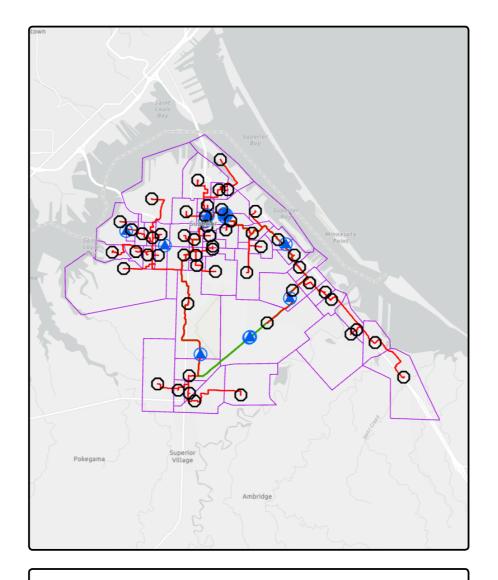
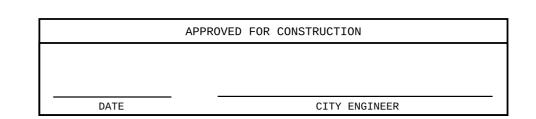
CITY OF SUPERIOR, WI



THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION OR BORING. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD. THE OWNER, CITY OF SUPERIOR SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR THE COMPLETENESS OF ANY SUCH INFORMATION AND DATA; AND, THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, FOR LOCATING ALL UNDERGROUND FACILITIES, FOR COORDINATION OF THE WORK WITH THE OWNERS OF SUCH UNDERGROUND FACILITIES DURING CONSTRUCTION, FOR THE SAFETY AND PROTECTION THEREOF, AND FOR REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL OF WHICH WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.



LOCATION MAP SCALE: N.T.S.



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FACILITY OWNER

CITY OF SUPERIOR

UTILITY CONTACTS CONT.

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ENGINEERING

EN COMMUNICATIONS

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Contact Email: smorris@ENTRUSTSOL.com

Contact Email: agillard@ENTRUSTSOL.com

TEETT CONTACTO CONT.

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PRIOR TO CONSTRUCTION CALL call811.org (TOLL FREE) AT 1-800-242-8511 OR 811 FOR LOCATION OF UNDERGROUND UTILITIES

NOTE: ALL CONDUIT TO BE PLACED AT A MINIMUM DEPTH OF 36" UNLESS OTHERWISE NOTED







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FIBER OPTIC NETW TYPICAL PACKA SHEET-02

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ABBREVIATIONS

DB DIRECTIONAL BORE

ED **EXISTING DUCT**

EOP EDGE OF PAVEMENT

FIBER OPTIC CABLE FOC

HDD HORIZONTAL DIRECTIONAL DRILL

HIGH DENSITY POLY ETHYLENE HDPE

HHHAND HOLE (VAULT)

HUT LOCATION WITH ACTIVE ELECTRONICS SERVING FIBER

FDH FIBER DISTRIBUTION HUB (PASSIVE CABINET)

MID CABLE ACCESS (SPLICE POINT) MCA

MULTI DWELLING UNIT MDU

NAP NETWORK ACCESS POINT

POINT OF PRESENCE (HUT OR DATACENTER, CITY HALL) POP

PUE PUBLIC UTILITY EASEMENT

ROW RIGHT OF WAY

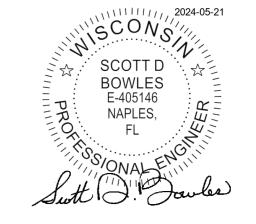


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SHEET-03

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GENERAL NOTES:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION OR BORING. THE INFORMATION AND DATA SHOWN WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS APPROXIMATE AND BASED ON PHYSICAL APPURTENANCES OBSERVED IN THE FIELD. THE OWNER, CITY OF SUPERIOR, SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR THE COMPLETENESS OF ANY SUCH INFORMATION AND DATA; AND, THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, FOR LOCATING ALL UNDERGROUND FACILITIES, FOR COORDINATION OF THE WORK WITH THE OWNERS OF SUCH UNDERGROUND FACILITIES DURING CONSTRUCTION, FOR THE SAFETY AND PROTECTION THEREOF, AND FOR REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL OF WHICH WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 2. STATE LAW REQUIRES CONTRACTORS TO CALL FOR LOCATES (811), NO LESS THAN 2 BUSINESS DAYS OR NO MORE THAN 3 BUSINESS DAYS BEFORE BEGINNING ANY EXCAVATION OR DEMOLITION. NOT ALL UTILITY AGENCIES/OWNERS ARE MEMBERS OF THE ONE-CALL SYSTEM.

MAINTAIN AN 18-INCH BUFFER ZONE ON EACH SIDE OF A MARKED FACILITY.

NO MECHANIZED EQUIPMENT CAN BE USED WITHIN THE BUFFER ZONE, ONLY HAND DIGGING IS ALLOWED. EXCAVATION, ACCORDING TO THE LAW, MEANS ANYTHING THAT MOVES, REMOVES, OR DISPLACES EARTH, ROCK, OR OTHER MATERIAL IN OR ON THE GROUND. WISC STATE STATUTE 182.0175

3. EXISTING UTILITY INFORMATION DEPICTED ON THE PLANS IS IN ACCORDANCE WITH THE AMERICAN SOCIETY OF CIVIL ENGINEER'S (ASCE 38-22) STANDARD GUIDELINE FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA QUALITY LEVEL D (ASCE-38-22 QL D).

- 4. THE WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION AND CITY OF SUPERIOR CONSTRUCTION SPECIFICATIONS SHALL BE REFERENCED FOR ALL EROSION AND RESTORATION WORK FOR THE PROJECT.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING A BEST MANAGEMENT PRACTICE (BMP) FOR THE PROJECT. THE BMP SHALL BE APPROVED BY THE CITY OF SUPERIOR PRIOR TO BEGINNING CONSTRUCTION. THE BMP SHALL BE UPDATED MAINTAINED AND UPDATED AS THE PROJECT PROGRESSES.
- 6. CONTRACTOR SHALL FIELD LOCATE EXISTING UTILITY LINES TO BE CONNECTED TO PRIOR TO COMMENCING WORK. IF A DISCREPANCY EXISTS BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY.
- 7. CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS IN VICINITY OF ANY OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL ABIDE BY NATIONAL ELECTRIC CODE AND ANY REQUIREMENT BY OWNER OF ELECTRIC LINE.
- 8. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT MANAGER OF ANY DAMAGE OR CHANGED CONDITION CAUSED BY CONSTRUCTION ACTIVITIES THAT MAY RESULT IN A DISRUPTION OF SANITARY SEWER SERVICE.
- 9. THE CONTRACTOR SHALL NOT COMMENCE WORK BEFORE 6:00AM OR PER TRAFFIC CONTROL RULES. NO WORK IS ALLOWED AFTER 8:00PM OR WEEKENDS WITHOUT WRITTEN APPROVAL OF SUPERIOR CITY PUBLIC WORKS DEPARTMENT. REFERENCE SHEET-CON-10, JOB CONDITIONS AND PARKING.
- 10. THE CONTRACTOR SHALL RE-ESTABLISH ANY PROPERTY MARKER, BENCHMARK, ETC. DISTURBED DURING CONSTRUCTION TO ITS ORIGINAL LOCATION AND ELEVATION. WISDOT SECTION 785.1
- 11. THE CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING WATER, OR AS APPROVED BY OWNER, CITY OF SUPERIOR, WI.

SEE SDD 08E08 - 03, SHEET-COSR-18.



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SUPERIOR

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- 12. THE CONTRACTOR SHALL NOT PLACE FILL OR WASTE MATERIAL ON ANY PRIVATE PROPERTY WITHOUT PRIOR WRITTEN AGREEMENT WITH PROPERTY OWNER.
- 13. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION AND CITY OF SUPERIOR CONSTRUCTION SPECIFICATIONS EXCEPT WHERE MODIFIED IN THESE PLANS OR THE SPECIFICATIONS.
- 14. NO MATERIALS MAY BE STORED IN THE ROADWAY PAVEMENT AREA & CURB/GUTTER OR SIDEWALK SO AS TO BLOCK DRAINAGE OR CREATE A HAZARD TO THE TRAVELING PUBLIC. ANY STOCKPILE THAT REMAINS IN THE ROADWAY AT THE END OF THE WORKDAY SHALL HAVE MUTCD COMPLIANT TRAFFIC CONTROL INSTALLED UNTIL SUCH TIME AS THE STOCKPILE IS REMOVED & CLEANUP IS COMPLETE. NO ADDITIONAL PAYMENT WILL BE MADE FOR INSTALLING EROSION CONTROL, ROADWAY & BOULEVARD CLEANUP, & HYDROSEEDING RESULTING FROM MATERIAL STOCK PILES. NO STOCKPILE SHALL BE STORED ON ANY ROADWAY THAT IMPEDES REGULAR TRAFFIC IN ALL DRIVING LANES AT ANY TIME DURING THE PROJECT.
- 15. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS GOVERNING EXCAVATION. TRENCH SIDE SLOPES SHALL MEET OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS THAT ARE IN EFFECT AT THE TIME OF CONSTRUCTION. SHEETING, SHORING AND BRACING SHALL BE REQUIRED WHEN SIDE SLOPE STANDARDS ARE NOT MET. A PULL BOX, MEETING OSHA STANDARDS, MAY BE ACCEPTABLE, UNLESS NEGATED BY GROUNDWATER CONTROL MEASURES.
- 16. UNTIL THE WORK IS ACCEPTED BY THE OWNER, THE PROJECT SHALL BE UNDER THE CHARGE AND CUSTODY OF THE CONTRACTOR AND THE CONTRACTOR SHALL TAKE EVERY NECESSARY PRECAUTION AGAINST INJURY AND/OR DAMAGE TO THE WORK.
- 17. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY DAMAGE TO PRIVATE PROPERTY, INCLUDING, BUT NOT LIMITED TO, FENCES, WALLS, PAVEMENT, GRASS, AND TREES, AT NO ADDITIONAL COST TO THE OWNER. THIS WORK SHALL BE SUBSIDIARY TO THE COST OF THE CONTRACT UNLESS OTHERWISE NOTED.

- 18. CONTRACTOR SHALL INSTALL TEMPORARY BACK FILL AS REQUIRED FOR OPEN TRENCH IN ESTABLISHED ROADWAYS. NO OPEN TRENCH WILL BE ALLOWED IN EXISTING PAVEMENT EXCEPT DURING DAYLIGHT HOURS AND DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL INSTALL TEMPORARY BACKFILL TO FOLLOW WISDOT & CITY STANDARDS UNLESS PERMISSION WITH RESTRICTIONS ARE GRANTED BY PUBLIC WORKS.
- 19. EXCAVATION BACKFILL IN 12-INCH OR SHALLOWER THOROUGHLY COMPACT LAYERS. TOPSOIL TO BE REPLACED IN 4" LAYER AND MUST CONSIST OF LOAM, SANDY LOAM, SILTY CLAY LOAM OR CLAY LOAM HUMUS-BEARING SOILS ADAPTED TO SUSTAIN PLANT LIFE AND ENSURE PH RANGES FROM 6.0-7.0 TOPSOIL SHALL BE KEPT SEPARATE FROM GENERAL TRENCH EXCAVATED MATERIAL AND SHALL BE PLACED ON TOP OF TRENCH BACK FILL. CONTRACTOR SHALL REMOVE ALL ROCK FROM TOPSOIL IN CULTIVATED AREAS. REFER TO WISDOT 625.2 AND WISDOT 651.3.1.
- 20. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND SUBMITTING A TRENCH SAFETY PLAN, PREPARED BY A PROFESSIONAL ENGINEER IN THE STATE OF WISCONSIN, TO THE OWNER, CITY OF SUPERIOR, WI PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY, STATE, AND FEDERAL REQUIREMENTS, INCLUDING OSHA FOR ALL TRENCHES. NO OPEN TRENCHES SHALL BE ALLOWED OVERNIGHT WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY.
- 21. IN ORDER TO MINIMIZE IMPACT TO LANDSCAPING MATERIAL, THE CONTRACTOR SHALL EXERCISE CAUTION THROUGH LANDSCAPING LIMITS DURING ALL PHASES OF CONSTRUCTION ACTIVITY. ANY LANDSCAPE MATERIAL DAMAGED DURING THE CONSTRUCTION PROCESS SHALL BE REPLACED IN KIND AT THE CONTRACTORS EXPENSE. REFERENCE SHEET-TREES-01-04 FOR FURTHER STANDARDS AND DETAILS
- 22. ALL APPLICABLE PROVISIONS OF EXISTING UTILITY EASEMENTS WILL BE ADHERED TO BY THE CONTRACTOR.

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CITY OF SUPERIOR, V FIBER OPTIC NETWOF TYPICAL PACKAGE EET-CON-02

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- 23. THE CONTRACTOR SHALL AVOID AND/OR PROTECT ALL TREES AND ROOTS BY HAND DIGGING AS NECESSARY. ANY TREES, SHRUBS OR VEGETATION DAMAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND AT NO COST TO THE CITY. REFER TO SHEET-TREES-01 THROUGH 04 FOR FURTHER STANDARDS AND DETAILS.
- 24. WORK SHALL NOT START UNTIL THE CONTRACTOR HAS ALL NECESSARY PERMITS FROM THE APPROPRIATE GOVERNING REGULATORY AGENCIES, INCLUDING BUT NOT LIMITED TO THE CITY OF SUPERIOR, APPROPRIATE RAILROAD, WISDOT, AND **SUPERIOR WATER LIGHT & POWER**
- 25. THE CONTRACTOR MUST SEED ALL DISTURBED AREAS UPON COMPLETION OF PROJECT. FOLLOW SPECIFICATIONS FOUND IN WISDOT 107 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC 107.20 EROSION CONTROL PART 4&6, SHEET-TYP-02.
- 26. ANY APPLICANT OR CONTRACTOR DOING WORK WITHIN THE CITY'S RIGHT OF WAY MUST RESTORE THE AREA TO THE PREVIOUS CONDITION AND LEAVE THE AREA IN A CLEAN AND NEAT CONDITION. ANY FUTURE COMPLAINTS ABOUT CUT OR DAMAGED TILES OR POORLY FINISHED SLOPES OR SURFACES WILL BE DIRECTED BACK TO THE CONTRACTOR TO BE CORRECTED. REFERENCE SDD 08D01 - A THROUGH SDD 08D21 ATTACHED

UTILITIES TO BE PLACED ALONG PAVED ROADS:

- 1. SHALL BE INSTALLED PER THE APPROVED PERMITS AND DRAWINGS AND IN **RESPECT TO EXISTING UTLITIES & LOCATES.**
- 2. SHALL NOT CUT OR DISTURB ANY DRAINAGE TILES. THE CONTRACTOR MUST BORE UNDER TILE LINES A MINIMUM OF THIRTY-SIX (36) INCHES.
- 3. ALL CONSTRUCTION SITE RESTORATION TO CONFORM TO CITY AND WISDOT STANDARDS. REFERENCE SHEET-TYP-02, RESTORATION.
- 4. REFERENCE WISDOT HMM 09-15-25 LOCATION REQUIREMENTS

UTILITIES TO BE PLACED ALONG GRAVEL ROADS:

1. SHALL BE INSTALLED PER THE APPROVED PERMITS AND DRAWINGS AND IN RESPECT TO EXISTING UTLITIES & LOCATES.

- 2. SHALL NOT CUT OR DISTURB ANY DRAINAGE TILES, CULVERTS OR BRIDGES. THE CONTRACTOR MUST BORE UNDER TILE AND CULVERT A MINIMUM OF THIRTY-SIX (36) INCHES. UTILITIES MAY BE INSTALLED AROUND A CULVERT OR BRIDGE WITH A MINIMUM OF 15 TO BE MAINTAINED FROM ALL SIDES OF THE STRUCTURE. REFERENCE SHEET-TYP-04.
- 3. ALL CONSTRUCTION SITE RESTORATION TO CONFORM TO CITY AND WISDOT STANDARDS. REFERENCE SHEET-TYP-02, RESTORATION.
- 4. REFERENCE WISDOT HMM 09-15-25 LOCATION REQUIREMENTS

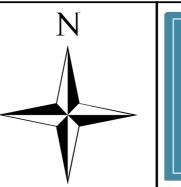
ROADWAY CROSSINGS:

- 1. ALL UTILITIES SHOULD CROSS THE ROAD AT A 90° ANGLE.
- 2. ALL CROSS ROAD BORE PITS SHALL BE BACKFILLED IN LAYERS NOT MORE THAN EIGHT (8) INCHES IN LOOSE THICKNESS. BASE LAYER TO BE STRUCTURAL BACKFILL (CMM 325 & WISDOT 209.1) AND EIGHT (8) INCHES OF 1 1/4" BAD (WISDOT 305) COMPACTED. FURTHER BACKFILL LAYERS TO MATCH EXISTING SECTION ABOVE. EACH LAYER SHALL BE THOROUGHLY COMPACTED BEFORE THE NEXT LAYER IS PLACED, 625.2 AND WISDOT 651.3.1.

SAWCUT PAVEMENTS A MINIMUM OF 12" FROM THE AREA TO BE EXCAVATED.

- 3. DUE TO THE HEAVY CLAY MAKEUP OF THE REGIONAL SOIL, THE TOP LAYER OF THE EXCAVATION BACKFILL IS TO 'CRUSH AND RUN' GRAVEL MATERIAL 1/4" AND SMALLER, NOT TO BE FINISHED WITH OPEN GRADED ROCK LARGER THAN 1/4". TOPSOIL REPLACEMENT IS REQUIRED IN ALL AREAS WHERE TOPSOIL EXISTS. REFERENCE WISDOT 209.1 GRANULAR BACKFILL AND CMM - 325 STRUCTURE **EXCAVATION. TOPSOIL REFERENCE SHEET-CON-02, ITEM 18.**
- 3. ALL PAVED ROADS SHALL HAVE THE UTILITIES BORED.
- 4. ALL CONSTRUCTION SITE RESTORATION TO CONFORM TO CITY AND WISDOT STANDARDS. REFERENCE SHEET-TYP-02, RESTORATION.
- 5. REFERENCE TYPICAL DRAWINGS ON SHEET-TYP-03 AND WISDOT HMM 09-15-25

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SHEET-CON-03

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EROSION CONTROL:

- 1. AN NPDES PERMIT FROM THE WISCONSIN DNR IS REQUIRED FOR ANY SITE THAT DISTURBS AND EXPOSES ONE ACRE OF LAND OR MORE. A PERMIT IS ALSO REQUIRED FOR PROJECTS THAT WILL DISTURB ONE OR MORE ACRES AS PART OF A COMMON PLAN OF DEVELOPMENT, EVEN IF THERE WILL NOT BE ONE ACRE OF DISTURBED GROUND EXPOSED AT ANY GIVEN TIME. IN ADDITION TO THE WISCONSIN DNR, MANY LOCAL AGENCIES ALSO HAVE A PERMIT PROCESS. IT IS NECESSARY TO CHECK WITH THE JURISDICTIONAL ENGINEER TO DETERMINE WHAT, IF ANY, INFORMATION IS NEEDED FOR THE LOCAL AGENCY PERMIT.
- 2. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NPDES PERMITS IF REQUIRED.
- 3. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL **EROSION CONTROL AND WATER QUALITY REQUIREMENTS, LAWS, AND** ORDINANCES THAT APPLY TO THE CONSTRUCTION SITE LAND DISTURBANCE.
- 4. EROSION CONTROL DEVICES SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START OF LAND DISTURBANCE. LAND DISTURBANCE SHOULD NOT PROCEED UNTIL PRE-CONSTRUCTION INSPECTION OF SITE HAS BEEN APPROVED BY CITY REPRESENTATIVE ON OVERSIGHT.
- 5. CONTRACTOR IS SOLELY RESPONSIBLE FOR INSTALLATION, IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS, AND REMOVAL OF ALL EROSION CONTROL DEVICES, BEST MANAGEMENT PRACTICES (BMPS), AND FOR UPDATING THE EROSION CONTROL PLAN DURING CONSTRUCTION AS FIELD CONDITIONS CHANGE.
- 6. THE EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE AREA IT PROTECTS HAS BEEN PERMANENTLY STABILIZED, TO A UNIFORM, GOOD PERENNIAL VEGETATIVE COVER OF 70% (NO INVASIVE OR UNPERMITTED SPECIES).

- 7. CONTRACTOR SHALL OBSERVE THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES AND MAKE FIELD ADJUSTMENTS AND MODIFICATIONS AS NEEDED TO PREVENT SEDIMENT FROM LEAVING THE SITE. IF THE EROSION CONTROL DEVICES DO NOT EFFECTIVELY CONTROL EROSION AND PREVENT SEDIMENTATION FROM WASHING OFF THE SITE, THEN THE CONTRACTOR SHALL NOTIFY THE OWNER, CITY OF SUPERIOR. THE CITY RETAINS THE ABILITY TO ADD ADDITIONAL EROSION & SEDIMENT CONTROL PRACTICES IF NECESSARY. REFER TO SDD08E08 AND SDD08E09, ATTACHED.
- 8. OFF-SITE SOIL BORROW, SPOIL, AND STORAGE AREAS (IF APPLICABLE) ARE CONSIDERED AS PART OF THE PROJECT SITE AND MUST ALSO COMPLY WITH THE **EROSION CONTROL REQUIREMENTS FOR THIS PROJECT. THIS INCLUDES** THE INSTALLATION OF BMP S TO CONTROL EROSION AND SEDIMENTATION AND THE ESTABLISHMENT OF PERMANENT GROUND COVER ON DISTURBED AREAS PRIOR TO FINAL APPROVAL OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE EROSION CONTROL PLAN TO INCLUDE BMP'S FOR ANY OFF-SITE THAT ARE NOT ANTICIPATED OR SHOWN ON THE EROSION CONTROL PLAN.
- 9. CONTRACTORS SHALL INSPECT ALL EROSION CONTROL DEVICES, BMPS, DISTURBED AREAS, AND VEHICLE ENTRY AND EXIT AREAS, AND KEEP A RECORD OF THIS INSPECTION TO VERIFY THAT THE DEVICES AND EROSION CONTROL PLAN ARE FUNCTIONING PROPERLY. INSPECTIONS TO OCCUR WEEKLY AND AFTER SIGNIFICANT RAIN EVENTS OF 0.5" OR MORE.
- 10. SITE ENTRY AND EXITS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING AND FLOWING OF SEDIMENT AND DIRT ONTO OFF-SITE ROADWAYS. ALL SEDIMENT AND DIRT FROM THE SITE THAT IS DEPOSITED ONTO AN OFF-SITE ROADWAY SHALL BE REMOVED IMMEDIATELY.

REFERENCE SHEET-COSR-18 AND SHEET-COSR-19 FOR TYPICAL INSTALLATIONS



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EET-CON-04

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- 11. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS FROM THE AFFECTED OFF-SITE ROADWAYS THAT ARE A RESULT OF THE CONSTRUCTION, AS REQUESTED BY OWNER. AT A MINIMUM, THIS SHOULD OCCUR ONCE PER DAY FOR THE OFF-SITE ROADWAYS.
- 12. ALL FINES IMPOSED FOR SEDIMENT OR DIRT DISCHARGED FROM THE SITE SHALL BE PAID BY THE RESPONSIBLE CONTRACTOR.
- 13. TEMPORARY SEEDING OR OTHER APPROVED STABILIZATION SHALL BE INITIATED IMMEDIATELY OF ANY AREA, UNLESS ADDITIONAL CONSTRUCTION IN THE AREA IS EXPECTED WITHIN 14 DAYS OF THE LAST DISTURBANCE.
- 14. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING CONSTRUCTION, ALWAYS CLEANING UP DIRT, LOOSE MATERIAL, AND TRASH AS **CONSTRUCTION PROGRESSES.**
- 15. UPON COMPLETION OF FINE GRADING, ALL SURFACES OF DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED. STABILIZATION IS ACHIEVED WHEN THE AREA IS EITHER COVERED BY PERMANENT IMPERVIOUS STRUCTURES, SUCH AS BUILDINGS, SIDEWALK, PAVEMENT, OR A UNIFORM PERENNIAL VEGETATIVE COVER ACROSS ENTIRE SITE. REFER TO CITY OF SUPERIOR SIDEWALK DRAWINGS ATTACHED, SHEET-COSS-01 THROUGH 15.
- 16. THE CONTRACTOR SHALL REVEGETATE UNPAVED AREAS DISTURBED BY CONSTRUCTION PRIOR TO ACCEPTANCE OF THE PROJECT. REVEGETATION SHALL CONSIST OF SEED SOWING, GROUND COVER(NOT INCLUDING STRAW MULCH), FERTILIZING AND WATERING. REVEGETATION SHALL BE ACCEPTABLE WHEN **VEGETATION ACHIEVES A UNIFORM PERENNIAL COVERAGE OF 70%. THIS ITEM** SHALL BE CONSIDERED AS A SUBSIDIARY COST TO THE PROJECT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. COMPLETE WORK IN ACCORDANCE WITH THE REQUIREMENTS WI DNR TECHNICAL STANDARDS 1059. SEED MIXTURE SHALL BE NO. 40, OR AS DETAILED IN THE PLANS, AS REFERENCED IN SECTION 630 OF THE WI DOT STANDARD SPECIFICATIONS. SEED SHALL BE SOWN **USING HYDROSEED METHODS.**

REFERENCE SHEET-COSR-18 AND SHEET-COSR-19 FOR TYPICAL INSTALLATIONS

TRAFFIC CONTROL:

1. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN FOR THE ENTIRE PROJECT. THE CONTRACTOR WILL SUBMIT THE TRAFFIC CONTROL PLAN TO THE OWNER/ENGINEER PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE CONTROLS IDENTIFIED IN THE PLAN AND CHANGES TO THE PLAN ONCE CONSTRUCTION BEGINS.

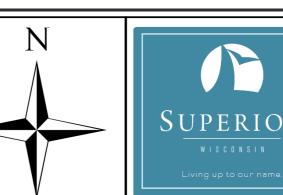
NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR COMPLIANCE WITH THE PROJECT TRAFFIC CONTROL PLAN. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR COMPLIANCE WITH REQUESTS FOR DOT INSPECTOR, IF APPLICABLE.

CONTRACTOR TO REFERENCE WISCONSIN MANUAL ON UNIFORM TRAFFIC **CONTROL DEVICES (WMUTCD)**

2. BARRICADES AND SIGNS SHALL BE PLACED IN SUCH A MANNER AS NOT TO INTERFERE WITH THE SIGHT DISTANCE OF DRIVERS ENTERING THE ROADWAYS OR SIDE STREETS. TO FACILITATE LANE SHIFTING, BARRICADES AND SIGNS USED IN LANE CLOSURES OR TRAFFIC STAGING MAY BE ERECTED AND MOUNTED ON PORTABLE SUPPORTS.

THE DESIGN OF THESE SUPPORTS SHALL CONFORM TO THE WMUTCD AND ARE SUBJECT TO THE APPROVAL OF THE CONTRACTOR.

- 3. ALL TRAFFIC CONTROL DEVICES (SIGNS, MARKINGS, BARRICADES, ETC.) USED TO WARN MOTORIST OF THE CONSTRUCTION ACTIVITY MUST CONFORM TO THE LATEST VERSION OF THE WMUTCD.
- 4. BARRICADES AND WARNING SIGNS, AS APPROPRIATE, TO FOLLOW CITY/COUNTY/STATE STANDARDS, WMUTCD.





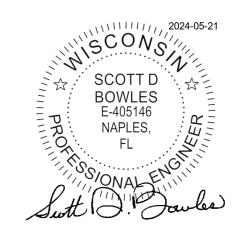


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ENGINEER: SM JW DRAWN BY: CHECKED BY: JW

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SOME UTILITIES SHOWN ON THESE PLANS ARE PER GIS DATA. LOCATIONS AND DEPTHS FOR ALL UTILITIES ARE APPROXIMATE. NOT ALL UTILITIES ARE SHOWN ON PLANS

PRIOR TO CONSTRUCTION CALL call811.org (TOLL FREE) AT 1-800-242-8511 OR 811 FOR LOCATION OF UNDERGROUND UTILITIES

NOTE: ALL CONDUIT TO BE PLACED AT A MINIMUM DEPTH OF 36" UNLESS OTHERWISE NOTED

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CONDUIT:

- 1. THE FIBER OPTIC CONDUIT NETWORK SHALL BE MAINTAINED AT A CONSTANT HORIZONTAL AND VERTICAL LOCATION AS SHOWN IN THE ROADWAY CROSS SECTIONS OF THE ROADWAY PLANS, DRAINAGE PLANS, STRUCTURE PLANS AND OTHER PLAN COMPONENTS OF THIS PROJECT. REFERENCE WISDOT HMM 09-15-25 LOCATION REQUIREMENTS.
- 2. IF CONSTANT HORIZONTAL AND VERTICAL LOCATIONS CANNOT BE MAINTAINED BASED ON EXISTING UTILITIES OR OBSTACLES CONDUIT SHALL MAINTAIN A MINIMUM DEPTH OF 36 INCHES, MAINTAIN DISTANCES BASED ON EXISTING UTILITIES IDENTIFIED VIA LOCATES OBTAINED BY CONTRACTOR, AND PER THE DIRECTIVES OF APPROVED PERMITS. REFERENCE SHEET-TYP-01, UTLIITY CROSSING.
- 3. CONDUIT RUN SHALL NOT EXCEED 180° OF BENDS OR PER MANUFACTURER RECOMMENDATIONS BETWEEN MANHOLES OR JUNCTION BOXES.
- 4. THE HDPE CONDUIT ENTERING A PROPOSED FIBER OPTIC PULLBOX SHALL NOT EXCEED 45 DEGREE ENTRY ANGLE OR PER MANUFACTURER RECOMMENDATIONS. REFERENCE SHEET-TYP-01, GRADE LEVEL HANDHOLE.
- 5. CONTRACTOR SHALL INSTALL MAXIMUM LAYING LENGTHS OF HDPE CONDUIT ELIMINATING CONNECTIONS OR JOINTS IN BETWEEN CONDUIT RUNS. A CITY OF SUPERIOR REPRESENTATIVE PRIOR APPROVAL IS REQUIRED FOR ANY CONNECTIONS JOINED WITH EITHER ELECTROFUSION COUPLING OR USING ANY OTHER MANUFACTURER'S RECOMMENDATIONS.
- 6. ALL EMPTY FIBER OPTIC CONDUITS SHALL BE CAPPED AND FURNISHED WITH A PULL STRING FOR FUTURE USE. IF DAMAGE HAS OCCURRED TO THE CONDUIT, THE CONTRACTOR SHALL REPLACE THE ENTIRE LENGTH OF CONDUIT BETWEEN THE CORRESPONDING JUNCTION BOXES OR ENCLOSURES.
- 7. IDENTIFY ALL CIRCUITS, FIBER, AND EQUIPMENT WITH APPROVED ID TAGS. **REFERENCE SHEET-TYP-05.**

- 8. THE TONE WIRE SHALL BE CONNECTED CONTINUOUSLY THROUGH EACH PULL BOX WITH A COPPER SPLIT BOLT FOR CONTINUITY TESTING AND SPLICING. THE TONE WIRE SHALL HAVE A MINIMUM OF 5 FT SPARE IN EACH PULL BOX. REFERENCE WISDOT 655 ELECTRICAL WIRING & SHEET-TYP-01
- 9. IF UTILIZING ARMORED FIBERCABLE, GROUND RODS WILL BE PLACED IN PULL BOXES AT NO MORE THAN 2,000' APART. ALL DEAD-END VAULTS AND VAULTS WITH MORE THAN TWO PATHS SHALL HAVE A GROUND ROD INSTALLED. REFERENCE SHEET-TYP-01.
- 10. GROUND RODS SHALL BE 8FT x 5/8" ALL COPPER RODS AND PLACED AT THE BOTTOM OF THE PULL BOX OR PER MANUFACTURER DIRECTION.
- 11. GROUND RODS SHALL HAVE A BONDING CLAMP INSTALLED ON THEM WITH A MINIMUM OF 15 FT OF 12 AWG TONE WIRE CONNECTED TO THE BONDING CLAMP. THE TONE WIRE FROM THE GROUND IS NOT TO BE CONNECTED TO THE CONTINUOUS TONE WIRE EXCEPT AT DEAD END PULL BOXES. WISDOT 655 **ELECTRICAL WIRING**
- 12. UPON COMPLETION, THE CONTRACTOR SHALL DEMONSTRATE THAT THE WIRE IS CONTINUOUS AND UNBROKEN THROUGH THE ENTIRE RUN OF DUCT BY PROVIDING FULL SIGNAL CONDUCTIVITY (INCLUDING SPLICES). IF THE WIRE IS BROKEN, THE CONTRACTOR SHALL REPAIR OR REPLACE IT. REFERENCE SHEET-TYP-01.
- 13. IF CITY AUTHORITIES REQUIRE, RAISED MARKERS INDICATING FIBER OPTIC CABLE BURIED BELOW SHALL BE INSTALLED AT NO MORE THAN 2,000' APART. ALL DEAD-END VAULTS AND VAULTS WITH MORE THAN TWO PATHS SHALL HAVE A RAISED MARKER INSTALLED. REFERENCE SHEET-TYP-04, FIBER OPTIC UTILITY MARKER.
- 14. ALL NEW UNDERGROUND CONDUIT SHALL BE PROPERLY SEALED AT BOTH ENDS WITH APPROVED DUCT PLUGS TO PREVENT THE ENTRY OF DUST, DIRT OR MOISTURE.



