

ARCHITECTURAL LEGEND	
	BUILDING SECTION
	WALL SECTION
	ENLARGED DETAIL
	ELEVATION DETAIL
	WINDOW LABEL
	WALL LABEL
	DOOR LABEL
	SHEET TITLE
	ROOM LABEL
	VERTICAL ELEV.
	EXIT SIGN
	FIRE EXTINGUISHER
*FE	
CIVIL LEGEND	
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING HYDRANT
	PROPOSED HYDRANT
	VALVE
	CURB STOP
	WELL
	PROPERTY CORNER
	LIGHT POLE
	POWER/TELEPHONE POLE GUY WIRE
	UTILITY PEDESTAL
	SIGN
	SOIL BORING
	MONITORING WELL
	MAILBOX
	POTENTIAL HAZARD
	BENCH MARK
	DECIDUOUS TREE
	CONIFEROUS TREE
	ACCESSIBILITY SYMBOL
<p>DIGGERS HOTLINE NOTE</p> <p>To Obtain Location of Participants Underground Facilities Before You Dig in Wisconsin</p> <p>CALL DIGGERS HOTLINE 1-800-242-8511</p> <p>Wis Statute 182.0175 (1974) Requires Min. 3 Work Days Notice Before You Excavate</p>	

TERRA ENGINEERING OFFICE

CITY OF MADISON
DANE COUNTY, WI

DECEMBER 2013

CITY SUBMITTAL PLANS

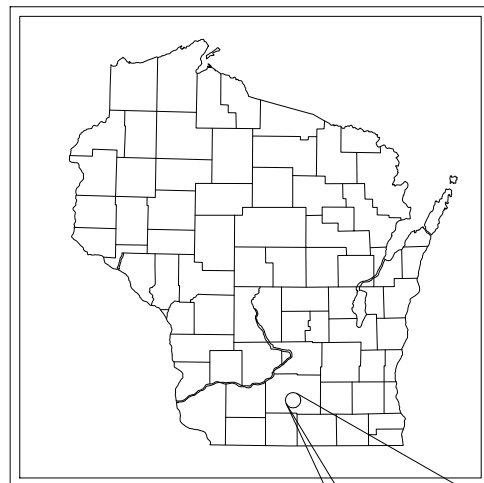


PROPOSED COMPLETED ELEVATION

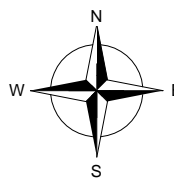
SUBMITTAL TYPE	NEW
PRIMARY OCCUPANCY TYPE	B
SECONDARY OCCUPANCY TYPE	NONE
OCCUPANCY SEPARATIONS	NONE

PROJECT AREA	1 + LOWER LEVEL
FLOOR LEVELS	VB
CONSTRUCTION CLASS	COMPLETE NFPA 13
SPRINKLER PROTECTION	

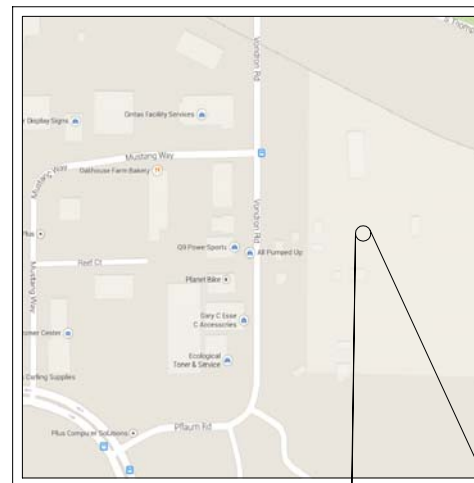
1ST FLR = 5,953 SQ. FT.
LL FLR = 5,452 SQ. FT.
TOTAL = 11,408 SQ. FT.



LOCATION PLAN
DANE COUNTY, WI



NOT TO SCALE



LOCATION PLAN
CITY OF MADISON

UTILITIES

ELECTRIC MADISON GAS & ELEC. 133 S. BLAIR ST MADISON, WI 53703 PHONE: 608-252-7379 RICH PARKER	GAS MADISON GAS & ELEC. 133 S. BLAIR ST MADISON, WI 53703 PHONE: 608-252-5618 DON McCLAIN
TELEPHONE XXXXXXXXXX XXXXXXXXXXXXXXXXXX PHONE: XXX-XXX-XXXX	WATER WATER & UTILITIES XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX PHONE: XXXXXXXX
CABLE CHARTER COMMUNICATIONS 2701 DANIELS ST. MADISON, WI 53718 PHONE: 608-209-3202 GLEN JAKUSZ	MUNICIPALITY CITY OF MADISON 210 MARTIN LUTHER KING, JR. BLVD. MADISON, WI 53716

ABBREVIATIONS

EOP = EDGE OF PAVEMENT	MFG. = MANUFACTURER
BOC = BACK OF CURB	DIM. = DIMENSION
EOSW = EDGE OF SIDEWALK	SPF = SPRUCE PINE FUR
TOF = TOP OF FOOTING	DF = DOUGLAS FIR
FFE = FIRST FLOOR ELEVATION	SP = SOUTHERN PINE
TOW = TOP OF WALL	CONC. = CONCRETE
SFE = SECOND FLOOR ELEVATION	WWF = WIRE WELDED FABRIC
ELEV. = ELEVATION	OC = ON CENTER
RO = ROUGH OPENING	EW = EACH WAY
BM = BENCHMARK	EF = EACH FACE
SQ. FT. = SQUARE FEET	WH = WATER HEATER
DIA. = DIAMETER	DW = DISHWASHER
TYP. = TYPICAL	REF. = REFRIGERATOR
HM = HOLLOW METAL	FRZ. = FREEZER
SS = STAINLESS STEEL	FTG. = FOOTING
ALUM. = ALUMINUM	PC = PRECAST
IBC = INTERNATIONAL BUILDING CODE	OHD = OVERHEAD DOOR
WD = WOOD	T/O = TOP OF
MTL = METAL	GALV. = GALVANIZED
HSS = HOLLOW STEEL STRUCTURE	BRG. = BEARING
STL = STEEL	OH = OVERHANG
OFOI = OWNER FURNISHED OWNER INSTALLED	

SEAL

OWNER

TERRA ENGINEERING & CONSTRUCTION
MADISON, WI

DESIGN TEAM

ENGINEER OF RECORD

GENERAL ENGINEERING COMPANY
CONTACT: KORY ANDERSON
916 SILVER LAKE DRIVE
PORTAGE, WI 53901
PH: 608-742-2169
FX: 608-742-2592

GENERAL CONTRACTOR

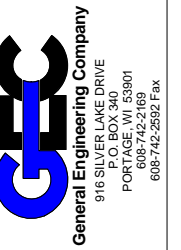
HARMONY CONSTRUCTION MANAGEMENT, INC.
CONTACT: PAUL REED
906 JONATHON DRIVE
MADISON, WI 53713
PH: 608-224-3310
FX: 608-223-4392

BUILDING DESIGN CRITERIA

- CODE COMPLIANCE PER 2011 WISCONSIN COMMERCIAL BUILDING CODE (WCBC) (2009 I - CODES)
- OCCUPANCY TYPE
B - BUSINESS
- CONSTRUCTION CLASSIFICATION - VB
WOOD FRAMED UNPROTECTED
- ALLOWABLE AREA
9000 SQ. FT. (TABLE 503)
- OCCUPANT LOAD
83 - TOTAL
- BUILDING IS PROTECTED BY A COMPLETE FIRE SPRINKLER SYSTEM

INDEX OF DRAWINGS

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C2.0	PROPOSED SITE PLAN
C3.0	PROPOSED GRADING & EC PLAN
C4.0	PROPOSED UTILITIES PLAN
C4.1	UTILITY PLAN PROFILE
C5.0	WET POND DETAILS
C5.1	INFILTRATION BASIN DETAILS
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C8.0 - C8.1	PROPOSED LANDSCAPING PLAN
C9.0	LIGHTING PLAN
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A1.0	FIRST FLOOR PLAN
A1.1	LOWER LEVEL FLOOR PLAN
A4.0	EXTERIOR ELEVATIONS
A12.0	PERSPECTIVE VIEWS

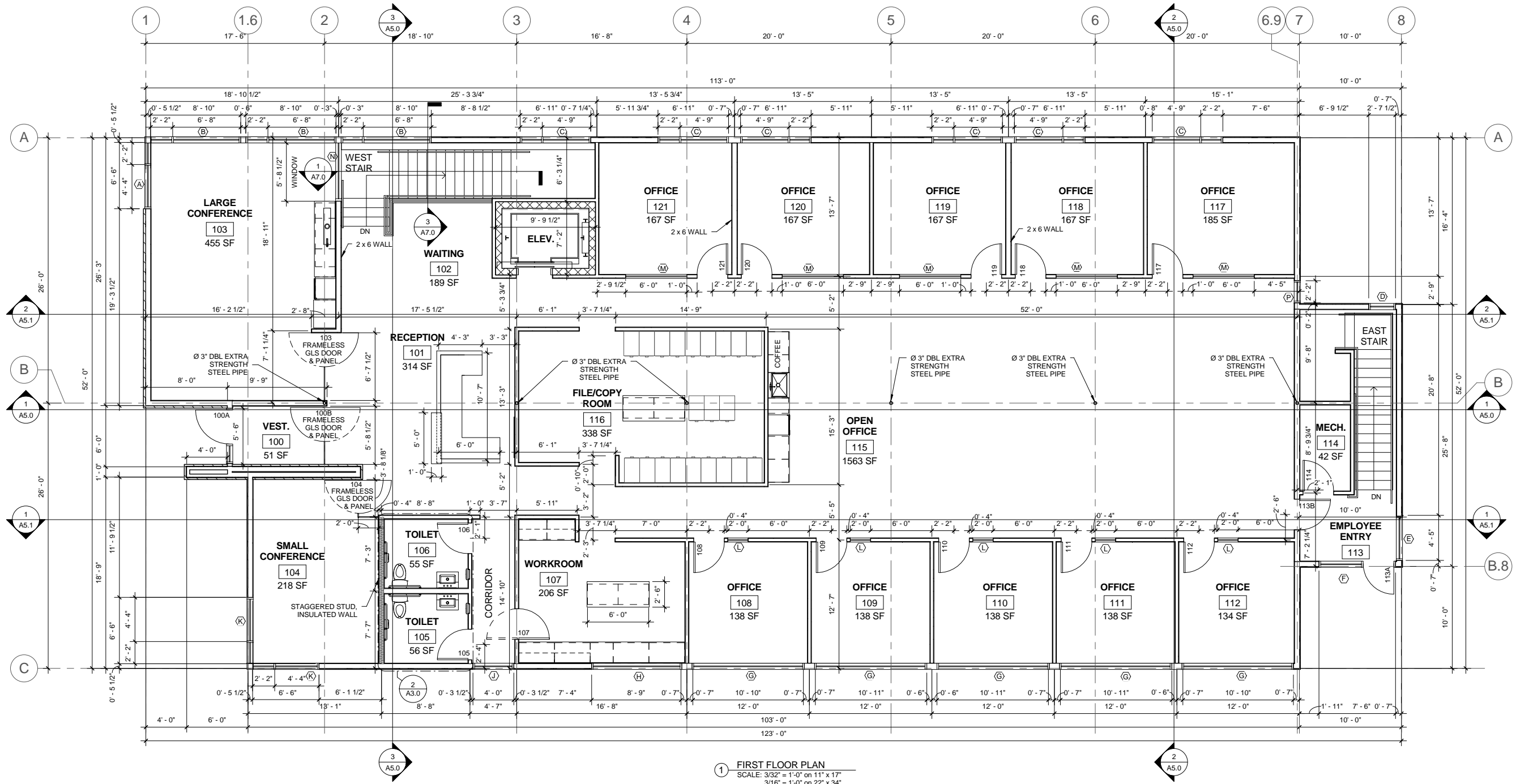


NO.	BY	DATE
1	JEO	12/16/2013

TITLE SHEET
TERRA ENGINEERING OFFICE FACILITY
City of Madison
Dane County, WI
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DATE	12/13/2013
BY	JEO
GEC FILE NO.	2-0513-164
SHEET NO.	G1.0

REVISIONS	NO.	BY	DATE
City Submittal	1	JEO	12/16/2013



1 FIRST FLOOR PLAN
 SCALE: 3/32" = 1'-0" on 11" x 17"
 3/16" = 1'-0" on 22" x 34"

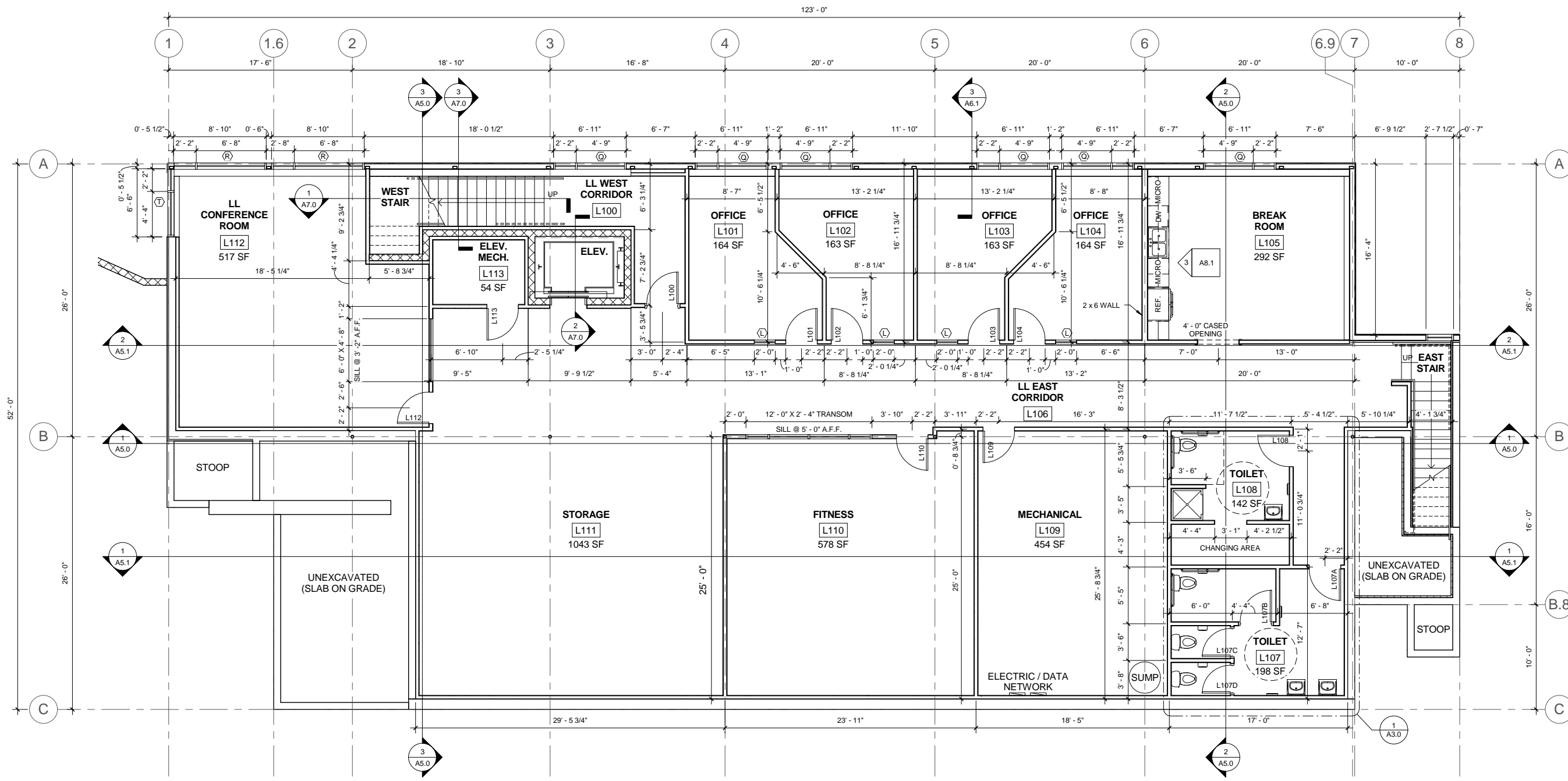
GENERAL NOTES:

- CONTRACTOR TO PROVIDE (2) FIRE EXTINGUISHERS PER IFC 906 AND OWNER TO MAINTAIN THEM IN ACCORDANCE WITH THIS SECTION & NFPA 10. THEY SHALL BE LOCATED IN CONSPICUOUS LOCATIONS ALONG NORMAL PATHS OF TRAVEL.(CONTRACTOR TO COORDINATE WITH LOCAL FIRE INSPECTOR)
- PROVIDE EXIT SIGNS PER IBC 1011. EXIT SIGNS SHALL BE READILY VISIBLE FROM ANY DIRECTION OF EGRESS TRAVEL & SHALL BE CONTINUOUSLY LUMINATED FOR NOT LESS THAN 90 MINUTES IN CASE OF POWER LOSS.
- PROVIDE EMERGENCY LIGHTS PER IBC 1006. LIGHTS AT EXTERIOR EXIT DOORS SHALL BE PROVIDED & SHALL ILLUMINATE AT ALL TIMES WHILE THE BUILDING IS OCCUPIED IN THE EVENT OF POWER SUPPLY FAILURE.
- PROVIDE A SIGN STATING THE OCCUPANT LOAD PER IBC 1004.3. THE SIGN SHALL BE POSTED IN A CONSPICUOUS PLACE, NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. THE SIGN SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN.
- PUBLIC RESTROOMS SHALL BE COVERED WITH SMOOTH, HARD, NONABSORBENT MATERIALS EXTENDING A MINIMUM OF 6" ABOVE FLOOR LEVEL. WALLS WITHIN 2 FT. OF URINALS OR WATER CLOSETS SHALL BE COVERED A MINIMUM OF 4 FT. ABOVE FLOOR LEVEL.
- ROOM(S) WITH A MOP BASIN OR UTILITY SINK SHALL HAVE AN EXHAUST FAN WHICH RUNS CONTINUOUSLY WHILE THE BUILDING IS OCCUPIED.
- ROOF TRUSS DESIGN BY OTHERS
- ALL DIMENSIONS ARE FROM OUTSIDE OF EXTERIOR WALL FRAMING TO CENTER OF INTERIOR WALLS.

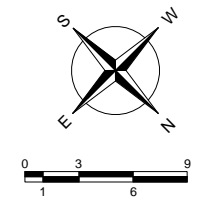
REVISIONS	NO.	BY	DATE
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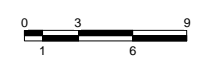
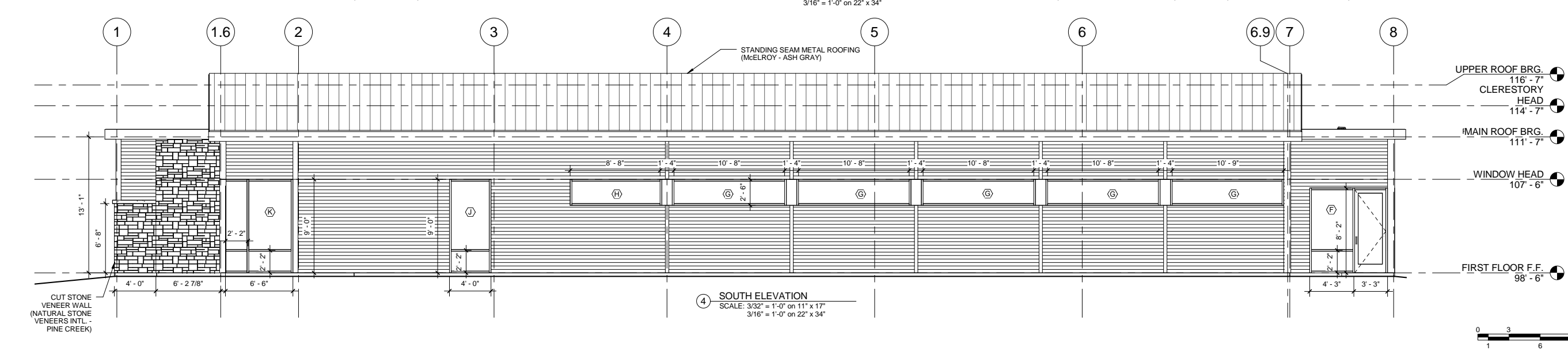
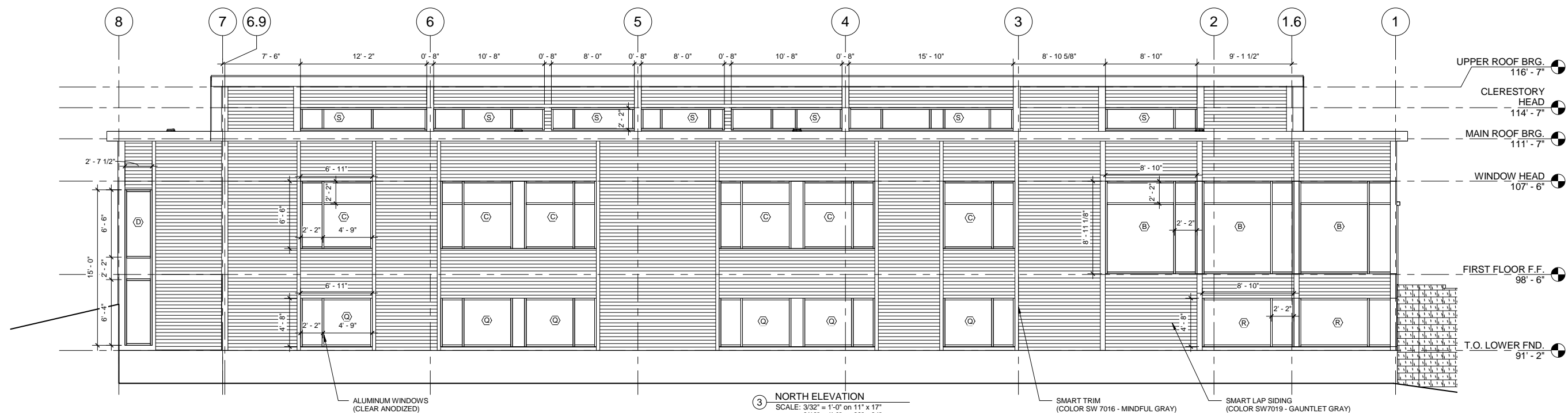
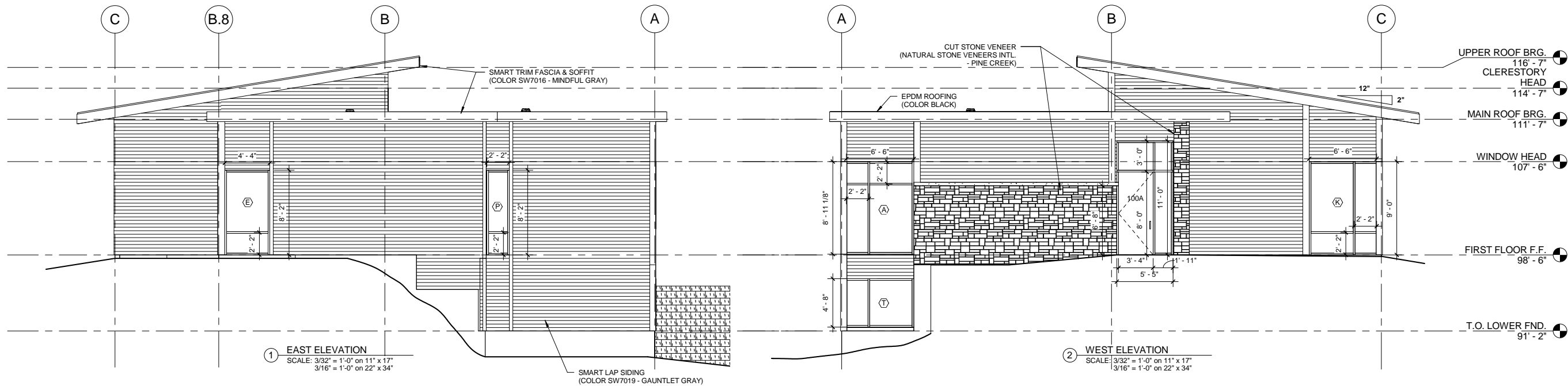
LOWER LEVEL FLOOR PLAN
TERRA ENGINEERING OFFICE FACILITY
 City of Madison
 Dane County, WI
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DATE	12/13/2013
BY	JEO
GEC FILE NO.	2-0513-164
SHEET NO.	A1.1



1 LOWER LEVEL FLOOR PLAN
 SCALE: 3/32" = 1'-0" on 11" x 17"
 3/16" = 1'-0" on 22" x 34"





General Engineering Company
 916 SILVER LAKE DRIVE
 P.O. BOX 340
 PORTAGE, WI 53901
 608-742-2169
 608-742-2892 Fax

HARMONY Construction Management, Inc.
 906 JONATHAN DRIVE
 MADISON, WI 53713
 PHONE: 608-224-3310
 FAX: 608-237-4382

SARA INVESTMENT REAL ESTATE LLC
 6264 NESBITT ROAD
 MADISON, WI 53719
 PHONE: 608-852-8777
 FAX: 608-237-7695

REVISIONS	NO.	BY	DATE
City Submittal	1	JEO	12/16/2013

EXTERIOR ELEVATIONS
TERRA ENGINEERING OFFICE FACILITY
 City of Madison
 Dane County, WI

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G:\Current Files E-K\Harmony Const. Mgmt\2-0513-164 Terra Property Development\CAD 2-0513-164_Architectural\FP_2-0513-164.rvt



③ NORTH PERSPECTIVE



② ENTRANCE PERSPECTIVE



① WEST PERSPECTIVE

GEC
General Engineering Company
 916 SILVER LAKE DRIVE
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Construction Management, Inc.
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REVISIONS	NO.	BY	DATE
City Submittal	1	JEO	12/16/2013

PERSPECTIVE VIEWS
TERRA ENGINEERING OFFICE FACILITY
 City of Madison
 Dane County, WI
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A12.0

Member
of the
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Utility
Diggers
System
International

To Obtain Location of
Participants Underground
Facilities Before You
Dig in Wisconsin

