

**SITE DEVELOPMENT DATA:**

SITE ADDRESS: 1206 NORTHPORT DR, MADISON, WI  
 PARCEL ID 080925300991  
 CERTIFIED SURVEY MAP NO 12189 AS RECORDED IN DANE COUNTY REGISTER OF DEEDS IN VOL 75 PAGE 171 OF CERTIFIED SURVEYS, LOT 1

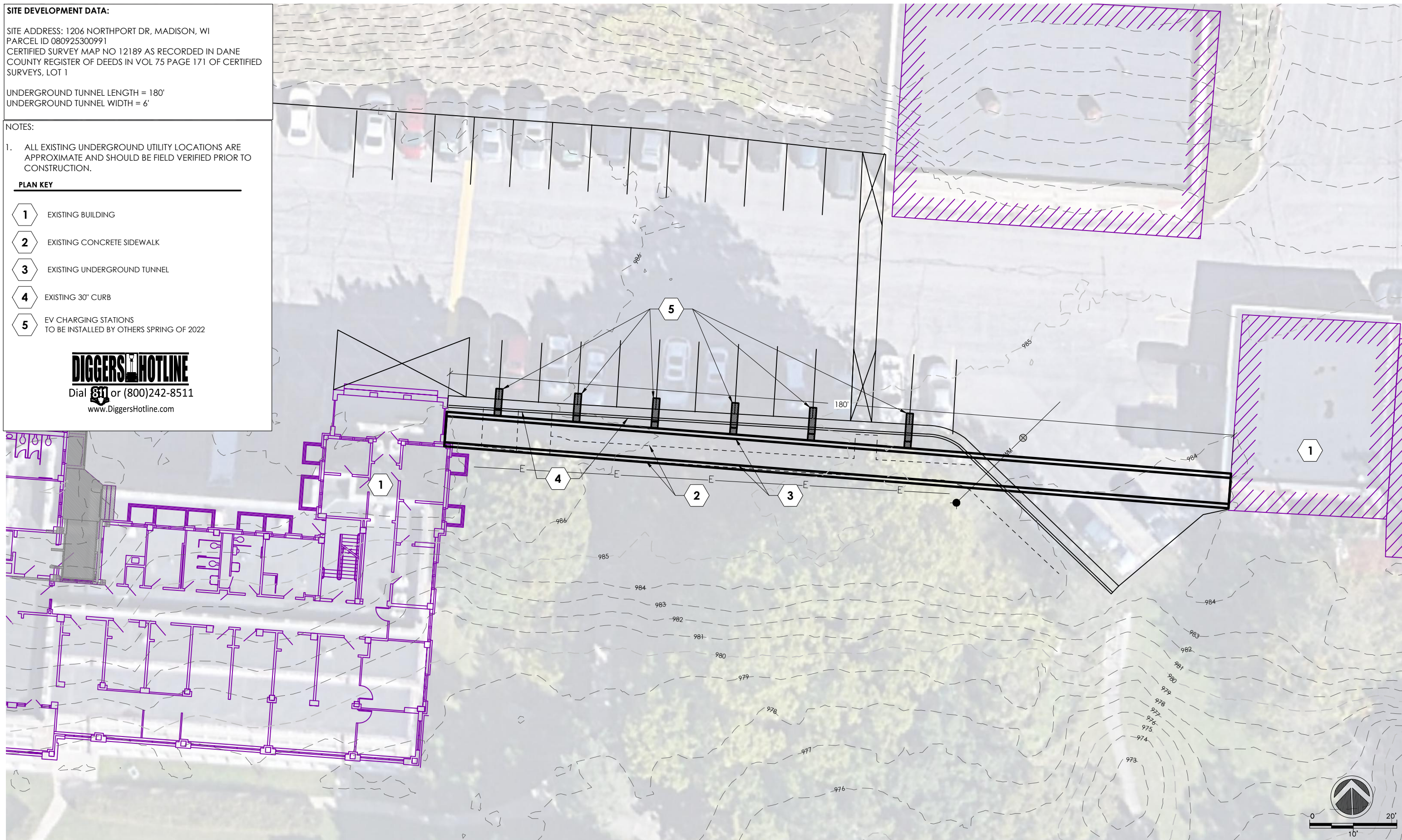
UNDERGROUND TUNNEL LENGTH = 180'  
 UNDERGROUND TUNNEL WIDTH = 6'

**NOTES:**

- ALL EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

**PLAN KEY**

- 1** EXISTING BUILDING
- 2** EXISTING CONCRETE SIDEWALK
- 3** EXISTING UNDERGROUND TUNNEL
- 4** EXISTING 30" CURB
- 5** EV CHARGING STATIONS TO BE INSTALLED BY OTHERS SPRING OF 2022



FILE NAME: \\ssr2\RES\Projects\2022\0322-08 Dane County NPOBase.dwg

PROJECT:	ADDRESS:	SHEET NAME:	REVISION:	PROJECT NO:	RES ROUSSEV ENGINEERING SOLUTIONS, LLC	SHEET
UNDERGROUND TUNNEL WATERPROOFING AND CONCRETE REPAIRS NORTHPORT HUMAN SERVICES BUILDING	1202 NORTHPORT DR, MADISON WI 53704	EXISTING SITE	REVISIONS NO. BY DATE	0322-08	406 Windy Peak Rd - Verona, WI 53593 608-620-3036 (Office) - svet@roussevengeering.com	<b>C1.0</b>

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PLOT DATE: 6/1/22  
PLOT BY: SSR



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 PARCEL ID 080925300991  
 CERTIFIED SURVEY MAP NO 12189 AS RECORDED IN DANE COUNTY REGISTER OF DEEDS IN VOL 75 PAGE 171 OF CERTIFIED SURVEYS, LOT 1

UNDERGROUND TUNNEL LENGTH = 180'  
 UNDERGROUND TUNNEL WIDTH = 6'

**NOTES:**

1. ALL EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
2. UNDERGROUND TUNNEL CEILING IS REPORTEDLY 12" TO 36" BELOW EXISTING GRADE.
3. CONTRACT RESPONSIBLE FOR RESTORING DISTURBED GRADING AREAS AND LANDSCAPING.

