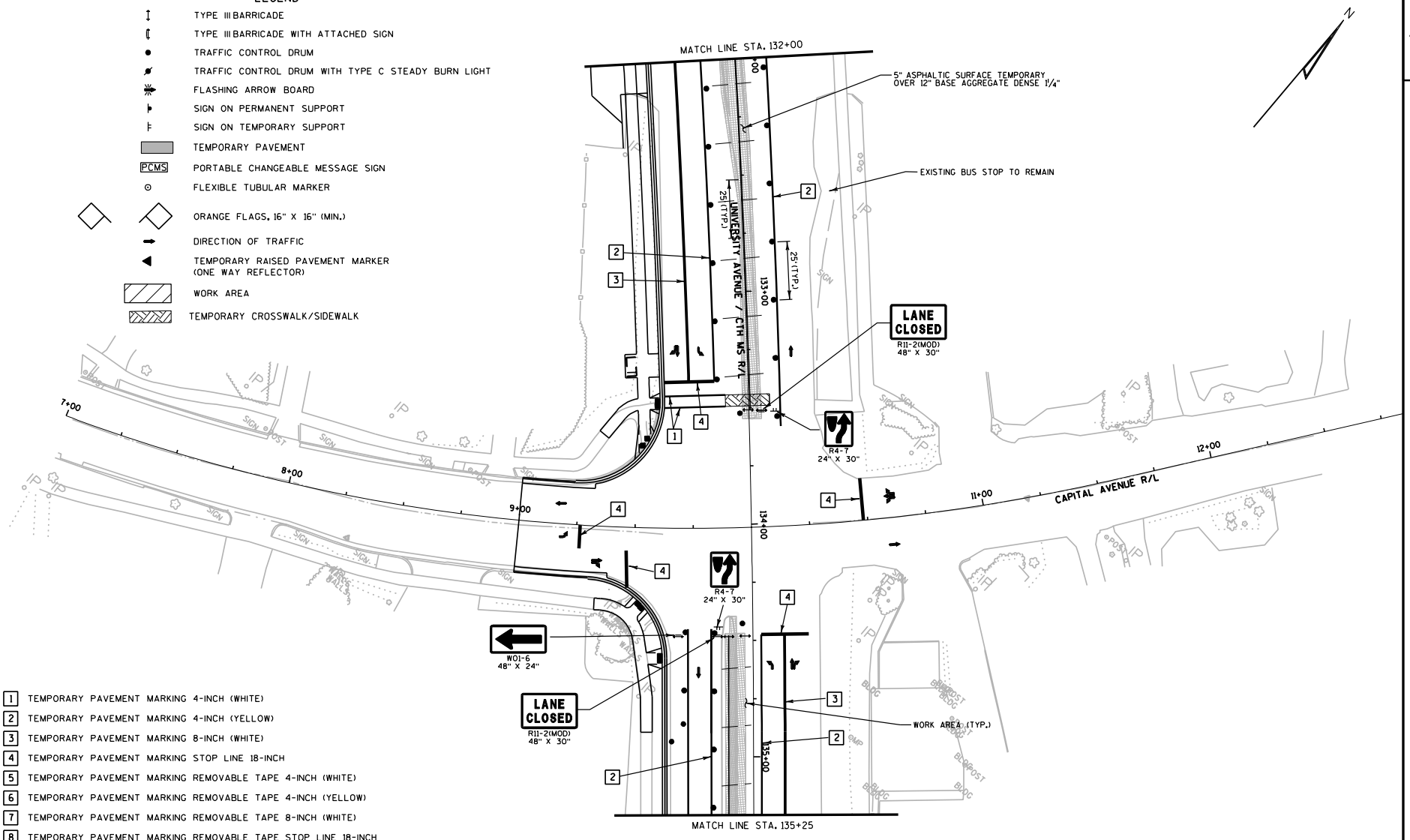
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\026307_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

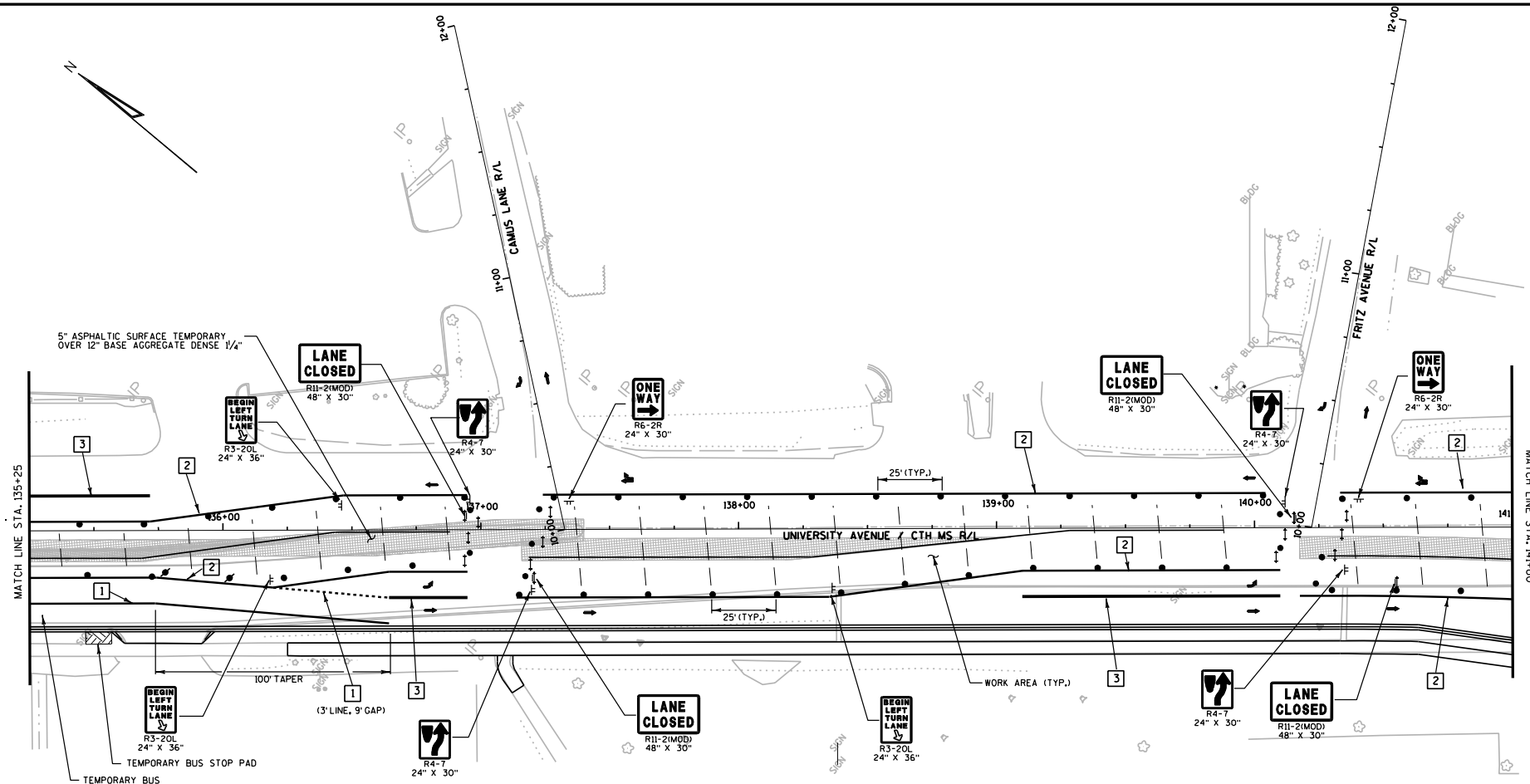
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026308_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

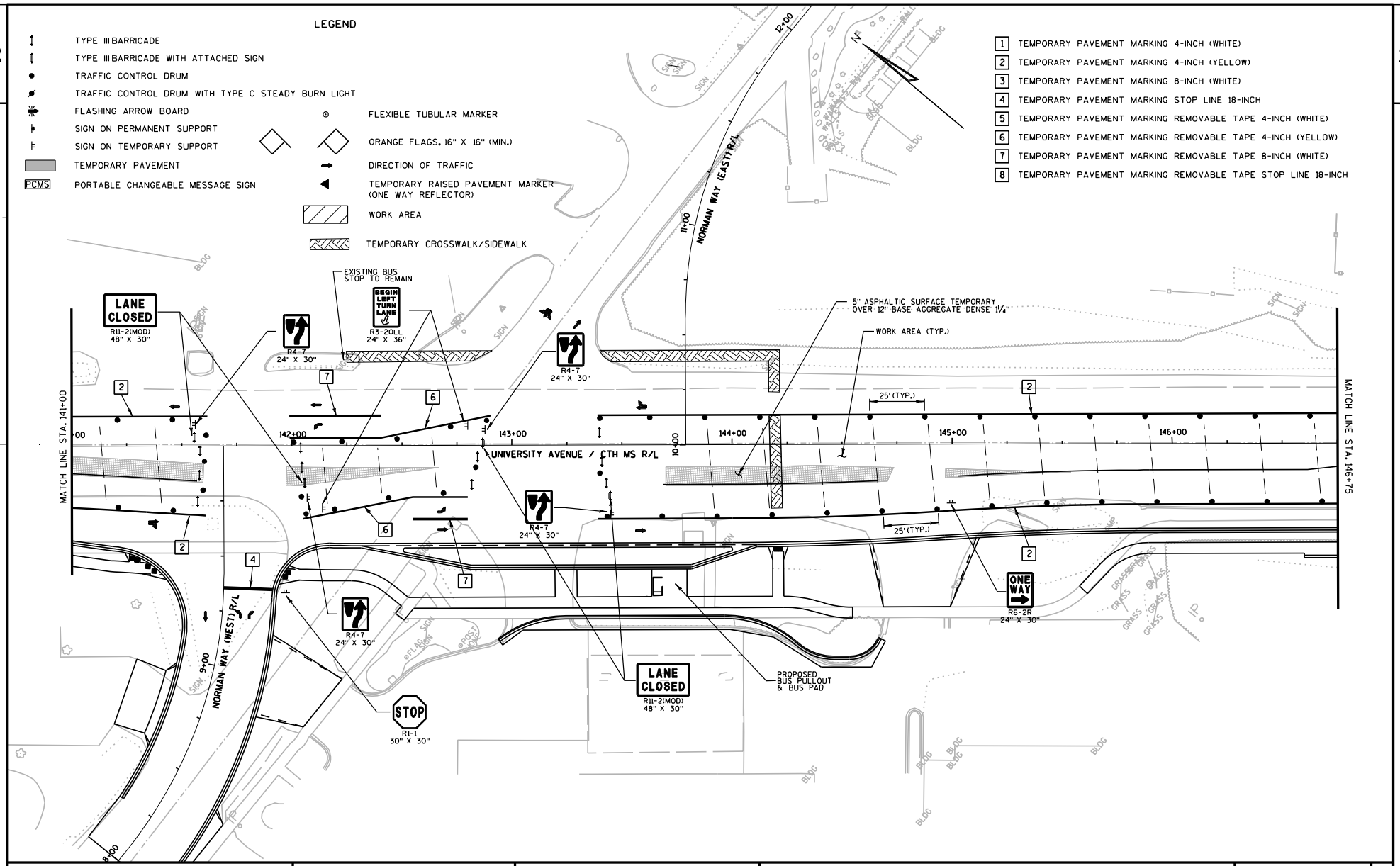
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 341 E

FILE NAME : g:\madison\md2009035\dgn\026309_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

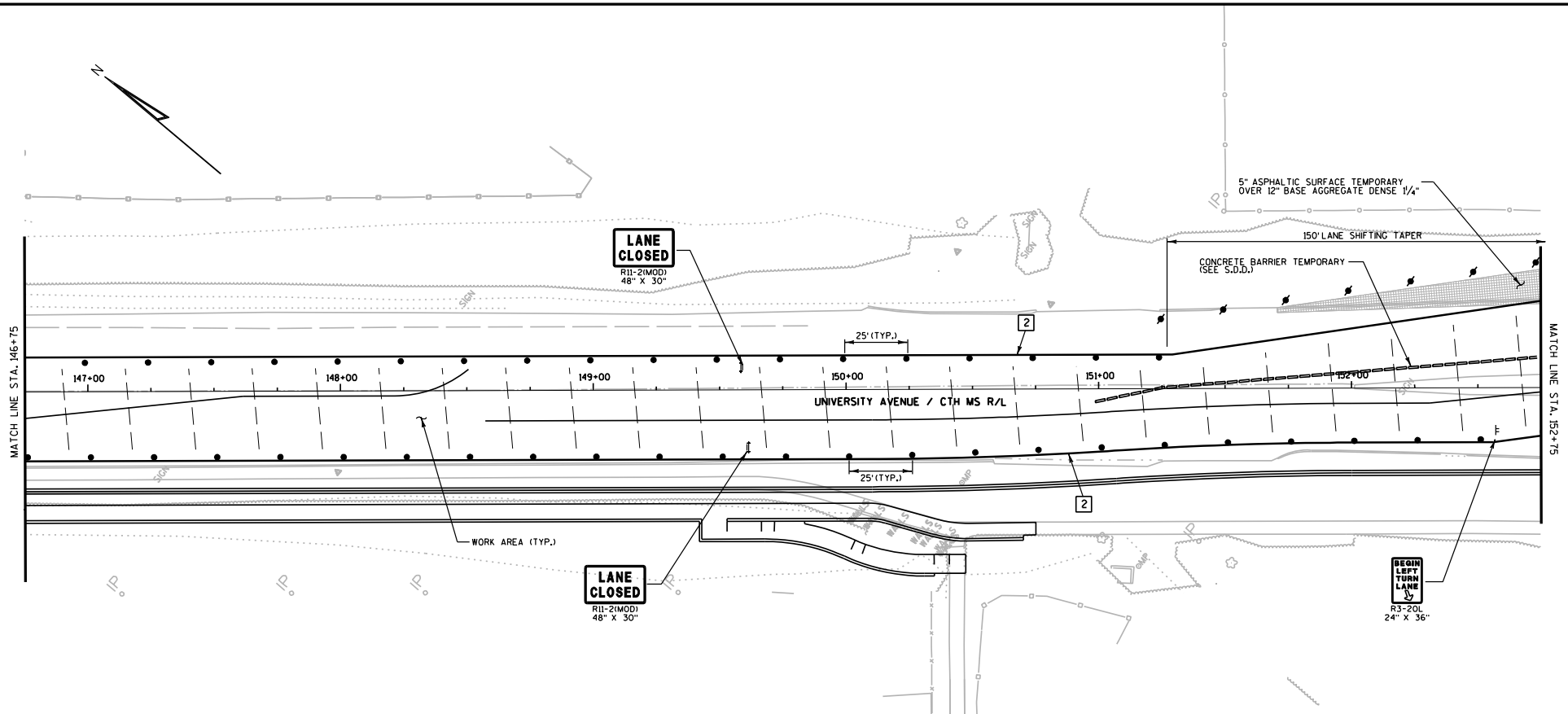
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026310_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

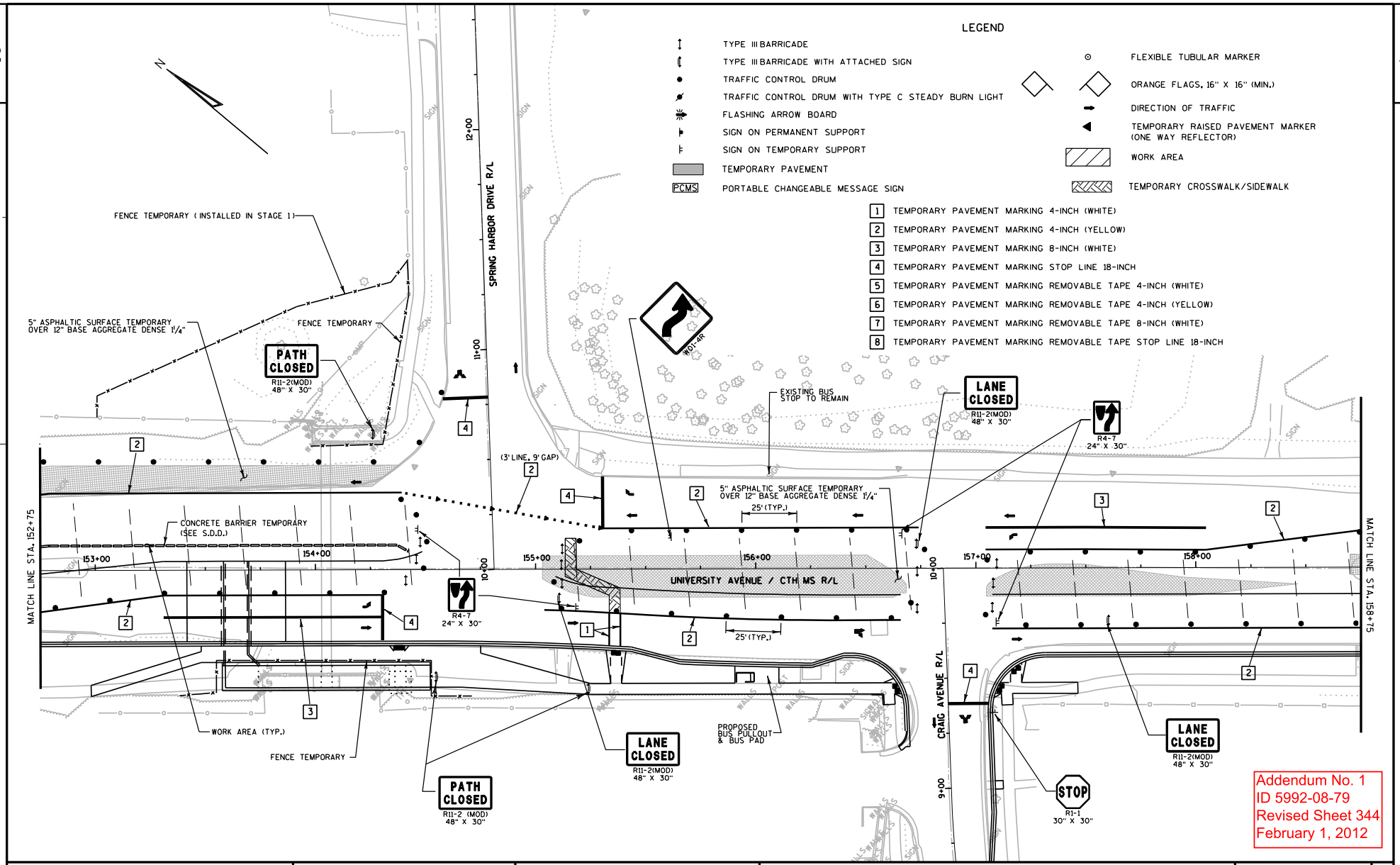
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026311_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

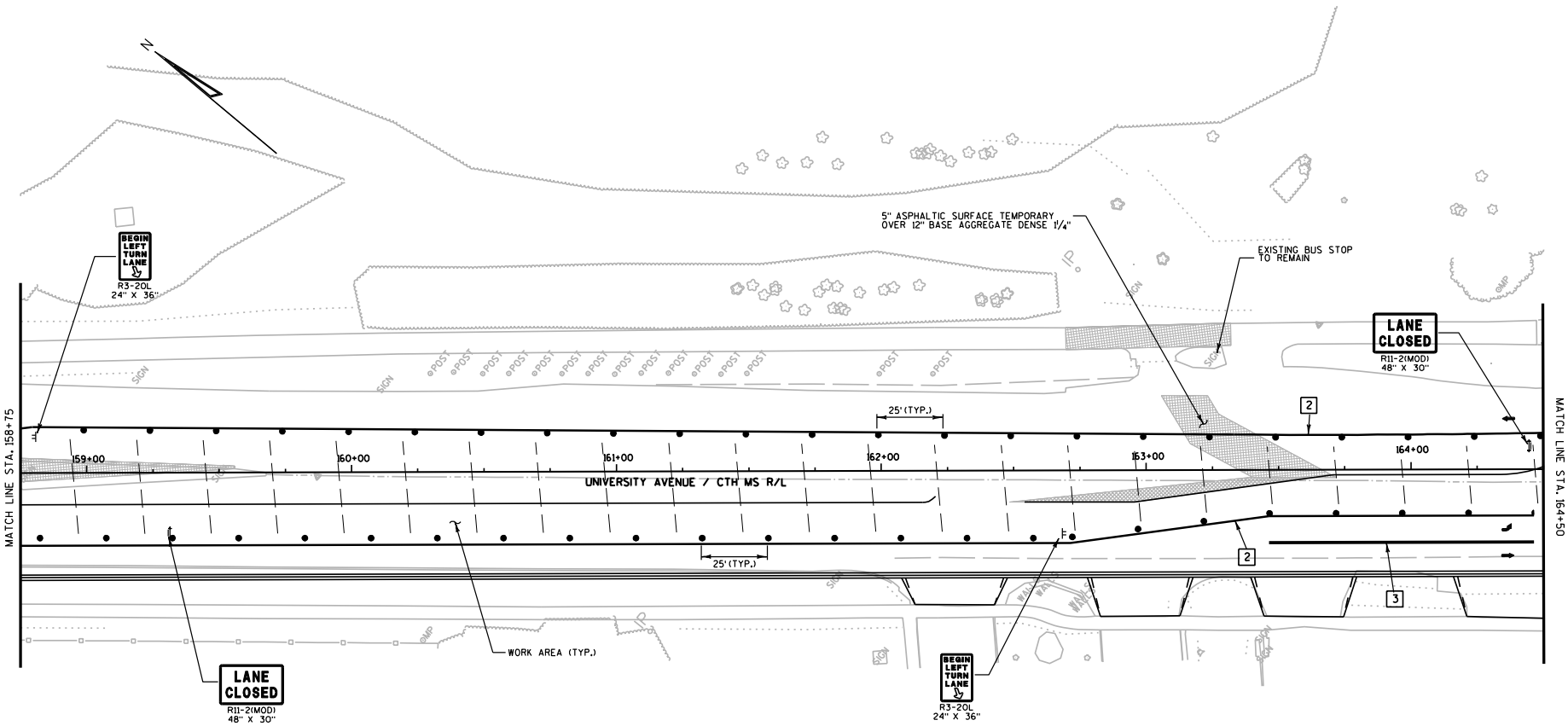


Addendum No. 1
ID 5992-08-79
Revised Sheet 344
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 344	E

FILE NAME : G:\Madison\MD2009035\DGN\026312_tc_s3.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

Addendum No. 1
ID 5992-08-79
Revised Sheet 345
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 345	E

FILE NAME : G:\Madison\MD2009035\DGN\026313_tc_s3.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

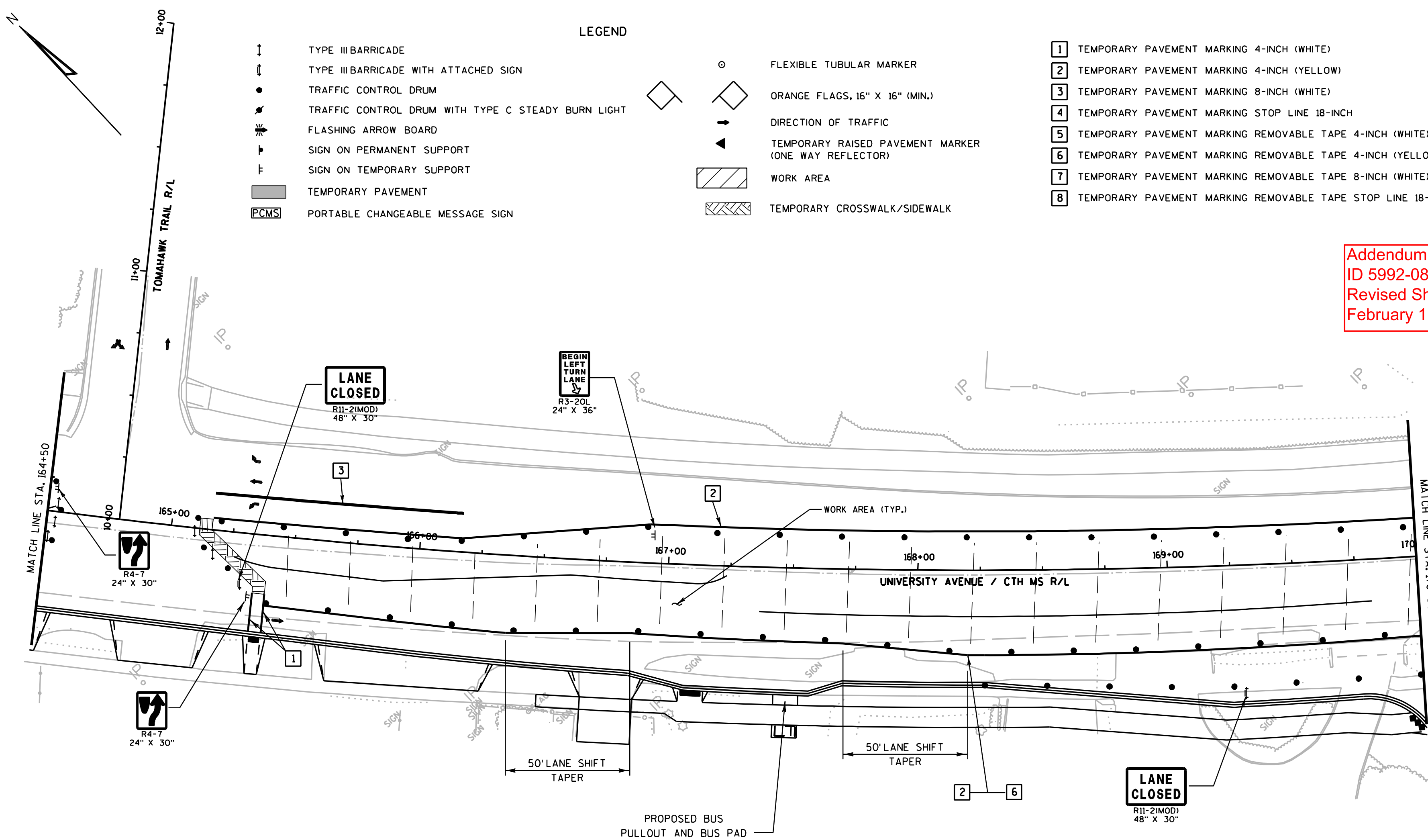
WISDOT/CADDS SHEET 42

2

LEGEND

Symbol	Description
	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	TEMPORARY PAVEMENT
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
	FLEXIBLE TUBULAR MARKER
	ORANGE FLAGS, 16" X 16" (MIN.)
	DIRECTION OF TRAFFIC
	TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
	WORK AREA
	TEMPORARY CROSSWALK/SIDEWALK
1	TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2	TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3	TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4	TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

Addendum No. 1
ID 5992-08-79
Revised Sheet 346
February 1, 2012



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 346	E

FILE NAME : G:\Madison\MD2009035\DGN\026314_tc_s3a.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

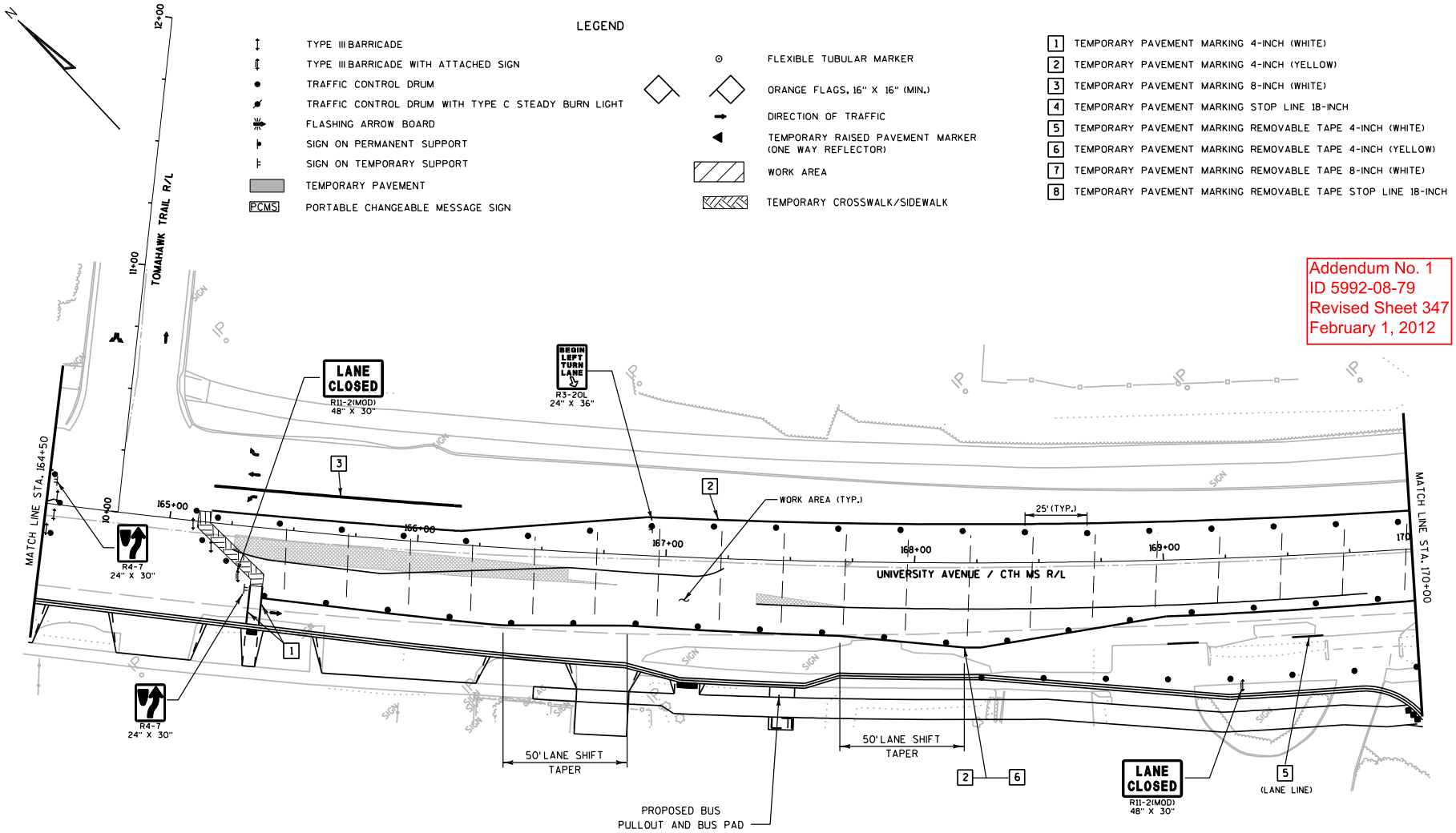
2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

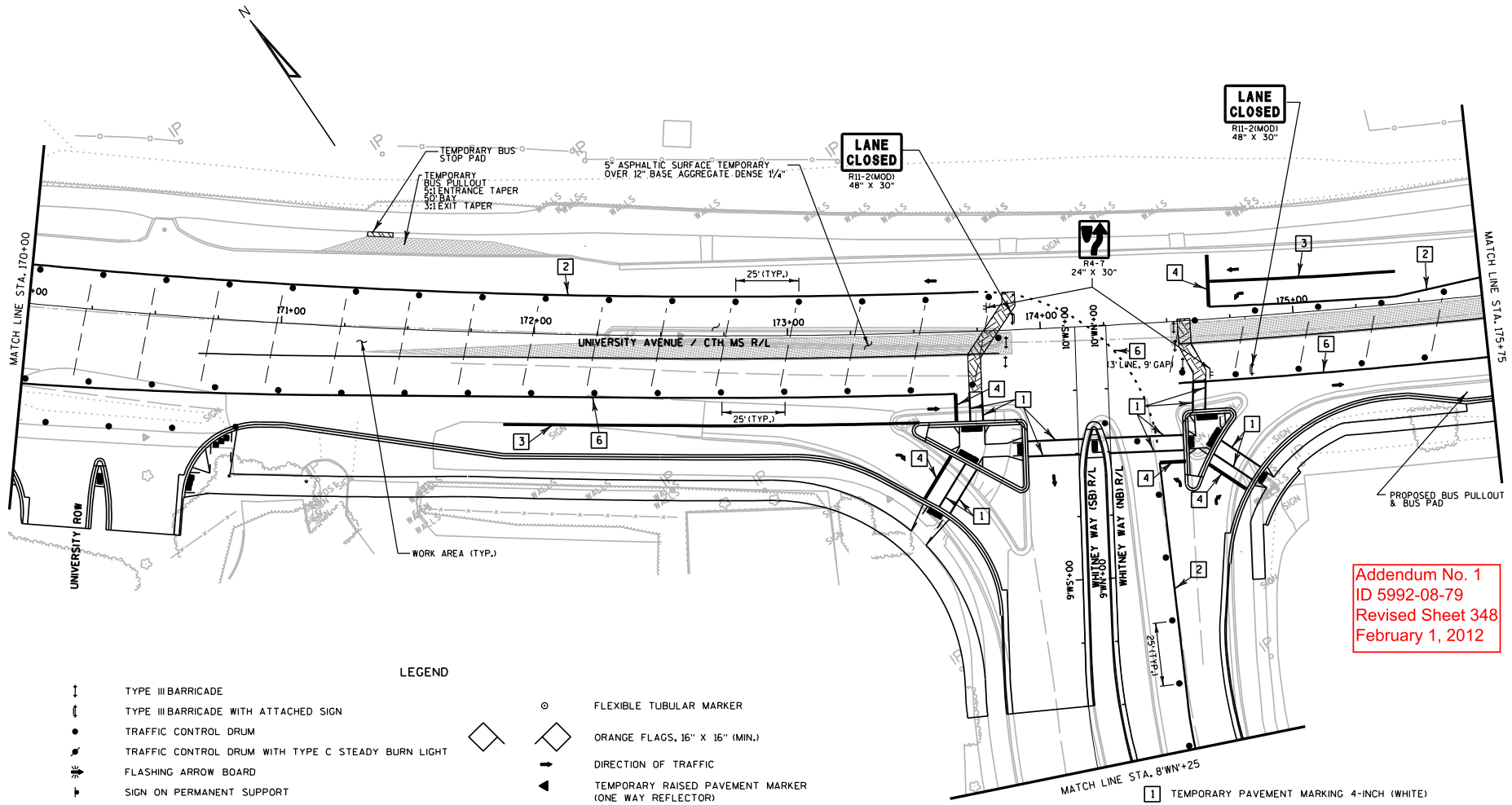
Addendum No. 1
ID 5992-08-79
Revised Sheet 347
February 1, 2012



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 347 347	E

FILE NAME : G:\Madison\MD2009035\DGN\026314_tc_s3b.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

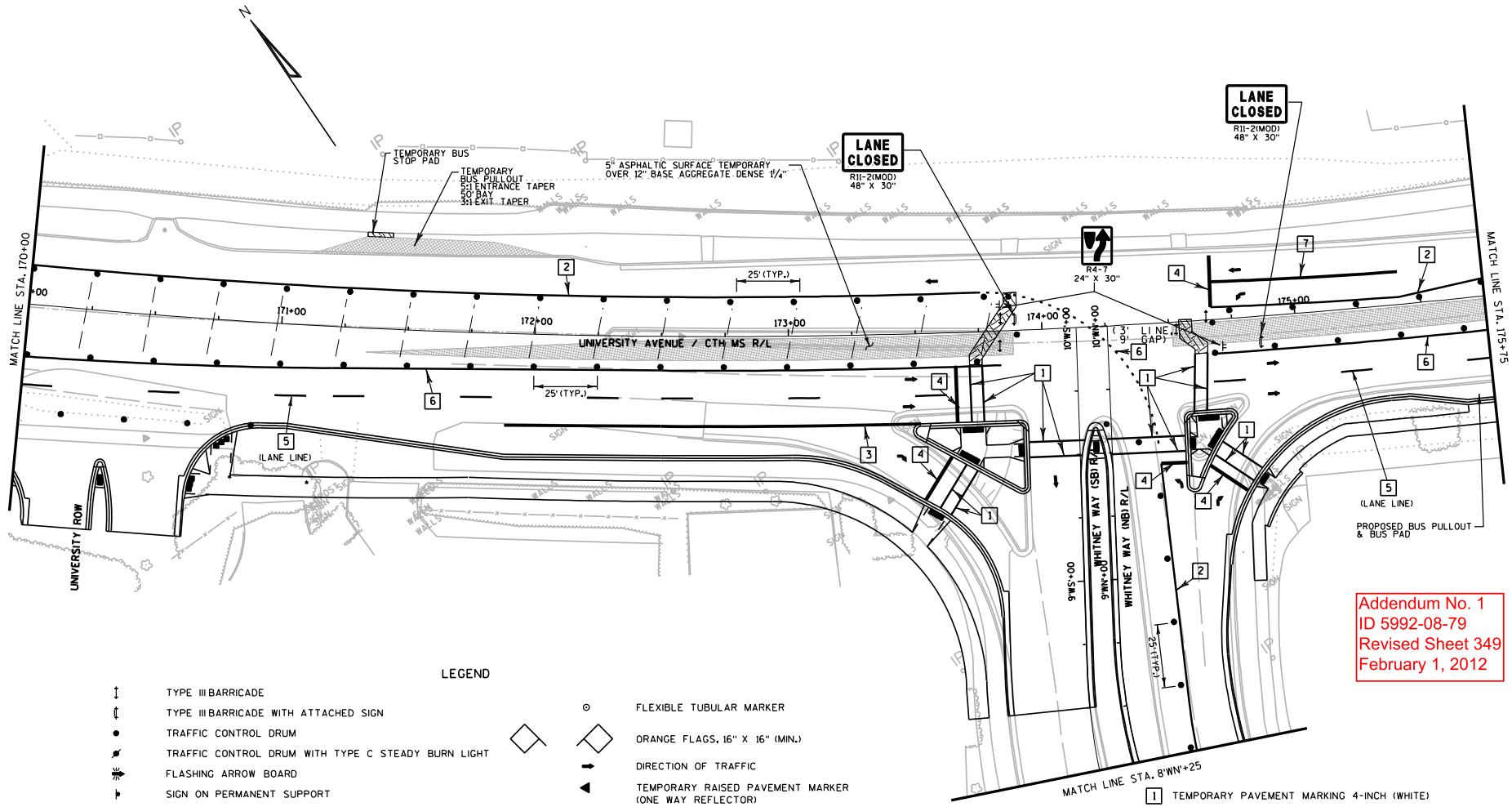
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 348	E

FILE NAME : G:\Madison\MD2009035\DGN\026315_tc_s3a.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

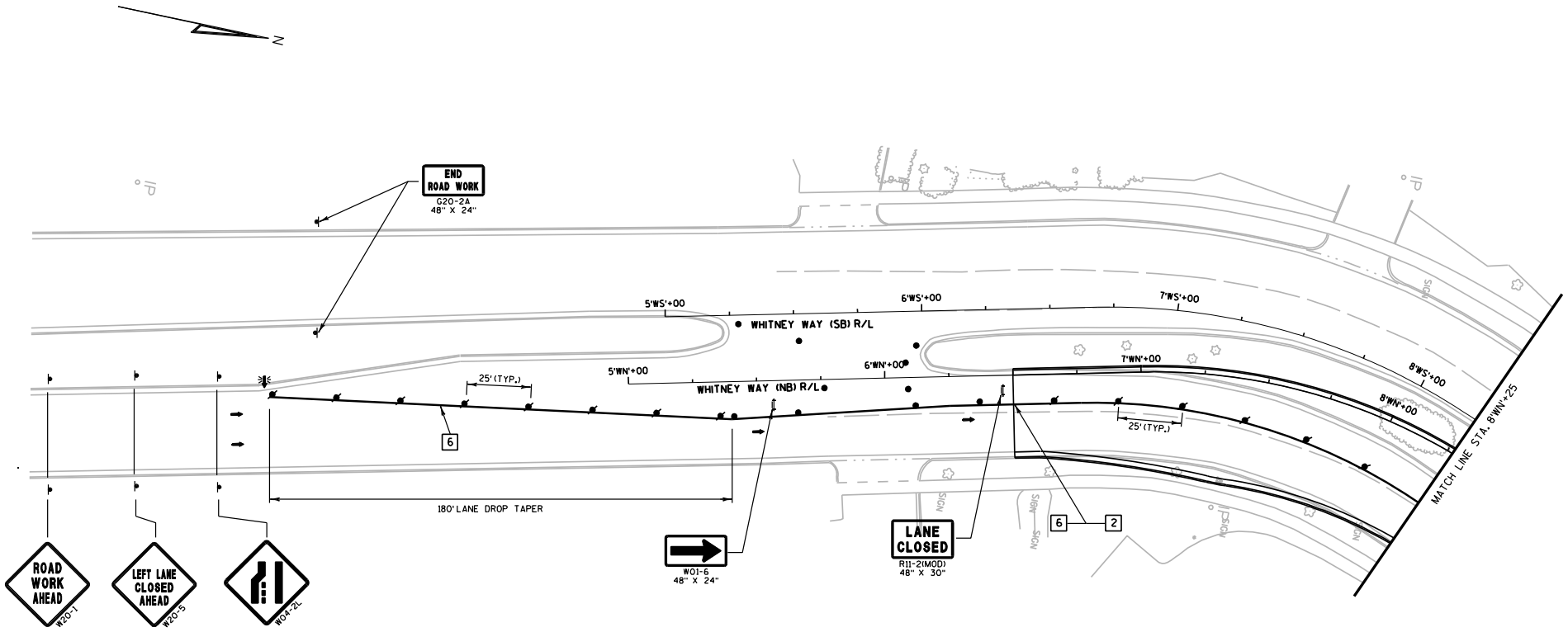
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

Addendum No. 1
ID 5992-08-79
Revised Sheet 349
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 349	E

FILE NAME : G:\Madison\MD2009035\DGN\026315_tc_s3b.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

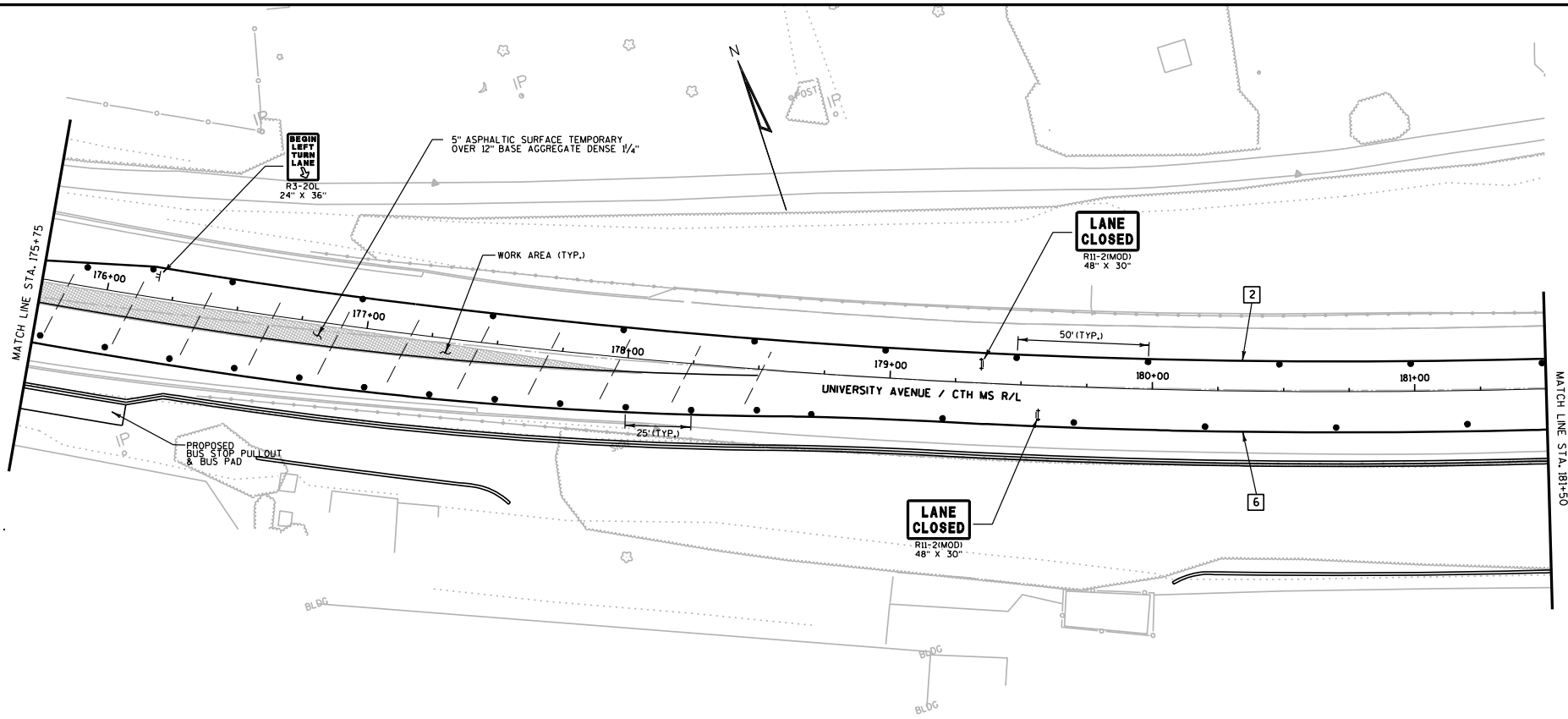
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 350 E

FILE NAME : g:\madison\md2009035\dgn\026316_tc_s3 (whitney).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

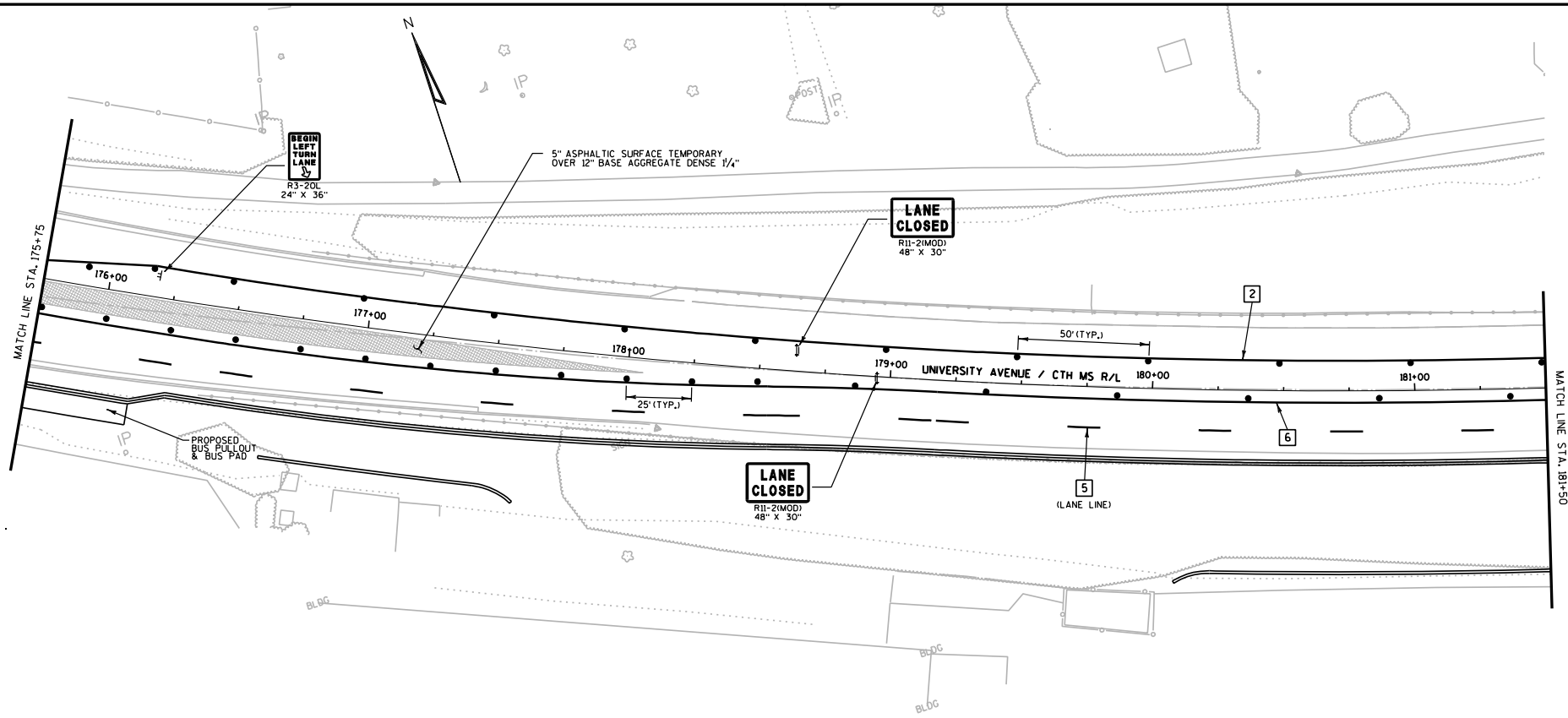
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 351 E

FILE NAME : g:\madison\md2009035\dgn\026317_tc_s3a.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
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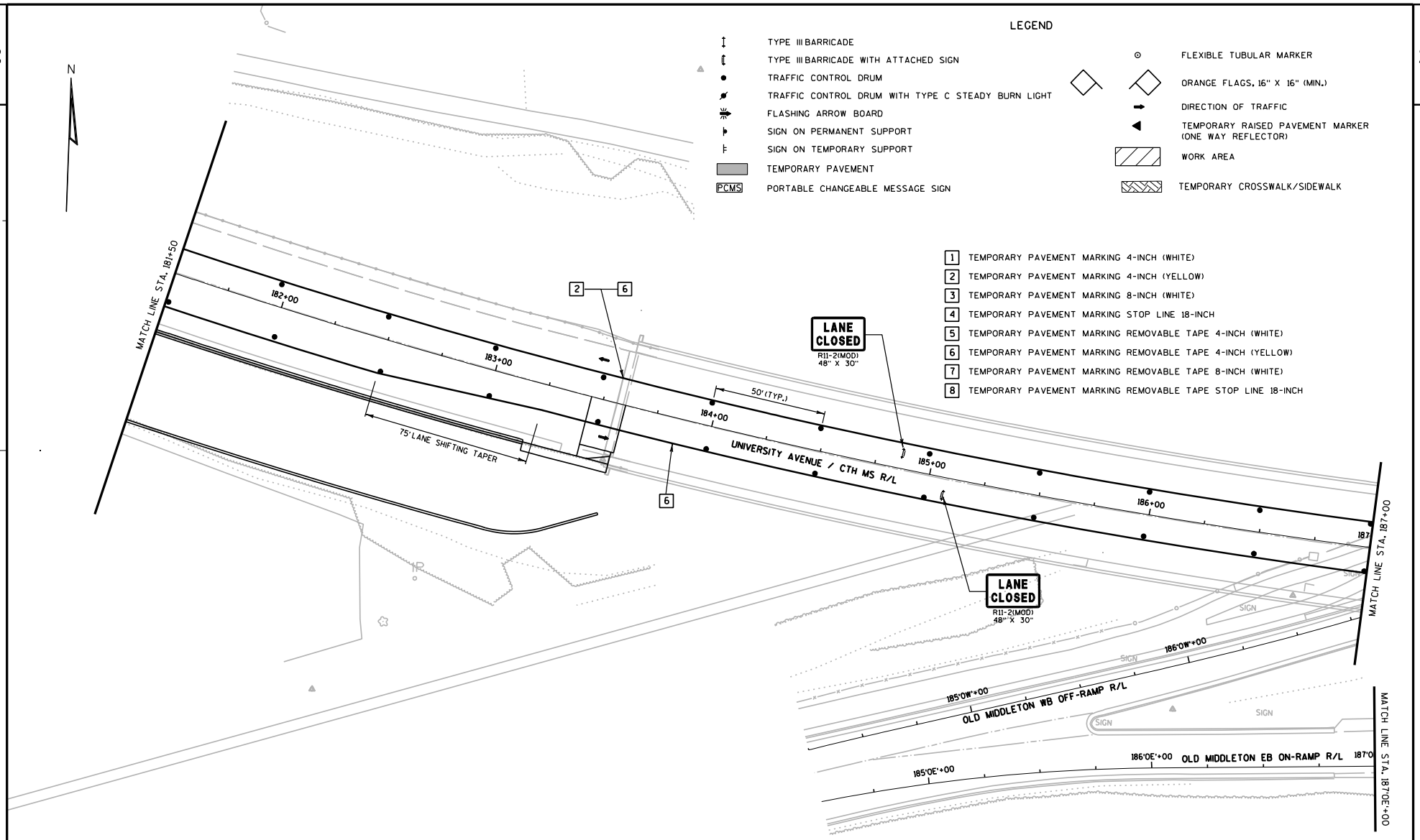
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 352 E

FILE NAME : g:\madison\md2009035\dgn\026317_tc_s3b.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

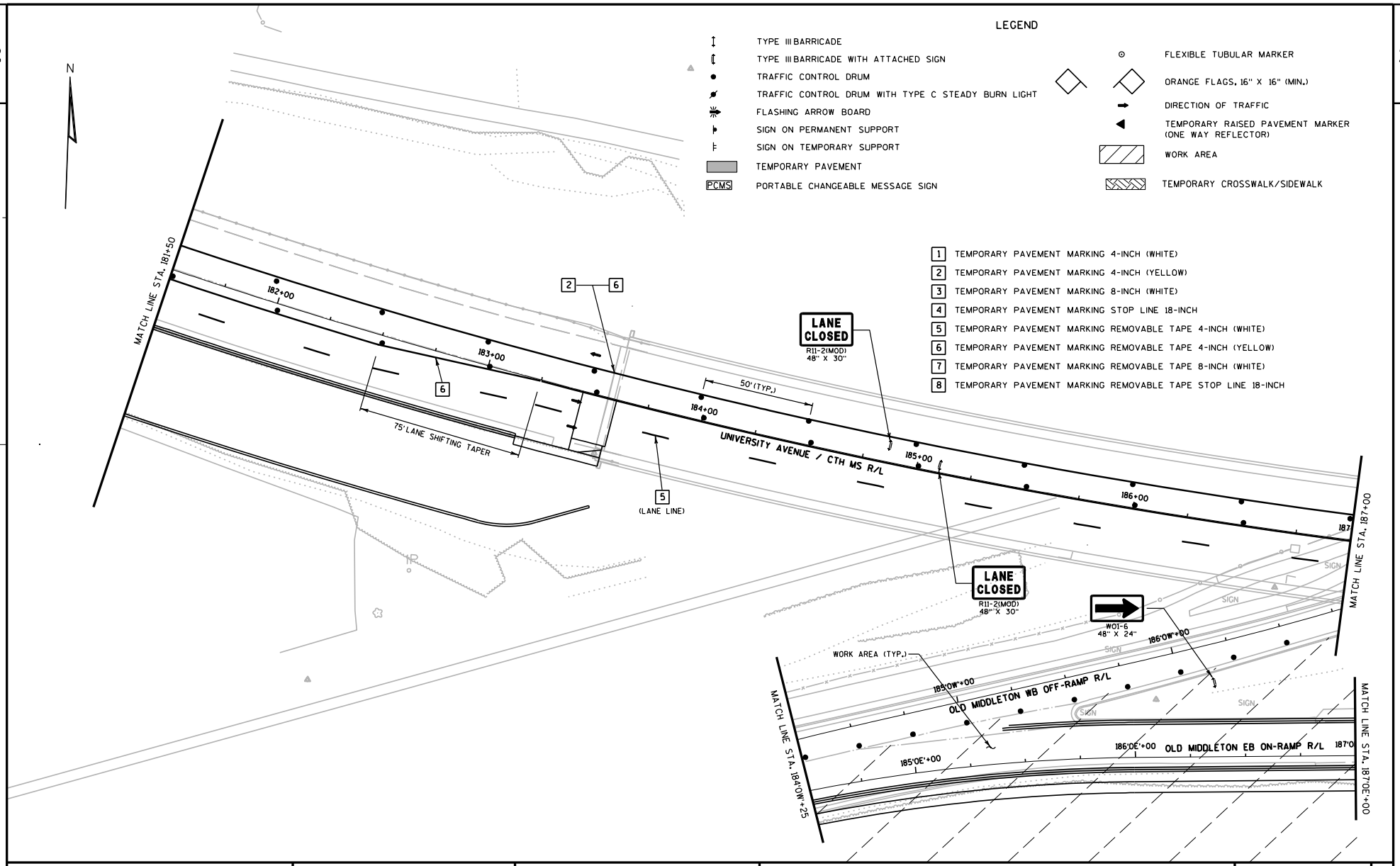
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026318_tc_s3a.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

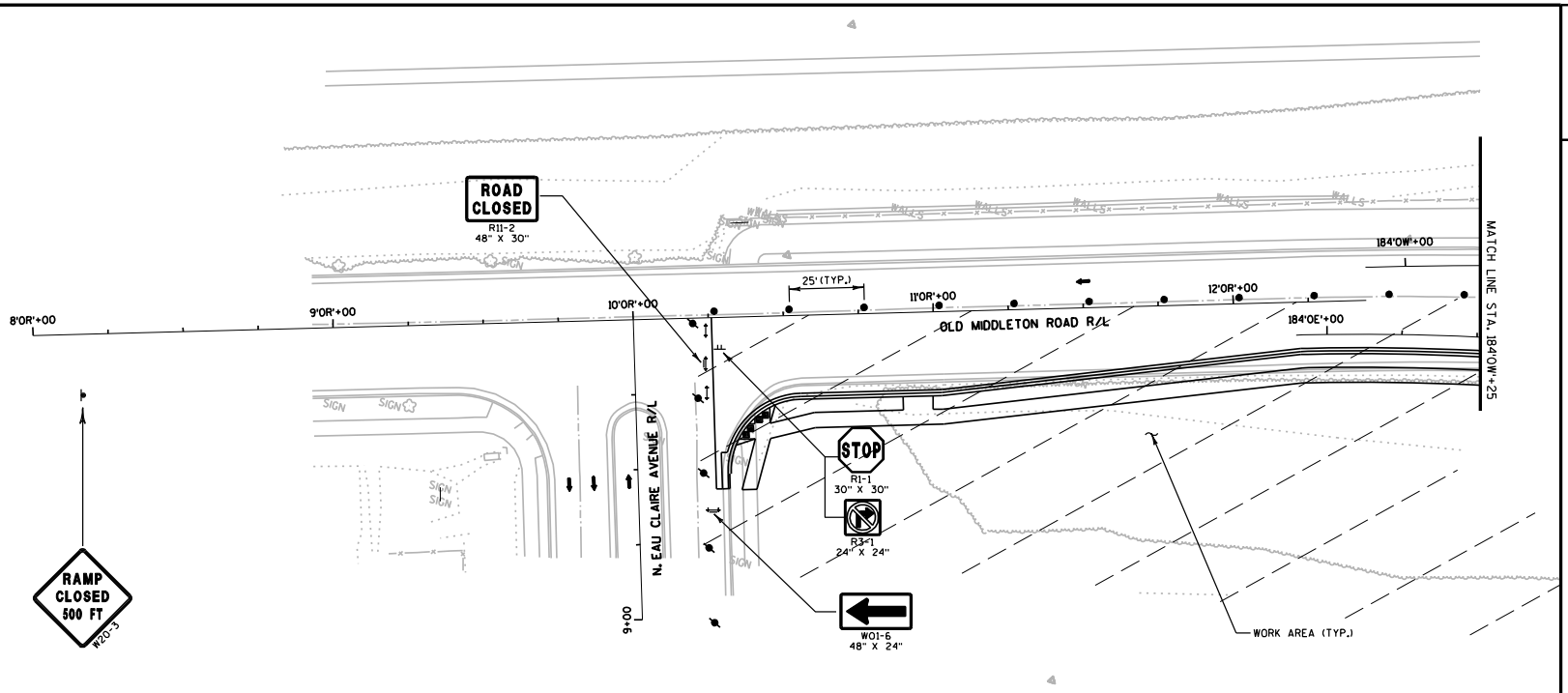
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026318_tc_s3b.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 355 E

FILE NAME : g:\madison\md2009035\dgn\026319_tc_s3b (omr).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

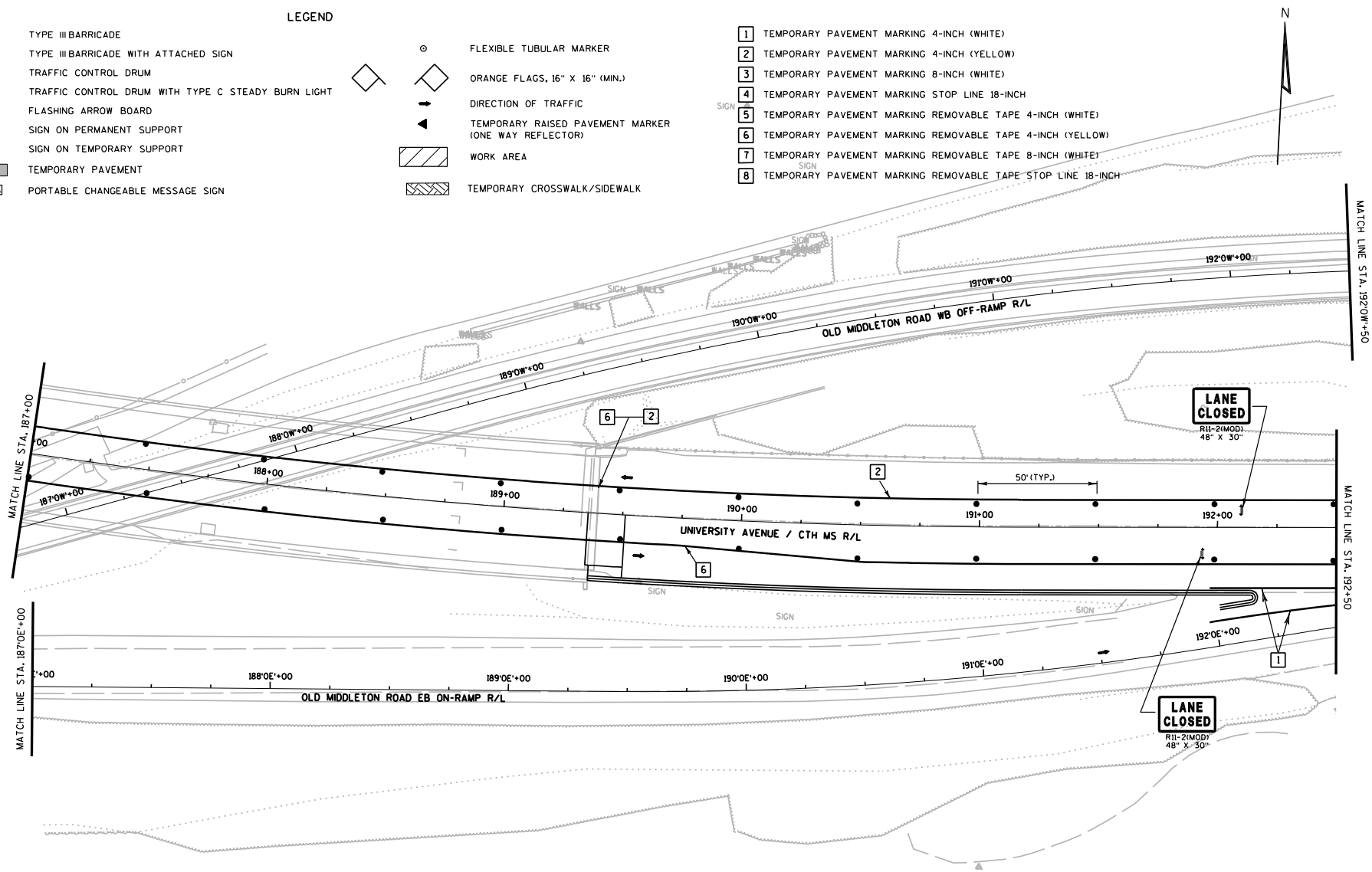
WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



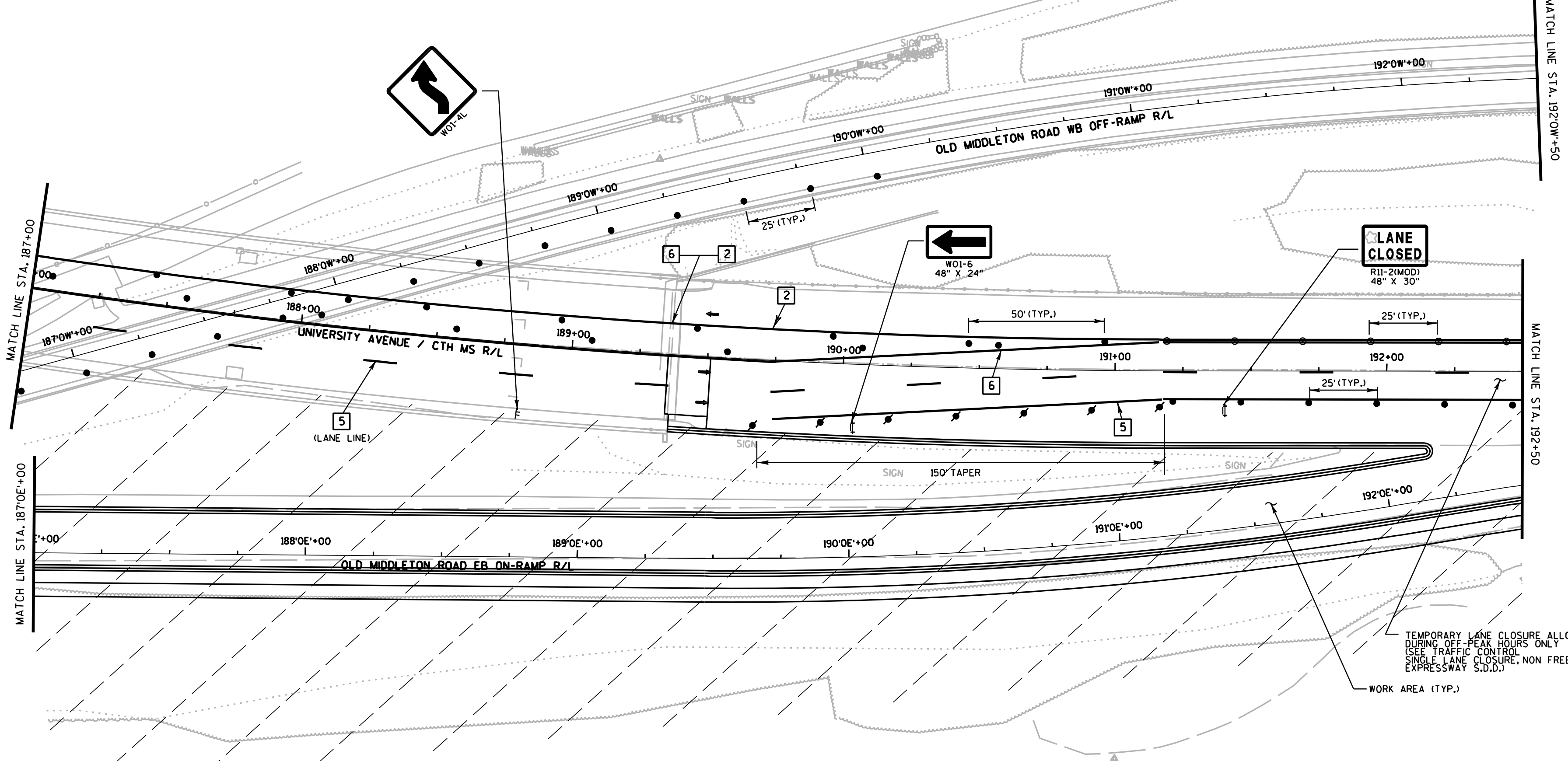
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 356	E

FILE NAME : g:\madison\md2009035\dgn\026320_tc_s3a.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

LEGEND

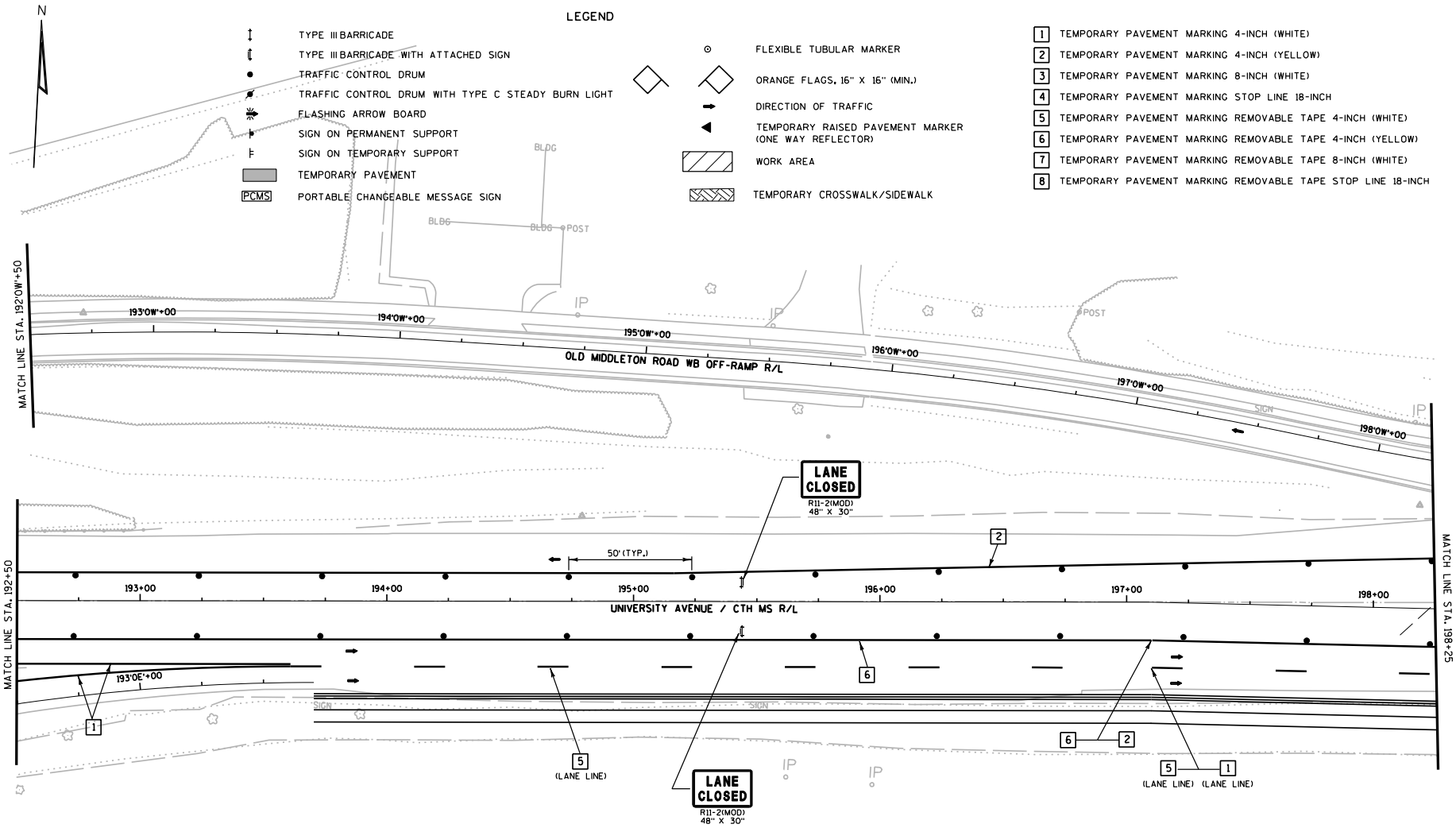
- ↕ TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- ● TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- ⊙ FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 357	E

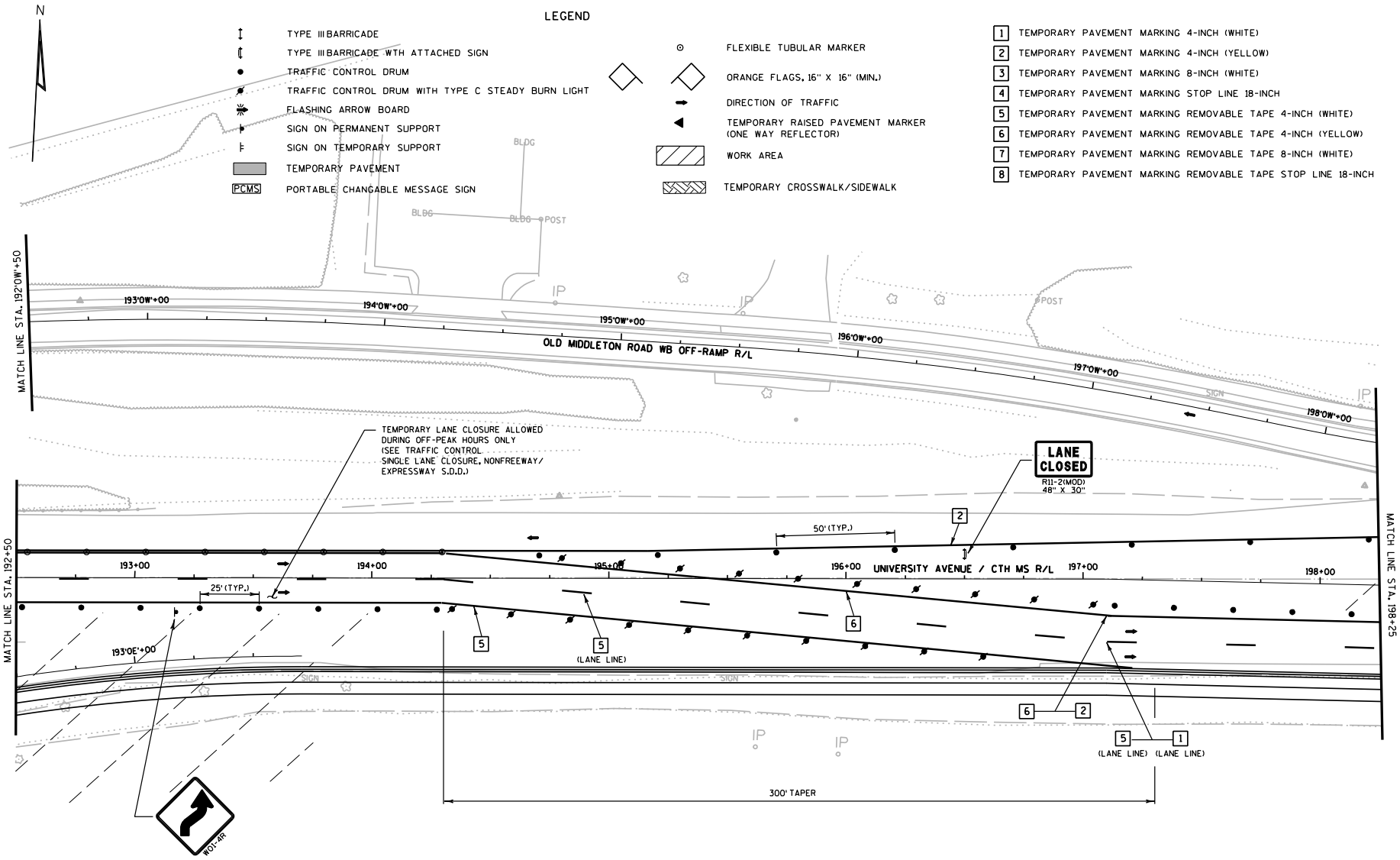
2



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 358 E

FILE NAME : g:\madison\md2009035\dgn\026321_tc_s3a.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

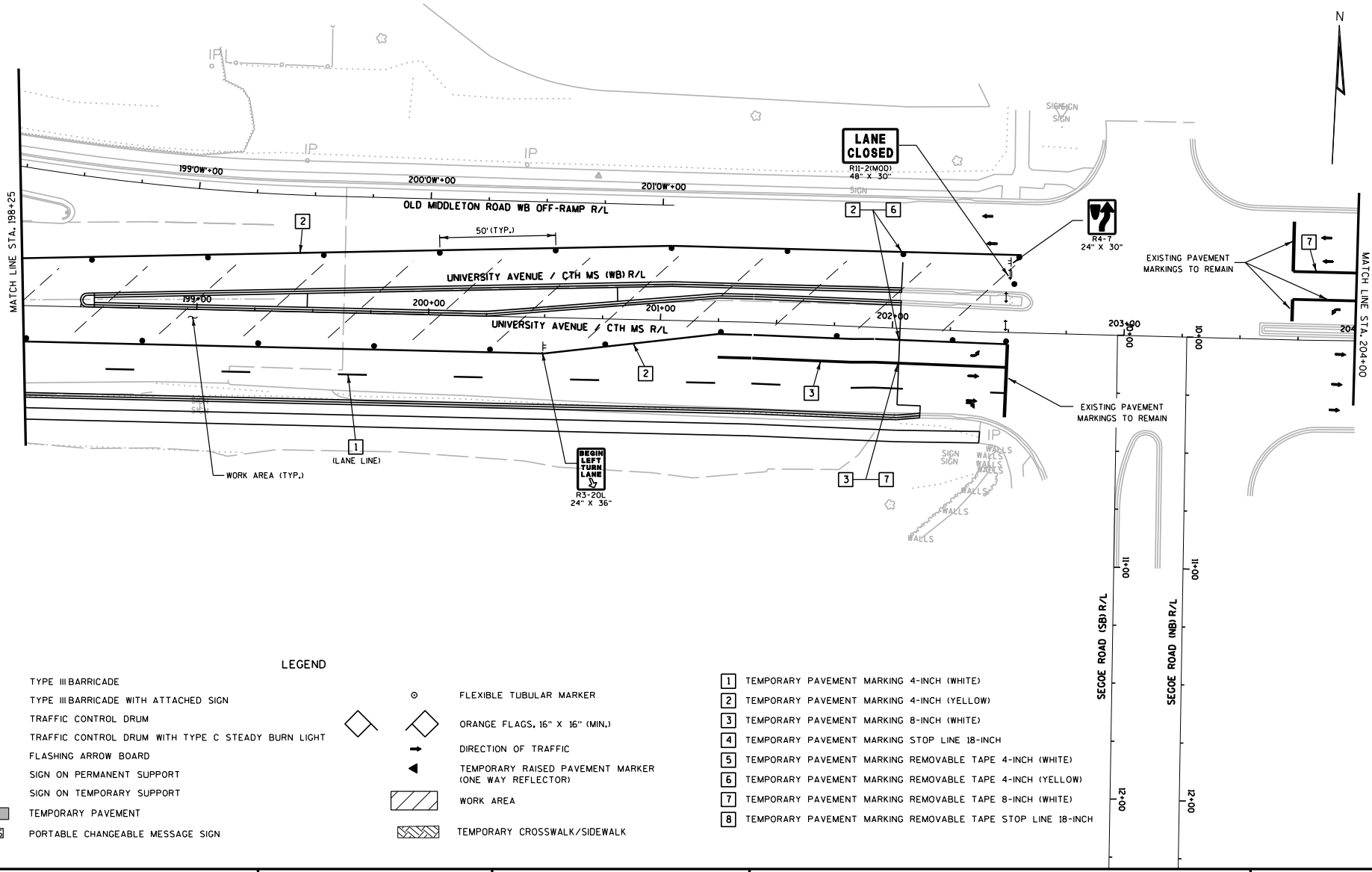
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 359 E

FILE NAME : g:\madison\md2009035\dgn\026321_tc_s3b.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

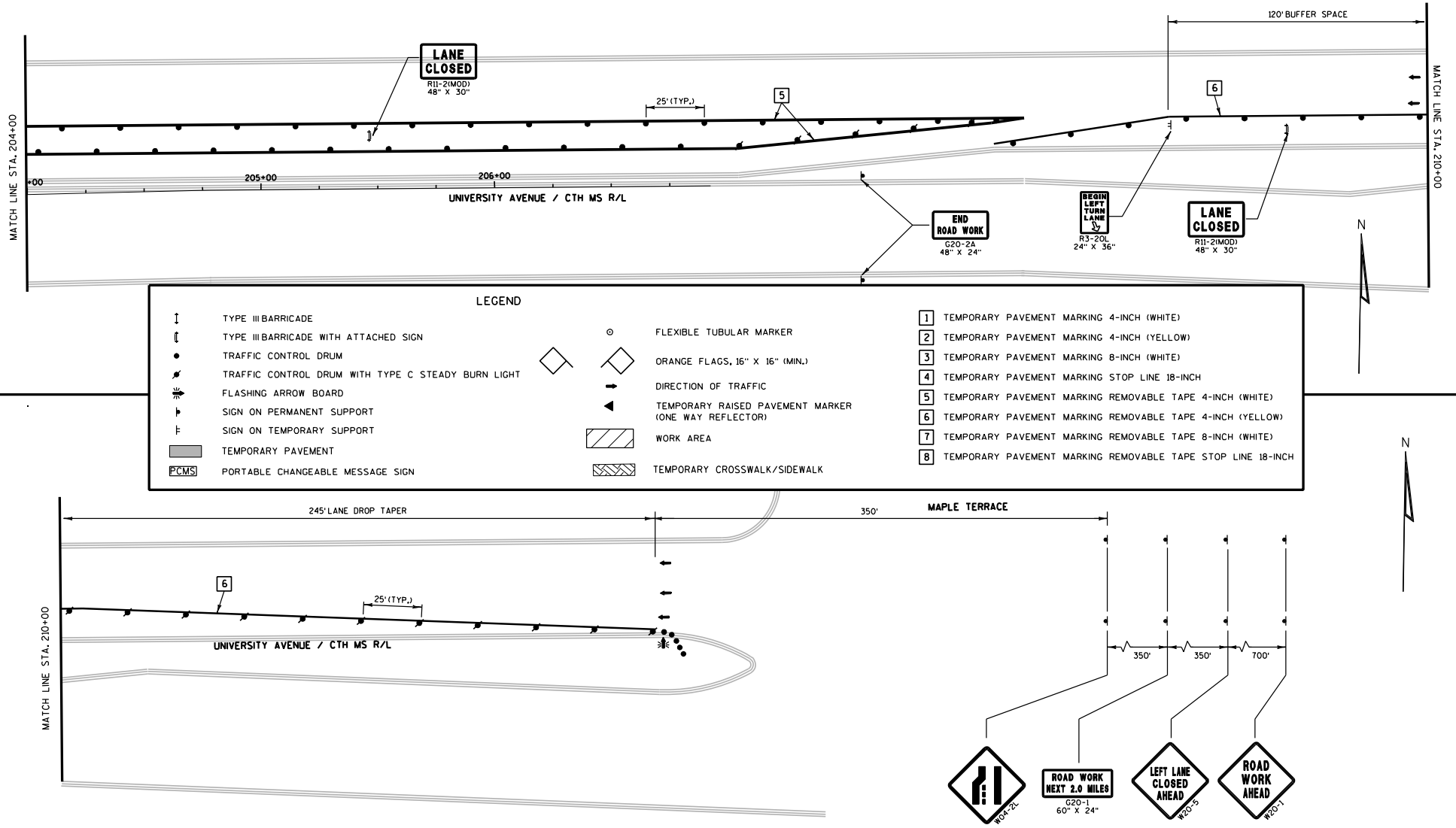
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 360 E

FILE NAME : g:\madison\md2009035\dgn\026322_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

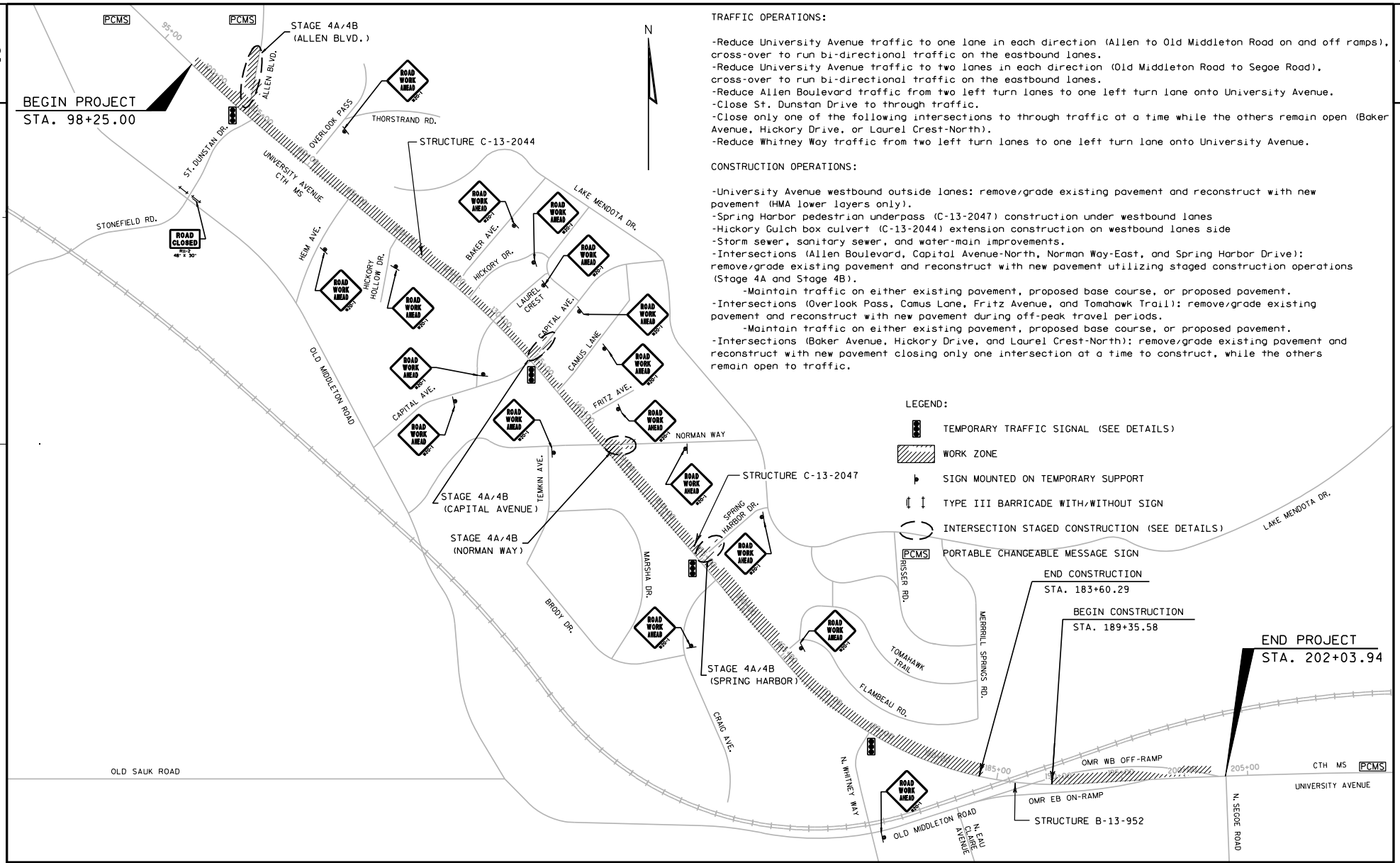
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026323_tc_s3.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



TRAFFIC OPERATIONS:

-Reduce University Avenue traffic to one lane in each direction (Allen to Old Middleton Road on and off ramps), cross-over to run bi-directional traffic on the eastbound lanes.
-Reduce University Avenue traffic to two lanes in each direction (Old Middleton Road to Segoe Road), cross-over to run bi-directional traffic on the eastbound lanes.
-Reduce Allen Boulevard traffic from two left turn lanes to one left turn lane onto University Avenue.
-Close St. Dunstan Drive to through traffic.
-Close only one of the following intersections to through traffic at a time while the others remain open (Baker Avenue, Hickory Drive, or Laurel Crest-North).
-Reduce Whitney Way traffic from two left turn lanes to one left turn lane onto University Avenue.

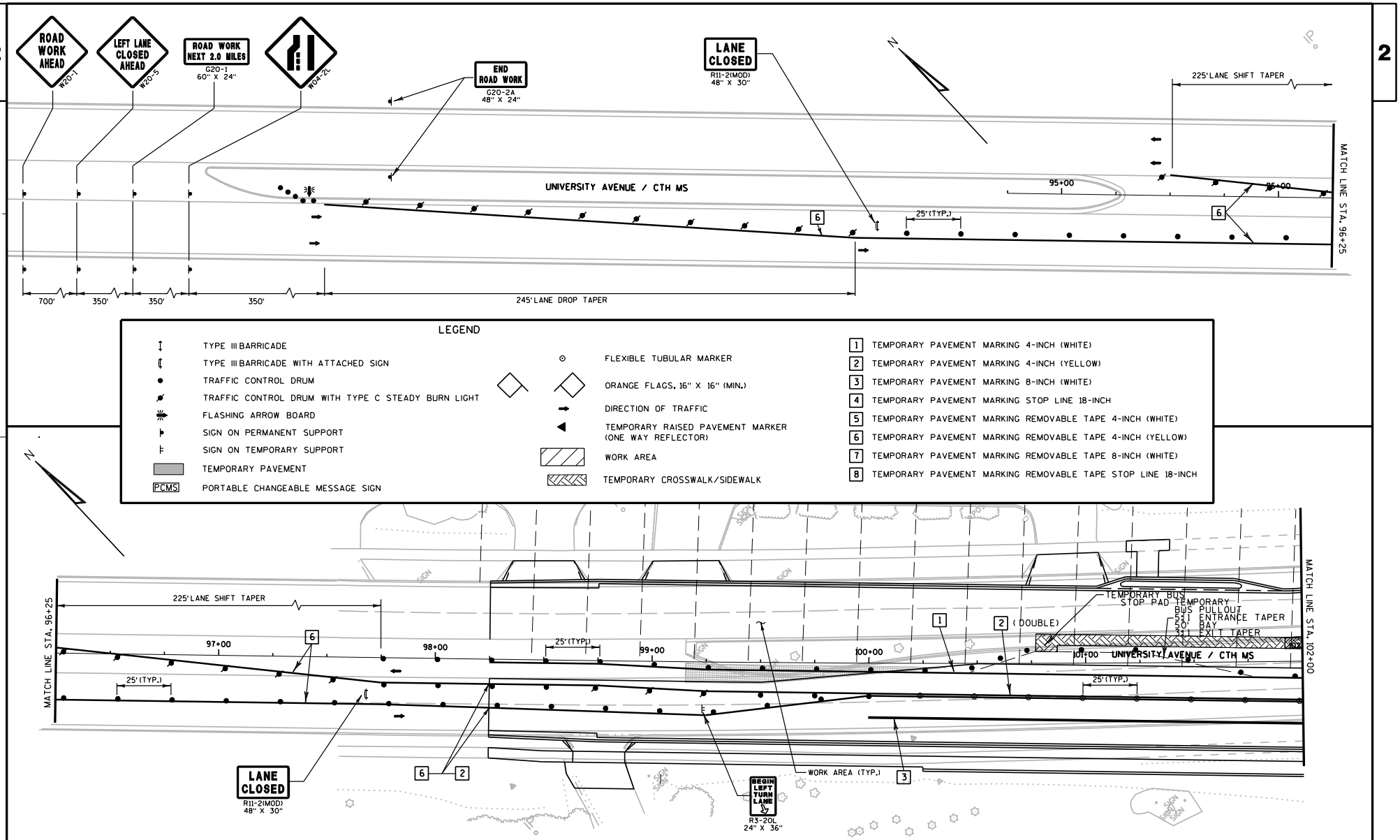
CONSTRUCTION OPERATIONS:

-University Avenue westbound outside lanes: remove/grade existing pavement and reconstruct with new pavement (HMA lower layers only).
-Spring Harbor pedestrian underpass (C-13-2047) construction under westbound lanes
-Hickory Gulch box culvert (C-13-2044) extension construction on westbound lanes side
-Storm sewer, sanitary sewer, and water-main improvements.
-Intersections (Allen Boulevard, Capital Avenue-North, Norman Way-East, and Spring Harbor Drive): remove/grade existing pavement and reconstruct with new pavement utilizing staged construction operations (Stage 4A and Stage 4B).
  -Maintain traffic on either existing pavement, proposed base course, or proposed pavement.
-Intersections (Overlook Pass, Camus Lane, Fritz Avenue, and Tomahawk Trail): remove/grade existing pavement and reconstruct with new pavement during off-peak travel periods.
  -Maintain traffic on either existing pavement, proposed base course, or proposed pavement.
-Intersections (Baker Avenue, Hickory Drive, and Laurel Crest-North): remove/grade existing pavement and reconstruct with new pavement closing only one intersection at a time to construct, while the others remain open to traffic.

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL OVERVIEW (STAGE 4)	SHEET 362 E

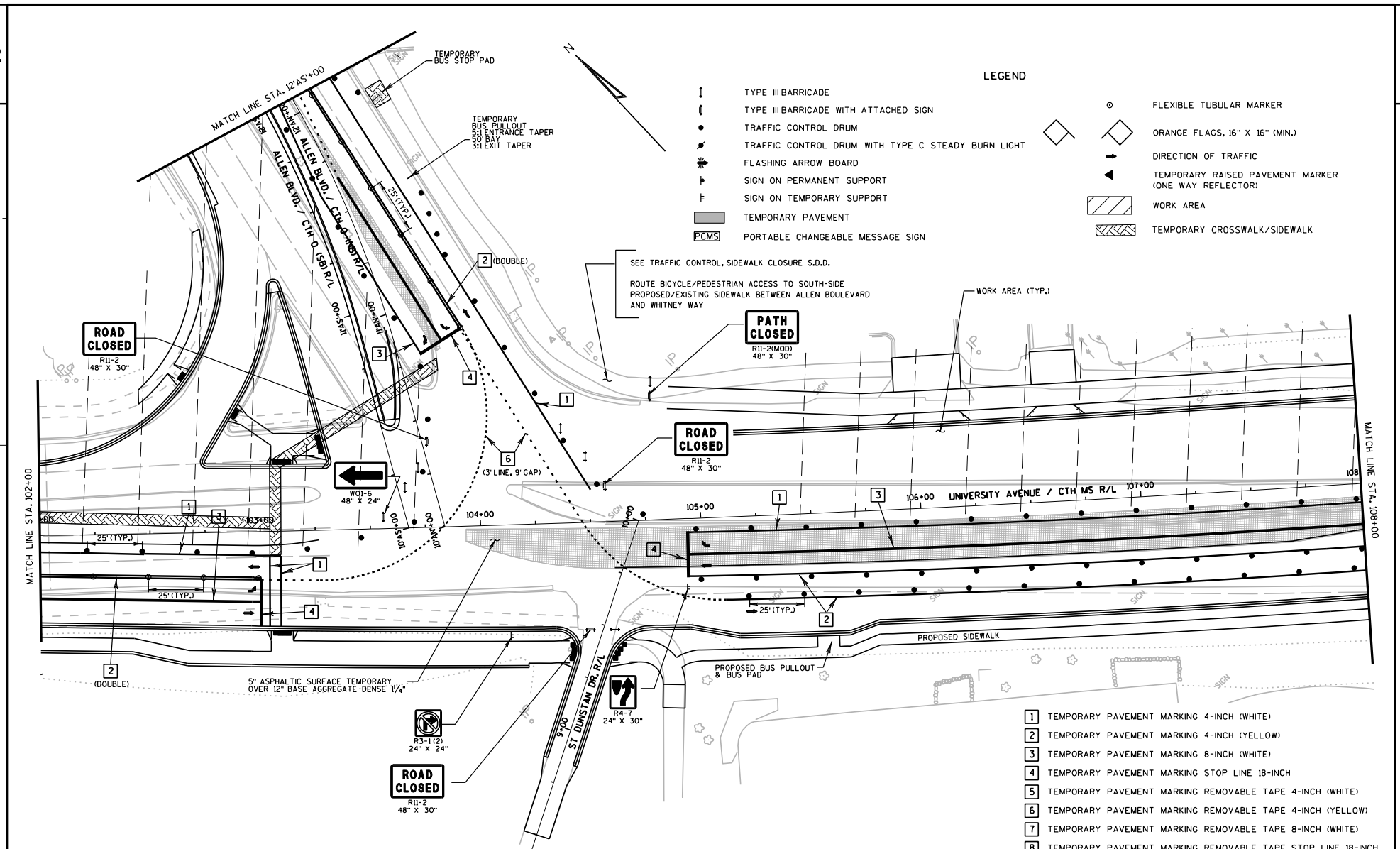
FILE NAME : g:\madison\md2009035\dgn\026400_tc_s4.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET	E

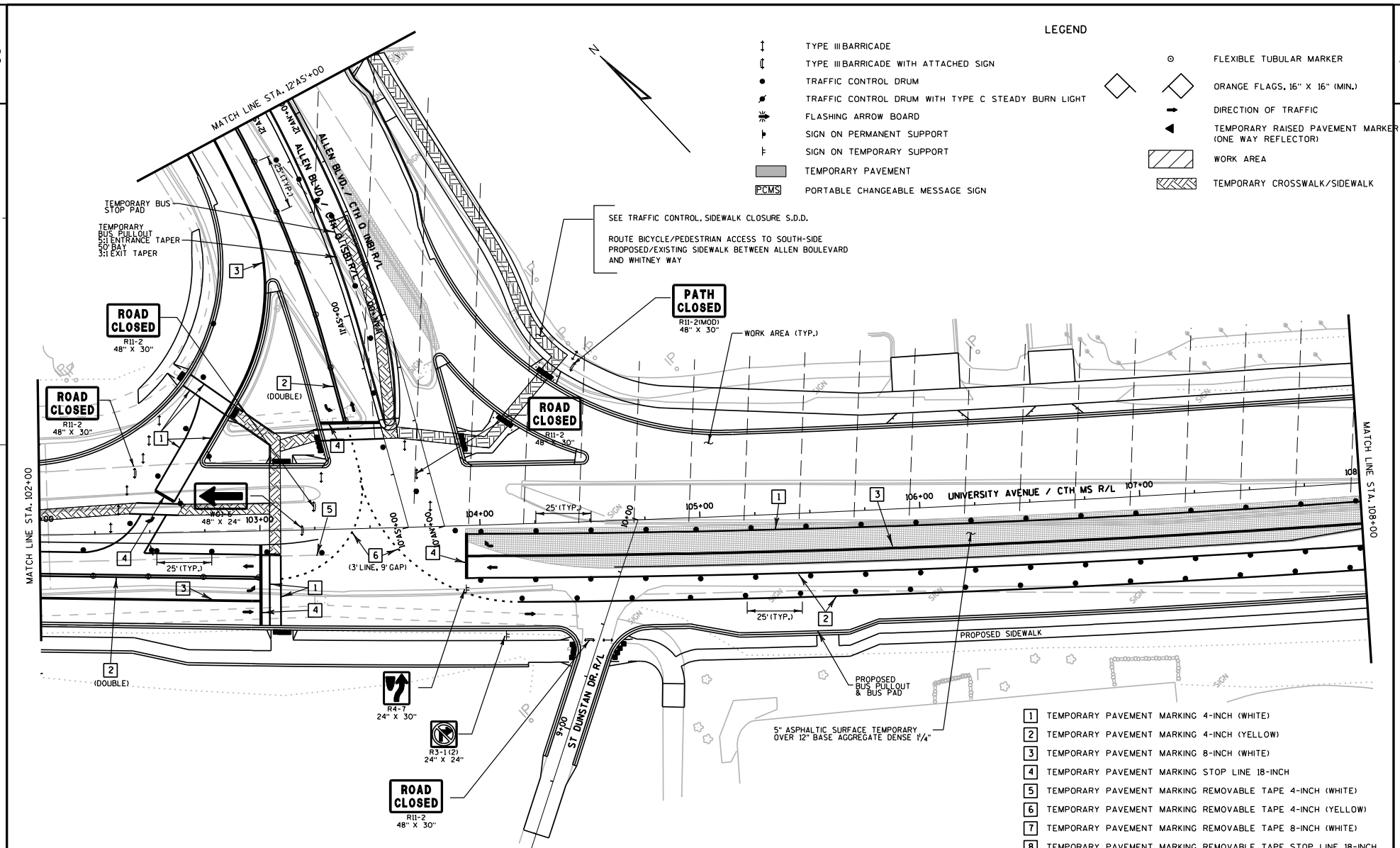
FILE NAME : g:\madison\md2009035\dgn\026401_tc_s4.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4A	SHEET E

FILE NAME : G:\Madison\MD2009035\DGN\026402_tc_s4a.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

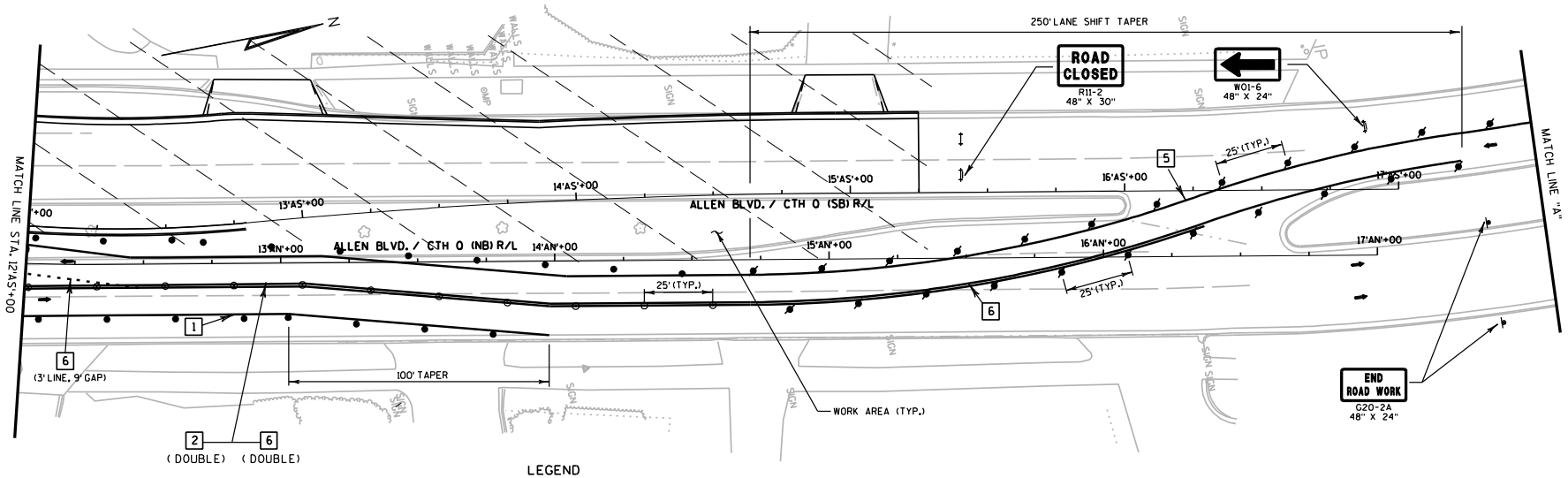
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4B	SHEET E

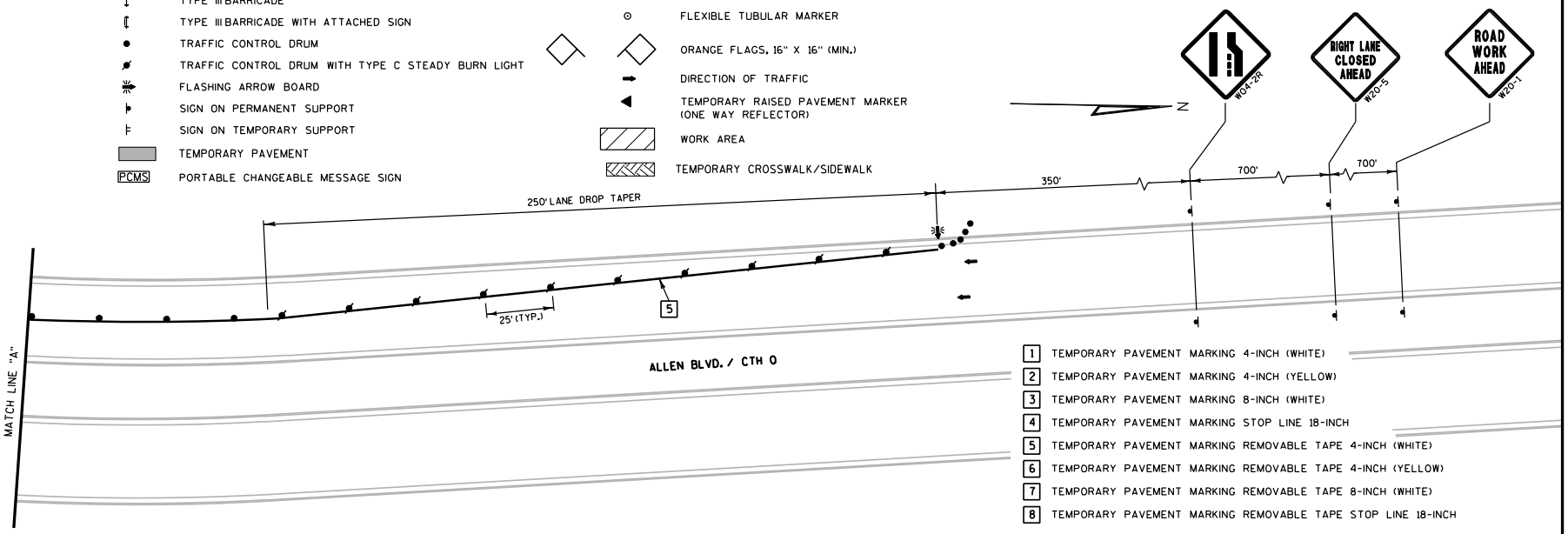
FILE NAME : G:\Madison\MD2009035\DGN\026402_tc_s4b.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

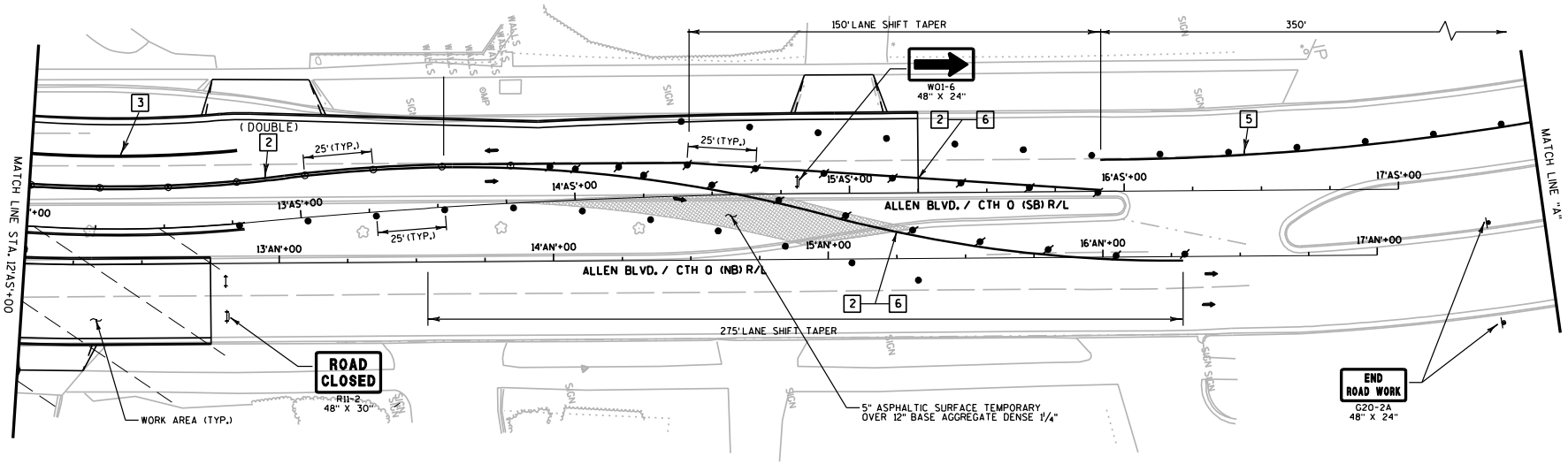
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK



1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

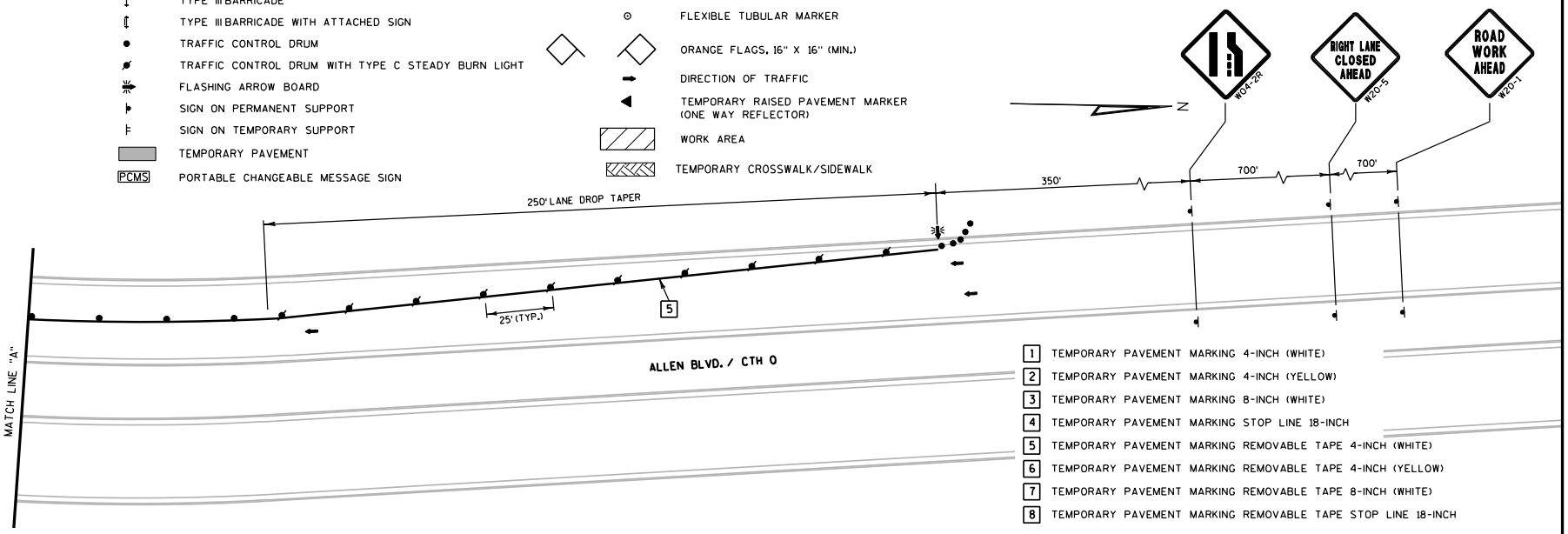
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4A	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026403_tc_s4a (allen).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42



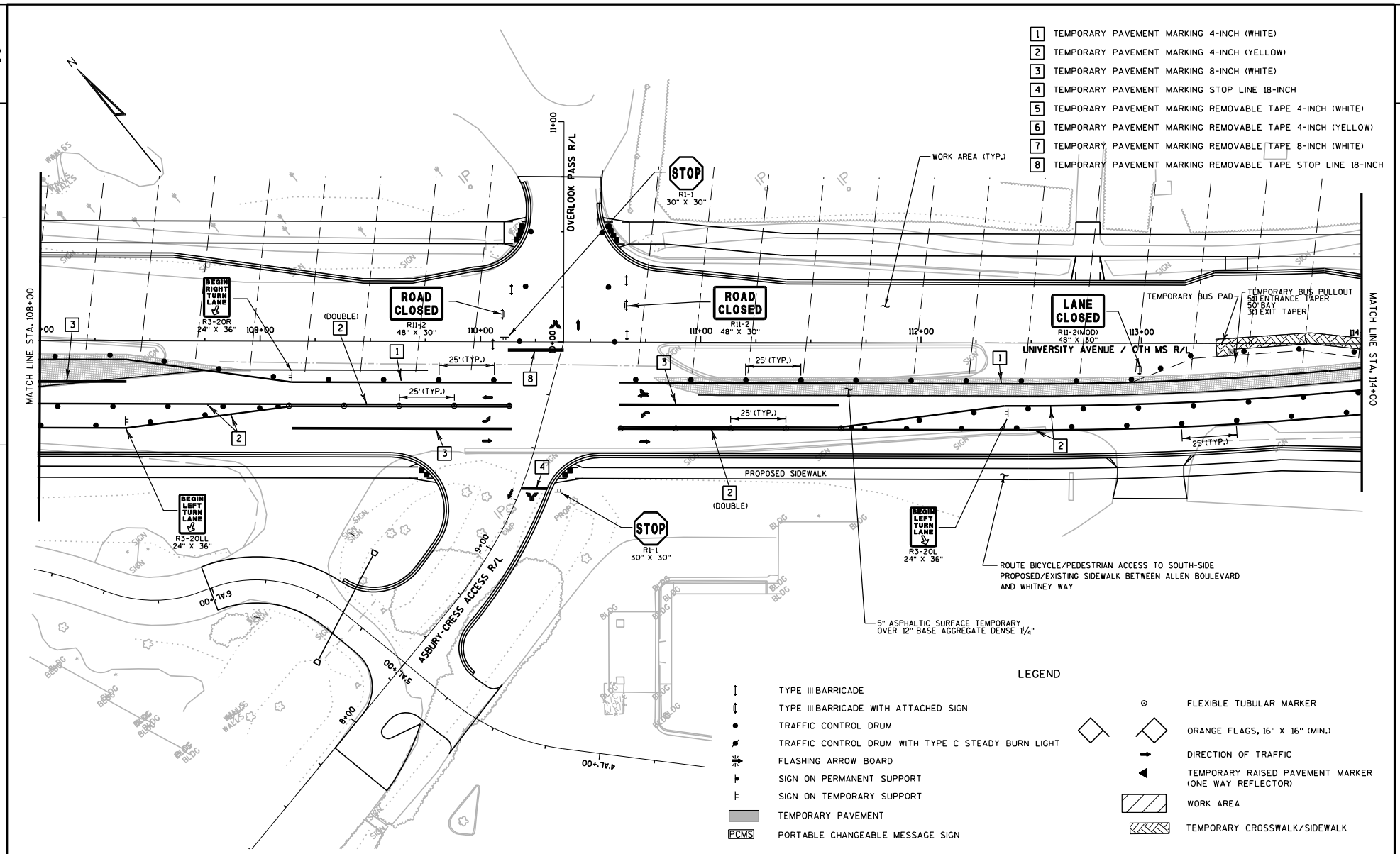
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK



1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

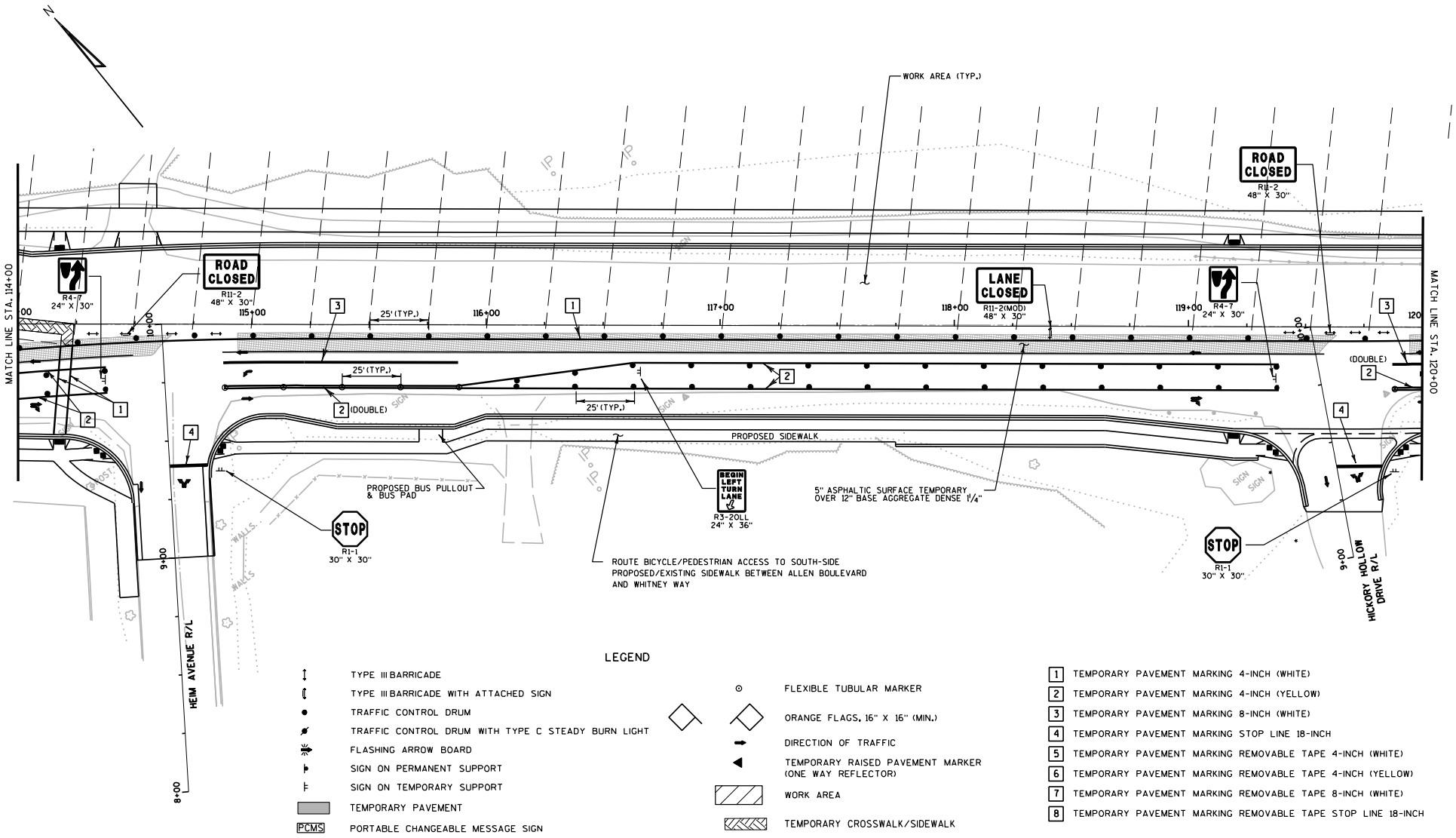
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4B	SHEET 367 E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET E

FILE NAME : G:\Madison\MD2009035\DGN\026404_tc_s4.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 369	E

FILE NAME : g:\madison\md2009035\dgn\026405_tc_s4.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

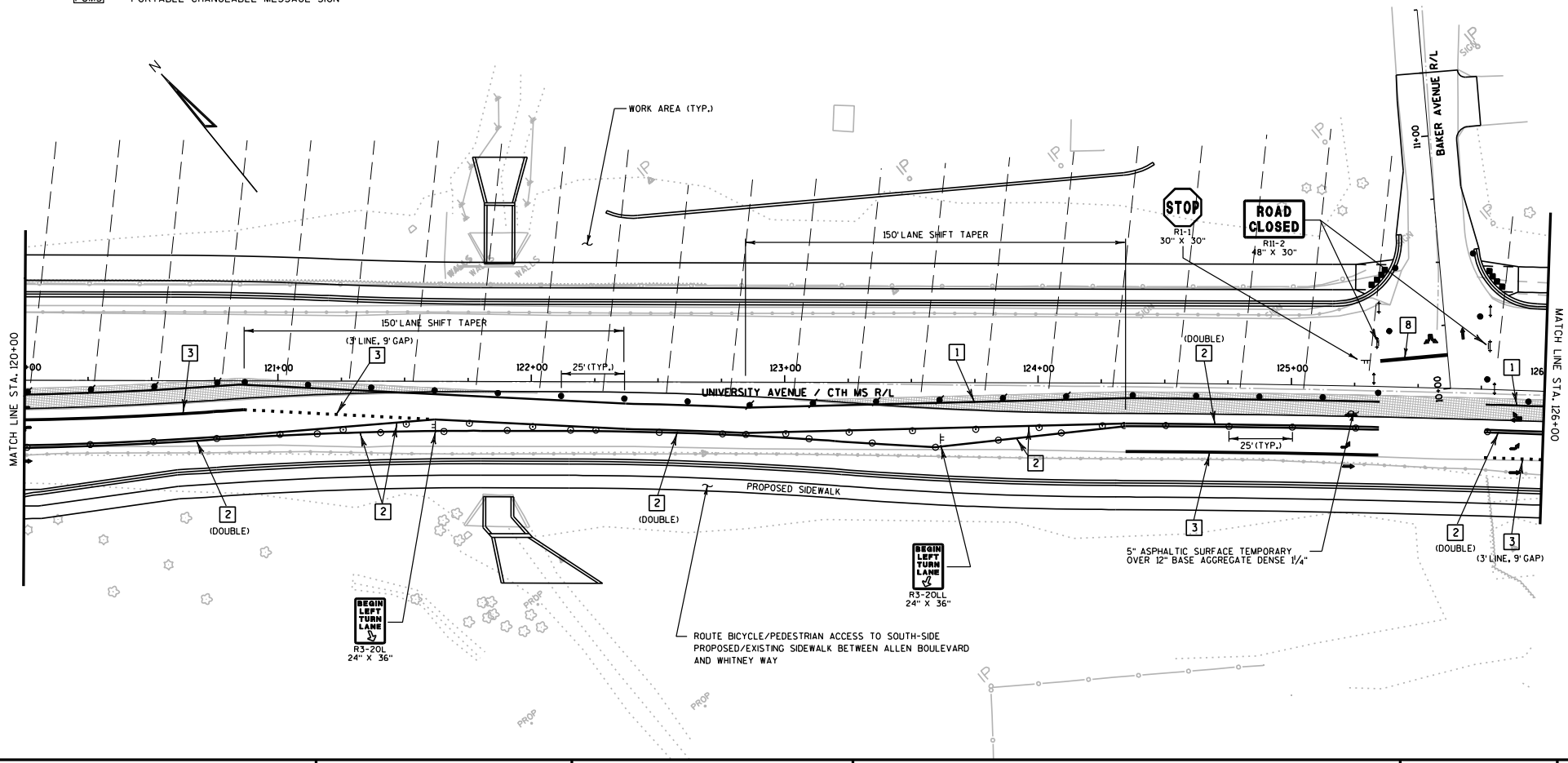
WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

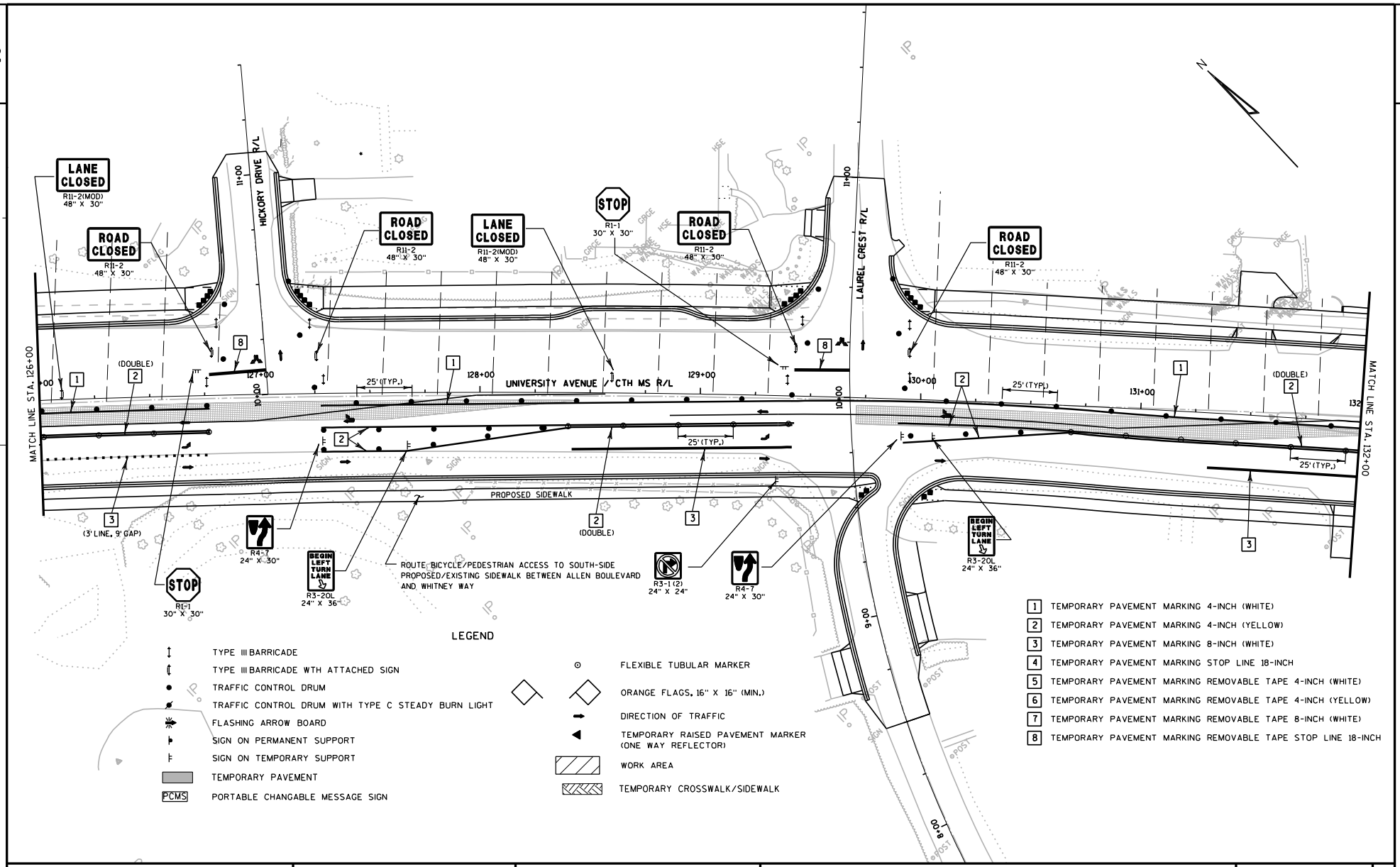
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 370	E

FILE NAME : g:\madison\md2009035\dgn\026406_tc_s4.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

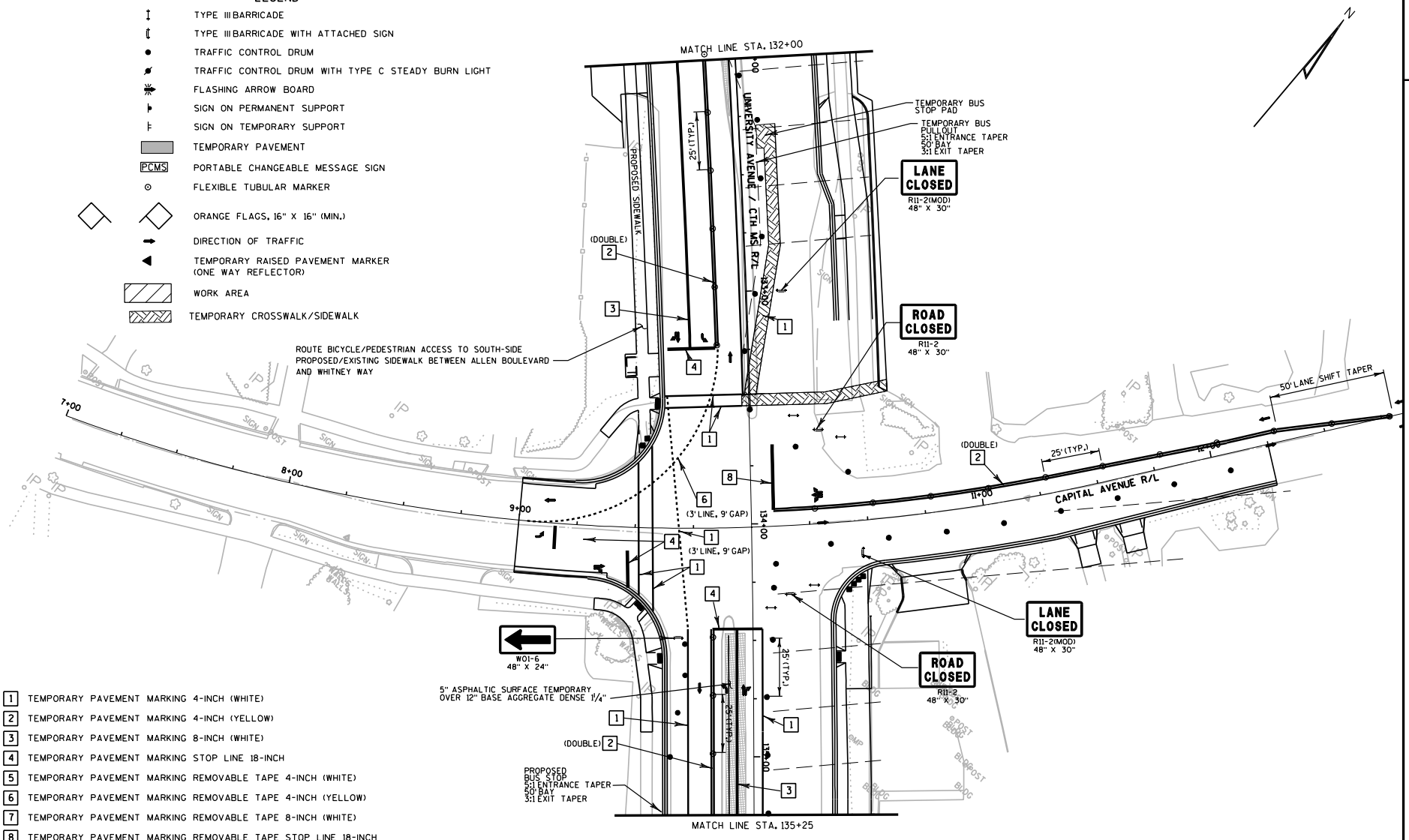
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026407_tc_s4.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

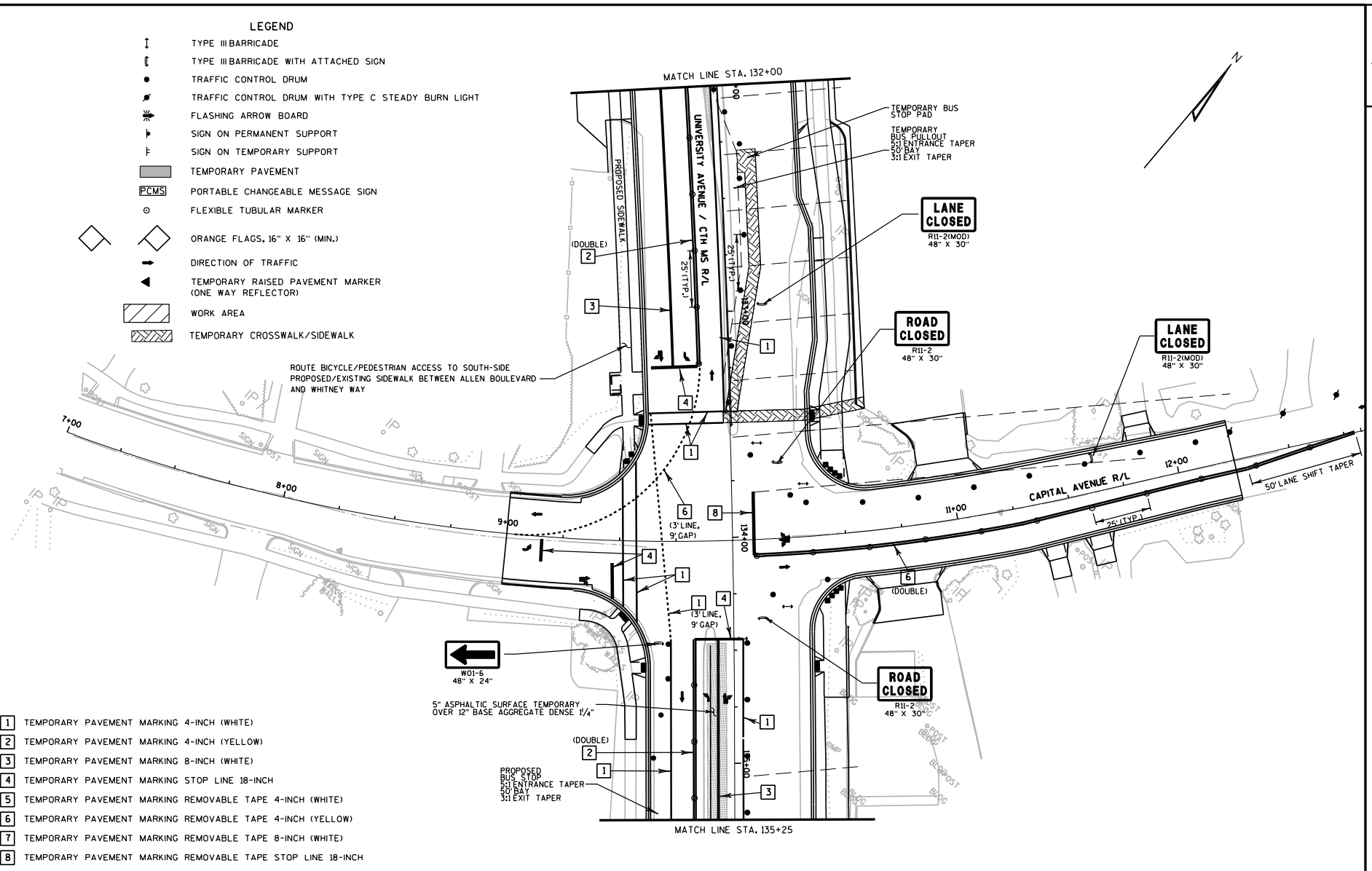
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4A	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026408_tc_s4a.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

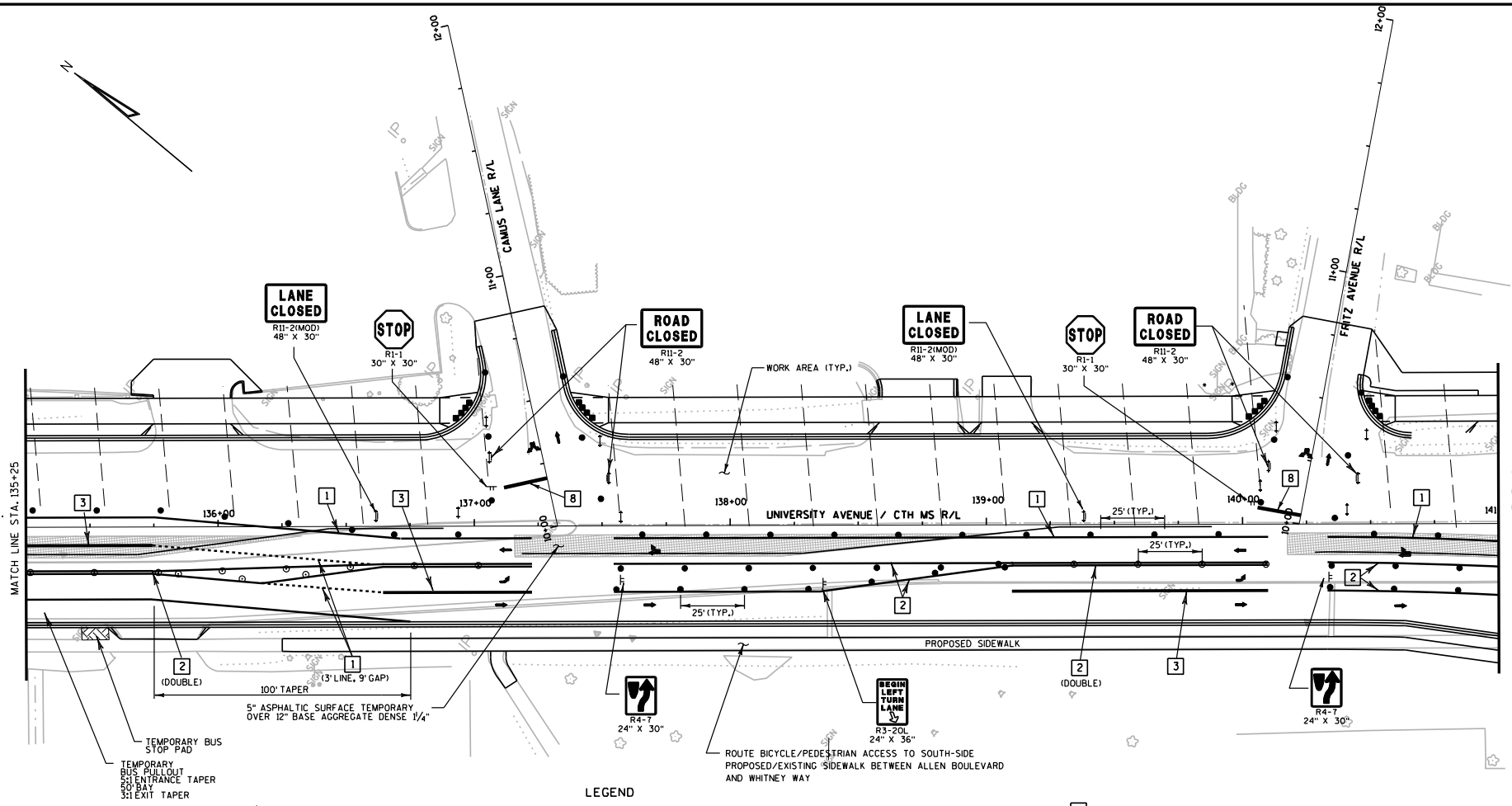
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4B	SHEET 373 E

FILE NAME : g:\madison\md2009035\dgn\026408_tc_s4b.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

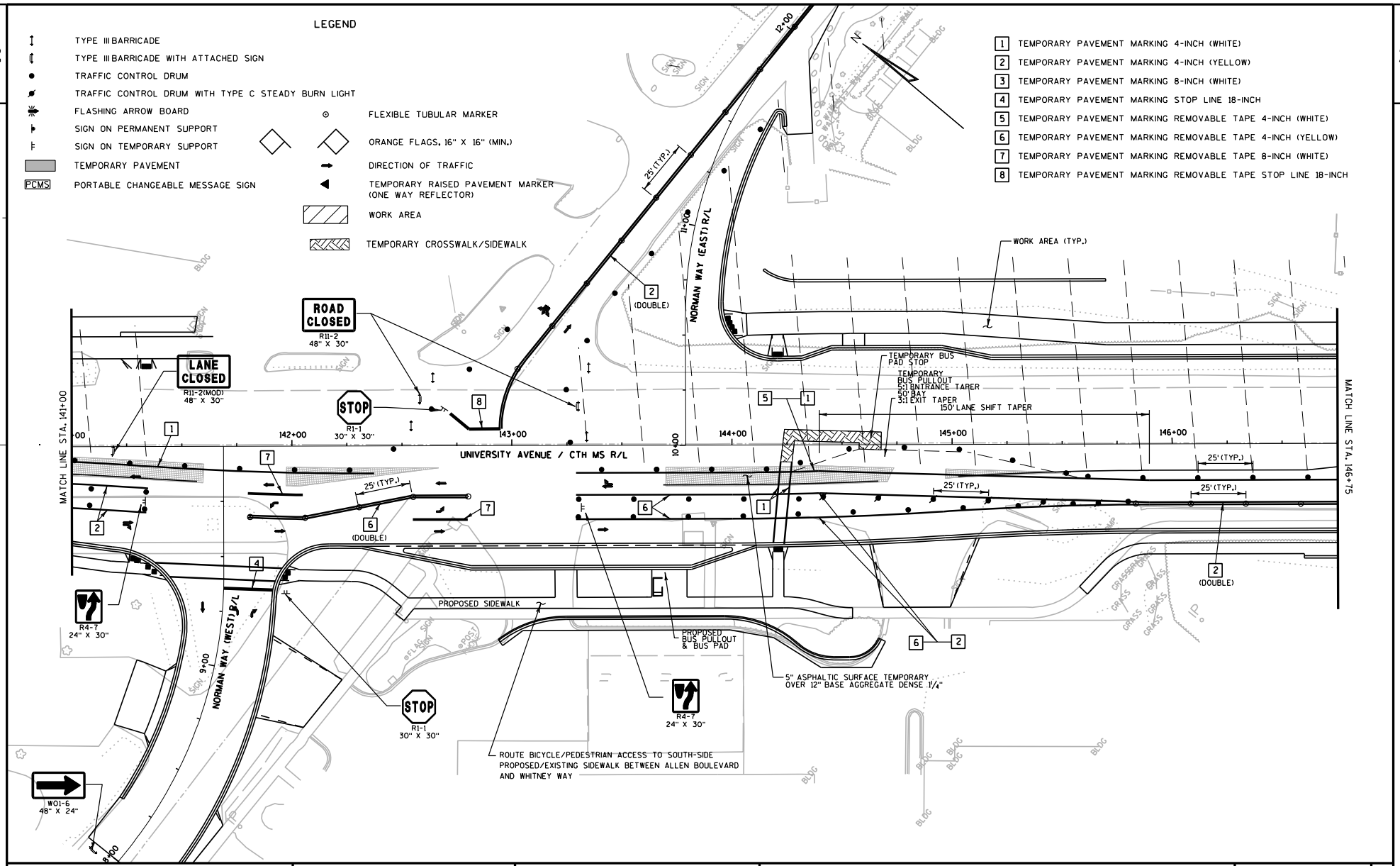
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 374 E

FILE NAME : g:\madison\md2009035\dgn\026409_tc_s4.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

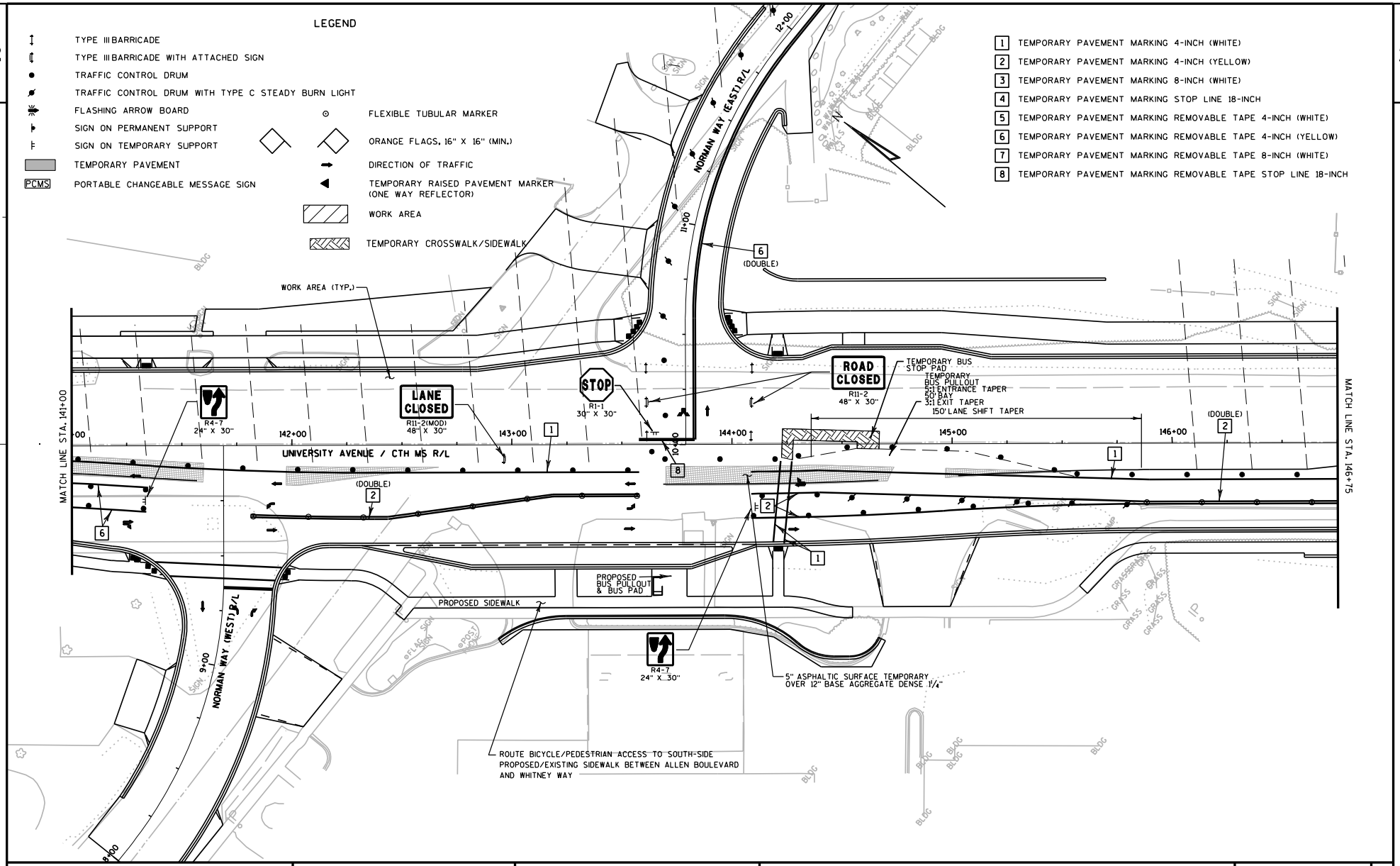
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4A	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026410_tc_s4a.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

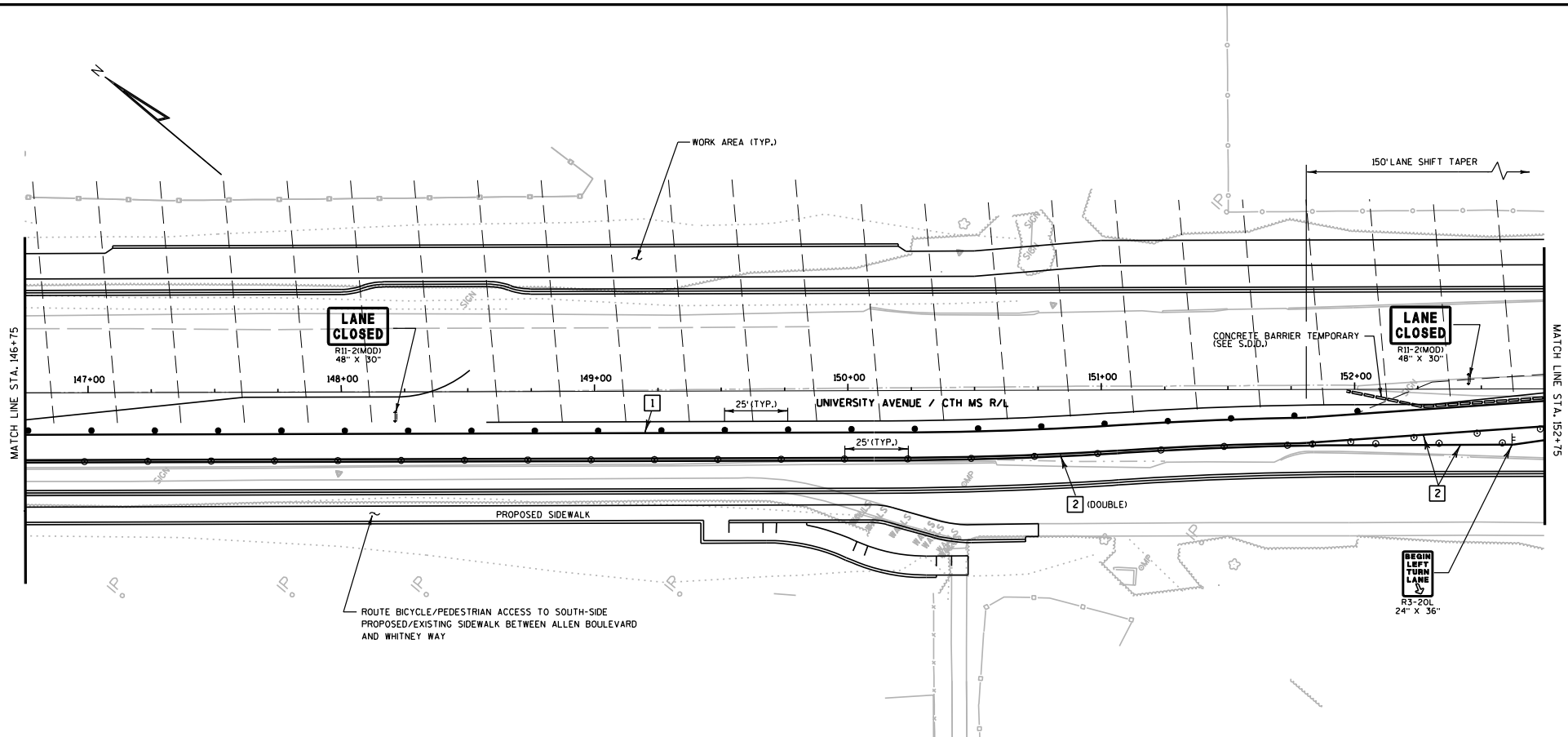
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4B	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026410_tc_s4b.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

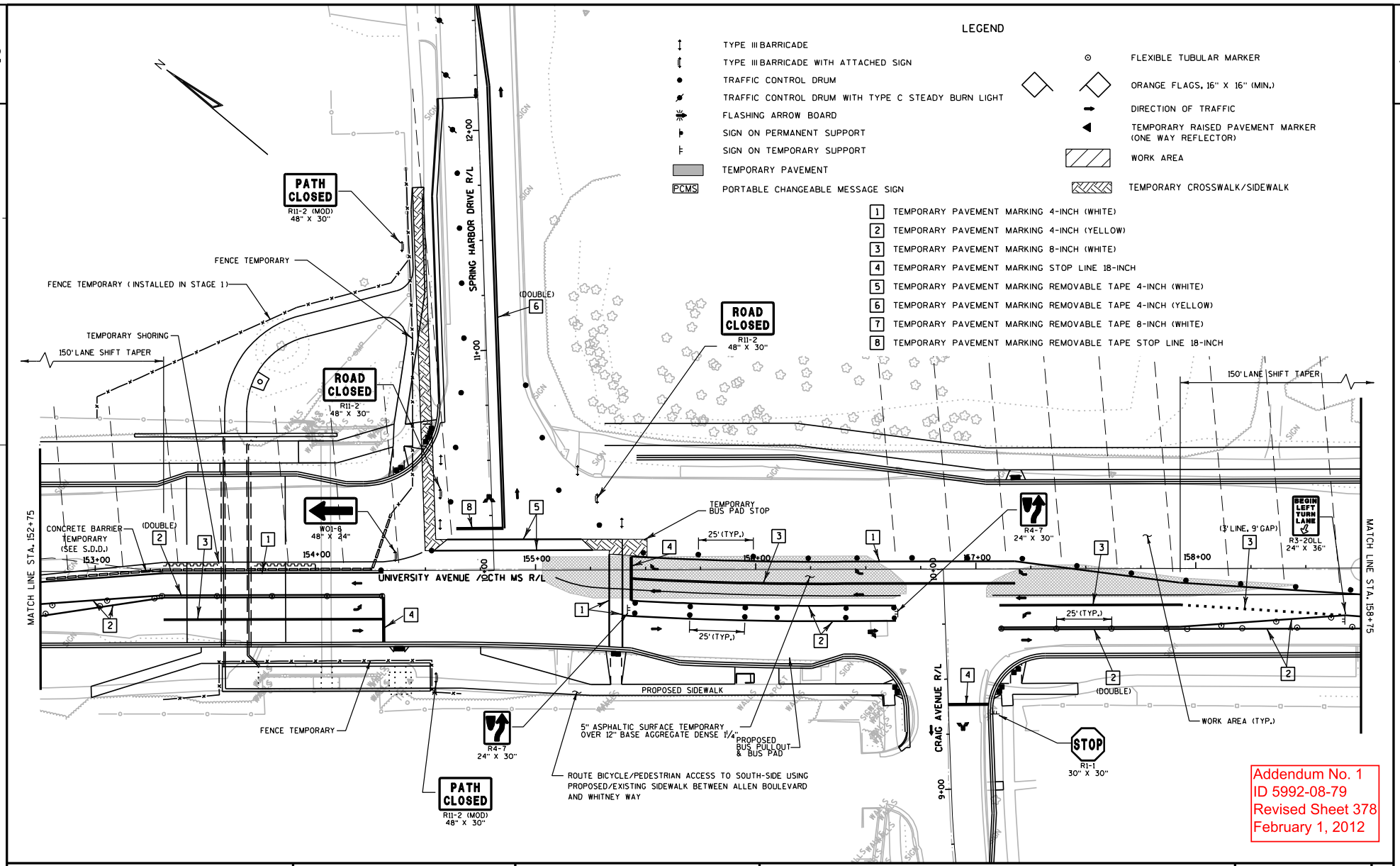
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 377	E

FILE NAME : g:\madison\md2009035\dgn\026411_tc_s4.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

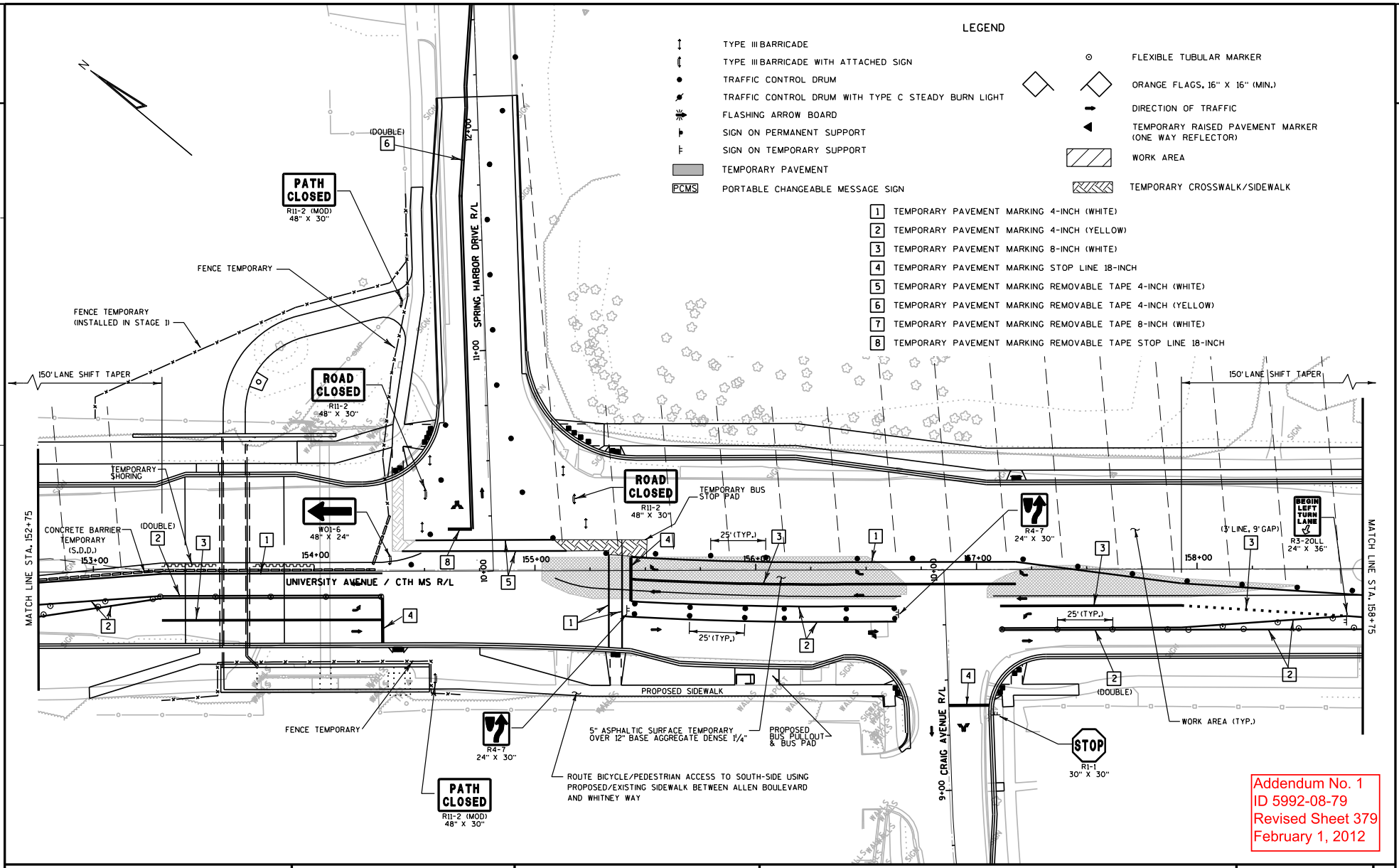
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4A	SHEET 378	E

FILE NAME : G:\Madison\MD2009035\DGN\026412_tc_s4a.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

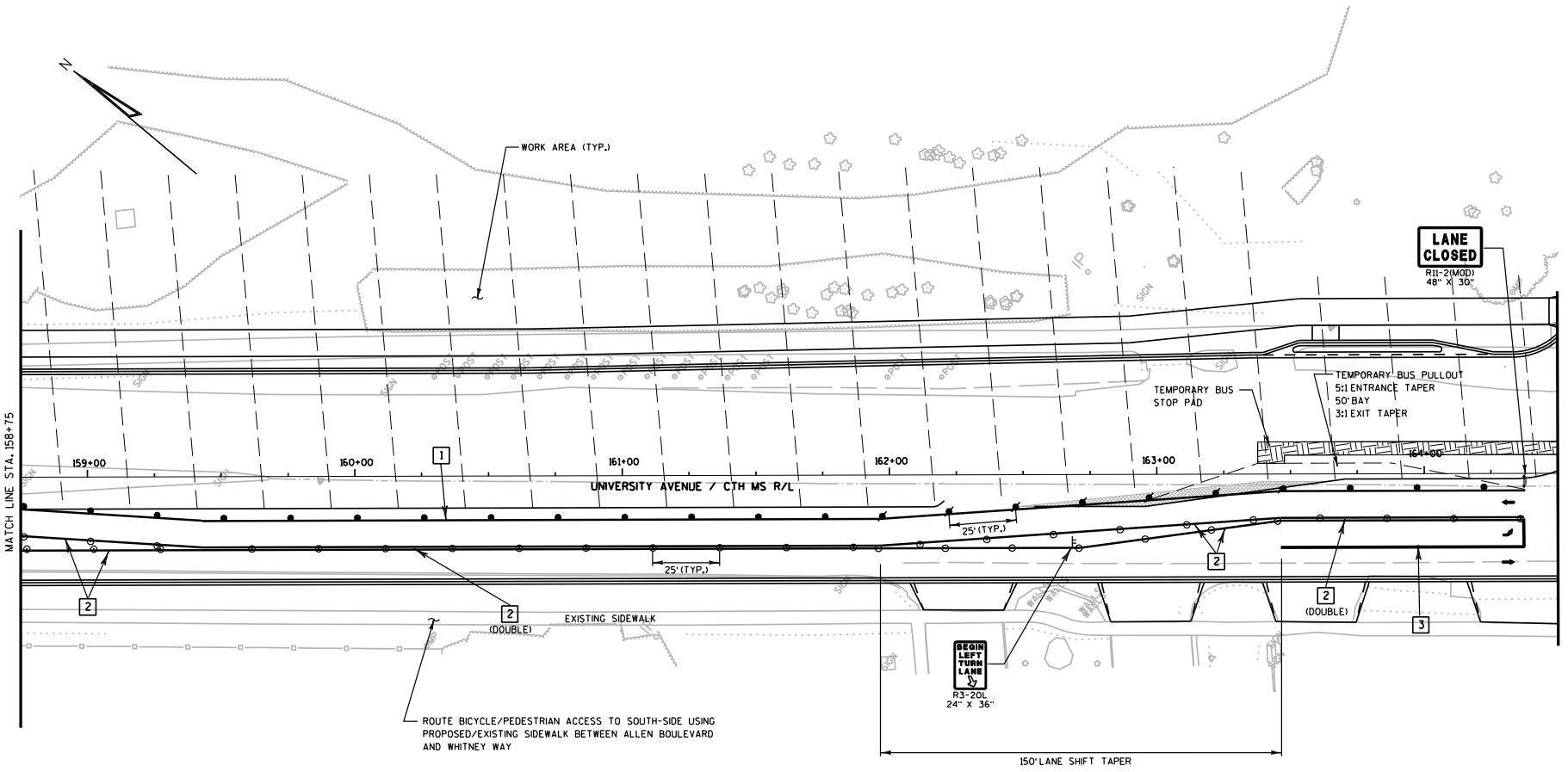
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4B	SHEET 379	E

FILE NAME : G:\Madison\MD2009035\DGN\026412_tc_s4b.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

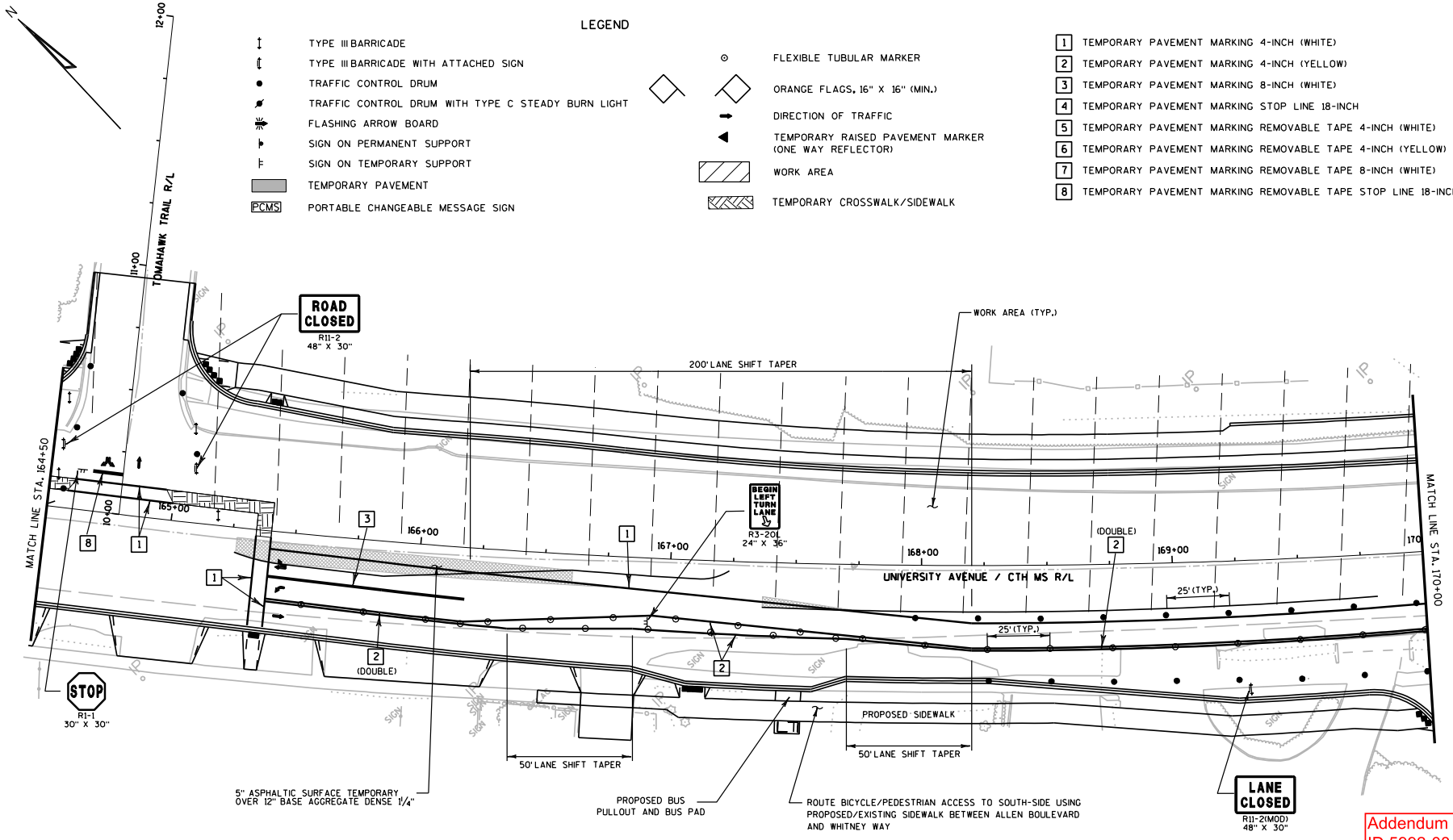
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

Addendum No. 1
ID 5992-08-79
Revised Sheet 380
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 380	E

FILE NAME : G:\Madison\MD2009035\DGN\026413_tc_s4.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

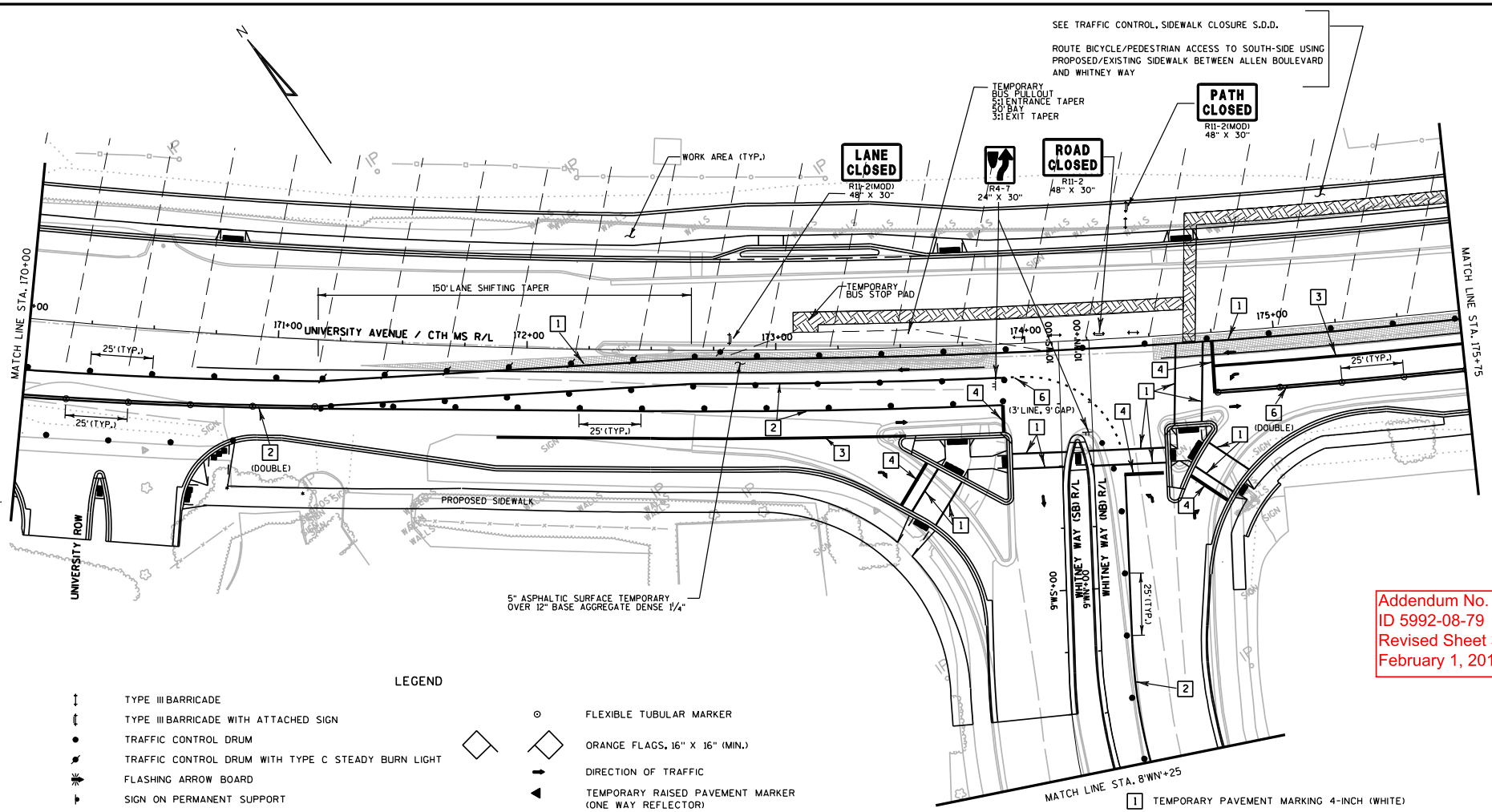


Addendum No. 1
ID 5992-08-79
Revised Sheet 381
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 381	E

FILE NAME : G:\Madison\MD2009035\DGN\026414_tc_s4.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

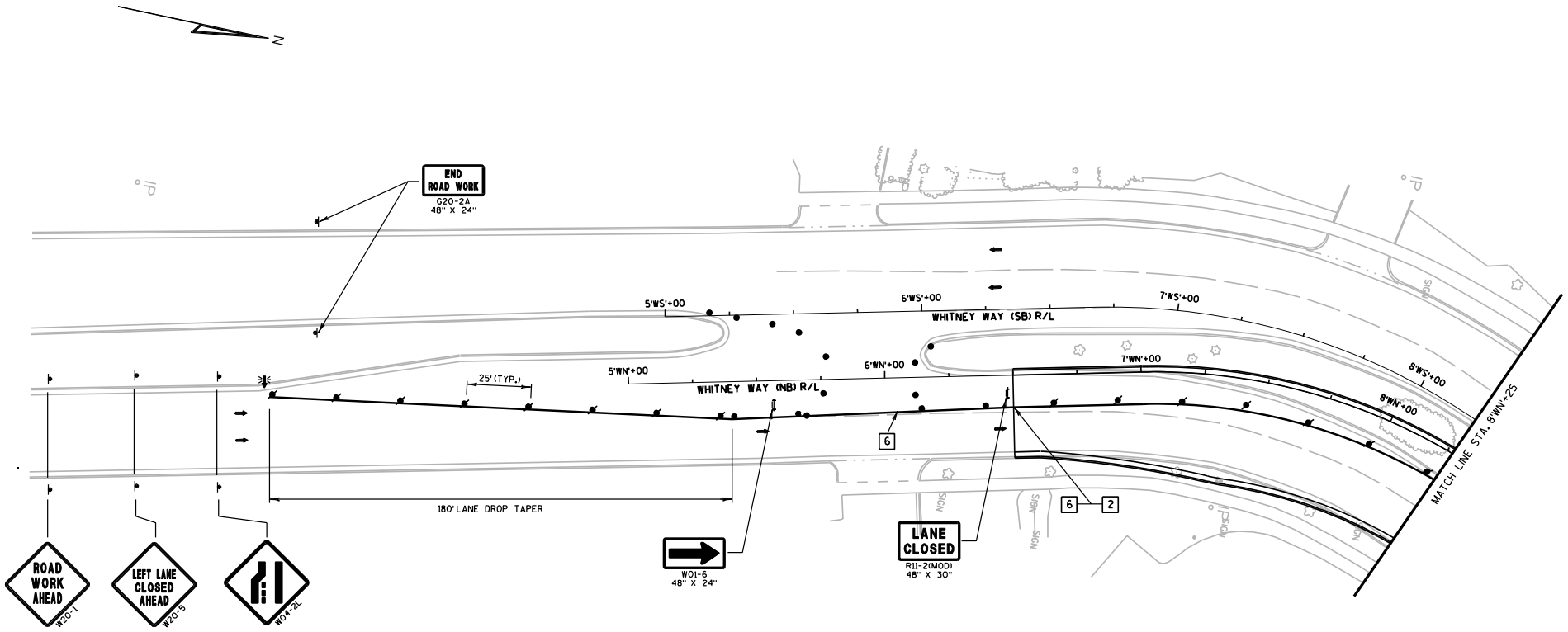
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

Addendum No. 1
ID 5992-08-79
Revised Sheet 382
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 382	E

FILE NAME : G:\Madison\MD2009035\DGN\026415_tc_s4.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

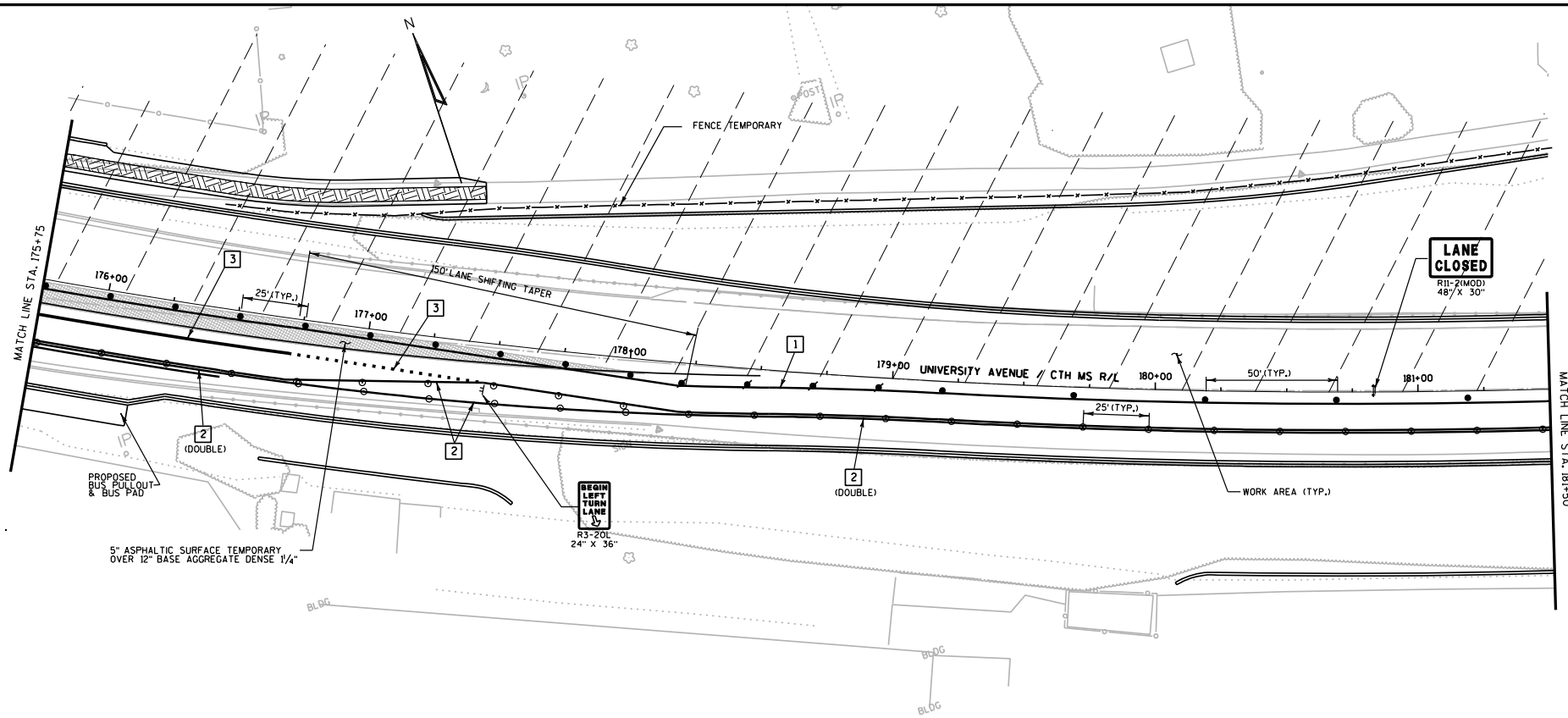
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 383 E

FILE NAME : g:\madison\md2009035\dgn\026416_tc_s4 (whitney).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 384 E

FILE NAME : g:\madison\md2009035\dgn\026417_tc_s4.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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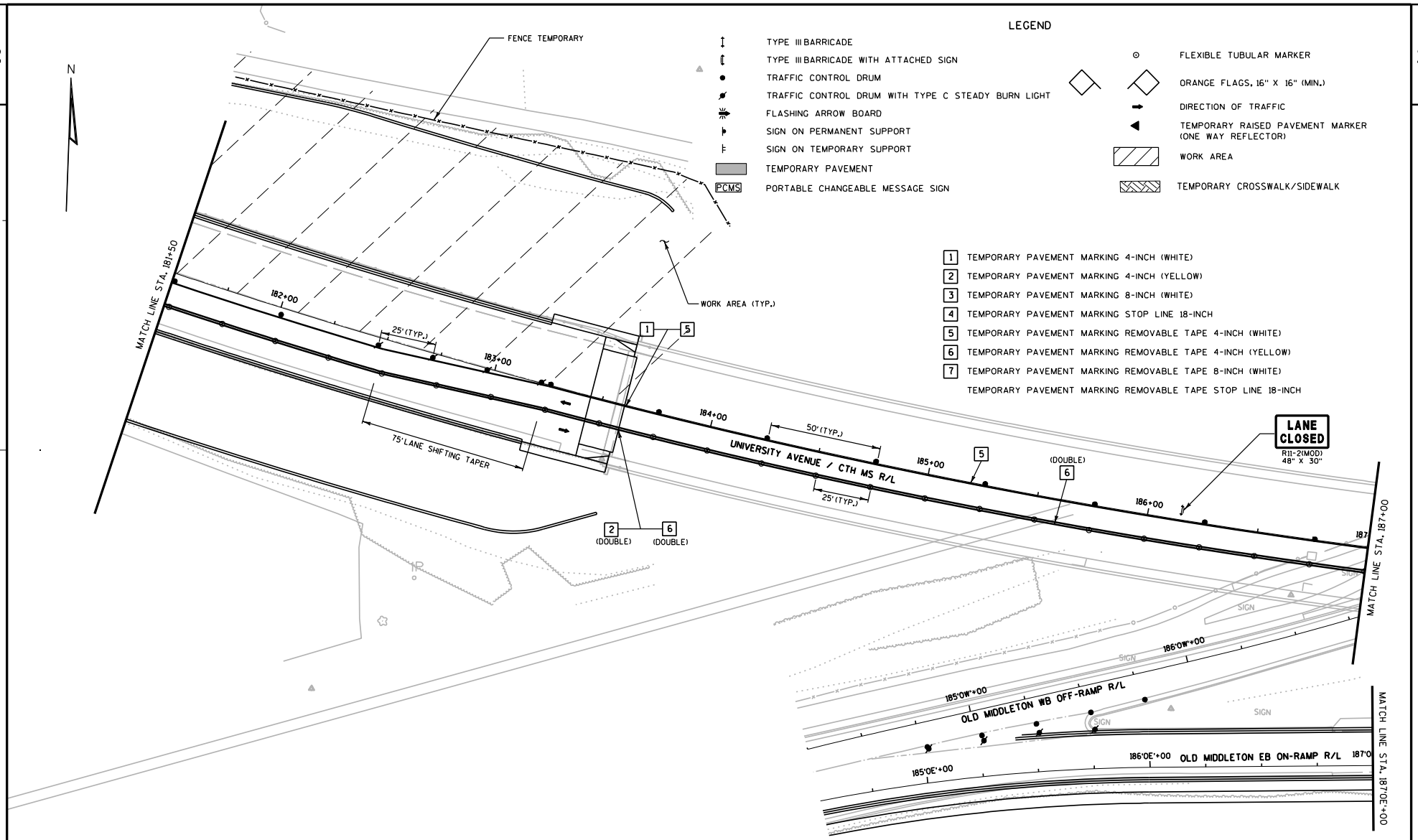

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 385 E

FILE NAME : g:\madison\md2009035\dgn\026418_tc_s4.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

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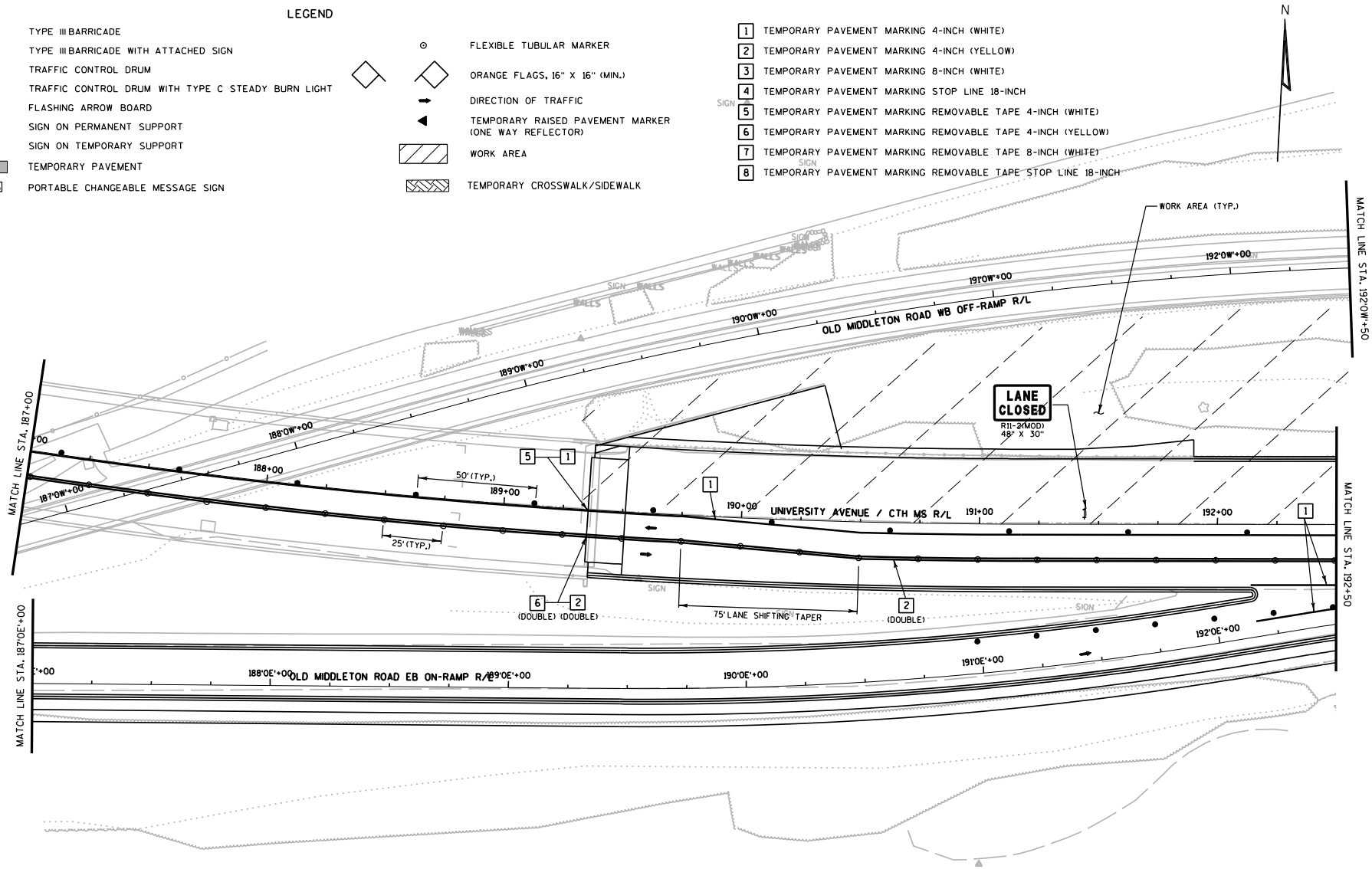
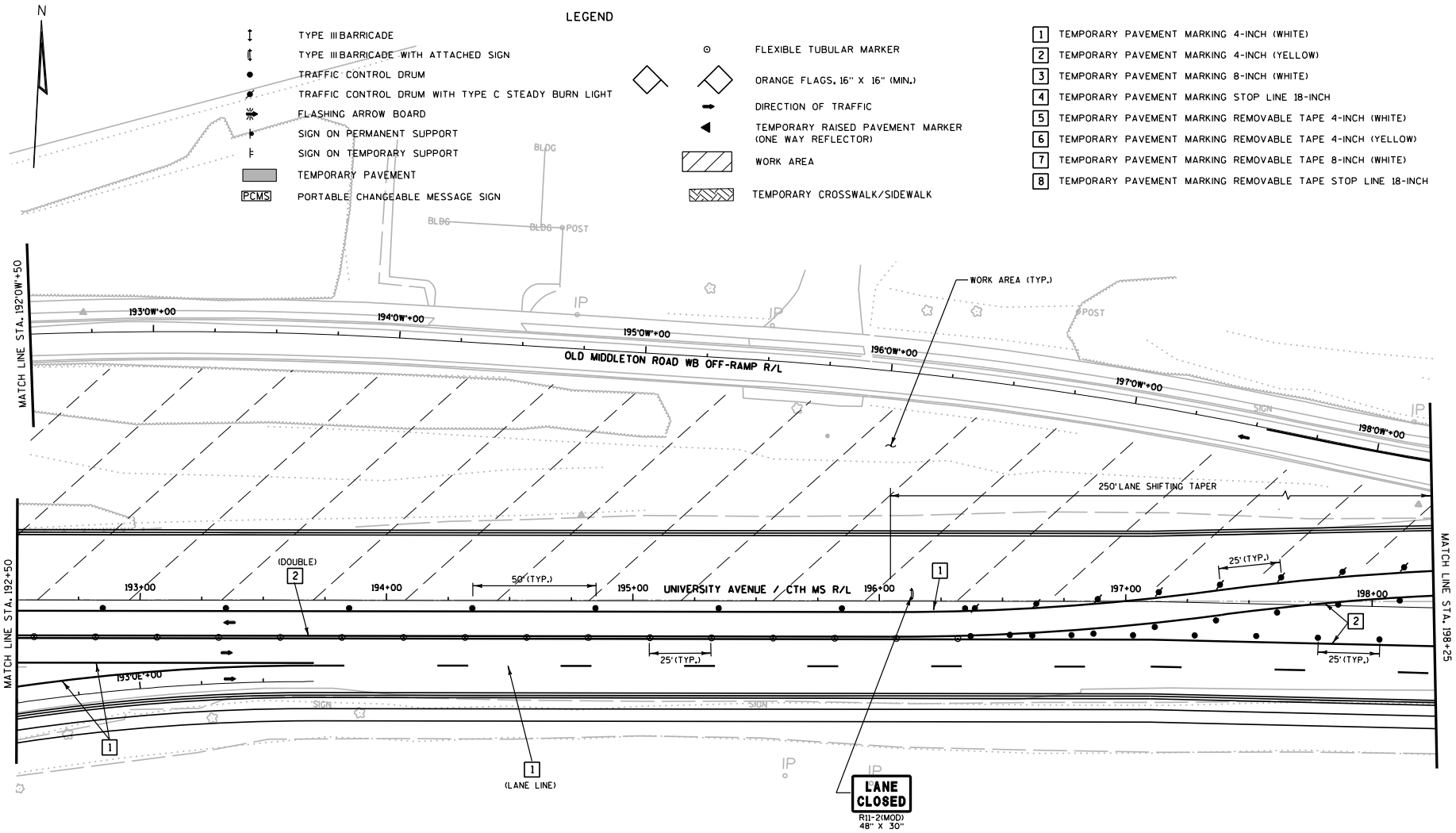
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 386 E

FILE NAME : g:\madison\md2009035\dgn\026420_tc_s4.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

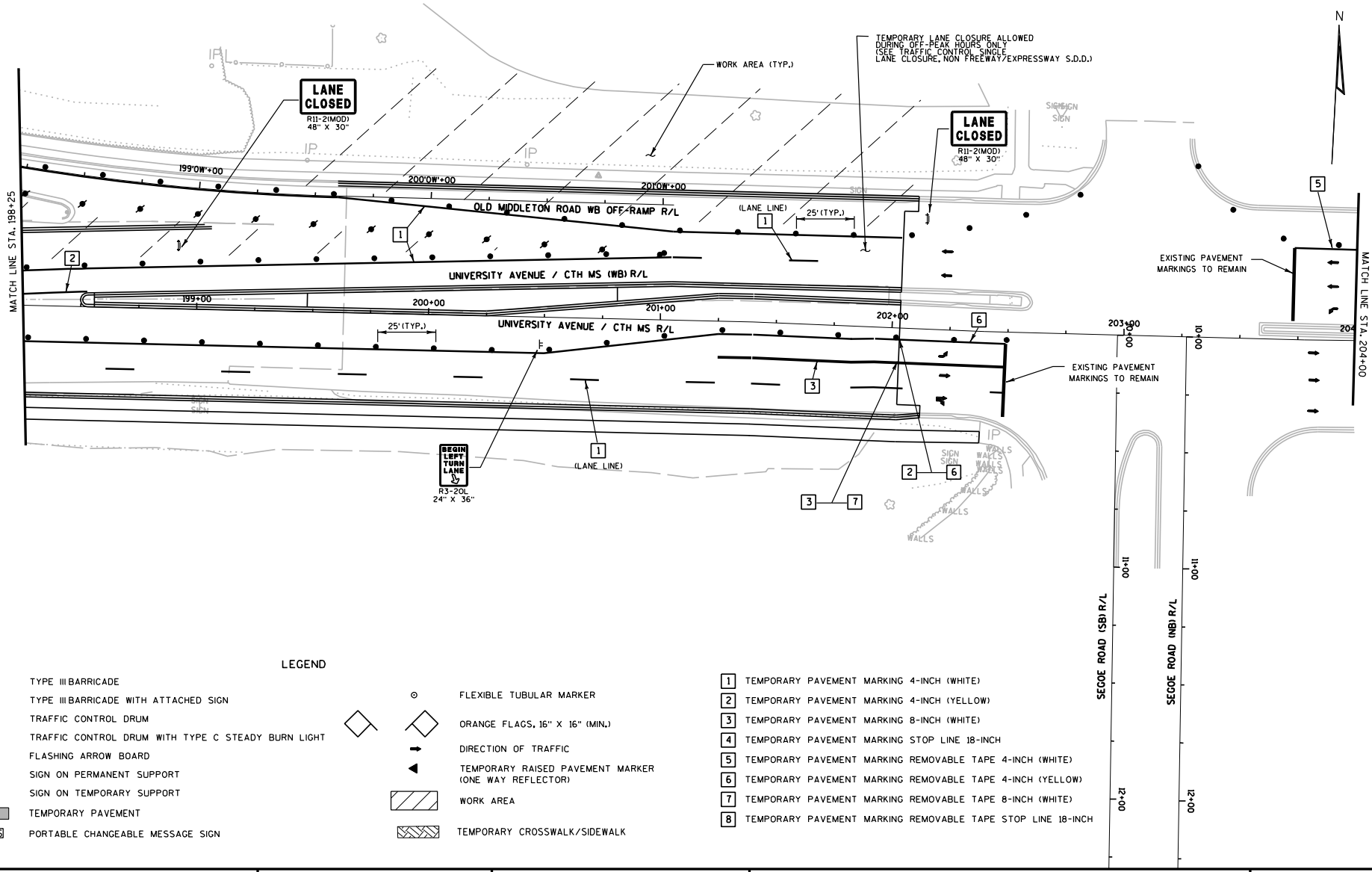
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 387	E

FILE NAME : g:\madison\md2009035\dgn\026421_tc_s4.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

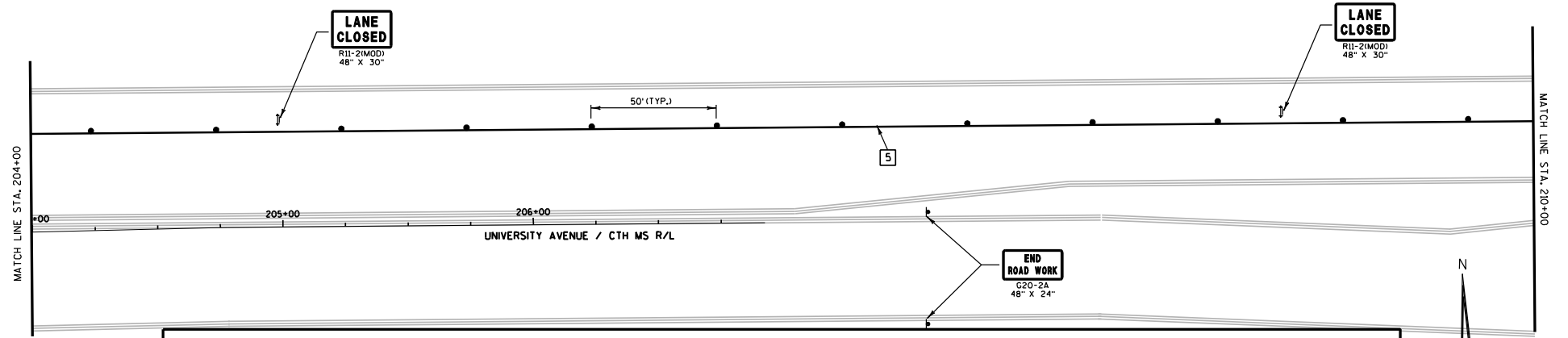
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET 388 E

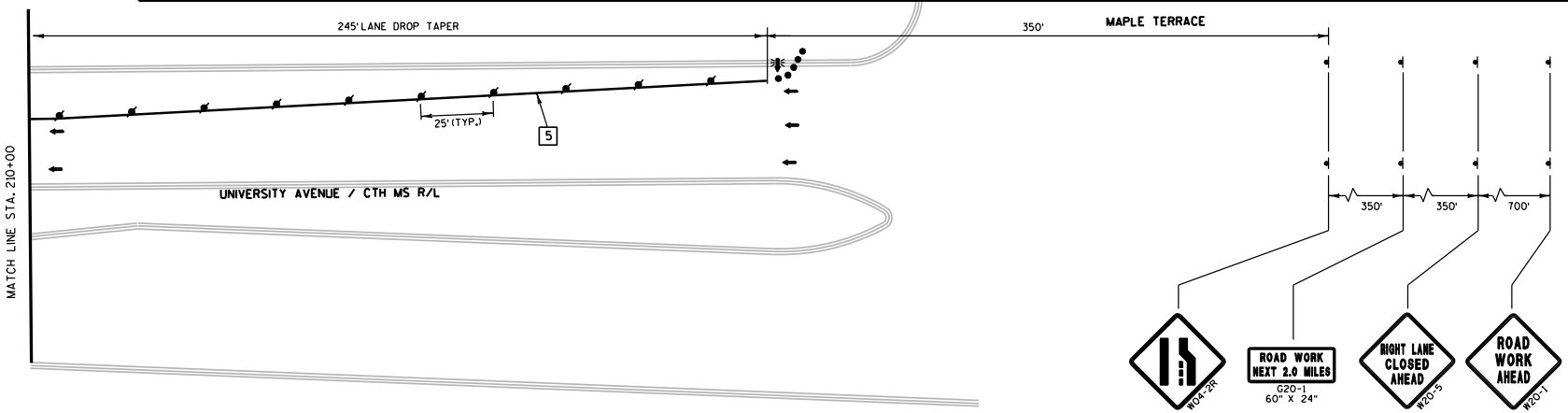
FILE NAME : g:\madison\md2009035\dgn\026422_tc_s4.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

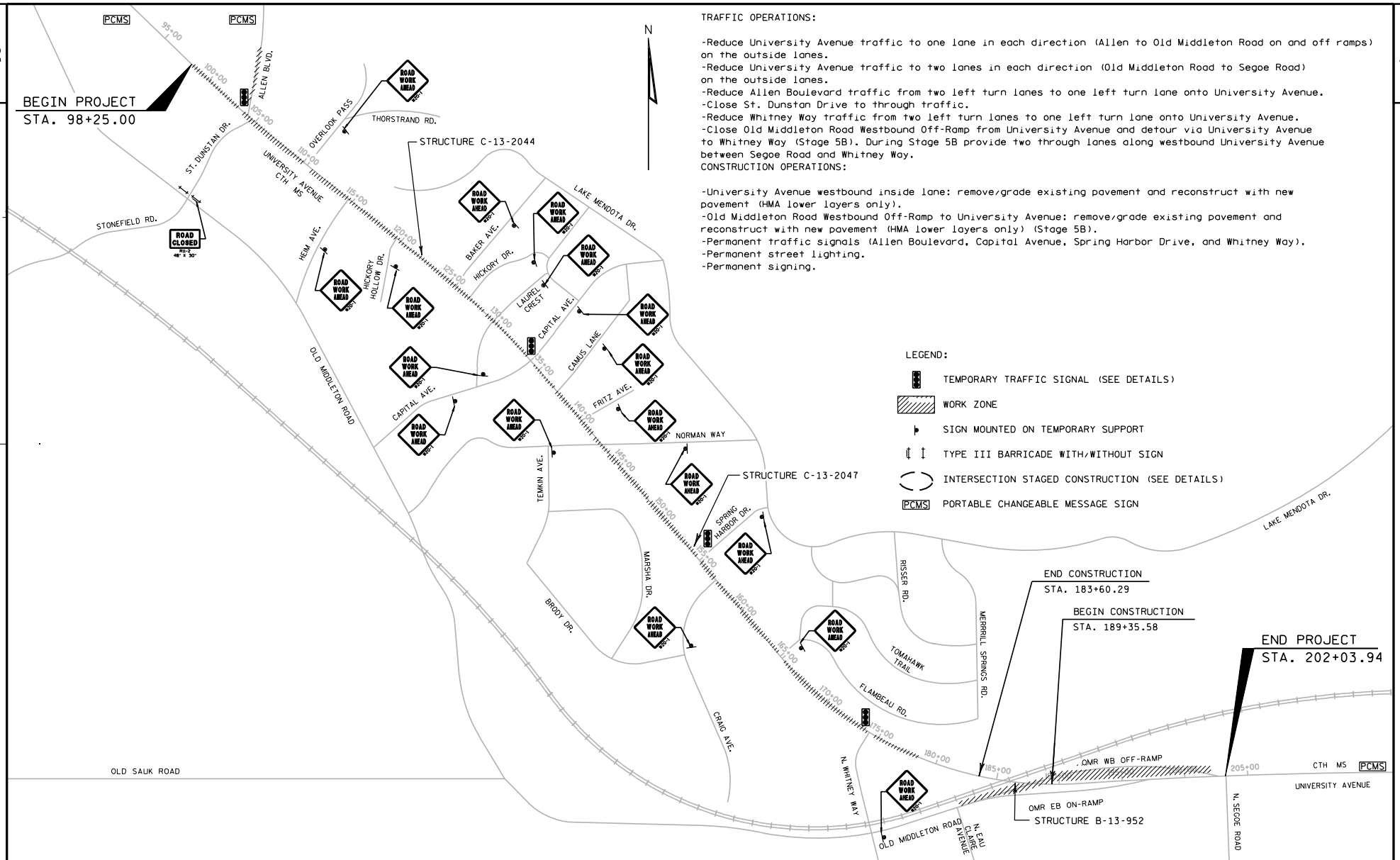
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK
- 1 TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- 2 TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
- 3 TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
- 4 TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
- 5 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
- 6 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- 7 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
- 8 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026423_tc_s4.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



N

TRAFFIC OPERATIONS:

-Reduce University Avenue traffic to one lane in each direction (Allen to Old Middleton Road on and off ramps) on the outside lanes.
-Reduce University Avenue traffic to two lanes in each direction (Old Middleton Road to Segoe Road) on the outside lanes.
-Reduce Allen Boulevard traffic from two left turn lanes to one left turn lane onto University Avenue.
-Close St. Dunstan Drive to through traffic.
-Reduce Whitney Way traffic from two left turn lanes to one left turn lane onto University Avenue.
-Close Old Middleton Road Westbound Off-Ramp from University Avenue and detour via University Avenue to Whitney Way (Stage 5B). During Stage 5B provide two through lanes along westbound University Avenue between Segoe Road and Whitney Way.

CONSTRUCTION OPERATIONS:

-University Avenue westbound inside lane: remove/grade existing pavement and reconstruct with new pavement (HMA lower layers only).
-Old Middleton Road Westbound Off-Ramp to University Avenue: remove/grade existing pavement and reconstruct with new pavement (HMA lower layers only) (Stage 5B).
-Permanent traffic signals (Allen Boulevard, Capital Avenue, Spring Harbor Drive, and Whitney Way).
-Permanent street lighting.
-Permanent signing.

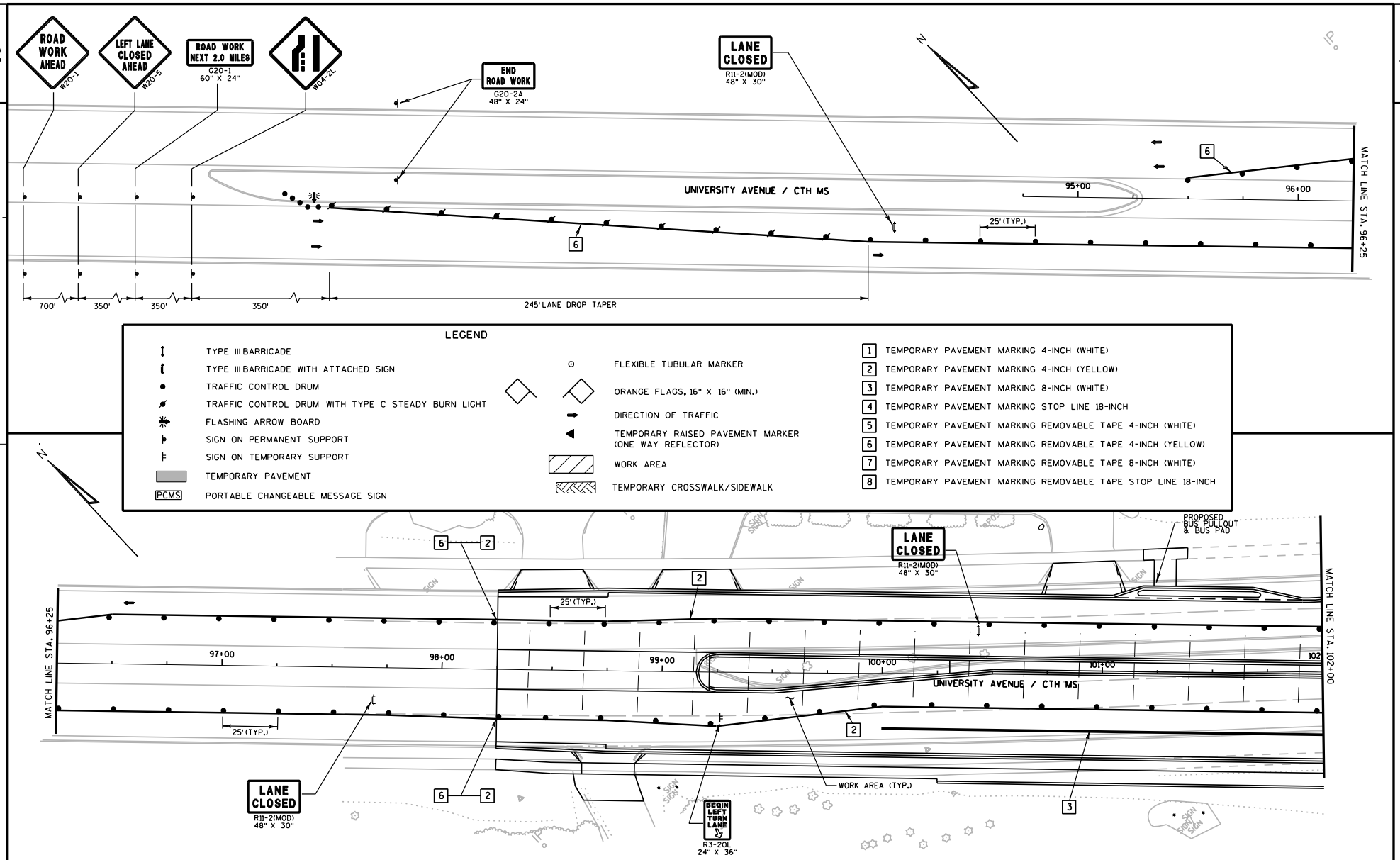
LEGEND:

- TEMPORARY TRAFFIC SIGNAL (SEE DETAILS)
- WORK ZONE
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- INTERSECTION STAGED CONSTRUCTION (SEE DETAILS)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL OVERVIEW (STAGE 5)	SHEET 390 E

FILE NAME : g:\madison\md2009035\dgn\026500_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

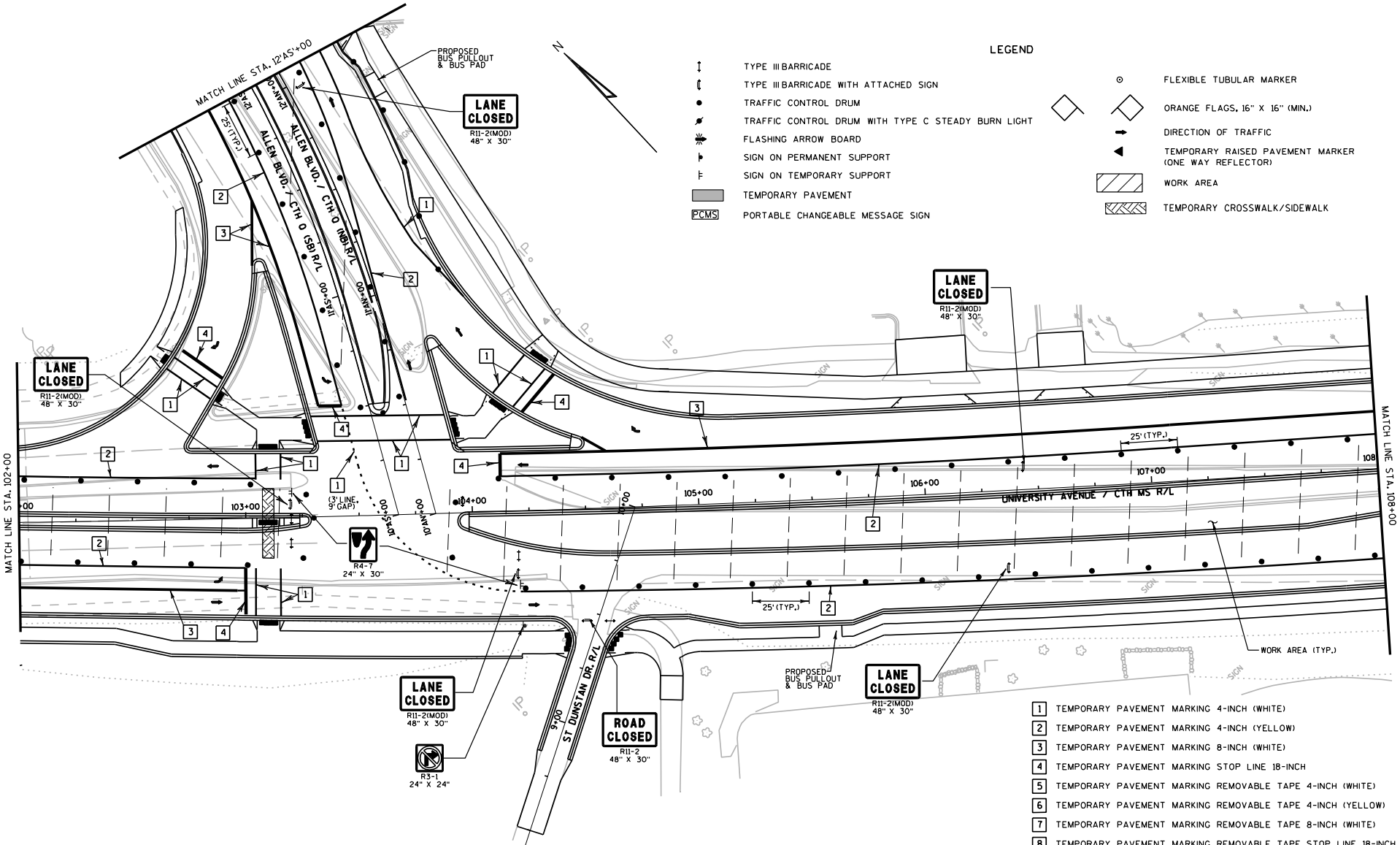
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 391 E

FILE NAME : g:\madison\md2009035\dgn\026501_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

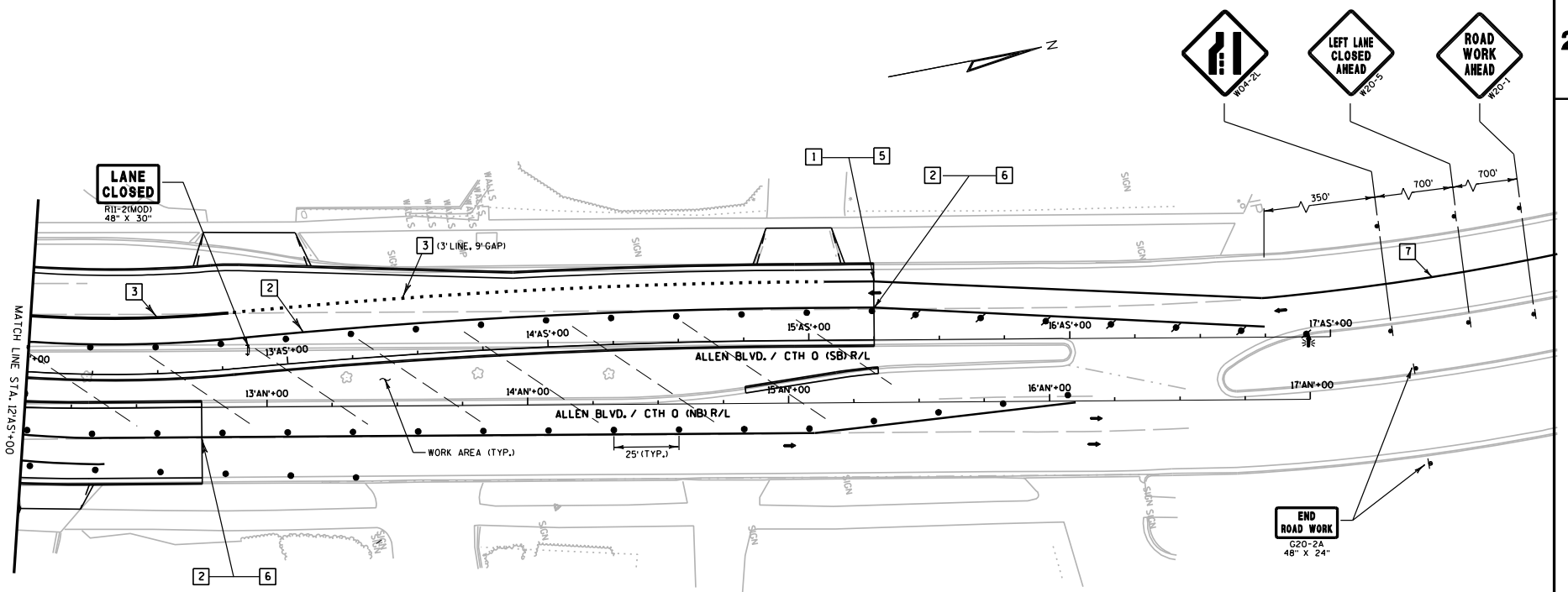
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026502_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

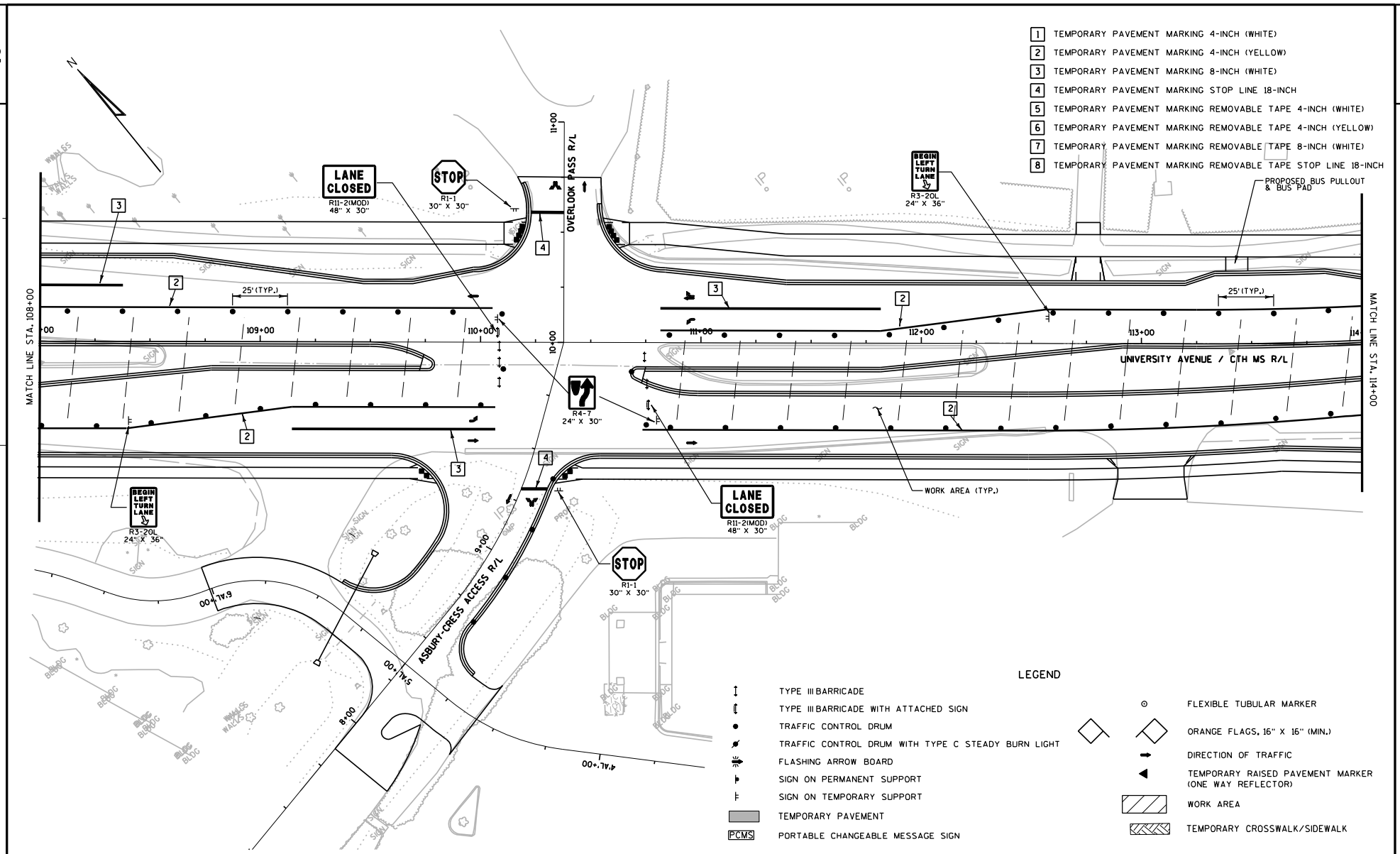


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

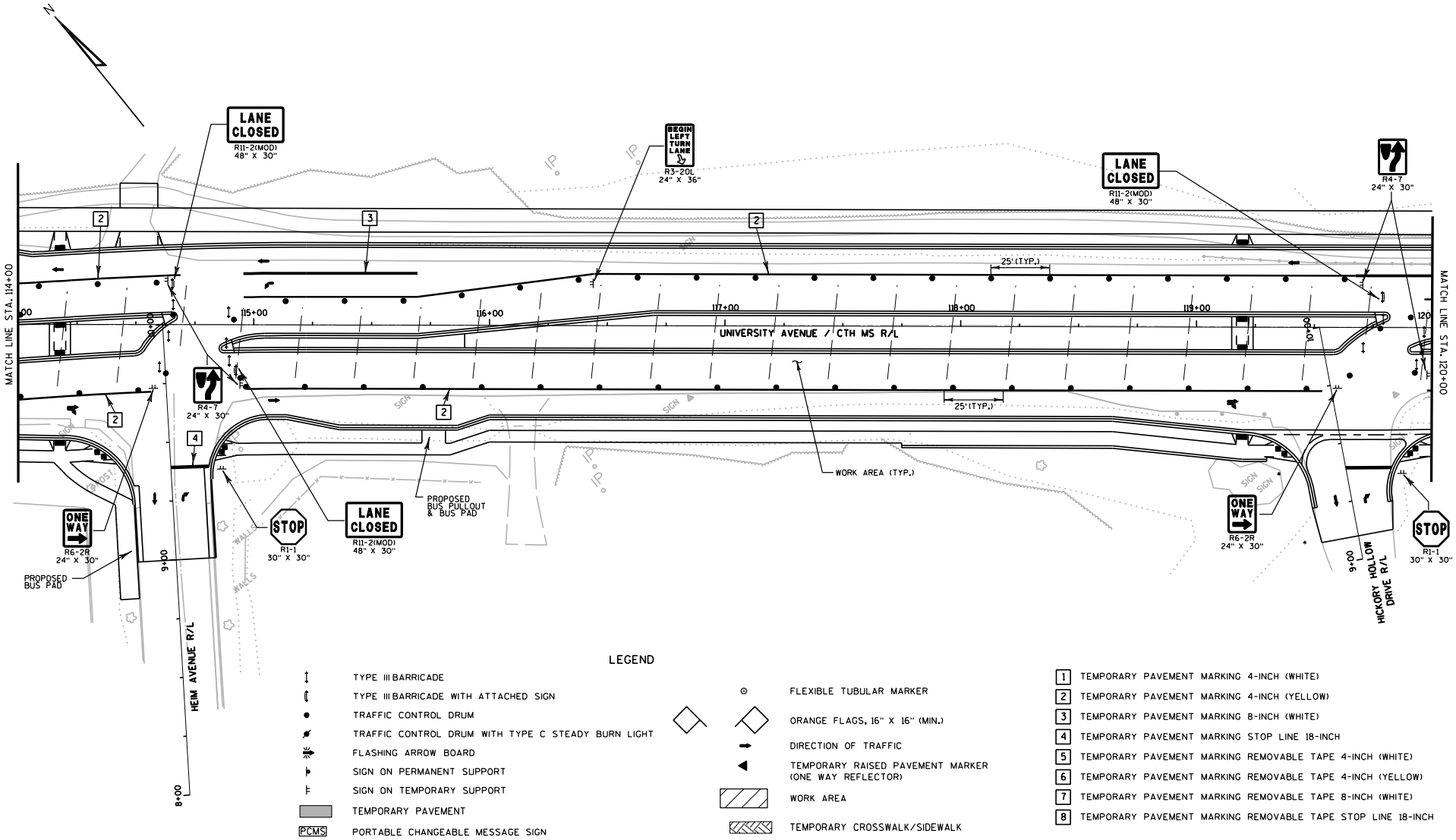
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 393	E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026504_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 395 E

FILE NAME : g:\madison\md2009035\dgn\026505_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

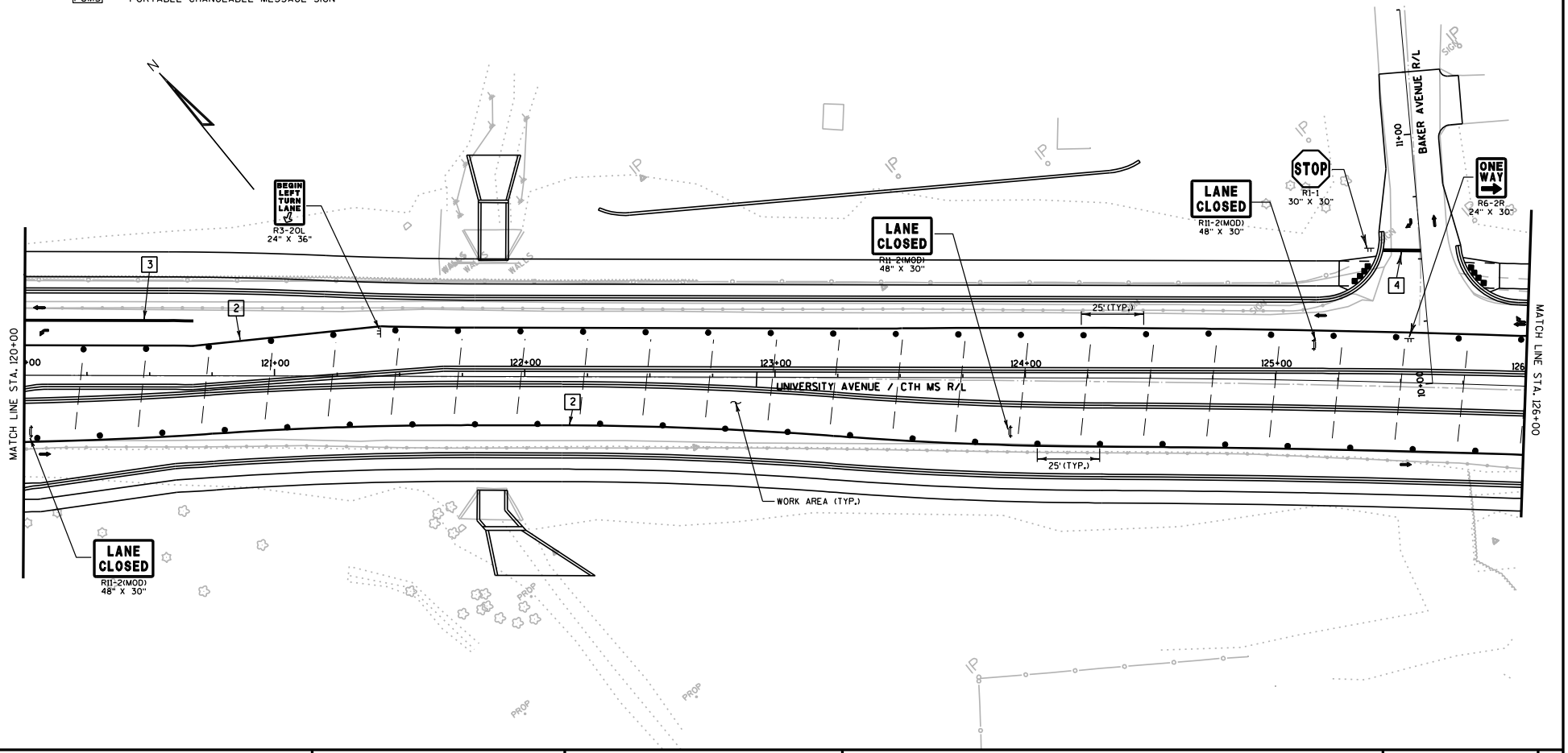
WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

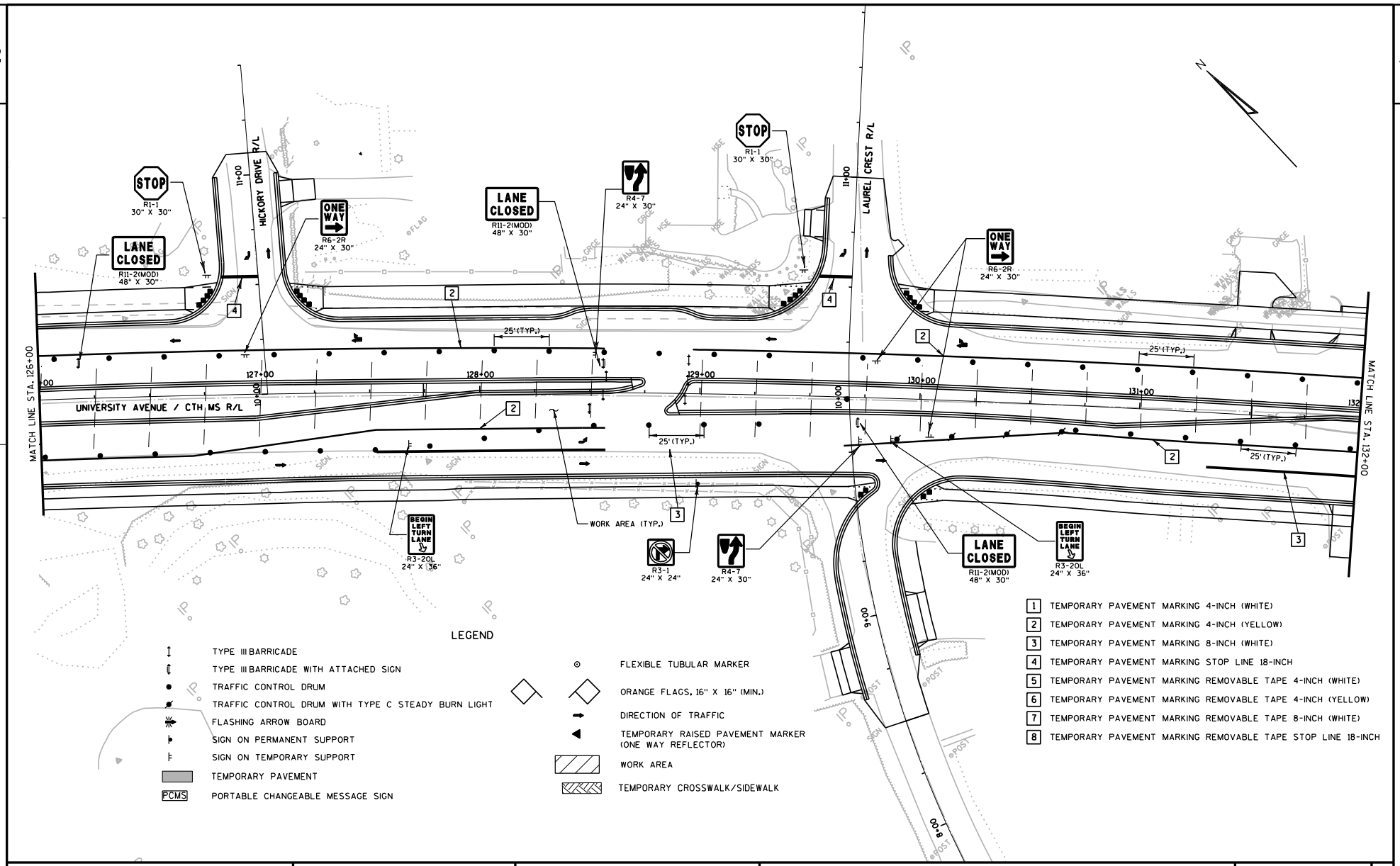
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 396 E

FILE NAME : g:\madison\md2009035\dgn\026506_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

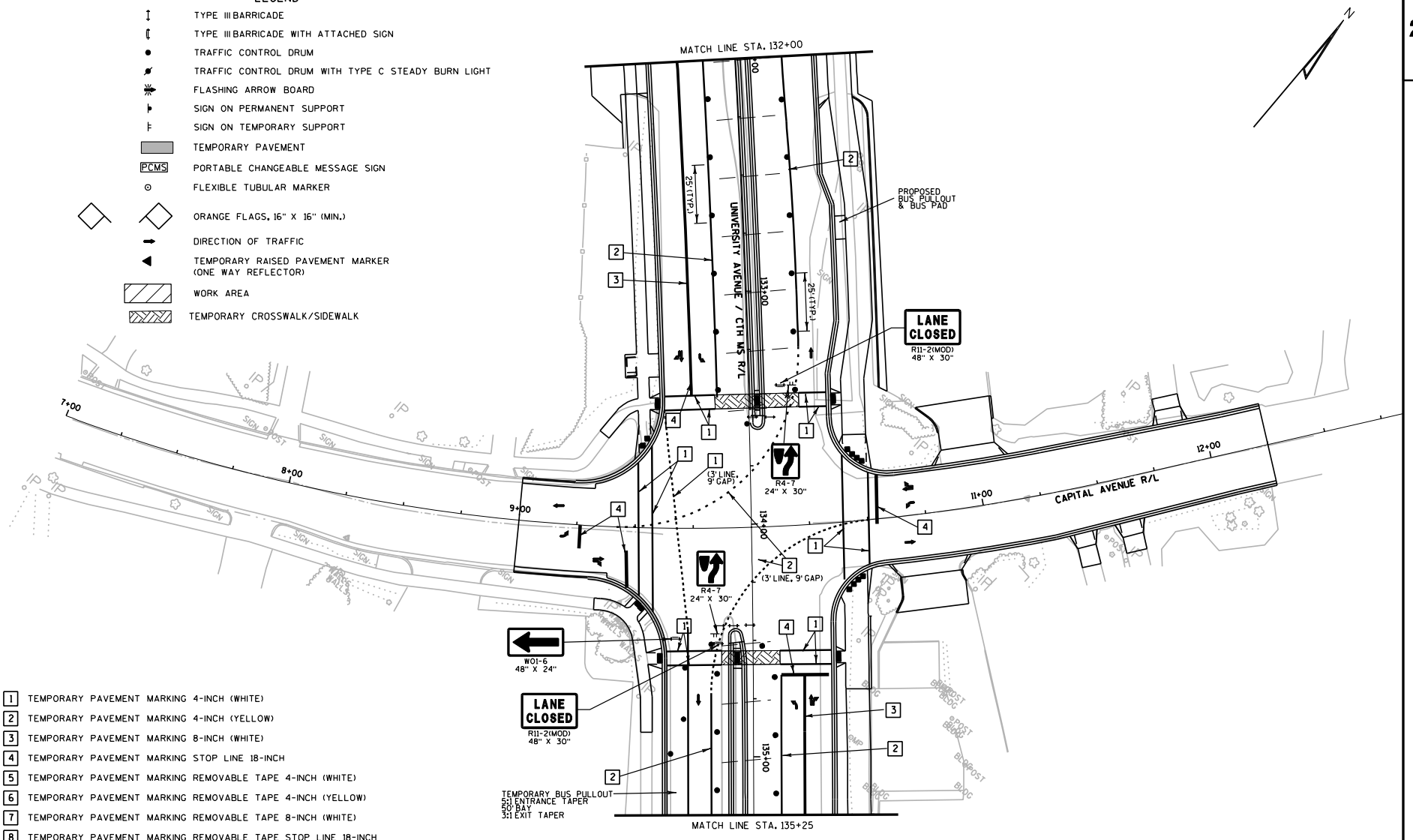
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026507_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

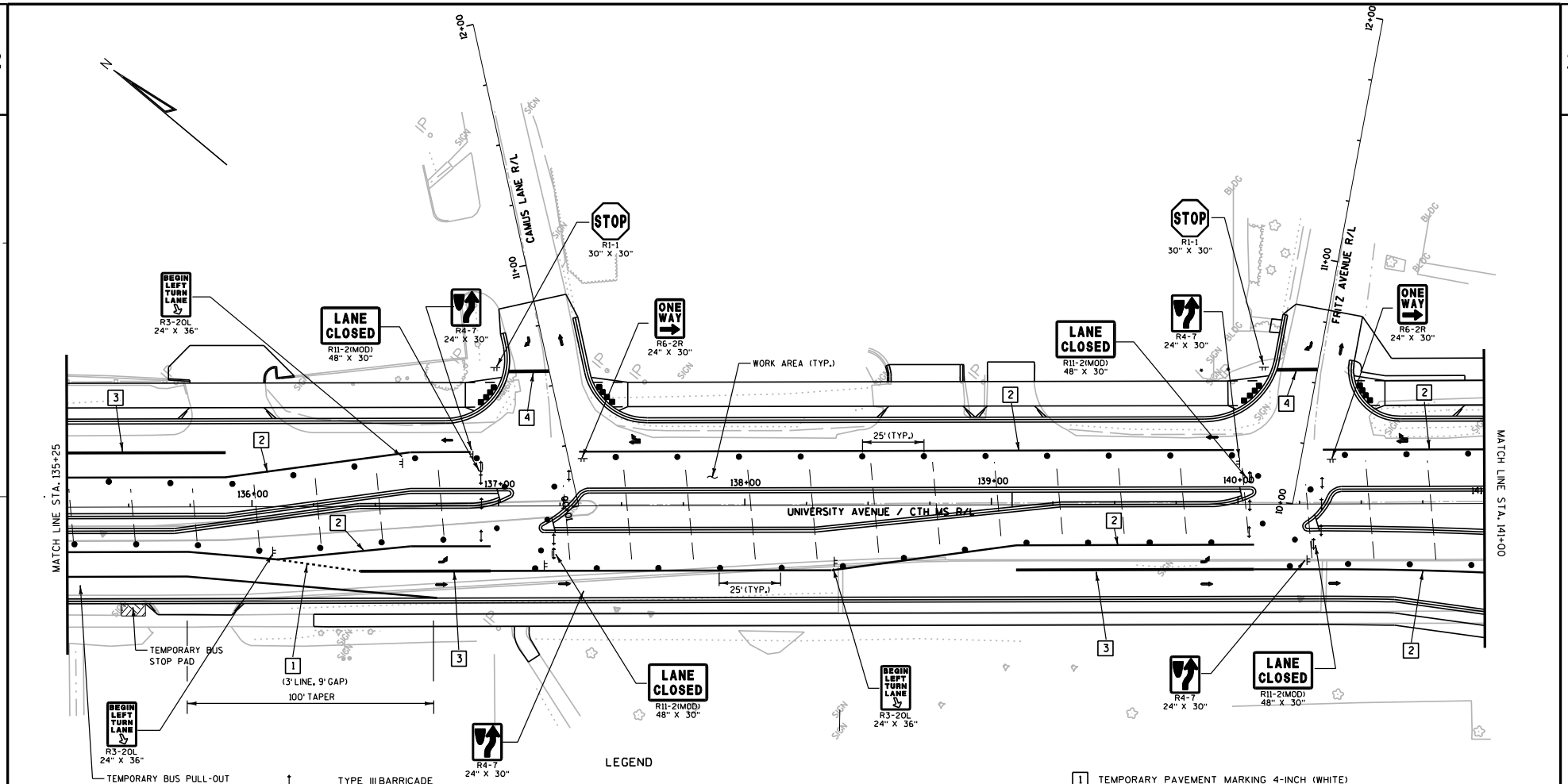
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026508_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

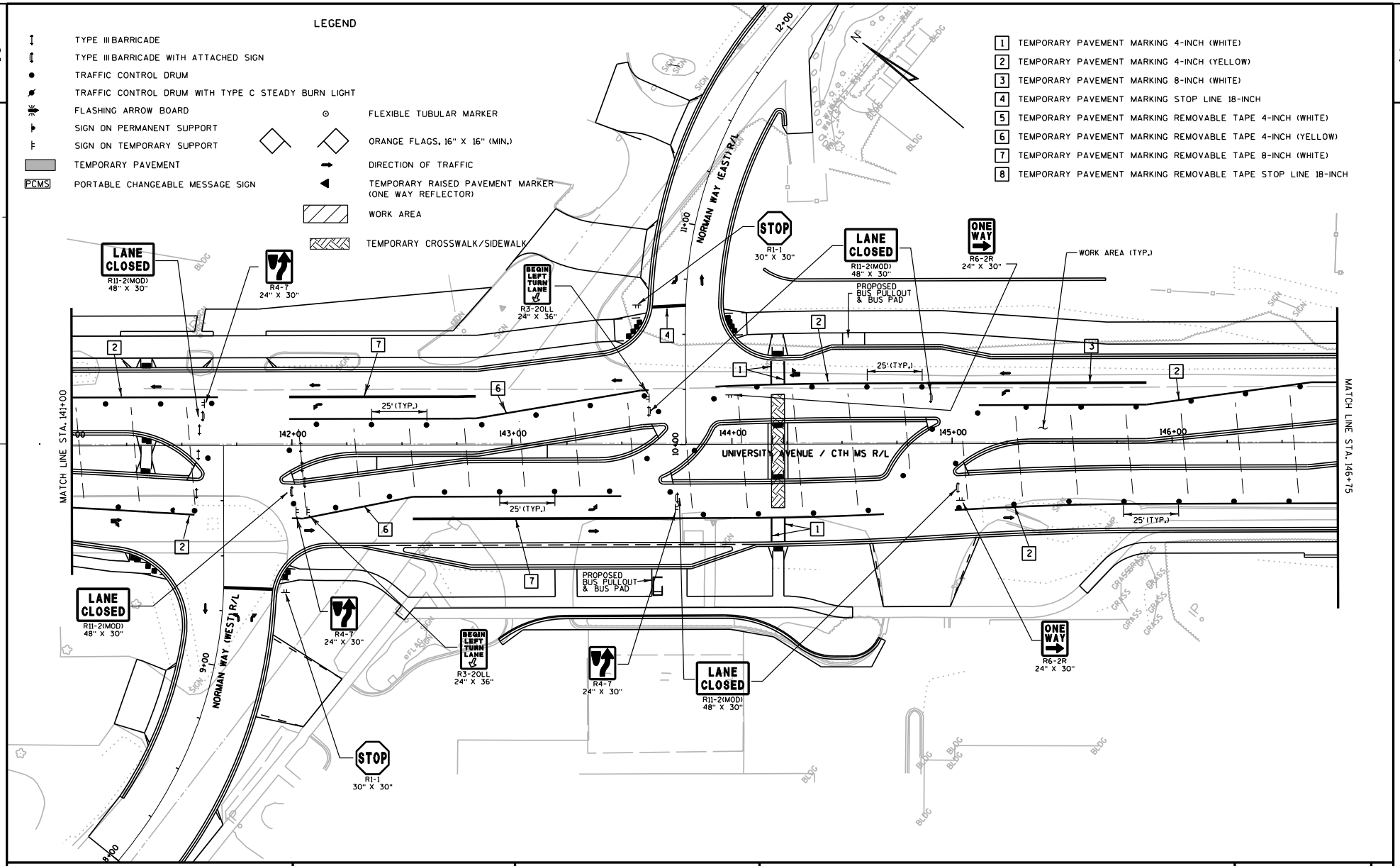
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 399 E

FILE NAME : G:\Madison\MD2009035\DGN\026509_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

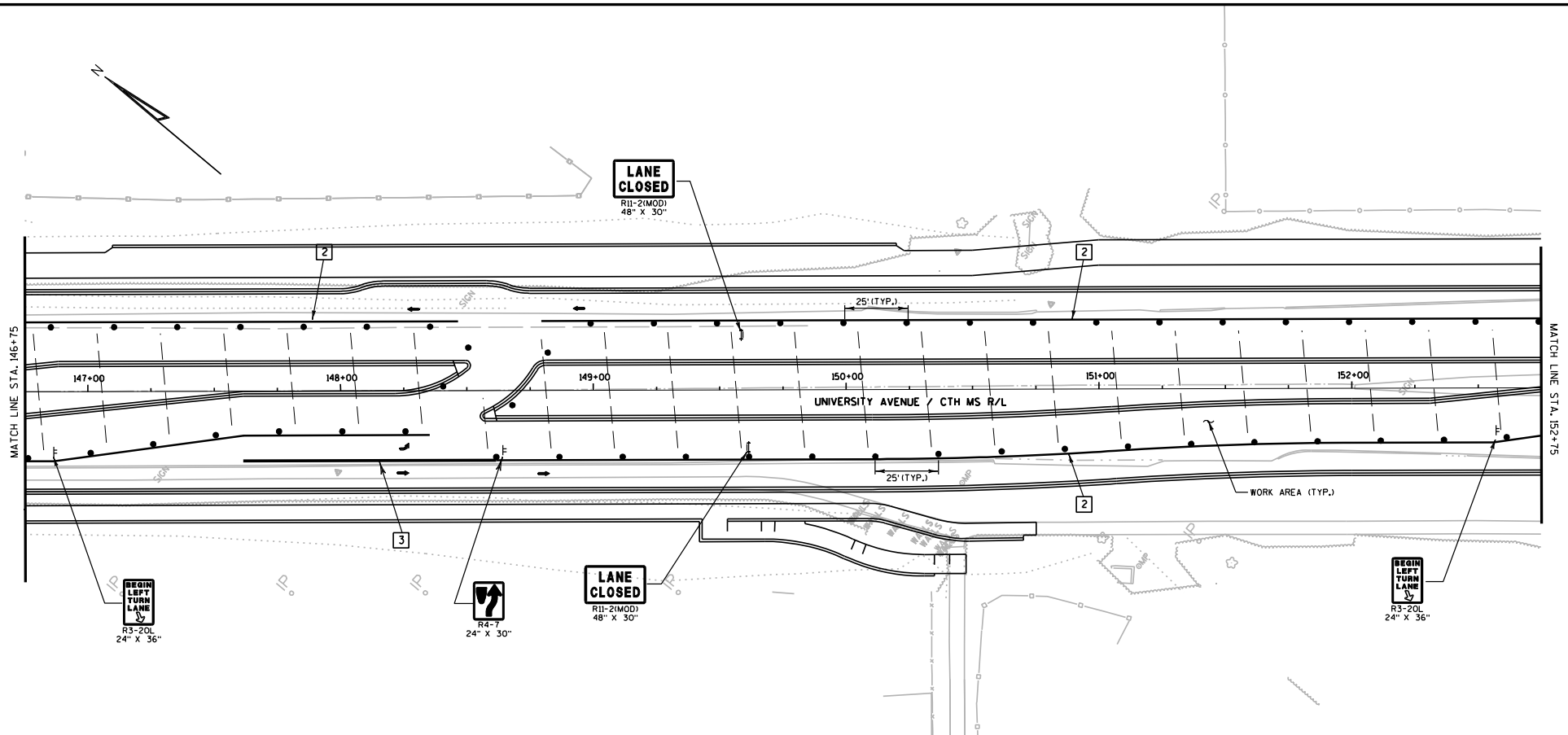
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 400	E

FILE NAME : g:\madison\md2009035\dgn\026510_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

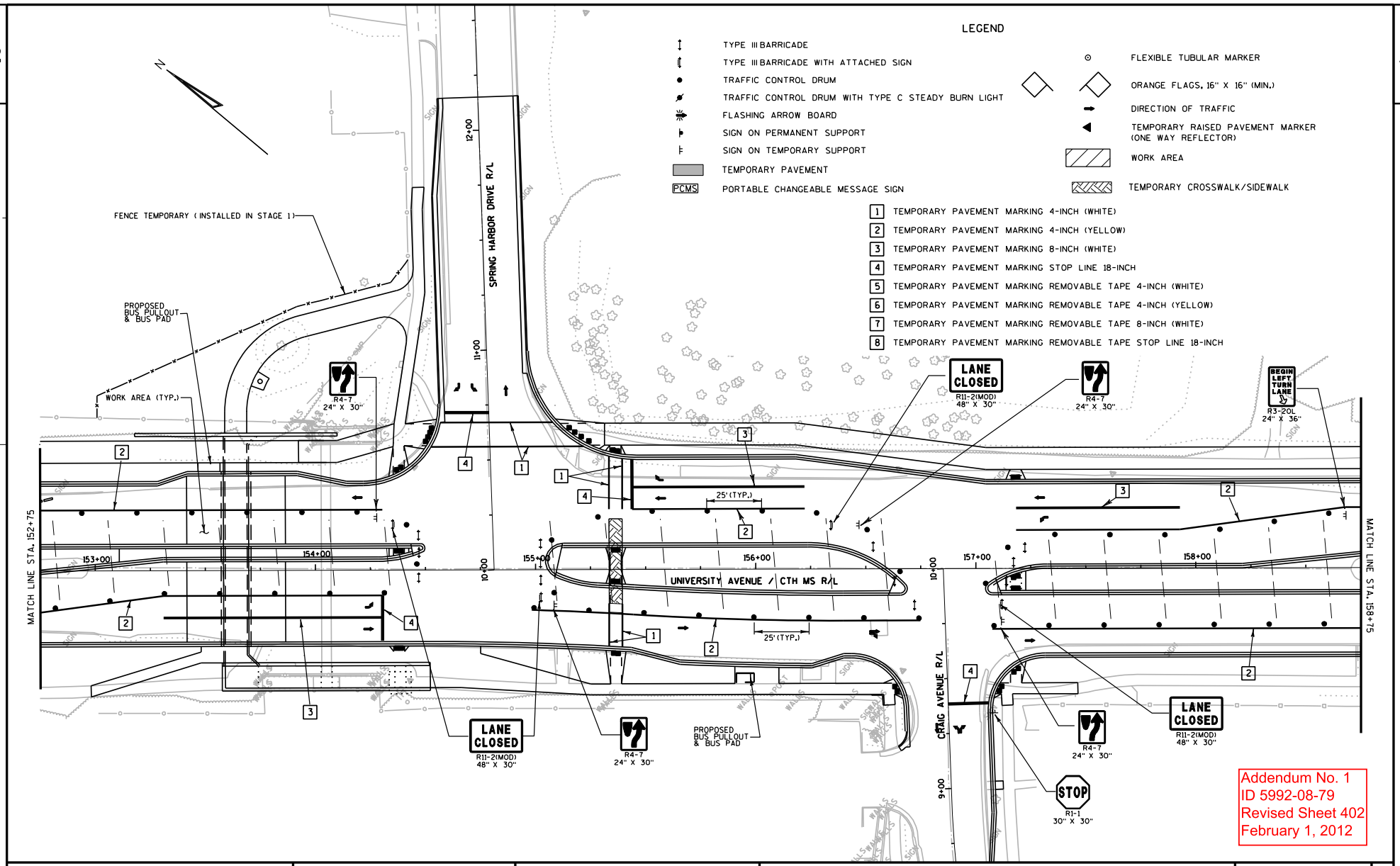
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 401 E

FILE NAME : g:\madison\md2009035\dgn\026511_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

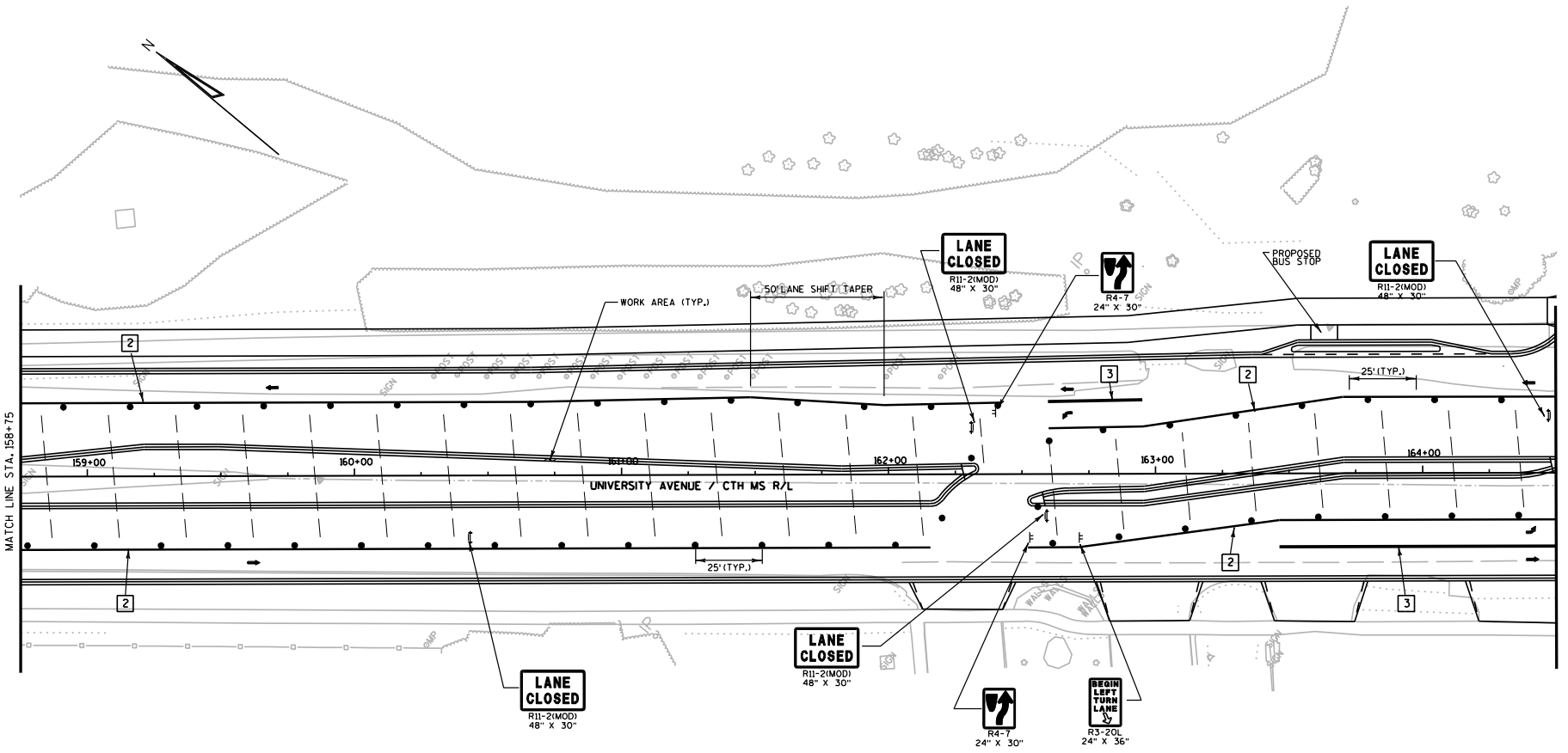


Addendum No. 1
ID 5992-08-79
Revised Sheet 402
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 402	E

FILE NAME : G:\Madison\MD2009035\DGN\026512_tc_s5.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

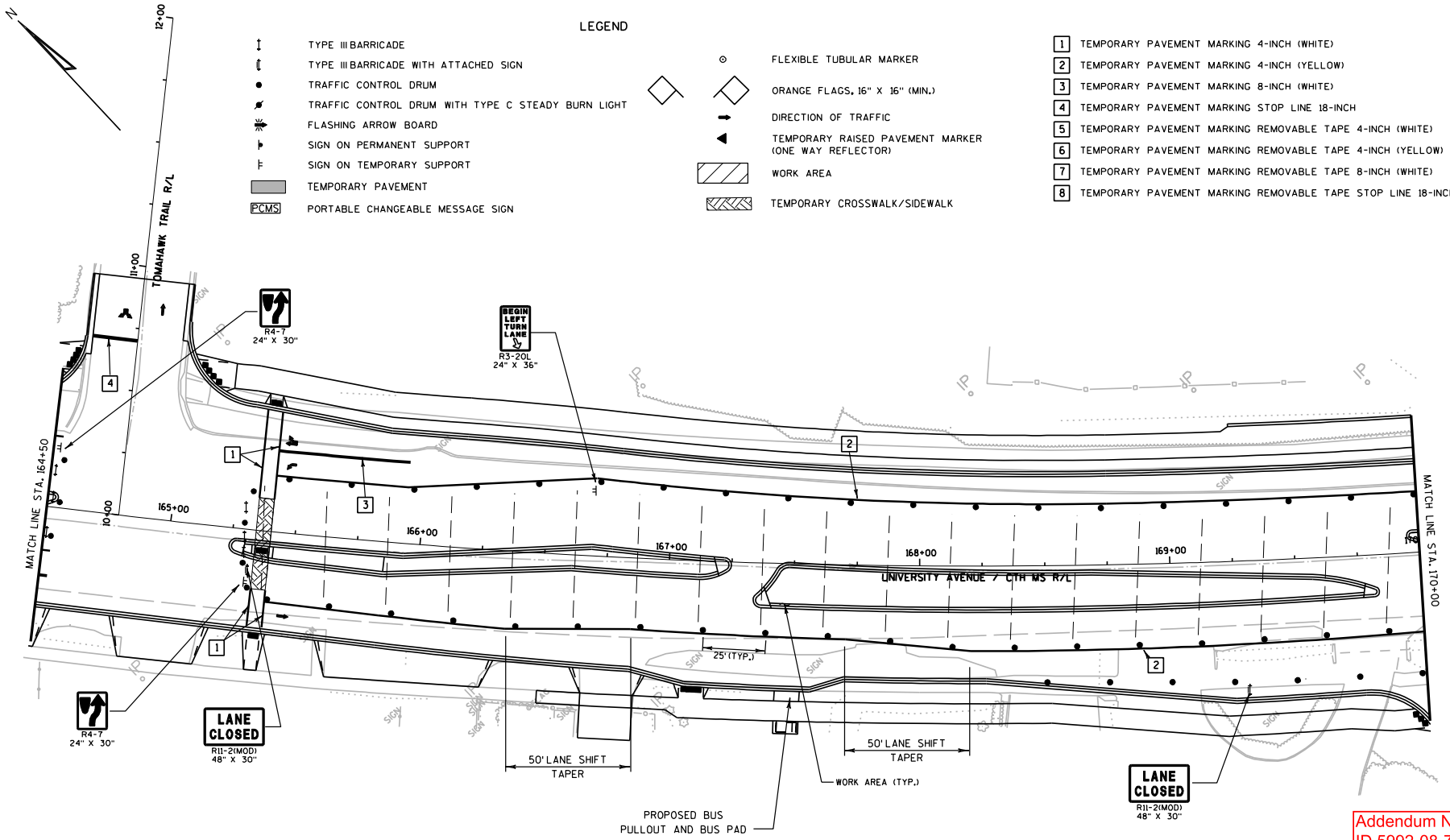
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

Addendum No. 1
ID 5992-08-79
Revised Sheet 403
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 403	E

FILE NAME : G:\Madison\MD2009035\DGN\026513_tc_s5.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

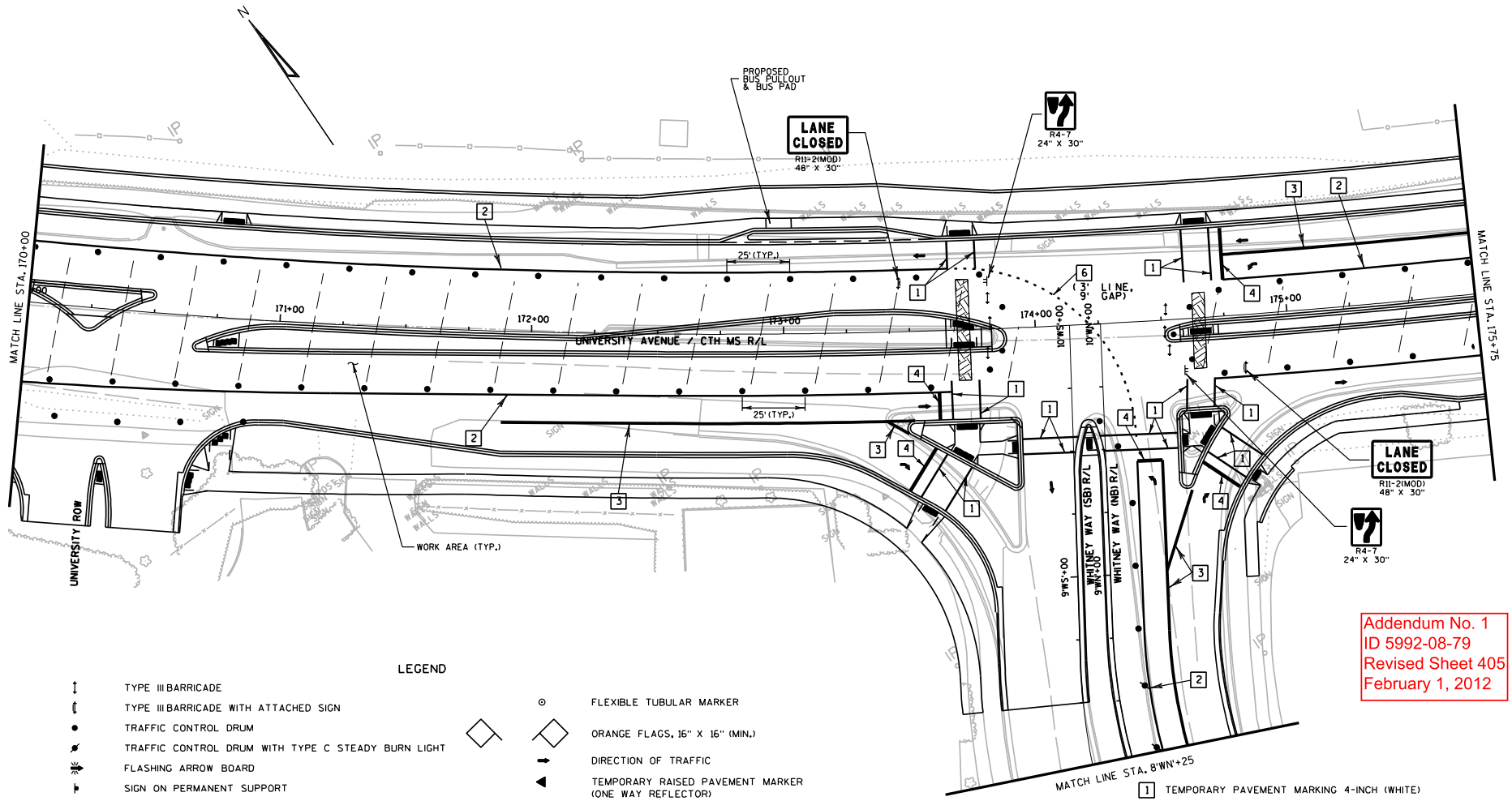


Addendum No. 1
ID 5992-08-79
Revised Sheet 404
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 404	E

FILE NAME : G:\Madison\MD2009035\DGN\026514_tc_s5.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

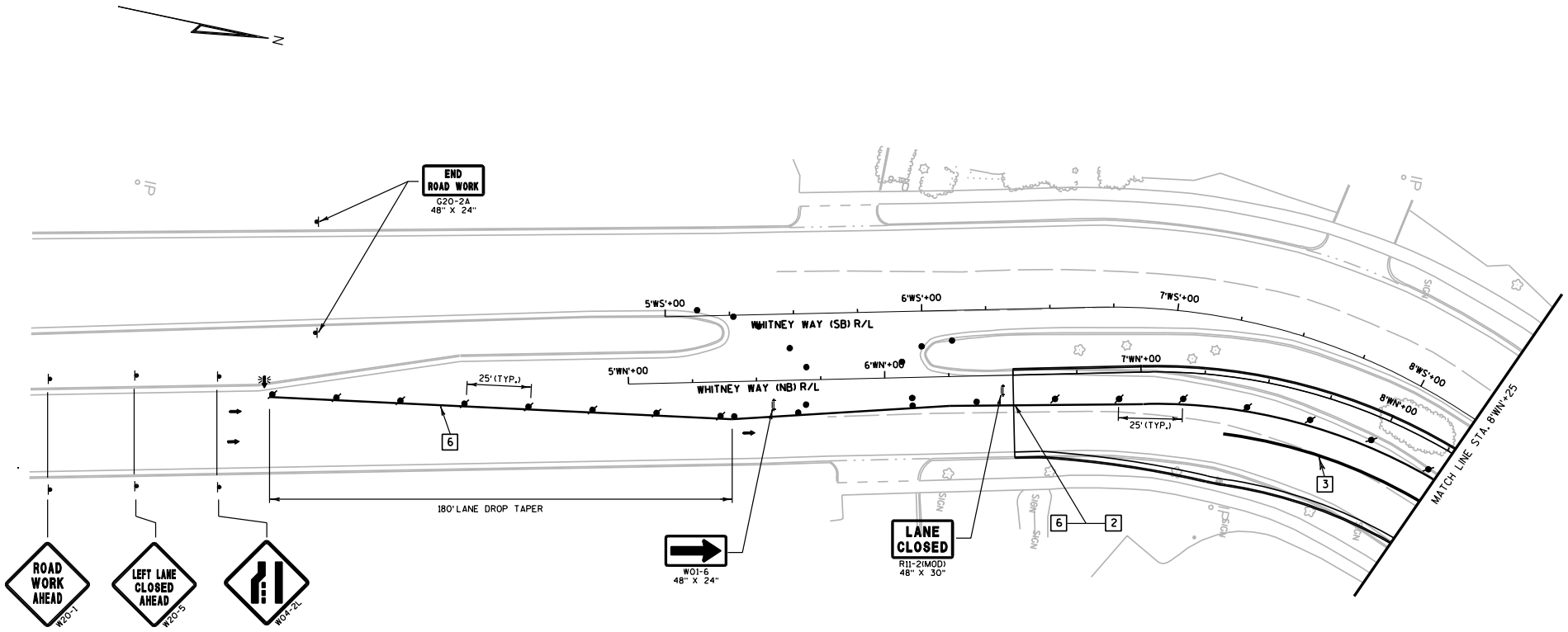
1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

Addendum No. 1
ID 5992-08-79
Revised Sheet 405
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5A & 5B	SHEET 405	E

FILE NAME : G:\Madison\MD2009035\DGN\026515_tc_s5.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

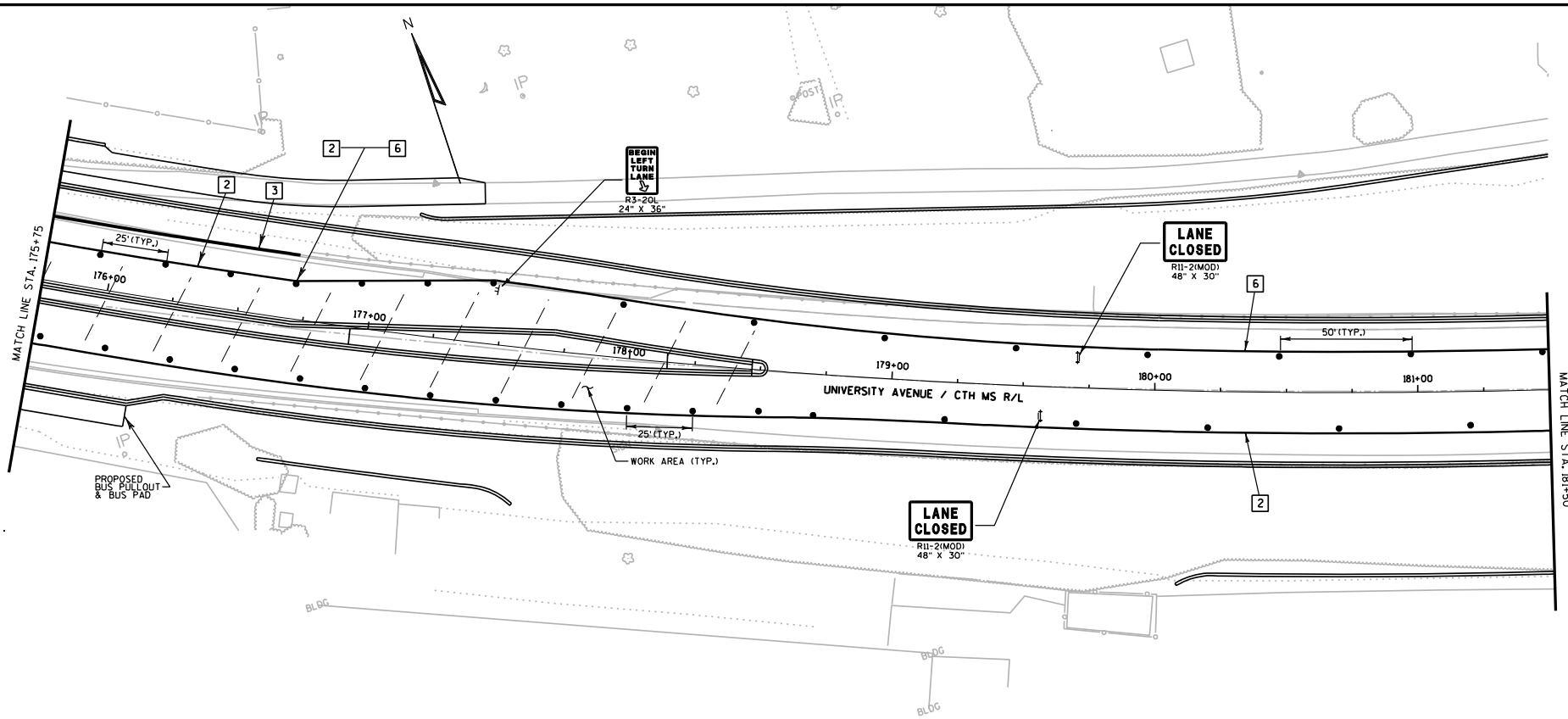
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET 406 E

FILE NAME : g:\madison\md2009035\dgn\026516_tc_s5 (whitney).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

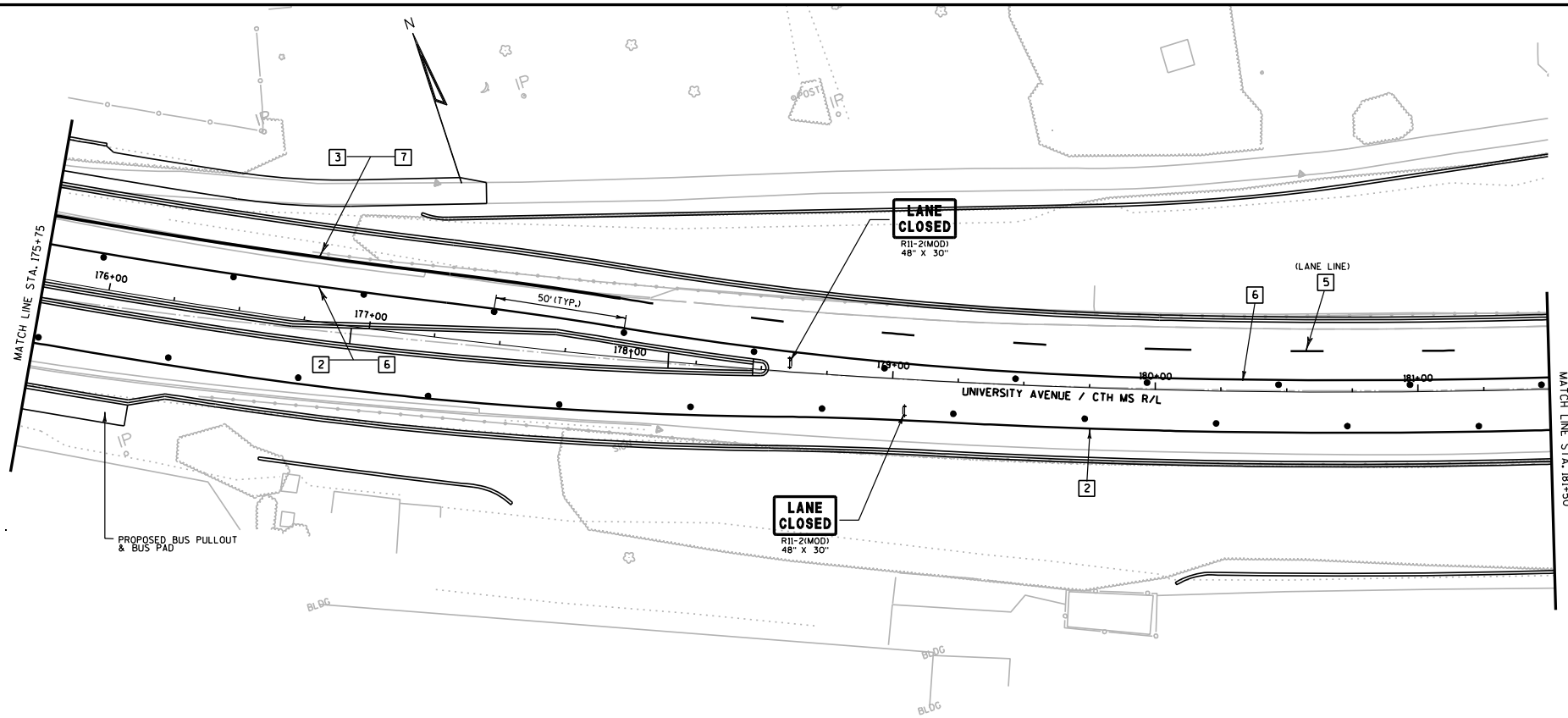


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5A	SHEET 407 E

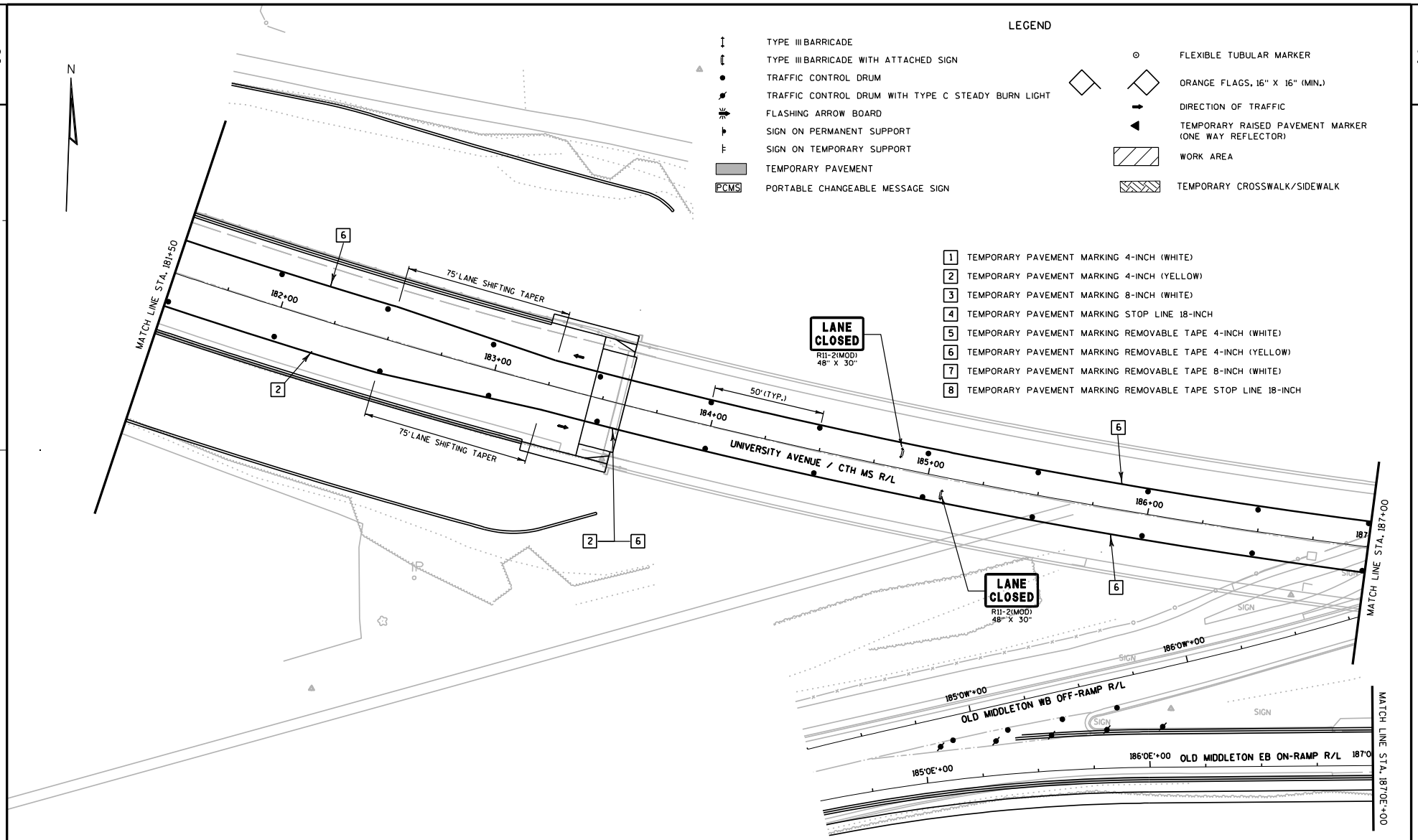


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

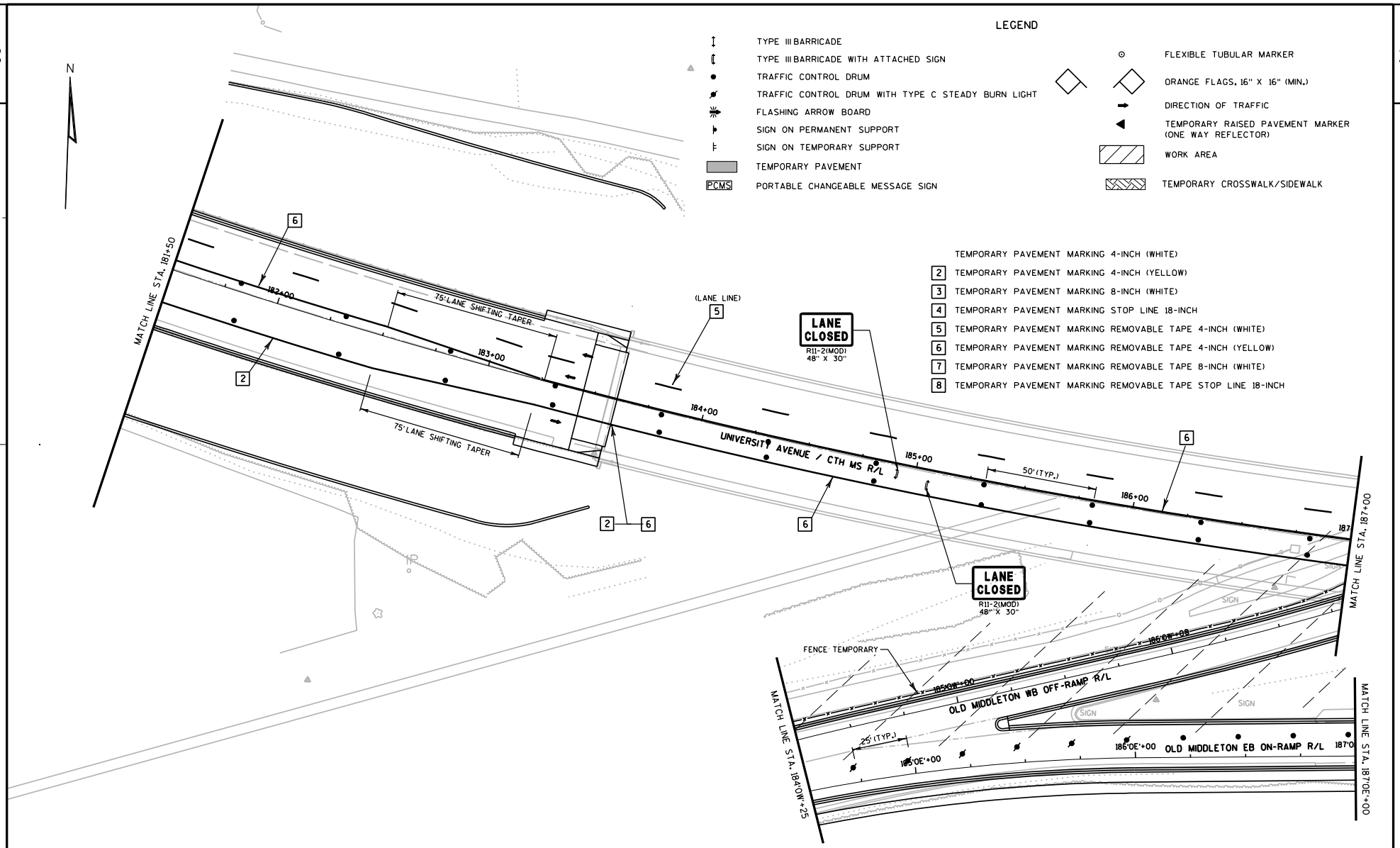
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5B	SHEET 408 E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5A	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026518_tc_s5a.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

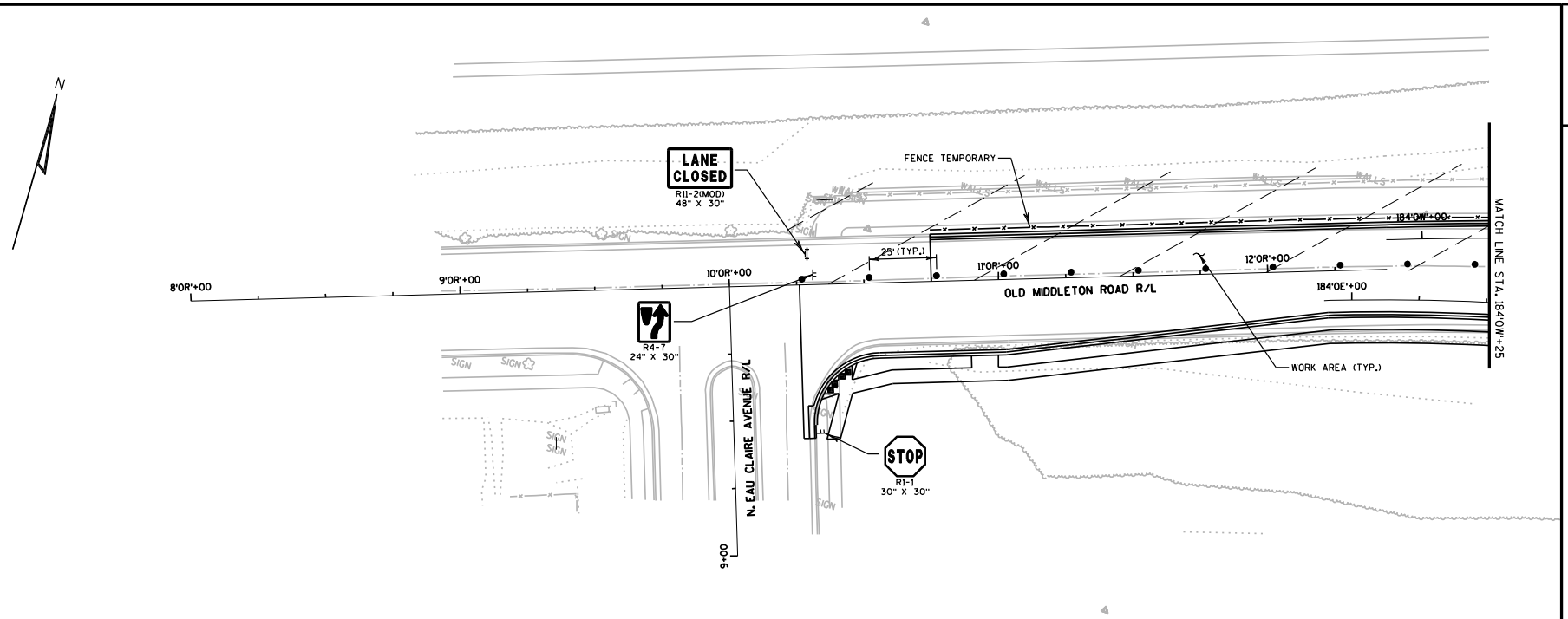
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5B	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026518_tc_s5b.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5B	SHEET 411	E

FILE NAME : g:\madison\md2009035\dgn\026519_tc_s5b (omr).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

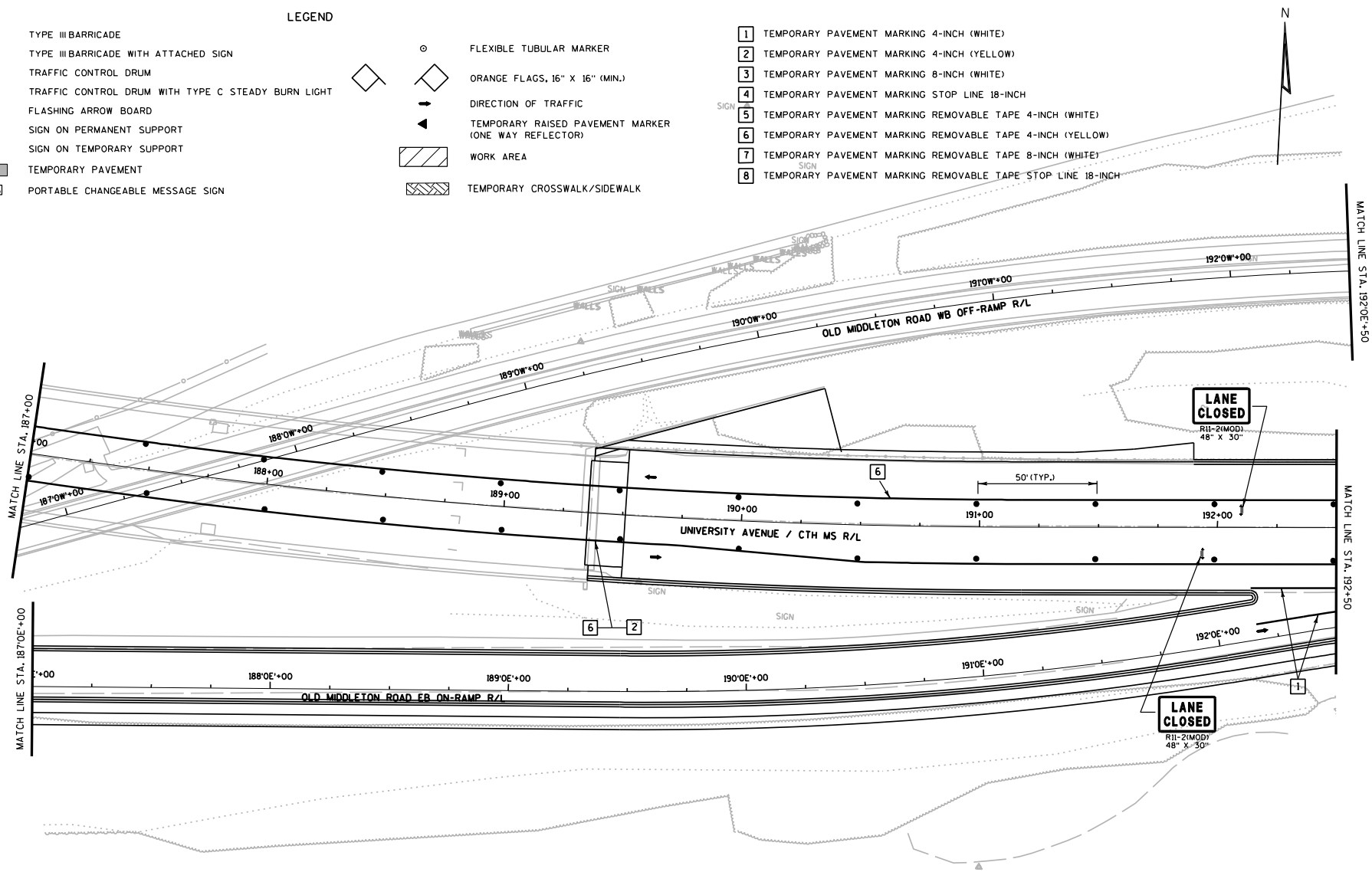
WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5A	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\026520_tc_s5a.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

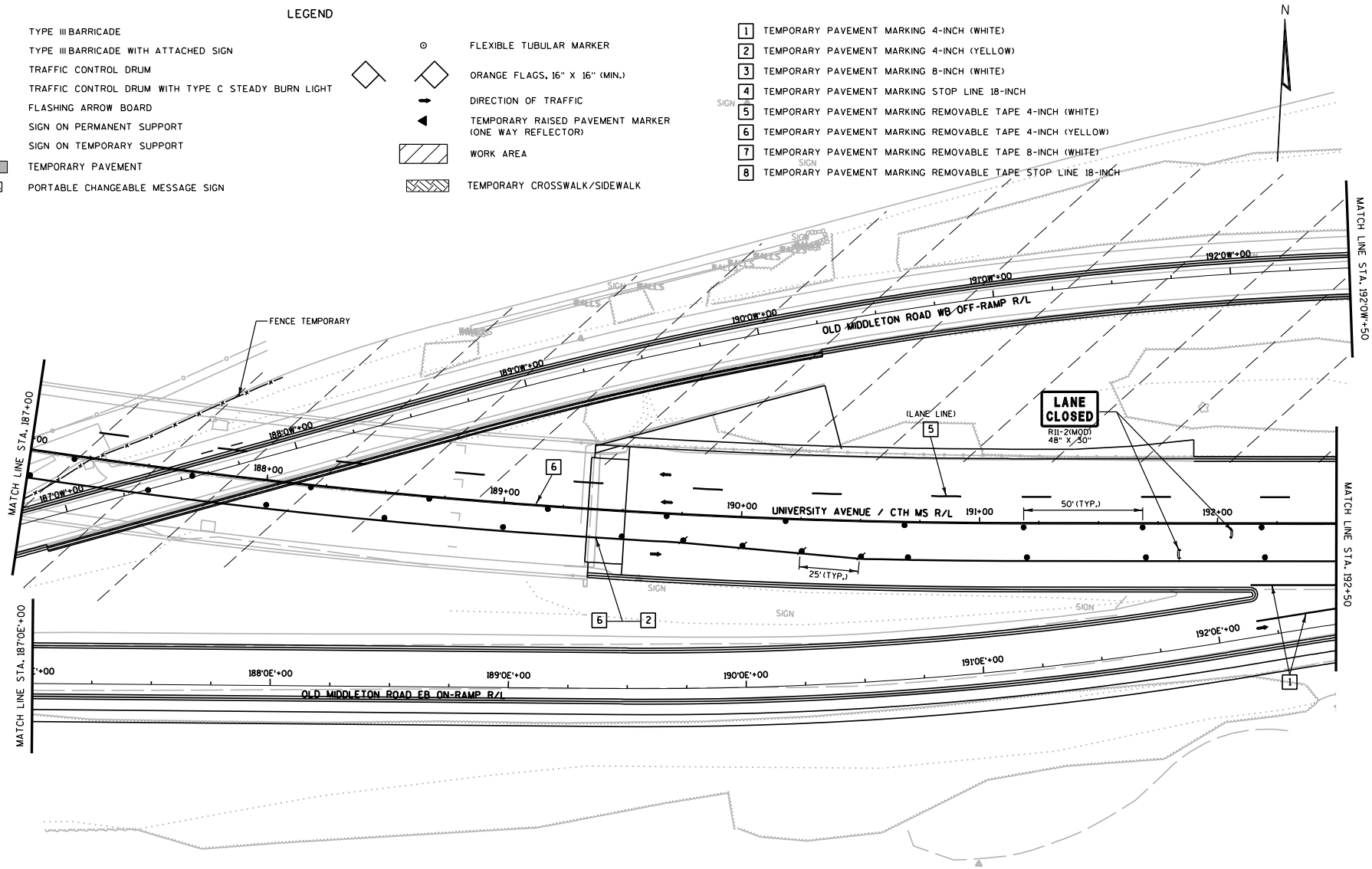
WISDOT/CADDS SHEET 42

2

LEGEND

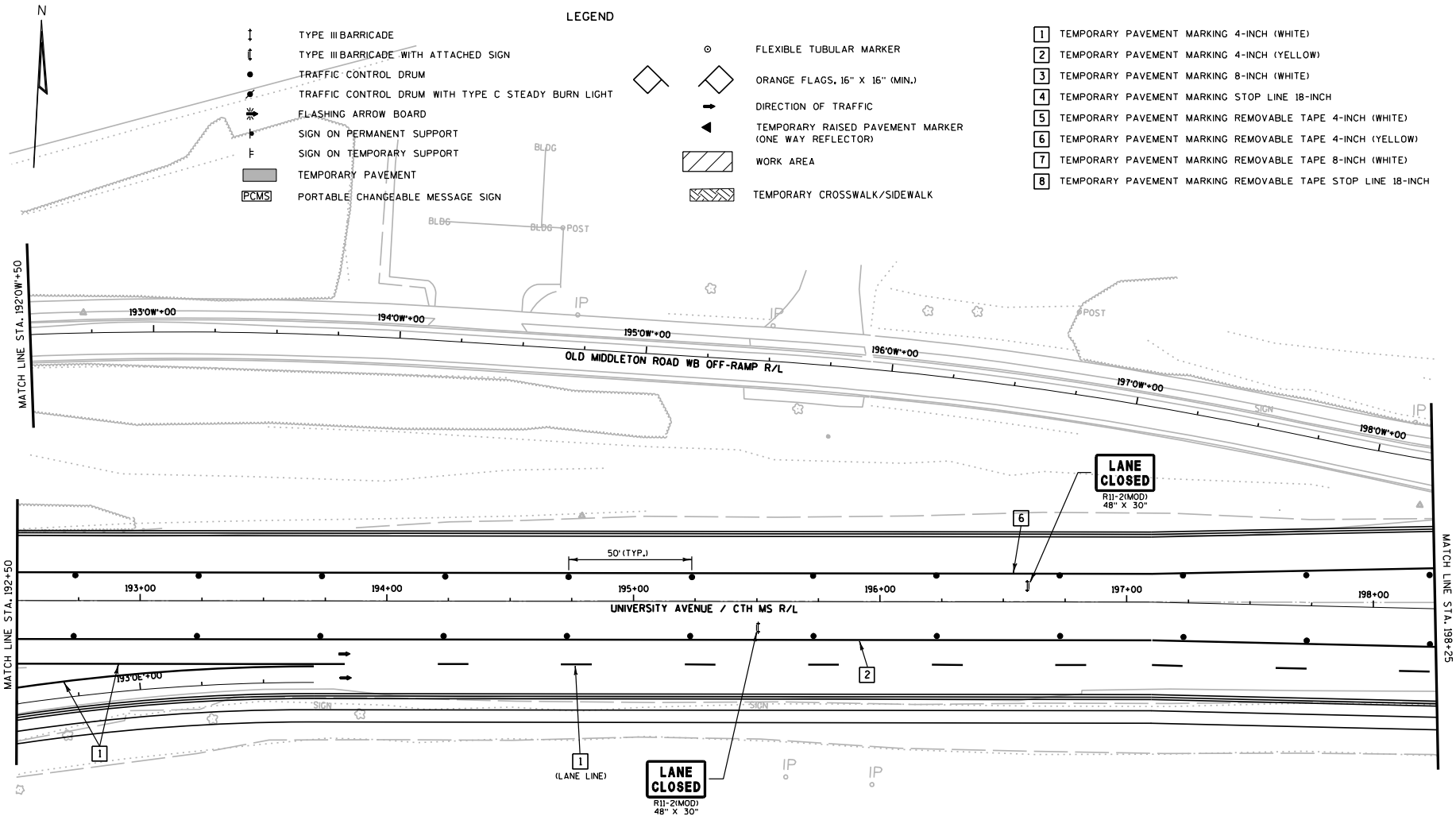
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5B	SHEET 413 E

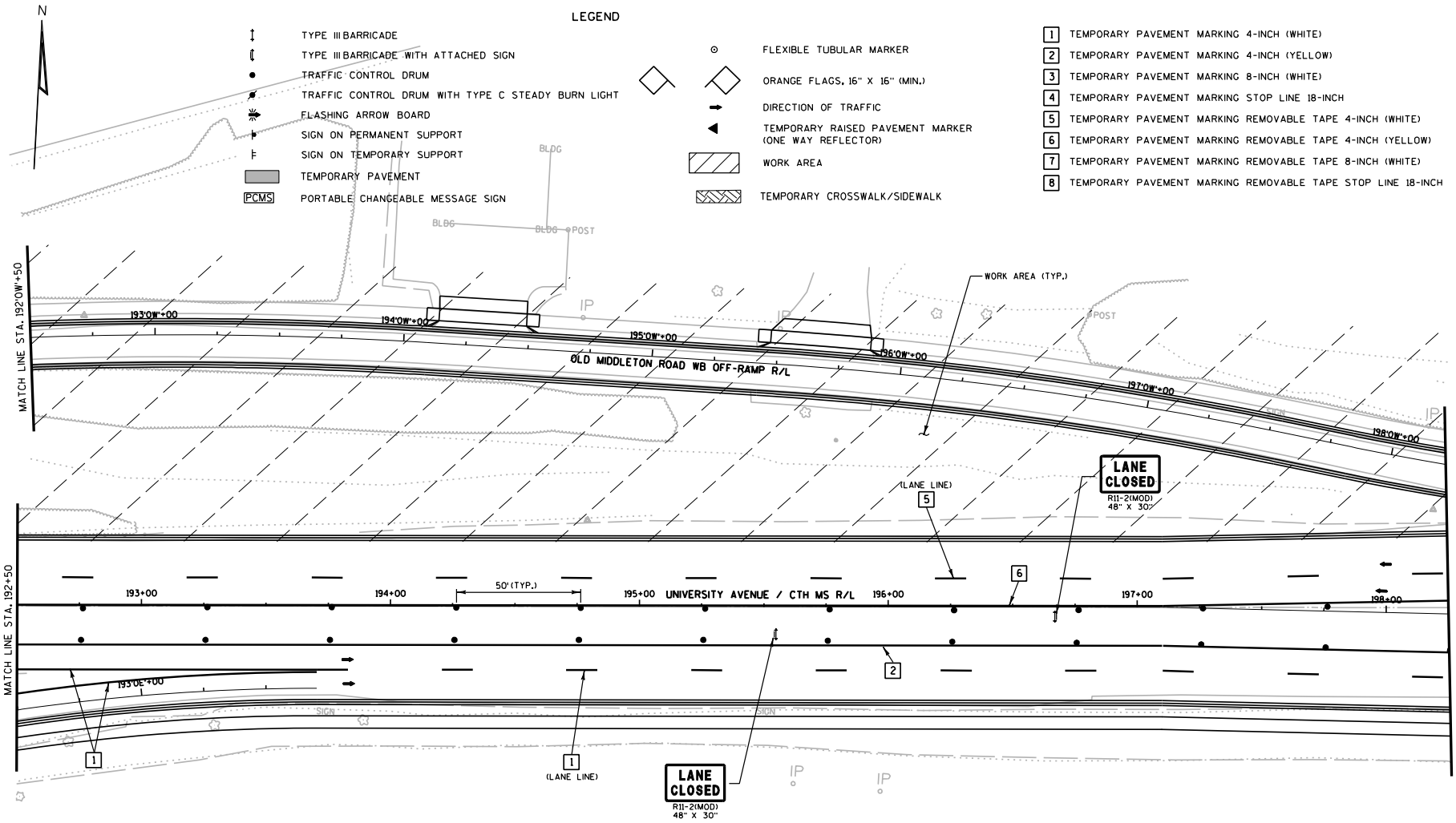
FILE NAME : g:\madison\md2009035\dgn\026520_tc_s5b.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5A	SHEET 414 E

FILE NAME : g:\madison\md2009035\dgn\026521_tc_s5a.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

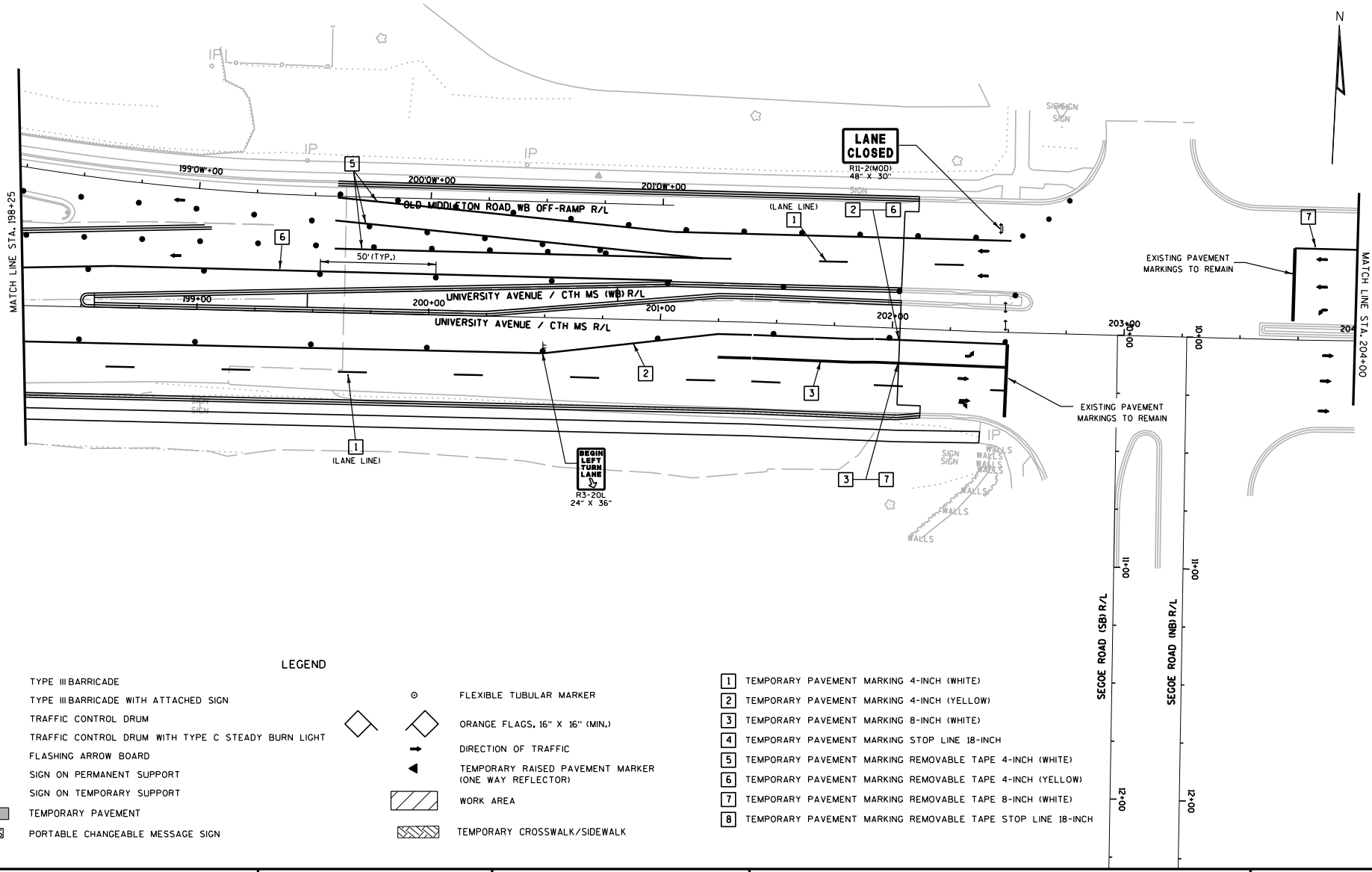
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5B	SHEET 415 E

FILE NAME : g:\madison\md2009035\dgn\026521_tc_s5b.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

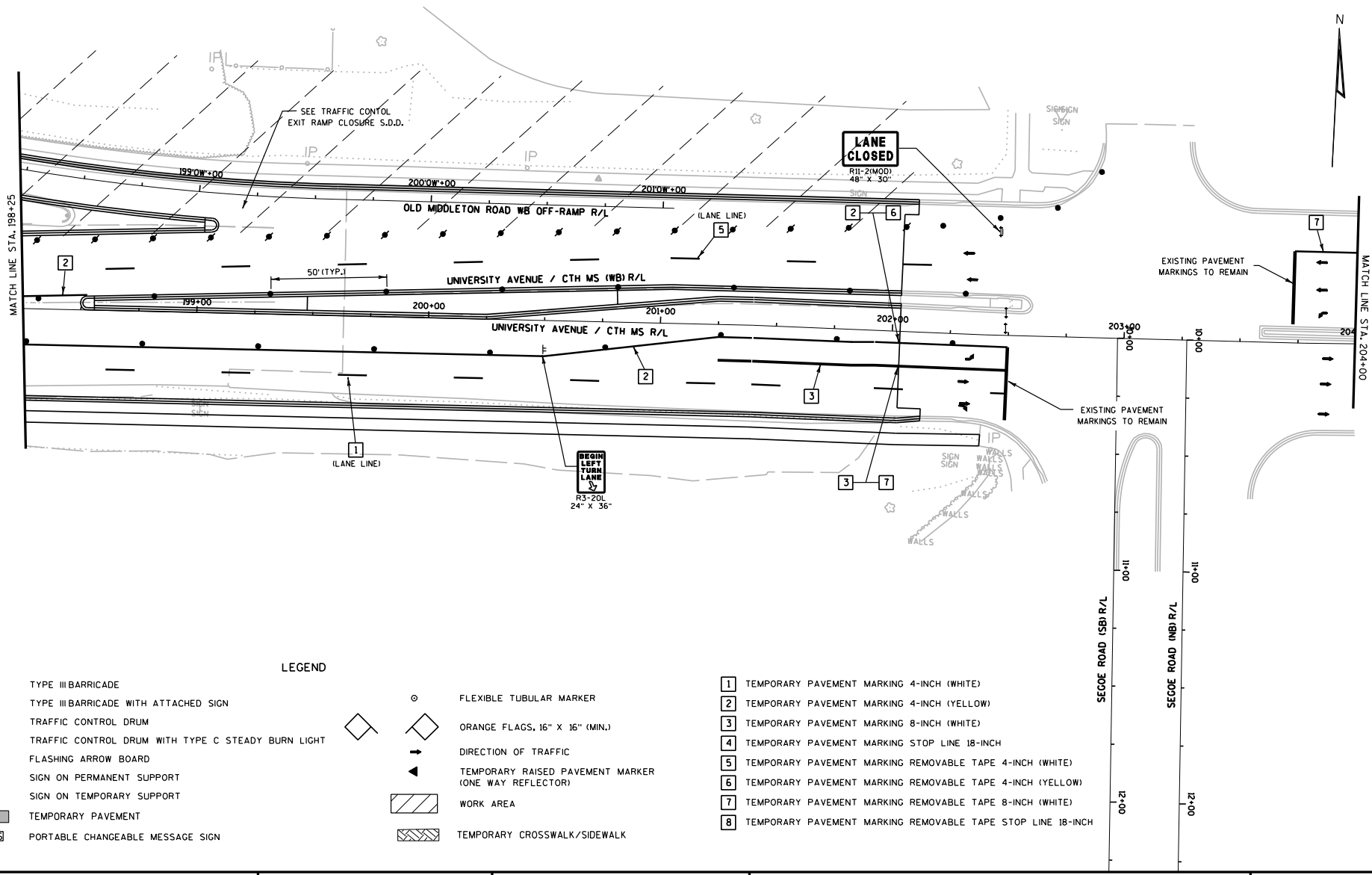
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5A	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026522_tc_s5a.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



LEGEND

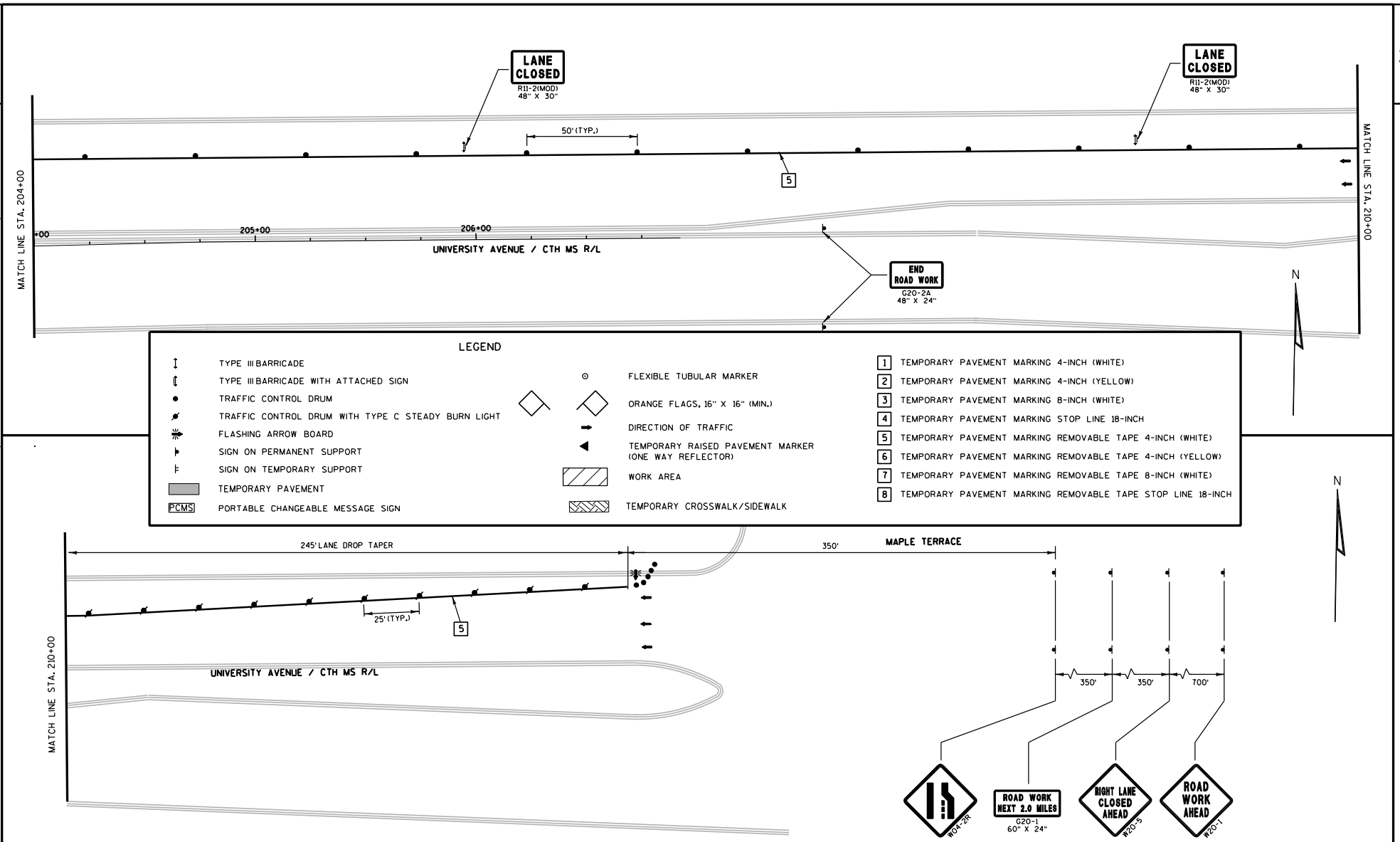
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PAVEMENT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLEXIBLE TUBULAR MARKER
- ORANGE FLAGS, 16" X 16" (MIN.)
- DIRECTION OF TRAFFIC
- TEMPORARY RAISED PAVEMENT MARKER (ONE WAY REFLECTOR)
- WORK AREA
- TEMPORARY CROSSWALK/SIDEWALK

1. TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
2. TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
3. TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
4. TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH
5. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)
6. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
7. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY PAVEMENT MARKING REMOVABLE TAPE STOP LINE 18-INCH

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5B	SHEET 417 E

FILE NAME : g:\madison\md2009035\dgn\026522_tc_s5b.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

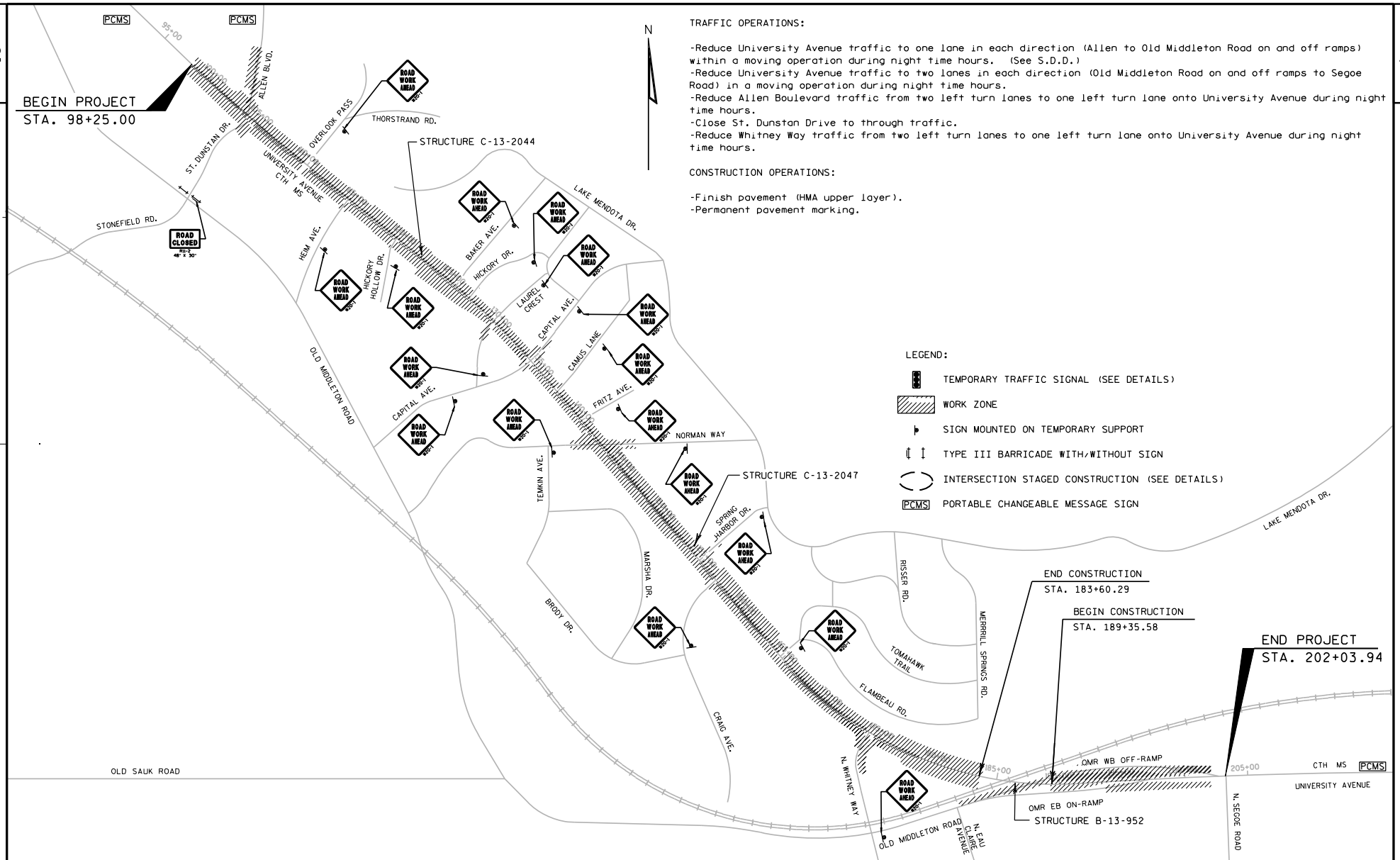
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5	SHEET E

FILE NAME : g:\madison\md2009035\dgn\026523_tc_s5.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



TRAFFIC OPERATIONS:

-Reduce University Avenue traffic to one lane in each direction (Allen to Old Middleton Road on and off ramps) within a moving operation during night time hours. (See S.D.D.)
-Reduce University Avenue traffic to two lanes in each direction (Old Middleton Road on and off ramps to Segoe Road) in a moving operation during night time hours.
-Reduce Allen Boulevard traffic from two left turn lanes to one left turn lane onto University Avenue during night time hours.
-Close St. Dunstan Drive to through traffic.
-Reduce Whitney Way traffic from two left turn lanes to one left turn lane onto University Avenue during night time hours.

CONSTRUCTION OPERATIONS:

-Finish pavement (HMA upper layer).
-Permanent pavement marking.

