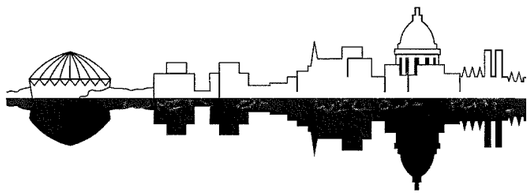


*Madison, Wisconsin*

# CITY OF MADISON

## CITY ENGINEERING DIVISION
## DEPARTMENT OF PUBLIC WORKS

# SANITARY SEWER EXTENSION

## THE WILLOWS – OFFSITE UTILITIES ONLY

*PROJECT NO. 10513*

*CONTRACT NO. 2419*

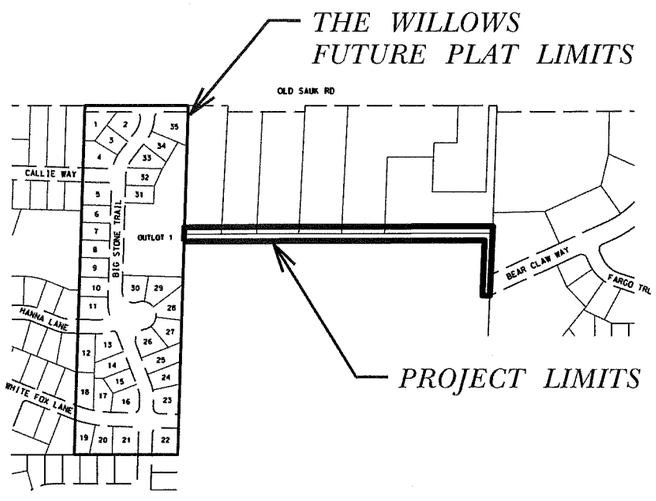
*INDEX OF SHEETS*

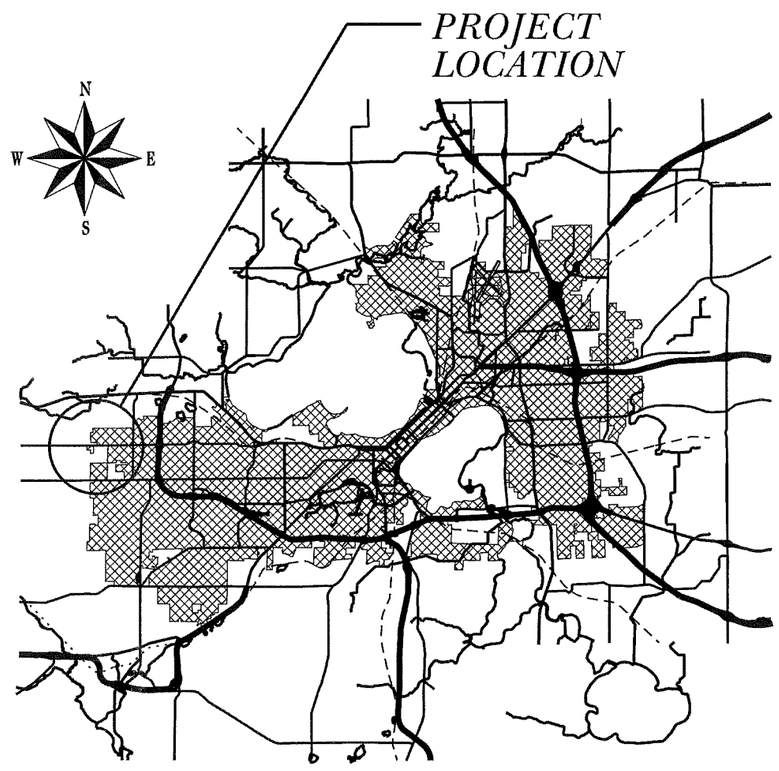


*CONVENTIONAL SIGNS*

*FIELD VERIFY ALL UTILITY LOCATIONS*

| | |
|---|---|
| FIBER OPTIC | FO |
| TELEPHONE | T |
| GAS | G |
| STORM SEWER | ST |
| SANITARY SEWER | SAN |
| WATER | W |
| OVERHEAD ELECTRIC | OH |
| POWER POLE | |
| ADA COMPLIANT RAMP W/ DETECTABLE WARNING FIELD | |
| COMBUSTIBLE FLUIDS | CAUTION |