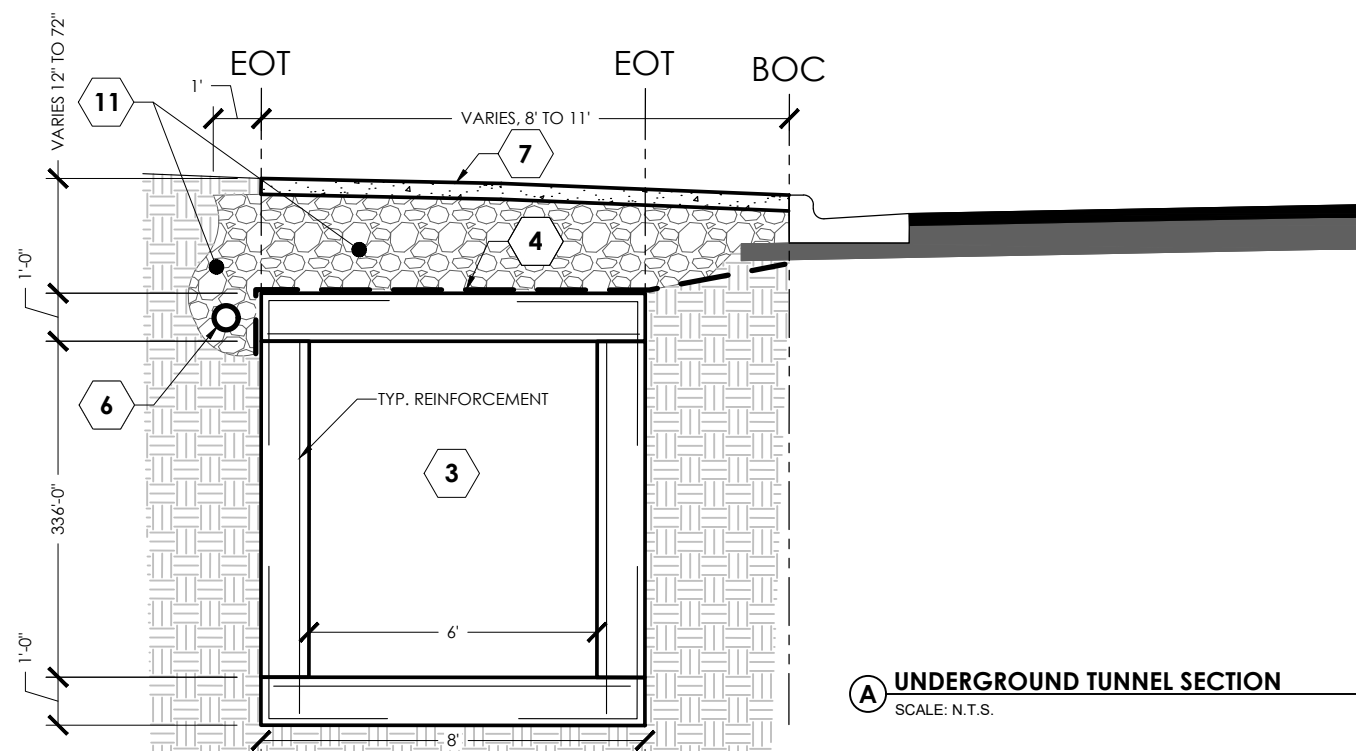
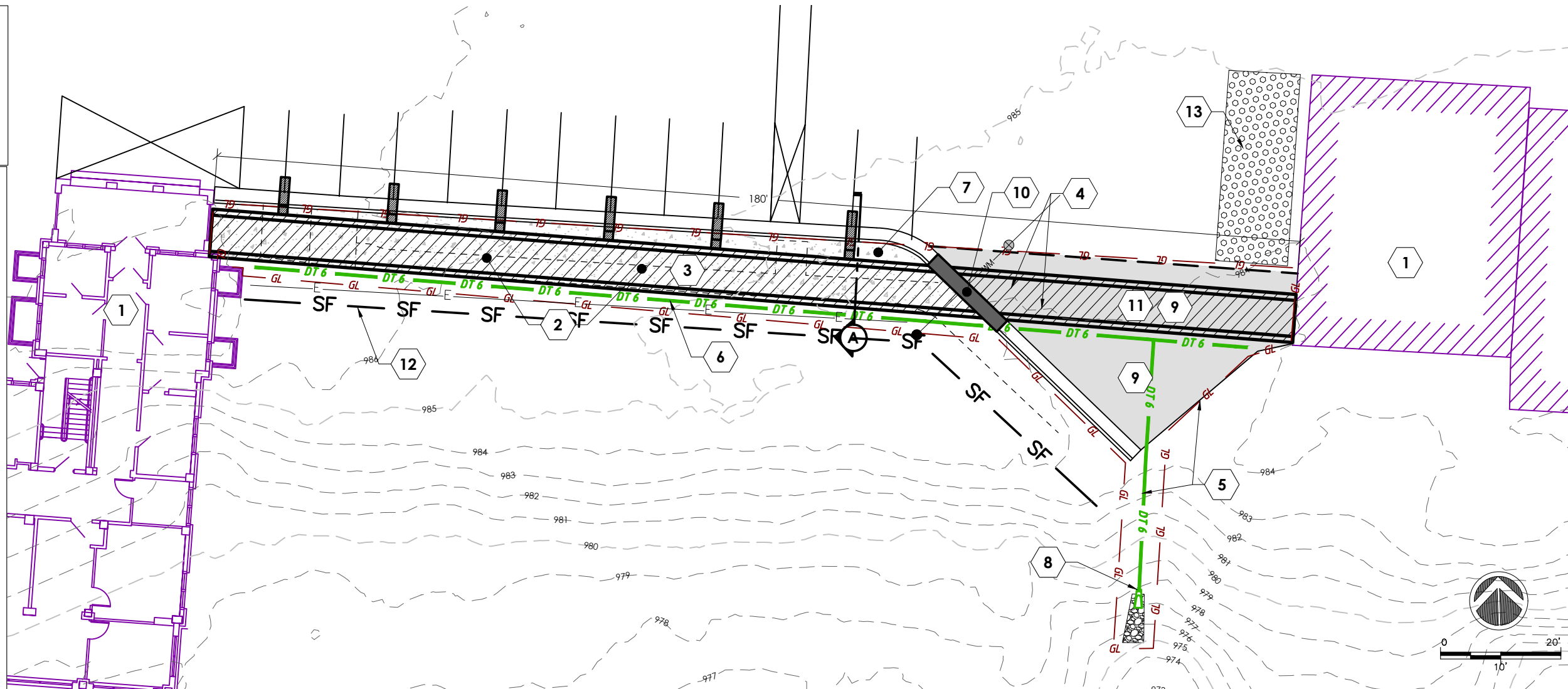
**PLAN KEY**

