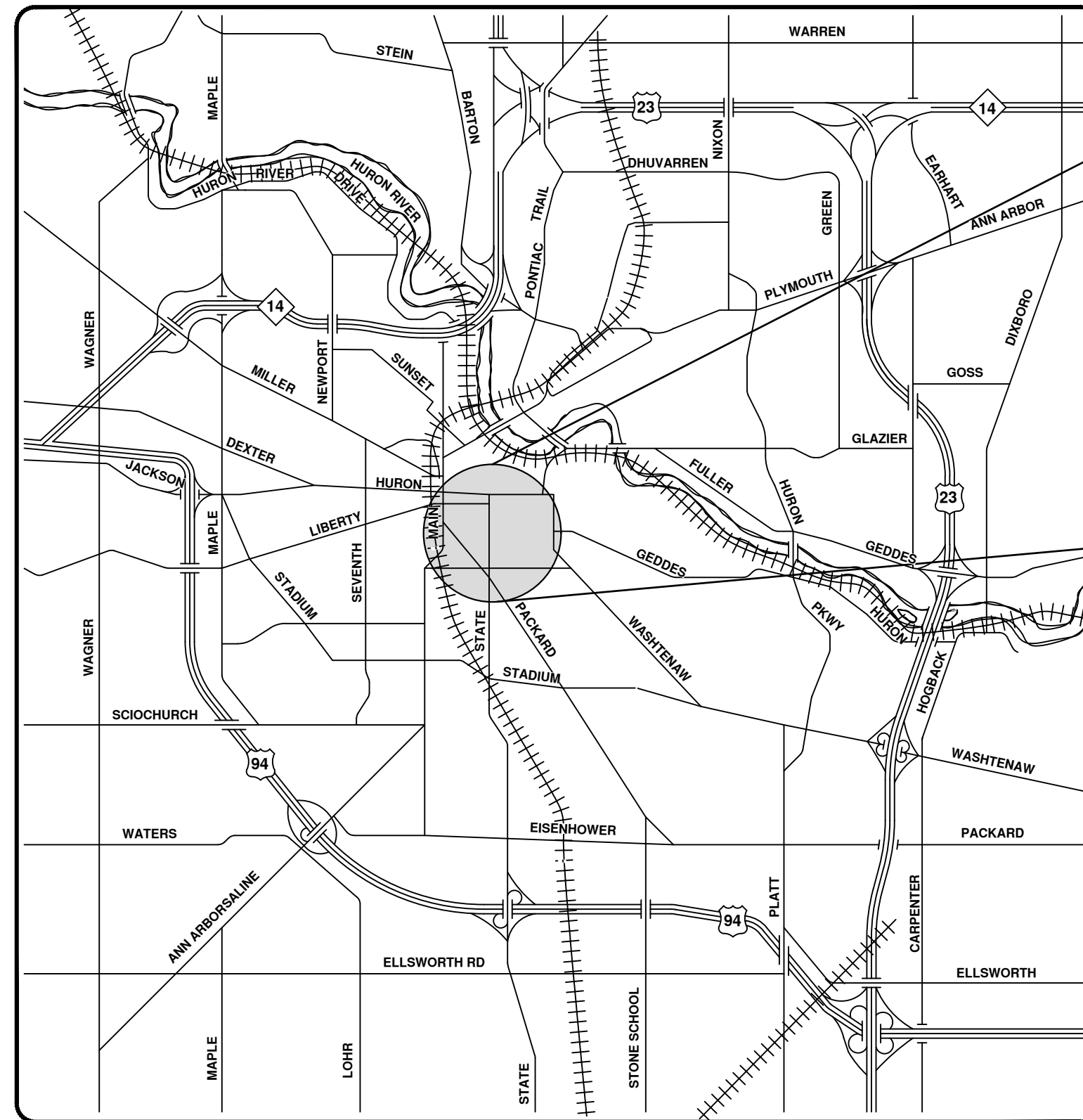
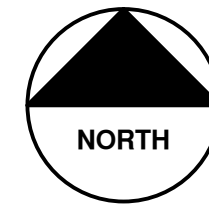




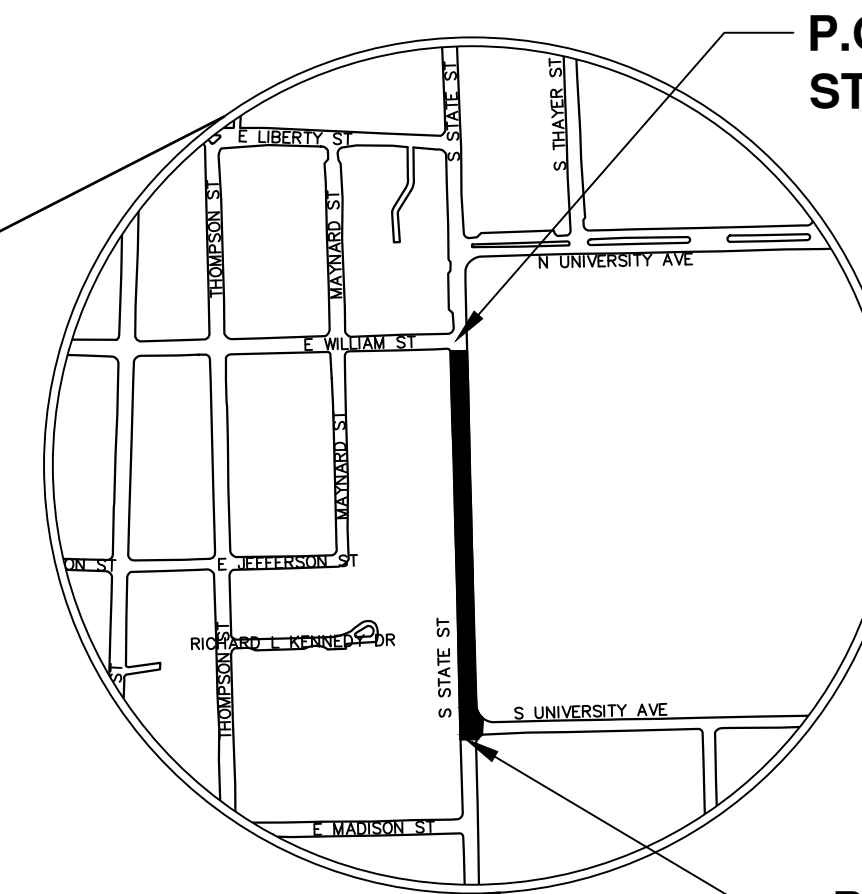
CITY OF ANN ARBOR ENGINEERING

STATE STREET IMPROVEMENTS

BID No. RFP# 25-12, FILE No. 2023-023



VICINITY MAP



P.O.E.
STA 111+70

P.O.B.
STA 100+51

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 2024 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS, IT'S DETAILS, WHICH ARE INCLUDED BY REFERENCE, AND THIS PROJECT'S CONTRACT DOCUMENTS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.



REV.	DATE	DESCRIPTION	CHECKED	DRAWN

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-6647
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
COVER SHEET
SCALE
DRAWING No.
2023-023-1

PREPARED UNDER THE SUPERVISION OF

Christopher Wall
1 / 31 / 2025
DATE

CHRISTOPHER WALL, P.E. - MI LICENSE No. 45668
PROJECT MANAGER

c:\pw_work\wade-trim_fbrown\d1339881\GCS-PLTS-Cover.dwg - _g2 standard bw.stb - Plot Date: 2/3/2025 11:53:58 AM

© STATE STREET IMPROVEMENTS; BID No. RFP# 25-12; 2023-023

Sheet List Table	
Sheet Number	Sheet Title
1	COVER
2	INDEX
3	NOTES
4	LEGEND
5	DETAILS
6	DETAILS
7	DETAILS
8	DETAILS
9	DETAILS
10	DETAILS
11	DETAILS
12	DETAILS
13	DETAILS
14	DETAILS
15	DETAILS
16	DETAILS
17	DETAILS
18	DETAILS
19	OVERALL PLAN WITH EXISTING UTILITIES
20	TYPICAL SECTIONS - STATE ST
21	TYPICAL SECTIONS - STATE ST
22	TYPICAL SECTIONS - STATE ST
23	TYPICAL SECTIONS - STATE ST
24	TYPICAL SECTIONS - STATE ST
25	EXISTING CONDITIONS - STATE STREET
26	EXISTING CONDITIONS - STATE STREET
27	REMOVAL & SESC - STATE STREET
28	REMOVAL & SESC - STATE STREET
29	PROPOSED WATER MAIN PLAN & PROFILE - STATE ST
30	PROPOSED WATER MAIN PLAN & PROFILE - STATE ST
31	PROPOSED WATER MAIN PLAN & PROFILE - STATE ST
32	PROPOSED WATER MAIN PLAN & PROFILE - STATE ST LATERALS
33	PROPOSED WATER MAIN PLAN & PROFILE - STATE ST LATERALS
34	PROPOSED WATER MAIN PLAN & PROFILE - STATE ST LATERALS
35	PROPOSED WATER MAIN PLAN & PROFILE - STATE ST LATERALS
36	PROPOSED ANGELL HALL WATER SERVICE PLUMBING PLANS
37	PROPOSED ANGELL HALL WATER SERVICE PLUMBING PLANS
38	PROPOSED ANGELL HALL WATER SERVICE PLUMBING PLANS
39	PROPOSED ANGELL HALL WATER SERVICE PLUMBING PLANS
40	PROPOSED ANGELL HALL WATER SERVICE PLUMBING PLANS
41	PROPOSED STORM PLAN & PROFILE - STATE ST
42	PROPOSED STORM PLAN & PROFILE - STATE ST
43	PROPOSED STORM PLAN & PROFILE - STATE ST
44	PROPOSED STORM PLAN & PROFILE - STATE ST

45	PROPOSED ROAD CONSTRUCTION PLAN
46	PROPOSED ROAD CONSTRUCTION PLAN
47	PROPOSED ROAD CONSTRUCTION PLAN
48	PAVING PLAN & PROFILE - STATE ST
49	PAVING PLAN & PROFILE - STATE ST
50	PAVING PLAN & PROFILE - STATE ST
51	DETAILED GRADING
52	DETAILED GRADING
53	DETAILED GRADING
54	PROPOSED PAVEMENT MARKING - STATE ST
55	PROPOSED PAVEMENT MARKING - STATE ST
56	PROPOSED PAVEMENT MARKING - STATE ST
57	TRAFFIC SIGNAL - LEGEND & NOTES
58	TRAFFIC SIGNAL - REMOVAL SHEET STATE @ WILLIAM ST
59	TRAFFIC SIGNAL - CONSTRUCTION SHEET STATE @ WILLIAM ST
60	TRAFFIC SIGNAL - CONSTRUCTION SHEET STATE @ WILLIAM ST DETAILS
61	LIGHTING PLAN
62	LIGHTING PLAN
63	LIGHTING PLAN
64	LIGHTING DETAILS
65	LIGHTING DETAILS
66	MOT PLAN - STAGE 1
67	MOT PLAN - STAGE 1A
68	MOT PLAN - STAGE 1B
69	MOT PLAN - PEDESTRIAN DETOUR
70	MOT PLAN - BICYCLE DETOUR
71	MOT SIGN SPECIAL DETAILS
72	MOT AA PEDESTRIAN DETOUR DETAILS
73	MOT AA PEDESTRIAN DETOUR DETAILS
74	MOT AA PEDESTRIAN DETOUR DETAILS
75	MOT AA PEDESTRIAN DETOUR DETAILS



CONSTRUCTION NOTES:

- VEHICLE AND PEDESTRIAN TRAFFIC WILL BE MAINTAINED AT ALL TIMES TO ALL PROPERTIES. MAINTAIN DRIVEWAY OPENINGS, SIDEWALKS, BIKE PATHS, MAIL DELIVERIES, AND SOLID WASTE/RECYCLE PICK-UPS. THIS INCLUDES THE PLACEMENT AND MAINTENANCE OF MAINTENANCE AGGREGATE IN DRIVEWAY OPENINGS, ACROSS SIDEWALK RAMPS AS NEEDED AND AS DIRECTED BY THE ENGINEER. A MINIMUM OF 12" DRIVEWAY SHALL BE MAINTAINED AT ALL TIMES TO ALL RESIDENCES AND BUSINESS UNLESS OTHERWISE APPROVED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL NECESSARY DRIVEWAY CLOSURE WITH THE PROPERTY OWNER(S) AND RESIDENT(S).
- THE CONTRACTOR SHALL MAINTAIN REASONABLE ACCESS FOR RESIDENTS AND BUSINESSES TO ACCESS THEIR HOMES AND BUSINESSES AT ALL TIMES. A SAFE ACCESS PATH SHALL BE IDENTIFIED ALONG WITH VEHICLE PARKING IN THE EVENT THAT CONSTRUCTION ACTIVITIES INHIBIT VEHICULAR ACCESS TO HOMES AND BUSINESSES.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO LOCATE OR HAVE LOCATED ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. THIS SHALL BE PERFORMED IN ACCORDANCE WITH PUBLIC ACT 174 OF 2013, MISS DIG UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT, MCL 460.721-MCL 460.733 AS AMENDED.
- THE CONTRACTOR SHALL EXPOSE ALL UTILITY CROSSINGS PRIOR TO ANY EXCAVATION ACTIVITY AND AT THE DIRECTION OF THE ENGINEER. PAYMENT FOR THIS WORK WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN PAYMENT FOR OTHER PAY ITEMS.
- DURING NON-WORKING HOURS NO MORE THAN TEN (10) FEET OF TRENCH SHALL REMAIN OPEN. ANY TRENCH SHALL BE PROPERLY SEGREGED WITH PROTECTIVE FENCING. THIS WORK SHALL BE INCLUDED IN THE ITEMS OF WORK BEING UNDERTAKEN AND WILL NOT BE PAID FOR SEPARATELY.
- TRENCHES FOR NEW WATER AND/OR SANITARY SERVICES SHALL BE EXCAVATED TO MIDSHA AND CITY OF ANN ARBOR PUBLIC WORKS REQUIREMENTS. WHERE SEWER AND WATER MAIN ARE TO BE REMOVED & REPLACED OR ADDED, ALL PIPE SHALL BE INSTALLED USING TRENCH DETAIL DETAILED IN THE SPECIFICATIONS OR SHOWN ON PLANS. BACKFILL FOR SEWER AND WATER CONSTRUCTION SHALL BE MDOT GRANULAR MATERIAL, CLASS II.
- THE TAPPING OF WATER MAINS, THE INSTALLATION OF ALL CORPORATIONS, AND THE OPERATION OF VALVES AND HYDRANTS IS RESERVED FOR CITY PERSONNEL ONLY. THE CONTRACTOR IS REQUIRED TO SCHEDULE AND COORDINATE WITH CITY PERSONNEL AND ASSIST IN VALVE AND HYDRANT OPERATION. THE CONTRACTOR SHALL NOT RECEIVE ADDITIONAL COMPENSATION FOR DELAYS DUE TO THE SCHEDULING OF, OR COORDINATION WITH, CITY OF ANN ARBOR PUBLIC WORKS. CITY OF ANN ARBOR PUBLIC WORKS WILL INSTALL THE CORPORATION AND COPPER SERVICE LEAD(S) TO TRANSFER THE CONNECTION(S). IF AN EXISTING WATER SERVICE IS FOUND TO BE FAILING OR IS NOT COPPER, THE LEAD WILL BE REPLACED TO THE CURB BOX BY PUBLIC WORKS.
- THE CONTRACTOR SHALL BACKFILL TRENCHES IN ACCORDANCE WITH APPLICABLE CITY OF ANN ARBOR TRENCH DETAIL(S) FOUND ONLINE. THIS WORK SHALL BE INCLUDED IN THE ITEM OF WORK BEING PERFORMED.
- ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLYETHYLENE WRAPPED PER ANS/AWWA C105/A21.5.
- ALL FITTINGS, HYDRANTS, VALVES AND CASTINGS REMOVED DURING CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL COORDINATE PICKUP BY THE CITY OF ANN ARBOR FIELD OPERATIONS UNIT.
- FLOURPOLYMER COATED BOLTS ARE TO BE USED AT ALL MECHANICAL WATER MAIN JOINTS (HYDRANTS AND MEGALUG FITTINGS). SEE DETAILED SPECIFICATION ENTITLED "WATER MAIN AND APPURTENANCES" FOR ADDITIONAL INFORMATION.
- THE CONTRACTOR SHALL CONSTRUCT, FLUSH, AND BACTERIOLOGICALLY TEST THE WATER MAIN PER DETAILED SPECIFICATION "WATER MAIN AND APPURTENANCES" AND AS APPROVED BY THE ENGINEER. ALL CHLORINATED WATER SHALL BE DISCHARGED DIRECTLY INTO AN APPROVED SANITARY SEWER. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY HOSES, FITTINGS AND THE LIKE TO ACCOMPLISH THIS WORK.
- WATER MAIN FITTINGS, OTHER THAN THOSE SPECIFICALLY LISTED AS SEPARATE PAY ITEMS, WHICH ARE REQUIRED TO COMPLETE THE WORK, SUCH AS BLOW-OFF ASSEMBLIES, CONCRETE THRUST BLOCKS, SOLID SLEEVES AND MECHANICAL PLUGS, SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ASSOCIATED ITEMS OF WORK.
- WHERE CURB AND GUTTER, CURB, PAVEMENT OR SIMILAR ITEMS BECOME UNDERMINED DUE TO THE CONTRACTOR'S OPERATIONS, THEY SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S SOLE EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUOUS MAINTENANCE OF THE TEMPORARY ROAD SURFACE AND SOIL EROSION CONTROL MEASURES, FOR WHICH NO PAY ITEM EXISTS, WITHIN THE CONSTRUCTION AREA UNTIL THE COMPLETION OF THE PROJECT. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS, MAX, _____".
- THE LOCATION OF MATERIAL STOCK PILES AND ON-SITE STAGING AREAS SHALL BE APPROVED BY THE ENGINEER. ALL MATERIAL STOCKPILES SHALL BE MAINTAINED SUCH THAT DRAINAGE AND SIGHT DISTANCES ARE NOT ADVERSELY IMPACTED. SOIL EROSION REQUIREMENTS SHALL APPLY TO ALL MATERIAL STOCKPILES. ALL STOCKPILES WILL REMAIN IN RIGHT OF WAY AND SHOULD BE COVERED FOR WIND EROSION.
- WHERE SEWER PIPES OF DIFFERENT SIZES OR MATERIALS ARE JOINED, FERNCO FLEXIBLE COUPLINGS WITH STAINLESS STEEL SHEAR RINGS WILL BE USED. THE CONTRACTOR'S PURCHASE PRICE FOR THESE DEVICES, INCLUDING SHIPPING, SHALL BE PAID FOR AS AN EXTRA PRIOR TO PAYMENT FOR THIS ITEM. THE CONTRACTOR SHALL SUBMIT RECEIPTS FOR THE ENGINEER'S REVIEW AND APPROVAL. ALL OTHER COSTS ASSOCIATED WITH THE INSTALLATION OF THESE DEVICES SHALL BE INCLUDED IN THE PAYMENT FOR THE SEWER.
- THE CONTRACTOR IS TO TAKE SPECIAL CARE TO PROTECT THE EXISTING WATER MAIN AND BE RESPONSIBLE FOR MAINTAINING CONSISTENT WATER SERVICE.

CONSTRUCTION NOTES (CON'T):

- SOME STORM SEWER MAY UNAVOIDABLY BECOME DAMAGED DURING CONSTRUCTION OR IT MAY BE DETERMINED BY THE ENGINEER THAT EXISTING STORM SEWER NEEDS TO BE REPLACED. IN EITHER CASE, THE ENGINEER MAY DIRECT THE SEWER TO BE REMOVED AND REPLACED. THE REMOVAL OF THE EXISTING SEWER AND/OR DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE CONTRACT WORK ITEMS "STORM SEWER PIPE, _ IN. DIA., REM" OR "STORM SEWER STRUCTURE, REM", AND THE REPLACEMENT SEWER SHALL BE INSTALLED AND PAID FOR AT THE CORRESPONDING CONTRACT UNIT PRICE, IF CONTAINED WITHIN THE CONTRACT, FOR THE VARIOUS TYPES AND SIZES OF SEWER TO BE REPLACED.
- WHERE EXISTING SEWER AND/OR DRAINAGE STRUCTURES ARE TO BE REMOVED, THEY SHALL BE PROPERLY DISPOSED OF OFF-SITE AND THE EXCAVATION SHALL BE BACKFILLED WITH MDOT CLASS II GRANULAR MATERIAL, COMPACTED TO 95% OF ITS MAX. DRY DENSITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT ITEMS "STORM SEWER PIPE, _ IN. DIA., REM" AND/OR "STORM SEWER STRUCTURE, REM".
- IF THE CONTRACTOR ENCOUNTERS EXISTING EDGE DRAIN(S) DURING CONSTRUCTION OF THE PROPOSED EDGE DRAINS, INLET LEADS, OR CATCH BASINS, IT SHALL BE CAPPED AT EACH END TO PREVENT MATERIAL FROM ENTERING THE PIPE. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE PARTICULAR ITEM OF WORK BEING PERFORMED WHEN EXISTING EDGE DRAIN(S) ARE ENCOUNTERED.
- EXISTING STREET NAME, GUIDE AND REGULATORY SIGNS, AND MAILBOXES WHICH CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED PRIOR TO CONSTRUCTION STORED IN A MANNER WHICH WILL PREVENT DAMAGE, AND RE-SET IN LOCATIONS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN "GENERAL CONDITIONS, MAX, _____".
- ALL EXCAVATION REQUIRED FOR PROJECT GRADING WITHIN THE PROJECT LIMITS, INCLUDING PROPOSED PAVEMENT, DRIVE APPROACHES, SIDEWALK, AND SIDEWALK RAMPS SHALL BE INCLUDED IN "MACHINE GRADING, MODIFIED."
- ALL CURB, SIDEWALK, AND DRIVEWAY APPROACH REMOVALS SHALL BE APPROVED BY THE ENGINEER BEFORE THE WORK IS PERFORMED. ALL CONCRETE AND BITUMINOUS MATERIALS SHALL BE SAW-CUT FULL-DEPTH AT THEIR REMOVAL LIMITS PRIOR TO REMOVAL. SAW-CUTTING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "MACHINE GRADING, MODIFIED."
- "NO PARKING" SIGNS SHALL BE INSTALLED BY THE CONTRACTOR AT LOCATIONS AS APPROVED OR DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILED SPECIFICATIONS.
- SAWED SEWER PIPE CONNECTIONS SHALL BE COUPLED WITH A FERNCO FLEXIBLE COUPLING AND A STAINLESS STEEL SHEAR RING.
- ALL STRUCTURES SHALL RECEIVE NEW CASTINGS AS DIRECTED BY THE ENGINEER. AS SPECIFIED ON THE STANDARD CASTING SCHEDULE. THE EXISTING CASTINGS ARE THE PROPERTY OF THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL DELIVER TO CITY OF ANN ARBOR PUBLIC WORKS FACILITY AT THE W.R. WHEELER SERVICE CENTER LOCATED AT 4251 STONE SCHOOL ROAD. CONTRACTOR TO CONTACT tpietras@azgov.org & dcwooden@azgov.org TO ARRANGE FOR DELIVERY.
- PAYMENT FOR DRAINAGE STRUCTURE SUMPS, WHERE SPECIFIED, SHALL BE INCLUDED IN THE PAYMENT FOR THE VARIOUS DRAINAGE STRUCTURE SIZES AND OR TYPES.
- IN AREAS WHERE EDGE DRAIN CANNOT BE INSTALLED IN ACCORDANCE WITH CITY OF ANN ARBOR DETAIL SD-TD-4, THE EDGE DRAIN SHALL BE INSTALLED AT THE DEPTH AS INDICATED ON THE PLANS, OR AS DIRECTED BY ENGINEER. IN NO CASE SHALL THE EDGE DRAIN BE INSTALLED AT A GRADE LESS THAN 0.50% OR AT A DEPTH OF LESS THAN 3.25' FROM TOP OF CURB.
- GEOFABRIC, 6A STONE, 12" WRAPPED PERFORATED HDPE, AND SAND BACKFILL INCLUDED PAY ITEM "INFILTRATION TRENCH"

WATER MAIN CONSTRUCTION NOTES

- SEE EROSION CONTROL SHEETS FOR DETAILS ON PLACEMENT, MAINTENANCE, AND REMOVAL OF EROSION CONTROL ITEMS.
- THE CONTRACTOR SHALL CAREFULLY PROTECT FROM DAMAGE OR INJURY DURING CONSTRUCTION OPERATIONS ALL UTILITIES, SITE FEATURES, LANDSCAPING, AND OTHER ITEMS NOT DESIGNATED FOR REMOVAL OR ABANDONMENT. PAYMENT FOR PROTECTION OF UTILITIES INCLUDED IN "GENERAL CONDITIONS, MAX". EXISTING FACILITIES NOT DESIGNATED FOR REMOVAL OR ABANDONMENT, BUT WHICH ARE DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS SOLE EXPENSE, AS DETERMINED BY THE ENGINEER.
- THE EXISTING UTILITIES SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AS OBTAINED THROUGH SURVEYS AND/OR EXISTING PLANS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO BE SATISFIED AS TO ITS ACCURACY AND THE LOCATION OF EXISTING UTILITIES. IF STORM OR WATERMAINS CROSS OTHER UTILITIES, CONTACT THEIR RESPECTIVE OWNERS FOR INFORMATION ON HOW TO PROCEED. PAYMENT FOR THE COORDINATION EFFORTS AND ASSOCIATED ITEMS SHALL BE INCLUDED IN ASSOCIATED PROPOSED STORM OR WATERMAIN ITEMS AND SHALL NOT BE PAID FOR SEPARATELY.
- THE CONTRACTOR SHALL CAREFULLY PROTECT FROM DAMAGE OR INJURY THE EXISTING WATER MAIN DURING CONSTRUCTION OPERATIONS. ANY DAMAGE TO THIS FACILITY BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE, AS DETERMINED BY THE ENGINEER. PAYMENT FOR PROTECTION OF THE EXISTING WATER MAIN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS, MAX".
- THE CONTRACTOR SHALL NOT REMOVE OR DAMAGE EXISTING SANITARY SEWER OR WATER MAIN LEADS FOR EASE OF CONSTRUCTING OTHER ASPECTS OF WORK. THE CONTRACTOR SHALL CAREFULLY PROTECT ALL LEADS FROM DAMAGE OR INJURY.
- THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS WHICH ARE FOUND UNDER ARTICLE 12 OF THE 2024 ANN ARBOR STANDARD SPECIFICATIONS. THE OMISSION OF ANY CURRENT STANDARD DETAIL FROM THESE PLANS DOES NOT RELIEVE THE CONTRACTOR FROM THE REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH CURRENT PUBLIC SERVICE DEPARTMENT STANDARD SPECIFICATIONS AND DETAILS.
- 12 INCH AND SMALLER WATER MAIN SHALL BE, PC 350; 14 TO 20 INCH SHALL BE PC 250; 24 INCH SHALL BE PC 200; EXCEPT UNDER RAILROAD, RIVER, OR INTERSTATE HIGHWAY WILL BE SPECIAL THICKNESS CLASS 56 OR AS SPECIFIED. ALL WATER MAIN SHALL BE DUCTILE IRON WATER MAIN, CEMENT-LINED (DOUBLE THICKNESS), WITH POLYWRAP UNLESS NOTED OTHERWISE.
- RESTRAINED JOINT SYSTEMS FOR WATER MAIN SHALL BE UTILIZED WHERE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. RESTRAINED JOINT GASKET SYSTEMS ARE TO BE USED. (FIELD-LOK 350 BY U.S. PIPE, FAST-GRIP BY AMERICAN DUCTILE IRON PIPE, OR APPROVED EQUIV.).
- ALL WATER MAIN TO HAVE 5.5 FEET MINIMUM OF COVER. MAINTAIN A MINIMUM OF 18-INCH VERTICAL CLEARANCE FOR STORM AND SANITARY CROSSINGS AND A MINIMUM OF 12-INCH VERTICAL CLEARANCE WITH ALL OTHER UTILITIES.
- UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL UTILIZE STANDARD PIPE DEFLECTIONS FOR FOLLOWING THE PROPOSED ALIGNMENT.
- NEW FIRE HYDRANTS SHALL BE EJIW 5BR-250 WITH 5-INCH STORZ CONNECTION, 1-3/8-INCH PENTAGON OPERATING NUT, 3-3/8-INCH AA PUMPER CONNECTION, PUSH-ON JOINT WITH NO BARREL DRAIN.
- FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL NECESSARY HYDRANT EXTENSIONS, THRUST BLOCKS, PIPE AND FITTINGS, INCLUDING ADJUSTMENT OF THE COMPANION VALVE. FIRE HYDRANT ASSEMBLY INCLUDES 6-INCH COMPANION VALVE LOCATED THREE FEET FROM THE HYDRANT.
- ALL WATER MAIN TRENCH BACKFILL SHALL BE MDOT CLASS II GRANULAR MATERIAL. (SEE UTILITY TRENCH DETAIL SD-TD-1)
- CONNECTIONS TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE NEW MAIN HAS BEEN SUCCESSFULLY TESTED AND HAS PASSED ALL HYDROSTATIC AND BACTERIOLOGICAL TESTING. FINAL CONNECTIONS SHALL BE COORDINATED WITH THE ENGINEER.
- WATER SERVICES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE BASED ON RECORDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE CITY IN LOCATING, VERIFYING AND RECONNECTING ALL EXISTING ACTIVE SERVICES.
- ALL LINE STOP LOCATIONS SHALL BE DETERMINED BY THE CITY ENGINEER AS NEEDED. THIS ITEM OF WORK SHALL BE PAID FOR AS "TEMPORARY WATER MAIN LINE STOP, _ IN."

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

- NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.
- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
 - ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CHAPTER 55 ANN ARBOR UNIFIED DEVELOPMENT CODE, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
 - DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
 - EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
 - ALL MUD/SOIL TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR.
 - RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL GRADE.
 - CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS, AND ADJACENT STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
 - SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
 - PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLIATIVE AS REQUIRED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND REMOVAL OF SOME MEASURES UPON AUTHORIZED COMPLETION OF THE PROJECT. FINAL COMPLETION OF PROJECT WILL NOT BE AUTHORIZED UNTIL ALL SITE WORK AND UTILITY CONSTRUCTION IS COMPLETE AND ALL SOILS ARE STABILIZED.
 - THE CONTRACTOR SHALL NOT GRADE INTO ADJACENT PROPERTIES. SILT AND PROTECTIVE FENCE SHALL BE INSTALLED AND MAINTAINED TO PREVENT GRADING, EROSION AND SEDIMENTATION INTO THE ADJACENT PROPERTIES.
 - TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

SEQUENCE OF EROSION CONTROL MEASURES:

- THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER, A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.

SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS:

- INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE INLETS.
- PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
- CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- COMPLETE ALL FINE GRADING.
- TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
- REFER TO PLANS AND SPECIFICATIONS FOR PERMANENT SITE STABILIZATION.
- CLEAN OUT STORM SEWER SYSTEMS.
- REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
- ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL, PRIOR TO FINAL INSPECTION

NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT, AND APPROVAL.

TEMPORARY SEEDING:

- SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.