LEGEND:

- TEMPORARY TRAFFIC SIGNAL (SEE DETAILS)
- WORK ZONE
- SIGN MOUNTED ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- INTERSECTION STAGED CONSTRUCTION (SEE DETAILS)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	TRAFFIC CONTROL OVERVIEW (STAGE 6)	SHEET 419 E

FILE NAME : g:\madison\md2009035\dgn\026600_tc_s6.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

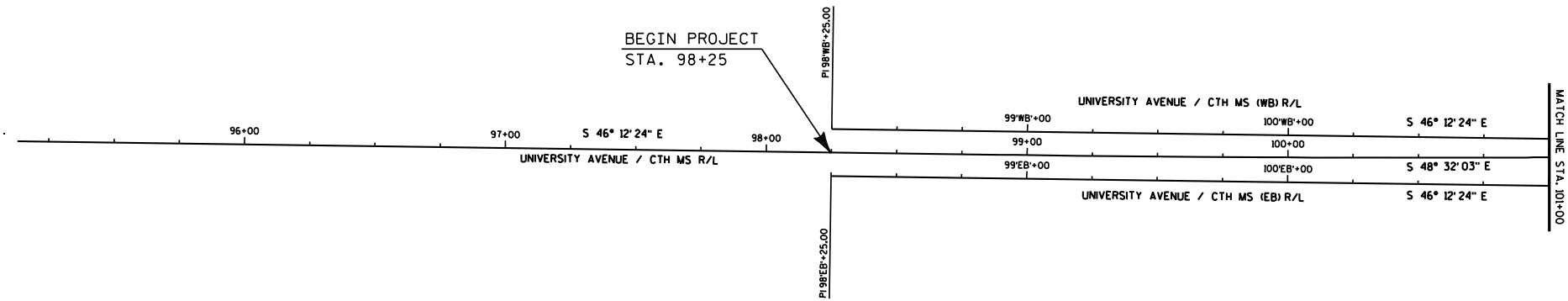
N

UNIVERSITY AVENUE R/L

STA: 94+75.00
X: 793265.38
Y: 488957.93

UNIVERSITY AVENUE WB R/L

STA: 98'WB'+25.00
X: 793524.25
Y: 488722.21

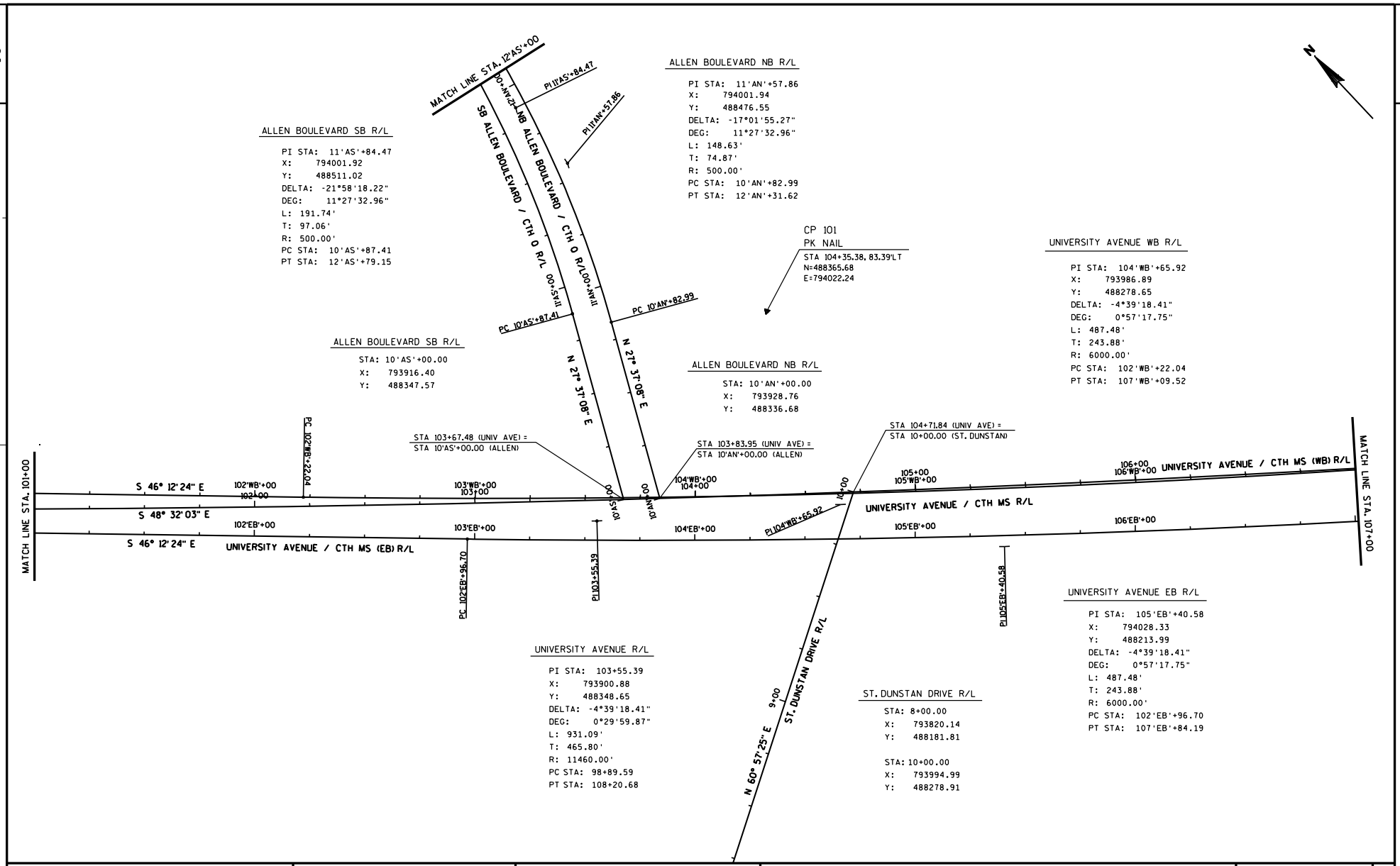


UNIVERSITY AVENUE EB R/L

STA: 98'EB'+25.00
X: 793511.79
Y: 488709.21

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\027201_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\027202_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

2

N

ALLEN BOULEVARD SB R/L

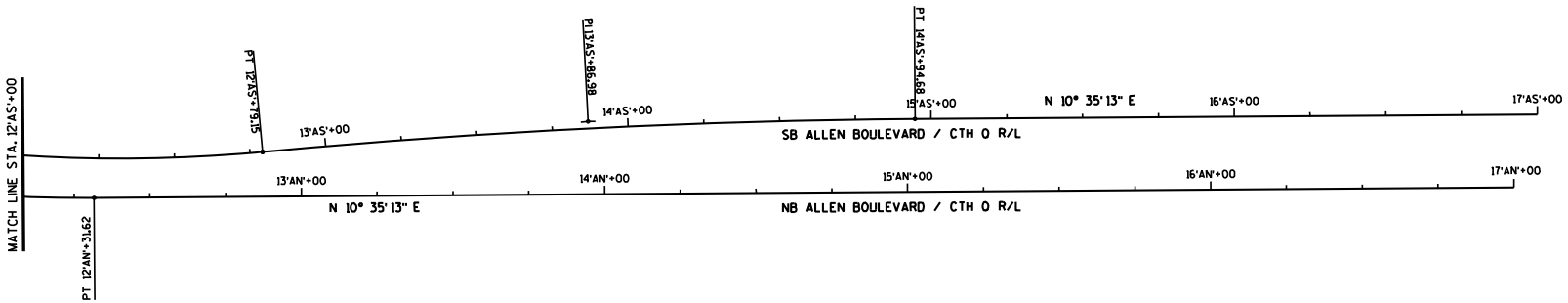
PI STA: 11'AS'+84.47
X: 794001.92
Y: 488511.02
DELTA: -21°58'18.22"
DEG: 11°27'32.96"
L: 191.74'
T: 97.06'
R: 500.00'
PC STA: 10'AS'+87.41
PT STA: 12'AS'+79.15

ALLEN BOULEVARD SB R/L

PI STA: 13'AS'+86.98
X: 794022.08
Y: 488714.92
DELTA: 4°56'22.95"
DEG: 2°17'30.59"
L: 215.54'
T: 107.83'
R: 2500.00'
PC STA: 12'AS'+79.15
PT STA: 14'AS'+94.68

ALLEN BOULEVARD SB R/L

STA: 17'AS'+00.00
X: 794079.61
Y: 489022.74



ALLEN BOULEVARD NB R/L

PI STA: 11'AN'+57.86
X: 794001.94
Y: 488476.55
DELTA: -17°01'55.27"
DEG: 11°27'32.96"
L: 148.63'
T: 74.87'
R: 500.00'
PC STA: 10'AN'+82.99
PT STA: 12'AN'+31.62

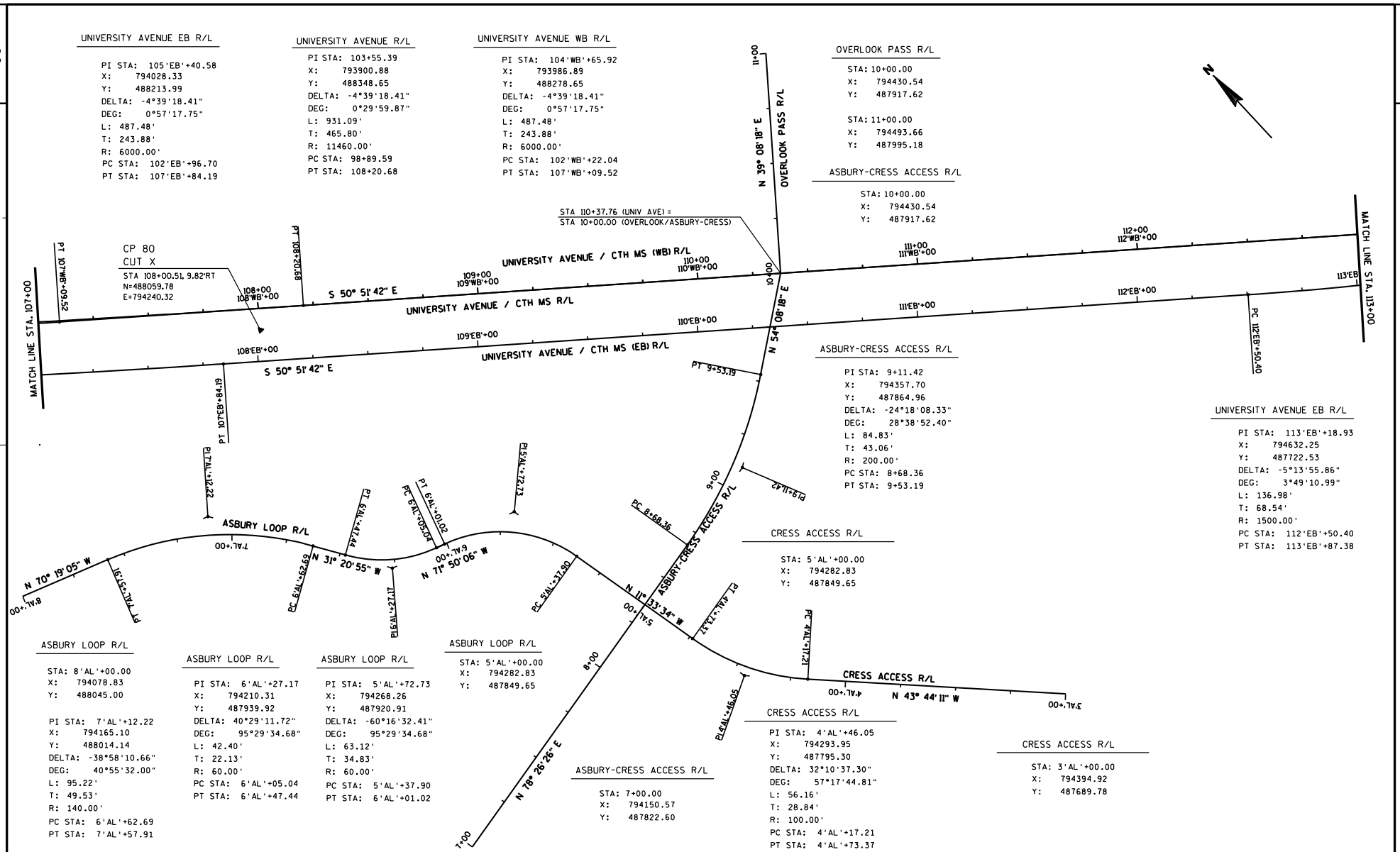
ALLEN BOULEVARD NB R/L

STA: 17'AN'+00.00
X: 794101.75
Y: 489010.55

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\027203_ad(allen).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

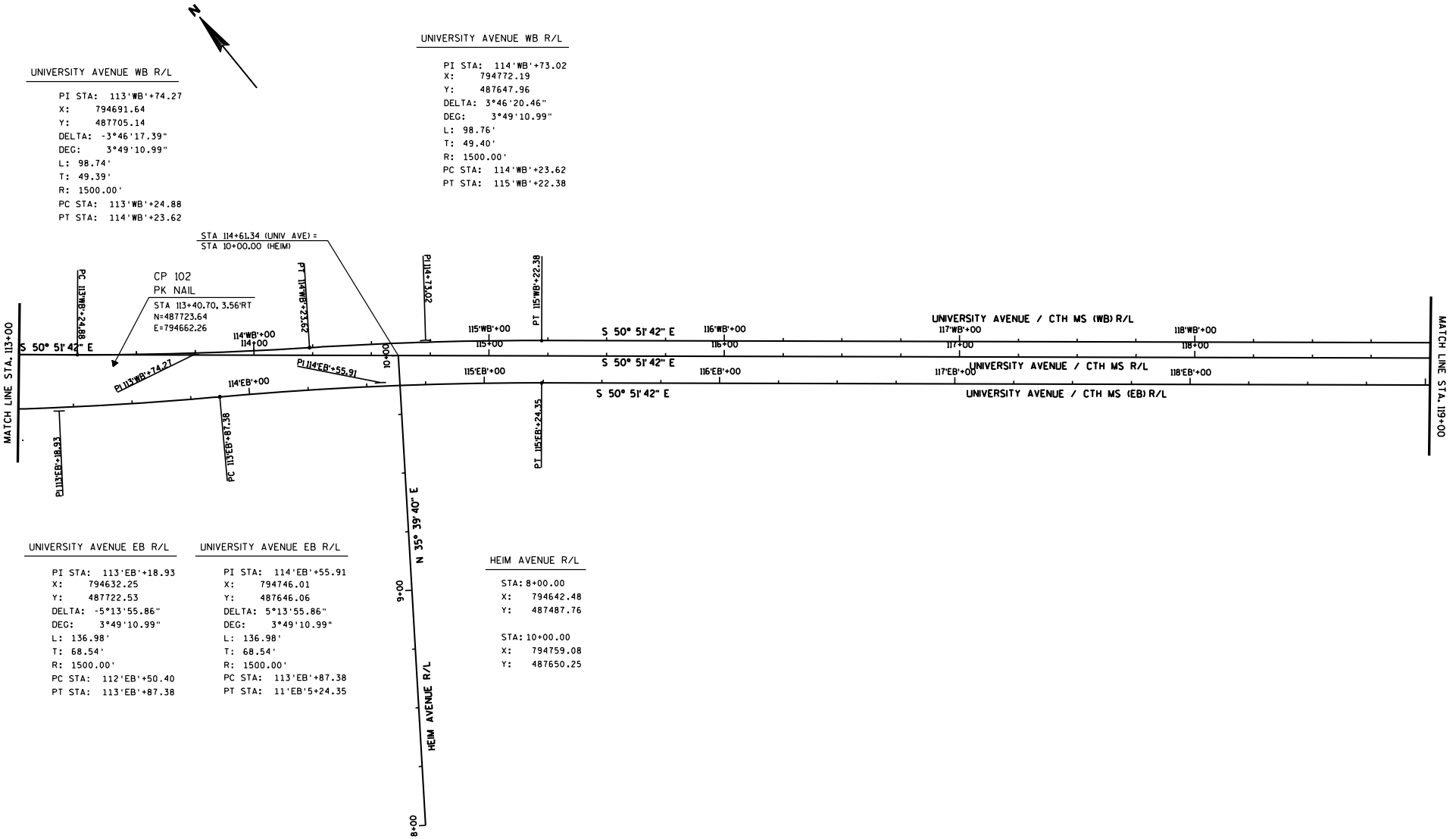


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET 423 E

FILE NAME : g:\madison\md2009035\dgn\027204_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

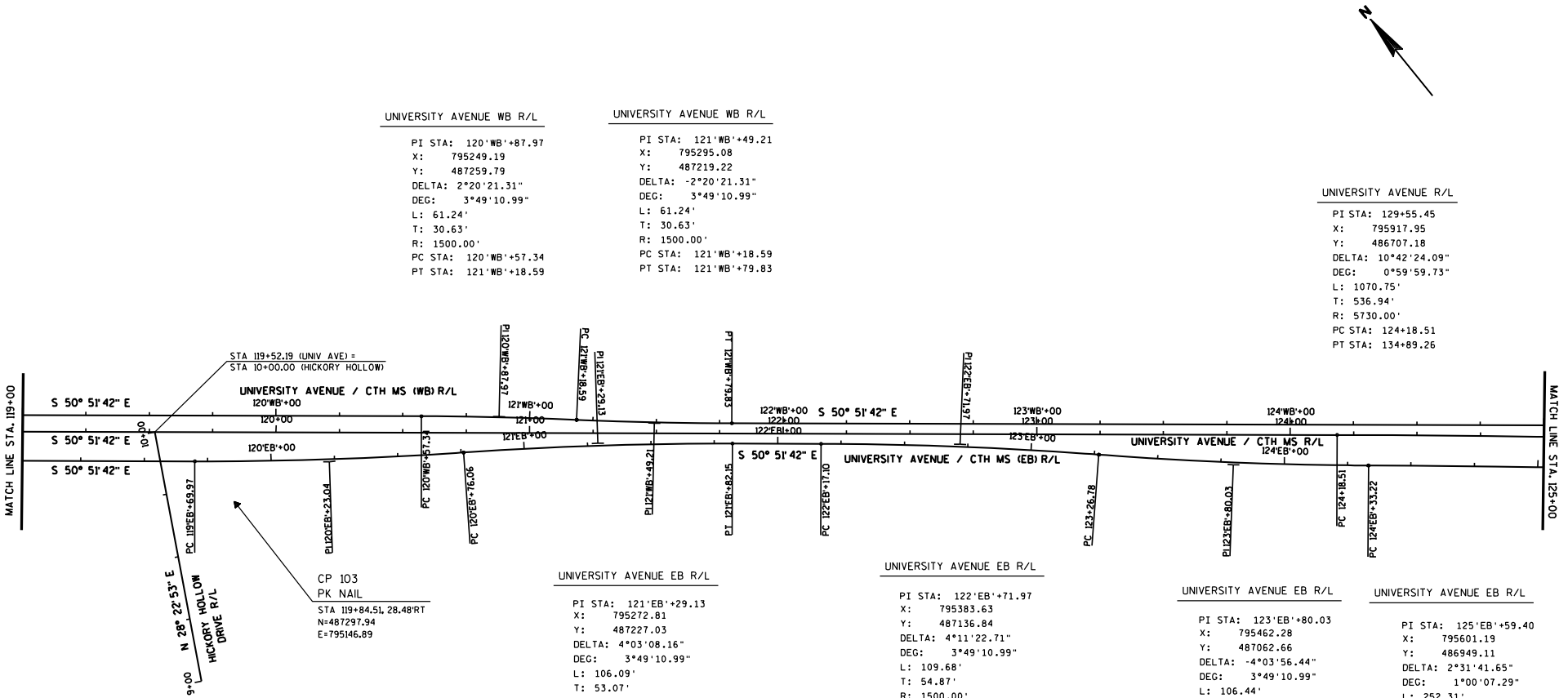
2



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\027205_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

2



UNIVERSITY AVENUE WB R/L

PI STA: 120'WB'+87.97
X: 795249.19
Y: 487259.79
DELTA: 2°20'21.31"
DEG: 3°49'10.99"
L: 61.24'
T: 30.63'
R: 1500.00'
PC STA: 120'WB'+57.34
PT STA: 121'WB'+18.59

UNIVERSITY AVENUE WB R/L

PI STA: 121'WB'+49.21
X: 795295.08
Y: 487219.22
DELTA: -2°20'21.31"
DEG: 3°49'10.99"
L: 61.24'
T: 30.63'
R: 1500.00'
PC STA: 121'WB'+18.59
PT STA: 121'WB'+79.83

UNIVERSITY AVENUE R/L

PI STA: 129+55.45
X: 795917.95
Y: 486707.18
DELTA: 10°42'24.09"
DEG: 0°59'59.73"
L: 1070.75'
T: 536.94'
R: 5730.00'
PC STA: 124+18.51
PT STA: 134+89.26

HICKORY HOLLOW DRIVE R/L

STA: 9+00.00
X: 795092.26
Y: 487252.45

STA: 10+00.00
X: 795139.80
Y: 487340.43

UNIVERSITY AVENUE EB R/L

PI STA: 120'EB'+23.04
X: 795185.96
Y: 487288.04
DELTA: -4°03'08.16"
DEG: 3°49'10.99"
L: 106.09'
T: 53.07'
R: 1500.00'
PC STA: 119'EB'+69.97
PT STA: 120'EB'+76.06

UNIVERSITY AVENUE EB R/L

PI STA: 121'EB'+29.13
X: 795272.81
Y: 487227.03
DELTA: 4°03'08.16"
DEG: 3°49'10.99"
L: 106.09'
T: 53.07'
R: 1500.00'
PC STA: 120'EB'+76.06
PT STA: 121'EB'+82.15

UNIVERSITY AVENUE EB R/L

PI STA: 122'EB'+71.97
X: 795383.63
Y: 487136.84
DELTA: 4°11'22.71"
DEG: 3°49'10.99"
L: 109.68'
T: 54.87'
R: 1500.00'
PC STA: 122'EB'+17.10
PT STA: 123'EB'+26.78

UNIVERSITY AVENUE EB R/L

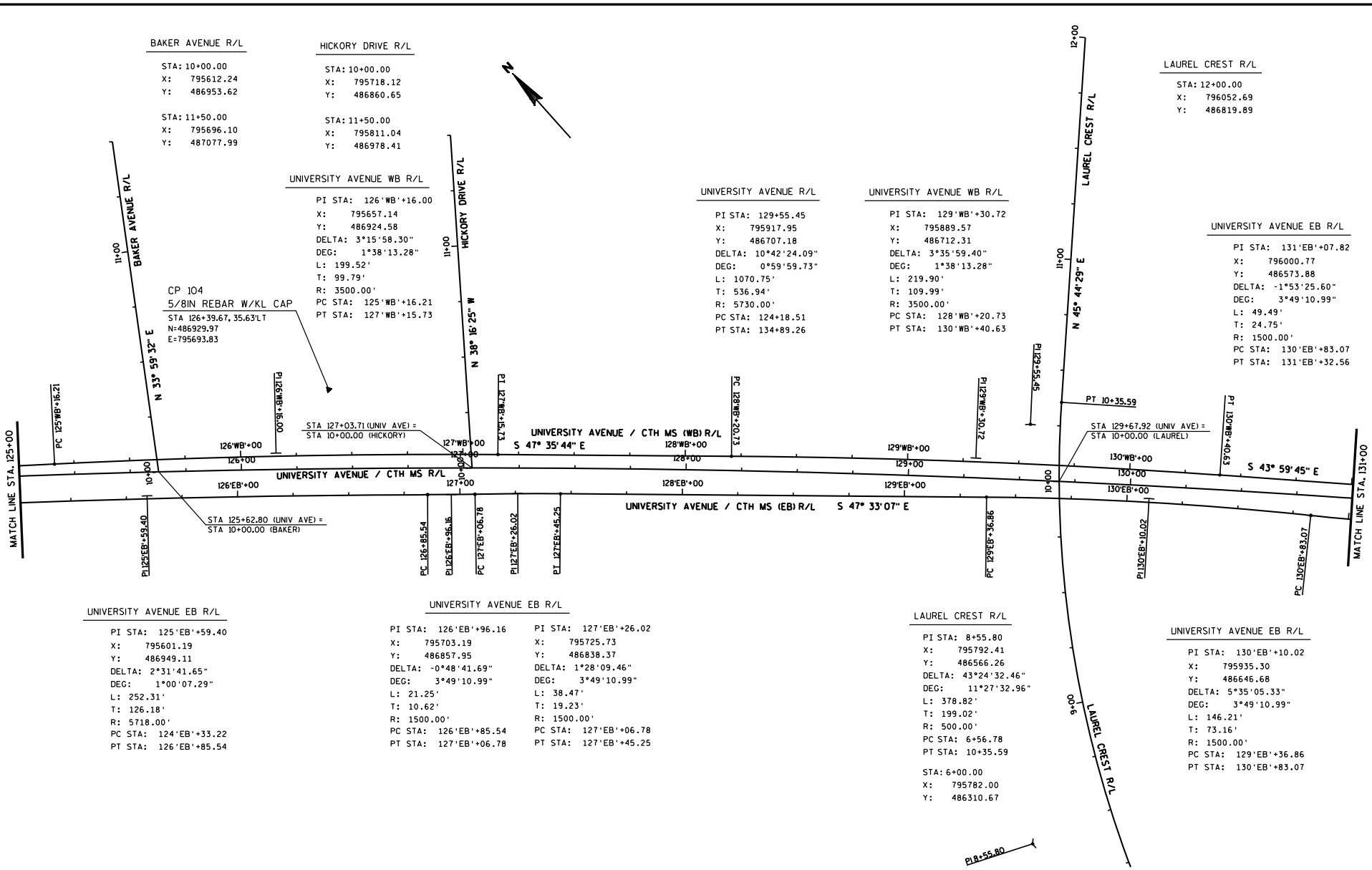
PI STA: 123'EB'+80.03
X: 795462.28
Y: 487062.66
DELTA: -4°03'56.44"
DEG: 3°49'10.99"
L: 106.44'
T: 53.24'
R: 1500.00'
PC STA: 123'EB'+26.78
PT STA: 124'EB'+33.22

UNIVERSITY AVENUE EB R/L

PI STA: 125'EB'+59.40
X: 795601.19
Y: 486949.11
DELTA: 2°31'41.65"
DEG: 1°00'07.29"
L: 252.31'
T: 126.18'
R: 5718.00'
PC STA: 124'EB'+33.22
PT STA: 126'EB'+85.54

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

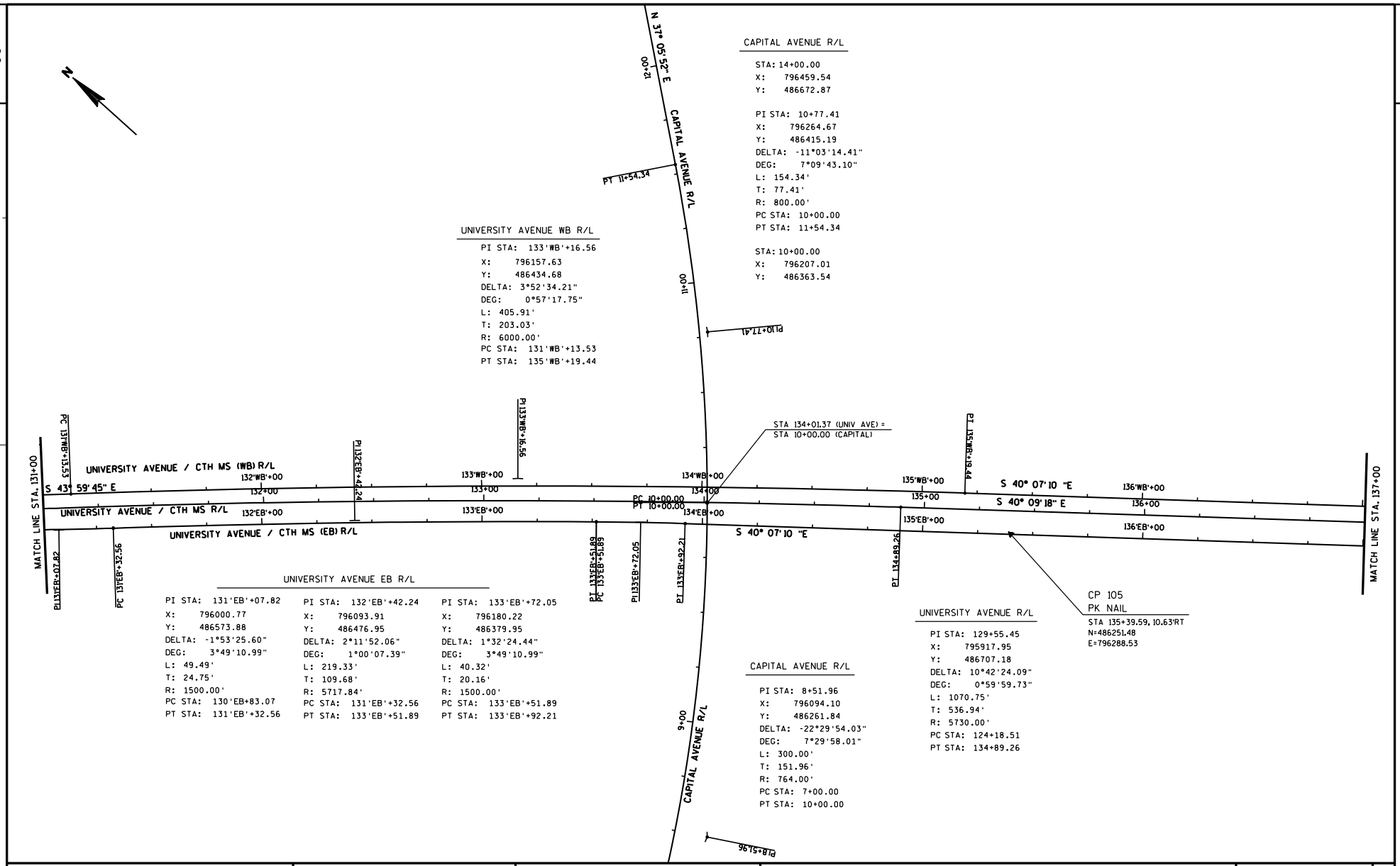
FILE NAME : g:\madison\md2009035\dgn\027206_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\027207_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



CAPITAL AVENUE R/L

STA: 14+00.00
X: 796459.54
Y: 486672.87

PI STA: 10+77.41
X: 796264.67
Y: 486415.19
DELTA: -11°03'14.41"
DEG: 7°09'43.10"
L: 154.34'
T: 77.41'
R: 800.00'
PC STA: 10+00.00
PT STA: 11+54.34

STA: 10+00.00
X: 796207.01
Y: 486363.54

UNIVERSITY AVENUE WB R/L

PI STA: 133'WB'+16.56
X: 796157.63
Y: 486434.68
DELTA: 3°52'34.21"
DEG: 0°57'17.75"
L: 405.91'
T: 203.03'
R: 6000.00'
PC STA: 131'WB'+13.53
PT STA: 135'WB'+19.44

UNIVERSITY AVENUE EB R/L

PI STA: 131'EB'+07.82
X: 796000.77
Y: 486573.88
DELTA: -1°53'25.60"
DEG: 3°49'10.99"
L: 49.49'
T: 24.75'
R: 1500.00'
PC STA: 130'EB+83.07
PT STA: 131'EB'+32.56

PI STA: 132'EB'+42.24
X: 796093.91
Y: 486476.95
DELTA: 2°11'52.06"
DEG: 1°00'07.39"
L: 219.33'
T: 109.68'
R: 5717.84'
PC STA: 131'EB'+32.56
PT STA: 133'EB'+51.89

PI STA: 133'EB'+72.05
X: 796180.22
Y: 486379.95
DELTA: 1°32'24.44"
DEG: 3°49'10.99"
L: 40.32'
T: 20.16'
R: 1500.00'
PC STA: 133'EB'+51.89
PT STA: 133'EB'+92.21

CAPITAL AVENUE R/L

PI STA: 8+51.96
X: 796094.10
Y: 486261.84
DELTA: -22°29'54.03"
DEG: 7°29'58.01"
L: 300.00'
T: 151.96'
R: 764.00'
PC STA: 7+00.00
PT STA: 10+00.00

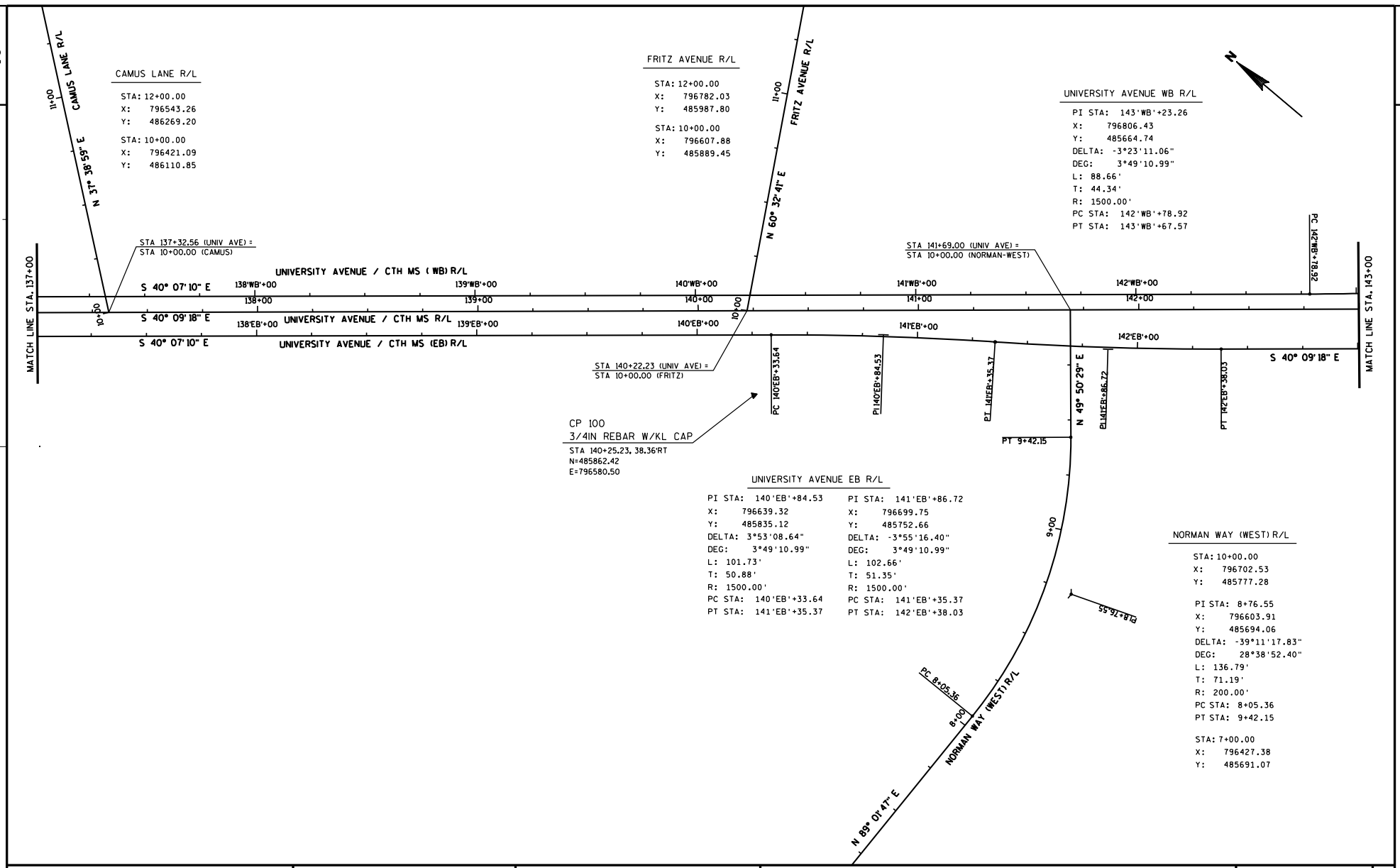
UNIVERSITY AVENUE R/L

PI STA: 129+55.45
X: 795917.95
Y: 486707.18
DELTA: 10°42'24.09"
DEG: 0°59'59.73"
L: 1070.75'
T: 536.94'
R: 5730.00'
PC STA: 124+18.51
PT STA: 134+89.26

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\027208_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

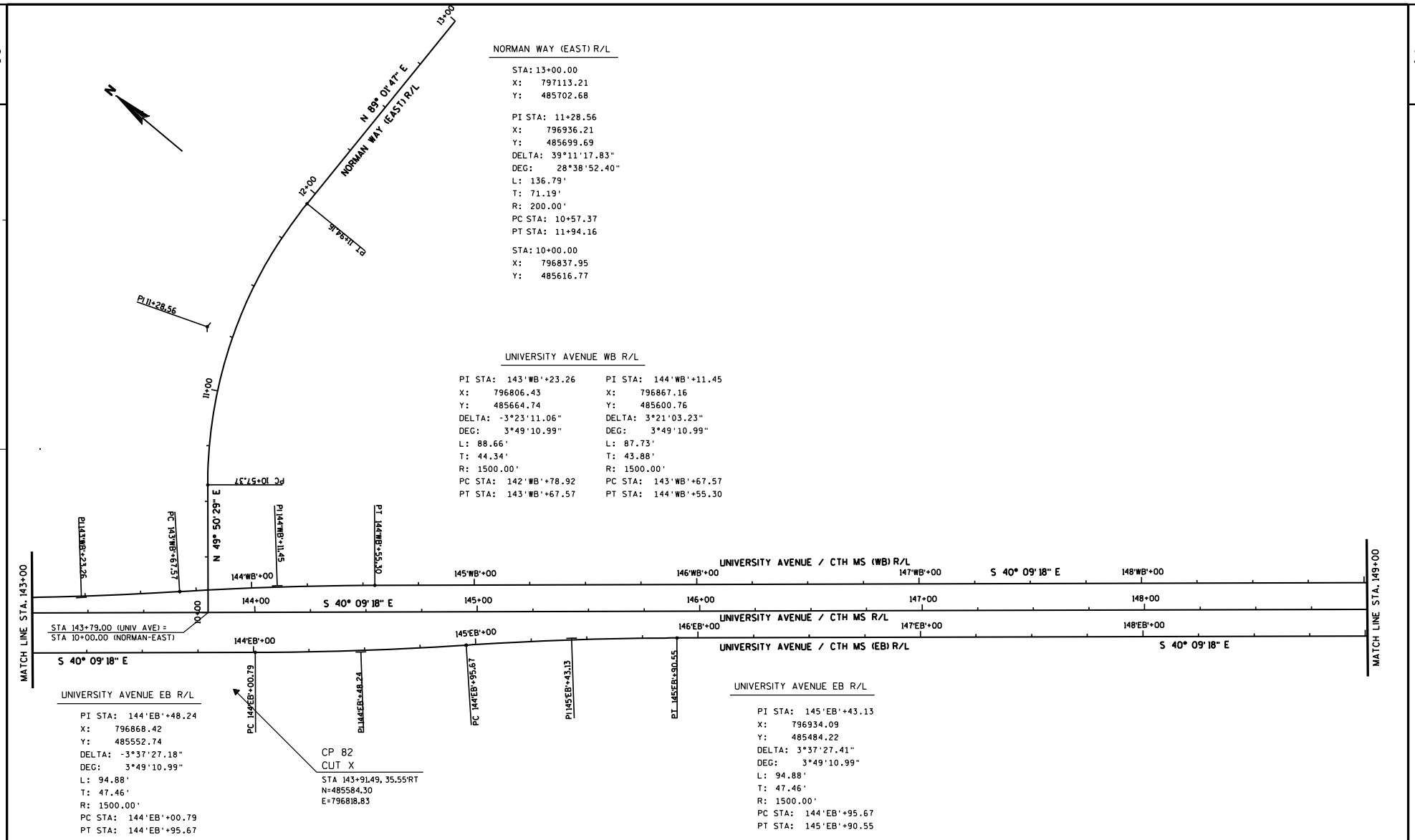
WISDOT/CADDS SHEET 42



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\027209_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



NORMAN WAY (EAST) R/L

STA: 13+00.00
X: 797113.21
Y: 485702.68

PI STA: 11+28.56
X: 796936.21
Y: 485699.69
DELTA: 39°11'17.83"
DEG: 28°38'52.40"
L: 136.79'
T: 71.19'
R: 200.00'
PC STA: 10+57.37
PT STA: 11+94.16

STA: 10+00.00
X: 796837.95
Y: 485616.77

UNIVERSITY AVENUE WB R/L

PI STA: 143'WB'+23.26	PI STA: 144'WB'+11.45
X: 796806.43	X: 796867.16
Y: 485664.74	Y: 485600.76
DELTA: -3°23'11.06"	DELTA: 3°21'03.23"
DEG: 3°49'10.99"	DEG: 3°49'10.99"
L: 88.66'	L: 87.73'
T: 44.34'	T: 43.88'
R: 1500.00'	R: 1500.00'
PC STA: 142'WB'+78.92	PC STA: 143'WB'+67.57
PT STA: 143'WB'+67.57	PT STA: 144'WB'+55.30

UNIVERSITY AVENUE EB R/L

PI STA: 144'EB'+48.24
X: 796868.42
Y: 485552.74
DELTA: -3°37'27.18"
DEG: 3°49'10.99"
L: 94.88'
T: 47.46'
R: 1500.00'
PC STA: 144'EB'+00.79
PT STA: 144'EB'+95.67

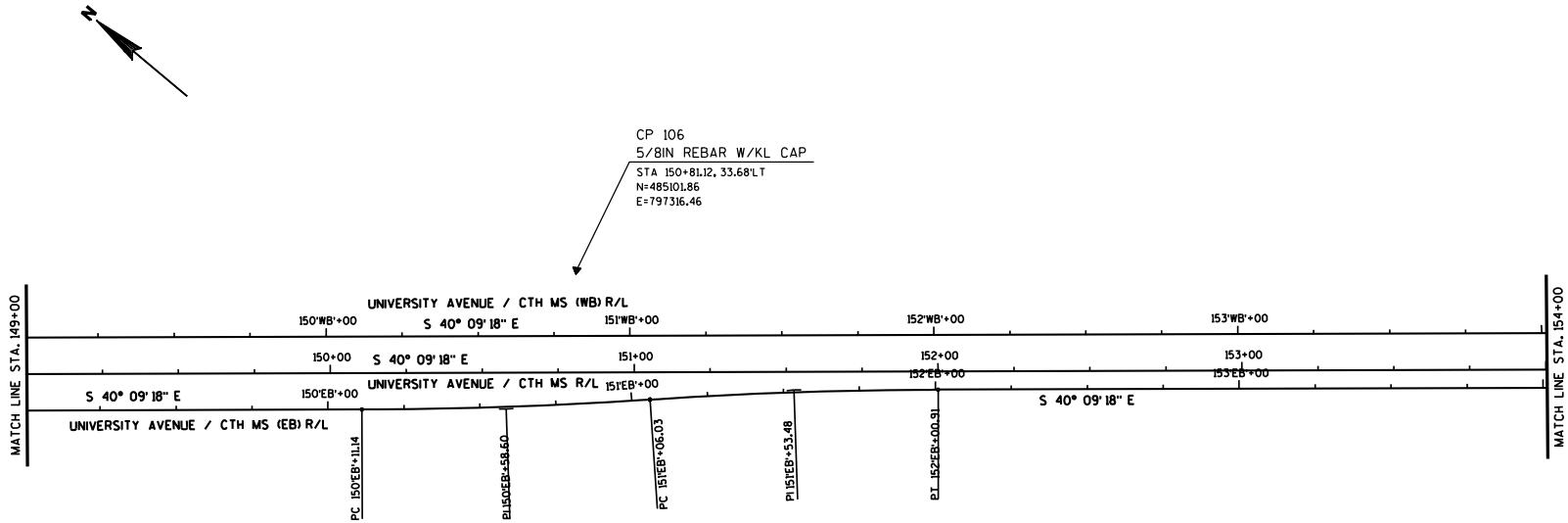
UNIVERSITY AVENUE EB R/L

PI STA: 145'EB'+43.13
X: 796934.09
Y: 485484.22
DELTA: 3°37'27.41"
DEG: 3°49'10.99"
L: 94.88'
T: 47.46'
R: 1500.00'
PC STA: 144'EB'+95.67
PT STA: 145'EB'+90.55

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET E

FILE NAME : g:\madison\md2009035\dgn\027210_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42



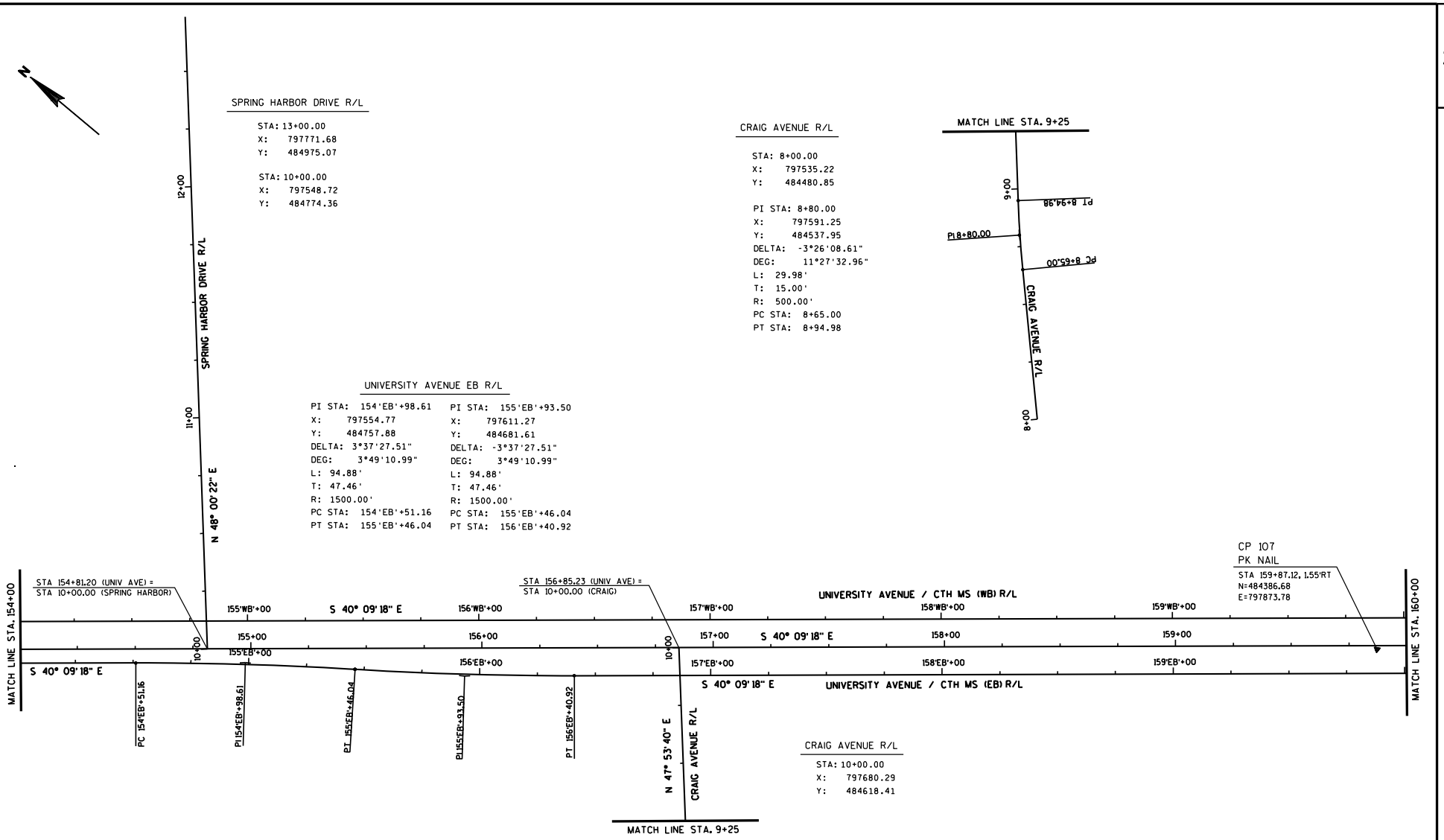
UNIVERSITY AVENUE EB R/L

PI STA: 150'EB'+58.60
X: 797266.52
Y: 485090.21
DELTA: -3°37'27.51"
DEG: 3°49'10.99"
L: 94.88'
T: 47.46'
R: 1500.00'
PC STA: 150'EB'+11.14
PT STA: 151'EB'+06.03

UNIVERSITY AVENUE EB R/L

PI STA: 151'EB'+53.48
X: 797332.19
Y: 485021.68
DELTA: 3°37'27.51"
DEG: 3°49'10.99"
L: 94.88'
T: 47.46'
R: 1500.00'
PC STA: 151'EB'+06.03
PT STA: 152'EB'+00.91

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET 430 E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\027212_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

UNIVERSITY AVENUE WB R/L

STA: 160'WB'+67.91
X: 797935.36
Y: 484334.70

STA: 163'WB'+37.96
X: 798113.30
Y: 484131.57

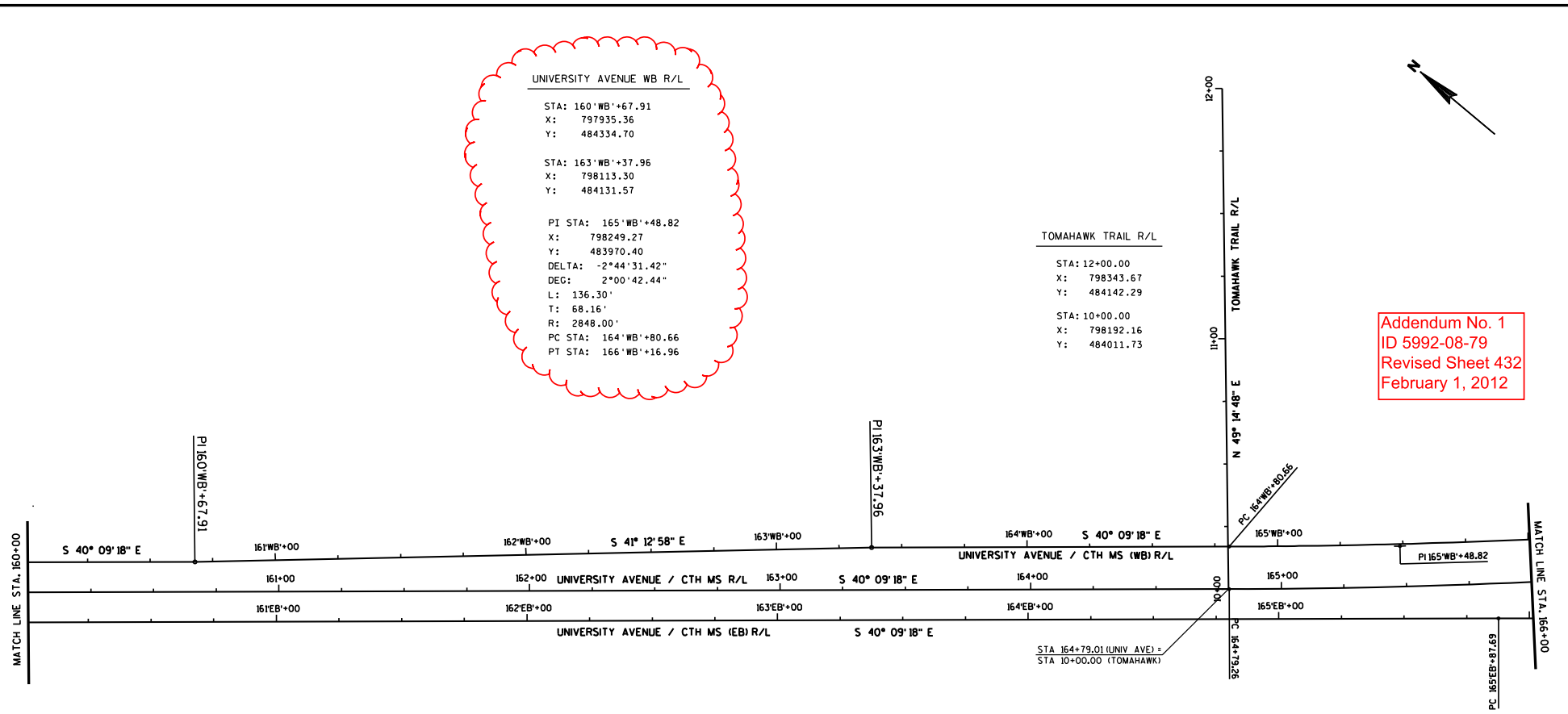
PI STA: 165'WB'+48.82
X: 798249.27
Y: 483970.40
DELTA: -2°44'31.42"
DEG: 2°00'42.44"
L: 136.30'
T: 68.16'
R: 2848.00'
PC STA: 164'WB'+80.66
PT STA: 166'WB'+16.96

TOMAHAWK TRAIL R/L

STA: 12+00.00
X: 798343.67
Y: 484142.29

STA: 10+00.00
X: 798192.16
Y: 484011.73

Addendum No. 1
ID 5992-08-79
Revised Sheet 432
February 1, 2012



UNIVERSITY AVENUE R/L

PI STA: 179+00.36
X: 799108.73
Y: 482925.39
DELTA: -52°45'53.54"
DEG: 1°59'59.47"
L: 2638.44'
T: 1421.10'
R: 2865.00'
PC STA: 164+79.26
PT STA: 191+17.70

UNIVERSITY AVENUE EB R/L

PI STA: 168'EB'+58.35
X: 798426.94
Y: 483714.86
DELTA: -15°24'49.24"
DEG: 2°51'53.24"
L: 538.04'
T: 270.65'
R: 2000.00'
PC STA: 165'EB'+87.69
PT STA: 171'EB'+25.73

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET 432	E

2

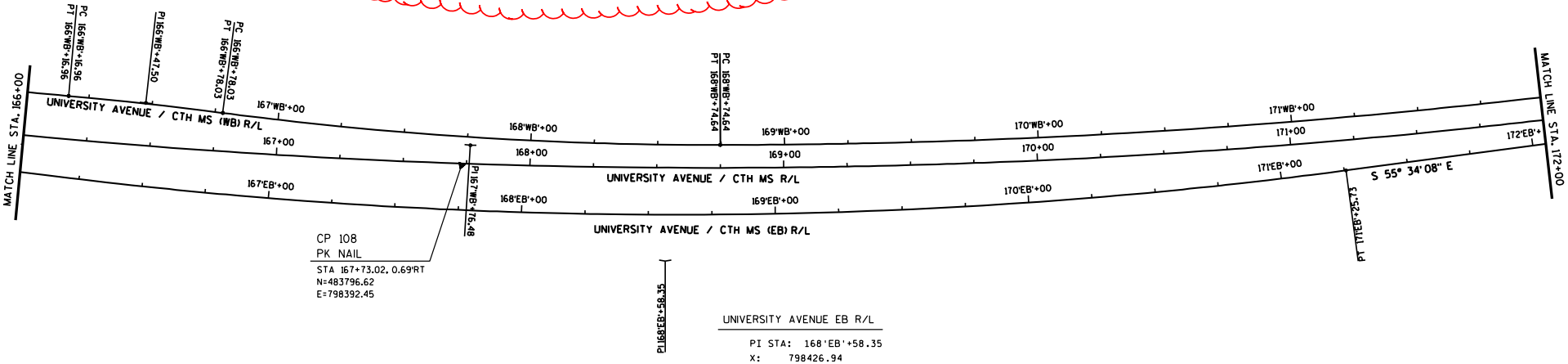
N

UNIVERSITY AVENUE WB R/L

PI STA: 166WB'+47.50	PI STA: 167'WB'+76.48	PI STA: 173'WB'+02.98
X: 798316.46	X: 798400.34	X: 798792.24
Y: 483898.09	Y: 483800.11	Y: 483448.10
DELTA: 2°19'58.61"	DELTA: -7°30'35.09"	DELTA: -17°03'32.49"
DEG: 3°49'10.99"	DEG: 3°49'10.99"	DEG: 2°00'22.16"
L: 61.08'	L: 196.60'	L: 850.33'
T: 30.54'	T: 98.44'	T: 428.34'
R: 1500.00'	R: 1500.00'	R: 2856.00'
PC STA: 166'WB'+16.96	PC STA: 166'WB'+78.03	PC STA: 168'WB'+74.64
PT STA: 166'WB'+78.03	PT STA: 168'WB'+74.64	PT STA: 177'WB'+24.97

UNIVERSITY AVENUE R/L

PI STA: 179+00.36
X: 799108.73
Y: 482925.39
DELTA: -52°45'53.54"
DEG: 1°59'59.47"
L: 2638.44'
T: 1421.10'
R: 2865.00'
PC STA: 164+79.26
PT STA: 191+17.70



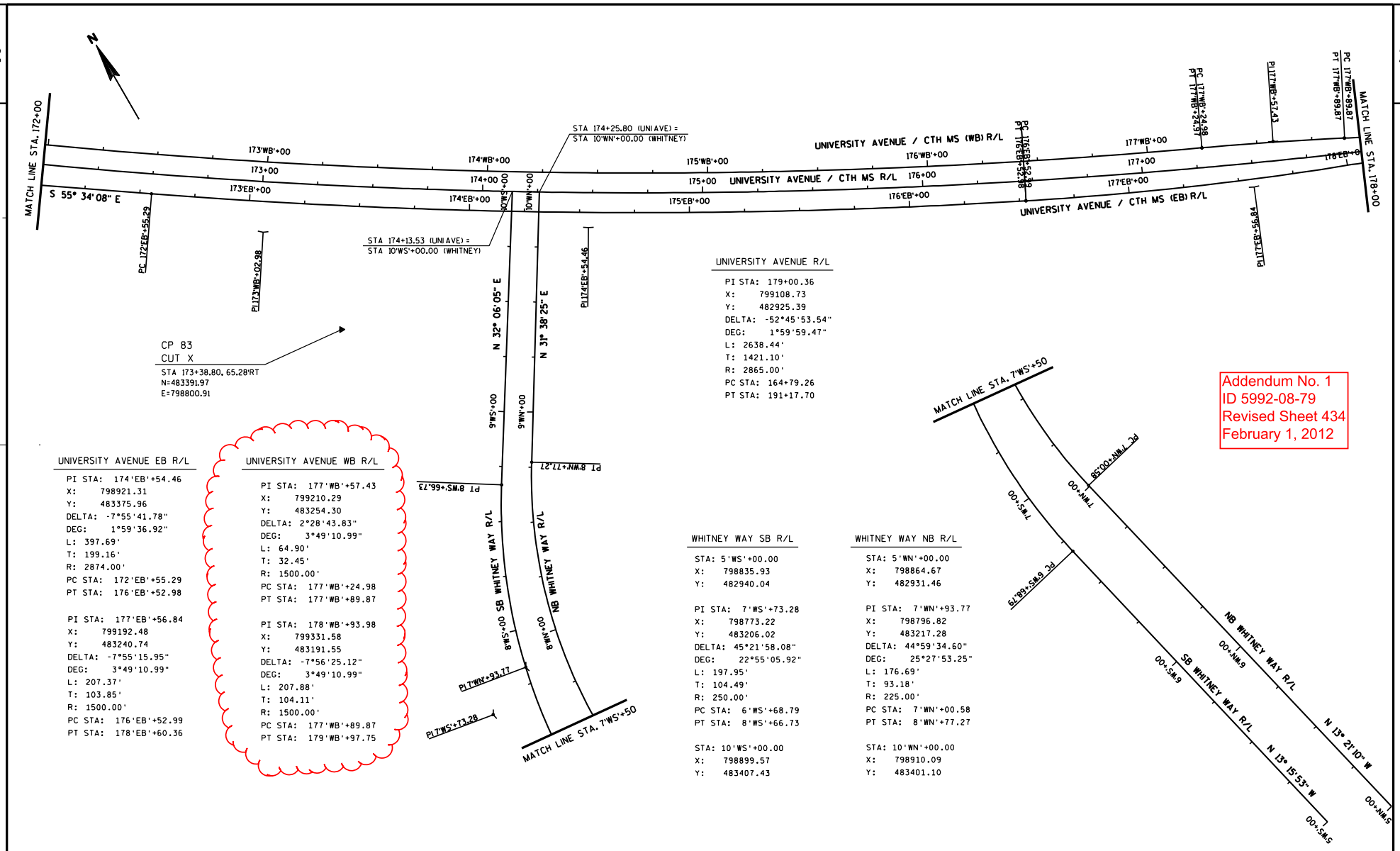
UNIVERSITY AVENUE EB R/L

PI STA: 168'EB'+58.35
X: 798426.94
Y: 483714.86
DELTA: -15°24'49.24"
DEG: 2°51'53.24"
L: 538.04'
T: 270.65'
R: 2000.00'
PC STA: 165'EB'+87.69
PT STA: 171'EB'+25.73

Addendum No. 1
ID 5992-08-79
Revised Sheet 433
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET 433	E

FILE NAME : G:\Madison\MD2009035\DGN\027214_ad.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :



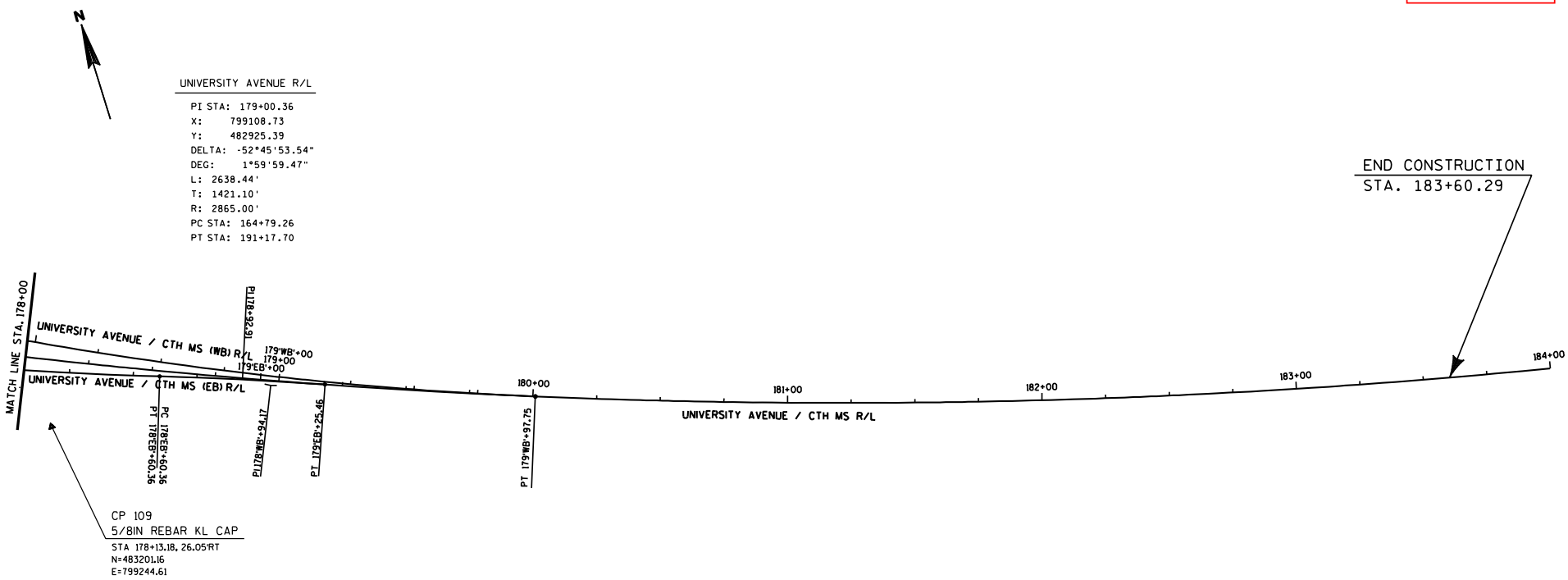
Addendum No. 1
ID 5992-08-79
Revised Sheet 434
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET 434	E

FILE NAME : G:\Madison\MD2009035\DGN\027215_ad.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : ALIGNMENT DIAGRAM PLOT SCALE :

WISDOT/CADDS SHEET 42

Addendum No. 1
ID 5992-08-79
Revised Sheet 435
February 1, 2012



UNIVERSITY AVENUE EB R/L

PI STA: 177'EB'+56.84	PI STA: 178'EB'+92.91
X: 799192.48	X: 799321.78
Y: 483240.74	Y: 483197.27
DELTA: -7°55'15.95"	DELTA: 2°29'11.66"
DEG: 3°49'10.99"	DEG: 3°49'10.99"
L: 207.37'	L: 65.10'
T: 103.85'	T: 32.55'
R: 1500.00'	R: 1500.00'
PC STA: 176'EB'+52.99	PC STA: 178'EB'+60.36
PT STA: 178'EB'+60.36	PT STA: 179'EB'+25.46

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET 435	E

FILE NAME : G:\Madison\MD2009035\DGN\027216_ad.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

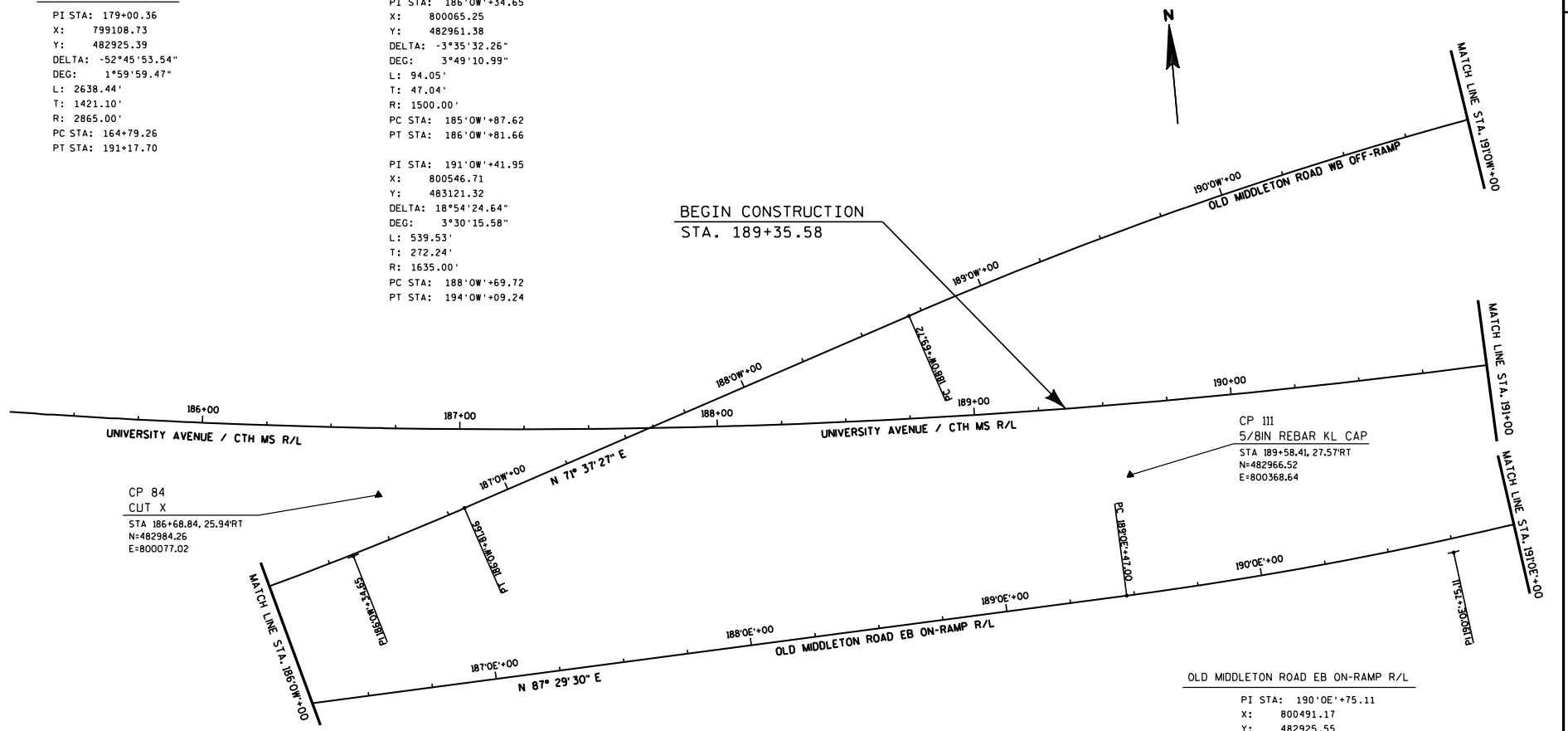
UNIVERSITY AVENUE R/L

PI STA: 179+00.36
X: 799108.73
Y: 482925.39
DELTA: -52°45'53.54"
DEG: 1°59'59.47"
L: 2638.44'
T: 1421.10'
R: 2865.00'
PC STA: 164+79.26
PT STA: 191+17.70

OLD MIDDLETON ROAD WB OFF-RAMP R/L

PI STA: 186'OW'+34.65
X: 800065.25
Y: 482961.38
DELTA: -3°35'32.26"
DEG: 3°49'10.99"
L: 94.05'
T: 47.04'
R: 1500.00'
PC STA: 185'OW'+87.62
PT STA: 186'OW'+81.66

PI STA: 191'OW'+41.95
X: 800546.71
Y: 483121.32
DELTA: 18°54'24.64"
DEG: 3°30'15.58"
L: 539.53'
T: 272.24'
R: 1635.00'
PC STA: 188'OW'+69.72
PT STA: 194'OW'+09.24

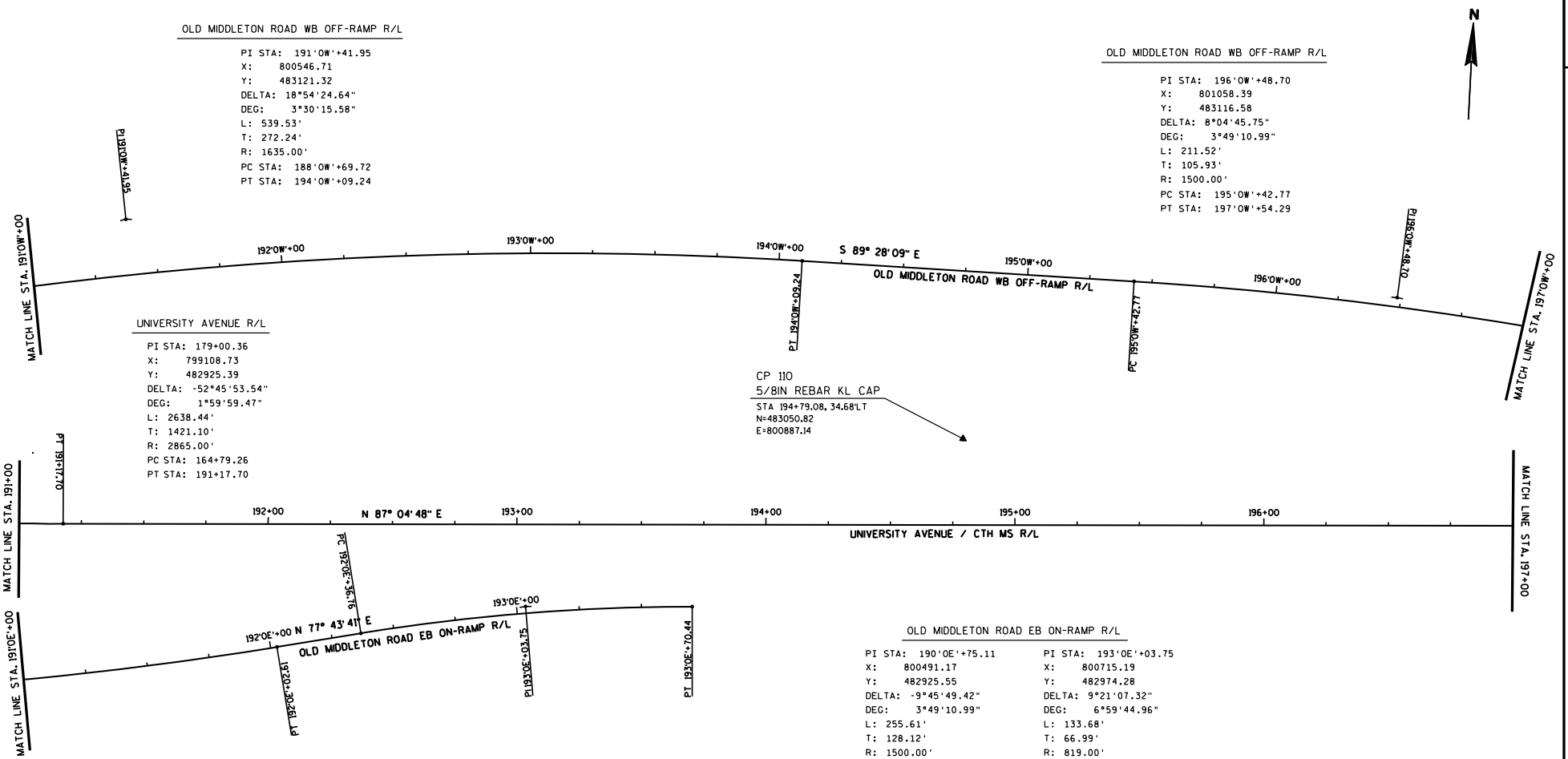


OLD MIDDLETON ROAD EB ON-RAMP R/L

PI STA: 190'OE'+75.11
X: 800491.17
Y: 482925.55
DELTA: -9°45'49.42"
DEG: 3°49'10.99"
L: 255.61'
T: 128.12'
R: 1500.00'
PC STA: 189'OE'+47.00
PT STA: 192'OE'+02.61

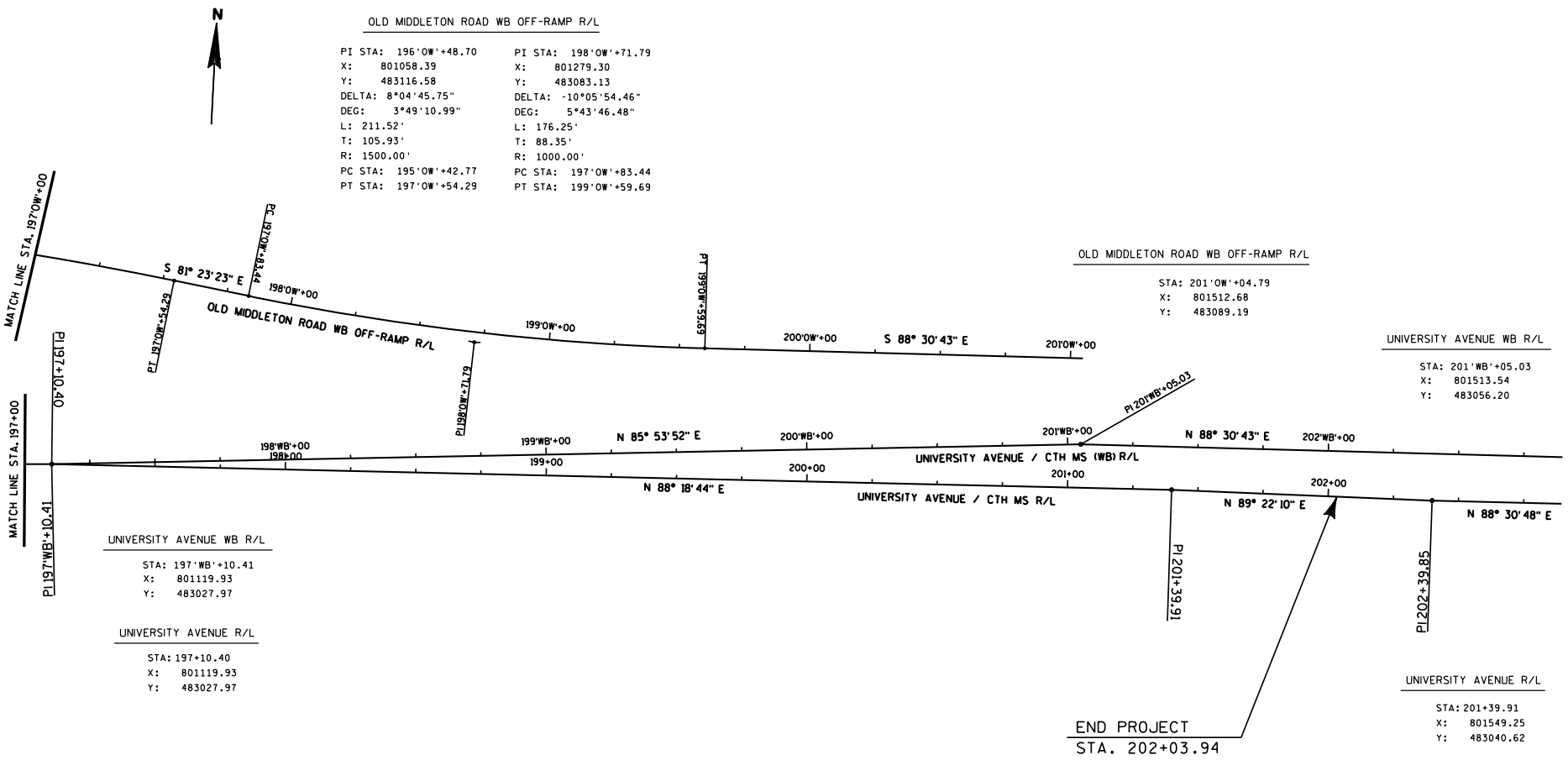
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET 436	E

2



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET 437	E

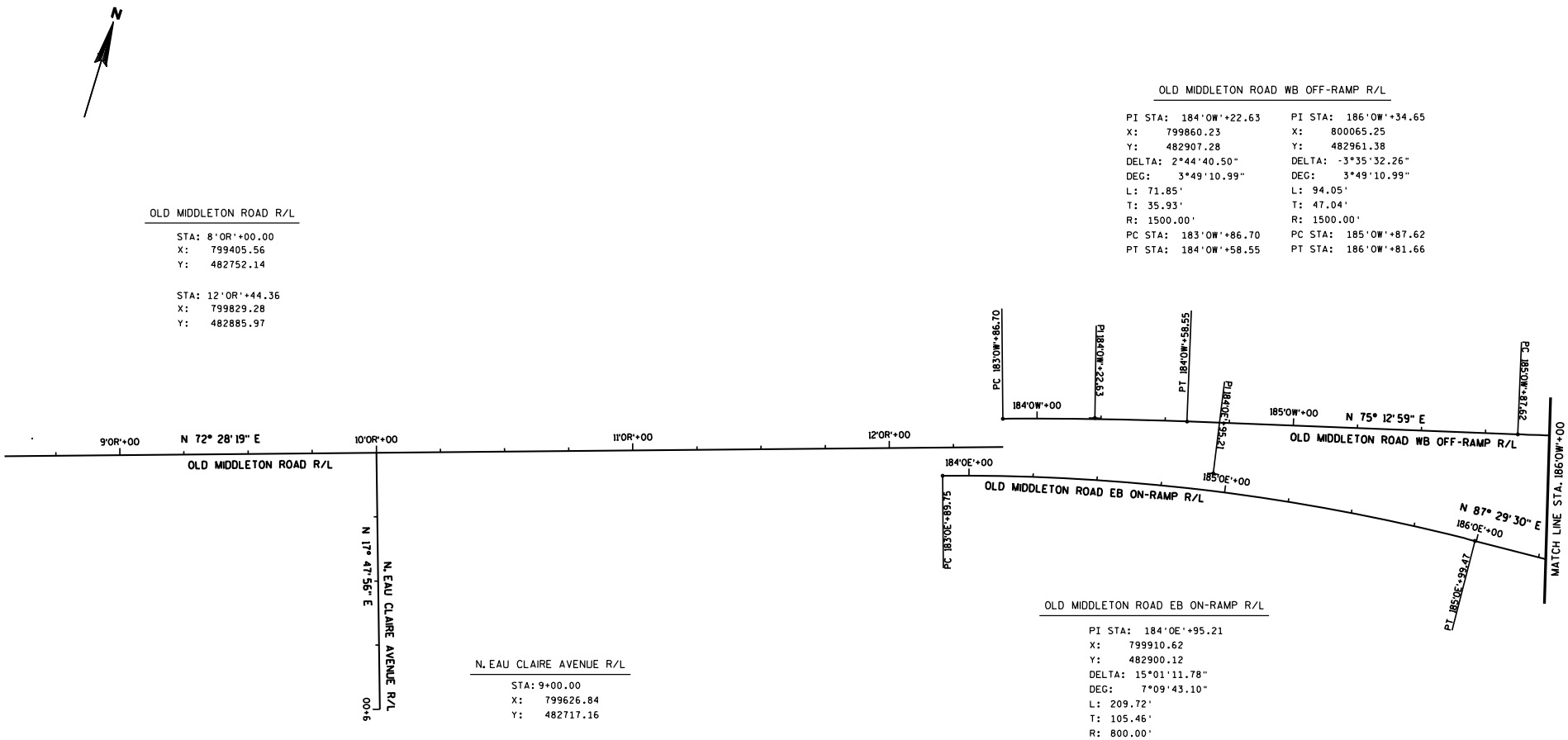
2



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\027219_ad.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

2



OLD MIDDLETON ROAD R/L

STA: 8'0R'+00.00
X: 799405.56
Y: 482752.14

STA: 12'0R'+44.36
X: 799829.28
Y: 482885.97

OLD MIDDLETON ROAD WB OFF-RAMP R/L

PI STA: 184'0W'+22.63	PI STA: 186'0W'+34.65
X: 799860.23	X: 800065.25
Y: 482907.28	Y: 482961.38
DELTA: 2°44'40.50"	DELTA: -3°35'32.26"
DEG: 3°49'10.99"	DEG: 3°49'10.99"
L: 71.85'	L: 94.05'
T: 35.93'	T: 47.04'
R: 1500.00'	R: 1500.00'
PC STA: 183'0W'+86.70	PC STA: 185'0W'+87.62
PT STA: 184'0W'+58.55	PT STA: 186'0W'+81.66

N. EAU CLAIRE AVENUE R/L

STA: 9+00.00
X: 799626.84
Y: 482717.16

STA: 10+00.00
X: 799596.27
Y: 482812.37

OLD MIDDLETON ROAD EB ON-RAMP R/L

PI STA: 184'0E'+95.21
X: 799910.62
Y: 482900.12
DELTA: 15°01'11.78"
DEG: 7°09'43.10"
L: 209.72'
T: 105.46'
R: 800.00'
PC STA: 183'0E'+89.75
PT STA: 185'0E'+99.47

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\027220_ad(omr).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

DATE 22DEC11 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5992-08-79 QUANTITY	5992-08-82 QUANTITY	5992-08-86 QUANTITY	5992-08-87 QUANTITY
0010	201.0105	CLEARING	STA	99.000	95.000			4.000
0020	201.0120	CLEARING	ID	650.000	650.000			
0030	201.0205	GRUBBING	STA	95.000	95.000			
0040	201.0220	GRUBBING	ID	650.000	650.000			
0050	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	3.000	3.000			
0060	203.0200	REMOVING OLD STRUCTURE (STATION) 01. STA. 121+87	LS	1.000	1.000			
0070	203.0200	REMOVING OLD STRUCTURE (STATION) 02. STA. 154+00	LS	1.000		1.000		
0080	204.0100	REMOVING PAVEMENT	SY	30,600.000	30,600.000			
0090	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	125.000	125.000			
0100	204.0150	REMOVING CURB & GUTTER	LF	12,500.000	12,500.000			
0110	204.0155	REMOVING CONCRETE SIDEWALK	SY	4,500.000	4,500.000			
0120	204.0165	REMOVING GUARDRAIL	LF	3,020.000	3,020.000			
0130	204.0170	REMOVING FENCE	LF	770.000	770.000			
0140	204.0195	REMOVING CONCRETE BASES	EACH	66.000	66.000			
0150	204.0210	REMOVING MANHOLES	EACH	15.000	15.000			
0160	204.0220	REMOVING INLETS	EACH	40.000	40.000			
0170	204.0245	REMOVING STORM SEWER (SIZE) 01. 12-INCH	LF	1,000.000	1,000.000			
0180	204.0245	REMOVING STORM SEWER (SIZE) 02. 15-INCH	LF	125.000	125.000			
0190	204.0245	REMOVING STORM SEWER (SIZE) 03. 18-INCH	LF	100.000	100.000			
0200	204.0245	REMOVING STORM SEWER (SIZE) 04. 24-INCH	LF	1,200.000	1,200.000			
0210	204.0245	REMOVING STORM SEWER (SIZE) 05. 27-INCH	LF	200.000	200.000			
0220	204.0245	REMOVING STORM SEWER (SIZE) 06. 30-INCH	LF	150.000	150.000			
0230	204.0245	REMOVING STORM SEWER (SIZE) 07. 36-INCH	LF	125.000	125.000			
0240	204.0291.S	ABANDONING SEWER	CY	150.000	150.000			
0250	205.0100	EXCAVATION COMMON	CY	89,368.000	89,368.000			
0260	206.2000	EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 10. C-13-2044	LS	1.000	1.000			
0270	206.2000	EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 11. C-13-2047	LS	1.000		1.000		
0280	206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (STRUCTURE) 02. R-13-186	LS	1.000	1.000			
0290	206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (STRUCTURE) 04. R-13-188	LS	1.000	1.000			
0300	206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (STRUCTURE) 07. R-13-191	LS	1.000	1.000			
0310	206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (STRUCTURE) 08. R-13-192	LS	1.000	1.000			
0320	206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (STRUCTURE) 09. R-13-193	LS	1.000	1.000			
0330	206.6000.S	TEMPORARY SHORING	SF	5,800.000	4,000.000	1,800.000		
0340	210.0100	BACKFILL STRUCTURE	CY	1,386.000	186.000	1,200.000		
0350	211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01. 5992-08-79	LS	1.000	1.000			
0360	213.0100	FINISHING ROADWAY (PROJECT) 01. 5992-08-79	EACH	1.000	1.000			
0370	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	2,700.000	2,300.000	400.000		
0380	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	57,500.000	57,500.000			
0390	305.0125	BASE AGGREGATE DENSE 1 1/4-INCH	CY	625.000	625.000			
0400	305.0130	BASE AGGREGATE DENSE 3-INCH	TON	56,000.000	56,000.000			
0410	311.0115	BREAKER RUN	CY	243.000	243.000			
0420	415.0070	CONCRETE PAVEMENT 7-INCH	SY	195.000	195.000			
0430	415.0410	CONCRETE PAVEMENT APPROACH SLAB	SY	135.000	135.000			
0440	416.0170	CONCRETE DRIVEWAY 7-INCH	SY	1,575.000	1,575.000			
0450	416.0270	CONCRETE DRIVEWAY HES 7-INCH	SY	200.000	200.000			

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5992-08-79 QUANTITY	5992-08-82 QUANTITY	5992-08-86 QUANTITY	5992-08-87 QUANTITY
0460	440.4410.S	INCENTIVE IRI RIDE	DOL	10,780.000	10,780.000			
0470	455.0105	ASPHALTIC MATERIAL PG58-28	TON	90.000	90.000			
0480	455.0115	ASPHALTIC MATERIAL PG64-22	TON	1,300.000	1,300.000			
0490	455.0120	ASPHALTIC MATERIAL PG64-28	TON	540.000	540.000			
0500	455.0605	TACK COAT	GAL	4,300.000	4,300.000			
0510	460.1100	HMA PAVEMENT TYPE E-0.3	TON	1,500.000	1,500.000			
0520	460.1101	HMA PAVEMENT TYPE E-1	TON	1,200.000	1,200.000			
0530	460.1110	HMA PAVEMENT TYPE E-10	TON	29,000.000	29,000.000			
0540	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	20,290.000	20,290.000			
0550	460.4100.S	REHEATING HMA LONGITUDINAL JOINTS	STA	285.000	285.000			
0560	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	300.000	300.000			
0570	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	2,050.000	2,050.000			
0580	502.0100	CONCRETE MASONRY BRIDGES	CY	95.000		95.000		
0590	502.3200	PROTECTIVE SURFACE TREATMENT	SY	230.000		230.000		
0600	502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	48.000	48.000			
0610	504.0100	CONCRETE MASONRY CULVERTS	CY	431.000	98.000	333.000		
0620	505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	LB	40,140.000	12,330.000	27,810.000		
0630	505.0610	BAR STEEL REINFORCEMENT HS COATED CULVERTS	LB	15,260.000		15,260.000		
0640	509.1500	CONCRETE SURFACE REPAIR	SF	320.000	320.000			
0650	513.2000	RAILING PIPE (STRUCTURE) 01. C-13-2047	LS	1.000		1.000		
0660	513.6000	RAILING STEEL (STRUCTURE) 01. R-13-185	LS	1.000	1.000			
0670	513.6000	RAILING STEEL (STRUCTURE) 02. R-13-186	LS	1.000	1.000			
0680	513.6000	RAILING STEEL (STRUCTURE) 03. R-13-187	LS	1.000	1.000			
0690	513.6000	RAILING STEEL (STRUCTURE) 04. R-13-190	LS	1.000	1.000			
0700	513.6000	RAILING STEEL (STRUCTURE) 05. R-13-192	LS	1.000	1.000			
0710	513.6000	RAILING STEEL (STRUCTURE) 06. STA. 134+40-134+71	LS	1.000	1.000			
0720	513.6000	RAILING STEEL (STRUCTURE) 07. C-13-2047	LS	1.000		1.000		
0730	513.6000	RAILING STEEL (STRUCTURE) 08. STA. 120+35-125+25	LS	1.000	1.000			
0740	513.6000	RAILING STEEL (STRUCTURE) 09. STA. 144+07-145+70	LS	1.000	1.000			
0750	513.7010	RAILING STEEL TYPE C2 (STRUCTURE) 01. C-13-2047	LS	1.000		1.000		
0760	516.0100	DAMPPROOFING	SY	220.000		220.000		
0770	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	187.000	67.000	120.000		
0780	517.1010.S	CONCRETE STAINING (STRUCTURE) 01. R-13-185	SF	1,500.000	1,500.000			
0790	517.1010.S	CONCRETE STAINING (STRUCTURE) 02. R-13-186	SF	600.000	600.000			
0800	517.1010.S	CONCRETE STAINING (STRUCTURE) 03. R-13-187	SF	1,900.000	1,900.000			
0810	517.1010.S	CONCRETE STAINING (STRUCTURE) 04. R-13-188	SF	800.000	800.000			
0820	517.1010.S	CONCRETE STAINING (STRUCTURE) 05. R-13-189	SF	600.000	600.000			
0830	517.1010.S	CONCRETE STAINING (STRUCTURE) 06. R-13-190	SF	1,200.000	1,200.000			
0840	517.1010.S	CONCRETE STAINING (STRUCTURE) 07. R-13-191	SF	1,300.000	1,300.000			
0850	517.1010.S	CONCRETE STAINING (STRUCTURE) 08. R-13-192	SF	2,500.000	2,500.000			

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5992-08-79 QUANTITY	5992-08-82 QUANTITY	5992-08-86 QUANTITY	5992-08-87 QUANTITY
0860	517.1010.S	CONCRETE STAINING (STRUCTURE) 09. R-13-193	SF	2,400.000	2,400.000			
0870	517.1015.S	CONCRETE STAINING MULTI-COLOR (STRUCTURE) 01. C-13-2047	SF	3,000.000		3,000.000		
0880	517.1050.S	ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 01. C-13-2047	SF	2,320.000		2,320.000		
0890	520.0118	CULVERT PIPE CLASS III 18-INCH	LF	50.000	50.000			
0900	520.1018	APRON ENDWALLS FOR CULVERT PIPE 18-INCH	EACH	2.000	2.000			
0910	520.1024	APRON ENDWALLS FOR CULVERT PIPE 24-INCH	EACH	1.000	1.000			
0920	520.1042	APRON ENDWALLS FOR CULVERT PIPE 42-INCH	EACH	1.000	1.000			
0930	520.8000.S	CULVERT PIPE CONCRETE COLLAR	EACH	5.000	5.000			
0940	532.0200.S	WALL MODULAR BLOCK GRAVITY	SF	650.000	650.000			
0950	532.0300.S	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH	SF	21,950.000	21,950.000			
0960	601.0110	CONCRETE CURB TYPE D	LF	220.000	220.000			
0970	601.0407	CONCRETE CURB & GUTTER 18-INCH TYPE D	LF	220.000	220.000			
0980	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	2,700.000	2,700.000			
0990	601.0600	CONCRETE CURB PEDESTRIAN	LF	50.000	50.000			
1000	602.0410	CONCRETE SIDEWALK 5-INCH	SF	53,000.000	53,000.000			
1010	602.0415	CONCRETE SIDEWALK 6-INCH	SF	120.000	120.000			
1020	602.0420	CONCRETE SIDEWALK 7-INCH	SF	5,450.000	5,450.000			
1030	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	1,150.000	1,150.000			
1040	603.1136	CONCRETE BARRIER TYPE S36	LF	250.000	250.000			
1050	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	400.000	400.000			
1060	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	2,200.000	2,200.000			
1070	604.0400	SLOPE PAVING CONCRETE	SY	130.000	130.000			
1080	607.0306	STORM SEWER PIPE NONREINFORCED CONCRETE CLASS 3 6-INCH	LF	65.000	65.000			
1090	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	4,464.000	4,464.000			
1100	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	40.000	40.000			
1110	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	463.000	463.000			
1120	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	7,817.000	7,817.000			
1130	608.0330	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	797.000	797.000			
1140	608.0336	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	1,220.000	1,220.000			
1150	608.0342	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH	LF	495.000	495.000			
1160	608.0348	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 48-INCH	LF	592.000	592.000			
1170	608.0412	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH	LF	156.000	156.000			
1180	611.0201	MANHOLES TYPE 1	EACH	30.000	30.000			
1190	611.0210	MANHOLES TYPE 3	EACH	14.000	14.000			
1200	611.0303	INLETS TYPE 3	EACH	149.000	149.000			
1210	611.0420	RECONSTRUCTING MANHOLES	EACH	7.000	7.000			
1220	611.0430	RECONSTRUCTING INLETS	EACH	2.000	2.000			
1230	611.0612	INLET COVERS TYPE C	EACH	3.000	3.000			
1240	611.8110	ADJUSTING MANHOLE COVERS	EACH	60.000	60.000			
1250	611.8115	ADJUSTING INLET COVERS	EACH	3.000	3.000			

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5992-08-79 QUANTITY	5992-08-82 QUANTITY	5992-08-86 QUANTITY	5992-08-87 QUANTITY
1260	611.8120.S	COVER PLATES TEMPORARY	EACH	20.000	20.000			
1270	611.9800.S	PIPE GRATES	EACH	1.000	1.000			
1280	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	3,860.000	3,360.000	500.000		
1290	614.0360	STEEL PLATE BEAM GUARD TEMPORARY	LF	75.000	75.000			
1300	614.0396	GUARDRAIL MOW STRIP ASPHALT	SY	160.000	160.000			
1310	614.2300	MGS GUARDRAIL 3	LF	1,426.000	1,426.000			
1320	614.2500	MGS THRIE BEAM TRANSITION	LF	160.000	160.000			
1330	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	4.000	4.000			
1340	616.0600.S	FENCE TEMPORARY	LF	2,200.000	2,200.000			
1350	619.1000	MOBILIZATION	EACH	1.000	0.890	0.040	0.040	0.030
1360	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	1,530.000	1,530.000			
1370	624.0100	WATER	MGAL	4,000.000	4,000.000			
1380	625.0100	TOPSOIL	SY	62,800.000	62,800.000			
1390	627.0200	MULCHING	SY	23,000.000	23,000.000			
1400	628.1504	SILT FENCE	LF	6,000.000	6,000.000			
1410	628.1520	SILT FENCE MAINTENANCE	LF	3,000.000	3,000.000			
1420	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	18.000	18.000			
1430	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	8.000	8.000			
1440	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	23,000.000	23,000.000			
1450	628.7005	INLET PROTECTION TYPE A	EACH	250.000	250.000			
1460	628.7010	INLET PROTECTION TYPE B	EACH	19.000	19.000			
1470	628.7015	INLET PROTECTION TYPE C	EACH	201.000	201.000			
1480	628.7020	INLET PROTECTION TYPE D	EACH	10.000	10.000			
1490	628.7504	TEMPORARY DITCH CHECKS	LF	270.000	270.000			
1500	628.7560	TRACKING PADS	EACH	20.000	20.000			
1510	629.0210	FERTILIZER TYPE B	CWT	40.000	40.000			
1520	631.0300	SOD WATER	MGAL	950.000	950.000			
1530	631.1000	SOD LAWN	SY	42,000.000	42,000.000			
1540	637.0202	SIGNS REFLECTIVE TYPE II	SF	1,171.250	1,171.250			
1550	638.2102	MOVING SIGNS TYPE II	EACH	22.000	22.000			
1560	638.2602	REMOVING SIGNS TYPE II	EACH	49.000	49.000			
1570	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	19.000	19.000			
1580	642.5201	FIELD OFFICE TYPE C	EACH	1.000	1.000			
1590	642.6001	FIELD LABORATORY	EACH	1.000	1.000			
1600	643.0100	TRAFFIC CONTROL (PROJECT) 01. 5992-08-79	EACH	1.000	1.000			
1610	643.0300	TRAFFIC CONTROL DRUMS	DAY	110,000.000	110,000.000			
1620	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	15,500.000	15,500.000			
1630	643.0500	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	EACH	1,700.000	1,700.000			
1640	643.0600	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	EACH	1,700.000	1,700.000			
1650	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	12,000.000	12,000.000			
1660	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	550.000	550.000			
1670	643.0900	TRAFFIC CONTROL SIGNS	DAY	20,000.000	20,000.000			
1680	643.0905.S	TRAFFIC CONTROL COVERING SIGNS	EACH	10.000	10.000			
1690	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SF	192.000	192.000			
1700	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	600.000	600.000			
1710	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 5992-08-79	EACH	1.000	1.000			
1720	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	2,500.000	2,500.000			
1730	645.0140	GEOTEXTILE FABRIC TYPE SAS	SY	366.000	366.000			
1740	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	13,700.000	13,700.000			
1750	646.0116	PAVEMENT MARKING EPOXY 6-INCH	LF	21,000.000	21,000.000			

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5992-08-79 QUANTITY	5992-08-82 QUANTITY	5992-08-86 QUANTITY	5992-08-87 QUANTITY
1760	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	8,000.000	8,000.000			
1770	646.0600	REMOVING PAVEMENT MARKINGS	LF	3,000.000	3,000.000			
1780	647.0156	PAVEMENT MARKING ARROWS EPOXY TYPE 1	EACH	2.000	2.000			
1790	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	50.000	50.000			
1800	647.0176	PAVEMENT MARKING ARROWS EPOXY TYPE 3	EACH	2.000	2.000			
1810	647.0206	PAVEMENT MARKING ARROWS BIKE LANE EPOXY	EACH	25.000	25.000			
1820	647.0306	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY	EACH	30.000	30.000			
1830	647.0316	PAVEMENT MARKING SYMBOLS BIKE DETECTOR EPOXY	EACH	2.000	2.000			
1840	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	20.000	20.000			
1850	647.0406	PAVEMENT MARKING WORDS BIKE LANE EPOXY	EACH	2.000	2.000			
1860	647.0456	PAVEMENT MARKING CURB EPOXY	LF	1,400.000	1,400.000			
1870	647.0576	PAVEMENT MARKING STOP LINE EPOXY 24-INCH	LF	900.000	900.000			
1880	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	50.000	50.000			
1890	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	50.000	50.000			
1900	647.0746	PAVEMENT MARKING DIAGONAL EPOXY 24-INCH	LF	170.000	170.000			
1910	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	2,000.000	2,000.000			
1920	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	1,100.000	1,100.000			
1930	647.0786	PAVEMENT MARKING CROSSWALK EPOXY 18-INCH	LF	1,100.000	1,100.000			
1940	647.0796	PAVEMENT MARKING CROSSWALK EPOXY 24-INCH	LF	320.000	320.000			
1950	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	128,000.000	128,000.000			
1960	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	41,400.000	41,400.000			
1970	649.0701	TEMPORARY PAVEMENT MARKING 8-INCH	LF	16,000.000	16,000.000			
1980	649.0801	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH	LF	1,100.000	1,100.000			
1990	649.1100	TEMPORARY PAVEMENT MARKING STOP LINE 18-INCH	LF	2,300.000	2,300.000			
2000	649.1200	TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 18-INCH	LF	450.000	450.000			
2010	649.2100	TEMPORARY RAISED PAVEMENT MARKERS	EACH	40.000	40.000			
2020	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	228.000	228.000			
2030	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	28,450.000	28,450.000			
2040	650.5000	CONSTRUCTION STAKING BASE	LF	28,450.000	28,450.000			
2050	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	45,000.000	45,000.000			
2060	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. R-13-185	LS	1.000	1.000			
2070	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 02. R-13-186	LS	1.000	1.000			
2080	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 03. R-13-187	LS	1.000	1.000			
2090	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 04. R-13-188	LS	1.000	1.000			
2100	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 05. R-13-189	LS	1.000	1.000			
2110	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 06. R-13-190	LS	1.000	1.000			
2120	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 07. R-13-191	LS	1.000	1.000			
2130	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 08. R-13-192	LS	1.000	1.000			
2140	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 09. R-13-193	LS	1.000	1.000			
2150	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 10. STA. 134+40 TO 134+71	LS	1.000	1.000			

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5992-08-79 QUANTITY	5992-08-82 QUANTITY	5992-08-86 QUANTITY	5992-08-87 QUANTITY
2160	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 11. STA. 176+65 TO 177+60	LS	1.000	1.000			
2170	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 12. STA. 9+18 TO 9+40	LS	1.000	1.000			
2180	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 13. C-13-2044	LS	1.000	1.000			
2190	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 14. C-13-2047	LS	1.000		1.000		
2200	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	120.000	120.000			
2210	650.7500	CONSTRUCTION STAKING CONCRETE BARRIER	LF	250.000	250.000			
2220	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 5992-08-79	LS	1.000	1.000			
2230	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 5992-08-79	LS	1.000	1.000			
2240	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	18,071.000	18,071.000			
2250	652.0110	CONDUIT RIGID METALLIC 1-INCH	LF	35.000		35.000		
2260	652.0210	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	LF	95.000		95.000		
2270	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	16,708.000	16,678.000	30.000		
2280	652.0230	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2 1/2-INCH	LF	1,840.000	1,840.000			
2290	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	19,470.000	19,440.000	30.000		
2300	652.0325	CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH	LF	2,449.000	2,449.000			
2310	652.0330	CONDUIT RIGID NONMETALLIC SCHEDULE 80 2 1/2-INCH	LF	200.000	200.000			
2320	652.0335	CONDUIT RIGID NONMETALLIC SCHEDULE 80 3-INCH	LF	7,946.000	7,946.000			
2330	652.0615	CONDUIT SPECIAL 3-INCH	LF	200.000	200.000			
2340	652.0800	CONDUIT LOOP DETECTOR	LF	2,247.500	2,247.500			
2350	653.0208	JUNCTION BOXES 8X8X8-INCH	EACH	1.000		1.000		
2360	653.0900	ADJUSTING PULL BOXES	EACH	5.000	5.000			
2370	653.0905	REMOVING PULL BOXES	EACH	4.000	4.000			
2380	654.0105	CONCRETE BASES TYPE 5	EACH	78.000	78.000			
2390	654.0110	CONCRETE BASES TYPE 10	EACH	10.000	10.000			
2400	655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	LF	4,255.000	4,255.000			
2410	655.0240	CABLE TRAFFIC SIGNAL 7-14 AWG	LF	1,806.000	1,806.000			
2420	655.0250	CABLE TRAFFIC SIGNAL 9-14 AWG	LF	530.000	530.000			
2430	655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	LF	1,785.000	1,785.000			
2440	655.0270	CABLE TRAFFIC SIGNAL 15-14 AWG	LF	465.000	465.000			
2450	655.0280	CABLE TRAFFIC SIGNAL 19-14 AWG	LF	90.000	90.000			
2460	655.0410	COMMUNICATION CABLE INSTALLED IN CONDUIT	LF	12,290.000	12,290.000			
2470	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	17,699.000	17,699.000			
2480	655.0615	ELECTRICAL WIRE LIGHTING 10 AWG	LF	43,190.000	43,190.000			
2490	655.0620	ELECTRICAL WIRE LIGHTING 8 AWG	LF	19,502.000	19,502.000			
2500	655.0630	ELECTRICAL WIRE LIGHTING 4 AWG	LF	58,291.000	58,291.000			
2510	655.0800	LOOP DETECTOR WIRE	LF	5,985.000	5,985.000			
2520	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. ALLEN BLVD	LS	1.000	1.000			
2530	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 02. CAPITAL AVENUE	LS	1.000	1.000			
2540	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 03. SPRING HARBOR DRIVE	LS	1.000	1.000			

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5992-08-79 QUANTITY	5992-08-82 QUANTITY	5992-08-86 QUANTITY	5992-08-87 QUANTITY
2550	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 04. WHITNEY WAY	LS	1.000	1.000			
2560	657.0100	PEDESTAL BASES	EACH	20.000	20.000			
2570	657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	EACH	75.000	75.000			
2580	657.0420	TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT	EACH	20.000	20.000			
2590	658.0500	PEDESTRIAN PUSH BUTTONS	EACH	23.000	23.000			
2600	658.5069	SIGNAL MOUNTING HARDWARE (LOCATION) 01. ALLEN BOULEVARD	LS	1.000	1.000			
2610	658.5069	SIGNAL MOUNTING HARDWARE (LOCATION) 02. CAPITAL AVENUE	LS	1.000	1.000			
2620	658.5069	SIGNAL MOUNTING HARDWARE (LOCATION) 03. SPRING HARBOR DRIVE	LS	1.000	1.000			
2630	658.5069	SIGNAL MOUNTING HARDWARE (LOCATION) 04. CRAIG AVENUE	LS	1.000	1.000			
2640	658.5069	SIGNAL MOUNTING HARDWARE (LOCATION) 05. WHITNEY WAY	LS	1.000	1.000			
2650	690.0150	SAWING ASPHALT	LF	12,000.000	12,000.000			
2660	690.0250	SAWING CONCRETE	LF	850.000	850.000			
2670	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	500.000	500.000			
2680	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	3,068.000	500.000	2,568.000		
2690	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	1,750.000	1,750.000			
2700	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	2,750.000	2,750.000			
2710	SPV.0035	SPECIAL 18. ABANDON SANITARY 10-INCH SEWER PIPE WITH SLURRY	CY	16.500				16.500
2720	SPV.0045	SPECIAL 01. TEMPORARY CROSSWALK/SIDEWALK	DAY	1,200.000	1,200.000			
2730	SPV.0060	SPECIAL 01. INLET COVER TYPE H SPECIAL	EACH	163.000	163.000			
2740	SPV.0060	SPECIAL 02. INLET COVERS TERRACE TYPE 3 SPECIAL	EACH	12.000	12.000			
2750	SPV.0060	SPECIAL 03. TERRACE INLET TYPE 3 SPECIAL	EACH	12.000	12.000			
2760	SPV.0060	SPECIAL 04. CATCH BASIN SPECIAL	EACH	19.000	19.000			
2770	SPV.0060	SPECIAL 05. MANHOLE, TYPE 8 SPECIAL	EACH	3.000	3.000			
2780	SPV.0060	SPECIAL 06. MANHOLE COVER TYPE J SPECIAL	EACH	64.000	64.000			
2790	SPV.0060	SPECIAL 07. REMOVE STREET LIGHT	EACH	41.000	41.000			
2800	SPV.0060	SPECIAL 08. REMOVE LIGHTING CONTROL CABINET	EACH	1.000	1.000			
2810	SPV.0060	SPECIAL 09. LIGHTING CONTROL CABINET	EACH	4.000	4.000			
2820	SPV.0060	SPECIAL 10. LED LUMINAIRE AND MOUNTING BRACKET TYPE 1	EACH	147.000	147.000			
2830	SPV.0060	SPECIAL 11. LED LUMINAIRE AND MOUNTING BRACKET TYPE 2	EACH	9.000	9.000			
2840	SPV.0060	SPECIAL 12. WALL PACK LUMINAIRE LED	EACH	4.000	4.000			
2850	SPV.0060	SPECIAL 13. UTILITY LINE OPENING	EACH	30.000	25.000		4.000	1.000
2860	SPV.0060	SPECIAL 14. PRECAST SIGN POST BASE	EACH	251.000	251.000			
2870	SPV.0060	SPECIAL 15. SIGN POST BASE FOR CONCRETE INSTALLATION	EACH	17.000	17.000			
2880	SPV.0060	SPECIAL 16. ROOT PRUNING EXISTING TERRACE TREES	EACH	8.000	8.000			
2890	SPV.0060	SPECIAL 17. BUS SHELTER	EACH	3.000	3.000			
2900	SPV.0060	SPECIAL 18. STORM SEWER TREATMENT STRUCTURE SPECIAL	EACH	2.000	2.000			
2910	SPV.0060	SPECIAL 19. CUT-IN CONNECTION	EACH	2.000			2.000	
2920	SPV.0060	SPECIAL 20. FURNISH AND INSTALL HYDRANT	EACH	14.000			14.000	
2930	SPV.0060	SPECIAL 21. CUT OFF EXISTING WATER MAIN	EACH	5.000			5.000	
2940	SPV.0060	SPECIAL 22. ABANDON WATER VALVE BOX	EACH	10.000			10.000	

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5992-08-79 QUANTITY	5992-08-82 QUANTITY	5992-08-86 QUANTITY	5992-08-87 QUANTITY
2950	SPV.0060	SPECIAL 23. ABANDON HYDRANT	EACH	8.000			8.000	
2960	SPV.0060	SPECIAL 24. ADJUST WATER VALVE BOX	EACH	30.000			30.000	
2970	SPV.0060	SPECIAL 25. RELOCATE HYDRANT	EACH	1.000			1.000	
2980	SPV.0060	SPECIAL 26. CUT OUT AND REPLACE EXISTING WATER MAIN VALVE	EACH	5.000			5.000	
2990	SPV.0060	SPECIAL 27. FURNISH & INSTALL 6-INCH VALVE	EACH	13.000			13.000	
3000	SPV.0060	SPECIAL 28. FURNISH & INSTALL 8-INCH VALVE	EACH	4.000			4.000	
3010	SPV.0060	SPECIAL 29. FURNISH & INSTALL 10-INCH VALVE	EACH	3.000			3.000	
3020	SPV.0060	SPECIAL 30. FURNISH & INSTALL 12-INCH VALVE	EACH	1.000			1.000	
3030	SPV.0060	SPECIAL 31. FURNISH & INSTALL 16-INCH VALVE	EACH	1.000			1.000	
3040	SPV.0060	SPECIAL 32. ADJUST WATER SERVICE BOX	EACH	1.000			1.000	
3050	SPV.0060	SPECIAL 33. ABANDON EXISTING CURB BOX	EACH	5.000			5.000	
3060	SPV.0060	SPECIAL 34. FURNISH EXCAVATION AND DITCH FOR LIVE TAP	EACH	10.000			10.000	
3070	SPV.0060	SPECIAL 35. LOCATE AND REFERENCE PROPERTY CORNER	EACH	70.000	70.000			
3080	SPV.0060	SPECIAL 36. RESET PROPERTY CORNERS	EACH	70.000	70.000			
3090	SPV.0060	SPECIAL 37. TEMPORARY BUS STOP PAD	EACH	20.000	20.000			
3100	SPV.0060	SPECIAL 38. MANHOLE, TYPE 9 SPECIAL	EACH	1.000	1.000			
3110	SPV.0060	SPECIAL 39. REMOVE SEWER ACCESS STRUCTURE	EACH	4.000				4.000
3120	SPV.0060	SPECIAL 40. ABANDON SEWER ACCESS STRUCTURE	EACH	2.000				2.000
3130	SPV.0060	SPECIAL 41. PIPE PLUG	EACH	10.000				10.000
3140	SPV.0060	SPECIAL 42. TRENCH FRAME AND GRATED COVER	EACH	1.000		1.000		
3150	SPV.0060	SPECIAL 43. MANHOLE COVER SPECIAL	EACH	1.000	1.000			
3160	SPV.0060	SPECIAL 44. ADJUST SEWER ACCESS STRUCTURE	EACH	8.000				8.000
3170	SPV.0060	SPECIAL 45. ADJUST SEWER ACCESS STRUCTURE- SPECIAL	EACH	16.000				16.000
3180	SPV.0060	SPECIAL 47. SANITARY SEWER ELECTRONIC MARKERS	EACH	1.000				1.000
3190	SPV.0060	SPECIAL 48. SANITARY SEWER ACCESS STRUCTURE, 4' DIAMETER	EACH	5.000				5.000
3200	SPV.0060	SPECIAL 49. SANITARY SEWER ACCESS STRUCTURE, 6' DIAMETER	EACH	1.000				1.000
3210	SPV.0060	SPECIAL 51. COMPRESSION COUPLING	EACH	1.000				1.000
3220	SPV.0060	SPECIAL 52. SANITARY SEWER INTERNAL CHIMMEY SEAL	EACH	4.000				4.000
3230	SPV.0060	SPECIAL 54. OUTLET BOX 4X4X4-INCH	EACH	4.000		4.000		
3240	SPV.0060	SPECIAL 57. REMOVE AND REPLACE MAILBOXES	EACH	6.000	6.000			
3250	SPV.0060	SPECIAL 58. SANITARY TAP	EACH	4.000				4.000
3260	SPV.0060	SPECIAL 60. POLE 30-FOOT 11 GAUGE	EACH	89.000	89.000			
3270	SPV.0060	SPECIAL 61. POLE 30-FOOT 7 GAUGE	EACH	1.000	1.000			
3280	SPV.0060	SPECIAL 63. REMOVE LUMINAIRE	EACH	3.000	3.000			
3290	SPV.0060	SPECIAL 64. REINSTALL STREET LIGHT	EACH	2.000	2.000			
3300	SPV.0060	SPECIAL 65. CONCRETE STREET LIGHT POLE AND ALUMINUM ARM	EACH	9.000	9.000			
3310	SPV.0060	SPECIAL 66. DECORATIVE LIGHT COVER	EACH	4.000	4.000			
3320	SPV.0060	SPECIAL 70. ELECTRIC PULLBOX TYPE 1	EACH	65.000	65.000			

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3330	SPV.0060	SPECIAL 71. ELECTRIC PULLBOX TYPE 3	EACH	17.000	17.000			
3340	SPV.0060	SPECIAL 72. ELECTRIC PULLBOX TYPE 5	EACH	19.000	19.000			
3350	SPV.0060	SPECIAL 73. CONCRETE BASE TYPE G	EACH	19.000	19.000			
3360	SPV.0060	SPECIAL 74. CONCRETE BASE TYPE LB-3	EACH	16.000	16.000			
3370	SPV.0060	SPECIAL 75. CONCRETE BASE TYPE LB-8	EACH	5.000	5.000			
3380	SPV.0060	SPECIAL 76. CONCRETE BASE TYPE P	EACH	5.000	5.000			
3390	SPV.0060	SPECIAL 78. CONCRETE BASE OFFSET	EACH	2.000	2.000			
3400	SPV.0060	SPECIAL 79. TRANSFORMER BASE 16-INCH STEEL	EACH	16.000	16.000			
3410	SPV.0060	SPECIAL 80. MONOTUBE POLE TYPE 9	EACH	10.000	10.000			
3420	SPV.0060	SPECIAL 81. MONOTUBE ARM 30-FOOT	EACH	9.000	9.000			
3430	SPV.0060	SPECIAL 82. MONOTUBE ARM 35-FOOT	EACH	1.000	1.000			
3440	SPV.0060	SPECIAL 84. POLE 20-FOOT 7-GAUGE	EACH	4.000	4.000			
3450	SPV.0060	SPECIAL 85. TRAFFIC SIGNAL CONTROL CABINET	EACH	5.000	5.000			
3460	SPV.0060	SPECIAL 86. TRAFFIC SIGNAL CONTROLLER	EACH	5.000	5.000			
3470	SPV.0060	SPECIAL 87. NEMA-PLUS CONFLICT MONITOR	EACH	5.000	5.000			
3480	SPV.0060	SPECIAL 88. TRAFFIC SIGNAL TROMBONE ARMS ALUMINUM 15-FOOT	EACH	2.000	2.000			
3490	SPV.0060	SPECIAL 89. TRAFFIC SIGNAL TROMBONE ARMS ALUMINUM 18-FOOT	EACH	3.000	3.000			
3500	SPV.0060	SPECIAL 90. TRAFFIC SIGNAL HEADS 12-INCH 3-SECTION VERTICAL	EACH	59.000	59.000			
3510	SPV.0060	SPECIAL 91. TRAFFIC SIGNAL HEADS 12-INCH 4-SECTION VERTICAL	EACH	4.000	4.000			
3520	SPV.0060	SPECIAL 92. TRAFFIC SIGNAL HEADS 12-INCH 3-SECTION HORIZONTAL	EACH	3.000	3.000			
3530	SPV.0060	SPECIAL 93. TRAFFIC SIGNAL HEADS 12-INCH PEDESTRIAN	EACH	40.000	40.000			
3540	SPV.0060	SPECIAL 94. TRAFFIC SIGNAL HEADS 12-INCH PEDESTRIAN COUNTDOWN	EACH	40.000	40.000			
3550	SPV.0060	SPECIAL 95. BACKPLATES SIGNAL FACE, 3-SECTION 12-INCH	EACH	62.000	62.000			
3560	SPV.0060	SPECIAL 96. BACKPLATES SIGNAL FACE, 4-SECTION 12-INCH	EACH	4.000	4.000			
3570	SPV.0060	SPECIAL 97. CONCRETE BASE TYPE M	EACH	4.000	4.000			
3580	SPV.0085	SPECIAL 01. NO MOW LAWN SEED	LB	415.000	415.000			
3590	SPV.0090	SPECIAL 01. FURNISH & INSTALL 4-INCH WATER PIPE AND FITTINGS	LF	25.000			25.000	
3600	SPV.0090	SPECIAL 02. FURNISH & INSTALL 6-INCH WATER PIPE AND FITTINGS	LF	454.000			454.000	
3610	SPV.0090	SPECIAL 03. FURNISH & INSTALL 8-INCH WATER PIPE AND FITTINGS	LF	374.000			374.000	
3620	SPV.0090	SPECIAL 04. FURNISH & INSTALL 10-INCH WATER PIPE AND FITTINGS	LF	702.000			702.000	
3630	SPV.0090	SPECIAL 05. FURNISH & INSTALL 12-INCH WATER PIPE AND FITTINGS	LF	35.000			35.000	
3640	SPV.0090	SPECIAL 06. FURNISH & INSTALL 16-INCH WATER PIPE AND FITTINGS	LF	2,580.000			2,580.000	
3650	SPV.0090	SPECIAL 07. SELECT FILL FOR WATER MAIN	LF	4,170.000			4,170.000	
3660	SPV.0090	SPECIAL 08. FURNISH AND INSTALL POLYSTYRENE	LF	80.000			80.000	
3670	SPV.0090	SPECIAL 09. EXTEND AND RECONNECT SERVICE LATERAL 1-INCH	LF	12.000			12.000	
3680	SPV.0090	SPECIAL 11. EXTEND AND RECONNECT SERVICE LATERAL 2-INCH	LF	16.000			16.000	

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3690	SPV.0090	SPECIAL 12. REPLACE COPPER SERVICE LATERAL 1-INCH	LF	59.000			59.000	
3700	SPV.0090	SPECIAL 13. CONCRETE CURB AND GUTTER 24-INCH TYPE A SPECIAL	LF	70.000	70.000			
3710	SPV.0090	SPECIAL 14. CONCRETE CURB AND GUTTER 24-INCH TYPE D SPECIAL	LF	42,000.000	42,000.000			
3720	SPV.0090	SPECIAL 16. SIGN POST	LF	827.000	827.000			
3730	SPV.0090	SPECIAL 17. REFLECTIVE SIGN POST	LF	2,952.500	2,952.500			
3740	SPV.0090	SPECIAL 19. SELECT FILL FOR SANITARY SEWER	LF	729.000				729.000
3750	SPV.0090	SPECIAL 20. SANITARY SEWER PIPE 8-INCH	LF	196.000				196.000
3760	SPV.0090	SPECIAL 21. SANITARY SEWER PIPE 10-INCH	LF	8.000				8.000
3770	SPV.0090	SPECIAL 22. SANITARY SEWER PIPE 12-INCH	LF	525.000				525.000
3780	SPV.0090	SPECIAL 30. LOOP DETECTOR LEAD-IN CABLE SPECIAL	LF	5,960.000	5,960.000			
3790	SPV.0105	SPECIAL 01. TEMPORARY VEHICLE DETECTION WHITNEY WAY INTERSECTION	LS	1.000	1.000			
3800	SPV.0105	SPECIAL 02. TEMPORARY VEHICLE DETECTION SPRING HARBOR INTERSECTION	LS	1.000	1.000			
3810	SPV.0105	SPECIAL 03. TEMPORARY VEHICLE DETECTION CAPITOL AVENUE INTERSECTION	LS	1.000	1.000			
3820	SPV.0105	SPECIAL 04. TEMPORARY VEHICLE DETECTION ALLEN BOULEVARD INTERSECTION	LS	1.000	1.000			
3830	SPV.0105	SPECIAL 05. TEMPORARY TRAFFIC SIGNALS WHITNEY WAY INTERSECTION	LS	1.000	1.000			
3840	SPV.0105	SPECIAL 06. TEMPORARY TRAFFIC SIGNALS SPRING HARBOR INTERSECTION	LS	1.000	1.000			
3850	SPV.0105	SPECIAL 07. TEMPORARY TRAFFIC SIGNALS CAPITOL AVENUE INTERSECTION	LS	1.000	1.000			
3860	SPV.0105	SPECIAL 08. TEMPORARY TRAFFIC SIGNALS ALLEN BOULEVARD INTERSECTION	LS	1.000	1.000			
3870	SPV.0105	SPECIAL 09. CONSTRUCTION STAKING WATER MAIN	LS	1.000			1.000	
3880	SPV.0105	SPECIAL 10. CONSTRUCTION STAKING SANITARY SEWER	LS	1.000				1.000
3890	SPV.0105	SPECIAL 11. WASTEWATER CONTROL	LS	1.000				1.000
3900	SPV.0105	SPECIAL 12. DEWATERING FOR SANITARY SEWER	LS	1.000				1.000
3910	SPV.0105	SPECIAL 13. LOCATING MMSD FORCE MAIN	LS	1.000				1.000
3920	SPV.0105	SPECIAL 14. CONCRETE PAVEMENT JOINT LAYOUT	LS	1.000	1.000			
3930	SPV.0105	SPECIAL 20. OPTICAL SIGNAL PREEMPT	LS	1.000	1.000			
3940	SPV.0165	SPECIAL 01. SPECIAL WATERWAY CURB	SF	475.000	475.000			
3950	SPV.0165	SPECIAL 02. COLORED CROSSWALK	SF	4,700.000	4,700.000			
3960	SPV.0180	SPECIAL 01. ARCHITECTURAL CONCRETE PAVEMENT 5-INCH	SY	900.000	900.000			
3970	SPV.0180	SPECIAL 02. CONCRETE PAVEMENT APPROACH SLAB SHES SPECIAL	SY	160.000	160.000			
3980	SPV.0195	SPECIAL 01. EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL	TON	100.000	100.000			

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REMOVING FENCE

STATION	TO	STATION	O/S	LOCATION	204.0170 (LF)
119+59	-	125+29	LT	UNIVERSITY AVE	570
153+00	-	154+43	LT	UNIVERSITY AVE	180
11+25	-	11+45	LT	SPRING HARBOR DRIVE	20
TOTAL					770

REMOVING SMALL PIPE CULVERTS

STATION	O/S	LOCATION	203.0100 (EACH)	NOTES
116+14	RT	UNIVERSITY AVE	1	18"X18" CMCP
169+75	RT	UNIVERSITY AVE	1	18"X32" CMCP
5'AL'+30		ASBURY LOOP DRIVEWAY	1	18"X35" CMCP
TOTAL			3	

REMOVING STORM SEWER AND ABANDONING SEWER

STATION	TO	STATION	LOCATION	204.0245 (12 INCH) (LF)	204.0245 (15 INCH) (LF)	204.0245 (18 INCH) (LF)	204.0245 (24 INCH) (LF)	204.0245 (27 INCH) (LF)	204.0245 (30 INCH) (LF)	204.0245 (36 INCH) (LF)	204.0291.S ABANDONING SEWER (CY)
98+25	-	103+75	UNIVERSITY AVENUE	24	-	-	-	-	-	-	-
103+75	-	134+00	UNIVERSITY AVENUE	160	-	-	313	158	130	-	-
134+00	-	154+80	UNIVERSITY AVENUE	257	-	64	522	-	-	105	-
154+80	-	174+20	UNIVERSITY AVENUE	326	97	-	330	-	-	-	93
174+20	-	183+60	UNIVERSITY AVENUE	-	-	-	-	-	-	-	40
189+35	-	202+04	UNIVERSITY AVENUE	-	-	-	-	-	-	-	-
10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	-	-	-	-	-	-	-	-
8+50	-	10+00	ST. DUNSTAN DRIVE	-	-	-	-	-	-	-	-
4'AL'+50	-	6'AL'+00	ASBURY LOOP DRIVEWAY	-	-	-	-	-	-	-	-
7+75	-	10+00	ASBURY-CRESS ACCESS	-	-	-	-	-	-	-	-
10+00	-	10+75	OVERLOOK PASS	-	-	-	-	-	-	-	-
9+00	-	10+00	HEIM AVENUE	-	-	-	-	-	-	-	-
9+10	-	10+00	HICKORY HOLLOW DRIVE	-	-	-	-	-	-	-	-
10+00	-	11+25	BAKER AVENUE	-	-	-	-	-	-	-	-
10+00	-	11+10	HICKORY DRIVE	-	-	-	-	-	-	-	-
8+50	-	10+00	LAUREL CREST	-	-	-	-	-	-	-	-
10+00	-	11+00	LAUREL CREST	-	-	-	-	-	-	-	-
9+00	-	10+00	CAPITAL AVENUE	-	-	-	-	-	-	-	-
10+00	-	12+25	CAPITAL AVENUE	-	-	-	-	-	-	-	-
10+00	-	10+85	CAMUS LANE	-	-	-	-	-	-	-	-
10+00	-	10+80	FRITZ AVENUE	-	-	-	-	-	-	-	-
8+00	-	10+00	NORMAN WAY (WEST)	-	-	-	-	-	-	-	-
10+00	-	12+25	NORMAN WAY (EAST)	-	-	-	-	-	-	-	-
10+00	-	12+15	SPRING HARBOR DRIVE	-	-	-	-	-	-	-	-
8+50	-	10+00	CRAIG AVENUE	-	-	-	-	-	-	-	-
10+00	-	10+90	TOMAHAWK TRAIL	-	-	-	-	-	-	-	-
6'WN'+50	-	10'WN'+00	WHITNEY WAY	-	-	-	-	-	-	-	-
10'OR'+00	-	12'OR'+25	OLD MIDDLETON ROAD	-	-	-	-	-	-	-	-
183'OW'+86	-	199'OW'+60	OLD MIDDLETON WB OFF-RAMP	192	-	-	-	-	-	-	-
183'OE'+90	-	193'OE'+70	OLD MIDDLETON EB ON-RAMP	-	-	-	-	-	-	-	-
			UNDISTRIBUTED	41	28	36	35	42	20	20	17
TOTALS				1,000	125	100	1,200	200	150	125	150

REMOVING STORM SEWER STRUCTURES

STATION	LOCATION	OFFSET	204.0210 REMOVING MANHOLES (EACH)	204.0220 REMOVING INLETS (EACH)
98+48	UNIVERSITY AVENUE	33' RT	-	1
98+63	UNIVERSITY AVENUE	51' RT	-	1
108+45	UNIVERSITY AVENUE	9' RT	-	1
112+20	UNIVERSITY AVENUE	13' RT	-	1
112+46	UNIVERSITY AVENUE	41' RT	-	1
114+81	UNIVERSITY AVENUE	36' RT	1	-
119+31	UNIVERSITY AVENUE	38' RT	-	1
133+80	UNIVERSITY AVENUE	75' RT	-	1
134+24	UNIVERSITY AVENUE	54' RT	-	1
134+22	UNIVERSITY AVENUE	37' RT	1	-
137+13	UNIVERSITY AVENUE	29' RT	-	1
141+64	UNIVERSITY AVENUE	35' RT	-	1
142+73	UNIVERSITY AVENUE	35' RT	1	-
143+37	UNIVERSITY AVENUE	49' LT	1	-
144+13	UNIVERSITY AVENUE	150' LT	1	-
150+80	UNIVERSITY AVENUE	42' RT	1	-
153+93	UNIVERSITY AVENUE	42' RT	1	-
154+04	UNIVERSITY AVENUE	60' LT	-	1
154+04	UNIVERSITY AVENUE	49' RT	-	1
154+06	UNIVERSITY AVENUE	114' LT	-	1
154+38	UNIVERSITY AVENUE	67' LT	1	-
154+52	UNIVERSITY AVENUE	103' LT	1	-
156+72	UNIVERSITY AVENUE	67' RT	-	1
158+85	UNIVERSITY AVENUE	33' RT	-	1
162+95	UNIVERSITY AVENUE	41' LT	-	1
164+56	UNIVERSITY AVENUE	34' LT	-	1
164+58	UNIVERSITY AVENUE	41' LT	-	1
164+59	UNIVERSITY AVENUE	44' LT	-	1
164+62	UNIVERSITY AVENUE	42' RT	-	1
165+00	UNIVERSITY AVENUE	45' LT	-	1
165+01	UNIVERSITY AVENUE	41' LT	-	1
165+11	UNIVERSITY AVENUE	43' LT	1	-
165+47	UNIVERSITY AVENUE	40' RT	-	1
165+97	UNIVERSITY AVENUE	40' RT	-	1
166+01	UNIVERSITY AVENUE	38' LT	-	1
166+98	UNIVERSITY AVENUE	41' RT	-	1
170+49	UNIVERSITY AVENUE	37' LT	-	1
170+52	UNIVERSITY AVENUE	37' LT	-	1
173+25	UNIVERSITY AVENUE	29' LT	-	1
173+25	UNIVERSITY AVENUE	36' LT	-	1
177+19	UNIVERSITY AVENUE	44' LT	1	-
185'OW'+32	OLD MIDDLETON WB OFF-RAMP	37' RT	-	1
185'OW'+55	OLD MIDDLETON WB OFF-RAMP	4' RT	-	1
185'OW'+59	OLD MIDDLETON WB OFF-RAMP	22' RT	-	1
189'OW'+42	OLD MIDDLETON WB OFF-RAMP	4' LT	-	1
189'OW'+52	OLD MIDDLETON WB OFF-RAMP	5' LT	-	1
190'OW'+73	OLD MIDDLETON WB OFF-RAMP	5' LT	-	1
	UNDISTRIBUTED		4	4
TOTALS			15	40

REMOVING PAVEMENT & REMOVING CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	204.0100 REMOVING PAVEMENT (SY)	204.0155 REMOVING CONCRETE SIDEWALK (SY)
98+25		103+75	UNIVERSITY AVENUE	3,957	717
103+75		134+00	UNIVERSITY AVENUE	12,787	652
134+00		154+80	UNIVERSITY AVENUE	5,084	1,291
154+80		174+20	UNIVERSITY AVENUE	4,795	1,041
174+20		183+60	UNIVERSITY AVENUE	2,298	-
189+35		202+04	UNIVERSITY AVENUE	1,467	110
10'AS'+00		15'AS'+25	ALLEN BOULEVARD	-	155
10+00		11+10	HICKORY DRIVE	-	37
8+50		10+00	LAUREL CREST	-	1
9+00		10+00	CAPITAL AVENUE	-	138
10+00		12+25	CAPITAL AVENUE	-	28
10+00		12+15	SPRING HARBOR DRIVE	-	79
6'WN'+50		10'WN'+00	WHITNEY WAY	-	107
10'OR'+00		12'OR'+25	OLD MIDDLETON ROAD	-	13
183'OW'+86		199'OW'+60	OLD MIDDLETON WB OFF-RAMP	-	66
			UNDISTRIBUTED	212	165
TOTALS				30,600	4,600

REMOVING CURB & GUTTER

STATION	TO	STATION	LOCATION	204.0150 (LF)
103+75	-	134+00	UNIVERSITY AVENUE	21
134+00	-	154+80	UNIVERSITY AVENUE	2,066
154+80	-	174+20	UNIVERSITY AVENUE	1,647
174+20	-	183+60	UNIVERSITY AVENUE	695
189+35	-	202+04	UNIVERSITY AVENUE	151
10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	1,672
10+00	-	10+75	OVERLOOK PASS	107
9+00	-	10+00	HEIM AVENUE	46
9+00	-	10+00	CAPITAL AVENUE	113
10+00	-	12+25	CAPITAL AVENUE	27
10+00	-	12+25	NORMAN WAY (EAST)	138
10+00	-	12+15	SPRING HARBOR DRIVE	305
8+50	-	10+00	CRAIG AVENUE	70
10+00	-	10+90	TOMAHAWK TRAIL	112
6'WN'+50	-	10'WN'+00	WHITNEY WAY	1,119
10'OR'+00	-	12'OR'+25	OLD MIDDLETON ROAD	431
183'OW'+86	-	199'OW'+60	OLD MIDDLETON WB OFF-RAMP	3,018
183'OE'+90	-	193'OE'+70	OLD MIDDLETON EB ON-RAMP	401
			UNDISTRIBUTED	361
TOTAL				12,500

REMOVE CONCRETE BASES

STATION	TO	STATION	LOCATION	204.0195 (EACH)
98+25	-	103+75	UNIVERSITY AVENUE	3
103+75	-	134+00	UNIVERSITY AVENUE	7
134+00	-	154+80	UNIVERSITY AVENUE	7
154+80	-	174+20	UNIVERSITY AVENUE	5
174+20	-	183+60	UNIVERSITY AVENUE	2
10+00	-	15+25	ALLEN BOULEVARD	3
9+00	-	10+00	CAPITAL AVENUE	2
TOTALS				29

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CLEARING & GRUBBING

STATION	TO	STATION	LOCATION	201.0105 CLEARING (STA)	201.0120 CLEARING (ID)	201.0205 GRUBBING (STA)	201.0220 GRUBBING (ID)
103+75		134+00	UNIVERSITY AVENUE	23	288	23	288
134+00		154+80	UNIVERSITY AVENUE	14	-	14	-
154+80		174+20	UNIVERSITY AVENUE	13	-	13	-
174+20		183+60	UNIVERSITY AVENUE	15	-	15	-
189+35		202+04	UNIVERSITY AVENUE	4	98	4	98
10'AS'+00		15'AS'+25	ALLEN BOULEVARD	-	6	-	6
7+75		10+00	ASBURY-CRESS ACCESS	2	139	2	139
9+00		10+00	HEIM AVENUE	-	12	-	12
9+00		10+00	CAPITAL AVENUE	-	3	-	3
10+00		12+25	CAPITAL AVENUE	-	9	-	9
8+50		10+00	CRIAG AVE	-	18	-	18
6'WN'+50		10'WN'+00	WHITNEY WAY	-	18	-	18
10'OR'+00		12'OR'+25	OLD MIDDLETON ROAD	2	-	2	-
183'OW'+86		199'OW'+60	OLD MIDDLETON WB OFF-RAMP	4	21	4	21
183'OE'+90		193'OE'+70	OLD MIDDLETON EB ON-RAMP	8	-	8	-
			UNDISTRIBUTED	10	38	10	38
TOTALS				95	650	95	650

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	MISCELLANEOUS QUANTITIES	SHEET 450	E

FILE NAME: G:\MADISON\MD2009035\PS&E\FINAL\PLANS | ORIGINATOR: KL ENGINEERING, INC. | ORIG. DATE: | REV. DATE: | PRINT DATE: January 30, 2012

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EARTHWORK

Stage	From/To Station	Location	205.0100 Common Excavation (1) Cut (2) (CY)	205.0100 Common Excavation (1) EBS Excavation (3) (CY)	Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Marsh Excavation (6) (CY)	Reduced Marsh in Fill (7) Factor 0.60	Reduced EBS in Fill (8) Factor 0.80	Expanded Marsh Backfill (9) Factor 1.50	Unexpanded Fill	Expanded Fill (10) Factor 1.25	Mass Ordinate +/- (11)	Waste	208.0100 Borrow (CY)	Comment:
1		UNIVERSITY AVENUE	1,102	0	151	951	0	0	0	0	2	3	949	949		
		ASBURY LOOP	72	0	0	72	0	0	0	0	1	1	71	71		
		ASBURY-CRESS DRIVEWAY	272	0	0	272	0	0	0	0	95	119	153	153		
Sub-total 1			1,446	0	151	1,295	0	0	0	0	98	123	1,173	1,173	0	
2		UNIVERSITY AVENUE	30,666	0	1,022	29,644	0	0	0	0	7,072	8,840	20,804	20,804		
		CAPITAL AVENUE (SOUTH)	133	0	0	133	0	0	0	0	0	0	133	133		
		CRAIG AVENUE	141	0	0	141	0	0	0	0	0	0	141	141		
		HEIM AVENUE	97	0	0	97	0	0	0	0	11	14	83	83		
		HICKORY HOLLOW	74	0	0	74	0	0	0	0	4	5	69	69		
		LAUREL CREST (SOUTH)	115	0	0	115	0	0	0	0	1	1	114	114		
		NORMAN WAY (WEST)	554	0	0	554	0	0	0	0	5	6	548	548		
		ST. DUNSTAN DRIVE	230	0	0	230	0	0	0	0	0	0	230	230		
		WHITNEY WAY	1,889	0	0	1,889	0	0	0	0	14	18	1,872	1,872		
Sub-total 2			33,899	0	1,022	32,877	0	0	0	0	7,107	8,884	23,993	23,993	0	
3		UNIVERSITY AVENUE	8,254	0	2,837	5,417	0	0	0	0	383	479	4,938	4,938		
		OLD MIDDLETON EB ON-RAMP	810	0	0	810	0	0	0	0	150	188	623	623		
		OLD MIDDLETON ROAD	715	0	0	715	0	0	0	0	7	9	706	706		
Sub-total 3			9,779	0	2,837	6,942	0	0	0	0	540	675	6,267	6,267	0	
4		UNIVERSITY AVENUE	30,898	0	973	29,925	0	0	0	0	11,989	14,986	14,939	14,939		
		ALLEN BLVD	2,693	0	0	2,693	0	0	0	0	52	65	2,628	2,628		
		BAKER AVENUE	75	0	0	75	0	0	0	0	52	65	10	10		
		CAMUS LANE	51	0	0	51	0	0	0	0	1	1	50	50		
		CAPITAL AVENUE (NORTH)	161	0	0	161	0	0	0	0	317	396	-235	0		
		FRITZ AVENUE	129	0	0	129	0	0	0	0	0	0	129	129		
		HICKORY DRIVE	197	0	0	197	0	0	0	0	1	1	196	196		
		LAUREL CREST (NORTH)	98	0	0	98	0	0	0	0	6	8	91	91		
		NORMAN WAY (EAST)	42	0	0	42	0	0	0	0	1,115	1,394	-1,352	0		
		OVERLOOK PASS	94	0	0	94	0	0	0	0	0	0	94	94		
		SPRING HARBOR DR	361	0	0	361	0	0	0	0	30	38	324	324		
		SPRING HARBOR TUNNEL PATH	422	0	0	422	0	0	0	0	5	6	416	416		
		TOMAHAWK TRAIL	169	0	0	169	0	0	0	0	0	0	169	169		
Sub-total 4			35,390	0	973	34,417	0	0	0	0	13,568	16,960	17,457	19,044	0	
5		UNIVERSITY AVENUE	6,595	0	2,740	3,855	0	0	0	0	196	245	3,610	3,610		
		OLD MIDDLETON WB OFF-RAMP	2,509	0	0	2,509	0	0	0	0	21	26	2,483	2,483		
		OLD MIDDLETON ROAD	184	0	0	184	0	0	0	0	1	1	183	183		
Sub-total 5			9,288	0	2,740	6,548	0	0	0	0	218	273	6,276	6,276	0	
Grand Totals			89,802	0	7,723	82,079	0	0	0	0	21,531	26,914	55,165	56,752	0	
Total Common Excavation			89,802													

1) Common Excavation is the sum of the Cut and EBS Excavation columns
2) Salvaged/Unsuable Pavement Material is included in Cut
3) EBS Excavation to be backfilled with Breaker Run
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusable Pavement Material
6) Marsh Excavation - to be backfilled with Borrow Material
7) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
8) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
9) Expanded Marsh Backfill - This is to be filled with Borrow material. Marsh Backfill Factor = 1.5
10) Expanded Fill. Factor = 1.25
11) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

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ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 3/4-INCH (TON)	305.0120 1 1/4-INCH (TON)	305.0130 3-INCH (TON)
98+25-103+75	UNIVERSITY AVENUE	10	2,100	2,650
103+75-134+00	UNIVERSITY AVENUE	-	11,200	13,950
134+00-154+80	UNIVERSITY AVENUE	30	7,900	9,850
154+80-174+20	UNIVERSITY AVENUE	10	8,200	10,200
174+20-183+60	UNIVERSITY AVENUE	-	3,200	4,000
183+60-202+04	UNIVERSITY AVENUE	-	4,000	5,050
10'AS'+00-15'AS'+25	ALLEN BOULEVARD	-	1,900	2,300
8+50-10+00	ST. DUNSTAN DRIVE	-	150	50
4'AL'+50-6'AL'+00	ASBURY LOOP DRIVEWAY	-	200	-
7+75-10+00	ASBURY-CRESS ACCESS	-	450	200
10+00-10+75	OVERLOOK PASS	-	150	125
9+00-10+00	HEIM AVENUE	-	150	125
9+10-10+00	HICKORY HOLLOW DRIVE	-	150	100
10+00-11+25	BAKER AVENUE	-	200	75
10+00-11+10	HICKORY DRIVE	-	200	125
8+50-10+00	LAUREL CREST	-	250	100
10+00-11+00	LAUREL CREST	-	200	150
9+00-10+00	CAPITAL AVENUE	-	250	200
10+00-12+25	CAPITAL AVENUE	-	550	125
10+00-10+85	CAMUS LANE	-	100	100
10+00-10+80	FRITZ AVENUE	-	100	75
8+00-10+00	NORMAN WAY (WEST)	-	500	200
10+00-12+25	NORMAN WAY (EAST)	-	500	125
10+00-12+15	SPRING HARBOR DRIVE	-	550	250
8+50-10+00	CRAIG AVENUE	-	250	150
10+00-10+90	TOMAHAWK TRAIL	-	150	150
6'WN'+50-10'WN'+00	WHITNEY WAY	-	1,200	1,400
10'OR'+00-12'OR'+25	OLD MIDDLETON ROAD	-	500	575
183'OW'+86-199'OW'+60	OLD MIDDLETON WB OFF-RAMP	-	2,000	2,450
183'OE'+90-193'OE'+70	OLD MIDDLETON EB ON-RAMP	-	1,300	1,650
	DRIVEWAYS	350	800	-
	SIDEWALK	1,800	-	-
	MULTI-USE PATH	-	3,400	-
	TRAFFIC CONTROL STAGE 1	-	1,700	-
	TRAFFIC CONTROL STAGE 2	-	150	-
	TRAFFIC CONTROL STAGE 3	-	3,000	-
	TRAFFIC CONTROL STAGE 4	-	100	-
	TEMPORARY DRIVEWAYS	150	-	-
	UNDISTRIBUTED	50	300	200
TOTALS		2,400	58,000	56,700

CONCRETE DRIVEWAYS

CATEGORY	STATION	TO	STATION	LOCATION	416.0170 CONCRETE DRIVEWAY 7-INCH (SY)	416.0270 CONCRETE DRIVEWAY HES 7-INCH (SY)	602.0420 (A) CONCRETE SIDEWALK 7-INCH (SF)
0010	98+25	-	103+75	UNIVERSITY AVENUE	-	-	120
	103+75	-	134+00	UNIVERSITY AVENUE	-	-	260
	134+00	-	154+80	UNIVERSITY AVENUE	-	-	-
	154+80	-	174+20	UNIVERSITY AVENUE	-	-	105
	10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	-	-	-
	10+00	-	11+10	HICKORY DRIVE	15	-	-
	8+50	-	10+00	LAUREL CREST	-	-	-
	10+00	-	11+00	LAUREL CREST	4	-	-
	9+00	-	10+00	CAPITAL AVENUE	-	-	-
	10+00	-	12+25	CAPITAL AVENUE	-	-	-
	8+00	-	10+00	NORMAN WAY (WEST)	-	-	-
	10+00	-	12+25	NORMAN WAY (EAST)	-	-	-
	183'OW'+86	-	199'OW'+60	OLD MIDDLETON WB OFF-RAMP	-	-	377
				UNDISTRUIBUTED	6	-	48
0010	CATEGORY TOTALS				25	0	910
0060	98+25	-	103+75	UNIVERSITY AVENUE	138	-	-
	103+75	-	134+00	UNIVERSITY AVENUE	111	-	-
	134+00	-	154+80	UNIVERSITY AVENUE	230	-	-
	154+80	-	174+20	UNIVERSITY AVENUE	395	-	-
	10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	129	-	-
	10+00	-	11+10	HICKORY DRIVE	10	-	-
	8+50	-	10+00	LAUREL CREST	26	-	-
	10+00	-	11+00	LAUREL CREST	11	-	-
	9+00	-	10+00	CAPITAL AVENUE	-	-	-
	10+00	-	12+25	CAPITAL AVENUE	68	-	-
	8+00	-	10+00	NORMAN WAY (WEST)	131	-	-
	10+00	-	12+25	NORMAN WAY (EAST)	24	-	-
	183'OW'+86	-	199'OW'+60	OLD MIDDLETON WB OFF-RAMP	20	-	-
				UNDISTRUIBUTED	57	200	-
0060	CATEGORY TOTALS				1,350	200	0

(A) ADDITIONAL QUANTITY FOUND IN CONCRETE SIDEWALKS TABLE

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CONCRETE PAVEMENT APPROACH SLAB

STATION	TO	STATION	LOCATION	415.0410 (SY)	SPV.0180.02 SHES SPECIAL (SY)	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT (LF)
153+42	-	153+86	UNIVERSITY AVENUE	250	-	88
183+45	-	183+60	UNIVERSITY AVENUE	-	80	16
189+35	-	189+52	UNIVERSITY AVENUE	-	80	16
TOTAL				250	160	120

ASPHALTIC SURFACE TEMPORARY

TRAFFIC CONTROL STAGE	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS (SY)	465.0125 ASPHALTIC SURFACE TEMPORARY (TON)	REMARKS
STAGE 1	PROJECT	-	685	TEMPORARY PAVEMENT
STAGE 2	PROJECT	-	53	TEMPORARY PAVEMENT
STAGE 3	PROJECT	-	1,248	TEMPORARY PAVEMENT
STAGE 4	PROJECT	-	37	TEMPORARY PAVEMENT
	UNDISTRIBUTED	125	7	MANHOLES WEDGES
	UNDISTRIBUTED	-	20	
TOTALS		125	2,050	

CONCRETE PAVEMENT 7-INCH

STATION	TO	STATION	O/S	NOTE	LOCATION	415.0070 (SY)
101+16	-	101+72	LT	BUS PULLOUT	UNIVERSITY AVENUE	15
142+51	-	144+00	RT	BUS PULLOUT	UNIVERSITY AVENUE	116
163+51	-	164+07	LT	BUS PULLOUT	UNIVERSITY AVENUE	15
172+86	-	173+42	LT	BUS PULLOUT	UNIVERSITY AVENUE	15
183+45	-	183+59	LT	-	UNIVERSITY AVENUE	9
183+45	-	183+59	RT	-	UNIVERSITY AVENUE	9
189+37	-	189+51	LT	-	UNIVERSITY AVENUE	9
189+37	-	189+51	RT	-	UNIVERSITY AVENUE	7
TOTAL						195

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

HMA PAVEMENT ITEMS

STATION - STATION	LOCATION	460.1110 HMA PAVEMENT TYPE E-10 (TON)	460.1101 HMA PAVEMENT TYPE E-1 (TON)	460.1100 HMA PAVEMENT TYPE E-0.3 (TON)	455.0105 ASPHALTIC MATERIAL PG58-28 (TON)	455.0115 ASPHALTIC MATERIAL PG64-22 (TON)	455.0120 ASPHALTIC MATERIAL PG64-28 (TON)	455.0605 TACK COAT (GAL)	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)
98+25-103+75	UNIVERSITY AVENUE	1,345	-	-	-	57	24	194	8
103+75-134+00	UNIVERSITY AVENUE	7,024	-	511	31	299	123	1,014	66
134+00-154+80	UNIVERSITY AVENUE	4,974	-	384	23	211	87	718	97
154+80-174+20	UNIVERSITY AVENUE	5,216	-	365	22	222	91	753	6
174+20-183+60	UNIVERSITY AVENUE	2,073	-	67	4	88	36	299	-
183+60-202+04	UNIVERSITY AVENUE	3,068	-	-	-	130	54	443	-
10'AS'+00-15'AS'+25	ALLEN BOULEVARD	1,128	-	41	2	48	20	163	-
8+50-10+00	ST. DUNSTAN DRIVE	16	27	-	-	2	1	6	-
4'AL'+50-6'AL'+00	ASBURY LOOP DRIVEWAY	-	80	-	-	3	2	12	-
7+75-10+00	ASBURY-CRESS ACCESS	106	102	-	-	8	4	30	-
10+00-10+75	OVERLOOK PASS	68	11	-	-	3	1	11	-
9+00-10+00	HEIM AVENUE	62	19	-	-	3	2	12	-
9+10-10+00	HICKORY HOLLOW DRIVE	52	12	-	-	3	1	9	-
10+00-11+25	BAKER AVENUE	37	47	-	-	3	2	12	-
10+00-11+10	HICKORY DRIVE	57	33	-	-	4	2	13	-
8+50-10+00	LAUREL CREST	38	52	-	-	3	2	13	4
10+00-11+00	LAUREL CREST	74	25	-	-	4	2	14	-
9+00-10+00	CAPITAL AVENUE	58	153	-	-	8	5	30	-
10+00-12+25	CAPITAL AVENUE	96	23	-	-	5	2	17	25
10+00-10+85	CAMUS LANE	45	8	-	-	2	1	8	-
10+00-10+80	FRITZ AVENUE	38	14	-	-	2	1	8	-
8+00-10+00	NORMAN WAY (WEST)	108	113	-	-	9	5	32	10
10+00-12+25	NORMAN WAY (EAST)	57	137	-	-	7	4	28	44
10+00-12+15	SPRING HARBOR DRIVE	151	112	-	-	10	5	38	-
8+50-10+00	CRAIG AVENUE	70	93	-	-	6	4	24	-
10+00-10+90	TOMAHAWK TRAIL	62	64	-	-	5	3	18	-
6'WN'+50-10'WN'+00	WHITNEY WAY	698	-	-	-	30	12	101	-
10'OR'+00-12'OR'+25	OLD MIDDLETON ROAD	295	-	-	-	13	5	43	-
183'OW'+86-199'OW'+60	OLD MIDDLETON WB OFF-RAMP	1,040	-	-	-	44	18	150	8
183'OE'+90-193'OE'+70	OLD MIDDLETON EB ON-RAMP	721	-	-	-	31	13	104	-
	UNDISTRIBUTED	623	75	132	8	57	18	33	12
TOTALS		29,400	1,200	1,500	90	1,320	550	4,350	280

CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH (SF)	602.0415 CONCRETE SIDEWALK 6-INCH (SF)	602.0420 (A) CONCRETE SIDEWALK 7-INCH (SF)	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW (SF)	SPV.0180.01 ARCHITECTURAL CONCRETE PAVEMENT 5-INCH (SY)
98+25		103+75	UNIVERSITY AVENUE	3,571	-	110	32	127
103+75		134+00	UNIVERSITY AVENUE	15,889	36	1,304	344	234
134+00		154+80	UNIVERSITY AVENUE	10,747	36	1,223	264	209
154+80		174+20	UNIVERSITY AVENUE	7,285	72	707	292	244
174+20		183+60	UNIVERSITY AVENUE	1,130	-	53	32	116
189+35		202+04	UNIVERSITY AVENUE	4,335	-	-	-	90
10'AS'+00		15'AS'+25	ALLEN BOULEVARD	3,269	-	332	96	-
10+00		12+15	SPRING HARBOR DRIVE	1,953	-	145	-	-
8+50		10+00	CRIAG AVE	14	-	-	-	-
6'WN'+50		10'WN'+00	WHITNEY WAY	1,422	-	165	108	1
10'OR'+00		12'OR'+25	OLD MIDDLETON ROAD	1,102	-	-	16	-
183'OW'+86		199'OW'+60	OLD MIDDLETON WB OFF-RAMP	332	-	-	16	-
183'OE'+90		193'OE'+70	OLD MIDDLETON EB ON-RAMP	4,887	-	-	-	-
			UNDISTRUIBUTED	864	16	61	50	9
TOTALS				56,800	160	4,100	1,250	1,030

RETAINING WALLS

	STATION	TO	STATION	LOCATION	532.0200.S WALL MODULAR BLOCK GRAVITY (SF)	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (LS)	513.6000 (B) RAILING STEEL (LS)
	134+40	-	134+71	UNIVERSITY AVENUE	125	1	1
	9'WN'+18	-	9'WN'+40	WHITNEY WAY	75	1	-
	176+65	-	177+60	UNIVERSITY AVENUE	450	1	-
R-13-185	100+25	-	104+20	UNIVERSITY AVENUE	-	1	-
R-13-186	117+75	-	119+30	UNIVERSITY AVENUE	-	1	-
R-13-187	146+60	-	150+34	UNIVERSITY AVENUE	-	1	-
R-13-188	122+30	-	124+45	UNIVERSITY AVENUE	-	1	-
R-13-189	144+15	-	145+70	UNIVERSITY AVENUE	-	1	-
R-13-190	147+10	-	150+20	UNIVERSITY AVENUE	-	1	-
R-13-191	180+10	-	183+60	UNIVERSITY AVENUE	-	1	-
R-13-192	169+25	-	175+90	UNIVERSITY AVENUE	-	1	-
R-13-193	177+15	-	183+60	UNIVERSITY AVENUE	-	1	-
	TOTALS				650	12	1

(B) ADDITIONAL QUANTITY FOUND IN RAILING STEEL TABLE

CONCRETE BARRIER

STATION	TO	STATION	LOCATION	603.1136 CONCRETE BARRIER TYPE S36 (LF)	650.7500 CONSTRUCTION STAKING CONCRETE BARRIER (LF)
183'OW'+86	-	199'OW'+60	OLD MIDDLETON WB OFF-RAMP	237	237
			UNDISTRIBUTED	13	13
TOTALS				250	250

SLOPE PAVING CONCRETE

STATION	TO	STATION	LOCATION	604.0400 SLOPE PAVING CONCRETE (SY)
189+47	-	190+41	UNIVERSITY AVENUE LT	130
TOTAL				130

RAILING STEEL

STATION	TO	STATION	LOCATION	513.6000 (B) (LS)
120+35	-	125+25	UNIVERSITY AVENUE	1
144+07	-	145+70	UNIVERSITY AVENUE	1
TOTAL				2

(B) ADDITIONAL QUANTITY FOUND IN RETAINING WALL TABLE

PIPE GRATES

STATION	O/S	LOCATION	611.9800.S EACH
121+56	73.0' LT	UNIVERSITY AVE	1
TOTAL			1

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ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

CONCRETE CURB & GUTTER

STATION	TO	STATION	LOCATION	601.0110 CONCRETE CURB TYPE D (LF)	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D (LF)	SPV.0090.13 CONCRETE CURB & GUTTER 24-INCH TYPE A SPECIAL (LF)	SPV.0090.14 CONCRETE CURB & GUTTER 24-INCH TYPE D SPECIAL (LF)	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D (LF)	601.0600 CONCRETE CURB PEDISTRIAN (LF)	SPV.0165.01 SPECIAL WATERWAY CURB (SF)	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER (LF)
98+25	-	103+75	UNIVERSITY AVENUE	-	-	-	1,616	100	-	-	1,616
103+75	-	134+00	UNIVERSITY AVENUE	131	-	14	10,901	-	-	-	10,901
134+00	-	154+80	UNIVERSITY AVENUE	28	196	-	7,530	-	-	-	7,726
154+80	-	174+20	UNIVERSITY AVENUE	-	-	-	7,199	34	-	-	7,199
174+20	-	183+60	UNIVERSITY AVENUE	-	-	29	2,540	-	-	-	2,540
183+60	-	202+04	UNIVERSITY AVENUE	-	-	14	2,653	-	-	-	2,653
10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	-	-	-	723	1,265	-	-	1,988
8+50	-	10+00	ST. DUNSTAN DRIVE	-	-	-	143	-	-	-	143
4'AL'+50	-	6'AL'+00	ASBURY LOOP DRIVEWAY	-	-	-	-	-	-	-	-
7+75	-	10+00	ASBURY-CRESS ACCESS	-	-	-	196	-	-	-	196
10+00	-	10+75	OVERLOOK PASS	-	-	-	101	-	-	-	101
9+00	-	10+00	HEIM AVENUE	-	-	-	78	71	-	-	149
9+00	-	10+00	HICKORY HOLLOW DRIVE	-	-	-	40	-	-	464	40
10+00	-	11+25	BAKER AVENUE	-	-	-	78	-	-	-	78
10+00	-	11+10	HICKORY DRIVE	-	-	-	161	-	-	-	161
8+50	-	10+00	LAUREL CREST	-	-	-	212	-	-	-	212
10+00	-	11+00	LAUREL CREST	-	-	-	123	-	-	-	123
9+00	-	10+00	CAPITAL AVENUE	46	-	-	409	-	-	-	409
10+00	-	12+25	CAPITAL AVENUE	-	-	-	97	71	-	-	168
10+00	-	10+85	CAMUS LANE	-	-	-	106	-	-	-	106
10+00	-	10+80	FRITZ AVENUE	-	-	-	95	-	-	-	95
8+00	-	10+00	NORMAN WAY (WEST)	-	-	-	310	-	-	-	310
10+00	-	12+25	NORMAN WAY (EAST)	-	-	-	324	-	-	-	324
10+00	-	12+15	SPRING HARBOR DRIVE	-	-	-	118	273	-	-	391
8+50	-	10+00	CRAIG AVENUE	-	-	-	182	3	10	-	185
10+00	-	10+90	TOMAHAWK TRAIL	-	-	-	75	55	-	-	130
6'WN'+50	-	10'WN'+00	WHITNEY WAY	-	-	-	377	705	-	-	1,082
10'OR'+00	-	12'OR'+25	OLD MIDDLETON ROAD	-	-	-	368	17	-	-	385
183'OW'+86	-	19'OW'+960	OLD MIDDLETON WB OFF-RAMP	-	-	-	2,960	-	-	-	2,960
183'OE'+90	-	193'OE'+70	OLD MIDDLETON EB ON-RAMP	-	-	-	1,658	-	-	-	1,658
			UNDISTRIBUTED	15	24	13	627	106	40	11	971
TOTALS				220	220	70	42,000	2,700	50	475	45,000

CONCRETE MEDIAN SLOPED NOSES

STATION	TO	STATION	LOCATION	620.0300 (SF)
98+25	-	103+75	UNIVERSITY AVENUE	139
103+75	-	134+00	UNIVERSITY AVENUE	337
134+00	-	154+80	UNIVERSITY AVENUE	400
154+80	-	174+20	UNIVERSITY AVENUE	585
174+20	-	183+60	UNIVERSITY AVENUE	75
189+35	-	202+04	UNIVERSITY AVENUE	32
10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	70
6'WN'+50	-	10'WN'+00	WHITNEY WAY	49
183'OE'+90	-	193'OE'+70	OLD MIDDLETON EB ON-RAMP	33
TOTAL				1,720

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WATER

LOCATION	NOTE	624.0100 (MGAL)
PROJECT	BASE COMPACTION	2,000
PROJECT	DUST CONTROL	2,000
TOTAL		4,000

STEEL PLATE BEAM GUARD

STATION	TO	STATION	O/S	LOCATION	204.0165 REMOVING GUARDRAIL (LF)	614.0360 STEEL PLATE BEAM GUARD TEMPORARY (LF)	614.2500 MGS THRIE BEAM TRANSITION (LF)	614.2300 MGS GUARDRAIL 3 (LF)	614.2610 MGS GUARDRAIL TERMINAL EAT (EACH)	614.0396 GUARDRAIL MOW STRIP ASPHALT (SY)	NOTES
119+02	-	125+30	LT	UNIVERSITY AVE	629	-	-	-	-	-	
119+97	-	126+03	RT	UNIVERSITY AVE	512	-	-	-	-	-	
121+25	-	122+00	LT	UNIVERSITY AVE	75	75	-	-	-	-	DURING STAGE 1
176+40	-	183+60	RT	UNIVERSITY AVE	736	-	-	-	-	-	
176+70	-	183+60	LT	UNIVERSITY AVE	687	-	-	-	-	-	
176+43	-	183+60	LT	UNIVERSITY AVE	-	-	40	625	1	20	MODIFIED BACK-UP PLATE
176+30	-	183+60	RT	UNIVERSITY AVE	-	-	40	638	1	20	MODIFIED BACK-UP PLATE
189+35	-	193+10	LT	UNIVERSITY AVE	380	-	-	-	-	-	
189+35	-	191+90	LT	UNIVERSITY AVE	-	-	40	163	1	120	MODIFIED BACK-UP PLATE
190'OW'+25	-	191'OW'+17	RT	OLD MIDDLETON RD WB OFF-RAMP	-	-	40	-	1	-	
TOTALS					3,020	75	160	1,426	4	160	

LANDSCAPING

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL (SY)	627.0200 MULCHING (SY)	629.0210 FERTILIZER TYPE B (CWT)	SPV.0085.01 NO MOW LAWN SEED (LB)	631.0300 SOD WATER (MGAL)	631.1000 SOD LAWN (SY)
98+25	-	103+75	UNIVERSITY AVENUE	1580	143	1.0	2.6	32	1437
103+75	-	134+00	UNIVERSITY AVENUE	15650	5407	9.9	97.3	230	10243
134+00	-	154+80	UNIVERSITY AVENUE	8566	1483	5.4	26.7	159	7083
154+80	-	174+20	UNIVERSITY AVENUE	7335	1700	4.6	30.6	126	5635
174+20	-	183+60	UNIVERSITY AVENUE	7839	6260	4.9	112.7	35	1579
189+35	-	202+04	UNIVERSITY AVENUE	5181	3681	3.3	66.3	34	1500
10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	1325	-	0.6	-	30	1325
8+50	-	10+00	ST. DUNSTAN DRIVE	131	71	0.1	1.3	1	60
4'AL'+50	-	6'AL'+00	ASBURY LOOP DRIVEWAY	85	-	0.1	-	2	85
7+75	-	10+00	ASBURY-CRESS ACCESS	96	28	0.1	0.5	2	68
10+00	-	10+75	OVERLOOK PASS	9	-	0.0	-	0	9
9+00	-	10+00	HEIM AVENUE	58	-	0.0	-	1	58
9+10	-	10+00	HICKORY HOLLOW DRIVE	62	-	0.0	-	1	62
10+00	-	11+25	BAKER AVENUE	212	-	0.1	-	5	212
10+00	-	11+10	HICKORY DRIVE	104	-	0.1	-	2	104
8+50	-	10+00	LAUREL CREST	188	-	0.1	-	4	188
10+00	-	11+00	LAUREL CREST	58	-	0.0	-	1	58
9+00	-	10+00	CAPITAL AVENUE	578	-	0.4	-	13	578
10+00	-	12+25	CAPITAL AVENUE	422	-	0.3	-	9	422
10+00	-	10+85	CAMUS LANE	37	-	0.0	-	1	37
10+00	-	10+80	FRITZ AVENUE	33	-	0.0	-	1	33
8+00	-	10+00	NORMAN WAY (WEST)	485	-	0.3	-	11	485
10+00	-	12+25	NORMAN WAY (EAST)	679	-	0.4	-	15	679
10+00	-	12+15	SPRING HARBOR DRIVE	681	-	0.4	-	15	681
8+50	-	10+00	CRAIG AVENUE	32	-	0.0	-	1	32
10+00	-	10+90	TOMAHAWK TRAIL	45	-	0.0	-	1	45
6'WN'+50	-	10'WN'+00	WHITNEY WAY	575	-	0.4	-	13	575
10'OR'+00	-	12'OR'+25	OLD MIDDLETON ROAD	-	-	-	-	-	-
183'OW'+86	-	199'OW'+60	OLD MIDDLETON WB OFF-RAMP	2366	102	1.5	1.8	51	2264
183'OE'+90	-	193'OE'+70	OLD MIDDLETON EB ON-RAMP	2074	1881	1.3	33.9	4	193
			UNDISTRIBUTED	6314	2244	4.6	41.4	148	6270
TOTALS				62,800	23,000	40.0	415.0	950	42,000

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

STRUCTURE SCHEDULE

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	CASTING ELEV.	TOP OF STR. ELEV.	BOTTOM OF STR. ELEV.	DEPTH	SPV.0060.04 CATCH BASIN SPECIAL (EACH)	SPV.0060.18 STORM SEWER TREATMENT STRUCTURE SPECIAL (EACH)	611.0201 MANHOLE TYPE 1 (EACH)	611.0210 MANHOLE TYPE 3 (EACH)	SPV.0060.05 MANHOLE TYPE 8 SPECIAL (EACH)	611.0303 INLET TYPE 3 (EACH)	SPV.0060.03 TERRACE INLET TYPE 3 SPECIAL (EACH)	611.0420 RECONSTR MANHOLES (EACH)	611.0430 RECONSTR INLETS (EACH)	SPV.0060.06 MANHOLE COVERS TYPE J SPECIAL (EACH)	611.0612 INLET COVERS TYPE C (EACH)	SPV.0060.01 INLET COVERS TYPE H SPECIAL (EACH)	SPV.0060.02 INLET COVERS TERRACE TYPE 3 SPECIAL (EACH)	SPV.0060.43 MANHOLE COVER SPECIAL (EACH)	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH (EACH)	520.1042 APRON ENDWALLS FOR CULVERT PIPE 42-INCH (EACH)	611.8110 ADJUSTING MANHOLE COVERS (EACH)	611.8115 ADJUSTING INLET COVERS (EACH)	520.8000.S CULVERT PIPE CONCRETE COLLAR (EACH)	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	COMMENT
0020	3.0	99+22.5	10.4' LT	923.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	-	-	-	CITY OF MIDDLETON
	4.0	121+54.4	46.9' RT	878.58	877.33	869.95	7.38	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-
	5.0	120+39.0	61.3' RT	878.08	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-
	6.0	119+11.1	43.7' RT	885.15	883.90	874.52	9.38	1	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	1	-
	6.1	119+01.2	42.7' RT	885.52	884.52	878.39	6.13	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	7.0	118+67.5	37.5' RT	886.53	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	1	-	-	-	-
	8.0	116+61.8	47.7' RT	894.00	892.75	885.06	7.69	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-
	9.0	115+06.7	55.1' RT	897.89	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	1	-	-	-	-
	10.0	114+82.2	56.1' RT	897.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	12.0	114+09.3	37.4' RT	899.82	898.57	890.65	7.92	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	13.0	112+78.7	40.5' RT	903.67	902.42	894.27	8.15	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	13.3	110+66.1	40.4' RT	909.70	908.45	899.25	9.20	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	14.0	109+58.4	40.4' RT	912.61	911.36	903.46	7.90	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	16.0	106+85.0	40.5' RT	919.99	918.74	913.55	5.19	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	1	1	-
	17.0	104+38.6	37.0' RT	926.01	924.76	920.35	4.41	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	18.0	121+54.4	31.7' RT	881.03	880.03	869.87	10.16	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	19.1	121+55.7	0.5' RT	881.50	880.50	869.68	10.82	-	-	-	-	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-	1	STR, CENTER FOR CASTING 19.1 & 19.2
	19.3	121+56.0	31.7' LT	881.21	880.21	866.53	13.68	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	19.7	121+56.0	69.7' LT	-	-	869.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	20.0	123+74.9	16.4' RT	885.10	883.85	874.76	9.09	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	21.0	125+97.6	17.5' RT	895.33	894.08	887.13	6.95	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	22.0	127+39.0	17.0' RT	902.33	901.08	891.50	9.58	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	23.0	129+85.7	13.0' RT	909.77	908.52	901.41	7.11	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	24.0	137+77.1	48.7' LT	903.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-
	24.1	137+12.0	29.0' LT	904.91	903.66	899.60	4.06	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	25.0	137+13.1	10.5' RT	905.93	904.68	900.72	3.96	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	25.1	136+24.8	38.2' RT	905.97	904.97	901.22	3.75	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	27.0	136+77.3	26.8' LT	905.24	903.99	900.27	3.72	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	28.0	134+20.7	27.1' LT	907.25	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	-	-	-	-
	29.0	134+23.1	36.4' RT	907.52	906.27	902.23	4.04	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	30.0	133+36.9	23.2' LT	908.17	906.92	903.33	3.59	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	31.0	11+58.7	13.2' RT	894.85	893.60	886.01	7.59	-	-	-	-	1	-	-	-	-	1	-	1	-	-	-	-	1	-	-	1	STR, CENTER FOR CASTING 31.0 & 31.1
	31.4	143+54.7	28.9' LT		SEE DETAIL			-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	1	-
	32.0	143+56.1	16.5' LT	905.80	904.55	897.42	7.13	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	32.1	143+19.6	1.4' LT	905.95	904.95	897.68	7.27	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	33.0	142+73.8	35.5' RT	906.61	905.36	897.68	7.68	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	33.1	142+18.4	45.3' RT	906.22	905.22	898.26	6.96	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	34.0	9+31.2	23.0' RT	906.32	905.32	897.44	7.88	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	35.0	9+30.9	5.5' RT	906.67	905.42	898.54	6.88	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	35.1	9+38.5	24.4' LT	906.00	905.00	898.68	6.32	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	36.0	8+51.2	16.5' RT	909.66	908.41	903.73	4.68	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	37.0	8+00.0	13.5' RT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	38.0	140+50.0	41.7' RT	905.81	905.15	899.20	5.95	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-
	38.1	140+50.0	10.1' RT	906.07	905.07	900.43	4.64	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	39.0	140+50.0	6.0' LT	905.80	904.80	900.51	4.29	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	39.2	139+85.2	6.1' LT	905.97	904.97	900.84	4.13	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	40.0	145+49.1	40.1' RT	905.34	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-
	41.0	157+71.4	61.5' LT	866.87	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	1	-	-	-	-
	41.1	157+71.6	39.5' LT	866.41	865.41	854.55	10.86	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	42.0	157+72.1	17.5' RT	866.80	865.55	856.26	9.29	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	42.1	158+50.0	11.3' RT		SEE DETAIL			-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	1	-
	43.0	157+71.9	40.7' RT	866.36	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-
	44.0	157+04.5	39.9' RT	867.56	866.31	861.68	4.63	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	45.0	156+59.8	39.2' RT	868.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	46.0	154+96.8	42.5' RT	875.64	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-
	47.0	154+55.5	33.5' RT	877.05	876.05	865.29	10.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	47.1	154+27.1	11.5' RT	877.47	876.22	865.40	10.82	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	1	-	-	1	-
	49.0	153+25.0	11.5' RT	884.10	882.85	868.75	14.10	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	50.0	151+12.8	17.5' RT	894.61	893.36	886.33	7.03	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	50.2	151+12.8	36.1' RT	894.26	893.26	888.98	4.28	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	50.3	150+77.1	46.4' RT	896.62	895.37	889.85	5.52	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-
	51.0	148+28.6	17.5' RT	903.81	902.56	897.47	5.09	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	52.0	158+69.7	17.5' RT	866.07	864.82	857.07	7.75	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-
	53.0	160+02.4	17.5' RT	866.59	865.34	857.53	7.81	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	54.0	161+50.6	17.5' RT	867.33	866.08	858.89	7.19	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	55.0	162+50.5	17.5' RT	867.83	866.58	859.71	6.87	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	56.0	163+25.0	38.8' LT	867.98	866.73	859.94	6.79	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-
	57.0	163+36.0	22.5' LT	868.37	867.12	860.11	7.01	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
			SUBTOTALS					13	2	21	7	3	6	1	4	2	45	0	20	1	1	0	1	44	1	1	54	

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

Addendum No. 1
ID 5992-08-79
Revised Sheet 455
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	MISCELLANEOUS QUANTITIES	SHEET 455	E

FILE NAME: G:\MADISON\MD2009035\PS&E\FINAL\PLANS | ORIGINATOR: KL ENGINEERING, INC. | ORIG. DATE: | REV. DATE: | PRINT DATE: January 30, 2012

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	CASTING ELEV.	TOP OF STR. ELEV.	BOTTOM OF STR. ELEV.	DEPTH	SPV.0060.04 CATCH BASIN SPECIAL (EACH)	SPV.0060.18 STORM SEWER TREATMENT STRUCTURE SPECIAL (EACH)	611.0201 MANHOLE TYPE 1 (EACH)	611.0210 MANHOLE TYPE 3 (EACH)	SPV.0060.05 MANHOLE TYPE 8 SPECIAL (EACH)	611.0303 INLET TYPE 3 (EACH)	SPV.0060.03 TERRACE INLET TYPE 3 SPECIAL (EACH)	611.0420 RECONSTR MANHOLES (EACH)	611.0430 RECONSTR INLETS (EACH)	SPV.0060.06 MANHOLE COVERS TYPE J SPECIAL (EACH)	611.0612 INLET COVERS TYPE C (EACH)	SPV.0060.01 INLET COVERS TYPE H SPECIAL (EACH)	SPV.0060.02 INLET COVERS TERRACE TYPE 3 SPECIAL (EACH)	SPV.0060.43 MANHOLE COVER SPECIAL (EACH)	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH (EACH)	520.1042 APRON ENDWALLS FOR CULVERT PIPE 42-INCH (EACH)	611.8110 ADJUSTING MANHOLE COVERS (EACH)	611.8115 ADJUSTING INLET COVERS (EACH)	520.8000.S CULVERT PIPE CONCRETE COLLAR (EACH)	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	COMMENT
0020																												
			CONTINUED FROM PREVIOUS					13	2	21	7	3	6	1	4	2	45	0	20	1	1	0	1	44	1	1	54	
	58.0	164+00.6	28.5' RT	868.66	867.41	857.58	9.83	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	59.0	165+47.0	28.5' RT	872.02	870.77	858.37	12.40	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	59.7	164+91.1	69.2' LT	870.44	869.19	865.02	4.17	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	59.9	164+91.3	39.4' LT	870.33	869.08	864.39	4.69	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
	60.0	167+50.0	23.6' RT	879.50	878.25	869.11	9.14	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	60.4	169+85.0	22.2' RT	887.98	886.73	878.72	8.01	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	61.0	170+90.0	18.8' RT	891.77	890.52	882.51	8.01	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	62.0	173+56.0	14.5' RT	901.37	900.12	894.66	5.46	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	63.0	174+69.4	25.5' RT	905.24	903.99	895.77	8.22	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	64.0	176+75.0	25.4' RT	912.67	911.42	896.81	14.61	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	64.2	177+02.9	40.9' LT	913.36	912.11	897.62	14.49	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-
	65.0	180+50.0	16.5' RT	926.21	924.96	920.13	4.83	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	66.0	201+27.7	36.6' RT	931.78	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	-	-	-	-
	67.0	201+41.1	5.5' RT	931.93	930.68	921.50	9.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	68.0	201+00.0	5.5' RT	932.59	931.34	923.00	8.34	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	69.0	199+08.0	5.5' RT	934.00	932.75	927.85	4.90	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	70.0	197+75.0	5.5' RT	935.06	933.81	929.24	4.57	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	71.0	194+50.0	5.5' RT	937.66	936.41	930.86	5.55	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-
	72.0	13'AN'+25.89	12.5' RT	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
			0020 TOTALS					19	2	27	11	3	6	1	4	2	63	0	20	1	1	0	1	61	1	2	69	

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	CASTING ELEV.	TOP OF STR. ELEV.	BOTTOM OF STR. ELEV.	DEPTH	SPV.0060.04 CATCH BASIN SPECIAL (EACH)	SPV.0060.18 STORM SEWER TREATMENT STRUCTURE SPECIAL (EACH)	611.0201 MANHOLE TYPE 1 (EACH)	611.0210 MANHOLE TYPE 3 (EACH)	SPV.0060.05 MANHOLE TYPE 8 SPECIAL (EACH)	611.0303 INLET TYPE 3 (EACH)	SPV.0060.03 TERRACE INLET TYPE 3 SPECIAL (EACH)	611.0420 RECONSTR MANHOLES (EACH)	611.0430 RECONSTR INLETS (EACH)	SPV.0060.06 MANHOLE COVERS TYPE J SPECIAL (EACH)	611.0612 INLET COVERS TYPE C (EACH)	SPV.0060.01 INLET COVERS TYPE H SPECIAL (EACH)	SPV.0060.02 INLET COVERS TERRACE TYPE 3 SPECIAL (EACH)	SPV.0060.43 MANHOLE COVER SPECIAL (EACH)	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH (EACH)	520.1042 APRON ENDWALLS FOR CULVERT PIPE 42-INCH (EACH)	611.8110 ADJUSTING MANHOLE COVERS (EACH)	611.8115 ADJUSTING INLET COVERS (EACH)	520.8000.S CULVERT PIPE CONCRETE COLLAR (EACH)	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	COMMENT
0030	1.0	98+50.0	35.8' RT	921.09	920.09	914.50	5.59	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	1	-
	1.1	98+62.4	48.8' RT	922.91	921.66	918.57	3.09	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-
	3.1	99+25.8	8.0' LT	923.54	922.54	918.98	3.56	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	CITY OF MIDDLETON
	3.2	99+25.8	8.1' RT	924.50	923.50	919.92	3.58	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	6.2	119+10.8	10.5' RT	885.80	884.80	881.47	3.33	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	6.3	119+10.8	5.5' LT	886.24	885.24	881.91	3.33	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	6.4	118+85.4	37.1' LT	886.65	885.99	882.66	3.33	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-
	8.1	116+61.3	39.0' RT	893.32	892.32	887.69	4.63	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	8.2	116+63.3	34.0' LT	892.89	891.89	888.32	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	8.3	116+53.3	34.0' LT	893.21	892.21	888.64	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	12.1	114+09.2	48.1' RT	899.63	898.63	894.98	3.65	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	12.2	113+99.2	47.9' RT	899.94	898.94	895.33	3.61	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	12.3	114+11.5	14.8' RT	900.18	899.18	895.61	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	12.4	114+09.3	1.4' LT	900.84	899.84	895.75	4.09	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	12.5	114+09.3	29.9' LT	900.31	899.31	895.89	3.42	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	13.1	112+78.9	51.2' RT	903.47	902.47	898.90	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	13.2	112+61.9	27.5' LT	904.61	903.61	900.04	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	14.1	109+58.4	51.5' RT	912.41	911.41	906.27	5.14	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	14.2	109+58.4	71.3' RT	ENDWALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-
	14.3	109+58.4	12.0' RT	913.40	912.40	908.31	4.09	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	14.4	109+58.4	1.7' RT	913.79	912.79	908.37	4.42	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	14.5	109+58.4	27.5' LT	913.25	912.25	908.54	3.71	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	CITY OF MIDDLETON
	14.6	109+48.3	27.5' LT	913.51	912.51	908.84	3.67	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	CITY OF MIDDLETON
	15.0	109+94.2	58.4' LT	910.62	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	CITY OF MIDDLETON
	15.1	108+87.7	63.9' LT	910.18	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	CITY OF MIDDLETON
	15.3	106+52.2	64.5' LT	921.87	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	CITY OF MIDDLETON
	16.1	106+85.0	38.2' LT	920.07	919.07	915.51	3.56	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	16.3	106+41.9	38.0' LT	921.18	920.18	916.78	3.40	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	CITY OF MIDDLETON
	17.1	104+38.2	49.5' RT	926.25	925.25	921.77	3.48	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	17.2	104+39.8	67.8' RT	927.29	926.29	922.71	3.58	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	17.3	104+40.6	27.2' LT	926.38	925.38	921.75	3.63	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	CITY OF MIDDLETON
	17.4	104+40.6	33.8' LT	926.21	925.21	921.79	3.42	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	CITY OF MIDDLETON
	17.5	103+26.8	29.1' LT	928.04	927.04	923.47	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	CITY OF MIDDLETON
	17.6	103+22.1	1.7' RT	928.59	927.59	924.01	3.58	-	-	-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	1	STR, CENTER FOR CASTING 17.6 & 17.7
	18.1	121+64.4	31.6' RT	881.03	880.03	876.46	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	18.2	121+44.3	31.9' RT	881.04	880.04	876.47	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	19.4	121+66.0	31.6' LT	881.27	880.27	876.77	3.50	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	19.5	122+00.0	31.5' LT	881.47	880.47	876.97	3.50	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
			SUBTOTALS					0	0	1	1	0	31	1	3	0	0	1	33	1	0	1	0	0	0	1	35	

Addendum No. 1
ID 5992-08-79
Revised Sheet 456
February 1, 2012

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	MISCELLANEOUS QUANTITIES	SHEET 456	E

FILE NAME: G:\MADISON\MD2009035\PS&E\FINAL\PLANS ORIGINATOR: KL ENGINEERING, INC. ORIG. DATE: REV. DATE: PRINT DATE: January 30, 2012

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	CASTING ELEV.	TOP OF STR. ELEV.	BOTTOM OF STR. ELEV.	DEPTH	SPV.0060.04 CATCH BASIN SPECIAL (EACH)	SPV.0060.18 STORM SEWER TREATMENT STRUCTURE SPECIAL (EACH)	611.0201 MANHOLE TYPE 1 (EACH)	611.0210 MANHOLE TYPE 3 (EACH)	SPV.0060.05 MANHOLE TYPE 8 SPECIAL (EACH)	611.0303 INLET TYPE 3 (EACH)	SPV.0060.03 TERRACE INLET TYPE 3 SPECIAL (EACH)	611.0420 RECONSTR MANHOLES (EACH)	611.0430 RECONSTR INLETS (EACH)	SPV.0060.06 MANHOLE COVERS TYPE J SPECIAL (EACH)	611.0612 INLET COVERS TYPE C (EACH)	SPV.0060.01 INLET COVERS TYPE H SPECIAL (EACH)	SPV.0060.02 INLET COVERS TERRACE TYPE 3 SPECIAL (EACH)	SPV.0060.43 MANHOLE COVER SPECIAL (EACH)	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH (EACH)	520.1042 APRON ENDWALLS FOR CULVERT PIPE 42-INCH (EACH)	611.8110 ADJUSTING MANHOLE COVERS (EACH)	611.8115 ADJUSTING INLET COVERS (EACH)	520.8000.S CULVERT PIPE CONCRETE COLLAR (EACH)	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	COMMENT
0030			CONTINUED FROM PREVIOUS					0	0	1	1	0	31	1	3	0	0	1	33	1	0	1	0	0	0	1	35	
	19.6	121+46.0	31.9' LT	881.29	880.29	876.77	3.52	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	20.1	123+74.8	38.4' RT	884.68	883.68	880.11	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	20.2	123+84.7	38.8' RT	885.02	884.02	880.45	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	20.3	123+75.2	31.5' LT	884.95	883.95	877.83	6.12	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	21.1	125+97.6	39.5' RT	894.91	893.91	890.36	3.55	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	21.2	125+97.6	33.3' LT	895.15	894.15	890.82	3.33	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	22.1	127+39.0	39.0' RT	901.91	900.91	897.39	3.52	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	22.2	127+39.0	33.4' LT	902.94	901.94	895.14	6.80	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	22.3	127+12.7	52.2' LT	901.93	900.93	895.32	5.61	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	22.4	126+83.9	61.5' LT	901.98	900.98	895.49	5.49	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	23.1	129+95.2	49.6' RT	909.43	908.43	903.56	4.87	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	23.2	129+58.0	61.7' RT	909.11	908.45	903.70	4.75	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-
	23.3	129+85.7	6.5' RT	909.88	908.88	901.52	7.36	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	23.4	129+85.7	6.1' LT	910.49	909.49	901.58	7.91	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	23.5	129+85.9	56.1' LT	910.53	909.53	904.73	4.80	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	23.6	129+53.1	57.9' LT	910.33	909.33	905.17	4.16	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	23.7	129+85.9	34.6' LT	909.92	908.67	902.25	6.42	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-
	23.8	130+15.5	34.4' LT	910.20	909.20	906.69	2.51	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	24.2	137+61.9	34.7' LT	905.06	904.06	900.48	3.58	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	26.0	137+27.5	9.8' RT	905.92	904.92	900.89	4.03	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	26.1	137+27.5	41.3' RT	905.63	904.63	901.05	3.58	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-
	26.2	137+38.2	6.2' LT	905.44	904.44	901.06	3.38	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	27.1	136+77.3	6.2' LT	905.63	904.63	900.75	3.88	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	27.2	136+77.3	0.2' LT	905.72	904.72	901.27	3.45	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	27.3	136+77.3	34.7' LT	904.82	903.82	900.44	3.38	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	29.1	134+27.5	59.9' RT	906.87	905.87	902.37	3.50	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-
	29.2	133+76.5	63.6' RT	906.95	905.95	902.65	3.30	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-
	29.3	133+36.7	37.0' RT	908.14	907.14	903.57	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	30.1	133+36.9	3.6' LT	908.47	907.47	903.83	3.64	-	-	-	-	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-	1	STR. CENTER FOR CASTING 30.1 & 30.2
	30.3	133+36.9	34.2' LT	907.97	906.97	903.38	3.59	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	31.2	11+56.0	16.0' LT	895.69	894.69	889.22	5.47	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	31.3	11+07.5	16.0' LT	900.78	899.78	894.77	5.01	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	31.5	11+42.1	57.8' LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	31.6	11+02.2	67.4' LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	32.2	143+96.7	9.9' LT	906.03	905.03	901.52	3.51	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	
	33.2	143+97.9	86.0' RT	908.10	907.10	904.57	2.53	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	1	
	36.1	8+51.1	26.1' RT	909.36	908.36	903.78	4.58	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	
	36.2	8+46.5	19.1' LT	909.50	908.50	903.92	4.58	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	
	39.1	140+67.5	34.6' LT	905.28	904.28	900.79	3.49	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	
	39.3	139+85.2	0.1' LT	906.04	905.04	901.47	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	
	39.4	139+85.2	34.6' LT	905.44	904.44	900.99	3.45	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	41.2	157+61.6	39.5' LT	866.56	865.56	861.78	3.78	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	41.3	156+58.8	11.0' RT	869.30	868.30	864.59	3.71	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	41.4	156+58.8	0' LT	869.40	868.40	865.00	3.40	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	44.1	157+06.5	66.8' RT	867.31	866.31	862.58	3.73	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	44.2	156+68.5	66.8' RT	867.65	866.65	862.78	3.87	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	44.3	156+61.5	47.3' RT	868.45	867.45	863.91	3.54	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	47.2	154+27.0	5.0' LT	879.31	878.31	868.50	9.81	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	47.3	154+27.1	11.0' LT	878.95	877.95	868.53	9.42	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	47.4	154+20.4	39.5' LT	878.65	877.65	868.68	8.97	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	47.5	154+10.3	40.3' LT	879.23	878.23	874.74	3.49	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	47.6	153+91.0	79.2' LT	871.62	870.37	869.01	1.36	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
	48.0	153+64.0	48.4' RT	872.10	870.85	867.96	2.89	1	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-
	50.1	151+25.0	39.5' LT	894.05	893.05	889.45	3.60	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	51.1	148+28.6	39.5' RT	903.39	902.39	899.06	3.33	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	51.2	148+28.6	0.4' RT	904.13	903.13	898.77	4.36	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	51.3	148+28.6	11.0' LT	903.92	902.92	898.83	4.09	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	51.4	148+28.6	42.5' LT	903.34	902.34	899.51	2.83	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
	52.1	158+69.8	39.5' RT	865.65	864.65	860.84	3.81	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	52.2	158+78.9	42.6' RT	865.79	865.13	860.89	4.24	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-
	52.3	158+89.3	39.5' RT	865.65	864.65	861.07	3.58	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	52.4	158+78.9	10.9' RT	866.18	865.18	860.70	4.48	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	52.5	158+73.7	6.2' LT	866.36	865.36	860.78	4.58	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	52.6	158+73.8	42.6' LT	865.89	865.23	860.78	4.45	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-
	53.1	160+02.4	39.5' RT	866.17	865.17	861.58	3.59	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	53.2	160+12.3	39.5' RT	866.22	865.22	861.63	3.59	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	53.3	160+02.2	11.0' RT	866.70	865.70	861.10	4.60	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	53.4	160+17.7	8.3' LT	866.94	865.94	861.23	4.71	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	53.5	160+20.2	39.5' LT	866.37	865.37	861.45	3.92	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
			SUBTOTALS					1	0	3	2	1	86	9	3	0	1	3	88	9	0	1	0	0	0	2	100	

Addendum No. 1
ID 5992-08-79
Revised Sheet 457
February 1, 2012

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	MISCELLANEOUS QUANTITIES	SHEET 457	E

FILE NAME: G:\MADISON\MD2009035\PS&E\FINAL\PLANS | ORIGINATOR: KL ENGINEERING, INC. | ORIG. DATE: | REV. DATE: | PRINT DATE: January 30, 2012

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	CASTING ELEV.	TOP OF STR. ELEV.	BOTTOM OF STR. ELEV.	DEPTH	SPV.0060.04 CATCH BASIN SPECIAL (EACH)	SPV.0060.18 STORM SEWER TREATMENT STRUCTURE SPECIAL (EACH)	611.0201 MANHOLE TYPE 1 (EACH)	611.0210 MANHOLE TYPE 3 (EACH)	SPV.0060.05 MANHOLE TYPE 8 SPECIAL (EACH)	611.0303 INLET TYPE 3 (EACH)	SPV.0060.03 TERRACE INLET TYPE 3 SPECIAL (EACH)	611.0420 RECONSTR MANHOLES (EACH)	611.0430 RECONSTR INLETS (EACH)	SPV.0060.06 MANHOLE COVERS TYPE J SPECIAL (EACH)	611.0612 INLET COVERS TYPE C (EACH)	SPV.0060.01 INLET COVERS TYPE H SPECIAL (EACH)	SPV.0060.02 INLET COVERS TERRACE TYPE 3 SPECIAL (EACH)	SPV.0060.43 MANHOLE COVER SPECIAL (EACH)	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH (EACH)	520.1042 APRON ENDWALLS FOR CULVERT PIPE 42-INCH (EACH)	611.8110 ADJUSTING MANHOLE COVERS (EACH)	611.8115 ADJUSTING INLET COVERS (EACH)	520.8000.S CULVERT PIPE CONCRETE COLLAR (EACH)	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	COMMENT
0030			CONTINUED FROM PREVIOUS					1	0	3	2	1	86	9	3	0	1	3	88	9	0	1	0	0	0	2	100	
	53.6	160+10.2	39.5' LT	866.32	865.32	861.50	3.82	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	54.1	161+50.5	39.5' RT	866.91	865.91	862.33	3.58	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	54.2	161+50.5	41.2' LT	867.02	866.02	862.46	3.56	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	55.1	162+50.5	39.5' RT	867.41	866.41	862.82	3.59	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	55.2	162+60.5	39.5' RT	867.46	866.46	862.92	3.54	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	55.3	162+70.0	8.6' RT	868.04	867.04	863.45	3.59	-	-	-	-	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-	1	-
	58.1	164+00.6	39.5' RT	868.46	867.46	863.88	3.58	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	58.2	164+10.6	39.5' RT	868.61	867.61	864.04	3.57	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	58.3	163+06.4	50.0' RT	867.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	58.4	163+50.4	51.2' RT	868.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	59.1	165+30.3	40.0' RT	871.30	870.30	866.88	3.42	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	59.2	165+47.0	40.3' RT	871.82	870.82	866.78	4.04	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	59.3	165+47.1	11.7' RT	872.35	871.35	866.61	4.74	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	59.4	165+47.1	5.1' RT	872.75	871.75	866.65	5.10	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	59.5	165+44.3	48.8' LT	871.64	870.64	866.97	3.67	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	59.6	165+03.2	71.2' LT	870.55	869.89	865.62	4.27	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-
	59.8	164+55.7	72.8' LT	870.42	869.42	865.24	4.18	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-
	60.1	167+68.0	46.6' RT	879.12	878.12	874.53	3.59	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	60.2	167+78.0	45.9' RT	880.09	879.09	874.86	4.23	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	60.3	167+50.0	39.1' LT	879.05	878.05	875.05	3.00	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	60.5	170+04.9	79.0' RT	888.54	887.54	883.64	3.90	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	60.6	170+30.8	78.5' RT	889.00	888.00	883.78	4.22	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	60.7	170+38.0	78.3' RT	889.04	888.04	883.82	4.22	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	60.8	170+65.4	78.0' RT	888.78	887.78	883.96	3.82	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	60.9	167+50.0	17.0' RT	879.61	878.61	874.77	3.84	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	60.10	167+50.0	0.7' RT	879.80	878.80	874.85	3.95	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	61.1	170+90.0	41.1' RT	891.34	890.34	886.44	3.90	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	61.2	170+99.8	40.4' RT	891.71	890.71	886.80	3.91	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	61.3	170+90.0	36.6' LT	891.33	890.33	887.79	2.54	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	61.4	170+90.0	12.1' RT	891.88	890.88	887.54	3.34	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	61.5	170+90.0	3.3' RT	892.08	891.08	887.59	3.49	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	62.1	173+56.3	36.5' RT	900.95	899.95	896.08	3.87	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	62.2	173+55.0	42.9' RT	900.70	899.70	896.11	3.59	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	62.3	173+66.5	77.0' RT	901.20	900.20	896.61	3.59	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	62.4	173+92.0	60.0' RT	902.29	901.29	897.70	3.59	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	62.5	173+55.3	37.8' LT	900.91	899.91	897.00	2.91	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	63.1	174+89.5	54.2' RT	905.70	904.70	899.30	5.40	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	63.2	174+60.3	60.4' RT	904.40	903.40	899.46	3.94	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	63.3	174+54.5	58.9' RT	904.08	903.08	899.49	3.59	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	63.4	174+69.4	8.0' RT	905.83	904.83	900.44	4.39	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	63.5	174+76.3	2.0' RT	906.02	905.02	900.47	4.55	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	63.6	174+76.3	36.5' LT	905.24	904.24	900.66	3.58	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	63.7	174+87.1	36.5' LT	905.60	904.60	900.71	3.89	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	64.1	176+75.0	36.4' RT	912.45	911.45	907.19	4.26	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	64.2	177+02.9	40.9' LT	913.36	912.11	897.62	14.49	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	1	-
	65.1	180+50.0	27.5' RT	926.01	925.01	921.43	3.58	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	65.2	180+50.0	27.5' LT	926.01	925.01	921.43	3.58	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	68.1	200+95.0	38.5' RT	932.00	931.00	927.20	3.80	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	68.2	200+85.0	38.5' RT	932.06	931.06	927.25	3.81	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	68.3	201+00.0	55.1' LT	929.62	928.62	925.25	3.37	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	69.1	199+00.7	35.6' LT	933.15	932.15	928.74	3.41	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	70.1	197+75.0	38.5' RT	934.42	933.42	930.05	3.37	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	70.2	197+65.0	38.5' RT	934.50	933.50	930.13	3.37	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	70.3	197+73.8	30.2' LT	934.48	933.48	930.11	3.37	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	71.1	194+50.0	38.5' RT	937.02	936.02	932.65	3.37	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	71.2	194+40.0	38.5' RT	937.10	936.10	932.73	3.37	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	71.3	194+50.0	27.5' LT	937.24	936.24	932.87	3.37	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	71.4	192+12.5	27.5' RT	939.12	938.12	934.83	3.29	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	73.0	13'AN'+27.14	2.0' RT	918.72	917.72	915.10	2.62	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	74.0	13'AN'+31.05	33.7' LT	918.30	917.30	915.28	2.02	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	74.1	13'AS'+21.2	34.7' LT	918.85	917.85	915.33	2.52	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	74.2	11'AS'+19.83	32.8' LT	926.45	925.45	922.09	3.36	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	74.3	11'AS'+18.67	27.0' LT	926.46	925.46	922.12	3.34	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	74.4	13'AS'+31.71	42.8' LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	75.0	185'OW'+53.93	5.5' LT	923.99	922.99	920.12	2.87	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	75.1	185'OE'+46.45	16.0' LT	925.38	924.38	920.31	4.07	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	75.2	185'OE'+58.54	5.5' RT	925.07	924.07	920.43	3.64	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	75.3	185'OE'+14.41	5.5' RT	924.91	923.91	920.65	3.26	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
			0030 SUBTOTALS					1	0	3	3	2	147	11	3	0	2	3	151	11	0	1	0	0	2	3	165	

Addendum No. 1
ID 5992-08-79
Revised Sheet 458
February 1, 2012

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	MISCELLANEOUS QUANTITIES	SHEET 458	E

FILE NAME: G:\MADISON\MD2009035\PS&E\FINAL\PLANS | ORIGINATOR: KL ENGINEERING, INC. | ORIG. DATE: | REV. DATE: | PRINT DATE: January 30, 2012

CATEGORY	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	CASTING ELEV.	TOP OF STR. ELEV.	BOTTOM OF STR. ELEV.	DEPTH	SPV.0060.04 CATCH BASIN SPECIAL (EACH)	SPV.0060.18 STORM SEWER TREATMENT STRUCTURE SPECIAL (EACH)	611.0201 MANHOLE TYPE 1 (EACH)	611.0210 MANHOLE TYPE 3 (EACH)	SPV.0060.05 MANHOLE TYPE 8 SPECIAL (EACH)	611.0303 INLET TYPE 3 (EACH)	SPV.0060.03 TERRACE INLET TYPE 3 SPECIAL (EACH)	611.0420 RECONSTR MANHOLES (EACH)	611.0430 RECONSTR INLETS (EACH)	SPV.0060.06 MANHOLE COVERS TYPE J SPECIAL (EACH)	611.0612 INLET COVERS TYPE C (EACH)	SPV.0060.01 INLET COVERS TYPE H SPECIAL (EACH)	SPV.0060.02 INLET COVERS TERRACE TYPE 3 SPECIAL (EACH)	SPV.0060.43 MANHOLE COVER SPECIAL (EACH)	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH (EACH)	520.1042 APRON ENDWALLS FOR CULVERT PIPE 42-INCH (EACH)	611.8110 ADJUSTING MANHOLE COVERS (EACH)	611.8115 ADJUSTING INLET COVERS (EACH)	520.8000.S CULVERT PIPE CONCRETE COLLAR (EACH)	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	COMMENT
0030																												
			CONTINUED FROM PREVIOUS					1	0	3	3	2	147	11	3	0	2	3	151	11	0	1	0	0	2	3	165	
	76.0	190'OW'+74	5.5' LT	919.84	918.84	914.62	4.22	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	76.1	189'OW'+58.73	5.5' LT	918.87	917.87	915.24	2.63	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	76.2	189'OW'+48.73	5.5' LT	918.89	917.89	915.29	2.60	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-
	77.0	10'OR'+31.5	44.5' RT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	77.1	10'OR'+30.6	48.2' RT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
			0030 TOTALS					1	0	3	3	2	150	11	3	0	2	3	154	11	0	1	0	0	4	3	168	
			TOTALS					20	2	30	14	5	156	12	7	2	65	3	174	12	1	1	1	61	5	5	237	

Addendum No. 1
ID 5992-08-79
Add Sheet 458A
February 1, 2012

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	MISCELLANEOUS QUANTITIES	SHEET 458A	E

FILE NAME: G:\MADISON\MD2009035\PS&E\FINAL\PLANS | ORIGINATOR: KL ENGINEERING, INC. | ORIG. DATE: | REV. DATE: | PRINT DATE: January 30, 2012

PIPE SCHEDULE

CATEGORY	FROM	TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	607.0306 6-INCH NON RCP CLASS III SS (LF)	608.0312 12-INCH RCP CLASS III SS (LF)	608.0315 15-INCH RCP CLASS III SS (LF)	608.0318 18-INCH RCP CLASS III SS (LF)	608.0324 24-INCH RCP CLASS III SS (LF)	608.0330 30-INCH RCP CLASS III SS (LF)	608.0336 36-INCH RCP CLASS III SS (LF)	608.0342 42-INCH RCP CLASS III SS (LF)	608.0348 48-INCH RCP CLASS III SS (LF)	608.0412 12-INCH RCP CLASS IV SS (LF)
0020	4.0	18.0	870.33	870.25	0.005	-	-	-	-	-	15	-	-	-	-
	5.0	4.0	871.91	871.33	0.005	-	-	-	-	-	116	-	-	-	-
	6.1	6.0	878.68	877.81	0.087	-	-	-	-	-	10	-	-	-	-
	12.0	9.0	893.90	888.84	0.067	-	-	-	-	75	-	-	-	-	-
	13.0	12.0	897.52	893.90	0.028	-	-	-	-	131	-	-	-	-	-
	13.3	13.0	899.50	897.76	0.008	-	-	-	-	213	-	-	-	-	-
	14.0	13.3	906.46	903.55	0.027	-	-	-	-	108	-	-	-	-	-
	16.0	14.0	913.80	907.20	0.025	-	-	-	-	259	-	-	-	-	-
	17.0	16.0	920.60	914.32	0.025	-	-	-	-	247	-	-	-	-	-
	18.0	19.0	870.25	870.18	0.006	-	-	-	-	-	11	-	-	-	-
	19.0	19.1	870.18	870.06	0.007	-	-	-	-	-	-	-	18	-	-
	19.1	19.3	870.06	869.91	0.005	-	-	-	-	-	-	-	30	-	-
	19.3	19.7	869.91	869.71	0.005	-	-	-	-	-	-	-	38	-	-
	20.0	19.0	877.76	876.04	0.008	-	-	-	-	220	-	-	-	-	-
	21.0	20.0	887.38	879.69	0.035	-	-	-	-	222	-	-	-	-	-
	22.0	21.0	894.75	889.94	0.034	-	-	-	-	141	-	-	-	-	-
	23.0	22.0	901.66	896.97	0.019	-	-	-	-	246	-	-	-	-	-
	24.1	24.0	899.85	899.74	0.005	-	-	-	-	20	-	-	-	-	-
	25.0	24.1	900.97	900.77	0.005	-	-	-	-	39	-	-	-	-	-
	25.1	25.0	901.43	900.97	0.005	-	-	-	92	-	-	-	-	-	-
	27.0	24.1	900.48	900.31	0.005	-	-	-	35	-	-	-	-	-	-
	29.0	25.1	902.44	901.43	0.005	-	-	-	202	-	-	-	-	-	-
	30.0	28.0	903.50	902.83	0.008	-	84	-	-	-	-	-	-	-	-
	31.4	31.0	894.80	888.34	0.047	-	-	-	-	139	-	-	-	-	-
	32.0	31.4	897.67	897.63	0.005	-	-	-	-	8	-	-	-	-	-
	32.1	32.0	897.93	897.67	0.009	-	-	-	-	30	-	-	-	-	-
	33.0	32.1	898.23	897.93	0.005	-	-	-	-	59	-	-	-	-	-
	33.1	33.0	898.51	898.23	0.005	-	-	-	-	56	-	-	-	-	-
	34.0	33.1	898.69	898.51	0.005	-	-	-	-	36	-	-	-	-	-
	35.0	34.0	898.79	898.69	0.006	-	-	-	-	18	-	-	-	-	-
	35.1	35.0	898.93	898.79	0.005	-	-	-	-	31	-	-	-	-	-
	36.0	35.0	903.98	901.12	0.034	-	-	-	-	84	-	-	-	-	-
	37.0	36.0	905.62	904.33	0.024	-	-	-	-	55	-	-	-	-	-
	38.0	35.1	899.45	898.93	0.005	-	-	-	-	97	-	-	-	-	-
	38.1	38.0	900.60	900.45	0.005	-	32	-	-	-	-	-	-	-	-
	39.0	38.1	900.68	900.60	0.005	-	16	-	-	-	-	-	-	-	-
	42.1	42.0	857.06	856.59	0.007	-	-	-	-	73	-	-	-	-	-
	47.0	46.0	865.54	865.19	0.005	-	-	-	-	70	-	-	-	-	-
	47.1	47.0	865.65	865.54	0.005	-	-	-	-	22	-	-	-	-	-
	49.0	47.1	869.00	865.65	0.033	-	-	-	-	102	-	-	-	-	-
	50.0	49.0	889.10	879.10	0.047	-	-	-	-	212	-	-	-	-	-
	50.2	50.0	889.21	889.10	0.005	-	-	-	-	22	-	-	-	-	-
	50.3	50.2	890.10	889.21	0.024	-	-	-	-	37	-	-	-	-	-
	51.0	50.0	897.72	890.05	0.027	-	-	-	-	284	-	-	-	-	-
	52.0	42.1	860.07	859.89	0.009	-	-	-	-	20	-	-	-	-	-
	53.0	52.0	860.74	860.07	0.005	-	-	-	-	133	-	-	-	-	-
	54.0	53.0	862.08	860.74	0.009	-	-	-	-	148	-	-	-	-	-
	55.0	54.0	862.88	862.08	0.008	-	-	-	-	100	-	-	-	-	-
	56.0	EXISTING	860.36	858.32	0.045	-	-	-	-	-	-	-	-	45	-
	57.0	56.0	860.53	860.36	0.009	-	-	-	-	-	-	-	-	20	-
	58.0	57.0	861.00	860.53	0.006	-	-	-	-	-	-	-	-	82	-
	59.0	58.0	861.79	861.05	0.005	-	-	-	-	-	-	-	-	147	-
	59.7	59.9	865.27	864.64	0.021	-	-	-	-	30	-	-	-	-	-
	59.9	56.0	864.64	863.71	0.006	-	-	-	-	166	-	-	-	-	-
	60.0	59.0	872.11	864.59	0.037	-	-	-	-	-	-	-	205	-	-
	60.4	60.0	881.75	873.29	0.036	-	-	-	-	-	-	237	-	-	-
	61.0	60.4	885.51	881.75	0.036	-	-	-	-	-	-	106	-	-	-
	62.0	61.0	894.99	886.19	0.033	-	-	-	-	-	-	267	-	-	-
	63.0	62.0	896.06	895.49	0.005	-	-	-	-	-	115	-	-	-	-
	64.0	63.0	897.10	896.06	0.005	-	-	-	-	-	208	-	-	-	-
	64.2	64.0	897.87	897.51	0.005	-	-	-	-	72	-	-	-	-	-
	EXISTING	64.2	897.94	897.87	0.004	-	-	-	-	16	-	-	-	-	-
	65.0	64.0	920.38	907.25	0.031	-	-	-	-	420	-	-	-	-	-
	68.0	67.0	923.25	923.00	0.006	-	-	-	-	41	-	-	-	-	-
	69.0	68.0	928.10	927.13	0.005	-	-	-	-	192	-	-	-	-	-
	70.0	69.0	929.49	928.10	0.010	-	-	-	-	134	-	-	-	-	-
	71.0	70.0	931.11	929.49	0.005	-	-	-	-	324	-	-	-	-	-
			0020 TOTALS			0	132	0	328	5,150	475	610	290	294	0

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ALL ITEMS ARE CATEGORY 0010
UNLESS NOTED OTHERWISE

PIPE SCHEDULE

CATEGORY	FROM	TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	607.0306 6-INCH NON RCP CLASS III SS (LF)	608.0312 12-INCH RCP CLASS III SS (LF)	608.0315 15-INCH RCP CLASS III SS (LF)	608.0318 18-INCH RCP CLASS III SS (LF)	608.0324 24-INCH RCP CLASS III SS (LF)	608.0330 30-INCH RCP CLASS III SS (LF)	608.0336 36-INCH RCP CLASS III SS (LF)	608.0342 42-INCH RCP CLASS III SS (LF)	608.0348 48-INCH RCP CLASS III SS (LF)	608.0412 12-INCH RCP CLASS IV SS (LF)
0030	1.0	EXISTING	914.67	914.63	0.005	-	7	-	-	-	-	-	-	-	-
	1.1	1.0	918.74	916.93	0.098	-	18	-	-	-	-	-	-	-	-
	3.1	3.0	919.15	919.10	0.012	-	4	-	-	-	-	-	-	-	-
	3.2	3.1	920.09	919.15	0.059	-	16	-	-	-	-	-	-	-	-
	6.2	6.0	881.64	880.85	0.028	-	28	-	-	-	-	-	-	-	-
	6.3	6.2	882.08	881.64	0.028	-	16	-	-	-	-	-	-	-	-
	6.4	6.3	882.83	882.08	0.018	-	41	-	-	-	-	-	-	-	-
	8.1	8.0	887.88	887.83	0.006	-	-	9	-	-	-	-	-	-	-
	8.2	8.1	888.49	888.13	0.005	-	73	-	-	-	-	-	-	-	-
	8.3	8.2	888.81	888.49	0.032	-	10	-	-	-	-	-	-	-	-
	12.1	12.0	895.15	895.10	0.005	-	11	-	-	-	-	-	-	-	-
	12.2	12.1	895.50	895.15	0.035	-	10	-	-	-	-	-	-	-	-
	12.3	12.0	895.78	895.35	0.019	-	23	-	-	-	-	-	-	-	-
	12.4	12.3	895.92	895.78	0.009	-	16	-	-	-	-	-	-	-	-
	12.5	12.4	896.06	895.92	0.005	-	29	-	-	-	-	-	-	-	-
	13.1	13.0	899.07	899.02	0.005	-	11	-	-	-	-	-	-	-	-
	13.2	13.0	900.21	899.26	0.014	-	70	-	-	-	-	-	-	-	-
	14.1	14.0	906.52	906.46	0.005	-	-	-	-	11	-	-	-	-	-
	14.2	14.1	908.00	906.83	0.060	-	-	-	-	20	-	-	-	-	-
	14.3	14.0	908.48	908.20	0.010	-	29	-	-	-	-	-	-	-	-
	14.4	14.3	908.54	908.48	0.006	-	10	-	-	-	-	-	-	-	-
	14.5	14.4	908.71	908.54	0.006	-	29	-	-	-	-	-	-	-	-
	14.6	14.5	909.01	908.71	0.030	-	10	-	-	-	-	-	-	-	-
	16.1	16.0	915.68	915.32	0.005	-	79	-	-	-	-	-	-	-	-
	COLLAR	16.0	-	914.80	-	-	39	-	-	-	-	-	-	-	-
	16.3	16.1	916.95	915.68	0.030	-	42	-	-	-	-	-	-	-	-
	17.1	17.0	921.94	921.60	0.027	-	13	-	-	-	-	-	-	-	-
	17.2	17.1	922.88	921.94	0.051	-	18	-	-	-	-	-	-	-	-
	17.3	17.0	921.92	921.60	0.005	-	64	-	-	-	-	-	-	-	-
	17.4	17.3	921.96	921.92	0.006	-	6	-	-	-	-	-	-	-	-
	17.5	17.3	923.64	921.92	0.015	-	114	-	-	-	-	-	-	-	-
	17.6	17.5	924.18	923.64	0.019	-	29	-	-	-	-	-	-	-	-
	18.1	18.0	876.63	876.58	0.005	-	10	-	-	-	-	-	-	-	-
	18.2	18.0	876.64	876.59	0.005	-	10	-	-	-	-	-	-	-	-
	19.4	19.3	876.94	876.89	0.005	-	10	-	-	-	-	-	-	-	-
	19.5	19.4	877.14	876.94	0.006	-	34	-	-	-	-	-	-	-	-
	19.6	19.3	876.94	876.89	0.005	-	10	-	-	-	-	-	-	-	-
	20.1	20.0	880.28	880.17	0.005	-	22	-	-	-	-	-	-	-	-
	20.2	20.1	880.62	880.28	0.034	-	10	-	-	-	-	-	-	-	-
	20.3	20.0	878.00	877.76	0.005	-	48	-	-	-	-	-	-	-	-
	21.1	21.0	890.53	890.42	0.005	-	22	-	-	-	-	-	-	-	-
	21.2	21.0	890.99	890.73	0.005	-	51	-	-	-	-	-	-	-	-
	22.1	22.0	897.56	897.45	0.005	-	22	-	-	-	-	-	-	-	-
	22.2	22.0	895.31	895.07	0.005	-	51	-	-	-	-	-	-	-	-
	22.3	22.2	895.49	895.31	0.006	-	32	-	-	-	-	-	-	-	-
	22.4	22.3	895.66	895.49	0.006	-	31	-	-	-	-	-	-	-	-
	23.1	23.0	903.77	903.58	0.005	-	-	-	38	-	-	-	-	-	-
	23.2	23.1	903.95	903.77	0.005	-	-	-	35	-	-	-	-	-	-
	23.3	23.0	901.69	901.66	0.005	-	7	-	-	-	-	-	-	-	-
	23.4	23.3	901.75	901.69	0.005	-	12	-	-	-	-	-	-	-	-
	23.5	23.7	904.90	904.67	0.011	-	21	-	-	-	-	-	-	-	-
	23.6	23.5	905.34	904.90	0.014	-	32	-	-	-	-	-	-	-	-
	23.7	23.4	902.42	901.75	0.023	-	29	-	-	-	-	-	-	-	-
	23.8	23.7	906.86	904.67	0.073	-	-	-	-	-	-	-	-	-	30
	24.2	24.1	900.65	900.39	0.005	-	50	-	-	-	-	-	-	-	-
	26.0	25.0	901.14	900.97	0.005	-	-	-	-	34	-	-	-	-	-
	26.1	26.0	901.30	901.14	0.005	-	-	-	-	32	-	-	-	-	-
	26.2	26.0	901.23	901.14	0.005	-	18	-	-	-	-	-	-	-	-
	27.1	27.0	900.92	900.81	0.005	-	21	-	-	-	-	-	-	-	-
	27.2	27.1	901.44	901.07	0.064	-	6	-	-	-	-	-	-	-	-
	27.3	27.0	900.61	900.57	0.005	-	8	-	-	-	-	-	-	-	-
	29.1	29.0	902.56	902.44	0.005	-	-	24	-	-	-	-	-	-	-
	29.2	29.1	902.82	902.56	0.005	-	51	-	-	-	-	-	-	-	-
	29.3	29.0	903.74	903.10	0.007	-	86	-	-	-	-	-	-	-	-
	30.1	30.0	904.00	903.74	0.015	-	18	-	-	-	-	-	-	-	-
	30.3	30.0	903.55	903.50	0.005	-	11	-	-	-	-	-	-	-	-
	31.2	31.0	889.53	889.39	0.005	-	27	-	-	-	-	-	-	-	-
0030 SUBTOTALS						0	1,625	32	73	97	0	0	0	0	30

ALL ITEMS ARE CATEGORY 0010
UNLESS NOTED OTHERWISE

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PIPE SCHEDULE

CATEGORY	FROM	TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	607.0306 6-INCH NON RCP CLASS III SS (LF)	608.0312 12-INCH RCP CLASS III SS (LF)	608.0315 15-INCH RCP CLASS III SS (LF)	608.0318 18-INCH RCP CLASS III SS (LF)	608.0324 24-INCH RCP CLASS III SS (LF)	608.0330 30-INCH RCP CLASS III SS (LF)	608.0336 36-INCH RCP CLASS III SS (LF)	608.0342 42-INCH RCP CLASS III SS (LF)	608.0348 48-INCH RCP CLASS III SS (LF)	608.0412 12-INCH RCP CLASS IV SS (LF)
0030															
		CONTINUED FROM PREVIOUS				0	1,625	32	73	97	0	0	0	0	30
	31.3	31.2	894.94	889.53	0.103	-	52	-	-	-	-	-	-	-	-
	31.5	31.2	890.87	889.53	0.031	-	43	-	-	-	-	-	-	-	-
	31.6	31.3	896.41	894.94	0.029	-	50	-	-	-	-	-	-	-	-
	32.2	32.0	901.69	901.29	0.009	-	44	-	-	-	-	-	-	-	-
	33.2	EXISTING	904.76	904.72	0.005	-	-	8	-	-	-	-	-	-	-
	36.1	36.0	904.03	903.98	0.005	-	-	-	-	9	-	-	-	-	-
	36.2	36.0	904.17	903.98	0.005	-	-	-	-	36	-	-	-	-	-
	39.1	39.0	900.96	900.80	0.005	-	34	-	-	-	-	-	-	-	-
	39.2	39.0	901.01	900.68	0.005	-	65	-	-	-	-	-	-	-	-
	39.3	39.2	901.64	901.60	0.008	-	5	-	-	-	-	-	-	-	-
	39.4	39.2	901.16	901.01	0.005	-	29	-	-	-	-	-	-	-	-
	41.2	41.1	861.95	861.82	0.013	-	10	-	-	-	-	-	-	-	-
	41.3	44.0	864.76	862.62	0.040	-	54	-	-	-	-	-	-	-	-
	41.4	41.3	865.17	864.76	0.038	-	11	-	-	-	-	-	-	-	-
	44.1	44.0	862.75	862.62	0.005	-	27	-	-	-	-	-	-	-	-
	44.2	44.1	862.95	862.75	0.005	-	38	-	-	-	-	-	-	-	-
	44.3	44.2	864.08	862.95	0.055	-	20	-	-	-	-	-	-	-	-
	47.2	47.1	868.67	868.59	0.005	-	17	-	-	-	-	-	-	-	-
	47.3	47.2	868.70	868.67	0.005	-	6	-	-	-	-	-	-	-	-
	47.4	47.3	868.85	868.70	0.005	-	29	-	-	-	-	-	-	-	-
	47.5	47.4	874.91	874.26	0.065	-	10	-	-	-	-	-	-	-	-
	47.6	47.4	869.18	868.85	0.005	65	-	-	-	-	-	-	-	-	-
	48.0	47.0	868.10	867.00	0.017	-	-	-	-	65	-	-	-	-	-
	50.1	50.0	889.62	889.33	0.005	-	58	-	-	-	-	-	-	-	-
	51.1	51.0	899.23	899.12	0.005	-	22	-	-	-	-	-	-	-	-
	51.2	51.0	898.94	898.86	0.005	-	17	-	-	-	-	-	-	-	-
	51.3	51.2	899.00	898.94	0.005	-	12	-	-	-	-	-	-	-	-
	51.4	51.3	899.68	899.52	0.005	-	-	-	-	-	-	-	-	-	31
	52.1	52.0	861.01	860.90	0.005	-	23	-	-	-	-	-	-	-	-
	52.2	52.1	861.06	861.01	0.005	-	10	-	-	-	-	-	-	-	-
	52.3	52.2	861.24	861.06	0.016	-	11	-	-	-	-	-	-	-	-
	52.4	52.0	860.87	860.81	0.005	-	11	-	-	-	-	-	-	-	-
	52.5	52.4	860.95	860.87	0.005	-	18	-	-	-	-	-	-	-	-
	52.6	52.5	861.14	860.95	0.005	-	36	-	-	-	-	-	-	-	-
	53.1	53.0	861.75	861.64	0.005	-	22	-	-	-	-	-	-	-	-
	53.2	53.1	861.80	861.75	0.005	-	10	-	-	-	-	-	-	-	-
	53.3	53.0	861.27	861.24	0.005	-	7	-	-	-	-	-	-	-	-
	53.4	53.3	861.40	861.27	0.005	-	25	-	-	-	-	-	-	-	-
	53.5	53.4	861.62	861.40	0.007	-	31	-	-	-	-	-	-	-	-
	53.6	53.5	861.67	861.62	0.005	-	10	-	-	-	-	-	-	-	-
	54.1	54.0	862.50	862.39	0.005	-	22	-	-	-	-	-	-	-	-
	54.2	54.0	862.63	862.33	0.005	-	59	-	-	-	-	-	-	-	-
	55.1	55.0	862.99	862.88	0.005	-	22	-	-	-	-	-	-	-	-
	55.2	55.1	863.09	862.99	0.010	-	10	-	-	-	-	-	-	-	-
	55.3	55.0	863.62	863.52	0.005	-	21	-	-	-	-	-	-	-	-
	58.1	58.0	864.05	864.00	0.005	-	11	-	-	-	-	-	-	-	-
	58.2	58.1	864.21	864.05	0.016	-	10	-	-	-	-	-	-	-	-
	59.1	59.2	867.05	866.95	0.006	-	16	-	-	-	-	-	-	-	-
	59.2	59.0	866.95	866.85	0.009	-	11	-	-	-	-	-	-	-	-
	59.3	59.0	866.94	866.85	0.005	-	18	-	-	-	-	-	-	-	-
	59.4	59.3	866.98	866.94	0.006	-	7	-	-	-	-	-	-	-	-
	59.5	59.9	867.30	865.64	0.031	-	53	-	-	-	-	-	-	-	-
	59.6	59.7	865.83	865.77	0.005	-	-	-	12	-	-	-	-	-	-
	59.8	59.7	865.45	865.27	0.005	-	-	-	35	-	-	-	-	-	-
	60.1	60.0	874.70	874.55	0.005	-	29	-	-	-	-	-	-	-	-
	60.2	60.1	875.03	874.70	0.032	-	10	-	-	-	-	-	-	-	-
	60.3	60.10	875.22	875.02	0.005	-	40	-	-	-	-	-	-	-	-
	60.5	60.4	883.81	883.49	0.005	-	60	-	-	-	-	-	-	-	-
	60.6	60.5	883.95	883.81	0.005	-	27	-	-	-	-	-	-	-	-
	60.7	60.6	883.99	883.95	0.005	-	7	-	-	-	-	-	-	-	-
	60.8	60.7	884.13	883.99	0.005	-	28	-	-	-	-	-	-	-	-
	60.10	60.9	875.02	874.94	0.005	-	16	-	-	-	-	-	-	-	-
	60.9	60.0	874.94	874.91	0.005	-	7	-	-	-	-	-	-	-	-
	61.1	61.0	886.61	886.50	0.005	-	22	-	-	-	-	-	-	-	-
		0030 SUBTOTALS				65	2,998	40	120	207	0	0	0	0	61

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ALL ITEMS ARE CATEGORY 0010
UNLESS NOTED OTHERWISE

PIPE SCHEDULE

CATEGORY	FROM	TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	607.0306 6-INCH NON RCP CLASS III SS (LF)	608.0312 12-INCH RCP CLASS III SS (LF)	608.0315 15-INCH RCP CLASS III SS (LF)	608.0318 18-INCH RCP CLASS III SS (LF)	608.0324 24-INCH RCP CLASS III SS (LF)	608.0330 30-INCH RCP CLASS III SS (LF)	608.0336 36-INCH RCP CLASS III SS (LF)	608.0342 42-INCH RCP CLASS III SS (LF)	608.0348 48-INCH RCP CLASS III SS (LF)	608.0412 12-INCH RCP CLASS IV SS (LF)
0030															
			CONTINUED FROM PREVIOUS			65	2,998	40	120	207	0	0	0	0	61
	61.2	61.1	886.97	886.61	0.036	-	10	-	-	-	-	-	-	-	-
	61.3	61.5	887.96	887.76	0.005	-	-	-	-	-	-	-	-	-	40
	61.5	61.4	887.76	887.71	0.006	-	-	-	-	-	-	-	-	-	9
	61.4	61.0	887.71	887.67	0.006	-	-	-	-	-	-	-	-	-	7
	62.1	62.0	896.25	896.14	0.005	-	22	-	-	-	-	-	-	-	-
	62.2	62.1	896.28	896.25	0.005	-	6	-	-	-	-	-	-	-	-
	62.3	62.2	896.78	896.28	0.014	-	36	-	-	-	-	-	-	-	-
	62.4	62.3	897.87	896.78	0.035	-	31	-	-	-	-	-	-	-	-
	62.5	62.0	897.17	896.23	0.018	-	52	-	-	-	-	-	-	-	-
	63.1	63.0	899.47	899.30	0.005	-	35	-	-	-	-	-	-	-	-
	63.2	63.1	899.63	899.47	0.005	-	31	-	-	-	-	-	-	-	-
	63.3	63.2	899.66	899.63	0.005	-	6	-	-	-	-	-	-	-	-
	63.4	63.0	900.61	900.52	0.005	-	19	-	-	-	-	-	-	-	-
	63.5	63.4	900.64	900.61	0.005	-	6	-	-	-	-	-	-	-	-
	63.6	63.5	900.83	900.64	0.005	-	39	-	-	-	-	-	-	-	-
	63.7	63.6	900.88	900.83	0.005	-	10	-	-	-	-	-	-	-	-
	64.1	64.0	907.36	907.31	0.005	-	11	-	-	-	-	-	-	-	-
	65.1	65.0	921.60	921.55	0.005	-	11	-	-	-	-	-	-	-	-
	65.2	65.1	921.60	921.38	0.005	-	44	-	-	-	-	-	-	-	-
	68.1	68.0	927.37	927.21	0.005	-	33	-	-	-	-	-	-	-	-
	68.2	68.1	927.42	927.37	0.005	-	10	-	-	-	-	-	-	-	-
	68.3	68.0	925.42	925.01	0.007	-	61	-	-	-	-	-	-	-	-
	69.1	69.0	928.91	928.60	0.007	-	42	-	-	-	-	-	-	-	-
	70.1	70.0	930.22	930.05	0.005	-	33	-	-	-	-	-	-	-	-
	70.2	70.1	930.30	930.22	0.008	-	10	-	-	-	-	-	-	-	-
	70.3	70.0	930.28	929.99	0.008	-	36	-	-	-	-	-	-	-	-
	71.1	71.0	932.82	932.66	0.005	-	33	-	-	-	-	-	-	-	-
	71.2	71.1	932.90	932.82	0.008	-	10	-	-	-	-	-	-	-	-
	71.3	71.0	933.04	932.77	0.008	-	33	-	-	-	-	-	-	-	-
	71.4	71.0	935.00	933.01	0.008	-	238	-	-	-	-	-	-	-	-
	73.0	72.0	915.27	915.22	0.005	-	11	-	-	-	-	-	-	-	-
	74.0	73.0	915.45	915.27	0.005	-	-	-	-	-	-	-	-	-	36
	74.1	74.0	915.50	915.45	0.005	-	10	-	-	-	-	-	-	-	-
	74.2	74.1	922.26	915.50	0.036	-	190	-	-	-	-	-	-	-	-
	74.3	74.2	922.29	922.26	0.005	-	6	-	-	-	-	-	-	-	-
	74.4	74.0	915.49	915.45	0.005	-	8	-	-	-	-	-	-	-	-
	75.1	75.0	920.48	920.29	0.005	-	38	-	-	-	-	-	-	-	-
	75.2	75.1	920.60	920.48	0.005	-	25	-	-	-	-	-	-	-	-
	75.3	75.2	920.82	920.60	0.005	-	43	-	-	-	-	-	-	-	-
	76.1	76.0	915.41	914.79	0.005	-	124	-	-	-	-	-	-	-	-
	76.2	76.1	915.46	915.41	0.005	-	10	-	-	-	-	-	-	-	-
			0030 SUBTOTALS			65	4,373	40	120	207	0	0	0	0	152
			TOTALS			65	4,504	40	448	5,357	475	610	290	294	152

Addendum No. 1
ID 5992-08-79
Revised Sheet 462
February 1, 2012

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

TEMPORARY PAVEMENT MARKINGS

STAGE	STATION	TO	STATION	LOCATION	646.0600 REMOVE PAVEMENT MARKINGS (LF)	649.0100 TEMPORARY PAVEMENT MARKING 4-IN WHITE (LF)	649.0100 TEMPORARY PAVEMENT MARKING 4-IN YELLOW (LF)	649.0701 TEMPORARY PAVEMENT MARKING 8-IN WHITE (LF)	649.1100 TEMPORARY PAVEMENT MARKING 18-IN STOP LINE (LF)	649.0400 TEMPORARY PAVEMENT TAPE 4-IN WHITE (LF)	649.0400 TEMPORARY PAVEMENT TAPE 4-IN YELLOW (LF)	649.0801 TEMPORARY PAVEMENT TAPE 8-IN WHITE (LF)	649.1200 TEMPORARY PAVEMENT TAPE 18-IN STOP LINE (LF)	649.2100 TEMPORARY RAISED PAVEMENT MARKERS (EACH)	SPV.0045.01 TEMPORARY CROSSWALK OR SIDEWALK (DAYS)	SPV.0060.37 TEMPORARY BUS STOP PAD (EACH)
STAGE 1	98+25	-	202+04	UNIVERSITY AVENUE	-	265	14,362	2,363	282	687	1,849	46	-	4	21	1
STAGE 2 A	98+25	-	202+04	UNIVERSITY AVENUE	-	10,453	18,385	2,723	176	2,665	4,241	177	121	8	252	8
STAGE 2 B	98+25	-	202+04	UNIVERSITY AVENUE	-	2,017	3,058	600	100	481	923	-	49	8	252	2
STAGE 3 A	98+25	-	202+04	UNIVERSITY AVENUE	-	839	16,700	1,822	401	998	5,415	114	-	4	60	1
STAGE 3 B	98+25	-	202+04	UNIVERSITY AVENUE	-	523	3,282	174	92	632	3,429	-	-	4	48	-
STAGE 4 A	98+25	-	202+04	UNIVERSITY AVENUE	-	10,564	18,504	2,802	343	2,317	4,265	96	237	-	128	6
STAGE 4 B	98+25	-	202+04	UNIVERSITY AVENUE	-	2,162	4,110	1,281	220	711	1,784	-	36	-	112	2
STAGE 5 A	98+25	-	202+04	UNIVERSITY AVENUE	-	2,396	16,525	3,716	528	1,613	5,193	444	-	-	120	-
STAGE 5 B	98+25	-	202+04	UNIVERSITY AVENUE	-	673	2,190	180	-	789	2,766	163	-	-	104	-
				PROJECT (UNDISTRIBUTED)	3,000	108	884	339	158	107	535	60	7	12	103	-
	TOTALS				3,000	30,000	98,000	16,000	2,300	11,000	30,400	1,100	450	40	1,200	20
						128,000				41,400						

Addendum No. 1
ID 5992-08-79
Revised Sheet 463
February 1, 2012

EROSION CONTROL

STATION	TO	STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2008 EROSION MAT URBAN CLASS I TYPE B (SY)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7005 INLET PROTECTION TYPE A (EACH)	628.7010 INLET PROTECTION TYPE B (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7020 INLET PROTECTION TYPE D (EACH)
98+25	-	103+75	UNIVERSITY AVENUE	-	-	143	-	10	1	8	-
103+75	-	134+00	UNIVERSITY AVENUE	1,731	866	5,407	194	68	-	47	3
134+00	-	154+80	UNIVERSITY AVENUE	652	326	1,483	8	46	2	33	-
154+80	-	174+20	UNIVERSITY AVENUE	929	465	1,700	-	66	4	46	-
174+20	-	183+60	UNIVERSITY AVENUE	1,426	713	6,260	24	10	1	7	-
189+35	-	202+04	UNIVERSITY AVENUE	-	-	3,681	-	12	1	16	-
10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	-	-	-	-	5	-	7	-
8+50	-	10+00	ST. DUNSTAN DRIVE	-	-	71	-	1	-	1	-
4'AL'+50	-	6'AL'+00	ASBURY LOOP DRIVEWAY	126	63	-	-	-	-	-	-
7+75	-	10+00	ASBURY-CRESS ACCESS	-	-	28	-	-	-	-	-
9+00	-	10+00	HEIM AVENUE	27	14	-	-	-	-	4	-
10+00	-	11+25	BAKER AVENUE	35	18	-	-	-	-	-	-
10+00	-	11+10	HICKORY DRIVE	-	-	-	-	2	1	1	-
8+50	-	10+00	LAUREL CREST	-	-	-	-	2	1	1	-
10+00	-	11+00	LAUREL CREST	-	-	-	-	2	-	2	-
9+00	-	10+00	CAPITAL AVENUE	-	-	-	-	2	2	-	-
10+00	-	12+25	CAPITAL AVENUE	-	-	-	-	1	-	1	-
8+00	-	10+00	NORMAN WAY (WEST)	-	-	-	-	6	2	-	2
10+00	-	12+25	NORMAN WAY (EAST)	48	24	-	-	4	2	3	-
10+00	-	12+15	SPRING HARBOR DRIVE	136	68	-	-	-	-	-	-
8+50	-	10+00	CRAIG AVENUE	-	-	-	-	2	-	2	-
10+00	-	10+90	TOMAHAWK TRAIL	-	-	-	-	3	2	-	-
6'WN'+50	-	10'WN'+00	WHITNEY WAY	-	-	-	-	5	-	9	-
10'OR'+00	-	12'OR'+25	OLD MIDDLETON ROAD	-	-	-	-	-	-	6	-
183'OW'+86	-	199'OW'+60	OLD MIDDLETON WB OFF-RAMP	-	-	102	-	4	-	3	1
183'OE'+90	-	193'OE'+70	OLD MIDDLETON EB ON-RAMP	319	160	1,881	-	3	-	3	-
			UNDISTRIBUTED*	-	-	-	28	-	-	-	-
			UNDISTRIBUTED	571	285	2244	16	16	1	10	4
TOTALS				6,000	3,000	23,000	270	270	20	210	10

* STONE CHECKS FOR STONE BASE AND INTERSECTIONS PRIOR TO ASPHALT

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.4500 SUBGRADE (LF)	650.5000 BASE (LF)	650.8500 ELECTRICAL INSTALLATIONS (LS)	650.9910 SUPPLEMENTAL CONTROL 5992-08-79 (LS)	650.9920 SLOPE STAKES (LF)
98+25	-	103+75	UNIVERSITY AVENUE	1,100	1,100	-	-	550
103+75	-	134+00	UNIVERSITY AVENUE	6,050	6,050	-	-	3,025
134+00	-	154+80	UNIVERSITY AVENUE	4,160	4,160	-	-	2,080
154+80	-	174+20	UNIVERSITY AVENUE	3,880	3,880	-	-	1,940
174+20	-	183+60	UNIVERSITY AVENUE	1,880	1,880	-	-	940
183+60	-	202+04	UNIVERSITY AVENUE	3,688	3,688	-	-	1,844
10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	1,600	1,600	-	-	1,600
8+50	-	10+00	ST. DUNSTAN DRIVE	100	100	-	-	100
4'AL'+50	-	6'AL'+00	ASBURY LOOP DRIVEWAY	119	119	-	-	119
7+75	-	10+00	ASBURY-CRESS ACCESS	168	168	-	-	168
10+00	-	10+75	OVERLOOK PASS	65	65	-	-	65
9+00	-	10+00	HEIM AVENUE	59	59	-	-	59
9+10	-	10+00	HICKORY HOLLOW DRIVE	46	46	-	-	46
10+00	-	11+25	BAKER AVENUE	89	89	-	-	89
10+00	-	11+10	HICKORY DRIVE	75	75	-	-	75
8+50	-	10+00	LAUREL CREST	150	150	-	-	150
10+00	-	11+00	LAUREL CREST	66	66	-	-	66
9+00	-	10+00	CAPITAL AVENUE	200	200	-	-	200
10+00	-	12+25	CAPITAL AVENUE	450	450	-	-	450
10+00	-	10+85	CAMUS LANE	50	50	-	-	50
10+00	-	10+80	FRITZ AVENUE	50	50	-	-	50
8+00	-	10+00	NORMAN WAY (WEST)	150	150	-	-	150
10+00	-	12+25	NORMAN WAY (EAST)	183	183	-	-	183
10+00	-	12+15	SPRING HARBOR DRIVE	430	430	-	-	430
8+50	-	10+00	CRAIG AVENUE	45	45	-	-	45
10+00	-	10+90	TOMAHAWK TRAIL	50	50	-	-	50
6'WN'+50	-	10'WN'+00	WHITNEY WAY	1,000	1,000	-	-	1,000
10'OR'+00	-	12'OR'+25	OLD MIDDLETON ROAD	200	200	-	-	200
183'OW'+86	-	199'OW'+60	OLD MIDDLETON WB OFF-RAMP	1,512	1,512	-	-	1,512
183'OE'+90	-	193'OE'+70	OLD MIDDLETON EB ON-RAMP	835	835	-	-	835
TOTALS				28,450	28,450	1	1	18,071

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PERMANENT SIGNING

SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE (IN x IN)	637.0202 SIGNS REFLECTIVE TYPE II (SF)	SPV.0090.33 SIGN POST (LF)	SPV.0090.17 REFLECTIVE SIGN POST (LF)	SPV.0060.14 PRECAST SIGN POST BASE (EACH)	SPV.0060.15 SIGN POST BASE FOR CONCRETE INSTALLATION (EACH)	SIGN MOUNTED ON SAME POST AS	REMARKS
01-01	R4-7	(2)	24X30	5	-	14	1	-		KEEP RIGHT SYMBOL
01-02	J13-1	(2)	-	0.68	-	16	1	-		REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-		COUNTY ROUTE MARKER
01-03	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
01-04	J13-1	(2)	-	0.68	-	16	1	-		REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-		COUNTY ROUTE MARKER
	M5-1L	(2)	21X21	3.06	-	-	-	-		ADVANCE ARROW LEFT
01-05	M1-94	(2)	60X15	6.25	-	28	2	-		ALLEN BLVD.
01-06	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
01-07	R3-20L	(2)	24X30	5	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
01-08	-	(2)	30X36	-	-	14	1	-		CITY OF MADISON - BIKE LANE ENDS WITH BIKE SYMBOL
1M-01	-		60X78	-	-	40	2	-		CITY OF MIDDLETON WAYFINDING SIGN
02-01	J13-1	(2)	-	0.68	-	-	-	-	SIGNAL	REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-	SIGNAL	COUNTY ROUTE MARKER
	M6-1	(2)	21X21	3.06	-	-	-	-	SIGNAL	ARROW RIGHT
02-03	W12-1D	(2)	24X24	4	9.5	-	-	1		DOUBLE DOWN ARROW
02-04	M1-5A	(2)	24X24	4	14	-	1	-		COUNTY ROUTE MARKER
02-05	J13-1	(2)	-	0.68	-	-	-	-	SIGNAL	REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-	SIGNAL	COUNTY ROUTE MARKER
	M6-1	(2)	21X21	3.06	-	-	-	-	SIGNAL	ARROW LEFT
02-06	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
02-07	J13-1	(2)	-	0.68	-	-	-	-	SIGNAL	REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-	SIGNAL	COUNTY ROUTE MARKER
	M6-1	(2)	21X21	3.06	-	-	-	-	SIGNAL	ARROW RIGHT
02-08	J13-1	(2)	-	0.68	-	16	-	1		REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-		COUNTY ROUTE MARKER
	M6-1	(2)	21X21	3.06	-	-	-	-		ARROW RIGHT
02-09	W12-1D	(2)	24X24	4	-	9.5	-	1		DOUBLE DOWN ARROW
02-11	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
02-12	R3-4	(2)	24X24	4	-	-	-	-	SIGNAL	NO U TURN SYMBOL
02-13	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
02-14	J13-1	(2)	-	0.68	-	-	-	-	SIGNAL	REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-	SIGNAL	COUNTY ROUTE MARKER
	M6-1	(2)	21X21	3.06	-	-	-	-	SIGNAL	ARROW LEFT
02-17	R5-1	(2)	30X30	6.26	14	-	1	-		DO NOT ENTER
02-18	R3-1	(2)	24X24	4	-	14	1	-		NO RIGHT TURN SYMBOL
02-19	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
02-20	R3-4	(2)	24X24	4	-	-	-	-	SIGNAL	NO U TURN SYMBOL
02-21	R6-1R	(2)	36X12	3	-	14	1	-		ONE WAY RIGHT ARROW
02-22	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
02-23	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
02-25	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
02-26	-	(2)	18X24	-	14	-	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
02-27	R5-50	(2)	30X24	5	-	-	1	-	2M-01	DRIVEWAY AHEAD
02-28	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
02-29	R6-1R	(2)	36X12	3	-	-	-	-	02-22	ONE WAY RIGHT ARROW
02-30	R3-2	(2)	24X24	4	-	-	-	-	02-21	NO LEFT TURN SYMBOL
02-31	-	(2)	30X24	-	-	14	1	-		CITY OF MADISON CITY OF MADISON - BIKE LANE WITH BIKE SYMBOL WITH BIKE SYMBOL
2M-01	-		40X48	-	-	16	1	-		BUSINESS WATCH - MIDDLETON POLICE DEPARTMENT
2M-02	-		40X48	-	-	16	1	-		NO ENGINE BRAKING EXCEPT IN EMERGENCY
2M-03	-		30X36	-	-	14	1	-		CALENDAR PARKING AND EMERGENCY SNOW REGULATIONS
2M-04	-		30X36	-	-	14	1	-		TRUCK ROUTES HAVE YELLOW SIGN POSTS
03-01	R6-2R	(2)	24X30	5	14	-	1	-		ONE WAY RIGHT ARROW
03-02	R4-4	(2)	36X30	5	14	-	1	-		BEGIN RIGHT TURN LANE YIELD TO BIKES WITH DOWN LEFT ARROW
03-03	R3-8U	(2)	72X30	15	28	-	2	-		LANE DESIGNATION - 2 LTO, BIKE LANE, RTO
03-04	J13-1	(2)	-	0.68	16	-	1	-		REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-		COUNTY ROUTE MARKER
	M5-1R	(2)	21X21	3.06	-	-	-	-		ADVANCE ARROW RIGHT
03-05	J13-1	(2)	-	0.68	16	-	1	-		REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-		COUNTY ROUTE MARKER
	M5-1L	(2)	21X21	3.06	-	-	-	-		ADVANCE ARROW LEFT
04-01	J13-1	(2)	-	0.68	-	14	1	-		REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-		COUNTY ROUTE MARKER
04-02	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
04-03	M1-94	(2)	60X15	6.25	-	28	2	-		ALLEN BLVD.
04-04	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
04-05	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
04-06	R4-4	(2)	36X30	7.5	-	14	1	-		BEGIN RIGHT TURN LANE YIELD TO BIKES WITH DOWN LEFT ARROW
04-07	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
04-08	R4-7	(2)	24X30	5	-	14	1	-		KEEP RIGHT SYMBOL
04-09	R4-7	(2)	24X30	5	-	14	1	-		KEEP RIGHT SYMBOL
SUBTOTALS				232.90	167.50	479.50	43	3		

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PERMANENT SIGNING

SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE (IN x IN)	637.0202 SIGNS REFLECTIVE TYPE II (SF)	SPV.0090.16 SIGN POST (LF)	SPV.0090.17 REFLECTIVE SIGN POST (LF)	SPV.0060.14 PRECAST SIGN POST BASE (EACH)	SPV.0060.15 SIGN POST BASE FOR CONCRETE INSTALLATION (EACH)	SIGN MOUNTED ON SAME POST AS	REMARKS
CONTINUED FROM PREVIOUS				232.90	167.5	479.5	43	3		
04-10	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
04-11	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
04-12	J13-1	(2)	-	0.68	-	16	1	-		REASSURANCE ASSEMBLY
	M1-5A	(2)	24X24	4	-	-	-	-		COUNTY ROUTE MARKER
	M5-1R	(2)	21X21	3.06	-	-	-	-		ADVANCE RIGHT ARROW
04-13	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
04-14	J13-1	(2)	-	0.68	-	16	1	-		REASSURANCE ASSEMBLY
	M2-1	(2)	21X15	2.2	-	-	-	-		JCT
	M1-5A	(2)	24X24	4	-	-	-	-		COUNTY ROUTE MARKER
04-15	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
04-16	R5-50	(2)	30X24	5	-	14	1	-		DRIVEWAY AHEAD
04-17	-	(2)	30X30	-	-	-	-	-	04-08	CITY OF MADISON - TURNING VEHICLES YIELD TO PEDESTRIANS W/ BIKE SYMBOL
4M-01	-		30X36	-	-	16	1	-		TRUCK ROUTES HAVE YELLOW SIGN POSTS
4M-02	-		30X36	-	-	-	-	-	4M-01	TREE CITY - ARBOR DAY FOUNDATION
4M-03	-		60X78	-	-	40	2	-		CITY OF MIDDLETON WAYFINDING SIGN
4M-04	12-3		66X24	-	-	32	2	-		MIDDLETON POPULATION SIGN
4M-05	-		30X36	-	-	-	-	-	4M-04	NIGHT PARKING REGULATIONS IN EFFECT NOV 15 TO MARCH 15
4M-06	-		30X36	-	-	14	1	-		UW CAMPUS WITH AHEAD ARROW - CITY OF MADISON
4M-07	-		30X36	-	-	14	1	-		DOWNTOWN WITH AHEAD ARROW - CITY OF MADISON
05-01	R3-1	(2)	24X24	4	-	14	1	-		NO RIGHT TURN SYMBOL
05-02	-	(2)	24X8	1.33	-	-	-	-	05-01	7-9 AM
05-03	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
05-04	R6-1R	(2)	36X12	3	-	-	-	-	05-03	ONE WAY RIGHT ARROW
05-05	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
05-06	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
05-07	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
05-08	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
05-09	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
05-10	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
05-11	R3-2	(2)	24X24	4	-	14	1	-		NO LEFT TURN SYMBOL
05-12	R6-1R	(2)	36X12	3	-	14	1	-		ONE WAY RIGHT ARROW
05-13	R3-2	(2)	24X24	4	-	-	-	-	05-12	NO LEFT TURN SYMBOL
05-14	R5-1	(2)	30X30	6.25	-	14	-	1		DO NOT ENTER
5M-01	D9-2	(2)	24X24	-	-	16	1	-		HOSPITAL SYMBOL
5M-02	-	(2)	8X30	-	-	-	-	-	5M-01	AHEAD ARROW (BLUE & WHITE)
06-01	W14-2	(2)	30X30	6.25	16	-	1	-		NO OUTLET
06-02	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
06-03	R6-1R	(2)	36X12	3	-	-	-	-	06-02	ONE WAY RIGHT ARROW
06-04	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
06-05	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
06-06	R3-20L	(2)	24X36	6	-	14	-	1		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
06-07	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
06-08	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
06-09	R3-2	(2)	24X24	4	-	14	1	-		NO LEFT TURN SYMBOL
06-10	R5-1	(2)	30X30	6.25	-	14	-	1		DO NOT ENTER
06-11	R6-1R	(2)	36X12	3	-	14	1	-		ONE WAY RIGHT ARROW
06-12	R3-2	(2)	24X24	4	-	-	-	-	06-11	NO LEFT TURN SYMBOL
07-01	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
07-02	R6-1R	(2)	36X12	3	-	14	1	-		ONE WAY RIGHT ARROW
07-03	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
07-04	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
07-05	R6-1R	(2)	36X12	3	-	14	1	-		ONE WAY RIGHT ARROW
07-06	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
07-07	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
07-08	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
07-09	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
07-10	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
07-11	R3-2	(2)	24X24	4	-	14	1	-		NO LEFT TURN SYMBOL
07-12	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
07-13	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
07-14	M1-94	(2)	66X15	6.88	-	28	2	-		CAPITAL AVE.
07-15	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
07-17	R3-2	(2)	24X24	4	-	14	1	-		NO LEFT TURN SYMBOL
07-18	R3-1	(2)	24X24	4	-	14	1	-		NO RIGHT TURN SYMBOL
07-19	R6-1R	(2)	36X12	3	-	-	-	-	07-15	ONE WAY RIGHT ARROW
07-20	R5-1	(2)	30X30	6.25	-	14	-	1		DO NOT ENTER
07-21	R6-1R	(2)	36X12	3	-	-	-	-	07-10	ONE WAY RIGHT ARROW
07-22	R6-1R	(2)	36X12	3	-	-	-	-	07-11	ONE WAY RIGHT ARROW
SUBTOTALS				451.99	281.50	1161.50	94	7		

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PERMANENT SIGNING

SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE (IN x IN)	637.0202 SIGNS REFLECTIVE TYPE II (SF)	SPV.0090.16 SIGN POST (LF)	SPV.0090.17 REFLECTIVE SIGN POST (LF)	SPV.0060.14 PRECAST SIGN POST BASE (EACH)	SPV.0060.15 SIGN POST BASE FOR CONCRETE INSTALLATION (EACH)	SIGN MOUNTED ON SAME POST AS	REMARKS
CONTINUED FROM PREVIOUS				451.99	281.5	1161.5	94	7		
07-23	R6-1R	(2)	36X12	3	-	14	1	-		ONE WAY RIGHT ARROW
07-24	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
08-01	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
08-03	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
08-04	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
08-07	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
08-09	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
08-11	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
08-12	R3-20L	(2)	24X36	6	-	14	-	1		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
08-13	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
08-14	R3-20L	(2)	24X36	6	-	14	-	1		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
08-15	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
08-16	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
08-17	-	(2)	30X30	-	-	-	-	-	SIGNAL	CITY OF MADISON - TURNING VEHICLES YIELD TO PEDESTRIANS W/ BIKE SYMBOL
08-18	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
08-19	-	(2)	30X24	-	-	14	1	-		CITY OF MADISON - BIKE LANE WITH BIKE SYMBOL
08-20	R5-1	(2)	30X30	6.25	-	14	-	1		DO NOT ENTER
08-21	-	(2)	30X30	-	-	-	-	-	SIGNAL	CITY OF MADISON - TURNING VEHICLES YIELD TO PEDESTRIANS W/ BIKE SYMBOL
08-22	R5-50	(2)	30X24	5	-	14	1	-		DRIVEWAY AHEAD
08-23	-	(2)	30X24	-	-	14	1	-		CITY OF MADISON - BIKE LANE WITH BIKE SYMBOL
09-01	R3-7L	(2)	30X30	6.25	14	-	1	-		LEFT LANE MUST TURN LEFT
09-02	R7-51L	(2)	18X24	3	14	-	1	-		NO PARKING HERE TO CORNER
10-01	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
10-02	M1-94	(2)	66X15	6.88	-	28	2	-		CAPITAL AVE.
10-03	R6-1R	(2)	36X12	3	-	-	-	-		ONE WAY RIGHT ARROW
10-04	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
10-05	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
10-06	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
10-07	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
10-08	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
10-09	R6-1R	(2)	36X12	3	-	-	-	-		ONE WAY RIGHT ARROW
10-10	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
10-11	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
10-12	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
10-13	R4-7	(2)	24X30	5	-	14	1	-		KEEP RIGHT SYMBOL
10-14	R4-7	(2)	24X30	5	-	14	1	-		KEEP RIGHT SYMBOL
10-15	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
10-16	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
10-17	R2-1	(2)	24X30	5	14	-	1	-		SPEED LIMIT 25
10-18	R7-51R	(2)	18X24	3	14	-	1	-		NO PARKING HERE TO CORNER RIGHT ARROW
10-19	R3-7L	(2)	30X30	6.25	14	-	1	-		LEFT LANE MUST TURN LEFT
10-20	R7-51L	(2)	18X24	3	14	-	1	-		NO PARKING HERE TO CORNER LEFT ARROW
10-21	R6-1R	(2)	36X12	3	-	-	-	-	10-01	ONE WAY RIGHT ARROW
10-22	-	(2)	30X30	-	-	14	1	-		CITY OF MADISON - TURNING VEHICLES YIELD TO PEDESTRIANS W/ BIKE SYMBOL
10-23	R3-2	(2)	24X24	4	-	14	1	-		NO LEFT TURN SYMBOL
10-24	-	(2)	30X30	-	-	14	1	-		CITY OF MADISON - TURNING VEHICLES YIELD TO PEDESTRIANS W/ BIKE SYMBOL
10-25	R3-2	(2)	24X24	4	-	14	1	-		NO LEFT TURN SYMBOL
10-26	R3-2	(2)	24X24	4	-	-	-	-	10-03	NO LEFT TURN SYMBOL
10-27	R5-1	(2)	30X30	6.25	-	14	-	1		DO NOT ENTER
10-28	R6-1R	(2)	36X12	3	-	-	-	-	10-08	ONE WAY RIGHT ARROW
10-29	R3-2	(2)	24X24	4	-	-	-	-	10-09	NO LEFT TURN SYMBOL
11-01	R7-51L	(2)	18X24	3	14	-	1	-		NO PARKING HERE TO CORNER LEFT ARROW
11-02	R7-51R	(2)	18X24	3	14	-	1	-		NO PARKING HERE TO CORNER RIGHT ARROW
11-03	R2-1	(2)	24X30	5	14	-	1	-		SPEED LIMIT 25
11-04	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
11-05	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
11-06	R6-1R	(2)	36X12	3	-	-	-	-	11-04	ONE WAY RIGHT ARROW
11-07	R6-1R	(2)	36X12	3	-	-	-	-		ONE WAY RIGHT ARROW
11-08	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
11-07	R6-1R	(2)	36X12	3	-	-	-	-		ONE WAY RIGHT ARROW
11-08	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
11-09	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
11-10	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
11-11	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
11-12	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
11-13	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
11-14	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
11-15	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
11-16	R5-50	(2)	30X24	3	-	14	1	-		DRIVEWAY AHEAD
SUBTOTALS				701.59	463.50	1777.50	147	11		

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PERMANENT SIGNING

Addendum No. 1
ID 5992-08-79
Revised Sheet 467
February 1, 2012

SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE (IN x IN)	637.0202 SIGNS REFLECTIVE TYPE II (SF)	SPV.0090.16 SIGN POST (LF)	SPV.0090.17 REFLECTIVE SIGN POST (LF)	SPV.0060.14 PRECAST SIGN POST BASE (EACH)	SPV.0060.15 SIGN POST BASE FOR CONCRETE INSTALLATION (EACH)	SIGN MOUNTED ON SAME POST AS	REMARKS
CONTINUED FROM PREVIOUS				701.59	463.5	1777.5	147	11		
11-17	-	(2)	30X30	-	-	14	1	-		CITY OF MADISON - TURNING VEHICLES YIELD TO PEDESTRIANS W/ BIKE SYMBOL
11-18	R3-2	(2)	24X24	4	-	14	1	-		NO LEFT TURN SYMBOL
11-19	R3-2	(2)	24X24	4	-	14	1	-		NO LEFT TURN SYMBOL
11-20	R3-2	(2)	24X24	4	-	14	1	-		NO LEFT TURN SYMBOL
11-21	R3-2	(2)	24X24	4	-	-	-	-	11-07	NO LEFT TURN SYMBOL
11-22	R6-1R	(2)	36X12	3	-	-	-	-	11-04	ONE WAY RIGHT ARROW
11-23	R3-2	(2)	24X24	4	-	-	-	-	11-06	NO LEFT TURN SYMBOL
12-01	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
12-02	M1-94	(2)	96X15	10	-	28	2	-		SPRING HARBOR DR.
12-03	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
12-04	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
12-05	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
12-06	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
12-07	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
12-08	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
12-09	-	(2)	30X24	-	-	14	1	-		CITY OF MADISON - BIKE LANE WITH BIKE SYMBOL
13-01	R3-7L	(2)	30X30	6.25	14	-	1	-		LEFT LANE MUST TURN LEFT
13-02	R7-51R	(2)	18X24	3	14	-	1	-		NO PARKING HERE TO CORNER RIGHT ARROW
13-03	R2-1	(2)	24X30	5	14	-	1	-		SPEED LIMIT 25
13-04	S1-1	(2)	36X36	4.69	14	-	1	-		SCHOOL CROSSING SYMBOL
13-05	WF16-9P	(2)	24X8	1.33	-	-	-	-	13-04	AHEAD
13-07	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
13-08	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
13-11	M1-94	(2)	96X15	10	-	28	2	-		SPRING HARBOR DR
13-12	-	(2)	30X24	-	-	14	1	-		CITY OF MADISON - BIKE LANE WITH BIKE SYMBOL
13-13	R3-4	(2)	24X24	4	-	-	-	-	SIGNAL	NO LEFT TURN SYMBOL
13-14	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
13-15	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
13-16	R4-4	(2)	36X30	5	-	14	1	-		BEGIN RIGHT TURN LANE YIELD TO BIKES WITH DOWN LEFT ARROW
13-17	-	(2)	30X30	-	-	-	-	-	SIGNAL	CITY OF MADISON - TURNING VEHICLES YIELD TO PEDESTRIANS W/ BIKE SYMBOL
13-18	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
13-20	R3-4	(2)	24X24	4	-	-	-	-	SIGNAL	NO LEFT TURN SYMBOL
13M-01	-		24X36	-	-	16	1	-		CITY OF MADISON - PARK SIGN
14-01	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
14-02	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
14-03	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
14-04	R3-20L	(2)	24X36	6	-	14	-	1		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
14-05	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
14-06	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
14-07	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
14-08	R1-1	(2)	30X30	5.18	14	-	1	-		STOP SIGN
14-09	R4-7	(2)	24X30	5	-	14	-	1		KEEP RIGHT SYMBOL
14-10	R4-7	(2)	24X30	5	-	14	-	1		KEEP RIGHT SYMBOL
14-11	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
14-13	W4-2L	(2)	36X36	9	-	16	1	-		LEFT LANE ENDS AHEAD SYMBOL
14-14	-	(2)	30X30	-	-	-	-	-	14-09	CITY OF MADISON - TURNING VEHICLES YIELD TO PEDESTRIANS W/ BIKE SYMBOL
14-15	R3-20L	(2)	24X36	6	-	14	-	1		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
14M-01	-		24X36	-	-	16	1	-		CITY OF MADISON - PARK SIGN
15-01	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
15-02	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
15-03	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
15-04	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
15-05	R4-4	(2)	36X30	5	-	14	1	-		BEGIN RIGHT TURN LANE YIELD TO BIKES WITH DOWN LEFT ARROW
15-06	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
15-07	M1-94	(2)	78X15	8.13	-	28	2	-		WHITNEY WAY
15-08	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
15-09	W9-1L	(2)	36X36	9	-	16	1	-		LEFT LANE ENDS
15-10	R4-7	(2)	24X30	5	-	14	-	1		KEEP RIGHT SYMBOL
15-11	W12-1D	(2)	24X24	4	-	9.5	-	1		DOUBLE DOWN ARROW
15-12	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
15-13	R4-8	(2)	24X30	5	-	14	-	1		KEEP LEFT SYMBOL
15-14	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
16-01	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
16-02	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
16-03	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
16-04	W12-1D	(2)	24X24	4	-	9.5	-	1		DOUBLE DOWN ARROW
16-06	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
16-07	R3-4	(2)	24X24	4	-	-	-	-	SIGNAL	NO U TURN SYMBOL
SUBTOTALS				970.17	533.50	2490.50	195	19		

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

Addendum No. 1
ID 5992-08-79
Revised Sheet 468
February 1, 2012

SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE (IN x IN)	637.0202 SIGNS REFLECTIVE TYPE II (SF)	SPV.0090.16 SIGN POST (LF)	SPV.0090.17 REFLECTIVE SIGN POST (LF)	SPV.0060.14 PRECAST SIGN POST BASE (EACH)	SPV.0060.15 SIGN POST BASE FOR CONCRETE INSTALLATION (EACH)	SIGN MOUNTED ON SAME POST AS	REMARKS
CONTINUED FROM PREVIOUS				970.17	533.5	2490.5	195	19		
16-08	R4-7	(2)	24X30	5	-	-	-	-	SIGNAL	KEEP RIGHT SYMBOL
16-10	R3-4	(2)	24X24	4	-	-	-	-	SIGNAL	NO U TURN SYMBOL
16-12	W12-1D	(2)	24X24	4	9.5	-	-	1		DOUBLE DOWN ARROW
16-13	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
16-14	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
16-15	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
16-16	M1-94	(2)	78X15	8.13	-	28	2	-		WHITNEY WAY
16-17	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
16-18	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
16-19	R3-8U	(2)	72X30	15	28	-	2	-		LANE DESIGNATION - 2 LTO, BIKE LANE, RTO
16-20	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
16-21	-	(2)	30X36	-	-	14	1	-		CITY OF MADISON - BIKE LANE ENDS WITH BIKE SYMBOL
16-22	-	(2)	18X24	-	-	14	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
16-23	-	(2)	30X24	-	-	14	1	-		CITY OF MADISON - BIKE LANE WITH BIKE SYMBOL
16M-01	W8-64	(2)	36X36	-	-	14	1	-		WATCH FOR ICE ON BRIDGE
17-01	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
17-02	W6-1	(2)	36X36	9	-	16	-	1		DIVIDED HIGHWAY AHEAD SYMBOL
17-03	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
17-04	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
17-05	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
18-01	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
18-02	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
18-03	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
18-04	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
18-05	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
19-01	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
19-02	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
19-03	W4-3R	(2)	30X30	6.25	-	16	1	-		RAMP MERGING FROM THE RIGHT SYMBOL
19-04	R5-1	(2)	30X30	6.26	-	-	-	-	19-03	DO NOT ENTER
19-05	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
19-06	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
19-07	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
19-08	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
19-09	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
19-10	W6-1	(2)	36X36	9	-	16	1	-		DIVIDED HIGHWAY AHEAD SYMBOL
19M-01	W8-64	(2)	36X36	-	-	16	1	-		WATCH FOR ICE ON BRIDGE
20-01	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
20-02	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
20-03	R2-1	(2)	24X30	5	14	-	1	-		SPEED LIMIT 30
20-04	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
20-05	R4-7	(2)	24X30	5	-	14	-	1		KEEP RIGHT SYMBOL
20-06	W12-1D	(2)	24X24	4	-	9.5	1	-		DOUBLE DOWN ARROW
20-07	R2-1	(2)	24X30	5	-	14	1	-		SPEED LIMIT 35
20-08	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
20-09	R7-1D	(2)	18X24	3	-	14	1	-		NO PARKING ANY TIME
20-10	R3-20L	(2)	24X36	6	-	14	1	-		BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW
20-11	W12-2	(2)	36X36	9	-	-	-	-	LIGHT POLE TROMBONE	LOW CLEARANCE SYMBOL - 14'4"
20-12	MI-94	(2)	96X24	16	-	-	-	-	LIGHT POLE TROMBONE	OLD MIDDLETON RD, EXIT ONLY
20M-01	-		30X36	-	-	14	1	-		UW CAMPUS WITH AHEAD ARROW - CITY OF MADISON
20M-02	I55-56		30X36	-	-	14	1	-		ADOPT A HIGHWAY
20M-03	-		30X36	-	-	14	1	-		DOWNTOWN WITH AHEAD ARROW - CITY OF MADISON
20M-04	-		66X15	-	-	24	2	-		SEGOE RD WITH RIGHT ARROW
21-01	W6-3	(2)	36X36	9	16	-	1	-		TWO WAY TRAFFIC SYMBOL
21-02	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
21-03	R5-1	(2)	30X30	6.26	14	-	1	-		DO NOT ENTER
21-04	W6-1	(2)	36X36	9	16	-	1	-		DIVIDED HIGHWAY AHEAD SYMBOL
21-05	R4-7	(2)	24X30	5	14	-	1	-		KEEP RIGHT SYMBOL
21-06	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
21-07	R1-1F	(2)	30X30	5.18	14	-	1	-		STOP SIGN
21-08		(2)	18X24	-	14	-	1	-		CITY OF MADISON - MADISON METRO BUS STOP SIGN
21-09	R7-1D	(2)	18X24	3	14	-	1	-		NO PARKING ANY TIME
TOTALS				1217.25	827.00	3022.00	251	22		

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

REMOVING & MOVING SIGNS

SIGN #	SIGN CODE	638.2602 REMOVING TYPE II (EACH)	638.3000 REMOVING SMALL SUPPORTS	638.2102 MOVING SIGN (EACH)	REMOVING CONCRETE SIGN POST BASE (NOT BID ITEM, INFORMATION ONLY)	REMARKS
1R-01	-	1	1	-	-	"P" NO PARKING SYMBOL
1R-02	R7-1	1	-	-	-	NO PARKING ANY TIME
1R-03	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
1R-04	W3-3	1	-	-	-	SIGNAL AHEAD SYMBOL
1M-01	-	-	1	1	1	CITY MIDDLETON WAYFINDING SIGN
2R-01	-	-	1	-	1	MADISON METRO BUS STOP SYMBOL
2R-02	R1-1	1	1	-	-	STOP SIGN
2R-03	W12-1D	1	1	-	-	DIVERGING LANES (DOUBLE DOWN DIAGONAL ARROWS)
2R-04	-	-	1	-	1	MADISON METRO BUS STOP SYMBOL
2R-05	M1-5A	1	1	-	-	COUNTY ROUTE MARKER
2R-06	R4-7	1	-	-	-	KEEP RIGHT SYMBOL
2R-07	R10-11B	1	-	-	-	NO TURN ON RED
2R-08	R10-11B	1	-	-	-	NO TURN ON RED
2R-09	R3-4	1	-	-	-	NO U TURN SYMBOL
2R-10	R10-6	1	-	-	-	STOP HERE ON RED
2R-11	R3-4	1	-	-	-	NO U TURN SYMBOL
2R-12	R4-7	1	-	-	-	KEEP RIGHT SYMBOL
2R-13	R7-1	1	-	-	-	NO PARKING ANY TIME
2R-14	-	-	-	-	-	MADISON METRO BUS STOP SYMBOL
2R-15	-	-	-	-	-	BOARD BUS AT CORNER (MADISON METRO)
2R-16	R3-1	1	-	-	-	NO RIGHT TURN SYMBOL
2R-17	R3-4	1	-	-	-	NO U TURN SYMBOL
2R-18	R4-7	1	-	-	-	KEEP RIGHT SYMBOL
2R-19	R3-4	1	-	-	-	NO U TURN SYMBOL
2R-20	R6-2R	-	-	-	1	ONE WAY RIGHT ARROW
2R-21	R1-1	-	-	-	1	STOP SIGN
2R-22	R5-1	-	-	-	-	DO NOT ENTER
2R-23	R1-1	-	-	-	1	STOP SIGN
2R-24	R6-2R	-	-	-	1	ONE WAY RIGHT ARROW
2R-25	R5-1	-	-	-	-	DO NOT ENTER
2R-26	-	-	-	-	-	MOTOR DRIVEN VEHICLES PROHIBITED
2R-27	R1-1	-	-	-	1	STOP SIGN
2R-28	R7-1	-	-	-	1	NO PARKING ANY TIME
2M-01	-	-	1	1	1	BUSINESS WATCH (MIDDLETON POLICE DEPT)
2M-02	R10-64	-	1	1	1	NO ENGINE BRAKING EXCEPT IN EMERGENCY
2M-03	-	-	-	1	1	CALENDAR PARKING AND EMERGENCY SNOW REGULATIONS
2M-04	-	-	-	1	1	TRUCK ROUTES HAVE YELLOW SIGN POSTS
3R-01	R1-1	-	-	-	1	STOP SIGN
3R-02	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
3R-03	-	1	1	-	1	"P" NO PARKING SYMBOL
3R-04	R1-1	1	1	-	1	STOP SIGN
3R-05	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
3R-06	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
3R-07	R7-1	-	-	-	1	NO PARKING ANY TIME
3R-08	R2-1	-	-	-	1	SPEED LIMIT 35
3R-09	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
3R-10	-	-	-	-	-	BOARD BUS AT CORNER (MADISON METRO)
3R-11	R7-1	-	-	-	1	NO PARKING ANY TIME
3R-12	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
3R-13	R3-1	-	-	-	1	NO RIGHT TURN SYMBOL
3R-14	-	-	-	-	-	7-9 AM
3R-15	R1-1	-	-	-	1	STOP SIGN
3R-16	R7-1	-	-	-	1	NO PARKING ANY TIME
3R-17	R7-1	-	-	-	1	NO PARKING ANY TIME
3R-18	M2-1	-	-	-	1	JCT
3R-19	M1-5A	-	-	-	-	COUNTY ROUTE MARKER
3R-20	W14-2	-	-	-	-	NO OUTLET
3R-21	R1-1	-	-	-	1	STOP SIGN
3M-01	-	-	1	1	1	TRUCK ROUTES HAVE YELLOW SIGN POSTS
3M-02	-	-	1	1	-	TREE CITY - ARBOR DAY FOUNDATION
3M-03	-	-	1	1	-	CITY OF MIDDLETON WAYFINDING SIGN
3M-04	12-3	-	1	1	1	CITY OF MIDDLETON - POPULATION 16,935
3M-05	-	-	-	1	-	NIGHT PARKING REGULATION IN EFFECT NOV 15 TO MARCH 15
3M-06	-	-	-	1	1	UW CAMPUS - AHEAD ARROW (CITY OF MADISON WAYFINDING)
3M-07	-	-	-	1	1	DOWNTOWN - AHEAD ARROW (CITY OF MADISON WAYFINDING)
3M-08	D9-2	-	-	1	1	"H" HOSPITAL SYMBOL
SUBTOTALS		20	15	13	36	

REMOVING & MOVING SIGNS

SIGN #	SIGN CODE	638.2602 REMOVING TYPE II (EACH)	638.3000 REMOVING SMALL SUPPORTS	638.2102 MOVING SIGN (EACH)	REMOVING CONCRETE SIGN POST BASE (NOT BID ITEM, INFORMATION ONLY)	REMARKS
CONTINUED FROM PREVIOUS		20	15	13	36	
3M-09	-	-	-	1	-	AHEAD ARROW (BLUE & WHITE)
4R-01	R2-1	-	-	-	1	SPEED LIMIT 35
4R-02	-	-	-	-	1	BIKE ROUTE (W/ BIKE SYMBOL) - LEFT ARROW
4R-03	-	-	-	-	1	BIKE ROUTE (W/ BIKE SYMBOL) - AHEAD ARROW
4R-04	W5-52R	-	-	-	1	CLEARANCE STRIPER DOWN LEFT
4R-05	R1-1	-	-	-	1	STOP SIGN
4R-06	R1-1	-	-	-	1	STOP SIGN
4R-07	R2-1	-	-	-	1	SPEED LIMIT 35
4R-08	R7-1	-	-	-	1	NO PARKING ANY TIME
4R-09	R7-1	-	-	-	1	NO PARKING ANY TIME
4R-10	R3-1	-	-	-	1	NO RIGHT TURN SYMBOL
4R-11	R1-1	-	-	-	1	STOP SIGN
4R-12	R1-1	-	-	-	1	STOP SIGN
4R-13	R7-1	-	-	-	1	NO PARKING ANY TIME
4R-14	W11-2	1	-	-	-	PEDESTRIAN CROSSING SYMBOL
4R-15	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
5R-01	R7-1	1	-	-	-	NO PARKING ANY TIME
5R-02	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
5R-03	R3-4	1	-	-	-	NO U TURN SYMBOL
5R-04	R3-4	1	-	-	-	NO U TURN SYMBOL
5R-05	R1-1	-	-	-	1	STOP SIGN
5R-06	R7-1	1	-	-	-	NO PARKING ANY TIME
5R-07	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
5R-08	R7-1	1	-	-	-	NO PARKING ANY TIME
5R-09	R1-1	-	-	-	-	STOP SIGN
5R-10	R3-53R	-	-	-	1	RIGHT TURN ONLY
5R-11	W11-2	-	-	-	1	PEDESTRIAN CROSSING SYMBOL
5R-12	R3-4	-	-	-	1	NO U TURN SYMBOL
5R-13	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
5R-14	R1-1	-	-	-	1	STOP SIGN
5R-15	R7-1	-	-	-	1	NO PARKING ANY TIME
5R-16	R2-1	-	-	-	1	SPEED LIMIT 35
5R-17	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
5R-18	R1-1	-	-	-	1	STOP SIGN
5R-19	R7-1	-	-	-	1	NO PARKING ANY TIME
5R-20	R2-1	-	-	-	1	SPEED LIMIT 25 (24" X 30")
5R-21	R2-1	-	-	-	1	SPEED LIMIT 25 (24" X 30")
5R-22	R1-1	-	-	-	1	STOP SIGN
5R-23	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
6R-01	R2-1	-	-	-	1	SPEED LIMIT 35
6R-02	R7-1	-	-	-	1	NO PARKING ANY TIME
6R-03	R7-1	-	-	-	1	NO PARKING ANY TIME
6R-04	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
6R-05	R7-1	-	-	-	1	NO PARKING ANY TIME
6R-06	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
6R-07	R7-1	-	-	-	1	NO PARKING ANY TIME
6R-08	R2-1	-	-	-	1	SPEED LIMIT 25
6R-09	-	-	-	-	-	BIKE ROUTE (W/ BIKE SYMBOL) - AHEAD ARROW
6R-10	-	-	-	-	1	BIKE ROUTE (W/ BIKE SYMBOL) - RIGHT ARROW
7R-01	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
7R-02	-	-	-	-	-	BOARD BUS AT CORNER (MADISON METRO)
7R-03	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
7R-04	R7-1	-	-	-	1	NO PARKING ANY TIME
7R-05	R1-1	-	-	-	1	STOP SIGN
7R-06	R7-1	-	-	-	1	NO PARKING ANY TIME
7R-07	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
7R-08	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
7R-09	R2-1	-	-	-	1	SPEED LIMIT 35
7R-10	R7-1	-	-	-	1	NO PARKING ANY TIME
7R-11	R7-1	-	-	-	1	NO PARKING ANY TIME
SUBTOTALS		26	15	14	86	

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

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REMOVING & MOVING SIGNS

SIGN #	SIGN CODE	638.2602 REMOVING TYPE II (EACH)	638.3000 REMOVING SMALL SUPPORTS	638.2102 MOVING SIGN (EACH)	REMOVING CONCRETE SIGN POST BASE (NOT BID ITEM, INFORMATION ONLY)	REMARKS
CONTINUED FROM PREVIOUS		26	15	14	86	
7R-12	W5-52R	1	1	-	-	CLEARANCE STRIPER DOWN LEFT
7R-13	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
7R-14	R1-1	-	-	-	1	STOP SIGN
7R-15	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
7R-16	R7-1	-	-	-	1	NO PARKING ANY TIME
7R-17	R7-1	-	-	-	1	NO PARKING ANY TIME
7R-18	R2-1	-	-	-	1	SPEED LIMIT 35
7R-19	R7-1	-	-	-	1	NO PARKING ANY TIME
7M-01	-	-	-	1	1	CITY OF MADISON PARK SIGN
7M-02	-	-	-	1	1	CITY OF MADISON PARK SIGN
8R-01	R7-1	-	-	-	1	NO PARKING ANY TIME
8R-02	-	-	-	-	1	MADISON METRO BUS STOP SYMBOL
8R-03	W11-2	-	-	-	1	PEDESTRIAN CROSSING SYMBOL
8R-04	R7-1	-	-	-	1	NO PARKING ANY TIME
8R-05	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
8R-06	-	1	-	-	-	MADISON METRO BUS STOP SYMBOL
8R-07	W12-1D	-	-	-	1	DIVERGING LANES (DOUBLE DOWN DIAGONAL ARROWS)
8R-08	R3-4	1	-	-	-	NO U TURN SYMBOL
8R-09	R4-7	1	-	-	-	KEEP RIGHT SYMBOL
8R-10	-	-	-	-	-	BIKE ROUTE (W/ BIKE SYMBOL) - AHEAD & RIGHT ARROW
8R-11	-	-	-	-	-	BIKE ROUTE (W/ BIKE SYMBOL) - LEFT & RIGHT ARROW
8R-12	-	-	-	-	1	BIKE ROUTE (W/ BIKE SYMBOL) - AHEAD & LEFT ARROW
8R-13	R4-7	-	-	-	1	KEEP RIGHT SYMBOL
8R-14	R1-1	-	-	-	1	STOP SIGN
8R-15	R5-1	-	-	-	-	DO NOT ENTER
8R-16	R1-1	-	-	-	1	STOP SIGN
8R-17	W12-1D	-	-	-	1	DIVERGING LANES (DIAGONAL DOWNWARD ARROWS L & R)
8R-18	R2-1	1	-	-	-	SPEED LIMIT 35
8M-01	W8-64	-	1	1	-	WATCH FOR ICE ON BRIDGE
9R-01	R2-1	1	-	-	-	SPEED LIMIT 35
9R-02	R7-1	1	-	-	-	NO PARKING ANY TIME
9R-03	R7-1	1	-	-	-	NO PARKING ANY TIME
9R-04	W1-6	-	-	-	1	RIGHT ARROW
9R-05	R5-1	-	-	-	1	DO NOT ENTER
9R-06	W6-3	-	-	-	-	TWO WAY TRAFFIC AHEAD SYMBOL
9R-07	R7-1	-	-	-	1	NO PARKING ANY TIME
10R-01	R3-1	-	-	-	1	NO RIGHT TURN SYMBOL
10R-02	R7-1	-	-	-	1	NO PARKING ANY TIME
10R-03	R7-1	1	-	-	-	NO PARKING ANY TIME
10R-04	W4-3R	-	-	-	1	RAMP MERGING FROM RIGHT
10R-05	R5-1	-	-	-	-	DO NOT ENTER
10R-06	R7-1	-	-	-	1	NO PARKING ANY TIME
10R-07	R7-1	1	-	-	-	NO PARKING ANY TIME
10R-08	R7-1	1	-	-	-	NO PARKING ANY TIME
10R-09	R7-1	1	-	-	-	NO PARKING ANY TIME
10R-10	W6-1	-	-	-	1	DIVIDED ROAD AHEAD SYMBOL
11R-01	R7-1	-	-	-	1	NO PARKING ANY TIME
11R-02	R7-1	1	-	-	-	NO PARKING ANY TIME
11R-03	R7-1	1	-	-	-	NO PARKING ANY TIME
11R-04	R2-1	1	-	-	-	SPEED LIMIT 35
11R-05	R2-1	-	-	-	1	SPEED LIMIT 30
11R-06	R7-1	1	-	-	-	NO PARKING ANY TIME
11R-07	R2-1	-	-	-	-	SPEED LIMIT 35
11M-01	W8-64	-	-	1	-	WATCH FOR ICE ON BRIDGE
11M-02	-	-	-	1	2	SEGOE RD WAYFINDING WITH RIGHT ARROW
12R-01	R7-1	1	-	-	-	NO PARKING ANY TIME
12R-02	W12-2	1	-	-	-	LOW CLEARANCE SYMBOL - 14'4"
12R-03	E5-1A	1	-	-	-	OLD MIDDLETON RD WITH UP RIGHT ARROW
12R-04	E1-11C	1	-	-	-	EXIT ONLY
12M-01	-	-	-	1	-	UW CAMPUS - AHEAD ARROW (CITY OF MADISON WAYFINDING)
12M-02	-	-	-	1	-	DOWNTOWN - AHEAD ARROW (CITY OF MADISON WAYFINDING)
12M-03	I55-56	-	1	1	-	ADOPT-A-HIGHWAY (UW MADISON AMERICAN NUCLEAR SOCIETY)
13R-01	R6-2R	1	-	-	-	ONE WAY WITH RIGHT ARROW
13R-02	-	1	1	-	1	MADISON METRO BUS STOP SYMBOL
SUBTOTALS		48	19	22	119	

REMOVING & MOVING SIGNS

SIGN #	SIGN CODE	638.2602 REMOVING TYPE II (EACH)	638.3000 REMOVING SMALL SUPPORTS	638.2102 MOVING SIGN (EACH)	REMOVING CONCRETE SIGN POST BASE (NOT BID ITEM, INFORMATION ONLY)	REMARKS
CONTINUED FROM PREVIOUS		48	19	22	119	
13R-03	R1-1	-	-	-	1	STOP SIGN
13R-04	R7-1	-	-	-	1	NO PARKING ANY TIME
14R-01	R7-1	-	-	-	1	NO PARKING ANY TIME
14R-02	R3-8Y	1	-	-	-	LANE DESIGNATION - DOUBLE LEFT TURN ONLY
14R-03	S1-1	-	-	-	1	SCHOOL CROSSING ZONE SYMBOL
14R-04	R7-51L	-	-	-	1	NO PARKING HERE TO CORNER WITH LEFT ARROW
TOTALS		49	19	22	124	

EXCAVATION, HAULING & DISPOSAL OF PETROLEUM CONTAMINATED SOIL

SPV.0195.01

STATION	TO	STATION	O/S	LOCATION	TONS
134+50	-	137+00	LT	UNIVERSITY AVENUE	100
TOTAL					100

REMOVING & REPLACING MAILBOXES

SPV.0060.57

CATEGORY	STATION	TO	STATION	LOCATION	MAILBOXES (EACH)
008	98+25		202+04	UNIVERSITY AVENUE	3
	10+00		12+25	CAPITAL AVE	3
	TOTAL				6

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PAVEMENT MARKING EPOXY

STATION	TO	STATION	LOCATION	646.0106 4-INCH (YELLOW) (LF)	4-INCH (WHITE) (LF)	646.0116 6-INCH (WHITE) (LF)	646.0126 8-INCH (WHITE) (LF)	647.0156 ARROWS TYPE I (EACH)	647.0166 ARROWS TYPE II (EACH)	647.0176 ARROWS TYPE III (EACH)	647.0206 ARROWS BIKE LANE (EACH)	647.0356 WORDS (EACH)	647.0306 SYMBOLS BIKE LANE (EACH)	647.0313 BIKE DETECTOR EPOXY (EACH)	647.0406 WORDS BIKE LANE (EACH)	647.0456 CURB (LF)	647.0576 STOP LINE 24-INCH (LF)	647.0606 ISLAND NOSE (EACH)	647.0726 DIAGONAL 12-INCH (LF)	647.0746 DIAGONAL 24-INCH (LF)	647.0766 CROSSWALK 6-INCH (LF)	647.0776 CROSSWALK 12-INCH (LF)	647.0786 CROSSWALK 18-INCH (LF)	647.0796 CROSSWALK 24-INCH (LF)	SPV.0165.02 COLORED CROSSWALK (SF)
98+25	-	103+75	UNIVERSITY AVENUE	215	367	890	250	-	1	-	1	1	2	-	1	47	37	3	-	-	128	-	-	-	-
103+75	-	134+00	UNIVERSITY AVENUE	698	1,457	4,647	1,616	-	6	-	10	5	10	-	-	306	104	11	-	-	83	361	-	154	-
134+00	-	154+80	UNIVERSITY AVENUE	451	985	3,655	854	-	7	-	6	6	6	-	-	483	151	14	-	-	-	387	180	-	-
154+80	-	174+20	UNIVERSITY AVENUE	451	1,367	2,716	1,400	-	8	-	3	3	3	-	-	469	187	17	-	-	121	446	504	-	-
174+20	-	183+60	UNIVERSITY AVENUE	1,049	505	1,178	195	-	1	-	-	1	1	-	1	31	37	2	10	27	-	-	216	-	-
189+35	-	202+04	UNIVERSITY AVENUE	1,352	914	1,746	376	-	2	-	2	1	2	-	-	10	-	1	17	50	-	-	-	-	-
10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	26	112	398	796	-	6	-	1	2	1	-	-	85	50	2	-	-	165	-	-	138	-
8+50	-	10+00	ST. DUNSTAN DRIVE	-	-	-	-	-	1	-	-	-	-	-	-	-	13	-	-	-	31	-	-	-	-
7+75	-	10+00	ASBURY-CRESS ACCESS	125	-	-	71	-	1	-	-	-	-	-	-	-	24	-	-	-	112	-	-	-	-
10+00	-	10+75	OVERLOOK PASS	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	72	-	-	-	390
9+00	-	10+00	HEIM AVENUE	-	-	-	-	-	1	-	-	-	-	-	-	-	16	-	-	-	87	-	-	-	-
9+10	-	10+00	HICKORY HOLLOW DRIVE	-	-	-	-	-	1	-	-	-	-	-	-	-	19	-	-	-	98	-	-	-	-
10+00	-	11+25	BAKER AVENUE	-	-	-	-	-	1	-	-	-	-	-	-	-	15	-	-	-	78	-	-	-	415
10+00	-	11+10	HICKORY DRIVE	-	-	-	-	-	1	-	-	-	-	-	-	-	17	-	-	-	78	-	-	-	415
8+50	-	10+00	LAUREL CREST	-	-	-	-	-	1	-	-	-	-	-	-	-	22	-	-	-	41	-	-	-	-
10+00	-	11+00	LAUREL CREST	-	-	-	-	-	1	-	-	-	-	-	-	-	15	-	-	-	93	-	-	-	500
9+00	-	10+00	CAPITAL AVENUE	54	-	-	49	-	1	1	-	-	-	1	-	-	25	-	-	-	128	-	-	-	-
10+00	-	12+25	CAPITAL AVENUE	342	20	-	72	-	1	1	-	-	-	1	-	-	21	-	-	-	94	-	-	-	505
10+00	-	10+85	CAMUS LANE	-	-	-	-	-	1	-	-	-	-	-	-	-	17	-	-	-	82	-	-	-	435
10+00	-	10+80	FRITZ AVENUE	-	-	-	-	-	1	-	-	-	-	-	-	-	17	-	-	-	78	-	-	-	415
8+00	-	10+00	NORMAN WAY (WEST)	260	-	-	137	-	2	-	-	-	-	-	-	-	22	-	-	-	106	-	-	-	-
10+00	-	12+25	NORMAN WAY (EAST)	-	-	-	-	-	1	-	-	-	-	-	-	-	15	-	-	-	75	-	-	-	400
10+00	-	12+15	SPRING HARBOR DRIVE	84	-	-	100	-	2	-	-	-	-	-	-	-	20	-	-	-	120	-	-	-	660
8+50	-	10+00	CRAIG AVENUE	178	-	-	50	-	2	-	-	-	-	-	-	-	21	-	-	-	81	-	-	-	-
10+00	-	10+90	TOMAHAWK TRAIL	-	-	-	-	-	-	-	-	-	-	-	-	-	18	-	-	-	96	-	-	-	515
6'WN'+50	-	10'WN'+00	WHITNEY WAY	-	54	1,154	765	2	3	-	-	2	-	-	-	58	47	2	-	-	-	-	158	-	-
10'OR'+00	-	12'OR'+25	OLD MIDDLETON ROAD	405	-	385	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
183'OW'+86	-	199'OW'+60	OLD MIDDLETON WB OFF-RAMP	1,337	-	1,824	249	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
183'OE'+90	-	193'OE'+70	OLD MIDDLETON EB ON-RAMP	1,064	-	1,821	128	-	-	-	-	-	-	-	-	10	-	1	8	-	-	-	-	-	-
			UNDISTRUBITED	109	119	586	32	-	2	-	2	-	5	-	-	26	55	2	15	23	53	56	42	28	50
TOTALS				8,200	5,900	21,000	7,200	2	55	2	25	21	30	2	2	1,525	1,000	55	50	100	2,100	1,250	1,100	320	4,700

TRAFFIC CONTROL DEVICES

STAGE	STATION	TO	STATION	LOCATION	643.0300 DRUMS (DAYS)	643.0420 BARRICADES TYPE III (DAYS)	643.0500 FLEXIBLE TUBULAR MARKER POSTS (EACH)	643.0600 FLEXIBLE TUBULAR MARKER BASES (EACH)	643.0715 WARNING LIGHTS TYPE C (DAYS)	643.0800 ARROW BOARDS (DAYS)	643.0900 TRAFFIC CONTROL SIGNS (DAYS)	643.0905.S COVERING SIGNS (EACH)	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE (DAY)	643.2000 TRAFFIC CONTROL DETOUR (EACH)	643.3000 DETOUR SIGNS (DAYS)	616.0600.S FENCE TEMPORARY (LF)	603.8000 DELIVER TEMPORARY CONCRETE BARRIER (LF)	603.8125 INSTALL TEMPORARY CONCRETE BARRIER (LF)	643.1000 TRAFFIC CONTROL SIGN FIXED MESSAGE (SF)
STAGE 1	98+25	-	202+04	UNIVERSITY AVENUE	5,166	616	35	35	588	28	868	-	21	-	-	200	388	173	-
STAGE 2 A	98+25	-	202+04	UNIVERSITY AVENUE	15,435	2,310	423	423	2,289	84	3,003	-	147	-	1,197	73	-	388	-
STAGE 2 B	98+25	-	202+04	UNIVERSITY AVENUE	15,288	2,331	435	435	2,331	84	3,003	-	147	-	1,197	73	-	388	-
STAGE 3 A	98+25	-	202+04	UNIVERSITY AVENUE	9,050	1,380	-	-	450	40	1,640	-	30	-	-	-	-	350	-
STAGE 3 B	98+25	-	202+04	UNIVERSITY AVENUE	7,768	1,128	-	-	400	32	1,352	-	24	-	-	-	-	350	-
STAGE 4 A	98+25	-	202+04	UNIVERSITY AVENUE	13,872	1,856	331	331	2,288	64	2,448	-	48	-	-	905	-	260	-
STAGE 4 B	98+25	-	202+04	UNIVERSITY AVENUE	14,144	1,888	340	340	2,352	64	2,432	-	48	-	-	891	-	260	-
STAGE 5 A	98+25	-	202+04	UNIVERSITY AVENUE	14,835	1,995	-	-	660	60	2,670	-	45	-	-	-	-	-	-
STAGE 5 B	98+25	-	202+04	UNIVERSITY AVENUE	12,857	1,729	-	-	572	52	2,314	-	39	-	-	-	-	-	-
				ALTERNATE BUSINESS ACCESS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	192
				PROJECT (UNDISTRIBUTED)	1,585	267	136	136	70	42	270	10	51	1	106	58	12	31	-
TOTALS					110,000	15,500	1,700	1,700	12,000	550	20,000	10	600	1	2,500	2,200	400	2,200	192

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ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	MISCELLANEOUS QUANTITIES	SHEET 471	E

FILE NAME: G:\MADISON\MD2009035\PS&E\FINAL\PLANS | ORIGINATOR: KL ENGINEERING, INC. | ORIG. DATE: | REV. DATE: | PRINT DATE: January 30, 2012

SAWING PAVEMENT

STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT (LF)	690.0250 SAWING CONCRETE (LF)
98+25	-	103+75	UNIVERSITY AVENUE	27	94
103+75	-	134+00	UNIVERSITY AVENUE	354	-
134+00	-	154+80	UNIVERSITY AVENUE	529	47
154+80	-	174+20	UNIVERSITY AVENUE	69	18
174+20	-	183+60	UNIVERSITY AVENUE	8	-
189+35	-	202+04	UNIVERSITY AVENUE	111	-
10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	71	9
8+50	-	10+00	ST. DUNSTAN DRIVE	22	-
4'AL'+50	-	6'AL'+00	ASBURY LOOP DRIVEWAY	61	-
7+75	-	10+00	ASBURY-CRESS ACCESS	31	-
10+00	-	10+75	OVERLOOK PASS	38	-
9+00	-	10+00	HEIM AVENUE	34	-
9+10	-	10+00	HICKORY HOLLOW DRIVE	31	-
10+00	-	11+25	BAKER AVENUE	44	-
10+00	-	11+10	HICKORY DRIVE	28	-
8+50	-	10+00	LAUREL CREST	87	-
10+00	-	11+00	LAUREL CREST	35	-
9+00	-	10+00	CAPITAL AVENUE	41	10
10+00	-	12+25	CAPITAL AVENUE	128	-
10+00	-	10+85	CAMUS LANE	28	-
10+00	-	10+80	FRITZ AVENUE	27	5
8+00	-	10+00	NORMAN WAY (WEST)	72	-
10+00	-	12+25	NORMAN WAY (EAST)	96	-
10+00	-	12+15	SPRING HARBOR DRIVE	37	5
8+50	-	10+00	CRAIG AVENUE	107	10
10+00	-	10+90	TOMAHAWK TRAIL	36	5
6'WN'+50	-	10'WN'+00	WHITNEY WAY	70	5
10'OR'+00	-	12'OR'+25	OLD MIDDLETON ROAD	129	5
183'OW'+86	-	199'OW'+60	OLD MIDDLETON WB OFF-RAMP	70	20
183'OE'+90	-	193'OE'+70	OLD MIDDLETON EB ON-RAMP	-	-
			TRAFFIC CONTROL STAGE 1	3,150	339
			TRAFFIC CONTROL STAGE 3	5,529	130
			TRAFFIC CONTROL STAGE 4	135	49
			UNDISTRIBUTED	765	49
TOTALS				12,000	800

DRIVEWAY CULVERT PIPES

STATION	LOCATION	520.0118 CULVERT PIPE CLASS III 18-INCH (LF)	STEEL THICKNESS (IN)	ALUMINUM THICKNESS (IN)	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH (EACH)
5'AL'+35	ASBURY LOOP DRIVEWAY	50	0.064	0.060	2
TOTALS		50			2

EROSION CONTROL MOBILIZATIONS

LOCATION	628.1905 MOBILIZATION EROSION CONTROL (EACH)	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL (EACH)
PROJECT	18	8
TOTALS	18	8

UTILITY LINE OPENING (ULO)

SPV.0060.13

STATION	O/S	LOCATION	EACH
118+85	37' LT	UNIVERSITY AVE	1
127+39	33' LT	UNIVERSITY AVE	1
129+86	35' LT	UNIVERSITY AVE	1
153+91	75' LT	UNIVERSITY AVE	1
162+60	90' LT	UNIVERSITY AVE	1
165+45	19' LT	UNIVERSITY AVE	1
11+20	47' LT	SPRING HARBOR DRIVE	1
		UNDISTRIBUTED	18
TOTAL			25

BUS SHELTERS

SPV.0060.17

STATION	O/S	LOCATION	BUS SHELTER (EACH)	BUS SHELTER NOTES
133+31	RT	UNIVERSITY AVE	1	TYPE B
143+65	RT	UNIVERSITY AVE	1	TYPE B
155+95	RT	UNIVERSITY AVE	1	TYPE A
167+50	RT	UNIVERSITY AVE	1	TYPE B
TOTAL			4	

PROPERTY CORNERS

STATION	TO	STATION	LOCATION	SPV.0060.35 LOCATE & REFERENCE PROPERTY CORNERS (EACH)	SPV.0060.36 RESET PROPERTY CORNERS (EACH)
103+75	-	134+00	UNIVERSITY AVENUE	27	27
134+00	-	154+80	UNIVERSITY AVENUE	15	15
154+80	-	174+20	UNIVERSITY AVENUE	12	12
174+20	-	183+60	UNIVERSITY AVENUE	5	5
10'AS'+00	-	15'AS'+25	ALLEN BOULEVARD	5	5
10+00	-	11+10	HICKORY DRIVE	1	1
10+00	-	12+25	CAPITAL AVENUE	2	2
			UNDISTRIBUTED	3	3
TOTAL				70	70

ROOT PRUNING EXISTING TERRACE TREES TO REMAIN

SPV.0060.16

STATION	O/S	LOCATION	(EACH)
120+95	68' RT	UNIVERSITY AVE	1
128+57	51' RT	UNIVERSITY AVE	1
128+70	50' RT	UNIVERSITY AVE	1
128+85	51' RT	UNIVERSITY AVE	1
129+07	49' RT	UNIVERSITY AVE	1
129+17	50' RT	UNIVERSITY AVE	1
129+27	49' RT	UNIVERSITY AVE	1
141+29	72' RT	UNIVERSITY AVE	1
TOTAL			8

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COVER PLATES TEMPORARY

611.8120.S

STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	(EACH)
3.0	99+22.5	10.4' LT	1
12.3	114+11.5	14.8' RT	1
6.2	119+10.8	10.5' RT	1
19.1	121+55.7	0.5' RT	2
23.3	129+85.7	6.5' RT	1
26.0	137+27.5	9.8' RT	1
38.1	140+50.0	10.1' RT	1
57.0	163+20.8	17.5' LT	1
59.3	165+47.0	8.4' RT	2
63.4	174+69.4	8.0' RT	1
63.5	174+69.9	2.0' RT	1
	UNDISTRIBUTED		7
TOTALS			20

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

CABLE & WIRE

CATEGORY	FROM	TO	655.0230** 5-14 AWG (LF)	655.0240** 7-14 AWG (LF)	655.0250 9-14 AWG (LF)	655.0260 12-14 AWG (LF)	655.0270 15-14 AWG (LF)	655.0280 19-14 AWG (LF)	655.0615** 10 AWG (LF)	SPV.0090.30 LOOP DETECTOR LEAD-IN CABLE SPECIAL (LF)	655.0410 COMMUNICATION CABLE INSTALLED IN CONDUIT (LF)
0050	**ALLEN BLVD INTERSECTION**										
	TC1	9181	70	-	-	-	-	-	-	-	-
	TC1	TS1	-	-	20	-	-	-	-	-	-
	TC1	TS2	-	-	100	-	-	-	-	-	-
	TC1	9182	160	-	-	-	-	-	-	-	-
	TC1	TS3	-	-	200	-	-	-	-	-	-
	TC1	TS4	230	-	-	-	-	-	-	-	-
	TC1	TS8	130	-	-	-	-	-	-	-	-
	TC1	TS7	-	220	-	-	-	-	-	-	-
	TC1	TS6	-	-	-	200	-	-	-	-	-
	TC1	9184	240	-	-	-	-	-	-	-	-
	TC1	TS5	-	290	-	-	-	-	-	-	-
	SYSTEM GROUND		-	-	-	-	-	-	835	-	-
	SYSTEM NEUTRAL		-	-	-	-	-	-	835	-	-
	DETECTOR LOOP LEAD-IN		-	-	-	-	-	-	-	3100	-
	HH14	TC1	-	-	-	-	-	-	-	-	100
	CAPITAL AVENUE INTERSECTION										
	TC2	TS9	-	-	-	-	30	-	-	-	-
	TC2	9161	-	30	-	-	-	-	-	-	-
	TC2	TS10	140	-	-	-	-	-	-	-	-
	TC2	TS11	-	-	-	130	-	-	-	-	-
	TC2	9160	170	-	-	-	-	-	-	-	-
	TC2	TS12	-	-	-	-	230	-	-	-	-
	TC2	9162	-	240	-	-	-	-	-	-	-
	TC2	TS13	150	-	-	-	-	-	-	-	-
	TC2	TS14	-	-	-	120	-	-	-	-	-
	TC2	9163	70	-	-	-	-	-	-	-	-
	SYSTEM GROUND		-	-	-	-	-	-	640	-	-
	SYSTEM NEUTRAL		-	-	-	-	-	-	640	-	-
	DETECTOR LOOP LEAD-IN		-	-	-	-	-	-	-	1700	-
	HH27	TC2	-	-	-	-	-	-	-	-	60
	SPEED BOARD/FLASHER AT 150+40										
	SB1	TC3	-	-	-	-	-	-	400	-	-
	GROUND		-	-	-	-	-	-	400	-	-
	NEUTRAL		-	-	-	-	-	-	400	-	-
	SPARE		-	-	-	-	-	-	400	-	-
	SPRING HARBOR DRIVE INTERSECTION										
	TC3	TS15	-	-	-	60	-	-	-	-	-
	TC3	9144	-	30	-	-	-	-	-	-	-
	TC3	TS16	-	-	-	140	-	-	-	-	-
	TC3	9143	-	-	-	190	-	-	-	-	-
	TC3	TS17	-	-	-	220	-	-	-	-	-
	TC3	TS18	210	-	-	-	-	-	-	-	-
	TC3	9146	-	-	-	165	-	-	-	-	-
	SYSTEM GROUND		-	-	-	-	-	-	660	-	-
	SYSTEM NEUTRAL		-	-	-	-	-	-	660	-	-
	DETECTOR LOOP LEAD-IN		-	-	-	-	-	-	-	220	-
	HH45	TC3	-	-	-	-	-	-	-	-	100
	CRAIG AVENUE INTERSECTION										
	TC4	TS20	-	-	-	-	15	-	-	-	-
	TC4	9141	30	-	-	-	-	-	-	-	-
	TC4	TS21	-	100	-	-	-	-	-	-	-
	TC4	9142	155	-	-	-	-	-	-	-	-
	TC4	TS23	-	-	210	-	-	-	-	-	-
	TC4	TS24	110	-	-	-	-	-	-	-	-
	TC4	TS25	-	110	-	-	-	-	-	-	-
	TC4	TS22	-	50	-	-	-	-	-	-	-
	SYSTEM GROUND		-	-	-	-	-	-	500	-	-
	SYSTEM NEUTRAL		-	-	-	-	-	-	500	-	-
	DETECTOR LOOP LEAD-IN		-	-	-	-	-	-	-	220	-
	HH56	TC4	-	-	-	-	-	-	-	-	50
	SUBTOTALS		1865	1070	530	1225	275	0	6870	5240	310

CABLE & WIRE

CATEGORY	FROM	TO	655.0230** 5-14 AWG (LF)	655.0240** 7-14 AWG (LF)	655.0250 9-14 AWG (LF)	655.0260 12-14 AWG (LF)	655.0270 15-14 AWG (LF)	655.0280 19-14 AWG (LF)	655.0615** 10 AWG (LF)	SPV.0090.30 LOOP DETECTOR LEAD-IN CABLE SPECIAL (LF)	655.0410 COMMUNICATION CABLE INSTALLED IN CONDUIT (LF)
0050	CONTINUED FROM PREVIOUS		1865	1070	530	1225	275	0	6870	5240	310
	SERVICE FROM SPRING HARBOR DR TO CRAIG AVE										
	TC3	TC4	-	-	-	-	-	-	450	-	-
	GROUND		-	-	-	-	-	-	450	-	-
	NEUTRAL		-	-	-	-	-	-	450	-	-
	SPARE		-	-	-	-	-	-	450	-	-
	WHITNEY WAY INTERSECTION										
	TC5	TS26	-	70	-	-	-	-	-	-	-
	TC5	TS27	-	-	-	-	-	90	-	-	-
	TC5	TS28	90	-	-	-	-	-	-	-	-
	TC5	9128	150	-	-	-	-	-	-	-	-
	TC5	TS29	180	-	-	-	-	-	-	-	-
	TC5	9129	-	210	-	-	-	-	-	-	-
	TC5	TS30	-	-	-	-	190	-	-	-	-
	TC5	9130	-	-	-	250	-	-	-	-	-
	TC5	TS32	-	-	-	310	-	-	-	-	-
	TC5	TS33	-	180	-	-	-	-	-	-	-
	TC5	TS34	-	130	-	-	-	-	-	-	-
	TC5	9127	-	90	-	-	-	-	-	-	-
	TC5	TS35	110	-	-	-	-	-	-	-	-
	SYSTEM GROUND		-	-	-	-	-	-	850	-	-
	SYSTEM NEUTRAL		-	-	-	-	-	-	850	-	-
	DETECTOR LOOP LEAD-IN		-	-	-	-	-	-	-	720	-
	HH68	TC5	-	-	-	-	-	-	-	-	80
	SYSTEM INTERCONNECT*		-	-	-	-	-	-	-	-	9900
	PULL WIRE		-	-	-	-	-	-	30760	-	-
	UNDISTRIBUTED		-	-	-	-	-	-	2000	-	2000
	UNIVERSITY CROSSING INTERSECTION										
	TC6	TS38	-	-	15	-	-	-	-	-	-
	TC6	TS39	-	45	-	-	-	-	-	-	-
	TC6	9133-1	90	-	-	-	-	-	-	-	-
	TC6	TS40	-	145	-	-	-	-	-	-	-
	TC6	TS41	-	-	260	-	-	-	-	-	-
	TC6	TS42	-	270	-	-	-	-	-	-	-
	TC6	TS36	310	-	-	-	-	-	-	-	-
	TC6	TS37	-	-	110	-	-	-	-	-	-
	TC6	9132	-	-	-	-	70	-	-	-	-
	SYSTEM GROUND			-	-	-	-	-	700	-	-
	SYSTEM NEUTRAL			-	-	-	-	-	700	-	-
	DETECTOR LOOP LEAD-IN			-	-	-	-	-	-	250	-
	SERVICE FROM WHITNEY WAY TO UNIVERSITY ROW										
	TC6	TC5	-	-	-	-	-	-	470		
		NEUTRAL	-	-	-	-	-	-	470		
		GROUND	-	-	-	-	-	-	470		
		SPARE	-	-	-	-	-	-	470		
	TOTALS		2795	2210	915	1785	535	90	46410	6210	12290

*SYSTEM INTERCONNECT CABLE INSTALLATION SHALL BE ALONG UNIVERSITY AVE, FROM HH14 TO HH83, INCLUDING THE DISTANCE IN EXISTING CONUIT BETWEEN HH78 AND HH79.
**ADDITIONAL QUANTITIES FOUND IN CABLE TRAFFIC SIGNAL TABLE

Addendum No. 1
ID 5992-08-79
Revised Sheet 473
February 1, 2012

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

Addendum No. 1
ID 5992-08-79
Revised Sheet 474
February 1, 2012

3

CABLE TRAFFIC SIGNAL

CATEGORY	AT POLE #	TO HEAD #	655.0230* 5-14 AWG (LF)	655.0240* 7-14 AWG (LF)	655.0615* 10 AWG (LF)
0050	**ALLEN BLVD INTERSECTION**				
	TS1	P1	10	-	-
	TS1	5	14	-	-
	TS1	6	35	-	-
	9181	4	14	-	-
	TS2	1	14	-	-
	TS3	P2	10	-	-
	TS4	P3	10	-	-
	9182	11	-	14	-
	TS3	15	14	-	-
	TS3	8	35	-	-
	TS3	9	45	-	-
	TS4	14	14	-	-
	TS5	7	14	-	-
	TS5	P6	10	-	-
	9184	10	-	14	-
	TS6	P5	10	-	-
	TS6	2	35	-	-
	TS6	3	45	-	-
	TS7	P4	10	-	-
	TS7	12	14	-	-
	TS8	13	14	-	-
	INTERSECTION TOTAL		367	28	0
	CAPITAL INTERSECTION				
	TS9	2	35	-	-
	TS9	3	45	-	-
	TS9	P5	10	-	-
	TS9	P3	10	-	-
	9161	9	14	-	-
	9161	13	14	-	-
	TS10	14	14	-	-
	TS11	1	14	-	-
	TS11	P6	10	-	-
	TS11	P1	10	-	-
	9160	8	14	-	-
	TS12	6	35	-	-
	TS12	7	45	-	-
	TS12	P2	10	-	-
	TS12	P8	10	-	-
	9162	11	14	-	-
	9162	12	14	-	-
	TS13	10	38	-	-
	TS14	5	14	-	-
	TS14	P4	10	-	-
	TS14	P7	10	-	-
	9163	4	14	-	-
	INTERSECTION TOTAL		404	0	0
	SPEED BOARD/FLASHER AT 150+40				
	SB1	SPEED BOARD CONTROLLER TO BE INSTALLED BY CITY CREW ON THE POLE	-	-	60
	SUBTOTAL		771	28	60

CABLE TRAFFIC SIGNAL

CATEGORY	AT POLE #	TO HEAD #	655.0230* 5-14 AWG (LF)	655.0240* 7-14 AWG (LF)	655.0615* 10 AWG (LF)
0050	CONTINUED FROM PREVIOUS		771	28	60
	SPRING HARBOR INTERSECTION				
	TS15	2	35	-	-
	TS15	3	45	-	-
	TS15	P5	10	-	-
	9144	8	14	-	-
	9144	P7	10	-	-
	TS16	1	14	-	-
	TS16	P8	10	-	-
	TS16	P1	10	-	-
	9143	7	14	-	-
	9143	P2	10	-	-
	9143	P3	10	-	-
	TS17	5	35	-	-
	TS17	6	45	-	-
	TS17	P4	10	-	-
	TS18	9	14	-	-
	9146	10	14	-	-
	9146	4	14	-	-
	9146	P6	10	-	-
	INTERSECTION TOTAL		324	0	0
	CRAIG INTERSECTION				
	TS20	6	35	-	-
	TS20	7	45	-	-
	TS20	P4	10	-	-
	TS20	P5	10	-	-
	9141	8	14	-	-
	TS21	5	14	-	-
	TS21	P6	10	-	-
	TS22	4	14	-	-
	TS23	2	40	-	-
	TS23	3	50	-	-
	TS23	10	14	-	-
	TS24	9	14	-	-
	TS25	1	14	-	-
	TS25	P1	10	-	-
	9142	P2	10	-	-
	SL10	P3	10	-	-
	INTERSECTION TOTAL		314	0	0
	WHITNEY INTERSECTION				
	TS26	15	14	-	-
	TS26	P12	10	-	-
	TS27	7	35	-	-
	TS27	8	45	-	-
	TS27	P11	10	-	-
	TS27	P2	10	-	-
	TS27	P10	10	-	-
	TS28	12	10	-	-
	9128	10	14	-	-
	TS29	11	14	-	-
	9129	9	14	-	-
	9129	P8	10	-	-
	TS30	6	14	-	-
	TS30	P6	10	-	-
	TS30	P7	10	-	-
	TS30	P9	10	-	-
	9130	5	-	14	-
	9130	P5	10	-	-
	9130	P4	10	-	-
	TS32	2	35	-	-
	TS32	3	45	-	-
	TS32	P3	10	-	-
	TS33	13	35	-	-
	TS33	14	14	-	-
	TS34	1	14	-	-
	TS34	P1	10	-	-
	9127	4	-	14	-
	9127	16	14	-	-
	TS35	17	14	-	-
	INTERSECTION TOTAL		451	28	0
	SUBTOTAL		1860	56	60

CABLE TRAFFIC SIGNAL

CATEGORY	AT POLE #	TO HEAD #	655.0230* 5-14 AWG (LF)	655.0240* 7-14 AWG (LF)	655.0615* 10 AWG (LF)
0050	CONTINUED FROM PREVIOUS		1860	56	60
	UNIVERSITY ROW INTERSECTION				
	TS37	1	14	-	-
	TS37	P1	10	-	-
	9132	4	14	-	-
	9132	P2	10	-	-
	9132	P3	10	-	-
	TS38	7	35	-	-
	TS38	8	45	-	-
	TS38	P4	10	-	-
	TS39	P5	10	-	-
	TS39	9	14	-	-
	9133-1	11	14	-	-
	TS40	6	14	-	-
	TS40	P6	10	-	-
	TS41	5	14	-	-
	TS41	13	14	-	-
	TS42	10	35	-	-
	TS42	12	14	-	-
	TS36	2	35	-	-
	TS36	3	45	-	-
	INTERSECTION TOTAL		367	0	0
	TOTALS		2227	56	60

*ADDITIONAL QUANTITIES FOUND IN CABLE & WIRE TABLE

ALL ITEMS ARE CATEGORY 0010
UNLESS NOTED OTHERWISE

CONDUIT

CATEGORY	FROM	TO	# OF CONDUITS	652.0235 SCHEDULE 40 3" (LF)	652.0230 * SCHEDULE 40 2.5" (LF)	652.0225 * SCHEDULE 40 2" (LF)	652.0335 * SCHEDULE 80 3" (LF)	652.0330 SCHEDULE 80 2.5" (LF)	652.0325 * SCHEDULE 80 2" (LF)
0050	98+25	HH1	2	200	-	-	-	-	-
	HH1	HH2	2	-	-	-	90	-	-
	HH2	HH6	2	730	-	-	-	-	-
	HH3	HH4	-	-	-	255	-	-	-
	HH4	HH5	-	-	-	100	-	-	-
	HH5	HH6	-	-	-	10	-	-	-
	HH6	HH14	3	-	-	-	375	-	-
	HH6	HH7	2	-	-	-	80	-	-
	HH6	9184	-	-	-	15	-	-	-
	HH7	HH8	2	-	-	-	140	-	-
	HH7	TS7	-	-	-	30	-	-	-
	HH7	TS6	-	-	-	10	-	-	-
	HH8	TS8	-	-	-	10	-	-	-
	HH8	HH9	-	-	-	55	-	-	-
	HH8	HH11	-	470	-	-	-	-	-
	HH9	HH10	-	-	-	140	-	-	-
	HH8	HH12	2	-	-	-	80	-	-
	HH12	HH13	3	-	-	-	150	-	-
	HH12	TS2	-	-	-	20	-	-	-
	HH13	9181	-	30	-	-	-	-	-
	HH14	TC1	3	85	-	-	-	-	-
	TC1	TS1	-	-	-	20	-	-	-
	TC1	HH14	3	-	-	-	300	-	-
	HH14	HH12	2	-	-	-	120	-	-
	HH14	9182	-	-	-	15	-	-	-
	HH14	HH15	2	-	-	-	90	-	-
	HH15	107+00	-	-	-	300	-	-	-
	HH15	TS3	-	-	-	10	-	-	-
	HH15	TS4	-	-	-	45	-	-	-
	HH15	HH16	-	125	-	-	-	-	-
	HH16	TS5	-	-	-	15	-	-	-
	HH16	HH6	2	-	-	-	90	-	-
	HH14	HH17	-	-	-	125	-	-	-
	HH17	HH18	-	-	-	200	-	-	-
	HH14	HH19	2	830	-	-	-	-	-
	HH19	HH20	2	640	-	-	200	-	-
	HH20	HH21	2	750	-	-	80	-	-
	HH21	HH22	2	730	-	-	70	-	-
	HH22	HH23	2	920	-	-	-	-	-
	HH23	HH24	2	880	-	-	80	-	-
	HH24	HH27	2	700	-	-	-	-	-
	HH25	HH26	-	-	-	200	-	-	-
	HH26	HH27	-	-	-	105	-	-	-
	HH27	9163	-	-	-	10	-	-	-
	HH27	HH32	3	-	-	-	430	-	-
	HH27	HH28	3	-	-	-	150	-	-
	HH28	TC2	5	125	-	-	-	-	-
	TC2	TS9	-	30	-	-	-	-	-
	TC2	HH29	-	20	-	-	-	-	-
	HH29	9161	-	-	-	10	-	-	-
	HH29	HH30	-	-	-	100	-	-	-
	HH28	HH31	2	-	-	-	190	-	-
	HH31	TS10	-	-	-	30	-	-	-
	HH31	TS11	-	-	-	20	-	-	-
	HH31	HH32	2	-	-	-	100	-	-
	HH32	9160	-	-	-	10	-	-	-
	HH32	HH33	2	-	-	-	100	-	-
	HH33	TS12	-	20	-	-	-	-	-
	HH33	HH34	-	-	-	50	-	-	-
	HH33	9162	-	-	-	25	-	-	-
	HH33	HH35	2	-	-	-	220	-	-
	HH35	TS14	-	-	-	10	-	-	-
	HH35	TS13	-	-	-	40	-	-	-
	HH35	HH27	2	-	-	-	100	-	-
	HH32	HH36	-	-	-	30	-	-	-
	HH36	HH37	-	-	-	75	-	-	-
	HH37	HH38	-	-	-	190	-	-	-
	HH32	HH39	2	900	-	-	60	-	-
	HH39	HH40	2	700	-	-	260	-	-
	HH40	HH41	-	-	-	-	-	-	40
	HH40	HH42	-	-	-	-	-	-	60
	HH40	HH43	2	890	-	-	140	-	-
	HH43	HH45	2	1000	-	-	-	-	-
	SB1	HH45	-	-	-	400	-	-	-
	HH45	HH44	-	-	-	20	-	-	-
	HH45	HH46	3	75	-	-	140	-	-
	HH46	TS15	-	-	-	30	-	-	-
	HH46	TC3	5	130	-	-	-	-	-
	TC3	9144	-	-	-	30	-	-	-
	TC3	HH47	-	-	-	20	-	-	-
	HH47	HH48	-	-	-	65	-	-	-
	HH46	HH49	3	-	-	-	210	-	-
	HH49	TS16	-	-	-	35	-	-	-
	HH49	HH50	2	-	-	-	140	-	-
	HH50	9143	-	-	-	20	-	-	-
		SUBTOTALS		10980	0	2900	4185	0	100

CONDUIT

CATEGORY	FROM	TO	# OF CONDUITS	652.0235 SCHEDULE 40 3" (LF)	652.0230 * SCHEDULE 40 2.5" (LF)	652.0225 * SCHEDULE 40 2" (LF)	652.0335 * SCHEDULE 80 3" (LF)	652.0330 SCHEDULE 80 2.5" (LF)	652.0325 * SCHEDULE 80 2" (LF)
0050	CONTINUED FROM PREVIOUS			10980	0	2900	4185	0	100
	HH50	HH51	2	-	-	-	90	-	-
	HH51	TS17	-	-	-	15	-	-	-
	HH51	HH52	-	115	-	-	-	-	-
	HH52	TS18	-	-	-	55	-	-	-
	HH52	9146	-	-	-	15	-	-	-
	HH52	HH45	2	-	-	-	90	-	-
	HH45	HH50	3	-	-	-	320	-	-
	HH50	HH53	2	290	-	-	-	-	-
	HH53	9142	-	-	-	15	-	-	-
	HH53	HH54	2	-	-	-	110	-	-
	HH54	TS23	-	-	-	10	-	-	-
	HH54	HH55	-	65	-	-	-	-	-
	HH55	TS24	-	-	-	20	-	-	-
	HH55	TS25	-	-	-	15	-	-	-
	HH55	HH56	2	-	-	-	110	-	-
	HH56	TS22	-	-	-	10	-	-	-
	HH56	TC4	3	-	-	-	130	-	-
	TC4	HH57	-	-	-	50	-	-	-
	HH57	HH58	-	-	-	70	-	-	-
	TC4	TS20	-	-	-	15	-	-	-
	TC4	9141	-	-	-	35	-	-	-
	TC4	HH59	2	-	-	-	170	-	-
	HH59	TS21	-	-	-	10	-	-	-
	HH59	HH53	2	-	-	-	90	-	-
	HH53	HH56	3	-	-	-	250	-	-
	HH56	HH60	2	530	-	-	60	-	-
	HH60	HH61	2	850	-	-	200	-	-
	HH61	HH62	-	-	-	-	-	-	55
	HH61	HH63	-	-	-	-	-	-	40
	HH61	HH64	2	800	-	-	-	-	-
	HH64	HH91	3	-	-	-	400	-	-
	HH65	9130	-	-	-	10	-	-	-
	HH65	HH66	2	-	-	-	100	-	-
	HH66	TS32	-	-	-	20	-	-	-
	HH66	TS33	-	-	-	45	-	-	-
	HH66	HH67	-	105	-	-	-	-	-
	HH67	TS34	-	-	-	15	-	-	-
	HH67	HH68	2	-	-	-	90	-	-
	HH68	9127	-	-	-	10	-	-	-
	HH68	TS35	-	-	-	35	-	-	-
	HH68	HH69	2	-	-	-	110	-	-
	HH68	TC5	3	-	-	-	230	-	-
	TC5	HH69	4	200	-	-	140	-	-
	TC5	TS26	-	-	-	80	-	-	-
	HH69	TS27	-	10	-	-	-	-	-
	HH69	TS28	-	-	-	10	-	-	-
	HH69	MH1	3	-	-	-	130	-	-
	MH1	HH70	-	20	-	-	-	-	-
	HH70	9128	-	-	-	10	-	-	-
	HH70	TS29	-	-	-	35	-	-	-
	HH70	HH72	-	-	-	125	-	-	-
	MH1	HH71	-	75	-	-	-	-	-
	HH71	HH73	-	220	-	-	-	-	-
	MH1	HH74	2	-	-	-	90	-	-
	HH74	9129	-	-	-	-	40	-	-
	HH74	TS30	-	-	-	25	-	-	-
	HH74	HH65	2	60	-	-	80	-	-
	HH65	HH68	3	-	-	-	400	-	-
	HH68	HH75	-	-	-	25	-	-	-
	HH68	HH76	2	750	-	-	-	-	-
	HH76	HH77	2	-	-	-	80	-	-
	HH77	HH78	2	1000	-	-	-	-	-
	HH79	HH80	2	940	-	-	-	-	-
	HH80	HH81	2	960	-	-	-	-	-
	HH81	HH82	2	-	-	-	70	-	-
	HH82	HH83	2	740	-	-	-	-	-
	TC6	TS38	-	15	-	-	-	-	-
	TC6	TS39	-	-	-	30	-	-	-
	TC6	HH93	-	80	-	-	-	-	-
	TC6	HH95	2	70	-	-	70	-	-
	TC6	HH91	3	-	-	-	150	-	-
	HH95	9133-1	-	10	-	-	-	-	-
	HH95	HH96	2	-	-	-	130	-	-
	HH96	TS40	-	-	-	10	-	-	-
	HH96	HH64	2	-	-	-	110	-	-
	HH64	9133	-	-	-	10	-	-	-
	HH64	HH97	2	-	-	-	110	-	-
	HH97	TS41	-	15	-	-	-	-	-
	HH97	TS42	-	25	-	-	-	-	-
	HH97	HH89	2	-	-	-	100	-	-
	HH89	TS36	-	10	-	-	-	-	-
	HH89	HH90	2	180	-	-	-	-	-
	HH90	TS37	-	10	-	-	-	-	-
	HH90	HH91	2	-	-	-	100	-	-
	HH91	9132	-	-	-	10	-	-	-
	HH91	HH92	-	-	-	25	-	-	-
	HH91	HH65	2	540	-	-	-	-	-
		UNDISTRIBUTED	-	-	1800	-	-	200	-
		TOTALS		19665	1800	3765	8535	200	195

* ADDITIONAL QUANTITIES FOUND ELSEWHERE IN PLAN SET

Addendum No. 1
ID 5992-08-79
Revised Sheet 475
February 1, 2012

ALL ITEMS ARE CATEGORY 0010
UNLESS NOTED OTHERWISE

ELECTRICAL PULLBOX

CATEGORY	STRUCTURE	STATION	OFFSET	SPV.0060.70 * TYPE 1	SPV.0060.71 TYPE 3	SPV.0060.72 TYPE 5	653.0900 ADJUSTING PULL BOXES EACH	MANHOLE
0050	HH1	99+22.9	40.1' RT	1	-	-	-	-
	HH2	99+24.9	3.4' LT	1	-	-	-	-
	HH3	99+83.9	1.6' RT	-	1	-	-	-
	HH4	101+79.4	1.1' LT	-	1	-	-	-
	HH5	102+79.1	2.3' RT	1	-	-	-	-
	HH6	102+89.7	2.2' RT	-	-	1	-	-
	HH7	102+96.3	37.3' LT	1	-	-	-	-
	HH8	103+60.1	59.1' LT	-	-	1	-	-
	HH9	11'AS'+12.3	5.4' RT	-	1	-	-	-
	HH10	12'AS'+52.8	5.1' RT	-	1	-	-	-
	HH11	15'AS'+22.4	6.5' RT	1	-	-	-	-
	HH12	103+98.3	49.2' LT	-	-	1	-	-
	HH13	104+43.5	62.7' LT	-	-	1	-	-
	HH14	104+11.8	6.9' RT	-	-	1	-	-
	HH15	104+09.4	50.8' RT	1	-	-	-	-
	HH16	102+87.1	46.8' RT	1	-	-	-	-
	HH17	105+35.2	6.4' RT	1	-	-	-	-
	HH18	107+31.2	6.8' RT	-	1	-	-	-
	HH19	108+27.1	6.8' RT	1	-	-	-	-
	HH20	112+46.1	11.6' RT	1	-	-	-	-
	HH21	116+52.5	2.6' RT	1	-	-	-	-
	HH22	121+60.0	0.0' RT	1	-	-	-	-
	HH23	125+11.2	2.7' RT	1	-	-	-	-
	HH24	129+81.8	0.9' LT	1	-	-	-	-
	HH25	130+35.3	3.1' RT	-	1	-	-	-
	HH26	132+28.6	2.6' LT	-	1	-	-	-
	HH27	133+30.7	3.4' LT	-	-	1	-	-
	HH28	133+57.1	37.5' LT	-	-	1	-	-
	HH29	133+75.0	65.1' LT	1	-	-	-	-
	HH30	11+68.1	22.6' LT	-	1	-	-	-
	HH31	134+48.4	38.0' LT	1	-	-	-	-
	HH32	134+71.1	6.6' RT	-	-	1	-	-
	HH33	134+44.1	44.3' RT	-	-	1	-	-
	HH34	9+19.9	27.5' RT	1	-	-	-	-
	HH35	133+37.6	40.3' RT	1	-	-	-	-
	HH36	134+99.3	6.4' RT	-	1	-	-	-
	HH37	135+75.8	5.1' RT	-	1	-	-	-
	HH38	137+66.9	2.2' LT	-	1	-	-	-
	HH39	139+50.0	3.1' LT	1	-	-	-	-
	HH40	144+40.4	3.0' LT	1	-	-	-	-
	HH41	144+37.6	46.9' LT	1	-	-	-	-
	HH42	144+40.7	51.2' RT	1	-	-	-	-
	HH43	149+30.5	6.1' LT	1	-	-	-	-
	HH44	153+98.4	8.0' LT	-	1	-	-	-
	HH45	154+18.9	8.0' LT	-	-	1	-	-
	HH46	154+44.4	70.2' LT	-	-	1	-	-
	HH47	10+47.3	25.5' LT	-	1	-	-	-
	HH48	11+62.0	24.8' LT	-	1	-	-	-
	HH49	155+12.6	72.0' LT	-	-	1	-	-
	HH50	155+21.0	2.9' LT	-	-	1	-	-
	HH51	155+29.5	39.3' RT	-	-	-	-	-
	HH52	154+18.3	37.7' RT	1	-	-	-	-
	HH53	156+52.9	4.5' RT	-	-	1	-	-
	HH54	156+52.3	49.2' LT	1	-	-	-	-
	HH55	157+09.6	42.8' LT	1	-	-	-	-
	HH56	157+31.2	5.4' RT	-	-	1	-	-
	HH57	9+21.2	22.4' RT	1	-	-	-	-
	HH58	8+58.1	18.6' RT	-	1	-	-	-
	HH59	156+54.9	45.8' RT	1	-	-	-	-
	HH60	160+27.3	1.5' RT	1	-	-	-	-
	HH61	165+55.4	8.5' RT	1	-	-	-	-
	HH62	165+53.0	51.1' LT	1	-	-	-	-
	HH63	165+55.6	45.1' RT	1	-	-	-	-
	HH64	169+61.6	12.2' RT	-	-	1	-	-
	HH65	173+53.4	1.6' RT	-	-	1	-	-
	HH66	173+82.4	39.6' LT	1	-	-	-	-
	HH67	174+85.4	39.4' LT	1	-	-	-	-
	HH68	174+85.1	4.3' RT	-	-	1	-	-
	HH69	174+59.2	53.1' RT	-	-	1	-	-
	SUBTOTALS			34	15	19	-	-

ELECTRICAL PULLBOX

CATEGORY	STRUCTURE	STATION	OFFSET	SPV.0060.70 * TYPE 1	SPV.0060.71 TYPE 3	SPV.0060.72 TYPE 5	653.0900 ADJUSTING PULL BOXES EACH	MANHOLE	COMMENTS
0050	CONTINUED FROM PREVIOUS			34	15	19	-	-	
	HH70	9'WN'+17.1	4.1' LT	1	-	-	-	-	
	HH71	8'WN'+61.0	7.3' LT	1	-	-	-	-	
	HH72	7'WN'+95.1	4.3' LT	-	1	-	-	-	
	HH73	6'WN'+52.3	6.1' LT	1	-	-	-	-	
	HH74	173+84.0	52.8' RT	-	-	1	-	-	
	HH75	175+08.3	4.1' RT	-	1	-	-	-	
	HH76	178+40.8	0.6' LT	1	-	-	-	-	
	HH77	178+42.1	35.8' LT	1	-	-	-	-	
	HH78	183+41.0	34.2' LT	1	-	-	-	-	
	HH79	189+36.9	29.5' LT	1	-	-	-	-	
	HH80	193+93.7	33.2' LT	1	-	-	-	-	
	HH81	198+63.3	37.8' LT	1	-	-	-	-	
	HH82	198+63.5	3.9' LT	1	-	-	-	-	
	HH83	202+22.1	13.6' LT	1	-	-	-	-	
	HH84	202+25	41.0' RT	-	-	-	1	-	EXISTING
	HH85	200+61	43.0' RT	-	-	-	1	-	EXISTING
	HH86	194+87	43.0' RT	-	-	-	1	-	EXISTING
	HH87	190'OE'+50	13.0' RT	-	-	-	1	-	EXISTING
	HH88	186'OE'+01	7.5' RT	-	-	-	1	-	EXISTING
	HH89	170+10.7	40.0' LT	1	-				
	HH90	170+93.7	40.0' LT	1	-	-	-	-	
	HH91	170+96.5	7.1' RT	-	-	1	-	-	
	HH92	171+20.2	6.5' RT	-	1	-	-	-	
	HH93	170+69.0	89.9' RT	-	1	-	-	-	
	HH95	170+34.6	81.7' RT	1	-	-	-	-	
	HH96	169+80.5	59.2' RT	1	-	-	-	-	
	HH98	170+11.9	4.4' LT	1	-	-	-	-	
	MH1	9'WN'+35.9	3.8' LT	-	-	-	-	-	EXISTING
	TOTALS			50	19	21	5	-	

* ADDITIONAL QUANTITIES FOUND ELSEWHERE IN PLAN SET

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ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

CONCRETE BASE SUMMARY

CATEGORY	STRUCTURE	TYPE G EACH	TYPE LB-3 EACH	TYPE LB-8 EACH	TYPE P EACH	OFFSET EACH	TYPE 10 EACH	COMMENTS
		SPV.0060.73	SPV.0060.74	SPV0060.75**	SPV.0060.76	SPV.0060.78	654.0110*	
0050	TC1	-	-	-	1	-	-	
	TC2	-	-	-	1	-	-	
	TC3	-	-	-	1	-	-	
	TC4	-	-	-	1	-	-	
	TC5	-	-	-	1	-	-	
	TC6	-	-	-	1	-	-	
	SB1	-	-	1	-	-	-	11" BOLT CIRCLE
	TS1	-	-	1	-	-	-	11" BOLT CIRCLE
	TS2	1	-	-	-	-	-	
	TS3	-	-	-	-	-	1	
	TS4	1	-	-	-	-	-	
	TS5	1	-	-	-	-	-	
	TS6	-	-	-	-	-	1	
	TS7	1	-	-	-	-	-	
	TS8	1	-	-	-	-	-	
	TS9	-	-	-	-	-	1	
	TS10	1	-	-	-	-	-	
	TS11	1	-	-	-	-	-	
	TS12	-	-	-	-	-	1	
	TS13	-	-	1	-	-	-	11" BOLT CIRCLE
	TS14	-	-	-	-	-	-	EXISTING
	TS15	-	-	-	-	-	1	
	TS16	1	-	-	-	-	-	
	TS17	-	-	-	-	-	1	
	TS18	1	-	-	-	-	-	
	TS20	-	-	-	-	-	1	
	TS21	1	-	-	-	-	-	
	TS22	1	-	-	-	-	-	
	TS23	-	-	-	-	-	1	
	TS24	1	-	-	-	-	-	
	TS25	1	-	-	-	-	-	
	TS26	1	-	-	-	-	-	
	TS27	-	-	-	-	-	1	
	TS28	1	-	-	-	-	-	
	TS29	1	-	-	-	-	-	
	TS30	1	-	-	-	-	-	
	TS32	-	-	-	-	-	1	
	TS33	-	-	1	-	-	-	11" BOLT CIRCLE
	TS34	1	-	-	-	-	-	
	TS35	1	-	-	-	-	-	
	TS36	-	-	-	-	-	1	
	TS37	1	-	-	-	-	-	
	TS38	-	-	-	-	-	1	
	TS39	1	-	-	-	-	-	
	TS40	1	-	-	-	-	-	
	TS41	1	-	-	-	-	-	
	TS42	-	-	1	-	-	-	11" BOLT CIRCLE
	9127	-	1	-	-	-	-	
	9128	-	1	-	-	-	-	
	9129	-	1	-	-	-	-	
	9130	-	1	-	-	-	-	
	9132	-	1	-	-	-	-	
	9133-1	-	1	-	-	-	-	
	9141	-	1	-	-	-	-	
	9142	-	1	-	-	-	-	
	9143	-	1	-	-	-	-	
	9144	-	1	-	-	-	-	
	9146	-	1	-	-	-	-	
	9160	-	1	-	-	-	-	
	9161	-	1	-	-	-	-	
	9162	-	1	-	-	-	-	
	9163	-	1	-	-	-	-	
	9181	-	1	-	-	-	-	
	9182	-	1	-	-	-	-	
	9184	-	1	-	-	-	-	
	UNDISTRIBUTED	-	-	-	-	2	-	
	TOTALS	23	18	5	6	2	12	

*SEE SPV.0060.80 FOR ANCHOR RODS, NUTS, AND WASHERS.
**ADDITIONAL QUANTITIES FOUND IN STREET LIGHTING TABLE

TRAFFIC DETECTOR LOOPS

CATEGORY	LOOP NO.	STATION*	OFFSET FROM CURB FACE** (FT)	CURB FACE REFERENCE***	SIZE (FT)	NO. TURNS	652.0800 CONDUIT LOOP DETECTOR (LF)	655.0800 LOOP DETECTOR WIRE (LF)
0050	L1	99+79.8	14	MEDIAN	6 x 14	3	57	154
	L2	101+74.6	16	MEDIAN	6 x 6	3	43	110
	L3	101+74.1	28	MEDIAN	6 x 6	3	55	134
	L4	102+58.4	5	MEDIAN	6 x 15	3	50	142
	L5	102+74.5	5	MEDIAN	6 x 6	3	32	88
	L6	103+17.4	5	MEDIAN	6 x 15	3	50	142
	L7	12'AS'+51.5	13	MEDIAN	6 x 14	3	56	152
	L8	11'AS'+16.6	19	MEDIAN	6 x 6	3	46	116
	L9	11'AS'+16.3	7	MEDIAN	6 x 6	3	34	92
	L10	11'AS'+03.7	26	MEDIAN	4 x 6 QUADRUPOLE	3	61	154
	L11	105+41.2	33	MEDIAN	6 x 6	3	60	144
	L12	105+41.9	18	MEDIAN	6 x 6	3	45	114
	L13	105+42.2	6	MEDIAN	6 x 6	3	33	90
	L14	105+48.1	6	MEDIAN	6 x 6	3	33	90
	L15	105+48.0	18	MEDIAN	6 x 6	3	45	114
	L16	107+33.6	11	MEDIAN	6 x 14	3	54	148
	L17	130+30.5	12	MEDIAN	6 x 14	3	55	150
	L18	132+22.8	16	MEDIAN	6 x 6	3	43	110
	L19	132+22.4	28	MEDIAN	6 x 6	3	55	134
	L20	11+62.9	8	WEST	6 x 6 DIAMOND	3	35	94
	L21	10+65.5	5	WEST	6 x 15	3	50	142
	L22	10+74.4	17	WEST	6 x 6	3	44	112
	L23	10+51.3	10	WEST	4 x 6 QUADRUPOLE	3	45	122
	L24	9+52.0	10	EAST	4 x 6 QUADRUPOLE	3	45	122
	L25	9+37.0	5	EAST	6 x 15	3	50	142
	L26	9+07.5	17	EAST	6 x 6	3	44	112
	L27	134+87.7	5	MEDIAN	6 x 6	3	32	88
	L28	135+04.3	5	MEDIAN	6 x 20	3	60	172
	L29	135+84.3	29	MEDIAN	6 x 6	3	56	136
	L30	135+84.9	17	MEDIAN	6 x 6	3	44	112
	L31	137+70.0	11	MEDIAN	6 x 14	3	54	148
	L32	153+88.3	5	MEDIAN	6 x 20	3	60	172
	L33	154+06.3	5	MEDIAN	6 x 6	3	32	88
	L34	11+62.6	5	WEST	6 x 6	3	32	88
	L35	11+62.7	17	WEST	6 x 6	3	44	112
	L36	11+05.1	18	WEST	6 x 6	3	45	114
	L37	10+73.5	6	WEST	6 x 15	3	51	144
	L38	9+36.0	17	EAST	6 x 6	3	44	112
	L39	9+22.0	17	EAST	6 x 6	3	44	112
	L40	9+35.4	5	EAST	6 x 15	3	50	142
	L41	8+56.8	8	EAST	6 x 6	3	35	94
	L42	9'WN'+13.7	7	MEDIAN	6 x 6	3	34	92
	L43	9'WN'+13.7	19	MEDIAN	6 x 6	3	46	116
	L44	9'WN'+25.2	27.5	MEDIAN	4 x 6 QUADRUPOLE	3	62.5	157
	L45	9'WN'+35.5	8	ISLAND	6 x 15	3	53	148
	L46	7'WN'+87.9	14	MEDIAN	6 x 14	3	57	154
	L47	175+00.0	5	MEDIAN	6 x 6	3	32	88
	L48	175+16.3	5	MEDIAN	6 x 20	3	60	172
	L49	171+09.6	5	MEDIAN	6 X 6	3	32	88
	L50	171+24.7	5	MEDIAN	6 X 20	3	60	172
	L51	170+57.7	5	EAST	6 x 20	3	60	172
	L52	170+45.5	5	WEST	6 X 20	3	60	172
						TOTAL	2460	6589

*STATION IS TO FRONT CENTER OF LOOP
**OFFSET IS TO FRONT CENTER OF LOOP
***CURBLINE REFERENCE:
MEDIAN: CURB FACE OF MEDIAN
WEST: CURB FACE WEST OF LOOP
EAST: CURB FACE EAST OF LOOP
ISLAND: CURB FACE OF ISLAND

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ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

POLE - SIGNAL SCHEDULE

CATEGORY	STRUCTURE	657.0100 BASE PEDESTAL (EACH)	SPV.0060.80 MONOTUBE POLE TYPE 9 (EACH)	SPV.0060.84 POLES 20' -7 GA (EACH)	657.0420 TRAFFIC SIGNAL STANDARD 13' ALUMINUM (EACH)	SPV.0060.88 TRAFFIC SIGNAL TROMBONE ARM 15' ALUMINUM (EACH)	SPV.0060.89 ** TRAFFIC SIGNAL TROMBONE ARM 18' ALUMINUM (EACH)	SPV.0060.81 MONOTUBE ARM 30' (EACH)	SPV.0060.82 MONOTUBE ARM 35' (EACH)	SPV.0105.20* OPTICAL PREEMPT DETECTOR* (EACH)	SPV.0060.90 TRAFFIC SIGNAL HEADS 3-12 INCH VERTICAL (EACH)	SPV.0060.91 TRAFFIC SIGNAL HEADS 4-12 INCH VERTICAL (EACH)	SPV.0060.92 TRAFFIC SIGNAL HEADS 3-12 INCH HORIZONTAL (EACH)	SPV.0060.95 BACKPLATE 3-SECTION 12 INCH (EACH)	SPV.0060.96 BACKPLATE 4-SECTION 12 INCH (EACH)	SPV.0060.93 PEDESTRIAN SIGNAL 12 INCH (EACH)	SPV.0060.94 COUNTDOWN PED 12 INCH (EACH)	SPV.0060.97 ACCESSIBLE PEDESTRIAN PUSHBUTTON (EACH)	658.0500 PEDESTRIAN PUSH BUTTON (EACH)	COMMENTS
0050	**ALLEN INTERSECTION**																				
	TS1	-	-	1	-	1	-	-	-	-	1	-	1	2	-	1	1	-	1		
	TS2	1	-	-	1	-	-	-	-	-	1	-	-	1	-	2	2	-	1		
	TS3	-	1	-	-	-	-	1	-	1	3	-	-	3	-	-	-	-	-		
	TS4	1	-	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-		
	TS5	1	-	-	1	-	-	-	-	-	1	-	-	1	-	1	1	-	1		
	TS6	-	1	-	-	-	-	1	-	1	2	-	-	2	-	1	1	-	1		
	TS7	1	-	-	1	-	-	-	-	-	1	-	-	1	-	1	1	-	-		
	TS8	1	-	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-		
	9184	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-		
	9181	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-		
	9182	-	-	-	-	-	-	-	-	1	-	1	-	-	1	-	-	-	-		
	CAPITAL INTERSECTION																				
	TS9	-	1	-	-	-	-	1	-	1	2	-	-	2	-	2	2	1	-		
	TS10	1	-	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-		
	TS11	1	-	-	1	-	-	-	-	-	1	-	-	1	-	2	2	-	1		
	TS12	-	1	-	-	-	-	1	-	1	2	-	-	2	-	2	2	-	1		
	TS13	-	-	1	-	-	1	-	-	-	-	-	1	1	-	-	-	1	-		
	TS14	1	-	-	1	-	-	-	-	-	1	-	-	1	-	2	2	1	-		
	9163	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-		
	9161	-	-	-	-	-	-	-	-	-	2	-	-	2	-	-	-	-	-		
	9160	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-		
	9162	-	-	-	-	-	-	-	-	-	2	-	-	2	-	-	-	1	-		
	SPEED BOARD/FLASHER AT 150+40:																				
	SB1	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-		
	SPRING HARBOR INTERSECTION																				
	TS15	-	1	-	-	-	-	1	-	1	2	-	-	2	-	1	1	-	1		
	TS16	1	-	-	1	-	-	-	-	-	1	-	-	1	-	2	2	-	1		
	TS17	-	1	-	-	-	-	1	-	1	2	-	-	2	-	1	1	-	1		
	TS18	1	-	-	1	-	-	-	-	-	1	-	-	1	-			-			
	9146	-	-	-	-	-	-	-	-	-	2	-	-	2	-	1	1	-	1		
	9144	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	1	-			
	9143	-	-	-	-	-	-	-	-	-	1	-	-	1	-	2	2	-	1		
	CRAIG INTERSECTION																				
	TS20	-	1	-	-	-	-	1	-	1	2	-	-	2	-	2	2	-	1		
	TS21	1	-	-	1	-	-	-	-	-	1	-	-	1	-	1	1	-	-		
	TS22	1	-	-	1	-	-	-	-	-	-	-	-	-	-	2	2	-	1		
	TS23	-	1	-	-	-	-	-	1	1	3	-	-	3	-	-	-	-	-		
	TS24	1	-	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-		
	TS25	1	-	-	1	-	-	-	-	-	1	-	-	1	-	1	1	-	1		
	9142	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-		
	9141	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-		
	SUBTOTALS	14	8	3	14	1	2	7	1	9	45	2	2	47	2	28	28	4	14		