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- 15. ALL CONDUIT TRENCHES AND POTHOLES SHALL BE BACKFILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF EACH WORKING DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE. THE CONTRACTOR SHALL NOT OPEN ANY AREA THAT CANNOT BE BACKFILLED IN THE SAME DAY/NIGHT OPERATION.
- 16. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY JACKING OR TRENCHING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.
- 17. ALL HDPE CONDUIT SHALL BE SMOOTH OUTSIDE, HAVE A RATING OF SDR-11 OR THICKER. ALL PVC CONDUIT RATED SCHEDULE 40 OR THICKER.
- 18. IF OPEN TRENCH IS USED EARLY PROTECTION WARNING TAPE SHALL BE PLACED 12 INCHES ABOVE CONDUIT. REFERENCE SHEET-TYP-02, TYPICALS.
- 19. POTHOLING IS REQUIRED PRIOR TO CROSSING ANY CITY-OWNED UTILITY.
- 20. CONTRACTOR MUST MAINTAIN MINIMUM VERTICAL AND HORIZONTAL CLEARANCES FROM EXISTING UTILITIES AT ALL TIME AND AVOID CROSSING AT HIGHLY ACUTE ANGLES.

HANDHOLE, PULL BOX:

- 1. ALL FIBER OPTIC MARKERS SHALL HAVE "THE CITY OF SUPERIOR" MARKED ON THEM. APPROXIMATE LOCATIONS OF PULL BOXES ARE SHOWN IN THE PLANS. THE NUMBER OF PULL BOXES REQUIRED IN THE CONTRACT MAY VARY. CONTRACTORS SHALL SUBMIT AS-BUILT DRAWINGS AND GIS LOCATES/COORDINATES SHOWING FINAL LOCATIONS OF PULL BOXES.
- 2. PULL BOXES AND LIDS SHALL HAVE A MINIMUM ANSI/SCTE 77-2017 TIER 15 DESIGNATION FOR VAULTS PLACED IN GRASS OR NON-PAVED AREAS. FOR SIDEWALK APPLICATIONS PULL BOXES AND LIDS SHALL HAVE A MINIMUM ANSI/SCTE 77-2017 TIER 15 DESIGNATION.

- 3. THIS PLAN DOES NOT CALL FOR ANY PULL BOXES TO BE PLACED ON ROADWAYS, DRIVEWAYS, OR BRIDGES. THE CONTRACTOR SHALL NOTIFY THE ENGENEER AND PROJECT MANAGER IMMEDIATELY IF A PULL BOX NEEDS TO BE PLACED ON A ROADWAY OR DRIVEWAY.
- 4. ALL FIBER OPTIC MARKERS SHALL HAVE "City of SUPERIOR" AND CITY PHONE NUMBER MARKED ON THEM. THE WORDS "SWI COMM" SHALL BE CAST OR INSCRIBED IN THE SURFACE OF ALL BOX COVERS UNLESS OTHERWISE DIRECTED TO PROJECT SPECIFIC BRANDING INDICATED BY PROJECT MANAGER. REFERENCE SHEET-TYPE-04.
- 5. ALL VAULT INSTALLATIONS SHALL BE BACKFILLED IN LAYERS NOT MORE THAN EIGHT (8) INCHES IN LOOSE THICKNESS. THE BASE LAYER OF THE VAULT SHOULD CONSIST OF 3/4" GRAVEL, WITH LAYERS OF 1/4" OR LOWER 'CRUSH AND RUN' GRAVEL MATERIAL ABOVE. EACH LAYER SHALL BE THOROUGHLY COMPACTED BEFORE THE NEXT LAYER IS PLACED. 625.2 AND WISDOT 651.3.1.
- 3. DUE TO THE HEAVY CLAY MAKEUP OF THE REGIONAL SOIL, THE TOP LAYER OF THE EXCAVATION BACKFILL IS TO 'CRUSH AND RUN' GRAVEL MATERIAL 1/4" AND SMALLER, NOT TO BE FINISHED WITH OPEN GRADED ROCK LARGER THAN 1/4". TOPSOIL REPLACEMENT IS REQUIRED IN ALL AREAS WHERE TOPSOIL EXISTS. REFERENCE WISDOT 209.1 GRANULAR BACKFILL AND CMM 325 STRUCTURE EXCAVATION. TOPSOIL REFERENCE SHEET-CON-02, ITEM 18.

FIBER OPTIC CABLE:

- 1. THE FIBER OPTIC CABLE INSTALLATION TECHNIQUES AND PROCEDURES SHALL BE AS SPECIFIED BY THE CABLE MANUFACTURER AND SHALL BE SUCH THAT THE OPTICAL AND MECHANICAL CHARACTERISTICS OF THE CABLES ARE NOT DEGRADED AT THE TIME OF INSTALLATION. THE CENTRAL STRENGTH MEMBER AND ARAMID YARN SHALL BE ATTACHED DIRECTLY TO THE PULLING EYE DURING CABLE PULLING. "BASKET GRIP" OR "PULLING SOCK" TYPE ATTACHMENTS TO THE CABLE OUTER TENSILE RATING SHALL BE USED ON ALL PULLS.
- 2. ALL FIBER OPTIC CABLE INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER1S RECOMMENDATIONS AND INDUSTRY STANDARDS.
- 3. CONTRACTOR SHALL COORDINATE WITH THE PROJECT MANAGER PRIOR TO DISCONNECTING ANY EXISTING FIBERS AND ALL FIBER SPLICING AT CITY SITES.

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NOTE: ALL CONDUIT TO BE PLACED AT A MINIMUM DEPTH OF 36" UNLESS OTHERWISE NOTED







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CITY OF SUPERIOR, WI FIBER OPTIC NETWORK TYPICAL PACKAGE SHEET-CON-07

ENGINEER: SM

DRAWN BY: JW

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- 4. ONLY IN CERTAIN CIRCUMSTANCES SHALL ENERGIZED CABLE BE PLACED IN THE SAME CONDUIT OR PULL BOX AS FIBER OPTIC CABLE, AND ONLY WITH WRITTEN APPROVAL AND SEPARATION GUIDELINES FROM CITY OF SUPERIOR.
- 5. FIBER COUNT IS SPECIFIED ON THE PLANS. SINGLE MODE ALL DIELECTRIC FIBER SHOULD BE USED. CABLE GROUNDING IS REQUIRED FOR ARMORED CABLE. TAILS FROM PATCH PANELS, CABINETS, AND POP-SITES SHALL BE ALL DIELECTRIC.
- 6. ONCE CABLE HAS BEEN INSTALLED INTO SPLICE CLOSURES FOLLOW MANUFACTURER'S RECOMMENDATIONS TO ENSURE PROPER SEAL OF CLOSURE.
- 7. SEPARATE ENTRY FOR DISTRIBUTION NETWORK. PROVIDE 60' SPARE FIBER FOR INLINE AND END OF LINE CLOSURE INSTALLS. IF CLOSURE SERVES A BRANCH/LATERAL, PROVIDE 120' SPARE FIBER FOR THE MAINLINE CABLE, 60' SPARE FIBER FOR THE LATERAL CABLE BEING SPLICED TO MAINLINE.
- 8. SAME STORAGE FIGURES FOR AERIAL FIBER CONSTRUCTION, FIBER TO BE STORED WITH SNOWSHOE STYLE UNITS.
- 9. ALL FIBER OPTIC CABLES SHALL BE TESTED VIA OTDR AFTER SPLICING IS COMPLETE. SPLICE RESULTS SHALL BE SUPPLIED TO THE PROJECT MANAGER FOR CITY OF SUPERIOR APPROVAL. TESTING STANDARDS ARE SPECIFIED IN THE SPECIFICATIONS FOR THIS PROJECT. REFERENCE SHEET-CON-09, CODES AND STANDARDS, LINE ITEM 1.
- 10. FUSION WELDING METHOD WILL BE UTILIZED ON ALL PERMANENT SPLICES, SINGLE AND MASS FUSION(RIBBON CABLE). THE AVERAGE OPTIC LOSS TO BE DETERMINED VIA OTDR TESTING. SEE SHEET-CON-09, CODES AND STANDARDS LINE ITEM 1.
- 11. CONVENTIONAL CONSTRUCTION METHODS MUST BE FOLLOWED WHEN PULLING FIBER OPTIC CABLE IN UNDERGROUND DUCTS. EMPLOYEES AND CONTRACTORS MUST BE FAMILIAR WITH STANDARD TELEPHONE COMPANY PRACTICES FOR INSTALLATION OF THE UNDERGROUND CABLE.

- 12. TESTING, VENTILATING, PUMPING AND SETTING UP VAULTS AND DUCT FOR PULLING OPERATIONS ARE THE SAME AS FOR COPPER CABLE.
- 13. A PULLING SOCK / BASKET GRIP IS TO BE ATTACHED TO THE OUTSIDE OF THE CABLE END FOR CABLE PULLING. IN ADDITION, THE CABLE STRENGTH MEMBERS CAN BE ATTACHED TO THE PULLING EYE IF DEEMED NECESSARY.
- 14. MAXIMUM PULLING TENSIONS FOR CABLE PULLED IN CONDUIT SHALL NOT EXCEED 600 LBS OR THE AMOUNT SPECIFIED BY THE CABLE MANUFACTURER IF LESS THAN 600 LBS.
- 15. A TENSION METER OR TENSION LIMITER WILL BE USED TO MONITOR PULLING TENSIONS.
- 16. USE A SWIVEL BETWEEN THE PULLING LINE AND PULLING FEATURE TO RELIEVE ROPE TWIST DURING THE PLACING OPERATION.
- 17. THE CABLE SHALL NOT BE SUBJECTED TO A DYNAMIC BENDING RADIUS OF LESS THAN THE MANUFACTURER'S SPECIFICATION OF THE CABLE DURING PULL. FINAL STATIC BENDING RADIUS TO BE NO LESS THAN THE MANUFACTURER'S SPECIFICATION OF THE CABLE.
- 18. THE CABLE SHOULD BE SECURED WITH TIE WRAPS TO PREVENT INTERFERING WITH FUTURE CABLE INSTALLATIONS.

PASSIVE CABINETS:

- 1. PASSIVE CABINETS SHALL BE MOUNTED TO CONCRETE PADS WITH AN ADJACENT VAULT PLACED FOR SPLICING. FOLLOW MANUFACTURER'S DIRECTIONS FOR INSTALLING AND MOUNTING VAULTS.
- 2. VAULTS FOR PASSIVE CABINETS SHOULD FOLLOW THE SAME TYPICAL FOR ALL OTHER VAULTS.
- 3. PASSIVE CABINETS TO BE LABELED ACCORDING TO CITY SPECIFICATIONS.

REFERENCE SHEET-TYP-15 FOR FDH CABINET TYPICAL DRAWING



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AERIAL CONSTRUCTION:

- 1. ALL POLE ATTACHMENTS SHALL FOLLOW REGIONAL COMMUNICATION POLE ATTACHMENT STANDARDS.
- 2. AERIAL INSTALLATION OF FIBER CABLE IS THE SAME AS COPPER CABLE; USING THE SAME TOOLS, EQUIPMENT, MATERIAL AND PROCEDURES.
- 3. FIBER CABLE SHALL BE LASHED ON A SEPARATE STRAND MESSENGER OR EXISTING MESSENGER WITH COMMUNICATION CABLE ALREADY LASHED TO IT. MESSENGER WILL BE INSTALLED BY THE CONTRACTOR WHEN DIRECTED BY THE PROJECT PLANS.
- 4. THE INSTALLATION OF AERIAL CABLE MAY BE PERFORMED BY EITHER THE BACK PULL OR DRIVE OFF METHOD. THE METHOD TO BE USED MUST BE DISCUSSED AND APPROVED FOR EACH PHASE OF THE PROJECT.
 - a. THE BACKPULL METHOD REQUIRES PULLING THE ENTIRE CABLE INTO POSITION WHILE TEMPORARILY SECURING IT TO THE MESSENGER WITH CABLE BLOCKS. THE BLOCKS SHOULD BE LOCATED APPROXIMATELY EVERY 50 FEET ALONG THE ROUTE EXCEPT OVER ROADWAYS, DRIVEWAYS, RAILROADS, ETC., WHERE THEY SHOULD BE SPACED AS REQUIRED FOR PROPER CLEARANCE. b. THE DRIVE OFF METHOD INVOLVES LASHING THE CABLE IN SECTIONS ALONG THE ROUTE. THE CABLE IS DRIVEN PAST THE FIRST SPAN AND LASHED. THIS METHOD IS REPEATED UNTIL THE END OF THE ROUTE IS REACHED.
- 5. DURING THE LASHING OPERATION, AN AERIAL CABLE GUIDE SHOULD BE USED TO PROTECT THE CABLE FROM HARMFUL BEND RADIUS.
- 6. FIBER OPTIC MARKERS SHALL BE PLACED ON THE CABLE AT EACH POLE. FIBER OPTIC MARKERS WILL BE SUPPLIED BY THE CITY.
- 7. REFERENCE AERIAL CONSTRUCTION TYPICALS ON SHEET-TYP-08 THROUGH SHEET-TYP-14.

CODES AND STANDARDS:

1. ACCEPTANCE TESTING SHALL BE DONE BY THE CONTRACTOR USING OTDR TESTING, BOTH SINGLE AND BI-DIRECTIONAL TESTING DEPENDING ON APPLICATION. DB LOSSES AND TOLERANCES TO BE DETERMINED BY OWNER, CITY OF SUPERIOR. TESTING RESULTS TO BE REVIEWED BY CONSTRUCTION MANAGEMENT AND OVERSIGHT.

SINGLEMODE: 1310nm AND 1550nm

MAX. IND. FIBER LOSS AT 1310 NM 0.35 DB/KM

MAX. IND. FIBER LOSS AT 1550 NM 0.25 DB/KM

SUMMARIZE THE RESULTS OF BOTH THE OTDR AND OPTICAL SOURCE/POWER METER
TESTS IN SPREADSHEET/TABULAR FORMAT ADHERING TO THE FOLLOWING
REQUIREMENTS:

- LIST FIBER OPTIC CABLE NAME, ROUTE, START POINT, END POINT
- LIST ALL FIBERS BY NUMBER AND DIRECTION (NB,SB,EB,WB)
- LIST TOTAL FIBER OPTIC CABLE LENGTH FOR EACH FIBER AS DOCUMENTED BY OTDR
- LIST ATTENUATION IN dB OF GAIN/LOSS FOR EACH FIBER OPTIC EVENT IN THE OTDR
- LIST FIBER OPTIC LOSS EVENT DESC. & LOCATIONS INCLUDING SPLICES, MISC EVENTS, & TERMINATIONS
- LIST THE ATTENUATION ACROSS THE CABLE IN dB/KM FOR EACH FIBER TESTED.
- LIST THE TOTAL SEGMENT LOSSFOR EACH FIBER AS DETERMINED BY THE OPTICAL SOURCE/POWER METER TEST
- PROVIDE BI-DIRECTION DATA INCLUDING EVENT DISTANCES, EVENT DESCRIPTIONS, AND ATTENUATION LOSSES FOR EACH FIBER CORRESPONDING TO A COMMON START POINT.
- PROVIDE BI-DIRECTIONAL DATA ON SEPARATE LINES, SIDE-BY-SIDE WITHIN THE SAME SHEET
- PROVIDE 1310 NM AND 1550 NM TEST RESULTS ON SEPARATE SHEETS IN IDENTICAL FORMATS.

REFERENCE WISDOT 678.3.4 COMMUNICATION SYSTEM TESTING FOR MORE INFORMATION

2. THE CITY RESERVES THE RIGHT TO HAVE THE CONTRACTOR REPAIR OR REPLACE ANY DEFECTIVE ITEMS OR DAMAGE INCURRED TO EXISTING FACILITIES AT THE CONTRACTOR'S EXPENSE

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FIBER OPTIC NETW

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ENGINEER: SM

DRAWN BY: JW

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- 3. RULES FOR CONSTRUCTION OF UNDERGROUND ELECTRIC SUPPLY AND COMMUNICATION SYSTEMS, AND THE PUBLIC SERVICE COMMISSION OF WISCONSIN.
- 4. ALL AERIAL CONSTRUCTION AND CABLE PLACEMENT ON OVERHEAD POLE LINES SHALL ABIDE BY THE NATIONAL ELECTRICAL SAFETY CODE, OR NESC (LATEST REVISION)
- 5. CITY OF SUPERIOR NOISE GUIDANCE TO BE FOLLOWED MONDAY FRIDAY, 6AM -8PM. NO WORK SHALL BE COMPLETED ON HOLIDAYS UNLESS PRIOR WRITTEN APPROVAL IS GRANTED. REFERENCE SHEET-CON-01, GENERAL NOTES LINE ITEM
- 6. CITY OF SUPERIOR TRUCK ROUTE MAP SHALL BE FOLLOWED. REFERANCE PAGE 69 FOR TRUCK ROUTE MAP. CITY OF SUPERIOR CODE OF ORDINANCE, CHAPTER 112 SECTION 33 -HEAVY TRAFFIC (TRUCK) ROUTE MUST ALSO BE FOLLOWED. REFERENCE SHEET-COS-TR-01.

JOB CONDITIONS AND PARKING:

- 1. NO STOCKPILING OF MATERIALS OR PARKING OF EQUIPMENT DURING NON-WORKING HOURS WILL BE ALLOWED ON CITY PROPERTY, I.E. STREETS, ALLEYS, PARKING LOTS, BIKE PATHS OR SIDEWALKS. WISDOT 106 CONTROL OF MATERIALS.
- 2. THE CONTRACTOR SHALL CONDUCT THEIR OPERATIONS AND SCHEDULE CLEANUP SO AS TO CAUSE THE LEAST POSSIBLE OBSTRUCTION AND INCONVENIENCE TO TRAFFIC, PEDESTRIAN, CYCLISTS AND ADJACENT PROPERTY OWNERS. WISDOT 106 CONTROL OF MATERIALS.
- 3. THE CONTRACTOR SHALL LIMIT THEIR ACTIVITIES WITHIN THE AREAS TO THE ESTABLISHED SCHEDULE. NO WORK SHALL PROCEED ON THE SITE UNTIL TEMPORARY BARRIERS AND PROTECTION ARE FURNISHED AND INSTALLED. THE COST OF ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT USED PROVIDING A SAFE PROJECT SHALL BE INCLUDED IN THE BID ITEMS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 4. NO TRASH, EXCESS MATERIAL, RUBBISH, ETC., ARE TO BE PLACED IN THE MANHOLES, VAULTS, OR SPLICE BOXES. ALL EXCESS MATERIAL IS TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL OF ALL EXCESS CONSTRUCTION MATERIAL. WISDOT 106 CONTROL OF MATERIALS.
- 5. CITY WILL NOT MAKE ARRANGEMENTS FOR CONTRACTOR TO PARK **VEHICLES AND MATERIALS.**
- 6. WHEREVER PARKING IS RESTRICTED, THE CONTRACTOR WILL BE REQUIRED TO OBTAIN, AT THEIR EXPENSE, PARKING PERMITS FROM THE CITY'S POLICE DEPARTMENT.
- 7. CONTRACTOR IS NOT TO ACCESS ELECTRIC VAULTS, THESE SHOULD ONLY BE HANDLED BY POWER UTILITY EMPLOYEES.





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Tree Planting, Preservation, and Protection

A Description

The City of Superior acknowledges the importance of trees to the community's health, safety, welfare, and tranquility. Trees increase property values, provide visual continuity, provide shade and cooling, decrease wind velocities, control erosion, conserve energy, reduce stormwater runoff, filter airborne pollutants, reduce noise, provide privacy, provide habitat and food value, and release oxygen. No trees will be removed within the project limits without the approval of the engineer.

Definition of Terms

A. Tree Protection Zone:

A specified area above and below ground and at a given distance from the trunk set aside for the protection of a tree's roots and crown to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development. Tree Protection Zone shall be determined to be the diameter of the tree trunk measured in inches at chest height multiplied by 1.5 and expressed as feet. That distance is measured from the trunk of the tree creating a radius around the tree, as shown in the details within the Tree Protection Zone Details.

B. Materials

Trees and other vegetation are to be protected and preserved during construction. Trees and other vegetation will be properly protected during construction to maximize their survival rate. In order to achieve an appropriate balance between protecting trees and allowing necessary construction, the practices that follow will be employed.

All trees within and adjacent to the project limits shall be protected and maintained against damage during construction. All workers on the site shall be educated in tree preservation practices. Tree protection devices shall be placed before material deliveries, excavation, or grading begins and is to be maintained in good repair for the duration of the construction work, unless otherwise directed. Tree protection shall remain until the landscape restoration work begins.

C. Construction

Protection of trees during construction: Protection of existing trees will be accomplished with the establishment of the Tree Protection Zone (TPZ) for each tree and using tools such as fencing placed along the construction limits, carefully choosing the style of machinery the specifications allow to travel behind the existing curb and gutter, shoring, construction boxes, and protective ground sheeting. However, it will not be limited to just these tools. The Contractor can use other tools to protect the trees and landscaping at their discretion and as approved by the Engineer, such as hiring a commercial arborist to advise how to best protect the trees. If this arborist should contest a damage assessment performed by the Engineer, the City will consider the arborists argument, but the Engineer's ultimate decision will prevail.

Handheld operating tools, air-excavation or other non-mechanical methods are encouraged to be used for removal or construction activities within the Tree Protection Zone.

Prior to any site work, all trees to be preserved must be protected, and maintained, in accordance with the Tree Protection Zone Details.

Tree Protection

Trees in the area of disturbance and in the vehicle access route are to be protected by fencing in the following manner:

No material or construction equipment shall be stored within the tree protection zone.

No protective devices, signs, utility boxes or other objects shall be nailed to the trees on the site.

Tree protection fencing shall be erected and approved by the Engineer at least 24 hours before construction begins.

ENCOMMUNICATIONS

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-TREE

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ENGINEER: SM JW DRAWN BY: CHECKED BY: JW

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SUPERIOR WISCONSIN	
Living up to our name.	

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Grade Changes

Grade cuts shall be minimized or eliminated within the tree protection zone.

Areas within the tree protection zone disturbed by construction activity shall be mulched with a 2-3" deep layer of shredded bark mulch as temporary protection of roots. Mulching shall be done within 4 hours of disturbance.

Trenching and Tunneling

Trenching shall be done outside the tree protection zone. Trenchless techniques shall be employed within the tree protection zone.

Pruning of branches shall be done under the requirements and direction of the engineer.

Bridging Roots

One option for working near trees with large root issues is to bridge over the existing roots. This is done by either supporting the raised section with concrete pillars near the roots or increasing the base layer over the root growth area. When increasing the base course material; course sand or pea gravel must be used along with a thin layer of foam board. Any bridged sections must still maintain ADA allowed slopes of 1:20. It is anticipated bridging roots will be required behind the sidewalks and on side streets.

Root Grinding

When dealing with a larger root (2" diameter or larger) it is better to grind the root rather than fully sever the root. This is done by either a stump/root grinder, chainsaw or debarking tool. Roots must maintain at least 1/3 of their original diameter when grinding roots. When possible, apply a layer or ridged foam or pipe insulation between the shaved root and the new concrete surface to allow for roots to callus. Any work on a root with a diameter greater than 2" must be approved by the Engineer prior to commencement. No root grinding or cutting is permitted within 4 feet from the face of the tree.

Clean Root Cutting

Root cutting shall be a LAST RESORT option when doing construction around trees. Where a trees root systems interfere with the construction of curb and gutter, drain tile, or other utilities; Contractor may address the roots in accordance with the following:

Cleanly cut tree roots as directed by the Engineer.

Immediately and cleanly cut damaged and exposed roots. Cut back damaged roots of trees designated for protection to sound healthy tissue and immediately place topsoil over the exposed roots. Immediately cover root ends exposed by excavation activities with 6 inches of topsoil as measured outward from the cut root ends. No cutting of roots larger than 2" will be allowed unless approved by the Engineer. No root grinding or cutting is permitted withing 4 feet from the face of the tree.

D. Measurement

The department will measure Tree Root Preservation and Protection by the tree regardless of tree protection zone size. Measurement will be considered complete when excavations in the **Tree Protection Zone are completed.**

E. Payment

The department will pay for the measured quantity at the contract unit price under the following bid item:

ITEM NUMBER

DESCRIPTION

UNIT

Tree Root Preservation and Protection Type 1

Each

Payment is full compensation for providing all labor, equipment, and materials necessary to protect the trees and roots to the level as specified in the plans and specifications. Payment will include protective construction fencing for each tree. All protection shall be inspected by the Engineer prior to start of construction.



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F. Schedule of Damages

Damages to trees will be measured according to the following table.

SCHEDULE OF DAMAGES (PER TREE OR F	PRIVATE L	ANDSCAPING FEA	ATURE)
TYPE OF DAMAGE	LEVEL OF DAMAGE		
	LOW	MODERATE	SEVERE
Trees	1	•	•
Above Ground			
Canopy			
Branches			
Less than 2 inches diameter	Each		
Greater than 2 inches and less than 4 inches diameter.		Each	
Greater than 4 inches diameter			Each
	1		•
Trunk Stem Circumference Damage			
\$200/sf bark loss			
Below Ground			
Root Zone			
Construction within TPZ			
Material storage	Each		
Equipment storage	Each		
Soil Compaction	Each		
De et Cottine a en Cuin din a			
Root Cutting or Grinding Unapproved grinding or damage to 2/3 or more of			Each
a root within 4 feet from the face of the tree.			Lacii
Unapproved grinding or damage to 2/3 or more of a root with a diameter of 2" or greater.			Each

NOTE: ALL CONDUIT TO BE PLACED AT A NOTED





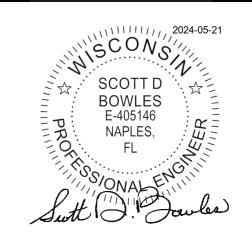


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SHEET-TREES-03

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PRIOR TO CONSTRUCTION CALL call811.org (TOLL FREE) AT 1-800-242-8511 OR 811 FOR LOCATION OF UNDERGROUND UTILITIES

MINIMUM DEPTH OF 36" UNLESS OTHERWISE

G. Schedule of Deductions

Deductions from the amount due to the Contractor for the tree and private landscaping protection item will be calculated in accordance with the following table.

Level of Damage	Damage Fee ¹	
Trees		
Low of all Types	\$200	
Moderate of all Types	\$325	
Severe of all Types	Greater of 100 times the diameter of the tree in inches expressed in dollars or \$1000	

Should the Contractor accrue damages; the engineer will maintain a running account of those damage fees throughout the project. Damage fees will be assessed against the contractor in the last application for payment. The Engineers running damage account will be available to the Contractor for review upon request.



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SHEET-TREES-04

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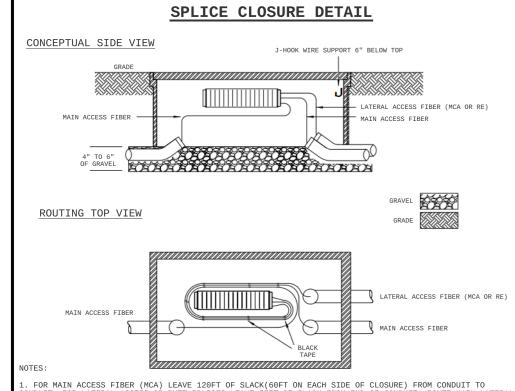
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BUILDING



1. FOR MAIN ACCESS FIBER (MCA) LEAVE 120FT OF SLACK(60FT ON EACH SIDE OF CLOSURE) FROM CONDUIT TO CONDUIT. FOR LATERAL ACCESS OR BUTT SPLICES LEAVE 55FT OF SLACK FROM END OF CONDUIT. ROUTE MAIN LATERAL AND DROP CABLES TOGETHER FROM CONDUIT TO CLOSURES. DO NOT EXCEED MINIMUM CABLE BEND RADIUS. CONDUITS MUST NOT EXTEND MORE THAN 2" ABOVE GRAVEL. UST NOT EXTEND MORE THAN 2" ABOVE GRAVEL. . J-HOOK WIRE SUPPORTS SHALL BE SECURELY ATTACHED TO THE JUNCTION BOX WITH A BOLT AND NUT WITH A EOPRENE WASHER OR AN EXPANSION FITTING. ONE J-HOOK PER WALL SHALL BE INSTALLED FOR ALL VAULTS WITH

BUILDING ENTRANCE

1. COORDINATION WITH THE PROJECT MANAGER SHOULD BE MADE BEFORE CONDUIT IS RAN TO ANY FACILITY. EXTERIOR BUILDING CONDUIT, PULL BOXES, CORE DRILLS, AND FIBER PULL LENGTH ARE DEPENDENT ON EACH FACILITY.

PROFILE

SIDE VIEW

36" MINIMUM

A. BUTT SPLICES FOR REEL ENDS ARE NOT DESIGNATED ON THE MAP. VAULTS WITH REEL ENDS SHALL BE DESIGNATED ON THE AS-BUILTS.
4. IF FIBER CABLE IS ARMORED, GROUNDING MUST BE INSTALLED PER FIBERCABLE/CLOSURE SPECIFICATION

HANDHOLE GRADE LEVEL ENCLOSURE TRACER WIRE -GRAVEL GRAVEL

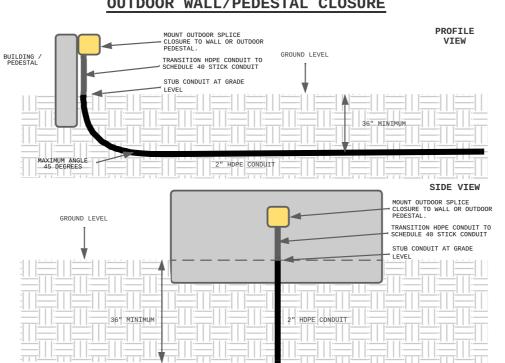
GRADE LEVEL HANDHOLE

36" MIN

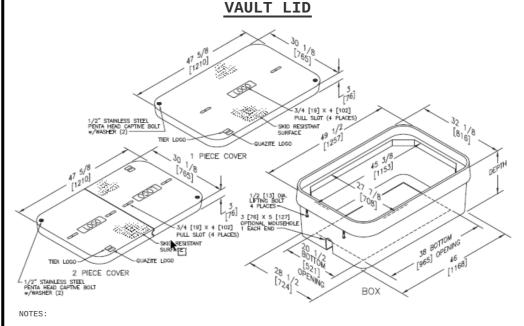
UTILITY CROSSING

- 1. MAINTAIN 5' HORIZONTAL SEPARATION FROM ALL UTILITIES 2. MAINTAIN 12" VERTICAL SEPARATION FROM ALL UTILITIES
- IF HORIZONTAL SEPARATION IS NOT POSSIBLE BORE 12" BELOW UTILITY AND MAINTAIN 12" VERTICAL SEPARATION.

. EXCAVATE HANDHOLE 4" - 6" DEEPER THAN THE DEPTH OF THE HANDHOLE. . THE 4" TO 6" OF GRAVEL SHALL BE PLACED IN HOLE. . THE HANDHOLE SHALL BE PLACED IN HOLE WITH TOP AT GRADE LEVEL. . THE HOLE SURROUNDING HANDHOLE SHALL BE FILLED AND COMPACTED AT GRADE LEVEL. OUTDOOR WALL/PEDESTAL CLOSURE



1. COORDINATION WITH THE PROJECT MANAGER SHOULD BE MADE BEFORE CONDUIT IS RAN TO ANY FACILITY. EXTERIOR BUILDING CONDUIT, PULL BOXES, CORE DRILLS, AND FIBER PULL LENGTH ARE DEPENDENT ON EACH FACILITY.



1. PULL BOXES AND LIDS SHALL HAVE A MINIMUM ANSI/SCTE 77-2017 TIER 15 DESIGNATION FOR VAULTS PLACED IN 1. PULL BOXES AND LIDS SHALL HAVE A MINIMUM ANSI/SCTE 77-2017 TIER 15 DESIGNATION FOR VAULTS PLACED IN GRASS, SIDEWALKS, OR NON-PAVED AREAS.