IMPERVIOUS PROJECT AREA	
PRIOR TO CONSTRUCTION = 1.95 ACRES	POST CONSTRUCTION = 2.01 ACRES

AREA OF PROPOSED DISTURBANCE = 2.52 ACRES



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48106-1067
www.a2gov.org

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

NOTES

SCALE: NTS

DRAWING NO. 2023-023-3

SHEET NO. 3 OF 75

c:\pwwork\wade-trim_rbrown\dl339881\GNS-PLTS-Notes.dwg -o2 standard bw.stb - Plot Date: 2/3/2025 11:54:05 AM

c:\pw_work\wade-trim_fbrown\dl339881\GIS-PLTS-Legend.dwg - _o2_standard bw.stb - Plot Date: 2/3/2025 11:54:11 AM

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.	
PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR ENGINEERING
"NO PARKING" SIGNS PERMIT*	CITY OF ANN ARBOR ENGINEERING
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
TEMPORARY ACCESS PERMIT*	UNIVERSITY OF MICHIGAN REAL ESTATE OFFICE
* NO COST TO CONTRACTOR	

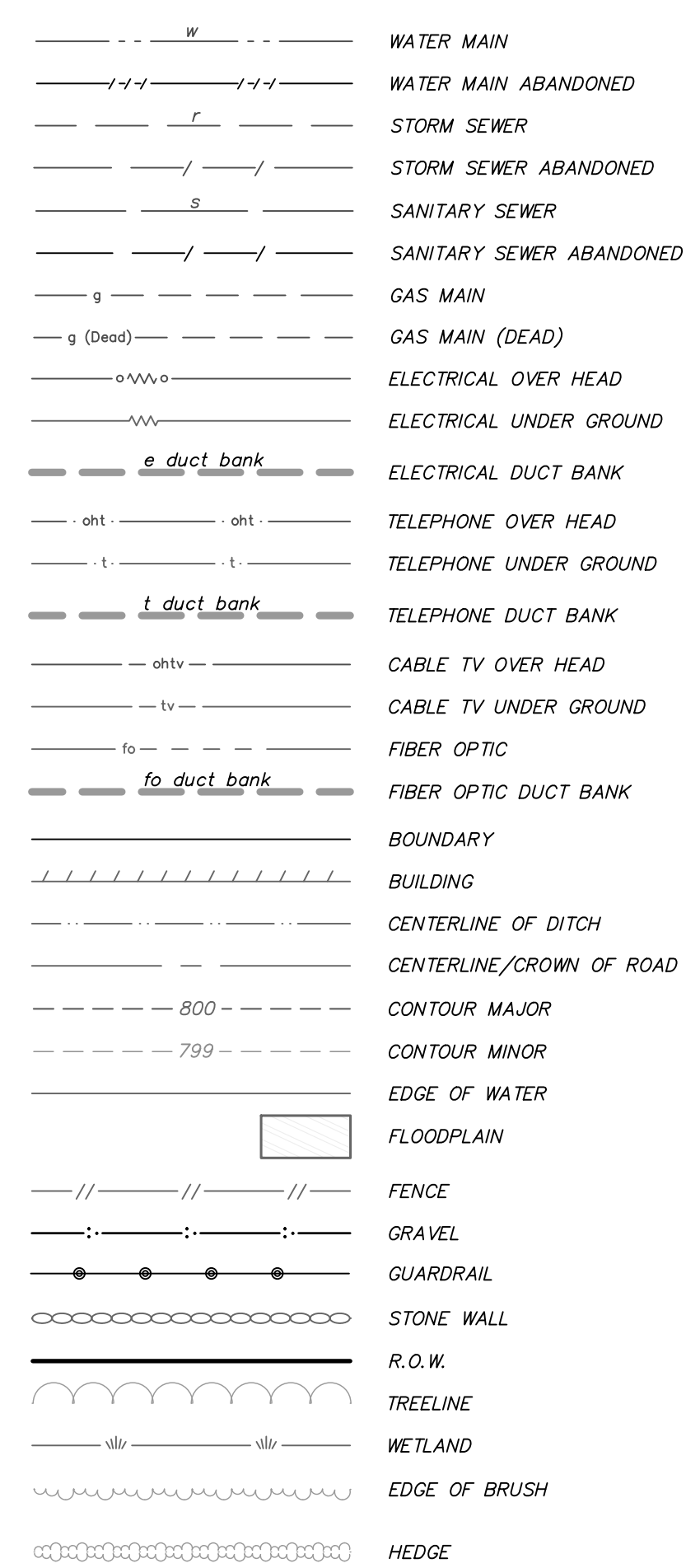
UNLESS OTHERWISE INDICATED, ALL REQUIRED PERMITS, LICENSES, INSPECTIONS, APPROVALS AND FEES SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR. ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES, RULES AND REGULATIONS.

PERMITS REQUIRED TO BE OBTAINED BY THE CITY OF ANN ARBOR PRIOR TO THE BEGINNING OF CONSTRUCTION.	
PERMIT	ISSUING AUTHORITY
EGLE ACT 399 WATER MAIN CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

CONTACT INFORMATION		
PUBLIC UTILITIES	OWNER	CONTACT
WATER (DAN WOODEN)	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	(734) 794-6350
SANITARY (TRAVIS CONLEY)		
STORM (MARK SIRLS)		
FORESTRY (NICK JACOB)		
SIGNS SIGNALS STREET LIGHTS (MARC MORENO)		(734) 794-6361
FIBER OPTIC (IT)		(734) 794-6550
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	LAURIE MURRAY (313) 919-0523
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	ANDREA HUNTER (734) 460-9880
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	CHRIS SHOUP (734) 263-7385
FIBER OPTIC	MCI/VERIZON 4401 STECKER STREET DEARBORN, MI 48126	MARLON REDD (313) 588-0849
FIBER OPTIC	WINDSTREAM 1295 S LINDBEN ROAD, SUITE B FLINT, MI	JEFFERY WEBB (734) 790-6556
FIBER OPTIC	LUMEN 19675 W 10 MILE ROAD SOUTHFIELD, MI 48075	DAVE HUCKFELDT (517) 812-2592
FIBER OPTIC	FIBERLINK, INC 3529 GENESEE RD SUITE 6 LAPEER, MI 48446	TINA SNOBLEN (810) 667-2891 EXT 307
STREET LIGHTING	DTE ENERGY 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	BRANDON FARON (734) 309-2937 BRIAN KINNICK (734) 358-1529
UNIVERSITY OF MICHIGAN UTILITIES	UNIVERSITY OF MICHIGAN 1201 KIPKE DRIVE, ROOM 1080 ANN ARBOR, MI 48109	TERRY RAMSEY (734) 647-2031

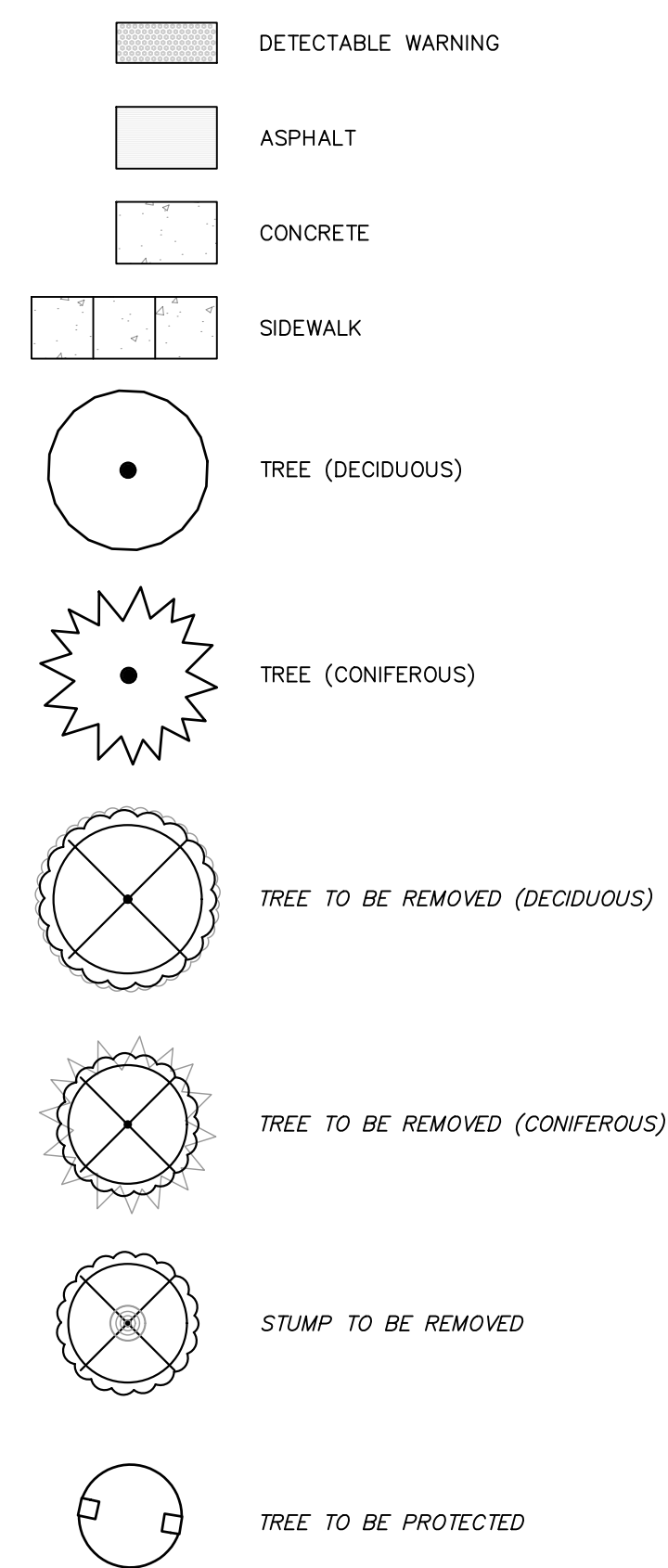
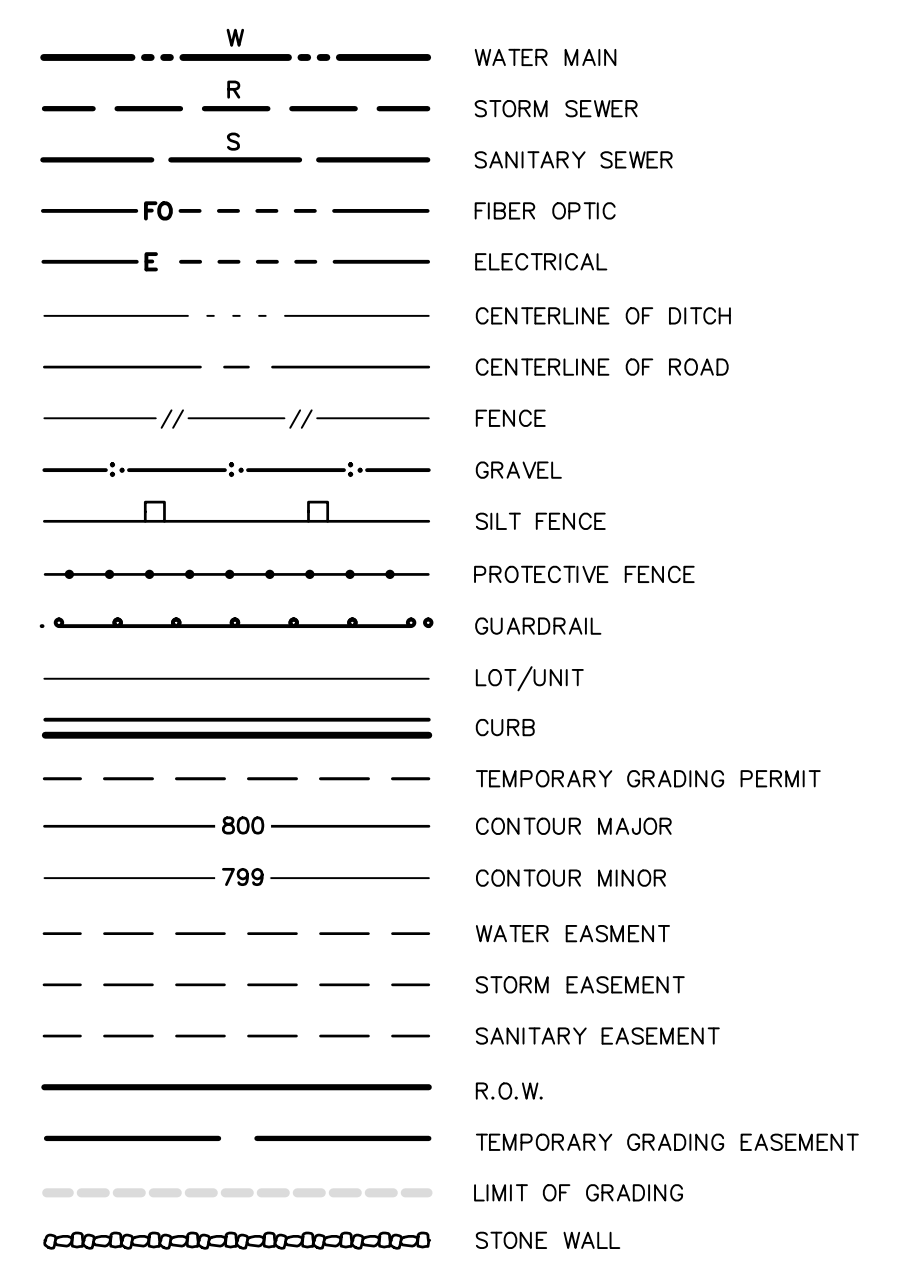
EXISTING LEGEND

- EX = EXISTING
- ⊕ FIRE HYDRANT
 - ↘ FIRE DEPARTMENT CONNECTION
 - I GATE VALVE IN BOX
 - ⊗ GATE VALVE IN WELL
 - ⊙ STOP BOX
 - ⊠ WATER VAULT
 - ⊙ WELL
 - ⊠ CATCH BASIN (SQ)
 - ⊙ CATCH BASIN (RD)
 - ⊠ NON-CURB CATCH BASIN (SQ)
 -) END SECTION
 - SANITARY MANHOLE
 - CLEAN-OUT
 - POST
 - ⊠ PEDESTRIAN SIGNAL
 - ⊠ SIGN
 - HAND HOLE
 - ⊙ ORNAMENTAL LIGHT
 - ⊠ FLOOD LIGHT
 - ⊙ UNKNOWN MANHOLE
 - ⊙ TELEPHONE MANHOLE
 - ⊠ TELEPHONE RISER
 - ⊙ GAS VALVE
 - ⊙ GAS VENT
 - ⊠ GAS BOX
 - ⊠ ELECTRICAL RISER
 - ⊠ TRANSFORMER
 - ⊠ UTILITY POLE
 - LAMP POLE
 - ⊠ GUY ANCHOR
 - ⊙ GUY POLE
 - ⊙ MONITORING WELL
 - ⊠ MAILBOX
 - ⊙ SOIL BORING
 - △ TRAVERSE POINT
 - + BENCH MARK
 - IRON PIPE
 - ⊠ MON BOX



PROPOSED LEGEND

- PROP = PROPOSED
- ⊕ HYDRANT (PLAN)
 - ⊙ WATER GATE WELL
 - ⊠ REDUCER
 - ⊠ WATER GATE VALVE
 - ⊙ WATER STOP BOX
 - ⊠ WATER VAULT
 - ⊙ INLET
 - ⊠ DOUBLE INLET
 - ⊠ INLET JUNCTION CHAMBER
 - ⊙ ROUND CATCH BASIN
 - ⊙ STORM MANHOLE
 - ⊠ DRAIN ARROW
 - ⊠ FLARED END SECTION
 - ⊙ SANITARY MANHOLE
 - CLEAN-OUT
 - BARREL
 - ⊠ SIGN
 - ⊙ PUSH BUTTON
 - ⊠ HAND HOLE



BENCHMARKS		
BM #	ELEV	DESCRIPTION
50	878.360	TOP OF ARROW ON HYDRANT 02-01023
51	879.600	TOP NUT (HIGHEST POINT) ON HYDRANT 02-03581
52	879.360	TOP OF ARROW ON HYDRANT 02-00106
53	878.980	TOP OF ARROW ON HYDRANT 02-01017
57	881.510	SOUTHEAST CORNER LIGHT POLE BASE AT HILL AUDITORIUM
58	882.650	TOP OF ARROW ON HYDRANT 02-00981
200	877.330	EAST SIDE OF MLP CONC BASE (NEW POLE) SOUTHWEST CORNER OF S. THAYER & N. UNIVERSITY
201	877.950	WEST SIDE OF MLP CONC BASE EAST SIDE OF S. THAYER IN FRONT OF HILL AUDITORIUM
203	877.630	SOUTHWEST CORNER OF MLP CONC BASE SOUTHEAST CORNER OF S. THAYER & E. WASHINGTON

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

LEGEND

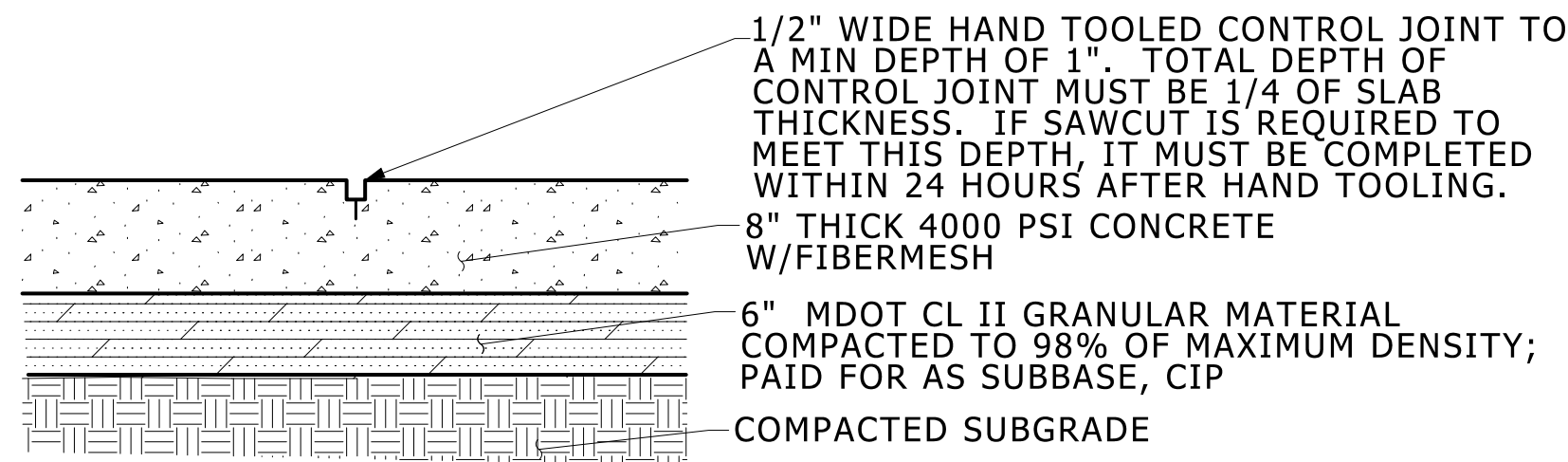
SCALE: NTS

DRAWING No. 2023-023-4

SHEET No.

	CHECKED
	DRAWN
	DATE
	DESCRIPTION
	REV.

CITY OF ANN ARBOR PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-6647
www.a2gov.org



CONC, SIDEWALK, FIBERMESH, 8 IN.

NO SCALE

NOTES: EXPANSION JOINTS SHALL BE INSTALLED SUCH THAT NO SINGLE DIMENSION EXCEEDS 50 FT.

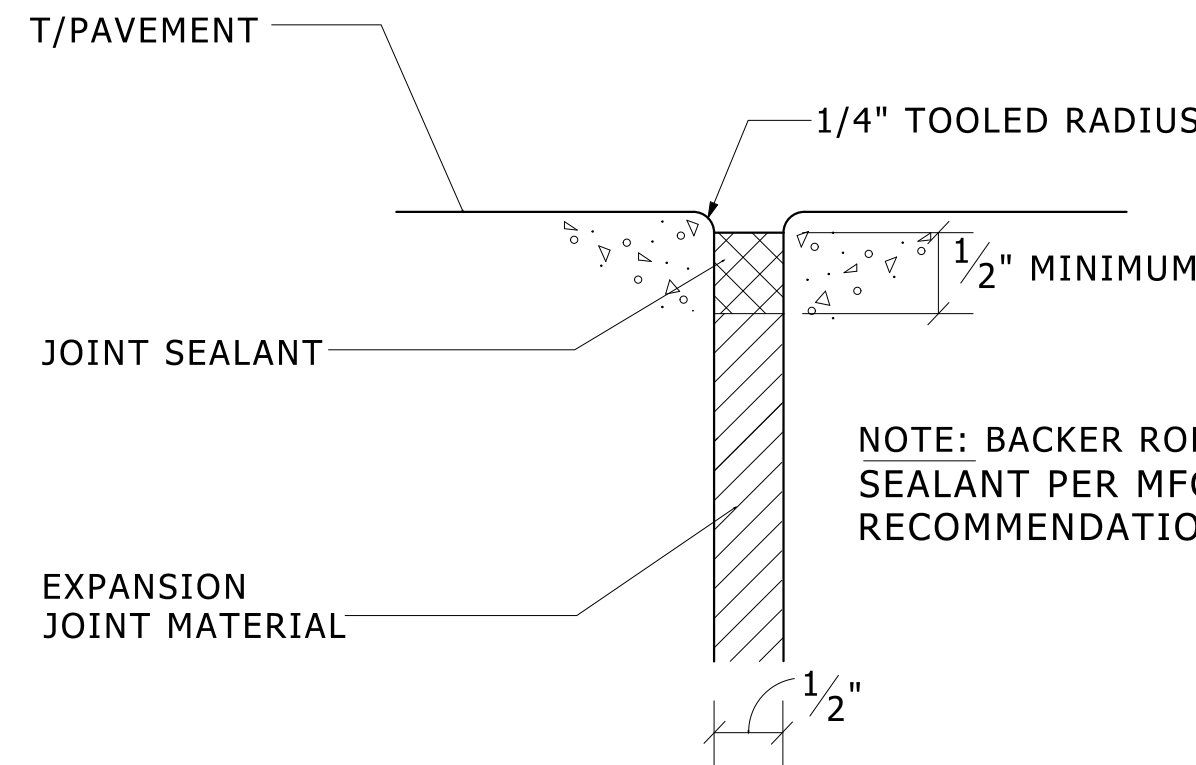
1/2" EXPANSION PAPER SHALL BE PLACED AT ALL LOCATIONS WHERE NEW SIDEWALK ABUTS CONCRETE CURB, EXISTING SIDEWALK, LIGHT POLE BASES AND RETAINING WALLS.

SNAP-CAP EXPANSION JOINT STRIPS CAN BE USED ON ALL EXPANSION JOINTS.

ALL EXPANSION JOINTS SHALL BE SEALED.

BROOM FINISH PARALLEL TO JOINTS AND PERPENDICULAR TO TRAFFIC (IF BROOMING PATTERN NOT SHOWN).

SD-SW-STD

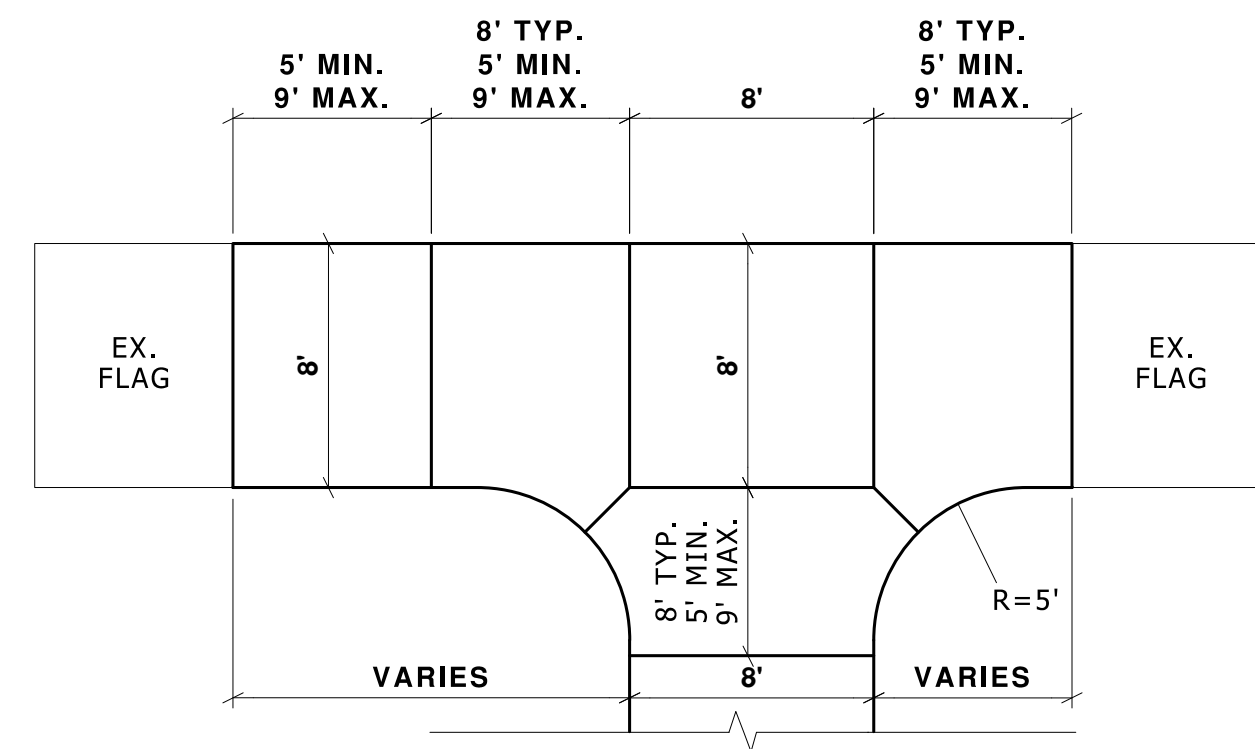


NOTE: BACKER ROD AND SEALANT PER MFGR'S RECOMMENDATIONS

PAVEMENT EXPANSION JOINT (E.J.)

NO SCALE

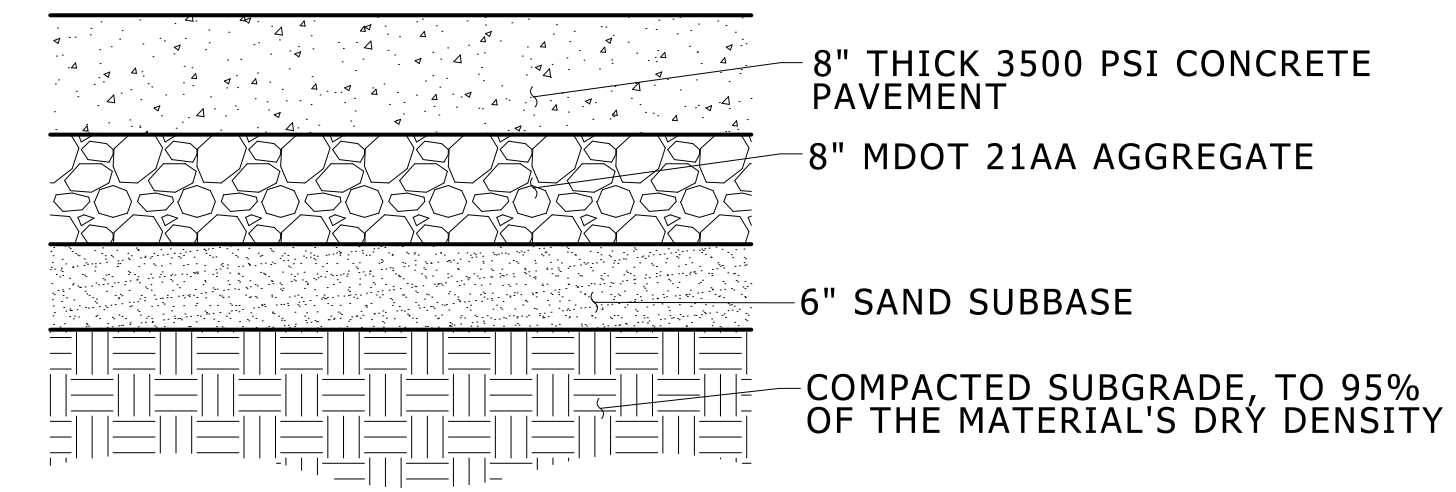
- VERTICAL SURFACES: PROVIDE MANUFACTURER'S STANDARD, NON-MODIFIED, TWO-OR-MORE-PART, POLY-SULFIDE-BASED, ELASTOMERIC SEALANT; COMPLYING WITH EITHER ASTM C 920 TYPE M CLASS 25, OR FS TT-S-00227E CLASS A; NON-SAG GRADE/TYPE.
- HORIZONTAL SURFACES: PROVIDE MANUFACTURER'S STANDARD, NON-MODIFIED, TWO-OR-MORE-PART, POLYURETHANE-BASED, ELASTOMERIC SEALANT; COMPLYING WITH EITHER ASTM C 920 TYPE M CLASS 25, OR FS TT-S-00227E CLASS A; SELF-LEVELING GRADE/TYPE.
- SET UP TIME FOR SEALANT ON WALKING SURFACES SHALL BE NO LONGER THAN 8 HOURS.
- PROVIDE PRODUCT OF ONE OF THE FOLLOWING MANUFACTURERS:
 - CONTECH/SONNEBORN
 - MAMECO INTERNATIONAL
 - W. R. MEADOWS, INC.
 - PECORA CORP.
 - PRODUCTS RESEARCH & CHEMICAL CORP.
 - SIKA CHEMICAL CORP.
 - TREMCO, INC.
 - TOCH/CARBOLINE
- DO NOT ALLOW SEALANTS TO OVERFLOW OR SPILL ONTO ADJOINING SURFACES. REMOVE EXCESS AND SPILLAGE OF SEALANTS PROMPTLY.
- SEALED ZIP STRIPS ARE ACCEPTABLE.
- INCLUDED IN PAYMENT FOR CORRESPONDING CONCRETE PAY ITEMS



SIDEWALK CONTROL JOINT LAYOUT

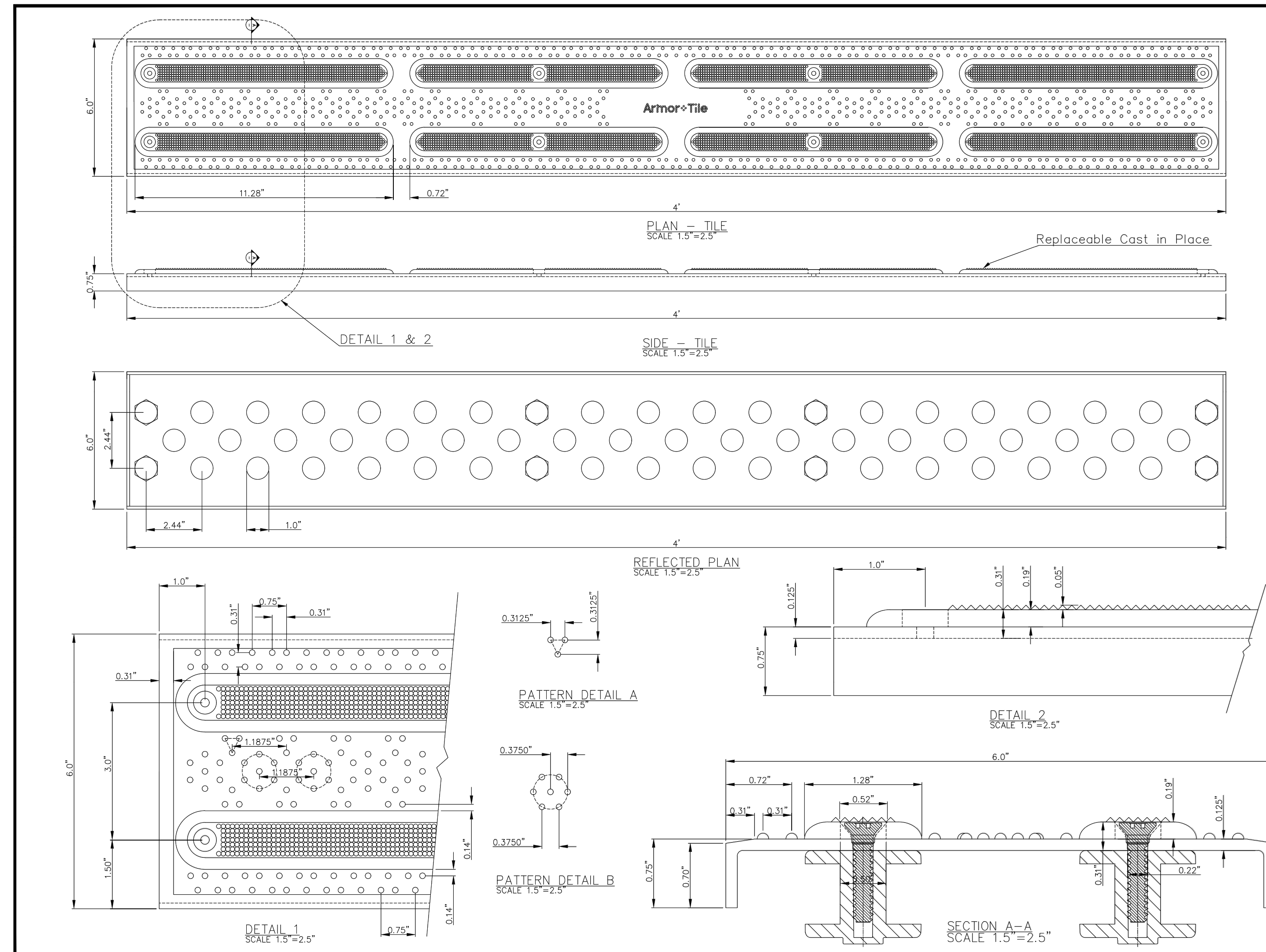
NO SCALE

SD-SW-CTRL_JNT



ROAD CONCRETE PAVEMENT, 8 IN. STATE ST & E WILLIAM ST INTERSECTION

NO SCALE



www.Armor-Tile.com



MATERIAL LIST			
#	DESCRIPTION	PART No.	QTY
1	ARMOR-TILE	ADD-C-504-2-YW	1
2	REPLACEABLE ANCHOR		8

No.	DATE	REVISION	APPR.