CALL DIGGERS HOTLINE
1-800-242-8511

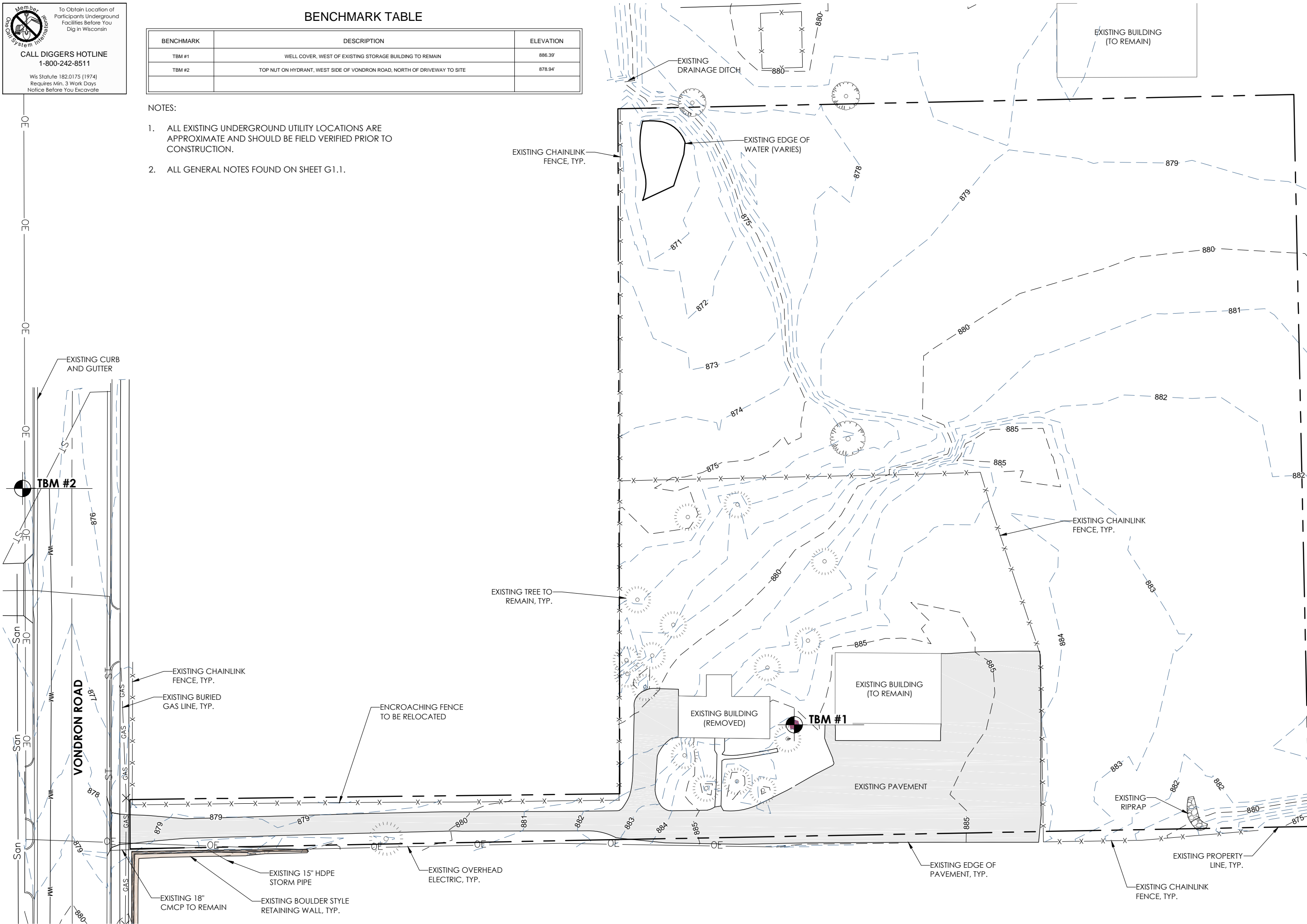
Wis Statute 182.0175 (1974)
Requires Min. 3 Work Days
Notice Before You Excavate

BENCHMARK TABLE

BENCHMARK	DESCRIPTION	ELEVATION
TBM #1	WELL COVER, WEST OF EXISTING STORAGE BUILDING TO REMAIN	886.39'
TBM #2	TOP NUT ON HYDRANT, WEST SIDE OF VONDRON ROAD, NORTH OF DRIVEWAY TO SITE	878.94'

NOTES:

1. ALL EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
2. ALL GENERAL NOTES FOUND ON SHEET G1.1.



General Engineering Company

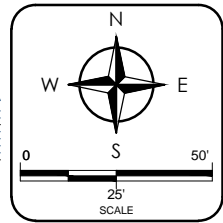
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EXISTING SITE PLAN
Harmony Construction Management
Terra Construction Site Development

City of Madison
Dane County, WI

REVISIONS	NO.	BY	DATE
CITY SUBMITTAL	1	EDB	12/18/2013



DRAWN BY: EDB
DATE: 12/18/2013
GEC FILE NO.: 2-0513-164
SHEET NO.: **C1.0**

G:\Current Files\Kilhamong Const. Agmt\2-0513-164 Terra Property Development\CAD\2-0513-164_1.dwg, 12/18/2013 10:15:11 AM, DWG TO PDF.plt

Member
 International
 Association
 of
 Diggers
 Hotline

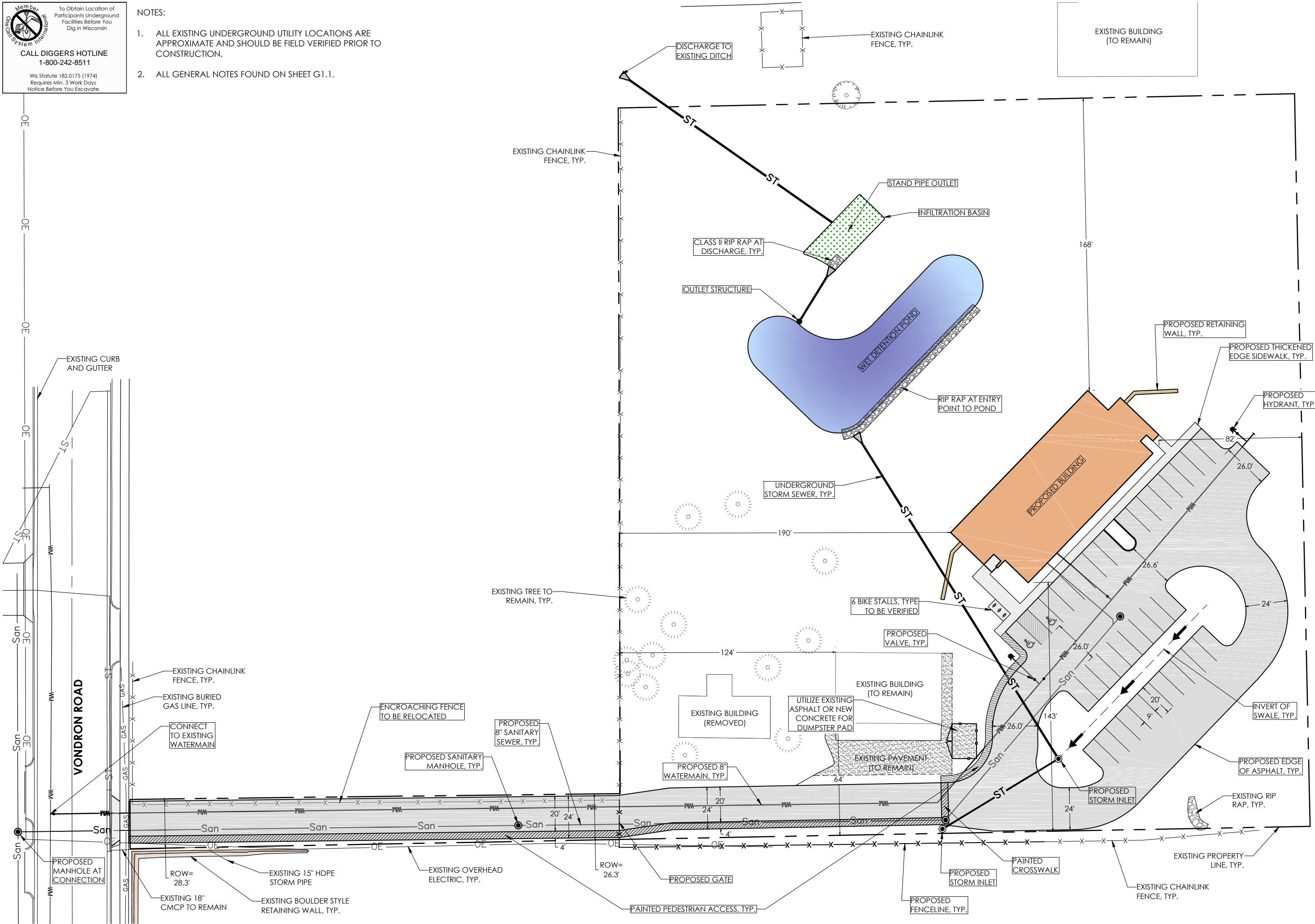
To Obtain Location of Participants Underground Facilities Before You Dig in Wisconsin

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 1-800-242-8511

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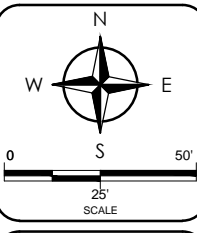
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PROPOSED SITE PLAN
 Harmony Construction Management
 Terra Construction Site Development

City of Madison
 Dane County, WI

REVISIONS	NO.	BY	DATE
CITY SUBMITTAL	1	EDB	12/18/2013



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 DATE: 12/18/2013
 GEC FILE NO.: 2-0513-164
 SHEET NO.: C2.0

Member
 Wisconsin
 Utility System International

To Obtain Location of Participants Underground Facilities Before You Dig in Wisconsin

CALL DIGGERS HOTLINE
 1-800-242-8511

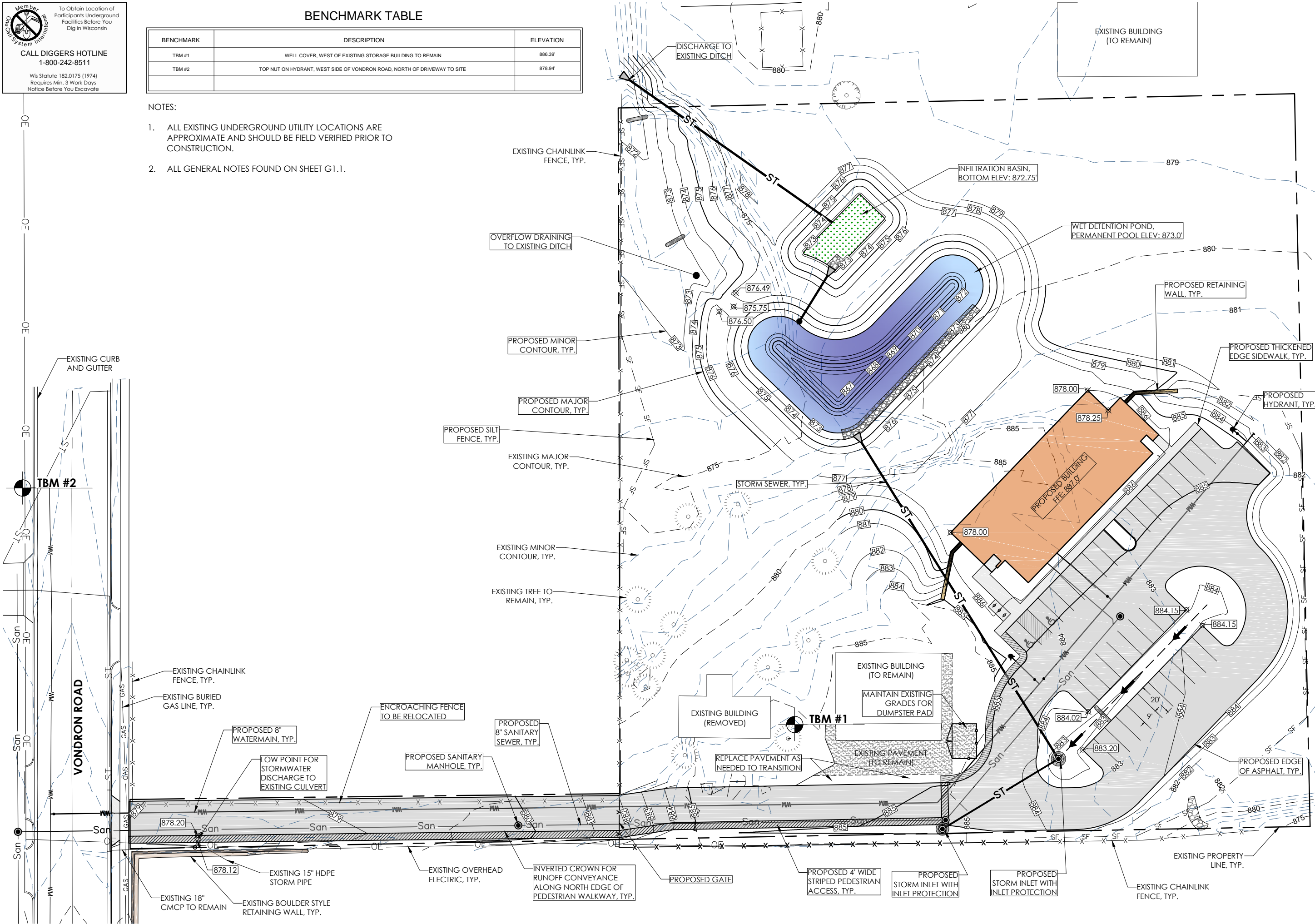
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General Engineering Company

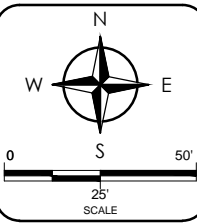
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PROPOSED GRADING & EC PLAN
 Harmony Construction Management
 Terra Construction Site Development

City of Madison
 Dane County, WI

REVISIONS	NO.	BY	DATE
CITY SUBMITTAL	1	EDB	12/18/2013

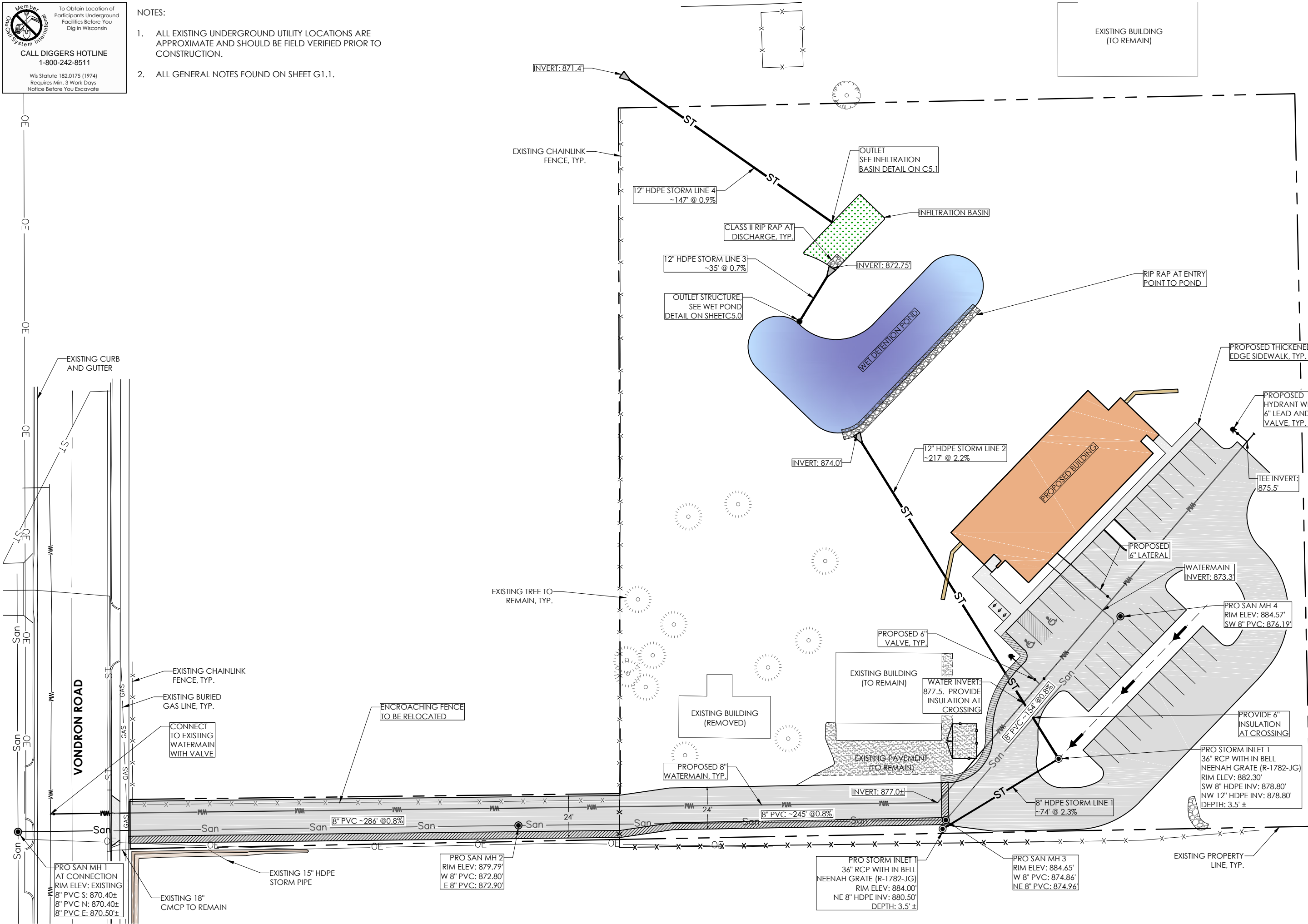


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 DATE: 12/18/2013
 GEC FILE NO.: 2-0513-164
 SHEET NO.: **C3.0**

Member
 To Obtain Location of
 Participants Underground
 Facilities Before You
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 1-800-242-8511
 Wis Statute 182.0175 (1974)
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NOTES:

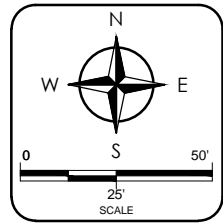
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PROPOSED UTILITIES PLAN
 Harmony Construction Management
 Terra Construction Site Development

NO.	DATE	BY	REVISIONS
1	12/18/2013	EDB	CITY SUBMITTAL



DRAWN BY: EDB
 DATE: 12/18/2013
 GEC FILE NO.: 2-0513-164
 SHEET NO.: **C4.0**

City of Madison
 Dane County, WI

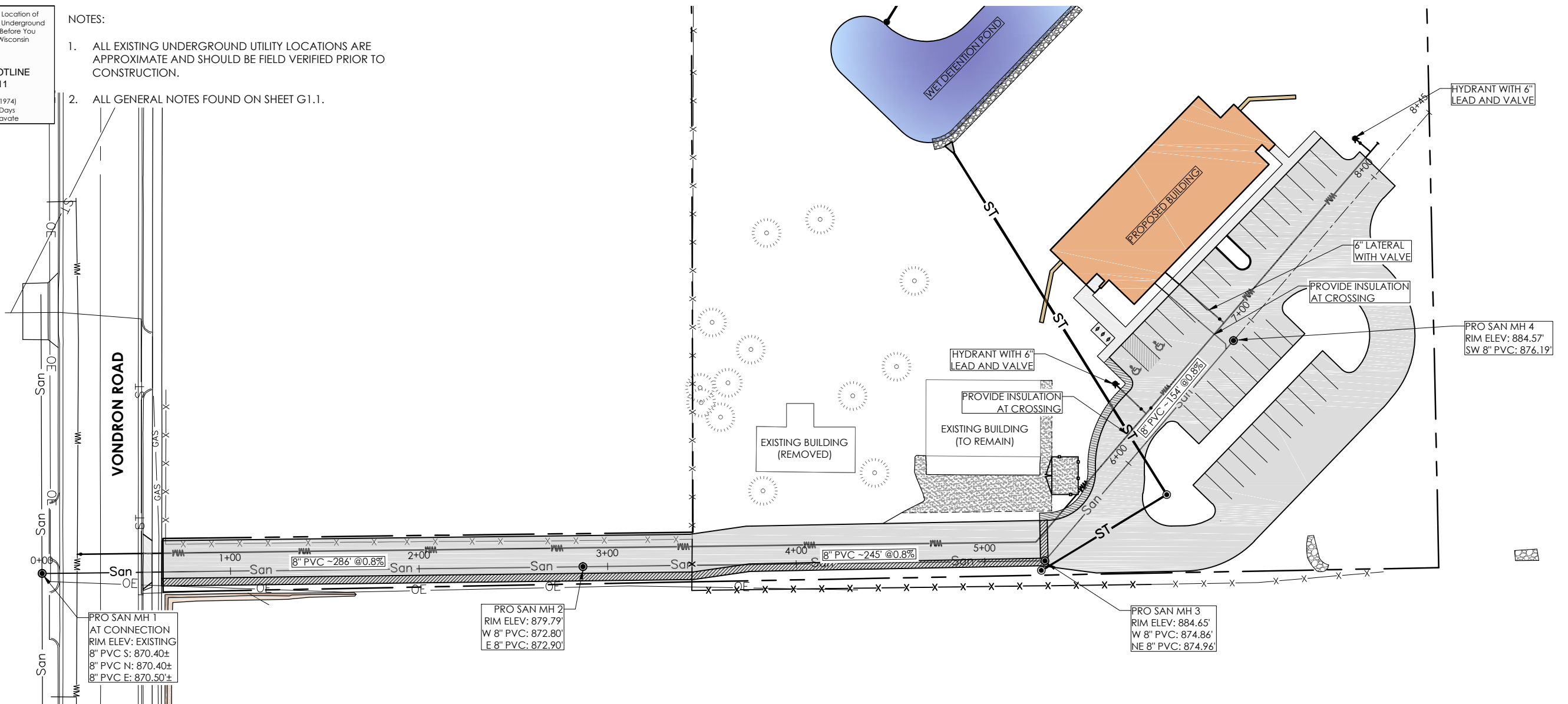
Member
CallSystem International

To Obtain Location of Participants Underground Facilities Before You Dig in Wisconsin
CALL DIGGERS HOTLINE
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Wis Statute 182.0175 (1974)
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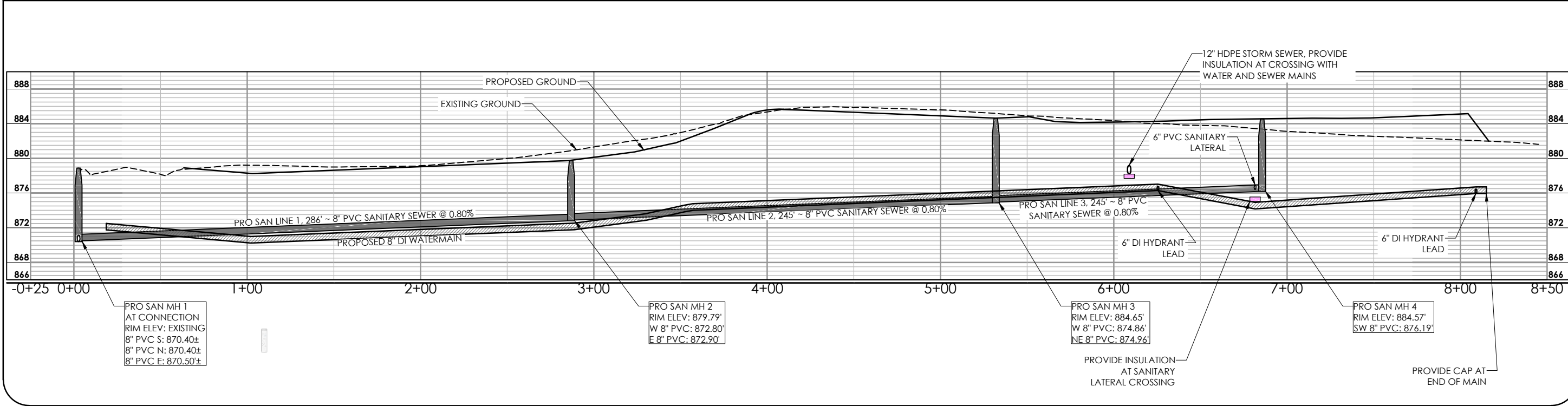
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PROFILE VIEW

*STATIONING AND ALIGNMENT ALONG SANITARY SEWER.



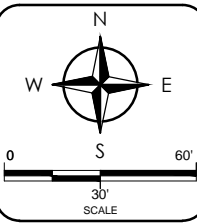
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UTILITIES PLAN & PROFILE
Harmony Construction Management
Terra Construction Site Development

City of Madison
Dane County, WI

NO.	DATE	BY	REVISIONS
1	12/18/2013	EDB	CITY SUBMITTAL



DRAWN BY: EDB
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SHEET NO.