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ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

POLE - SIGNAL SCHEDULE

CATEGORY	STRUCTURE	657.0100 BASE PEDESTAL (EACH)	SPV.0060.80 MONOTUBE POLE TYPE 9 (EACH)	SPV.0060.84 POLES 20' -7 GA (EACH)	657.0420 TRAFFIC SIGNAL STANDARD 13' ALUMINUM (EACH)	SPV.0060.88 TRAFFIC SIGNAL TROMBONE ARM 15' ALUMINUM (EACH)	SPV.0060.89 ** TRAFFIC SIGNAL TROMBONE ARM 18' ALUMINUM (EACH)	SPV.0060.81 MONOTUBE ARM 30' (EACH)	SPV.0060.82 MONOTUBE ARM 35' (EACH)	SPV.0105.20* OPTICAL PREEMPT DETECTOR* (EACH)	SPV.0060.90 TRAFFIC SIGNAL HEADS 3-12 INCH VERTICAL (EACH)	SPV.0060.91 TRAFFIC SIGNAL HEADS 4-12 INCH VERTICAL (EACH)	SPV.0060.92 TRAFFIC SIGNAL HEADS 3-12 INCH HORIZONTAL (EACH)	SPV.0060.95 BACKPLATE 3-SECTION 12 INCH (EACH)	SPV.0060.96 BACKPLATE 4-SECTION 12 INCH (EACH)	SPV.0060.93 PEDESTRIAN SIGNAL 12 INCH (EACH)	SPV.0060.94 COUNTDOWN PED 12 INCH (EACH)	SPV.0060.97 ACCESSIBLE PEDESTRIAN PUSHBUTTON (EACH)	658.0500 PEDESTRIAN PUSH BUTTON (EACH)	COMMENTS
0050	CONTINUED FROM PREVIOUS	14	8	3	14	1	2	7	1	9	45	2	2	47	2	28	28	4	14	
	WHITNEY INTERSECTION																			
	TS26	1	-	-	1	-	-	-	-	-	1	-	-	1	-	1	1	-	-	
	TS27	-	1	-	-	-	-	1	-	1	2	-	-	2	-	3	3	-	1	
	TS28	1	-	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-	
	TS29	1	-	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-	
	TS30	1	-	-	1	-	-	-	-	-	1	-	-	1	-	3	3	-	2	
	9130	-	-	-	-	-	-	-	-	-	-	1	-	-	1	2	2	-	1	
	TS32	-	1	-	-	-	-	1	-	1	2	-	-	2	-	1	1	-	1	
	TS33	-	-	1	-	1	-	-	-	1	1	-	1	2	-	-	-	-	-	
	TS34	1	-	-	1	-	-	-	-	-	1	-	-	1	-	1	1	-	1	
	TS35	1	-	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-	
	9129	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	1	-	1	
	9128	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	
	9127	-	-	-	-	-	-	-	-	-	1	1	-	1	1	-	-	-	-	
	UNIVERSITY ROW INTERSECTION																			
	TS36	-	1	-	-	-	-	1	-	1	2	-	-	2	-	-	-	-	-	
	TS37	1		-	1	-	-	-	-	-	1	-	-	1	-	1	1	-	1	
	TS38	-	1	-	-	-	-	1	-	1	2	-	-	2	-	1	1	-	1	
	TS39	1	-	-	1	-	-	-	-	-	1	-	-	1	-	1	1	-	-	
	TS40	1	-	-	1	-	-	-	-	-	1	-	-	1	-	1	1	-	-	
	TS41	1	-	-	1	-	-	-	-	-	1	1	-	1	1	-	-	-	-	
	TS42	-	-	1	-	-	1	-	-	-	1	-	1	2	-	-	-	-	-	
	9132	-	-	-	-	-	-	-	-	-	-	1	-	-	1	2	2	-	2	
	9133-1	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	
	TOTALS	24	12	5	24	2	3	11	1	14	69	6	4	73	6	46	46	4	25	

* OPTICAL PREEMPT IS BID AS LUMP SUM FOR THE 5 INTERSECTIONS. (SEE SPV.0105.20)
NOTE: FOR SHARED STREETLIGHT/SIGNAL POLES, SEE STREETLIGHT SCHEDULE FOR REQUIRED BREAKAWAY/TRANSFORMER BASES AND POLES
** ADDITIONAL QUANTITIES FOUND ELSEWHERE IN PLAN SET

SERVICE

CATEGORY	ITEM NUMBER	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	COMMENTS
0050	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL 01. ALLEN BLVD	LS	1	SIGNAL, STREET LIGHTING
	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL 02. CAPITAL AVE	LS	1	SIGNAL, STREET LIGHTING
	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL 03. SPRING HARBOR DR	LS	1	DR AND CRAIG AVE, SPEED BOARD, FLASHERS, STREET LIGHTING
	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL 04. WHITNEY WAY	LS	1	SIGNAL, STREET LIGHTING
	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL 05. UNIVERSITY ROW	LS	1	SIGNAL

ADDITIONAL ITEMS

CATEGORY	ITEM NUMBER	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	COMMENTS
0050	658.5069	SIGNAL MOUNTING HARDWARE 01. UNIVERSITY-ALLEN	LS	1	
	658.5069	SIGNAL MOUNTING HARDWARE 02. UNIVERSITY-CAPITAL	LS	1	
	658.5069	SIGNAL MOUNTING HARDWARE 03. UNIVERSITY-SPRING HARBOR	LS	1	
	658.5069	SIGNAL MOUNTING HARDWARE 04. UNIVERSITY-CRAIG	LS	1	
	658.5069	SIGNAL MOUNTING HARDWARE 05. UNIVERSITY-WHITNEY	LS	1	
	658.5069	SIGNAL MOUNTING HARDWARE 06. UNIVERSITY-UNIVERSITY ROW	LS	1	
	SPV.0060.85	TRAFFIC SIGNAL CONTROL CABINET	EACH	6	
	SPV.0060.86	TRAFFIC SIGNAL CONTOLLER	EACH	6	
	SPV.0060.87	NEMA-PLUS CONFLICT MONITOR	EACH	6	
	SPV.0105.20	OPTICAL SIGNAL PREEMPT	LS	1	

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ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	MISCELLANEOUS QUANTITIES	SHEET 479	E

FILE NAME: G:\MADISON\MD2009035\PS&E\FINAL\PLANS | ORIGINATOR: KL ENGINEERING, INC. | ORIG. DATE: | REV. DATE: | PRINT DATE: January 30, 2012

LIGHTING REMOVALS

CATEGORY	LIGHT POLE NUMBER	STATION	O/S	LOCATION	204.0195 REMOVE CONCRETE BASES (EACH)	653.0905 REMOVING PULL BOXES (EACH)	SPV.0060.07 REMOVE STREET LIGHT (EACH)	SPV.0060.08 REMOVE LIGHTING CONTROL CABINET (EACH)	SPV.0060.63 REMOVE LUMINAIRE (EACH)	SPV.0060.64 REINSTALL STREET LIGHT (EACH)
0040	MT02	99+20	RT	UNIVERSITY AVE	1	-	1	-	-	-
	MT03	100+55	RT	UNIVERSITY AVE	1	-	1	-	-	-
	MT04	102+00	RT	UNIVERSITY AVE	1	-	1	-	-	-
	MT05	12'AS'+75	MED	ALLEN BLVD	1	-	-	-	-	1
	MT06	14'AS'+75	MED	ALLEN BLVD	1	-	-	-	-	1
	1499A	131+00	RT	UNIVERSITY AVE	1	-	1	-	-	-
	1497A	132+35	RT	UNIVERSITY AVE	1	-	1	-	-	-
	1496A	135+65	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1492A	136+45	RT	UNIVERSITY AVE	1	-	1	-	-	-
	1491A	138+70	RT	UNIVERSITY AVE	1	-	1	-	-	-
	1464A	172+65	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1463A	173+00	RT	UNIVERSITY AVE	1	-	1	-	-	-
	6237-1A/M	8'WN'+80	MED	WHITNEY WAY	1	-	1	-	-	-
	-	173+60	LT	UNIVERSITY AVE	-	1	-	-	-	-
	1460A	175+35	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1459M	176+25	RT	UNIVERSITY AVE	1	-	1	-	-	-
	1458A	177+05	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1456M	178+65	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1454A	180+45	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1452M	182+30	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1450A	184+25	LT	UNIVERSITY AVE	-	-	-	-	1	-
	1448M	186+25	LT	UNIVERSITY AVE	-	-	-	-	1	-
	1446A	188+25	LT	UNIVERSITY AVE	-	-	-	-	1	-
	1444M	190+00	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1442A	192+00	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1440A	193+95	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1438M	195+80	LT	UNIVERSITY AVE	1	-	1	1	-	-
	-	195+80	LT	UNIVERSITY AVE	-	1	-	-	-	-
	1436A	197+65	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1434A	199+55	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1437A	200+65	RT	UNIVERSITY AVE	1	-	1	-	-	-
	1432A	201+15	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1435A	201+70	RT	UNIVERSITY AVE	1	-	1	-	-	-
	1430A	202+45	LT	UNIVERSITY AVE	1	-	1	-	-	-
	1433A	202+45	RT	UNIVERSITY AVE	1	-	1	-	-	-
	3450A	196'OW'+00	RT	OLD MIDDLETON WB OFF-RAMP	-	-	1	-	-	-
	3451M	194'OW'+15	RT	OLD MIDDLETON WB OFF-RAMP	-	-	1	-	-	-
	3452A	192'OW'+40	RT	OLD MIDDLETON WB OFF-RAMP	-	-	1	-	-	-
	3453M	190'OW'+70	RT	OLD MIDDLETON WB OFF-RAMP	-	-	1	-	-	-
	3454A	189'OW'+00	RT	OLD MIDDLETON WB OFF-RAMP	-	-	1	-	-	-
	2457A	186'OW'+05	RT	OLD MIDDLETON WB OFF-RAMP	1	-	1	-	-	-
	3607A	192'OE'+95	RT	OLD MIDDLETON EB ON-RAMP	1	-	1	-	-	-
	3608M	191'OE'+45	RT	OLD MIDDLETON EB ON-RAMP	1	-	1	-	-	-
	3609A	189'OE'+80	RT	OLD MIDDLETON EB ON-RAMP	1	-	1	-	-	-
	3610M	188'OE'+15	RT	OLD MIDDLETON EB ON-RAMP	1	-	1	-	-	-
	3456A	186'OE'+50	RT	OLD MIDDLETON EB ON-RAMP	-	-	1	-	-	-
	-	187'OW'+80	RT	OLD MIDDLETON WB OFF-RAMP	-	1	-	-	-	-
	-	186'OE'+00	RT	OLD MIDDLETON ROAD	-	1	-	-	-	-
	3458M	12'OR'+25	LT	OLD MIDDLETON ROAD	1	-	1	-	-	-
	3459A	10'OR'+25	LT	OLD MIDDLETON ROAD	1	-	1	-	-	-
		TOTALS			37	4	41	1	3	2

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

LIGHTING CONDUIT AND WIRE

CATEGORY		652.0225 * SCHEDULE 40 2-INCH (LF)	652.0325 * CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH (LF)	652.0230 * SCHEDULE 40 2.5-INCH (LF)	652.0335 * SCHEDULE 80 3-INCH (LF)	652.0615 3-INCH SPECIAL (LF)	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG (LF)	655.0630 4 AWG (LF)
0040	HH2 - 9187	29	--	-	-	-	--	--
	9187 - 9186	196	-	-	-	-	206	618
	9186 - 9184	151	-	-	-	-	161	483
	9184 - 9182	47	80	-	--	-	137	411
	9182 - LPB2	45	-	-	--	-	56	168
	LPB2 - TC1	-	-	-	107	-	238	714
	TC1 - 9181	-	-	-	-	-	81	162
	TC1 - CB1	-	-	-	10	-	22	66
	TC1 - CB1	-	-	-	10	-	--	--
	CB1 - LPB1	-	-	-	79	-	91	273
	LPB1 - 9183	65	-	-	-	-	76	228
	LPB1 - 9185	65	58	-	-	-	134	268
	LPB2 - 9180	101	-	-	-	-	112	336
	9180 - 9179	182	-	-	-	-	192	576
	MT05 - MT06	200	-	-	-	-	210	630
	MT06 - EXISTING	35	-	-	-	-	45	135
	9179 - 9177	182	-	-	-	-	192	576
	9177 - LPB3	22	-	-	-	-	33	99
	LPB3 - LPB4	-	48	-	-	-	60	180
	LPB4 - 9178	38	-	-	-	-	49	147
	LPB3 - 1976	57	102	-	-	-	170	510
	9176 - 9175	171	-	-	-	-	181	543
	9175 - 9174	171	-	-	-	-	181	543
	9174 - 9173	121	50	-	-	-	181	543
	9173 - 9172	171	-	-	-	-	181	543
	9172 - 9171	171	-	-	-	-	-	-
	9171 - 9170	134	46	-	-	-	190	570
	9170 - 9169	181	-	-	-	-	191	573
	9169 - 9168	171	-	-	-	-	181	543
	9168 - 9167	171	-	-	-	-	181	543
	9167 - 9166	171	-	-	-	-	181	543
	9166 - 9165	131	40	-	-	-	181	543
	9165 - 9164	179	-	-	-	-	189	567
	9164 - LPB5	146	-	-	-	-	157	471
	LPB5 - 9163	16	-	-	-	-	27	81
	9163 - 9160	41	87	-	-	-	138	414
	LPB5 - CB2	-	-	-	60	-	144	432
	CB2 - TC2	-	-	-	11	-	23	69
	CB2 - TC2	-	-	-	11	-	--	--
	TC2 - 9161	-	-	-	-	-	56	168
	TC2 - 9162	-	-	-	-	-	271	813
	9160 - 9159	205	-	-	-	-	215	645
	9159 - 9158	151	40	-	-	-	201	603
	9158 - 9157	136	55	-	-	-	201	603
	9157 - LPB6	100	-	-	-	-	111	333
	LPB6 - 9156	-	78	-	-	-	89	267
	LPB6 - 9155	-	77	-	-	-	88	264
	9155 - LPB7	132	-	-	-	-	-	-
	LPB7 - 9154	-	62	-	-	-	73	219
	LPB7 - LPB8	-	63	-	-	-	-	-
	LPB7 - 9153	-	40	-	-	-	51	153
	9153 - 9152	135	48	-	-	-	193	579
	9152 - 9151	181	-	-	-	-	191	573
	9151 - 9150	129	45	-	-	-	184	552
	9150 - LPB9	-	45	-	-	-	-	-
	9150 - 9149	152	-	-	-	-	162	486
	9149 - 9148	161	-	-	-	-	171	513
	9148 - 9147	159	-	-	-	-	169	507
	9147 - CB3	-	-	-	95	-	212	636
	CB3 - TC3	-	-	-	10	-	22	66
	CB3 - TC3	-	-	-	10	-	--	--
	TC3 - 9144	-	-	-	-	-	51	153
	TC3 - 9146	-	-	-	-	-	186	558
	CB3 - 9145	41	-	-	-	-	52	156
	9145 - LPB10	51	-	-	-	-	62	186
	LPB18 - C-13-2047	6	-	-	-	-	12	36
	9147 - 9143	66	76	-	-	-	152	456
	9143 - 9142	102	-	-	-	-	112	336
	9142 - 9141	-	-	-	-	-	210	630
	9142 - 9140	110	50	-	-	-	170	510
	9140 - 9139	155	-	-	-	-	165	495
	9139 - 9138	137	-	-	-	-	147	441
	9138 - 9137	139	-	-	-	-	149	447
	9137 - 9136	120	45	-	-	-	175	525
	9136 - 9135	80	85	-	-	-	-	-
	9135 - 9134	138	-	-	-	-	148	444
	9134 - 9134-1	135	25	-	-	-	170	510
	9134-1 - 9133	141	-	-	-	-	151	453
	9133 - 9133-1	5	--	-	-	-	140	420
	SUBTOTALS	6628	1345	0	403	0	9684	28837

LIGHTING CONDUIT AND WIRE

CATEGORY		652.0225 * SCHEDULE 40 2-INCH (LF)	652.0325 * CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH (LF)	652.0230 * SCHEDULE 40 2.5-INCH (LF)	652.0335 * SCHEDULE 80 3-INCH (LF)	652.0615 3-INCH SPECIAL (LF)	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG (LF)	655.0630 4 AWG (LF)
0040	CONTINUED FROM PREVIOUS	6628	1345	0	403	0	9684	28837
	9133 - 9132	-	130	-	-	-	140	420
	9132 - 9131	142	-	-	-	-	152	456
	9131 - 9130	139	--	-	-	-	149	447
	9130 - 9127	50	65	-	-	-	125	375
	9127 - CB4	-	-	-	78	-	178	534
	CB4 - TC5	-	-	-	10	-	22	66
	CB4 - TC5	-	-	-	10	-	--	--
	TC5 - 9128	-	-	-	-	-	159	477
	TC5 - 9129	-	-	-	-	-	216	648
	9127 - 9126	152	-	-	-	-	162	486
	9126 - 9125	181	-	-	-	-	191	573
	9125 - LPB11	-	38	-	-	-	49	147
	LPB11 - 9124	153	-	-	-	-	164	492
	9124 - 9122	155	-	-	-	-	165	495
	9122 - 9120	155	-	-	-	-	165	495
	9125 - LPB12	-	39	-	--	-	50	150
	LPB12 - 9123	150	-	-	-	-	161	483
	9123 - 9121	151	-	-	-	-	161	483
	9121 - 9119	152	-	-	-	-	162	486
	9119 - LPB13	85	-	-	-	-	96	288
	LPB13 - 9118	-	-	20	-	-	93	279
	9118 - 9117	-	-	-	-	-	215	645
	9117 - 9116	-	-	-	-	-	205	615
	9116 - LPB15	40	-	20	-	-	186	558
	LPB15 - 9115	30	-	-	-	-	41	123
	9115 - 9113	151	-	-	-	-	161	483
	9113 - 9112	66	-	-	-	-	76	228
	9112 - 9114	155	-	-	-	-	165	495
	9113 - 9111	-	146	-	-	-	156	468
	9111 - 9109	155	-	-	-	-	165	495
	9109 - 9107	157	-	-	-	-	167	501
	9107 - 9105	155	-	-	-	-	165	495
	9110 - 9108	149	-	-	-	-	159	477
	9108 - 9106	157	-	-	-	-	167	501
	9106 - 9104	157	-	-	-	-	167	501
	9105 - LPB16	80	-	-	-	-	91	273
	LPB16 - LPB17	-	25	-	-	-	37	111
	LPB16 - LPB17	-	25	-	-	-	37	111
	LPB17 - 9103	112	-	-	-	-	123	369
	9103 - 9101	155	-	-	-	-	165	495
	9101 - LPB18	83	-	-	-	-	94	282
	LPB17 - LPB18	175	-	-	-	-	187	561
	LPB18 - LPB19	175	-	-	-	-	187	561
	LPB19 - EX PB	-	-	-	-	100	112	336
	LPB19 - EX PB	-	-	-	-	100	112	336
	EX PB - CB5	-	-	-	-	-	624	1,872
	9104 - 9102	163	-	-	-	-	173	519
	9102 - 9100	163	-	-	-	-	173	519
	9100 - EX PB	155	-	-	-	-	166	498
	EX PB - CB5	-	-	-	-	-	212	636
	LPB16 - 9200	10	-	-	-	-	21	63
	9200 - 9201	150	-	-	-	-	160	480
	9201 - 9202	150	-	-	-	-	160	480
	9202 - 9203	151	-	-	-	-	161	483
	9203 - 9204	150	-	-	-	-	160	480
	9204 - 9205	150	-	-	-	-	160	480
	9205 - 9206	150	-	-	-	-	160	480
	9206 - 9207	218	-	-	-	-	228	684
	9207 - 9208	135	-	-	-	-	145	435
	9208 - LPB14	-	32	-	-	-	-	-
	EXISTING - 9209	-	21	-	-	-	32	96
	9209 - 9210	182	-	-	-	-	192	576
	9210 - LPB14	171	-	-	-	-	182	546
	LPB14 - 9211	94	-	-	-	-	105	315
	9211 - 9212	158	-	-	-	-	168	504
	9212 - 9213	155	-	-	-	-	165	495
	9213 - 9214	157	-	-	-	-	167	501
	9214 - 9112	152	-	-	-	-	-	-
	9214 - 9110	152	-	-	-	-	162	486
	TOTALS	13411	1866	40	501	200	19660	58765

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN SET

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ALL ITEMS ARE CATEGORY 0010
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STREET LIGHTING

CATEGORY	LIGHT NUMBER	STATION	OFFSET (FT)	R/L	654.0105 CONCRETE BASES TYPE 5 (EACH)	SPV0060.75 * CONCRETE BASES TYPE LB-8 EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE (EACH)	SPV.0060.79 TRANSFORMER BASES 16-INCH STEEL (EACH)	SPV.0060.60 POLE 30-FOOT 11 GAUGE EACH	SPV.0060.61 POLE 30-FOOT 7 GAUGE (EACH)	SPV.0060.65 CONCRETE STREET LIGHT POLE AND ALUMINUM ARM (EACH)	SPV.0060.10 LED LUMINAIRE AND MOUNTING BRACKET TYPE 1 (EACH)	SPV.0060.11 LED LUMINAIRE AND MOUNTING BRACKET TYPE 2 (EACH)	SPV.0060.89 * TRAFFIC SIGNAL TROMBONE ARMS ALUMINUM 18-FOOT (EACH)	655.0610 * ELECTRICAL WIRE LIGHTING 12 AWG (LF)
0040	9100	200+74	43.0	RT	1	--	1	--	1	-	-	1	-	-	108
	9101	200+90	58.2	LT	1	-	1	--	1	-	-	1	-	-	108
	9102	199+10	43.0	RT	1	-	1	--	1	-	-	1	-	-	108
11" BOLT CIRCLE REQ'D	** 9103	199+35	59.5	LT	-	1	-	1	-	1	-	1	-	1	108
	9104	197+49	42.8	RT	1	-	1	--	1	-	-	1	-	-	108
	9105	197+44	34.9	LT	1	-	1	--	1	-	-	1	-	-	108
	9106	195+91	43.0	RT	1	-	1	--	1	-	-	1	-	-	108
	9107	195+91	33.5	LT	1	-	1	--	1	-	-	1	-	-	108
	9108	194+34	43.0	RT	1	-	1	--	1	-	-	1	-	-	108
	9109	194+34	33.5	LT	1	-	1	--	1	-	-	1	-	-	108
	9110	192'OE'+89	10.0	RT	1	-	1	--	1	-	-	1	-	-	108
	9111	192+80	33.5	LT	1	-	1	--	1	-	-	1	-	-	108
	9112	191+29	32.5	RT	1	-	1	--	1	-	-	1	-	-	108
	9113	191+29	33.0	LT	1	-	1	--	1	-	-	1	-	-	108
	9114	189+77	32.8	RT	1	-	1	--	1	-	-	1	-	-	108
	9115	189+77	32.7	LT	1	-	1	--	1	-	-	1	-	-	108
	9116	188+22	28.6	LT	-	-	-	--	-	-	-	1	-	-	108
	9117	186+25	28.7	LT	-	-	-	--	-	-	-	1	-	-	108
	9118	184+21	28.9	LT	-	-	-	--	-	-	-	1	-	-	108
	9119	182+64	33.0	LT	1	-	1	--	1	-	-	1	-	-	108
	9120	182+64	33.0	RT	1	-	1	--	1	-	-	1	-	-	108
	9121	181+11	33.0	LT	1	-	1	--	1	-	-	1	-	-	108
	9122	181+11	33.0	RT	1	-	1	--	1	-	-	1	-	-	108
	9123	179+58	33.3	LT	1	-	1	--	1	-	-	1	-	-	108
	9124	179+58	33.0	RT	1	-	1	--	1	-	-	1	-	-	108
	9125	178+05	0.6	LT	1	-	1	--	1	-	-	2	-	-	216
	9126	176+25	5.0	RT	1	-	1	--	1	-	-	2	-	-	216
	9127	174+74.2	4.9	RT	-	-	--	1	1	-	-	2	-	-	216
	9128	174+18.1	89.1	RT	-	-	--	1	1	-	-	2	-	-	216
	9129	173+51.7	70.0	RT	-	-	--	1	1	-	-	1	-	-	108
	9130	173+63	1.2	RT	-	-	--	1	1	-	-	2	-	-	216
	9131	172+25	4.7	RT	1	-	1	--	1	-	-	2	-	-	216
	9132	170+86	8.3	RT	-	-	--	1	1	-	-	2	-	-	216
	9133-1	170+34	71.6	RT	-	-	--	1	1	-	-	2	-	-	216
	9133	169+57	12.0	RT	1	-	1	--	1	-	-	2	-	-	216
	9134-1	168+18	10.0	RT	1	-	1	--	1	-	-	2	-	-	216
	9134	166+80	1.4	RT	1	-	1	--	1	-	-	2	-	-	216
	9135	165+43	8.4	RT	1	-	1	--	1	-	-	2	-	-	216
	9136	163+80	2.0	LT	1	-	1	--	1	-	-	2	-	-	216
	9137	162+18	3.7	RT	1	-	1	--	1	-	-	2	-	-	216
	9138	160+81	2.5	RT	1	-	1	--	1	-	-	2	-	-	216
	9139	159+48	0.0	LT	1	-	1	--	1	-	-	2	-	-	216
	9140	157+96	5.0	RT	1	-	1	--	1	-	-	2	-	-	216
	9141	9+28.7	22.7	RT	-	-	--	1	1	-	-	1	-	-	108
	9142	156+41.5	1.4	LT	-	-	--	1	1	-	-	2	-	-	216
	9143	155+41.7	1.6	LT	-	-	--	1	1	-	-	2	-	-	216
	9144	154+51.5	70.4	LT	-	-	--	1	1	-	-	1	-	-	108
	9145	153+92.3	101.0	LT	--	-	--	--	--	-	1	--	1	-	99
	9146	154+31.3	37.1	RT	1	-	--	1	--	-	-	2	-	-	216
	9147	154+03	8.0	LT	1	-	1	--	1	-	-	2	-	-	216
	9148	152+45	3.7	LT	1	-	1	--	1	-	-	2	-	-	216
	9149	150+85	0.9	LT	1	-	1	--	1	-	-	2	-	-	216
	9150	149+35	0.0	RT	1	-	1	--	1	-	-	2	-	-	216
	9151	147+56	4.7	LT	1	-	1	--	1	-	-	2	-	-	216
	9152	145+76	5.0	RT	1	-	1	--	1	-	-	2	-	-	216
	9153	143+95	3.6	RT	1	-	1	--	1	-	-	2	-	-	216
	9154	143+58	63.2	LT	1	-	1	--	1	-	-	1	-	-	108
	9155	142+19	9.9	RT	1	-	1	--	1	-	-	2	-	-	216
	9156	141+46	80.8	RT	1	-	1	--	1	-	-	1	-	-	108
	9157	140+45	2.0	RT	1	-	1	--	1	-	-	2	-	-	216
	9158	138+54	0.6	RT	1	-	1	--	1	-	-	2	-	-	216
	9159	136+64.4	3.3	LT	1	-	1	--	1	-	-	2	-	-	216
	9160	134+64.8	6.5	RT	-	-	--	1	1	-	-	2	-	-	216
	9161	133+74.7	55.2	LT	-	-	--	1	1	-	-	1	-	-	108
	9162	134+32.6	55.1	RT	-	-	--	1	1	-	-	1	-	-	108
	9163	133+38.8	3.6	LT	-	-	--	1	1	-	-	2	-	-	216
	9164	131+79.2	2.7	LT	1	-	1	--	1	-	-	2	-	-	216
	9165	130+01	0.2	RT	1	-	1	--	1	-	-	2	-	-	216
	9166	128+30	2.8	LT	1	-	1	--	1	-	-	2	-	-	216
	SUBTOTALS				50	1	49	16	63	1	1	104	1	1	11331

LIGHTING PULLBOXES

CATEGORY	PULLBOX NUMBER	STATION	OFFSET (FT)	R/L	SPV.0060.70 * ELECTRICAL PULLBOX TYPE I (EACH)
0040	LPB1	103+57.8	64.2	LT	1
	LPB2	104+70.9	8.6	RT	1
	LPB3	109+52	7.0	RT	1
	LPB4	109+52	55.1	RT	1
	LPB5	133+24.6	3.6	LT	1
	LPB6	141+42	3.1	RT	1
	LPB7	143+59	2.6	LT	1
	LPB8	143+60	60.1	RT	1
	LPB9	149+28	42.4	RT	1
	LPB10	153+57	66.9	LT	1
	LPB11	178+07	37.0	RT	1
	LPB12	178+07	38.0	LT	1
	LPB13	183+49	36.7	LY	1
	LPB14	185'OE'+74	9.2	RT	1
	LPB15	189+47	31.0	LT	1
	LPB16	198'OW'+23	17.0	RT	1
	LPB17	198'OW'+23	7.7	LT	1
	LPB18	199+99	58.3	LT	1
	LPB19	201+72	57.9	LT	1
	TOTALS				19

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN SET

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LIGHTING CONTROL

CATEGORY	CABINET NUMBER	STATION	OFFSET (FT)	R/L	SPV.0060.97 CONCRETE BASE TYPE M (EACH)	SPV.0060.09 LIGHTING CONTROL CABINET (EACH)
0040	CB1	104+30.3	96.4	LT	1	1
	CB2	133+49.3	51.8	LT	1	1
	CB3	154+13.9	64.3	LT	1	1
	CB4	175+33.1	52.0	RT	1	1
	TOTALS				4	4

PEDESTRIAN UNDERPASS LIGHTING

CATEGORY	LOCATION	SPV.0060.66 DECORATIVE LIGHT COVER (EACH)	SPV.0060.12 WALL PACK LUMINAIRE LED (EACH)	655.0610 * ELECTRICAL WIRE LIGHTING 12 AWG (LF)
0040	C-13-2047	4	4	500
	TOTALS	4	4	500

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN SET

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

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FILE NAME: G:\MADISON\MD2009035\PS&E\FINAL\PLANS | ORIGINATOR: KL ENGINEERING, INC. | ORIG. DATE: | REV. DATE: | PRINT DATE: January 30, 2012

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STREET LIGHTING

CATEGORY	LIGHT NUMBER	STATION	OFFSET (FT)	R/L	654.0105 CONCRETE BASES TYPE 5 (EACH)	SPV0060.75 * CONCRETE BASES TYPE LB-8 EACH	657.0255 TRANSFORMER BASES STEEL 11 1/2-INCH BOLT CIRCLE (EACH)	SPV.0060.79 TRANSFORMER BASES 16-INCH STEEL (EACH)	SPV.0060.60 POLE 30-FOOT 11 GAUGE (EACH)	SPV.0060.61 POLE 30-FOOT 7 GAUGE (EACH)	SPV.0060.65 CONCRETE STREET LIGHT POLE AND ALUMINUM ARM (EACH)	SPV.0060.10 LED LUMINAIRE AND MOUNTING BRACKET TYPE 1 (EACH)	SPV.0060.11 LED LUMINAIRE AND MOUNTING BRACKET TYPE 2 (EACH)	SPV.0060.89 * TRAFFIC SIGNAL TROMBONE ARMS ALUMINUM 18-FOOT (EACH)	635.0610 * ELECTRICAL WIRE LIGHTING 12 AWG (LF)
0040	CONTINUED FROM PREVIOUS				50	1	49	16	63	1	1	104	1	1	11331
	9167	126+60	2.9	RT	1	-	1	--	1	-	-	2	-	-	216
	9168	124+90	3.8	RT	1	-	1	--	1	-	-	2	-	-	216
	9169	123+20	1.8	RT	1	-	1	--	1	-	-	2	-	-	216
	9170	121+40	1.3	RT	1	-	1	--	1	-	-	2	-	-	216
	9171	119+60	2.1	RT	1	-	1	--	1	-	-	2	-	-	216
	9172	117+90	2.5	RT	1	-	1	--	1	-	-	2	-	-	216
	9173	116+20	5.0	RT	1	-	1	--	1	-	-	2	-	-	216
	9174	114+50	4.3	RT	1	-	1	--	1	-	-	2	-	-	216
	9175	112+80	12.4	RT	1	-	1	--	1	-	-	2	-	-	216
	9176	111+10	17.5	RT	1	-	1	--	1	-	-	2	-	-	216
	9177	109+30	6.5	RT	1	-	1	--	1	-	-	2	-	-	216
	9178	109+79	73.7	RT	1	-	1	--	1	-	-	1	-	-	108
	9179	107+50	12.2	RT	1	-	1	--	1	-	-	2	-	-	216
	9180	105+70	12.0	RT	1	-	1	--	1	-	-	2	-	-	216
	9181	104+71.4	49.3	LT	-	-	1	--	1	-	-	1	-	-	108
	9182	104+26.4	7.6	RT	-	-	--	1	1	-	-	2	-	-	216
	9183	103+42.0	126.3	LT	1	-	1	--	1	-	-	2	-	-	216
	9184	103+01.4	2.3	RT	-	-	--	1	1	-	-	2	-	-	216
	9185	102+39.7	50.8	LT	1	-	1	--	1	-	-	1	-	-	108
	9186	101+51	2.0	LT	1	-	1	--	1	-	-	2	-	-	216
	9187	99+56	0.1	LT	1	-	1	--	1	-	-	2	-	-	216
	9200	198'OW'+13	17.0	RT	-	-	-	--	-	-	1	-	1	-	99
	9201	196'OW'+63	17.0	RT	-	-	-	--	-	-	1	-	1	-	99
	9202	195'OW'+11	17.0	RT	-	-	-	--	-	-	1	-	1	-	99
	9203	193'OW'+61	17.0	RT	-	-	-	--	-	-	1	-	1	-	99
	9204	192'OW'+10	17.0	RT	-	-	-	--	-	-	1	-	1	-	99
	9205	190'OW'+58	17.0	RT	-	-	-	--	-	-	1	-	1	-	99
	9206	189'OW'+07	18.0	RT	-	-	-	--	-	-	1	-	1	-	99
	9207	186'OW'+89	18.0	RT	-	-	-	--	-	-	1	-	1	-	99
	9208	185'OW'+53	16.9	RT	1	-	1	--	1	-	-	2	-	-	216
	9209	10'OR'+52	33.2	RT	1	-	1	--	1	-	-	1	-	-	108
	9210	12'OR'+32	21.1	RT	1	-	1	--	1	-	-	1	-	-	108
	9211	186'OE'+67	10.0	RT	1	-	1	--	1	-	-	1	-	-	108
	9212	188'OE'+24	10.0	RT	1	-	1	--	1	-	-	1	-	-	108
	9213	189'OE'+78	10.0	RT	1	-	1	--	1	-	-	1	-	-	108
	9214	191'OE'+33	7.8	RT	1	-	1	--	1	-	-	1	-	-	108
	MT05	12'AN'+75	7.0	LT	1	-	-	-	-	-	-	-	-	-	216
	MT06	14'AN'+80	14.0	LT	1	-	-	-	-	-	-	-	-	-	216
	TOTALS				77	1	75	18	91	1	9	151	9	1	17631

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN SET

TEMPORARY TRAFFIC SIGNALS

CATEGORY	INTERSECTION	SPV.0105.05 TEMPORARY TRAFFIC SIGNALS (LS)	SPV.0105.06 TEMPORARY TRAFFIC SIGNALS (LS)	SPV.0105.07 TEMPORARY TRAFFIC SIGNALS (LS)	SPV.0105.08 TEMPORARY TRAFFIC SIGNALS (LS)	SPV.0105.01 TEMPORARY VEHICLE DETECTION (LS)	SPV.0105.02 TEMPORARY VEHICLE DETECTION (LS)	SPV.0105.03 TEMPORARY VEHICLE DETECTION (LS)	SPV.0105.04 TEMPORARY VEHICLE DETECTION (LS)
0050	ALLEN BOULEVARD	-	-	-	1	-	-	-	1
	CAPITOL AVENUE	-	-	1	-	-	-	1	-
	SPRING HARBOR	-	1	-	-	-	1	-	-
	WHITNEY WAY	1	-	-	-	1	-	-	-
	TOTALS	1	1	1	1	1	1	1	1

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE

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FURNISH & INSTALL VALVES

STATION	LOCATION	OFFSET	SPV.0060.27 6-INCH VALVE EACH	SPV.0060.28 8-INCH VALVE EACH	SPV.0060.29 10-INCH VALVE EACH	SPV.0060.30 12-INCH VALVE EACH	SPV.0060.31 16-INCH VALVE EACH	SPV.0060.22 ABANDON VALVE BOX EACH	SPV.0060.24 ADJUST VALVE BOX EACH
104+12	UNIVERSITY AVENUE	35' RT	-	-	-	-	-	-	1
109+50	UNIVERSITY AVENUE	30' RT	1	-	-	-	-	-	-
110+08	UNIVERSITY AVENUE	28' RT	-	-	-	-	-	1	-
120+92	UNIVERSITY AVENUE	75' RT	-	-	-	-	-	-	1
122+45	UNIVERSITY AVENUE	75' RT	-	-	-	-	-	-	1
122+51	UNIVERSITY AVENUE	77' RT	-	-	1	-	-	-	-
125+58	UNIVERSITY AVENUE	29' RT	-	1	-	-	-	-	-
125+58	UNIVERSITY AVENUE	64' LT	1	-	-	-	-	-	-
126+20	UNIVERSITY AVENUE	91' RT	1	-	-	-	-	-	-
126+82	UNIVERSITY AVENUE	34' RT	-	-	1	-	-	-	-
126+89	UNIVERSITY AVENUE	56' LT	1	-	-	-	-	-	-
126+94	UNIVERSITY AVENUE	73' LT	1	-	-	-	-	-	-
127+13	UNIVERSITY AVENUE	32' RT	-	1	-	-	-	-	-
129+15	UNIVERSITY AVENUE	43' RT	1	-	-	-	-	-	-
129+29	UNIVERSITY AVENUE	29'RT		-	1	-	-	-	
129+71	UNIVERSITY AVENUE	49' LT	-	1	-	-	-	-	-
133+66	UNIVERSITY AVENUE	19' RT	-	-	-	-	-	-	1
133+80	UNIVERSITY AVENUE	54' RT	-	-	-	-	-	-	1
133+82	UNIVERSITY AVENUE	48' RT	-	-	-	-	-	-	1
134+14	UNIVERSITY AVENUE	51' RT	-	-	-	-	-	-	1
134+16	UNIVERSITY AVENUE	33' LT	-	-	-	-	-	-	1
138+63	UNIVERSITY AVENUE	22' RT	-	-	-	-	-	-	1
140+36	UNIVERSITY AVENUE	49' LT	-	-	-	-	-	-	1
142+13	UNIVERSITY AVENUE	26' RT	-	-	-	-	-	-	1
156+58	UNIVERSITY AVENUE	27' RT	-	-	-	-	-	-	1
156+72	UNIVERSITY AVENUE	55' RT	-	-	-	-	-	1	-
161+20	UNIVERSITY AVENUE	30' RT	-	-	-	-	-	-	1
164+60	UNIVERSITY AVENUE	45' RT	-	-	-	-	-	-	1
164+78	UNIVERSITY AVENUE	48' RT	-	-	-	-	-	-	1
164+82	UNIVERSITY AVENUE	58' LT	-	-	-	-	-	-	1
164+85	UNIVERSITY AVENUE	48' RT	-	-	-	-	-	1	-
165+90	UNIVERSITY AVENUE	28' LT	-	-	-	1	-	-	-
167+66	UNIVERSITY AVENUE	46' RT	-	-	-	-	-	1	-
167+71	UNIVERSITY AVENUE	35' RT	1	-	-	-	-	-	-
168+44	UNIVERSITY AVENUE	31' LT	1	-	-	-	-	-	-
170+03	UNIVERSITY AVENUE	45' RT	-	-	-	-	-	1	-
171+29	UNIVERSITY AVENUE	50' RT	-	-	-	-	-	1	-
173+50	UNIVERSITY AVENUE	33' LT	-	-	-	-	-	-	1
174+45	UNIVERSITY AVENUE	28' LT	1	-	-	-	-	-	-
174+46	UNIVERSITY AVENUE	13' RT	-	-	-	-	1	-	-
174+75	UNIVERSITY AVENUE	68' RT	-	-	-	-	-	1	-
199+75	UNIVERSITY AVENUE	23' LT	-	-	-	-	-	1	-
199+77	UNIVERSITY AVENUE	17' LT	-	-	-	-	-	-	1
199+82	UNIVERSITY AVENUE	20' LT	-	-	-	-	-	-	1
199+87	UNIVERSITY AVENUE	20' LT	-	-	-	-	-	-	1
9+10	NORMAN WAY	3' RT	1						
6'WN'+72	WHITNEY WAY	20' RT	1	-	-	-	-	-	-
9'WN'+35	WHITNEY WAY	52' RT	-	-	-	-	-	-	1
9'WN'+45	WHITNEY WAY	40' RT	-	-	-	-	-	-	1
190'OW'+22	OLD MIDDLETON ROAD	3' LT	1	-	-	-	-	-	-
196'OW'+67	OLD MIDDLETON ROAD	3' RT	1	-	-	-	-	-	-
196'OW'+70	OLD MIDDLETON ROAD	15' LT	-	-	-	-	-	1	-
196'OW'+75	OLD MIDDLETON ROAD	18' LT	-	-	-	-	-	1	-
198'OW'+49	OLD MIDDLETON ROAD	9' RT	-	1	-	-	-	-	-
N/A	UNDISTRIBUTED		-	-	-	-	-	-	8
TOTALS			13	4	3	1	1	10	30

HYDRANTS

STATION	LOCATION	OFFSET	SPV.0060.20 FURNISH AND INSTALL HYDRANT EACH	SPV.0060.23 ABANDON HYDRANT EACH	SPV.0060.25 RELOCATE HYDRANT EACH
104+12	UNIVERSITY AVENUE	51' RT	-	-	1
109+50	UNIVERSITY AVENUE	55' RT	1	-	-
110+10	UNIVERSITY AVENUE	55' RT	-	1	-
126+76	UNIVERSITY AVENUE	55' LT	1	-	-
126+80	UNIVERSITY AVENUE	77' LT	-	1	-
129+15	UNIVERSITY AVENUE	40' RT	1	-	-
137+00	UNIVERSITY AVENUE	41' LT	-	1	-
137+39	UNIVERSITY AVENUE	61' LT	1	-	-
150+90	UNIVERSITY AVENUE	44' LT	1	-	-
156+69	UNIVERSITY AVENUE	62' RT	-	1	-
157+30	UNIVERSITY AVENUE	47' RT	1	-	-
167+71	UNIVERSITY AVENUE	52' RT	1	-	-
167+66	UNIVERSITY AVENUE	55' RT	-	1	-
168+44	UNIVERSITY AVENUE	40' LT	1	-	-
171+25	UNIVERSITY AVENUE	46' RT	1	-	-
171+28	UNIVERSITY AVENUE	58' RT	-	1	-
174+45	UNIVERSITY AVENUE	39' LT	1	-	-
174+83	UNIVERSITY AVENUE	68' RT	-	1	-
9+30	NORMAN WAY	27' LT	1	-	-
6'WN'+72	WHITNEY WAY	37' RT	1	-	-
190'OW'+22	OLD MIDDLETON ROAD	19' LT	1	-	-
196'OW'+67	OLD MIDDLETON ROAD	20' LT	1	-	-
196'OW'+75	OLD MIDDLETON ROAD	22' LT	-	1	-
TOTALS			14	8	1

WATER MAIN CONNECTIONS

STATION	LOCATION	OFFSET	SPV.0060.19 CUT-IN CONNECTION EACH	SPV.0060.21 CUT OFF EXISTING WATER MAIN EACH	SPV.0060.26 CUT OUT AND REPLACE EX. WATER MAIN VALVE EACH	SPV.0060.34 FURNISH EXCAVATION AND DITCH FOR LIVE TAP EACH
109+50	UNIVERSITY AVENUE	30' RT	-	-	-	1
125+58	UNIVERSITY AVENUE	64' LT	-	-	1	-
126+20	UNIVERSITY AVENUE	91' RT	-	-	1	-
126+94	UNIVERSITY AVENUE	73' LT	-	-	1	-
129+29	UNIVERSITY AVENUE	29' RT	-	-	1	-
129+71	UNIVERSITY AVENUE	51' LT	-	-	1	-
129+75	UNIVERSITY AVENUE	27' RT	-	-	-	1
137+13	UNIVERSITY AVENUE	55' LT	-	-	-	1
157+90	UNIVERSITY AVENUE	27.5' RT	-	-	-	1
157+30	UNIVERSITY AVENUE	27' RT	-	-	-	1
165+86	UNIVERSITY AVENUE	28' LT	-	-	-	1
164+85	UNIVERSITY AVENUE	48' RT	-	1	-	-
165+85	UNIVERSITY AVENUE	43' RT	-	1	-	-
171+25	UNIVERSITY AVENUE	30' RT	-	-	-	1
174+62	UNIVERSITY AVENUE	42' RT	-	1	-	-
6'WN'+53	WHITNEY WAY	23' RT	-	-	-	1
186'OW'+05	OLD MIDDLETON ROAD	6' LT	-	-	-	1
186'OW'+10	OLD MIDDLETON ROAD	6' LT	-	1	-	-
198'OW'+22	UNIVERISTY AVENUE	26' RT	1	-	-	-
199'OW'+70	UNIVERSITY AVENUE	25' LT	-	1	-	-
TOTALS			1	5	5	9

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WATER SERVICES

STATION	LOCATION	OFFSET	SPV.0090.09 EXTEND AND RECONNECT SERVICE LATERAL-1 INCH (LF)	SPV.0090.11 EXTEND AND RECONNECT SERVICE LATERAL-2 INCH (LF)	SPV.0090.12 REPLACE COPPER SERVICE LATERAL-1 INCH (LF)	SPV.0060.33 ABANDON EXISTING CURB BOX (EACH)	SPV.0060.32 ADJUST WATER SERVICE BOX (EACH)
164+91	UNIVERSITY AVENUE	49' RT	-	-	-	1	-
165+20	UNIVERSITY AVENUE	49' RT	-	-	17	-	-
166+08	UNIVERSITY AVENUE	49' RT	12	-	-	-	-
164+00	UNIVERSITY AVENUE	49' RT	-	-	-	-	1
166+71	UNIVERSITY AVENUE	49' RT	-	-	20	-	-
167+54	UNIVERSITY AVENUE	46' RT	-	-	-	1	-
168+37	UNIVERSITY AVENUE	46' RT	-	-	22	-	-
170+68	UNIVERSITY AVENUE	54' RT	-	-	-	1	-
171+27	UNIVERSITY AVENUE	49' RT	-	-	-	1	-
172+10	UNIVERSITY AVENUE	48' RT	-	-	-	1	-
173+26	UNIVERSITY AVENUE	49' RT	-	-	-	1	-
197'OW'+10	OLD MIDDLETON ROAD	22' LT	-	16	-	-	-
TOTALS			12	16	59	6	1

WATER PIPE FITTINGS

STATION	TO STATION	LOCATOIN	SPV.0090.02 FINISH & INSTALL 6-INCH WATER PIPE & FITTINGS (LF)	SPV.0090.03 FINISH & INSTALL 8-INCH WATER PIPE & FITTINGS (LF)	SPV.0090.04 FINISH & INSTALL 10-INCH WATER PIPE & FITTINGS (LF)	SPV.0090.05 FINISH & INSTALL 12-INCH WATER PIPE & FITTINGS (LF)	SPV.0090.06 FINISH & INSTALL 16-INCH WATER PIPE & FITTINGS (LF)	SPV.0090.07 SELECT FILL FOR WATER MAIN (LF)
101+00	107+00	UNIVERSITY AVENUE	13	-	-	-	-	13
107+00	113+00	UNIVERSITY AVENUE	25	-	-	-	-	25
119+00	125+00	UNIVERSITY AVENUE	-	-	275	-	-	275
125+00	131+00	UNIVERSITY AVENUE	111	287	427	-	-	825
137+00	143+00	UNIVERSITY AVENUE	27	-	-	-	-	27
149+00	155+00	UNIVERSITY AVENUE	72	-	-	-	-	72
155+00	161+00	UNIVERSITY AVENUE	18	-	-	-	-	18
161+00	167+00	UNIVERSITY AVENUE	-	-	-	23	90	113
167+00	173+00	UNIVERSITY AVENUE	49	-	-	-	607	656
173+00	179+00	UNIVERSITY AVENUE	24	-	-	-	172	196
186+00	191+50	UNIVERSITY AVENUE	22	-	-	12	544	578
191+50	197+50	UNIVERSITY AVENUE	25	-	-	-	601	626
197+50	200+00	UNIVERSITY AVENUE	-	87	-	-	225	312
8+00	10+00	NORMAN WAY	38	-	-	-	-	38
6+00	10+00	WHITNEY WAY	22	-	-	-	341	363
TOTALS			446	374	702	35	2,580	4,137

CONSTRUCTION STAKING WATER MAIN

LOCATION	SPV.0105.09 (LS)
PROJECT	1
TOTAL	1

SANITARY STRUCTURES REQUIRING ADJUSTMENT

SAS NO.	STATION	LOCATION (OFFSET)	EX RIM	PROP. RIM	ADJ REQRD (FT)	EX ADJUST (IN)	STRUCTURE SIZE	CHIMNEY TYPE	ROOF TYPE	CONSTUCTION	SPV.0060.44 ADJUST SEWER ACCESS STRUCTURE (EACH)	SPV.0060.45 ADJUST SEWER ACCESS STRUCTURE SPECIAL (EACH)	NOTES
3044-005	110+55.89	LT-31.61	910.68	910.50	-0.18	2	4' DIA	RINGS	CONE	PRECAST	-	1	
3044-004	114+64.15	LT-37.98	898.80	899.23	0.43	9	4' DIA	RINGS	CONE	PRECAST	-	1	
3044-003	114+66.00	RT-48.09	897.94	897.96	0.02	12	4' DIA	RINGS	CONE	PRECAST	1	-	
3144-013	117+63.26	RT-35.25	891.60	889.59	-2.01	1	4' DIA	MORTAR	CONE	PRECAST	-	1	
3145-004	120+34.24	RT-66.30	879.17	879.17	0.00	0	4' DIA	NONE	CONE	PRECAST	-	-	
3145-019	121+40.00	RT-66.58	871.46	871.46	0.00	0	4' DIA	NONE	CONE	PRECAST	-	-	
MSD MH05-205	122+27.80	LT-69.96	868.54	872.50	3.96	0	6' DIA	NONE	CONE	PRECAST	-	1	MMSD NOTE
MH15-03537	122+36.29	RT-68.40	868.88	870.61	1.73	26	6' DIA	CONC RINGS	CONE OFFSET	PRECAST	-	1	MMSD NOTE
3145-016	129+71.04	RT-40.61	908.90	909.66	0.76	8	4X4	BRICK	FLAT	PIP	-	1	
3146-013	132+13.65	RT-46.38	909.17	909.34	0.17	6	5x5	BRICK	FLAT	PIP	1	-	
3246-004	11+48 Capital Ave	LT-17.69	898.50	899.51	1.01	15	4X4	BRICK	FLAT	PIP	-	1	
3246-001	134+31.24	RT-41.10	907.49	907.35	-0.14	8	4X4	CONC RINGS	FLAT	PIP	1	-	
3246-002	137+44.69	RT-42.13	907.45	906.23	-1.22	30	4X4	BRICK	FLAT	PIP	-	1	
3246-003	139+34.39	RT-45.11	907.53	906.60	-0.93	30	4X4	CONC RINGS	FLAT	PIP	-	1	
3247-015	142+73.38	RT-44.60	907.17	906.49	-0.68	15	4X4	CONC RINGS	FLAT	PIP	1	-	
3246-014	143+13.15	LT-80.04	902.35	903.14	0.79	36	4' DIA	BRICK	FLAT	PRECAST	-	1	
3247-016	145+43.77	RT-45.61	903.75	906.02	2.27	14	4X4	RINGS	FLAT	PIP	-	1	
3247-017	148+04.01	RT-44.63	905.29	904.36	-0.93	12	4X4	BRICK	FLAT	PIP	1	-	
3247-018	150+33.93	RT-45.55	900.51	899.01	-1.50	24	4X4	CONC RINGS	FLAT	PIP	1	-	
3348-010	163+14.86	RT-53.86	867.10	867.10	0.00	1	4' DIA	RINGS	CONE	PRECAST	-	-	4" CASTING; OFFSET CONE
3349-003	165+77.07	RT-51.80	873.76	873.40	-0.36	30	4X4	BRICK	FLAT	PIP	-	1	
3349-002	167+26.09	LT-60.65	879.96	879.96	0.00	1	4X4	BRICK	FLAT	PIP	-	-	
3349-004	167+92.87	RT-54.16	881.54	881.65	0.11	9	4X4	BRICK	FLAT	PIP	1	-	
3349-001	169+97.00	LT-36.98	888.44	888.44	0.00	1	4'-DIA	CONC RINGS	CONE	PRECAST	-	1	SWAP TO OFFSET CONE; CASTING BEHIND CURB
3349-005	170+77.03	RT-51.87	891.63	891.20	-0.43	15	4X4	BRICK	FLAT	PIP	-	1	SWAP TO OFFSET CONE; CASTING BEHIND CURB
3449-010	172+51.48	RT-57.49	897.84	897.68	-0.16	6	4X4	BRING	FLAT	PIP	1	-	
3449-011	174+23.42	RT-58.19	904.58	903.15	-1.43	16	4' DIA	CONC RINGS	CONE	PRECAST	-	1	SWAP TO OFFSET CONE; CASTING BEHIND CURB
3449-013	175+62.28	RT-57.57	908.41	908.41	0.00	36	4X4	BRICK	FLAT	PIP	-	1	
TOTALS											8	16	

SPECIFIC NOTES

FOR ALL MMSD STRUCTURES: PLEASE CONTACT JOHN PODEBRADSKY AT (608) 516-5862 OR JOHNP@MADSEWER.ORG 48 HOURS PRIOR TO ADJUSTING SEWER STRUCTURE. MMSD TO PROVIDE CASTINGS AND RUBBER ADJUSTMENT RINGS.

STANDARD NOTES:

- ABBREVIATIONS: PIP =POURED IN PLACE; AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONC

- APPROXIMATE DISCHARGE E.I. GIVEN, ADJUST E.I. AND PIPE SLOPE IN THE FIELD.

- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SAS's.

- TOP OF CONCRETE ROOF (TR) IS 1.25' BELOW TOP OF CASTING UNLESS OTHERWISE NOTED.

- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.

- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.

- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT GREG FRIES OF CITY ENGINEERING AT (267-1199)

Addendum No. 1
ID 5992-08-79
Revised Sheet 487
February 1, 2012

3

3

EXISTING SANITARY STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	SPV.0060.39 REMOVE SEWER ACCESS STRUCTURE (EACH)	SPV.0060.40 ABANDON SEWER ACCESS STRUCTURE (EACH)
3348-003	162+13	LT-99.00	1	-
3348-005	162+25	LT-87.00	-	1
3348-006	162+42	LT-88.00	-	1
3348-007	163+53	RT-29.00	1	-
3348-009	163+66	RT-53.00	1	-
3348-002	164+22	LT-62.00	1	-
TOTALS			4	2

EXISTING SANITARY PIPES

REMOVE FROM	REMOVE TO	LENGTH (FT)	PAID (Y/N)	SPV.0035.18 ABANDON SANITARY 10-INCH SEWER PIPE WITH SLURRY (CY)	SPV.0060.41 PIPE PLUG (EACH)	NOTES:
3348-004	3348-003	328	N	-	2	ABANDON WITH PLUGS
3348-005	3348-003	15	N	1.2	2	ABANDON WITH SLURRY
3348-005	3348-006	19	N	1.5	2	ABANDON WITH SLURRY
3348-006	3348-007	153	N	11.6	2	ABANDON WITH SLURRY
3348-007	3348-008	8	N	-	2	ABANDON WITH SLURRY
3348-008	3348-009	28	N	2.2	2	ABANDON WITH SLURRY
3348-003	3348-002	212	N	-	-	REMOVE
TOTALS				16.5	12	

PROPOSED SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH	SPV.0060.48 SANITARY SEWER ACCESS STRUCTURE 4 FT DIA (EACH)	SPV.0060.49 SANITARY SEWER ACCESS STRUCTURE 6 FT DIA (EACH)	SPV.0060.52 SANITARY SEWER INTERNAL CHIMNEY SEAL (EACH)	SPV.0060.58 SANITARY TAP (EACH)	NOTES
SAS-1	163+46	RT-33.40	868.00	855.74	12.26	-	1	-	-	-
SAS-2	163+01	LT-65.00	868.05	855.23	12.82	-	1	1	-	-
SAS-3	162+13	LT-99.00	866.21	854.74	11.47	1	-	1	-	-
SAS-4	164+22	LT-62.00	870.41	862.41	8.00	1	-	1	2	-
SAS-5	163+66	RT-53.00	868.70	856.80	11.90	1	-	-	2	-
SAS-6	158+84	LT-127.00	864.51	853.00	11.51	1	-	1	-	FINAL RIM AND EI TO BE DETERMINED BASED ON LOCATION OF FORCE MAIN
SAS-100	170+32	RT-49.80	888.32	879.37	8.95	1	-	1	1	-
TOTALS						5	2	5	5	

CONSTRUCTION STAKING SANITARY SEWER

LOCATION	SPV.0105.10 (LS)
PROJECT	1
TOTAL	1

PROPOSED SANITARY PIPES

FROM SAS (DWNSTRM)	TO SAS (UPSTREAM)	EI # (DWNSTRM)	EI # (UPSTRM)	SPV.0090.19 SELECT FILL FOR SANITARY SEWER (LF)	SLOPE (%)	SPV.0090.20 SANITARY SEWER PIPE 8-INCH (LF)	SPV.0090.22 SANITARY SEWER PIPE 12-INCH (LF)	NOTES:
SAS#6	SAS#3	853.10	854.74	328	0.50%	-	328	PVC
SAS#3	SAS#2	854.84	855.23	98	0.40%	-	98	PVC
SAS#2	SAS#4	855.33	862.41	122	5.80%	122	-	PVC
SAS#2	SAS#1	855.3	855.74	109	0.40%	-	109	PVC
SAS#1	SAS#5	855.91	856.80	28	3.18%	28	-	PVC
SAS#100	-	879.37	879.57	50	0.40%	50	-	PVC
TOTALS				735		200	535	

TRANSPORTATION PROJECT PLAT NO: 5992-08-18 - 4.01

CITY OF MADISON, UNIVERSITY AVENUE
ALLEN BOULEVARD - SEGOE ROAD
CTH MS DANE COUNTY

PART OF LOT 1, CSM #10085 & LOT 2, CSM #2599 LOCATED IN THE NE¼- NE¼ OF SECTION 13, T 7 N, R 8 E, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN.

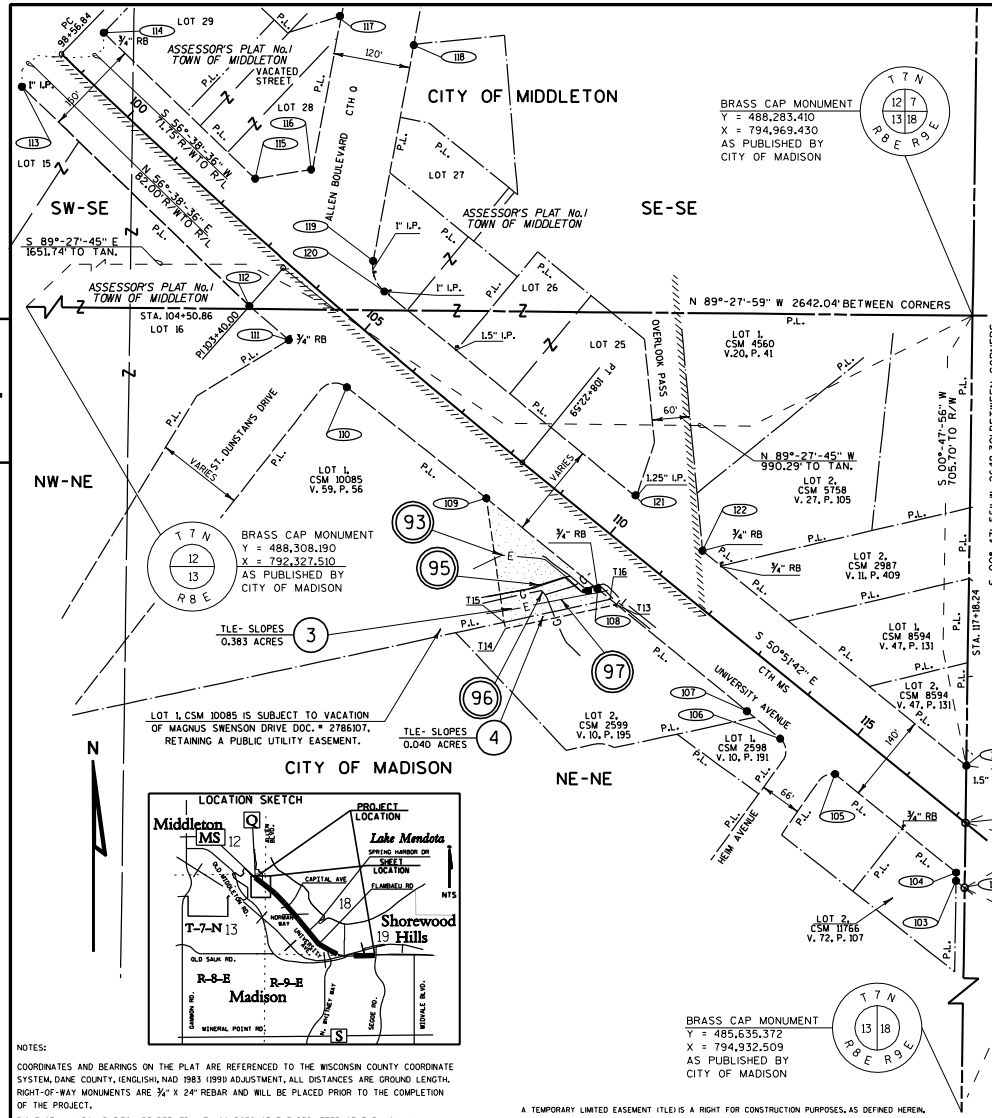
RELOCATION ORDER UNIVERSITY AVENUE

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF MADISON DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MADISON HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MADISON, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5992-08-18-4.01
AMENDMENT NO:



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE CITY OF MADISON. ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
3	ASBURY UNITED METHODIST CHURCH	TLE	----	----	----	0.383
4	CRESS-UNIVERSITY, LLC.	TLE	----	----	----	0.040
93	MG&E (ELECTRIC)	TEMPORARY RELEASE OF RIGHTS				
95	AT&T - WISCONSIN	TEMPORARY RELEASE OF RIGHTS				
96	MG&E (GAS)	TEMPORARY RELEASE OF RIGHTS				
97	ATC	TEMPORARY RELEASE OF RIGHTS				

TLE STATION & OFFSET TABLE

Point Number	Station	Offset
T13	110+77.72	79.80'
T14	109+66.45	218.70'
T15	109+58.64	212.45'
T16	110+64.93	79.77'

STATION & OFFSET TABLE

Point Number	Station	Offset
100	116+62.61	70.35'
101	117+18.24	0.00'
102	117+81.31	79.74'
103	117+63.97	79.73'
104	117+56.06	69.72'
105	115+11.23	69.54'
106	114+09.52	80.90'
107	113+41.83	80.39'
108	110+39.35	79.71'
109	108+14.15	79.22'
110	105+36.96	85.77'
111	104+20.09	90.56'
112	103+39.71	90.18'
113	98+47.75	80.00'
114	98+81.65	69.98'
115	102+13.14	64.55'
116	102+69.20	133.93'
117	101+38.05	342.58'
118	102+57.59	387.69'
119	104+38.78	91.16'
120	104+83.71	66.43'
121	109+95.26	70.29'
122	111+28.98	70.73'

COURSE TABLE

POINT NUMBER	BEARING	DISTANCE	TO POINT NUMBER
100	S 00°47'56" W	89.69'	101
101	S 00°47'56" W	101.67'	102
102	N 50°49'12" W	17.34'	103
103	N 00°48'01" E	12.76'	104
104	N 50°49'12" W	244.82'	105
105	N 57°13'49" W	102.35'	106
106	N 50°25'46" W	67.69'	107
107	N 50°44'01" W	302.48'	108
108	N 50°44'10" W	225.26'	109
109	N 51°28'16" W	279.25'	110
110	N 51°28'16" W	117.87'	111
111	N 48°22'37" W	81.01'	112
112	N 46°02'30" W	495.61'	113
113	N 56°38'36" E	153.75'	114
114	S 46°02'30" E	329.59'	115
115	N 80°44'12" E	88.90'	116
116	N 10°37'08" E	245.00'	117
117	S 69°02'03" E	124.21'	118
118	S 10°37'08" W	345.54'	119
120	S 50°44'09" E	509.54'	121
121	S 51°03'10" E	133.72'	122
122	S 50°49'12" E	533.63'	100

CURVE 119-120
L = 53.54'
LC = 51.02'
LCB = S 20°-03'-31" E
R = 50.00'

P.I. = 103+40.00
Y = 488,358.400
X = 793,888.894
DELTA = 04° 49' 42" (LT)
D = 00° 30' 00"
T = 483.16'
L = 965.75'
R = 11,460.00'
P.C. = 98+56.84
P.T. = 108+22.59

CONVENTIONAL ABBREVIATIONS

ACCESS POINT, DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (1" UNLESS NOTED)
R/W MONUMENT ● =(SET)
R/W STANDARD ▲ =(SET)
SIGN ISIGN
SECTION CORNER MONUMENT
SECTION CORNER SYMBOL
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT 100
PARCEL NUMBER 102
UTILITY PARCEL NUMBER 92
SIGN NUMBER (OFF PREMISE) 21-1
BUILDING

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)
ACCESS CONTROLLED BY PARCEL ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER —W—
GAS —G—
TELEPHONE —T—
OVERHEAD TRANSMISSION LINES —OH—
ELECTRIC —E—
CABLE TELEVISION —TV—
FIBER OPTIC —FO—
SANITARY SEWER —SAN—
STORM SEWER —SS—

	NON COMPENSABLE	COMPENSABLE
POWER POLE	○	●
TELEPHONE POLE	⌀	⌀
TELEPHONE PEDESTAL	⋈	⋈
ELECTRIC TOWER	⊠	

SCALE, FEET
0 100 200

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY, (ENGLISH), NAD 1983 (1991) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH. RIGHT-OF-WAY MONUMENTS ARE ¾" X 24" REBAR AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR UNIVERSITY AVENUE IS ESTABLISHED FROM PREVIOUS PROJECT NRH 8-A AND ASSESSOR'S PLAT No. 1 OF THE TOWN OF MIDDLETON.
EXISTING HIGHWAY RIGHT-OF-WAY FOR HEIM AVENUE IS ESTABLISHED FROM CSM #11766 AND #2598.
EXISTING HIGHWAY RIGHT-OF-WAY FOR OVERLOOK PASS IS ESTABLISHED FROM CSM #4560.
EXISTING HIGHWAY RIGHT-OF-WAY FOR ST. DUNSTAN'S DRIVE IS ESTABLISHED FROM CSM #10085.

APPROVED FOR CITY OF MADISON

RELOCATION ORDER APPROVED BY THE COMMON COUNCIL
DATE: 6/21/11 CITY CLERK

RELOCATION ORDER APPROVED BY THE PLAN COMMISSION
DATE: 5/16/11 EXECUTIVE SECRETARY

RELOCATION ORDER APPROVED BY THE BOARD OF PUBLIC WORKS
DATE: 5/18/11 EXECUTIVE SECRETARY

KL Engineering
[A] Better Experience

I, THOMAS J. HANSEN, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5922-08-18-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

JULY 1, 2011
THOMAS J. HANSEN — DATE
AGENT FOR KL ENGINEERING, INC.
R.L.S. NUMBER 2033

WISCONSIN — THOMAS J. HANSEN S-2033 MADISON, WISCONSIN — LAND SURVEYOR

488

FILE NAME : G:\Madison\MD2009035\tpp\sheet5992_08_18_401.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/1/2011
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :

4.01

TRANSPORTATION PROJECT PLAT NO: 5992-08-18 - 4.02

CITY OF MADISON, UNIVERSITY AVENUE
ALLEN BOULEVARD - SEGOE ROAD
CTH MS DANE COUNTY

PART OF OUT LOTS 2, 3 & 5, HICKORY HOLLOW PLAT, PART OF LOTS 34, 39, 40 & 41, MENDOTA BEACH HEIGHTS, ALL LOCATED IN THE NW1/4- NW1/4 OF SECTION 18, T 7 N, R 9 E, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN.

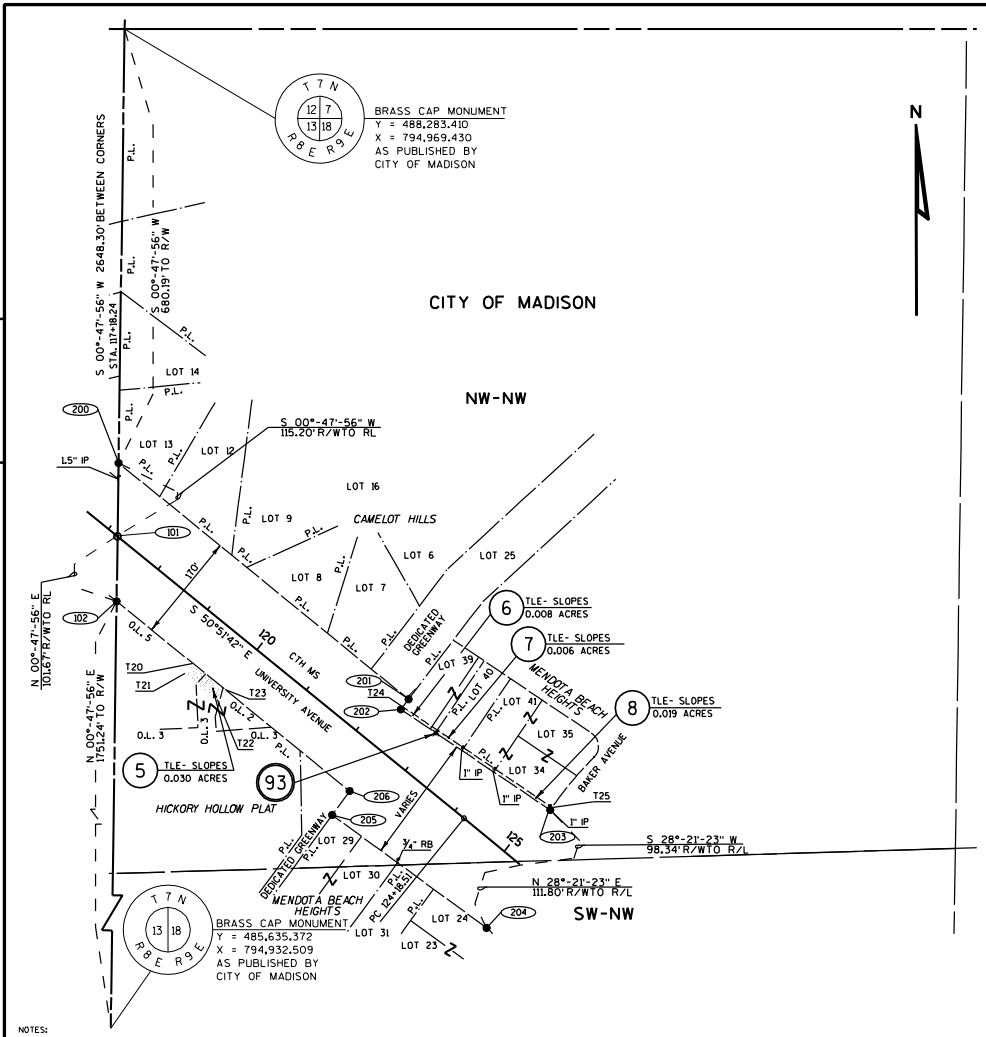
RELOCATION ORDER UNIVERSITY AVENUE

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF MADISON DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22 WISCONSIN STATUTES, THE CITY OF MADISON HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MADISON, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5992-08-18-4.02
AMENDMENT NO:



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE CITY OF MADISON
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
5	HICKORY HOLLOW JOINT VENTURE	TLE	----	----	----	0.030
6	PAUL H. & LAURIE A. CAPABIANCO, JR	TLE	----	----	----	0.008
7	JANICE BRANCH	TLE	----	----	----	0.006
8	JENNY E. GUMPERZ & CAROL GLASER	TLE	----	----	----	0.019
93	MG&E (ELECTRIC)	TEMPORARY RELEASE OF RIGHTS				

TLE STATION & OFFSET TABLE

T20	119+36.00	79.85'
T21	119+35.99	99.85'
T22	120+00.99	99.90'
T23	120+01.00	79.90'
T24	122+33.71	74.96'
T25	125+13.08	101.22'

STATION & OFFSET TABLE

101	117+18.24	0.00'
102	117+81.31	79.74'
200	116+46.78	90.36'
201	122+33.22	89.93'
202	122+33.88	69.96'
203	125+13.56	96.25'
204	125+57.12	109.34'
205	122+54.89	126.34'
206	122+52.52	80.08'

COURSE TABLE

POINT NUMBER	BEARING	DISTANCE	TO POINT NUMBER
200	S 50°49'12" E	586.44'	201
201	S 37°16'09" W	19.98'	202
202	S 56°02'23" E	282.43'	203
203	S 28°21'23" W	210.14'	204
204	N 53°47'48" W	299.96'	205
205	N 36°12'12" E	46.32'	206
206	N 50°49'12" W	471.21'	102
102	N 00°47'56" E	101.67'	101
101	N 00°47'56" E	115.20'	200

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (IF 1" UNLESS NOTED)
R/W MONUMENT ● =(SET)
R/W STANDARD ▲ =(SET)
SIGN ISIGN
SECTION CORNER MONUMENT
SECTION CORNER SYMBOL
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT RWB2D
PARCEL NUMBER 02
UTILITY PARCEL NUMBER 92
SIGN NUMBER (OFF PREMISE) 21
BUILDING

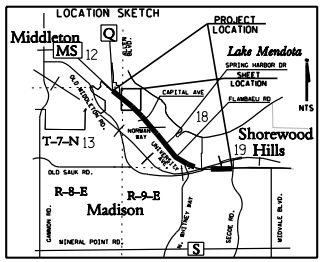
PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)
ACCESS CONTROLLED BY PARCEL ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

P.I. = 129+55.45
Y = 486,707.182
X = 795,917.949
DELTA = 10° 42' 24" (RT)
D = 01° 00' 00"
T = 536.94'
L = 1070.75
R = 5,730.00'
P.C. = 124+18.51
P.T. = 134+89.26
AH = S 40° 09' 18" E

SCALE, FEET
0 100 200



NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY, (ENGLISH), NAD 1983 (1991) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH. RIGHT-OF-WAY MONUMENTS ARE ¾" X 24" REBAR AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR UNIVERSITY AVENUE IS ESTABLISHED FROM PREVIOUS PROJECT NRH 8-A AND SUBDIVISION PLATS OF CAMELOT HILLS, HICKORY HOLLOW AND MENDOTA BEACH HEIGHTS.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

APPROVED FOR CITY OF MADISON

RELOCATION ORDER APPROVED BY THE COMMON COUNCIL
DATE: 6/21/11 CITY CLERK

RELOCATION ORDER APPROVED BY THE PLAN COMMISSION
DATE: 5/16/11 EXECUTIVE SECRETARY

RELOCATION ORDER APPROVED BY THE BOARD OF PUBLIC WORKS
DATE: 5/18/11 EXECUTIVE SECRETARY

KL Engineering
[a] Better Experience

I, THOMAS J. HANSEN, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5992-08-18-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

JULY 1, 2011
THOMAS J. HANSEN DATE
AGENT FOR KL ENGINEERING, INC.
R.L.S. NUMBER 2033

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

FILE NAME : g:\madison\md2009035\tpp\sheet5992_08_18_402.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/1/2011
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :
4.02

TRANSPORTATION PROJECT PLAT NO: 5992-08-18 - 4.03

CITY OF MADISON, UNIVERSITY AVENUE
ALLEN BOULEVARD - SEGOE ROAD
CTH MS DANE COUNTY

PART OF LOTS 61, 69, 70, 82, 83, 84, 85 86, 87, 96, 97 & 115, MENDOTA BEACH HEIGHTS SUBDIVISION AND PART OF LOT 1, BAKER'S REPLAT SUBDIVISION ALL LOCATED IN THE SW¼- NW¼, OF SECTION 18, T 7 N, R 9 E, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN.

RELOCATION ORDER UNIVERSITY AVENUE

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF MADISON DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22 WISCONSIN STATUTES, THE CITY OF MADISON HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
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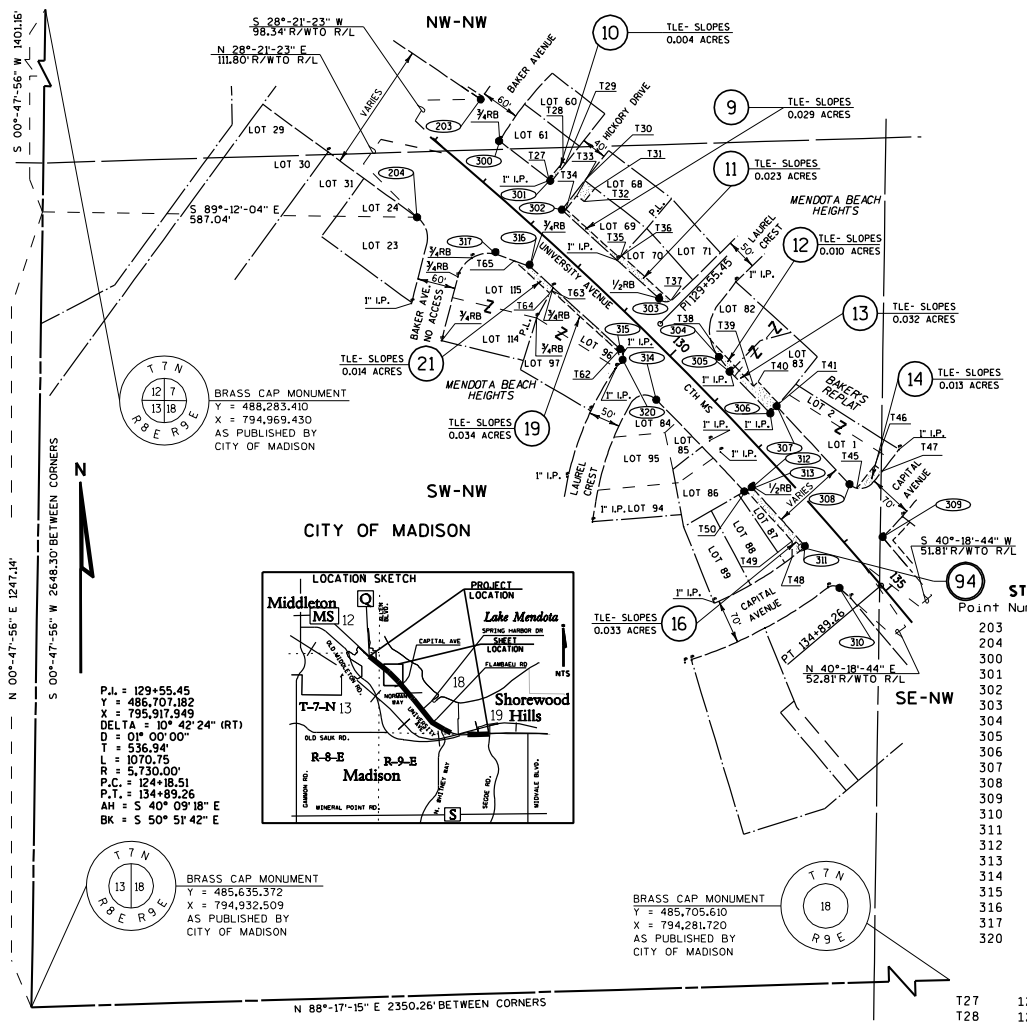
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5992-08-18-4.03
AMENDMENT NO:



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE CITY OF MADISON
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
9	RANDALL L. ERB LIVING TRUST & ****	TLE	----	----	----	0.029
10	PAUL A. MARINO	TLE	----	----	----	0.004
11	ANDREW GOPLIN	TLE	----	----	----	0.023
12	LAURA KARL	TLE	----	----	----	0.010
13	HOLLY S. HAASE, DAVID S. & SUSAN HAASE	TLE	----	----	----	0.032
14	GOCHANOUR BROTHERS, INC.	TLE	----	----	----	0.013
16	CITY OF MADISON	TLE	----	----	----	0.033
17	NOT USED					
18	NOT USED					
19	MATTHEW & JENNIFER ZASTROW	TLE	----	----	----	0.019
21	LOUIS GARDNER	TLE	----	----	----	0.014
94	CITY OF MADISON - WATER	TEMPORARY RELEASE OF RIGHTS				

**** MARSHA L. ALDERMAN, LIVING TRUST

STATION & OFFSET TABLE

Point Number	Station	Offset
203	125+13.56	96.25'
204	125+57.12	109.34'
300	125+77.70	65.64'
301	126+79.30	72.00'
302	127+20.40	49.49'
303	129+25.34	52.29'
304	130+54.99	53.50'
305	130+83.69	49.79'
306	131+73.56	50.16'
307	131+72.13	65.09'
308	133+63.70	52.09'
309	134+33.28	51.17'
310	134+49.75	52.15'
311	133+64.86	47.91'
312	132+38.32	50.00
313	132+35.39	63.19'
314	130+33.71	63.62'
315	129+36.77	46.96'
316	127+43.54	49.99'
317	126+90.35	71.46'
320	129+52.43	62.23'

TLE STATION & OFFSET TABLE

T27	126+74.38	71.65'	T45	133+49.84	71.14'
T28	126+72.32	106.58'	T46	133+41.69	116.08'
T29	126+77.22	106.93'	T47	133+56.18	118.55'
T30	127+16.53	107.49'	T48	133+63.62	76.85'
T31	127+36.13	109.04'	T49	133+44.29	59.95'
T32	127+37.98	82.50'	T50	132+36.06	60.18'
T33	127+23.20	81.45'	T62	129+36.94	51.95'
T34	127+25.02	54.47'	T63	127+94.20	54.82'
T35	128+37.25	55.18'	T64	127+95.50	59.81'
T36	128+37.21	60.18'	T65	127+18.70	59.91'
T37	129+40.66	62.81'			
T38	130+27.25	62.83'			
T39	131+24.87	60.63'			
T40	131+25.01	70.62'			
T41	131+71.65	70.17'			

COURSE TABLE			
POINT NUMBER	BEARING	DISTANCE	TO POINT NUMBER
203	S 24°23'27" E	71.89'	300
300	S 52°17'59" E	103.02'	301
301	S 19°35'31" E	47.24'	302
302	S 47°35'44" E	206.77'	303
303	S 45°40'22" E	130.85'	304
304	S 37°02'54" E	29.19'	305
305	S 43°59'45" E	90.65'	306
306	N 41°10'28" E	15.00'	307
307	S 42°56'22" E	165.58'	308
308	S 32°26'45" E	99.61'	309
309	S 40°18'44" W	104.62'	310
310	N 39°30'52" W	84.20'	311
312	N 59°43'06" E	13.50'	313
314	N 44°07'21" W	80.40'	320
315	N 47°33'07" W	191.61'	316
316	N 70°04'29" W	56.85'	317
317	N 64°55'09" W	136.48'	204
204	N 28°21'23" E	210.14'	203

CURVE 311-312
L = 125.39'
LC = 125.39'
LCB = N 42°01'-55" W
R = 5680.00'

CURVE 313-314
L = 199.45'
LC = 199.44'
LCB = N 43°49'-40" W
R = 5664.34'

CURVE 320-315
L = 24.35'
LC = 21.77'
LCB = N 01°02'-22" W
R = 15.00'

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	REBAR	RB
HIGHWAY EASEMENT	H.E.	**CURVE DATA**	
LAND CONTRACT	LC	LONG CHORD	LCH
MONUMENT	MON.	LONG CHORD BEARING	LCB
PAGE	P.	RADIUS	R
PERMANENT LIMITED EASEMENT	PLE	DEGREE OF CURVE	D
PROPERTY LINE	PL	CENTRAL ANGLE OR DELTA	DELTA
RECORDED AS	(100')	LENGTH OF CURVE	L
		TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (¾" UNLESS NOTED)
R/W MONUMENT ● =(SET)
R/W STANDARD ▲ =(SET)
SIGN
SECTION CORNER MONUMENT
SECTION CORNER SYMBOL
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT
PARCEL NUMBER
UTILITY PARCEL NUMBER
SIGN NUMBER (OFF PREMISE)
BUILDING

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)
ACCESS CONTROLLED BY PARCEL ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER —W—
GAS —G—
TELEPHONE —T—
OVERHEAD —OH—
TRANSMISSION LINES
ELECTRIC —E—
CABLE TELEVISION —TV—
FIBER OPTIC —FO—
SANITARY SEWER —SAN—
STORM SEWER —SS—

	NON COMPENSABLE	COMPENSABLE
POWER POLE	ø	ø
TELEPHONE POLE	ø	ø
TELEPHONE PEDESTAL	⌑	⌑
ELECTRIC TOWER	⊠	

SCALE, FEET
0 100 200

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY, (ENGLISH, NAD 1983 (1991) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH.

RIGHT-OF-WAY MONUMENTS ARE ¾" X 24" REBAR AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR UNIVERSITY AVENUE IS ESTABLISHED FROM PREVIOUS PROJECT NRH 8-A AND SUBDIVISION PLATS OF MENDOTA BEACH HEIGHTS AND BAKER'S REPLAT.
EXISTING HIGHWAY RIGHT-OF-WAY FOR BAKER AVENUE, HICKORY AVENUE AND LAUREL CREST IS ESTABLISHED FROM SUBDIVISION PLAT OF MENDOTA BEACH HEIGHTS.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CAPITAL AVENUE IS ESTABLISHED FROM SUBDIVISION PLATS OF BAKER REPLAT, MENDOTA BEACH HEIGHTS AND STOEBER SUBDIVISION.

APPROVED FOR CITY OF MADISON

RELOCATION ORDER APPROVED BY THE COMMON COUNCIL
DATE: 6/21/11 CITY CLERK

RELOCATION ORDER APPROVED BY THE PLAN COMMISSION
DATE: 5/16/11 EXECUTIVE SECRETARY

RELOCATION ORDER APPROVED BY THE BOARD OF PUBLIC WORKS
DATE: 5/18/11 EXECUTIVE SECRETARY

KL Engineering
[A] Better Experience

I, THOMAS J. HANSEN, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5992-08-18-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

JULY 1, 2011
THOMAS J. HANSEN DATE
AGENT FOR KL ENGINEERING, INC.
R.L.S. NUMBER 2033

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

FILE NAME : g:\madison\md2009035\tpp\sheet5992_08_18_403.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/1/2011
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :

4.03

TRANSPORTATION PROJECT PLAT NO: 5992-08-18 - 4.04

CITY OF MADISON, UNIVERSITY AVENUE
ALLEN BOULEVARD - SEGOE ROAD
CTH MS DANE COUNTY

PART OF LOTS 2 & 3, STOEBER ADDITION, IN THE SW¼- NW 1/4, LOT 1, BLOCK 13, MENDOTA BEACH SUBDIVISION, LOTS 4 & 5, BLOCK 1, AND PART OF LOTS 1, 7 & 8, BLOCK 2, A.K. FRITZ'S SUBDIVISION, & A PART OF THE SE¼- NW¼, LOT 1, CSM 1818 & LOT 1, CSM 206 IN THE NE¼- SW 1/4, ALL IN SECTION 18, T 7 N, R 9 E, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN.

RELOCATION ORDER UNIVERSITY AVENUE

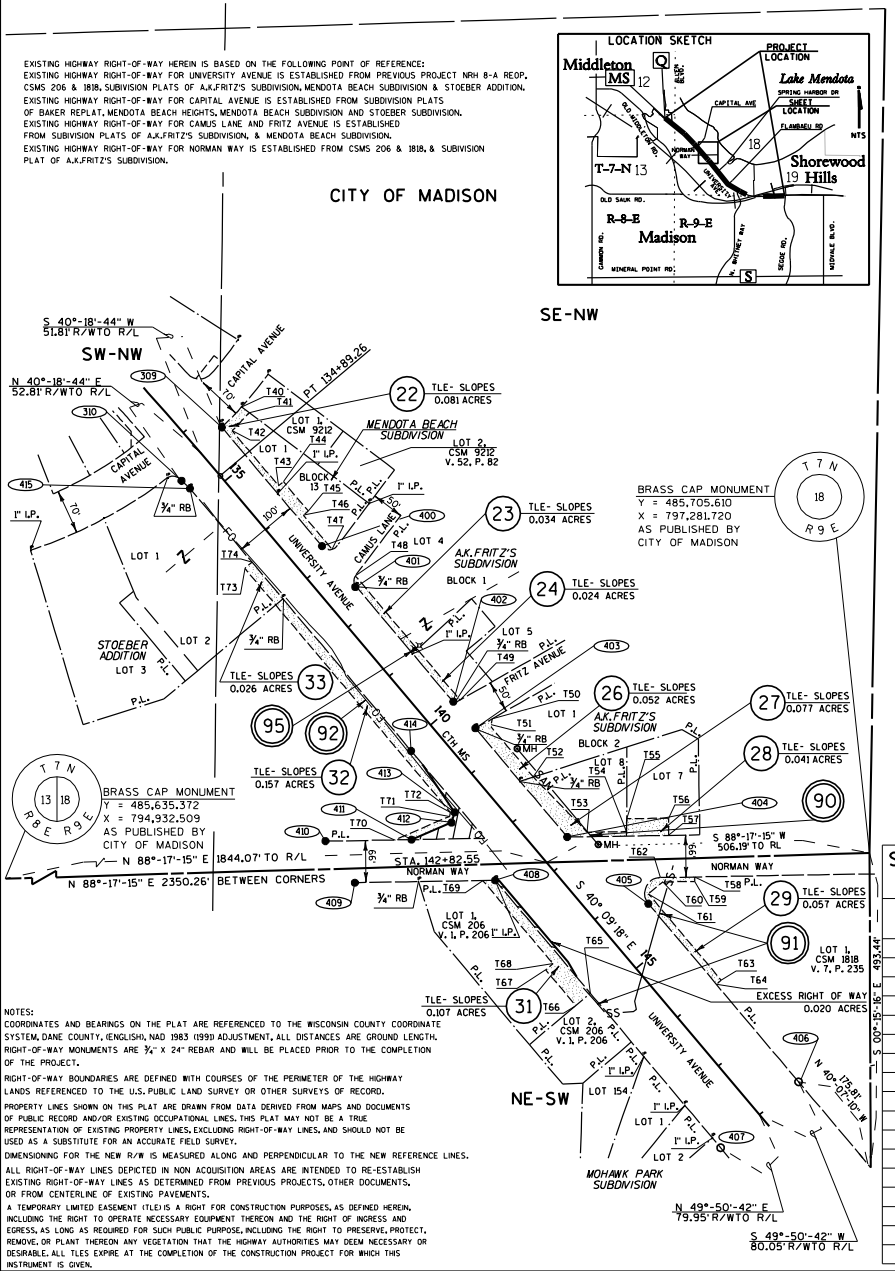
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF MADISON DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MADISON HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MADISON, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5992-08-18-4.04
AMENDMENT NO:

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR UNIVERSITY AVENUE IS ESTABLISHED FROM PREVIOUS PROJECT NRH 8-A REOP, CSMS 206 & 1818, SUBDIVISION PLATS OF A.K.FRITZ'S SUBDIVISION, MENDOTA BEACH SUBDIVISION & STOEBER ADDITION.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CAPITAL AVENUE IS ESTABLISHED FROM SUBDIVISION PLATS OF BAKER REPLAT, MENDOTA BEACH HEIGHTS, MENDOTA BEACH SUBDIVISION AND STOEBER SUBDIVISION.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CAMUS LANE AND FRITZ AVENUE IS ESTABLISHED FROM SUBDIVISION PLATS OF A.K.FRITZ'S SUBDIVISION, & MENDOTA BEACH SUBDIVISION.
EXISTING HIGHWAY RIGHT-OF-WAY FOR NORMAN WAY IS ESTABLISHED FROM CSMS 206 & 1818, & SUBDIVISION PLAT OF A.K.FRITZ'S SUBDIVISION.



STATION & OFFSET TABLE

Point Number	Station	Offset
309	134+33.28	51.17'
310	134+49.75	52.15'
400	136+76.10	50.74'
401	137+59.50	50.69'
402	139+98.24	50.54'
403	140+49.49	50.51'
404	142+72.68	50.37'
405	144+34.72	80.27'
406	148+00.00	80.05'
407	148+00.00	79.95'
408	142+51.87	79.61'
409	141+12.86	250.14'
410	140+33.25	243.35'
411	141+18.54	138.71'
412	141+38.32	73.13'
413	141+29.21	59.77'
414	140+40.00	49.48'
415	134+73.33	49.11'

COURSE TABLE

POINT NUMBER	BEARING	DISTANCE	TO POINT NUMBER
309	S 40°07'10" E	243.32'	400
400	S 40°07'10" E	83.40'	401
401	S 40°07'10" E	238.74'	402
402	S 40°07'10" E	51.25'	403
403	S 40°07'10" E	223.19'	404
404	S 50°36'35" E	164.78'	405
405	S 40°07'10" E	365.28'	406
406	S 49°50'42" W	160.00'	407
407	N 40°07'10" W	548.13'	408
408	S 89°01'50" W	220.00'	409
409	N 35°17'05" W	79.91'	410
410	N 89°01'50" E	135.00'	411
411	N 66°37'23" E	68.50'	412
412	N 15°32'57" E	16.17'	413
413	N 33°34'32" W	89.79'	414
414	N 40°07'10" W	566.54'	415
415	N 47°50'10" W	23.57'	310
310	N 40°18'44" E	104.62'	309

TLE STATION & OFFSET TABLE

Point Number	Station	Offset	Point Number	Station	Offset	Point Number	Station	Offset
T40	134+28.98	95.71'	T56	143+52.70	191.27'			
T41	134+43.44	98.88'	T57	143+73.25	173.75'			
T42	134+47.53	60.04'	T58	144+49.54	162.88'	T72	141+24.89	64.53'
T43	135+60.06	59.82'	T59	144+54.96	158.46'	T73	136+24.89	64.22'
T44	135+60.07	69.82'	T60	144+23.19	119.48'	T74	136+24.90	49.22'
T45	136+20.09	69.78'	T61	144+22.85	90.28'	T75	134+20.59	182.22'
T46	136+20.08	59.78'	T62	144+15.39	120.99'	T76	134+30.44	185.45'
T47	136+90.34	59.74'	T63	146+00.01	90.17'	T77	134+25.87	204.52'
T48	137+45.45	60.70'	T64	146+00.01	80.17'	T78	134+40.98	208.10'
T49	140+00.10	60.54'	T65	144+83.37	79.76'	T79	134+32.25	239.18'
T50	140+55.05	80.34'	T66	144+83.35	109.76'	T80	134+17.25	234.90'
T51	140+63.22	70.50'	T67	144+09.98	109.71'	T81	133+90.23	305.56'
T52	141+66.36	70.44'	T68	144+09.99	94.71'	T82	133+80.61	301.41'
T53	142+87.18	79.25'	T69	142+39.65	94.61'			
T54	143+26.16	127.06'	T70	141+01.97	159.04'			
T55	143+10.94	140.04'	T71	141+28.88	69.78'			

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE CITY OF MADISON
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
22	BADGER WASH-UNIVERSITY AVE, LLC	TLE	----	----	----	0.079
23	ACLD, LLC & ACLS, LLC	TLE	----	----	----	0.034
24	ZOWNIR, LLC	TLE	----	----	----	0.024
26	JAMES A. SHAPIRO	TLE	----	----	----	0.052
27	G & D PLETZER, LLC	TLE	----	----	----	0.077
28	KENNETH OPITZ, TRUSTEE	TLE	----	----	----	0.041
29	RICHARD R. & JEAN D. MCKENZIE	TLE	----	----	----	0.057
31	STOP N GO OF MADISON, INC.	TLE	----	----	----	0.107
32	DALE HEIGHTS PRESBYTERIAN CHURCH	FEE,TLE	0.063	----	0.063	0.157
33	BRENNAN & CULHANE LAND CO., LLC	TLE	----	----	----	0.026
34	NOT USED					
90	CITY OF MADISON - SANITARY	TEMPORARY RELEASE OF RIGHTS				
91	CITY OF MADISON - STORM	TEMPORARY RELEASE OF RIGHTS				
92	CENTURYTEL	RELEASE OF RIGHTS				
95	AT&T - WISCONSIN	TEMPORARY RELEASE OF RIGHTS				

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(000')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (1" UNLESS NOTED)
R/W MONUMENT (SET)
R/W STANDARD (SET)
SIGN
SECTION CORNER MONUMENT
SECTION CORNER SYMBOL
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT
PARCEL NUMBER
UTILITY PARCEL NUMBER
SIGN NUMBER (OFF PREMISE)
BUILDING

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)
ACCESS CONTROLLED BY PARCEL ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

P.I. = 129+55.45
Y = 486,707.182
X = 795,917.949
DELTA = 10° 42' 24" (RT)
D = 01° 00' 00"
T = 536.94'
L = 1070.75
R = 5,730.00'
P.C. = 124+18.51
P.T. = 134+89.26
BK = S 50° 51' 42" E

SCALE, FEET
0 100 200

NOTES:
COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY, (ENGLISH), NAD 1983 (1991) ADJUSTMENT, ALL DISTANCES ARE GROUND LENGTH. RIGHT-OF-WAY MONUMENTS ARE ¾" X 24" REBAR AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

APPROVED FOR CITY OF MADISON

RELOCATION ORDER APPROVED BY THE COMMON COUNCIL
DATE: 6/21/11 CITY CLERK

RELOCATION ORDER APPROVED BY THE PLAN COMMISSION
DATE: 5/16/11 EXECUTIVE SECRETARY

RELOCATION ORDER APPROVED BY THE BOARD OF PUBLIC WORKS
DATE: 5/18/11 EXECUTIVE SECRETARY

KL Engineering [A] Better Experience

I, THOMAS J. HANSEN, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5992-08-18-4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

JULY 1, 2011
THOMAS J. HANSEN DATE
AGENT FOR KL ENGINEERING, INC.
R.L.S. NUMBER 2033

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

491

FILE NAME : g:\madison\md2009035\tpp\sheet5992_08_18_404.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/1/2011
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :

4.04

TRANSPORTATION PROJECT PLAT NO: 5992-08-18 - 4.05 AMENDMENT NO.2 REMOVES UTILITY PARCEL 90 AND ADDS UTILTIY PARCELS 97 AND 98 TO TRANSPORTATION PROJECT PLAT 5992-08-18-4.05 RECORDED AS DOCUMENT NO. 4777512 AND FILED IN VOL. 59-092, PLATS, PAGE 428

CITY OF MADISON, UNIVERSITY AVENUE
ALLEN BOULEVARD - SEGOE ROAD
CTH MS DANE COUNTY

PART OF LOT 16, BLOCK 2, SPRING HARBOR & A PART OF THE NW¼- SE¼ OF SECTION 18, T 7 N, R 9 E, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN.

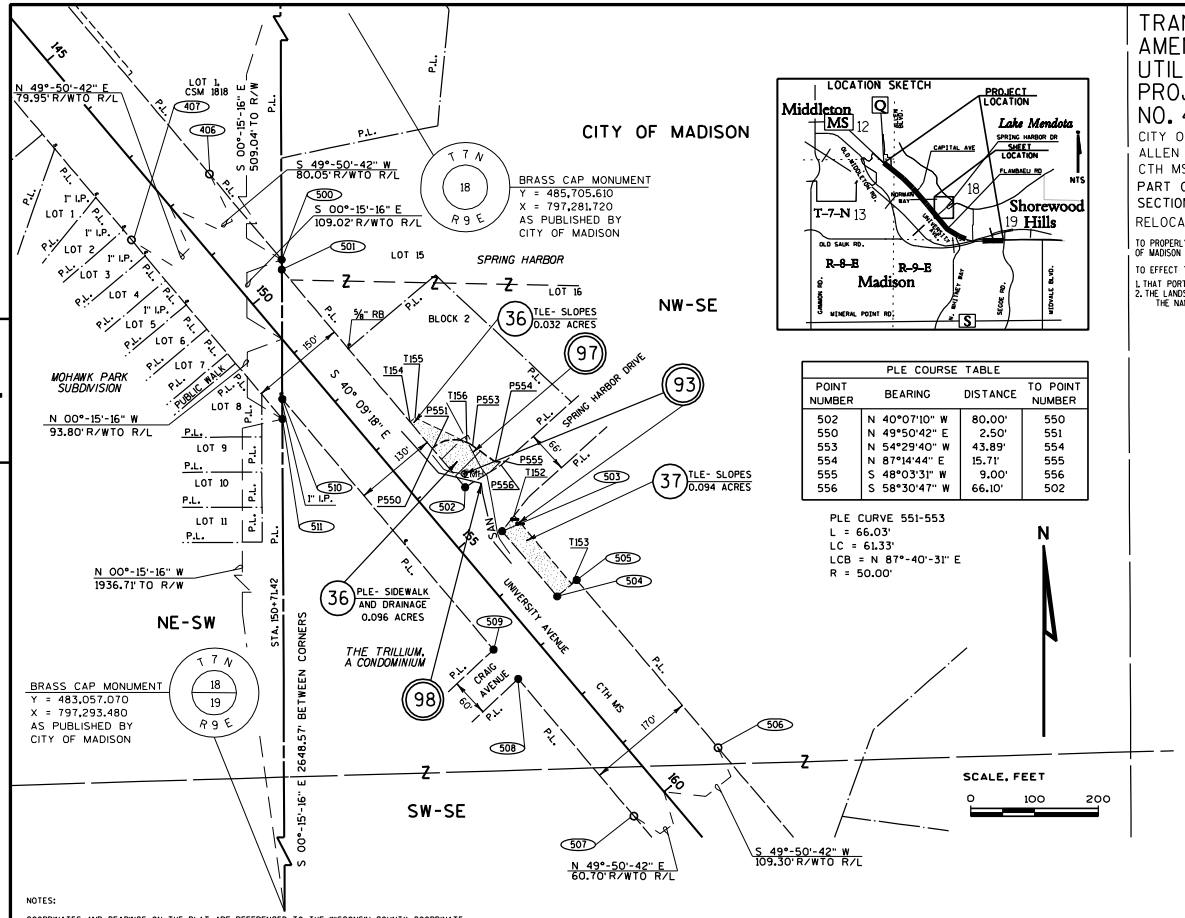
RELOCATION ORDER UNIVERSITY AVENUE

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF MADISON DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MADISON HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MADISON, PURSUANT TO THE PROVISIONS OF SECTION 62.22 WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5992-08-18-4.05
AMENDMENT NO: 2



PLE COURSE TABLE			
POINT NUMBER	BEARING	DISTANCE	TO POINT NUMBER
502	N 40°07'10" W	80.00'	550
550	N 49°50'42" E	2.50'	551
553	N 54°29'40" W	43.89'	554
554	N 87°14'44" E	15.71'	555
555	S 48°03'31" W	9.00'	556
556	S 58°30'47" W	66.10'	502

PLE CURVE 551-553
L = 66.03'
LC = 61.33'
LCB = N 87°-40'-31" E
R = 50.00'

STATION & OFFSET TABLE

Point Number	Station	Offset
406	148+00.00	80.05'
407	148+00.00	79.95'
500	149+75.81	79.94'
501	149+87.78	69.93'
502	154+33.91	69.66'
503	155+23.94	69.60'
504	156+57.78	69.52'
505	156+57.81	109.52'
506	160+00.00	109.30'
507	160+00.00	60.70'
508	157+17.22	60.52'
509	156+57.15	60.48'
510	151+43.37	60.17'
511	151+67.31	80.18'

TLE STATION & OFFSET TABLE

T152	155+17.50	99.60'
T153	156+57.80	99.52'
T154	153+00.00	69.74'
T155	153+00.00	80.00'
T156	153+81.49	116.90'

PLE STATION & OFFSET TABLE

P550	153+53.91	69.70'
P551	153+53.91	72.20'
P553	153+91.53	120.65'
P554	154+34.05	131.52'
P555	154+43.59	144.00'
P556	154+43.87	135.00'

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	(1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	● =(SET)	PROPERTY LINE	
R/W STANDARD	▲ =(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS CONTROLLED BY PARCEL ACQUISTION	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	103	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY, (ENGLISH), NAD 1983 (1991) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH.

RIGHT-OF-WAY MONUMENTS ARE ¾" X 24" REBAR AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR DRAINAGE AND SIDEWALK PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES. PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR UNIVERSITY AVENUE IS ESTABLISHED FROM PREVIOUS PROJECT N.R.H 8-A REOP., LOT 1, CSM 1818 AND SUBDIVISION PLATS OF MOHAWK PARK SUBDIVISION, SPRING HARBOR AND THE TRILLIUM, A CONDOMINIUM

EXISTING HIGHWAY RIGHT-OF-WAY FOR SPRING HARBOR DRIVE IS ESTABLISHED FROM EXISTING CENTERLINE OF ROADWAY.

COURSE TABLE			
POINT NUMBER	BEARING	DISTANCE	TO POINT NUMBER
406	S 40°07'10" E	175.81'	500
500	S 00°15'16" E	15.60'	501
501	S 40°07'10" E	446.13'	502
502	S 40°07'10" E	90.03'	503
503	S 40°07'10" E	133.84'	504
504	N 49°52'50" E	40.00'	505
505	S 40°07'10" E	342.19'	506
506	S 49°50'42" W	170.00'	507
507	N 40°07'10" W	282.78'	508
508	N 40°07'10" W	60.07'	509
509	N 40°07'10" W	513.78'	510
510	S 00°15'16" E	31.20'	511
511	N 40°07'10" W	367.31'	407
407	N 49°50'42" E	160.00'	406

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE CITY OF MADISON. ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	PLE ACRES	TLE ACRES
36	MG&E	PLE, TLE	----	----	----	0.096	0.032
37	CITY OF MADISON	TLE	----	----	----	----	0.094
93	MG&E (ELECTRIC)	TEMPORARY RELEASE OF RIGHTS					
97	ATC	TEMPORARY RELEASE OF RIGHTS					
98	MADISON METROPOLITAN SEWERAGE DISTRICT	TEMPORARY RELEASE OF RIGHTS					

APPROVED FOR CITY OF MADISON

RELOCATION ORDER APPROVED BY THE COMMON COUNCIL
DATE: 6/21/11 _____ CITY CLERK

RELOCATION ORDER APPROVED BY THE PLAN COMMISSION
DATE: 5/16/11 _____ EXECUTIVE SECRETARY

RELOCATION ORDER APPROVED BY THE BOARD OF PUBLIC WORKS
DATE: 5/18/11 _____ EXECUTIVE SECRETARY

KL Engineering
[A] Better Experience

I, THOMAS J. HANSEN, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5992-08-18-4.05 AMENDMENT NO. 2 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

Thomas J. Hansen — NOVEMBER 3, 2011
THOMAS J. HANSEN — DATE
AGENT FOR KL ENGINEERING, INC.
R.L.S. NUMBER 2033

FILE NAME : g:\madison\md2009035\tpp\amendments\amend2_sheet5992_08_18_405.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/1/2011
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :

4.05

TRANSPORTATION PROJECT PLAT NO: 5992-08-18 - 4.06

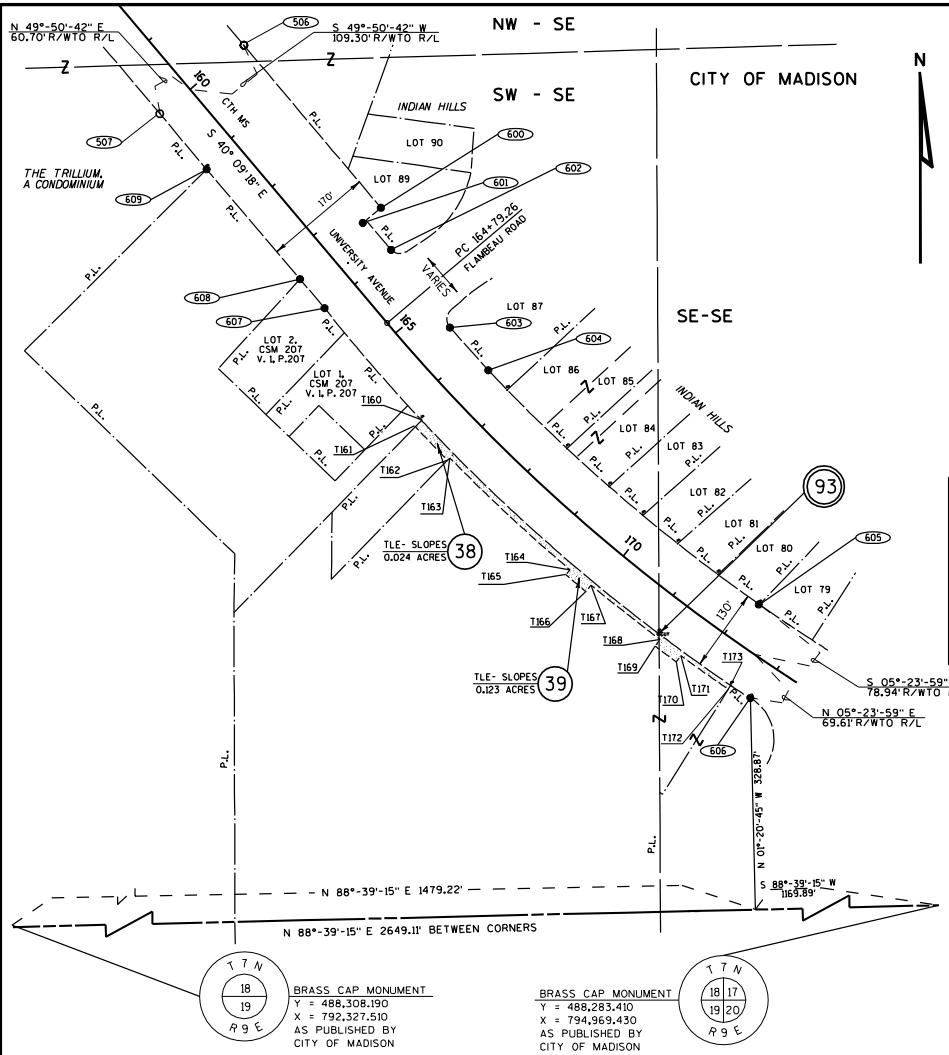
CITY OF MADISON, UNIVERSITY AVENUE
ALLEN BOULEVARD - SEGOE ROAD
CTH MS DANE COUNTY
PART OF THE SW¼- SE¼ & THE SE¼- SE¼ OF SECTION 18, T 7 N, R 9 E,
IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN.
RELOCATION ORDER UNIVERSITY AVENUE

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF MADISON DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MADISON HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MADISON, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5992-08-18-4.06
AMENDMENT NO:



BRASS CAP MONUMENT
Y = 488,308.190
X = 792,327.510
AS PUBLISHED BY
CITY OF MADISON

BRASS CAP MONUMENT
Y = 488,283.410
X = 794,969.430
AS PUBLISHED BY
CITY OF MADISON

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE CITY OF MADISON.
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
38	MORRIS A. LINK	TLE	----	----	----	0.024
39	ERDMAN REAL ESTATE HOLDINGS, LLC	TLE	----	----	----	0.122
93	MG&E (ELECTRIC)	TEMPORARY RELEASE OF RIGHTS				

COURSE TABLE			
POINT NUMBER	BEARING	DISTANCE	TO POINT NUMBER
506	S 40°07'10" E	334.81'	600
600	S 49°52'50" W	30.29'	601
601	S 40°07'07" E	61.00'	602
602	S 37°06'24" E	152.79'	603
603	S 41°58'54" E	89.92'	604
605	S 05°23'59" W	148.55'	606
607	N 40°16'37" W	59.46'	608
608	N 40°21'42" W	226.15'	609
609	N 40°07'10" W	112.58'	507
507	N 49°50'42" E	170.00'	506

P.I. = 179+00.36
Y = 482,925.385
X = 799,108.734
DELTA = 52° 45'54" (LT)
D = 02° 00'00"
T = 1,421.10'
L = 2638.44
R = 2865.00'
P.C. = 164+79.26
P.T. = 191+17.70
AH = N 87° 04'48" E

CURVE 604-605
L = 562.59'
LC = 561.64'
LCB = S 49°-09'-57" E
R = 2795.00'

CURVE 606-607
L = 909.80'
LC = 906.14'
LCB = N 47°-27'-43" W
R = 2925.00'

STATION & OFFSET TABLE

Point Number	Station	Offset
506	160+00.00	109.30'
507	160+00.00	60.70'
600	163+34.81	109.10'
601	163+34.78	78.81'
602	163+95.79	78.77'
603	165+50.09	69.79'
604	166+42.24	68.99'
605	172+18.70	68.86'
606	172+90.68	61.15'
607	163+98.19	59.82'
608	163+38.73	59.95'
609	161+12.58	60.77'

TLE STATION & OFFSET TABLE

T160	166+27.56	61.01'
T161	166+28.18	74.95'
T162	167+00.70	74.97'
T163	167+00.79	69.97'
T164	169+50.43	70.05'
T165	169+50.43	80.06'
T166	169+90.48	80.06'
T167	169+90.49	67.06'
T168	171+25.21	67.11'
T169	171+25.20	80.11'
T170	171+65.26	80.12'
T171	171+65.26	68.12'
T172	172+54.31	68.14'
T173	172+54.04	61.15'

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT VOLUME	TLE V.
DOCUMENT	DOC.		
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

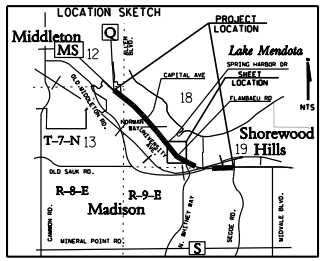
FOUND IRON PIPE/PIN	● (IF UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	● (SET)	PROPERTY LINE	
R/W STANDARD	▲ (SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT	◉	CORPORATE LIMITS	
SECTION CORNER SYMBOL	(SEC)	ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS CONTROLLED BY PARCEL ACQUISITION	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWBP	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

SCALE, FEET
0 100 200

LOCATION SKETCH



APPROVED FOR CITY OF MADISON

RELOCATION ORDER APPROVED BY THE COMMON COUNCIL
DATE: 6/21/11 CITY CLERK

RELOCATION ORDER APPROVED BY THE PLAN COMMISSION
DATE: 5/16/11 EXECUTIVE SECRETARY

RELOCATION ORDER APPROVED BY THE BOARD OF PUBLIC WORKS
DATE: 5/18/11 EXECUTIVE SECRETARY

KL Engineering
[A] Better Experience

I, THOMAS J. HANSEN, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5992-08-18-4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

JULY 1, 2011
THOMAS J. HANSEN DATE
AGENT FOR KL ENGINEERING, INC.
R.L.S. NUMBER 2033

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

493

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY, (ENGLISH), NAD 1983 (1991) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH. RIGHT-OF-WAY MONUMENTS ARE ¾" X 24" REBAR AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR UNIVERSITY AVENUE IS ESTABLISHED FROM PREVIOUS PROJECT NRH 8-A REOP, CSM 207, SUBIVISION PLAT OF INDIAN HILLS & PLATS OF SURVEY BY BIRRENKOTT, DATED 5-29-09, BY FRICK, DATED 3-22-05 AND LAWRENCE, DATED 11-18-05.

EXISTING HIGHWAY RIGHT-OF-WAY FOR TOMAHAWK IS ESTABLISHED FROM SUBIVISION PLAT OF INDIAN HILLS.

TRANSPORTATION PROJECT PLAT NO: 5992-08-18 - 4.07

CITY OF MADISON, UNIVERSITY AVENUE
ALLEN BOULEVARD - SEGOE ROAD
CTH MS DANE COUNTY

PART OF LOT 72, INDIAN HILLS & A PART OF THE SE¼- SE¼ OF SECTION 18, T 7 N, R 9 E, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN.

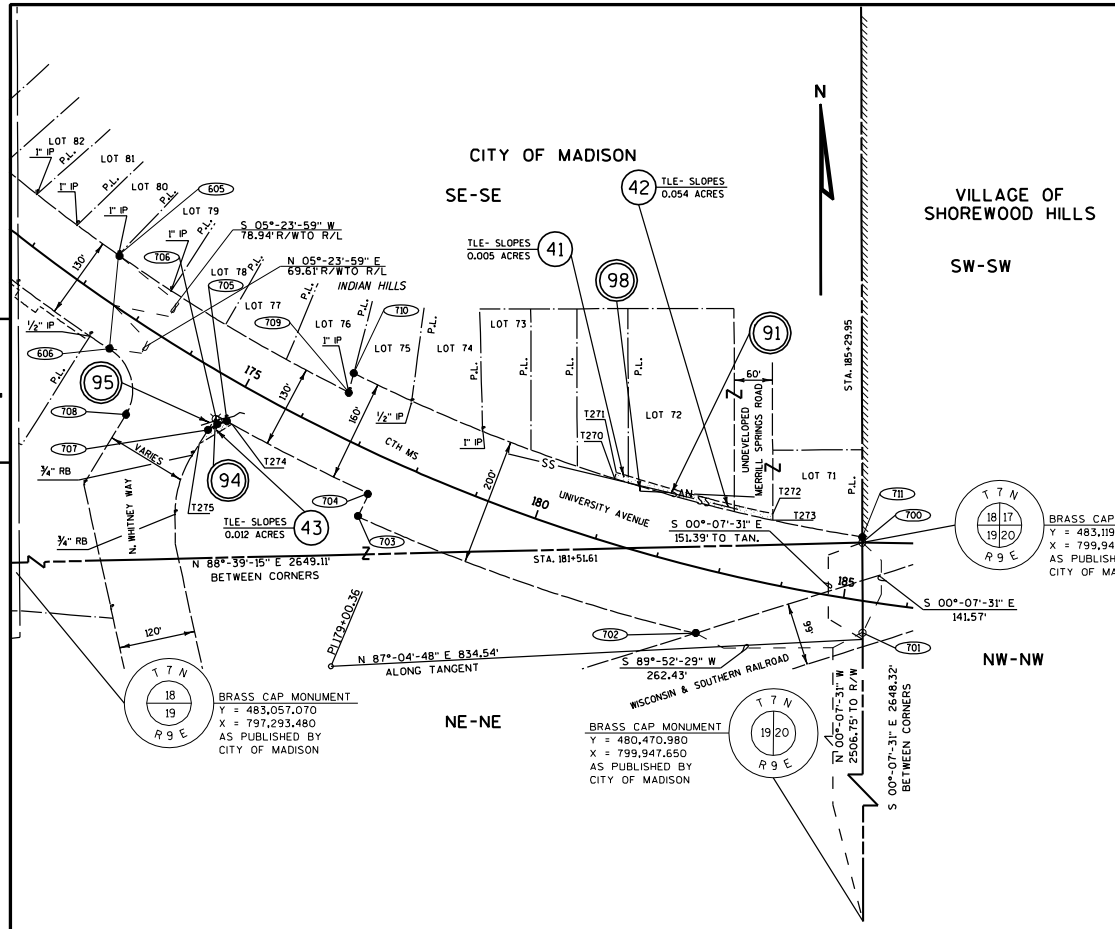
RELOCATION ORDER UNIVERSITY AVENUE

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF MADISON DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MADISON HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MADISON, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5992-08-18-4.07
AMENDMENT NO:



STATION & OFFSET TABLE

Point Number	Station	Offset
605	172+18.70	68.86'
606	172+90.68	61.15'
700	185+15.28	90.10'
701	185+37.65	49.72'
702	182+86.85	101.25'
703	177+45.41	101.21'
704	177+46.58	61.21'
705	175+01.78	61.18'
706	174+90.99	72.13'
707	174+83.23	87.40'
708	173+64.61	133.36'
709	176+49.44	68.80'
710	176+42.93	98.80'
711	185+13.82	98.75'

CURVE 605-709
L = 420.40'
LC = 420.00'
LCB = S 59°-14'-28" E
R = 2795.00'

CURVE 710-711
L = 840.87'
LC = 837.63'
LCB = S 72°-07'-55" E
R = 2765.00'

CURVE 702-703
L = 560.57'
LC = 559.74'
LCB = N 70°-53'-12" W
R = 2965.00'

CURVE 704-705
L = 250.02'
LC = 249.95'
LCB = N 63°-02'-42" W
R = 2925.00'

CURVE 708-606
L = 116.52'
LC = 105.15'
LCB = N 13°-45'-24" W
R = 75.00'

TLE STATION & OFFSET TABLE

T270	181+00.00	98.76'
T271	181+00.00	108.76'
T272	183+63.64	108.75'
T273	183+65.89	98.75'
T274	175+10.97	61.19'
T275	174+82.23	112.83'

P.I. = 179+00.36
Y = 482,925.385
X = 799,108.734
DELTA = 52° 45' 54" (LT)
D = 02° 00' 00"
T = 1,421.10'
L = 2,638.44
R = 2,865.00'
P.C. = 164+79.26
P.T. = 191+17.70
AH = N 87° 04' 48" E
BK = N 40° 09' 18" W

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS (100')		TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (IF UNLESS NOTED)
R/W MONUMENT ● =(SET)
R/W STANDARD ▲ =(SET)
SIGN ISIGN
SECTION CORNER MONUMENT
SECTION CORNER SYMBOL
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT
PARCEL NUMBER
UTILITY PARCEL NUMBER
SIGN NUMBER (OFF PREMISE)
BUILDING

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)
ACCESS CONTROLLED BY PARCEL ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER — W —
GAS — G —
TELEPHONE — T —
OVERHEAD TRANSMISSION LINES — OH —
ELECTRIC — E —
CABLE TELEVISION — TV —
FIBER OPTIC — FO —
SANITARY SEWER — SAN —
STORM SEWER — SS —

	NON-COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

SCALE, FEET
0 100 200

COURSE TABLE

POINT NUMBER	BEARING	DISTANCE	TO POINT NUMBER
700	S 00°07'31" E	141.57'	701
701	S 89°52'29" W	262.43'	702
703	N 26°13'26" E	40.02'	704
705	S 74°47'08" W	15.55'	706
706	S 57°14'29" W	17.23'	707
707	N 79°58'03" W	131.12'	708
606	N 05°23'59" E	148.55'	605
709	N 14°36'19" E	30.66'	710
711	S 00°07'31" E	8.77'	700

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY, (ENGLISH), NAD 1983 (1991) ADJUSTMENT, ALL DISTANCES ARE GROUND LENGTH. RIGHT-OF-WAY MONUMENTS ARE ¾" X 24" REBAR AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

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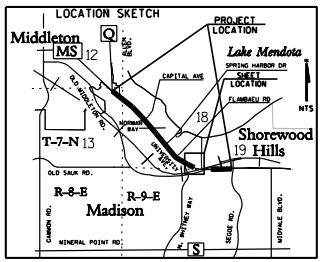
A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR UNIVERSITY AVENUE IS ESTABLISHED FROM PREVIOUS PROJECT NRH 8-A REOP, SUBDIVISION PLAT OF INDIAN HILLS AND PLAT OF SURVEYS BY NOTBOHM, DATED 10-25-01 AND BY WILLIAMSON, DATED 5-14-07

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE CITY OF MADISON. ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
41	KENNETH KRUSE	TLE	----	----	----	0.005
42	CITY OF MADISON	TLE	----	----	----	0.054
43	UNIVERSITY PLACE ASSOCIATES, LLC	FEE,TLE	0.004	----	0.004	0.012
91	CITY OF MADISON - STORM SEWER	TEMPORARY RELEASE OF RIGHTS				
94	CITY OF MADISON - WATER	RELEASE OF RIGHTS				
95	AT&T - WISCONSIN	RELEASE OF RIGHTS				
98	MADISON METROPOLITAN SEWAGE DISTRICT	TEMPORARY RELEASE OF RIGHTS				



APPROVED FOR CITY OF MADISON

RELOCATION ORDER APPROVED BY THE COMMON COUNCIL
DATE: 6/21/11 CITY CLERK

RELOCATION ORDER APPROVED BY THE PLAN COMMISSION
DATE: 5/16/11 EXECUTIVE SECRETARY

RELOCATION ORDER APPROVED BY THE BOARD OF PUBLIC WORKS
DATE: 5/18/11 EXECUTIVE SECRETARY

KL Engineering
[A] Better Experience

I, THOMAS J. HANSEN, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5992-08-18-4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

JULY 1, 2011
THOMAS J. HANSEN — DATE
AGENT FOR KL ENGINEERING, INC.
R.L.S. NUMBER 2033

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

494

FILE NAME : g:\madison\md2009035\tpp\sheet5992_08_18_407.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/1/2011
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :

4.07

TRANSPORTATION PROJECT PLAT NO: 5992-08-18 - 4.09

CITY OF MADISON, UNIVERSITY AVENUE
ALLEN BOULEVARD - SEGOE ROAD
CTH MS DANE COUNTY

PART OF THE NW¼- NW¼ & THE NE¼- NW¼ OF SECTION 20, T 7 N, R 9 E, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN.

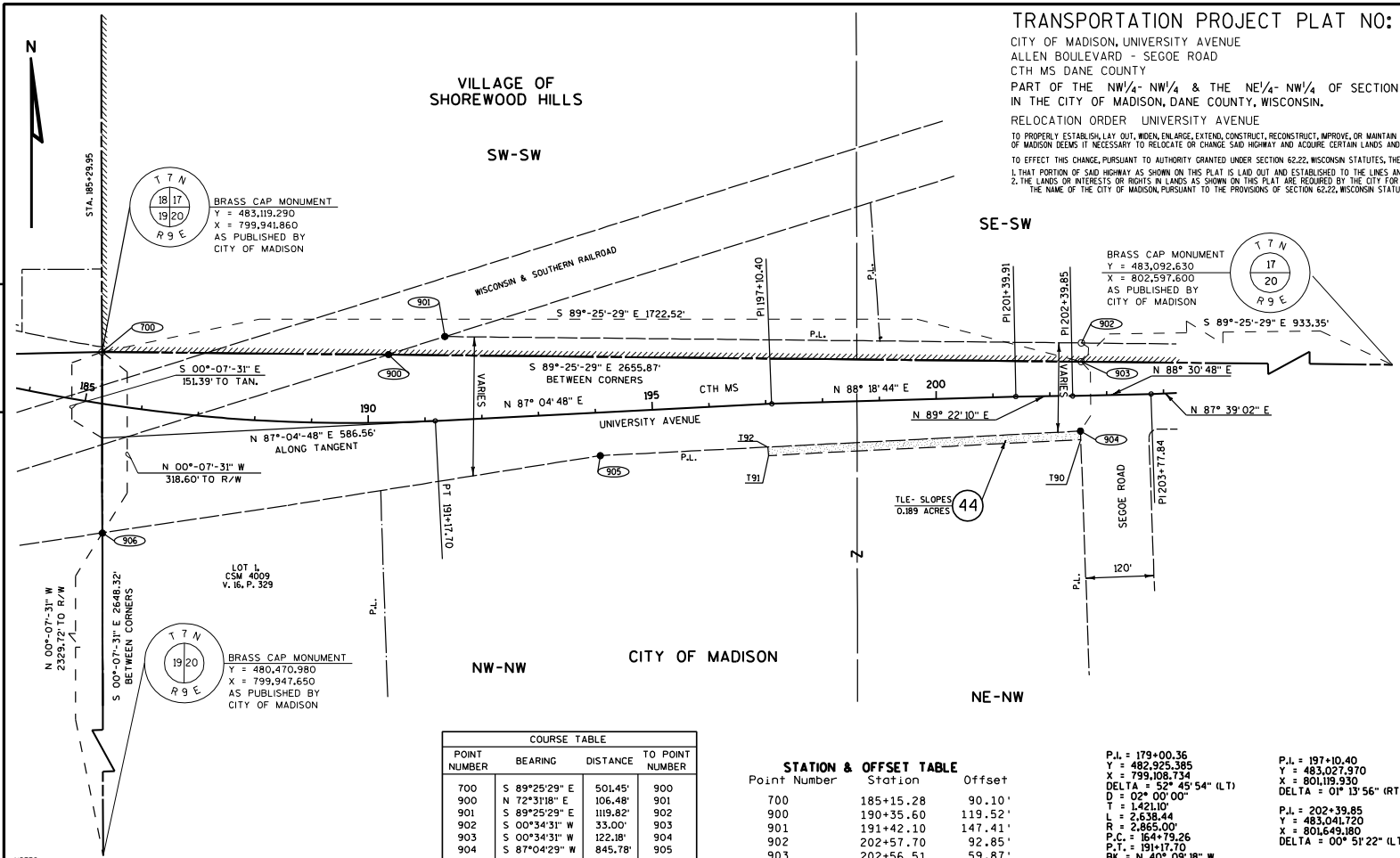
RELOCATION ORDER UNIVERSITY AVENUE

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF MADISON DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MADISON HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MADISON, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5992-08-18-4.09
AMENDMENT NO:



CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	IF (IF UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	● M(SET)	PROPERTY LINE	
R/W STANDARD	▲ M(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS CONTROLLED BY PARCEL ACQUISITION	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	03	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	POWER POLE	
GAS	G	TELEPHONE POLE	
TELEPHONE	T	TELEPHONE PEDESTAL	
OVERHEAD TRANSMISSION LINES	OH	ELECTRIC TOWER	
ELECTRIC	E		NON COMPENSABLE / COMPENSABLE
CABLE TELEVISION	TV		
FIBER OPTIC	FO		
SANITARY SEWER	SAN		
STORM SEWER	SS		

SCALE, FEET
0 100 200

COURSE TABLE			
POINT NUMBER	BEARING	DISTANCE	TO POINT NUMBER
700	S 89°25'29" E	501.45'	900
900	N 72°31'18" E	106.48'	901
901	S 89°25'29" E	1119.82'	902
902	S 00°34'31" W	33.00'	903
903	S 00°34'31" W	122.18'	904
904	S 87°04'29" W	845.78'	905
905	S 81°10'30" W	886.32'	906
906	N 00°07'31" W	318.60'	700

STATION & OFFSET TABLE

Point Number	Station	Offset
700	185+15.28	90.10'
900	190+35.60	119.52'
901	191+42.10	147.41'
902	202+57.70	92.85'
903	202+56.51	59.87'
904	202+52.12	62.23'
905	194+04.60	75.83'
906	185+62.78	224.79'

P.I. = 179+00.36
Y = 482,925.385
X = 799,108.734
DELTA = 52° 45' 54" (LT)
D = 02° 00' 00"
T = 1,421.10'
L = 2,638.44
R = 2,865.00'
P.C. = 164+79.26
P.T. = 191+17.70
BK = N 40° 09' 18" W

P.I. = 197+10.40
Y = 483,027.970
X = 801,119.930
DELTA = 01° 13' 56" (RT)

P.I. = 202+39.85
Y = 483,041.720
X = 801,649.180
DELTA = 00° 51' 22" (LT)

P.I. = 201+39.91
Y = 483,040.620
X = 801,549.250
DELTA = 01° 04' 26" (RT)

P.I. = 203+77.84
Y = 483,045.300
X = 801,787.130
DELTA = 00° 51' 46" (LT)

TLE STATION & OFFSET TABLE

T90	202+52.27	77.23'
T91	197+00.00	90.80'
T92	197+00.00	75.80'

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE CITY OF MADISON. ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
44	STATE OF WISCONSIN BUILDING COMMISSION	TLE	----	----	----	0.189

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY, (ENGLISH), NAD 1983 (1991) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH. RIGHT-OF-WAY MONUMENTS ARE ¾" X 24" REBAR AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

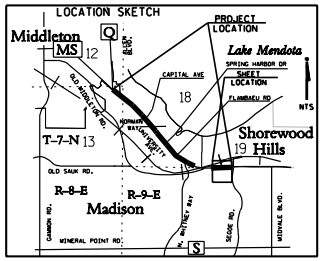
DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR UNIVERSITY AVENUE IS ESTABLISHED FROM PREVIOUS PROJECT NRH 8-A REOP..

LOCATION SKETCH



APPROVED FOR CITY OF MADISON

RELOCATION ORDER APPROVED BY THE COMMON COUNCIL
DATE: 6/21/11 _____ CITY CLERK

RELOCATION ORDER APPROVED BY THE PLAN COMMISSION
DATE: 5/16/11 _____ EXECUTIVE SECRETARY

RELOCATION ORDER APPROVED BY THE BOARD OF PUBLIC WORKS
DATE: 5/182/11 _____ EXECUTIVE SECRETARY

KL Engineering
[A] Better Experience

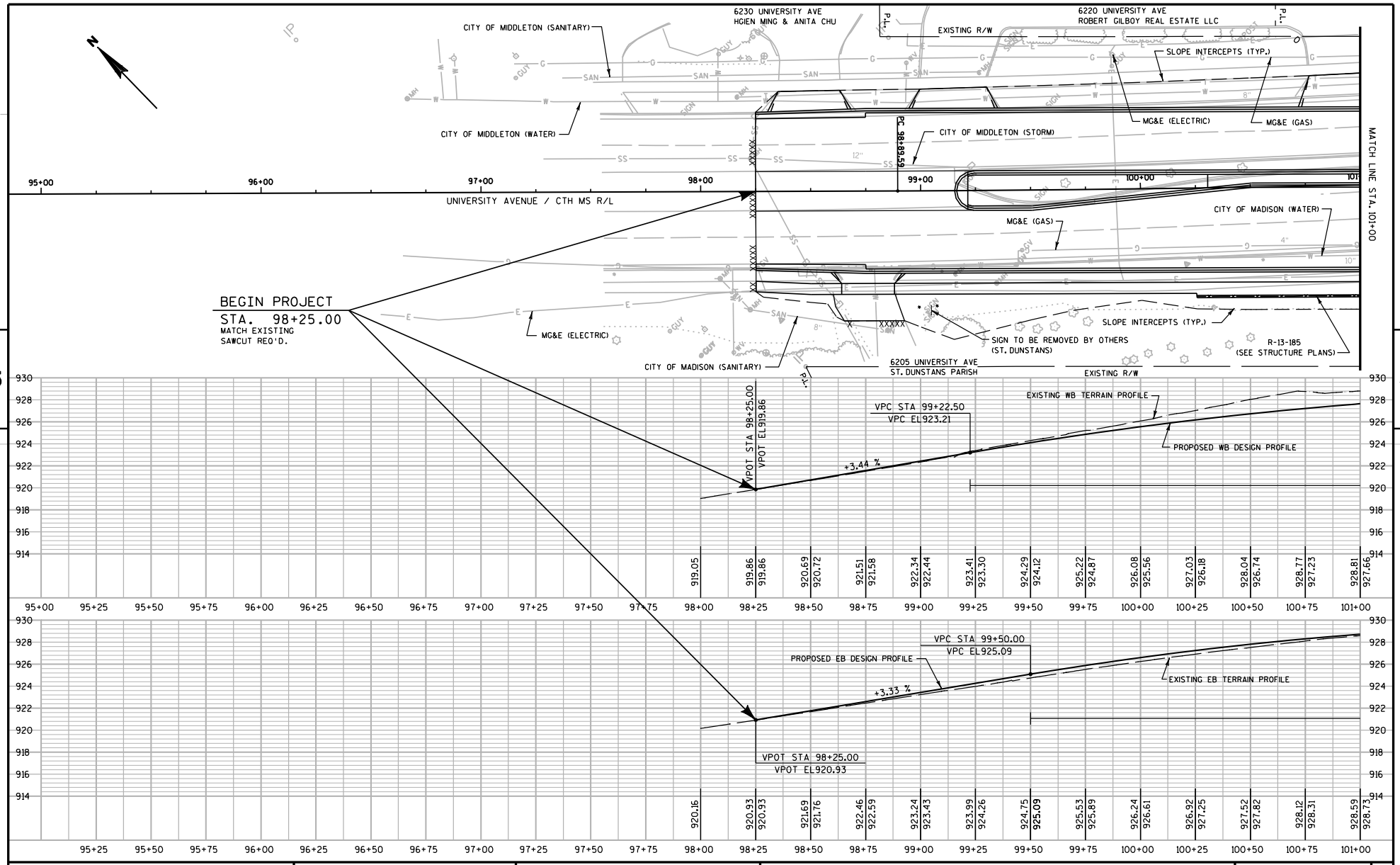
I, THOMAS J. HANSEN, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5992-08-18-4.09 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

JULY 1, 2011
THOMAS J. HANSEN — DATE
AGENT FOR KL ENGINEERING, INC.
R.L.S. NUMBER 2033

WISCONSIN — THOMAS J. HANSEN S-2033 MADISON, WISCONSIN — LAND SURVEYOR

495

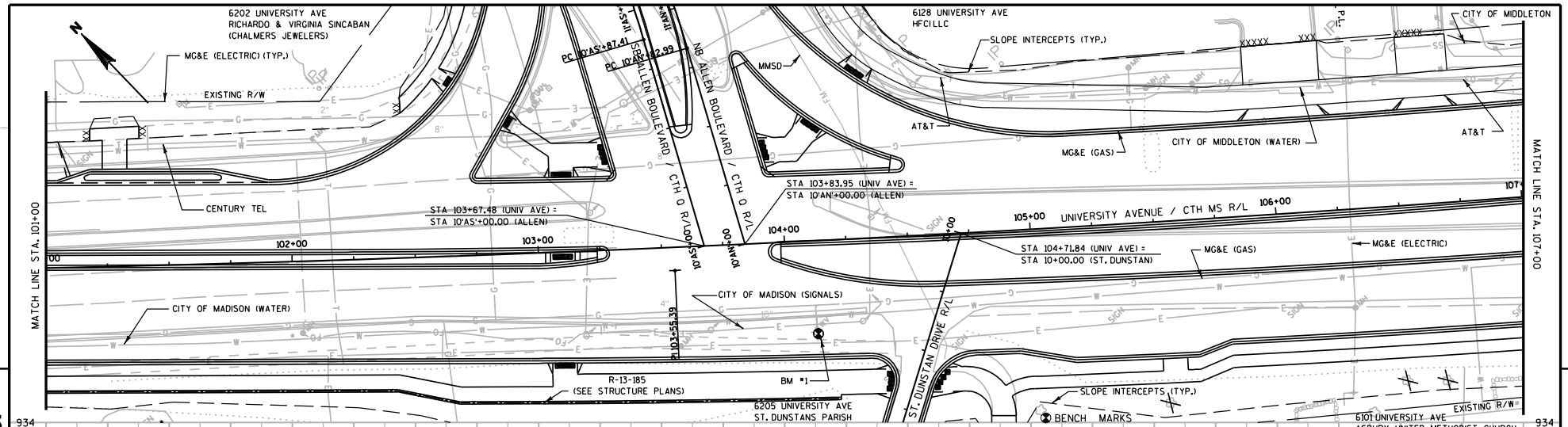
FILE NAME : g:\madison\md2009035\tpp\sheet5992_08_18_409.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/1/2011
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :



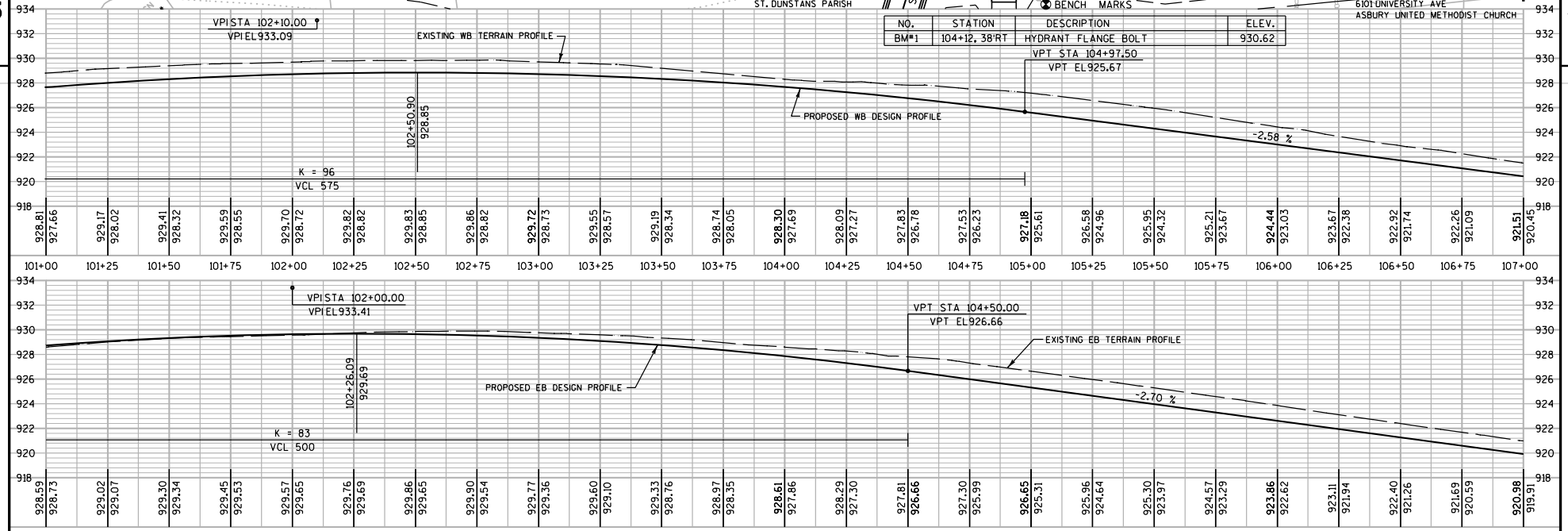
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\050101_pp.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

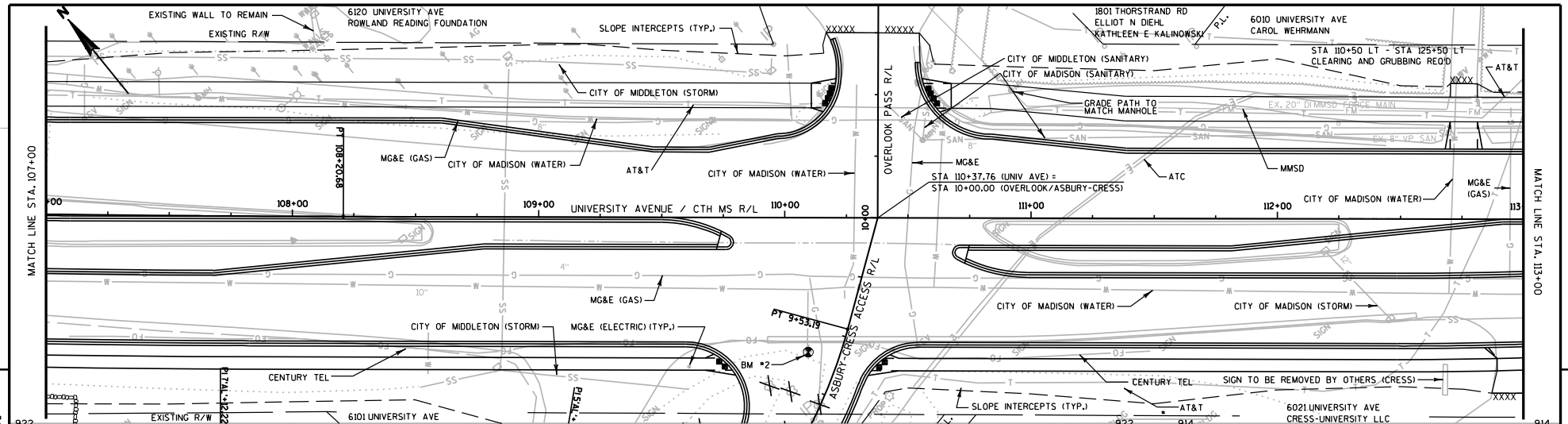
WISDOT/CADDS SHEET 46



NO.	STATION	DESCRIPTION	ELEV.
BM#1	104+12. 38'RT	HYDRANT FLANGE BOLT	930.62



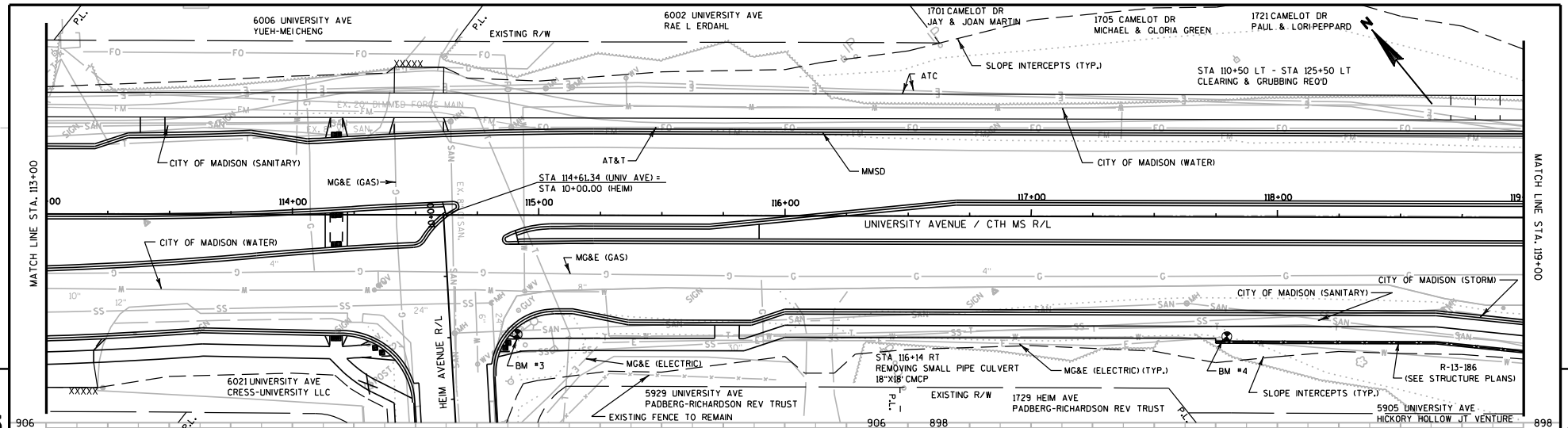
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 497 E



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 498 E

FILE NAME : g:\madison\md2009035\dgn\050103_pp.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46



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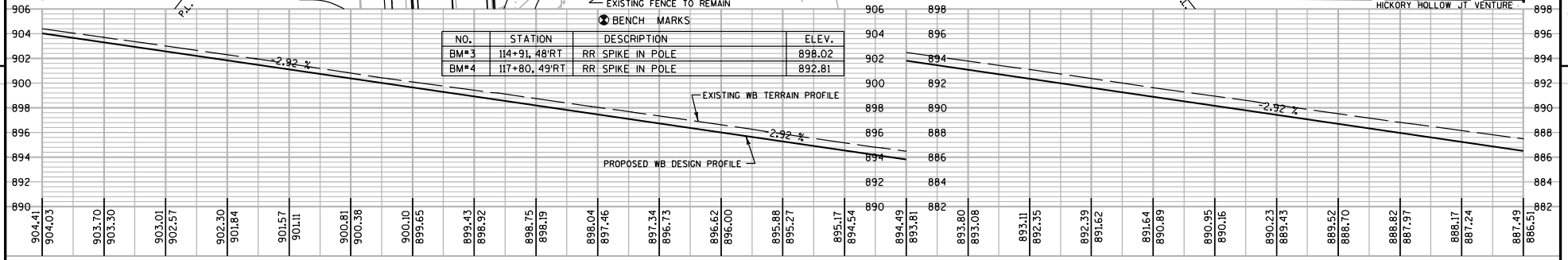
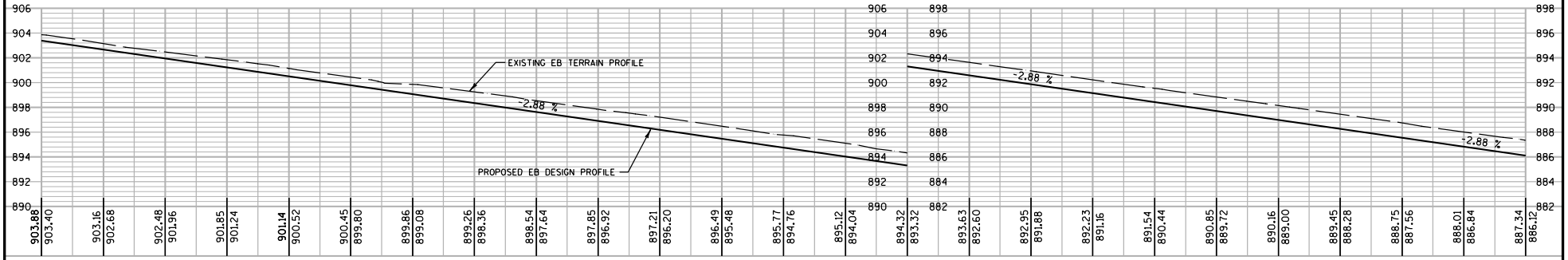
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM#3	114+91, 48'RT	RR SPIKE IN POLE	898.02
BM#4	117+80, 49'RT	RR SPIKE IN POLE	892.81

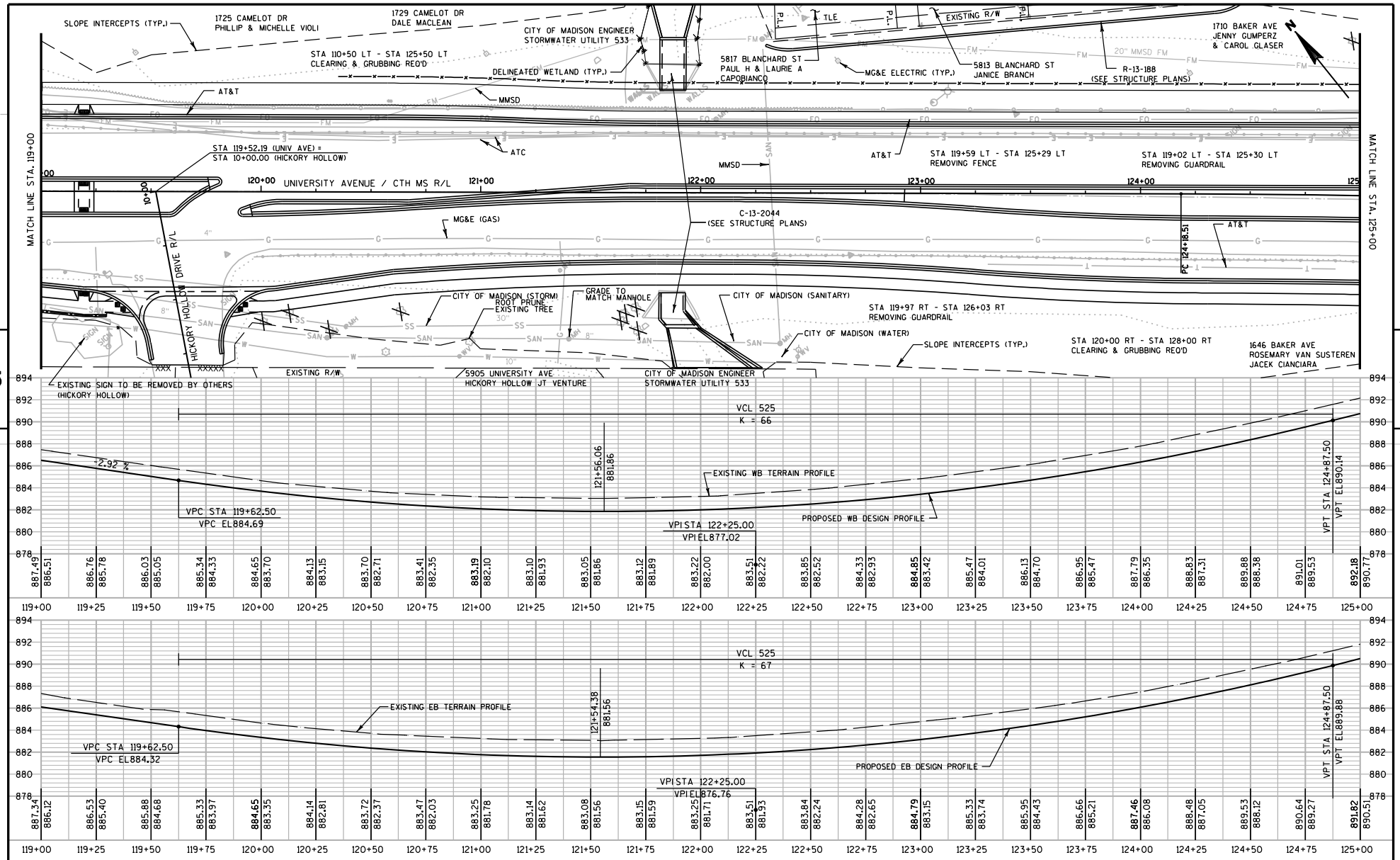




PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\050104_pp.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

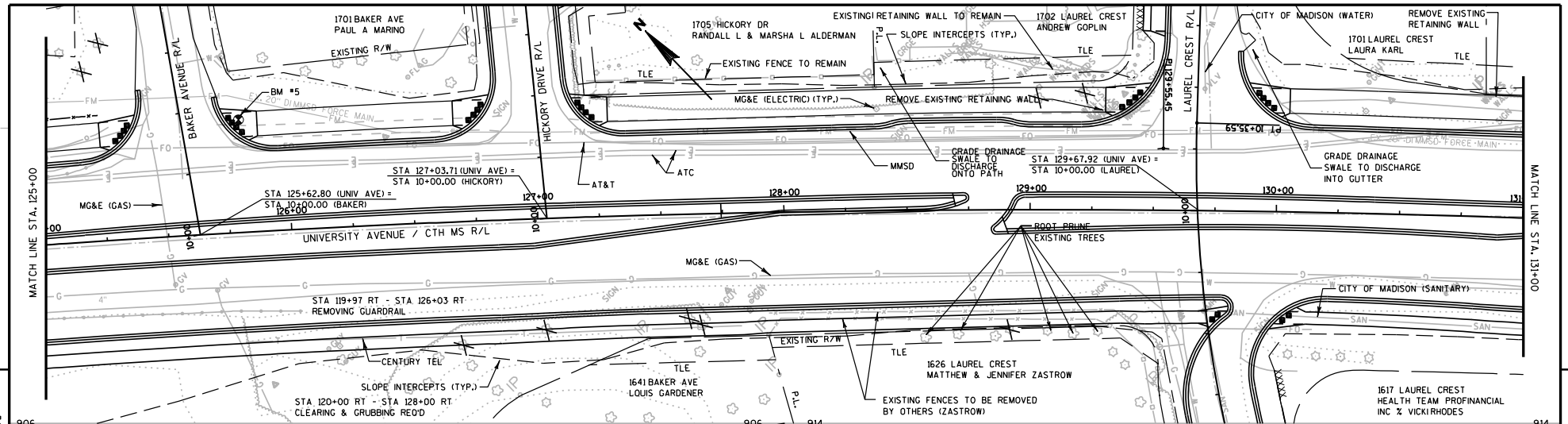
WISDOT/CADDS SHEET 46

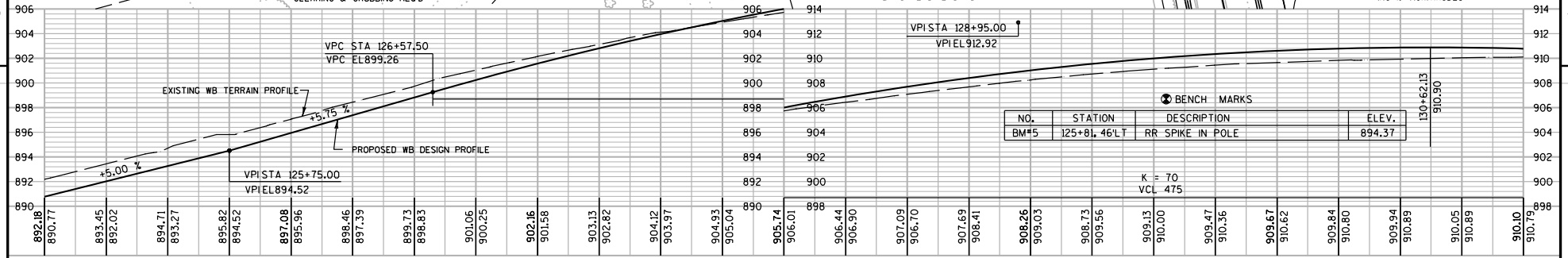


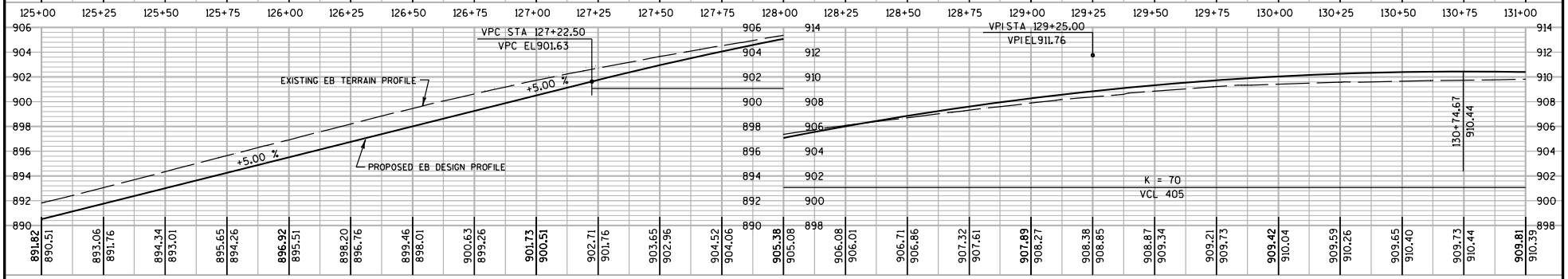
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 500	E

FILE NAME : g:\madison\md2009035\dgn\050105_pp.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46



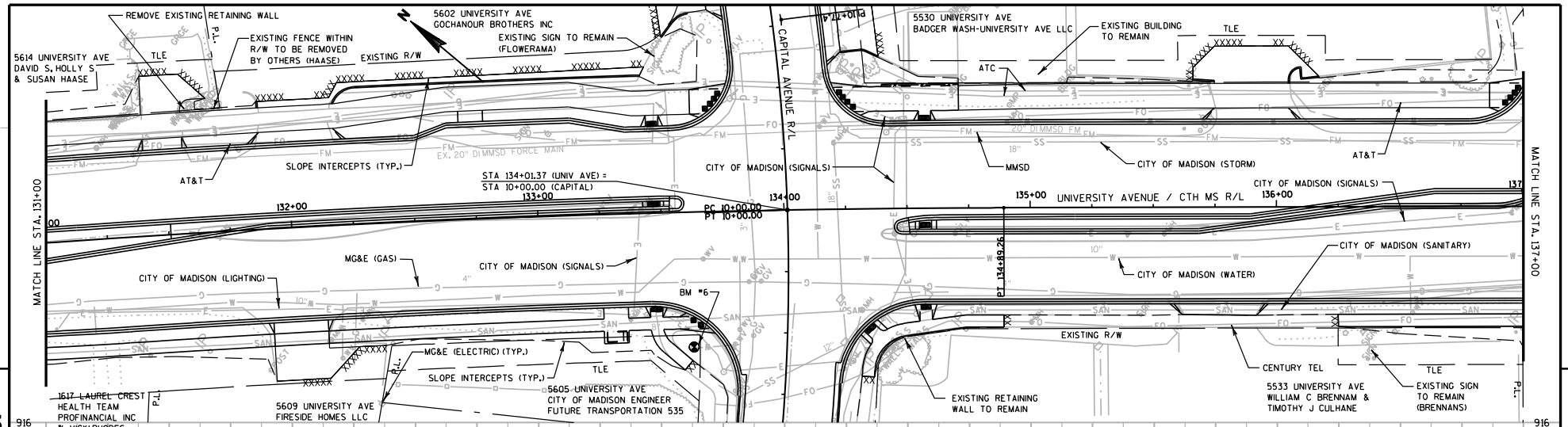




PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 501	E

FILE NAME : g:\madison\md2009035\dgn\050106_pp.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46



5

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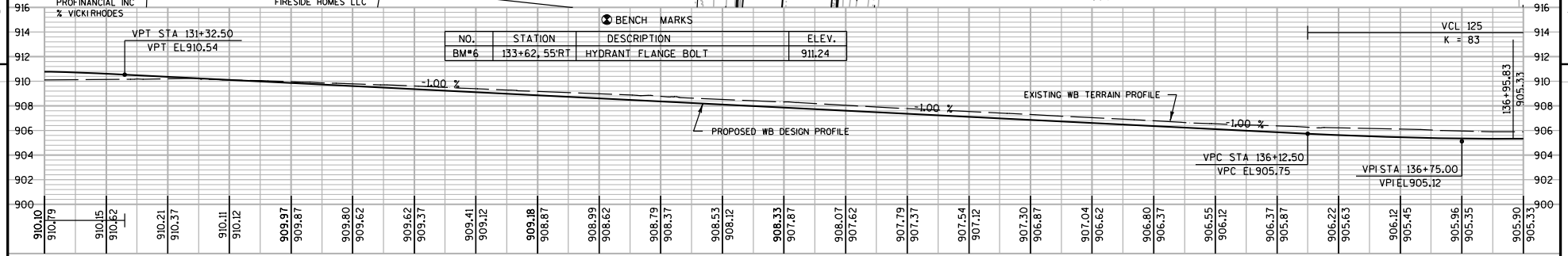
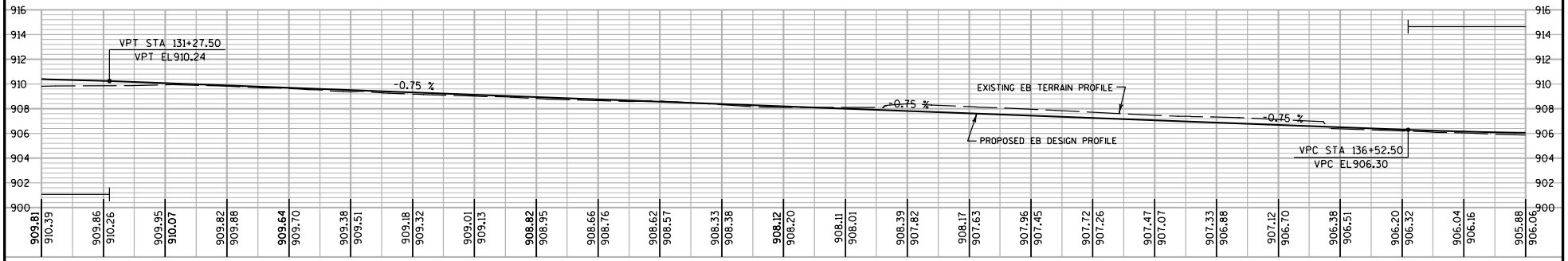
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM"6	133+62, 55'RT	HYDRANT FLANGE BOLT	911.24

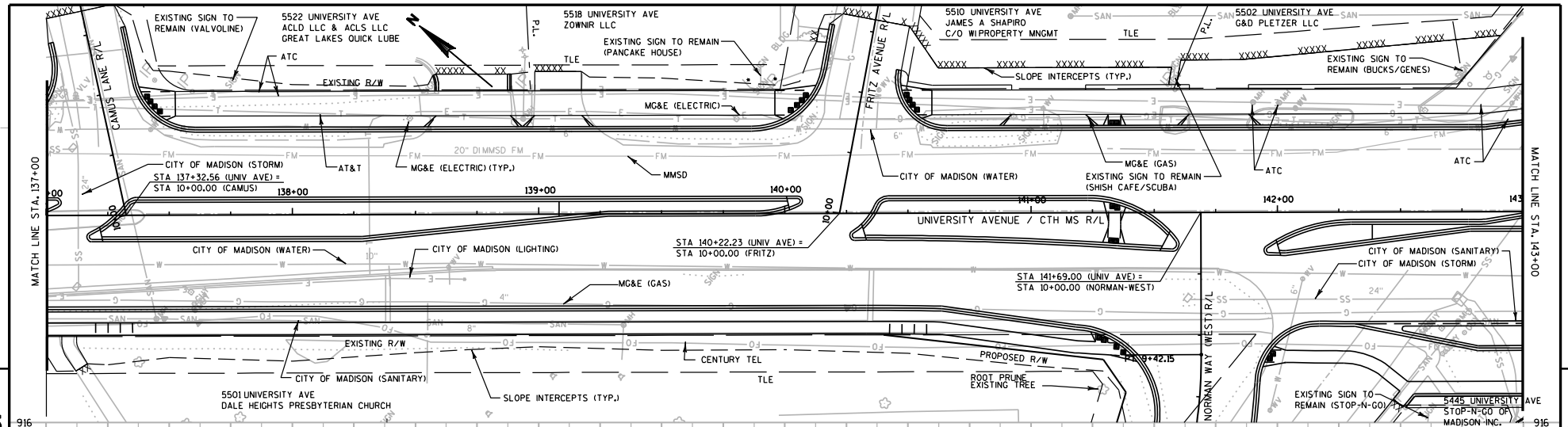


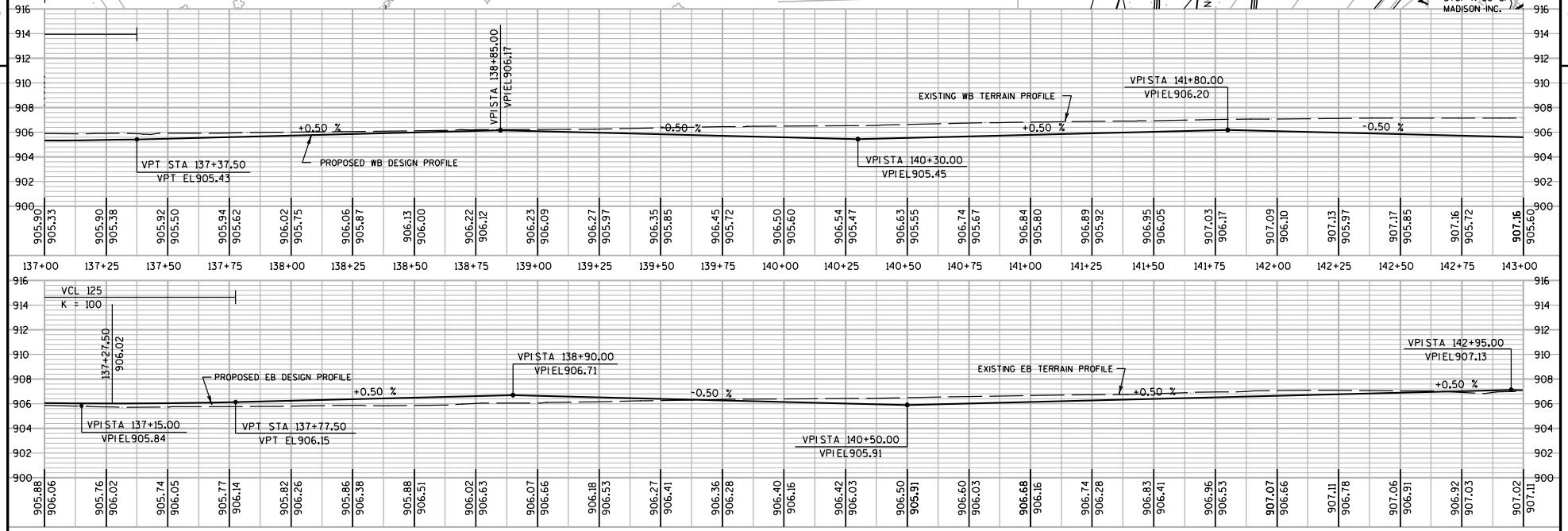


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 502	E

FILE NAME : g:\madison\md2009035\dgn\050107_pp.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46



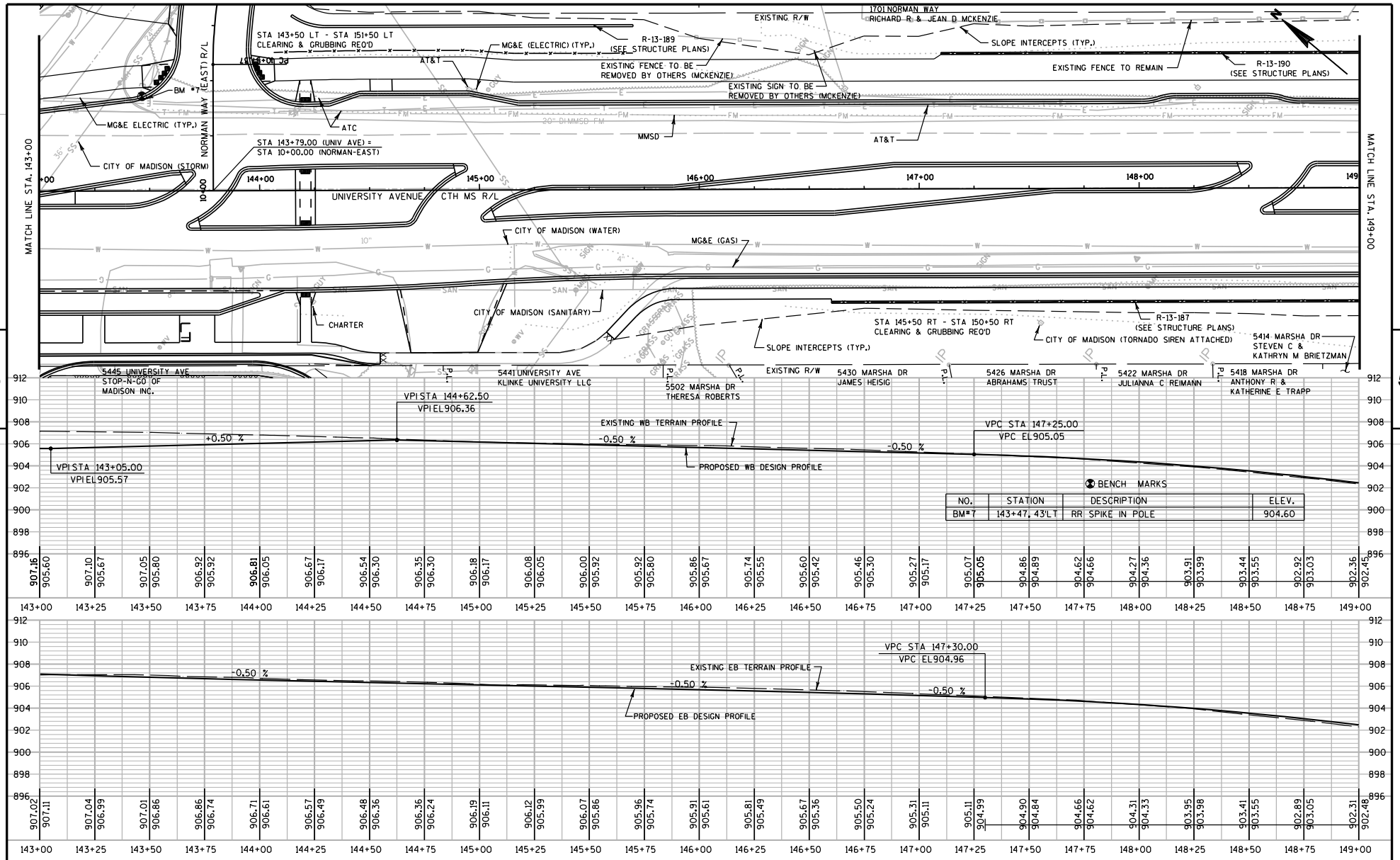


5 5

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 503 E

FILE NAME : g:\madison\md2009035\dgn\050108_pp.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

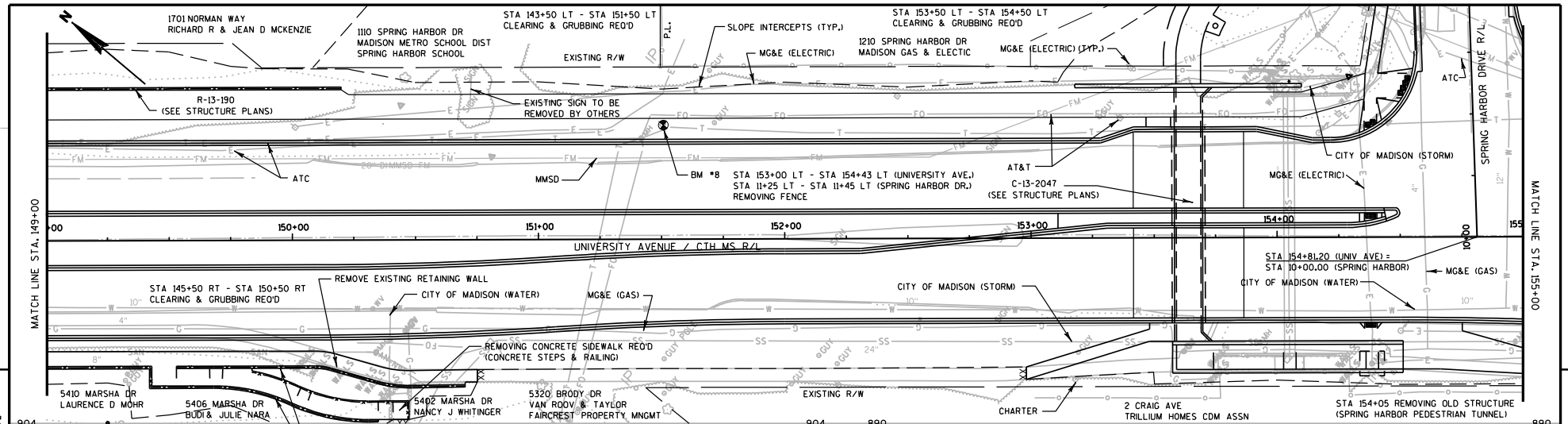
WISDOT/CADDS SHEET 46

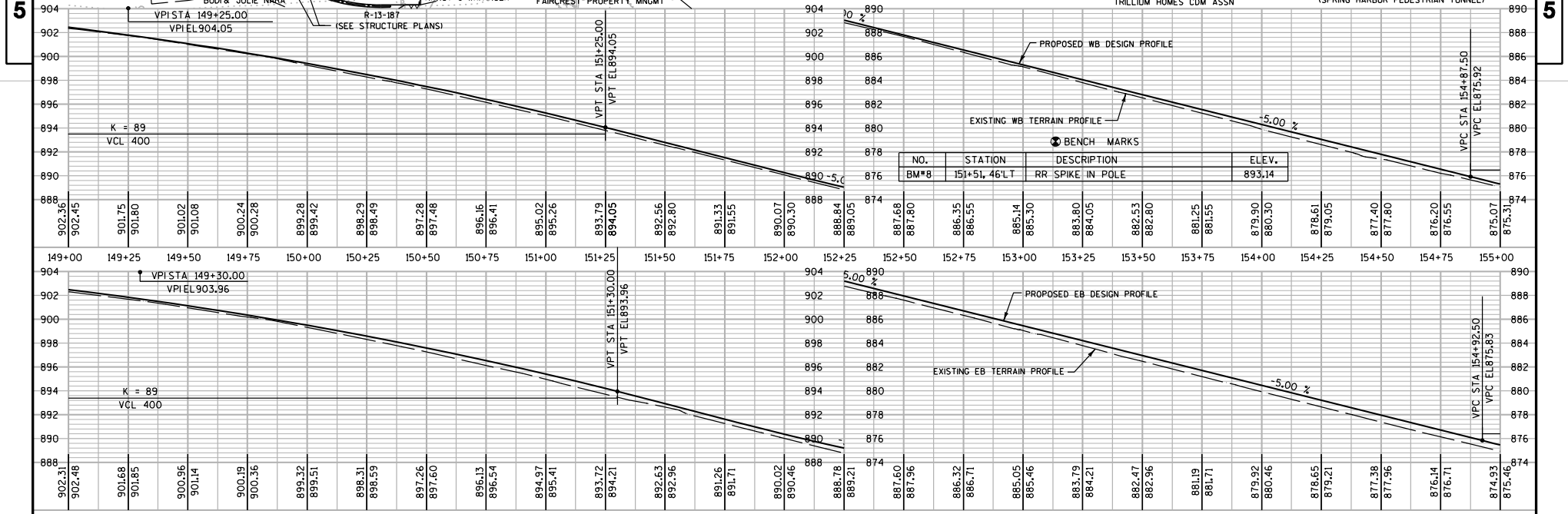


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 504	E

FILE NAME : G:\Madison\MD2009035\DGN\050109_pp.dgn PLOT DATE : 3/9/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46

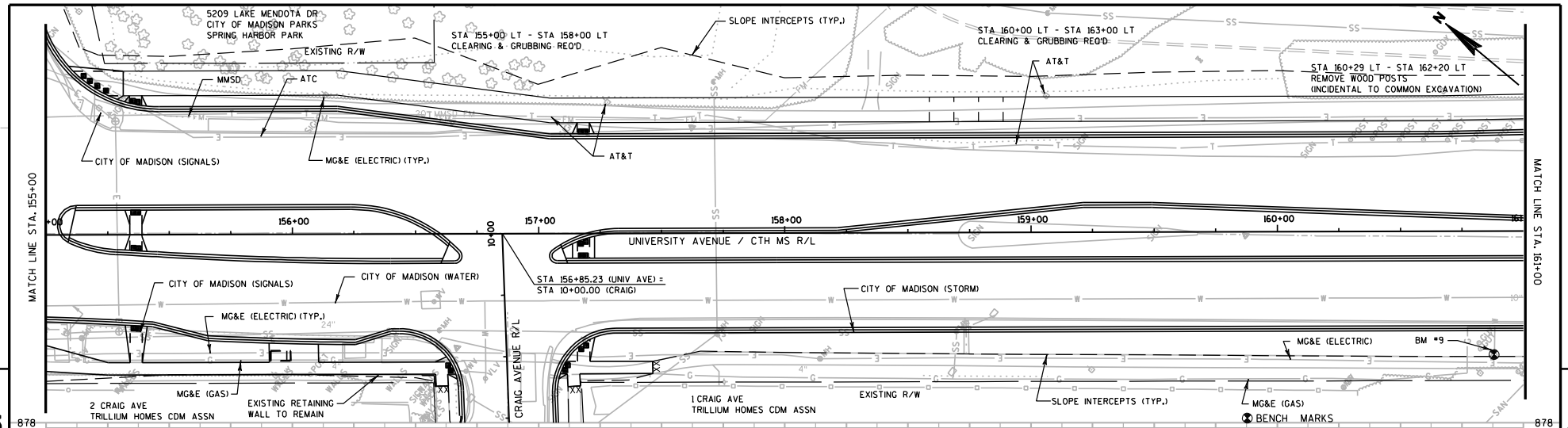


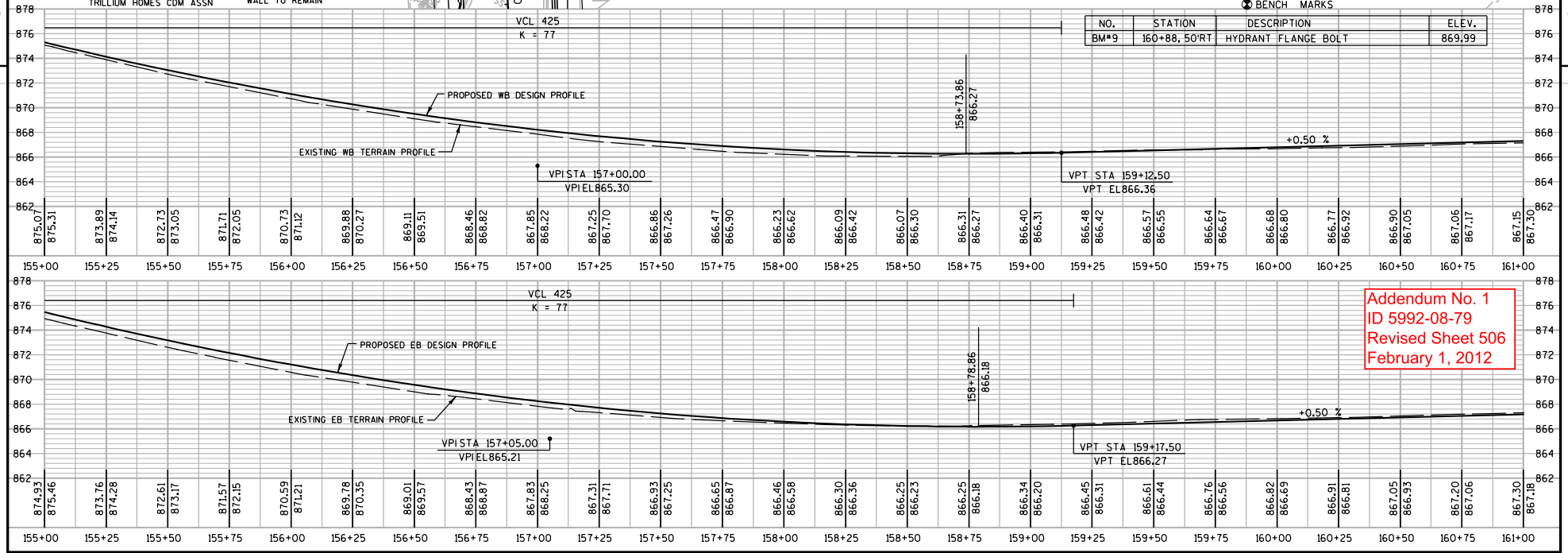


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 505	E

FILE NAME : G:\Madison\MD2009035\DGN\050110_pp.dgn PLOT DATE : 3/9/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46





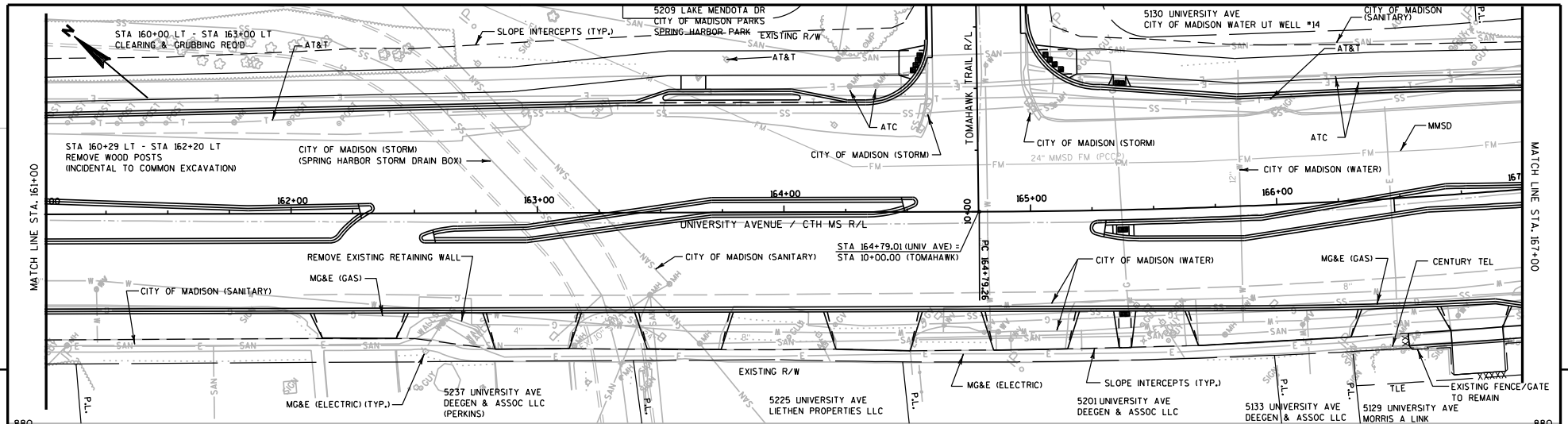
NO.	STATION	DESCRIPTION	ELEV.
BM*9	160+88, 50'RT	HYDRANT FLANGE BOLT	869.99

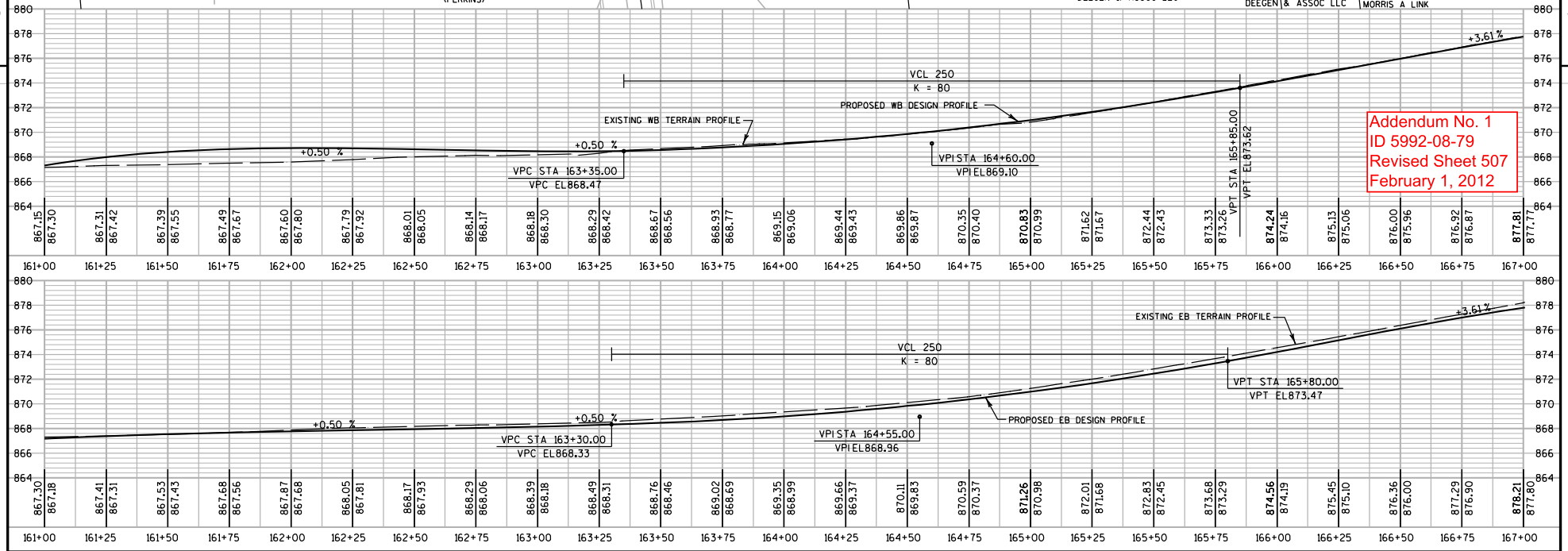
Addendum No. 1
ID 5992-08-79
Revised Sheet 506
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 506

FILE NAME : G:\Madison\MD2009035\DGN\050111_pp.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46



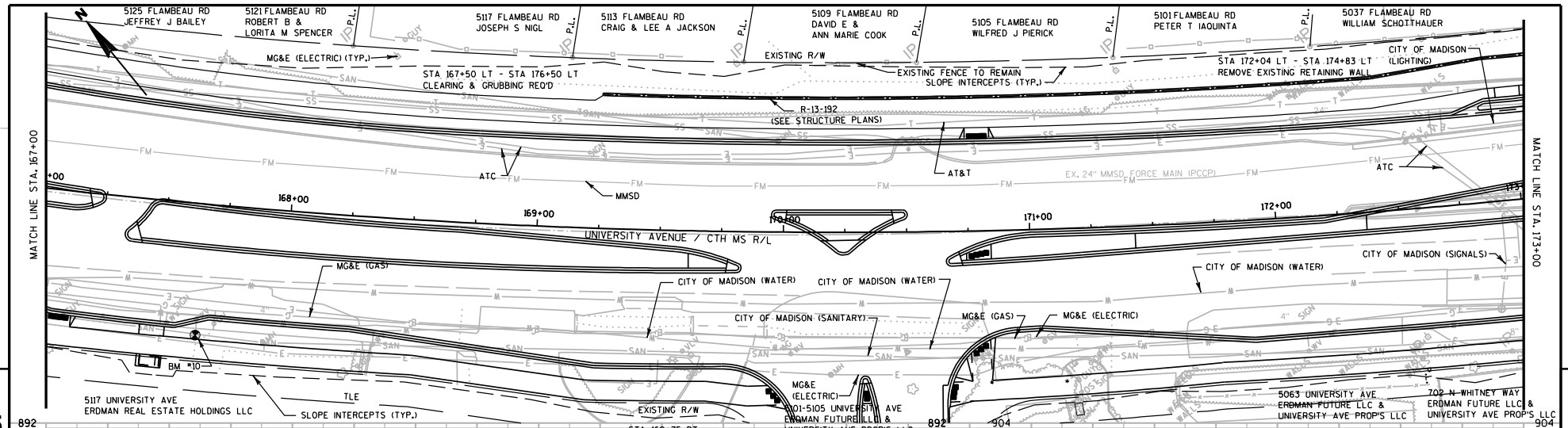


Addendum No. 1
ID 5992-08-79
Revised Sheet 507
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 507	E

FILE NAME : G:\Madison\MD2009035\DGN\050112_pp.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46



5

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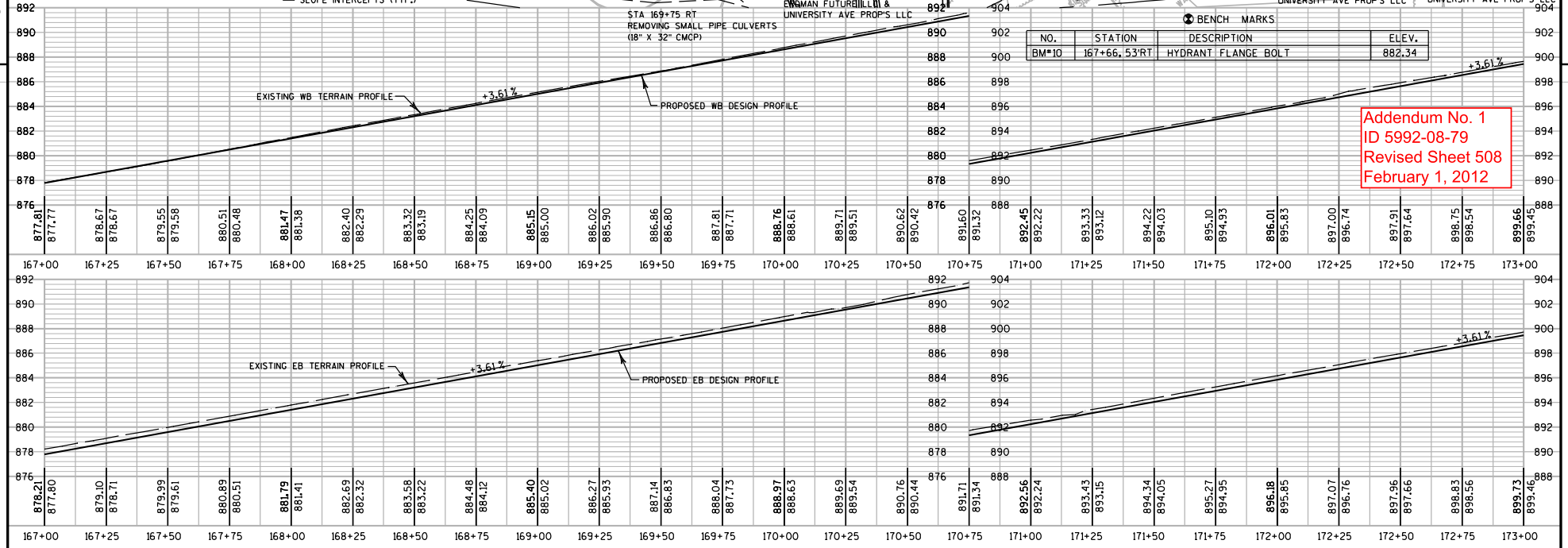
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM#10	167+66, 53'RT	HYDRANT FLANGE BOLT	882.34

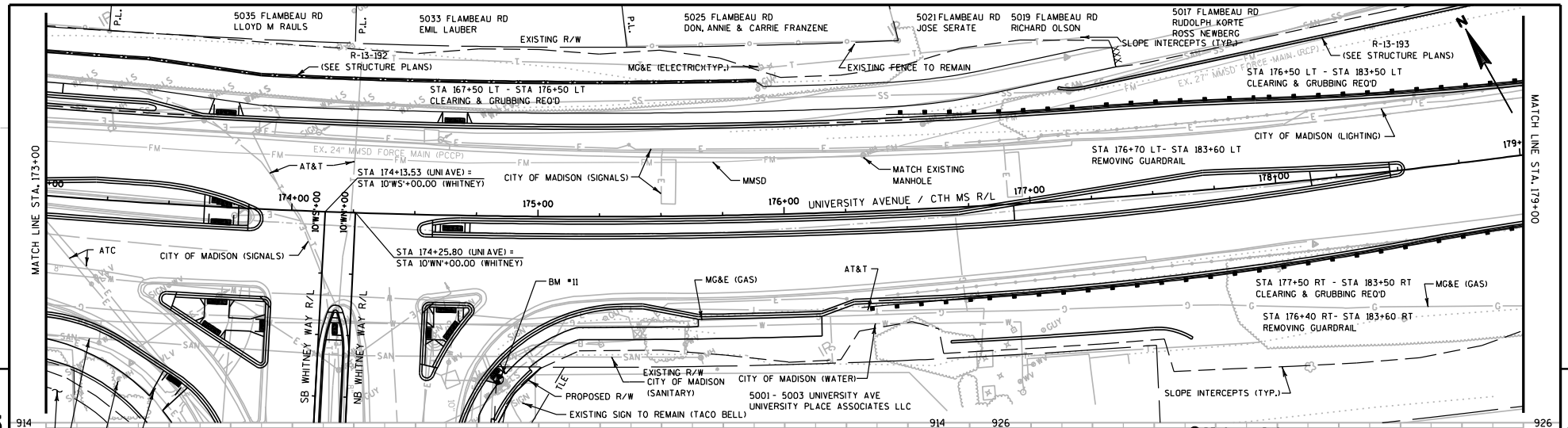


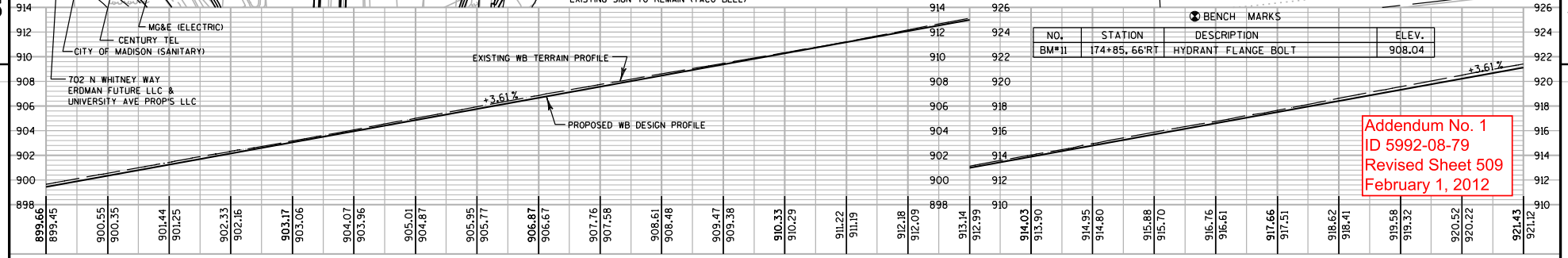
Addendum No. 1
ID 5992-08-79
Revised Sheet 508
February 1, 2012

PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 508	E

FILE NAME : G:\Madison\MD2009035\DGN\050113_pp.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46

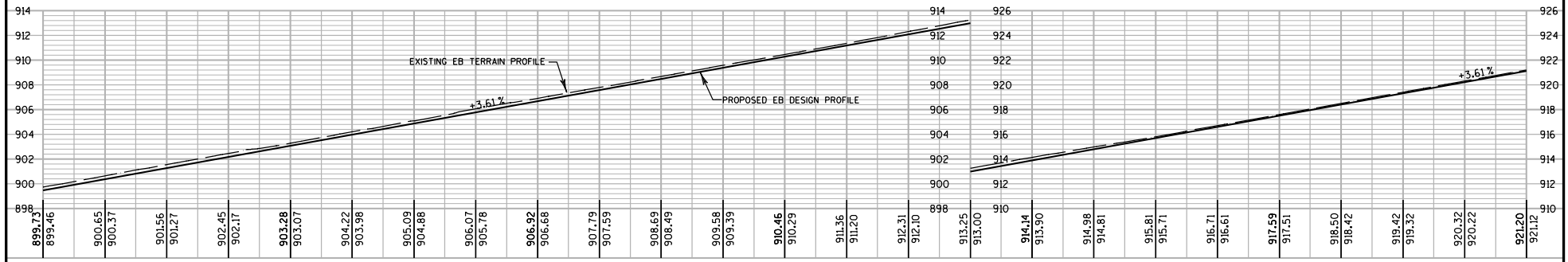




BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM#11	174+85.66'RT	HYDRANT FLANGE BOLT	908.04

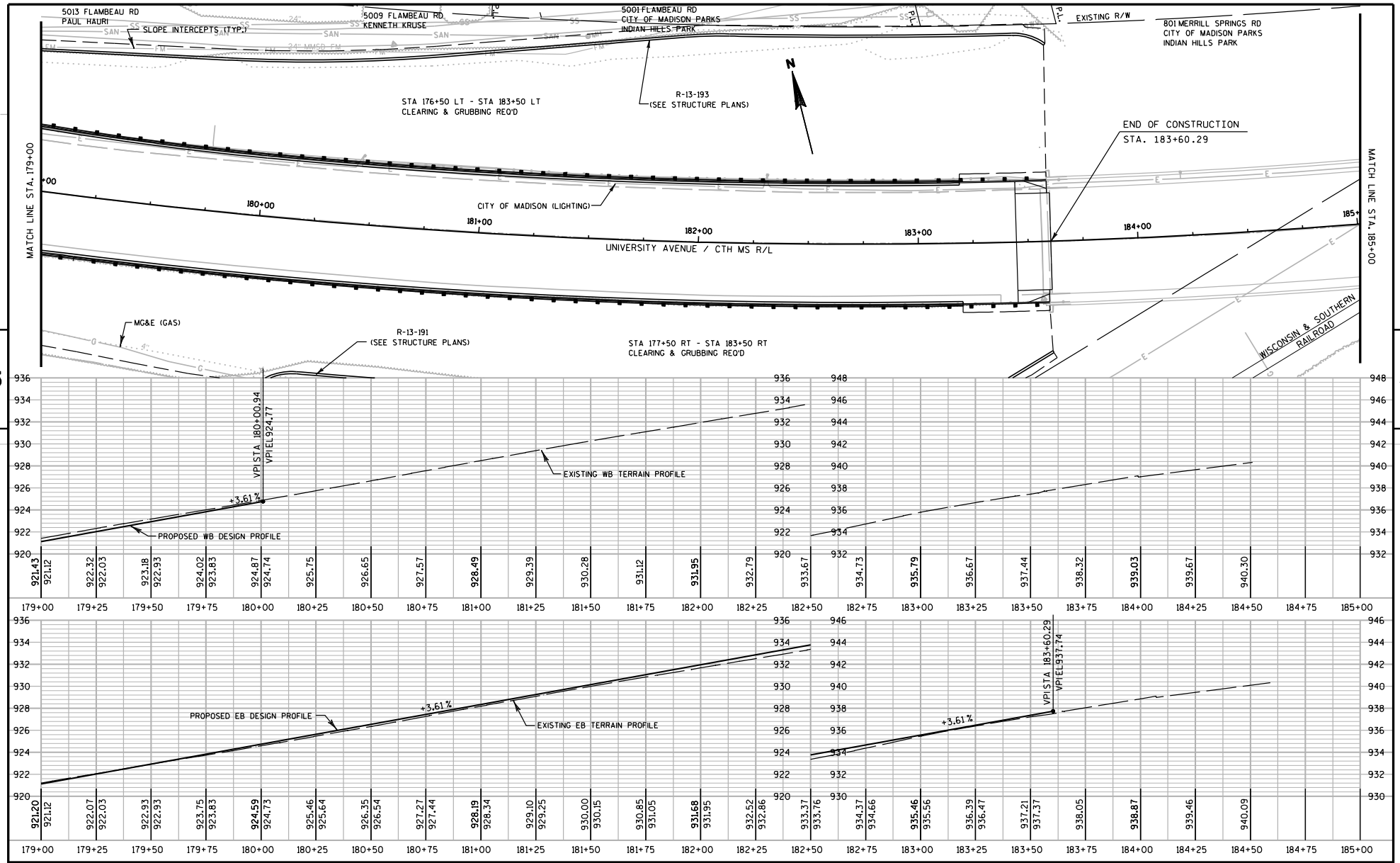
Addendum No. 1
ID 5992-08-79
Revised Sheet 509
February 1, 2012



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 509	E

FILE NAME : G:\Madison\MD2009035\DGN\050114_pp.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

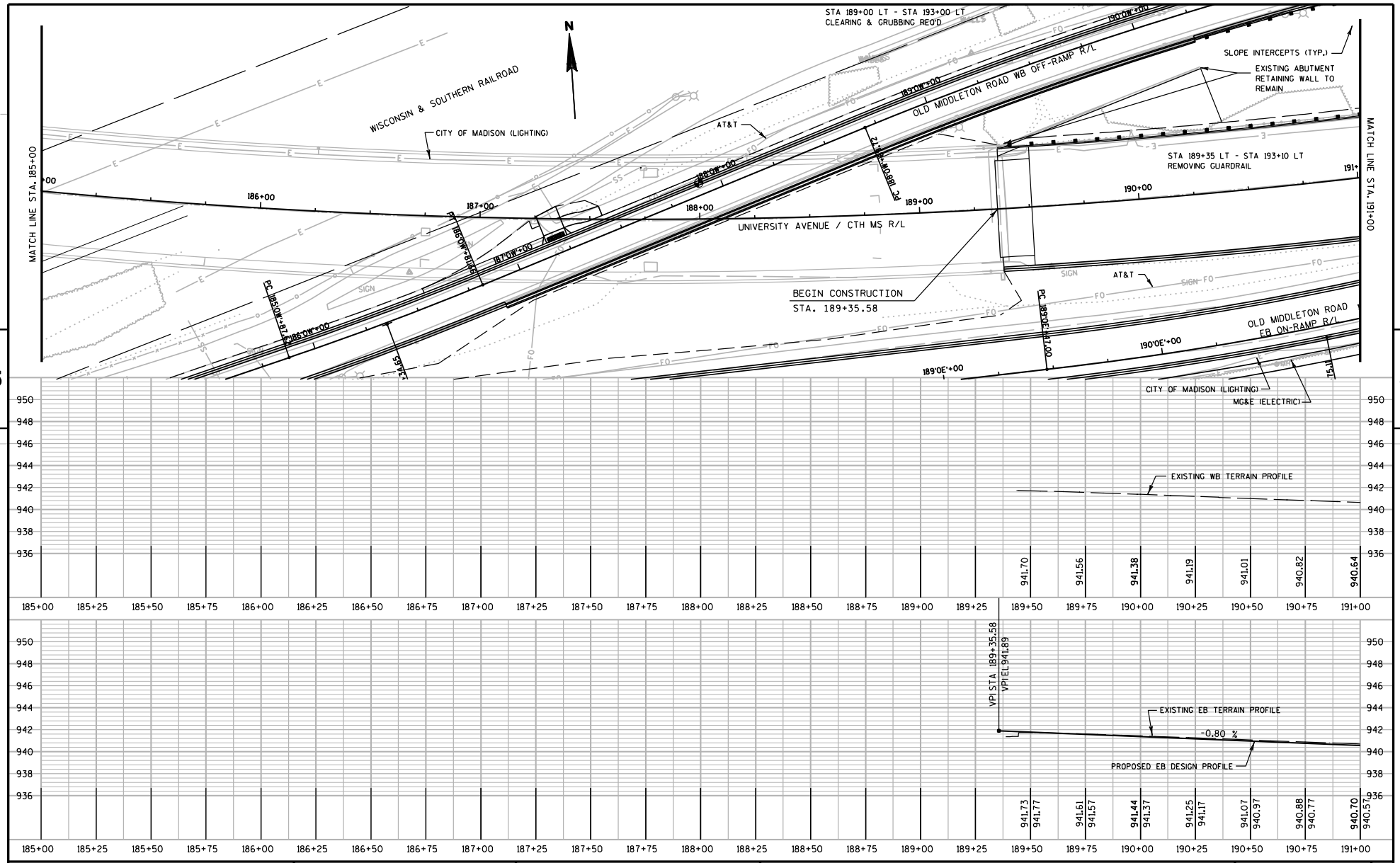
WISDOT/CADDS SHEET 46



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 510 E

FILE NAME : g:\madison\md2009035\dgn\050115_pp.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

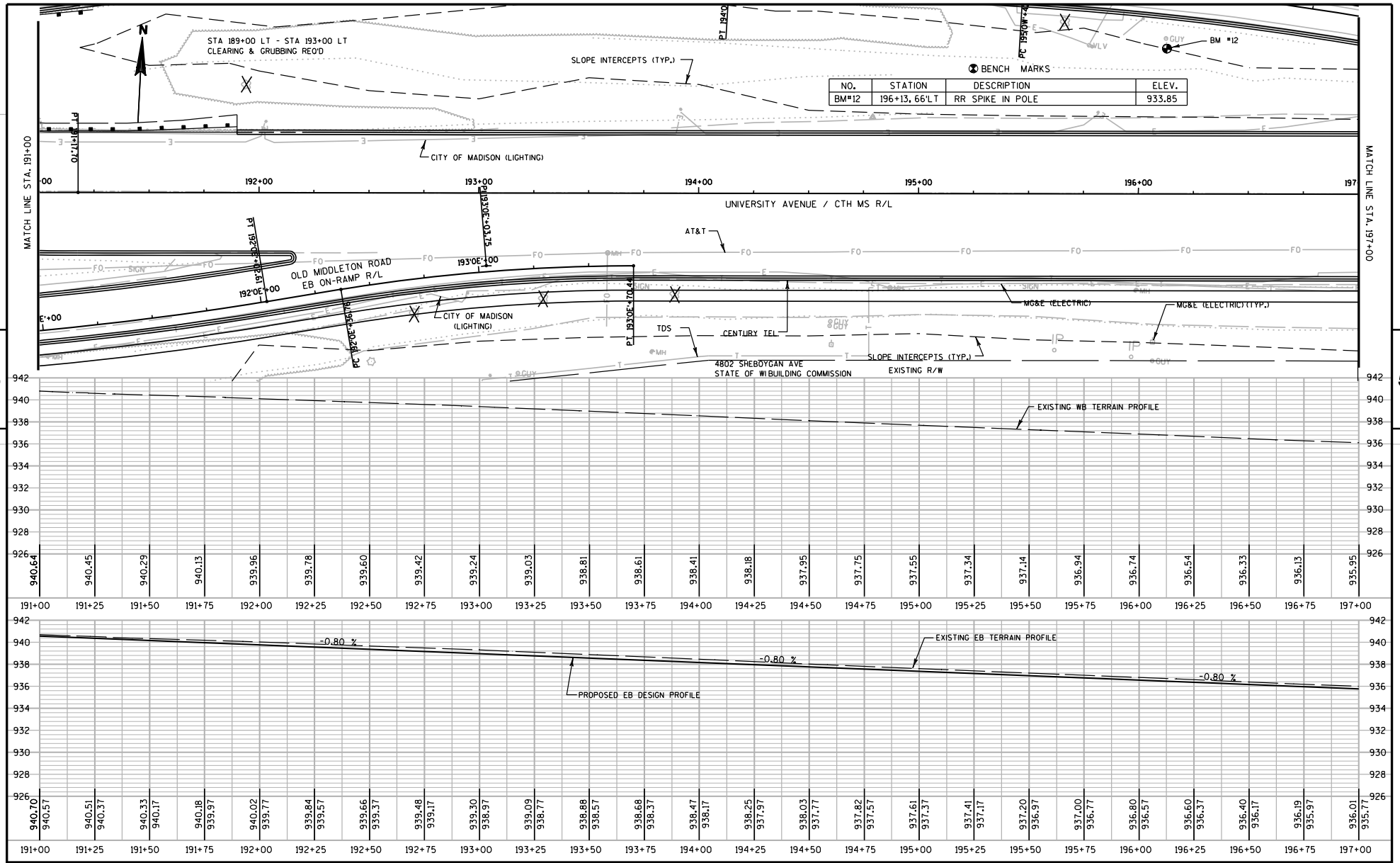
WISDOT/CADDS SHEET 46



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET 511 E

FILE NAME : g:\madison\md2009035\dgn\050116_pp.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

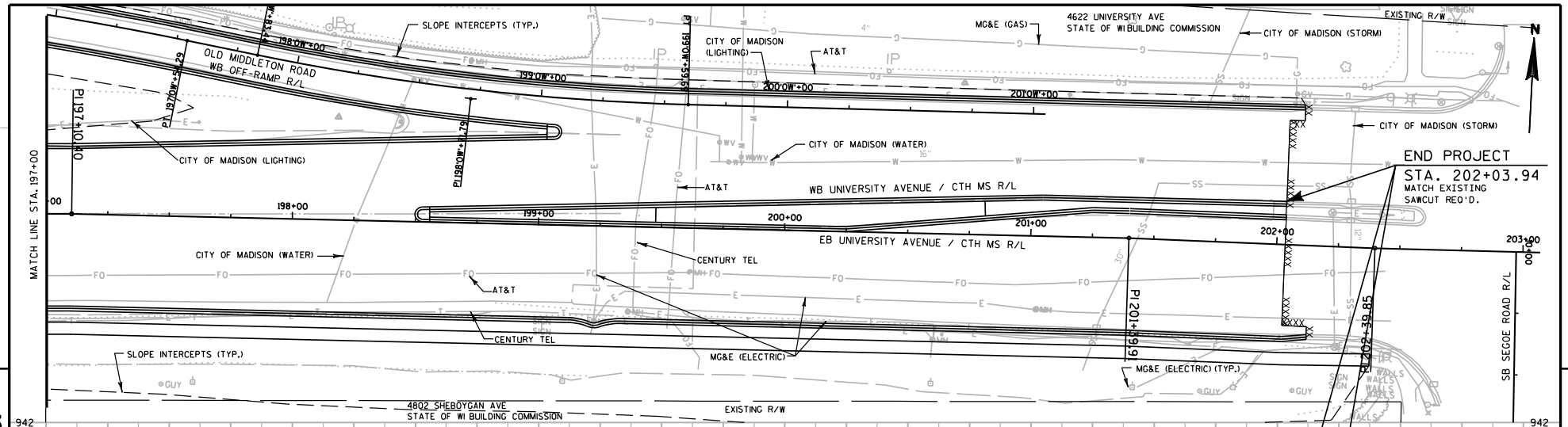
WISDOT/CADDS SHEET 46

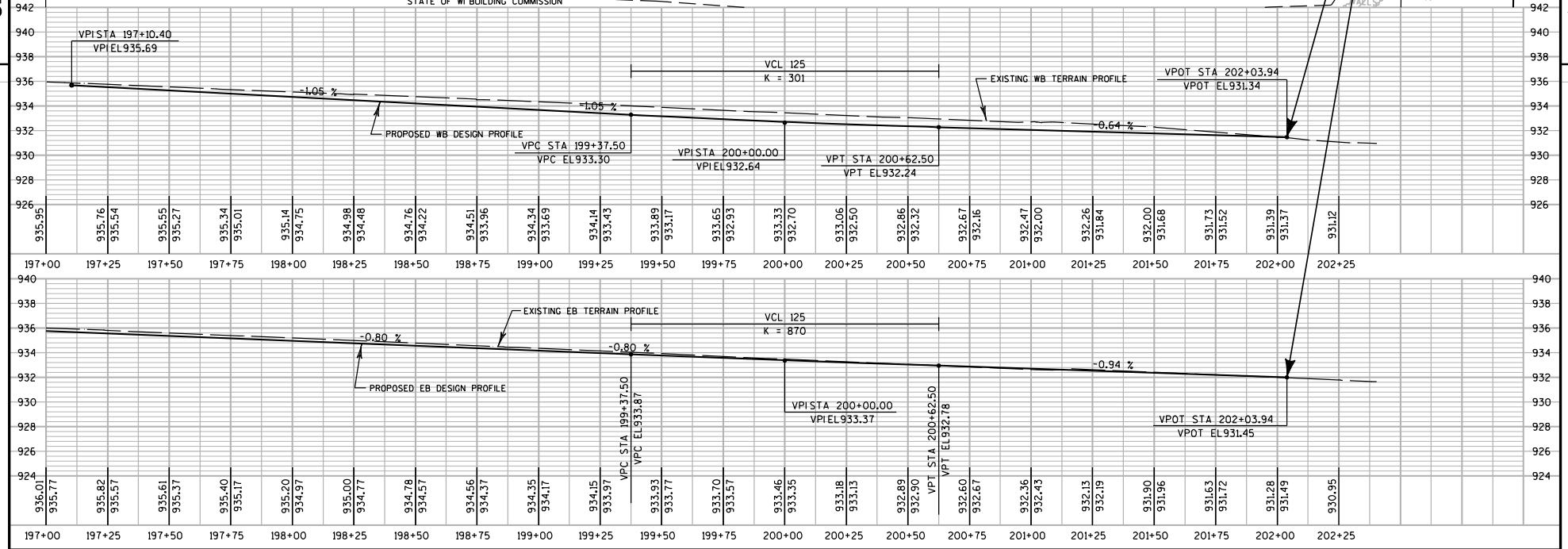


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET	E

FILE NAME : G:\Madison\MD2009035\DGN\050117_pp.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46

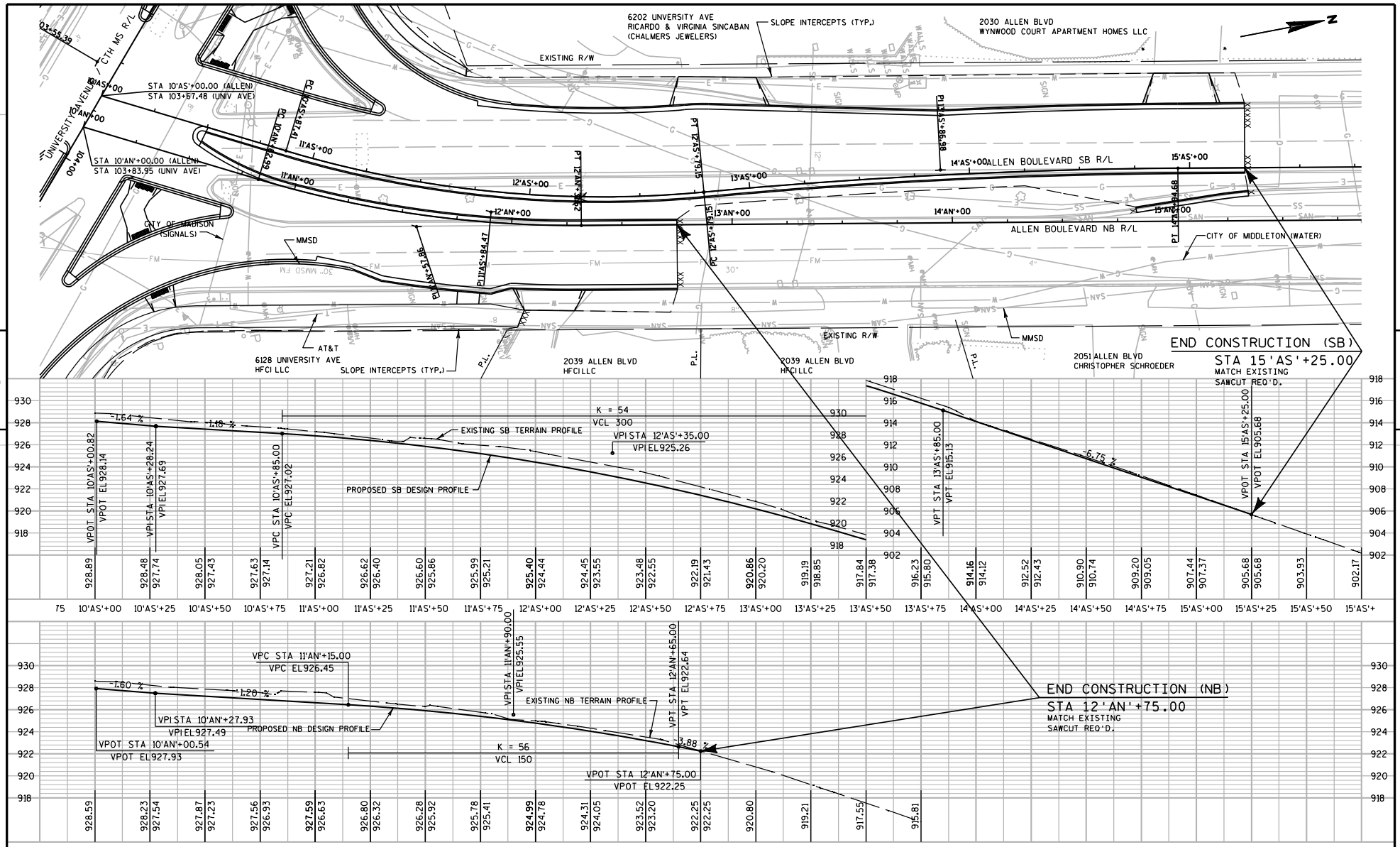




PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (UNIVERSITY AVENUE)	SHEET	E

FILE NAME : g:\madison\md2009035\dgn\050118_pp.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

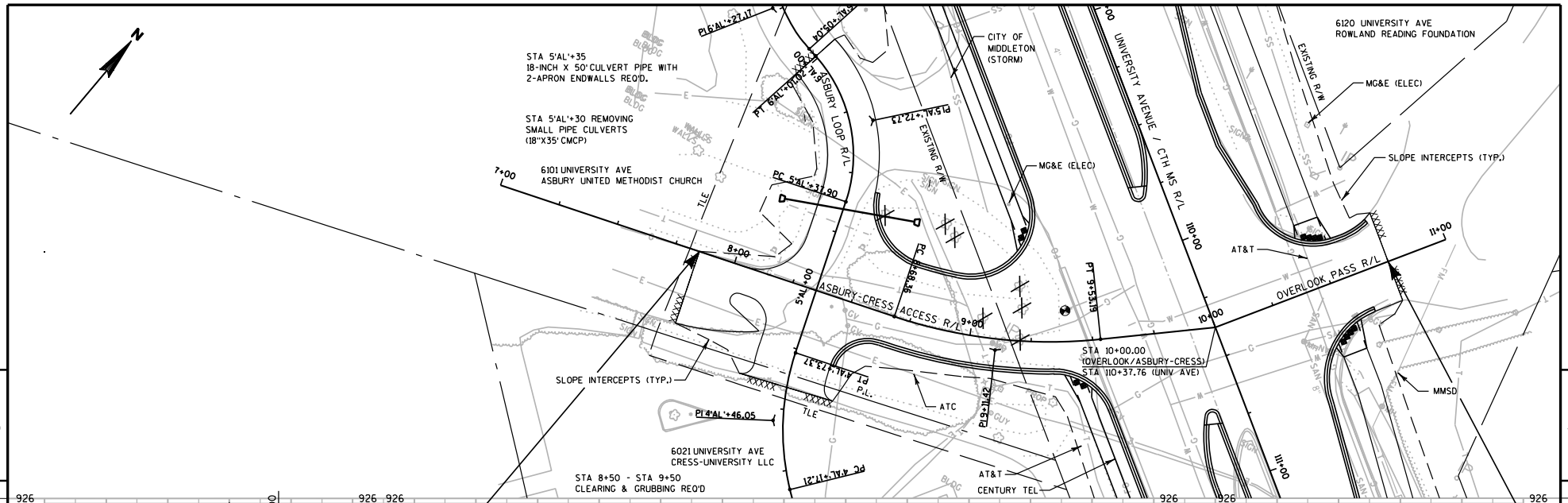
WISDOT/CADDS SHEET 46

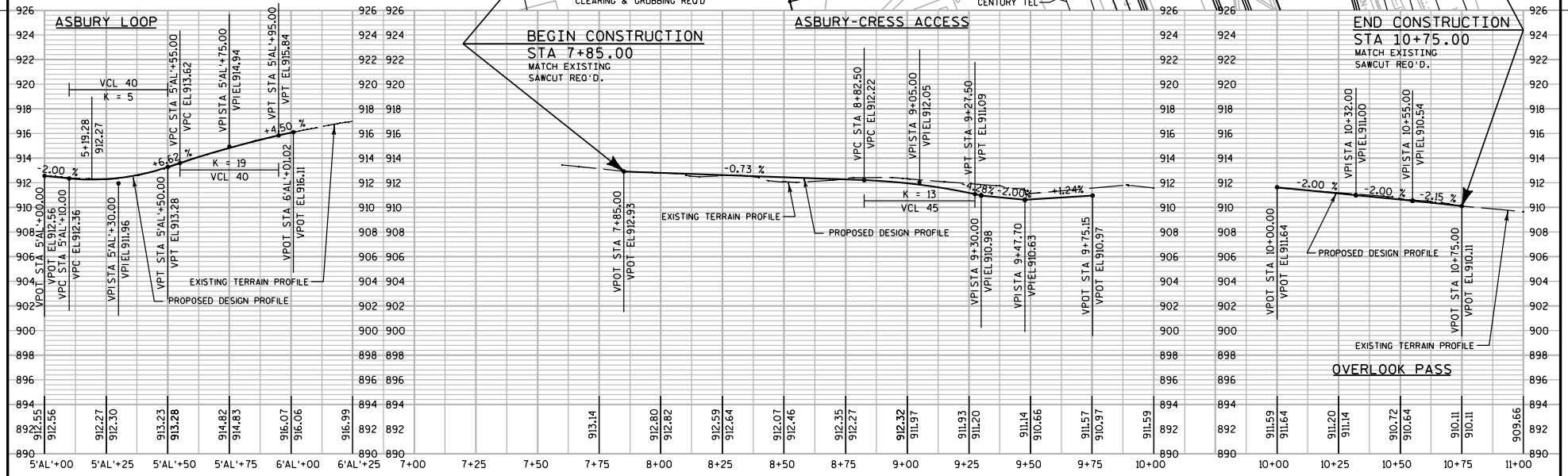


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (ALLEN BOULEVARD)	SHEET 514 E

FILE NAME : g:\madison\md2009035\dgn\050119_pp (allen).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46

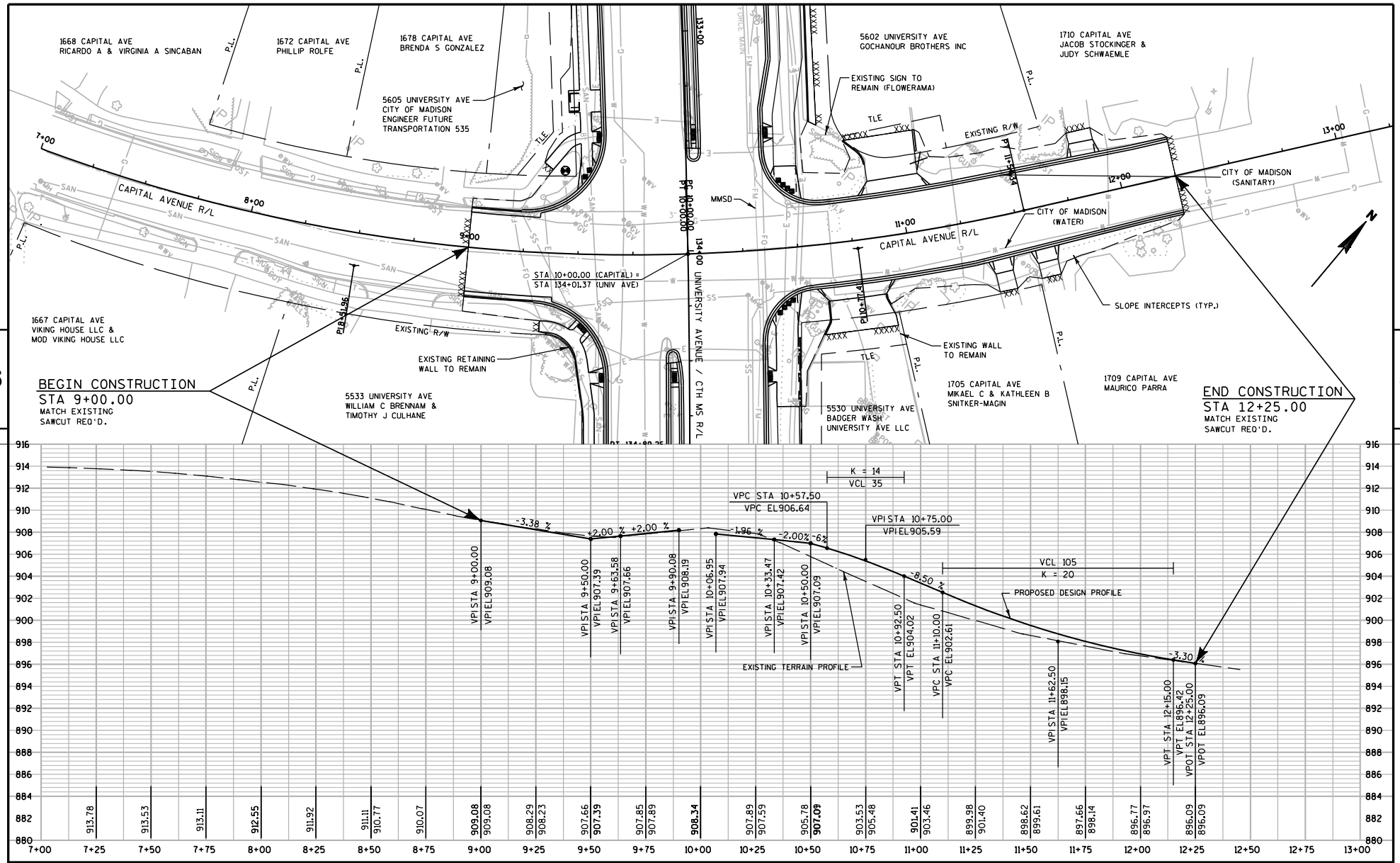




PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (ASBURY-CRESS ACCESS & OVERLOOK PASS)	SHEET 515 E

FILE NAME : G:\Madison\MD2009035\DGN\050120_pp (asbury-cress & overlook).dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

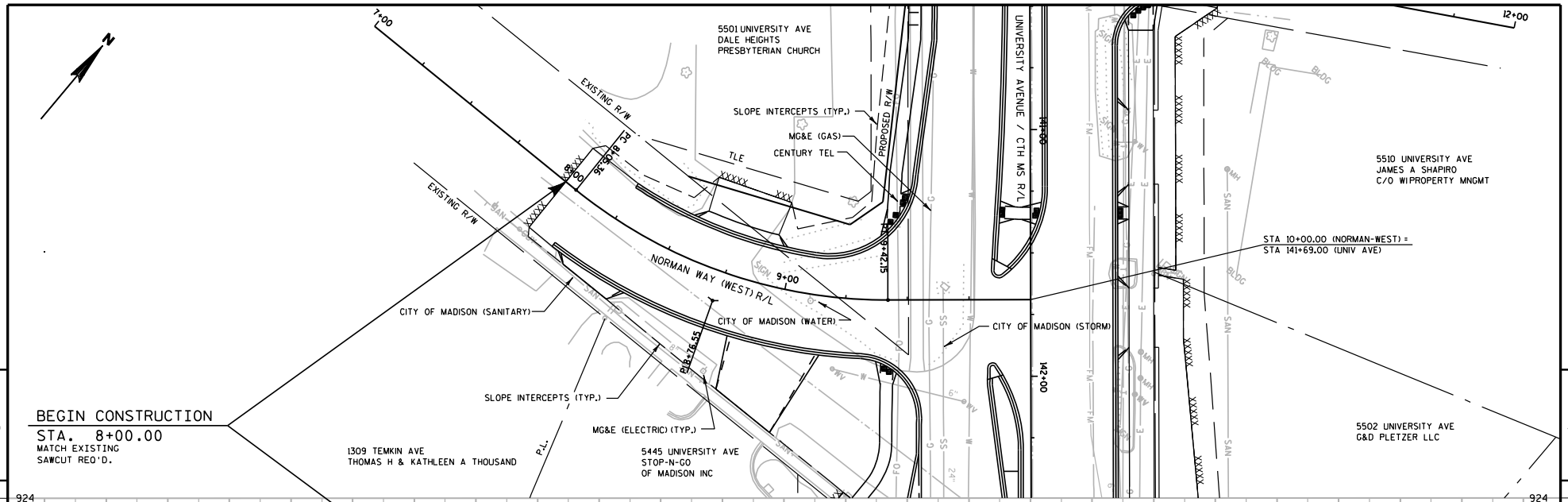
WISDOT/CADDS SHEET 30



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (CAPITAL AVENUE)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\050121_pp (capital).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

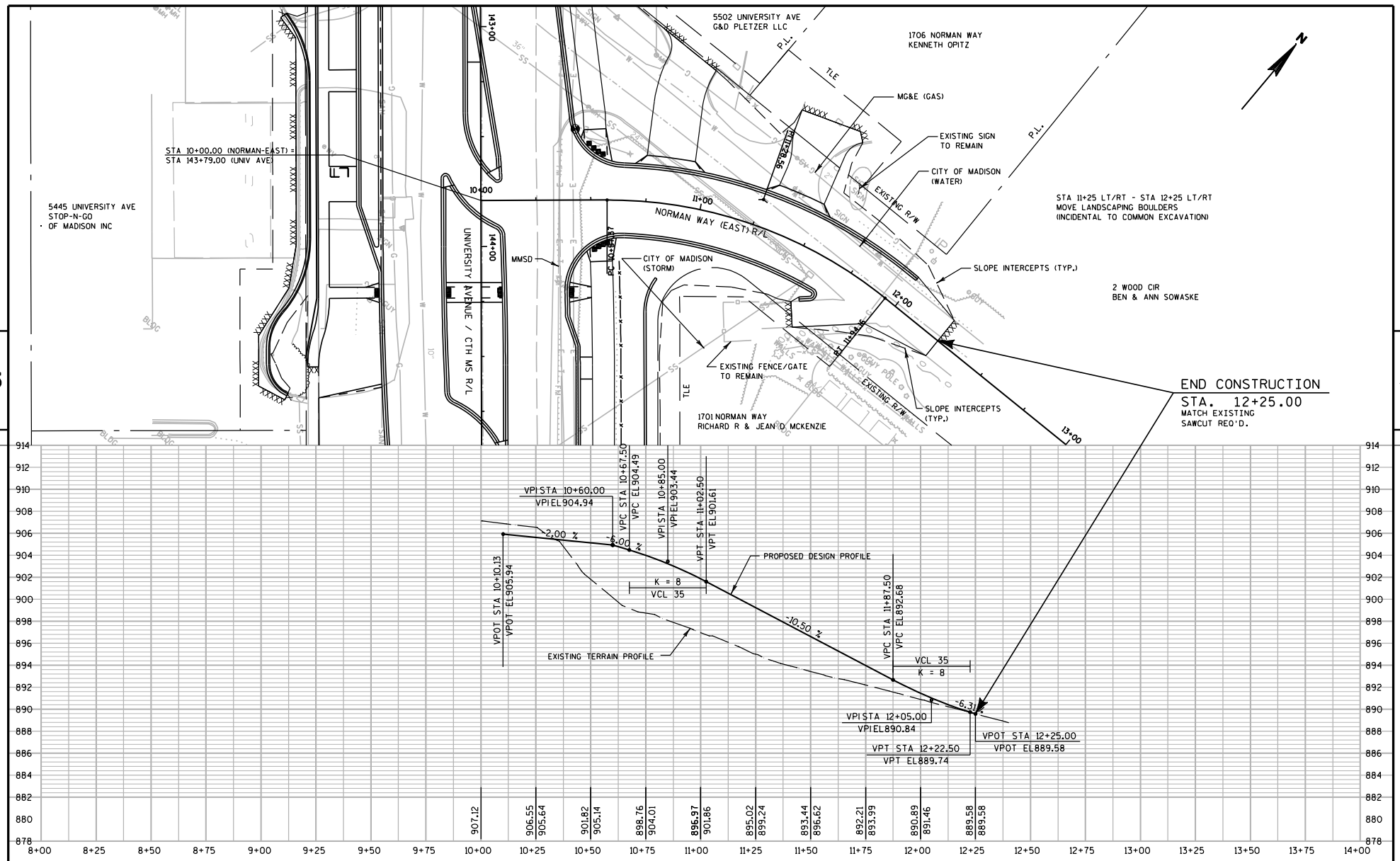
WISDOT/CADDS SHEET 30



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (NORMAN WAY - WEST)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\050122_pp (norman way - west).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

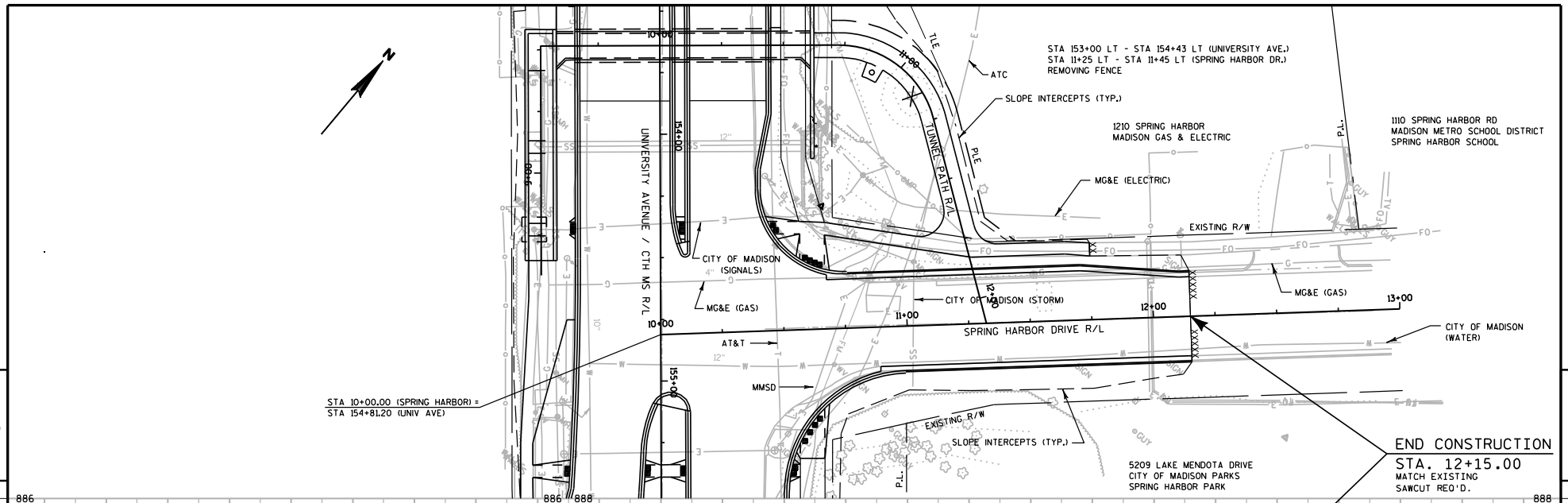
WISDOT/CADDS SHEET 30

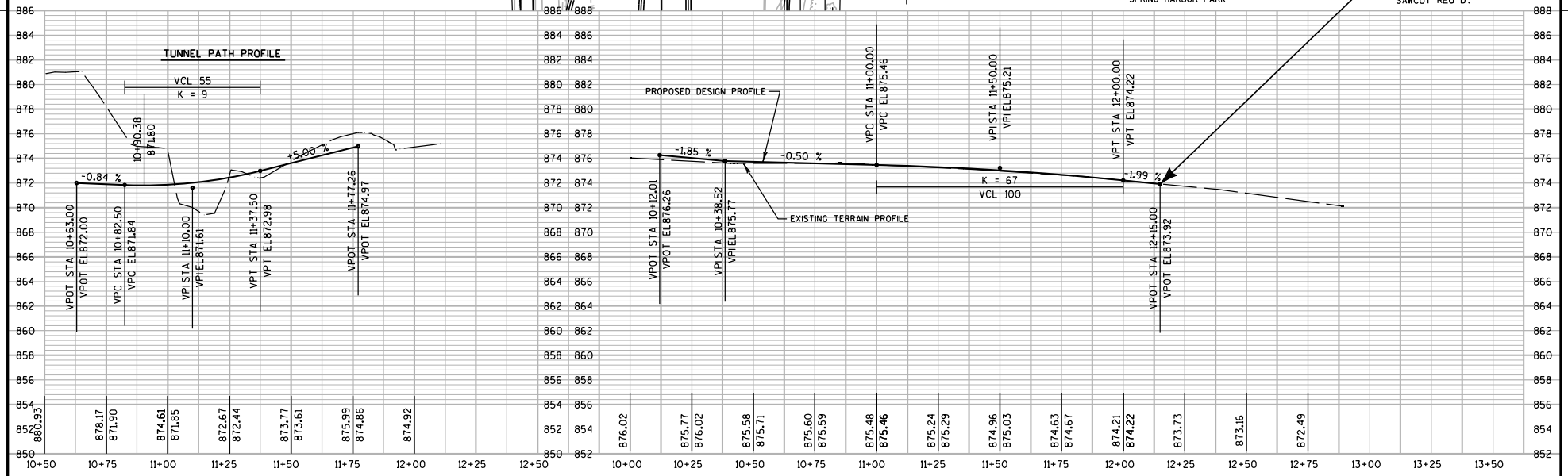


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (NORMAN WAY - EAST)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\050123_pp (norman way - east).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30

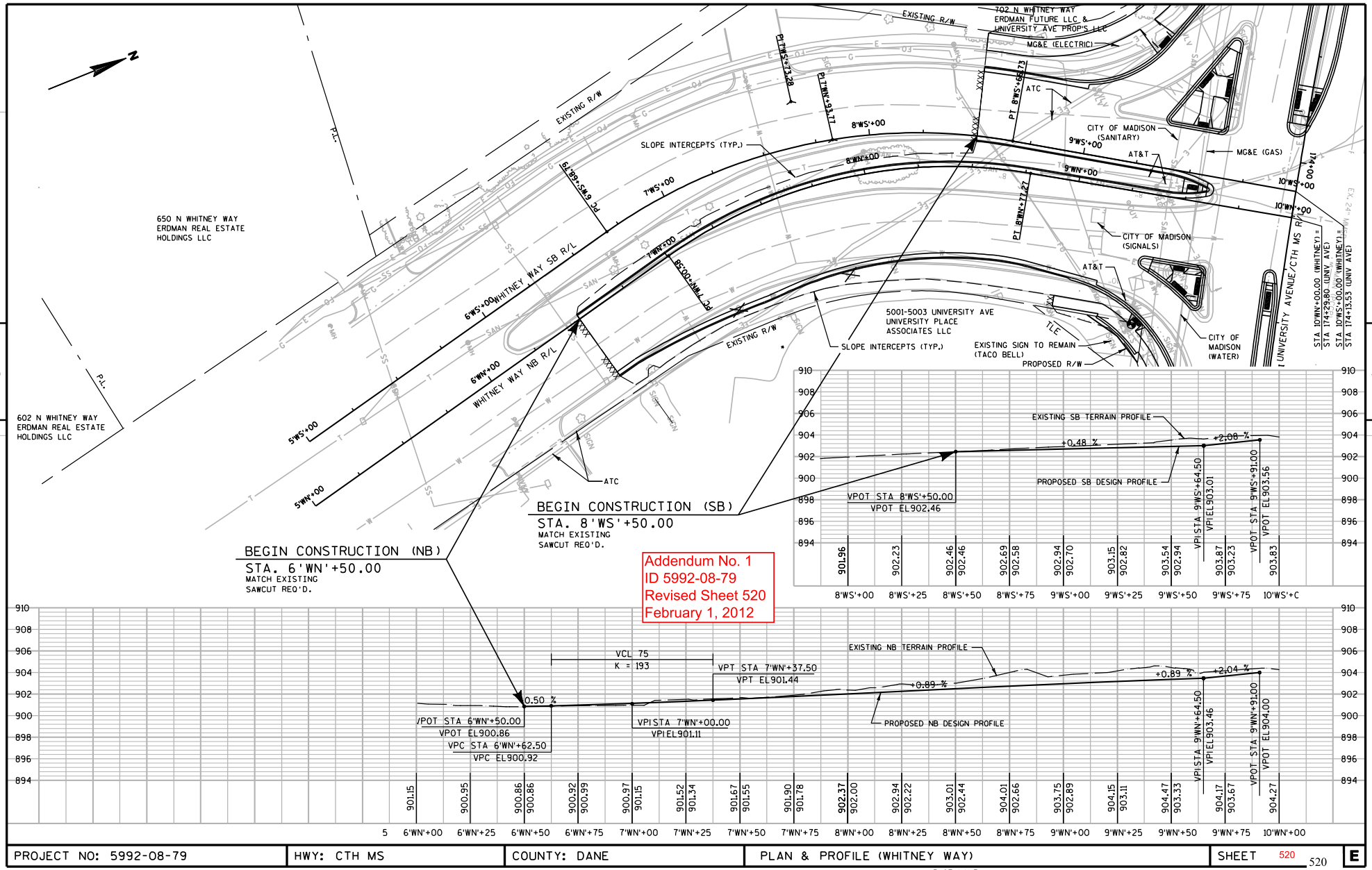




PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (SPRING HARBOR DRIVE)	SHEET 519 E

FILE NAME : G:\Madison\MD2009035\DGN\050124_pp (spring harbor).dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

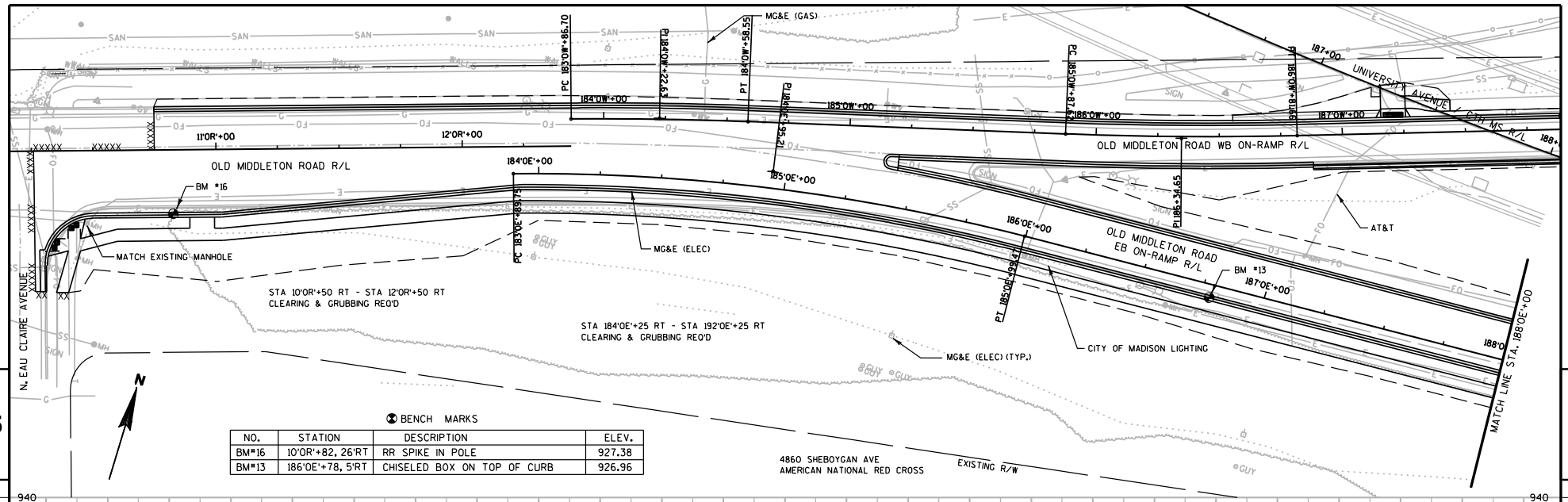
WISDOT/CADDS SHEET 30



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (WHITNEY WAY)	SHEET 520	E

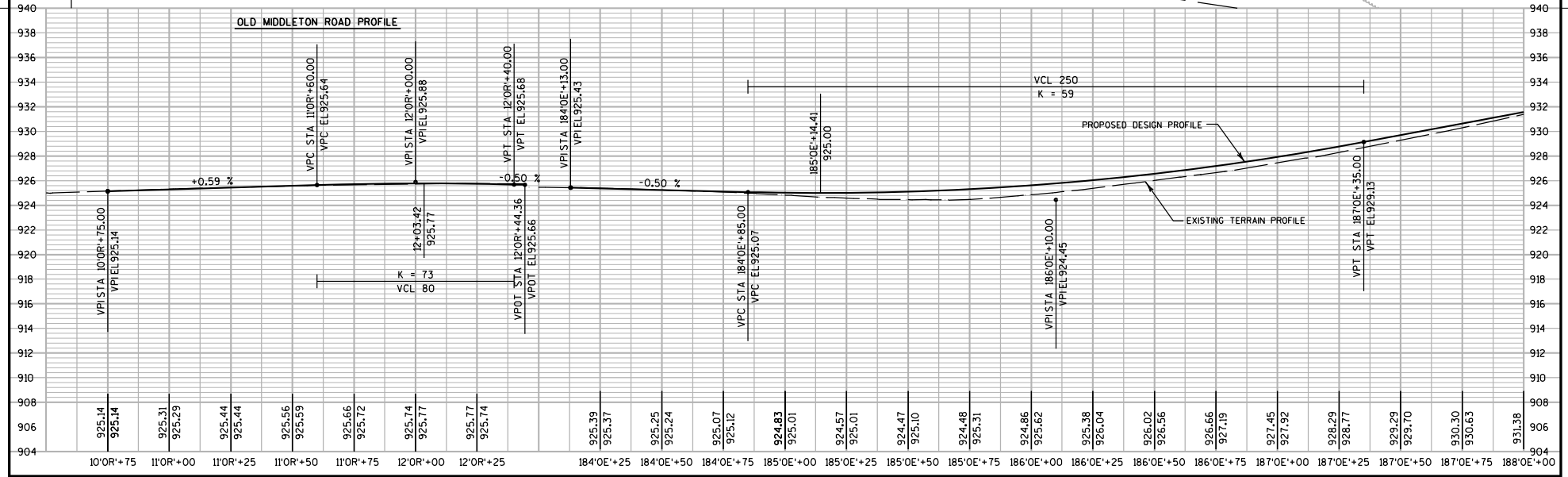
FILE NAME : G:\Madison\MD2009035\DGN\050125_pp (whitney).dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 46



BENCH MARKS

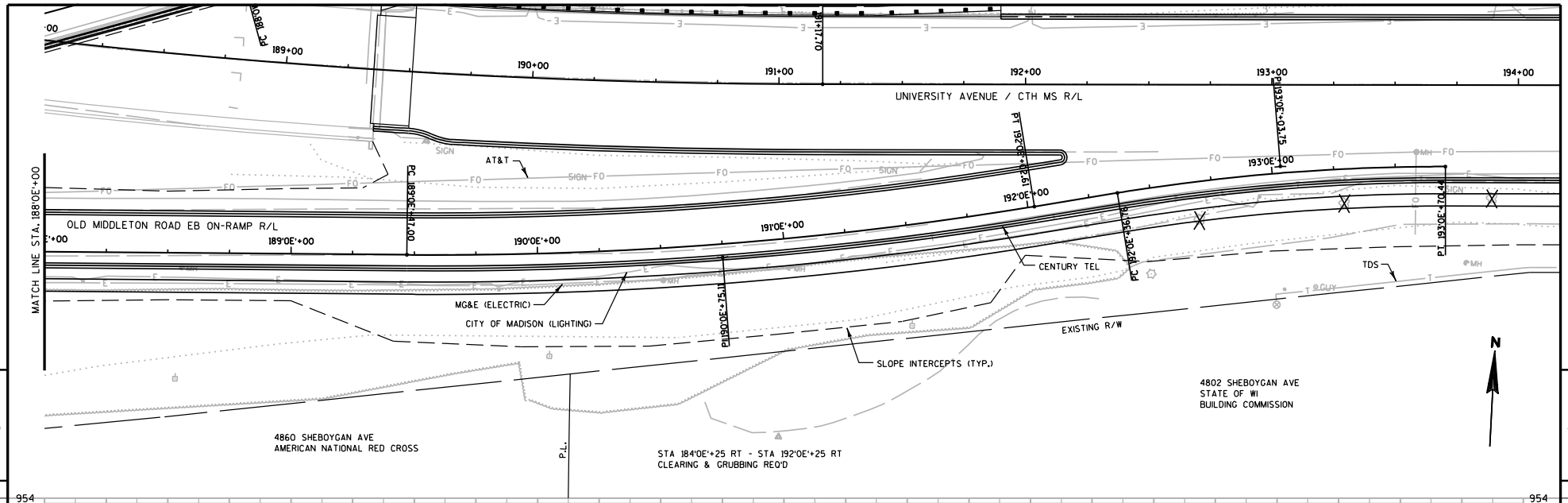
NO.	STATION	DESCRIPTION	ELEV.
BM#16	10'OR'+82, 26'RT	RR SPIKE IN POLE	927.38
BM#13	186'OE'+78, 5'RT	CHISELED BOX ON TOP OF CURB	926.96

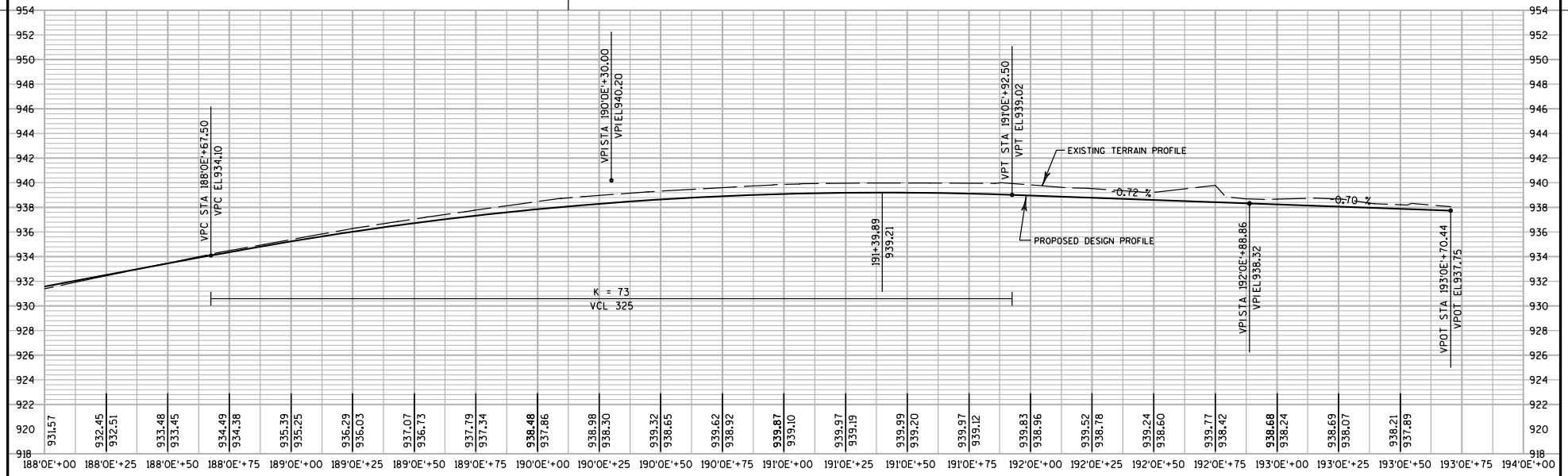


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (OLD MIDDLETON ROAD EB ON-RAMP)	SHEET E

FILE NAME : g:\madison\md2009035\dgn\050126_pp (omr eb on).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30

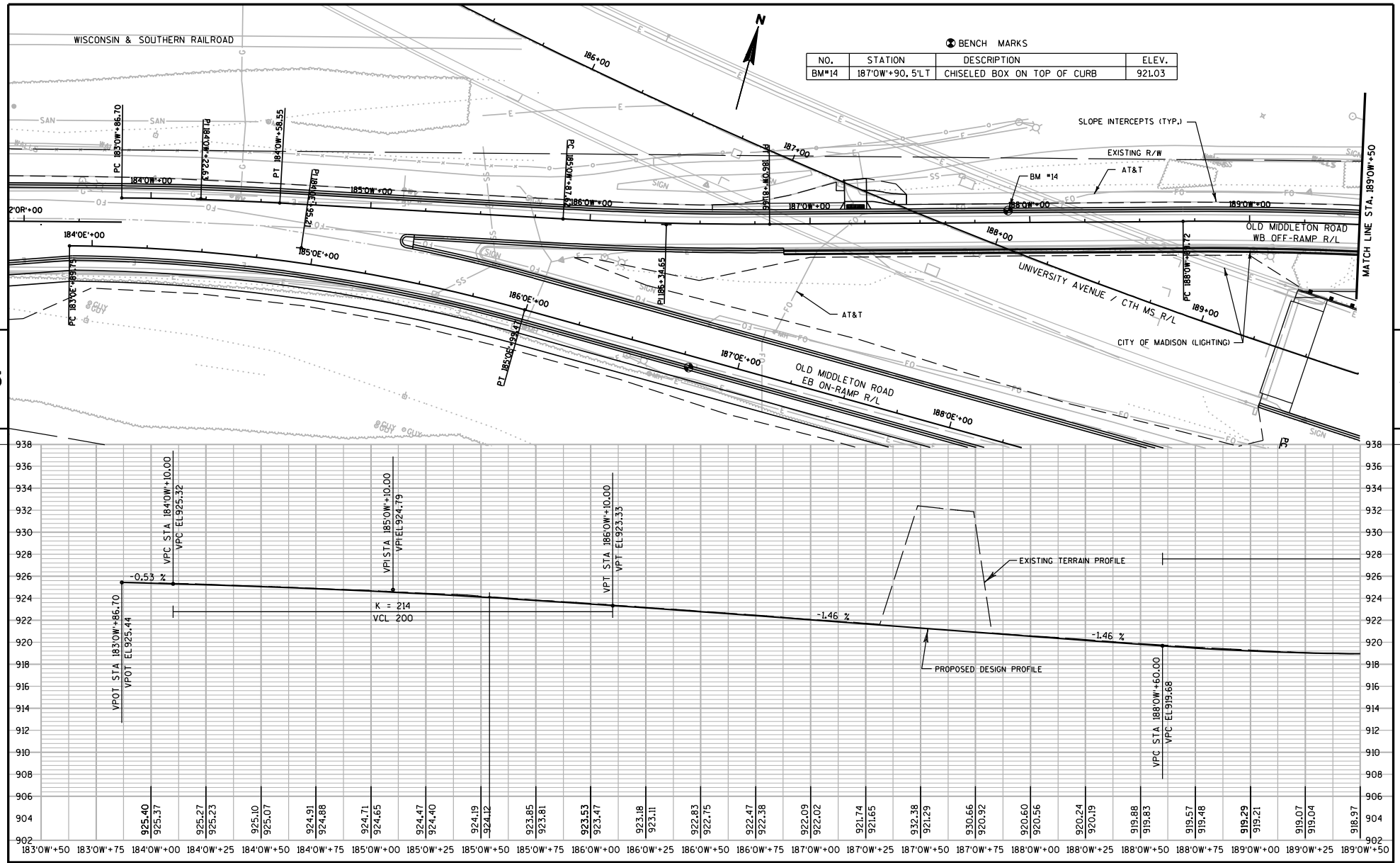




PROJECT NO:5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (OLD MIDDLETON ROAD EB ON-RAMP)	SHEET 522 E

FILE NAME : G:\Madison\MD2009035\DGN\050127_pp (omr eb on).dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

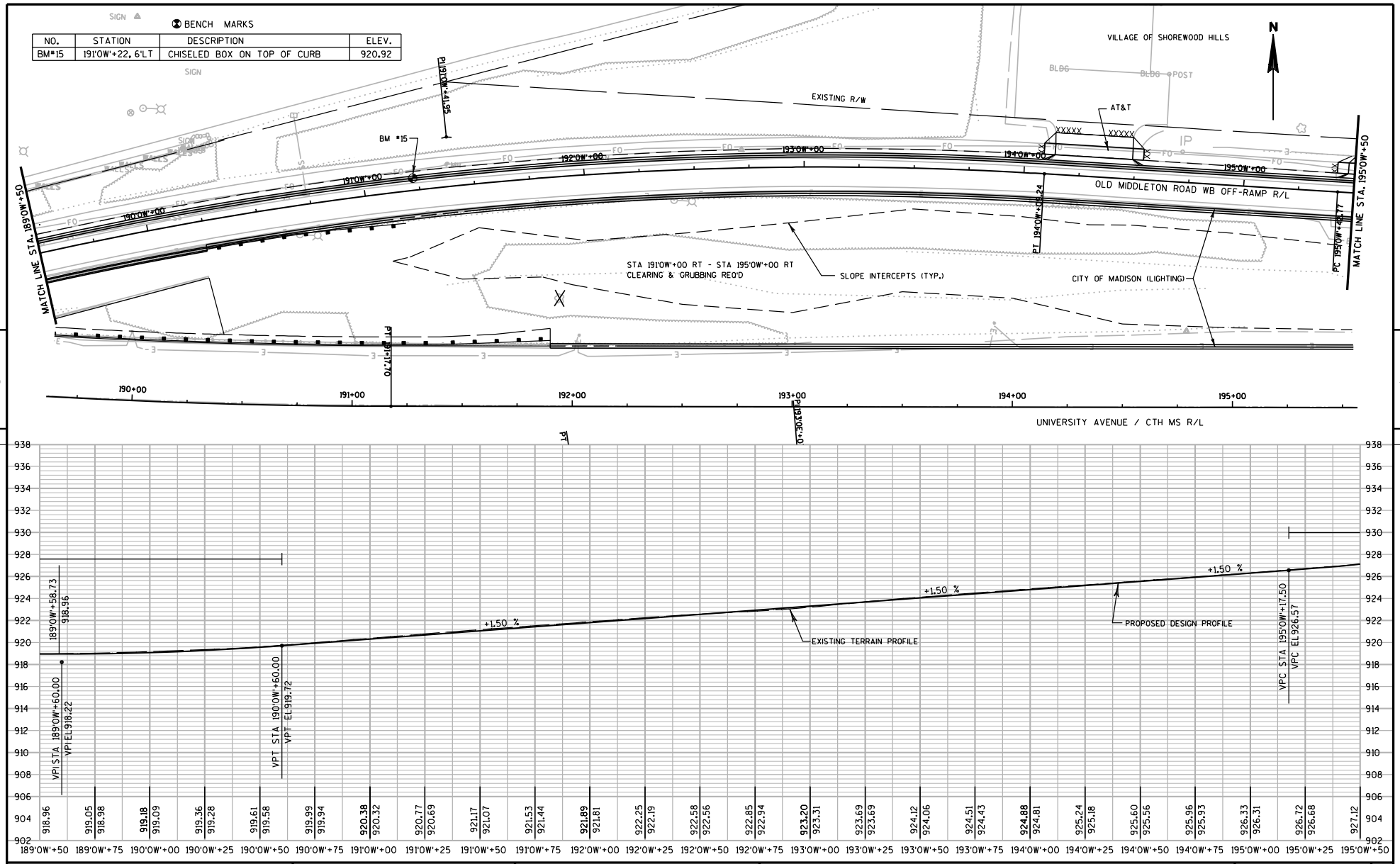
WISDOT/CADDS SHEET 30



PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (OLD MIDDLETON ROAD WB OFF-RAMP)	SHEET 523 E

FILE NAME : g:\madison\md2009035\dgn\050128_pp (omr wb off).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

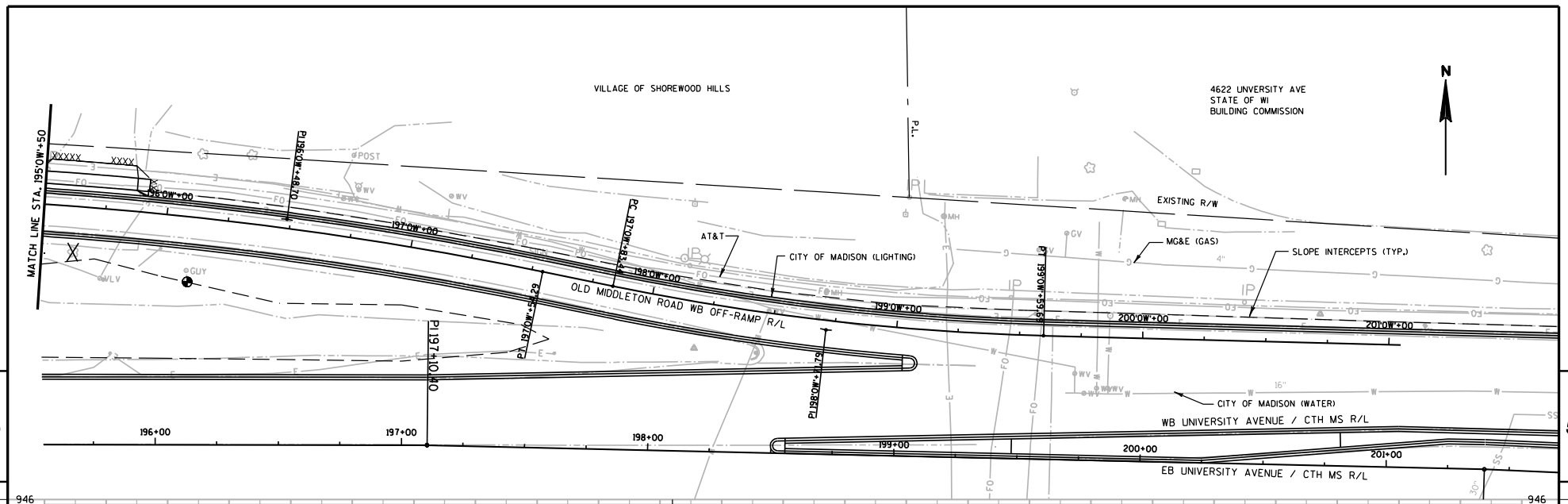
WISDOT/CADDS SHEET 30

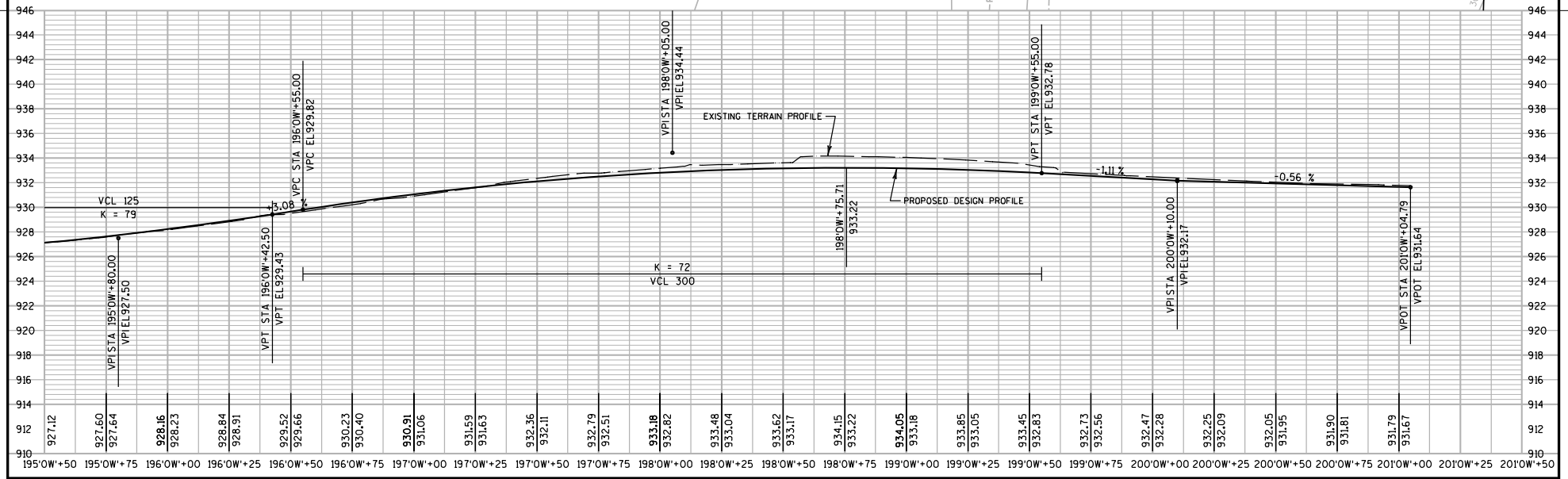


PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (OLD MIDDLETON ROAD WB OFF-RAMP)	SHEET 524 E

FILE NAME : g:\madison\md2009035\dgn\050129_pp (omr wb off).dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

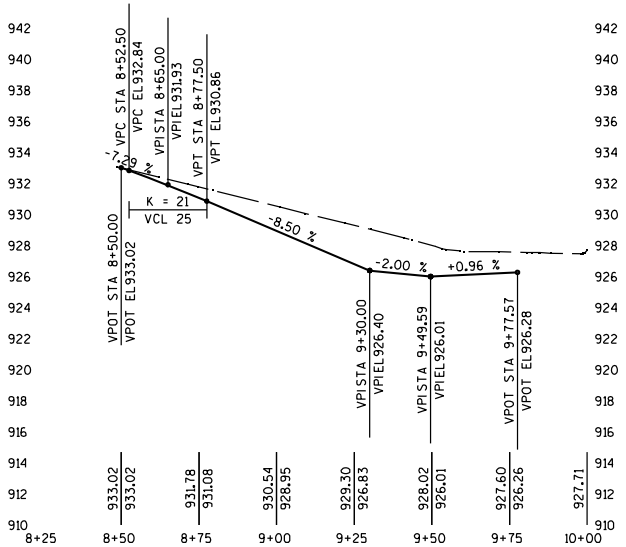
WISDOT/CADDS SHEET 30

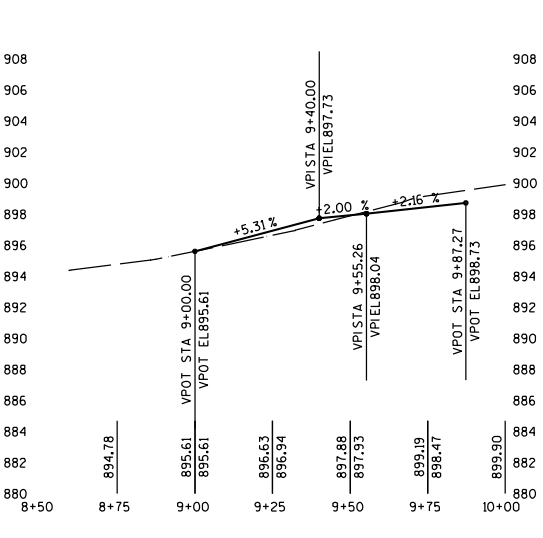


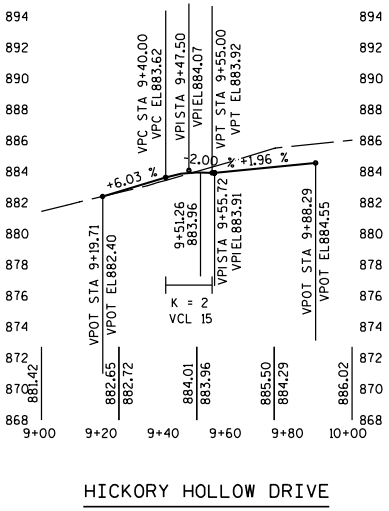


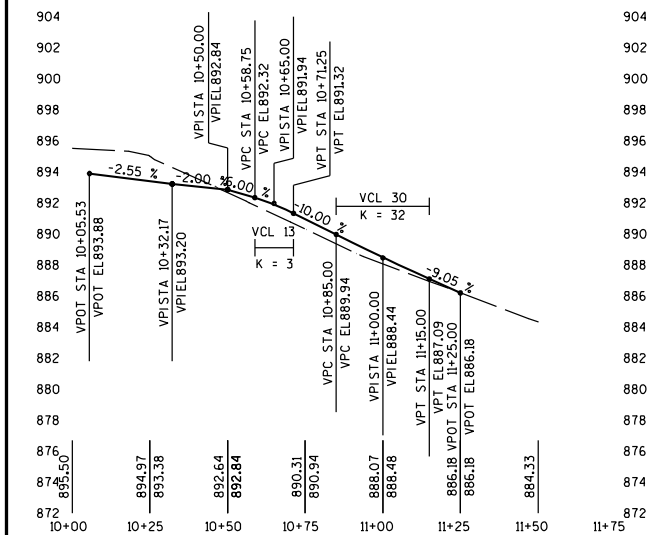
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PLAN & PROFILE (OLD MIDDLETON ROAD WB OFF-RAMP)	SHEET 525 E

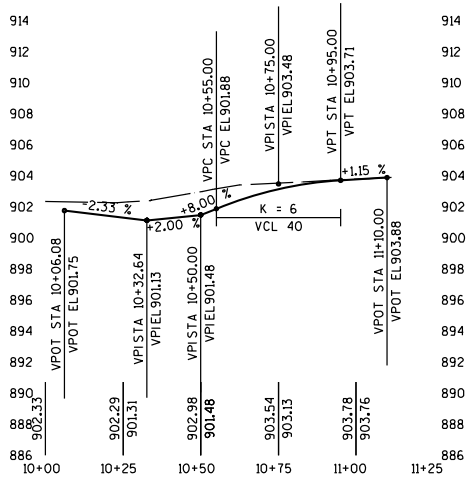
FILE NAME : g:\madison\md2009035\dgn\050130_pp (omr wb off).dgn
PLOT DATE : 8/15/2011
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :
WISDOT/CADDS SHEET 30









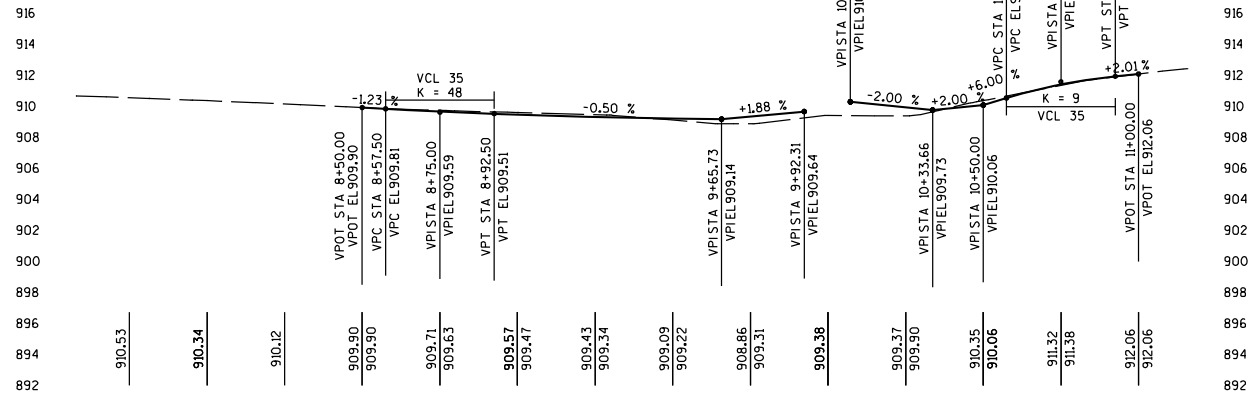


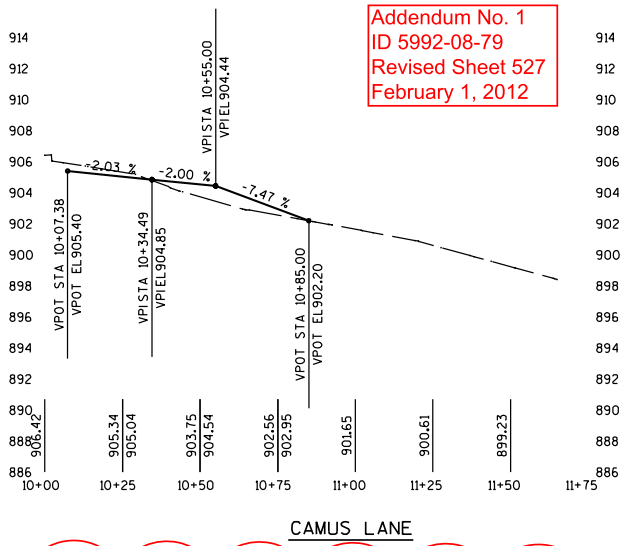
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PROFILES (SIDEROADS)	SHEET E

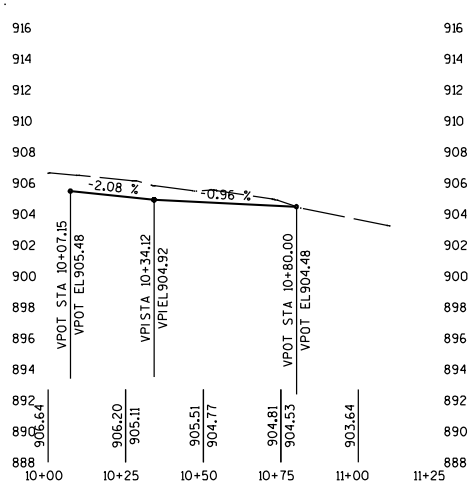
FILE NAME : G:\Madison\MD2009035\DGN\050131_pp (sideroad profiles).dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

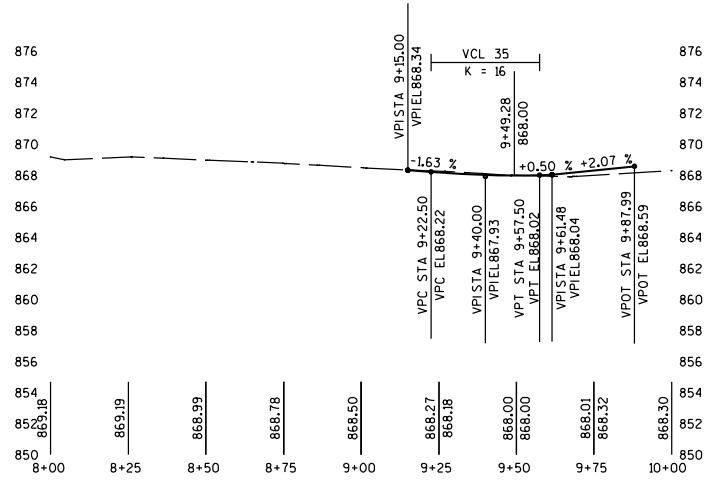
WISDOT/CADDS SHEET 44

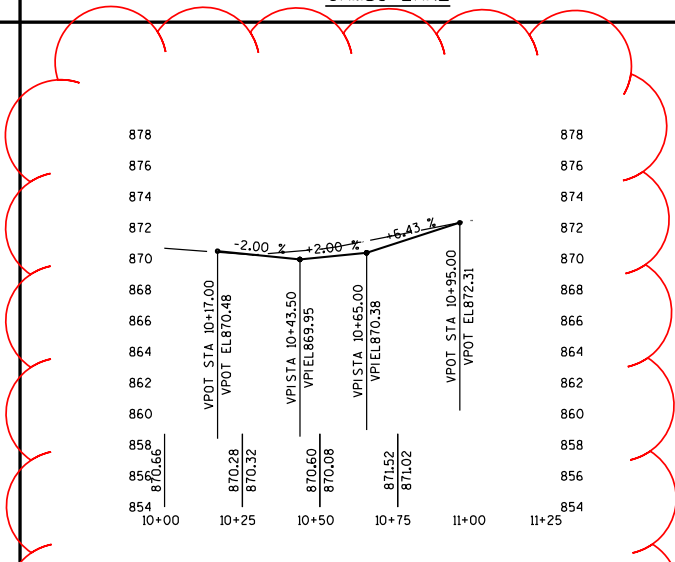
Addendum No. 1
ID 5992-08-79
Revised Sheet 527
February 1, 2012











PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	PROFILES (SIDEROADS)	SHEET 527	E

FILE NAME : G:\Madison\MD2009035\DGN\050131_pp (sideroad profiles).dgn
PLOT DATE : 1/31/2012
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

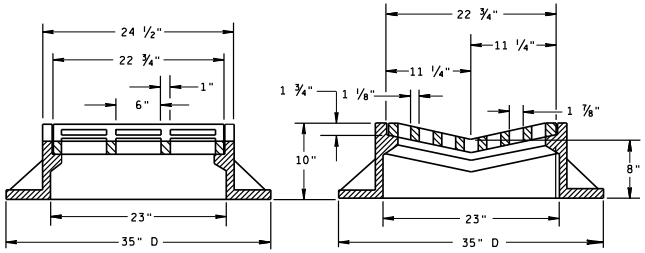
08A5-16B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A5-17D	INLET COVER, TYPE Z MANHOLE COVERS, TYPE K, J, J-S, J-H, J-H-S, L & M
08B6-4	MANHOLES TYPE 1
08B7-4	MANHOLES TYPE 2 & 3
08C1-5	INLETS TYPE 1, 2, 3 & 4
08D1-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D5-14A	CURB RAMPS TYPES 1 AND 1-A
08D5-14B	CURB RAMPS TYPES 2 AND 3
08D5-14C	CURB RAMPS TYPE 4A
08D5-14D	CURB RAMPS TYPE 4B
08D5-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E4-2	SOD OR MASONRY AND SOD DITCH CHECKS
08E8-3	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E9-6	SILT FENCE
08E10-2	INLET PROTECTION TYPE A, B, C AND D
08E14-1	TRACKING PAD
08F1-11	APRON ENDWALLS FOR CULVERT PIPE
08F4-6	JOINT TIES FOR CONCRETE PIPE
09B2-7	CONDUIT
09B4-9	PULL BOX
09C2-6	CONCRETE BASES, TYPES 1, 2 & 5
09C3-3	TRANSFORMER/PEDESTAL BASES
09C5-7	CONCRETE CONTROL CABINET BASES
09C11-2	CONCRETE BASE TYPE 10
09D1-4	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D2-2	SIGNAL OR LIGHTING CONTROL CABINET
09E1-11D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E1-11G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E3-4	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E5-5	TRAFFIC SIGNAL STANDARD ORNAMENTAL BRACKET MOUNTINGS TYPICAL FOR 13 FT. OR 15 FT.
09E8-4A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E8-4E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F8-3	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)
09G1-3A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G1-3B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G1-3C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G1-3D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G1-3E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G1-3F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G1-3G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
11B2-2	CONCRETE MEDIAN NOSE
12A3-10	NAME PLATE (STRUCTURES)
13B2-6	CONCRETE PAVEMENT APPROACH SLAB
13C1-15	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-7	URBAN DOWELED CONCRETE PAVEMENT
14B7-12A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B7-12B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B7-12C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B7-12D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B15-7A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-7B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-7C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B28-1	GUARDRAIL MOW STRIP
14B32-1A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-1B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-1C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-1D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B42-1A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-1B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-1C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-1A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-1B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-1C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-1A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-1B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-1C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-1D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-1E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

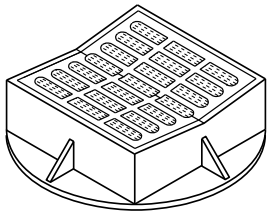
6

Standard Detail Drawing List

14B45-1F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-1G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-1H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-1I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15C2-4A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C2-4B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C2-4C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C3-1	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C5-1	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C7-12A	PAVEMENT MARKING SYMBOLS
15C7-12B	PAVEMENT MARKING WORDS
15C7-12C	PAVEMENT MARKING ARROWS
15C8-14A	PAVEMENT MARKING (MAINLINE)
15C8-14B	PAVEMENT MARKING (INTERSECTIONS)
15C8-14E	PAVEMENT MARKING (LEFT TURN LANE)
15C8-14F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C11-5	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-3	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-3	MEDIAN ISLAND MARKING
15C27-1	DOUBLE ARROW WARNING SIGN PLACEMENT
15C29-1A	BICYCLE LANE MARKING
15C29-1B	BICYCLE LANE MARKING
15C29-1C	URBAN BICYCLE LANE MARKING
15C29-1D	URBAN BICYCLE LANE MARKING
15C29-1E	PAVEMENT MARKING FOR BIKE LANES
15C31-1A	PAVEMENT MARKING (RAMPS AND GORES)
15D6-2	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D11-3	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D15-1	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-1	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-1	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-1	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D28-1	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-1	TRAFFIC CONTROL, SIDEWALK CLOSURE

6

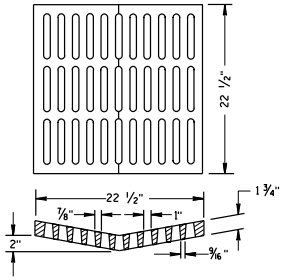




TYPE "B"

(APPROXIMATE WEIGHT 395 LBS.)

FRAME..... 285 LBS.
GRATE..... 110 LBS.

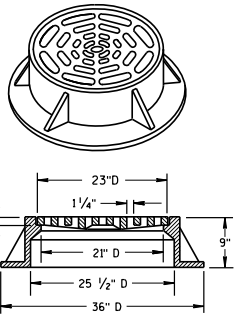


ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 125 LBS.)
GRATE.....125 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

(APPROXIMATE WEIGHT 340 LBS.)

FRAME..... 235 LBS.
GRATE..... 105 LBS.

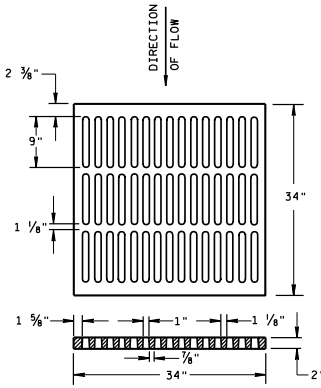
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

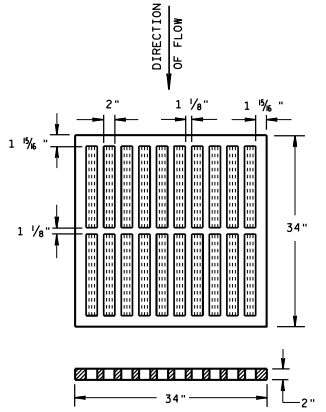


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 365 LBS.)
GRATE.....365 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

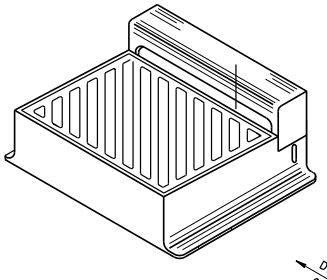


TYPE "MS"

(APPROXIMATE GRATE WEIGHT 270 LBS.)
GRATE.....270 LBS.

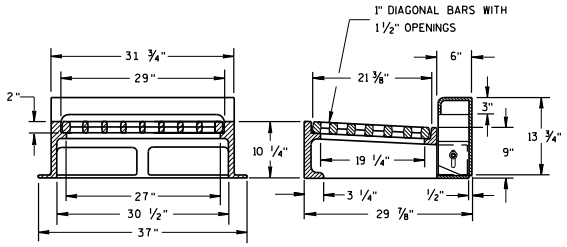
USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE



DIRECTION OF FLOW

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

(APPROXIMATE WEIGHT 670 LBS.)

FRAME..... 360 LBS.
GRATE..... 160 LBS.
CURB BOX..... 150 LBS.

INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/4/99
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

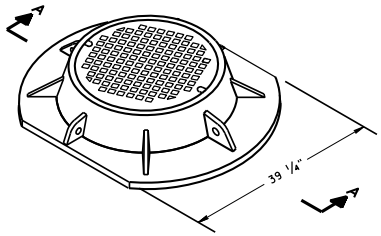
FHWA

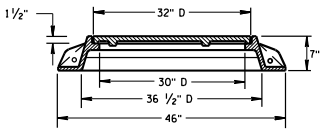
6

S.D.D. 8 A 5-16b

6

S.D.D. 8 A 5-16b



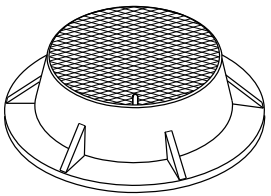


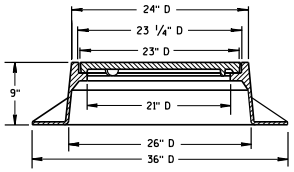
SECTION A-A

TYPE "K"

(APPROXIMATE WEIGHT 415 LBS.)

FRAME.....210 LBS.
LID.....205 LBS.

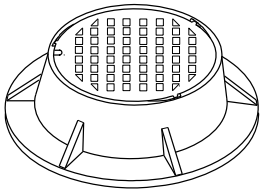


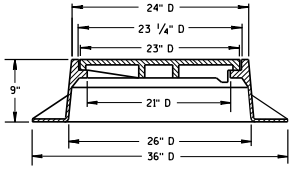


TYPE "J"

(APPROXIMATE WEIGHT 250 LBS.)

FRAME.....135 LBS.
LID.....115 LBS.





TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 245 LBS.)

FRAME.....145 LBS.
LID.....100 LBS.

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

GENERAL NOTES

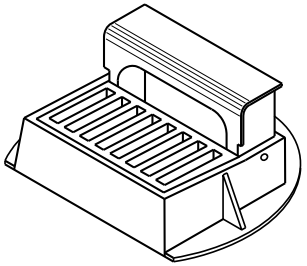
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

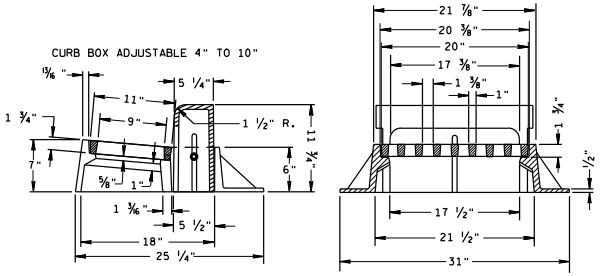
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

(1) MANUFACTURER MAY PROVIDE ADDITIONAL SEALS OR GASKETS.

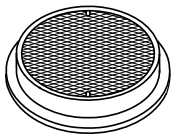


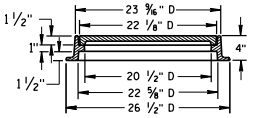


INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 340 LBS.)

FRAME.....198 LBS.
GRATE.....50 LBS.
CURB BOX.....92 LBS.

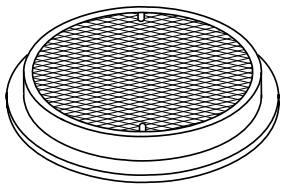


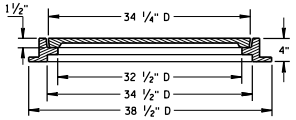


TYPE "L"

(APPROXIMATE WEIGHT 145 LBS.)

FRAME.....75*
LID.....70*

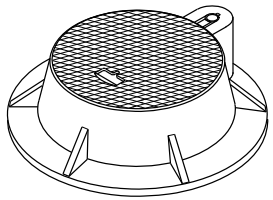


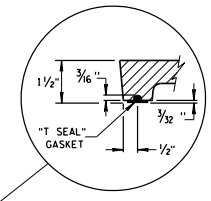


TYPE "M"

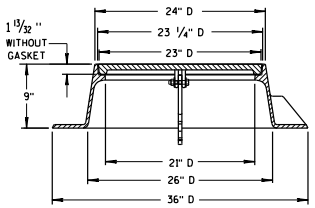
(APPROXIMATE WEIGHT 385 LBS.)

FRAME.....125*
LID.....260*





"T SEAL" GASKET DETAIL



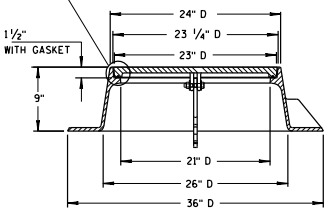
TYPE "J" HINGED

LID WITHOUT "T SEAL" GASKET

(APPROXIMATE WEIGHT 310 LBS.)

FRAME.....190 LBS.
LID.....120 LBS.

(NOTED AS TYPE J-H ON THE DRAINAGE TABLE)



TYPE "J" HINGED-SPECIAL (1)

LID WITH "T SEAL" GASKET

(APPROXIMATE WEIGHT 310 LBS.)

FRAME.....190 LBS.
LID.....120 LBS.

(NOTED AS TYPE J-S-H ON THE DRAINAGE TABLE)

INLET COVER, TYPE Z
MANHOLE COVERS, TYPE
K, J, J-S, J-H, J-H-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05
DATE
FHWA

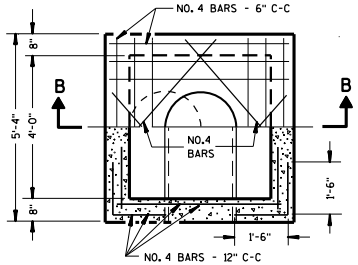
CHIEF ROADWAY DEVELOPMENT ENGINEER

6

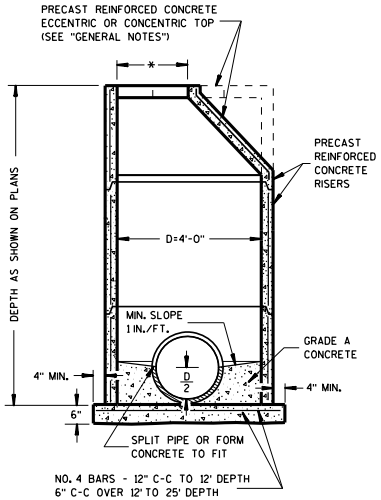
S.D.D. 8 A 5-17d

6

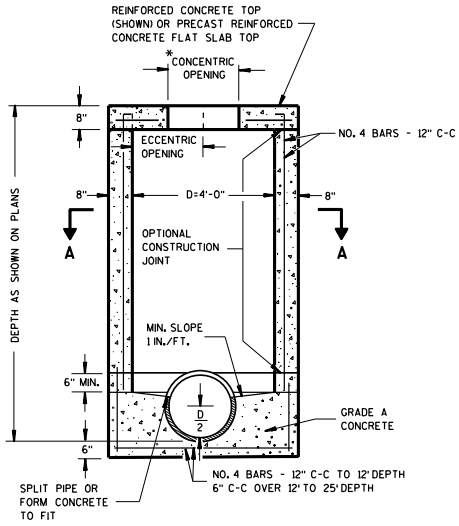
S.D.D. 8 A 5-17d



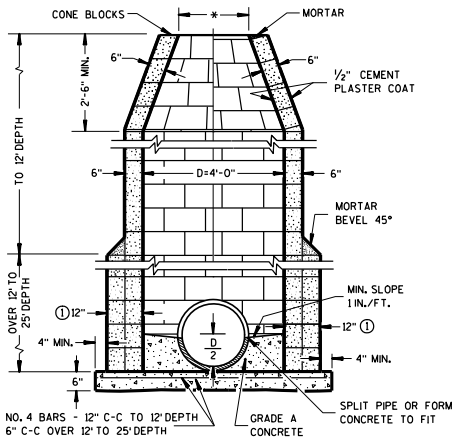
HALF SECTION A-A



PRECAST REINFORCED CONCRETE



SECTION B-B
REINFORCED CONCRETE



CONCRETE BLOCK

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS CONFORMING TO AASHTO M 199 SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS AND MANHOLES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

* USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS.

① 2 COURSES 6" BLOCK.

MANHOLES TYPE 1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

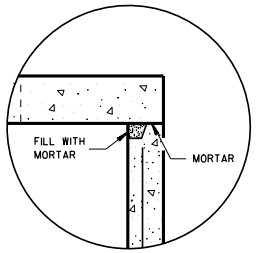
APPROVED
9/9/05 — DATE
/S/ Jerry M. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

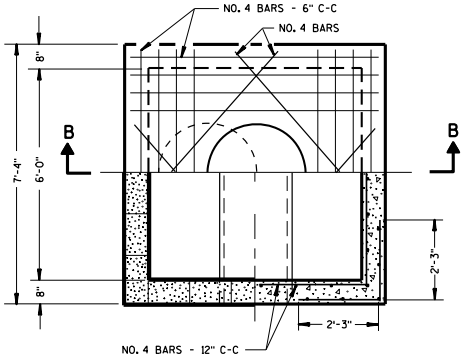
6

S.D.D. 8 B 6-4

S.D.D. 8 B 6-4



DETAIL "A"



HALF SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

STEPS CONFORMING TO AASHTO M 199 SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

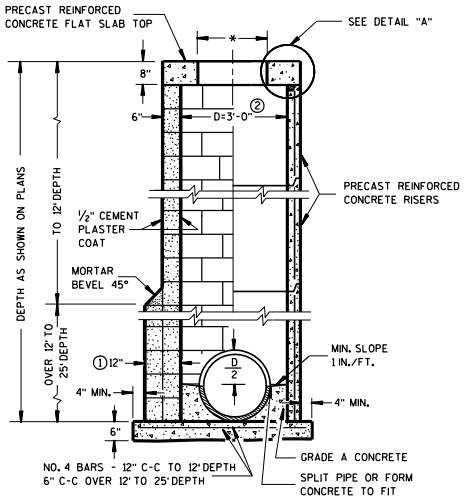
PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS AND MANHOLES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

* USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS.

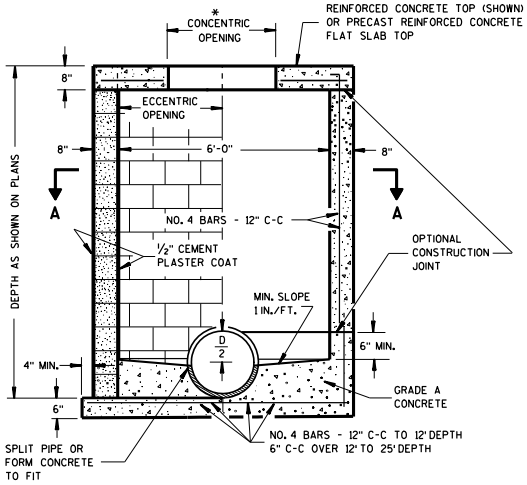
① 2 COURSES 6" BLOCK.

② WHEN CONNECTING PIPES ARE 24" OR LARGER THE PRECAST MANHOLES MAY BE INCREASED TO 42" DIAMETER.



CONCRETE BLOCK ② PRECAST REINFORCED CONCRETE

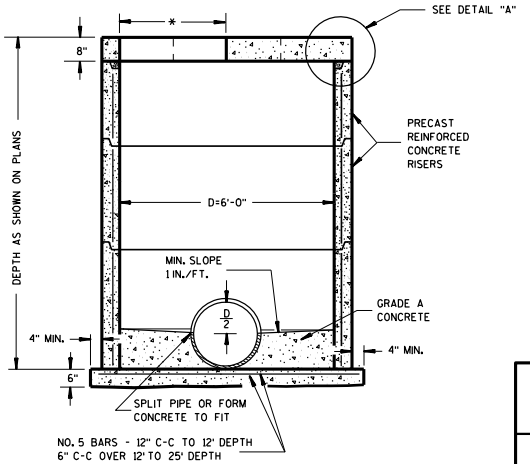
MANHOLES TYPE 2



SECTION B-B

CONCRETE BLOCK REINFORCED CONCRETE

MANHOLES TYPE 3

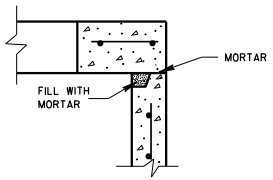


PRECAST REINFORCED CONCRETE

MANHOLES TYPE 2 & 3

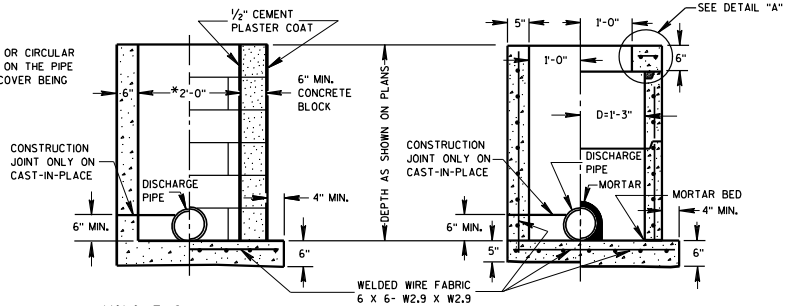
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/9/05 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



DETAIL "A"

*SELECTION OF SQUARE OR CIRCULAR DESIGN WILL BE BASED ON THE PIPE SIZES AND THE INLET COVER BEING UTILIZED



INLETS TYPE 1

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

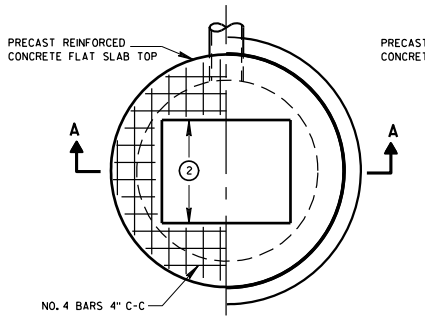
PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

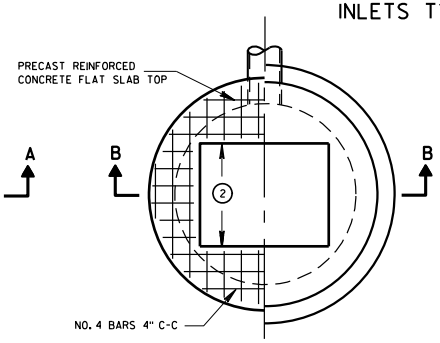
PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

(1) USE 2'-6" OPENING FOR TYPE 2 INLETS, 3'-0" OPENING FOR TYPE 3 INLETS, AND 2'-11" FOR TYPE 4 INLETS.

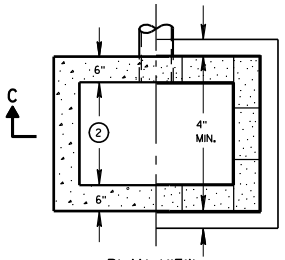
(2) USE 2'-0" OPENING FOR TYPE 1, 2 & 3 INLETS, 2'-6½" OPENING FOR TYPE 4 INLETS.



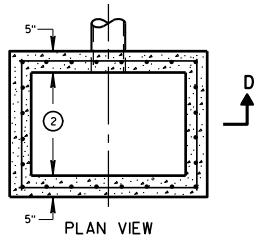
PLAN VIEW



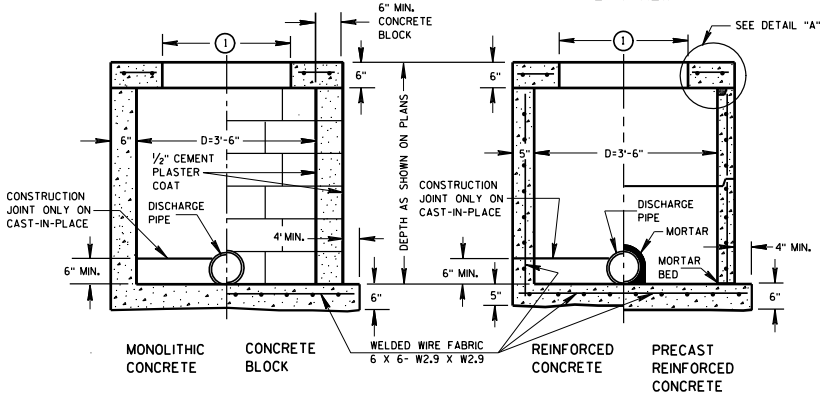
PLAN VIEW



PLAN VIEW

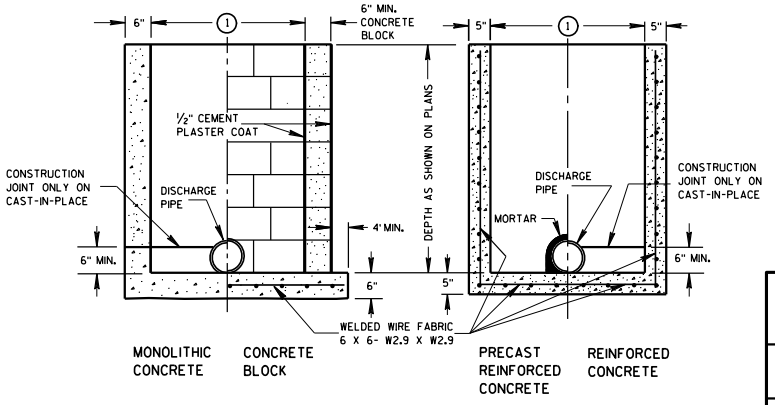


PLAN VIEW



SECTION A-A

SECTION B-B



SECTION C-C

SECTION D-D

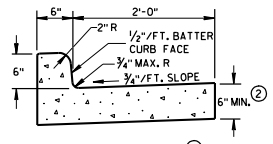
INLETS TYPE 2, 3 & 4

INLETS TYPE 1, 2, 3 & 4

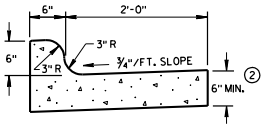
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 8/26/94 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

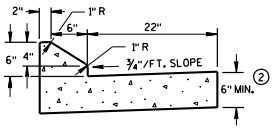
S.D.D. 8 C 1-5



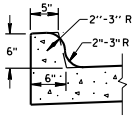
TYPES A & D ①



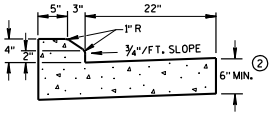
TYPES K & L ①



6" SLOPED CURB TYPES G & J ①

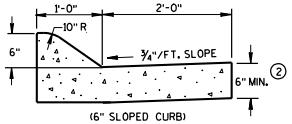


OPTIONAL CURB SHAPE FOR TYPES K & L ①

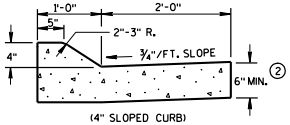


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

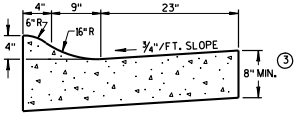


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

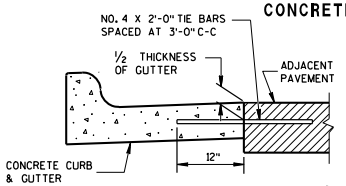
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, C, K AND R.

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

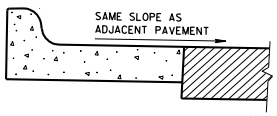
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

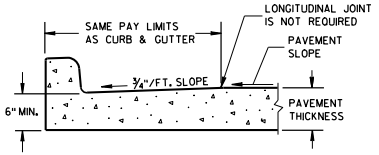
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



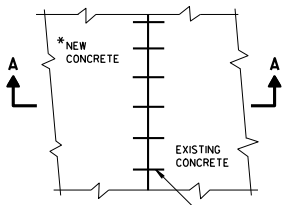
TYPICAL TIE BAR LOCATION ①



REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)

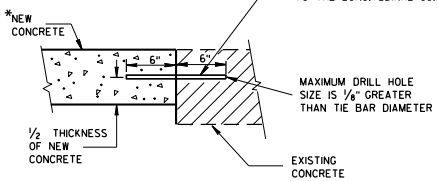


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



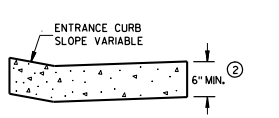
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

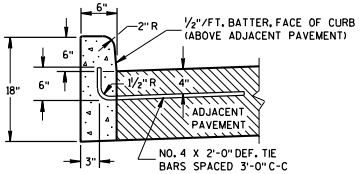


SECTION A-A

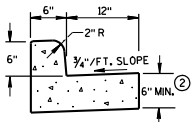
TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

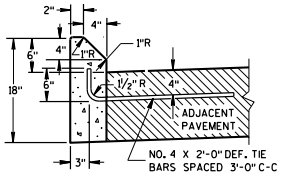


① TYPES A & D



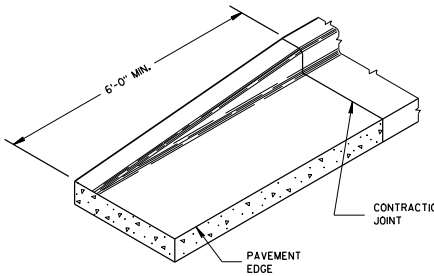
① TYPES A & D

CONCRETE CURB & GUTTER 18"



① TYPES G & J

CONCRETE CURB



END SECTION CURB & GUTTER

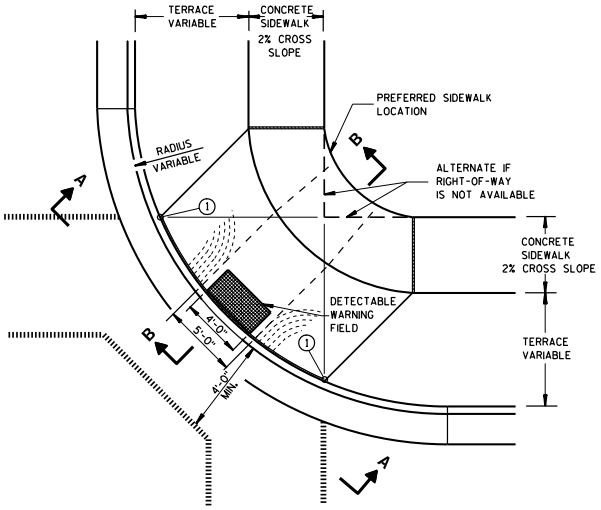
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

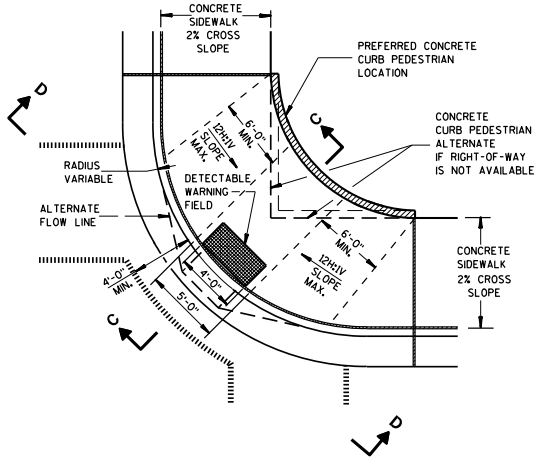
S.D.D. 8 D 1-17



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

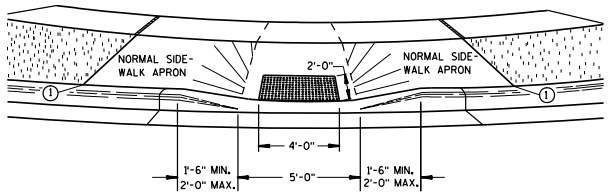
SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

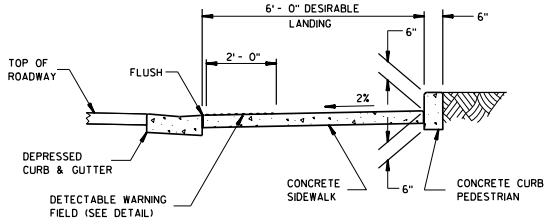
(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

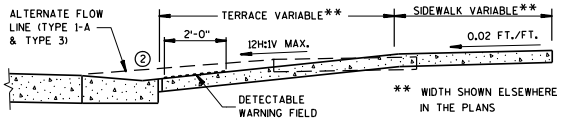
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



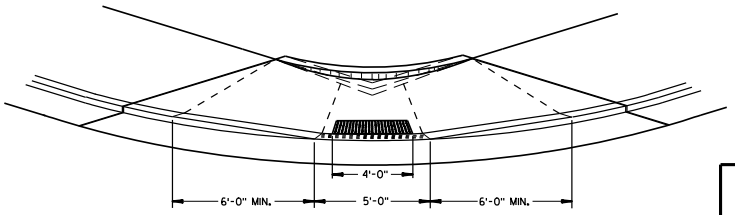
VIEW A-A



SECTION C-C



SECTION B-B



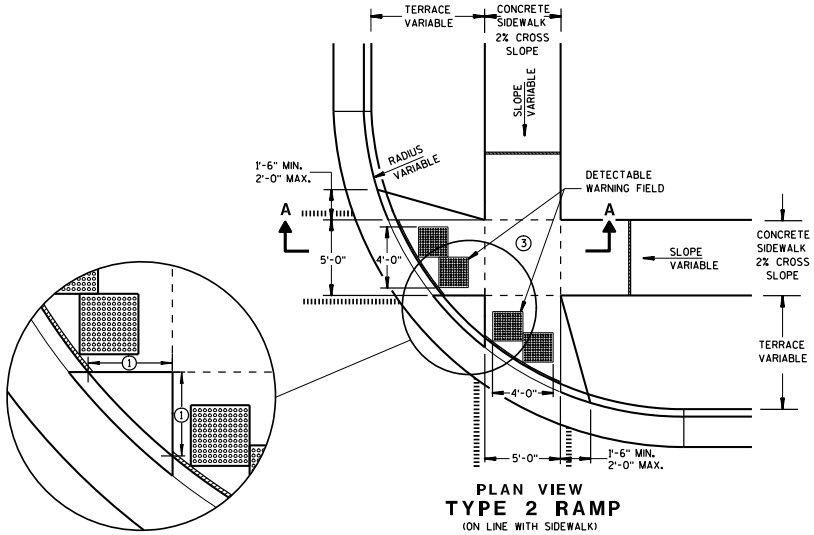
VIEW D-D

CURB RAMPS
TYPES 1 AND 1-A

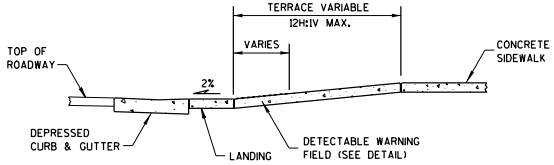
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 5-14a

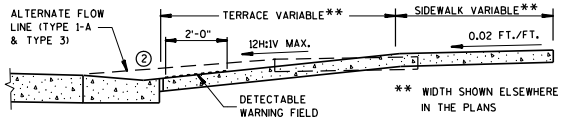
S.D.D. 8 D 5-14a



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

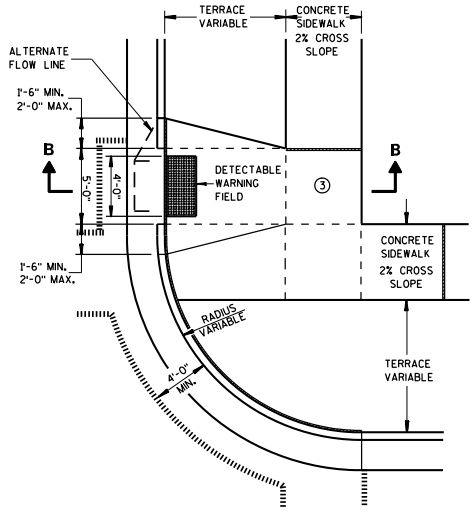
(1) WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

(3) PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS
TYPES 2 AND 3

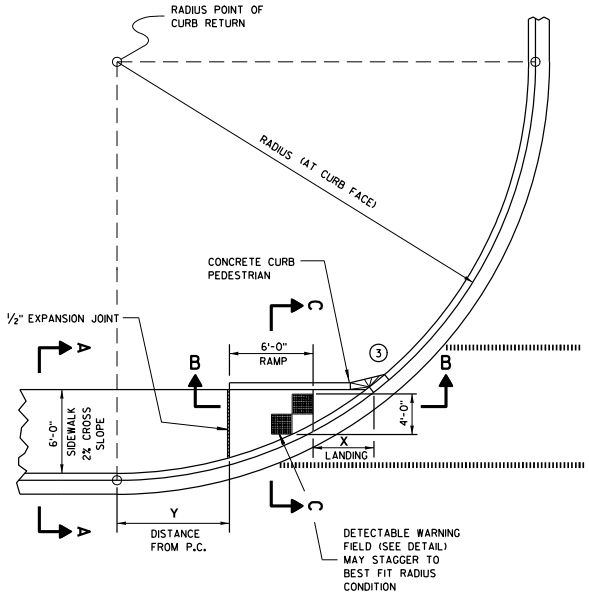
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 5-14b

6

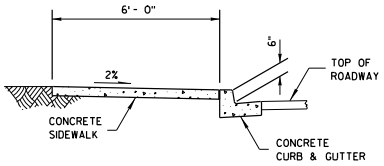
S.D.D. 8 D 5-14b



CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A

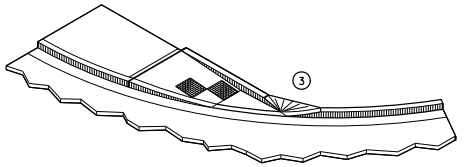
GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

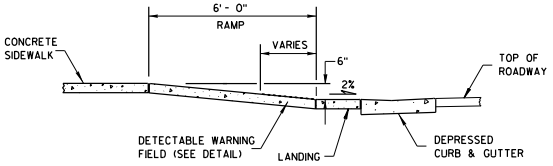
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

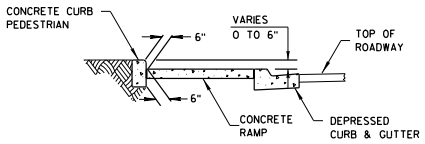
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW



SECTION B-B



SECTION C-C

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

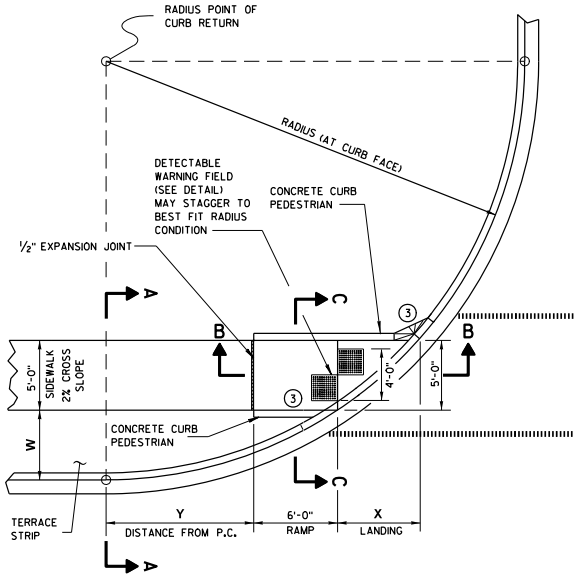
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 5-14c



CURB RAMP TYPE 4B
PLAN VIEW

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

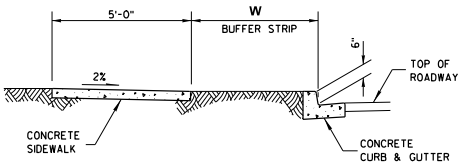
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

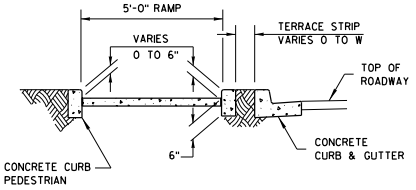
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-1¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"
70 FEET	12'-2¾"	14'-3¼"	11'-1¼"	17'-4"	10'-1"	19'-11¾"	9'-3¾"	22'-4¼"	8'-8¼"	24'-6¼"
80 FEET	13'-2"	15'-8½"	11'-10½"	18'-11¾"	10'-10¾"	21'-10"	10'-1"	24'-4¾"	9'-5"	26'-8¾"
90 FEET	14'- ½"	17'-½"	12'-8¼"	20'-6½"	11'-7¾"	23'-7"	10'-9¾"	26'-3¾"	10'-1¼"	28'-9½"
100 FEET	14'-10½"	18'-3¾"	13'-5½"	22'-0"	12'-4¼"	25'-2¾"	11'-5¾"	28'-1½"	10'-9"	30'-9"

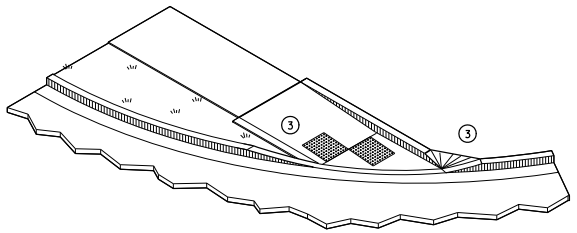
INTERMEDIATE RADII CAN BE INTERPOLATED



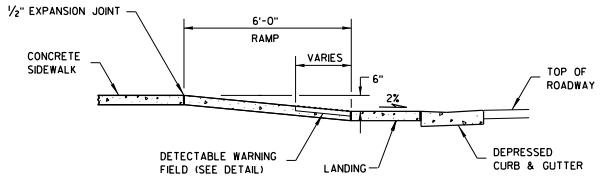
SECTION A-A



SECTION C-C



ISOMETRIC VIEW



SECTION B-B

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B

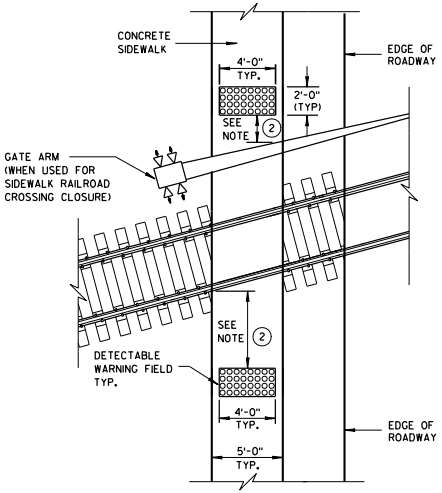
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

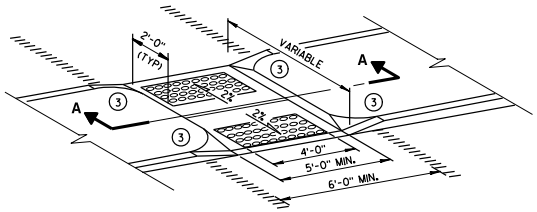
S.D.D. 8 D 5-14d

6

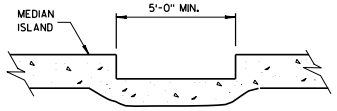
S.D.D. 8 D 5-14d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



SECTION A-A

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

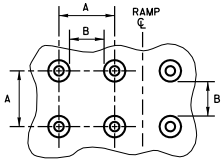
(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

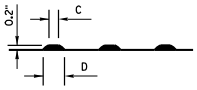
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



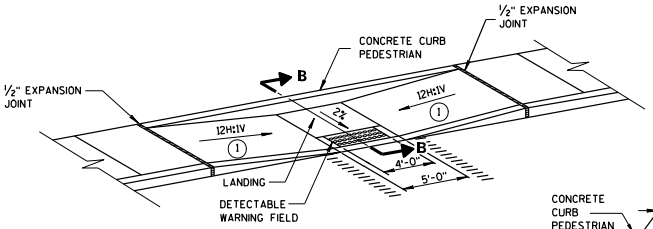
PLAN VIEW



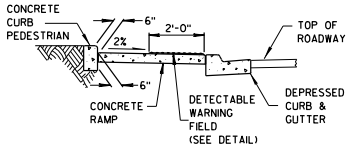
ELEVATION VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

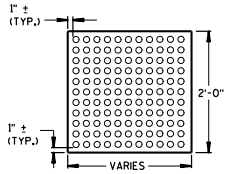


MID-BLOCK CROSSING
TYPE 7A

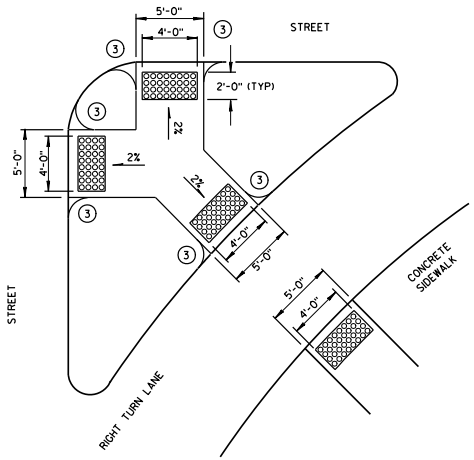


SECTION B-B

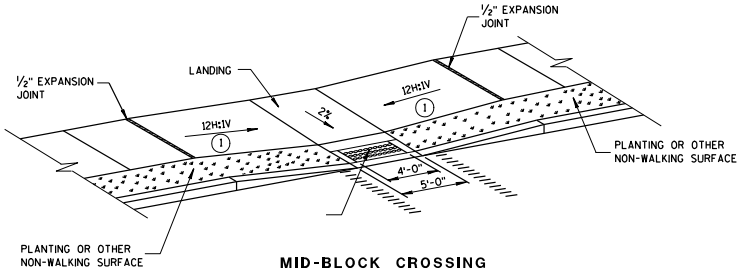
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

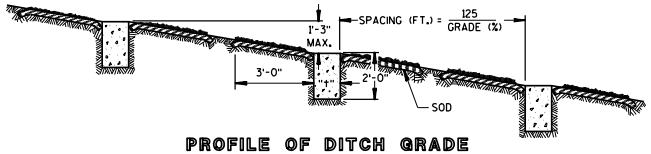
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

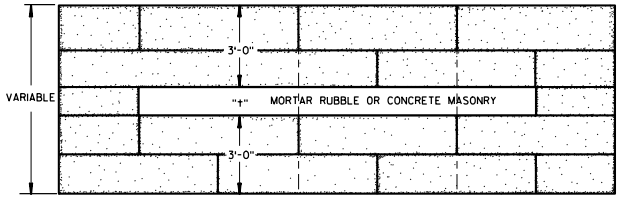
APPROVED

2-9-10 — DATE — FHWA

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

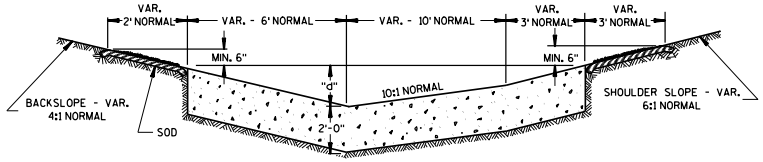


PROFILE OF DITCH GRADE

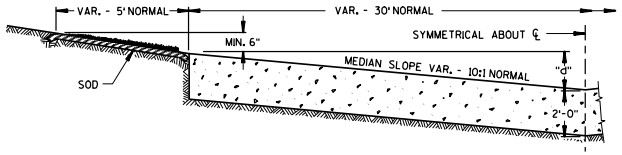


PLAN VIEW SHOWING MASONRY AND SOD

"t" - MASONRY THICKNESS SHALL BE 0'-9" FOR CONCRETE AND 1'-0" FOR MORTAR RUBBLE.