SCALE: _____

DESIGNED BY	K.S.	DATE	
DRAWN	D.G.	07/15/2024	
CHECKED			

PROJECT MANAGER: _____
 TRADE: DETECTABLE WARNING SURFACE
 PART No.: ADD-C-504-2-YW
 MATERIAL: VITRIFIED POLYMER COMPOSITE

Armor-Tile™ ADA
 SOUND AMPLIFYING DETECTABLE/TACTILE WARNING SURFACE TILE

Armor-Tile™
 DETECTABLE/TACTILE DIRECTIONAL TILE
 6" x 48" CAST-IN-PLACE BAR TILE
 PLANS AND DETAILS

DRAWING No.	ADD-C-504-2-YW	REV. No.	0
-------------	----------------	----------	---



Know what's below. Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
 PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-0647
 ANN ARBOR 734.794.4410
 www.a2gov.org



STATE STREET IMPROVEMENTS
 DETAILS

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
 SCALE PLAN: N.T.S.
 DRAWING No. 2023-023-5

c:\p_w_work\wade-trim_rbrown\dl339881\CDT-PLTS-Details.dwg Dwg Created: 31-Jan-25 - _o2_standard bw.sib - Plot Date: 3-Feb-25



PEXCO, DAVIDSON TRAFFIC CONTROL PRODUCTS
 3110 70TH AVENUE EAST
 TACOMA, WA 98424, USA
 TOLL FREE: 1-877-335-4638
 PHONE: (253) 284-8000
 FAX: (253) 284-8080
 www.pexco.com/traffic

SELECT DESIRED HEIGHT:

- 18" 28"
- 24" 36"

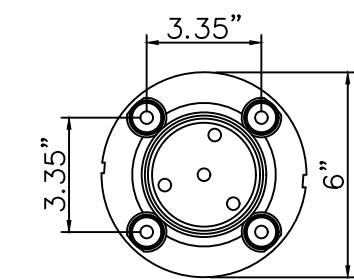
CUSTOM (SEE NOTE 4)

SELECT DESIRED COLOR:

- WHITE
- YELLOW
- FLUORESCENT ORANGE
- BLACK

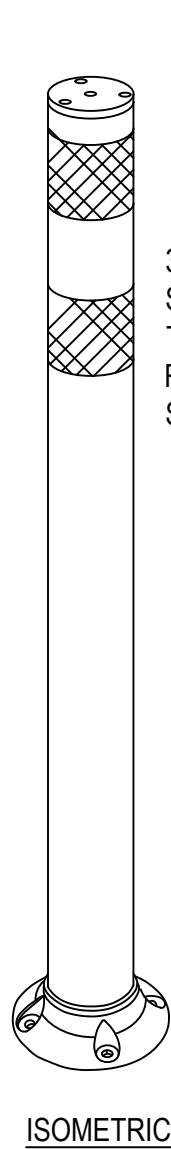
SELECT DESIRED REFLECTIVE SHEETING:

- ABRASION RESISTANT AR 1000
- 3M FLEX DIAMOND GRADE
- 3M FLEXIBLE HIP

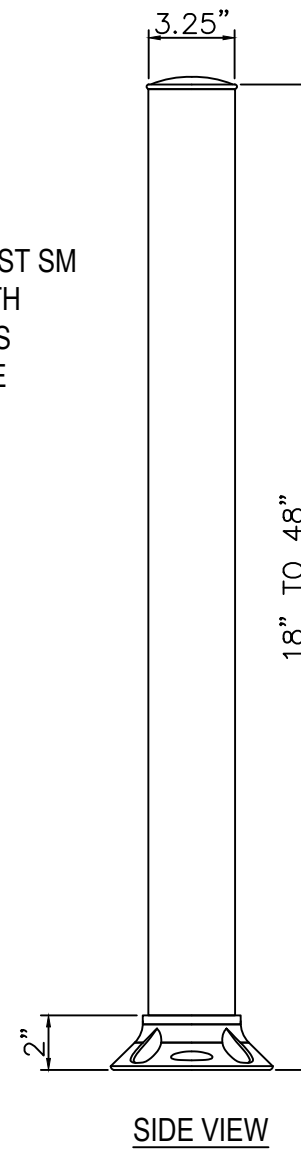


EACH POST REQUIRES 4 HCA ANCHORS:
 - CONCRETE: P/N 80SMANCHOR COIL ANCHOR 3" X 3/8"
 - ASPHALT: P/N 80SMANCHOR5 COIL ANCHOR 5" X 3/8"

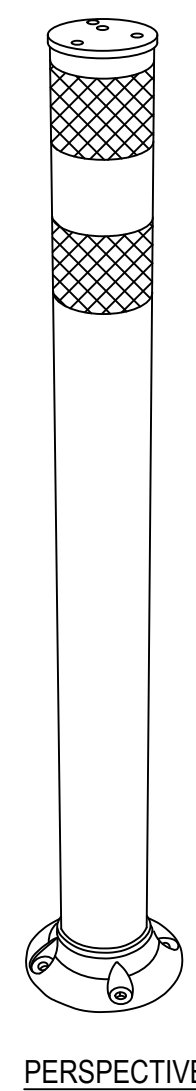
PLAN VIEW



ISOMETRIC



SIDE VIEW



PERSPECTIVE

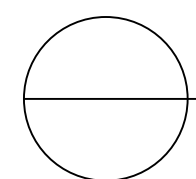


MANUFACTURER NOTES:

1. FLUORESCENT COLORS ARE RECOMMENDED FOR APPLICATIONS REQUIRING THE HIGHEST VISIBILITY.

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER CDT-PLTS



CITY POST: SURFACE MOUNT MODEL SM

CITY POST SM SURFACE MOUNT



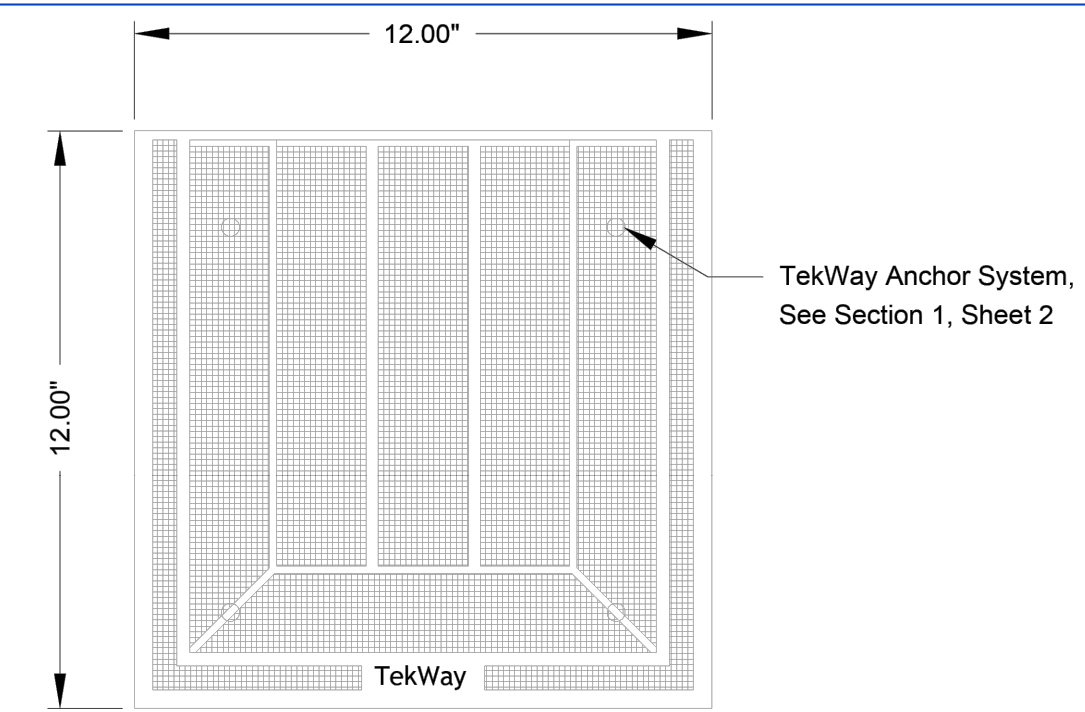
REVISION DATE 02/03/2025

CDT-PLT

PROTECTED BY COPYRIGHT ©2021 CADDDETAILS.COM LTD.

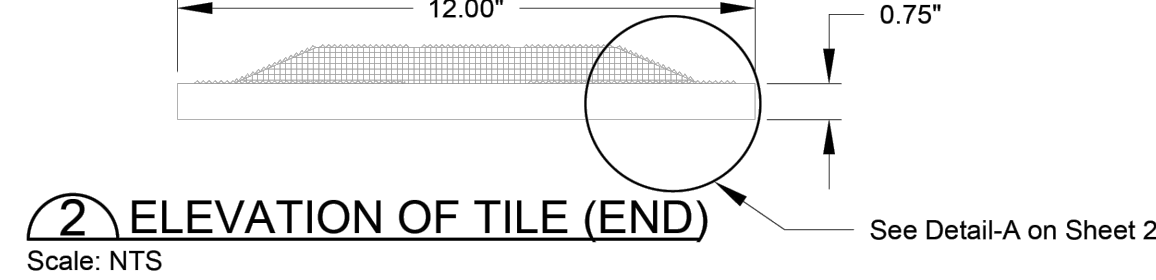
CADdetails.com

TekWay Tactile Warning Delineator (Trapezoid)



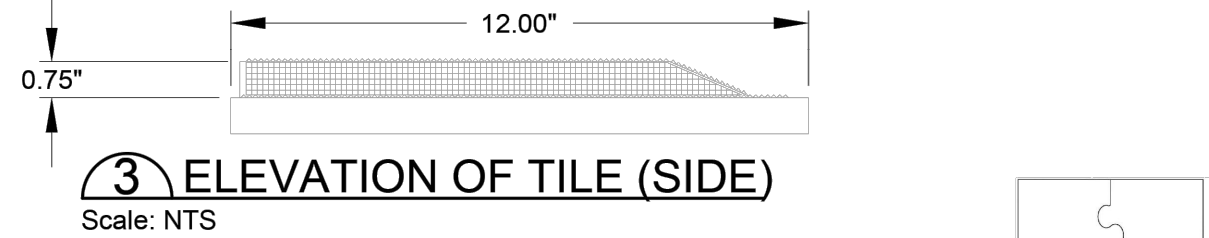
1 PLAN OF TILE

Scale: NTS



2 ELEVATION OF TILE (END)

Scale: NTS



3 ELEVATION OF TILE (SIDE)

Scale: NTS

Notes:

1. The allowable width of tile is 12.00" ± 0.06".
2. The allowable length of tile is 12.00" ± 0.06".
3. All dimensions are in inches.

This drawing contains information that is property of StrongGo INDUSTRIES. This document may not in whole or in part be duplicated or disclosed or used for manufacture of the part disclosed herein without written permission of StrongGo INDUSTRIES.

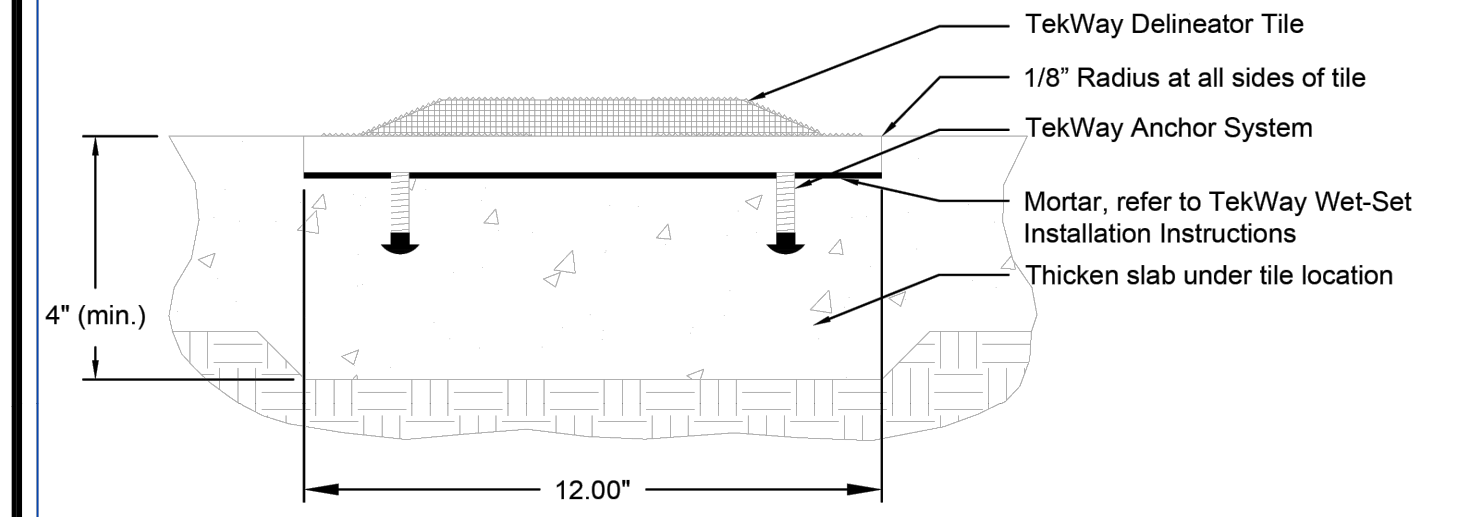


3296 E. Hemisphere Loop Tucson, AZ 85706
 Tel: (520) 547-3510 Fax: (520) 547-3515

DRAWING TITLE
12" X 12" TekWay Tactile Warning Delineator (Trapezoid End Cap) THA Plan & Elevation

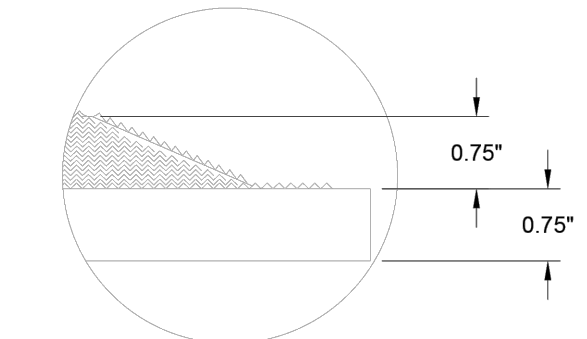
SHEET NO.
 1 of 2

TekWay Tactile Warning Delineator (Trapezoid)



1 TYPICAL - WET-SET INSTALLATION (Fresh Concrete)

Scale: NTS



3 DETAIL - A

Scale: NTS

Notes:

1. The allowable width of tile is 12.00" ± 0.06".
2. The allowable length of tile is 12.00" ± 0.06".
3. All dimensions are in inches.

This drawing contains information that is property of StrongGo INDUSTRIES. This document may not in whole or in part be duplicated or disclosed or used for manufacture of the part disclosed herein without written permission of StrongGo INDUSTRIES.

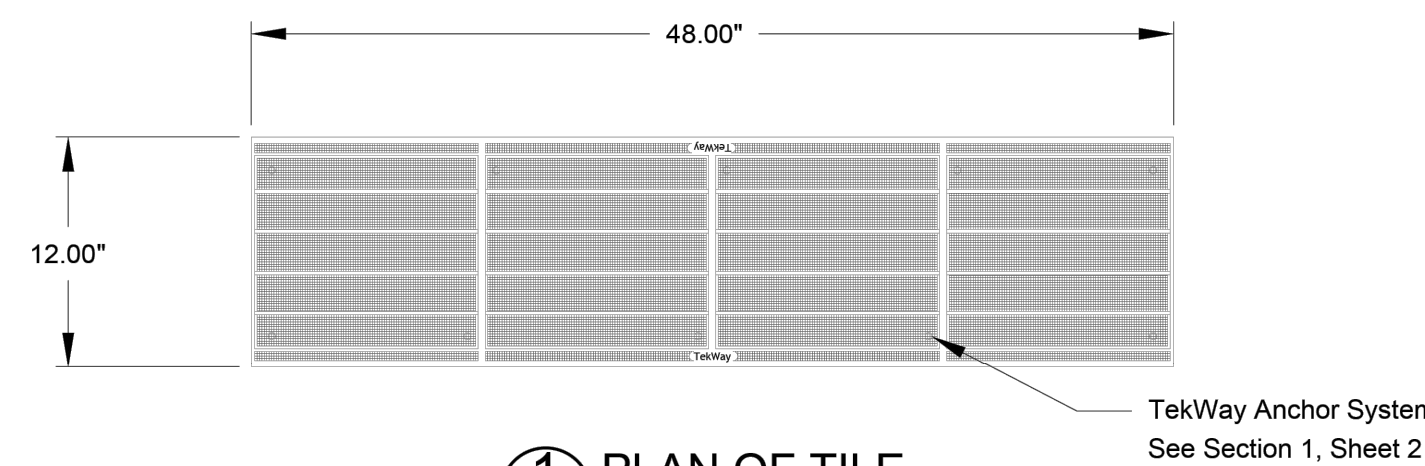


3296 E. Hemisphere Loop Tucson, AZ 85706
 Tel: (520) 547-3510 Fax: (520) 547-3515

DRAWING TITLE
12" X 12" TekWay Tactile Warning Delineator (Trapezoid End Cap) THA Plan & Elevation

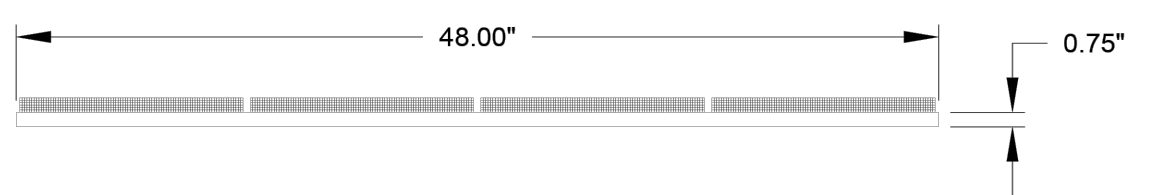
SHEET NO.
 2 of 2

TekWay Tactile Warning Delineator (Trapezoid)



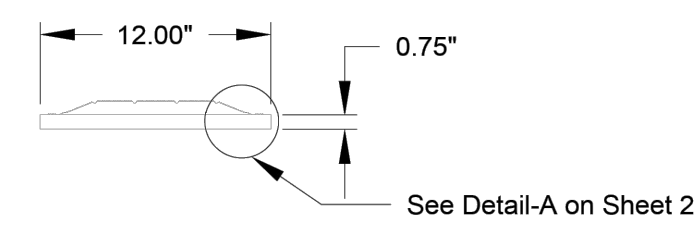
1 PLAN OF TILE

Scale: NTS



2 ELEVATION OF TILE

Scale: NTS



3 ELEVATION OF TILE

Scale: NTS

Notes:

1. The allowable width of tile is 12.00" ± 0.06".
2. The allowable length of tile is 48.00" ± 0.06".
3. All dimensions are in inches.

This drawing contains information that is property of StrongGo INDUSTRIES. This document may not in whole or in part be duplicated or disclosed or used for manufacture of the part disclosed herein without written permission of StrongGo INDUSTRIES.

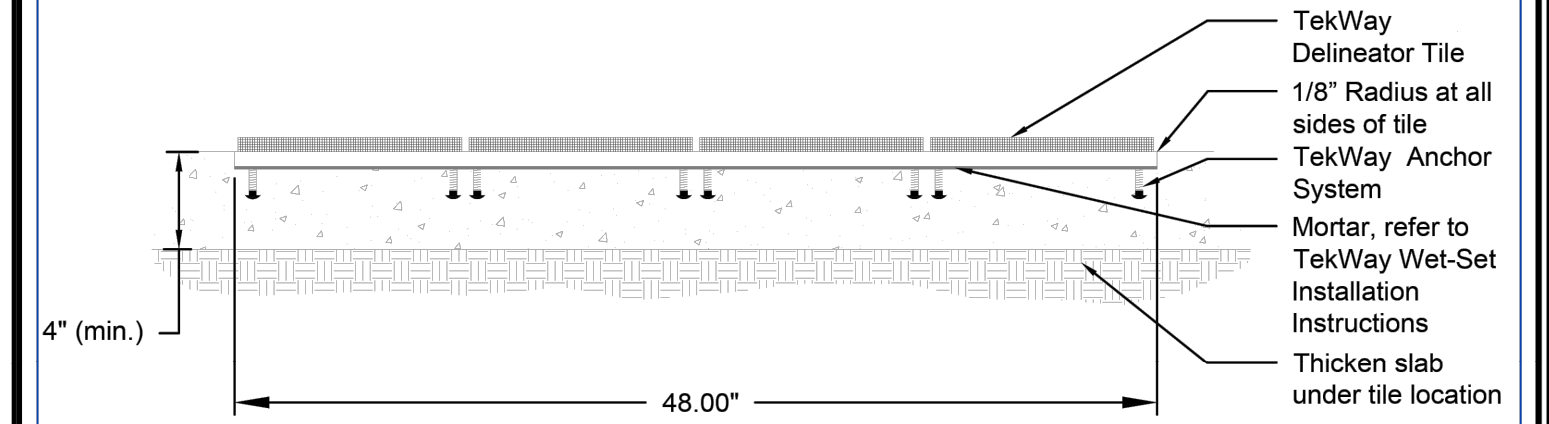


3296 E. Hemisphere Loop Tucson, AZ 85706
 Tel: (520) 547-3510 Fax: (520) 547-3515

DRAWING TITLE
12" X 48" TekWay Tactile Warning Delineator (Trapezoid Bar) THA Plan & Elevation

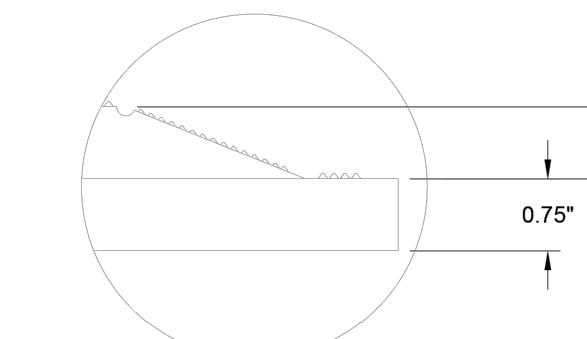
SHEET NO.
 1 of 2

TekWay Tactile Warning Delineator (Trapezoid)



1 TYPICAL - WET-SET INSTALLATION (Fresh Concrete)

Scale: NTS



2 DETAIL - A

Scale: NTS

Notes:

1. The allowable width of tile is 12.00" ± 0.06".
2. The allowable length of tile is 48.00" ± 0.06".
3. All dimensions are in inches.

This drawing contains information that is property of StrongGo INDUSTRIES. This document may not in whole or in part be duplicated or disclosed or used for manufacture of the part disclosed herein without written permission of StrongGo INDUSTRIES.



3296 E. Hemisphere Loop Tucson, AZ 85706
 Tel: (520) 547-3510 Fax: (520) 547-3515

DRAWING TITLE
12" X 48" TekWay Tactile Warning Delineator (Trapezoid Bar) THA Plan & Elevation

SHEET NO.
 2 of 2

c:\pw_work\wade-trim_rbrown\dl339881\CDT-PLTS-Details.dwg Dwg Created: 31-Jan-25 - _o2 standard bw.sib - Plot Date: 3-Feb-25

811 Know what's below. Call before you dig.

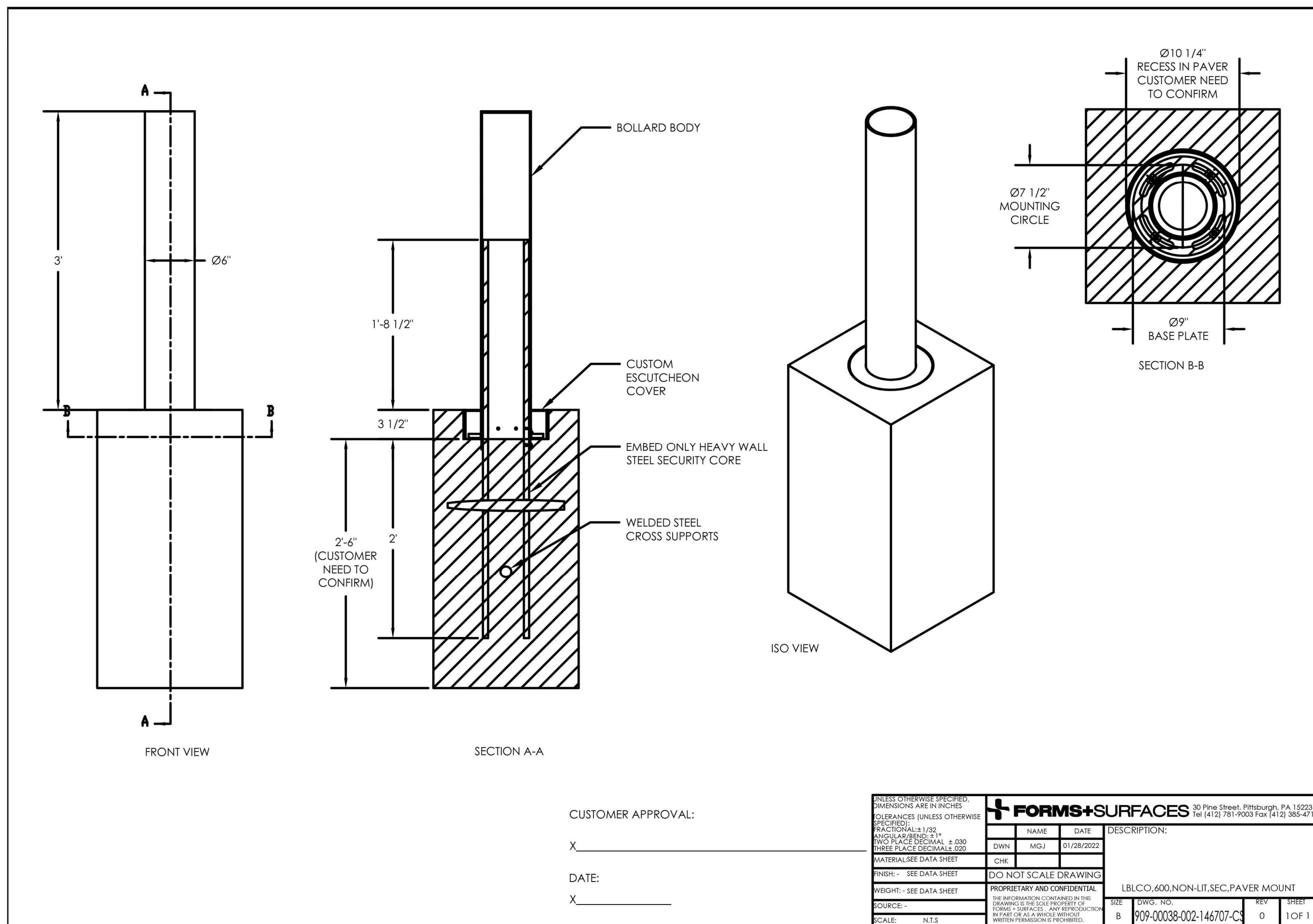
CITY OF ANN ARBOR PUBLIC SERVICES - ENGINEERING STATE STREET IMPROVEMENTS DETAILS

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET P.O. BOX 8647 ANN ARBOR, MI 48107-8647 www.a3gov.org

SCALE PLAN: N.T.S. DRAWING No. 2023-023-6 SHEET No. 6 OF 75

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

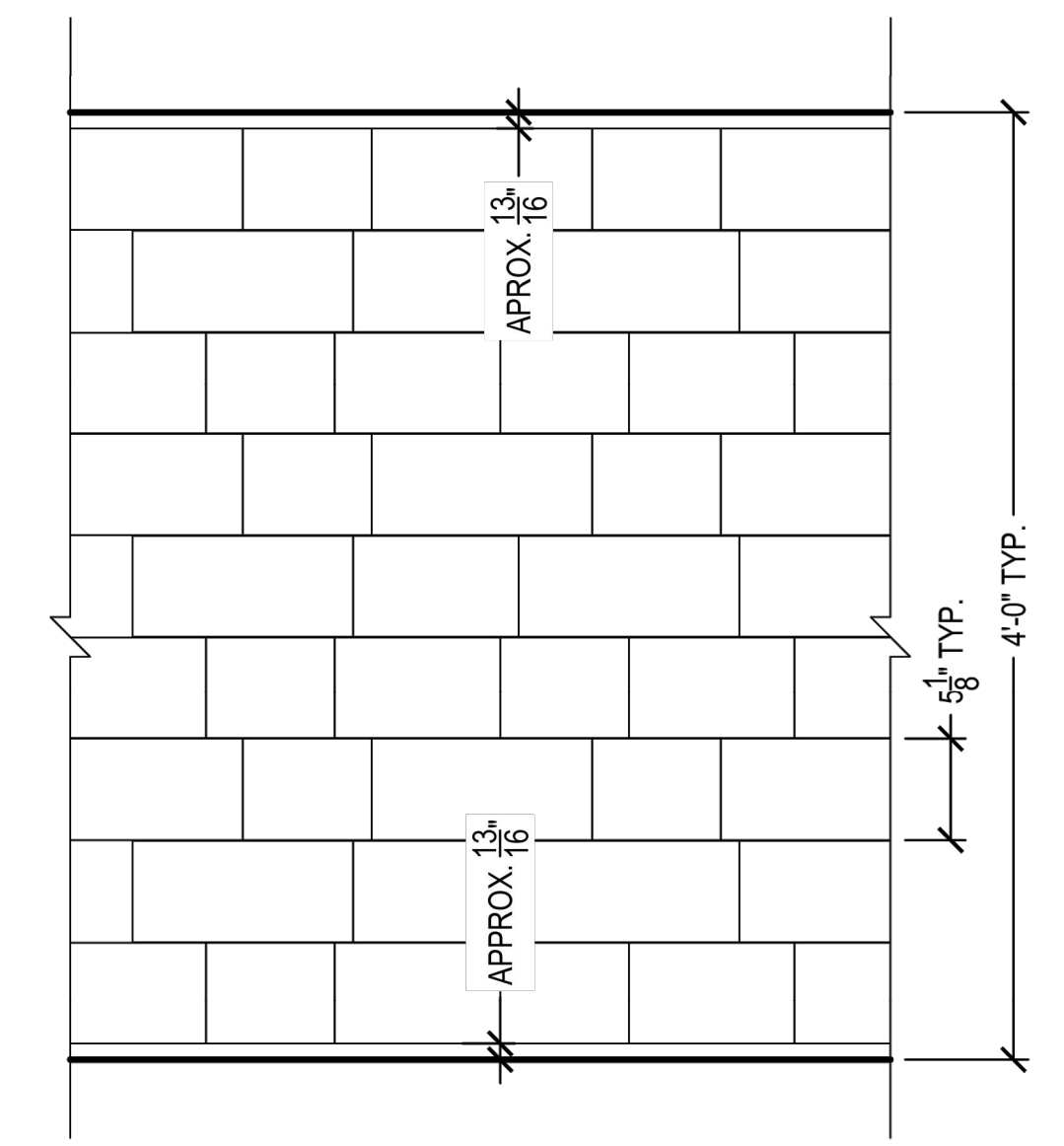
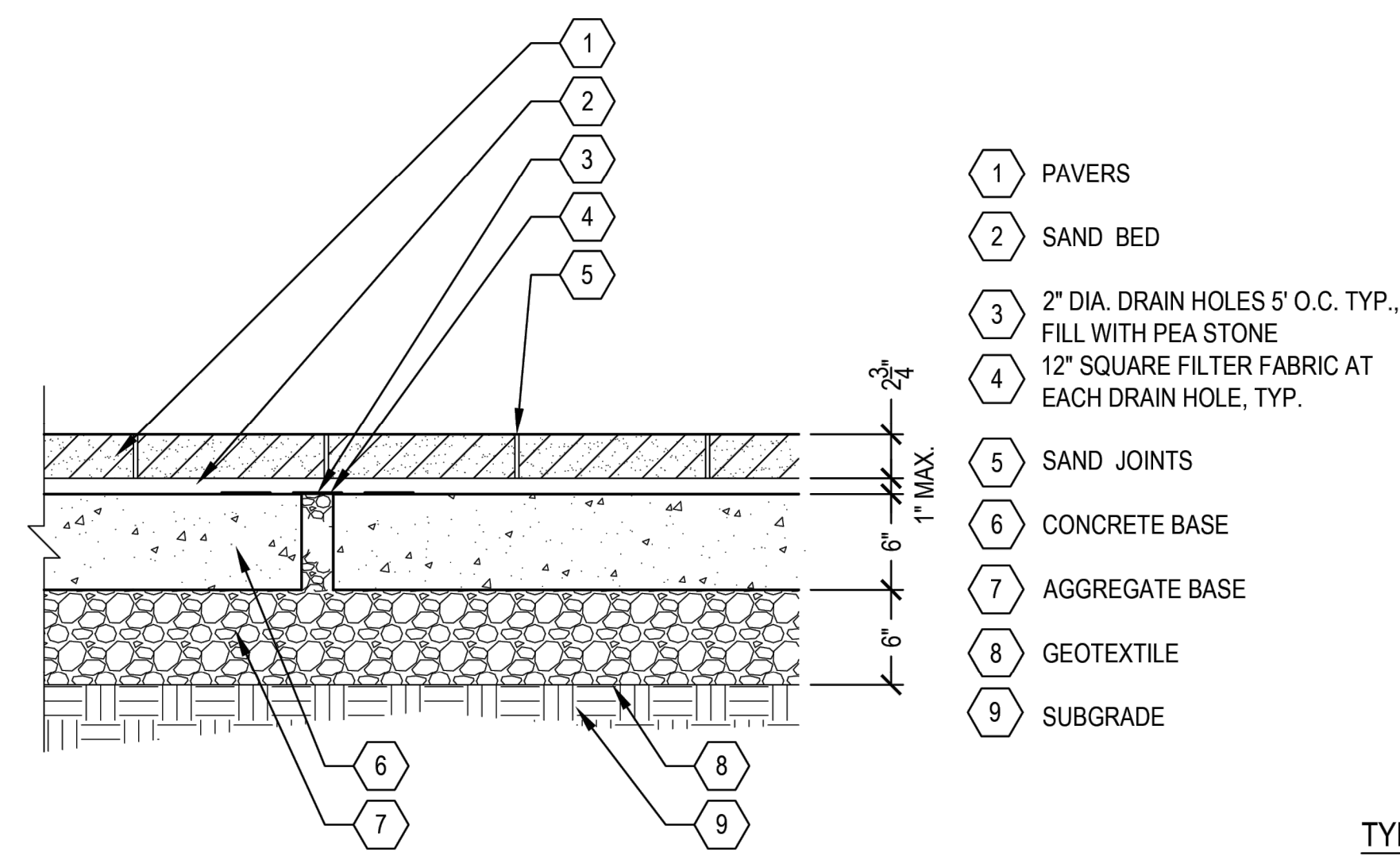
c:\pw_work\wade-trim_fbrown\dl339881\CDT-PLTS-Details.dwg Dwg Created: 31-Jan-25 - _o2_standard bw.sib - Plot Date: 3-Feb-25