- 1 EXISTING BUILDING
- 2 REMOVE EXISTING CONCRETE SIDEWALK, EXCAVATE OVERBURDEN OVER TUNNEL CEILING AND EXPOSE WALLS TO RECEIVE WATERPROOFING.
- 3 EXISTING UNDERGROUND TUNNEL
- 4 PLACE RUBBERIZED MEMBRANE OVER TUNNEL CEILING AND WRAP 16" ON WALLS. COORDINATE DETAILING WITH CONCRETE FOUNDATIONS FOR ELECTRIC VEHICLE CHARGING STATIONS.
- 5 GRADING LIMITS
- 6 6" PERFORATED DRAINTILE WITH SOCK
- 7 NEW 4" SIDEWALK (WIDTH VARIES) BACK OF CURB (BOC) TO SOUTH EDGE OF TUNNEL (EOT)
- 8 DAYLIGHT DRAINTILE TO EXISTING SWALE. ADD CLASS II RIPRAP AT OUTLET.
- 9 RESTORE PAVEMENT SURFACE TO AGGREGATE BASE (DENSE 1 1/4" AGGREGATE BASE) ~ 8" COURSE. ASPHALT PAVEMENT SHALL BE BY OTHERS.
- 10 REPLACE CURB IN-KIND AFTER WATER PROOFING, TYP.
- 11 AGGREGATE BACKFILL @ TUNNEL DRAINTILE: USE A WASHED OR OPEN-GRADED BASE CONSISTING OF 1-1/4" CRUSHED STONE OR CRUSHED GRAVEL WITH NO GREATER THAN 5% PASSING THE NO. 200 SIEVE.
- 12 SILT FENCE, TYP.
- 13 TRACKING PAD, TYP.



**PAVEMENT KEY**

- EXISTING ASPHALT PAVEMENT OVER 8" ~ 1-1/4" DENSE AGGREGATE BASE
- 4" CONCRETE SIDEWALK
- SAWCUT LINE

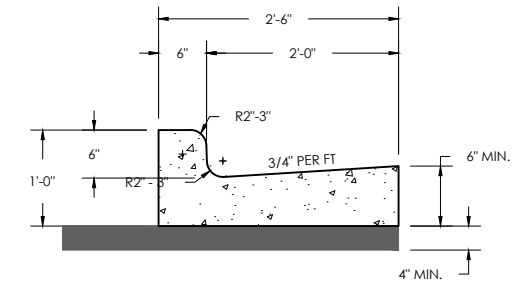
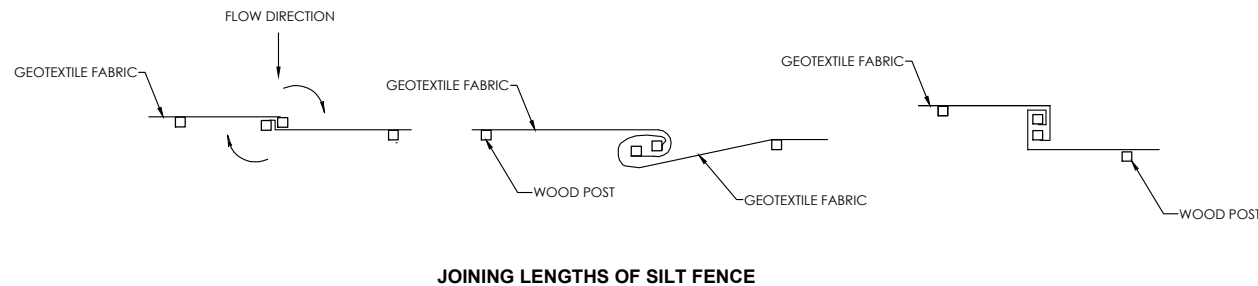
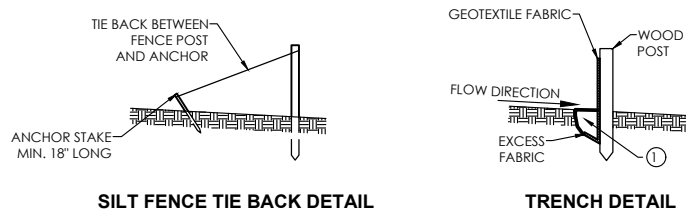
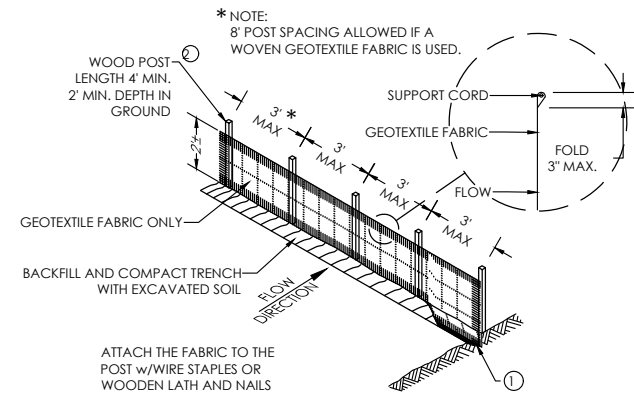


**A UNDERGROUND TUNNEL SECTION**  
 SCALE: N.T.S.

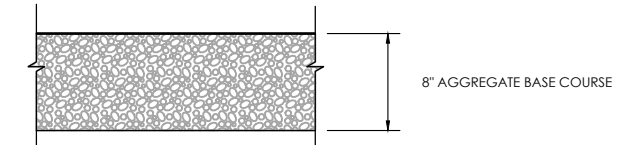
PROJECT: UNDERGROUND TUNNEL WATERPROOFING AND CONCRETE REPAIRS NORTHPORT HUMAN SERVICES BUILDING	ADDRESS: 1202 NORTHPORT DR, MADISON WI 53704	SHEET NAME: PROPOSED IMPROVEMENTS	REVISION: REVISIONS	PROJECT NO: 0322-08	RES ROUSSEV ENGINEERING SOLUTIONS, LLC 406 Windy Peak Rd - Verona, WI 53593 608-620-3036 (Office) - svet@roussevengineering.com	SHEET <b>C2.0</b>
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- NOTES:
- TRENCH SHALL BE A MINIMUM OF 4" WIDE BY 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC, FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
  - HORIZONTAL BRACE WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POST AS DIRECTED BY THE ENGINEER.
  - WOOD POST SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.

