

# SITE WORK FOR STONE BROOK ACADEMY

## CONSTRUCTION PLANS FOR AGGREGATE BASE, BITUMINOUS SURFACING, CURB & GUTTER, GRADING, SEWER AND WATER SERVICES, STORM SEWER AND MISCELLANEOUS CONSTRUCTION CITY OF RAMSEY

### GOVERNING SPECIFICATIONS

THE 2016 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE 2013 ADDITION OF THE CEAM STANDARD SPECIFICATIONS SHALL APPLY.

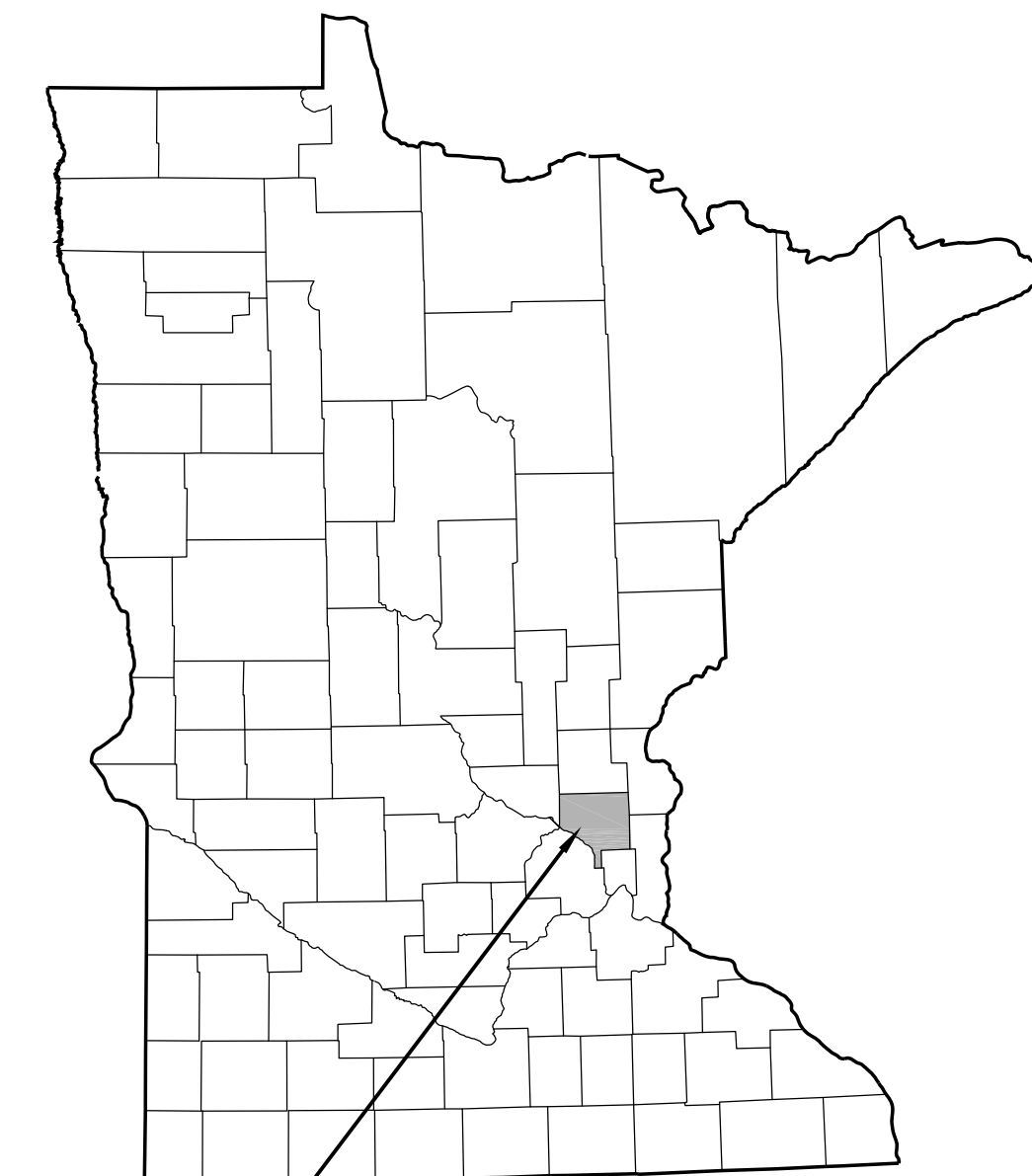
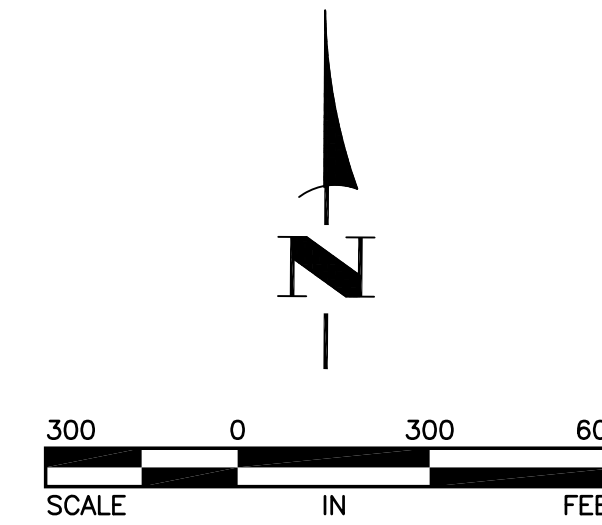
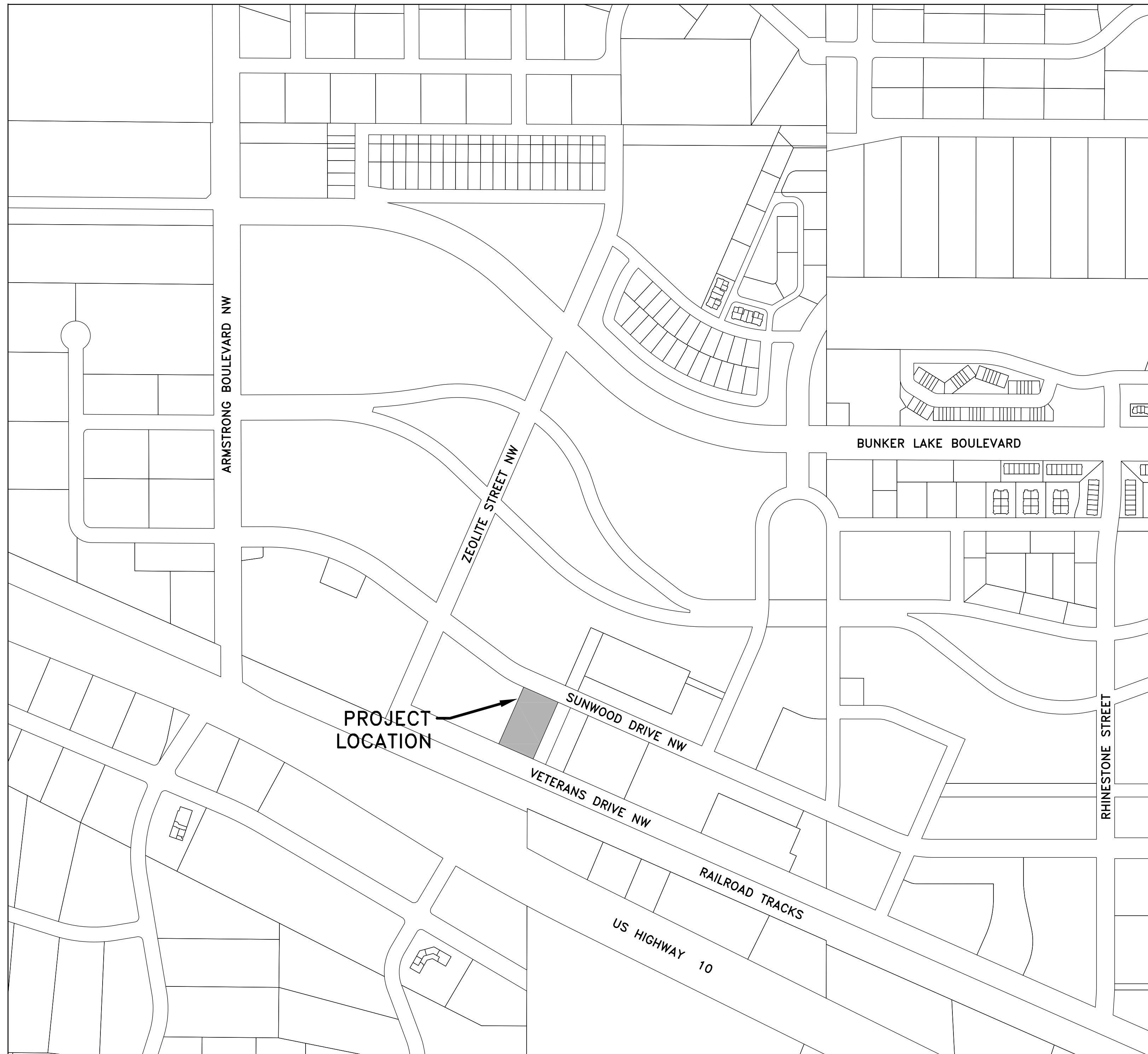
ALL FEDERAL, STATE AND LOCAL LAWS, REGULATIONS, AND ORDINANCES SHALL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

### SHEET INDEX

THIS PLAN CONTAINS 6 SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	EXISTING TOPOGRAPHY AND REMOVALS PLAN
3	GRADING, DRAINAGE AND EROSION CONTROL PLAN
4	UTILITY AND PAVING PLAN
5	GENERAL CONSTRUCTION NOTES AND DETAILS
6	DETAILS