NOTE:
1. PRODUCT "HELIO SECURITY BOLLARD" FROM FORMS & SURFACES ADDING CHAIN LOOP ON BOTH SIDES OF BOLLARD

CUSTOMER APPROVAL:
X _____
DATE:
X _____

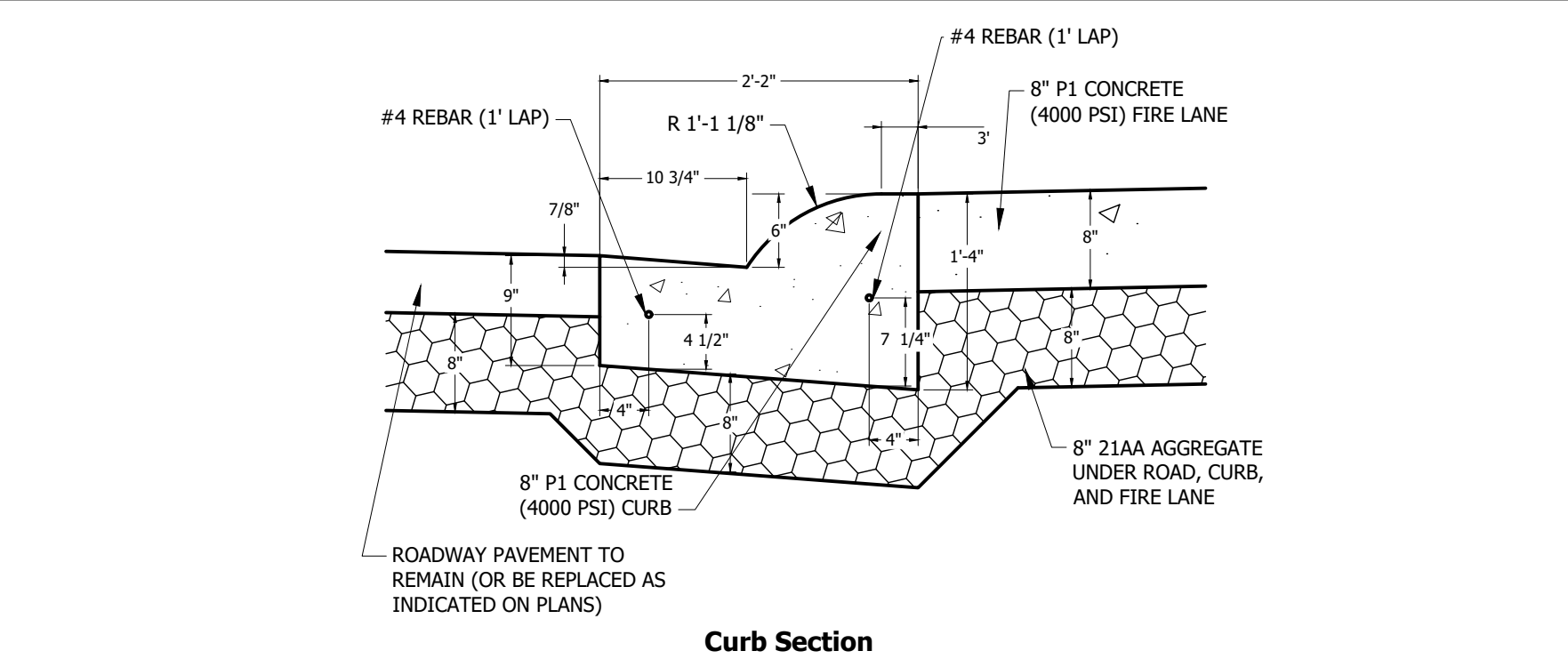
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS OTHERWISE SPECIFIED: FRACTIONS: 1/32 ANGULAR DIMENSIONS: 1/2 DOWEL PLACEMENT: ± 0.00 THREE PLACE DECIMALS: 0.00		FORMS+SURFACES 30 Pine Street, Pittsburgh, PA 15223 Tel (412) 791-9900 Fax (412) 385-4715	
MATERIAL: SEE DATA SHEET	CHK: _____	NAME: _____	DATE: _____
FINISH: SEE DATA SHEET	DO NOT SCALE DRAWING	DWN: MGJ	01/28/2022
WEIGHT: SEE DATA SHEET	PROPRIETARY AND CONFIDENTIAL: THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FORMS+SURFACES. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT WRITTEN PERMISSION IS PROHIBITED.	DESCRIPTION: LBLCO, 600, NON-LIT. SEC. PAVER MOUNT	REV: _____
SOURCE: _____	SCALE: N.T.S.	SIZE: B	909-00038-002-146707-C3 0 1 OF 1



TYPICAL PAVER PATTERN
PAID FOR AS BRICK PAVERS, SIDEWALK, REM AND REINSTALL

6.875" x 5.125" x 2.75"
9" x 5.125" x 2.75"
12" x 5.125" x 2.75"

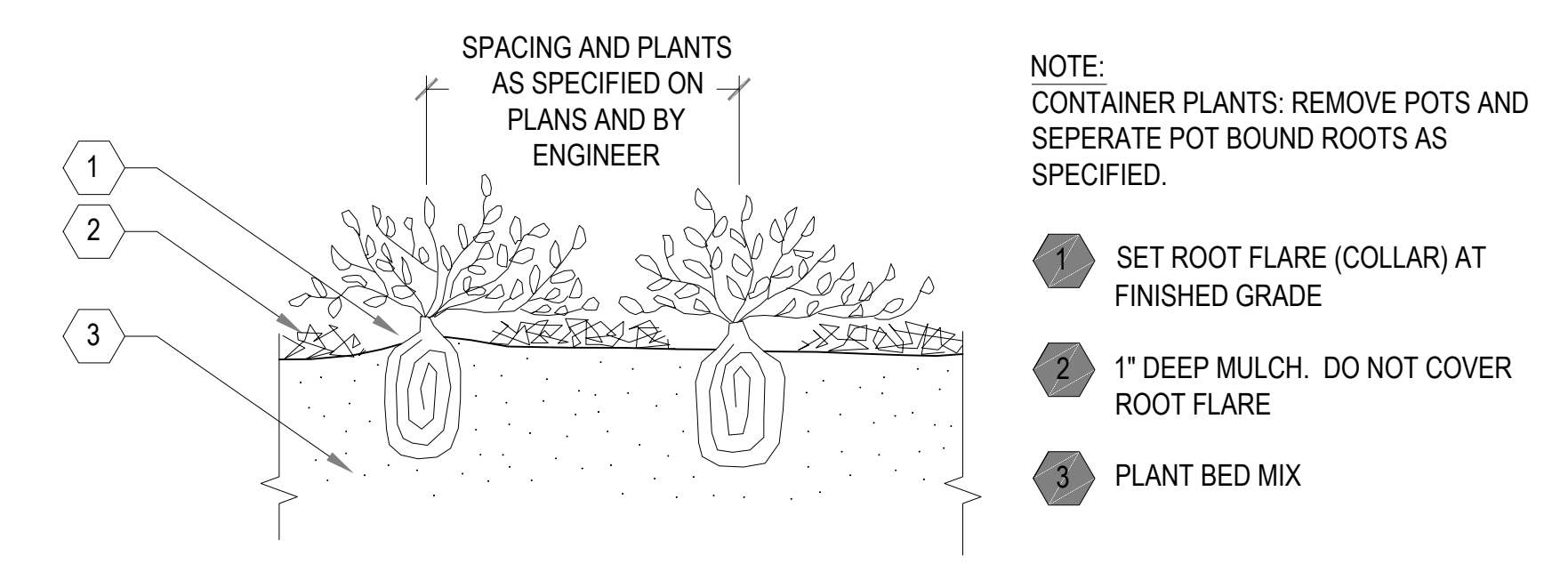
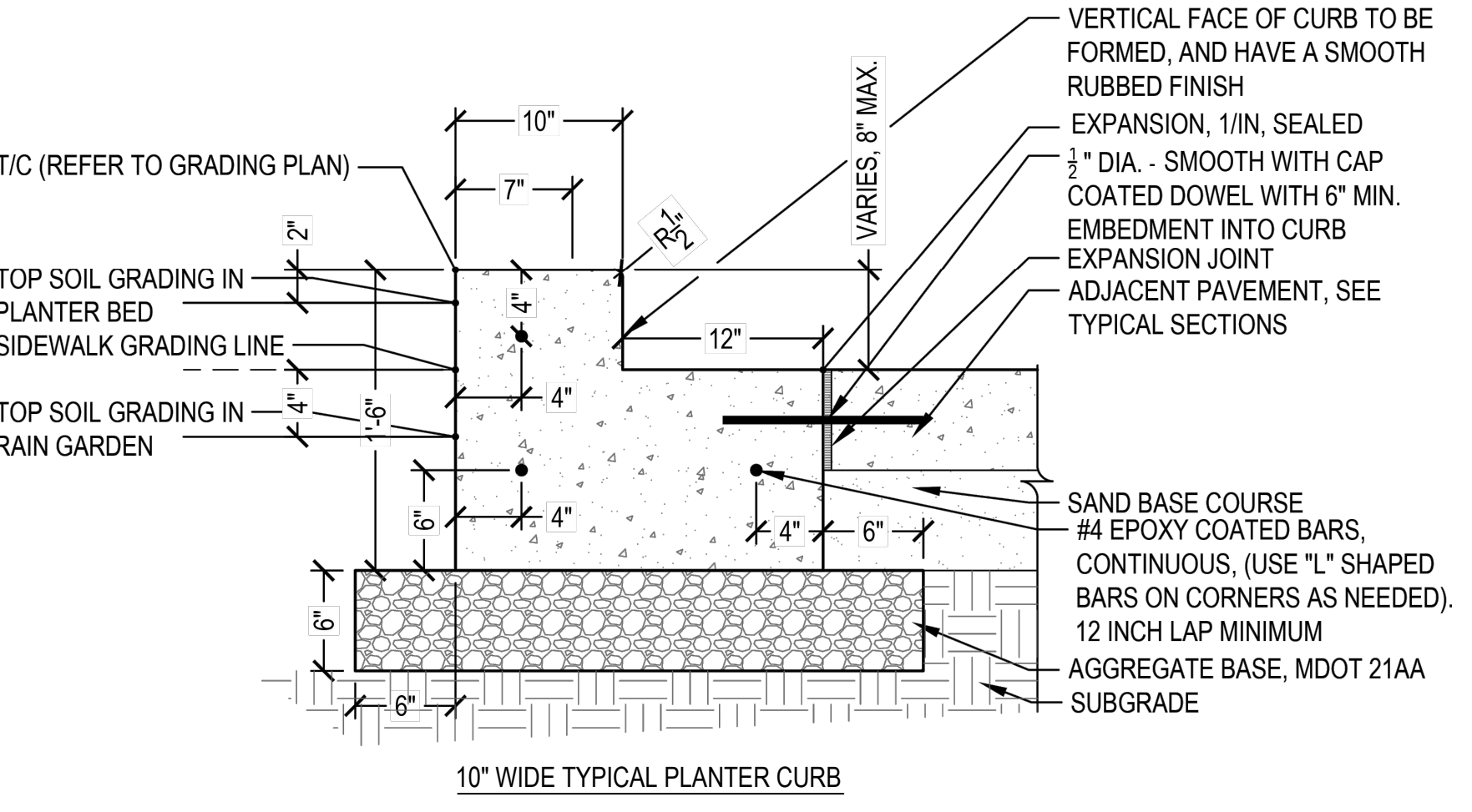
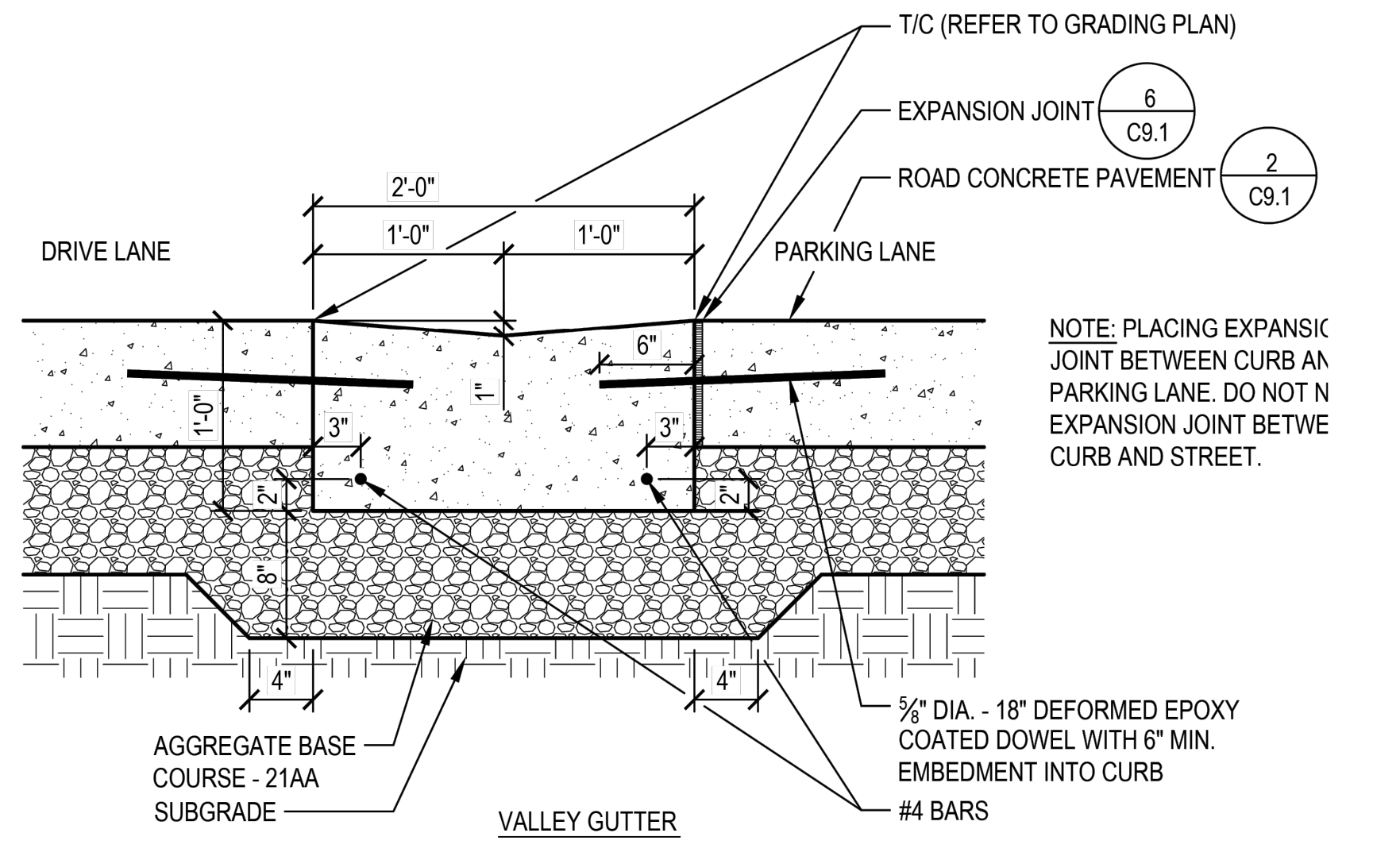
NOTE: TRIBECA COBBLE PAVERS FROM UNILOCK, COBALT GREY COLOR, RANDOM BUNDLE, PATTERN A



NOTES:
1) TO BE USED WITH 18" CONCRETE CURB & GUTTER (NON-STANDARD).
2) REBAR TO BE EPOXY-COATED.
3) DOWEL CURB PATCHES TO ADJACENT CURB
4) PLACE CONTROL JOINTS EVERY 10 FEET

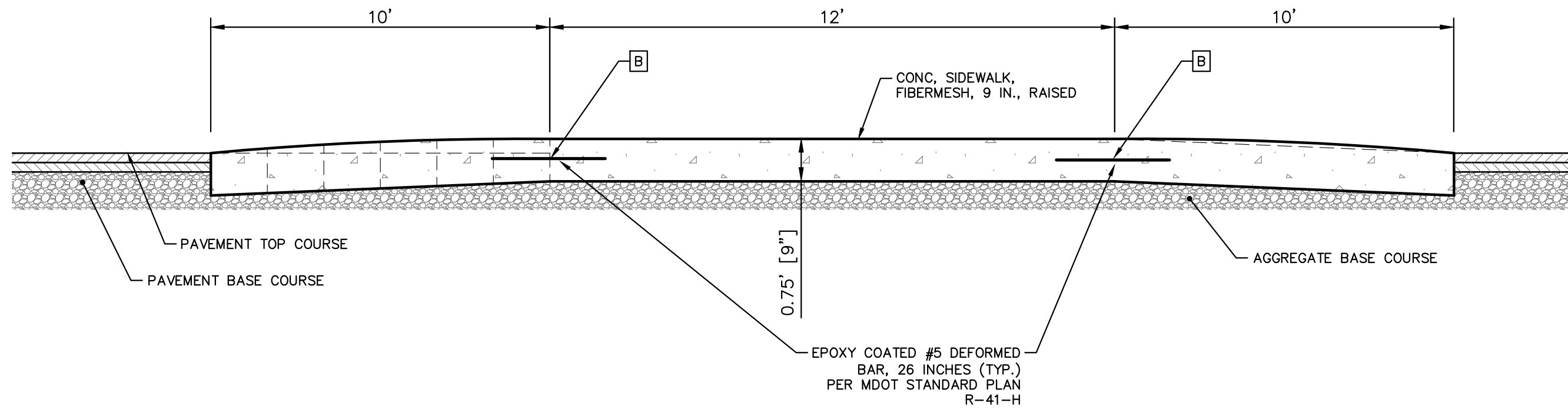
26" CONCRETE CURB & GUTTER - FIRE TRUCK ACCESS

NO SCALE MD 321313 004 26" Concrete Curb & Gutter - Fire Truck Access
Last Updated 9/12/23



ORNAMENTAL PLANTING BED DETAIL
SCALE: N.T.S.
PAID FOR AS DS_PLANTING SOIL AND MULCH

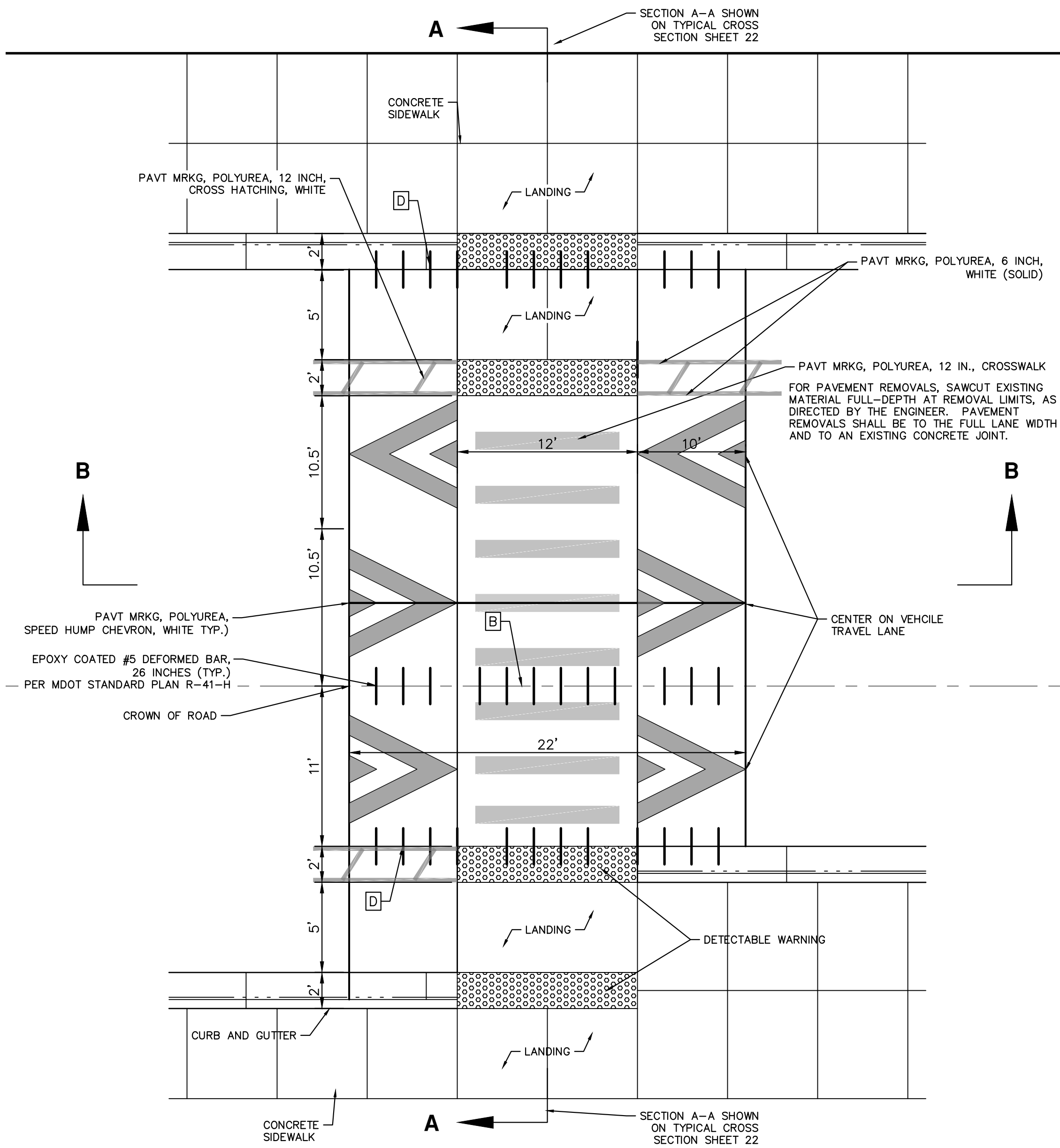
c:\pwwork\wade--trim_fbrown\dl1339881\CDT-PLTS-Details.dwg Dwg Created: 31-Jan-25 - _o2_standard bw.sib - Plot Date: 3-Feb-25



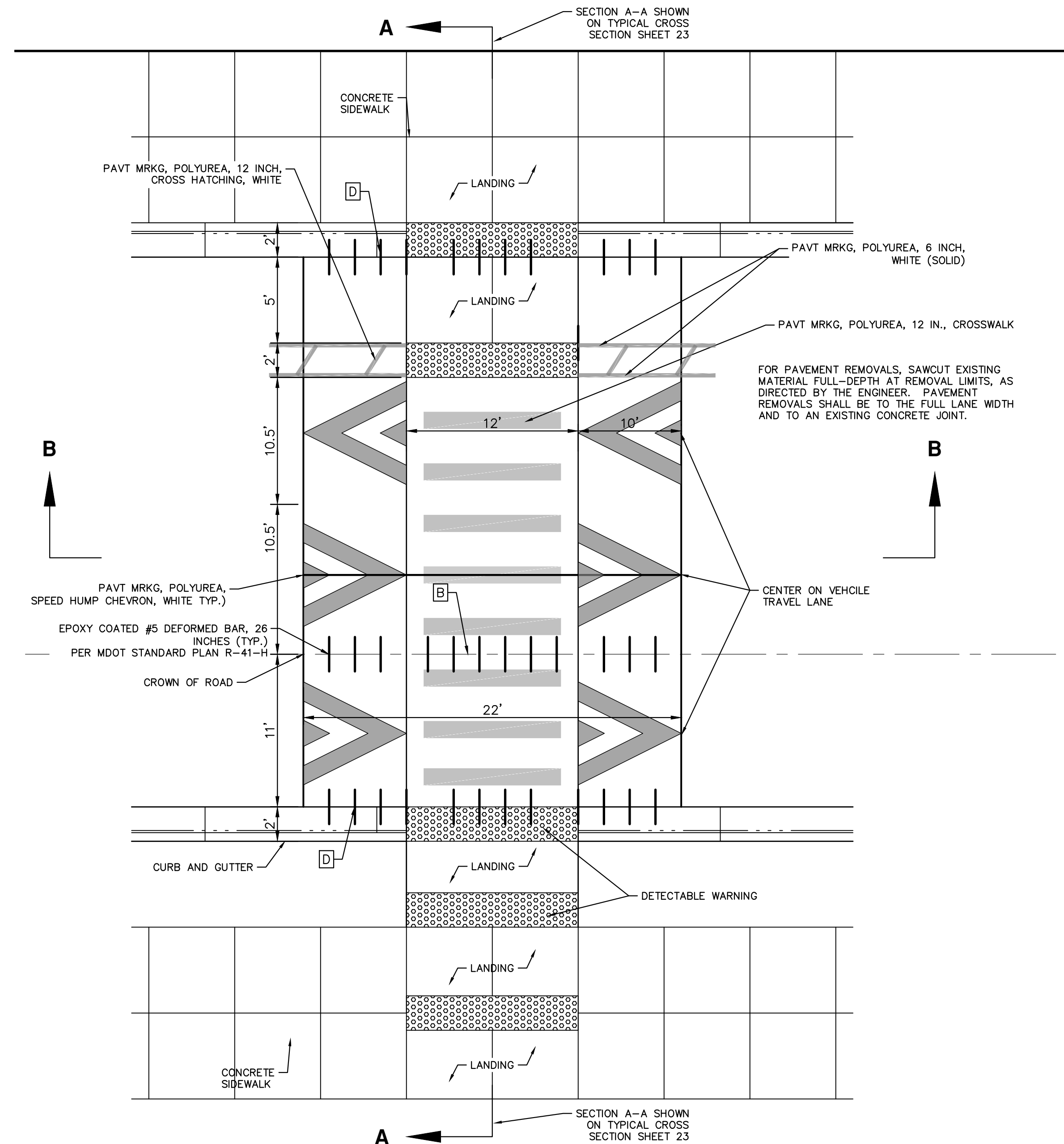
SECTION B-B
NOT TO SCALE

RAISED CONCRETE CONCRETE JOINT LEGEND:

- B - LONGITUDINAL BULKHEAD JOINT, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (B)
- D - LONGITUDINAL LANE TIE JOINT WITH TIE BARS, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (D)



STATE ST SOUTH RAISED CROSSWALK PLAN VIEW - STA 103+65
NOT TO SCALE



STATE ST NORTH RAISED CROSSWALK PLAN VIEW - STA 107+19
NOT TO SCALE



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-0647
www.a3gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
DETAILS

SCALE PLAN: N.T.S.
DRAWING No. 2023-023-8

c:\pw_work\wade-trim_rbrown\01.339881\01-PLTS-Details 2.dwg Dwg Created: 3-Feb-25 - _a2 standard bw.stb - Plot Date: 3-Feb-25