2. PULL BOXES SHALL BE POLYMER CONCRETE WITH STRAIGHT SIDE OR POLYMER CONCRETE WITH FLARED OR STRAIGHT FIBERGLASS SIDES.

3. GROUND RODS SHALL BE 8'X5/8" ALL COPPER RODS AND PLACED AT THE BOTTOM OF THE PULL BOX.

4. GROUND RODS SHALL HAVE A BONDING CLAMP INSTALLED ON THEM WITH A MINIMUM OF 15FT OF 12 AWG TRACE WIRE CONNECTED TO THE BONDING CLAMP. THE TRACE WIRE FROM THE GROUND IS NOT TO BE CONNECTED TO THE CONTINUOUS TRACE WIRE EXCEPT AT DEAD END PULL BOXES.

5. REFER TO "GROUNDING" IN THE CONSTRUCTION NOTES FOR DETAILS ON GROUND ROD PLACEMENT.

6. GROUND ROD INSTALL TO FOLLOW VAULT/HANDHOLE/BOX MANUFACTURERS SPECIFICATIONS.

6. ALL LIDS SHALL SAY "CPA COMM"

REFERENCE SHEET-CON-06 & 07 FOR MORE INFORMATION

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NOTE: ALL CONDUIT TO BE PLACED AT A MINIMUM DEPTH OF 36" UNLESS OTHERWISE NOTED







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CITY OF SUPERIOR, WI FIBER OPTIC NETWORK **TYPICAL PACKAGE** PRELIMINARY - FOR REVIEW

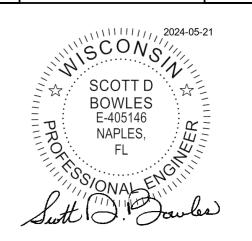
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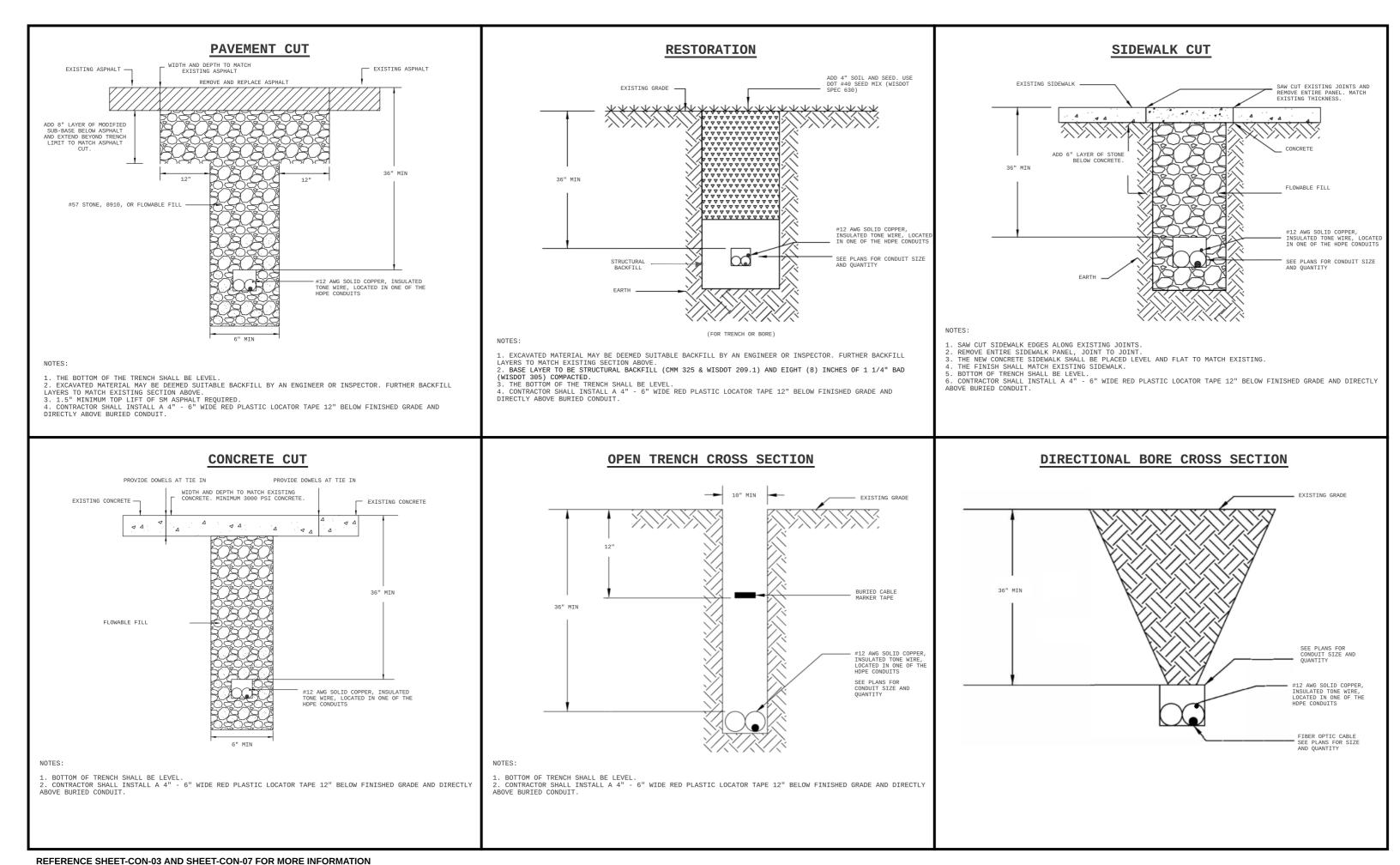
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CITY OF SUPERIOR, WI FIBER OPTIC NETWORK **TYPICAL PACKAGE** PRELIMINARY - FOR REVIEW

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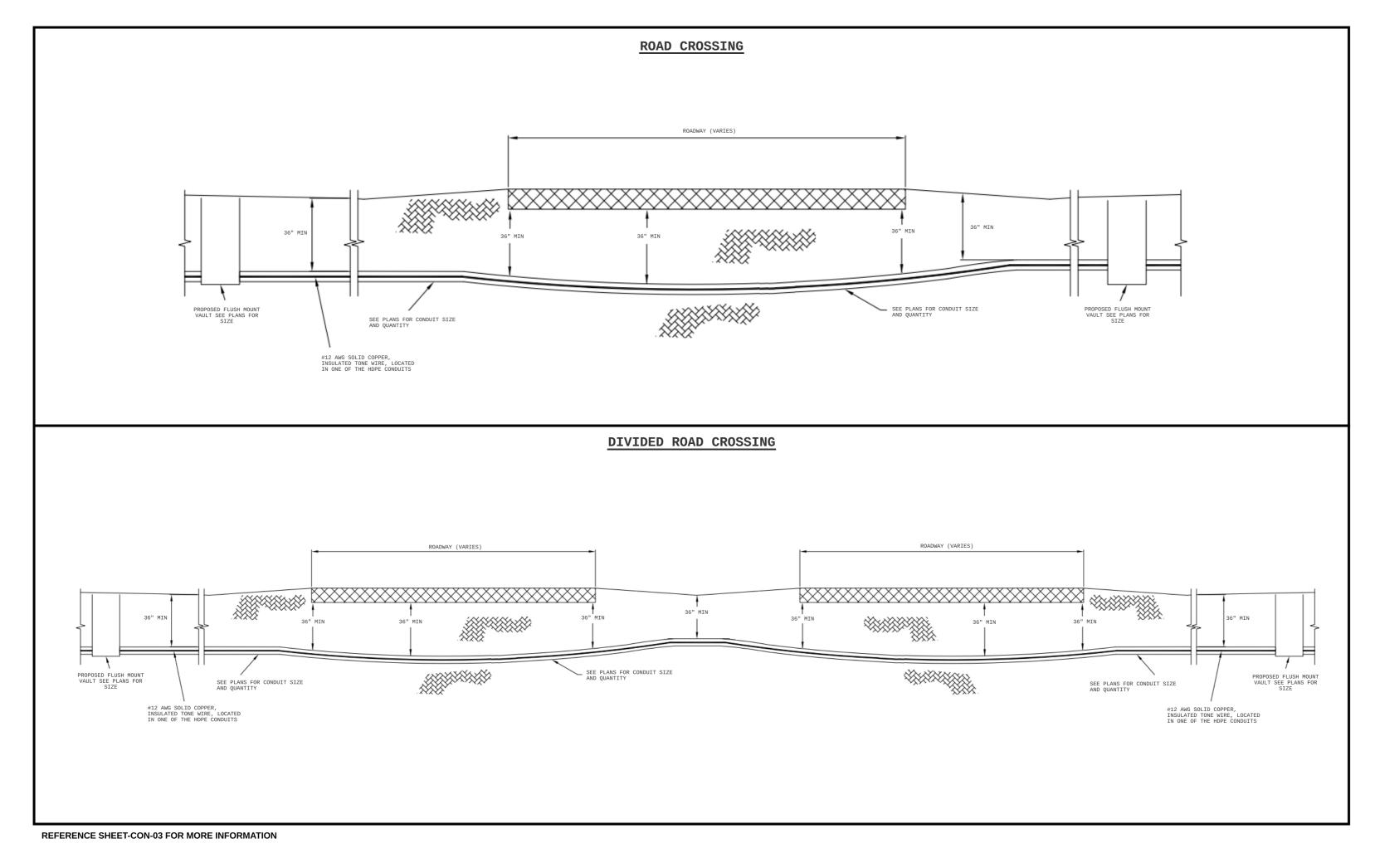
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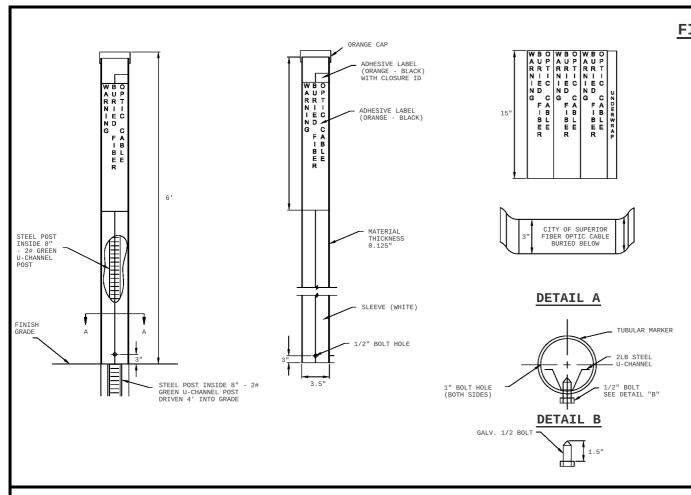
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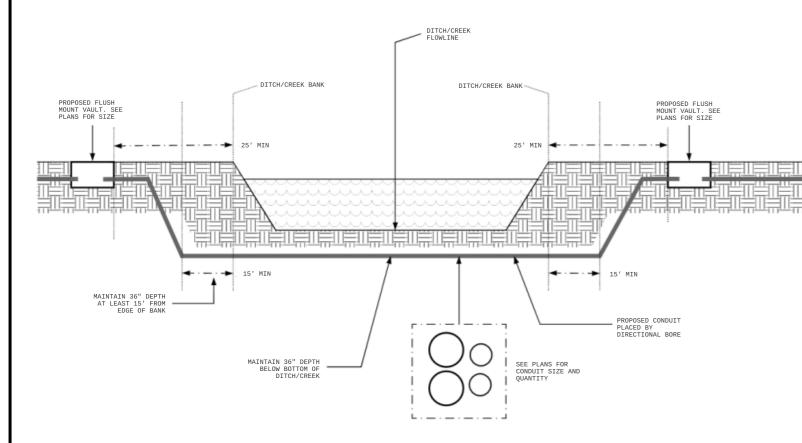


FIBER OPTIC UTILITY MARKER

NOTES:

- 1. 8' 2#/FT. GREEN STEEL U-CHANNEL POST OR CITY OF SUPERIOR APPROVED EQUAL.
- 2. 72" H-41-RF TUBULAR ROUTER MARKER OR CITY OF SUPERIOR EQUAL.
- 3. ROUTE MAKER WRAP DECAL, BLACK TEXT ON ORANGE BACKGROUND.
- 4. RAISED MARKERS INDICATING FIBER OPTIC CABLE BURIED BELOW SHALL BE INSTALLED WHERE INDICATED ON THE PLANS.
- 5. ALL RAISED MARKERS INSTALLED SHALL BE MARKED ON THE AS-BUILT DRAWINGS.
- 6. ALL FIBER OPTIC MARKERS SHALL HAVE "THE CITY OF SUPERIOR" MARKED ON THEM.
- 7. CABLE MARKERS SHALL ONLY BE PLACED ON RURAL FIBER INSTALLS UNLESS OTHERWISE SPECIFIED. USE WISDOT SPEC 671.3.3 FIBER OPTIC CABLE MARKER.
- 8. MARKERS SHALL BE PLACED NO MORE THAN 2,000' APART.
- 9. CONTRACTOR SHALL INDICATE WHERE MARKERS PLACED ON ALL REDLINE DRAWINGS

CREEK / DITCH CROSSING



NOTES:

- 1. REFER TO THE CONSTRUCTION NOTES FOR MORE DETAILS ON DITCH AND CREEK CROSSINGS.
- 2. IF CROSSING CULVERT VERIFY THERE IS 36" OF COVER. IF THERE IS 36" OF COVER CONDUIT MAY BE INSTALLED OVER CULVERT.

REFERENCE SHEET-CON-04, SHEET-CON-07 FOR MORE INFORMATION

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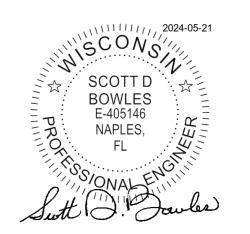
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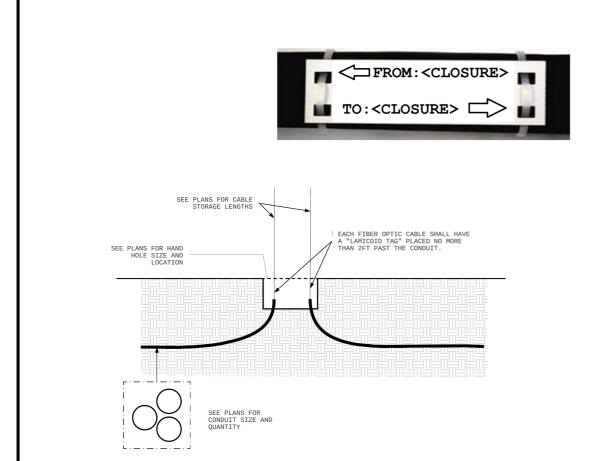
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CLOSURE LABELS 1

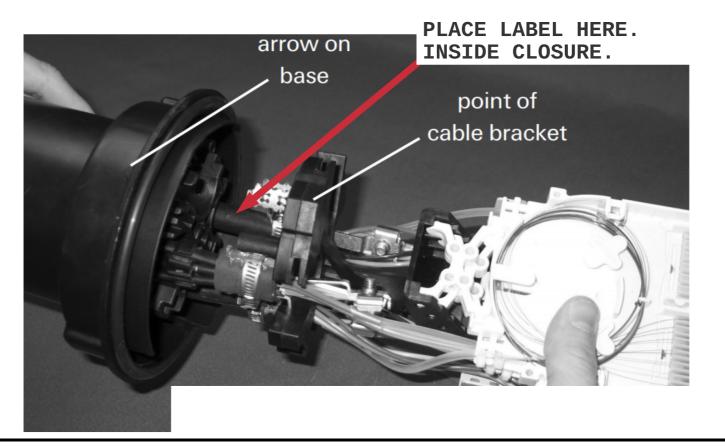
NOTES:

- 1. TAGS SHALL BE INSTALLED WHEN CABLE IS INSTALLED. THIS IS TO AID SPLICERS IN IDENTIFYING CABLES AND FUTURE MAINTENANCE ACTIVITIES.
- 2. TAGS ARE ONLY TO BE INSTALLED IN HANDHOLDS WITH CLOSURES. PULL THROUGH HANDHOLDS DO NOT REQUIRE TAGS.
- 3. TAGS SHALL BE FASTENED TO CABLES WITH A MINIMUM OF TWO ZIP TIES.
- 4. EXAMPLE TAG LABEL "SUW102b-L006c, 48CT"
- 5. METAL EMBOSSED TAGS WITH METAL STRAPS TO BE UTILIZED, EXAMPLE; PANDUIT MEHT187 / 30PR57

CLOSURE LABELS 2

NOTES:

- 1. EACH CABLE INSIDE CLOSURE SHALL BE LABELED WITH A STICK ON LABEL. THE LABEL SHALL BE COMPLETELY CONTAINED WITHIN THE CLOSURE. THE LABEL SHALL INDICATE WHICH CLOSURE THE CABLE IS GOING TO.
- 2. THE PICTURE SHOWN DISPLAYS A COMMSCOPE FOSC STYLE CLOSURE WITH THE LID REMOVED.



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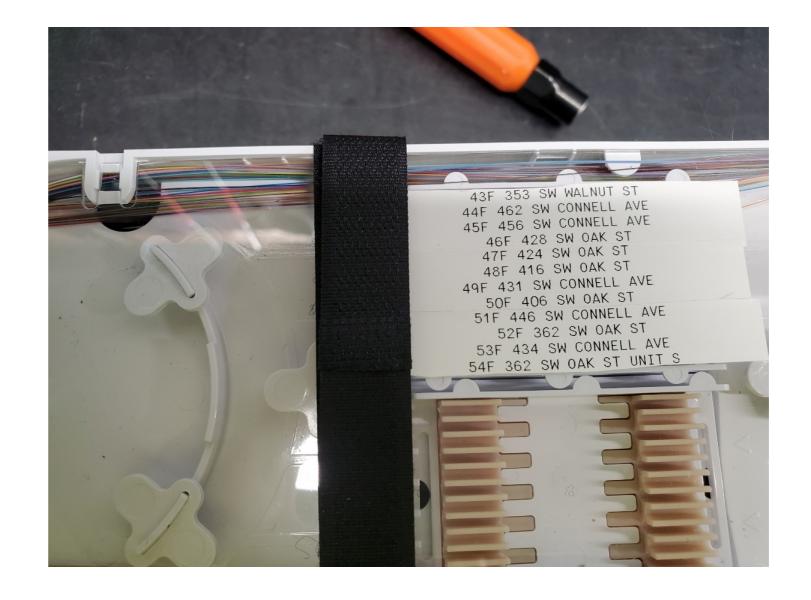
EXAMPLE SPLICE CLOSURE EXTERIOR LABELS AND FIBERCABLE LABELS

60059-NO4



CITY OF SUPERIOR FIBER NETWORK NAMING SCHEME [CITY][HUT][LEG] - [FDH][LEG] - [CLOSURE] SUW102b-L005a-N04

EXAMPLE SPLICE CLOSURE INTERIOR LABELS, FIBER ASSIGNMENT TABLE FOR SPLICE TRAY





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Lock latch

(accepts snap-lock on dome)

Charles logo

Ground line imprint (8.5" up from bottom)

Drop cable access port

Figure 1a. Rear Half of Base

Top round collar of base

Push tab on support leg guide

Corrugated/ribbed

Cup screw

pole-mount kit (one set on rear and both sides)

> Optional Drop Cable Knockout

Figure 1b. Front Half of Base. Figure 1c. Base with

No Drop Channe

Inside View

PRODUCT PURPOSE

PEDESTAL

THESE PEDESTAL PLANS REFER TO THE CHARLES INDUSTRIES BDO SERIES OF PEDESTALS. CONTRACTORS SHALL USE THE LATEST INSTALLATION PRACTICES FROM CHARLES INDUSTRIES. FURTHER INFORMATION MAY BE FOUND ONLINE AT THIS ADDRESS
HTTPS://www.charlesindustries.com/support/resources/practices-installation-guidelines/

IF ANOTHER PEDESTAL MODEL OR ANOTHER MANUFACTURER IS USED THE CONTRACTOR SHALL FOLLOW THE INSTALLATION INSTRUCTION PROVIDED BY THE MANUFACTURER. CHARLES INDUSTRIES BDO PEDESTAL BASE INSTALLATION INSTRUCTIONS

THE CHARLES PEDLOCK® PEDESTAL IS AN ABOVE-GRADE DEVICE THAT PROVIDES ENVIRONMENTAL PROTECTION FOR BURIED FEED AND DISTRIBUTION CABLES, AS WELL AS CUSTOMER SERVICE DROPS IN FIBER-TO-THE-HOME (FTTH) AND FIBER- TO-THE-PREMISES (FTTP) DEPLOYMENTS.

PRODUCT MOUNTING AND LOCATION

1. THE PEDESTAL BASE IS INSTALLED IN A TRENCH OR HOLE IN THE GROUND, UP TO THE GROUND LINE (GL) INDICATOR, AT THE FTTP OR FTTH DISTRIBUTION POINT. WHEN THE BASE IS INSTALLED, THE PEDESTAL IS EASILY SECURED WITH THE OVERLAPPING OUTERDOME. THE OUTERDOME IS SECURED TO THE BASE WITH A SELF-LOCKING LATCH.

2. PREPARE TRENCH. BE CAREFUL NOT TO DAMAGE ANY BURIED CABLES OR WIRES WHILE DIGGING. DIG AND PREPARE THE CABLE TRENCH, PER LOCAL COMPANY PRACTICES.

3. PLACE CABLES, CONDUIT OR INNERDUCT IN TRENCH. PLACE OR LAY CABLE/CONDUIT IN THE TRENCH PER LOCAL PRACTICE. IN THE FINAL POSITION, CONDUIT HEIGHT SHOULD BE 1.5 INCHES BELOW THE BOTTOM OF THE BASE COLLAR, BUT NO HIGHER THAN THE BOTTOM OF THE COLLAR. NOTE: THE MOST ACCURATE CUT CAN BE MADE AFTER THE BASE HAS BEEN SET TO ITS PROPER DEPTH.

4. ASSEMBLE THE BASE. IF THE CABLE LOOP OR TAIL CAN BE FIT THROUGH THE BASE COLLAR, THE TWO HALVES CAN BE ASSEMBLED PRIOR TO POSITIONING THE BASE. LIFT THE FRONT HALF OVER AND ONTO THE TWO LOCKING BOLTS AND THE TWO TABS. LEVEL BOTH HALVES AND LOCK THEM IN PLACE BY TIGHTENING THE TWO

5. DETERMINE BASE INSTALLATION LOCATION. POSITION THE BASE IN THE APPROXIMATE DESIRED POSITION IN THE TRENCH. THE FRONT OR DROP SIDE OF THE BASE (CHARLES LOGO) GENERALLY FACES THE STREET. USING EITHER THE BACK HALF OF THE BASE OR THE ENTIRE ASSEMBLY, POSITION THE FEED CABLES/CONDUIT

(CHARLES LOGD) GENERALLY FACES THE STREET. USING EITHER THE BACK HALF OF THE BASE OR THE ENTIRE ASSEMBLY, POSITION THE FEED CABLES/CONDUIT TOWARDS THE REAR OF THE BASE. NOTE: THIS POSITIONING FACILITATES THE ATTACHMENT OF CABLE(S) DURING SPLICING PROCEDURES.

6. POSITION AND LEVEL BASE IN TRENCH AND BEGIN BACKFILL. POSITION THE BASE AND. NOTE: MAINTAIN THIS LEVEL AS BACKFILL IS BEING ADDED AND TAMPED ONCE THE CABLES/CONDUIT HAS BEEN POSITIONED, THE BASE CAN BE PLACED IN THE TRENCH (WITH THE OPTIONAL ATTACHED STAKE). AS THE TRENCH IS BACKFILLED, PERIODICALLY TAMP THE SOIL, ALWAYS PUSHING THE SOIL TOWARDS THE BASE. THIS PRACTICE HELPS TO REMOVE AIR FROM THE BACKFILL SOIL, MAKING SETTLING LESS LIKELY TO OCCUR. THE BASE IS DESIGNED TO MAINTAIN ITS ORIENTATION AFTER INSTALLATION; THEREFORE, IT IS IMPORTANT TO VERIFY THAT THE BASE IS LEVEL DURING THE ENTIRE INSTALLATION PROCEDURE. NOTE: SHOULD IT BE NECESSARY TO STRAIGHTEN A PEDESTAL AT ANY FUTURE TIME (SUCH AS IN THE EVENT OF UNEVEN GROUND SETTLING), NEVER ATTEMPT TO STRAIGHTEN AN INSTALLED PEDESTAL BY MANIPULATING, PUSHING, OR PULLING ON THE ATTACHED DOME, AS PEDESTAL DAMAGE MAY RESULT. TO RE-PLUMB AND STRAIGHTEN A PEDESTAL POST-INSTALLATION, FIRST REMOVE THE SOIL FROM AROUND THE BASE. THEN RE-ADJUST THE BASE UNTIL A PROPER LEVEL IS ACHIEVED.

7. INSTALL BACKFILL SOIL, MOISTURE BARRIER AND PEA GRAVEL. ALTERNATELY BACKFILL THE BASE, INSIDE AND OUTSIDE, TAMPING THE SOIL AS IT IS ADDED. THE SOIL ON THE INSIDE OF THE BASE SHOULD BE EVEN WITH THE TOP OF THE SECOND RIB FROM THE BOTTOM. ON THE OUTSIDE, THE BACKFILL SHOULD BE EVEN WITH OR ABOVE THE GROUND LINE. ADDING BACKFILL ONE RIB HIGHER, AND CLOSE TO THE CHARLES' LOGO, WILL MAKE THE BASE MORE STABLE. CAUTION: NEVER MOUND BACKFILL SOIL ON THE OUTSIDE OF THE BASE TO MAKE IT APPEAR THAT THE BASE HAS BEEN INSTALLED TO THE RECOMMENDED DEPTH, AS THIS MOUND WILL WASH AWAY.

8. WHEN THE INTERNAL BACKFILL IS AT THE PROPER HEIGHT, INSTALL THE RED MOISTURE BARRIER. PLUG ALL OPEN CONDUITS PRIOR TO POURING IN ANY PEA GRAVEL. POUR 5 TO 6 INCHES OF PEA GRAVEL INTO THE BASE. THE GRAVEL SHOULD BE NO HIGHER THAN THE UPPERMOST RIB. NOTE: IF THE CONDUIT HAS BEEN TRIMMED TO THE HEIGHT DESCRIBED IN STEP 3, THE GRAVEL WILL BE 1 TO 1.5 INCHES BELOW THE TOP OF THE DUCT.

9. INSTALL FIBER ORGANIZER. A KEY ON EACH LEG ALLOWS IT TO BE ORIENTED IN ONLY ONE DIRECTION. ALIGN THE LEGS ONTO THE TABS ON THE SIDES OF THE BASE COLLAR. PUSH DOWN UNTIL TWO AUDIBLE CLICKS ARE HEARD.

10. INSTALL DOME(S). NOTE: THE DOME CAN ONLY BE FULLY INSTALLED WHEN THERE IS NO CABLE IN THE WAY. CFDP-EPS PEDESTALS HAVE AN INNER (BLACK) DOME THAT FITS OVER THE ORGANIZER AND SNAPS ONTO THE TOP SNAP CLIP. POSITION THE OUTER DOME AND ALIGN THE LOCK WITH THE BASE LATCH.

RAILROAD, WATERWAY, BRIDGE, OR OTHER CROSSING

NOTES:

- 1. THESE PLANS DO NOT INCLUDE PLANS OR TYPICALS FOR RAILROAD, BRIDGE, OR WATER WAY CROSSINGS. SEPARATE DRAWINGS FROM ENTRUST COMMUNICATIONS FOR EACH CROSSING WILL BE SUBMITTED WITH PERMITS FOR EACH CROSSING.
- 2. ANY CROSSING THAT REQUIRES ADDITIONAL PERMITS ARE NOTED ON THE PLANS. DO NOT CONSTRUCT THESE AREAS WITHOUT THE PROPER APPROVAL AND PERMITS.