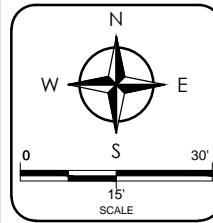
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WET POND DETAILS
 Harmony Construction Management
 Terra Construction Site Development

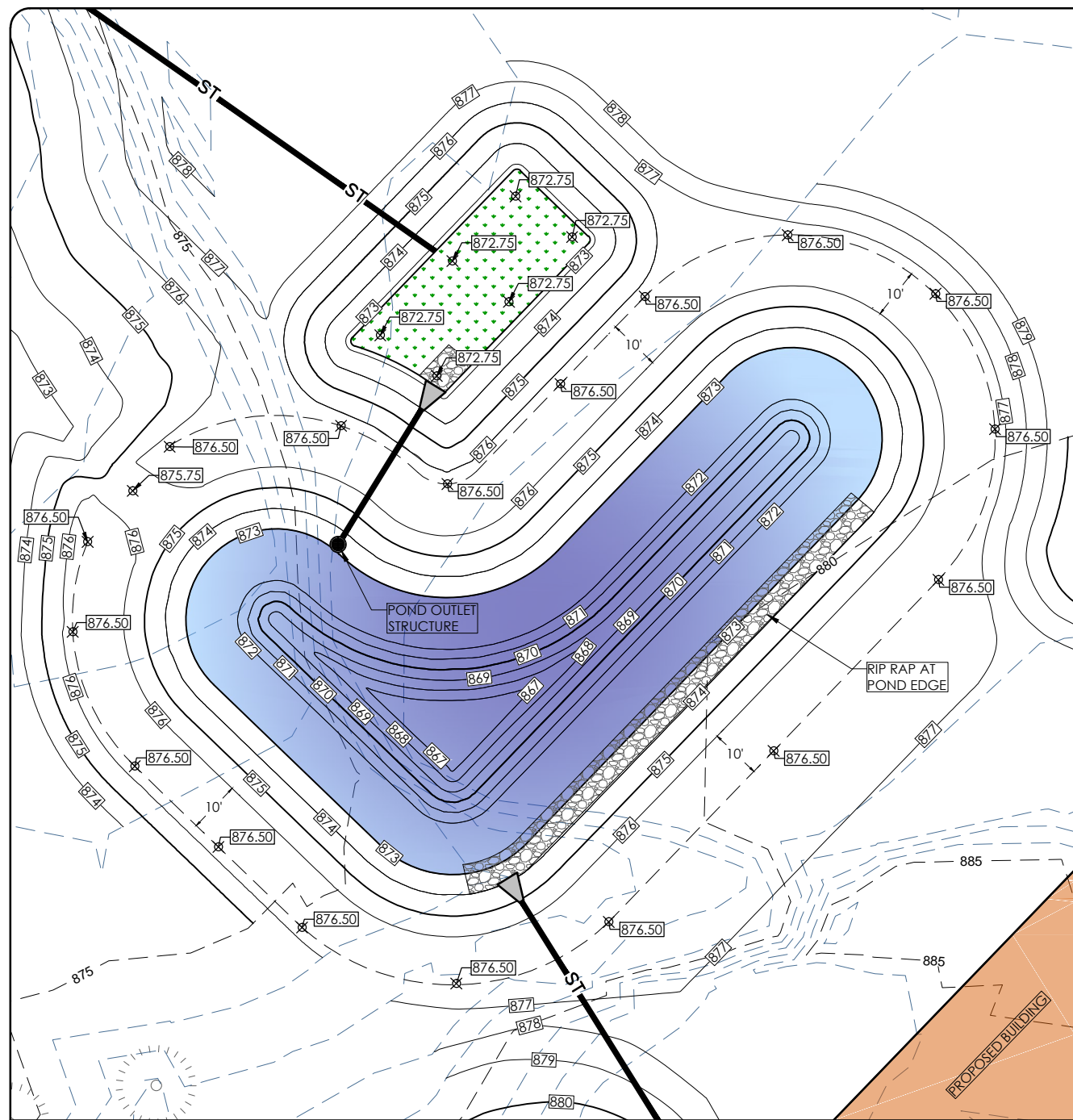
City of Madison
 Dane County, WI

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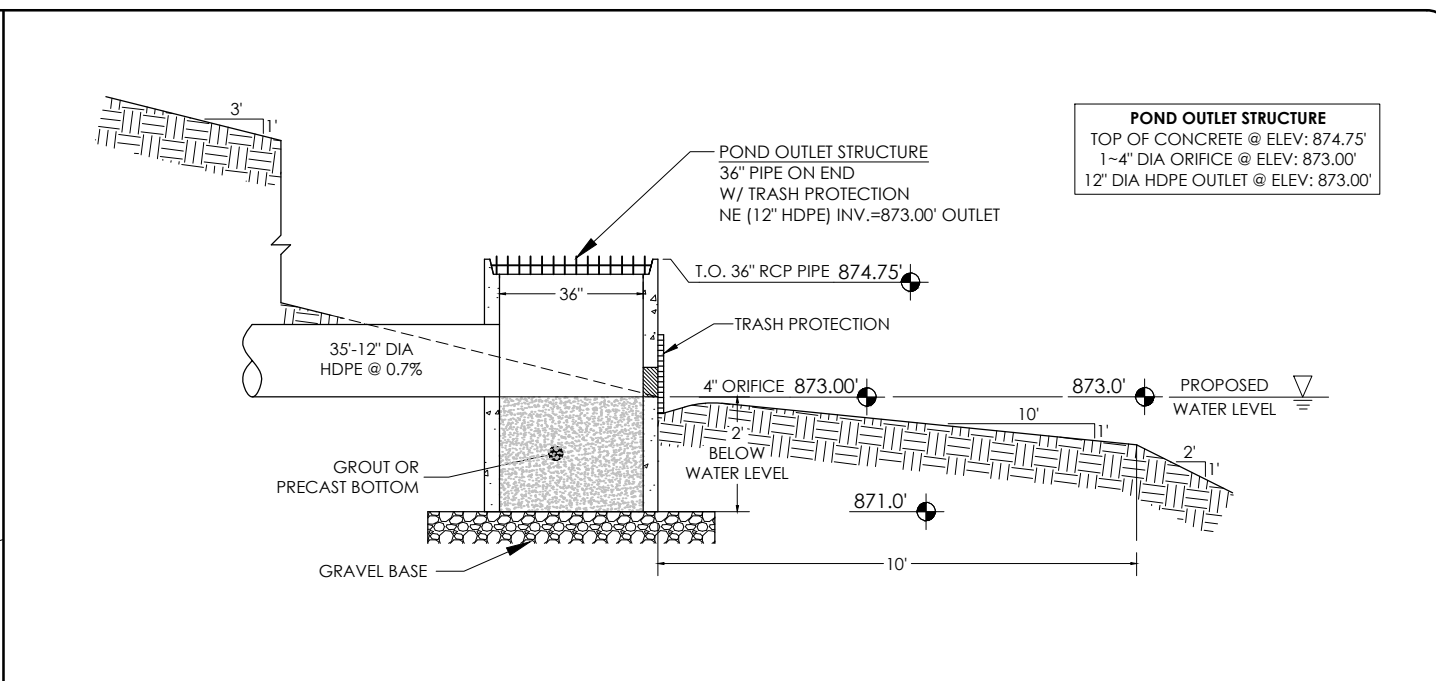


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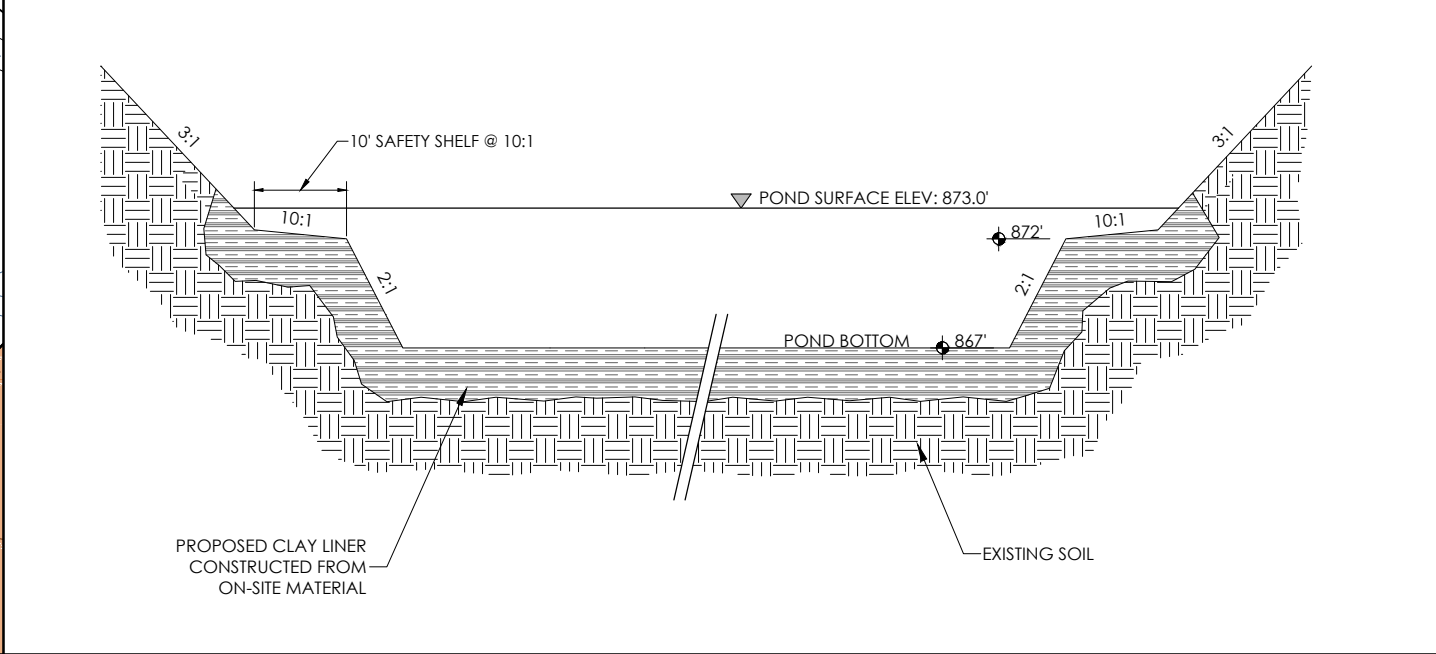
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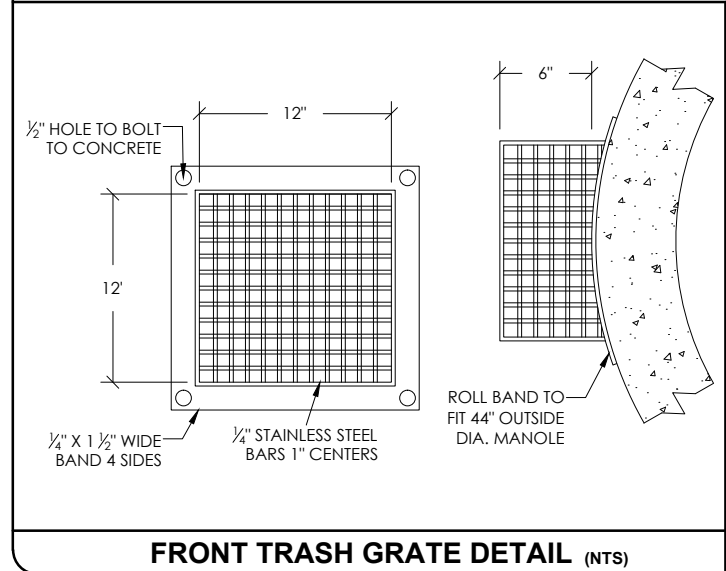
PLAN VIEW OF WET POND



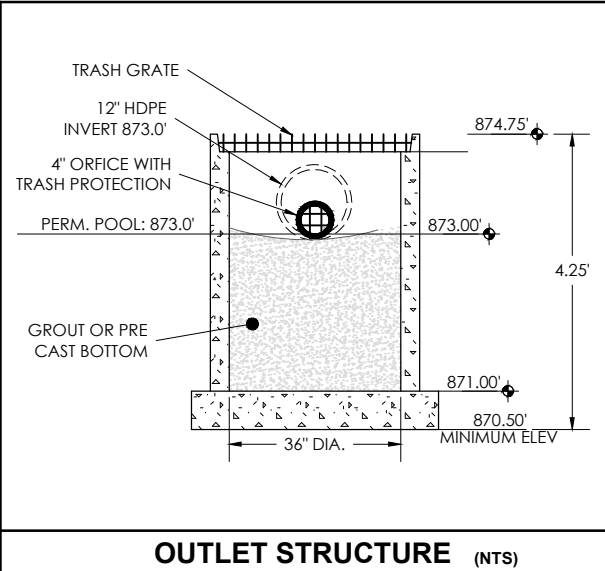
PROFILE VIEW OF POND OUTLET STRUCTURE (NTS)



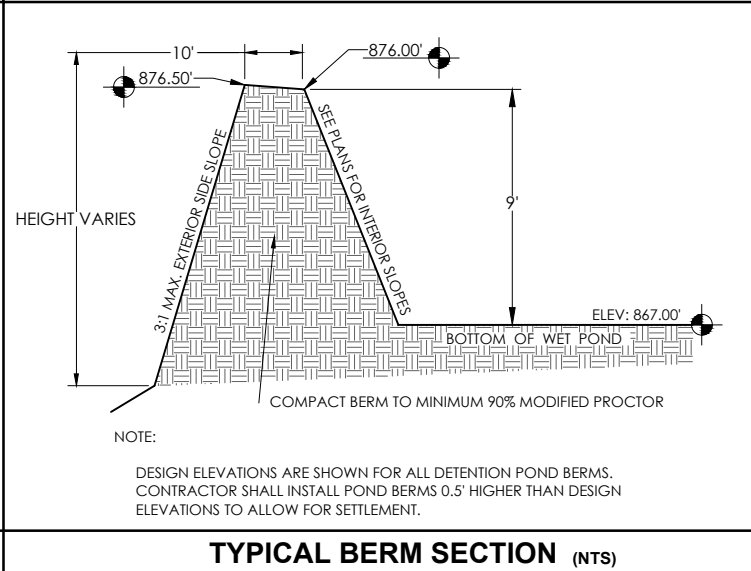
WET POND CROSS SECTION (NTS)



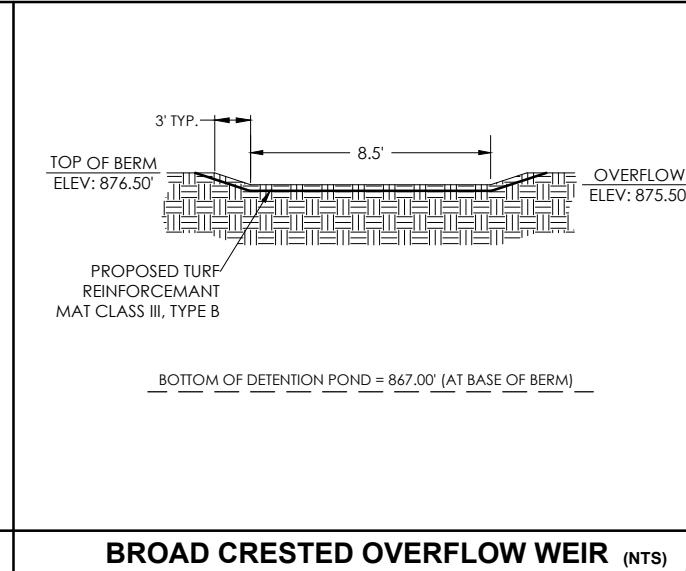
FRONT TRASH GRATE DETAIL (NTS)



OUTLET STRUCTURE (NTS)



TYPICAL BERM SECTION (NTS)



BROAD CRESTED OVERFLOW WEIR (NTS)

G:\Current Files\13_Kilmer\Cons. Agmt\2-0513-164_Terra Property Development\CAD\2-0513-164_POND DETAILS\2-0513-164.dwg, 12/18/2013, 10:36:06 AM, DWG, To PDF, p3



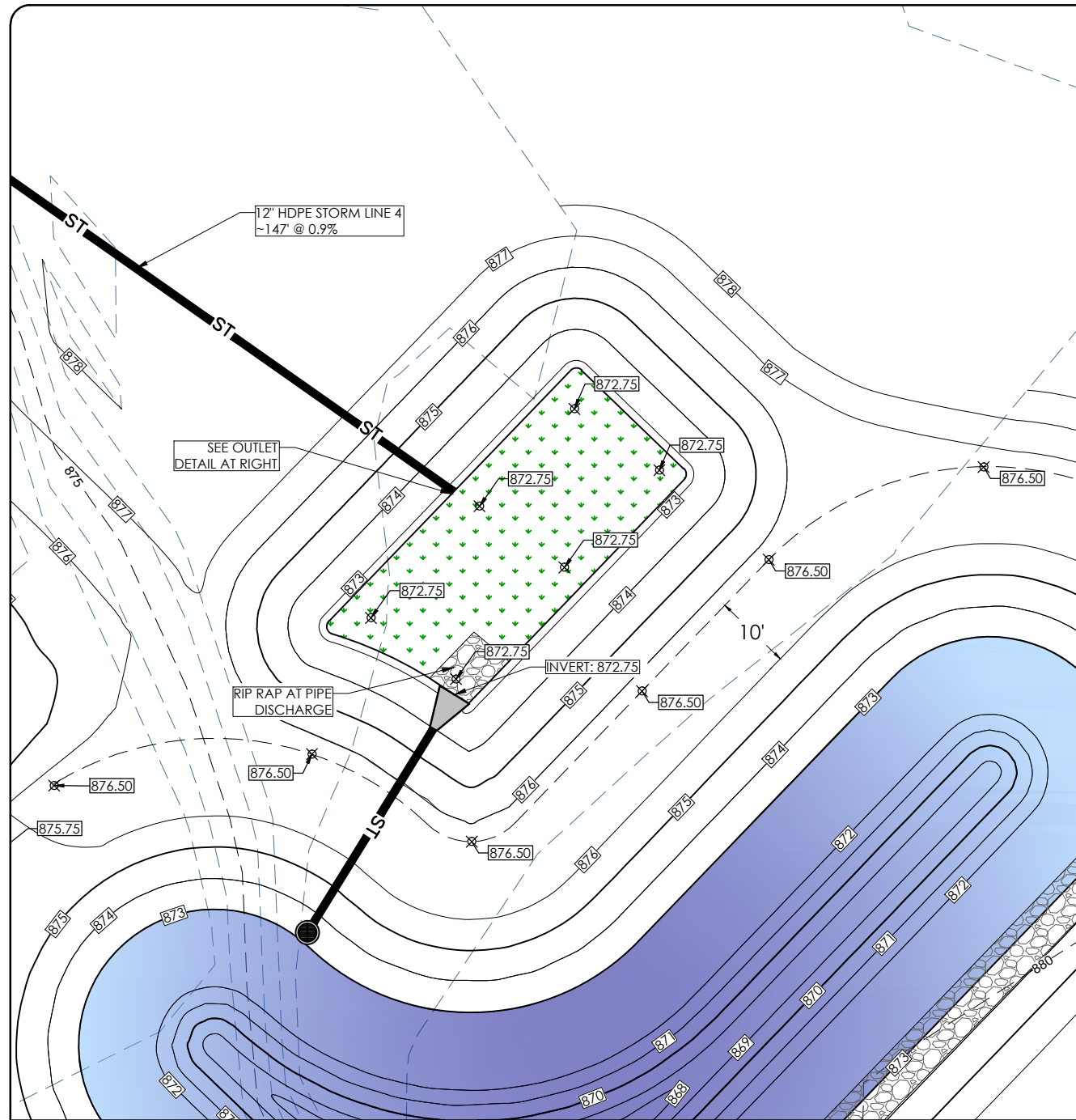
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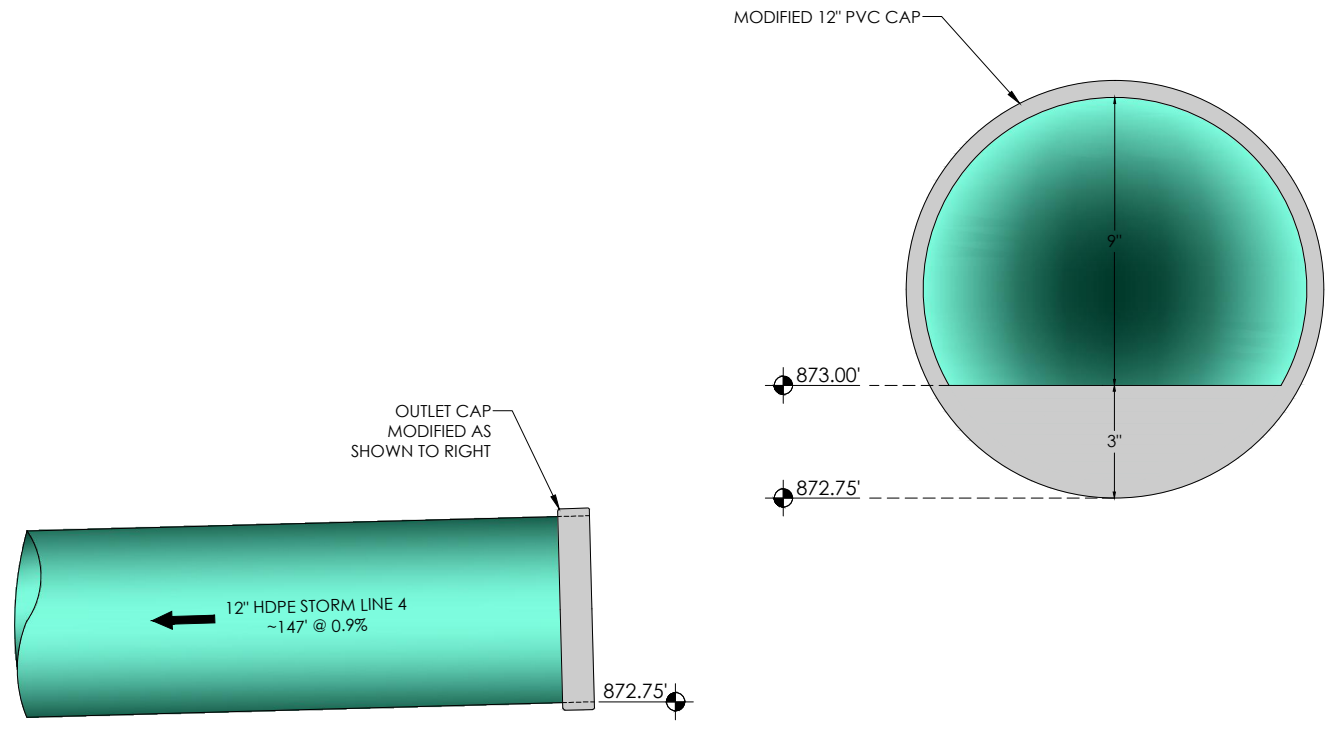
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INFILTRATION BASIN DETAILS
Harmony Construction Management
Terra Construction Site Development

City of Madison
Dane County, WI

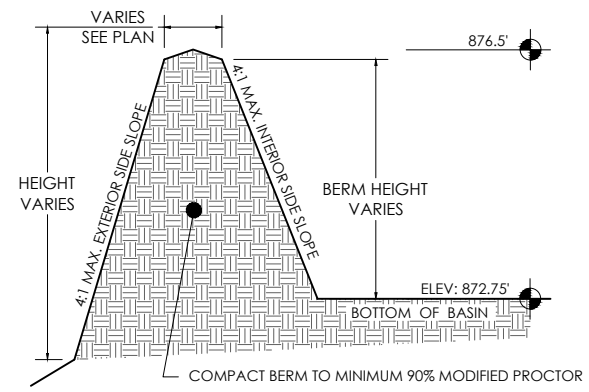


PLAN VIEW OF INFILTRATION BASIN



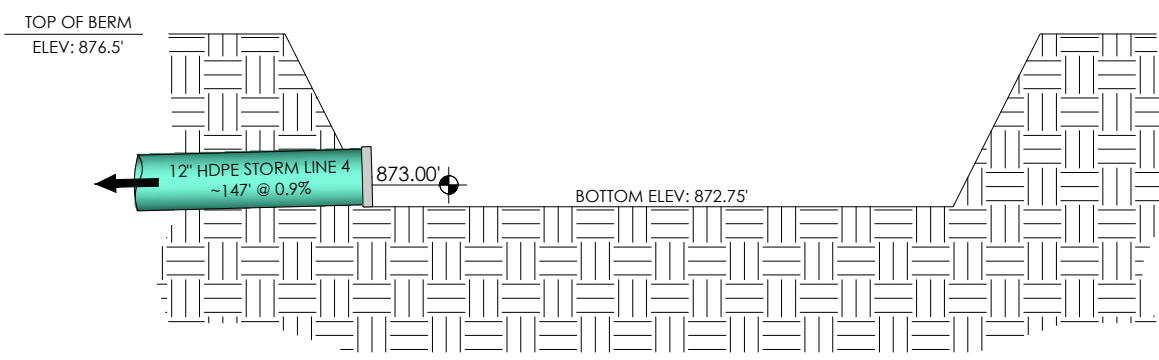
PROFILE VIEW OF POND OUTLET STRUCTURE (NTS)

- NOTES:
- CAP SHALL FIT TIGHTLY TO PIPE.
 - CAP SHALL NOT BE GLUED ON. IN MAINTENANCE SITUATIONS WHEN DRAWDOWN IS NEEDED, CAP MAY BE REMOVED TO PROVIDE A SAFE EXIT FOR THE DETAINED WATER.



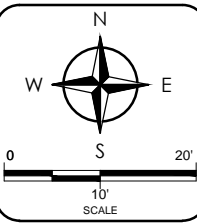
NOTE:
DESIGN ELEVATIONS ARE SHOWN FOR ALL DETENTION POND BERMS. CONTRACTOR SHALL INSTALL POND BERMS 0.5' HIGHER THAN DESIGN ELEVATIONS TO ALLOW FOR SETTLEMENT.

TYPICAL BERM SECTION (NTS)



WET POND CROSS SECTION (NTS)

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CITY SUBMITTAL	1	EDB	12/18/2013



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DATE	12/18/2013
GEC FILE NO.	2-0513-164
SHEET NO.	

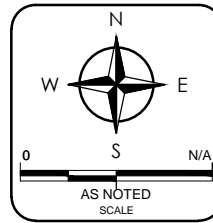
C5.1



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MISC. PROJECT DETAILS
 Harmony Construction Management
 Terra Construction Site Development

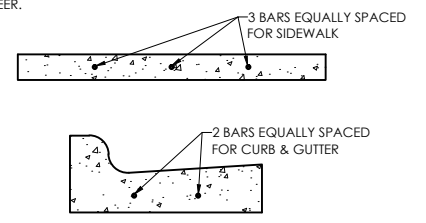
NO.	DATE	BY
1	12/18/2013	EDB



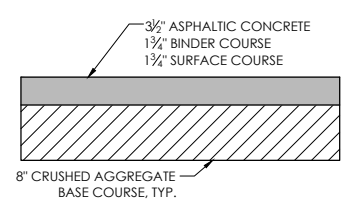
DRAWN BY: EDB
 DATE: 12/18/2013
 GEC FILE NO.: 2-0513-164
 SHEET NO.

C6.0

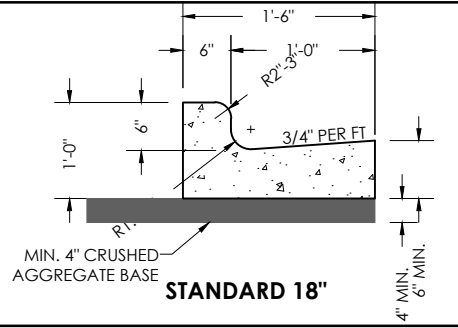
NOTES:
 PROVIDE #4 BARS 10' LONG IN CURB & GUTTERS AND SIDEWALKS THAT CROSS UTILITY TRENCHES OR AS DIRECTED BY THE ENGINEER.