CITY OF RAMSEY,  
ANOKA COUNTY,  
MINNESOTA

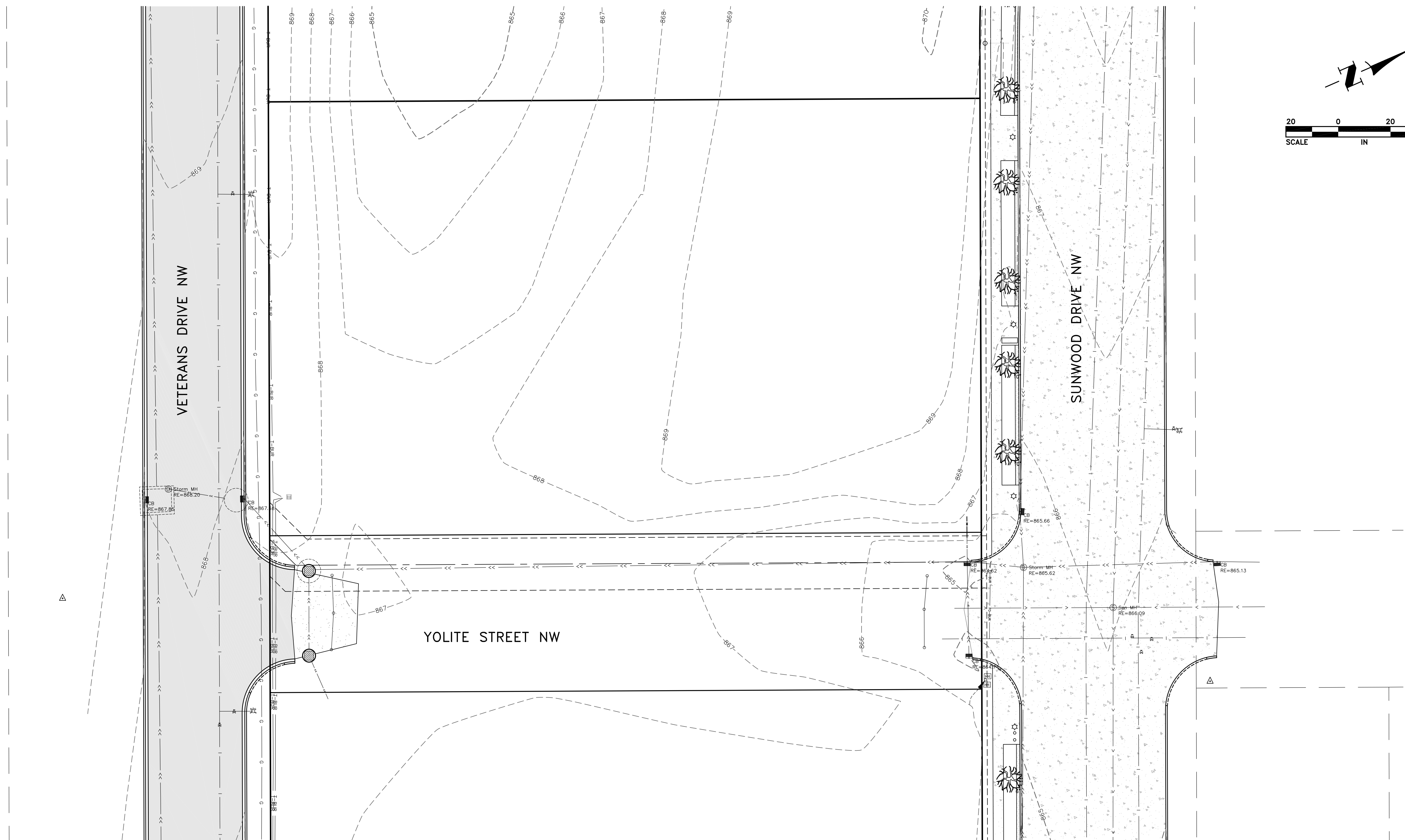
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*Craig J. Jochum* 23461 DATE 5/4/17  
 CRAIG J. JOCHUM, P.E. LIC. NO.  
 HAKANSON ANDERSON  
 DESIGN ENGINEER

DATE	REVISION



THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-2, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."



DATE	REVISION

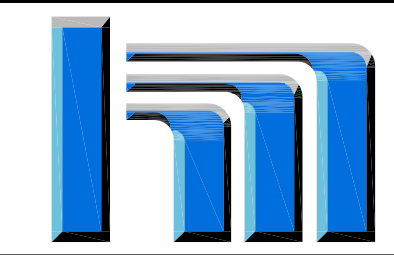
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*Craig J. Jochem*  
**CRAIG J. JOCHUM, P.E.**  
 Lic. No. 23461

DESIGNED BY:  
CJJ

DRAWN BY:  
MSS

CHECKED BY:  
CJJ

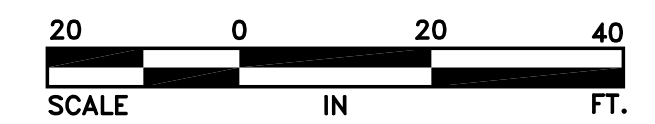
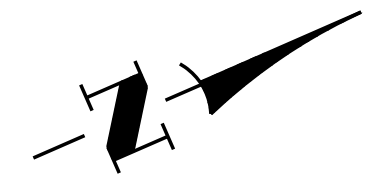


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**STONE BROOK ACADEMY SITE  
 CONSTRUCTION PLANS**

**EXISTING TOPOGRAPHY AND  
 REMOVALS PLAN  
 CITY OF RAMSEY, MINNESOTA**

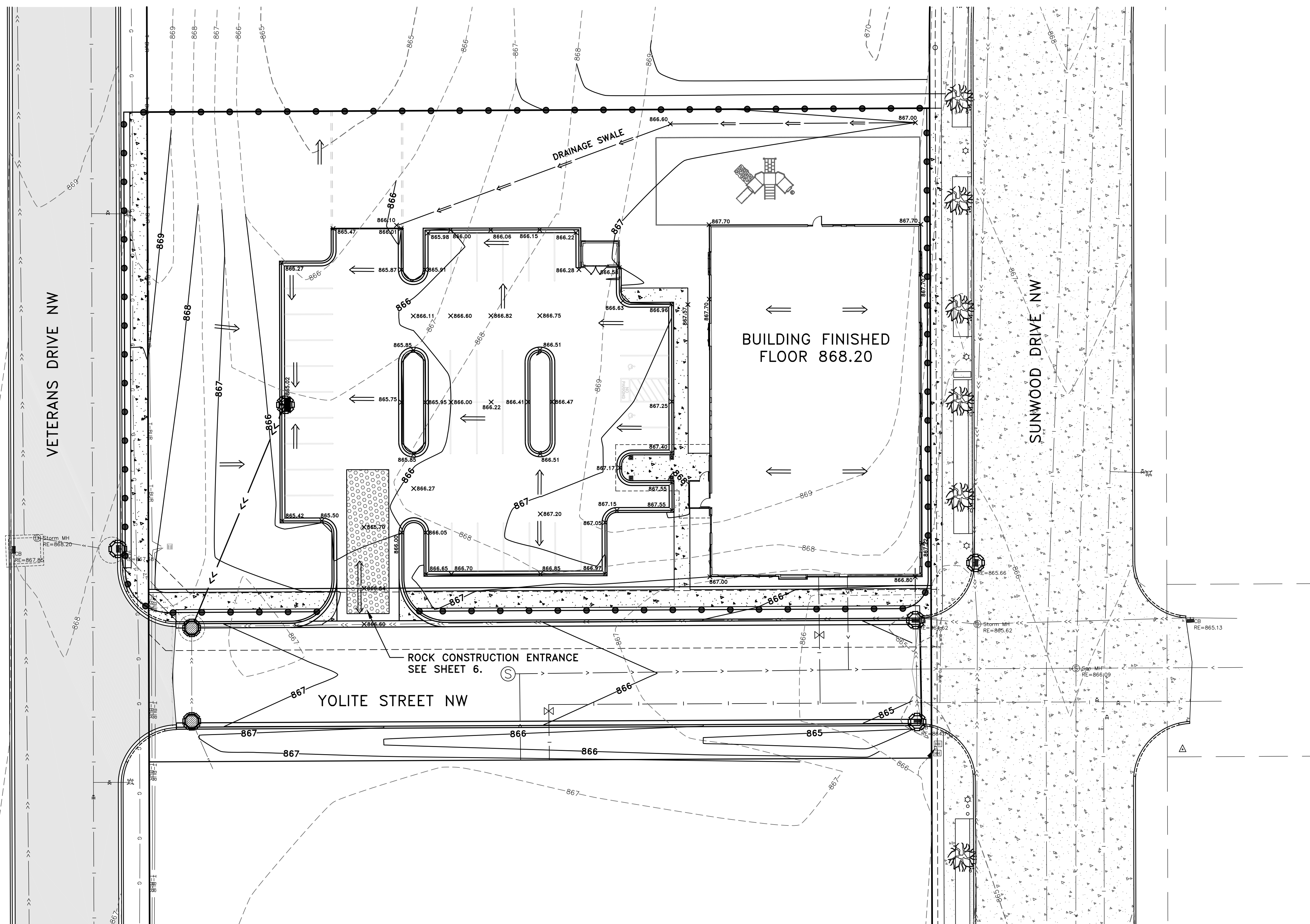
SHEET  
2  
OF  
6  
SHEETS



**LEGEND**

- 906 --- EXISTING CONTOUR
- 906 — PROPOSED CONTOUR
- DRAINAGE AND UTILITY EASEMENT
- PROPERTY LINE
- P-OH — OVERHEAD ELECTRIC
- P-BUR — UNDERGROUND ELECTRIC
- T-BUR — UNDERGROUND TELEPHONE
- G — UNDERGROUND GAS LINE
- ⊙ POWER POLE
- ⊕ GUY WIRE
- ⊙ LIGHT POLE
- EXISTING STORM SEWER
- △ EXISTING STORM SEWER APRON
- ⊙ EXISTING CATCH BASIN
- ⊙ EXISTING STORM MANHOLE
- EXISTING CONCRETE CURB
- ⊙ DECIDUOUS AND CONIFEROUS TREES
- EXISTING CHAIN LINK FENCE
- PROPOSED STORM SEWER
- ⊙ PROPOSED CATCH BASIN
- ⊙ PROPOSED STORM MANHOLE
- PROPOSED CONCRETE CURB & GUTTER
- ⊙ DETAIL NUMBER
- ⊙ SHEET NUMBER
- ⊙ INLET PROTECTION DEVICE SEE SHEET 6
- SILT FENCE PER  $\frac{2}{5}$
- X= 908.55 PROPOSED FINISHED ELEVATION
- ⇒ DRAINAGE ARROW

- GENERAL NOTES:**
1. VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
  2. SEE THE UTILITY AND PAVING PLAN FOR STORM SEWER AND SEWER AND WATER SERVICE INFORMATION.
  3. SEE THE STORM WATER POLLUTION PREVENTION PLAN FOR ADDITIONAL REQUIREMENTS.