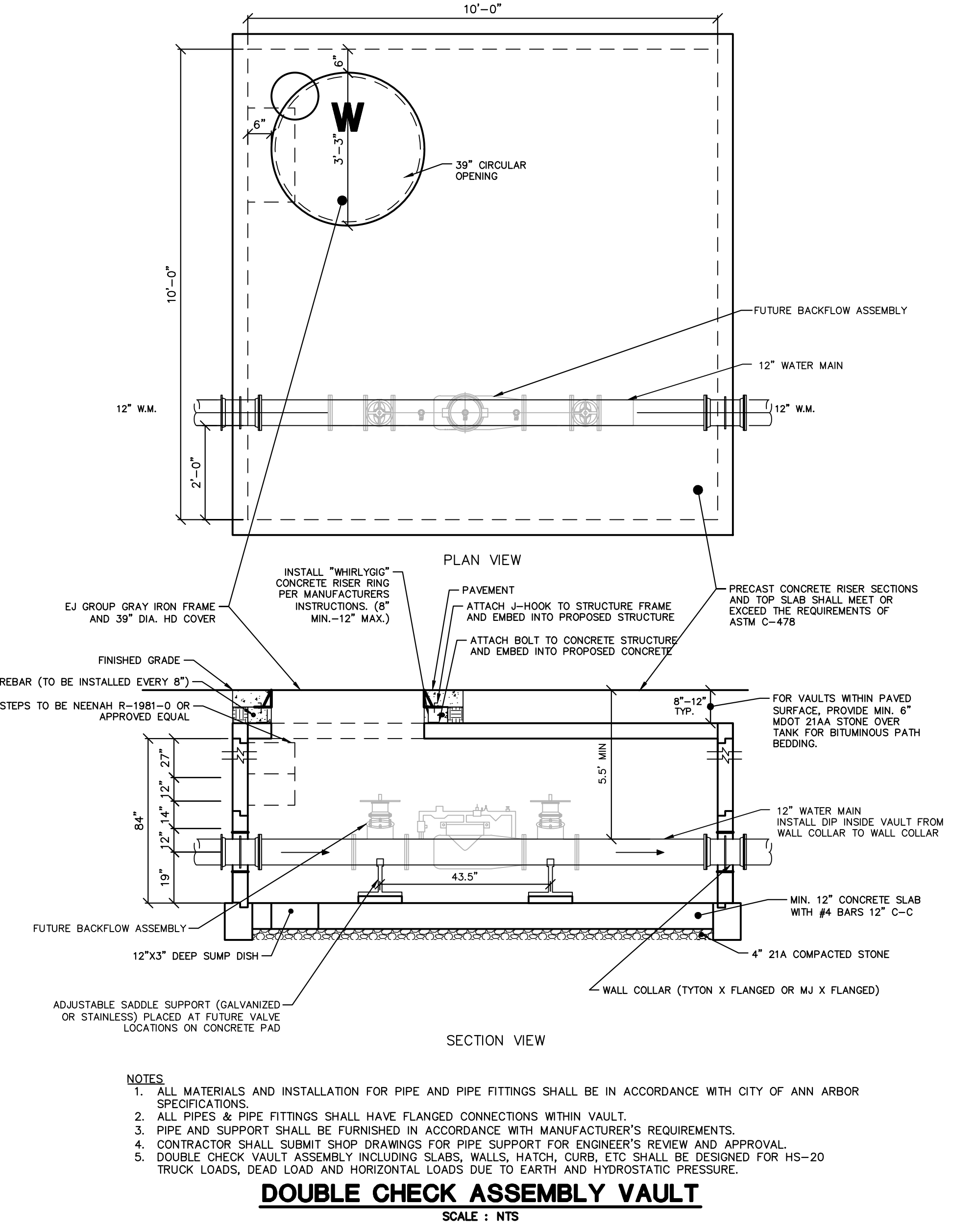
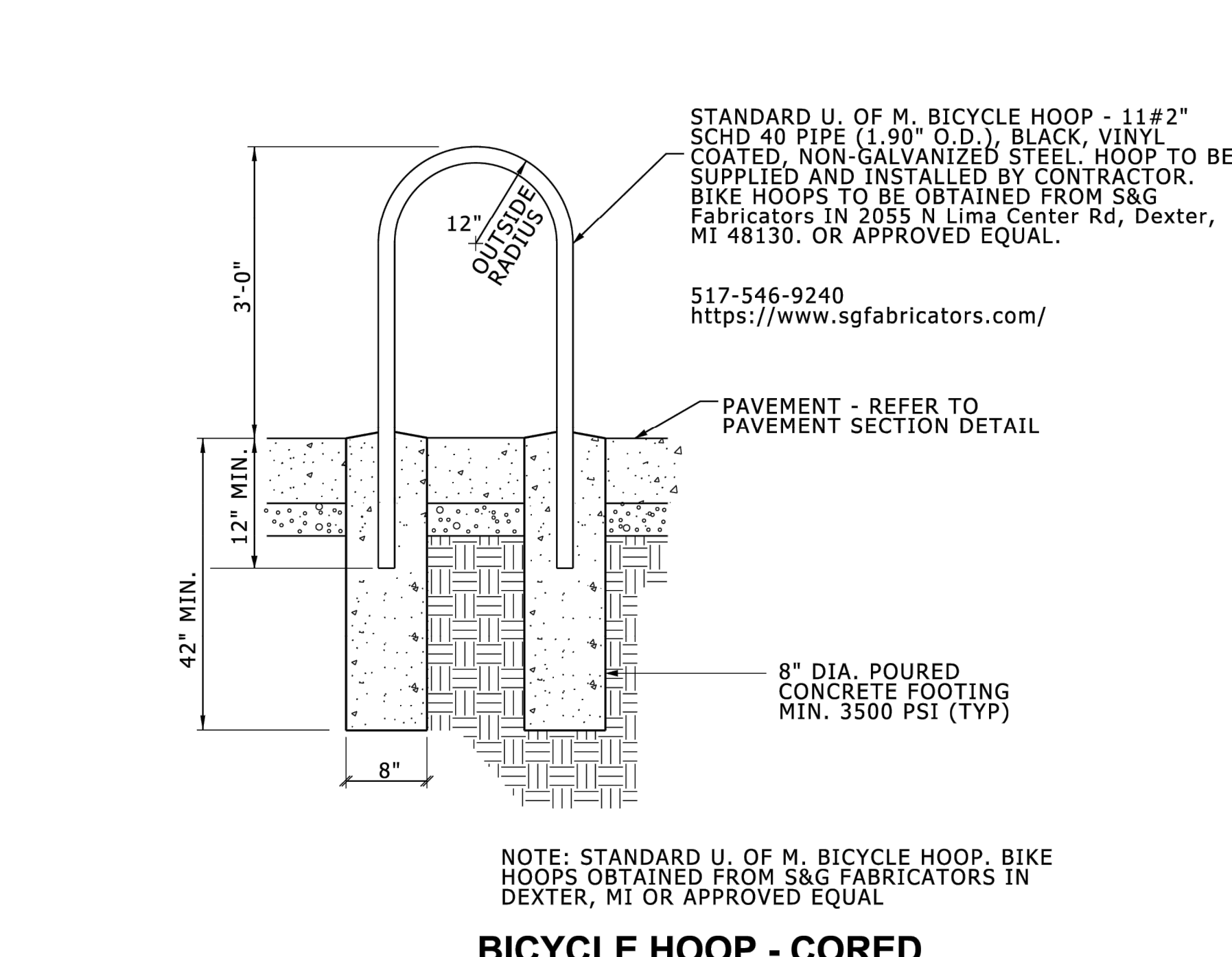
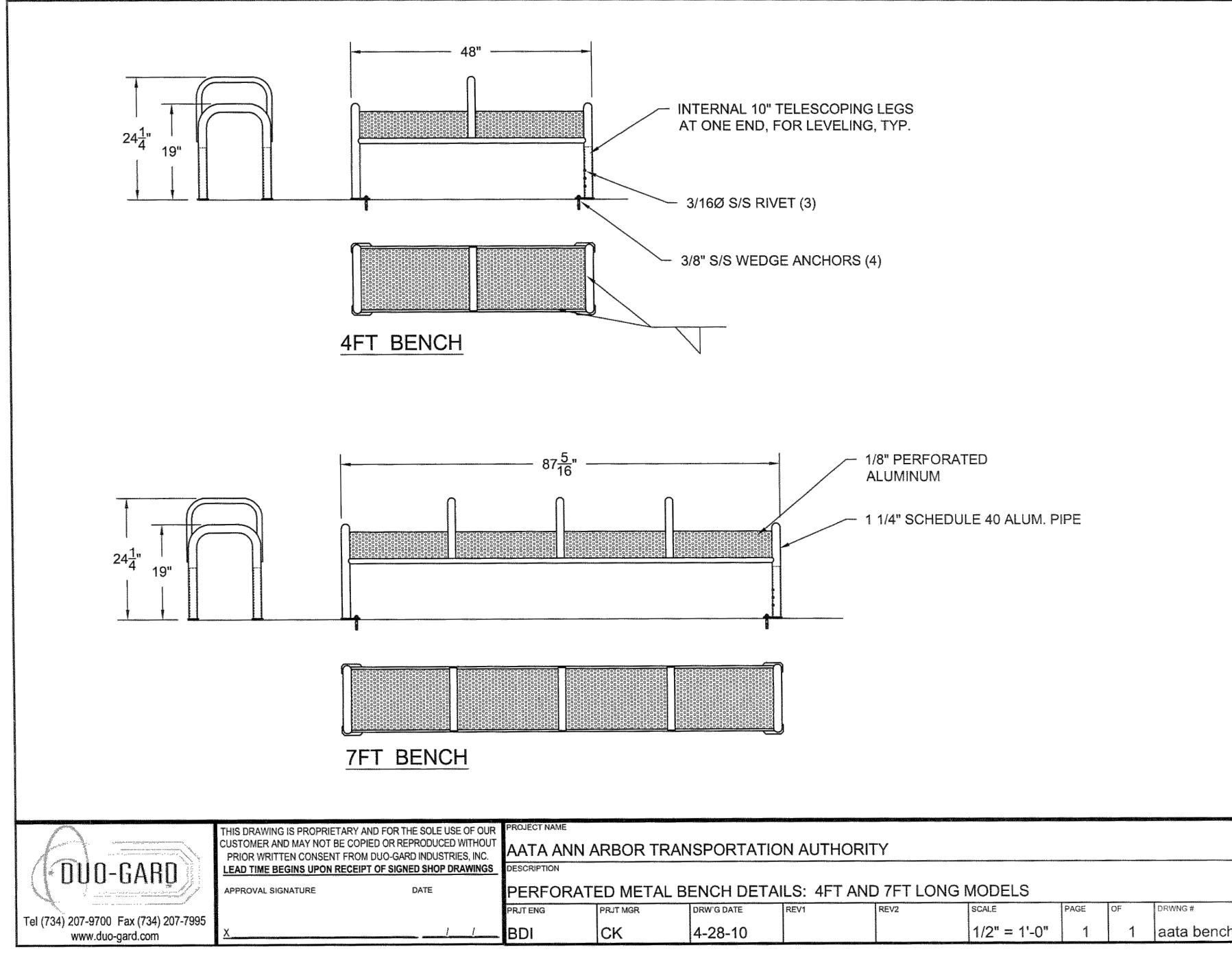
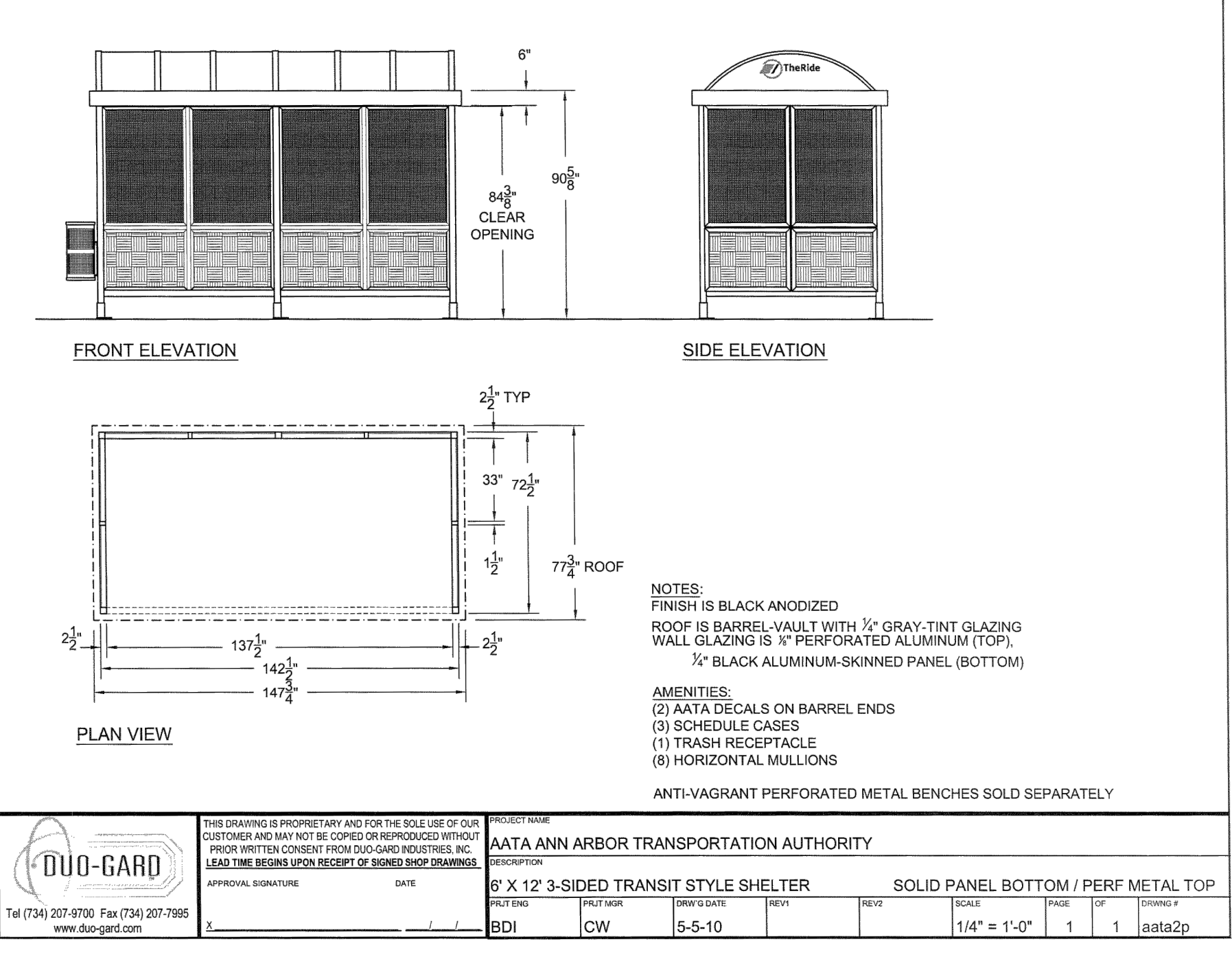
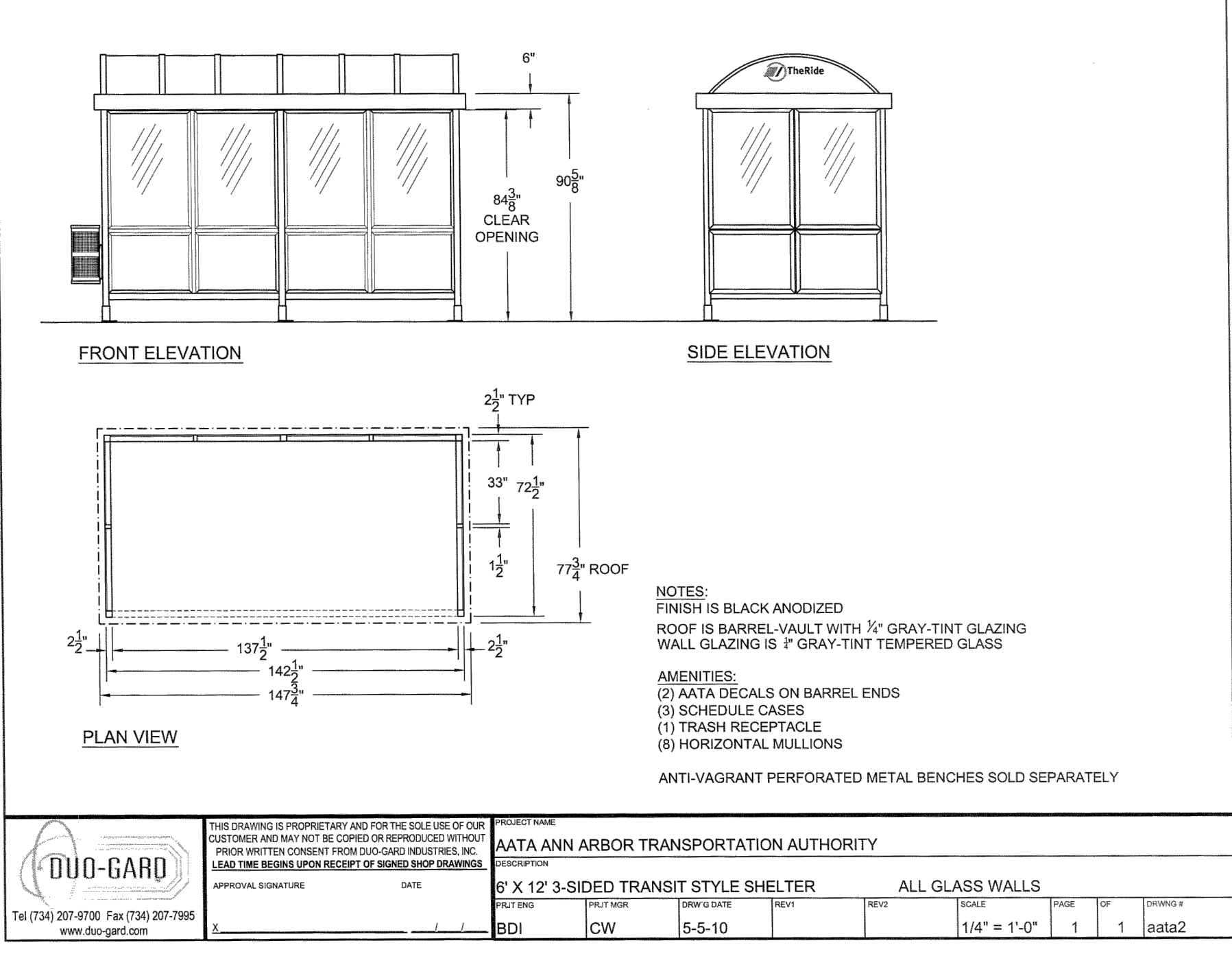
REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a2gov.org



STATE STREET IMPROVEMENTS
DETAILS

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
SCALE PLAN: N.T.S.
DRAWING No. 2023-023-9
SHEET No. 9 OF 75



MATERIALS FOR BUS SHELTER AND FENCE TO BE PROVIDED BY AAATA TO THE CONTRACTOR, REFER TO SPECIAL PROVISIONS FOR MORE DETAILS

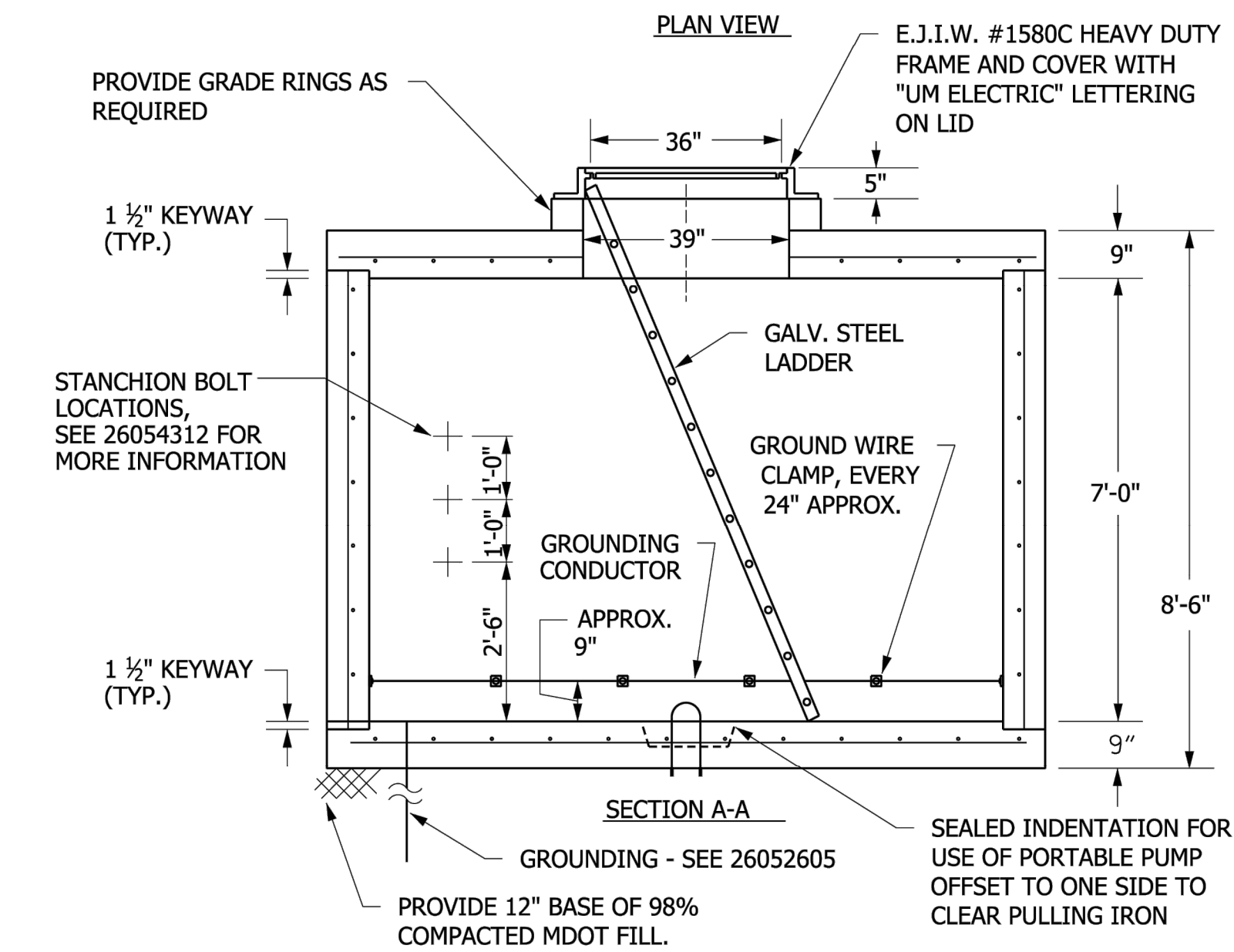
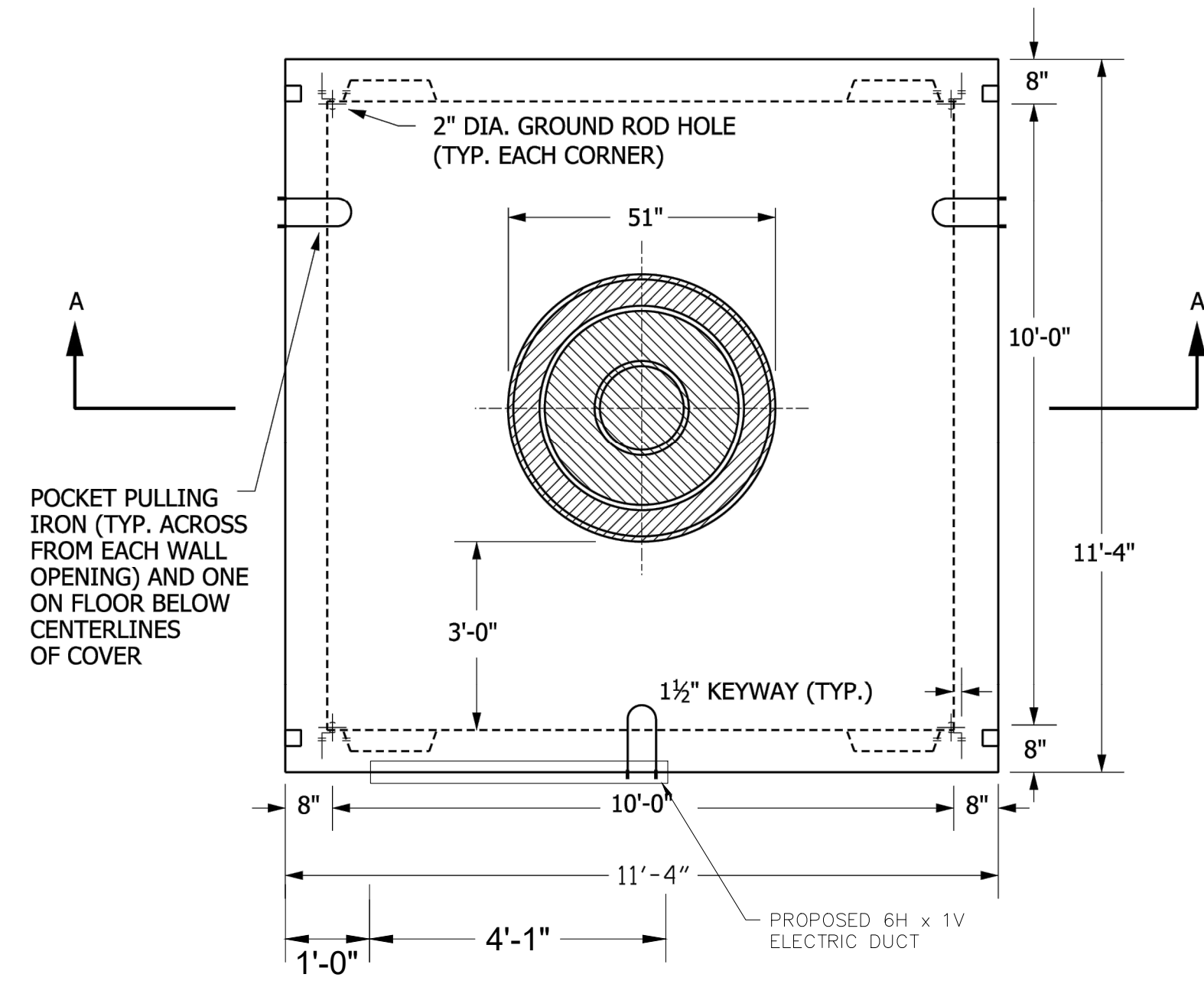
NOTE: STANDARD U. OF M. BICYCLE HOOP. BIKE HOOPS OBTAINED FROM S&G FABRICATORS IN DEXTER, MI OR APPROVED EQUAL

BICYCLE HOOP - CORED
NO SCALE

- NOTES
1. ALL MATERIALS AND INSTALLATION FOR PIPE AND PIPE FITTINGS SHALL BE IN ACCORDANCE WITH CITY OF ANN ARBOR SPECIFICATIONS.
 2. ALL PIPES & PIPE FITTINGS SHALL HAVE FLANGED CONNECTIONS WITHIN VAULT.
 3. PIPE AND SUPPORT SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.
 4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR PIPE SUPPORT FOR ENGINEER'S REVIEW AND APPROVAL.
 5. DOUBLE CHECK VAULT ASSEMBLY INCLUDING SLABS, WALLS, HATCH, CURB, ETC SHALL BE DESIGNED FOR HS-20 TRUCK LOADS, DEAD LOAD AND HORIZONTAL LOADS DUE TO EARTH AND HYDROSTATIC PRESSURE.

DOUBLE CHECK ASSEMBLY VAULT
SCALE: N.T.S.

c:\pw_work\wade-trim_fbrown\dl339881\CDT-PLTS-Details.dwg Dwg Created: 31-Jan-25 - _o2_standard bw.sib - Plot Date: 3-Feb-25



- GENERAL NOTES:**
1. INSTALL ONE PULLING IRON IN EACH WALL OPPOSITE EACH PRESENT & FUTURE DUCT RUN OUT OF MANHOLE, ALSO ON FLOOR CENTERED UNDER COVER.
 2. SEE DUCT PLAN DRAWING SHOWING PLANNED & FUTURE DUCT ENTRANCES. ON CURRENTLY PLANNED DUCTS, PROVIDE OPENING SIZED & CONSTRUCTED AS NOTED IN DETAIL 26054311.

CONCRETE: 5000 P.S.I. @ 28 DAYS

REINF: H-20 HIGHWAY LOADING
GRADE 60 REBAR
SPREAD BARS @ ALL OPENINGS

WALLS: #5 BAR @ 12" O.C. EACH WAY

ROOF AND FLOOR:
#5 BAR @ 12" O.C. LONGITUDINAL
#7 BAR @ 12" O.C. TRANSVERSE

(4) EXTRA #5 DIAGONAL BARS @
ROOF OPENING

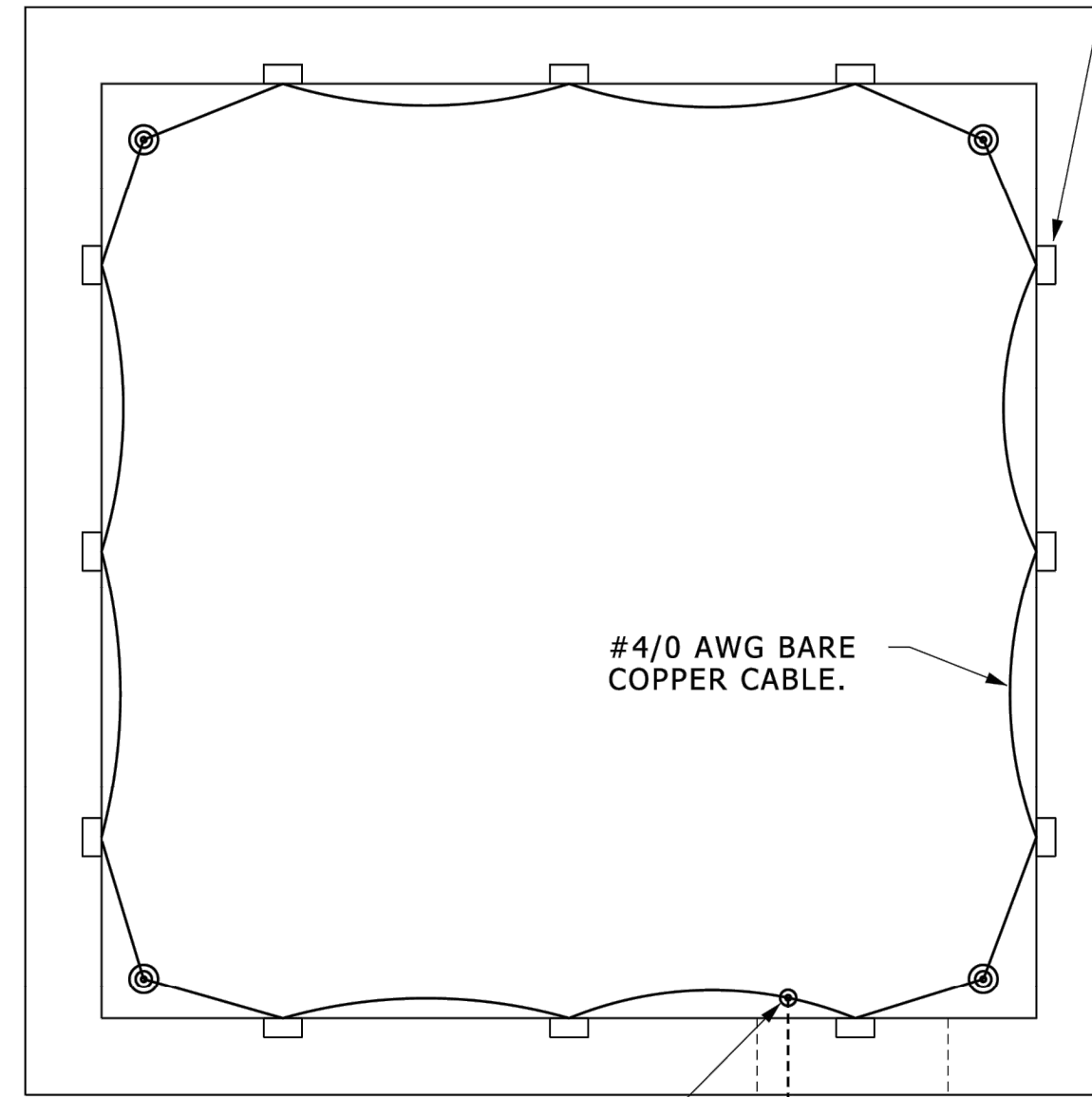
PROVIDE GALVANIZED STEEL
LADDER. (CONFIRM LENGTH)

10' x 10' x 7' PRE-CAST POWER MANHOLE

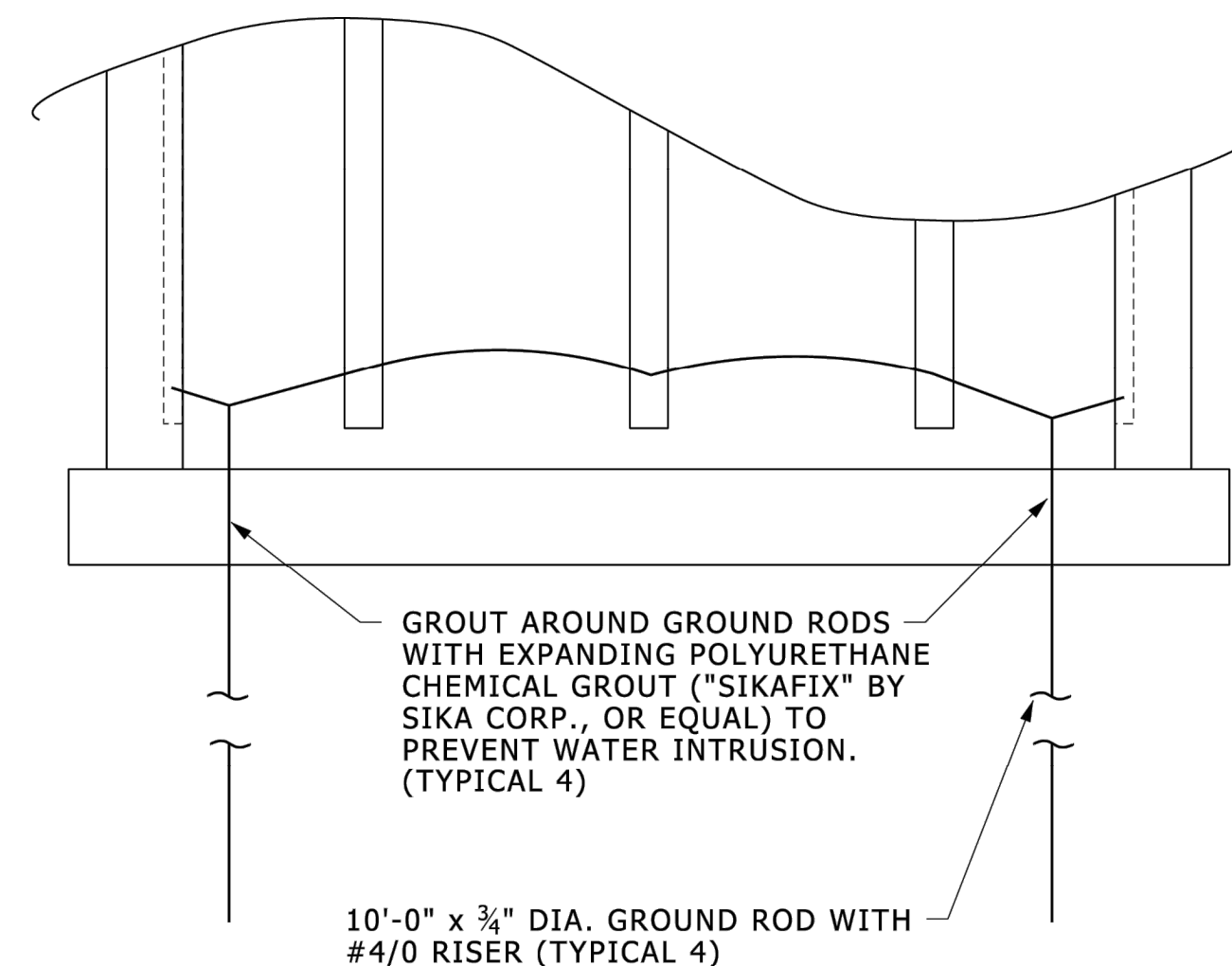
NO SCALE

26054304.dgn

CONNECT GROUND CABLE TO EACH INSERT WITH SPRING NUT AND BURNDY GB CLAMP. CONNECT RACK ARMS, NOT ATTACHED TO INSERTS, TO GROUND IN THE SAME MANNER AS INSERTS.



CONNECT TO GROUND CABLE FROM ALL DUCT RUNS.