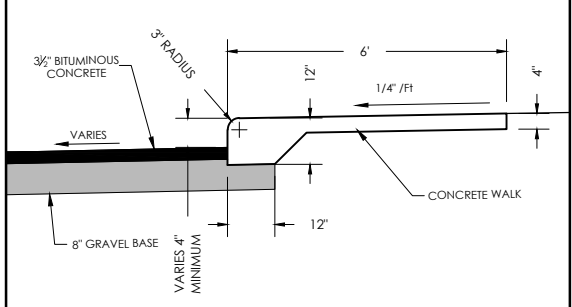
CURB & SIDEWALK REINFORCING



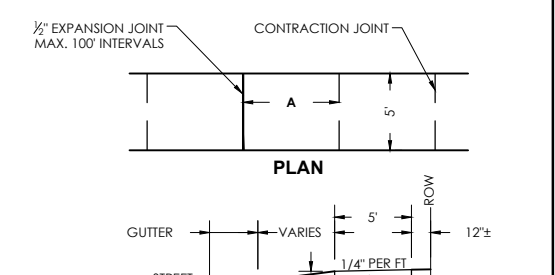
TYPICAL PAVEMENT SECTION



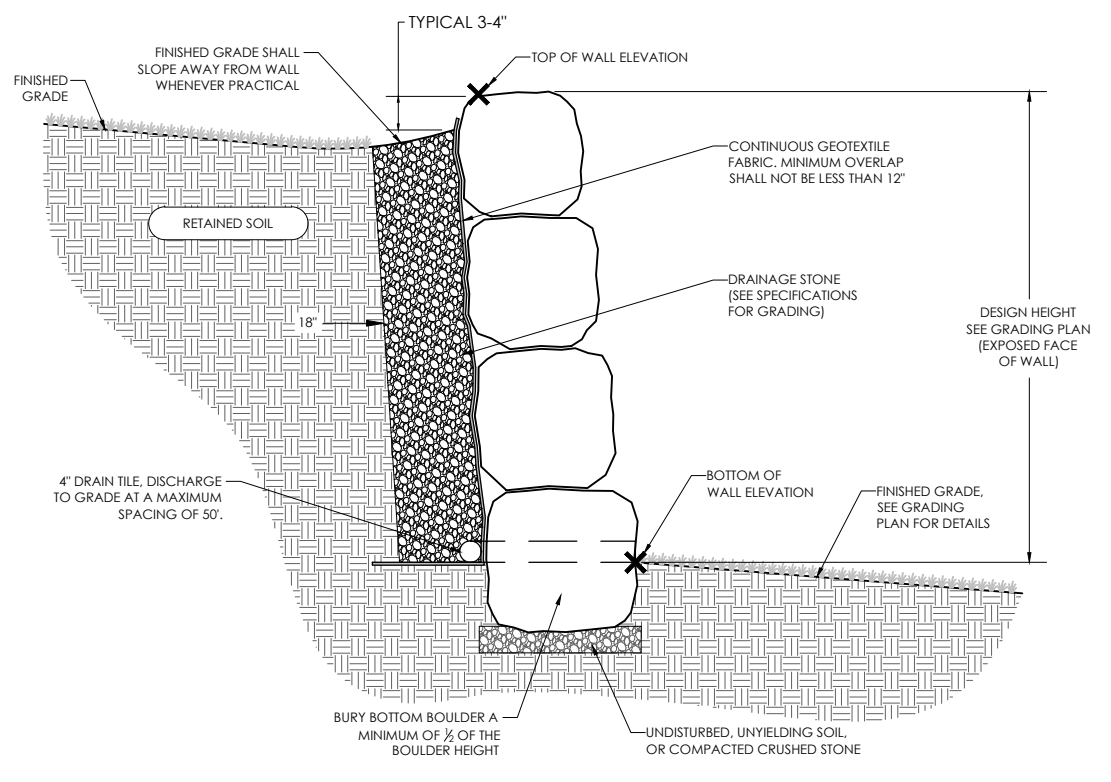
TYPICAL CURB DETAIL



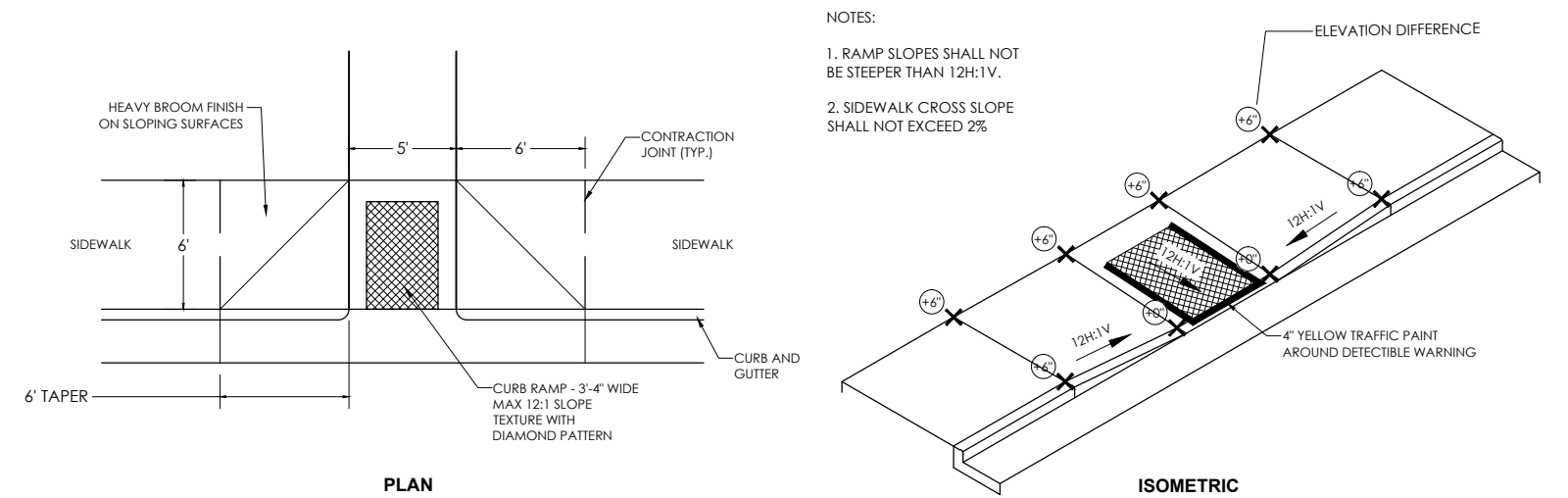
TYPICAL SIDEWALK/CURB SECTION



NOTES:
 1. A = 4' OR 5' TYPICALLY (SEE PLANS FOR PROPOSED WIDTH)
 2. AREA BETWEEN CURB AND SIDEWALK IS TO HAVE A MINIMUM OF 6\"/>



TYPICAL BOULDER RETAINING WALL SECTION

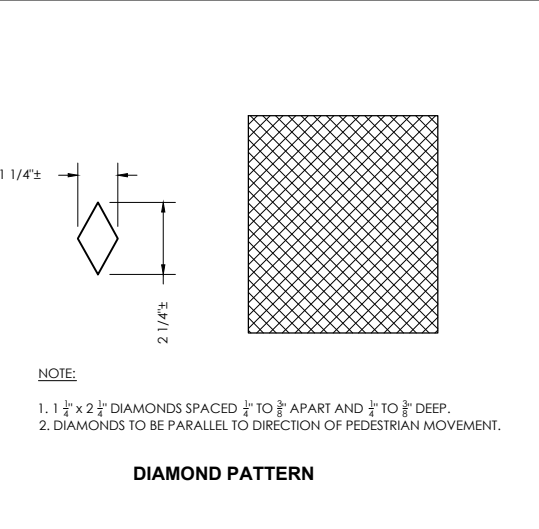


NOTES:
 1. RAMP SLOPES SHALL NOT BE STEEPER THAN 12H:1V.
 2. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%

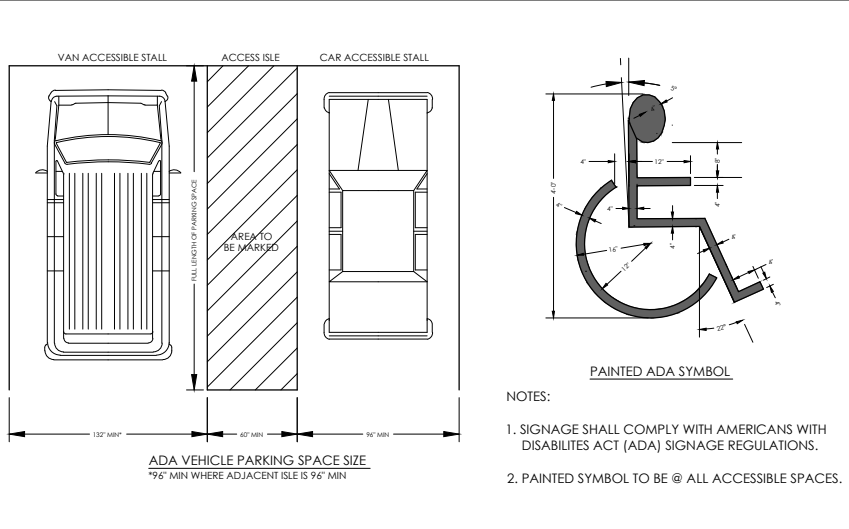
HANDICAP ACCESSIBLE CURB RAMP TYPE C

*TYPE TO BE DETERMINED AFTER INPUT BY CITY OFFICIALS

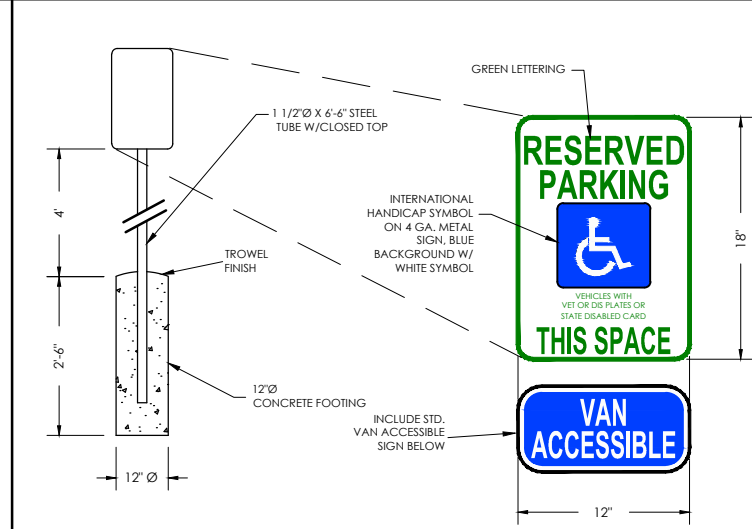
PROPOSED BIKE RACK DETAIL



DETECTIBLE WARNING SURFACE



TYPICAL HANDICAP ACCESSIBLE PARKING AREA



TYPICAL HANDICAP PARKING SIGN

TYPICAL SIDEWALK DETAIL

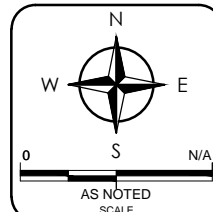
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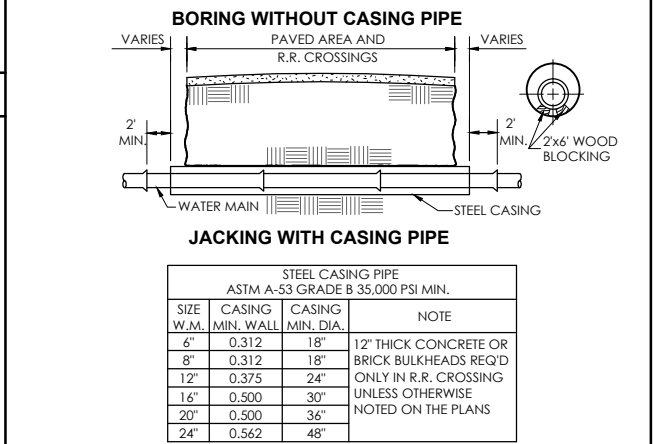
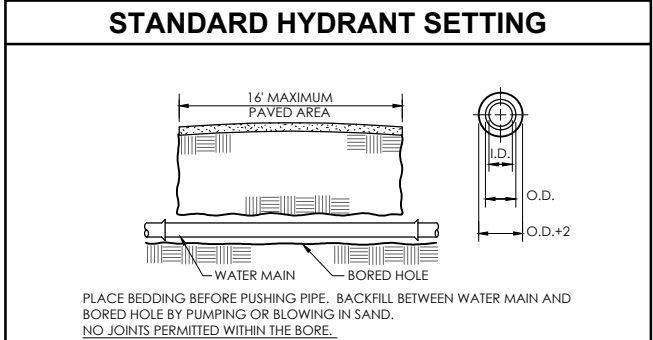
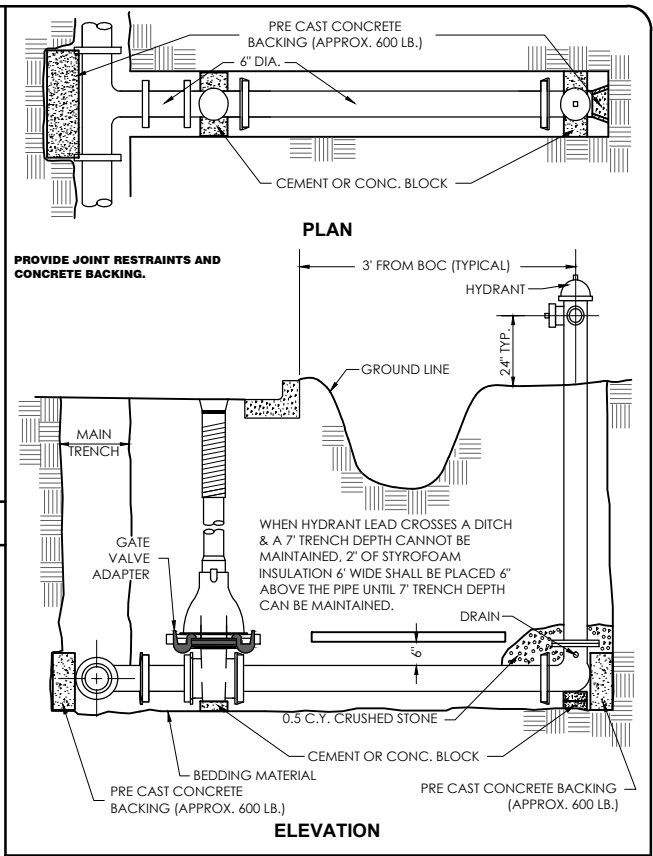
WATERMAIN DETAILS
 Harmony Construction Management
 Terra Construction Site Development

NO.	DATE	BY	REVISIONS
1	12/18/2013	EDB	CITY SUBMITTAL



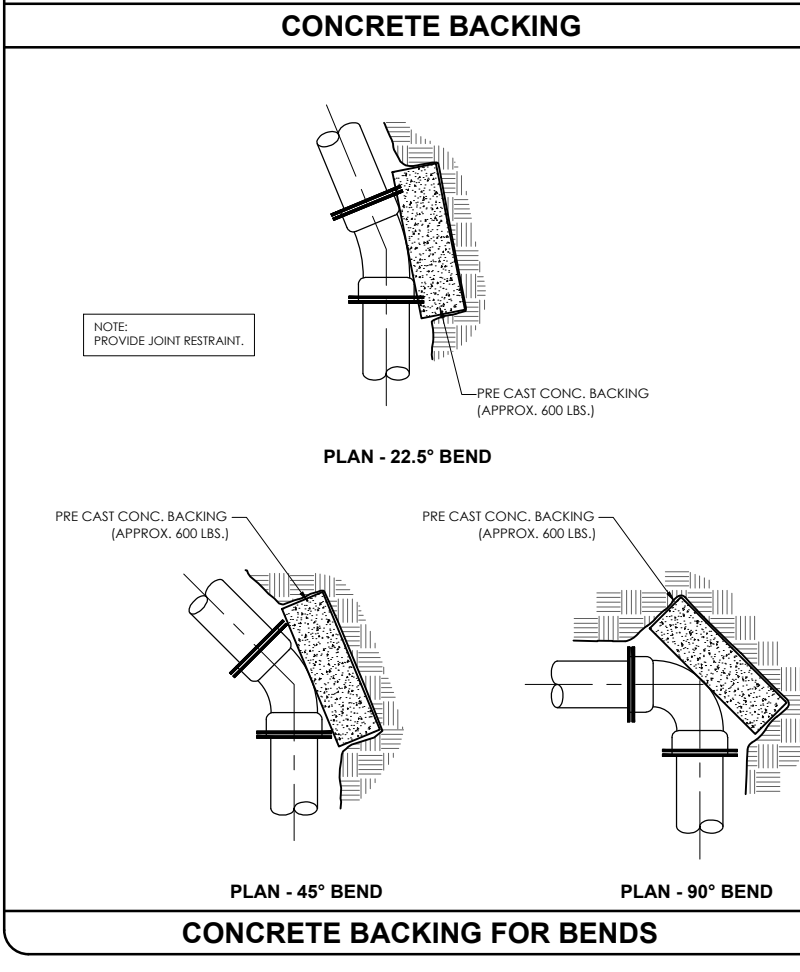
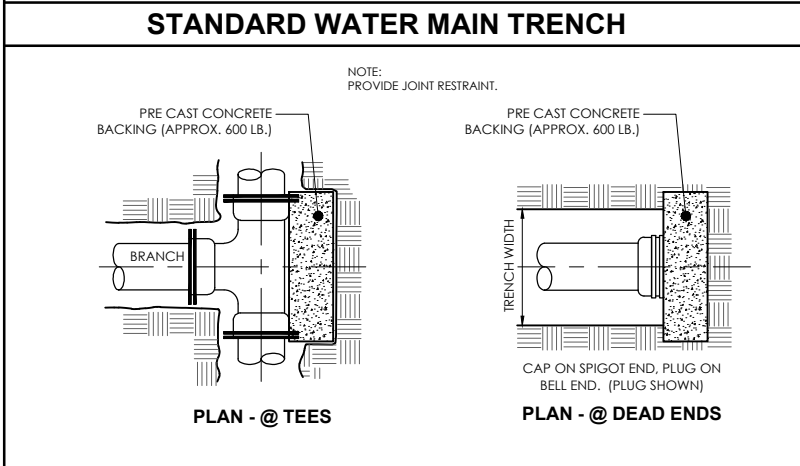
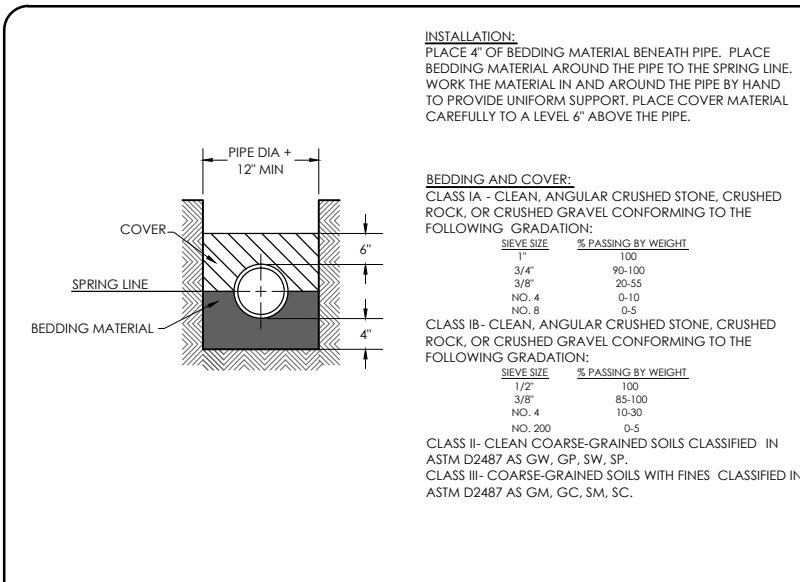
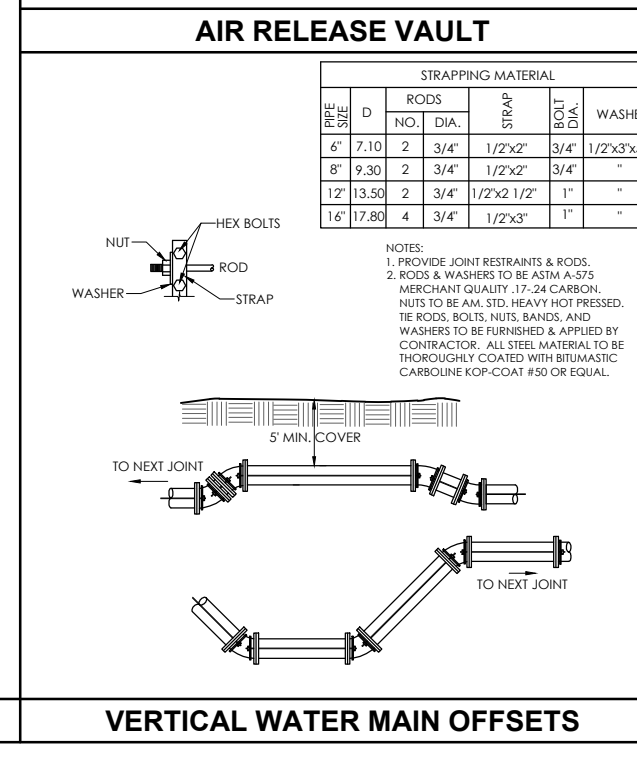
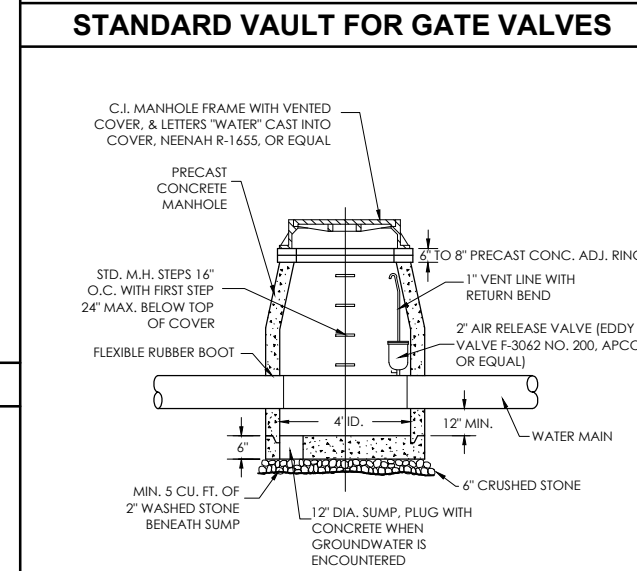
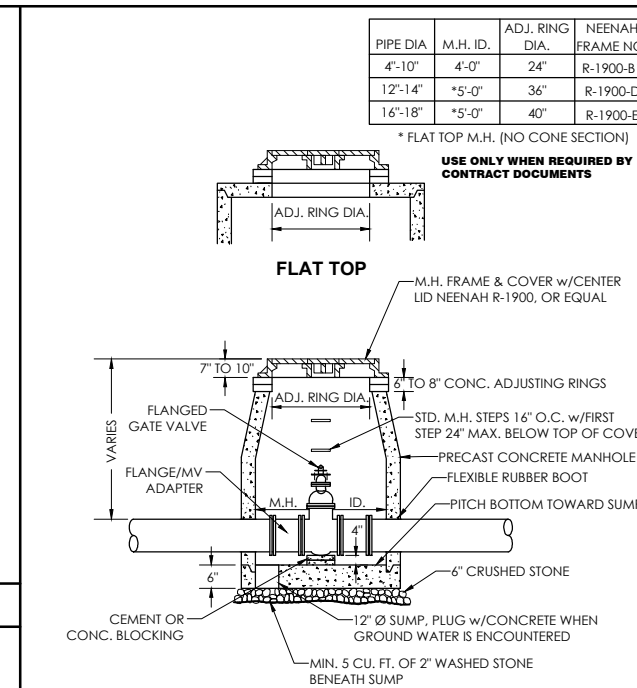
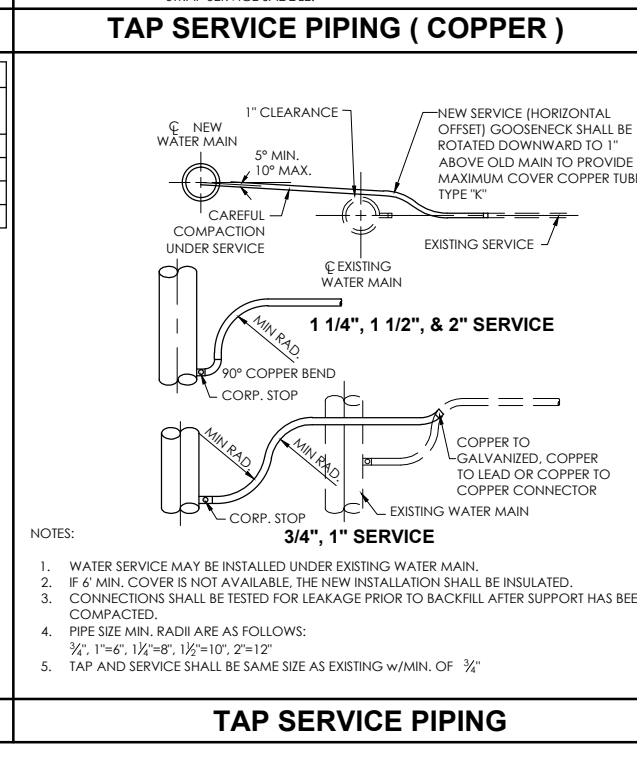
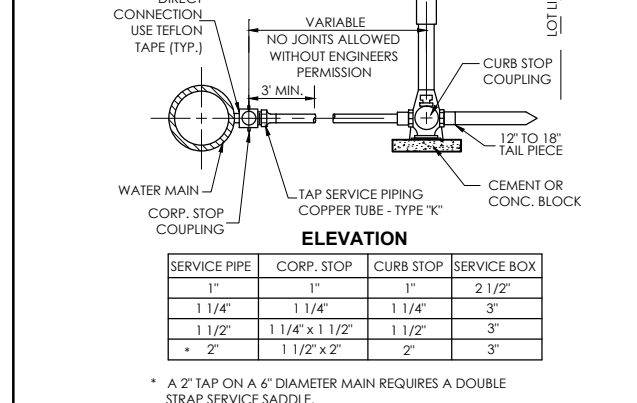
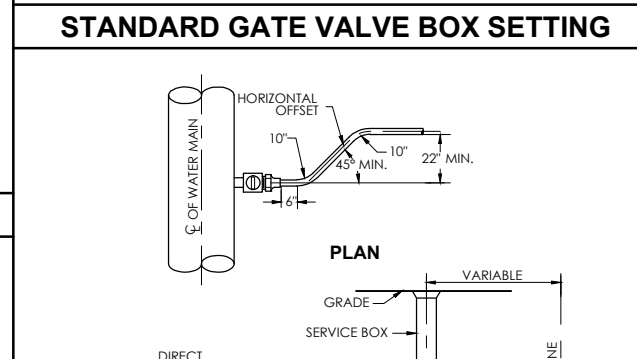
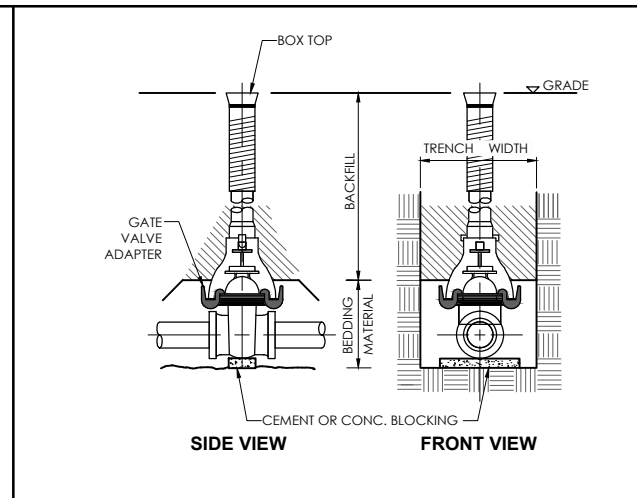
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 DATE: 12/18/2013
 GEC FILE NO.: 2-0513-164
 SHEET NO.