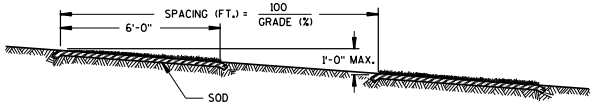
SIDE DITCH CROSS SECTION



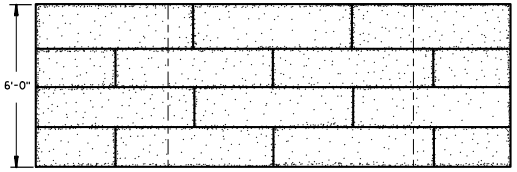
MEDIAN DITCH CROSS SECTION

"d" - THE MINIMUM DEPTH OF THE MASONRY PORTION OF THE DITCH CHECKS SHALL BE EQUAL TO THE MAXIMUM DEPTH OF FLOW. THE NORMAL "d" WILL BE 1'-6".

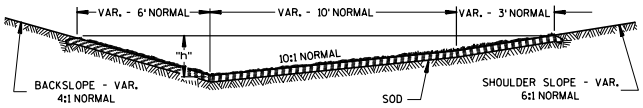
MASONRY AND SOD DITCH CHECKS



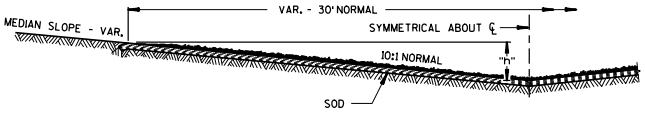
PROFILE OF DITCH GRADE



PLAN VIEW SHOWING SOD



SIDE DITCH CROSS SECTION



MEDIAN DITCH CROSS SECTION

"h" - THE MINIMUM HEIGHT OF DITCH TO BE SODDED SHALL BE EQUAL TO THE MAXIMUM DEPTH OF FLOW PLUS 6". THE NORMAL "h" WILL BE 1'-6".

SOD DITCH CHECKS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALTERNATE DESIGNS FOR DITCH CHECKS, OF THE MATERIAL OR COMBINATION OF MATERIALS SHOWN HEREON, MAY BE USED UPON WRITTEN PERMISSION OF THE ENGINEER.

SOD STRIPS FOR DITCH CHECKS MAY BE PLACED EITHER TRANSVERSELY OR LONGITUDINALLY TO THE DIRECTION OF WATER FLOW.

SOD OR MASONRY AND SOD DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

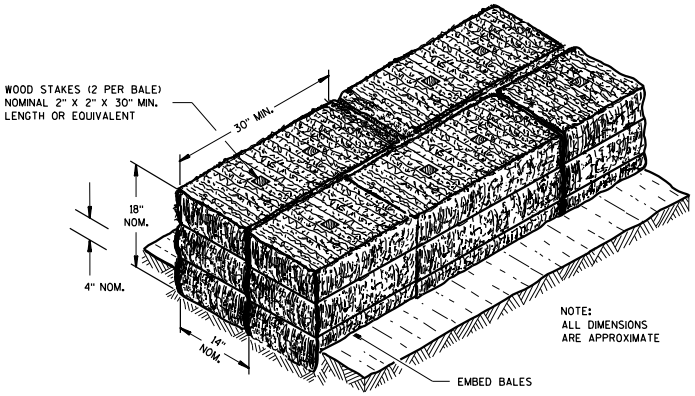
APPROVED 9/7/71 DATE
STATE HIGHWAY ENGINEER
FHWA

6

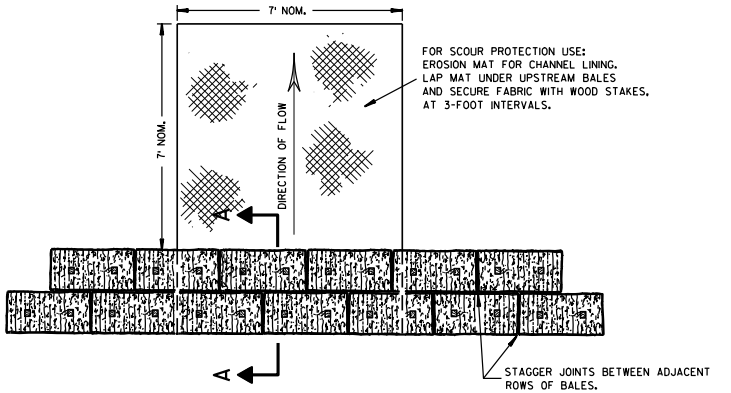
6

S.D.D. 8 E 4-2

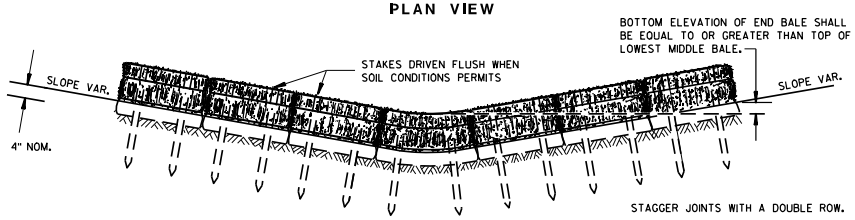
S.D.D. 8 E 4-2



SECTION A-A



PLAN VIEW



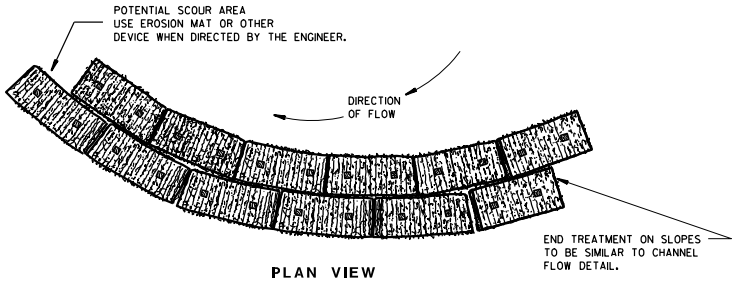
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

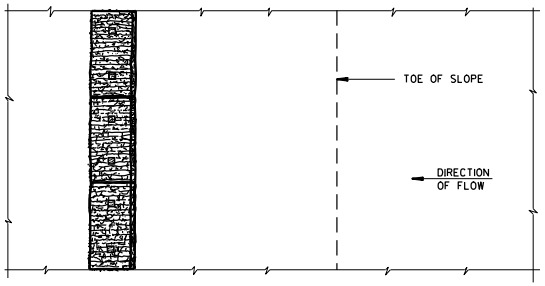
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

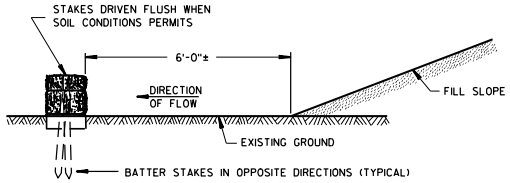


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

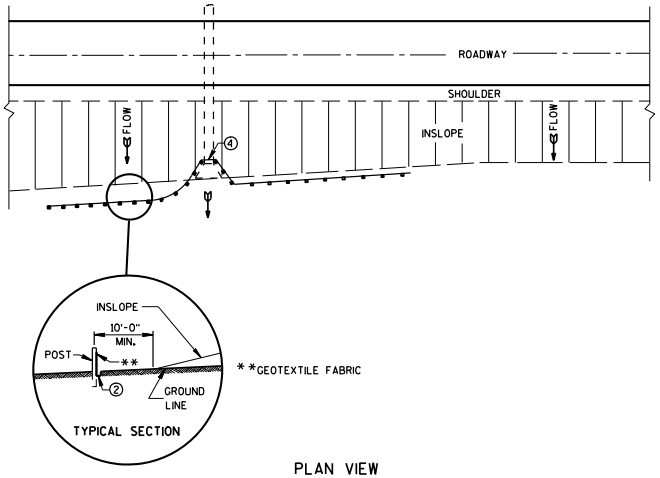
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

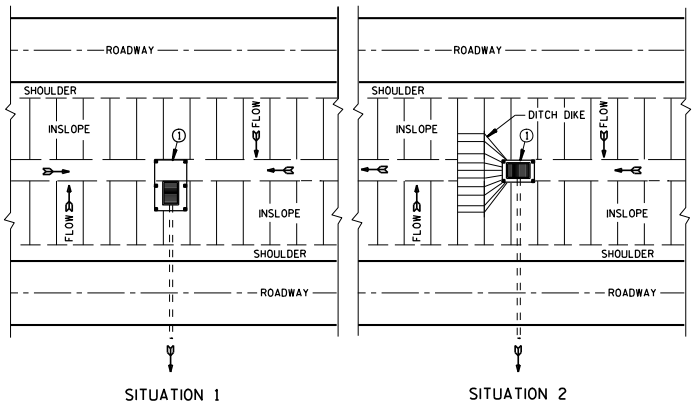
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 6/04/02 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

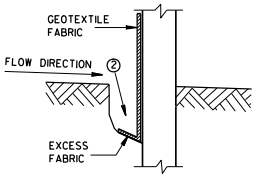
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

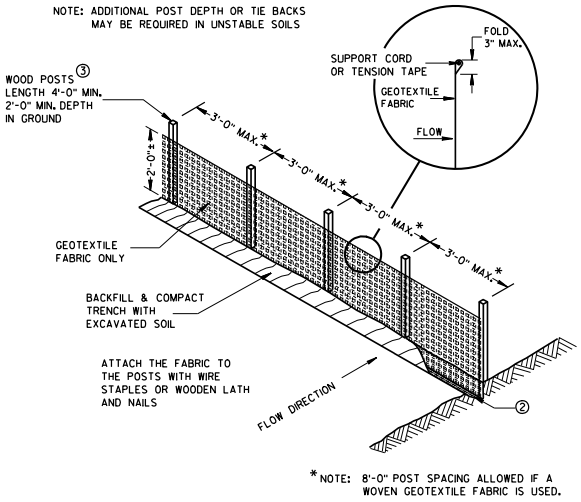
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

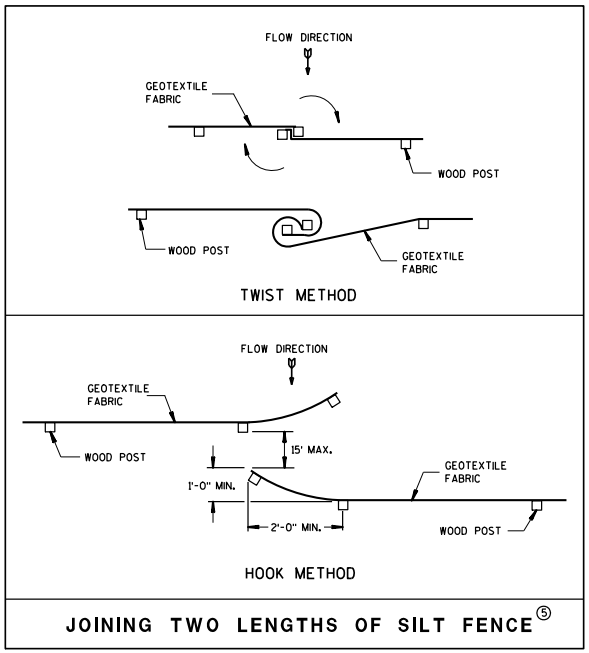
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



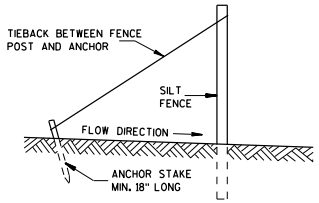
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

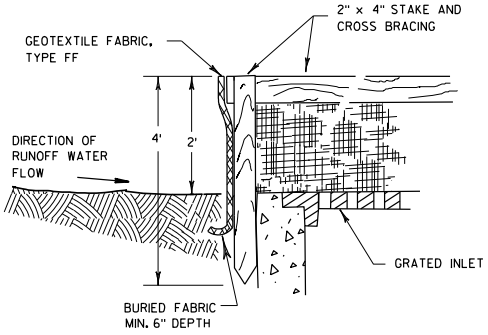
(WHEN REQUIRED BY THE ENGINEER)

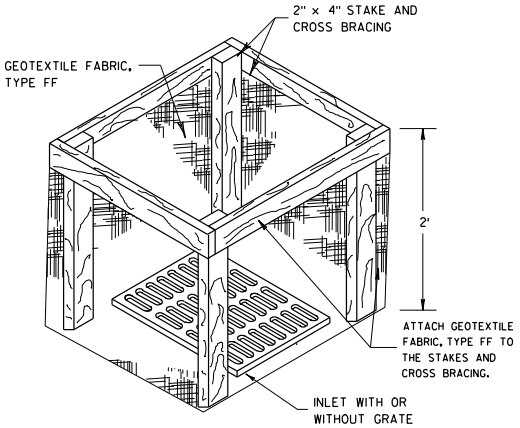
SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE FHWA	CHIEF ROADWAY DEVELOPMENT ENGINEER

6

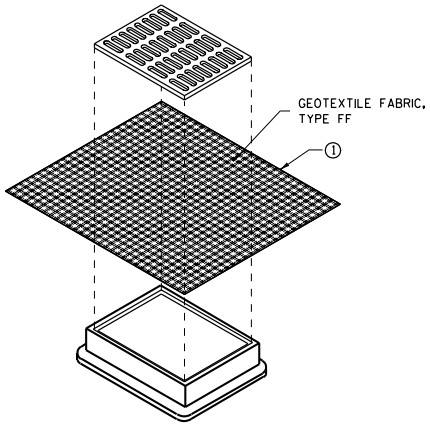
S.D.D. 8 E 9-6

S.D.D. 8 E 9-6



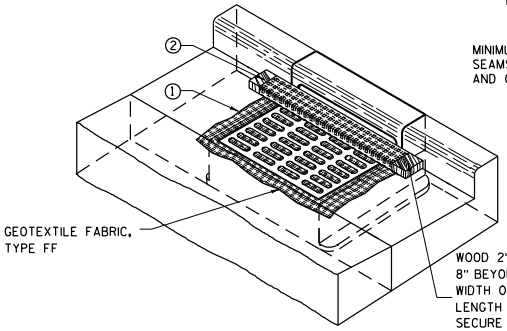


INLET PROTECTION, TYPE A

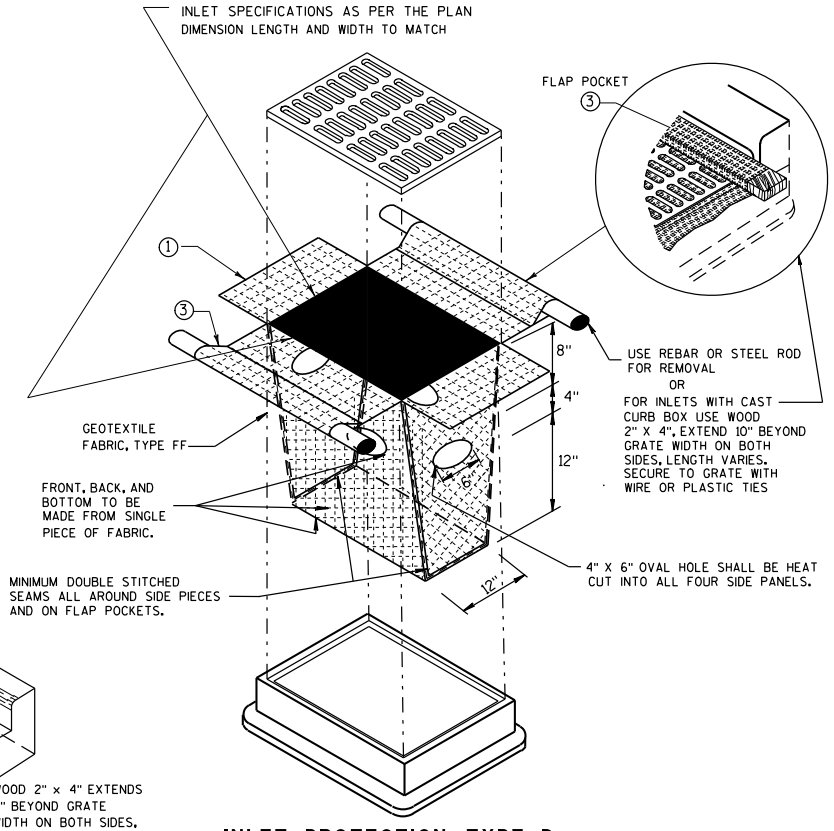


INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
FHWA

CHIEF ROADWAY DEVELOPMENT ENGINEER

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

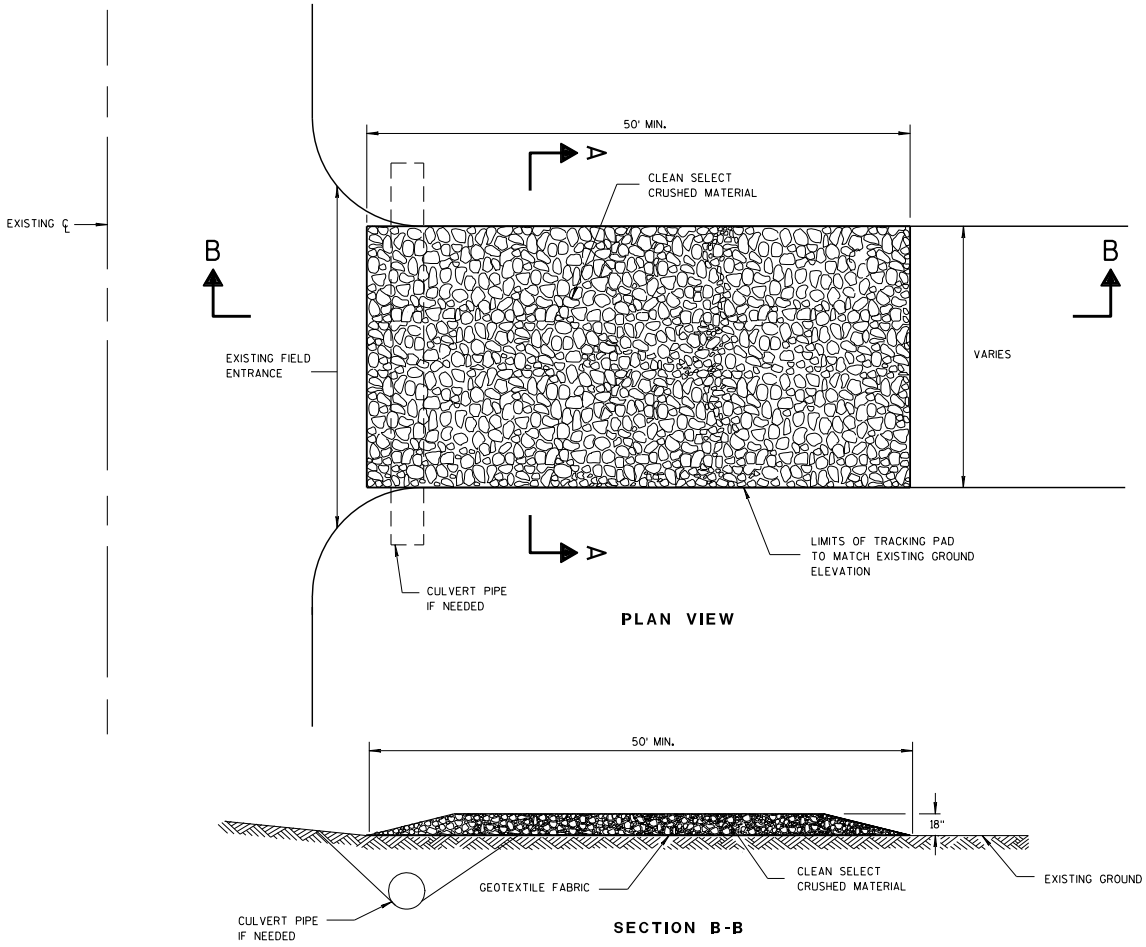
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

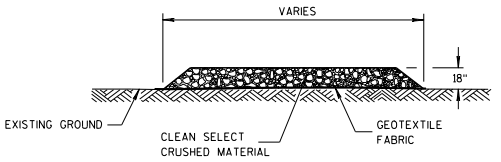
SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



PLAN VIEW



SECTION A-A

SECTION B-B

TRACKING PAD

6

S.D.D. 8 E 14-1

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS ENGINEER
545 ENT
FHWA

METAL APRON ENDWALLS

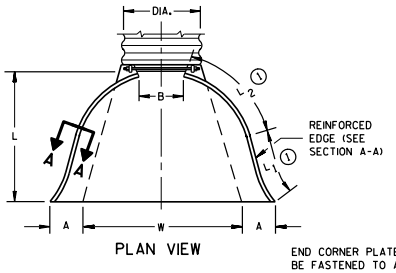
PIPE DIA. (IN.)	MIN. THICK. (inches) STEEL	ALUM.	DIMENSIONS (inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 3/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

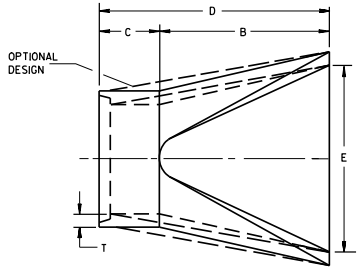
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 3/4 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24-30 ** 30-36	* 72-78 ** 78	* 21-27 ** 27	99	102	5 1/2	2 to 1
72	7	* 24-36 ** 30-36	78	21	99	108	6	2 to 1
78	7 1/2	* 24-36 ** 30-36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

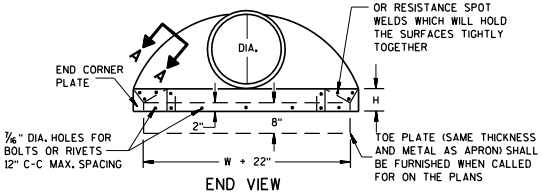
* MINIMUM
** MAXIMUM



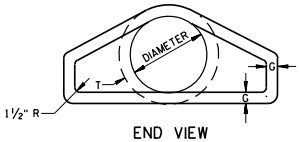
PLAN VIEW



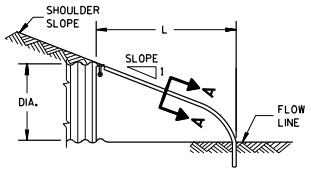
PLAN



END VIEW

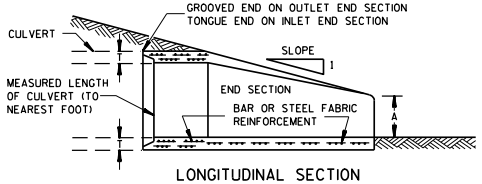


END VIEW



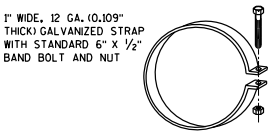
SIDE ELEVATION

METAL ENDWALLS



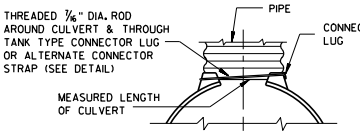
LONGITUDINAL SECTION

CONCRETE ENDWALLS

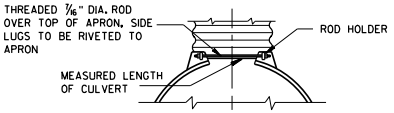


ALTERNATE FOR TYPE 1 CONNECTION

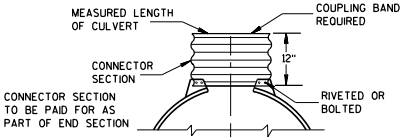
END SECTION CONNECTOR STRAP



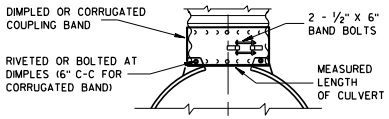
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

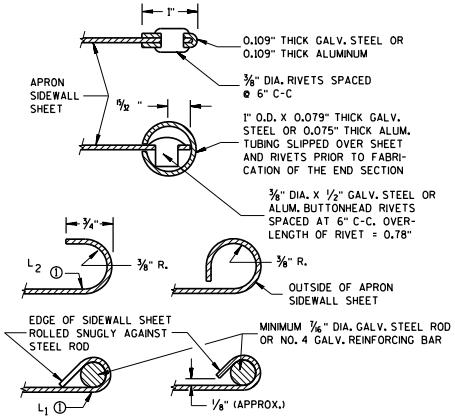
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

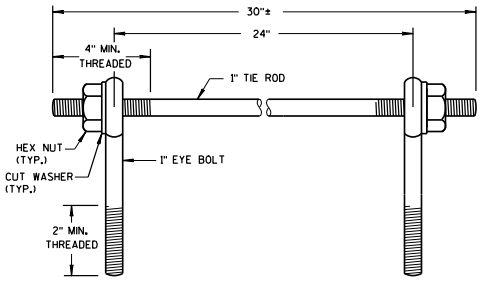
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

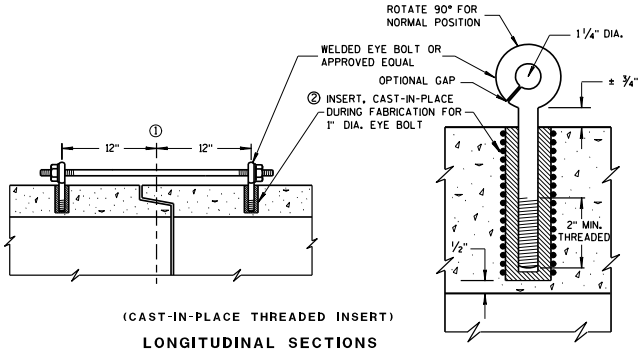
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 11/30/94 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED ON THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES. UNLESS OTHERWISE STATED IN THE CONTRACT THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE CULVERT PIPE AS INDICTED ON THE PLANS AND BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO CILVERT PIPE, REINFORCED CONCRETE CULVERT PIPE, OR REINFORCED CONCRETE PIPE CATTLE PASS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

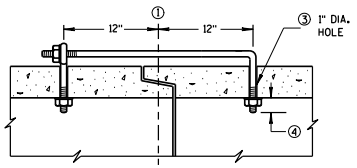
③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

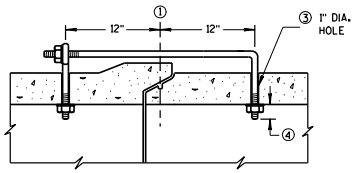
⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(TONGUE & GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

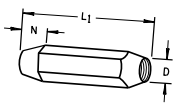
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



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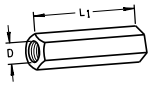
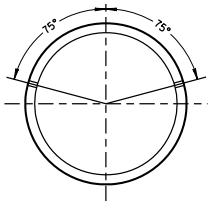


PLAIN

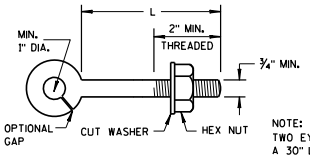
RIGHT AND LEFT THREADS

SLEEVE NUTS



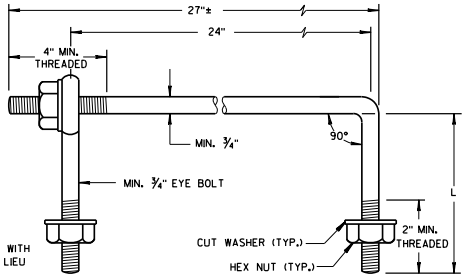
PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



EYE BOLT

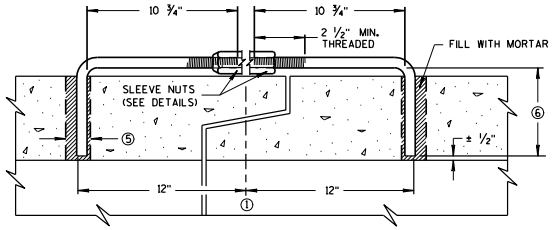
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)



LONGITUDINAL SECTION

(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

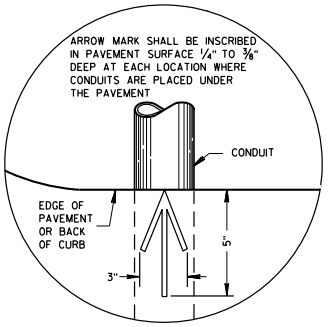
ADJUSTABLE TIE ROD (ALTERNATE NO. 3)

JOINT TIES FOR CONCRETE PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

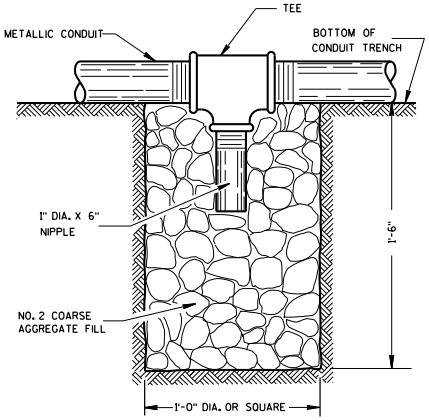
APPROVED
12/17/07
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 F 4-6



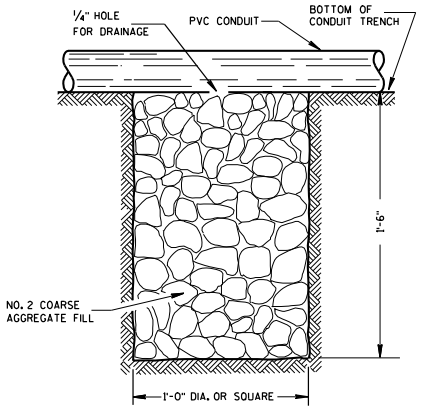
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

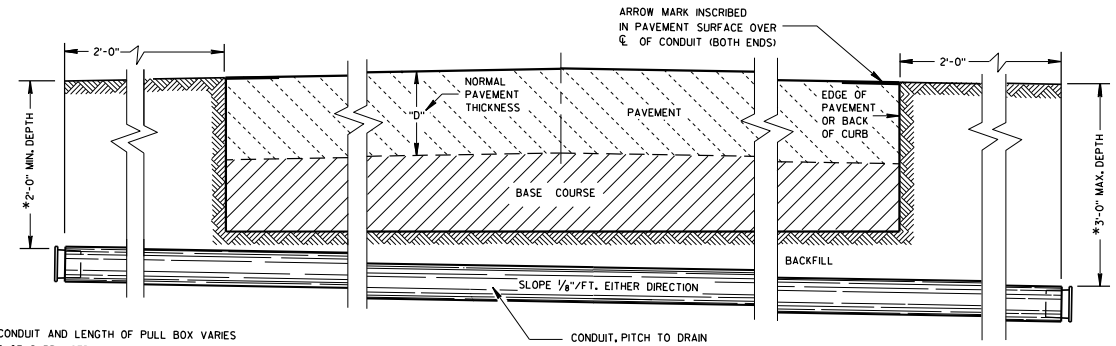
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/23/03
DATE

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

FHWA

6

S.D.D. 9 B 2-7

6

S.D.D. 9 B 2-7

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

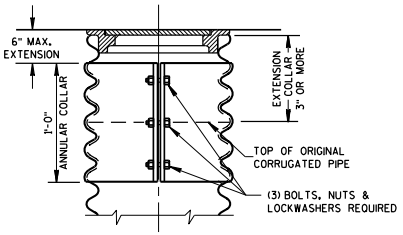
GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

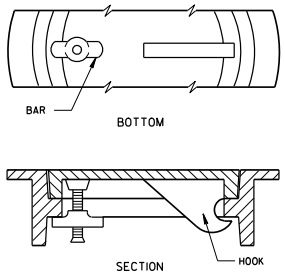
S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 5/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.

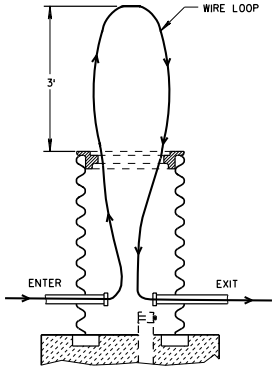


CORRUGATED PIPE EXTENDER

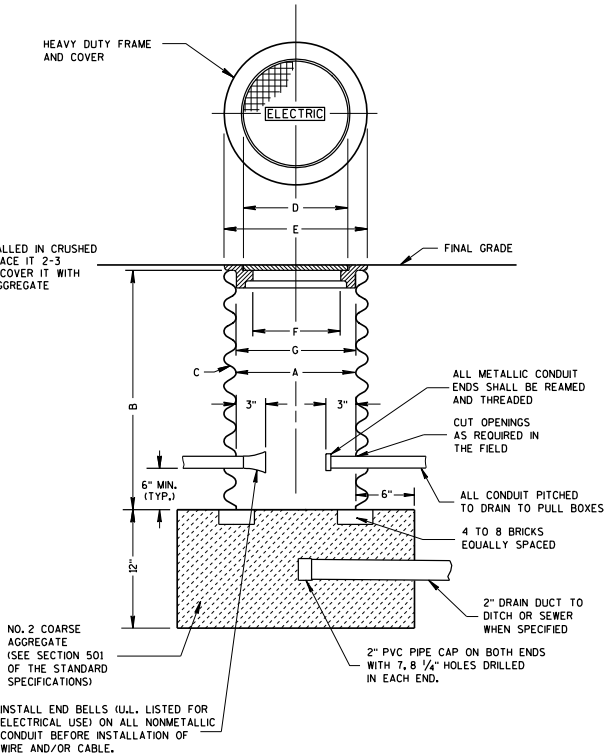


ALTERNATE COVER (LOCKING)

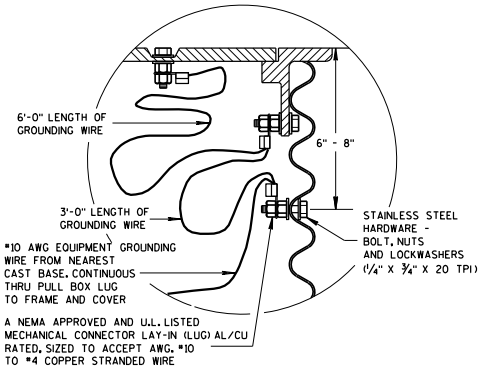
TIGHTENING BAR TYPE



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

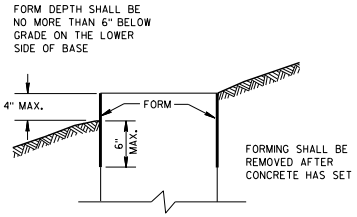
APPROVED
9/27/06 — DATE
/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

6

S.D.D. 9 B 4-9

6

S.D.D. 9 B 4-9



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

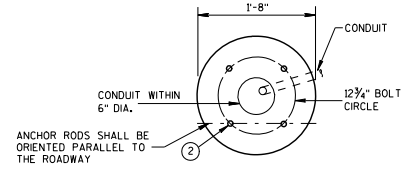
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

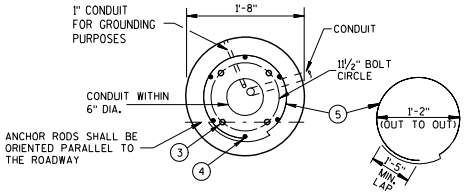
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

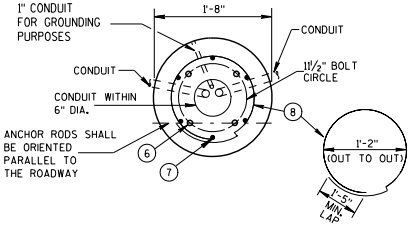
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

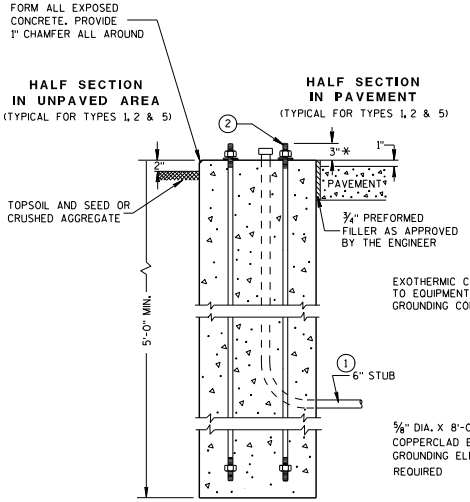
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

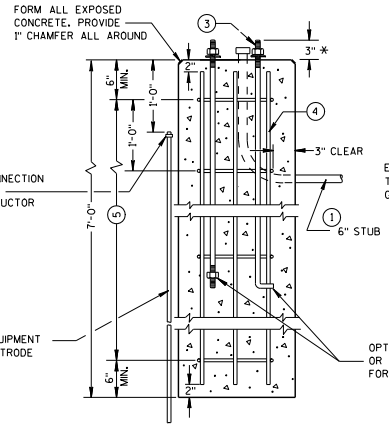








TYPE 1



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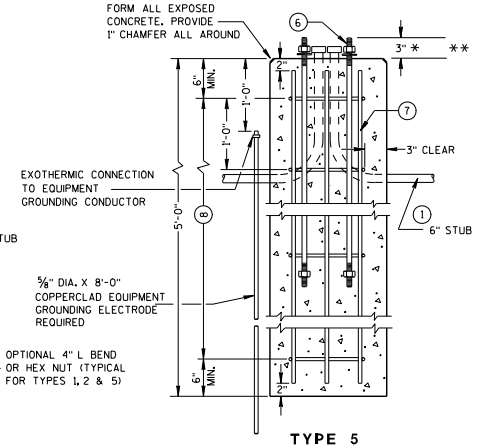


TYPE 5

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/3/10
DATE
/S/ Joanna L. Bush
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

6
S.D.D. 9 C 2-6

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (92,000 YIELD) HEAVY HEX NUT AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

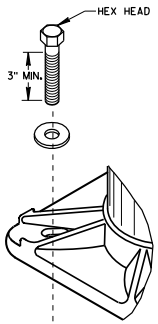
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

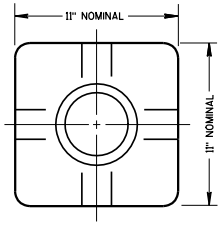
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

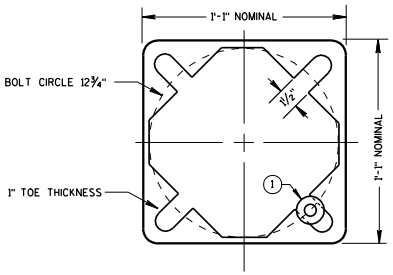
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1½", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

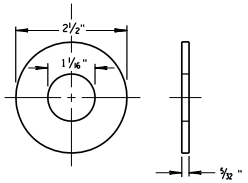




TOP VIEW
(PEDESTAL BASE)

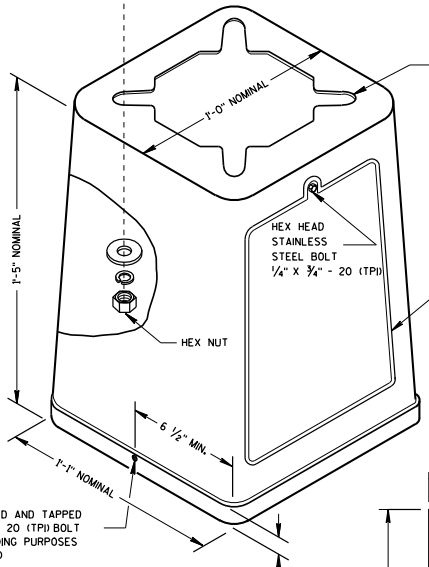


BOTTOM VIEW
(PEDESTAL BASE)

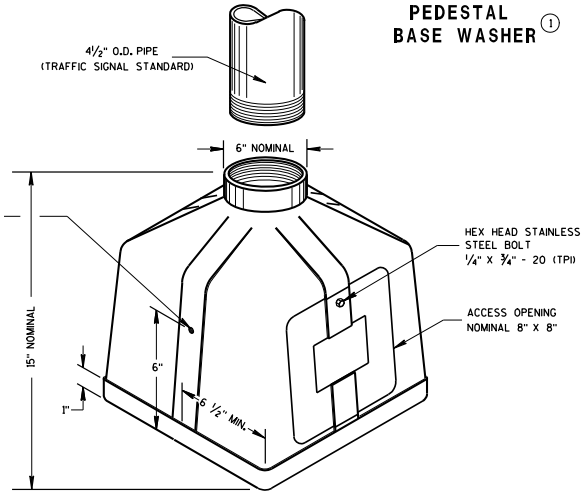


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

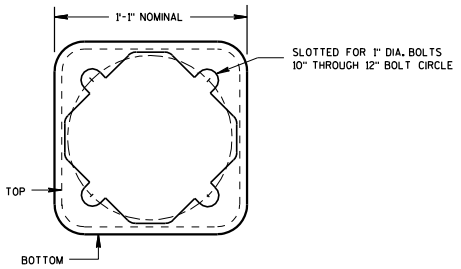
PEDESTAL BASE WASHER (1)



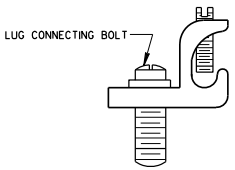
ISOMETRIC VIEW



ISOMETRIC VIEW
PEDESTAL BASE

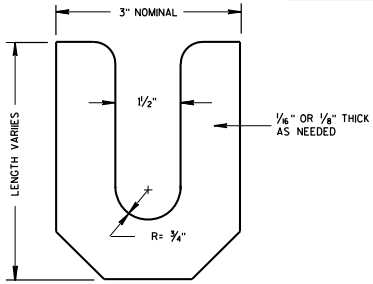


BOTTOM VIEW
(TRANSFORMER BASE)



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

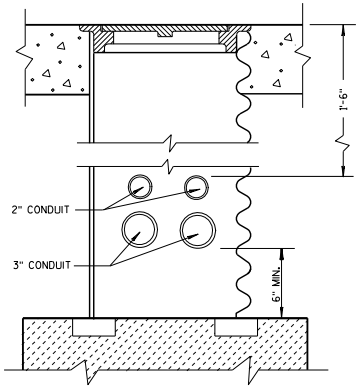
APPROVED
10/27/09
DATE
/S/ Joanna L. Bush
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

6

S.D.D. 9 C 3-3

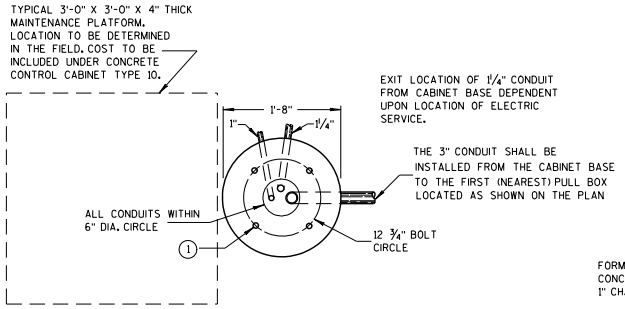
CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

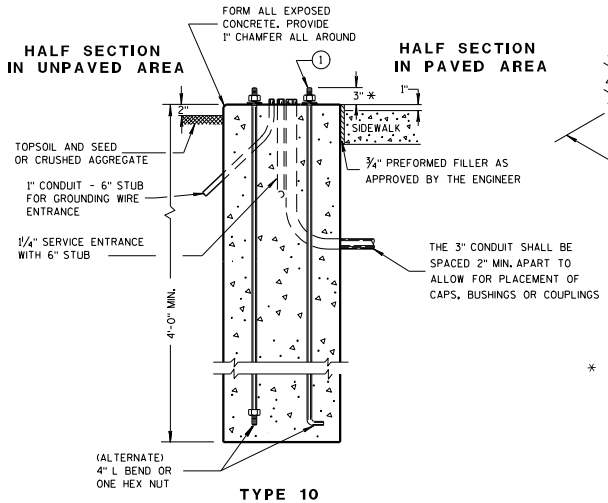
* INCLUDES MAINTENANCE PLATFORM.



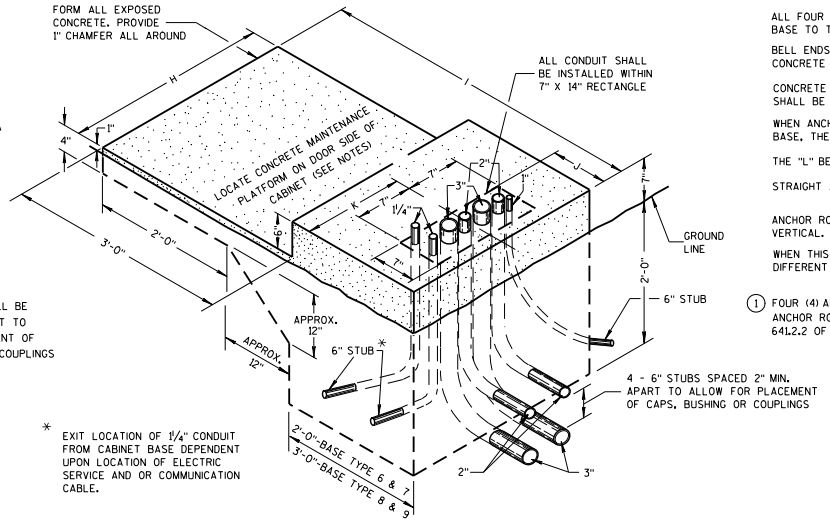
CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)





TYPE 10



* EXIT LOCATION OF 1¼" CONDUIT FROM CABINET BASE DEPENDENT UPON LOCATION OF ELECTRIC SERVICE AND OR COMMUNICATION CABLE.

TYPE 6,7,8 AND 9 (ISOMETRIC VIEW)

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WHEN THIS DRAWING IS USED FOR STREET LIGHTING CABINET BASES, CONDUIT MAY BE DIFFERENT AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6" ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS.

CONCRETE CONTROL CABINET BASES

CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/3/10
DATE
/S/ Joanna L. Bush
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

S.D.D. 9 C 5-7

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

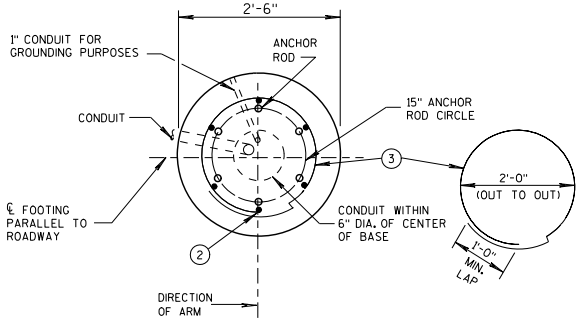
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

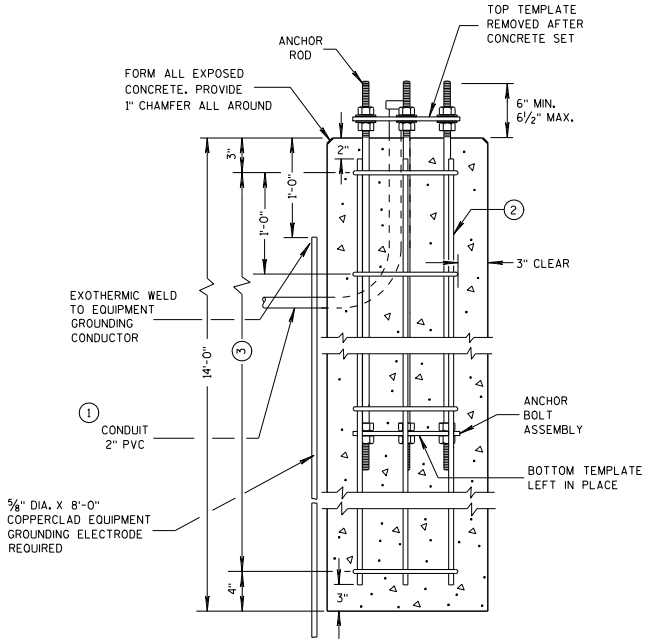
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (15) NO. 4 X 7'-4" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

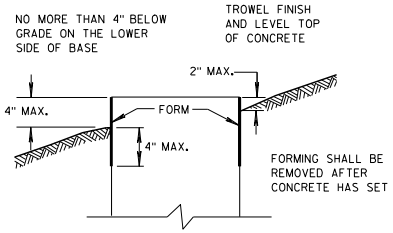
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



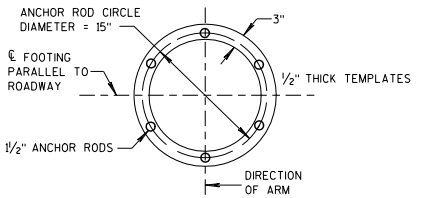


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 POLES)

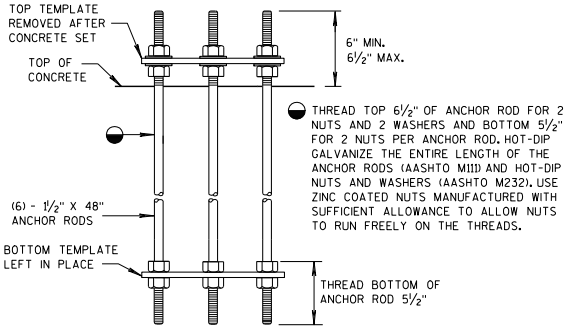
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-1 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10
ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	69
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

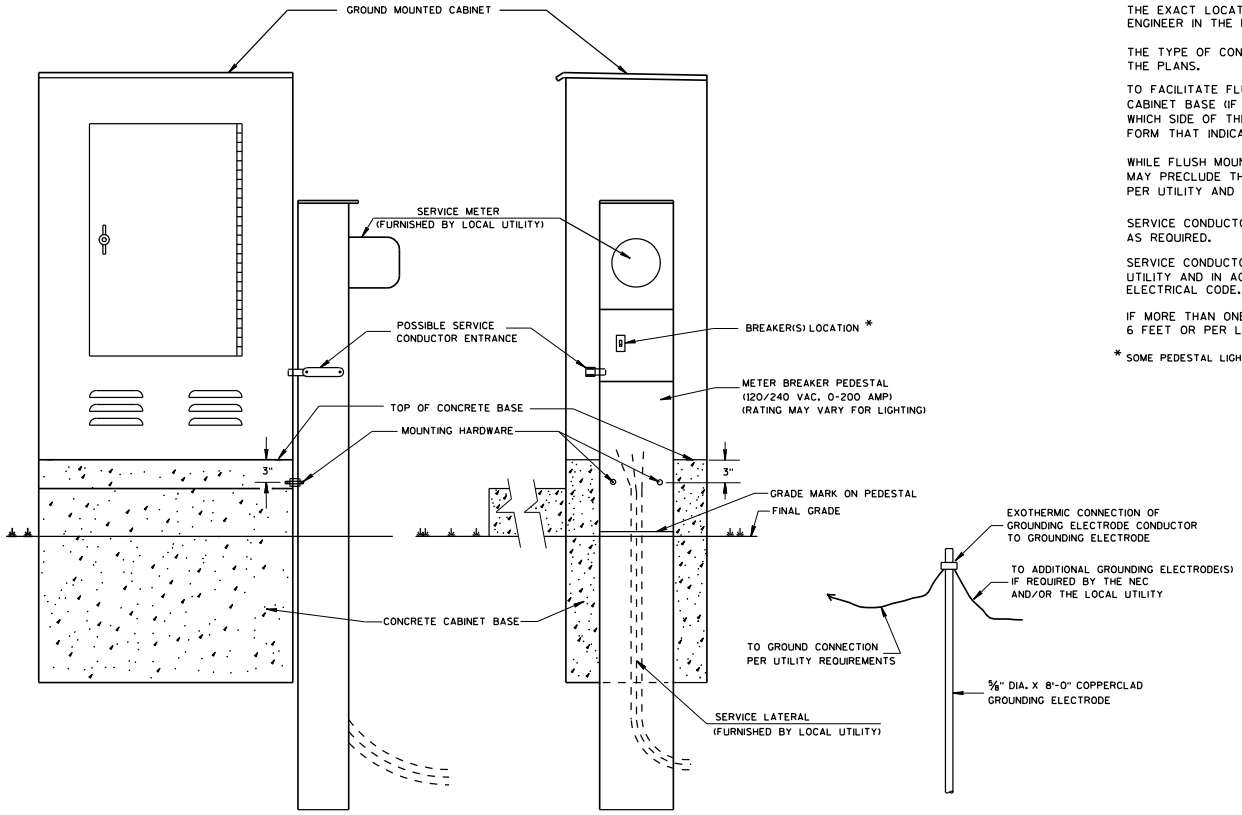
APPROVED
3-2-11 — DATE
/S/ Thomas J. Garrigan — STATE ELECTRICAL ENGR 553 — HWYS
FHWA

6

S.D.D. 9 C 11-2

6

S.D.D. 9 C 11-2



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE, CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

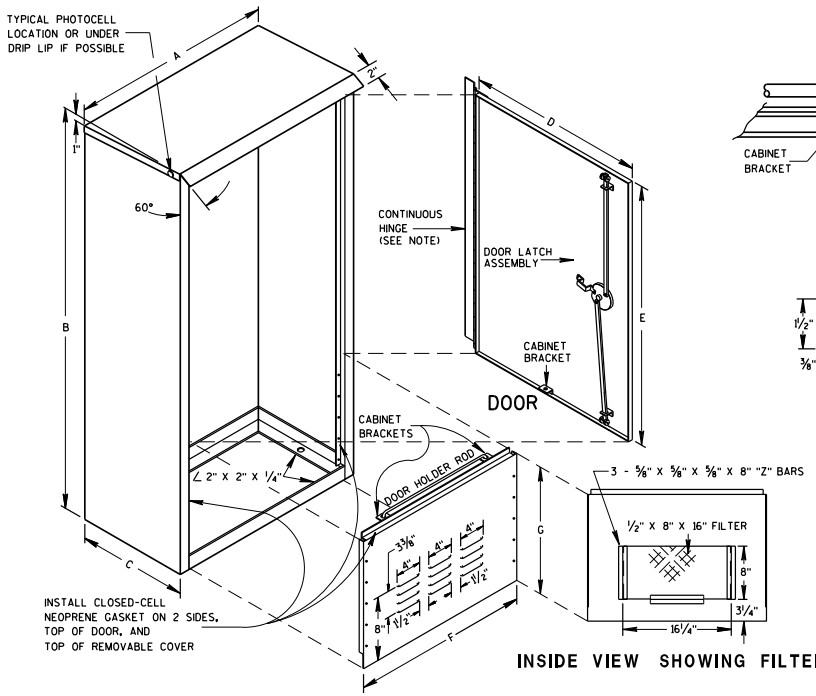
SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

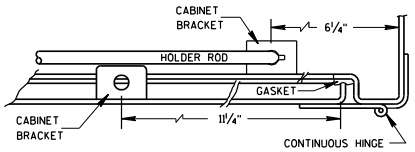
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10/27/09 DATE	/S/ Joanna L. Bush STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA	

6
S.D.D. 9 D 1-4

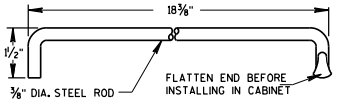


REMOVABLE COVER

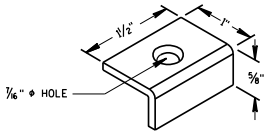
INSIDE VIEW SHOWING FILTER



HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

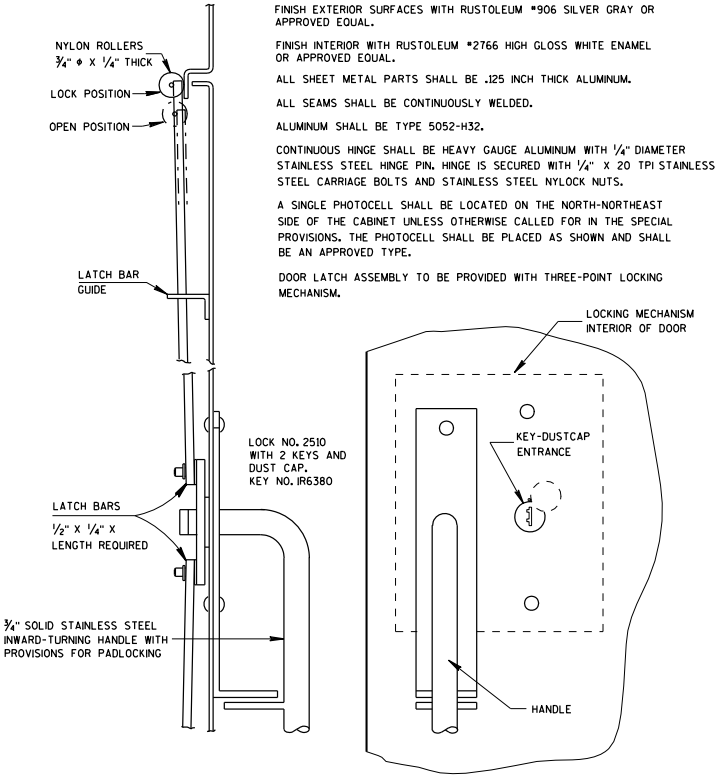
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE AN APPROVED TYPE.

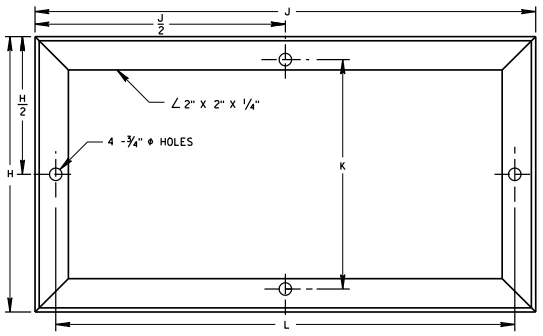
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

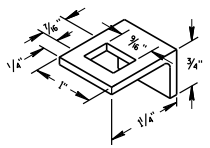
LATCH ASSEMBLY



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2



LATCH BAR GUIDE

SIGNAL OR LIGHTING CONTROL CABINET

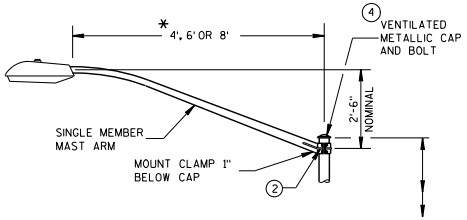
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

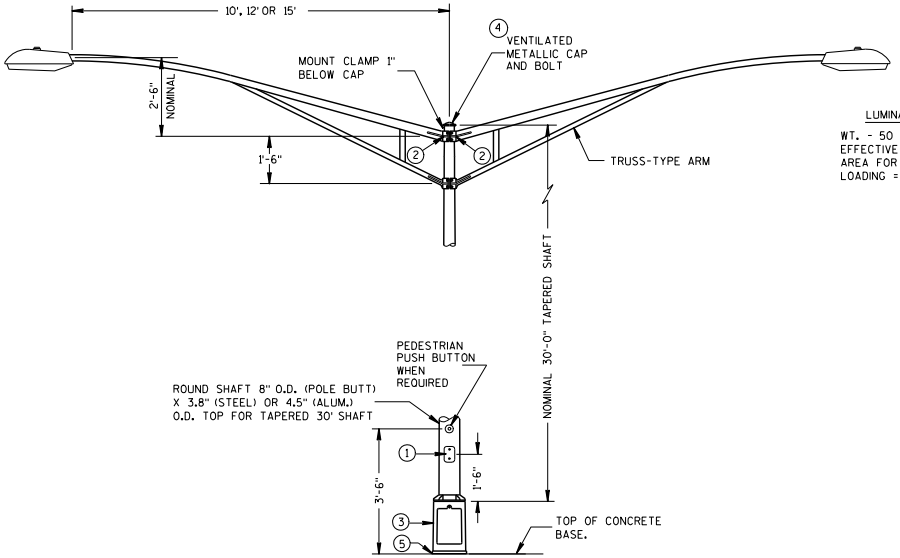
APPROVED 10/21/96 DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

S.D.D. 9 D 2-2

*RISE FOR 4' ARM SHALL BE 2'-0".





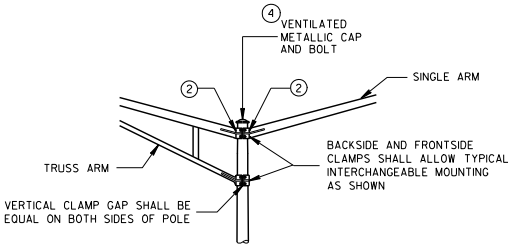
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

TYPE 5 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
3. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
4. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
5. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

POLE MONTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....

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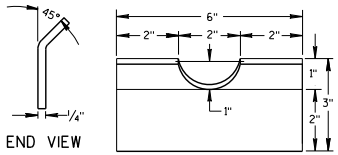
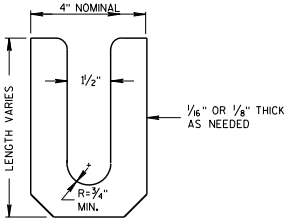
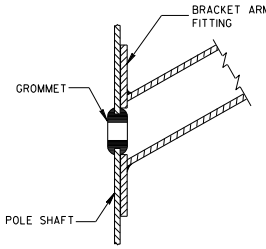


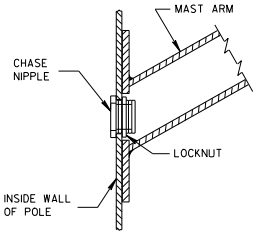
RECTANGULAR CLAMP SHIM
(4 TO A SET)



LEVELING SHIM (15)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10.) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11.) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12.) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13.) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14.) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

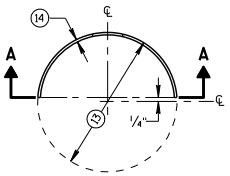
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

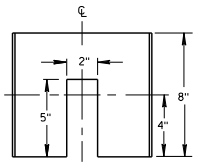
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15.) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

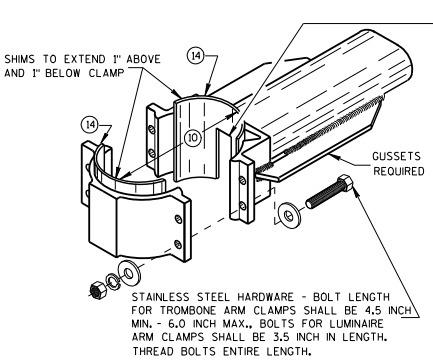
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



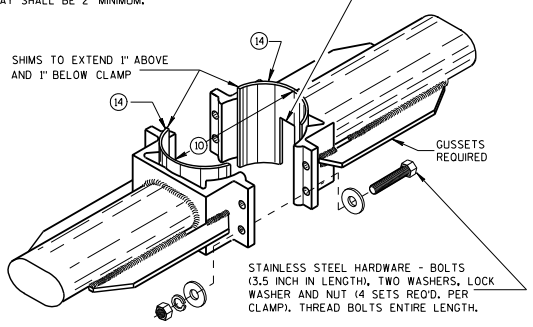
PLAN VIEW



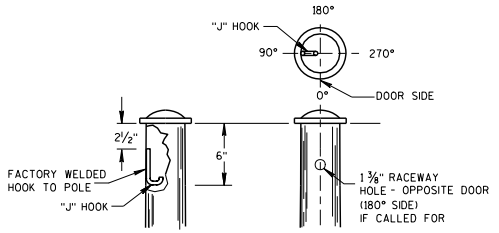
SECTION A-A
CIRCULAR CLAMP SHIM
(2 TO A SET)



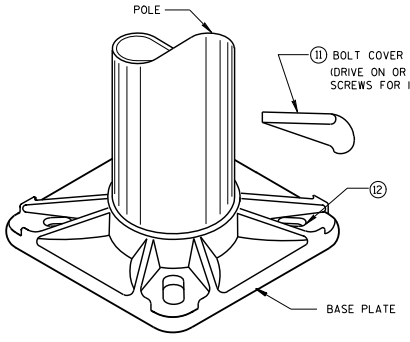
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



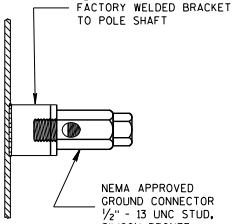
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

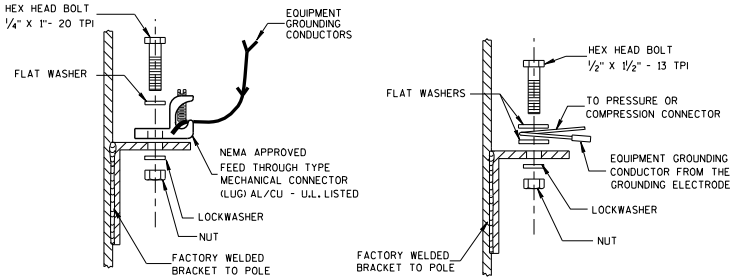


TYPICAL "J" HOOK LOCATION



BASE PLATE





TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/2/11 — DATE
/S/ Thomas J. Gosling — STATE ELECTRICAL ENGI 557 — HWYS
FHWA

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S.D.D. 9 E 1-11g

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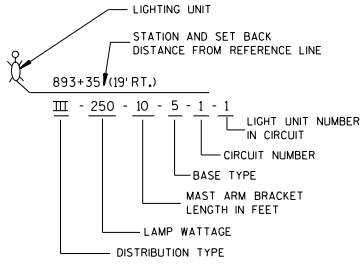
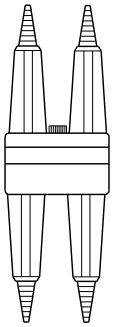
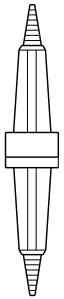


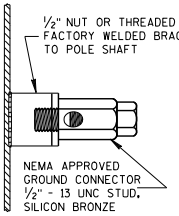
LIGHTING UNIT CODE
(TYPICAL)

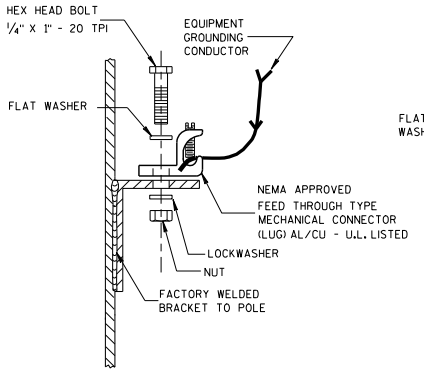


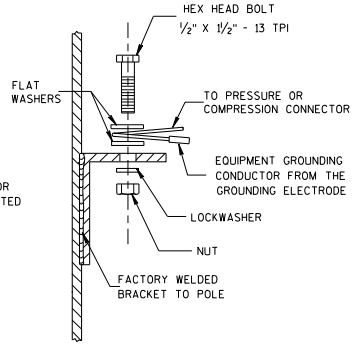
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT







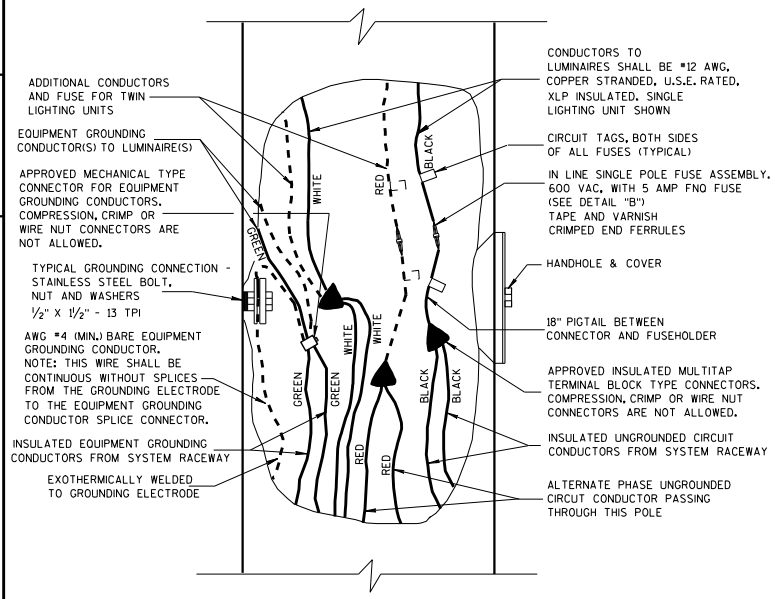
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL

GENERAL NOTES

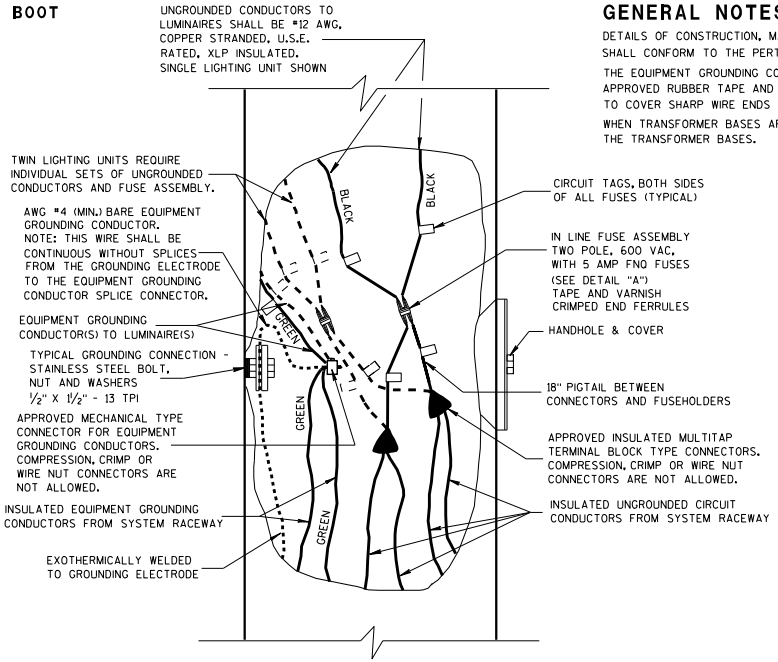
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/2/2011 DATE
/S/ Thomas J. Gosling STATE ELECTRICAL ENGR
FHWA

HWYS

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S.D.D. 9 E 3-4

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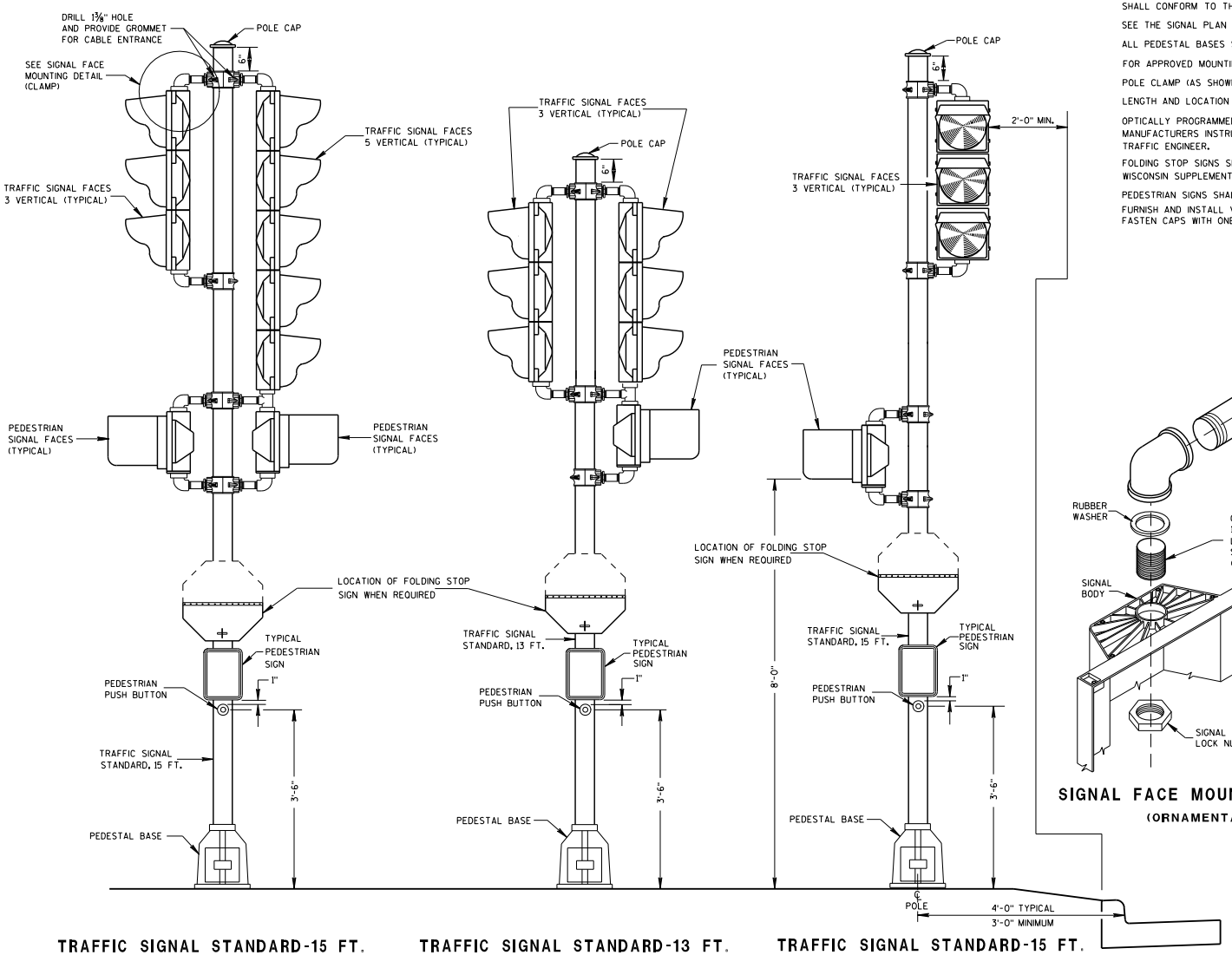
S.D.D. 9 E 3-4



TRAFFIC SIGNAL STANDARD-15 FT.

TRAFFIC SIGNAL STANDARD-13 FT.

TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLE CLAMP (AS SHOWN) MOUNTING BRACKETS SHALL BE USED.

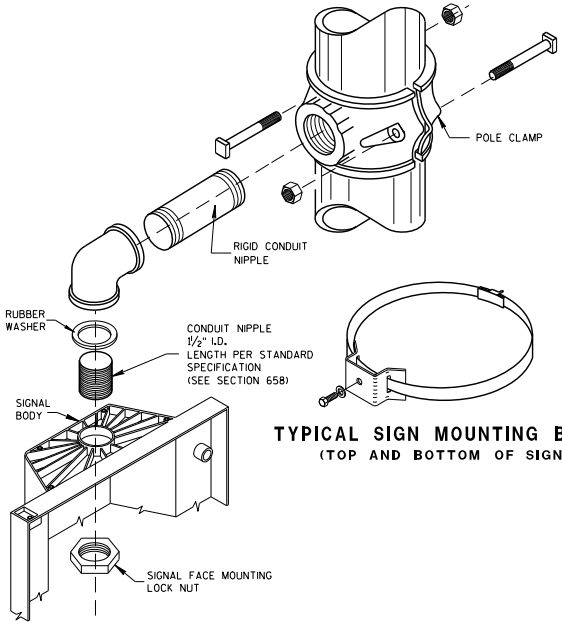
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE DISTRICT TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



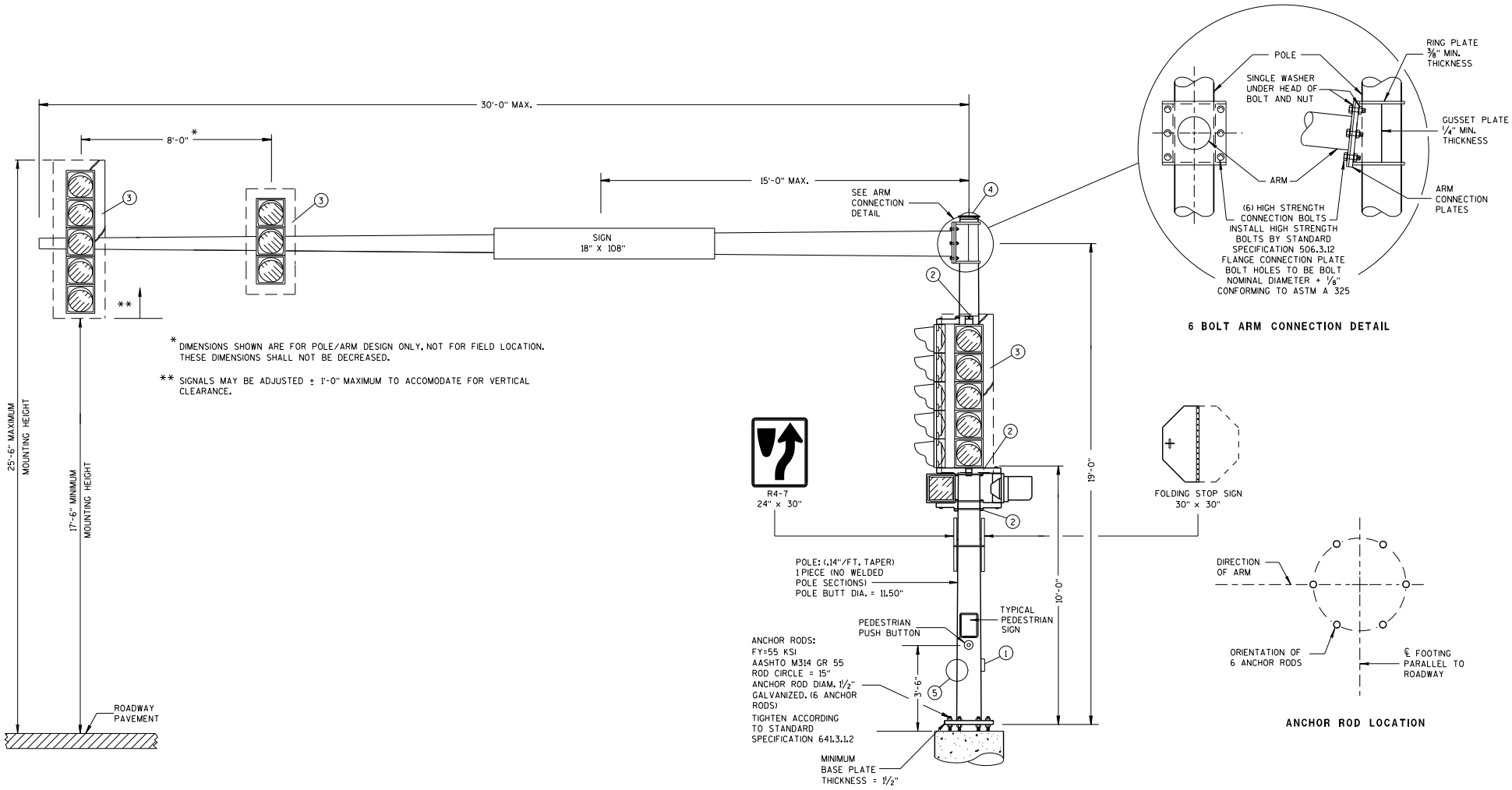
SIGNAL FACE MOUNTING DETAIL
(ORNAMENTAL)

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)

TRAFFIC SIGNAL STANDARD
ORNAMENTAL BRACKET MOUNTINGS
TYPICAL FOR 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/11/10
DATE
/S/ John Corbin
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA



(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

TYPE 9 POLE 15' - 30' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/2/2011 DATE	/S/ Thomas J. Sanglas STATE ELECTRICAL ENGI 560 HWYS
FHWA	

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S.D.D. 9 E 8-4a

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE LATEST AASHTO AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

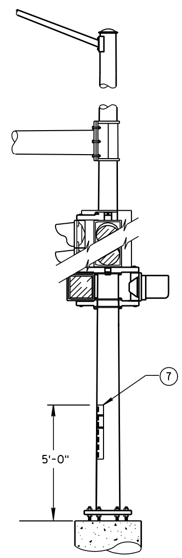
(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM), PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

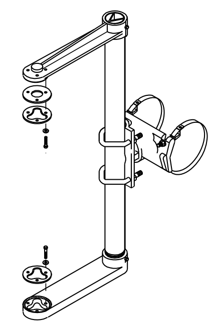
(7) INSTALL DEPARTMENT PROVIDED STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 5'-0" ABOVE THE CURB OR SHOULDER . ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

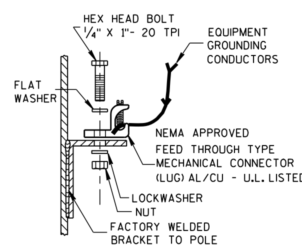


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



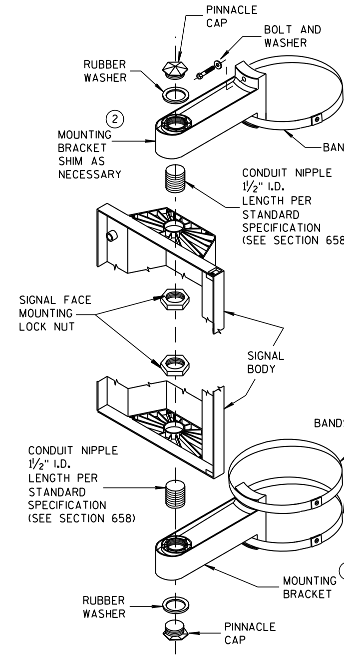
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

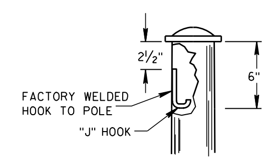


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 3/2/2011 DATE — /S/ Thomas J. Coerine STATE ELECTRICAL ENGI 561 HWYS FHWA

S.D.D. 9 E 8-4e
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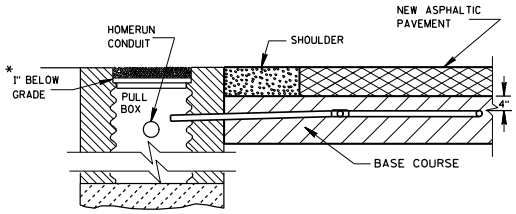
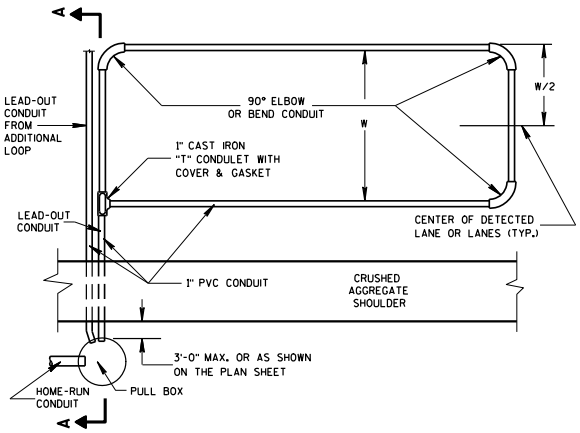


SECTION A-A
NO CURB & GUTTER

DETECTOR LOOP INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD-OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

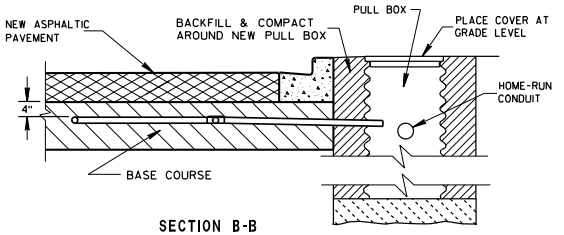
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

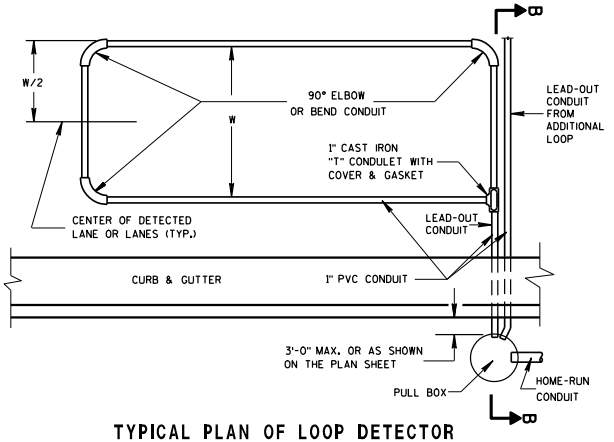
SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

DRIVE A 1½" MAX. PK NAIL INTO THE NEW ASPHALTIC PAVEMENT AND DIRECTLY ABOVE THE CONDULET AFTER THE FINAL LAYER OF NEW ASPHALTIC PAVEMENT IS COMPLETELY INSTALLED, IF REQUIRED BY THE DISTRICT TRAFFIC SECTION.



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
6/7/06 DATE	/S/ Balu Ananthanarayanan STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA	

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S.D.D. 9 F 8-3

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S.D.D. 9 F 8-3

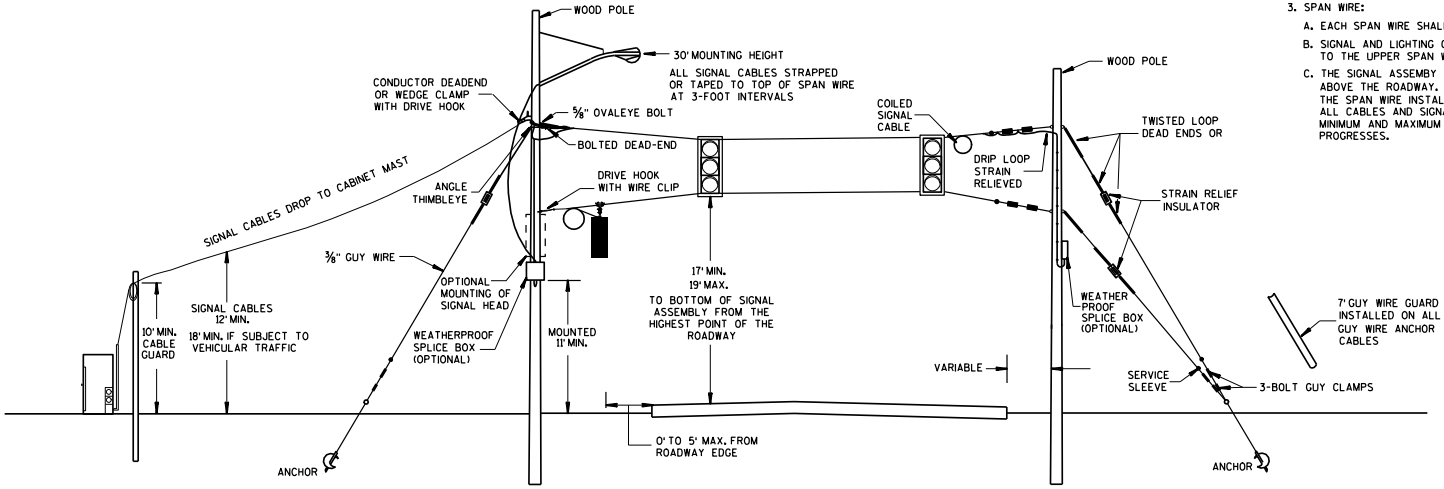
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
7-14-08 DATE	/S/ Balu Ananthanarayanan CHIEF ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA	

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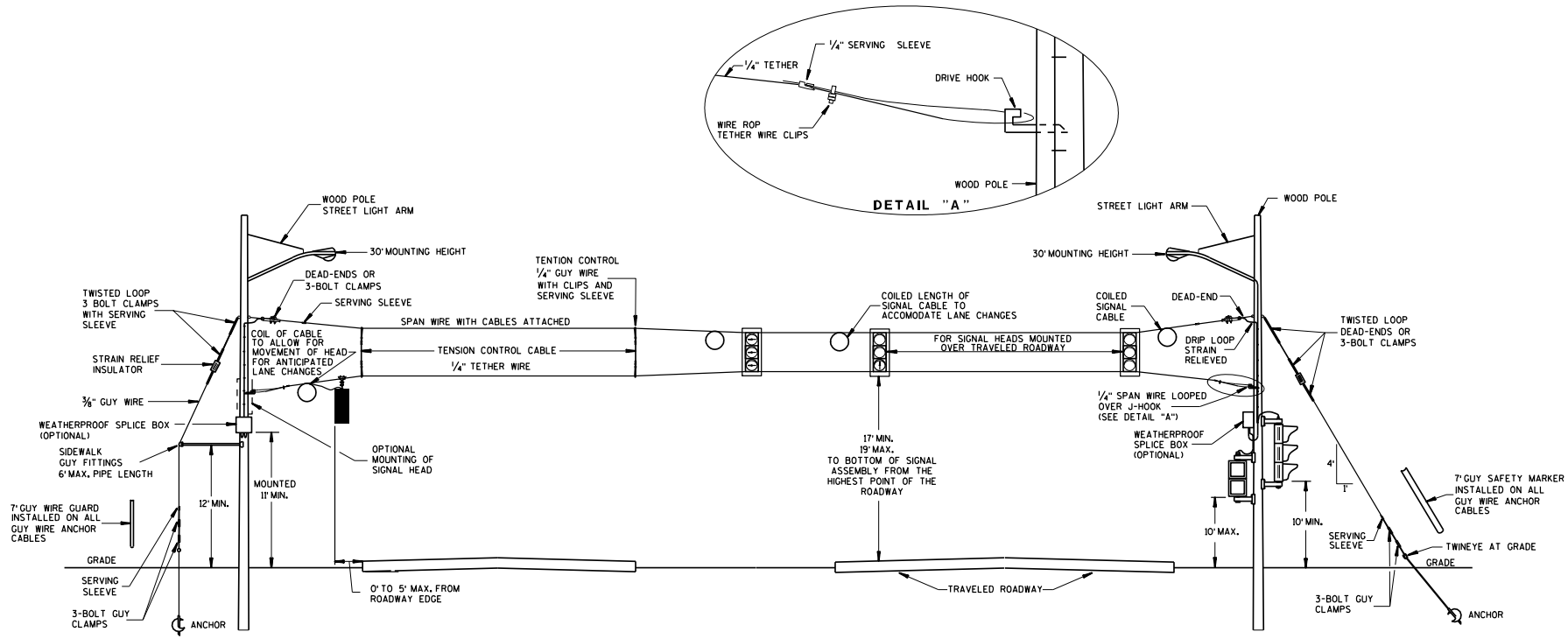

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   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
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   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

SPAN WIRE TEMPORARY SIGNALS

4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08
DATE

/S/ Balu Ananthanarayanan
CHIEF ELECTRICAL ENGINEER FOR HIGHWAYS

FHWA

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S.D.D. 9 G 1-3b

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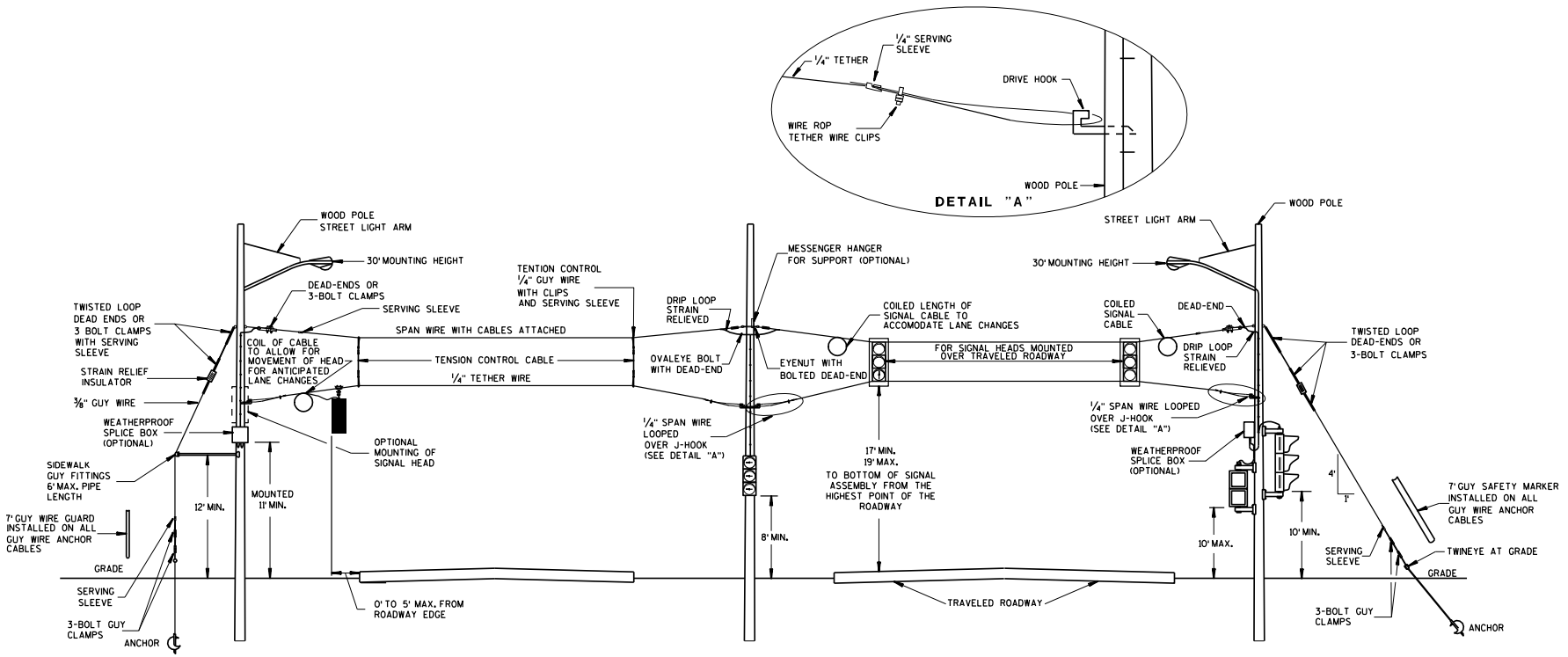
S.D.D. 9 G 1-3b



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

GENERAL NOTES

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MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7-14-08 DATE
/S/ Balu Ananthanarayanan
CHIEF ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

6

S.D.D. 9 G 1-3c

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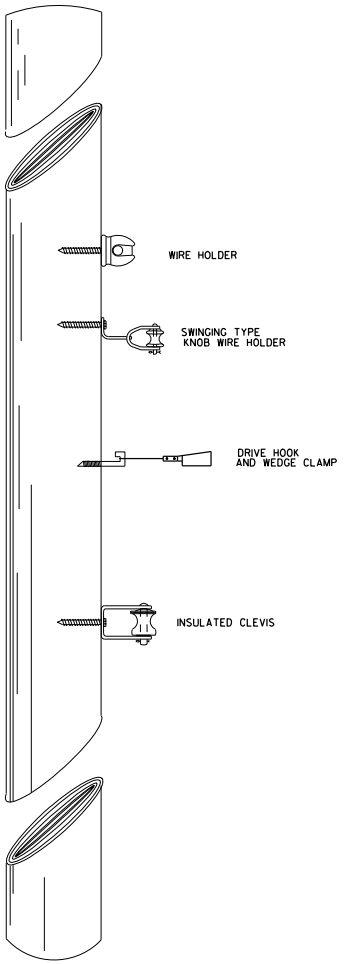
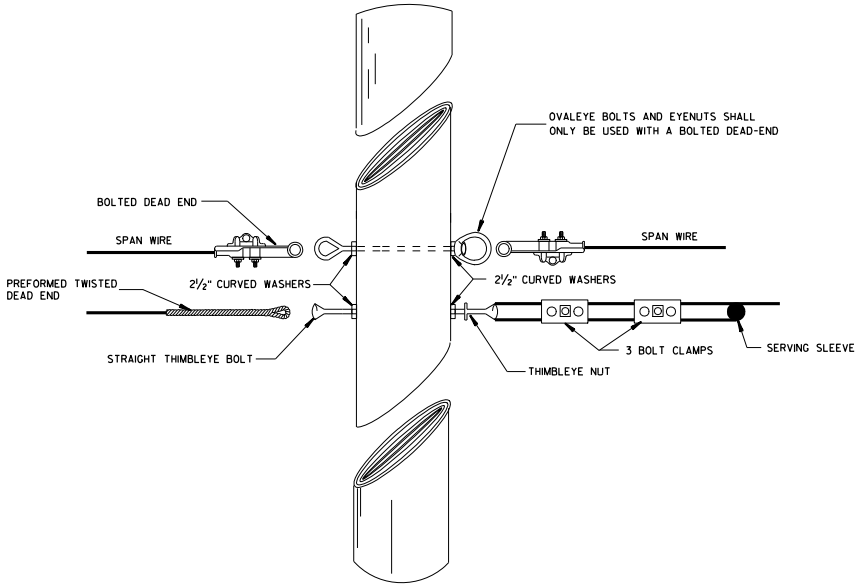


TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7-14-08 DATE FHWA	/S/ Balu Ananthanarayanan CHIEF ELECTRICAL ENGINEER FOR HIGHWAYS

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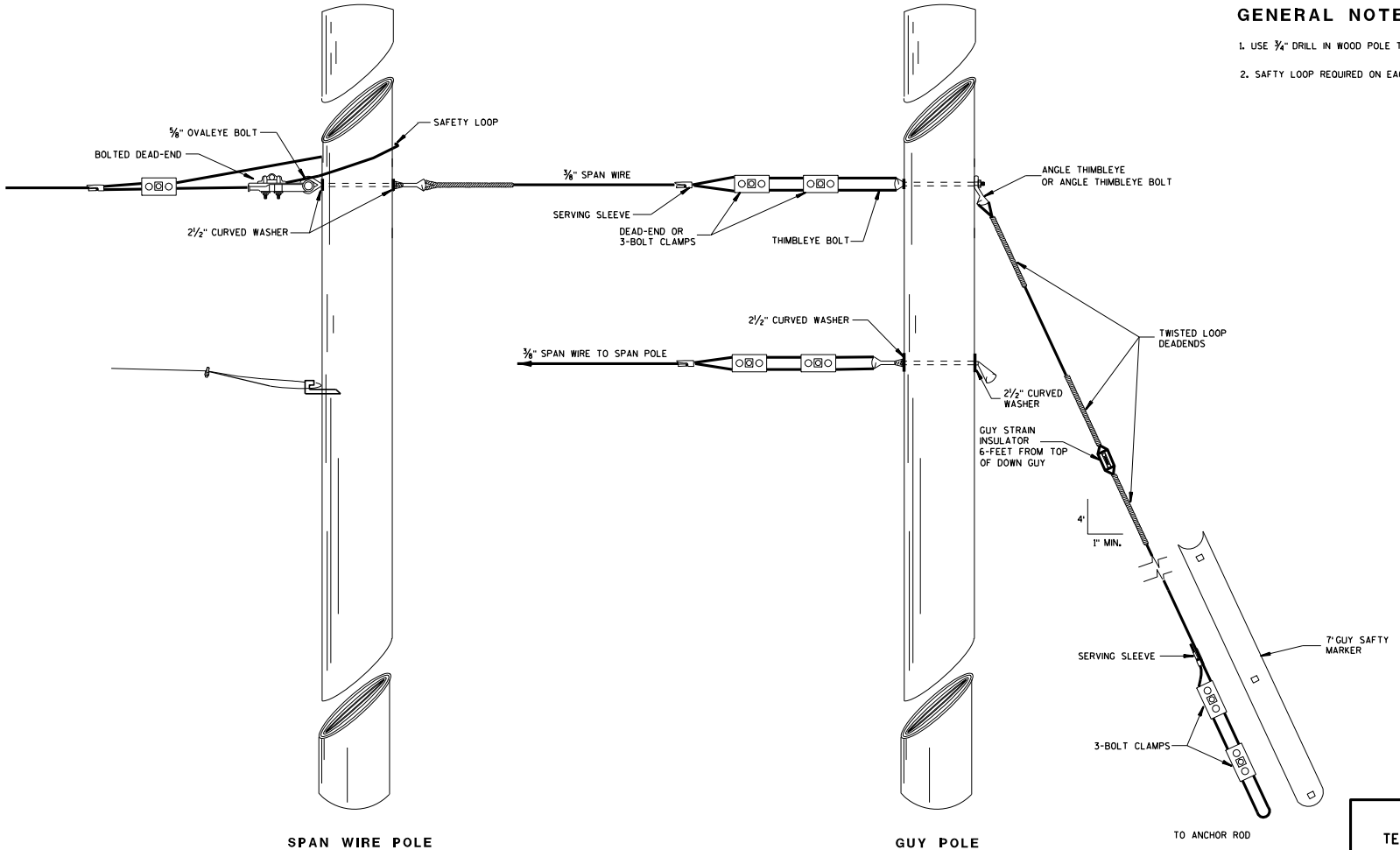

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR 5/8" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.

TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08
DATE

/S/ Balu Ananthanarayanan
CHIEF ELECTRICAL ENGINEER FOR HIGHWAYS

FHWA

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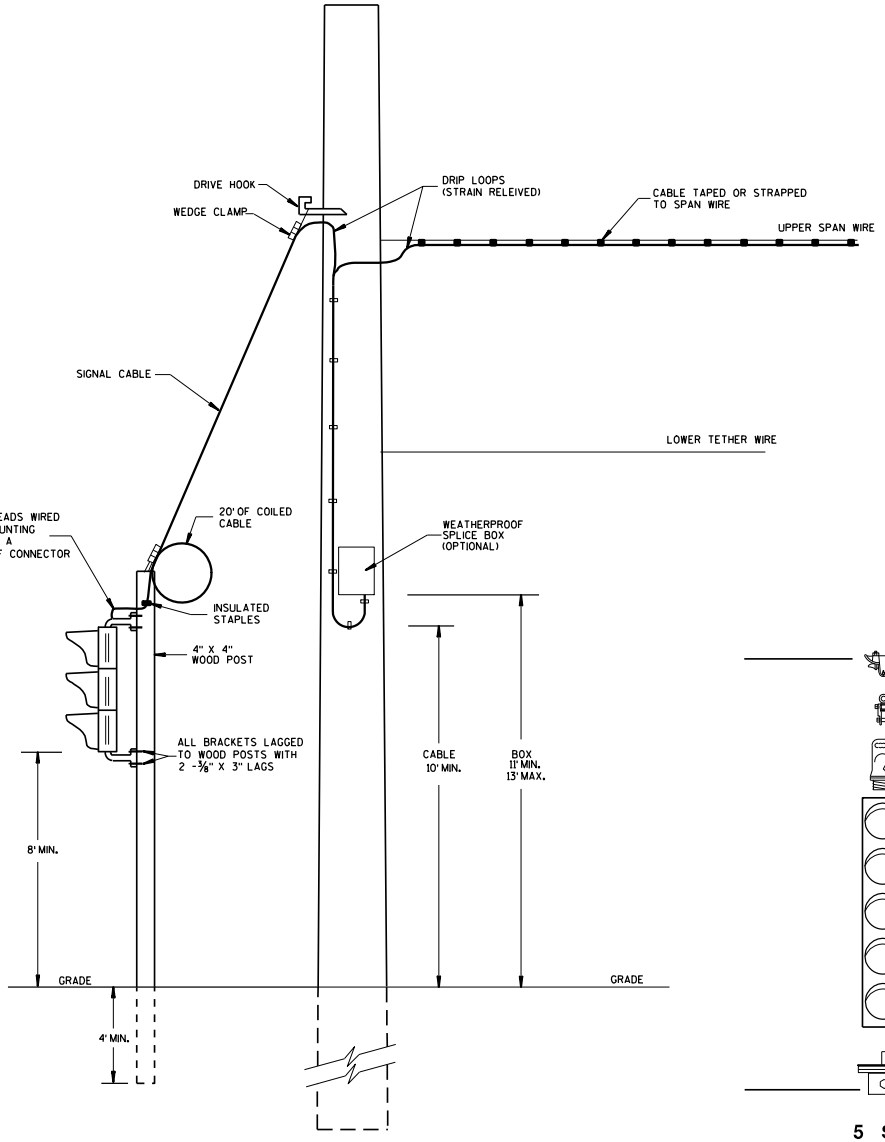
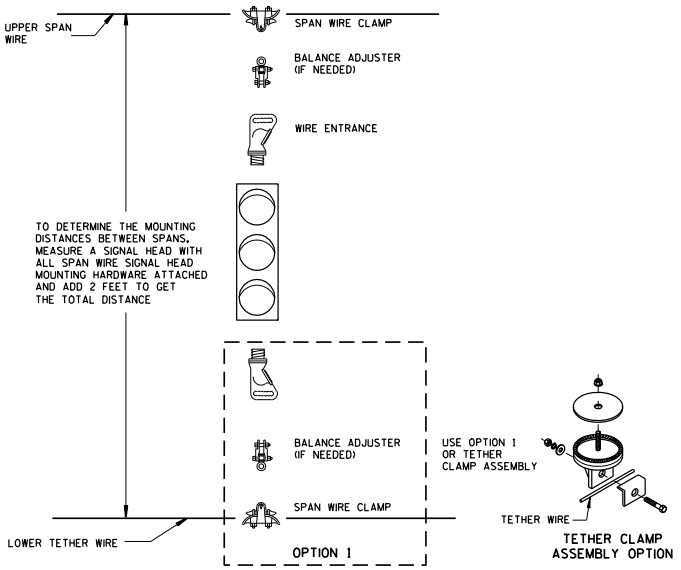
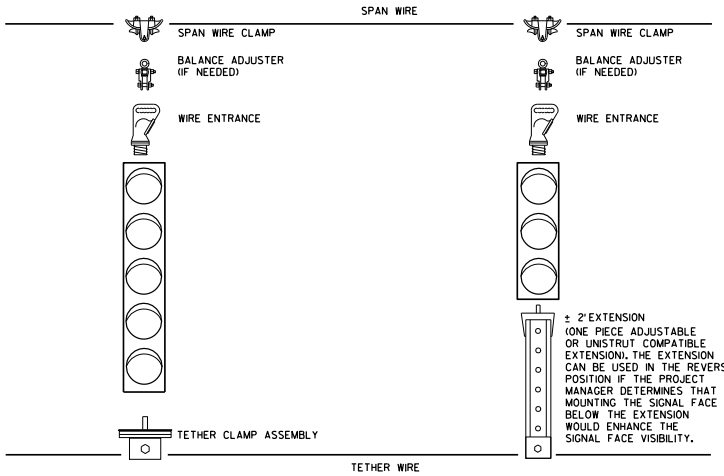
S.D.D. 9 G 1-3e



TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

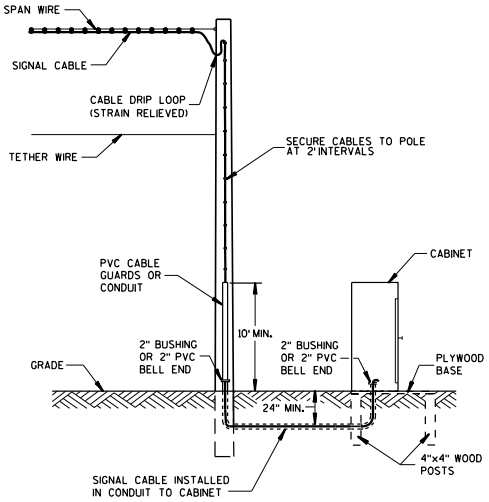
SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

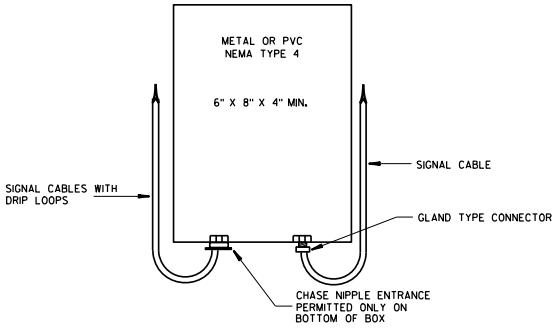
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7-14-08
DATE
FHWA

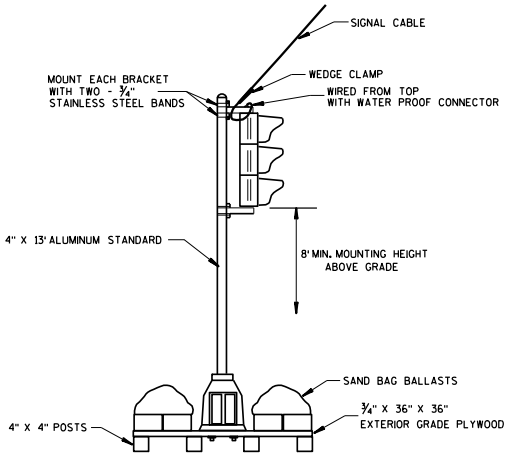
/S/ Balu Ananthanarayanan
CHIEF ELECTRICAL ENGINEER FOR HIGHWAYS

6
S.D.D. 9 G 1-3f

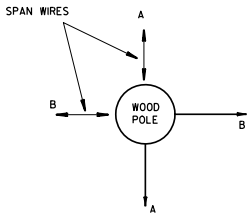




SPLICE BOX

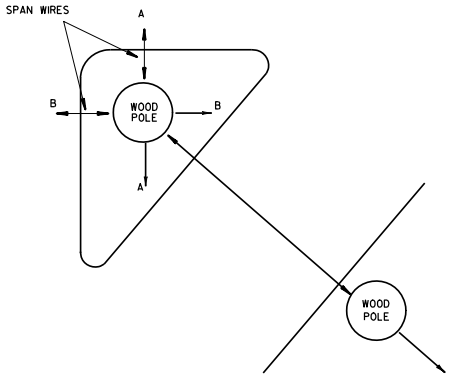


TYPICAL SKID TYPE TEMPORARY

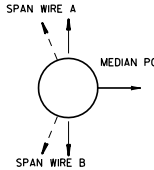


ALL DOWN OR SIDEWALK GUYS SHALL BE INSTALLED IN THE OPPOSITE DIRECTION OF THE STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM INTERSECTION OR IN OPPOSITE DIRECTION OF THE SPAN LOADING

MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08
DATE

/S/ Balu Ananthanarayanan
CHIEF ELECTRICAL ENGINEER FOR HIGHWAYS

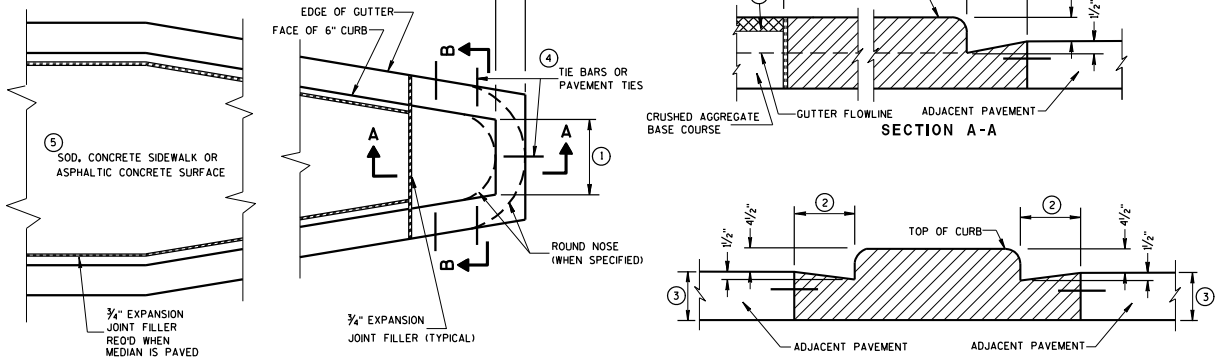
FHWA

6

6

S.D.D. 9 G 1-3g

S.D.D. 9 G 1-3g



CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

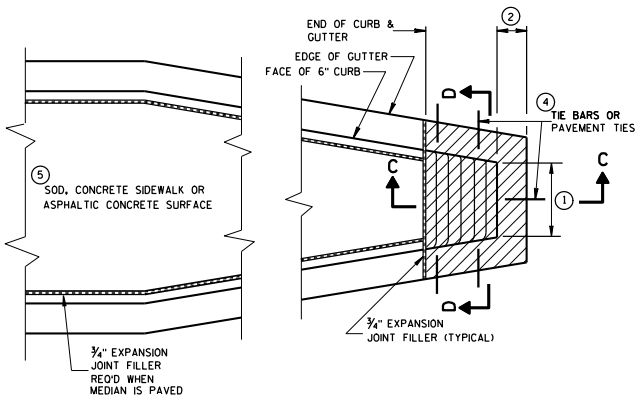
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

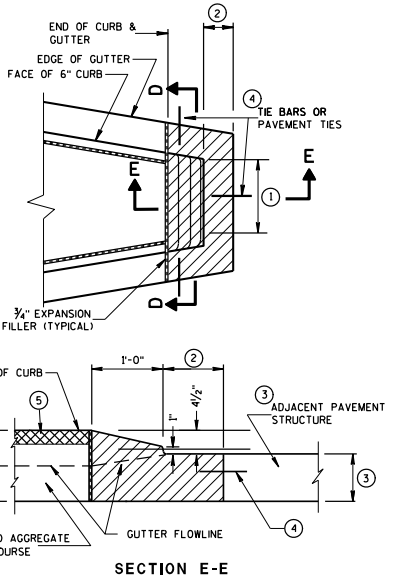
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

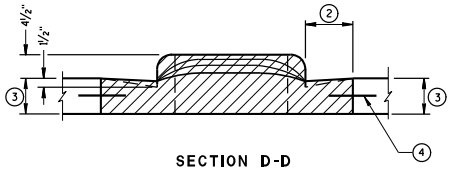
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



CONCRETE MEDIAN SLOPED NOSE TYPE 1



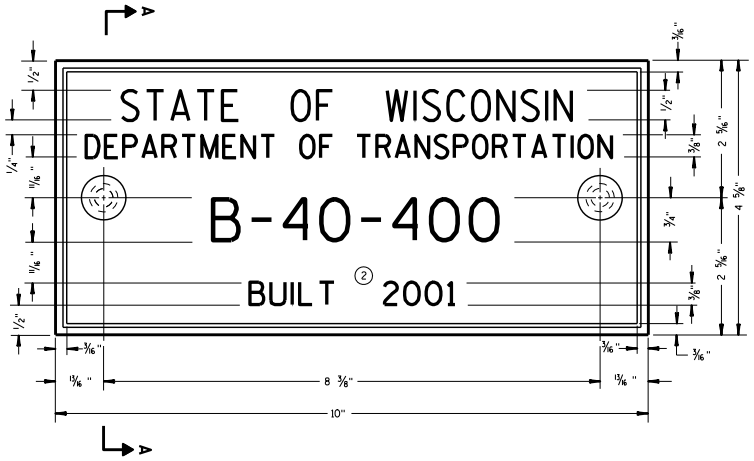
CONCRETE MEDIAN SLOPED NOSE TYPE 2



CONCRETE MEDIAN NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/8/06 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER

S.D.D. 11B 2-2

S.D.D. 11B 2-2



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

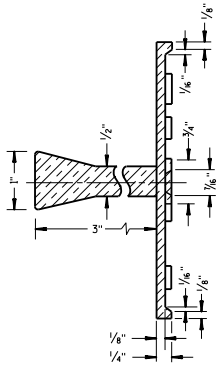
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

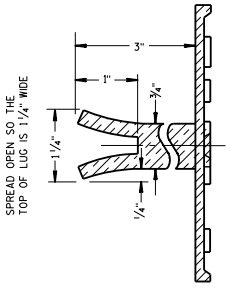
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

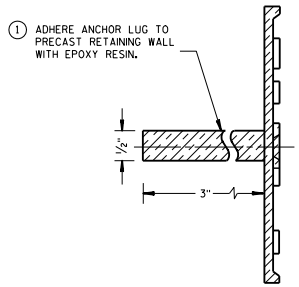
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
3/26/10 DATE	/S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	

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S.D.D. 12 A 3-10

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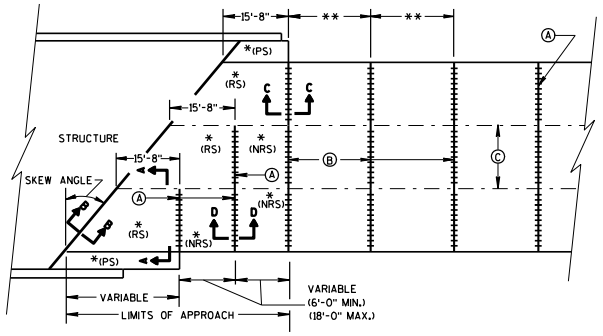
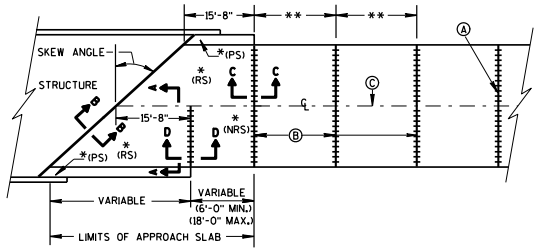
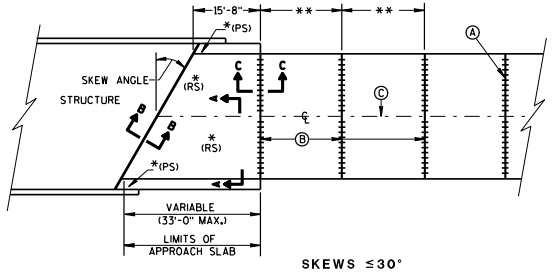
S.D.D. 12 A 3-10



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



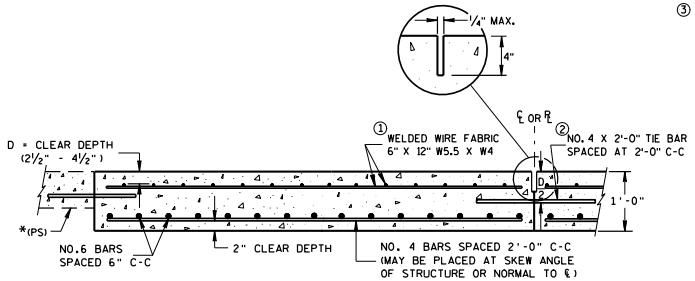
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

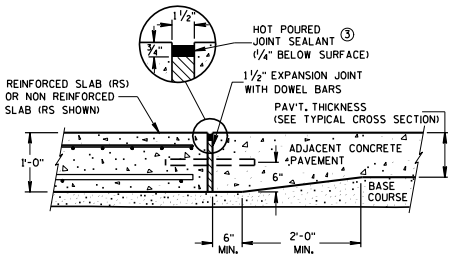
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN (SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)

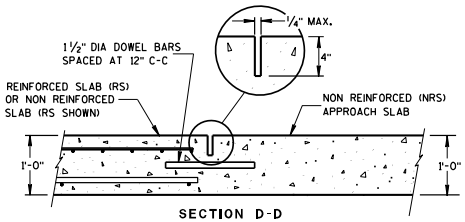
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
(B) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄
(C) STANDARD LONGITUDINAL JOINT AND TIE BARS.



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

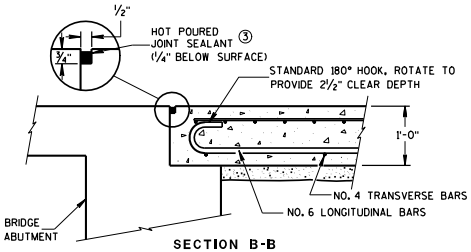
APPROACH SLABS ABUTTING AN HMA PAVEMENT OVER BASE COURSE DO NOT NEED TO BE DOWELED.

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

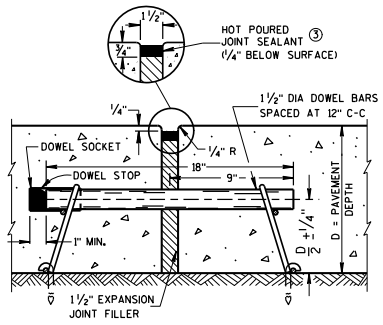
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

③ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT

CONCRETE PAVEMENT APPROACH SLAB	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12/11/2009 DATE	/S/ Deb Bischoff PAVEMENT POLICY & DESIGN ENGINEER
FHWA	

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S.D.D. 13 B 2-6

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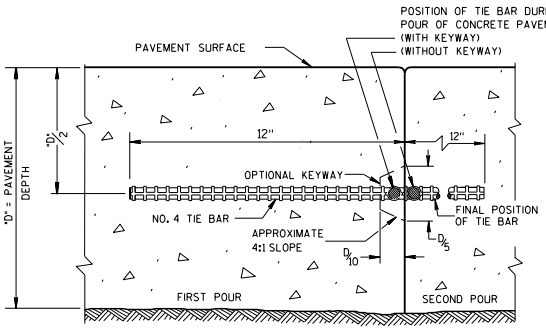
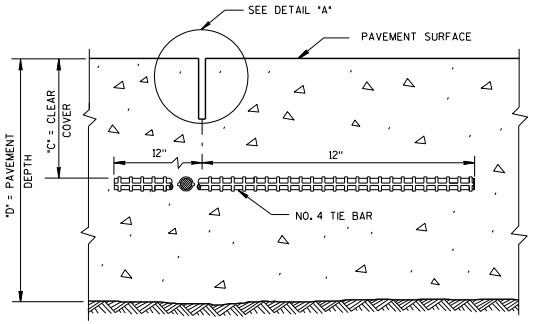
S.D.D. 13 B 2-6



CONSTRUCTION JOINT



SAWED JOINT

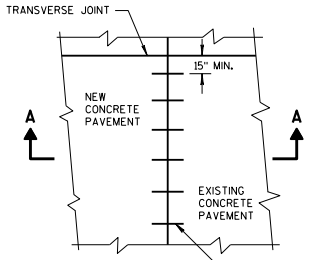
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

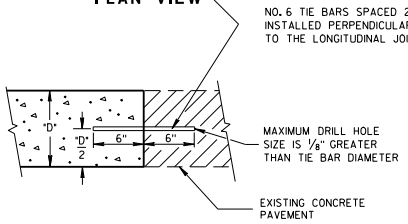
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

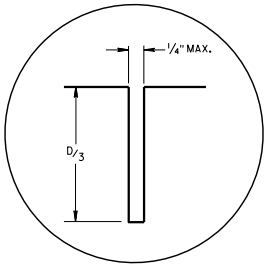


PLAN VIEW



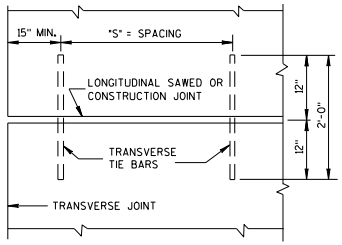
SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥ 30'
6, 6 ½"	3"±½"	48"	42"
7, 7 ½"	3 ¼"±1"	45"	36"
8, 8 ½"	3 ¾"±1"	39"	30"
9, 9 ½"	4 ¼"±1"	33"	27"
10, 10 ½"	4 ¾"±1"	30"	24"
11, 11 ½"	5 ¼"±1"	27"	21"
12"	5 ¾"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10-5-2010
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER

FHWA

6

S.D.D. 13 C 1-15

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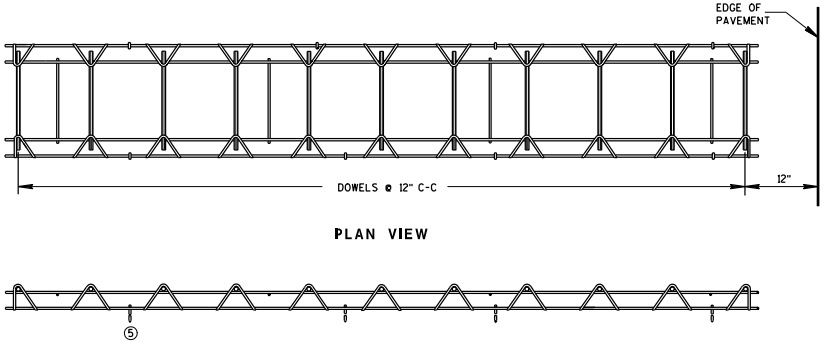
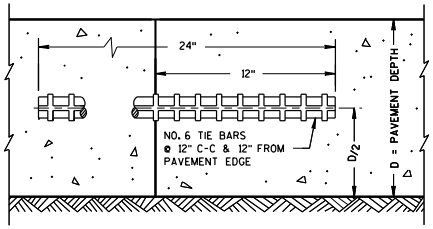
S.D.D. 13 C 1-15



PLAN VIEW

SIDE VIEW

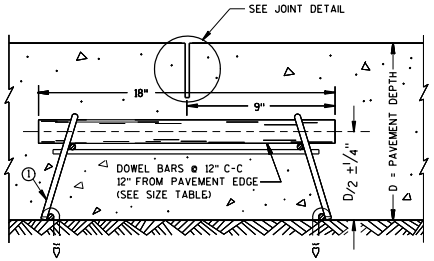
CONTRACTION JOINT DOWEL ASSEMBLY ①



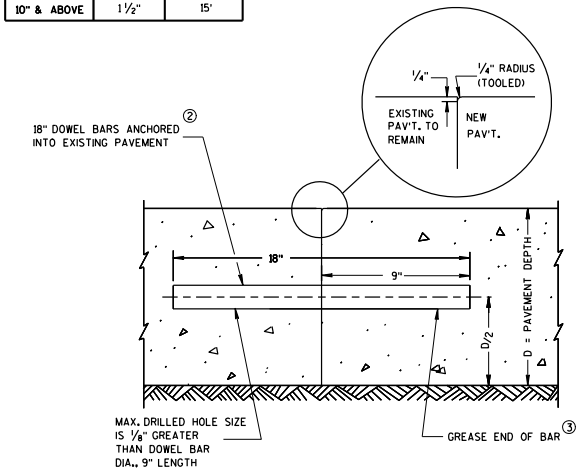
TRANSVERSE CONSTRUCTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6",6 ½"	NONE	12'
7",7 ½"	1"	14'
8",8 ½"	1 ¼"	15'
9",9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

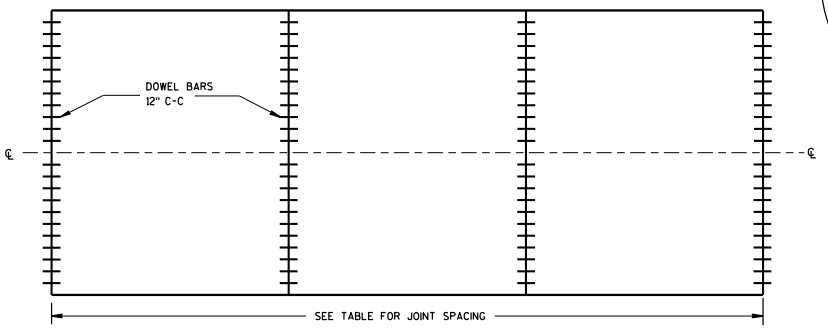


DOWELED CONTRACTION JOINT



TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

④ DOWEL BAR DETAIL



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, CENTER THE DOWEL ASSEMBLY ACROSS THE LANES. LOCATE THE INNER AND OUTER MOST DOWEL BARS SO THAT THE CENTER OF THE BARS ARE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 12 INCHES FROM THE LONGITUDINAL JOINT AND THE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

① THE ENGINEER MAY APPROVE THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. THE CONTRACTOR MAY USE MECHANICAL DOWEL BAR INSERTERS INSTEAD OF DOWEL ASSEMBLIES.

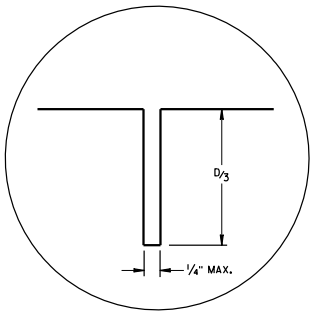
② ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

③ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

④ SPACE DOWEL BARS INSTALLED BY DRILLING 1'-3" ON CENTER. CENTER THE GROUPING OF DOWEL BARS INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

⑤ SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/11/2009
DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER
FHWA

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S.D.D. 13 C 13-7

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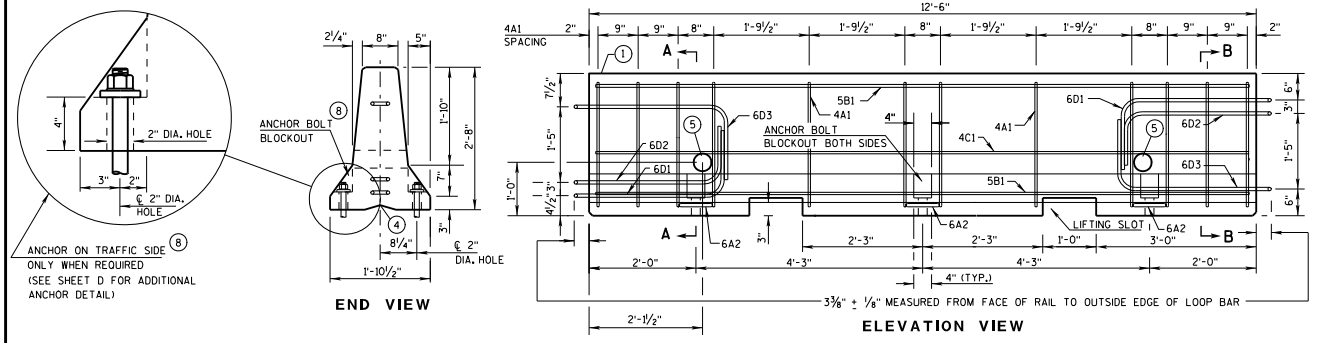
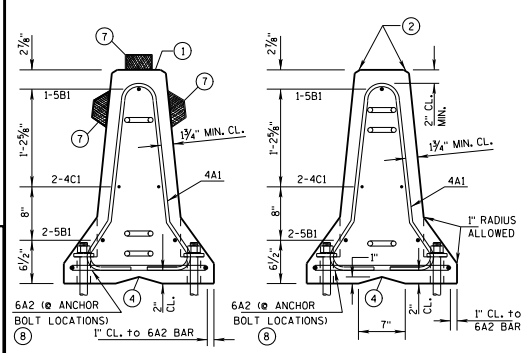
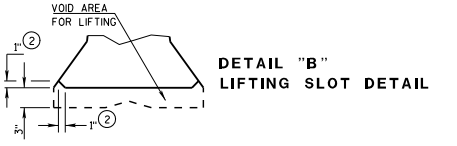
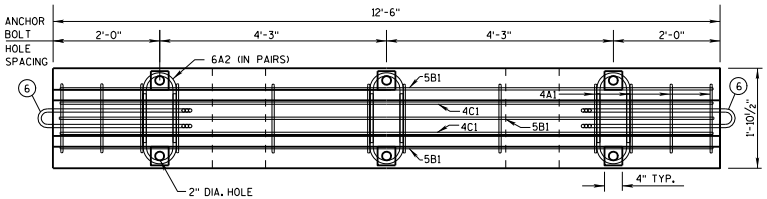
S.D.D. 13 C 13-7









DETAILS OF BARRIER SECTION

GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-12(a) THRU 14B7-12(d).

DETAILS AND REQUIREMENTS FOR THE FABRICATION AND INSTALLATION OF CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) ARE SHOWN ON 4 SHEETS, 14B7-12(a) THRU 14B7-12(d)

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

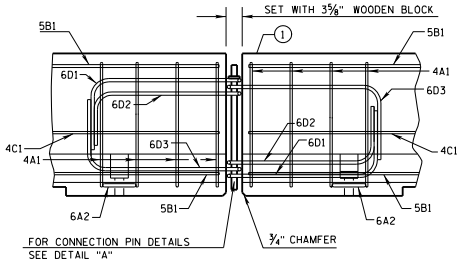
(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

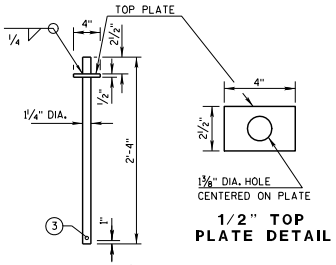
(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR ANCHORING CRITERIA.



DETAILS OF BARRIER CONNECTION



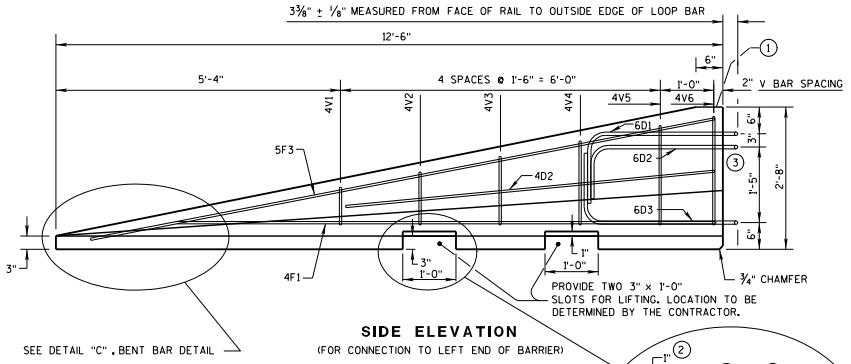
DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

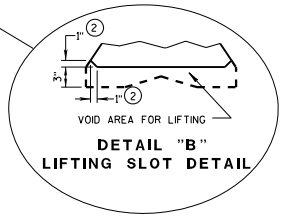
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 7-12a

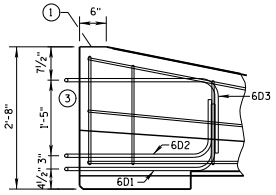
S.D.D. 14 B 7-12a



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



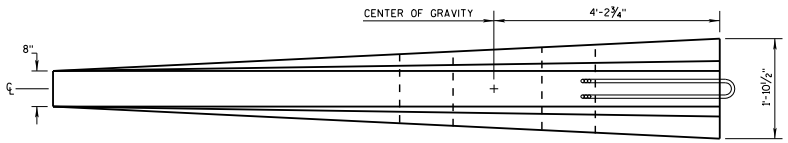
DETAIL "B"
LIFTING SLOT DETAIL



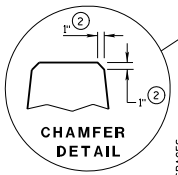
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

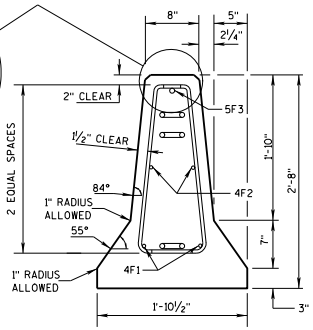
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



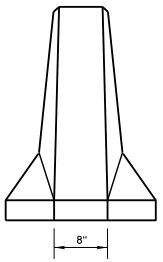
PLAN VIEW



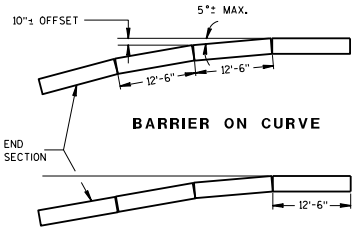
CHAMFER DETAIL



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

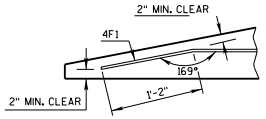
S.D.D. 14 B 7-12b

S.D.D. 14 B 7-12b

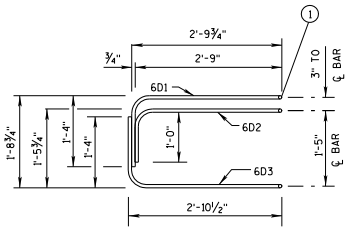
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

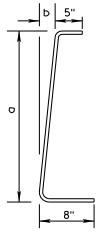
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



DETAIL "C"
BENT BAR DETAIL



ELEVATION
LOOP BAR ASSEMBLY



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

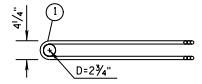
GENERAL NOTES

① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

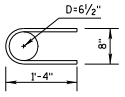
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

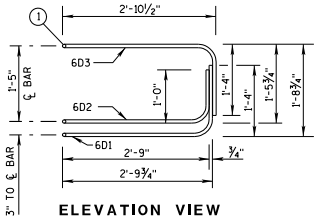
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



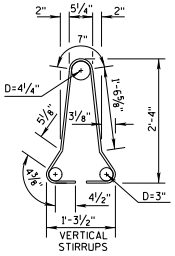
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



ELEVATION VIEW



4A1

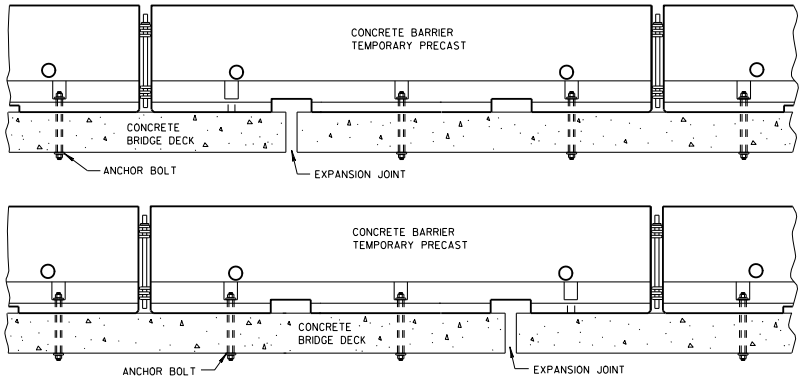
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 7-12c

S.D.D. 14 B 7-12c



TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)

GENERAL NOTES

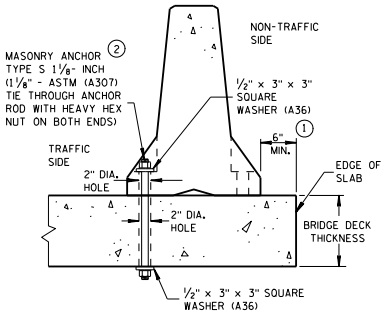
(1) CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

(2) ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

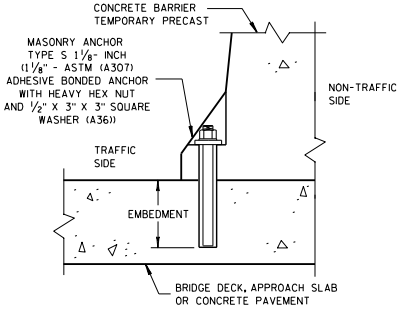
WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.



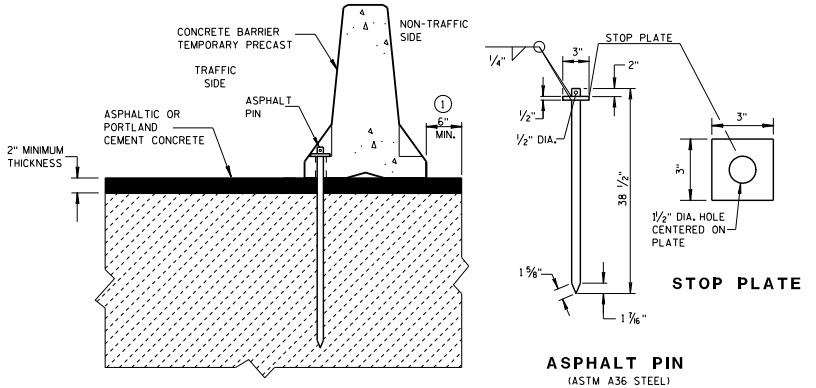
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR (2) INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



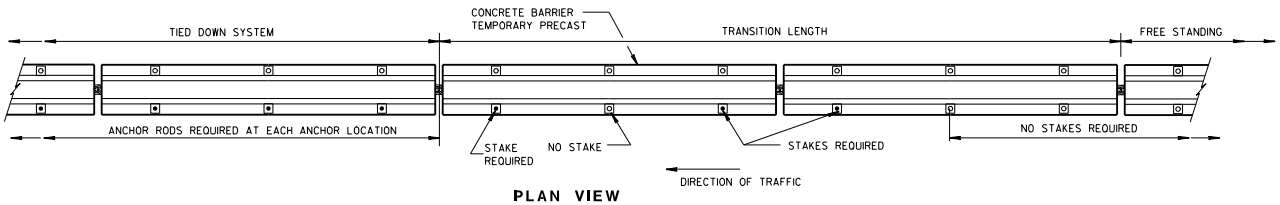
STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)

STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-3-2010
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 7-12d

6

S.D.D. 14 B 7-12d

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

1. W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

   DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

2. USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

3. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

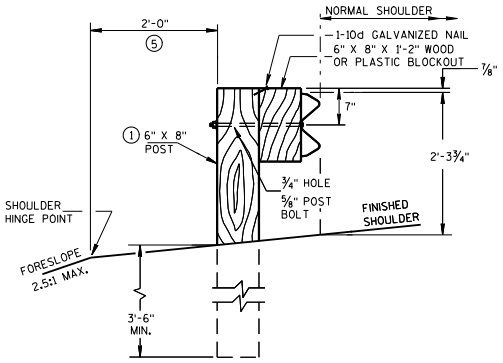
4. USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

5. IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

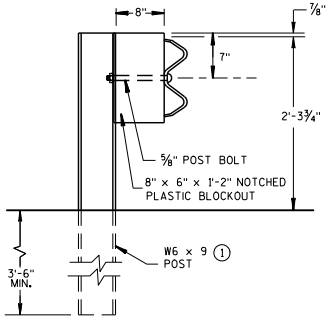
6. IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

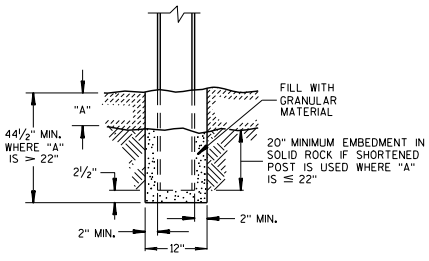
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



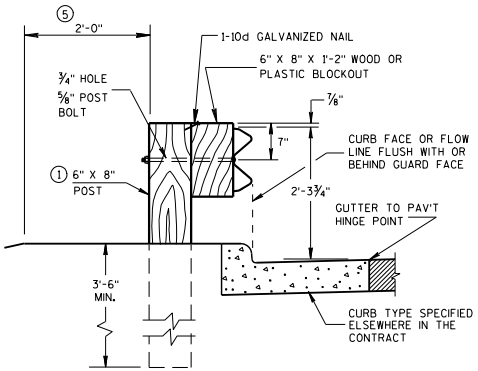
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



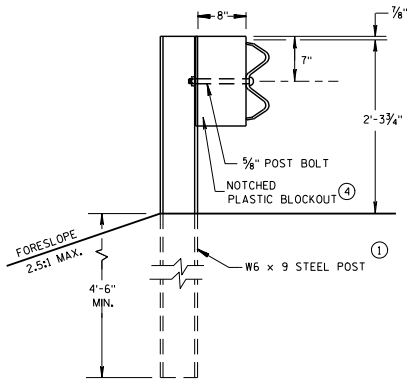
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



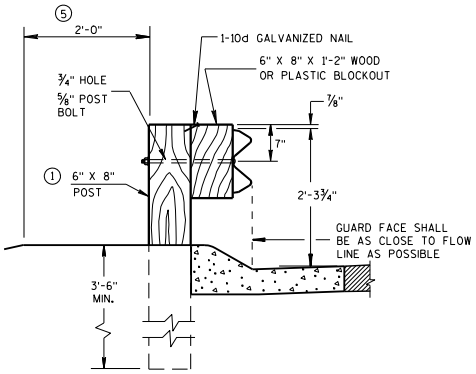
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥



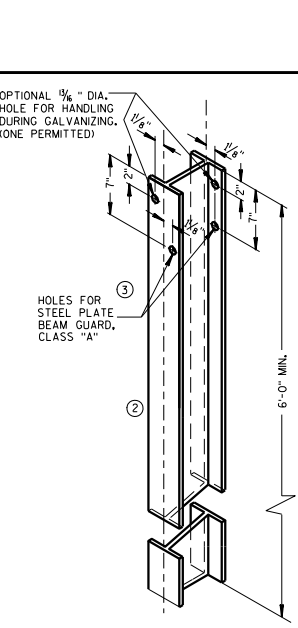
END VIEW
LOCATED ALONG A CURBED ROADWAY



END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)

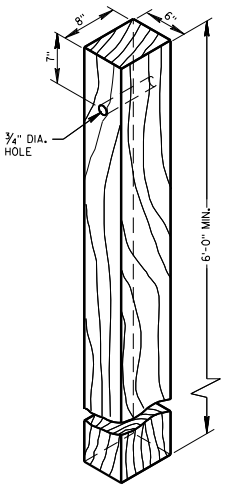


END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

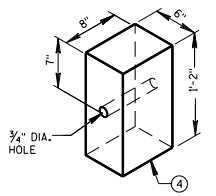


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①

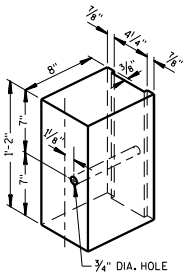
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



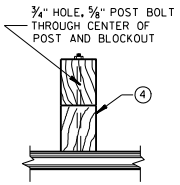
WOOD POST
(6"X8") NOMINAL



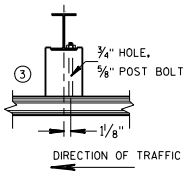
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



TYPICAL NOTCHED ①
PLASTIC BLOCKOUT
FOR STEEL POSTS



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....

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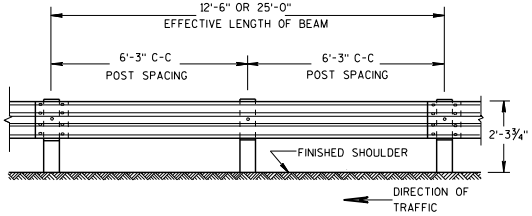
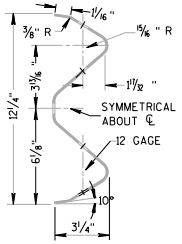
S.D.D. 14 B 15-7a

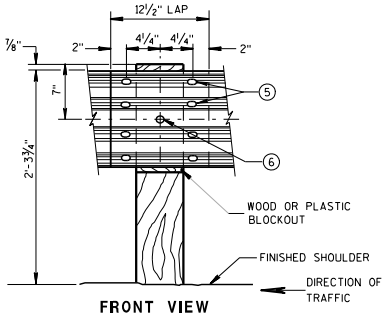


FRONT VIEW

POST SPACING STANDARD INSTALLATION



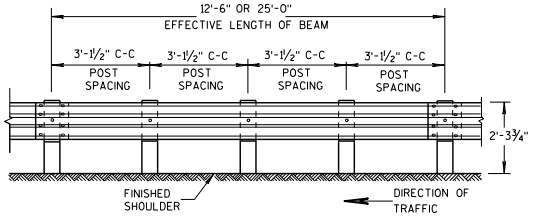
SECTION THRU W BEAM



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL

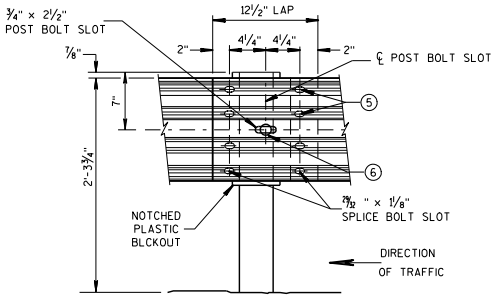
GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 8 -⅝" Φ X 2 " BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
6. ⅝" Φ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.



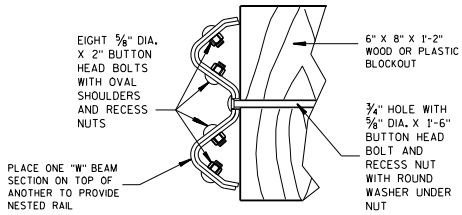
FRONT VIEW

POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW
BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

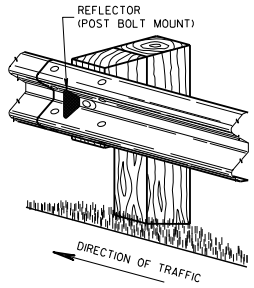


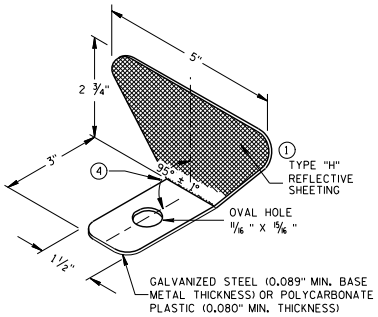
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING (2)

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (3)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 (4)	3
	> 200'	100' C-C	2	





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (1)

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....

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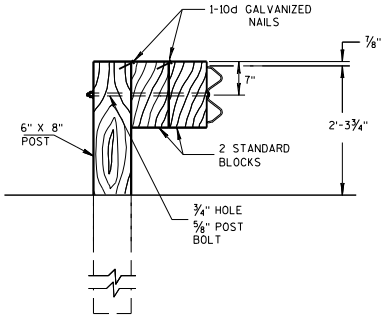
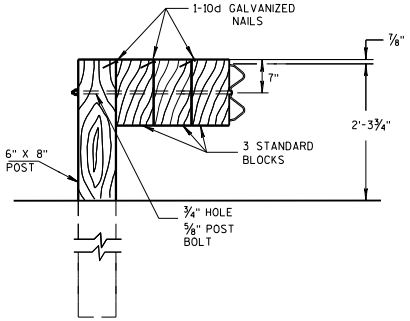
S.D.D. 14 B 15-7b



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

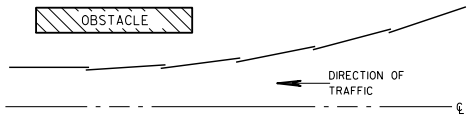


DETAIL FOR TRIPLE BLOCKS

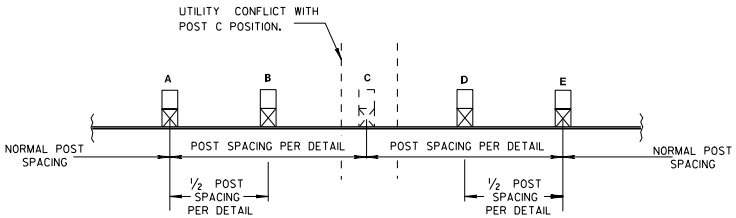
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/11 — DATE

/S/ Jerry H. Zoda — ROADWAY STANDARDS ENGINEER

581 — ENT

FHWA

6

S.D.D. 14 B 15-7c

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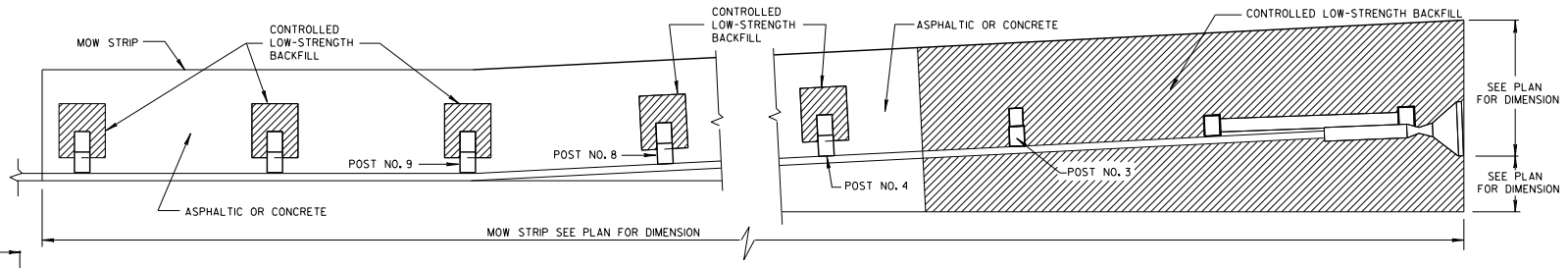
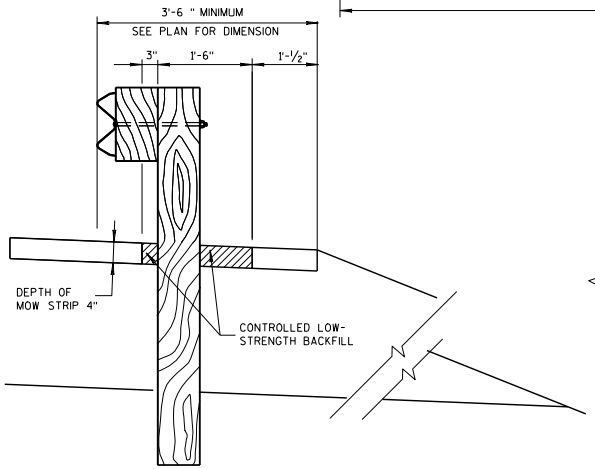
S.D.D. 14 B 15-7c

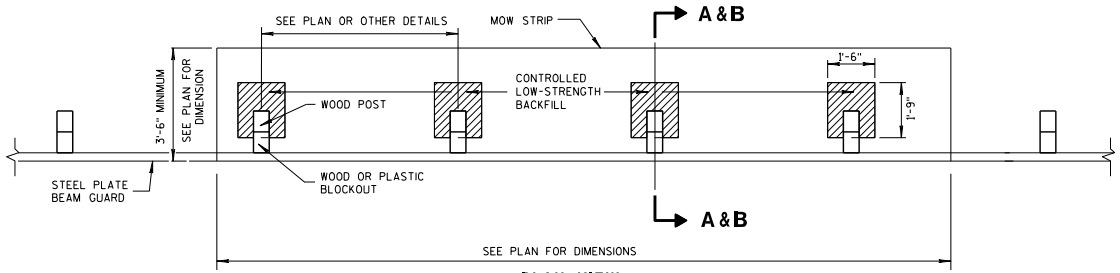


PLAN VIEW

MOW STRIP FOR STEEL PLATE BEAM GUARD ENERGY ABORBING TERMINAL

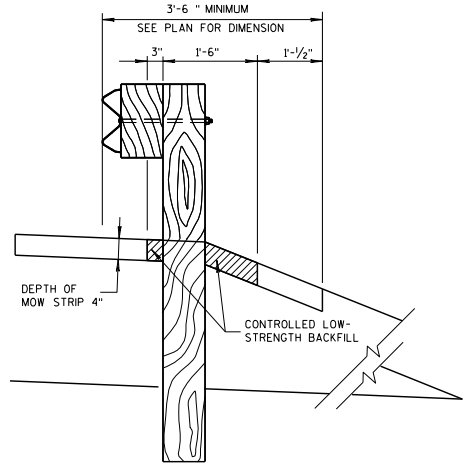


SECTION A-A

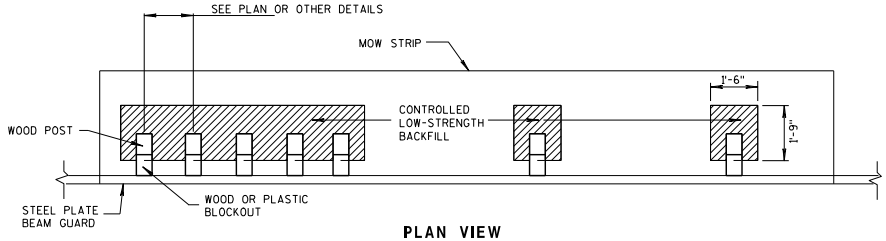


PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

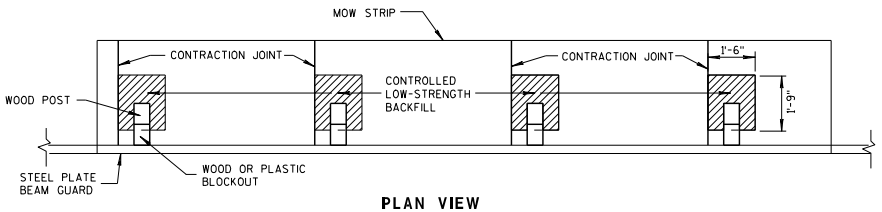


SECTION B-B



PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/11
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
1582
FHWA

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S.D.D. 14 B 28-1

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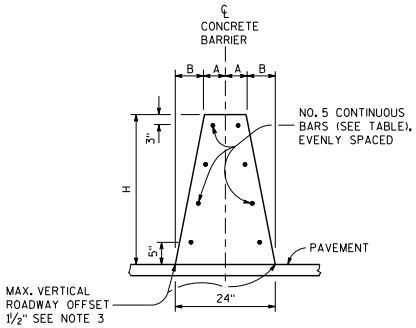
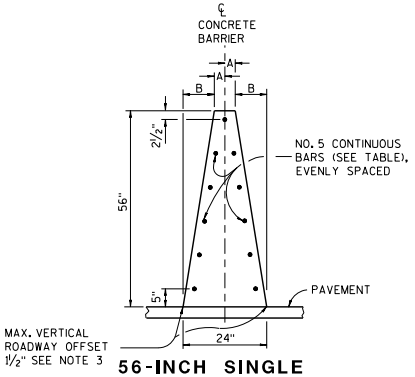
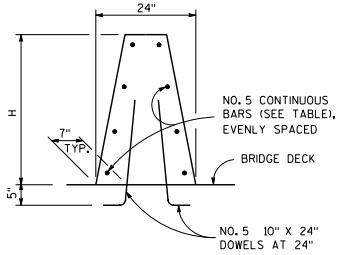
S.D.D. 14 B 28-1



32-INCH, 36-INCH OR 42-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S32, TYPE S36, AND TYPE S42)



56-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S56)

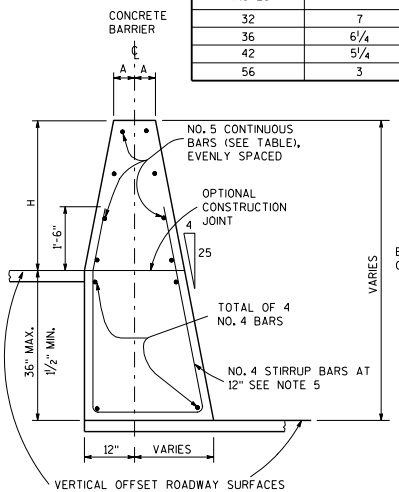


SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

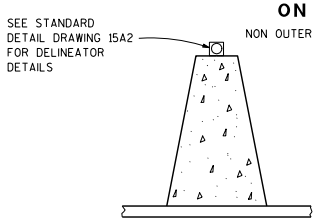
GENERAL NOTES

1. WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
2. EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, PAVEMENT AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.
3. WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1½", USE TYPE A
4. PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5. EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1'-0".
6. FOR TYPE S32, TYPE S36, TYPE S42, AND S56 MONOLITHIC FOOTING OR DOWELED FOOTING WITH 2-#8 x 8" @ 2'-0".
7. STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL 2 FEET. BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
8. 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
9. WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCEMENT. LAPS TO BE FIRMLY TIED.
10. USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
11. 2" CLEAR COVER TYPICAL.
12. COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED
13. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 NO ADDITIONAL VERTICAL STEEL NEEDED. IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A REQUIRES VERTICAL STEEL. SEE OTHER DETAIL
14. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 DEPTH OF FOOTING 10". IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A MATCH TOTAL HEIGHT OF SINGLE SLOPE BARRIER RETAINING WALL.
15. FOR ALL BARRIER TYPES SHOWN, ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN ON DRAWING OR DETAILS SHOWN ON S.D.D. 14B33. ANCHORS INCIDENTAL TO CBSS.

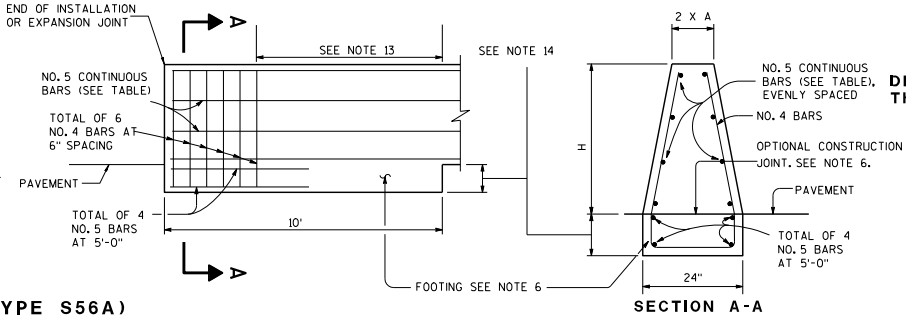
BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6¼	5¾	8
42	5¼	6¾	10
56	3	9	11



SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)
(BETWEEN ADJACENT ROADWAYS)



DELINEATION



END ANCHOR SINGLE SLOPE CONCRETE BARRIER
AT CONSTRUCTION JOINT

SECTION A-A

DELINEATOR SPACING ON HORIZONTAL CURVES

RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50'C-C	1	3
	> 200'	100'C-C	1	
TWO WAY TRAFFIC	< 200'	25'C-C	1	6
	> 200'	50'C-C	1	
TWO WAY TRAFFIC	< 200'	50'C-C	2	3
	> 200'	100'C-C	2	

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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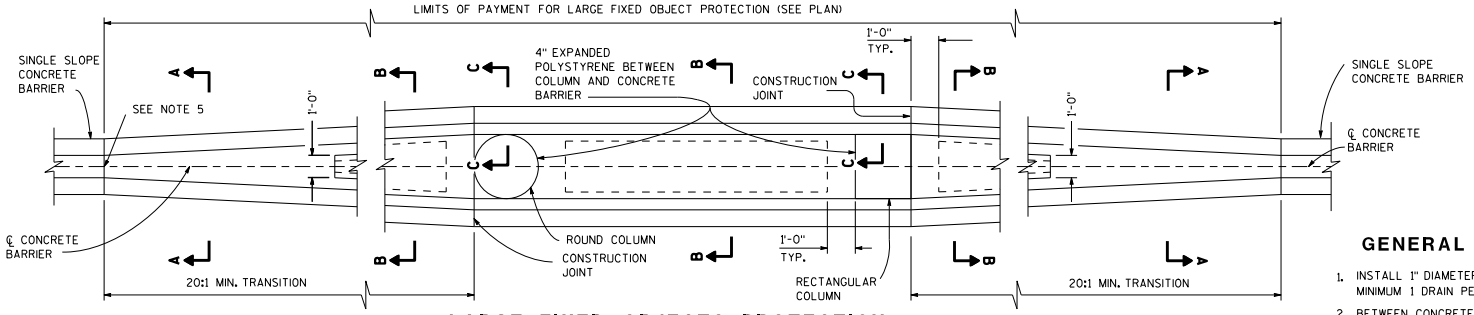
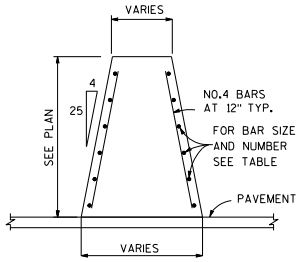
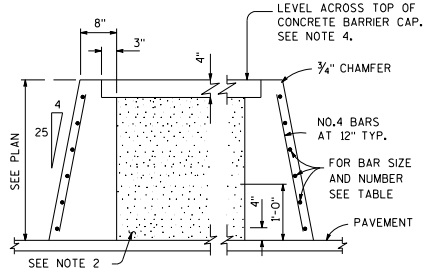
S.D.D. 14 B 32-1a



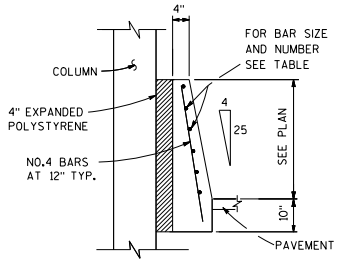
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



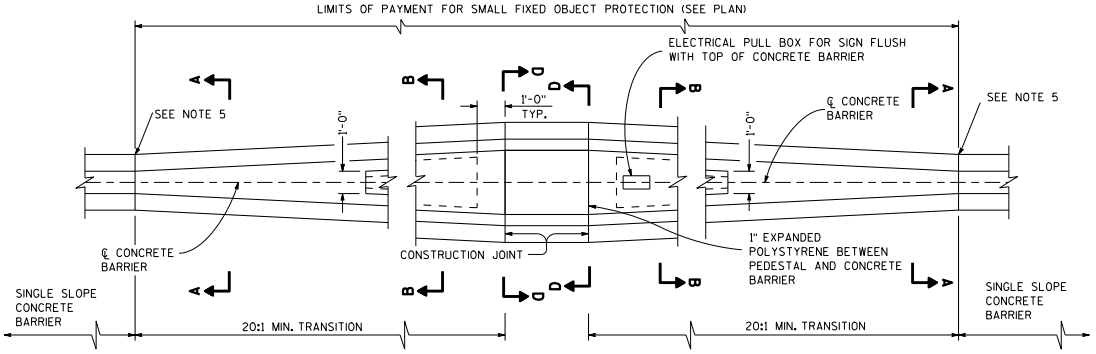
SECTION A-A



SECTION B-B



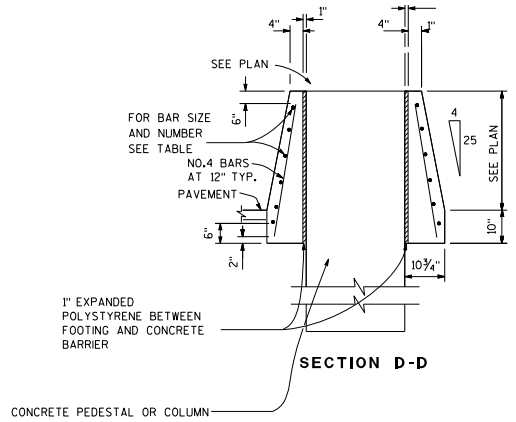
SECTION C-C



SMALL FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56

GENERAL NOTES

1. INSTALL 1" DIAMETER DRAIN PIPE EVERY 20' OF CROSS SECTION B-B. MINIMUM 1 DRAIN PER CAVITY.
2. BETWEEN CONCRETE BARRIER WALLS FILL WITH GRANULAR BACKFILL GRADE 2
3. REINFORCING STEEL SHALL EXTEND CONTINUOUS THROUGH CONSTRUCTION JOINTS.
4. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.
5. IF FIXED OBJECT PROTECTION IS INSTALLED FIRST, USE COLD JOINTS. IF CBSS PLACED FIRST, USE EXPANSION JOINT.



SECTION D-D

BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

CONCRETE BARRIER SINGLE SLOPE (CBSS)

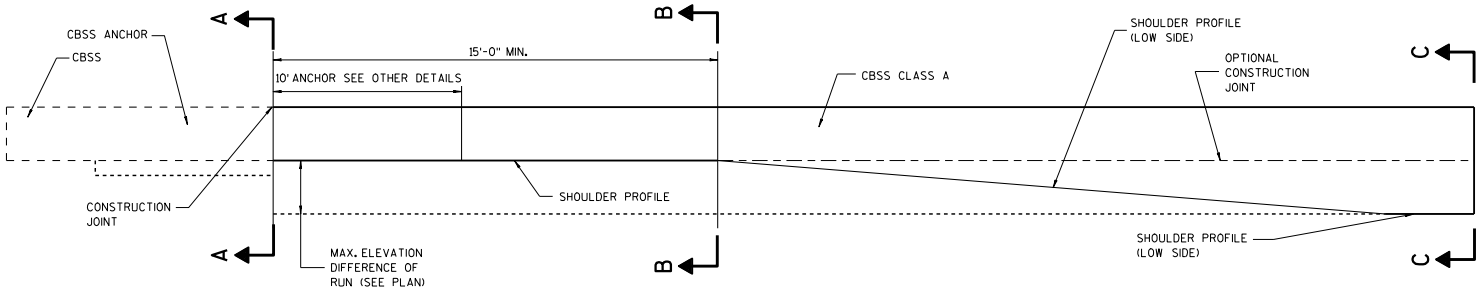
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

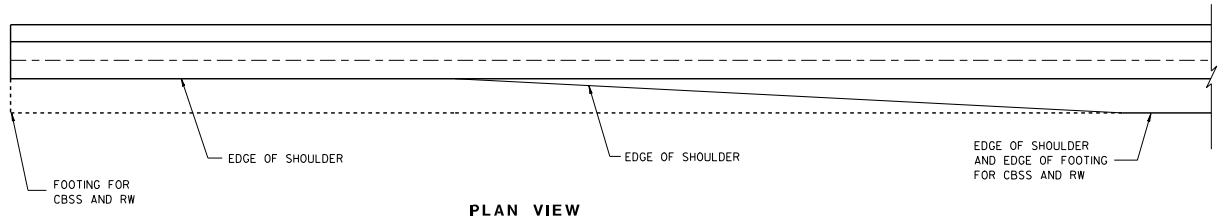
S.D.D. 14 B 32-1b

6

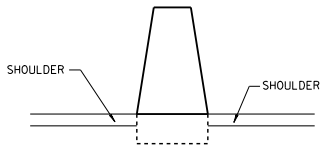
S.D.D. 14 B 32-1b



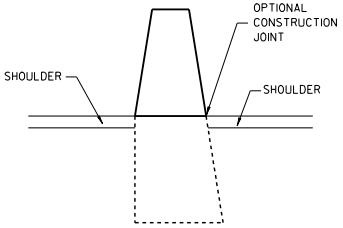
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



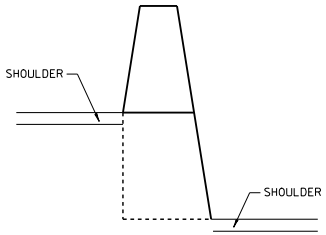
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



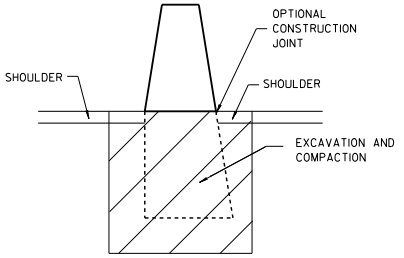
SECTION A-A



SECTION B-B



SECTION C-C



CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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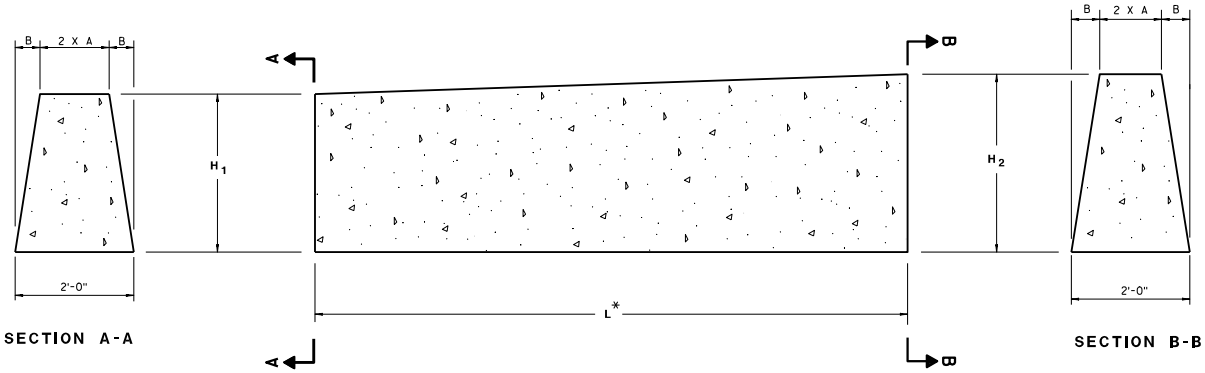
S.D.D. 14 B 32-1c

S.D.D. 14 B 32-1c



SECTION A-A

SECTION B-B

DOUBLE COLD JOINT HEIGHT TRANSITION

BARRIER DIMENSIONS

BARRIER HEIGHT INCHES	A INCHES	B INCHES
32	7	5
36	6 1/4	5 3/4
42	5 1/4	6 3/4
56	3	9

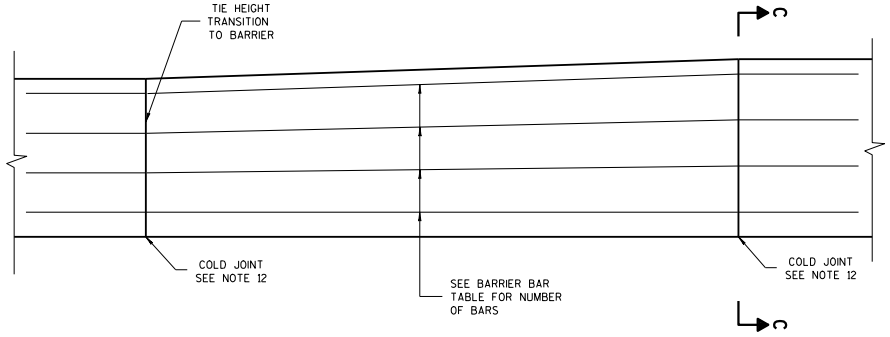
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

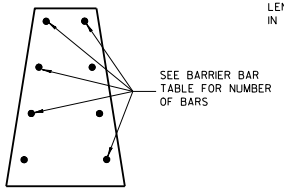
USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

BARRIER BARS

H_1	H_2	L*	NUMBER OF NO. 5 BARS
32"	36"	10'-0"	8
36"	42"	10'-6"	10
42"	56"	24'-6"	11

* LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.





SECTION C-C

STEEL REINFORCEMENT DETAIL

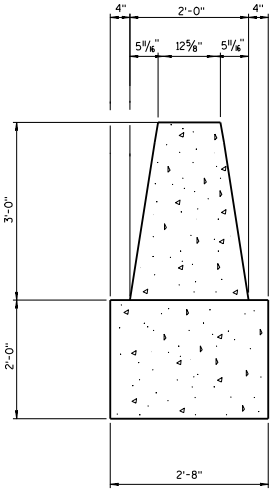
CONCRETE BARRIER
SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

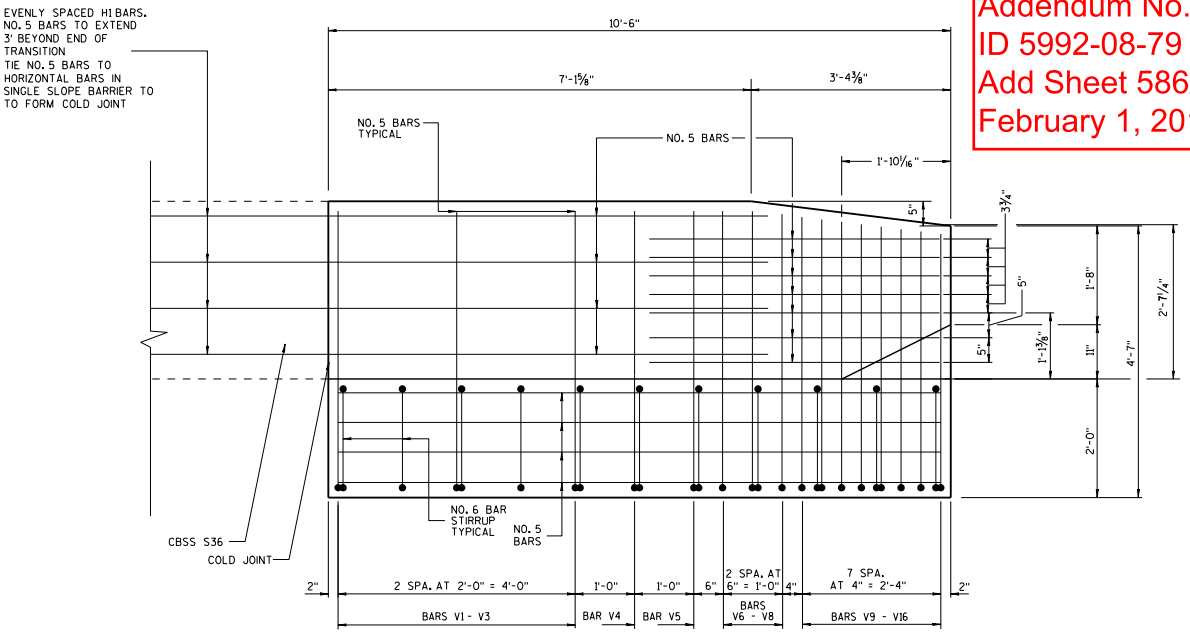
APPROVED
6-3-2010
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

Addendum No. 1
ID 5992-08-79
Add Sheet 586A
February 1, 2012

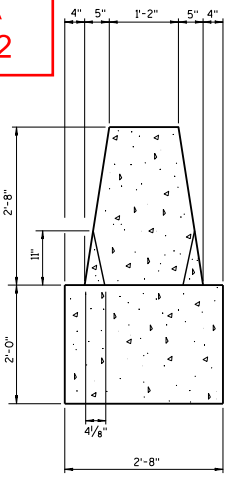


SECTION A-A

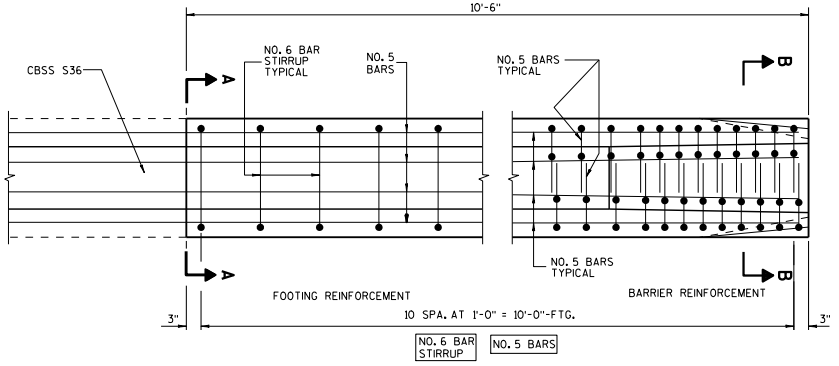


SEE SECTIONS (1) THRU (16)

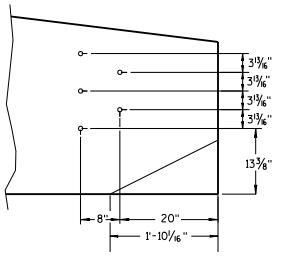
ELEVATION VIEW



SECTION B-B



PLAN VIEW



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE of BARRIER.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

CONCRETE BARRIER, SINGLE SLOPE 36"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

586A

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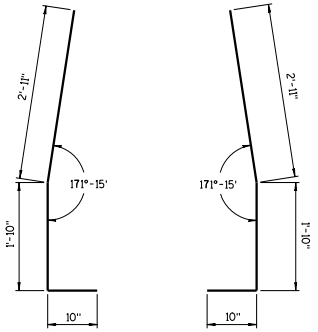
S.D.D. 14 B 33-1d

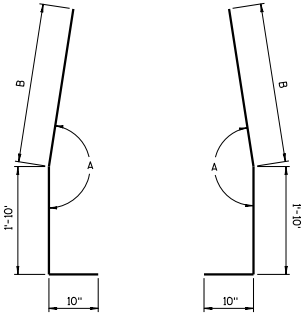
Addendum No. 1
ID 5992-08-79
Add Sheet 586B
February 1, 2012



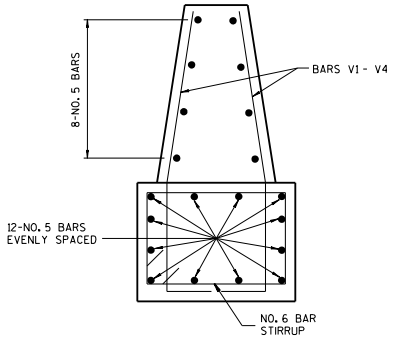
BAR BENDING DETAIL
FOR BARS V1 - V6

BAR CHART
SECTIONS V7 - V11

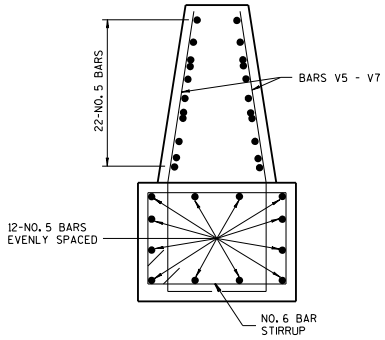
BAR	A	B
V7	171°-20'	2'-10½"
V8	171°-10'	2'-9½"
V9	171°-10'	2'-9"
V10	171°-05'	2'-8½"
V11	171°-10'	2'-8"



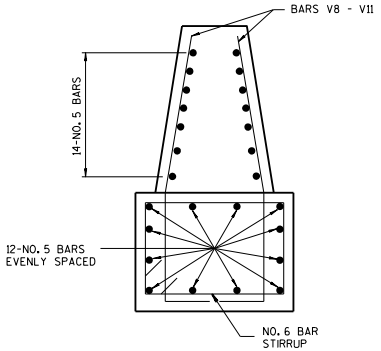
BAR BENDING DETAIL
FOR BARS V7 - V11



BAR DETAIL
SECTIONS 1 - 4



BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 11

CONCRETE BARRIER SINGLE SLOPE 36"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

586B

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S.D.D. 14 B 33-1e

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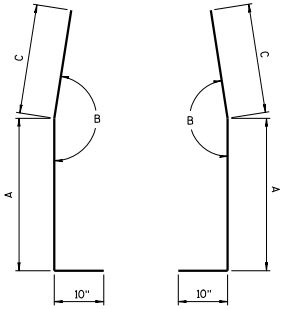
S.D.D. 14 B 33-1e

Addendum No. 1
ID 5992-08-79
Add Sheet 586C
February 1, 2012

BAR CHART
SECTIONS V12 - V13

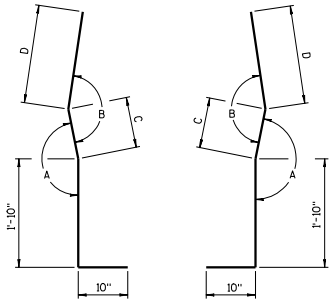
BAR	A	B	C
V12	2'-2"	171°-15'	2'-3½"
V13	2'-7"	171°-05'	1'-10"



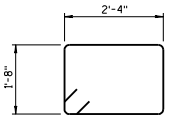
BAR BENDING DETAIL
FOR BARS V12 - V13

BAR CHART
SECTIONS V14 - V16

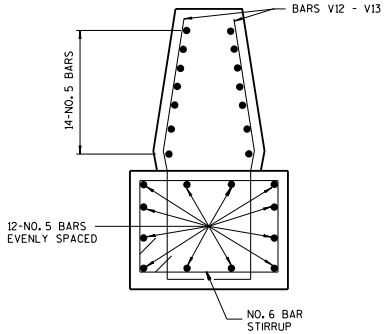
BAR	A	B	C	D
V14	168°-15'	159°-15'	6"	2'-0"
V15	169°-20'	161°-00'	8"	1'-10"
V16	168°-40'	160°-10'	10"	1'-8"



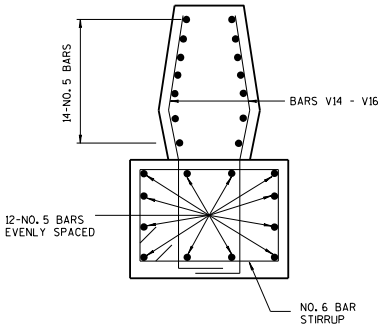
BAR BENDING DETAIL
FOR BARS V14 - V16



STIRRUP BAR
BENDING DETAIL



BAR DETAIL
SECTIONS 12 - 13



BAR DETAIL
SECTIONS 14 - 16

CONCRETE BARRIER SINGLE SLOPE 36"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-[illegible]-2010
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

586C

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S.D.D. 14 B 33-1f

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S.D.D. 14 B 33-1f

GENERAL NOTES

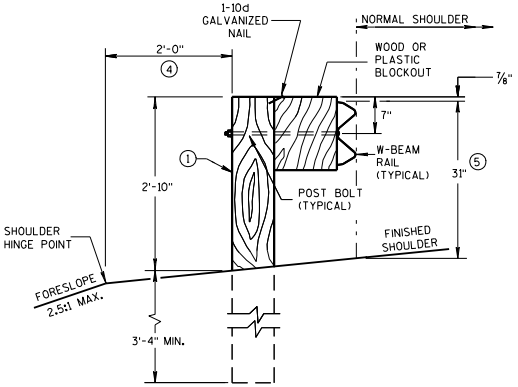
1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

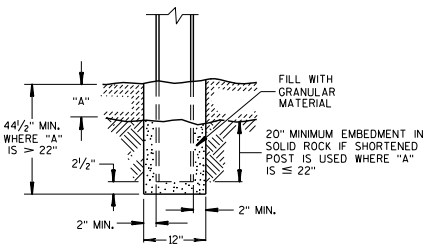
4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

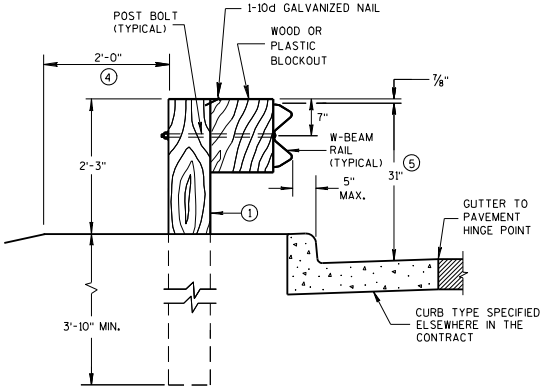


END VIEW

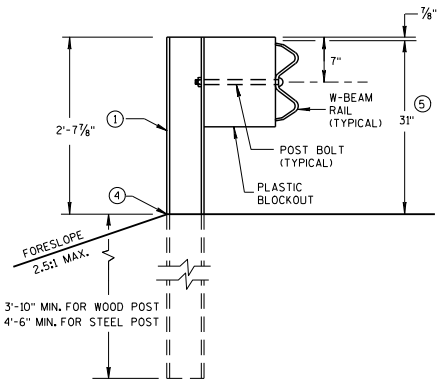
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



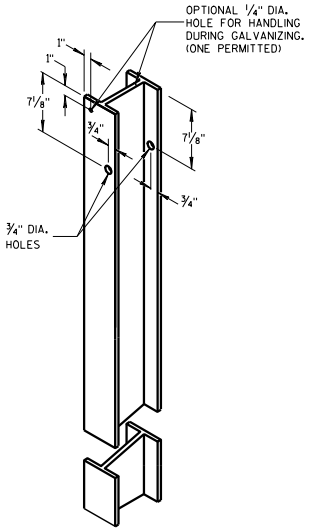
END VIEW
SETTING STEEL OR WOOD POST IN ROCK 3



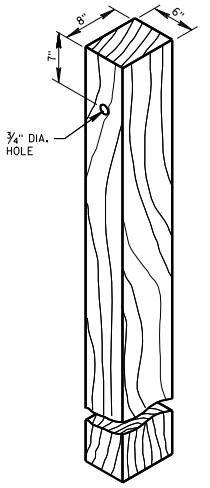
END VIEW
LOCATED ALONG A CURBED ROADWAY



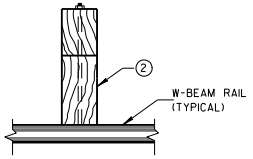
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



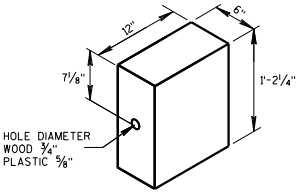
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) 1



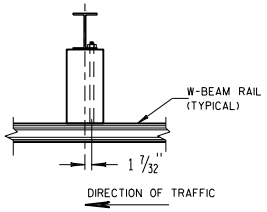
WOOD POST
(6" X 8") NOMINAL 1



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT 2



PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....

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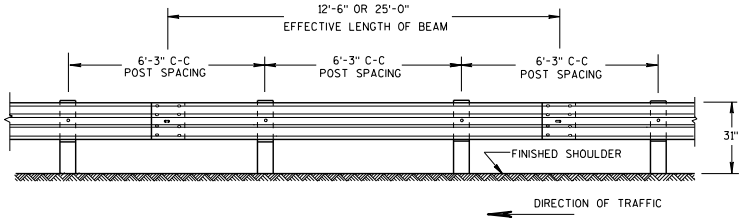
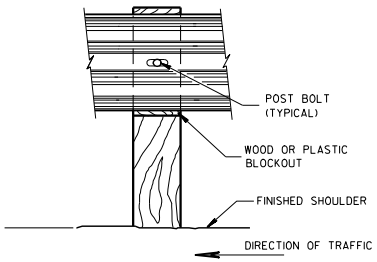
S.D.D. 14 B 42-1a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



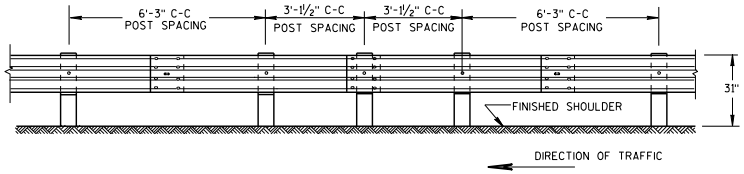
FRONT VIEW AT WOOD POST

GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

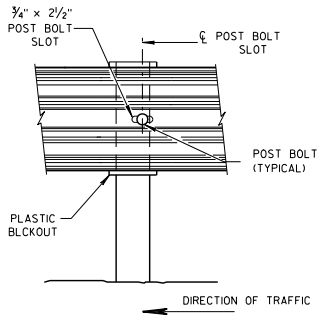
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. POST BOLTS ARE 21 INCHES LONG FOR WOOD POSTS AND 10 INCHES LONG IN STEEL POSTS. A POST BOLT REQUIRES 5/8" DIAMETER A563 DH MODIFIED (RECESSED) HEAVY HEX NUT AND 5/8" DIAMETER F436 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER X 1 1/4" LONG ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563 DH (RECESSED) HEAVY HEX NUT AND 5/8" DIAMETER F436 FLAT WASHER.

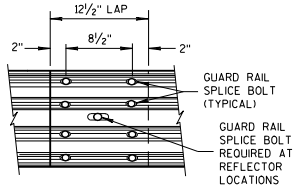


FRONT VIEW

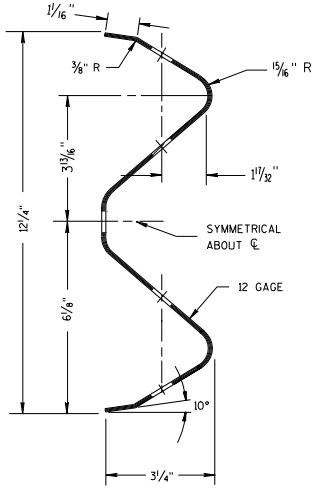
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



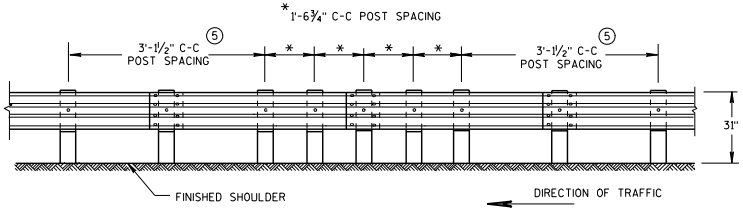
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

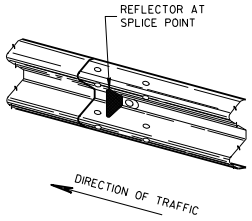


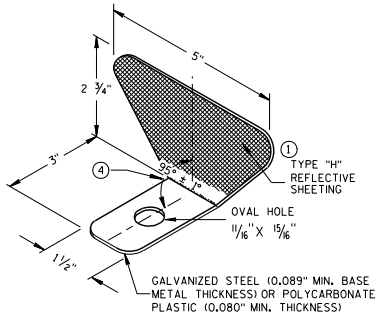
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (1)

REFLECTOR SPACING (2)

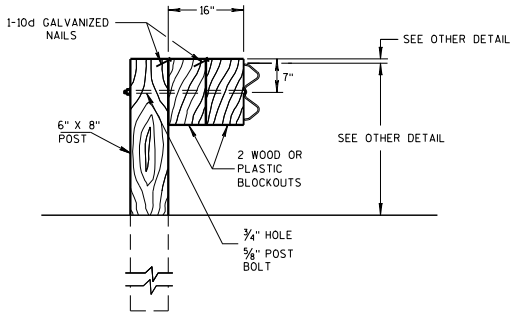
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (3)	6
	> 200'	50' C-C	1 (3)	
TWO WAY TRAFFIC	< 200'	50' C-C	2 (4)	3
	> 200'	100' C-C	2 (4)	

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

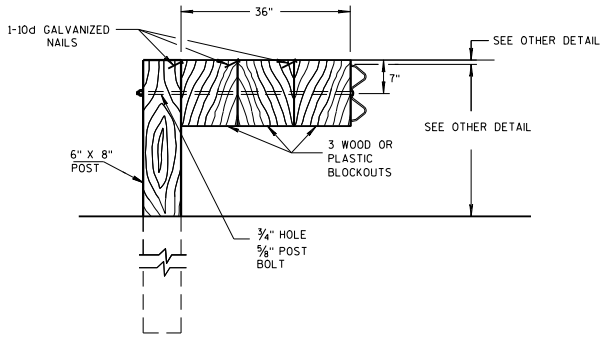
6

S.D.D. 14 B 42-1b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

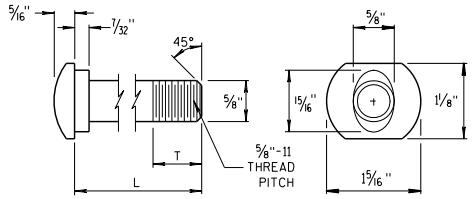


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

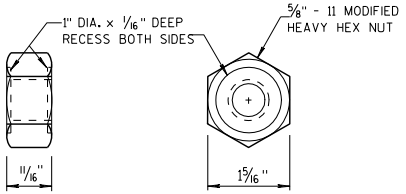
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

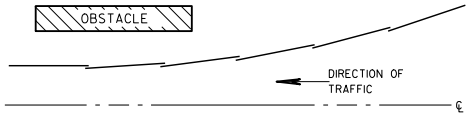


POST BOLT TABLE

L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"

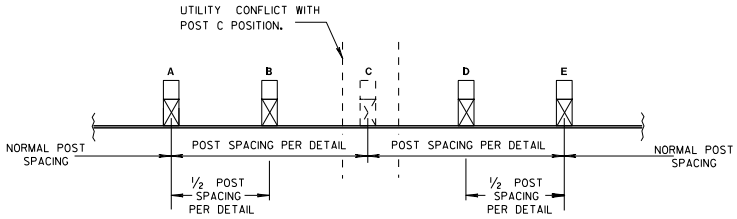


POST BOLT AND RECESS NUT

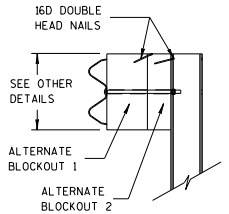


PLAN VIEW

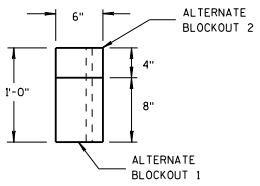
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2011 DATE
/S/ Jerry H Zoon ROADWAY STANDARDS ENGINEER
FHWA

ENT

6

S.D.D. 14 B 42-1c

6

S.D.D. 14 B 42-1c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL),AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

SEE SDD 14B42 FOR MORE INFORMATION.

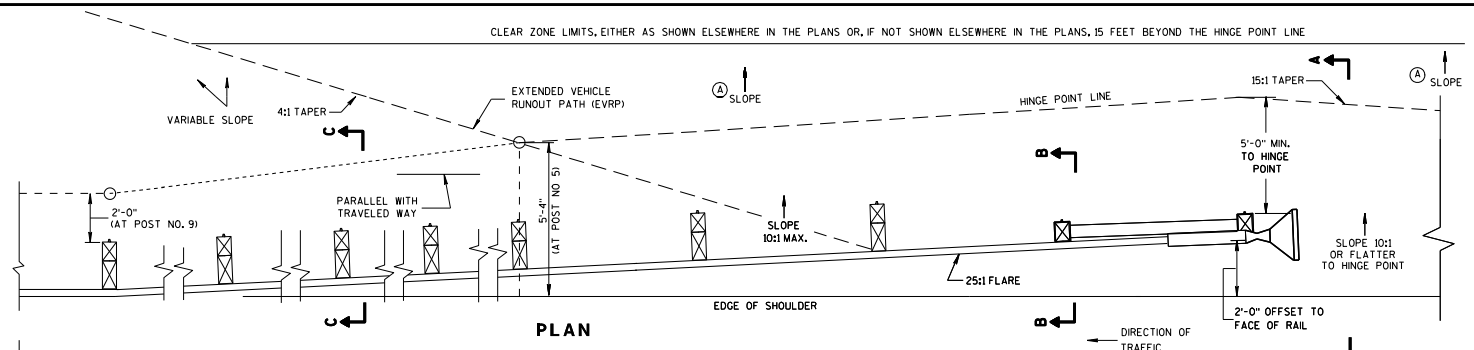
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

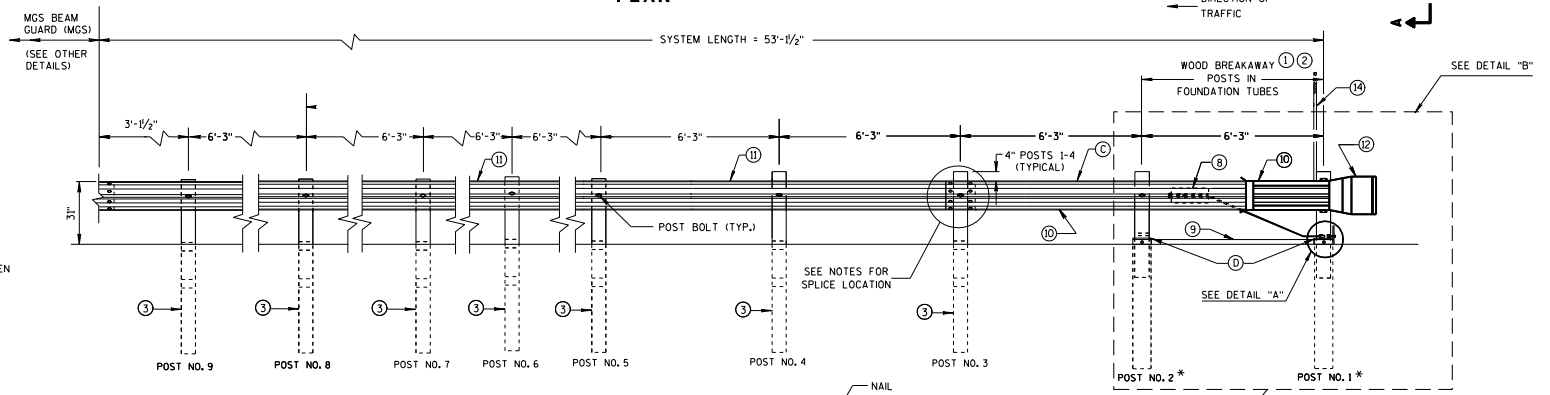
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

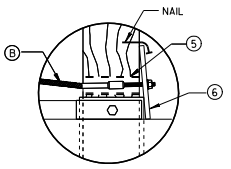
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

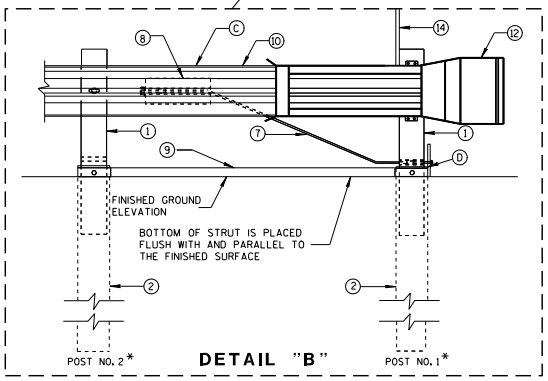
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

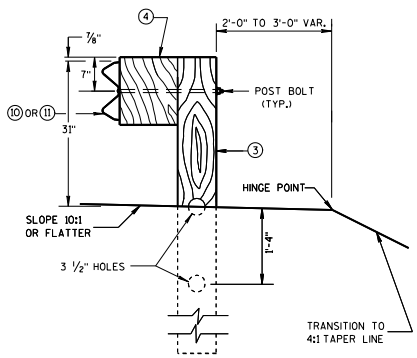
THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE (± ¾")



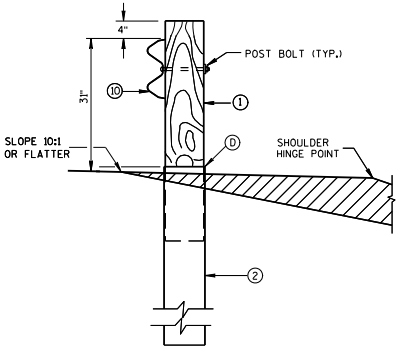




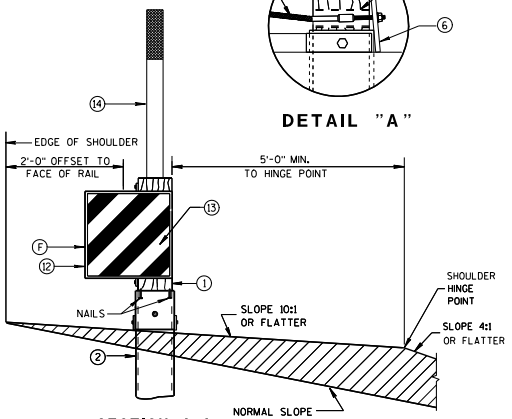




SECTION C-C
TYPICAL AT POST NOS. 3-9



SECTION B-B
TYPICAL AT POST NO. 2*



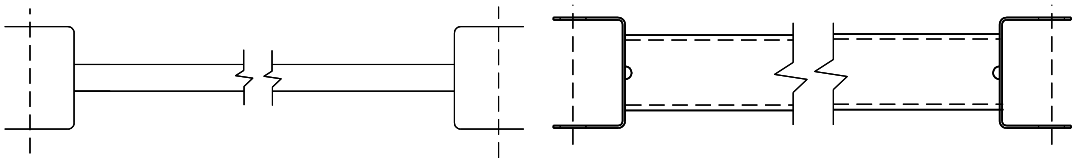
SECTION A-A
TYPICAL AT POST NO. 1*

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 44-1a

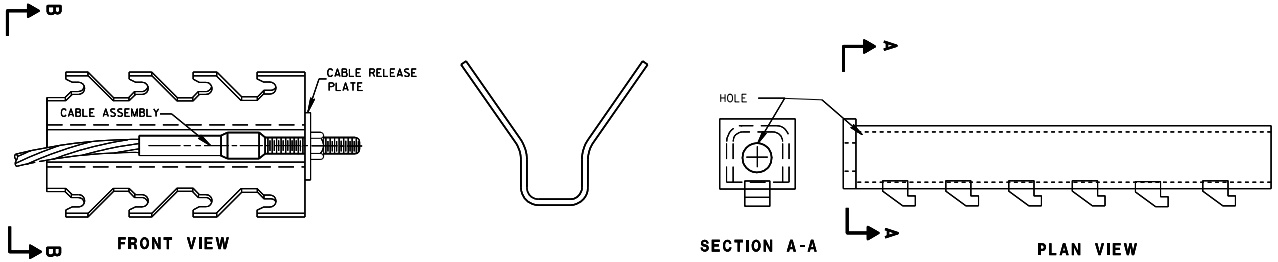


(9) (H)

GENERIC GROUND STRUT

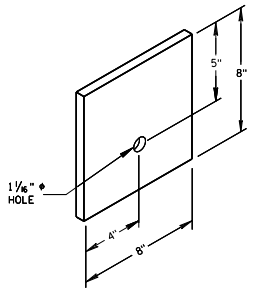
BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE H (ONLY THE SHEETING IS SUPPLIED BY THE MANUFACTURER)
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



(8) (H)

GENERIC ANCHOR CABLE BOX



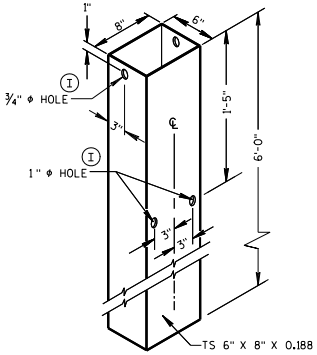
(6)

BEARING PLATE

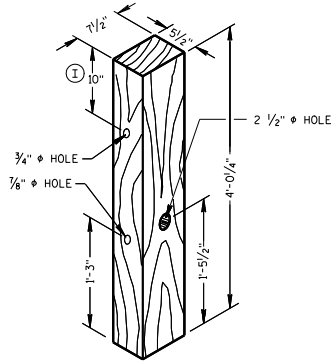
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 44-1b

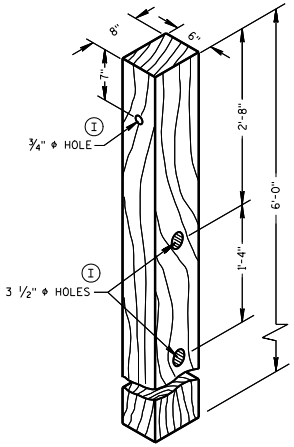


FOUNDATION TUBE (2)



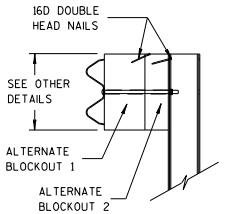
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

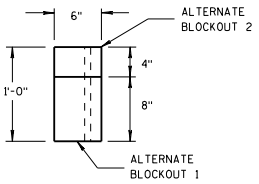


POSTS NUMBER 3-9

WOOD CRT POST (3)

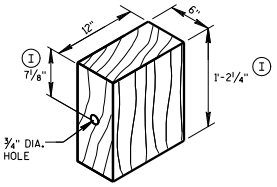


SIDE VIEW



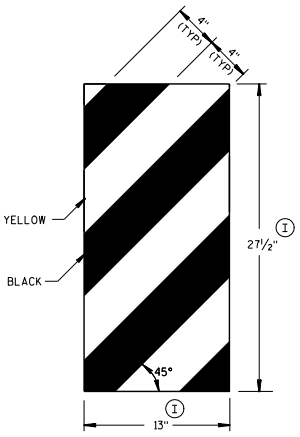
TOP VIEW

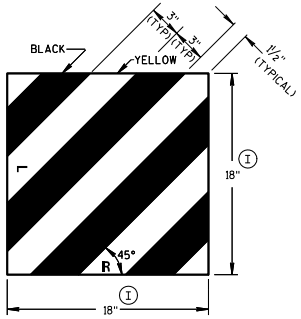
ALTERNATE WOOD
BLOCKOUT DETAIL



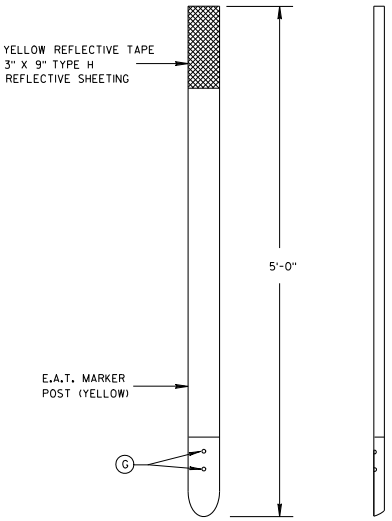
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





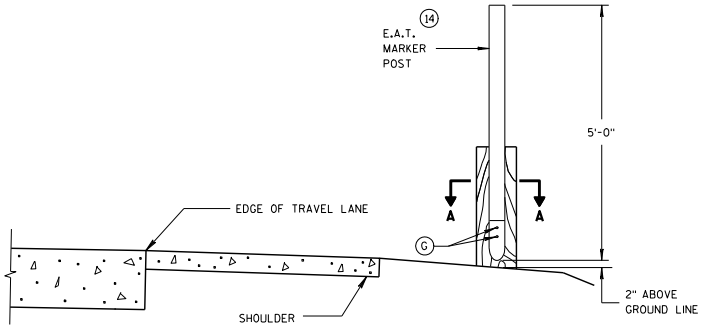
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

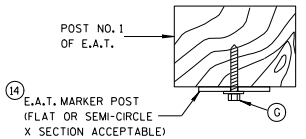
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5/23/2011 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER
FHWA	592 IENT

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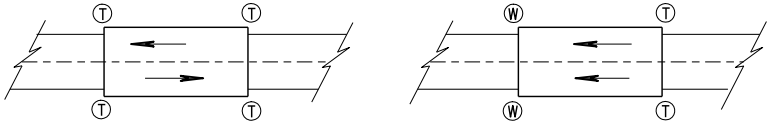
S.D.D. 14 B 44-1c

S.D.D. 14 B 44-1c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

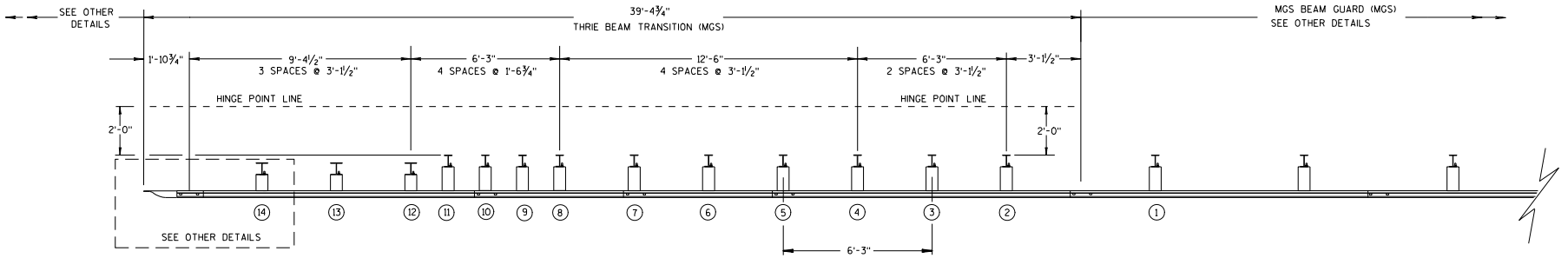
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

IF ROCK IS ENCOUNTERED DURING EXCAVATION, SEE STANDARD DETAIL DRAWING 14 B 15-a.

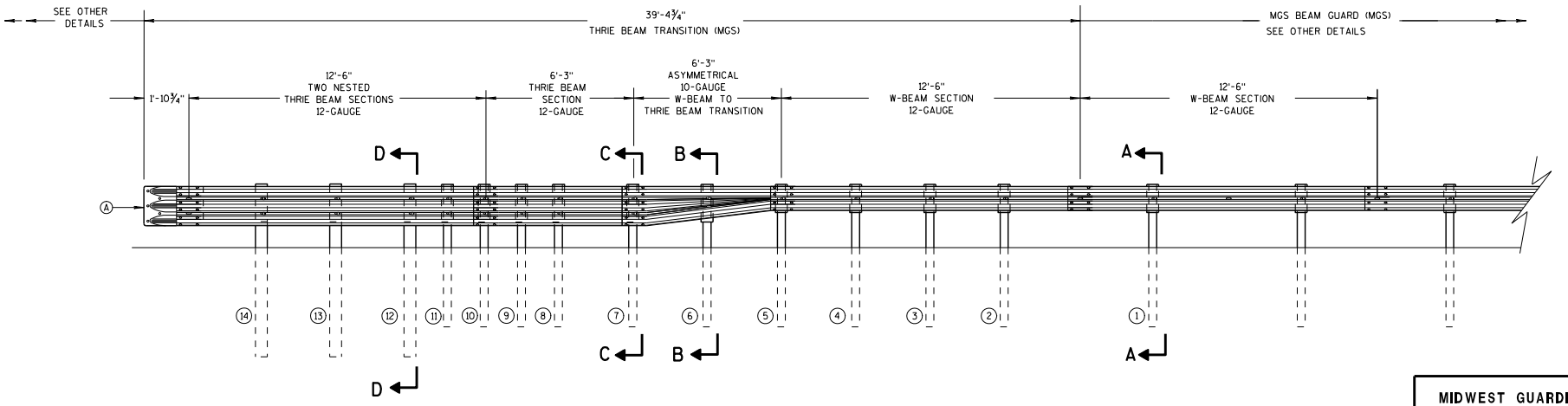
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

(A) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

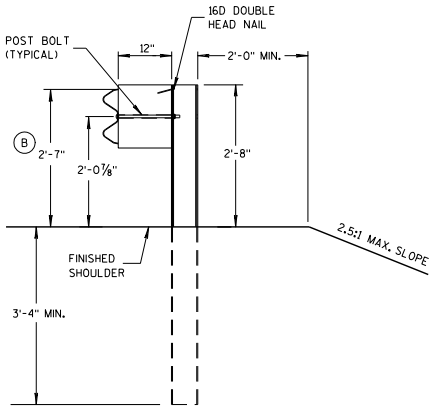
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 45-1a

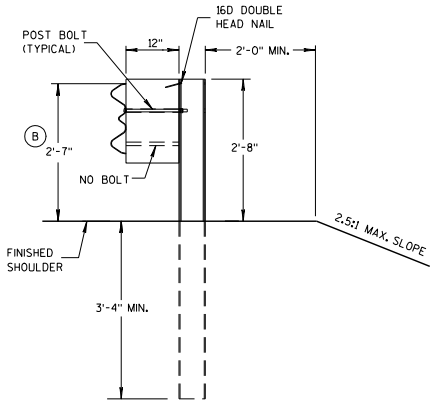
GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



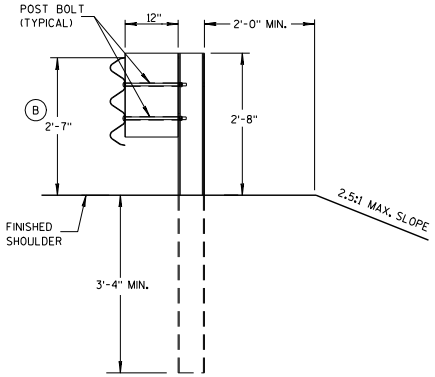
SECTION A-A

POSTS 1-5



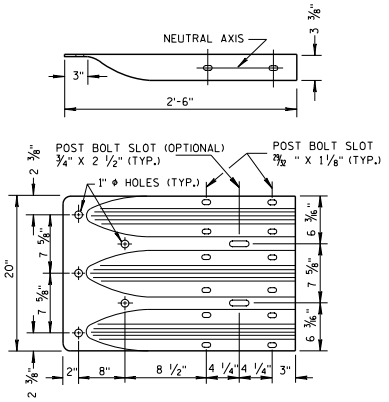
SECTION B-B

POST 6

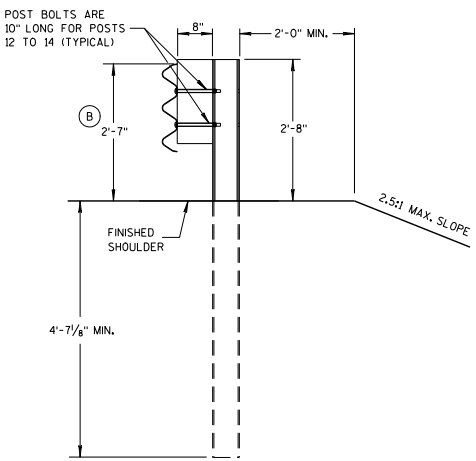


SECTION C-C

POSTS 7-11

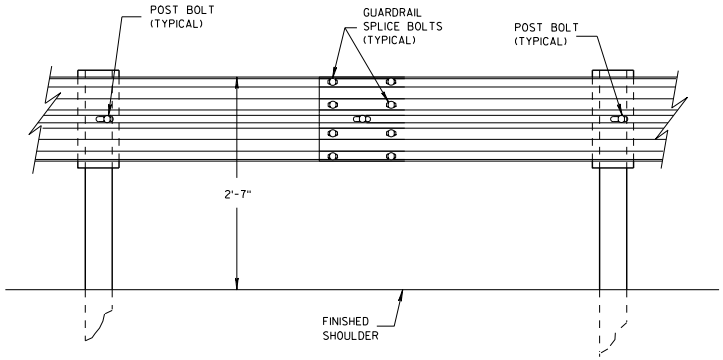


THRIE BEAM TERMINAL CONNECTOR

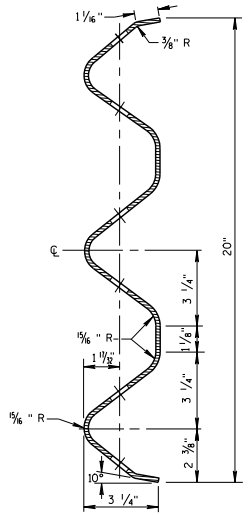


SECTION D-D

POSTS 12-14



SPLICE DETAIL

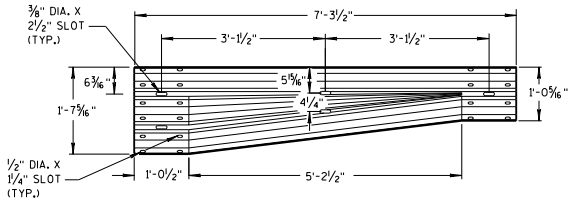


SECTION THRU THRIE BEAM RAIL ELEMENT

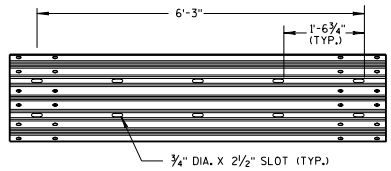
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

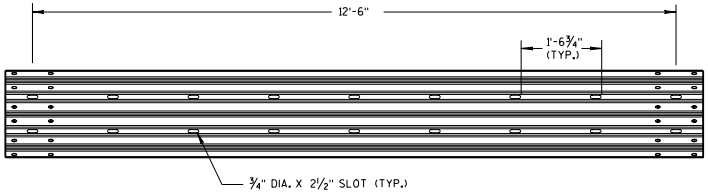
6
S.D.D. 14 B 45-1b



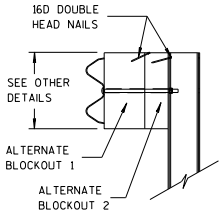
W-BEAM TO THRIE BEAM TRANSITION SECTION



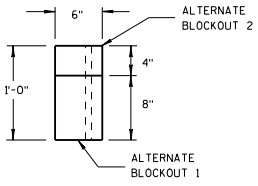
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

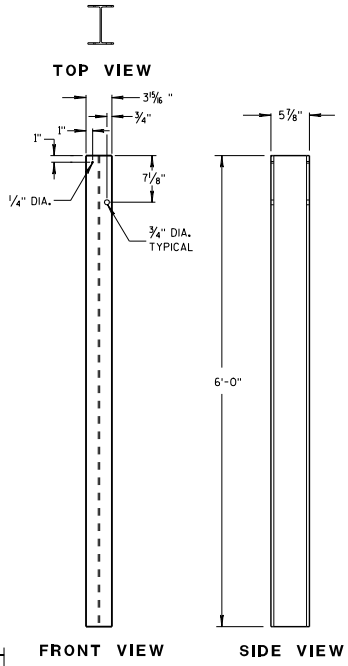


SIDE VIEW

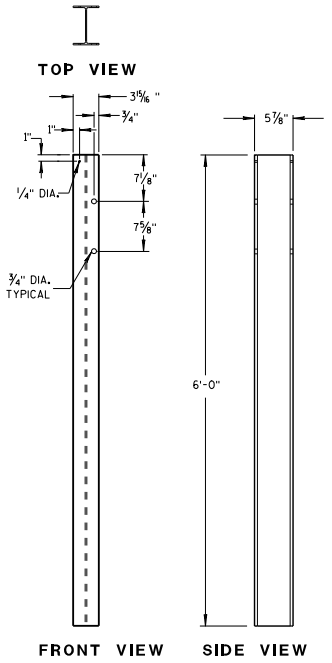


TOP VIEW

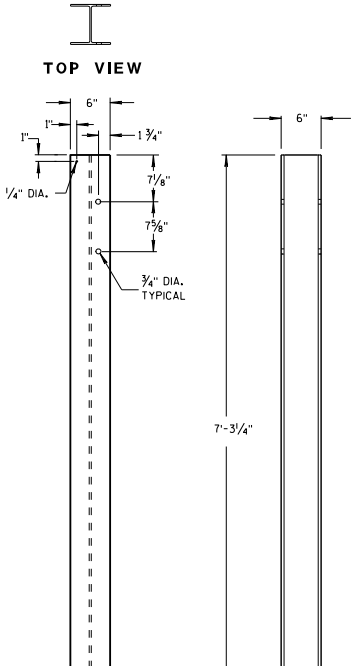
ALTERNATE WOOD BLOCKOUT DETAIL



STEEL POSTS 1-5

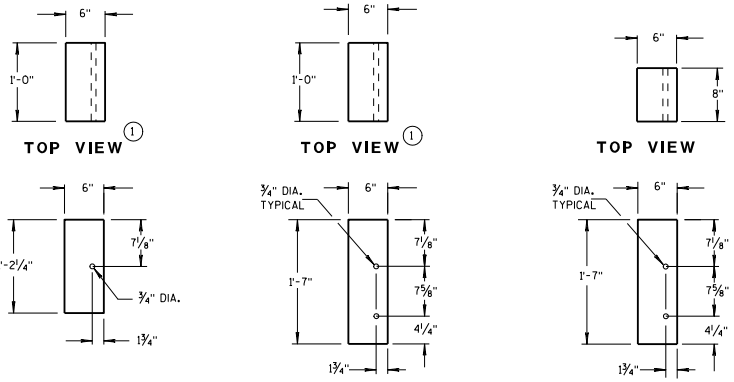


STEEL POSTS 6-11



STEEL POSTS 12-14

① WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



BLOCKOUT POSTS 1-5

BLOCKOUT POSTS 6-11

BLOCKOUT POSTS 12-14

STEEL POST OPTION

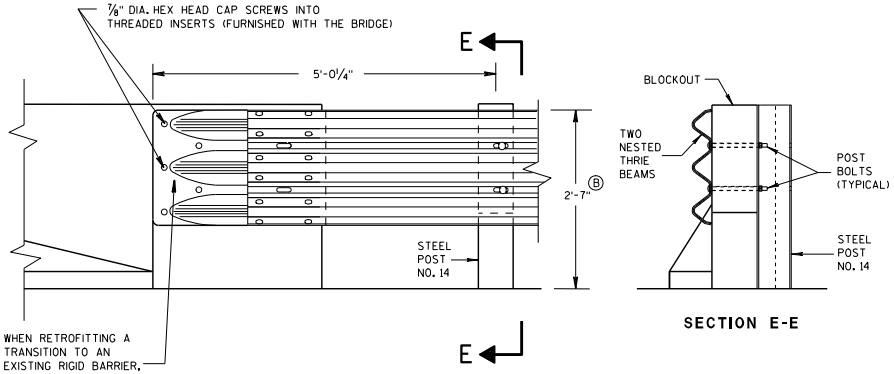
POST NUMBER	SECTION TYPE	LENGTH
①	W6x9	72"
②	W6x9	72"
③	W6x9	72"
④	W6x9	72"
⑤	W6x9	72"
⑥	W6x9	72"
⑦	W6x9	72"
⑧	W6x9	72"
⑨	W6x9	72"
⑩	W6x9	72"
⑪	W6x9	72"
⑫	W6x15	87 1/8"
⑬	W6x15	87 1/8"
⑭	W6x15	87 1/8"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 45-1c



FRONT VIEW

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

SECTION E-E

GENERAL NOTES

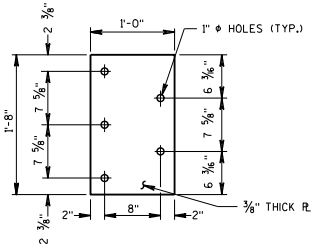
THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

② EACH BOLT AT THE BACK FACE OF THE PARAPET REQUIRES A HARDENED ROUND STEEL WASHER WITH A 2 ¼" O.D. X 5/32 " THICK.

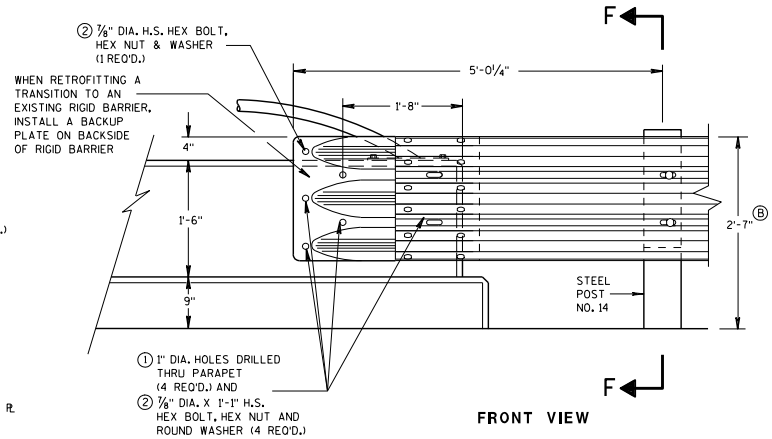
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

Ⓑ TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



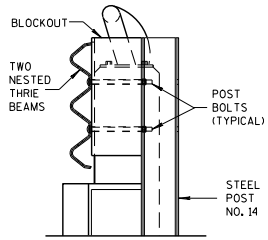
② BACKUP PLATE DETAIL

(USE ONLY AT BRIDGE PARAPET CONNECTIONS)

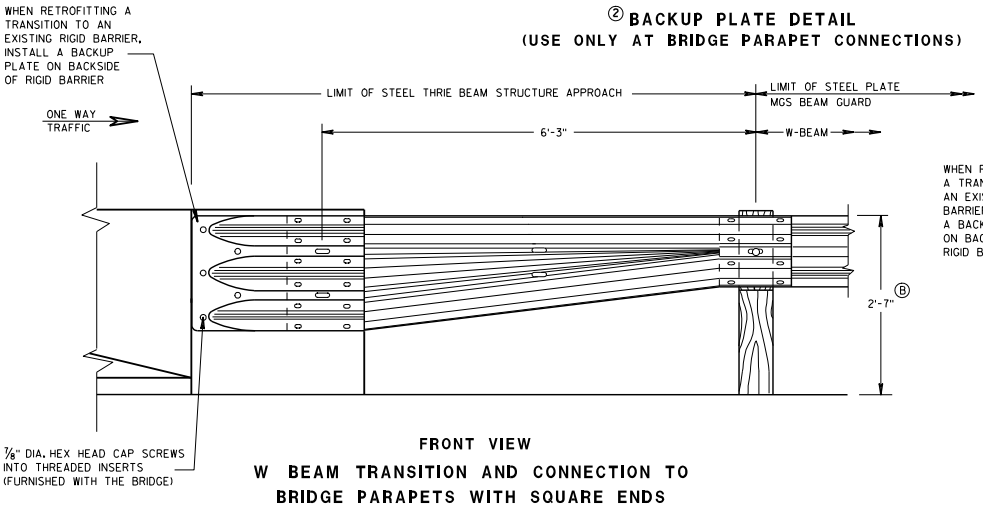


FRONT VIEW

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



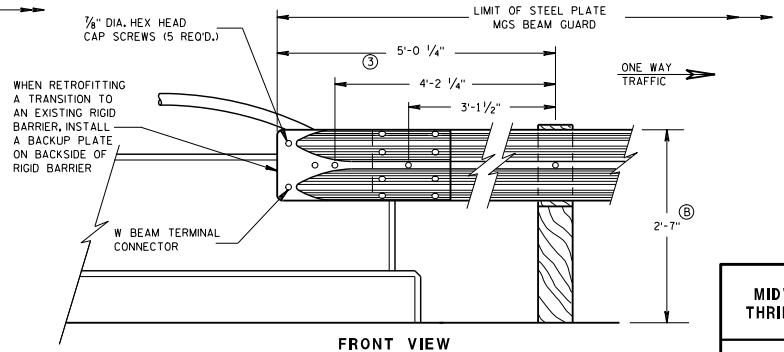
SECTION F-F



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/2011
DATE

/S/ Jerry H. Zaas
ROADWAY STANDARDS ENGINEER

1596

FHWA

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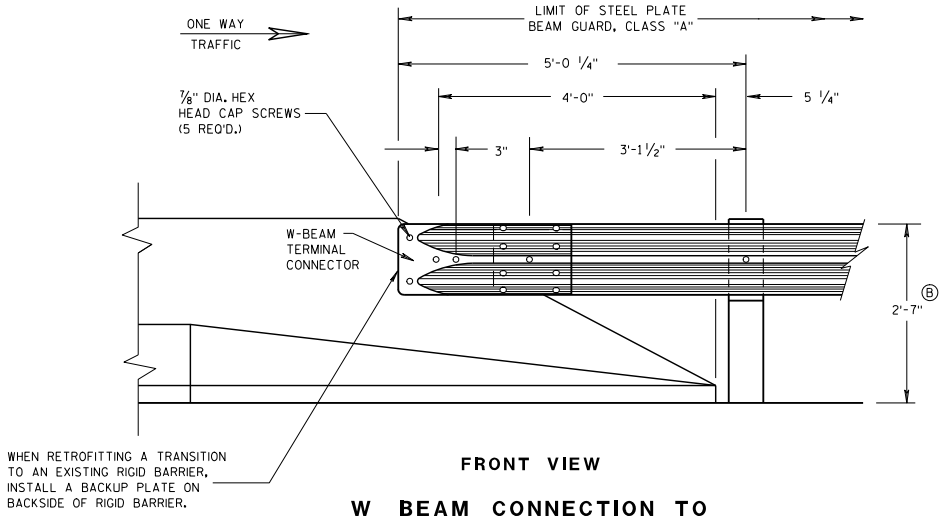
S.D.D. 14 B 45-1d

6

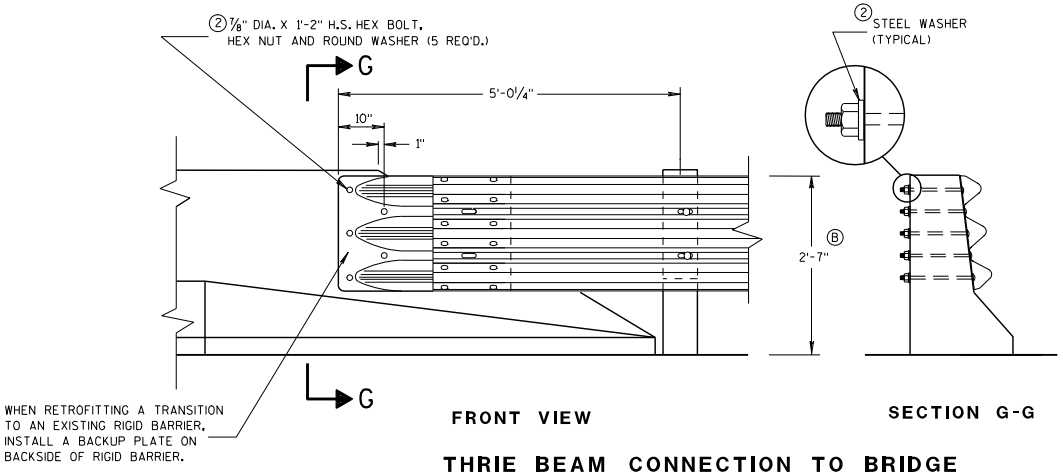
S.D.D. 14 B 45-1d



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)



FRONT VIEW

SECTION G-G

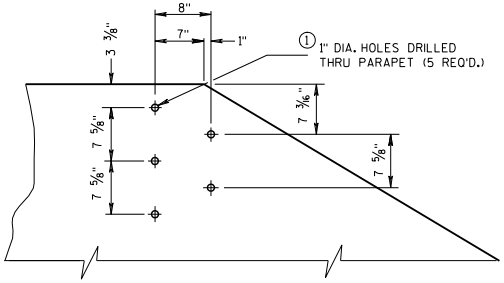
THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

GENERAL NOTES

① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

② EACH BOLT AT THE BACK FACE OF THE PARAPET REQUIRES A HARDENED ROUND STEEL WASHER WITH A 2 1/4" O.D. X 5/32 " THICK.

Ⓑ TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5-23-2011 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER.
FHWA	597 ENT

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S.D.D. 14 B 45-1e

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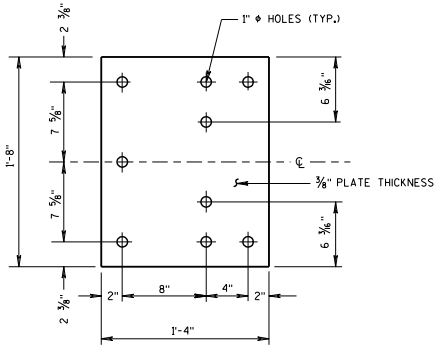
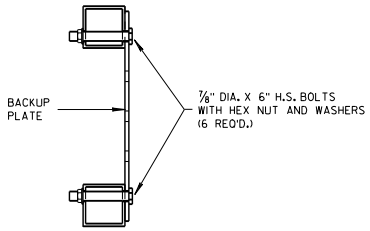
S.D.D. 14 B 45-1e



BACK-UP PLATE DETAIL

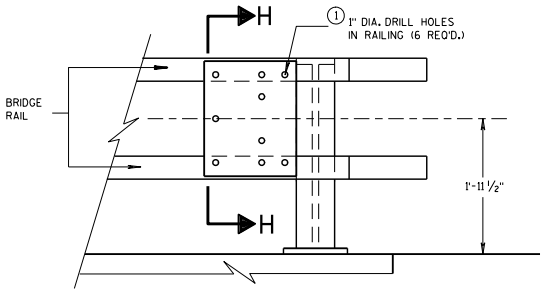


SECTION H-H

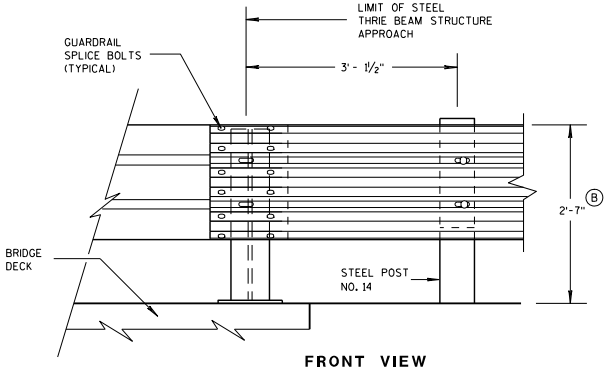
GENERAL NOTES

(1) INCLUDE THE PAYMENT FOR DRILLING HOLES IN RAILING IN THE ITEM "STEEL THRIE BEAM STRUCTURE APPROACH".

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

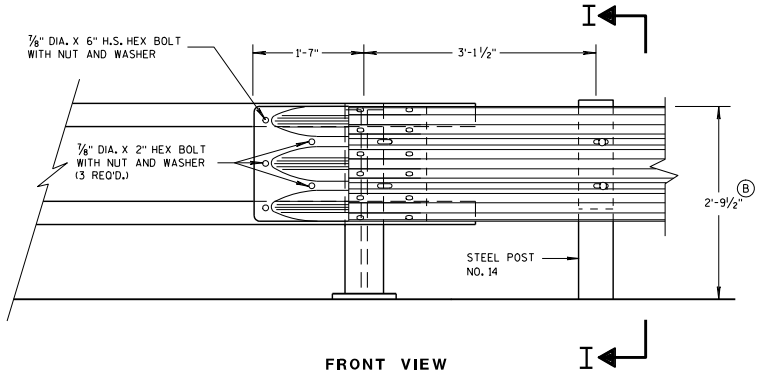


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

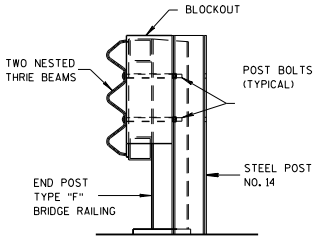


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION I-I

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-23-2011
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 14 B 45-1f

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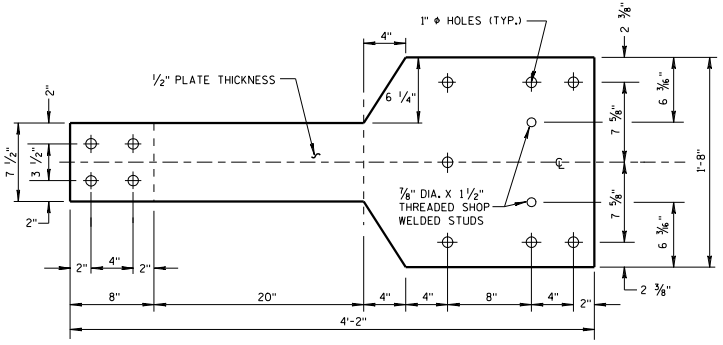
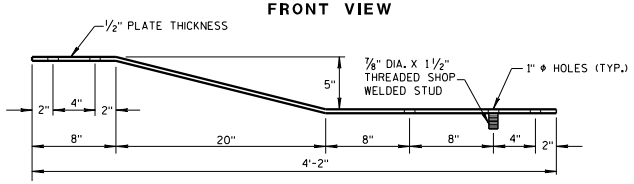
S.D.D. 14 B 45-1f

GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

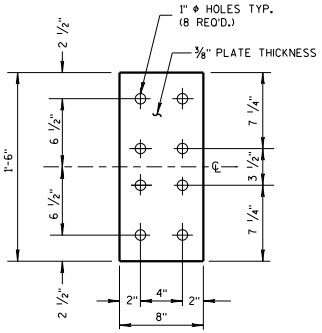


FRONT VIEW



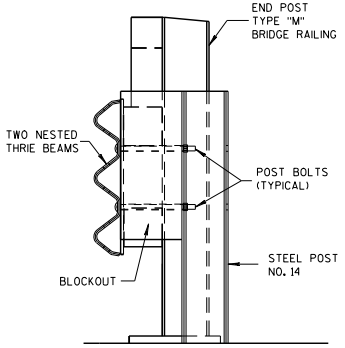
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

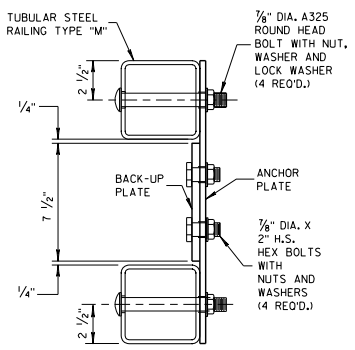


FRONT VIEW

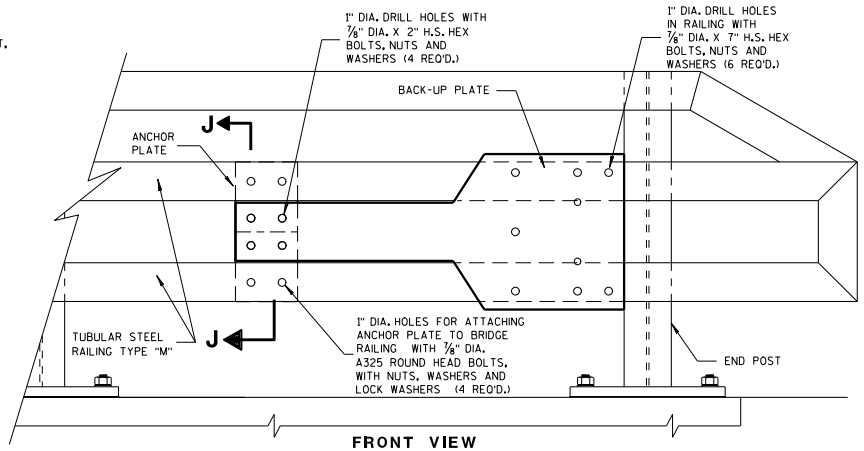
ANCHOR PLATE DETAIL, TYPE "M"



SECTION K-K

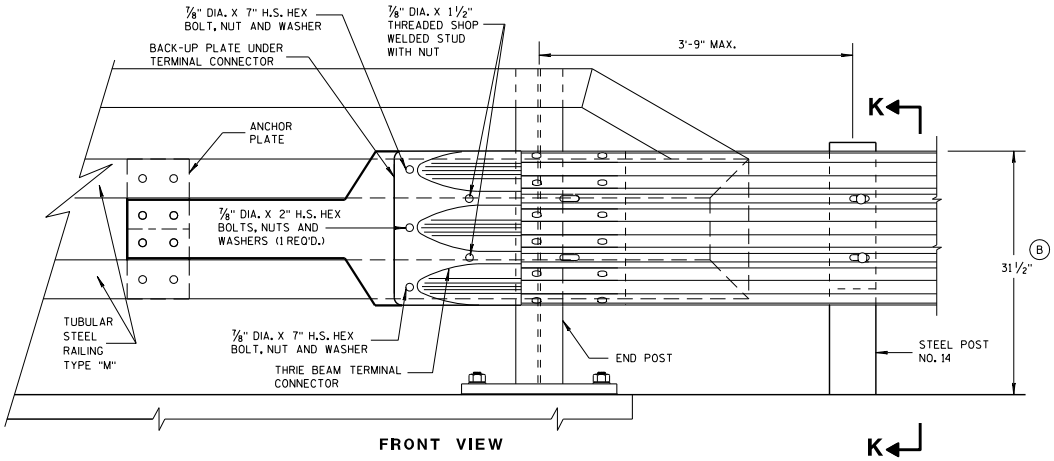


SECTION J-J

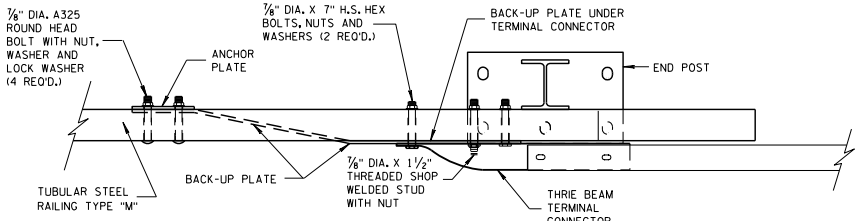


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-23-2011
DATE

/S/ Jerry H. Z---
ROADWAY STANDARDS ENGINEER

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FHWA

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S.D.D. 14 B 45-1g

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S.D.D. 14 B 45-1g

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

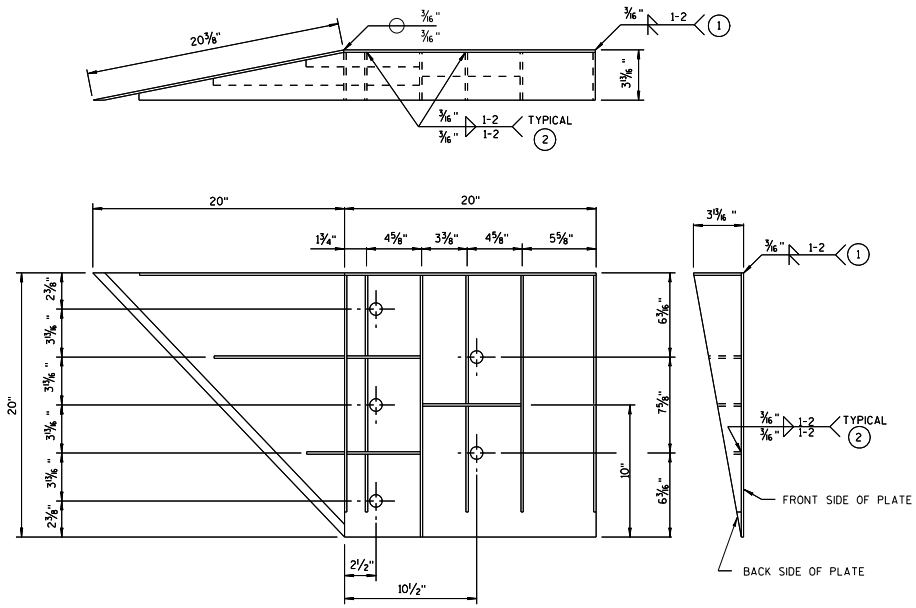
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(1) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(2) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

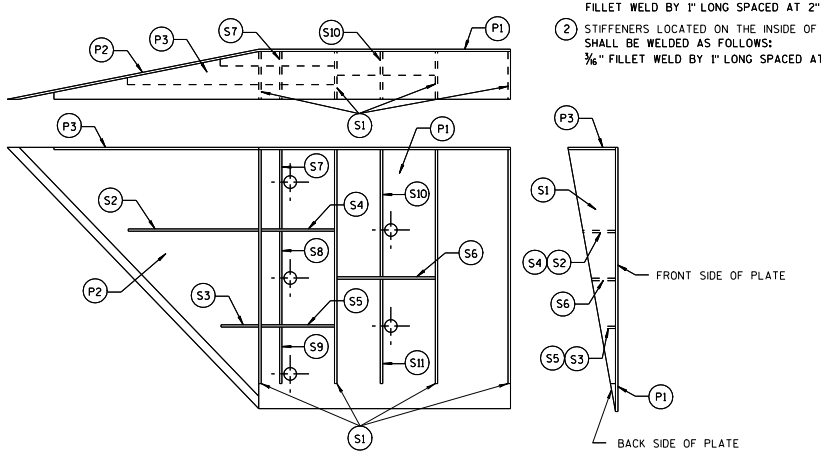


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1	B	20" x 20"	3/16"
P2	1	B A C	20" x 20" x 28 9/16"	3/16"
P3	1	B A C D	39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4	B A C	18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1	B A C D	10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1	B A C D	3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1	B A	6 1/8" x 2 7/16"	1/4"
S5	1	B A	6 1/8" x 1 1/16"	1/4"
S6	1	B A	7 3/4" x 1 3/4"	1/4"
S7	1	A D B C	2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1	A D B C	1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1	C A B	6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1	A D B C	1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1	C A B	8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-23-2011 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 14 B 45-1h

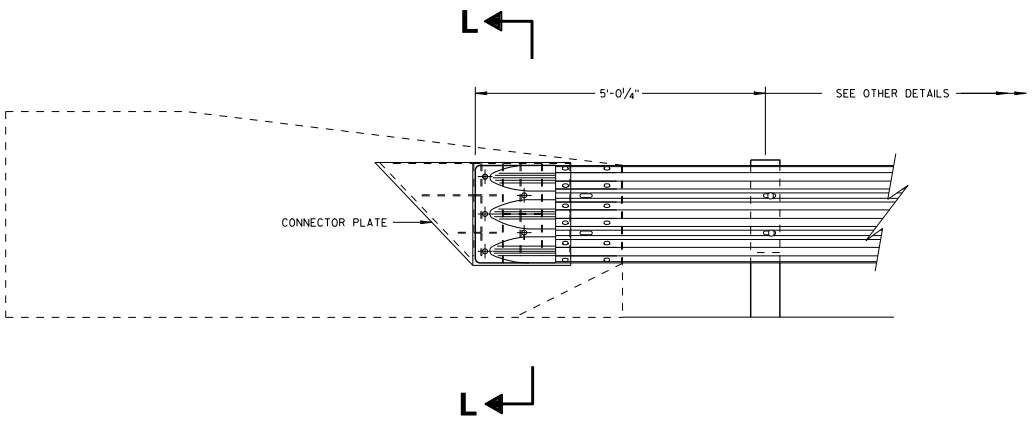
6

S.D.D. 14 B 45-1h

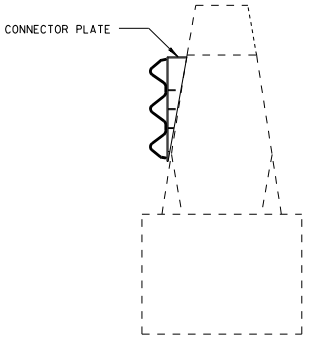
GENERAL NOTES

CONNECTION PLATE INCIDENTAL TO STEEL THRIE BEAM STRUCTURE APPROACH.

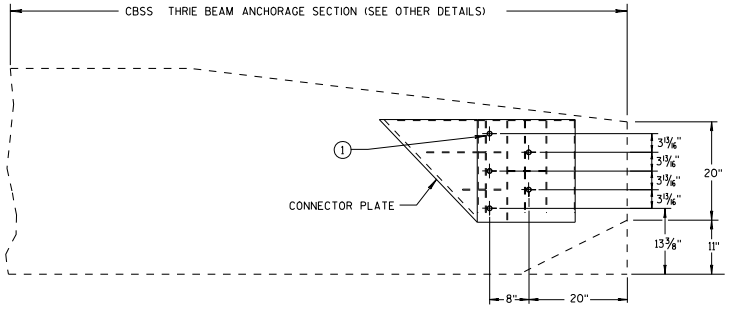
(1) USE 7/8" DIAMETER A325 BOLT WITH HEX HEAD AND, NUT, AND WASHER.
EXTEND 7/8" DIAMETER BOLT COMPLETELY THROUGH BARRIER.
BACK FACE OF BARRIER REQUIRES A HARDENED ROUND STEEL WASHER WITH 2 1/4" OUTER DIAMETER.
GROUT ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



SECTION L-L



SINGLE SLOPE CONNECTION PLATE PLACEMENT

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5-23-2011 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER
FHWA	

6

S.D.D. 14 B 45-11

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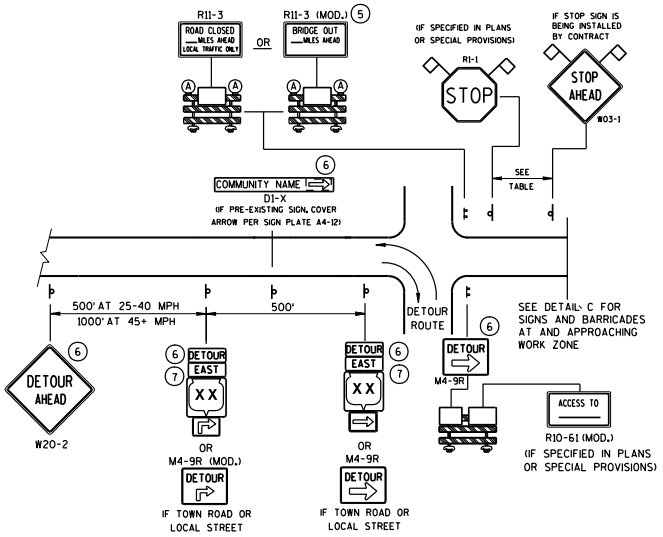
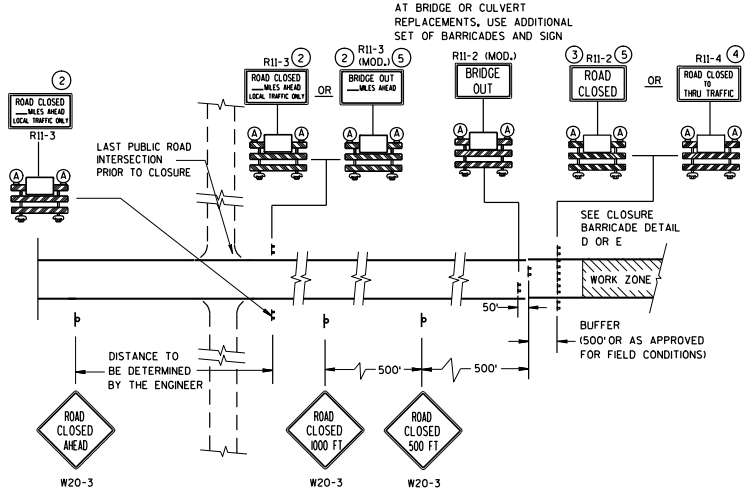
S.D.D. 14 B 45-11



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

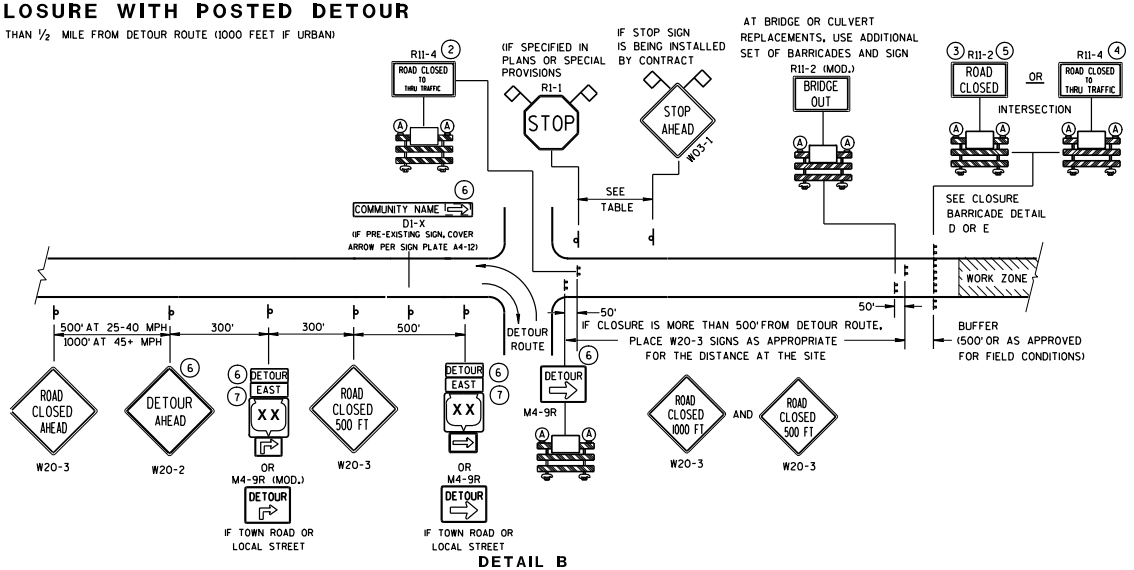


DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

- POST MOUNTED SIGN
- TYPE III BARRICADES
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

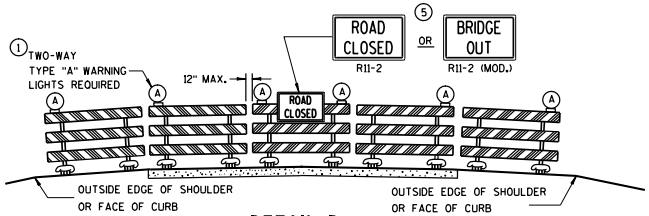
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 2-4a

6

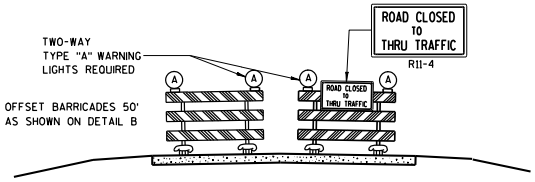
S.D.D. 15 C 2-4a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

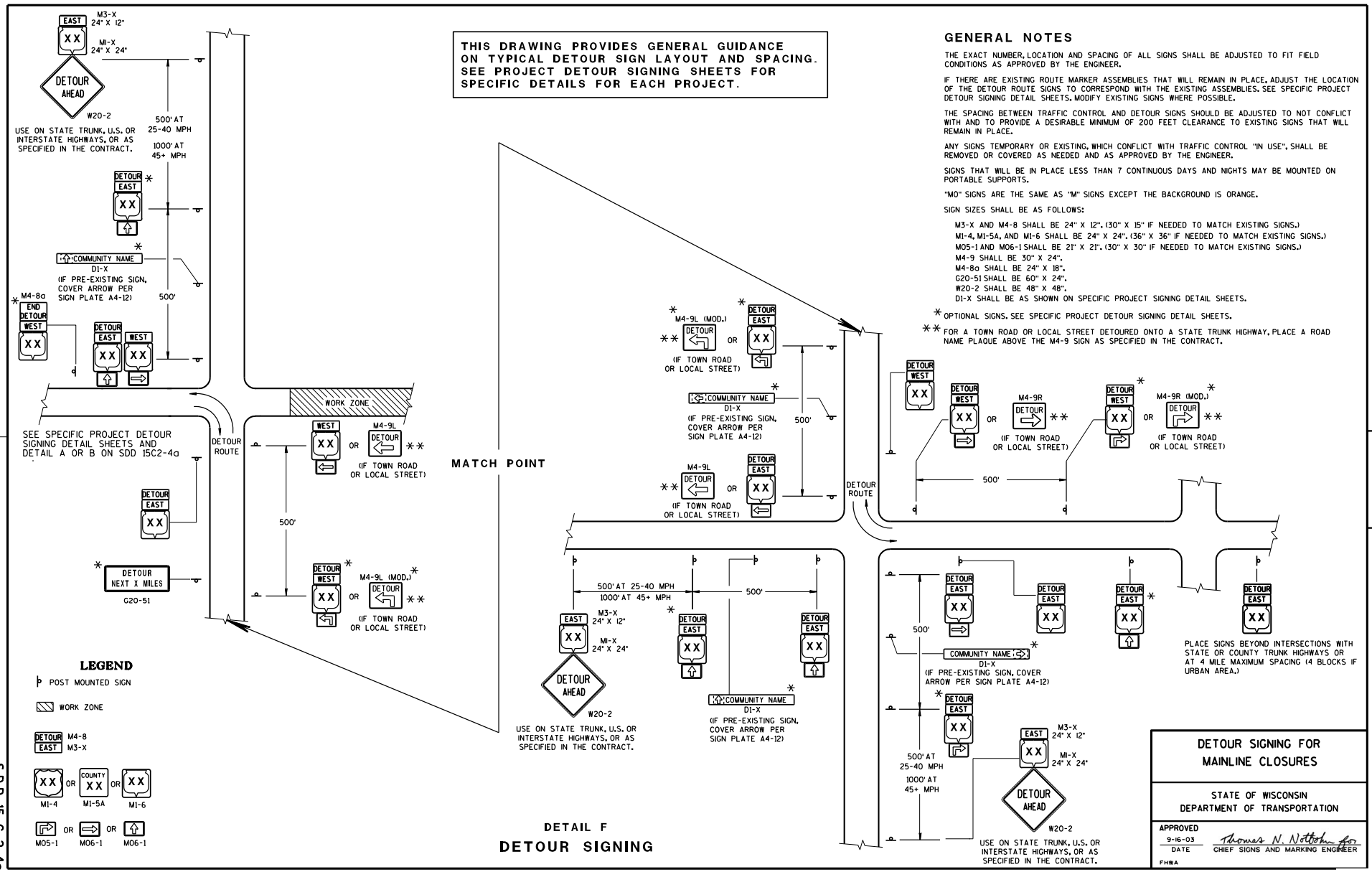
APPROVED
9/16/03
DATE
Thomas N. Notbohm for
CHIEF SIGNS AND MARKING ENGINEER
FHWA

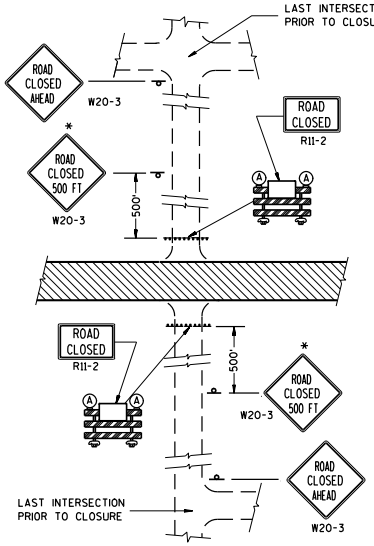
6

S.D.D. 15 C 2-4b

6

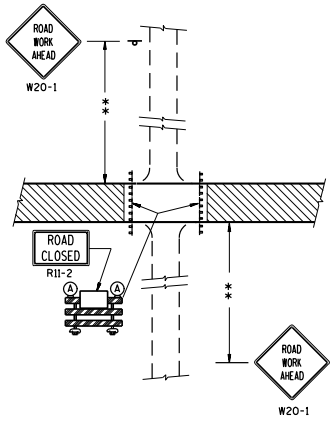
S.D.D. 15 C 2-4b


THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.
GENERAL NOTES
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.
THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
SIGN SIZES SHALL BE AS FOLLOWS:
M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
M4-9 SHALL BE 30" X 24".
M4-8a SHALL BE 24" X 18".
G20-51 SHALL BE 60" X 24".
W20-2 SHALL BE 48" X 48".
D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.
EAST M3-X 24" X 12"
XX MI-X 24" X 24"
DETOUR AHEAD
W20-2
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT.
500' AT 25-40 MPH
1000' AT 45+ MPH
500'
DETOUR EAST XX
COMMUNITY NAME
D1-X
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)
M4-8a END DETOUR WEST XX
DETOUR EAST XX WEST XX
SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-4a
DETOUR ROUTE
WORK ZONE
WEST XX OR M4-9L DETOUR
(IF TOWN ROAD OR LOCAL STREET)
500'
DETOUR EAST XX
DETOUR NEXT X MILES
G20-51
DETOUR WEST XX OR M4-9L (MOD.) DETOUR
(IF TOWN ROAD OR LOCAL STREET)
MATCH POINT
M4-9L (MOD.) DETOUR OR DETOUR EAST XX
(IF TOWN ROAD OR LOCAL STREET)
COMMUNITY NAME
D1-X
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)
500'
M4-9L DETOUR OR DETOUR EAST XX
(IF TOWN ROAD OR LOCAL STREET)
DETOUR ROUTE
DETOUR WEST XX
DETOUR WEST XX OR M4-9R DETOUR
(IF TOWN ROAD OR LOCAL STREET)
DETOUR WEST XX OR M4-9R (MOD.) DETOUR
(IF TOWN ROAD OR LOCAL STREET)
500'
500' AT 25-40 MPH
1000' AT 45+ MPH
500'
EAST M3-X 24" X 12"
XX MI-X 24" X 24"
DETOUR AHEAD
W20-2
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT.
DETOUR EAST XX
COMMUNITY NAME
D1-X
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)
500'
DETOUR EAST XX
COMMUNITY NAME
D1-X
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)
500' AT 25-40 MPH
1000' AT 45+ MPH
EAST M3-X 24" X 12"
XX MI-X 24" X 24"
DETOUR AHEAD
W20-2
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT.
PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA.)
LEGEND
POST MOUNTED SIGN
WORK ZONE
DETOUR EAST M4-8 M3-X
XX OR COUNTY XX OR XX
MI-4 MI-5A MI-6
OR OR
MO5-1 MO6-1 MO6-1
DETAIL F
DETOUR SIGNING
DETOUR SIGNING FOR MAINLINE CLOSURES
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
APPROVED
9-16-03
DATE
Thomas N. Nottom for
CHIEF SIGNS AND MARKING ENGINEER
FHWA
6
S.D.D. 15 C 2-4c
6
S.D.D. 15 C 2-4c



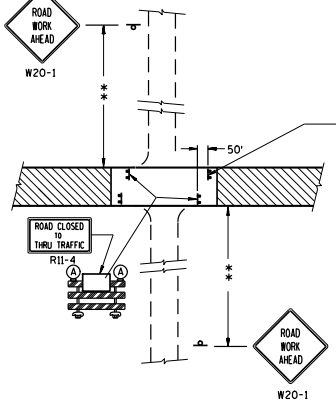
DETAIL 1

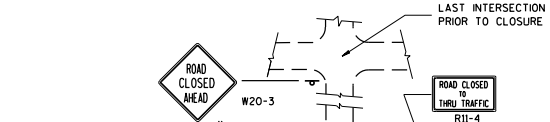
(NO ACCESS TO PROJECT)

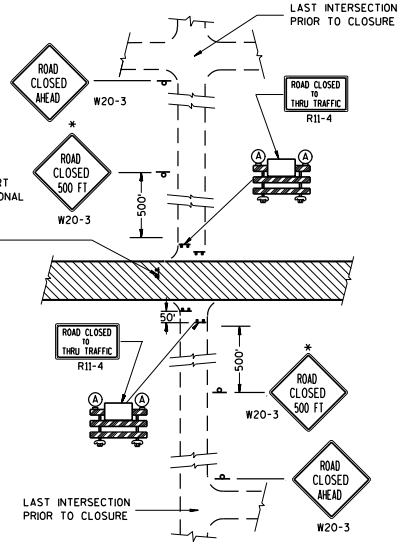


DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).







DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- POST MOUNTED WARNING SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

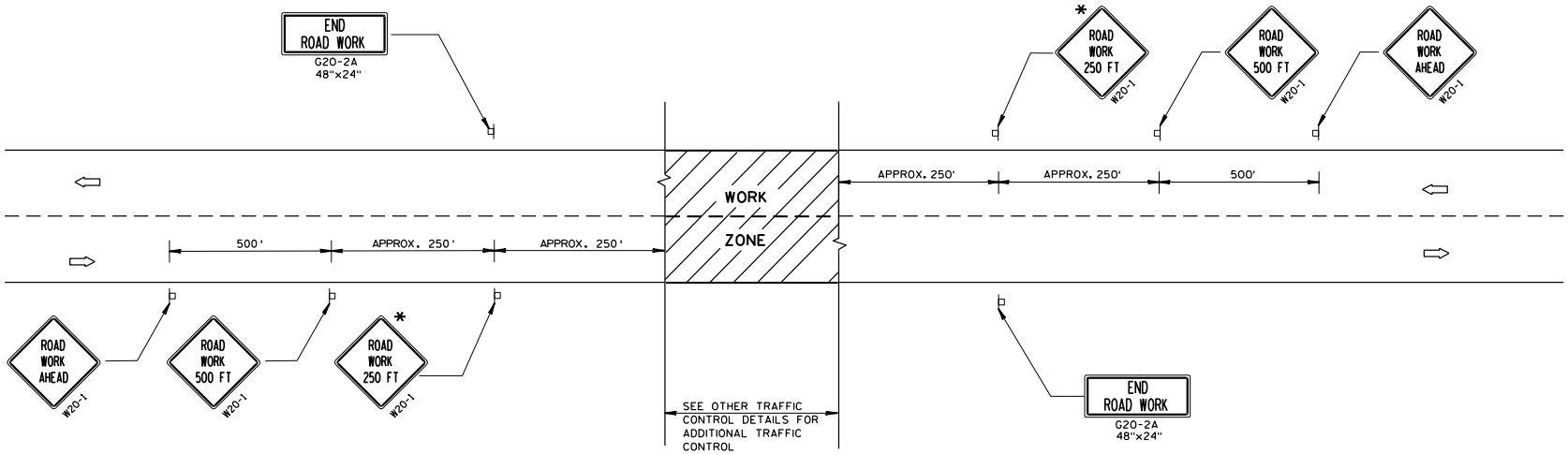
APPROVED
9-16-03
DATE
Thomas N. Notthom for
CHIEF SIGNS AND MARKING ENGINEER
FHWA

6

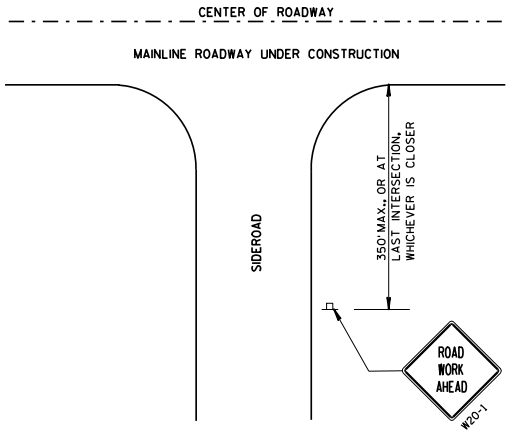
S.D.D. 15 C 3-1

6

S.D.D. 15 C 3-1



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



LEGEND

- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

TRAFFIC CONTROL,
ADVANCE WARNING SIGNS
40 M.P.H. OR LESS
TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00
DATE
Charles J. Sykes
CHIEF SIGNS AND MARKING ENGINEER
FHWA

6

S.D.D. 15 C 5-1

6

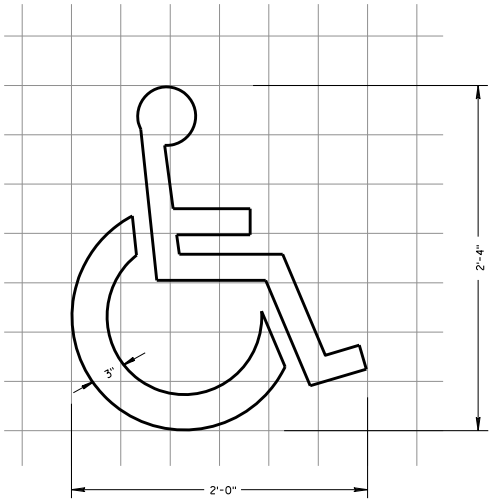
S.D.D. 15 C 5-1

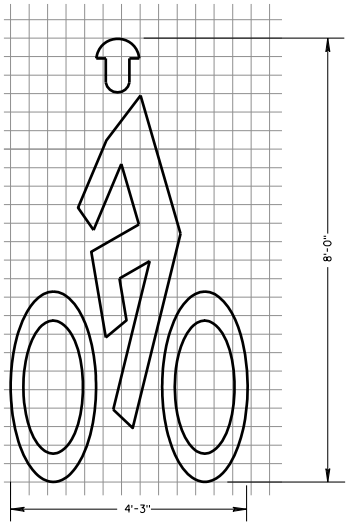
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

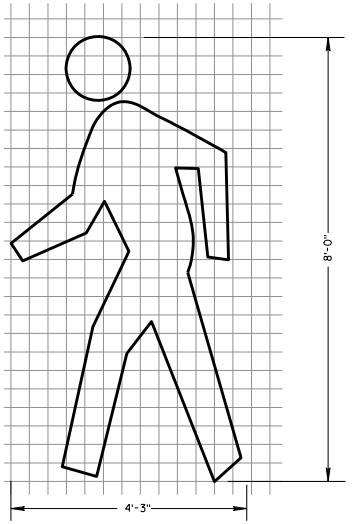
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

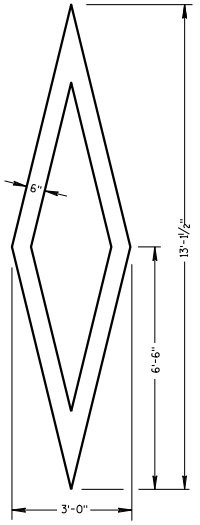




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

S.D.D. 15 C 7-12a

S.D.D. 15 C 7-12a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11
DATE

/S/ Thomas N Nathan
STATE TRAFFIC ENGINEER

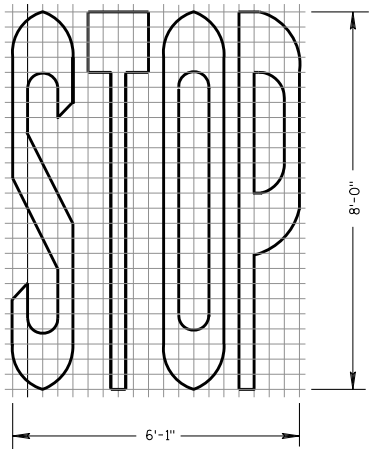
607
IGN

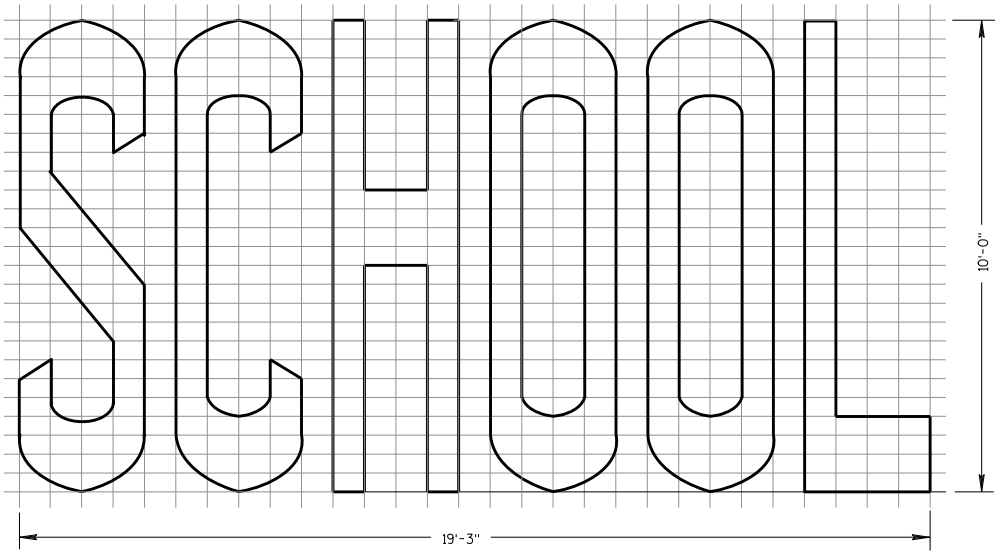
FHWA

GENERAL NOTES

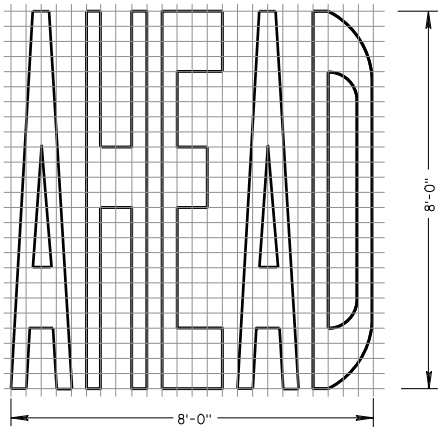
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

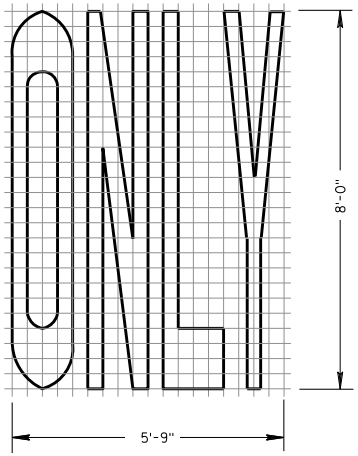
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

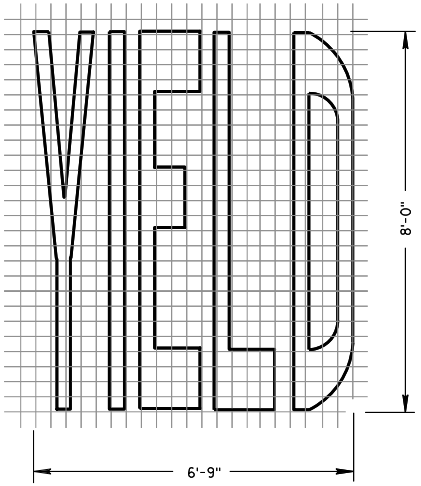


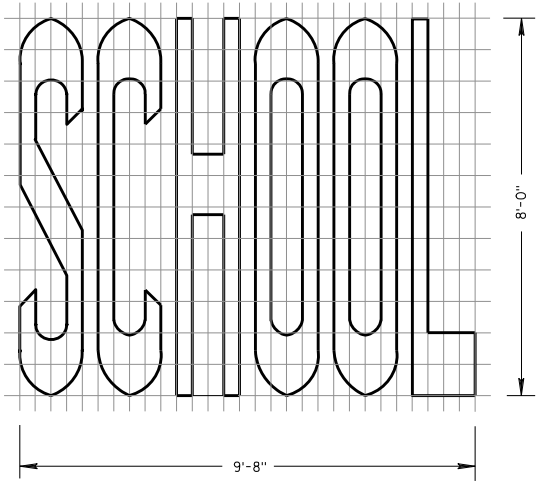


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11
DATE

/S/ Thomas N. Nothnagel
STATE TRAFFIC ENGINEER

608
IGN

FHWA

6

6

S.D.D. 15 C 7-12b

S.D.D. 15 C 7-12b

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/1/11 /S/ Thomas N. Nottestad
DATE STATE TRAFFIC ENGINEER (609) SIGN
FHWA

GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

TYPE 5 LANE DROP ARROW

TYPE 4

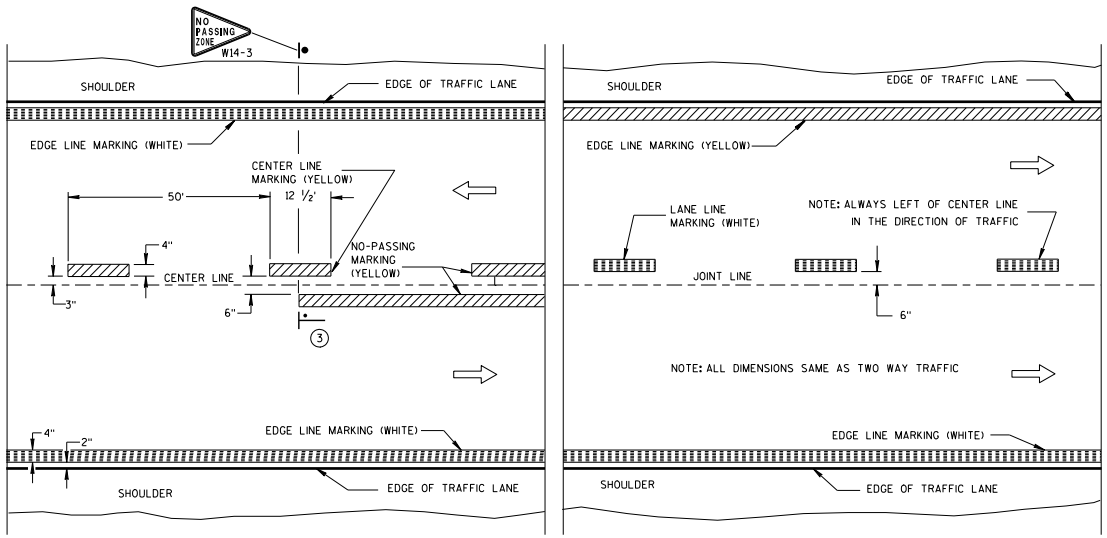
TYPE 3

TYPE 6

TYPE 7

TYPE 2

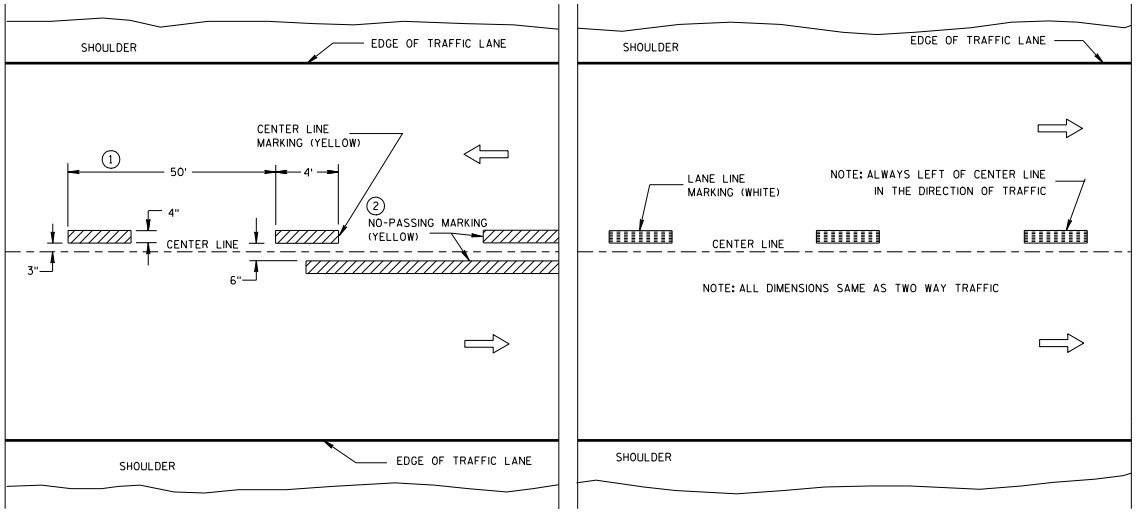
TYPE 1



TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC

ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

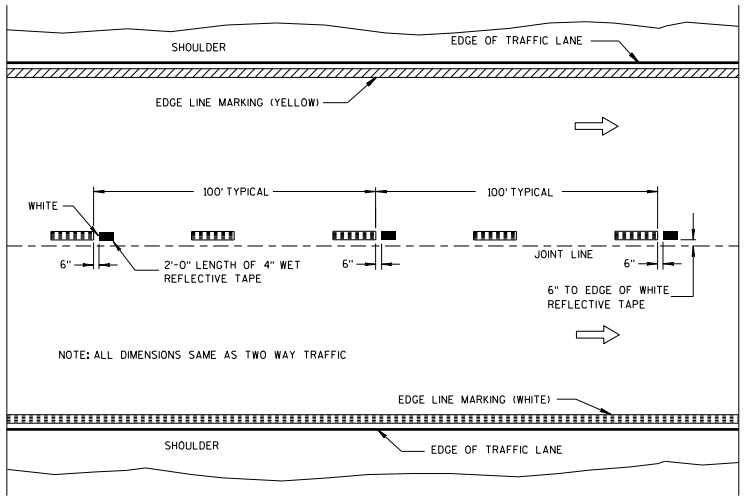
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-23-11 DATE
/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER
610 ESIGN
FHWA

6

S.D.D. 15 C 8-14a

6

S.D.D. 15 C 8-14a

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

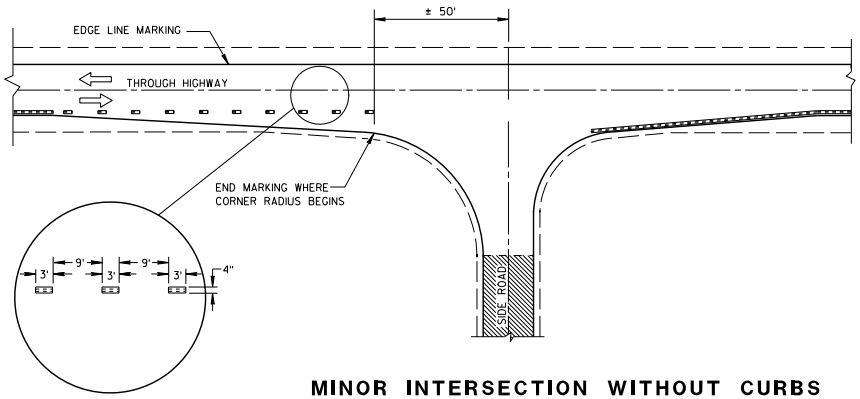
(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

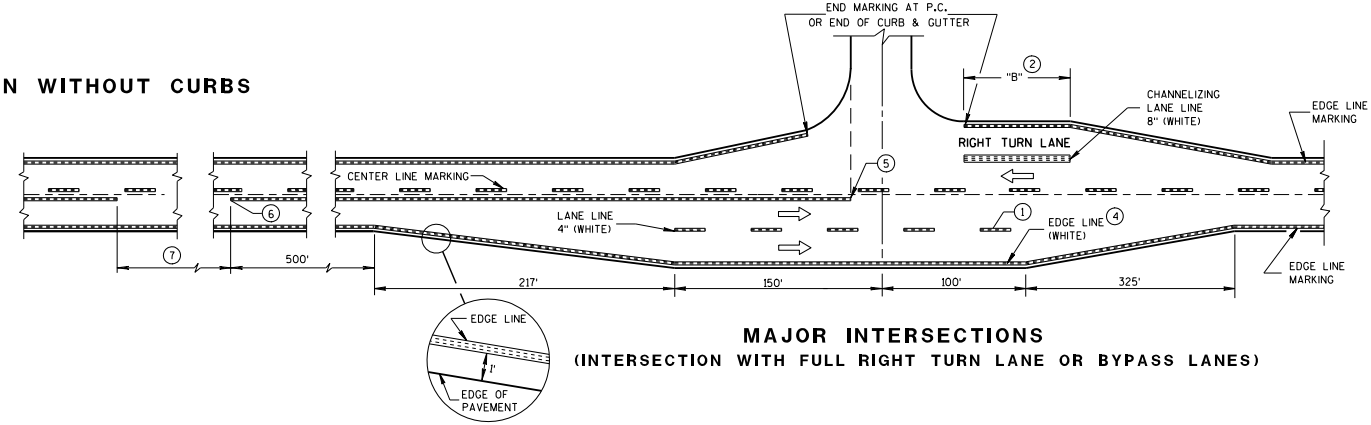
ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



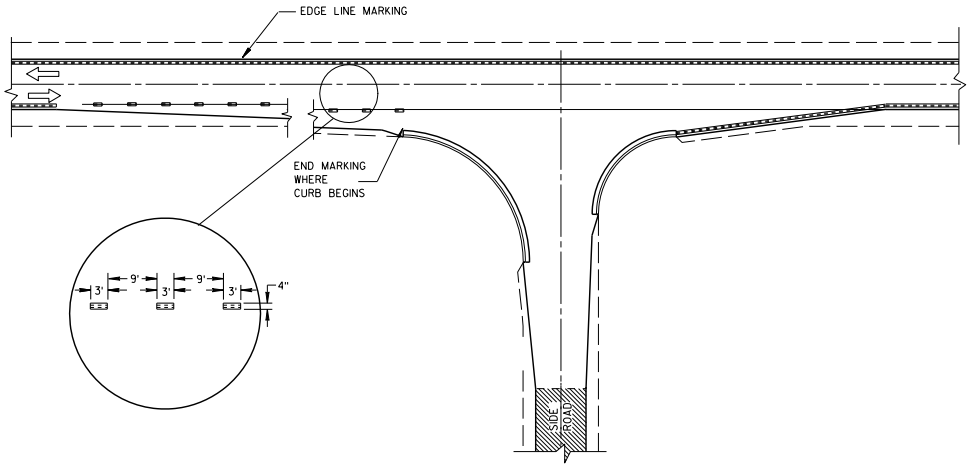
MINOR INTERSECTION WITHOUT CURBS

(7)

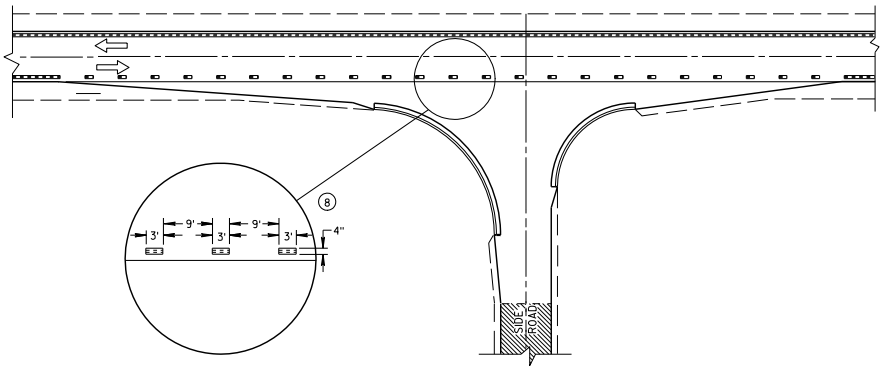
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING (INTERSECTIONS)

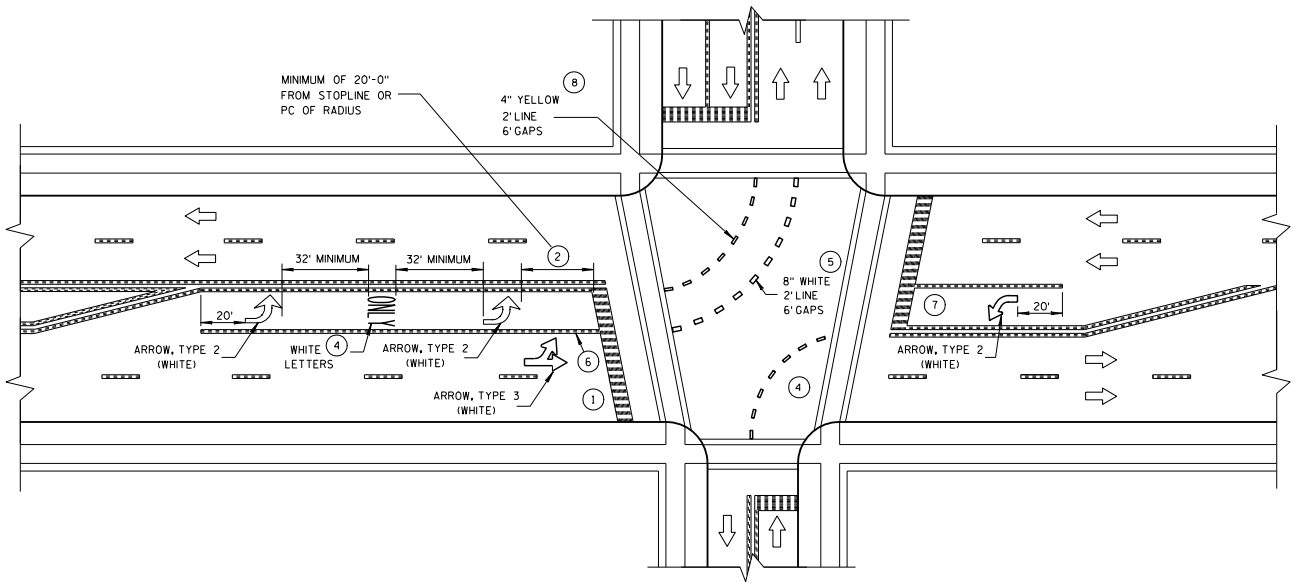
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 8-14b

6

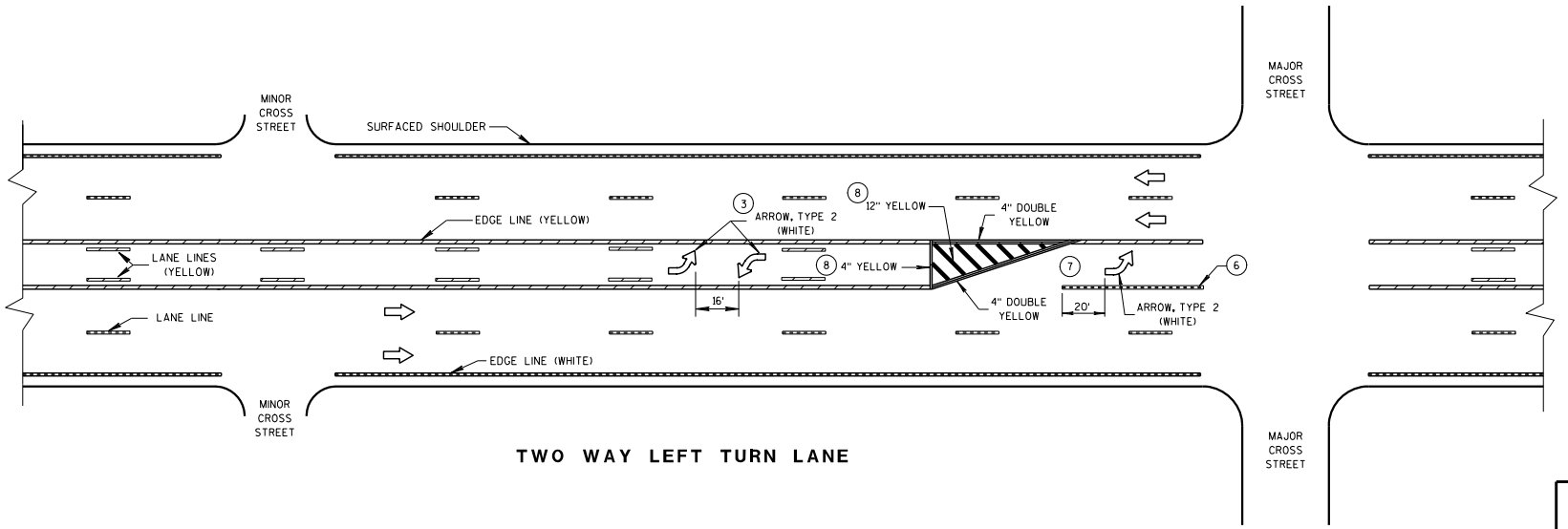
S.D.D. 15 C 8-14b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA ARROW AND ONLY PER 160' OR WHEN ON A CURVE.
5. 8" WHITE WITH 2'LINE 6'GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108'.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



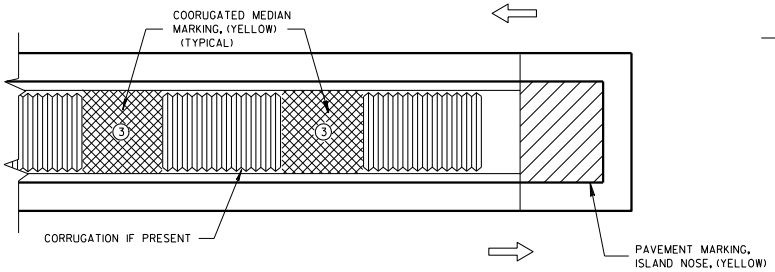
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

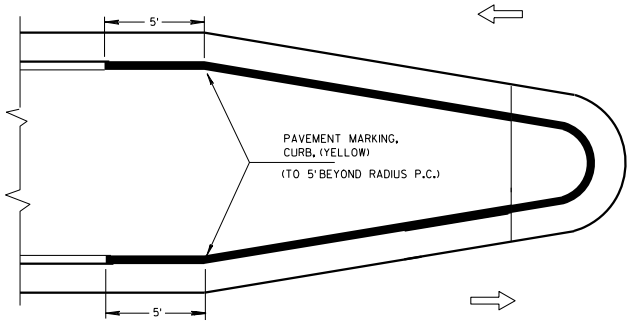
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....

6

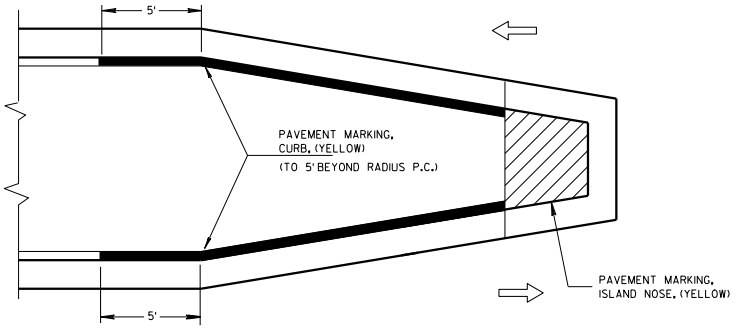
S.D.D. 15 C 8-14e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

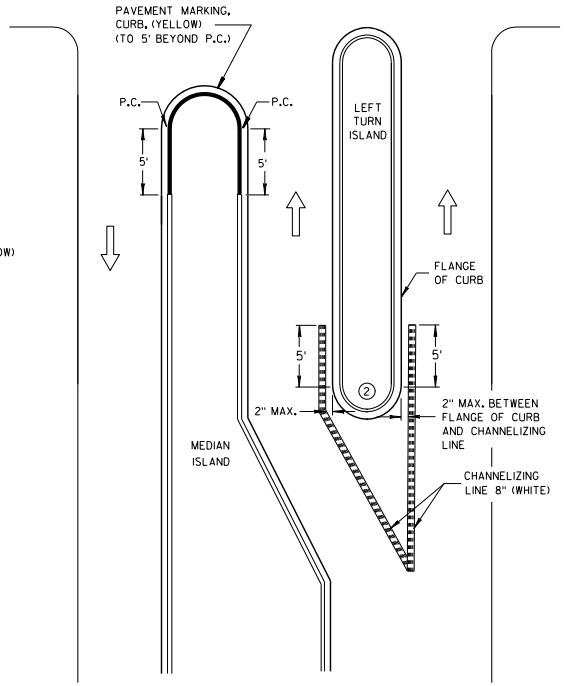


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

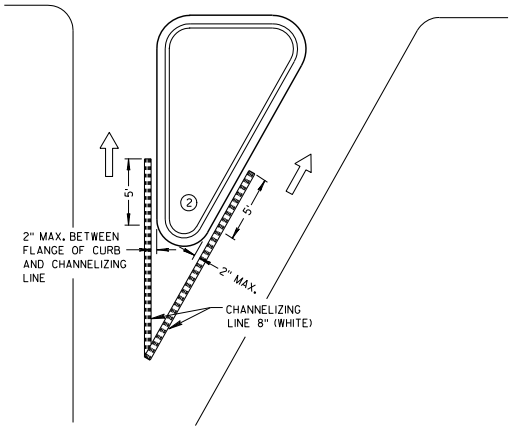
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



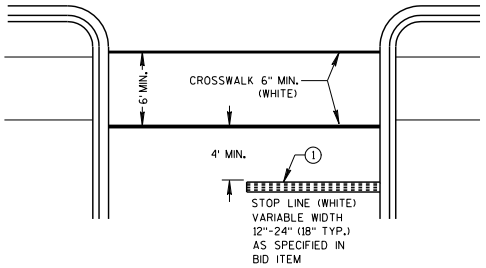
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
3. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND



STOP LINE AND CROSSWALK

LEGEND

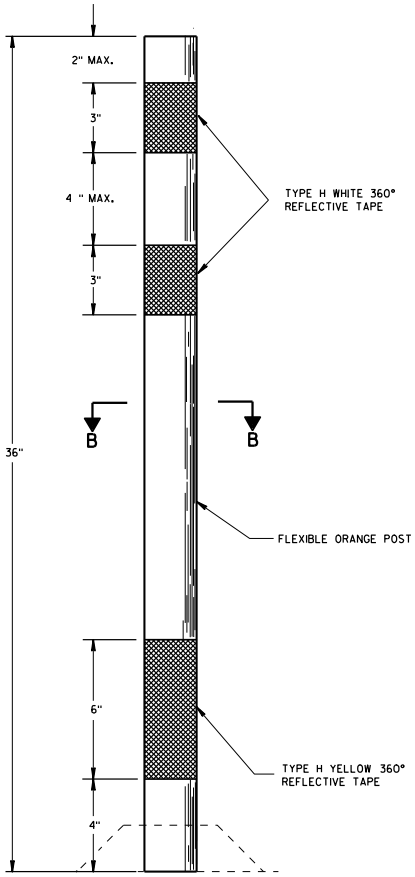
- ISLAND NOSE MARKING
- CURB MAKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

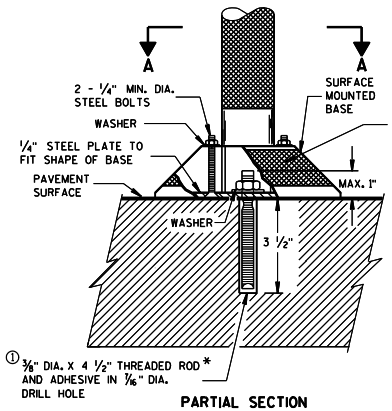
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....

6

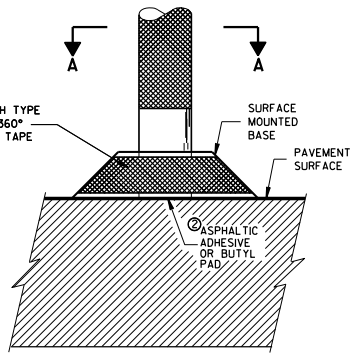
S.D.D. 15 C 8-14f



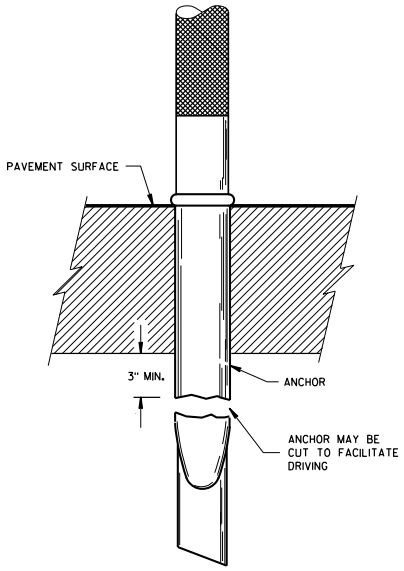
FLEXIBLE TUBULAR MARKER POST

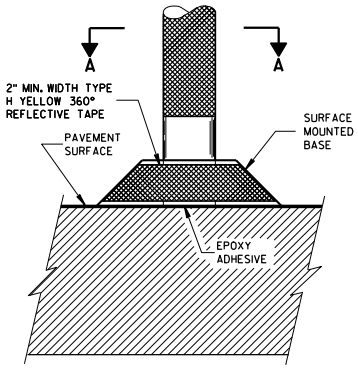


PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

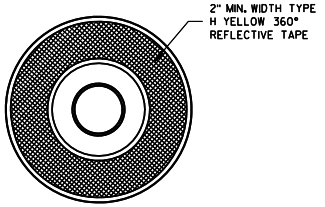
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

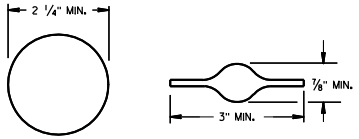
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



SECTION A-A

SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 2/17/94 DATE
FHWA

STATE TRAFFIC ENGINEER FOR HWYS

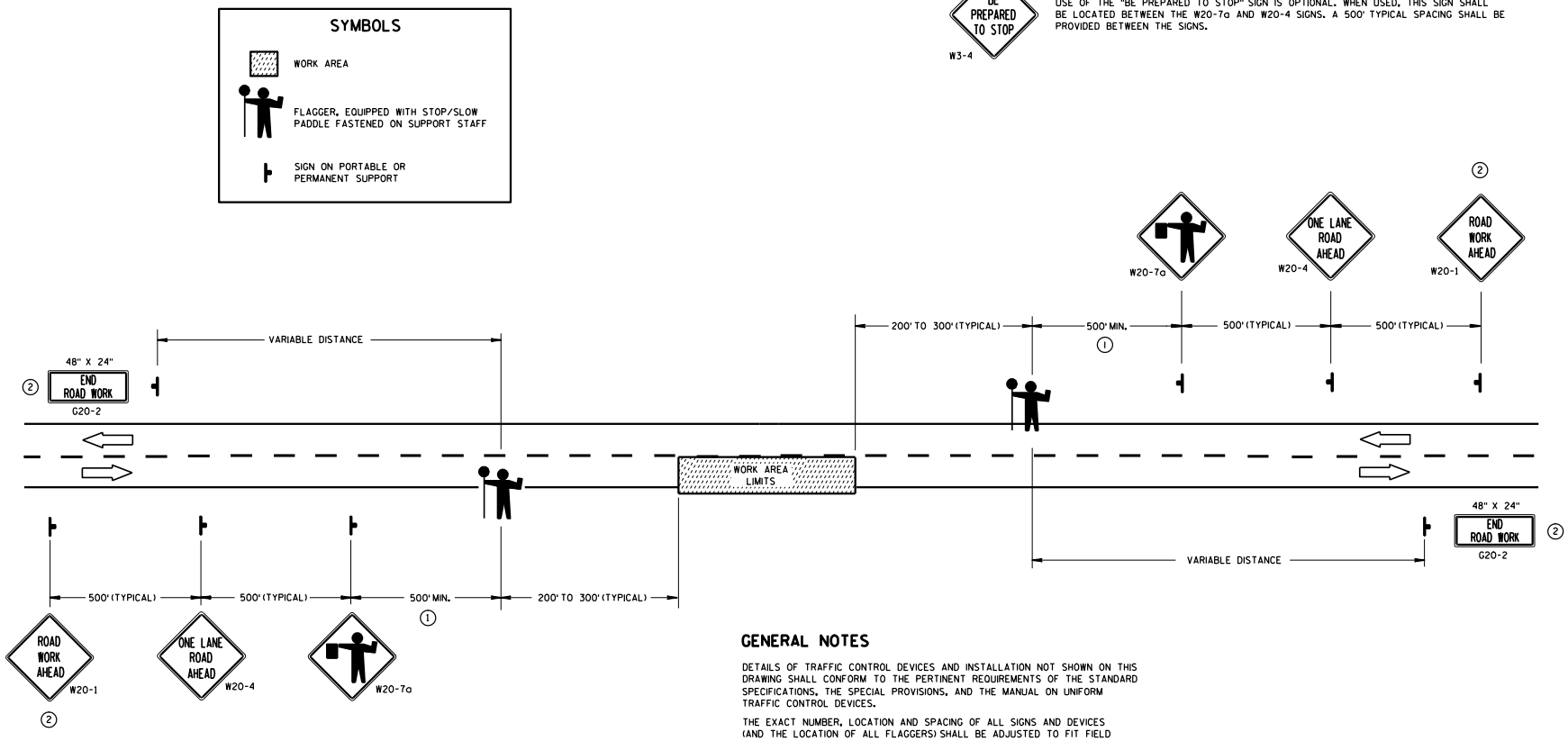
6

S.D.D. 15 C 11-5

6

S.D.D. 15 C 11-5

TWO-LANE ROADWAY



1 FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

2 SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

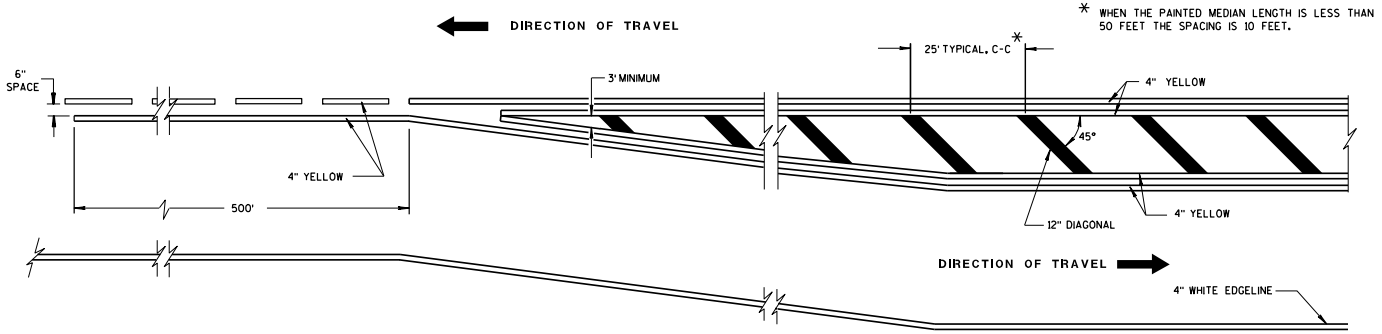
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06 — DATE
/S/ Thomas N. Notbohm — STATE TRAFFIC ENGINEER OF DESIGN
FHWA

6

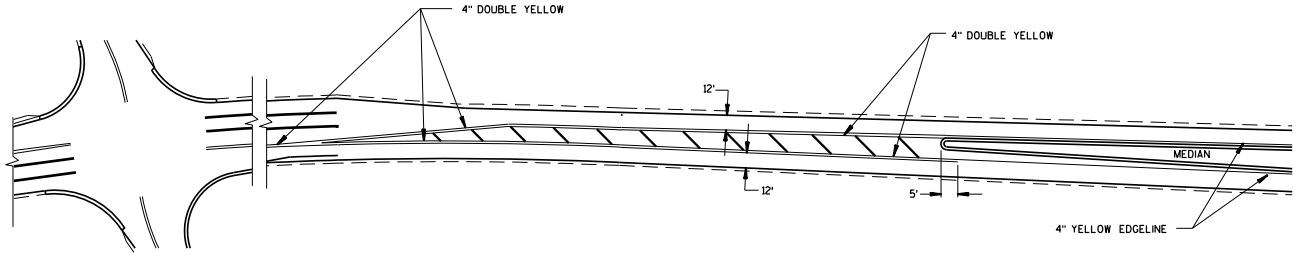
S.D.D. 15 C 12-3



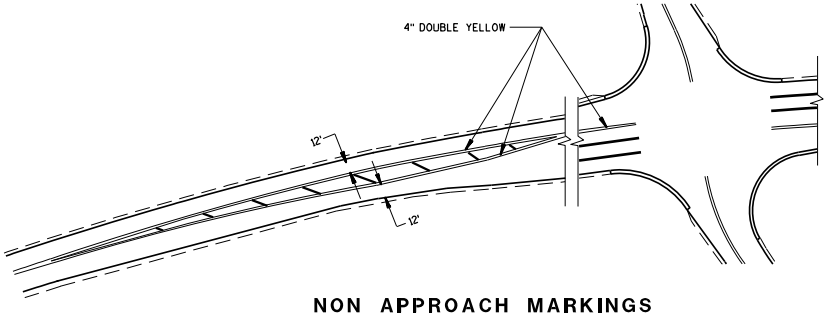
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE FHWA	/S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN

6

S.D.D. 15 C 18-3

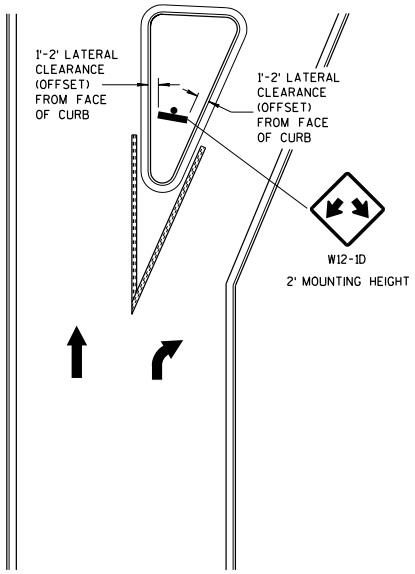
6

S.D.D. 15 C 18-3

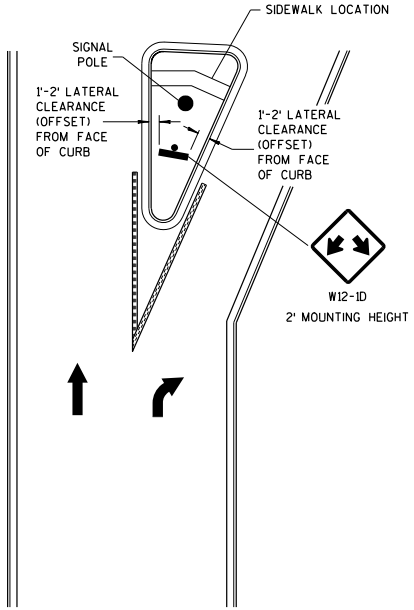
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

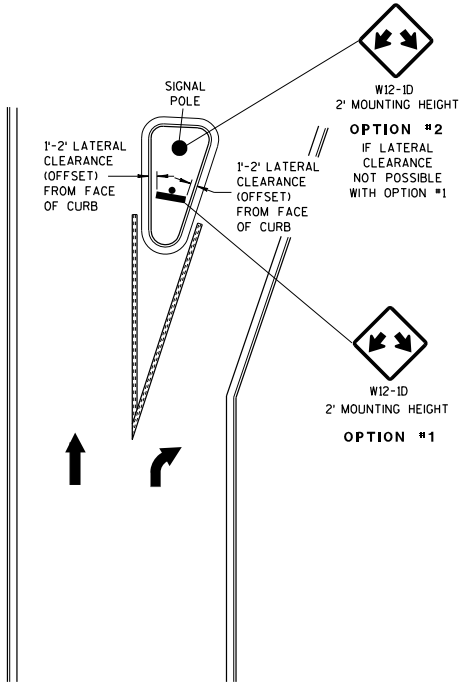
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

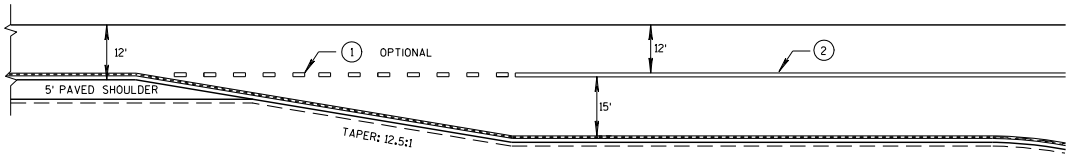
DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10-22-08 DATE	/S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

6

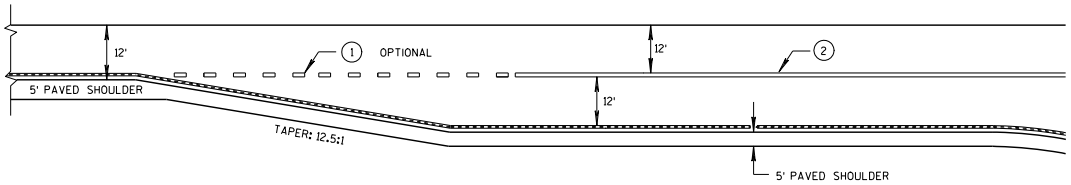
S.D.D. 15 C 27-1

6

S.D.D. 15 C 27-1

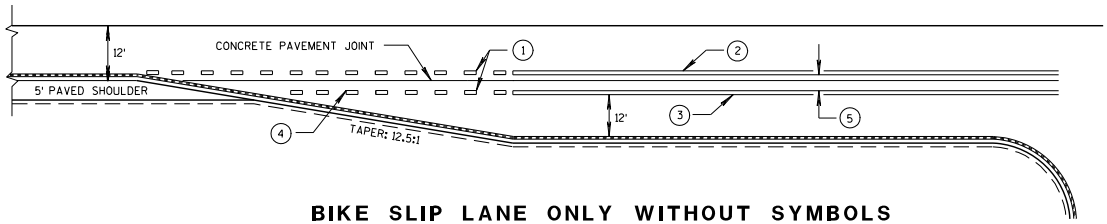


WIDER TURN LANE

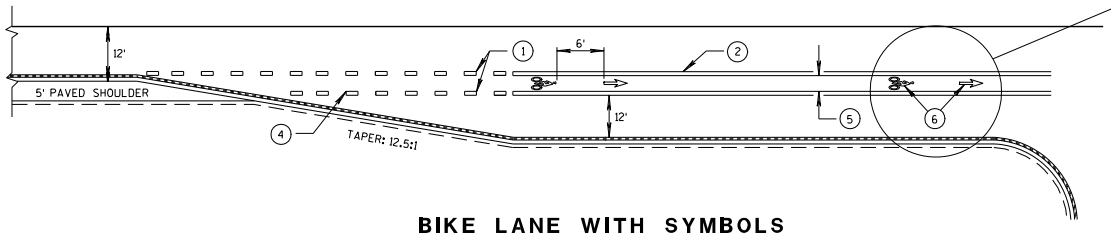


BIKE ACCOMMODATIONS ON SHOULDER

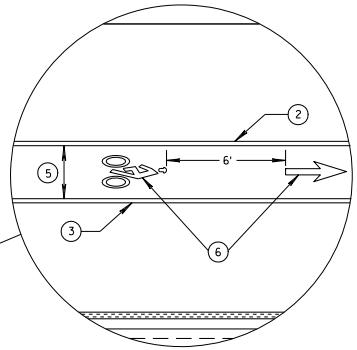
(RURAL ROADWAY POSTED SPEED GREATER THAN 45 MPH ONLY)



BIKE SLIP LANE ONLY WITHOUT SYMBOLS



BIKE LANE WITH SYMBOLS



GENERAL NOTES

1. 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.
2. 4-INCH, WHITE.
3. 8-INCH, WHITE.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMMODATION FOR CONCRETE PAVEMENT IS 5' WIDE.
   2 LANE (3' LEFT, 2' RIGHT OF JOINT).
   4 LANE (2' LEFT, 3' RIGHT OF JOINT).
   BIKE ACCOMMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4', 5' AT ≥45 MPH.
6. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/26/2011 DATE
/S/ Thomas N. [illegible] STATE TRAFFIC ENGINEER
618 SIGN
FHWA

6

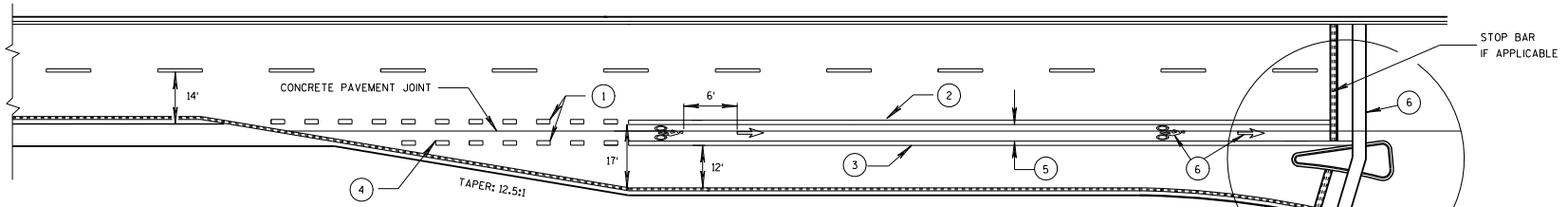
S.D.D. 15 C 29-1a

6

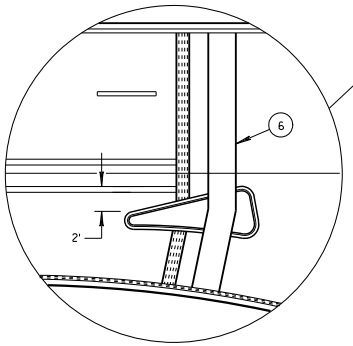
S.D.D. 15 C 29-1a

GENERAL NOTES

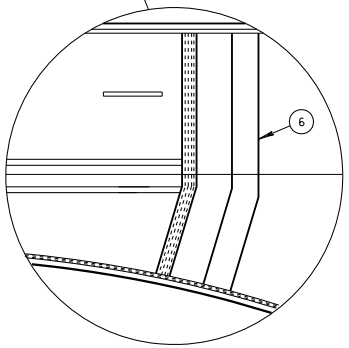
1. 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.
2. 4-INCH, WHITE.
3. 8-INCH, WHITE.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMMODATION FOR CONCRETE PAVEMENT IS 5' WIDE.
   2 LANE (3' LEFT, 2' RIGHT OF JOINT).
   4 LANE (2' LEFT, 3' RIGHT OF JOINT).
   BIKE ACCOMMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4', 5' AT ≥ 45 MPH.
6. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.



BIKE LANE - 4-LANE DIVIDED WITH RIGHT TURN LANE



4 LANE DIVIDED WITH ISLAND



4 LANE DIVIDED WITHOUT ISLAND

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/1/2011 — DATE
/S/ Thomas N. Nathan — STATE TRAFFIC ENGINEER 619 — SIGN
FHWA

6

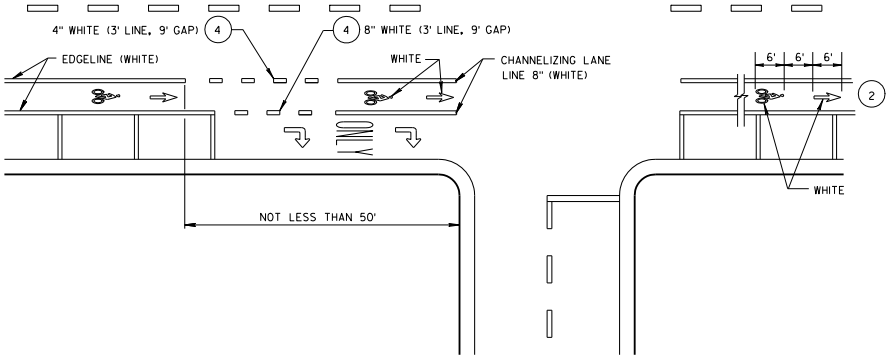
S.D.D. 15 C 29-1b

6

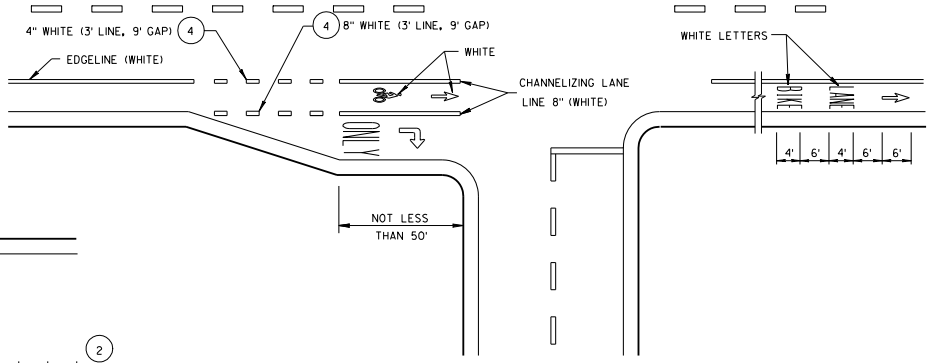
S.D.D. 15 C 29-1b

GENERAL NOTES

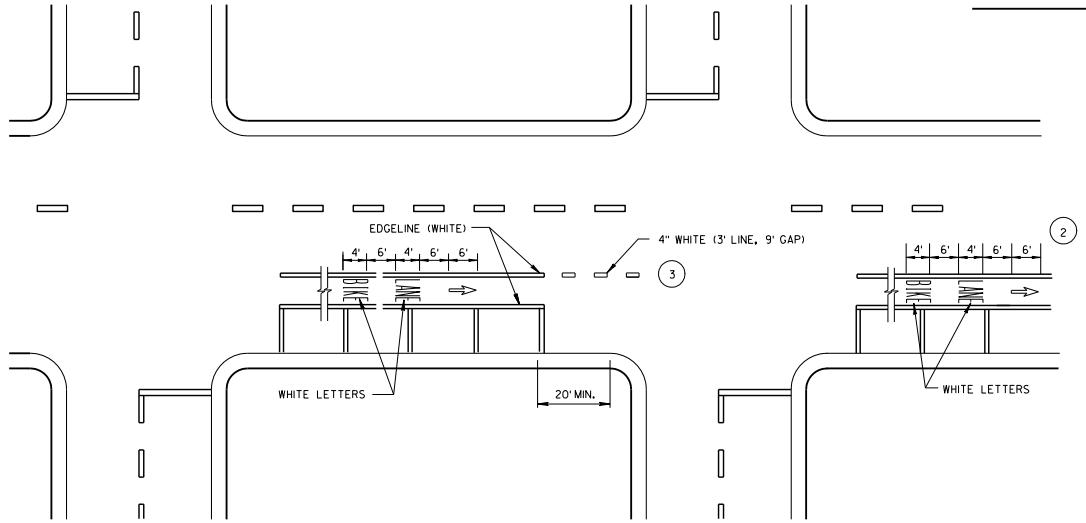
1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. THE SERIES OF PAVEMENT MARKING SYMBOLS SHALL BE REPEATED AFTER INTERSECTIONS AND SPACED A MAXIMUM OF 250'. NO PAVEMENT MARKING WILL TAKE PLACE IN THE CROSSWALK.
3. DOTTED LINES SHOULD BE USED 50' TO 200' IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. WHEN SPECIFIED IN THE CONTRACT.



DESIGNATED BICYCLE LANE



DESIGNATED BICYCLE LANE
NO PARKING, RIGHT TURN LANE



DESIGNATED BICYCLE LANE
WITH PARKING, NO RIGHT TURN LANE

URBAN BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/2011
DATE

/S/ Thomas N. Nothnagel
STATE TRAFFIC ENGINEER

620

FHWA

6

S.D.D. 15 C 29-1c

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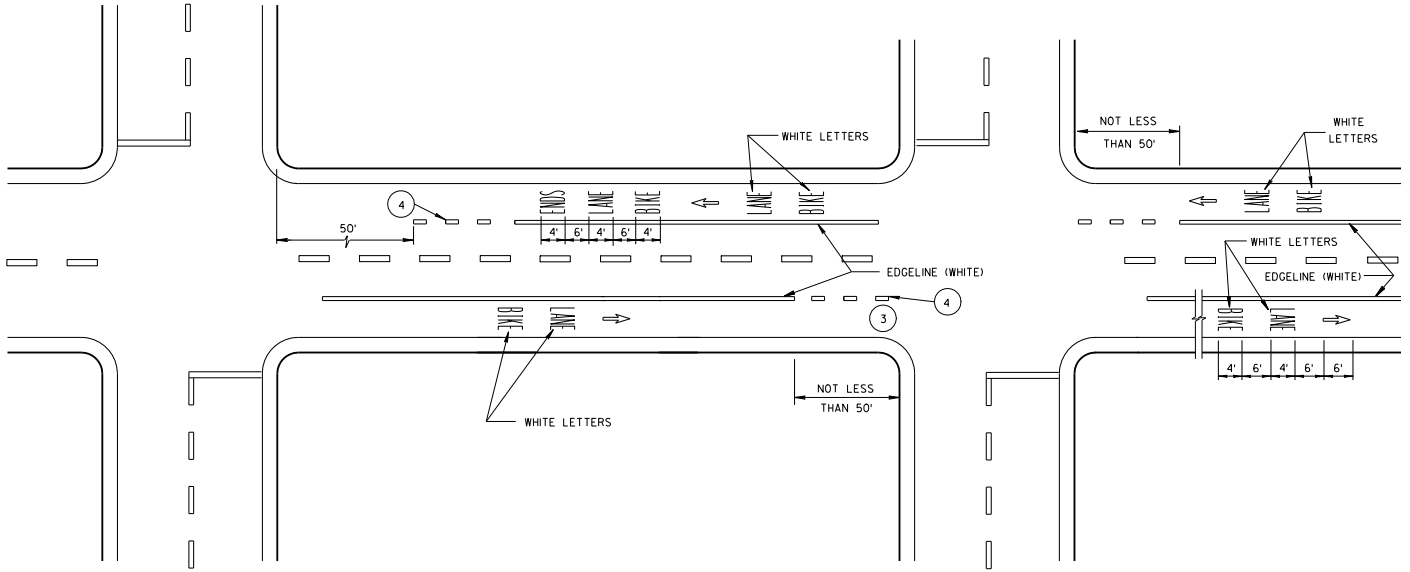
S.D.D. 15 C 29-1c

GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. THE SERIES OF PAVEMENT MARKING SYMBOLS SHALL BE REPEATED AFTER INTERSECTIONS AND SPACED A MAXIMUM OF 250'. NO PAVEMENT MARKING WILL TAKE PLACE IN THE CROSSWALK.
3. DOTTED LINES SHOULD BE USED 50' TO 200' IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. 3' LINE, 9' GAP - 4" WIDE, WHITE.