MANHOLE GROUNDING

NO SCALE

26052604.dgn



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

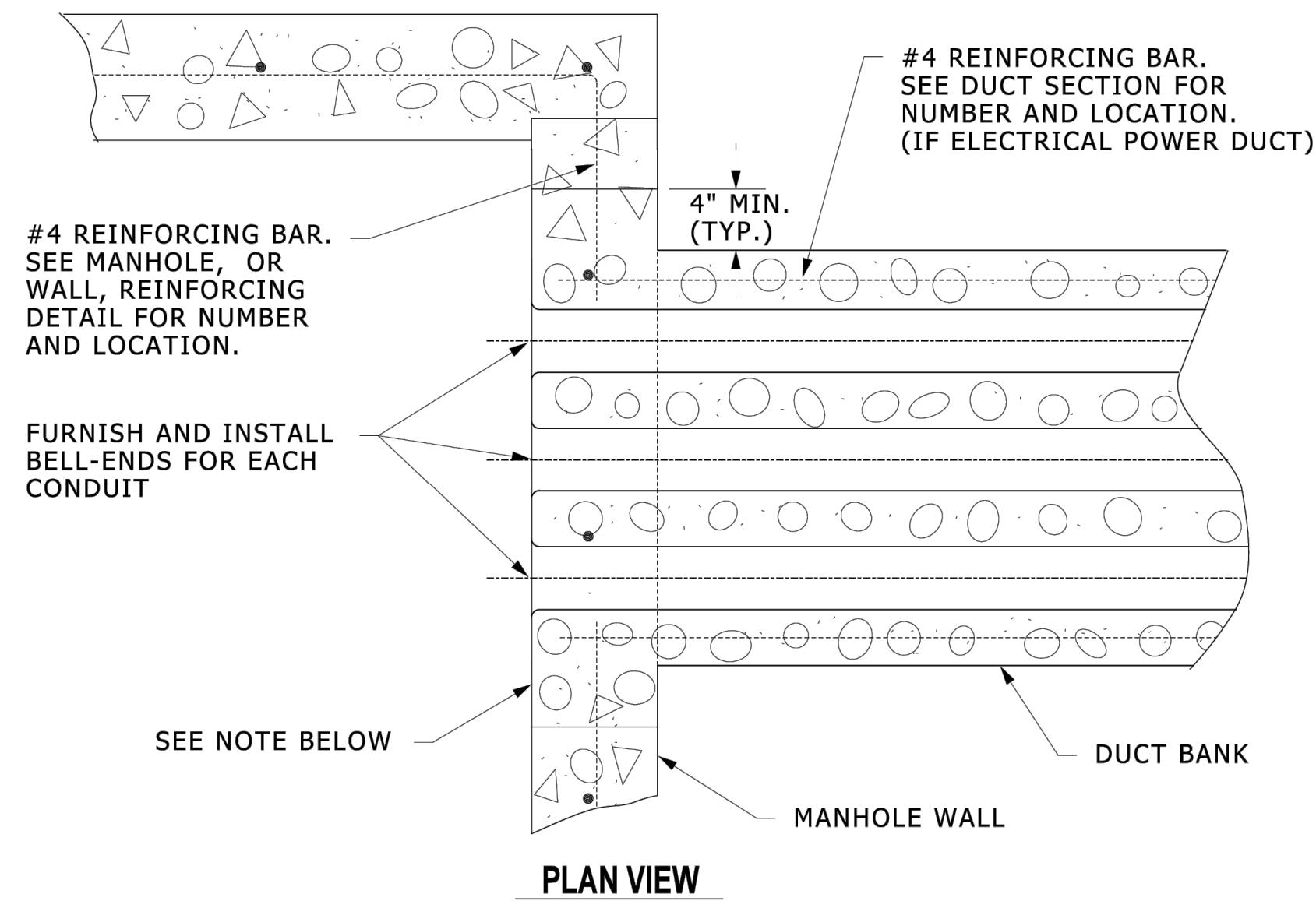
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
DETAILS

SCALE PLAN: N.T.S.
DRAWING No. 2023-023-10

c:\pwork\wade-trim_fbrown\dl1339881\CDT-PLTS-Details.dwg Dwg Created: 31-Jan-25 - _o2_standard bw.sib - Plot Date: 3-Feb-25



NOTE:

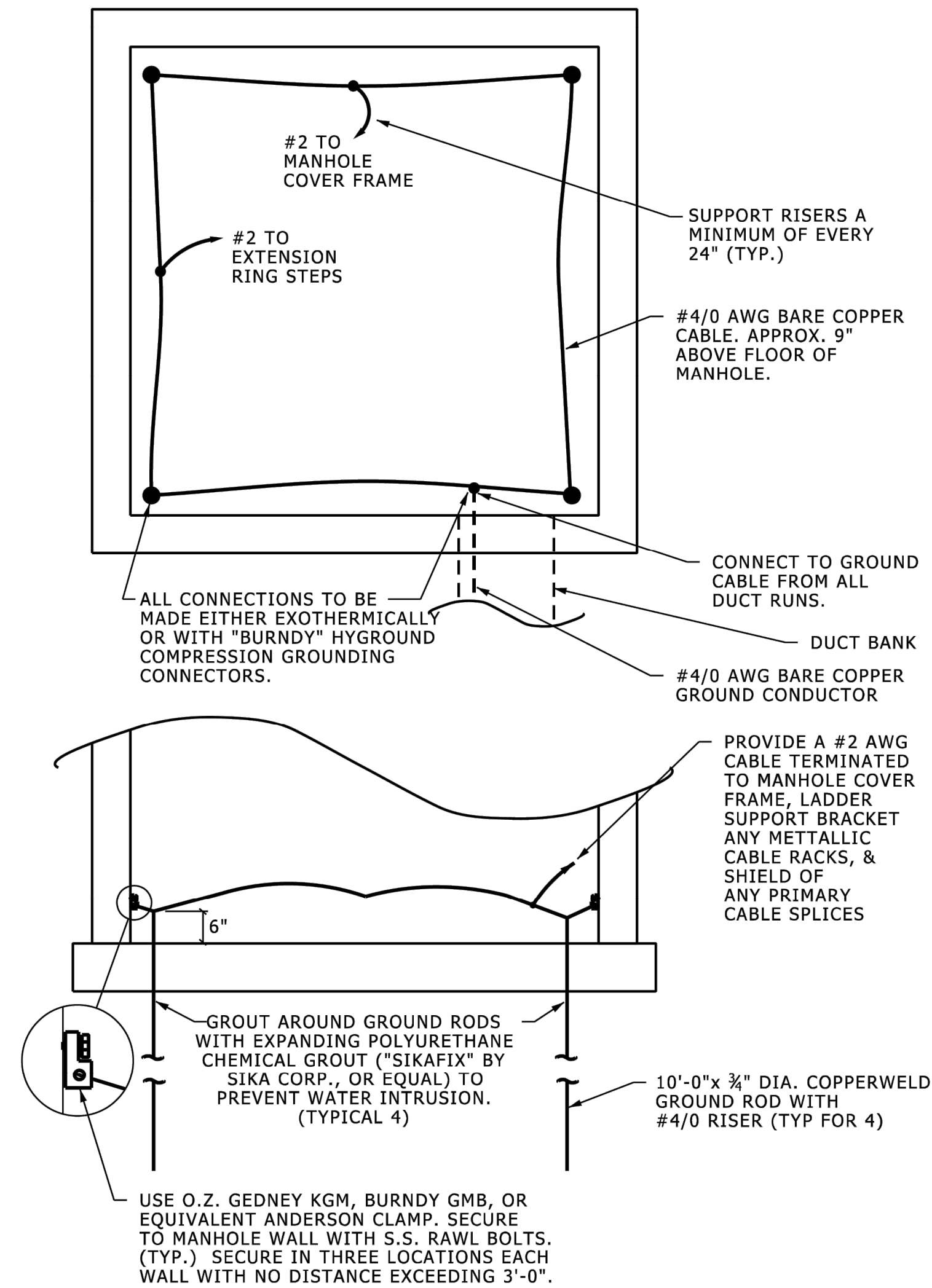
DUCTS ENTERING MANHOLES/VAULTS SHALL BE CONSTRUCTED AS INTEGRAL PARTS OF THE WALL: LEAVE AN OVERSIZED (ABOUT 4" ALL AROUND) OPENING INTO WALL TO RECEIVE DUCT. PROJECT WALL REINFORCING INTO/THROUGH THE DUCTS CROSS SECTION WITHOUT TOUCHING THE CONDUIT'S SURFACES.

SEE ALSO "POWER MANHOLE BELL END INSTALLATION" DETAIL.

DUCT REINFORCING AT MANHOLES, VAULTS, BUILDINGS

NO SCALE

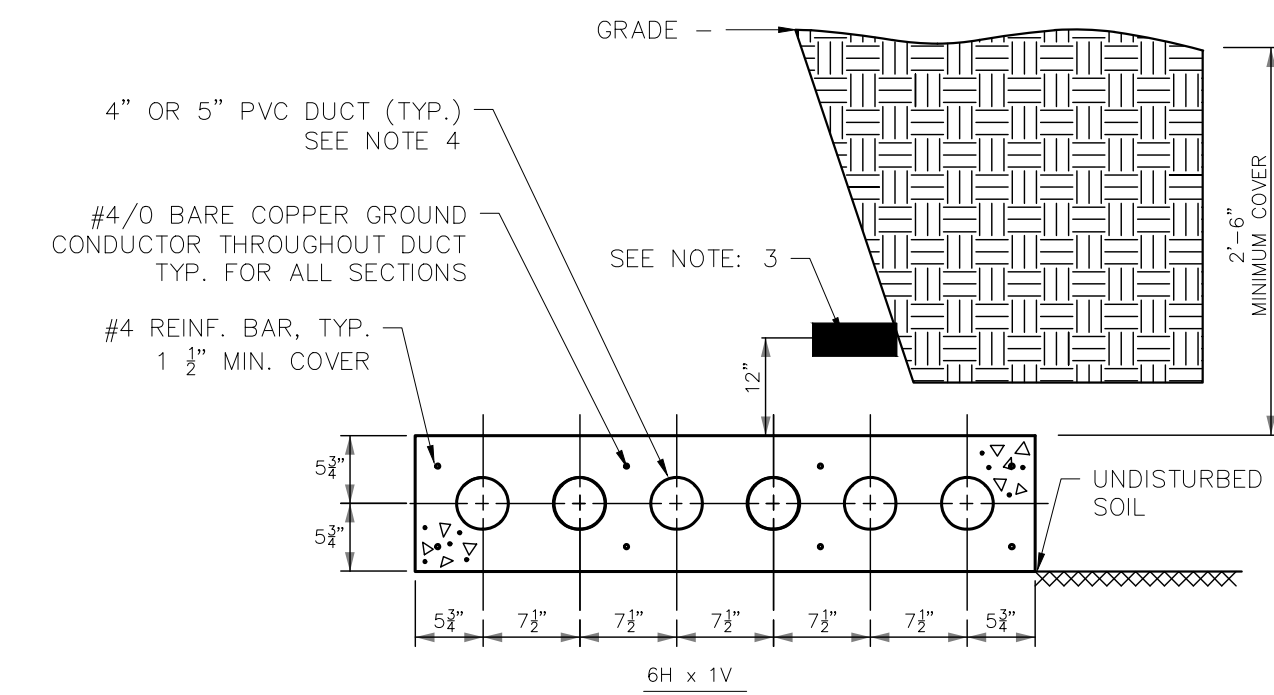
26054311.dgn



POWER MANHOLE GROUNDING WITH NON-METALLIC RACKS

NO SCALE

26052605.dgn



NOTES:

1. H - NUMBER OF DUCTS IN HORIZONTAL PLANE.
V - NUMBER OF DUCTS IN VERTICAL PLANE.
2. IF 2'-6" MINIMUM COVER CAN NOT BE MAINTAINED, 2" OF ADDITIONAL CONCRETE COVER MUST BE ADDED TO THE DUCT BANK WHEN COVER IS BETWEEN 2'-0" AND 2'-5" AND 4" OF CONCRETE WHEN BETWEEN 1'-6" AND 1'-11". CONSULT UoFM HIGH VOLTAGE BEFORE INSTALLING WHERE LESS THAN 1'-5" OF COVER WOULD BE PRESENT.
3. DUCT BANKS SHALL BE MARKED WITH A 6" WIDE RED PLASTIC MARKER STRIP LABELED TO INDICATE "HIGH VOLTAGE" AND PLACED IN THE BACKFILL APPROXIMATELY 12" ABOVE THE ENTIRE LENGTH OF THE DUCT BANK.
4. DUCTS ARE TYPICALLY 4". SEE PROJECT DOCUMENTS FOR ANY SPECIAL REQUIREMENTS.
5. ALL POWER DUCT BANKS HAVE #4/0 BARE COPPER GROUND CABLE, AND #4 REINFORCING BAR.
6. USE DUCT SPACERS TO HOLD DUCTS IN PLACE. NOTED SPACINGS ARE MINIMUMS. USE PRODUCTS FROM CARLON, CANTEX, OR STERLING. (TIE TOGETHER USING NON-FERROUS WIRE).
7. NO DEVIATIONS FROM THIS DESIGN DETAIL CAN BE MADE WITHOUT PRIOR WRITTEN APPROVAL FROM ONE OF THE UTILITIES AND PLANT ENGINEERING ELECTRICAL ENGINEERS.

UNDERGROUND POWER DUCT SECTIONS

NO SCALE

26054301.dgn



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48107-8647
www.a3gov.org



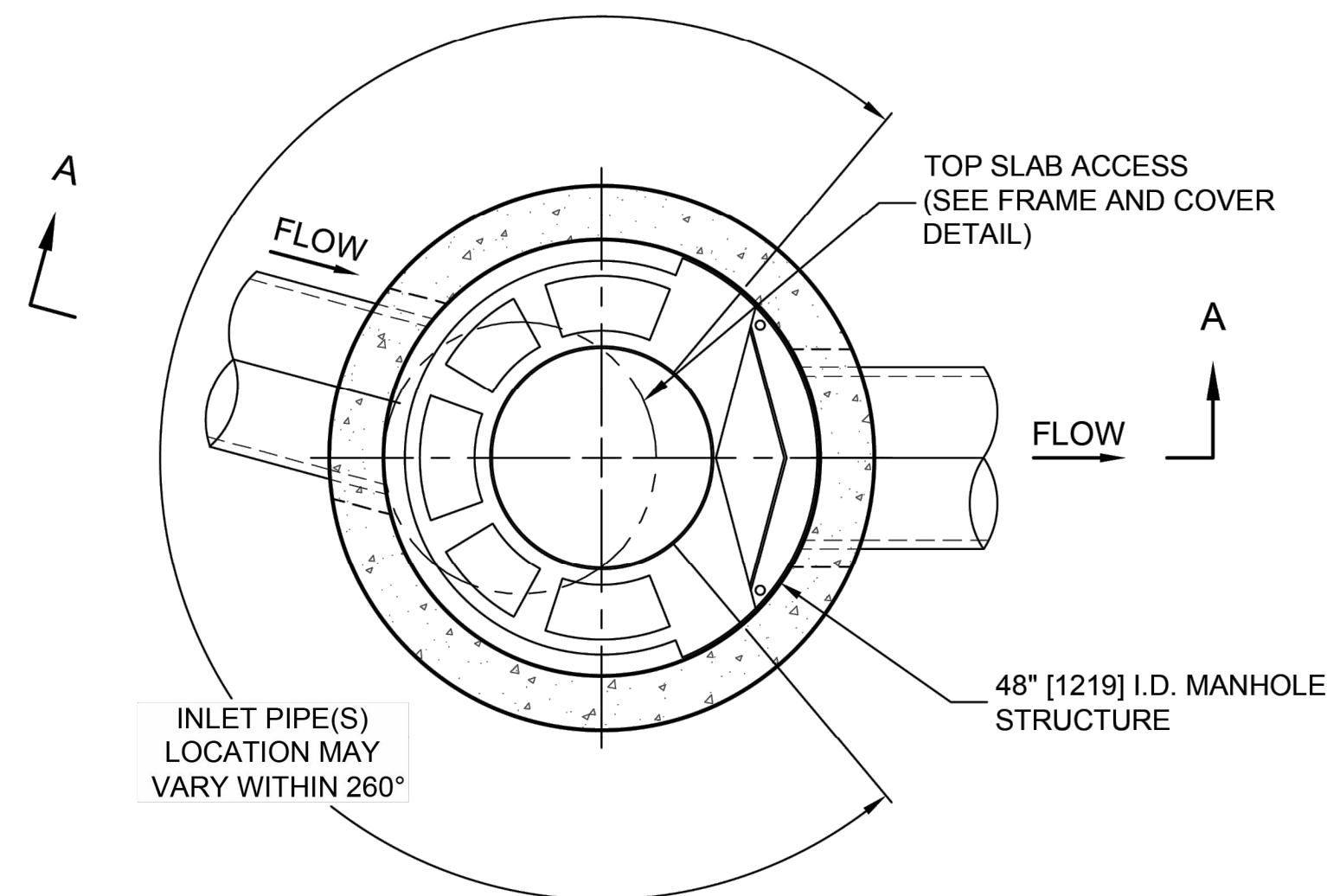
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
DETAILS

SCALE PLAN: N.T.S.
DRAWING No. 2023-023-11

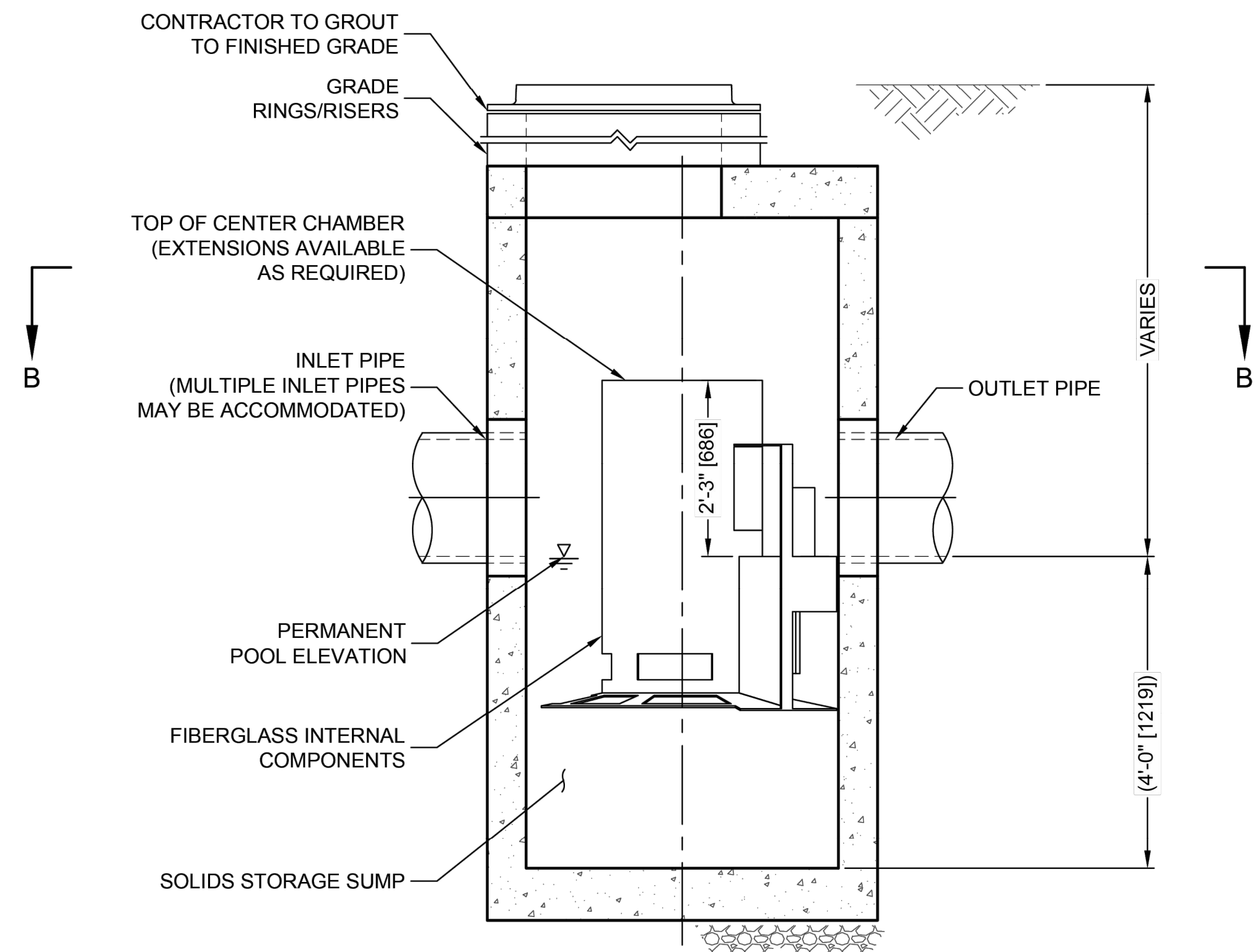
SHEET No.

c:\pwork\wade--trim_rbrown\01339881\CDT--PLTS--Details 2.dwg Dwg Created: 3--Feb--25 --_a2 standard bw.stb -- Plot Date: 3--Feb--25

I:\COMMON\CAD\TREATMENT\21 CASCADE\40 STANDARD DRAWINGS\DWG\CS-4-DTL.DWG 1/22/2019 9:34 AM



PLAN VIEW B-B
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

CASCADE
separator™

CASCADE SEPARATOR DESIGN NOTES

THE STANDARD CS-4 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

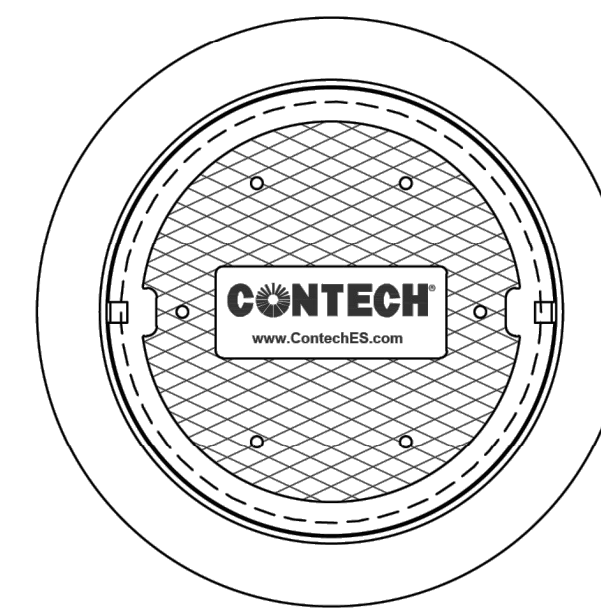
CONFIGURATION DESCRIPTION

- GRATED INLET ONLY (NO INLET PIPE)
- GRATED INLET WITH INLET PIPE OR PIPES
- CURB INLET ONLY (NO INLET PIPE)
- CURB INLET WITH INLET PIPE OR PIPES

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (cfs [L/s])			
PEAK FLOW RATE (cfs [L/s])			
RETURN PERIOD OF PEAK FLOW (yrs)			
RIM ELEVATION			
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			

NOTES / SPECIAL REQUIREMENTS:



FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

SEE SHEET 41 FOR CONTECH STRUCTURE LOCATIONS

GENERAL NOTES

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
5. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
6. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

INSTALLATION NOTES

- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
- C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH
ENGINEERED SOLUTIONS LLC

www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CS-4
CASCADE SEPARATOR
STANDARD DETAIL



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48107-0647
www.a3gov.org

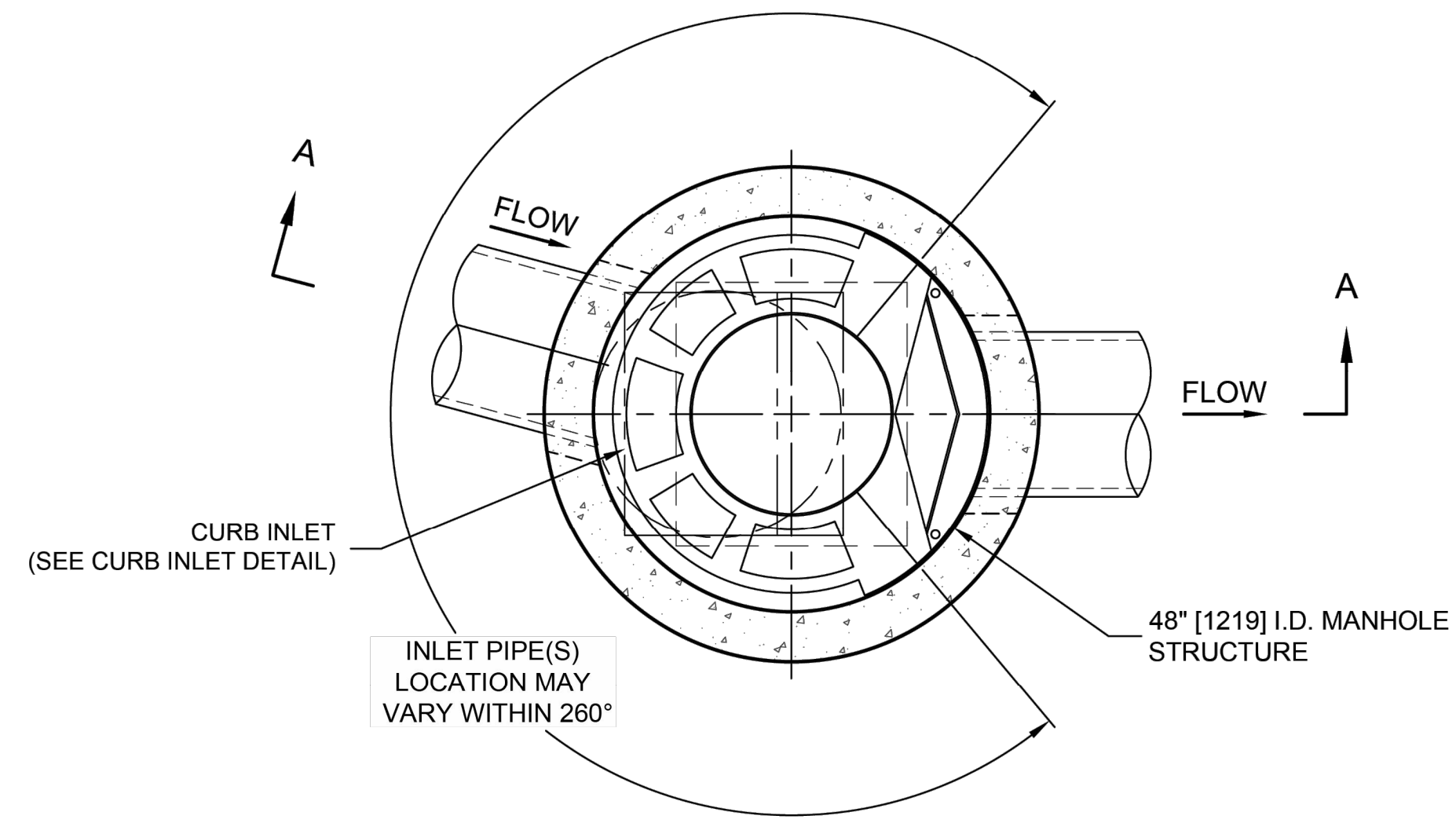


ENGINEERING
STATE STREET IMPROVEMENTS
DETAILS

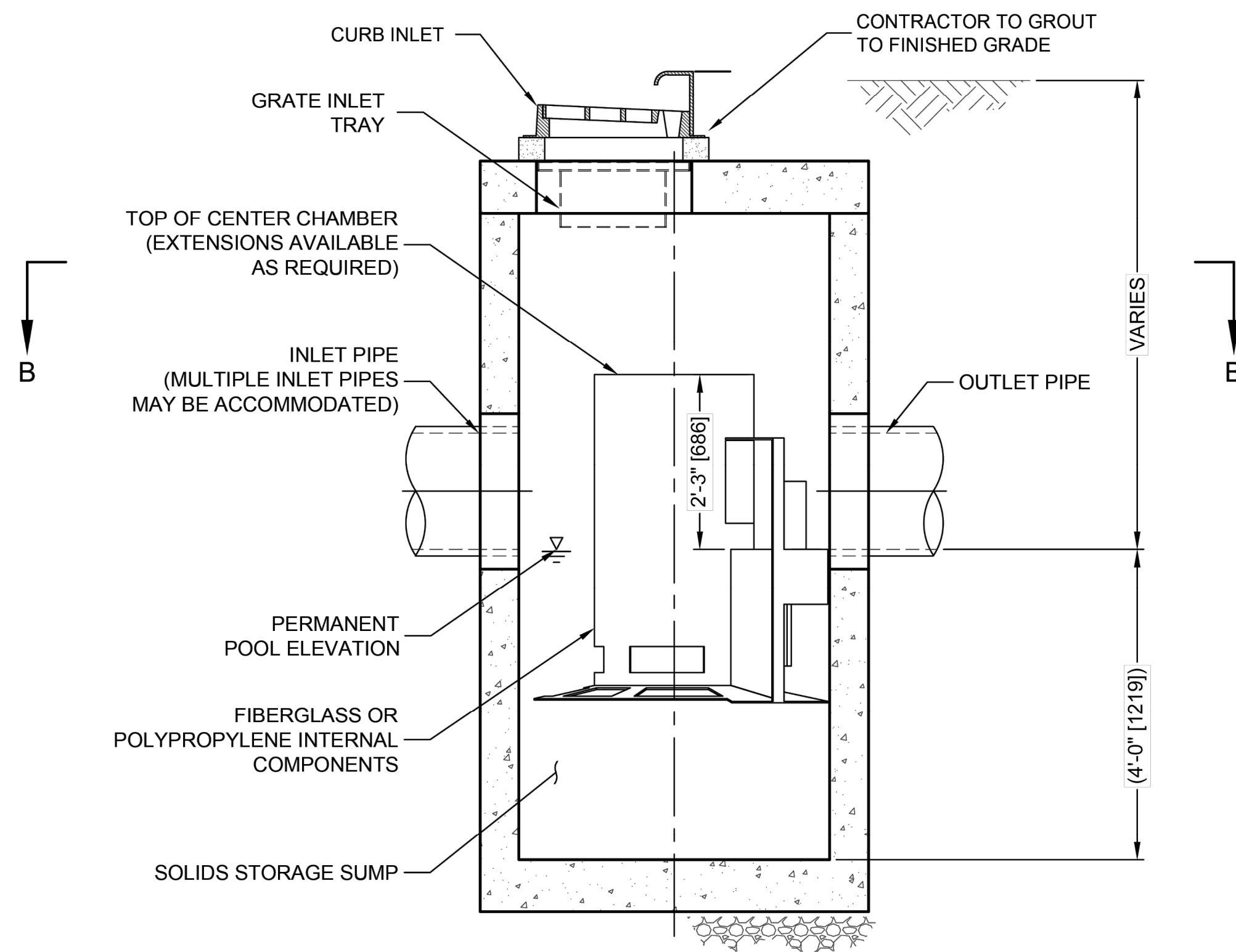
CITY OF ANN ARBOR - PUBLIC SERVICES - N.T.S.
DRAWING No. 2023-023-12
SHEET No. 12 OF 75

c:\pw_work\wade--trim_rbrown\01339881\CDT--PLTS--Details 2.dwg Dwg Created: 3--Feb--25 --_a2 standard bw.stb - Plot Date: 3--Feb--25

C:\USERS\MATTHEW.SMITH\DESKTOP\PCS-4-CURB INLET DTL.DWG 1/5/2024 3:58 PM



PLAN VIEW B-B
NOT TO SCALE

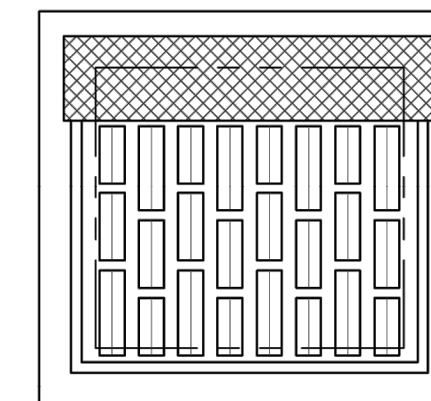


ELEVATION A-A
NOT TO SCALE

CASCADE
separator™

CASCADE SEPARATOR DESIGN NOTES

THE CURB INLET CS-4 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE UPON REQUEST. THIS CONFIGURATION IS DESIGNED TO USE EJ PART 00719131C01 OR APPROVED EQUAL. PLEASE CONFIRM WITH LOCAL CONTECH STORMWATER TEAM ON ANY ALTERNATE PROPOSED CURB INLETS.