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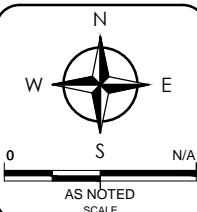


GENERAL NOTES

- SERVICE TAPS IN ALL WATER MAIN PIPE SHALL BE MADE WITH 2 WRAPS OF 3 MIL. TEFLON TAPE ON CORPORATION STOP THREADS.
- WHEN MORE THAN ONE TAP IN THE MAIN IS NECESSARY TO DELIVER THE REQUIRED FLOW FOR SERVICE LINES, THEY SHOULD BE STAGGERED AROUND THE CIRCUMFERENCE A MINIMUM OF 8" APART.



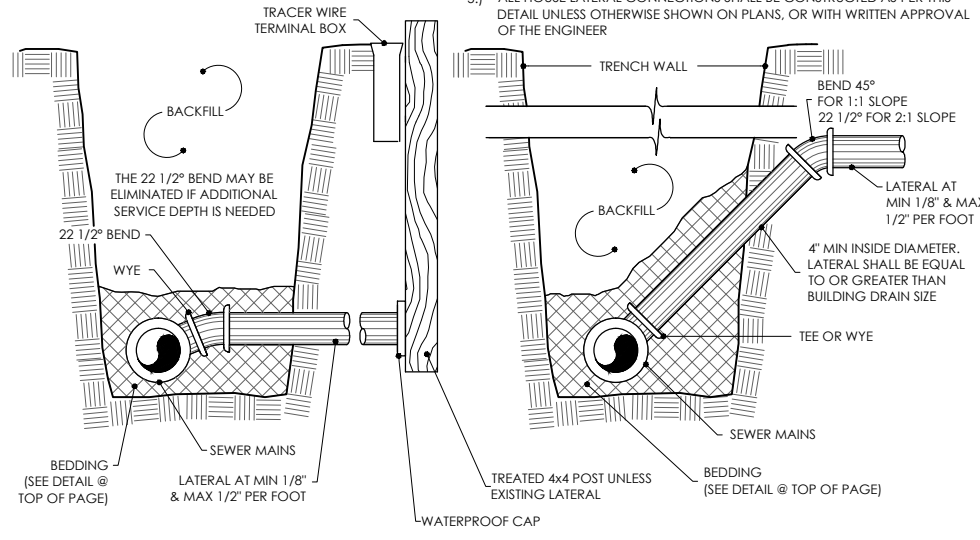
NO.	DATE	BY	REVISIONS
1	12/18/2013	EDB	CITY SUBMITTAL



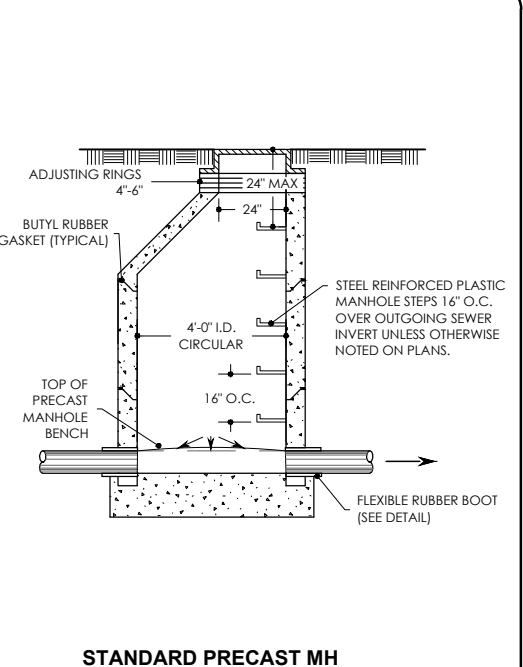
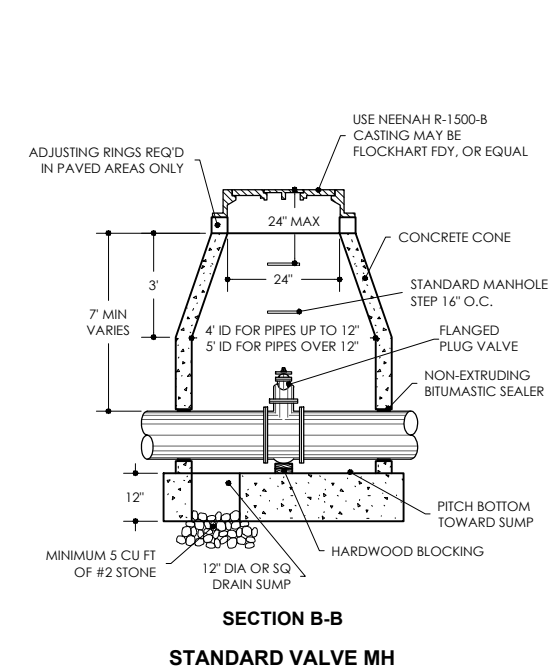
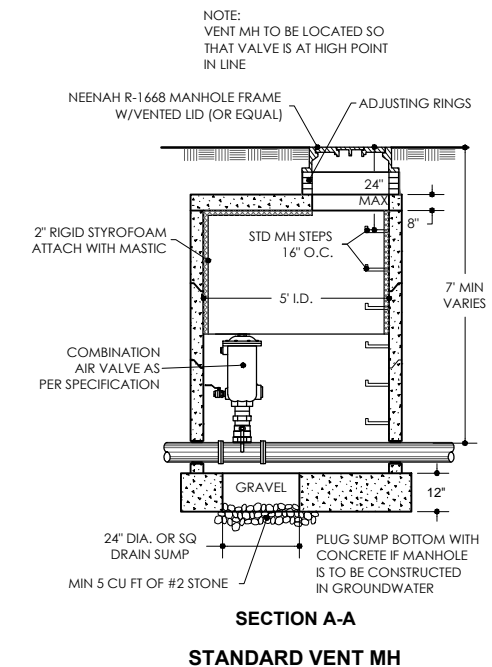
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DATE	12/18/2013
GEC FILE NO.	2-0513-164
SHEET NO.	

NOTES:

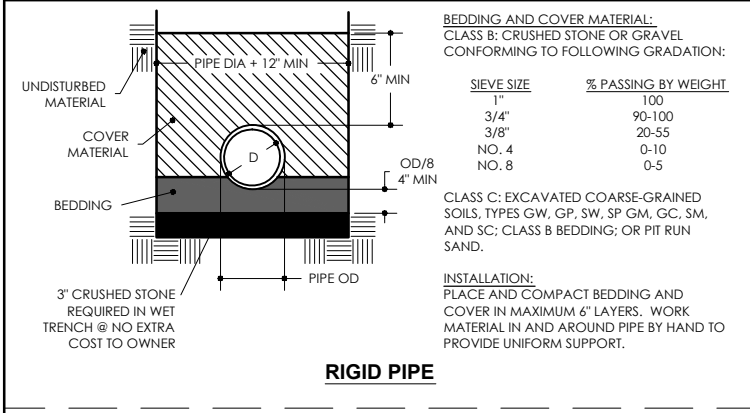
- USE OF RISERS GOVERNED BY BASEMENT DEPTH & LOCAL CONDITIONS OR AS DIRECTED BY ENGINEER
- LATERAL SHALL END AT PROPERTY LINE UNLESS OTHERWISE DIRECTED BY ENGINEER
- DEPTH TO LATERAL & PROPERTY LINE SHALL NOT BE DEEPER THAN NECESSARY TO SERVICE PARCEL
- ALL LATERALS TO BE 4" UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS
- ALL HOUSE LATERAL CONNECTIONS SHALL BE CONSTRUCTED AS PER THIS DETAIL UNLESS OTHERWISE SHOWN ON PLANS, OR WITH WRITTEN APPROVAL OF THE ENGINEER



TYPICAL LATERAL CONNECTIONS



TYPICAL MANHOLES

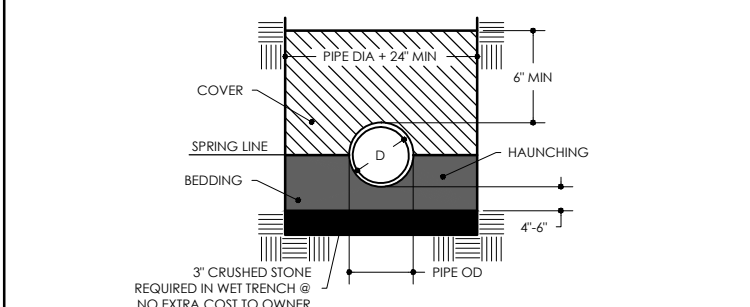


BEDDING AND COVER MATERIAL:
 CLASS B: CRUSHED STONE OR GRAVEL CONFORMING TO FOLLOWING GRADATION:

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90-100
3/8"	20-55
NO. 4	0-10
NO. 8	0-5

CLASS C: EXCAVATED COARSE-GRAINED SOILS, TYPES GW, GP, SW, SP, GM, GC, SM, AND SC; CLASS B BEDDING; OR PIT RUN SAND.

INSTALLATION:
 PLACE AND COMPACT BEDDING AND COVER IN MAXIMUM 6" LAYERS. WORK MATERIAL IN AND AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT.



BEDDING AND COVER MATERIAL:
 CLASS IA: CRUSHED STONE OR GRAVEL CONFORMING TO FOLLOWING GRADATION:

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90-100
3/8"	20-55
NO. 4	0-10
NO. 8	0-5

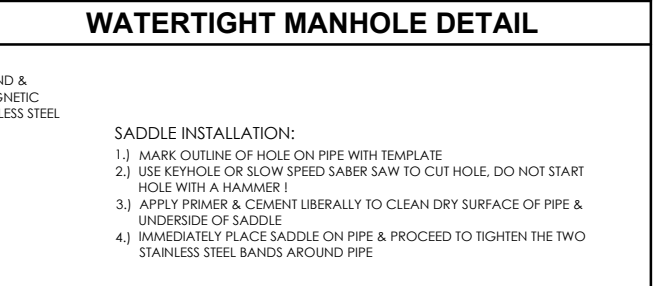
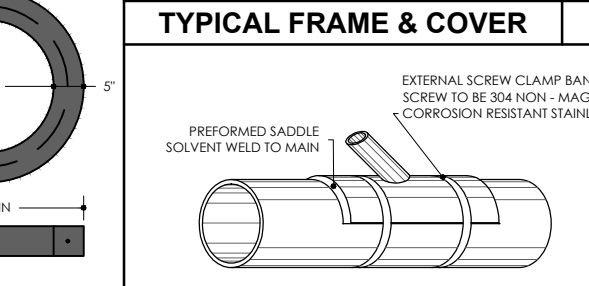
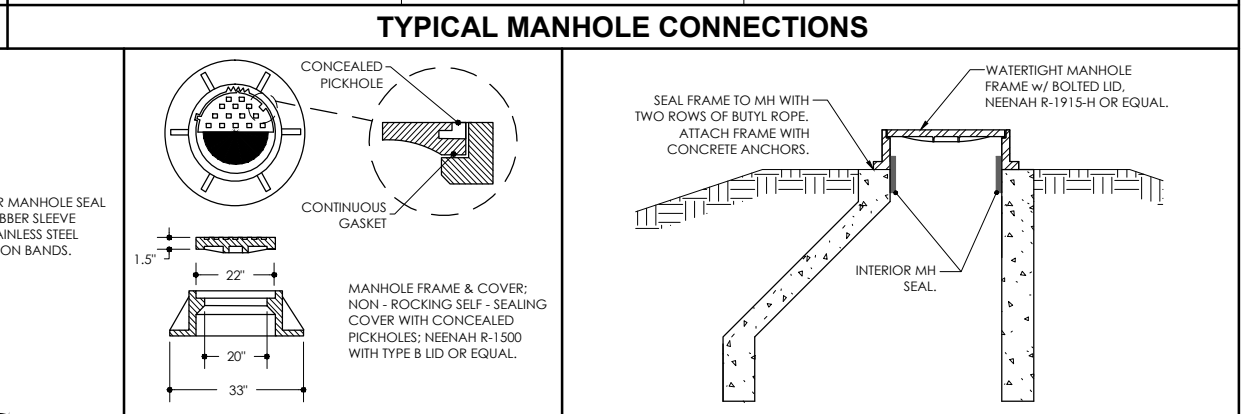
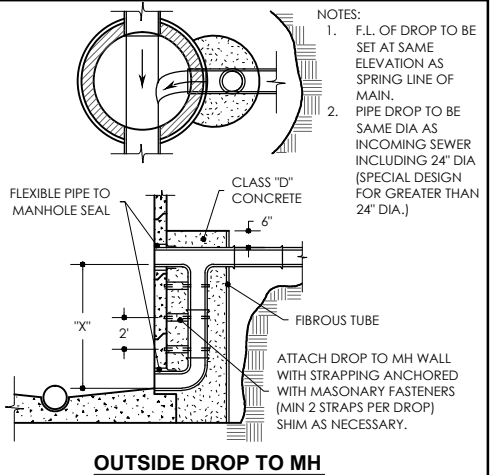
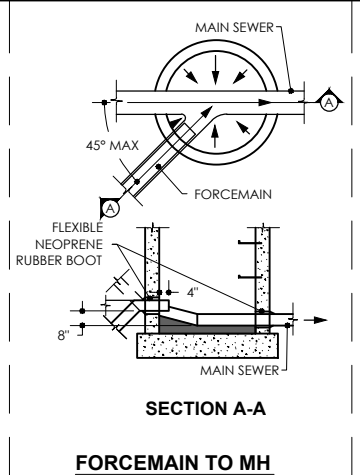
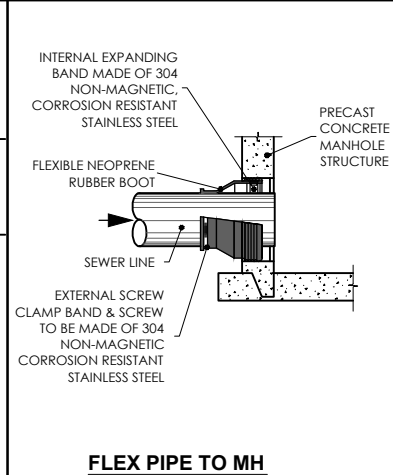
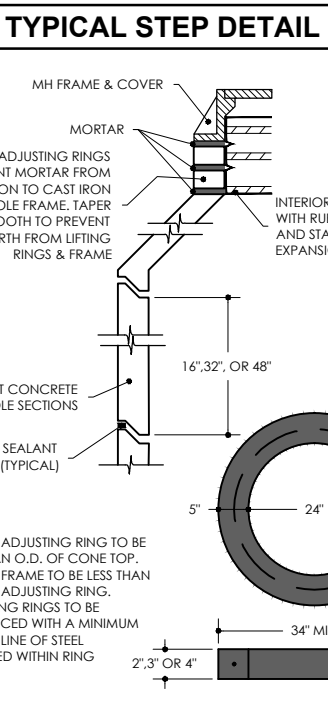
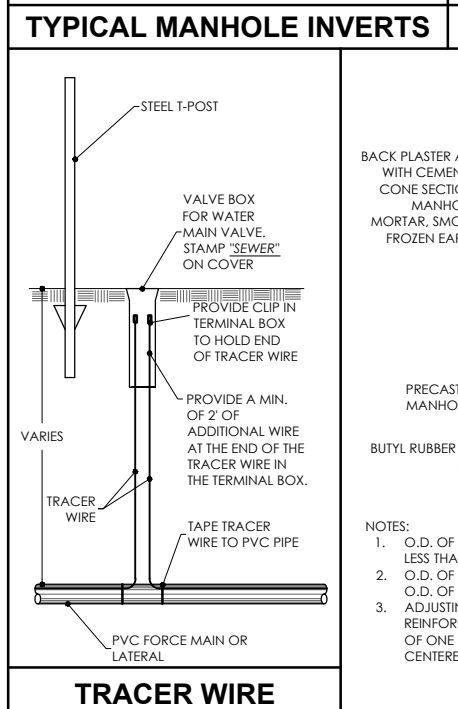
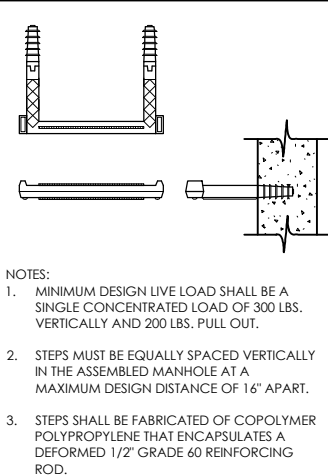
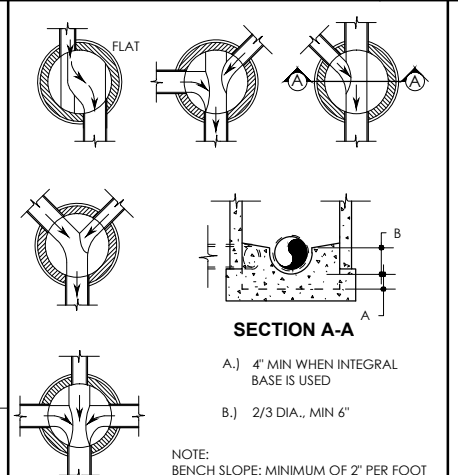
CLASS IB: CRUSHED STONE OR GRAVEL CONFORMING TO FOLLOWING GRADATION:

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	85-100
NO. 4	10-30
NO. 8	0-5

CLASS II: SAND, GRAVELS, AND SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES. SOIL TYPES GW, GP, SW, AND SP.
 CLASS III: SANDS, GRAVELS, AND SAND-GRAVEL MIXTURES WITH FINES. SOIL TYPES GM, GC, SM, AND SC.

INSTALLATION:
 PLACE AND COMPACT BEDDING AND COVER IN MAXIMUM 6" LAYERS. WORK MATERIAL IN AND AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT. COMPACT CLASS IB WITH HAND TAMPER OR VIBRATORY COMPACTOR TO 85% STANDARD PROCTOR, COMPACT CLASS II WITH VIBRATORY COMPACTOR TO 85% STANDARD PROCTOR, COMPACT CLASS III WITH VIBRATORY COMPACTOR TO 90% STANDARD PROCTOR.

TYPICAL PIPE BEDDING



TYPICAL MANHOLE CONNECTIONS

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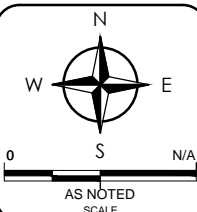
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STORM SEWER DETAILS
 Harmony Construction Management
 Terra Construction Site Development

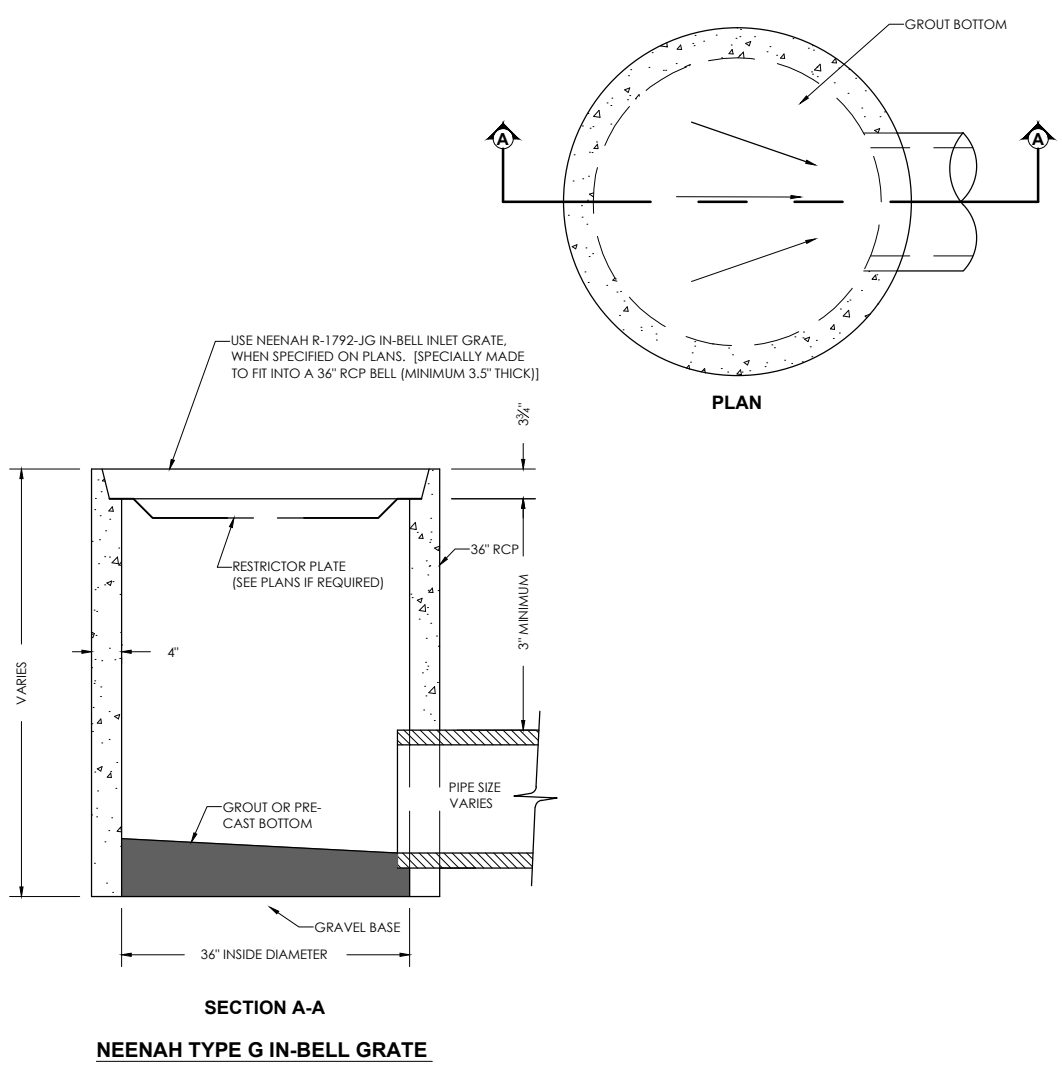
City of Madison
 Dane County, WI

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CITY SUBMITTAL	1	EDB	12/18/2013

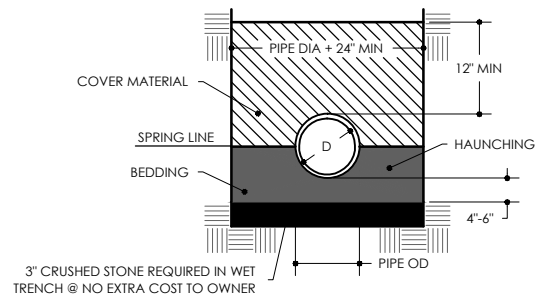


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SHEET NO.	

C6.3



36" RCP CYLINDRICAL INLET



BEDDING AND COVER MATERIAL:
 CLASS 1A: CRUSHED STONE OR GRAVEL CONFORMING TO FOLLOWING GRADATION:

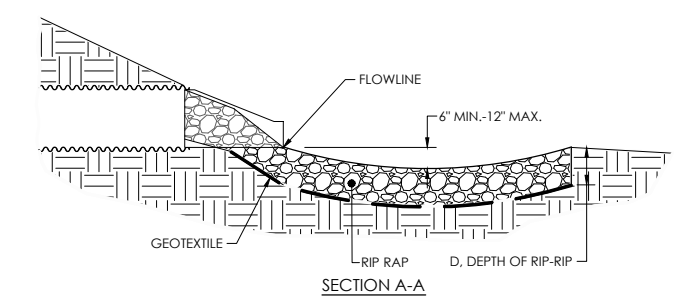
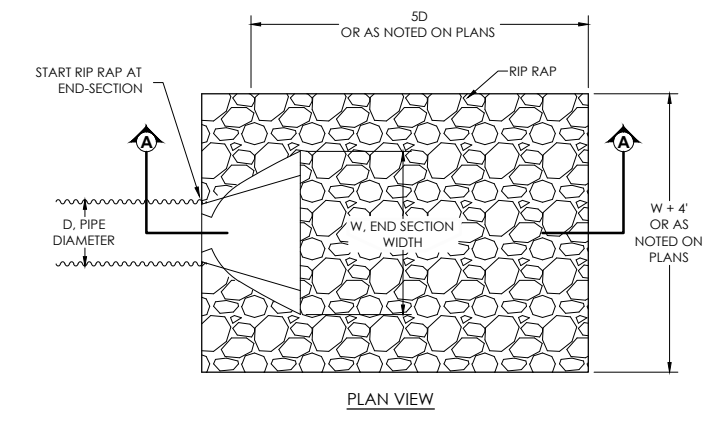
SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90-100
3/8"	20-55
NO. 4	0-10
NO. 8	0-5

CLASS 1B: CRUSHED STONE OR GRAVEL CONFORMING TO FOLLOWING GRADATION:

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	85-100
NO. 4	10-30
NO. 8	0-5

INSTALLATION:
 PLACE AND COMPACT BEDDING MATERIAL AND COVER IN MAXIMUM 6" LAYERS. WORK MATERIAL IN AND AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT. COMPACT CLASS 1B WITH HAND TAMPER OR VIBRATORY COMPACTOR TO 85% STANDARD PROCTOR.