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NOTE: ALL CONDUIT TO BE PLACED AT A MINIMUM DEPTH OF 36" UNLESS OTHERWISE NOTED





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CITY OF SUPERIOR, WI FIBER OPTIC NETWORK TYPICAL PACKAGE PRELIMINARY - FOR REVIEW

ENGINEER: SM

DRAWN BY: JW

CHECKED BY: JW

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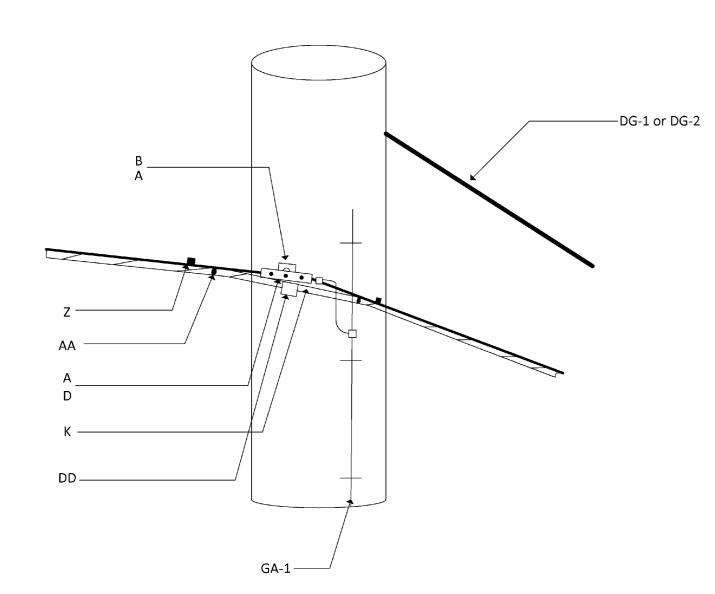


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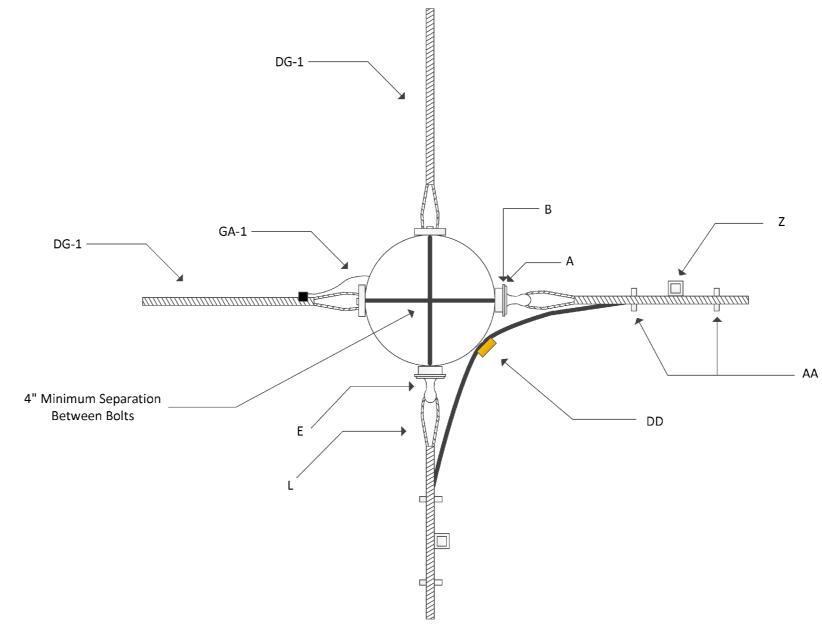
Curve Suspension Strand (CV-1)



CV-1 (Fiber)	Curve 1		
Item	Qty		Description
K	1	1	3 Bolt Curve Suspension Clamp
D	1	l	Machine Bolt (Various Length)
В	2	2	Square Washers
Α	2	2	Square Nuts
Z	2	2	Lashing Wire Clamps
AA	2	2	Strap and Spacers
DD	1	l	Fiber Tag
DG-1	1	L	Down Guy Assembly
GA-1	1	1	Ground Assembly

USE CITY SECONDARY STANDARDS FOR SECONDARY POLE ATTACHMENTS

Double Dead End (DD-1)



DD-1	Double De	ad End
Item	Qty	Description
Е	2	Eye Bolt
В	4	Square Washers
Α	2	Square Nuts
DG-1	2	DG Assembly
AA	4	Strap and Spacers
DD	1	Fiber Tags
Z	2	Lashing Wire Clamps
L	2	Dead End Grips
GA-1	1	Ground Assembly

REFERENCE SHEET-CON-09 FOR MORE INFORMATION

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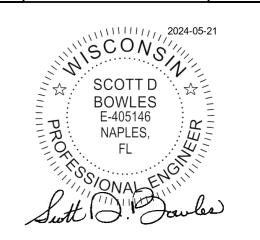


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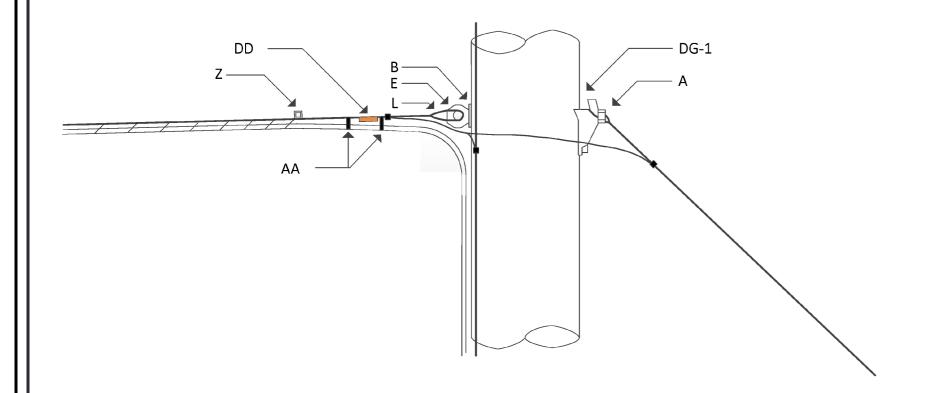
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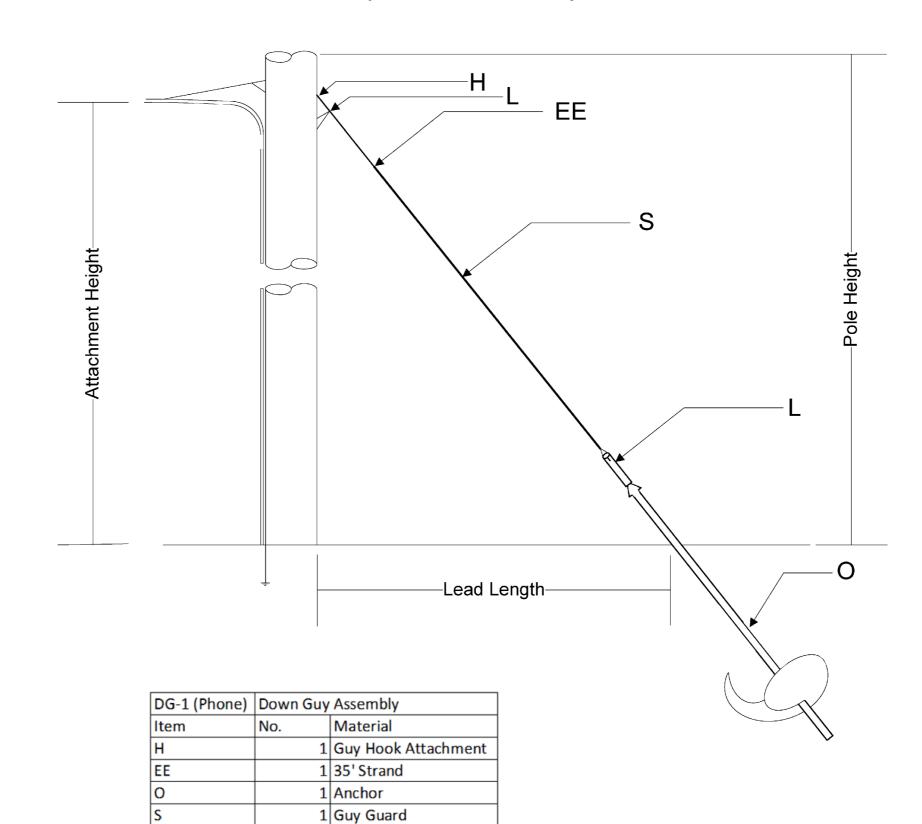
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Dead End (DE-1)



DE-1	Dead End		
Item	Qty	Description	
Е	1	Eye Bolt	
Α	1	Square Nuts	
DG-1	1	DG Assembly	
AA	2	Strap and Spacers Dead End Grips Fiber Tags Lashing Wire Clamps Square Washer Ground Assembly	
L	1		
DD	1		
Z	1		
В	1		
GA-1	1		

Anchor & Down Guy Detail (DG-1, DG-2)



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2 Dead End Grips





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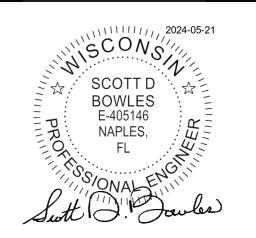
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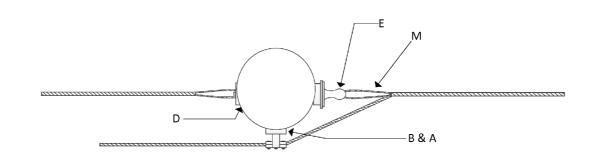


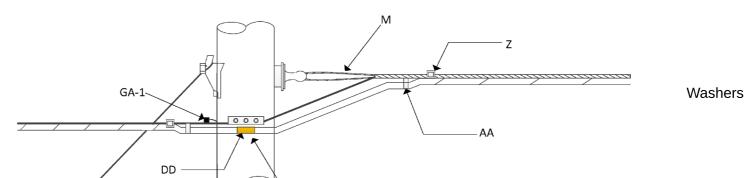
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USE SNOW SHOE STYLE STORAGE FOR ALL EXCESS AND SLACK AERIAL FIBERCABLE. INSTALL TO MANUFACTURER SPECIFICATIONS

Excess Aerial Cable Slack Storage No Sno-Shoe Was Lashing Wee Right (I) To Lashing Clamp Assembly Was Lashing Wee (CA) Note: Fold Back Separate From SFAN Lasing. Dettee Straps Every 18* 107 Fold Back Strap and Spacer

False Dead End (FD-2)





FD-2	Faslse Dea	ade End 2
Item	No.	Material
J	1	3 Bolt Staight Suspension Clamp
D	1	Machine Bolt (Various Lengths)
В	3	Square Washers
Α	3	Square Nuts
Z	2	Lashing Wire Clamps
DD	1	Fiber Tags
AA	4	Strap and Spacers
E	1	Eye Bolt
DG-1	1	DG Assembly
М	1	False and Dead End Grips
GA-1	1	Ground Assembly

USE CITY SECONDARY STANDARDS FOR SECONDARY POLE ATTACHMENTS

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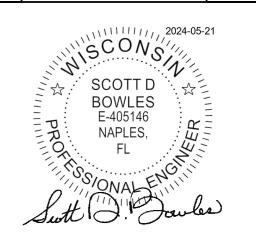
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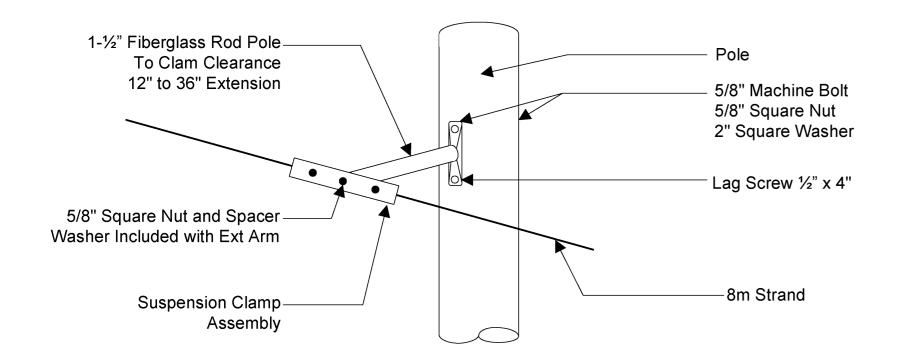
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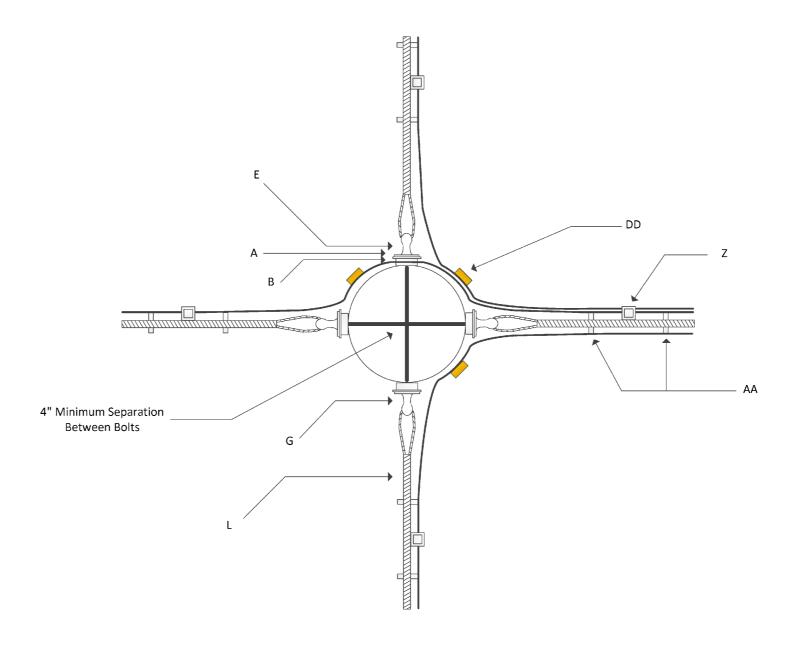


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SHEET:	27 OF 69
FILE:	City of Superior, WI Construction

Four Way (FW-1)

Fiberglass Extension





FW-1	Four Way	
ltem		Description
E		Eye Bolts
G		Eye Nuts
Α		Square Nuts
В		Square Washers
Z		Lashing Wire Clamps
AA		Strap and Spacers
DD		Fiber Tag
L		Dead End Grips
GA-1		Ground Assembly

USE CITY SECONDARY STANDARDS FOR SECONDARY POLE ATTACHMENTS

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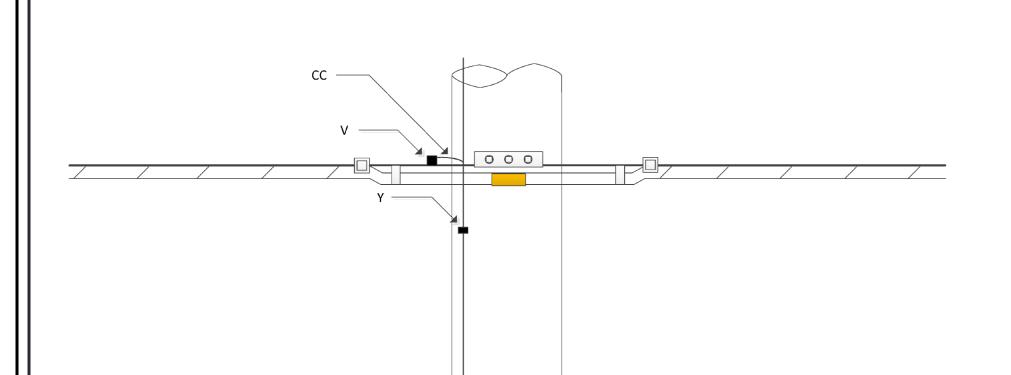
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SHEET:	28 OF 69
FILE:	City of Superior, WI Construction

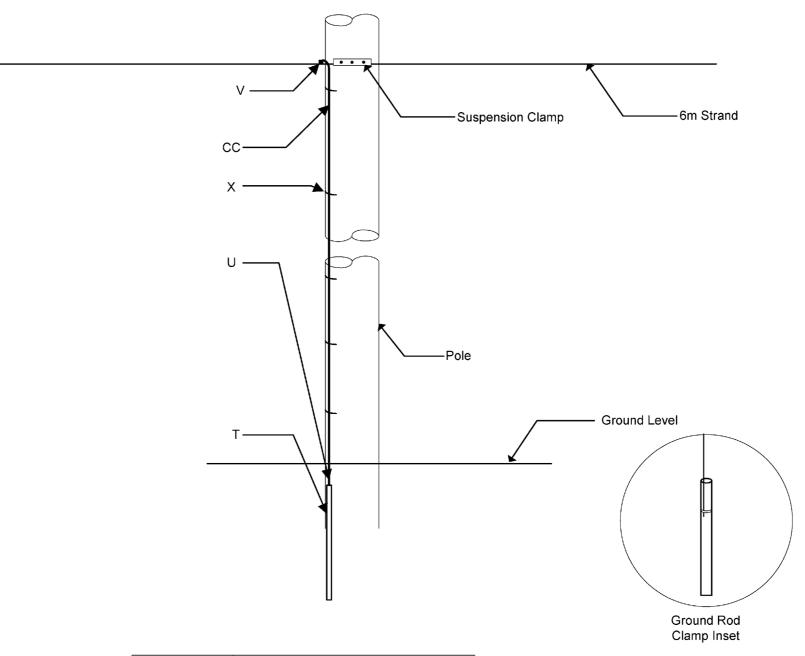
Ground Assembly GA-2



Ground Assembly (GA-1)

(PM2a)

GA-1	Ground Assembly (PM2a)	
Item	Qty Description	
V	1	K1 Ground Clamp
CC	1	8" #6 Bare Copper
Υ	1	Split Bolt



GA-2	Groun	Ground Assembly 2		
Item	No.		Material	
٧		1	K1 Ground Clamp	
CC		1	25' #6 Bare Copper	
Т		1	8' 5/8 Ground Rod	
U		1	5/8 Ground Rod Clamp	
Х		0	Copper States	

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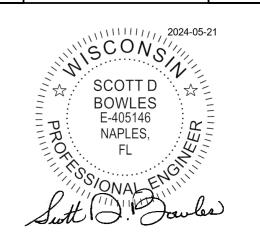
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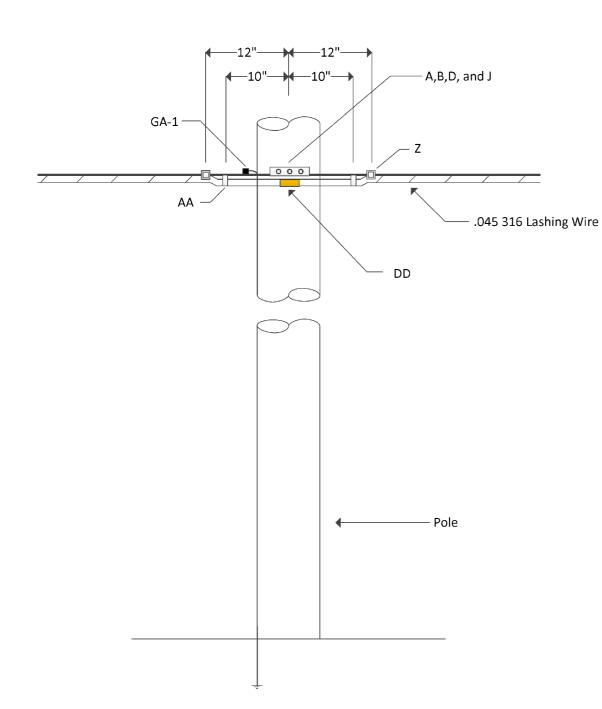
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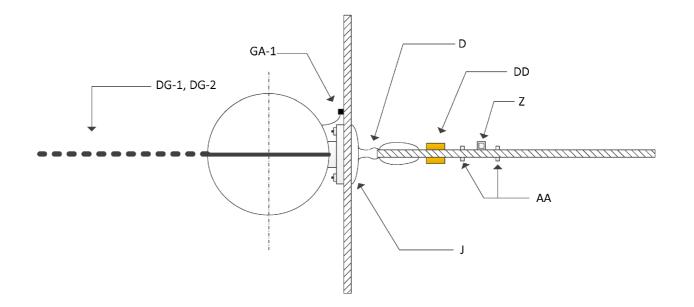
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FILE:	City of Superior, WI Construction					

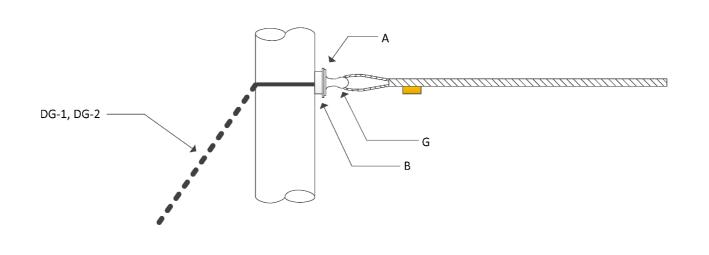
Straight Through (ST-1)



ST-1	Straight Through 1		
Item	Qty	Description	
J	1	3 Bolt Straight Suspension Clamp	
D	1	Machine Bolt (Various Length)	
В	2	Square Washers	
А	2	Square Nuts	
Z	2	Lashing Wire Clamps	
DD	1	Fiber Tag	
AA	2	Strap and Spacers	
GA-1	1	Ground Assembly	

T-Pole (TP-1)





TP-1	T Pole		
Item	Qty		Description
J		1	3 Bolt Straight Suspension Clamp
D		1	Machine Bolt (Various Length)
В		1	Square Washers
AA		1	Square Nuts
Z	;	3	Lashing Wire Clamps
AA		4	Strap and Spacers
DD		2	Fiber Tag
G	,	1	Thimble Eye Nuts
DG-1		1	Down Guy Assembly
GA-1		1	Ground Assembly

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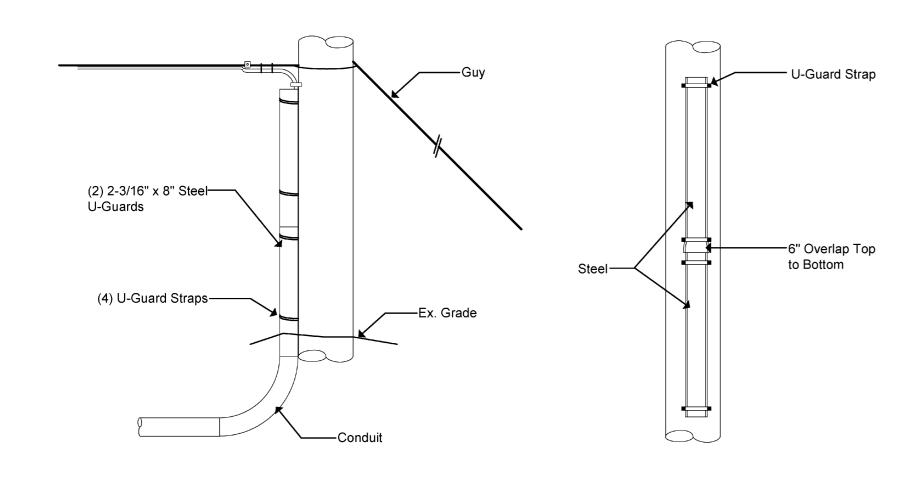
PRIOR TO CONSTRUCTION CALL call811.org (TOLL FREE) AT 1-800-242-8511 OR 811 FOR LOCATION OF UNDERGROUND UTILITIES





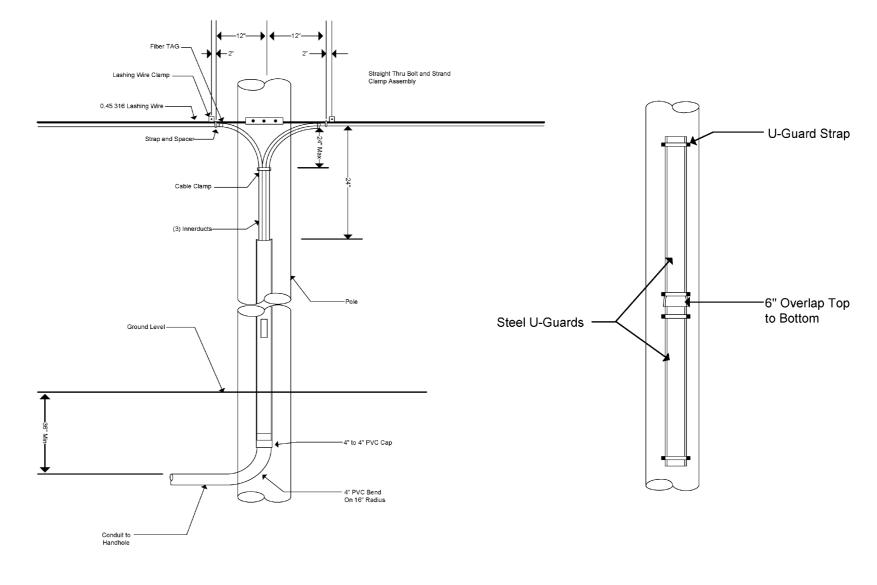
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Typical Deadend Pole Arrangement for Aerial to Buried Cable



ALL RISERS INSTALLED ON CITY OF SUPERIOR JOINT OWNED POLES TO BE 4 INCH DIAMETER

Typical Riser Pole Detail



ALL RISERS INSTALLED ON CITY OF SUPERIOR JOINT OWNED POLES TO BE 4 INCH DIAMETER

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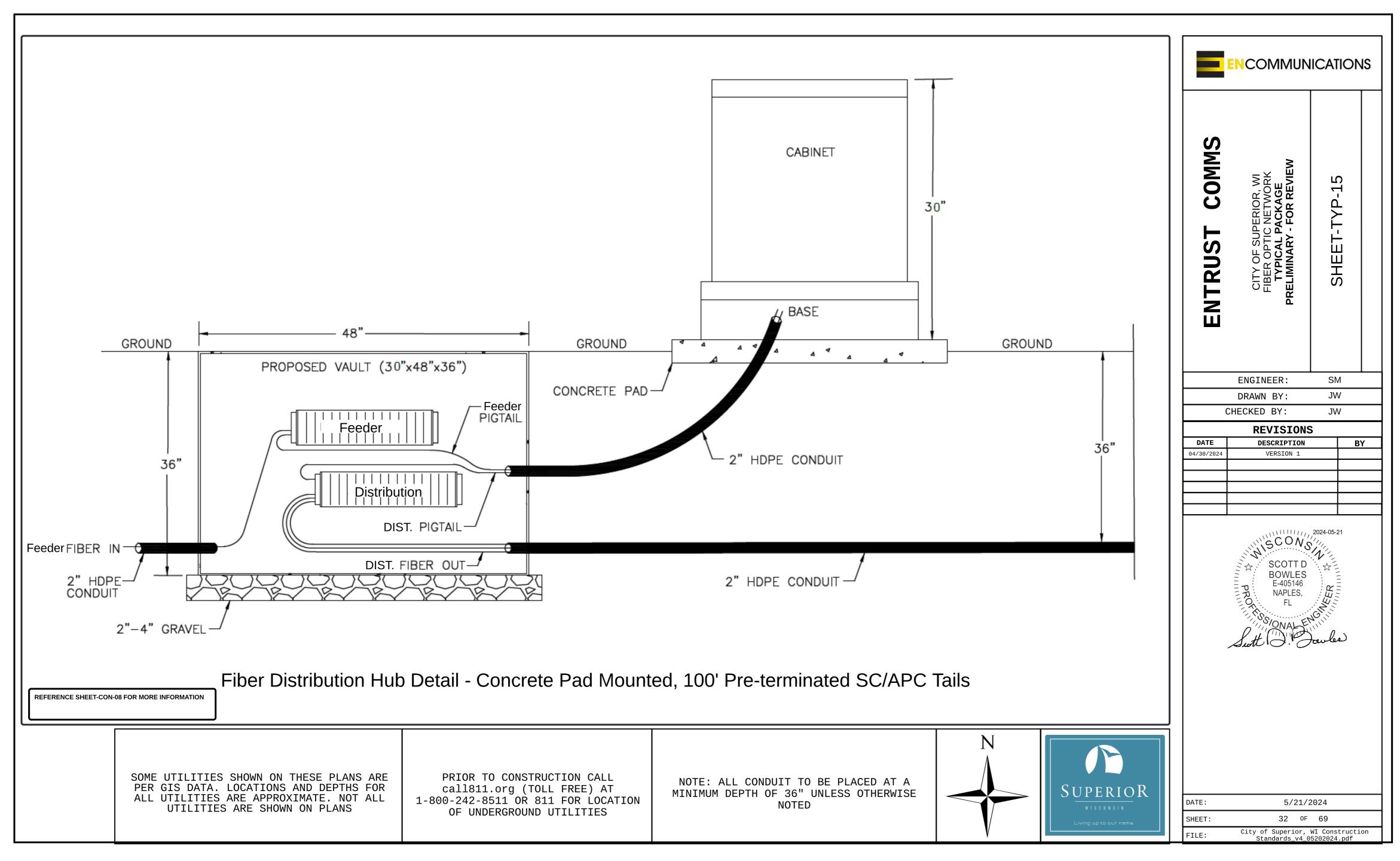
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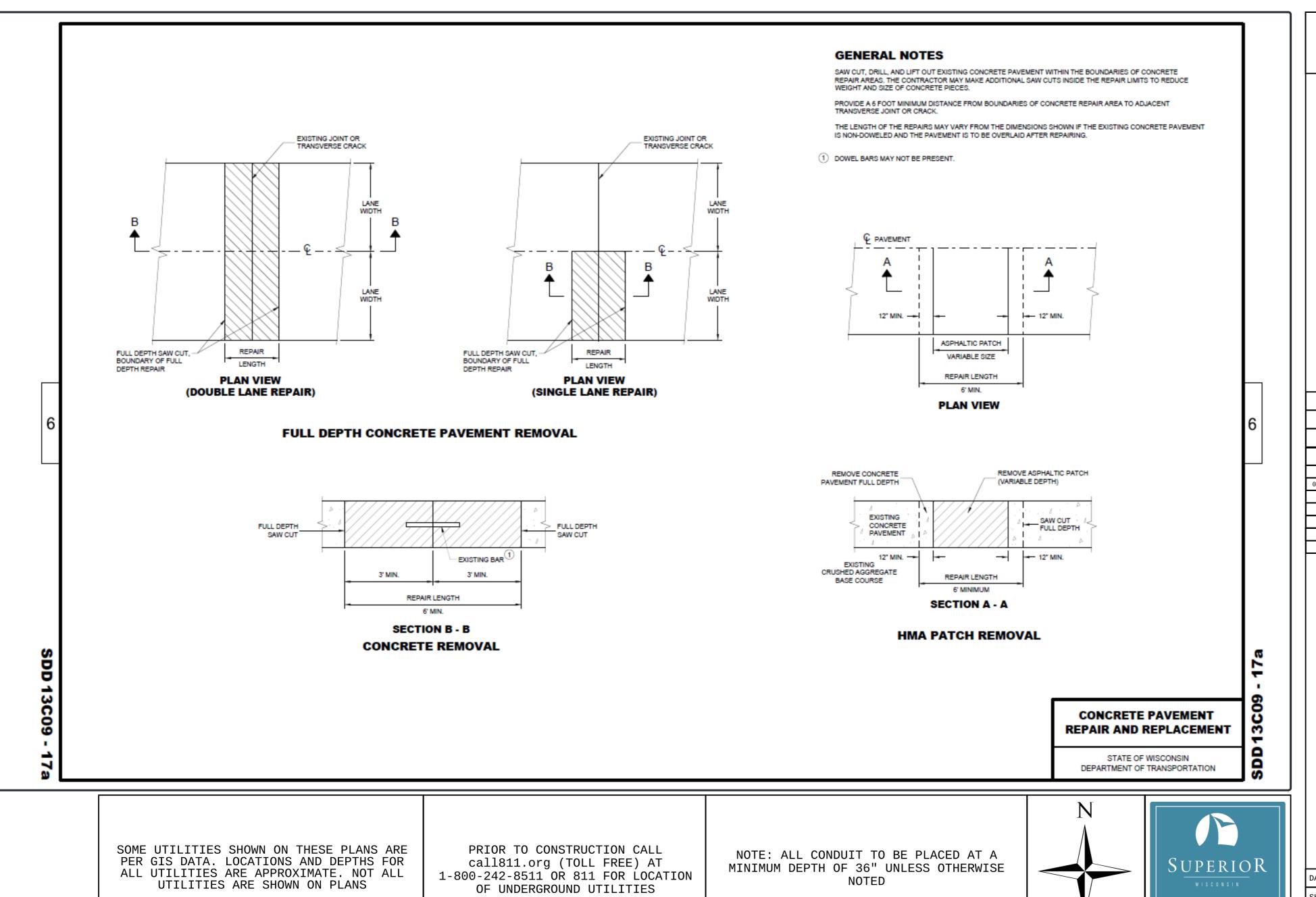
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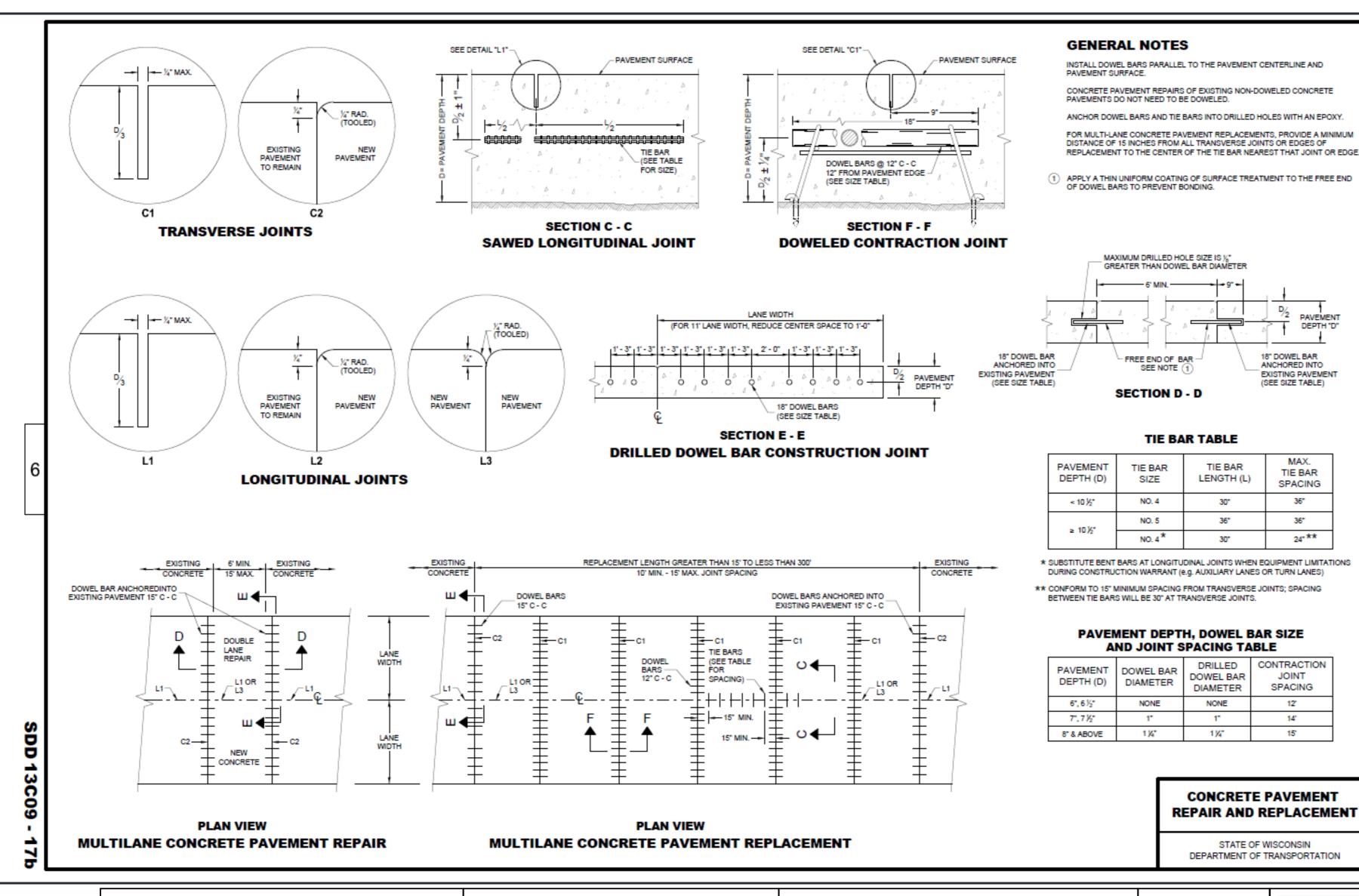
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5/21/2024 34 OF 69 SHEET: City of Superior, WI Construction Standards_v4_05202024.pdf FILE:

GENERAL NOTES (1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT. SEE DETAIL "L2" - USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) -PAVEMENT SURFACE FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8" GREATER THAN TIE BAR DIAMETER EXISTING CONCRETE PAVEMENT ENTRU NO. 6 TIE BARS, SPACED 30" C - C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT (3) SECTION G - G TIE BARS ANCHORED INTO EXISTING PAVEMENT EXISTING CONCRETE CONCRETE CONCRETE TRANSVERSE -TIE BARS ANCHORED INTO EXISTING PAVEMENT LANE EXISTING JOINT OR 04/30/2024 30" C - C (TYPICAL) SEE NOTE (1) WIDTH TRANSVERSE CRACK WIDTH BOND BREAKER 15" MIN. → SEE NOTE (2) L1-DOWEL BARS DOWEL BARS ANCHORED ANCHORED ANCHORED SINGLE A INTO EXISTING INTO EXISTING: LANE DOWEL A INTO EXISTING PAVEMENT PAVEMENT LANE WIDTH BARS PAVEMENT REPAIR WIDTH 15" C - C 15°C-C 15" C - C EXISTING EXISTING NEW EXISTING EXISTING NEW CONCRETE CONCRETE CONCRETE CONCRETE CONCRETE CONCRETE CONCRETE EDGE OF REPLACEMENT LENGTH REPLACEMENT GREATER THAN 15' TO 15' MAX. LESS THAN 300' PLAN VIEW **PLAN VIEW** SDD SINGLE LANE CONCRETE PAVEMENT REPLACEMENT SINGLE LANE CONCRETE PAVEMENT REPAIR **CONCRETE REPAIR 13C09** AND REPLACEMENT STATE OF WISCONSIN 3 DEPARTMENT OF TRANSPORTATION /S/ Peter Kemp P.E Ω PAVEMENT SUPERVISOR S PRIOR TO CONSTRUCTION CALL SOME UTILITIES SHOWN ON THESE PLANS ARE NOTE: ALL CONDUIT TO BE PLACED AT A PER GIS DATA. LOCATIONS AND DEPTHS FOR call811.org (TOLL FREE) AT SUPERIOR MINIMUM DEPTH OF 36" UNLESS OTHERWISE ALL UTILITIES ARE APPROXIMATE. NOT ALL 1-800-242-8511 OR 811 FOR LOCATION NOTED UTILITIES ARE SHOWN ON PLANS OF UNDERGROUND UTILITIES SHEET: FILE:

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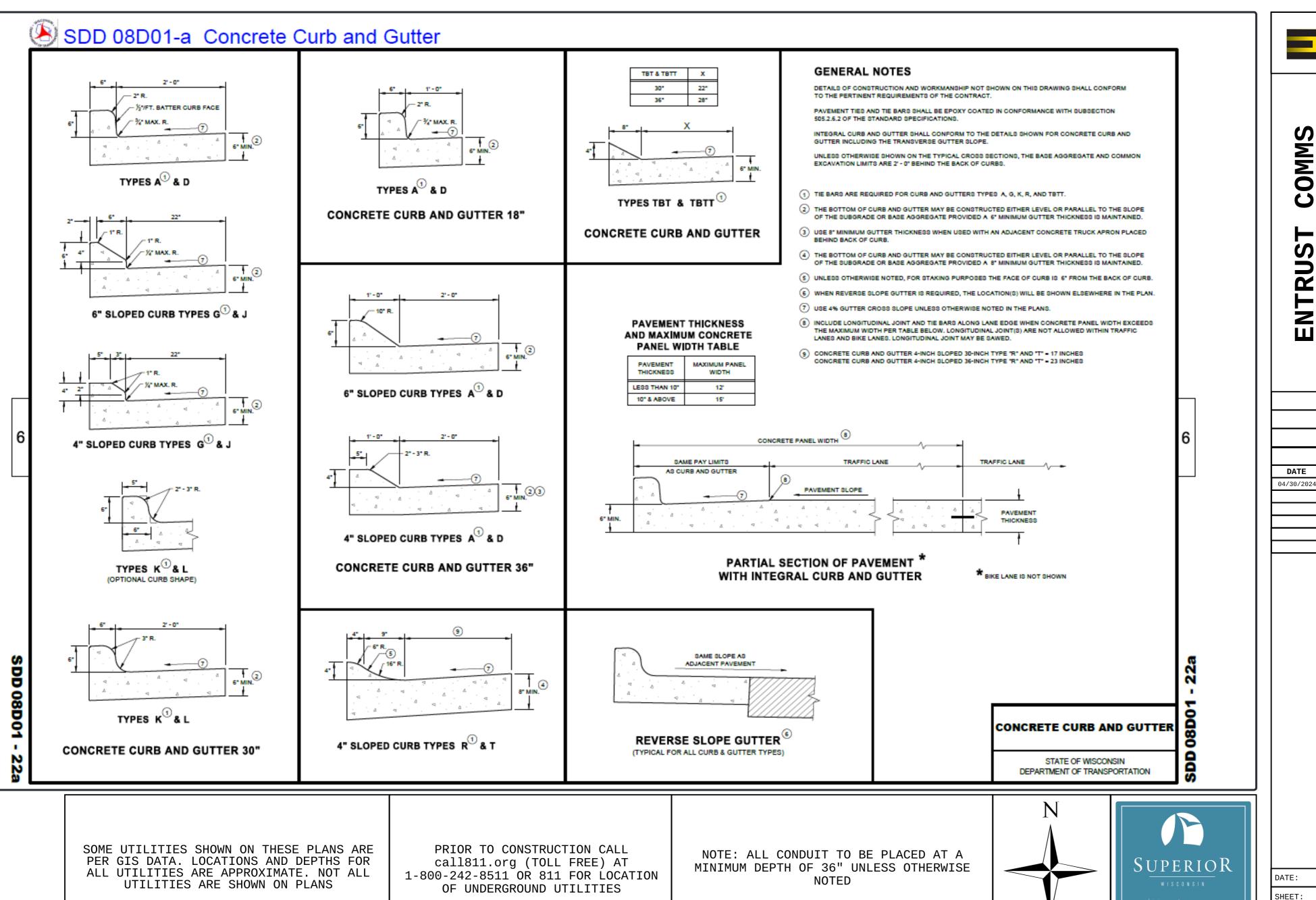
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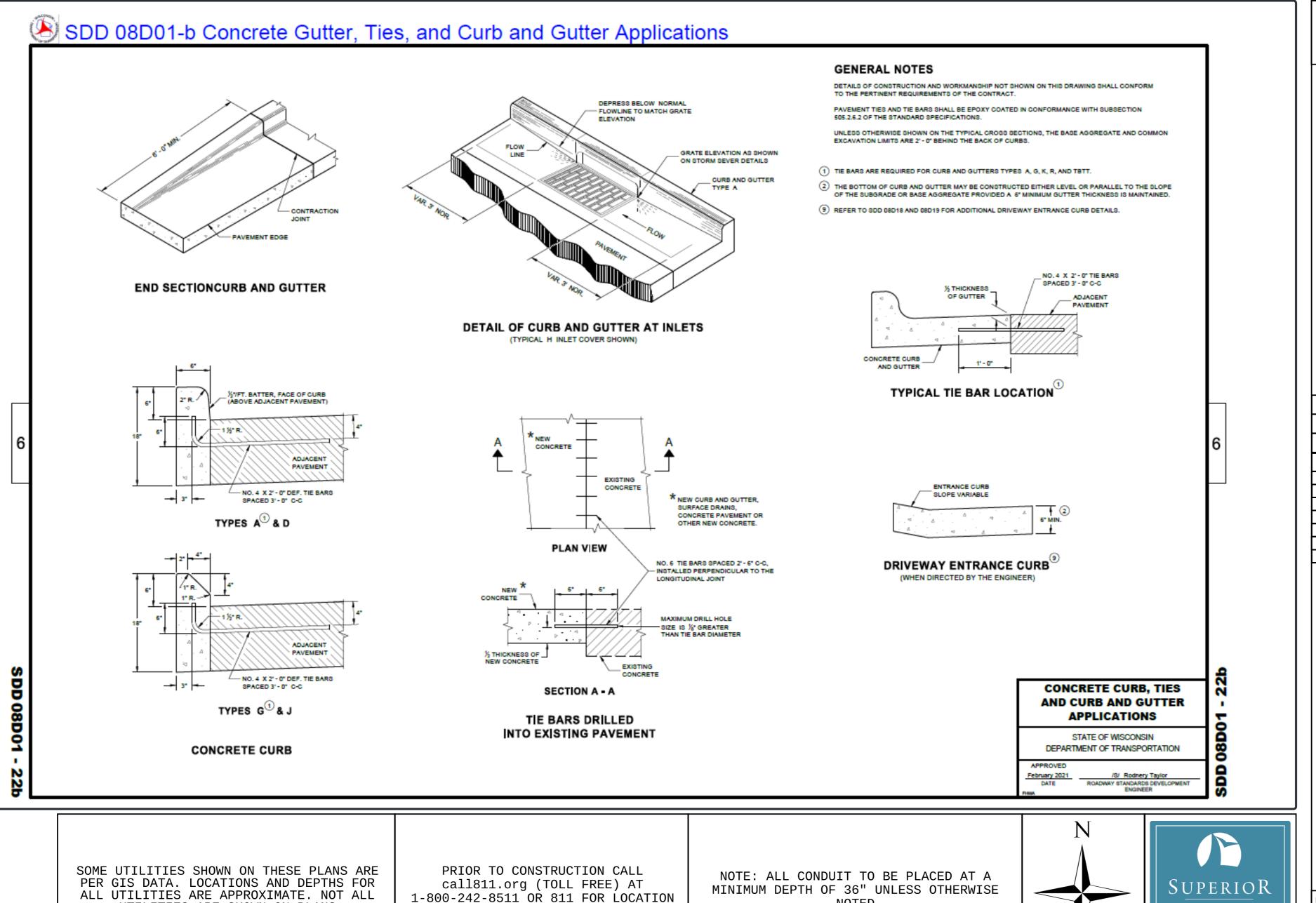
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UTILITIES ARE SHOWN ON PLANS

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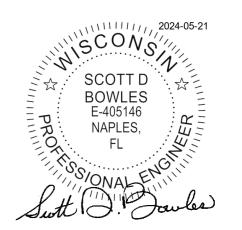
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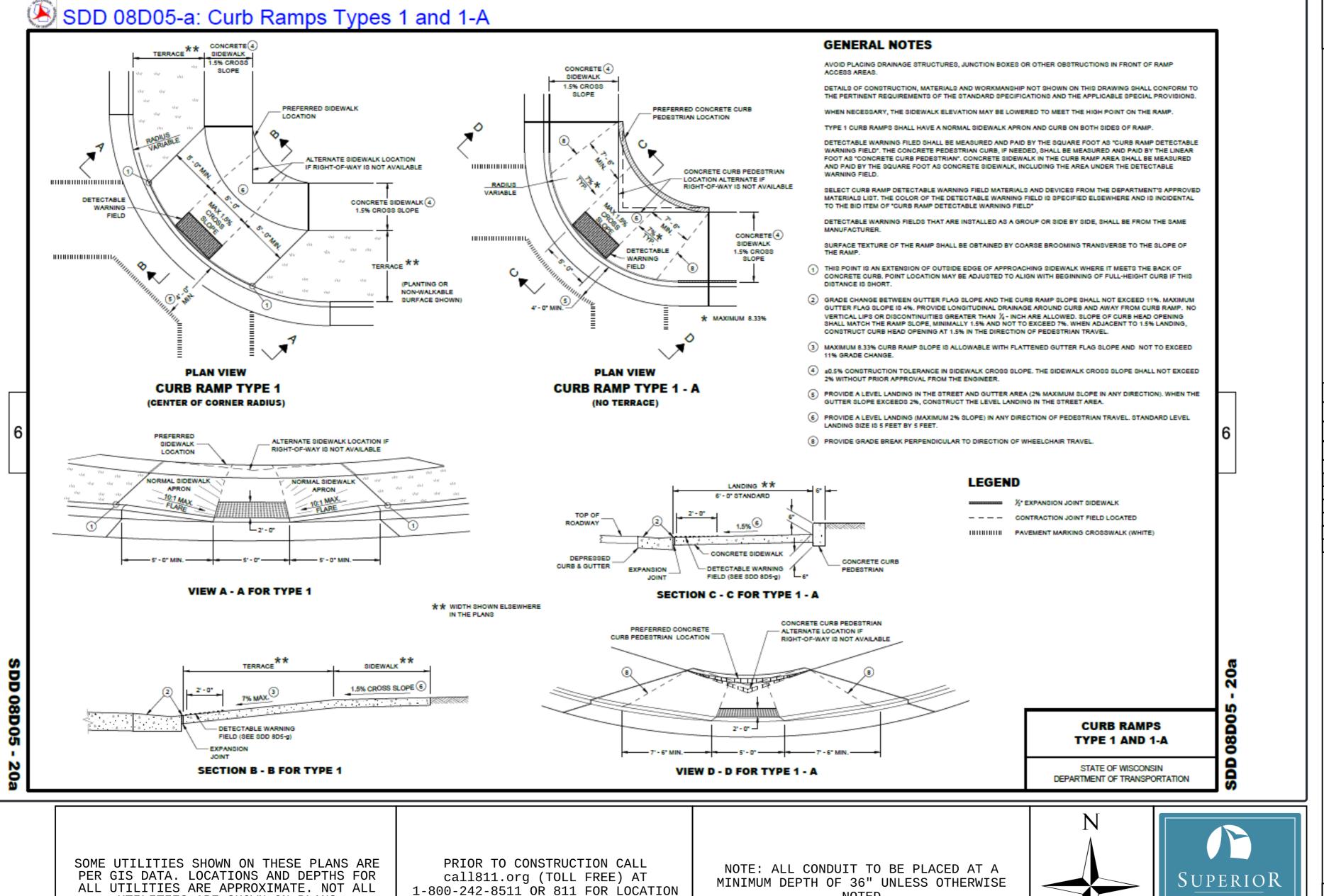
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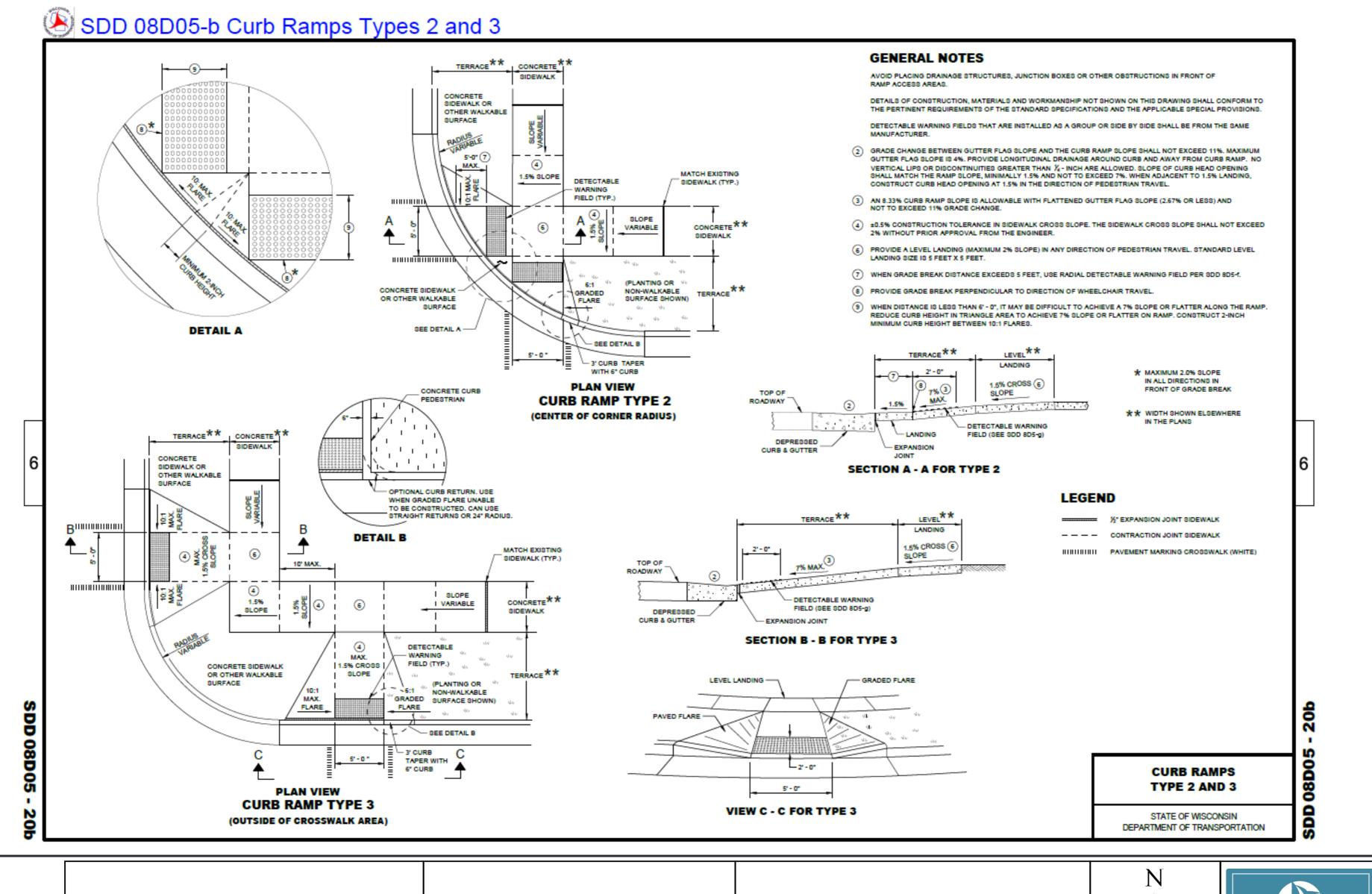
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38 OF 69 SHEET: City of Superior, WI Construction Standards_v4_05202024.pdf FILE:



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NOTE: ALL CONDUIT TO BE PLACED AT A MINIMUM DEPTH OF 36" UNLESS OTHERWISE NOTED







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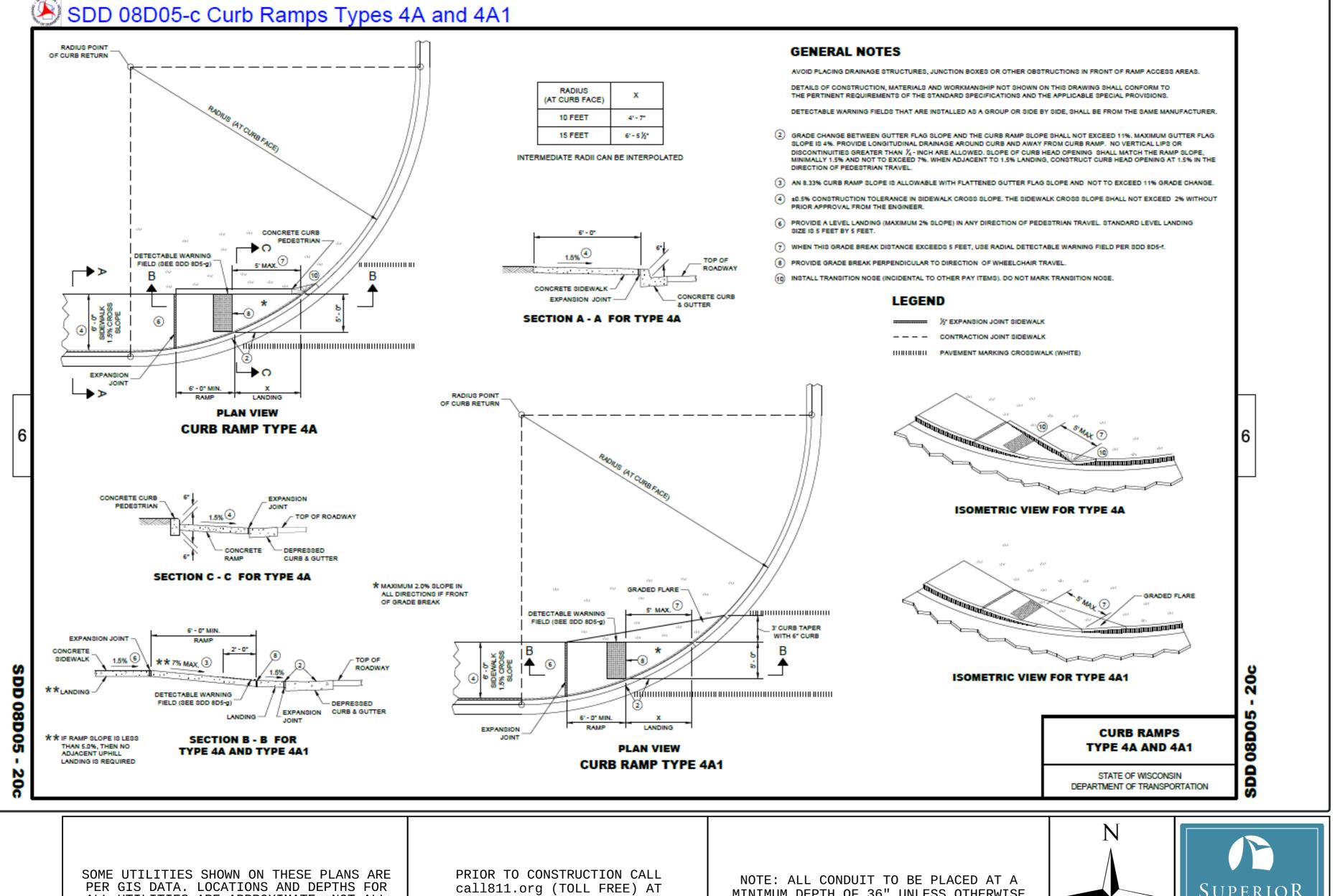
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ENGINEER: SM JW DRAWN BY: CHECKED BY: JW

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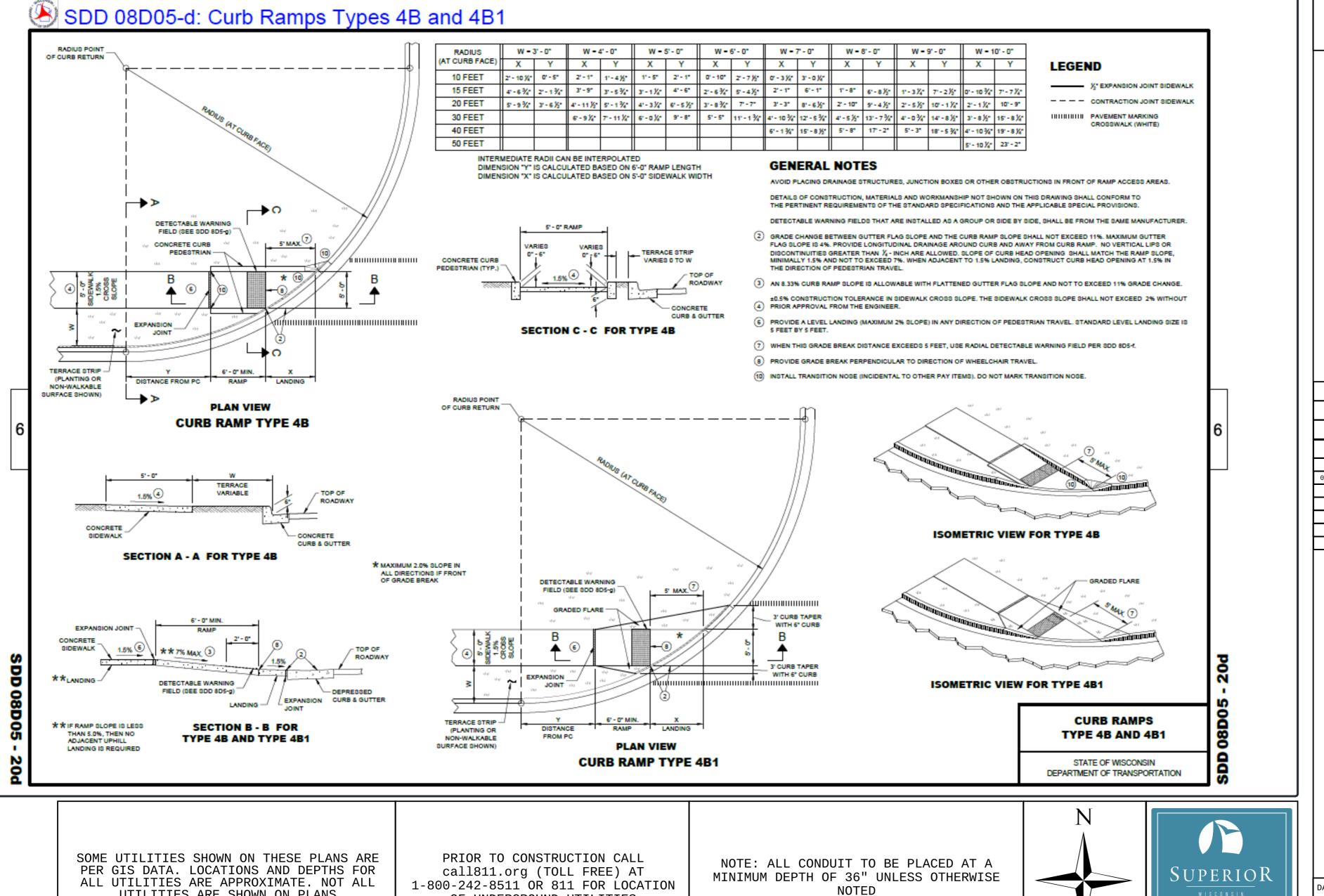


5/21/2024 40 OF 69 SHEET: City of Superior, WI Construction Standards_v4_05202024.pdf FILE:

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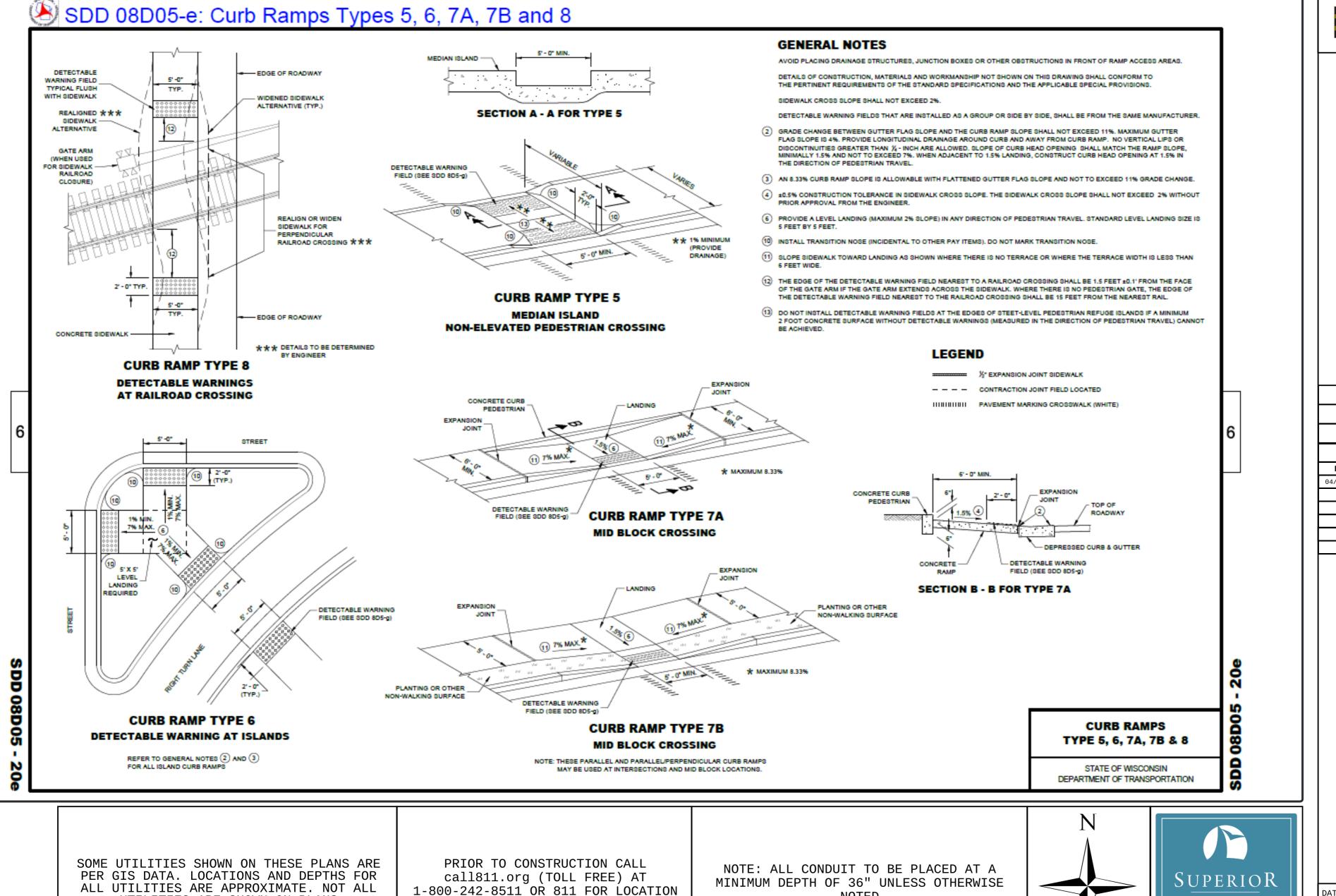
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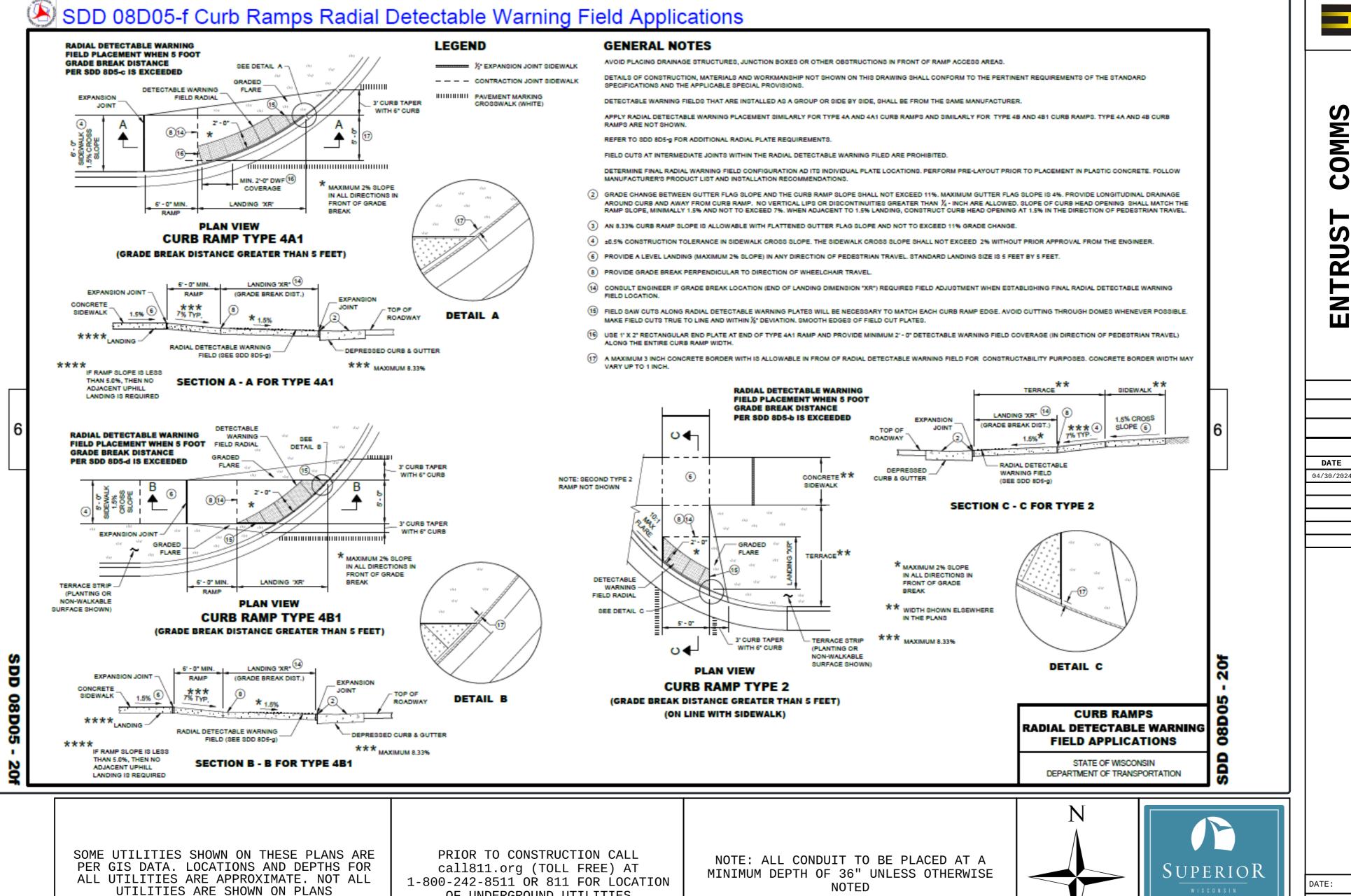
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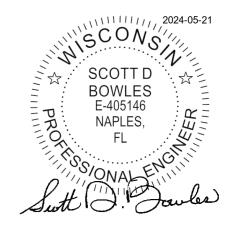
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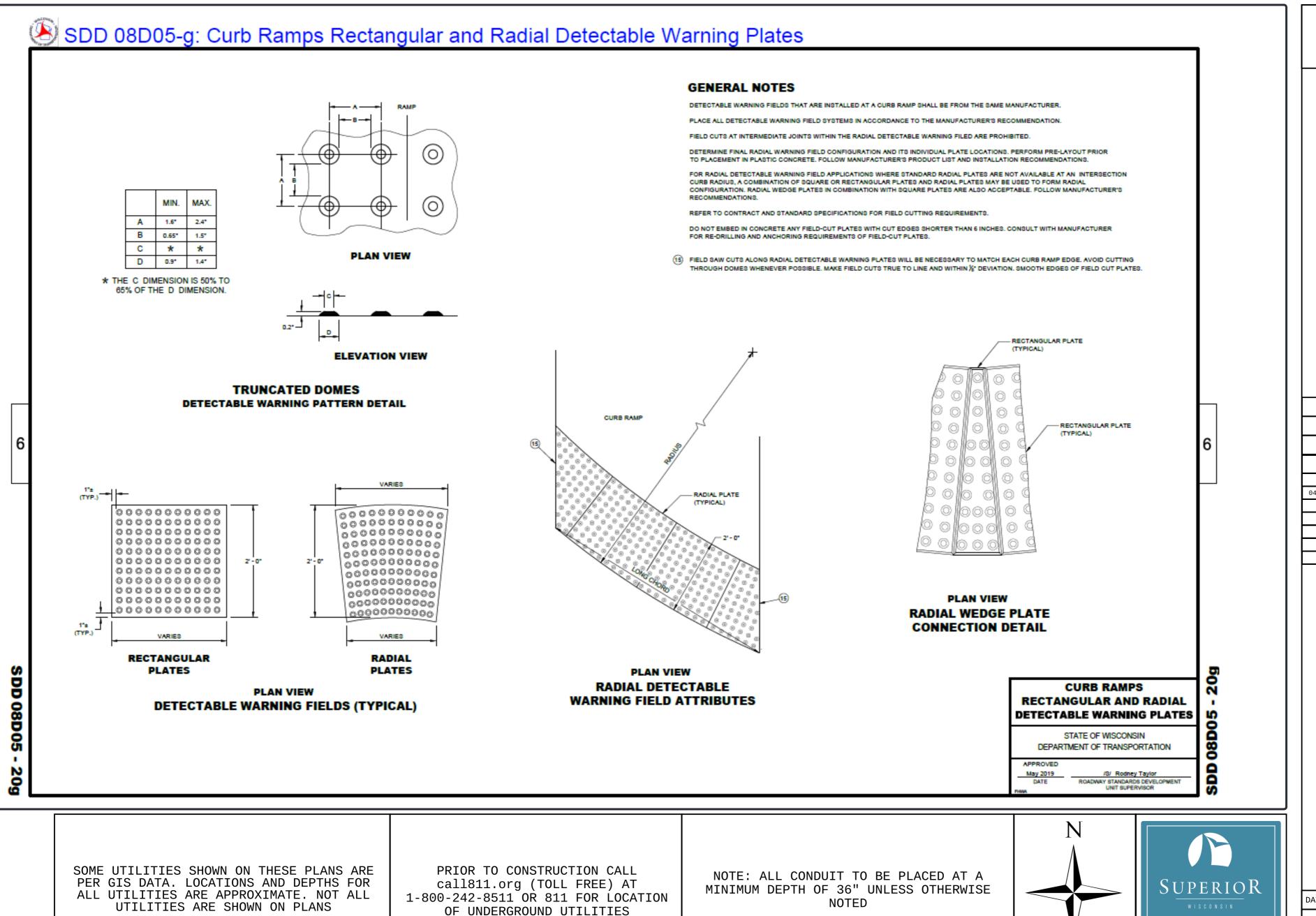
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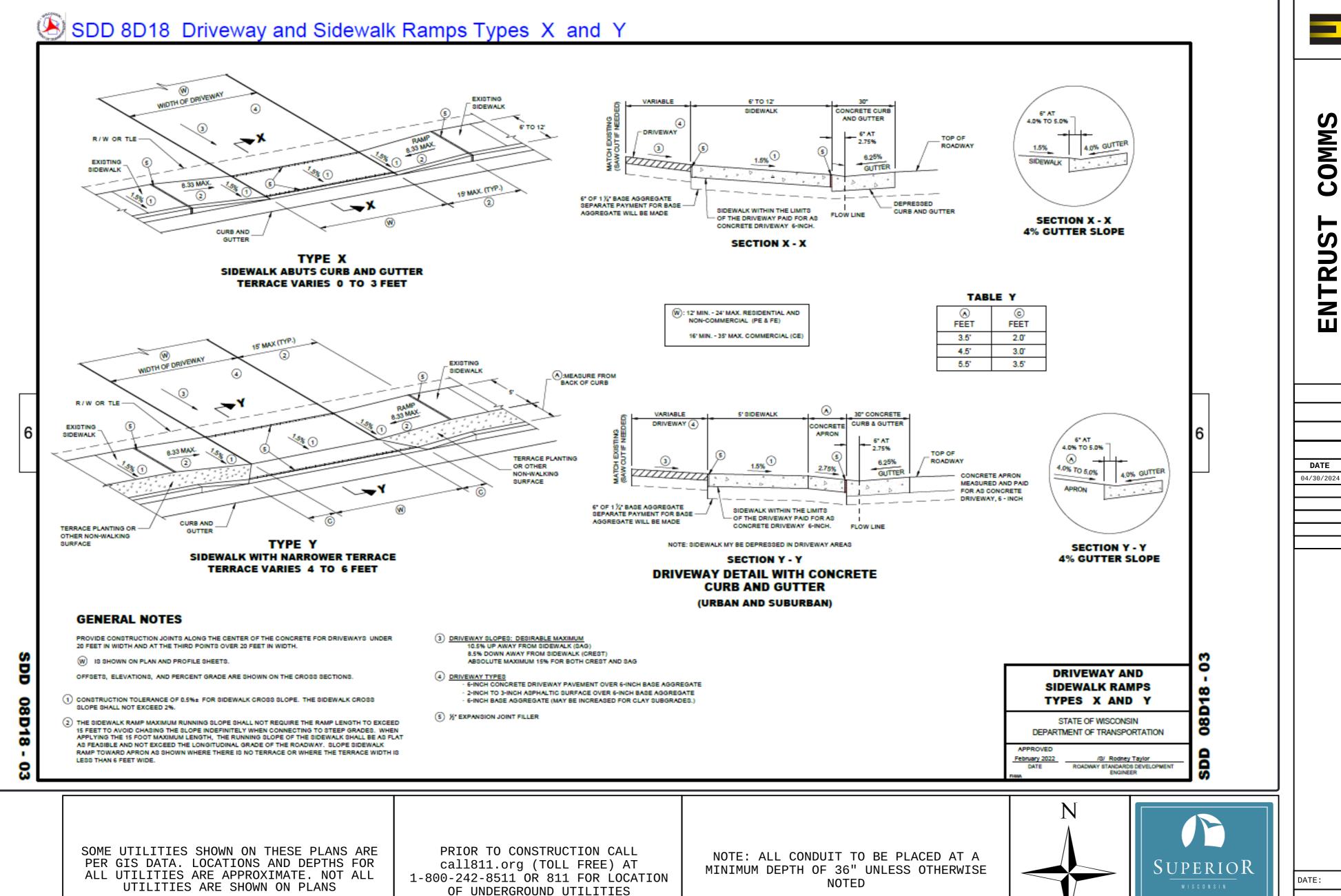
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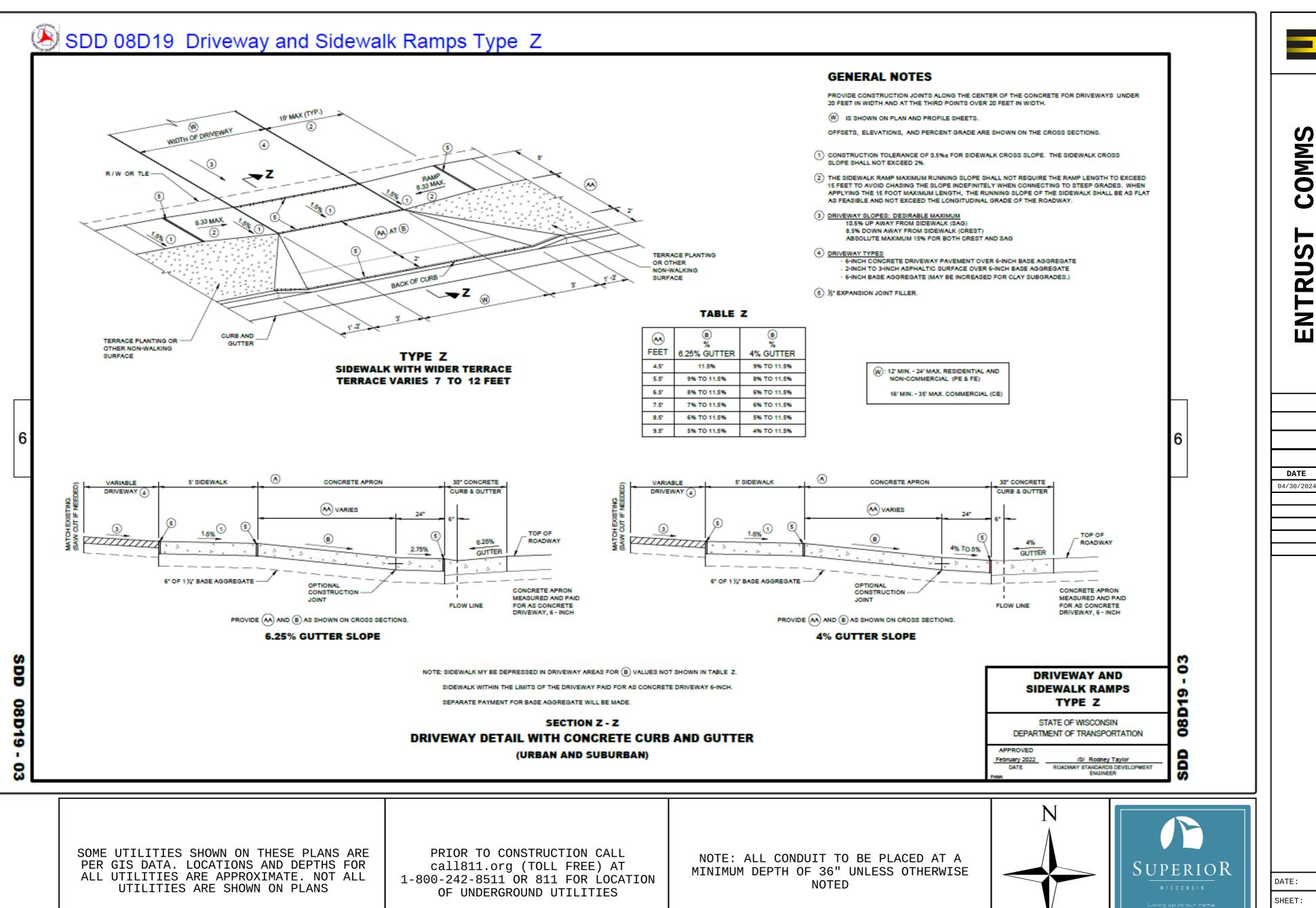
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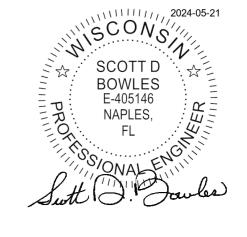
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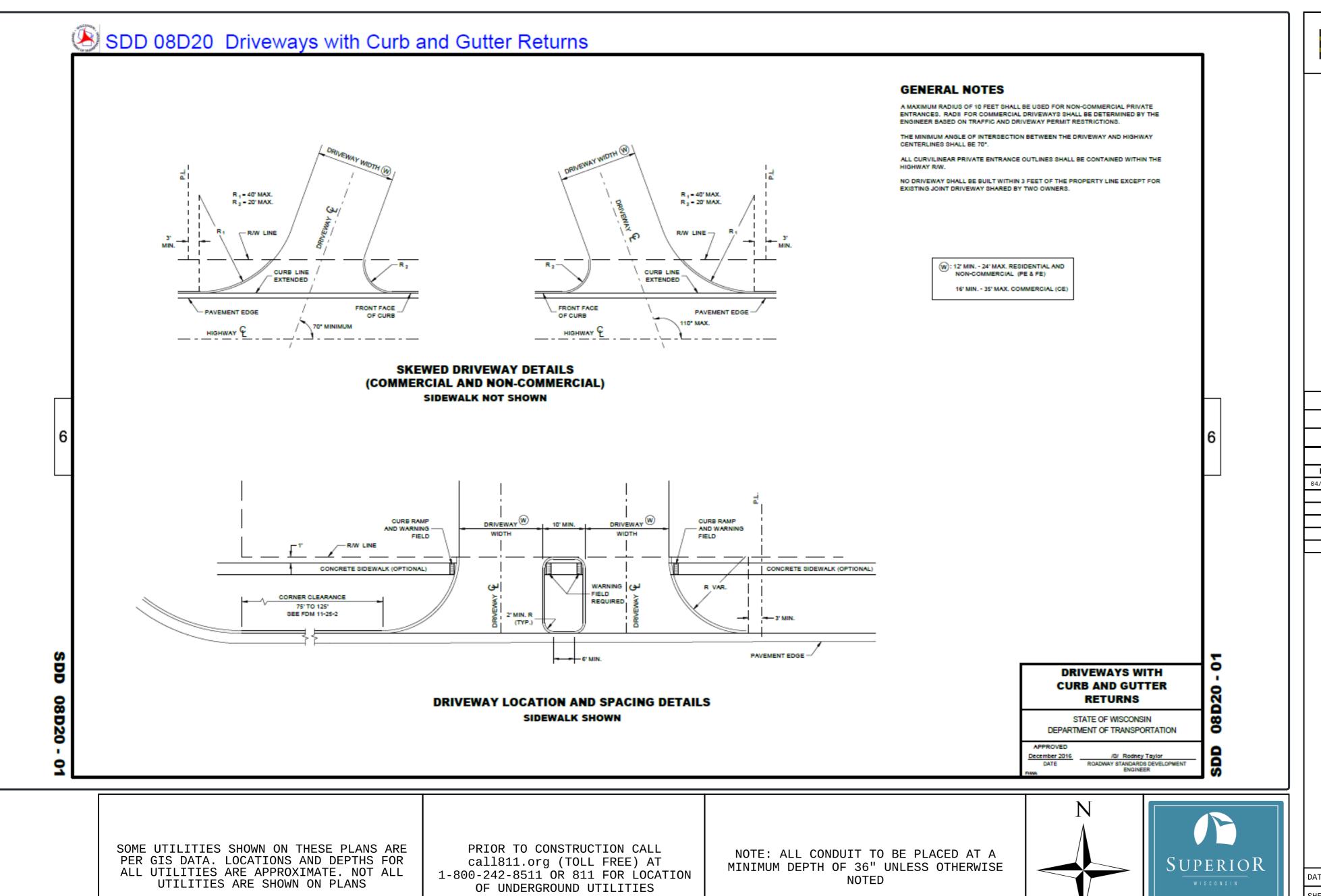
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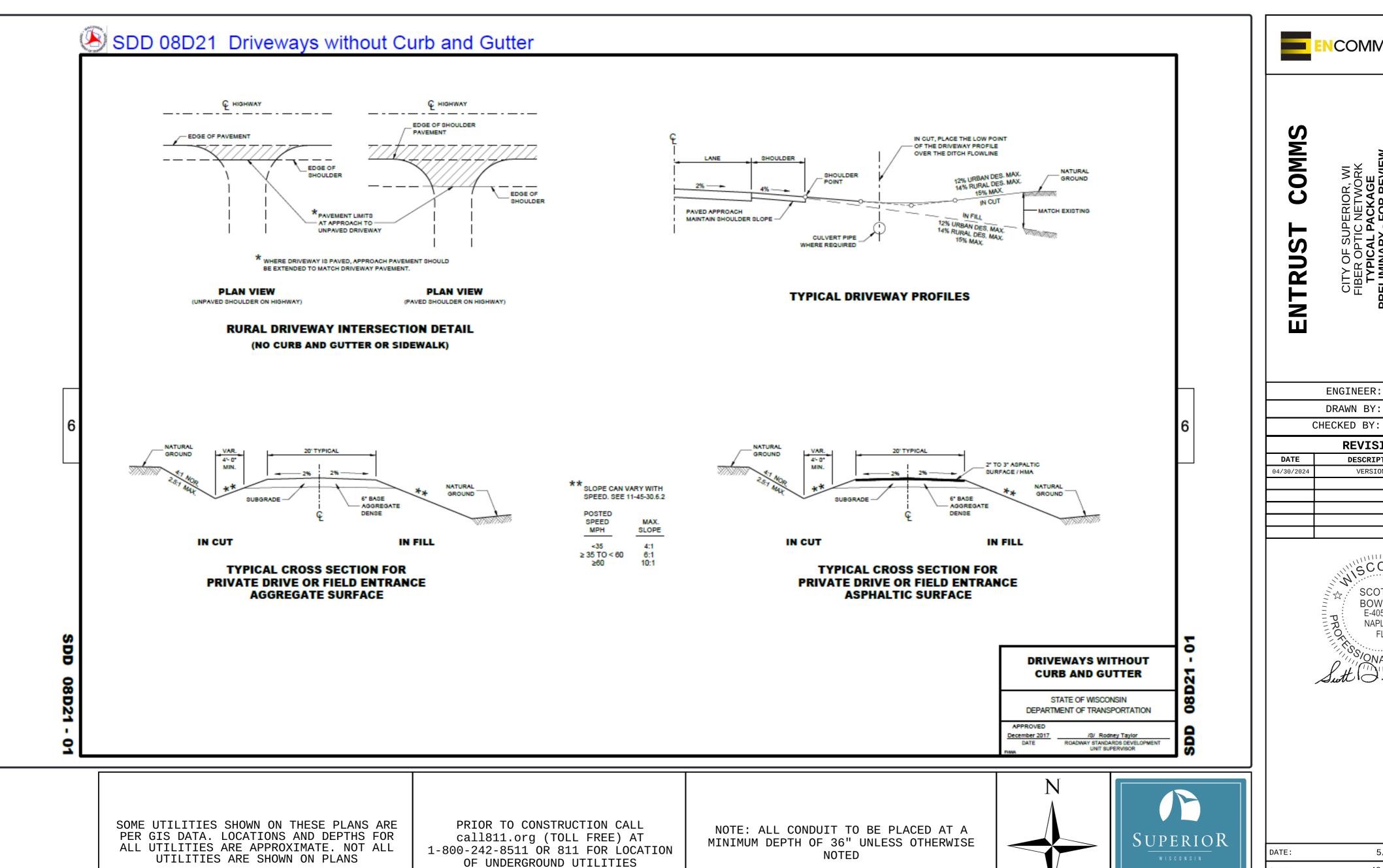
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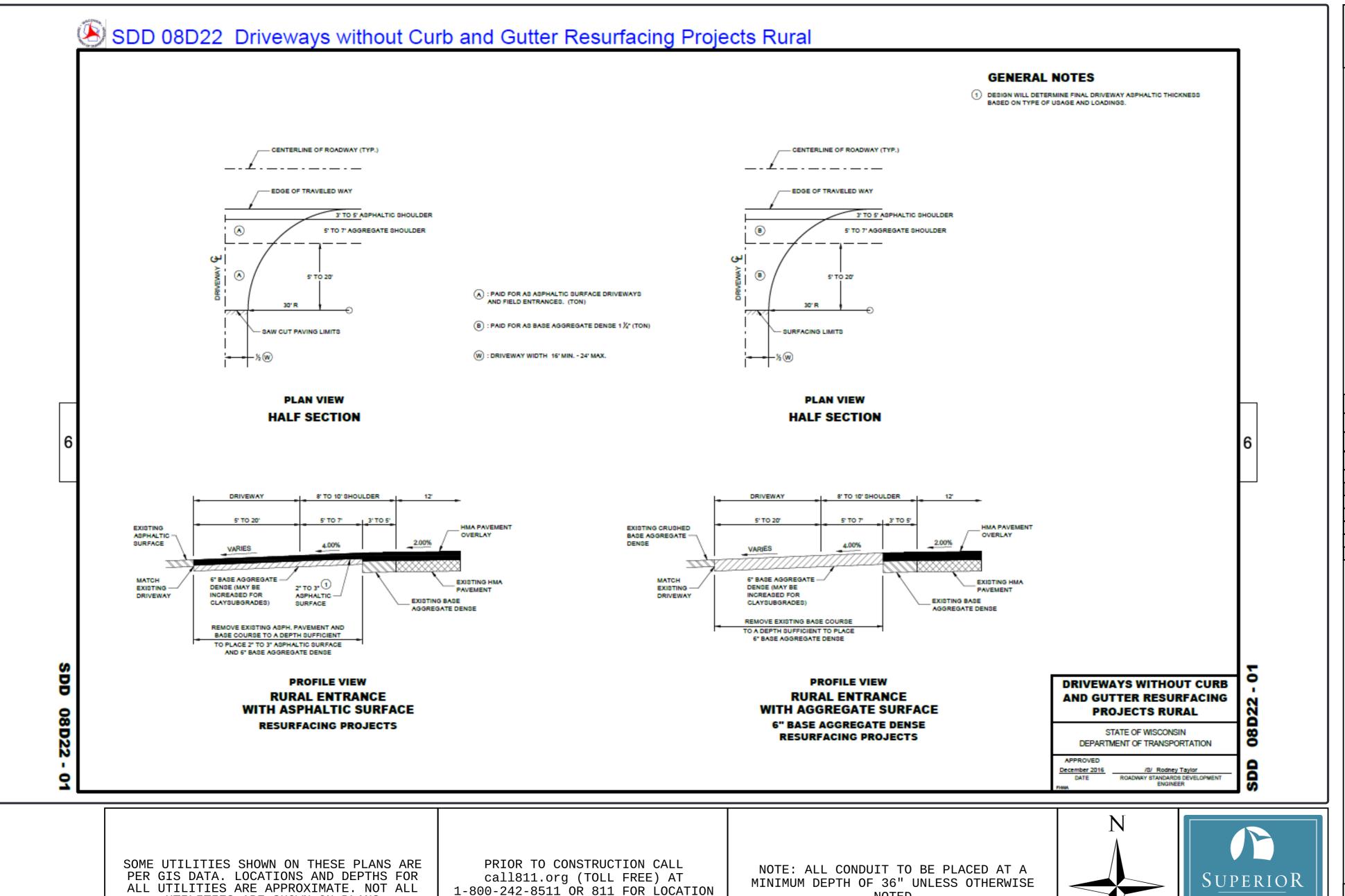
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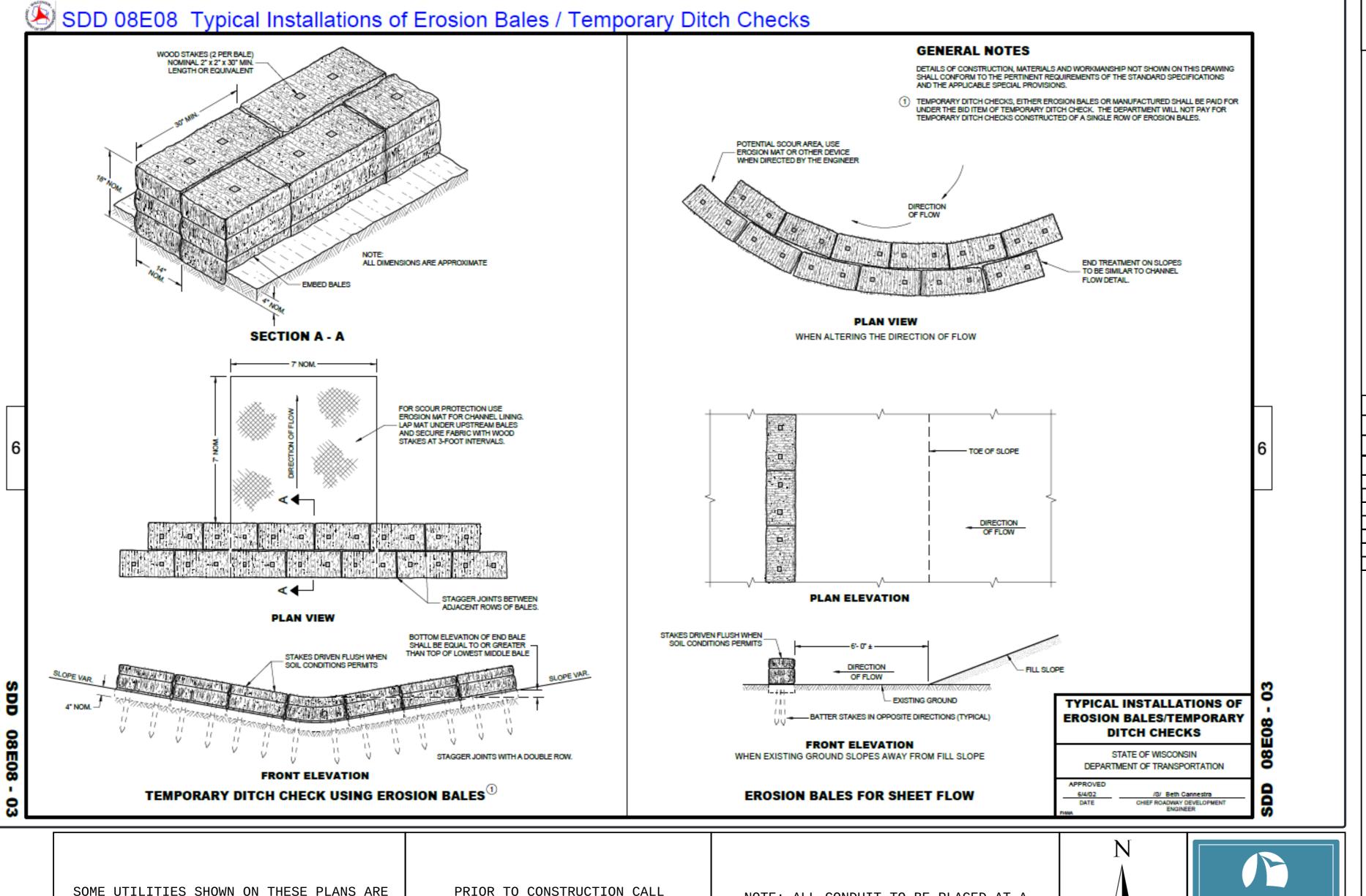
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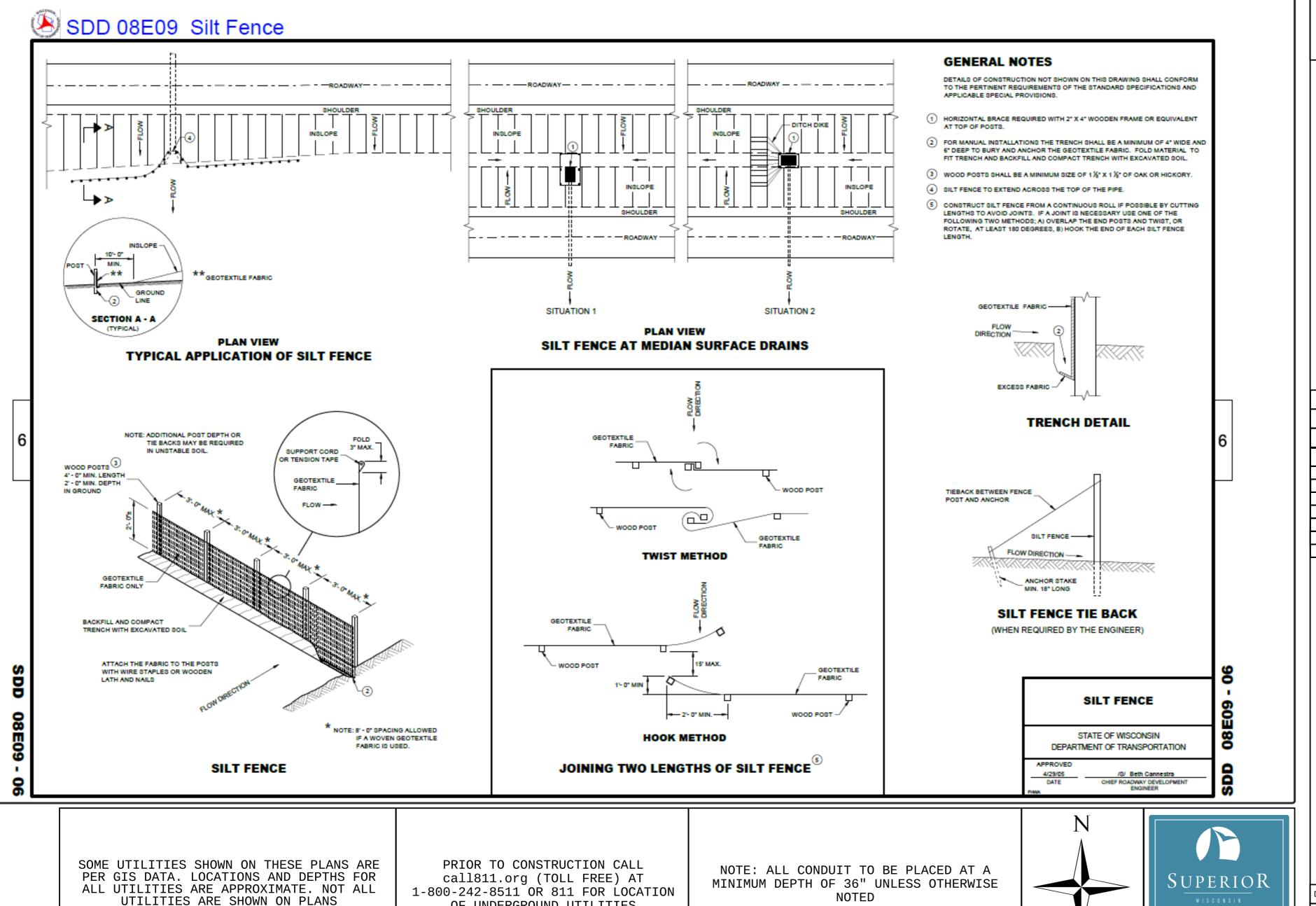


5/21/2024 50 OF 69 SHEET: City of Superior, WI Construction Standards_v4_05202024.pdf FILE:

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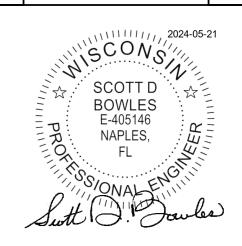
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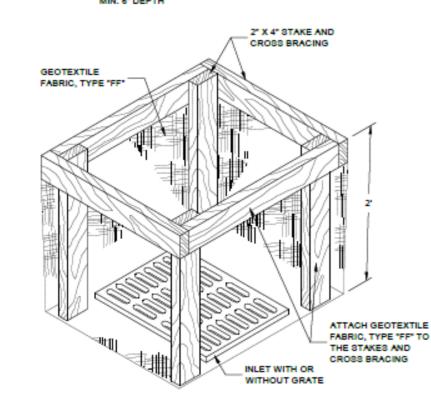
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FILE:	City of Superior, WI Construction Standards v4 05202024.pdf

SDD 08E10 Inlet Protection, Types A, B, C and D 2" X 4" STAKE AND CROSS BRACING GEOTEXTILE FABRIC, TYPE "FF" GEOTEXTILE DIRECTION OF RUNOFF WATER FLOW --



BURIED FABRIC

INLET PROTECTION, TYPE "A"

GENERAL NOTES

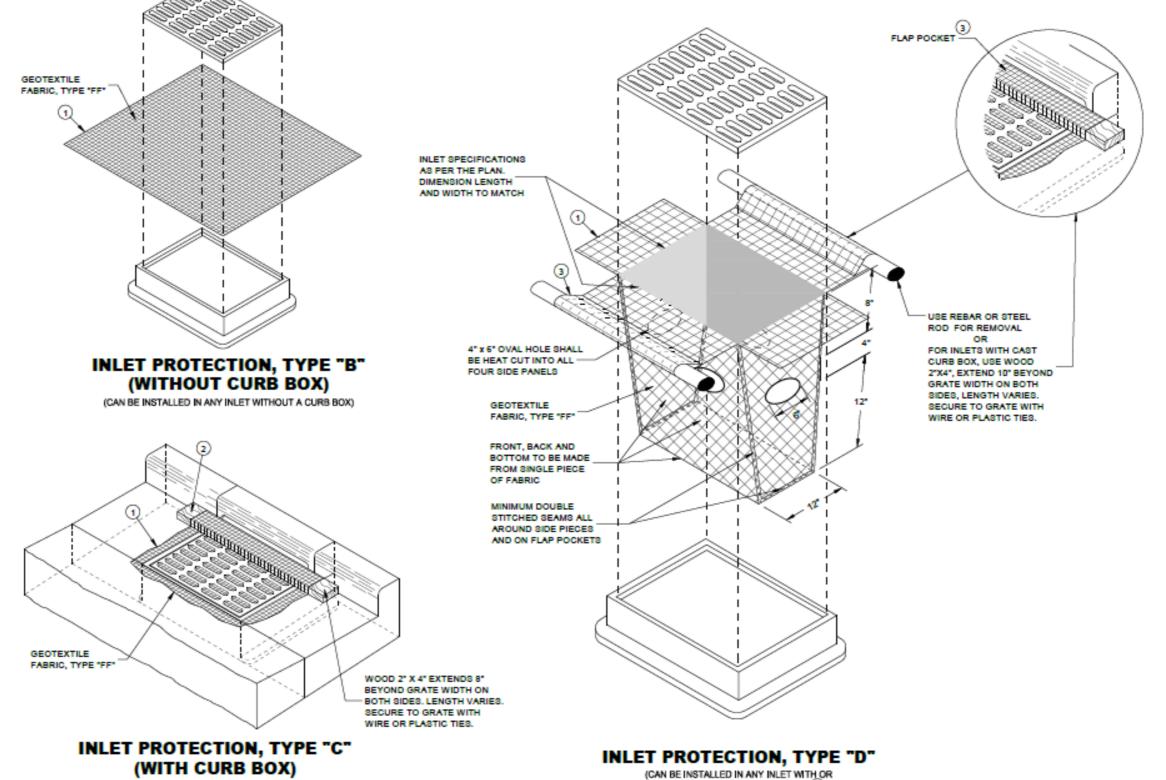
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INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

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

- 1) FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10° AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL
- FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- (3) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



INSTALLATION NOTES

TYPES 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

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

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.