*PUBLIC IMPROVEMENT PROJECT APPROVED*

*FEB 24, 2015*

*BY THE COMMON COUNCIL OF MADISON, WISCONSIN*

*PUBLIC IMPROVEMENT DESIGN APPROVED BY:*

*for City Engineer* — *Date* 3/25/2014

*SANITARY SEWER DESIGNED BY:*

WISCONSIN MARK MOSER E-33979 MADISON WI PROFESSIONAL ENGINEER

3/25/15

*STORM SEWER DESIGNED BY:*

WISCONSIN GREGORY GRIES E-39656 MADISON WI PROFESSIONAL ENGINEER

3/26/15

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

FILE NAME: M:\DESIGN\Projects\10513\Streets\Design\10513EN-TitleSht.dgn

DATE: 3/25/2015

| THE WILLOWS - OFFSITE UTILITIES ONLY<br>PROJECT NO. 10513 | SHEET NO.<br>U-1 |
|---|---|
| PLAN AND PROFILE | |
| OLD SAUK RD | CITY OF MADISON |

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

0708-212-0102-0
TRMCKENZIE INC
9803 Old Sauk Rd

0708-212-8110-5
AARON BRETTINGEN
7331 W. Old Sauk Rd
Town of Middleton

0708-212-8100-7
SCOTT E GIESE
BEVERLY J KEMP
7317 W. Old Sauk Rd
Town of Middleton

0708-212-8080-2
DAVID C KNOCHE
LINDA J KNOCHE
7309 W. Old Sauk Rd
Town of Middleton

0708-212-9501-0
THEIS FAMILY FARMS LLC
RANDALL THEIS
Town of Middleton

30' STM & SAN ESMT DOC 5110205

30' STM & SAN ESMT DOC 5110204

30' STM & SAN ESMT DOC 5110203

30' STM & SAN ESMT DOC 5110206

BOTTOM OF BANK

TOP OF BANK

10+00

11+00

SAS #7

12+00

325' - 12" PVC @ 0.22%

13+00

CONSTRUCT SAS ACCESS ROAD PER S.D.D. 5.1.4A

14+00

SAS #6

320' - 12" PVC @ 0.22%

15

MATCHLINE STA 15+00.00

EDGE OF FIELD

S-9 P-8 S-8 P-7

SAS #7
STA 11+08.24, CL
RIM = 1098.15
EI(E) = 1093.75 (12")

PROPOSED R.L. GRADE

EXISTING R.L. GRADE

SAS #6
STA 14+33.24, CL
RIM = 1100.81
EI(E) = 1093.03 (12")
EI(W) = 1093.05 (12")