CURB INLET
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (cfs [L/s])			
PEAK FLOW RATE (cfs [L/s])			
RETURN PERIOD OF PEAK FLOW (yrs)			
RIM ELEVATION			
PIPE DATA:	INVERT	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			

NOTES / SPECIAL REQUIREMENTS:

SEE SHEET 41 FOR CONTECH STRUCTURE LOCATIONS

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
- CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
- CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH
ENGINEERED SOLUTIONS LLC

www.contechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CS-4
CASCADE SEPARATOR
INLET DETAIL



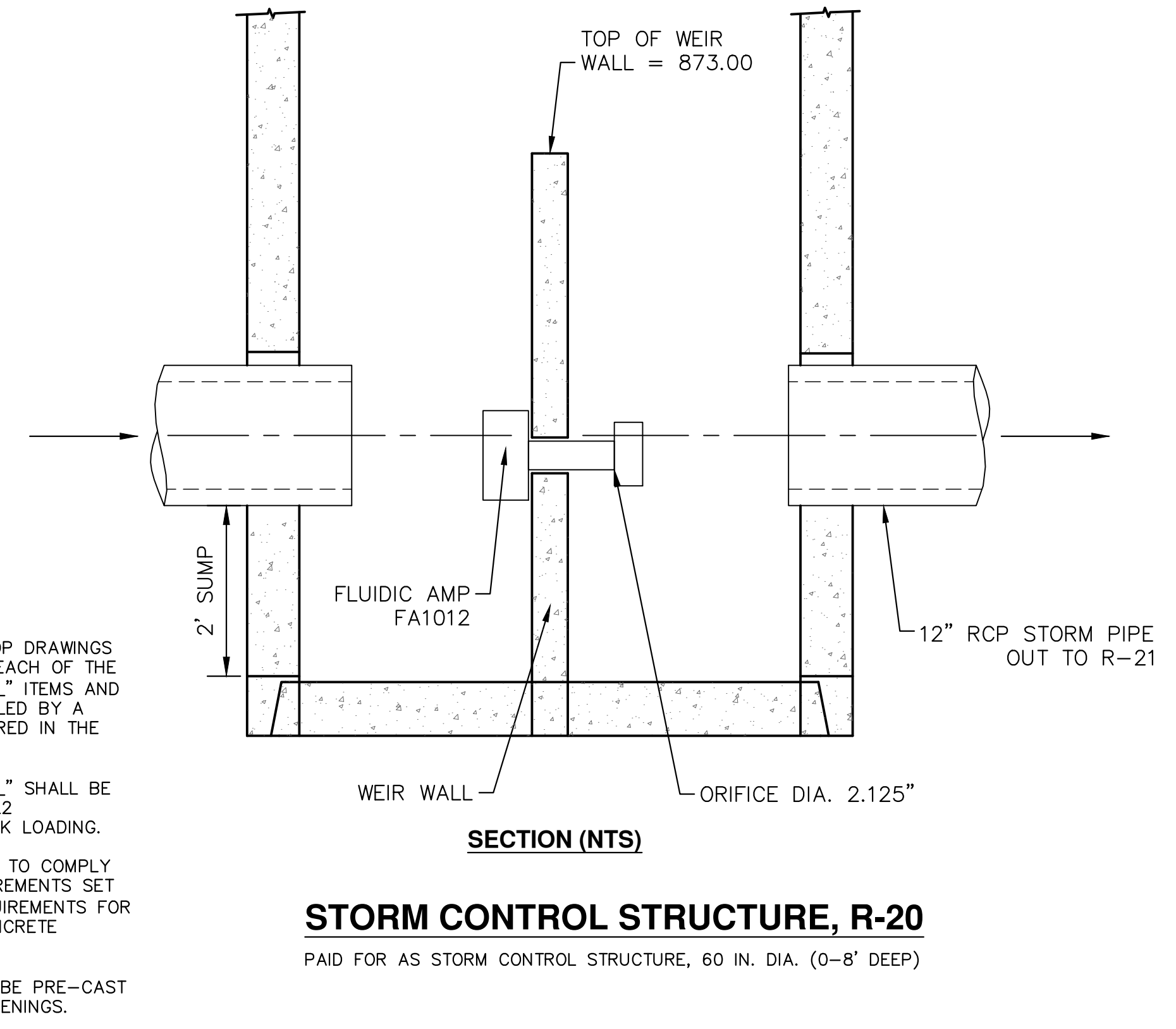
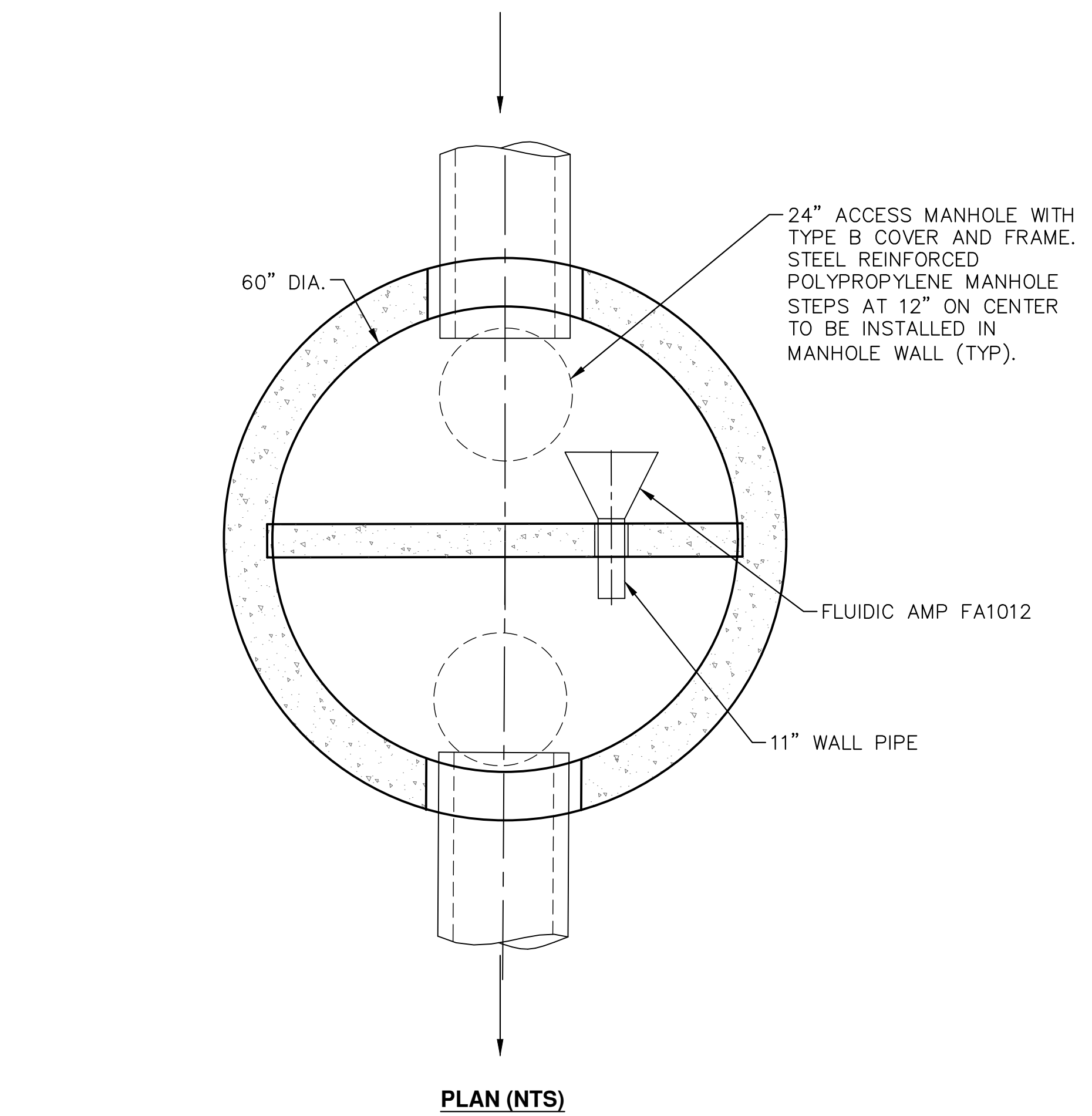
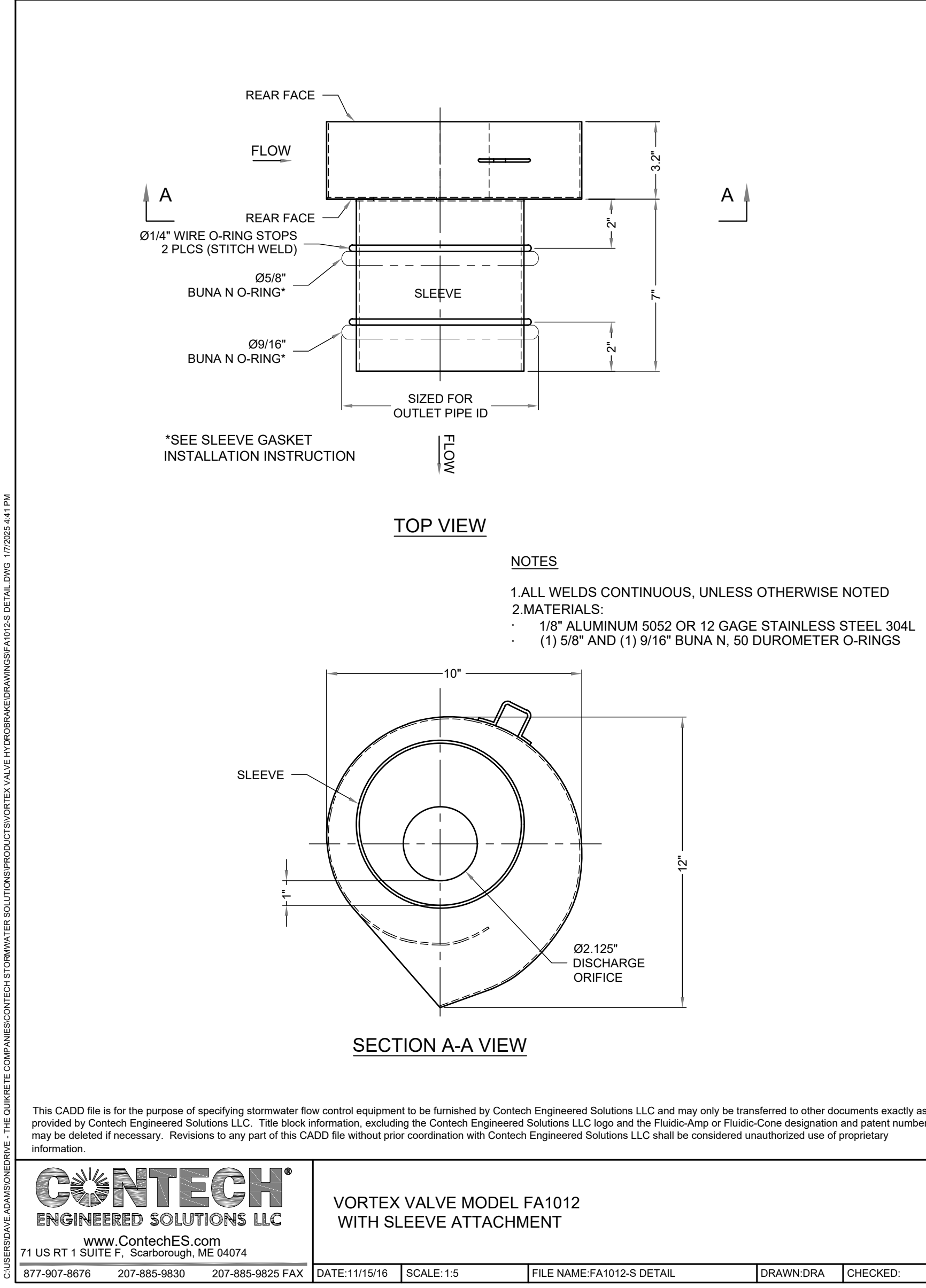
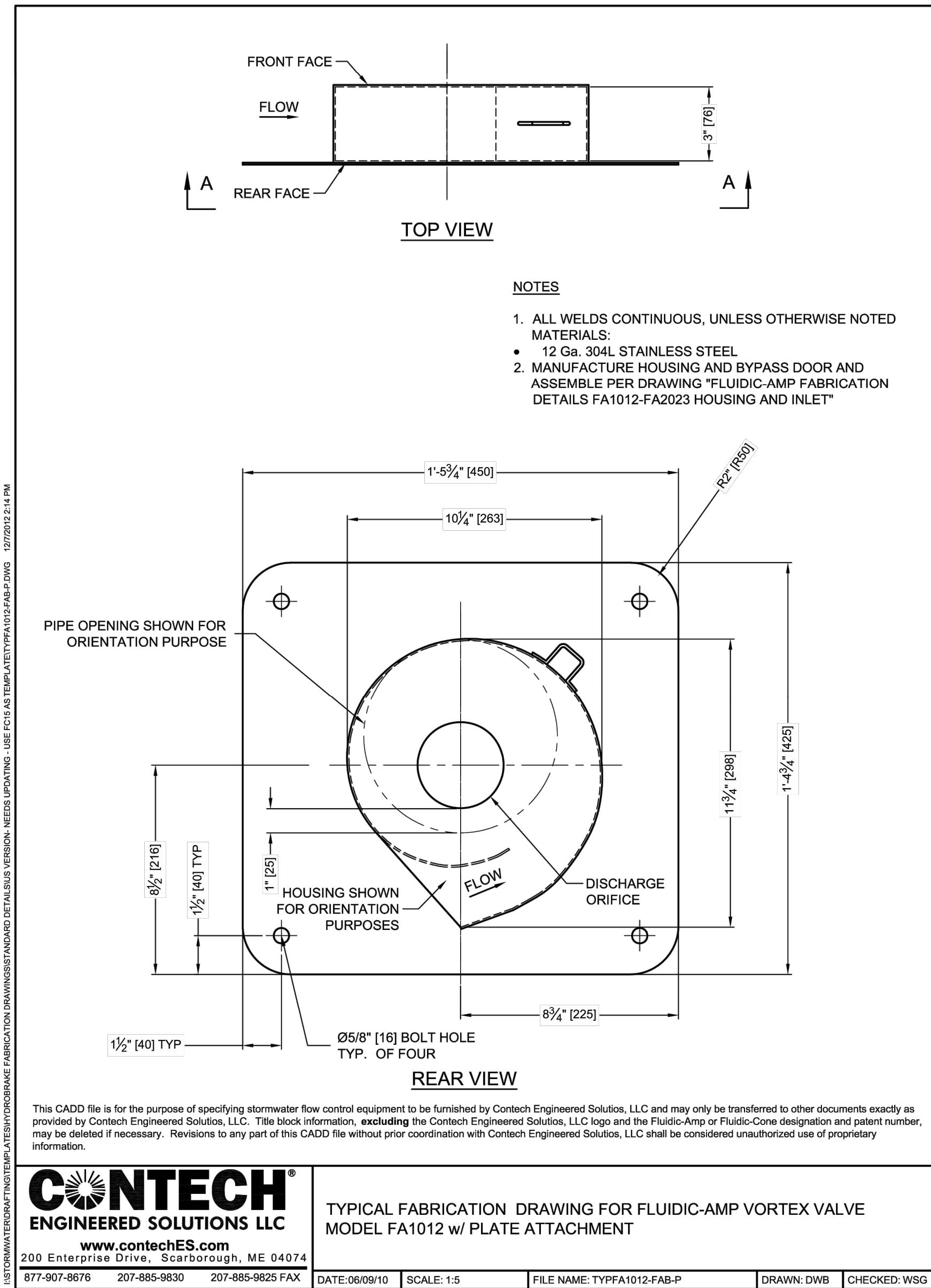
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48106-1667
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
DETAILS

SCALE PLAN: N.T.S.
DRAWING No. 2023-023-12

c:\pw_work\wade-trim_fbrown\dl339881\CDT-PLTS-Details 2.dwg Dwg Created: 3--Feb--25 --_a2_standard_bw.stb -- Plot Date: 3--Feb--25



- NOTE:**
1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND DESIGN CALCULATIONS FOR EACH OF THE "STORM CONTROL STRUCTURE, R-20" ITEMS AND THEY SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MICHIGAN.
 2. "STORM CONTROL STRUCTURE, R-20" SHALL BE MANUFACTURED TO ASTM C76-CL2 SPECIFICATIONS FOR HS-20 TRUCK LOADING.
 3. REINFORCED CONCRETE DESIGN IS TO COMPLY WITH APPLICABLE MINIMUM REQUIREMENTS SET FORTH IN ACI 350-01 (CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES).
 4. TOP SLAB OF STRUCTURE SHALL BE PRE-CAST CONCRETE WITH TWO 24-INCH OPENINGS.

811
Know what's below. Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a2gov.org

CITY OF ANN ARBOR MICHIGAN

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
DETAILS

SCALE PLAN: N.T.S.
DRAWING No. 2023-023-13

SHEET No. 13 OF 75

SYMBOL (Cp) AND (Csp)

SYMBOL (W)

SYMBOL (E2) AND (E4)

SYMBOL (E3)

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

SYMBOL (E2) AND (E4)

SYMBOL (E3)

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

SYMBOL (E2) AND (E4)

SYMBOL (E3)

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

EXPANSION JOINT FILLER

SECTION A-A

PLAN VIEW OF CONTRACTION JOINT ASSEMBLY

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

PLAN VIEW OF CONTRACTION JOINT ASSEMBLY

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

PLAN VIEW OF CONTRACTION JOINT ASSEMBLY

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

PLAN VIEW OF CONTRACTION JOINT ASSEMBLY

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

PLAN VIEW OF CONTRACTION JOINT ASSEMBLY

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

PLAN VIEW OF CONTRACTION JOINT ASSEMBLY

SECTION A-A

EXPANSION JOINT FILLER

SECTION A-A

LOAD TRANSFER ASSEMBLIES FOR TRANSVERSE JOINTS

SYMBOL (Cp) AND (Csp)

SYMBOL (W)

SYMBOL (E2) AND (E4)

SYMBOL (E3)

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

LOAD TRANSFER ASSEMBLIES FOR TRANSVERSE JOINTS

SYMBOL (Cp) AND (Csp)

SYMBOL (W)

SYMBOL (E2) AND (E4)

SYMBOL (E3)

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

LOAD TRANSFER ASSEMBLIES FOR TRANSVERSE JOINTS

SYMBOL (Cp) AND (Csp)

SYMBOL (W)

SYMBOL (E2) AND (E4)

SYMBOL (E3)

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

LOAD TRANSFER ASSEMBLIES FOR TRANSVERSE JOINTS

SYMBOL (Cp) AND (Csp)

SYMBOL (W)

SYMBOL (E2) AND (E4)

SYMBOL (E3)

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

LOAD TRANSFER ASSEMBLIES FOR TRANSVERSE JOINTS

SYMBOL (Cp) AND (Csp)

SYMBOL (W)

SYMBOL (E2) AND (E4)

SYMBOL (E3)

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

LOAD TRANSFER ASSEMBLIES FOR TRANSVERSE JOINTS

SYMBOL (Cp) AND (Csp)

SYMBOL (W)

SYMBOL (E2) AND (E4)

SYMBOL (E3)

SYMBOL (H)

SYMBOL (H')

SYMBOL (U)

SYMBOL (U')

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

DETAILS

811

Know what's below. Call before you dig.

CITY OF ANN ARBOR PUBLIC SERVICES

301 EAST HURON STREET

P.O. BOX 366

ANN ARBOR, MI 48106-0366

734.764.6410

www.a3gov.org

CITY OF ANN ARBOR PUBLIC SERVICES

301 EAST HURON STREET

P.O. BOX 366

ANN ARBOR, MI 48106-0366

734.764.6410

www.a3gov.org

SCALE PLAN: N.T.S.

DRAWING NO: 2023-023-15

SHEET NO. 15 OF 75

DESCRIPTION

REV.

DATE

DRAWN

CHECKED

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
GENERAL UTILITY	
SD-GU-1	STANDARD CASTING SCHEDULE
SD-GU-2	SPECIAL STRUCTURE COVER WATER
SD-GU-3	SPECIAL STRUCTURE COVER STORM
SD-GU-4	SPECIAL STRUCTURE COVER SANITARY
SD-GU-5A	STRUCTURE COVER ADJUST
SD-GU-5B	STRUCTURE COVER ADJUST
SD-GU-6	VALVE AND MONUMENT BOX ADJUSTMENT
SD-GU-7	MANHOLE AND VALVE MONUMENT BOX LOWERING
SD-GU-8	STRUCTURE PLATE
SD-GU-9	UTILITY LOCATION PLAN (66' R.O.W. WITH 24' PAVEMENT)
SD-GU-10	UTILITY LOCATION PLAN (66' R.O.W. WITH 28' PAVEMENT)
SD-GU-11	UTILITY LOCATION PLAN (70' R.O.W.)
SANITARY SEWER	
SD-SN-1	SANITARY MANHOLE
SD-SN-2	DROP MAN CONNECTION
SD-SN-3	SANITARY SEWER CONNECTION WITH RISER
SD-SN-4	SANITARY LEAD RELOCATION
SD-SN-5	SANITARY SEWER DEPTH
WATER	
SD-W-1	FIRE HYDRANT ASSEMBLY
SD-W-2	THRUST BLOCK
SD-W-3	PRECAST GATE WELL (WATERMANS, 16 INCH AND SMALLER)
SD-W-4	PRECAST GATE WELL (GUTTER/VALVE)
SD-W-5	PRECAST GATE WELL FOR TAPPING SLEEVE AND VALVE
SD-W-6	TYPICAL PIPE CASING DETAIL
SD-W-7	POLYETHYLENE ENCASEMENT
SD-W-8	DOMESTIC AND FIRE SERVICE CONFIGURATIONS
METER	
SD-MT-1	FIRE SERVICE METERING
SD-MT-2	FIRE SERVICE METERING - FIRE PUMP SYSTEM
SD-MT-3	ELECTROMAGNETIC METER INSTALLATION
SD-MT-4	ULTRASONIC METER INSTALLATION 0.75 INCH AND 1 INCH
SD-MT-5	ULTRASONIC METER INSTALLATION 1.5 INCH AND 2 INCH
STORM SEWER	
SD-ST-1A	STANDARD STORM MANHOLE (SEPARATE BASE)
SD-ST-1B	STANDARD STORM MANHOLE (PRECAST AND LEACHING BASES)
SD-ST-2	PRECAST JUNCTION INLET
SD-ST-3	PRECAST SINGLE INLET
SD-ST-4	PRECAST HIGH CAPACITY INLET
SD-ST-5	BLOCK JUNCTION INLET
SD-ST-6	BLOCK SINGLE INLET
SD-ST-7	BLOCK HIGH CAPACITY INLET



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

REV. NO.	DATE	A2D	SSORT
00	10/17/2024		

DR. ENG. CH. ENG. DRAWING NO.
SCALE N.T.S. DATE 12/8/2023 1 OF 3

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
CURB & GUTTER	
SD-CG-1	BANNER CURB AND GUTTER
SD-CG-2	MOUNTABLE CURB AND GUTTER FOR ASPHALT STREETS
SD-CG-3	MOUNTABLE CURB AND GUTTER FOR CONCRETE STREETS
SD-CG-4	SPLIT-OUT BARRIER CURB AND GUTTER
DRIVEWAY & SIDEWALK	
SD-DS-1	TYPE M DRIVE APPROACH FOR ASPHALT STREETS WITH BARRIER CURB
SD-DS-2	MODIFIED M DRIVE APPROACH FOR CONCRETE STREETS WITH BARRIER CURB
SD-DS-3	TYPE L DRIVE APPROACH FOR STREETS WITH MOUNTABLE CURB
SD-DS-4	SIDEWALK AND CURB & GUTTER JOINTS
SD-DS-5	SIDEWALK CROSS SECTION
STREETLIGHTS	
SD-SL-1	STREETLIGHT FOUNDATION
SD-SL-2	TRAFFIC SIGNAL POLE FOUNDATION
SD-SL-3	PEDESTRIAN SIGNAL POLE FOUNDATION
COMMUNICATIONS AND ELECTRICAL	
SD-E-1	COMMUNICATIONS HANDHOLE ASSEMBLY
SD-E-2	CONDUIT PLACEMENT DETAIL
SD-E-3	ELECTRICAL HANDHOLE ASSEMBLY
SOIL EROSION	
SD-SEC-1	INLET PROTECTION
SD-SEC-2	STONE FILTER
SD-SEC-3	SILT FENCE
SD-SEC-4	MULCH BLANKET
SD-SEC-5	MUD MAT
SD-SEC-6	STANDARD SOIL EROSION AND SEDIMENTATION CONTROL NOTES
SD-SEC-7	SEQUENCE OF SOIL EROSION CONTROL MEASURES
LANDSCAPING	
SD-L-1	TREE PLANTING
SD-L-2	TREE STAKING
SD-L-3	TREE PROTECTION
SD-L-4	TREE TUNNELING
TRENCH	
SD-TD-1	UTILITY TRENCH - TYPE 1
SD-TD-2	UTILITY TRENCH - TYPE 2
SD-TD-3	UTILITY TRENCH - TYPE 3
SD-TD-4-1	UTILITY TRENCH SURFACE RESTORATION
SD-TD-4-2	UTILITY TRENCH SURFACE RESTORATION
SD-TD-5	TYPICAL EDGE DRAIN TRENCH
SOLID WASTE	
SD-SW-1	SINGLE BIN ENCLOSURE
SD-SW-2	DOUBLE BIN ENCLOSURE
SD-SW-3	STANDARD BIN ENCLOSURE LAYOUTS
SD-SW-4	SWEEP PATH REQUIREMENTS FOR FRONT LOAD SOLID WASTE VEHICLE
SD-SW-5	SOLID WASTE VEHICLE TURN-AROUND
SD-SW-6A	SOLID WASTE GENERAL NOTES
SD-SW-6B	SOLID WASTE GENERAL NOTES



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

REV. NO.	DATE	A2D	SSORT
00	10/17/2024		

DR. ENG. CH. ENG. DRAWING NO.
SCALE N.T.S. DATE 12/8/2023 2 OF 3

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
MISCELLANEOUS	
SD-M-1	MAILBOX NEWSPAPER TUBE INSTALLATION AND RELOCATION
SD-M-2	VERTICAL CONTROL MONUMENT
SD-M-3	STEEL PIPE ROLLARD
SD-M-4	CHAIN LINK FENCE
SD-M-5	STEP CHAIN LINK FENCE
SD-M-6	URBAN GUARDRAIL LOCATION
ADA	
SD-ADA-1	ADA SIDEWALK CROSS SECTION
SD-ADA-2	ADA SIDEWALK AND AMENITY ZONE PLAN VIEW
SD-ADA-3	ADA CONCRETE SIDEWALK
SD-ADA-4	PAVER SECTION 1 - PAVERS ABOVE INTEGRAL CONCRETE SLAB
SD-ADA-5	ADA PAVER SECTION 2 - POROUS PAVERS AT PLANTER AND TREE GRATE
SD-ADA-6	ADA PAVER SECTION 3 - POROUS PAVERS ADJ. TO CONCRETE SIDEWALK
SD-ADA-7	ADA PAVER SECTION 4 - POROUS PAVERS ADJ. TO CONCRETE CURB
SD-ADA-8	ADA PAVER SECTION 5 - POROUS PAVERS AT PLANTER
SD-ADA-9	ADA CONCRETE CURB
SD-ADA-10	ADA BIKE HOOP SURFACE POINTED
SD-ADA-11	ADA BASED PLANTER WITH CURB
SD-ADA-12	ADA TREE PIT WITH GRATE
SD-ADA-13	ADA TREE GRATE DETAIL
SD-ADA-14	ADA TREE GRATE FRAME INSTALLATION
SD-ADA-15	ADA PLANTING ZONE BETWEEN TREE PITS
SD-ADA-16	ADA VEGETATED SWALE AND RAIN GARDEN
SD-ADA-17	ADA LIGHT POLE FOUNDATION
SD-ADA-18	ADA BENCH DETAIL



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

REV. NO.	DATE	A2D	SSORT
00	10/17/2024		

DR. ENG. CH. ENG. DRAWING NO.
SCALE N.T.S. DATE 12/8/2023 3 OF 3

TYPE OF CASTING	MDOT DESIGNATION	EJ CASTING NO.	NEENAH CASTING NO.
MANHOLE AND GATE WELL FRAME AND COVER	Q/B	1040Z W/ TYPE A COVER*	R-154Z W/ TYPE C COVER*
BARRIER CURB INLET FRAME AND COVER	K	7045Z W/ TYPE M1 GRATE	R-3031-B W/ TYPE S GRATE
BARRIER CURB LOW POINT INLET FRAME AND COVER	K	7035Z W/ TYPE M2 GRATE	N/A
GUTTER INLET FRAME AND COVER	R	5080Z W/ TYPE 5000M2 GRATE	R-3448C W/ TYPE S GRATE
HIGH CAPACITY INLET FRAME AND COVER		7034Z W/ TYPE M GRATE	N/A
MOUNTABLE CURB INLET ASSEMBLY		7065	N/A
YARD DRAIN (BEE HIVE) FRAME AND COVER	G	1040Z TYPE O2 GRATE	R-2560-E1
WATER VALVE BOX ASSEMBLY IN PAVEMENT		8560	N/A
MONUMENT BOX ASSEMBLY		8360	N/A
ADA COMPLIANT		5000Z4 W/ TYPE M5 GRATE	

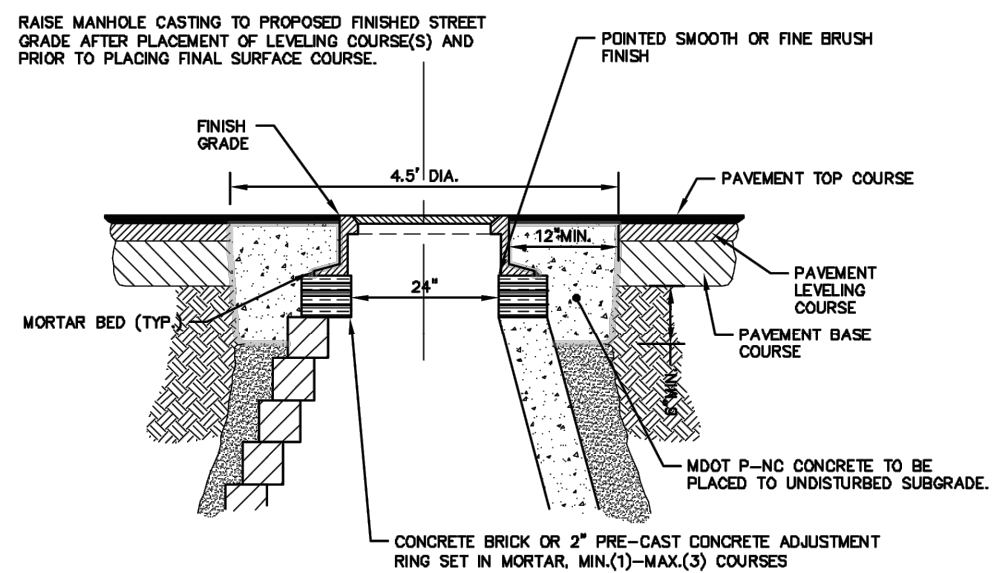
NOTES:
*EACH COVER SHALL HAVE "SANITARY", "STORM", OR "WATER" CAST IN THE SURFACE. WHICHEVER IS APPLICABLE. SANITARY SEWER COVERS SHALL BE GASKETED IN FLOOD PRONE AREAS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE PSA. FRAMES AND COVERS MUST HAVE MACHINED BEARING SURFACES.



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

REV. NO.	DATE	A2D	SSORT
00	10/17/2024		

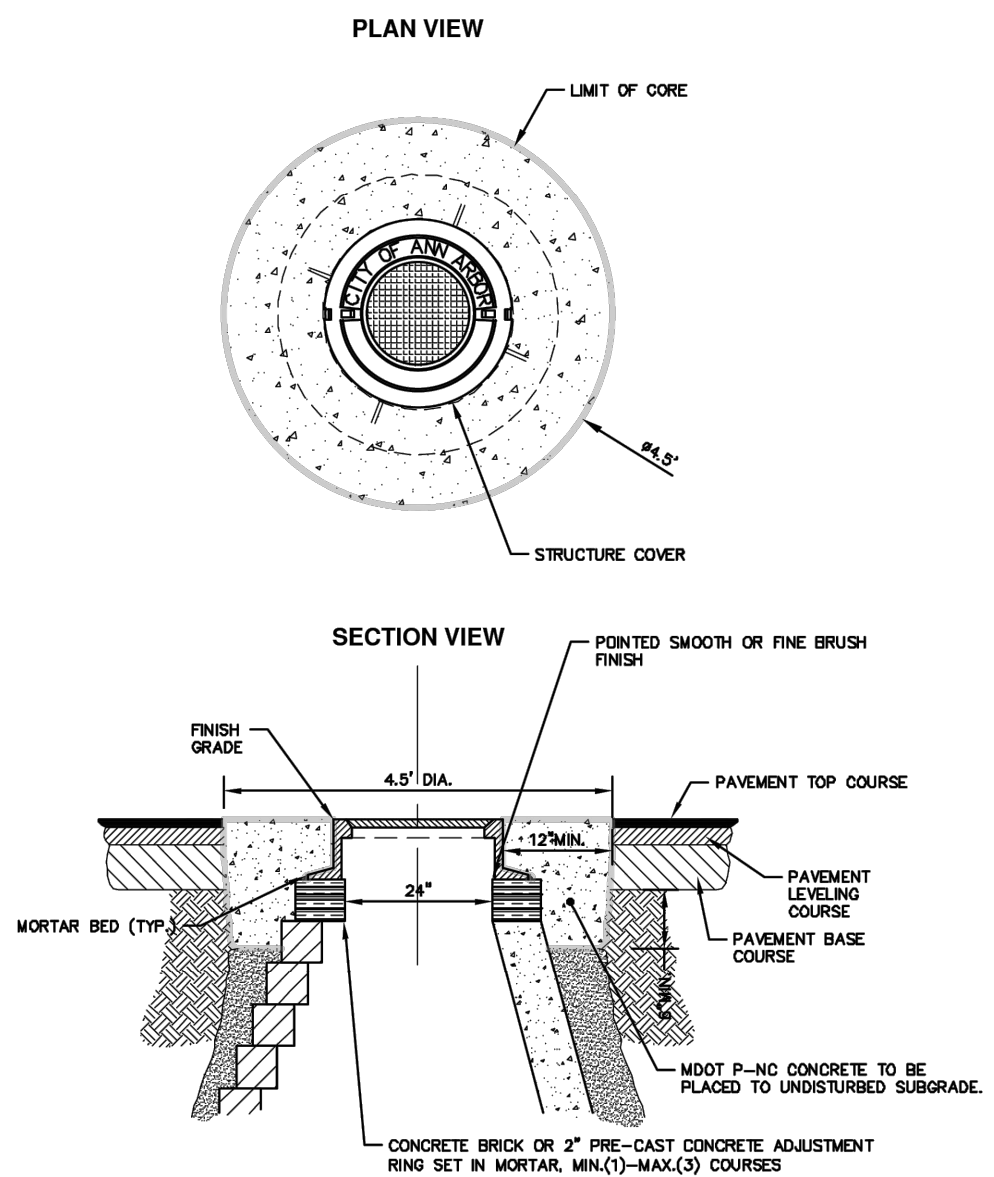
DR. ENG. CH. ENG. DRAWING NO.
SCALE N.T.S. DATE 12/8/2023 SD-GU-1



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

REV. NO.	DATE	A2D	SSORT
00	8/20/2024		

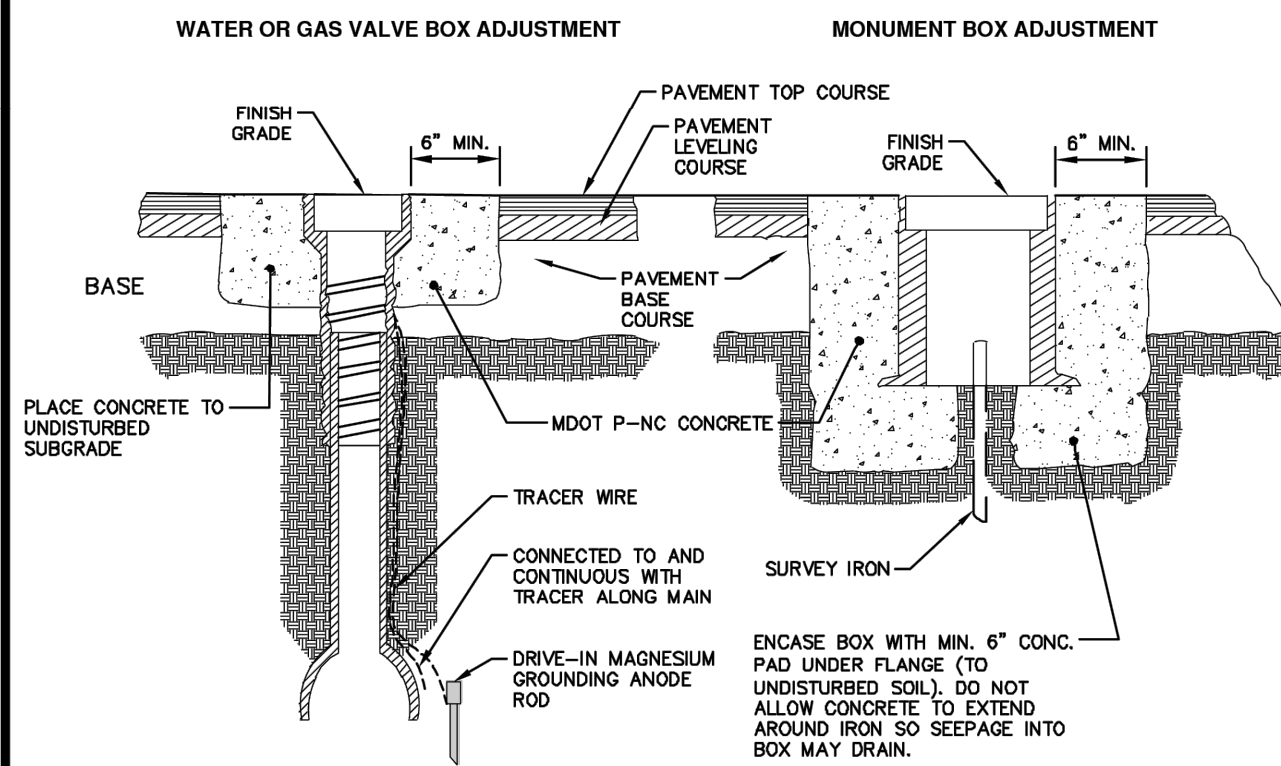
DR. ENG. CH. ENG. DRAWING NO.
SCALE N.T.S. DATE 12/8/2023 SD-GU-5A