INLET PROTECTION TYPES A, B, C AND D

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

ROADWAY STANDARDS DEVELOPMENT

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WITHOUTA CURB BOX AS PER NOTE (2))





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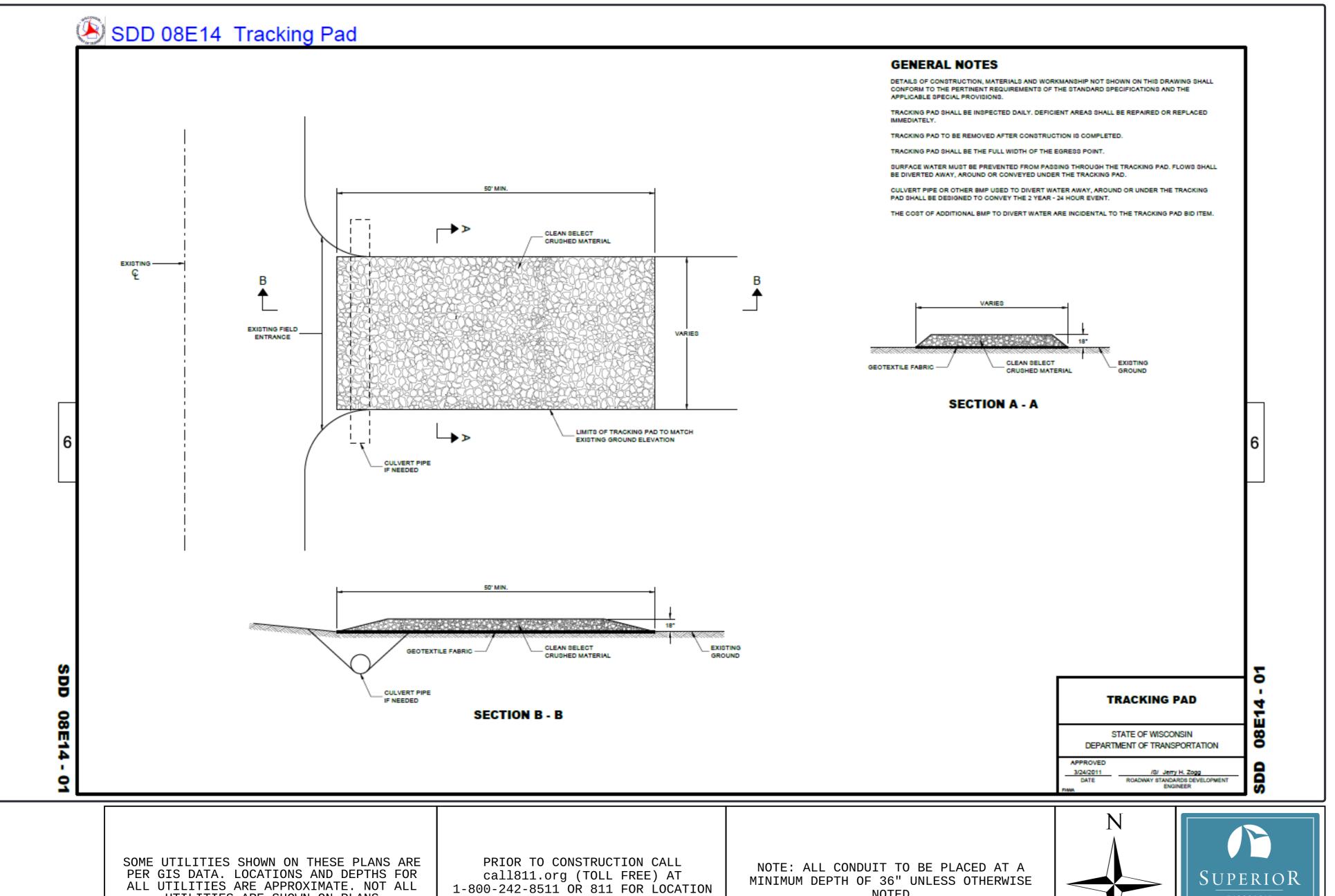
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5/21/2024 52 OF 69 SHEET: City of Superior, WI Construction Standards_v4_05202024.pdf FILE:



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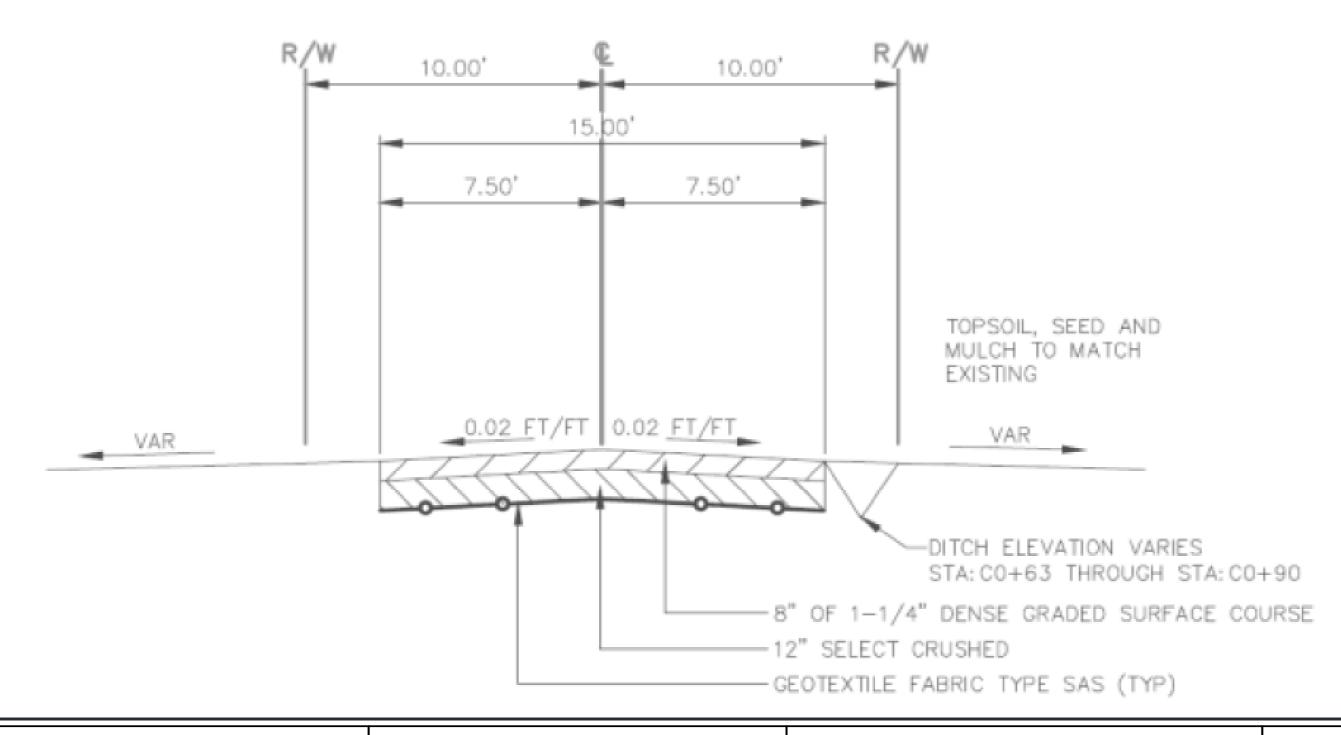
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5/21/2024 53 OF 69 SHEET: City of Superior, WI Construction Standards_v4_05202024.pdf FILE:

City of Superior Alley Typical Section

The drawing shown is a gravel alley, for any blacktop alley, add 4 inches of blacktop to the surface. For any concrete alley, match existing concrete depths or more than 7 inches. If there is concrete and asphalt, then match the existing profile of each surface type.



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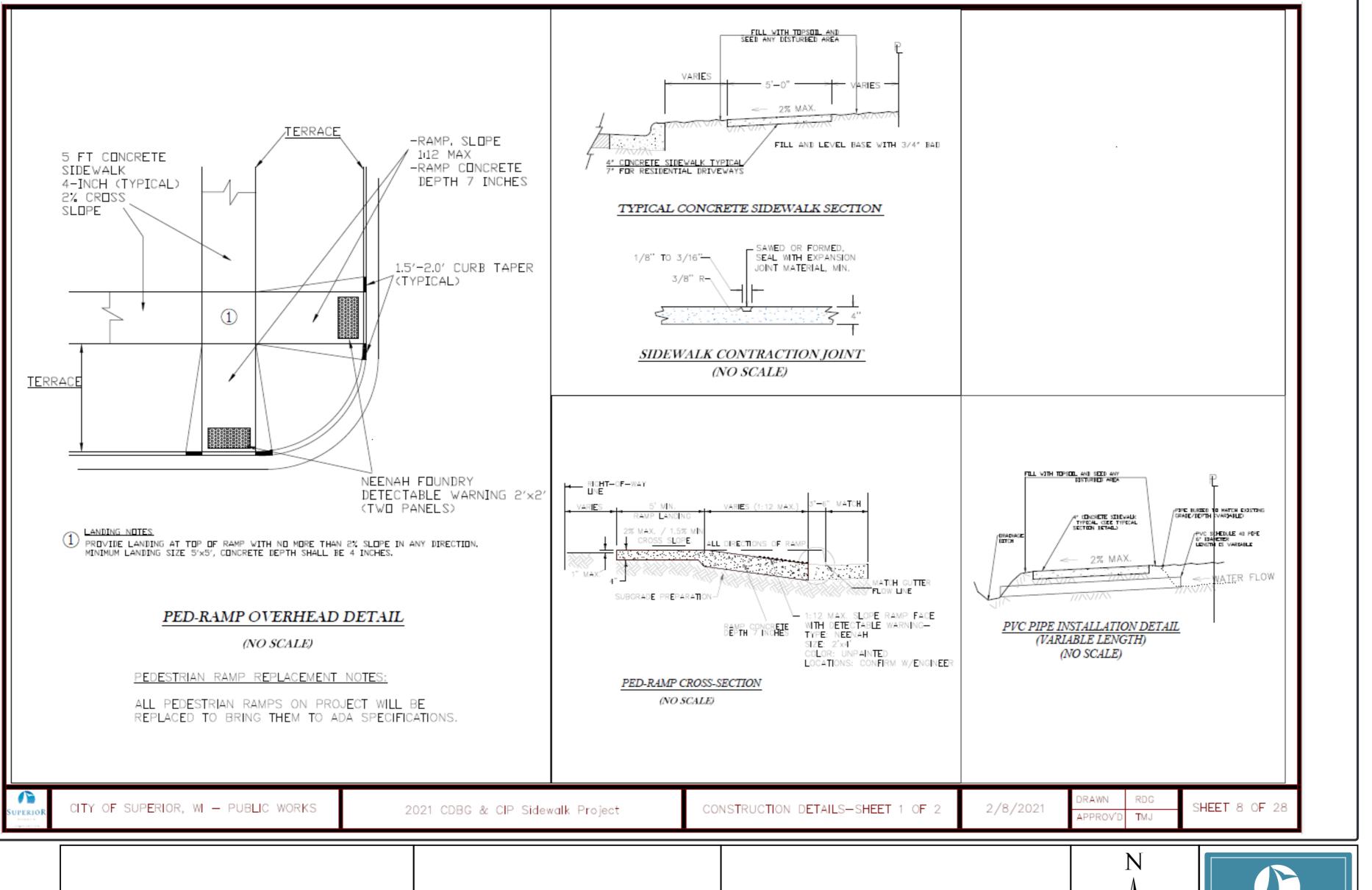
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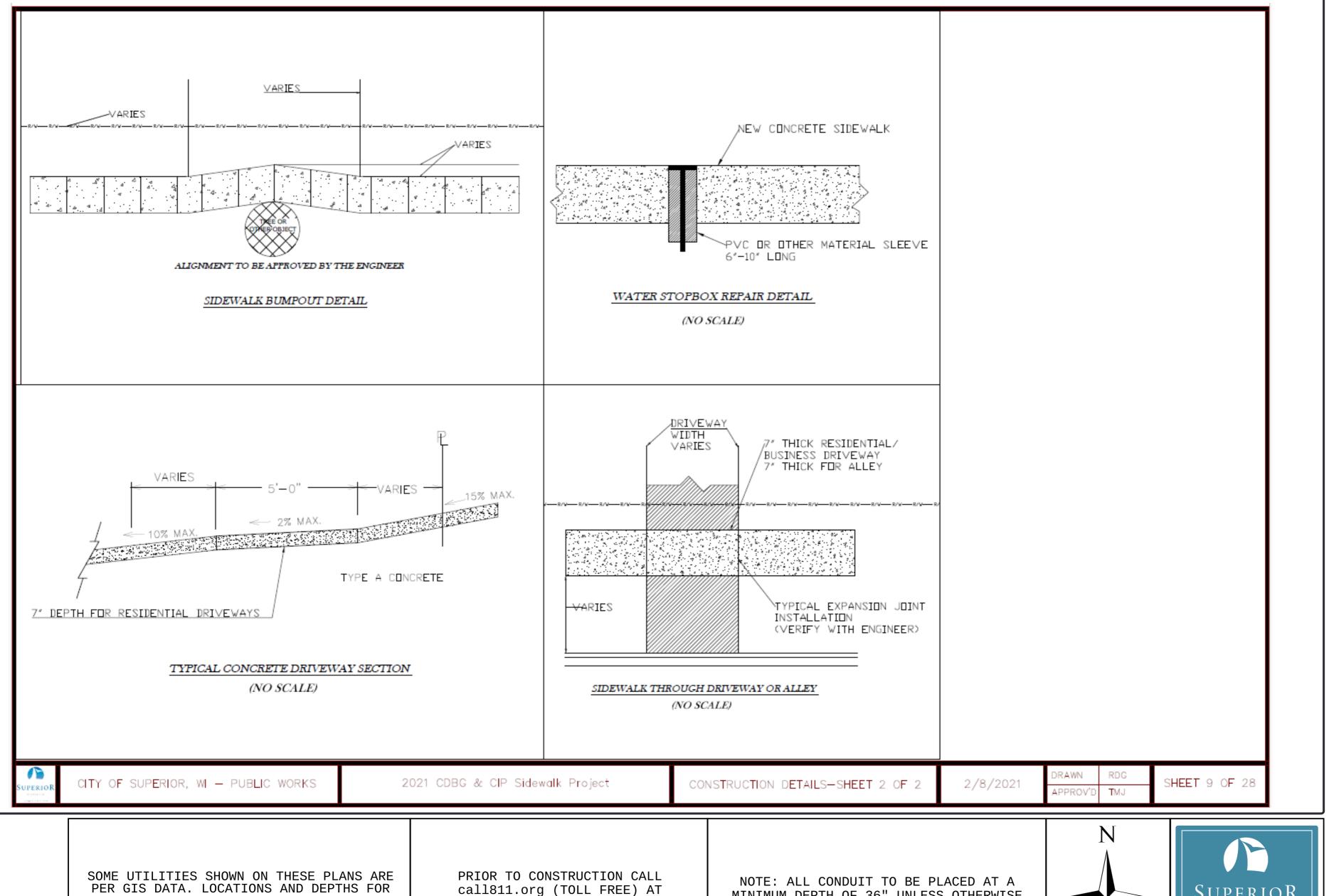
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5/21/2024 56 OF 69 SHEET: City of Superior, WI Construction Standards_v4_05202024.pdf FILE:

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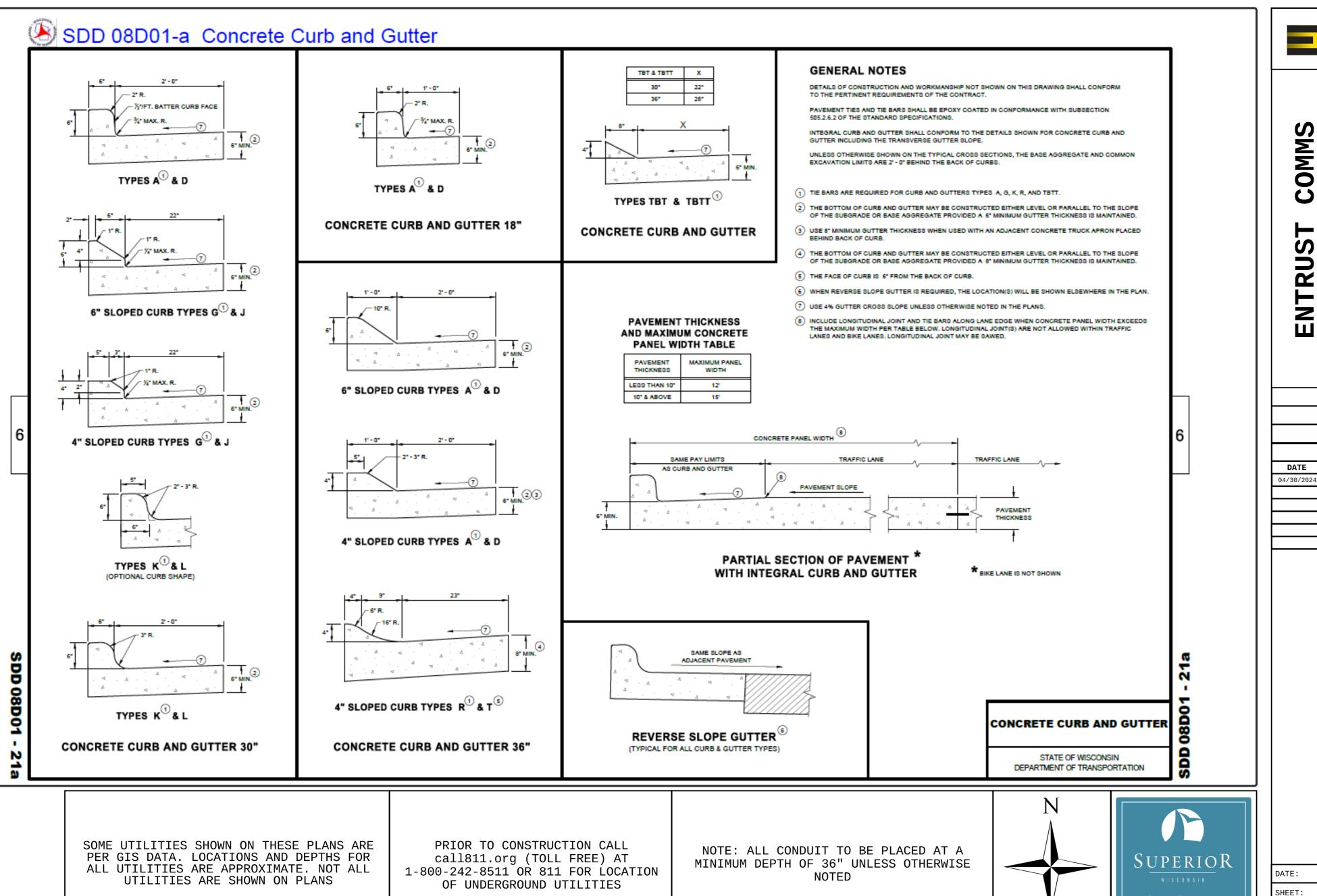
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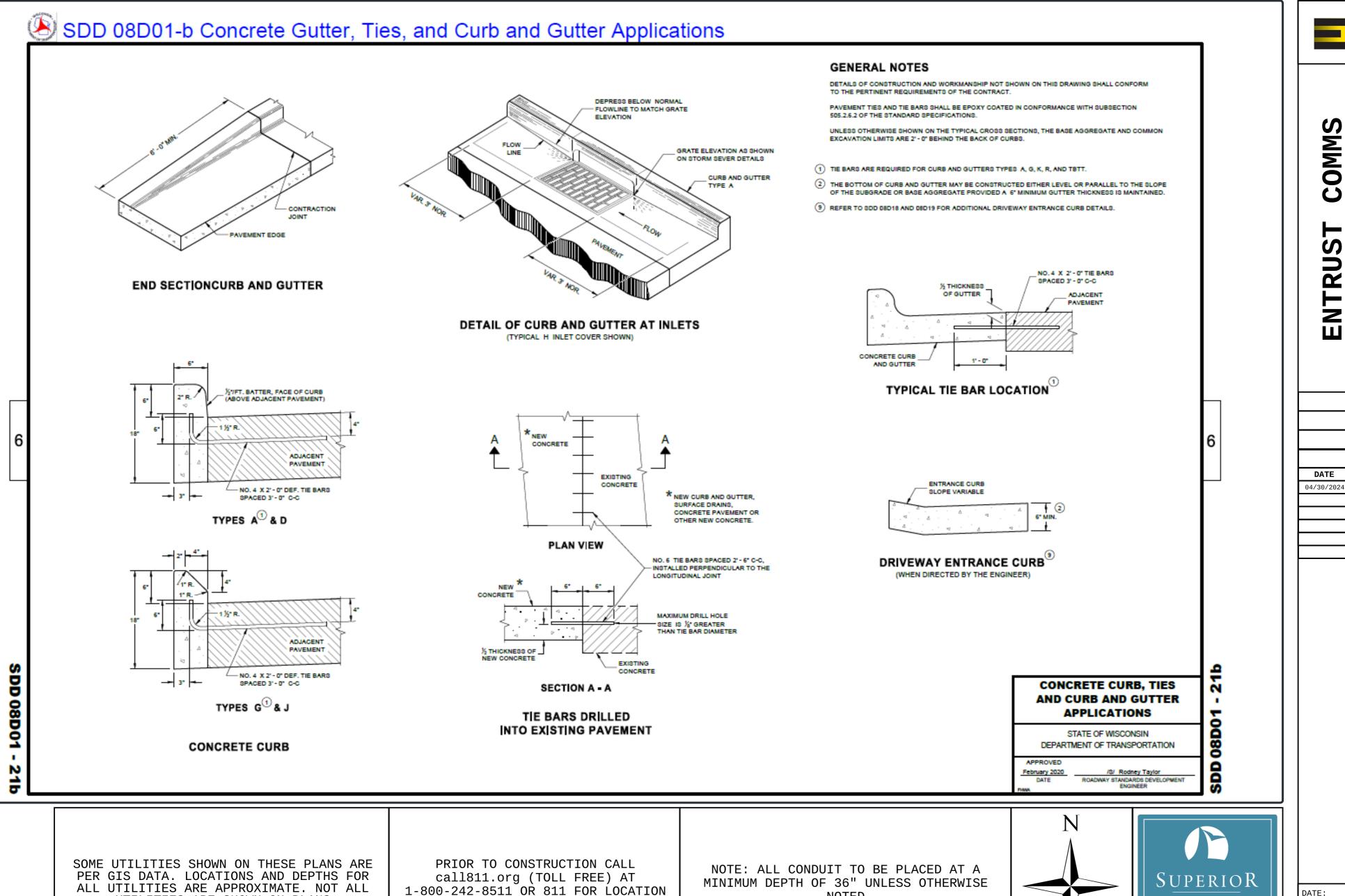
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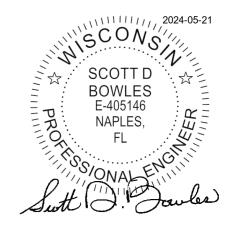
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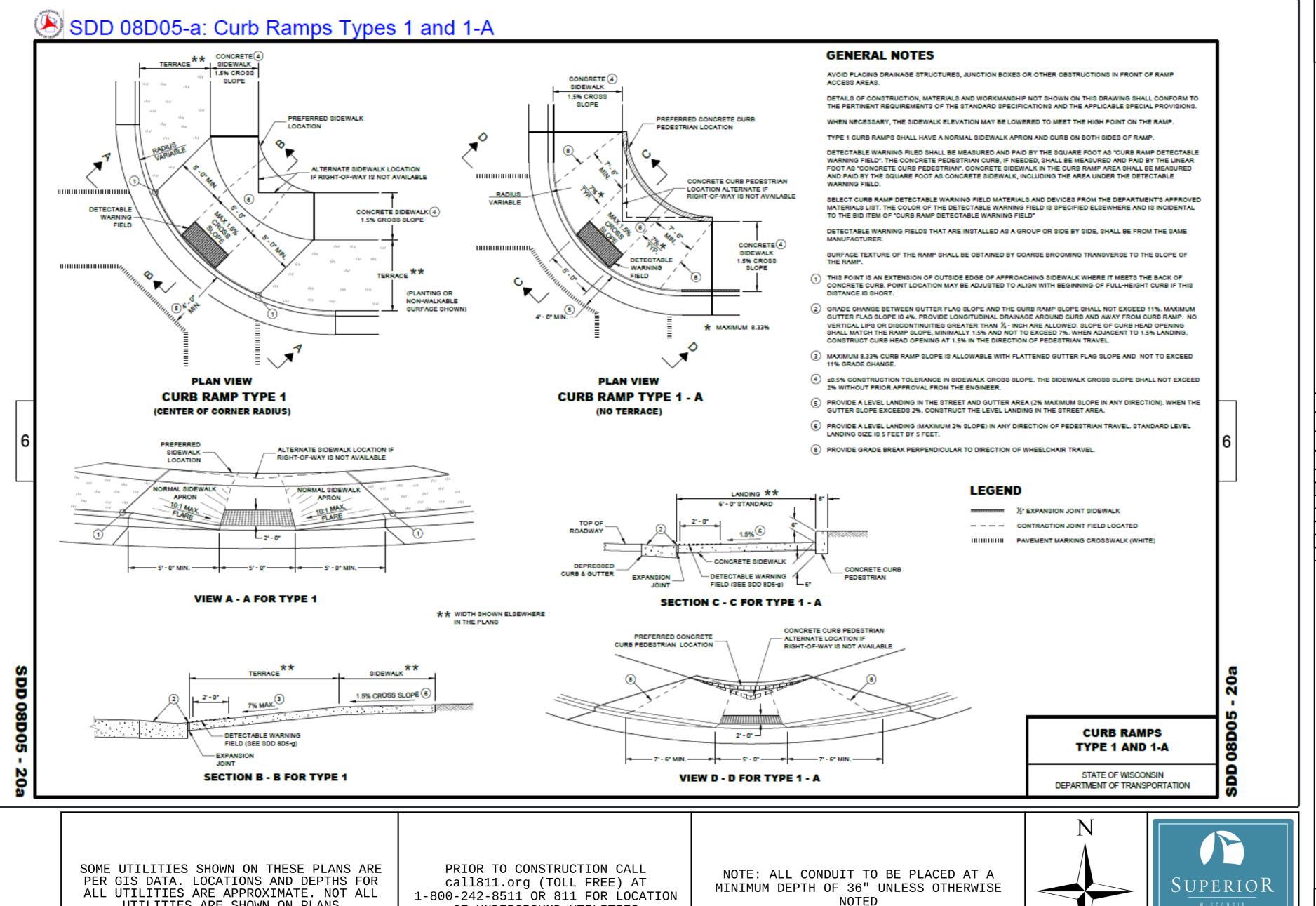
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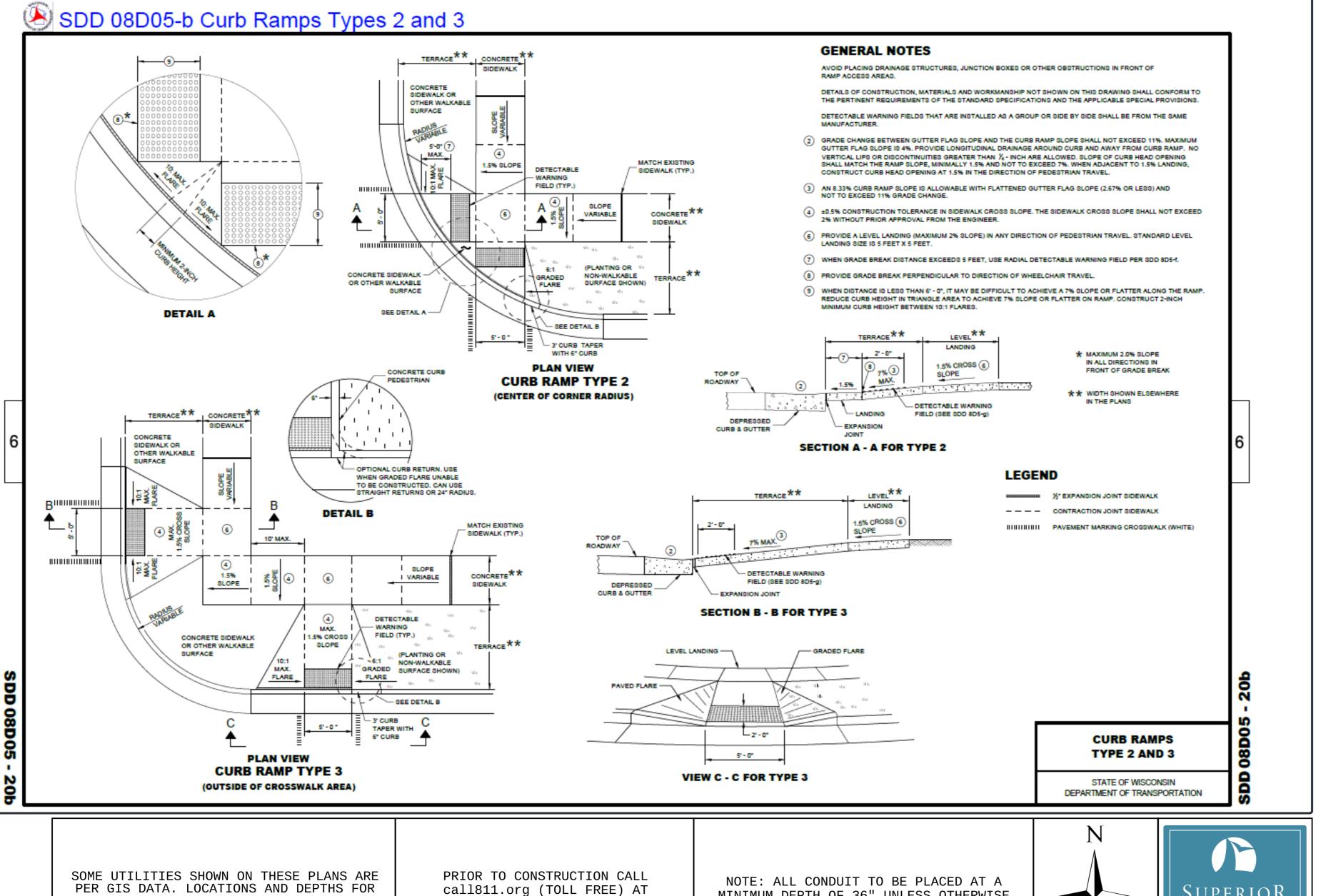
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5/21/2024 59 OF 69 SHEET: City of Superior, WI Construction Standards_v4_05202024.pdf FILE:



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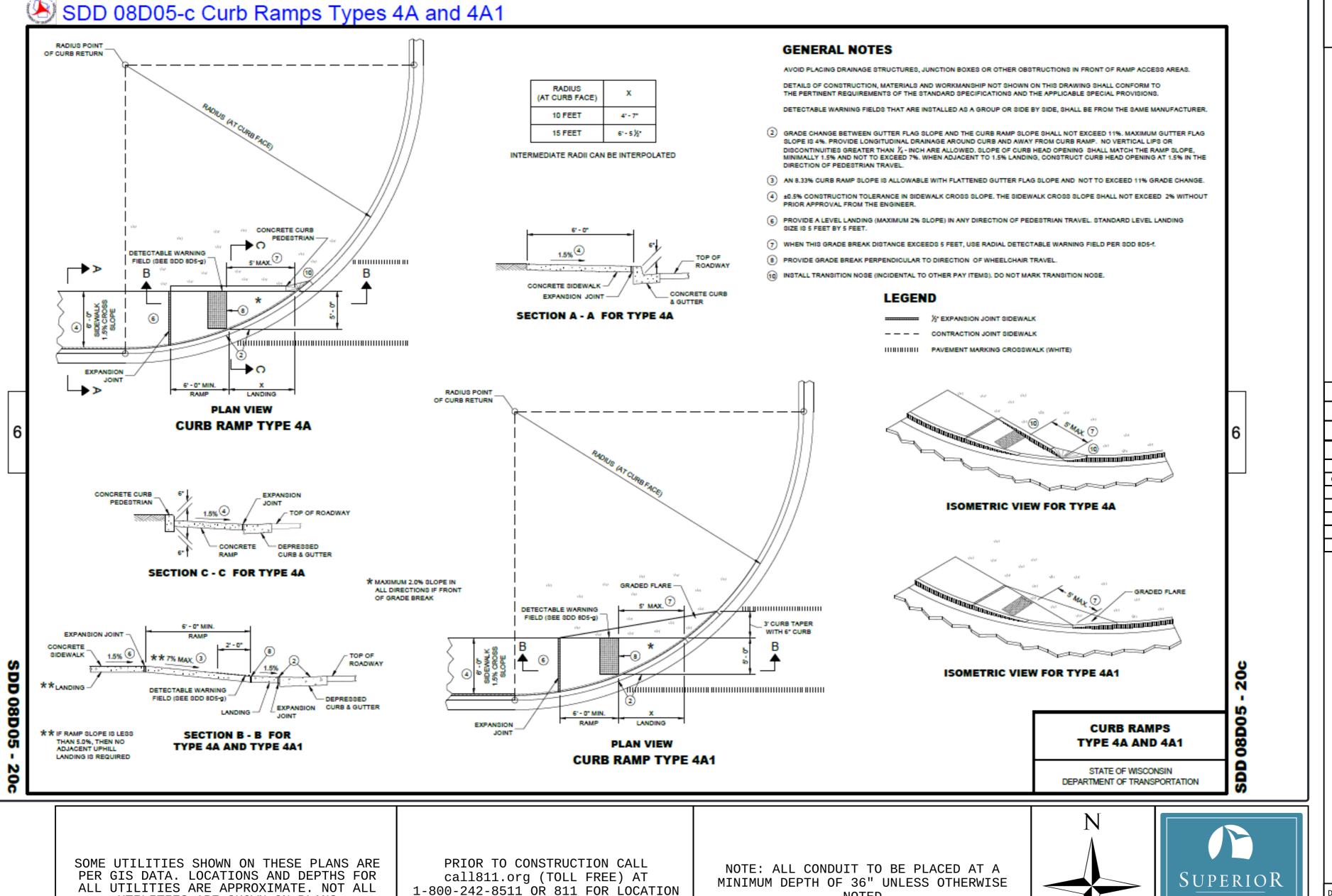
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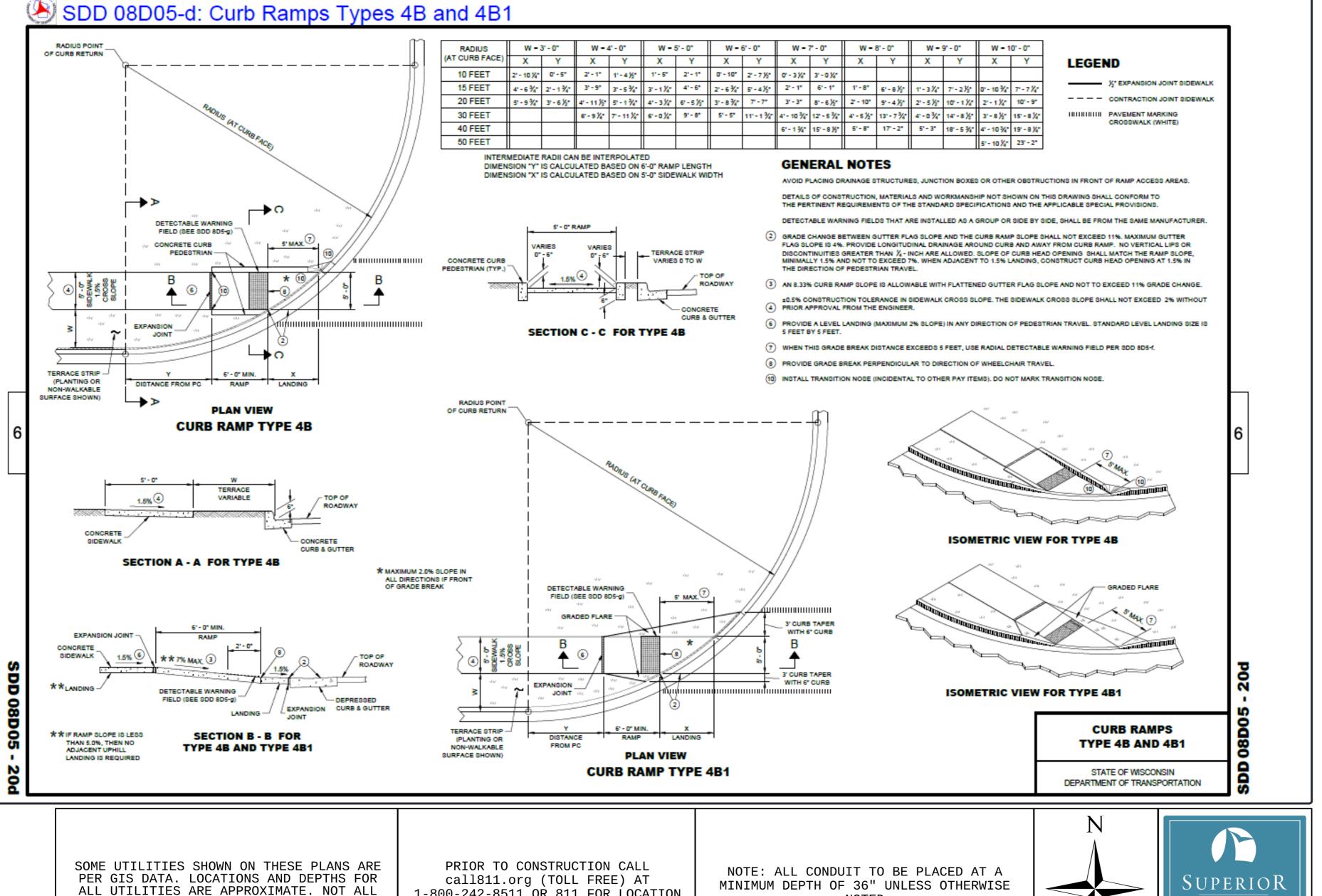
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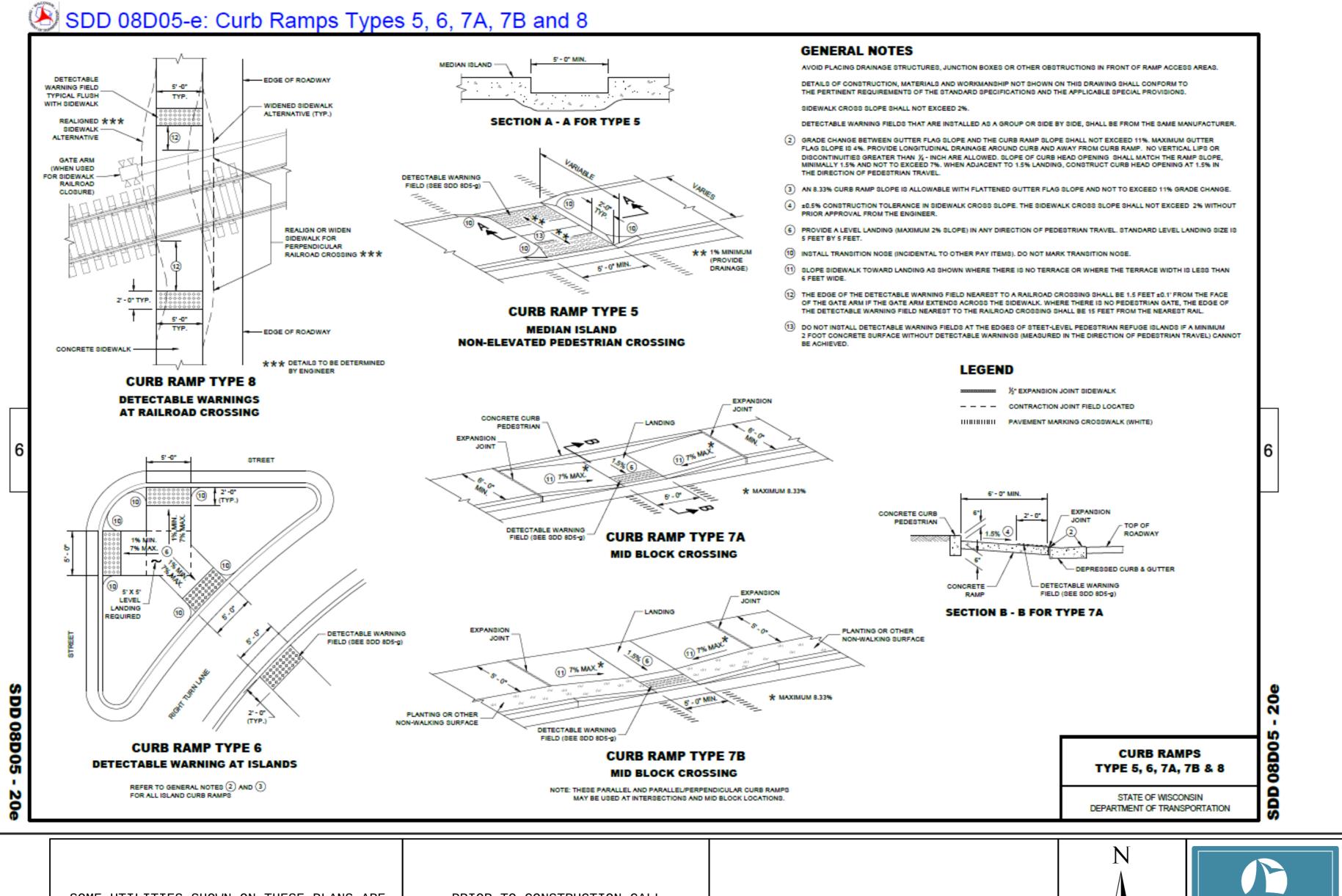
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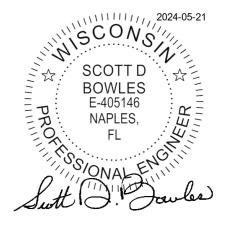
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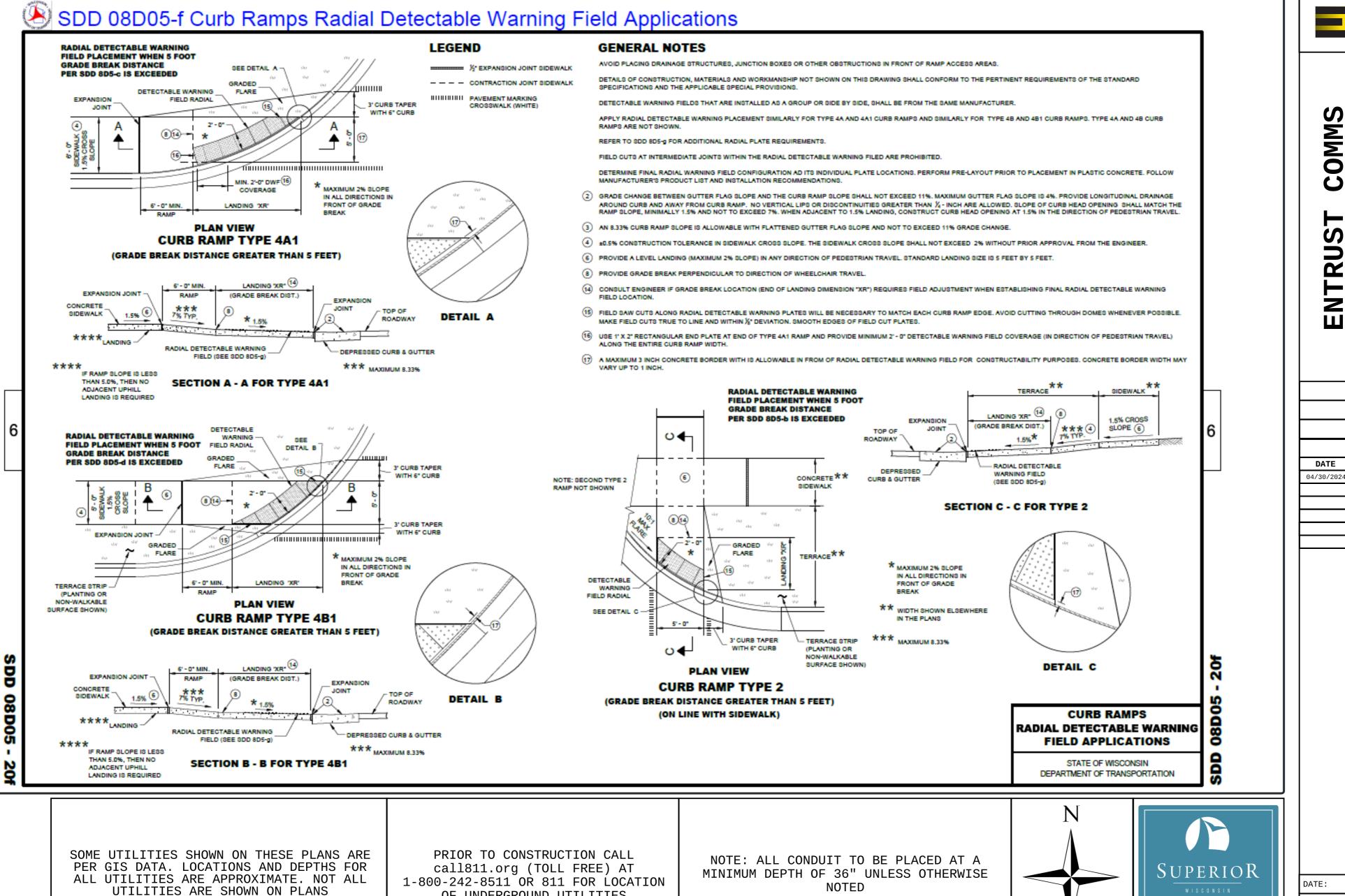
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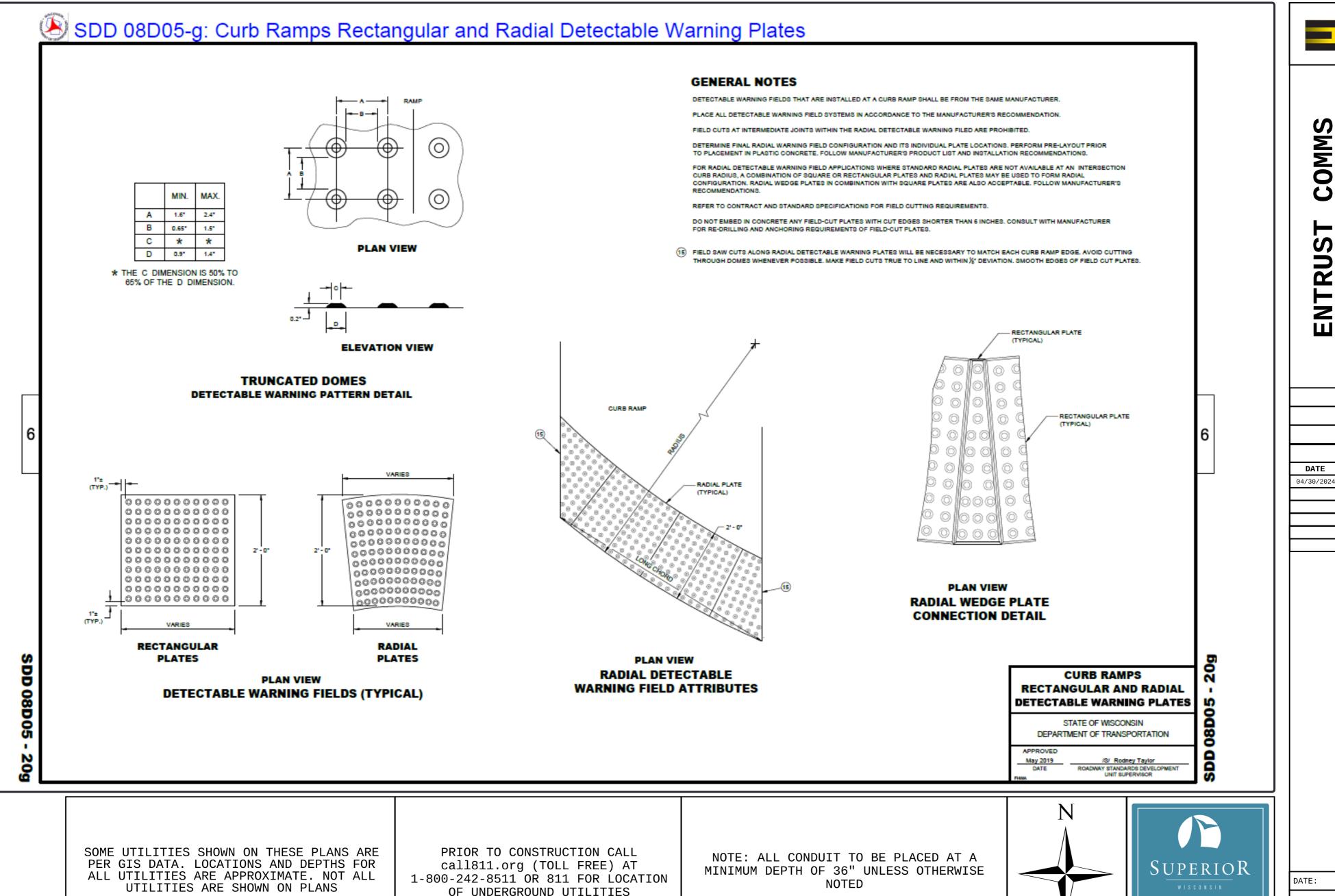
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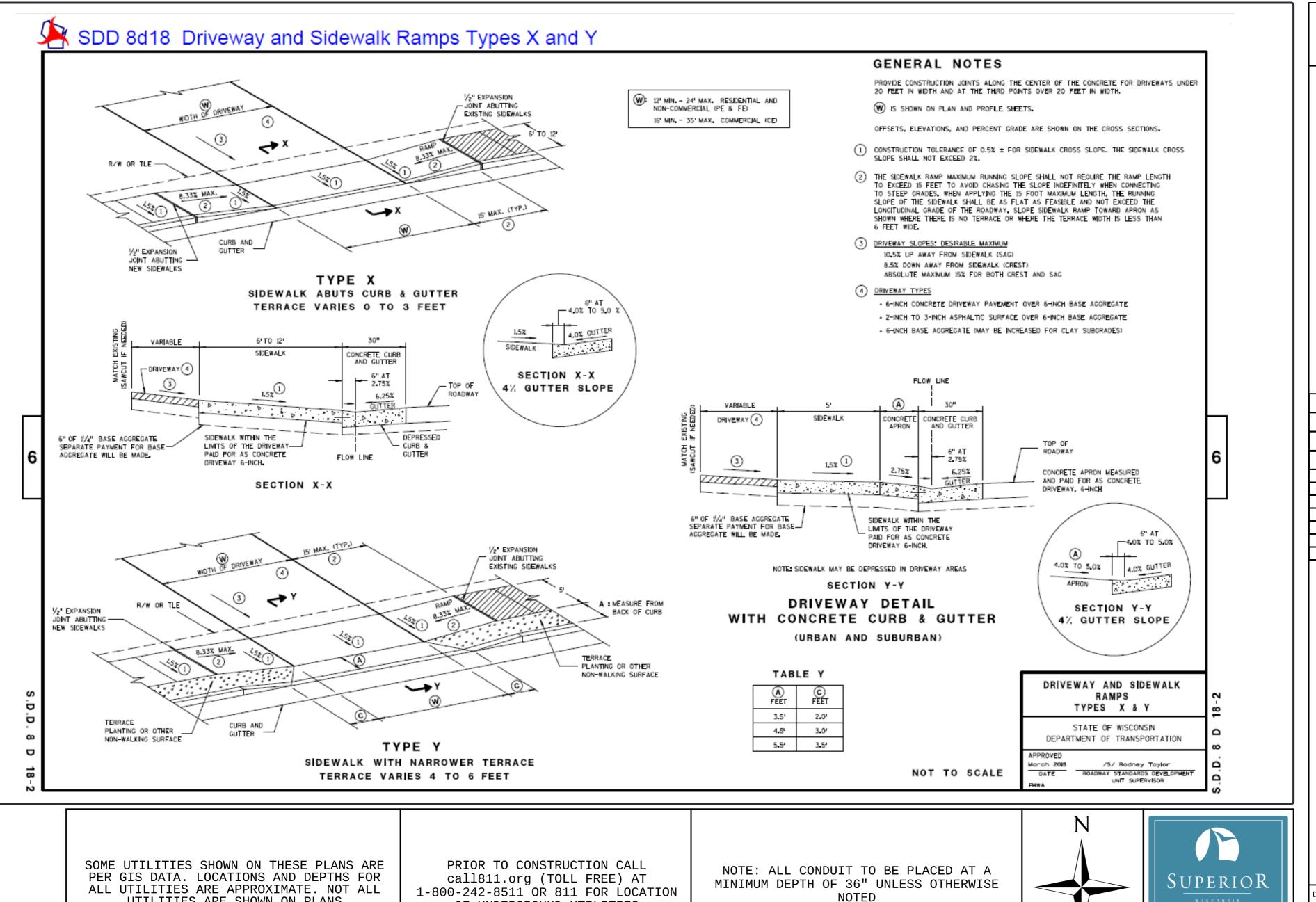
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SDD 8d20 Driveways with Curb & Gutter Returns I DRIVEWAY WOTH W R 1=40' MAX. R1=40' MAX. R₂-20' MAX. R2-20' MAX. MIN. R/# LNE -CURB LINE CURB LINE EXTENDED FRONT FACE FRONT FACE PAVEMENT) PAVEMENT EDGE 110° MAX. 70° MINIMUM OF CURB OF CURB HIGHWAY & HIGHWAY € SKEWED DRIVEWAY DETAILS (COMMERCIAL AND NON-COMMERCIAL) SIDEWALK NOT SHOWN FELD WARNING CURB RAMP ◉ AND WARNING -DRIVEWAY DRIVEWAY ⊞IDTH CONCRETE SIDEWALK (OPTIONAL) CONCRETE SIDEWALK (OPTIONAL) WARNING 04/30/2024 FIELD REQUIRED CORNER CLEARANCE 75' TO 125' — SEE FDM 11-25-2 PAVEMENT EDGE DRIVEWAY LOCATION AND SPACING DETAILS SIDEWALK SHOWN NOTES A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS W DRIVEWAY WIDTHS: DRIVEWAYS WITH SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS. CURB & GUTTER RETURNS COMMERCIAL - 35' MAX., 16' MIN. THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°. RESIDENTIAL AND - 24 MAX., 12 MIN. NON-COMMERCIAL STATE OF WISCONSIN ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W. DEPARTMENT OF TRANSPORTATION NO DRIVEWAY SHALL BE BULT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS. ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR PRIOR TO CONSTRUCTION CALL SOME UTILITIES SHOWN ON THESE PLANS ARE

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call811.org (TOLL FREE) AT 1-800-242-8511 OR 811 FOR LOCATION OF UNDERGROUND UTILITIES

PER GIS DATA. LOCATIONS AND DEPTHS FOR

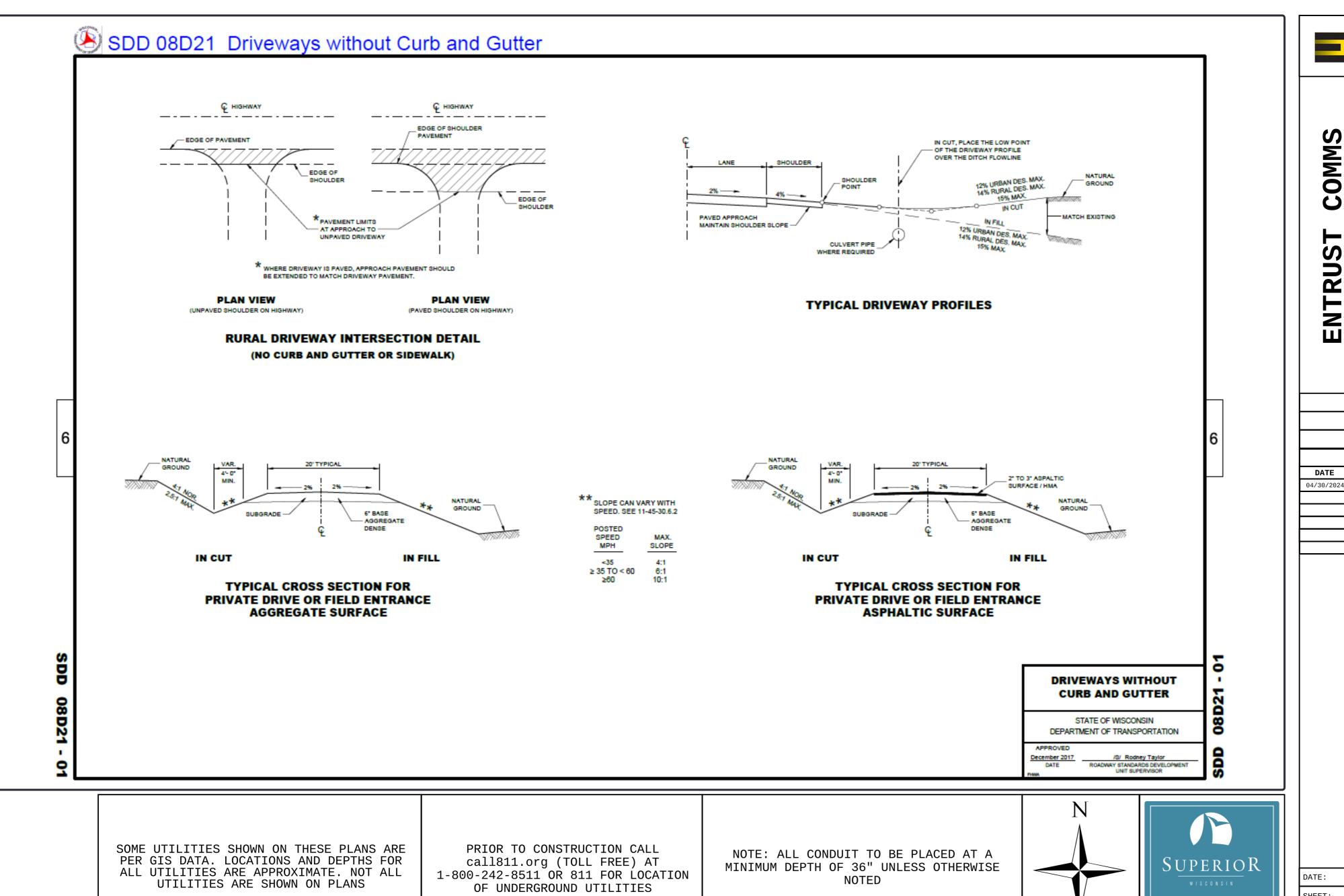
ALL UTILITIES ARE APPROXIMATE. NOT ALL

UTILITIES ARE SHOWN ON PLANS

NOTE: ALL CONDUIT TO BE PLACED AT A MINIMUM DEPTH OF 36" UNLESS OTHERWISE NOTED





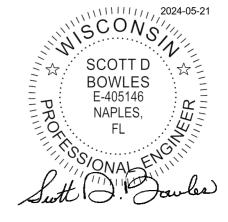


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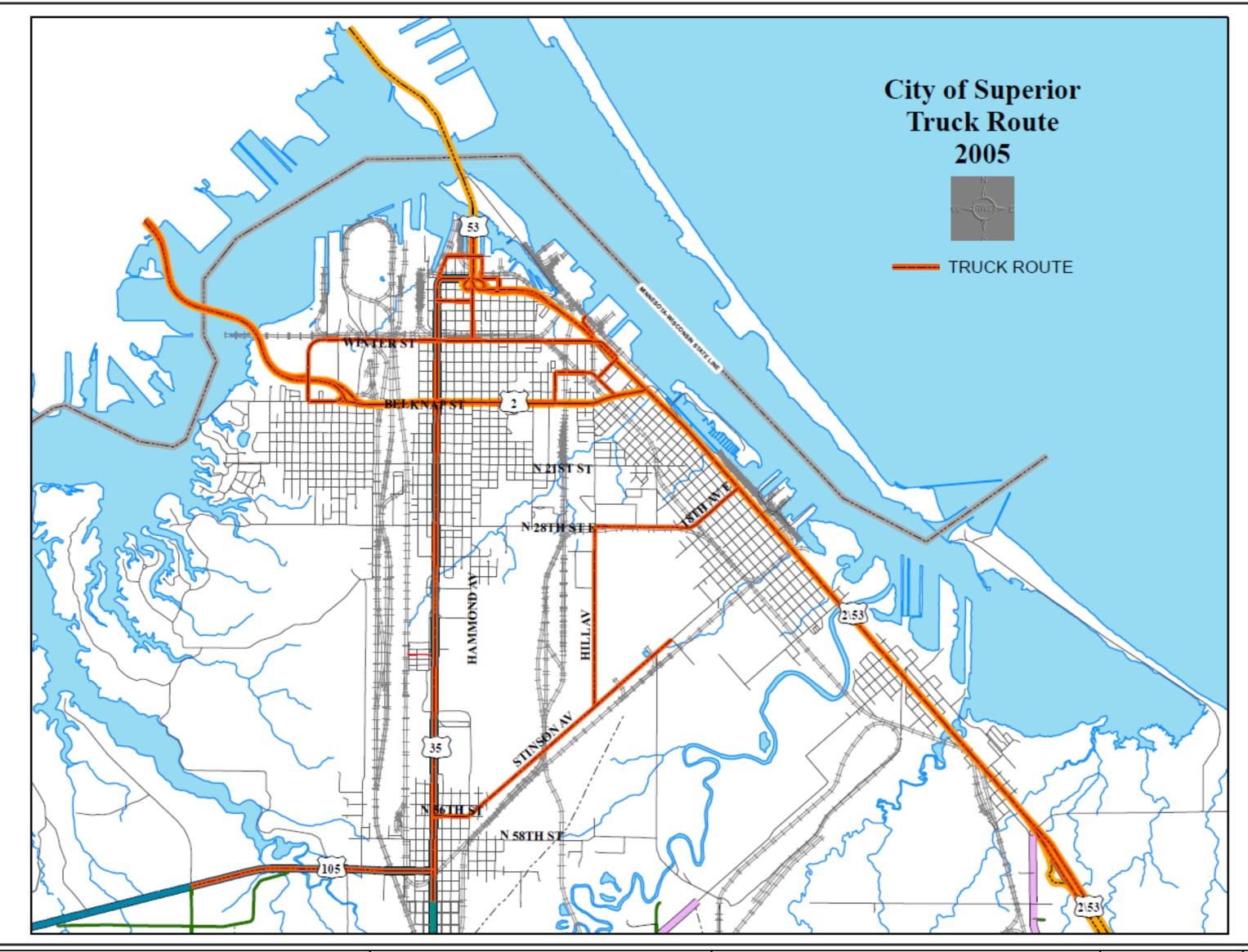
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REVISIONS		
CHECKED BY:	JW	
DRAWN BY:	JW	
ENGINEER:	SM	

DESCRIPTION BY 04/30/2024 VERSION 1



DATE:	5/21/2024	
SHEET:	68 OF 69	
FILE:	City of Superior, WI Construction Standards v4 05202024.pdf	



SOME UTILITIES SHOWN ON THESE PLANS ARE PER GIS DATA. LOCATIONS AND DEPTHS FOR ALL UTILITIES ARE APPROXIMATE. NOT ALL UTILITIES ARE SHOWN ON PLANS

PRIOR TO CONSTRUCTION CALL call811.org (TOLL FREE) AT 1-800-242-8511 OR 811 FOR LOCATION OF UNDERGROUND UTILITIES

NOTE: ALL CONDUIT TO BE PLACED AT A MINIMUM DEPTH OF 36" UNLESS OTHERWISE NOTED







ENTRUST

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