DESIGNATED BICYCLE LANE
NO PARKING

URBAN BICYCLE LANE MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
7/1/2011 DATE	/S/ Thomas N. Nothom STATE TRAFFIC ENGINEER
FHWA	621 SIGN

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S.D.D. 15 C 29-1d

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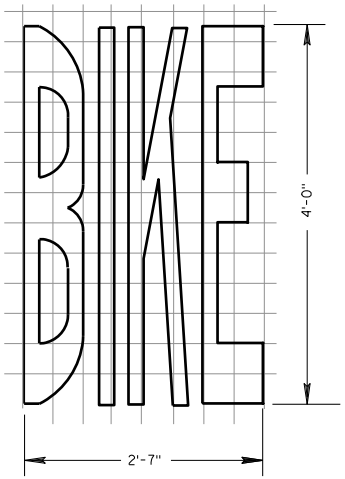
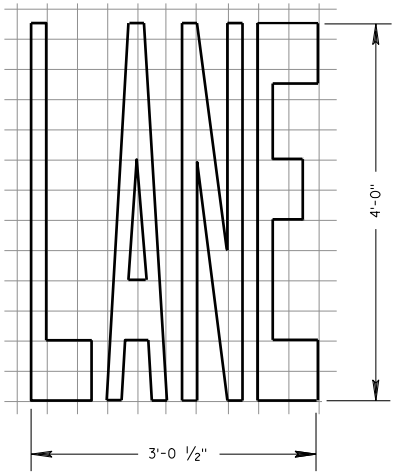
S.D.D. 15 C 29-1d

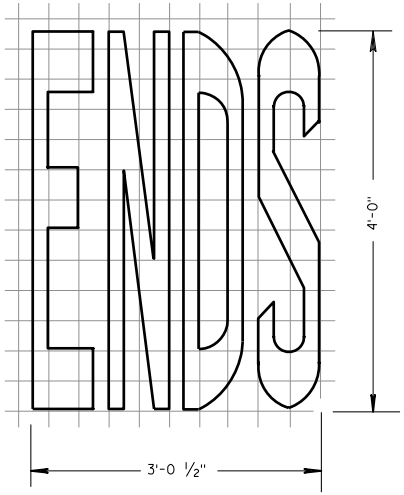
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

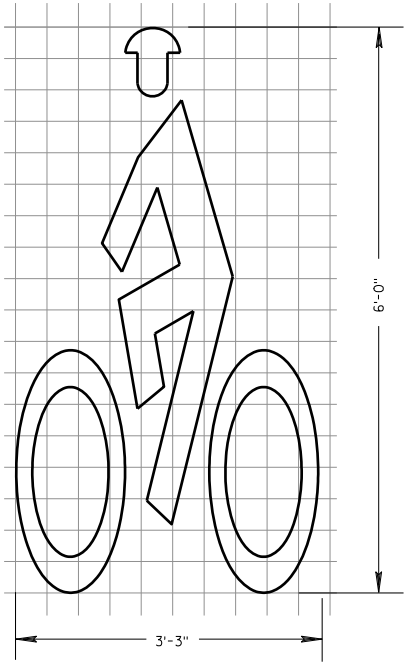
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



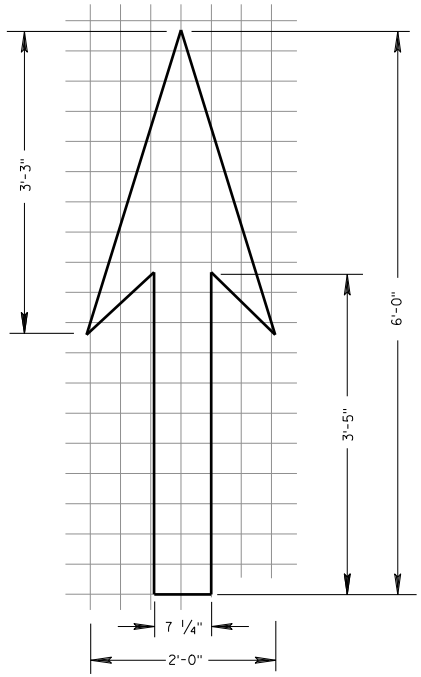




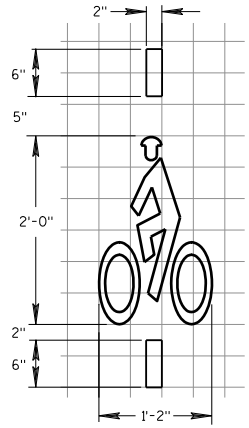
BIKE LANE WORDS



BIKE LANE SYMBOL



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

PAVEMENT MARKING FOR BIKE LANES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7-1-2011 DATE	/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER 622 IGN
FHWA	

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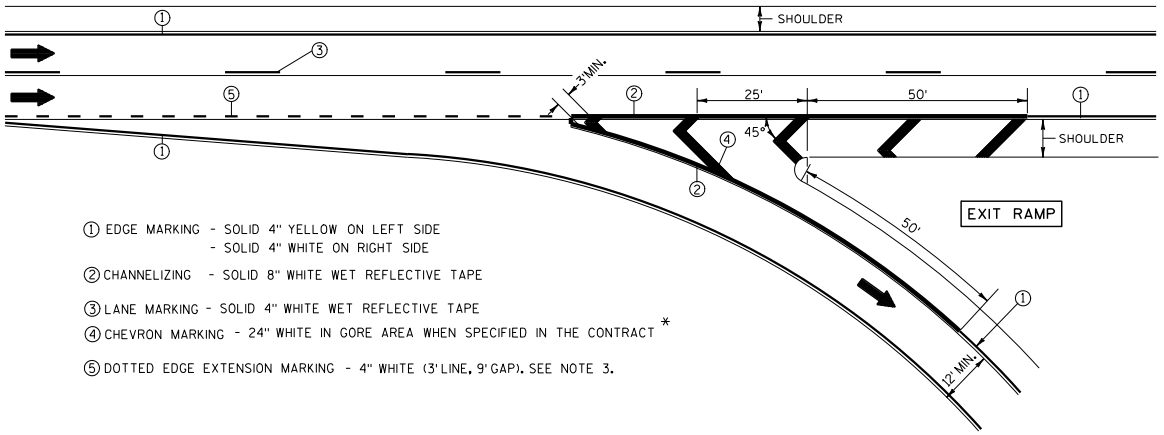
S.D.D. 15 C 29-1e

S.D.D. 15 C 29-1e



① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE

② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE

③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE

④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *

⑤ DOTTED EDGE EXTENSION MARKING - 4" WHITE (3' LINE, 9' GAP). SEE NOTE 3.

NOTES:

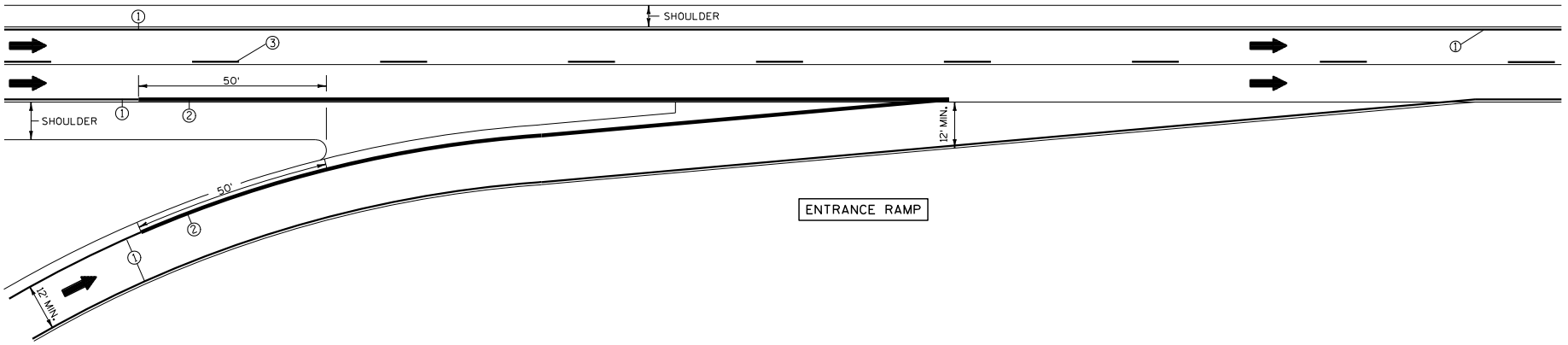
1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.

3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

4. RETRACE EXISTING DIAGONAL MARKINGS.

* REFER TO DESIGN NOTES.



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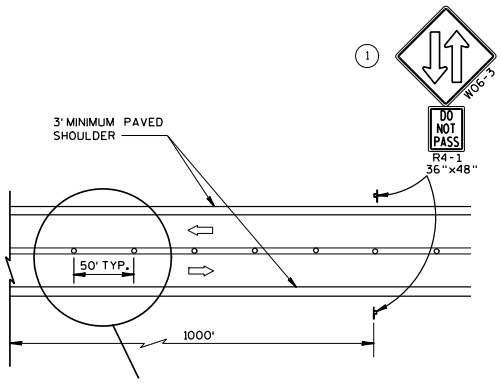
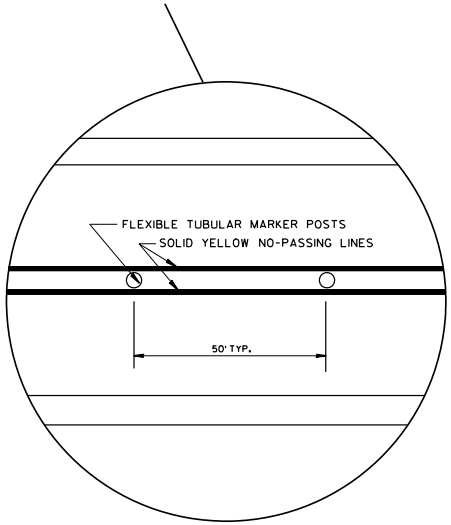
S.D.D. 15 C 31-1a

PAVEMENT MARKING (RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...



TWO LANE, TWO WAY OPERATION



GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

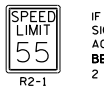
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET. (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

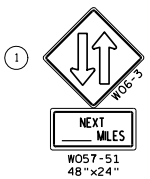
A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC @ 50' SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.



R2-1
48"x60"
(BLACK AND WHITE)

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD **BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY** 2 OR 3 MILES.



W057-51
48"x24"

R4-1
36"x48"

THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200' BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500' BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000' BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

LEGEND

- POST WITH ATTACHED SIGN
- FLEXIBLE TUBULAR MARKER AND BASE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL.
TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12-4-95
DATE

Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC

FHWA

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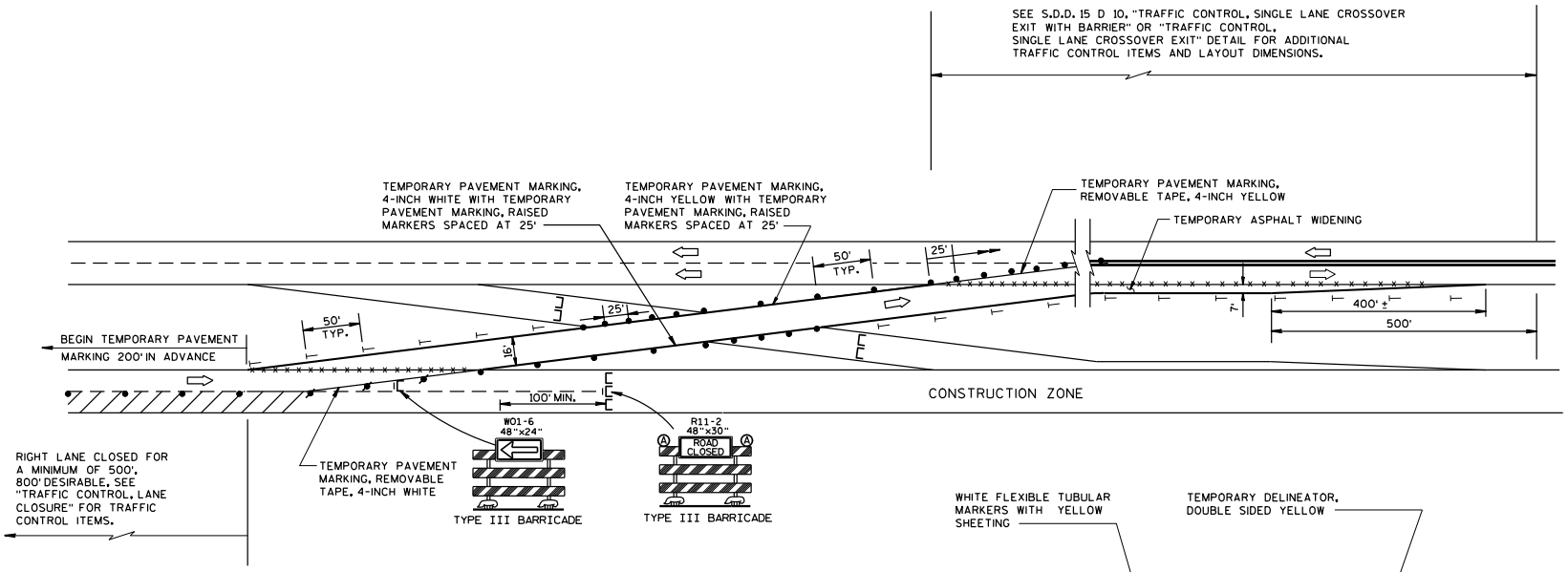
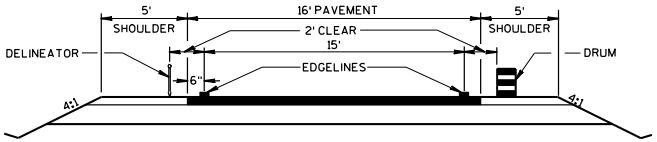
S.D.D. 15 D 6-2

6

S.D.D. 15 D 6-2





TYPICAL CROSSOVER ROADWAY DIMENSIONS

LEGEND

- 8' TYPE III BARRICADE WITHOUT/WITH ATTACHED SIGN
- DRUM WITH WARNING LIGHTS, TYPE C
- DRUM
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE PAINT
- (A) WARNING LIGHT, TYPE A
- REMOVING PAVEMENT MARKINGS
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- FLEXIBLE TUBULAR MARKER AND BASE
- DIRECTION OF TRAFFIC

GENERAL NOTES :

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

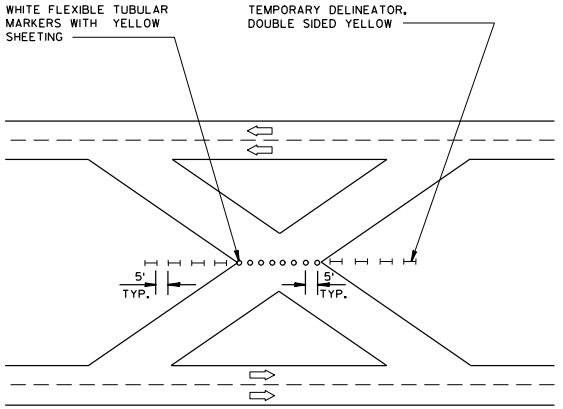
TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER AND TEMPORARY PAVEMENT MARKING WHERE USED.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.



PROTECTION OF CROSSOVER NOT IN USE WHEN CONSTRUCTION IS NOT TAKING PLACE

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

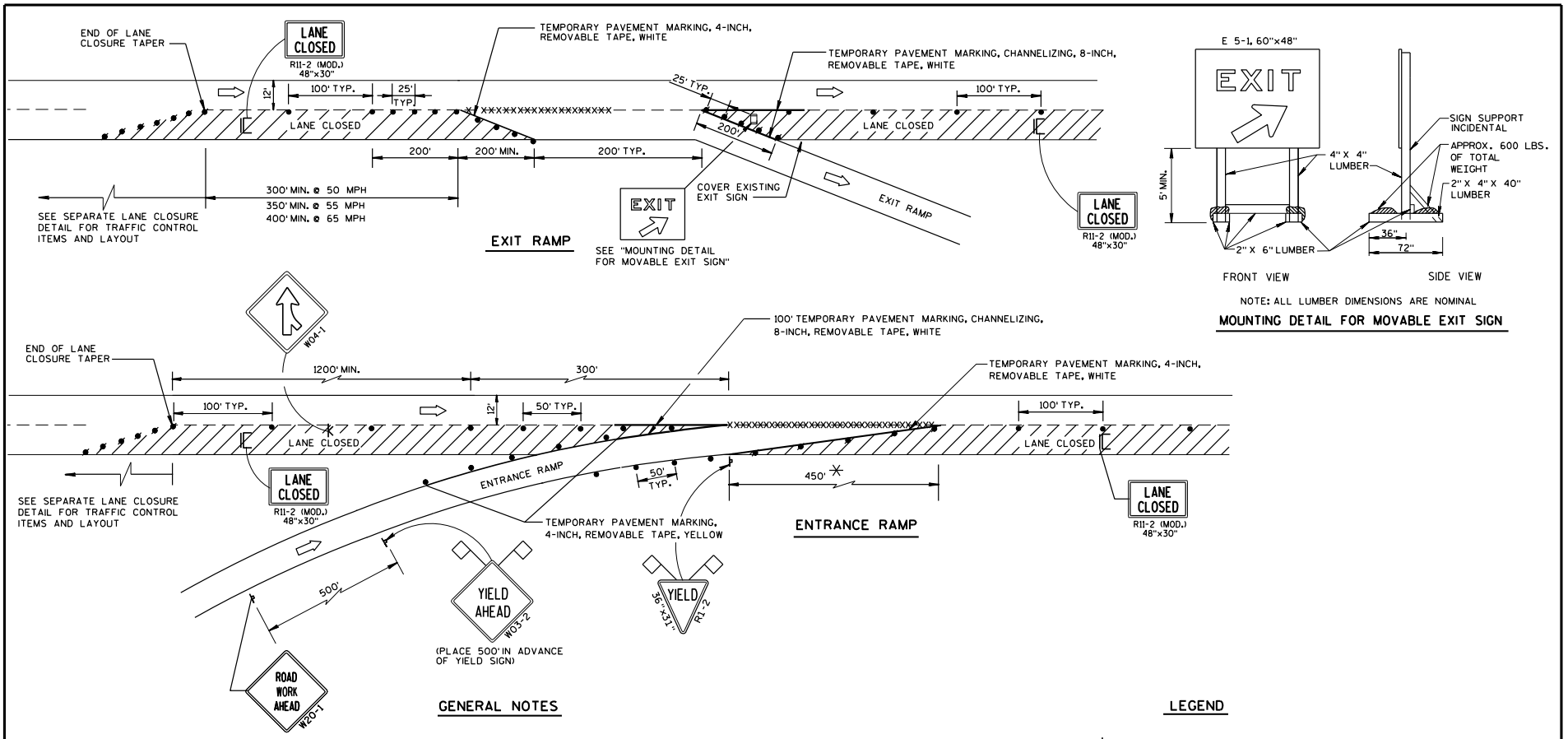
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-22-96
DATE
Charles J. Spang
for DIRECTOR, OFFICE OF TRAFFIC
FHWA

S.D.D. 15 D 11-3

6

S.D.D. 15 D 11-3



GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

✳ LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL, DRUM
- TRAFFIC CONTROL, DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- ~~XXXX~~ REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (8' EQUIVALENT) WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00
DATE
CHIEF SIGNS AND MARKING ENGINEER
FHWA

S.D.D. 15 D 15-1

SYMBOLS

- TYPE III BARRICADE (8' EQUIVALENT) WITH/WITHOUT SIGN
- DRUM
- POST MOUNTED SIGN
- WARNING LIGHT, TYPE A (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

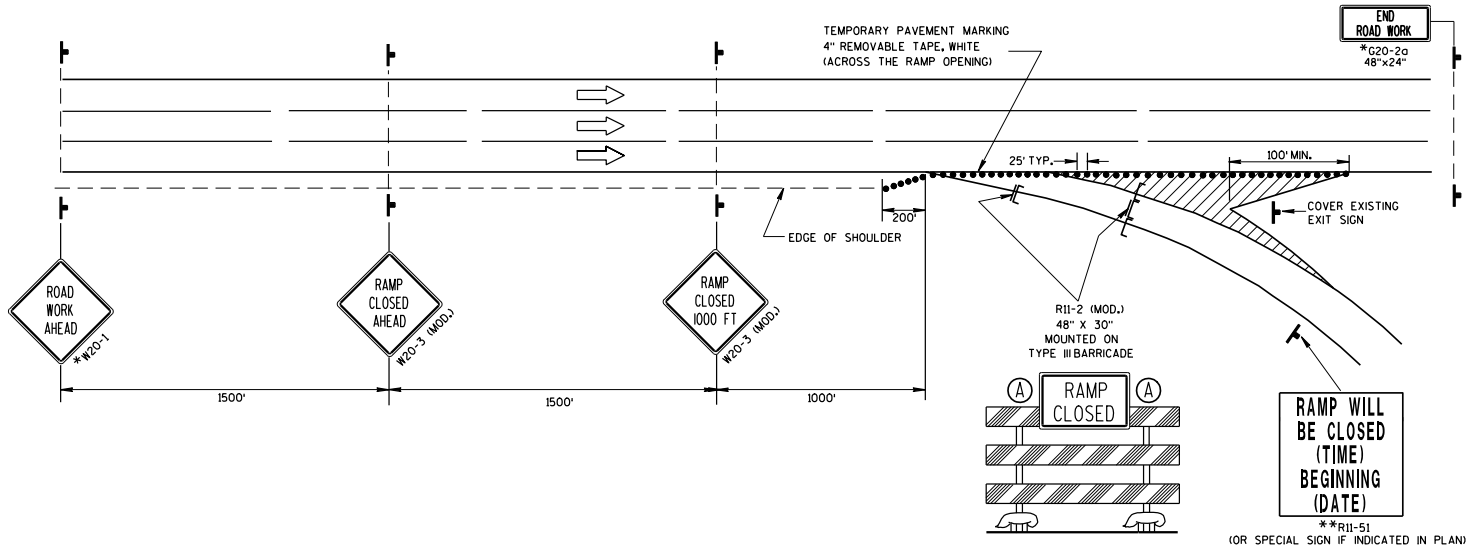
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

*W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

**USE THE "RAMP WILL BE CLOSED" SIGN IF INDICATED IN MISCELLANEOUS QUANTITIES. PLACE 10 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

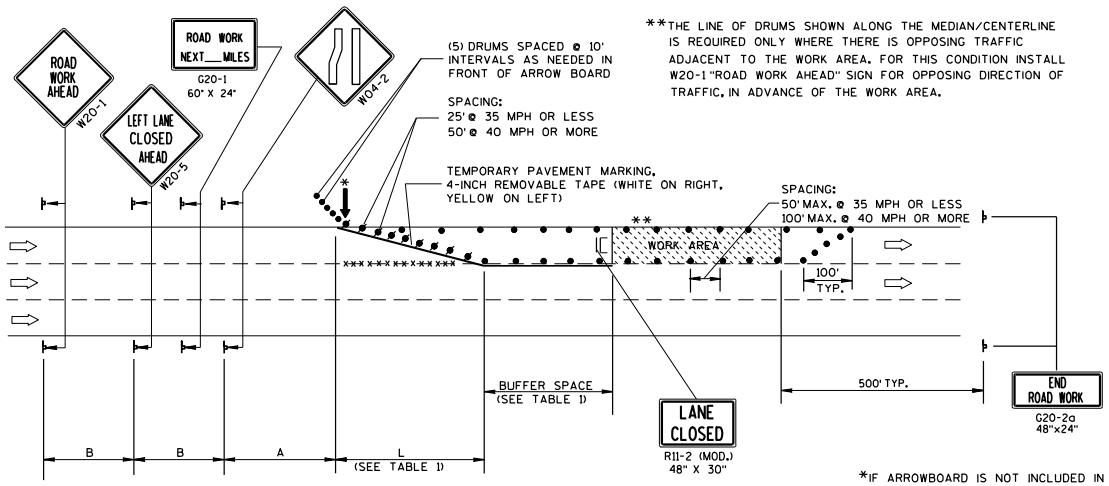
APPROVED
5/23/00
DATE
Clinton J. Sparg
CHIEF SIGNS AND MARKING ENGINEER
FHWA

6

S.D.D. 15 D 16-1

6

S.D.D. 15 D 16-1



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

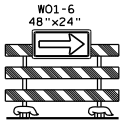


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET
S = NON-CONSTRUCTION SPEED LIMIT (MPH)
W = WIDTH OF LANE CLOSURE

LEGEND

- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- POST MOUNTED SIGN
- ARROW BOARD
- TYPE III BARRICADE (8' EQUIVALENT) AND WARNING LIGHTS, TYPE A (FLASHING) WITH/WITHOUT SIGN
- DIRECTION OF TRAFFIC FLOW
- xxxx REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

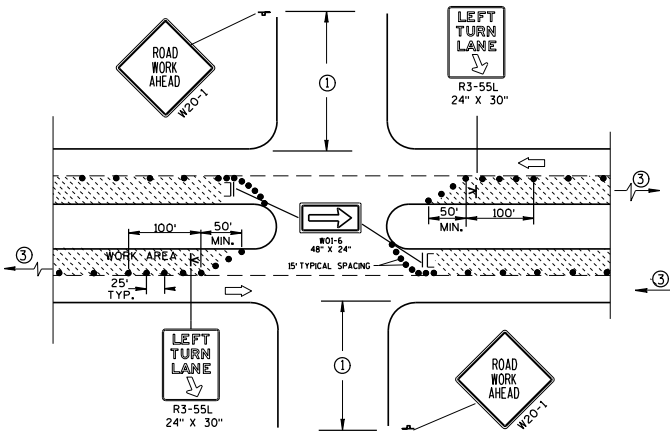
APPROVED
5/23/00
DATE
Chester J. Sparg
CHIEF SIGNS AND MARKING ENGINEER
FHWA

6

S.D.D. 15 D 20-1

6

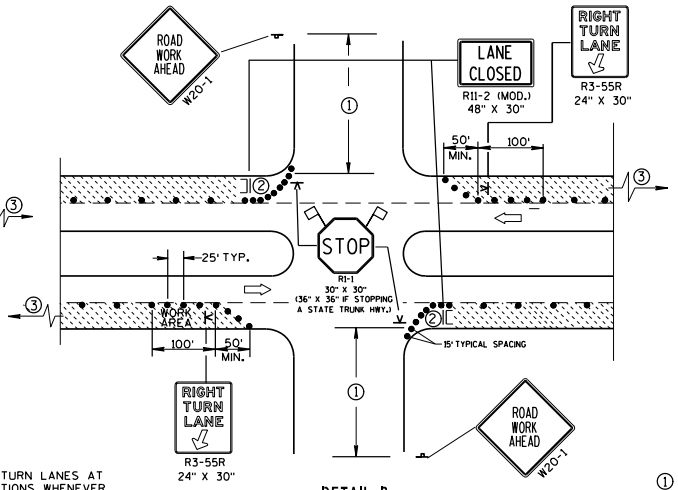
S.D.D. 15 D 20-1



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

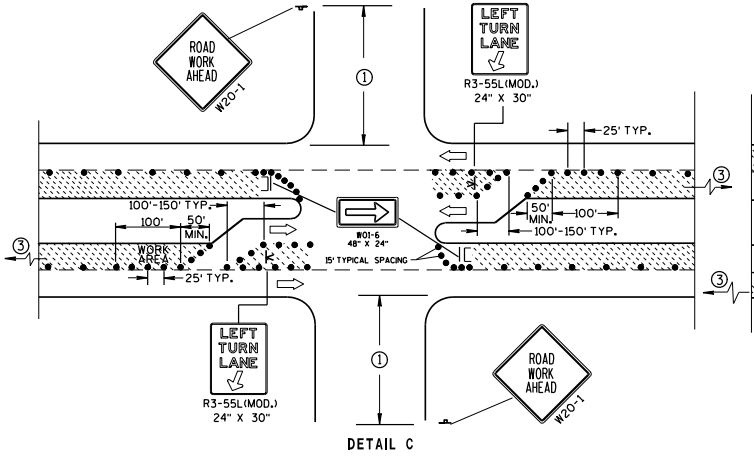
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

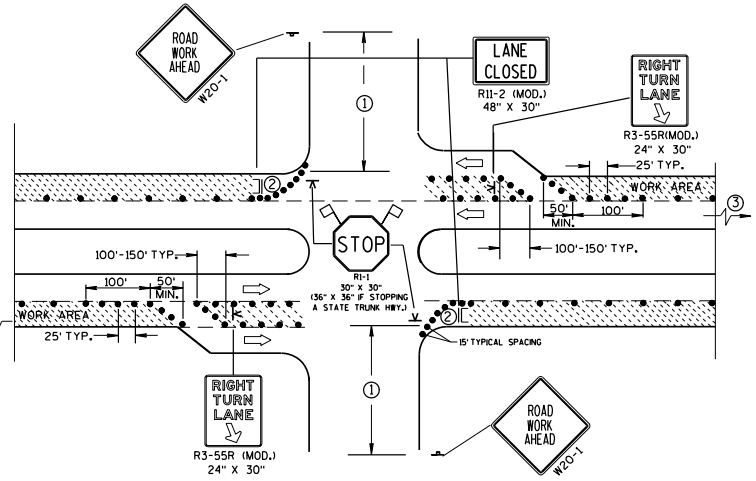
② ALSO USE BARRICADE AND 15' TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- DRUM
- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE (8' EQUIVALENT) AND WARNING LIGHT, TYPE A (FLASHING) WITH SIGN
- DIRECTION OF TRAFFIC FLOW
- FLAGS, 16" X 16" MIN., ORANGE

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 — DATE
/S/ Chester J. Spang — CHIEF SIGNS AND MARKING ENGINEER
FHWA

6

S.D.D. 15 D 21-1

6

S.D.D. 15 D 21-1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

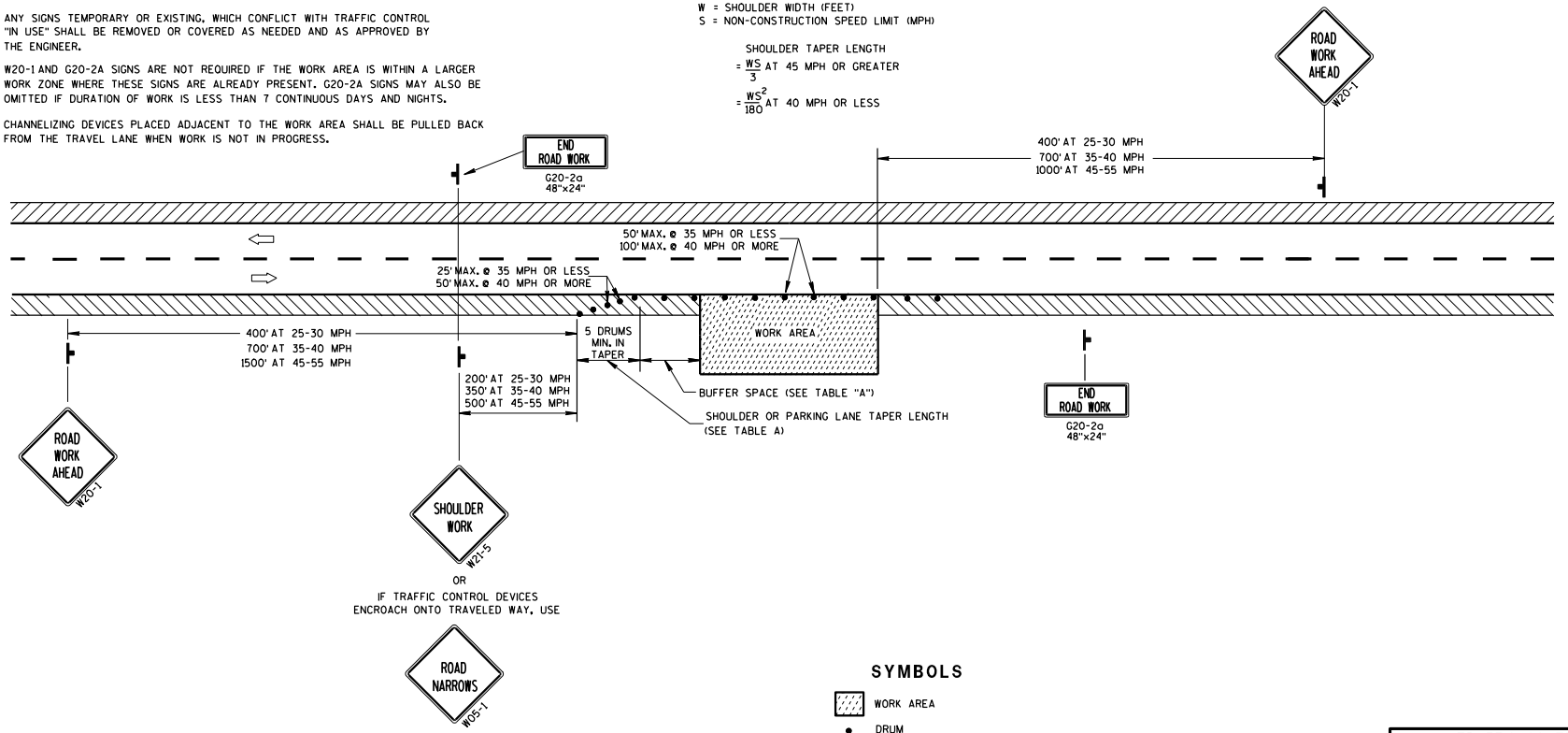
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH

$= \frac{WS}{3}$ AT 45 MPH OR GREATER

$= \frac{WS^2}{180}$ AT 40 MPH OR LESS



SYMBOLS

- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

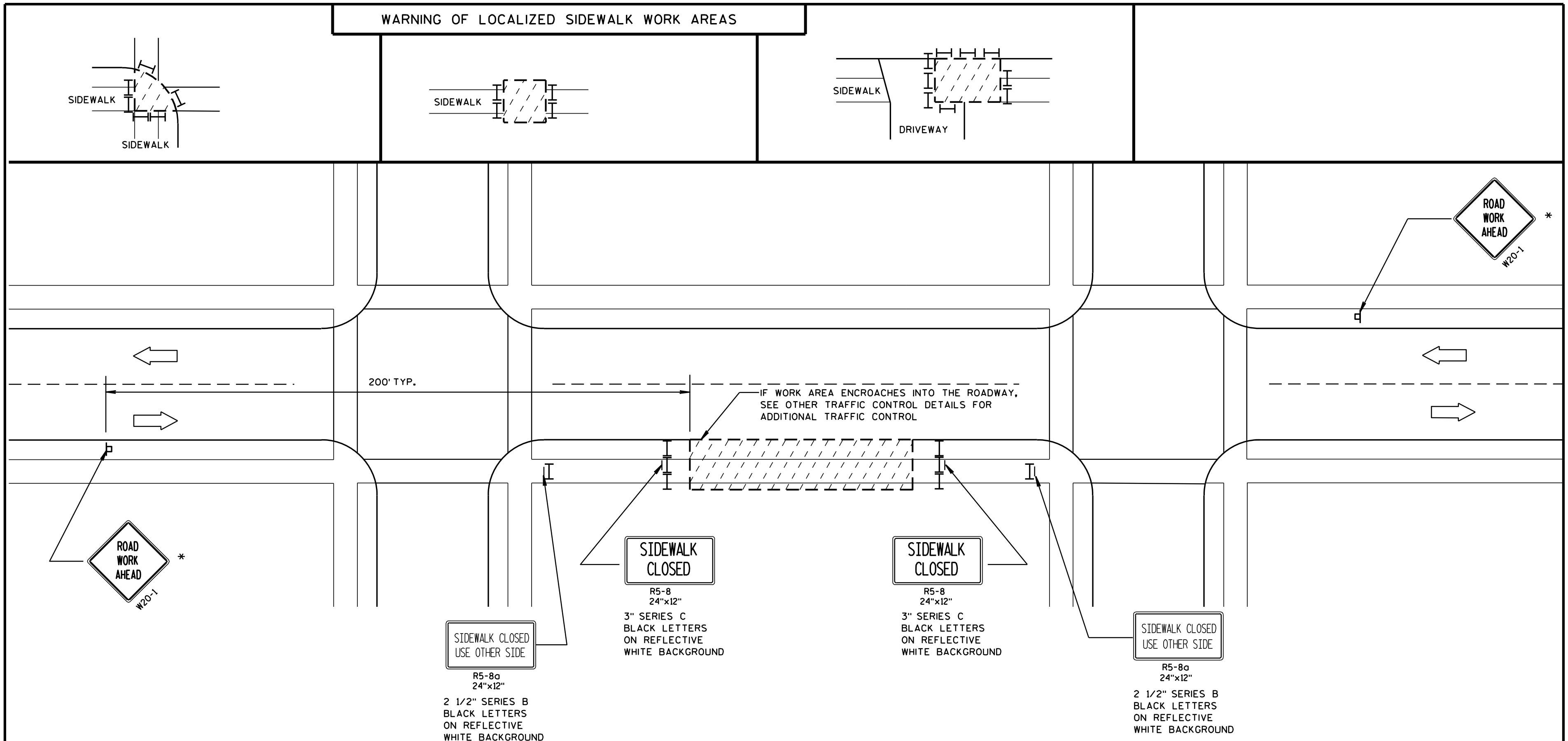
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00
DATE
FHWA

Chester J. Spang
CHIEF SIGNS AND MARKING ENGINEER

6

S.D.D. 15 D 28-1



LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

THE EXACT LOCATION AND PLACEMENT OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

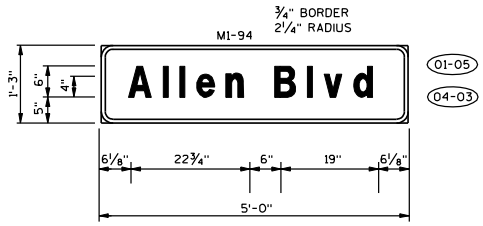
WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 5/23/00
DATE
FHWA

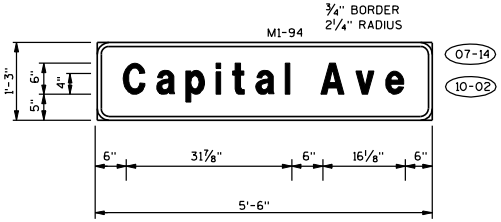
Chester J. Spears
CHIEF SIGNS AND MARKING ENGINEER



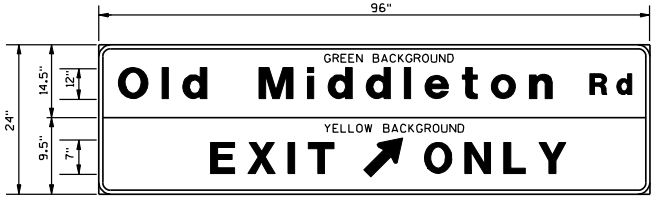
(01-05)
(04-03)

NOTES

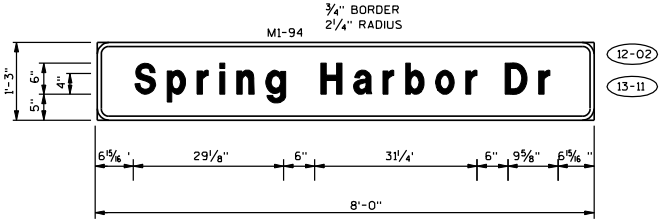
1. All Signs are Type II - Type H Reflective - reference WIS DOT Standard Specifications for ROAD and BRIDGE CONSTRUCTION latest edition.
2. COLOR:
   Background - Green
   Message - White
3. Message Series - E except as noted



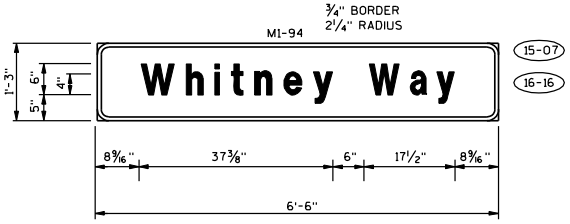
(07-14)
(10-02)



(20-12)
M1-94



(12-02)
(13-11)



(15-07)
(16-16)

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIRMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".
3. UNLESS OTHERWISE NOTED, TYPE I AND TYPE II SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND, "TYPE H MESSAGE MATERIAL".
4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
5. ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E, MODIFIED". ALL LOWERCASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E, MODIFIED".
6. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
7. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
8. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
9. DO NOT SCALE.

7

7

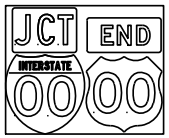
PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	SIGNING DETAILS	SCALE: 0 1' 2'	SHEET 632	E

FILE NAME : G:\Madison\MD2009035\DGN\070102_sd.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

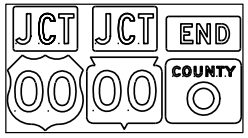
WISDOT/CADDS SHEET 47

TYPICAL ASSEMBLIES

J1-1

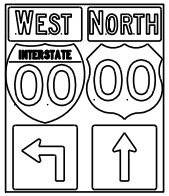


J1-2

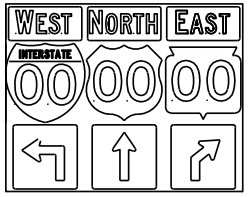


J1-3

J2-1



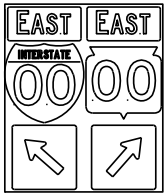
J2-2



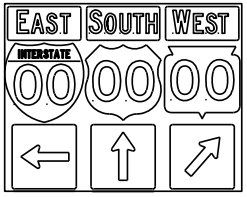
J2-3

JV

J3-1

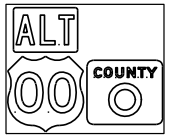


J3-2

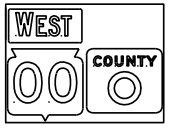


J3-3

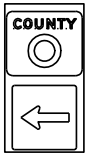
J4-1



J4-2



J4-2



J13-1

J12-1

J32-1

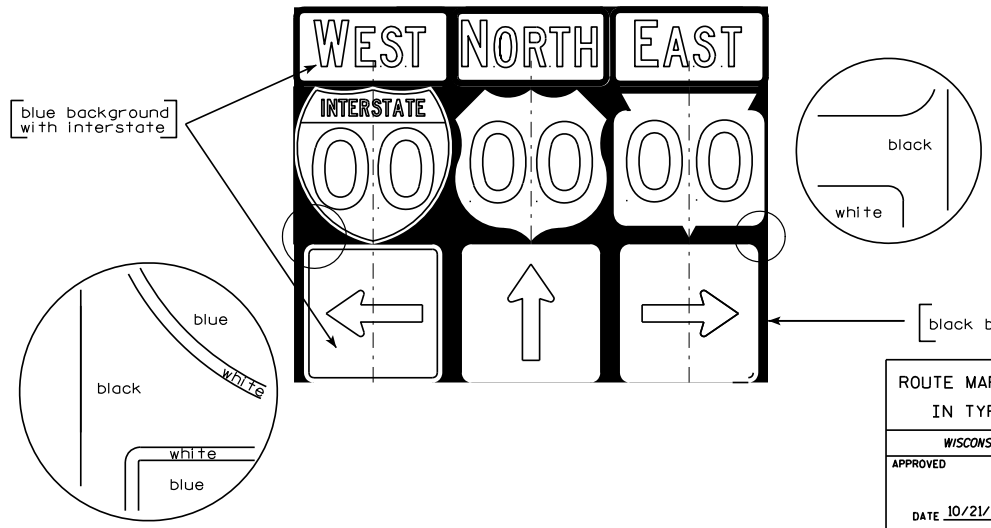
J33-1

J23-1

J22-1

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square since base material is plywood.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/21/09 PLATE NO. A2-1S.6

PROJECT NO:

SHEET NO: 633 E

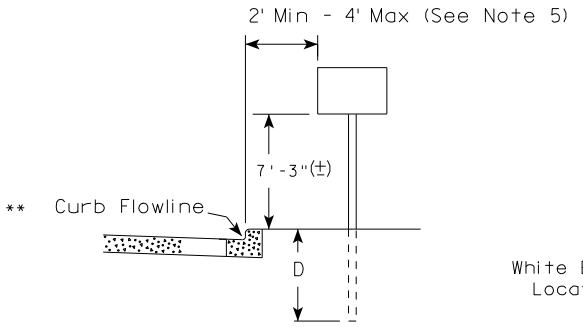
FILE NAME : C:\Users\PROJECTS\tr_stdplate\A21S.DGN PLOT DATE : 21-OCT-2009 09:27 PLOT BY : ditjph PLOT NAME :

WISDOT/CADDS SHEET 42

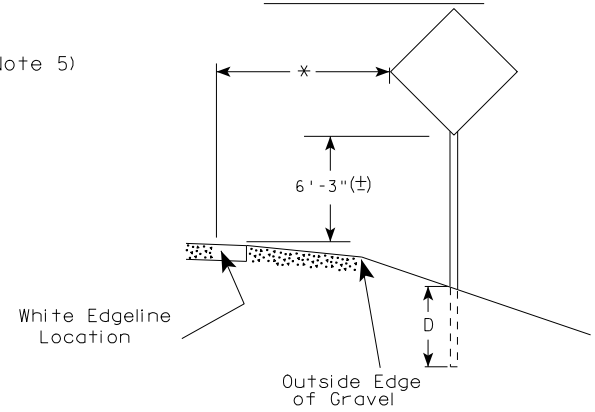
7

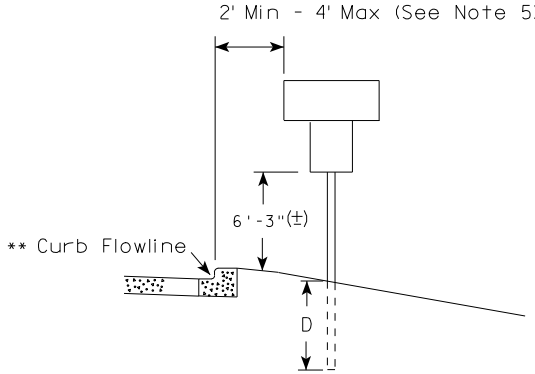
7

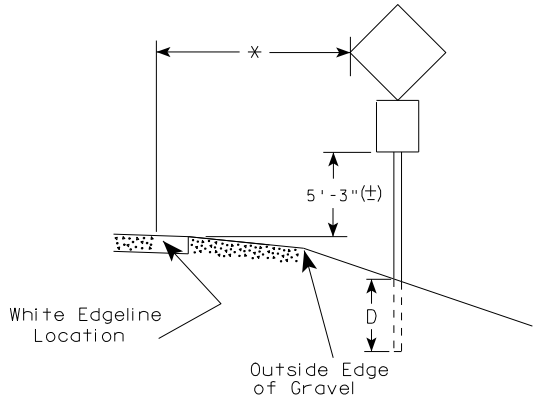
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

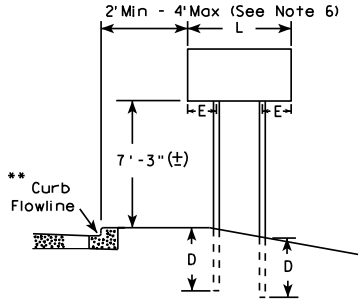
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

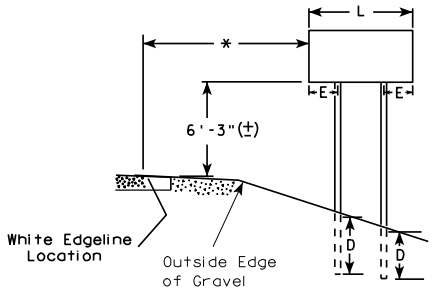
DATE 9/21/2011 PLATE NO. A4-3.16

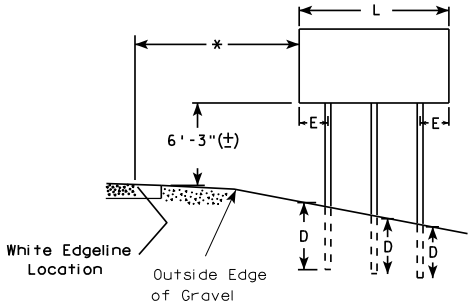
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 634	E

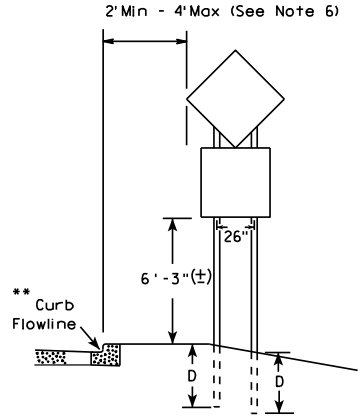
URBAN AREA



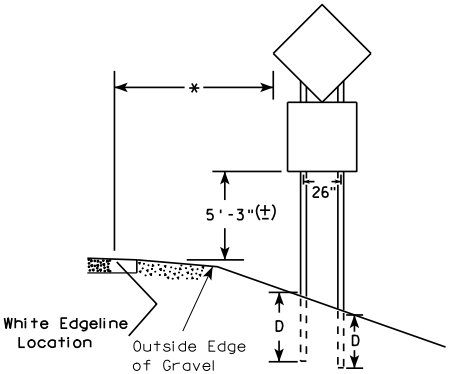
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For multiple post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

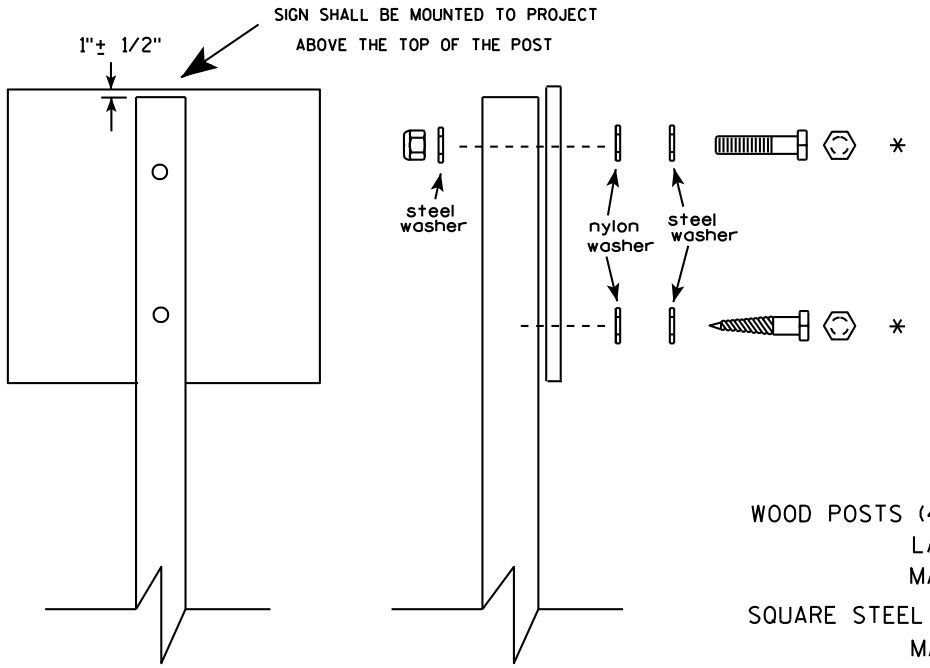
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-4.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 635	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

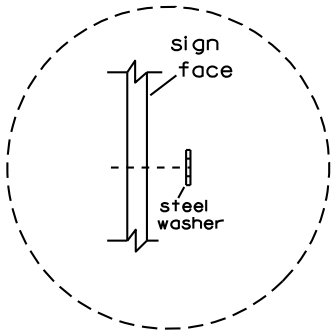
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

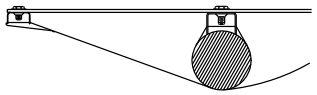
DATE 3/23/10 PLATE NO. A4-8.7

PROJECT NO:				SHEET NO: 636	E

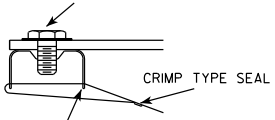
FILE NAME : C:\Users\PROJECTS\tr_stdplate\A48.DGN PLOT DATE : 23-MAR-2010 10:15 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

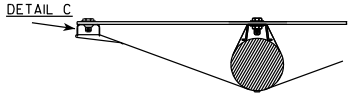
BRACE BANDING

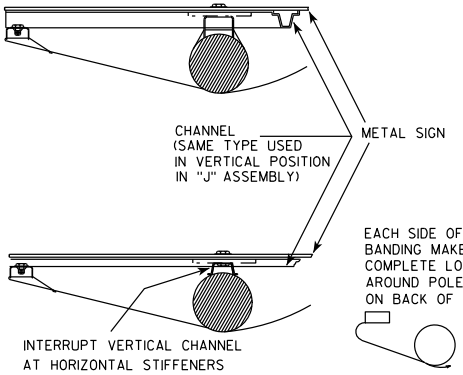


DETAIL C
CADMIUM PLATED STEEL BOLT
THROUGH BLACK BORDER

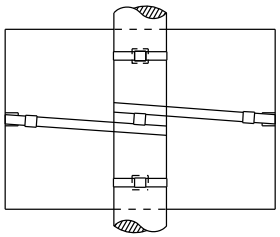


DETAIL C





EACH SIDE OF BRACE
BANDING MAKES ONE
COMPLETE LOOP
AROUND POLE-SEAL
ON BACK OF POLE

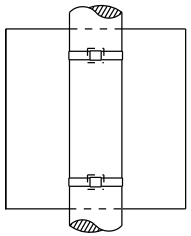


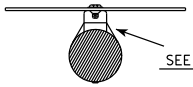
BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY
BUT NOT SO TIGHT AS TO APPRECIABLY
CURVE FACE OF SIGN.

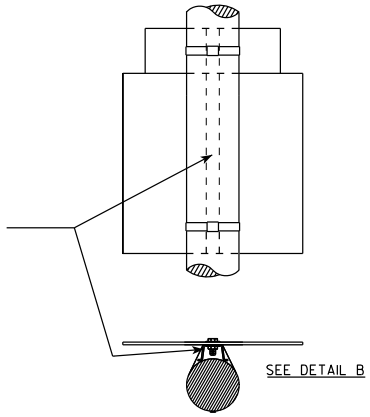
BRACKET BANDING

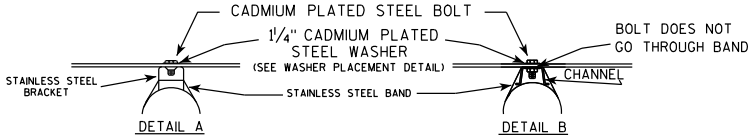
SINGLE SIGN



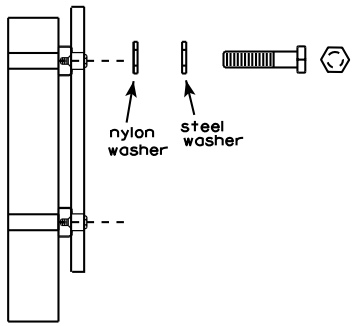


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

7

7

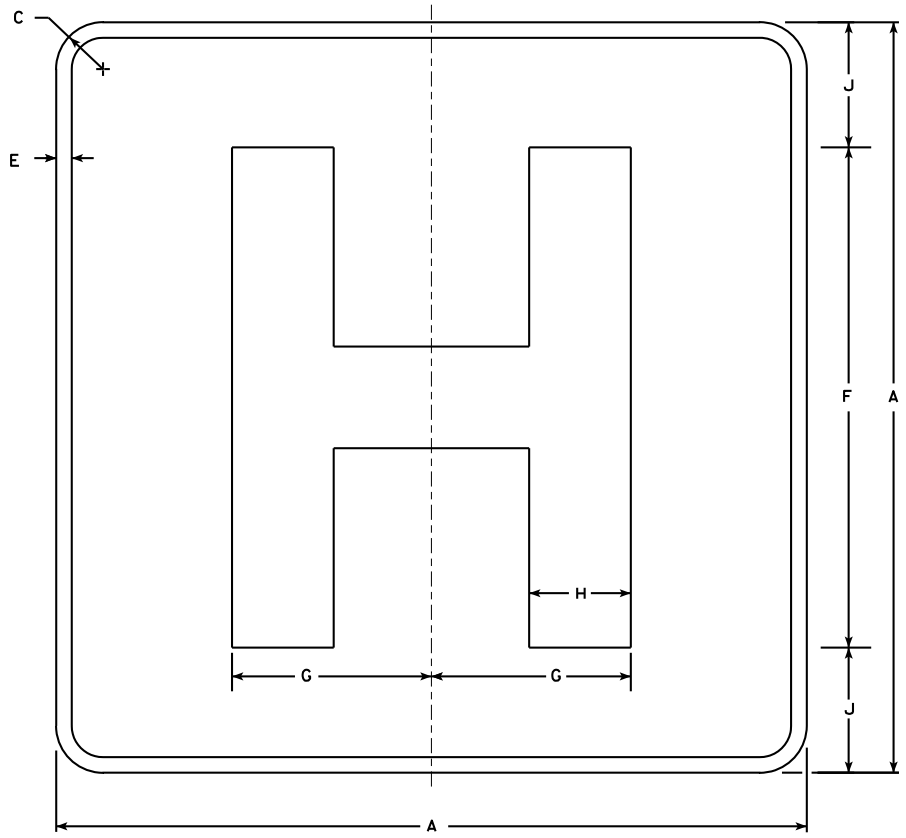
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 637	E



D9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

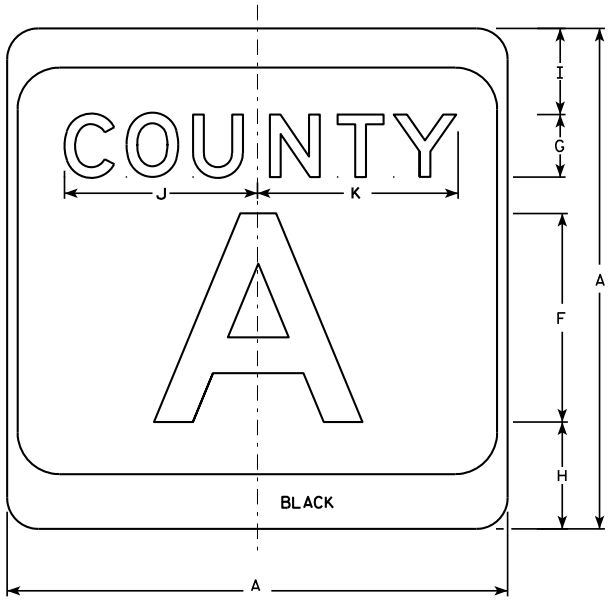
DATE 1/15/02 PLATE NO. D9-2.4

PROJECT NO:

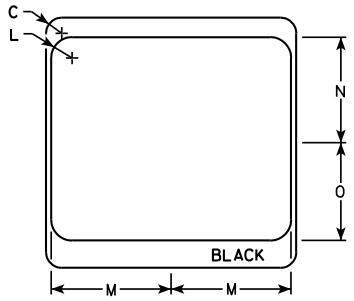
SHEET NO: 638 E

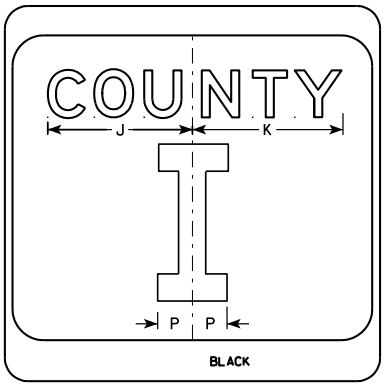
FILE NAME : C:\Users\Projects\tr_stdplate\D92.DGN PLOT DATE : 21-OCT-2005 10:28 PLOT BY : DOTSJA

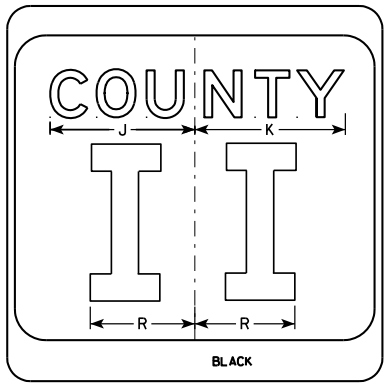
WISDOT/CADDS SHEET 42



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

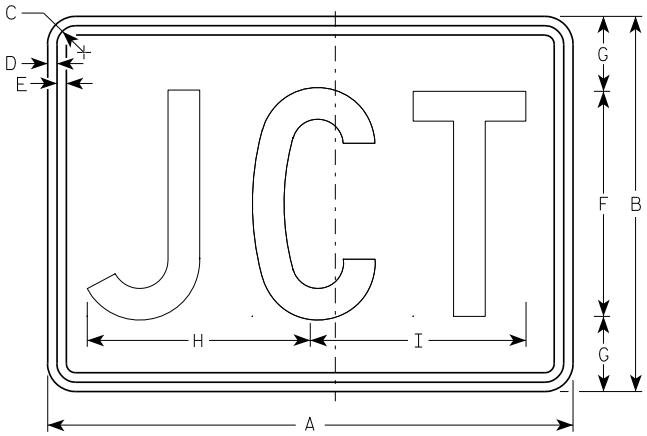
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

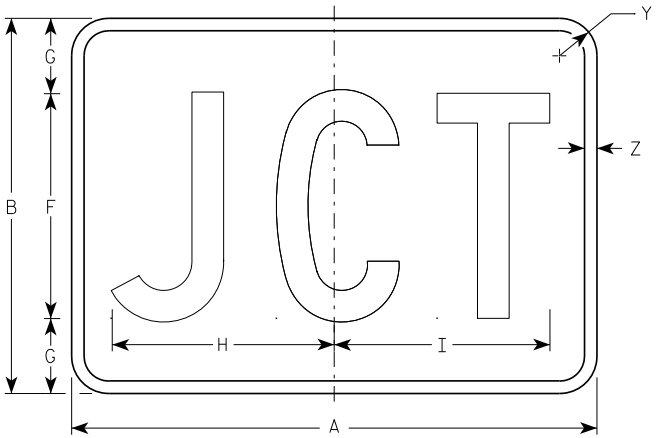
APPROVED Matthew L Rauch
Bayfield State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 639	E



M2-1
MK2-1
MM2-1
MR2-1



MB2-1
MG2-1
MN2-1

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB2-1 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG2-1 Background - Green
   Message - White - Type H Reflective
   MK2-1 Background - Green
   Message - White - Type H Reflective
   MM2-1 Background - White - Type H Reflective
   Message - Green
   MN2-1 Background - Brown
   Message - White - Type H Reflective
   MR2-1 Background - Brown
   Message - Yellow - Type H Reflective

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

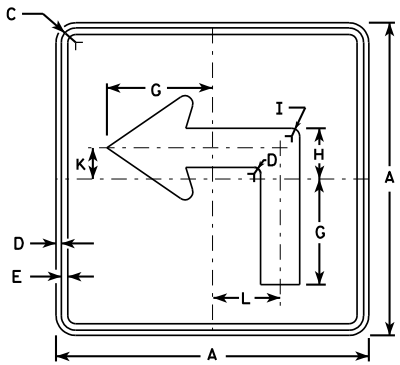
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

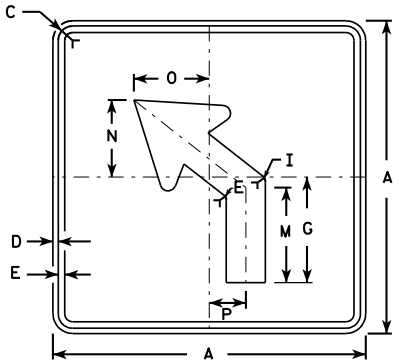
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M2-1.10

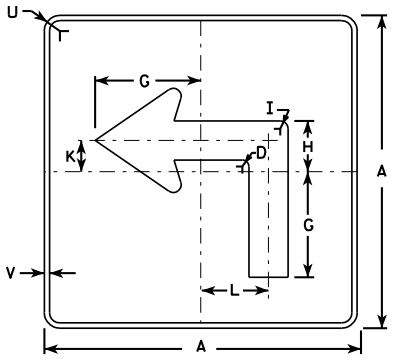
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 640	E



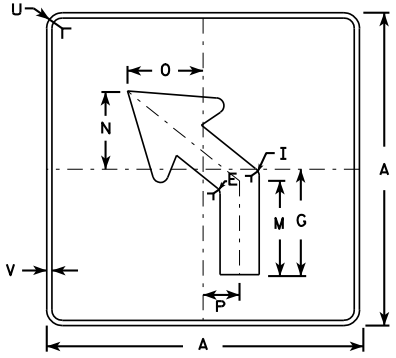
M5-1L
MK5-1L
MM5-1L
MO5-1L
MR5-1L



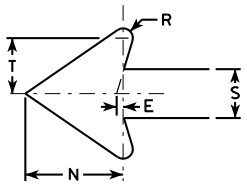
M5-2L
MK5-2L
MM5-2L
MO5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB5-1 and MB5-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG5-1 and MG5-2 Background - Green Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective Message - Green
   MN5-1 and MN5-2 Background - Brown Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Reflective Message - Black
   MR5-1 and MR5-2 Background - Brown Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m²
1																												
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56

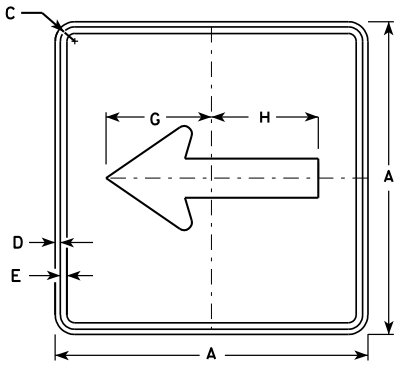
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

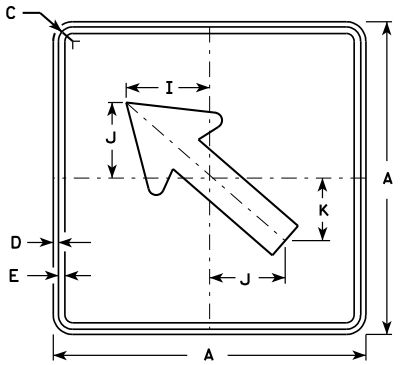
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M5-1.11

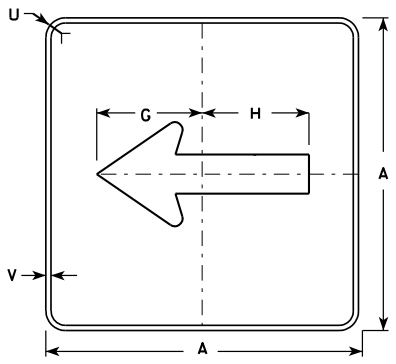
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 641	E



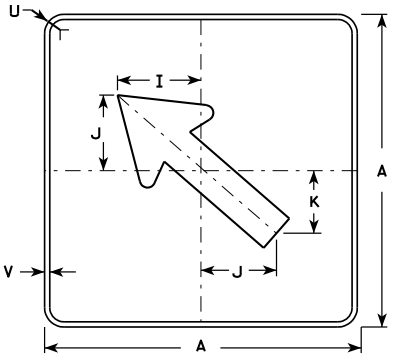
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



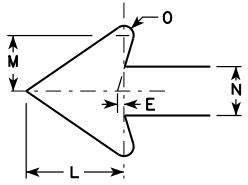
M6-2
MK6-2
MM6-2
MO6-2
MR6-2



MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG6-1 and MG6-2 Background - Green
   Message - White - Type H Reflective
   MK6-1 and MK6-2 Background - Green
   Message - White - Type H Reflective
   MM6-1 and MM6-2 Background - White - Type H Reflective
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White - Type H Reflective
   MO6-1 and MO6-2 Background - Orange - Reflective
   Message - Black
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow - Type H Reflective

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

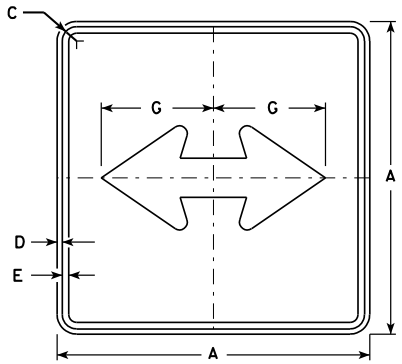
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

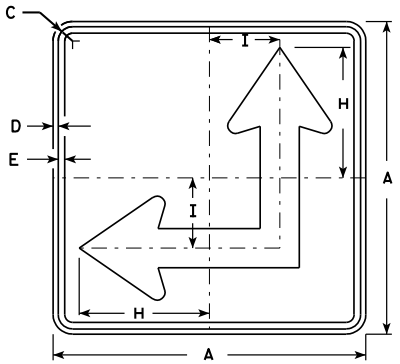
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-1.12

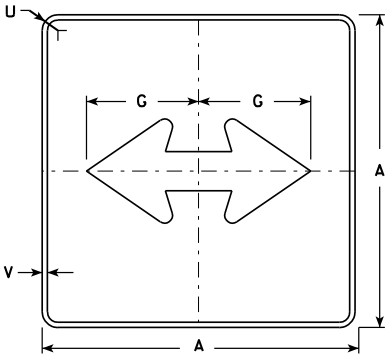
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 642	E



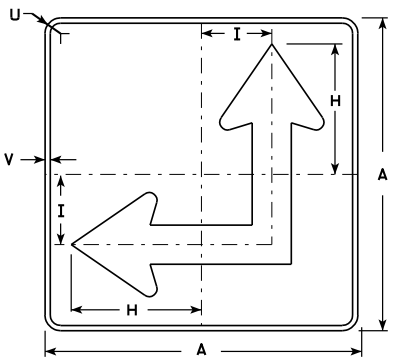
M6-4
MK6-4
MM6-4
MO6-4
MR6-4



M6-6
MK6-6
MM6-6
MO6-6
MR6-6



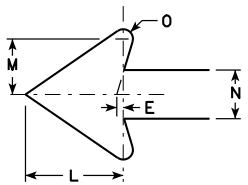
MB6-4
MG6-4
MN6-4



MB6-6
MG6-6
MN6-6

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG6-4 and MG6-6 Background - Green
   Message - White - Type H Reflective
   MK6-4 and MK6-6 Background - Green
   Message - White - Type H Reflective
   MM6-4 and MM6-6 Background - White - Type H Reflective
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White - Type H Reflective
   MO6-4 and MO6-6 Background - Orange - Reflective
   Message - Black
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow - Type H Reflective
5. M6-6R same as M6-6L except arrow points ahead and right.



Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m²
1																												
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

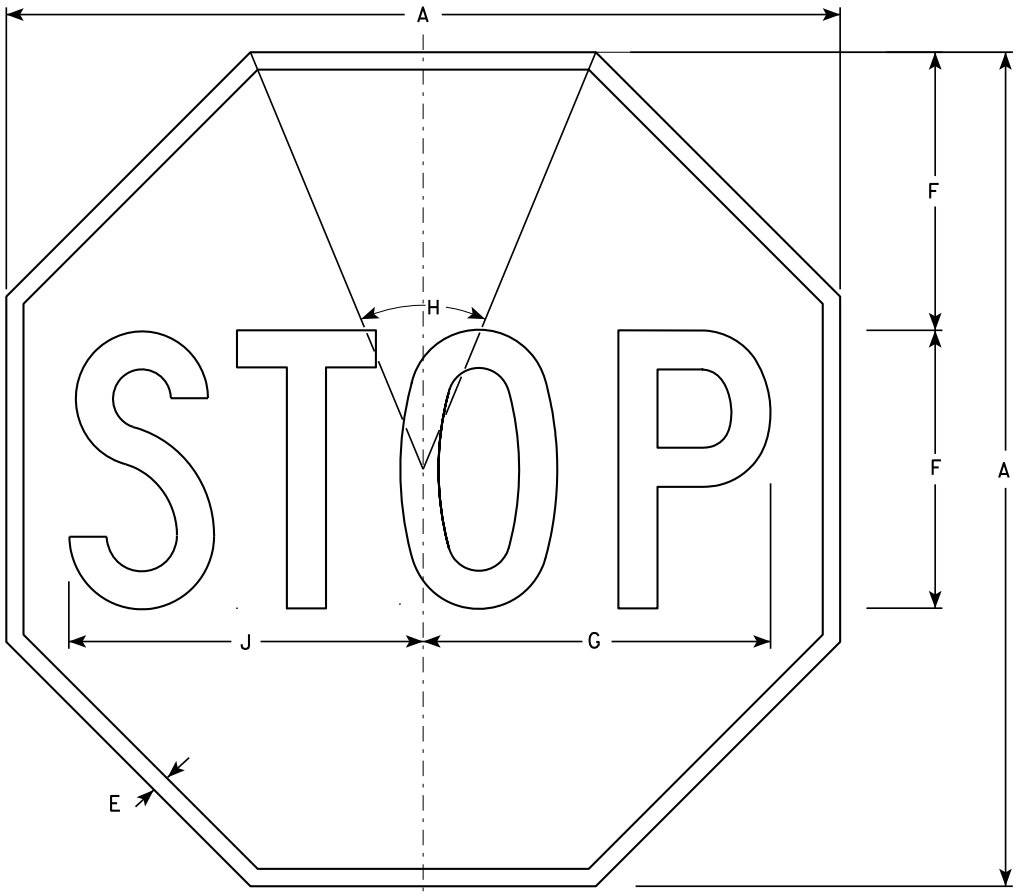
STANDARD SIGN M6-4 & M6-6 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-4.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 643 | E



R1-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

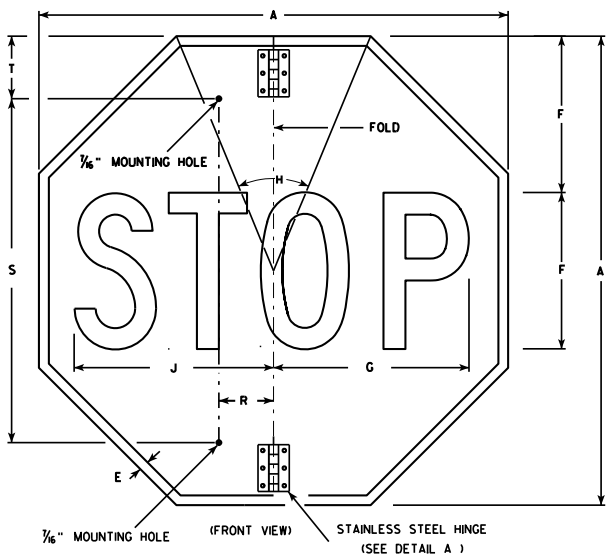
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 644	E

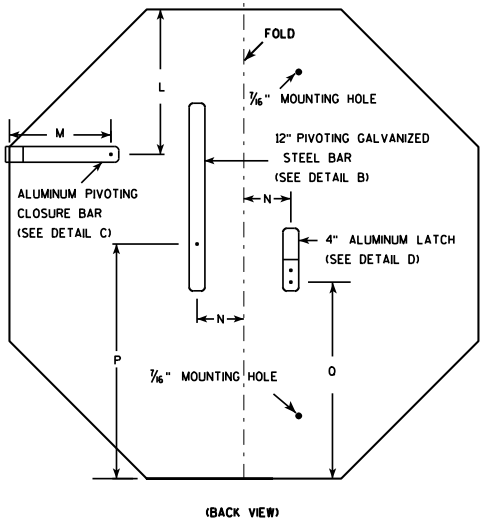
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11.DGN PLOT DATE : 02-DEC-2010 15:09 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 4.469282:1.000000

WISDOT/CADDS SHEET 42

7

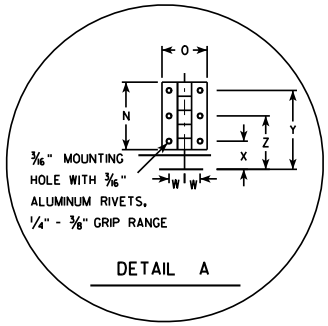
7



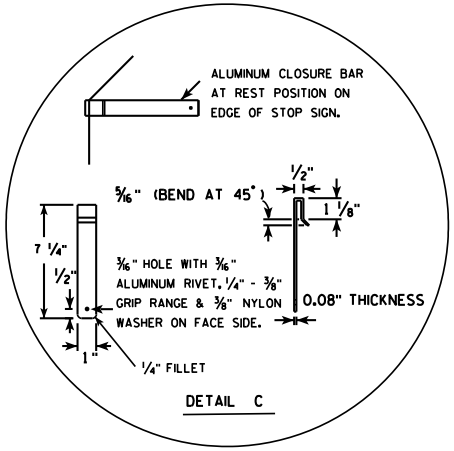


NOTES

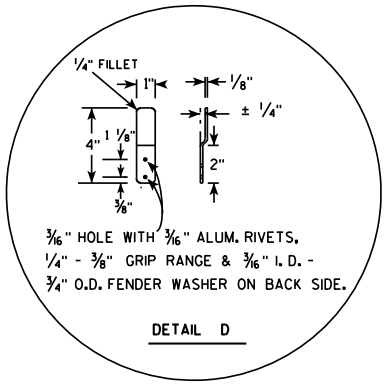
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



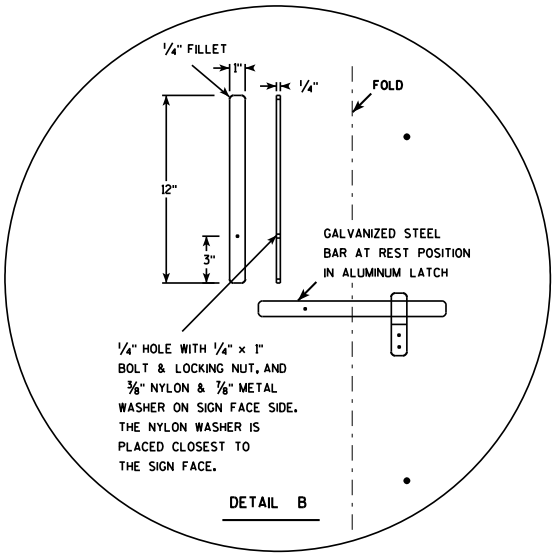
DETAIL A



DETAIL C



DETAIL D



DETAIL B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

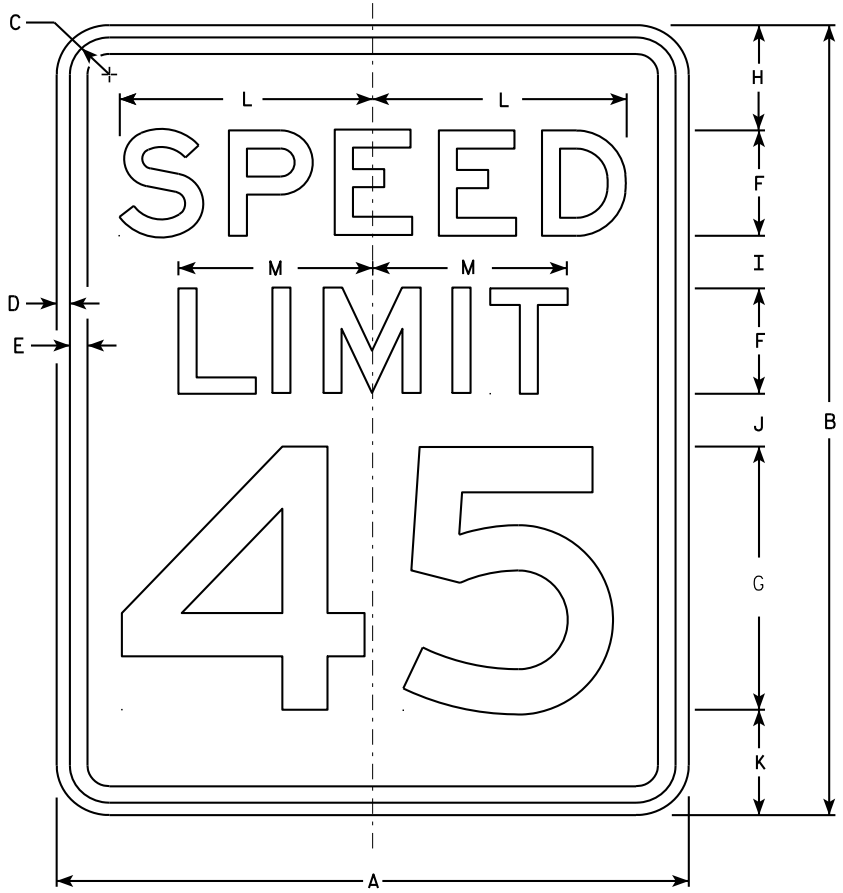
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 645	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

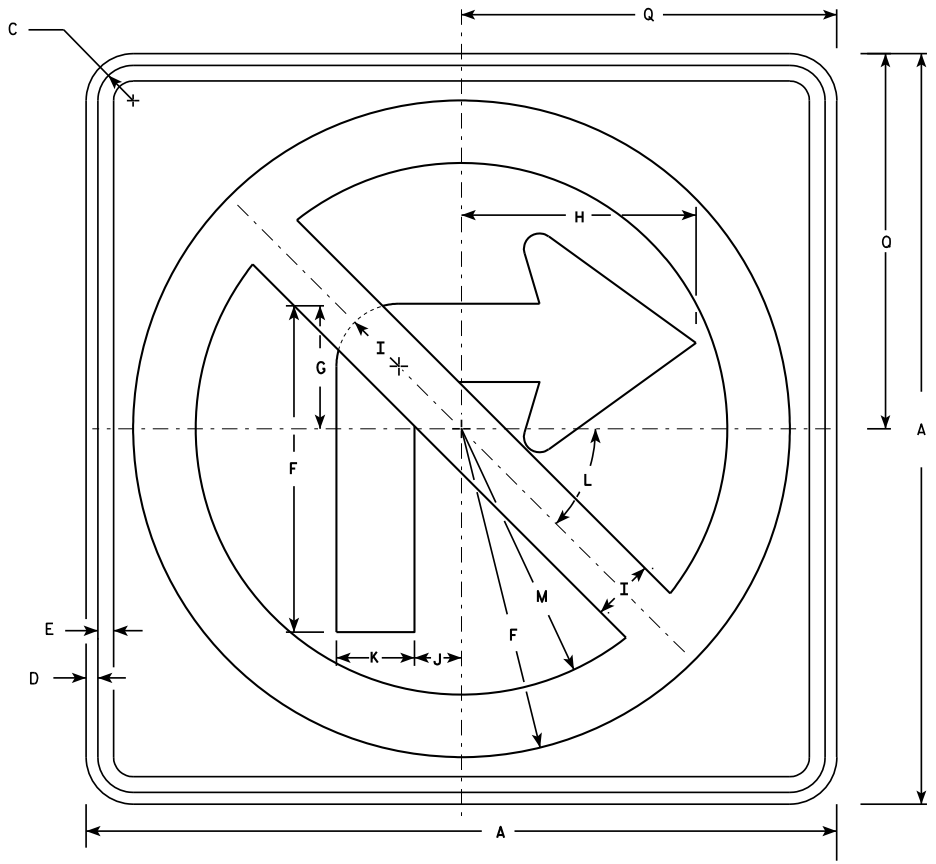
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

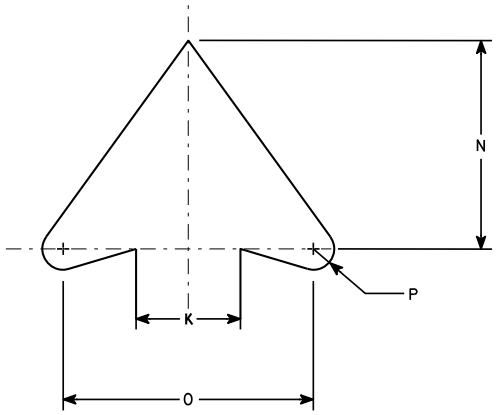
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 646 | E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

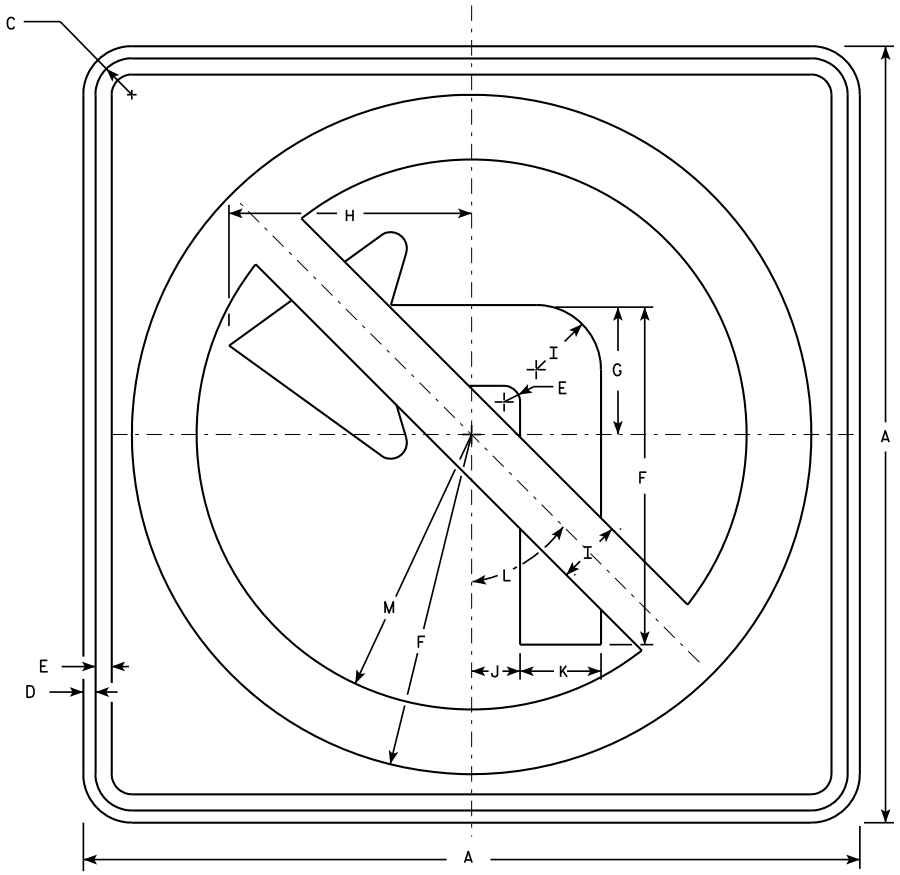
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

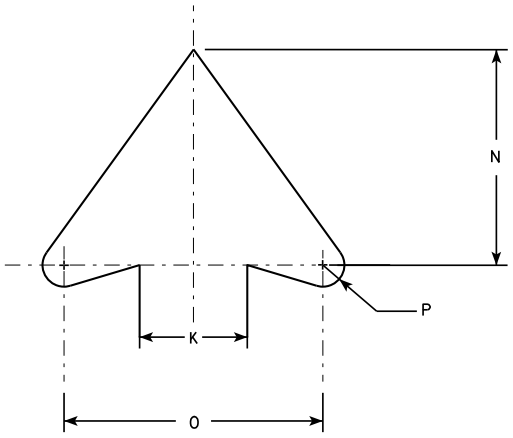
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 647	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

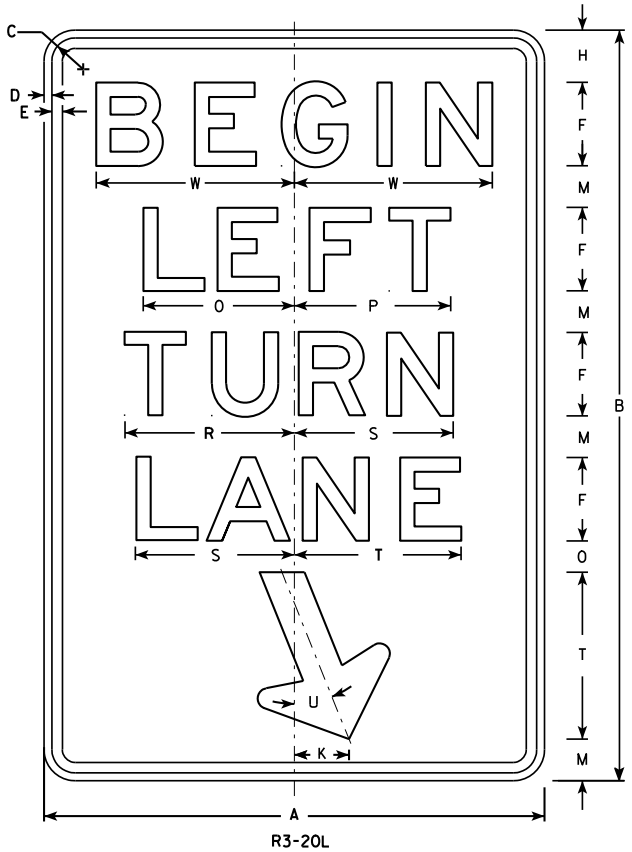
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 648	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R32.DGN PLOT DATE : 08-DEC-2010 14:41 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.760408:1.000000

WISDOT/CADDS SHEET 42

7

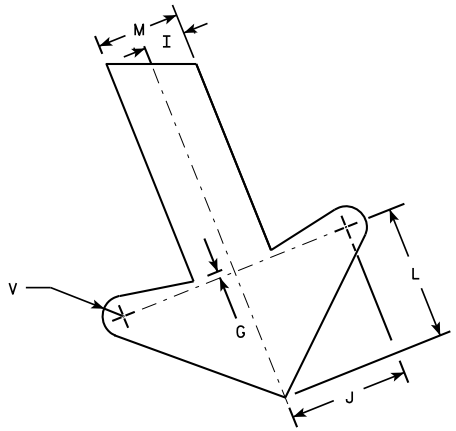
7



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

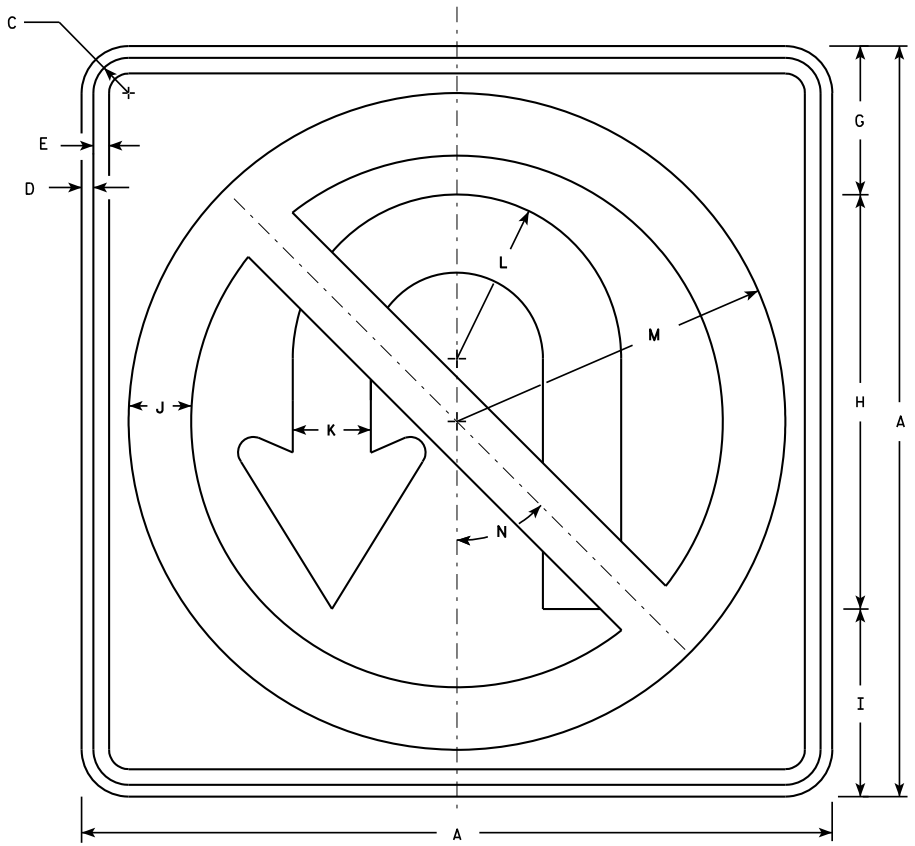
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 649 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320L.DGN PLOT DATE : 15-OCT-2010 14:45 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

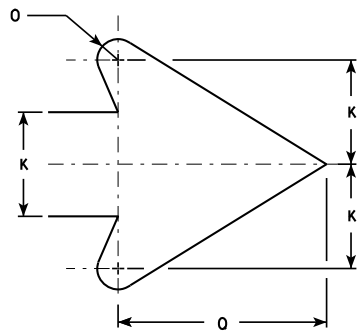
7



R3-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

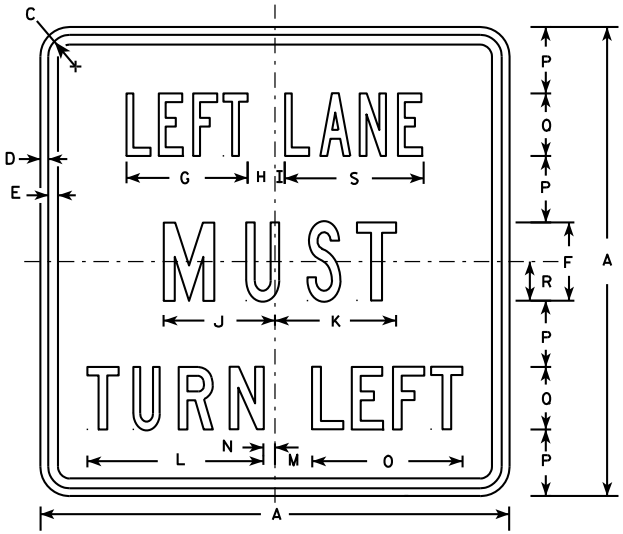
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

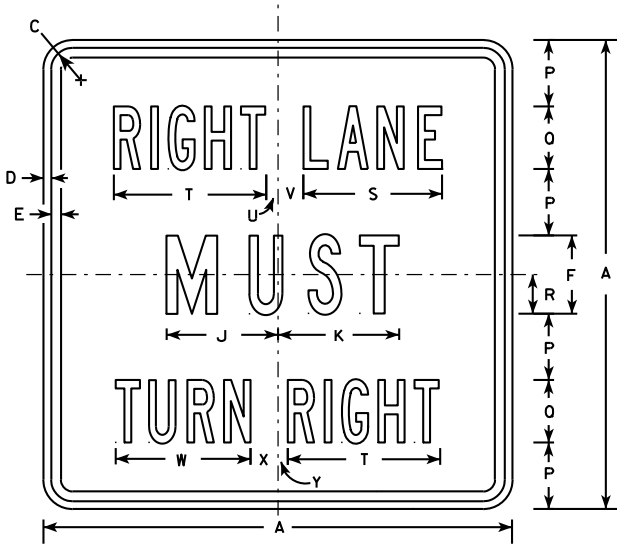
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 650 | E



R3-7L



R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

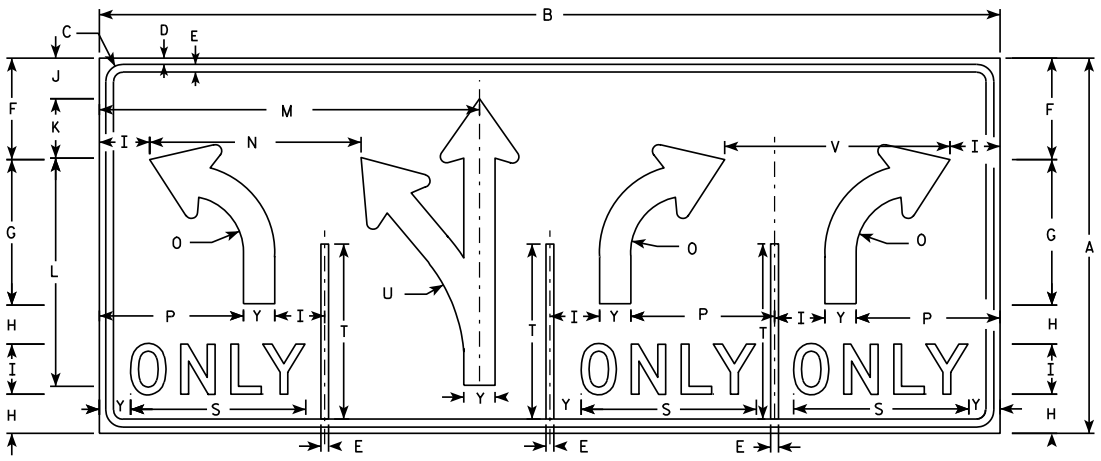
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 651 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R37.DGN PLOT DATE : 18-MAR-2011 09:43 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

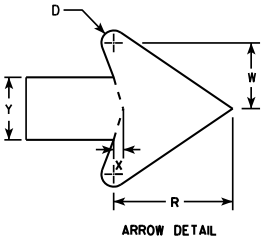
WISDOT/CADDS SHEET 42

7

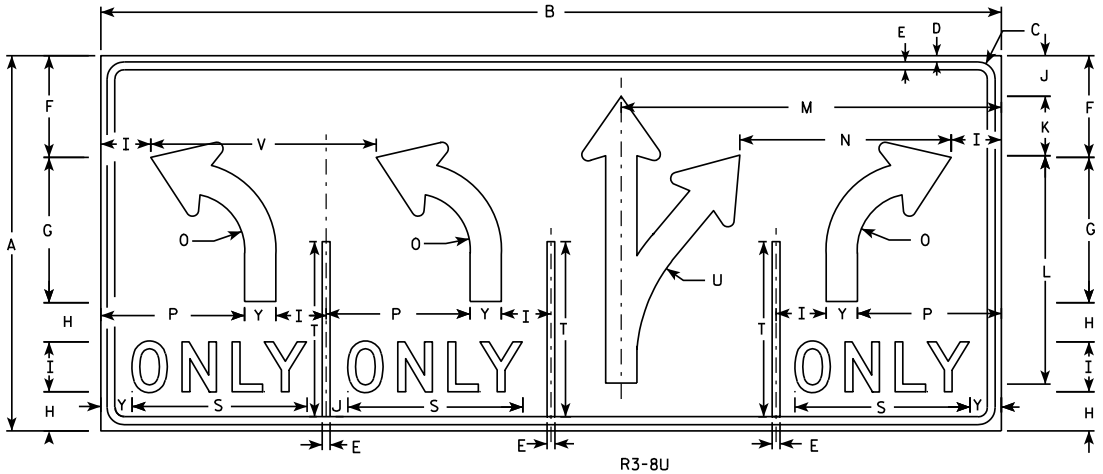
7



R3-8T



ARROW DETAIL



R3-8U

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	72	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	30 3/8	16 7/8	4 1/2	11 1/2		4 3/4	14	14	13 1/4	18	2 5/8	3/8	2 1/2		15.0
2M	30	72	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	30 3/8	16 7/8	4 1/2	11 1/2		4 3/4	14	14	13 1/4	18	2 5/8	3/8	2 1/2		15.0
3																											
4	48	108	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	8 1/4	7 5/8	29 1/4	45 1/2	25 3/8	6 3/4	17 1/4		7 1/8	20 5/8	22 3/8	19 7/8	27	4	5/8	4		36.0
5	48	108	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	8 1/4	7 5/8	29 1/4	45 1/2	25 3/8	6 3/4	17 1/4		7 1/8	20 5/8	22 3/8	19 7/8	27	4	5/8	4		36.0

STANDARD SIGN
R3-8T & R3-8U

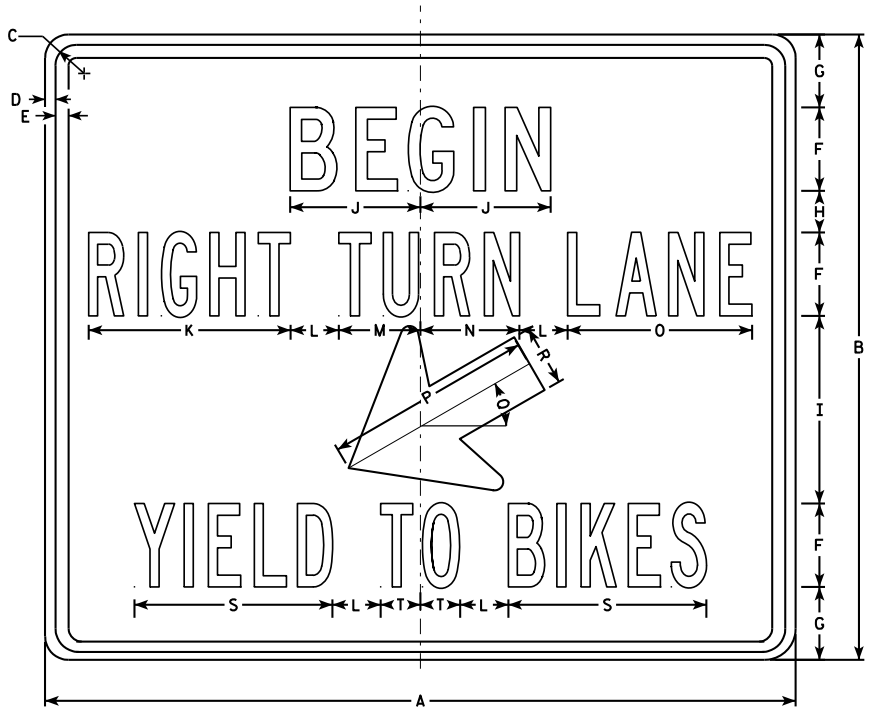
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8T.4

PROJECT NO:

SHEET NO: 652 E



R4-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C
   Lines 2 & 3 are Series B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	30	1 3/8	1/2	5/8	4	3 1/2	2	9	6 1/4	9 3/4	2 3/8	3 7/8	4 3/4	8 7/8	10	30°	2 7/8	9 1/2	1 7/8							7.5
2M	36	30	1 3/8	1/2	5/8	4	3 1/2	2	9	6 1/4	9 3/4	2 3/8	3 7/8	4 3/4	8 7/8	10	30°	2 7/8	9 1/2	1 7/8							7.5
3																											
4																											
5																											

STANDARD SIGN
R4-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

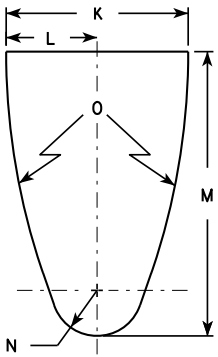
DATE 3/25/2011 PLATE NO. R4-4.2

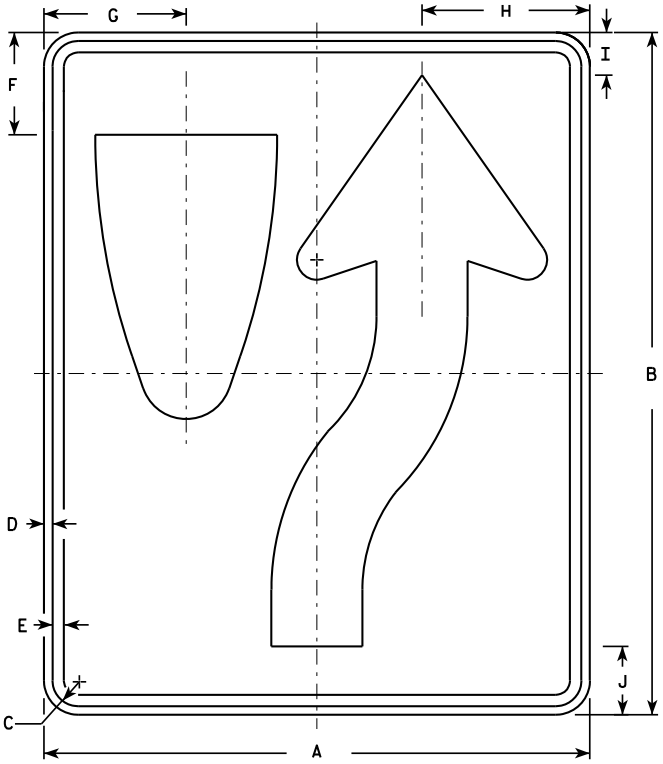
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 653	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R44.DGN PLOT DATE : 25-MAR-2011 13:45 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

7

7

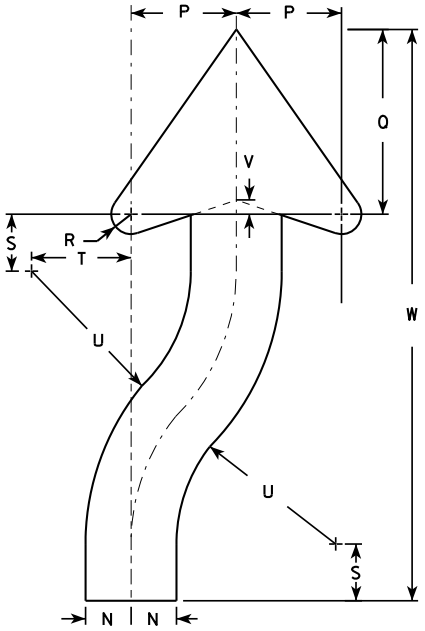




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

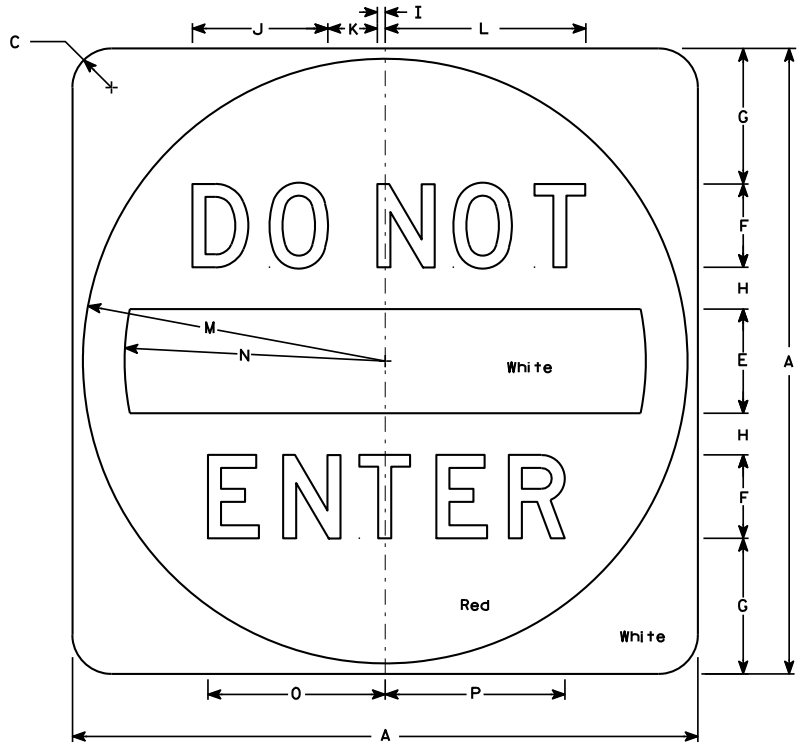
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 654	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

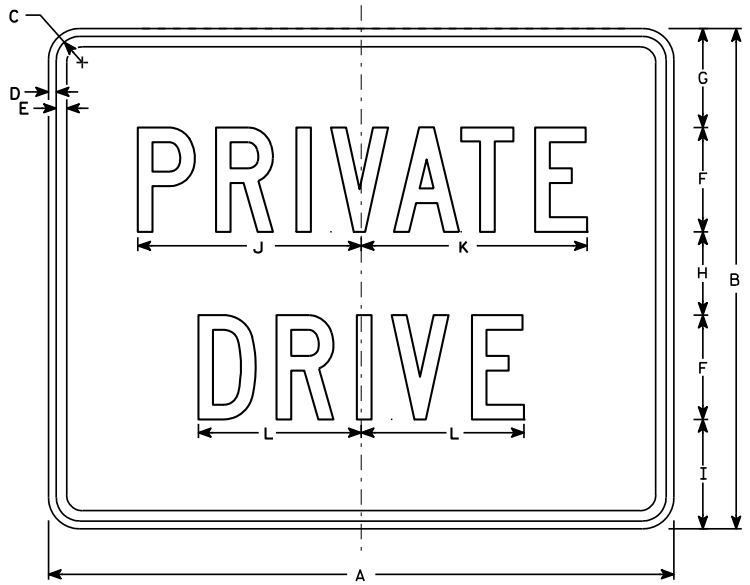
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 655 | E



R5-50

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/8	3/8	1/2	5	4 3/4	4	5 1/4	10 3/4	10 7/8	7 3/4															5.00
2M	30	24	1 1/8	3/8	1/2	5	4 3/4	4	5 1/4	10 3/4	10 7/8	7 3/4															5.00
3																											
4																											
5																											

STANDARD SIGN
R5-50

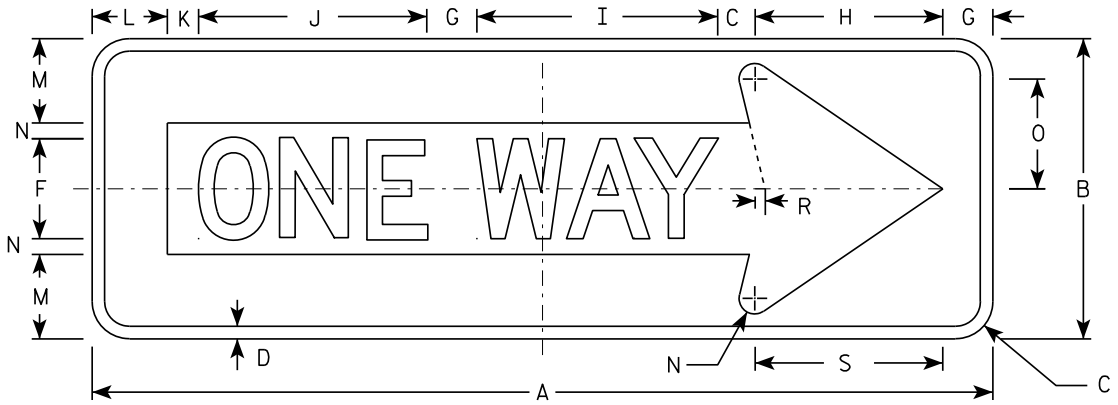
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-50.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 656 | E

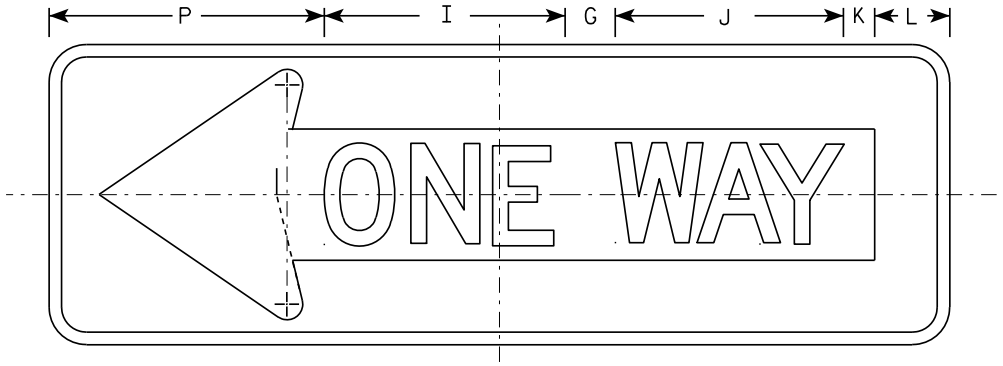
7



R6-1R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 ½	½		4	2	7 ½	9 ⅝	9 ⅛	1 ¼	3	3 ⅜	⅝	4 ⅜	11		⅜	7 ½								3.0
2M	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
3	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
4	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
5																											

STANDARD SIGN
R6-1 L & R

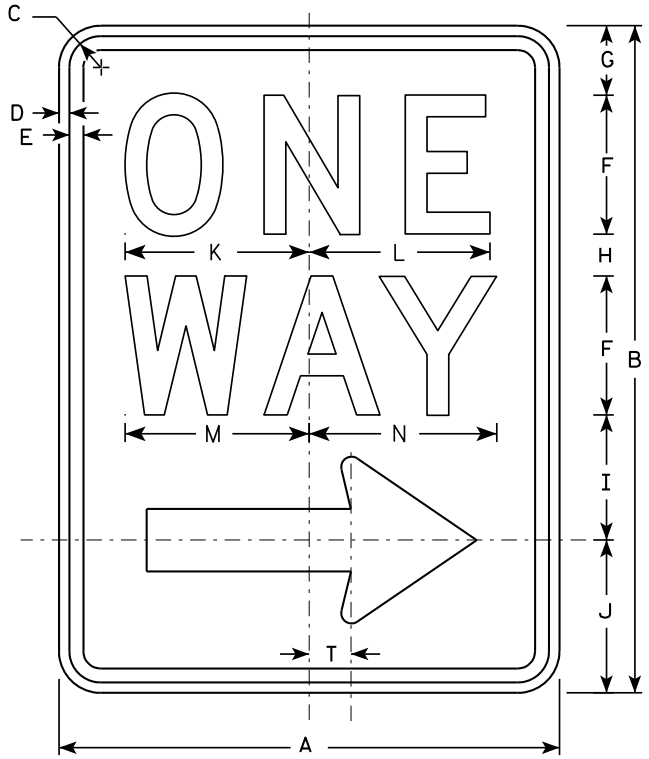
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

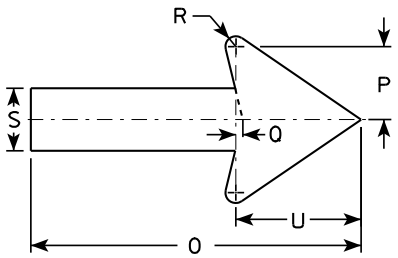
SHEET NO: 657 E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

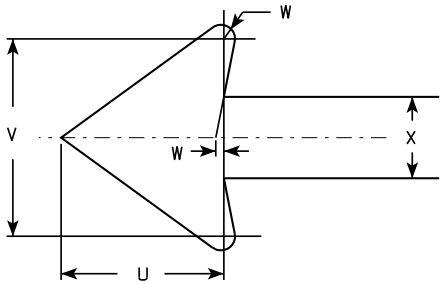
DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 658 | E

R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 659	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.DGN PLOT DATE : 31-MAR-2011 09:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000

WISDOT/CADDS SHEET 42

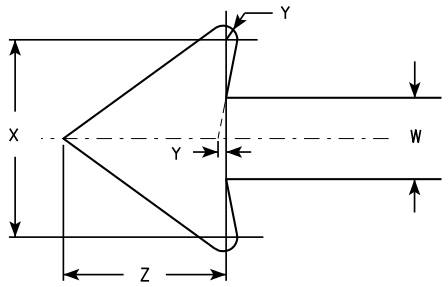
7

7

R7-51

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R7-51D (double arrow)
   R7-51R (right arrow)
   R7-51L (left arrow)
6. Lines 1, 3 and 4 are Series C.
   Line 2 is Series B.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	4 7/8	5/8	1 3/4	2 1/2	4 3/8	3 7/8	3/4	1 3/4	1/8	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	5 3/4	1 1/8	1 1/2	3 1/8	5 1/2	5 7/8	1 1/8	2 5/8	1/4	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
4																											
5																											

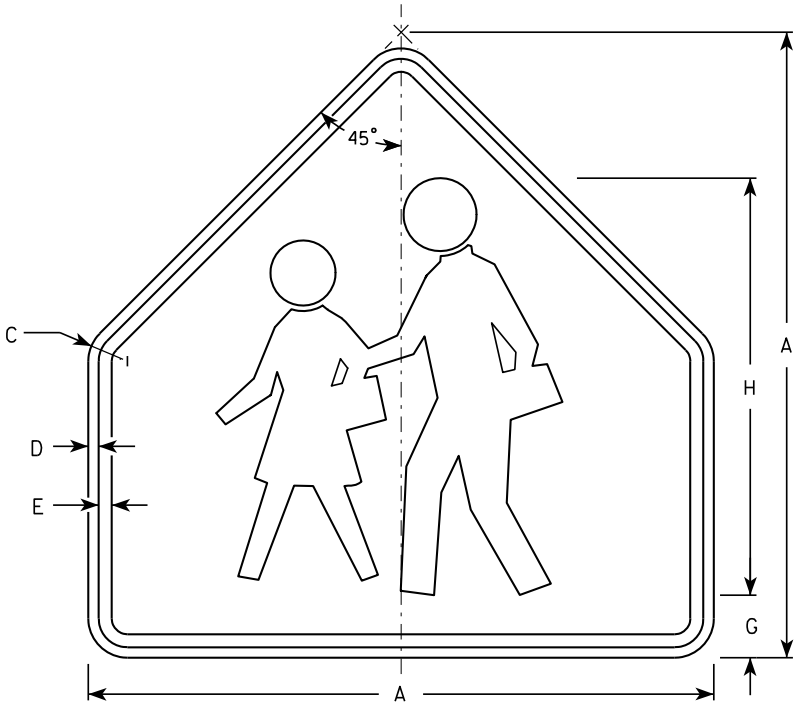
STANDARD SIGN
R7-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-51.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 660	E



S1-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

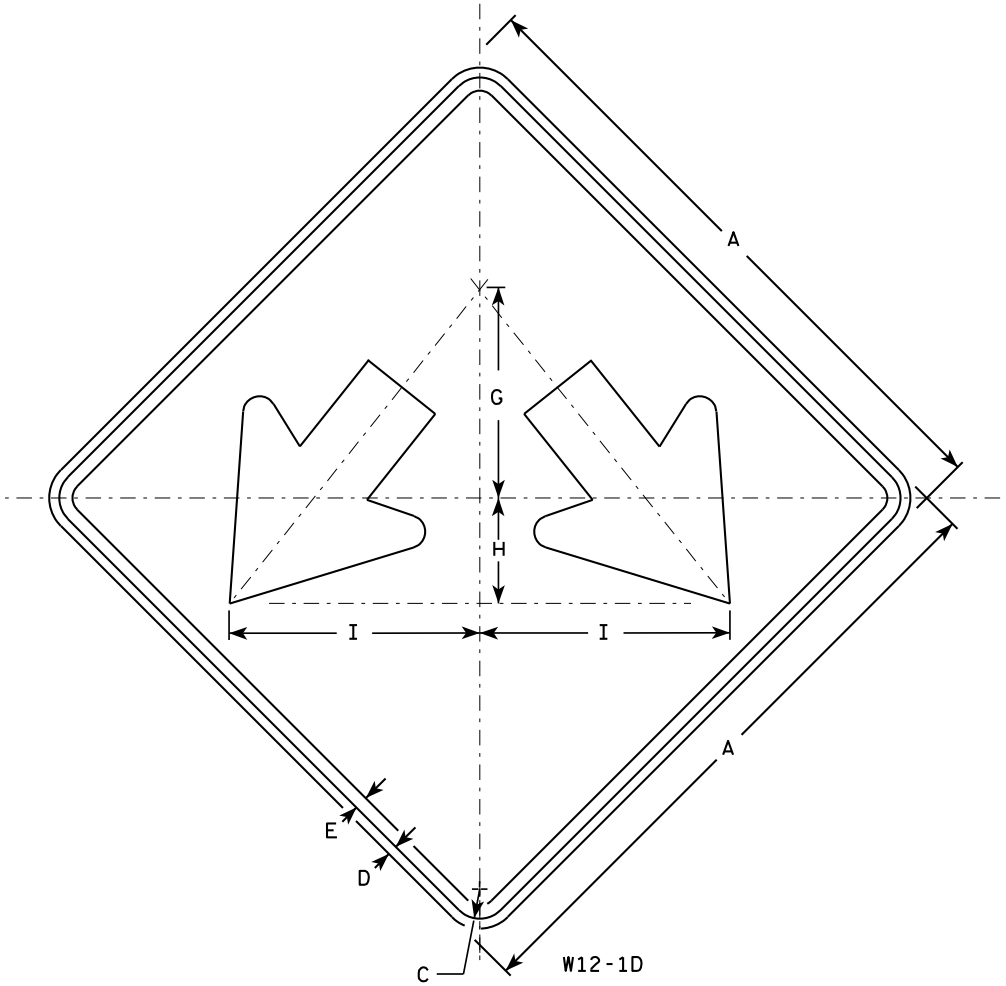
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

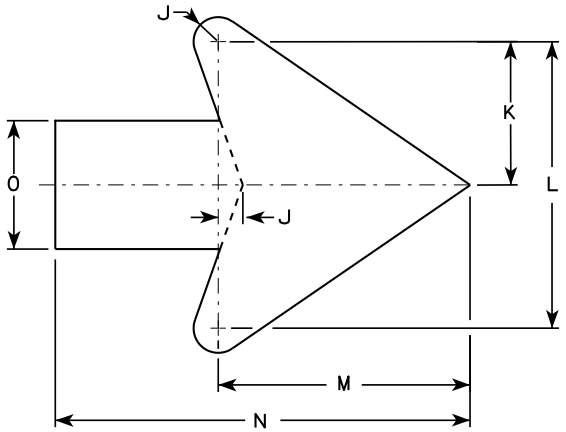
DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 661	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

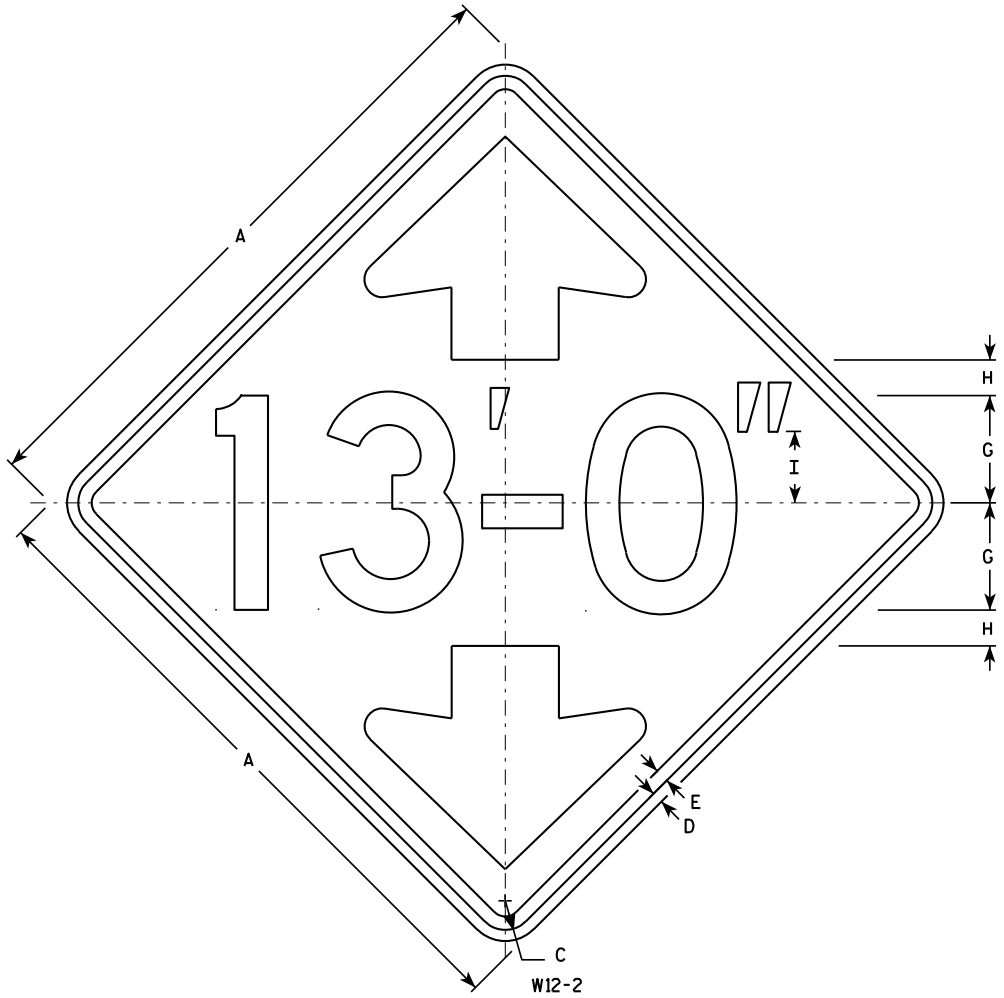
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

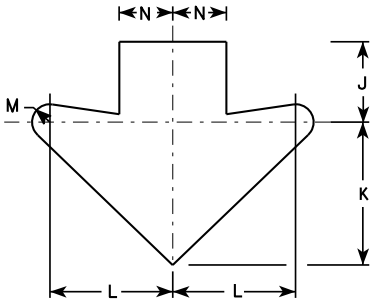
DATE 3/15/11 PLATE NO. W12-1D.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 662	E

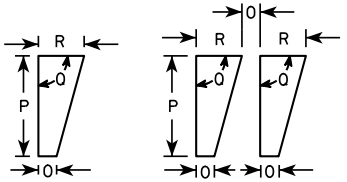


NOTES

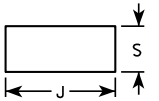
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing of numerals, hyphen, foot & inch marks to achieve proper balance.



Arrow Detail



Foot Mark & Inch Mark Detail



Hyphen Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		5	1 5/8	3 3/8	3 3/4	6 5/8	5 3/4	3/4	2 1/2	1/2	2 1/4	90°	1	1 5/8								6.25
2S	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
2M	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
3	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
4	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
5	48		2 1/4	3/4	1		8	2 5/8	5 1/2	5 7/8	10 5/8	9 1/4	1 3/8	4	5/8	3 5/8	90°	1 5/8	2 1/2								16.00

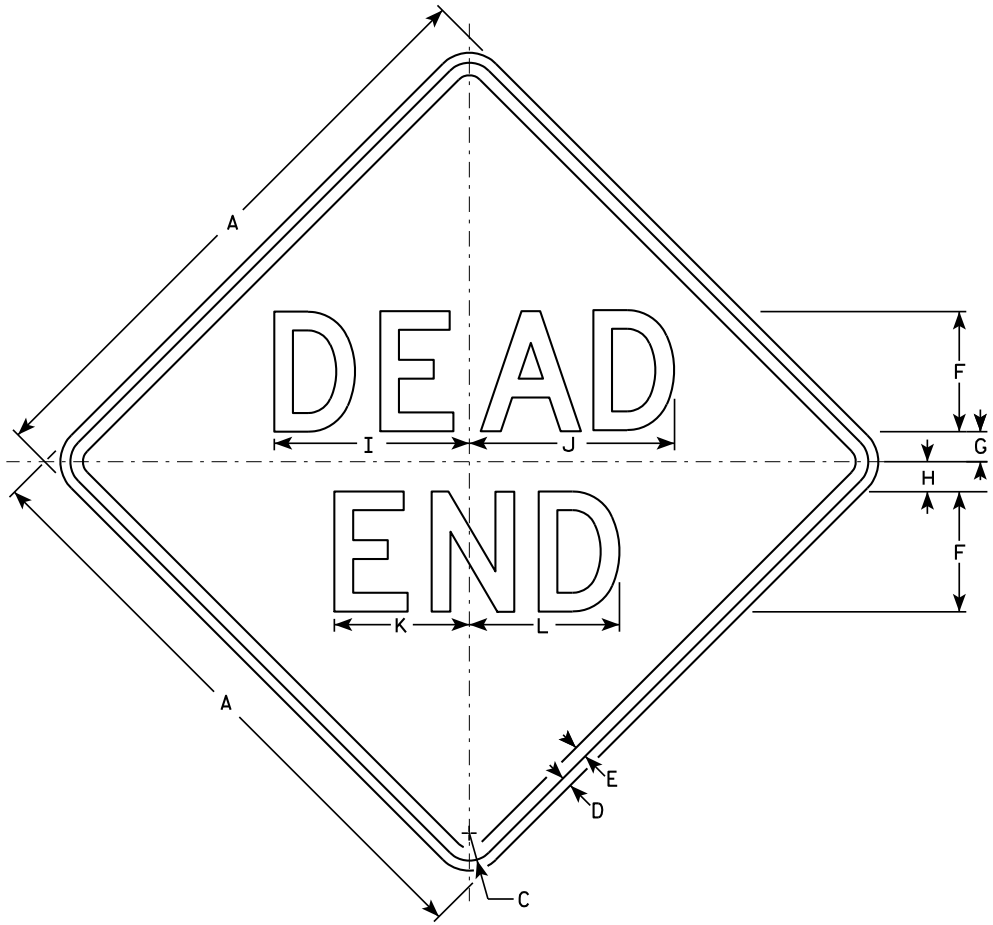
STANDARD SIGN
W12-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 663	E



W14-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0
2S	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
2M	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
3	36		1 5/8	5/8	3/4	7	2	3	11 3/8	12	7 7/8	8 3/4															9.0
4																											
5																											

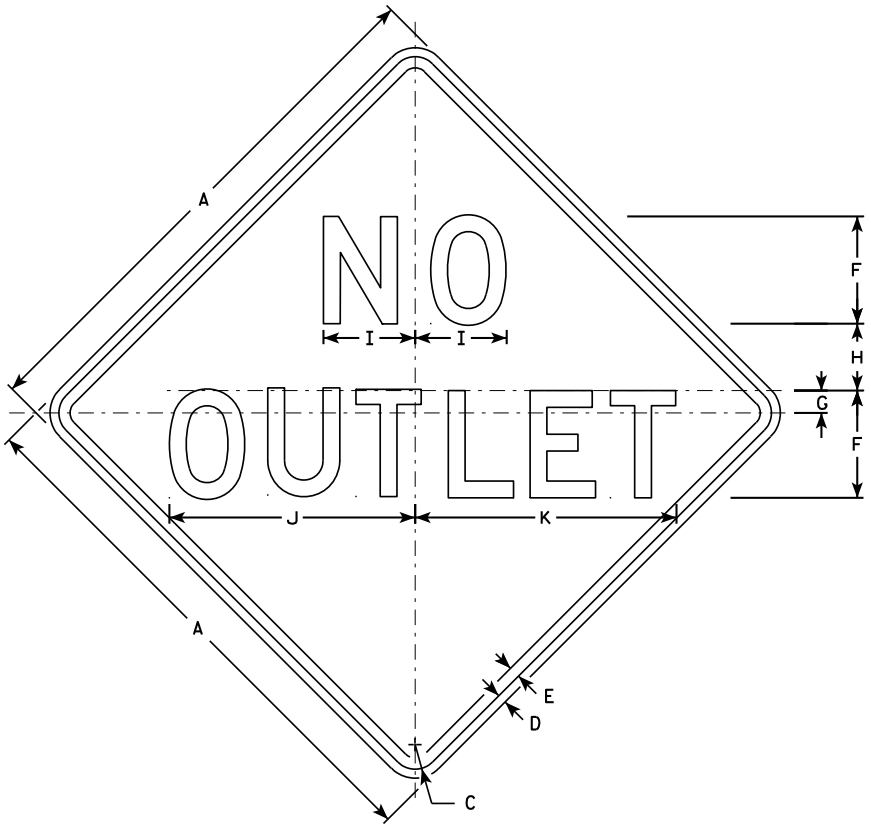
STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W14-1.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 664	E



W14-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2 3/4	4 1/8	11 3/4	12 3/8																4.0
2S	30		1 3/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
2M	30		1 3/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
3	36		1 5/8	5/8	3/4	7	1 3/8	4 5/8	6	16 1/8	17 1/8																9.0
4																											
5																											

STANDARD SIGN
W14-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

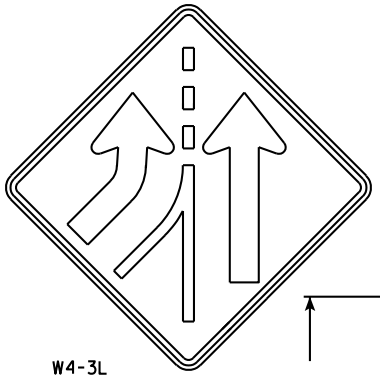
DATE 3/16/11 PLATE NO. W14-2.2

PROJECT NO:

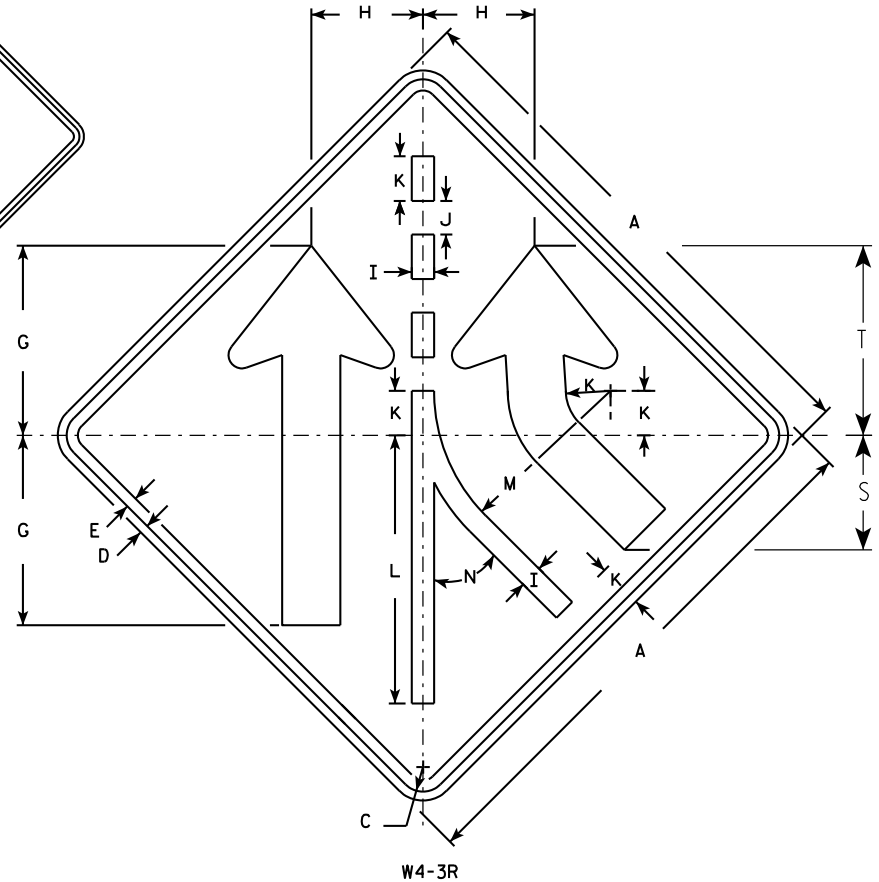
SHEET NO: 665 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W142.DGN PLOT DATE : 16-MAR-2011 15:50 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42



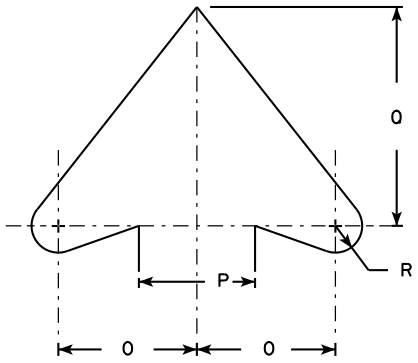
W4-3L



W4-3R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-3 L is the same as W4-3 R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		10 5/8	6 1/4	1 1/4	1 7/8	2 1/2	15	9 7/8	45°	3 7/8	3 1/4	6 1/8	3/4	6 3/8	10 5/8							6.25
2S	36		1 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2M	36		1 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
3																											
4	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

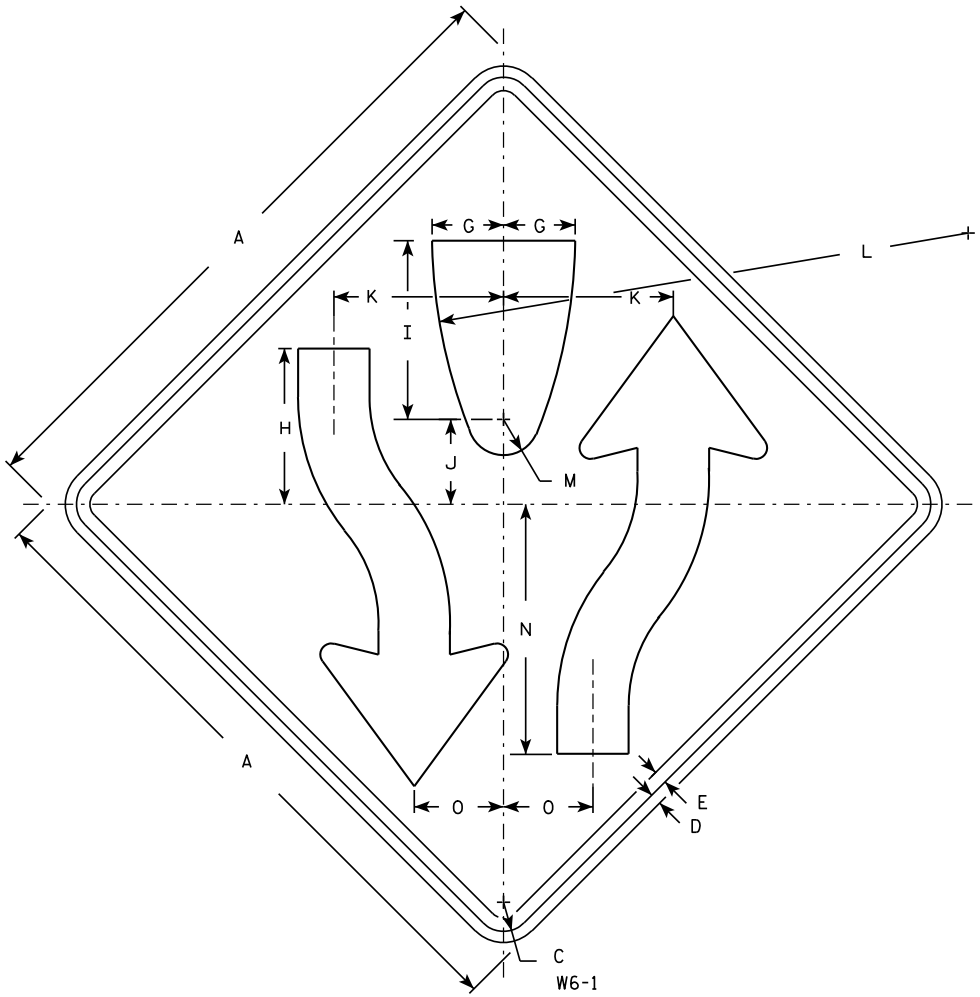
STANDARD SIGN
W4-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/21/11 PLATE NO. W4-3.7

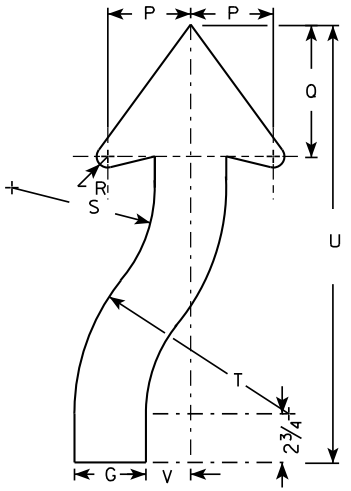
PROJECT NO:

SHEET NO: 666 E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

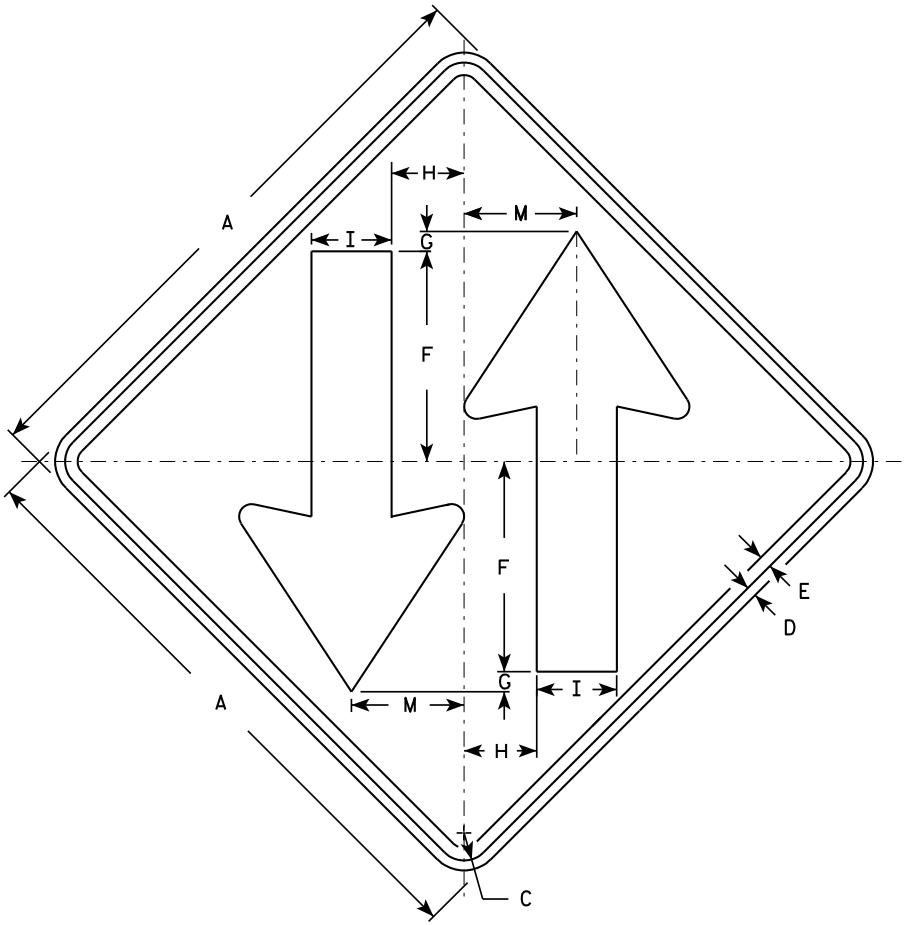
STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W6-1.13

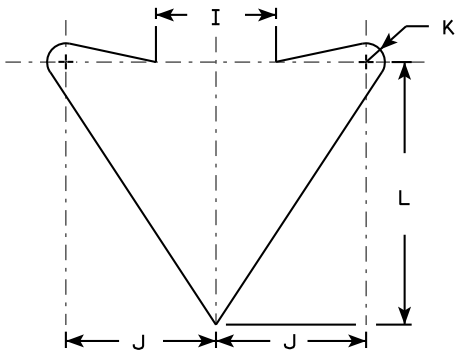
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 667	E



W6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25
2S	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2M	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
3																											
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

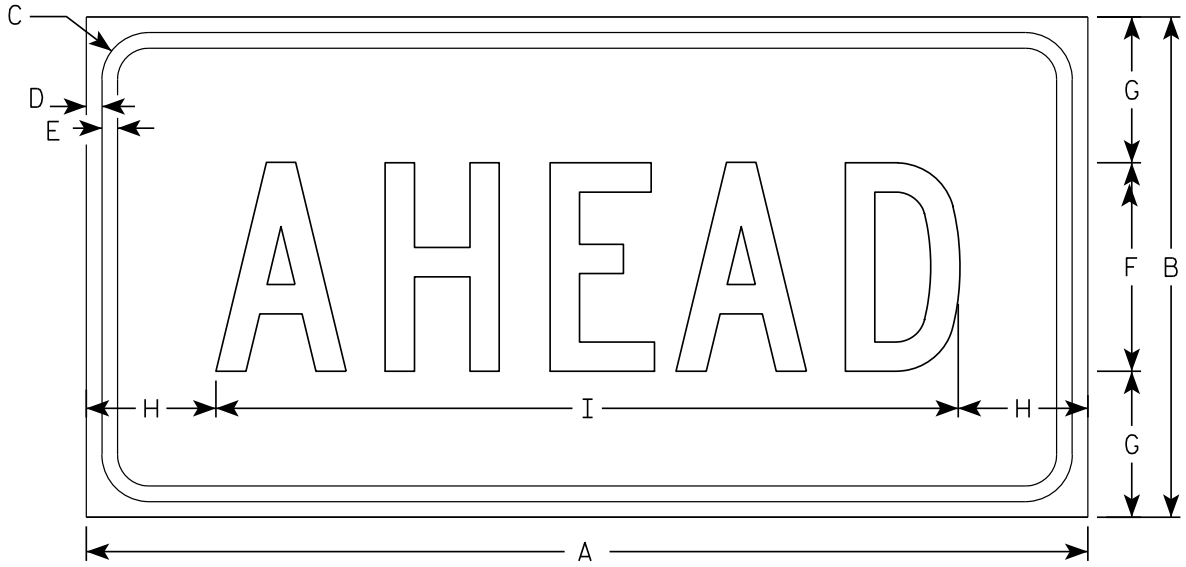
STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/22/11 PLATE NO. W6-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 668	E



W16-9P

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
WF16-9P

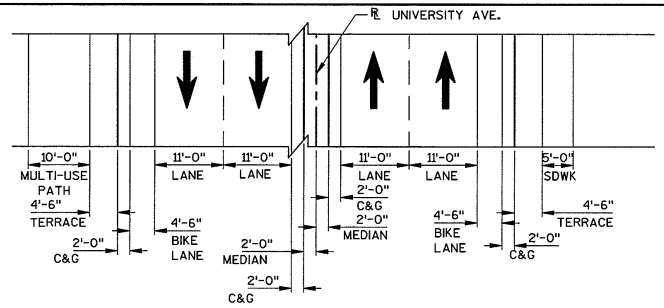
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/28/10 PLATE NO. WF16-9P.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 669 | E

STATE PROJECT NUMBER
5992-08-79

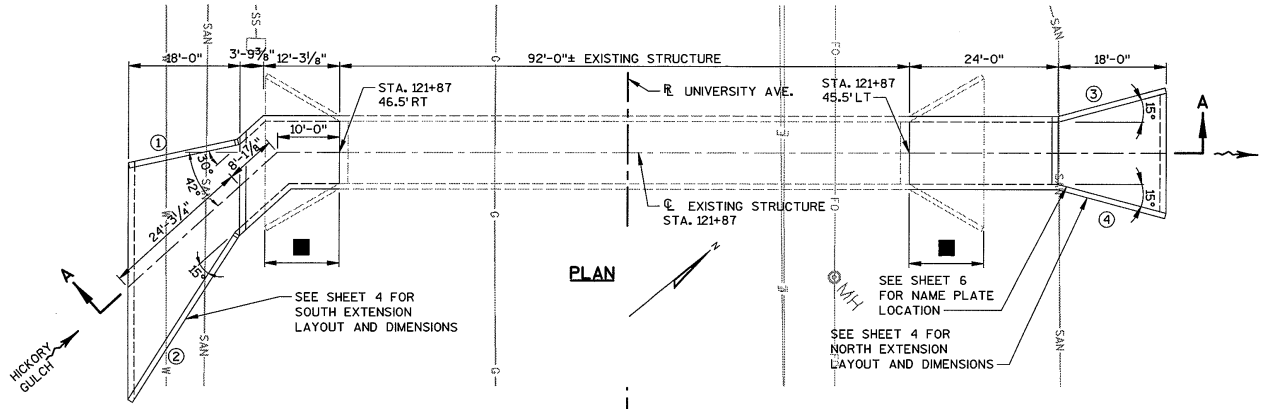


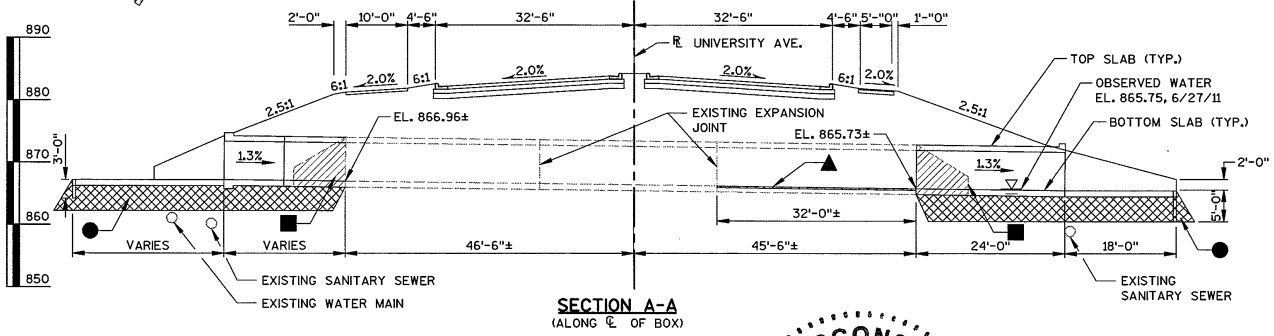
LEGEND

- ■ REMOVE EXISTING WINGS AND APRON
- ⑧ INDICATES WING NUMBER
- ▲ CONCRETE SURFACE REPAIR. REPAIR CONCRETE IN EXISTING BASE SLAB WHERE SHOWN.
- ● UNDERCUT EXISTING SUBGRADE AND PLACE SAS GEOTEXTILE AND BREAKER RUN STONE. SEE DETAIL ON SHEET 6.

DESIGN DATA

LIVE LOAD: HL-93
EARTH LOAD: DESIGNED FOR 10.0 FEET OF FILL (2.0 FEET MIN.)
ULTIMATE DESIGN STRESSES:
CONCRETE SUPERSTRUCTURE GRADE A-FA _____ f'c = 3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT _____ fy = 60,000 psi
TRAFFIC DATA:
A.D.T. (2012) : 33,000 - 47,000
A.D.T. (2032) : 45,400 - 64,800
DESIGN SPEED: 40 MPH





SECTION A-A
(ALONG ℄ OF BOX)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE.

REMOVAL OF THE EXISTING WINGS AND APRONS WILL BE PAID FOR AS "REMOVING OLD STRUCTURE STA. 121+87.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS C-13-2044" SHALL BE THE EXISTING GROUNDLINE.

WITHIN THE LENGTH OF THE BOX AND BEHIND THE APRON WINGS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE LIMITS SHOWN IN THE DETAIL ON SHEET 6.

BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SHOWN OR NOTED.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

THE CONCRETE IN THE CUTOFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

THE ALTERNATE CUT-OFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT-OFF WALL. PAYMENT SHALL BE BASED ON CONCRETE CUT-OFF WALLS.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR.

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".

THE EXISTING STRUCTURE IS A 6'-0" X 10'-0" REINFORCED CONCRETE BOX CULVERT AND SHALL REMAIN IN PLACE UNLESS NOTED OTHERWISE.

LIST OF DRAWINGS

1. GENERAL PLAN, NOTES, AND QUANTITIES
2. SUBSURFACE EXPLORATION
3. CROSS-SECTION AND DETAILS
4. BARREL, APRON & WING DETAILS
5. APRON AND WING DETAILS
6. MISC. DETAILS

TOTAL ESTIMATED QUANTITIES

WISDOT ITEM NO.	BID ITEM	UNIT	TOTAL
203.0200	REMOVING OLD STRUCTURE STA. 121+87	L.S.	1
206.2000	EXCAVATION FOR STRUCTURES CULVERTS C-13-2044	L.S.	1
210.0100	BACKFILL STRUCTURE	C.Y.	186
311.0115	BREAKER RUN	C.Y.	243
502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	48
504.0100	CONCRETE MASONRY CULVERTS	C.Y.	98
505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	LB.	12,330
509.1500	CONCRETE SURFACE REPAIR	S.F.	320
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	28
645.0140	GEOTEXTILE FABRIC TYPE SAS	S.Y.	366
	NON-BID ITEM		
	FILLER	SIZE	3/4"

WISCONSIN
DAVID D. RICE E-24137 MADISON WI
PROFESSIONAL ENGINEER
11/8/11

BENCH MARKS

NO.	STATION	OFFSET	DESCRIPTION	ELEV.
3	114+91	48' RT	RR SPIKE IN POLE	898.02
4	117+80	49' RT	RR SPIKE IN POLE	892.81

BOS CONTACT: WILLIAM DREHER (608) 266-8489
DESIGN CONTACT: DAVE WALKER (608) 251-4843

NO.	DATE	REVISION	BY

STRAND ASSOCIATES, INC. ENGINEERS
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715
(608)-251-4843
(608) 251-8655 FAX
WWW.STRAND.COM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher FOR CHIEF STRUCTURES DESIGN ENGINEER 11/08/11 DATE

STRUCTURE C-13-2044

CTH MS (UNIVERSITY AVENUE) BOX CULVERT EXTENSIONS

COUNTY DANE | CITY MADISON

DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	KRB	DESIGN CK'D.	DDR	DRAWN BY	AJW	PLANS CK'D.	DJW

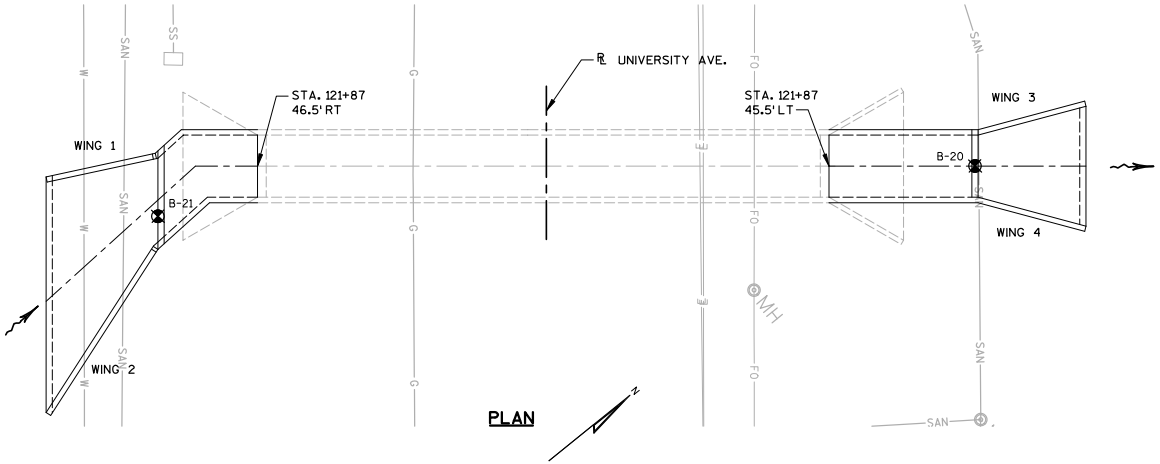
GENERAL PLAN, NOTES, AND QUANTITIES

SHEET 1 OF 6
670

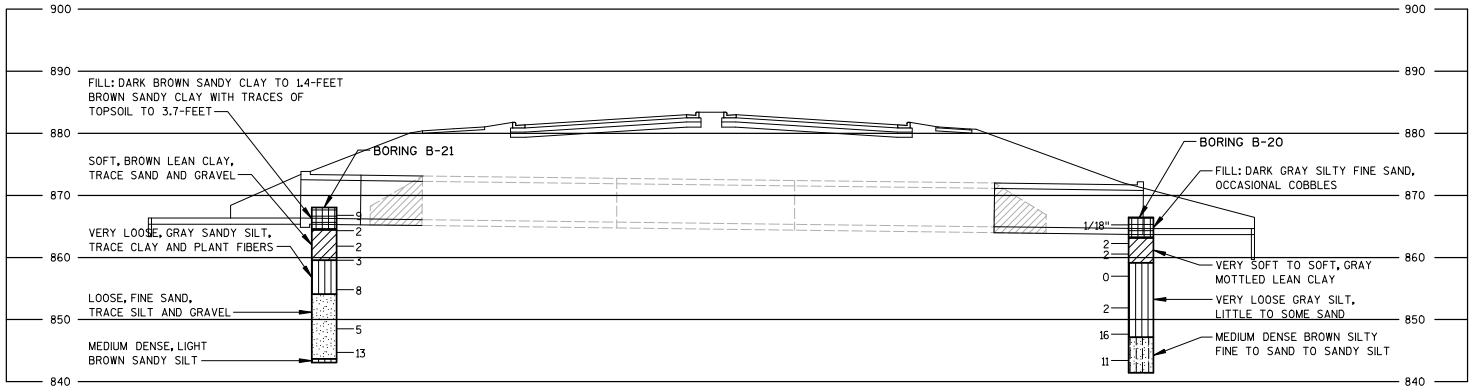
8

8

BORINGS PREPARED BY:
CGC, INC.
2921 PERRY STREET
MADISON, WI



PLAN



STATE PROJECT NUMBER

5992-08-79

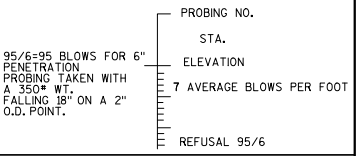
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

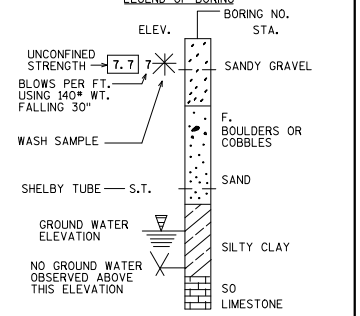
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2044

CONST SPEC	2010	DRAWN BY	AJW	PLANS CK'D.	DJW

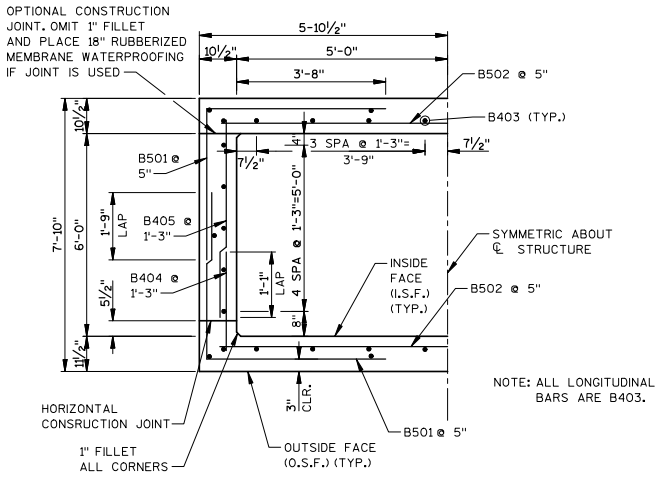
SUBSURFACE EXPLORATION

SHEET 2 OF 6
671

8

8

STATE PROJECT NUMBER
5992-08-79

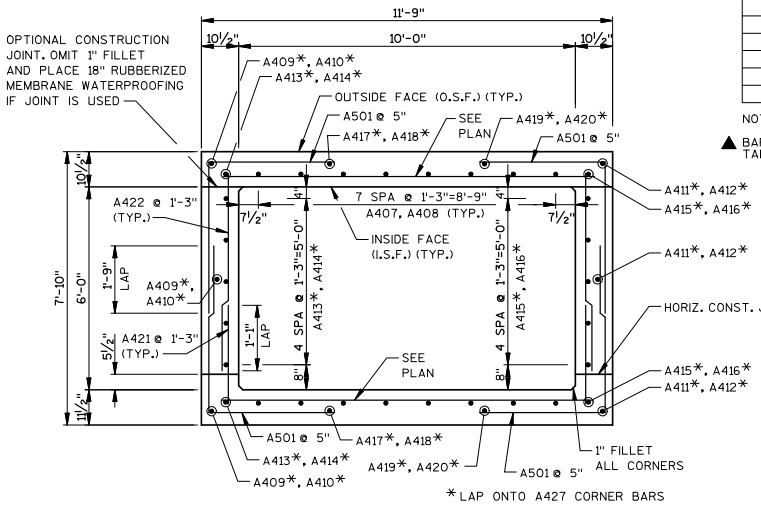


SECTION THRU NORTH BARREL EXTENSION
(NORMAL TO BOX)

NORTH BARREL EXTENSION
BILL OF BARS
UNCOATED 4,490 LBS.

MARK	NO.	LENGTH	BENT	BAR SERIES	LOCATION
B501	232	8'-11"	X		WALLS - VERTICAL - O.S.F.
B502	116	11'-3"			TOP AND BOTTOM SLAB - TRANSVERSE - I.S.F.
B403	40	23'-8"			WALLS AND SLABS - LONGITUDINAL - I.S.F. AND O.S.F.
B404	40	2'-3"			WALL - VERTICAL - DOWELS - I.S.F.
B405	40	6'-2"			WALL - VERTICAL - I.S.F.
B506	24	3'-5"			CONCRETE MASONRY ANCHORS
B407	2	11'-5"			HEADER - HORIZ.
B308	16	2'-6"	X		HEADER - STIRRUPS

NOTE: THE FIRST ONE OR TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



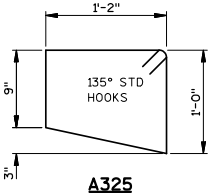
SECTION THRU SOUTH BARREL EXTENSION
(NORMAL TO BOX, LOOKING NORTH)

SOUTH BARREL EXTENSION
BILL OF BARS
UNCOATED 4,460 LBS.

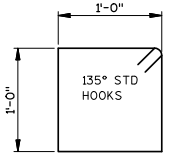
MARK	NO.	LENGTH	BENT	BAR SERIES	LOCATION
A501	176	8'-11"	X		WALLS - VERTICAL - O.S.F.
A502	8	11'-3"			TOP AND BOTTOM SLAB - TRANSVERSE - I.S.F.
▲ A503	52	11'-8"		X	TOP AND BOTTOM SLAB - TRANSVERSE - I.S.F.
▲ A504	22	11'-9"		X	TOP AND BOTTOM SLAB - TRANSVERSE - I.S.F.
▲ A505	28	8'-2"		X	TOP AND BOTTOM SLAB - TRANSVERSE - I.S.F.
▲ A506	18	2'-10"		X	TOP AND BOTTOM SLAB - TRANSVERSE - I.S.F.
▲ A407	16	9'-8"		X	TOP AND BOTTOM SLAB - LONGITUDINAL - I.S.F.
▲ A408	16	7'-9"		X	TOP AND BOTTOM SLAB - LONGITUDINAL - I.S.F.
A409	3	11'-9"			TOP AND BOTTOM SLAB AND WEST WALL - LONGITUDINAL - O.S.F.
A410	3	4'-10"			TOP AND BOTTOM SLAB AND WEST WALL - LONGITUDINAL - O.S.F.
A411	3	7'-6"			TOP AND BOTTOM SLAB AND EAST WALL - LONGITUDINAL - O.S.F.
A412	3	10'-7"			TOP AND BOTTOM SLAB AND EAST WALL - LONGITUDINAL - O.S.F.
A413	7	11'-8"			TOP AND BOTTOM SLAB AND WEST WALL - LONGITUDINAL - I.S.F.
A414	7	5'-0"			TOP AND BOTTOM SLAB AND WEST WALL - LONGITUDINAL - I.S.F.
A415	7	7'-7"			TOP AND BOTTOM SLAB AND EAST WALL - LONGITUDINAL - I.S.F.
A416	7	10'-5"			TOP AND BOTTOM SLAB AND EAST WALL - LONGITUDINAL - I.S.F.
A417	2	10'-3"			TOP AND BOTTOM SLAB - LONGITUDINAL - O.S.F.
A418	2	6'-11"			TOP AND BOTTOM SLAB - LONGITUDINAL - O.S.F.
A419	2	9'-0"			TOP AND BOTTOM SLAB - LONGITUDINAL - O.S.F.
A420	2	8'-6"			TOP AND BOTTOM SLAB - LONGITUDINAL - O.S.F.
A421	32	2'-3"			WALL - VERTICAL - DOWELS - I.S.F.
A422	32	6'-2"			WALL - VERTICAL - I.S.F.
A523	24	3'-5"			CONCRETE MASONRY ANCHORS
A924	12	15'-6"			HEADER AND FOOTER - HORIZONTAL
A325	20	4'-6"	X		HEADER - STIRRUP
A326	20	4'-5"	X		FOOTER - STIRRUP
A427	40	4'-0"	X		WALLS AND SLABS - LONGITUDINAL - I.S.F. AND O.S.F.

NOTE: THE FIRST ONE OR TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

▲ BAR SERIES - LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



A325



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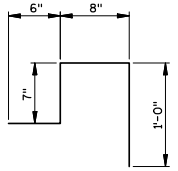
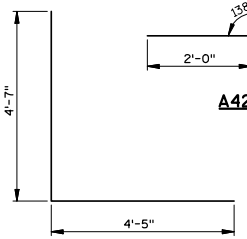


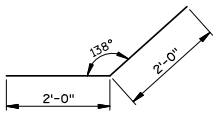
B308

▲ BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
A503	2 SERIES OF 26	11'-3" TO 12'-0"
A504	2 SERIES OF 11	11'-6" TO 12'-0"
A505	2 SERIES OF 14	5'-0" TO 11'-4"
A506	2 SERIES OF 9	1'-0" TO 4'-8"
A407	2 SERIES OF 8	7'-11" TO 11'-4"
A408	2 SERIES OF 8	5'-5" TO 10'-0"



A501, B501



A427

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2044

DRAWN BY AJW | PLANS CK'D. DJW

CROSS-SECTION AND DETAILS

SHEET 3 OF 6
672

8

8

STATE PROJECT NUMBER

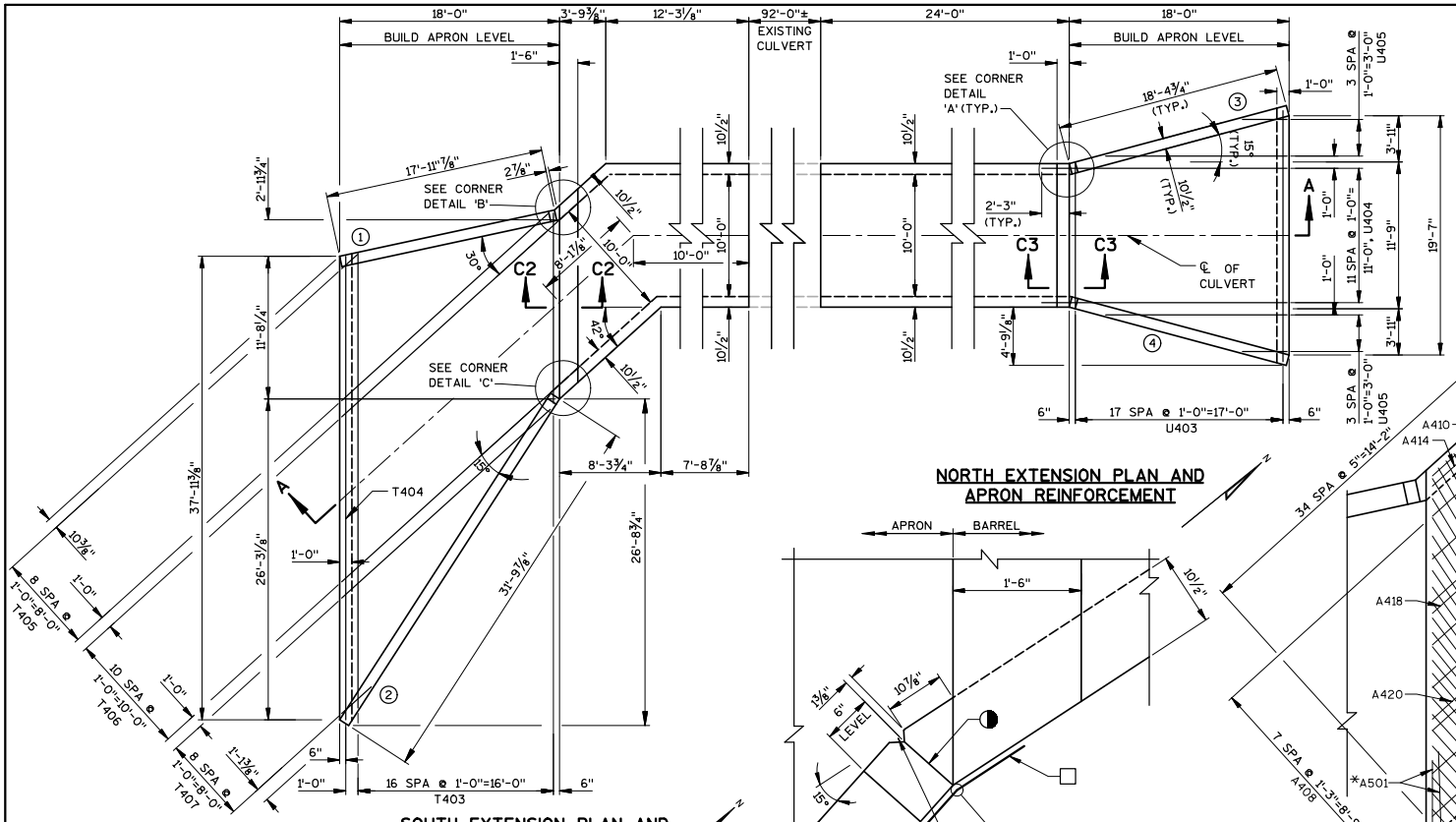
5992-08-79

NOTE

SEE SHEET 1 FOR SECTION A-A.

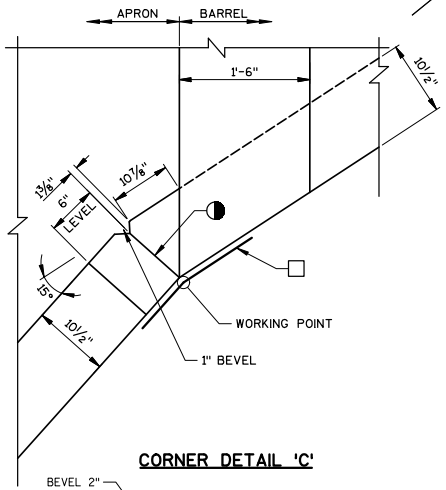
LEGEND

- RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WALL. 1'-6" MIN. WIDTH.
- ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.
- (*) INDICATES WING NUMBER

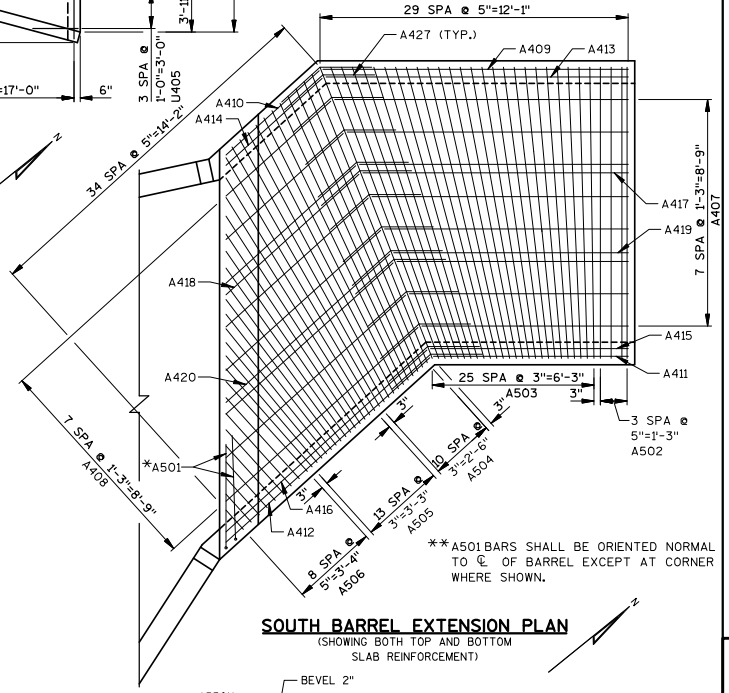


SOUTH EXTENSION PLAN AND APRON REINFORCEMENT

NORTH EXTENSION PLAN AND APRON REINFORCEMENT

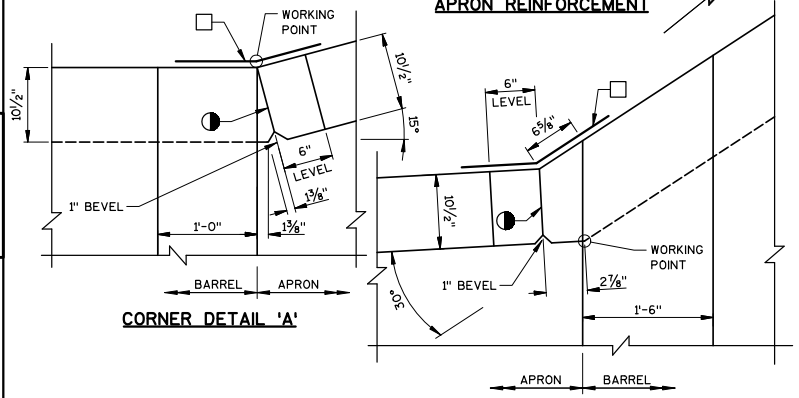


CORNER DETAIL 'C'



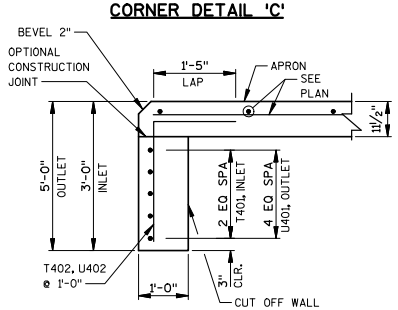
**A501 BARS SHALL BE ORIENTED NORMAL TO ℄ OF BARREL EXCEPT AT CORNER WHERE SHOWN.

SOUTH BARREL EXTENSION PLAN
(SHOWING BOTH TOP AND BOTTOM SLAB REINFORCEMENT)

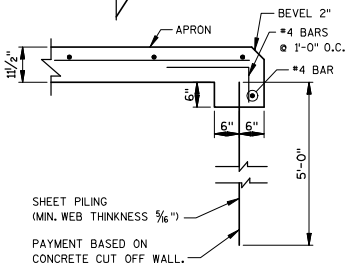


CORNER DETAIL 'A'

CORNER DETAIL 'B'



SECTION THRU CUTOFF WALL



ALTERNATE CUTOFF WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2044

DRAWN BY AJW | PLANS CK'D. DJW

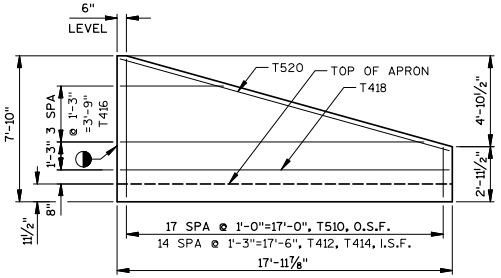
BARREL, APRON & WING DETAILS

SHEET 4 OF 6
673

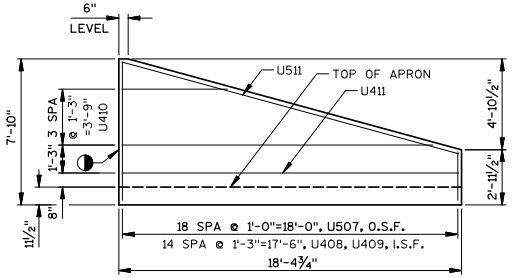
8

8

STATE PROJECT NUMBER
5992-08-79



WING 1 ELEVATION

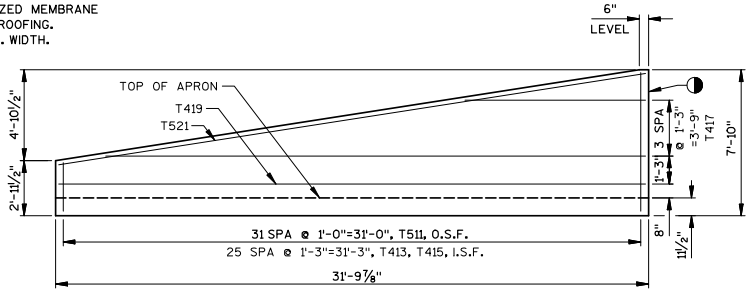


WINGS 3 AND 4 ELEVATIONS

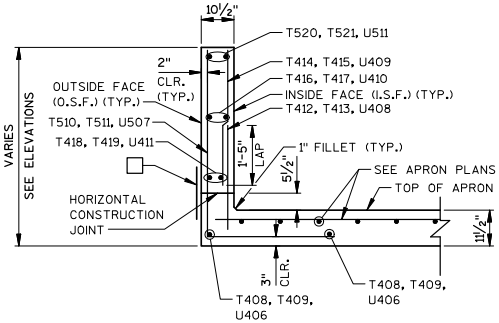
LEGEND

◑ ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WALL. INCLUDED IN WING LENGTH.

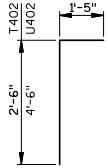
☐ RUBBERIZED MEMBRANE WATERPROOFING. 1'-6" MIN. WIDTH.



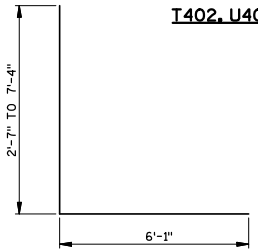
WING 2 ELEVATION



TYPICAL SECTION THRU WING



T402, U402



T510, T511, U507

NORTH APRON AND WINGS BILL OF BARS

UNCOATED 1,410 LBS.

	MARK	NO.	LENGTH	BENT	BAR SERIES	LOCATION
	U401	5	20'-10"			CUT OFF WALL - HORIZ.
	U402	22	5'-10"	X		CUT OFF WALL - VERT.
▲	U403	18	16'-3"		X	APRON - TRANS. - TOP
	U404	12	20'-1"			APRON - LONG. - TOP
▲	U405	8	9'-3"		X	APRON - LONG. - TOP
	U406	4	18'-0"			APRON - LONG. - BOTTOM
▲	U507	38	10'-11"	X	X	WINGS - VERT. - O.S.F.
	U408	30	2'-7"			WINGS - VERT. - DOWEL - I.S.F.
▲	U409	30	3'-9"		X	WINGS - VERT. - I.S.F.
▲	U410	16	10'-11"		X	WINGS - HORIZ.
	U411	4	18'-0"			WINGS - HORIZ.
	U511	4	18'-7"			WINGS - HORIZ. - TOP

NOTE: THE FIRST ONE OR TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

▲ BAR SERIES - LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

▲ BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
U403	1 SERIES OF 18	11'-8" TO 20'-10"
U405	2 SERIES OF 4	3'-7" TO 14'-10"
U507	2 SERIES OF 19	8'-7" TO 13'-4"
U409	2 SERIES OF 15	1'-4" TO 6'-2"
U410	4 SERIES OF 4	4'-0" TO 17'-9"

SOUTH APRON AND WINGS BILL OF BARS

UNCOATED 1,970 LBS.

	MARK	NO.	LENGTH	BENT	BAR SERIES	LOCATION
	T401	3	37'-7"			CUT OFF WALL - HORIZ.
	T402	39	3'-10"	X		CUT OFF WALL - VERT.
▲	T403	17	26'-2"		X	APRON - TRANS. - TOP
	T404	1	37'-7"			APRON - TRANS. - TOP
▲	T405	9	12'-3"		X	APRON - LONG. - TOP
	T406	11	26'-3"			APRON - LONG. - TOP
▲	T407	9	13'-2"		X	APRON - LONG. - TOP
	T408	2	24'-0"			APRON - LONG. - BOTTOM - EAST
	T409	2	18'-0"			APRON - LONG. - BOTTOM - WEST
▲	T510	18	10'-11"	X	X	WING 1 - VERT. - O.S.F.
▲	T511	32	10'-11"	X	X	WING 2 - VERT. - O.S.F.
	T412	15	2'-7"			WING 1 - VERT. - DOWEL - I.S.F.
	T413	26	2'-7"			WING 2 - VERT. - DOWEL - I.S.F.
▲	T414	15	3'-9"		X	WING 1 - VERT. - I.S.F.
▲	T415	26	3'-9"		X	WING 2 - VERT. - I.S.F.
▲	T416	8	10'-8"		X	WING 1 - HORIZ.
▲	T417	8	18'-11"		X	WING 2 - HORIZ.
	T418	2	17'-6"			WING 1 - HORIZ.
	T419	2	31'-5"			WING 2 - HORIZ.
	T520	2	18'-3"			WING 1 - HORIZ. - TOP
	T521	2	31'-9"			WING 2 - HORIZ. - TOP

NOTE: THE FIRST ONE OR TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

▲ BAR SERIES - LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

▲ BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
T403	1 SERIES OF 17	15'-6" TO 36'-10"
T405	1 SERIES OF 9	1'-8" TO 22'-9"
T407	1 SERIES OF 9	3'-3" TO 23'-0"
T510	1 SERIES OF 18	8'-7" TO 13'-4"
T511	1 SERIES OF 32	8'-7" TO 13'-4"
T414	1 SERIES OF 15	1'-4" TO 6'-2"
T415	1 SERIES OF 26	1'-4" TO 6'-2"
T416	2 SERIES OF 4	3'-11" TO 17'-4"
T417	2 SERIES OF 4	6'-10" TO 30'-11"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2044

DRAWN BY AJW | PLANS CK'D. DJW

APRON AND WING DETAILS

SHEET 5 OF 6
674

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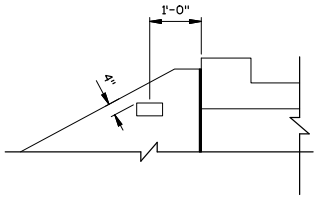
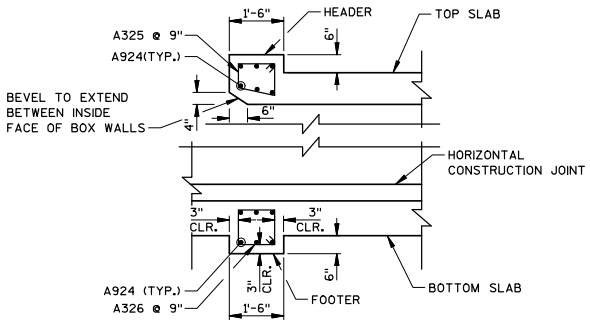
8

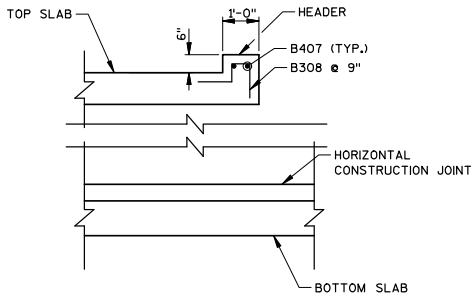
STATE PROJECT NUMBER
5992-08-79



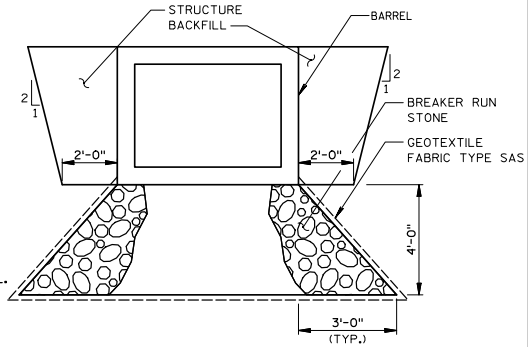
NAME PLATE LOCATION
WING 4



SECTION C2
(INLET)



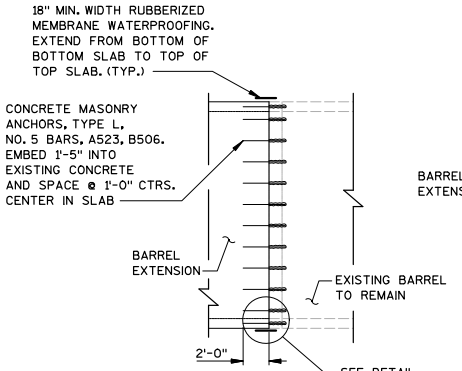
SECTION C3
(OUTLET)



NOTES:
UNDERCUT APRONS SIMILAR TO BARREL.

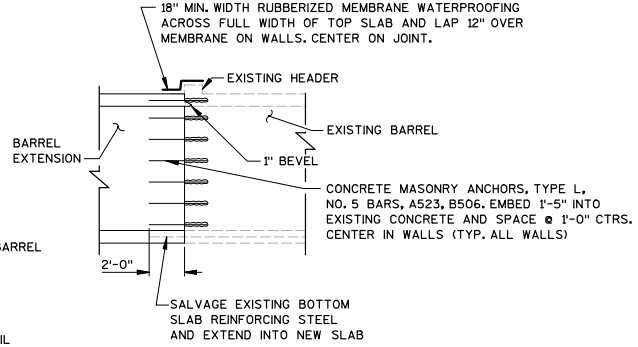
PROVIDE STRUCTURE BACKFILL BEHIND APRON WINGS SIMILAR TO BARREL.

UNDERCUT AND BACKFILL STRUCTURE LIMITS



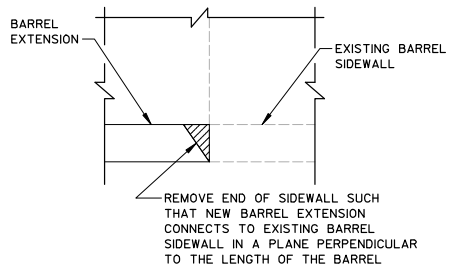
PLAN

NOTE:
ROUGHEN ENDS OF EXISTING BARREL WALLS, TOP SLAB, AND BOTTOM SLAB TO ¼" AMPLITUDE PRIOR TO PLACING NEW CONCRETE.



ELEVATION

CONSTRUCTION JOINT DETAILS



DETAIL 'D'

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2044

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MISC. DETAILS

SHEET 6 OF 6
675

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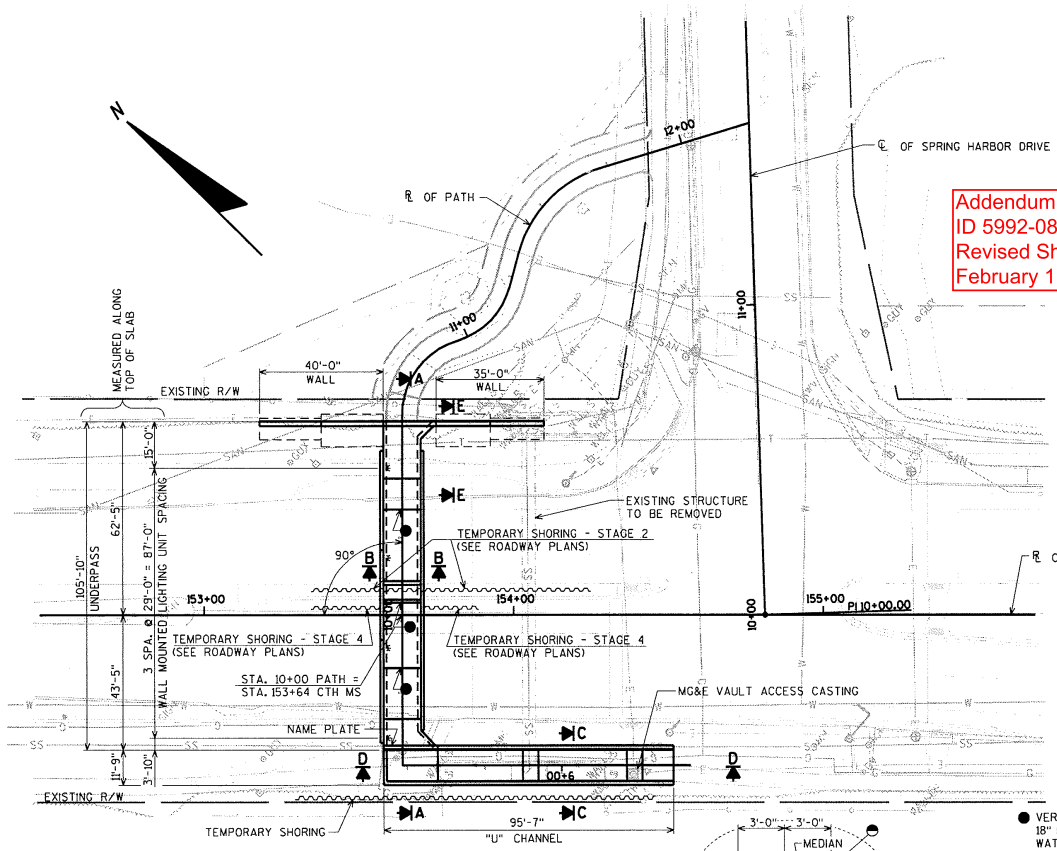
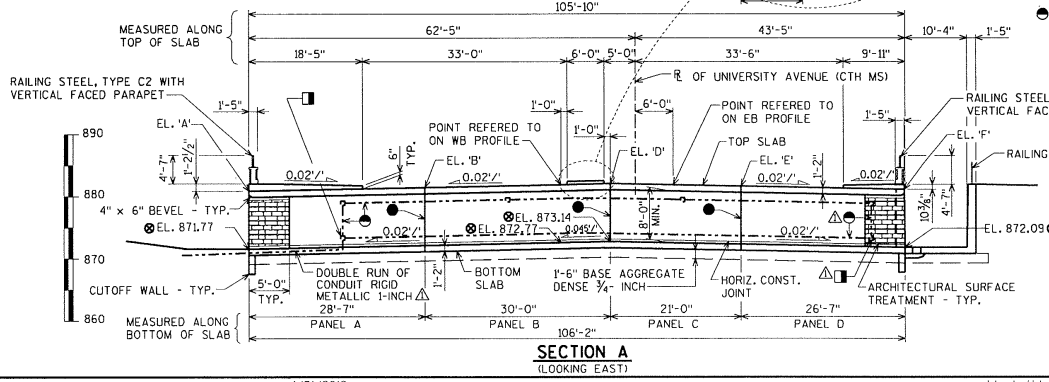
8

STATE PROJECT NUMBER
5992-08-82

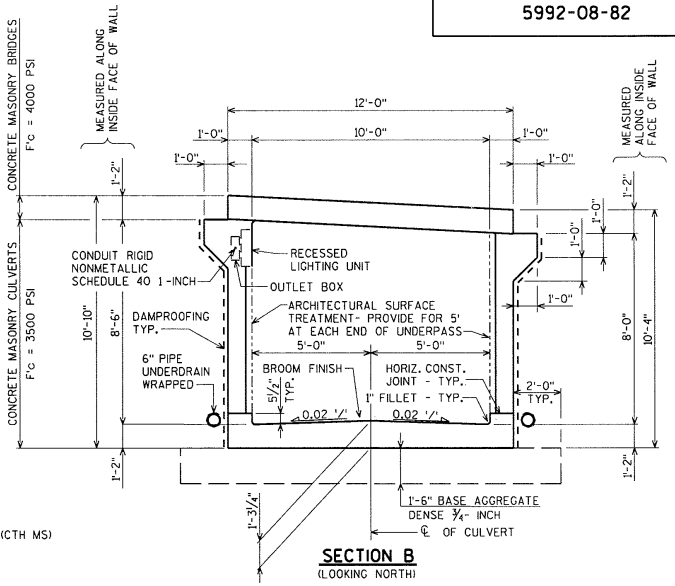
Addendum No. 1
ID 5992-08-79
Revised Sheet 676
February 1, 2012



PLAN
PEDESTRIAN UNDERPASS



SECTION A
(LOOKING EAST)



SECTION B
(LOOKING NORTH)

TOP OF SLAB ELEVATIONS (TAKEN ALONG FRONT FACE OF WALLS)

WALL	EL. 'A'	EL. 'B'	EL. 'C'	EL. 'D'	EL. 'E'	EL. 'F'
WEST	881.34	881.91	882.35	882.71	882.29	881.76
EAST	880.59	881.41	881.85	882.21	881.79	881.01

- JUNCTION BOX 8x8x8-INCH 1'-6" ABOVE FLOOR IN WEST WALL
- ⊗ ELEVATION TAKEN AT CENTERLINE OF CULVERT
- ● VERTICAL CONSTRUCTION JOINT. 18" RUBBERIZED MEMBRANE WATERPROOFING REQ'D. AT WALLS. SEAL WITH CRACK SEALER PER SECTION 502.3.13 OF THE STANDARD SPEC. PAYMENT INCIDENTAL TO "CONCRETE MASONRY BRIDGES."
- ◒ CONDUIT RIGID NONMETALLIC SCHEDULE 40

FOR SECTIONS C, D, & E SEE SHEET 3

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES AND NOTES
3. TYPICAL DETAILS
4. SUBSURFACE EXPLORATION
5. UNDERPASS PANEL A BOTTOM SLAB
6. UNDERPASS PANEL A TOP SLAB
7. UNDERPASS PANEL B
8. UNDERPASS PANEL C
9. UNDERPASS PANEL D BOTTOM SLAB
10. UNDERPASS PANEL D TOP SLAB
11. UNDERPASS DETAILS PANELS A & D
12. UNDERPASS DETAILS PANELS A & D
13. UNDERPASS DETAILS PANELS B & C
14. UNDERPASS BILL OF BARS
15. U CHANNEL PANELS E & F
16. U CHANNEL PANELS G & H
17. U CHANNEL PANEL E SECTION
18. U CHANNEL PANEL E SECTION
19. U CHANNEL PANEL F SECTION
20. U CHANNEL PANEL G SECTION
21. U CHANNEL PANEL H SECTION
22. U CHANNEL BILL OF BARS
23. WALLS R1 & R2 & BILL OF BARS
24. WALLS R3 & R4
25. SECTIONS THRU WALLS
26. RAILING LAYOUT
27. RAILING TYPE C2 & PARAPET DETAILS
28. RAILING STEEL TYPE C2
29. RAILING DETAILS

FOR GENERAL NOTES, DESIGN DATA, AND QUANTITIES SEE SHEET 2

WISCONSIN PROFESSIONAL ENGINEER
DANIEL N. SYDOW
E-38363
WI
1/31/12

BUREAU OF STRUCTURES CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

NO.	DATE	REVISION	BY
1	1/30/12	ADDENDUM FOR CONDUIT	DNS

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher BAR 12/09/11
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-13-2047

UNIVERSITY AVENUE (CTH MS) OVER PEDESTRIAN UNDERPASS

COUNTY: DANE — ~~TOWN~~/CITY/VILLAGE: MADISON

DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
DNS	AEB	CLS	DNS

GENERAL PLAN

SHEET 1 OF 29
676
676

DATE: 10/25/2011
DATE:
CHECKED BY: DNS
BACK CHECKED BY:
CORRECTED BY:

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STATE PROJECT NUMBER
5992-08-82

LIST OF BID ITEMS

203.0200	REMOVING OLD STRUCTURE STA. 154+00	1	LS
206.2000	EXCAVATION FOR STRUCTURES CULVERTS C-13-2047	1	LS
206.6000.S	TEMPORARY SHORING	1,800	SF
210.0100	BACKFILL STRUCTURE	1,200	CY
305.0110	BASE AGGREGATE DENSE ¾- INCH	400	TON
① 502.0100	CONCRETE MASONRY BRIDGES	95	CY
502.3200	PROTECTIVE SURFACE TREATMENT	230	SY
504.0100	CONCRETE MASONRY CULVERTS	333	CY
505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	27,810	LB
505.0610	BAR STEEL REINFORCEMENT HS COATED CULVERTS	15,260	LB
513.2000	RAILING PIPE C-13-2047	1	LS
513.6000	RAILING STEEL C-13-2047	1	LS
513.7010	RAILING STEEL TYPE C2 C-13-2047	1	LS
516.0100	DAMPROOFING	220	SY
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	120	SY
517.1015.S	CONCRETE STAINING MULTI-COLOR C-13-2047	3,000	SF
517.1050.S	ARCHITECTURAL SURFACE TREATMENT C-13-2047	2,320	SF
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	500	LF
652.0110	CONDUIT RIGID METALLIC 1-INCH	70	LF ⚠
652.0210	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	190	LF ⚠
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	30	LF
652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	30	LF
653.0208	JUNCTION BOXES 8x8x8 - INCH	2	EACH ⚠
SPV.0060.42	TRENCH FRAME AND GRATED COVER	1	EACH
SPV.0060.54	4x4x4-INCH OUTLET BOX	4	EACH

NON-BID ITEMS

FILLER	¾	SIZE

① SUPERSTRUCTURE CONCRETE (f'c=4000 PSI) IN TOP SLAB, SIDEWALKS, MEDIAN, & PARAPETS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" SHALL BE THE EXISTING GROUND LINE.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TO THE BOTTOM OF THE SUBGRADE WITHIN THE LENGTH OF THE BOX. THE PAY LIMITS OF THE BACKFILL STRUCTURE ARE 2'-0" BEYOND THE HORIZONTAL PLAN LIMITS AT THE BOTTOM OF THE BOX AND UP AT A 1:1.5 BACKFILL SLOPE FROM BOTTOM OF SLAB. PAY LIMITS OF BACKFILL STRUCTURE AT RETAINING WALLS ARE AS SHOWN ON SHEET 25.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE TOP OF BOX, THE TOP AND FACE OF MEDIAN, THE TOP AND FACE OF SIDEWALK AND THE TOP AND INSIDE FACE OF PARAPETS.

THE EXISTING STRUCTURE TO BE REMOVED IS A 104 FT. LONG 7.8 FT. HIGH x 7 FT. WIDE CORRUGATED STEEL CULVERT PIPE WITH CONCRETE RETAINING WALLS AND STAIRS AT EACH END.

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.05
OPERATING RATING FACTOR: 1.35
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 255 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 #/S.F.

ULTIMATE DESIGN STRESSES:

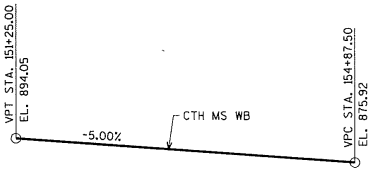
CONCRETE MASONRY	TOP SLAB, SIDEWALKS, MEDIAN, & PARAPETS	f'_c =	4,000 p.s.i.
	ALL OTHER	f'_c =	3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60)		f_y =	60,000 p.s.i.

FOUNDATION DATA:

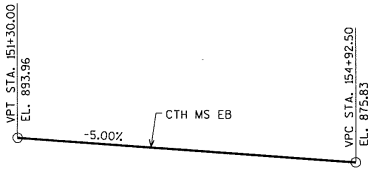
THE MAXIMUM DESIGN SOIL PRESSURE IS 1.25 TONS PER SQ. FT.

TRAFFIC DATA:

A.D.T. = 45,400 (2012)
A.D.T. = 64,800 (2032)
R.D.S. = 40 M.P.H.

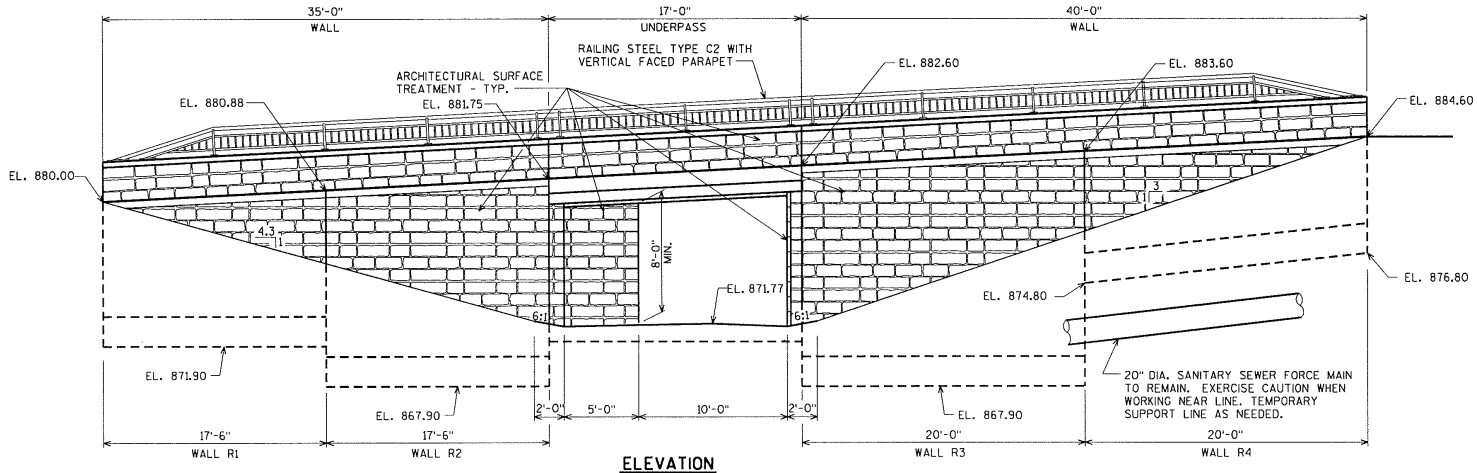


PROFILE GRADE LINE
(CTH MS WB)



PROFILE GRADE LINE
(CTH MS EB)

Addendum No. 1
ID 5992-08-79
Revised Sheet 677
February 1, 2012



ELEVATION
(LOOKING SOUTH)

WISCONSIN
DANIEL N. SYDOW
E-38363
WI
PROFESSIONAL ENGINEER
1/31/12

NO.	DATE	REVISION	BY
⚠ 1	1/30/12	ADDENDUM FOR CONDUIT	DNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

DRAWN BY CLS | PLANS CK'D. DNS

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

QUANTITIES AND NOTES

SHEET 2 OF 29
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677

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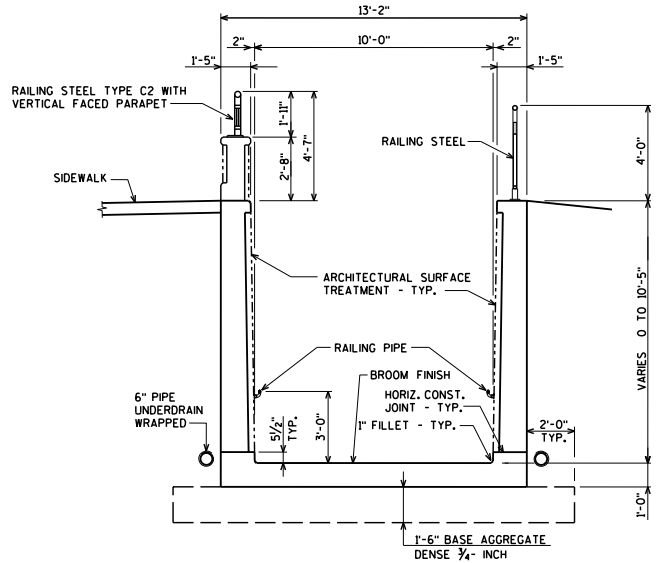
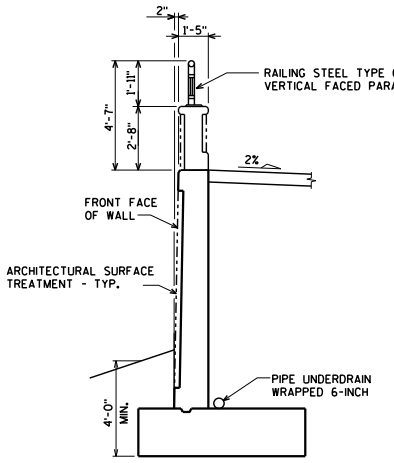
STATE PROJECT NUMBER

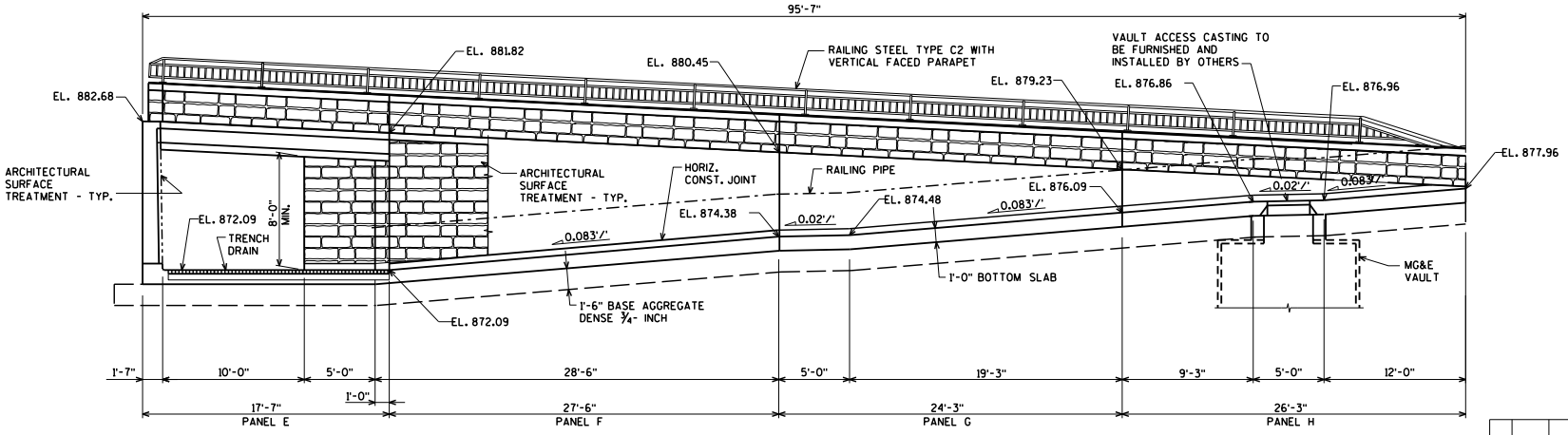
5992-08-82



SECTION C
(LOOKING EAST)



SECTION E
(LOOKING EAST)



SECTION D
(LOOKING NORTH)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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TYPICAL DETAILS

SHEET 3 OF 29
678

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10/28/2011

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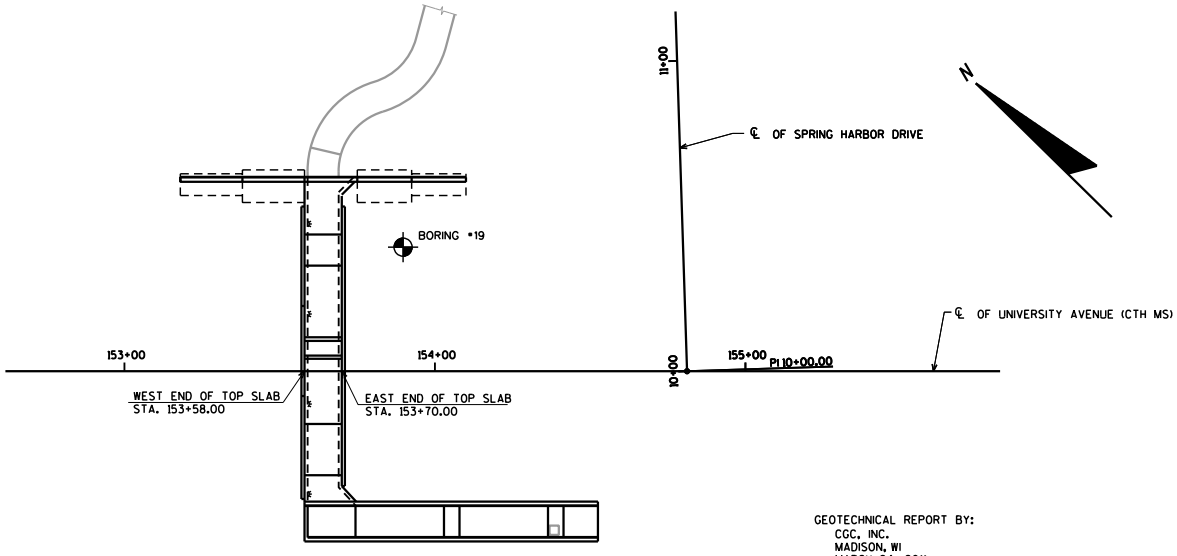
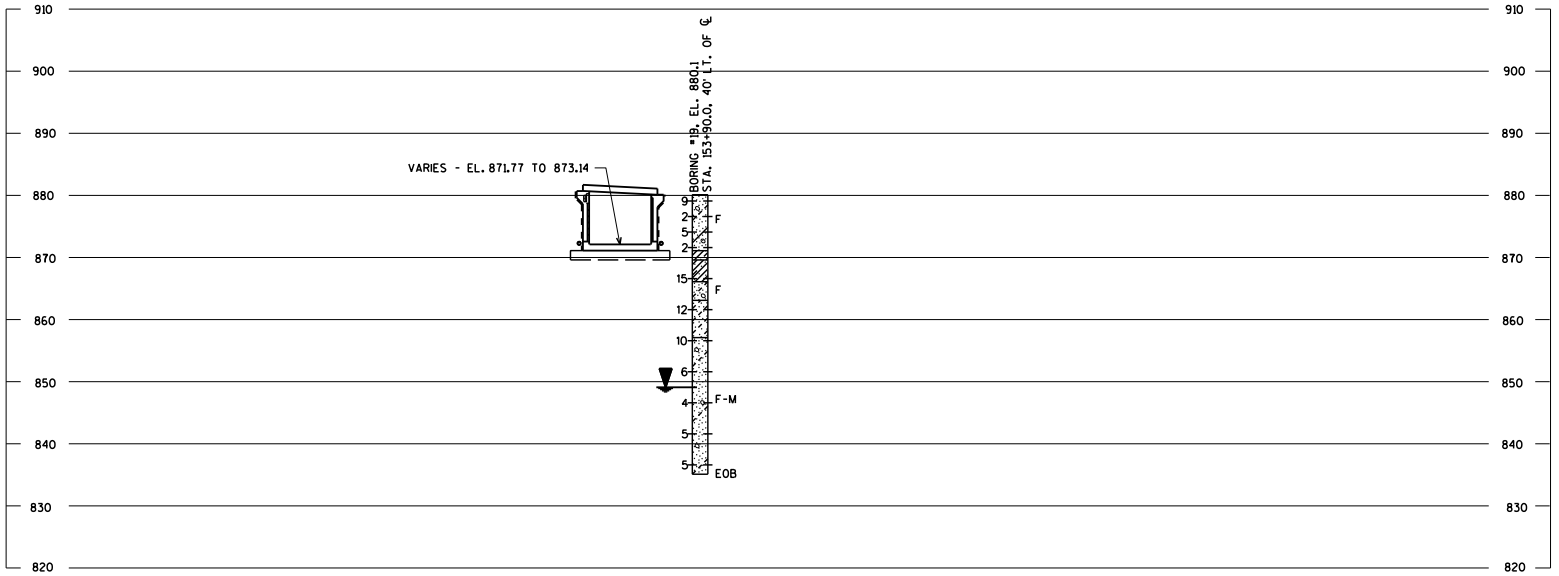


GEOTECHNICAL REPORT BY:
CGC, INC.
MADISON, WI
MARCH 24, 2011



STATE PROJECT NUMBER

5992-08-82

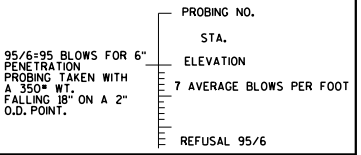
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

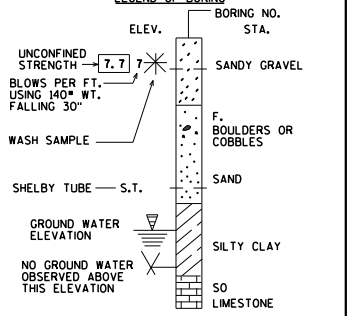
TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE ENGINEER DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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SUBSURFACE EXPLORATION

SHEET 4 OF 29
679

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10/28/2011

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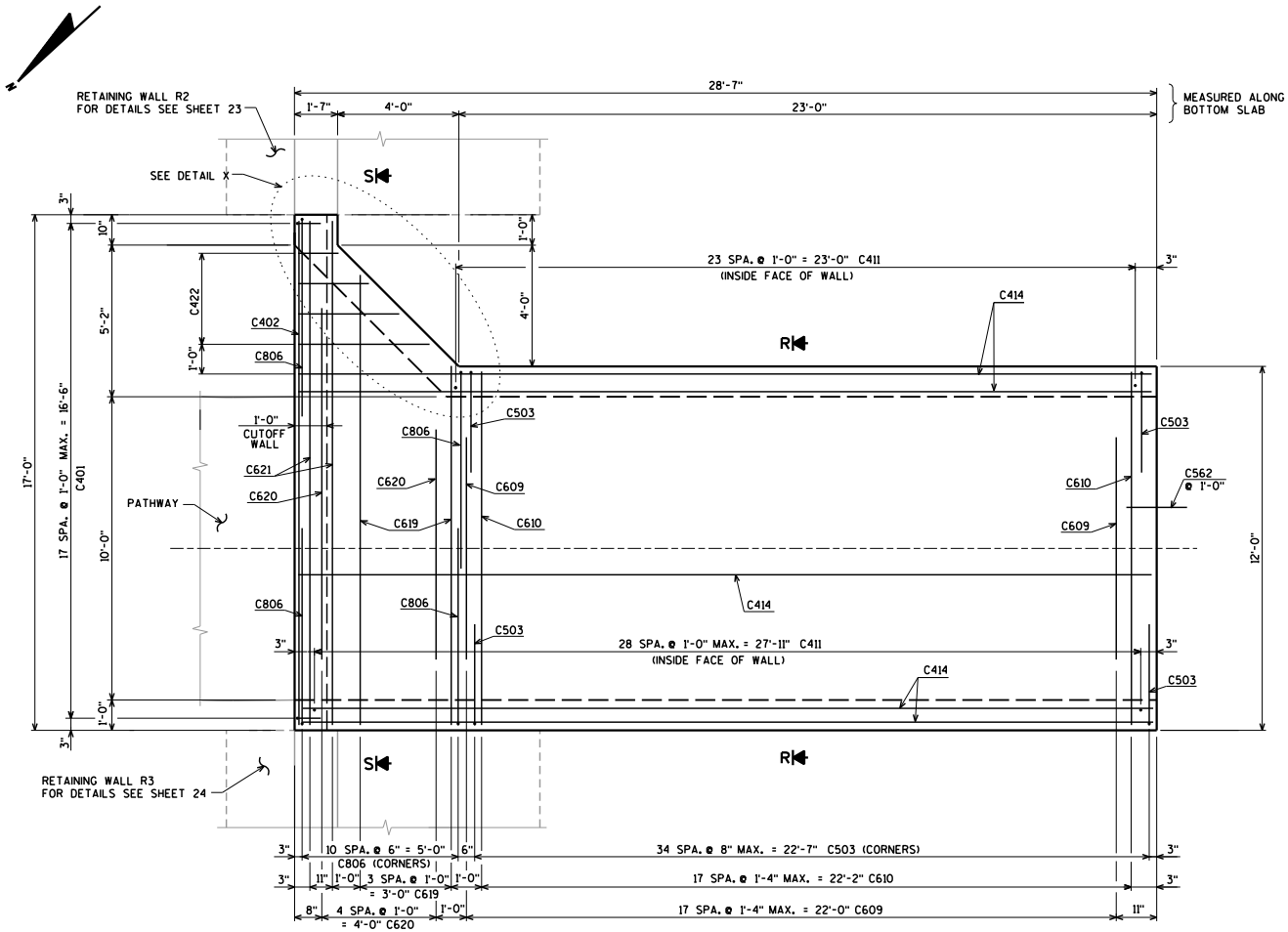
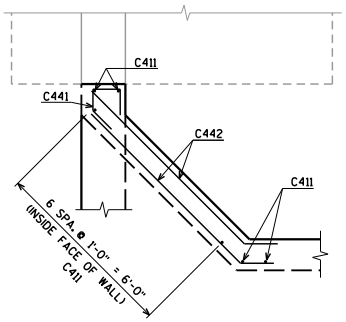
STATE PROJECT NUMBER

5992-08-82



PLAN OF PANEL A - BOTTOM SLAB



DETAIL X

SEE SHEETS 11 & 12
FOR SECTIONS R & S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

DRAWN BY CLS | PLANS CK'D. DNS

UNDERPASS
PANEL A
BOTTOM SLAB

SHEET 5 OF 29
680

ORIGINAL PLANS PREPARED BY
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3433 Oakwood Hills Parkway
Eau Claire, WI 54701
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C-13-2047 BOX.dgn

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10/28/2011

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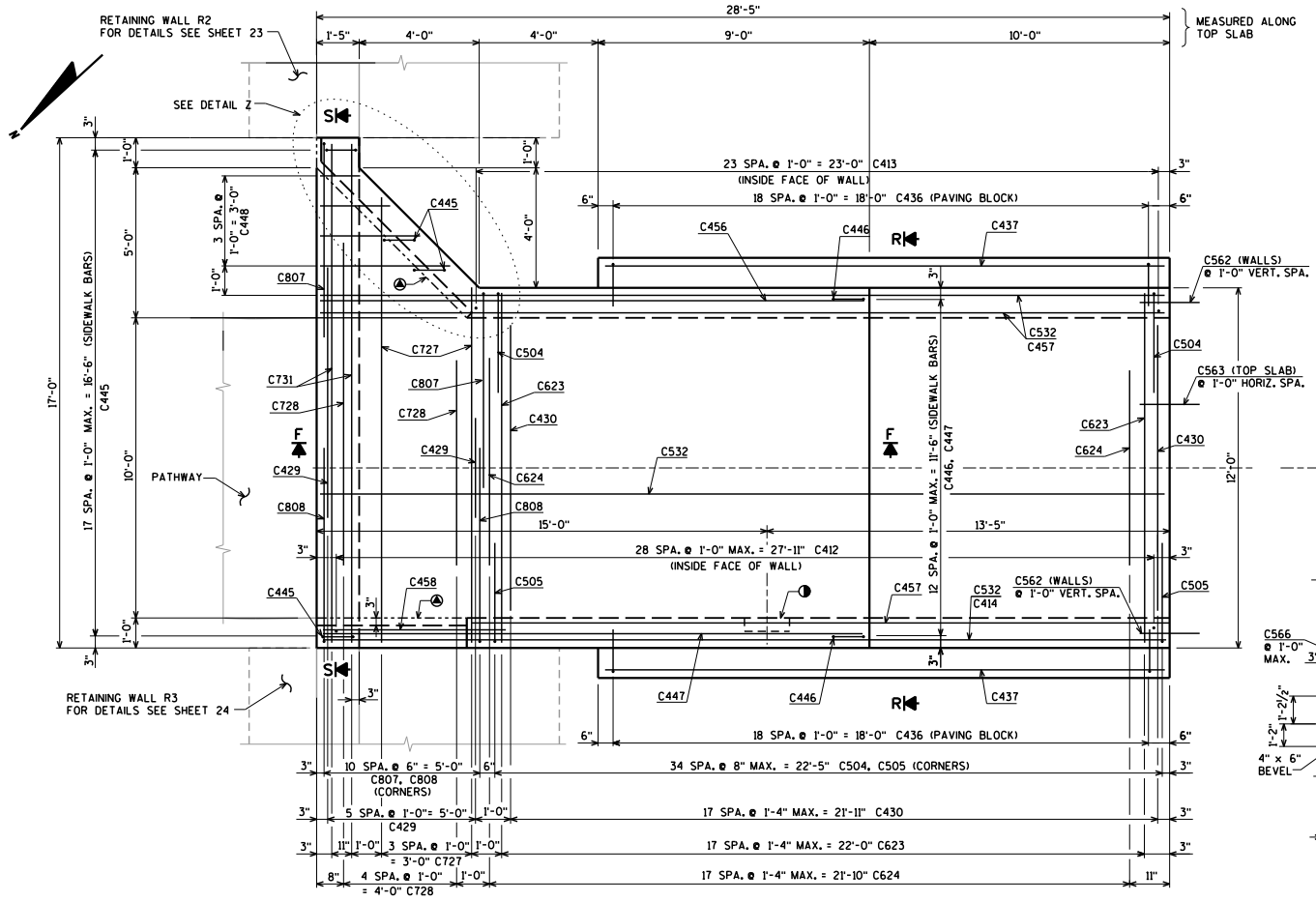
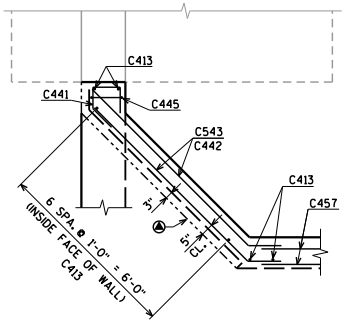
STATE PROJECT NUMBER

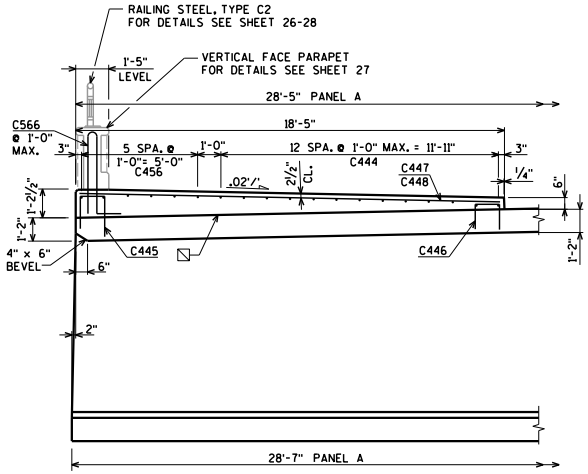
5992-08-82



PLAN OF PANEL A - TOP SLAB



DETAIL Z



SECTION F

SEE SHEETS 11 & 12
FOR SECTIONS R & S

◑ WALL MOUNTED LIGHTING UNIT. SEE SHEET 11 FOR RECESS DETAILS.

◬ ARCHITECTURAL SURFACE TREATMENT FOR DETAILS SEE SHEET 22

▨ HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

DRAWN BY CLS | PLANS CK'D. DNS

UNDERPASS
PANEL A
TOP SLAB

SHEET 6 OF 29
681

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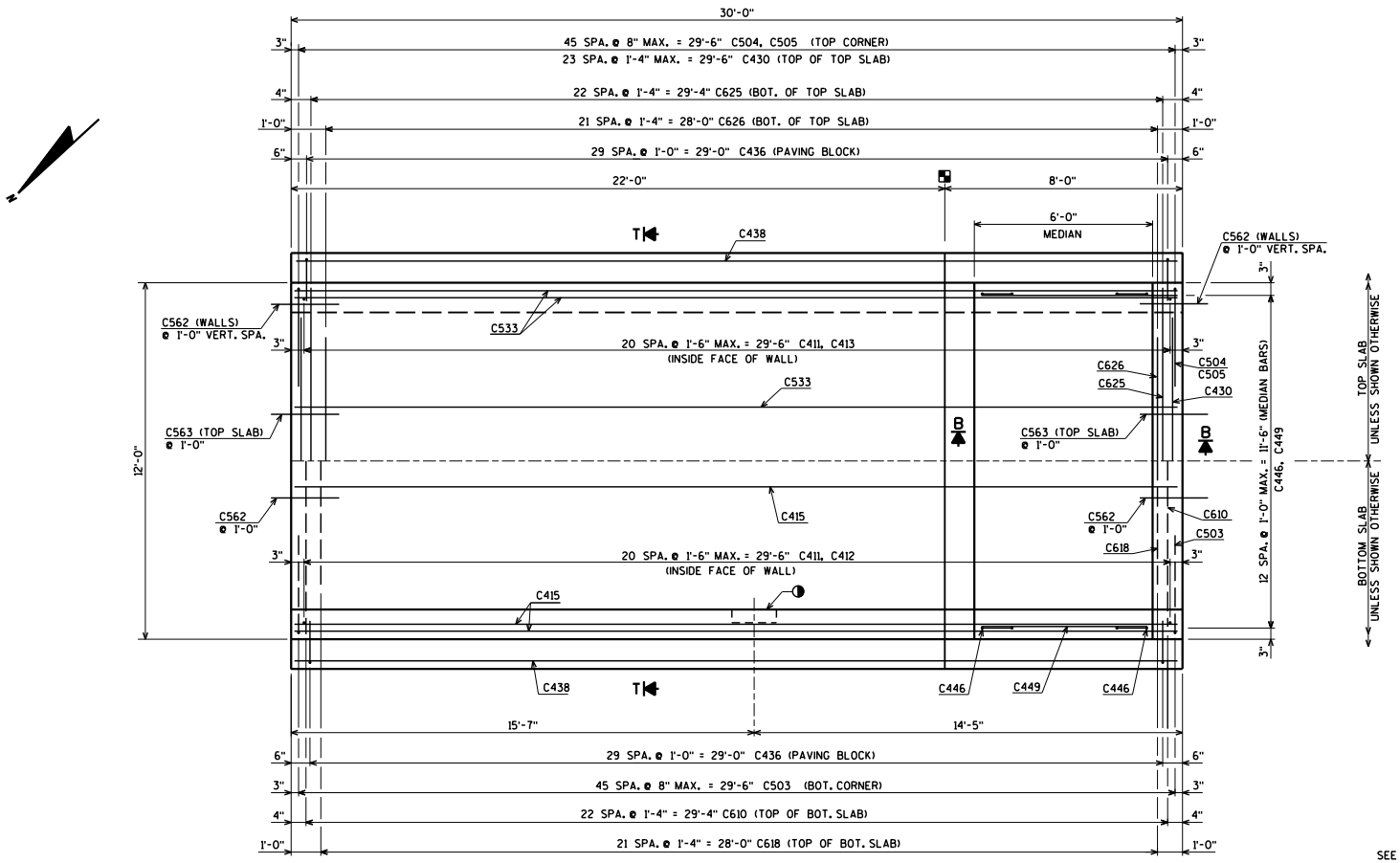
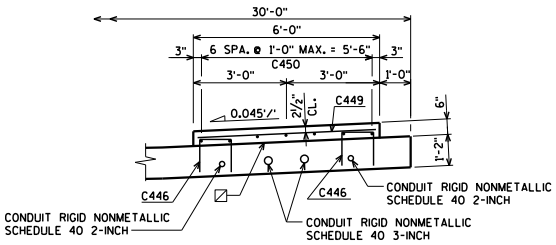
STATE PROJECT NUMBER
5992-08-82



PLAN OF PANEL B



SECTION B

SEE SHEETS 13 FOR SECTION T

◑ WALL MOUNTED LIGHTING UNIT. SEE SHEET 11 FOR RECESS DETAILS.

▨ HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

■ LOCATION OF CHANGE IN SLOPE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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UNDERPASS PANEL B

SHEET 7 OF 29
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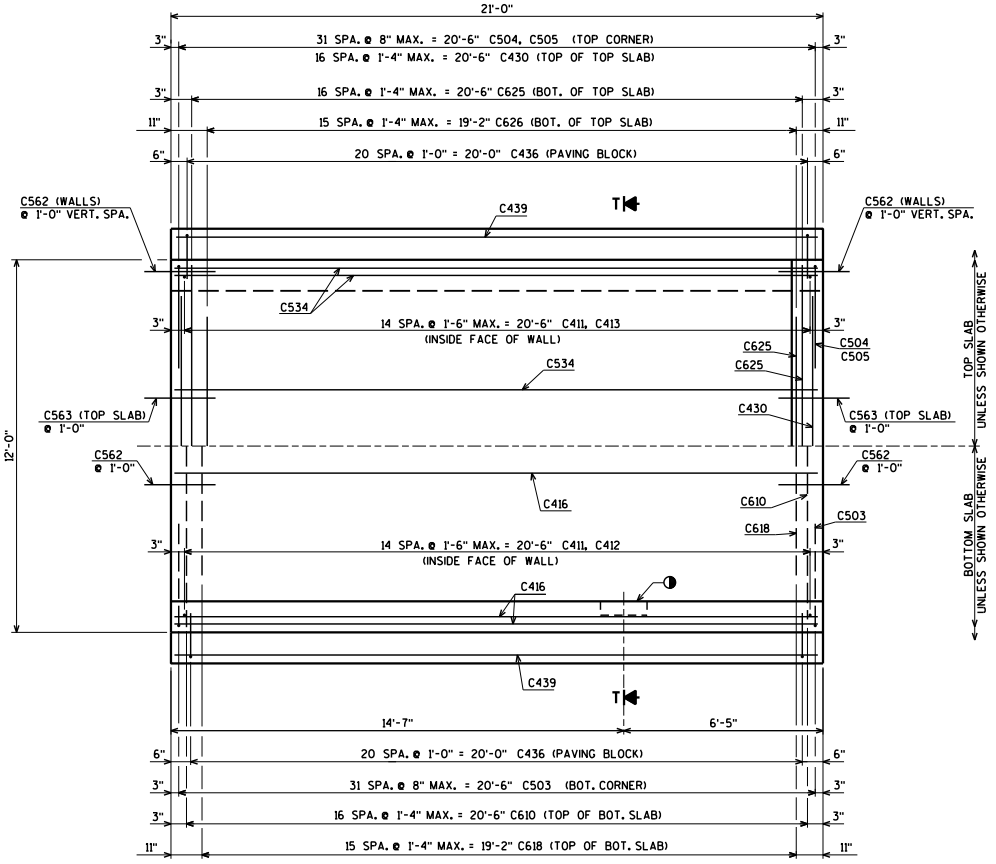

PLAN OF PANEL C

SEE SHEETS 13 FOR SECTION T

◑ WALL MOUNTED LIGHTING UNIT.
SEE SHEET 11 FOR RECESS DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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UNDERPASS
PANEL C

SHEET 8 OF 29
683

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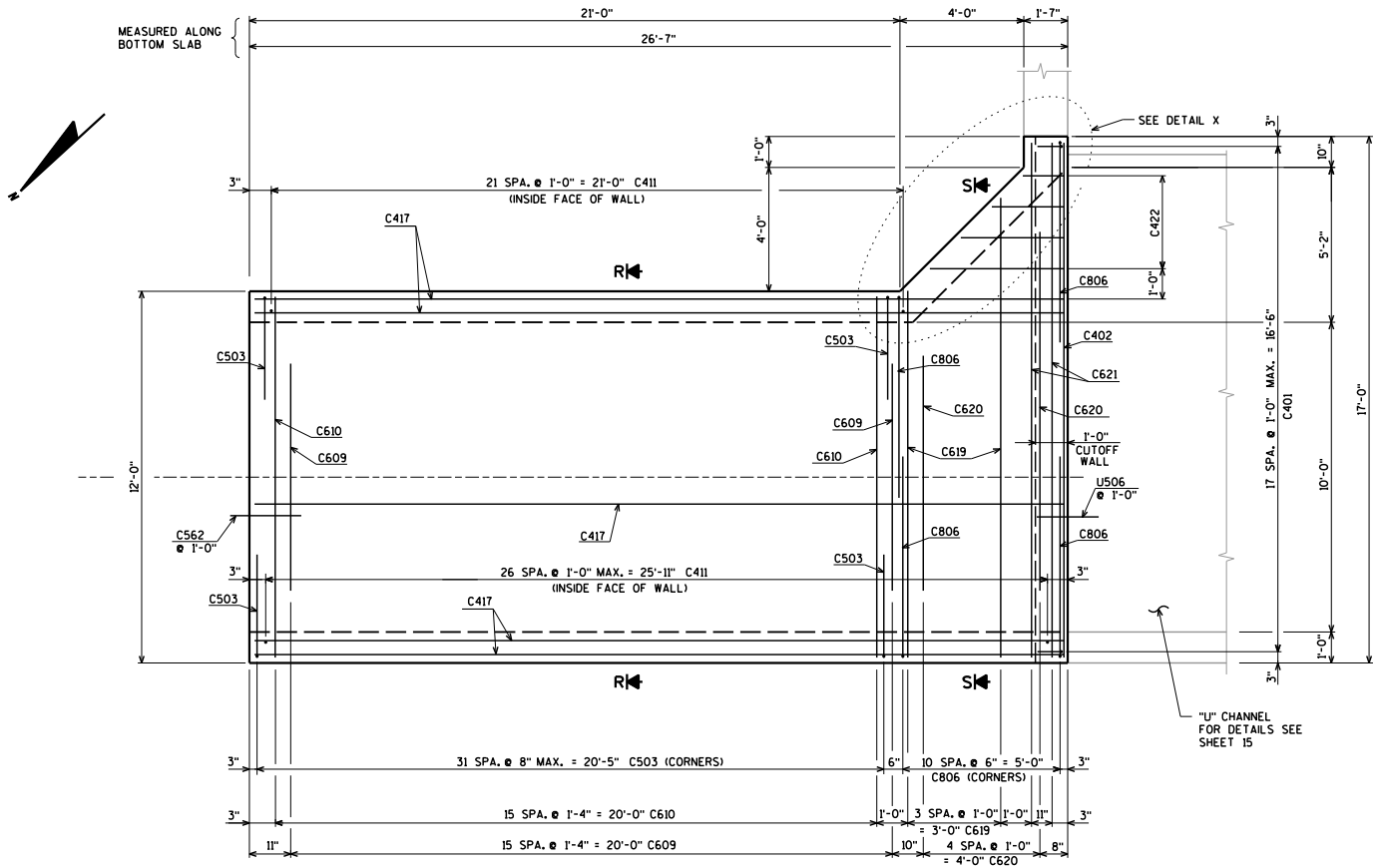
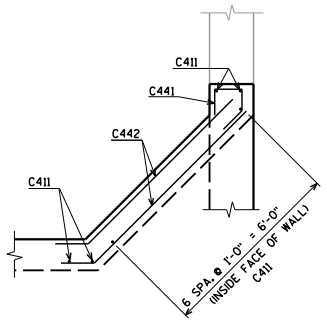


PLAN OF PANEL D - BOTTOM SLAB



DETAIL X

SEE SHEETS 11 & 12 FOR SECTIONS R & S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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UNDERPASS
PANEL D
BOTTOM SLAB

SHEET 9 OF 29
684

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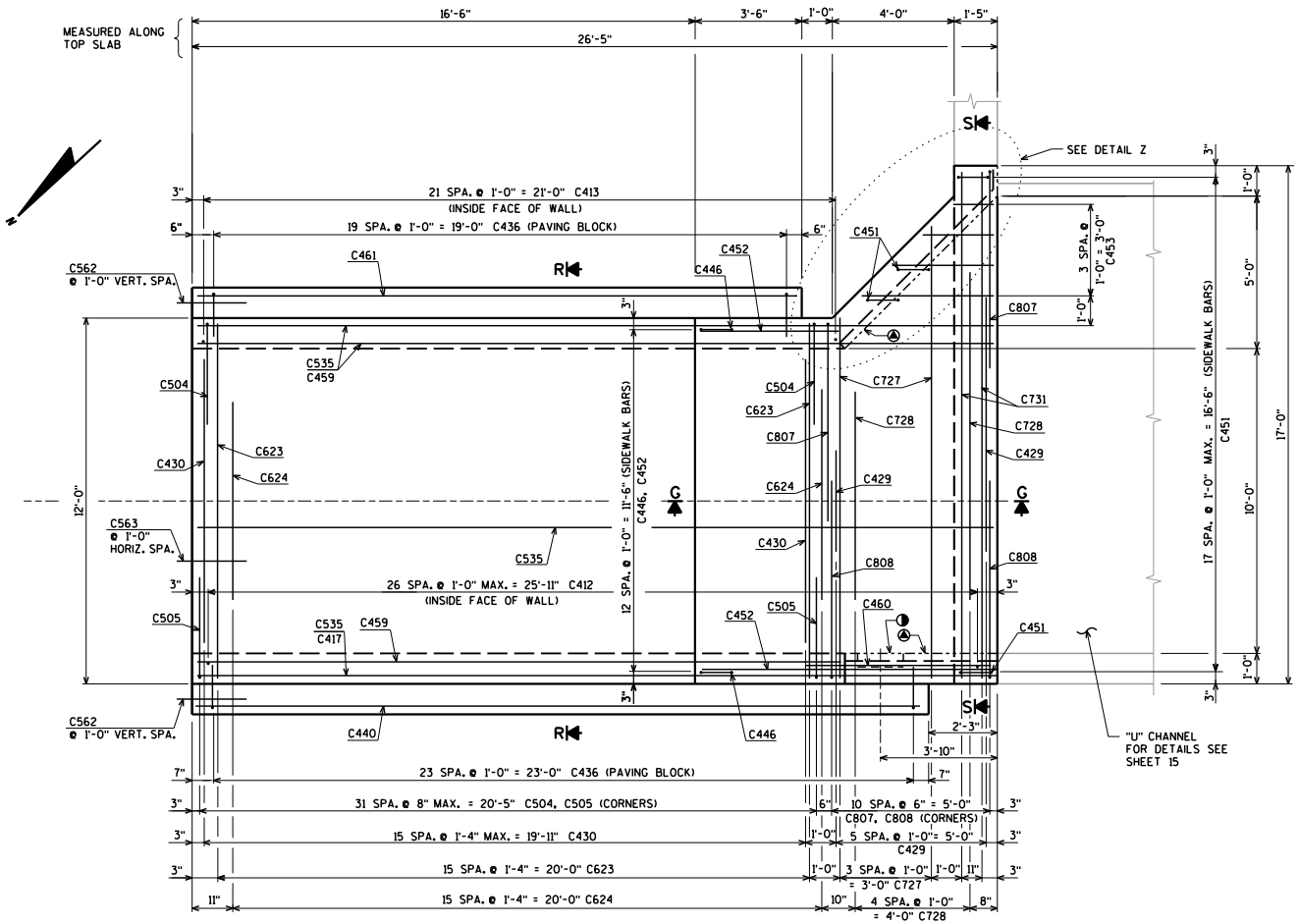
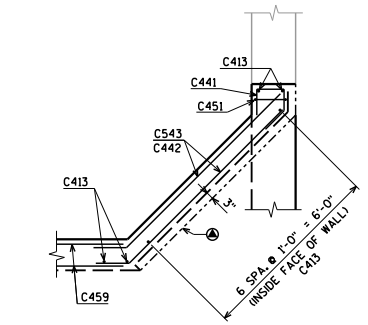
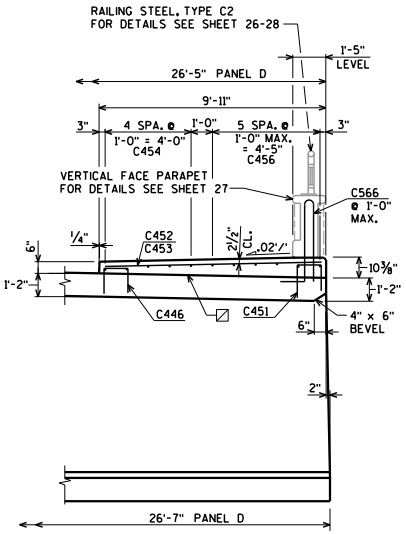


PLAN OF PANEL D - TOP SLAB



DETAIL Z



SECTION G

SEE SHEETS 11 & 12 FOR SECTIONS R & S

◑ WALL MOUNTED LIGHTING UNIT. SEE SHEET 11 FOR RECESS DETAILS.

◬ ARCHITECTURAL SURFACE TREATMENT FOR DETAILS SEE SHEET 22

☒ HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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UNDERPASS
PANEL D
TOP SLAB

SHEET 10 OF 29
685

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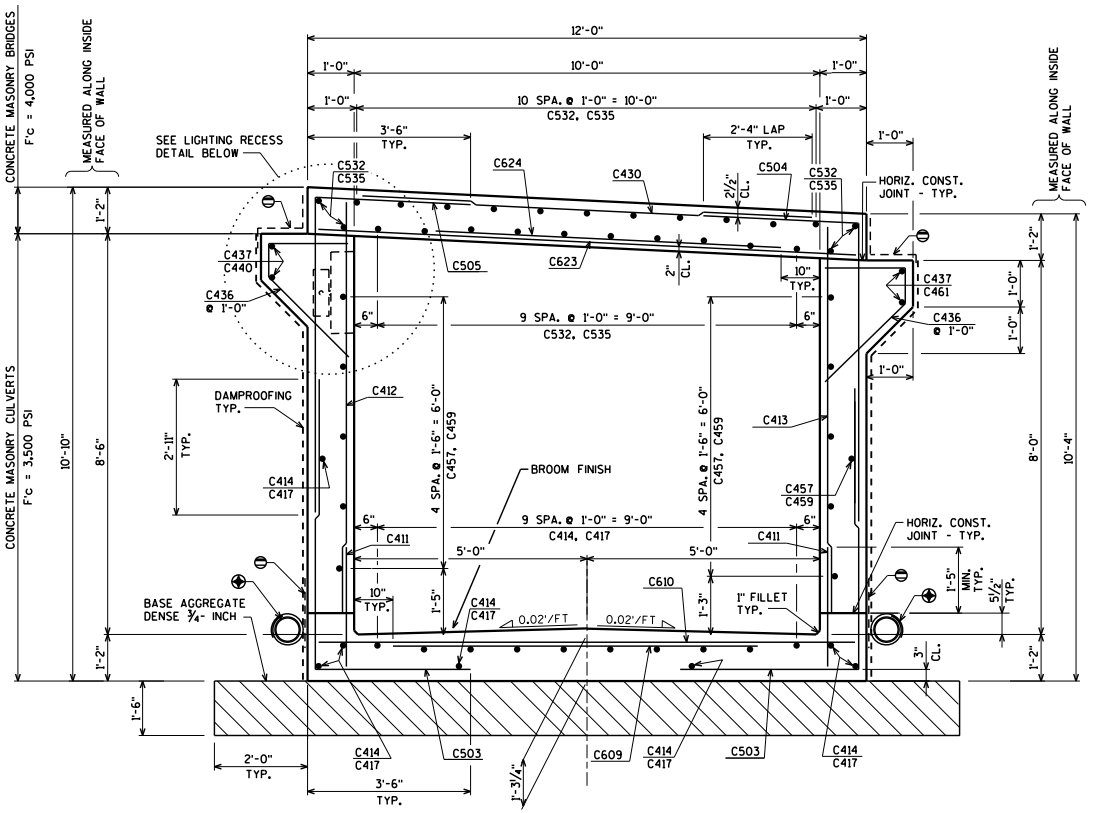
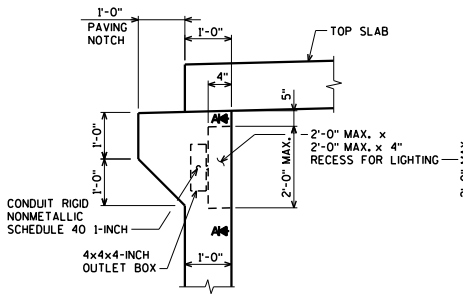


SECTION R THRU UNDERPASS - PANELS A & D
(LOOKING NORTH)

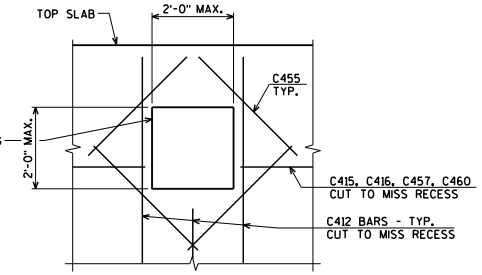
FOR LOCATION OF SECTION R SEE SHEETS 5, 6, 9 & 10

⊕ 6" PIPE UNDERDRAIN WRAPPED SLOPE 0.003'/' MIN. - TYP.

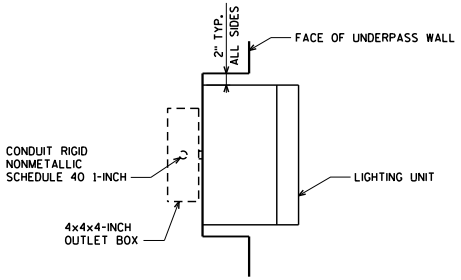
⊖ 18" RUBBERIZED MEMBRANE WATERPROOFING UP WALLS ALONG THE VERT. CONST. JOINTS AND ALONG HORIZONTAL CONSTRUCTION JOINTS.



LIGHTING RECESS DETAIL



SECTION A-A



LUMINAIRE DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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UNDERPASS DETAILS PANELS A & D

SHEET 11 OF 29
686

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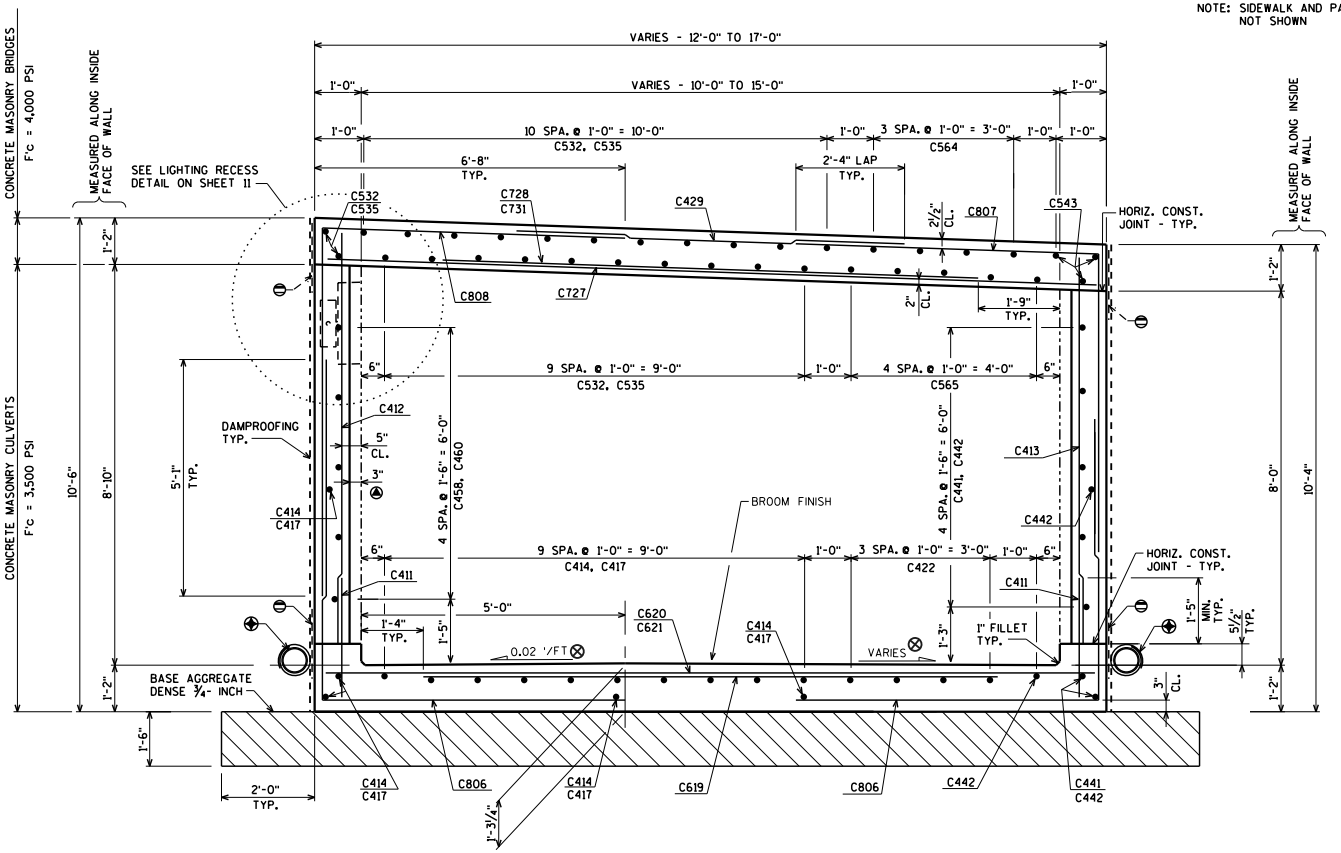

SECTION S THRU UNDERPASS - PANELS A & D
(LOOKING NORTH)

FOR LOCATION OF SECTION S SEE SHEETS 5, 6, 9 & 10

▲ ARCHITECTURAL SURFACE TREATMENT FOR DETAILS SEE SHEET 22

⊕ 6" PIPE UNDERDRAIN WRAPPED SLOPE 0.003'/' MIN. - TYP.

⊖ 18" RUBBERIZED MEMBRANE WATERPROOFING UP WALLS ALONG THE VERT. CONST. JOINTS AND ALONG HORIZONTAL CONSTRUCTION JOINTS.

⊗ TRANSITION IN LAST 5' OF CULVERT TO FLAT CROSS SLOPE AT SOUTH END OF PANEL D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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UNDERPASS DETAILS PANELS A & D

SHEET 12 OF 29
687

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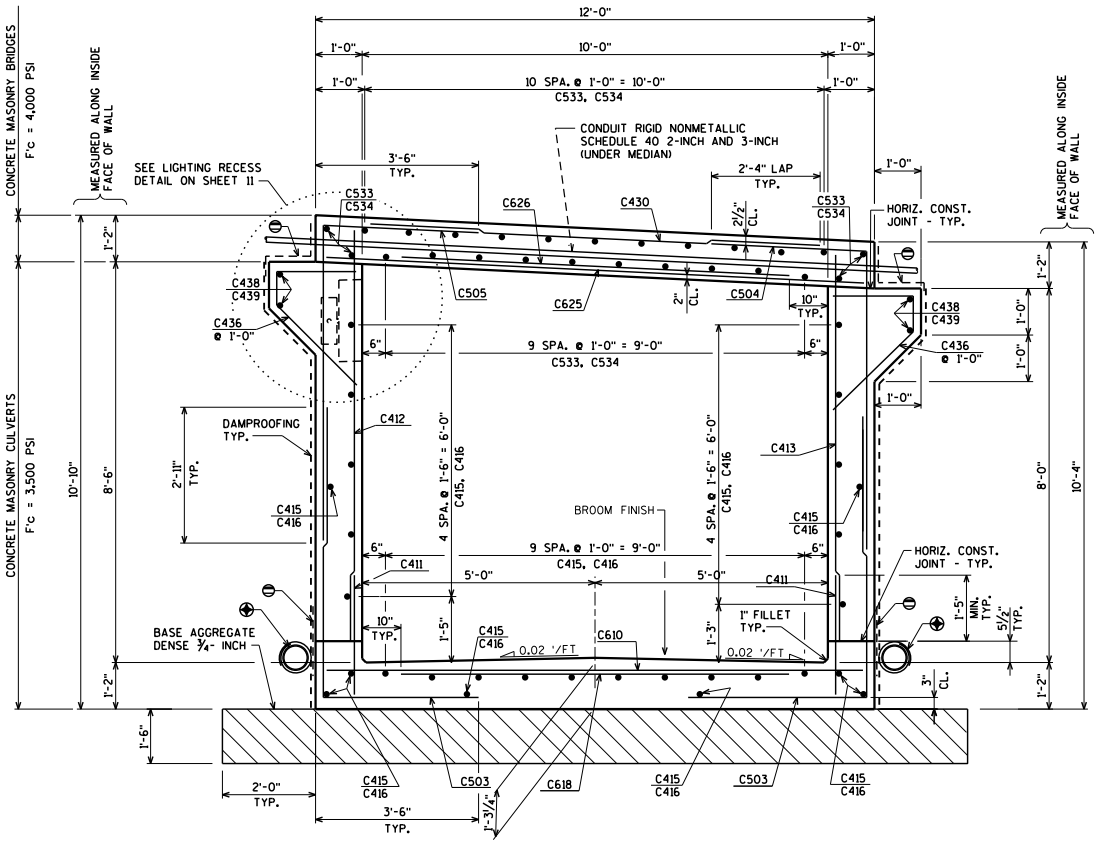

SECTION T THRU UNDERPASS - PANELS B & C

(LOOKING NORTH)

FOR LOCATION OF SECTION T SEE SHEETS 7 & 8

⊕ 6" PIPE UNDERDRAIN WRAPPED SLOPE 0.003'/' MIN. - TYP.

⊖ 18" RUBBERIZED MEMBRANE WATERPROOFING UP WALLS ALONG THE VERT. CONST. JOINTS AND ALONG HORIZONTAL CONSTRUCTION JOINTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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UNDERPASS DETAILS PANELS B & C

SHEET 13 OF 29
688

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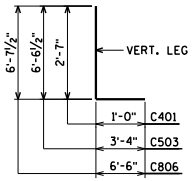
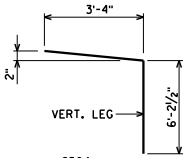
BILL OF BARS

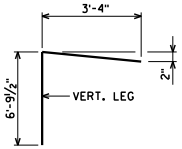
BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	13,030# COATED 11,140# UNCOATED LOCATION
C401		36	3-6	X		BOX CUTOFF WALL
C402		6	16-8			BOX CUTOFF WALL
C503		290	9-9	X		BOX CORNERS BOT.
C504	X	145	9-5	X		BOX CORNERS TOP
C505	X	145	10-0	X		BOX CORNERS TOP
C806		44	12-11	X		BOX PANELS A & D CORNERS BOT.
C807	X	22	14-9	X		BOX PANELS A & D CORNERS TOP
C808	X	22	15-4	X		BOX PANELS A & D CORNERS TOP
C609		34	8-4			BOX PANELS A & D BOT. SLAB
C610		74	11-8			BOX BOT. SLAB
C411		192	2-10			BOX WALLS DOWELS
C412		92	8-11			BOX WALLS VERT.
C413		100	8-5			BOX WALLS VERT.
C414		17	28-1			BOX A HORIZ.
C415		28	29-8			BOX B HORIZ.
C416		28	20-8			BOX C HORIZ.
C417		17	26-1			BOX D HORIZ.
C618		38	8-4			BOX PANELS B & C BOT. SLAB
C619		8	13-4		⊗	BOX PANELS A & D BOT. SLAB
C620		10	9-8		⊗	BOX PANELS A & D BOT. SLAB
C621		4	16-8			BOX PANELS A & D BOT. SLAB
C422		8	2-9		⊗	BOX PANELS A & D HORIZ.
C623	X	34	11-8			BOX PANELS A & D TOP SLAB
C624	X	34	8-3			BOX PANELS A & D TOP SLAB
C625	X	40	11-8			BOX PANELS B & C TOP SLAB
C626	X	38	8-4			BOX PANELS B & C TOP SLAB
C727	X	8	13-4		⊗	BOX PANELS A & D TOP SLAB
C728	X	10	8-10		⊗	BOX PANELS A & D TOP SLAB
C429	X	12	5-10		⊗	BOX PANELS A & D TOP SLAB
C430	X	75	9-8			BOX TOP SLAB
C731	X	4	16-8			BOX PANELS A & D TOP SLAB
C532	X	25	28-1			BOX PANEL A TOP SLAB
C533	X	25	29-8			BOX PANEL B TOP SLAB
C534	X	25	20-8			BOX PANEL C TOP SLAB
C535	X	25	26-1			BOX PANEL D TOP SLAB
C436	X	184	4-8	X		BOX PAVING BLOCK
C437	X	4	18-8			BOX PANEL A PAVING BLOCK
C438	X	4	29-8			BOX PANEL B PAVING BLOCK
C439	X	4	20-8			BOX PANEL C PAVING BLOCK
C440	X	2	23-10			BOX PANEL D PAVING BLOCK
C441		14	3-2	X		BOX PANELS A & D
C442		18	7-11	X		BOX PANELS A & D BOT. SLAB & WALLS
C543	X	6	7-11	X		BOX PANELS A & D TOP SLAB HORIZ.
C444	X	13	11-8			BOX PANEL A SIDEWALK
C445	X	20	4-0	X		BOX PANEL A SIDEWALK VERT.
C446	X	52	3-0	X		BOX PANELS A, B & D MEDIAN VERT.
C447	X	13	18-0			BOX PANEL A SIDEWALK
C448	X	4	2-7		⊗	BOX PANEL A SIDEWALK
C449	X	13	5-7			BOX PANEL B MEDIAN
C450	X	7	11-8			BOX PANEL B MEDIAN
C451	X	18	3-4	X		BOX PANEL D SIDEWALK VERT.
C452	X	13	9-6			BOX PANEL D SIDEWALK
C453	X	4	2-7		⊗	BOX PANEL D SIDEWALK
C454	X	5	11-8			BOX PANEL D SIDEWALK
C455	X	16	3-3			BOX RECESS FOR LIGHTING
C456	X	12	14-3		⊗	BOX PANELS A & D SIDEWALK
C457		11	22-11			BOX A HORIZ.
C458		5	6-3			BOX A HORIZ.
C459		11	20-11			BOX D HORIZ.
C460		5	6-3			BOX D HORIZ.
C461	X	2	19-8			BOX PANEL D PAVING BLOCK
C562		93	4-0			BOX DOWELS BOT. SLAB & WALLS
C563	X	39	4-0			BOX DOWELS TOP SLAB
C564	X	8	3-6		⊗	BOX PANELS A & D TOP SLAB HORIZ.
C565	X	10	3-6		⊗	BOX PANELS A & D TOP SLAB HORIZ.
C566	X	39	6-8	X		BOX PARAPET VERT.
C467	X	12	16-8			BOX PARAPET HORIZ.

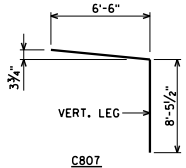
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

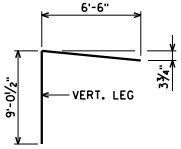
⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

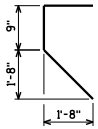


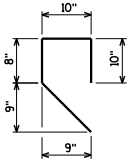


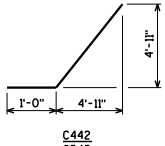


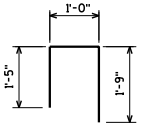


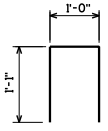


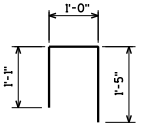


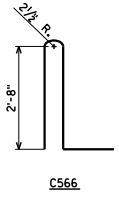








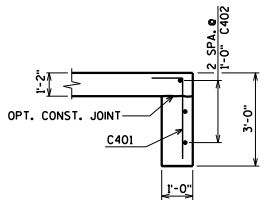




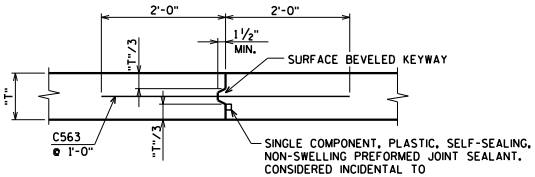
BAR SERIES TABLE

BAR MARK	NO REQ'D.	LENGTH
C619	2 SERIES OF 4	11'-10" TO 14'-10"
C620	2 SERIES OF 5	7'-8" TO 11'-8"
C422	2 SERIES OF 4	1'-3" TO 4'-3"
C727	2 SERIES OF 4	11'-10" TO 14'-10"
C728	2 SERIES OF 5	6'-10" TO 10'-10"
C429	2 SERIES OF 6	3'-4" TO 8'-4"
C448	1 SERIES OF 4	1'-1" TO 4'-1"
C453	1 SERIES OF 4	1'-1" TO 4'-1"
C456	2 SERIES OF 6	11'-10" TO 16'-8"
C564	2 SERIES OF 4	2'-0" TO 5'-0"
C565	2 SERIES OF 5	1'-6" TO 5'-6"

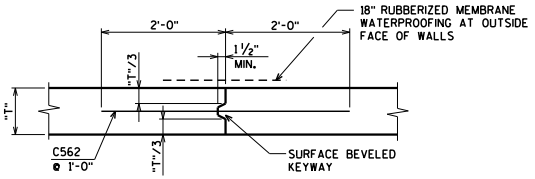
BUNDLE AND TAG EACH SERIES SEPARATELY.



SECTION THRU CUTOFF WALLS



VERT. CONST. JOINT
(TOP SLAB JOINT)



VERT. CONST. JOINT
(ALL WALLS AND BOTTOM SLAB JOINTS)

STATE PROJECT NUMBER

5992-08-82

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

DRAWN BY CLS | PLANS CK'D. DNS

UNDERPASS
BILL OF BARS

SHEET 14 OF 29
689

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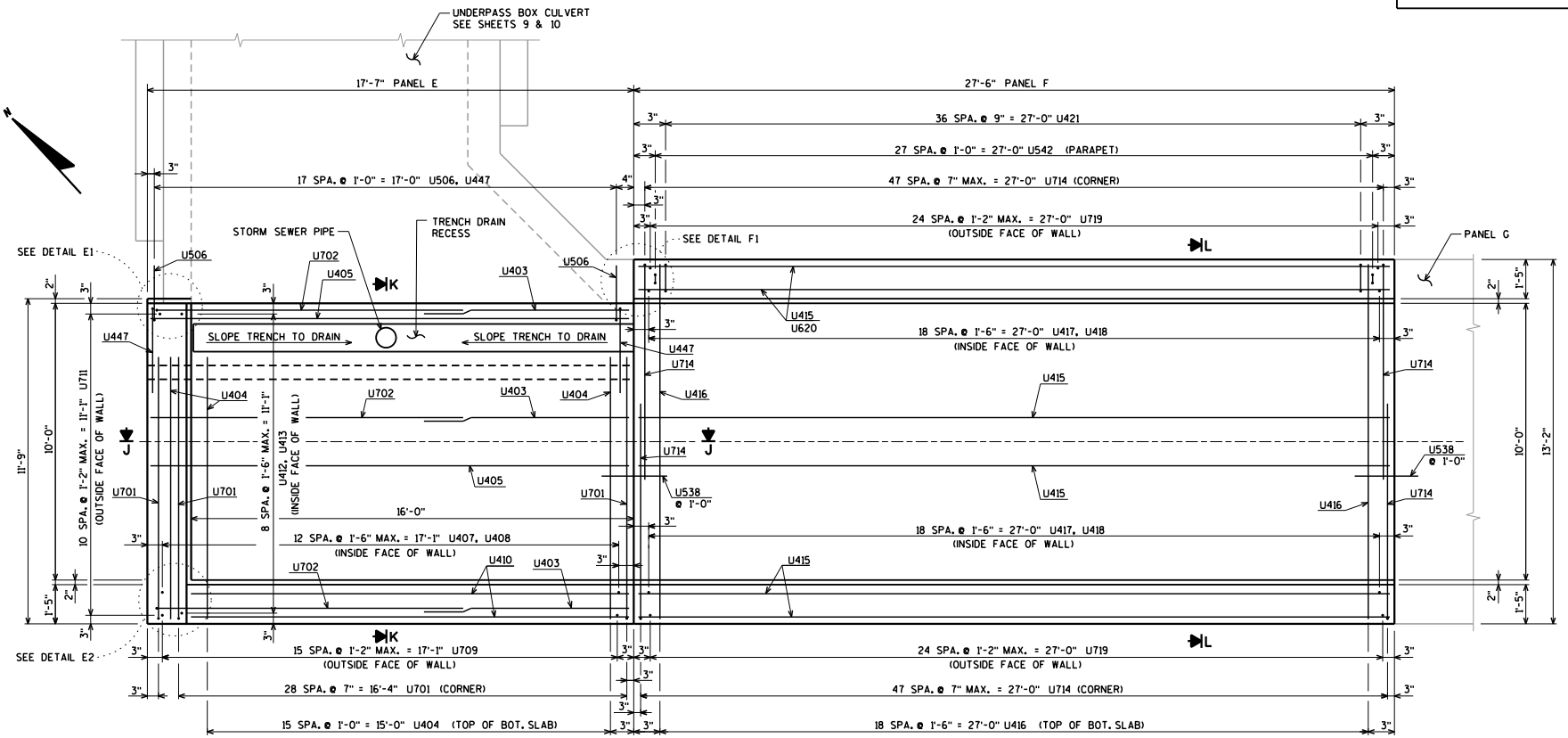
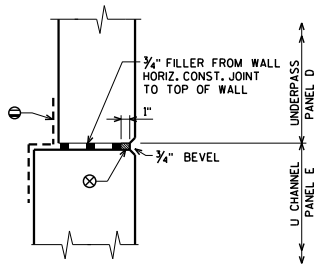
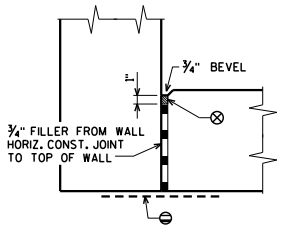


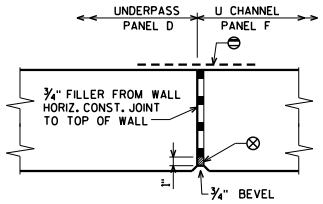


DETAIL E1



DETAIL E2

PLAN OF PANELS E & F



DETAIL F1

⊖ 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BOTTOM OF SLAB TO TOP OF WALL

⊗ FILL WITH NON-STAINING GRAY SINGLE COMPONENT NON-BITUMINOUS JOINT SEALER

SEE SHEETS 17, 18 & 19 FOR SECTIONS J, K & L

NO.	DATE	REVISION	BY

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STRUCTURE C-13-2047

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U CHANNEL PANELS E & F

SHEET 15 OF 29
690

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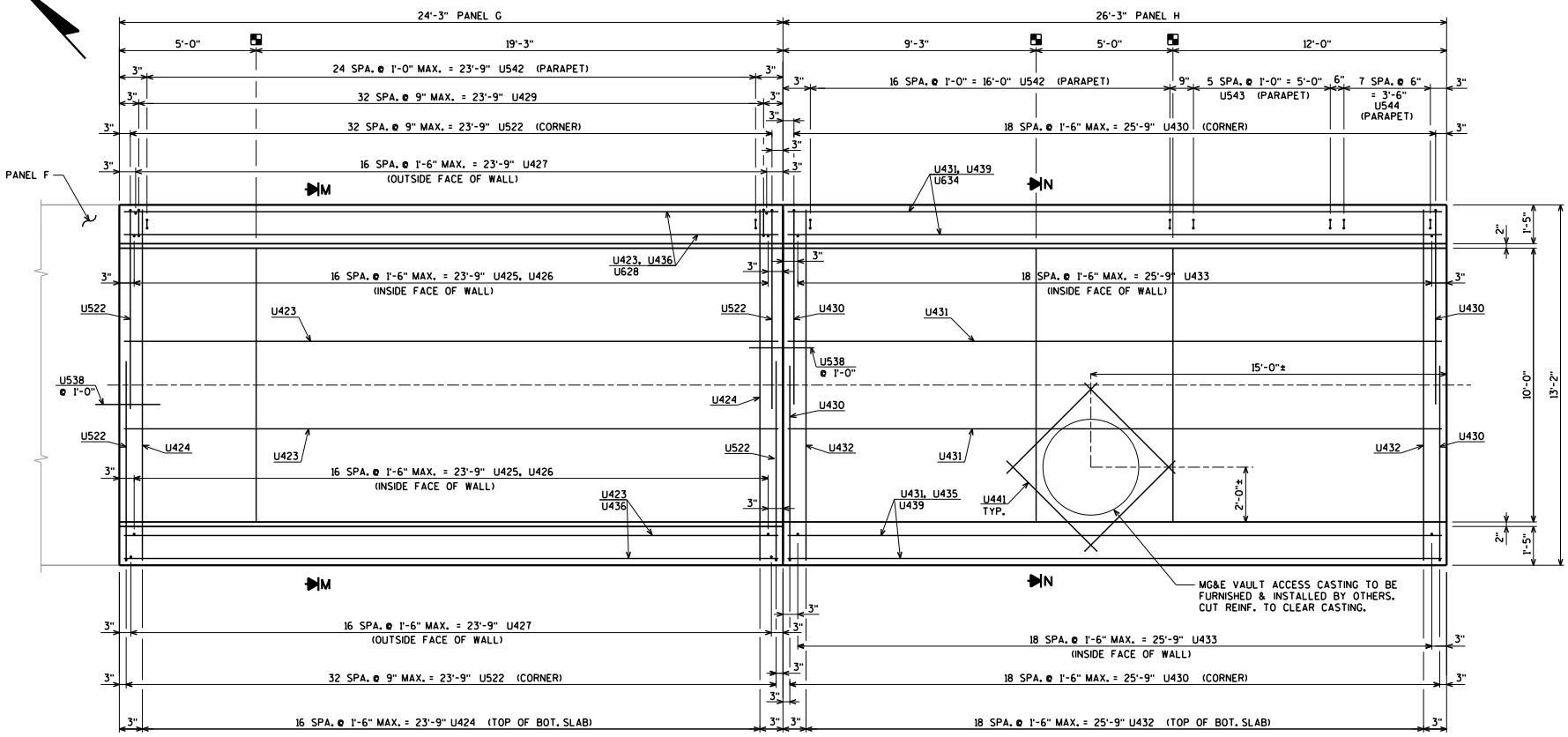

PLAN OF PANELS G & H

SEE SHEETS 20 & 21
FOR SECTIONS M & N

■ LOCATION OF CHANGE IN SLOPE OF BOTTOM SLAB

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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U CHANNEL
PANELS G & H

SHEET 16 OF 29
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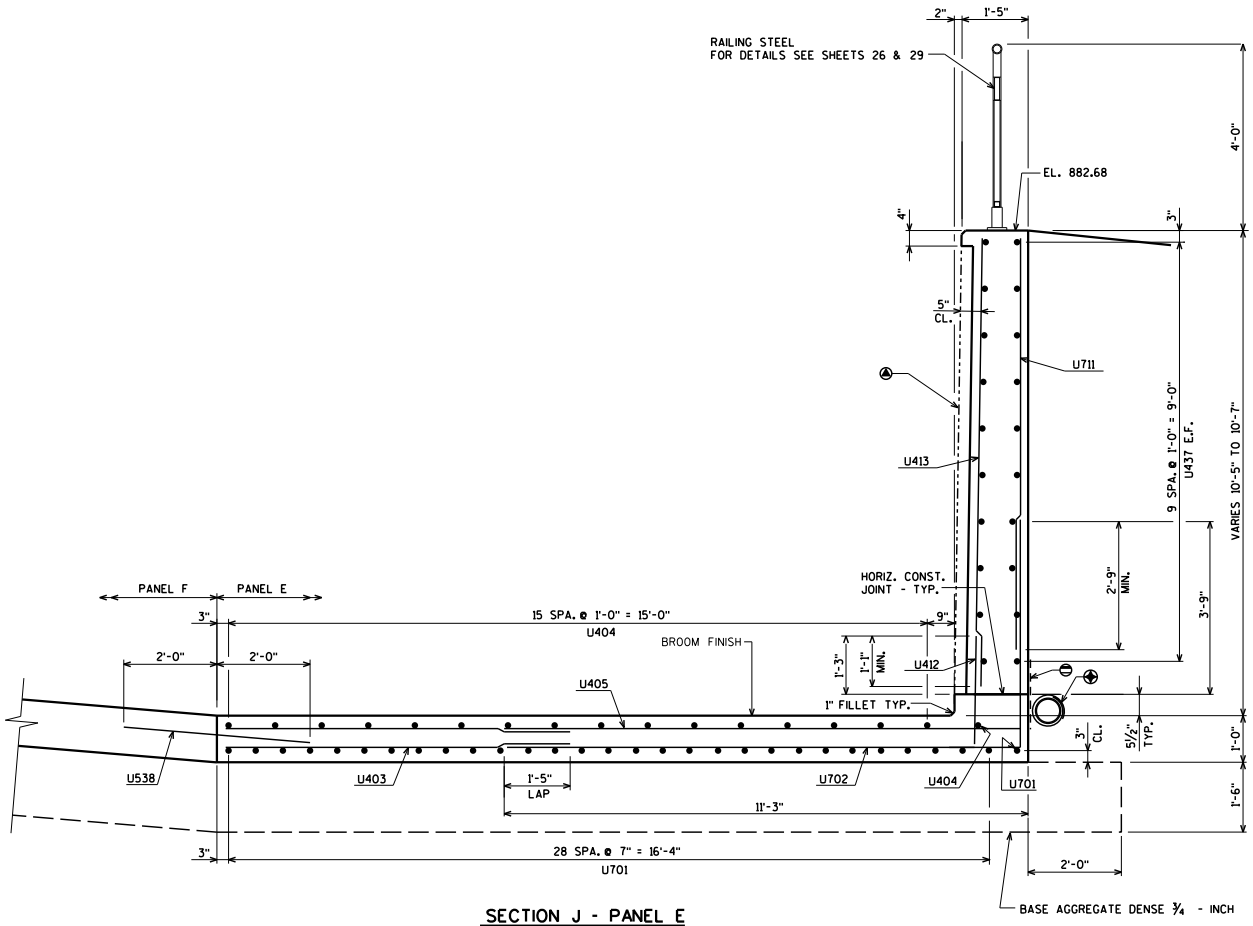

SECTION J - PANEL E
(LOOKING SOUTH)

E.F. DENOTES EACH FACE

FOR LOCATION OF SECTION J
SEE SHEET 15

▲ ARCHITECTURAL SURFACE TREATMENT
FOR DETAILS SEE SHEET 22

⊕ 6" PIPE UNDERDRAIN WRAPPED
SLOPE 0.003'/' MIN. - TYP.

⊖ 18" RUBBERIZED MEMBRANE
WATERPROOFING UP WALLS
ALONG THE VERT. CONST. JOINTS
AND ALONG HORIZONTAL
CONSTRUCTION JOINTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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U CHANNEL
PANEL E
SECTION

SHEET 17 OF 29
692

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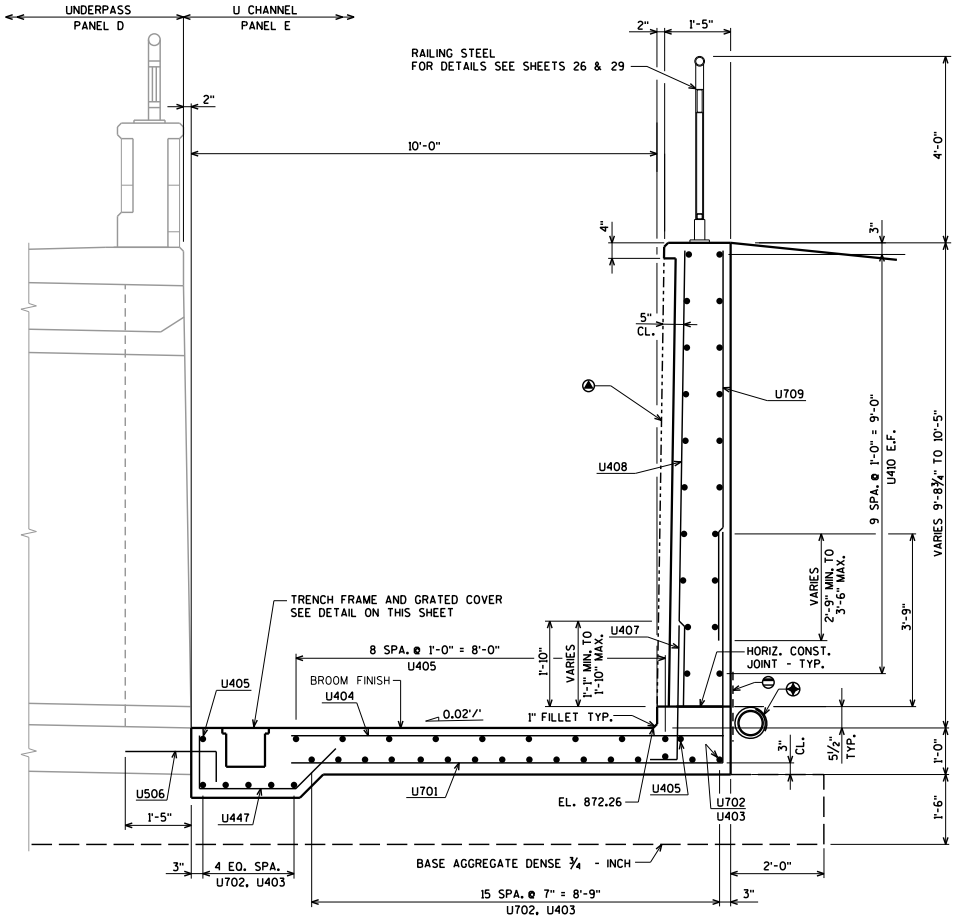
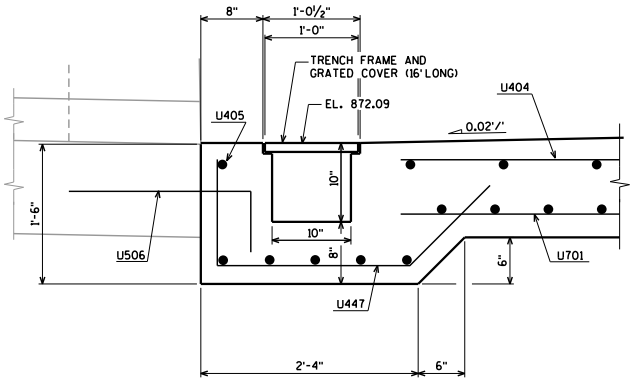


SECTION K - PANEL E
(LOOKING EAST)



TRENCH DRAIN DETAIL

E.F. DENOTES EACH FACE

FOR LOCATION OF SECTION K
SEE SHEET 15

▲ ARCHITECTURAL SURFACE TREATMENT
FOR DETAILS SEE SHEET 22

⊕ 6" PIPE UNDERDRAIN WRAPPED
SLOPE 0.003'/' MIN. - TYP.

⊖ 18" RUBBERIZED MEMBRANE
WATERPROOFING UP WALLS
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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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U CHANNEL
PANEL E
SECTION

SHEET 18 OF 29
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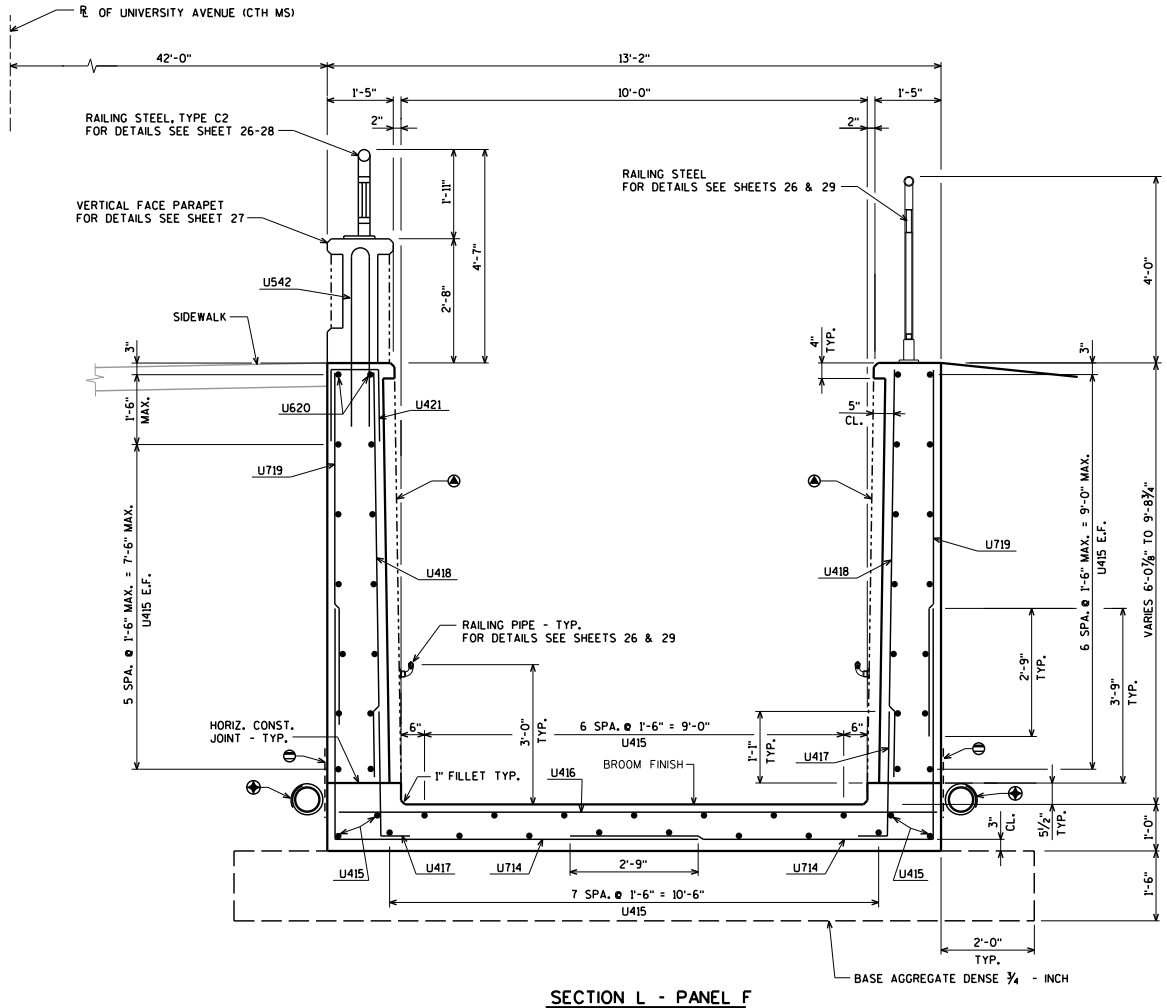

SECTION L - PANEL F
(LOOKING EAST)

E.F. DENOTES EACH FACE

FOR LOCATION OF SECTION L
SEE SHEET 15

▲ ARCHITECTURAL SURFACE TREATMENT
FOR DETAILS SEE SHEET 22

⊕ 6" PIPE UNDERDRAIN WRAPPED
SLOPE 0.003'/' MIN. - TYP.

⊖ 18" RUBBERIZED MEMBRANE
WATERPROOFING UP WALLS
ALONG THE VERT. CONST. JOINTS
AND ALONG HORIZONTAL
CONSTRUCTION JOINTS.

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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U CHANNEL
PANEL F
SECTION

SHEET 19 OF 29
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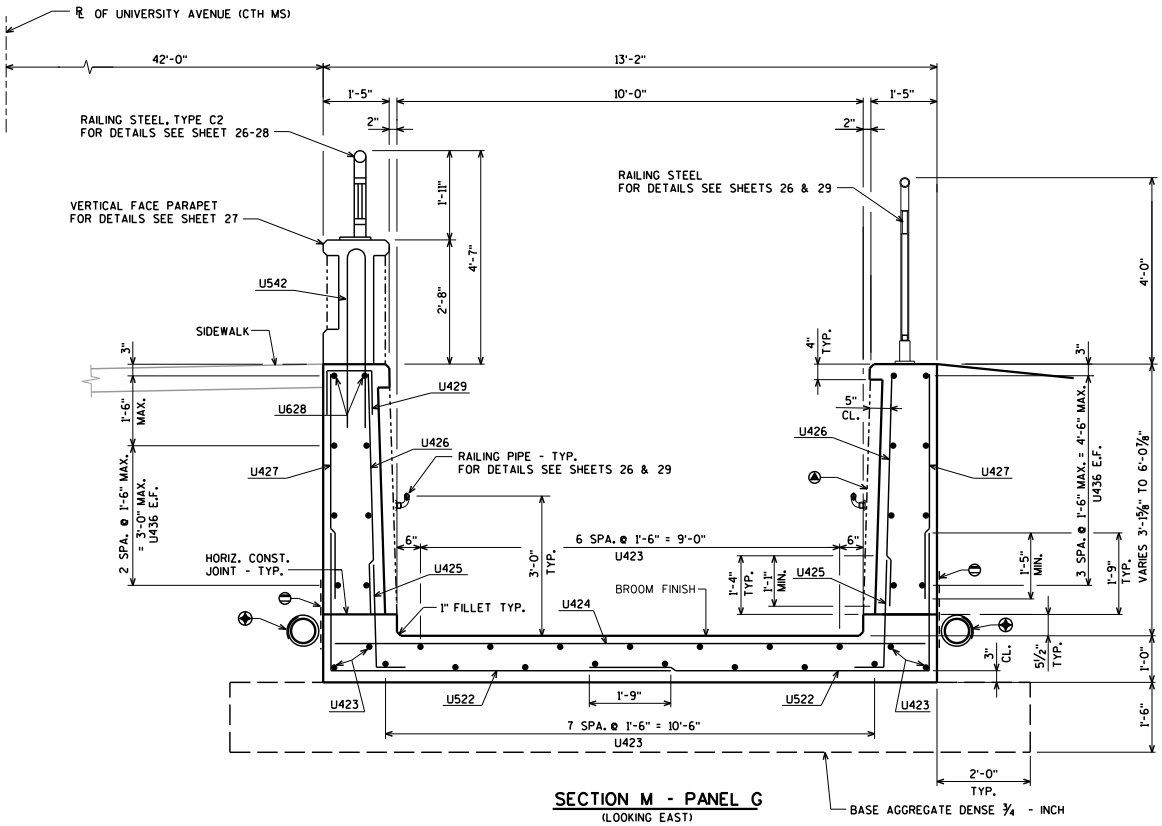

SECTION M - PANEL G
(LOOKING EAST)

E.F. DENOTES EACH FACE

FOR LOCATION OF SECTION M
SEE SHEET 16

▲ ARCHITECTURAL SURFACE TREATMENT
FOR DETAILS SEE SHEET 22

⊕ 6" PIPE UNDERDRAIN WRAPPED
SLOPE 0.003'/' MIN. - TYP.

⊖ 18" RUBBERIZED MEMBRANE
WATERPROOFING UP WALLS
ALONG THE VERT. CONST. JOINTS
AND ALONG HORIZONTAL
CONSTRUCTION JOINTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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U CHANNEL
PANEL G
SECTION

SHEET 20 OF 29
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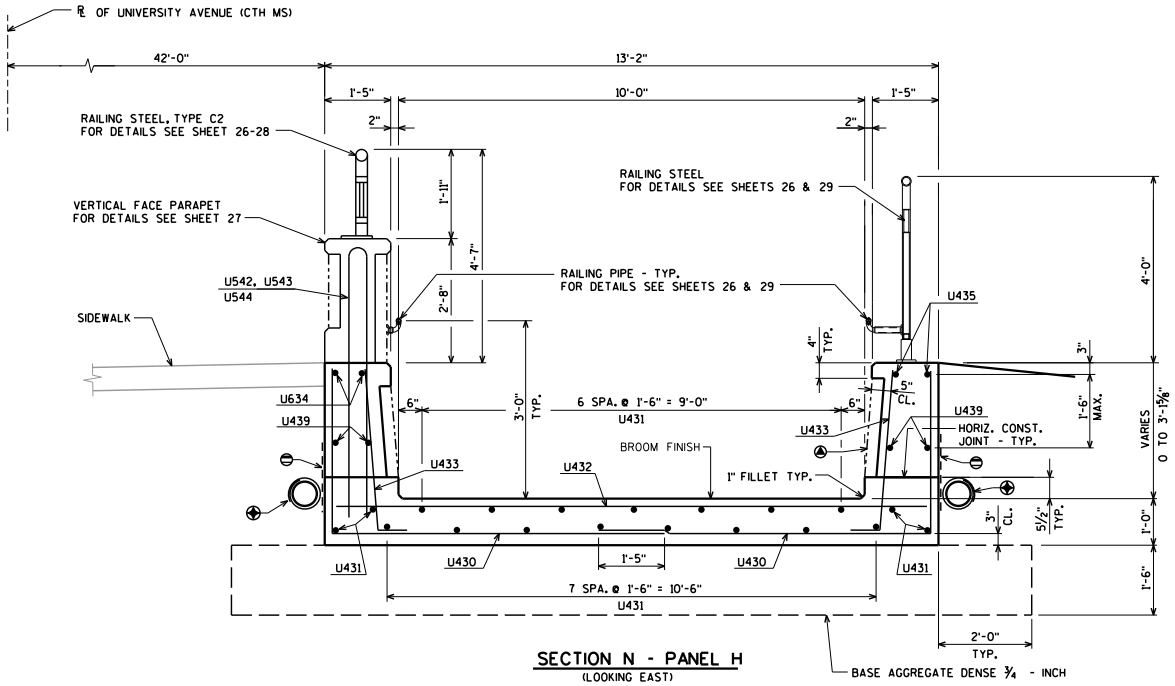

SECTION N - PANEL H
(LOOKING EAST)

E.F. DENOTES EACH FACE

FOR LOCATION OF SECTION N
SEE SHEET 16

▲ ARCHITECTURAL SURFACE TREATMENT
FOR DETAILS SEE SHEET 22

⊕ 6" PIPE UNDERDRAIN WRAPPED
SLOPE 0.003'/' MIN. - TYP.

⊖ 18" RUBBERIZED MEMBRANE
WATERPROOFING UP WALLS
ALONG THE VERT. CONST. JOINTS
AND ALONG HORIZONTAL
CONSTRUCTION JOINTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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U CHANNEL
PANEL H
SECTION

SHEET 21 OF 29
696

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BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	1,100# COATED 10,520# UNCOATED LOCATION
U701		30	14-7	X			CHANNEL PANEL E CORNER
U702		22	15-11	X			CHANNEL PANEL E CORNER
U403		22	7-7				CHANNEL PANEL E BOT. SLAB HORIZ.
U404		17	9-7				CHANNEL PANEL E TOP OF BOT. SLAB
U405		11	17-3				CHANNEL PANEL E BOT. SLAB HORIZ.
U506		18	2-7	X			CHANNEL PANEL E BOT. SLAB DOWELS
U407		13	4-0	X			CHANNEL PANEL E WALL DOWELS
U408		13	9-0				CHANNEL PANEL E WALL VERT.
U709		16	8-10				CHANNEL PANEL E WALL VERT.
U410		20	15-8				CHANNEL PANEL E WALL HORIZ.
U711		11	9-1				CHANNEL PANEL E WALL VERT.
U412		9	3-5	X			CHANNEL PANEL E WALL DOWELS
U413		9	9-9				CHANNEL PANEL E WALL VERT.
U714		96	12-8	X			CHANNEL PANEL F CORNERS
U415		45	27-2				CHANNEL PANEL F HORIZ.
U416		19	12-10				CHANNEL PANEL F TOP OF BOT. SLAB
U417		38	3-3	X			CHANNEL PANEL F WALLS DOWELS
U418		38	7-3			⊗	CHANNEL PANEL F WALLS VERT.
U719		50	6-4			⊗	CHANNEL PANEL F WALLS VERT.
U620		2	27-2				CHANNEL PANEL F HORIZ.
U421		37	3-8	X			CHANNEL PANEL F WALL VERT.
U522		66	10-2	X			CHANNEL PANEL G CORNERS
U423		19	23-11	X			CHANNEL PANEL G HORIZ. BOT. SLAB
U424		17	12-10				CHANNEL PANEL G TOP OF BOT. SLAB
U425		34	3-3	X			CHANNEL PANEL G WALLS DOWELS
U426		34	3-11			⊗	CHANNEL PANEL G WALLS VERT.
U427		34	3-11			⊗	CHANNEL PANEL G WALLS VERT.
U628		2	23-11				CHANNEL PANEL G HORIZ.
U429		33	2-8	X			CHANNEL PANEL G WALL VERT.
U430		38	9-4	X		⊗	CHANNEL PANEL H CORNERS
U431		19	23-11	X			CHANNEL PANEL H HORIZ. BOT. SLAB
U432		19	12-10				CHANNEL PANEL H TOP OF BOT. SLAB
U433		38	3-0	X		⊗	CHANNEL PANEL H WALLS DOWELS
U634		2	19-0				CHANNEL PANEL H HORIZ.
U435		2	19-0				CHANNEL PANEL H WALL HORIZ.
U436		14	23-11				CHANNEL PANEL G HORIZ. WALLS
U437		20	11-3				CHANNEL PANEL E HORIZ. WALL
U538		40	4-0				CHANNEL BOT. SLAB HORIZ. DOWELS
U439		4	15-0				CHANNEL PANEL H HORIZ. WALLS
U440		2	19-0				CHANNEL PANEL H HORIZ. WALLS
U441		4	4-6				CHANNEL PANEL H HORIZ. BOT. SLAB
U542	X	70	9-5	X			CHANNEL PARAPET VERT.
U543	X	6	8-5	X		⊗	CHANNEL PANEL H PARAPET VERT.
U544	X	8	7-2	X		⊗	CHANNEL PANEL H PARAPET VERT.
U445	X	6	27-1				CHANNEL PANEL F PARAPET HORIZ.
U446	X	12	23-10				CHANNEL PANELS G & H PARAPET HORIZ.
U447		18	4-5	X			CHANNEL PANEL E @ TRENCH DRAIN

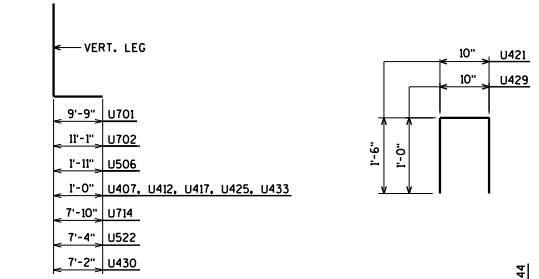
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

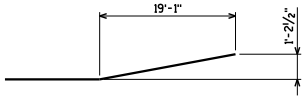
⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BAR MARK	NO REQ'D.	LENGTH
U418	2 SERIES OF 19	5'-5" TO 9'-1"
U719	2 SERIES OF 25	4'-6" TO 8'-2"
U426	2 SERIES OF 17	2'-5" TO 5'-5"
U427	2 SERIES OF 17	2'-5" TO 5'-5"
U430	2 SERIES OF 19	7'-11" TO 10'-9"
U433	2 SERIES OF 19	1'-6" TO 4'-6"
U543	1 SERIES OF 6	7'-9" TO 9'-1"
U544	1 SERIES OF 8	6'-9" TO 7'-7"

BUNDLE AND TAG EACH SERIES SEPARATELY.





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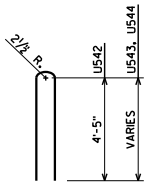

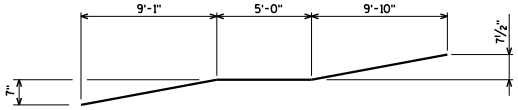

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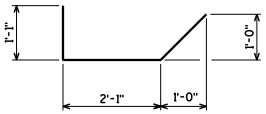
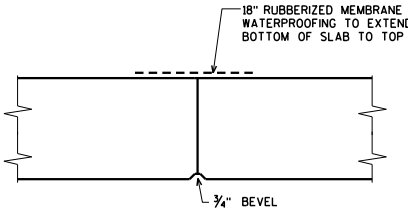
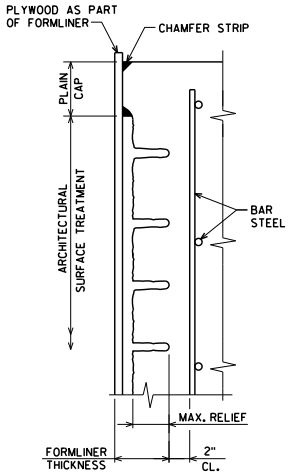


U447

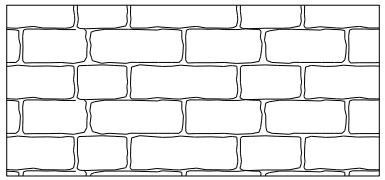


VERTICAL CONTRACTION JOINT DETAIL

DO NOT RUN ANY BAR STEEL THRU JOINT
(TYPICAL BETWEEN U CHANNEL PANELS)



SECTION THRU FORMLINER



RECTANGULAR CUT STONE

FORMLINER THICKNESS = 3½"
COURSE HEIGHT = 9"
MAX. RELIEF = 2½"

ARCHITECTURAL SURFACE TREATMENT NOTES

FORMLINER COURSING ON RETAINING WALLS, U CHANNEL, AND UNDERPASS SHALL BE LEVEL.

FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO THE TOP OF THE PARAPET.

THE ARCHITECTURAL SURFACE TREATMENT SHALL BE MULTI-COLOR STAINED TO COLORS THAT CLOSELY SIMULATE WEATHERED LIMESTONE. THE COST OF STAINING THE ARCHITECTURAL SURFACE TREATMENT IS INCLUDED IN THE BID ITEM "CONCRETE STAINING MULTI-COLOR C-13-2047".

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

ALL EXPOSED VERTICAL CONCRETE SURFACES ON RETAINING WALLS, U CHANNEL, AND PARAPETS THAT DO NOT HAVE ARCHITECTURAL SURFACE TREATMENT SHALL BE STAINED. THE COLOR OF THE CONCRETE STAIN SHALL BE PEARL GRAY IN ACCORDANCE WITH FEDERAL STANDARD NO. 595B #26622. THE COST OF STAINING THESE CONCRETE AREAS IS INCLUDED IN THE BID ITEM "CONCRETE STAINING MULTI-COLOR C-13-2047".

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STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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U CHANNEL
BILL OF BARS

SHEET 22 OF 29
697

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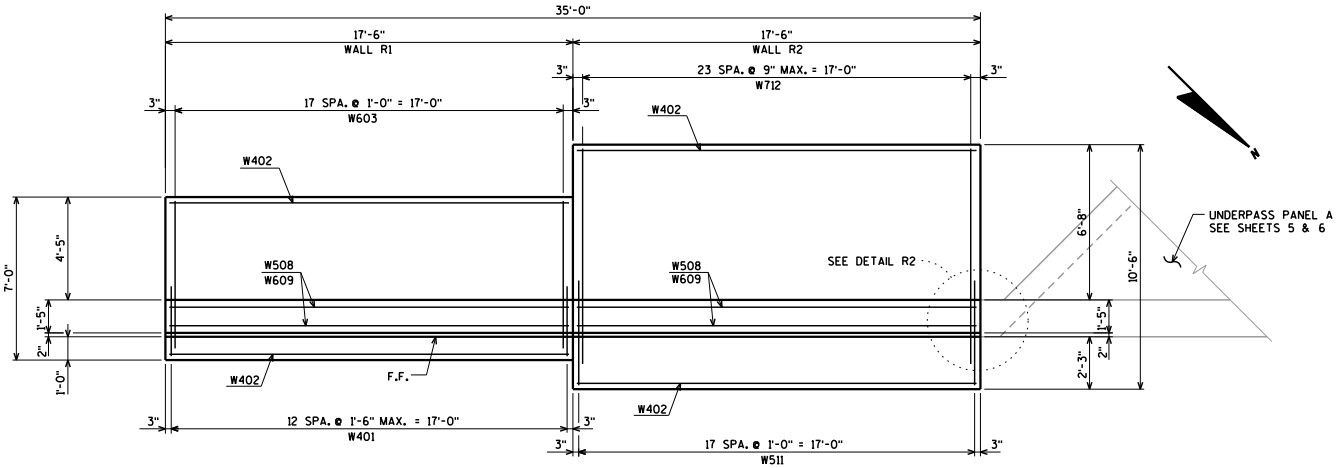
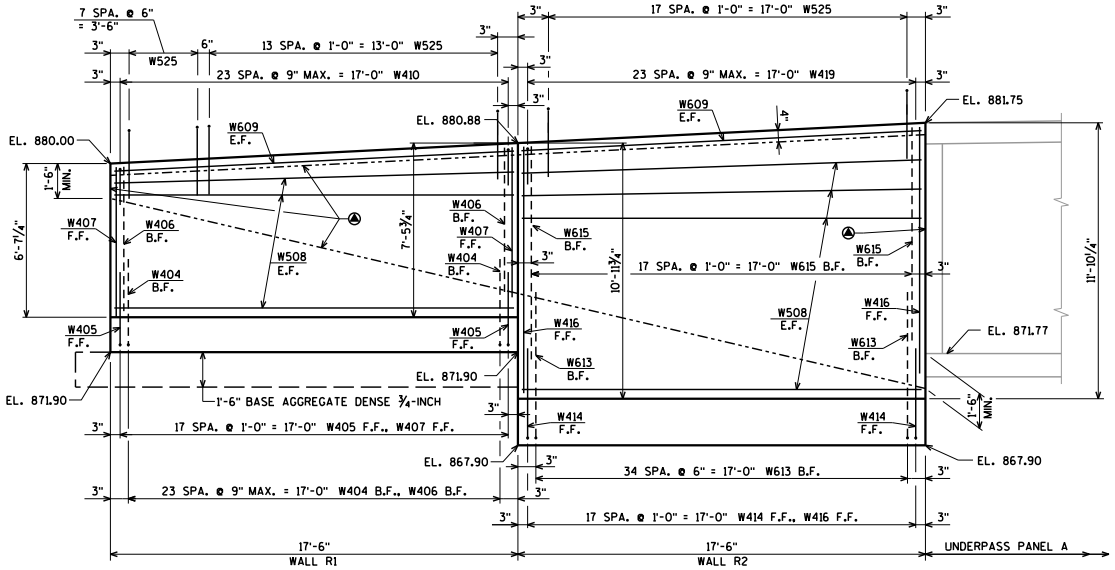


PLAN - WALLS R1 & R2

NOTE: PARAPET NOT SHOWN

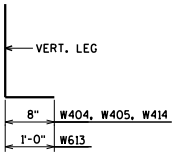


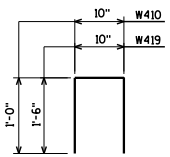
ELEVATION - WALLS R1 & R2

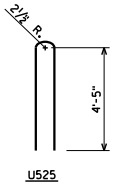
BILL OF BARS

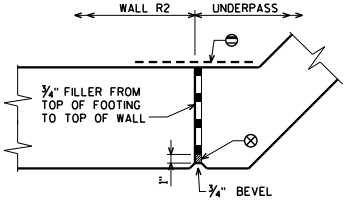
BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	6,150# UNCOATED 1,130# COATED LOCATION
W401		27	3-0				FOOTING - BOTTOM R1 & R4
W402		19	17-2				FOOTING - LONG. R1 & R2
W603		39	6-4				FOOTING - TOP R1 & R4
W404		51	4-3	X			WALLS - DOWELS R1 & R4 B.F.
W405		39	3-11	X			WALLS - DOWELS R1 & R4 F.F.
W406		24	6-2				WALLS - VERT. R1 B.F.
W407		18	6-5				WALLS - VERT. R1 F.F.
W508		30	17-2				WALLS - LONG. R1 & R2
W609		4	17-2				WALLS - LONG. TOP R1 & R2
W410		51	2-8	X			WALLS - TOP R1 & R4
W511		39	4-6				FOOTING - BOTTOM R2 & R3
W712		51	9-3				FOOTING - TOP R2 & R3
W613		75	7-1	X			WALLS - DOWELS R2 & R3 B.F.
W414		39	4-5	X			WALLS - DOWELS R2 & R3 F.F.
W615		18	9-2				WALLS - VERT. R2 B.F.
W416		18	10-7				WALLS - VERT. R2 F.F.
W417		19	19-8				FOOTING - LONG. R3 & R4
W518		34	19-8				WALLS - LONG. R3 & R4
W419		51	3-8	X			WALLS - TOP R2 & R3
W620		4	19-8				WALLS - LONG. TOP R3 & R4
W421		27	6-0				WALLS - VERT. R4 B.F.
W422		21	6-0				WALLS - VERT. R4 F.F.
W623		21	11-0				WALLS - VERT. R3 B.F.
W424		21	12-5				WALLS - VERT. R3 F.F.
W525	X	85	9-5	X			WALLS - VERT. @ PARAPET
W426	X	12	17-1				WALLS - HORIZ. R1 & R2 @ PARAPET
W427	X	12	19-7				WALLS - HORIZ. R3 & R4 @ PARAPET
W428		6	3-0				WALLS @ SAN. SEWER FORCE MAIN

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.









DETAIL R2

ARCHITECTURAL SURFACE TREATMENT FOR DETAILS SEE SHEET 22

18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BOTTOM OF SLAB TO TOP OF WALL

FILL WITH NON-STAINING GRAY SINGLE COMPONENT NON-BITUMINOUS JOINT SEALER

E.F. DENOTES EACH FACE
F.F. DENOTES FRONT FACE
B.F. DENOTES BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

DRAWN BY CLS | PLANS CK'D. DNS

WALLS R1 & R2 & BILL OF BARS

SHEET 23 OF 29
698

ORIGINAL PLANS PREPARED BY
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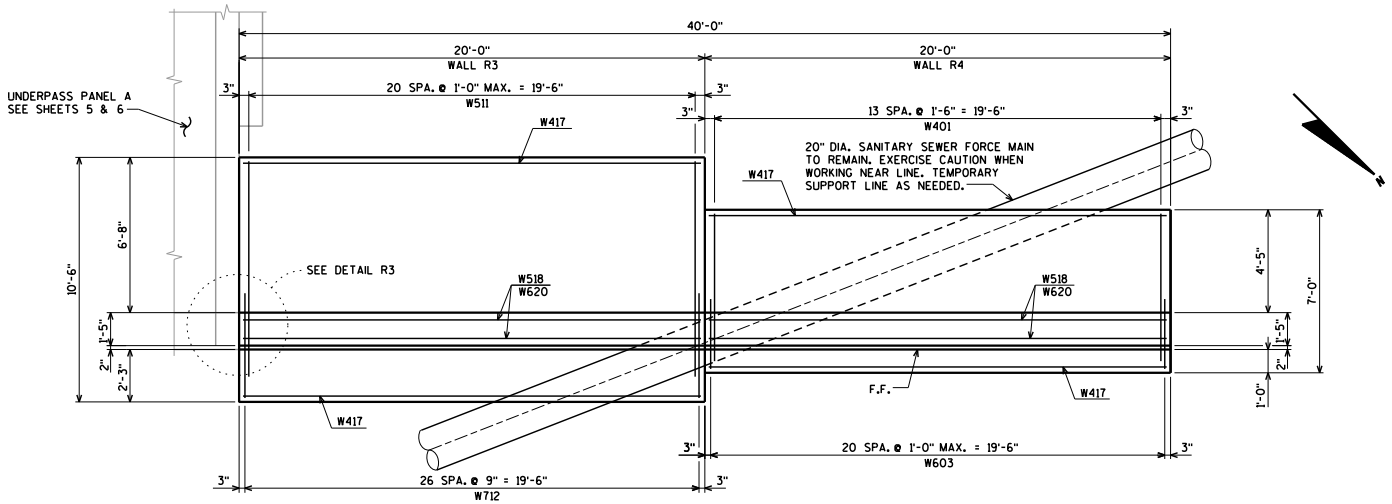
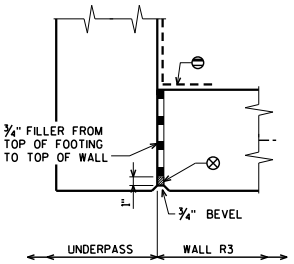
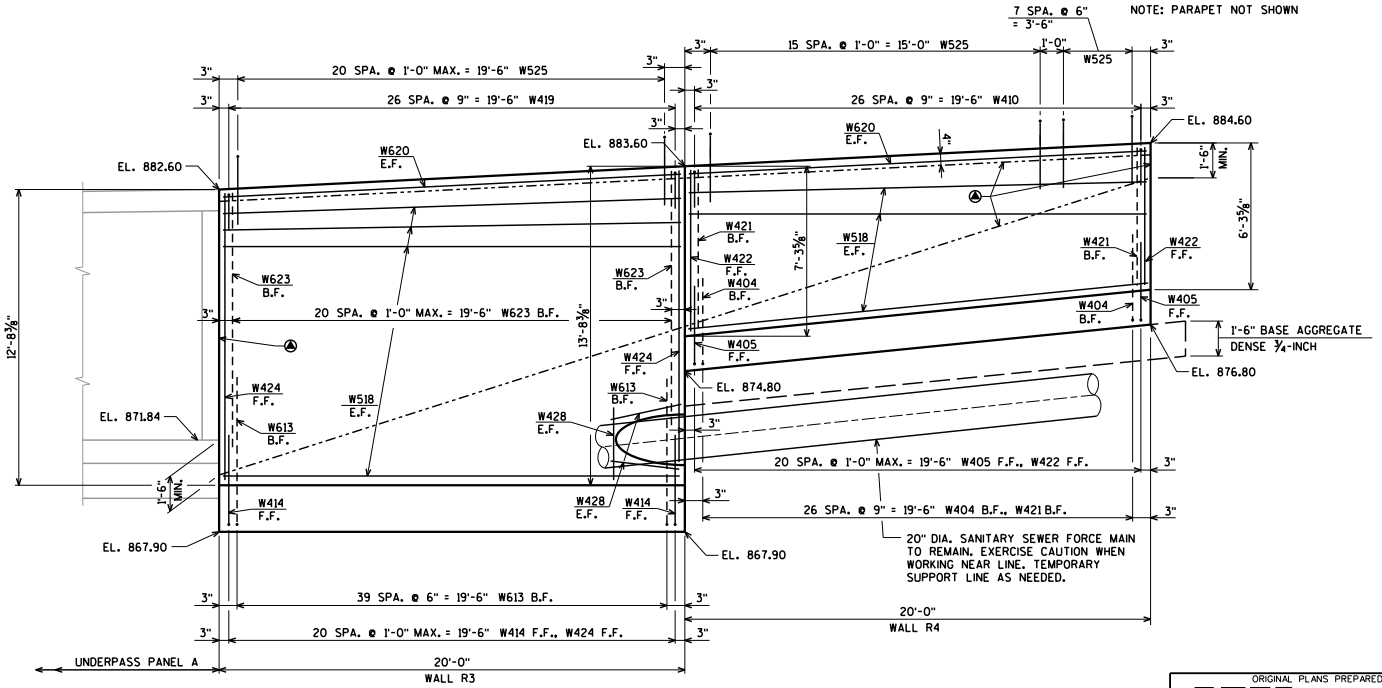
STATE PROJECT NUMBER
5992-08-82



PLAN - WALLS R3 & R4



DETAIL R3



ELEVATION - WALLS R3 & R4

▲ ARCHITECTURAL SURFACE TREATMENT FOR DETAILS SEE SHEET 22

⊖ 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BOTTOM OF SLAB TO TOP OF WALL

⊗ FILL WITH NON-STAINING GRAY SINGLE COMPONENT NON-BITUMINOUS JOINT SEALER

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F.F. DENOTES FRONT FACE
B.F. DENOTES BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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WALLS
R3 & R4

SHEET 24 OF 29
699

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STATE PROJECT NUMBER
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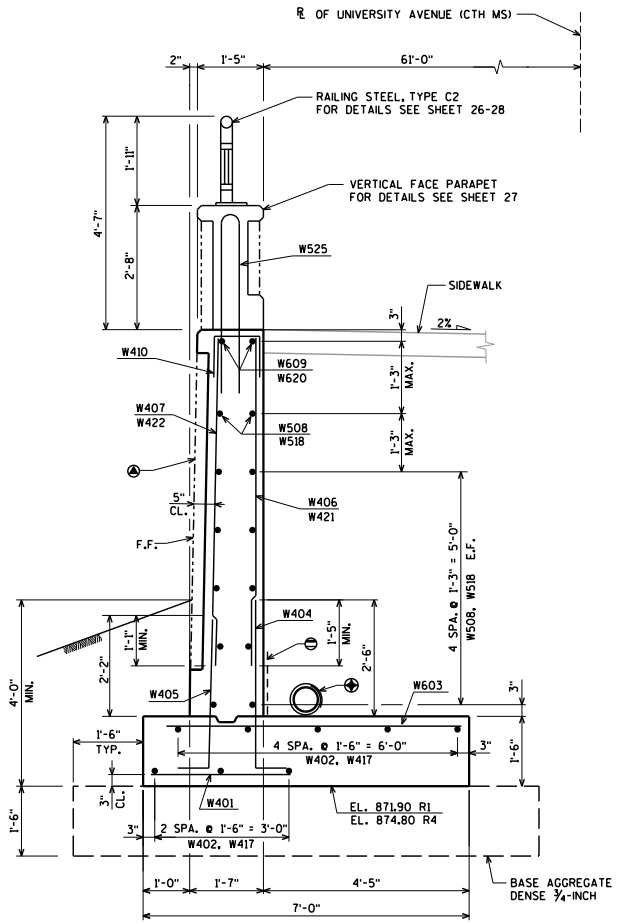
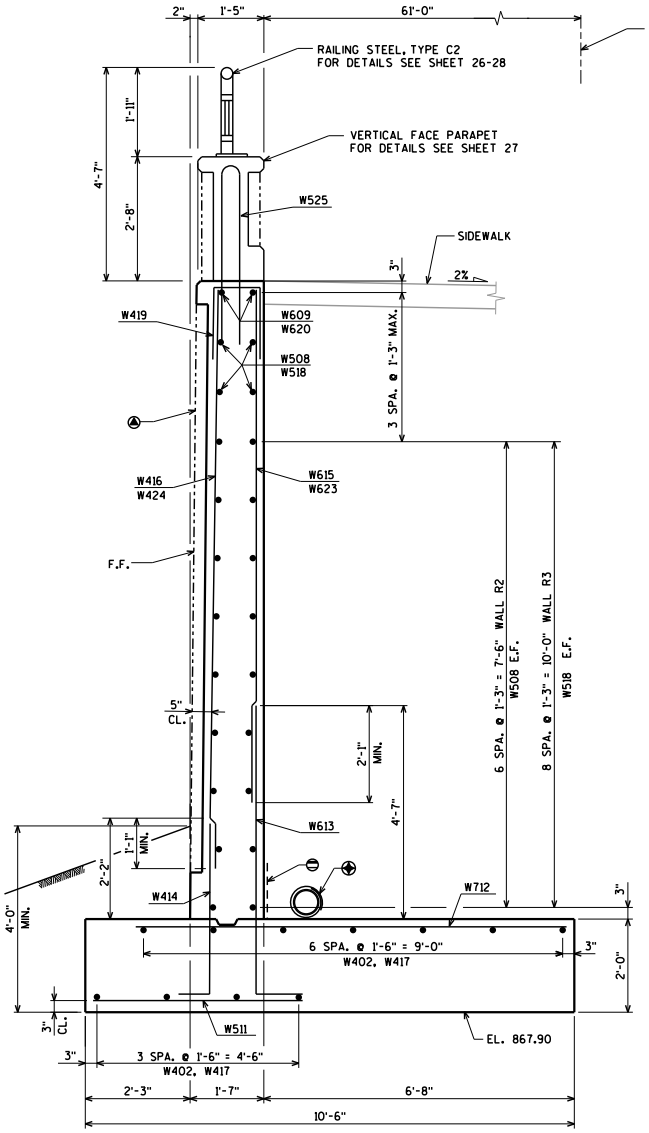


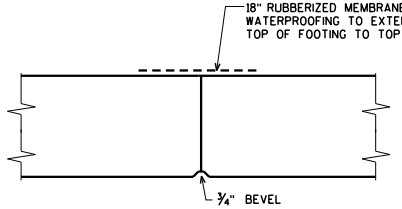
SECTION THRU WALL R1 & WALL R4

(LOOKING EAST)



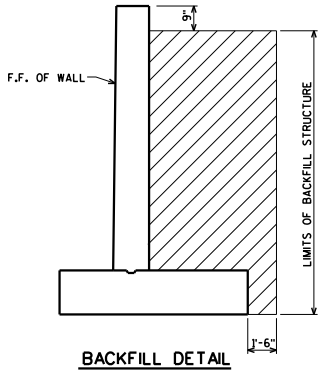
SECTION THRU WALL R2 & WALL R3

(LOOKING EAST)



VERTICAL CONTRACTION JOINT DETAIL

DO NOT RUN ANY BAR STEEL THRU JOINT



BACKFILL DETAIL

- ▲ ARCHITECTURAL SURFACE TREATMENT FOR DETAILS SEE SHEET 22
- ⊖ 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BOTTOM OF SLAB TO TOP OF WALL
- ⊗ FILL WITH NON-STAINING GRAY SINGLE COMPONENT NON-BITUMINOUS JOINT SEALER

E.F. DENOTES EACH FACE
F.F. DENOTES FRONT FACE
B.F. DENOTES BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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SECTIONS THRU WALLS

SHEET 25 OF 29
700

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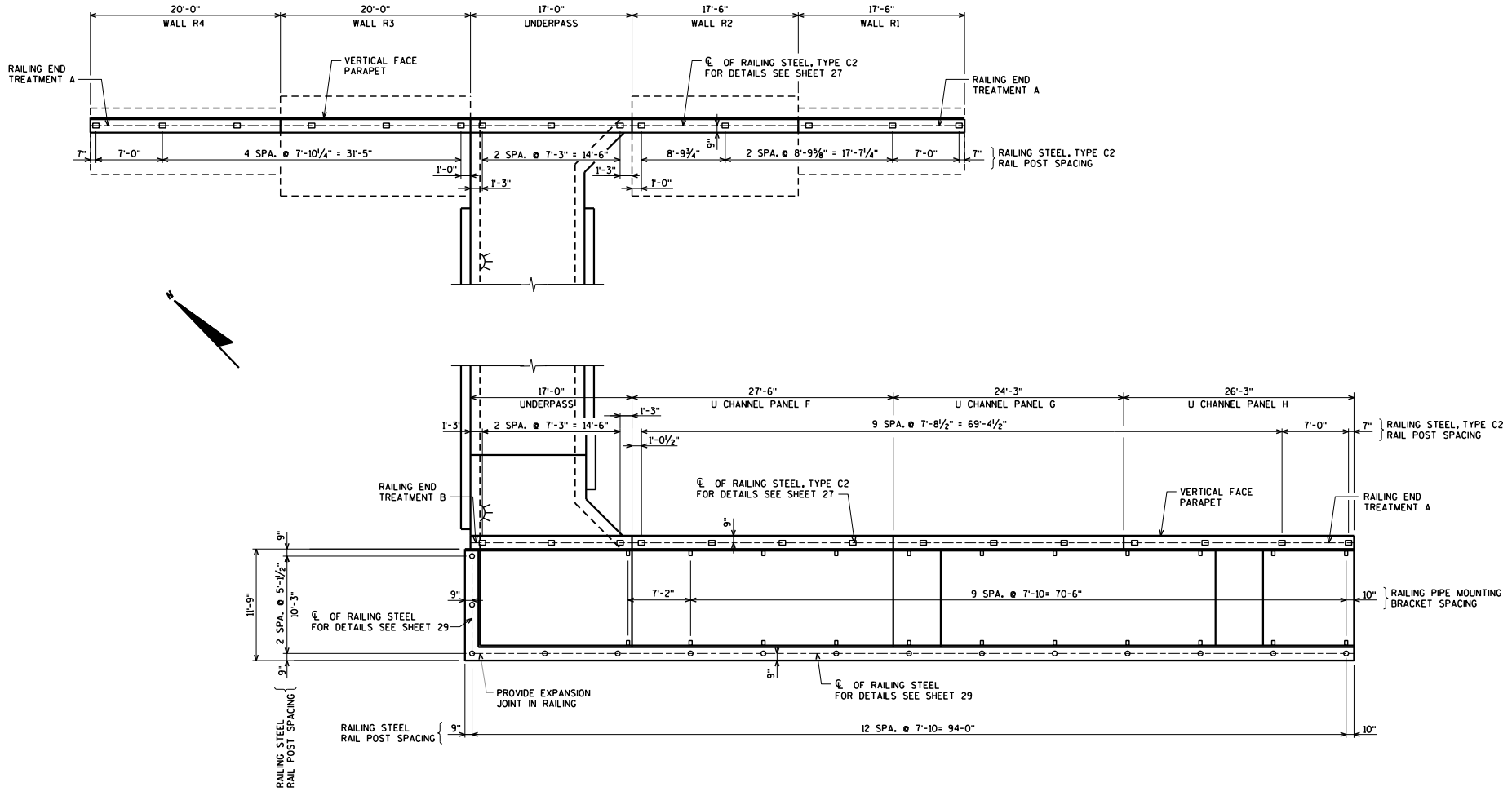

RAIL POST SPACING PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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RAILING LAYOUT

SHEET 26 OF 29
701

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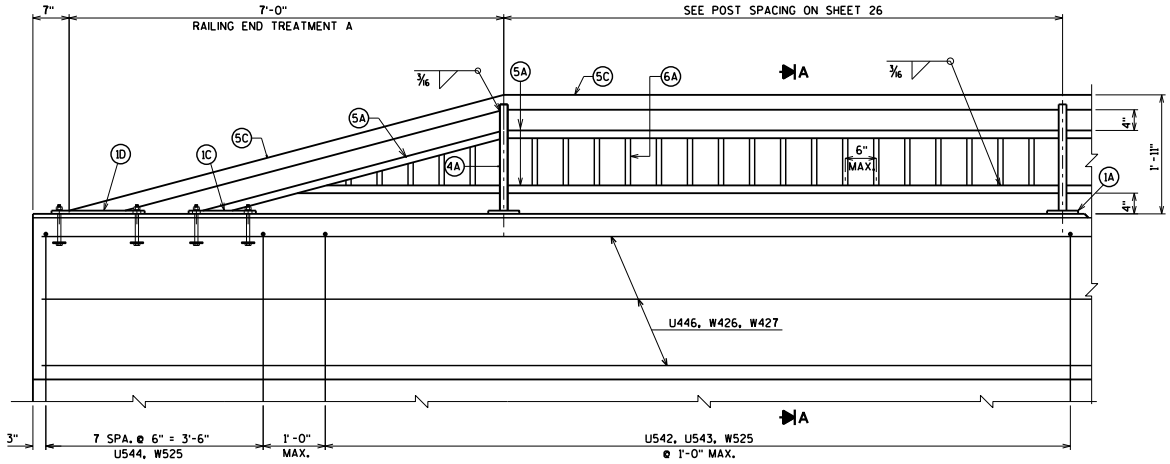
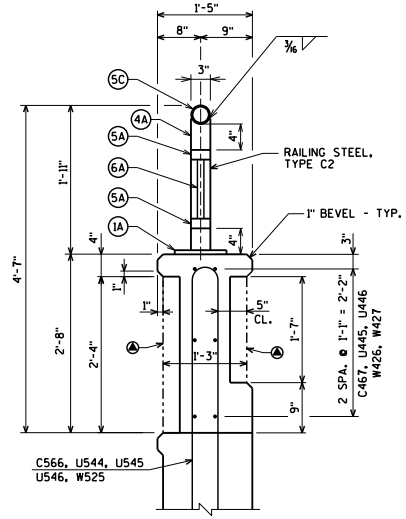
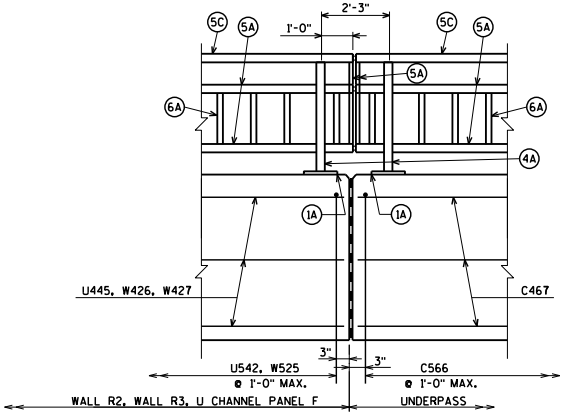


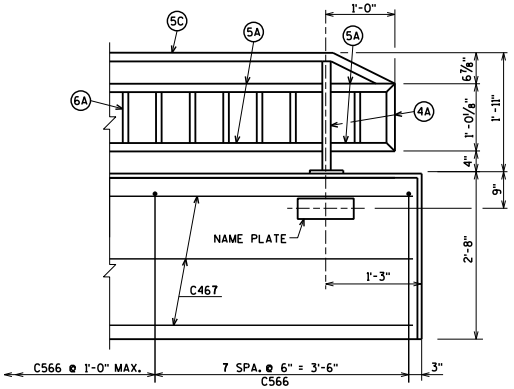
ELEVATION OF PARAPET



SECTION A-A



RAILING JONT TREATMENT



RAILING END TREATMENT B

A ARCHITECTURAL SURFACE TREATMENT
FOR DETAILS SEE SHEET 22

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

DRAWN BY	CLS	PLANS CK'D.	DNS

RAILING TYPE C2 AND PARAPET DETAILS

SHEET 27 OF 29
702

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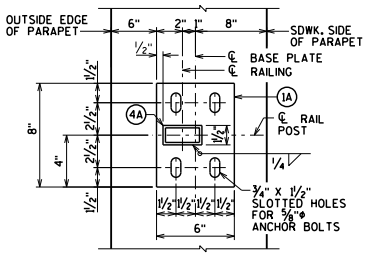
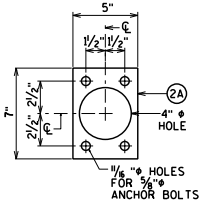
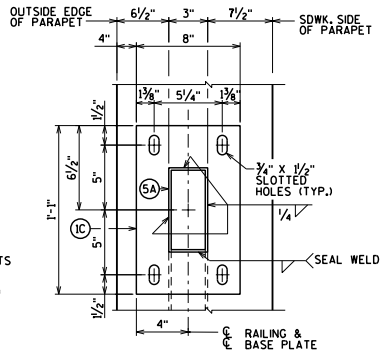


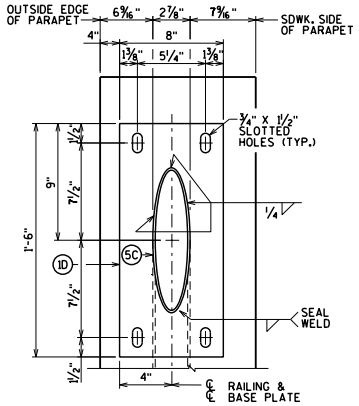
TYPICAL RAIL POST BASE PLATE



ANCHOR PLATE



END RAIL BASE PLATE



END RAIL BASE PLATE

LEGEND

(1A) PLATE ⅝" X 6" X 8" WITH ¾" X 1½" SLOTTED HOLES.

(1C) PLATE ⅝" X 8" X 1'-1" WITH ¾" X 1½" SLOTTED HOLES.

(1D) PLATE ⅝" X 8" X 1'-6" WITH ¾" X 1½" SLOTTED HOLES

(2A) ¼" X 5" X 7" ANCHOR PLATE WITH 11/16 " ø HOLES FOR ANCHOR BOLTS NO. 3.

(2C) ¼" X 2½" X 7¼" ANCHOR PLATE WITH 11/16 " ø HOLES FOR ANCHOR BOLTS NO. 3.

(3) ⅝" DIA. X 7½" LONG ASTM F593 TYPE 316 STAINLESS STEEL ANCHOR BOLTS WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE - 4 EQUIV. STAINLESS STEEL CONCRETE MASONRY ANCHORS, TYPE S (EPOXY), ⅝" ø, MINIMUM PULLOUT CAPACITY OF 15 KIPS. EMBED A MIN. OF 7" FOR RAIL POSTS AND 5" FOR END RAILS.)