DATE	REVISION

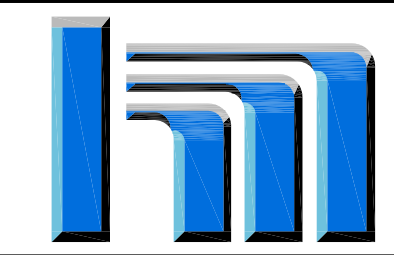
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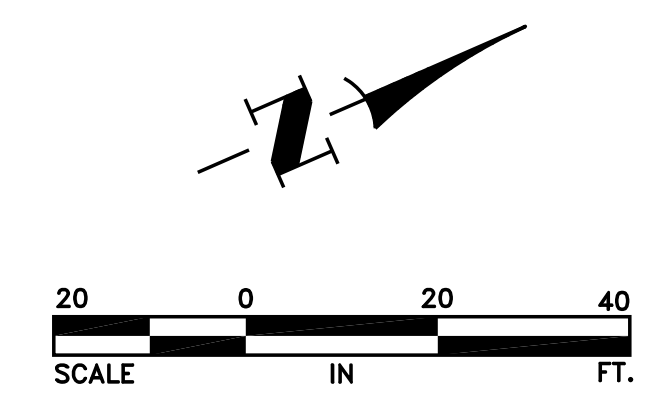
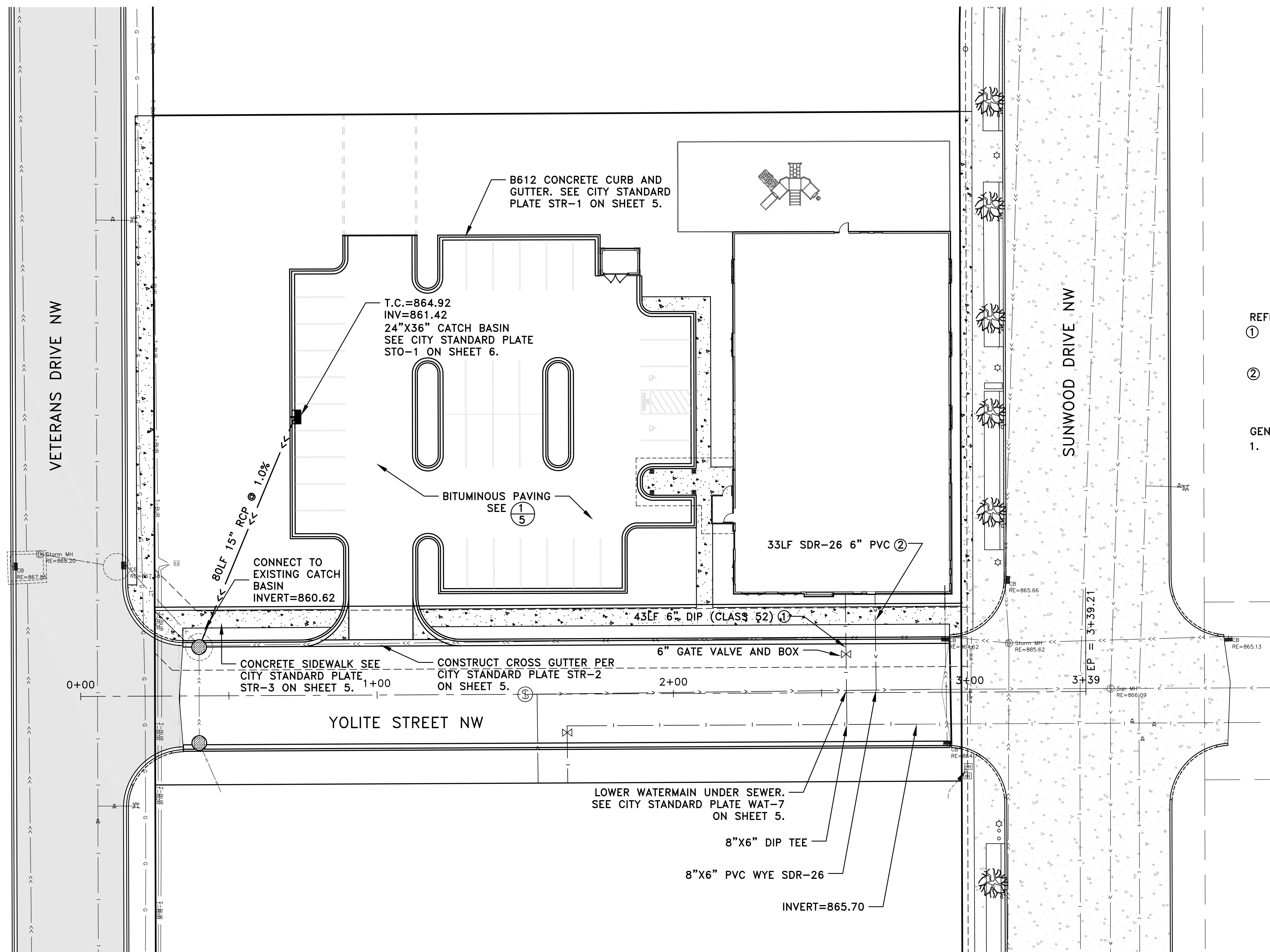


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**STONE BROOK ACADEMY SITE  
 CONSTRUCTION PLANS**

**GRADING, DRAINAGE AND EROSION  
 CONTROL PLAN  
 CITY OF RAMSEY, MINNESOTA**

SHEET  
3  
OF  
6  
SHEETS



- REFERENCE NOTES
- ① SEE CITY STANDARD PLATE WAT-5 ON SHEET 6 FOR WATER SERVICE INSTALLATION.
  - ② SEE CITY STANDARD PLATE SEW-3 ON SHEET 6 FOR SEWER SERVICE INSTALLATION.

- GENERAL NOTES
- 1. WATER SERVICE SHALL HAVE A MINIMUM BURY OF 7.5 FEET.

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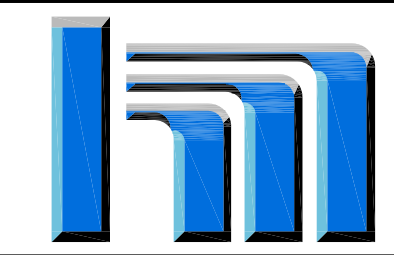
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**STONE BROOK ACADEMY SITE  
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**UTILITY AND PAVING PLAN  
 CITY OF RAMSEY, MINNESOTA**