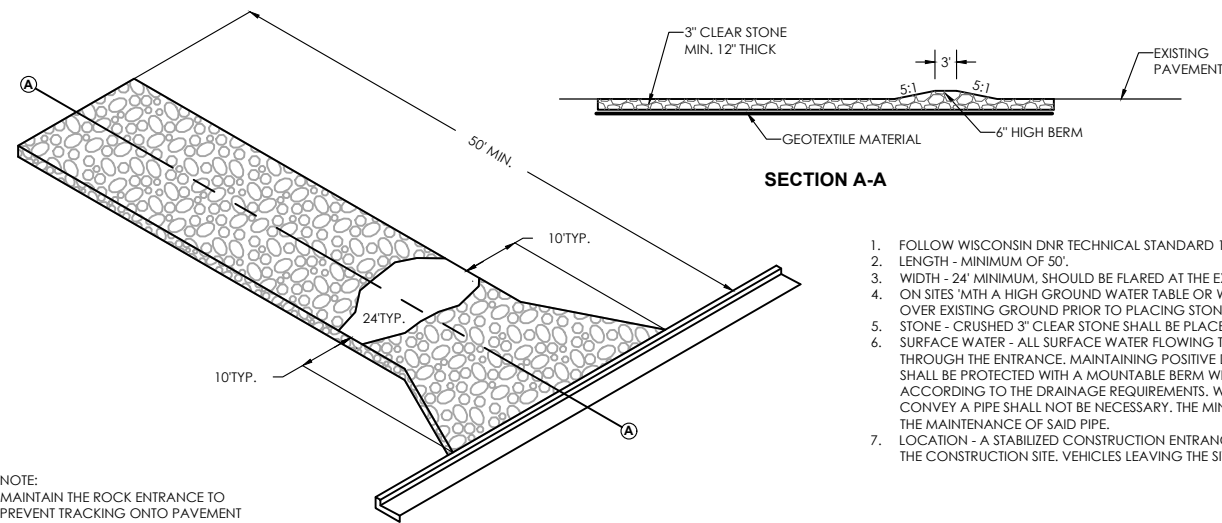


STANDARD 30" CURB & GUTTER



1-SILT FENCE

PAVEMENT RESTORATION @ TUNNEL WATERPROOFING

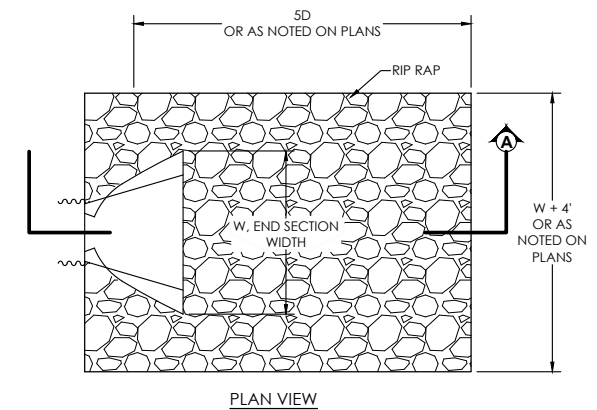


- FOLLOW WISCONSIN DNR TECHNICAL STANDARD 1057 FOR FURTHER DETAILS AND INSTALLATION.
- LENGTH - MINIMUM OF 50'.
- WIDTH - 24' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- ON SITES WITH A HIGH GROUND WATER TABLE OR WHERE SATURATED CONDITIONS EXIST, GEOTEXTILE FABRIC SHALL BE PLACED OVER EXISTING GROUND PRIOR TO PLACING STONE. FABRIC SHALL BE WISDOT TYPE-HR GEOTEXTILE FABRIC.
- STONE - CRUSHED 3" CLEAR STONE SHALL BE PLACED AT LEAST 12" DEEP OVER THE ENTIRE LENGTH AND WIDTH OF ENTRANCE.
- SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND MINIMUM OF 6" STONE OVER THE PIPE. PIPE SHALL BE SIZED ACCORDING TO THE DRAINAGE REQUIREMENTS. WHEN THE ENTRANCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE SHALL NOT BE NECESSARY. THE MINIMUM PIPE DIAMETER SHALL BE 6". CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF SAID PIPE.
- LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED WHERE CONSTRUCTION TRAFFIC ENTERS AND/OR LEAVES THE CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE TRACKING PAD.

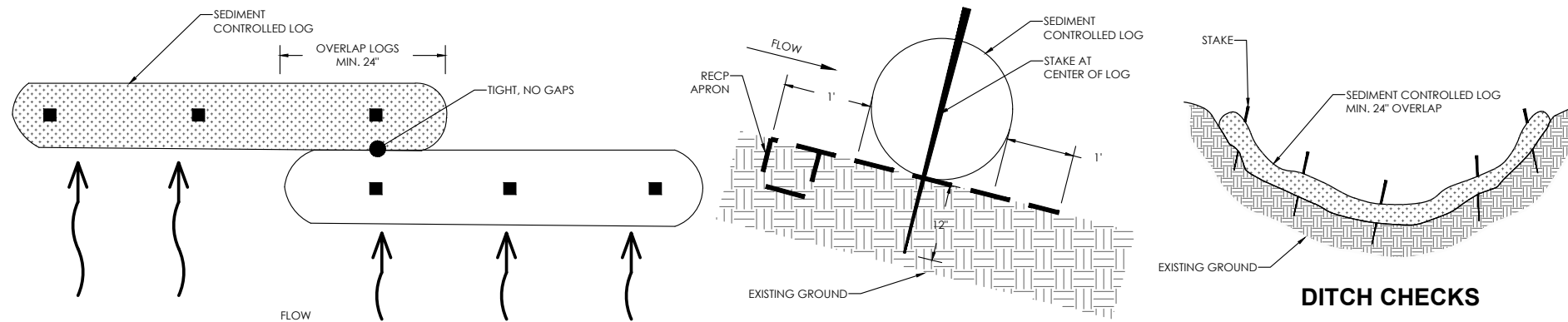
NOTE:  
MAINTAIN THE ROCK ENTRANCE TO  
PREVENT TRACKING ONTO PAVEMENT

2-TRACKING PAD

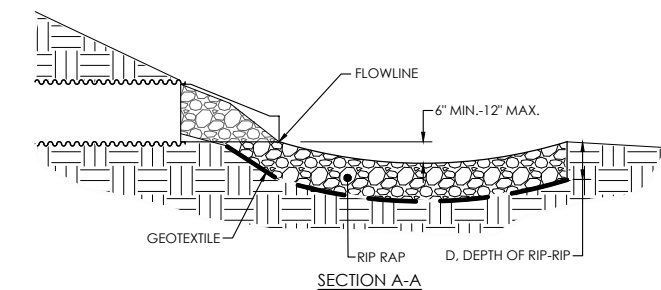
RIP RAP CLASS	WIS DOT RIP RAP EQUIVALENT	d, DEPTH
1	-	9"
2	LIGHT	18"
3	HEAVY	27"
4	EXTRA HEAVY	36"