(4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4.

(5C) 2½" ø STANDARD PIPE RAIL (2.875" O.D.). WELD TO NO. 1 & NO. 4.

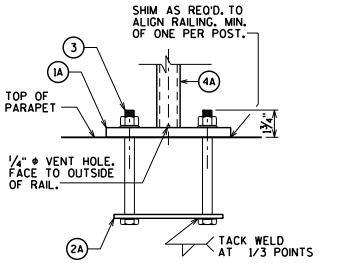
(6A) STRUCTURAL TUBING 1" X 1" X ⅛" PICKETS. WELD TO NO. 5. PLACE VERTICAL.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(9B) CIRCULAR SLEEVE FABRICATED FROM 2" ø STANDARD PIPE.

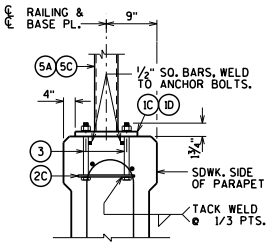
(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL JTS.)

(10B) CIRCULAR SLEEVE FABRICATED FROM 2" ø STANDARD PIPE. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)



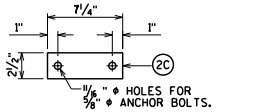
ANCHOR BOLTS FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.



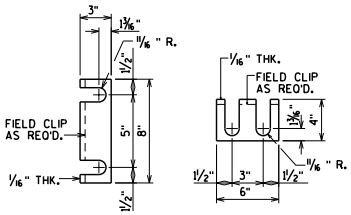
ANCHOR BOLTS FOR END RAIL

NOTE: ANCHOR PLATES NOT REQ'D. WHEN TYPE "S" ANCHORS ARE USED.



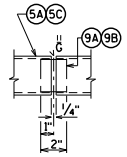
END RAIL ANCHOR PLATE

FOR END RAIL BASE PLATES 2 REQ'D. PER END RAIL BASE PLATE (1C) (1D)



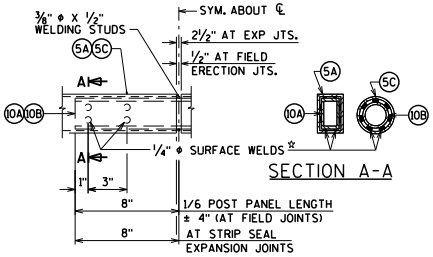
RAIL POST SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



FIELD ERECTION JOINT DETAIL

☆MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

NOTES

BID ITEM SHALL BE "RAILING STEEL, TYPE C2 C-13-2047", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN, AND GALVANIZING.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

NO. 1, 2, 9 AND NO. 10 SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36. STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B (NO. 4, NO. 5, AND NO. 6).

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

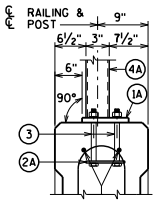
FILL BOLT SLOT OPENINGS IN SHIMS AND PLATE NO. 1 AND CAULK AROUND PERIMETER OF PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

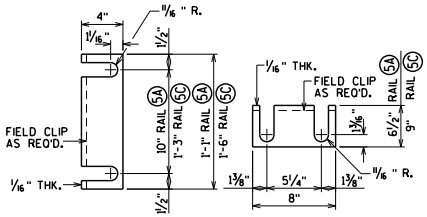
AFTER FABRICATION, ALL MATERIAL, EXCEPT ANCHORAGE (NO. 2 & 3) SHALL BE GALVANIZED. PRIOR TO GALVANIZING, ALL STEEL SHALL BE GIVEN A NO. 6 BLAST CLEANING BY SSPC SPECIFICATIONS.

¼"ø VENT HOLES LOCATED IN TOP RAIL OVER RAIL POSTS AND AT LOW END OF OTHER RAILS.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

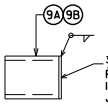


SECTION THRU RAIL POST



END RAIL SHIM DETAIL

(2 SETS PER POST)



⅜" PLATE AT 1 END TO PREVENT WATER FROM GETTING IN THE RAIL (AT FIELD ERECTION JOINT ONLY)

CLOSURE PLUG DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

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RAILING STEEL TYPE C2

SHEET 28 OF 29
703

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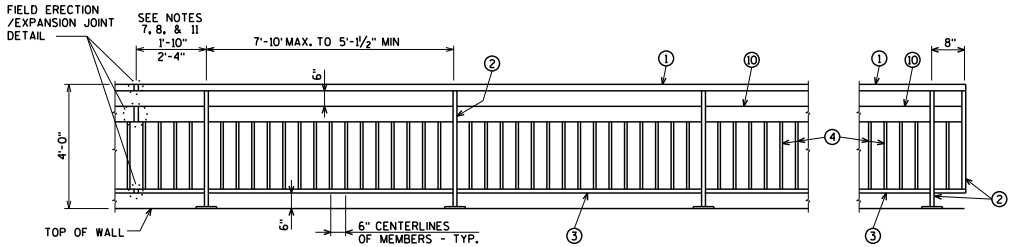
STATE PROJECT NUMBER

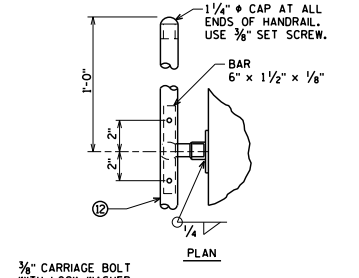
5992-08-82

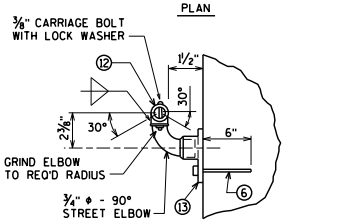


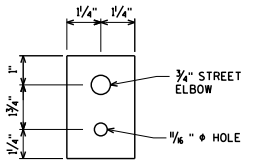
PART ELEVATION OF RAILING STEEL

END SECTION

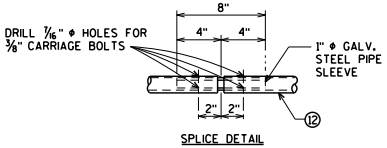
(N. END OF PANEL E & EAST END OF PANEL H)







MOUNTING BASE PLATE



RAILING PIPE DETAILS

LEGEND

① 2 ½" ϕ STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.

② TS 2" x 2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO MATCH SLOPE OF TOP OF WALL. HOLD 1/16" ABOVE BASE PLATE TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON BASE PLATE.

③ TS 1½" x 1½" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

④ TS 1" x 1" x 0.125" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

⑤ BASE PLATE ½" x 7" x 7" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 11/16 " HOLES FOR HEX BOLTS NO. 6. WELD TO NO. 2 AS SHOWN.

⑥ CONCRETE MASONRY ANCHORS, TYPE S, ⅝". PULLOUT STRENGTH SHALL BE 3.6 KIPS.

⑦ SQUARE SLEEVE FABRICATED FROM ½" COLD DRAWN STEEL ALLOY SQUARE CONFORMING TO ASTM A331 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" ϕ SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 3. PROVIDE ⅜" ϕ x ½" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

⑧ 1½" ϕ STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" ϕ SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE ⅜" ϕ x ½" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

⑨ 2" ϕ PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".

⑩ TS 6" x 2" x 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

⑪ 1" x 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 x 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" ϕ SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE IN I.D. OF NO. 10. PROVIDE ⅜" x ½" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

⑫ 1¼" SCHEDULE 40 PIPE HANDRAIL - GALVANIZED. HANDRAIL TO BE CONTINUOUS ACROSS WALL SECTIONS.

⑬ MOUNTING PLATE ¼" x 2½" x 4" CONFORMING TO ASTM A709 GRADE 36 WITH 11/16 " DIA. HOLE FOR ANCHOR BOLT NO. 6

GENERAL NOTES

BID ITEM SHALL BE "RAILING PIPE C-13-2047" AND "RAILING STEEL C-13-2047", WHICH INCLUDE ALL ITEMS SHOWN.

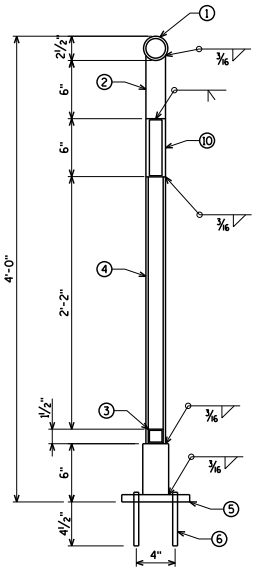
RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.

POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

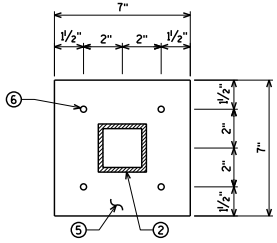
ALL MATERIAL EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.

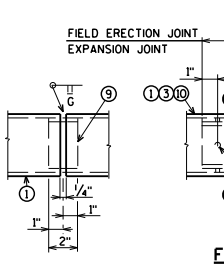
VERTICAL MEMBERS SHALL BE PLUMB.
HORIZONTAL MEMBERS SHALL PARALLEL TO GRADE.



SECTION THRU RAILING STEEL



RAILING BASE PLATE

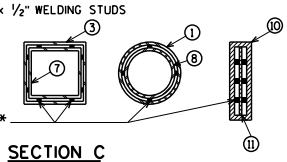


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)

FIELD ERECTION JOINT DETAIL

*MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



SECTION C

ORIGINAL PLANS PREPARED BY

AYRES ASSOCIATES

3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-2047

DRAWN BY CLS | PLANS CK'D. DNS

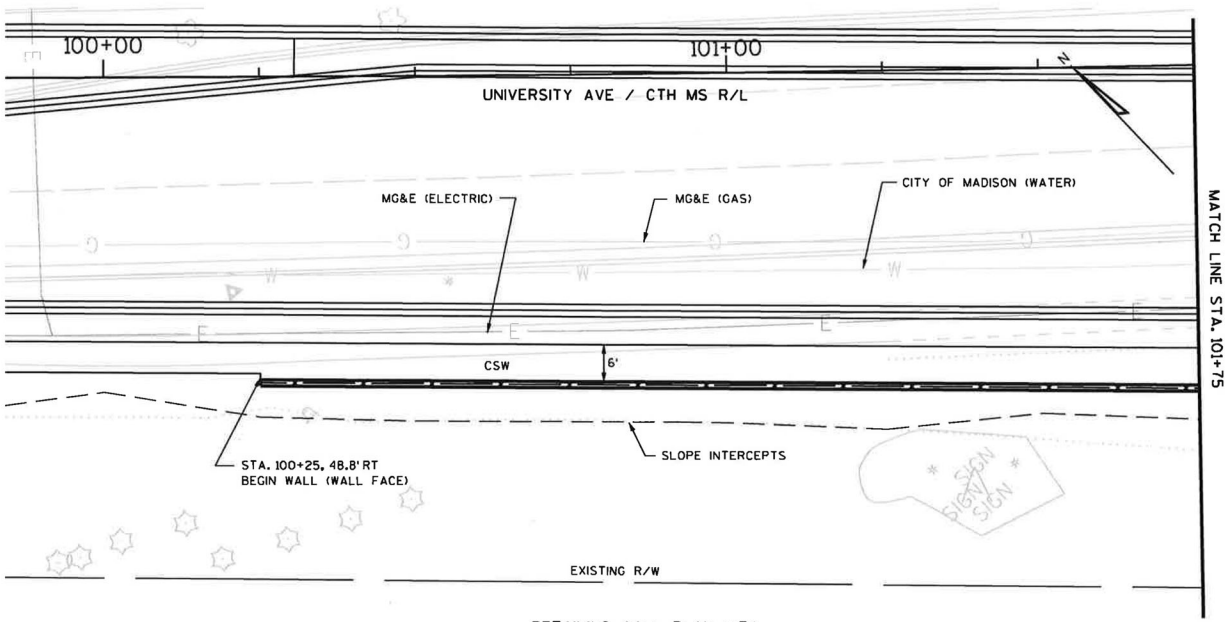
RAILING DETAILS

SHEET 29 OF 29
704

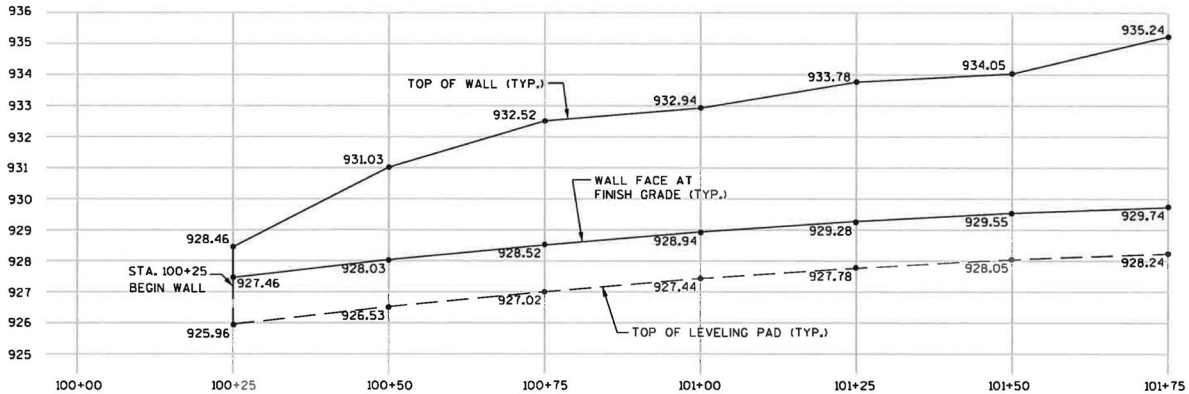
ecpdf.plt
C-13-2047 PIPErail.dgn

10/28/2011

black.tbl



RETAINING WALL PLAN VIEW



RETAINING WALL PROFILE VIEW
STA 100+25 RT - STA 104+20 RT

LIST OF BID ITEMS

513.6000	RAILING STEEL R-13-185	- 1 L.S.

BUREAU OF STRUCTURES CONTACT:

STATE PROJECT NUMBER
5992-08-79

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE GRADES PROVIDED ON THIS DETAIL.

DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED SLOPE BEHIND THE WALL AS SHOWN ON THE CROSS SECTIONS.

LARGE WET CAST CONCRETE BLOCKS MAY BE USED FOR THIS PROJECT, EITHER AS GRAVITY WALLS OR MSE WALLS OR A COMBINATION OF BOTH AS REQUIRED. WET CAST CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4000 PSI AND AIR CONTENT OF 5.0 TO 7.5 PERCENT. ABSORPTION AND FREEZE-THAW REQUIREMENTS DO NOT APPLY TO WET CAST CONCRETE BLOCKS.

WALL TO HAVE SPLIT BLOCK STRAIGHT FACE APPEARANCE AND BE TAN IN COLORATION. WET CAST CONCRETE BLOCKS MAY BE STAINED FOR COLOR.

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE NOTED.

ALLOWABLE SOIL BEARING CAPACITY = 3,000 PSF.

CONCRETE COPING SHALL BE STAINED FEDERAL STANDARD NO. 595B #26622 (PEARL GRAY). APPLY STAIN TO ENTIRE SURFACE AREA OF FRONT AND TOP OF COPING AND THE BACK TOP 9 INCHES OF COPING.

LIST OF DRAWINGS

1. GENERAL LAYOUT
2. GENERAL LAYOUT
3. COPING DETAILS
4. SUBSURFACE EXPLORATION
5. RAILING DETAILS

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 12/01/11
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-13-185

UNIVERSITY AVENUE (CTH MS)

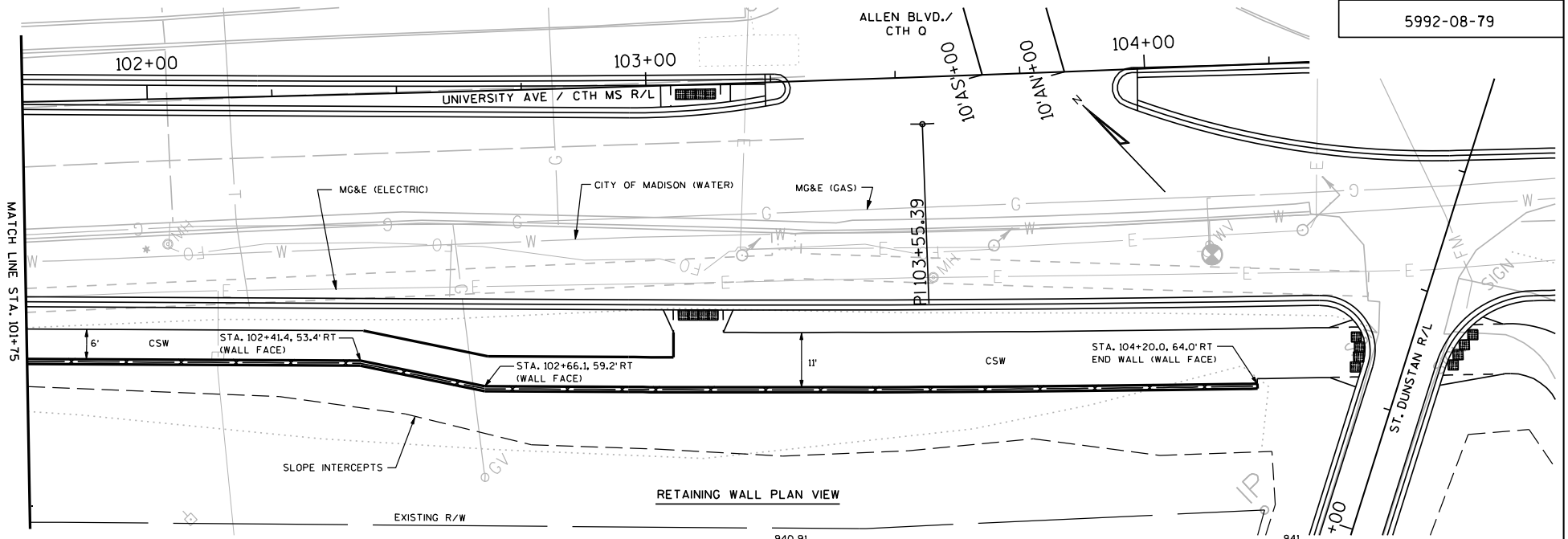
COUNTY DANE ~~TOWN/CITY/VILLAGE~~ MADISON

DESIGN SPEC.

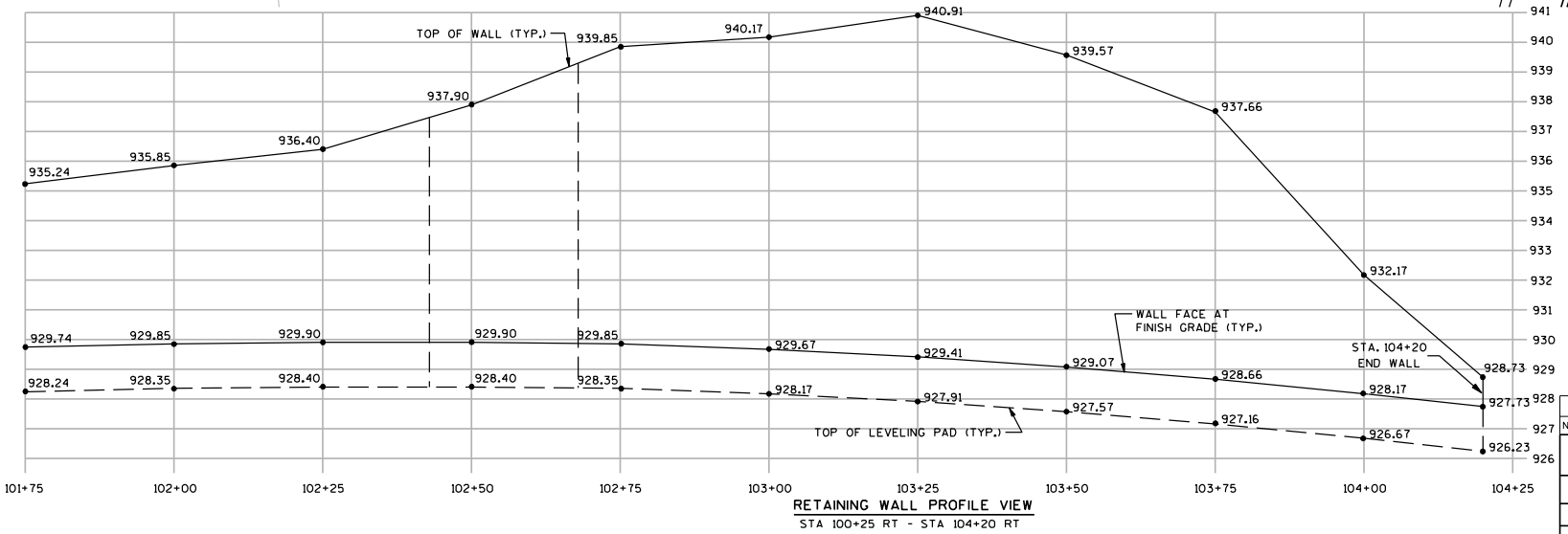
8

8

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW



RETAINING WALL PROFILE VIEW
STA 100+25 RT - STA 104+20 RT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-185

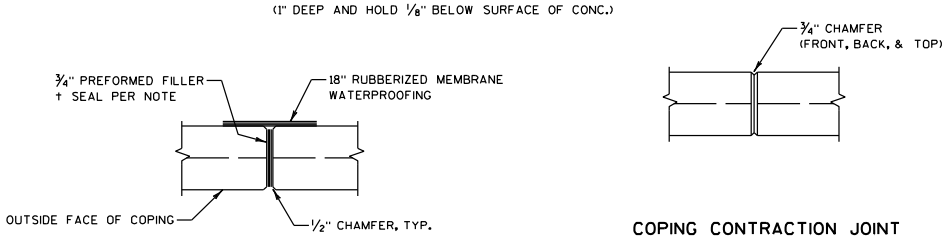
DRAWN BY	STD	PLANS CK'D.	MPB

GENERAL LAYOUT

SHEET 2 OF 5
706

STATE PROJECT NUMBER
5992-08-79

† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)



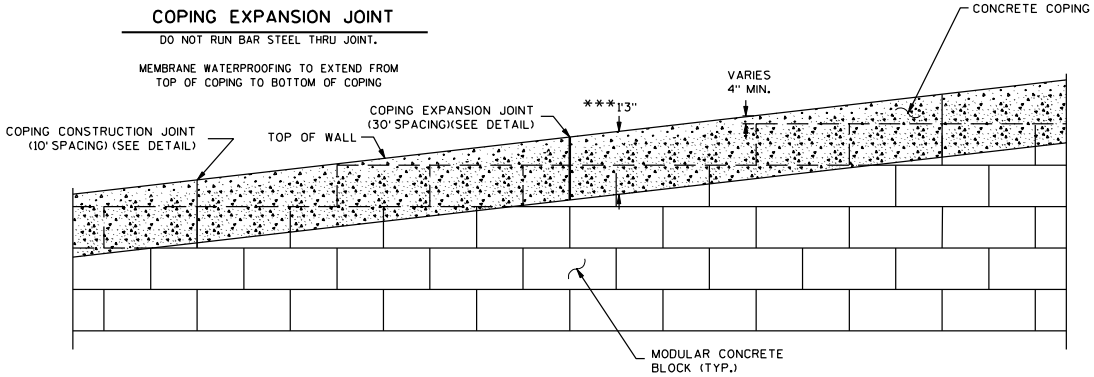
COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING



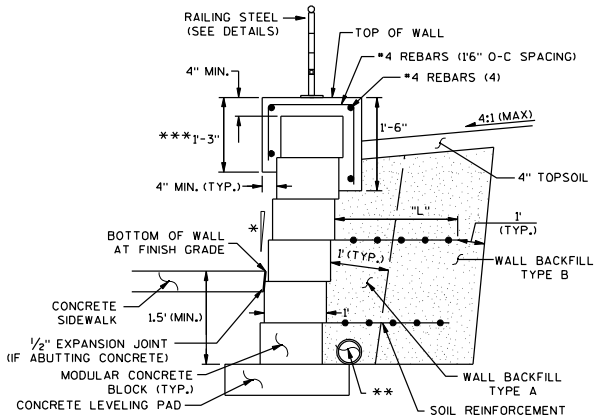
RETAINING WALL FACE & CONCRETE COPING DETAIL

NOTES:
MAINTAIN 2" MINIMUM COVER ON ALL REBAR.

PLACE EXPANSION JOINTS AT EVERY THIRD JOINT AND AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS.

SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
RETAINED SOIL	125	30°	0
BACKFILL SOIL	120	30°	0



TYPICAL SECTION OF RETAINING WALL
STA. 100+25 RT - STA. 104+20 RT
NTS

* BATTER VARIES BY MANUFACTURER

** PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.

*** THIS DIMENSION MAY CHANGE DEPENDING ON HEIGHT OF BLOCKS. THIS DIMENSION TO BE CONSTANT FOR ENTIRE LENGTH OF WALL. MAXIMUM ALLOWABLE HEIGHT OF BLOCKS TO BE 9 INCHES.

"L" SHALL BE A MINIMUM OF 0.7 TIMES THE WALL HEIGHT BUT NOT LESS THAN 6 FEET.

MSE WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS			
WALL HEIGHT (FEET)		5	10
EXPOSED WALL HEIGHT (FEET)		3.5	8.5
LENGTH OF REINFORCEMENT (FEET)		6	10
WALL STATION		± 101+00	± 103+00
BORING USED		BOR-1	BOR-2
FACTOR OF SAFETY			
SLIDING	(>1.5)	1.95	1.54
OVERTURNING	(>2.0)	8.99	5.78
BEARING	(<3.0 ksf)	0.83 ksf	1.73 ksf
GLOBAL STABILITY	(>1.3)	1.67	1.65

NOTE:
FINAL DESIGN FOR INTERNAL AND EXTERNAL STABILITY IS THE RESPONSIBILITY OF THE WALL DESIGNER AND MAY DIFFER FROM THE VALUES IN THE TABLE.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

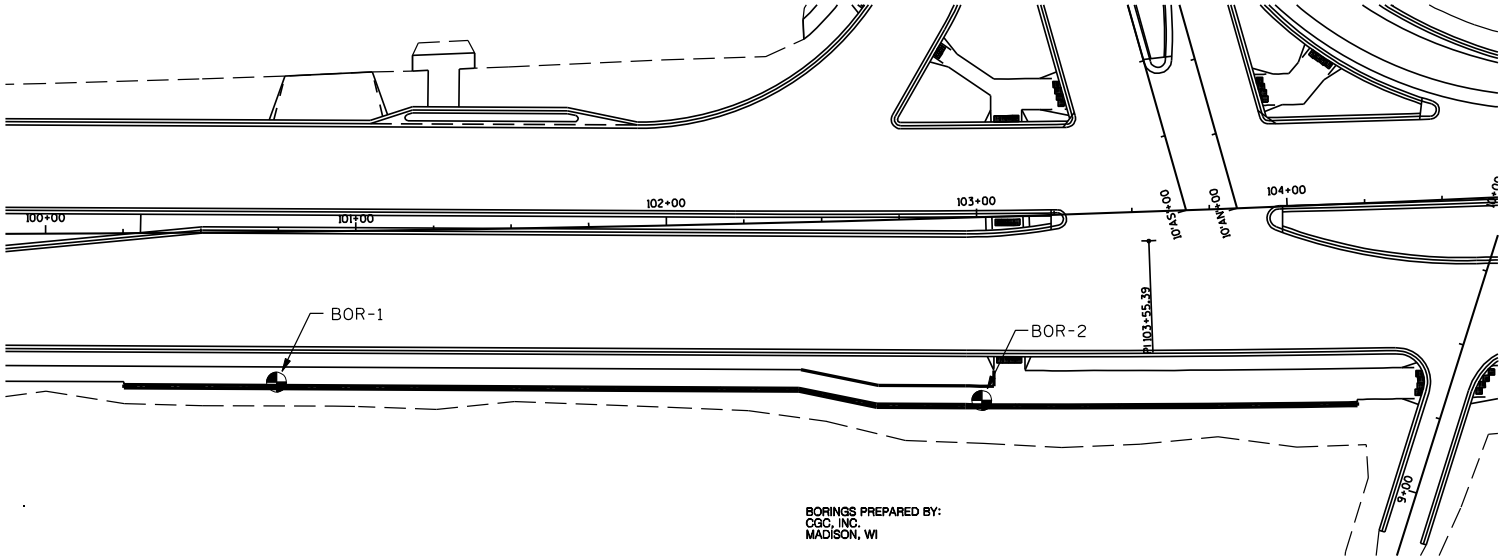
STRUCTURE R-13-185

DRAWN BY	STD	PLANS CK'D.	MPB

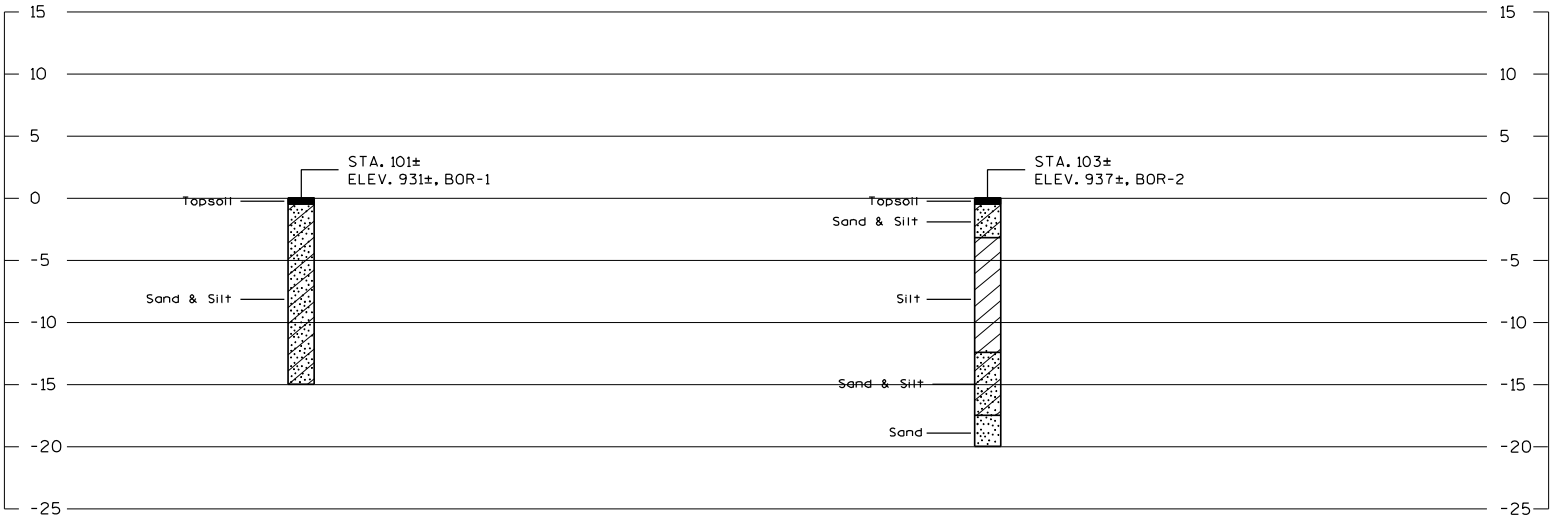
COPING DETAILS

SHEET 3 OF 5
707

UNIVERSITY AVE.
MADISON, WI.
DANE COUNTY



BORINGS PREPARED BY:
CGC, INC.
MADISON, WI

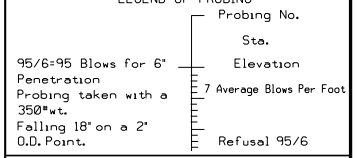


STATE PROJECT NUMBER	SHEET NO.
5992-08-79	

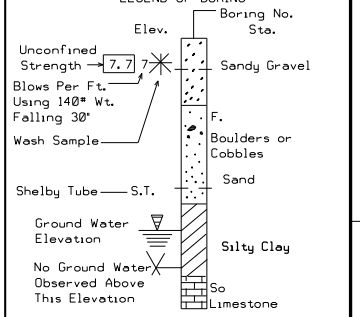
ABBREVIATIONS
F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS
Topsoil, Silt, Sandstone
Sand, Peat, Limestone
Gravel, Clay, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a O.D.x1.4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE R-13-185

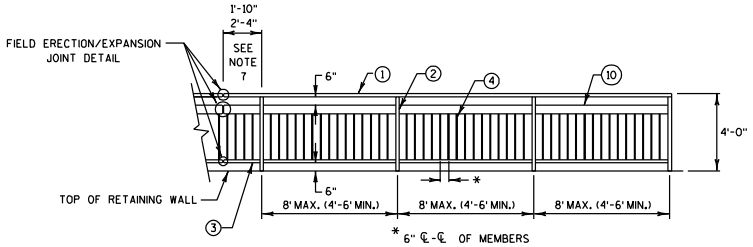
DRAWN BY STD | PLANS CK'D. MPB

SUBSURFACE EXPLORATION

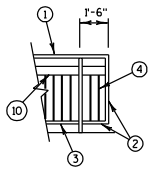
SHEET 4 OF 5

WISDOT/CADDS SHEET 3

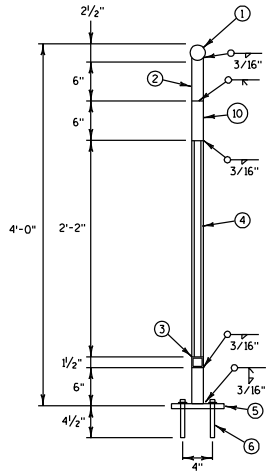
STATE PROJECT NUMBER
5992-08-79



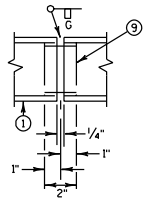
PIPE RAILING FOR RETAINING WALL ELEVATION



END SECTION

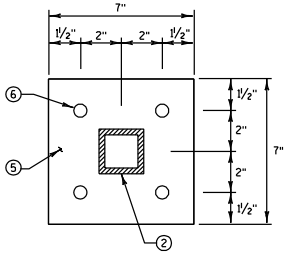


SECTION THRU RAILING

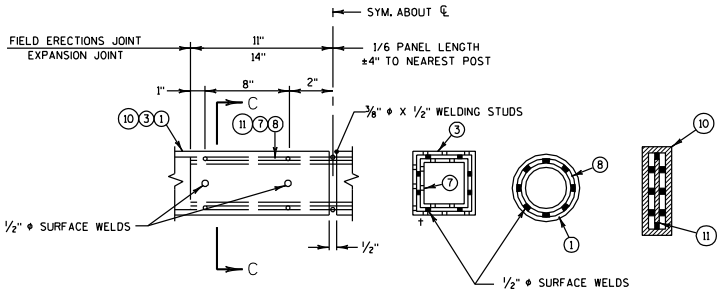


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



RAILING BASE PLATE



FIELD ERECTION JOINT DETAIL

† MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE

SECTION C-C

RAILING STEEL DETAIL

SEE RETAINING WALL PLANS FOR LOCATIONS ON WALLS
SEE PLAN DETAILS FOR LOCATIONS ADJACENT TO MULTI-USE PATH

LEGEND

(1) 2½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.

(2) TS 2" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO MATCH SLOPE OF TOP OF WALL. HOLD 1/16" ABOVE BASE PLATE TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON THE BASE PLATE.

(3) TS 1½" X 1½" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(4) TS 1" X 1" X 0.125" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(5) BASE PLATE ½" X 7" X 7" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 9/16" HOLES FOR HEX BOLTS NO. 6. WELD TO NO. 2 AS SHOWN.

(6) CONCRETE MASONRY ANCHORS, TYPE S, 5/8". PULLOUT STRENGTH SHALL BE 3.6 KIPS.

(7) SQUARE SLEEVE FABRICATED FROM ½" COLD DRAWN STEEL ALLOY SQUARE CONFORMING TO ASTM A331 X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 3. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.

(8) 1½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.

(9) 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".

(10) TS 6" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(11) 1" X 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 X 2'-4" LONG AT EXPANSION JOINTS OR 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 10. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

GENERAL NOTES

BID ITEM SHALL BE "RAILING STEEL" WHICH INCLUDES ALL ITEMS SHOWN INCLUDING GALVANIZED COATING.

RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.

POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIALS EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.

VERTICAL MEMBERS SHALL BE PLUMB.

HORIZONTAL MEMBERS SHALL PARALLEL GRADE.

PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

RAILING TO BE PAINTED FEDERAL COLOR NO. 17038 (BLACK).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-185

DRAWN BY	STD	PLANS CK'D.	MPB

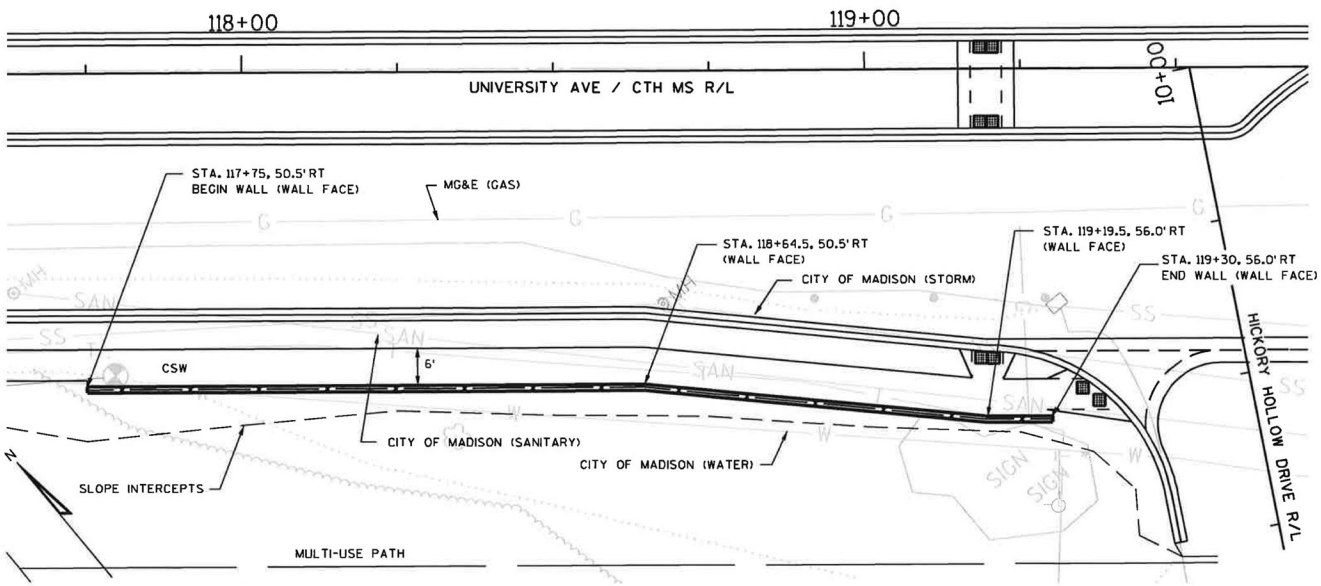
RAILING DETAILS

SHEET 5 OF 5
709

8

8

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE GRADES PROVIDED ON THIS DETAIL.

DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED SLOPE BEHIND THE WALL AS SHOWN ON THE CROSS SECTIONS.

LARGE WET CAST CONCRETE BLOCKS MAY BE USED FOR THIS PROJECT, EITHER AS GRAVITY WALLS OR MSE WALLS OR A COMBINATION OF BOTH AS REQUIRED. WET CAST CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4000 PSI AND AIR CONTENT OF 5.0 TO 7.5 PERCENT. ABSORPTION AND FREEZE-THAW REQUIREMENTS DO NOT APPLY TO WET CAST CONCRETE BLOCKS.

WALL TO HAVE SPLIT BLOCK STRAIGHT FACE APPEARANCE AND BE TAN IN COLORATION. WET CAST CONCRETE BLOCKS MAY BE STAINED FOR COLOR.

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE NOTED.

ALLOWABLE SOIL BEARING CAPACITY = 2,000 PSF.

QUANTITY FOR BASE AGGREGATE DENSE IS BASED ON OVER-EXCAVATING 1'0" BELOW THE BOTTOM OF THE LEVELING PAD.

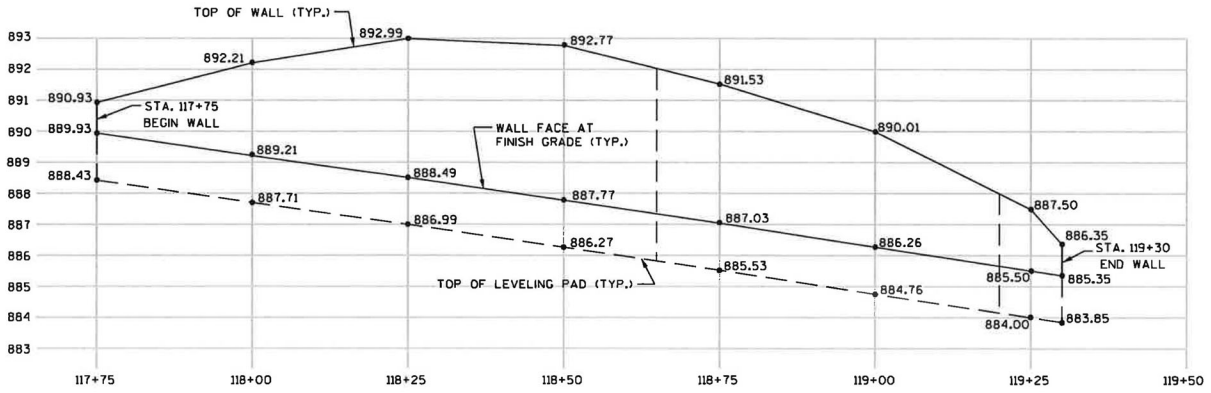
CONCRETE COPING SHALL BE STAINED FEDERAL STANDARD NO. 595B #26622 (PEARL GRAY). APPLY STAIN TO ENTIRE SURFACE AREA OF FRONT AND TOP OF COPING AND THE BACK TOP 9 INCHES OF COPING.

LIST OF DRAWINGS

1. GENERAL LAYOUT
2. COPING DETAILS
3. SUBSURFACE EXPLORATION
4. RAILING DETAILS

LIST OF BID ITEMS

206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS R-13-186	- 1 L.S.
305.0125	BASE AGGREGATE DENSE 1 1/4-INCH	- 50 C.Y.
513.6000	RAILING STEEL R-13-186	- 1 L.S.
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	- 2 S.Y.
517.1010.S	CONCRETE STAINING R-13-186	- 600 S.F.
532.0300.S	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH	- 800 S.F.
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	- 155 L.F.



NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 12/01/11
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-13-186

UNIVERSITY AVENUE (CTH MS)

COUNTY DANE ~~TOWN/CITY/VILLAGE~~ MADISON

DESIGN SPEC.

BUREAU OF STRUCTURES CONTACT:

8

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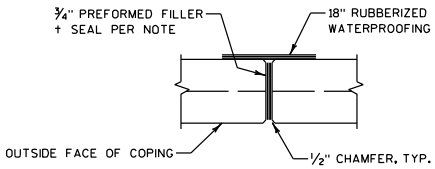
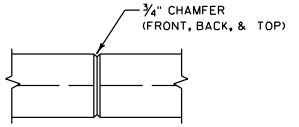
† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)





SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
RETAINED SOIL	125	28°	0
BACKFILL SOIL	120	30°	0

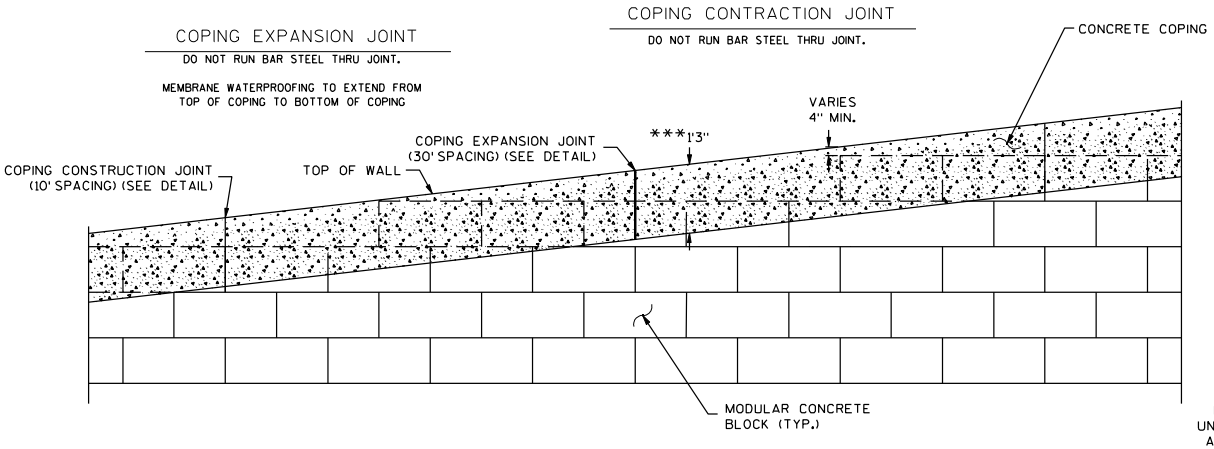
COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

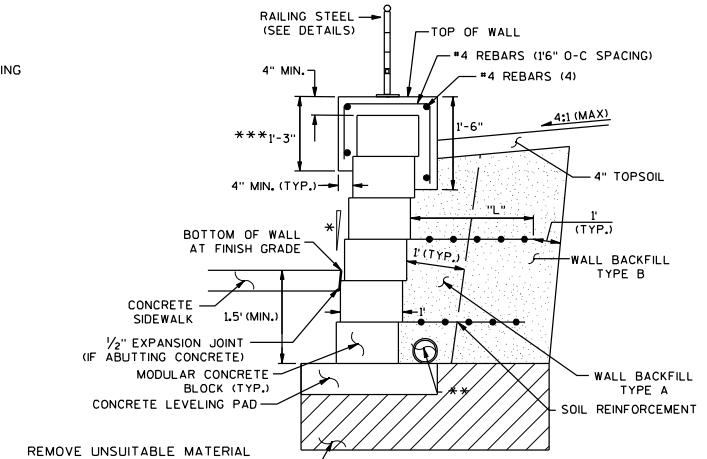
MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING

COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.



RETAINING WALL FACE & CONCRETE COPING DETAIL



TYPICAL SECTION OF RETAINING WALL

STA. 117+75 RT - STA. 119+30 RT

NTS

NOTES:
MAINTAIN 2" MINIMUM COVER ON ALL REBAR.

PLACE EXPANSION JOINTS AT EVERY THIRD JOINT AND AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS.

* BATTER VARIES BY MANUFACTURER

** PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.

*** THIS DIMENSION MAY CHANGE DEPENDING ON HEIGHT OF BLOCKS. THIS DIMENSION TO BE CONSTANT FOR ENTIRE LENGTH OF WALL. MAXIMUM ALLOWABLE HEIGHT OF BLOCKS TO BE 9 INCHES.

"L" SHALL BE A MINIMUM OF 0.7 TIMES THE WALL HEIGHT BUT NOT LESS THAN 6 FEET.

MSE WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS		
WALL HEIGHT (FEET)		6.5
EXPOSED WALL HEIGHT (FEET)		5
LENGTH OF REINFORCEMENT (FEET)		6
WALL STATION		± 119+00
BORING USED		BOR-3
FACTOR OF SAFETY		
SLIDING	(>1.5)	1.79
OVERTURNING	(>2.0)	7.08
BEARING	(<2.0 ksf)	1.01 ksf
GLOBAL STABILITY	(>1.3)	1.48

NOTE:
FINAL DESIGN FOR INTERNAL AND EXTERNAL STABILITY IS THE RESPONSIBILITY OF THE WALL DESIGNER AND MAY DIFFER FROM THE VALUES IN THE TABLE.

STATE PROJECT NUMBER

5992-08-79

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-186

DRAWN BY STD | PLANS CK'D. MPB

COPING DETAILS

SHEET 2 OF 4
711

8

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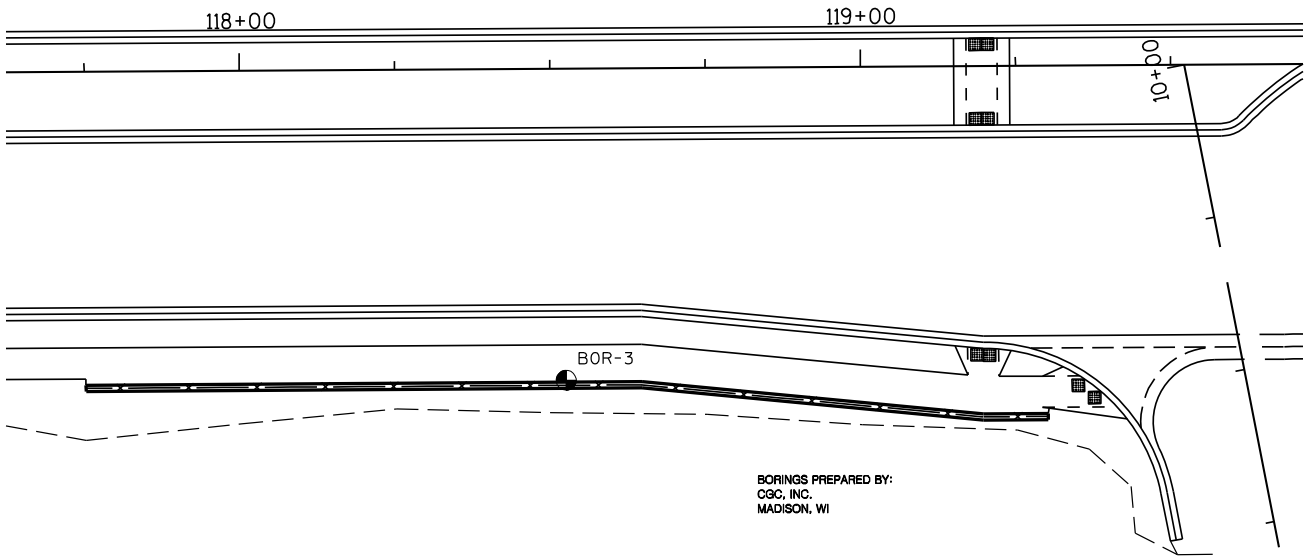
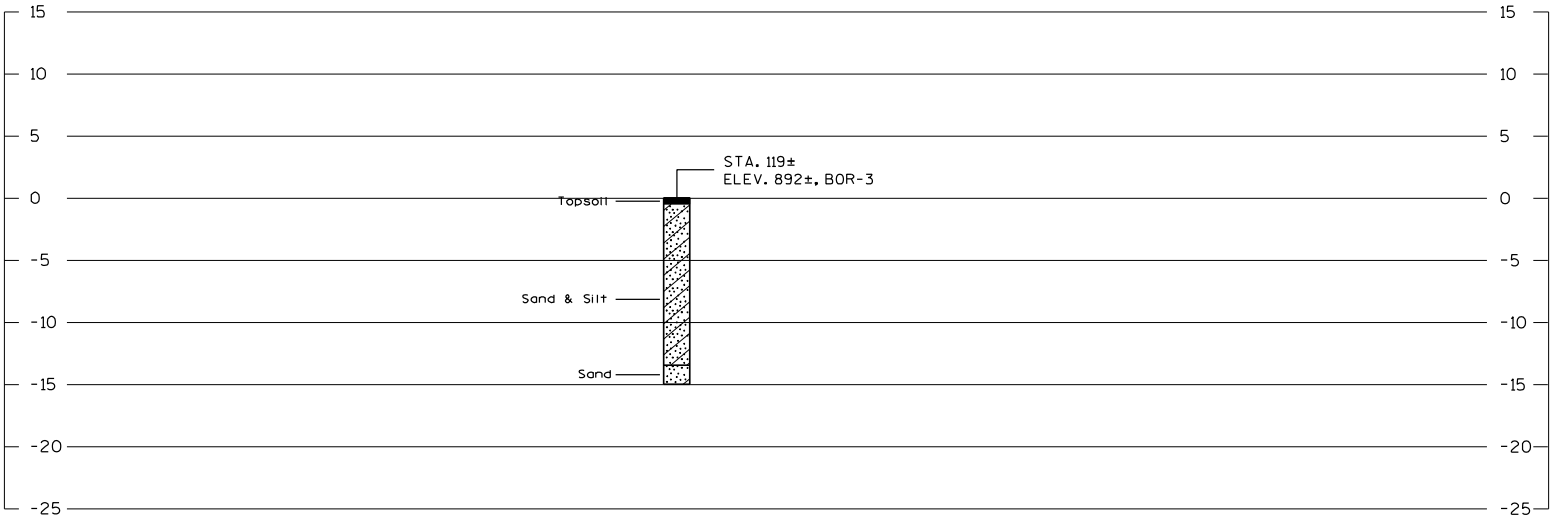
UNIVERSITY AVE.
MADISON, WI.
DANE COUNTY



BORINGS PREPARED BY:
CGC, INC.
MADISON, WI

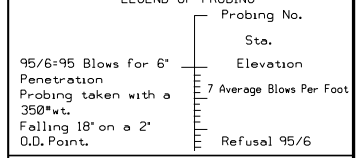


STATE PROJECT NUMBER	SHEET NO.
5992-08-79	

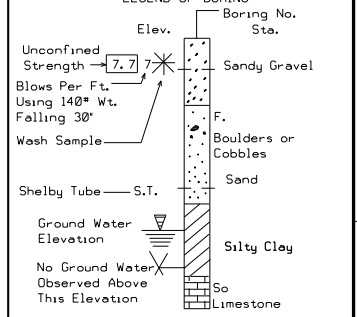
ABBREVIATIONS
F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS
Topsoil, Silt, Sandstone, Sand, Peat, Limestone, Gravel, Clay, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a O.D.x1. 4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE R-13-186

DRAWN BY STD | PLANS CK'D. MPB

SUBSURFACE EXPLORATION

SHEET 3 OF 4

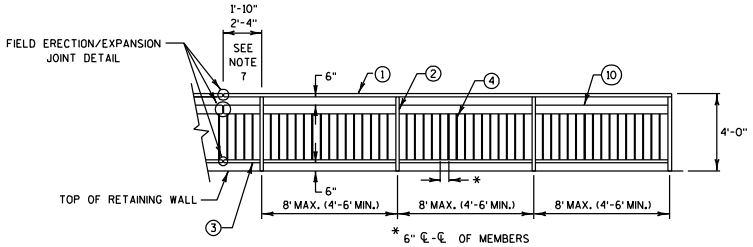
712

WISDOT/CADDS SHEET 3

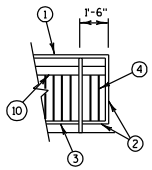
8

8

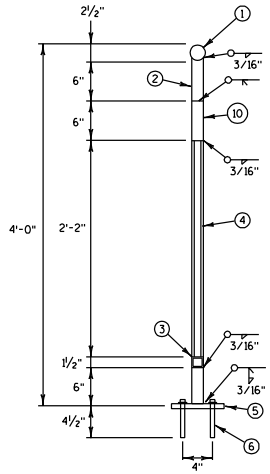
STATE PROJECT NUMBER
5992-08-79



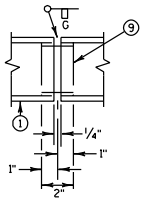
PIPE RAILING FOR RETAINING WALL ELEVATION



END SECTION

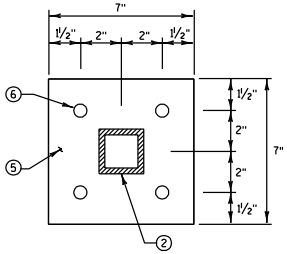


SECTION THRU RAILING

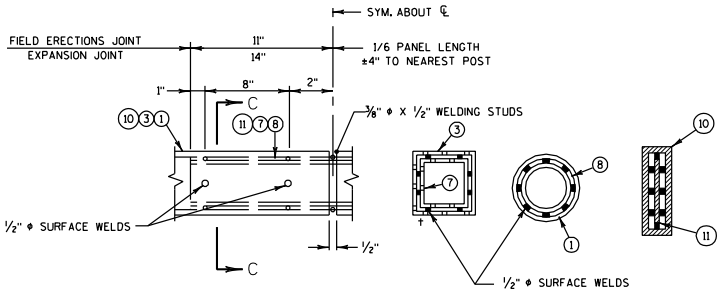


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



RAILING BASE PLATE



FIELD ERECTION JOINT DETAIL

† MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE

SECTION C-C

RAILING STEEL DETAIL

SEE RETAINING WALL PLANS FOR LOCATIONS ON WALLS
SEE PLAN DETAILS FOR LOCATIONS ADJACENT TO MULTI-USE PATH

LEGEND

① 2½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.

② TS 2" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO MATCH SLOPE OF TOP OF WALL. HOLD 1/16" ABOVE BASE PLATE TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON THE BASE PLATE.

③ TS 1½" X 1½" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

④ TS 1" X 1" X 0.125" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

⑤ BASE PLATE ½" X 7" X 7" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 9/16" HOLES FOR HEX BOLTS NO. 6. WELD TO NO. 2 AS SHOWN.

⑥ CONCRETE MASONRY ANCHORS, TYPE S, 5/8". PULLOUT STRENGTH SHALL BE 3.6 KIPS.

⑦ SQUARE SLEEVE FABRICATED FROM ½" COLD DRAWN STEEL ALLOY SQUARE CONFORMING TO ASTM A331 X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 3. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.

⑧ 1½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.

⑨ 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".

⑩ TS 6" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

⑪ 1" X 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 X 2'-4" LONG AT EXPANSION JOINTS OR 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 10. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

GENERAL NOTES

BID ITEM SHALL BE "RAILING STEEL" WHICH INCLUDES ALL ITEMS SHOWN INCLUDING GALVANIZED COATING.

RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.

POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIALS EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.

VERTICAL MEMBERS SHALL BE PLUMB.

HORIZONTAL MEMBERS SHALL PARALLEL GRADE.

PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

RAILING TO BE PAINTED FEDERAL COLOR NO. 17038 (BLACK).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-186

DRAWN BY	STD	PLANS CK'D.	MPB

RAILING DETAILS

SHEET 4 OF 4
713

8

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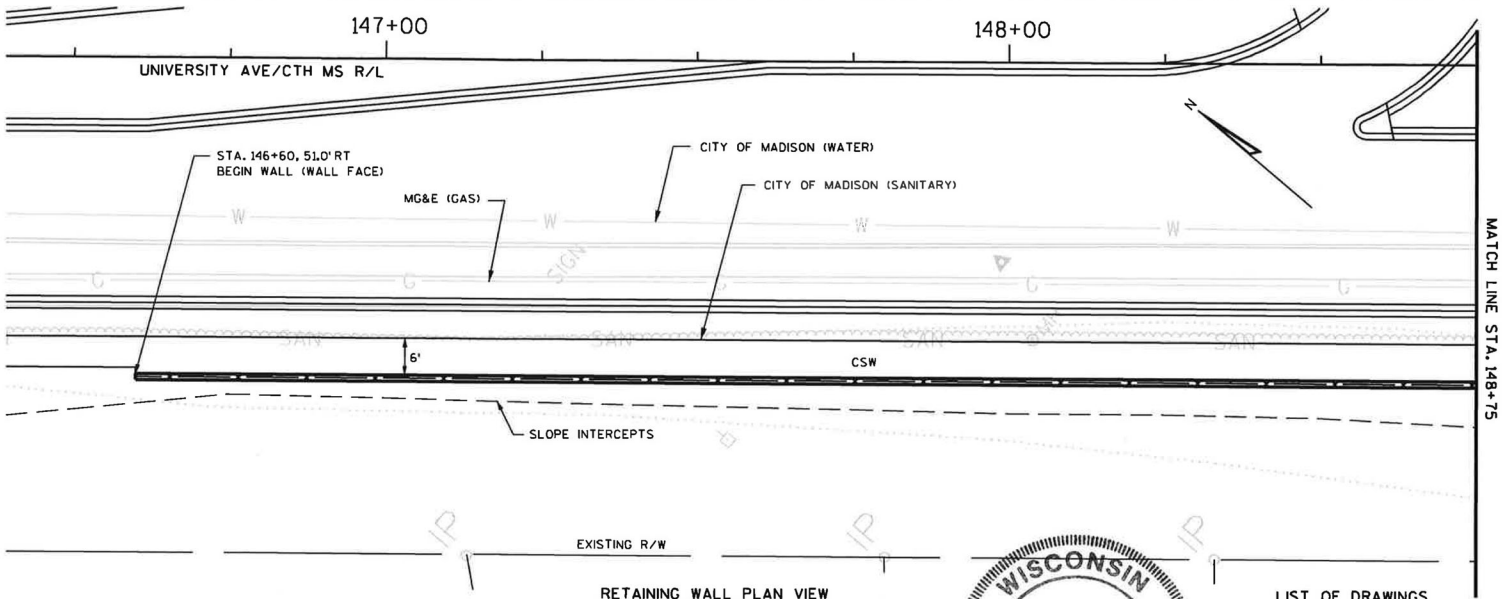


RETAINING WALL PLAN VIEW

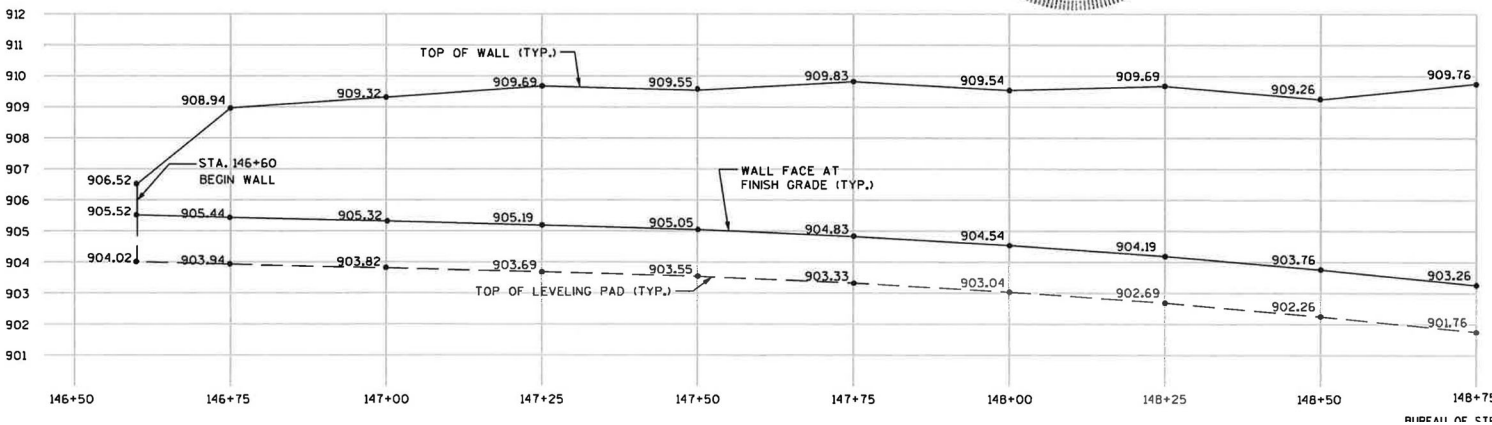
LIST OF BID ITEMS

513.6000	RAILING STEEL R-13-187	- 1 L.S.
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	- 7 S.Y.
517.1010.S	CONCRETE STAINING R-13-187	- 1,900 S.F.
532.0300.S	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH	- 3,200 S.F.
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	- 500 L.F.

LIST OF DRAWINGS

1. GENERAL LAYOUT
2. GENERAL LAYOUT
3. GENERAL LAYOUT
4. COPING DETAILS
5. SUBSURFACE EXPLORATION
6. RAILING DETAILS

WISCONSIN
AARON S. STEGER
36097-006
VERONA, WI
PROFESSIONAL ENGINEER
11/30/11



STATE PROJECT NUMBER

5992-08-79

DESIGN DATA

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PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE GRADES PROVIDED ON THIS DETAIL.

DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED SLOPE BEHIND THE WALL AS SHOWN ON THE CROSS SECTIONS.

LARGE WET CAST CONCRETE BLOCKS MAY BE USED FOR THIS PROJECT, EITHER AS GRAVITY WALLS OR MSE WALLS OR A COMBINATION OF BOTH AS REQUIRED. WET CAST CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4000 PSI AND AIR CONTENT OF 5.0 TO 7.5 PERCENT. ABSORPTION AND FREEZE-THAW REQUIREMENTS DO NOT APPLY TO WET CAST CONCRETE BLOCKS.

WALL TO HAVE SPLIT BLOCK STRAIGHT FACE APPEARANCE AND BE TAN IN COLORATION. WET CAST CONCRETE BLOCKS MAY BE STAINED FOR COLOR.

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE NOTED.

ALLOWABLE SOIL BEARING CAPACITY = 2,000 PSF.

DESIGN RETAINING WALL (STA 149+52.8 RT - STA 150+70 RT) FOR A LIVE LOAD SURCHARGE OF 120 PSF.

CONCRETE COPING SHALL BE STAINED FEDERAL STANDARD NO. 595B #26622 (PEARL GRAY). APPLY STAIN TO ENTIRE SURFACE AREA OF FRONT AND TOP OF COPING AND THE BACK TOP 9 INCHES OF COPING.

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

KL Engineering
[A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 12/01/11
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-13-187

UNIVERSITY AVENUE (CTH MS)

COUNTY DANE ~~TOWN/CITY/VILLAGE~~ MADISON

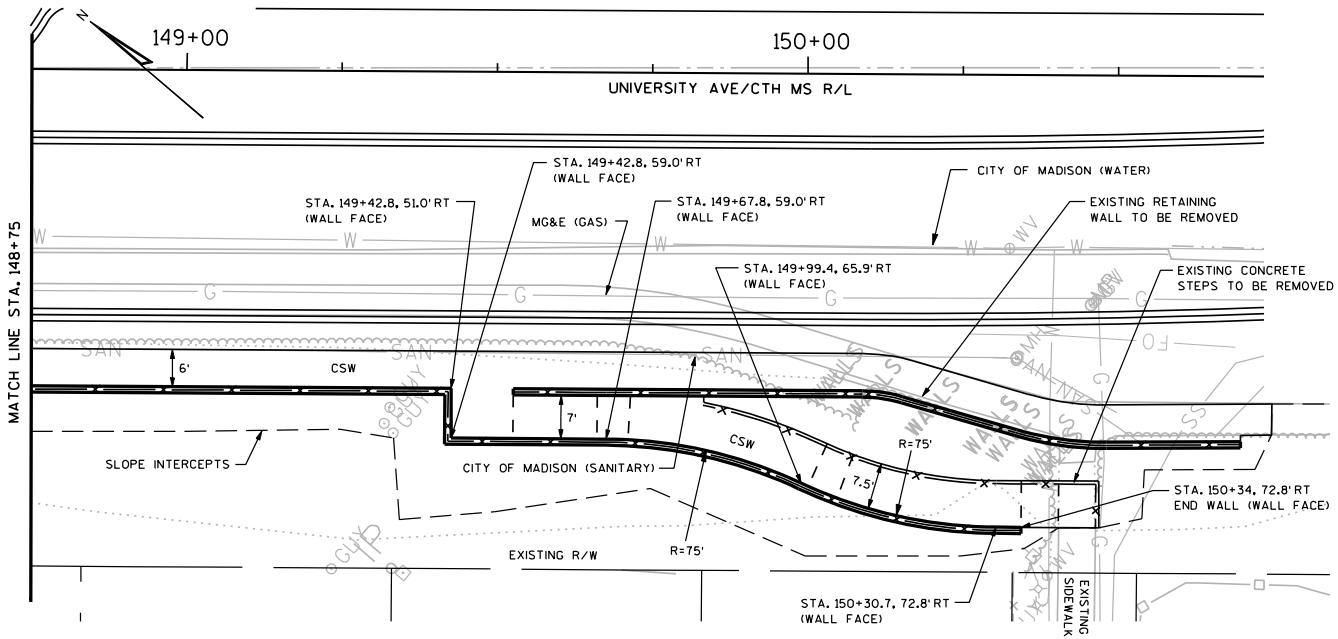
DESIGN SPEC.

BUREAU OF STRUCTURES CONTACT:

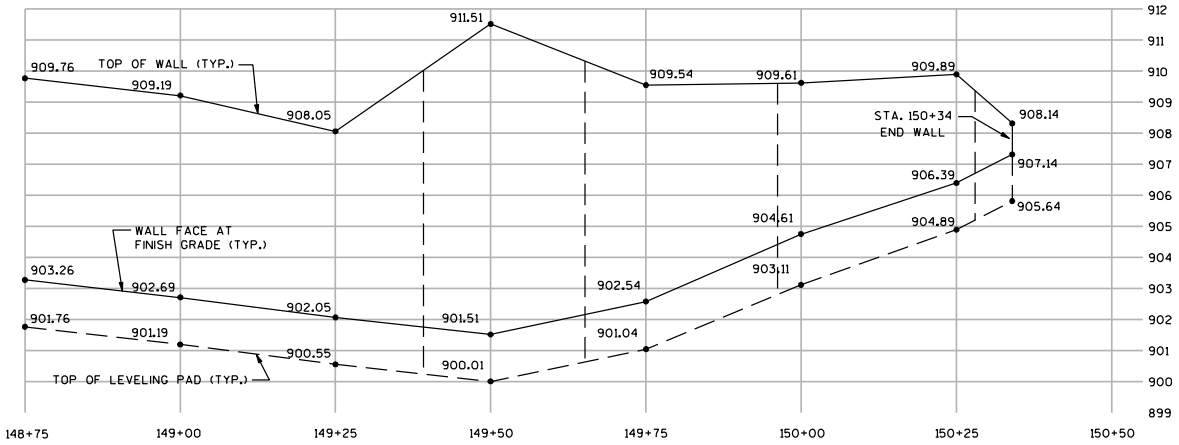
8

8

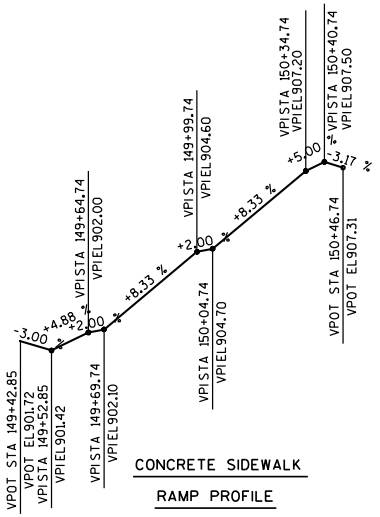
STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW



RETAINING WALL PROFILE VIEW
STA 146+60 RT - STA 150+34 RT



CONCRETE SIDEWALK
RAMP PROFILE

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

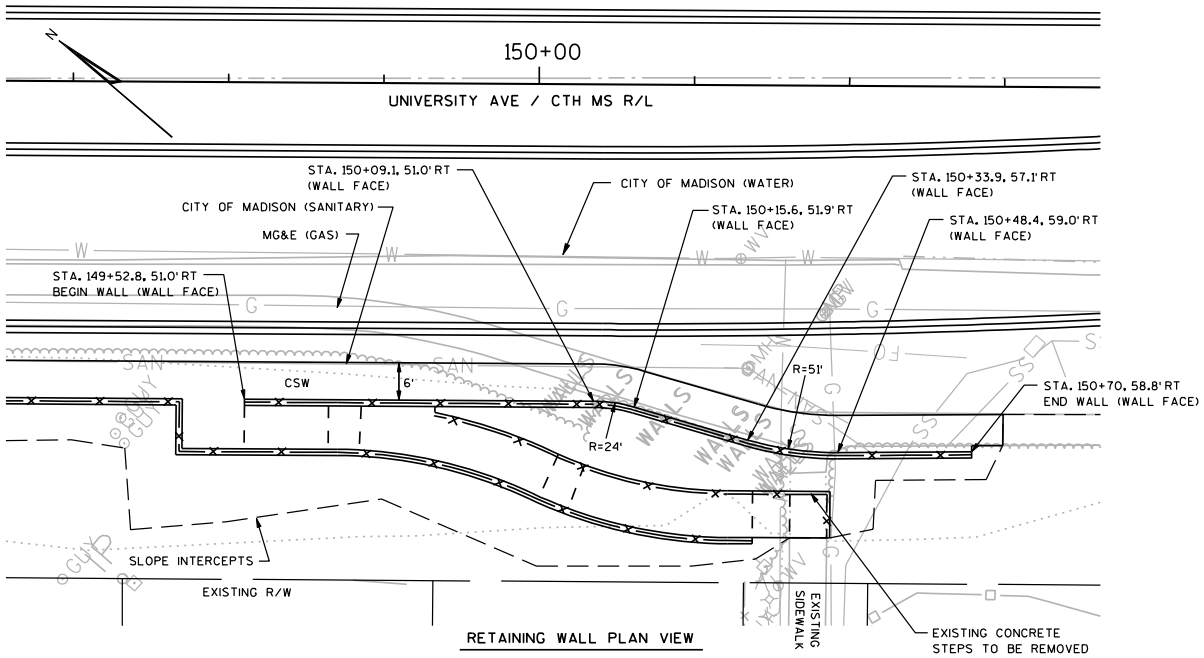
STRUCTURE R-13-187

DRAWN BY	STD	PLANS CK'D.	MPB

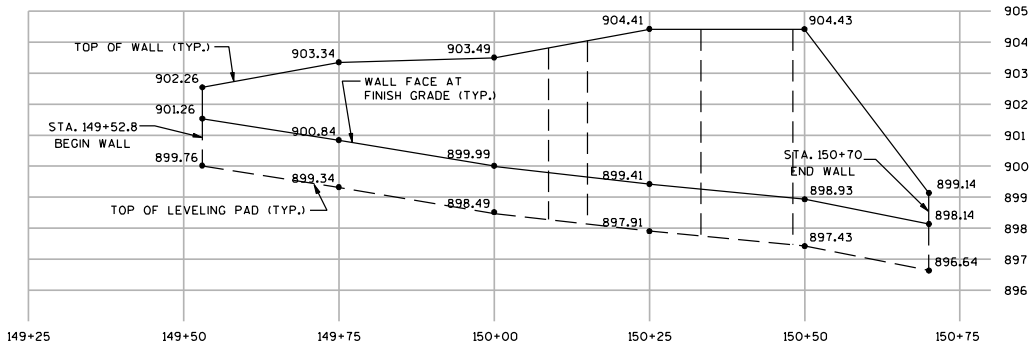
GENERAL LAYOUT

SHEET 2 OF 6
715

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW



RETAINING WALL PROFILE VIEW
STA 149+52.8 RT - STA 150+70 RT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-187

DRAWN BY	STD	PLANS CK'D.	MPB

GENERAL LAYOUT

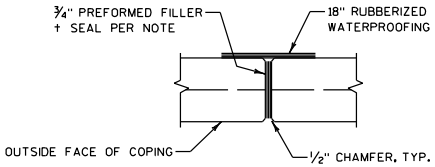
SHEET 3 OF 6
716

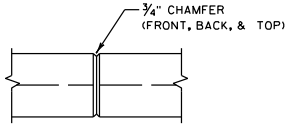
8

8

STATE PROJECT NUMBER
5992-08-79

† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)





SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
RETAINED SOIL	125	27°	0
BACKFILL SOIL	120	30°	0

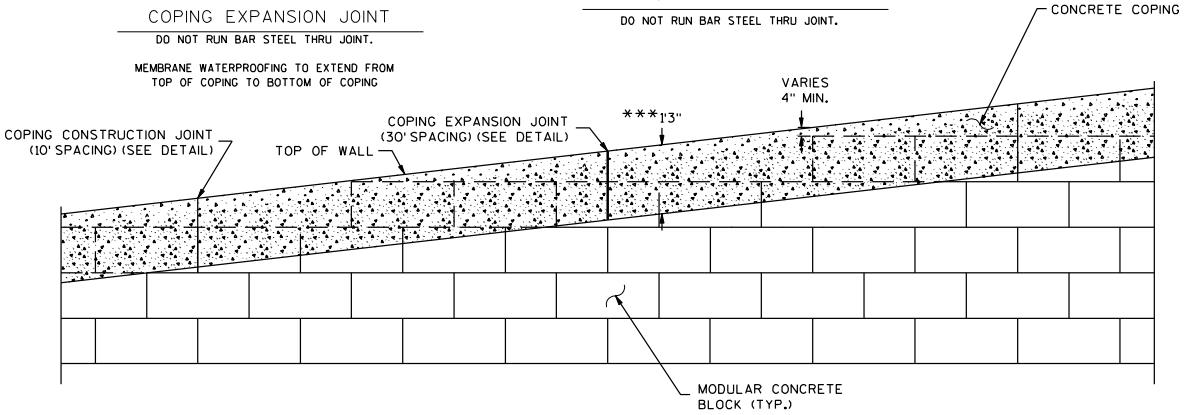
COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

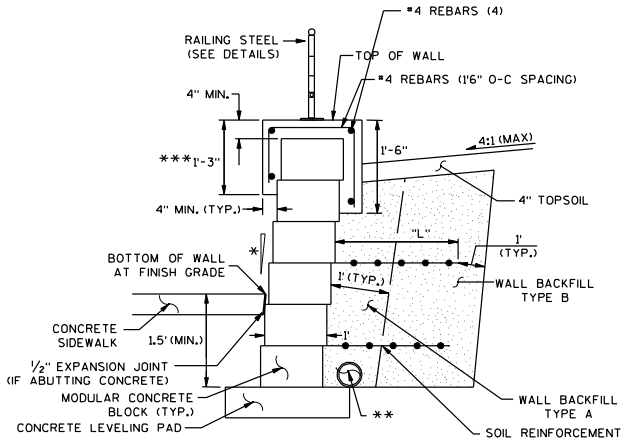
MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING

COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.



RETAINING WALL FACE & CONCRETE COPING DETAIL



TYPICAL SECTION OF RETAINING WALL

STA. 146+60 RT - STA. 150+34 RT
STA. 149+53 RT - STA. 150+70 RT

NTS

NOTES:
MAINTAIN 2" MINIMUM COVER ON ALL REBAR.

PLACE EXPANSION JOINTS AT EVERY THIRD JOINT AND AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS.

* BATTER VARIES BY MANUFACTURER

** PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.

*** THIS DIMENSION MAY CHANGE DEPENDING ON HEIGHT OF BLOCKS. THIS DIMENSION TO BE CONSTANT FOR ENTIRE LENGTH OF WALL. MAXIMUM ALLOWABLE HEIGHT OF BLOCKS TO BE 9 INCHES.

"L" SHALL BE A MINIMUM OF 0.7 TIMES THE WALL HEIGHT BUT NOT LESS THAN 6 FEET.

MSE WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS				
WALL HEIGHT (FEET)		6	7	11
EXPOSED WALL HEIGHT (FEET)		4.5	5.5	9.5
LENGTH OF REINFORCEMENT (FEET)		6	7	9
WALL STATION		± 148+00	± 150+00, 51' RT	± 150+00, 59' RT
BORING USED		BOR-7	BOR-9	BOR-9
FACTOR OF SAFETY				
SLIDING	(>1.5)	1.80	1.51	1.57
OVERTURNING	(>2.0)	7.49	5.87	5.54
BEARING	(<2.0 ksf)	0.94 ksf	1.24 ksf	1.68 ksf
GLOBAL STABILITY	(>1.3)	1.60	1.45	1.30

NOTE:
FINAL DESIGN FOR INTERNAL AND EXTERNAL STABILITY IS THE RESPONSIBILITY OF THE WALL DESIGNER AND MAY DIFFER FROM THE VALUES IN THE TABLE.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

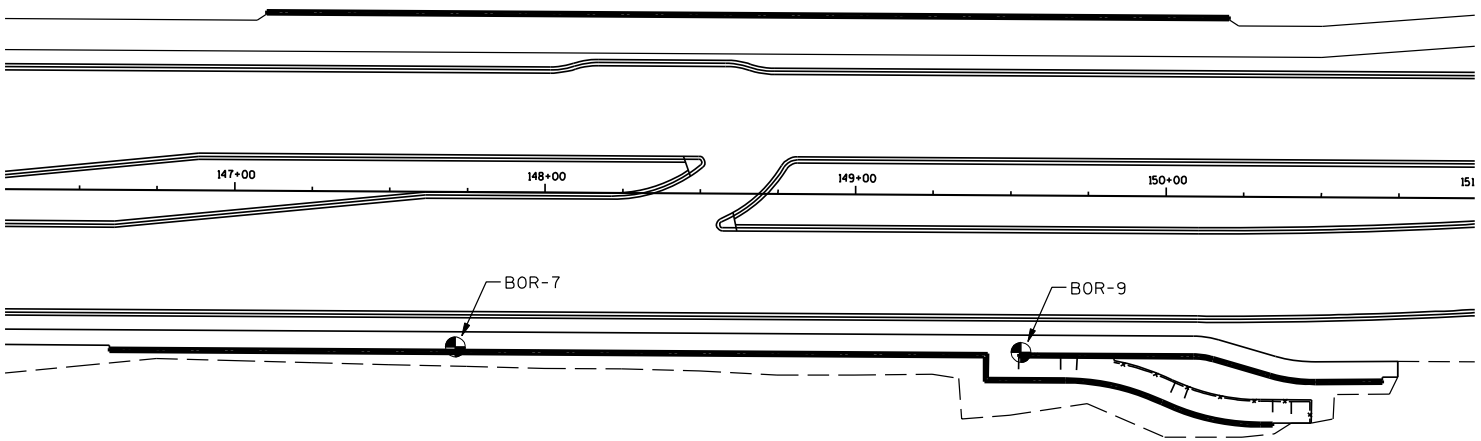
STRUCTURE R-13-187

DRAWN BY STD | PLANS CK'D. MPB

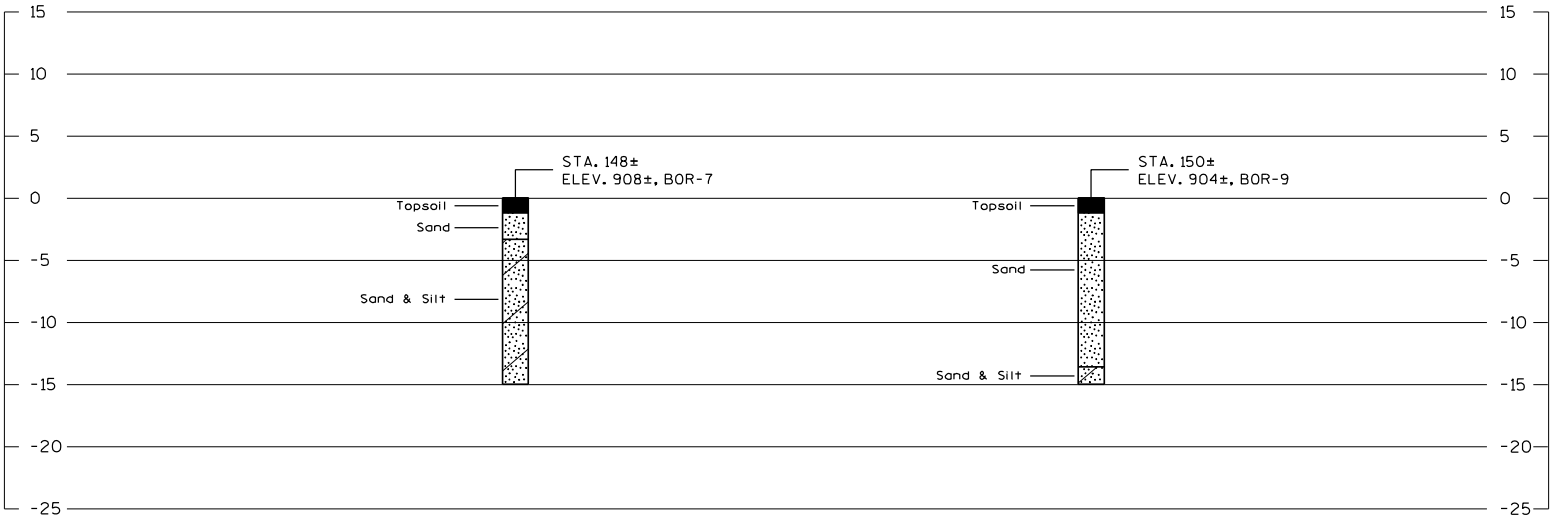
COPING DETAILS

SHEET 4 OF 6
717

UNIVERSITY AVE.
MADISON, WI.
DANE COUNTY



BORINGS PREPARED BY:
CGC, INC.
MADISON, WI

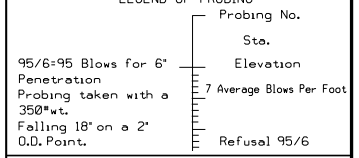


STATE PROJECT NUMBER	SHEET NO.
5992-08-79	

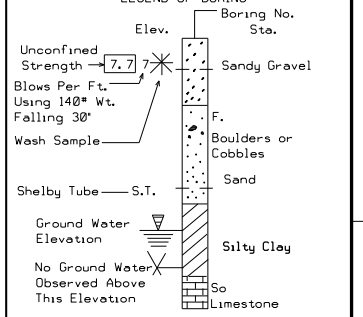
ABBREVIATIONS
F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS
Topsoil, Silt, Sandstone, Sand, Peat, Limestone, Gravel, Clay, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a O.D.x1.4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE R-13-187

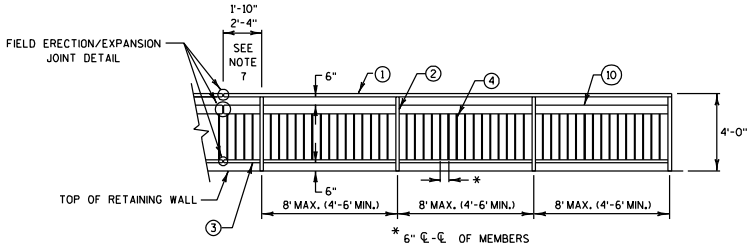
DRAWN BY STD	PLANS CK'D. MPB

SUBSURFACE EXPLORATION

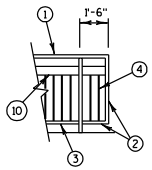
SHEET 5 OF 6

WISDOT/CADDS SHEET 3

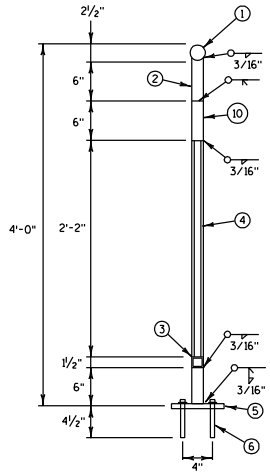
STATE PROJECT NUMBER
5992-08-79



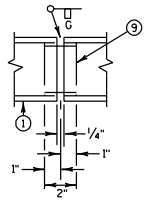
PIPE RAILING FOR RETAINING WALL ELEVATION



END SECTION

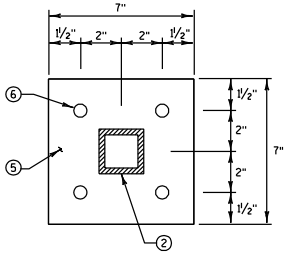


SECTION THRU RAILING

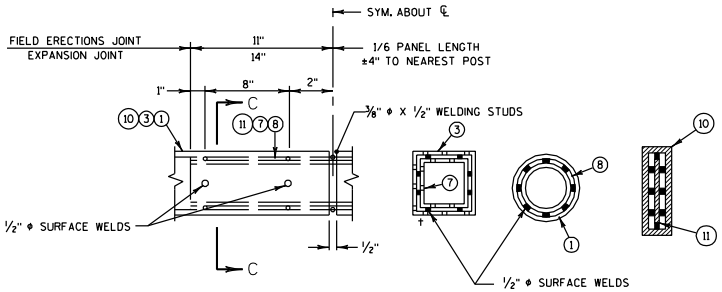


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



RAILING BASE PLATE



FIELD ERECTION JOINT DETAIL

† MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE

SECTION C-C

RAILING STEEL DETAIL

SEE RETAINING WALL PLANS FOR LOCATIONS ON WALLS
SEE PLAN DETAILS FOR LOCATIONS ADJACENT TO MULTI-USE PATH

LEGEND

(1) 2½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.

(2) TS 2" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO MATCH SLOPE OF TOP OF WALL. HOLD 1/16" ABOVE BASE PLATE TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON THE BASE PLATE.

(3) TS 1½" X 1½" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(4) TS 1" X 1" X 0.125" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(5) BASE PLATE ½" X 7" X 7" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 9/16" HOLES FOR HEX BOLTS NO. 6. WELD TO NO. 2 AS SHOWN.

(6) CONCRETE MASONRY ANCHORS, TYPE S, 5/8". PULLOUT STRENGTH SHALL BE 3.6 KIPS.

(7) SQUARE SLEEVE FABRICATED FROM ½" COLD DRAWN STEEL ALLOY SQUARE CONFORMING TO ASTM A331 X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 3. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.

(8) 1½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.

(9) 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".

(10) TS 6" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(11) 1" X 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 X 2'-4" LONG AT EXPANSION JOINTS OR 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 10. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

GENERAL NOTES

BID ITEM SHALL BE "RAILING STEEL" WHICH INCLUDES ALL ITEMS SHOWN INCLUDING GALVANIZED COATING.

RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.

POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIALS EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.

VERTICAL MEMBERS SHALL BE PLUMB.

HORIZONTAL MEMBERS SHALL PARALLEL GRADE.

PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

RAILING TO BE PAINTED FEDERAL COLOR NO. 17038 (BLACK).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-187

DRAWN BY	STD	PLANS CK'D.	MPB

RAILING DETAILS

SHEET 6 OF 6
719

8

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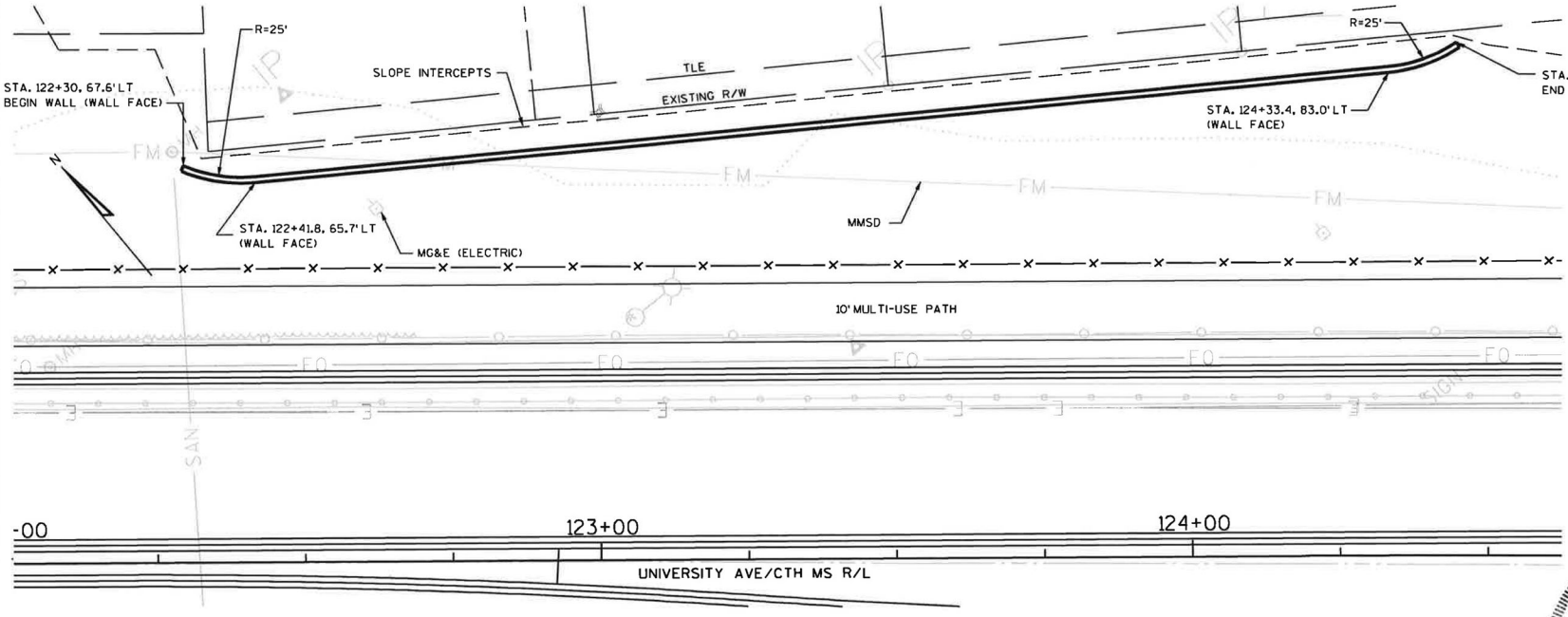
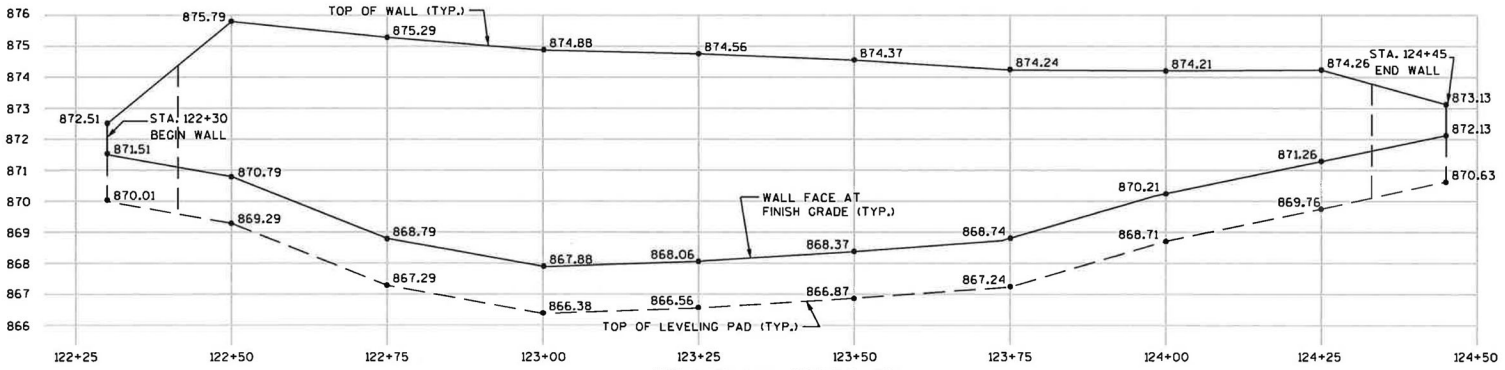
STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW

LIST OF DRAWINGS

1. GENERAL LAYOUT
2. COPING DETAILS
3. SUBSURFACE EXPLORATION



RETAINING WALL PROFILE VIEW

BUREAU OF STRUCTURES CONTACT:

WISCONSIN
AARON S. STEGER
38067-006
ARRONA, WI
PROFESSIONAL ENGINEER
11-30-11

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

KL Engineering
[A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 12/01/11
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-13-188

UNIVERSITY AVENUE (CTH MS)

COUNTY DANE | ~~TOWN~~/CITY/~~VILLAGE~~ MADISON

DESIGN SPEC.

8

8

STATE PROJECT NUMBER
5992-08-79

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE GRADES PROVIDED ON THIS DETAIL.

DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED SLOPE BEHIND THE WALL AS SHOWN ON THE CROSS SECTIONS.

LARGE WET CAST CONCRETE BLOCKS MAY BE USED FOR THIS PROJECT, EITHER AS GRAVITY WALLS OR MSE WALLS OR A COMBINATION OF BOTH AS REQUIRED. WET CAST CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4000 PSI AND AIR CONTENT OF 5.0 TO 7.5 PERCENT. ABSORPTION AND FREEZE-THAW REQUIREMENTS DO NOT APPLY TO WET CAST CONCRETE BLOCKS.

WALL TO HAVE SPLIT BLOCK STRAIGHT FACE APPEARANCE AND BE TAN IN COLORATION. WET CAST CONCRETE BLOCKS MAY BE STAINED FOR COLOR.

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE NOTED.

ALLOWABLE SOIL BEARING CAPACITY = 2,000 PSF.

CONCRETE COPING SHALL BE STAINED FEDERAL STANDARD NO. 595B #26622 (PEARL GRAY). APPLY STAIN TO ENTIRE SURFACE AREA OF FRONT AND TOP OF COPING AND THE BACK TOP 9 INCHES OF COPING.

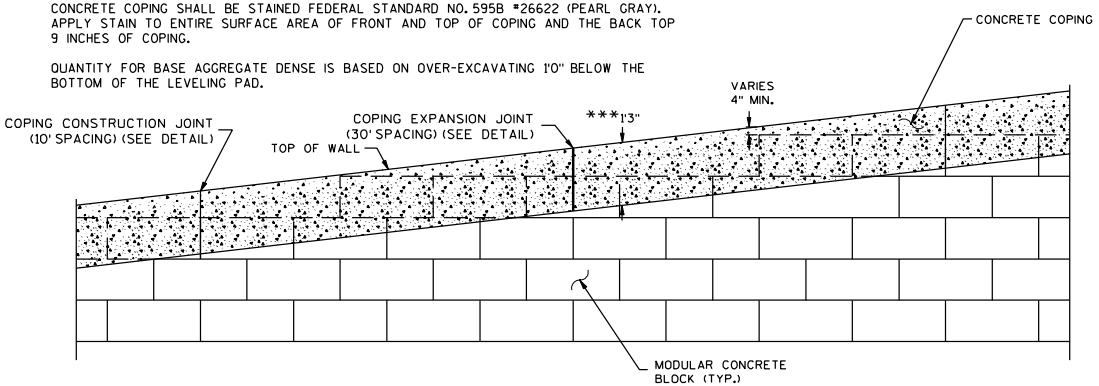
QUANTITY FOR BASE AGGREGATE DENSE IS BASED ON OVER-EXCAVATING 1'0" BELOW THE BOTTOM OF THE LEVELING PAD.

LIST OF BID ITEMS

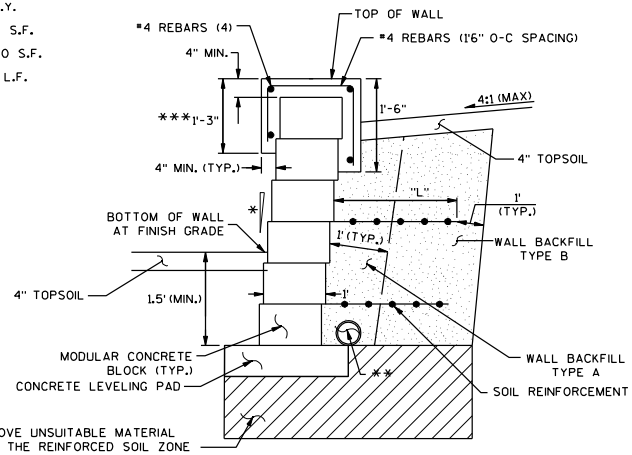
206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS R-13-188	- 1 L.S.
305.0125	BASE AGGREGATE DENSE 1 1/4-INCH	- 100 C.Y.
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	- 3 S.Y.
517.1010.S	CONCRETE STAINING R-13-188	- 800 S.F.
532.0300.S	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH	- 1,500 S.F.
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	- 215 L.F.

SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
RETAINED SOIL	125	30°	0
BACKFILL SOIL	120	30°	0



RETAINING WALL FACE & CONCRETE COPING DETAIL



TYPICAL SECTION OF RETAINING WALL
STA. 122+30 LT - STA. 124+45 LT
NTS

* BATTER VARIES BY MANUFACTURER

** PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.

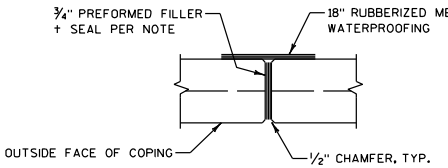
*** THIS DIMENSION MAY CHANGE DEPENDING ON HEIGHT OF BLOCKS. THIS DIMENSION TO BE CONSTANT FOR ENTIRE LENGTH OF WALL. MAXIMUM ALLOWABLE HEIGHT OF BLOCKS TO BE 9 INCHES.

"L" SHALL BE A MINIMUM OF 0.7 TIMES THE WALL HEIGHT BUT NOT LESS THAN 6 FEET.

NOTES:
MAINTAIN 2" MINIMUM COVER ON ALL REBAR.

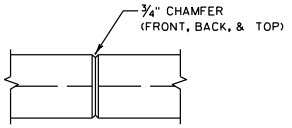
PLACE EXPANSION JOINTS AT EVERY THIRD JOINT AND AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS.

† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)



COPING EXPANSION JOINT
DO NOT RUN BAR STEEL THRU JOINT.

MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING



COPING CONTRACTION JOINT
DO NOT RUN BAR STEEL THRU JOINT.

MSE WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS		
WALL HEIGHT (FEET)		8
EXPOSED WALL HEIGHT (FEET)		6.5
LENGTH OF REINFORCEMENT (FEET)		10
WALL STATION		± 121+00
BORING USED		BOR-4
FACTOR OF SAFETY		
SLIDING	(>1.5)	1.54
OVERTURNING	(>2.0)	6.53
BEARING	(<2.0 ksf)	1.44 ksf
GLOBAL STABILITY	(>1.3)	1.50

NOTE:
FINAL DESIGN FOR INTERNAL AND EXTERNAL STABILITY IS THE RESPONSIBILITY OF THE WALL DESIGNER AND MAY DIFFER FROM THE VALUES IN THE TABLE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-188

DRAWN BY	STD	PLANS CK'D.	MPB

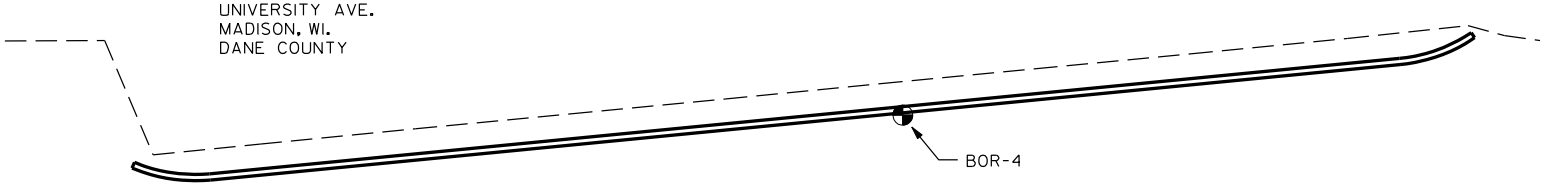
COPING DETAILS

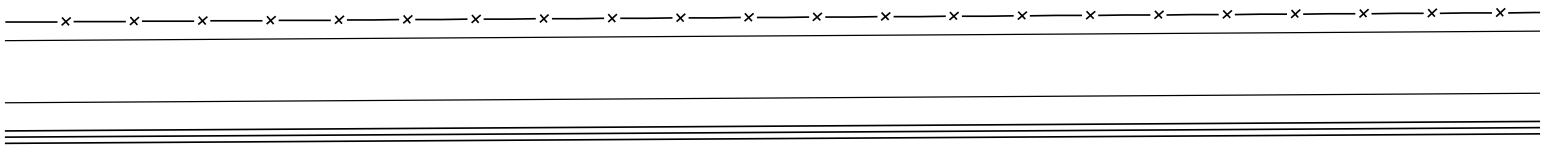
SHEET 2 OF 3
721

8

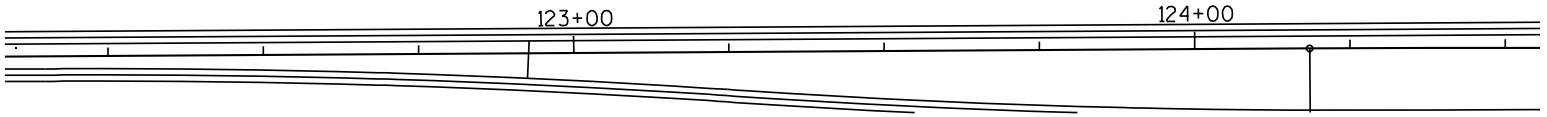
8

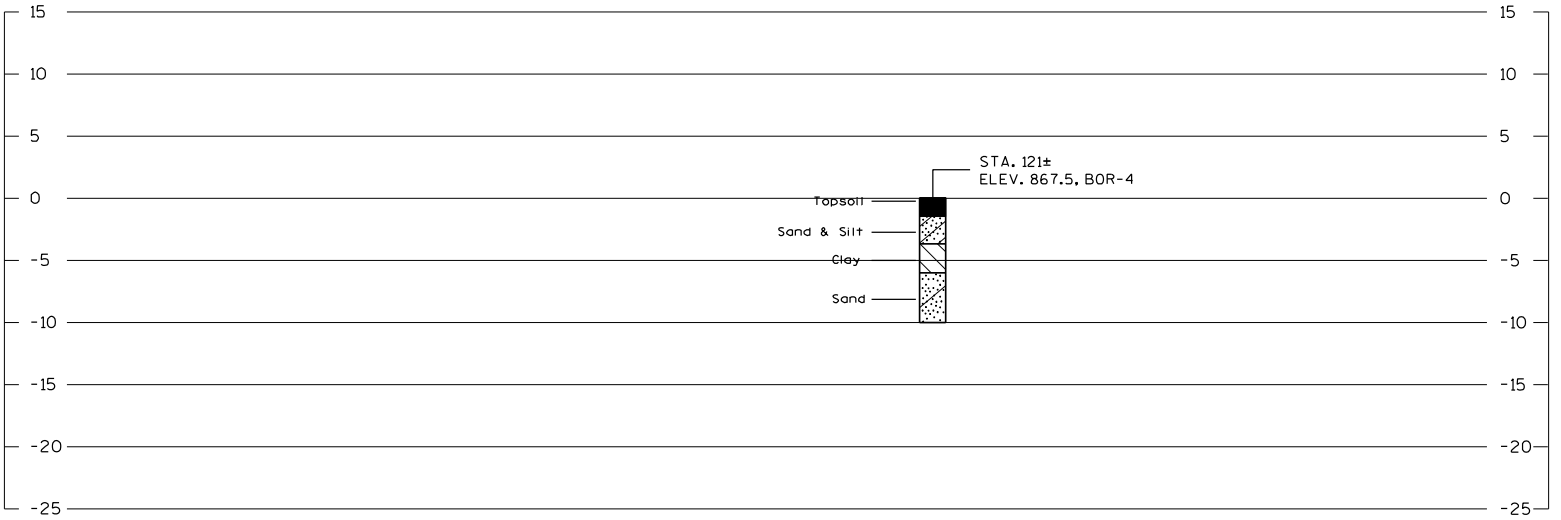
UNIVERSITY AVE.
MADISON, WI.
DANE COUNTY





BORINGS PREPARED BY:
CGC, INC.
MADISON, WI



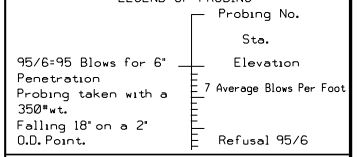


STATE PROJECT NUMBER	SHEET NO.
5992-08-79	

ABBREVIATIONS
F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

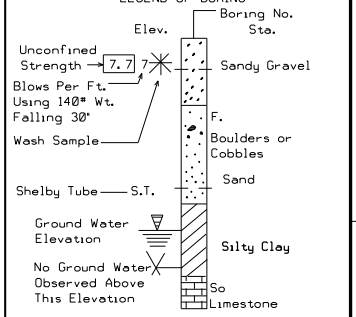
MATERIAL SYMBOLS
Topsoil, Silt, Sandstone, Sand, Peat, Limestone, Gravel, Clay, Igneous Rock

LEGEND OF PROBING



95/6=95 Blows for 6" Penetration
Probing taken with a 350#wt.
Falling 18" on a 2" O.D. Point.

LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a O.D.x1. 4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE R-13-188

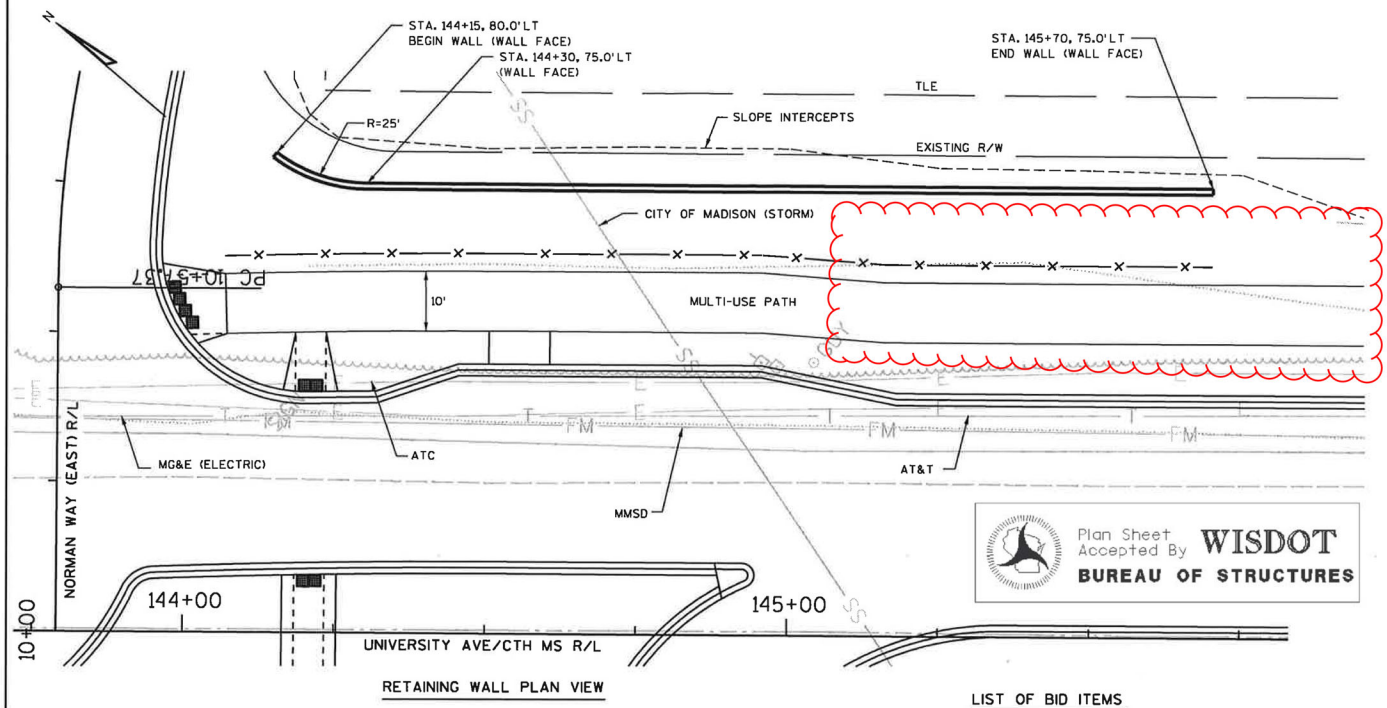
DRAWN BY STD | PLANS CK'D. MPB

SUBSURFACE EXPLORATION

SHEET 3 OF 3

WISDOT/CADDS SHEET 3

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW

Plan Sheet Accepted By WISDOT
BUREAU OF STRUCTURES

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE GRADES PROVIDED ON THIS DETAIL.

DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED SLOPE BEHIND THE WALL AS SHOWN ON THE CROSS SECTIONS.

LARGE WET CAST CONCRETE BLOCKS MAY BE USED FOR THIS PROJECT, EITHER AS GRAVITY WALLS OR MSE WALLS OR A COMBINATION OF BOTH AS REQUIRED. WET CAST CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4000 PSI AND AIR CONTENT OF 5.0 TO 7.5 PERCENT. ABSORPTION AND FREEZE-THAW REQUIREMENTS DO NOT APPLY TO WET CAST CONCRETE BLOCKS.

WALL TO HAVE SPLIT BLOCK STRAIGHT FACE APPEARANCE AND BE TAN IN COLORATION. WET CAST CONCRETE BLOCKS MAY BE STAINED FOR COLOR.

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE NOTED.

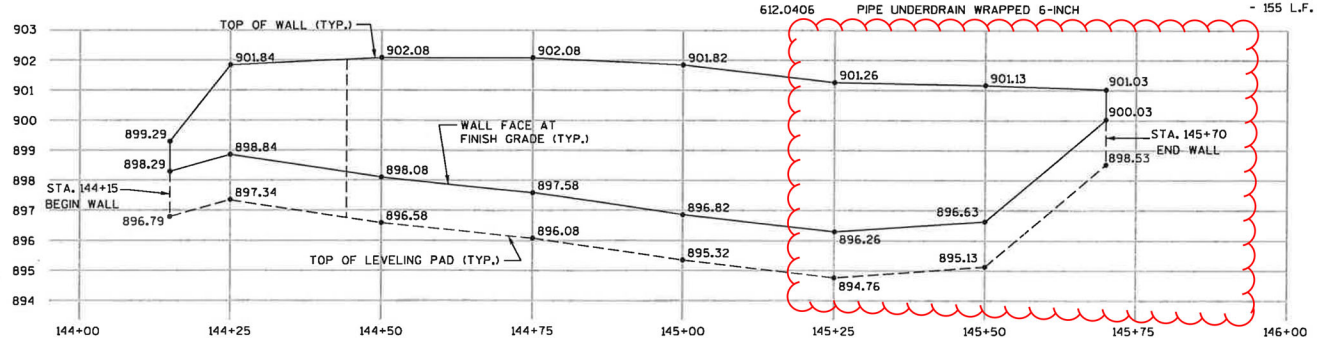
ALLOWABLE SOIL BEARING CAPACITY = 2,000 PSF.

CONCRETE COPING SHALL BE STAINED FEDERAL STANDARD NO. 595B #26622 (PEARL GRAY). APPLY STAIN TO ENTIRE SURFACE AREA OF FRONT AND TOP OF COPING AND THE BACK TOP 9 INCHES OF COPING.

WISCONSIN
AARON S. STEGER
36067-006
VERONA, WI
3/9/12
PROFESSIONAL ENGINEER

LIST OF BID ITEMS

516.0500	RUBBERIZED MEMBRANE WATERPROOFING	- 2 S.Y.
517.1010.S	CONCRETE STAINING R-13-189	- 600 S.F.
532.0300.S	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH	- 900 S.F.
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	- 155 L.F.



LIST OF DRAWINGS

1. GENERAL LAYOUT
2. COPING DETAILS
3. SUBSURFACE EXPLORATION

BUREAU OF STRUCTURES CONTACT:

NO.	DATE	REVISION	BY
1	3/9/12	REVISED PATH LOCATION	AS

ORIGINAL PLANS PREPARED BY
KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 12/01/11
CHIEF STRUCTURES DESIGN ENGINEER

STRUCTURE R-13-189

UNIVERSITY AVENUE (CTH MS)

COUNTY DANE ~~TOWN/CITY/VILLAGE~~ MADISON

DESIGN SPEC. AASHTO STANDARD SPEC.

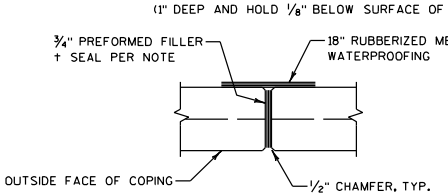
DESIGNED | DESIGN | DRAWN | DETAILS

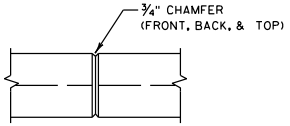
8

8

STATE PROJECT NUMBER
5992-08-79

† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)





SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
RETAINED SOIL	125	30°	0
BACKFILL SOIL	120	30°	0

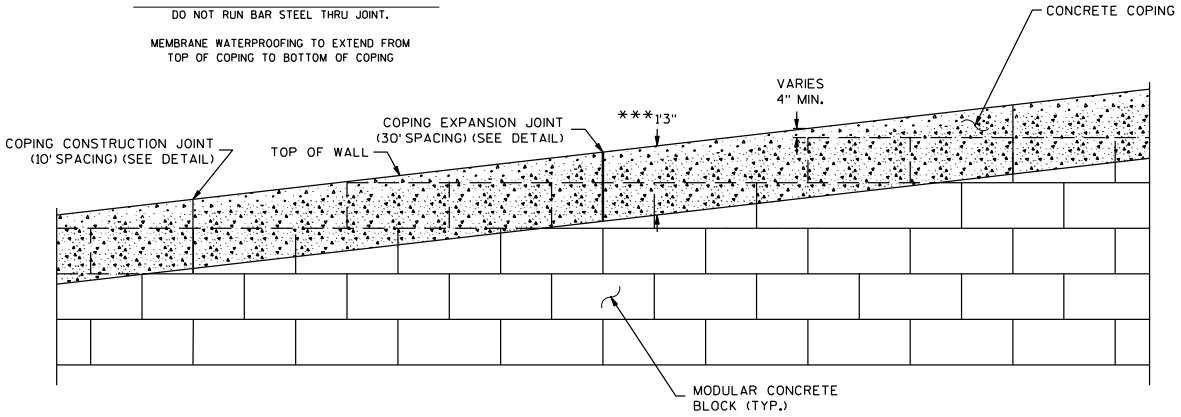
COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

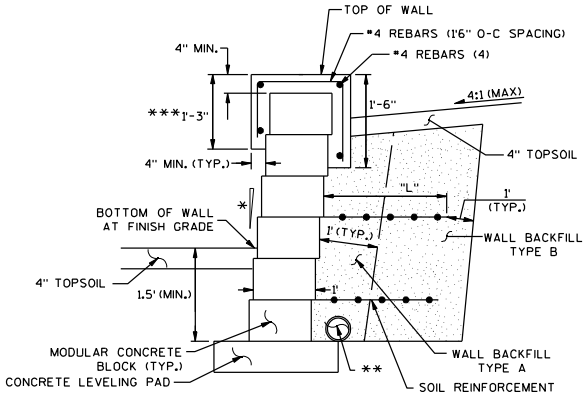
MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING

COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.



RETAINING WALL FACE & CONCRETE COPING DETAIL



TYPICAL SECTION OF RETAINING WALL

STA. 144+15 LT - STA. 145+70 LT

NTS

NOTES:
MAINTAIN 2" MINIMUM COVER ON ALL REBAR.

PLACE EXPANSION JOINTS AT EVERY THIRD JOINT AND AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS.

* BATTER VARIES BY MANUFACTURER

** PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.

*** THIS DIMENSION MAY CHANGE DEPENDING ON HEIGHT OF BLOCKS. THIS DIMENSION TO BE CONSTANT FOR ENTIRE LENGTH OF WALL. MAXIMUM ALLOWABLE HEIGHT OF BLOCKS TO BE 9 INCHES.

"L" SHALL BE A MINIMUM OF 0.7 TIMES THE WALL HEIGHT BUT NOT LESS THAN 6 FEET.

MSE WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS		
WALL HEIGHT (FEET)		8
EXPOSED WALL HEIGHT (FEET)		6.5
LENGTH OF REINFORCEMENT (FEET)		10
WALL STATION		± 145+00
BORING USED		BOR-5
FACTOR OF SAFETY		
SLIDING	(>1.5)	1.54
OVERTURNING	(>2.0)	6.53
BEARING	(<2.0 ksf)	1.44 ksf
GLOBAL STABILITY	(>1.3)	2.53

NOTE:
FINAL DESIGN FOR INTERNAL AND EXTERNAL STABILITY IS THE RESPONSIBILITY OF THE WALL DESIGNER AND MAY DIFFER FROM THE VALUES IN THE TABLE.

8

8

NO.	DATE	REVISION	BY

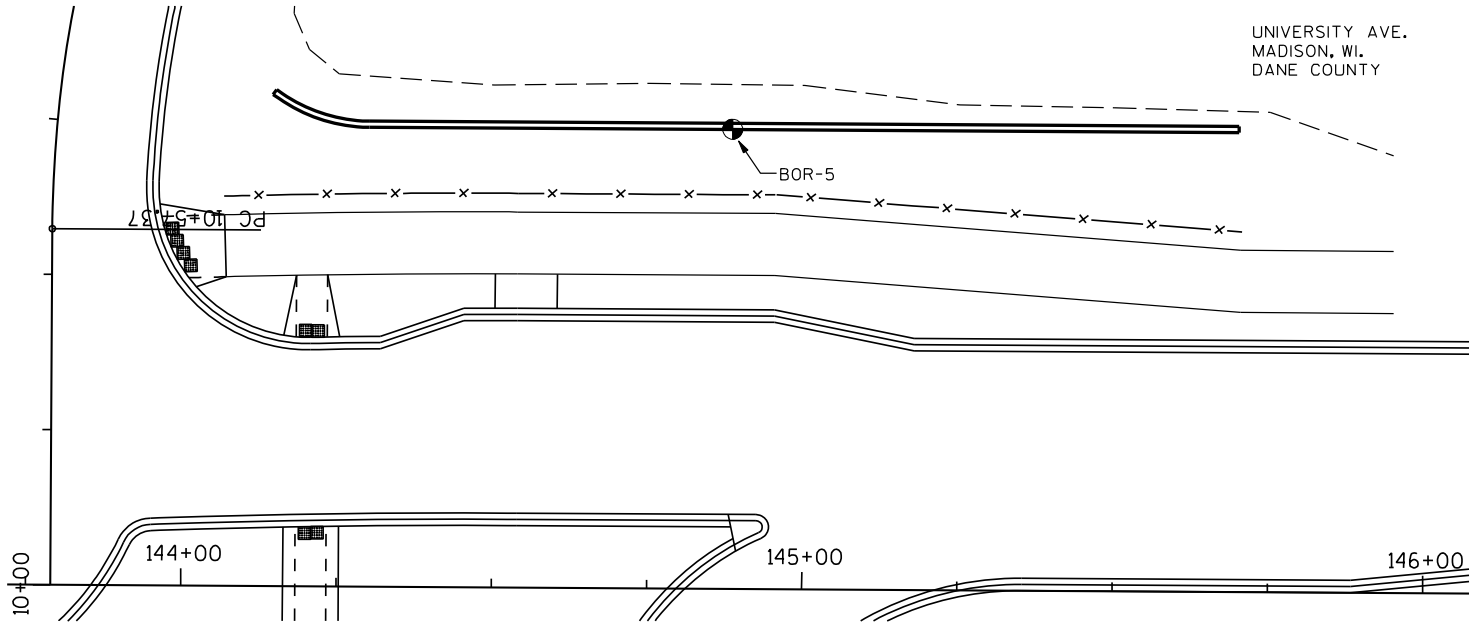
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-189

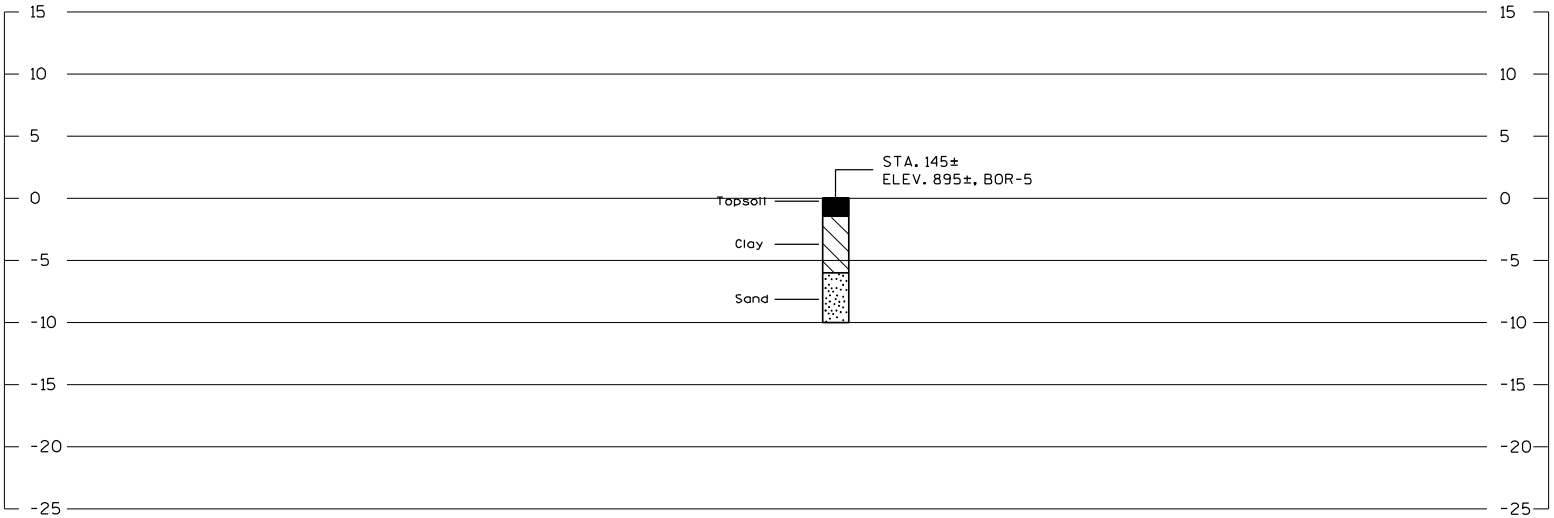
DRAWN BY STD | PLANS CK'D. MPB

COPING DETAILS

SHEET 2 OF 3
724



BORINGS PREPARED BY:
CGC, INC.
MADISON, WI



STATE PROJECT NUMBER	SHEET NO.
5992-08-79	

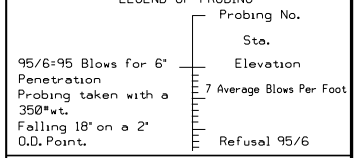
ABBREVIATIONS

F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

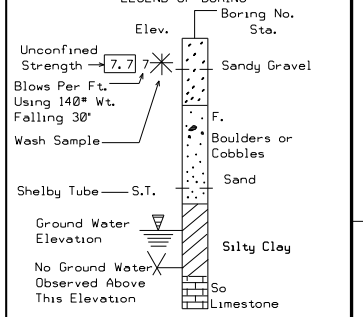
MATERIAL SYMBOLS

Topsoil, Silt, Sandstone
Sand, Peat, Limestone
Gravel, Clay, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE R-13-189

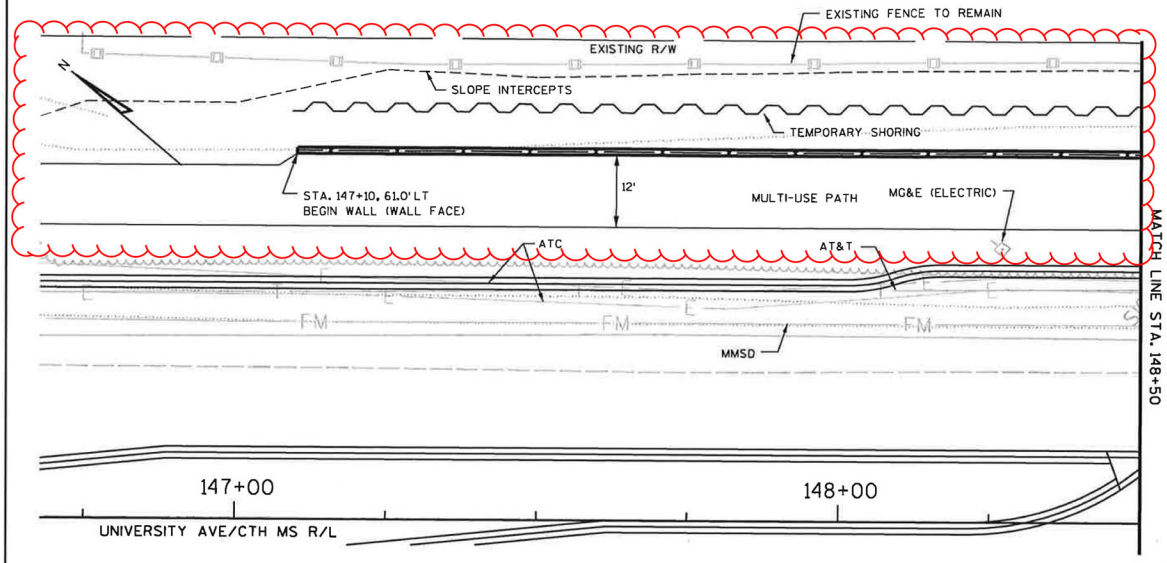
DRAWN BY STD | PLANS CK'D. MPB

SUBSURFACE EXPLORATION

SHEET 3 OF 3

WISDOT/CADDS SHEET 3

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW

DESIGN DATA

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LARGE WET CAST CONCRETE BLOCKS MAY BE USED FOR THIS PROJECT, EITHER AS GRAVITY WALLS OR MSE WALLS OR A COMBINATION OF BOTH AS REQUIRED. WET CAST CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4000 PSI AND AIR CONTENT OF 5.0 TO 7.5 PERCENT. ABSORPTION AND FREEZE-THAW REQUIREMENTS DO NOT APPLY TO WET CAST CONCRETE BLOCKS.

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DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE NOTED.

ALLOWABLE SOIL BEARING CAPACITY = 2,500 PSF.

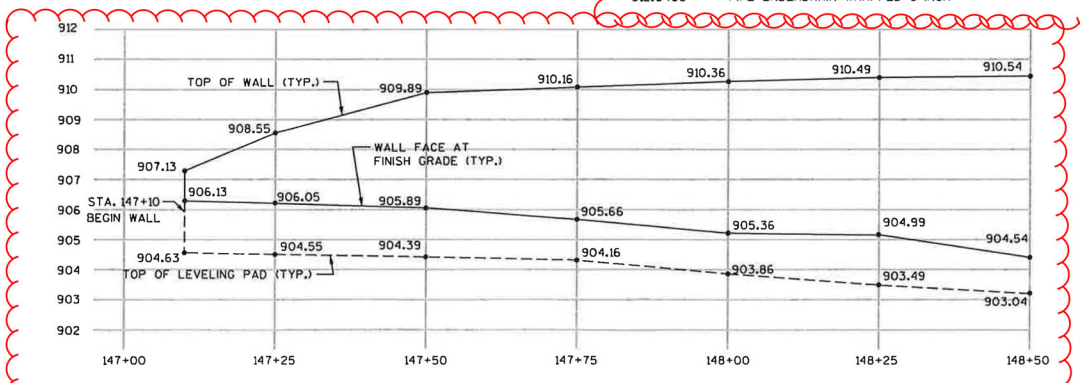
CONCRETE COPING SHALL BE STAINED FEDERAL STANDARD NO. 595B *26622 (PEARL GRAY). APPLY STAIN TO ENTIRE SURFACE AREA OF FRONT AND TOP OF COPING AND THE BACK TOP 9 INCHES OF COPING.

WISCONSIN
AARON S. STEGER
36087-006
VERONA, WI
PROFESSIONAL ENGINEER
3/9/12

Plan Sheet Accepted By **WISDOT**
BUREAU OF STRUCTURES

LIST OF BID ITEMS

206.6000.S	TEMPORARY SHORING R-13-190	- 2,800 S.F.
513.6000	RAILING STEEL R-13-190	- 1 L.S.
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	- 3 S.Y.
517.1010.S	CONCRETE STAINING R-13-190	- 1,200 S.F.
532.0300.S	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH	- 1,900 S.F.
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	- 310 L.F.



LIST OF DRAWINGS

1. GENERAL LAYOUT
2. GENERAL LAYOUT
3. COPING DETAILS
4. SUBSURFACE EXPLORATION
5. RAILING DETAILS

BUREAU OF STRUCTURES CONTACT:
WILLIAM DREHER

NO.	DATE	REVISION	BY
1	3/9/12	REVISED PATH LOCATION	AS

ORIGINAL PLANS PREPARED BY
KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ YEAR 12/01/11
CHIEF ~~Structures~~ DESIGN ENGINEER

STRUCTURE R-13-190

UNIVERSITY AVENUE (CTH MS)

COUNTY DANE — ~~TOWN~~/CITY/~~VILLAGE~~ MADISON

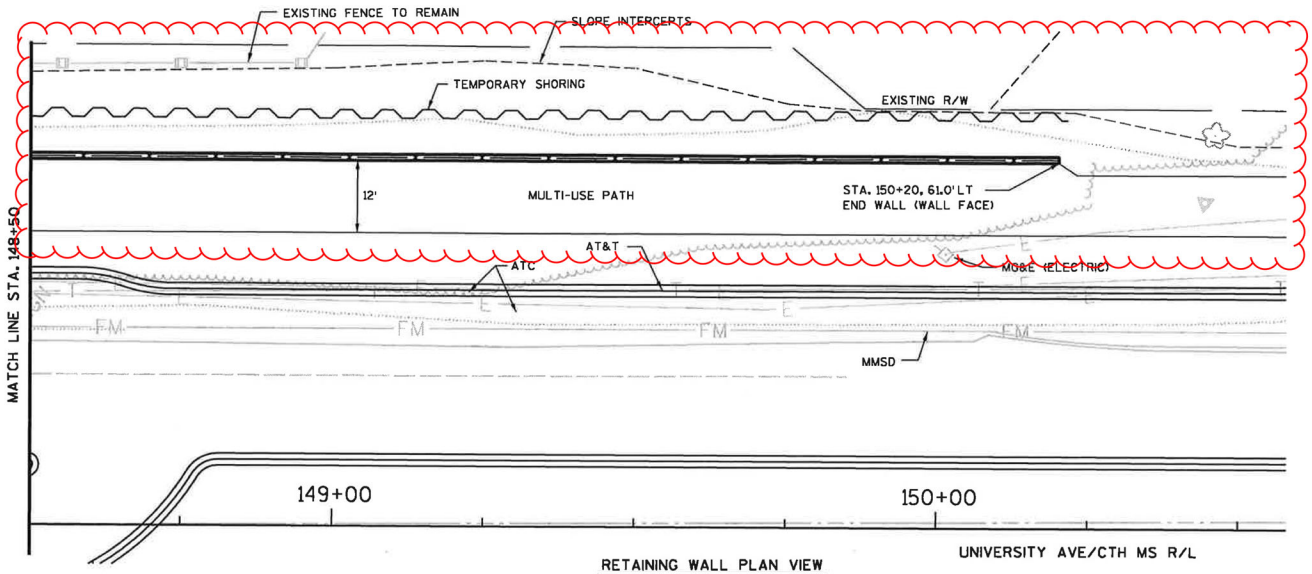
DESIGN SPEC. AASHTO STANDARD SPEC.

DESIGNED | DESIGN | DRAWN | PLANS

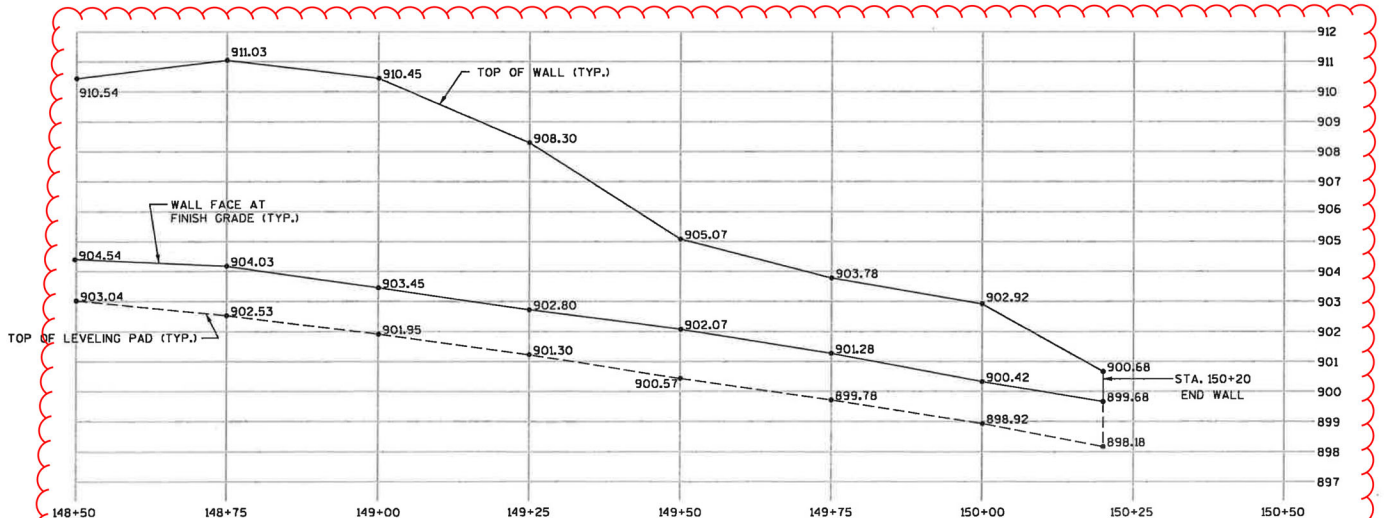
8

8

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW



Plan Sheet Accepted By **WISDOT**
BUREAU OF STRUCTURES

NO.	DATE	REVISION	BY
1	3/9/12	REVISED PATH LOCATION	AS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-190

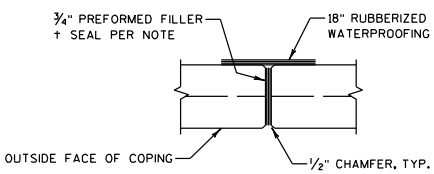
DRAWN PLANS

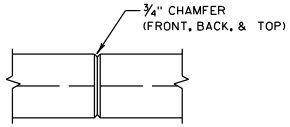
8

8

STATE PROJECT NUMBER
5992-08-79

† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)





SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
RETAINED SOIL	125	28°	0
BACKFILL SOIL	120	30°	0

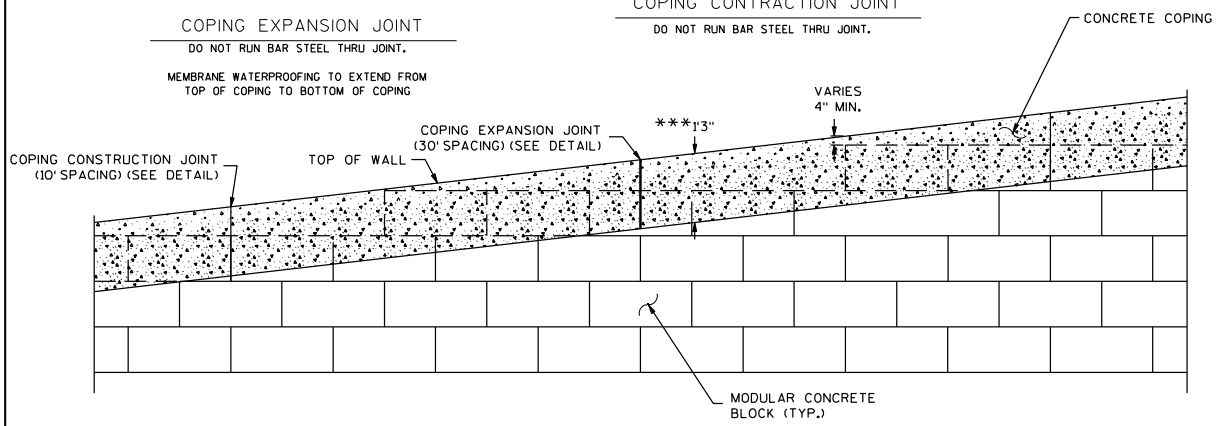
COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

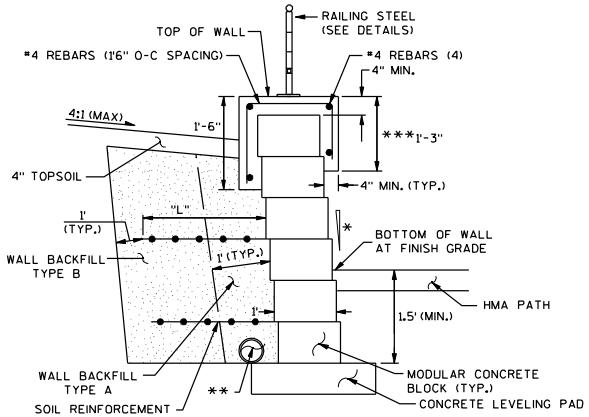
MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING

COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.



RETAINING WALL FACE & CONCRETE COPING DETAIL



TYPICAL SECTION OF RETAINING WALL

STA. 147+40 LT - STA. 150+20 LT

NTS

NOTES:
MAINTAIN 2" MINIMUM COVER ON ALL REBAR.

PLACE EXPANSION JOINTS AT EVERY THIRD JOINT AND AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS.

* BATTER VARIES BY MANUFACTURER

** PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.

*** THIS DIMENSION MAY CHANGE DEPENDING ON HEIGHT OF BLOCKS. THIS DIMENSION TO BE CONSTANT FOR ENTIRE LENGTH OF WALL. MAXIMUM ALLOWABLE HEIGHT OF BLOCKS TO BE 9 INCHES.

"L" SHALL BE A MINIMUM OF 0.7 TIMES THE WALL HEIGHT BUT NOT LESS THAN 6 FEET.

MSE WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS			
WALL HEIGHT (FEET)		7	6
EXPOSED WALL HEIGHT (FEET)		5.5	4.5
LENGTH OF REINFORCEMENT (FEET)		6	6
WALL STATION		± 148+00	± 150+00
BORING USED		BOR-6	BOR-8
FACTOR OF SAFETY			
SLIDING	(>1.5)	1.69	1.80
OVERTURNING	(>2.0)	6.41	7.49
BEARING	(<2.5 ksf)	1.08 ksf	0.94 ksf
GLOBAL STABILITY	(>1.3)	1.50	1.56

NOTE:
FINAL DESIGN FOR INTERNAL AND EXTERNAL STABILITY IS THE RESPONSIBILITY OF THE WALL DESIGNER AND MAY DIFFER FROM THE VALUES IN THE TABLE.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

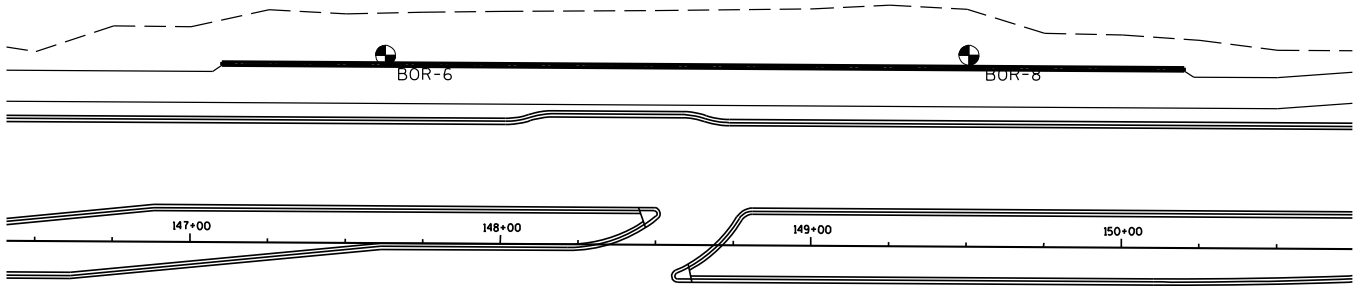
STRUCTURE R-13-190

DRAWN BY STD | PLANS CK'D. MPB

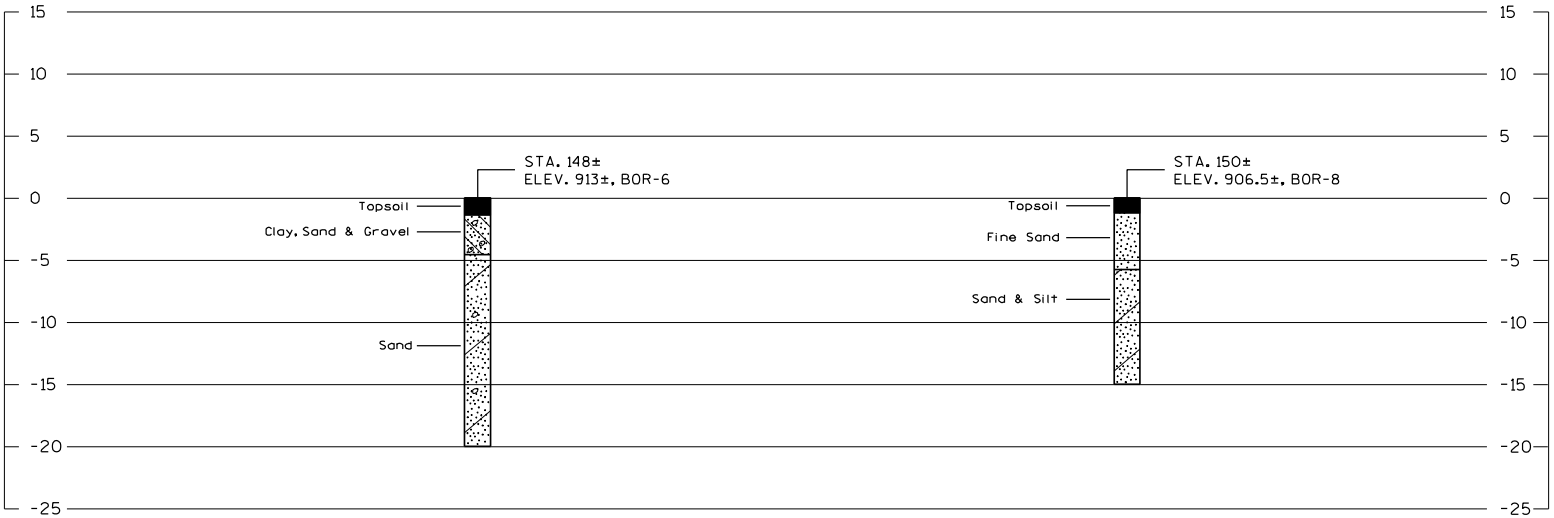
COPING DETAILS

SHEET 3 OF 5
728

UNIVERSITY AVE.
MADISON, WI.
DANE COUNTY



BORINGS PREPARED BY:
CGC, INC.
MADISON, WI

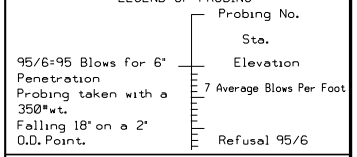


STATE PROJECT NUMBER	SHEET NO.
5992-08-79	

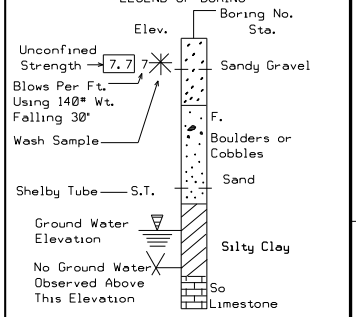
ABBREVIATIONS
F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS
Topsoil, Silt, Sandstone, Sand, Peat, Limestone, Gravel, Clay, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a O.D.x1.4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE R-13-190

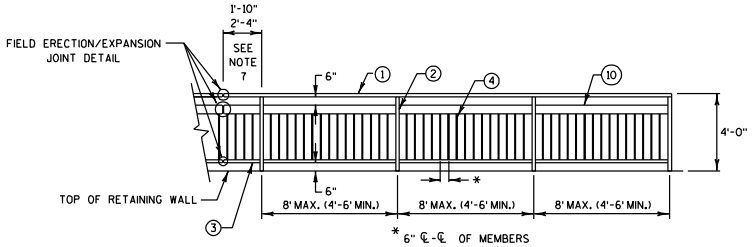
DRAWN BY STD | PLANS CK'D. MPB

SUBSURFACE EXPLORATION

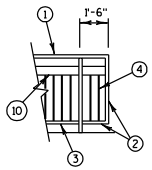
SHEET 4 OF 5

WISDOT/CADDS SHEET 3

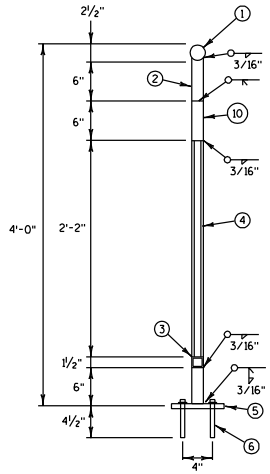
STATE PROJECT NUMBER
5992-08-79



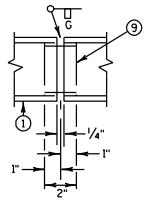
PIPE RAILING FOR RETAINING WALL ELEVATION



END SECTION

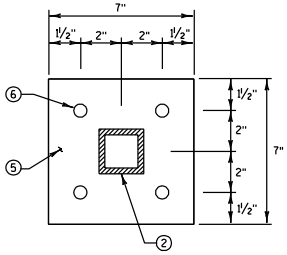


SECTION THRU RAILING

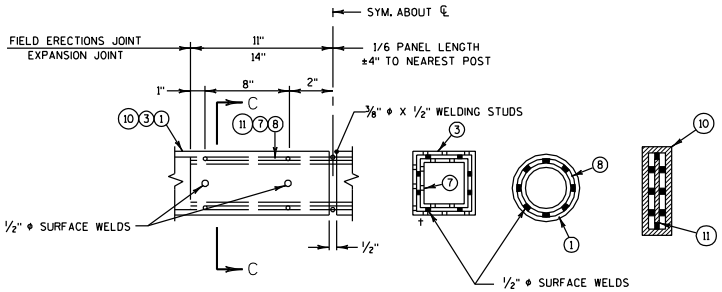


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



RAILING BASE PLATE



FIELD ERECTION JOINT DETAIL

† MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE

SECTION C-C

RAILING STEEL DETAIL

SEE RETAINING WALL PLANS FOR LOCATIONS ON WALLS
SEE PLAN DETAILS FOR LOCATIONS ADJACENT TO MULTI-USE PATH

LEGEND

(1) 2½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.

(2) TS 2" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO MATCH SLOPE OF TOP OF WALL. HOLD 1/16" ABOVE BASE PLATE TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON THE BASE PLATE.

(3) TS 1½" X 1½" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(4) TS 1" X 1" X 0.125" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(5) BASE PLATE ½" X 7" X 7" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 9/16" HOLES FOR HEX BOLTS NO. 6. WELD TO NO. 2 AS SHOWN.

(6) CONCRETE MASONRY ANCHORS, TYPE S, 5/8". PULLOUT STRENGTH SHALL BE 3.6 KIPS.

(7) SQUARE SLEEVE FABRICATED FROM ½" COLD DRAWN STEEL ALLOY SQUARE CONFORMING TO ASTM A331 X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 3. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.

(8) 1½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.

(9) 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".

(10) TS 6" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(11) 1" X 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 X 2'-4" LONG AT EXPANSION JOINTS OR 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 10. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

GENERAL NOTES

BID ITEM SHALL BE "RAILING STEEL" WHICH INCLUDES ALL ITEMS SHOWN INCLUDING GALVANIZED COATING.

RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.

POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIALS EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.

VERTICAL MEMBERS SHALL BE PLUMB.

HORIZONTAL MEMBERS SHALL PARALLEL GRADE.

PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

RAILING TO BE PAINTED FEDERAL COLOR NO. 17038 (BLACK).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-190

DRAWN BY	STD	PLANS CK'D.	MPB

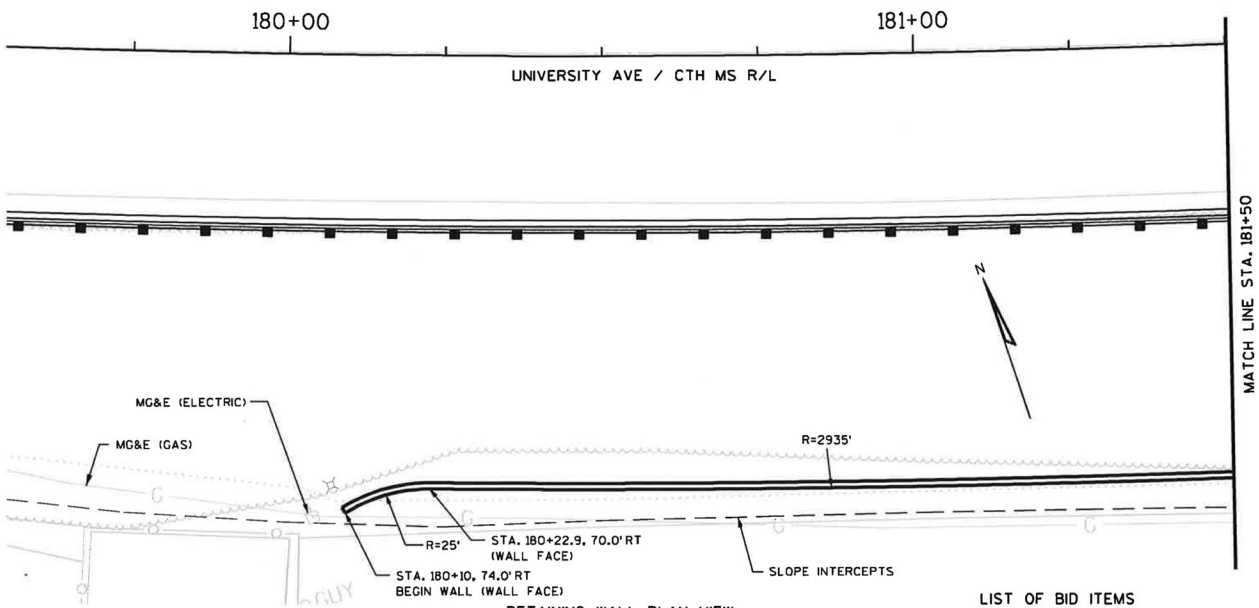
RAILING DETAILS

SHEET 5 OF 5
730

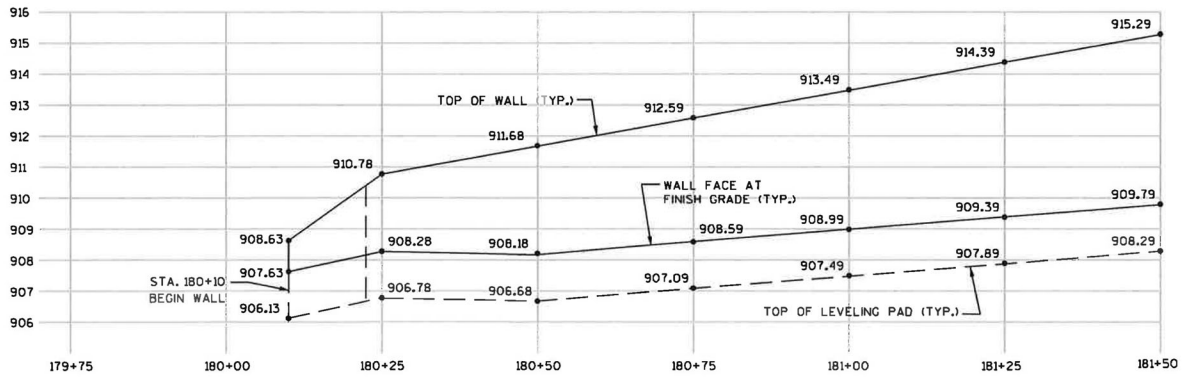
8

8

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW



DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE GRADES PROVIDED ON THIS DETAIL.

DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED SLOPE BEHIND THE WALL AS SHOWN ON THE CROSS SECTIONS.

LARGE WET CAST CONCRETE BLOCKS MAY BE USED FOR THIS PROJECT, EITHER AS GRAVITY WALLS OR MSE WALLS OR A COMBINATION OF BOTH AS REQUIRED. WET CAST CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4000 PSI AND AIR CONTENT OF 5.0 TO 7.5 PERCENT. ABSORPTION AND FREEZE-THAW REQUIREMENTS DO NOT APPLY TO WET CAST CONCRETE BLOCKS.

WALL TO HAVE SPLIT BLOCK STRAIGHT FACE APPEARANCE AND BE TAN IN COLORATION. WET CAST CONCRETE BLOCKS MAY BE STAINED FOR COLOR.

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE NOTED.

ALLOWABLE SOIL BEARING CAPACITY = 1,500 PSF.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

CONCRETE COPING SHALL BE STAINED FEDERAL STANDARD NO. 595B #26622 (PEARL GRAY). APPLY STAIN TO ENTIRE SURFACE AREA OF FRONT AND TOP OF COPING AND THE BACK TOP 9 INCHES OF COPING.

QUANTITY FOR BASE AGGREGATE DENSE IS BASED ON OVER-EXCAVATING 1'0" BELOW THE BOTTOM OF THE LEVELING PAD.

LIST OF BID ITEMS

206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS R-13-191	- 1 L.S.
305.0125	BASE AGGREGATE DENSE 1 1/4-INCH	- 100 C.Y.
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	- 4 S.Y.
517.1010.S	CONCRETE STAINING R-13-191	- 1,300 S.F.
532.0300.S	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH	- 2,500 S.F.
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	- 350 L.F.

WISCONSIN
AARON S. STEGER
36097-006
VERONA, WI
11/30/11
PROFESSIONAL ENGINEER

LIST OF DRAWINGS

1. GENERAL LAYOUT
2. GENERAL LAYOUT
3. COPING DETAILS
4. SUBSURFACE EXPLORATION

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

KL Engineering
[A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher FOR 12/01/11
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-13-191

UNIVERSITY AVENUE (CTH MS)

COUNTY DANE — ~~TOWN/CITY/VILLAGE~~ MADISON

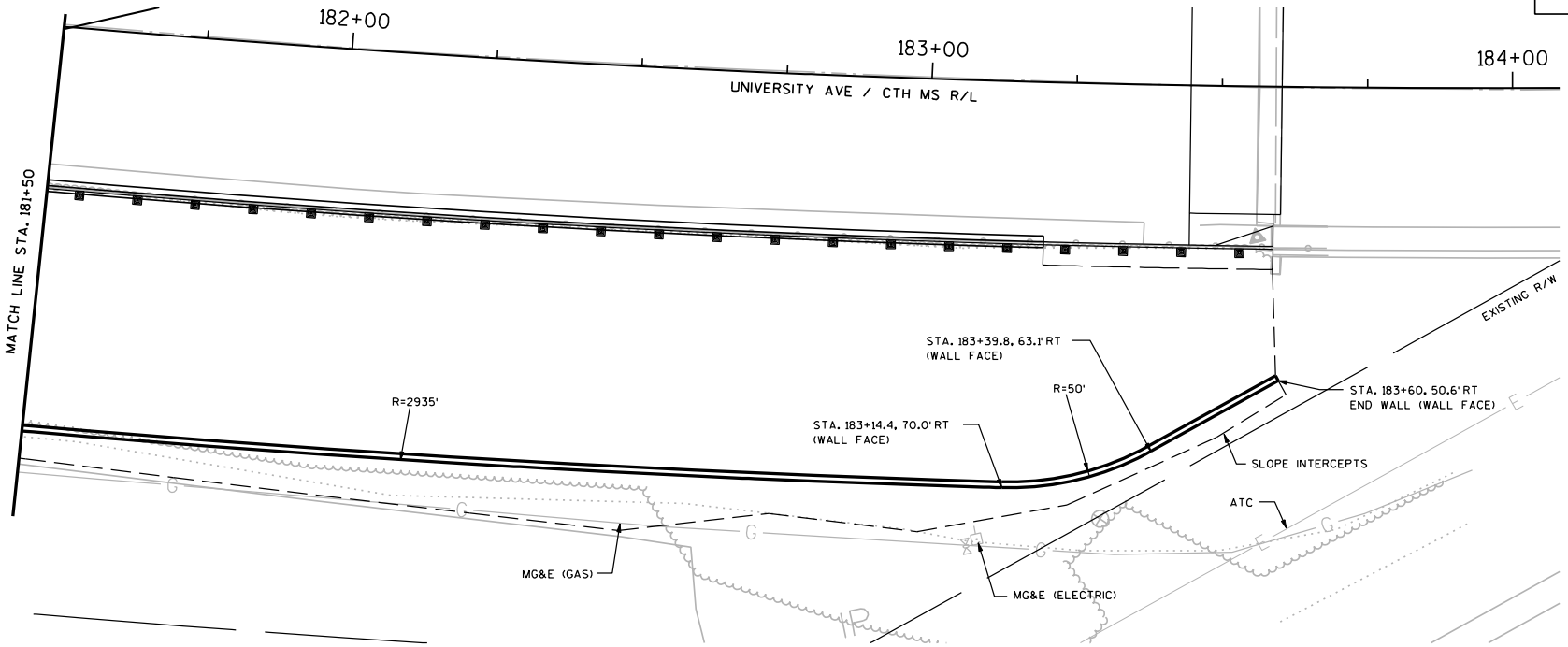
DESIGN SPEC.

BUREAU OF STRUCTURES CONTACT:

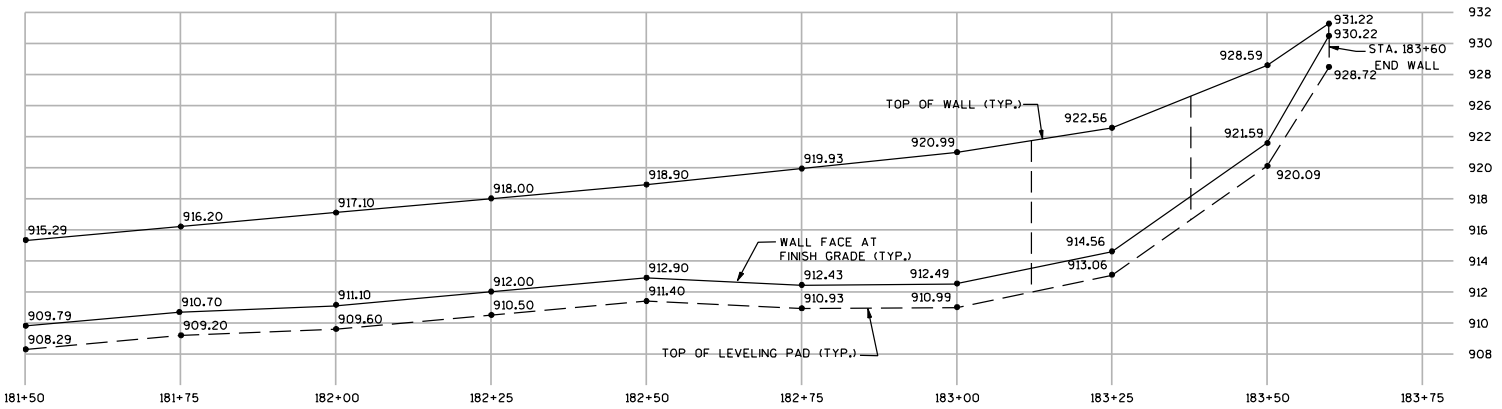
8

8

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW



RETAINING WALL PROFILE VIEW
STA 180+10 RT - STA 183+60 RT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-191

DRAWN BY	STD	PLANS CK'D.	MPB

GENERAL LAYOUT

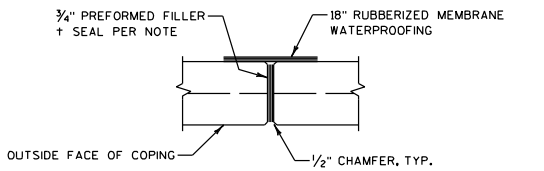
SHEET 2 OF 4
732

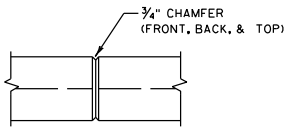
8

8

STATE PROJECT NUMBER
5992-08-79

† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)





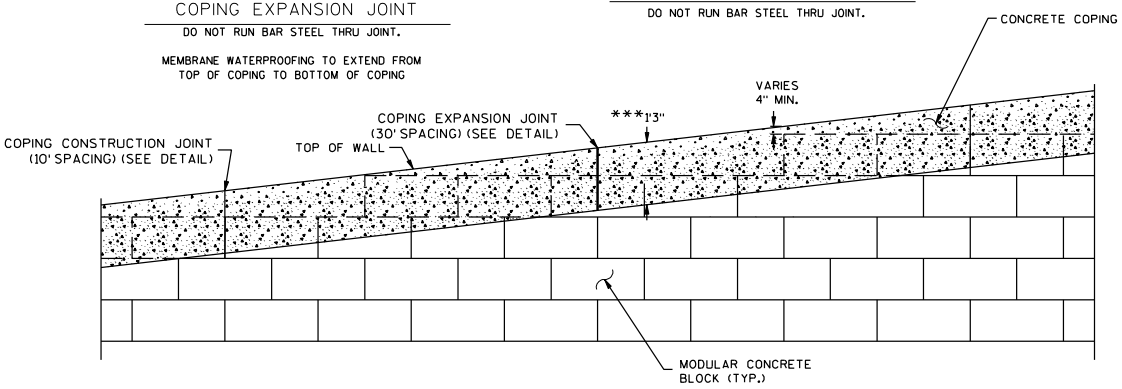
SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
RETAINED SOIL	125	28°	0
BACKFILL SOIL	120	30°	0

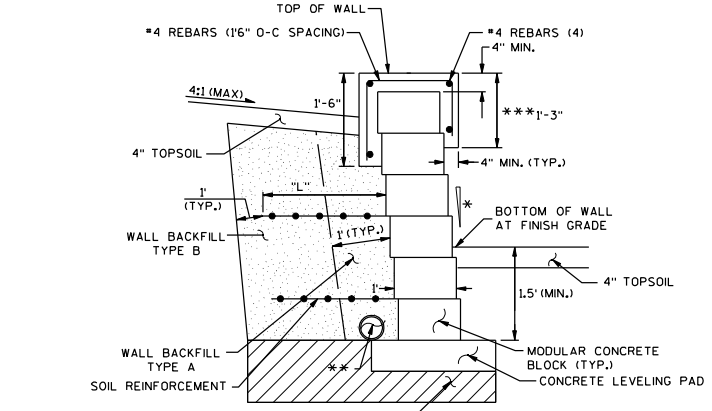
COPING EXPANSION JOINT
DO NOT RUN BAR STEEL THRU JOINT.

MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING

COPING CONTRACTION JOINT
DO NOT RUN BAR STEEL THRU JOINT.



RETAINING WALL FACE & CONCRETE COPING DETAIL



TYPICAL SECTION OF RETAINING WALL
STA. 180+10 RT - STA. 183+60 RT
NTS

NOTES:
MAINTAIN 2" MINIMUM COVER ON ALL REBAR.

PLACE EXPANSION JOINTS AT EVERY THIRD JOINT AND AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS.

* BATTER VARIES BY MANUFACTURER

** PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.

*** THIS DIMENSION MAY CHANGE DEPENDING ON HEIGHT OF BLOCKS. THIS DIMENSION TO BE CONSTANT FOR ENTIRE LENGTH OF WALL. MAXIMUM ALLOWABLE HEIGHT OF BLOCKS TO BE 9 INCHES.

"L" SHALL BE A MINIMUM OF 0.7 TIMES THE WALL HEIGHT BUT NOT LESS THAN 6 FEET.

MSE WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS			
WALL HEIGHT (FEET)		5.5	7
EXPOSED WALL HEIGHT (FEET)		4	5.5
LENGTH OF REINFORCEMENT (FEET)		6	8
WALL STATION		± 180+00	± 182+00
BORING USED		BOR-17	BOR-18
FACTOR OF SAFETY			
SLIDING	(>1.5)	1.78	1.52
OVERTURNING	(>2.0)	8.91	6.34
BEARING	(<1.5 ksf)	1.09 ksf	1.25 ksf
GLOBAL STABILITY	(>1.3)	1.37	1.34

NOTE:
FINAL DESIGN FOR INTERNAL AND EXTERNAL STABILITY IS THE RESPONSIBILITY OF THE WALL DESIGNER AND MAY DIFFER FROM THE VALUES IN THE TABLE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-191

DRAWN BY	STD	PLANS CK'D.	MPB

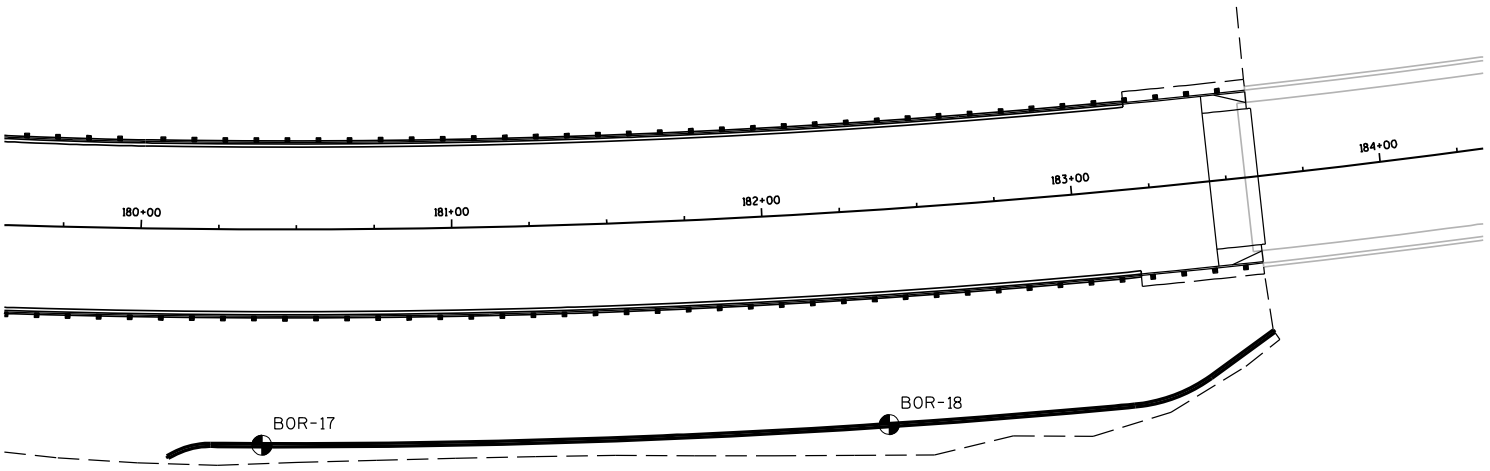
COPING DETAILS

SHEET 3 OF 4
733

8

8

UNIVERSITY AVE.
MADISON, WI.
DANE COUNTY



BORINGS PREPARED BY:
CGC, INC.
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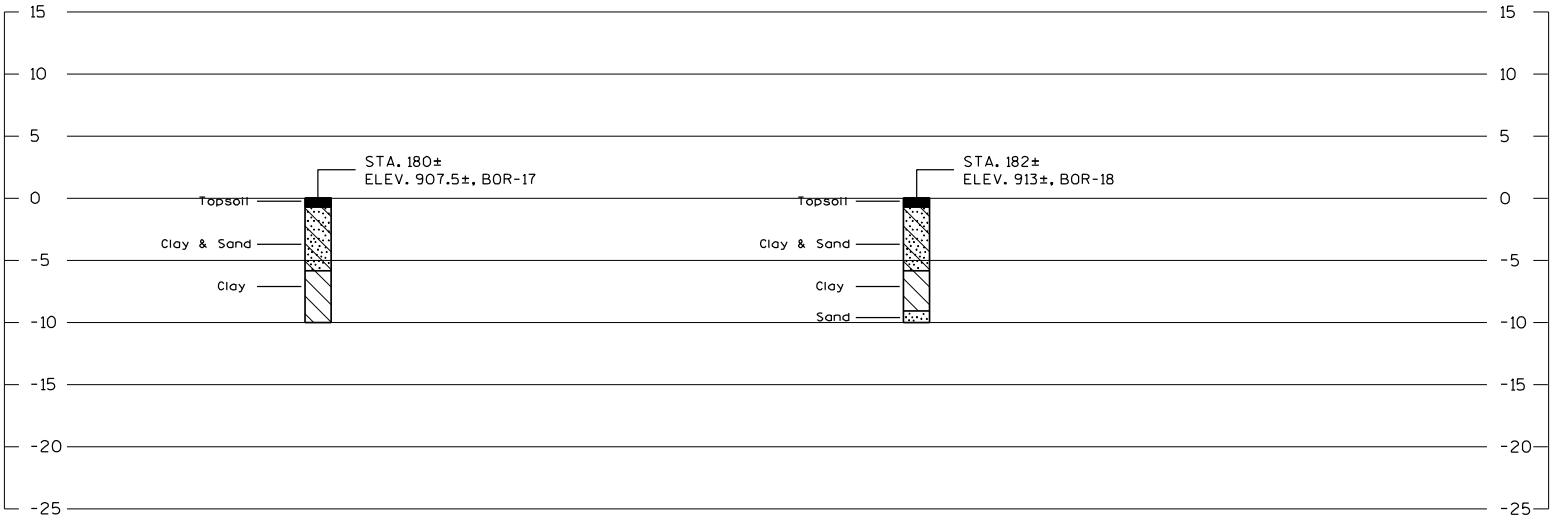

STATE PROJECT NUMBER	SHEET NO.
5992-08-79	

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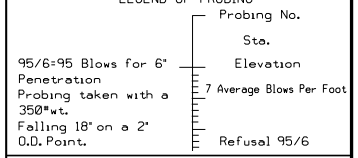
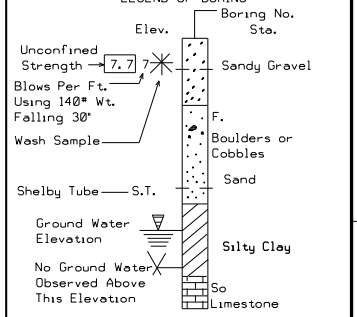


LEGEND OF BORING



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SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE R-13-191

DRAWN BY STD | PLANS CK'D. MPB

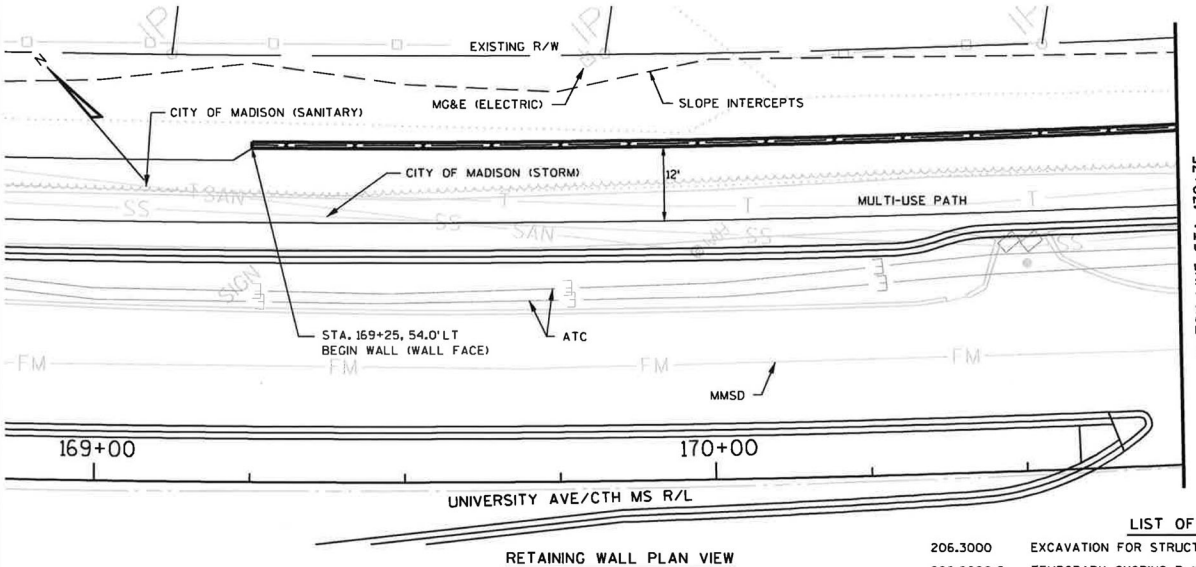
SUBSURFACE EXPLORATION

SHEET 4 OF 4

734

WISDOT/CADDS SHEET 3

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW

DESIGN DATA

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WALL TO HAVE SPLIT BLOCK STRAIGHT FACE APPEARANCE AND BE TAN IN COLORATION. WET CAST CONCRETE BLOCKS MAY BE STAINED FOR COLOR.

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE NOTED.

ALLOWABLE SOIL BEARING CAPACITY = 3,000 PSF.

CONCRETE COPING SHALL BE STAINED FEDERAL STANDARD NO. 595B #26622 (PEARL GRAY). APPLY STAIN TO ENTIRE SURFACE AREA OF FRONT AND TOP OF COPING AND THE BACK TOP 9 INCHES OF COPING.

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LIST OF BID ITEMS

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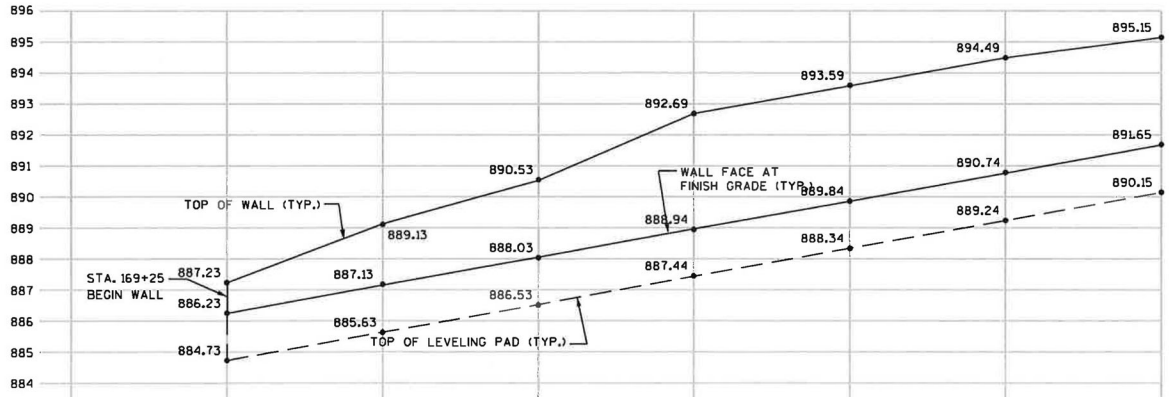
206.6000.S	TEMPORARY SHORING R-13-192	- 2,800 S.F.
305.0125	BASE AGGREGATE DENSE 1 1/4-INCH	- 200 C.Y.
513.6000	RAILING STEEL R-13-192	- 1 L.S.
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	- 7 S.Y.
517.1010.S	CONCRETE STAINING R-13-192	- 2,500 S.F.
532.0300.S	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH	- 4,700 S.F.
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	- 665 L.F.



LIST OF DRAWINGS

1. GENERAL LAYOUT
2. GENERAL LAYOUT
3. GENERAL LAYOUT
4. COPING DETAILS
5. SUBSURFACE EXPLORATION
6. RAILING DETAILS

BUREAU OF STRUCTURES CONTACT:

WISCONSIN
AARON S. STEGER
36097-006
VERONA, WI
PROFESSIONAL ENGINEER
11/30/11

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher FOR 12/01/11
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-13-192

UNIVERSITY AVENUE (CTH MS)

COUNTY DANE ~~TOWN~~/CITY ~~VILLAGE~~ MADISON

DESIGN SPEC. AASHTO STANDARD SPEC

8

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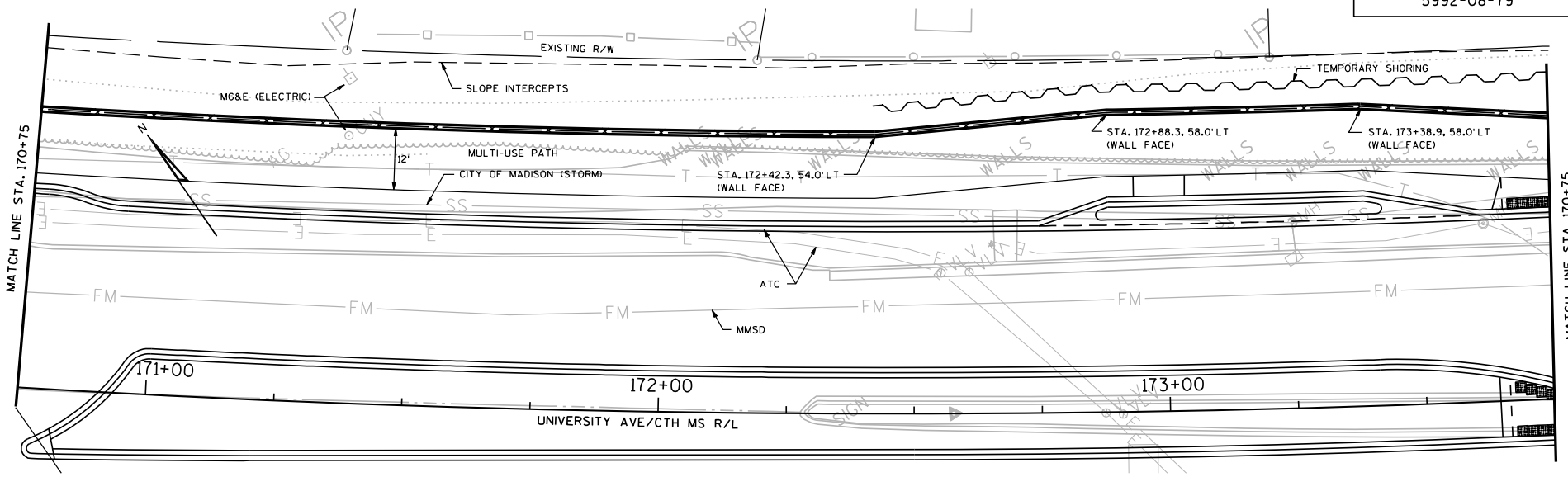
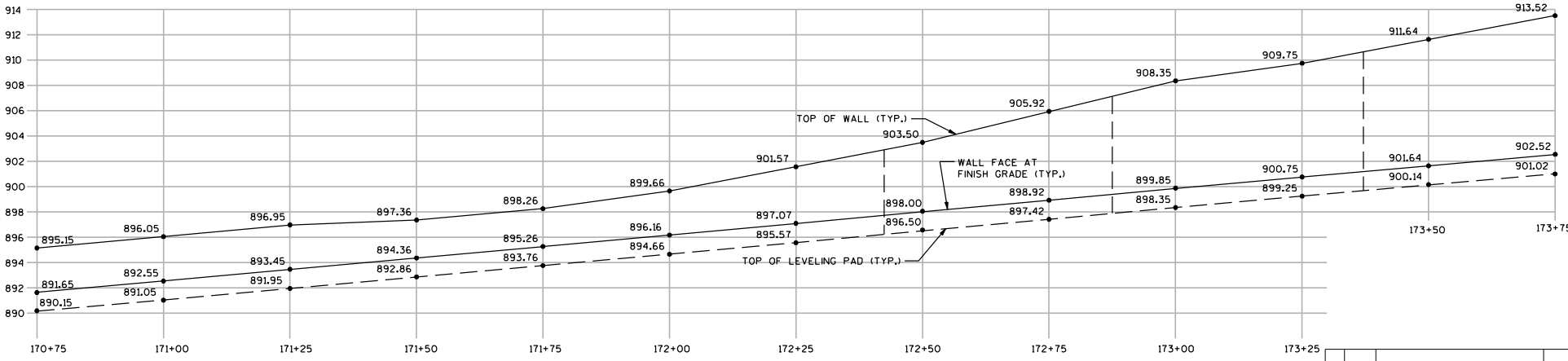
STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW



RETAINING WALL PROFILE VIEW
STA 169+25 LT - STA 175+90 LT

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

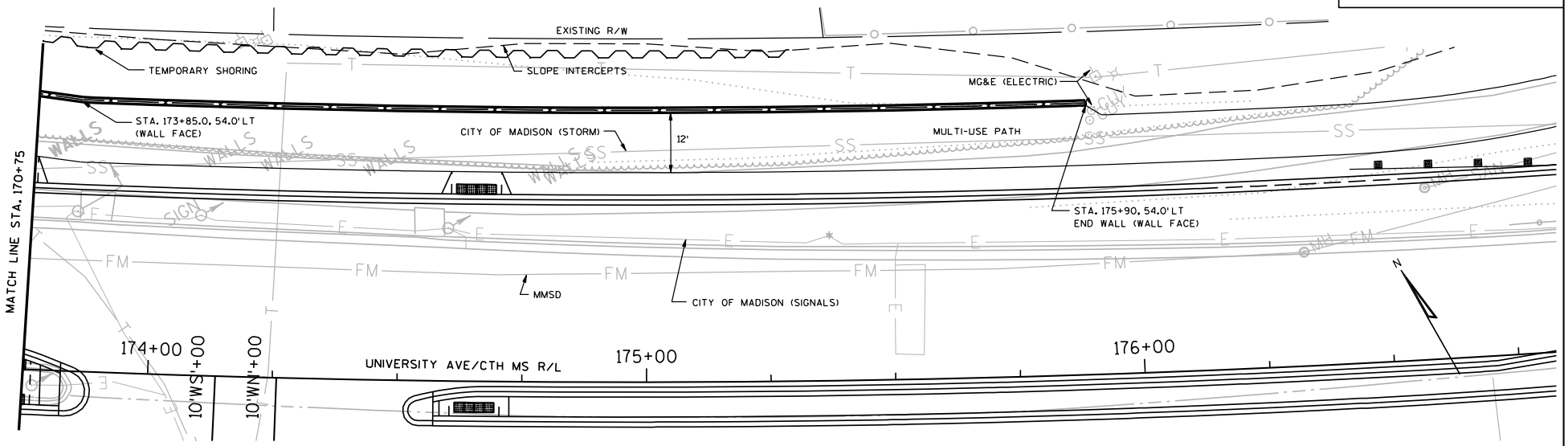
STRUCTURE R-13-192

DRAWN BY	STD	PLANS CK'D.	MPB

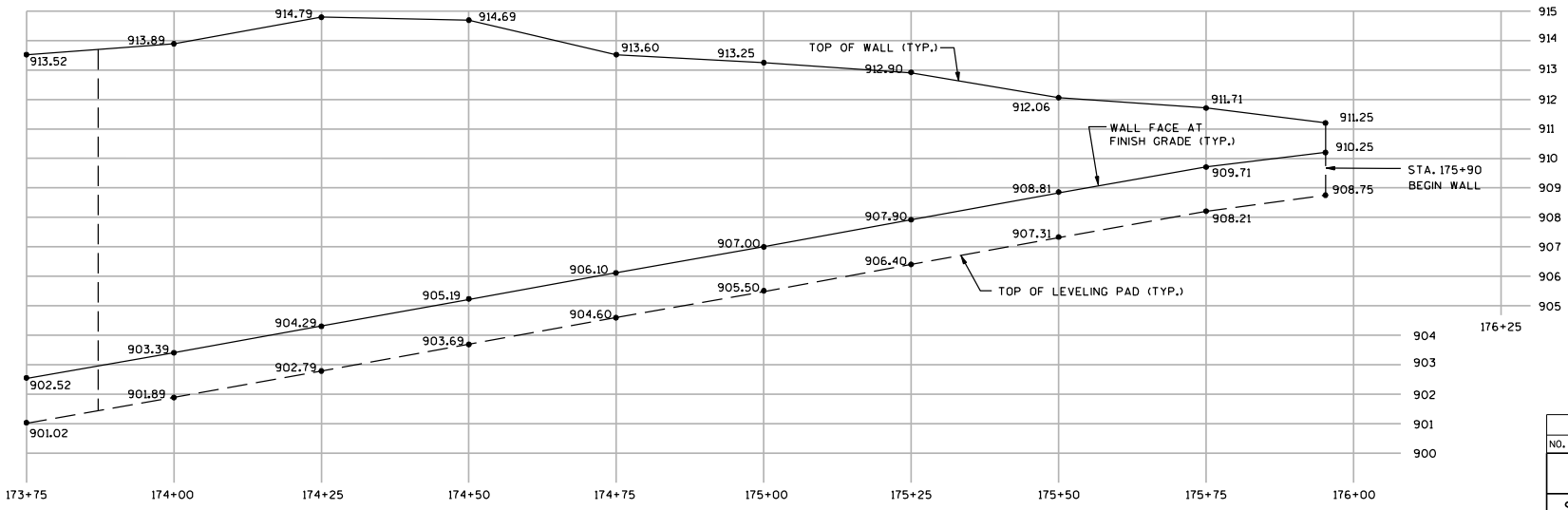
GENERAL LAYOUT

SHEET 2 OF 6
736

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW



RETAINING WALL PROFILE VIEW
STA 169+25 LT - STA 175+90 LT

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-192

DRAWN BY	STD	PLANS CK'D.	MPB

GENERAL LAYOUT

SHEET 3 OF 6
737

STATE PROJECT NUMBER
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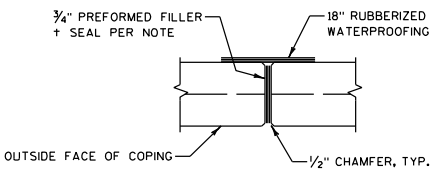
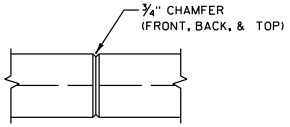
† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)





SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
RETAINED SOIL	120	26°	0
BACKFILL SOIL	120	30°	0

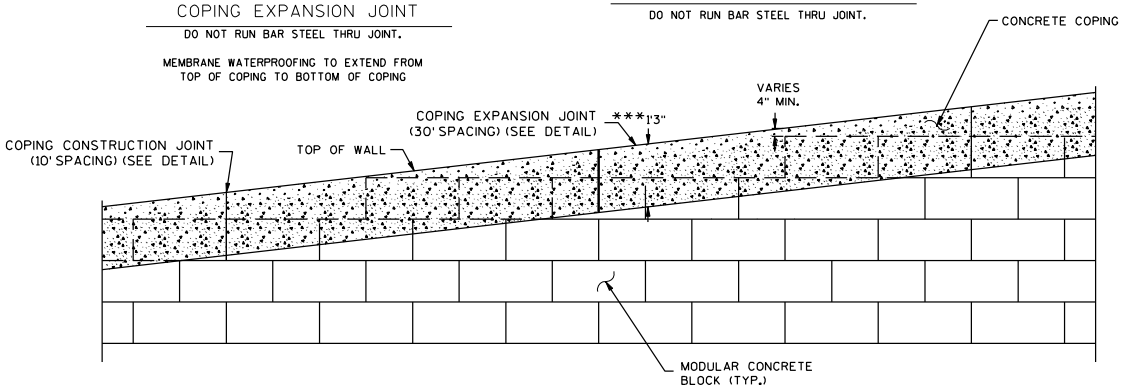
COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

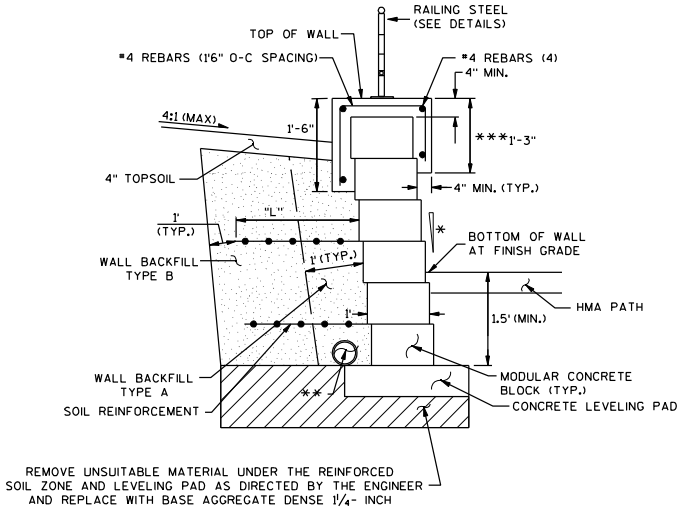
MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING

COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.



RETAINING WALL FACE & CONCRETE COPING DETAIL



REMOVE UNSUITABLE MATERIAL UNDER THE REINFORCED SOIL ZONE AND LEVELING PAD AS DIRECTED BY THE ENGINEER AND REPLACE WITH BASE AGGREGATE DENSE 1 1/4- INCH

TYPICAL SECTION OF RETAINING WALL

STA. 169+25 LT - STA. 175+90 LT

NTS

NOTES:
MAINTAIN 2" MINIMUM COVER ON ALL REBAR.

PLACE EXPANSION JOINTS AT EVERY THIRD JOINT AND AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS.

* BATTER VARIES BY MANUFACTURER

** PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.

*** THIS DIMENSION MAY CHANGE DEPENDING ON HEIGHT OF BLOCKS. THIS DIMENSION TO BE CONSTANT FOR ENTIRE LENGTH OF WALL. MAXIMUM ALLOWABLE HEIGHT OF BLOCKS TO BE 9 INCHES.

"L" SHALL BE A MINIMUM OF 0.7 TIMES THE WALL HEIGHT BUT NOT LESS THAN 6 FEET.

MSE WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS				
WALL HEIGHT (FEET)		6	10	11.5
EXPOSED WALL HEIGHT (FEET)		4.5	8.5	10
LENGTH OF REINFORCEMENT (FEET)		6	8	8
WALL STATION		± 170+00	± 173+00	± 175+00
BORING USED		BOR-10	BOR-11	BOR-12
FACTOR OF SAFETY				
SLIDING	(>1.5)	1.53	1.56	1.55
OVERTURNING	(>2.0)	5.78	5.49	5.02
BEARING	(<3.0 ksf)	1.05 ksf	1.52 ksf	1.74 ksf
GLOBAL STABILITY	(>1.3)	1.52	1.63	1.63

NOTE:
FINAL DESIGN FOR INTERNAL AND EXTERNAL STABILITY IS THE RESPONSIBILITY OF THE WALL DESIGNER AND MAY DIFFER FROM THE VALUES IN THE TABLE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-192

DRAWN BY STD | PLANS CK'D. MPB

COPING DETAILS

SHEET 4 OF 6
738

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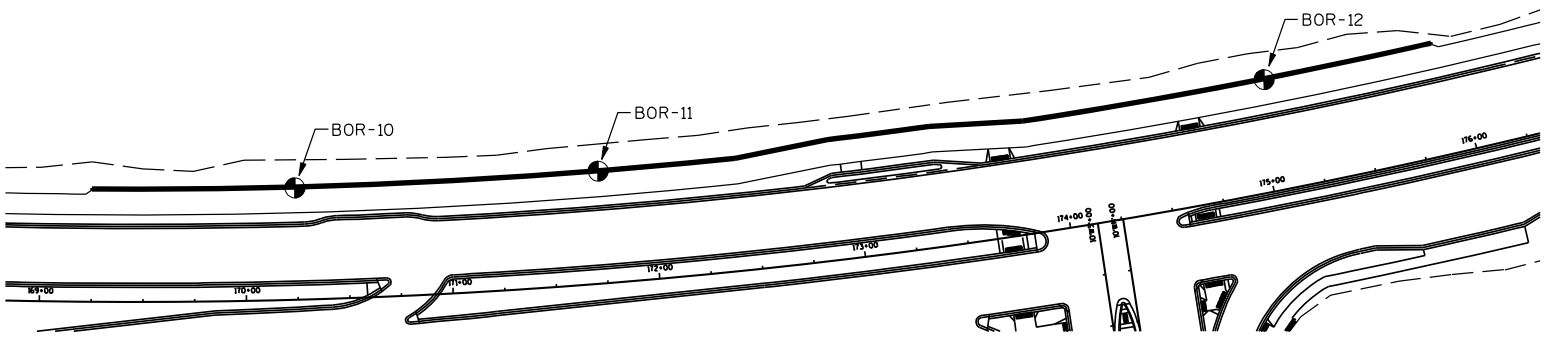
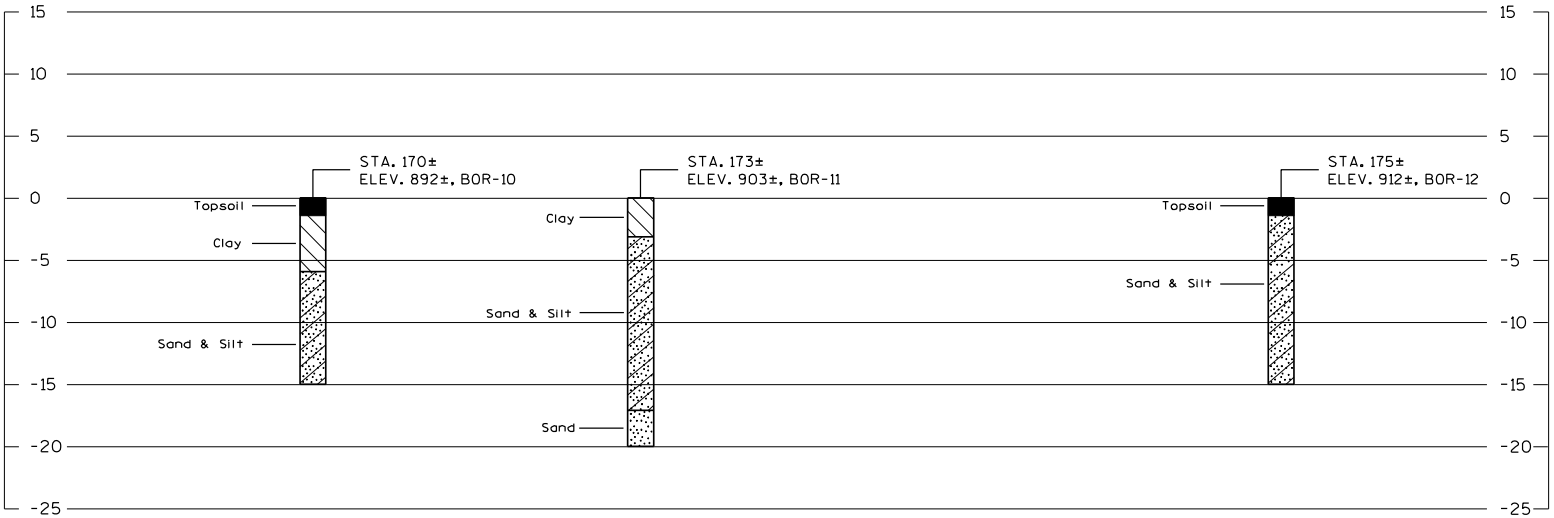
UNIVERSITY AVE.
MADISON, WI.
DANE COUNTY



BORINGS PREPARED BY:
CGC, INC.
MADISON, WI

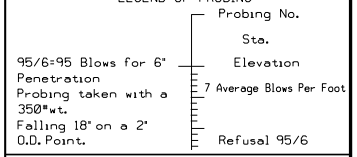


STATE PROJECT NUMBER	SHEET NO.
5992-08-79	

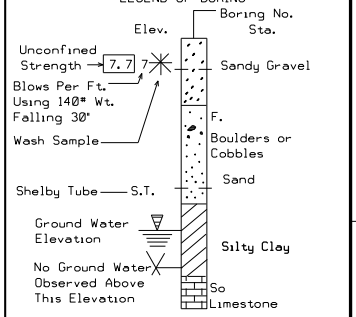
ABBREVIATIONS
F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS
Topsoil, Silt, Sandstone
Sand, Peat, Limestone
Gravel, Clay, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a O.D.x1.4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE R-13-192

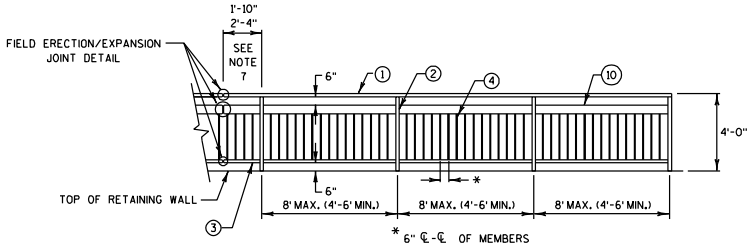
DRAWN BY STD | PLANS CK'D. MPB

SUBSURFACE EXPLORATION

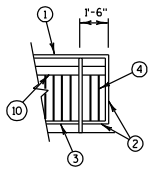
SHEET 5 OF 6

WISDOT/CADDS SHEET 3

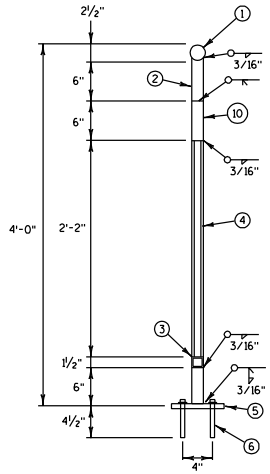
STATE PROJECT NUMBER
5992-08-79



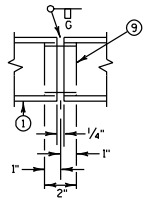
PIPE RAILING FOR RETAINING WALL ELEVATION



END SECTION

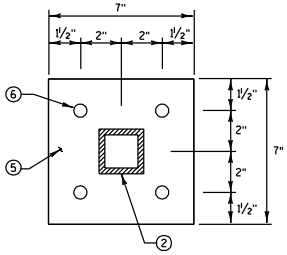


SECTION THRU RAILING

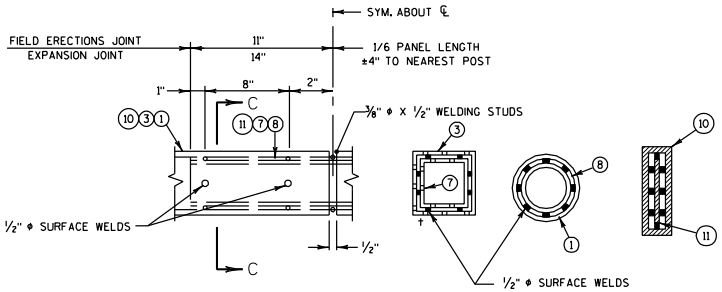


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



RAILING BASE PLATE



FIELD ERECTION JOINT DETAIL

† MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE

SECTION C-C

RAILING STEEL DETAIL

SEE RETAINING WALL PLANS FOR LOCATIONS ON WALLS
SEE PLAN DETAILS FOR LOCATIONS ADJACENT TO MULTI-USE PATH

LEGEND

(1) 2½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS.

(2) TS 2" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B. CUT BOTTOM OF POST TO MATCH SLOPE OF TOP OF WALL. HOLD 1/16" ABOVE BASE PLATE TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE POST VERTICAL AND CENTERED ON THE BASE PLATE.

(3) TS 1½" X 1½" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(4) TS 1" X 1" X 0.125" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(5) BASE PLATE ½" X 7" X 7" CONFORMING TO ASTM DESIGNATION A709 GRADE 36 WITH 9/16" HOLES FOR HEX BOLTS NO. 6. WELD TO NO. 2 AS SHOWN.

(6) CONCRETE MASONRY ANCHORS, TYPE S, 5/8". PULLOUT STRENGTH SHALL BE 3.6 KIPS.

(7) SQUARE SLEEVE FABRICATED FROM ½" COLD DRAWN STEEL ALLOY SQUARE CONFORMING TO ASTM A331 X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 3. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.

(8) 1½" DIA. STEEL PIPE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS X 2'-4" LONG AT EXPANSION JOINTS AND 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 1. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOMS SURFACES AT CENTERLINE.

(9) 2" DIA. PIPE SLEEVE CONFORMING TO SECTION 506 OF THE STANDARD SPECIFICATIONS. PROVIDE "SLIDING FIT".

(10) TS 6" X 2" X 0.188" STRUCTURAL TUBING CONFORMING TO ASTM DESIGNATION A501 OR A500 GRADE B.

(11) 1" X 5" SLEEVE CONFORMING TO ASTM DESIGNATION A709 GRADE 36 X 2'-4" LONG AT EXPANSION JOINTS OR 1'-10" LONG AT FIELD JOINTS. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 10. PROVIDE 3/8" DIA. X ½" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

GENERAL NOTES

BID ITEM SHALL BE "RAILING STEEL" WHICH INCLUDES ALL ITEMS SHOWN INCLUDING GALVANIZED COATING.

RAILING SHALL BE FABRICATED IN 2 OR 3 PANEL LENGTHS.

POST BASE PLATES NO. 5 SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIALS EXCEPT ANCHOR BOLTS NO. 6 SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS, STEEL TUBING, AND STEEL PIPE SHALL BE GIVEN A NO. 6 BLAST CLEANING PER S.S.P.C. SPECIFICATIONS.

VERTICAL MEMBERS SHALL BE PLUMB.

HORIZONTAL MEMBERS SHALL PARALLEL GRADE.

PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

RAILING TO BE PAINTED FEDERAL COLOR NO. 17038 (BLACK).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-192

DRAWN BY	STD	PLANS CK'D.	MPB

RAILING DETAILS

SHEET 6 OF 6
740

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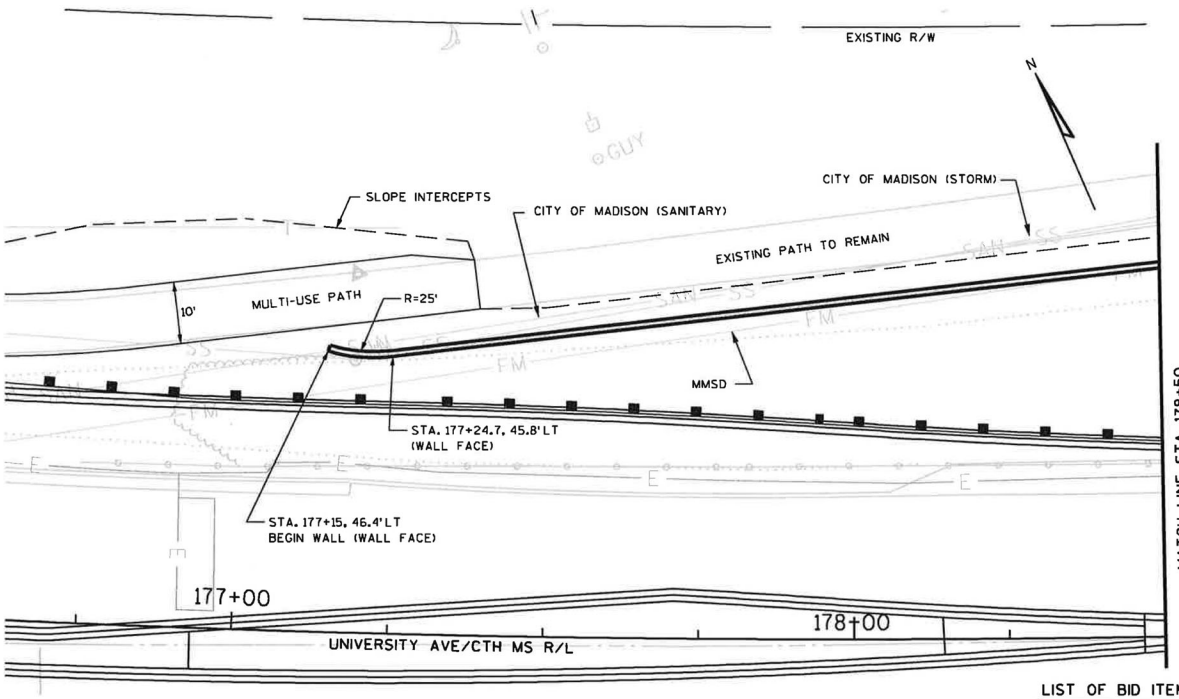
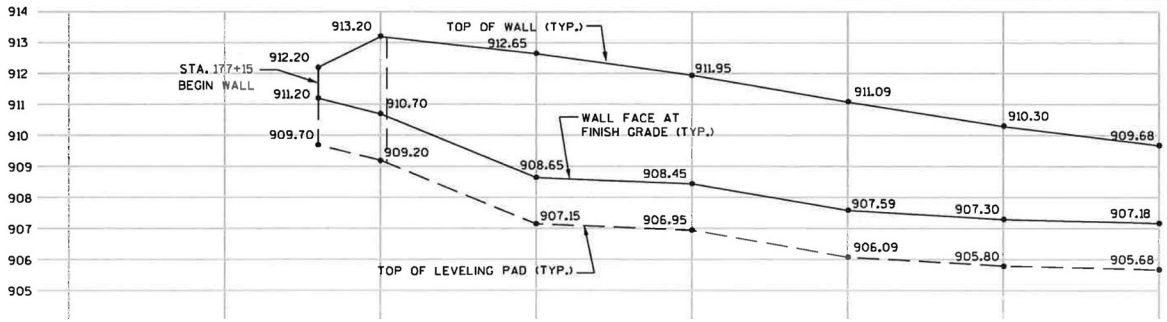


RETAINING WALL PLAN VIEW



STATE PROJECT NUMBER

5992-08-79

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE GRADES PROVIDED ON THIS DETAIL.

DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED SLOPE BEHIND THE WALL AS SHOWN ON THE CROSS SECTIONS.

LARGE WET CAST CONCRETE BLOCKS MAY BE USED FOR THIS PROJECT, EITHER AS GRAVITY WALLS OR MSE WALLS OR A COMBINATION OF BOTH AS REQUIRED. WET CAST CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4000 PSI AND AIR CONTENT OF 5.0 TO 7.5 PERCENT. ABSORPTION AND FREEZE-THAW REQUIREMENTS DO NOT APPLY TO WET CAST CONCRETE BLOCKS.

WALL TO HAVE SPLIT BLOCK STRAIGHT FACE APPEARANCE AND BE TAN IN COLORATION. WET CAST CONCRETE BLOCKS MAY BE STAINED FOR COLOR.

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE NOTED.

ALLOWABLE SOIL BEARING CAPACITY = 2,000 PSF.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 240 PSF.

CONCRETE COPING SHALL BE STAINED FEDERAL STANDARD NO. 595B #26622 (PEARL GRAY). APPLY STAIN TO ENTIRE SURFACE AREA OF FRONT AND TOP OF COPING AND THE BACK TOP 9 INCHES OF COPING.

QUANTITY FOR BASE AGGREGATE DENSE IS BASED ON OVER-EXCAVATING 1'0" BELOW THE TOP OF THE LEVELING PAD.

LIST OF BID ITEMS

206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS R-13-193	- 1 L.S.
305.0125	BASE AGGREGATE DENSE 1 1/4-INCH	- 175 C.Y.
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	- 7 S.Y.
517.1010.S	CONCRETE STAINING R-13-193	- 2,400 S.F.
532.0300.S	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH	- 3,350 S.F.
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	- 645 L.F.

WISCONSIN
AARON S. STEGER
36097-006
VERONA, WI
11/30/11
PROFESSIONAL ENGINEER

LIST OF DRAWINGS

1. GENERAL LAYOUT
2. GENERAL LAYOUT
3. GENERAL LAYOUT
4. COPING DETAILS
5. SUBSURFACE EXPLORATION

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

KL Engineering
[A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 11/01/11
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-13-193

UNIVERSITY AVENUE (CTH MS)

COUNTY DANE — ~~TOWN~~/CITY/~~VILLAGE~~ MADISON

DESIGN SPEC.

BUREAU OF STRUCTURES CONTACT:

8

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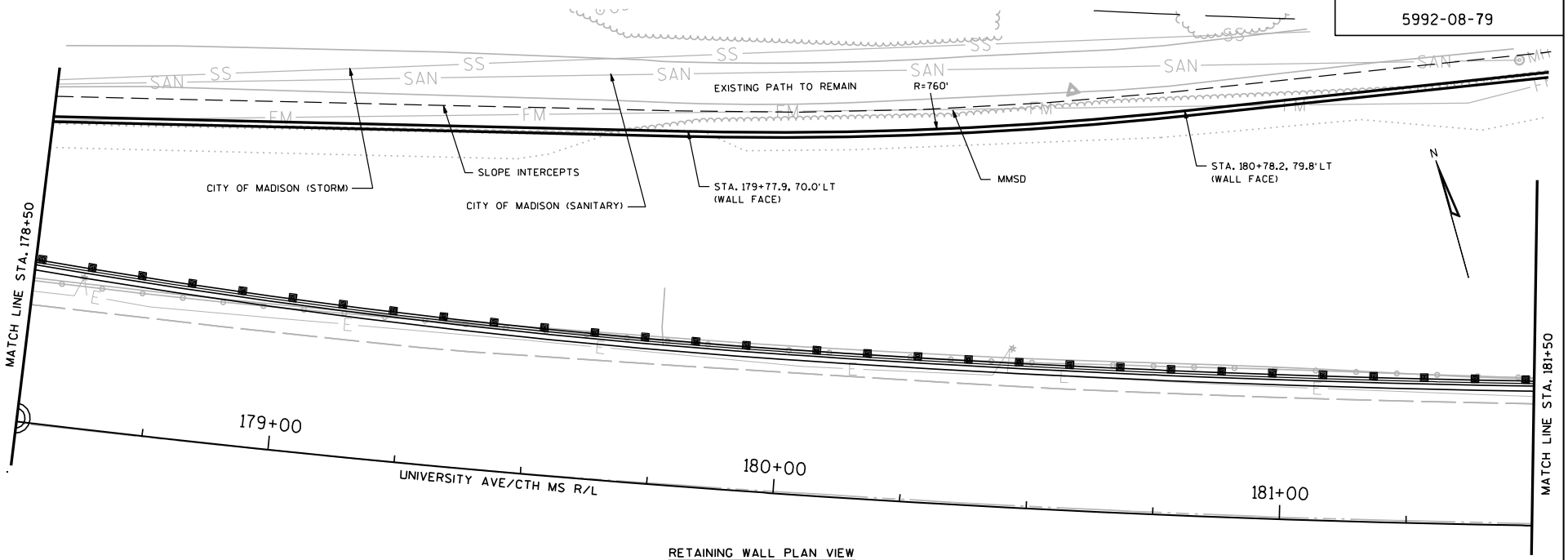
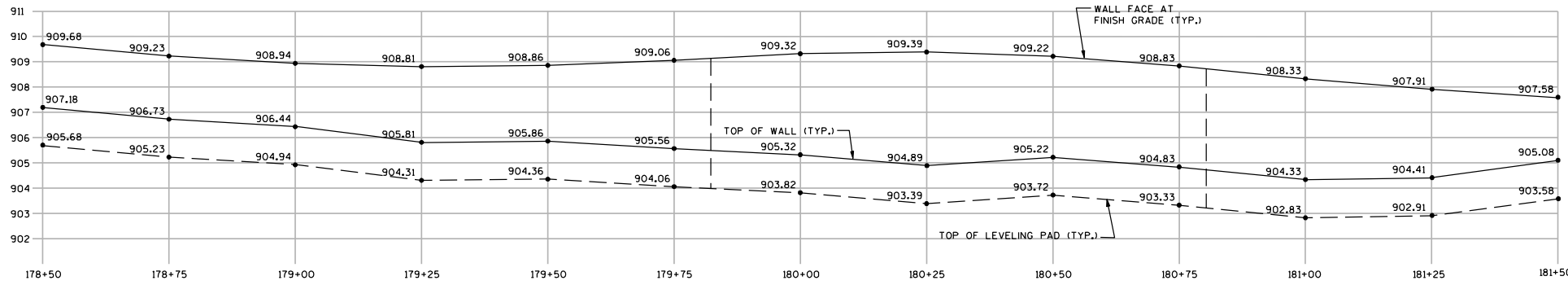
STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW



RETAINING WALL PROFILE VIEW
STA 177+15 LT - STA 183+60 LT

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

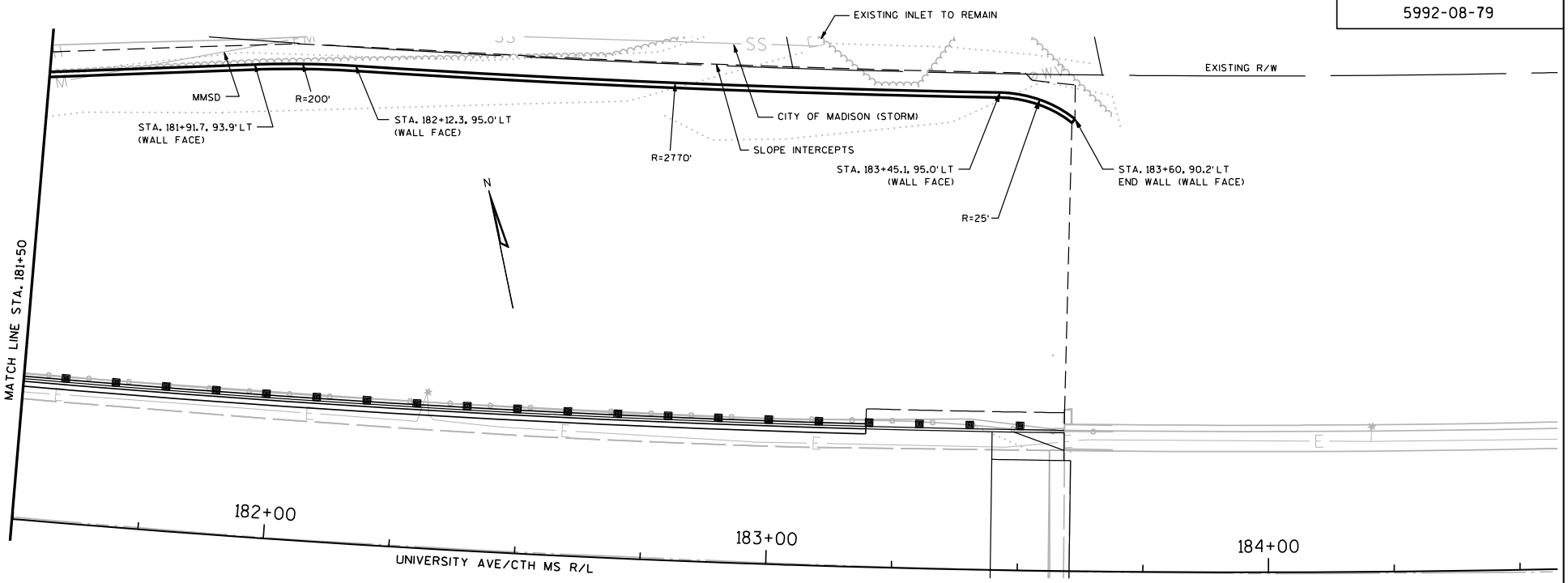
STRUCTURE R-13-193

DRAWN BY	STD	PLANS CK'D.	MPB

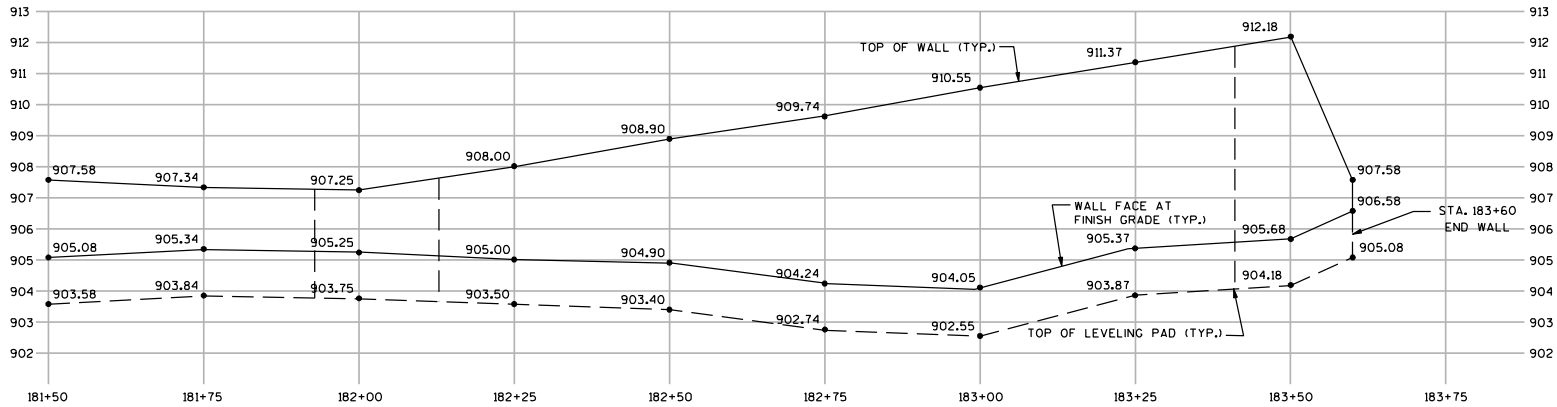
GENERAL LAYOUT

SHEET 2 OF 5
742

STATE PROJECT NUMBER
5992-08-79



RETAINING WALL PLAN VIEW



RETAINING WALL PROFILE VIEW
STA 177+15 LT - STA 183+60 LT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-13-193

DRAWN BY	STD	PLANS CK'D.	MPB

GENERAL LAYOUT

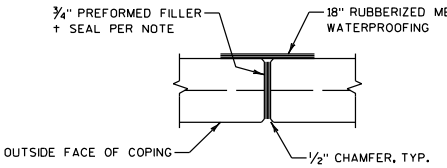
SHEET 3 OF 5
743

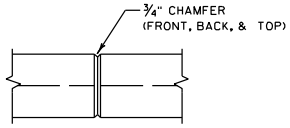
8

8

STATE PROJECT NUMBER
5992-08-79

† SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)





SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (pcf)	FRICTION ANGLE (degrees)	COHESION (psf)
RETAINED SOIL	125	30°	0
BACKFILL SOIL	120	30°	0

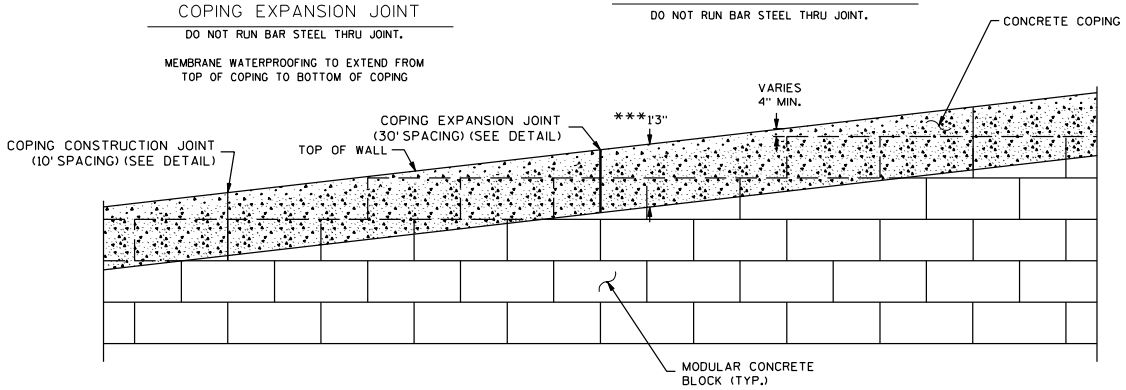
COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.

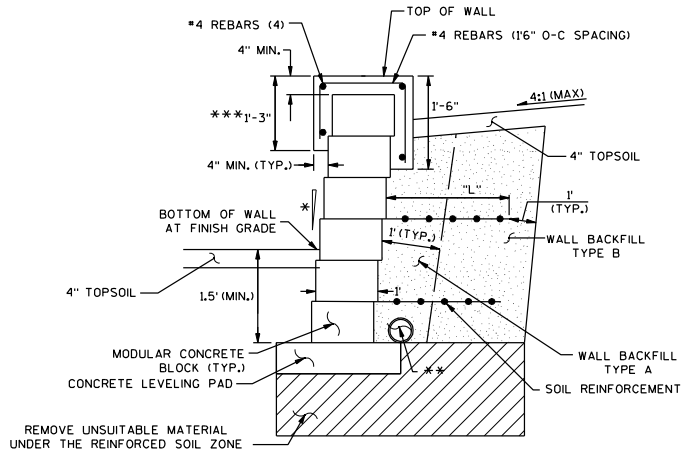
MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING

COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.



RETAINING WALL FACE & CONCRETE COPING DETAIL



TYPICAL SECTION OF RETAINING WALL

STA. 177+15 LT - STA. 183+60 LT

NTS

NOTES:
MAINTAIN 2" MINIMUM COVER ON ALL REBAR.

PLACE EXPANSION JOINTS AT EVERY THIRD JOINT AND AT ALL WALL RADIUS PC/PT POINTS AND BEND POINTS.

* BATTER VARIES BY MANUFACTURER

** PIPE UNDERDRAIN WRAPPED 6-INCH, SLOPE 0.5% MIN. TO SUITABLE DISCHARGE.

*** THIS DIMENSION MAY CHANGE DEPENDING ON HEIGHT OF BLOCKS. THIS DIMENSION TO BE CONSTANT FOR ENTIRE LENGTH OF WALL. MAXIMUM ALLOWABLE HEIGHT OF BLOCKS TO BE 9 INCHES.

"L" SHALL BE A MINIMUM OF 0.7 TIMES THE WALL HEIGHT BUT NOT LESS THAN 6 FEET.

MSE WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS				
WALL HEIGHT (FEET)		5.5	6.5	8
EXPOSED WALL HEIGHT (FEET)		4	5	6.5
LENGTH OF REINFORCEMENT (FEET)		6	7	9
WALL STATION		± 178+00	± 180+00	± 182+00
BORING USED		BOR-14	BOR-15	BOR-16
FACTOR OF SAFETY				
SLIDING	(>1.5)	1.70	1.57	1.50
OVERTURNING	(>2.0)	8.12	6.85	6.11
BEARING	(<2.0 ksf)	1.05 ksf	1.19 ksf	1.43 ksf
GLOBAL STABILITY	(>1.3)	1.37	1.36	1.39

NOTE:
FINAL DESIGN FOR INTERNAL AND EXTERNAL STABILITY IS THE RESPONSIBILITY OF THE WALL DESIGNER AND MAY DIFFER FROM THE VALUES IN THE TABLE.

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8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

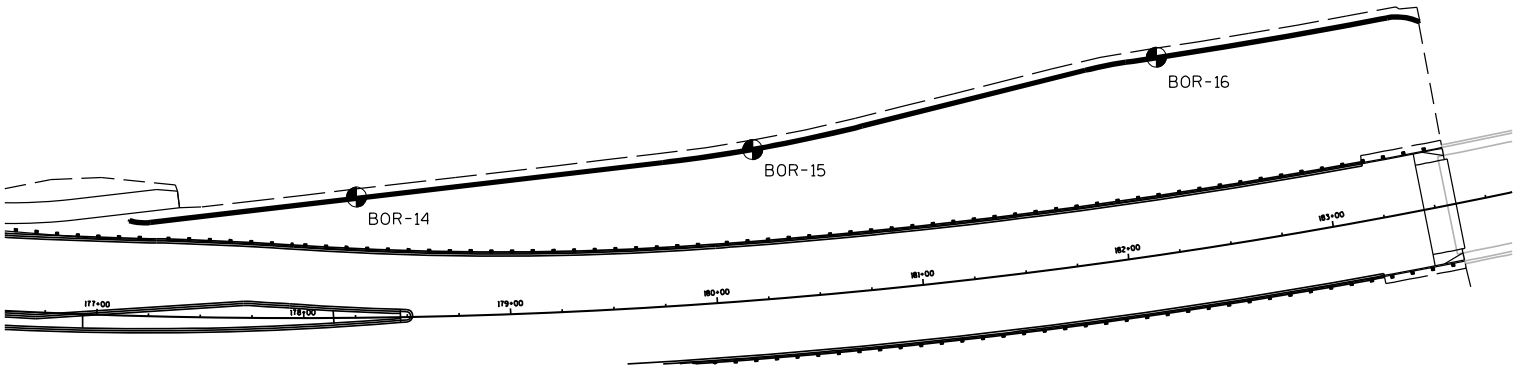
STRUCTURE R-13-193

DRAWN BY STD | PLANS CK'D. MPB

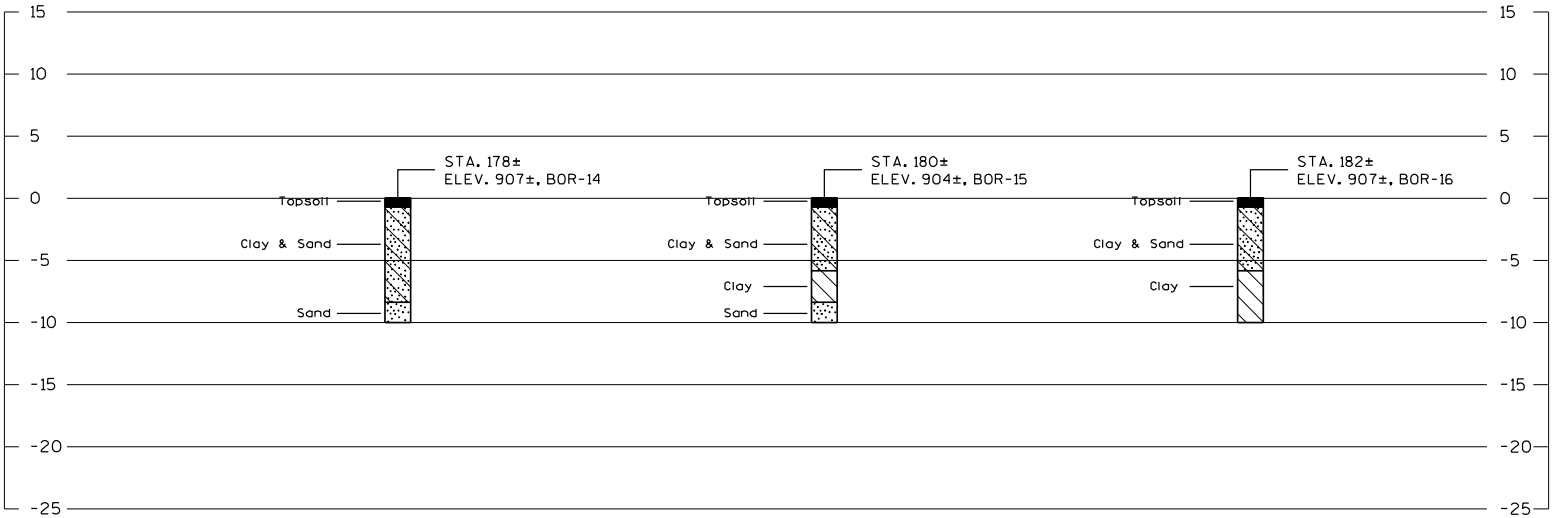
COPING DETAILS

SHEET 4 OF 5
744

UNIVERSITY AVE.
MADISON, WI.
DANE COUNTY



BORINGS PREPARED BY:
CGC, INC.
MADISON, WI



STATE PROJECT NUMBER	SHEET NO.
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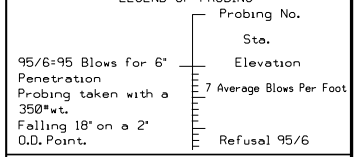
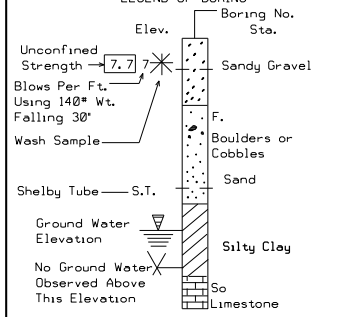
ABBREVIATIONS
F—Fine M—Medium C—Coarse
Ws—Weathered So—Sound

MATERIAL SYMBOLS
Topsoil, Silt, Sandstone
Sand, Peat, Limestone
Gravel, Clay, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a O.D. x 1. 4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE R-13-193

DRAWN BY STD | PLANS CK'D. MPB

SUBSURFACE EXPLORATION

SHEET 5 OF 5

745

WISDOT/CADDS SHEET 3

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded Marsh Backfill	Will be backfilled with Cut or Borrow
5 - Reduced Marsh in Fill	Reduced Marsh Excavation that can be used in Fill
6 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
7 - Mass Ordinate	If Marsh and EBS to be backfilled with Cut or Borrow: [(Cut) - ((Fill - Expanded Rock) * Fill Factor))]

STAGE 1 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
99+15		21.7	0.0	0.0	0.0	0.0											
99+50	35	21.7	0.0	0.0	0.0	0.0	28	0	0	0	0	28	0	0	0	0	28
100+00	50	23.0	0.0	0.0	0.0	0.0	41	0	0	0	0	70	0	0	0	0	70
100+50	50	21.5	0.0	0.0	0.0	0.0	41	0	0	0	0	111	0	0	0	0	111
101+00	50	19.4	0.0	0.0	0.0	0.0	38	0	0	0	0	149	0	0	0	0	149
101+50	50	18.9	0.0	0.0	0.0	0.0	35	0	0	0	0	184	0	0	0	0	184
102+00	50	18.7	0.0	0.0	0.0	0.0	35	0	0	0	0	219	0	0	0	0	219
102+50	50	20.1	0.0	0.0	0.0	0.0	36	0	0	0	0	255	0	0	0	0	255
103+00	50	18.3	0.0	0.0	0.0	0.0	36	0	0	0	0	290	0	0	0	0	290
103+28	28	18.3	0.0	0.0	0.0	0.0	19	0	0	0	0	309	0	0	0	0	309
104+12		8.7	0.0	0.0	0.0	0.0											
104+50	38	8.7	0.0	0.0	0.0	0.0	12	0	0	0	0	12	0	0	0	0	321
105+00	50	8.8	0.0	0.0	0.0	0.0	16	0	0	0	0	29	0	0	0	0	338
105+50	50	9.4	0.0	0.0	0.0	0.0	17	0	0	0	0	45	0	0	0	0	355
106+00	50	9.8	0.0	0.0	0.0	0.0	18	0	0	0	0	63	0	0	0	0	372
106+50	50	9.8	0.0	0.0	0.0	0.0	18	0	0	0	0	81	0	0	0	0	390
107+00	50	10.9	0.0	0.0	0.0	0.0	19	0	0	0	0	100	0	0	0	0	410
107+50	50	11.1	0.0	0.0	0.0	0.0	20	0	0	0	0	121	0	0	0	0	430
108+00	50	17.2	0.0	0.0	0.0	0.0	26	0	0	0	0	147	0	0	0	0	456
108+50	50	18.0	0.0	0.0	0.0	0.0	33	0	0	0	0	180	0	0	0	0	489
108+57	7	18.0	0.0	0.0	0.0	0.0	5	0	0	0	0	184	0	0	0	0	494
110+81		17.3	0.0	0.0	0.0	0.0											
111+00	19	17.3	0.0	0.0	0.0	0.0	12	0	0	0	0	12	0	0	0	0	506
111+50	50	17.6	0.0	0.0	0.0	0.0	32	0	0	0	0	44	0	0	0	0	538
112+00	50	17.3	0.0	0.0	0.0	0.0	32	0	0	0	0	77	0	0	0	0	570
112+30	30	17.3	0.0	0.0	0.0	0.0	19	0	0	0	0	96	0	0	0	0	590
131+62		16.0	7.5	0.5	0.0	0.0											
132+00	38	16.0	7.5	0.2	0.0	0.0	23	11	0	0	0	23	1	0	0	0	601
132+50	50	11.4	5.3	0.2	0.0	0.0	25	12	0	0	0	48	1	0	0	0	614
133+00	50	11.1	5.3	0.2	0.0	0.0	21	10	0	0	0	69	1	0	0	0	625
133+50	50	11.4	6.0	0.2	0.0	0.0	21	10	0	0	0	89	2	0	0	0	635
133+55	5	11.4	6.0	0.0	0.0	0.0	2	1	0	0	0	92	2	0	0	0	636
134+39		5.5	2.3	0.0	0.0	0.0											
134+50	11	5.5	2.3	0.0	0.0	0.0	2	1	0	0	0	2	0	0	0	0	637
135+00	50	5.4	2.3	0.0	0.0	0.0	10	4	0	0	0	12	0	0	0	0	643
135+50	50	5.5	2.3	0.0	0.0	0.0	10	4	0	0	0	22	0	0	0	0	649
136+00	50	10.8	4.5	0.0	0.0	0.0	15	6	0	0	0	37	0	0	0	0	658
136+50	50	16.6	7.5	0.0	0.0	0.0	25	11	0	0	0	63	0	0	0	0	672
137+00	50	18.1	8.3	0.2	0.0	0.0	32	15	0	0	0	95	0	0	0	0	689
137+40	40	18.1	8.3	0.1	0.0	0.0	27	12	0	0	0	122	0	0	0	0	704
151+71		9.9	0.0	0.0	0.0	0.0											
152+00	29	9.9	0.0	0.0	0.0	0.0	11	0	0	0	0	11	0	0	0	0	714
152+50	50	20.8	0.0	0.0	0.0	0.0	28	0	0	0	0	39	0	0	0	0	743
153+00	50	23.2	0.0	0.0	0.0	0.0	41	0	0	0	0	80	0	0	0	0	783
153+50	50	18.0	0.0	0.0	0.0	0.0	38	0	0	0	0	118	0	0	0	0	821
154+00	50	21.4	0.0	0.0	0.0	0.0	37	0	0	0	0	154	0	0	0	0	858
154+39	39	21.4	0.0	0.0	0.0	0.0	31	0	0	0	0	185	0	0	0	0	889
158+70		8.7	5.3	0.1	0.0	0.0											
159+00	30	8.7	5.3	0.0	0.0	0.0	10	6	0	0	0	10	0	0	0	0	893
159+50	50	2.3	1.1	0.0	0.0	0.0	10	6	0	0	0	20	0	0	0	0	897
159+56	6	2.3	1.1	0.0	0.0	0.0	1	0	0	0	0	20	0	0	0	0	897
172+28		13.7	6.8	0.0	0.0	0.0											
172+50	22	13.7	6.8	0.0	0.0	0.0	11	6	0	0	0	11	0	0	0	0	903
173+00	50	16.3	7.5	0.0	0.0	0.0	28	13	0	0	0	39	0	0	0	0	917
173+50	50	17.8	7.5	0.0	0.0	0.0	32	14	0	0	0	71	0	0	0	0	935
173+85	35	17.8	7.5	0.0	0.0	0.0	23	10	0	0	0	94	0	0	0	0	948
							1102	151	2	0	0						

STAGE 1 (STA 5+00 - STA 6+01): ASBURY LOOP

STATION	Distance	Area: Cut (SF) Note 1	Area: Salvaged/Unusable Pavement Material (SF) Note 2	Area: Fill (SF) Note 3	Area: Marsh Exc (SF)	Area: EBS (SF)	Incremental Volume (Unadjusted): Cut (CY)	Incremental Volume (Unadjusted): Salvaged/Unusable Pavement Material (CY)	Incremental Volume (Unadjusted): Fill (CY)	Incremental Volume (Unadjusted): Marsh Exc (CY)	Incremental Volume (Unadjusted): EBS (CY)	Cumulative Vol (CY): Cut 1.00 Note 1	Cumulative Vol (CY): Expanded Fill 1.25	Cumulative Vol (CY): Expanded Marsh Backfill 1.50 Note 4	Cumulative Vol (CY): Reduced Marsh in Fill 0.60 Note 5	Cumulative Vol (CY): Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
5+00		12.1	0.0	0.2	0.0	0.0											
5+25	25	12.1	0.0	0.2	0.0	0.0	11	0	0	0	0	11	0	0	0	0	11
5+50	25	24.2	0.0	0.1	0.0	0.0	15	0	0	0	0	15	0	0	0	0	15
5+75	25	23.4	0.0	0.6	0.0	0.0	22	0	0	0	0	37	1	0	0	0	36
6+00	25	25.2	0.0	0.0	0.0	0.0	22	0	0	0	0	59	1	0	0	0	58
6+01	1	25.2	0.0	0.0	0.0	0.0	1	0	0	0	0	60	1	0	0	0	59
					Column totals		72	0	1	0	0						

STAGE 1 (STA 7+85 - STA 9+48): ASBURY-CRESS DRIVEWAY

STATION	Distance	Area: Cut (SF) Note 1	Area: Salvaged/Unusable Pavement Material (SF) Note 2	Area: Fill (SF) Note 3	Area: Marsh Exc (SF)	Area: EBS (SF)	Incremental Volume (Unadjusted): Cut (CY)	Incremental Volume (Unadjusted): Salvaged/Unusable Pavement Material (CY)	Incremental Volume (Unadjusted): Fill (CY)	Incremental Volume (Unadjusted): Marsh Exc (CY)	Incremental Volume (Unadjusted): EBS (CY)	Cumulative Vol (CY): Cut 1.00 Note 1	Cumulative Vol (CY): Expanded Fill 1.25	Cumulative Vol (CY): Expanded Marsh Backfill 1.50 Note 4	Cumulative Vol (CY): Reduced Marsh in Fill 0.60 Note 5	Cumulative Vol (CY): Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
7+85		36.8	0.0	0.0	0.0	0.0											
8+00	15	36.8	0.0	0.0	0.0	0.0	20	0	0	0	0	20	0	0	0	0	20
8+25	25	66.7	0.0	0.0	0.0	0.0	43	0	0	0	0	43	0	0	0	0	43
8+50	25	71.1	0.0	0.0	0.0	0.0	64	0	0	0	0	107	0	0	0	0	107
8+75	25	26.9	0.0	36.6	0.0	0.0	45	0	17	0	0	152	21	0	0	0	131
9+00	25	31.6	0.0	47.1	0.0	0.0	27	0	39	0	0	179	70	0	0	0	110
9+25	25	51.9	0.0	0.3	0.0	0.0	34	0	26	0	0	186	54	0	0	0	133
9+48	23	51.9	0.0	0.3	0.0	0.0	38	0	13	0	0	218	86	0	0	0	131
					Column totals		272	0	95	0	0						

STAGE 2 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
98+25		65.7	18.0	0.9	0.0	0.0											
98+50	25	65.7	18.0	0.9	0.0	0.0	61	17	1	0	0	61	1	0	0	0	43
99+00	50	74.4	18.0	0.2	0.0	0.0	130	33	1	0	0	191	2	0	0	0	138
99+50	50	62.7	18.0	0.3	0.0	0.0	127	33	0	0	0	318	3	0	0	0	231
100+00	50	58.5	18.0	0.1	0.0	0.0	112	33	0	0	0	430	3	0	0	0	310
100+50	50	69.2	18.0	2.1	0.0	0.0	118	33	2	0	0	548	6	0	0	0	392
101+00	50	83.0	18.0	2.1	0.0	0.0	141	33	4	0	0	689	11	0	0	0	495
101+50	50	93.7	18.0	1.1	0.0	0.0	164	33	3	0	0	853	14	0	0	0	622
102+00	50	103.2	18.0	3.3	0.0	0.0	182	33	4	0	0	1035	19	0	0	0	766
102+50	50	128.2	18.0	7.4	0.0	0.0	214	33	10	0	0	1249	32	0	0	0	934
103+00	50	168.4	18.0	12.7	0.0	0.0	275	33	19	0	0	1524	55	0	0	0	1152
103+50	50	185.4	18.0	3.5	0.0	0.0	328	33	15	0	0	1852	74	0	0	0	1428
104+00	50	206.5	18.0	0.0	0.0	0.0	363	33	3	0	0	2214	78	0	0	0	1753
104+50	50	91.0	21.0	0.0	0.0	0.0	276	36	0	0	0	2490	78	0	0	0	1993
105+00	50	82.4	21.0	5.0	0.0	0.0	161	39	5	0	0	2650	84	0	0	0	2109
105+50	50	68.9	21.0	54.8	0.0	0.0	140	39	55	0	0	2791	153	0	0	0	2141
106+00	50	73.3	21.0	58.1	0.0	0.0	132	39	105	0	0	2922	283	0	0	0	2103
106+50	50	64.0	21.0	61.2	0.0	0.0	127	39	111	0	0	3049	422	0	0	0	2053
107+00	50	66.4	21.0	63.1	0.0	0.0	121	39	115	0	0	3170	565	0	0	0	1991
107+50	50	70.8	21.0	50.9	0.0	0.0	127	39	106	0	0	3297	697	0	0	0	1947
108+00	50	74.0	21.0	33.7	0.0	0.0	134	39	78	0	0	3431	795	0	0	0	1944
108+50	50	78.6	21.0	29.4	0.0	0.0	141	39	58	0	0	3572	868	0	0	0	1973
109+00	50	123.1	21.0	0.0	0.0	0.0	187	39	27	0	0	3759	902	0	0	0	2087
109+50	50	119.0	21.0	0.6	0.0	0.0	224	39	1	0	0	3983	903	0	0	0	2272
110+00	50	67.7	21.0	0.0	0.0	0.0	173	39	1	0	0	4156	904	0	0	0	2405
110+50	50	97.5	21.0	0.0	0.0	0.0	153	39	0	0	0	4309	904	0	0	0	2519
111+00	50	104.5	21.0	0.0	0.0	0.0	187	39	0	0	0	4496	904	0	0	0	2667
111+50	50	123.5	21.0	0.0	0.0	0.0	211	39	0	0	0	4707	904	0	0	0	2840
112+00	50	105.5	21.0	0.0	0.0	0.0	212	39	0	0	0	4919	904	0	0	0	3013
112+50	50	81.8	0.0	1.8	0.0	0.0	173	19	2	0	0	5093	906	0	0	0	3165
113+00	50	70.0	0.0	0.0	0.0	0.0	141	0	2	0	0	5233	908	0	0	0	3303
113+50	50	70.8	0.0	6.0	0.0	0.0	130	0	6	0	0	5363	915	0	0	0	3426
114+00	50	86.3	0.0	4.5	0.0	0.0	145	0	10	0	0	5509	927	0	0	0	3560
114+50	50	80.2	0.0	0.0	0.0	0.0	154	0	4	0	0	5663	932	0	0	0	3709
115+00	50	75.3	0.0	42.3	0.0	0.0	144	0	39	0	0	5807	981	0	0	0	3804
115+50	50	84.4	0.0	14.3	0.0	0.0	148	0	52	0	0	5955	1046	0	0	0	3886
116+00	50	77.8	0.0	15.1	0.0	0.0	150	0	27	0	0	6105	1081	0	0	0	4002
116+50	50	88.0	0.0	6.2	0.0	0.0	153	0	20	0	0	6258	1105	0	0	0	4131
117+00	50	90.5	0.0	0.0	0.0	0.0	165	0	6	0	0	6424	1112	0	0	0	4289
117+50	50	115.8	0.0	0.0	0.0	0.0	191	0	0	0	0	6615	1112	0	0	0	4480
118+00	50	133.0	0.0	0.0	0.0	0.0	230	0	0	0	0	6845	1112	0	0	0	4710
118+50	50	131.0	0.0	1.2	0.0	0.0	244	0	1	0	0	7089	1114	0	0	0	4953
119+00	50	135.7	0.0	0.1	0.0	0.0	247	0	1	0	0	7336	1115	0	0	0	5199
119+50	50	111.3	0.0	0.0	0.0	0.0	229	0	0	0	0	7565	1115	0	0	0	5427
120+00	50	83.3	0.0	10.0	0.0	0.0	180	0	9	0	0	7745	1127	0	0	0	5596
120+50	50	72.0	0.0	77.5	0.0	0.0	144	0	81	0	0	7889	1228	0	0	0	5638
121+00	50	76.3	0.0	92.8	0.0	0.0	137	0	158	0	0	8026	1425	0	0	0	5579
121+50	50	82.5	0.0	110.5	0.0	0.0	147	0	188	0	0	8173	1661	0	0	0	5490
122+00	50	98.8	0.0	177.3	0.0	0.0	168	0	266	0	0	8341	1994	0	0	0	5325
122+50	50	101.5	0.0	157.8	0.0	0.0	185	0	310	0	0	8526	2381	0	0	0	5123
123+00	50	96.8	0.0	196.5	0.0	0.0	184	0	328	0	0	8710	2791	0	0	0	4896
123+50	50	79.3	0.0	220.3	0.0	0.0	163	0	386	0	0	8873	3274	0	0	0	4577
124+00	50	71.9	0.0	251.4	0.0	0.0	140	0	437	0	0	9013	3820	0	0	0	4171
124+50	50	70.6	0.0	246.5	0.0	0.0	132	0	461	0	0	9145	4396	0	0	0	3727
125+00	50	68.5	0.0	226.8	0.0	0.0	129	0	438	0	0	9274	4944	0	0	0	3308
125+50	50	72.8	0.0	116.8	0.0	0.0	131	0	318	0	0	9404	5341	0	0	0	3041
126+00	50	94.3	0.0	2.4	0.0	0.0	155	0	110	0	0	9559	5479	0	0	0	3058
126+50	50	100.5	0.0	0.0	0.0	0.0	180	0	2	0	0	9739	5482	0	0	0	3235
127+00	50	107.8	0.0	0.0	0.0	0.0	193	0	0	0	0	9932	5482	0	0	0	3428
127+50	50	92.5	0.0	0.0	0.0	0.0	185	0	0	0	0	10118	5482	0	0	0	3614
128+00	50	72.8	0.0	0.0	0.0	0.0	153	0	0	0	0	10271	5482	0	0	0	3767
SUBTOTAL							10271	1022	4385	0	0						

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Addendum No. 1
ID 5992-08-79
Revised Sheet 749
February 1, 2012

STAGE 2 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

STATION	Distance	Area: Cut (SF)	Area: Salvaged/Unusable Pavement Material (SF)	Area: Fill (SF)	Area: Marsh Exc (SF)	Area: EBS (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unusable Pavement Material Note 2 (CY)	Incremental Volume (Unadjusted): Fill Note 3 (CY)	Incremental Volume (Unadjusted): Marsh Exc (CY)	Incremental Volume (Unadjusted): EBS (CY)	Cumulative Vol (CY): Cut 1.00 Note 1	Cumulative Vol (CY): Expanded Fill 1.25	Cumulative Vol (CY): Expanded Marsh Backfill 1.50 Note 4	Cumulative Vol (CY): Reduced Marsh in Fill 0.60 Note 5	Cumulative Vol (CY): Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
		CONINTUED FROM PREVIOUS					10271	1022	4385	0	0						
128+50	50	62.0	0.0	0.0	0.0	0.0	125	0	0	0	0	10395	5482	0	0	0	3891
129+00	50	54.5	0.0	0.0	0.0	0.0	108	0	0	0	0	10503	5482	0	0	0	3999
129+50	50	43.8	0.0	2.6	0.0	0.0	91	0	2	0	0	10594	5485	0	0	0	4087
130+00	50	33.0	0.0	0.0	0.0	0.0	71	0	2	0	0	10665	5488	0	0	0	4155
130+50	50	48.5	0.0	0.0	0.0	0.0	75	0	0	0	0	10741	5488	0	0	0	4231
131+00	50	51.5	0.0	0.0	0.0	0.0	93	0	0	0	0	10833	5488	0	0	0	4323
131+50	50	57.0	0.0	0.2	0.0	0.0	100	0	0	0	0	10934	5488	0	0	0	4424
132+00	50	66.3	0.0	0.0	0.0	0.0	114	0	0	0	0	11048	5488	0	0	0	4538
132+50	50	58.0	0.0	0.8	0.0	0.0	115	0	1	0	0	11163	5489	0	0	0	4652
133+00	50	62.5	0.0	0.7	0.0	0.0	112	0	1	0	0	11275	5491	0	0	0	4762
133+50	50	56.6	0.0	3.6	0.0	0.0	110	0	4	0	0	11385	5496	0	0	0	4867
134+00	50	48.5	0.0	0.0	0.0	0.0	97	0	3	0	0	11482	5500	0	0	0	4960
134+50	50	66.5	0.0	0.0	0.0	0.0	106	0	0	0	0	11589	5500	0	0	0	5067
135+00	50	61.5	0.0	0.0	0.0	0.0	119	0	0	0	0	11707	5500	0	0	0	5185
135+50	50	60.8	0.0	0.0	0.0	0.0	113	0	0	0	0	11820	5500	0	0	0	5298
136+00	50	60.3	0.0	0.0	0.0	0.0	112	0	0	0	0	11932	5500	0	0	0	5410
136+50	50	71.0	0.0	0.0	0.0	0.0	122	0	0	0	0	12054	5500	0	0	0	5532
137+00	50	80.0	0.0	0.0	0.0	0.0	140	0	0	0	0	12194	5500	0	0	0	5672
137+50	50	83.3	0.0	0.0	0.0	0.0	151	0	0	0	0	12345	5500	0	0	0	5823
138+00	50	80.8	0.0	0.0	0.0	0.0	152	0	0	0	0	12497	5500	0	0	0	5975
138+50	50	69.8	0.0	0.0	0.0	0.0	139	0	0	0	0	12636	5500	0	0	0	6114
139+00	50	73.8	0.0	0.0	0.0	0.0	133	0	0	0	0	12769	5500	0	0	0	6247
139+50	50	89.5	0.0	0.0	0.0	0.0	151	0	0	0	0	12920	5500	0	0	0	6398
140+00	50	98.5	0.0	0.0	0.0	0.0	174	0	0	0	0	13094	5500	0	0	0	6572
140+50	50	109.3	0.0	0.0	0.0	0.0	192	0	0	0	0	13287	5500	0	0	0	6765
141+00	50	127.5	0.0	0.0	0.0	0.0	219	0	0	0	0	13506	5500	0	0	0	6984
141+50	50	99.5	0.0	0.0	0.0	0.0	210	0	0	0	0	13716	5500	0	0	0	7194
142+00	50	98.3	0.0	0.0	0.0	0.0	183	0	0	0	0	13899	5500	0	0	0	7377
142+50	50	86.5	0.0	2.3	0.0	0.0	171	0	2	0	0	14070	5502	0	0	0	7546
143+00	50	110.7	0.0	0.8	0.0	0.0	183	0	3	0	0	14253	5506	0	0	0	7725
143+50	50	103.5	0.0	0.0	0.0	0.0	198	0	1	0	0	14451	5507	0	0	0	7922
144+00	50	83.8	0.0	0.0	0.0	0.0	173	0	0	0	0	14625	5507	0	0	0	8095
144+50	50	79.3	0.0	0.0	0.0	0.0	151	0	0	0	0	14776	5507	0	0	0	8246
145+00	50	64.8	0.0	0.3	0.0	0.0	133	0	0	0	0	14909	5507	0	0	0	8379
145+50	50	45.8	0.0	27.0	0.0	0.0	102	0	25	0	0	15011	5539	0	0	0	8450
146+00	50	84.3	0.0	11.8	0.0	0.0	120	0	36	0	0	15132	5584	0	0	0	8526
146+50	50	91.3	0.0	0.0	0.0	0.0	163	0	11	0	0	15294	5597	0	0	0	8675
147+00	50	93.3	0.0	1.3	0.0	0.0	171	0	1	0	0	15465	5599	0	0	0	8844
147+50	50	92.0	0.0	1.0	0.0	0.0	172	0	2	0	0	15636	5601	0	0	0	9013
148+00	50	112.1	0.0	1.9	0.0	0.0	189	0	3	0	0	15825	5605	0	0	0	9199
148+50	50	92.3	0.0	2.5	0.0	0.0	189	0	4	0	0	16015	5610	0	0	0	9383
149+00	50	91.5	0.0	5.3	0.0	0.0	170	0	7	0	0	16185	5619	0	0	0	9544
149+50	50	147.5	0.0	12.5	0.0	0.0	221	0	16	0	0	16406	5639	0	0	0	9745
150+00	50	154.8	0.0	1.8	0.0	0.0	280	0	13	0	0	16686	5656	0	0	0	10008
150+50	50	107.5	0.0	2.4	0.0	0.0	243	0	4	0	0	16929	5661	0	0	0	10246
151+00	50	66.0	0.0	0.0	0.0	0.0	161	0	2	0	0	17090	5664	0	0	0	10404
151+50	50	65.8	0.0	0.0	0.0	0.0	122	0	0	0	0	17212	5664	0	0	0	10526
152+00	50	62.0	0.0	0.0	0.0	0.0	118	0	0	0	0	17330	5664	0	0	0	10644
152+50	50	60.3	0.0	1.8	0.0	0.0	113	0	2	0	0	17443	5666	0	0	0	10755
153+00	50	57.8	0.0	2.8	0.0	0.0	109	0	4	0	0	17552	5671	0	0	0	10859
153+50	50	56.3	0.0	0.5	0.0	0.0	106	0	3	0	0	17658	5675	0	0	0	10961
154+00	50	53.8	0.0	2.8	0.0	0.0	102	0	3	0	0	17760	5678	0	0	0	11059
154+50	50	54.3	0.0	0.0	0.0	0.0	100	0	3	0	0	17860	5682	0	0	0	11156
155+00	50	52.3	0.0	3.7	0.0	0.0	99	0	3	0	0	17958	5686	0	0	0	11250
155+50	50	49.3	0.0	5.3	0.0	0.0	94	0	8	0	0	18052	5696	0	0	0	11334
156+00	50	45.8	0.0	4.0	0.0	0.0	88	0	9	0	0	18140	5707	0	0	0	11411
156+50	50	47.0	0.0	6.3	0.0	0.0	86	0	9	0	0	18226	5719	0	0	0	11485
157+00	50	54.0	0.0	0.0	0.0	0.0	94	0	6	0	0	18320	5726	0	0	0	11572
157+50	50	69.5	0.0	0.0	0.0	0.0	114	0	0	0	0	18434	5726	0	0	0	11686
158+00	50	66.4	0.0	0.0	0.0	0.0	126	0	0	0	0	18560	5726	0	0	0	11812
158+50	50	69.7	0.0	0.0	0.0	0.0	126	0	0	0	0	18686	5726	0	0	0	11938
159+00	50	71.2	0.0	0.0	0.0	0.0	130	0	0	0	0	18816	5726	0	0	0	12068
159+50	50	74.8	0.0	0.0	0.0	0.0	135	0	0	0	0	18952	5726	0	0	0	12203
160+00	50	73.9	0.0	0.0	0.0	0.0	138	0	0	0	0	19089	5726	0	0	0	12341
160+50	50	71.6	0.0	0.0	0.0	0.0	135	0	0	0	0	19224	5726	0	0	0	12476
161+00	50	70.4	0.0	0.0	0.0	0.0	131	0	0	0	0	19355	5726	0	0	0	12607
161+50	50	71.4	0.0	0.0	0.0	0.0	131	0	0	0	0	19487	5726	0	0	0	12738
162+00	50	72.0	0.0	0.0	0.0	0.0	133	0	0	0	0	19619	5726	0	0	0	12871
162+50	50	69.6	0.0	1.6	0.0	0.0	131	0	1	0	0	19750	5728	0	0	0	13000
163+00	50	74.3	0.0	0.0	0.0	0.0	133	0	1	0	0	19884	5730	0	0	0	13132
163+50	50	84.3	0.0	0.0	0.0	0.0	147	0	0	0	0	20030	5730	0	0	0	13278
164+00	50	73.7	0.0	3.5	0.0	0.0	146	0	3	0	0	20177	5734	0	0	0	13421
164+50	50	85.8	0.0	0.0	0.0	0.0	148	0	3	0	0	20324	5738	0	0	0	13564
165+00	50	91.4	0.0	0.0	0.0	0.0	164	0	0	0	0	20488	5738	0	0	0	13728
SUBTOTAL							20488	1022	4590	0	0						

Addendum No. 1
ID 5992-08-79
Revised Sheet 750
February 1, 2012

STAGE 2 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
			Salvaged/Unusable					Salvaged/Unusable					Expanded	Expanded Marsh	Reduced Marsh	Reduced EBS	Mass
STATION	Distance	Cut	Pavement Material	Fill	Marsh Exc	EBS	Cut	Pavement Material	Fill	Marsh Exc	EBS	Cut	Fill	Backfill	in Fill	In Fill	Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
		CONINTUED FROM PREVIOUS					20488	1022	4590	0	0						
165+50	50	81.3	0.0	0.0	0.0	0.0	160	0	0	0	0	20648	5738	0	0	0	13888
166+00	50	87.6	0.0	0.0	0.0	0.0	156	0	0	0	0	20805	5738	0	0	0	14045
166+50	50	84.9	0.0	0.0	0.0	0.0	160	0	0	0	0	20964	5738	0	0	0	14204
167+00	50	92.1	0.0	0.0	0.0	0.0	164	0	0	0	0	21128	5738	0	0	0	14368
167+50	50	105.1	0.0	0.0	0.0	0.0	183	0	0	0	0	21311	5738	0	0	0	14551
168+00	50	90.9	0.0	0.0	0.0	0.0	181	0	0	0	0	21492	5738	0	0	0	14732
168+50	50	90.8	0.0	0.2	0.0	0.0	168	0	0	0	0	21661	5738	0	0	0	14900
169+00	50	115.7	0.0	0.0	0.0	0.0	191	0	0	0	0	21852	5738	0	0	0	15091
169+50	50	127.6	0.0	0.0	0.0	0.0	225	0	0	0	0	22077	5738	0	0	0	15316
170+00	50	83.1	0.0	0.0	0.0	0.0	195	0	0	0	0	22272	5738	0	0	0	15512
170+50	50	84.0	0.0	0.0	0.0	0.0	155	0	0	0	0	22427	5738	0	0	0	15666
171+00	50	77.6	0.0	6.0	0.0	0.0	150	0	6	0	0	22576	5745	0	0	0	15809
171+50	50	116.7	0.0	0.0	0.0	0.0	180	0	6	0	0	22756	5752	0	0	0	15982
172+00	50	137.9	0.0	0.0	0.0	0.0	236	0	0	0	0	22992	5752	0	0	0	16218
172+50	50	117.4	0.0	0.0	0.0	0.0	236	0	0	0	0	23228	5752	0	0	0	16454
173+00	50	101.7	0.0	0.0	0.0	0.0	203	0	0	0	0	23431	5752	0	0	0	16657
173+50	50	47.9	0.0	0.0	0.0	0.0	138	0	0	0	0	23570	5752	0	0	0	16795
174+00	50	78.3	0.0	0.0	0.0	0.0	117	0	0	0	0	23686	5752	0	0	0	16912
174+50	50	87.4	0.0	0.0	0.0	0.0	153	0	0	0	0	23840	5752	0	0	0	17065
175+00	50	75.3	0.0	0.0	0.0	0.0	151	0	0	0	0	23990	5752	0	0	0	17216
175+50	50	85.9	0.0	1.6	0.0	0.0	149	0	1	0	0	24140	5754	0	0	0	17363
176+00	50	94.0	0.0	4.3	0.0	0.0	167	0	5	0	0	24306	5761	0	0	0	17523
176+50	50	82.3	0.0	1.0	0.0	0.0	163	0	5	0	0	24469	5767	0	0	0	17680
177+00	50	83.3	0.0	21.8	0.0	0.0	153	0	21	0	0	24623	5793	0	0	0	17807
177+50	50	77.8	0.0	39.3	0.0	0.0	149	0	56	0	0	24772	5864	0	0	0	17886
178+00	50	72.0	0.0	116.3	0.0	0.0	139	0	144	0	0	24910	6044	0	0	0	17844
178+50	50	74.0	0.0	159.5	0.0	0.0	135	0	255	0	0	25045	6363	0	0	0	17660
179+00	50	76.3	0.0	71.0	0.0	0.0	139	0	213	0	0	25185	6630	0	0	0	17533
179+50	50	74.0	0.0	73.5	0.0	0.0	139	0	134	0	0	25324	6797	0	0	0	17505
180+00	50	71.3	0.0	75.8	0.0	0.0	134	0	138	0	0	25458	6970	0	0	0	17466
180+50	50	73.0	0.0	110.3	0.0	0.0	134	0	172	0	0	25592	7185	0	0	0	17385
181+00	50	74.0	0.0	111.5	0.0	0.0	136	0	205	0	0	25728	7442	0	0	0	17264
181+50	50	72.0	0.0	107.8	0.0	0.0	135	0	203	0	0	25863	7695	0	0	0	17145
182+00	50	68.8	0.0	91.5	0.0	0.0	130	0	184	0	0	25993	7926	0	0	0	17045
182+50	50	69.9	0.0	118.6	0.0	0.0	128	0	195	0	0	26122	8169	0	0	0	16930
183+00	50	81.0	0.0	118.0	0.0	0.0	140	0	219	0	0	26261	8443	0	0	0	16796
183+50	50	69.8	0.0	82.0	0.0	0.0	140	0	185	0	0	26401	8675	0	0	0	16704
183+59	9	69.8	0.0	82.0	0.0	0.0	23	0	27	0	0	26424	8709	0	0	0	16693
189+35		54.5	0.0	25.3	0.0	0.0											16693
189+50	15	54.5	0.0	25.3	0.0	0.0	30	0	14	0	0	26454	8726	0	0	0	16706
190+00	65	63.5	0.0	12.0	0.0	0.0	142	0	45	0	0	26597	8782	0	0	0	16792
190+50	50	69.0	0.0	5.5	0.0	0.0	123	0	16	0	0	26719	8803	0	0	0	16894
191+00	50	67.5	0.0	3.8	0.0	0.0	126	0	9	0	0	26846	8813	0	0	0	17010
191+50	50	60.8	0.0	2.3	0.0	0.0	119	0	6	0	0	26964	8820	0	0	0	17122
192+00	50	63.5	0.0	0.1	0.0	0.0	115	0	2	0	0	27079	8823	0	0	0	17234
192+50	50	56.8	0.0	0.0	0.0	0.0	111	0	0	0	0	27191	8823	0	0	0	17346
193+00	50	39.3	0.0	0.0	0.0	0.0	89	0	0	0	0	27280	8823	0	0	0	17435
193+50	50	23.0	0.0	0.0	0.0	0.0	58	0	0	0	0	27337	8823	0	0	0	17492
194+00	50	102.0	0.0	0.8	0.0	0.0	116	0	1	0	0	27453	8824	0	0	0	17607
194+50	50	80.8	0.0	1.8	0.0	0.0	169	0	2	0	0	27622	8827	0	0	0	17773
195+00	50	90.5	0.0	1.3	0.0	0.0	159	0	3	0	0	27781	8830	0	0	0	17928
195+50	50	111.8	0.0	0.1	0.0	0.0	187	0	1	0	0	27968	8832	0	0	0	18114
196+00	50	101.5	0.0	0.3	0.0	0.0	197	0	0	0	0	28166	8832	0	0	0	18311
196+50	50	105.3	0.0	0.9	0.0	0.0	191	0	1	0	0	28357	8833	0	0	0	18501
197+00	50	117.5	0.0	1.5	0.0	0.0	206	0	2	0	0	28563	8836	0	0	0	18705
197+50	50	134.3	0.0	0.3	0.0	0.0	233	0	2	0	0	28796	8838	0	0	0	18936
198+00	50	157.3	0.0	0.0	0.0	0.0	270	0	0	0	0	29066	8839	0	0	0	19205
198+50	50	159.8	0.0	0.0	0.0	0.0	294	0	0	0	0	29360	8839	0	0	0	19499
199+00	50	132.8	0.0	0.0	0.0	0.0	271	0	0	0	0	29631	8839	0	0	0	19770
199+50	50	138.8	0.0	0.0	0.0	0.0	251	0	0	0	0	29882	8839	0	0	0	20021
200+00	50	111.5	0.0	0.0	0.0	0.0	232	0	0	0	0	30114	8839	0	0	0	20253
200+50	50	86.0	0.0	0.0	0.0	0.0	183	0	0	0	0	30297	8839	0	0	0	20436
201+00	50	63.5	0.0	0.0	0.0	0.0	138	0	0	0	0	30435	8839	0	0	0	20574
201+50	50	58.4	0.0	0.4	0.0	0.0	113	0	0	0	0	30548	8839	0	0	0	20687
202+00	50	61.4	0.0	0.0	0.0	0.0	111	0	0	0	0	30659	8840	0	0	0	20797
202+03	3	61.4	0.0	0.0	0.0	0.0	8	0	0	0	0	30666	8840	0	0	0	20805
						Column totals	30666	1022	7072	0	0						

STAGE 2 (STA 8+50 - STA 9+50): ST. DUNSTAN DRIVE

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
8+50		30.0	0.0	0.0	0.0	0.0											
8+75	25	30.0	0.0	0.0	0.0	0.0	28	0	0	0	0	28	0	0	0	0	28
9+00	25	57.2	0.0	0.0	0.0	0.0	40	0	0	0	0	68	0	0	0	0	68
9+25	25	97.2	0.0	0.0	0.0	0.0	71	0	0	0	0	140	0	0	0	0	140
9+50	25	97.2	0.0	0.0	0.0	0.0	90	0	0	0	0	230	0	0	0	0	230
						Column totals	230	0	0	0	0						

STAGE 2 (STA 9+00 - STA 9+61): HEIM AVENUE

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
9+00		42.5	0.0	0.1	0.0	0.0											
9+10	10	42.5	0.0	0.1	0.0	0.0	16	0	0	0	0	16	0	0	0	0	16
9+25	15	31.6	0.0	2.4	0.0	0.0	22	0	0	0	0	22	1	0	0	0	21
9+40	15	48.4	0.0	8.9	0.0	0.0	22	0	3	0	0	44	5	0	0	0	39
9+61	21	48.4	0.0	8.9	0.0	0.0	38	0	7	0	0	81	13	0	0	0	68
						Column totals	97	0	11	0	0						

STAGE 2 (STA 9+10 - STA 9+61): HICKORY HOLLOW

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
9+10		38.9	0.0	1.0	0.0	0.0											
9+25	15	38.9	0.0	1.0	0.0	0.0	22	0	1	0	0	22	1	0	0	0	21
9+35	10	40.2	0.0	3.8	0.0	0.0	15	0	1	0	0	15	1	0	0	0	14
9+61	26	40.2	0.0	3.8	0.0	0.0	38	0	2	0	0	38	3	0	0	0	35
						Column totals	74	0	4	0	0						

STAGE 2 (STA 8+25 - STA 9+50): LAUREL CREST (SOUTH)

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
8+50		27.7	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0
8+75	25	27.7	0.0	0.0	0.0	0.0	26	0	0	0	0	26	0	0	0	0	26
9+00	25	24.4	0.0	0.0	0.0	0.0	24	0	0	0	0	50	0	0	0	0	50
9+25	25	39.2	0.0	1.1	0.0	0.0	29	0	1	0	0	79	1	0	0	0	79
9+50	25	39.2	0.0	0.0	0.0	0.0	36	0	1	0	0	115	1	0	0	0	114
						Column totals	115	0	1	0	0						

Addendum No. 1
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STAGE 2 (STA 7+25 - STA 9+63): CAPITAL AVENUE

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
9+00		57.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0
9+25	25	56.8	0.0	0.2	0.0	0.0	53	0	0	0	0	53	0	0	0	0	53
9+63	38	56.8	0.0	0.2	0.0	0.0	80	0	0	0	0	133	1	0	0	0	132
						Column totals	133	0	0	0	0						

STAGE 2 (STA 10+40 - STA 12+25): NORMAN WAY (WEST)

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
8+00		62.8	0.0	0.0	0.0	0.0											
8+25	25	62.8	0.0	0.0	0.0	0.0	58	0	0	0	0	58	0	0	0	0	58
8+50	25	68.1	0.0	0.7	0.0	0.0	61	0	0	0	0	119	0	0	0	0	118
8+75	25	92.6	0.0	1.4	0.0	0.0	74	0	1	0	0	193	2	0	0	0	192
9+00	25	143.4	0.0	0.0	0.0	0.0	109	0	1	0	0	302	2	0	0	0	300
9+25	25	169.6	0.0	3.1	0.0	0.0	145	0	1	0	0	447	4	0	0	0	443
9+42	17	169.6	0.0	3.1	0.0	0.0	107	0	2	0	0	554	7	0	0	0	547
						Column totals	554	0	5	0	0						

STAGE 2 (STA 9+15 - STA 9+61): CRAIG AVENUE

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
8+50		24.5	0.0	0.0	0.0	0.0											
8+75	25	24.5	0.0	0.0	0.0	0.0	23	0	0	0	0	23	0	0	0	0	23
9+00	25	23.8	0.0	0.0	0.0	0.0	22	0	0	0	0	45	0	0	0	0	45
9+25	25	58.4	0.0	0.0	0.0	0.0	30	0	0	0	0	76	0	0	0	0	76
9+35	10	61.6	0.0	0.0	0.0	0.0	16	0	0	0	0	91	0	0	0	0	91
9+61	26	61.6	0.0	0.0	0.0	0.0	50	0	0	0	0	141	0	0	0	0	141

STAGE 2 (STA 6+50 - STA 9+65): WHITNEY WAY

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
6+50		90.2	0.0	0.0	0.0	0.0											
6+75	25	90.2	0.0	0.0	0.0	0.0	83	0	0	0	0	83	0	0	0	0	83
7+00	25	96.8	0.0	0.0	0.0	0.0	87	0	0	0	0	170	0	0	0	0	170
7+25	25	100.8	0.0	0.1	0.0	0.0	91	0	0	0	0	262	0	0	0	0	261
7+50	25	101.5	0.0	0.1	0.0	0.0	94	0	0	0	0	355	0	0	0	0	355
7+75	25	105.8	0.0	0.1	0.0	0.0	96	0	0	0	0	451	0	0	0	0	451
8+00	25	103.5	0.0	0.4	0.0	0.0	97	0	0	0	0	548	1	0	0	0	547
8+25	25	104.2	0.0	3.0	0.0	0.0	96	0	2	0	0	644	3	0	0	0	642
8+50	25	111.7	0.0	5.0	0.0	0.0	100	0	4	0	0	744	7	0	0	0	737
8+75	25	223.8	0.0	4.8	0.0	0.0	155	0	5	0	0	899	13	0	0	0	887
9+00	25	252.9	0.0	1.0	0.0	0.0	221	0	3	0	0	1120	16	0	0	0	1104
9+25	25	334.9	0.0	0.0	0.0	0.0	272	0	0	0	0	1392	17	0	0	0	1375
9+65	40	334.9	0.0	0.0	0.0	0.0	496	0	0	0	0	1889	17	0	0	0	1872
						Column totals	1889	0	14	0	0						

STAGE 3 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
98+25		7.3	0.0	2.3	0.0	0.0											
98+50	25	7.3	0.0	2.3	0.0	0.0	7	0	2	0	0	7	3	0	0	0	4
99+00	50	7.0	0.0	2.6	0.0	0.0	13	0	5	0	0	20	8	0	0	0	12
99+50	50	6.9	7.5	0.3	0.0	0.0	13	7	3	0	0	33	12	0	0	0	14
100+00	50	16.1	7.5	0.1	0.0	0.0	21	14	0	0	0	54	12	0	0	0	21
100+50	50	27.2	7.5	0.0	0.0	0.0	40	14	0	0	0	94	12	0	0	0	47
101+00	50	29.5	7.5	0.0	0.0	0.0	53	14	0	0	0	147	12	0	0	0	86
101+50	50	30.3	7.5	0.0	0.0	0.0	55	14	0	0	0	202	12	0	0	0	127
102+00	50	29.5	7.5	0.0	0.0	0.0	55	14	0	0	0	257	12	0	0	0	169
102+50	50	32.6	7.5	0.0	0.0	0.0	58	14	0	0	0	315	12	0	0	0	212
103+00	50	35.7	7.5	0.0	0.0	0.0	63	14	0	0	0	378	12	0	0	0	262
103+50	50	26.1	0.0	0.0	0.0	0.0	57	7	0	0	0	435	12	0	0	0	312
104+00	50	25.4	0.0	0.0	0.0	0.0	48	0	0	0	0	483	12	0	0	0	360
104+50	50	16.5	0.0	0.0	0.0	0.0	39	0	0	0	0	522	12	0	0	0	399
105+00	50	18.7	0.0	0.0	0.0	0.0	33	0	0	0	0	555	12	0	0	0	431
105+50	50	19.7	0.0	0.0	0.0	0.0	36	0	0	0	0	590	12	0	0	0	467
106+00	50	19.6	0.0	0.0	0.0	0.0	36	0	0	0	0	627	12	0	0	0	503
106+50	50	18.8	0.0	0.0	0.0	0.0	36	0	0	0	0	662	12	0	0	0	539
107+00	50	18.3	0.0	0.0	0.0	0.0	34	0	0	0	0	697	12	0	0	0	573
107+50	50	17.3	0.0	0.0	0.0	0.0	33	0	0	0	0	730	12	0	0	0	606
108+00	50	23.1	0.0	0.0	0.0	0.0	37	0	0	0	0	767	12	0	0	0	644
108+50	50	36.7	7.5	0.0	0.0	0.0	55	7	0	0	0	822	12	0	0	0	692
109+00	50	35.2	7.5	0.0	0.0	0.0	67	14	0	0	0	889	12	0	0	0	745
109+50	50	39.0	7.5	0.0	0.0	0.0	69	14	0	0	0	958	12	0	0	0	800
110+00	50	28.5	7.5	0.0	0.0	0.0	63	14	0	0	0	1020	12	0	0	0	848
110+50	50	28.8	7.5	0.0	0.0	0.0	53	14	0	0	0	1073	12	0	0	0	887
111+00	50	10.3	0.0	0.0	0.0	0.0	36	7	0	0	0	1109	12	0	0	0	916
111+50	50	10.5	0.0	0.0	0.0	0.0	19	0	0	0	0	1129	12	0	0	0	936
112+00	50	10.5	0.0	0.0	0.0	0.0	19	0	0	0	0	1148	12	0	0	0	955
112+50	50	11.8	9.0	0.0	0.0	0.0	21	8	0	0	0	1169	12	0	0	0	967
113+00	50	11.5	9.0	0.0	0.0	0.0	22	17	0	0	0	1190	12	0	0	0	972
113+50	50	10.3	9.0	0.0	0.0	0.0	20	17	0	0	0	1210	12	0	0	0	976
114+00	50	11.8	9.0	0.0	0.0	0.0	20	17	0	0	0	1231	12	0	0	0	979
114+50	50	12.0	9.0	0.0	0.0	0.0	22	17	0	0	0	1253	12	0	0	0	985
115+00	50	25.3	9.0	0.0	0.0	0.0	34	17	0	0	0	1287	12	0	0	0	1003
115+50	50	11.7	9.0	0.0	0.0	0.0	34	17	0	0	0	1321	12	0	0	0	1020
116+00	50	12.2	9.0	0.0	0.0	0.0	22	17	0	0	0	1343	12	0	0	0	1026
116+50	50	14.3	9.0	0.0	0.0	0.0	24	17	0	0	0	1368	12	0	0	0	1033
117+00	50	14.3	9.0	0.0	0.0	0.0	26	17	0	0	0	1394	12	0	0	0	1043
117+50	50	14.8	9.0	0.0	0.0	0.0	27	17	0	0	0	1421	12	0	0	0	1053
118+00	50	15.0	9.0	0.0	0.0	0.0	28	17	0	0	0	1449	12	0	0	0	1064
118+50	50	15.5	9.0	0.0	0.0	0.0	28	17	0	0	0	1477	12	0	0	0	1076
119+00	50	16.3	9.0	0.0	0.0	0.0	29	17	0	0	0	1506	12	0	0	0	1088
119+50	50	16.6	9.0	0.0	0.0	0.0	30	17	0	0	0	1537	12	0	0	0	1102
120+00	50	28.5	9.0	0.0	0.0	0.0	42	17	0	0	0	1579	12	0	0	0	1127
120+50	50	20.2	9.0	0.0	0.0	0.0	45	17	0	0	0	1624	12	0	0	0	1156
121+00	50	30.4	9.0	0.0	0.0	0.0	47	17	0	0	0	1670	12	0	0	0	1186
121+50	50	23.4	9.0	0.0	0.0	0.0	50	17	0	0	0	1720	12	0	0	0	1219
122+00	50	13.8	9.0	0.0	0.0	0.0	34	17	0	0	0	1755	12	0	0	0	1237
122+50	50	14.4	9.0	0.0	0.0	0.0	26	17	0	0	0	1781	12	0	0	0	1246
123+00	50	16.0	9.0	0.0	0.0	0.0	28	17	0	0	0	1809	12	0	0	0	1258
123+50	50	17.9	9.0	0.0	0.0	0.0	31	17	0	0	0	1840	12	0	0	0	1272
124+00	50	18.5	9.0	0.0	0.0	0.0	34	17	0	0	0	1874	12	0	0	0	1289
124+50	50	19.1	9.0	0.0	0.0	0.0	35	17	0	0	0	1909	12	0	0	0	1307
125+00	50	19.0	9.0	0.0	0.0	0.0	35	17	0	0	0	1944	12	0	0	0	1326
125+50	50	19.6	9.0	0.0	0.0	0.0	36	17	0	0	0	1980	12	0	0	0	1345
126+00	50	19.3	9.0	0.0	0.0	0.0	36	17	0	0	0	2016	12	0	0	0	1364
126+50	50	18.4	9.0	0.0	0.0	0.0	35	17	0	0	0	2051	12	0	0	0	1383
127+00	50	15.0	9.0	0.0	0.0	0.0	31	17	0	0	0	2081	12	0	0	0	1397
127+50	50	12.8	9.0	0.0	0.0	0.0	26	17	0	0	0	2107	12	0	0	0	1406
128+00	50	17.8	9.0	0.8	0.0	0.0	28	17	1	0	0	2135	13	0	0	0	1417
SUBTOTAL							2135	706	11	0	0						

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Addendum No. 1
ID 5992-08-79
Revised Sheet 754
February 1, 2012

STAGE 3 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
		Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
		CONINTUED FROM PREVIOUS					2135	706	11	0	0						
128+50	50	25.3	9.0	0.4	0.0	0.0	40	17	1	0	0	2175	15	0	0	0	1438
129+00	50	26.3	9.0	0.0	0.0	0.0	48	17	0	0	0	2223	15	0	0	0	1469
129+50	50	13.8	9.0	0.0	0.0	0.0	37	17	0	0	0	2260	15	0	0	0	1489
130+00	50	12.0	9.0	3.7	0.0	0.0	24	17	3	0	0	2284	19	0	0	0	1492
130+50	50	9.8	9.0	3.8	0.0	0.0	20	17	7	0	0	2304	28	0	0	0	1487
131+00	50	8.5	9.0	3.8	0.0	0.0	17	17	7	0	0	2321	37	0	0	0	1479
131+50	50	13.0	9.0	1.6	0.0	0.0	20	17	5	0	0	2341	43	0	0	0	1476
132+00	50	27.8	5.3	0.0	0.0	0.0	38	13	2	0	0	2378	45	0	0	0	1498
132+50	50	37.3	6.4	0.0	0.0	0.0	60	11	0	0	0	2439	45	0	0	0	1548
133+00	50	36.5	6.4	0.0	0.0	0.0	68	12	0	0	0	2507	45	0	0	0	1604
133+50	50	37.8	6.0	0.0	0.0	0.0	69	11	0	0	0	2576	45	0	0	0	1662
134+00	50	20.8	9.0	0.0	0.0	0.0	54	14	0	0	0	2630	45	0	0	0	1702
134+50	50	22.8	7.9	0.0	0.0	0.0	40	16	0	0	0	2670	45	0	0	0	1726
135+00	50	12.0	7.9	0.0	0.0	0.0	32	15	0	0	0	2702	45	0	0	0	1744
135+50	50	11.5	7.9	0.0	0.0	0.0	22	15	0	0	0	2724	45	0	0	0	1751
136+00	50	16.8	6.8	0.0	0.0	0.0	26	14	0	0	0	2750	45	0	0	0	1764
136+50	50	32.0	5.3	0.0	0.0	0.0	45	11	0	0	0	2795	45	0	0	0	1798
137+00	50	23.1	4.9	0.0	0.0	0.0	51	9	0	0	0	2846	45	0	0	0	1840
137+50	50	8.5	9.0	1.8	0.0	0.0	29	13	2	0	0	2876	47	0	0	0	1854
138+00	50	7.5	9.0	2.5	0.0	0.0	15	17	4	0	0	2890	52	0	0	0	1847
138+50	50	10.5	9.0	1.9	0.0	0.0	17	17	4	0	0	2907	57	0	0	0	1842
139+00	50	19.3	9.0	0.6	0.0	0.0	28	17	2	0	0	2935	60	0	0	0	1850
139+50	50	30.5	9.0	0.0	0.0	0.0	46	17	1	0	0	2981	60	0	0	0	1879
140+00	50	23.8	9.0	0.0	0.0	0.0	50	17	0	0	0	3031	60	0	0	0	1912
140+50	50	13.9	9.0	0.0	0.0	0.0	35	17	0	0	0	3066	60	0	0	0	1930
141+00	50	13.6	9.0	0.0	0.0	0.0	25	17	0	0	0	3091	60	0	0	0	1939
141+50	50	30.5	9.0	0.0	0.0	0.0	41	17	0	0	0	3132	60	0	0	0	1963
142+00	50	34.1	9.0	0.0	0.0	0.0	60	17	0	0	0	3192	60	0	0	0	2007
142+50	50	28.5	9.0	0.0	0.0	0.0	58	17	0	0	0	3250	60	0	0	0	2048
143+00	50	30.3	9.0	0.0	0.0	0.0	54	17	0	0	0	3304	60	0	0	0	2086
143+50	50	37.1	9.0	0.0	0.0	0.0	62	17	0	0	0	3367	60	0	0	0	2131
144+00	50	8.3	9.0	0.5	0.0	0.0	42	17	0	0	0	3409	61	0	0	0	2156
144+50	50	8.5	9.0	1.5	0.0	0.0	16	17	2	0	0	3424	63	0	0	0	2153
145+00	50	27.4	9.0	0.0	0.0	0.0	33	17	1	0	0	3457	65	0	0	0	2167
145+50	50	8.8	9.0	0.8	0.0	0.0	33	17	1	0	0	3491	66	0	0	0	2183
146+00	50	4.3	9.0	0.5	0.0	0.0	12	17	1	0	0	3503	67	0	0	0	2177
146+50	50	9.3	9.0	0.3	0.0	0.0	13	17	1	0	0	3515	68	0	0	0	2172
147+00	50	17.3	9.0	1.0	0.0	0.0	25	17	1	0	0	3540	70	0	0	0	2179
147+50	50	26.5	9.0	1.3	0.0	0.0	41	17	2	0	0	3581	72	0	0	0	2200
148+00	50	27.5	9.0	1.4	0.0	0.0	50	17	2	0	0	3631	75	0	0	0	2230
148+50	50	22.5	9.0	0.0	0.0	0.0	46	17	1	0	0	3677	77	0	0	0	2258
149+00	50	7.3	9.0	3.6	0.0	0.0	28	17	3	0	0	3704	81	0	0	0	2265
149+50	50	7.3	9.0	3.6	0.0	0.0	13	17	7	0	0	3718	89	0	0	0	2253
150+00	50	7.0	9.0	4.1	0.0	0.0	13	17	7	0	0	3731	98	0	0	0	2241
150+50	50	6.5	9.0	4.9	0.0	0.0	13	17	8	0	0	3743	109	0	0	0	2226
151+00	50	6.3	9.0	4.8	0.0	0.0	12	17	9	0	0	3755	120	0	0	0	2210
151+50	50	6.5	9.0	3.9	0.0	0.0	12	17	8	0	0	3767	130	0	0	0	2195
152+00	50	6.3	9.0	3.5	0.0	0.0	12	17	7	0	0	3779	139	0	0	0	2182
152+50	50	10.0	9.0	2.5	0.0	0.0	15	17	6	0	0	3794	145	0	0	0	2173
153+00	50	18.0	9.0	1.1	0.0	0.0	26	17	3	0	0	3820	150	0	0	0	2179
153+50	50	21.0	9.0	0.0	0.0	0.0	36	17	1	0	0	3856	151	0	0	0	2197
154+00	50	20.0	9.0	0.0	0.0	0.0	38	17	0	0	0	3894	151	0	0	0	2218
154+50	50	13.1	9.0	0.0	0.0	0.0	31	17	0	0	0	3925	151	0	0	0	2232
155+00	50	14.5	9.0	0.0	0.0	0.0	26	17	0	0	0	3950	151	0	0	0	2241
155+50	50	5.8	9.0	5.4	0.0	0.0	19	17	5	0	0	3969	157	0	0	0	2237
156+00	50	5.8	9.0	6.5	0.0	0.0	11	17	11	0	0	3980	171	0	0	0	2217
156+50	50	5.8	9.0	6.6	0.0	0.0	11	17	12	0	0	3990	186	0	0	0	2196
157+00	50	18.6	9.0	0.0	0.0	0.0	23	17	6	0	0	4013	194	0	0	0	2194
157+50	50	6.8	9.0	2.4	0.0	0.0	23	17	2	0	0	4036	197	0	0	0	2198
158+00	50	7.4	9.0	1.7	0.0	0.0	13	17	4	0	0	4049	201	0	0	0	2190
158+50	50	8.1	9.0	1.7	0.0	0.0	14	17	3	0	0	4064	205	0	0	0	2183
159+00	50	8.5	6.4	1.5	0.0	0.0	15	14	3	0	0	4079	209	0	0	0	2181
159+50	50	8.7	8.5	1.3	0.0	0.0	16	14	3	0	0	4095	212	0	0	0	2180
160+00	50	8.5	9.0	1.6	0.0	0.0	16	16	3	0	0	4111	215	0	0	0	2176
160+50	50	8.4	9.0	1.5	0.0	0.0	16	17	3	0	0	4127	219	0	0	0	2172
161+00	50	8.5	9.0	1.4	0.0	0.0	16	17	3	0	0	4142	222	0	0	0	2167
161+50	50	8.4	9.0	1.4	0.0	0.0	16	17	3	0	0	4158	226	0	0	0	2163
162+00	50	8.7	9.0	1.0	0.0	0.0	16	17	2	0	0	4174	228	0	0	0	2159
162+50	50	35.0	9.0	0.0	0.0	0.0	40	17	1	0	0	4214	230	0	0	0	2182
163+00	50	10.1	9.0	0.0	0.0	0.0	42	17	0	0	0	4256	230	0	0	0	2207
163+50	50	25.4	9.0	0.0	0.0	0.0	33	17	0	0	0	4289	230	0	0	0	2223
164+00	50	31.6	9.0	0.0	0.0	0.0	53	17	0	0	0	4342	230	0	0	0	2260
164+50	50	26.4	9.0	0.0	0.0	0.0	54	17	0	0	0	4395	230	0	0	0	2297
165+00	50	36.2	9.0	0.0	0.0	0.0	58	17	0	0	0	4453	230	0	0	0	2338
SUBTOTAL							4453	1886	184	0	0						

Addendum No. 1
ID 5992-08-79
Revised Sheet 755
February 1, 2012

STAGE 3 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
		CONINTUED FROM PREVIOUS					4453	1886	184	0	0						
165+50	50	9.5	9.0	0.1	0.0	0.0	42	17	0	0	0	4496	230	0	0	0	2363
166+00	50	14.2	9.0	0.1	0.0	0.0	22	17	0	0	0	4517	230	0	0	0	2368
166+50	50	29.1	9.0	0.2	0.0	0.0	40	17	0	0	0	4558	230	0	0	0	2391
167+00	50	32.5	9.0	0.2	0.0	0.0	57	17	0	0	0	4615	231	0	0	0	2431
167+50	50	9.6	9.0	0.3	0.0	0.0	39	17	0	0	0	4654	231	0	0	0	2453
168+00	50	9.7	9.0	0.3	0.0	0.0	18	17	0	0	0	4671	232	0	0	0	2454
168+50	50	9.6	9.0	0.3	0.0	0.0	18	17	1	0	0	4689	233	0	0	0	2454
169+00	50	9.5	9.0	0.3	0.0	0.0	18	17	1	0	0	4707	233	0	0	0	2454
169+50	50	9.4	9.0	0.3	0.0	0.0	17	17	1	0	0	4724	234	0	0	0	2455
170+00	50	35.8	9.0	0.0	0.0	0.0	42	17	0	0	0	4766	234	0	0	0	2479
170+50	50	32.2	9.0	0.0	0.0	0.0	63	17	0	0	0	4829	234	0	0	0	2526
171+00	50	9.3	9.0	0.2	0.0	0.0	38	17	0	0	0	4868	234	0	0	0	2547
171+50	50	9.5	9.0	0.1	0.0	0.0	17	17	0	0	0	4885	235	0	0	0	2548
172+00	50	9.5	9.0	0.0	0.0	0.0	18	17	0	0	0	4902	235	0	0	0	2548
172+50	50	11.2	5.6	0.1	0.0	0.0	19	14	0	0	0	4922	235	0	0	0	2554
173+00	50	19.7	5.3	0.0	0.0	0.0	29	10	0	0	0	4950	235	0	0	0	2572
173+50	50	27.6	5.3	0.0	0.0	0.0	44	10	0	0	0	4994	235	0	0	0	2606
174+00	50	29.9	9.0	0.0	0.0	0.0	53	13	0	0	0	5047	235	0	0	0	2646
174+50	50	20.1	9.0	0.0	0.0	0.0	46	17	0	0	0	5094	235	0	0	0	2676
175+00	50	9.5	9.0	0.0	0.0	0.0	27	17	0	0	0	5121	235	0	0	0	2687
175+50	50	9.5	9.0	0.0	0.0	0.0	18	17	0	0	0	5139	235	0	0	0	2688
176+00	50	9.3	9.0	0.1	0.0	0.0	17	17	0	0	0	5156	235	0	0	0	2688
176+50	50	9.5	9.0	0.5	0.0	0.0	17	17	1	0	0	5173	236	0	0	0	2688
177+00	50	9.5	9.0	0.0	0.0	0.0	18	17	0	0	0	5191	237	0	0	0	2689
177+50	50	9.0	9.0	6.3	0.0	0.0	17	17	6	0	0	5208	244	0	0	0	2682
178+00	50	8.8	9.0	0.4	0.0	0.0	16	17	6	0	0	5224	252	0	0	0	2674
178+50	50	6.5	9.0	0.0	0.0	0.0	14	17	0	0	0	5239	252	0	0	0	2671
179+00	50	0.0	9.0	0.0	0.0	0.0	6	17	0	0	0	5245	252	0	0	0	2660
179+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5245	252	0	0	0	2644
180+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5245	252	0	0	0	2627
180+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5245	252	0	0	0	2610
181+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5245	252	0	0	0	2594
181+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5245	252	0	0	0	2577
182+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5245	252	0	0	0	2560
182+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5245	252	0	0	0	2544
183+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5245	252	0	0	0	2527
183+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5245	252	0	0	0	2510
183+59	9	0.0	9.0	0.0	0.0	0.0	0	3	0	0	0	5245	252	0	0	0	2507
189+35		73.6	9.0	30.5	0.0	0.0											2507
189+50	15	73.6	9.0	30.5	0.0	0.0	41	5	17	0	0	5285	273	0	0	0	2522
190+00	65	95.4	9.0	19.7	0.0	0.0	203	22	60	0	0	5489	349	0	0	0	2628
190+50	50	103.5	9.0	11.9	0.0	0.0	184	17	29	0	0	5673	385	0	0	0	2759
191+00	50	127.5	9.0	6.6	0.0	0.0	214	17	17	0	0	5887	407	0	0	0	2935
191+50	50	94.3	9.0	3.2	0.0	0.0	205	17	9	0	0	6092	418	0	0	0	3112
192+00	50	87.6	9.0	21.3	0.0	0.0	168	17	23	0	0	6261	446	0	0	0	3236
192+50	50	61.4	9.0	0.8	0.0	0.0	138	17	20	0	0	6398	472	0	0	0	3331
193+00	50	71.6	9.0	1.4	0.0	0.0	123	17	2	0	0	6522	474	0	0	0	3435
193+50	50	107.1	9.0	0.1	0.0	0.0	165	17	1	0	0	6687	476	0	0	0	3582
194+00	50	23.2	9.0	0.0	0.0	0.0	121	17	0	0	0	6808	476	0	0	0	3686
194+50	50	32.1	9.0	0.2	0.0	0.0	51	17	0	0	0	6859	476	0	0	0	3720
195+00	50	30.9	9.0	0.0	0.0	0.0	58	17	0	0	0	6917	477	0	0	0	3762
195+50	50	30.7	9.0	0.1	0.0	0.0	57	17	0	0	0	6974	477	0	0	0	3802
196+00	50	30.6	9.0	0.0	0.0	0.0	57	17	0	0	0	7031	477	0	0	0	3842
196+50	50	30.1	9.0	0.0	0.0	0.0	56	17	0	0	0	7087	477	0	0	0	3882
197+00	50	44.6	9.0	0.1	0.0	0.0	69	17	0	0	0	7157	477	0	0	0	3934
197+50	50	49.3	9.0	0.0	0.0	0.0	87	17	0	0	0	7243	477	0	0	0	4004
198+00	50	54.9	9.0	0.0	0.0	0.0	97	17	0	0	0	7340	477	0	0	0	4084
198+50	50	62.5	9.0	0.0	0.0	0.0	109	17	0	0	0	7449	477	0	0	0	4176
199+00	50	65.9	9.0	0.0	0.0	0.0	119	17	0	0	0	7568	477	0	0	0	4278
199+50	50	64.5	9.0	0.0	0.0	0.0	121	17	0	0	0	7688	477	0	0	0	4383
200+00	50	61.3	0.0	0.3	0.0	0.0	116	8	0	0	0	7805	478	0	0	0	4490
200+50	50	63.5	0.0	0.5	0.0	0.0	116	0	1	0	0	7920	478	0	0	0	4605
201+00	50	62.1	0.0	0.1	0.0	0.0	116	0	1	0	0	8037	479	0	0	0	4721
201+50	50	57.2	0.0	0.0	0.0	0.0	110	0	0	0	0	8147	479	0	0	0	4831
202+00	50	51.6	0.0	0.0	0.0	0.0	101	0	0	0	0	8248	479	0	0	0	4932
202+03	3	51.6	0.0	0.0	0.0	0.0	6	0	0	0	0	8254	479	0	0	0	4938
						Column totals	8254	2837	383	0	0						

STAGE 3 (STA 183+90 - STA 189+33): OLD MIDDLETON EB ON-RAMP

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
183+90		36.6	0.0	4.5	0.0	0.0											
184+00	10	36.6	0.0	4.5	0.0	0.0	14	0	2	0	0	14	2	0	0	0	12
184+50	60	40.2	0.0	4.2	0.0	0.0	84	0	10	0	0	84	12	0	0	0	72
185+00	50	40.2	0.0	3.7	0.0	0.0	74	0	7	0	0	159	21	0	0	0	137
185+50	50	34.0	0.0	9.2	0.0	0.0	69	0	12	0	0	227	36	0	0	0	191
186+00	50	28.8	0.0	12.3	0.0	0.0	58	0	20	0	0	286	61	0	0	0	224
186+50	50	35.0	0.0	7.0	0.0	0.0	59	0	18	0	0	345	83	0	0	0	261
187+00	50	38.6	0.0	6.8	0.0	0.0	68	0	13	0	0	413	99	0	0	0	313
187+50	50	34.8	0.0	15.6	0.0	0.0	68	0	21	0	0	481	125	0	0	0	356
188+00	50	45.3	0.0	5.4	0.0	0.0	74	0	19	0	0	555	150	0	0	0	405
188+50	50	50.7	0.0	3.5	0.0	0.0	89	0	8	0	0	644	160	0	0	0	484
189+00	50	48.8	0.0	7.7	0.0	0.0	92	0	10	0	0	736	173	0	0	0	563
189+33	33	48.8	0.0	7.7	0.0	0.0	60	0	9	0	0	796	185	0	0	0	611
						Column totals	810	0	150	0	0						

STAGE 3 (STA 10+26 - STA 12+44 RT): OLD MIDDLETON ROAD

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
10+26		76.6	0.0	0.0	0.0	0.0											
10+50	24	76.6	0.0	0.0	0.0	0.0	68	0	0	0	0	68	0	0	0	0	68
11+00	50	140.0	0.0	0.0	0.0	0.0	201	0	0	0	0	201	0	0	0	0	201
11+50	50	95.1	0.0	0.0	0.0	0.0	218	0	0	0	0	418	0	0	0	0	418
12+00	50	55.3	0.0	2.8	0.0	0.0	139	0	3	0	0	557	3	0	0	0	554
12+44	44	55.3	0.0	2.8	0.0	0.0	90	0	4	0	0	647	9	0	0	0	639
						Column totals	715	0	7	0	0						

STAGE 4 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
98+25		64.7	18.0	0.0	0.0	0.0											
98+50	25	64.7	18.0	0.0	0.0	0.0	60	17	0	0	0	60	0	0	0	0	43
99+00	50	59.2	18.0	1.6	0.0	0.0	115	33	1	0	0	175	2	0	0	0	123
99+50	50	57.6	18.0	1.6	0.0	0.0	108	33	3	0	0	283	5	0	0	0	194
100+00	50	64.4	18.0	0.3	0.0	0.0	113	33	2	0	0	396	8	0	0	0	271
100+50	50	80.6	18.0	0.1	0.0	0.0	134	33	0	0	0	530	8	0	0	0	372
101+00	50	109.0	18.0	0.0	0.0	0.0	176	33	0	0	0	706	8	0	0	0	514
101+50	50	109.3	18.0	0.0	0.0	0.0	202	33	0	0	0	908	8	0	0	0	683
102+00	50	104.7	18.0	0.1	0.0	0.0	198	33	0	0	0	1106	8	0	0	0	847
102+50	50	99.5	18.0	0.0	0.0	0.0	189	33	0	0	0	1295	9	0	0	0	1003
103+00	50	115.8	18.0	0.0	0.0	0.0	199	33	0	0	0	1494	9	0	0	0	1169
103+50	50	122.8	18.0	0.0	0.0	0.0	221	33	0	0	0	1715	9	0	0	0	1357
104+00	50	74.9	18.0	0.0	0.0	0.0	183	33	0	0	0	1898	9	0	0	0	1506
104+50	50	81.1	18.0	0.0	0.0	0.0	144	33	0	0	0	2043	9	0	0	0	1617
105+00	50	171.4	26.5	0.0	0.0	0.0	234	41	0	0	0	2277	9	0	0	0	1810
105+50	50	174.3	26.5	0.0	0.0	0.0	320	49	0	0	0	2597	9	0	0	0	2081
106+00	50	143.3	26.5	0.0	0.0	0.0	294	49	0	0	0	2891	9	0	0	0	2326
106+50	50	107.1	26.5	39.1	0.0	0.0	232	49	36	0	0	3123	54	0	0	0	2464
107+00	50	103.8	26.5	7.3	0.0	0.0	195	49	43	0	0	3318	108	0	0	0	2556
107+50	50	100.1	26.5	9.3	0.0	0.0	189	49	15	0	0	3507	127	0	0	0	2677
108+00	50	93.1	26.5	27.5	0.0	0.0	179	49	34	0	0	3686	169	0	0	0	2764
108+50	50	85.4	26.5	62.3	0.0	0.0	165	49	83	0	0	3851	273	0	0	0	2776
109+00	50	73.4	26.5	88.7	0.0	0.0	147	49	140	0	0	3998	448	0	0	0	2699
109+50	50	60.5	26.5	68.0	0.0	0.0	124	49	145	0	0	4122	629	0	0	0	2593
110+00	50	69.0	26.5	29.8	0.0	0.0	120	49	91	0	0	4242	743	0	0	0	2551
110+50	50	67.0	0.0	0.0	0.0	0.0	126	25	28	0	0	4368	777	0	0	0	2617
111+00	50	89.5	0.0	2.7	0.0	0.0	145	0	2	0	0	4513	780	0	0	0	2759
111+50	50	107.0	0.0	3.8	0.0	0.0	182	0	6	0	0	4695	788	0	0	0	2934
112+00	50	100.0	0.0	2.2	0.0	0.0	192	0	6	0	0	4886	795	0	0	0	3119
112+50	50	73.9	0.0	4.4	0.0	0.0	161	0	6	0	0	5047	802	0	0	0	3272
113+00	50	81.6	0.0	9.2	0.0	0.0	144	0	13	0	0	5191	818	0	0	0	3400
113+50	50	78.1	0.0	5.8	0.0	0.0	148	0	14	0	0	5339	835	0	0	0	3531
114+00	50	76.9	0.0	8.5	0.0	0.0	144	0	13	0	0	5483	852	0	0	0	3658
114+50	50	96.3	0.0	0.0	0.0	0.0	160	0	8	0	0	5643	861	0	0	0	3808
115+00	50	81.6	0.0	1.4	0.0	0.0	165	0	1	0	0	5807	863	0	0	0	3971
115+50	50	83.1	0.0	0.8	0.0	0.0	152	0	2	0	0	5960	866	0	0	0	4121
116+00	50	92.8	0.0	0.0	0.0	0.0	163	0	1	0	0	6123	867	0	0	0	4283
116+50	50	118.3	0.0	0.0	0.0	0.0	195	0	0	0	0	6318	867	0	0	0	4478
117+00	50	206.0	0.0	0.0	0.0	0.0	300	0	0	0	0	6618	867	0	0	0	4779
117+50	50	256.5	0.0	0.0	0.0	0.0	428	0	0	0	0	7047	867	0	0	0	5207
118+00	50	279.9	0.0	0.0	0.0	0.0	497	0	0	0	0	7543	867	0	0	0	5704
118+50	50	242.7	0.0	0.0	0.0	0.0	484	0	0	0	0	8027	867	0	0	0	6187
119+00	50	168.3	0.0	0.0	0.0	0.0	380	0	0	0	0	8408	867	0	0	0	6568
119+50	50	85.5	0.0	17.9	0.0	0.0	235	0	17	0	0	8643	887	0	0	0	6782
120+00	50	92.7	0.0	53.8	0.0	0.0	165	0	66	0	0	8808	970	0	0	0	6864
120+50	50	91.0	0.0	80.1	0.0	0.0	170	0	124	0	0	8978	1125	0	0	0	6879
121+00	50	90.9	0.0	102.7	0.0	0.0	168	0	169	0	0	9146	1337	0	0	0	6836
121+50	50	97.0	0.0	159.6	0.0	0.0	174	0	243	0	0	9320	1640	0	0	0	6706
122+00	50	93.8	0.0	256.6	0.0	0.0	177	0	385	0	0	9496	2122	0	0	0	6401
122+50	50	113.2	0.0	57.2	0.0	0.0	192	0	291	0	0	9688	2485	0	0	0	6230
123+00	50	112.2	0.0	170.3	0.0	0.0	209	0	211	0	0	9897	2749	0	0	0	6175
123+50	50	115.7	0.0	141.5	0.0	0.0	211	0	289	0	0	10108	3109	0	0	0	6025
124+00	50	118.9	0.0	168.0	0.0	0.0	217	0	287	0	0	10325	3468	0	0	0	5884
124+50	50	117.8	0.0	173.5	0.0	0.0	219	0	316	0	0	10544	3863	0	0	0	5708
125+00	50	113.1	0.0	124.2	0.0	0.0	214	0	276	0	0	10758	4207	0	0	0	5578
125+50	50	92.8	0.0	0.0	0.0	0.0	191	0	115	0	0	10949	4351	0	0	0	5624
126+00	50	92.6	0.0	15.3	0.0	0.0	172	0	14	0	0	11120	4369	0	0	0	5778
126+50	50	116.6	0.0	0.0	0.0	0.0	194	0	14	0	0	11314	4387	0	0	0	5954
127+00	50	76.5	0.0	0.0	0.0	0.0	179	0	0	0	0	11493	4387	0	0	0	6133
127+50	50	90.5	0.0	0.1	0.0	0.0	155	0	0	0	0	11647	4387	0	0	0	6287
128+00	50	70.0	0.0	0.4	0.0	0.0	149	0	0	0	0	11796	4387	0	0	0	6436
SUBTOTAL							11796	973	3510	0	0						

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Addendum No. 1
ID 5992-08-79
Revised Sheet 758
February 1, 2012

STAGE 4 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

STATION	Distance	Area: Cut (SF)	Area: Salvaged/Unusable Pavement Material (SF)	Area: Fill (SF)	Area: Marsh Exc (SF)	Area: EBS (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unusable Pavement Material Note 2 (CY)	Incremental Volume (Unadjusted): Fill Note 3 (CY)	Incremental Volume (Unadjusted): Marsh Exc (CY)	Incremental Volume (Unadjusted): EBS (CY)	Cumulative Vol (CY): Cut 1.00 Note 1	Cumulative Vol (CY): Expanded Fill 1.25	Cumulative Vol (CY): Expanded Marsh Backfill 1.50 Note 4	Cumulative Vol (CY): Reduced Marsh in Fill 0.60 Note 5	Cumulative Vol (CY): Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
		CONINTUED FROM PREVIOUS					11796	973	3510	0	0						
128+50	50	61.3	0.0	0.3	0.0	0.0	122	0	1	0	0	11918	4388	0	0	0	6556
129+00	50	66.1	0.0	2.9	0.0	0.0	118	0	3	0	0	12036	4392	0	0	0	6671
129+50	50	38.8	0.0	0.0	0.0	0.0	97	0	3	0	0	12133	4395	0	0	0	6764
130+00	50	36.2	0.0	0.0	0.0	0.0	69	0	0	0	0	12202	4395	0	0	0	6834
130+50	50	58.0	0.0	0.1	0.0	0.0	87	0	0	0	0	12289	4395	0	0	0	6921
131+00	50	57.6	0.0	0.5	0.0	0.0	107	0	1	0	0	12396	4396	0	0	0	7027
131+50	50	96.5	0.0	0.0	0.0	0.0	143	0	0	0	0	12539	4397	0	0	0	7169
132+00	50	80.8	0.0	0.0	0.0	0.0	164	0	0	0	0	12703	4397	0	0	0	7333
132+50	50	77.8	0.0	0.7	0.0	0.0	147	0	1	0	0	12850	4397	0	0	0	7480
133+00	50	99.5	0.0	0.0	0.0	0.0	164	0	1	0	0	13014	4398	0	0	0	7643
133+50	50	78.0	0.0	0.0	0.0	0.0	164	0	0	0	0	13179	4398	0	0	0	7807
134+00	50	62.2	0.0	0.0	0.0	0.0	130	0	0	0	0	13309	4398	0	0	0	7937
134+50	50	71.1	0.0	6.0	0.0	0.0	123	0	6	0	0	13432	4405	0	0	0	8054
135+00	50	71.5	0.0	3.0	0.0	0.0	132	0	8	0	0	13564	4415	0	0	0	8175
135+50	50	78.5	0.0	0.3	0.0	0.0	139	0	3	0	0	13703	4419	0	0	0	8311
136+00	50	91.1	0.0	0.4	0.0	0.0	157	0	1	0	0	13860	4420	0	0	0	8467
136+50	50	76.2	0.0	2.7	0.0	0.0	155	0	3	0	0	14015	4424	0	0	0	8618
137+00	50	63.1	0.0	0.0	0.0	0.0	129	0	3	0	0	14144	4427	0	0	0	8744
137+50	50	66.3	0.0	11.8	0.0	0.0	120	0	11	0	0	14264	4440	0	0	0	8850
138+00	50	72.6	0.0	2.4	0.0	0.0	129	0	13	0	0	14392	4457	0	0	0	8962
138+50	50	71.4	0.0	0.8	0.0	0.0	133	0	3	0	0	14526	4461	0	0	0	9092
139+00	50	83.9	0.0	0.0	0.0	0.0	144	0	1	0	0	14669	4461	0	0	0	9235
139+50	50	85.3	0.0	1.8	0.0	0.0	157	0	2	0	0	14826	4464	0	0	0	9389
140+00	50	104.2	0.0	0.0	0.0	0.0	175	0	2	0	0	15001	4466	0	0	0	9563
140+50	50	80.6	0.0	0.0	0.0	0.0	171	0	0	0	0	15173	4466	0	0	0	9734
141+00	50	127.1	0.0	0.0	0.0	0.0	192	0	0	0	0	15365	4466	0	0	0	9926
141+50	50	103.8	0.0	0.1	0.0	0.0	214	0	0	0	0	15579	4466	0	0	0	10140
142+00	50	101.2	0.0	1.1	0.0	0.0	190	0	1	0	0	15768	4467	0	0	0	10328
142+50	50	121.1	0.0	0.8	0.0	0.0	206	0	2	0	0	15974	4469	0	0	0	10532
143+00	50	111.8	0.0	5.3	0.0	0.0	216	0	6	0	0	16190	4476	0	0	0	10741
143+50	50	110.4	0.0	0.0	0.0	0.0	206	0	5	0	0	16396	4482	0	0	0	10940
144+00	50	80.6	0.0	0.8	0.0	0.0	177	0	1	0	0	16572	4483	0	0	0	11116
144+50	50	48.8	0.0	186.6	0.0	0.0	120	0	174	0	0	16692	4700	0	0	0	11019
145+00	50	42.4	0.0	210.5	0.0	0.0	84	0	368	0	0	16777	5160	0	0	0	10644
145+50	50	42.9	0.0	216.9	0.0	0.0	79	0	396	0	0	16856	5654	0	0	0	10228
146+00	50	53.2	0.0	80.7	0.0	0.0	89	0	276	0	0	16945	5999	0	0	0	9973
146+50	50	52.5	0.0	19.2	0.0	0.0	98	0	93	0	0	17043	6114	0	0	0	9955
147+00	50	131.8	0.0	1.5	0.0	0.0	171	0	19	0	0	17213	6138	0	0	0	10102
147+50	50	157.3	0.0	1.1	0.0	0.0	268	0	2	0	0	17481	6141	0	0	0	10366
148+00	50	149.3	0.0	0.0	0.0	0.0	284	0	1	0	0	17765	6143	0	0	0	10649
148+50	50	179.1	0.0	0.0	0.0	0.0	304	0	0	0	0	18069	6143	0	0	0	10953
149+00	50	200.8	0.0	1.4	0.0	0.0	352	0	1	0	0	18420	6144	0	0	0	11303
149+50	50	191.6	0.0	1.3	0.0	0.0	363	0	2	0	0	18784	6147	0	0	0	11663
150+00	50	100.5	0.0	0.0	0.0	0.0	270	0	1	0	0	19054	6149	0	0	0	11932
150+50	50	89.0	0.0	0.0	0.0	0.0	175	0	0	0	0	19230	6149	0	0	0	12108
151+00	50	63.7	0.0	2.0	0.0	0.0	141	0	2	0	0	19371	6151	0	0	0	12247
151+50	50	62.7	0.0	2.5	0.0	0.0	117	0	4	0	0	19488	6156	0	0	0	12359
152+00	50	65.0	0.0	2.2	0.0	0.0	118	0	4	0	0	19606	6162	0	0	0	12471
152+50	50	63.4	0.0	3.0	0.0	0.0	119	0	5	0	0	19725	6168	0	0	0	12584
153+00	50	55.0	0.0	9.8	0.0	0.0	110	0	12	0	0	19835	6183	0	0	0	12679
153+50	50	60.6	0.0	4.7	0.0	0.0	107	0	13	0	0	19942	6199	0	0	0	12769
154+00	50	59.8	0.0	60.5	0.0	0.0	111	0	60	0	0	20053	6275	0	0	0	12805
154+50	50	41.9	0.0	0.0	0.0	0.0	94	0	56	0	0	20147	6345	0	0	0	12829
155+00	50	49.3	0.0	0.0	0.0	0.0	84	0	0	0	0	20232	6345	0	0	0	12914
155+50	50	103.4	0.0	4.8	0.0	0.0	141	0	4	0	0	20373	6350	0	0	0	13049
156+00	50	108.1	0.0	12.4	0.0	0.0	196	0	16	0	0	20569	6370	0	0	0	13225
156+50	50	86.7	0.0	59.9	0.0	0.0	180	0	67	0	0	20749	6454	0	0	0	13322
157+00	50	84.2	0.0	72.0	0.0	0.0	158	0	122	0	0	20908	6607	0	0	0	13328
157+50	50	69.7	0.0	94.6	0.0	0.0	142	0	154	0	0	21050	6799	0	0	0	13277
158+00	50	46.9	0.0	11.4	0.0	0.0	108	0	98	0	0	21158	6922	0	0	0	13263
158+50	50	50.4	0.0	19.2	0.0	0.0	90	0	28	0	0	21248	6957	0	0	0	13317
159+00	50	64.4	0.0	14.0	0.0	0.0	106	0	31	0	0	21354	6996	0	0	0	13385
159+50	50	61.8	0.0	16.7	0.0	0.0	117	0	28	0	0	21471	7031	0	0	0	13467
160+00	50	57.1	0.0	18.7	0.0	0.0	110	0	33	0	0	21581	7072	0	0	0	13536
160+50	50	55.0	0.0	15.3	0.0	0.0	104	0	31	0	0	21685	7112	0	0	0	13600
161+00	50	56.1	0.0	13.1	0.0	0.0	103	0	26	0	0	21788	7144	0	0	0	13670
161+50	50	54.3	0.0	12.9	0.0	0.0	102	0	24	0	0	21890	7174	0	0	0	13742
162+00	50	52.4	0.0	17.9	0.0	0.0	99	0	29	0	0	21989	7210	0	0	0	13805
162+50	50	54.5	0.0	16.9	0.0	0.0	99	0	32	0	0	22088	7250	0	0	0	13864
163+00	50	46.9	0.0	11.3	0.0	0.0	94	0	26	0	0	22182	7283	0	0	0	13925
163+50	50	89.8	0.0	0.0	0.0	0.0	127	0	10	0	0	22308	7296	0	0	0	14039
164+00	50	109.9	0.0	0.0	0.0	0.0	185	0	0	0	0	22493	7296	0	0	0	14224
164+50	50	55.5	0.0	0.0	0.0	0.0	153	0	0	0	0	22646	7296	0	0	0	14377
165+00	50	56.5	0.0	0.0	0.0	0.0	104	0	0	0	0	22750	7296	0	0	0	14481
SUBTOTAL							22750	973	5837	0	0						

Addendum No. 1
ID 5992-08-79
Revised Sheet 759
February 1, 2012

STAGE 4 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
		CONINTUED FROM PREVIOUS					22750	973	5837	0	0						
165+50	50	102.8	0.0	0.0	0.0	0.0	148	0	0	0	0	22897	7296	0	0	0	14628
166+00	50	84.0	0.0	0.0	0.0	0.0	173	0	0	0	0	23070	7296	0	0	0	14801
166+50	50	74.6	0.0	0.0	0.0	0.0	147	0	0	0	0	23217	7296	0	0	0	14948
167+00	50	67.3	0.0	0.3	0.0	0.0	131	0	0	0	0	23348	7296	0	0	0	15079
167+50	50	70.3	0.0	0.0	0.0	0.0	127	0	0	0	0	23476	7297	0	0	0	15206
168+00	50	85.1	0.0	0.0	0.0	0.0	144	0	0	0	0	23620	7297	0	0	0	15350
168+50	50	91.5	0.0	0.0	0.0	0.0	164	0	0	0	0	23783	7297	0	0	0	15513
169+00	50	101.1	0.0	0.0	0.0	0.0	178	0	0	0	0	23962	7297	0	0	0	15692
169+50	50	100.8	0.0	0.0	0.0	0.0	187	0	0	0	0	24148	7297	0	0	0	15879
170+00	50	96.9	0.0	0.0	0.0	0.0	183	0	0	0	0	24332	7297	0	0	0	16062
170+50	50	88.0	0.0	0.1	0.0	0.0	171	0	0	0	0	24503	7297	0	0	0	16233
171+00	50	103.0	0.0	0.0	0.0	0.0	177	0	0	0	0	24680	7297	0	0	0	16410
171+50	50	110.3	0.0	0.0	0.0	0.0	197	0	0	0	0	24877	7297	0	0	0	16607
172+00	50	116.3	0.0	0.0	0.0	0.0	210	0	0	0	0	25087	7297	0	0	0	16817
172+50	50	123.9	0.0	0.0	0.0	0.0	222	0	0	0	0	25309	7297	0	0	0	17039
173+00	50	151.2	0.0	0.5	0.0	0.0	255	0	0	0	0	25564	7298	0	0	0	17293
173+50	50	149.2	0.0	4.4	0.0	0.0	278	0	5	0	0	25842	7303	0	0	0	17566
174+00	50	126.3	0.0	16.8	0.0	0.0	255	0	20	0	0	26097	7328	0	0	0	17796
174+50	50	124.3	0.0	12.3	0.0	0.0	232	0	27	0	0	26329	7361	0	0	0	17995
175+00	50	128.0	0.0	0.2	0.0	0.0	234	0	11	0	0	26563	7376	0	0	0	18214
175+50	50	112.5	0.0	0.0	0.0	0.0	223	0	0	0	0	26785	7376	0	0	0	18436
176+00	50	66.7	0.0	0.9	0.0	0.0	166	0	1	0	0	26951	7377	0	0	0	18601
176+50	50	52.7	0.0	11.0	0.0	0.0	111	0	11	0	0	27062	7391	0	0	0	18698
177+00	50	46.1	0.0	42.8	0.0	0.0	92	0	50	0	0	27153	7453	0	0	0	18727
177+50	50	45.4	0.0	47.3	0.0	0.0	85	0	83	0	0	27238	7557	0	0	0	18708
178+00	50	45.9	0.0	102.6	0.0	0.0	85	0	139	0	0	27323	7731	0	0	0	18619
178+50	50	51.6	0.0	126.8	0.0	0.0	90	0	212	0	0	27413	7996	0	0	0	18444
179+00	50	60.8	0.0	146.7	0.0	0.0	104	0	253	0	0	27517	8313	0	0	0	18231
179+50	50	56.7	0.0	172.9	0.0	0.0	109	0	296	0	0	27626	8683	0	0	0	17970
180+00	50	54.1	0.0	188.5	0.0	0.0	103	0	335	0	0	27728	9101	0	0	0	17655
180+50	50	52.7	0.0	184.3	0.0	0.0	99	0	345	0	0	27827	9532	0	0	0	17322
181+00	50	51.6	0.0	264.9	0.0	0.0	97	0	416	0	0	27924	10052	0	0	0	16899
181+50	50	53.0	0.0	327.4	0.0	0.0	97	0	548	0	0	28021	10738	0	0	0	16310
182+00	50	50.4	0.0	363.6	0.0	0.0	96	0	640	0	0	28117	11538	0	0	0	15606
182+50	50	47.3	0.0	377.2	0.0	0.0	90	0	686	0	0	28207	12395	0	0	0	14839
183+00	50	58.3	0.0	378.6	0.0	0.0	98	0	700	0	0	28305	13270	0	0	0	14062
183+50	50	59.8	0.0	334.6	0.0	0.0	109	0	660	0	0	28414	14095	0	0	0	13346
183+59	9	59.8	0.0	334.6	0.0	0.0	20	0	112	0	0	28434	14235	0	0	0	13226
189+35		49.8	0.0	0.0	0.0	0.0											13226
189+50	15	49.8	0.0	0.0	0.0	0.0	28	0	0	0	0	28462	14235	0	0	0	13254
190+00	65	49.3	0.0	16.3	0.0	0.0	119	0	20	0	0	28581	14259	0	0	0	13349
190+50	50	52.5	0.0	73.5	0.0	0.0	94	0	83	0	0	28675	14363	0	0	0	13339
191+00	50	57.5	0.0	70.0	0.0	0.0	102	0	133	0	0	28777	14529	0	0	0	13275
191+50	50	60.3	0.0	44.0	0.0	0.0	109	0	106	0	0	28886	14661	0	0	0	13252
192+00	50	61.8	0.0	59.8	0.0	0.0	113	0	96	0	0	28999	14781	0	0	0	13245
192+50	50	64.3	0.0	12.5	0.0	0.0	117	0	67	0	0	29116	14865	0	0	0	13278
193+00	50	65.5	0.0	7.0	0.0	0.0	120	0	18	0	0	29236	14887	0	0	0	13375
193+50	50	66.0	0.0	17.3	0.0	0.0	122	0	22	0	0	29357	14915	0	0	0	13469
194+00	50	64.8	0.0	10.2	0.0	0.0	121	0	25	0	0	29479	14947	0	0	0	13558
194+50	50	62.8	0.0	2.5	0.0	0.0	118	0	12	0	0	29597	14962	0	0	0	13662
195+00	50	63.3	0.0	2.2	0.0	0.0	117	0	4	0	0	29713	14967	0	0	0	13773
195+50	50	63.3	0.0	1.8	0.0	0.0	117	0	4	0	0	29830	14972	0	0	0	13885
196+00	50	62.5	0.0	1.7	0.0	0.0	116	0	3	0	0	29947	14976	0	0	0	13998
196+50	50	62.8	0.0	1.4	0.0	0.0	116	0	3	0	0	30063	14979	0	0	0	14110
197+00	50	42.0	0.0	1.0	0.0	0.0	97	0	2	0	0	30160	14982	0	0	0	14204
197+50	50	43.0	0.0	1.0	0.0	0.0	79	0	2	0	0	30238	14985	0	0	0	14281
198+00	50	44.0	0.0	0.0	0.0	0.0	81	0	1	0	0	30319	14986	0	0	0	14360
198+50	50	51.0	0.0	0.0	0.0	0.0	88	0	0	0	0	30407	14986	0	0	0	14448
199+00	50	50.0	0.0	0.0	0.0	0.0	94	0	0	0	0	30501	14986	0	0	0	14542
199+50	50	42.5	0.0	0.0	0.0	0.0	86	0	0	0	0	30586	14986	0	0	0	14627
200+00	50	42.5	0.0	0.0	0.0	0.0	79	0	0	0	0	30665	14986	0	0	0	14706
200+50	50	22.8	0.0	0.0	0.0	0.0	60	0	0	0	0	30725	14986	0	0	0	14766
201+00	50	30.5	0.0	0.0	0.0	0.0	49	0	0	0	0	30775	14986	0	0	0	14816
201+50	50	33.0	0.0	0.0	0.0	0.0	59	0	0	0	0	30833	14986	0	0	0	14875
202+00	50	32.1	0.0	0.0	0.0	0.0	60	0	0	0	0	30894	14986	0	0	0	14935
202+03	3	32.1	0.0	0.0	0.0	0.0	4	0	0	0	0	30898	14986	0	0	0	14939
						Column totals	30898	973	11989	0	0						