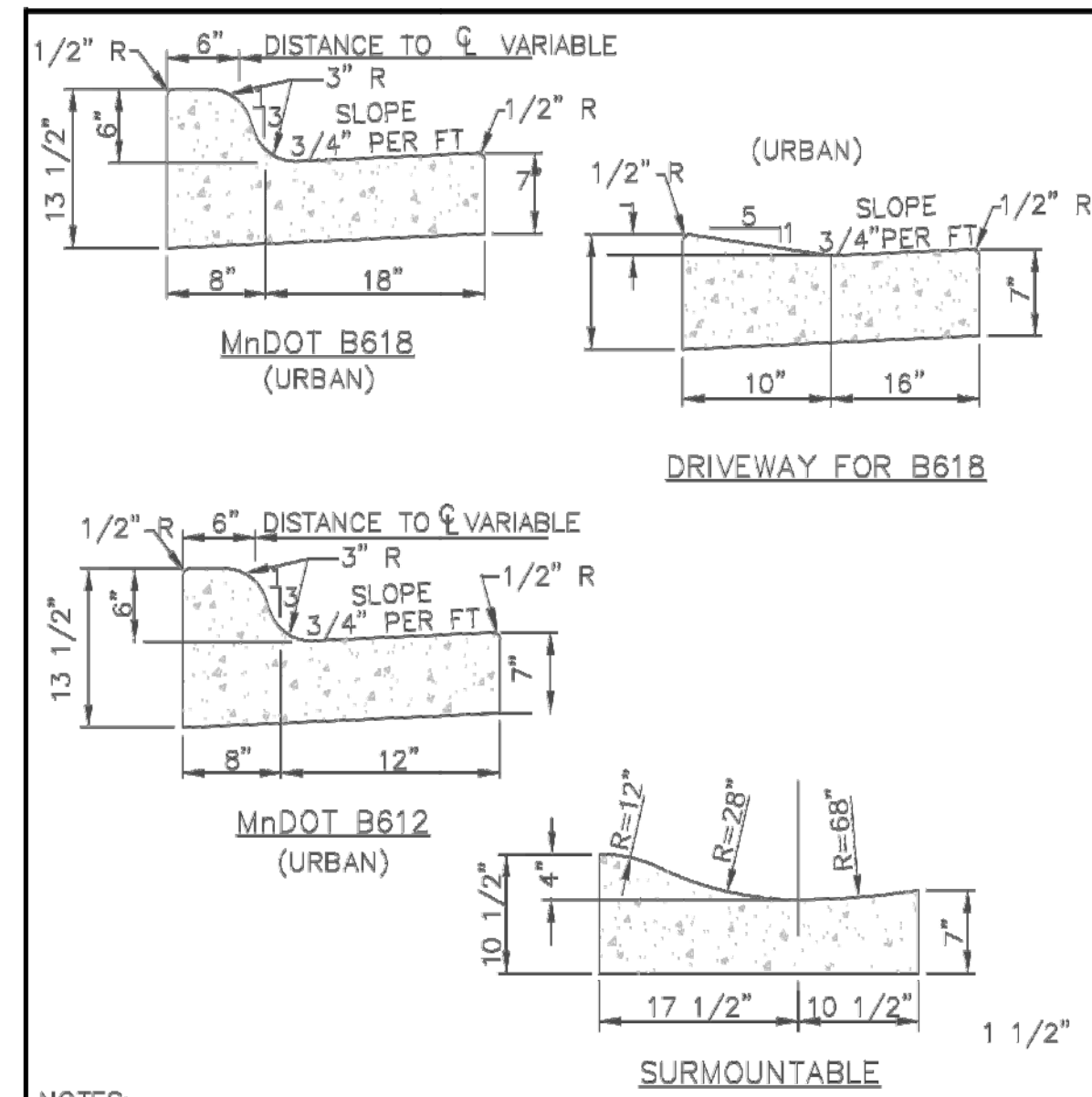
SHEET  
**4**  
 OF  
**6**  
 SHEETS

**GENERAL CONSTRUCTION AND SOILS NOTES:**

1. STRIP ALL INPLACE TOPSOIL IN AREAS TO BE DISTURBED BY CONSTRUCTION AND REUSE AS SLOPE DRESSING. IN AREAS OF PARKING LOT AND BUILDING CONSTRUCTION, THE EXPOSED SAND SHALL BE SURFACE COMPACTED TO AT LEAST 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY, ASTM D698, IN AT LEAST THE UPPER 3 FEET.
2. UNLESS OTHERWISE RECOMMENDED IN THESE PLANS, THE GRADING SUBGRADE SHALL BE CONSTRUCTED OF SUITABLE GRADING MATERIAL. THE FILL SHALL BE PLACED IN 8" TO 10" LOOSE LIFTS, AND COMPACTED TO 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
3. SUITABLE GRADING MATERIAL FOR THIS PROJECT SHALL CONSIST OF ALL SOILS ENCOUNTERED WITH THE EXCEPTION OF TOPSOIL, SILT, DEBRIS, ORGANIC MATERIAL AND OTHER UNSTABLE MATERIAL.
4. PROVIDE A SAW CUT WHEN PLACING NEW PAVEMENT ADJACENT TO INPLACE PAVEMENT AND AT TERMINI OF CONSTRUCTION TO ENSURE A UNIFORM JOINT.
5. BITUMINOUS AND CONCRETE ITEMS DISTURBED BY CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH Mn/DOT SPEC. 2104.3.
6. USE TACK COAT BETWEEN ALL BITUMINOUS MIXTURES. THE BITUMINOUS TACK COAT MATERIAL SHALL BE APPLIED AT A UNIFORM RATE OF 0.05 GAL/SY TO 0.07 GAL/SY BETWEEN BITUMINOUS LAYERS. THE APPLICATION RATES ARE FOR UNDILUTED EMULSIONS (AS SUPPLIED FROM THE REFINERY) OR MC AND RC LIQUID ASPHALTS.
7. PERFORMANCE GRADED (PG) ASPHALT BINDER PG 58-28, SPEC. 3151, SHALL BE USED FOR ALL BITUMINOUS MIXES ON THIS PROJECT. SPECIFIC PG GRADES SHALL BE LISTED AT THE END OF THE MIX DESIGNATION NUMBER SHOWN ON THE TYPICAL SECTION.
8. THE BITUMINOUS MIXTURES SHALL MEET THE REQUIREMENTS OF SPECIFICATIONS 2360 AND 3139.
9. ALL DISTURBED AREAS SHALL BE RESTORED WITH 4" OF TOPSOIL AND SOD. SEE CITY STANDARD PLATE ERO-6 ON SHEET 6 FOR TOPSOIL REQUIREMENTS.

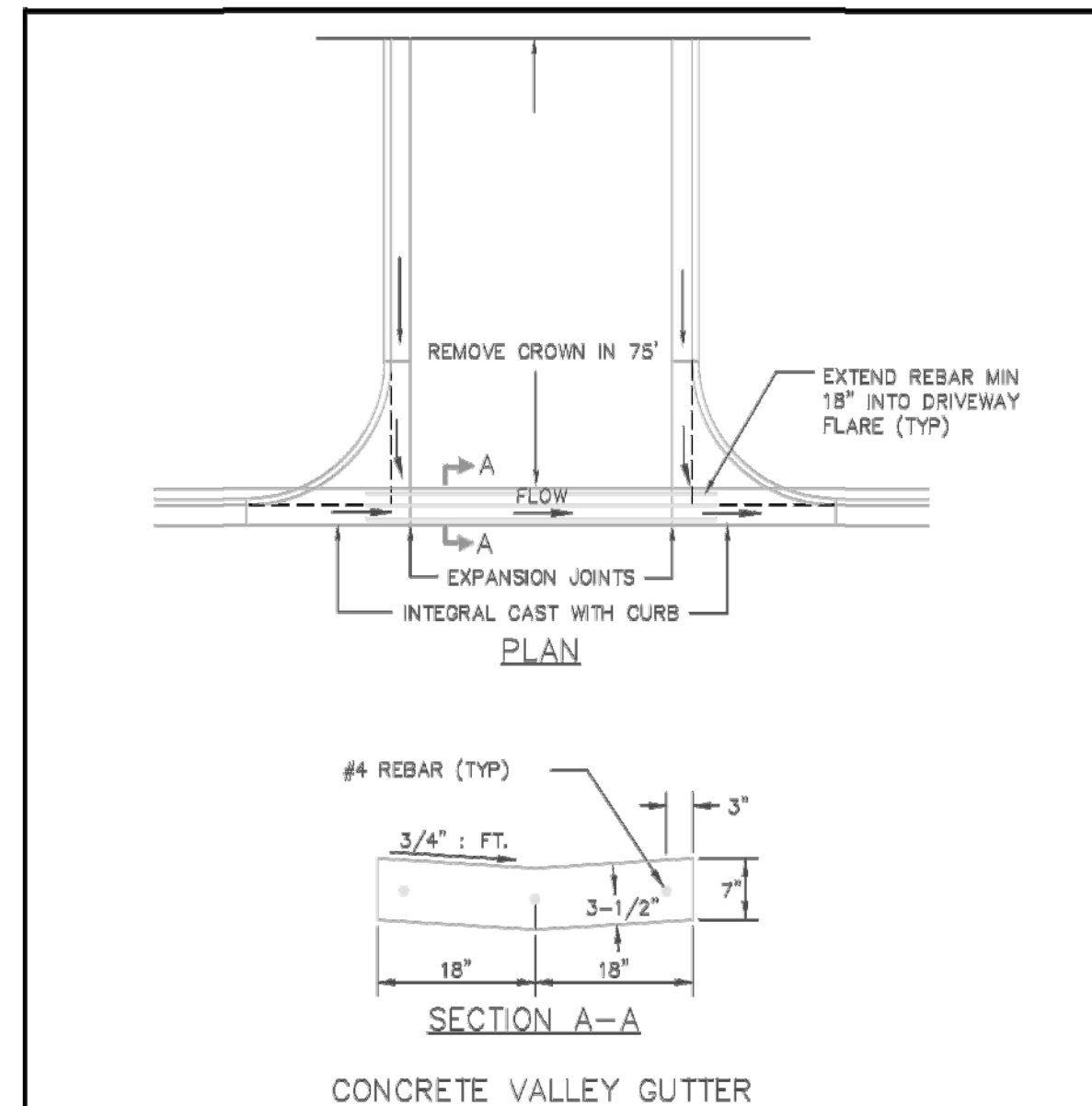
**GENERAL EROSION CONTROL NOTES:**

1. EROSION CONTROL SHALL CONFORM TO THE Mn/DOT EROSION CONTROL HANDBOOK.
2. PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ACQUIRE THE NECESSARY MPCA NPDES STORMWATER PERMIT.
3. THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL FACILITIES (BMP'S) PRIOR TO GRADING AND REMOVAL ACTIVITIES. BMP'S SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION ACTIVITIES AND POTENTIAL FOR EROSION HAS PASSED.
4. THE CONTRACTOR SHALL SCHEDULE HIS OPERATION TO MINIMIZE THE AMOUNT OF DISTURBED AREA AT ANY GIVEN TIME.
5. BMP'S SHALL BE INSPECTED DAILY BY THE CONTRACTOR. OBSERVATIONS SHALL BE RECORDED IN THE INSPECTION LOG.
6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION.
7. THE CONTRACTOR SHALL FILE A NOTICE OF TERMINATION WITH THE MPCA AFTER FINAL STABILIZATION HAS BEEN APPROVED.



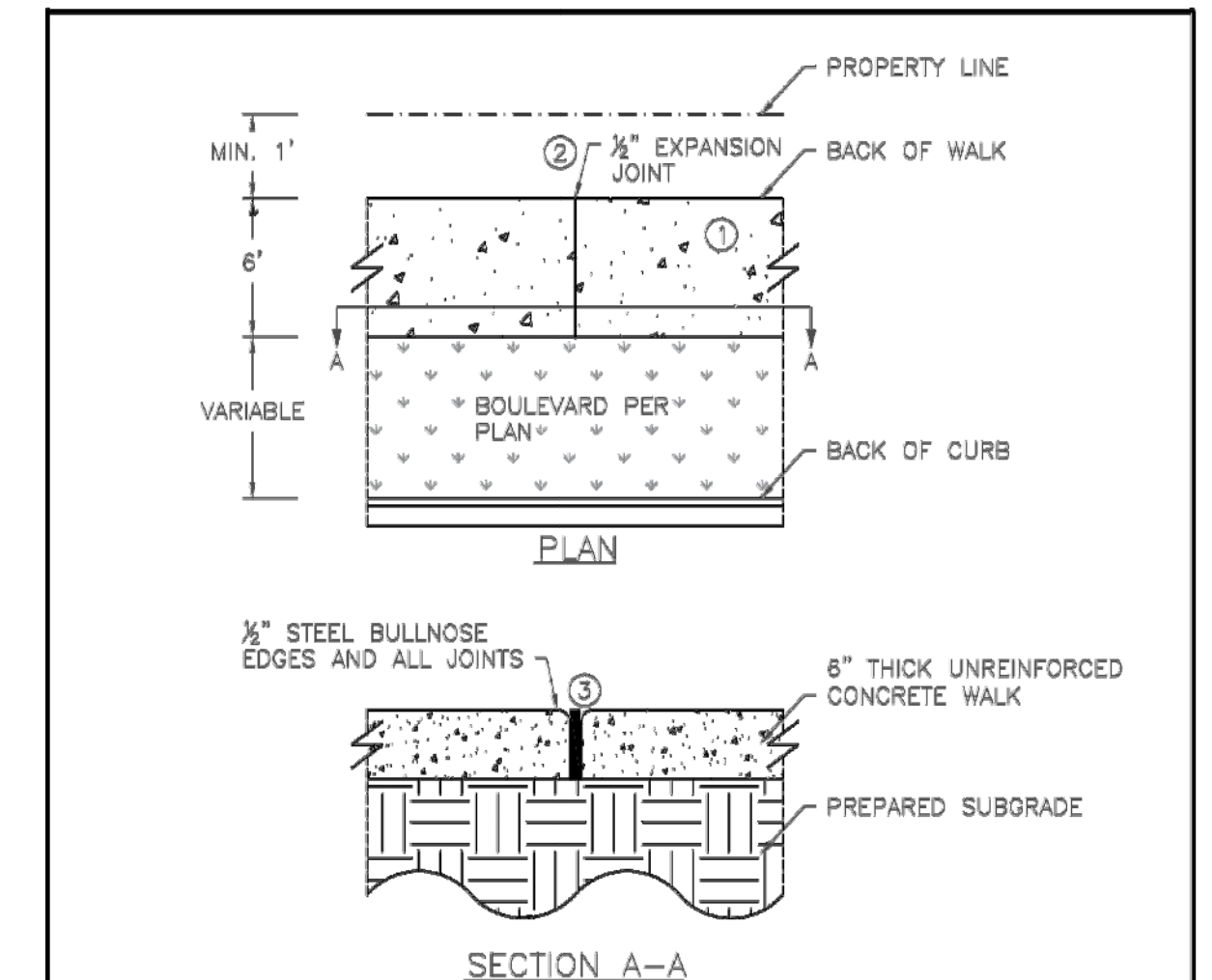
**NOTES:**  
 1. ON WEAR COURSE MILL THE EXISTING BITUMINOUS 1.5" BY 24" IN FRONT OF THE REPLACEMENT CURB.  
 2. ON BASE COURSE SAW CUT AND REMOVE EXISTING BITUMINOUS 18" IN FRONT OF THE REPLACEMENT CURB.