PLAN VIEW

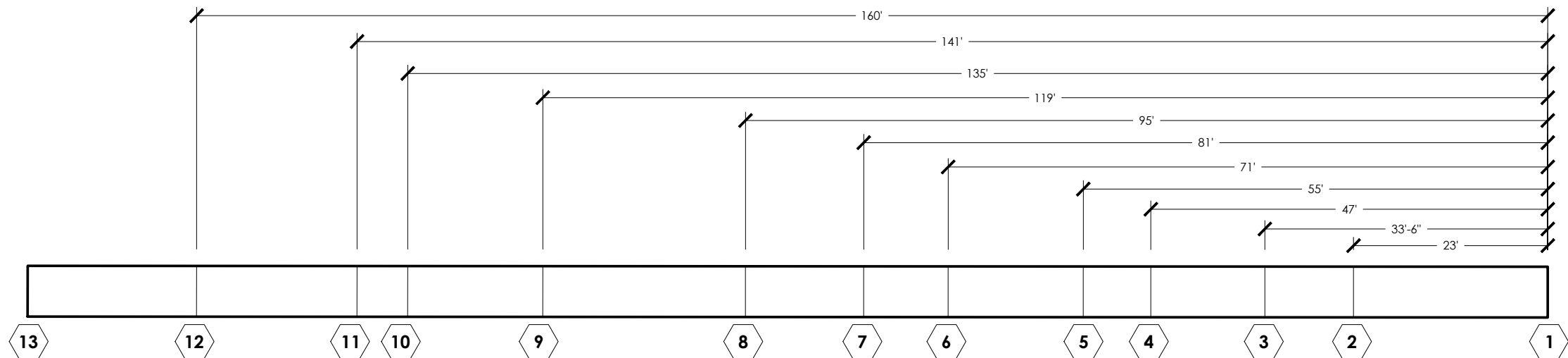


3-TEMPORARY EROSION SOCK



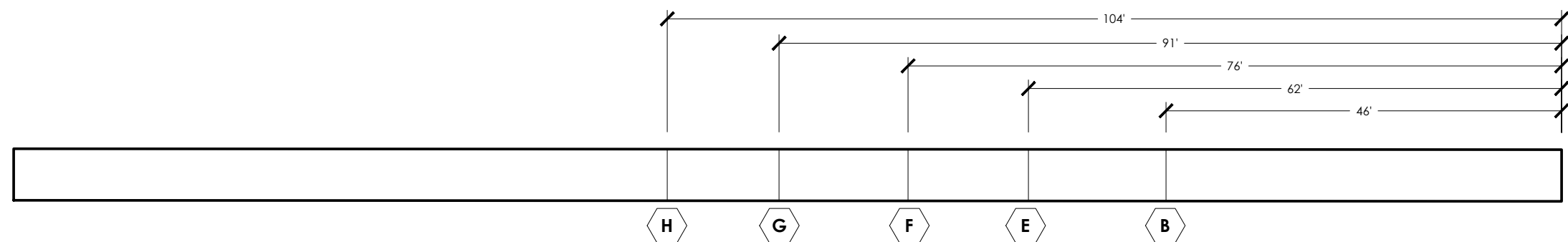
SECTION A-A

CMP/HDPE PIPE  
4-RIP RAP AT PIPE INLET



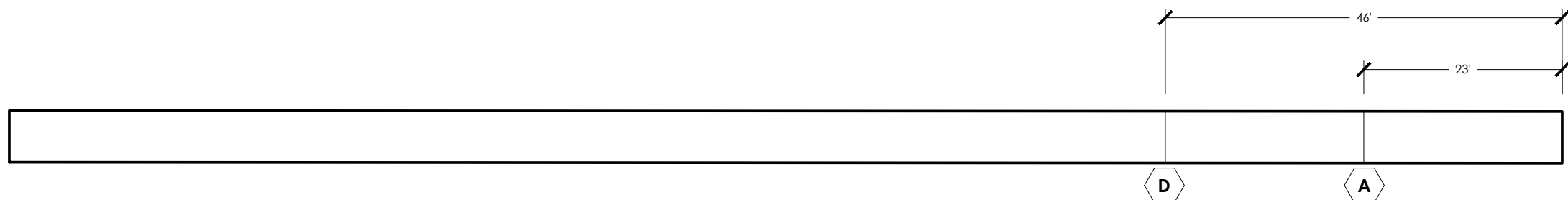
**(A) UNDERGROUND TUNNEL CEILING: VISUALLY ASSESSED AREAS NEEDING SURFACE REPAIRS**

SCALE: 1/16" = 1'-0"



**(B) UNDERGROUND TUNNEL NORTH WALL: VISUALLY ASSESSED AREAS NEEDING SURFACE REPAIRS**

SCALE: 1/16" = 1'-0"



**(C) UNDERGROUND TUNNEL SOUTH WALL: VISUALLY ASSESSED AREAS NEEDING SURFACE REPAIRS**

SCALE: 1/16" = 1'-0"