325' - 12" PVC @ 0.22%

320' - 12" PVC @ 0.22%

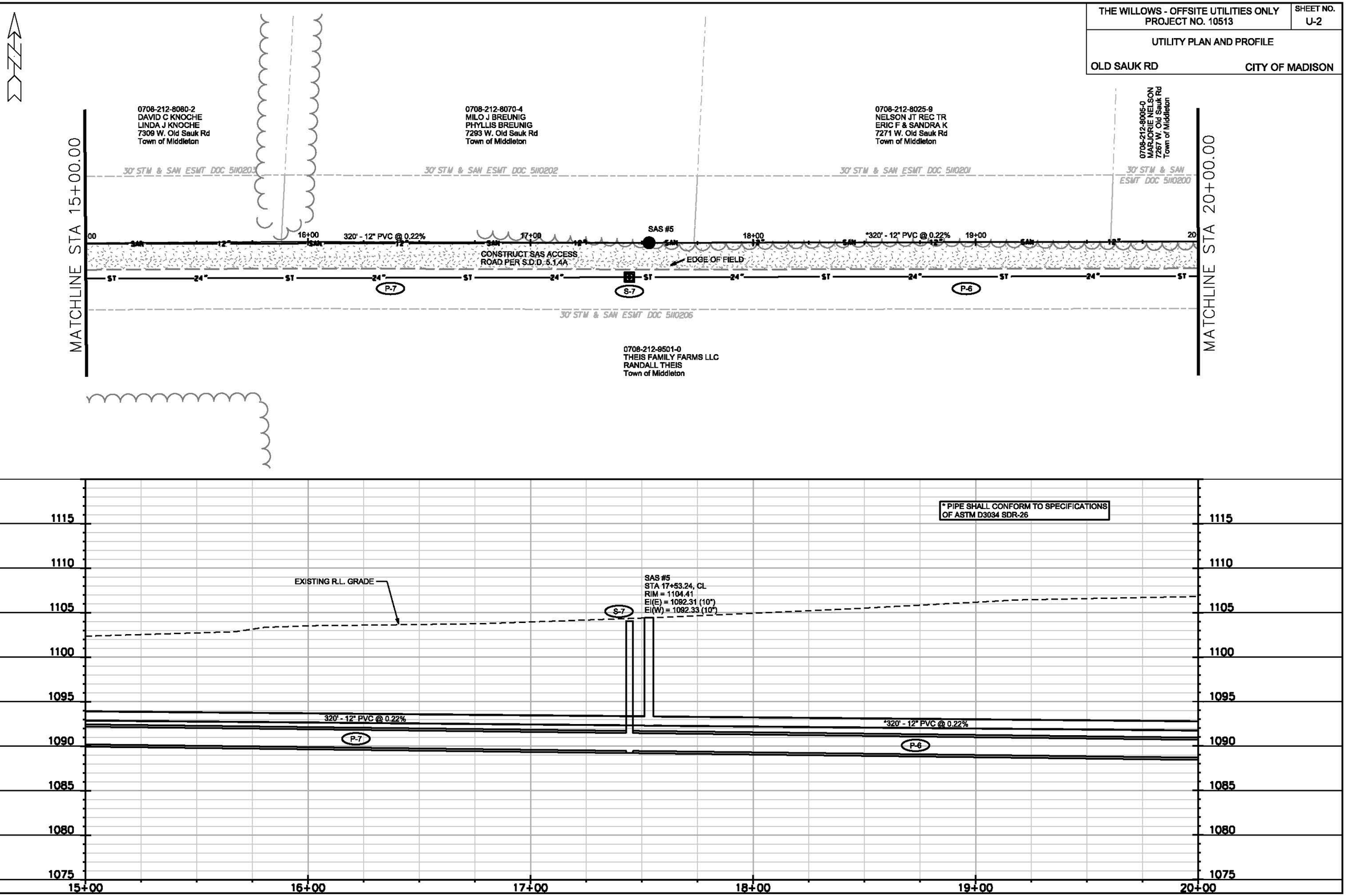
1115 1110 1105 1100 1095 1090 1085 1080 1075

10+00 11+00 12+00 13+00 14+00 15+00

FILE NAME: M:\DESIGN\Projects\10513\Sanitary\Design\10513SAN-PnP##1.dgn

DATE: 3/25/2015

| THE WILLOWS - OFFSITE UTILITIES ONLY<br>PROJECT NO. 10513 | SHEET NO.<br>U-2 |
|---|---|
| UTILITY PLAN AND PROFILE | |
| OLD SAUK RD | CITY OF MADISON |




PLOT SCALE:

PLOT NAME:

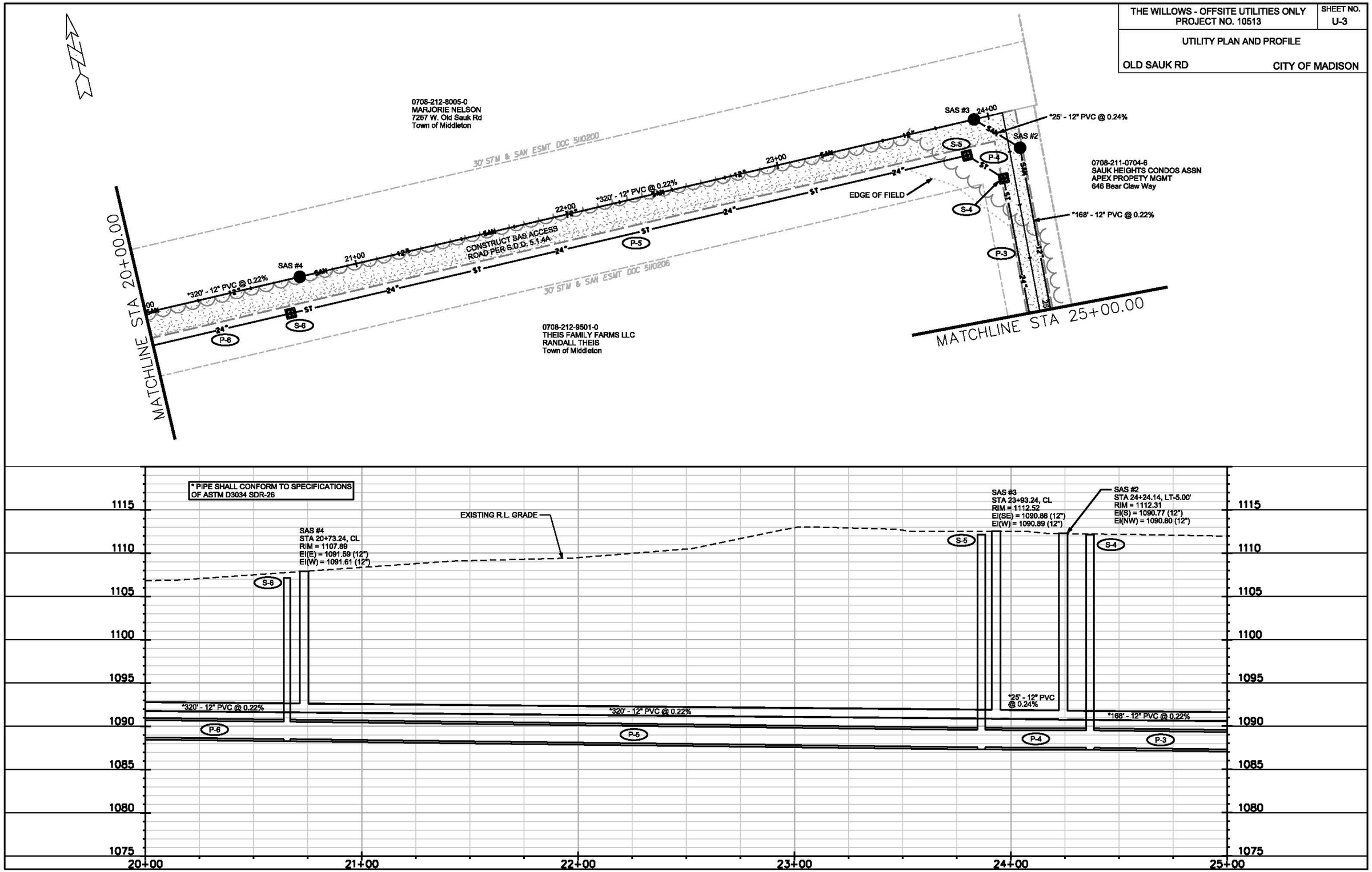
REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

FILE NAME: M:\DESIGN\Projects\10513\Sanitary\Design\10513SAN-PnP##2.dgn

DATE: 3/25/2015

| THE WILLOWS - OFFSITE UTILITIES ONLY<br>PROJECT NO. 10513 | SHEET NO.<br>U-3 |
|---|---|
| UTILITY PLAN AND PROFILE | |
| OLD SAUK RD | CITY OF MADISON |







PLOT SCALE:

PLOT NAME:

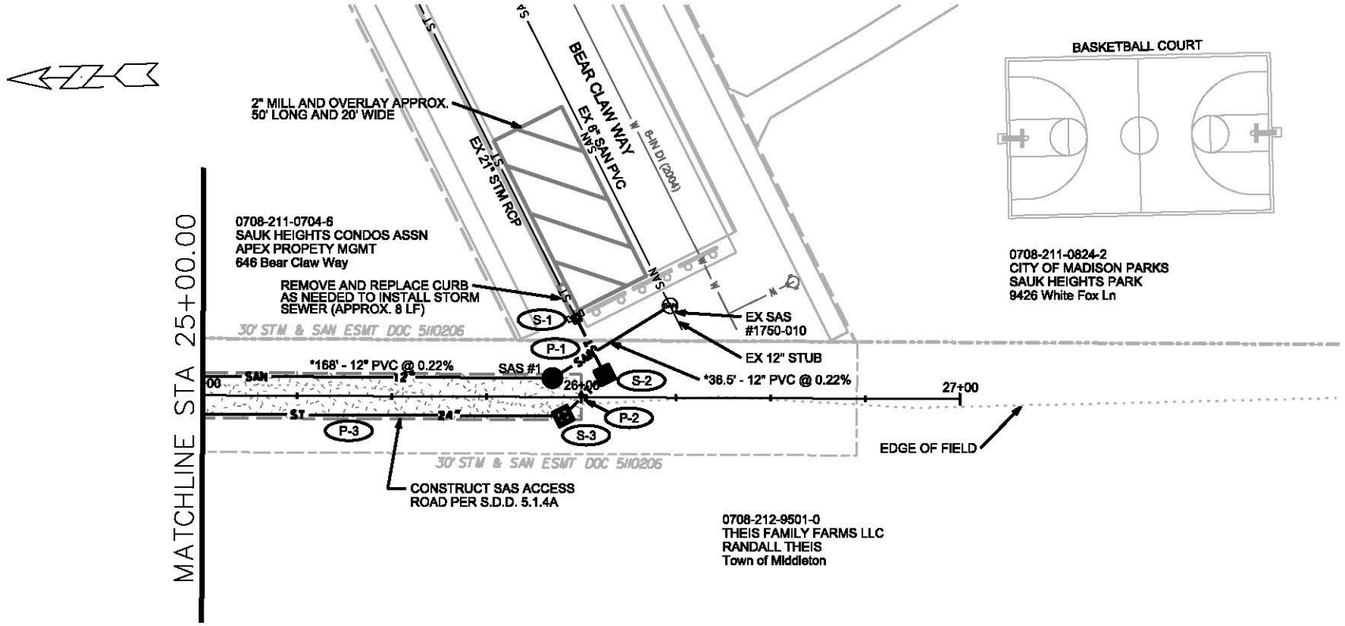
REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

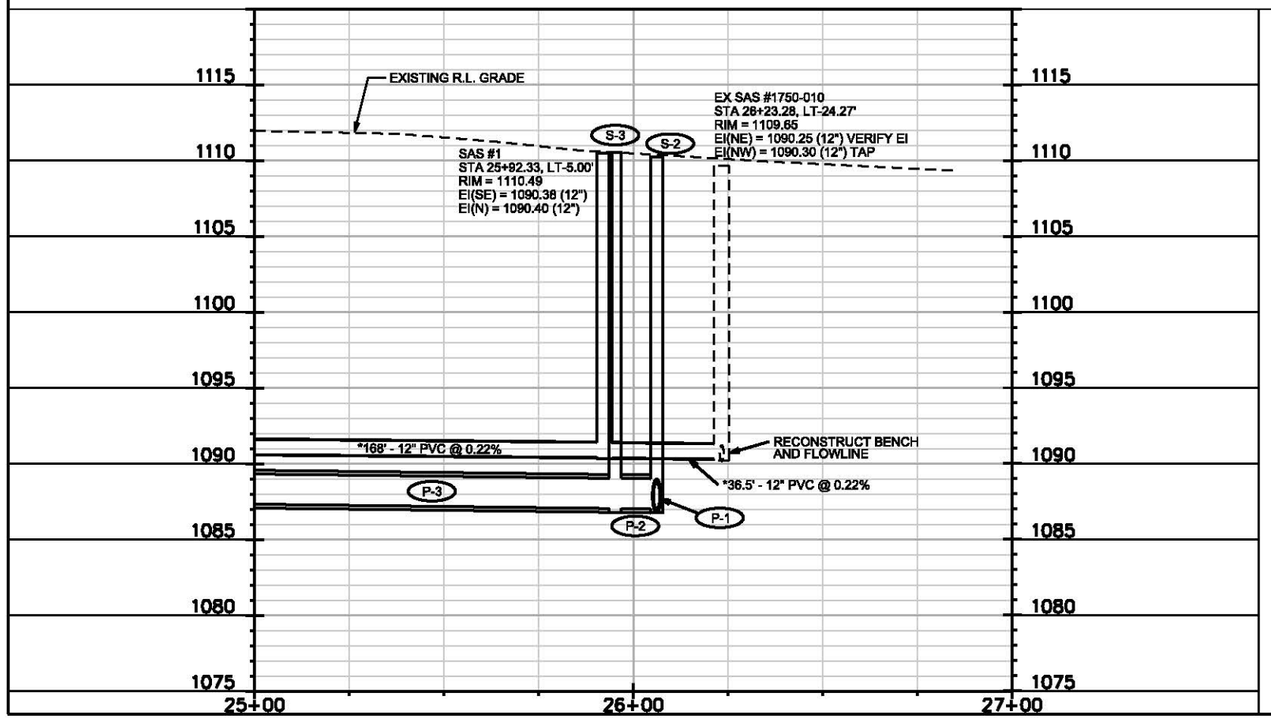
FILE NAME: M:\DESIGN\Projects\10513\Sanitary\Design\10513SAN-PnP##3.dgn