APPROVED: 1 - 2016  
 City of RAMSEY  
 STANDARD DETAILS: CURB AND GUTTER  
 CITY PLATE No. STR-1



**NOTES:**  
 1. WITH REMOVAL OF EXISTING CURB AT A STREET, MILL BITUMINOUS TO A DEPTH OF 1.5" AND A WIDTH OF 18" IN EXISTING STREET.  
 2. TO BE USED WHENEVER CROSS DRAINAGE IS < 2%

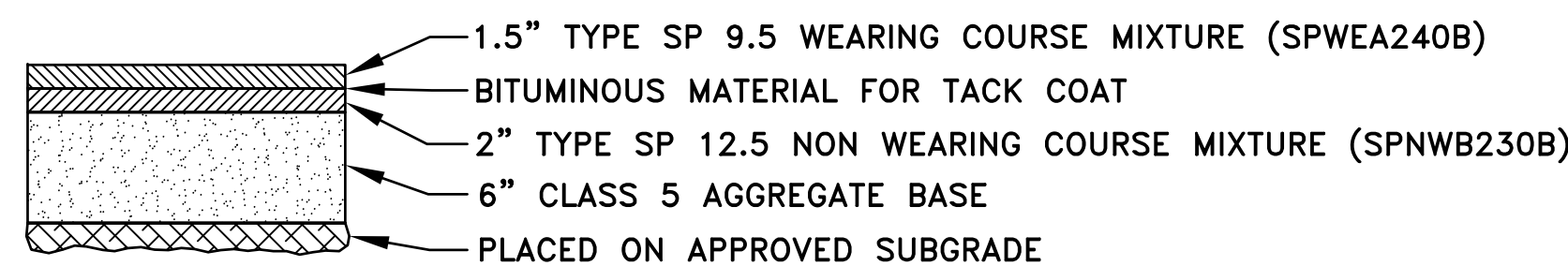
APPROVED: 4 - 2007  
 City of RAMSEY  
 STANDARD DETAILS: CROSS GUTTER  
 CITY PLATE No. STR-2



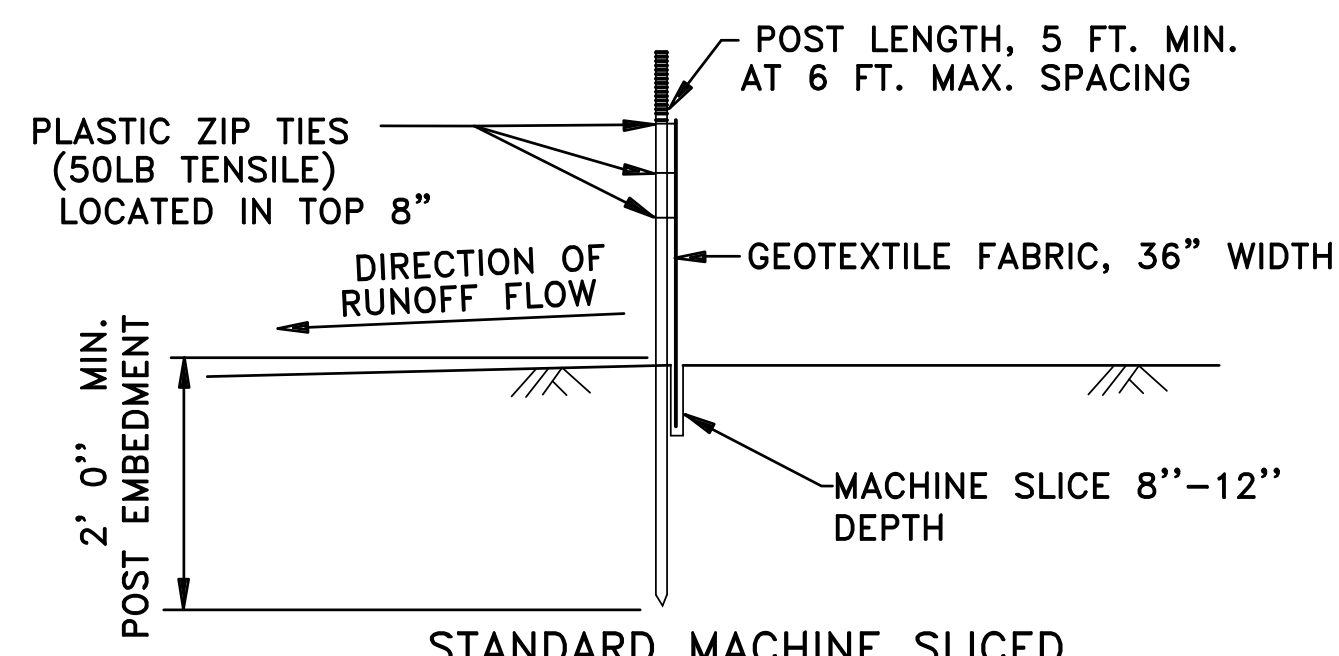
**NOTE:**  
 ① BROOM FINISH CONCRETE WALK SURFACE  
 ② MAXIMUM 100 FOOT SPACING BETWEEN EXPANSION JOINTS  
 ③ 1/2" EXPANSION JOINT MEETING MNDOT SPEC 3702. PROVIDE ONE PIECE OF FILLER FOR THE ENTIRE DEPTH AND WIDTH OF THE JOINT

NOT TO SCALE

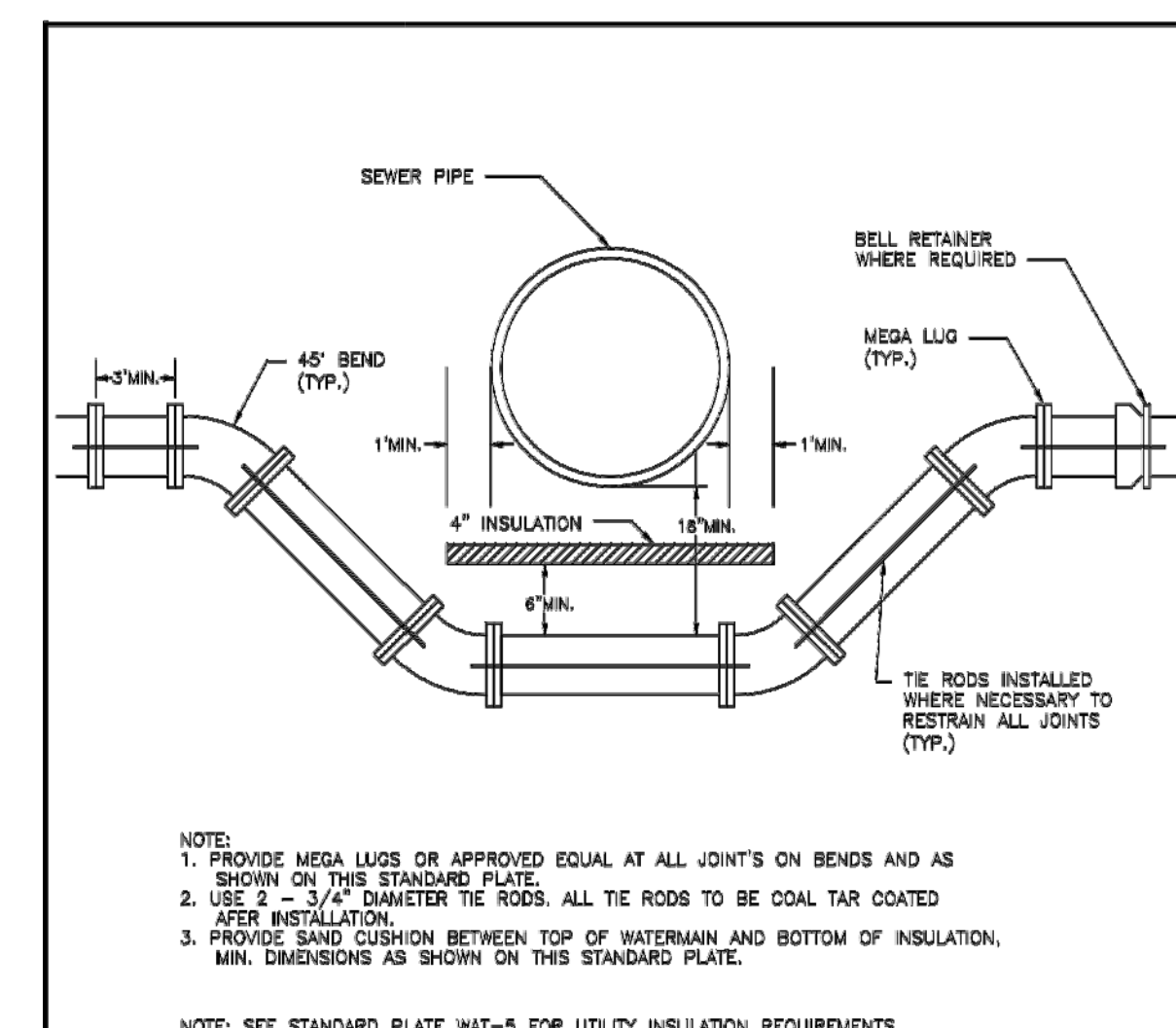
APPROVED: 10 - 2015  
 City of RAMSEY  
 STANDARD DETAILS: CONCRETE SIDEWALK  
 CITY PLATE No. STR-3