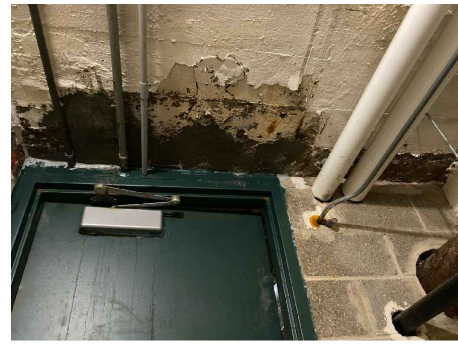
**NOTES:**

1. CONTRACTOR SHALL EXAMINE UNDERGROUND TUNNEL WALLS AND CEILING FOR DETERIORATED CONCRETE AREAS.
2. VISUALLY ASSESSED AREAS THAT REQUIRE CONCRETE REPAIRS VARY FROM 2 SF TO 15 SF
3. REMOVE LOOSE CONCRETE FROM THE SPALLED AREAS. INSPECT THE CAVITY FOR REMAINING DEFECTIVE CONCRETE BY TAPPING WITH A HAMMER OR STEEL ROD AND LISTEN FOR DULL OR HOLLOW SOUNDS. IN AREAS WHERE TAPPING DOES NOT PRODUCE A SOLID TONE, REMOVE ADDITIONAL CONCRETE UNTIL TAPPING PRODUCES A SOLID TONE. MAKE THE ENTIRE CAVITY AT LEAST ONE INCH DEEP. SAWCUT EDGES OF THE CAVITY TO AVOID FEATHERING EDGE. PREPARE SURFACE OF CAVITY BY SANDBLASTING, GRINDING, OR WATER BLASTING. REMOVE DUST, DIRT, AND LOOSELY BONDED MATERIAL RESULTING FROM CLEANING. ENSURE CAVITY SURFACES ARE DRY
4. WHERE REINFORCING STEEL WITH ACTIVE CORROSION IS ENCOUNTERED, SANDBLAST THE STEEL TO A WHITE METAL FINISH TO REMOVE ALL CONTAMINANTS AND RUST. WHERE CORROSION HAS OCCURRED DUE TO THE PRESENCE OF CHLORIDES, THE STEEL SHALL BE HIGH PRESSURE WASHED AFTER MECHANICAL CLEANING. PRIME STEEL WITH 2 COATS OF CORROSION INHIBITOR (SIKA® ARMATEC® 110 EPOCEM OR EQUAL) PER THE PRODUCT DATA SHEET.
5. PLACEMENT PROCEDURE WET PROCESS: AT TIME OF APPLICATION, SURFACE SHOULD BE SATURATED SURFACE DRY (SSD), NOT HOLDING ANY STANDING WATER. APPLY MATERIAL BY SPRAYING OR TROWELING FOR REPAIRING VERTICAL OR OVERHEAD SURFACES. SHOOT THE MATERIAL PERPENDICULAR TO THE SURFACE. THIS MINIMIZES REBOUND, CREATES THE SMOOTHEST PATTERN (REDUCES BUMPS) AND PROPERLY ENCASES EXPOSED REBARS. THE VELOCITY OF THE SHOTCRETE IS SUFFICIENT IF, AT A DISTANCE OF 18" TO 24", THE SHOTCRETE PATTERN FLATTENS OUT ON CONTACT WITH THE SURFACE AND THE REBARS ARE ENCASED. AFTER APPLYING THE MATERIAL, ALLOW TO STIFFEN FOR APPROX. 10 MINUTES BEFORE REMOVING BUMPY AREAS WITH A TROWEL. IF A ANOTHER LAYER IS DESIRED, ALLOW THE MATERIAL TO REACH INITIAL SET. THIS WILL TAKE ANYWHERE FROM 45 MINUTES TO SEVERAL HOURS DEPENDING ON MIX CONSISTENCY, MIX AND AMBIENT TEMPERATURE AND HUMIDITY. BEGIN AND FINISH A GIVEN PATCH ON THE SAME DAY.
6. AS PER ACI RECOMMENDATIONS FOR PORTLAND CEMENT CONCRETE, CURING IS REQUIRED. MOIST CURE WITH WET BURLAP AND POLYETHYLENE, A FINE MIST OF WATER OR A WATER-BASED\* COMPATIBLE CURING COMPOUND. MOIST CURING SHOULD COMMENCE IMMEDIATELY AFTER FINISHING AND CONTINUE FOR 48 HOURS. PROTECT NEWLY APPLIED MATERIAL FROM RAIN, SUN, AND WIND UNTIL COMPRESSIVE STRENGTH IS 70% OF THE 28 DAY COMPRESSIVE STRENGTH. TO PREVENT FROM FREEZING COVER WITH INSULATING MATERIAL. SETTING TIME IS DEPENDENT ON TEMPERATURE AND HUMIDITY.

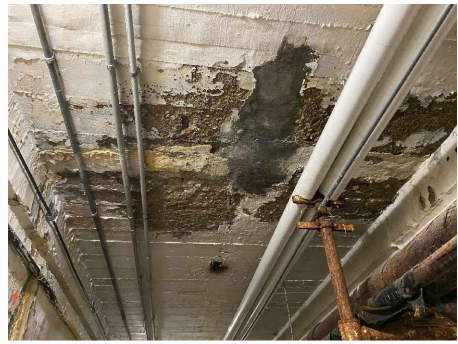
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PROJECT:	ADDRESS:	SHEET NAME:	REVISION:	PROJECT NO:	RES ROUSSEV ENGINEERING SOLUTIONS, LLC	SHEET
UNDERGROUND TUNNEL WATERPROOFING AND CONCRETE REPAIRS	1202 NORTHPORT DR, MADISON WI 53704	INTERIOR SURFACE CONCRETE REPAIRS - UNDERGROUND TUNNEL	REVISIONS NO. BY DATE	0322-08	406 Windy Peak Rd - Verona, WI 53593 608-620-3036 (Office) - svet@rousseveengineering.com	C4.0
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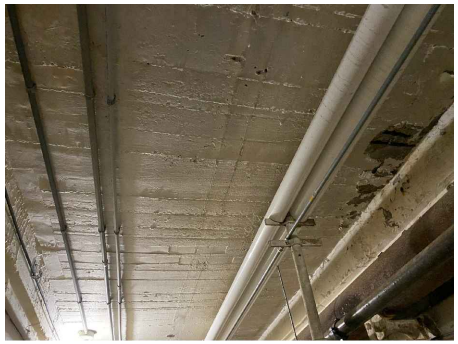