HDPE PIPE BEDDING



HDPE PIPE

RIP RAP CLASS	WIS DOT RIP RAP EQUIVALENT	D, DEPTH
1	-	9"
2	LIGHT	18"
3	HEAVY	27"
	EXTRA HEAVY	36"

RIP RAP AT PIPE DISCHARGE

G:\Current Files\13_Kilbuck\Cons. Agmt\2-0513-164_Terra\Storm Sewer Development\CAD\2-0513-164_C6.3-0513-164_RCP INLET DET.DWG, 12/18/2013 10:40:07 AM, DWG To PDF.plt



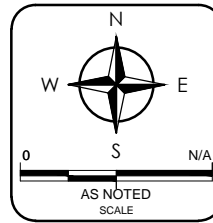
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EROSION CONTROL DETAILS
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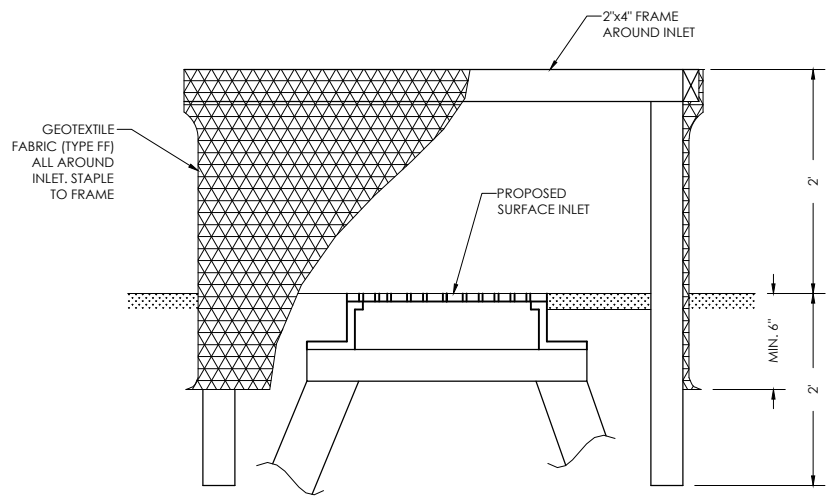
City of Madison
 Dane County, WI

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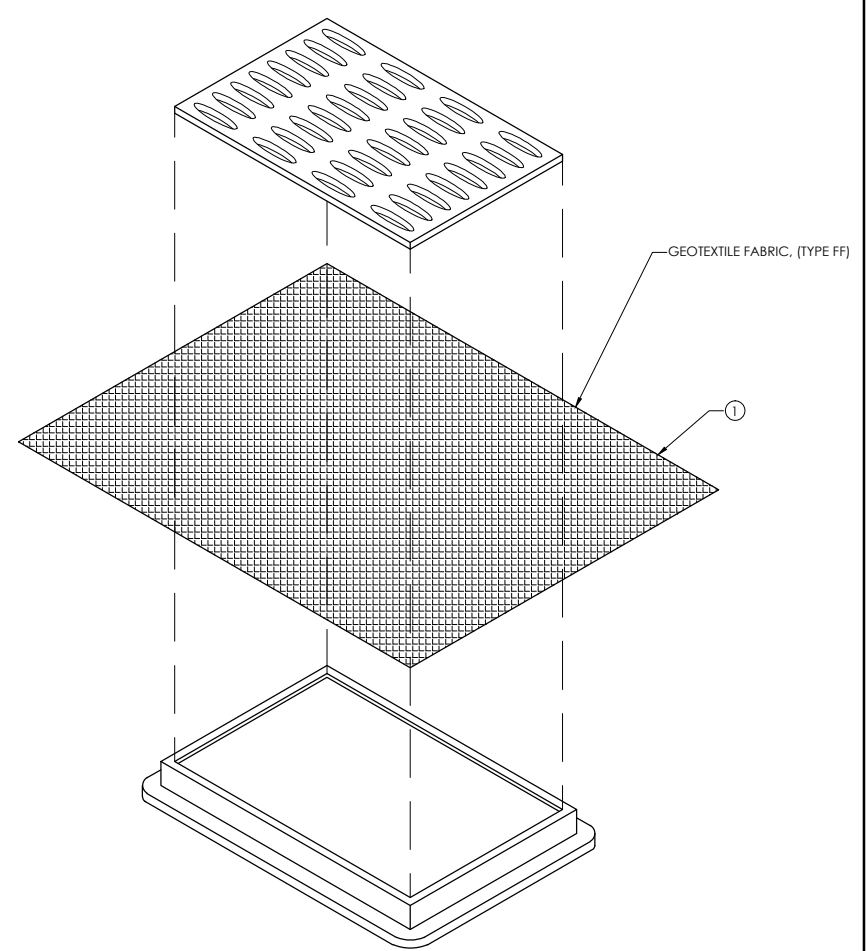


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SHEET NO.	

C6.4



INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

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.
- 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.

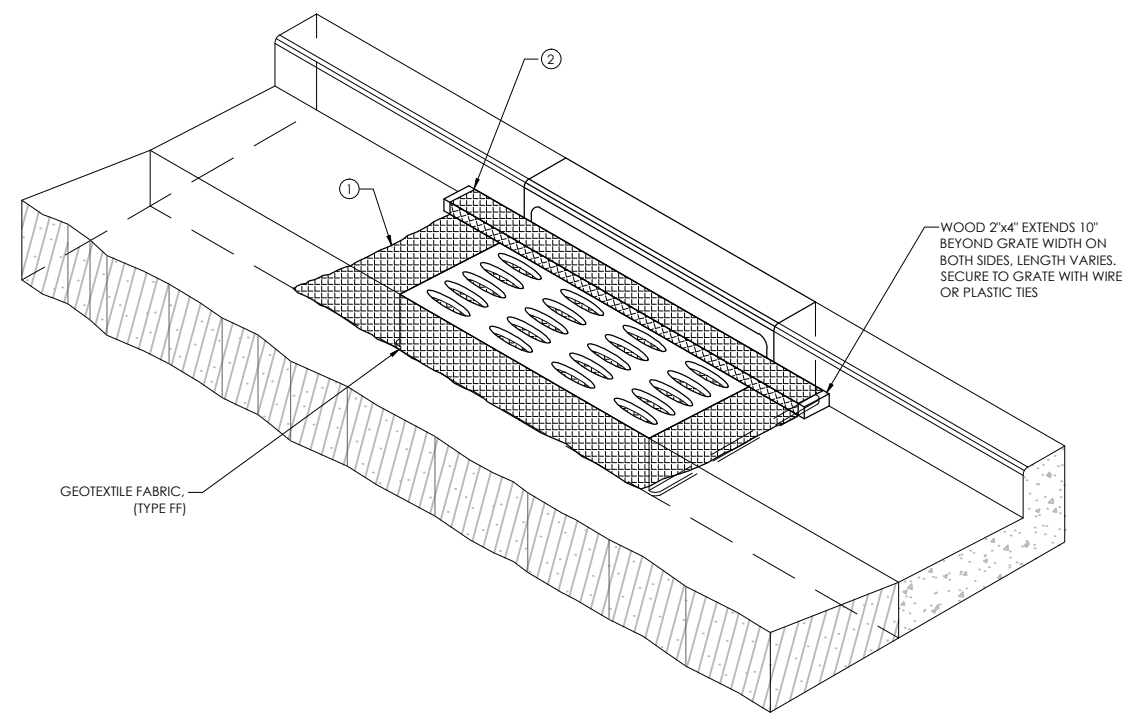
GENERAL NOTES:

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON WIS DOT PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

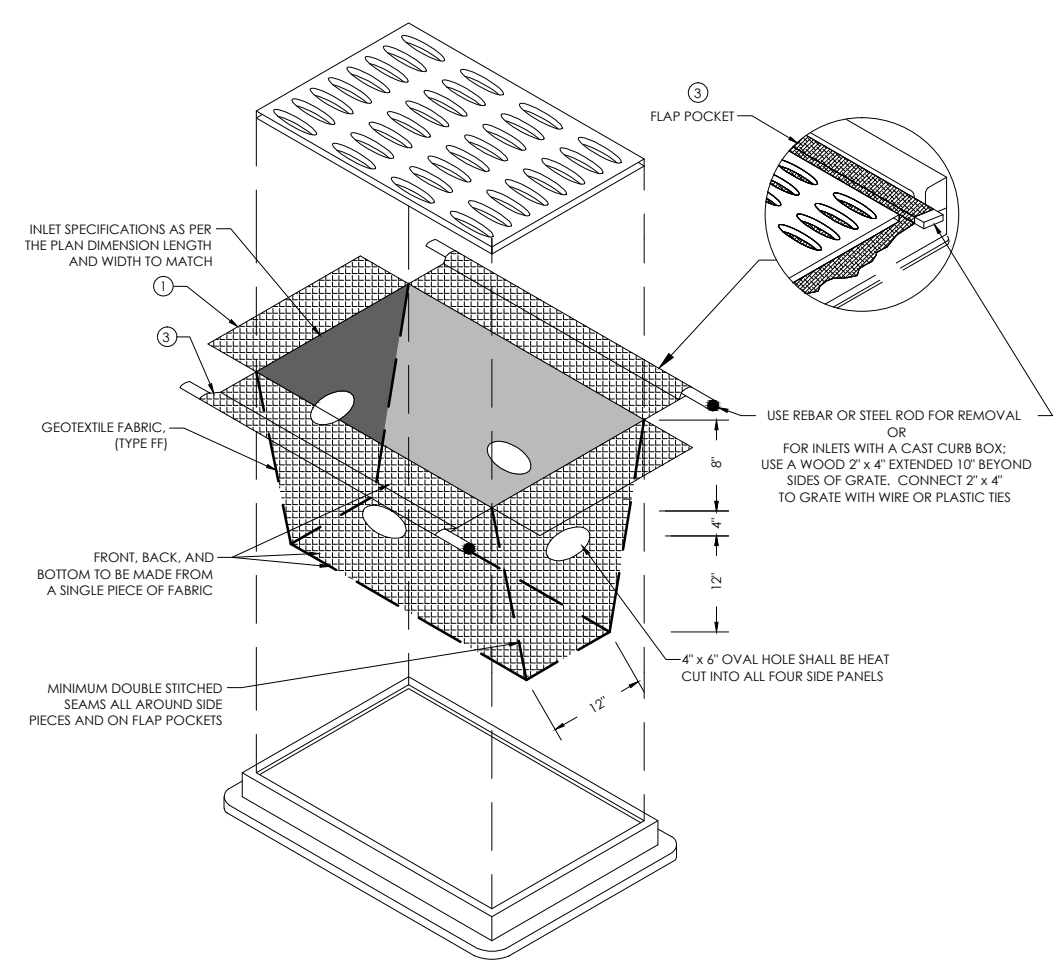
WHEN REMOVING OR MAINTAINING INLET PROTECTION, ARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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 POCKET SHALL BE LARGE ENOUGH TO ACCEPT A WOOD 2" x 4".

NOTES



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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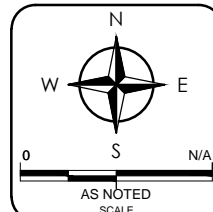


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EROSION CONTROL DETAILS
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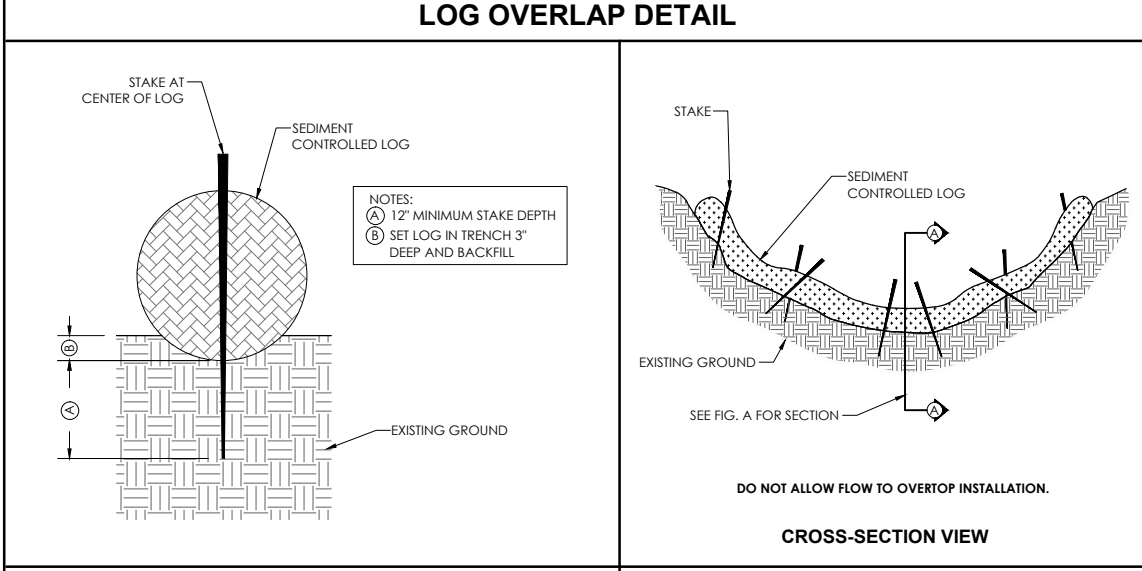
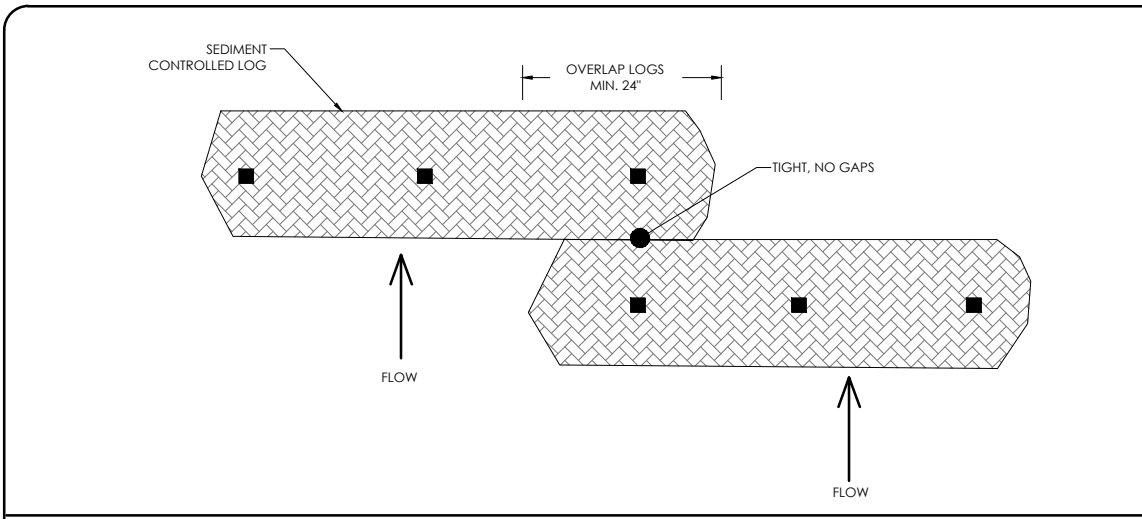
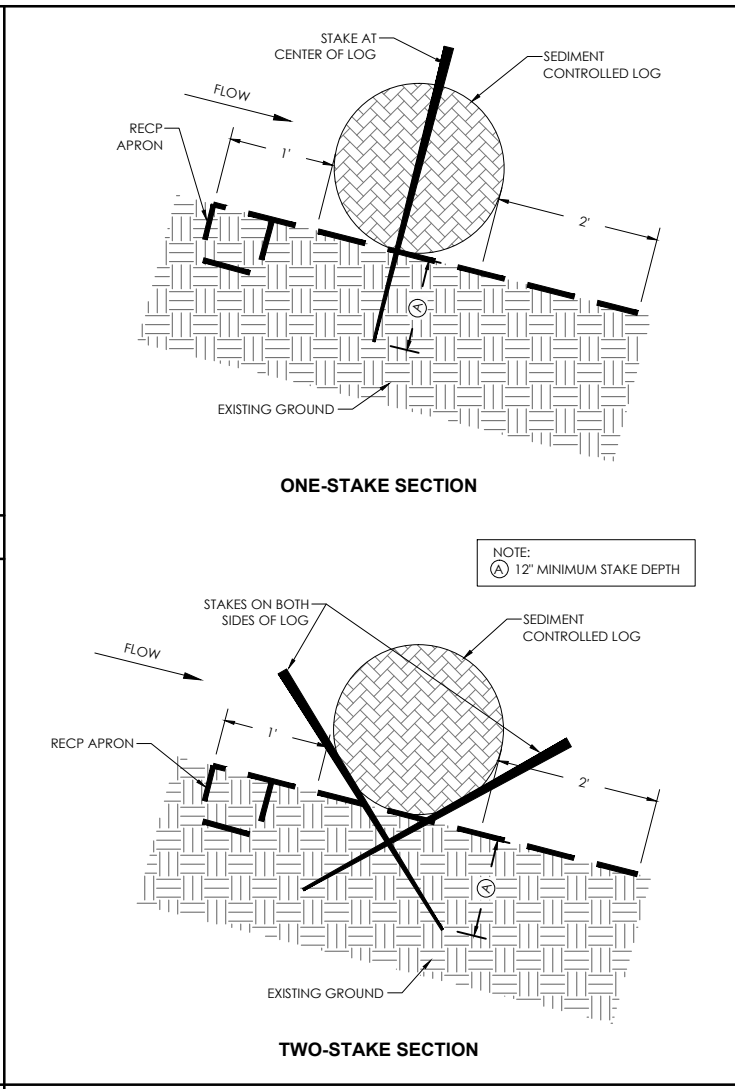
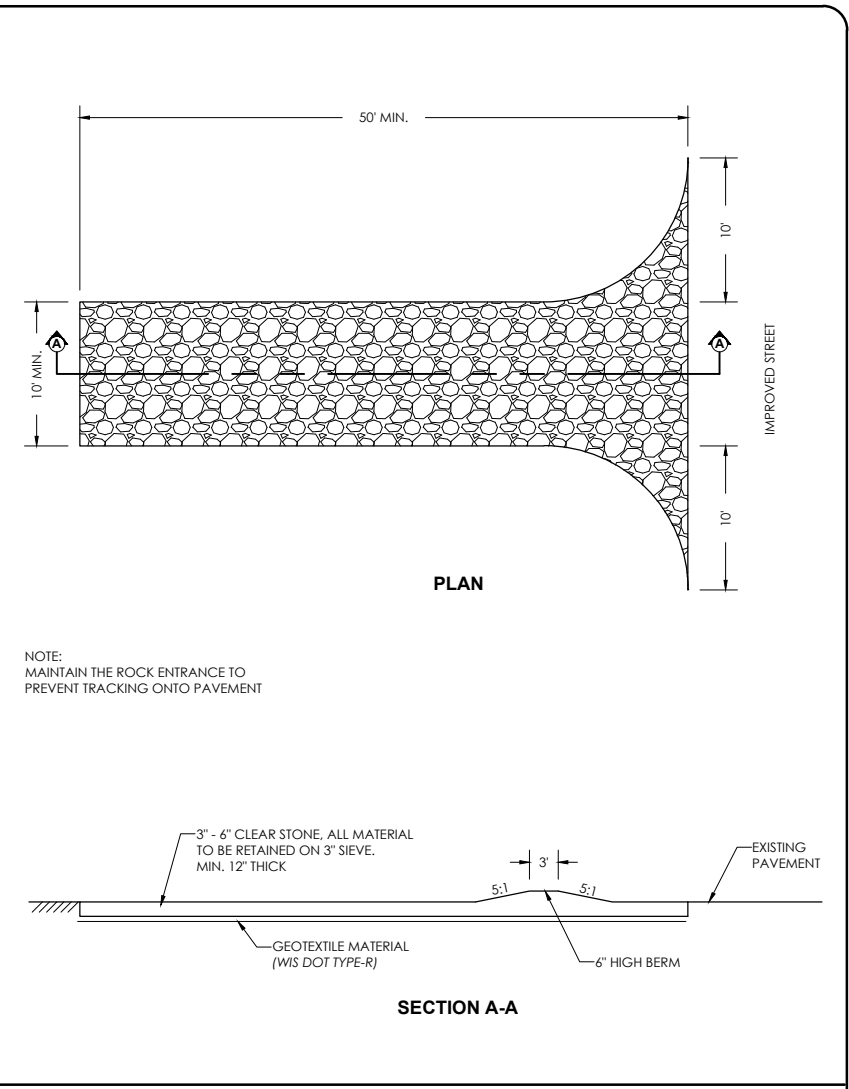
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 Dane County, WI

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 SHEET NO.

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LOG OVERLAP DETAIL
FLAT GROUND INSTALLATION (FIG. B)
CHANNEL INSTALLATION (FIG. C)
SLOPE/CHANNEL INSTALLATION (FIG. A)
ROCK CONSTRUCTION ENTRANCE

TEMPORARY DITCH CHECKS

PURPOSE & OPERATION
 PRODUCTS IN THIS CATEGORY ARE INTENDED FOR USE AT THE BOTTOM OF FILL SLOPES AND IN CHANNELS TO INTERCEPT AND POND SEDIMENT-LADEN RUNOFF. PONDING THE WATER REDUCES THE VELOCITY OF THE INCOMING FLOW AND ALLOWS MOST OF THE SEDIMENTS TO SETTLE OUT. WATER EXITS THE CHECK BY EITHER FILTERING THROUGH OR FLOWING OVER THE TOP.

CONSTRUCTION METHODS
 THIS WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR HIGHWAY AND STRUCTURE CONSTRUCTION, AND THE STANDARD DETAIL DRAWING IN THE WISDOT FACILITY DEVELOPMENT MANUAL, IN ADDITION TO THE ABOVE. TEMPORARY DITCH CHECKS SHALL BE PLACED PERPENDICULAR TO THE FLOW LINE OF THE DITCH AND SHALL EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECKS ARE HIGHER THAN THE LOW POINT ON THE CREST OF THE CHECK. THE INSTALLED MATERIAL SHALL HAVE A MINIMUM HEIGHT OF 10 INCHES ABOVE THE FLOW LINE IN THE INSTALLED CONDITION. ALL PRODUCTS SHALL BE ENTRENCHED A MINIMUM OF 2.0 INCHES ON BARE SOIL. DITCH CHECKS INSTALLED IN A CHANNEL THAT IS CONTINUOUSLY LINED WITH EROSION MAT NEED NOT BE ENTRENCHED IF INSTALLED OVER THE TOP OF THE EROSION MAT. INSTALLATIONS SHALL HAVE STAKES ON THE DOWNSTREAM SIDE OF THE TEMPORARY DITCH CHECK AND SHALL NOT REDUCE THE HEIGHT OF THE TEMPORARY DITCH CHECK. FABRIC TYPE PRODUCTS MAY BE ENTRENCHED WITH A NARROW CHECK SLOT ON THE UPSTREAM SIDE.

APPROVED MANUFACTURED ALTERNATIVES TO THE DEPARTMENT'S DETAILS ARE LISTED BELOW.

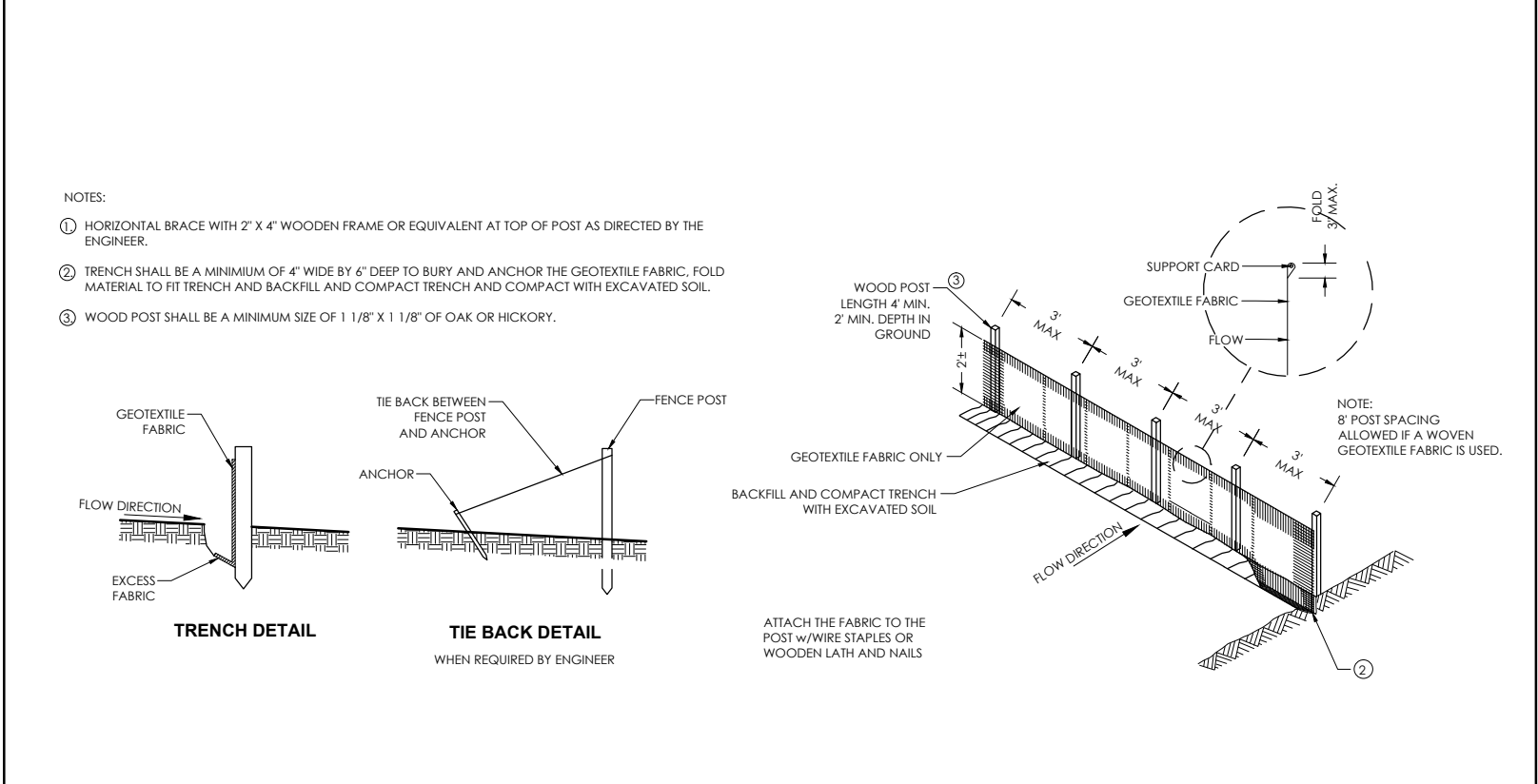
PRODUCT	MANUFACTURER
CURLEX 12 INCH SEDIMENT LOG	AMERICAN EXCELSIOR
CURLEX 20 INCH SEDIMENT LOG	AMERICAN EXCELSIOR
AEC PREMIER 12 INCH WATTLE	AMERICAN EXCELSIOR
AEC PREMIER 20 INCH WATTLE	AMERICAN EXCELSIOR
STENLOG 12	Erosion Control Blanket.com
TRIANGULAR SILT DIKE	TRIANGULAR SILT DIKE
ASPEN XCEL EXCELSIOR LOG	WESTERN EXCELSIOR
DITCH CHEXX	FILIREXX
BIO-D SILT CHECK	RO LANKA
WS-12	NORTH AMERICAN GREEN

INSTALLATION INSTRUCTIONS - LOGS AND WATTLES:

STEP 1 - SITE PREPARATION
 PREPARE SITE TO DESIGN PROFILE AND GRADE. REMOVE DEBRIS, ROCKS, CLODS, ETC. GROUND SURFACE SHOULD BE SMOOTH PRIOR TO INSTALLATION TO ENSURE LOG REMAINS IN CONTACT WITH SLOPE.