**1 BITUMINOUS PAVEMENT SECTION**  
 NO SCALE



**2 SILTY FENCE DETAILS**  
 TO PROTECT AREAS FROM SHEET FLOW (SEE SPEC. 3886)



**NOTE:**  
 1. PROVIDE MEGA LUGS OR APPROVED EQUAL AT ALL JOINTS ON BENDS AND AS SHOWN ON THIS STANDARD PLATE.  
 2. USE 2 - 3/4" DIAMETER TIE RODS. ALL TIE RODS TO BE COAL TAR COATED AFTER INSTALLATION.  
 3. PROVIDE SAND CUSHION BETWEEN TOP OF WATERMAIN AND BOTTOM OF INSULATION. MIN. DIMENSIONS AS SHOWN ON THIS STANDARD PLATE.

NOTE: SEE STANDARD PLATE WAT-5 FOR UTILITY INSULATION REQUIREMENTS.

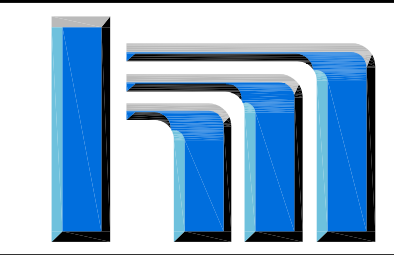
APPROVED: 6 - 2015  
 City of RAMSEY  
 STANDARD DETAILS: WATERMAIN LOWERING  
 CITY PLATE No. WAT-7