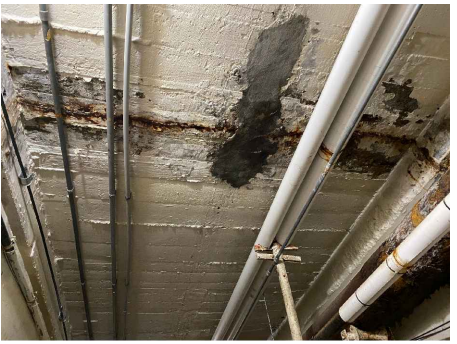
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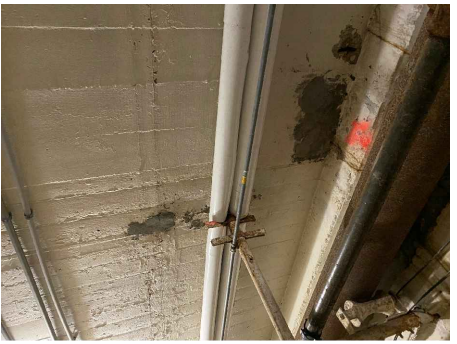
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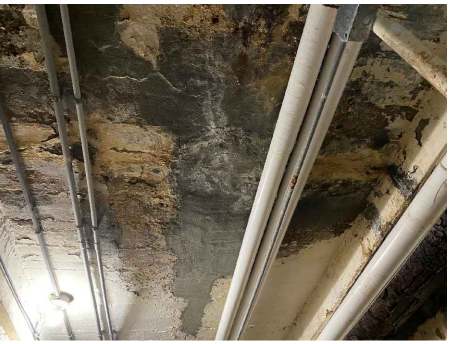
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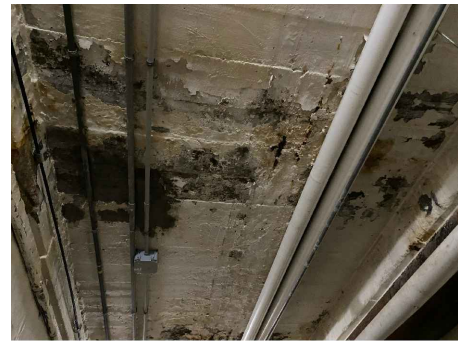
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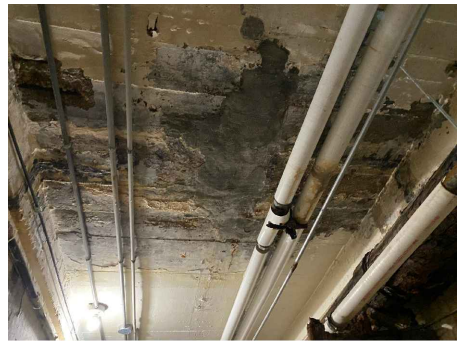
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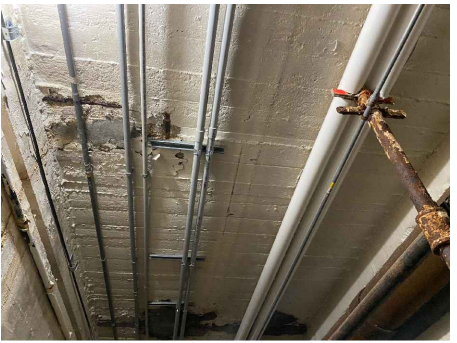
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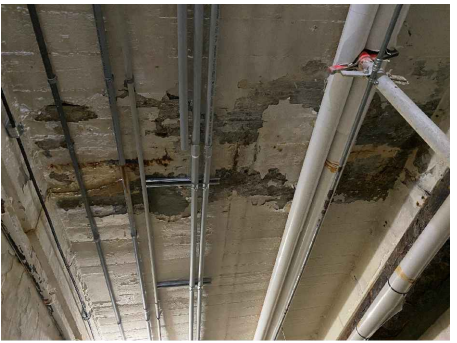
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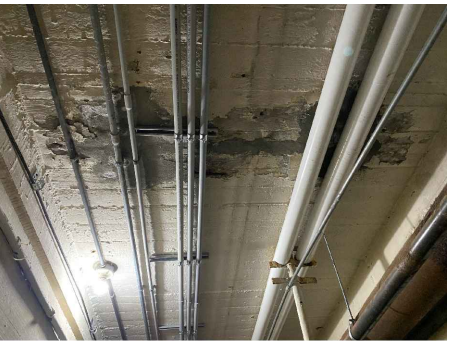
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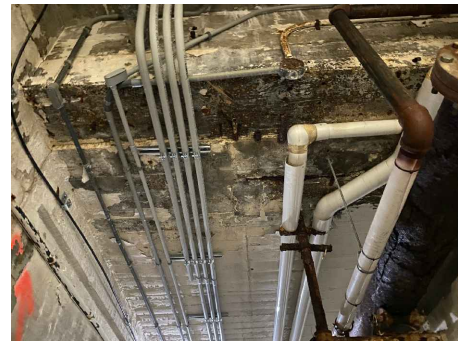
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11



12



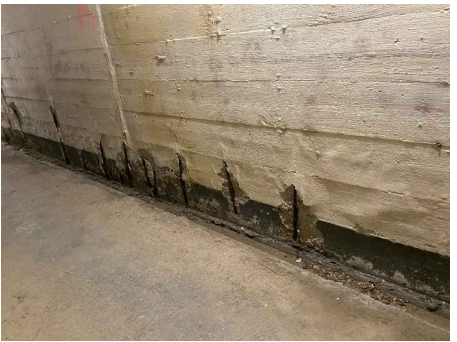
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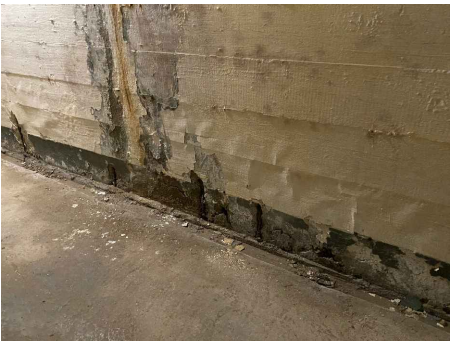
A