DATE: 3/25/2015

| THE WILLOWS - OFFSITE UTILITIES ONLY<br>PROJECT NO. 10513 | SHEET NO.<br>U-4 |
|---|---|
| UTILITY PLAN AND PROFILE | |
| BEAR CLAW WAY | CITY OF MADISON |




* PIPE SHALL CONFORM TO SPECIFICATIONS OF ASTM D3034 SDR-26




PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

FILE NAME: M:\DESIGN\Projects\10513\Sanitary\Design\10513SAN-PnP##4.dgn

DATE: 3/26/2015

# SANITARY SEWER SCHEDULE

## PROPOSED SANITARY STRUCTURES

| SAS NO. | STATION | LOCATION (OFFSET) | TOP OF CASTING | E.I. | DEPTH | NOTES |
|---|---|---|---|---|---|---|
| **EASEMENT** | | | | | | |
| SAS #1 | 25+92.33 | LT-5.00 | 1110.49 | 1090.38 | 20.11 | (1) |
| SAS #2 | 24+24.14 | LT-5.00 | 1112.31 | 1090.77 | 21.54 | (1) |
| SAS #3 | 23+93.24 | CL | 1112.52 | 1090.86 | 21.66 | (1) |
| SAS #4 | 20+73.24 | CL | 1107.89 | 1091.59 | 16.30 | (1) |
| SAS #5 | 17+53.24 | CL | 1104.41 | 1092.31 | 12.10 | (1) |
| SAS #6 | 14+33.24 | CL | 1100.81 | 1093.03 | 7.78 | (1) |
| SAS #7 | 11+08.24 | CL | 1098.15 | 1093.75 | 4.40 | (1) |

## PROPOSED SANITARY PIPES

| FROM (DNSTM) | TO (UPSTM) | DWNSTRM E.I. | UPSTRM E.I. | PLAN (PAY) LGTH (FT | SLOPE (%) | PIPE SIZE | PVC TYPE | NOTES |
|---|---|---|---|---|---|---|---|---|
| **EASEMENT** | | | | | | | | |
| EX SAS #1750-010 | SAS #1 | 1090.30 | 1090.38 | 36.5 | 0.22% | 12" | SDR-26 | - |
| SAS #1 | SAS #2 | 1090.40 | 1090.77 | 168 | 0.22% | 12" | SDR-26 | - |
| SAS #2 | SAS #3 | 1090.80 | 1090.86 | 25 | 0.24% | 12" | SDR-26 | - |
| SAS #3 | SAS #4 | 1090.89 | 1091.59 | 320 | 0.22% | 12" | SDR-26 | - |
| SAS #4 | SAS #5 | 1091.61 | 1092.31 | 320 | 0.22% | 12" | SDR-26 | - |
| SAS #5 | SAS #6 | 1092.33 | 1093.03 | 320 | 0.22% | 12" | SDR-35 | - |
| SAS #6 | SAS #7 | 1093.05 | 1093.75 | 325 | 0.22% | 12" | SDR-35 | - |