STEP 2 - STAPLE SELECTION
 AT A MINIMUM, 1" LONG BY 1" BY 24", STAKES ARE TO BE USED TO SECURE THE LOG TO THE GROUND SURFACE. INSTALLATION IN ROCKY, SANDY OR OTHER LOOSE SOIL MAY REQUIRE LONGER STAKES.

CHANNEL INSTALLATION
 PLACE RECP ALONG CHANNEL TO PROVIDE UPSTREAM AND DOWNSTREAM APRON FOR LOG IDENTICALLY TO SLOPE INSTALLATION. SECURE LOG TO BLANKET, ENSURING LOG REMAINS IN INTIMATE CONTACT WITH THE RECP OVER THE LENGTH OF THE INSTALLATION. A MINIMUM OF ONE FOOT UPSTREAM APRON AND TWO FOOT DOWNSTREAM APRON ARE REQUIRED FOR INSTALLATION. SUBSEQUENT, DOWNSLOPE ROWS OF LOGS SHOULD BE SPACED APPROPRIATELY FOR SITE CONDITIONS TO MINIMIZE ACCELERATION OF FLOW. FURTHER, LOG SEAMS ARE TO BE OFFSET TO ENSURE CONTINUOUS FILTRATION. FIGURE A AND FIGURE C PRESENT A SCHEMATIC OF A CHANNEL INSTALLATION.



SEDIMENT LOG INSTALLATION NOTES
SILT FENCE

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1. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION.
2. SILT FENCE & ROCK CONSTRUCTION ENTRANCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES, INCLUDING CLEARING & GRUBBING.
3. ALL STORM SEWER INLETS SHALL HAVE INLET PROTECTION TYPE-D INSTALLED UPON INLET INSTALLATION UNLESS OTHERWISE SPECIFIED.
4. CONTRACTOR IS RESPONSIBLE FOR WEEKLY DNR INSPECTION REPORTS IN ACCORDANCE WITH NR 216.46(9).
5. ADDITIONAL EROSION CONTROL MEASURES MAY BE ADDED ON AN AS-NEEDED BASIS.
6. THE POND SHALL BE CONSTRUCTED PRIOR TO MASS LAND DISTURBANCE.
7. ANY AREAS WHERE GRADING IS COMPLETE SHALL BE STABILIZED WITH FERTILIZER, SEED, & MULCH AS SOON AS POSSIBLE.
8. ALL BEST MANAGEMENT PRACTICES WILL BE INSTALLED BY THE TIME THE CONSTRUCTION SITE IS CONSIDERED STABILIZED.
9. A COPY OF THIS EROSION CONTROL PLAN SHALL BE KEPT ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
10. STOCKPILES LEFT INACTIVE FOR 7 DAYS SHALL BE SEEDED AND SURROUNDED BY SILT FENCE.
11. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, OR OTHER CONSTRUCTION MATERIALS) SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED BY RUNOFF INTO RECEIVING CHANNEL.
12. EROSION CONTROL MAT CLASS I, TYPE A WILL BE USED IN NON-CHANNEL AREAS AND CLASS I, TYPE B WILL BE USED IN CHANNEL AREAS.
13. ALL DEWATERING PERMITTING, IF REQUIRED, IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH DNR TECHNICAL STANDARD 1061.
14. STREETS SHALL BE SWEEPED AT THE END OF EACH WORK DAY OR AS DIRECTED BY THE MUNICIPALITY.
15. TRACKING PADS SHALL BE USED AT THE CONSTRUCTION ENTRANCE AND EXITS.
16. ALTHOUGH ROCK CONSTRUCTION TRACKING PADS MAY NOT BE SHOWN ON THE PLANS, THE CONTRACTOR SHALL INSTALL THEM AS NECESSARY OR AS DIRECTED BY THE ENGINEER TO MINIMIZE TRACKING ONTO ADJACENT STREETS. THESE PADS ARE CONSIDERED INCIDENTAL TO THE WORK AND WILL NOT BE MEASURED OR PAID FOR SEPARATELY.
17. CONTRACTOR WILL BE RESPONSIBLE FOR ALL DUST CONTROL.
18. POSITIVE DRAINAGE AWAY FROM THE BUILDING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE CONFIRMED BY THE ENGINEER.
19. DOWN SPOUTS SHALL BE DIRECTED IN A SAFE MANNER AND COMPLY WITH ALL LOCAL AND STATE REGULATIONS.
20. ALL FILL PLACED UNDER BUILDING AND PAVED AREAS SHALL BE STRUCTURALLY SOUND.
21. SEDIMENT WILL BE REMOVED FROM BEHIND SEDIMENT FENCES AND BARRIERS BEFORE IT REACHES A DEPTH THAT IS EQUAL TO HALF THE BARRIER'S HEIGHT.
22. BREAKS AND GAPS IN SEDIMENT FENCES AND BARRIERS WILL BE REPAIRED IMMEDIATELY. DECOMPOSING STRAW BALES WILL BE REPLACED (TYPICAL BALE LIFE IS THREE MONTHS).
23. ALL SEDIMENT THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS WILL BE CLEANED UP BEFORE THE END OF THE SAME WORKDAY.
24. ALL INSTALLED EROSION CONTROL PRACTICES WILL BE MAINTAINED UNTIL THE DISTURBED AREAS THEY PROTECT ARE STABILIZED.
25. ALL EROSION CONTROL MAT SHALL BE INSTALLED WITHIN 24 HOURS OF FINAL GRADES BEING ESTABLISHED.

GRADING & EROSION CONTROL NOTES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. FURNISHING, INSTALLING, MAINTAINING, AND REMOVING EROSION AND SEDIMENT CONTROL FACILITIES AND MEASURES.
- B. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL EROSION CONTROL FACILITIES AND MEASURES NECESSARY TO CONTROL EROSION AND SEDIMENTATION AT THE WORK SITE. THESE FACILITIES AND MEASURES MAY OR MAY NOT BE SHOWN ON THE DRAWINGS AND THEIR ABSENCE ON THE DRAWINGS DOES NOT ALLEVIATE THE CONTRACTOR FROM PROVIDING THEM. ANY MEASURES AND FACILITIES SHOWN ON THE DRAWINGS ARE THE MINIMUM ACTIONS REQUIRED.

1.02 REFERENCES

- A. WDNr TECHNICAL STANDARDS - SEE DNR WEBSITE @ <http://dnr.state.wi.us/org/water/wm/nps/stormwater/techstds.htm>
- B. WISCONSIN DEPARTMENT OF TRANSPORTATION, EROSION CONTROL, PRODUCT ACCEPTABILITY LISTS FOR MULTI-MODAL APPLICATIONS PAL, CURRENT EDITION.

1.03 GENERAL

- A. REQUIREMENTS OF WDNr TECHNICAL STANDARDS SHALL BE FOLLOWED AT ALL TIMES.
- B. USE SURFACE WATER AND EROSION CONTROL FACILITIES AND MEASURES THROUGHOUT THE DURATION OF THE CONSTRUCTION ACTIVITY TO CONTROL THE MOVEMENT OF SURFACE WATER AND TO REDUCE THE POTENTIAL FOR EROSION, MAINTAIN THE FACILITIES AND MEASURES UNTIL PERMANENT VEGETATION IS ESTABLISHED.
- C. ERODED SOIL MATERIAL SHALL NOT BE ALLOWED TO LEAVE THE CONSTRUCTION SITE OR TO ENTER A WATERWAY, LAKE, OR WETLAND.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, AND MAINTAINING THE EROSION CONTROL FACILITIES, AND IN GENERAL, SHALL USE CONSTRUCTION PRACTICES THAT MINIMIZE EROSION.
- E. ERODED MATERIAL THAT HAS LEFT THE CONSTRUCTION SITE SHALL BE COLLECTED AND RETURNED TO THE SITE BY THE CONTRACTOR.
- F. PREVENT CONSTRUCTION SITE TRACKING WITH GRAVELED ROADS, ACCESS DRIVES, AND PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC AND PRIVATE ROADWAYS. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING (NOT FLUSHING) BEFORE THE END OF EACH WORKDAY.

1.04 SEQUENCING AND SCHEDULING

- A. CONSTRUCT AND STABILIZE EROSION CONTROL MEASURES FOR DIVERSIONS OR OUTLETS PRIOR TO ANY GRADING OR DISTURBANCE OF THE CONSTRUCTION SITE.
- B. INSTALL FILTER FABRIC, FENCES AND BARRIERS PRIOR TO DISTURBING THE AREA.
- C. TURF AREAS THAT HAVE BEEN COMPLETED TO FINISH GRADE SHALL BE STABILIZED WITH PERMANENT SEEDING WITHIN SEVEN DAYS. TURF AREAS WHERE ACTIVITY HAS CEASED AND THAT WILL REMAIN EXPOSED FOR MORE THAN 20 DAYS BEFORE ACTIVITY RESUMES AND SOIL STOCKPILES SHALL BE STABILIZED WITH TEMPORARY SEEDING OR SOIL STABILIZER.
- D. OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO DISTURBANCE OF THE CONSTRUCTION SITE, AS APPLICABLE.

PART 2 - PRODUCTS

2.01 SILT FENCE

- FABRIC SHALL BE SHALL A WOVEN OR NONWOVEN POLYESTER, POLYPROPYLENE, STABILIZED NYLON, OR POLYETHYLENE GEOTEXTILE WITH THE FOLLOWING MINIMUM PROPERTIES:

PROPERTY	TEST METHOD	REQUIREMENT*
GRAB TENSILE STRENGTH, LBS. MIN. MACHINE DIRECTION	ASTM D 4632	120
CROSS DIRECTION		100
MAX. APPARENT OPENING SIZE, US SIEVE	ASTM D 4751	NO. 30
PERMITTIVITY, SEC-1, MIN.	ASTM D 4491	0.05
MIN. UV STABILITY AT 500 HRS, %	ASTM D 4355	70%

* MINIMUM OR MAXIMUM AVERAGE ROLL VALUES.

2.02 TEMPORARY SEED

- A. AREAS NEEDING PROTECTION DURING PERIODS WHEN PERMANENT SEEDING IS NOT APPLIED SHALL BE SEEDED WITH ANNUAL SPECIES FOR TEMPORARY PROTECTION. PROVIDE SPECIES AS FOLLOWS:

SPECIES	% PURITY
OATS	98
CEREAL RYE	97
WINTER WHEAT	95
ANNUAL RYEGRASS	97

- B. PROVIDE OATS FOR SPRING AND SUMMER. PROVIDE CEREAL RYE, WINTER WHEAT, OR ANNUAL RYEGRASS FOR FALL SEEDING.

2.03 EROSION MAT

- A. ALL EROSION MAT PRODUCTS SHALL BE OF THE CLASS AND TYPE INDICATED AND SHALL BE CHOSEN FROM THE EROSION CONTROL PRODUCT ACCEPTABILITY LISTS.

- B. CLASS I: A SHORT-TERM DURATION (SIX MONTHS OR GREATER), LIGHT DUTY, ORGANIC MAT. NETTING SHALL BE NON-ORGANIC, PHOTODEGRADABLE OR BIODEGRADABLE NETTING. THE WEIGHT OF THE NETTING SHALL NOT EXCEED 15% OF THE TOTAL BLANKET WEIGHT. THE NETTING SHALL BE SUFFICIENTLY BONDED TO THE PARENT MATERIAL TO PREVENT SEPARATION FOR THE LIFE OF THE PRODUCT.

1. TYPE A: A NETTED PRODUCT FOR USE ON SLOPES 2.5 TO 1 OR FLATTER WITH A MINIMUM PRODUCT PERMISSIBLE SHEAR STRESS OF 50 PA (1.0 LBS/FT²). NOT TO BE USED IN CHANNELS.
2. TYPE B: A DOUBLE NETTED PRODUCT FOR USE ON SLOPES 2 TO 1 OR FLATTER OR IN CHANNELS WITH A MINIMUM PRODUCT PERMISSIBLE SHEAR STRESS OF 70 PA (1.5 LBS/FT²).

- C. STAPLES: U-SHAPED NO. 11 GAUGE OR GREATER WIRE WITH A SPAN WIDTH OF ONE TO TWO INCHES AND A LENGTH OF NOT LESS THAN 6 INCHES FOR FIRM SOIL AND 12 INCHES FOR LOOSE SOIL.

2.04 INLET PROTECTION

- A. TYPE A: USE AROUND FIELD INLETS UNTIL PERMANENT STABILIZATION METHODS HAVE BEEN ESTABLISHED. USE ON PAVEMENT INLETS PRIOR TO INSTALLATION OF CURB AND GUTTER OR PAVEMENT.
- B. TYPE B: USE ON INLETS WITHOUT CURB HEAD AFTER CASTING AND GRATE ARE IN PLACE.
- C. TYPE C: USE ON STREET INLETS WITH CURB HEAD.
- D. TYPE D: USE IN AREAS WHERE OTHER TYPED OF INLET PROTECTION ARE INCOMPATIBLE WITH ROADWAY AND TRAFFIC CONDITIONS CAUSING POSSIBLE SAFETY HAZARDS WHEN PONDING OCCURS AT INLET.
- E. GEOTEXTILE: TYPE FF MEETING THE REQUIREMENTS OF THE LATEST EDITION OF WISDOT PAL.

PART 3 - EXECUTION

3.01 INSTALLATION OF DIVERSIONS

- A. TEMPORARY DIVERSIONS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH WDNr CONSERVATION PRACTICE STANDARD, CONSTRUCTION SITE DIVERSION (1066).

3.02 INSTALLATION OF SILT FENCE AND STRAW BALE BARRIERS

- A. INSTALL SILT FENCE IN ACCORDANCE WITH THE DRAWINGS AND WDNr CONSERVATION PRACTICE STANDARD, SILT FENCE (1056).
- B. SILT FENCE SHALL BE PLACED ON THE CONTOUR TO THE EXTENT PRACTICABLE. PLACE FENCES PARALLEL TO THE SLOPE WITH THE ENDS OF THE FENCE TURNED UPSLOPE A DISTANCE OF ONE TO TWO FEET. THE PARALLEL SPACING SHALL NOT EXCEED THE MAXIMUM SLOPE LENGTHS AS INDICATED IN THE FOLLOWING TABLE:

FENCE AND BARRIER SPACING	
SLOPE	SPACING
<2%	100'
2 - 5%	75'
5 - 10%	50'
10 - 33%	25'
>33%	20'

3.03 TEMPORARY SEEDING

- A. PROVIDE A SEEDBED OF LOOSE SOIL TO A MINIMUM DEPTH OF 2 INCHES.
- B. APPLY SEED EVENLY AT THE RATE SHOWN IN THE FOLLOWING TABLE. RAKE OR DRAG TO COVER THE SEED TO A DEPTH OF 1/4 INCH.

SPECIES	LBS./ACRE
OATS	131
CEREAL RYE	131
WINTER WHEAT	131
ANNUAL RYEGRASS	80

3.04 EROSION MAT INSTALLATION

- A. REMOVE STONES, CLOUDS, STICKS, OR OTHER FOREIGN MATERIAL THAT WOULD DAMAGE THE MAT OR INTERFERE WITH THE MAT BEARING COMPLETELY ON THE SURFACE.
- B. INSTALL EROSION MAT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- C. AFTER SEEDING HAS BEEN COMPLETED, ROLL BLANKETS OUT PARALLEL TO THE DIRECTION OF WATER FLOW, WITH THE NETTING ON TOP. SPREAD THE BLANKETS WITHOUT STRETCHING, MAKING SURE THE FIBERS ARE IN CONTACT WITH THE SOIL. OVERLAP ADJACENT STRIPS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. OVERLAP STRIP ENDS A MINIMUM OF 10 INCHES WITH THE UPGRADE STRIP ON TOP. BURY THE UPGRADE END OF EACH STRIP IN A VERTICAL TRENCH AT LEAST 6 INCHES DEEP.
- D. STAPLE THE MAT STRIPS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. STAPLE LONGITUDINAL OVERLAPS AND OUTER EDGES AT MAXIMUM INTERVALS OF 3 FEET. STAPLE STRIP ENDS AT MAXIMUM INTERVALS OF 16 INCHES. PLACE STAPLES THROUGHOUT THE MAT AT MAXIMUM 3-FOOT INTERVALS. INSERT STAPLES FLUSH WITH THE GROUND SURFACE.

3.05 DITCH EROSION CONTROL

- A. THE FOLLOWING EROSION CONTROL MEASURES ARE MINIMUM REQUIREMENTS FOR ALL DITCHES. THE DRAWINGS MAY INCLUDE MORE SPECIFIC MEASURES.

DITCH EROSION CONTROL		
SLOPE RANGE	METHOD	BALE CHECKS
0 - 1%	SEED AND MULCH	NONE
1% - 4%	SEED AND MULCH WITH EROSION MAT	1% - 2%: EVERY 200' 2% - 4%: EVERY 100'
4% - 6%	STAKED SOD	EVERY 75'
>6%	STAKED SOD AND/OR RIPRAP AS SPECIFIED BY ENGINEER ON DRAWINGS	EVERY 75' FOR SOD

3.06 INSTALLATION OF OTHER FACILITIES

- A. INLET PROTECTION BARRIERS, CHANNEL STABILIZATION, GRASSED WATERWAYS, ROCK LINED WATERWAYS, SEDIMENTS TRAPS, SEDIMENT BASINS, AND OTHER FORMS OF EROSION CONTROL MEASURES SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH WDNr TECHNICAL STANDARDS.

3.07 MAINTENANCE

- A. INSPECT DIVERSIONS WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING PERIODS OF PROLONGED RAINFALL, UNTIL THE VEGETATIVE COVER IS STABILIZED. MAKE NECESSARY REPAIRS IMMEDIATELY.
- B. INSPECT FILTER FABRIC FENCES AND BARRIERS WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING PERIODS OF PROLONGED RAINFALL. NECESSARY REPAIRS OR REPLACEMENT SHALL BE MADE IMMEDIATELY. REMOVE SEDIMENT DEPOSITS WHEN DEPOSITS REACH ONE-HALF THE HEIGHT OF THE FENCE. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR REPLACING FABRIC DUE TO WEATHERING.
- C. INSPECT STRAW BALE FENCES AND BARRIERS WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING PERIODS OF PROLONGED RAINFALL. NECESSARY REPAIRS OR REPLACEMENT SHALL BE MADE IMMEDIATELY. REMOVE SEDIMENT DEPOSITS WHEN DEPOSITS REACH ONE-THIRD THE HEIGHT OF THE BALES. REPLACE BALES AFTER THREE MONTHS.
- D. INSPECT ALL SEEDING, SOD, MULCHES, MATS AND NETS WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING PERIODS OF PROLONGED RAINFALL. ADDITIONAL MULCH, NETTING OR MATTING SHALL BE APPLIED IMMEDIATELY WHEN NECESSARY TO MAINTAIN SUITABLE COVERAGE. MAKE INSPECTIONS UNTIL VEGETATIVE COVER IS ESTABLISHED. WATER SEEDING AND SOD WHEN NECESSARY TO PROMOTE ESTABLISHMENT.
- E. ALL OTHER SOIL EROSION CONTROL MEASURES SHOULD BE INSPECTED AND REPAIRED IMMEDIATELY, IF REQUIRED, WITHIN 24 HOURS AFTER STORM EVENT OR DAILY DURING PERIODS OF PROLONGED RAINFALL.

3.08 REMOVAL

- A. AFTER FINAL VEGETATION IS ESTABLISHED, REMOVE BALES, SILT FENCES, DITCH CHECKS, DIVERSIONS, AND OTHER EROSION CONTROL FACILITIES. RESTORE AREAS DISTURBED BY THE REMOVALS.

3.09 MONITORING FOR WPDES PERMIT

- A. UNLESS INDICATED OTHERWISE WITHIN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MONITORING REQUIREMENTS OF THE WPDES PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- B. EROSION AND SEDIMENT CONTROLS SHALL BE ROUTINELY INSPECTED AT LEAST EVERY SEVEN DAYS, AND WITHIN 24 HOURS AFTER A PRECIPITATION EVENT OF 0.5 INCHES OR GREATER. WEEKLY WRITTEN REPORTS OF ALL INSPECTIONS SHALL BE MAINTAINED AND SUBMITTED TO THE ENGINEER. THE REPORTS SHALL CONTAIN THE FOLLOWING INFORMATION:
 1. DATE, TIME, AND EXACT PLACE OF INSPECTION.
 2. NAME(S) OF INDIVIDUAL(S) PERFORMING INSPECTION.
 3. AN ASSESSMENT OF THE CONDITION OF EROSION AND SEDIMENT CONTROLS.
 4. A DESCRIPTION OF ANY EROSION AND SEDIMENT CONTROL IMPLEMENTATION AND MAINTENANCE PERFORMED.
 5. A DESCRIPTION OF THE SITES PRESENT PHASE OF CONSTRUCTION.



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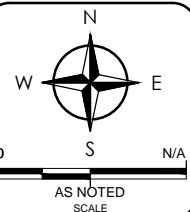
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Terra Construction Site Development

City of Madison
Dane County, WI

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EROSION CONTROL SPECIFICATIONS



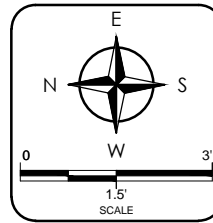
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 Harmony Construction Management
 Terra Construction Site Development

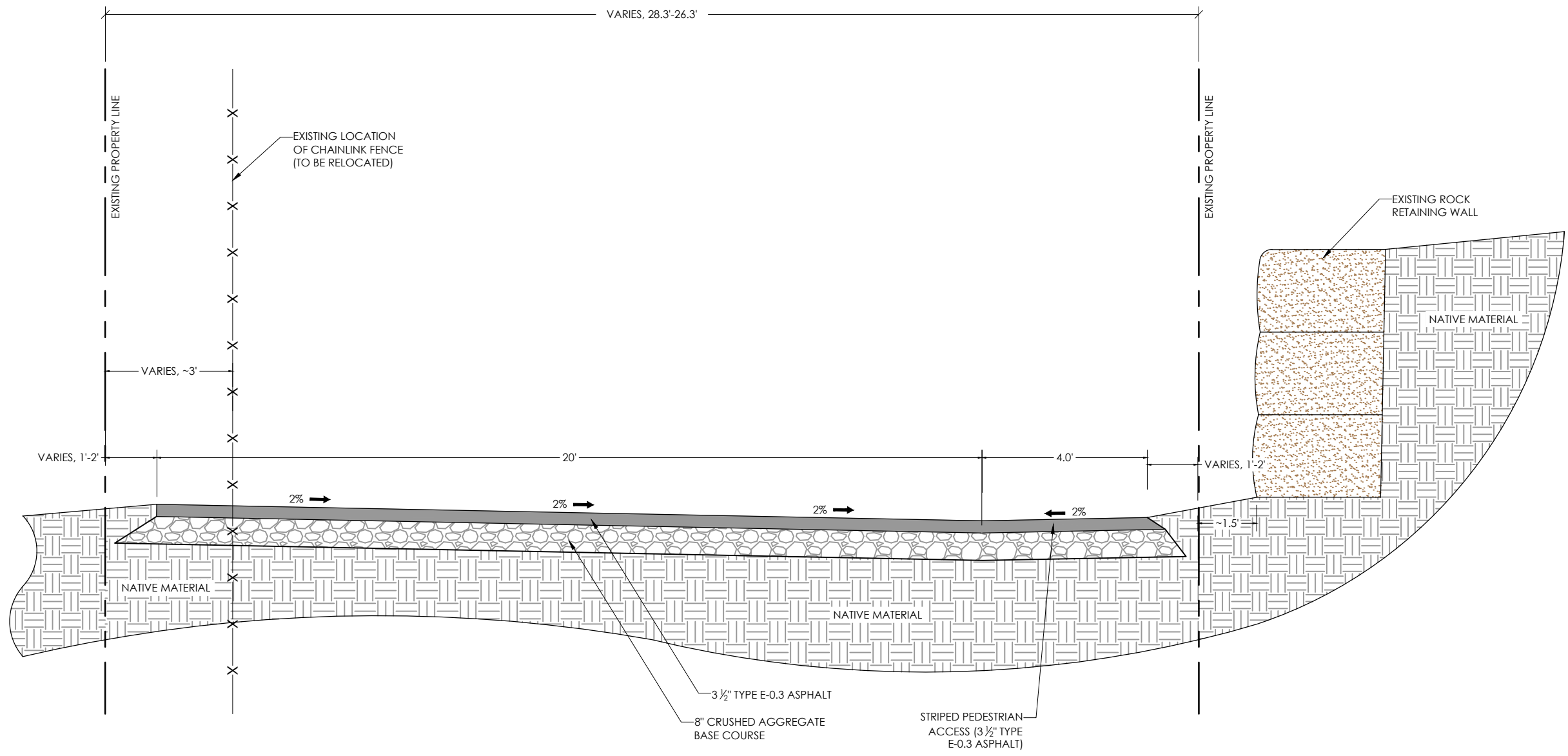
City of Madison
 Dane County, WI

REVISIONS	NO.	BY	DATE
CITY SUBMITTAL	1	EDB	12/18/2013



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DATE	12/18/2013
GEC FILE NO.	2-0513-164
SHEET NO.	