STAGE 4 (STA 10+25 - STA 15+25): ALLEN BOULEVARD

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+25		208.6	0.0	11.3	0.0	0.0											
10+75	50	208.6	0.0	11.3	0.0	0.0	386	0	21	0	0	386	26	0	0	0	360
11+00	25	172.9	0.0	12.3	0.0	0.0	182	0	11	0	0	182	14	0	0	0	169
11+25	25	243.5	0.0	7.9	0.0	0.0	193	0	9	0	0	375	25	0	0	0	350
11+50	25	222.9	0.0	0.8	0.0	0.0	216	0	4	0	0	591	30	0	0	0	560
11+75	25	201.8	0.0	1.2	0.0	0.0	197	0	1	0	0	787	32	0	0	0	756
12+00	25	205.3	0.0	1.4	0.0	0.0	188	0	1	0	0	976	33	0	0	0	943
12+25	25	188.3	0.0	1.9	0.0	0.0	182	0	2	0	0	1158	35	0	0	0	1123
12+50	25	185.6	0.0	2.3	0.0	0.0	173	0	2	0	0	1331	37	0	0	0	1294
12+75	25	121.6	0.0	0.0	0.0	0.0	142	0	1	0	0	1473	39	0	0	0	1435
13+00	25	116.4	0.0	0.0	0.0	0.0	110	0	0	0	0	1584	39	0	0	0	1545
13+25	25	93.4	0.0	0.0	0.0	0.0	97	0	0	0	0	1681	39	0	0	0	1642
13+50	25	89.0	0.0	0.0	0.0	0.0	84	0	0	0	0	1765	39	0	0	0	1726
13+75	25	81.5	0.0	0.1	0.0	0.0	79	0	0	0	0	1844	39	0	0	0	1805
14+00	25	80.5	0.0	0.0	0.0	0.0	75	0	0	0	0	1919	39	0	0	0	1880
14+25	25	81.0	0.0	0.0	0.0	0.0	75	0	0	0	0	1994	39	0	0	0	1955
14+50	25	82.9	0.0	0.0	0.0	0.0	76	0	0	0	0	2070	39	0	0	0	2031
14+75	25	80.6	0.0	0.0	0.0	0.0	76	0	0	0	0	2145	39	0	0	0	2107
15+00	25	89.0	0.0	0.0	0.0	0.0	78	0	0	0	0	2224	39	0	0	0	2185
15+25	25	89.0	0.0	0.0	0.0	0.0	82	0	0	0	0	2306	39	0	0	0	2268
						Column totals	2693	0	52	0	0						

STAGE 4 (STA 10+30 - STA 10+75): OVERLOOK PASS

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+30		57.1	0.0	0.0	0.0	0.0											
10+60	30	57.1	0.0	0.0	0.0	0.0	63	0	0	0	0	63	0	0	0	0	63
10+70	10	53.7	0.0	0.2	0.0	0.0	21	0	0	0	0	21	0	0	0	0	21
10+75	5	53.7	0.0	0.2	0.0	0.0	10	0	0	0	0	10	0	0	0	0	10
						Column totals	94	0	0	0	0						

STAGE 4 (STA 10+32 - STA 11+25): BAKER AVENUE

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+32		31.1	0.0	3.9	0.0	0.0											
10+50	18	31.1	0.0	3.9	0.0	0.0	21	0	3	0	0	21	3	0	0	0	18
10+75	25	11.7	0.0	46.1	0.0	0.0	23	0	17	0	0	23	21	0	0	0	2
11+00	25	15.5	0.0	10.7	0.0	0.0	13	0	26	0	0	35	54	0	0	0	-18
11+13	13	21.7	0.0	5.1	0.0	0.0	9	0	4	0	0	44	58	0	0	0	-14
11+25	12	21.7	0.0	5.1	0.0	0.0	10	0	2	0	0	54	61	0	0	0	-7
						Column totals	75	0	52	0	0						

STAGE 4 (STA 10+31 - STA 11+09): HICKORY DRIVE

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill Note 4	Reduced Marsh in Fill Note 5	Reduced EBS In Fill Note 6	Mass Ordinate Note 7
10+31		103.1	0.0	0.0	0.0	0.0											
10+50	19	103.1	0.0	0.0	0.0	0.0	73	0	0	0	0	73	0	0	0	0	73
10+60	10	72.9	0.0	0.0	0.0	0.0	34	0	0	0	0	34	0	0	0	0	34
10+75	15	49.7	0.0	1.6	0.0	0.0	34	0	0	0	0	68	1	0	0	0	68
10+91	16	30.4	0.0	0.5	0.0	0.0	24	0	1	0	0	92	1	0	0	0	91
11+00	9	54.9	0.0	0.0	0.0	0.0	14	0	0	0	0	106	1	0	0	0	105
11+09	9	54.9	0.0	0.0	0.0	0.0	18	0	0	0	0	125	1	0	0	0	123
						Column totals	197	0	1	0	0						

STAGE 4 (STA 10+34 - STA 11+00): LAUREL CREST (NORTH)

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill Note 4	Reduced Marsh in Fill Note 5	Reduced EBS In Fill Note 6	Mass Ordinate Note 7
10+34		42.8	0.0	4.0	0.0	0.0											
10+60	26	42.8	0.0	4.0	0.0	0.0	41	0	4	0	0	41	5	0	0	0	36
10+75	15	40.7	0.0	0.2	0.0	0.0	23	0	2	0	0	23	2	0	0	0	21
10+90	15	34.1	0.0	0.5	0.0	0.0	21	0	0	0	0	44	2	0	0	0	42
11+00	10	34.1	0.0	0.5	0.0	0.0	13	0	0	0	0	57	2	0	0	0	54
						Column totals	98	0	6	0	0						

STAGE 4 (STA 10+32 - STA 12+25): CAPITAL AVENUE

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill Note 4	Reduced Marsh in Fill Note 5	Reduced EBS In Fill Note 6	Mass Ordinate Note 7
10+32		4.5	0.0	70.7	0.0	0.0											
10+75	43	4.5	0.0	70.7	0.0	0.0	7	0	113	0	0	7	141	0	0	0	-133
11+00	68	5.5	0.0	31.5	0.0	0.0	12	0	145	0	0	12	181	0	0	0	-169
11+25	25	3.2	0.0	20.8	0.0	0.0	4	0	24	0	0	16	212	0	0	0	-195
11+50	25	18.6	0.0	12.5	0.0	0.0	10	0	15	0	0	26	231	0	0	0	-205
11+75	25	35.6	0.0	4.4	0.0	0.0	25	0	8	0	0	51	241	0	0	0	-189
12+00	50	47.1	0.0	0.5	0.0	0.0	63	0	11	0	0	89	244	0	0	0	-155
12+25	25	47.1	0.0	0.5	0.0	0.0	40	0	2	0	0	91	243	0	0	0	-151
						Column totals	161	0	317	0	0						

STAGE 4 (STA 10+34 - STA 10+85): CAMUS LANE

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill Note 4	Reduced Marsh in Fill Note 5	Reduced EBS In Fill Note 6	Mass Ordinate Note 7
10+34		25.6	0.0	0.5	0.0	0.0											
10+60	26	25.6	0.0	0.5	0.0	0.0	25	0	0	0	0	25	1	0	0	0	24
10+70	10	32.4	0.0	0.6	0.0	0.0	10	0	0	0	0	10	0	0	0	0	10
10+85	15	32.4	0.0	0.6	0.0	0.0	16	0	0	0	0	16	0	0	0	0	16
						Column totals	51	0	1	0	0						

STAGE 4 (STA 9+15 - STA 9+61): FRITZ AVENUE

STATION	Distance	Area: Cut (SF)	Area: Salvaged/Unusable Pavement Material (SF)	Area: Fill (SF)	Area: Marsh Exc (SF)	Area: EBS (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unusable Pavement Material Note 2 (CY)	Incremental Volume (Unadjusted): Fill Note 3 (CY)	Incremental Volume (Unadjusted): Marsh Exc (CY)	Incremental Volume (Unadjusted): EBS (CY)	Cumulative Vol (CY): Cut 1.00 Note 1	Cumulative Vol (CY): Expanded Fill 1.25	Cumulative Vol (CY): Expanded Marsh Backfill 1.50 Note 4	Cumulative Vol (CY): Reduced Marsh in Fill 0.60 Note 5	Cumulative Vol (CY): Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+34		76.2	0.0	0.0	0.0	0.0											
10+60	26	76.2	0.0	0.0	0.0	0.0	73	0	0	0	0	73	0	0	0	0	73
10+70	10	73.0	0.0	0.0	0.0	0.0	28	0	0	0	0	28	0	0	0	0	28
10+80	10	73.0	0.0	0.0	0.0	0.0	28	0	0	0	0	28	0	0	0	0	28
						Column totals	129	0	0	0	0						

STAGE 4 (STA 10+40 - STA 12+25): NORMAN WAY (EAST)

STATION	Distance	Area: Cut (SF)	Area: Salvaged/Unusable Pavement Material (SF)	Area: Fill (SF)	Area: Marsh Exc (SF)	Area: EBS (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unusable Pavement Material Note 2 (CY)	Incremental Volume (Unadjusted): Fill Note 3 (CY)	Incremental Volume (Unadjusted): Marsh Exc (CY)	Incremental Volume (Unadjusted): EBS (CY)	Cumulative Vol (CY): Cut 1.00 Note 1	Cumulative Vol (CY): Expanded Fill 1.25	Cumulative Vol (CY): Expanded Marsh Backfill 1.50 Note 4	Cumulative Vol (CY): Reduced Marsh in Fill 0.60 Note 5	Cumulative Vol (CY): Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+40		0.3	0.0	342.5	0.0	0.0											
10+75	35	0.3	0.0	342.5	0.0	0.0	0	0	444	0	0	0	555	0	0	0	-555
10+84	9	3.9	0.0	284.3	0.0	0.0	1	0	104	0	0	1	686	0	0	0	-684
11+00	16	0.0	0.0	284.2	0.0	0.0	1	0	168	0	0	2	896	0	0	0	-894
11+25	25	0.0	0.0	165.6	0.0	0.0	0	0	208	0	0	2	1156	0	0	0	-1154
11+44	19	9.4	0.0	98.0	0.0	0.0	3	0	93	0	0	6	1272	0	0	0	-1267
11+50	6	0.0	0.0	90.3	0.0	0.0	1	0	21	0	0	7	1298	0	0	0	-1292
11+75	25	7.9	0.0	31.5	0.0	0.0	4	0	56	0	0	10	1369	0	0	0	-1359
12+00	25	20.3	0.0	3.7	0.0	0.0	13	0	16	0	0	23	1389	0	0	0	-1366
12+25	25	20.3	0.0	3.7	0.0	0.0	19	0	3	0	0	42	1394	0	0	0	-1352

STAGE 4 (STA 10+40 - STA 12+15): SPRING HARBOR DRIVE

STATION	Distance	Area: Cut (SF)	Area: Salvaged/Unusable Pavement Material (SF)	Area: Fill (SF)	Area: Marsh Exc (SF)	Area: EBS (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unusable Pavement Material Note 2 (CY)	Incremental Volume (Unadjusted): Fill Note 3 (CY)	Incremental Volume (Unadjusted): Marsh Exc (CY)	Incremental Volume (Unadjusted): EBS (CY)	Cumulative Vol (CY): Cut 1.00 Note 1	Cumulative Vol (CY): Expanded Fill 1.25	Cumulative Vol (CY): Expanded Marsh Backfill 1.50 Note 4	Cumulative Vol (CY): Reduced Marsh in Fill 0.60 Note 5	Cumulative Vol (CY): Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+40		65.1	0.0	8.5	0.0	0.0											
10+75	35	65.1	0.0	8.5	0.0	0.0	84	0	11	0	0	84	14	0	0	0	71
11+00	25	58.2	0.0	2.6	0.0	0.0	57	0	5	0	0	141	20	0	0	0	121
11+25	25	58.8	0.0	3.5	0.0	0.0	54	0	3	0	0	196	24	0	0	0	172
11+50	25	55.0	0.0	4.1	0.0	0.0	53	0	4	0	0	248	28	0	0	0	220
11+75	25	45.7	0.0	4.2	0.0	0.0	47	0	4	0	0	295	33	0	0	0	262
12+00	25	43.7	0.0	1.7	0.0	0.0	41	0	3	0	0	336	36	0	0	0	300
12+15	15	43.7	0.0	1.7	0.0	0.0	24	0	1	0	0	361	38	0	0	0	323
						Column totals	361	0	30	0	0						

Addendum No. 1
ID 5992-08-79
Revised Sheet 763
February 1, 2012

STAGE 4 (STA 10+63 - STA 11+90): SPRING HARBOR TUNNEL PATH

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+63		285.1	0.0	0.0	0.0	0.0											
10+70	7	285.1	0.0	0.0	0.0	0.0	74	0	0	0	0	74	0	0	0	0	74
10+80	10	193.2	0.0	0.0	0.0	0.0	89	0	0	0	0	162	0	0	0	0	162
10+90	10	184.8	0.0	0.0	0.0	0.0	70	0	0	0	0	232	0	0	0	0	232
11+00	10	175.6	0.0	6.3	0.0	0.0	67	0	1	0	0	299	1	0	0	0	298
11+10	10	66.4	0.0	2.5	0.0	0.0	45	0	2	0	0	344	3	0	0	0	341
11+20	10	46.7	0.0	3.7	0.0	0.0	21	0	1	0	0	365	5	0	0	0	360
11+30	10	26.6	0.0	0.0	0.0	0.0	14	0	1	0	0	379	6	0	0	0	373
11+40	10	20.5	0.0	0.0	0.0	0.0	9	0	0	0	0	387	6	0	0	0	382
11+50	10	17.1	0.0	0.0	0.0	0.0	7	0	0	0	0	394	6	0	0	0	388
11+60	10	13.1	0.0	0.0	0.0	0.0	6	0	0	0	0	400	6	0	0	0	394
11+70	10	12.7	0.0	0.1	0.0	0.0	5	0	0	0	0	405	6	0	0	0	399
11+80	20	17.6	0.0	0.0	0.0	0.0	11	0	0	0	0	411	6	0	0	0	405
11+90	10	17.6	0.0	0.0	0.0	0.0	7	0	0	0	0	417	6	0	0	0	411
					Column totals		422	0	5	0	0						

STAGE 4 (STA 10+38 - STA 10+89): TOMAHAWK TRAIL

		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
STATION	Distance	Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
10+38		81.9	0.0	0.0	0.0	0.0											
10+75	37	81.9	0.0	0.0	0.0	0.0	112	0	0	0	0	112	0	0	0	0	112
10+85	10	68.3	0.0	0.0	0.0	0.0	29	0	0	0	0	29	0	0	0	0	29
10+95	10	68.3	0.0	0.0	0.0	0.0	28	0	0	0	0	28	0	0	0	0	28
					Column totals		169	0	0	0	0						

STAGE 5 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
98+25		8.2	0.0	2.3	0.0	0.0											
98+50	25	8.2	0.0	2.3	0.0	0.0	8	0	2	0	0	8	3	0	0	0	5
99+00	50	7.9	0.0	2.6	0.0	0.0	15	0	5	0	0	23	8	0	0	0	14
99+50	50	9.2	0.0	0.3	0.0	0.0	16	0	3	0	0	38	12	0	0	0	27
100+00	50	11.8	0.0	0.0	0.0	0.0	19	0	0	0	0	58	12	0	0	0	46
100+50	50	12.9	0.0	0.0	0.0	0.0	23	0	0	0	0	81	12	0	0	0	69
101+00	50	12.4	0.0	0.0	0.0	0.0	23	0	0	0	0	104	12	0	0	0	92
101+50	50	12.3	0.0	0.0	0.0	0.0	23	0	0	0	0	127	12	0	0	0	115
102+00	50	11.8	0.0	0.0	0.0	0.0	22	0	0	0	0	149	12	0	0	0	137
102+50	50	11.9	0.0	0.0	0.0	0.0	22	0	0	0	0	171	12	0	0	0	159
103+00	50	12.6	0.0	0.0	0.0	0.0	23	0	0	0	0	194	12	0	0	0	182
103+50	50	26.1	0.0	0.0	0.0	0.0	36	0	0	0	0	230	12	0	0	0	218
104+00	50	25.4	0.0	0.0	0.0	0.0	48	0	0	0	0	277	12	0	0	0	265
104+50	50	16.5	0.0	0.0	0.0	0.0	39	0	0	0	0	316	12	0	0	0	304
105+00	50	18.6	0.0	0.0	0.0	0.0	32	0	0	0	0	349	12	0	0	0	337
105+50	50	19.7	0.0	0.0	0.0	0.0	35	0	0	0	0	384	12	0	0	0	372
106+00	50	19.6	0.0	0.0	0.0	0.0	36	0	0	0	0	420	12	0	0	0	408
106+50	50	18.8	0.0	0.0	0.0	0.0	36	0	0	0	0	456	12	0	0	0	444
107+00	50	18.3	0.0	0.0	0.0	0.0	34	0	0	0	0	490	12	0	0	0	478
107+50	50	17.3	0.0	0.0	0.0	0.0	33	0	0	0	0	523	12	0	0	0	511
108+00	50	16.6	0.0	0.0	0.0	0.0	31	0	0	0	0	555	12	0	0	0	543
108+50	50	12.9	7.5	0.0	0.0	0.0	27	7	0	0	0	582	12	0	0	0	563
109+00	50	8.2	7.5	0.2	0.0	0.0	19	14	0	0	0	602	12	0	0	0	569
109+50	50	7.8	7.5	0.5	0.0	0.0	15	14	1	0	0	616	13	0	0	0	569
110+00	50	28.5	7.5	0.0	0.0	0.0	34	14	0	0	0	650	14	0	0	0	588
110+50	50	28.6	7.5	0.0	0.0	0.0	53	14	0	0	0	703	14	0	0	0	627
111+00	50	39.8	7.5	0.0	0.0	0.0	63	14	0	0	0	766	14	0	0	0	676
111+50	50	41.8	0.0	0.0	0.0	0.0	75	7	0	0	0	842	14	0	0	0	745
112+00	50	36.8	0.0	0.0	0.0	0.0	73	0	0	0	0	914	14	0	0	0	817
112+50	50	20.8	9.0	0.0	0.0	0.0	53	8	0	0	0	968	14	0	0	0	862
113+00	50	9.5	9.0	0.0	0.0	0.0	28	17	0	0	0	996	14	0	0	0	874
113+50	50	9.5	9.0	0.0	0.0	0.0	18	17	0	0	0	1013	14	0	0	0	875
114+00	50	11.5	9.0	0.0	0.0	0.0	19	17	0	0	0	1033	14	0	0	0	877
114+50	50	12.3	9.0	0.0	0.0	0.0	22	17	0	0	0	1055	14	0	0	0	883
115+00	50	25.3	9.0	0.0	0.0	0.0	35	17	0	0	0	1089	14	0	0	0	901
115+50	50	39.1	9.0	0.0	0.0	0.0	60	17	0	0	0	1149	14	0	0	0	944
116+00	50	32.1	9.0	0.0	0.0	0.0	66	17	0	0	0	1215	14	0	0	0	993
116+50	50	18.3	9.0	0.0	0.0	0.0	47	17	0	0	0	1261	14	0	0	0	1023
117+00	50	14.3	9.0	0.0	0.0	0.0	30	17	0	0	0	1291	14	0	0	0	1036
117+50	50	14.5	9.0	0.0	0.0	0.0	27	17	0	0	0	1318	14	0	0	0	1046
118+00	50	14.9	9.0	0.0	0.0	0.0	27	17	0	0	0	1345	14	0	0	0	1057
118+50	50	15.3	9.0	0.0	0.0	0.0	28	17	0	0	0	1373	14	0	0	0	1068
119+00	50	16.3	9.0	0.0	0.0	0.0	29	17	0	0	0	1402	14	0	0	0	1080
119+50	50	16.4	9.0	0.0	0.0	0.0	30	17	0	0	0	1433	14	0	0	0	1094
120+00	50	28.5	9.0	0.0	0.0	0.0	42	17	0	0	0	1474	14	0	0	0	1119
120+50	50	37.8	9.0	0.0	0.0	0.0	61	17	0	0	0	1535	14	0	0	0	1164
121+00	50	28.4	9.0	0.0	0.0	0.0	61	17	0	0	0	1597	14	0	0	0	1208
121+50	50	17.6	9.0	0.0	0.0	0.0	43	17	0	0	0	1639	14	0	0	0	1234
122+00	50	13.5	9.0	0.0	0.0	0.0	29	17	0	0	0	1668	14	0	0	0	1246
122+50	50	14.1	9.0	0.0	0.0	0.0	26	17	0	0	0	1694	14	0	0	0	1255
123+00	50	15.8	9.0	0.0	0.0	0.0	28	17	0	0	0	1721	14	0	0	0	1266
123+50	50	17.6	9.0	0.0	0.0	0.0	31	17	0	0	0	1752	14	0	0	0	1280
124+00	50	18.3	9.0	0.0	0.0	0.0	33	17	0	0	0	1786	14	0	0	0	1297
124+50	50	18.9	9.0	0.0	0.0	0.0	34	17	0	0	0	1820	14	0	0	0	1315
125+00	50	18.8	9.0	0.0	0.0	0.0	35	17	0	0	0	1855	14	0	0	0	1333
125+50	50	19.4	9.0	0.0	0.0	0.0	35	17	0	0	0	1890	14	0	0	0	1351
126+00	50	19.0	9.0	0.0	0.0	0.0	36	17	0	0	0	1926	14	0	0	0	1370
126+50	50	18.1	9.0	0.0	0.0	0.0	34	17	0	0	0	1960	14	0	0	0	1388
127+00	50	14.8	9.0	0.0	0.0	0.0	30	17	0	0	0	1990	14	0	0	0	1402
127+50	50	8.5	9.0	0.0	0.0	0.0	22	17	0	0	0	2012	14	0	0	0	1407
128+00	50	7.0	9.0	0.8	0.0	0.0	14	17	1	0	0	2026	14	0	0	0	1403
SUBTOTAL							2026	608	12	0	0						

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PROJECT NO: 5992-08-79	HWY: CTH MS	COUNTY: DANE	EARTHWORK DATA SHEETS	SHEET 764 E

FILE NAME: G:\MADISON\MD2009035\PS&E\90%\PLANS ORIGINATOR: KL ENGINEERING, INC. ORIG. DATE: REV. DATE: PRINT DATE: August 15, 2011

Addendum No. 1
ID 5992-08-79
Revised Sheet 765
February 1, 2012

STAGE 5 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

STATION	Distance	Area: Cut (SF)	Area: Salvaged/Unusable Pavement Material (SF)	Area: Fill (SF)	Area: Marsh Exc (SF)	Area: EBS (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unusable Pavement Material Note 2 (CY)	Incremental Volume (Unadjusted): Fill Note 3 (CY)	Incremental Volume (Unadjusted): Marsh Exc (CY)	Incremental Volume (Unadjusted): EBS (CY)	Cumulative Vol (CY): Cut 1.00 Note 1	Cumulative Vol (CY): Expanded Fill 1.25	Cumulative Vol (CY): Expanded Marsh Backfill 1.50 Note 4	Cumulative Vol (CY): Reduced Marsh in Fill 0.60 Note 5	Cumulative Vol (CY): Reduced EBS In Fill 0.80 Note 6	Mass Ordinate Note 7
		CONINTUED FROM PREVIOUS					2026	608	12	0	0						
128+50	50	5.8	9.0	0.4	0.0	0.0	12	17	1	0	0	2038	16	0	0	0	1397
129+00	50	3.3	9.0	0.0	0.0	0.0	8	17	0	0	0	2046	16	0	0	0	1389
129+50	50	13.6	9.0	0.0	0.0	0.0	16	17	0	0	0	2062	16	0	0	0	1388
130+00	50	4.0	9.0	3.5	0.0	0.0	16	17	3	0	0	2078	20	0	0	0	1383
130+50	50	4.0	9.0	3.8	0.0	0.0	7	17	7	0	0	2086	29	0	0	0	1365
131+00	50	5.3	9.0	3.8	0.0	0.0	9	17	7	0	0	2094	37	0	0	0	1349
131+50	50	7.3	9.0	1.6	0.0	0.0	12	17	5	0	0	2106	44	0	0	0	1337
132+00	50	9.8	5.3	0.0	0.0	0.0	16	13	2	0	0	2122	45	0	0	0	1338
132+50	50	5.0	6.4	0.0	0.0	0.0	14	11	0	0	0	2135	45	0	0	0	1341
133+00	50	5.0	6.4	0.0	0.0	0.0	9	12	0	0	0	2145	45	0	0	0	1338
133+50	50	5.5	6.0	0.0	0.0	0.0	10	11	0	0	0	2154	45	0	0	0	1337
134+00	50	20.8	9.0	0.0	0.0	0.0	24	14	0	0	0	2179	45	0	0	0	1347
134+50	50	22.6	7.9	0.0	0.0	0.0	40	16	0	0	0	2219	45	0	0	0	1372
135+00	50	33.8	7.9	0.0	0.0	0.0	52	15	0	0	0	2271	45	0	0	0	1409
135+50	50	33.8	7.9	0.0	0.0	0.0	63	15	0	0	0	2333	45	0	0	0	1457
136+00	50	30.5	6.8	0.0	0.0	0.0	59	14	0	0	0	2393	45	0	0	0	1503
136+50	50	15.8	5.3	0.0	0.0	0.0	43	11	0	0	0	2436	45	0	0	0	1535
137+00	50	23.1	4.9	0.0	0.0	0.0	36	9	0	0	0	2472	45	0	0	0	1561
137+50	50	9.8	9.0	0.5	0.0	0.0	30	13	0	0	0	2502	46	0	0	0	1578
138+00	50	9.3	9.0	1.3	0.0	0.0	18	17	2	0	0	2520	48	0	0	0	1577
138+50	50	8.8	9.0	1.9	0.0	0.0	17	17	3	0	0	2536	52	0	0	0	1574
139+00	50	8.5	9.0	0.6	0.0	0.0	16	17	2	0	0	2552	54	0	0	0	1570
139+50	50	10.0	9.0	0.0	0.0	0.0	17	17	1	0	0	2570	55	0	0	0	1570
140+00	50	23.8	9.0	0.0	0.0	0.0	31	17	0	0	0	2601	55	0	0	0	1585
140+50	50	14.1	9.0	0.0	0.0	0.0	35	17	0	0	0	2636	55	0	0	0	1603
141+00	50	13.9	9.0	0.0	0.0	0.0	26	17	0	0	0	2662	55	0	0	0	1612
141+50	50	30.5	9.0	0.0	0.0	0.0	41	17	0	0	0	2703	55	0	0	0	1637
142+00	50	34.1	9.0	0.0	0.0	0.0	60	17	0	0	0	2763	55	0	0	0	1680
142+50	50	42.5	9.0	0.0	0.0	0.0	71	17	0	0	0	2834	55	0	0	0	1734
143+00	50	41.0	9.0	0.0	0.0	0.0	77	17	0	0	0	2911	55	0	0	0	1795
143+50	50	37.1	9.0	0.0	0.0	0.0	72	17	0	0	0	2983	55	0	0	0	1850
144+00	50	15.3	9.0	0.0	0.0	0.0	48	17	0	0	0	3032	55	0	0	0	1882
144+50	50	8.8	9.0	0.3	0.0	0.0	22	17	0	0	0	3054	55	0	0	0	1888
145+00	50	27.4	9.0	0.0	0.0	0.0	33	17	0	0	0	3088	56	0	0	0	1904
145+50	50	29.3	9.0	0.8	0.0	0.0	52	17	1	0	0	3140	57	0	0	0	1939
146+00	50	28.3	9.0	0.5	0.0	0.0	53	17	1	0	0	3193	58	0	0	0	1974
146+50	50	17.3	9.0	0.3	0.0	0.0	42	17	1	0	0	3235	59	0	0	0	1999
147+00	50	8.5	9.0	1.0	0.0	0.0	24	17	1	0	0	3259	60	0	0	0	2004
147+50	50	7.8	9.0	1.3	0.0	0.0	15	17	2	0	0	3274	63	0	0	0	2000
148+00	50	7.8	9.0	1.4	0.0	0.0	14	17	2	0	0	3289	66	0	0	0	1995
148+50	50	22.5	9.0	0.0	0.0	0.0	28	17	1	0	0	3317	68	0	0	0	2005
149+00	50	7.5	9.0	3.6	0.0	0.0	28	17	3	0	0	3344	72	0	0	0	2011
149+50	50	7.8	9.0	3.6	0.0	0.0	14	17	7	0	0	3358	80	0	0	0	2001
150+00	50	7.3	9.0	4.1	0.0	0.0	14	17	7	0	0	3372	89	0	0	0	1989
150+50	50	7.0	9.0	4.9	0.0	0.0	13	17	8	0	0	3386	100	0	0	0	1975
151+00	50	6.8	9.0	4.8	0.0	0.0	13	17	9	0	0	3398	111	0	0	0	1960
151+50	50	6.8	9.0	3.9	0.0	0.0	13	17	8	0	0	3411	121	0	0	0	1946
152+00	50	6.8	9.0	3.5	0.0	0.0	13	17	7	0	0	3423	129	0	0	0	1933
152+50	50	7.3	9.0	2.5	0.0	0.0	13	17	6	0	0	3436	136	0	0	0	1922
153+00	50	6.8	9.0	1.1	0.0	0.0	13	17	3	0	0	3449	140	0	0	0	1914
153+50	50	6.8	9.0	0.0	0.0	0.0	13	17	1	0	0	3462	142	0	0	0	1909
154+00	50	6.3	9.0	0.0	0.0	0.0	12	17	0	0	0	3474	142	0	0	0	1904
154+50	50	13.1	9.0	0.0	0.0	0.0	18	17	0	0	0	3492	142	0	0	0	1906
155+00	50	14.5	9.0	0.0	0.0	0.0	26	17	0	0	0	3517	142	0	0	0	1914
155+50	50	6.3	9.0	5.4	0.0	0.0	19	17	5	0	0	3536	148	0	0	0	1911
156+00	50	6.3	9.0	6.5	0.0	0.0	12	17	11	0	0	3548	162	0	0	0	1892
156+50	50	6.3	9.0	6.6	0.0	0.0	12	17	12	0	0	3560	177	0	0	0	1872
157+00	50	18.6	9.0	0.0	0.0	0.0	23	17	6	0	0	3583	184	0	0	0	1870
157+50	50	22.0	9.0	2.4	0.0	0.0	38	17	2	0	0	3620	187	0	0	0	1889
158+00	50	24.1	9.0	1.8	0.0	0.0	43	17	4	0	0	3663	192	0	0	0	1910
158+50	50	20.4	9.0	1.7	0.0	0.0	41	17	3	0	0	3704	196	0	0	0	1930
159+00	50	12.7	6.4	1.6	0.0	0.0	31	14	3	0	0	3735	200	0	0	0	1943
159+50	50	8.1	8.5	1.8	0.0	0.0	19	14	3	0	0	3754	204	0	0	0	1944
160+00	50	11.2	9.0	2.4	0.0	0.0	18	16	4	0	0	3772	209	0	0	0	1941
160+50	50	14.6	9.0	2.2	0.0	0.0	24	17	4	0	0	3796	214	0	0	0	1943
161+00	50	19.2	9.0	1.8	0.0	0.0	31	17	4	0	0	3827	219	0	0	0	1953
161+50	50	23.8	9.0	1.7	0.0	0.0	40	17	3	0	0	3867	223	0	0	0	1972
162+00	50	26.9	9.0	1.4	0.0	0.0	47	17	3	0	0	3914	227	0	0	0	1999
162+50	50	20.9	9.0	0.0	0.0	0.0	44	17	1	0	0	3958	228	0	0	0	2025
163+00	50	42.9	9.0	0.0	0.0	0.0	59	17	0	0	0	4017	228	0	0	0	2067
163+50	50	35.4	9.0	0.0	0.0	0.0	72	17	0	0	0	4090	228	0	0	0	2123
164+00	50	29.9	9.0	0.0	0.0	0.0	60	17	0	0	0	4150	228	0	0	0	2167
164+50	50	33.5	9.0	0.0	0.0	0.0	59	17	0	0	0	4209	228	0	0	0	2209
165+00	50	21.4	9.0	0.0	0.0	0.0	51	17	0	0	0	4260	228	0	0	0	2243
SUBTOTAL							4260	1789	183	0	0						

Addendum No. 1
ID 5992-08-79
Revised Sheet 766
February 1, 2012

STAGE 5 (STA 98+25 - STA 202+04): UNIVERSITY AVENUE/CTH MS

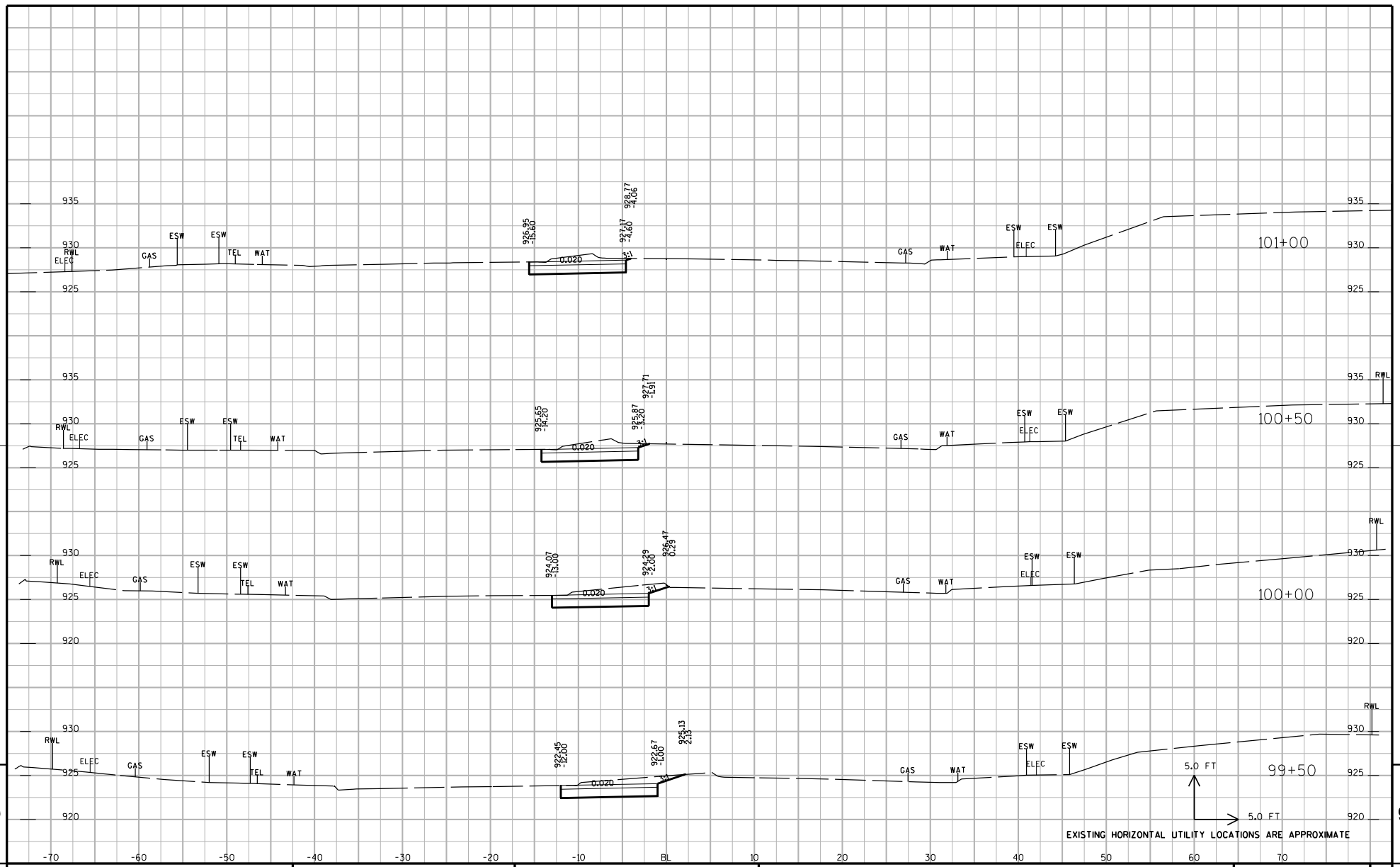
		Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					
			Salvaged/Unusable					Salvaged/Unusable					Expanded	Expanded Marsh	Reduced Marsh	Reduced EBS	Mass
STATION	Distance	Cut	Pavement Material	Fill	Marsh Exc	EBS	Cut	Pavement Material	Fill	Marsh Exc	EBS	Cut	Fill	Backfill	in Fill	In Fill	Ordinate
		(SF)	(SF)	(SF)	(SF)	(SF)	Note 1 (CY)	Note 2 (CY)	Note 3 (CY)	(CY)	(CY)	1.00 Note 1	1.25	1.50 Note 4	0.60 Note 5	0.80 Note 6	Note 7
		CONINTUED FROM PREVIOUS					4260	1789	183	0	0						
165+50	50	48.8	9.0	0.1	0.0	0.0	65	17	0	0	0	4325	228	0	0	0	2291
166+00	50	48.7	9.0	0.2	0.0	0.0	90	17	0	0	0	4415	229	0	0	0	2364
166+50	50	36.5	9.0	0.2	0.0	0.0	79	17	0	0	0	4494	229	0	0	0	2426
167+00	50	31.5	9.0	0.2	0.0	0.0	63	17	0	0	0	4557	230	0	0	0	2472
167+50	50	31.4	9.0	0.8	0.0	0.0	58	17	1	0	0	4615	231	0	0	0	2512
168+00	50	32.4	9.0	0.6	0.0	0.0	59	17	1	0	0	4674	232	0	0	0	2553
168+50	50	32.9	9.0	0.6	0.0	0.0	60	17	1	0	0	4735	234	0	0	0	2596
169+00	50	36.4	9.0	0.5	0.0	0.0	64	17	1	0	0	4799	235	0	0	0	2642
169+50	50	40.7	9.0	0.4	0.0	0.0	71	17	1	0	0	4870	236	0	0	0	2696
170+00	50	22.0	9.0	0.0	0.0	0.0	58	17	0	0	0	4928	236	0	0	0	2737
170+50	50	22.7	9.0	0.0	0.0	0.0	41	17	0	0	0	4970	236	0	0	0	2761
171+00	50	31.4	9.0	0.3	0.0	0.0	50	17	0	0	0	5020	237	0	0	0	2794
171+50	50	30.8	9.0	0.1	0.0	0.0	58	17	0	0	0	5077	237	0	0	0	2835
172+00	50	30.3	9.0	0.0	0.0	0.0	57	17	0	0	0	5134	237	0	0	0	2874
172+50	50	25.4	5.6	0.0	0.0	0.0	52	14	0	0	0	5185	237	0	0	0	2912
173+00	50	13.6	5.3	0.2	0.0	0.0	36	10	0	0	0	5221	238	0	0	0	2938
173+50	50	9.0	5.3	0.5	0.0	0.0	21	10	1	0	0	5242	238	0	0	0	2949
174+00	50	29.9	9.0	0.0	0.0	0.0	36	13	0	0	0	5278	239	0	0	0	2971
174+50	50	20.1	9.0	0.0	0.0	0.0	46	17	0	0	0	5325	239	0	0	0	3000
175+00	50	29.5	9.0	0.0	0.0	0.0	46	17	0	0	0	5370	239	0	0	0	3030
175+50	50	29.5	9.0	0.0	0.0	0.0	55	17	0	0	0	5425	239	0	0	0	3068
176+00	50	25.3	9.0	0.1	0.0	0.0	51	17	0	0	0	5476	239	0	0	0	3101
176+50	50	15.0	9.0	0.5	0.0	0.0	37	17	1	0	0	5513	240	0	0	0	3121
177+00	50	8.3	9.0	1.0	0.0	0.0	22	17	1	0	0	5535	242	0	0	0	3124
177+50	50	8.3	9.0	0.6	0.0	0.0	15	17	2	0	0	5550	244	0	0	0	3121
178+00	50	8.3	9.0	0.4	0.0	0.0	15	17	1	0	0	5565	245	0	0	0	3119
178+50	50	6.5	9.0	0.0	0.0	0.0	14	17	0	0	0	5579	245	0	0	0	3115
179+00	50	0.0	9.0	0.0	0.0	0.0	6	17	0	0	0	5585	245	0	0	0	3105
179+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	3088
180+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	3071
180+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	3055
181+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	3038
181+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	3021
182+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	3005
182+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2988
183+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2971
183+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2955
183+59	9	0.0	9.0	0.0	0.0	0.0	0	3	0	0	0	5585	245	0	0	0	2952
189+35		0.0	9.0	0.0	0.0	0.0											2952
189+50	15	0.0	9.0	0.0	0.0	0.0	0	5	0	0	0	5585	245	0	0	0	2947
190+00	65	0.0	9.0	0.0	0.0	0.0	0	22	0	0	0	5585	245	0	0	0	2925
190+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2908
191+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2892
191+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2875
192+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2858
192+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2842
193+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2825
193+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2808
194+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2792
194+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2775
195+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2758
195+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2742
196+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2725
196+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2708
197+00	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2692
197+50	50	0.0	9.0	0.0	0.0	0.0	0	17	0	0	0	5585	245	0	0	0	2675
198+00	50	60.5	9.0	0.0	0.0	0.0	56	17	0	0	0	5641	245	0	0	0	2714
198+50	50	61.5	9.0	0.0	0.0	0.0	113	17	0	0	0	5754	245	0	0	0	2811
199+00	50	77.3	9.0	0.0	0.0	0.0	128	17	0	0	0	5882	245	0	0	0	2922
199+50	50	70.3	9.0	0.0	0.0	0.0	137	17	0	0	0	6019	245	0	0	0	3042
200+00	50	53.3	0.0	0.0	0.0	0.0	114	8	0	0	0	6133	245	0	0	0	3148
200+50	50	63.0	0.0	0.0	0.0	0.0	108	0	0	0	0	6241	245	0	0	0	3256
201+00	50	58.5	0.0	0.0	0.0	0.0	113	0	0	0	0	6353	245	0	0	0	3368
201+50	50	65.4	0.0	0.0	0.0	0.0	115	0	0	0	0	6468	245	0	0	0	3483
202+00	50	63.2	0.0	0.0	0.0	0.0	119	0	0	0	0	6587	245	0	0	0	3602
202+03	3	63.2	0.0	0.0	0.0	0.0	8	0	0	0	0	6595	245	0	0	0	3610
						Column totals	6595	2740	196	0	0						

STAGE 5 (STA 183+87 - STA 197+54): OLD MIDDLETON WB OFF-RAMP

STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
183+87		37.3	0.0	0.0	0.0	0.0											
184+00	13	37.3	0.0	0.0	0.0	0.0	18	0	0	0	0	18	0	0	0	0	18
184+50	63	37.8	0.0	0.0	0.0	0.0	87	0	0	0	0	87	0	0	0	0	87
185+00	50	38.4	0.0	0.0	0.0	0.0	71	0	0	0	0	158	0	0	0	0	158
185+50	50	44.7	0.0	1.9	0.0	0.0	77	0	2	0	0	235	2	0	0	0	233
186+00	50	47.0	0.0	0.0	0.0	0.0	85	0	2	0	0	320	4	0	0	0	316
186+50	50	53.3	0.0	0.0	0.0	0.0	93	0	0	0	0	413	4	0	0	0	408
187+00	50	47.6	0.0	1.1	0.0	0.0	93	0	1	0	0	506	6	0	0	0	500
187+50	50	44.9	0.0	0.4	0.0	0.0	86	0	1	0	0	592	7	0	0	0	584
188+00	50	46.7	0.0	1.7	0.0	0.0	85	0	2	0	0	677	10	0	0	0	667
188+50	50	46.9	0.0	1.9	0.0	0.0	87	0	3	0	0	763	14	0	0	0	749
189+00	50	46.8	0.0	2.3	0.0	0.0	87	0	4	0	0	850	19	0	0	0	831
189+50	50	45.8	0.0	1.1	0.0	0.0	86	0	3	0	0	936	23	0	0	0	913
190+00	50	47.7	0.0	1.1	0.0	0.0	87	0	2	0	0	1023	25	0	0	0	997
190+50	50	56.5	0.0	0.0	0.0	0.0	96	0	1	0	0	1119	26	0	0	0	1093
191+00	50	52.8	0.0	0.0	0.0	0.0	101	0	0	0	0	1220	26	0	0	0	1194
191+17	17	59.6	0.0	0.0	0.0	0.0	35	0	0	0	0	1256	26	0	0	0	1229
191+50	33	50.1	0.0	0.0	0.0	0.0	67	0	0	0	0	1323	26	0	0	0	1296
192+00	50	57.8	0.0	0.0	0.0	0.0	100	0	0	0	0	1423	26	0	0	0	1396
192+50	50	60.6	0.0	0.0	0.0	0.0	110	0	0	0	0	1532	26	0	0	0	1506
193+00	50	48.1	0.0	0.0	0.0	0.0	101	0	0	0	0	1633	26	0	0	0	1606
193+50	50	46.8	0.0	0.1	0.0	0.0	88	0	0	0	0	1721	27	0	0	0	1694
194+00	50	49.2	0.0	0.0	0.0	0.0	89	0	0	0	0	1810	27	0	0	0	1783
194+31	31	63.6	0.0	0.0	0.0	0.0	65	0	0	0	0	1874	27	0	0	0	1848
194+50	19	50.3	0.0	0.0	0.0	0.0	40	0	0	0	0	1914	27	0	0	0	1888
195+00	50	50.8	0.0	0.0	0.0	0.0	94	0	0	0	0	2008	27	0	0	0	1981
195+50	50	56.8	0.0	0.1	0.0	0.0	100	0	0	0	0	2108	27	0	0	0	2081
195+72	22	56.8	0.0	0.0	0.0	0.0	46	0	0	0	0	2154	27	0	0	0	2127
196+00	28	49.8	0.0	0.0	0.0	0.0	55	0	0	0	0	2209	27	0	0	0	2182
196+50	50	47.9	0.0	0.0	0.0	0.0	90	0	0	0	0	2300	27	0	0	0	2273
197+00	50	48.2	0.0	0.0	0.0	0.0	90	0	0	0	0	2299	27	0	0	0	2272
197+50	50	55.7	0.0	0.0	0.0	0.0	94	0	0	0	0	2393	27	0	0	0	2367
197+54	4	55.7	0.0	0.0	0.0	0.0	8	0	0	0	0	2217	27	0	0	0	2190

STAGE 5 (STA 10+26 - STA 12+44 LT): OLD MIDDLETON ROAD

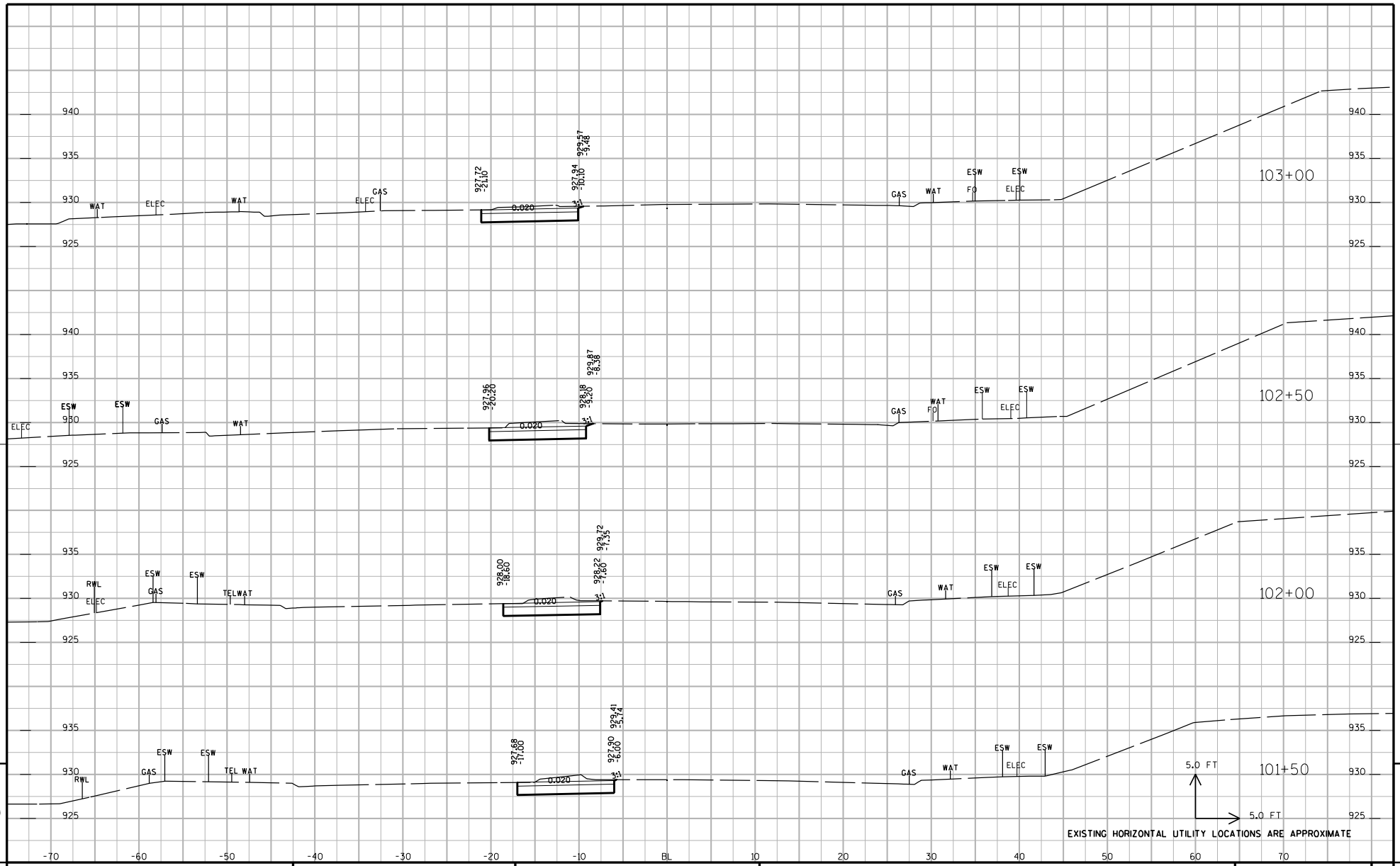
STATION	Distance	Area					Incremental Volume (Unadjusted)					Cumulative Vol (CY)					Mass Ordinate
		Cut (SF)	Salvaged/Unusable Pavement Material (SF)	Fill (SF)	Marsh Exc (SF)	EBS (SF)	Cut Note 1 (CY)	Salvaged/Unusable Pavement Material Note 2 (CY)	Fill Note 3 (CY)	Marsh Exc (CY)	EBS (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Reduced Marsh in Fill 0.60 Note 5	Reduced EBS In Fill 0.80 Note 6	Note 7
10+26		0.0	0.0	0.0	0.0	0.0											
10+50	24	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0
11+00	50	33.7	0.0	0.1	0.0	0.0	21	0	0	0	0	21	0	0	0	0	21
11+50	50	28.9	0.0	0.1	0.0	0.0	58	0	0	0	0	79	0	0	0	0	79
12+00	50	30.8	0.0	0.4	0.0	0.0	55	0	0	0	0	134	1	0	0	0	133
12+44	44	30.8	0.0	0.4	0.0	0.0	50	0	1	0	0	184	1	0	0	0	183
						Column totals	184	0	1	0	0						



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 1)	SHEET NO: 768 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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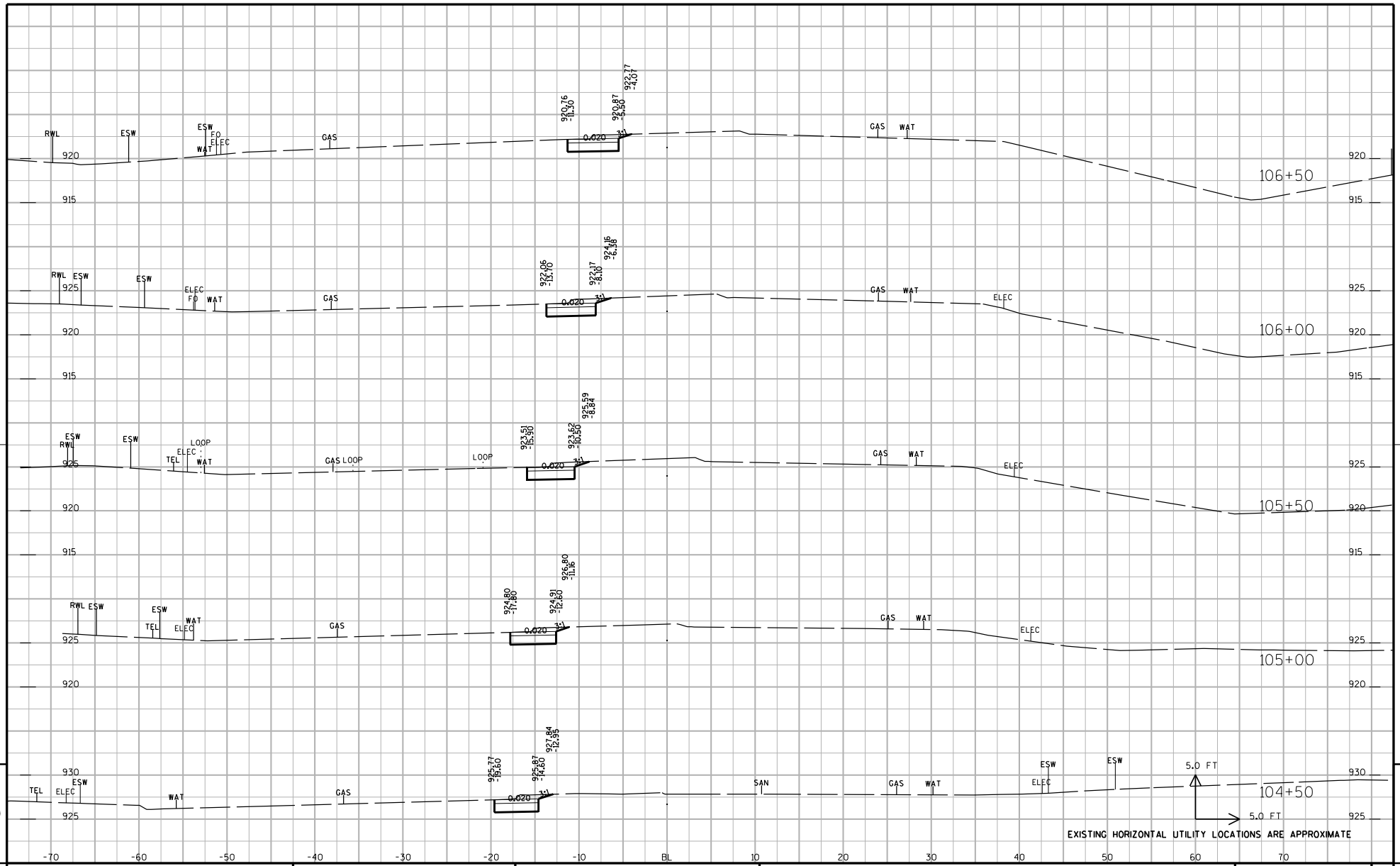
9

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 1)	SHEET NO: 769	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

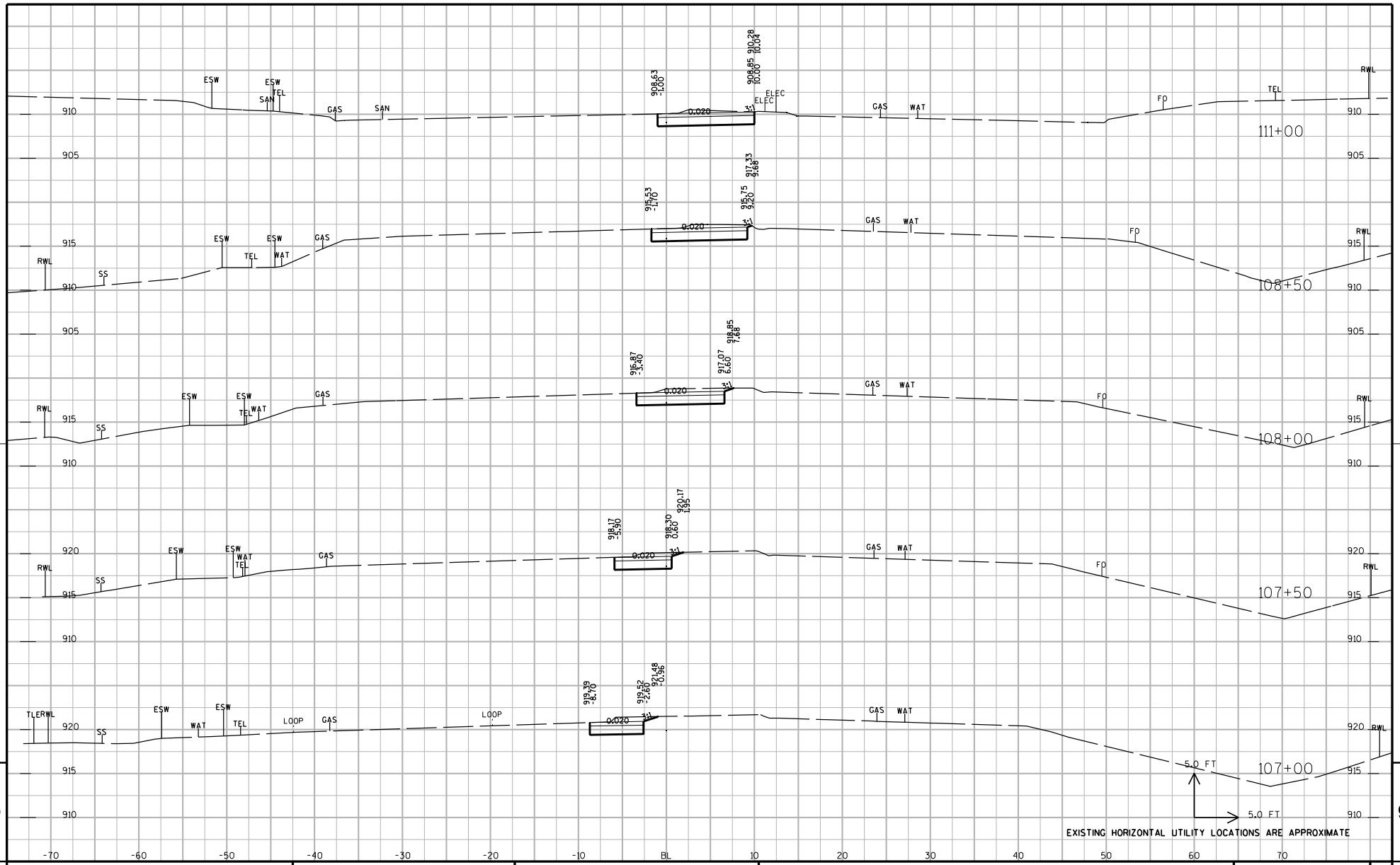
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 1)	SHEET NO: 770 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

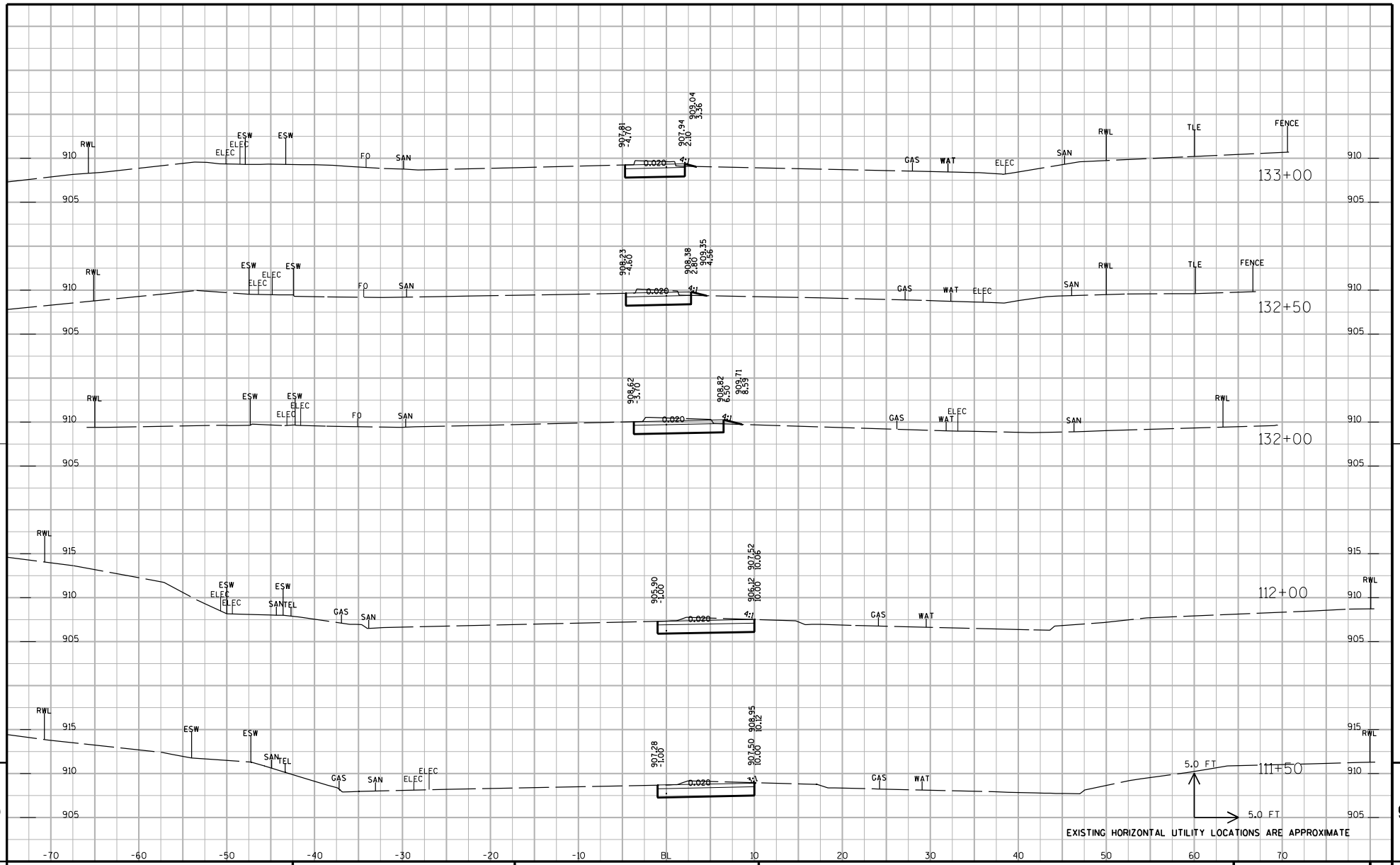
WISDOT/CADDS SHEET 21



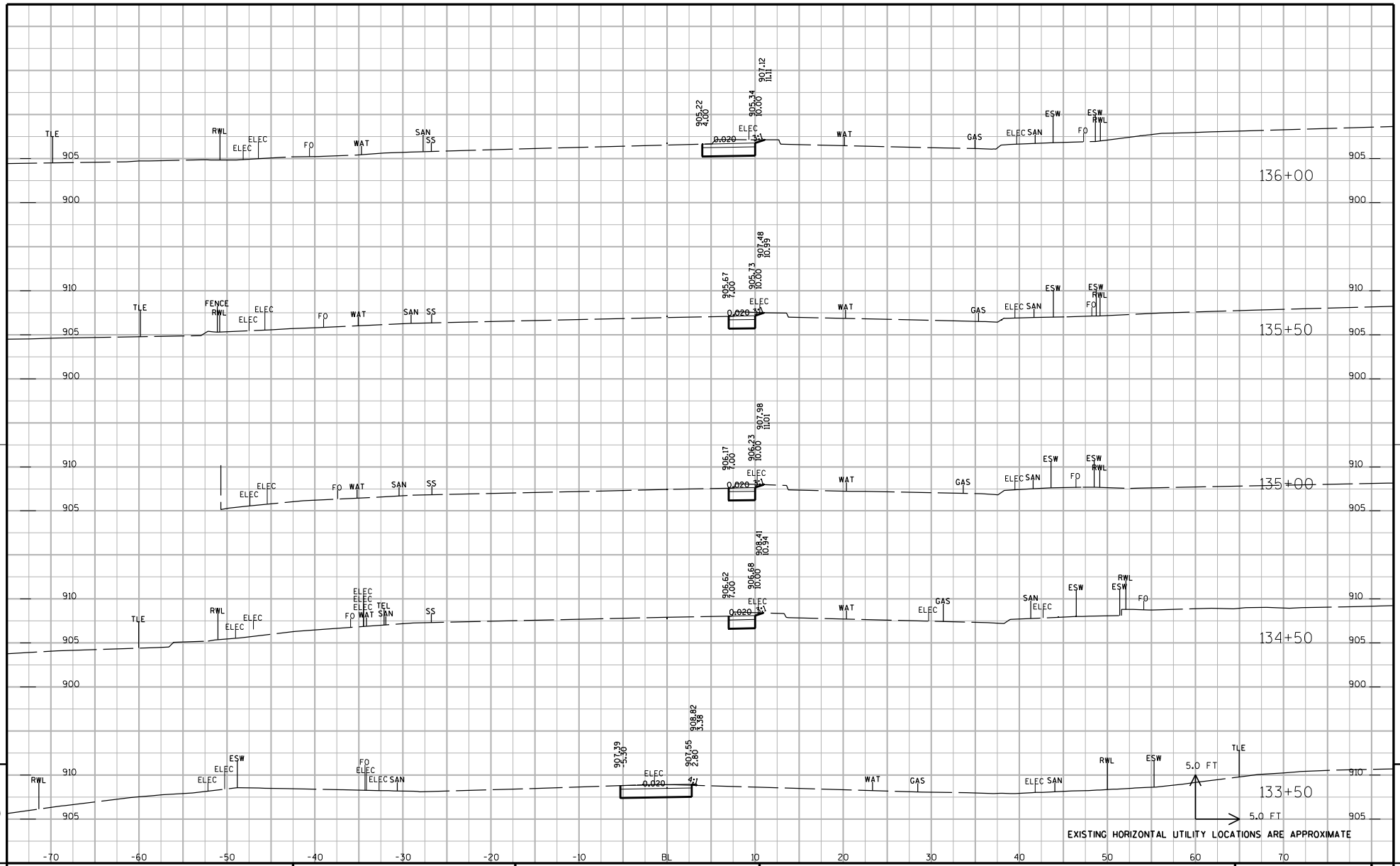
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 1)	SHEET NO: 771 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 1)	SHEET NO: 772 E



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 1)	SHEET NO: 773	E

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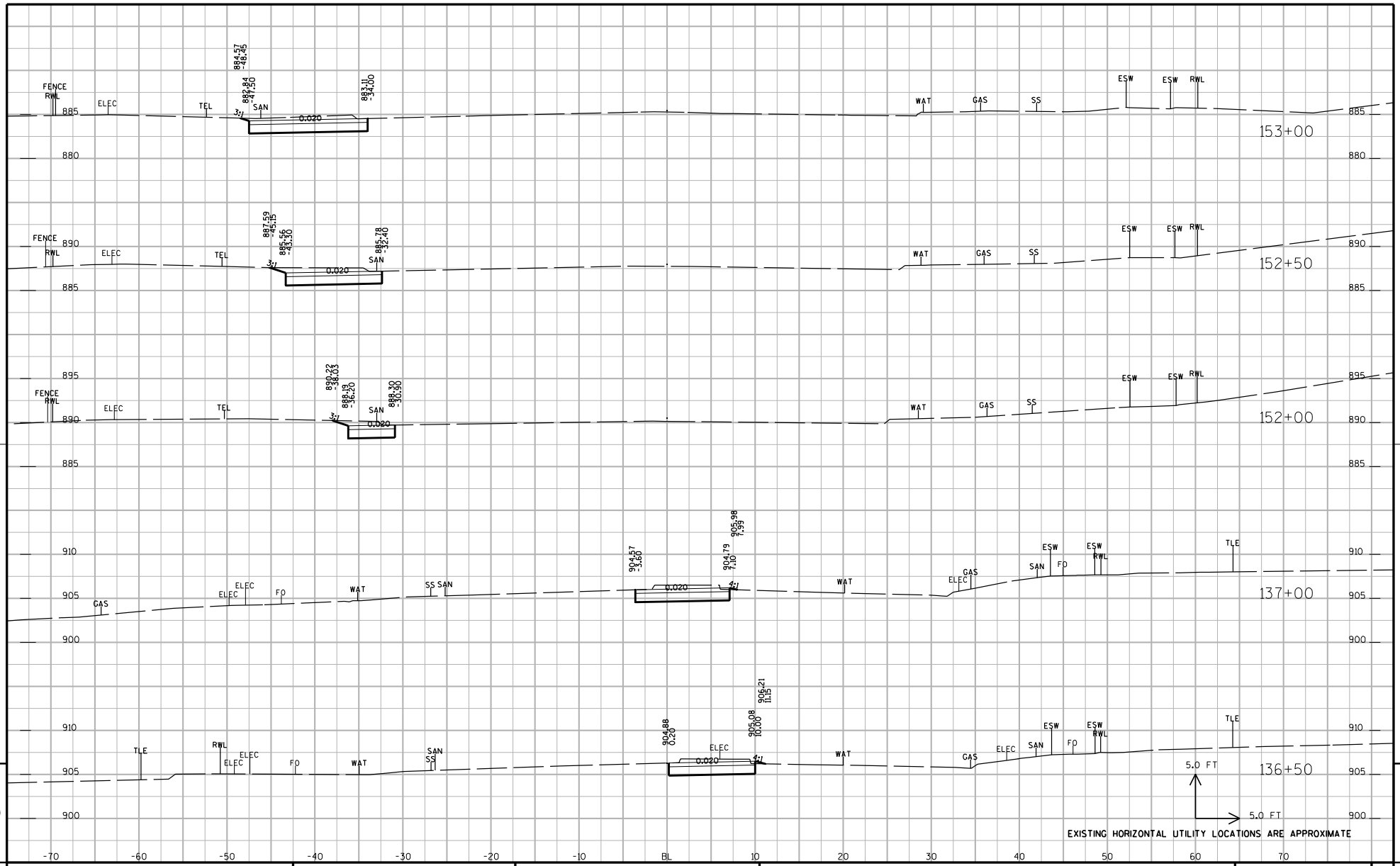
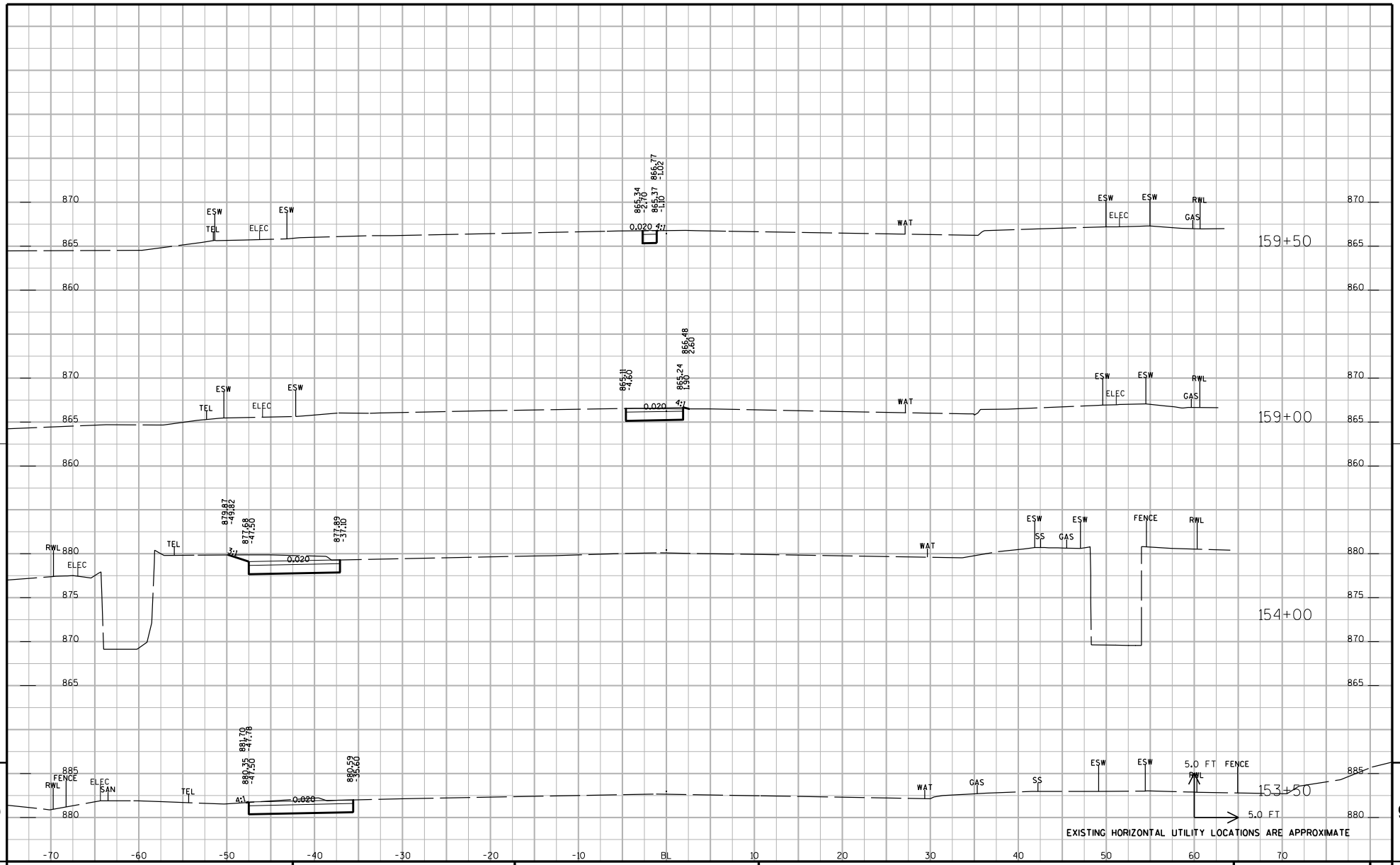
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 1)	SHEET NO: 774 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

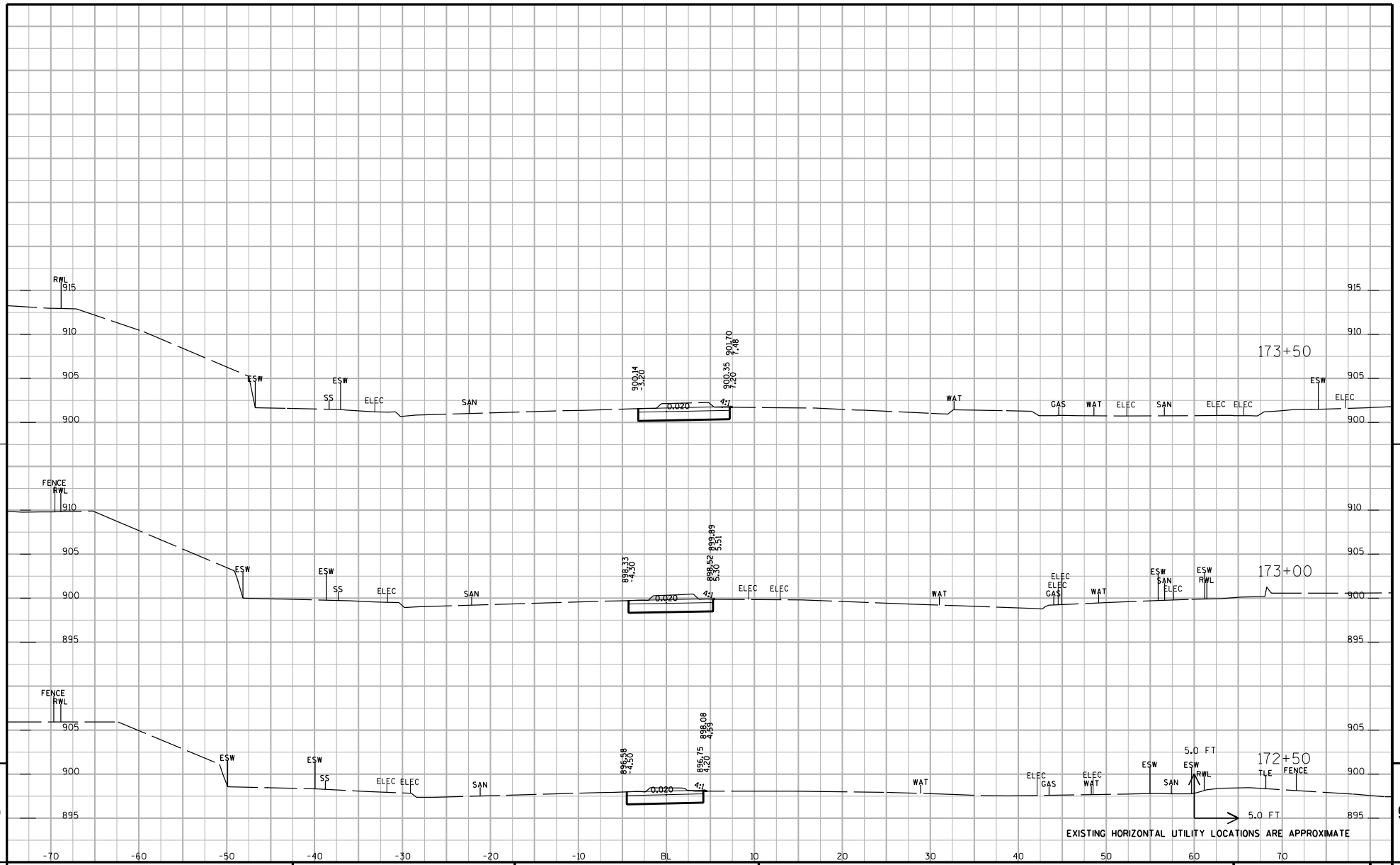
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 1)	SHEET NO: 775 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

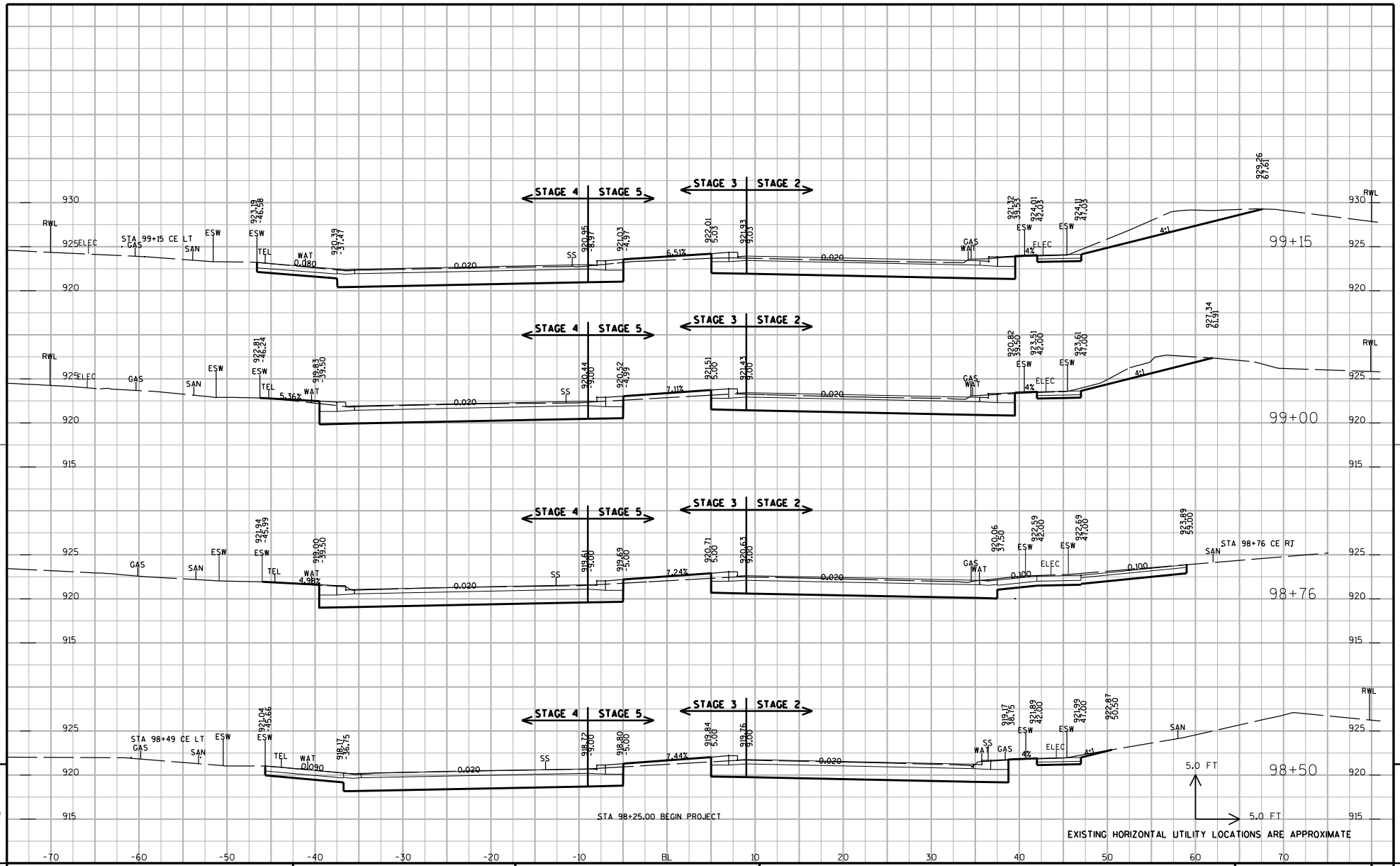
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 1)	SHEET NO: 776 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

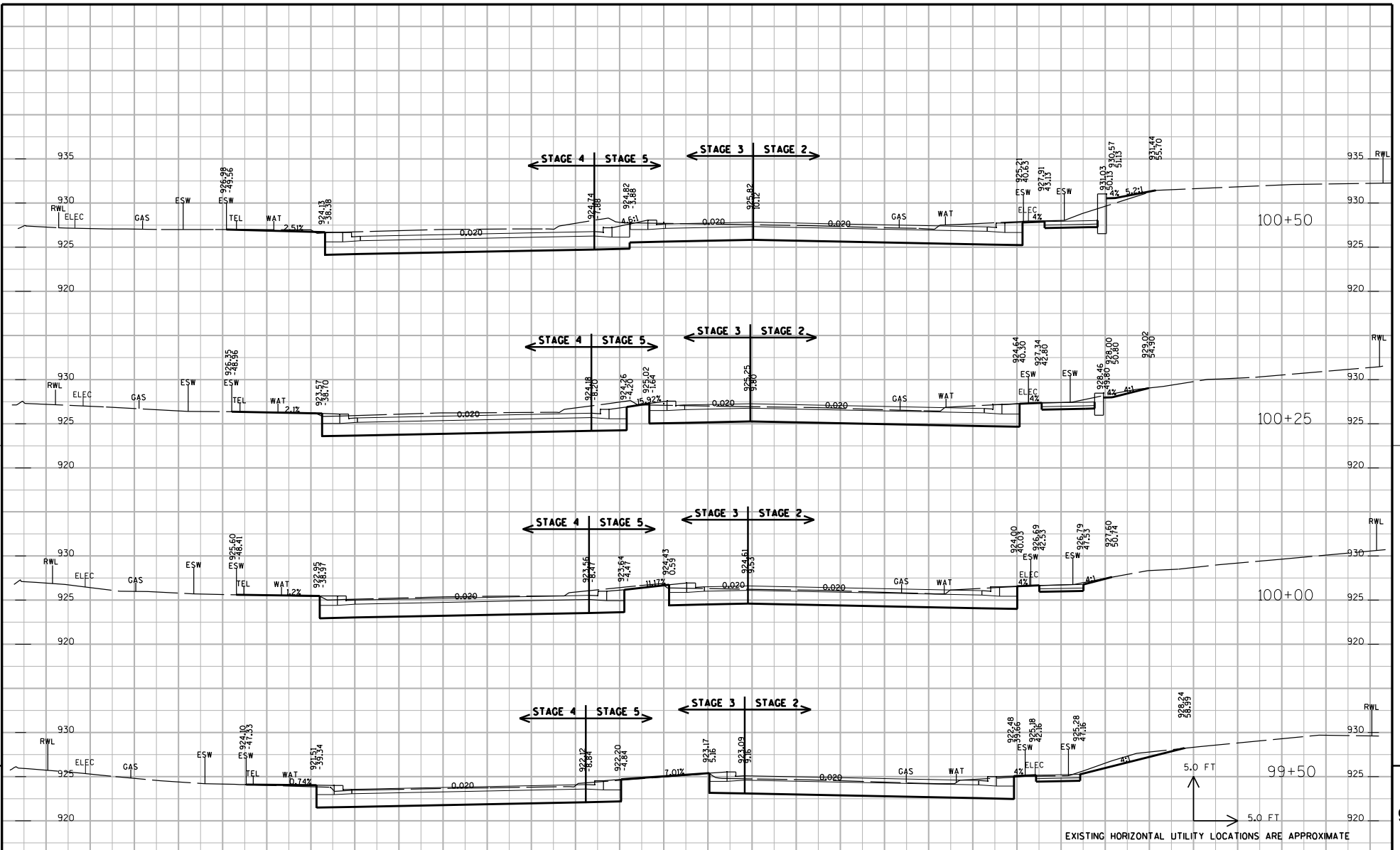
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 777 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 778 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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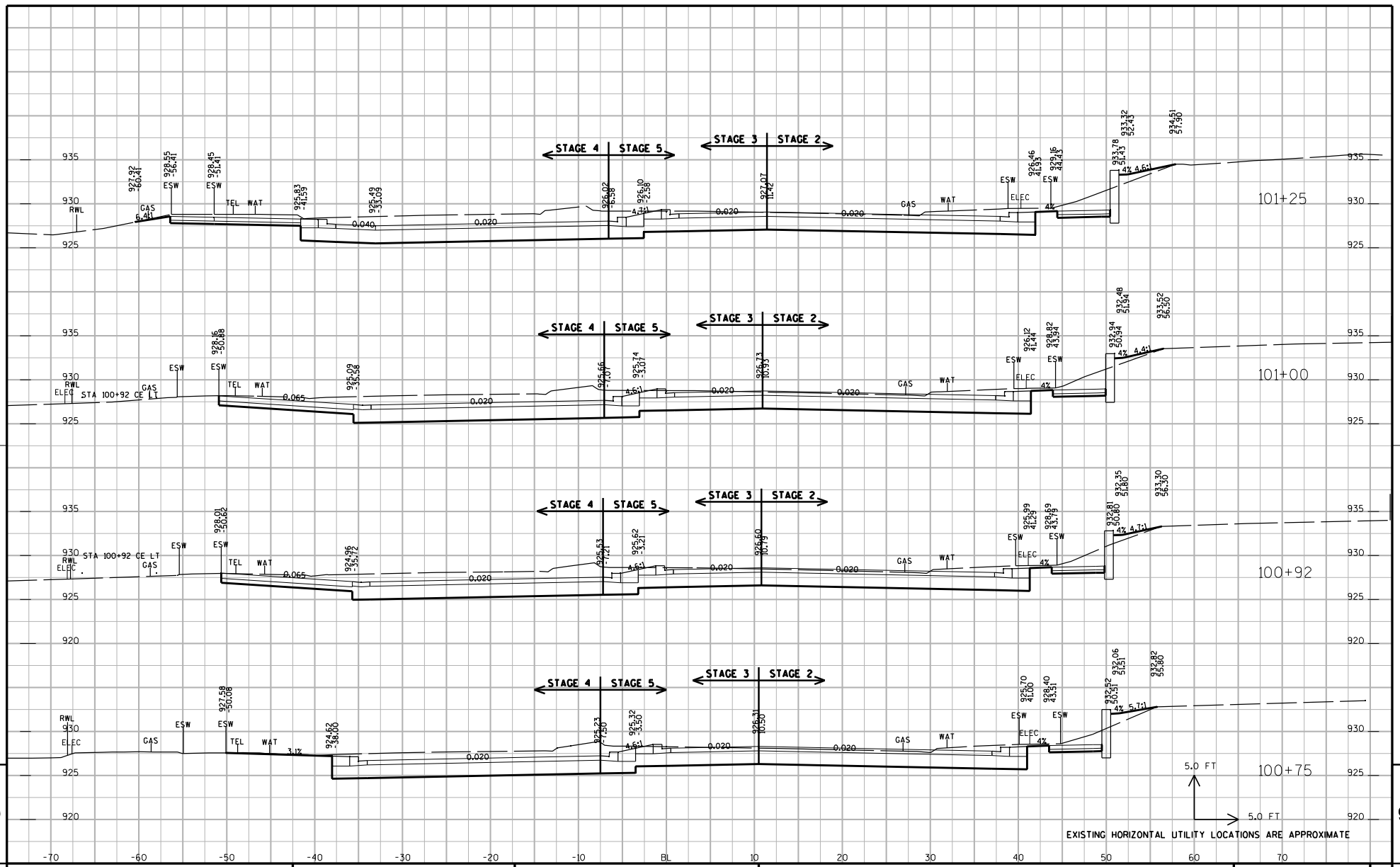

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 779 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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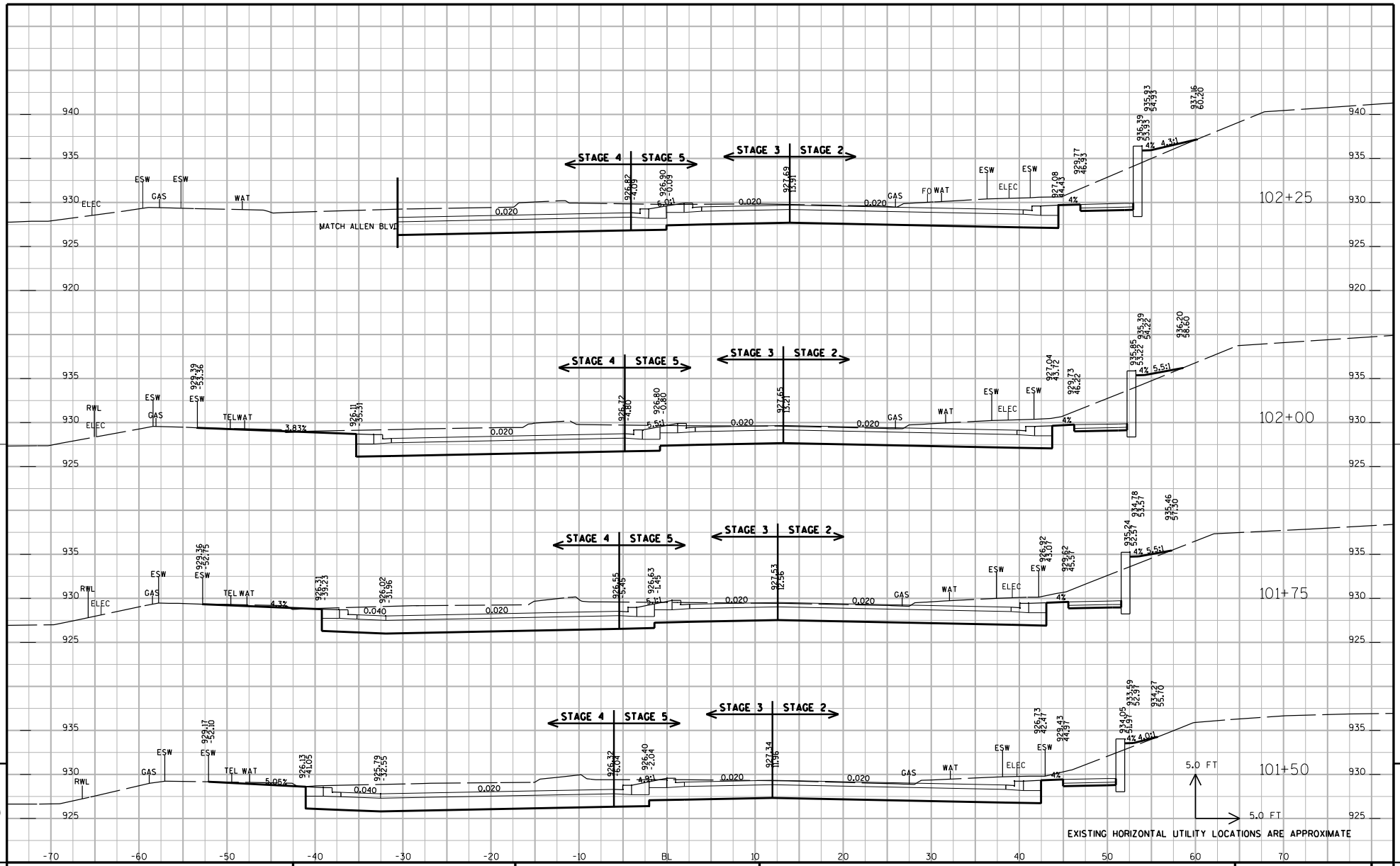

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 780 E

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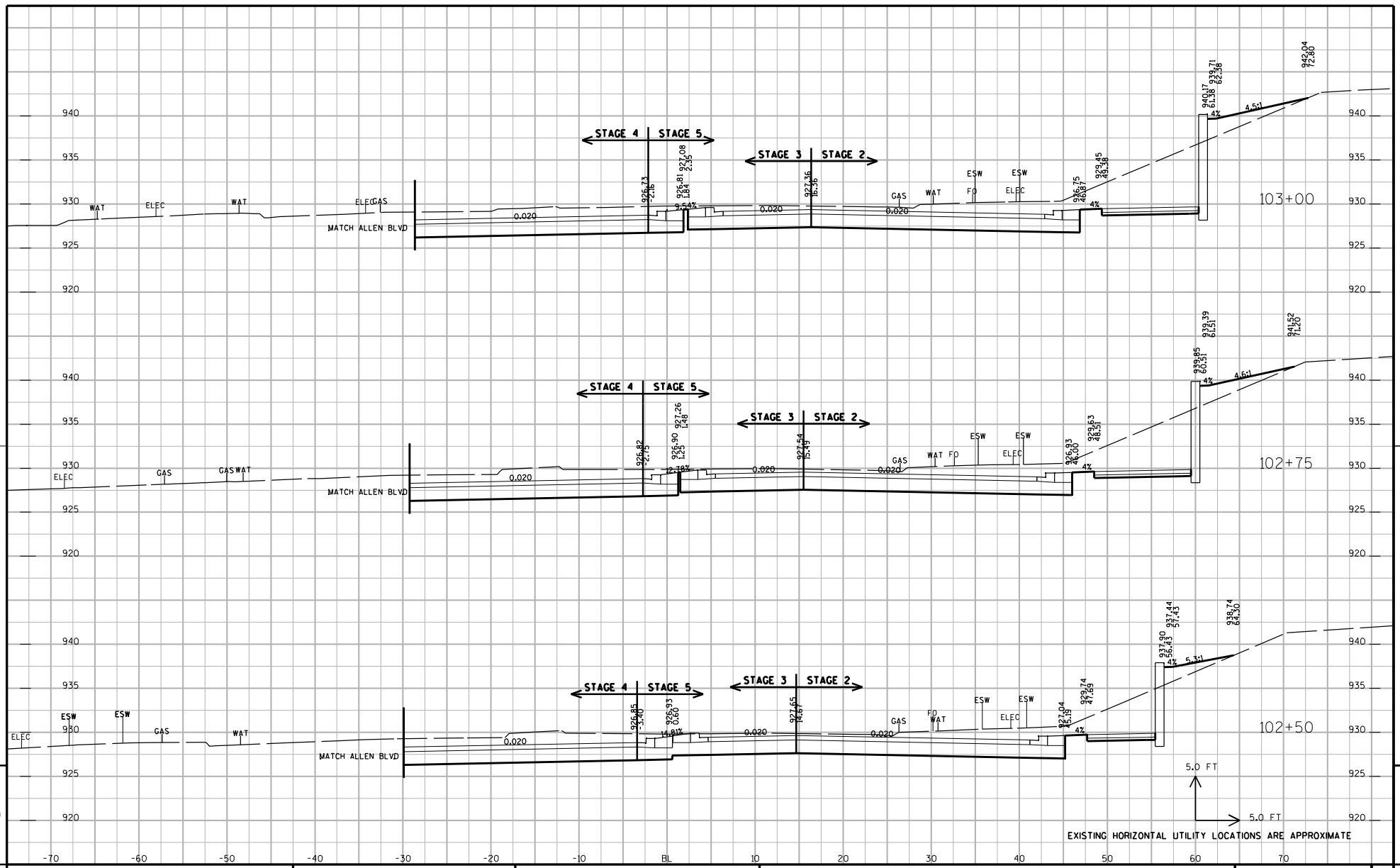
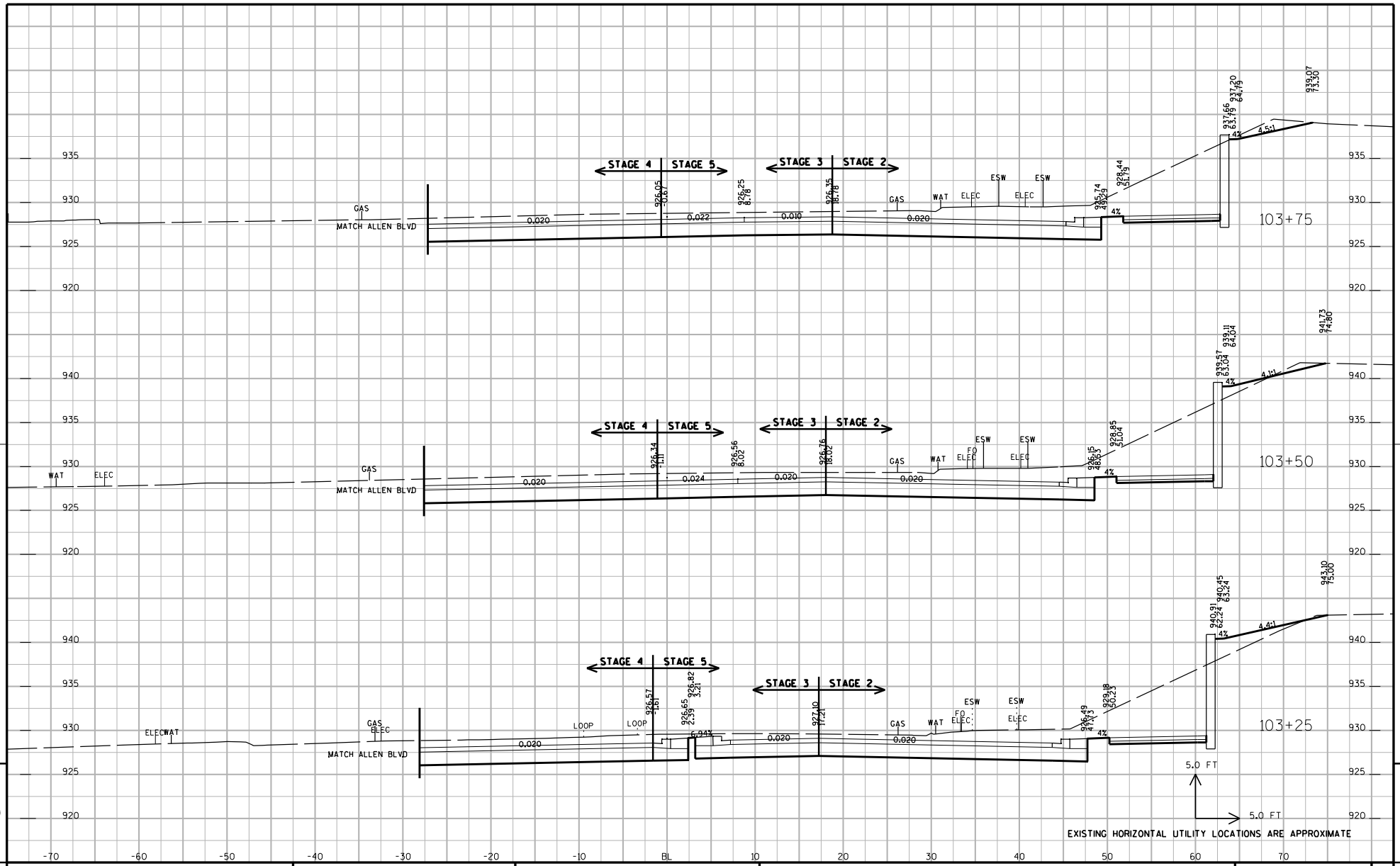
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 781 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

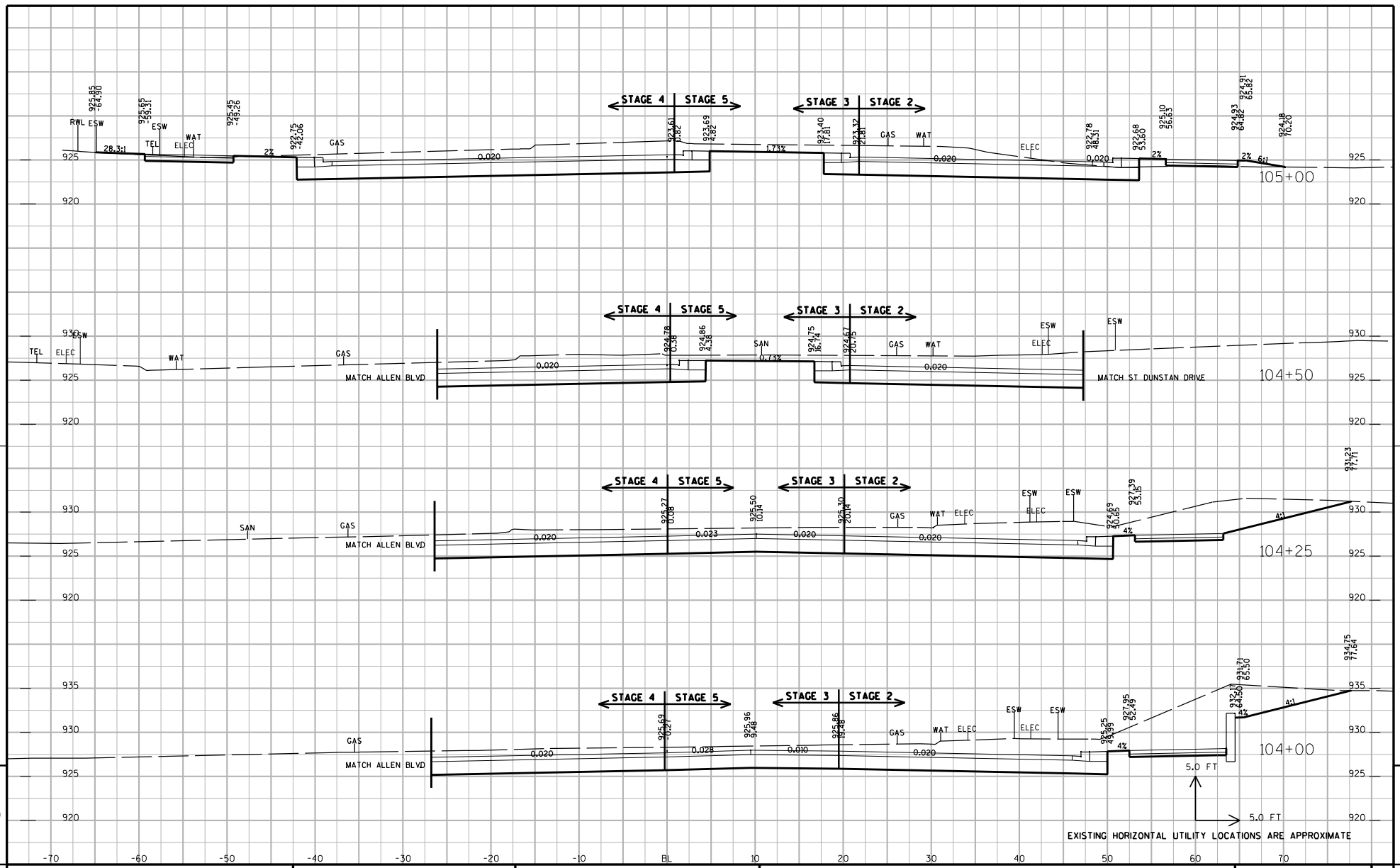
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 782 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

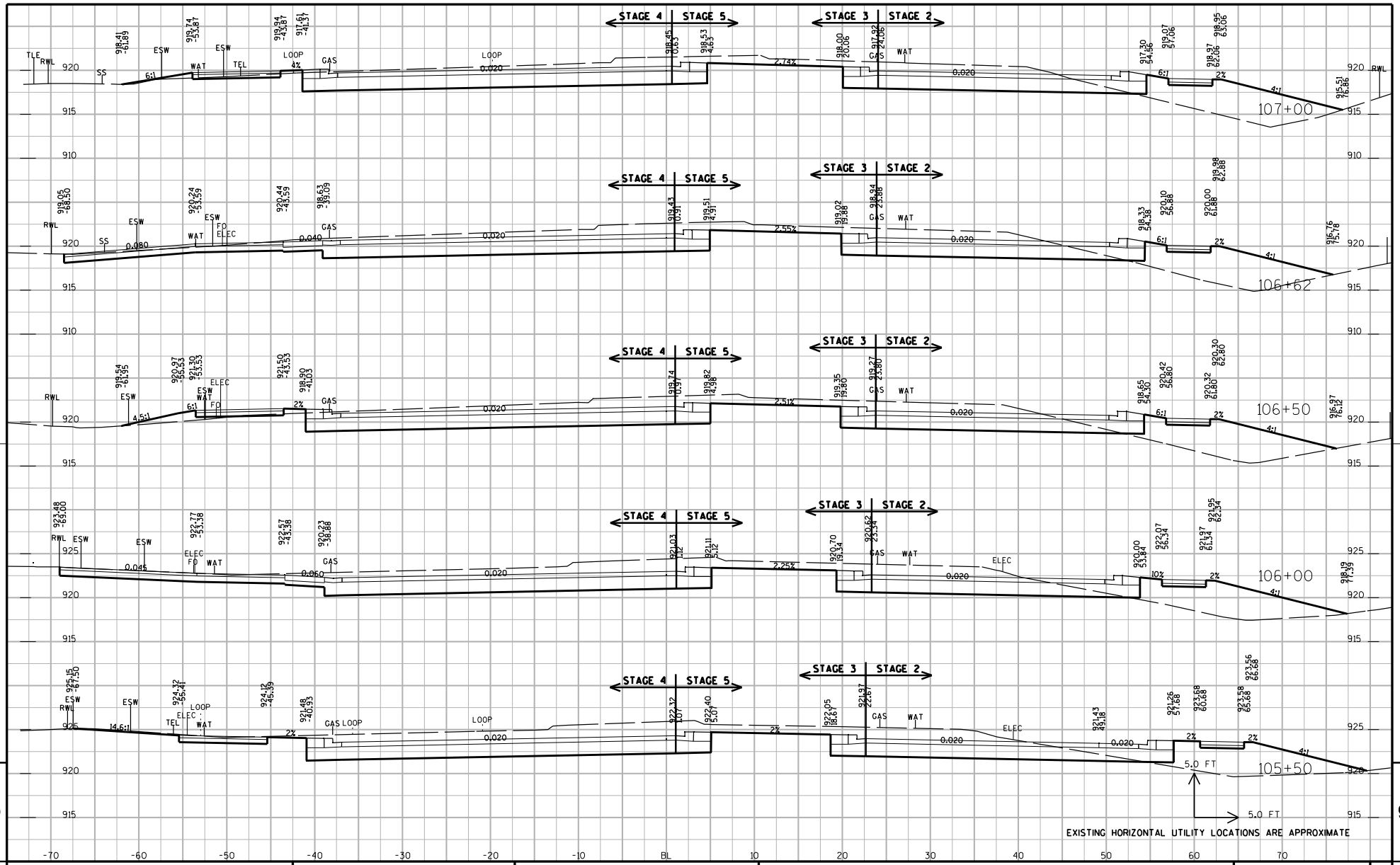
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 783 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

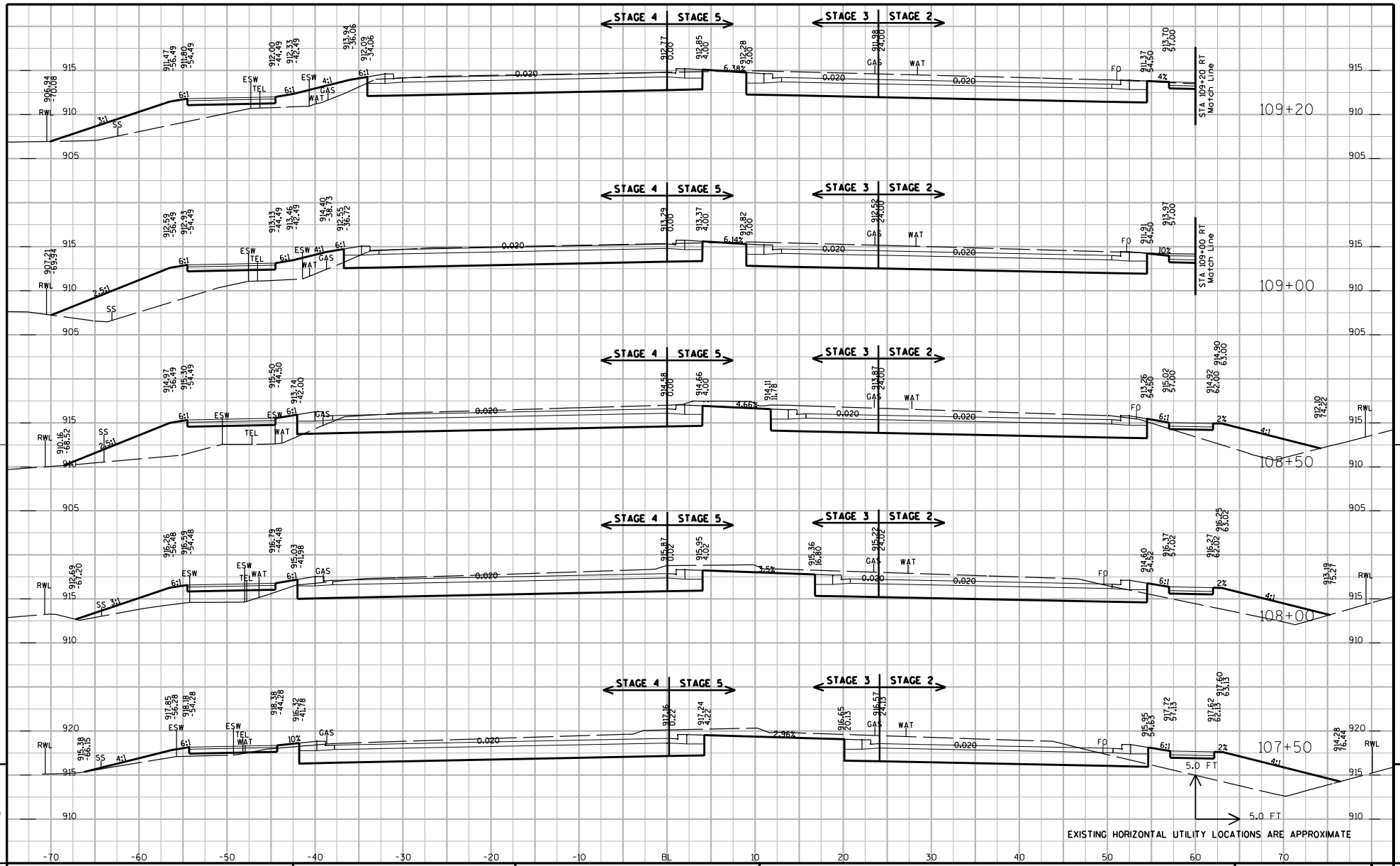
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 784

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

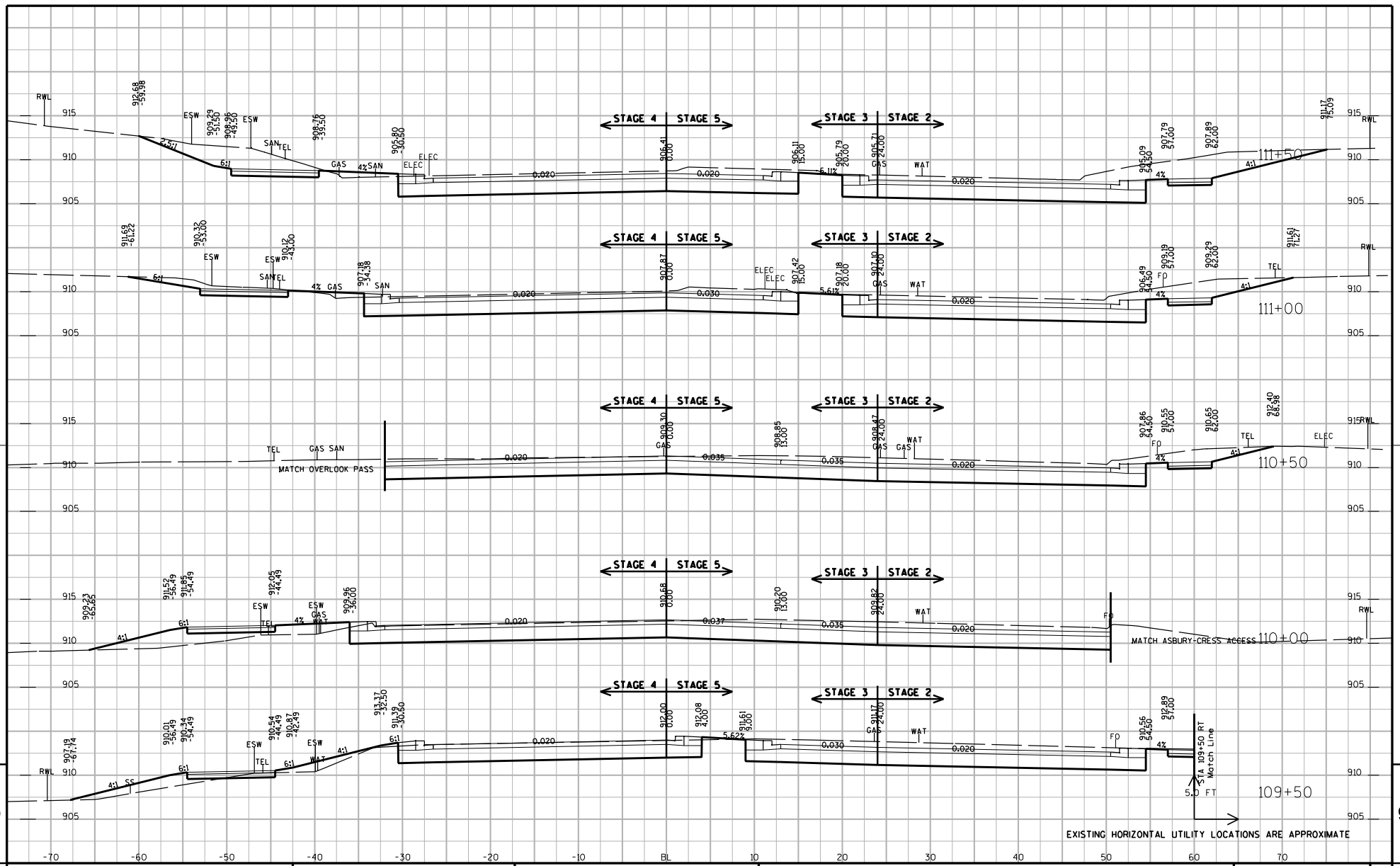
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4, & 5)	SHEET NO: 785 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

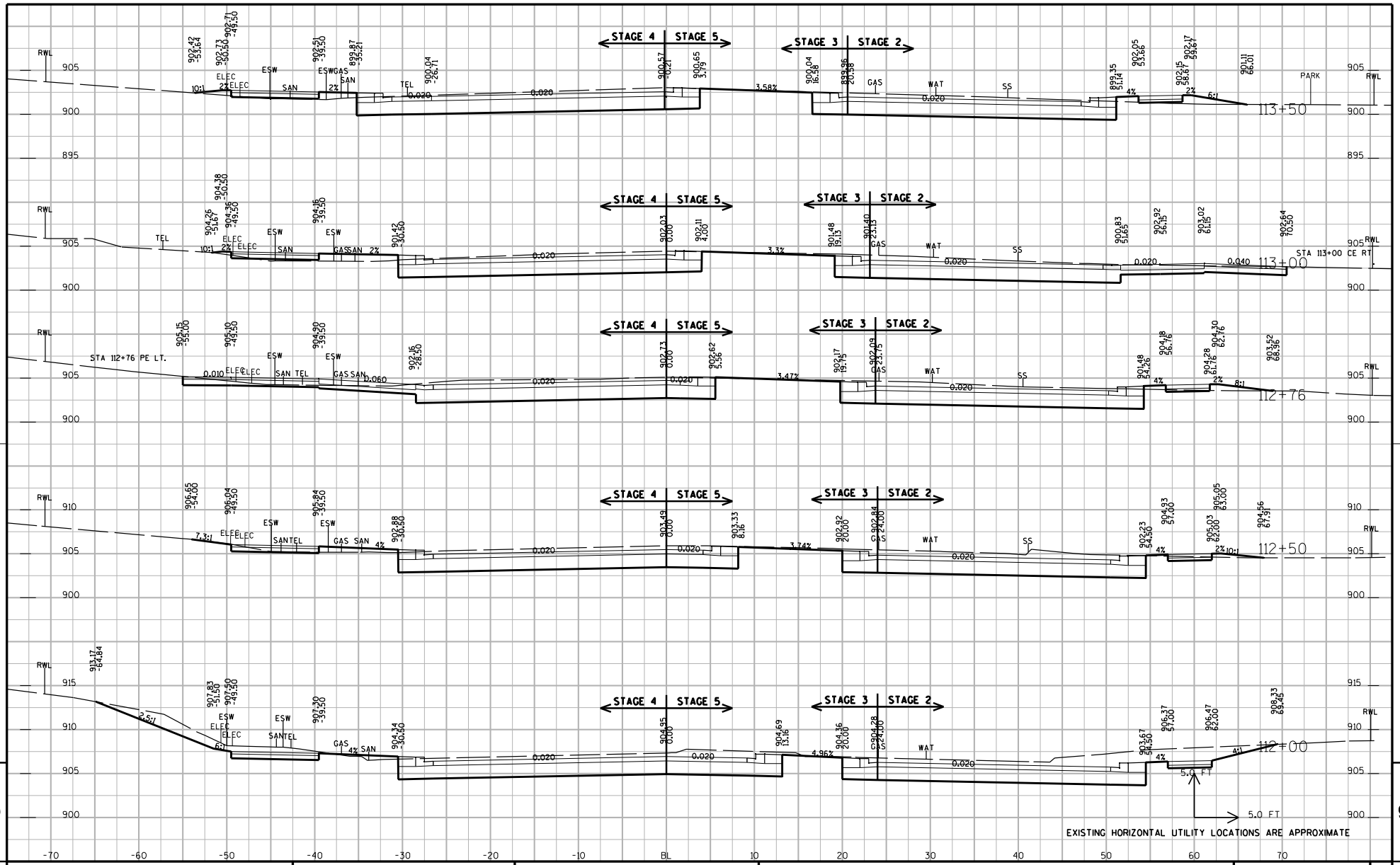
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 786 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 787 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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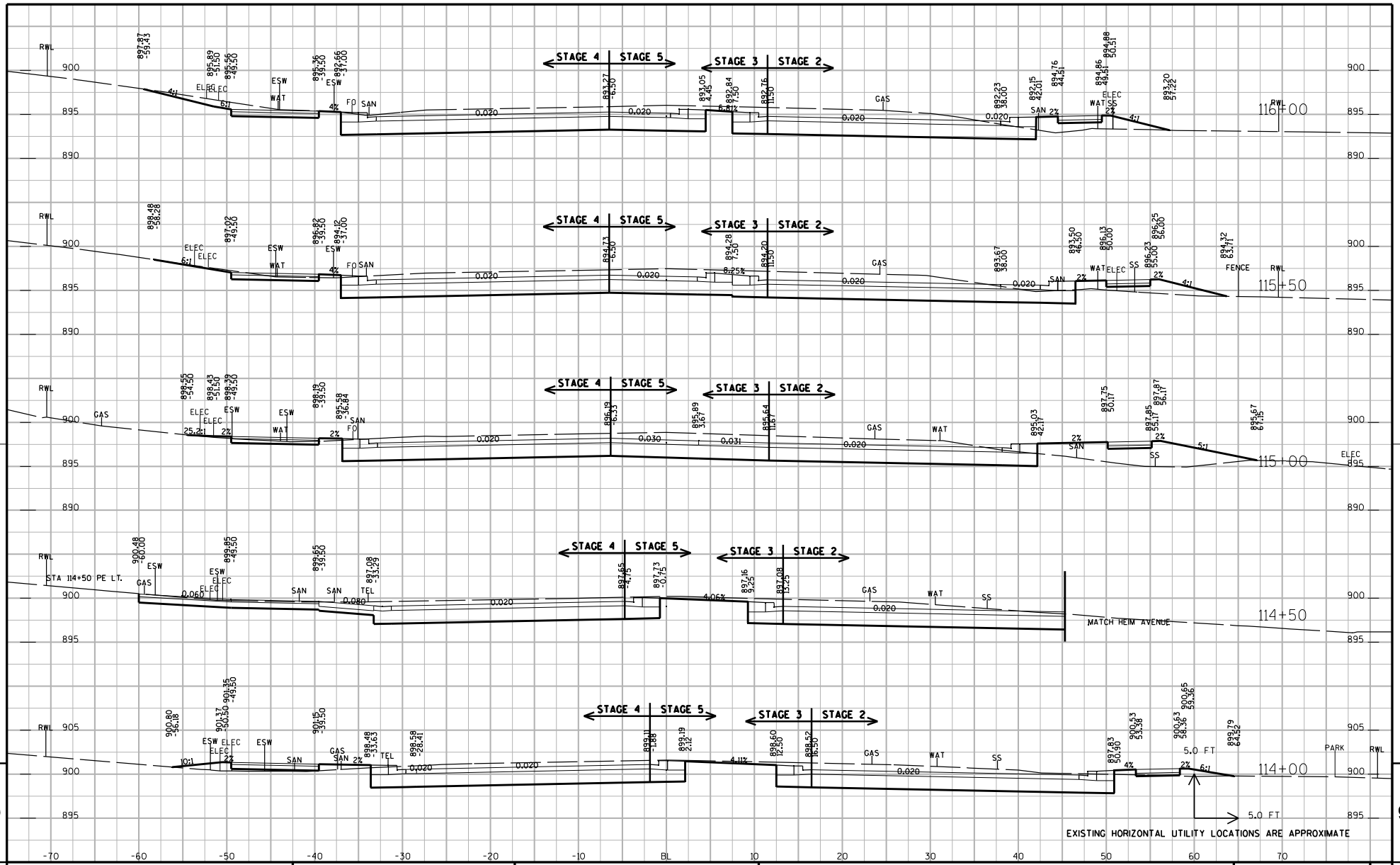

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 788 E

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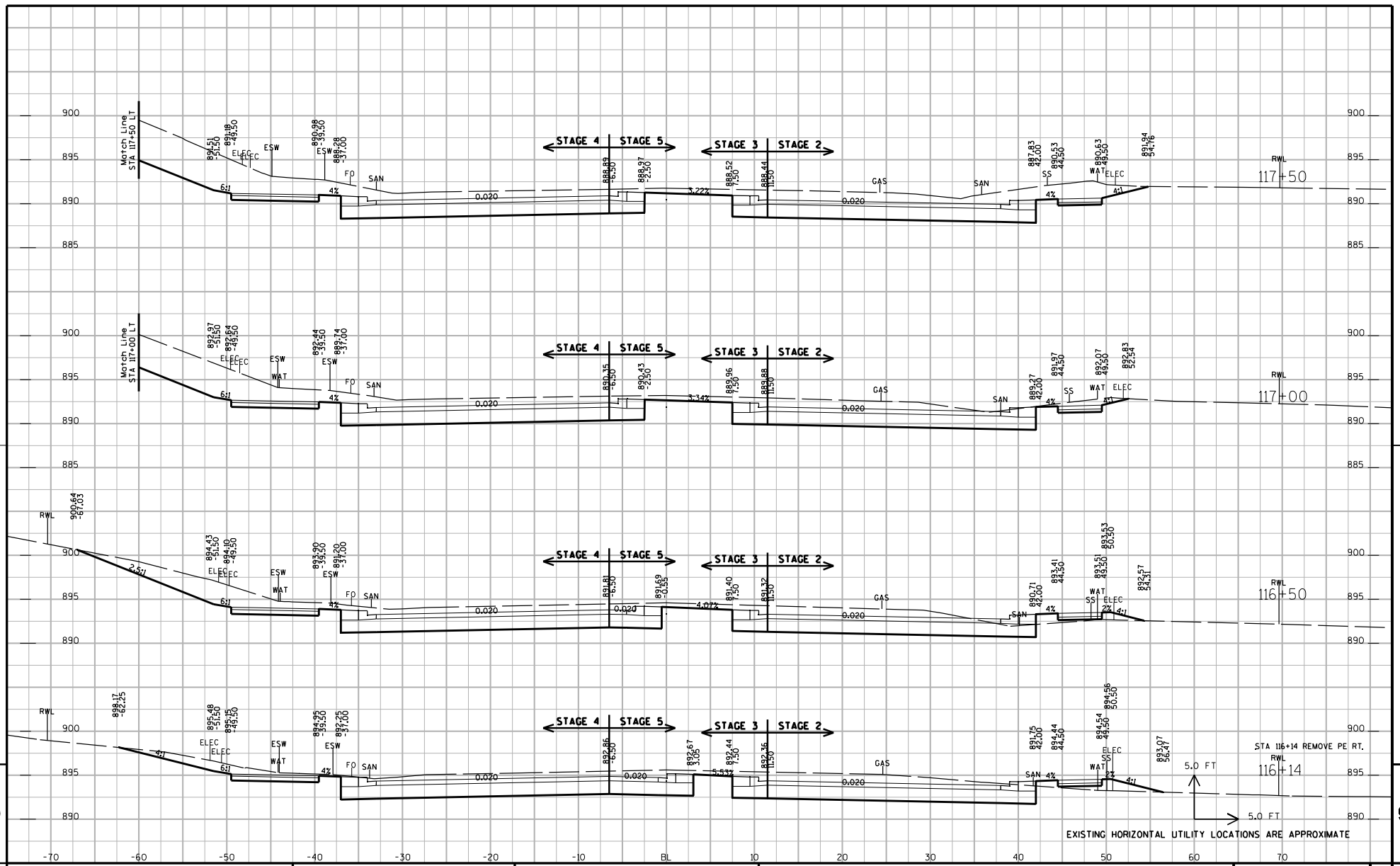

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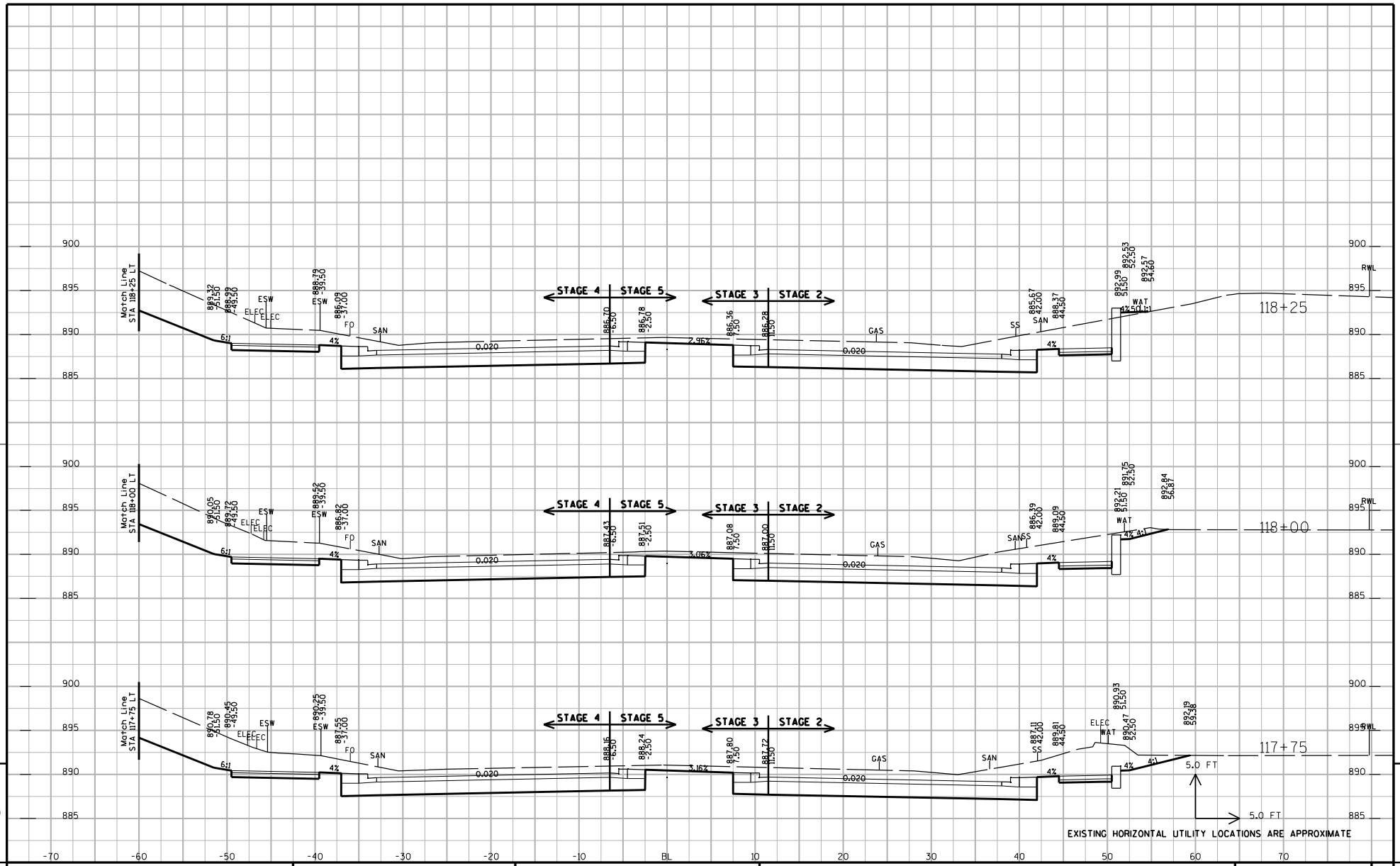

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 790 E

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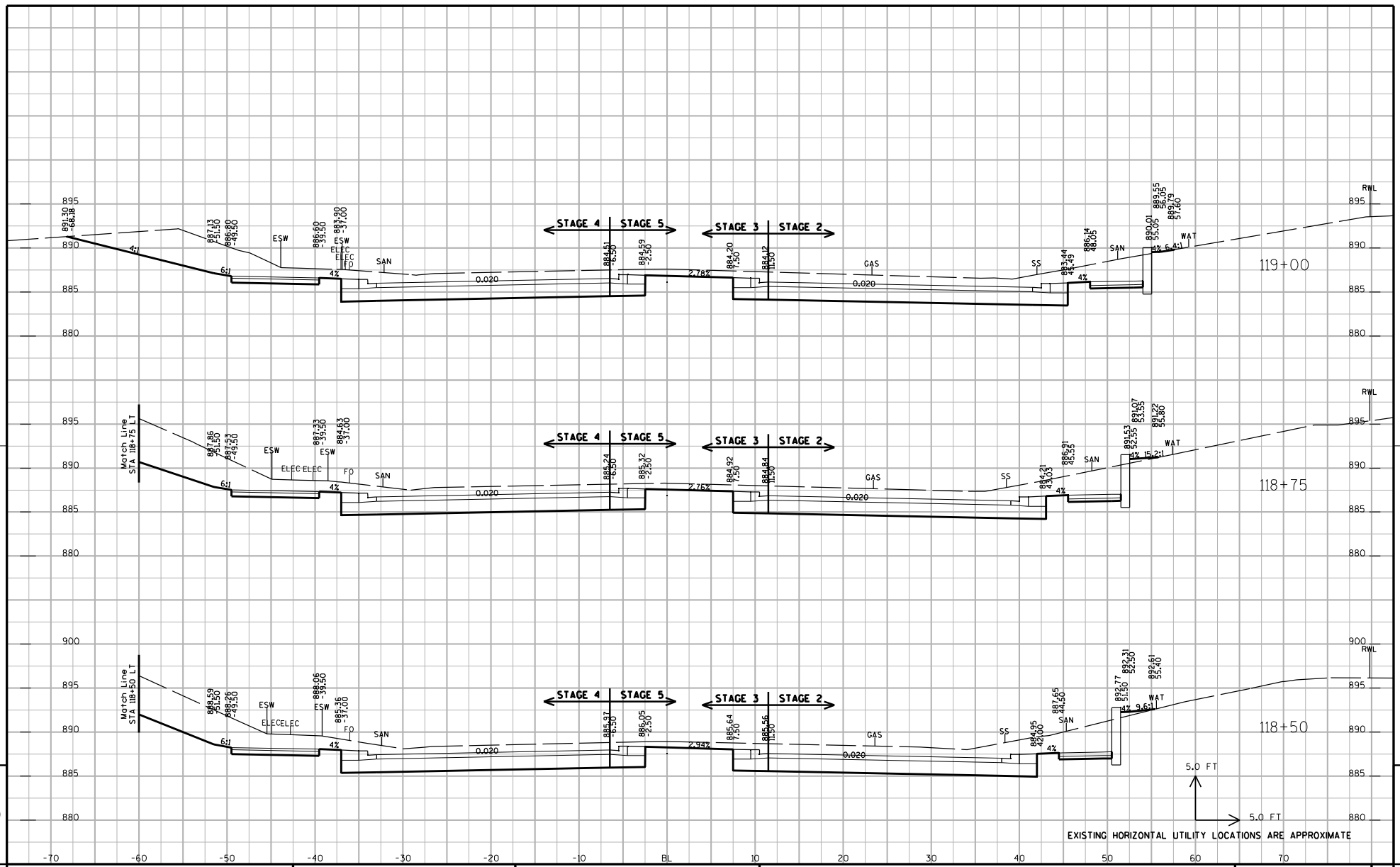

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 791 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 792 E

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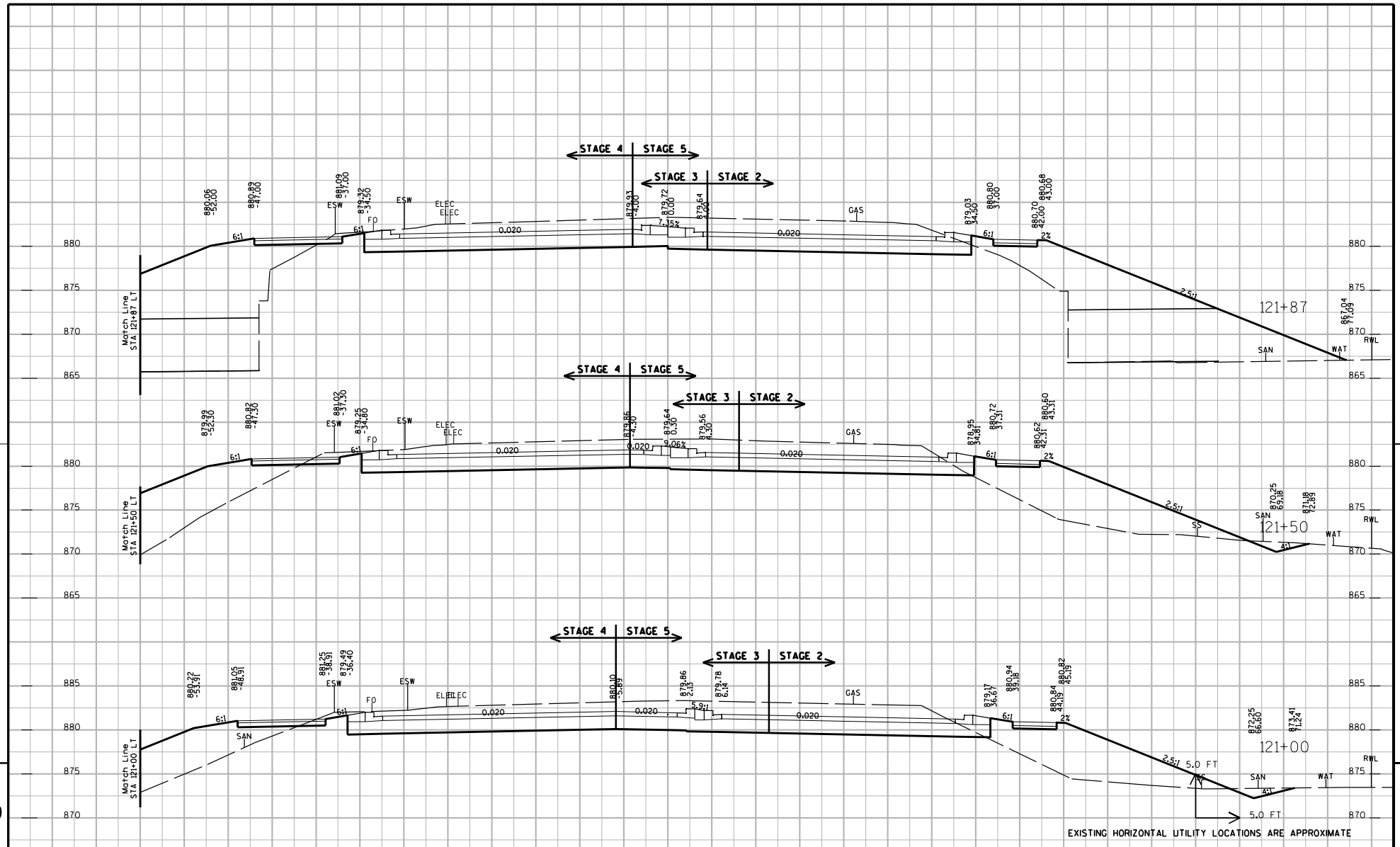
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 793 E

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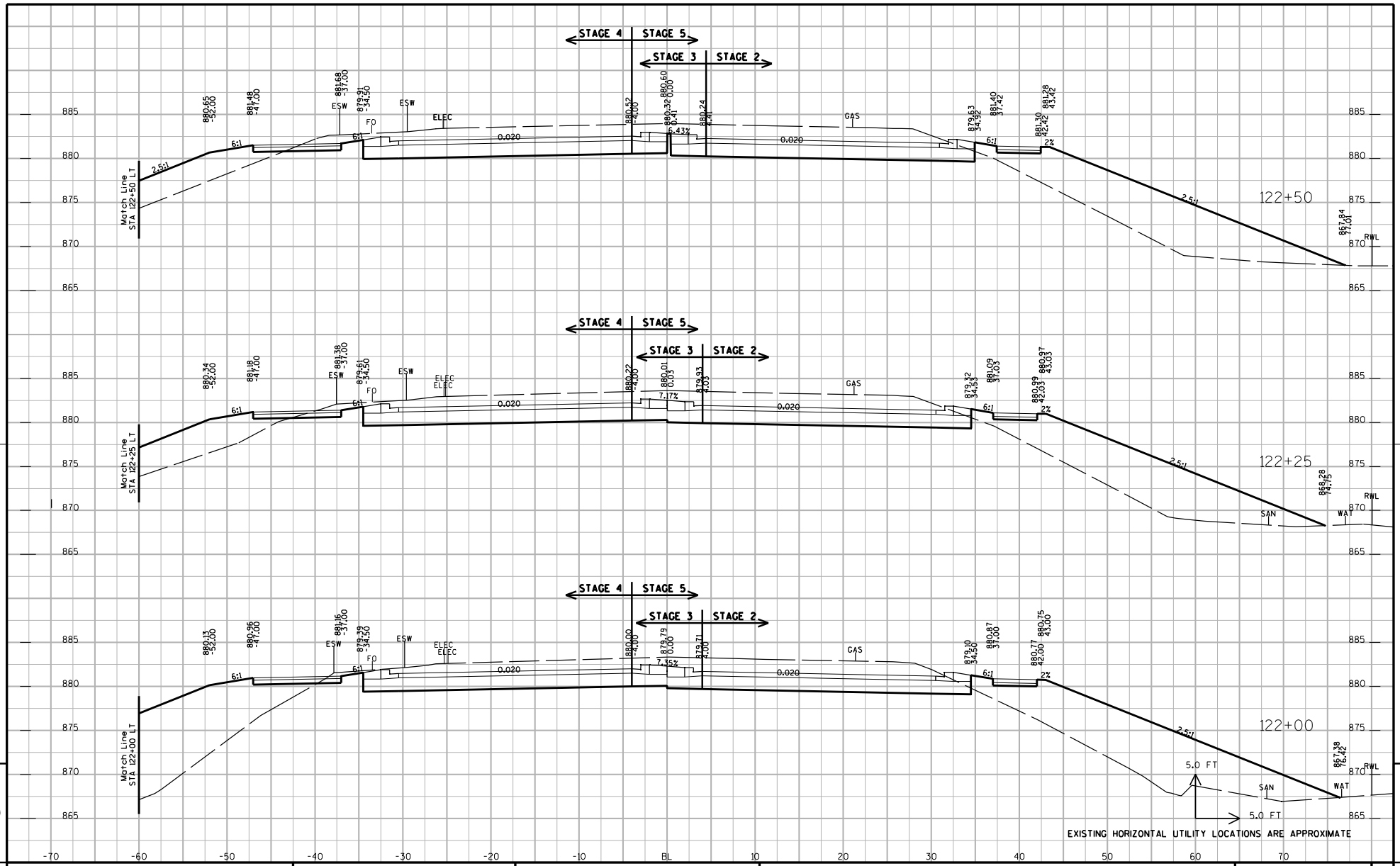
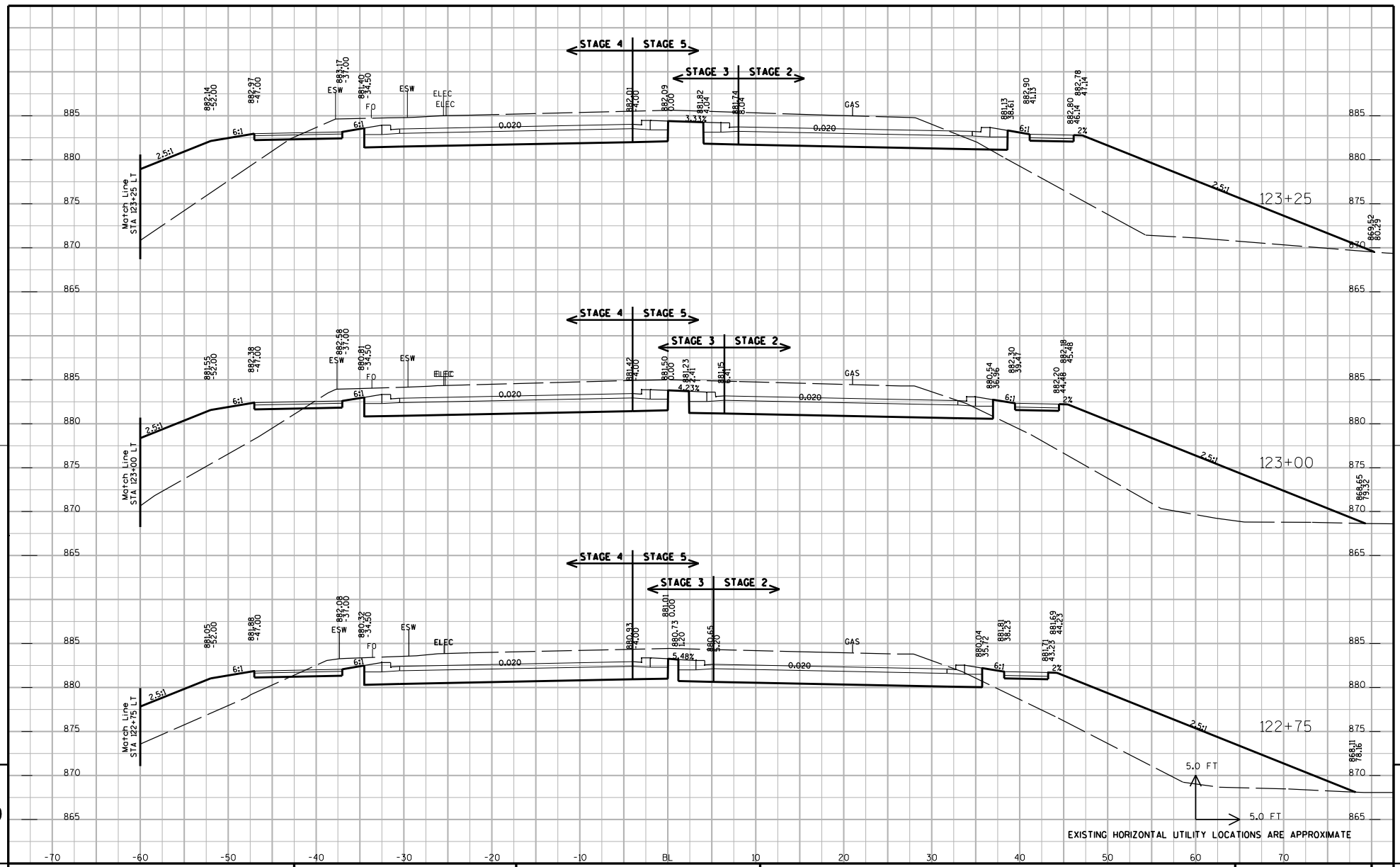
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 794

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

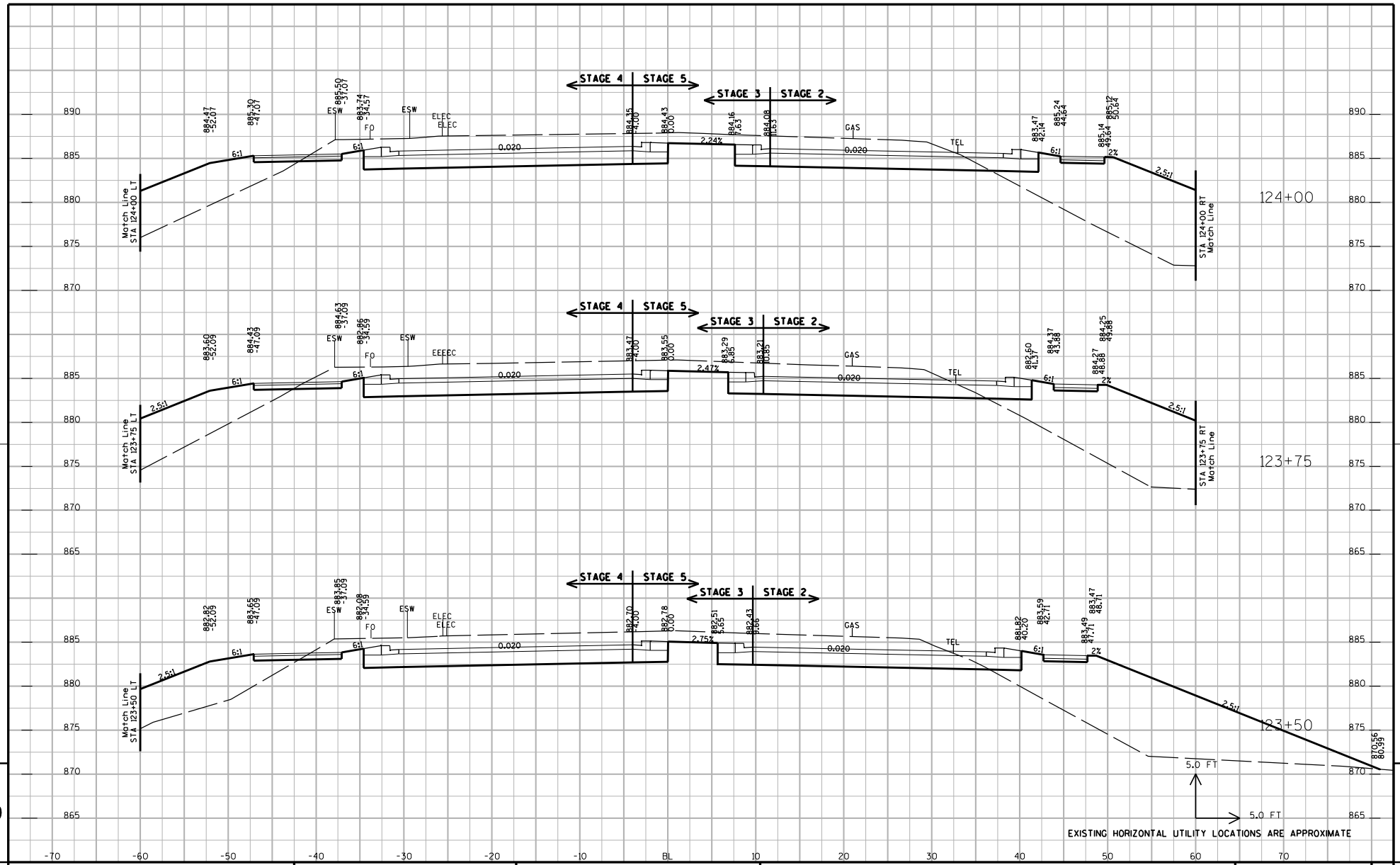
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 795 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 796 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 797 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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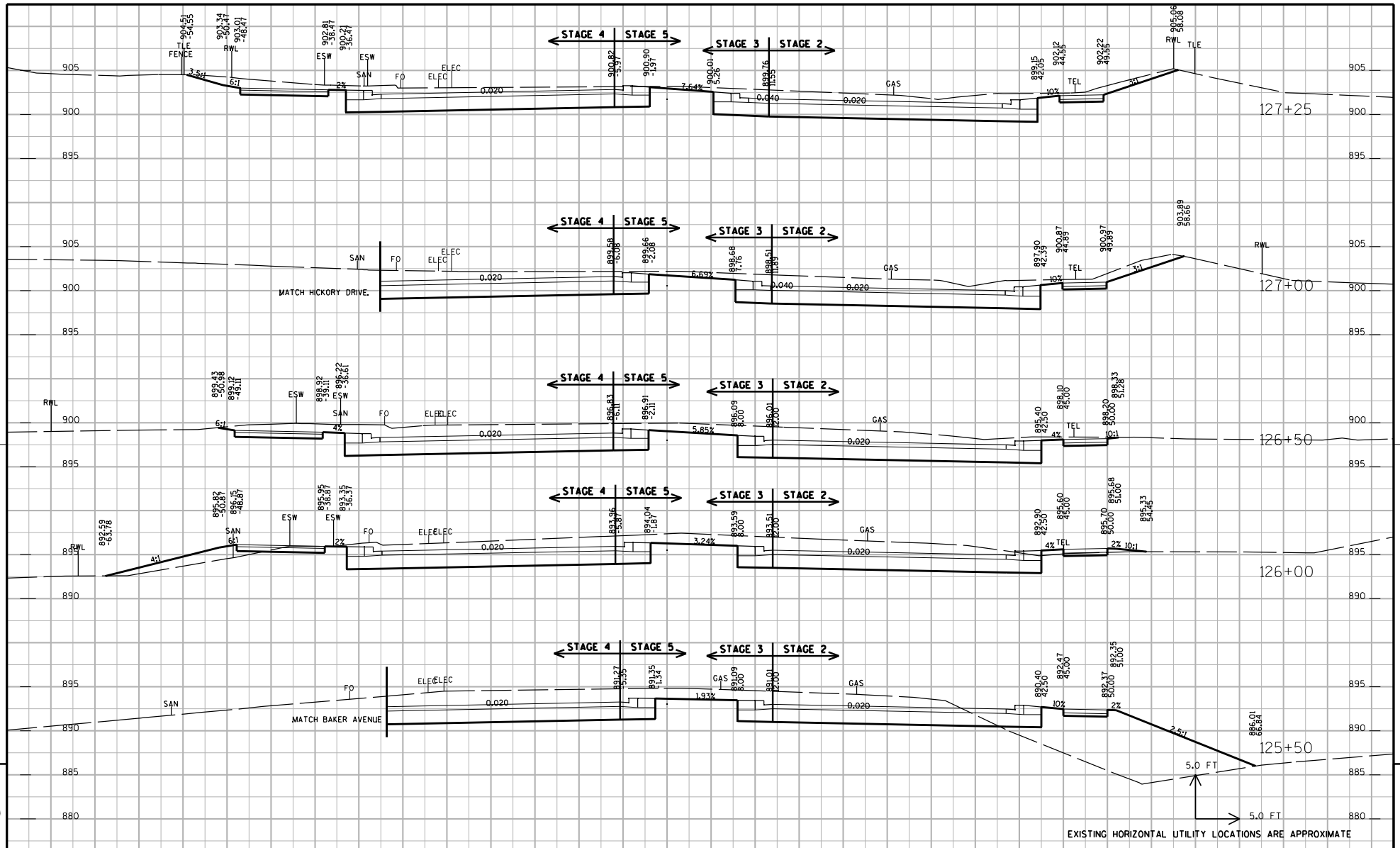

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 798 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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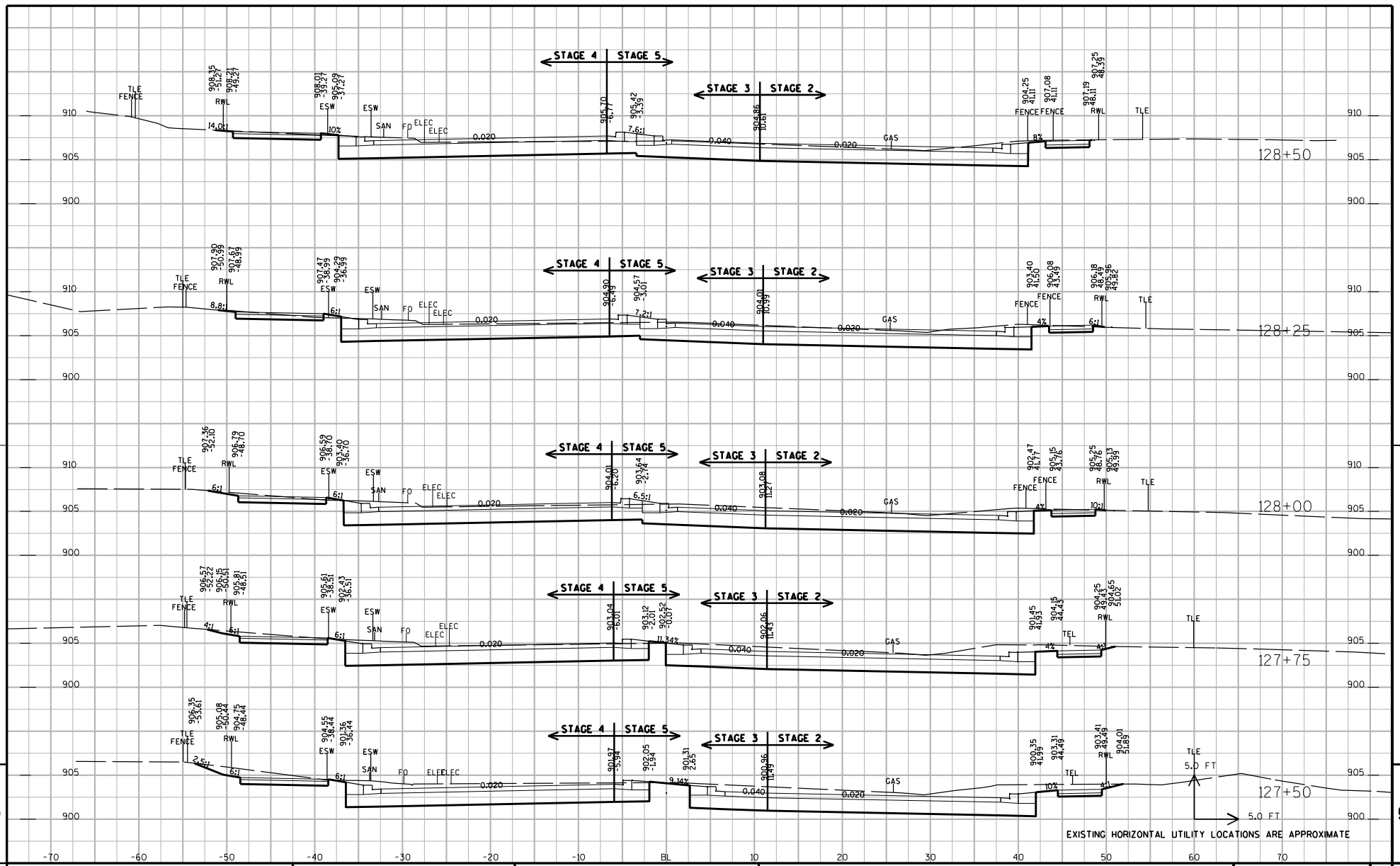

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 799 E

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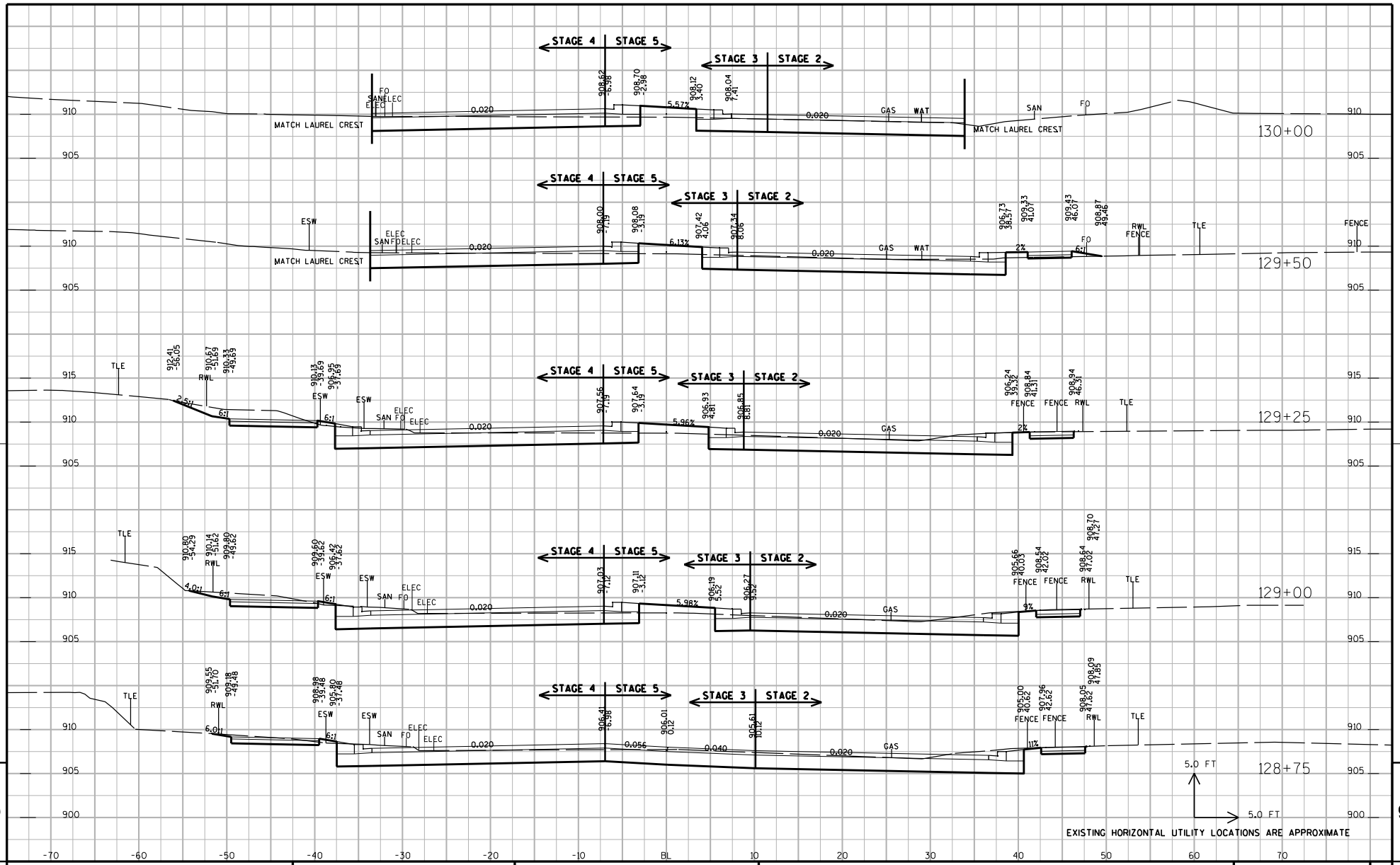

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 800 E

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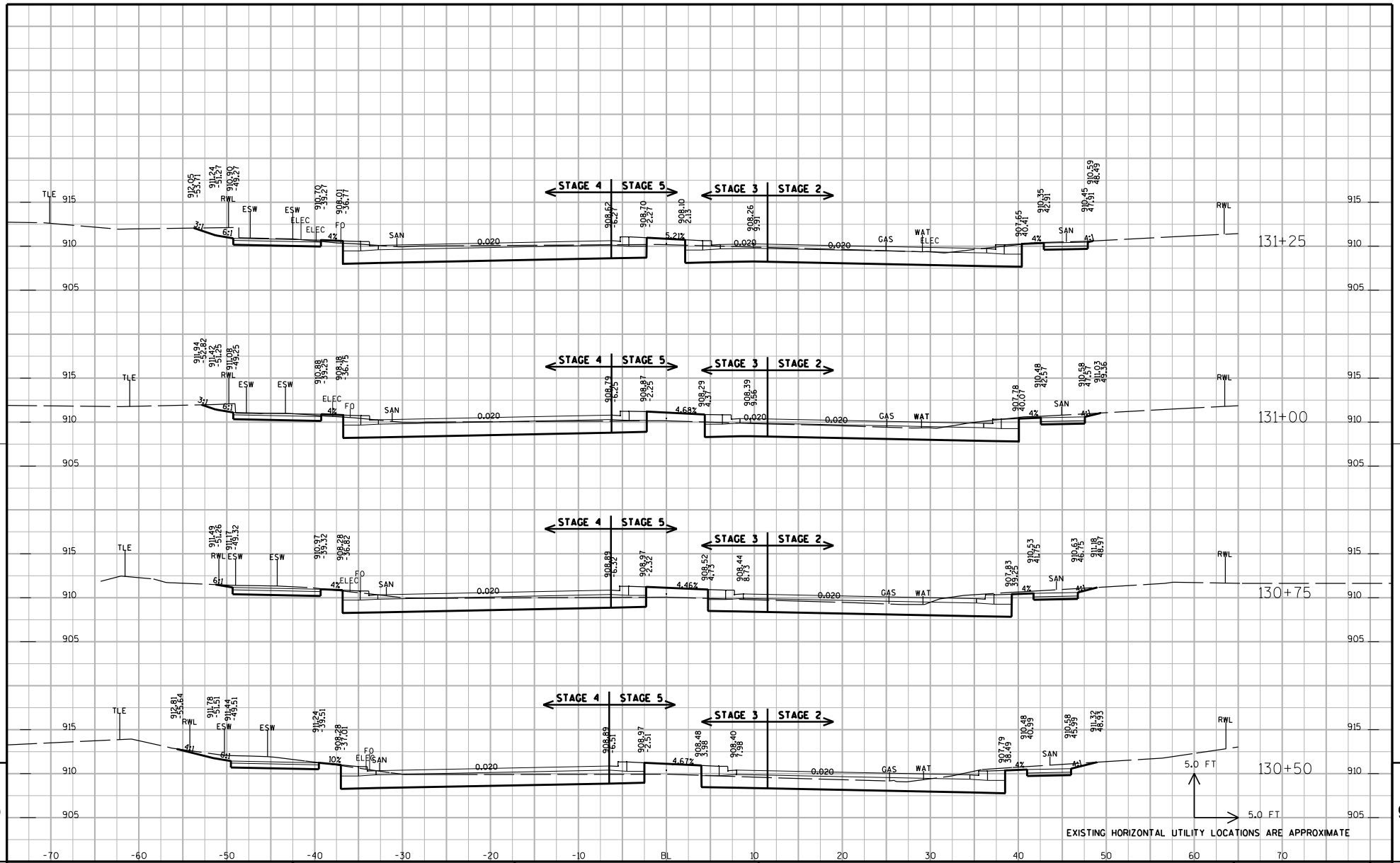
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 801 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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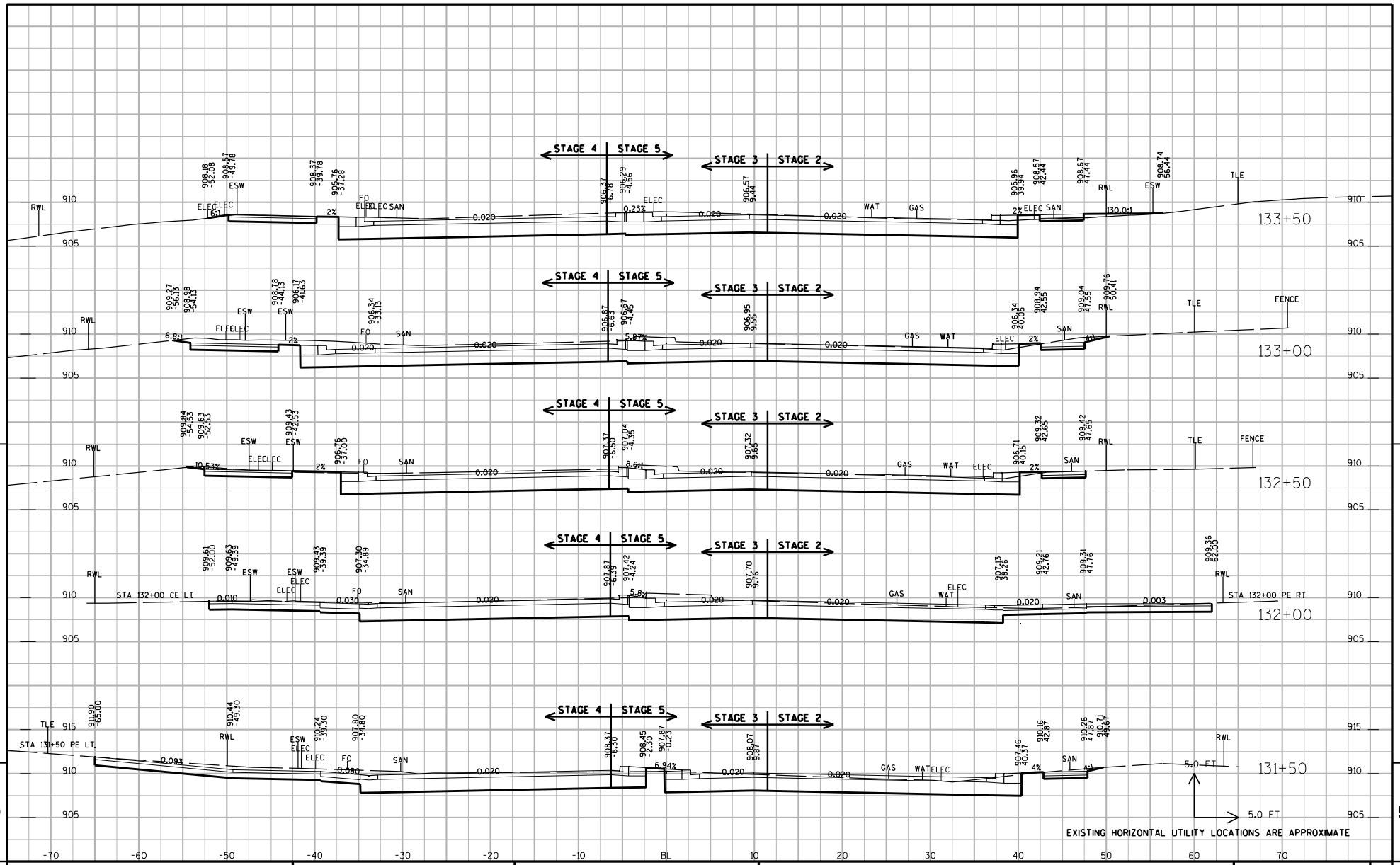

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 802	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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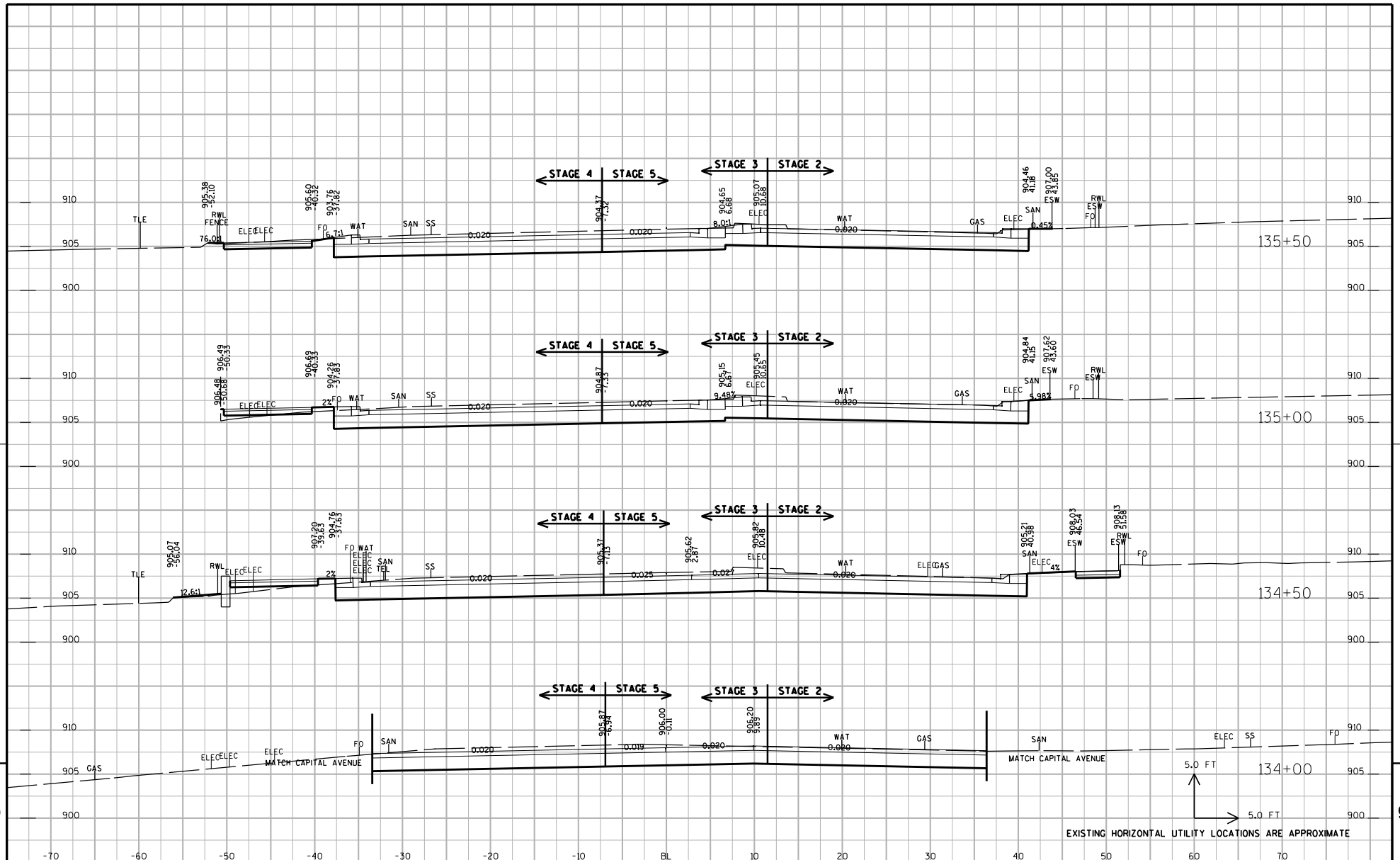
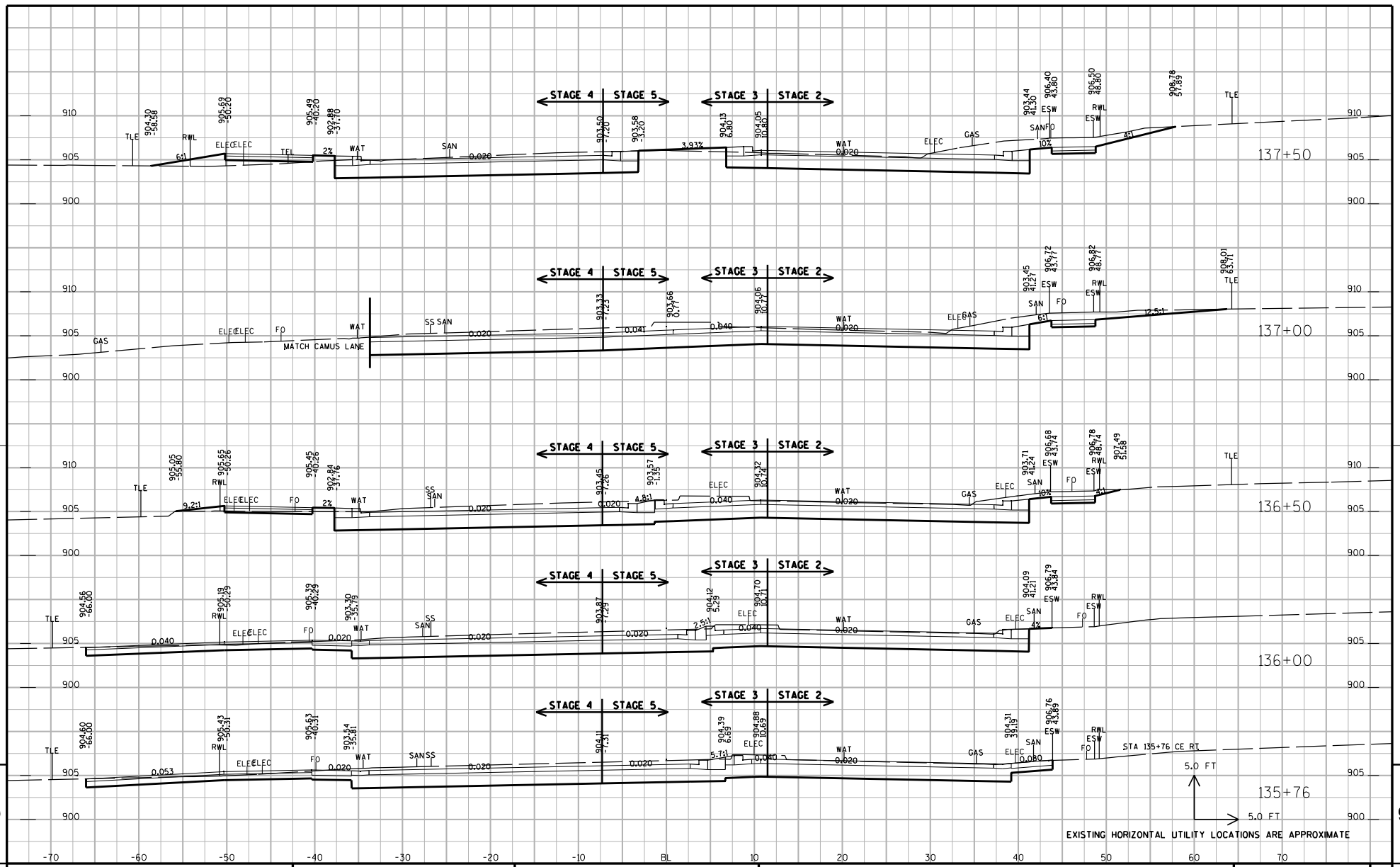


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 803 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

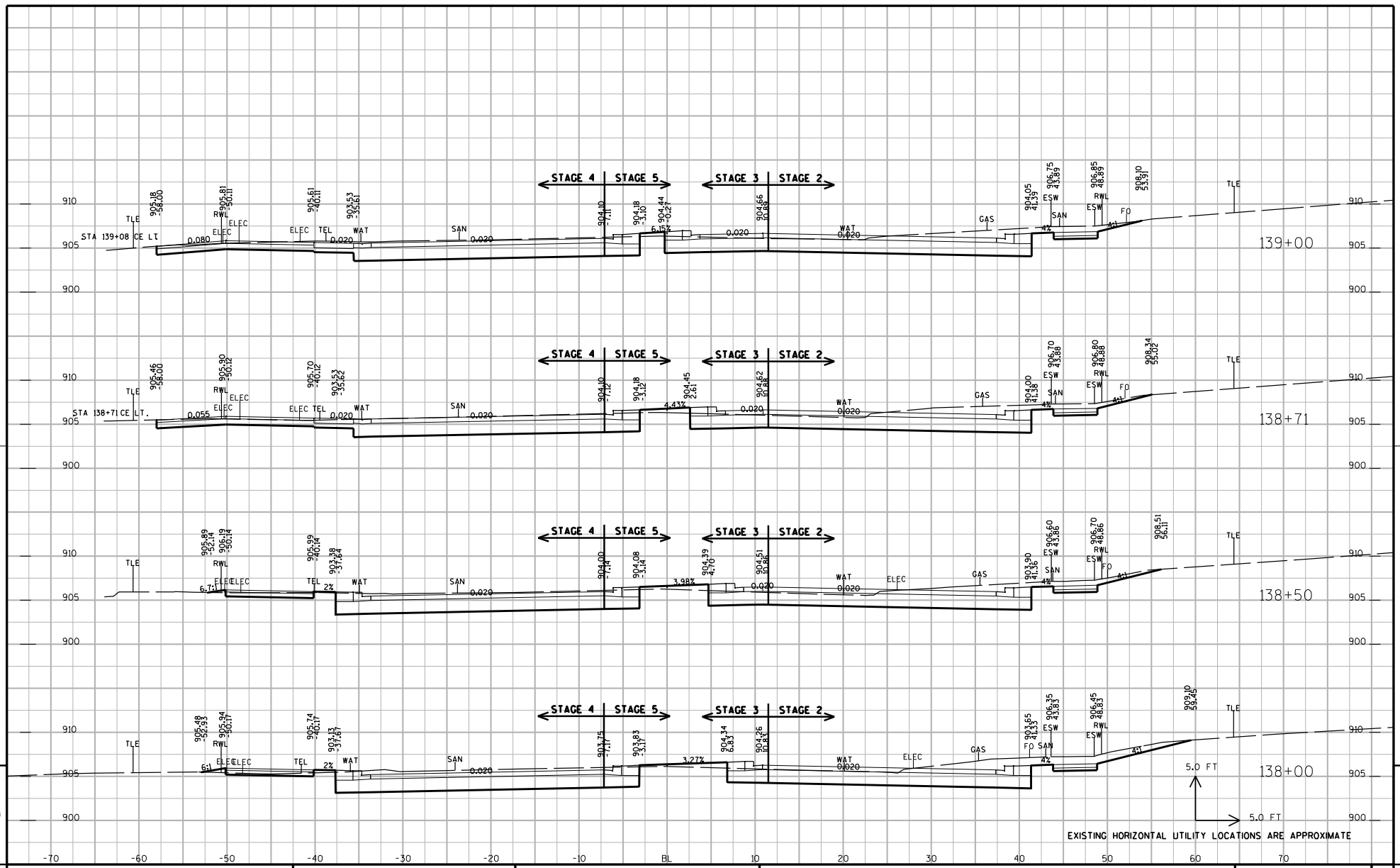
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 804 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 805 E

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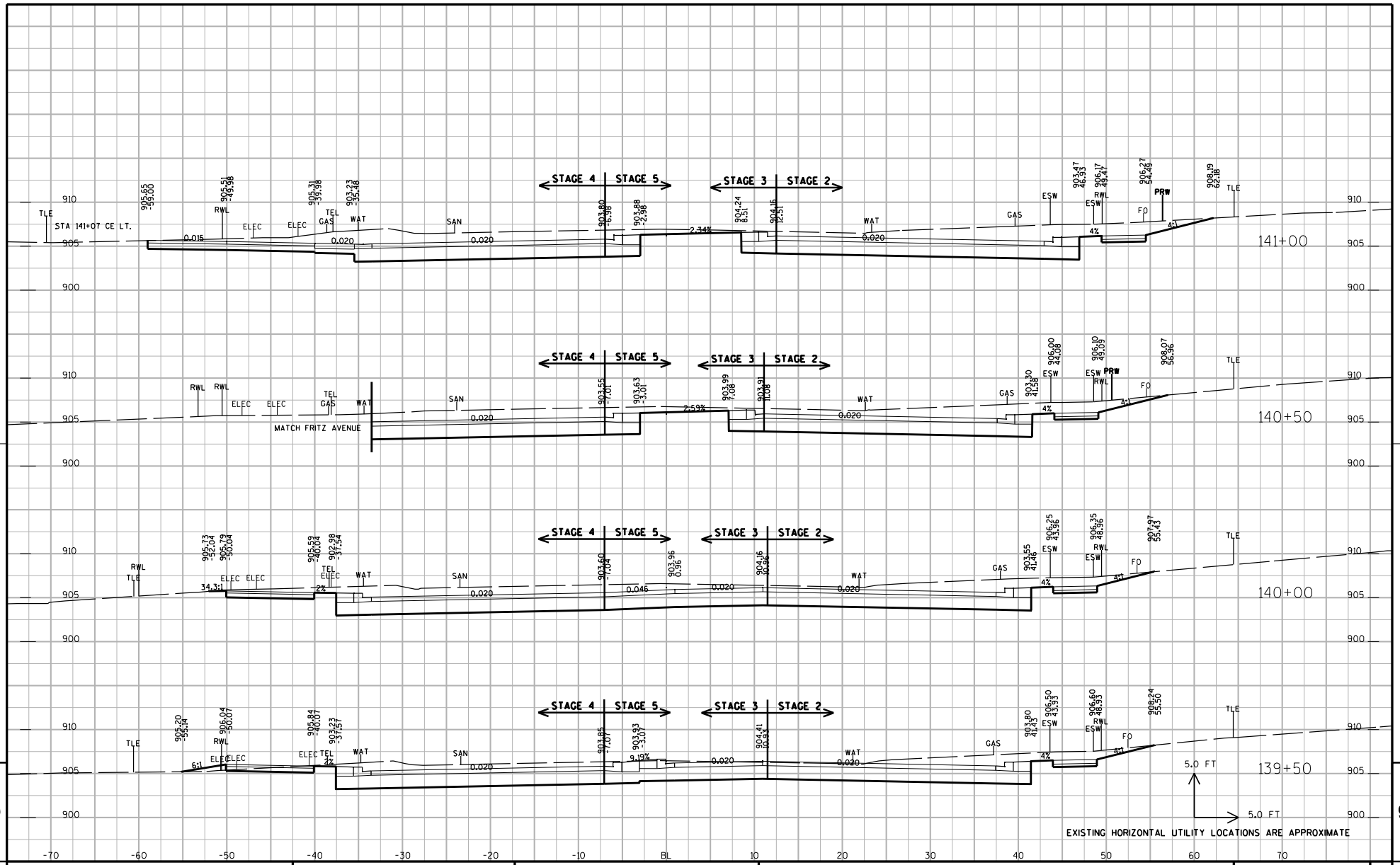
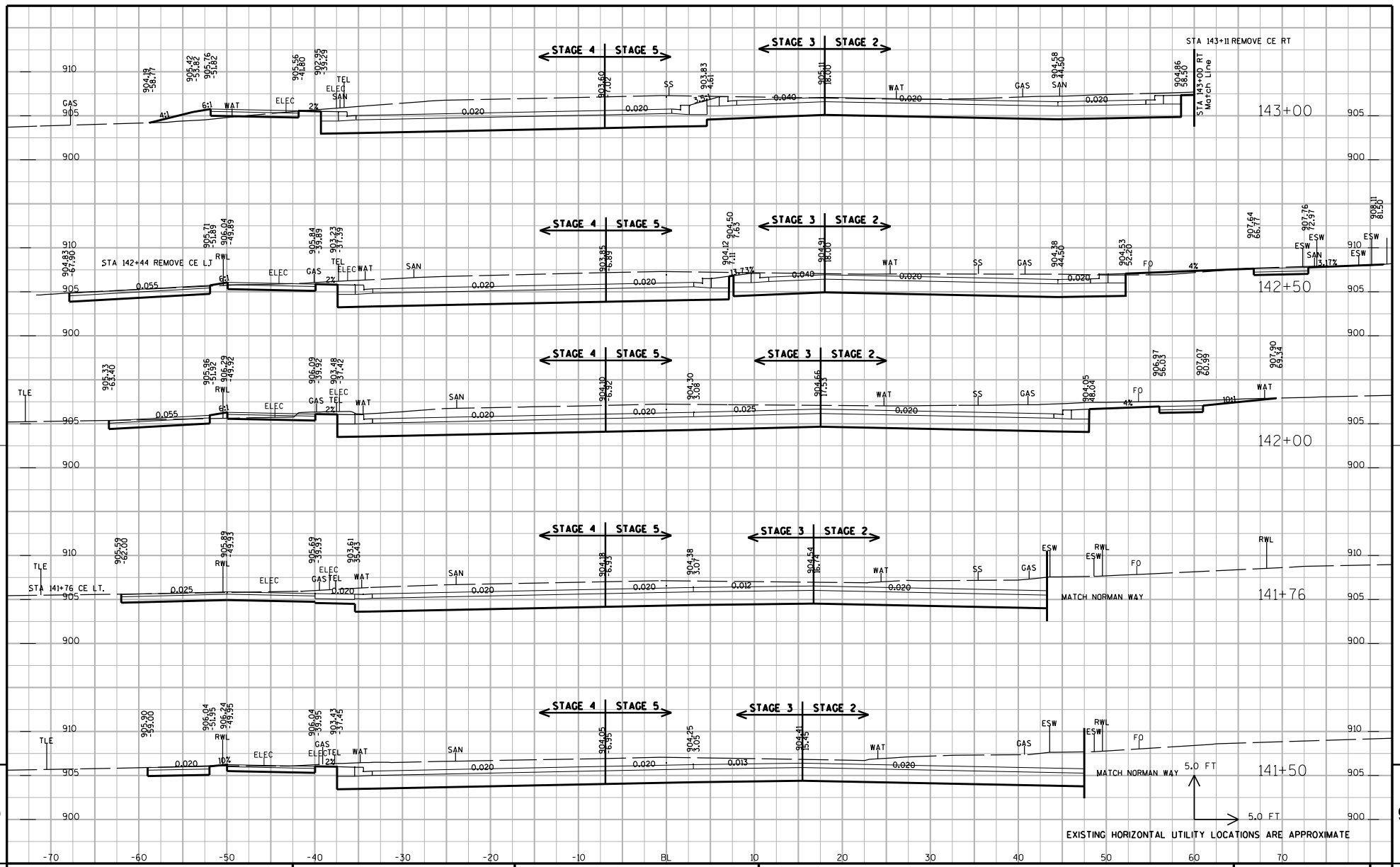
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 806 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

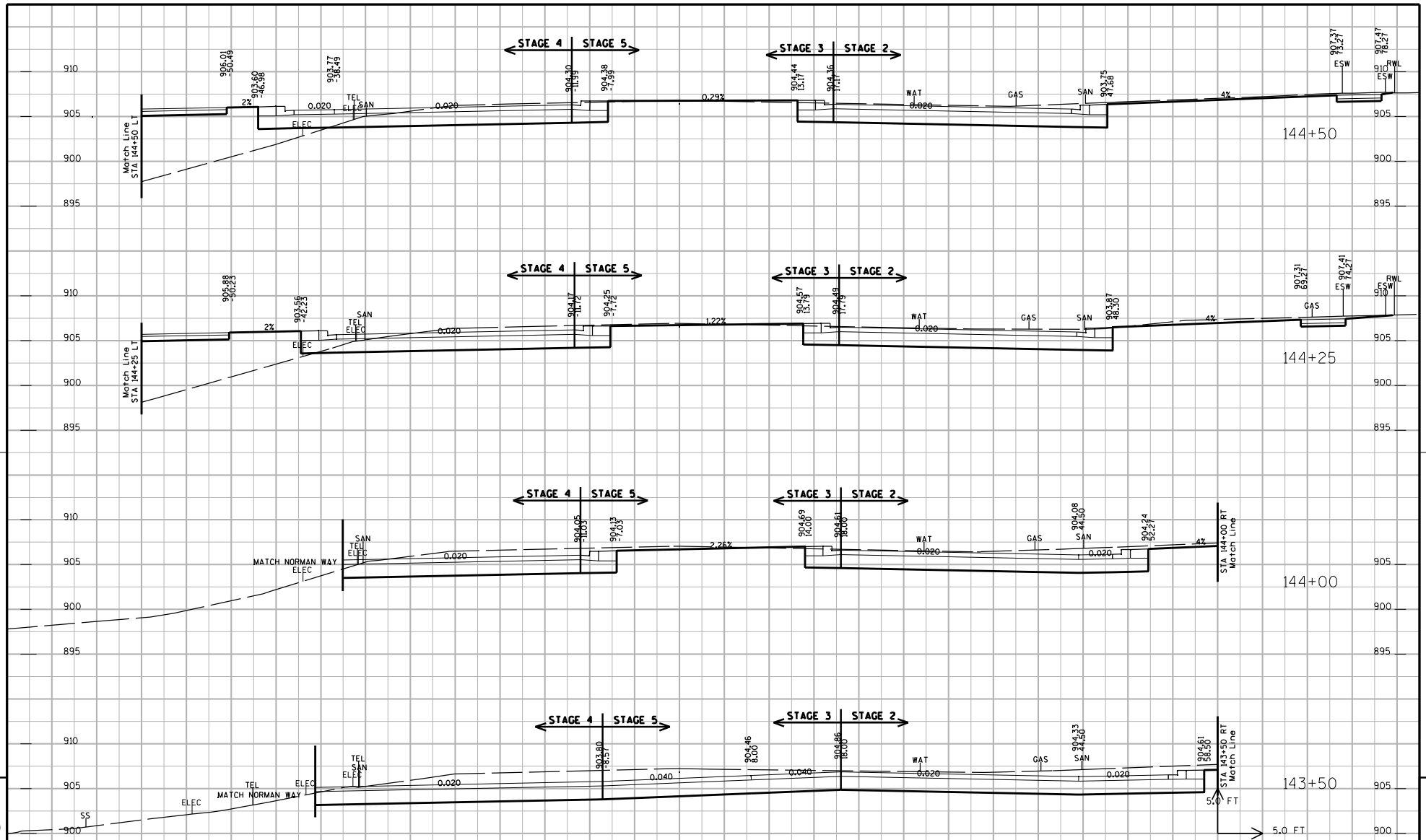
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 807	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

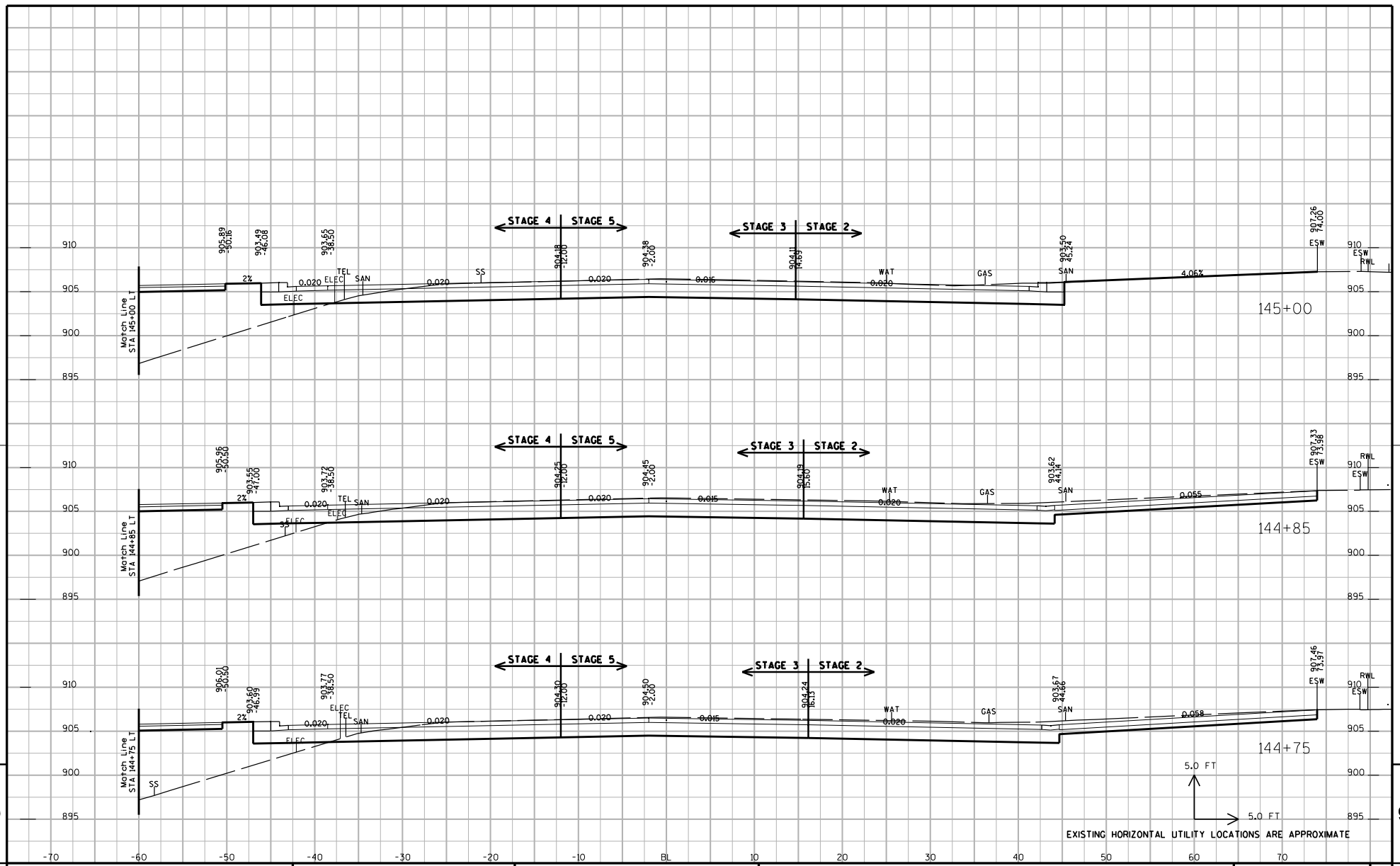
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 808 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

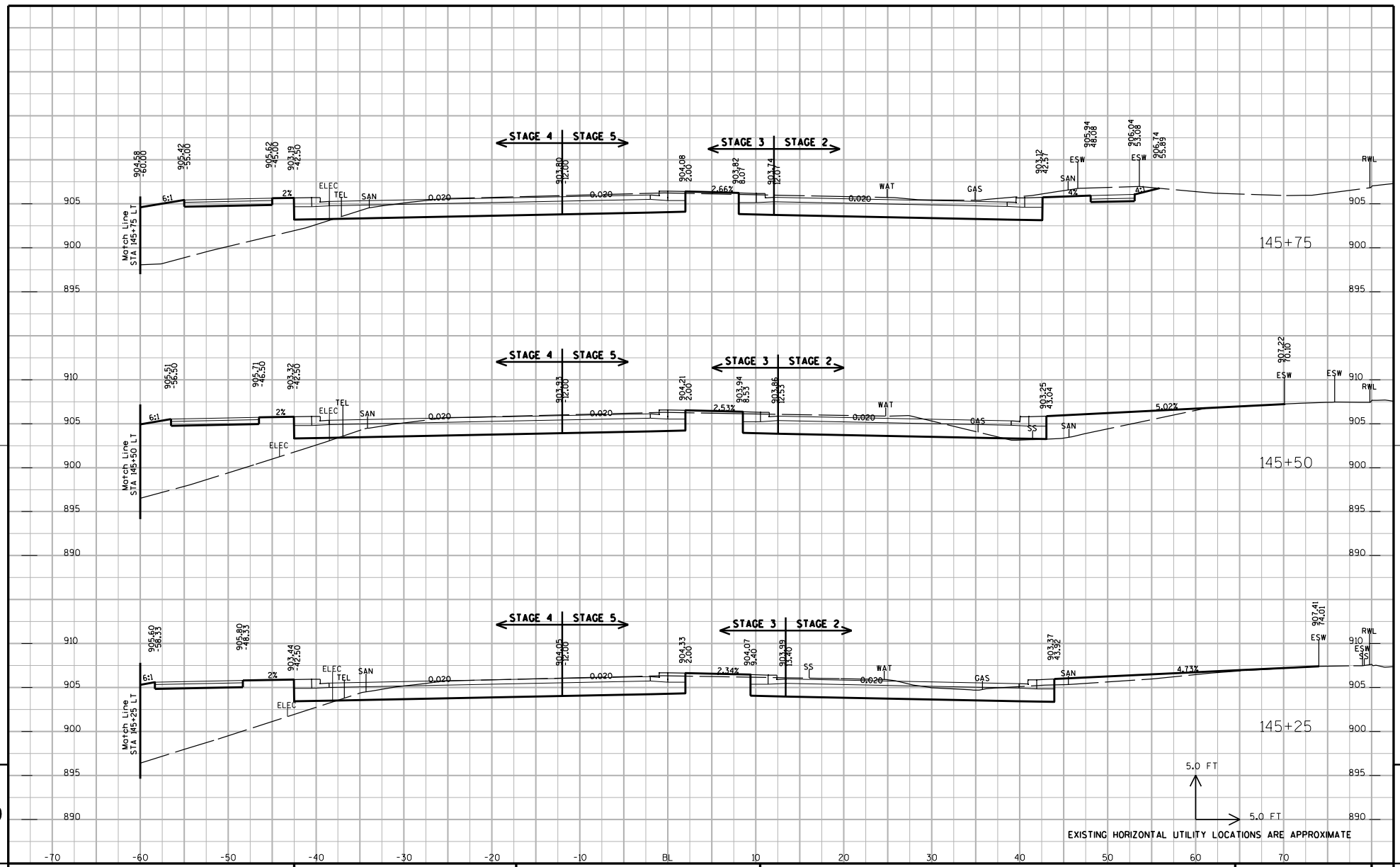
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 809 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

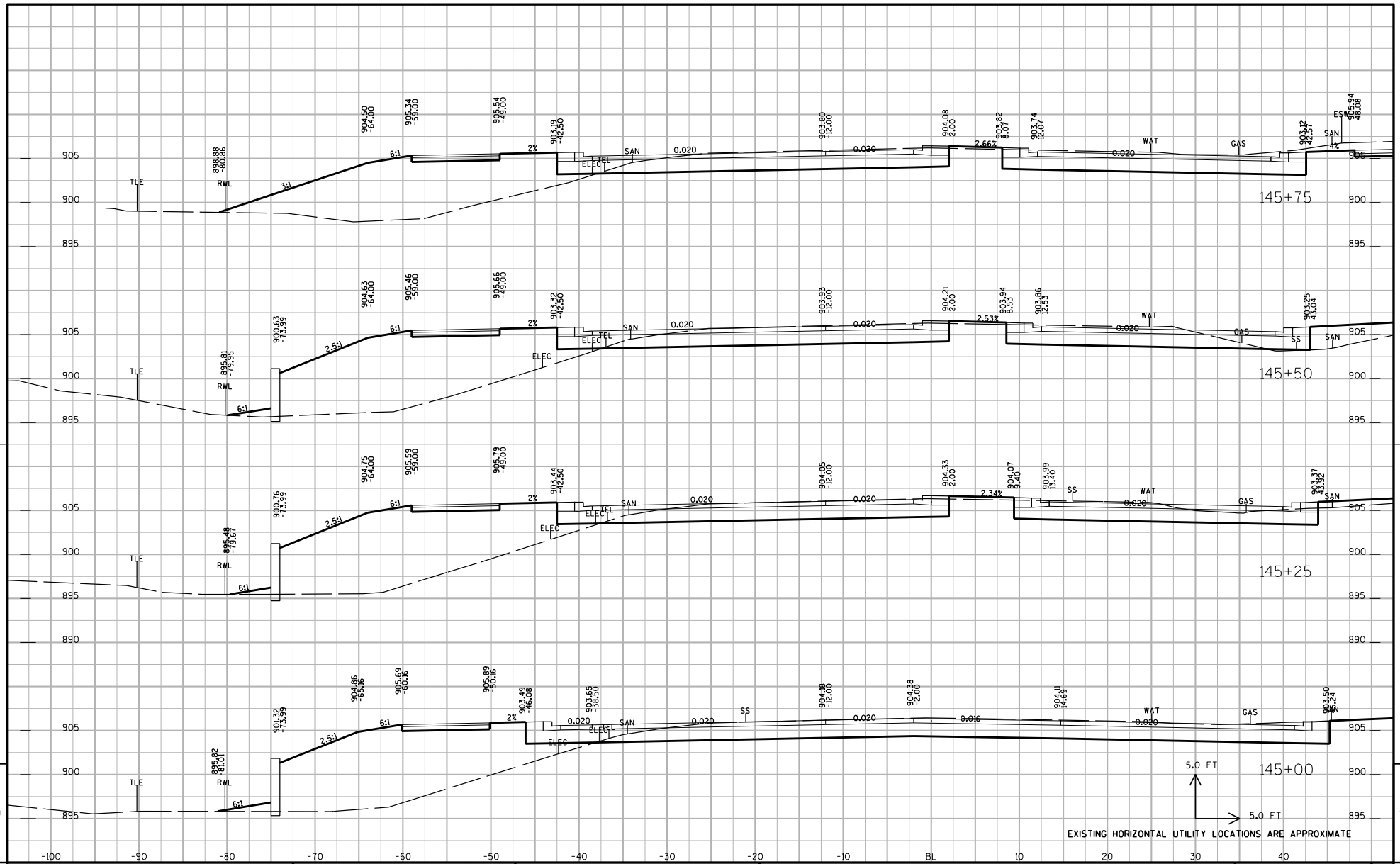
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 810 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

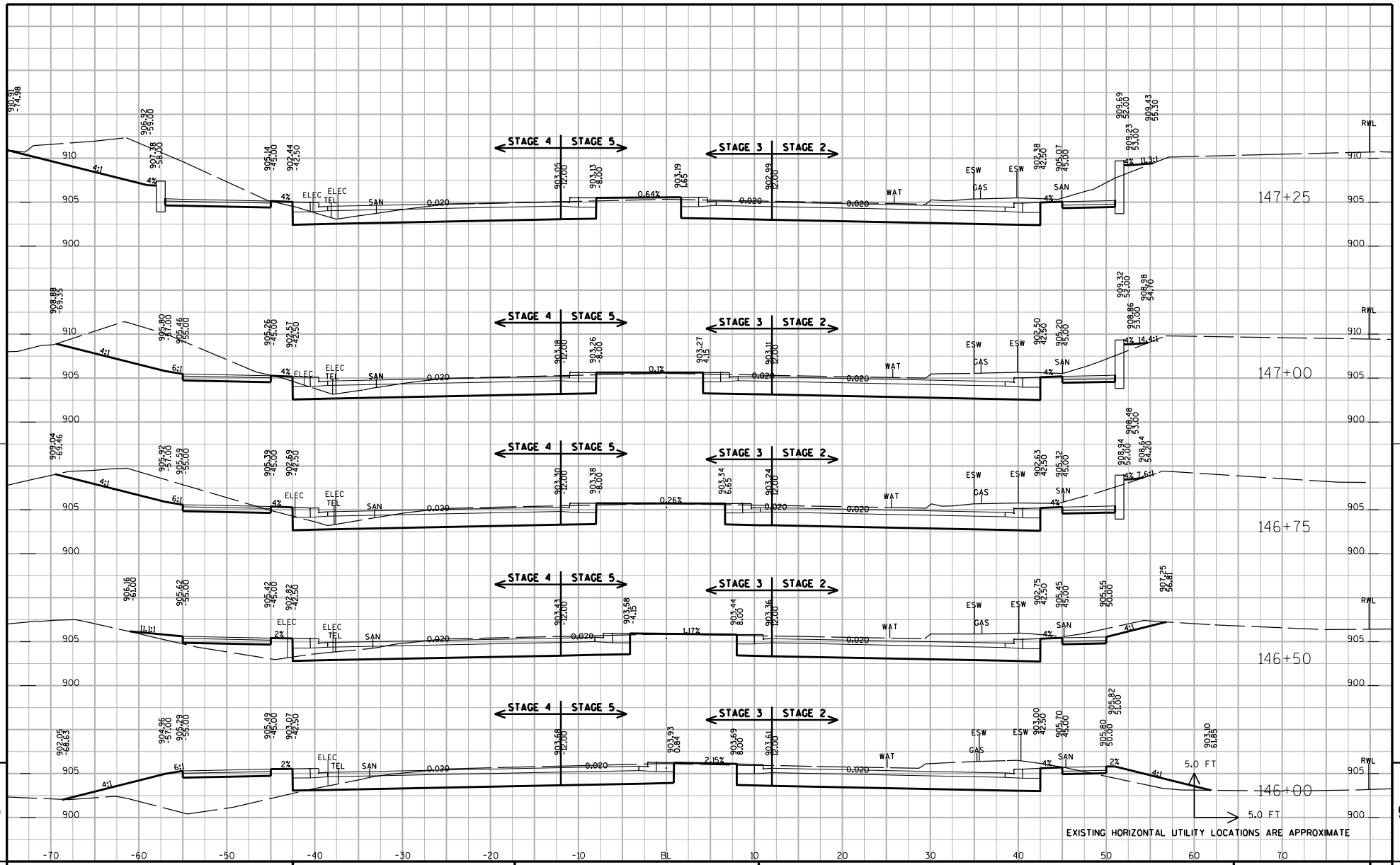
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 2, 3, 4 & 5)	SHEET NO: 810A	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 3/9/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

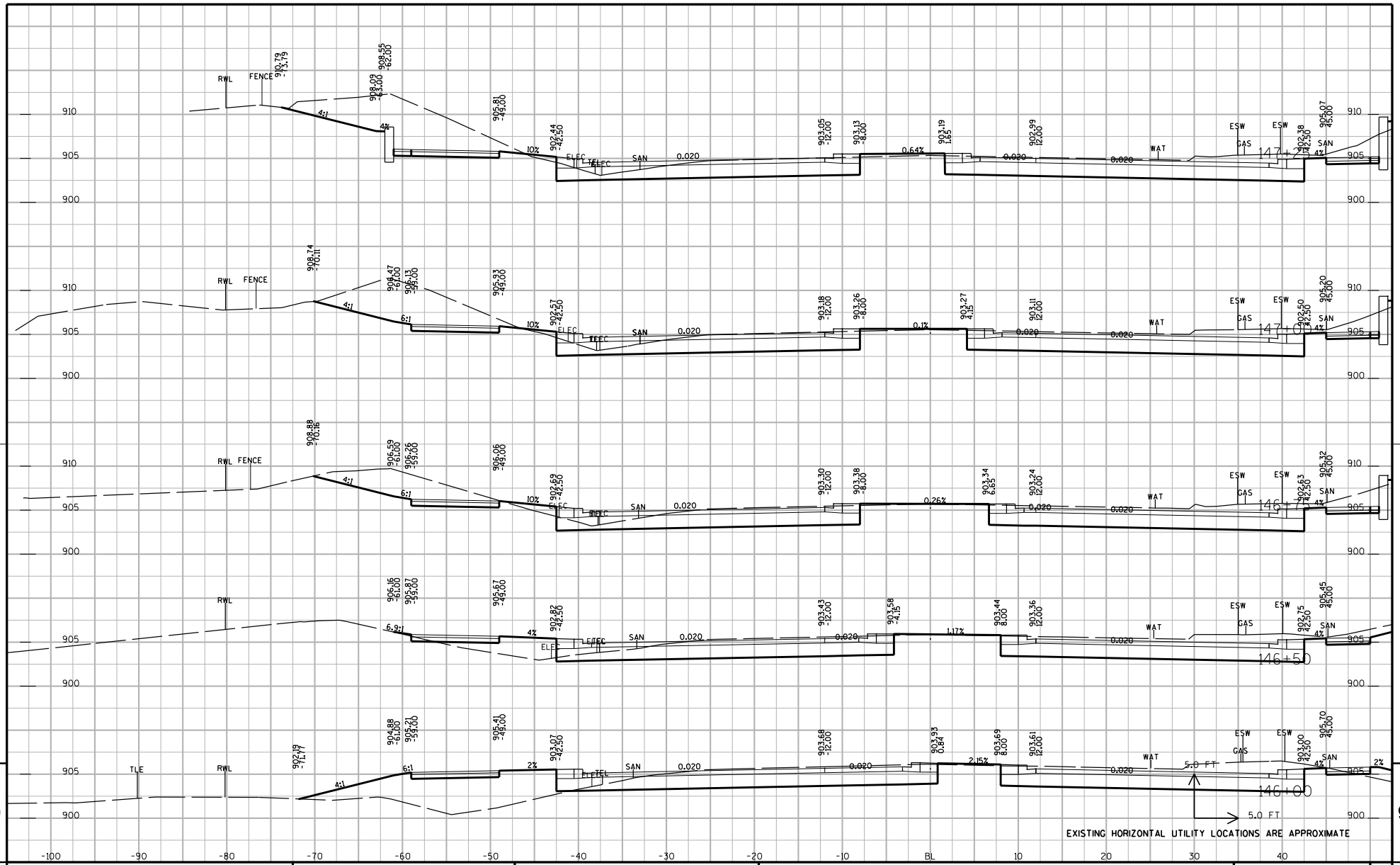
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 811 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

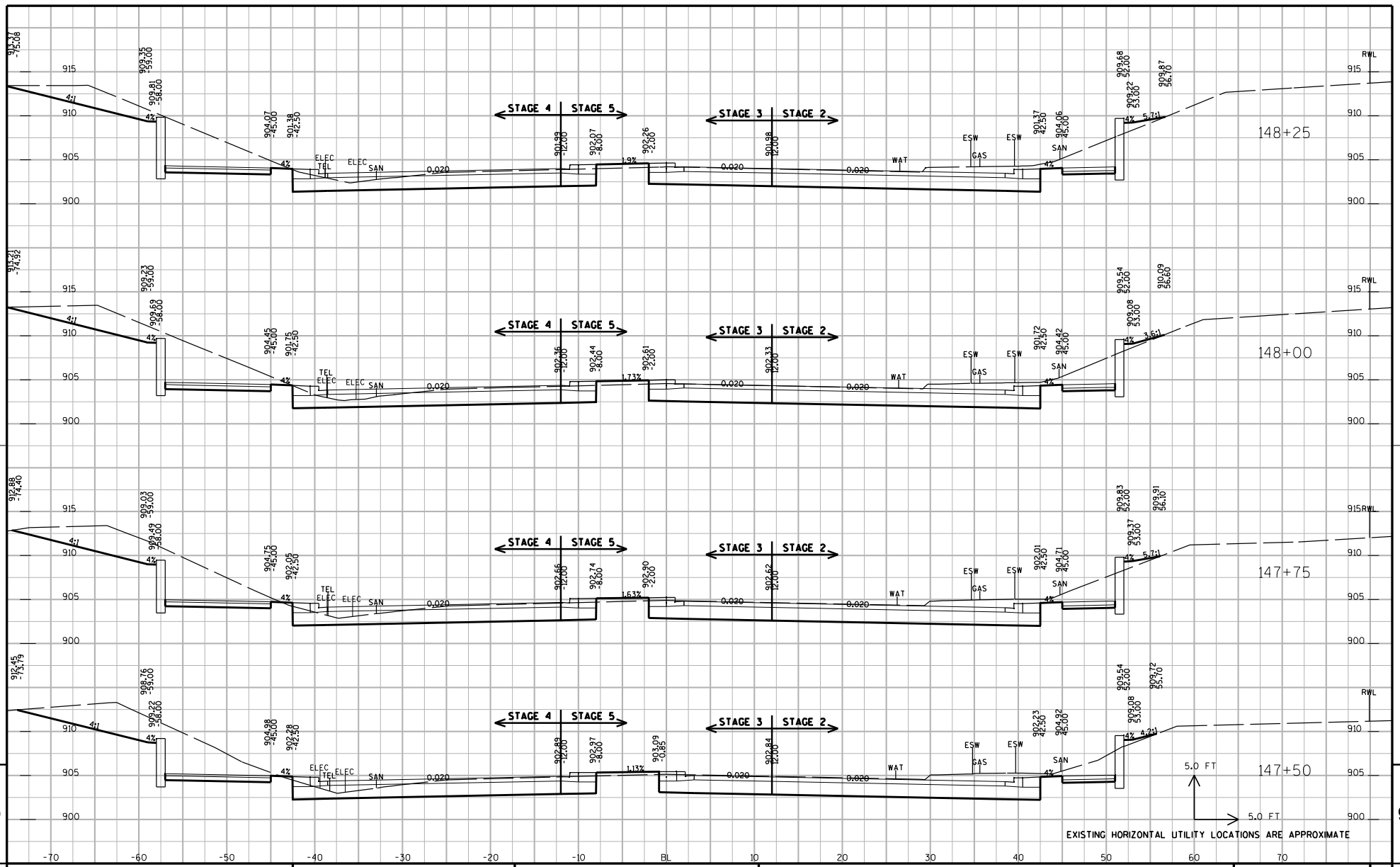
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 2, 3, 4 & 5)	SHEET NO: 811A	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 3/9/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

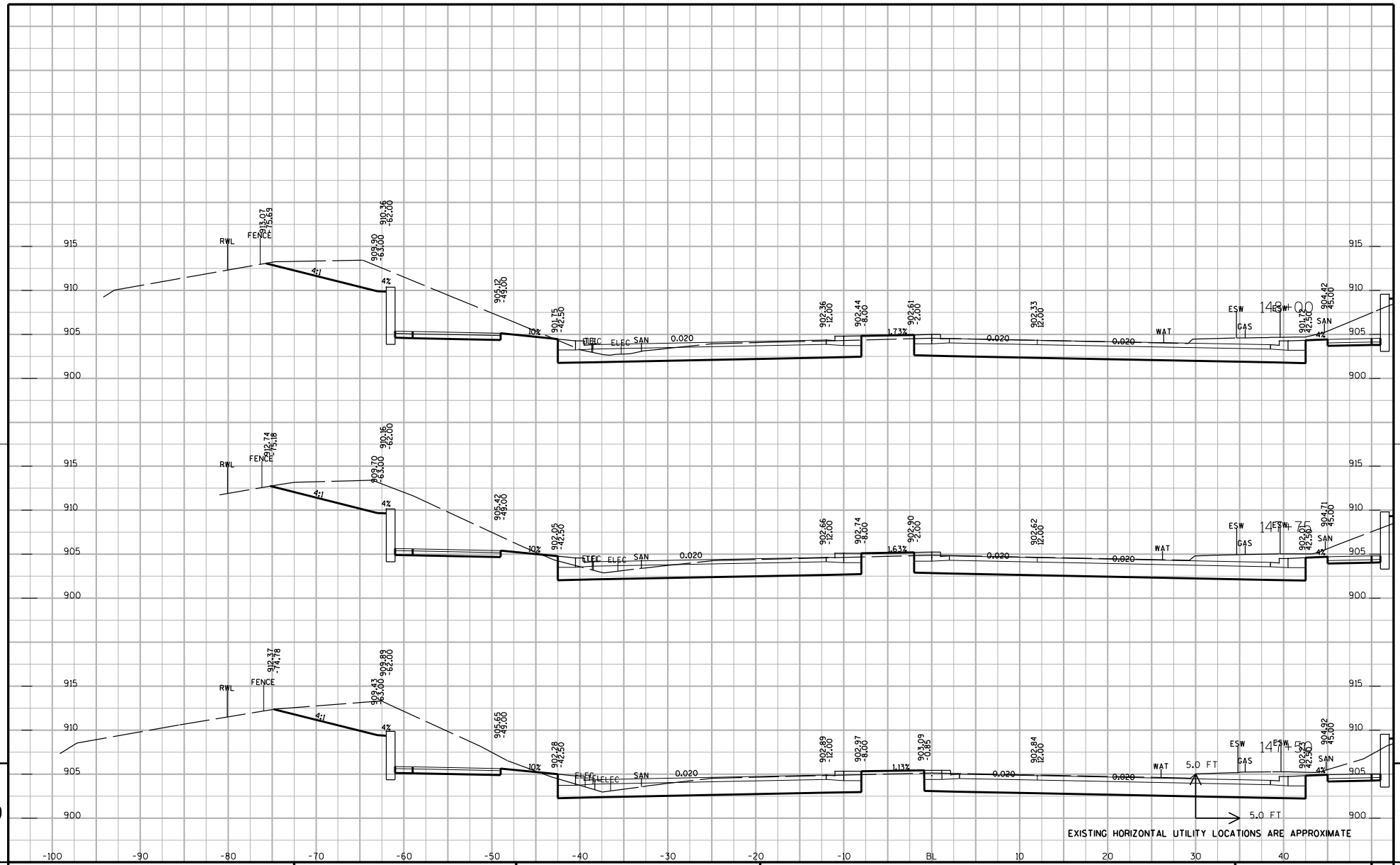
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 812 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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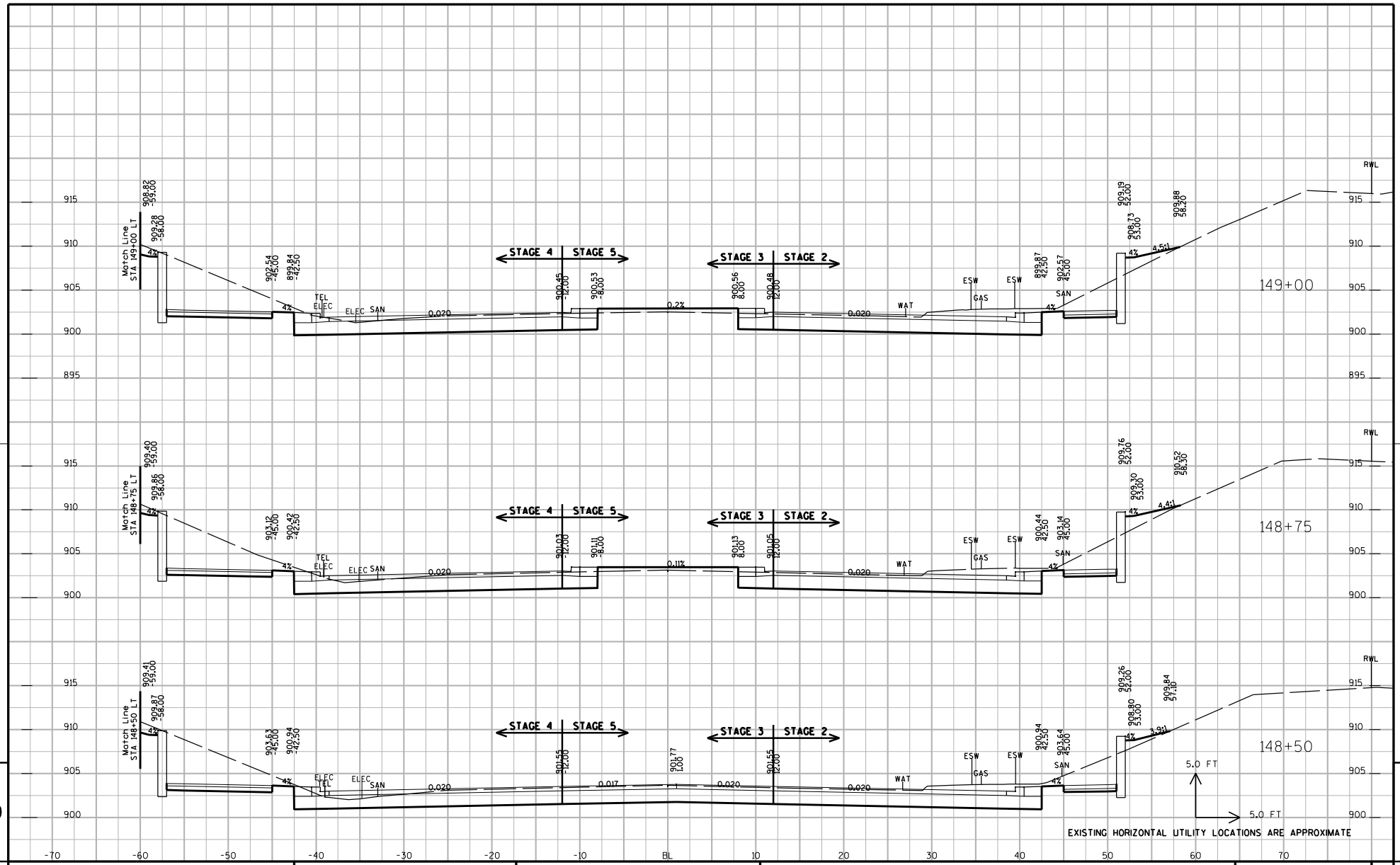
9

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 2, 3, 4 & 5)	SHEET NO: 812A	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 3/9/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

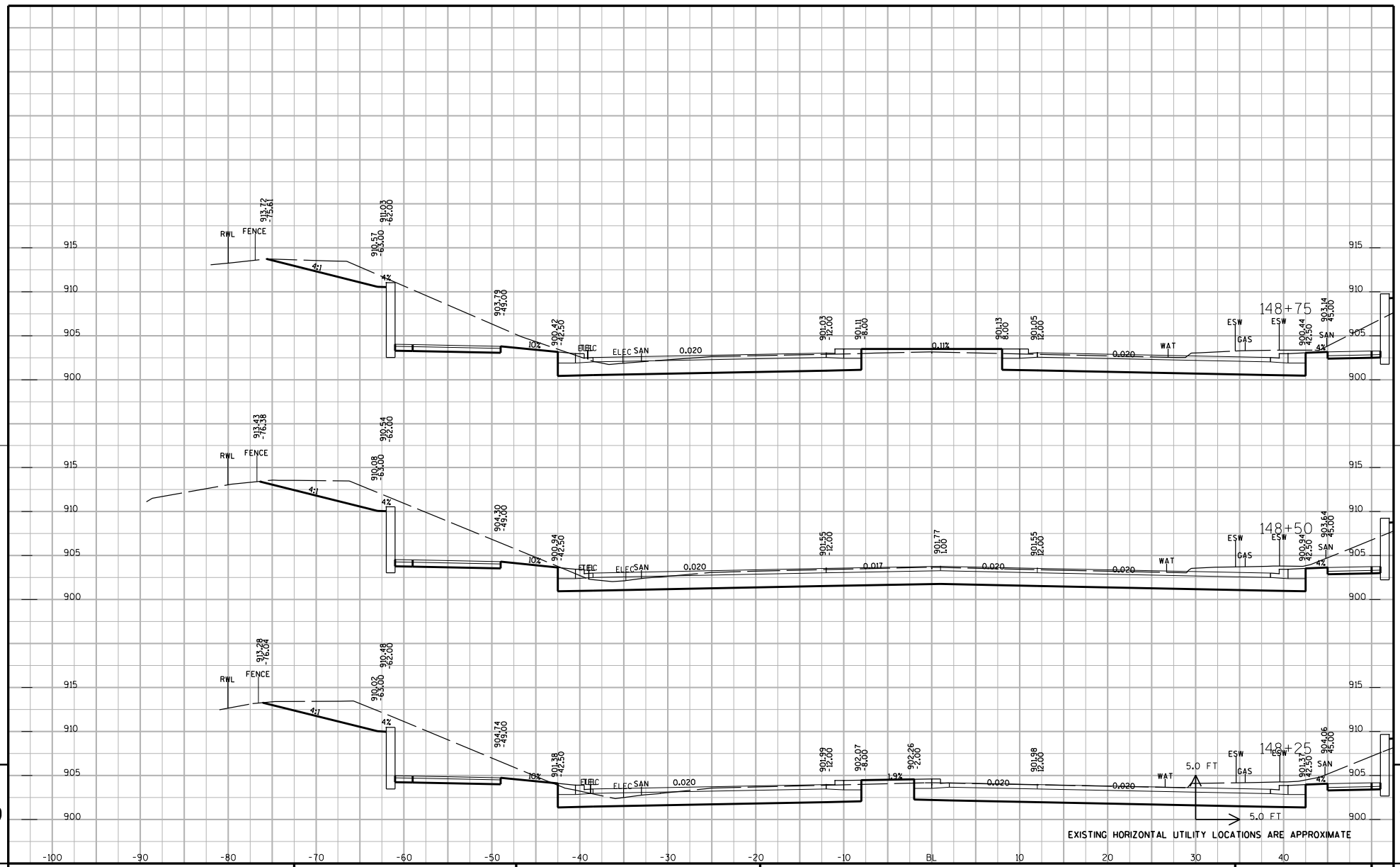
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 813 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 2, 3, 4 & 5)	SHEET NO: 813A	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 3/9/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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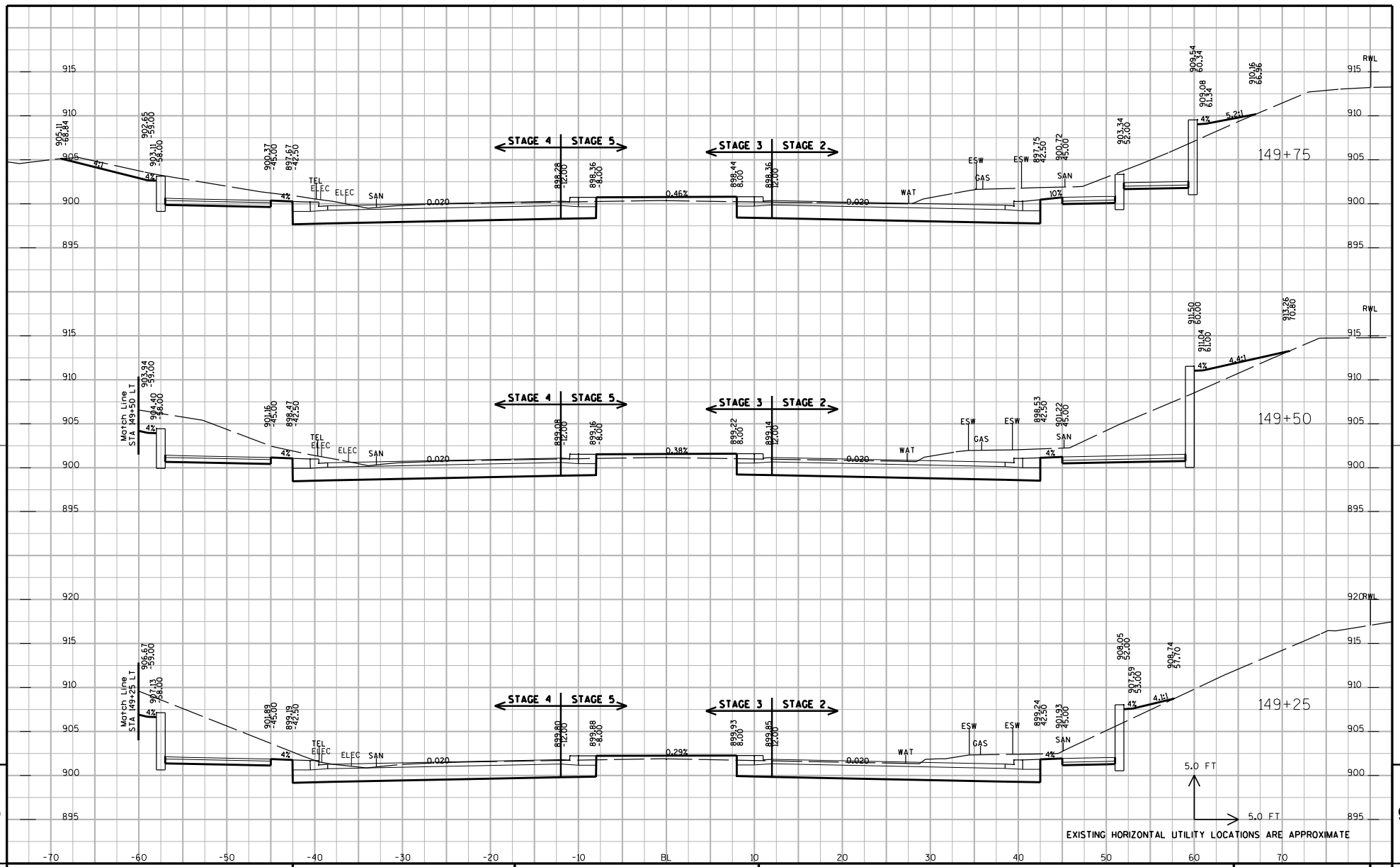
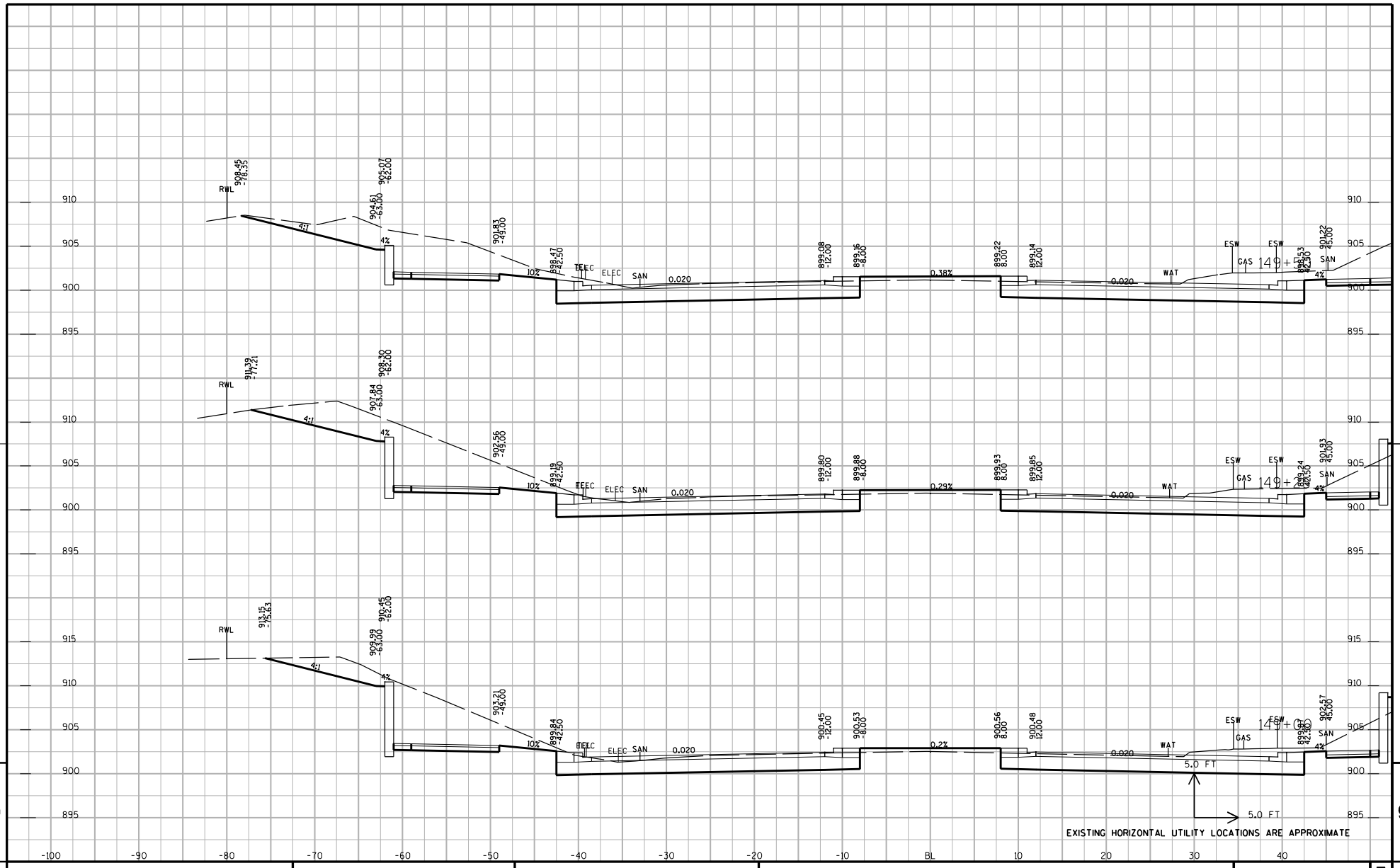


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 814 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



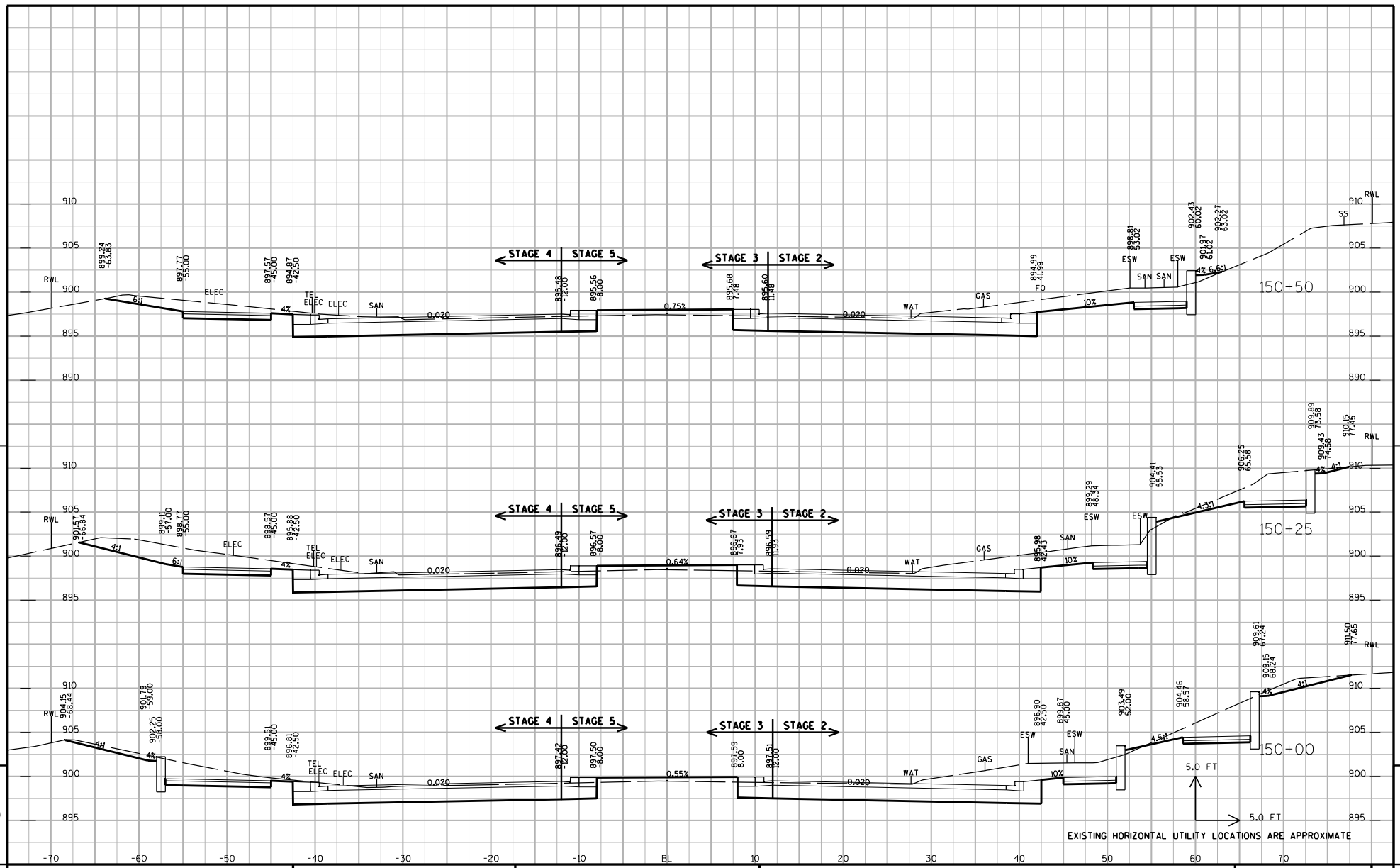
EXISTING HORIZONTAL UTILITY LOCATIONS ARE APPROXIMATE

9 9

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 2, 3, 4 & 5)	SHEET NO: 814A	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 3/9/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

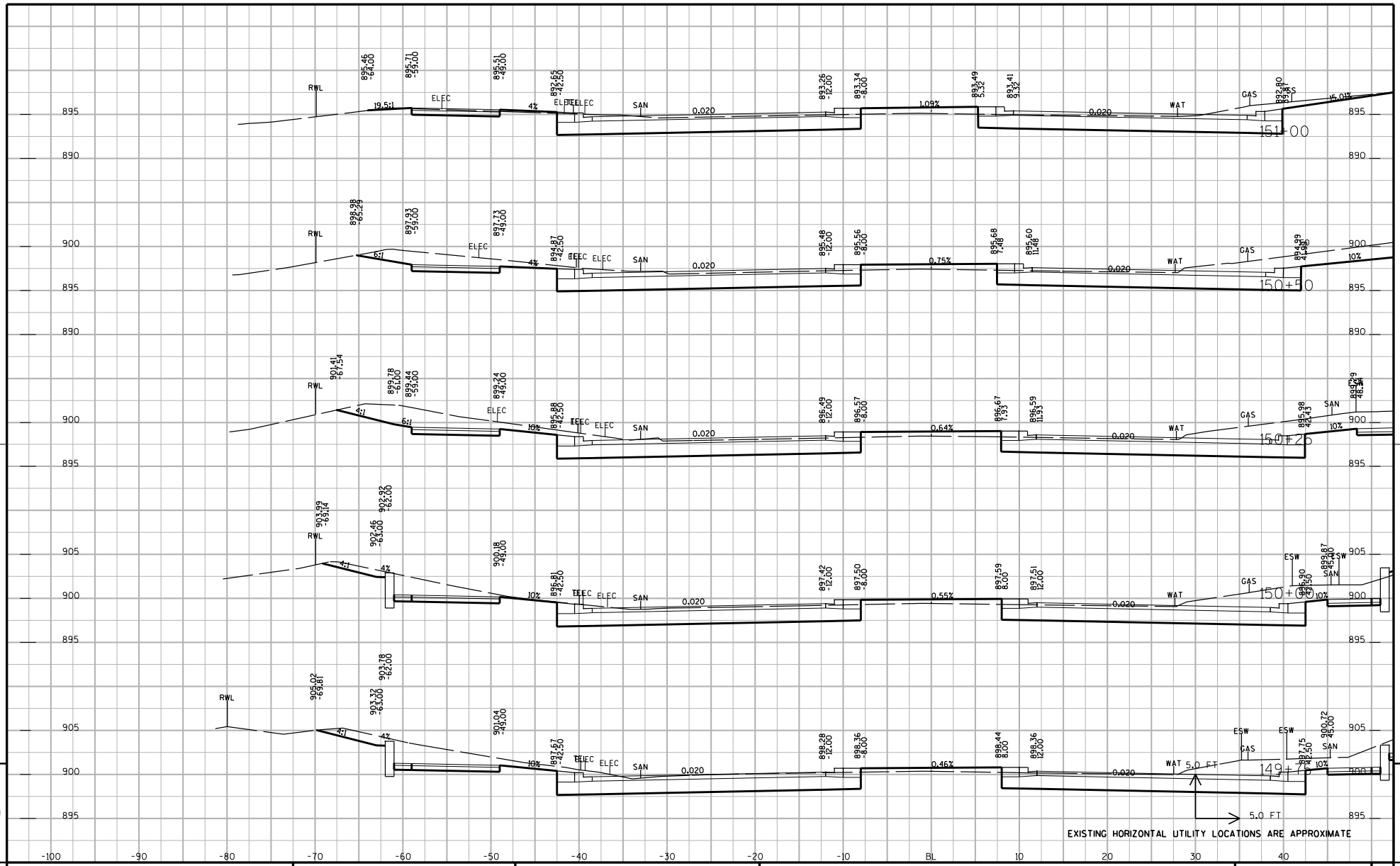
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 815 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

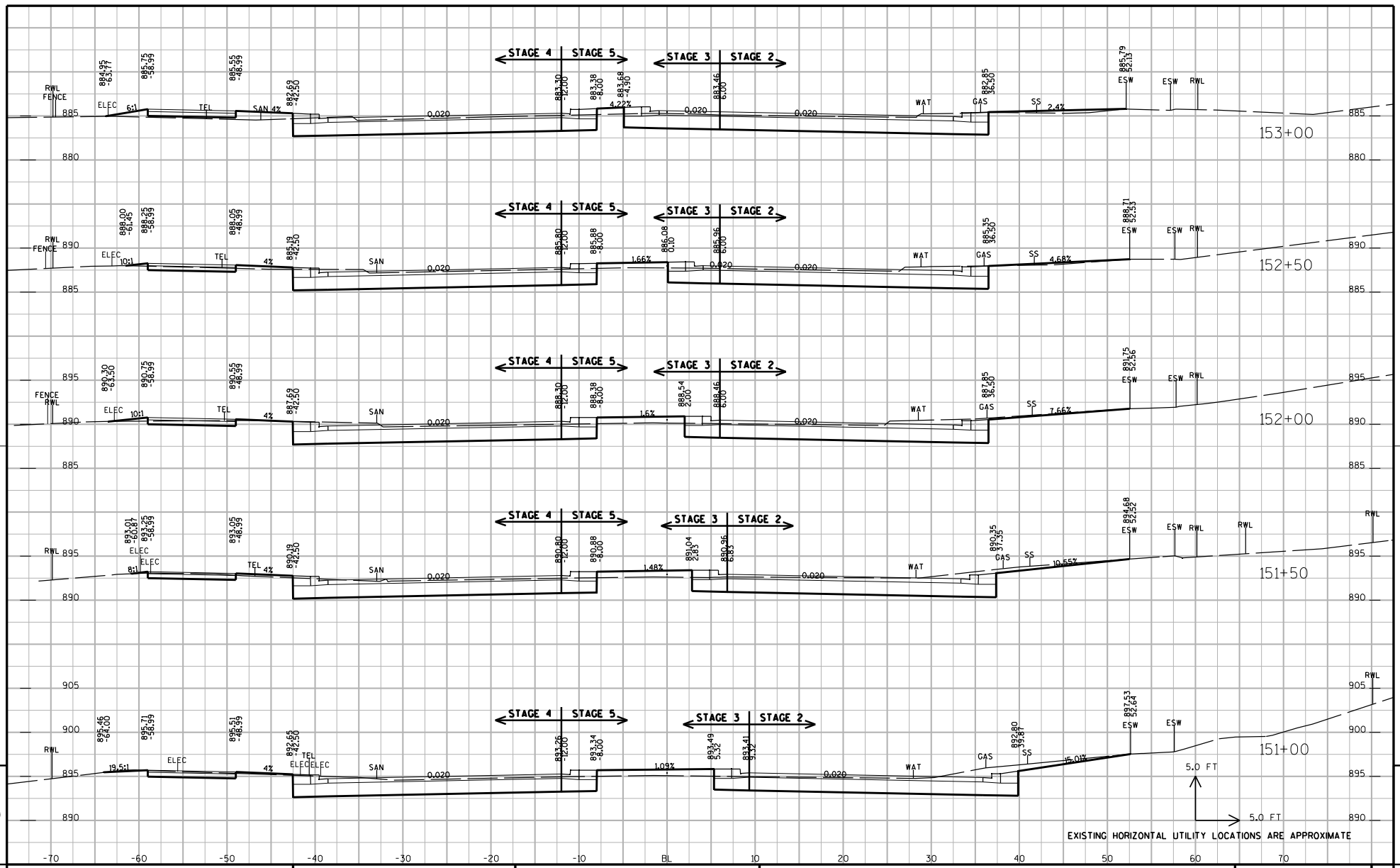
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGE 2, 3, 4 & 5)	SHEET NO: 815A	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 3/9/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

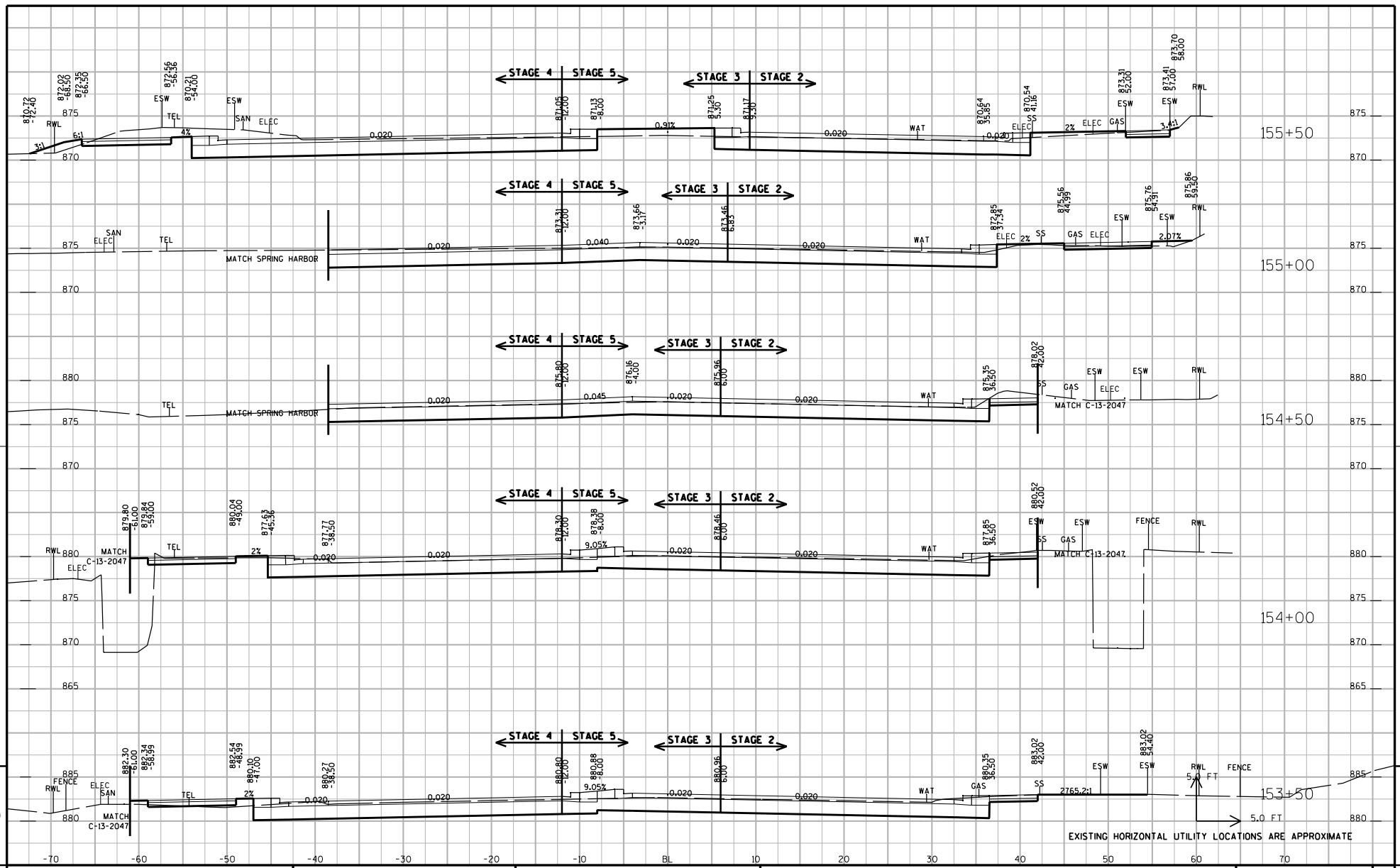
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 816 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

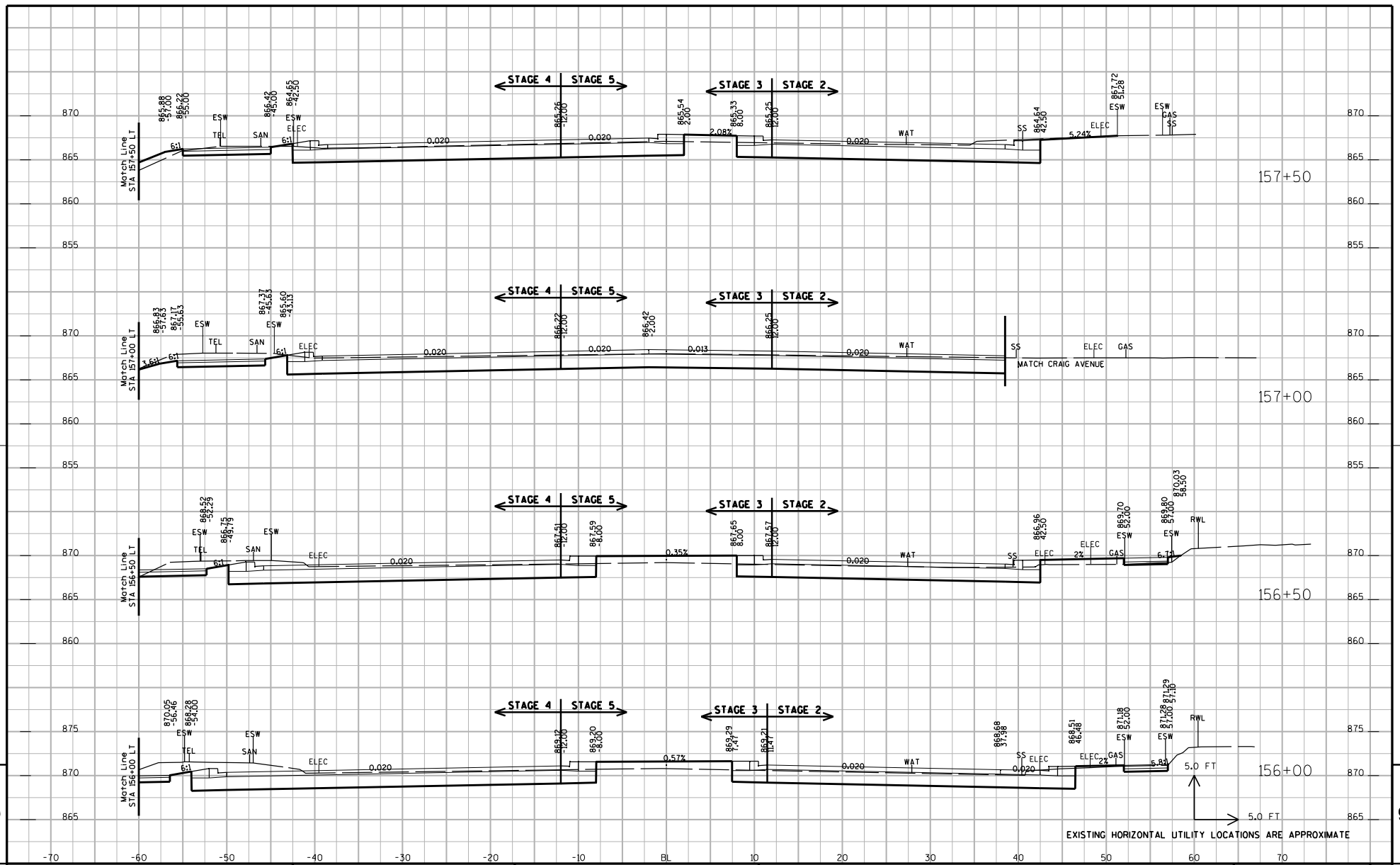
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 817 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

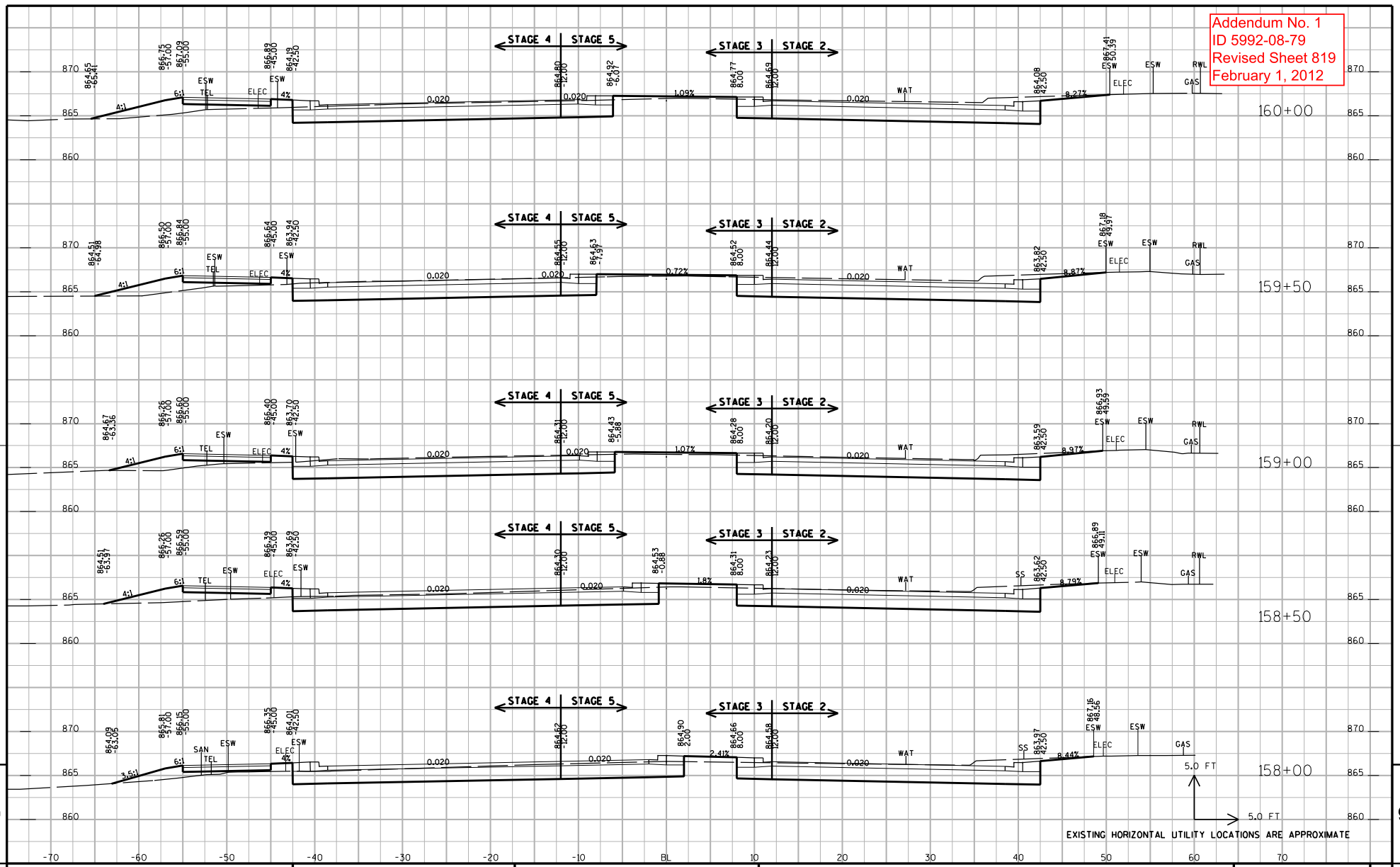
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 818 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

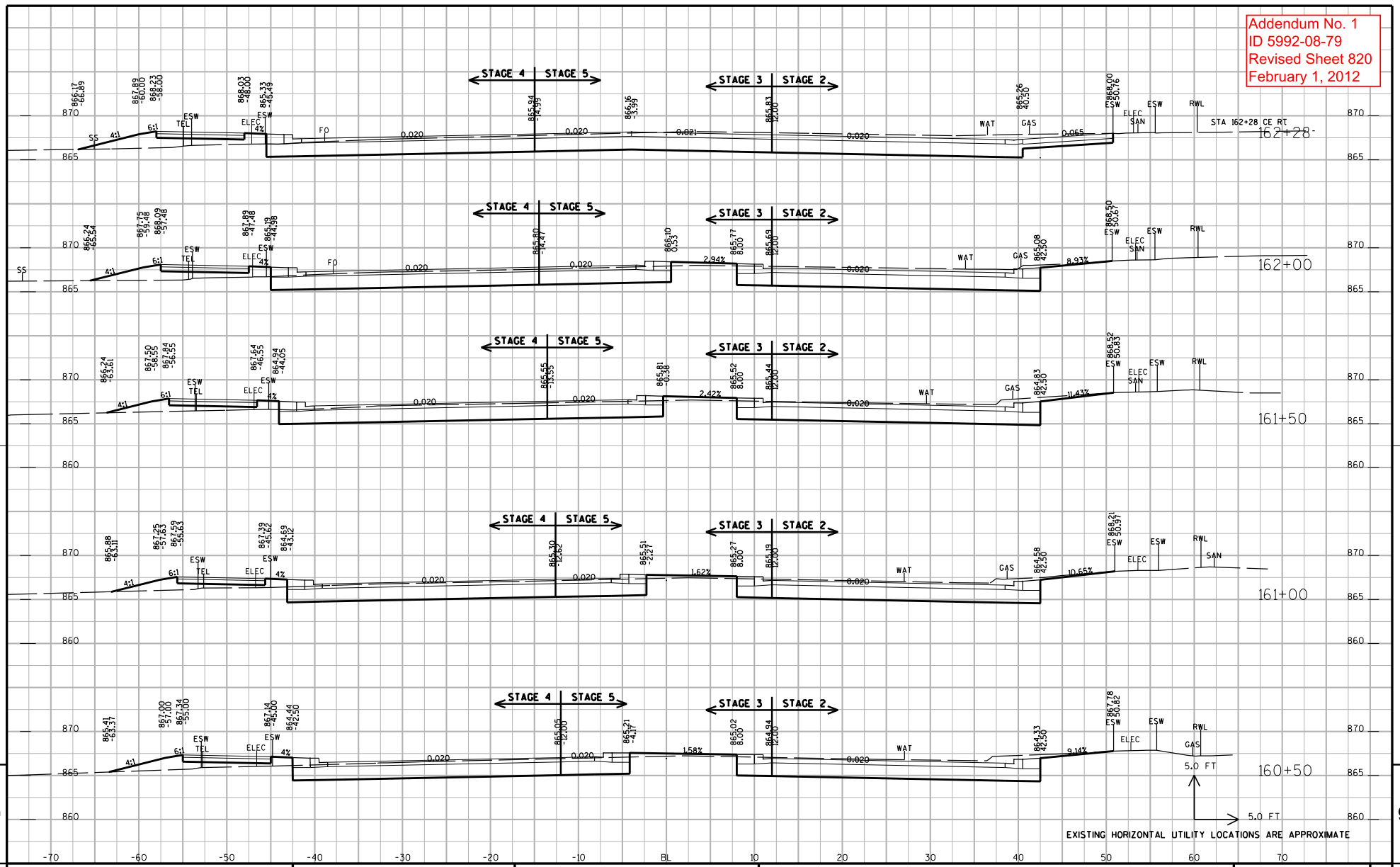


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 819	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

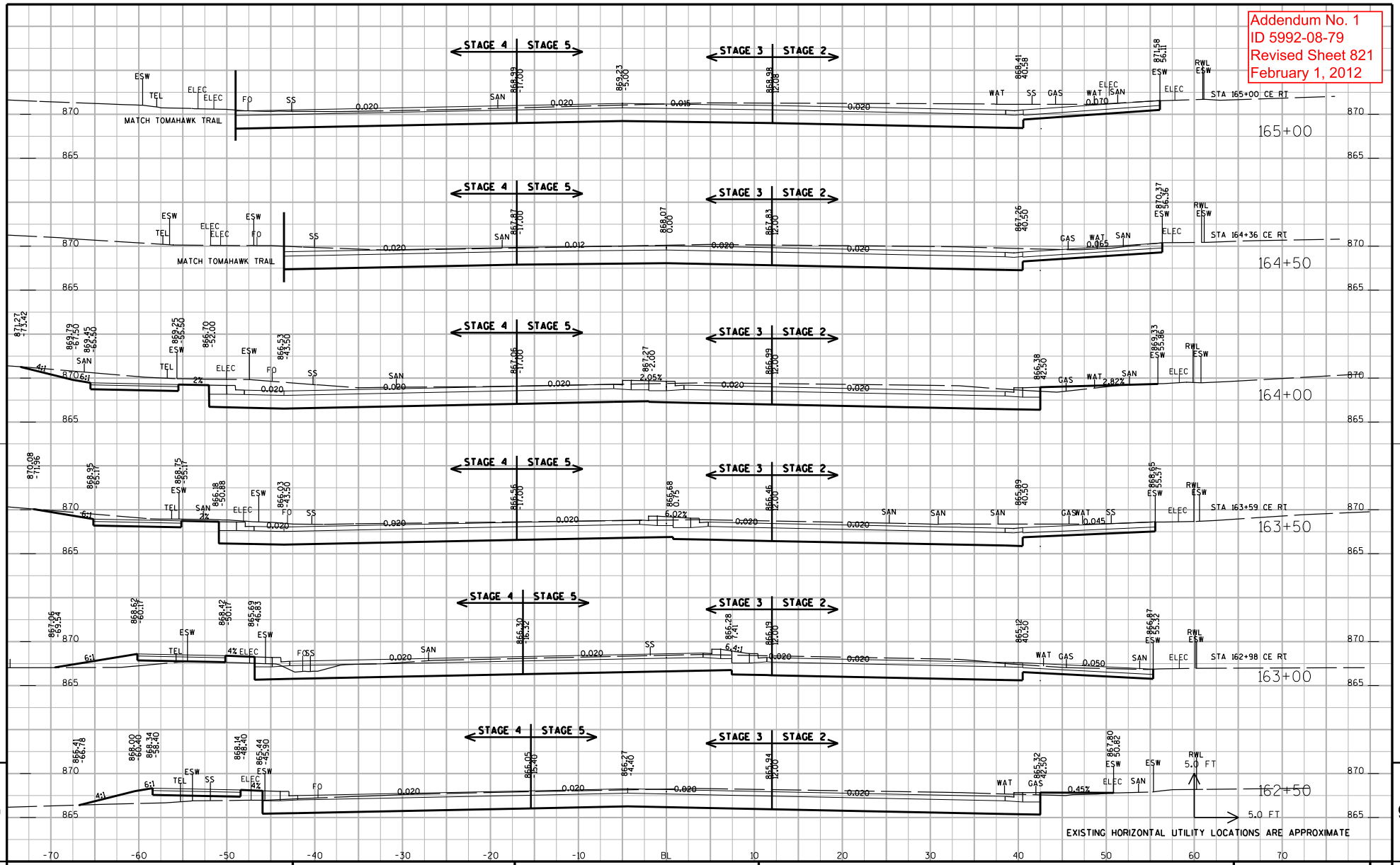
Addendum No. 1
ID 5992-08-79
Revised Sheet 820
February 1, 2012



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 820	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn
PLOT DATE : 1/30/2012
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :
WISDOT/CADDS SHEET 21

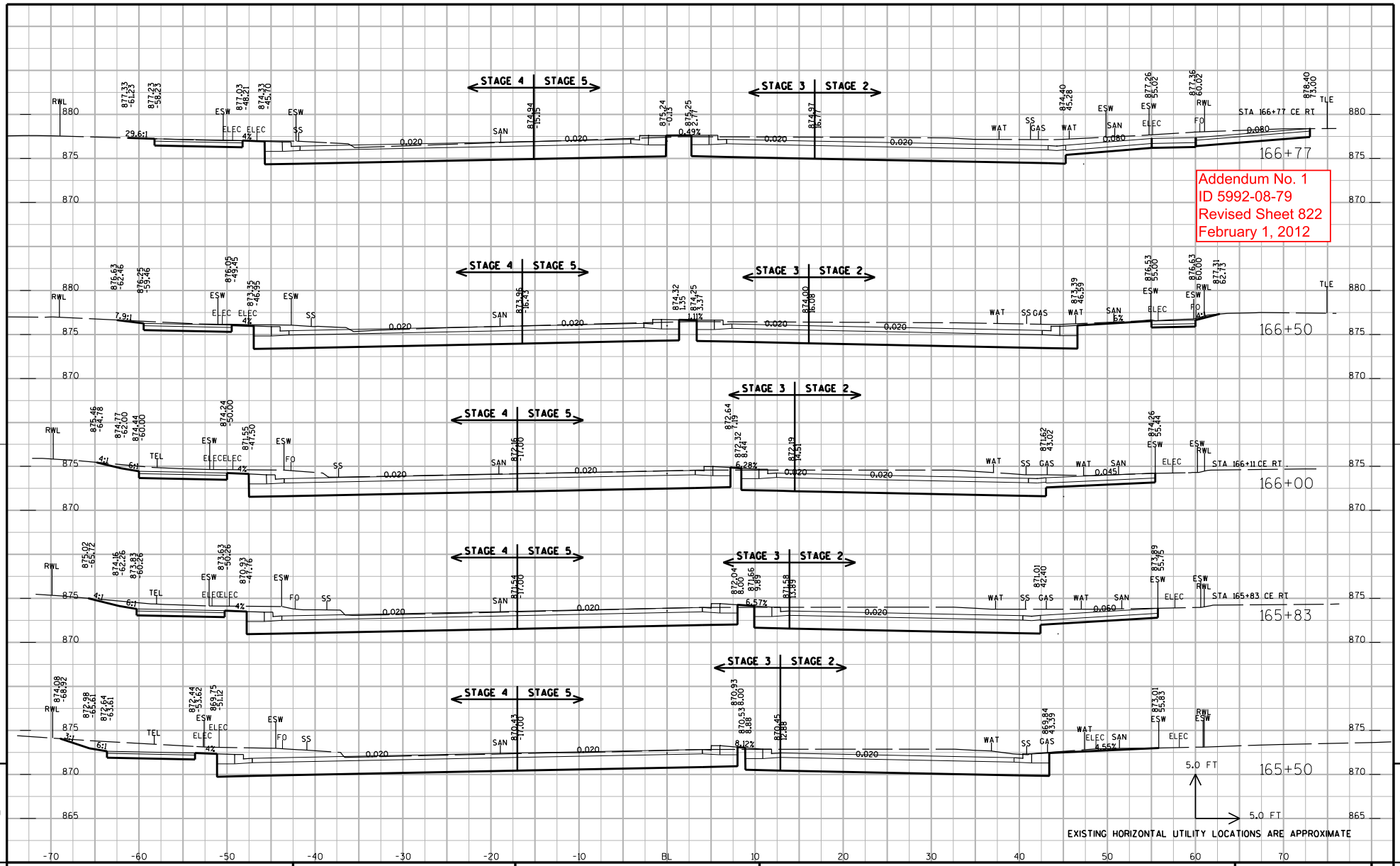
Addendum No. 1
ID 5992-08-79
Revised Sheet 821
February 1, 2012



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 821	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



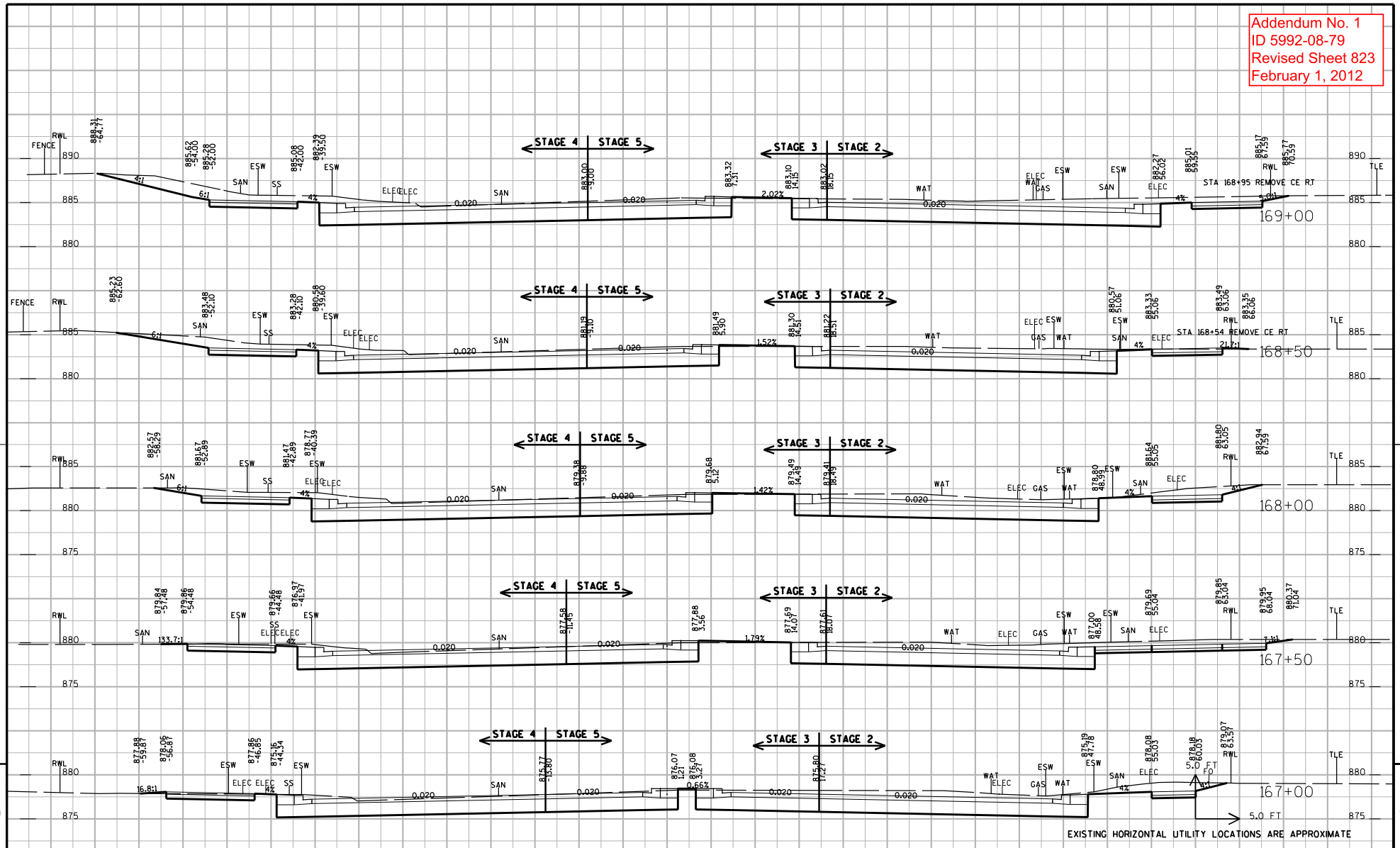
Addendum No. 1
ID 5992-08-79
Revised Sheet 822
February 1, 2012

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 822

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

Addendum No. 1
ID 5992-08-79
Revised Sheet 823
February 1, 2012

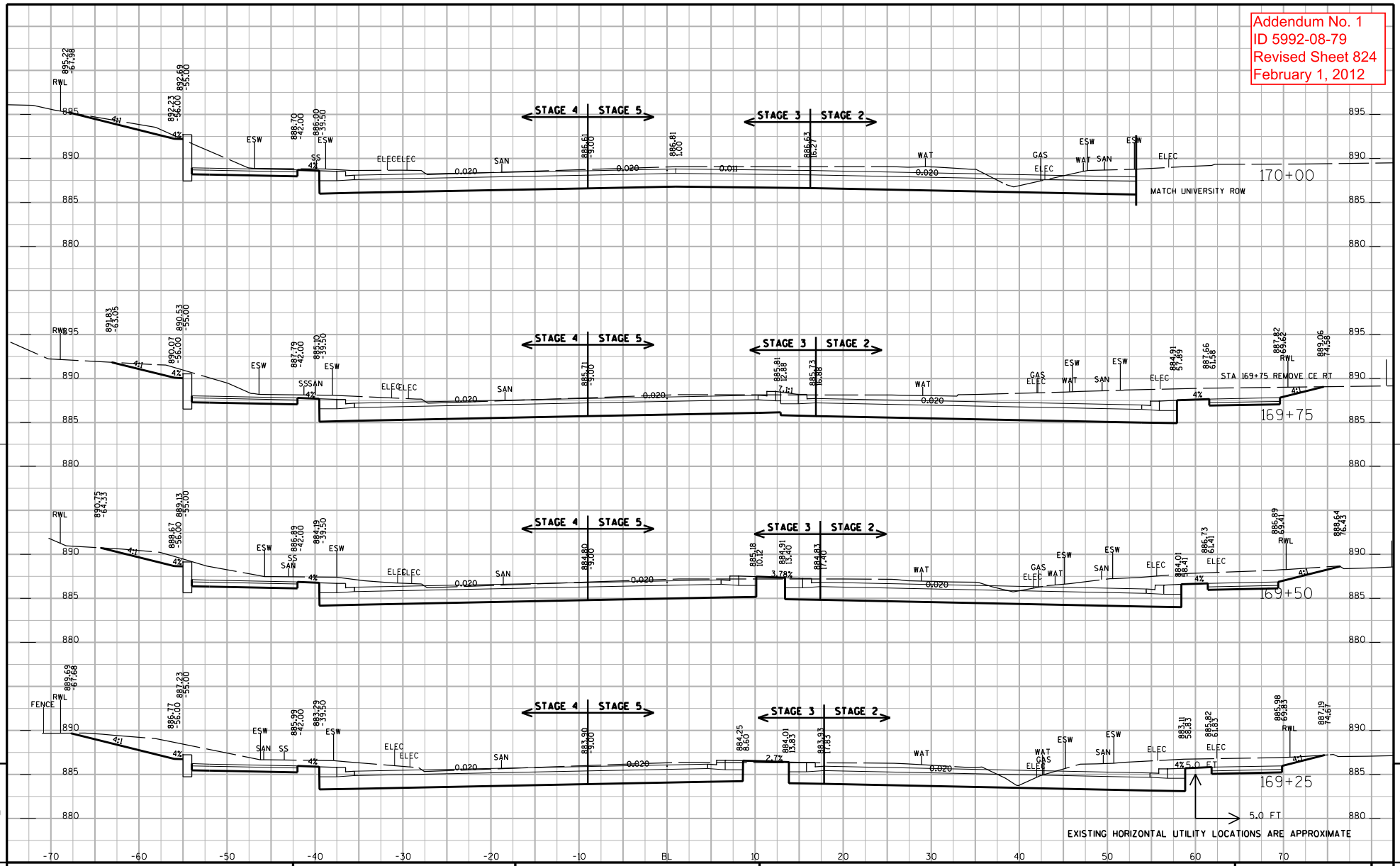


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 823	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

Addendum No. 1
ID 5992-08-79
Revised Sheet 824
February 1, 2012

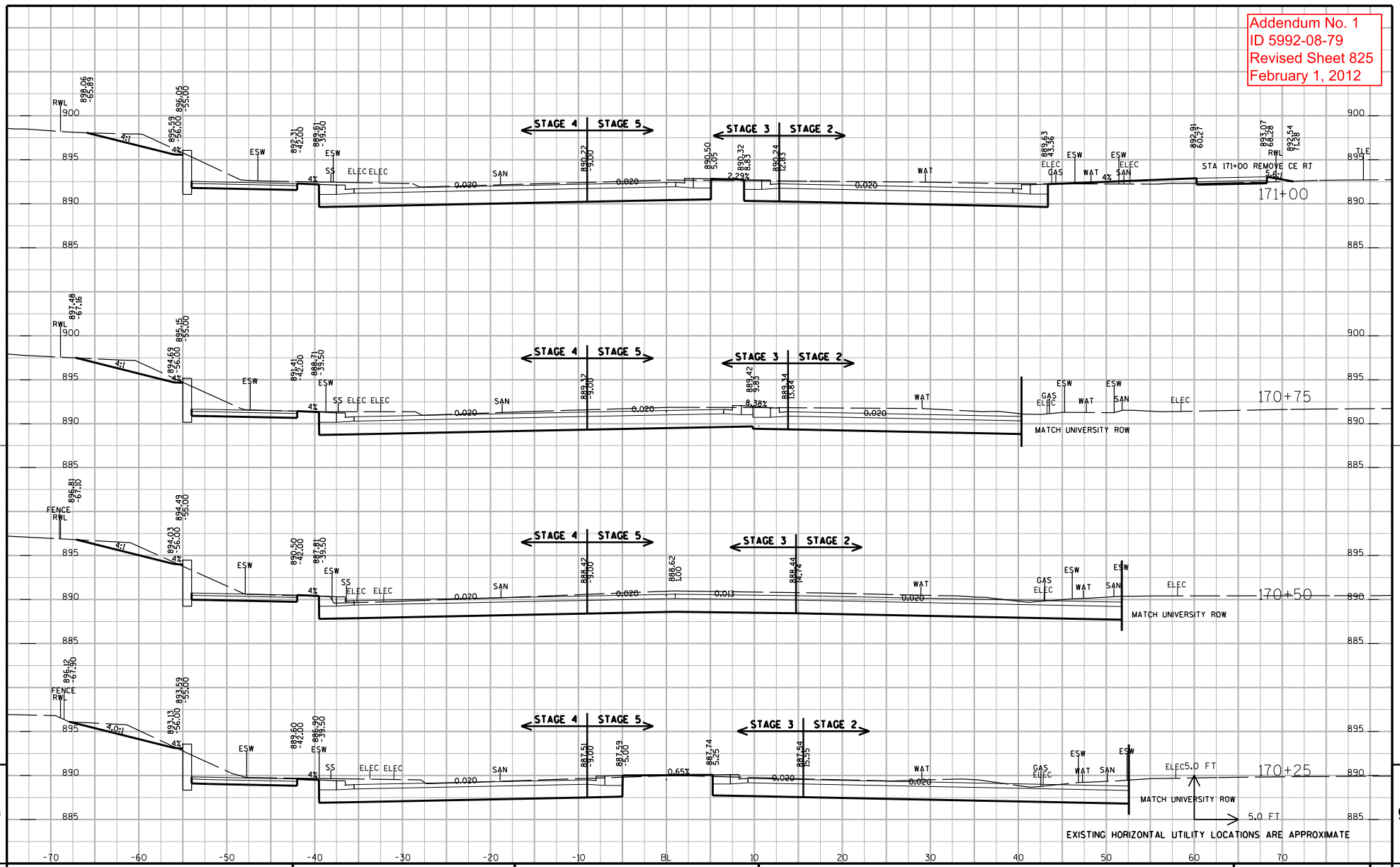


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 824

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

Addendum No. 1
ID 5992-08-79
Revised Sheet 825
February 1, 2012

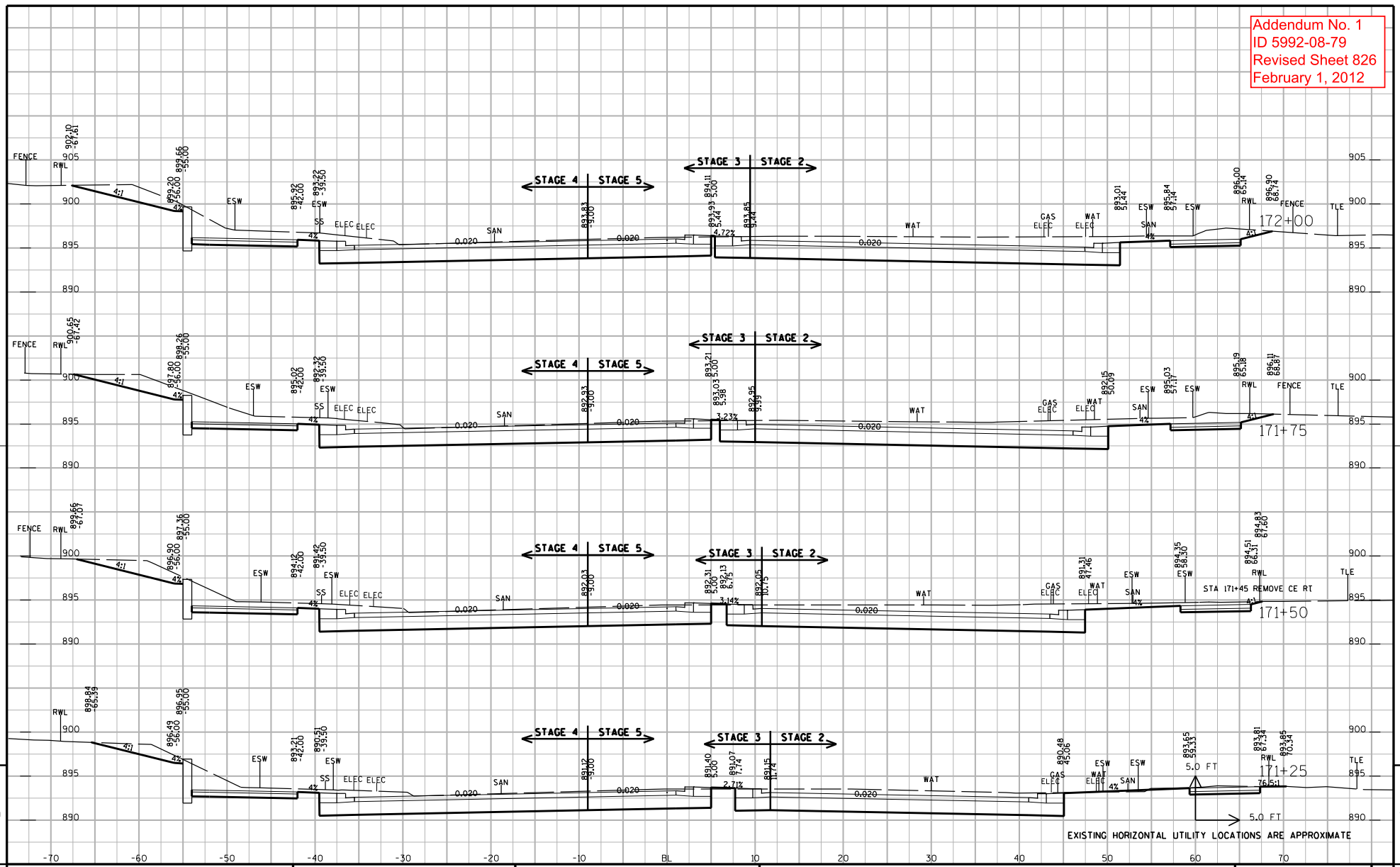


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 825

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

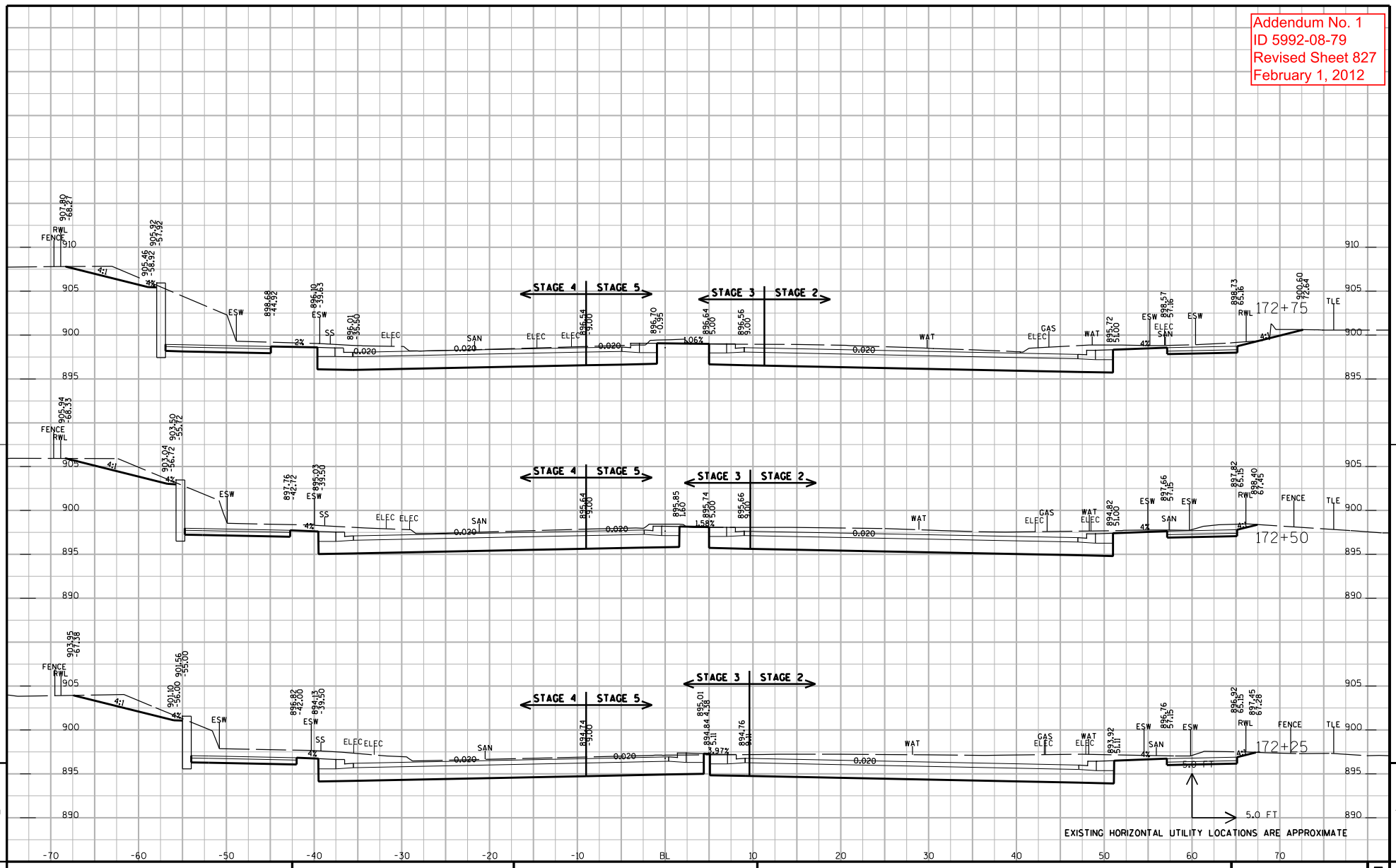
Addendum No. 1
ID 5992-08-79
Revised Sheet 826
February 1, 2012



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 826

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn
PLOT DATE : 1/30/2012
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :
WISDOT/CADDS SHEET 21

Addendum No. 1
ID 5992-08-79
Revised Sheet 827
February 1, 2012

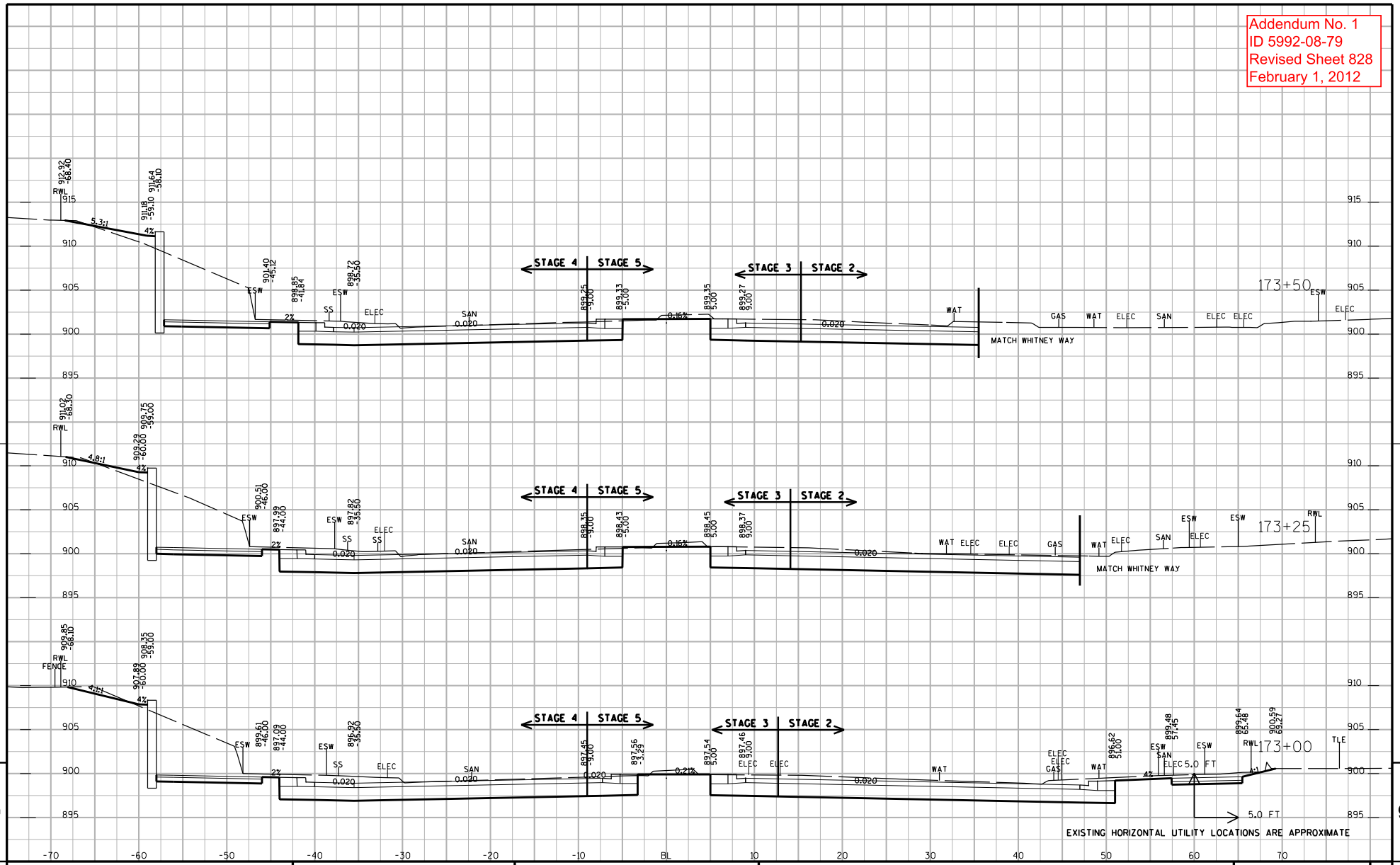


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 827

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

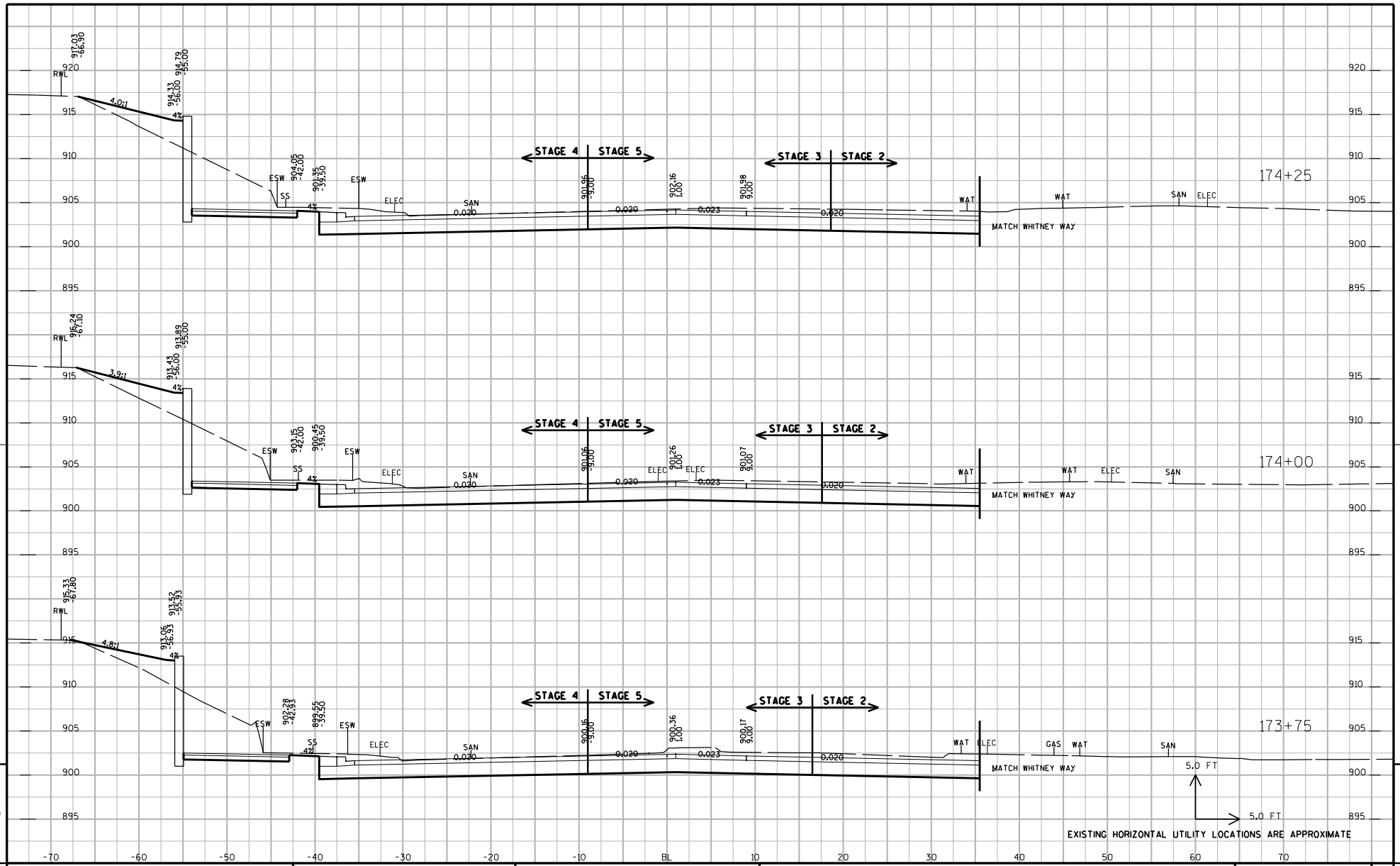
Addendum No. 1
ID 5992-08-79
Revised Sheet 828
February 1, 2012



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 828

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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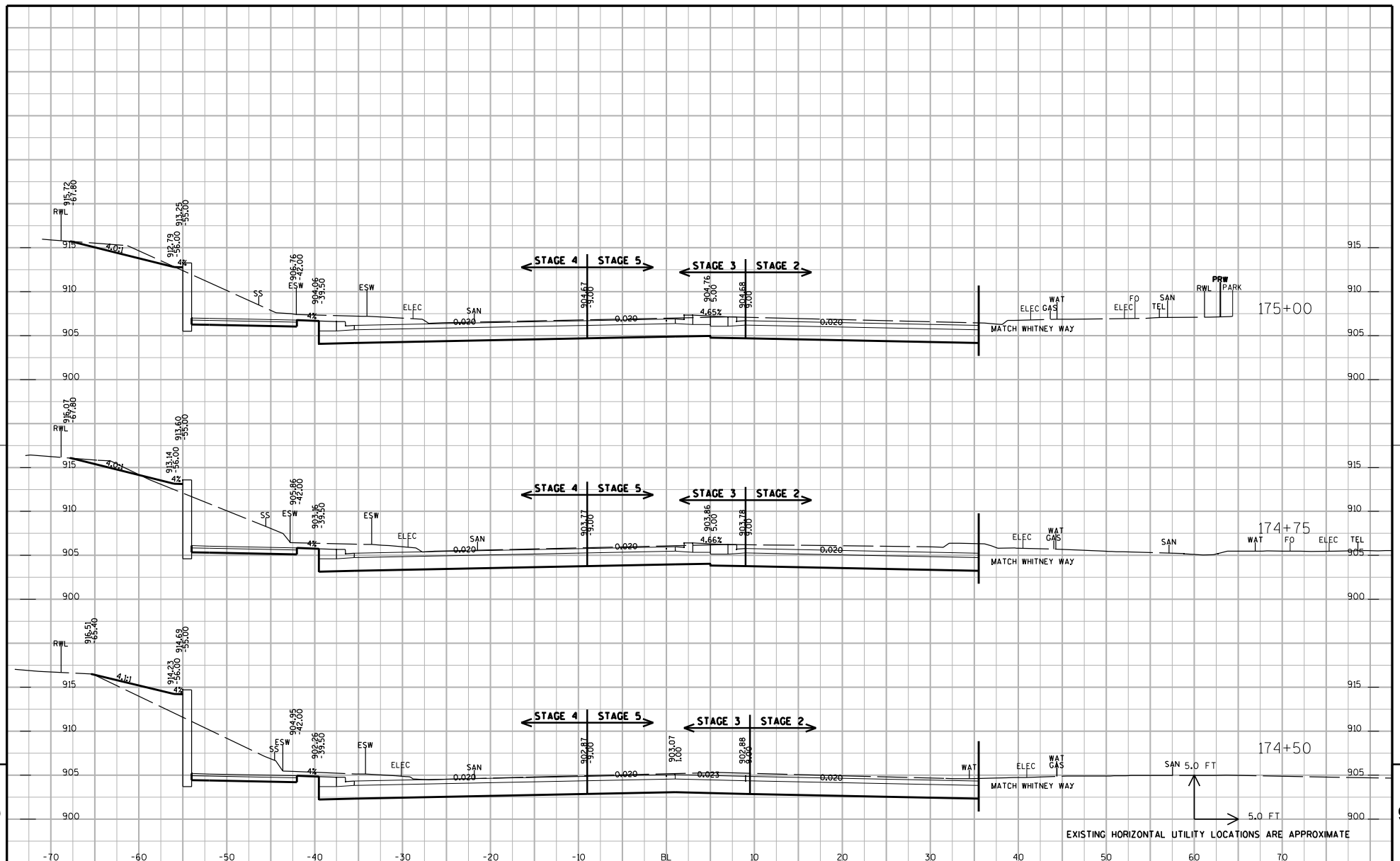
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 829	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

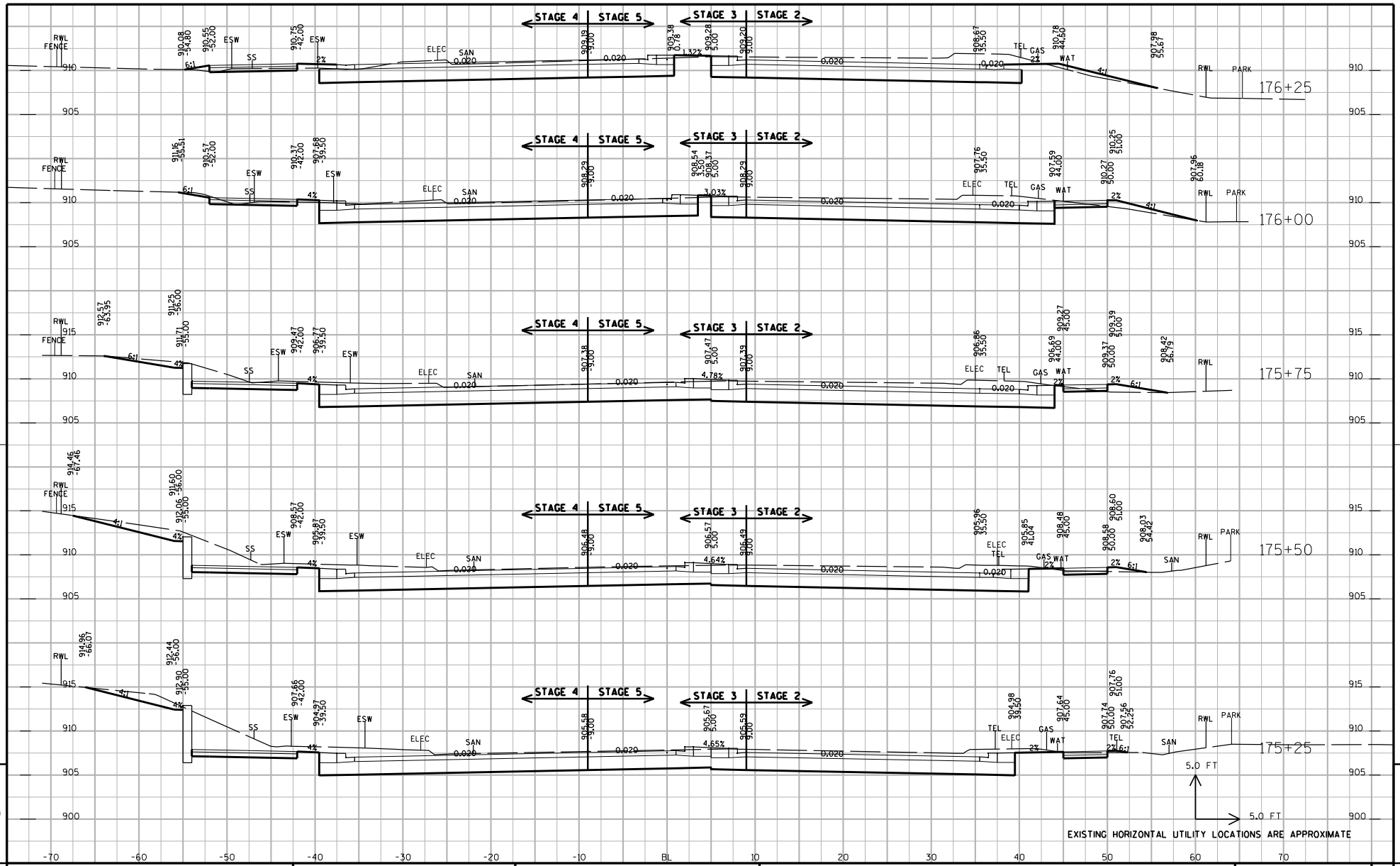
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 830 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

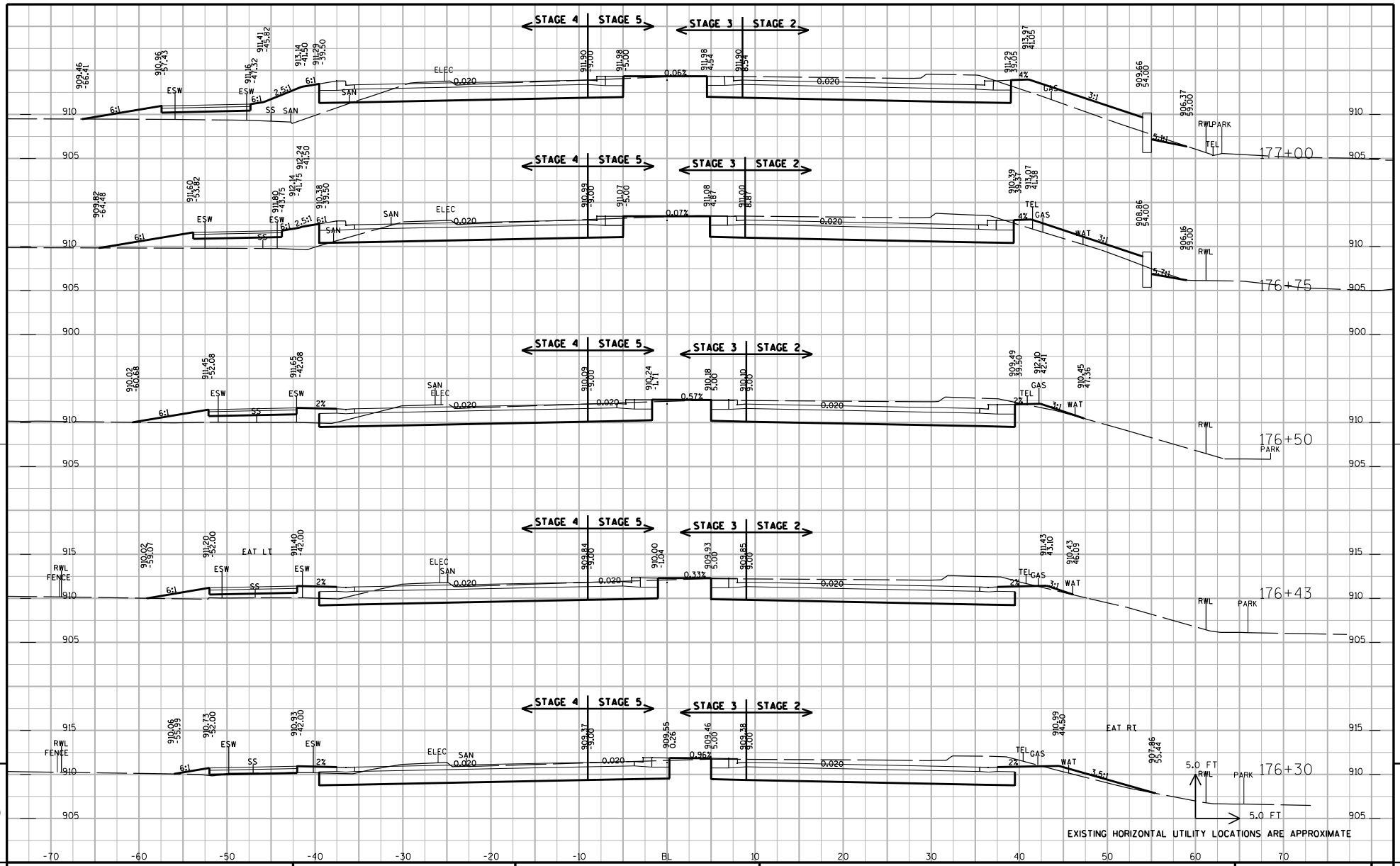
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 831 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

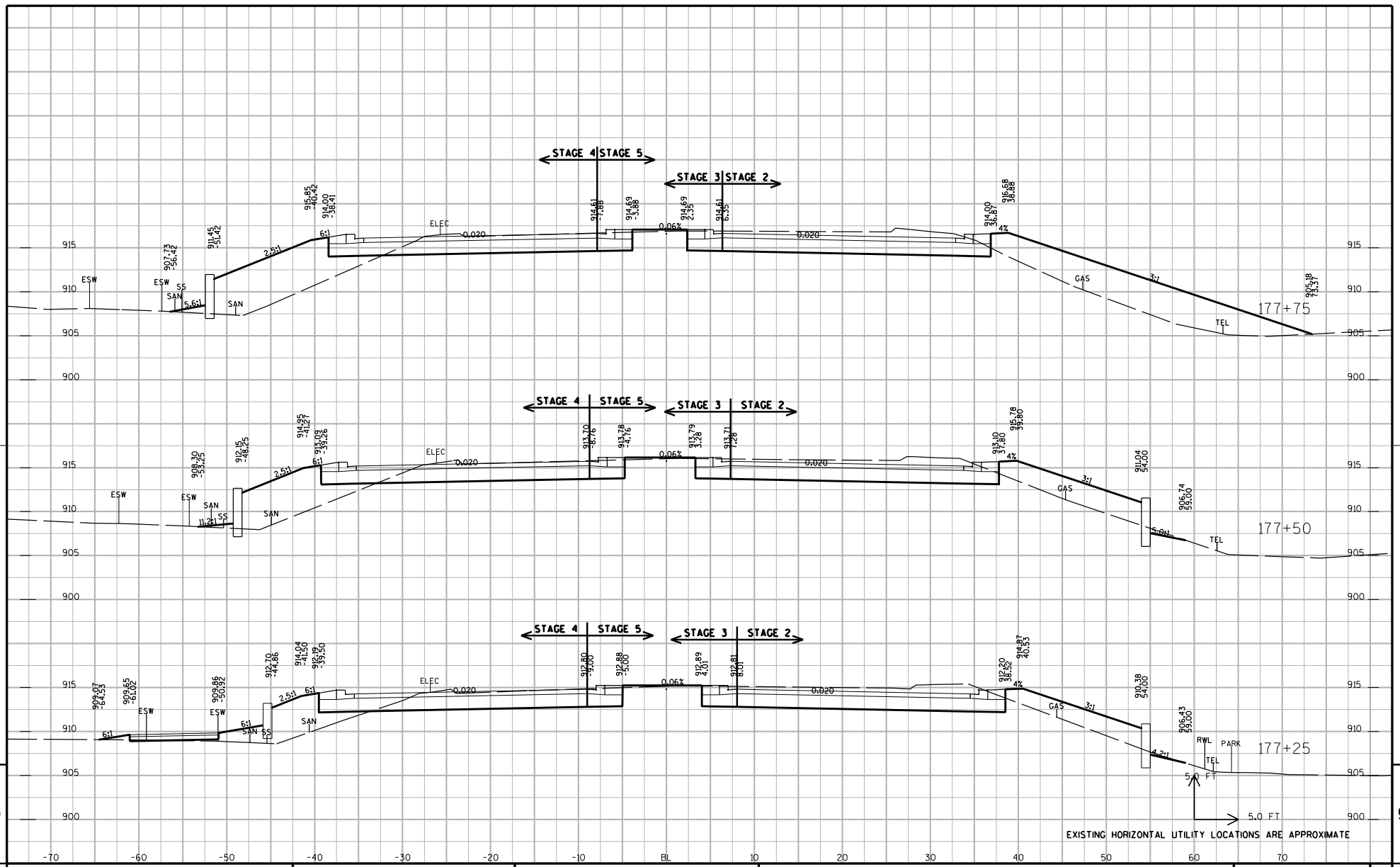
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 832 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

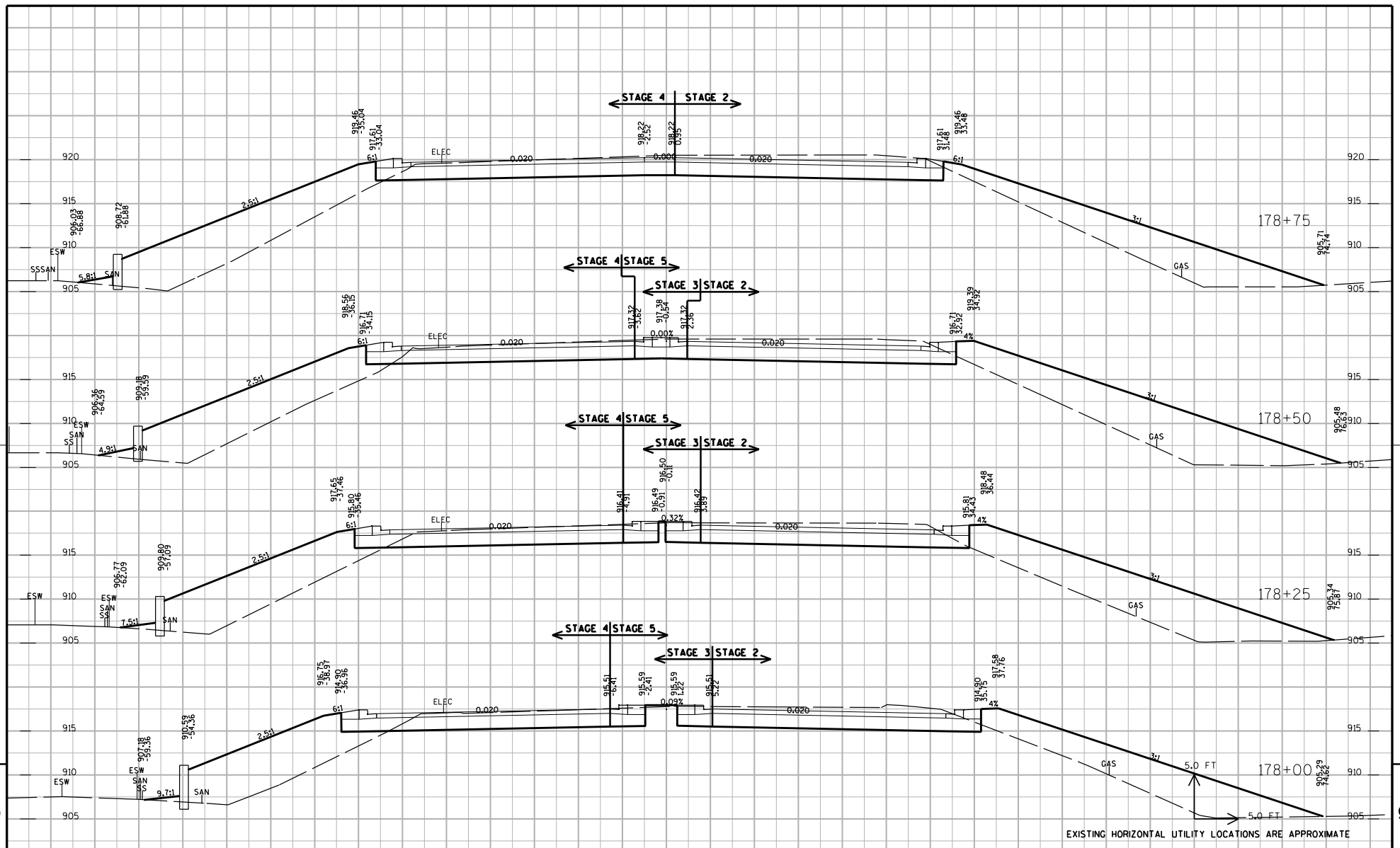
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 833 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

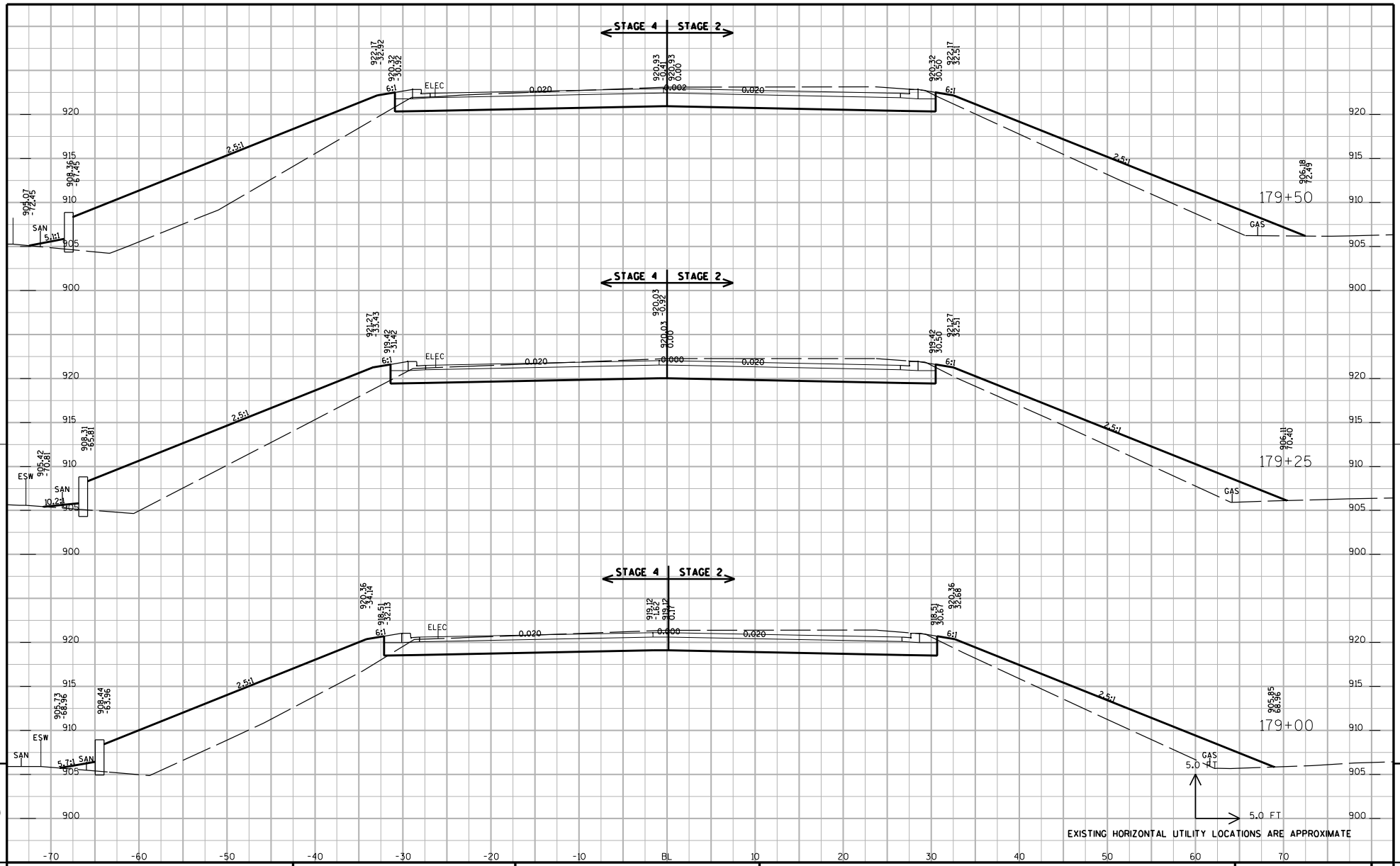
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 834 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

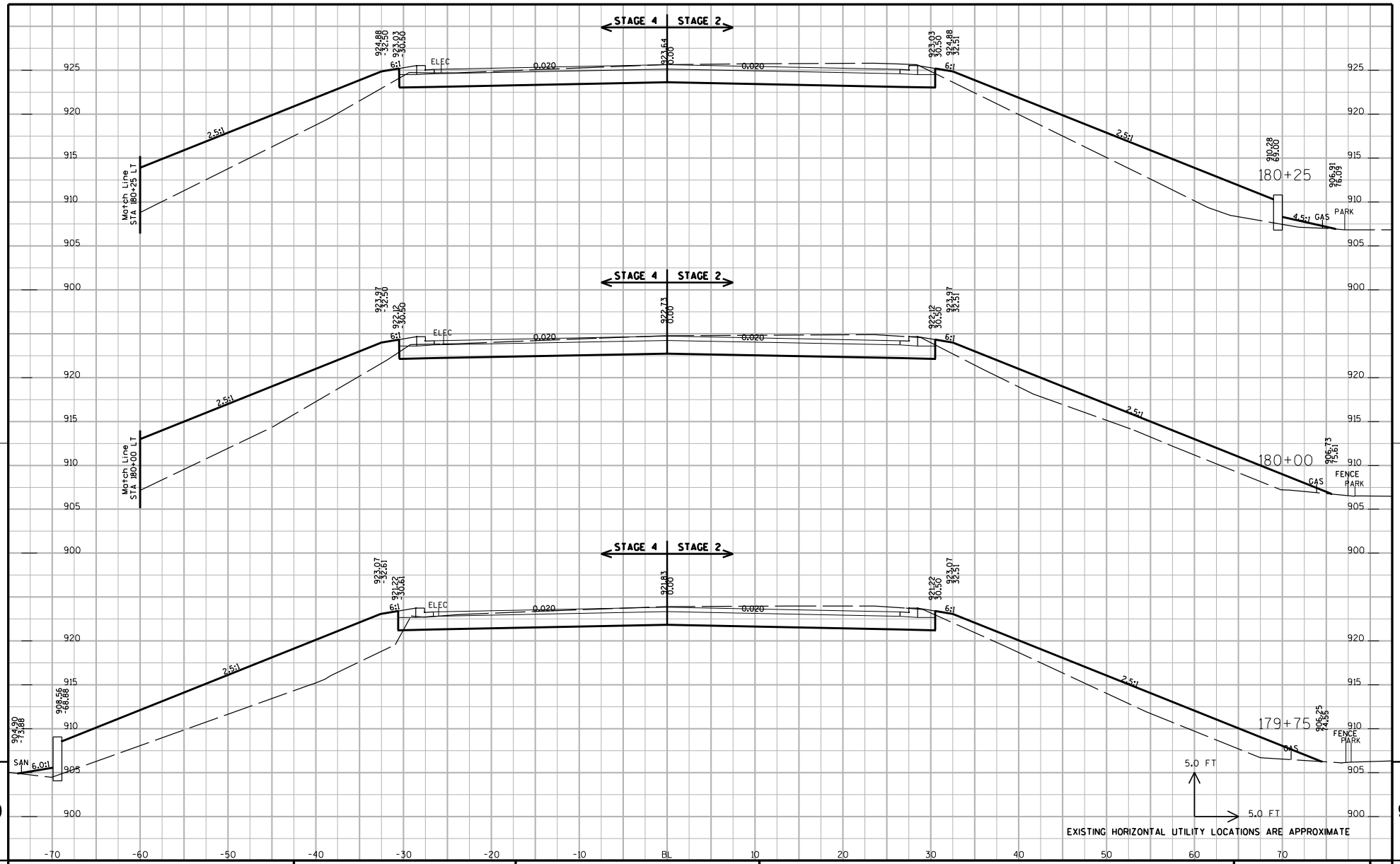
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 835

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

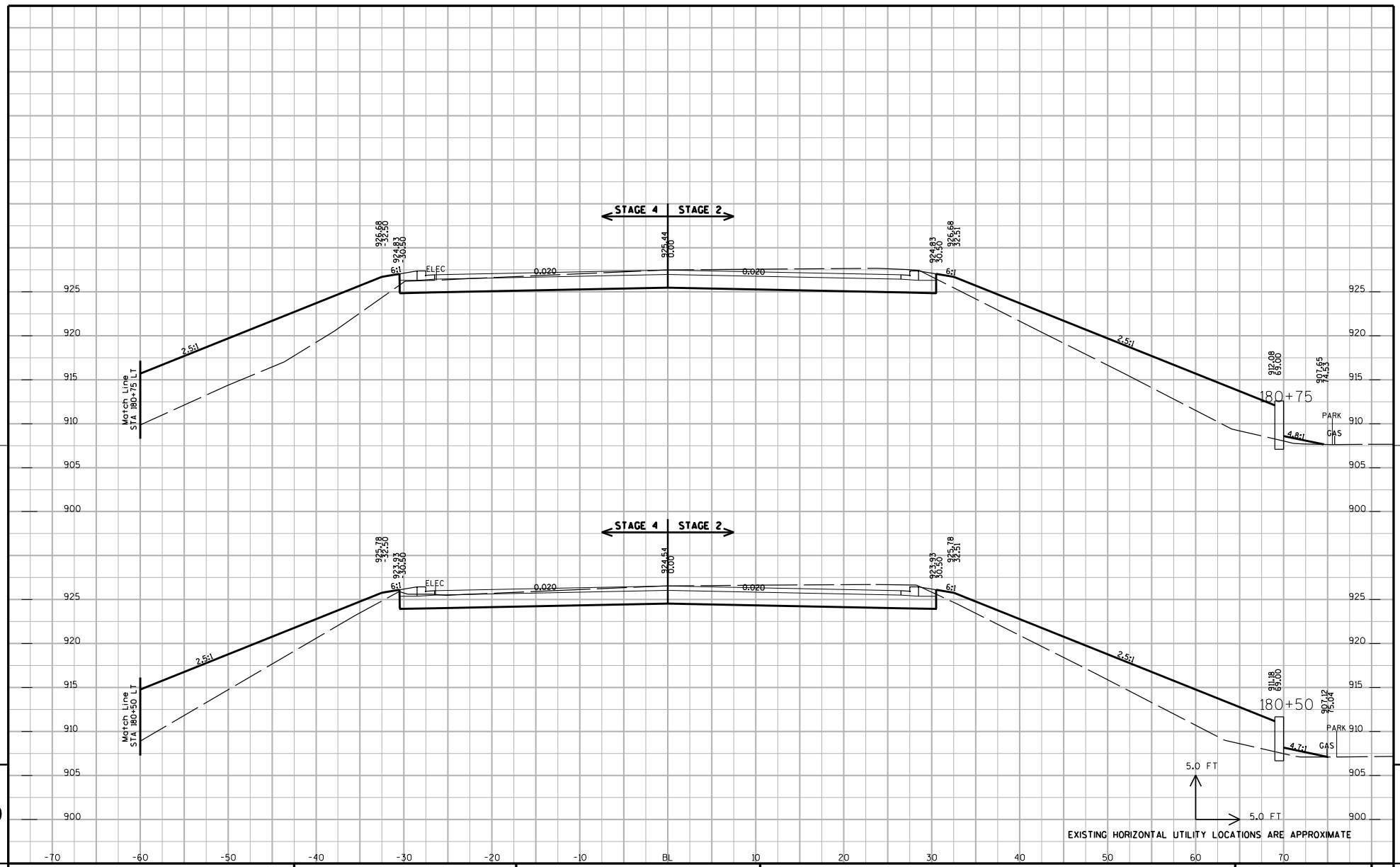
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 836