# STORM SEWER SCHEDULE

## PROPOSED STORM STRUCTURES

| STRUC. NO. | STATION | LOCATION (OFFSET) | TYPE | TOP OF CASTING | E.I. | DEPTH | NOTES |
|---|---|---|---|---|---|---|---|
| **EASEMENT** | | | | | | | |
| S-1 | 25+98.60 | LT-20.73 | COLLAR | - | 1086.92 | - | - |
| S-2 | 26+06.11 | LT-5.91 | 3X3 SAS | 1110.25 | 1087.00 | 23.25 | W/R-3067-7004-V |
| S-3 | 25+95.19 | RT-5.00 | 3X3 SAS | 1110.53 | 1087.04 | 23.49 | W/R-1916C-0054 |
| S-4 | 24+36.65 | RT-5.00 | 3X3 SAS | 1112.13 | 1087.51 | 24.62 | W/R-1050-0054 |
| S-5 | 23+86.36 | RT-15.50 | 3X3 SAS | 1112.13 | 1087.56 | 24.57 | W/R-1050-0054 |
| S-6 | 20+65.36 | RT-15.50 | 3X3 SAS | 1107.14 | 1088.51 | 18.63 | W/R-1050-0054 |
| S-7 | 17+44.44 | RT-15.50 | 3X3 SAS | 1104.05 | 1089.46 | 14.59 | W/R-1050-0054 |
| S-8 | 14+23.29 | RT-15.50 | 3X3 SAS | 1100.73 | 1090.41 | 10.32 | W/R-1050-0054 |
| S-9 | 11+02.29 | RT-15.50 | 3X3 SAS | 1098.25 | 1091.36 | 6.89 | W/R-1050-0054 |

## PROPOSED STORM PIPES

| PIPE NO. | FROM (DNSTM) | TO (UPSTM) | DISCH. E.I. | INLET E.I. | PLAN (PAY) LGTH (FT) | PIPE LGTH (FT) | SLOPE (%) | PIPE SIZE | TYPE | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| **EASEMENT** | | | | | | | | | | |
| P-1 | S-1 | S-2 | 1086.92 | 1087.00 | 16.5 | 15.1 | 0.53% | 21" | RCP | - |
| P-2 | S-2 | S-3 | 1087.00 | 1087.04 | 15.5 | 12.2 | 0.33% | 24" | RCP | NCM |
| P-3 | S-3 | S-4 | 1087.04 | 1087.51 | 158.5 | 155.4 | 0.30% | 24" | RCP | - |
| P-4 | S-4 | S-5 | 1087.51 | 1087.56 | 20 | 15.8 | 0.32% | 24" | RCP | - |
| P-5 | S-5 | S-6 | 1087.56 | 1088.51 | 321 | 318 | 0.30% | 24" | RCP | - |
| P-6 | S-6 | S-7 | 1088.51 | 1089.46 | 321 | 318 | 0.30% | 24" | RCP | - |
| P-7 | S-7 | S-8 | 1089.46 | 1090.41 | 321 | 318 | 0.30% | 24" | RCP | - |
| P-8 | S-8 | S-9 | 1090.41 | 1091.36 | 321 | 318 | 0.30% | 24" | RCP | - |

**NOTE:** PLAN LENGTH (PAY LENGTH) IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTH IS ACTUAL LENGTH OF PIPE FROM STRUCTURE WALL TO STRUCTURE WALL. SLOPE CALCULATED USING PIPE LENGTH.

## SPECIFIC NOTES

(1) INSTALL SAS CASTING R-1916C-0054, LOCKING LID WITH LOGO COVER HEX BOLTED TO SAS CHIMNEY (NO ADJUSTMENT RINGS)

## STANDARD NOTES:

- ABBREVIATIONS: 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 CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES; UD = UNDERDRAIN
- 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 KYLE FRANK OF CITY ENGINEERING AT (608) 266-4098 FOR PRECAST APPROVALS, FAX SHOP DRAWINGS TO (608)264-9275, OR EMAIL SHOP DRAWINGS TO KRANK@CITYOFMADISON.COM.