C7.0



DRIVEWAY CROSS SECTION

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CALL DIGGERS HOTLINE 1-800-242-8511

Wis Statute 182.0175 (1974)
Requires Min. 3 Work Days Notice Before You Excavate

- NOTES:**
1. ALL EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
 2. ALL GENERAL NOTES FOUND ON SHEET G1.1.



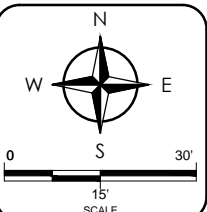
General Engineering Company
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PROPOSED LANDSCAPING PLAN
 Harmony Construction Management
 Terra Construction Site Development

City of Madison
 Dane County, WI

NO.	DATE	BY	REVISIONS
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PLANT LIST

KEY	COMMON NAME (BOTANICAL NAME)	PLANTING SIZE (Inches)	COMMENTS
SHRUBS			
AP	ABBOTSWOOD FLOWERING POTENTILLA (POTENTILLA FRUTICOSA 'ABBOTSWOOD')	18-24	3 ½' O/C WHITE FLOWER
BD	BAILEY DOGWOOD (CORNUS SERICEA 'BAILEY')	24-30	6½' O/C
GF	GOLDFLAME SPIREA (SPRAEA x BUMALDA 'GOLDFLAME')	18-24	3½' O/C
GN	GOLDEN NINEBARK 'GOLDEN DARTS' (PHYSOCARPUS OPULIFOLIUS 'DARTS GOLD')	18-24	5½' O/C
GS	GLOBE BLUE SPRUCE (PICEA PUNGENS 'GLAUCA GLOBOSA')	18-24	4' O/C
JC	BLUE CHIP JUNIPER (JUNIPERUS HORIZONTALIS 'BLUE CHIP')	18-24	6' O/C
JS	BLUE STAR JUNIPER (JUNIPERUS SQUAMATA 'BLUE STAR')	18-24	3½' O/C, BLUE-GREEN NEEDLES
JU	MOUNTBATTEN UPRIGHT JUNIPER (JUNIPERUS CHINENSIS 'MOUNTBATTEN')	3'-4' HT	4' O/C, GRAY-GREEN NEEDLES
ND	DIABLO NINEBARK (PHYSOCARPUS OPULIFOLIUS 'MONLO')	18-24	5 O/C, RED-PURPLE FOLIAGE SUMMER CREAMY-WHITE FLOWERS
RH	'PJM-HYBRID' RHODODENDRON (RHODODENDRON 'PJM-HYBRID')	18-24	4' O/C, BROADLEAF EVERGREEN, FLOWERS
WH	'HAKURO NISHIKI' DWARF WILLOW (SALIX INTEGRAL 'HAKURO HISHIKI')	30-36	7' O/C, TRICOLOR LEAVES

* Shrubs shown in container root ball condition at time of planting.

TREES

CH	'PRAIRIE PRIDE' COMMON HACKBERRY (CELTIS OCCIDENTALIS 'PRAIRIE PRIDE')	2½" CAL.	YELLOW FALL COLOR
CS	'CLEVELAND SELECT' ORNAMENTAL PEAR (PYRUS CALLERYANA 'CLEVELAND SELECT')	2"-CAL.	WHITE FLOWER, RED FALL COLOR
FC	'CELEBRATION' FREEMAN MAPLE (ACER x FREEMANII 'CELEBRATION')	2½"-CAL.	ORANGE FALL COLOR
FW	WHITE FIR (ABIES CONCOLOR)	4'-5' HT.	14' O/C
FM	'AUTUMN BLAZE' FREEMAN MAPLE (ACER x FREEMANII 'AUTUMN BLAZE')	2½" -CAL.	ORANGE-RED FALL COLOR
GO	GINKGO (MALE PLANT) (GINKGO BILOBA var. 'AUTUMN GOLD')	2½"-CAL.	GOLDEN YELLOW FALL COLOR YELLOW FALL COLOR
IH	IMPERIAL HONEYLOCUST (GLEDTISIA TRIACANTHOS INERMIS 'IMPERIAL')	2½"-CAL.	EARLY RED FALL COLOR
MA	'AUTUMN FLAME' RED MAPLE (ACER RUBRUM 'AUTUMN FLAME')	2½"-CAL.	DP. RED TO REDDISH PURPLE FALL COLOR
MO	'OCTOBER GLORY' RED MAPLE (ACER RUBRUM 'OCTOBER GLORY')	2½"-CAL.	ROSE FLOWER-LATE, REDDISH FALL COLOR
MP	'PRAIRIFIRE' FLOWERING CRABAPPLE (MALUS x 'PRAIRIFIRE')	2"-CAL.	WHITE FLOWERS, NO FRUITS
PW	WHITE PINE (PINUS STROBUS)	5'-6' HT.	15' O/C
RB	'HERITAGE' RIVER BIRCH (BETULA NIGRA 'HERITAGE')	8'-10' HT.	MULTI (3+) TRUNK
SS	'SPRING SNOW' FLOWERING CRABAPPLE (MALUS x 'SPRING SNOW')	2"-CAL.	

* Trees shown in B&B (balled and Burlapped) root condition at time of planting.

ORNAMENTAL GRASSES

Key	Common Name (Botanical Name)	Spacing (Inches O/C)	Comments
BOG	BLUE OAT GRASS (HELICTOTRICHON SEMPERVIRENS)	30	LEAVES-2' HT., SPIKES OF SILVERY BLUE LEAVES
KFR	'KARL FOERSTER' FEATHER REED GRASS (CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER')	30	5'-6' HT. SEED HEADS GOLD TO SILVER
LTB	LITTLE BLUESTEM 'THE BLUES' (SCHIZACHYRIUM SCOPARIUM 'THE BLUES')	30	2'-3' HT, CRIMSON-RED FALL COLOR
PRD	PRAIRIE DROPSEED (SPOROBOLUS HETEROLEPIS) (PENNISETUM SETACEUM 'RUBRUM')	24	2' HT

* Ornamental grasses shown as gallon container size at time of planting.

LANDSCAPING POINTS:

Foundation Plantings: 163 pts.

Interior Parking Lot Plantings: 230 pts.

Site 'Green Space' Development: 350 pts.
(This area primarily utilized as screening along east property line.)

LANDSCAPE SPECIFICATIONS

A. QUALITY ASSURANCE

- All trees, shrubs and planting material shall meet or exceed the specifications of Federal, State, and County laws requiring inspection for plant disease and insect control.
- Quality and size shall conform to the current edition of "horticultural Standards" for number one grade nursery stock as adopted by the American Association of Nurserymen.
- All plants shall be true to name. In all cases, botanical names shall take precedence over common names.
- All plant materials shall conform to varieties and sizes listed on plant "Key" list. Trees and shrubs of larger size may be used if acceptable to the owner, and if sizes of roots or balls are increased proportionately.
- No substitutions without written approval of owner.
- Trees and shrubs shall be grown in a recognized nursery in accordance with standard horticultural practice. Provide healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sunscald, injuries, abrasions, or disfigurement.
- The owner, or owner's representative, reserves the right to inspect trees and shrubs at site before planting, for compliance with requirements for name, variety, size, and quality. Maintain labels and/or plant identification tags on all plants at time of planting. Do not remove tags after planting.
- Landscaping work shall be performed by personnel familiar and experienced with planting procedures. Work shall be carried out under the supervision of a qualified planting foreman.

B. DELIVERY, STORAGE, AND HANDLING

- Do not prune prior to delivery. Do not bed or bind-tie trees or shrubs in such a manner as to damage bark, break branches, or destroy the natural shape. Provide protective cover during delivery.
- Deliver trees and shrubs only after preparations for planting have been completed and plant immediately. If planting is delayed more than 6 hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist.
- Planting operations shall be conducted under favorable weather conditions.

C. SITE INVESTIGATION

- Contractor shall be completely familiar with all conditions at site prior to the execution of Contractor's work.
- Prior to all landscape work, Contractor will inspect the installed work of all other trades, and verify that all such work is complete prior to commencing installation.
- Contractor will determine location of underground utilities and perform work in a manner, which will avoid possible damage.

D. RETAINING WALLS (IF APPLICABLE)

- All measurements, locations, and figures shown are approximate, used as reference and are to field verified.
- All retaining walls, unless shown otherwise, are to be constructed of boulder rock material, native to the area.
- A pervious soil retainer fabric, suitable for boulder wall construction, shall be installed behind boulder walls at all locations.
- Contractor shall be proficient at boulder wall construction and have previous work experience at boulder wall construction.
- Contractor shall provide references of site locations of boulder wall construction projects previously completed, to landscape architect, 30 days prior to commencement of boulder wall work.
- Contractor to visit site prior to providing an estimate of installation costs.

E. INSTALLATION OF SHRUBS AND TREES

- Plant nursery stock upon delivery to the site. If this is not feasible, regularly water all nursery stock and place them in a cool area protected from sun and drying winds.
- Dig holes no deeper than the level on which the bottom of the root ball will set. Place trees and shrubs in planting pits with root collar slightly above grade when installing.
- Fertilize all trees and shrubs with a commercial slow-release fertilizer tablet or packet, installed to manufacturer's specifications.
- Backfill, to a minimum of 3-times the diameter of the root ball, all trees and shrubs with a soil mix rich in organic matter. Water in all plant material accordingly to provide sufficient moisture for plants during installation.
- Do not stake trees, unless exposure to windy conditions requires initial staking. Remove stakes within one year, or as conditions dictate.
- Where trees are located independently in lawn areas, provide a 5-foot diameter mulch bed around each tree. Mulch around trees with a 3-inch depth of shredded hardwood bark mulch, free of large chunks, spread evenly. Keep mulch away from root collar of tree. Do not install a bed divider around tree nor weed barrier fabric under mulch.

F. SHRUB AND TREE PLANTING BEDS

- Mulching material, for planting beds adjacent foundation and retaining walls, where shown, is to be #1 multi-colored washed stone, installed and spread evenly at a depth of 2 ¼ to 3 inches.
- Install organic shredded hardwood bark mulch in parking lot planting bed where 'Prairie Dropseed' is located, free of large chunks, installed and spread evenly at a depth of 2½ to 3 inches. Do not install weed barrier fabric in organic mulch areas. Also install shredded hardwood bark mulch along and around 'Bailey Dogwood', located to east of parking lot - width of mulch area at 5-feet.
- A pervious weed barrier fabric, DeWitt Co. "Pro-5", or similar product of equal quality, shall be installed under washed stone mulch in all shrub planting bed areas shown.
- Where applicable, planting bed edging to be Valley View 'Black Diamond' polyethylene bed divider, installed to manufacturer's specifications.

G. PERENNIAL AND/OR ORNAMENTAL GRASSES PLANTINGS

- If existing soil is inferior for sustainable plant growth, remove existing soil and replace with a rich organic soil, including peat moss, bone meal (5-6 pounds per 100 sq.ft.), and any necessary soil additives to insure rich organic matter for sustainable plant growth. Avoid manure, as it contains weed seeds. Blend and mix soil, then spread evenly to final grade, providing sufficient depth for backfilling and spreading of organic mulch.
- Sustainable perennial plant soil shall be installed at a minimum depth of 8-inches. For ornamental grasses, soil shall be backfilled at a minimum depth of 15-18 inches.

H. ANNUAL PLANTING BEDS (IF APPLICABLE)

- Where existing soil is inferior for sustainable plant growth, remove existing soil and replace with a rich organic soil, at a minimum depth of 6-inches.
- Install annuals according to spacing shown on plant list.
- Prior to, or after planting annuals, apply a 5-10-5 or 10-10-10 commercial fertilizer to soil.
- Water in all plants and apply under foliage.
- After installation and watering, apply the pre-emergent herbicide "PREEN", by Greenview, according to manufacturer's specifications, around plants and throughout planting bed.

I. LAWN AREAS

- Provide topsoil, if contract requires.
- Topsoil shall be black loam native to the area, without subsoil, stones, lumps, clods of hard earth, plants, roots, sticks, and other extraneous materials.
- Stockpiled topsoil meeting the requirements stated herein may be used.
- Place topsoil and spread uniformly over all lawn areas to a minimum depth of 6 inches. Do not place topsoil while in a frozen or muddy condition.
- Rake topsoil until surface is friable, smooth, and of uniformly fine texture immediately prior to sodding and/or seeding. Correct all soft spots and irregularities in grade.
- Just prior to sodding and/or seeding, spread and rake lawn fertilizer into topsoil at a rate of 10 lbs. per 1,000 sq. ft. Commercial lawn fertilizer shall be a complete fertilizer partially derived from organic sources and containing 10% nitrogen, 10% phosphoric acid, and 10% potash, all by weight as specified.
- Blend in new soil to match existing grades of adjacent properties, where applicable.
- Seed all new and disturbed lawn areas. If sod is called for in contract, apply the following:
 - Sod shall be vigorous, dense, well-rooted, healthy turf, composed of a minimum of 50% Kentucky Bluegrass mix, grown in the general locality where it is to be used, approximately 2 inches in height. Sod shall be free of debris, free from disease, insect pests, stones, weeds, and other undesirable grasses.
 - Lay sod within 24 hours from time of stripping. Do not plant dormant sod or if ground is frozen.
 - Sod pieces shall be fitted together tightly and shall be firmed down by tamping or rolling lightly to ensure contact with subgrade. Sod joints shall alternate whenever possible.
 - Sod on slope steeper than 2 to 1 shall be held in place by wooden pins, about 1 square and 6 long, driven through the sod into the soil until they are flush with the top of the sod.
 - All sodded areas shall be watered adequately with a fine spray to prevent drying and shrinking of sod.
 - The completed sodded surfaces shall be true to finished grade, even and firm at all points.
 - Contractor is responsible to top dress and re-sod any excessive cracks which appear upon shrinkage, if and when applicable, during the initial growing season.
- Seeding:
 - Where seeding is required, seed blend shall be "Madison Parks Lawn Seed Mix", blended by Olds Seed Company of Madison, Wisconsin, or similar blend of equal proportion and germination rate.
 - Sow uniformly at a minimum rate of 6 lbs. per 1,000 sq. ft.
 - After seeding, apply mulch consisting of clean marsh hay, or straw, as free of weeds as possible, uniformly over all seeded areas.
- Protect all sodded and/or seeded areas, as necessary, to prevent trampling and/or damage, by erecting temporary fences, barriers, signs, etc.

J. PROJECT WARRANTY

- Trees and Shrubs:
 - Guarantee trees and shrubs, for a period of one year after date of installation, against defect including death and unsatisfactory growth, except for abuse or damage by others.
 - Replace trees and shrubs, which are in doubtful condition, by the end of warranty period.
- Perennials and Ornamental Grasses:
 - Guarantee all perennials and ornamental grasses for a period of 90 days following installation. Replace any dead plants by the end of warranty period.
- Annuals:
 - Guarantee all annuals for a period of 60 days following installation. Replace any dead plants by the end of warranty period.
- Lawn Areas (Sodding and Seeding):
 - Lawn areas placed during the spring planting season shall be guaranteed for ninety (90) days following final placement.
 - Lawn areas placed during fall planting season shall be guaranteed through July 1st of the following year.
 - Remove and replace all lawn areas found dead or not in satisfactory growth. Replace lawn areas with same turf grass blend as originally specified. Cost of replacement shall be born by the Contractor, except replacement required due to loss or damage from Owner occupancy, vandalism, or natural disaster.
 - Where maintenance is taken over by Owner during guarantee period, Contractor shall inspect, periodically, maintenance operation of Owner, and shall promptly report to Owner any method, practices, or operations which he or she considers unsatisfactory.



General Engineering Company

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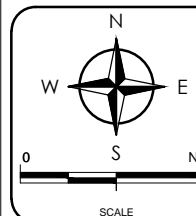
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LANDSCAPING SPECIFICATIONS
Harmony Construction Management
Terra Construction Site Development

City of Madison
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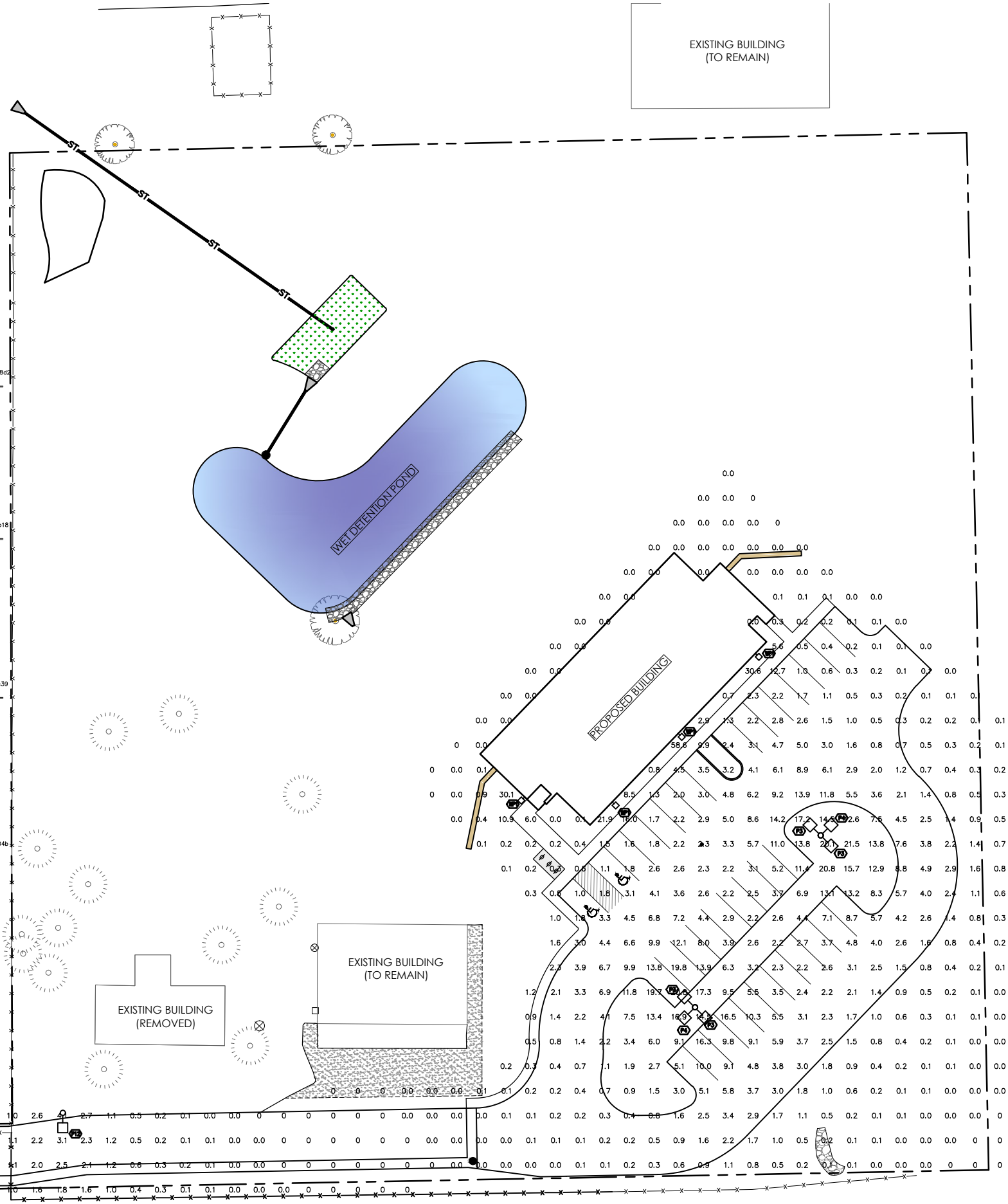
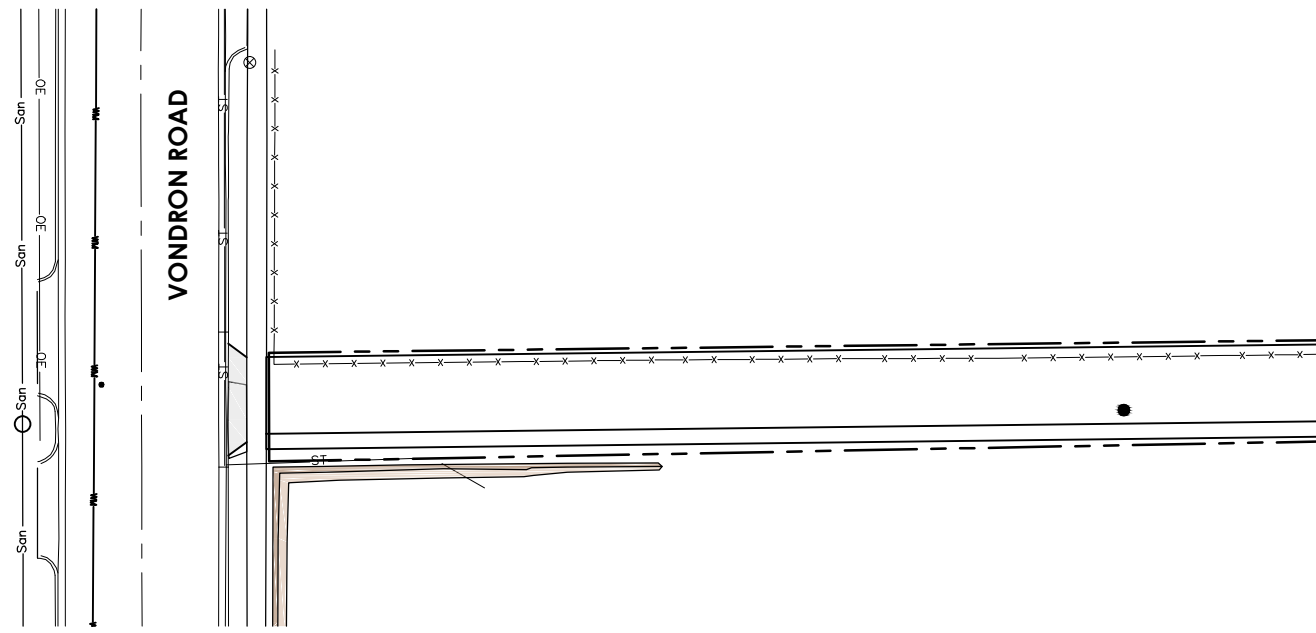
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CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	NOTE 1	NOTE 2	NOTE 3	QUANTITY
P3		(1) MH350W/U/ED28/PS	Area Luminaire, 350W MH, High Performance SR3 Reflector, Full Cutoff MEETS THE "NIGHTTIME FRIENDLY" CRITERIA	ELECTRONIC	POLE	Lithonia Lighting, KAD 350M SR3 (PULSE START)	120V 1P 2W	ONE 350-WATT CLEAR ED-28 METAL HALIDE, HORIZONTAL POSITION.		1/31/2008 5/11/2009 ACUTY BRANDS LIGHTING CONYERS LAB TYPE III, MEDIUM, FULL CUTOFF, BUG RATING: B4 - U0 - G4 0, 0 METAL HALIDE 350 33300 Arm Mounted KAD 13b49d53-a86c-4bfe-8ba5-e3b28e12a8d4 www.lithonia.com/visual/es/es.asp?file=OUTDOOR Area & Site Light - Type III 55	4
P4		(1) MH320W/U/ED28/PS	Area Luminaire, 320W MH, High Performance SR4SC Sharp Cutoff Reflector, Full Cutoff MEETS THE "NIGHTTIME FRIENDLY" CRITERIA	ELECTRONIC	POLE	Lithonia Lighting, KAD 320M SR4SC (PULSE START)	120V 1P 2W	ONE 320-WATT CLEAR ED-28 METAL HALIDE, HORIZONTAL POSITION.		1/31/2008 5/11/2009 ACUTY BRANDS LIGHTING CONYERS LAB TYPE IV, VERY SHORT, FULL CUTOFF, BUG RATING: B1 - U0 - G2 0, 0 METAL HALIDE 320 29700 Arm Mounted KAD fc76880c-1b0c-4eb1-a043-9915142adb18 www.lithonia.com/visual/es/es.asp?file=OUTDOOR Area & Site Light - Type IV 29	2
P12		(1) LU150/55	Area Luminaire, 150W HPS, High Performance SR4SC Sharp Cutoff Reflector, Full Cutoff MEETS THE "NIGHTTIME FRIENDLY" CRITERIA	ELECTRONIC	POLE	Lithonia Lighting, KAD 150S SR4SC	120V 1P 2W	ONE 150-WATT CLEAR ET-23.5 HIGH PRESSURE SODIUM, HORIZONTAL POSITION.		1/31/2008 9/4/2008 ACUTY BRANDS LIGHTING CONYERS LAB TYPE IV, VERY SHORT, FULL CUTOFF, BUG RATING: B1 - U0 - G2 0, 0 HIGH PRESSURE SODIUM 150 16000 Arm Mounted KAD 3f754c27-187c-4fc4-9ec3-c5bfe2694e39 www.lithonia.com/visual/es/es.asp?file=OUTDOOR Area & Site Light - Type IV 30	1
WP1		(1) MP150/U/MED	BUILDING MOUNTED LUMINAIRE WITH VERTICAL LAMP ORIENTATION (150 WATT MH MEDIUM BASE LAMP)	ELECTRONIC	WALL	Lithonia Lighting, TW1 150M	120V 1P 2W	ONE 150-WATT CLEAR ET-23.5 HIGH PRESSURE SODIUM, VERTICAL BASE UP POS.	M102	9/28/2009 10/11/2010 ACUTY BRANDS LIGHTING CONYERS LAB TYPE III, VERY SHORT, FULL CUTOFF, BUG RATING: B2 - U0 - G1 0, 0 METAL HALIDE PULSE START (BELOW 250W) 150 12900 Wall TW1 baf19893-8342-475c-94a2-c1abff03404b	4



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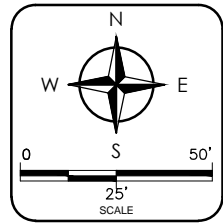
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LIGHTING PLAN

Harmony Construction Management
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City of Madison
Dane County, WI

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