D



C



B



E



F



G

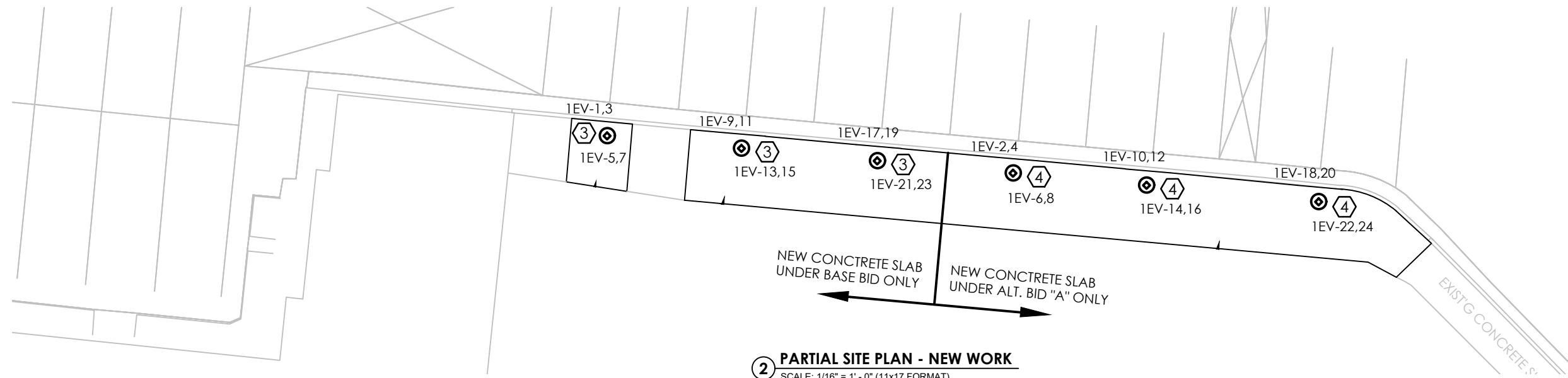


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PROJECT: UNDERGROUND TUNNEL WATERPROOFING AND CONCRETE REPAIRS NORTHPORT HUMAN SERVICES BUILDING	ADDRESS: 1202 NORTHPORT DR, MADISON WI 53704	SHEET NAME: INTERIOR SURFACE CONCRETE REPAIRS - UNDERGROUND TUNNEL PICS	REVISION: REVISIONS	PROJECT NO: 0322-08	RES ROUSSEV ENGINEERING SOLUTIONS, LLC 406 Windy Peak Rd - Verona, WI 53593 608-620-3036 (Office) - svet@roussevengeering.com <small>This document contains confidential or proprietary information of Roussev Engineering Solutions LLC. Neither this document nor the information herein is to be reproduced, distributed, used or disclosed either in whole or in part except as specifically authorized by Roussev Engineering Solutions LLC.</small>	SHEET C5.0 PLOT DATE: 6/1/22 PLOT BY: SSR
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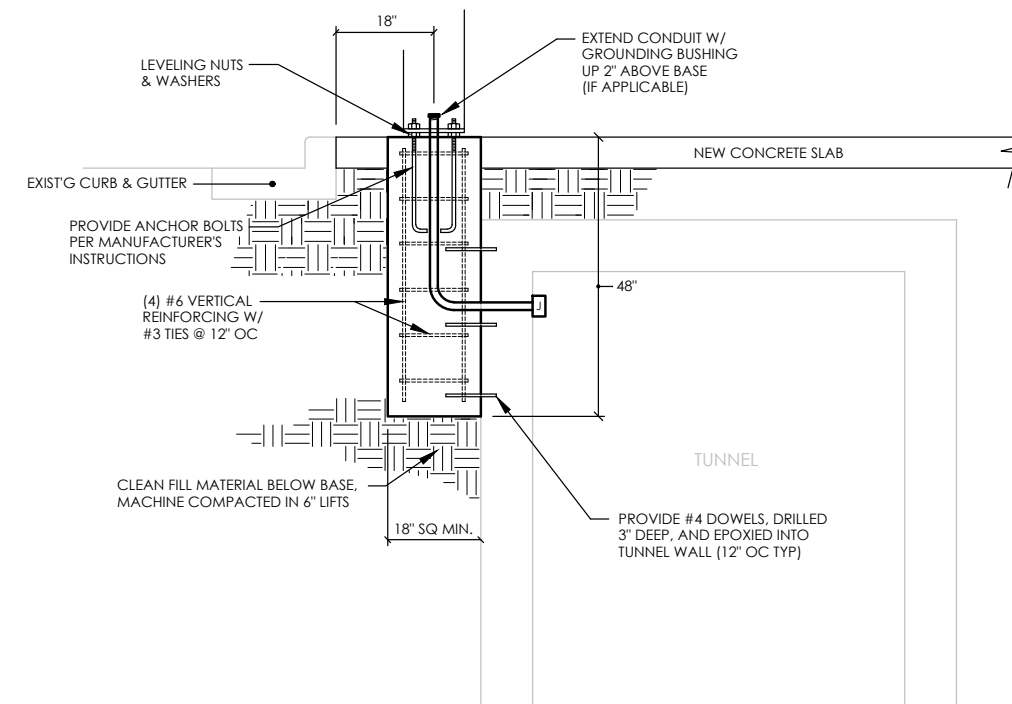
**2 PARTIAL SITE PLAN - NEW WORK**  
SCALE: 1/16" = 1' - 0" (11x17 FORMAT)

**PLAN NOTES:**

- ① REMOVE THIS SECTION OF EXISTING CONCRETE PAVEMENT TO ACCOMMODATE INSTALLATION OF NEW CHARGER AND ASSOCIATED FOUNDATION (BASE BID ONLY).
- ② REMOVE THIS SECTION OF EXISTING CONCRETE PAVEMENT (BASE OR ALT. BID "A" AS INDICATED).
- ③ INSTALL THIS EV CHARGER AND ASSOCIATED FOUNDATION UNDER BASE BID ONLY.
- ④ INSTALL THIS EV CHARGER AND ASSOCIATED FOUNDATION UNDER ALT. BID "A" ONLY.

THIS PAGE IS PROVIDED FOR REFERENCE ONLY.

This work will be performed by Owner. This information is provided to illustrate the details and extents of concrete bases associated with the Electric Vehicle Charging Station project.



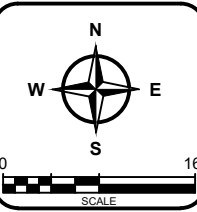
**1 CHARGER BASE INSTALLATION DETAIL - SECTION**  
NO SCALE



**General Engineering Company**  
P.O. Box 340 • 916 Silver Lake Dr. • Portage, WI 53901  
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**PARTIAL SITE PLANS, SYMBOLS  
HUMAN SERVICES ELECTRIC  
VEHICLE CHARGING STATIONS  
DANE COUNTY DEPT. OF PUBLIC WORKS  
CITY OF MADISON  
DANE COUNTY, WI**

REVISIONS	NO.	BY	DATE



DRAWN BY	RDH
REVIEWED BY	RDH
ISSUE DATE	SEPT 2021
GEC FILE NO.	2-0321-176
SHEET NO.	

E1.0