DATE	REVISION

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 Date 5-4-17 Lic. No. 23461

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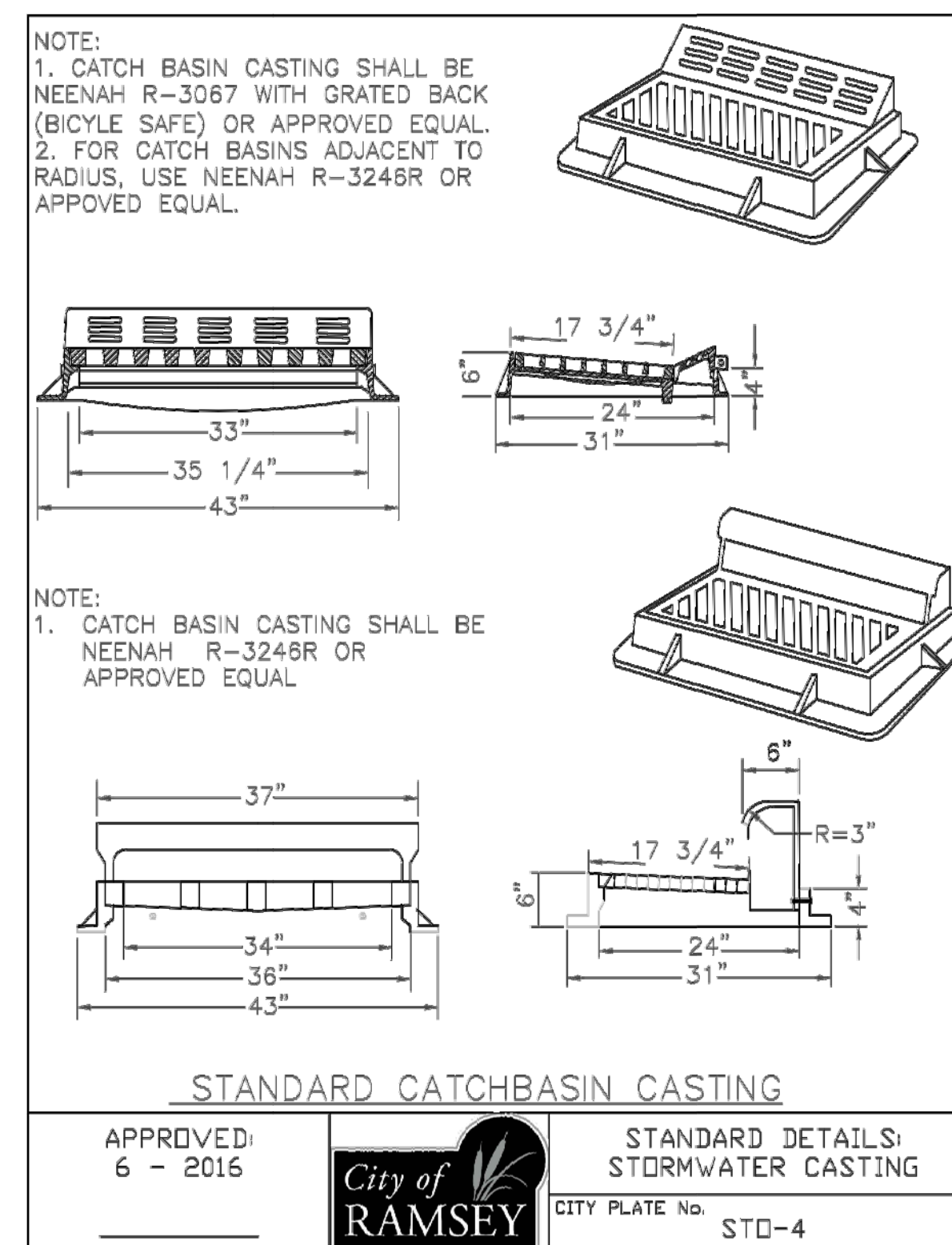
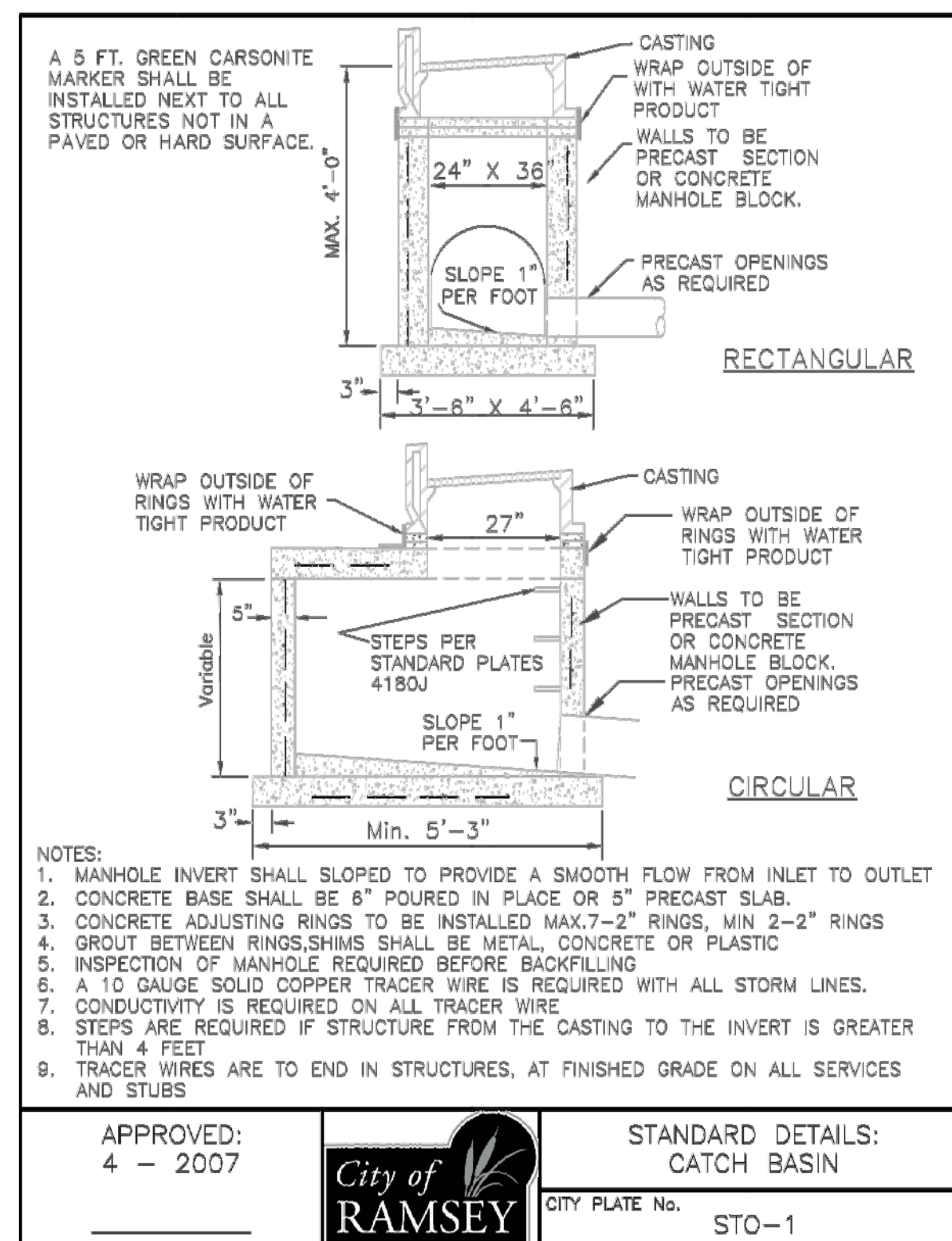
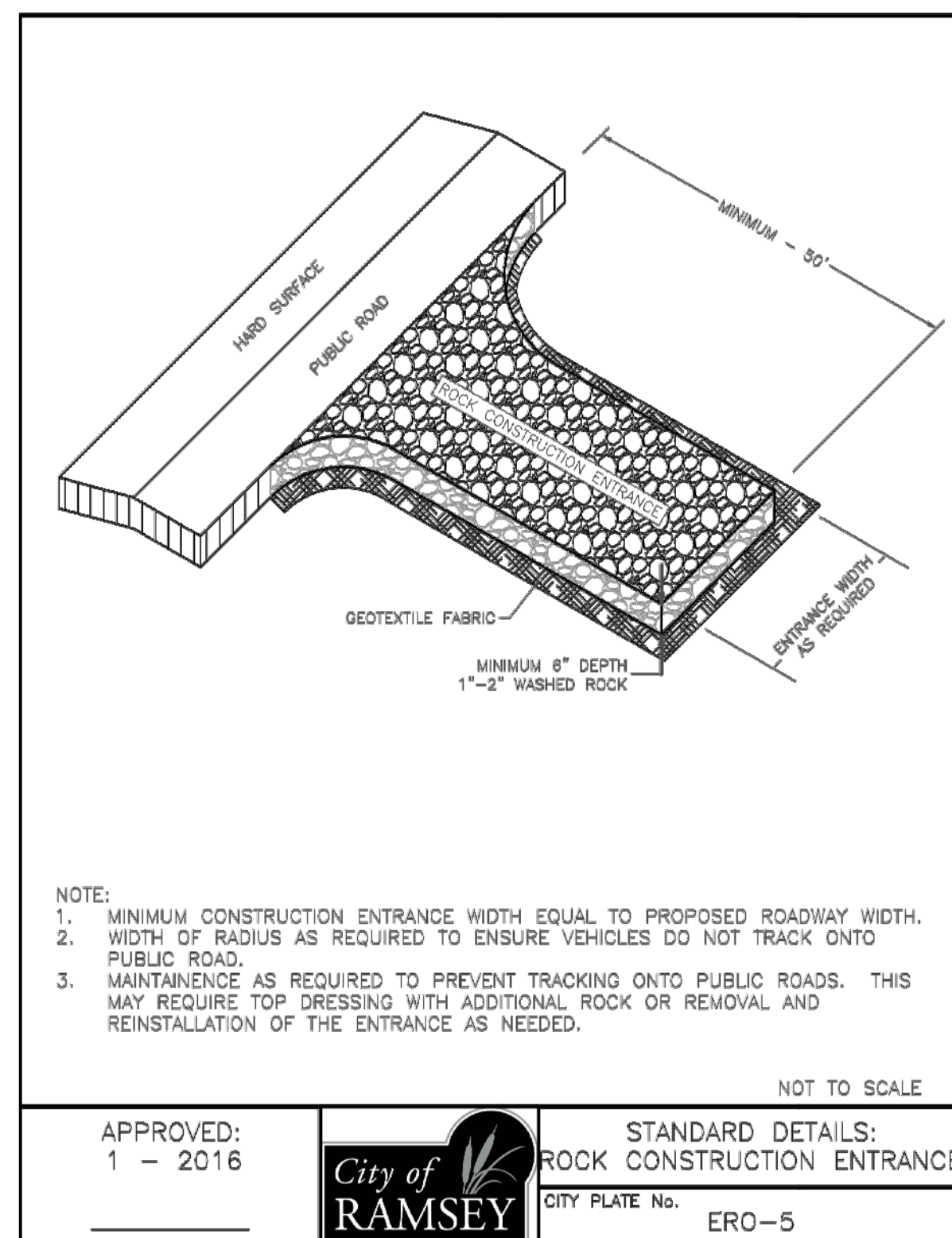
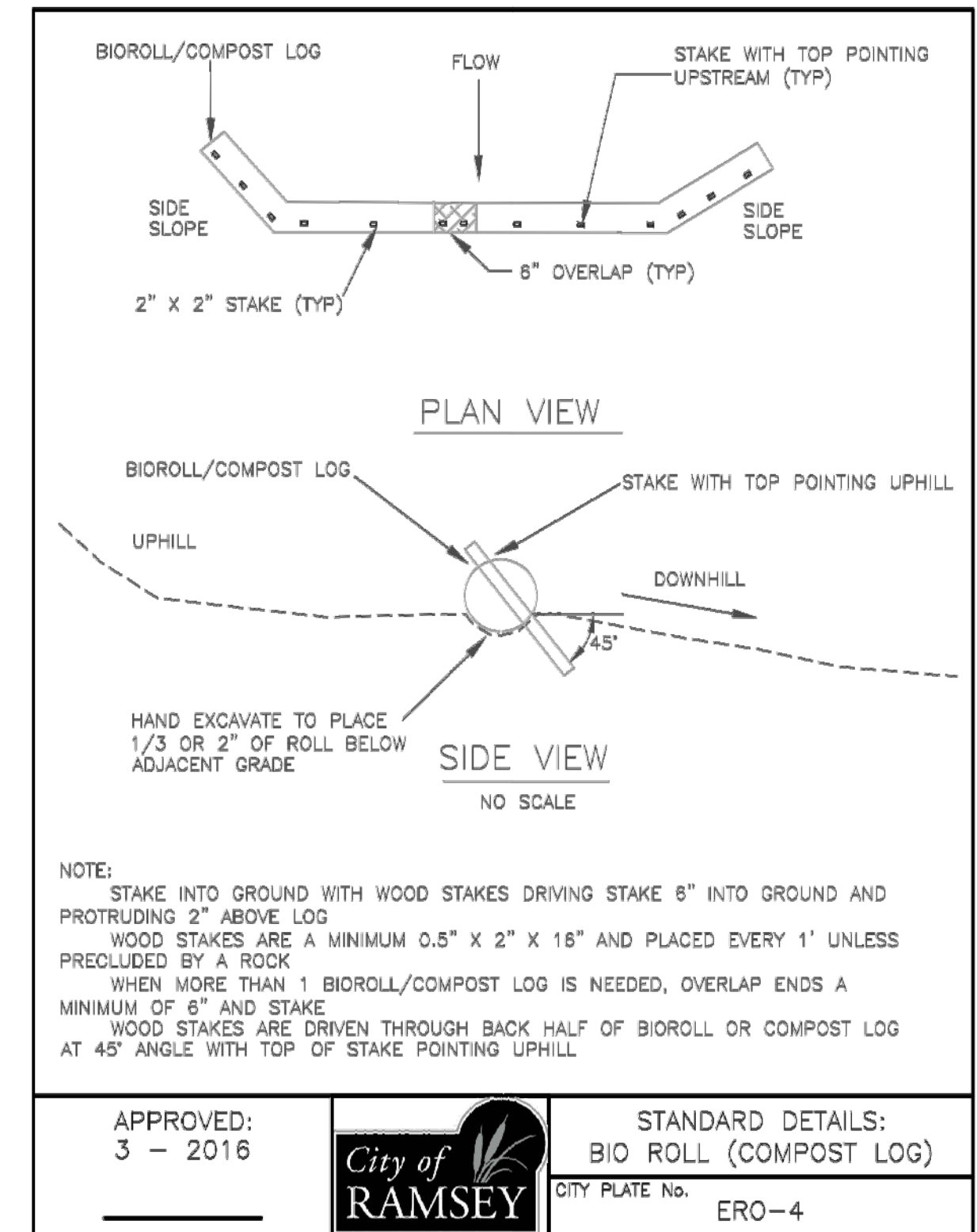
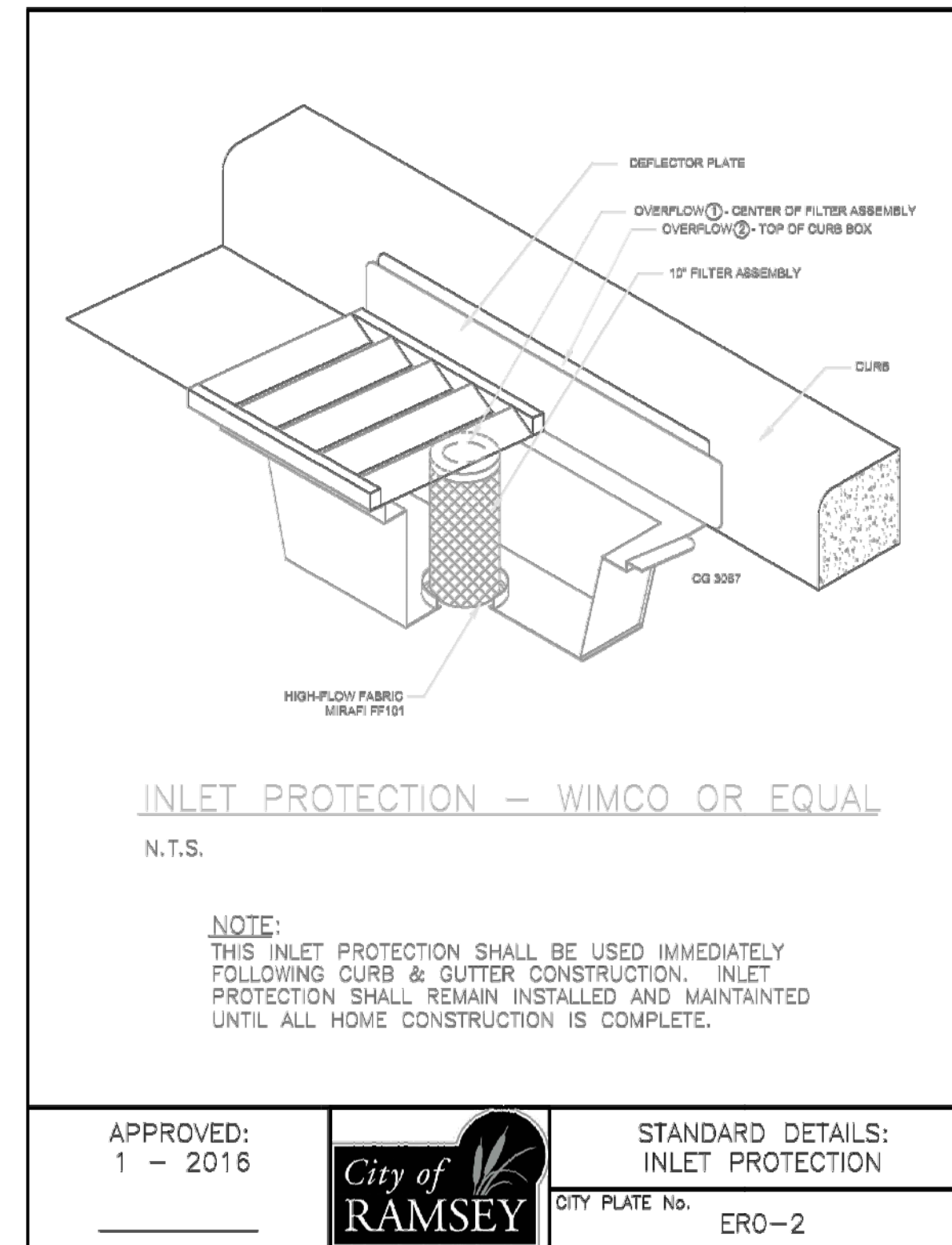
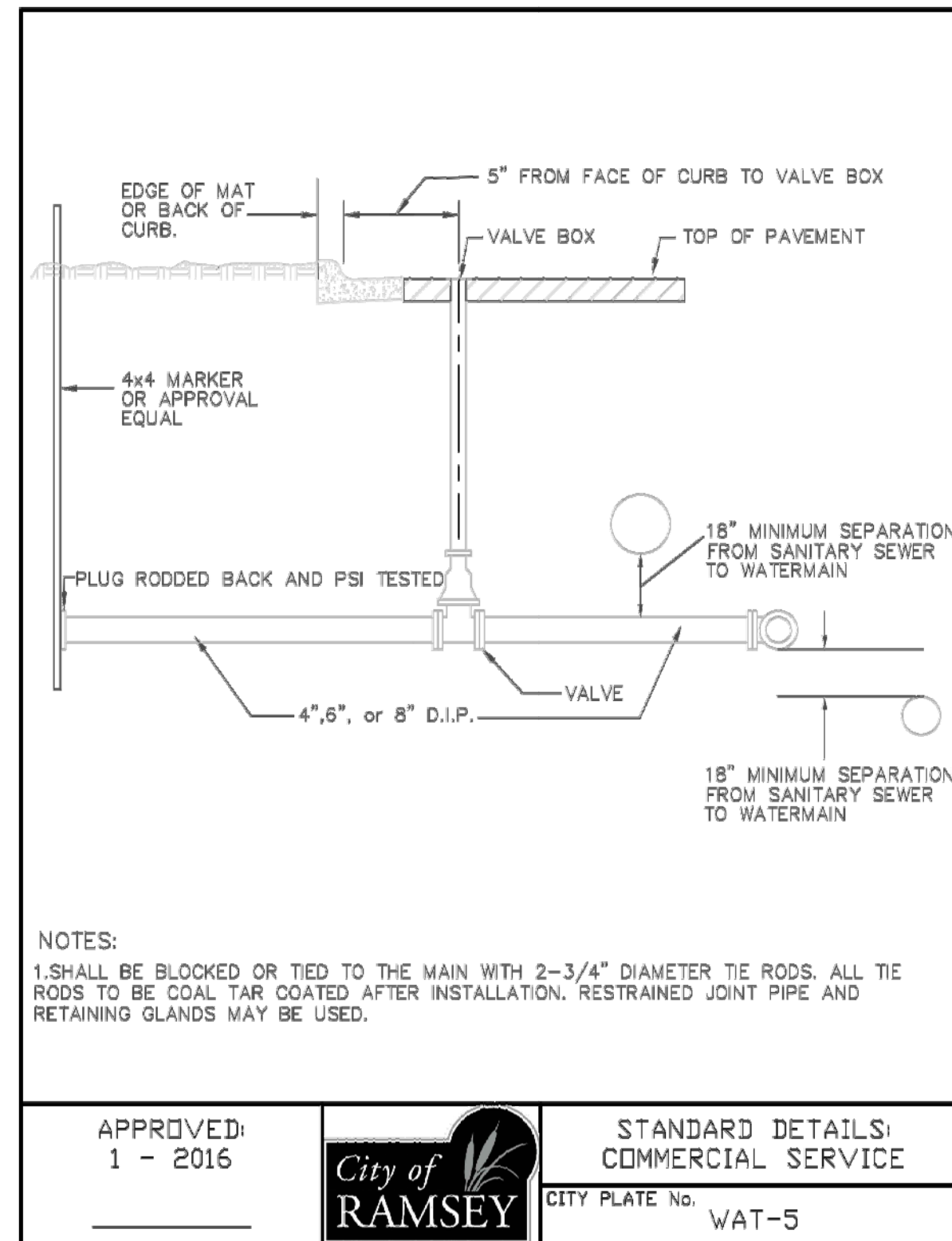
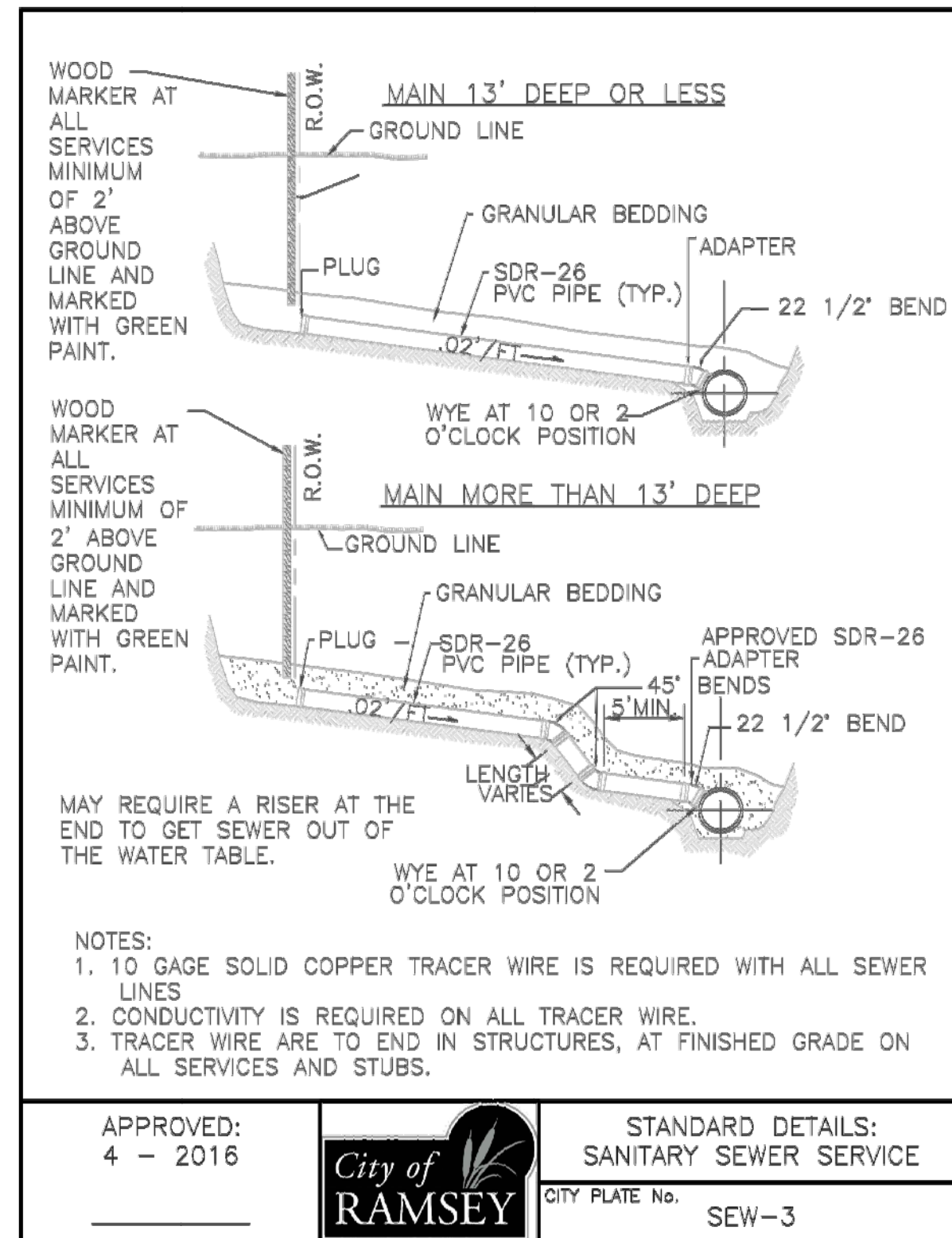