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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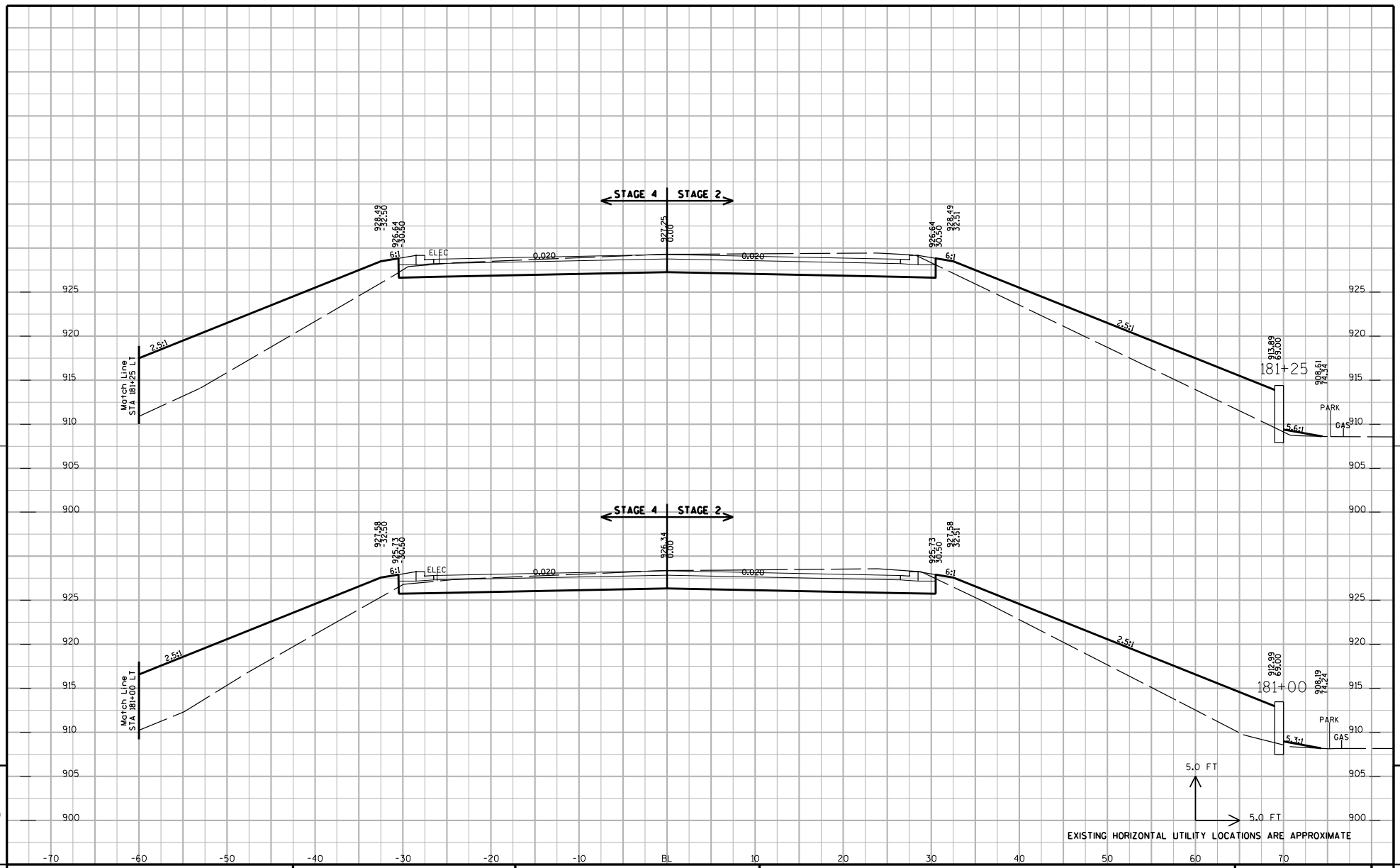
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 837	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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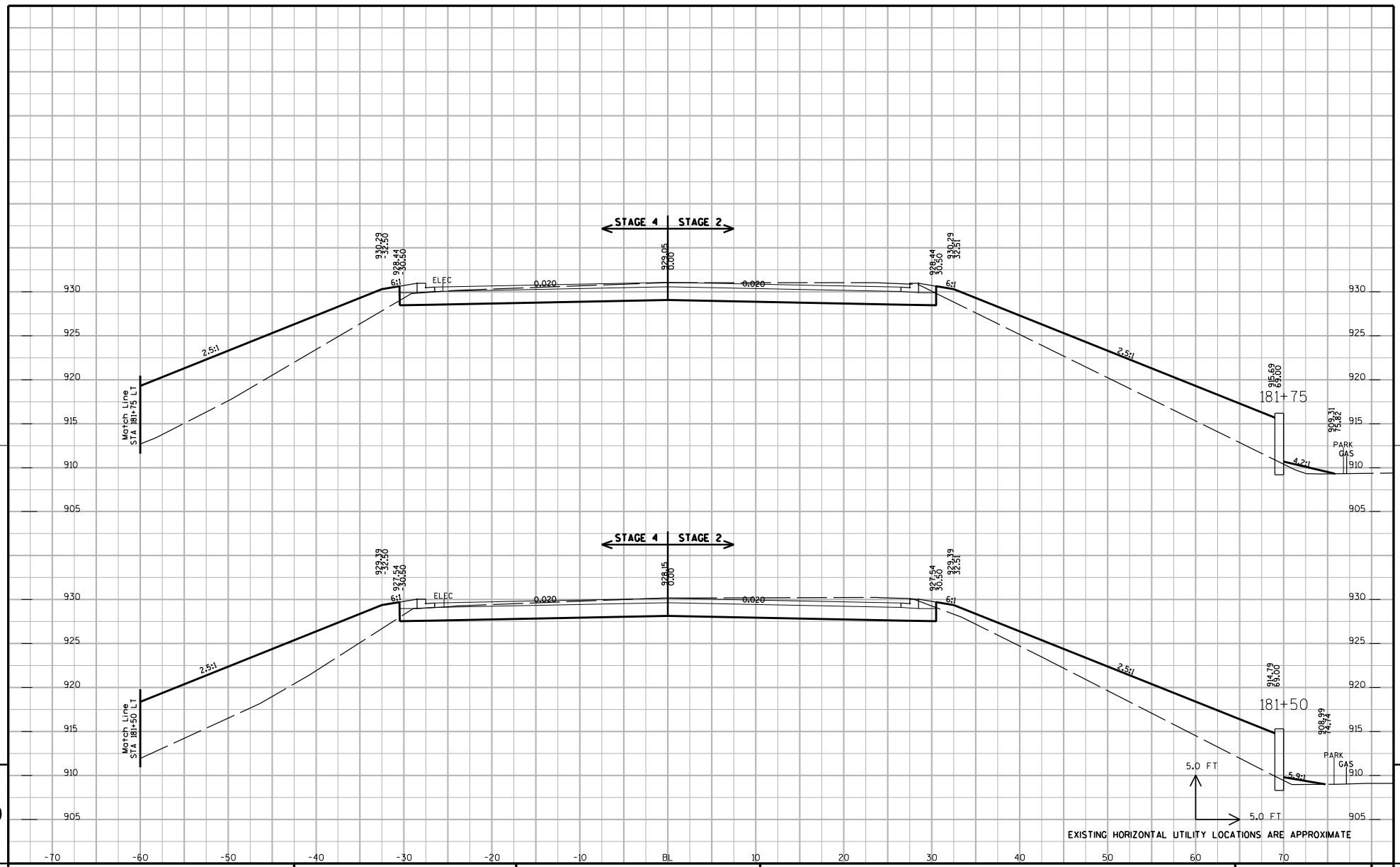
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 838	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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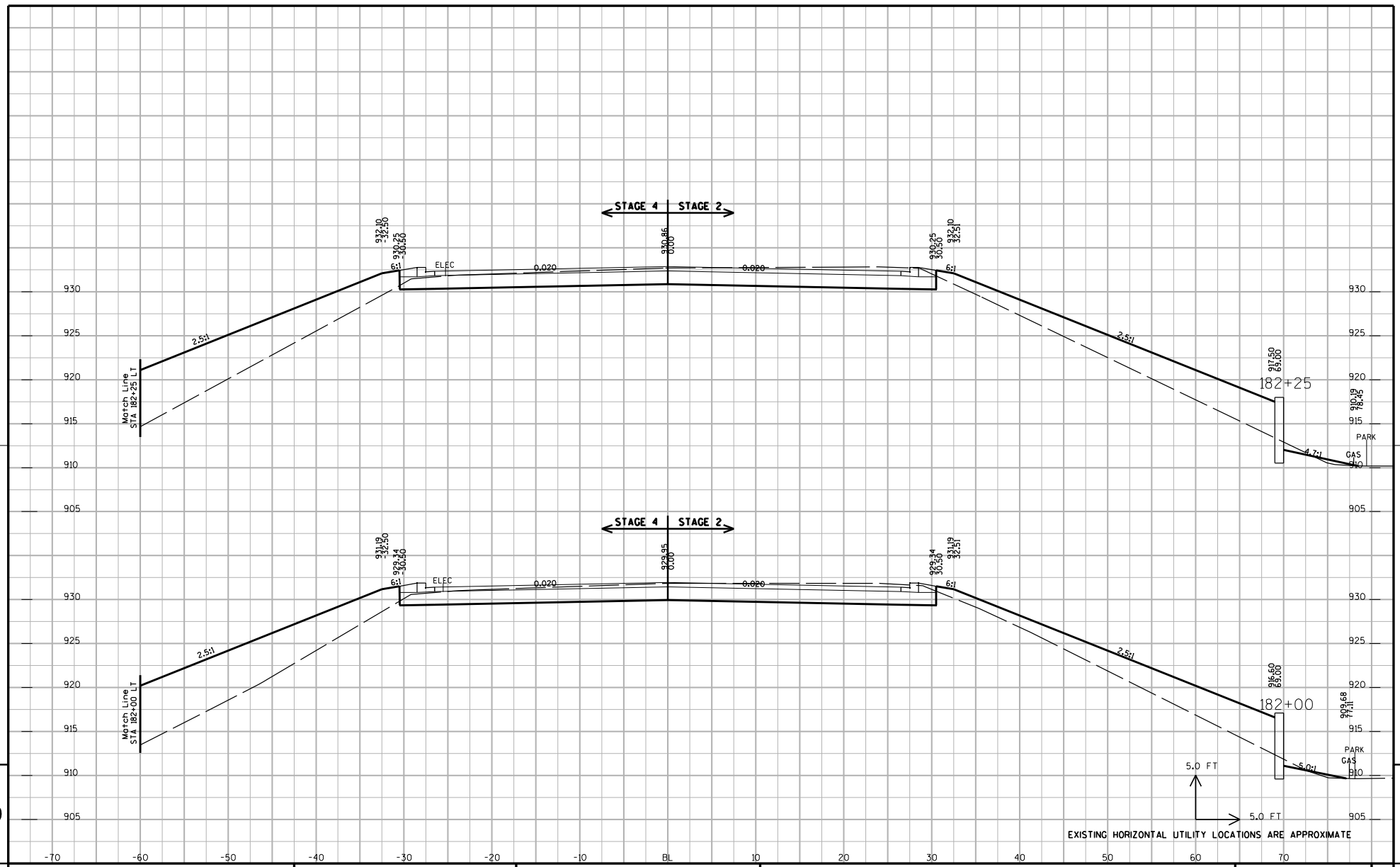
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 839	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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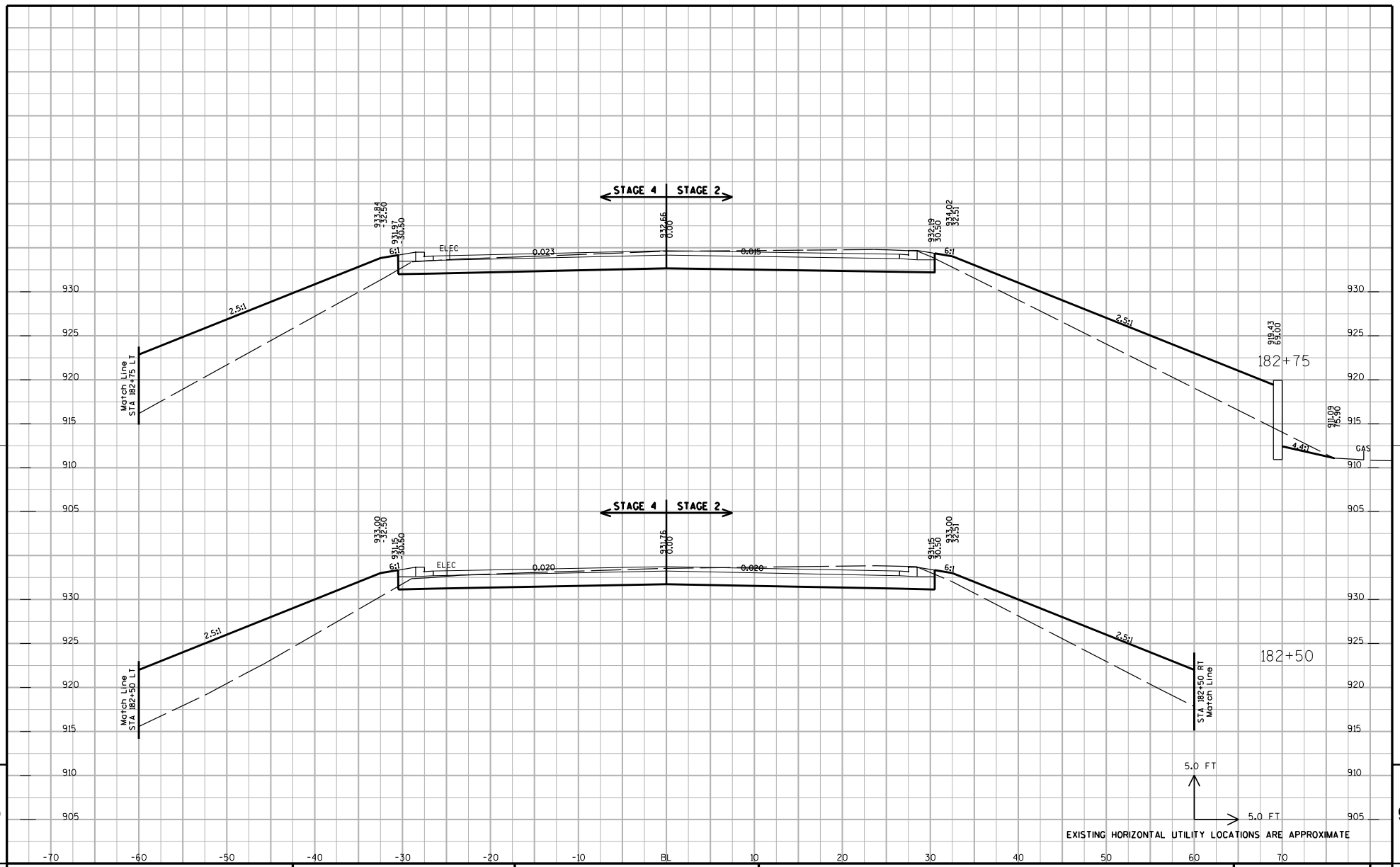
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 840	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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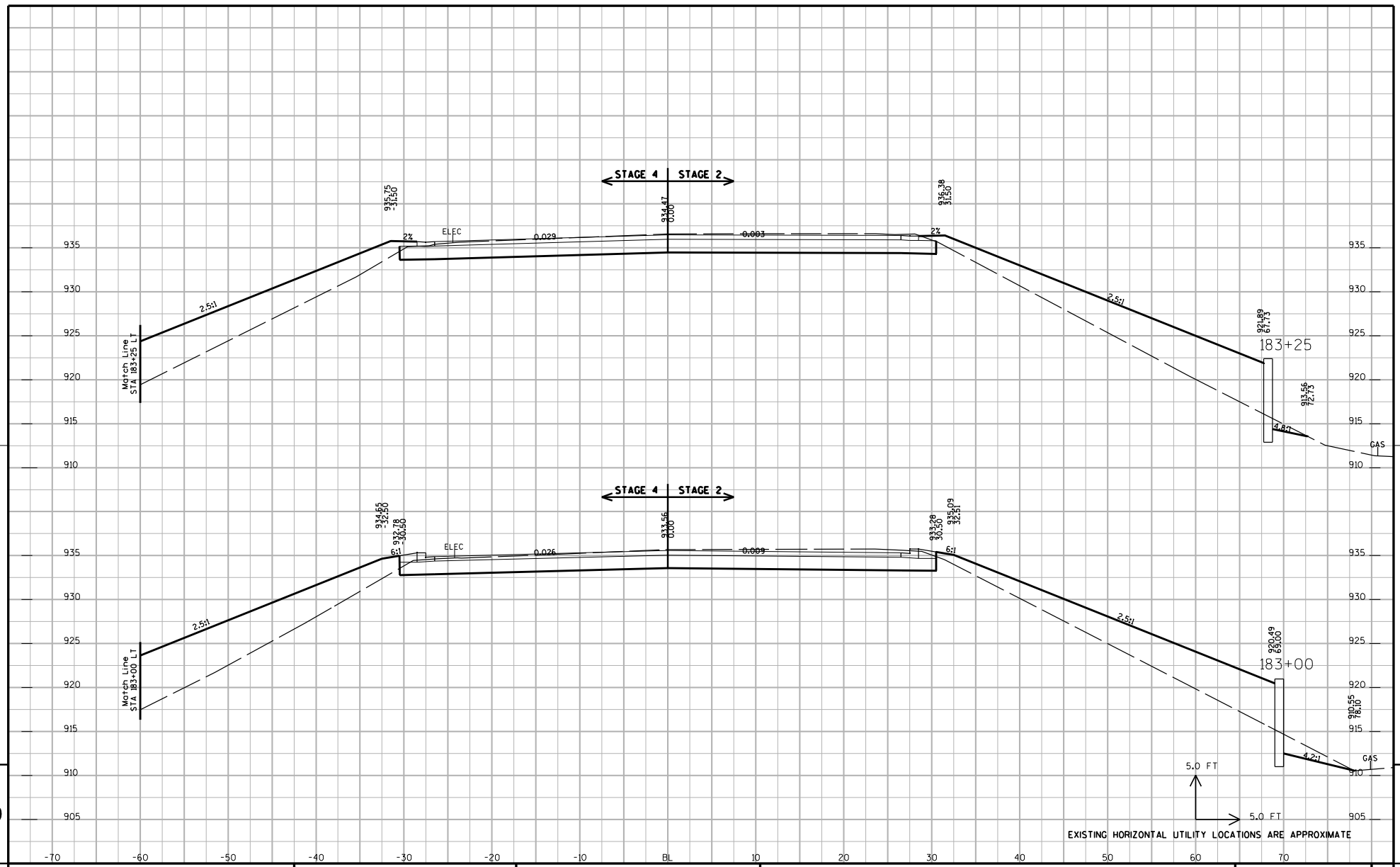
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 841 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

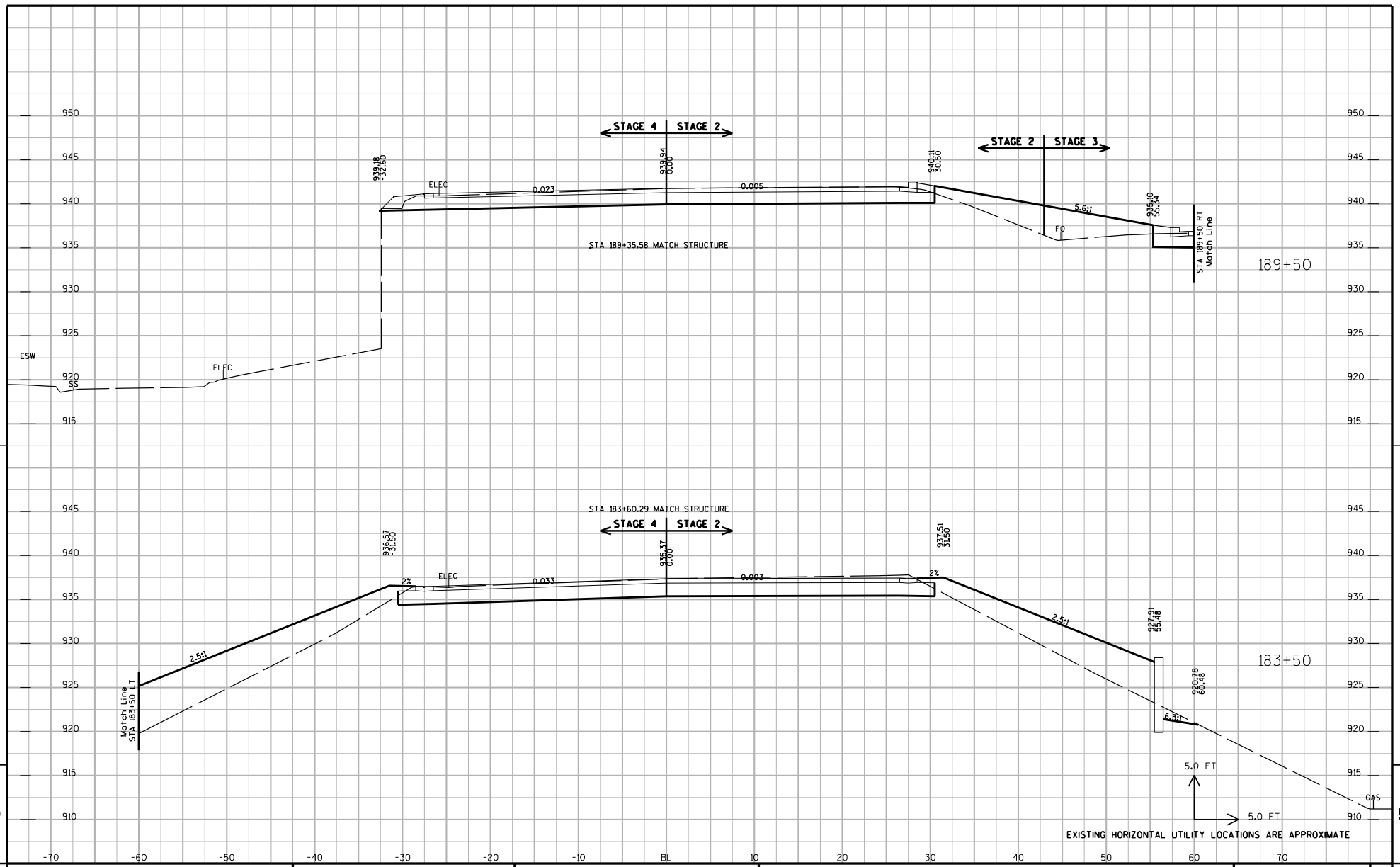
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 842	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

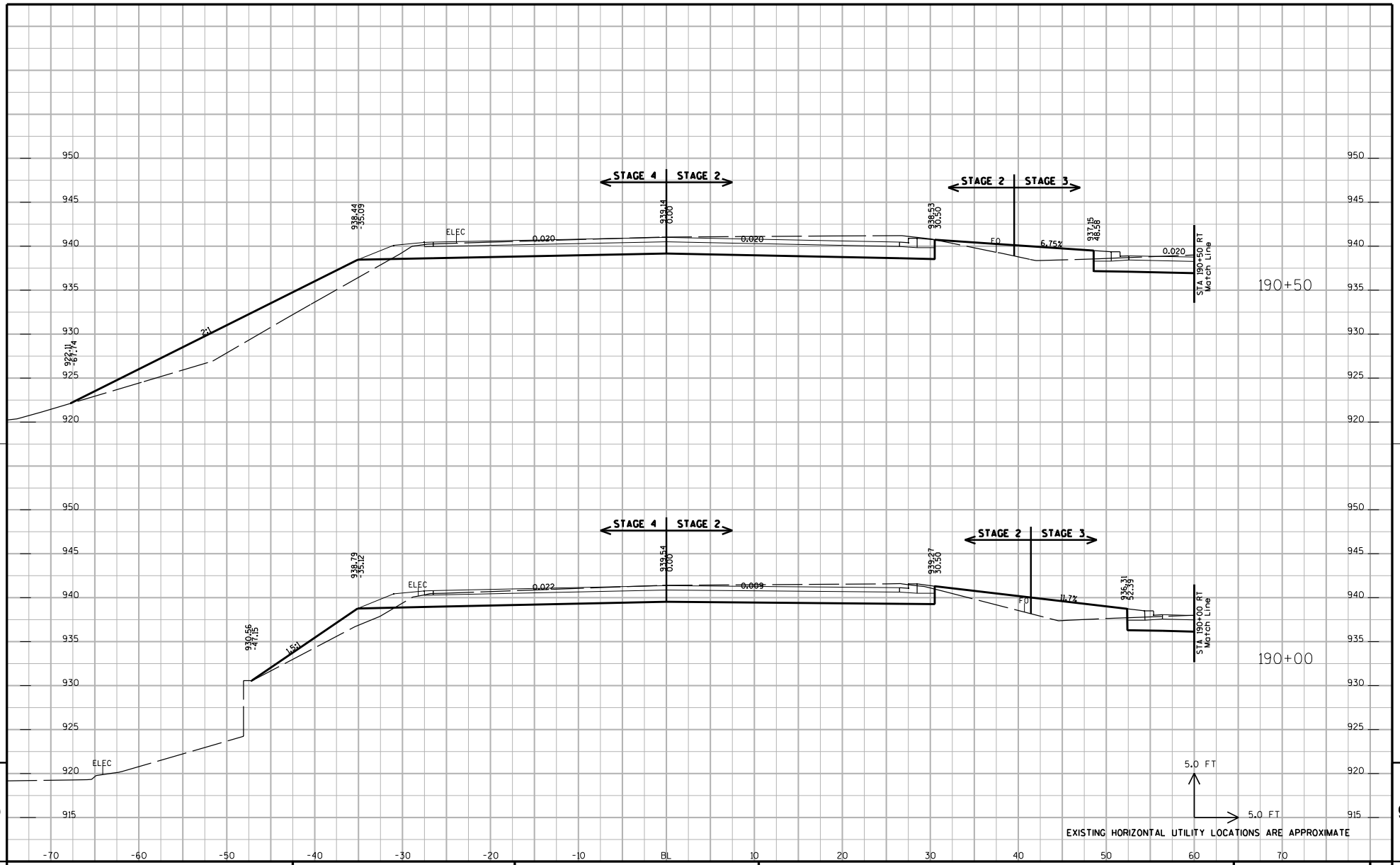
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 843	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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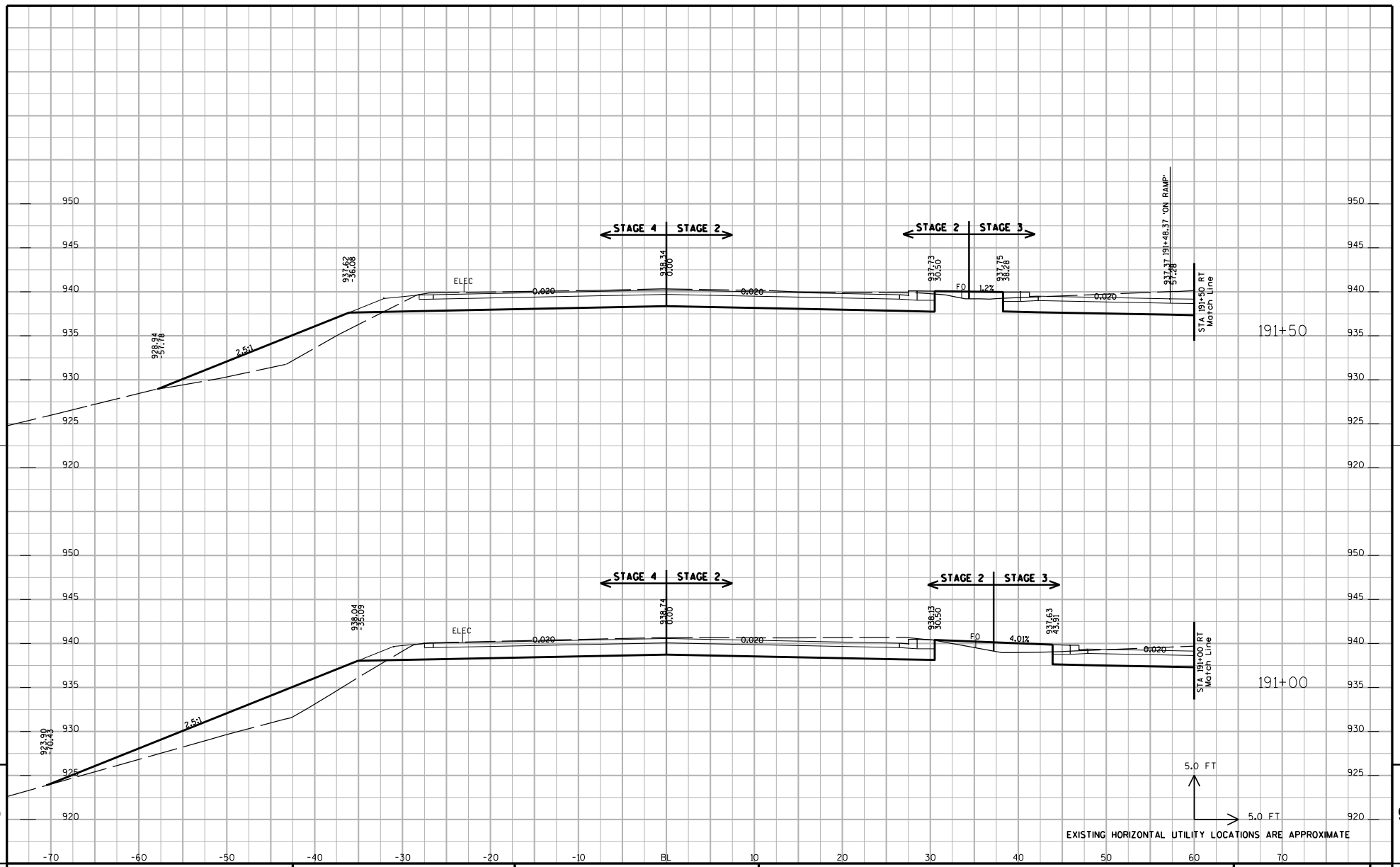
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 844	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

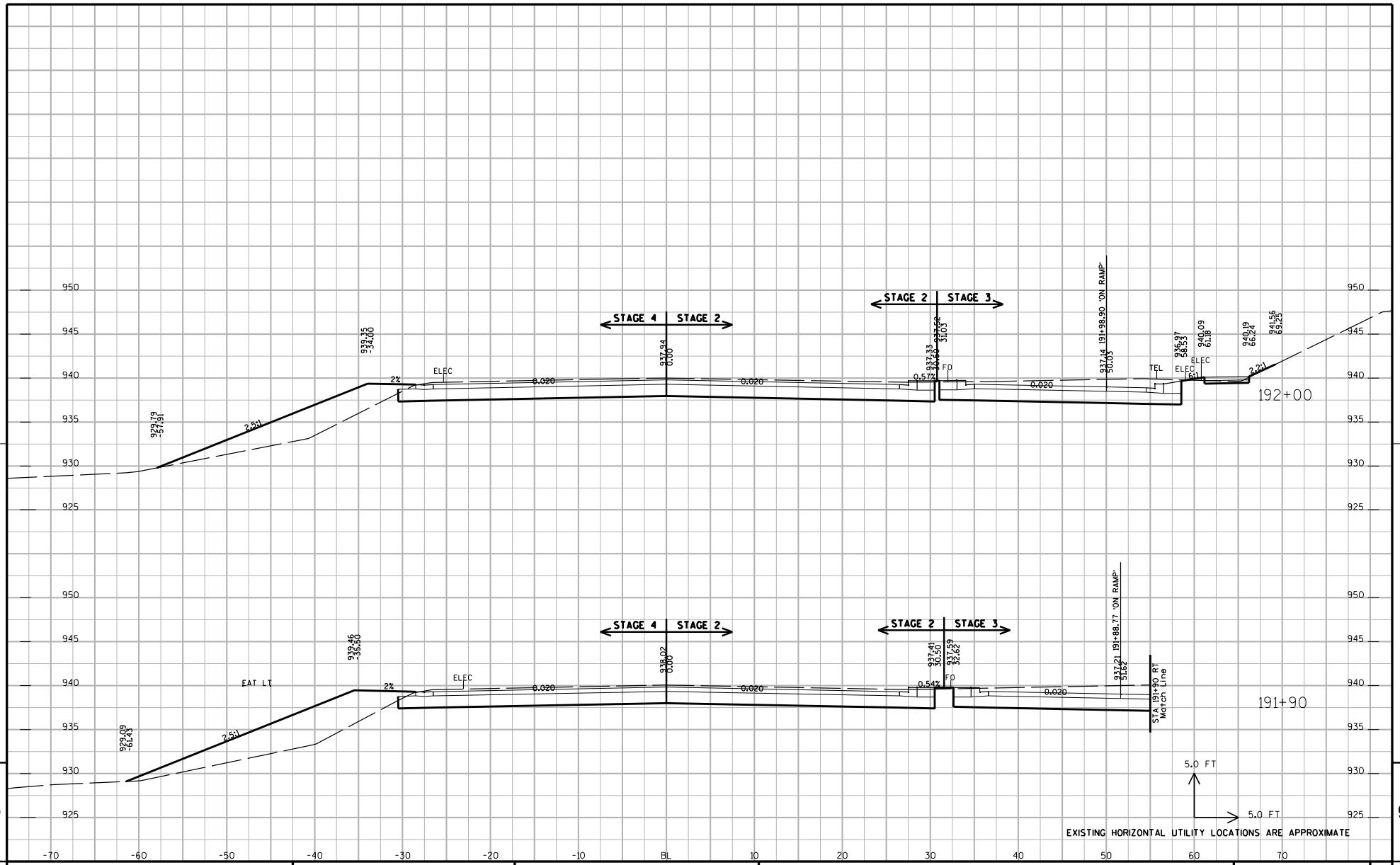
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 845	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

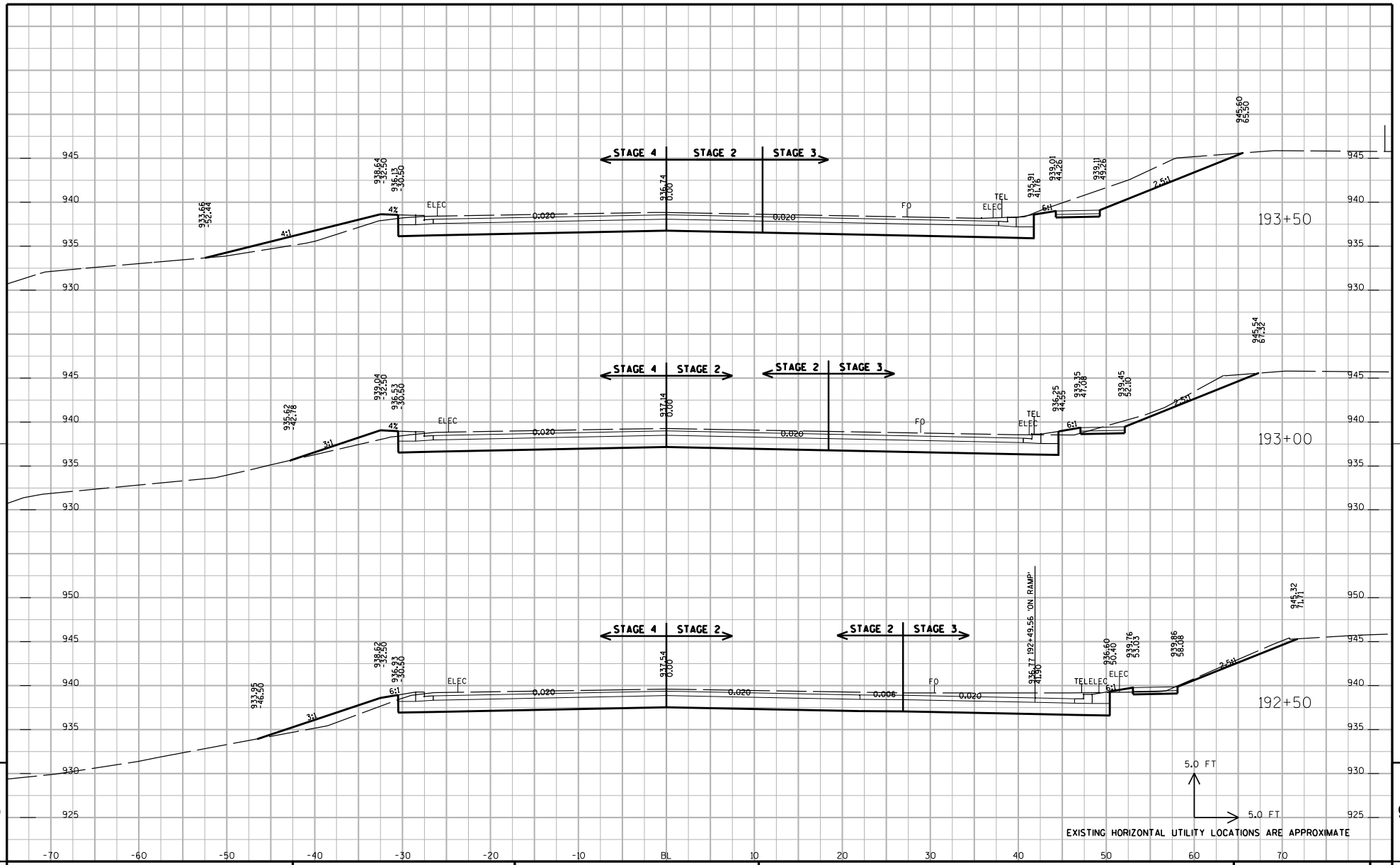
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 846	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

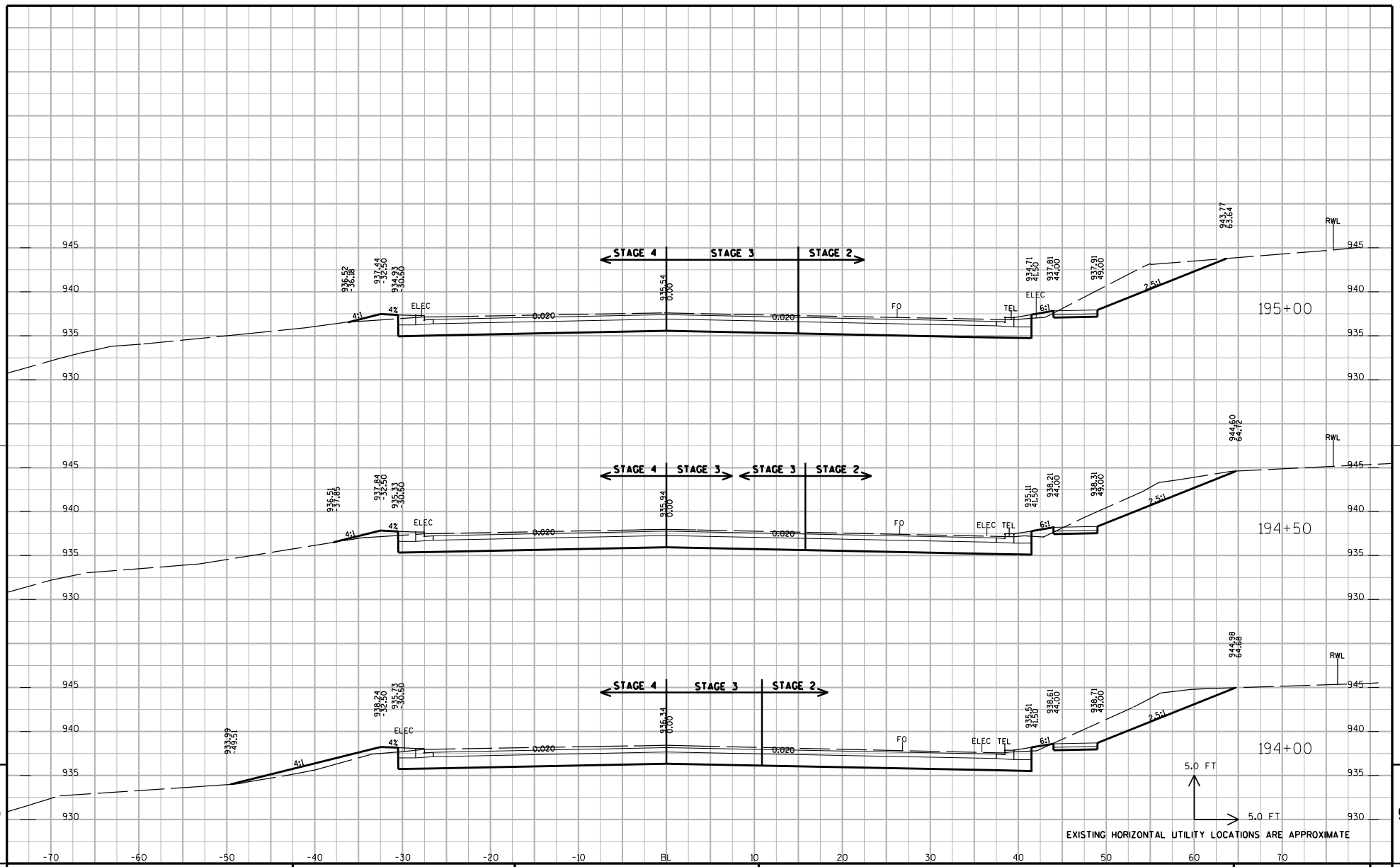
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 847 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

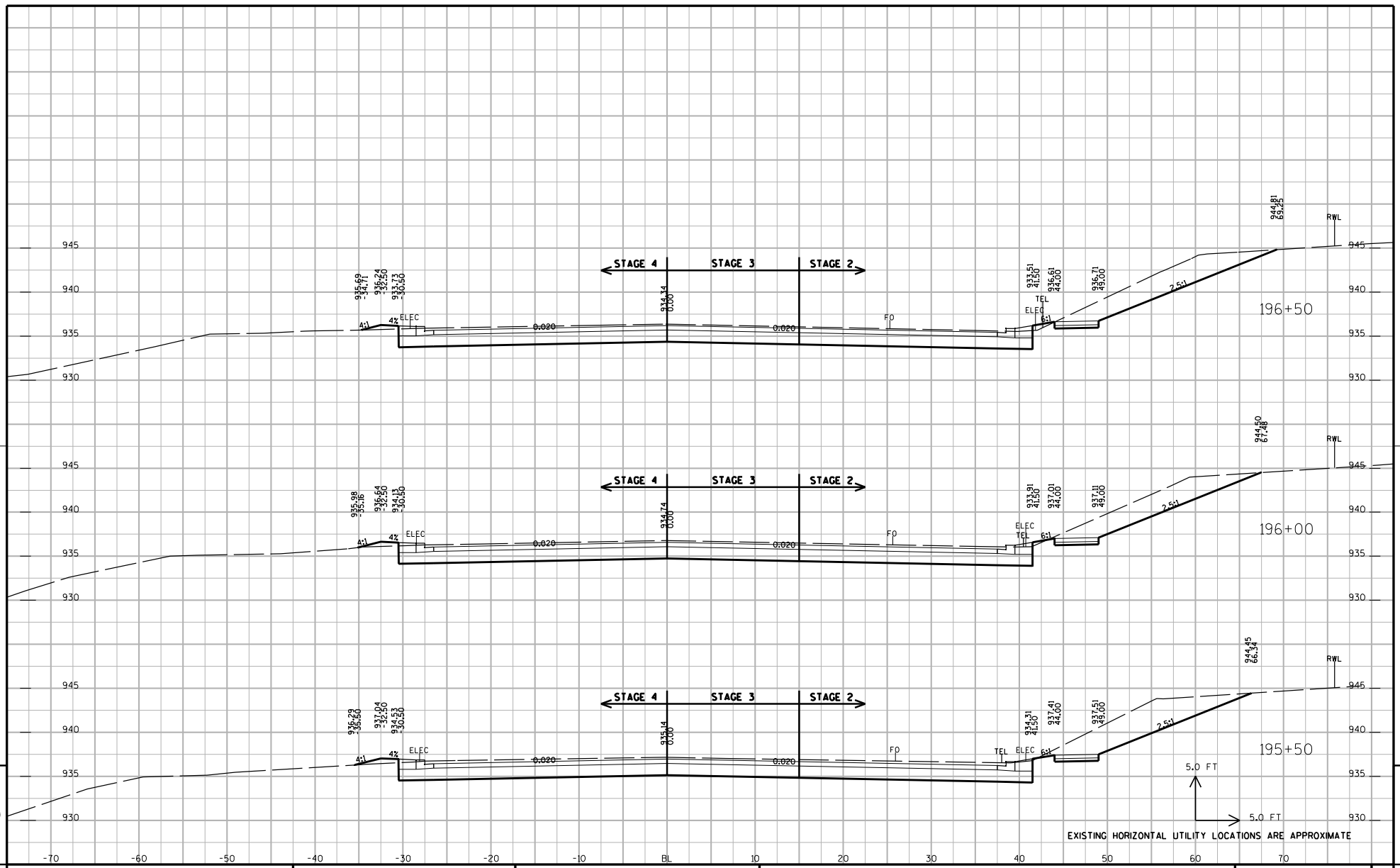
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 848	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

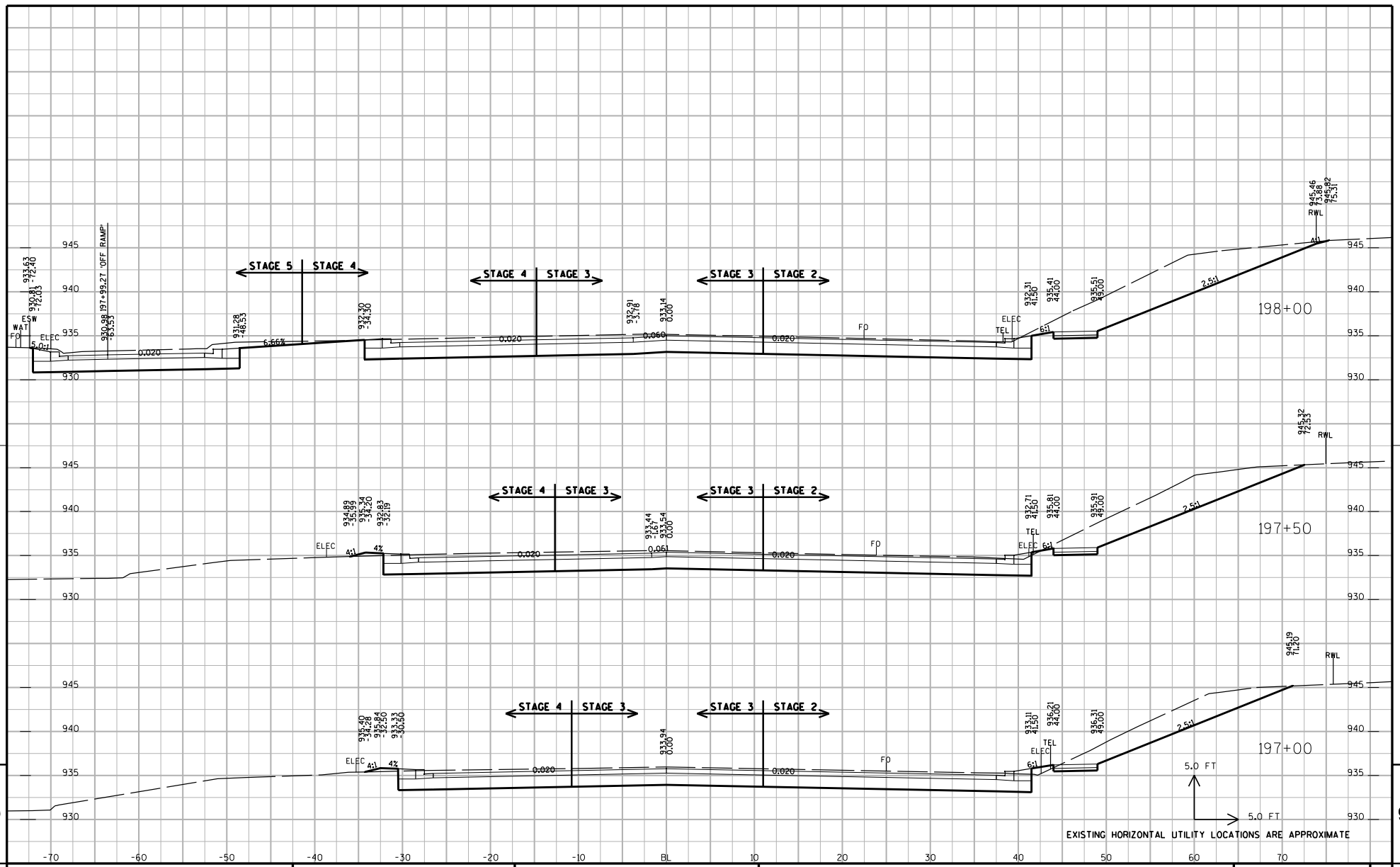
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 849 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

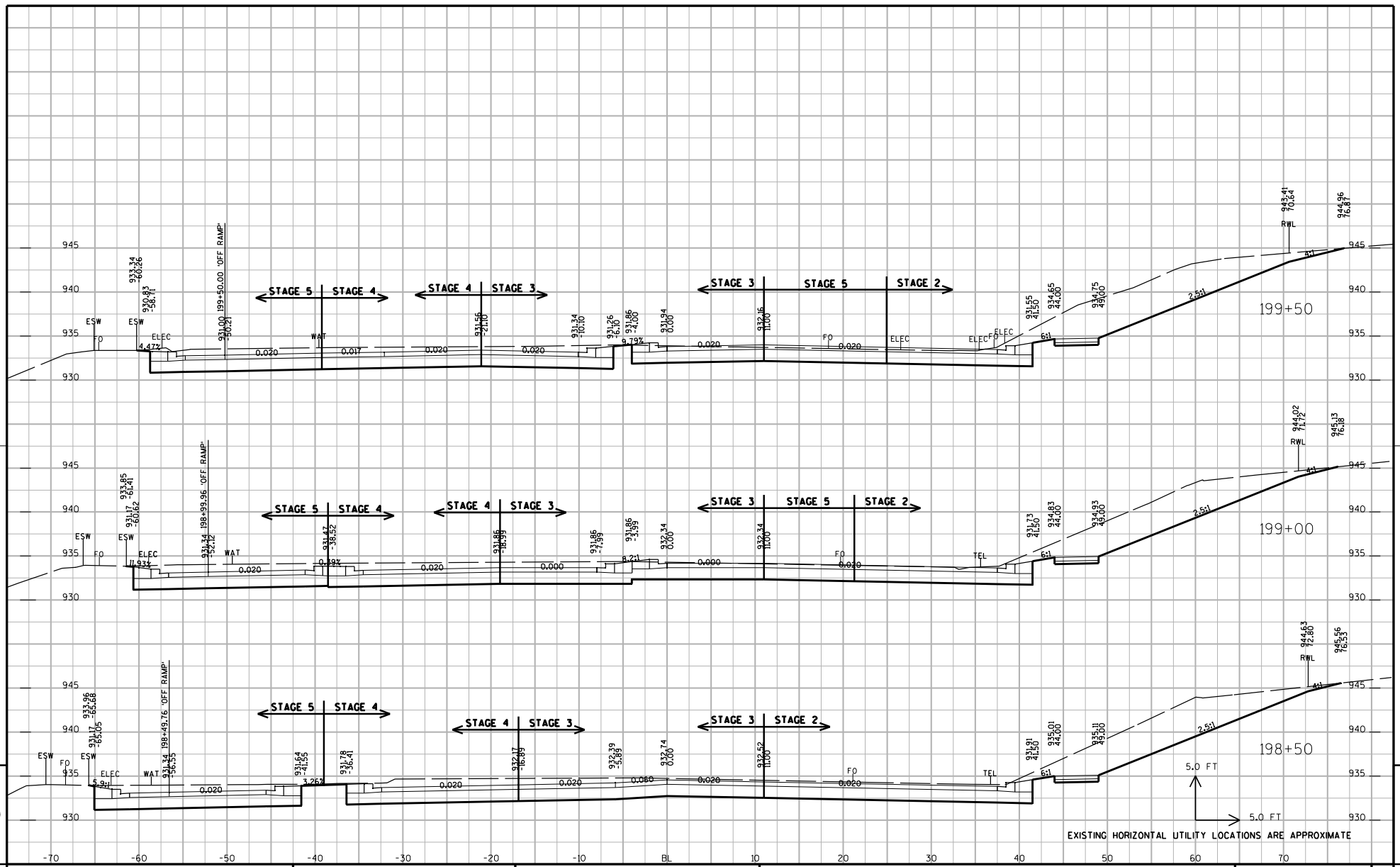
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 850 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

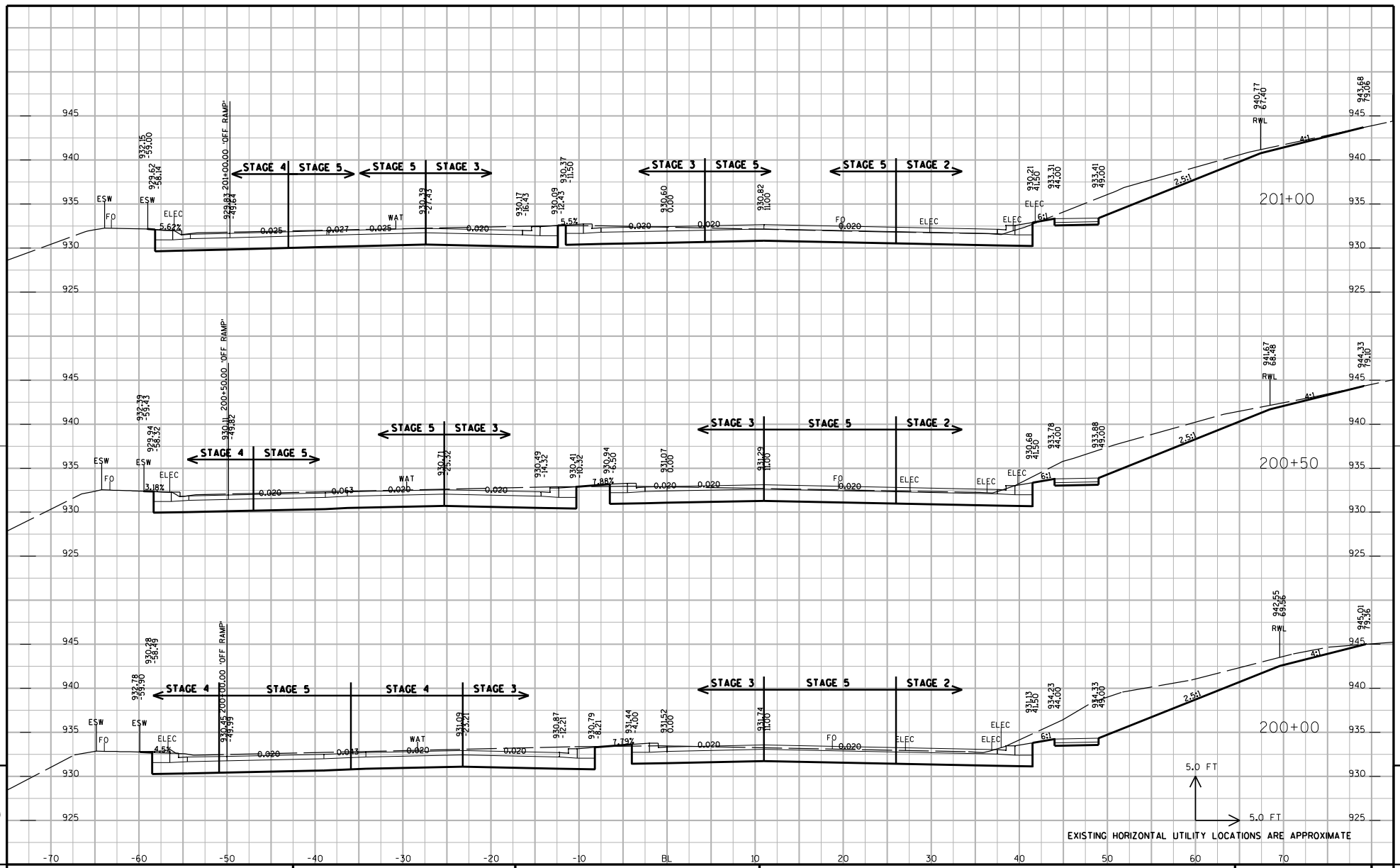
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 851 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

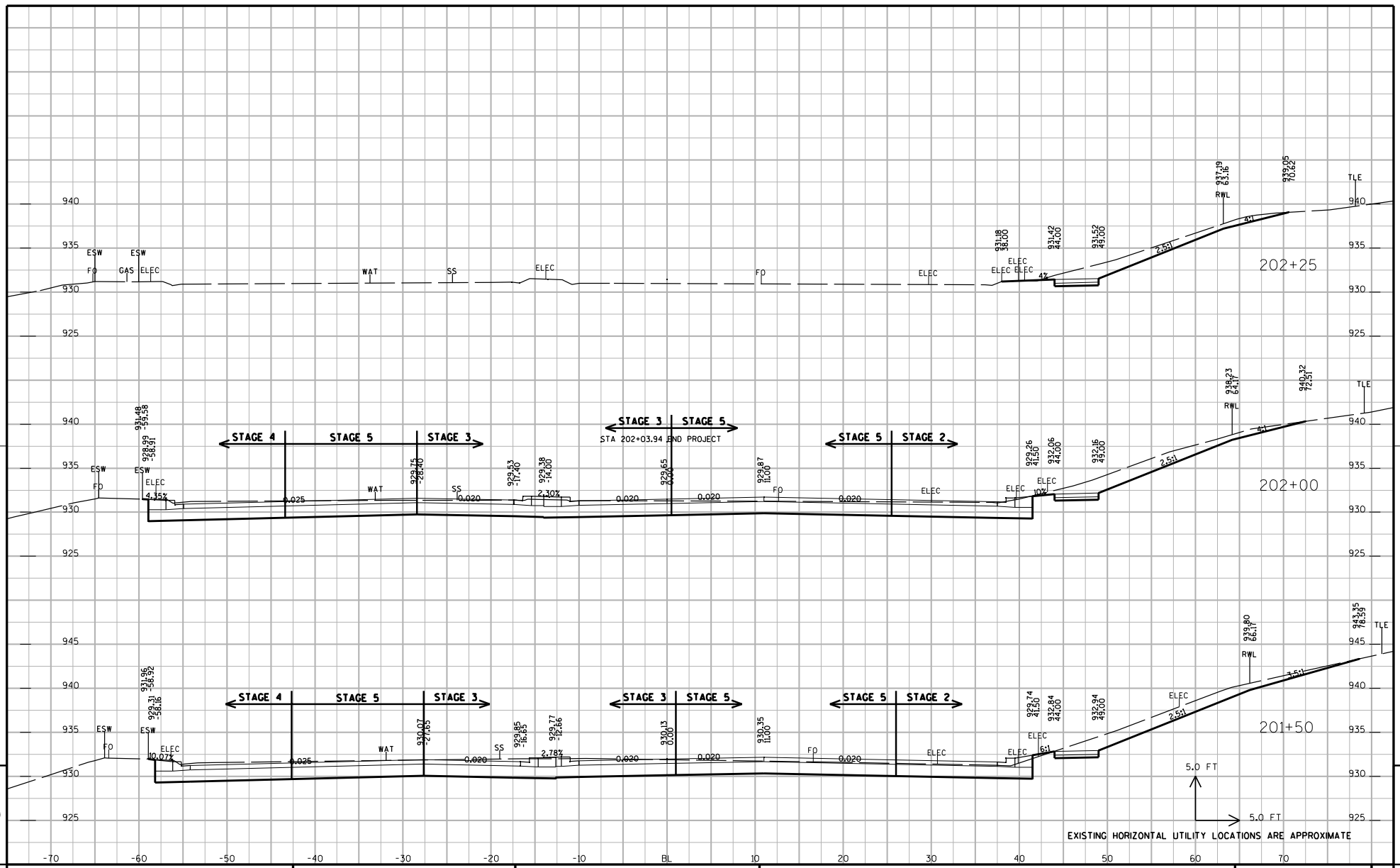
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 852 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

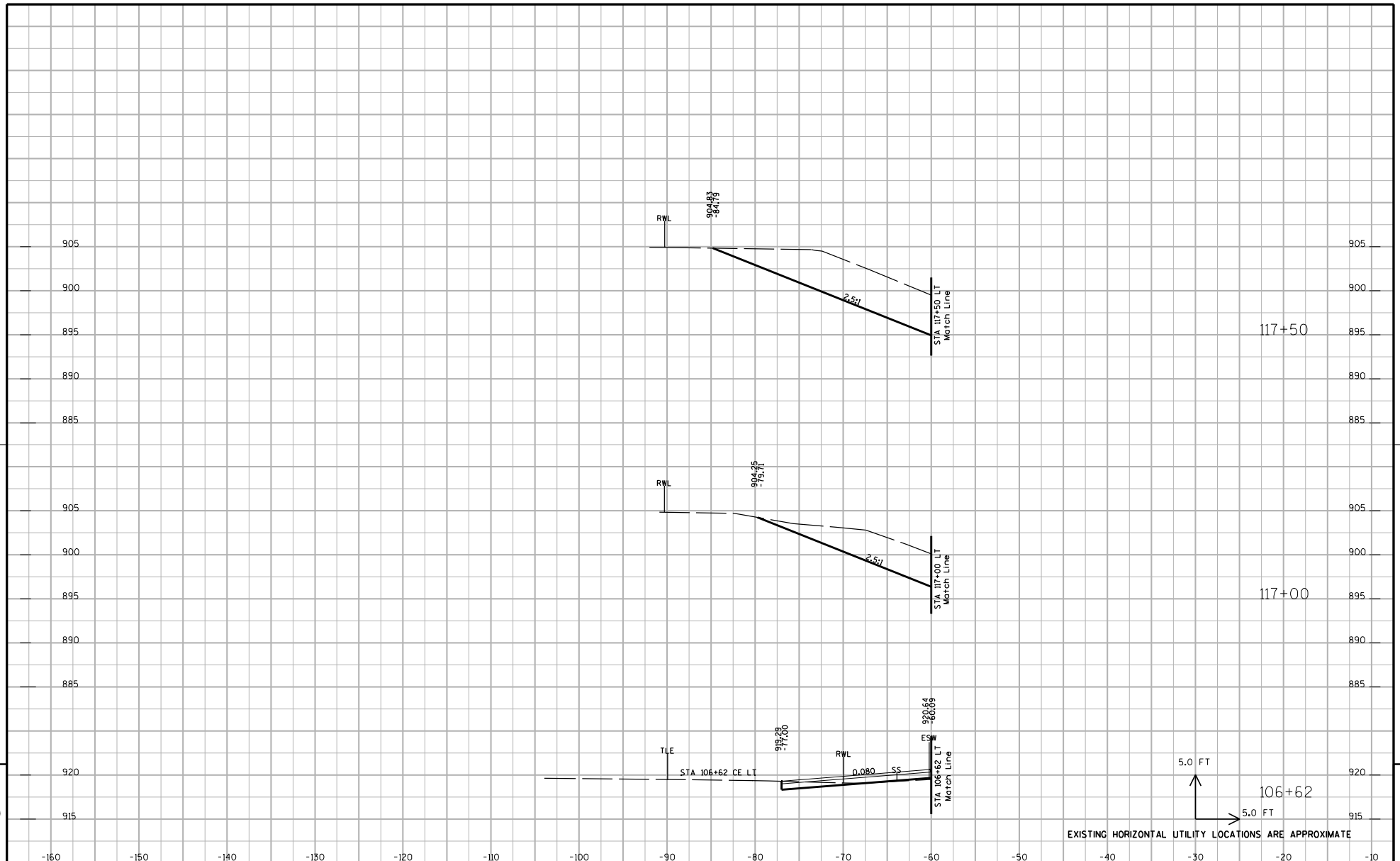
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE (STAGES 2, 3, 4 & 5)	SHEET NO: 853	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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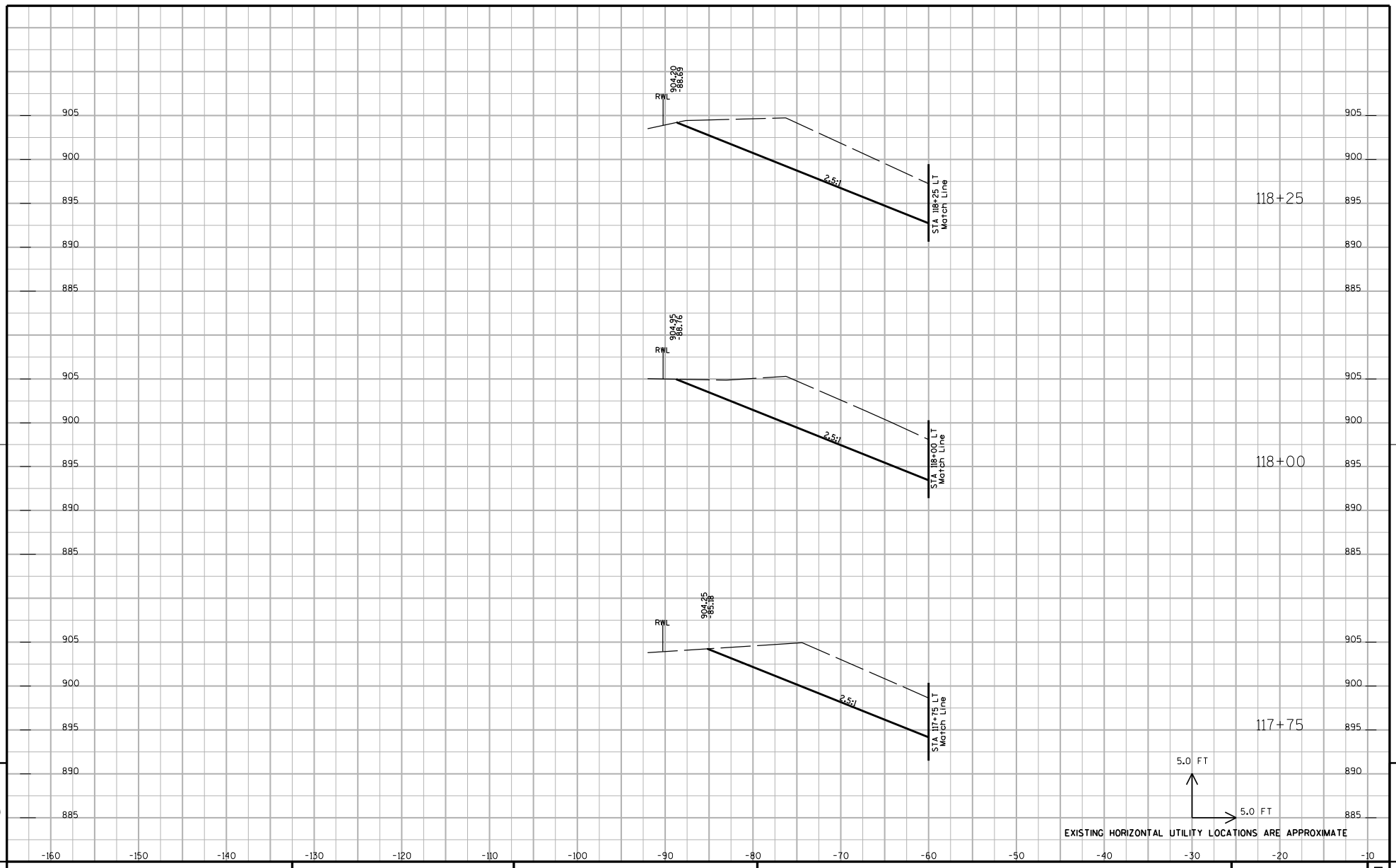
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 854	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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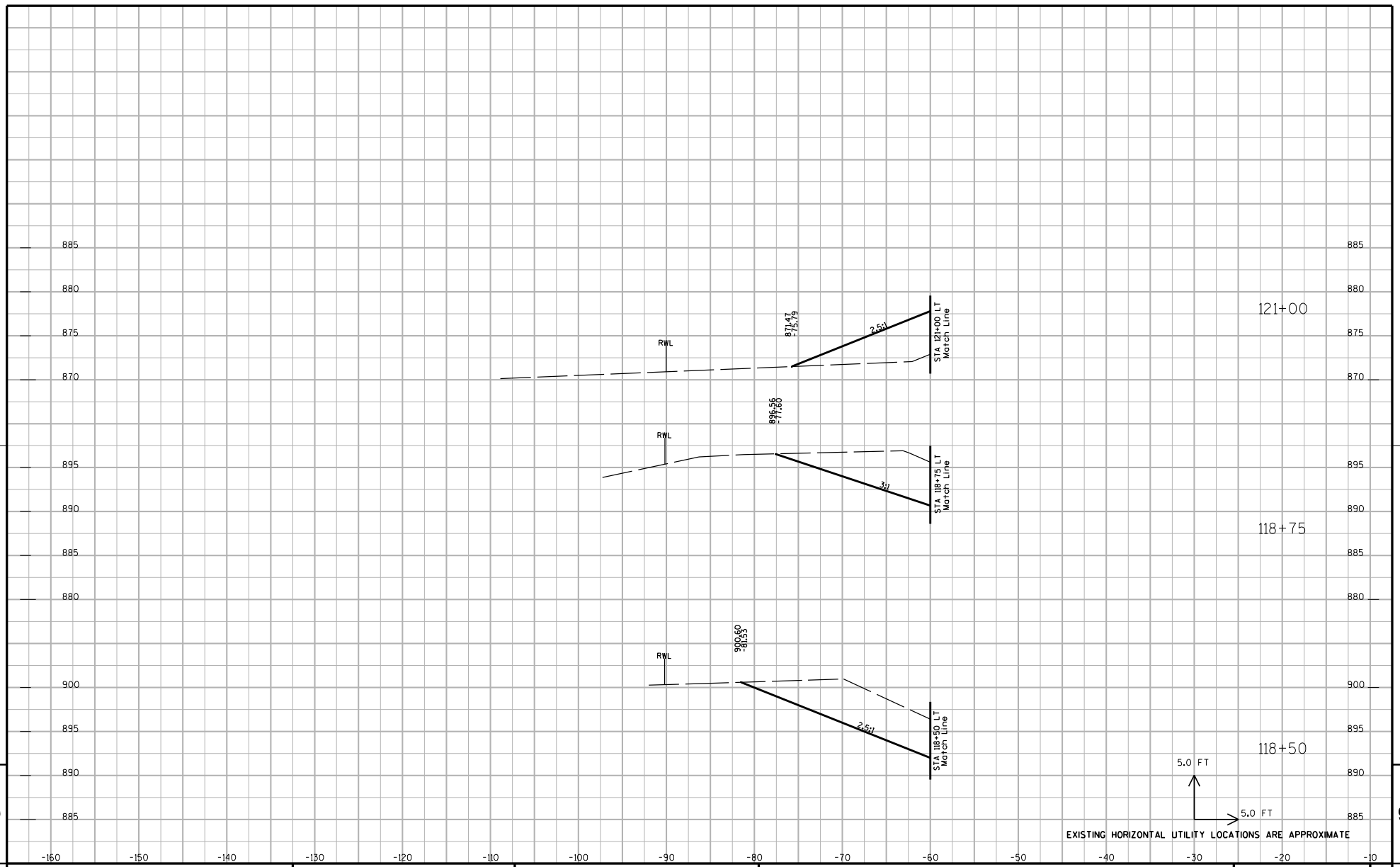
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 855	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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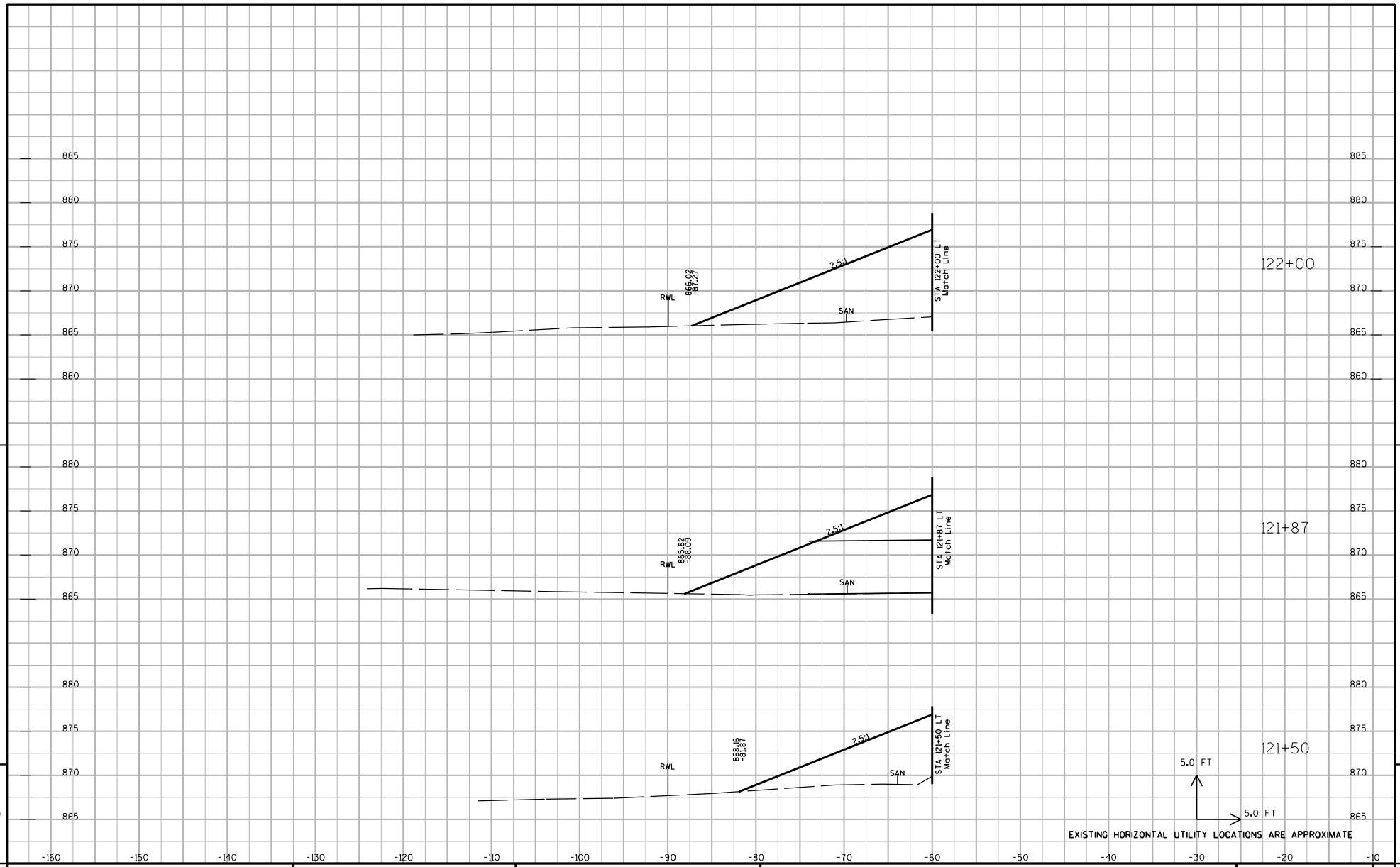
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 856	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

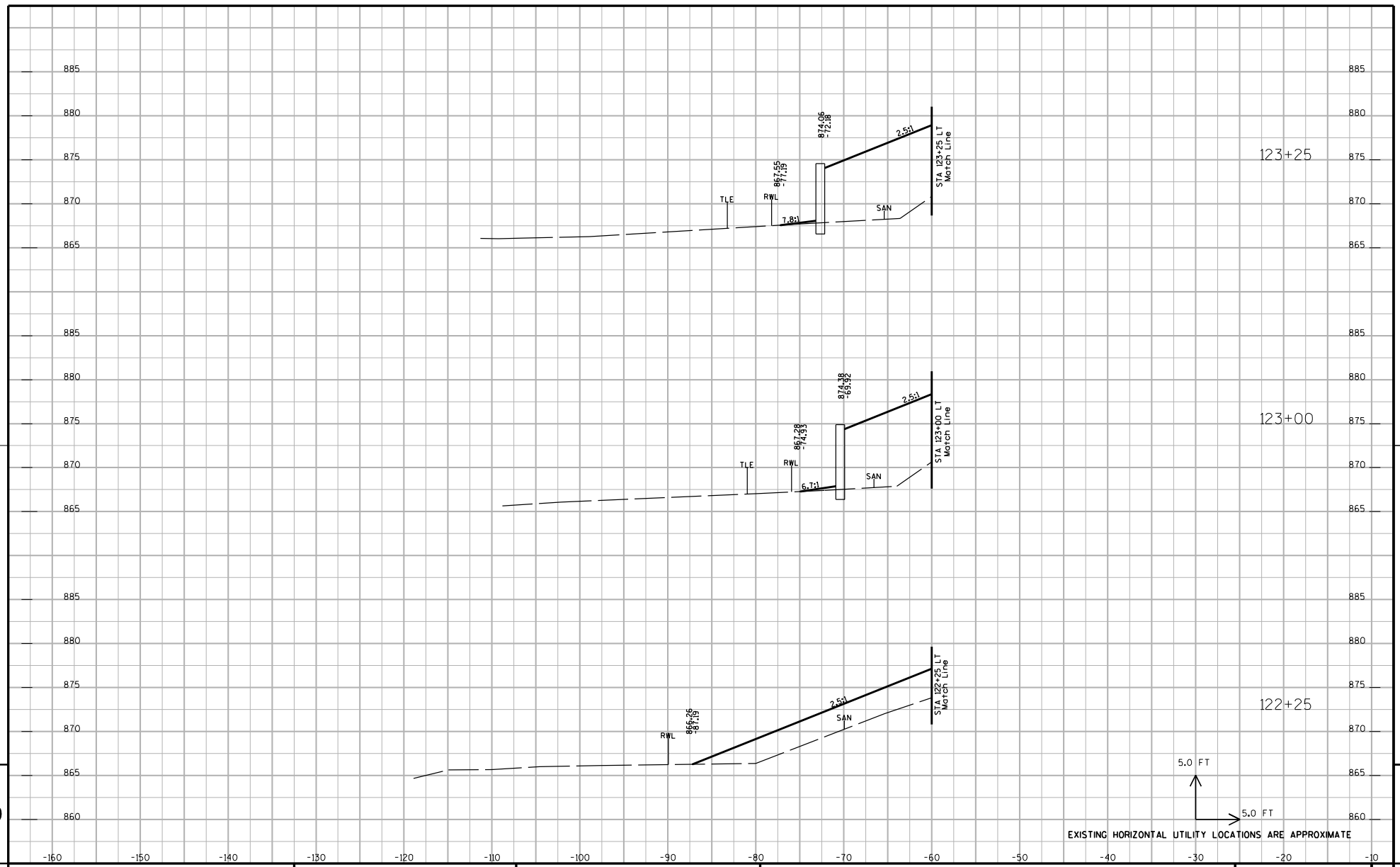


9 9

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 857	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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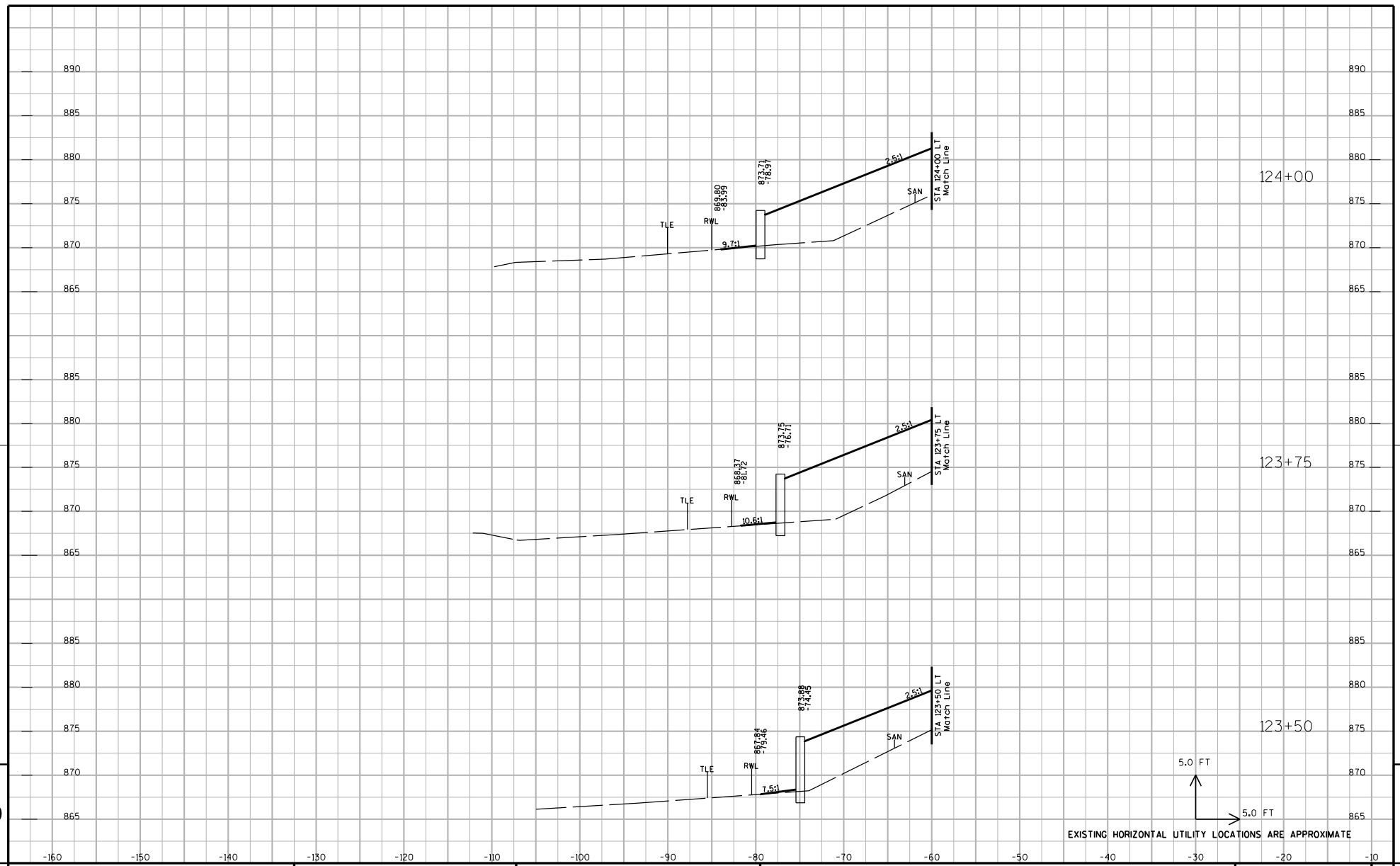
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 858	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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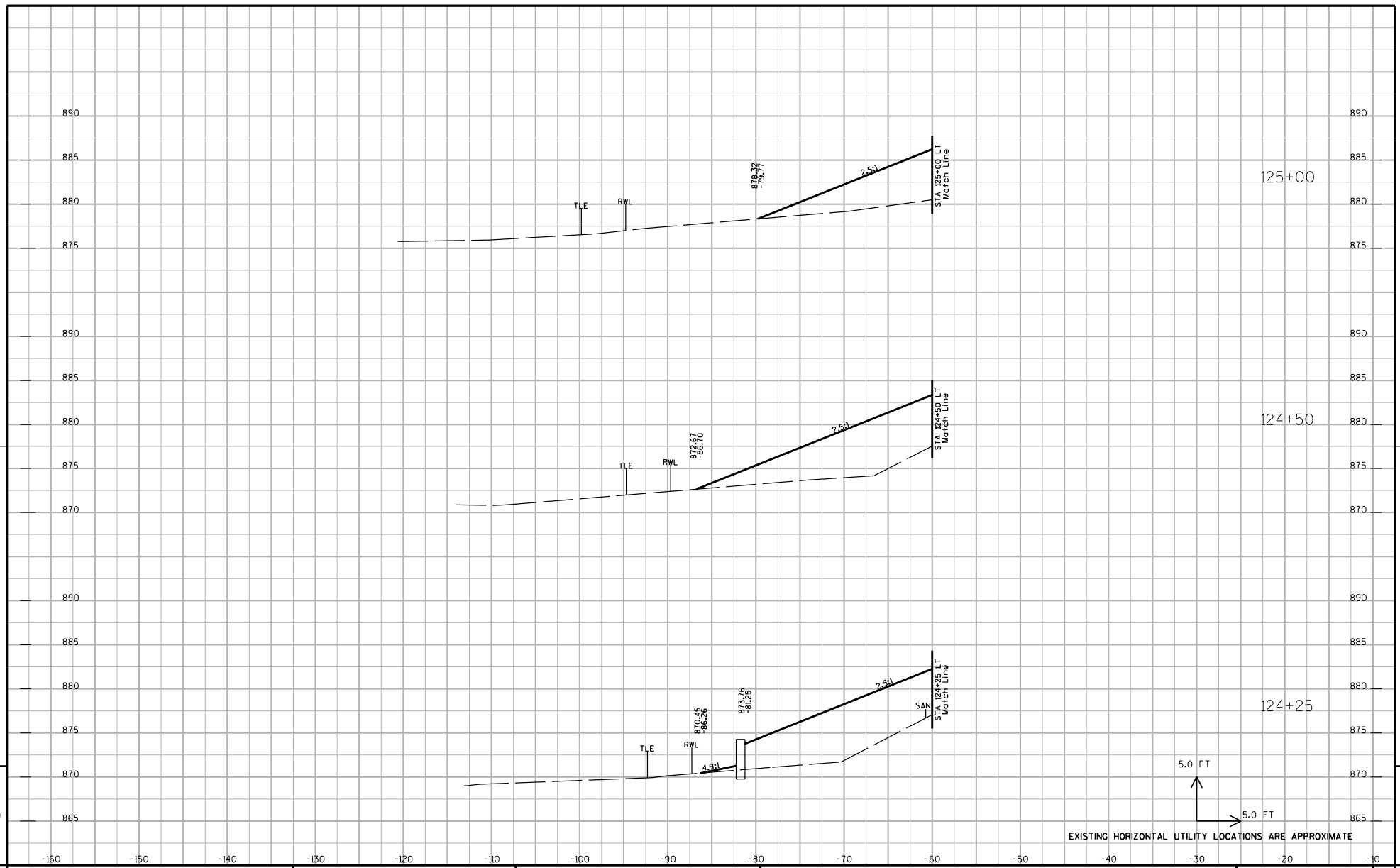
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 859	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

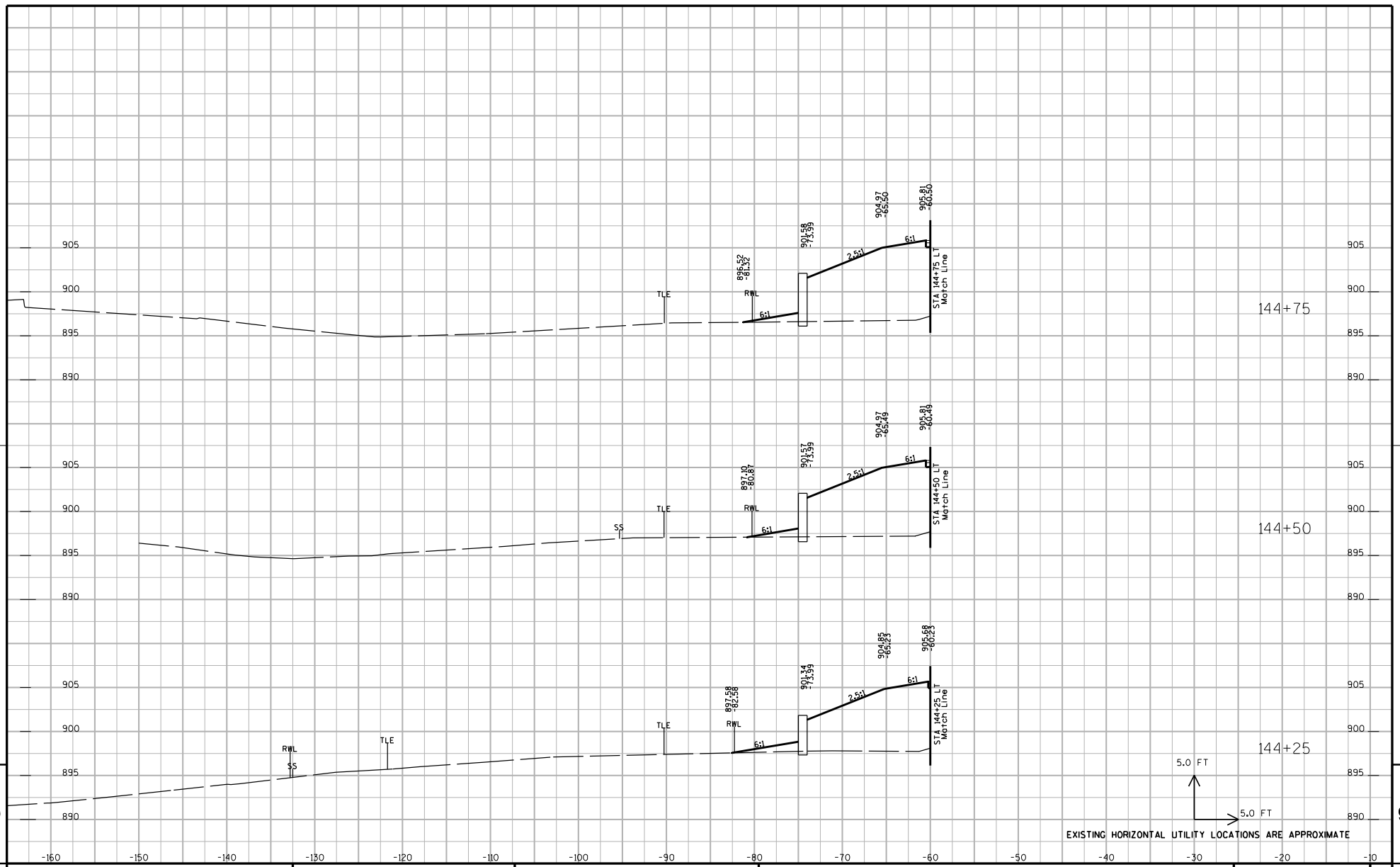
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 860 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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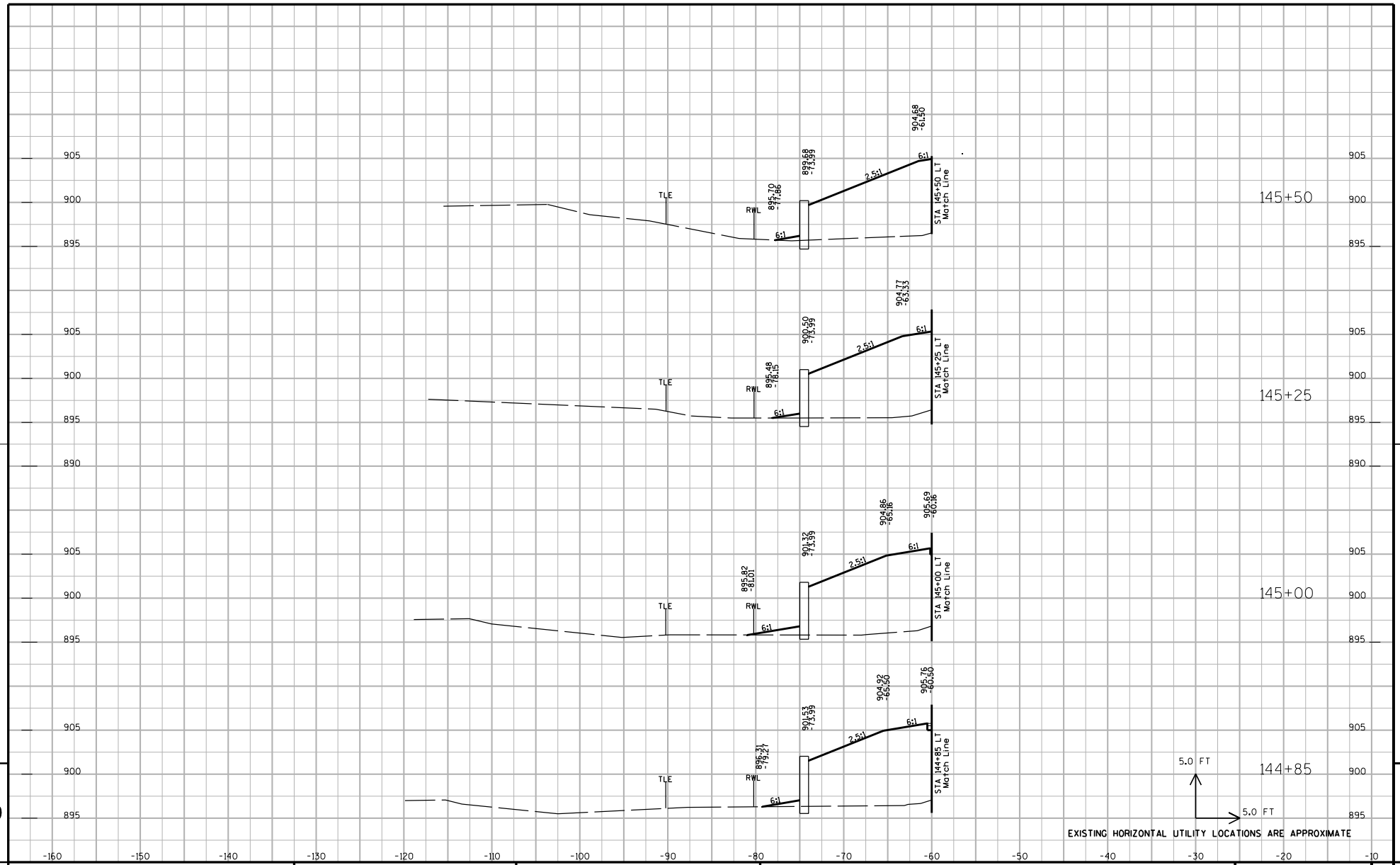
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 861 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

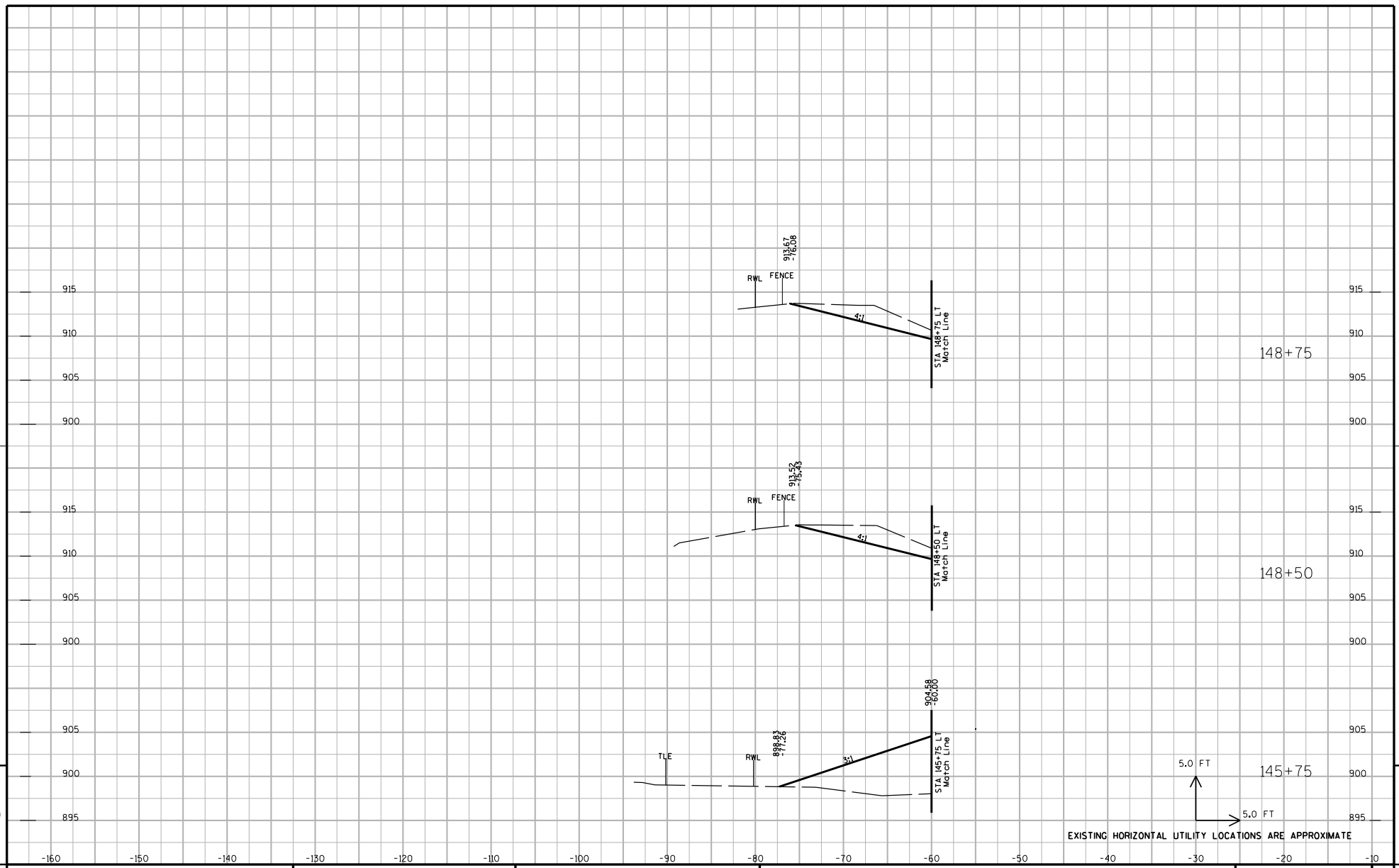
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 862 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

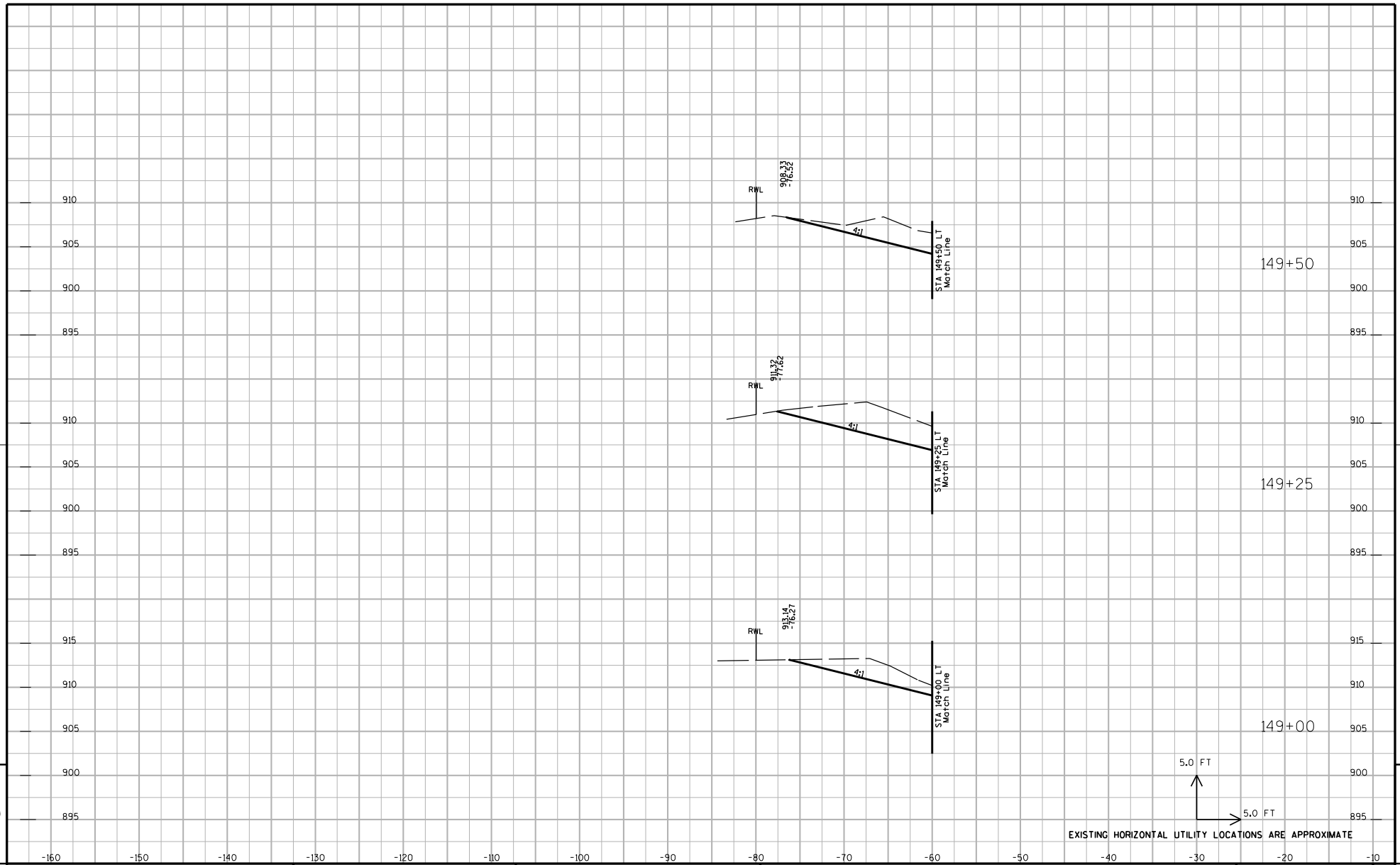
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 863	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 864	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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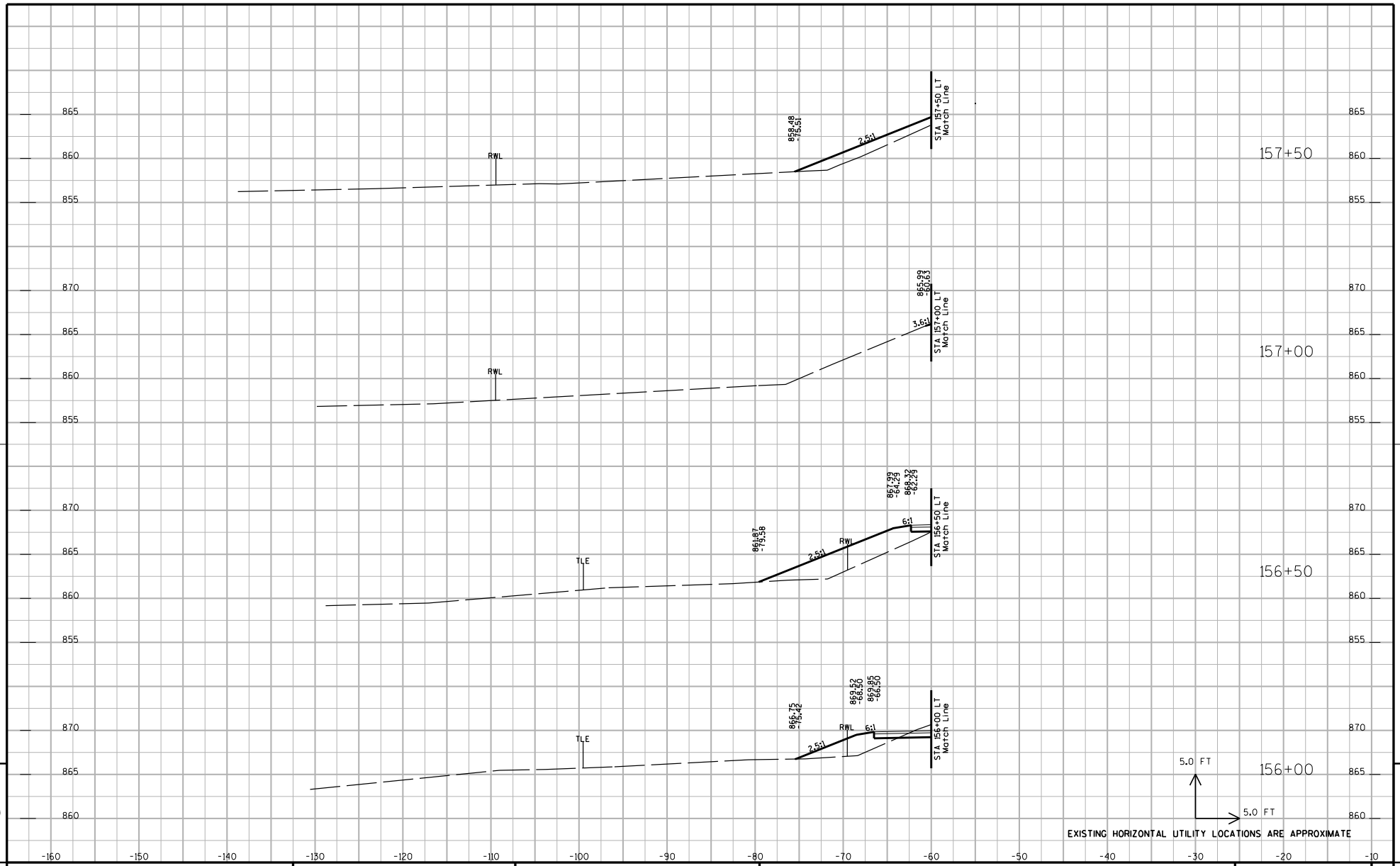

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 865 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

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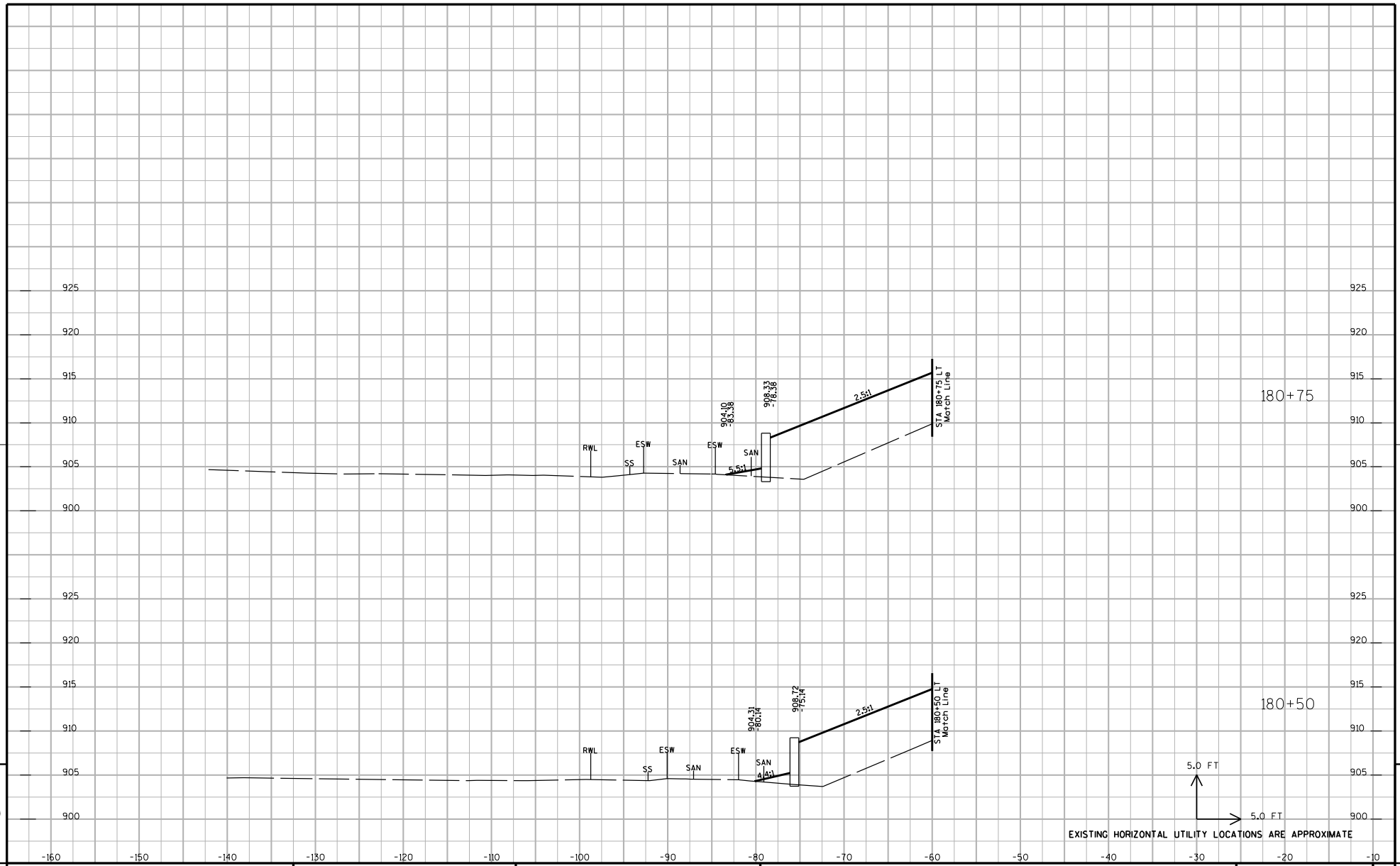
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 866	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

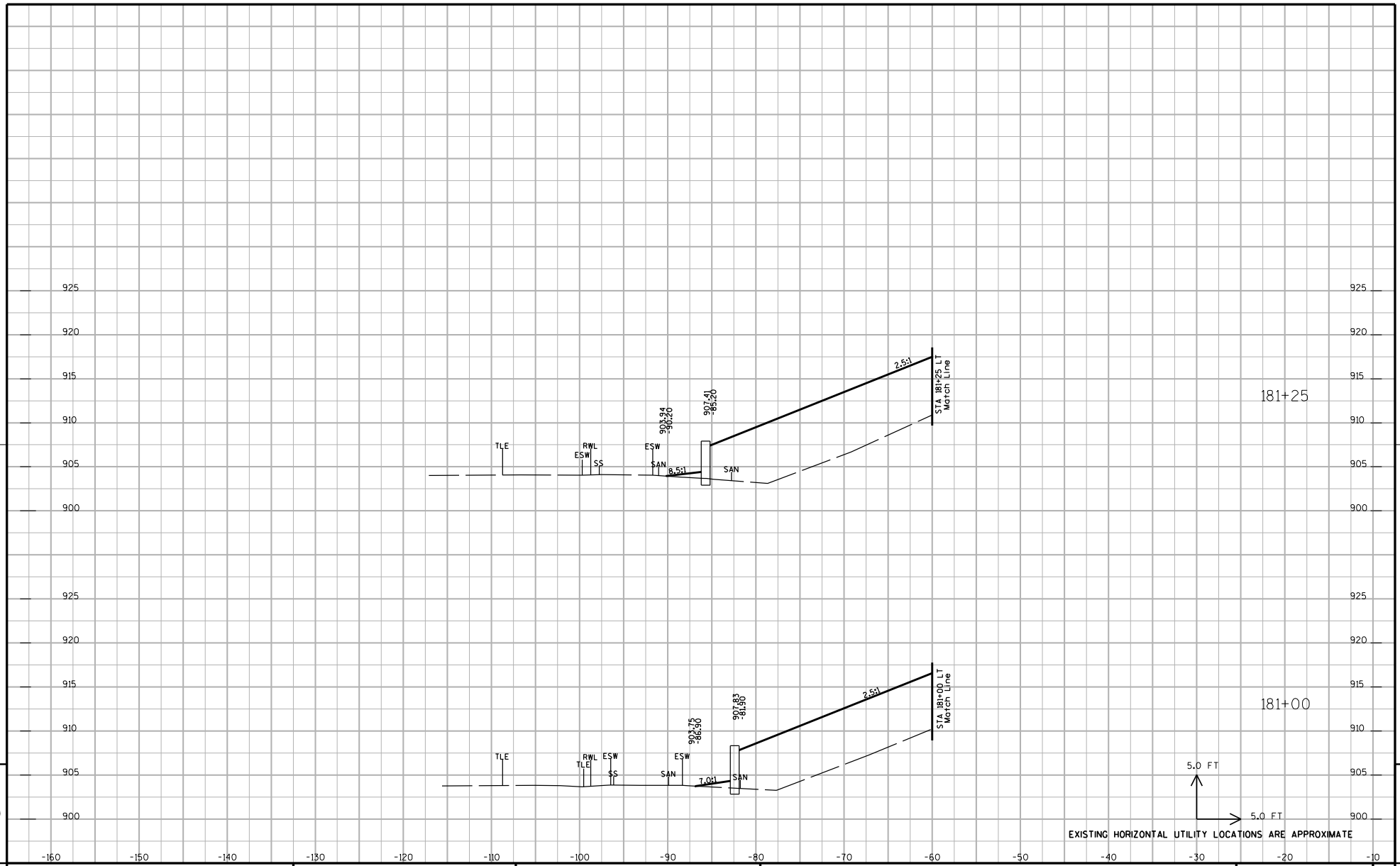
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 867 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

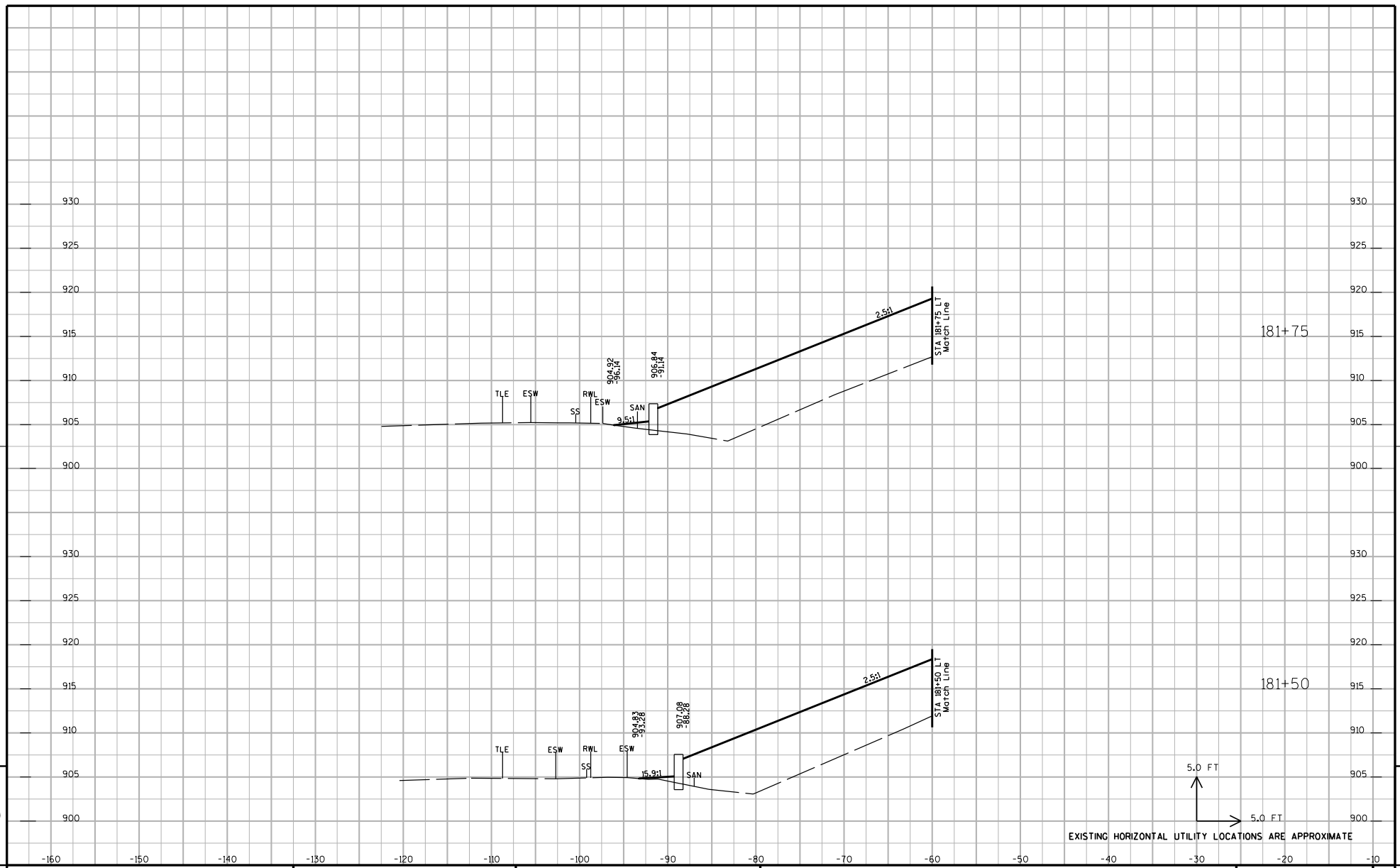
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 868 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

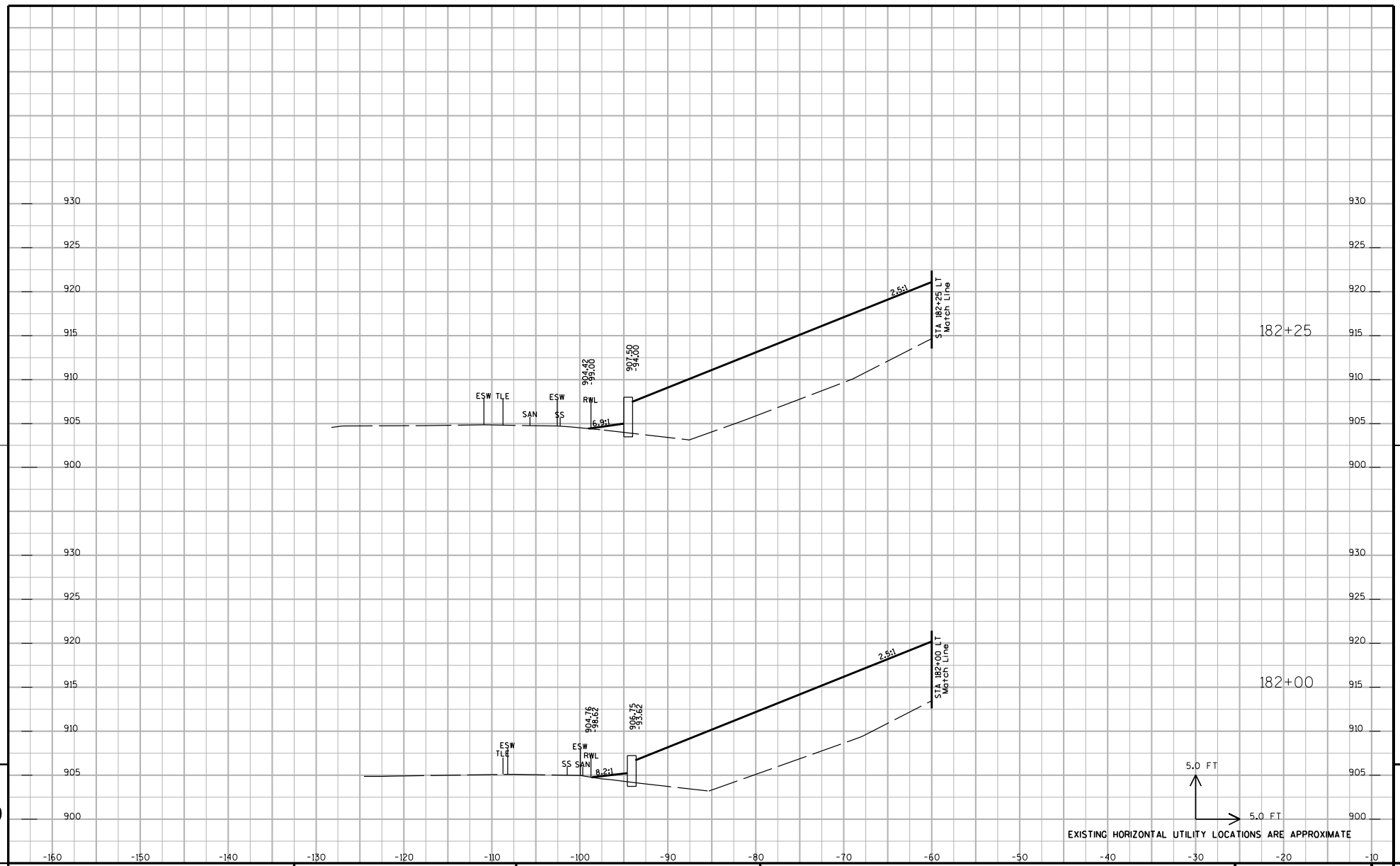
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 869 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

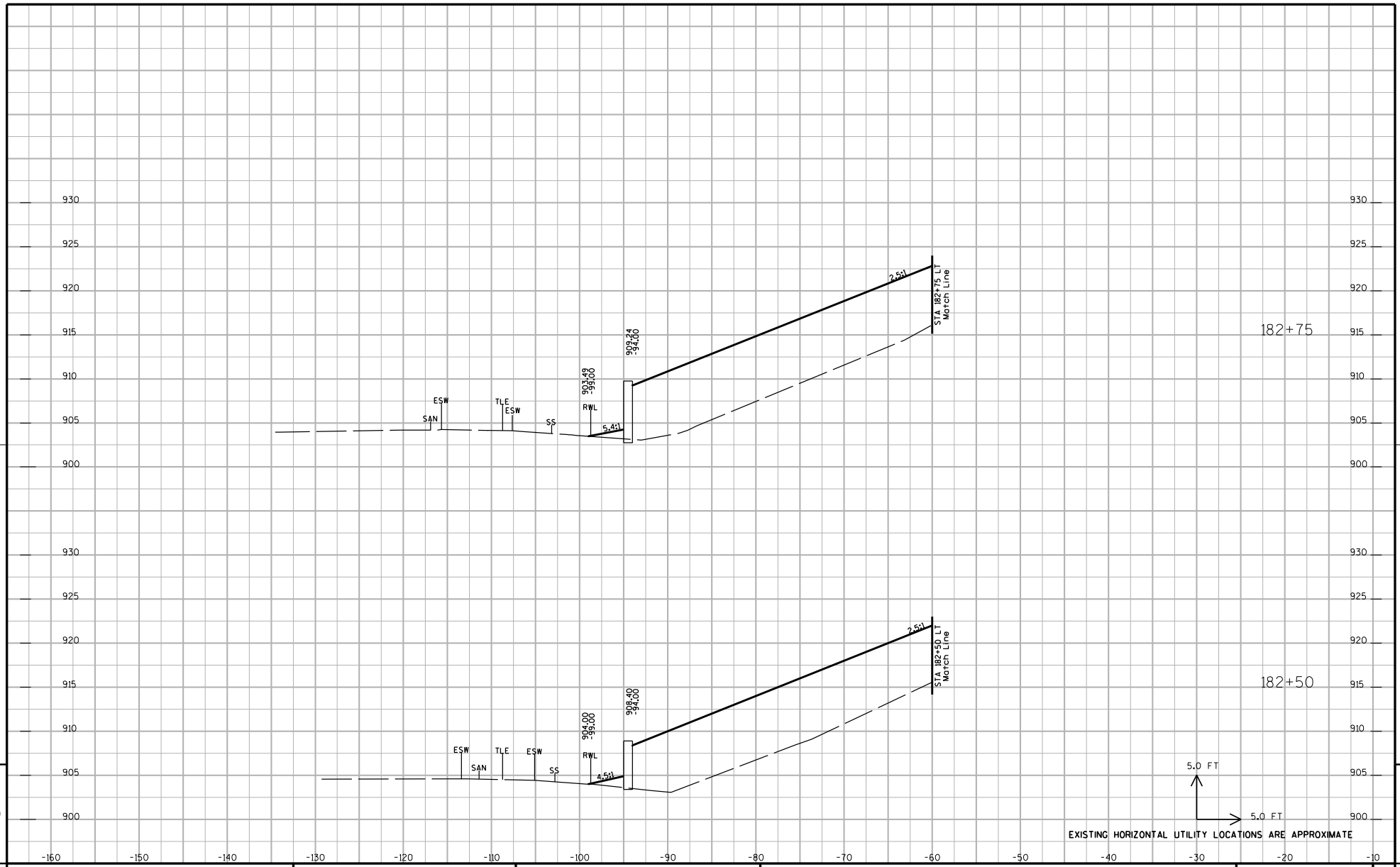
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 870 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

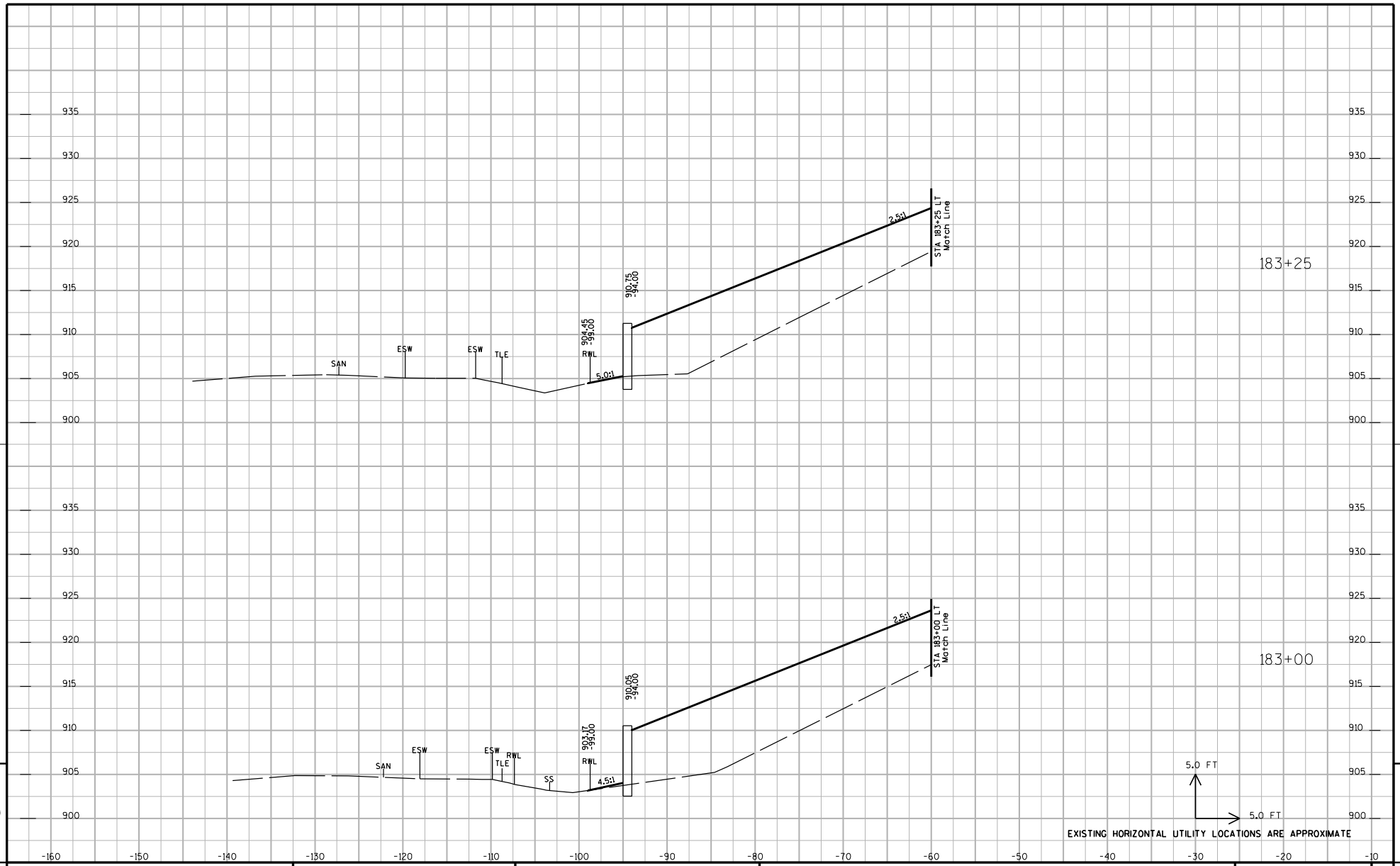
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 871 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

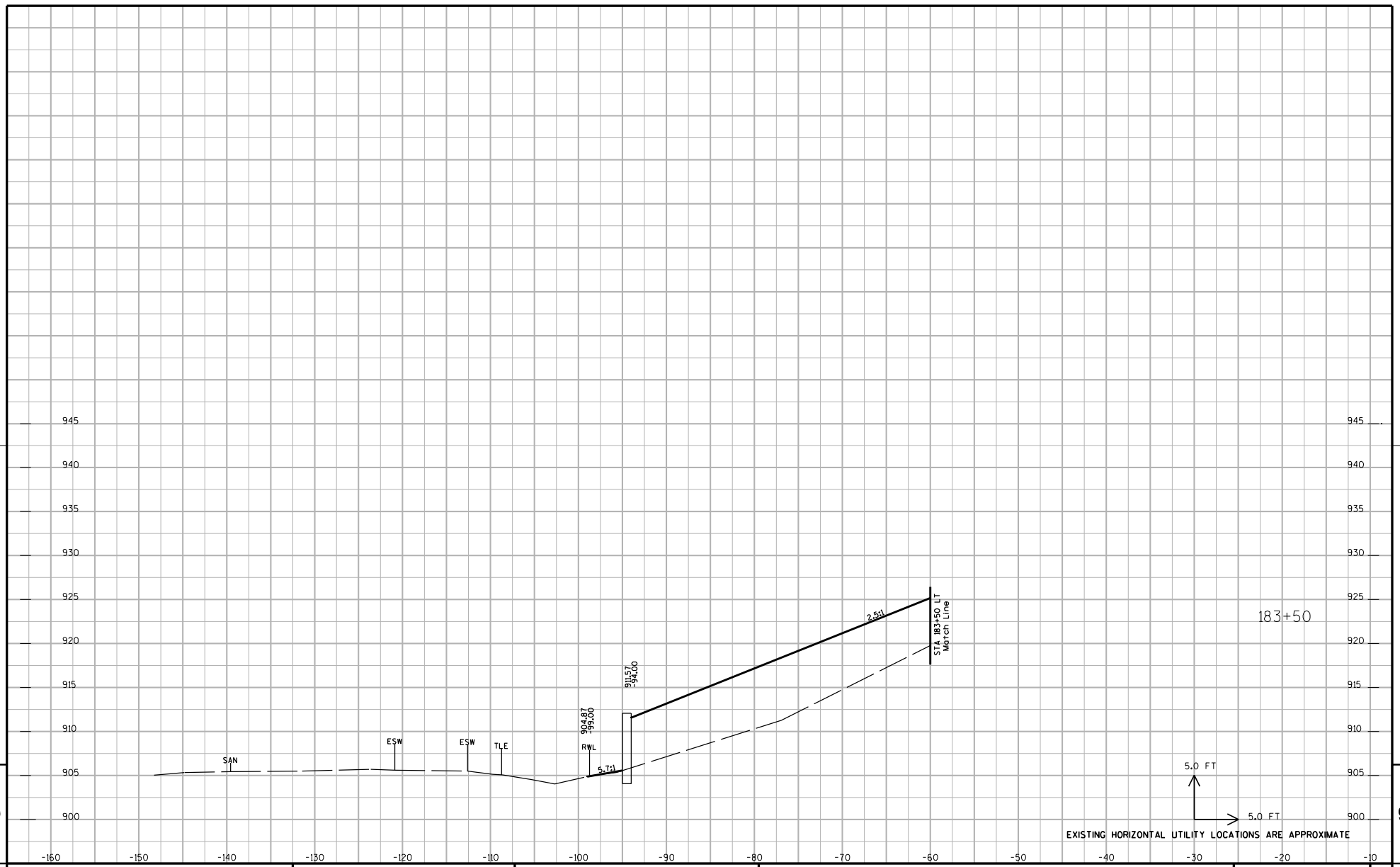
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 872	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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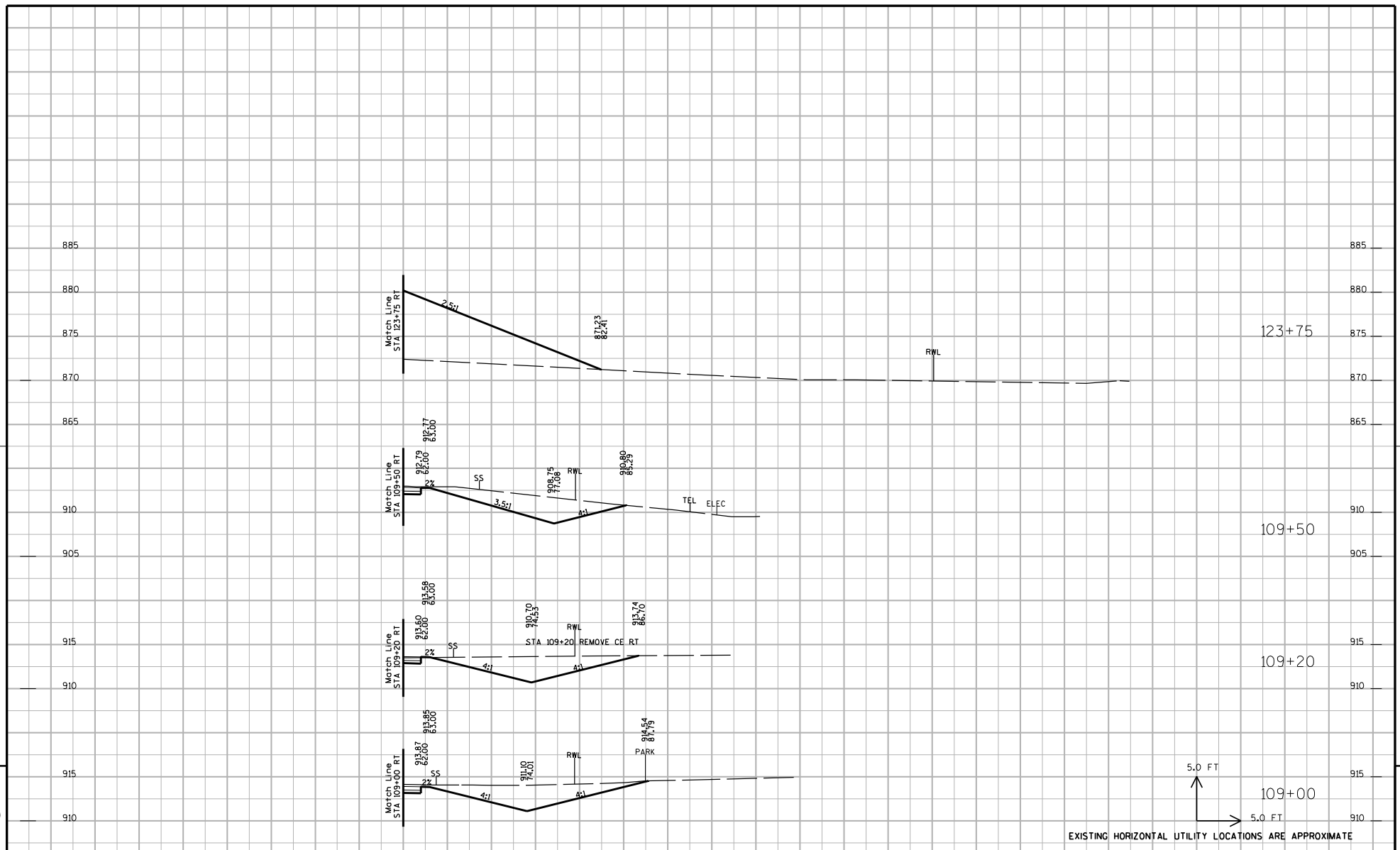
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 873	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

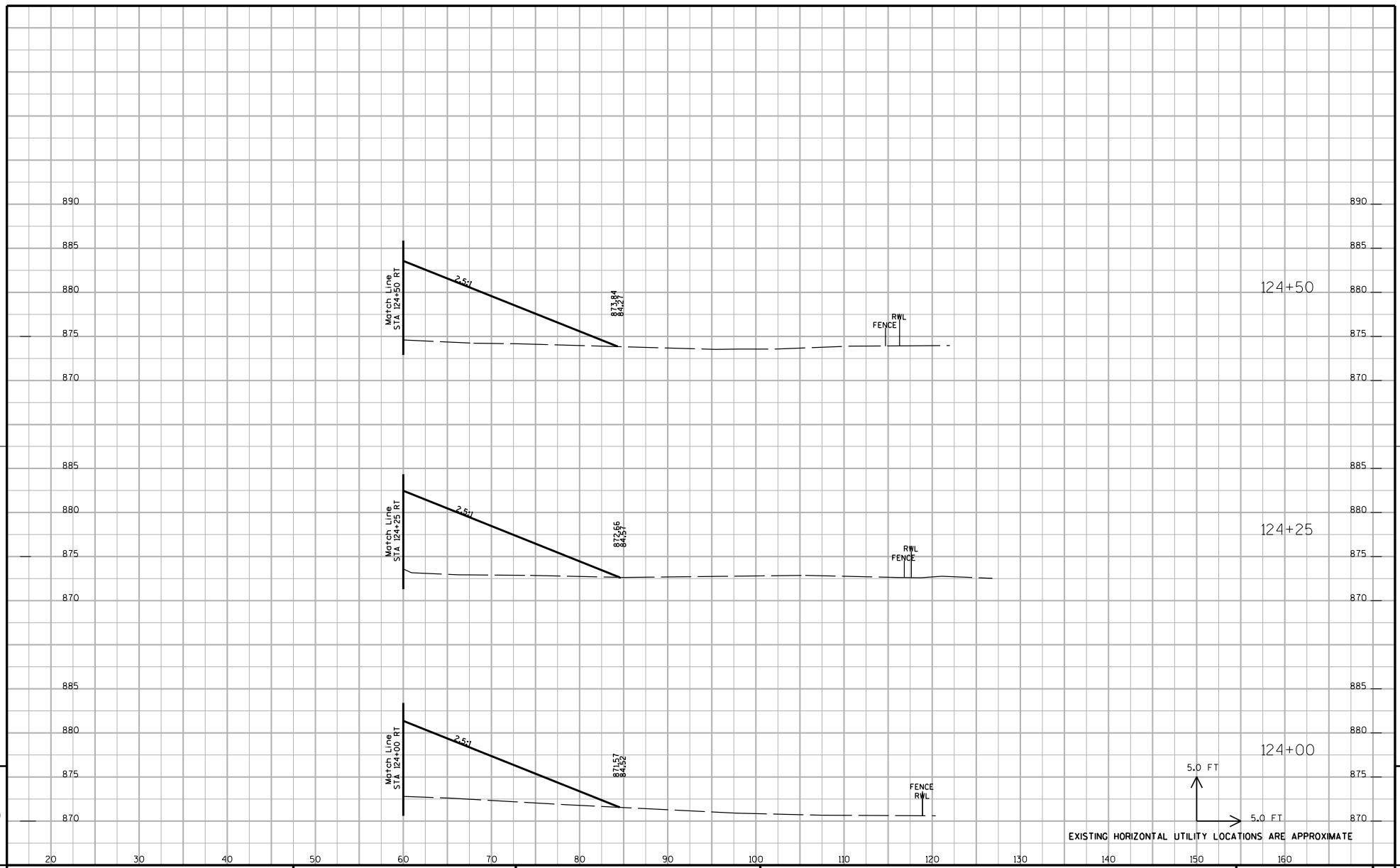
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 874 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

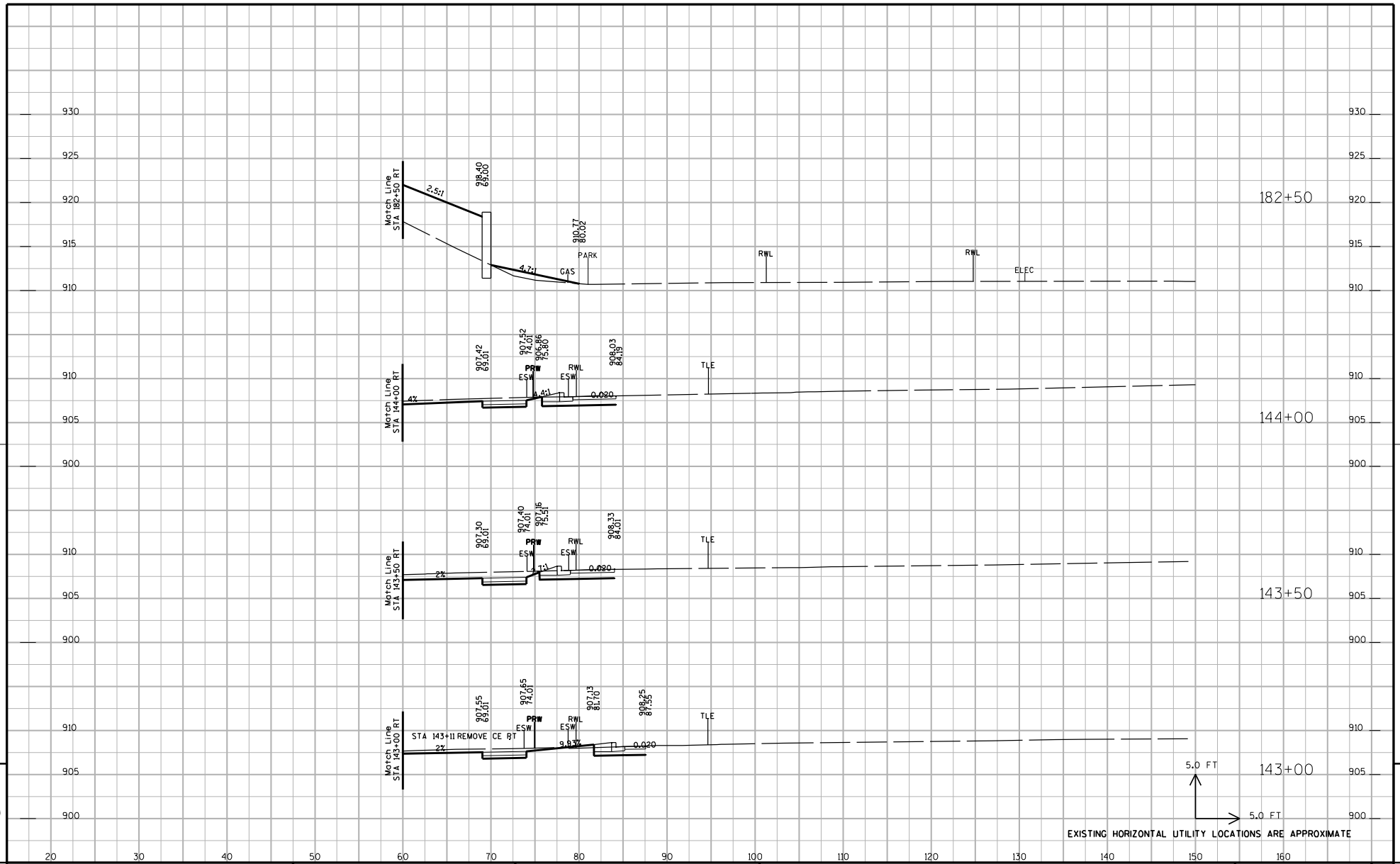
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 875	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

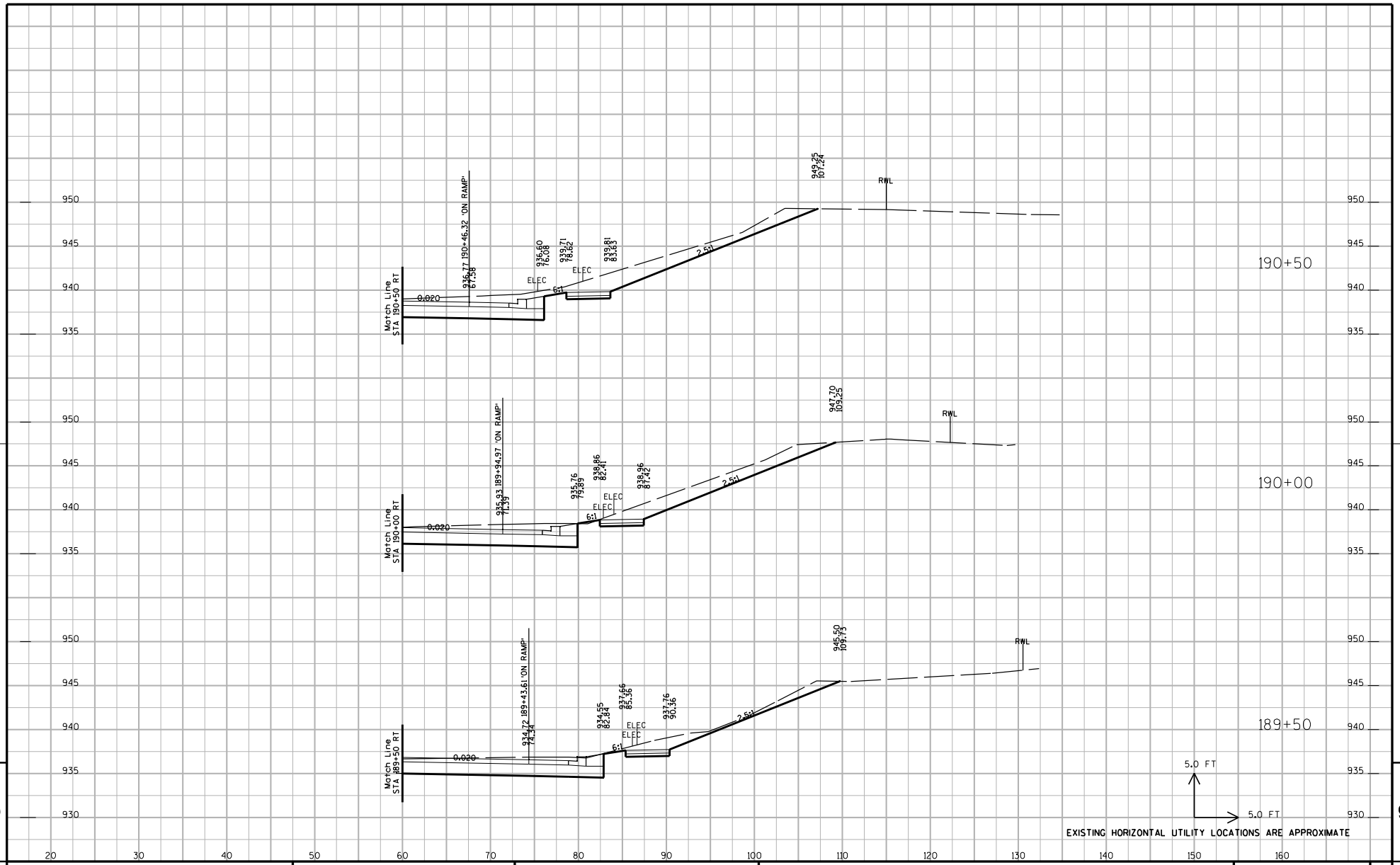
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 876 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

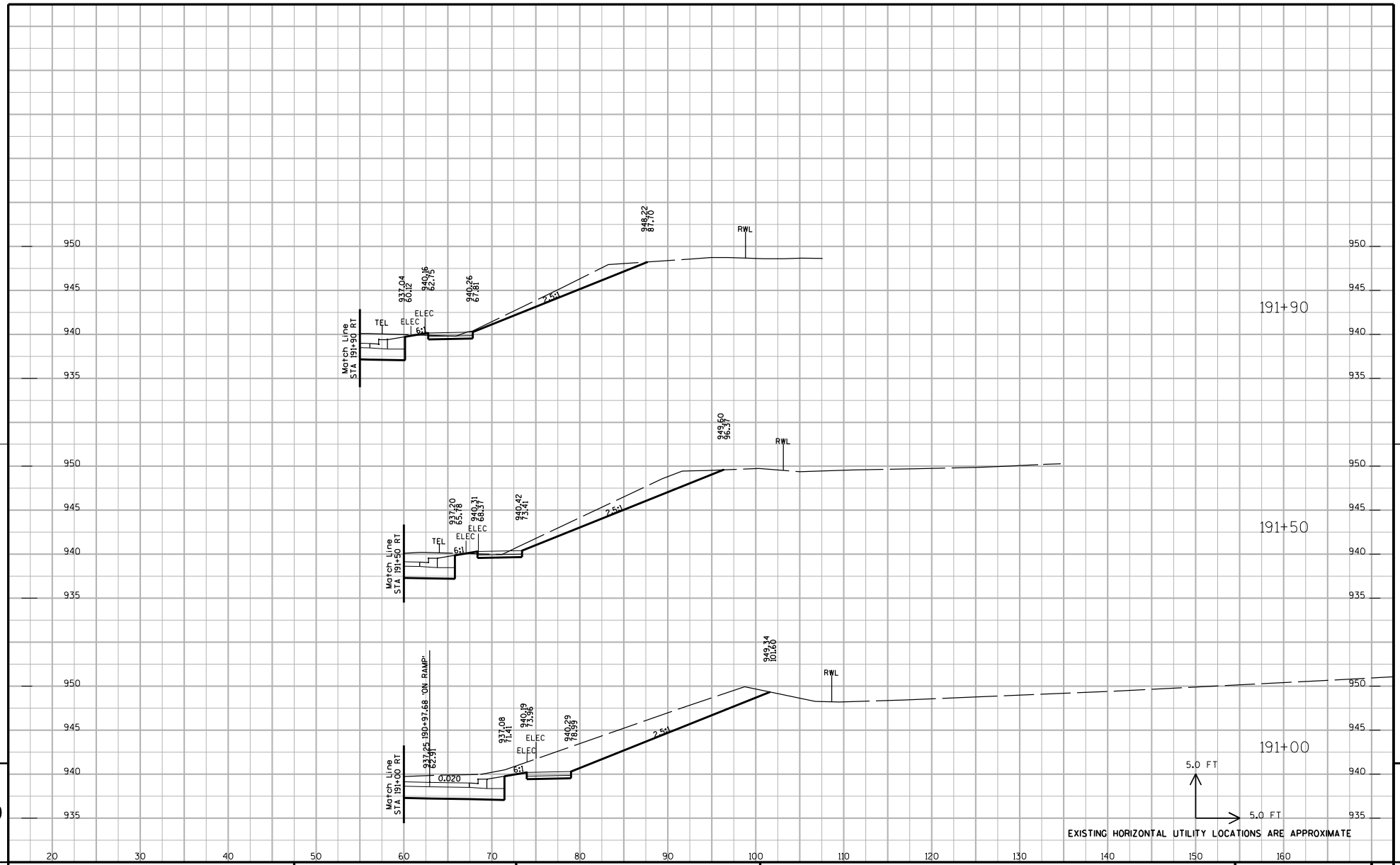
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 877 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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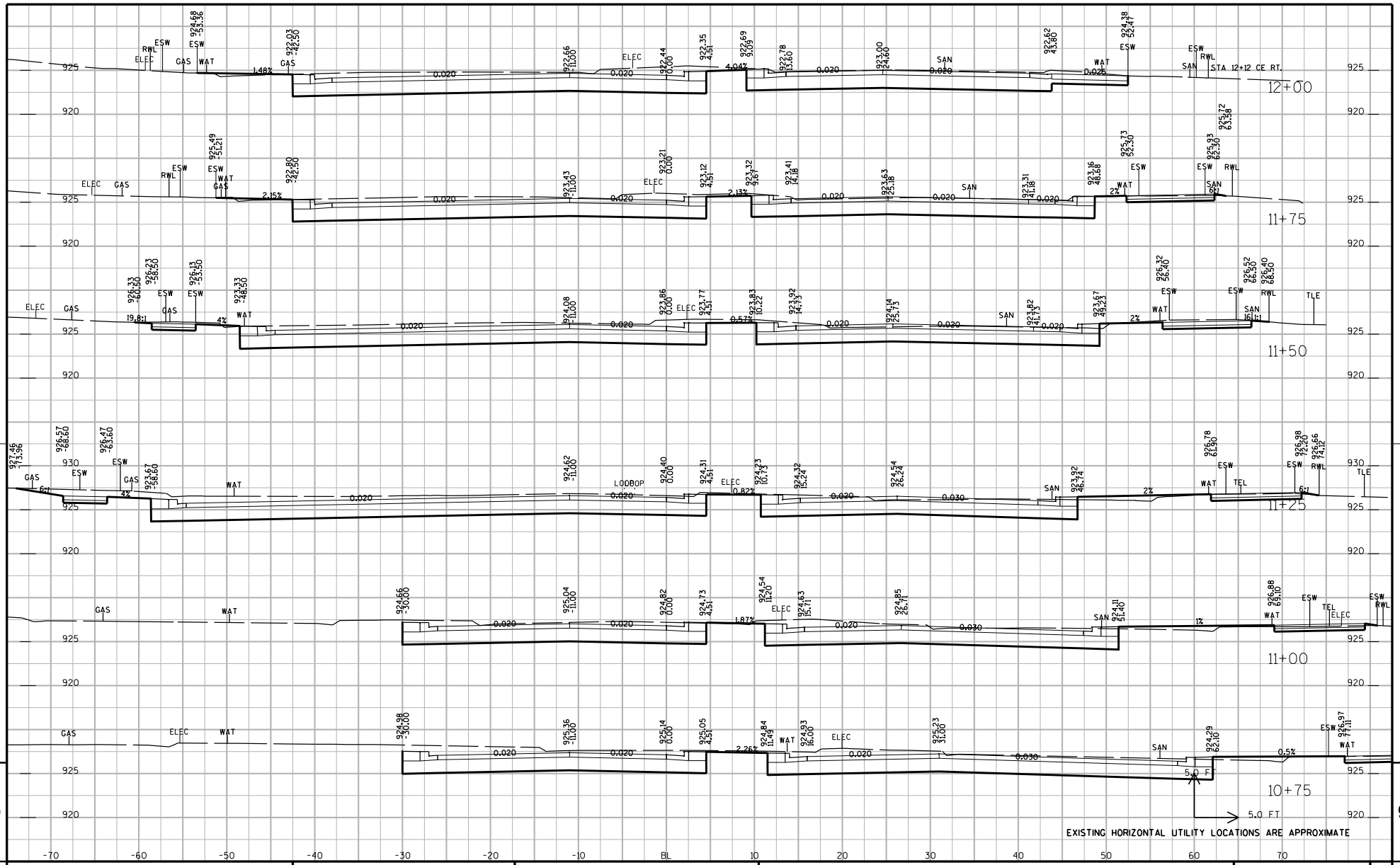
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: UNIVERSITY AVENUE	SHEET NO: 878	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

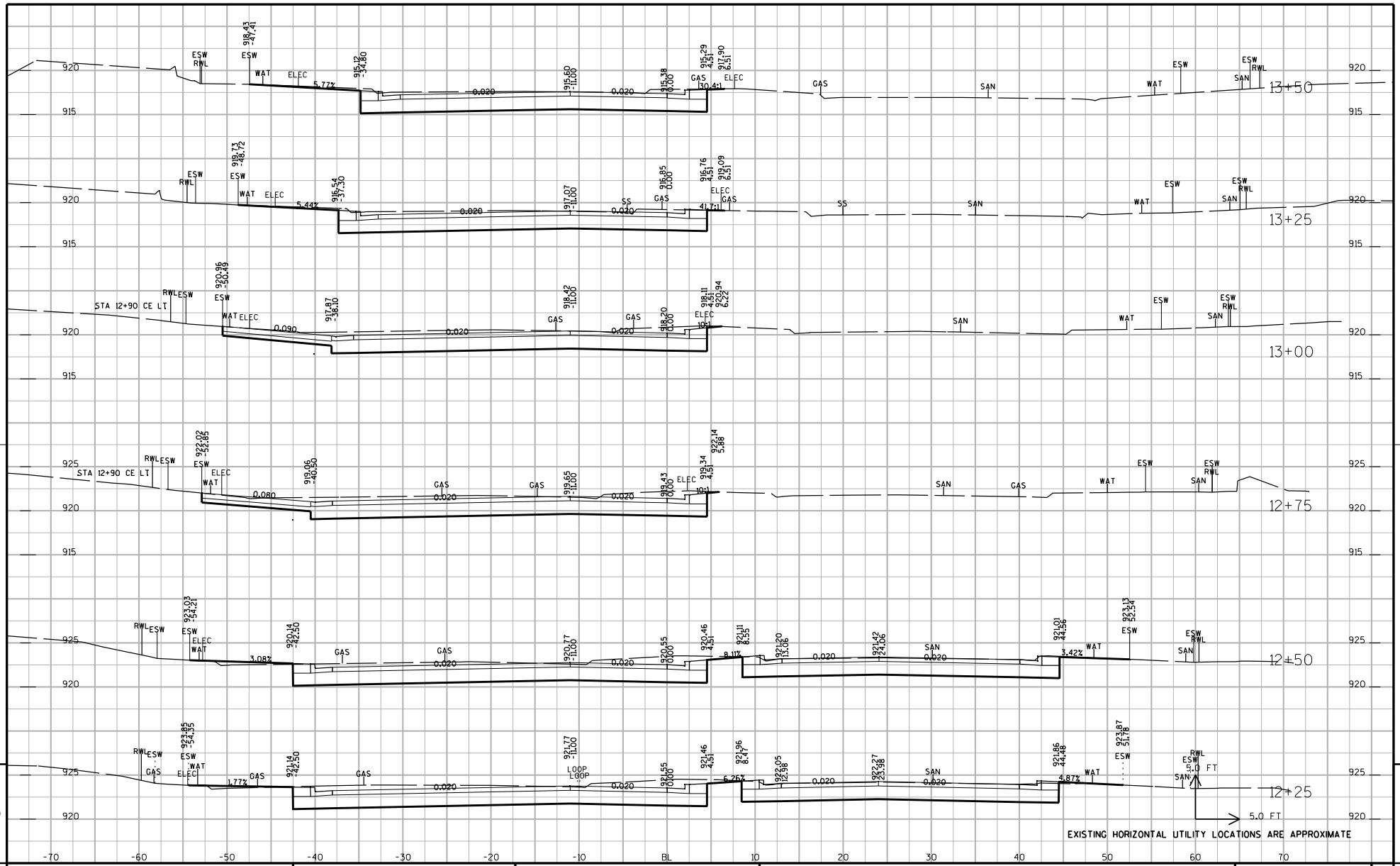
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: ALLEN BOULEVARD	SHEET NO: 879

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

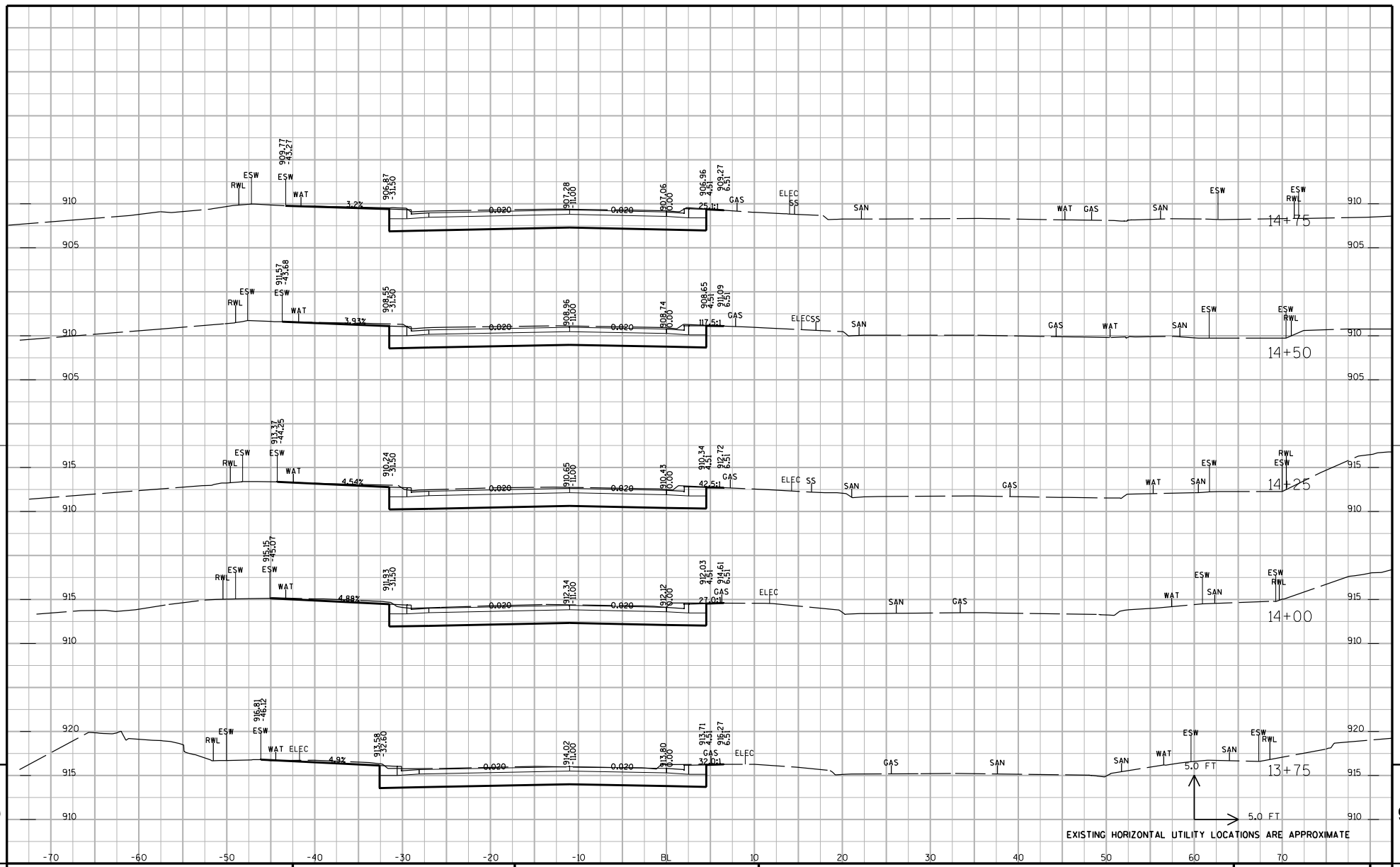
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: ALLEN BOULEVARD	SHEET NO: 880 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

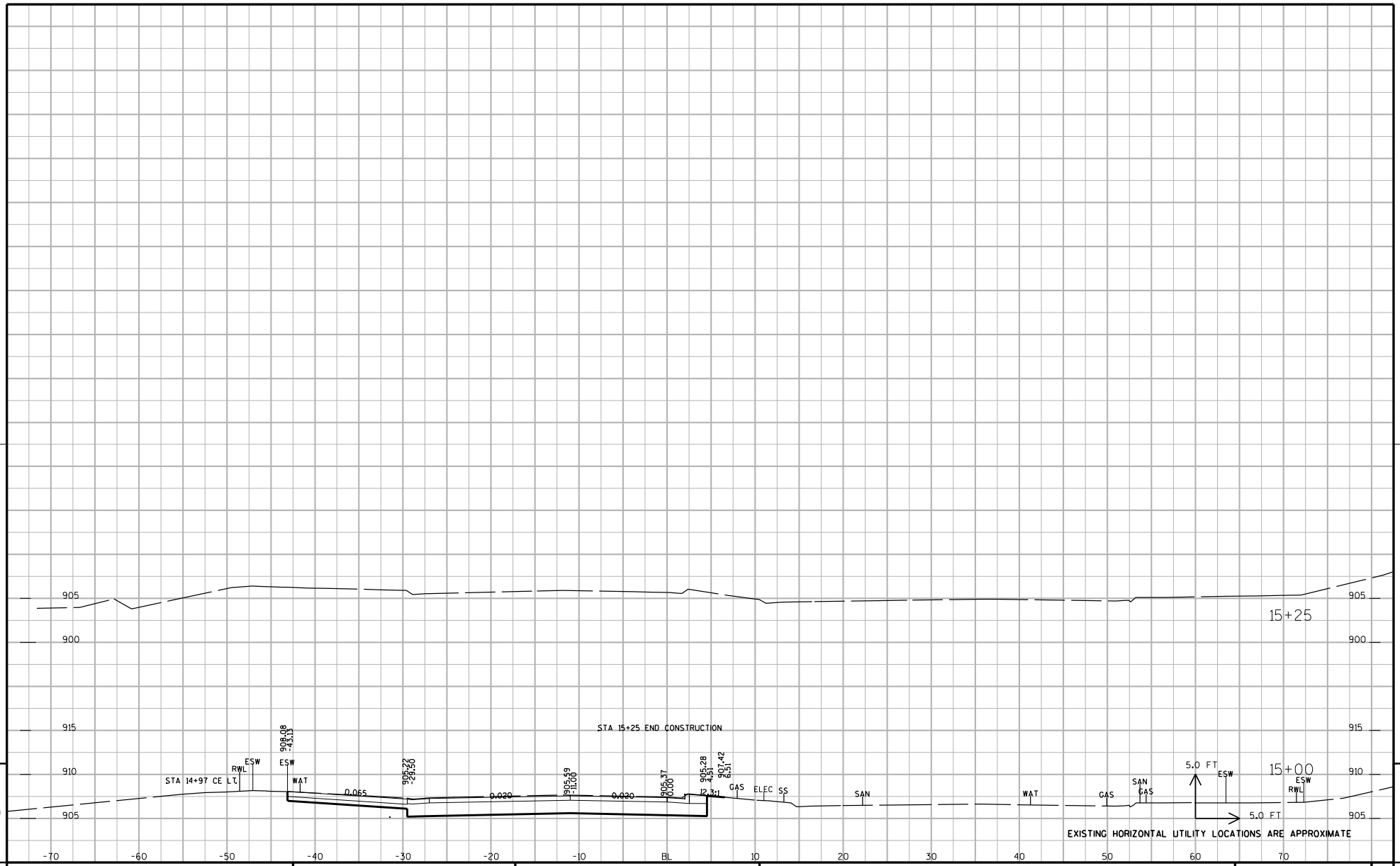
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: ALLEN BOULEVARD	SHEET NO: 881 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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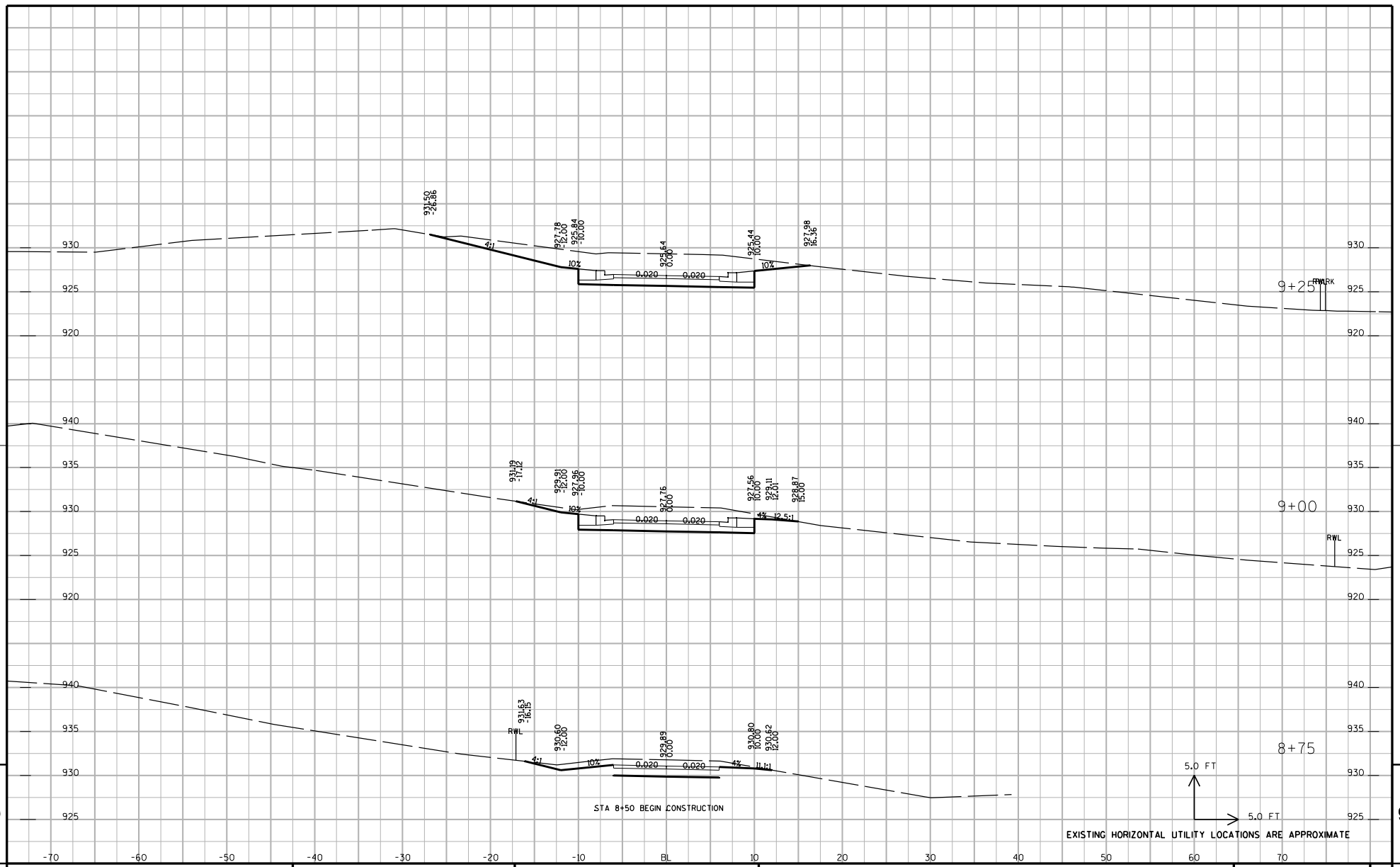
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: ALLEN BOULEVARD	SHEET NO: 882	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

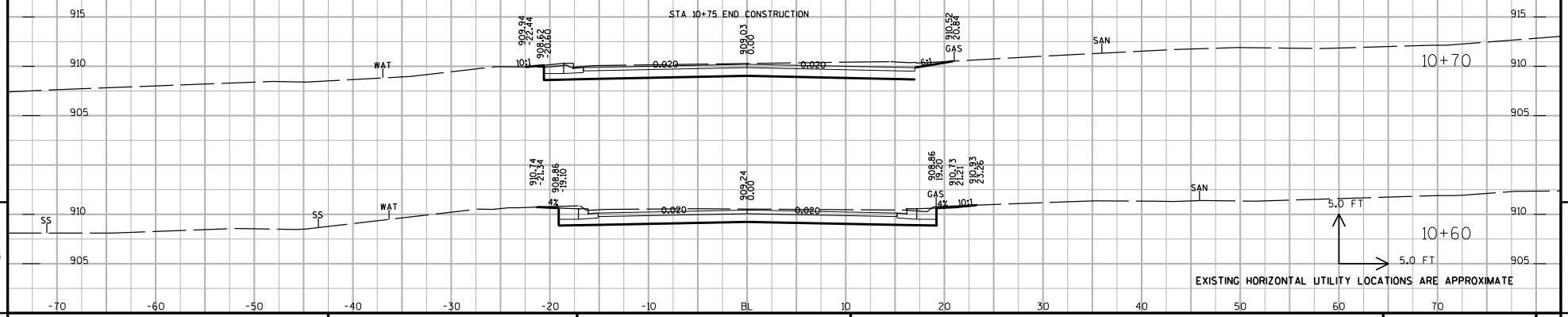
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: ST DUNSTAN DRIVE	SHEET NO: 883	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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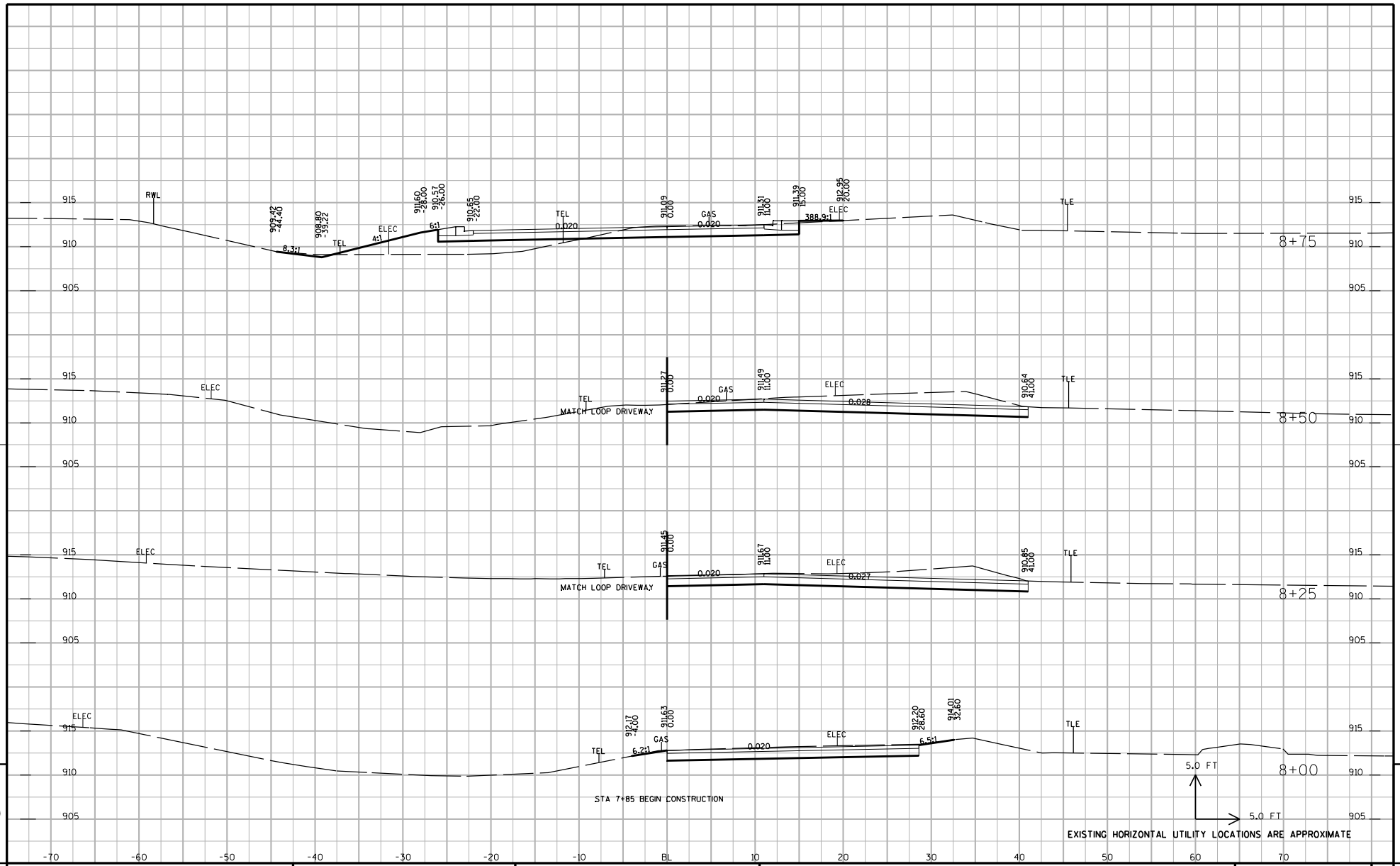
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OVERLOOK PASS	SHEET NO: 884	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

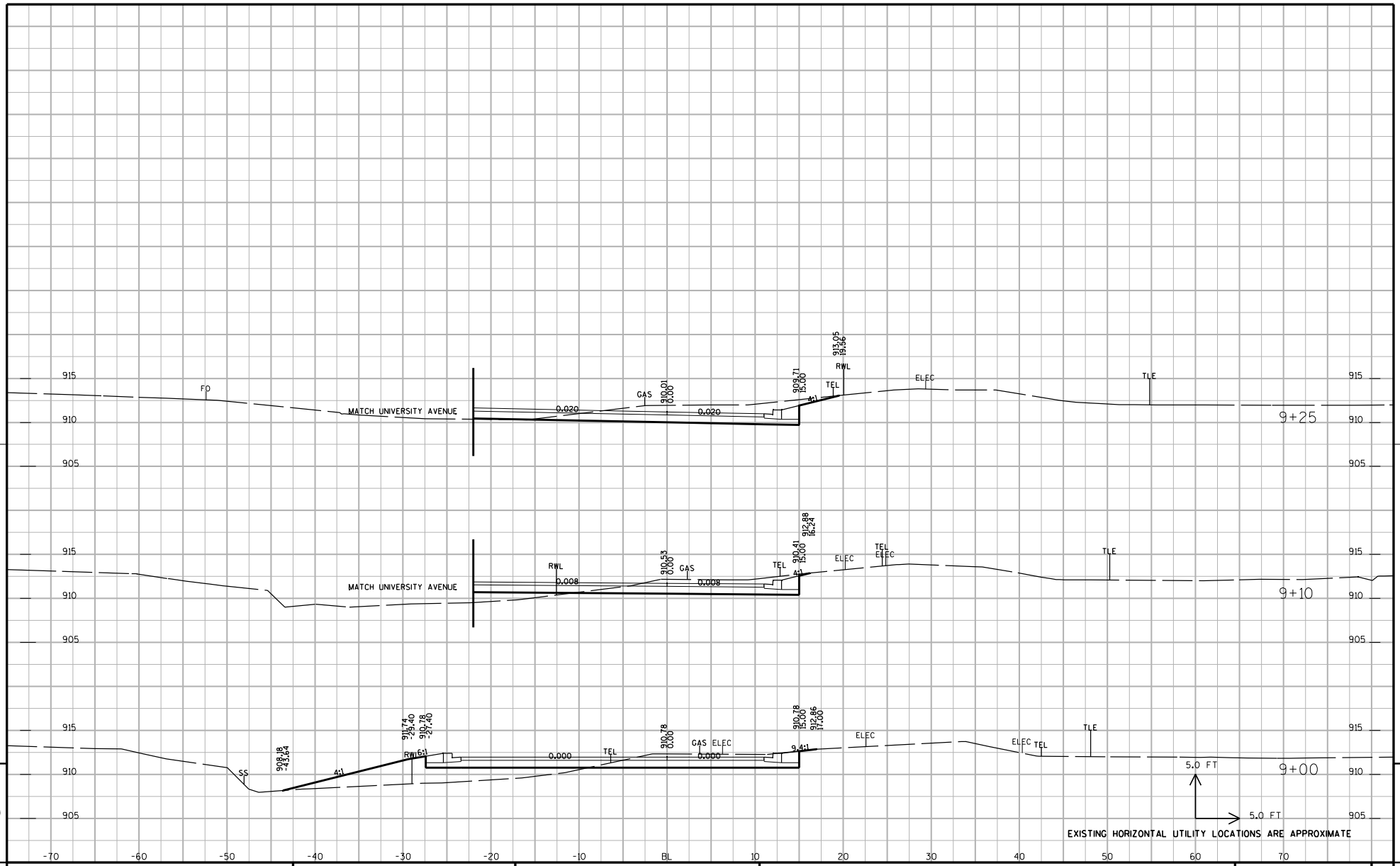
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: ASBURY-CRESS COMBINED ACCESS	SHEET NO: 885 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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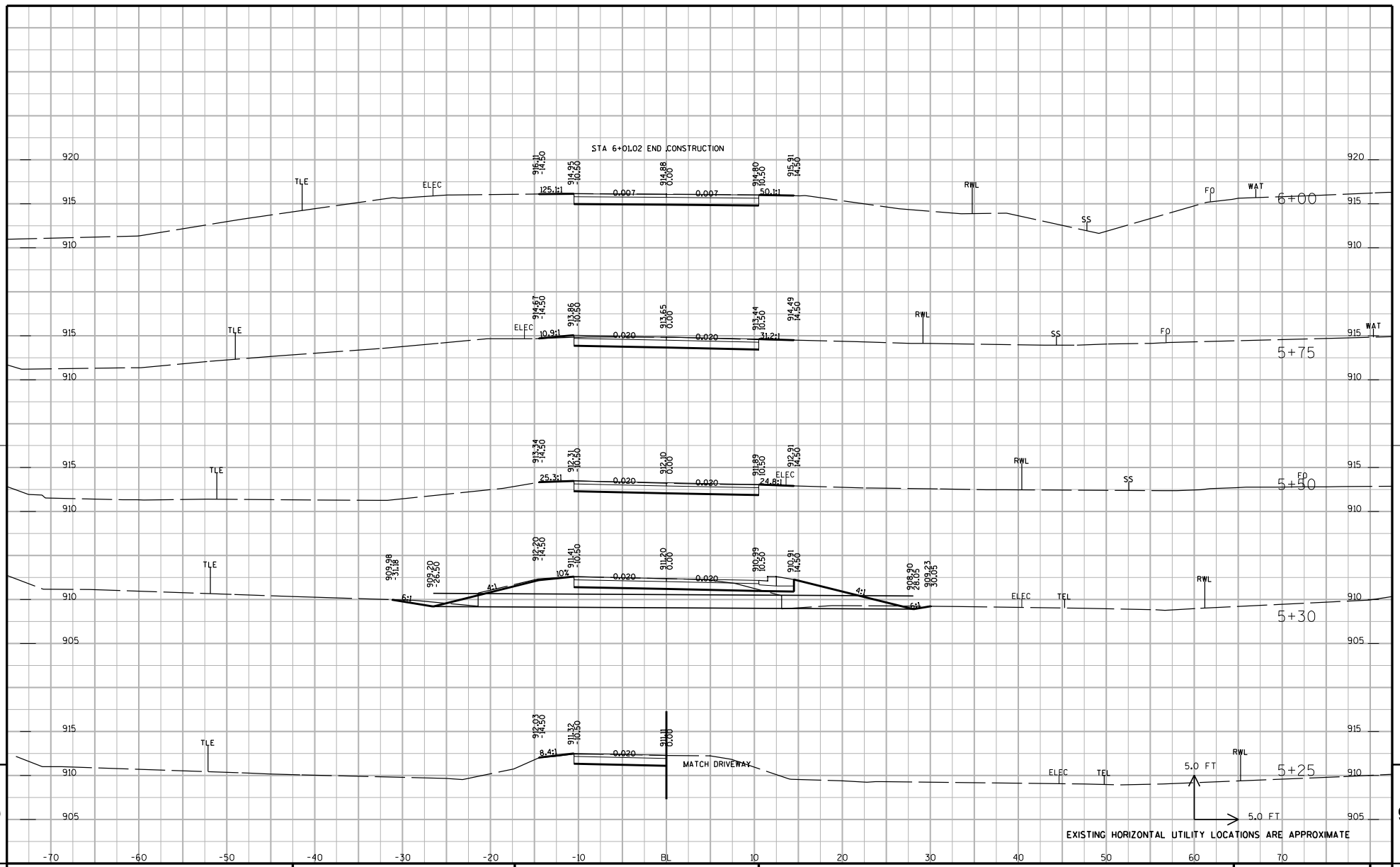
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: ASBURY-CRESS COMBINED ACCESS	SHEET NO: 886	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: ASBURY LOOP DRIVEWAY	SHEET NO: 887	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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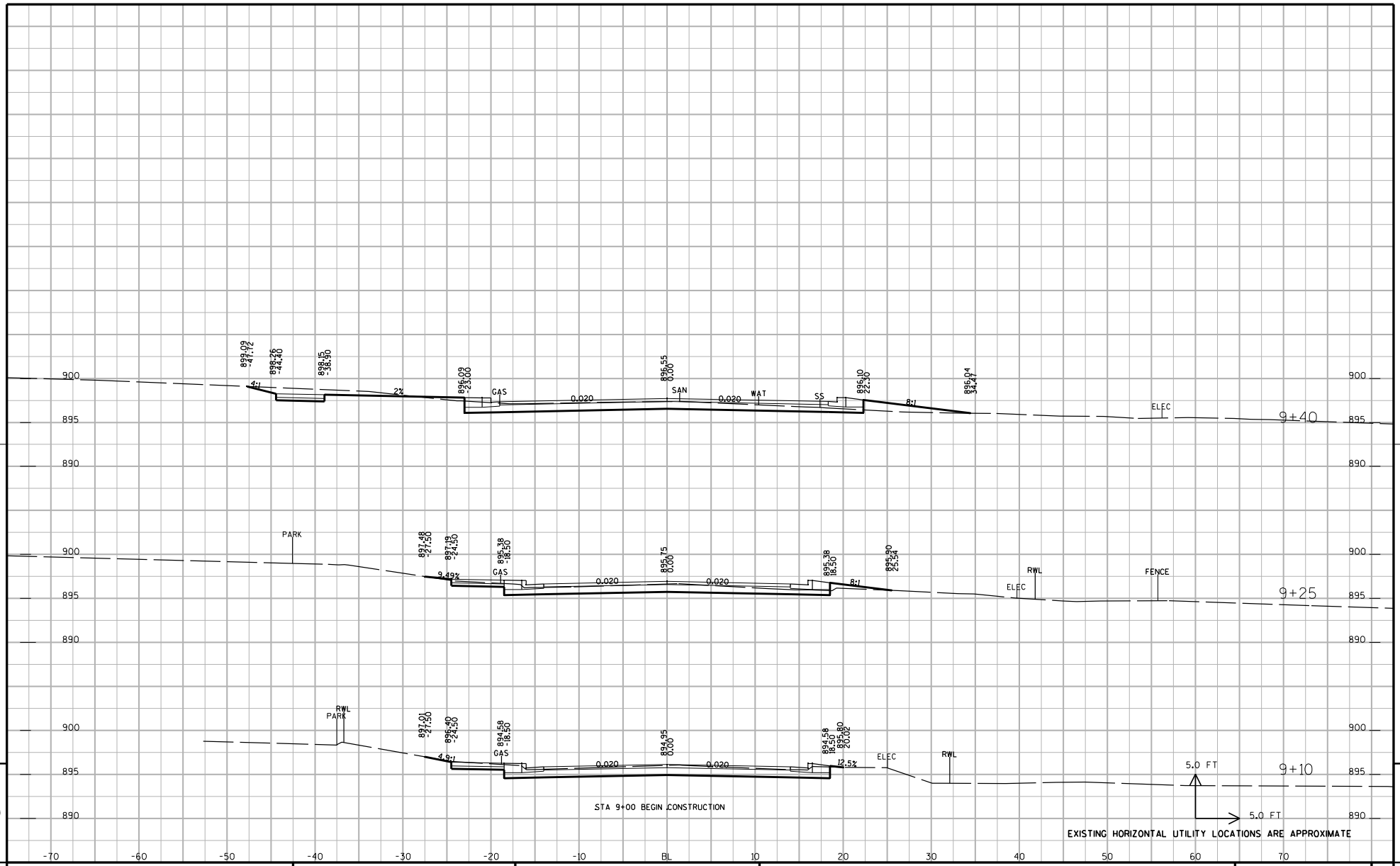

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PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: HEIM AVENUE	SHEET NO: 888	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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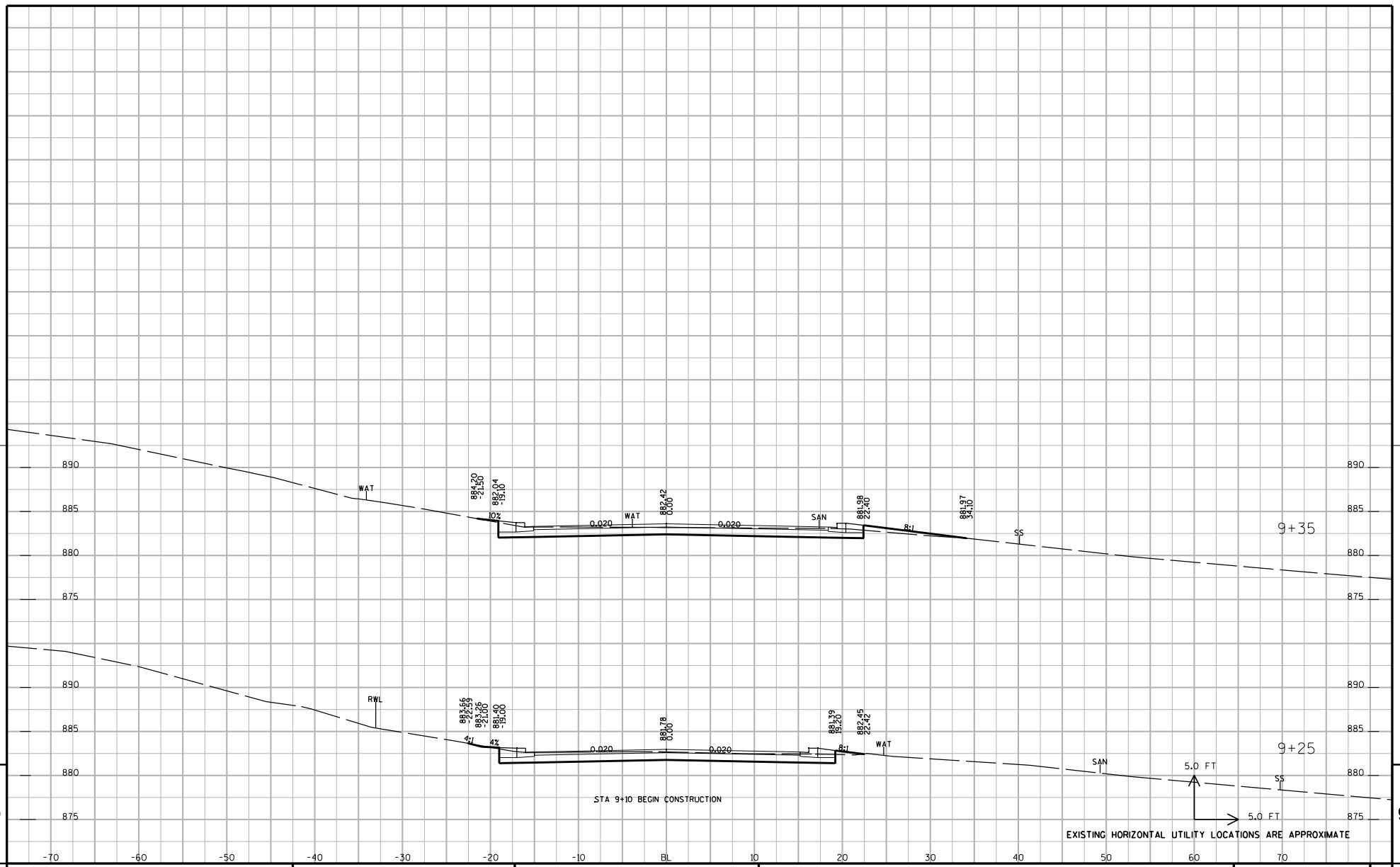

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: HICKORY HOLLOW DRIVE	SHEET NO: 889 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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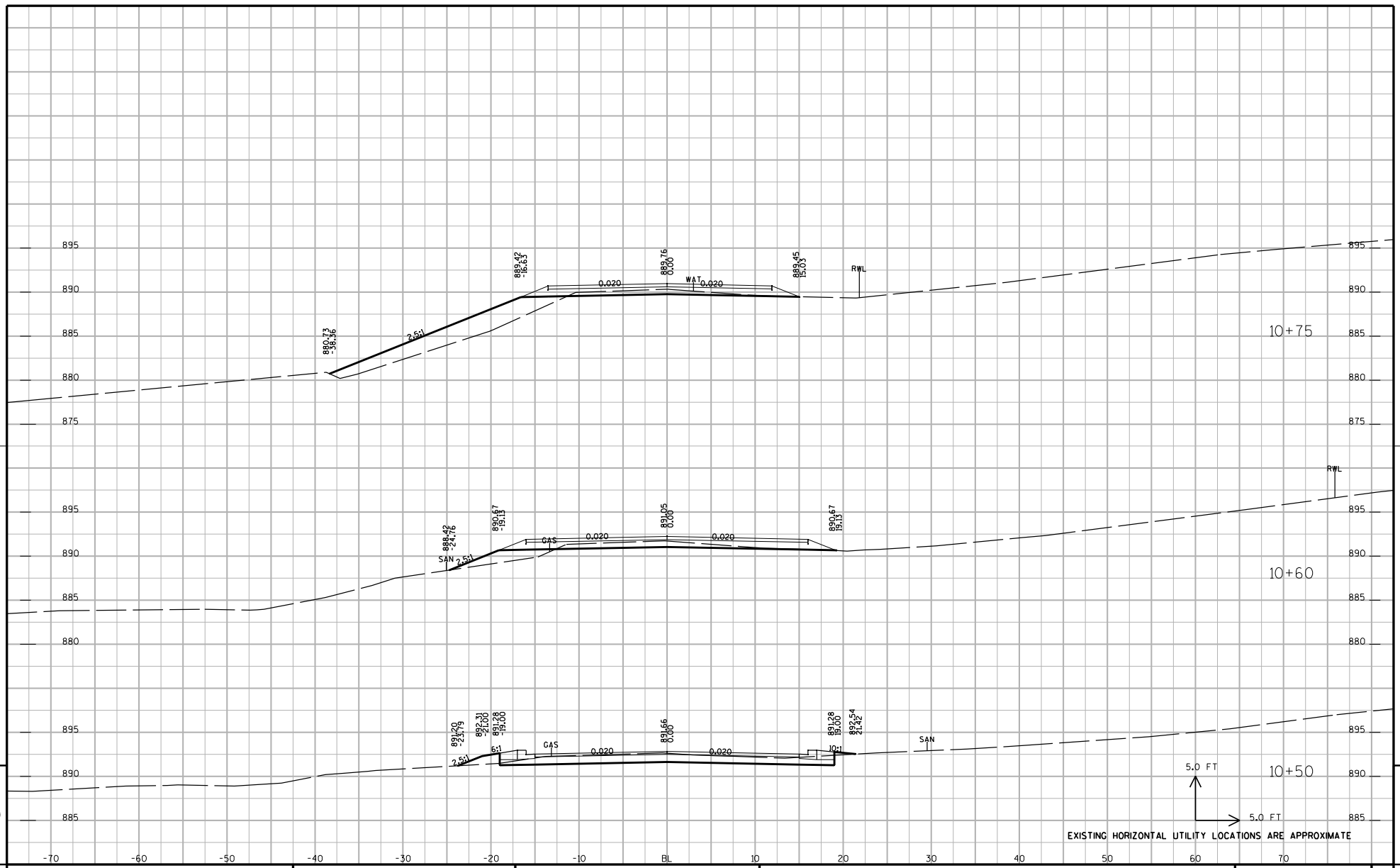

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: BAKER AVENUE	SHEET NO: 890 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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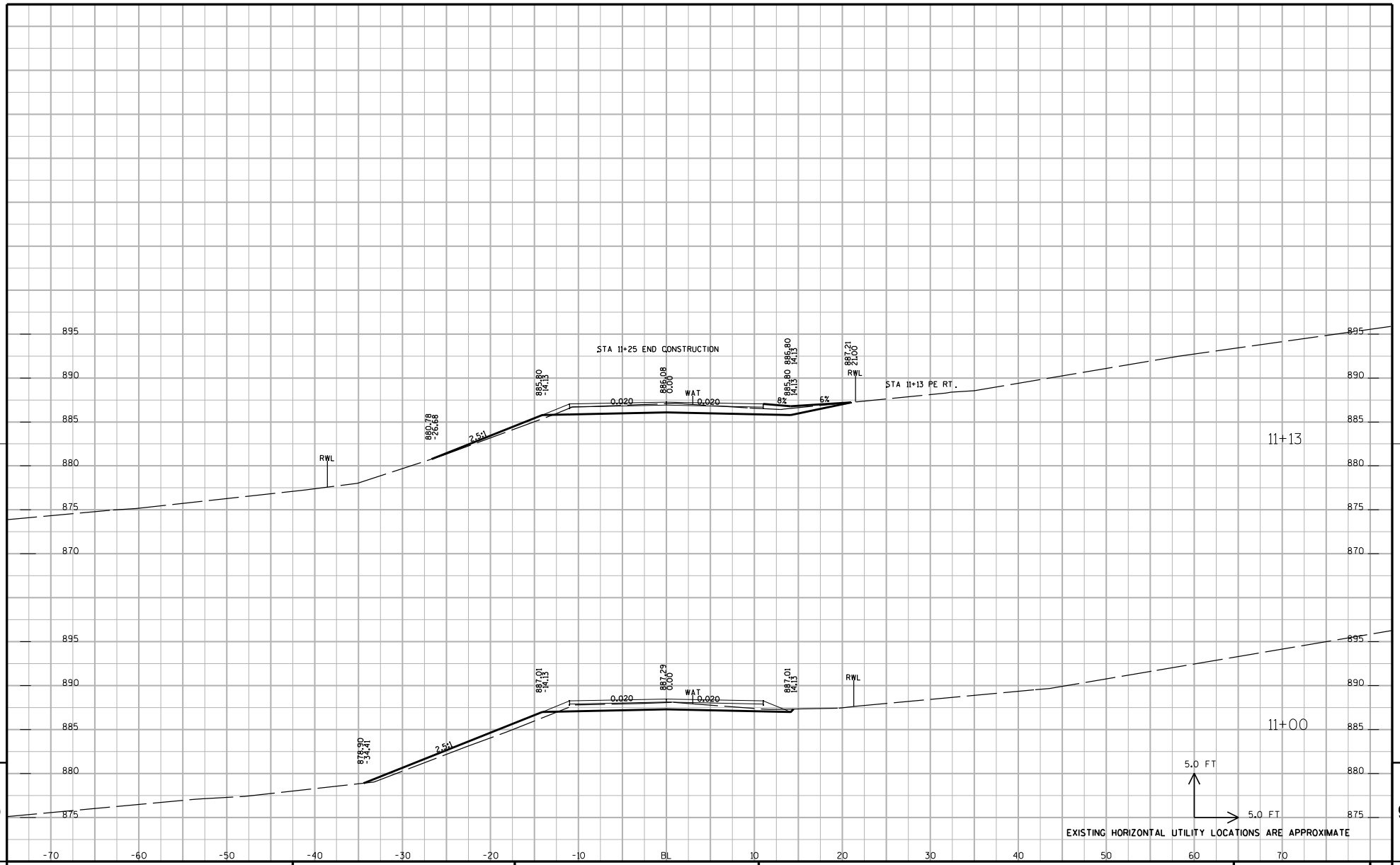

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PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: BAKER AVENUE	SHEET NO: 891	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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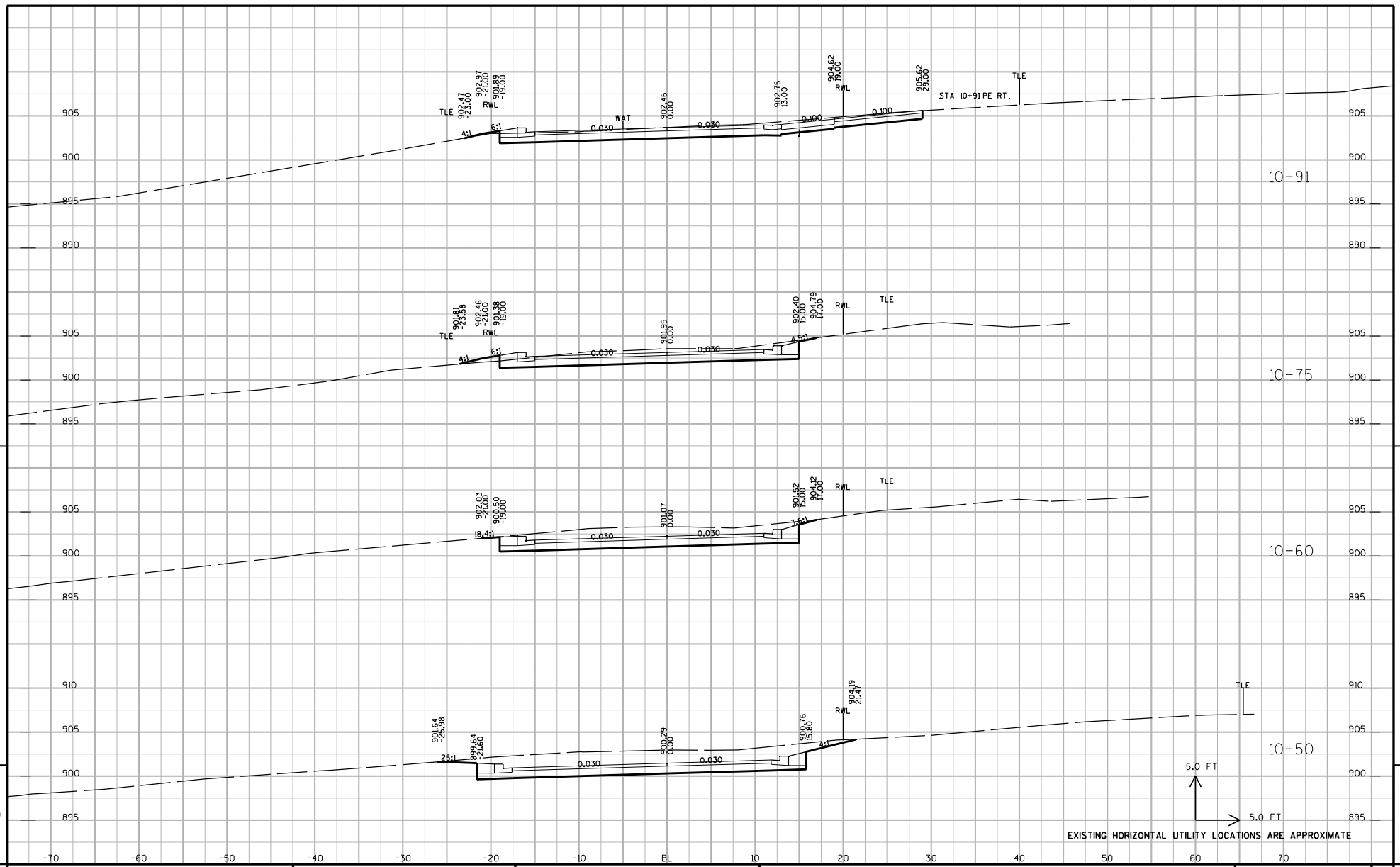
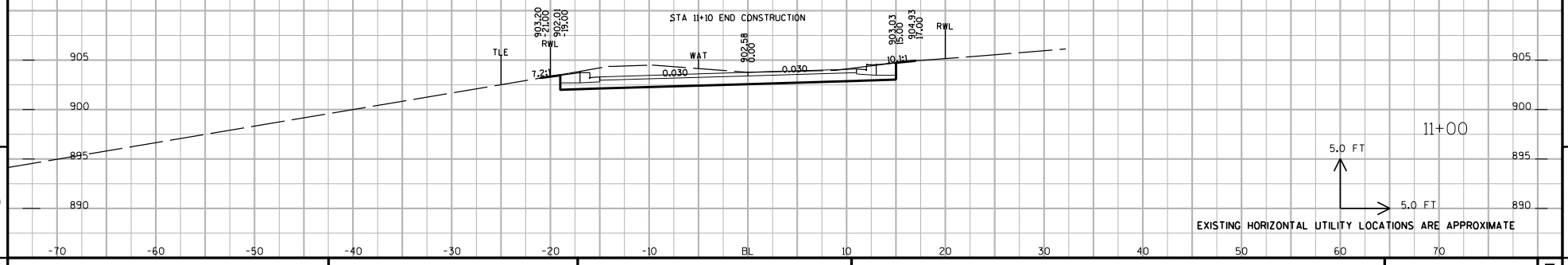


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: HICKORY DRIVE	SHEET NO: 892	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: HICKORY DRIVE	SHEET NO: 893	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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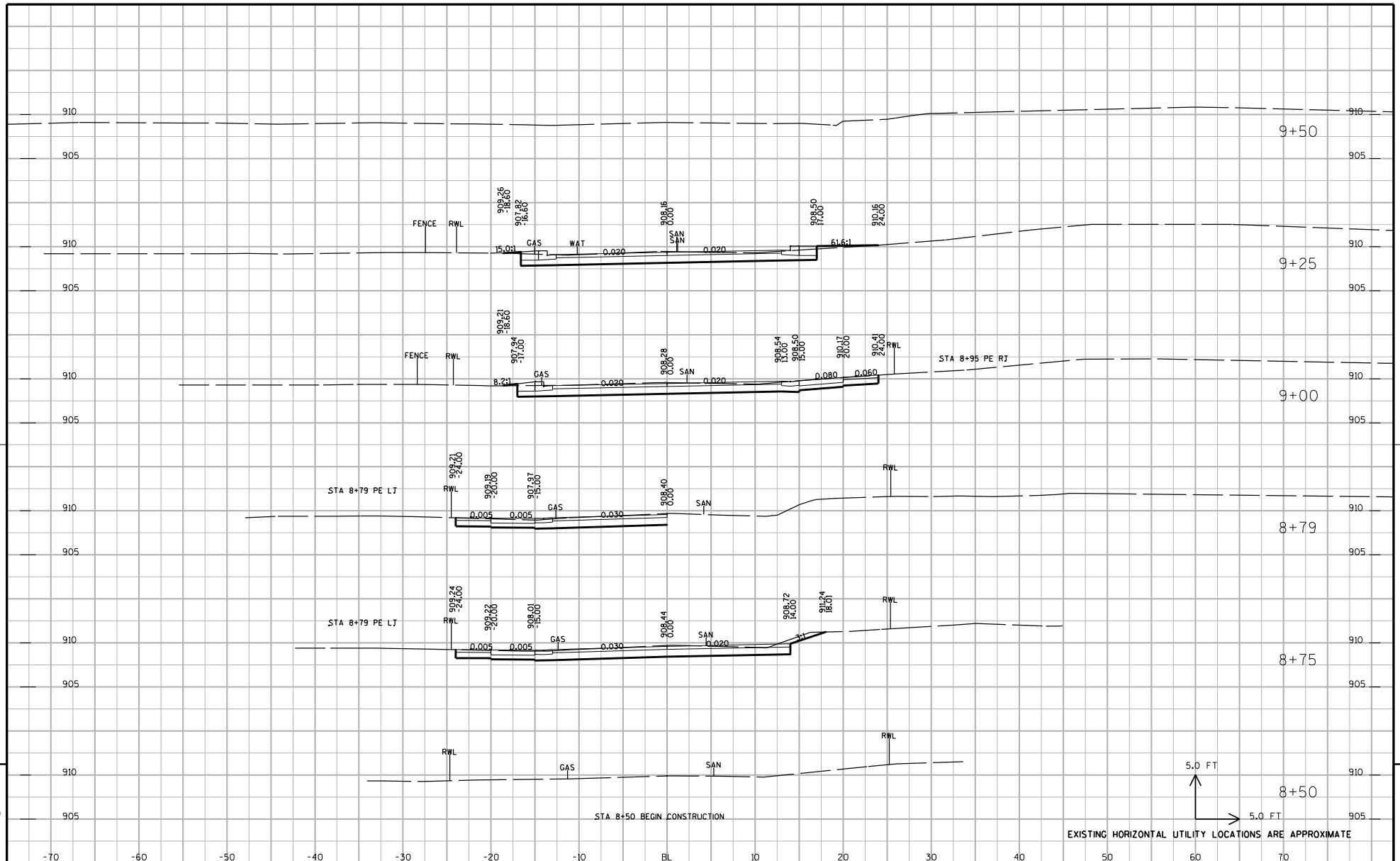

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PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: LAUREL CREST (SOUTH)	SHEET NO: 894	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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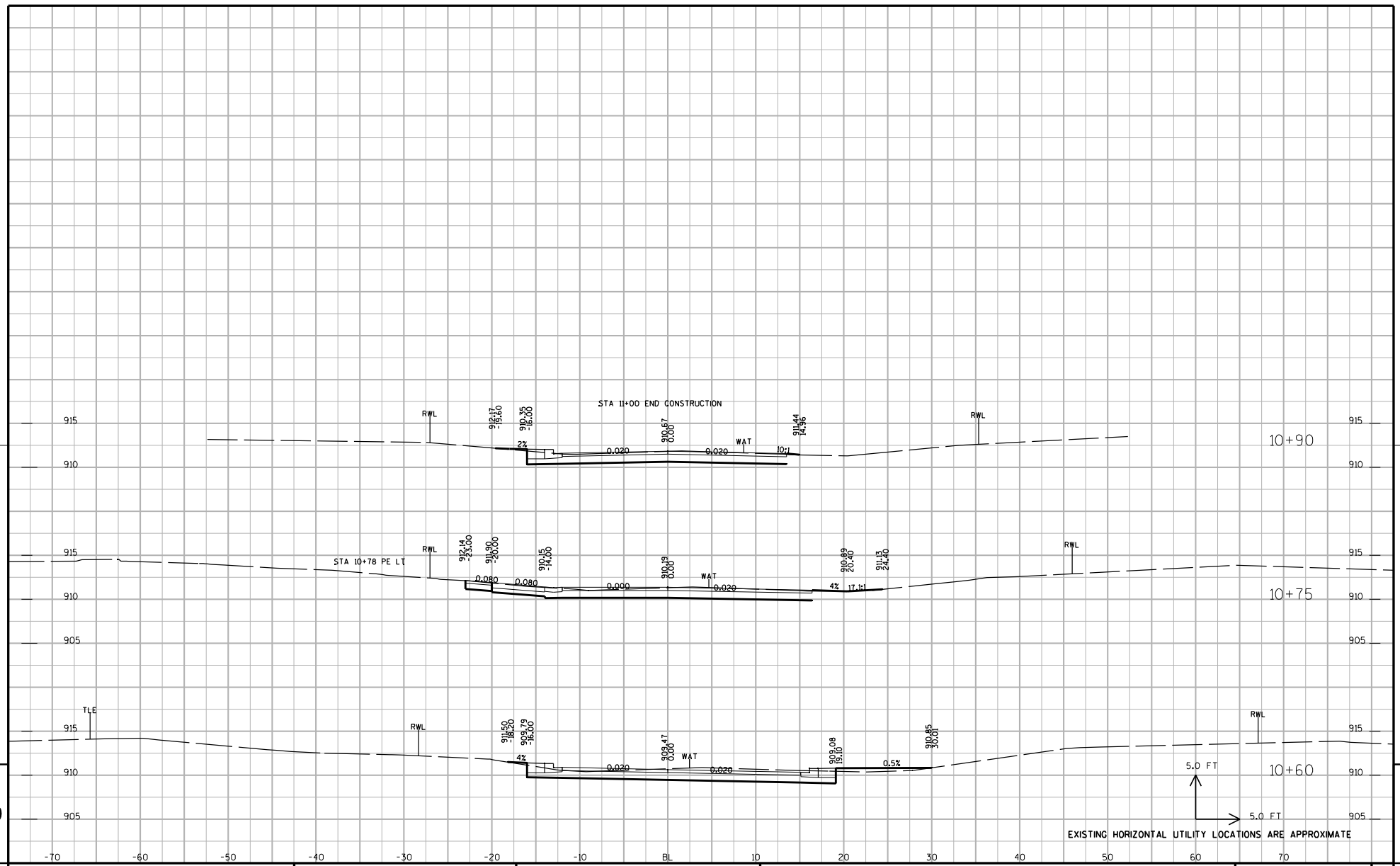

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PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: LAUREL CREST (NORTH)	SHEET NO: 895	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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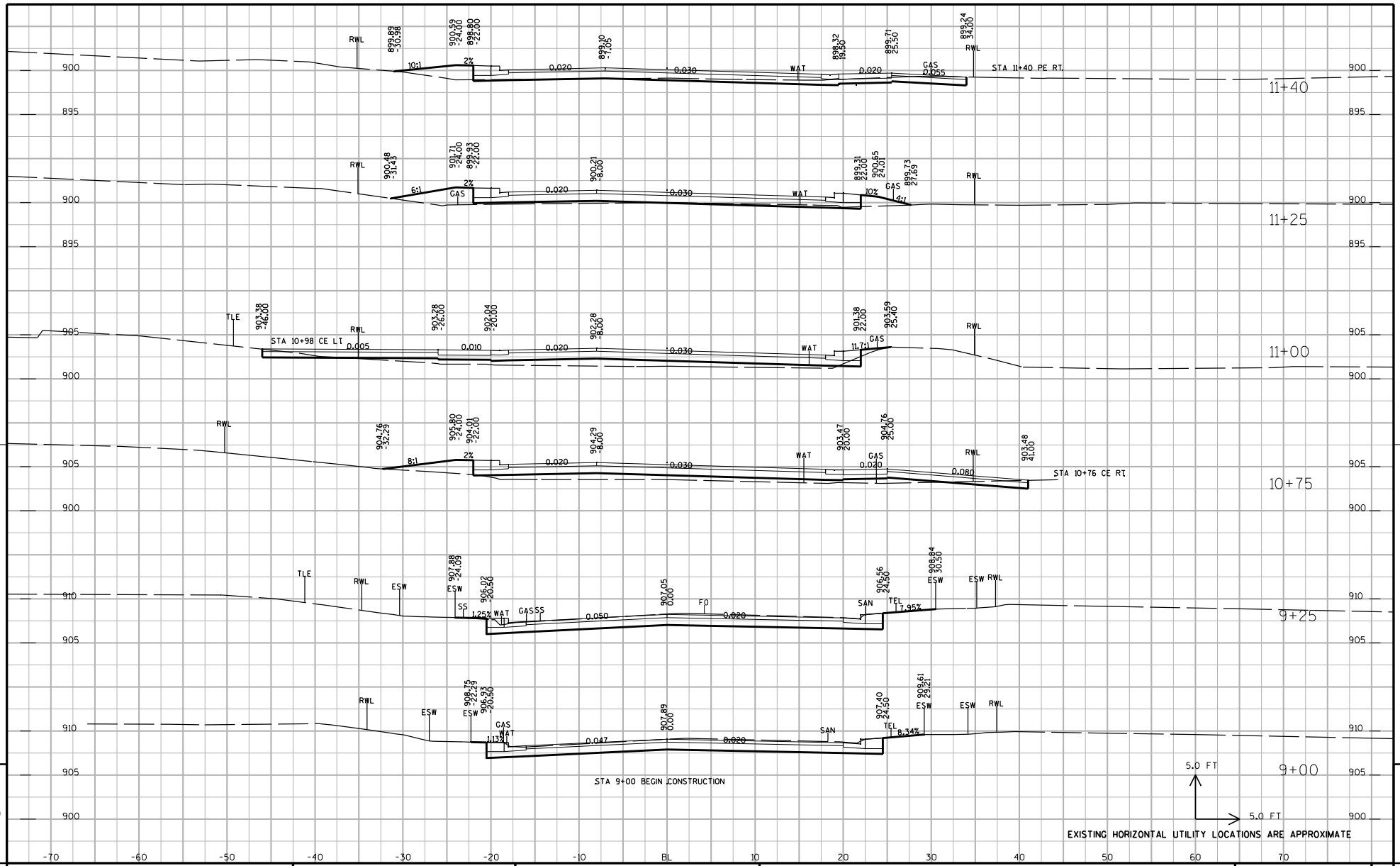

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: CAPITAL AVENUE	SHEET NO: 896 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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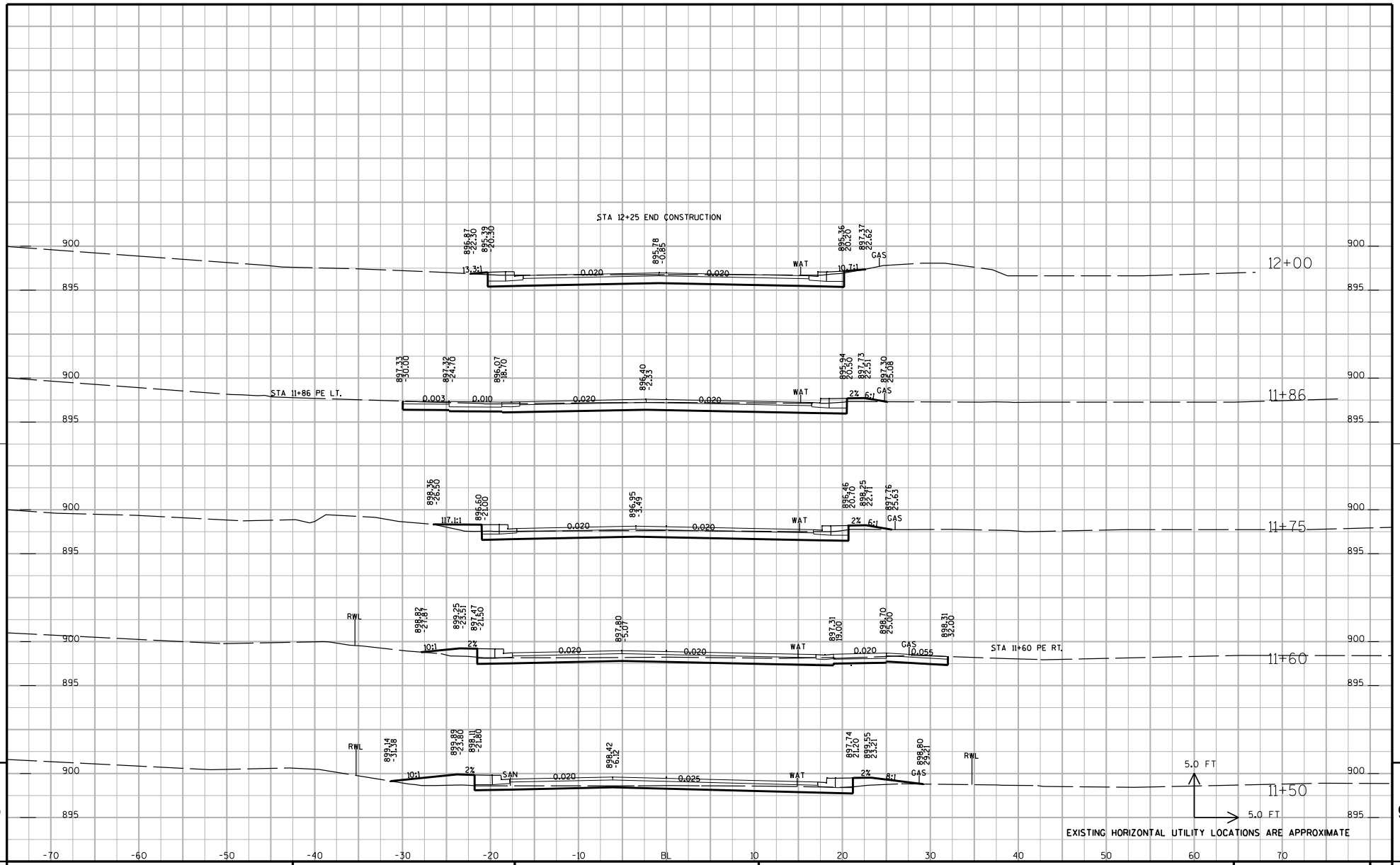
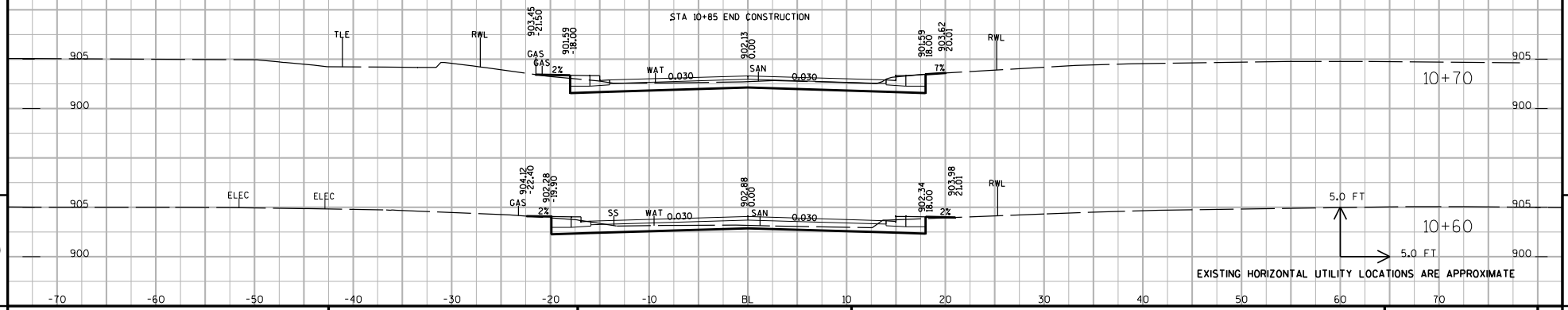


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: CAPITAL AVENUE	SHEET NO: 897	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: CAMUS LANE	SHEET NO: 898	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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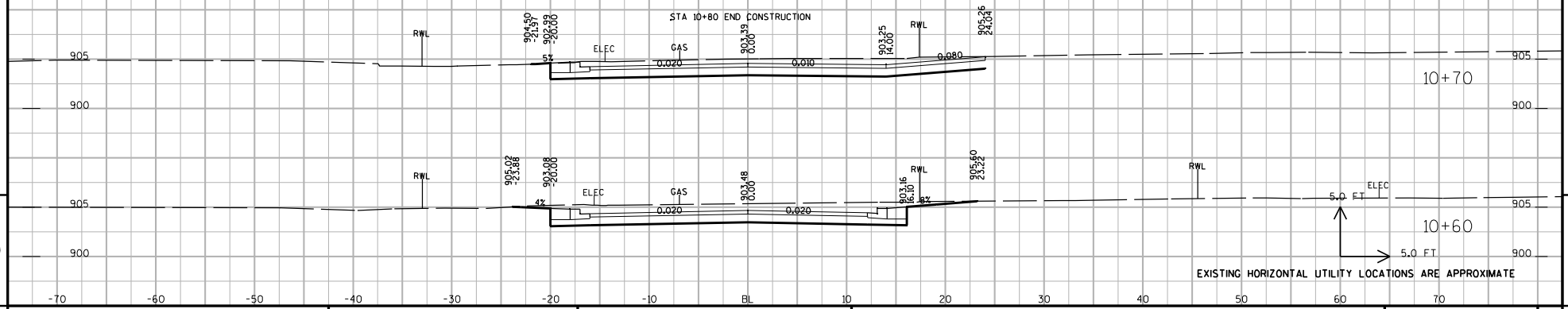
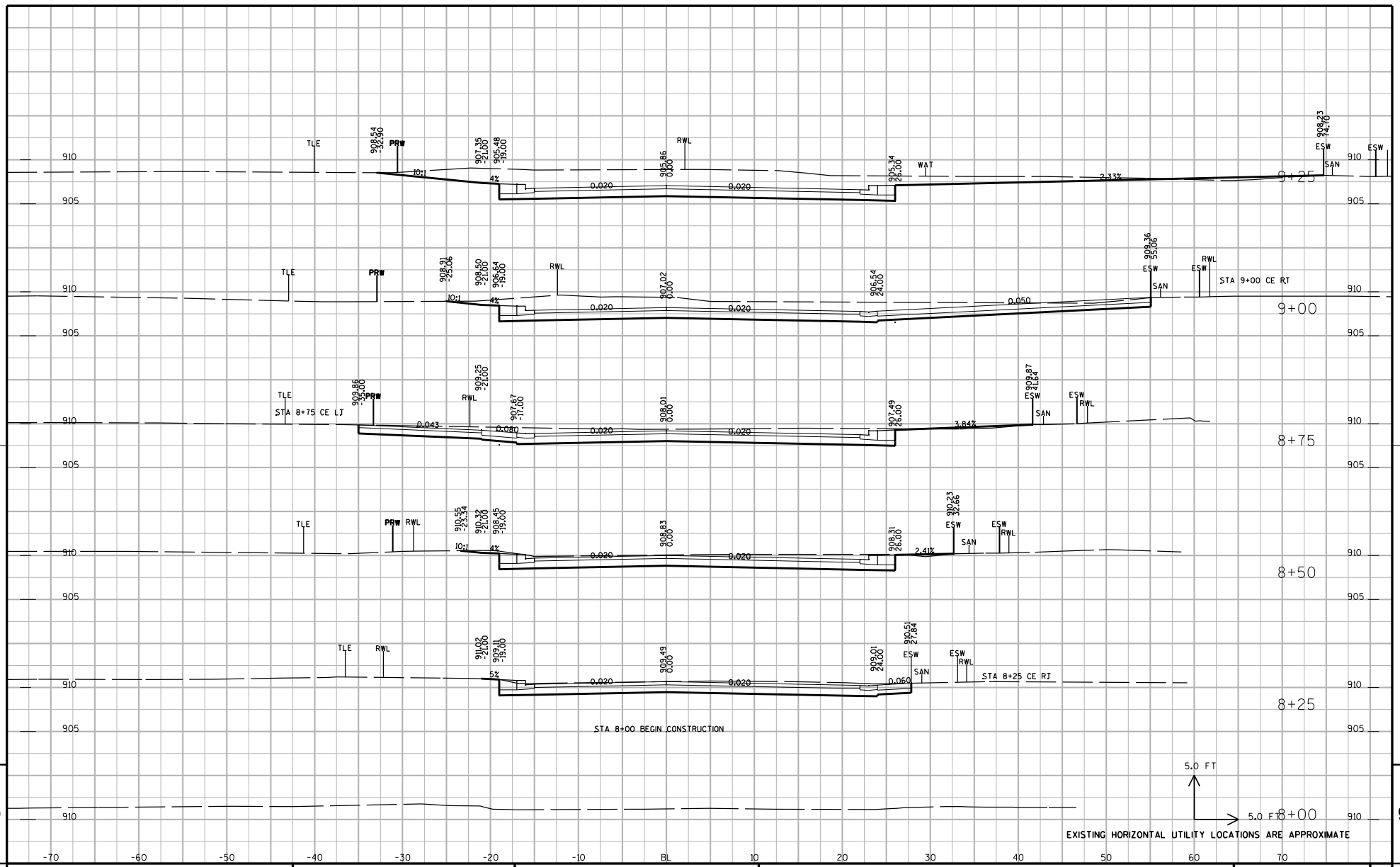


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: FRITZ AVENUE	SHEET NO: 899	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

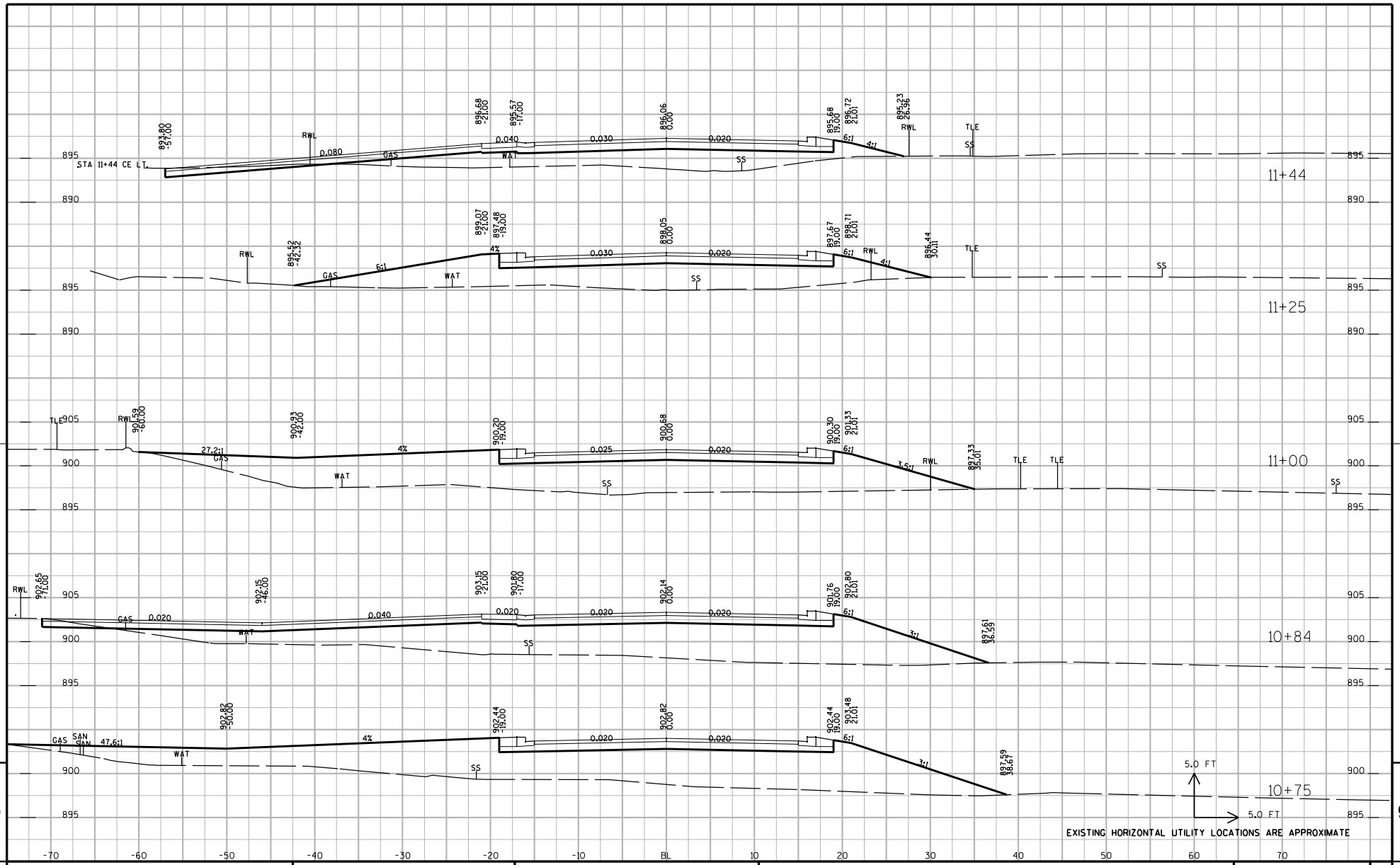
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: NORMAN WAY (WEST)	SHEET NO: 900 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: NORMAN WAY (EAST)	SHEET NO: 901 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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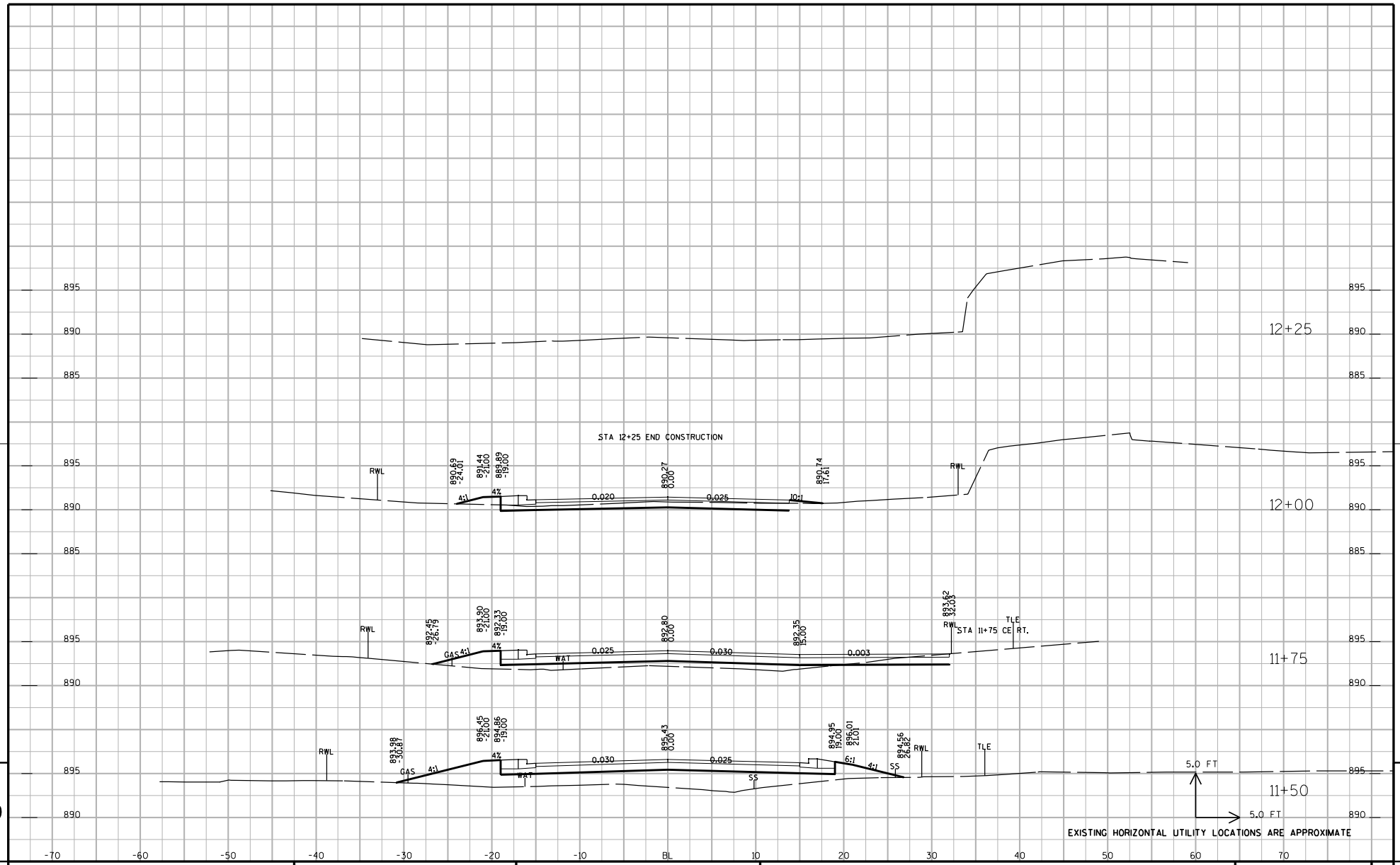


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: NORMAN WAY (EAST)	SHEET NO: 902 E

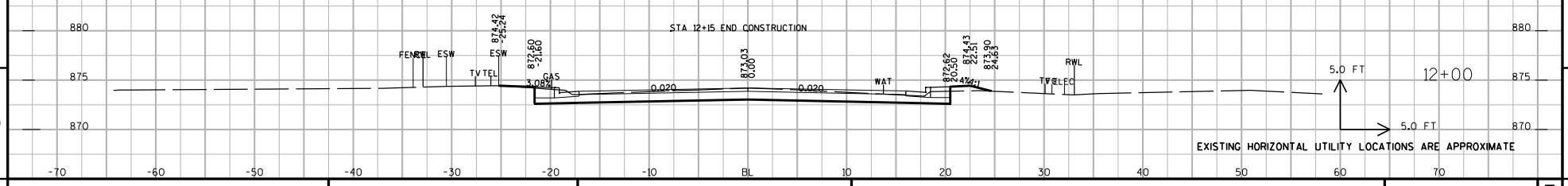
FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: SPRING HARBOR DRIVE	SHEET NO: 903 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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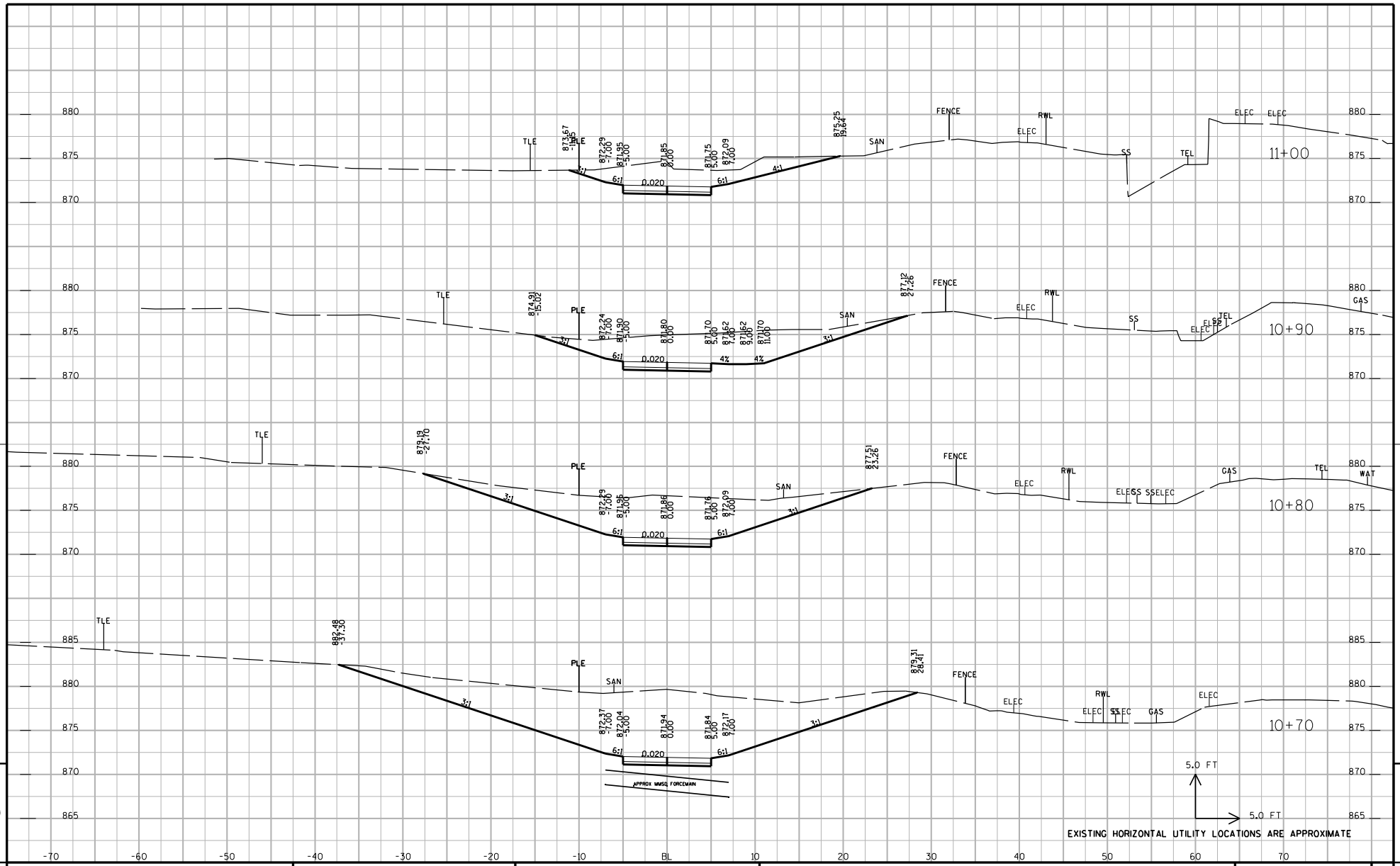
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: SPRING HARBOR DRIVE	SHEET NO: 904	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

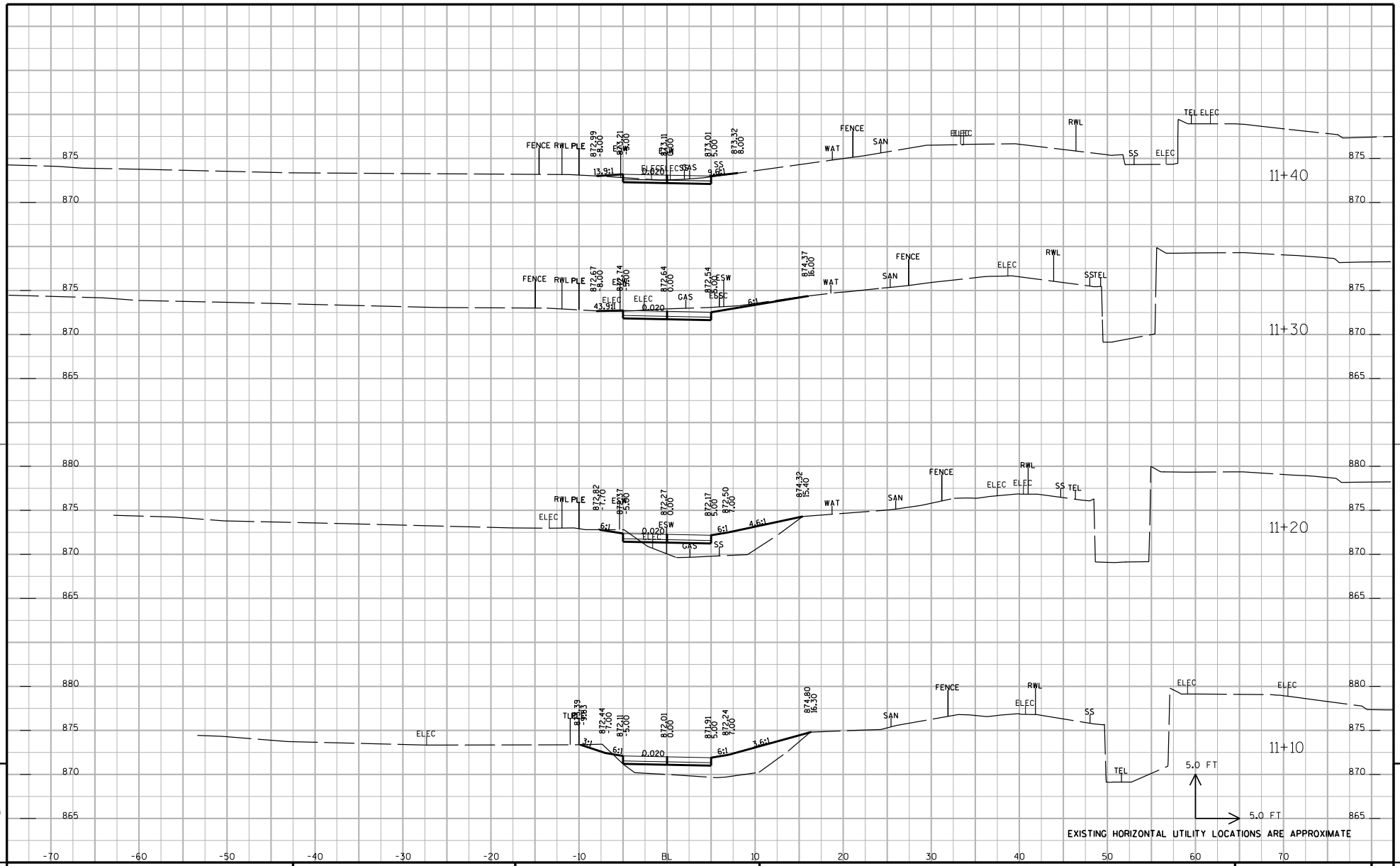
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: TUNNEL PATH	SHEET NO: 905 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

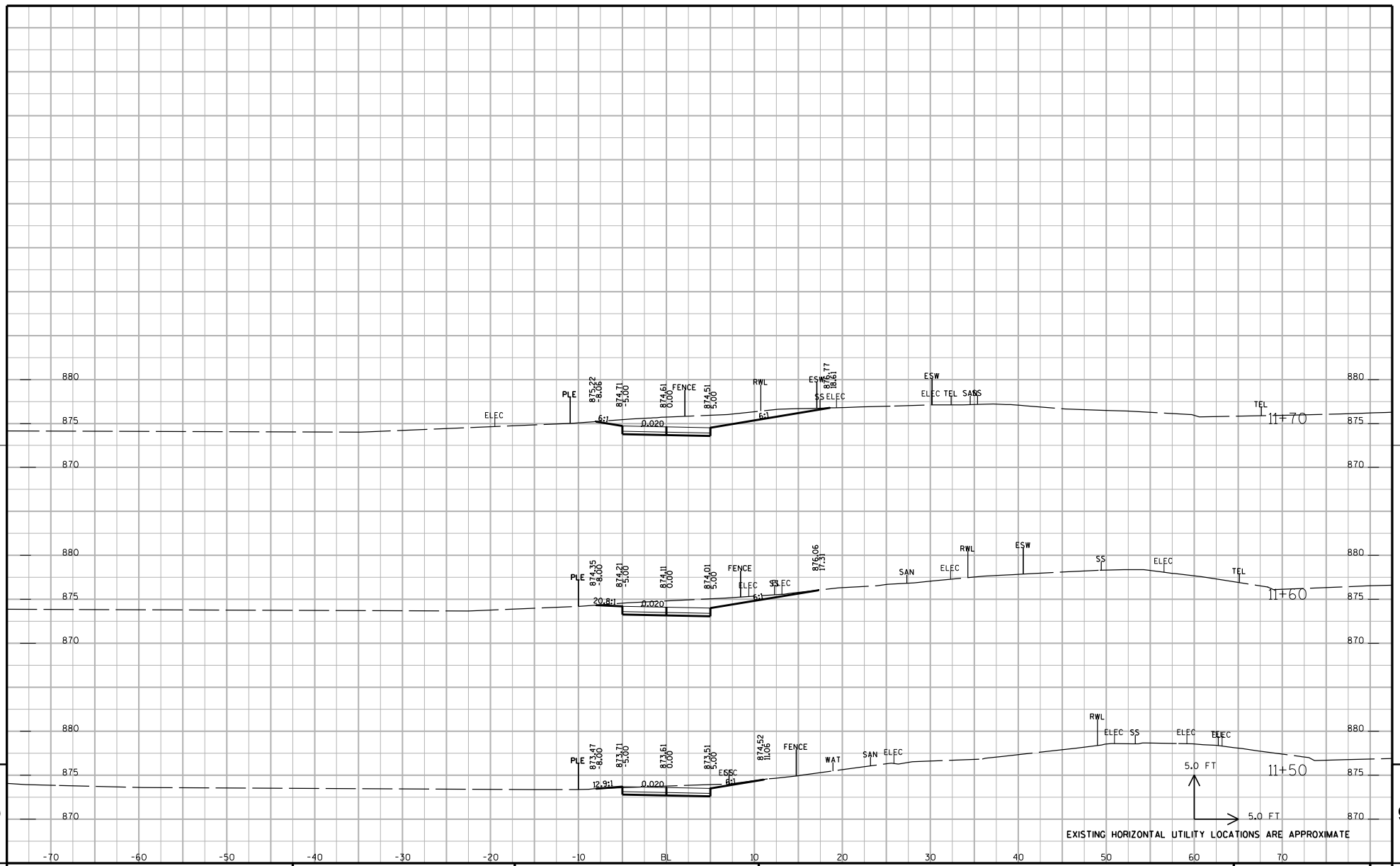
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: TUNNEL PATH	SHEET NO: 906 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

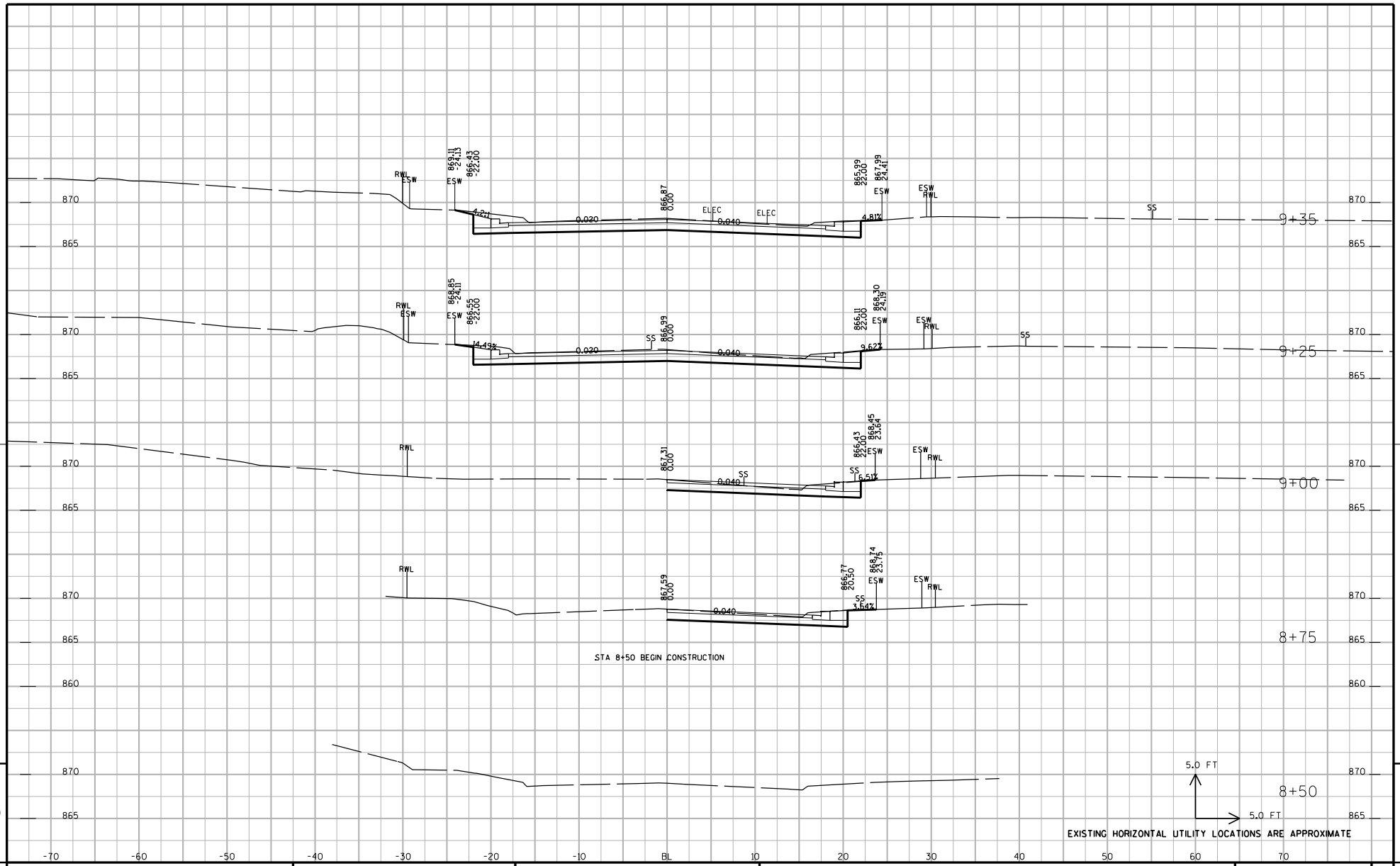
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: TUNNEL PATH	SHEET NO: 907 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 10/28/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

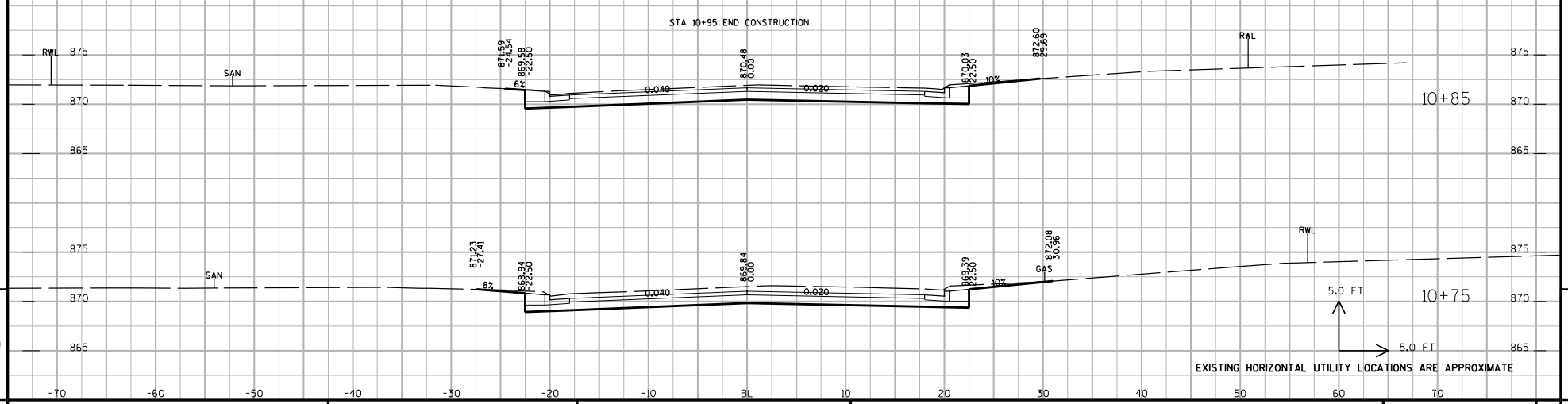


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: CRAIG AVENUE	SHEET NO: 908 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

Addendum No. 1
ID 5992-08-79
Revised Sheet 909
February 1, 2012



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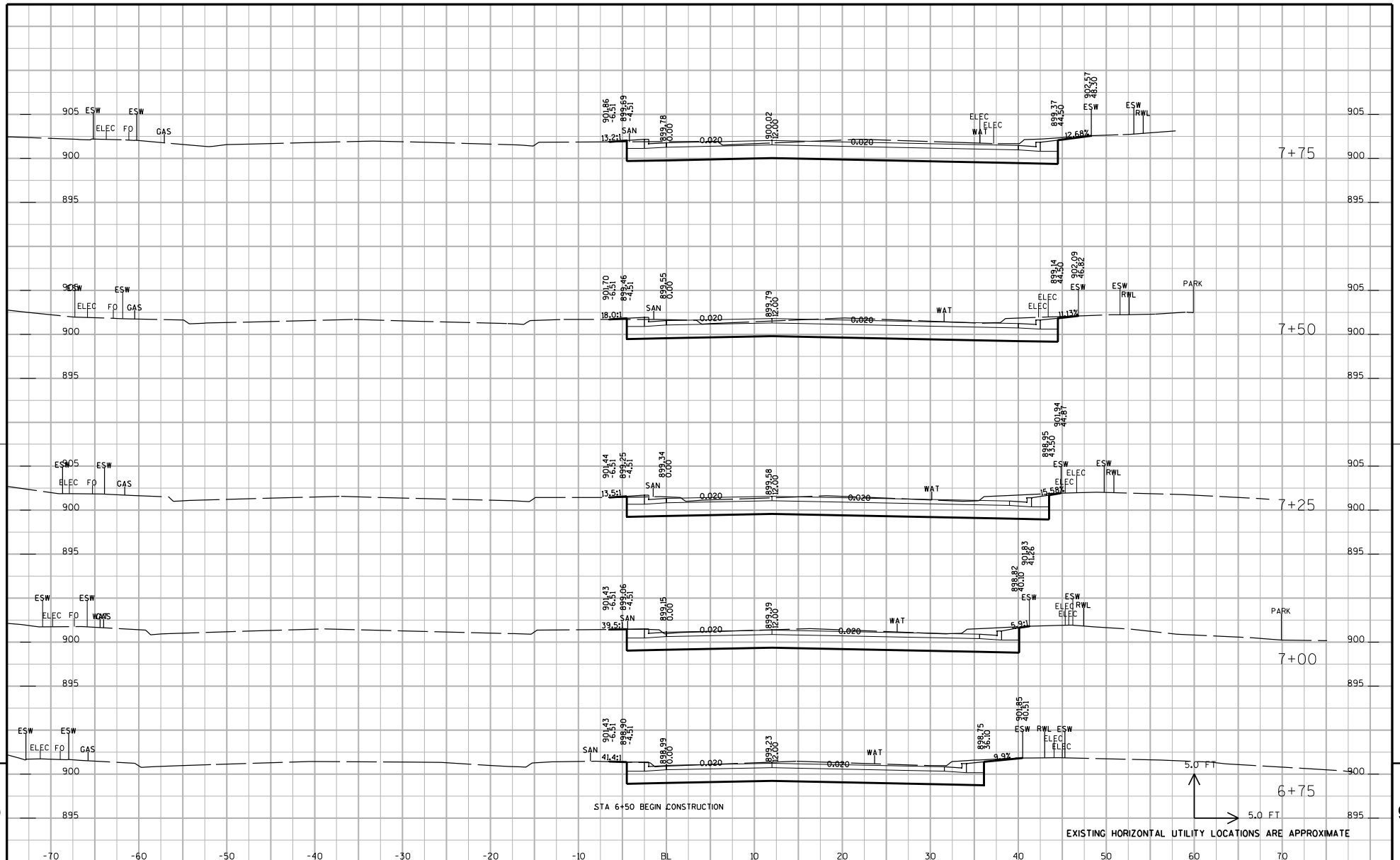
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: TOMAHAWK TRAIL	SHEET NO: 9~909	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

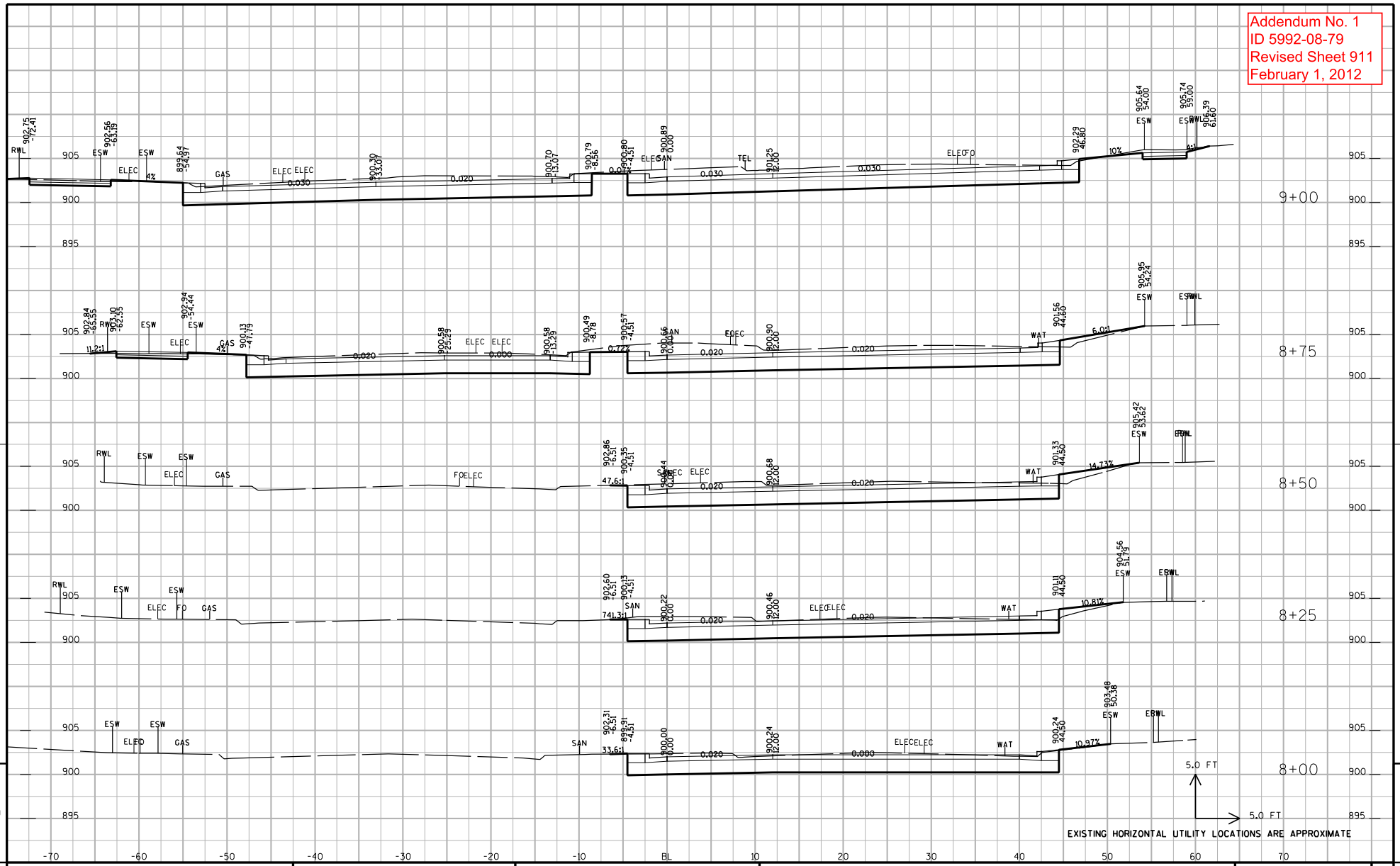


PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: WHITNEY WAY	SHEET NO: 910 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

Addendum No. 1
ID 5992-08-79
Revised Sheet 911
February 1, 2012



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: WHITNEY WAY	SHEET NO: 9 911	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 1/30/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

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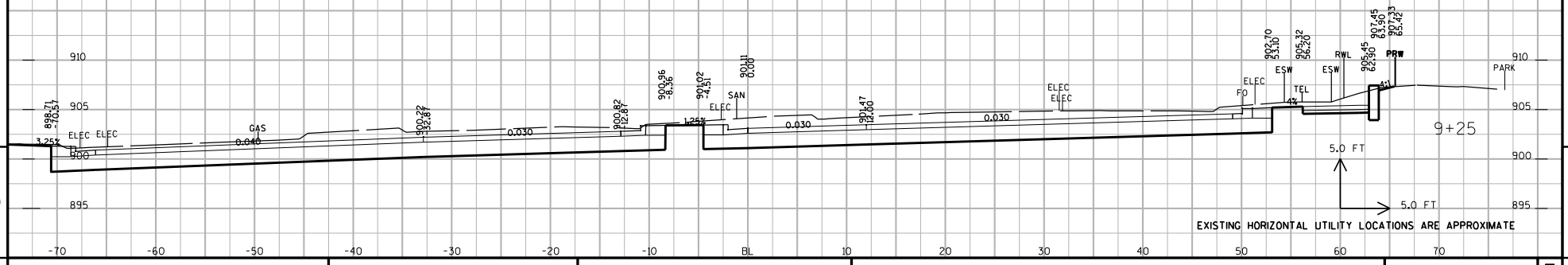

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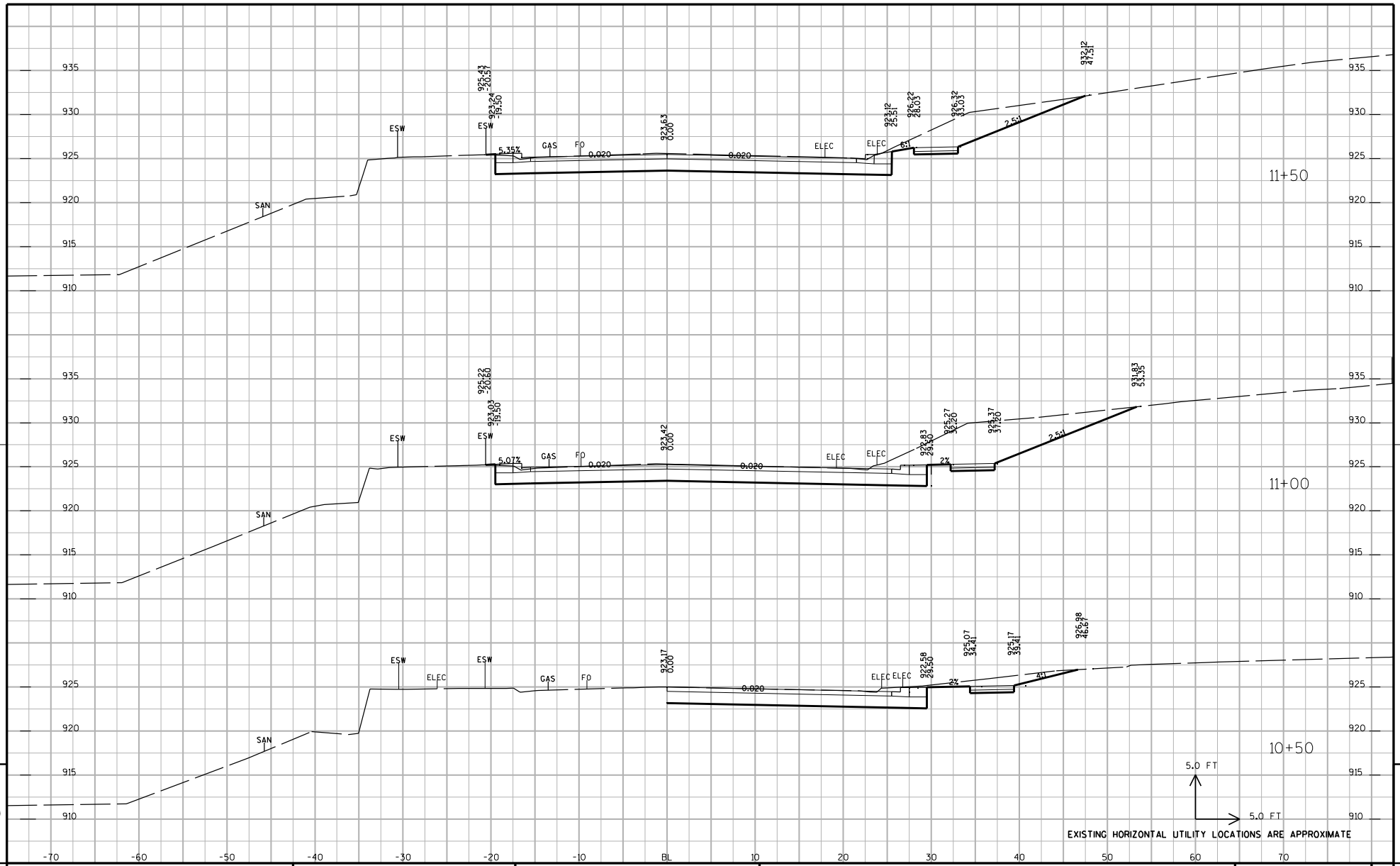
PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: WHITNEY WAY	SHEET NO: 912 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

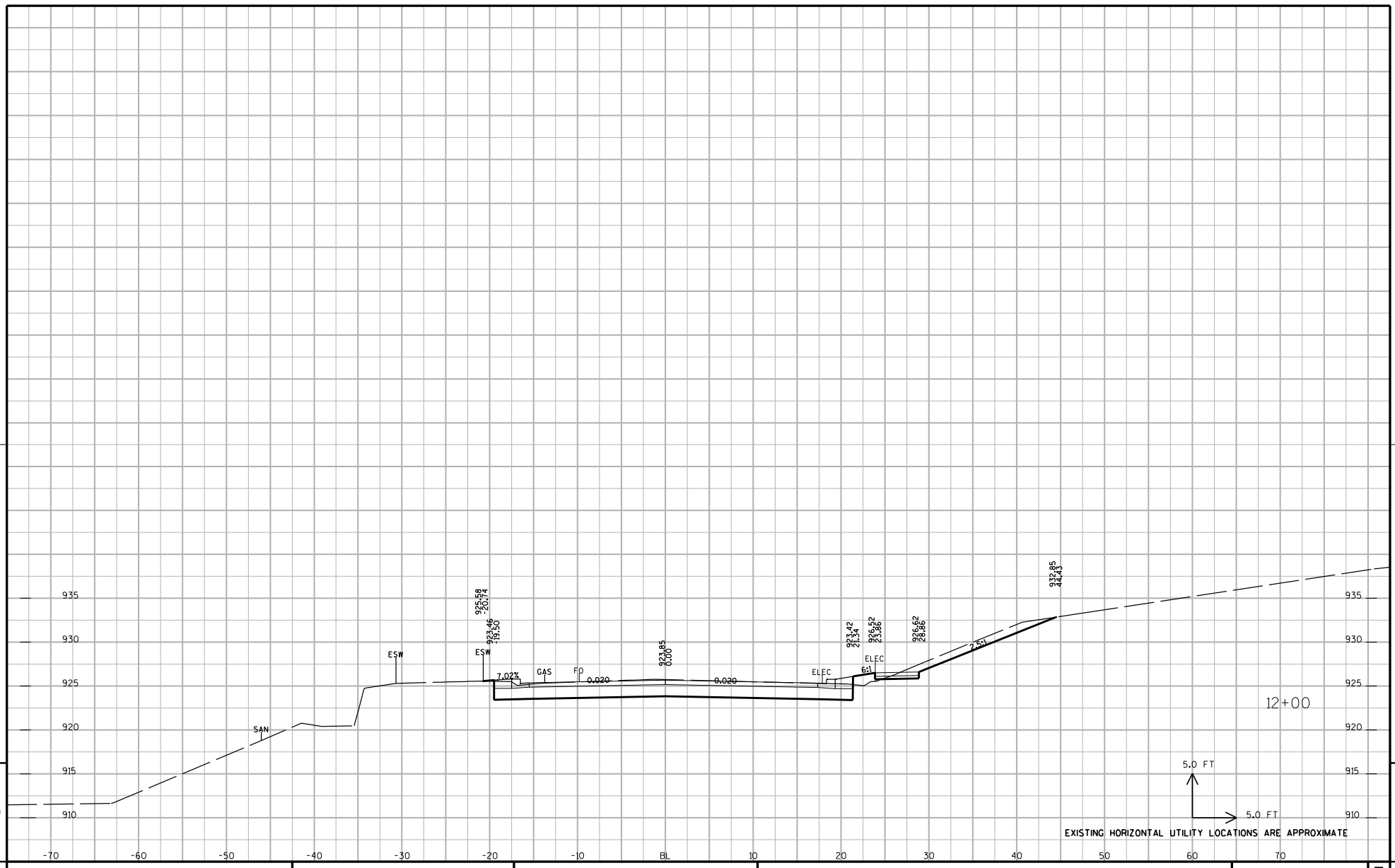
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD	SHEET NO: 913 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

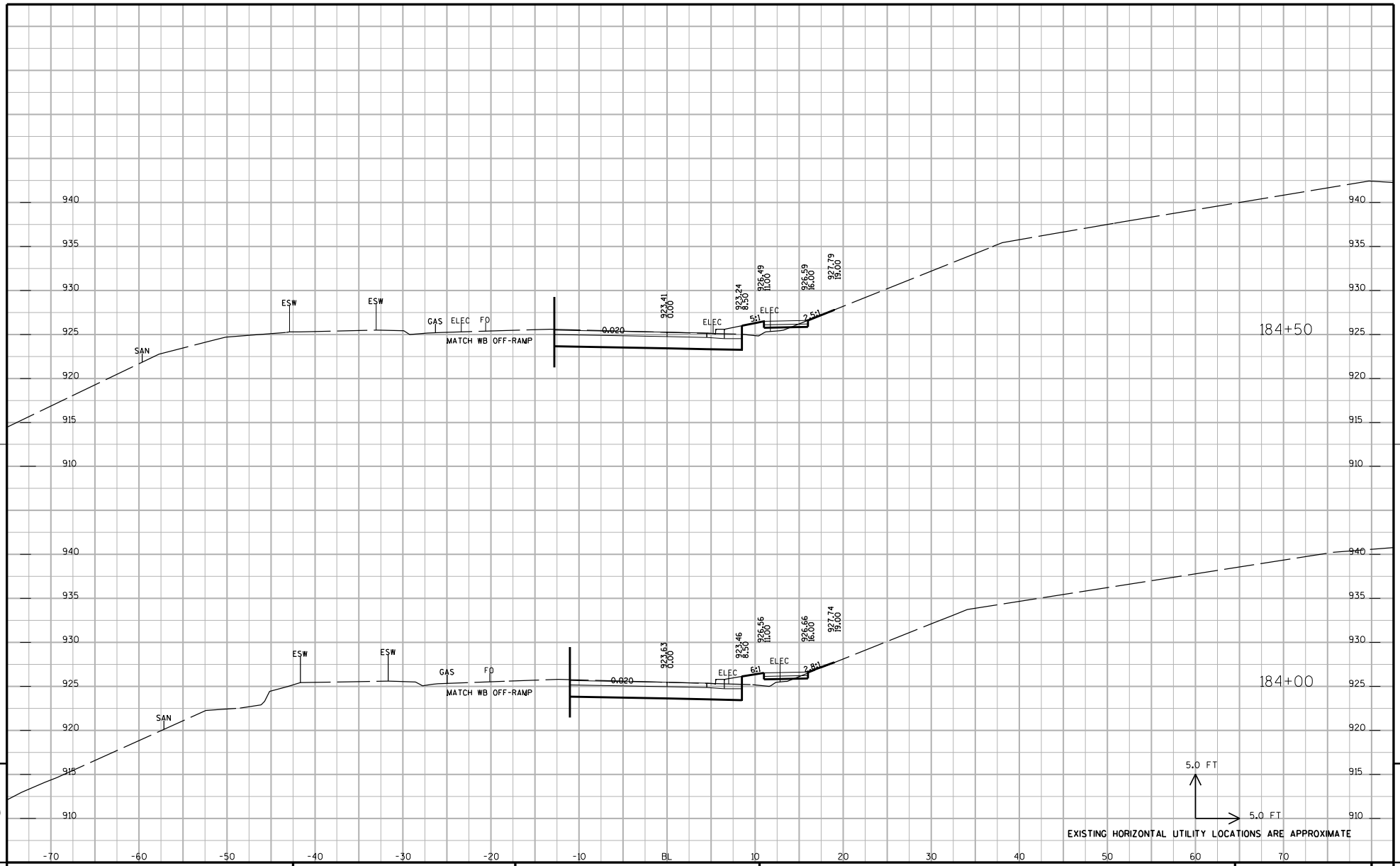
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD	SHEET NO: 914 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD EB ON-RAMP	SHEET NO: 915 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD EB ON-RAMP	SHEET NO: 916 E

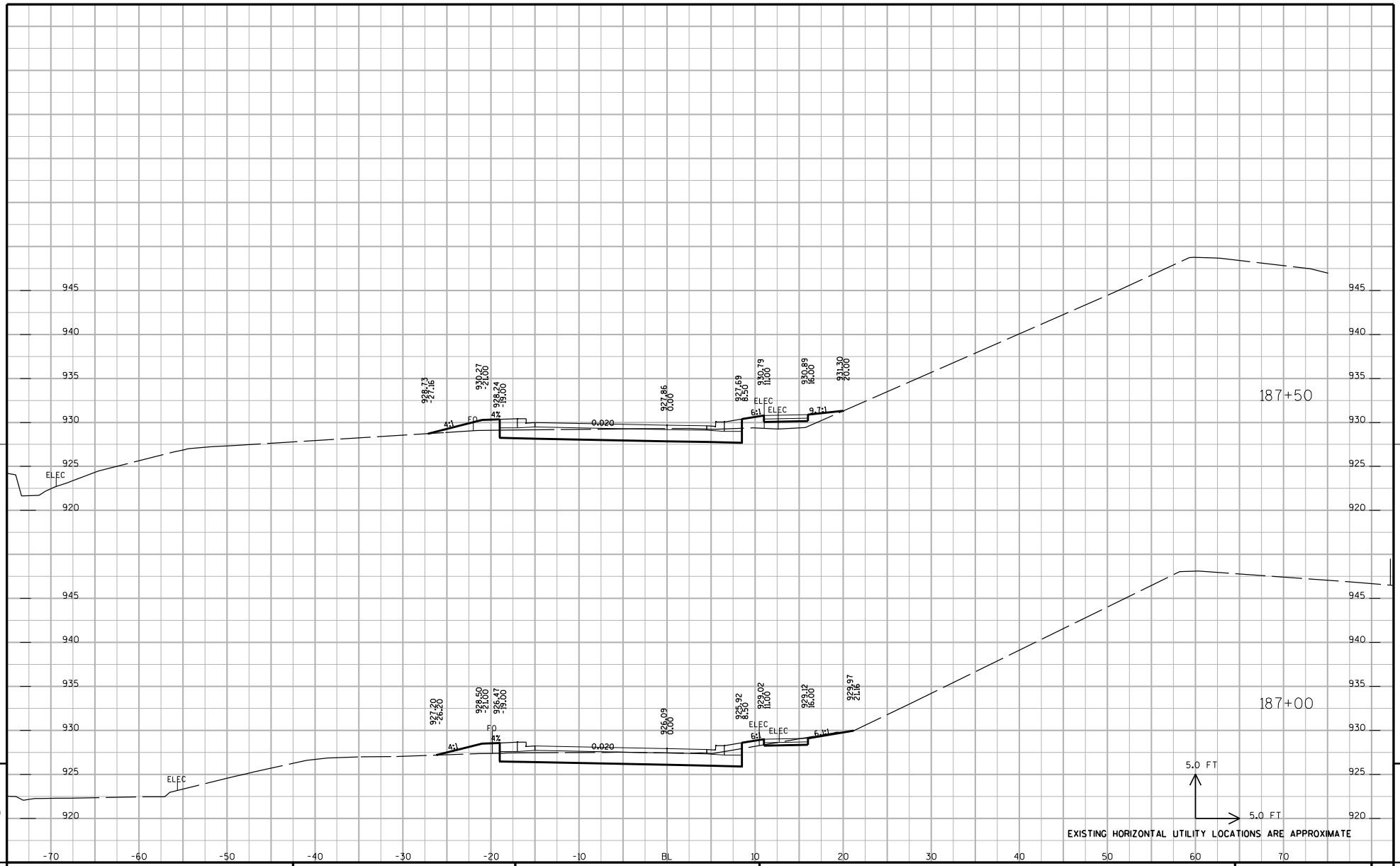
FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD EB ON-RAMP	SHEET NO: 917 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

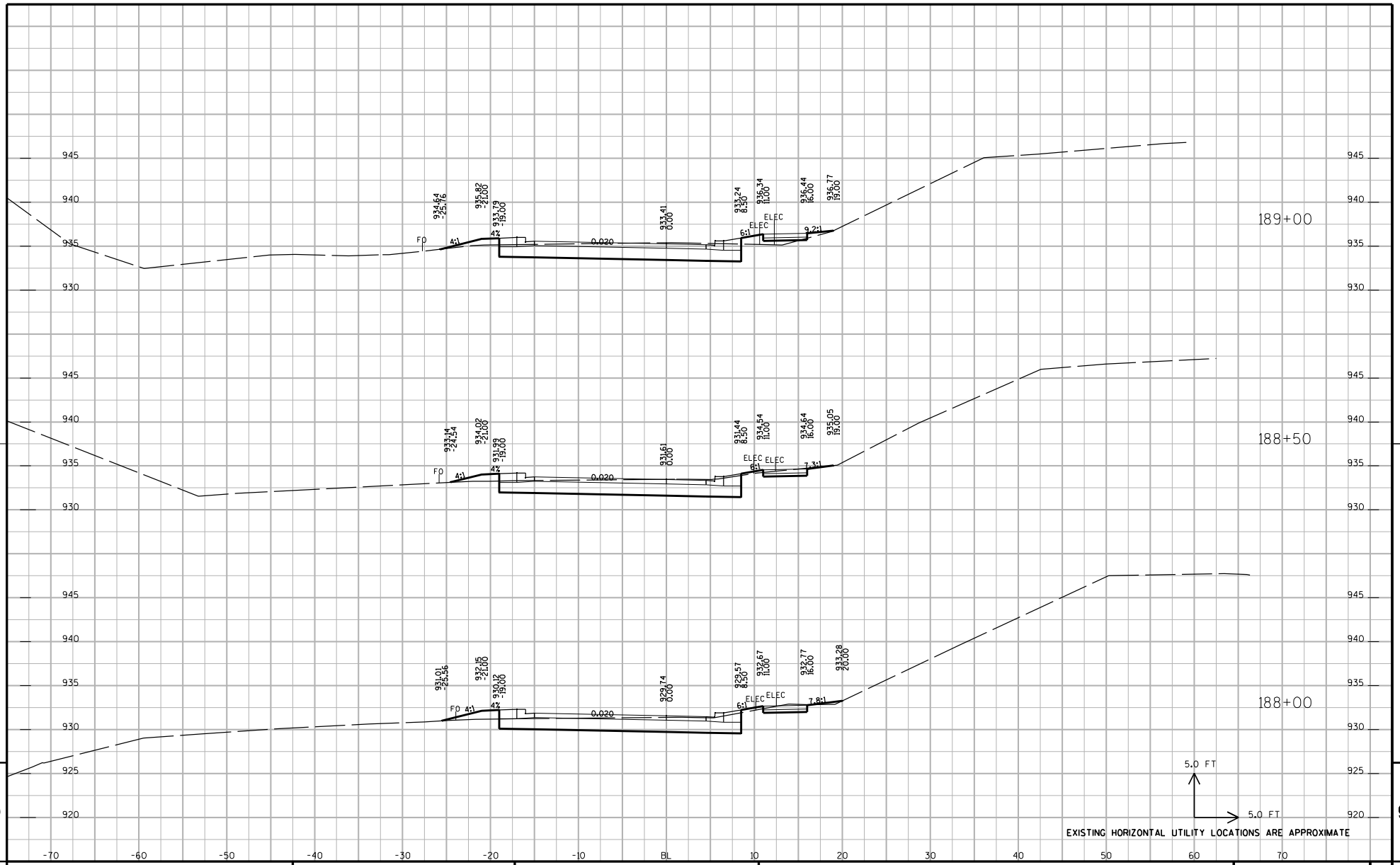
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD EB ON-RAMP	SHEET NO: 918 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

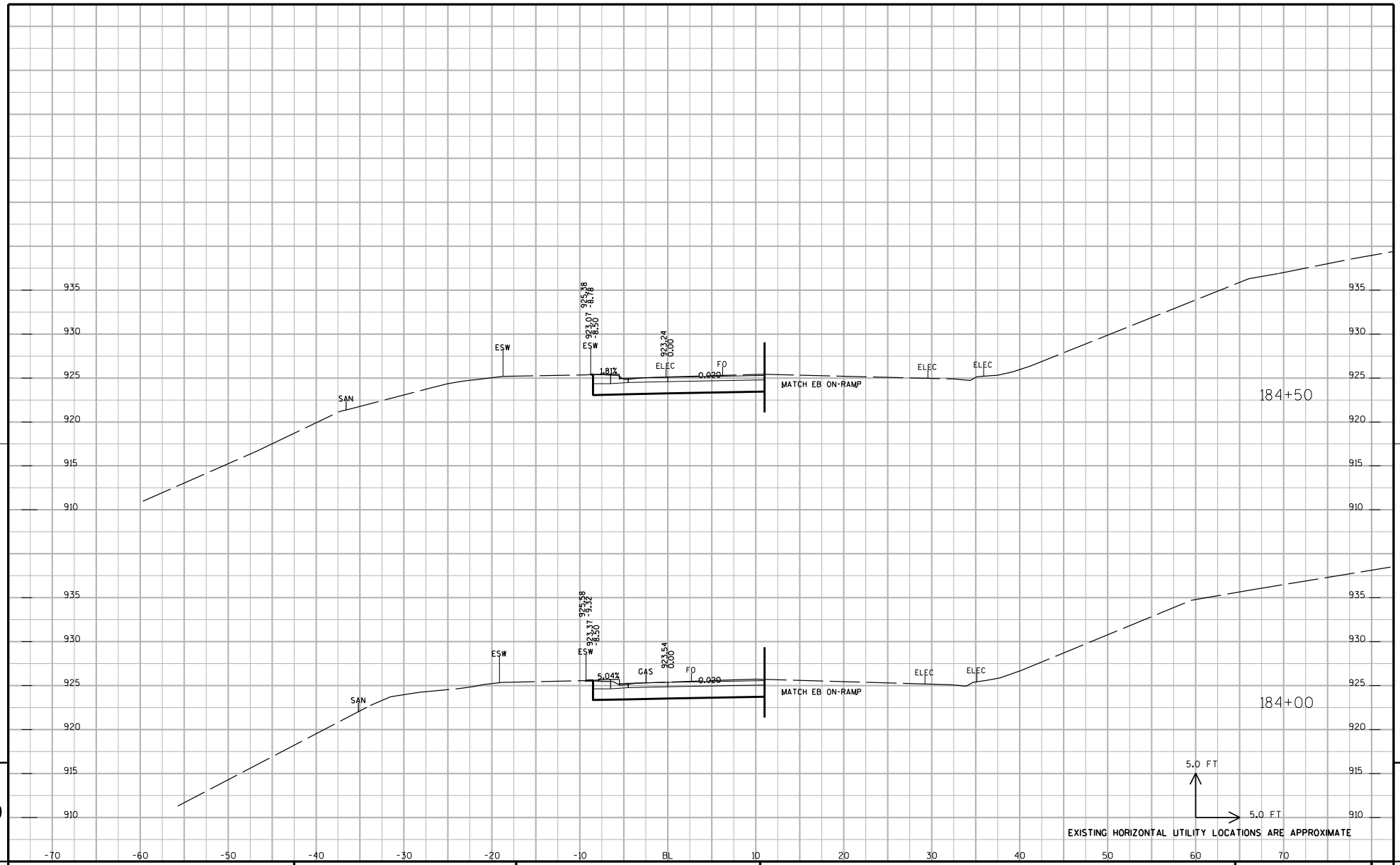
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD EB ON-RAMP	SHEET NO: 919 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

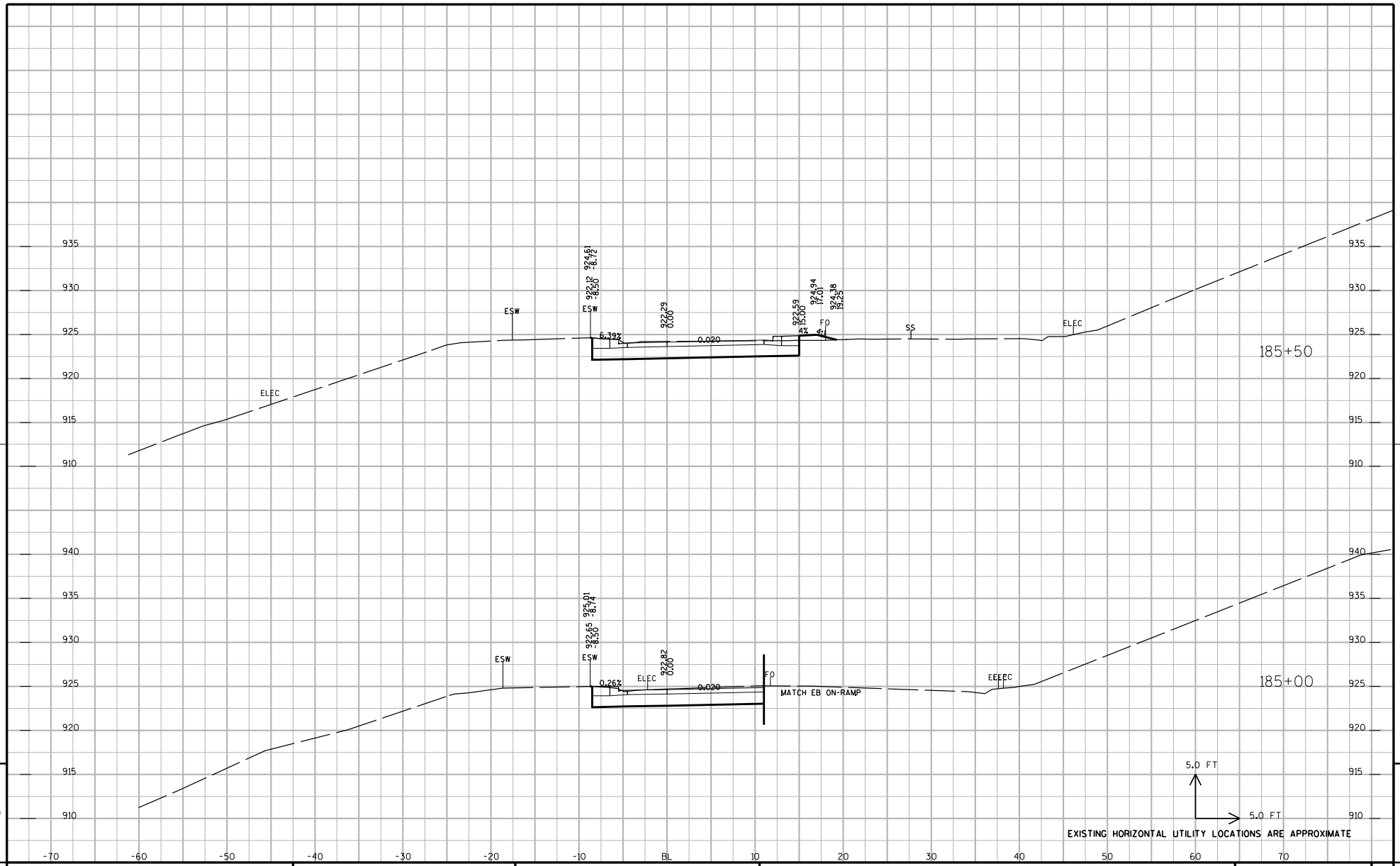
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 920

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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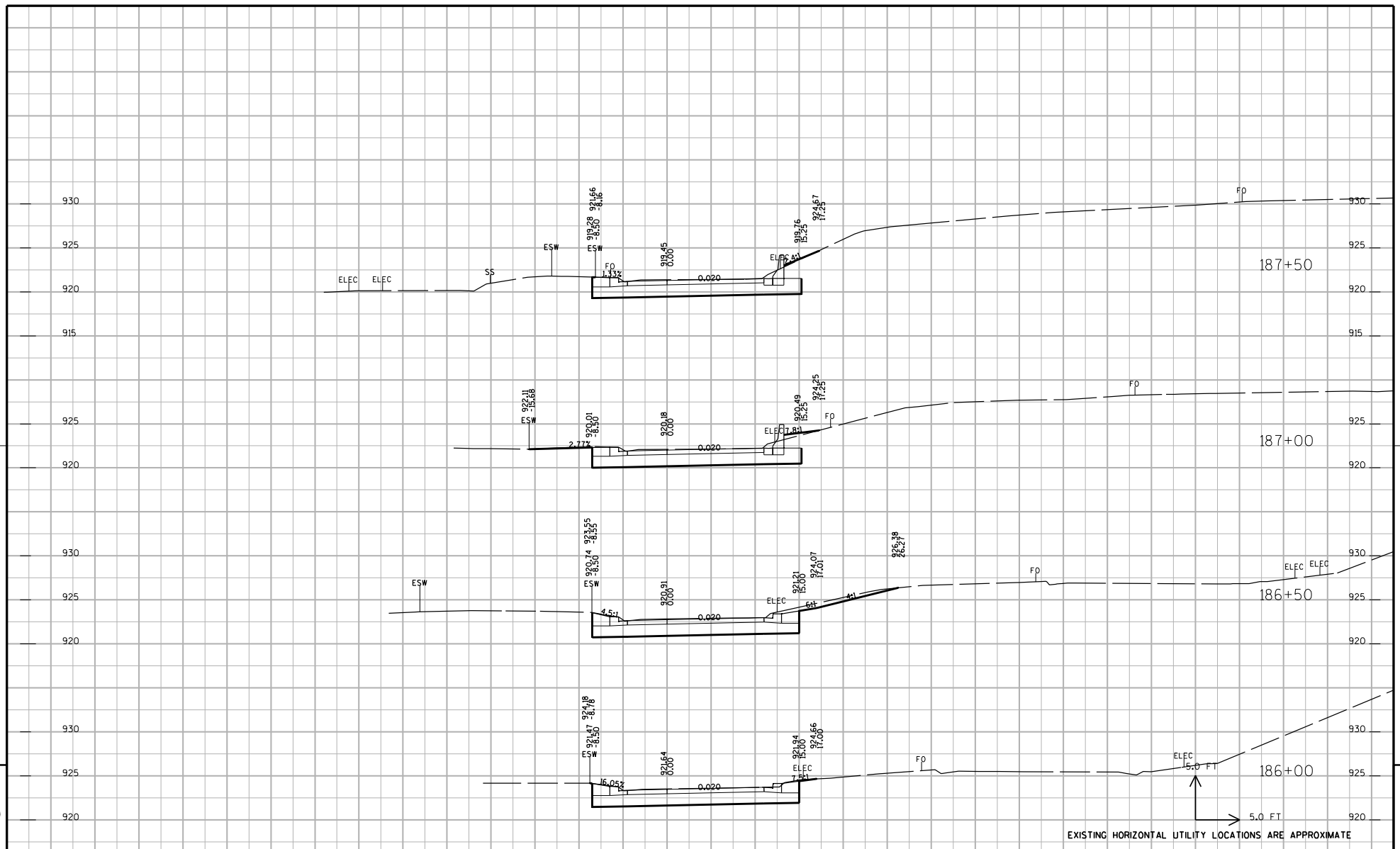
9

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 921	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

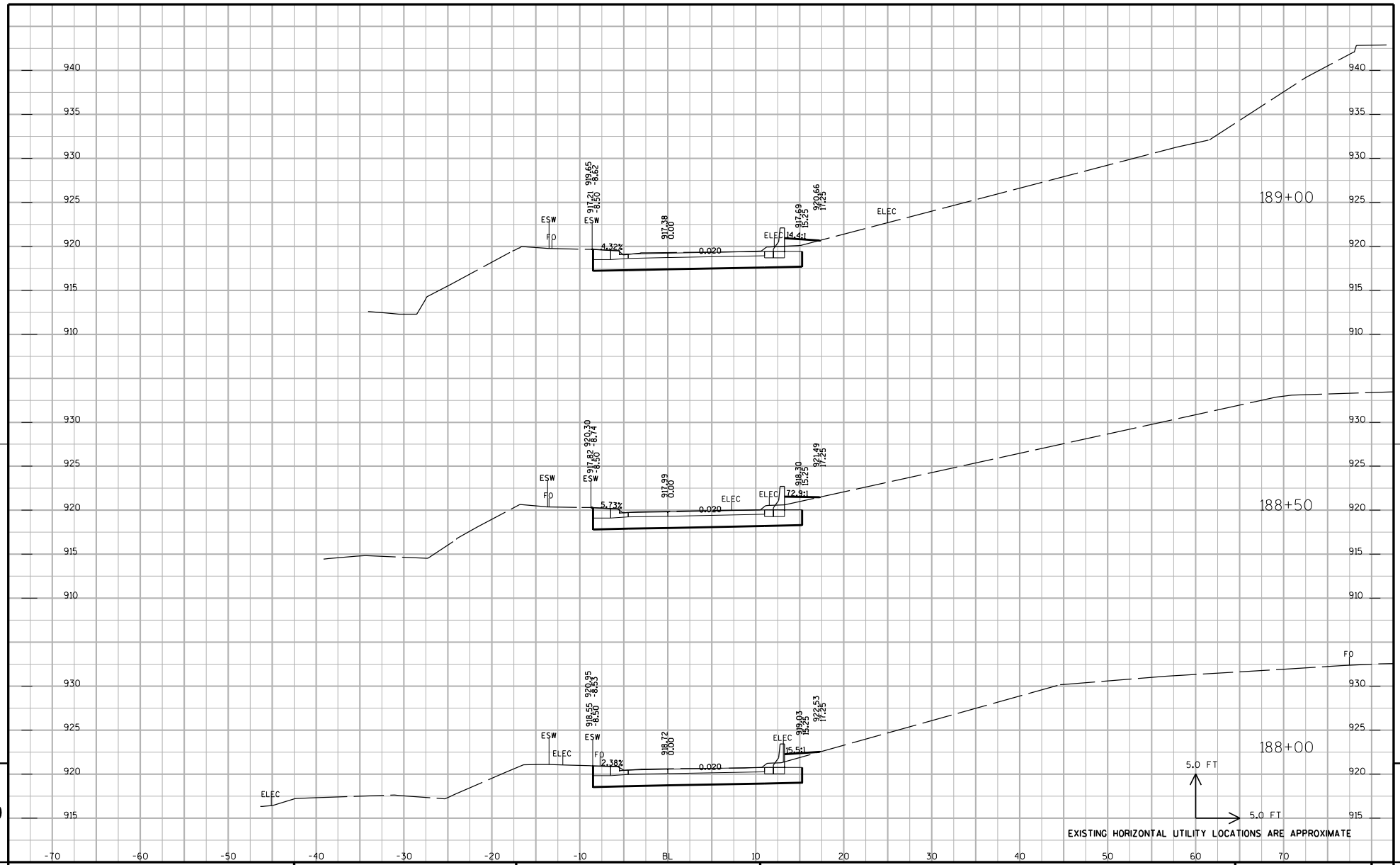
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 922	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

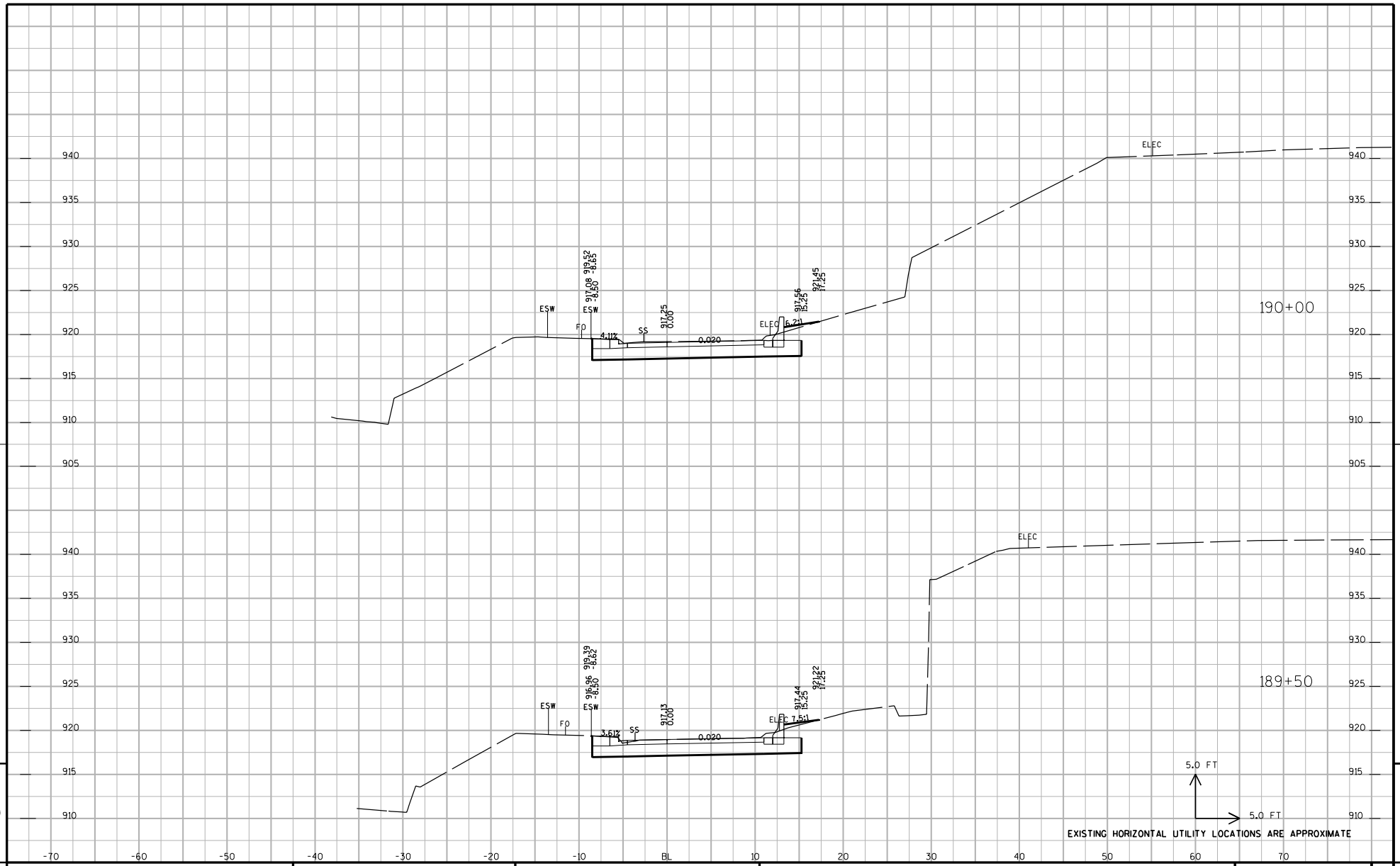
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 923 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



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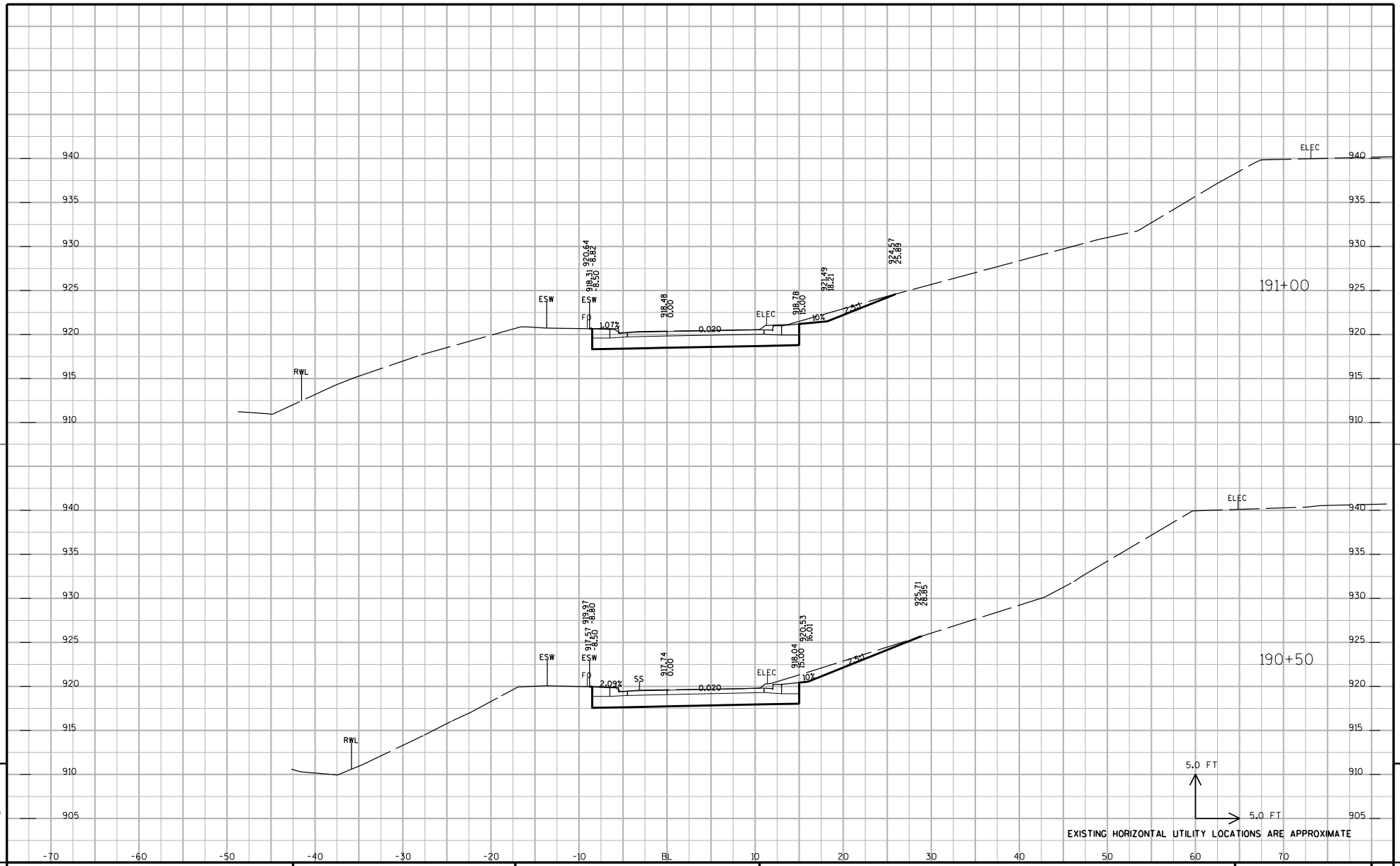
9

PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 924	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

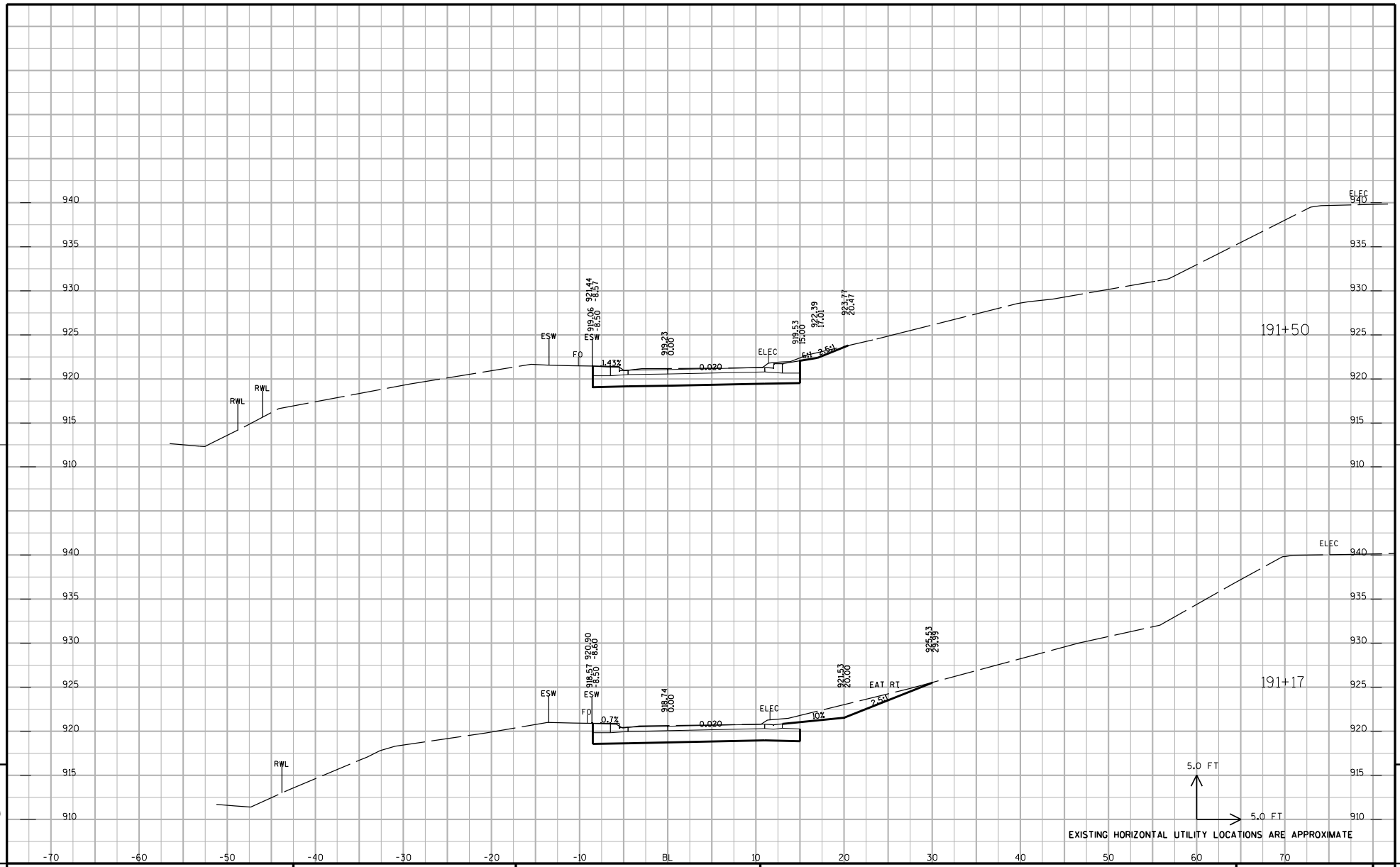
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 925	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

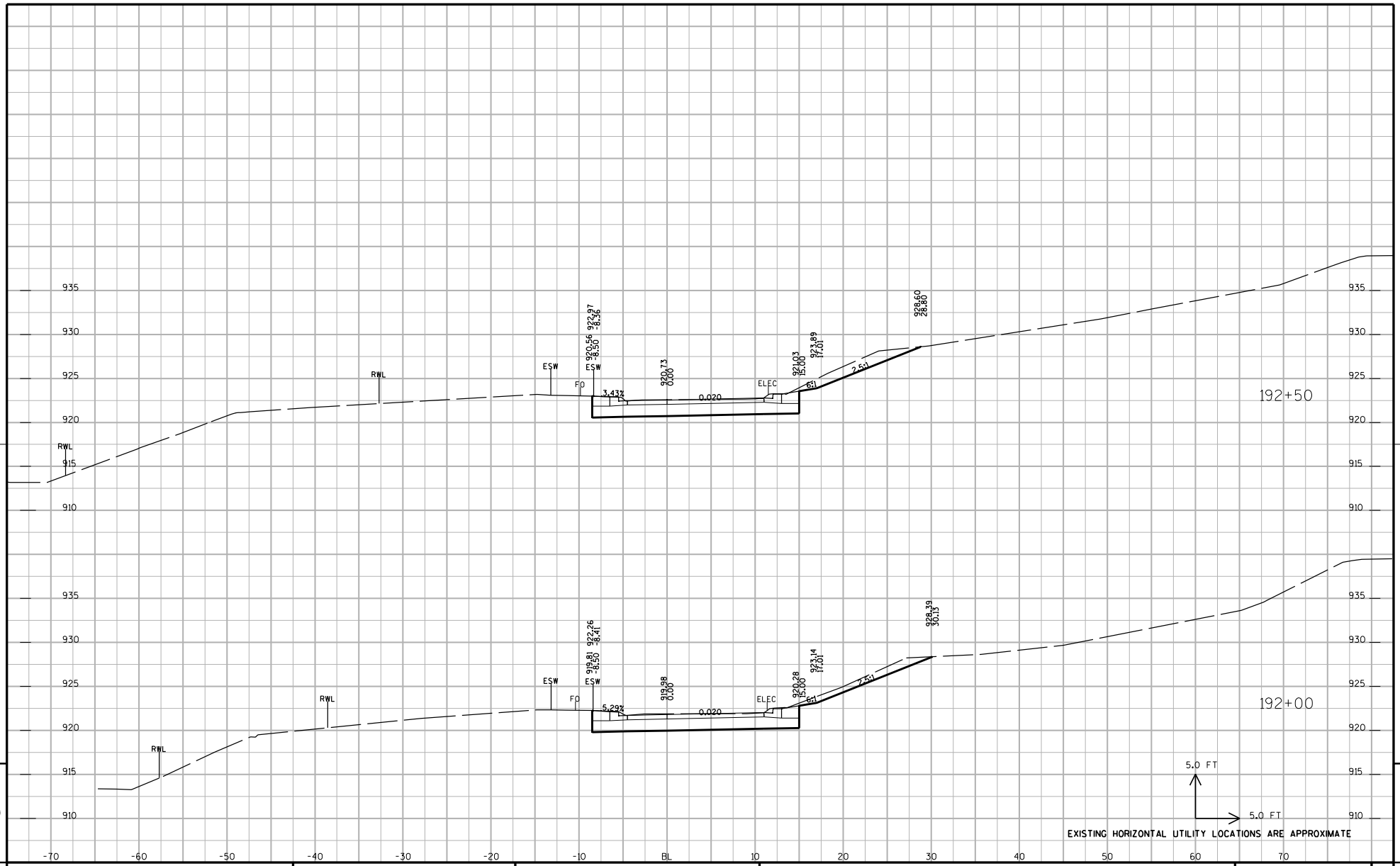
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 926	E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

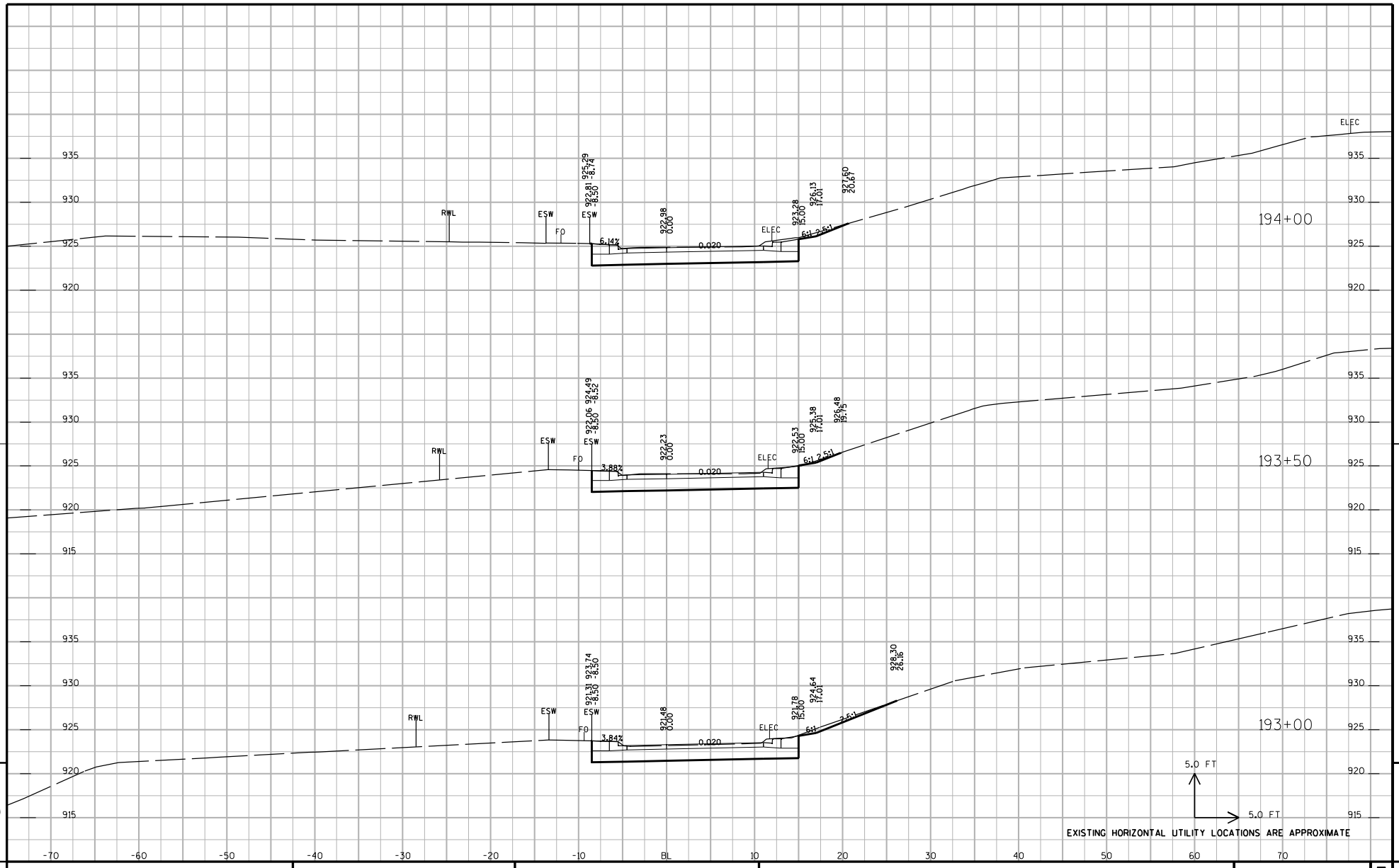
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 927 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

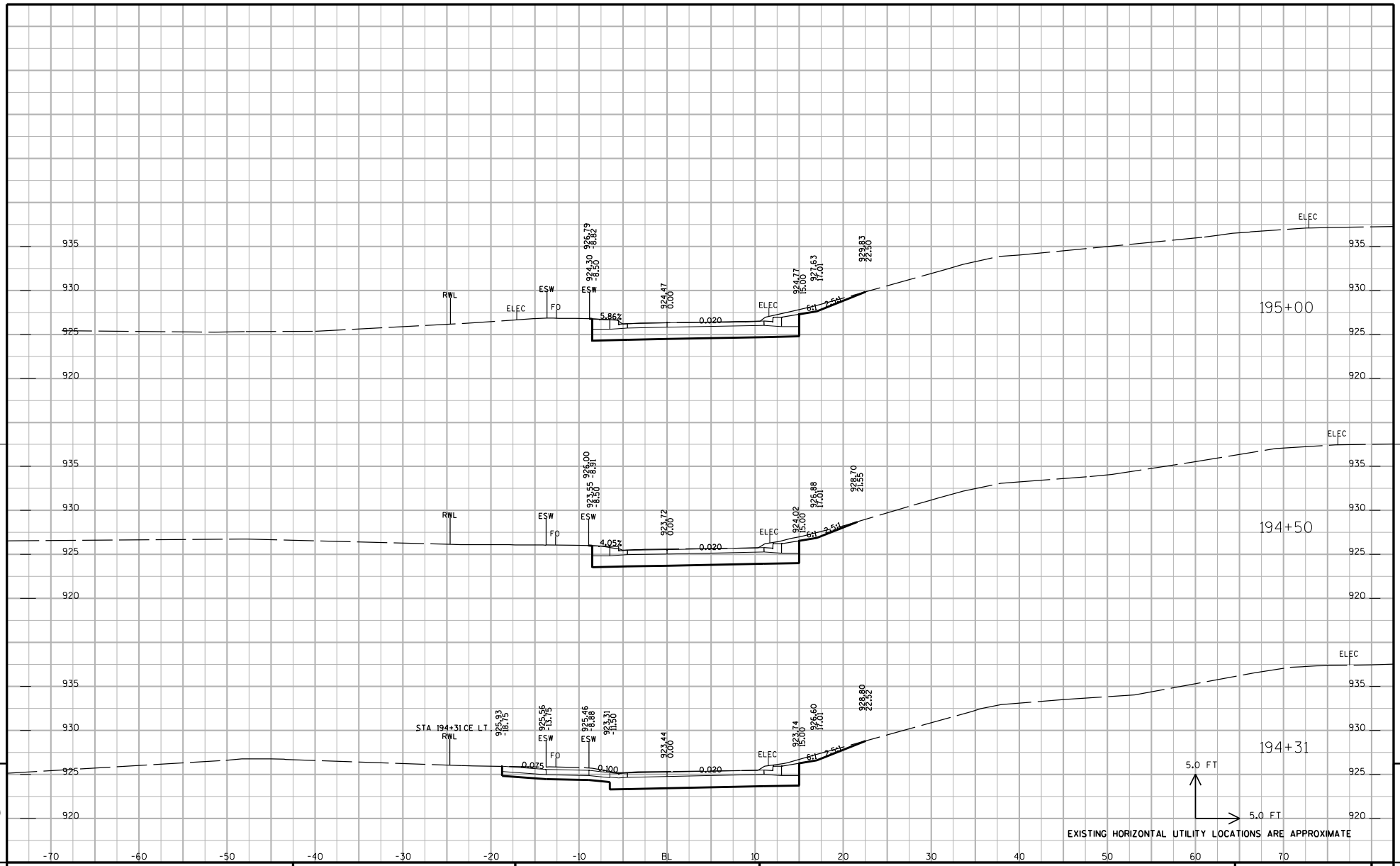
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 928 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

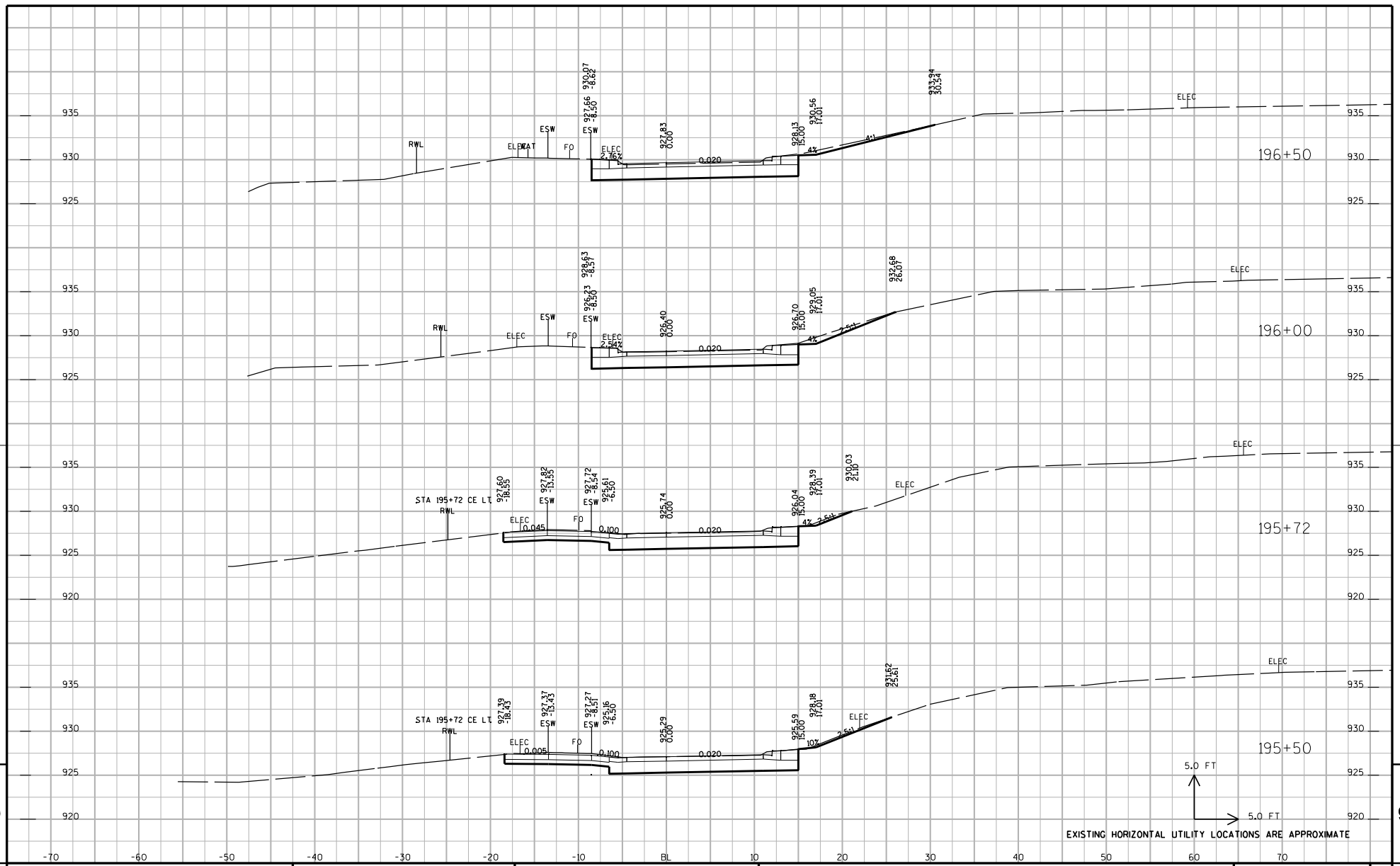
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 929 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

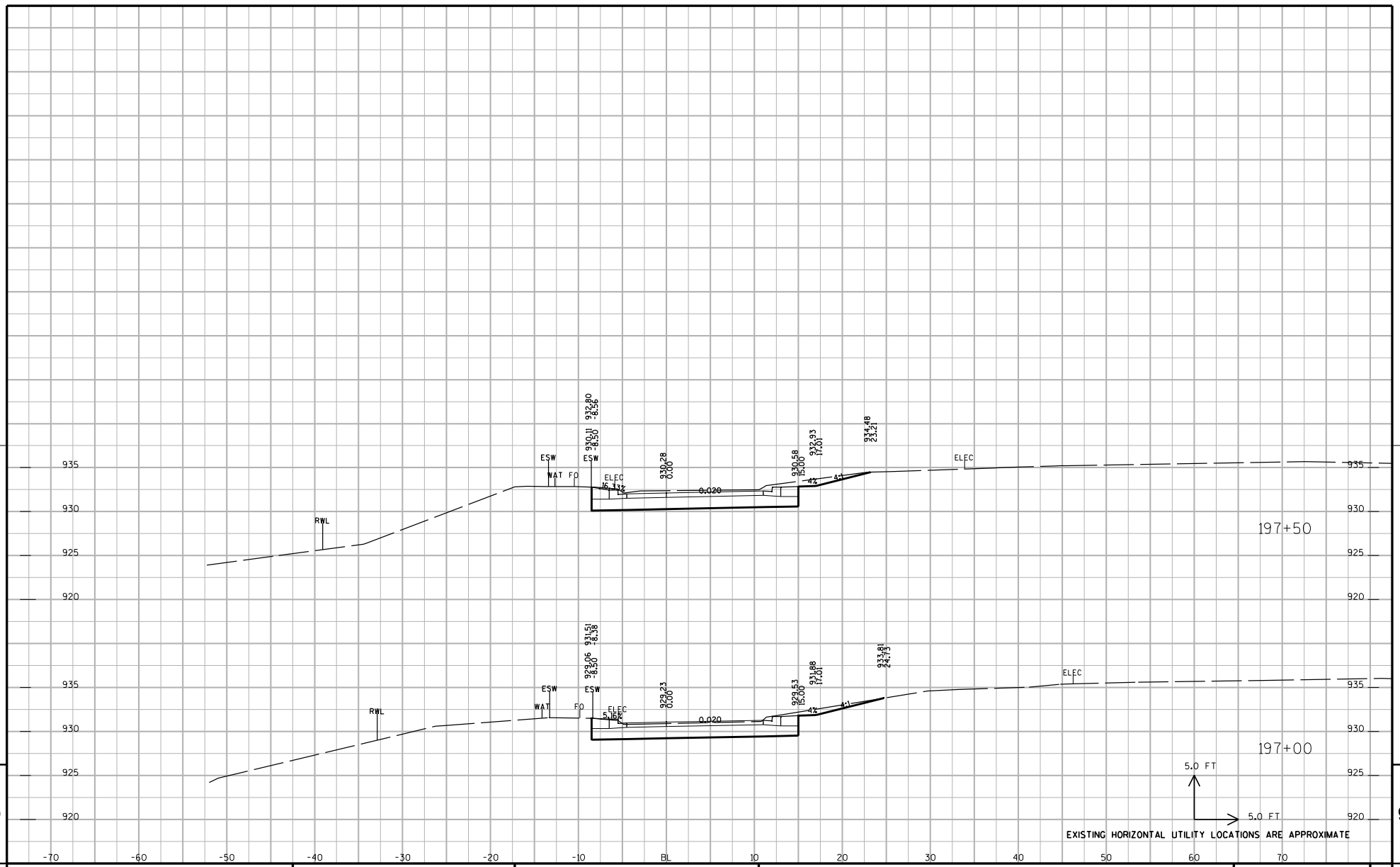
WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 930 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21



PROJECT NUMBER: 5992-08-79	HWY: CTH MS	COUNTY: DANE	CROSS SECTIONS: OLD MIDDLETON ROAD WB OFF-RAMP	SHEET NO: 931 E

FILE NAME : G:\Madison\MD2009035\DGN\090201_xs.dgn PLOT DATE : 8/15/2011 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

Wisconsin Department of Transportation

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