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**STONE BROOK ACADEMY SITE CONSTRUCTION PLANS**

**GENERAL CONSTRUCTION NOTES AND DETAILS**  
 CITY OF RAMSEY, MINNESOTA

SHEET 5 OF 6 SHEETS



MNDOT 2016 SPEC

MNDOT 2016 SPEC TABLE 3877-1 COMMON TOPSOIL BORROW		
REQUIREMENT	RANGE	TEST METHOD
MATERIAL PASSING THE 3/4 IN [19MM]	100%	ASTM D 422
MATERIAL PASSING NO. 4 [4.75MM]	>85%	-
CLAY	5% - 35%	ASTM D 422
SILT	5% - 70%	ASTM D 422
SAND	10% - 75%	ASTM D 422
ORGANIC MATTER	3% - 15%	ASTM D 2974
pH	6.1-7.8	ASTM G 51

NOTE:

- INSTALLATION OF 4" OF TOPSOIL MEETING MNDOT SPECIFICATION 3877A COMMON TOPSOIL BORROW, MAY BE REQUIRED ACROSS ALL DISTURBED AREAS.
- A SOIL CERTIFICATION FROM A GEOTECHNICAL FIRM MUST BE PROVIDED VERIFYING THE TOPSOIL MEETS SPECIFICATION ALONG WITH LOAD TICKETS TO VERIFY THE SOURCE OF MATERIAL AND QUANTITY.
- TOPSOIL MUST COME FROM A CITY APPROVED SOURCE.

APPROVED: 1 - 2016

City of RAMSEY

CITY PLATE No. ERO-6

STANDARD DETAILS: TOPSOIL REQUIREMENTS

DATE	REVISION

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 CONSTRUCTION PLANS

DETAILS  
 CITY OF RAMSEY, MINNESOTA

SHEET 6 OF 6 SHEETS