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

REV. NO.	DATE	A2D	SSORT
00	8/20/2024		

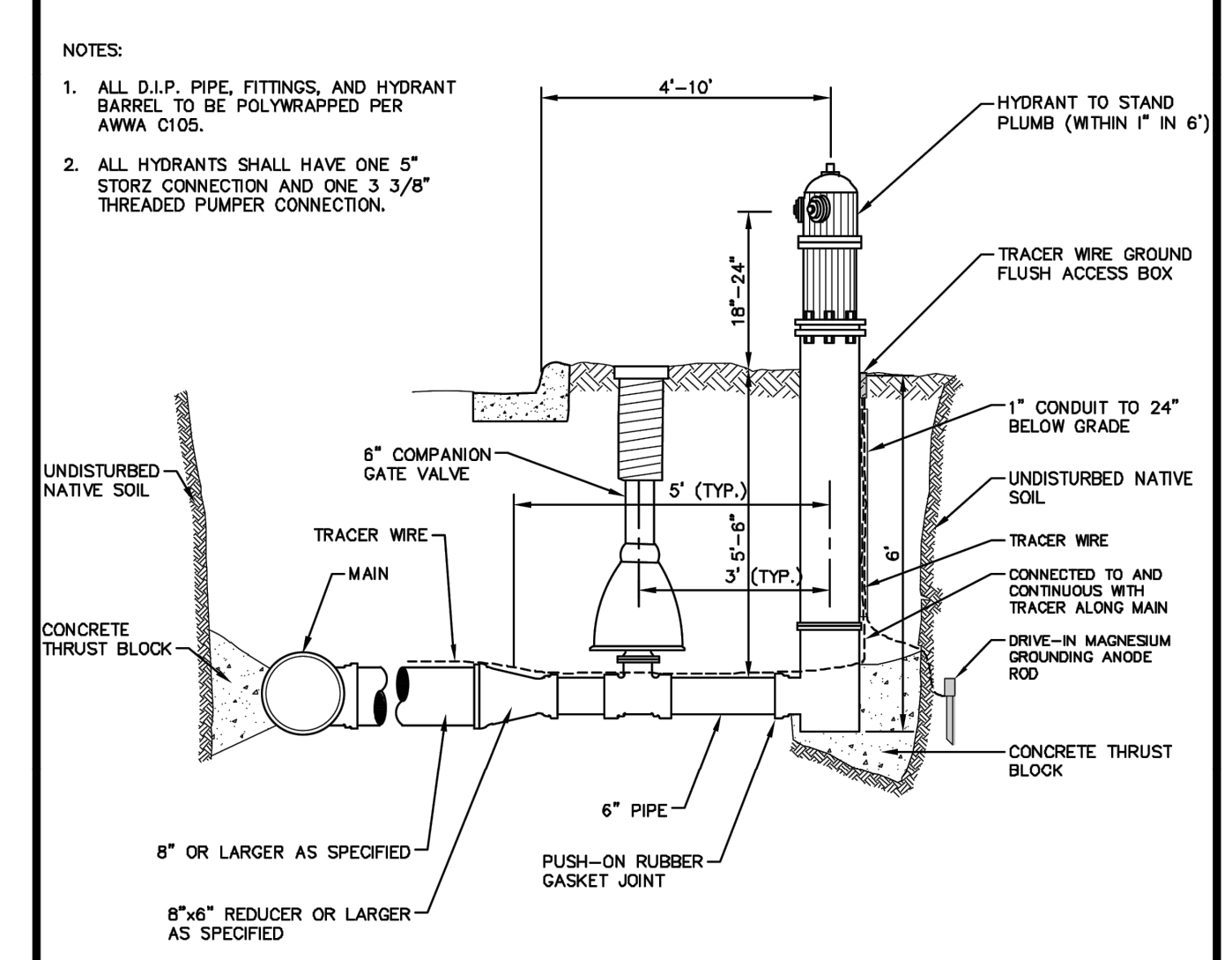
DR. ENG. CH. ENG. DRAWING NO.
SCALE N.T.S. DATE 12/8/2023 SD-GU-5B



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

REV. NO.	DATE	A2D	SSORT
01	8/20/2024		

DR. ENG. CH. ENG. DRAWING NO.
SCALE N.T.S. DATE 12/8/2023 SD-GU-6



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

REV. NO.	DATE	A2D	SSORT
00	2/5/2024		

DR. ENG. CH. ENG. DRAWING NO.
SCALE N.T.S. DATE 12/8/2023 SD-W-1



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
www.a2gov.org

CITY OF ANN ARBOR - ENGINEERING
STATE STREET IMPROVEMENTS
DETAILS

SCALE PLAN: N.T.S.
DRAWING NO. 2023-023-14
SHEET NO. 14 OF 75

c:\pwwork\wade-trim_rbrown\dl1339881\CDT-PLTS-Details 2.dwg Dwg Created: 3-Feb-25 - _a2_standard_bwsitb - Plot Date: 3-Feb-25



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
DETAILS
SCALE PLAN: N.T.S.
DRAWING NO. 2023-023-16
SHEET NO. 16 OF 75

TYPICAL MANHOLE SECTION

NOTES:
1. PRECAST MANHOLE PER ASTM C-478.
2. REINFORCING IN WALLS TO BE ONE LAYER OF 2" X 8" W3/W2.9 WELDED WIRE MESH. CIRCUMFERENTIAL REINFORCEMENT = 0.18 SQ. IN./VERT. FT.
3. BASE SLAB TO BE REINFORCED WITH ONE LAYER OF #4 REBAR AT 12" C-C, E.W. AREA/STEEL = .20 SQ. IN./FT. E.W.

00	10/17/2024	A2D	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
PRECAST GATE WELL (WATERMANS 16 INCH AND SMALLER)			
DR. ENG.	CH. ENG.	DRAWING NO.	SCALE N.T.S.

PIPE SIZE	A	B
24"	6"	8"
20"	6.5"	8"
16"	7"	9.5"

PRECAST GATE WELL (BUTTERFLY VALVES)

00	10/17/2024	A2D	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
PRECAST GATE WELL (BUTTERFLY VALVES)			
DR. ENG.	CH. ENG.	DRAWING NO.	SCALE N.T.S.

PRECAST GATE WELL FOR TAPPING SLEEVE AND VALVE

00	10/17/2024	A2D	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
PRECAST GATE WELL FOR TAPPING SLEEVE AND VALVE			
DR. ENG.	CH. ENG.	DRAWING NO.	SCALE N.T.S.

STANDARD STORM MANHOLE (SEPARATE BASE)

00	10/17/2024	A2D	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
STANDARD STORM MANHOLE (SEPARATE BASE)			
DR. ENG.	CH. ENG.	DRAWING NO.	SCALE N.T.S.

INTEGRAL BASE OPTION

LEACHING BASE OPTION

STANDARD STORM MANHOLE (PRECAST AND LEACHING BASES)

01	12/30/24	A2D	SSORT
00	8/20/12	AG	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
STANDARD STORM MANHOLE (PRECAST AND LEACHING BASES)			
DR. ENG.	CH. ENG.	DRAWING NO.	SCALE N.T.S.

UTILITY TRENCH - TYPE 1

NOTES:
1. ALL TRENCH EXCAVATION, BEDDING, BACKFILLING, AND SURFACE RESTORATION SHALL COMPLY WITH CITY OF ANN ARBOR STANDARDS, ARTICLE 10.
2. TRENCH DETAILS SHOW TYPE OF BACKFILL AND TRENCHING REQUIREMENTS ONLY.
3. ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. AND CITY STANDARDS.
4. PIPE BEDDING THICKNESS UNDER CONCRETE PIPE 66" OR LARGER SHALL BE INCREASED TO 6".
5. SEE SD-TD-2 FOR SANITARY BEDDING AREA DETAIL. SEE SD-TD-4 FOR EDGE DRAIN BEDDING AND BACKFILL.
6. SURFACE RESTORATION SHALL NOT BE INCLUDED IN THE UNIT PRICE FOR PIPE AND WILL BE PAID FOR SEPARATELY.
7. NOT TO BE USED FOR SANITARY SEWER OR EDGE DRAIN.

00	10/17/2024	A2D	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
UTILITY TRENCH - TYPE 1			
DR. ENG.	CH. ENG.	DRAWING NO.	SCALE N.T.S.

UTILITY TRENCH - TYPE 2

NOTES:
1. ALL TRENCH EXCAVATION, BEDDING, BACKFILLING, AND SURFACE RESTORATION SHALL COMPLY WITH CITY OF ANN ARBOR STANDARDS, ARTICLE 10.
2. TRENCH DETAILS SHOW TYPE OF BACKFILL AND TRENCHING REQUIREMENTS ONLY.
3. ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. AND CITY STANDARDS.
4. PIPE BEDDING THICKNESS UNDER CONCRETE PIPE 66" OR LARGER SHALL BE INCREASED TO 6".
5. SEE SD-TD-4 FOR EDGE DRAIN BEDDING AND BACKFILL DETAILS.
6. SURFACE RESTORATION SHALL NOT BE INCLUDED IN THE UNIT PRICE FOR PIPE AND WILL BE PAID FOR SEPARATELY.

00	10/17/2024	A2D	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
UTILITY TRENCH - TYPE 2			
DR. ENG.	CH. ENG.	DRAWING NO.	SCALE N.T.S.

UTILITY TRENCH - TYPE 3

NOTES:
1. ALL TRENCH EXCAVATION, BEDDING, BACKFILLING, AND SURFACE RESTORATION SHALL COMPLY WITH CITY OF ANN ARBOR STANDARDS, ARTICLE 10.
2. TRENCH DETAILS SHOW TYPE OF BACKFILL AND TRENCHING REQUIREMENTS ONLY.
3. ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. AND CITY STANDARDS.
4. PIPE BEDDING THICKNESS UNDER CONCRETE PIPE 66" OR LARGER SHALL BE INCREASED TO 6".
5. SEE SD-TD-2 FOR SANITARY BEDDING AREA DETAIL. SEE SD-TD-4 FOR EDGE DRAIN BEDDING AND BACKFILL.
6. SURFACE RESTORATION SHALL NOT BE INCLUDED IN THE UNIT PRICE FOR PIPE AND WILL BE PAID FOR SEPARATELY.
7. NOT TO BE USED FOR SANITARY SEWER OR EDGE DRAIN.

00	10/17/2024	A2D	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
UTILITY TRENCH - TYPE 3			
DR. ENG.	CH. ENG.	DRAWING NO.	SCALE N.T.S.

c:\pw_work\wade-trim_rbrown\dt1339881\CDT-PLTS-Details 2.dwg Dwg Created: 3--Feb-25 --_a2 standard bw.stb - Plot Date: 3--Feb-25

BITUMINOUS PAVEMENT RESTORATION
 SAWCUT PAVEMENT, FULL DEPTH, AT REMOVAL LIMITS (TYP.)
 AGGREGATE BASE AS SPECIFIED, MATCH EXISTING OR 8 INCH WHICH IS GREATER, COMPACTED TO 98% OF THE MATERIAL'S MAXIMUM DRY DENSITY.
 HMA PAVEMENT AS SPECIFIED
 SUBBASE OR SUBGRADE AS SPECIFIED (TYP.)
 1.0' TYP. 1.0' TYP.

GRAVEL ROAD / PARKING
 MDOT CLASS 23A DENSE GRADED AGGREGATE (MIN. 8") COMPACTED TO 98% OF THE MATERIAL'S MAXIMUM DRY DENSITY.
 SUBBASE OR SUBGRADE AS SPECIFIED (TYP.)
 1.0' MIN. 1.0' MIN.

CONCRETE PAVEMENT
 MDOT GRADE 3500 CONCRETE TO MATCH EXISTING THICKNESS (MIN. 8")
 SAWCUT (TYP.)
 EPOXY COATED REBAR
 LIMIT OF PAVEMENT PATCH 5.0' MIN.
 AGGREGATE BASE AS SPECIFIED, MATCH EXISTING OR 8 INCH WHICH IS GREATER, COMPACTED TO 98% OF THE MATERIAL'S MAXIMUM DRY DENSITY.
 SUBBASE OR SUBGRADE AS SPECIFIED (TYP.)
 1.0' MIN. 1.0' MIN.
 DRILL 1 3/8" DIAMETER HOLE INTO EXISTING CONCRETE PAVEMENT AND GROUT-IN-PLACE #9 x 1'-6" LONG EPOXY COATED REBAR.

00	10/17/2024	A2D	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
UTILITY TRENCH SURFACE RESTORATION			
DR. ENG.	CH. ENG.	DRAWING NO.	
SCALE N.T.S.	DATE 12/8/2023	SD-TD-4.1	

CITY OF ANN ARBOR PUBLIC SERVICES
 301 EAST HURON STREET
 P.O. BOX 8647
 ANN ARBOR, MI 48107-8647
 734-794-6410
 www.a2gov.org

CONCRETE PAVEMENT WITH BITUMINOUS OVERLAY
 HMA PAVEMENT AS SPECIFIED.
 MDOT GRADE 3500 CONCRETE TO MATCH EXISTING THICKNESS (MIN. 8")
 SAWCUT (TYP.)
 EPOXY COATED REBAR
 AGGREGATE BASE AS SPECIFIED, MATCH EXISTING OR 8 INCH WHICH IS GREATER, COMPACTED TO 98% OF THE MATERIAL'S MAXIMUM DRY DENSITY.
 SUBBASE OR SUBGRADE AS SPECIFIED (TYP.)
 5.0' MIN.
 LIMIT OF PAVEMENT PATCH
 1.0' MIN. 1.0' MIN.
 DRILL 1 3/8" DIAMETER HOLE INTO EXISTING CONCRETE PAVEMENT AND GROUT-IN-PLACE #9 x 1'-6" LONG EPOXY COATED REBAR.

SIDEWALK OR DRIVE APPROACH
 MDOT GRADE 3500 CONCRETE AS SPECIFIED, THICKNESS AND WIDTH TO MATCH REQUIREMENTS OF CITY STANDARDS FOR SIDEWALKS OR DRIVE APPROACHES, WHICHEVER IS APPLICABLE.
 SUBBASE OR SUBGRADE AS SPECIFIED (TYP.)
 1.0' MIN. 1.0' MIN.

TURF
 4" MINIMUM TOPSOIL AND SEED OR SOD AS SPECIFIED PER CITY OF ANN ARBOR STANDARDS.

NOTE:
 PIPE TO BE BEDDED AND BACKFILLED PER UTILITY TRENCH TYPE-1, TYPE-2, OR TYPE-3.

00	10/17/2024	A2D	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
UTILITY TRENCH SURFACE RESTORATION			
DR. ENG.	CH. ENG.	DRAWING NO.	
SCALE N.T.S.	DATE 12/8/2023	SD-TD-4.2	

CITY OF ANN ARBOR PUBLIC SERVICES
 301 EAST HURON STREET
 P.O. BOX 8647
 ANN ARBOR, MI 48107-8647
 734-794-6410
 www.a2gov.org

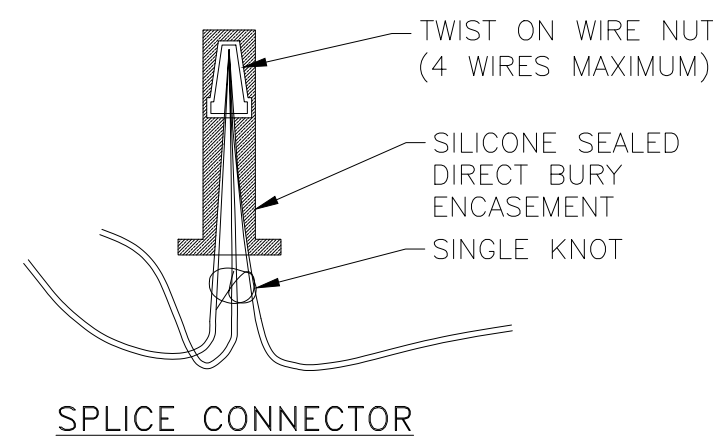
TYPICAL EDGE DRAIN TRENCH
 PROP CURB AND GUTTER, AS SPECIFIED
 PROP TYP SECTION, AS SPECIFIED
 1.0' (TYP.)
 AGGREGATE BASE COURSE
 SAND SUB-BASE
 NOMINAL DEPTH APPROXIMATELY 4'. DISTANCE VARIES FROM TOP OF CURB TO TOP OF UNDERDRAIN PIPE (3.25' MIN) OR AS SHOWN IN THE PLANS
 MDOT CLASS 2MS SAND BACK FILL MATERIAL COMPACTED TO 95% MAXIMUM DRY DENSITY
 0.5' MIN (TYP.)
 0.25' MIN PIPE BEDDING
 PROP UNDERDRAIN, W/SOCK 6-INCH WRAPPED UNDERDRAIN
 1.5'

NOTES:

- IN AREAS WHERE EDGE DRAIN CANNOT BE INSTALLED IN ACCORDANCE WITH THE DETAIL, THE EDGE DRAIN SHALL BE INSTALLED AT THE DEPTH AS INDICATED ON THE PLANS, OR AS DIRECTED BY ENGINEER. IN NO CASE SHALL THE EDGE DRAIN BE INSTALLED AT A GRADE LESS THAN 0.50% OR AT A DEPTH OF LESS THAN 3' BELOW TOP OF PROPOSED PAVEMENT.
- FOR PAVEMENT BASE AND SUBBASE THICKNESS, SEE TYPICAL PAVEMENT CROSS-SECTION(S)
- TRENCH DETAILS SHOW TYPE OF BACKFILL AND SURFACE RESTORATION ONLY
- ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS
- EDGE DRAINS SHALL BE CONNECTED TO A DRAINAGE STRUCTURE AND WILL EXTEND A MINIMUM OF 100 FEET UPSLOPE FROM THE STRUCTURE.
- ADDITIONAL LENGTHS OF EDGE DRAIN MAY BE REQUIRED BY THE ENGINEER BASED ON EXISTING SITE CONDITIONS, INCLUDING CONDITION OF THE SUBGRADE.

00	10/17/2024	A2D	SSORT
REV. NO.	DATE	DRAWN BY	CHECKED BY
TYPICAL EDGE DRAIN TRENCH			
DR. ENG.	CH. ENG.	DRAWING NO.	
SCALE N.T.S.	DATE 12/8/2023	SD-TD-5	

CITY OF ANN ARBOR PUBLIC SERVICES
 301 EAST HURON STREET
 P.O. BOX 8647
 ANN ARBOR, MI 48107-8647
 734-794-6410
 www.a2gov.org



NOTES:
 1. WIRE SHALL BE CONTINUITY TESTED AFTER INSTALLATION. ANY WIRE WHICH FAILS THE CONTINUITY TEST SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.

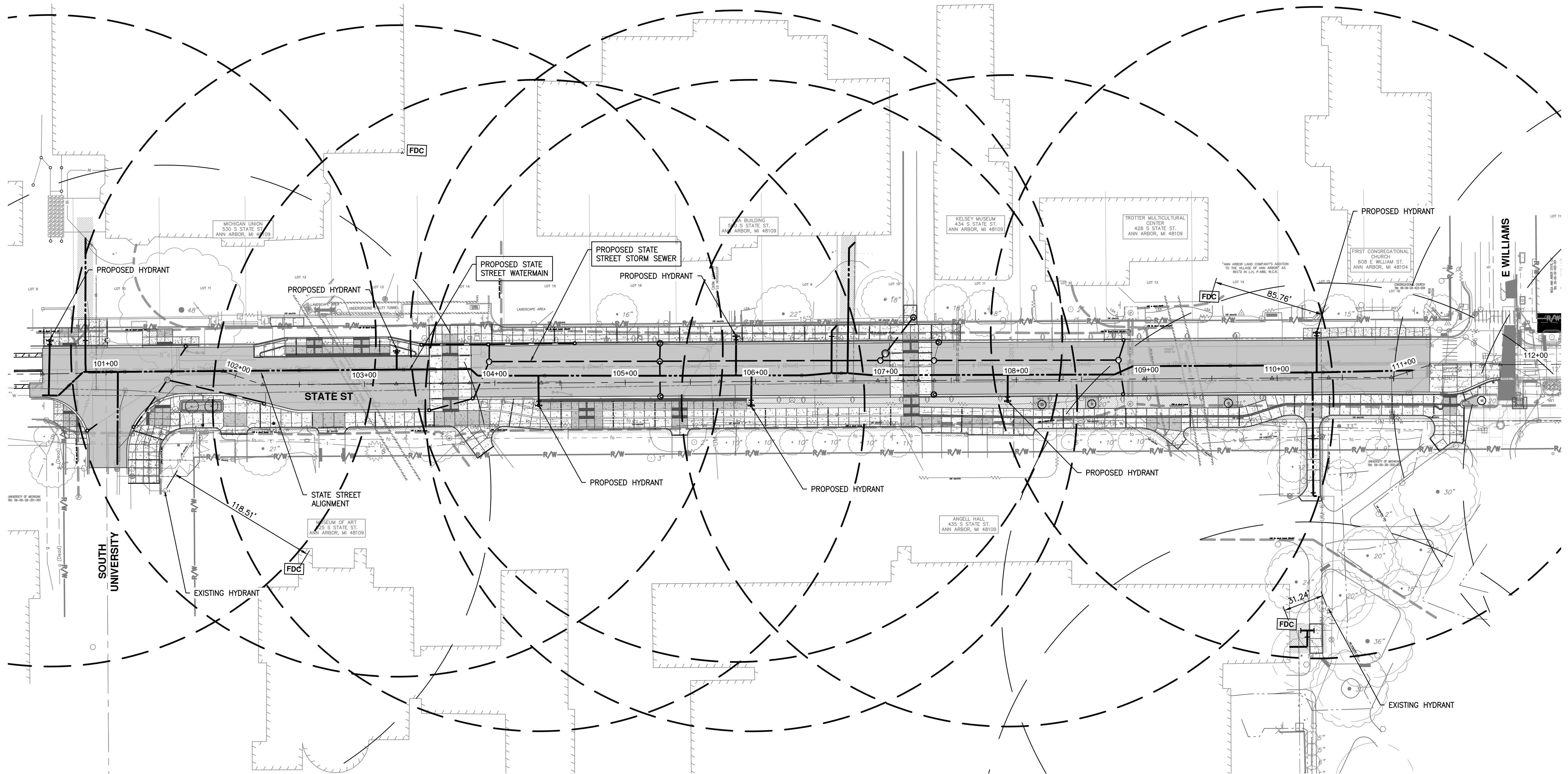
TRACER WIRE SPLICE DETAIL
 N.T.S.



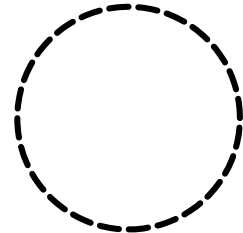
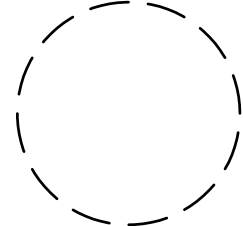
REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR PUBLIC SERVICES
 301 EAST HURON STREET
 P.O. BOX 8647
 ANN ARBOR, MI 48107-8647
 www.a2gov.org

c:\pw_work\wade-trim_rbrown\1339881\CSP-PLTS-Overall_Plan.dwg Dwg Created: 2-Feb-25 - _a2_standard bw.stb - Plot Date: 3-Feb-25



LEGEND

-  250-FT HYDRANT COVERAGE (PROPOSED)
-  250-FT HYDRANT COVERAGE (EXISTING)



REV.	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
 PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106
 734.794.6410
 www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
 OVERALL PLAN WITH EXISTING UTILITIES

SCALE: 1" = 40'
 DRAWING No. 2023-023-19

EXISTING GEOTECHNICAL INFORMATION

B-7: 10' SOIL BORING INDICATES 14" OF HMA PAVEMENT; 42" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND SOME CLAYEY FINES; 64" MOIST BROWN POORLY GRADED SAND W/ MOSTLY COARSE TO FINE SAND, FEW COARSE TO FINE GRAVEL, AND TRACE SILTY FINES.

B-8: TWO 5' SOIL BORINGS INDICATES 18 1/4"-24" OF HMA PAVEMENT, 13" OF NATURAL AGGREGATE BASE, AND 29" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL, AND FEW SILTY FINES.

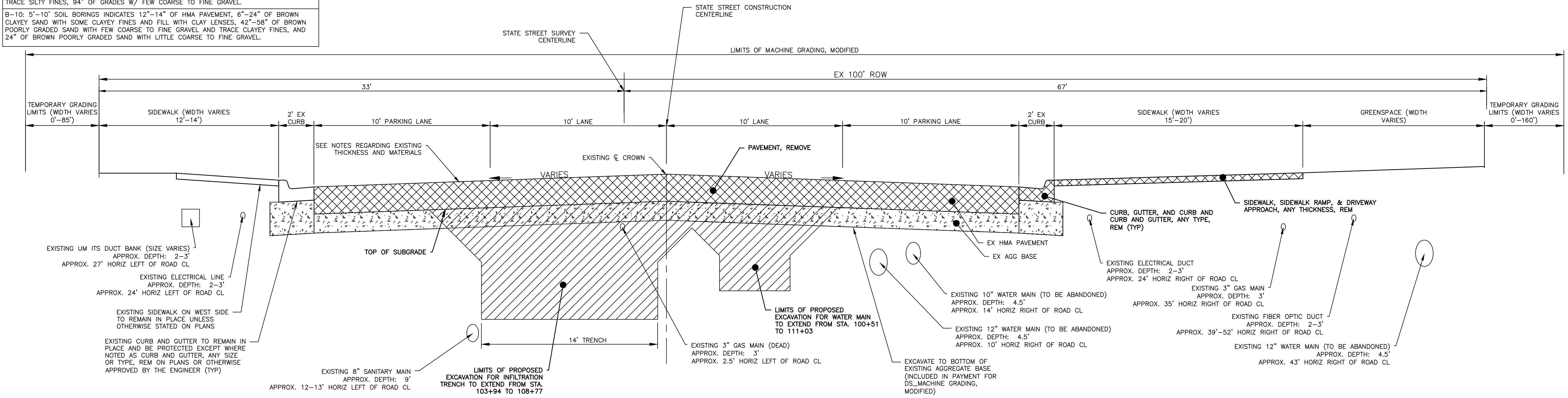
B-9: 10' SOIL BORING INDICATES 8" HMA PAVEMENT, 11" NATURAL AGGREGATE BASE W/ HMA MILLINGS, 7" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND TRACE SILTY FINES, 94" OF GRADES W/ FEW COARSE TO FINE GRAVEL.

B-10: 5'-10' SOIL BORINGS INDICATES 12"-14" OF HMA PAVEMENT, 6"-24" OF BROWN CLAYEY SAND WITH SOME CLAYEY FINES AND FILL WITH CLAY LENSES, 42"-58" OF BROWN POORLY GRADED SAND WITH FEW COARSE TO FINE GRAVEL AND TRACE CLAYEY FINES, AND 24" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL.

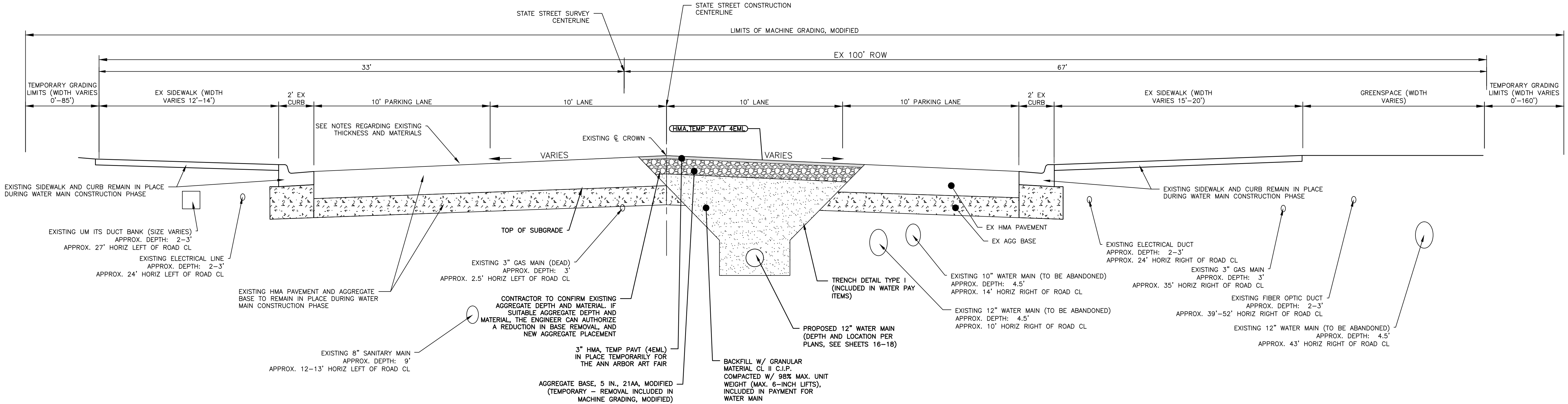
NOTES:

HISTORICAL RECORDS INDICATE A TROLLEY TRACK MAY EXIST BURIED IN THE STATE ROAD RIGHT OF WAY. SHOULD THIS BE DISCOVERED DURING CONSTRUCTION, PAY ITEMS DEDICATED TO THE REMOVAL OF THE TROLLEY TRACK WILL APPLY.

PRIOR TO THE ANN ARBOR ART FAIR, PAVEMENT, CURB AND SIDEWALK REMOVAL WILL BE LIMITED TO THE LIMITS OF THE PROPOSED 12" WATER MAIN TRENCH UNLESS AUTHORIZED BY THE ENGINEER.



**STATE STREET EXISTING CROSS SECTION
STA 100+51 - STA 111+70**




**PRE-ART FAIR PHASE
STATE STREET PROPOSED CROSS-SECTION
FOR WATER MAIN INSTALLATION ONLY
STA 100+51 - STA 111+03**

HMA APPLICATION ESTIMATE (THIS SECTION)					
PAY ITEM	HMA MIX	APPLICATION RATE	EST. THICKNESS	PERF GRADE	AWI (MIN)
HMA TEMP PAVT (4EML)	HMA TEMP PAVT (4EML)	220 LB/SYD	2 INCH	PG 58-28	N/A

FOR INFORMATION ONLY: APPLY BOND COAT AT 0.05 TO 0.15 GAL/SYD BETWEEN PROPOSED HMA LIFTS (PAYMENT INCLUDED IN PAYMENT FOR HMA MIXTURES).

c:\pwork\wade-trim_brown\dl339881\CTP-PLTS-Typicals.dwg Dwg Created: 31-Jan-25 - _a2_standard bw.stb - Plot Date: 3-Feb-25



Know what's below.
Call before you dig.



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48106-1647
www.a2gov.org

STATE STREET IMPROVEMENTS
TYPICAL SECTIONS - STATE ST

SHEET No.
20 OF 75

SCALE PLAN: N.T.S.

DRAWING No.
2023-025-20

REV.

DESCRIPTION

DATE

DRAWN

CHECKED

EXISTING GEOTECHNICAL INFORMATION

B-7: 10' SOIL BORING INDICATES 14" OF HMA PAVEMENT; 42" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND SOME CLAYEY FINES; 64" MOIST BROWN POORLY GRADED SAND W/ MOSTLY COARSE TO FINE SAND, FEW COARSE TO FINE GRAVEL, AND TRACE SILTY FINES.

B-8: TWO 5' SOIL BORINGS INDICATES 18 1/4"-24" OF HMA PAVEMENT, 13" OF NATURAL AGGREGATE BASE, AND 29" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL, AND FEW SILTY FINES.

B-9: 10' SOIL BORING INDICATES 8" HMA PAVEMENT, 11" NATURAL AGGREGATE BASE W/ HMA MILLINGS, 7" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND TRACE SILTY FINES, 94" OF GRADES W/ FEW COARSE TO FINE GRAVEL.

B-10: 5'-10' SOIL BORINGS INDICATES 12"-14" OF HMA PAVEMENT, 6"-24" OF BROWN CLAYEY SAND WITH SOME CLAYEY FINES AND FILL WITH CLAY LENSES, 42"-58" OF BROWN POORLY GRADED SAND WITH FEW COARSE TO FINE GRAVEL AND TRACE CLAYEY FINES, AND 24" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL.

NOTES:
 HISTORICAL RECORDS INDICATE A TROLLEY TRACK MAY EXIST BURIED IN THE STATE ROAD RIGHT OF WAY. SHOULD THIS BE DISCOVERED DURING CONSTRUCTION, PAY ITEMS DEDICATED TO THE REMOVAL OF THE TROLLEY TRACK WILL APPLY.



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-1667
 www.aagov.org

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

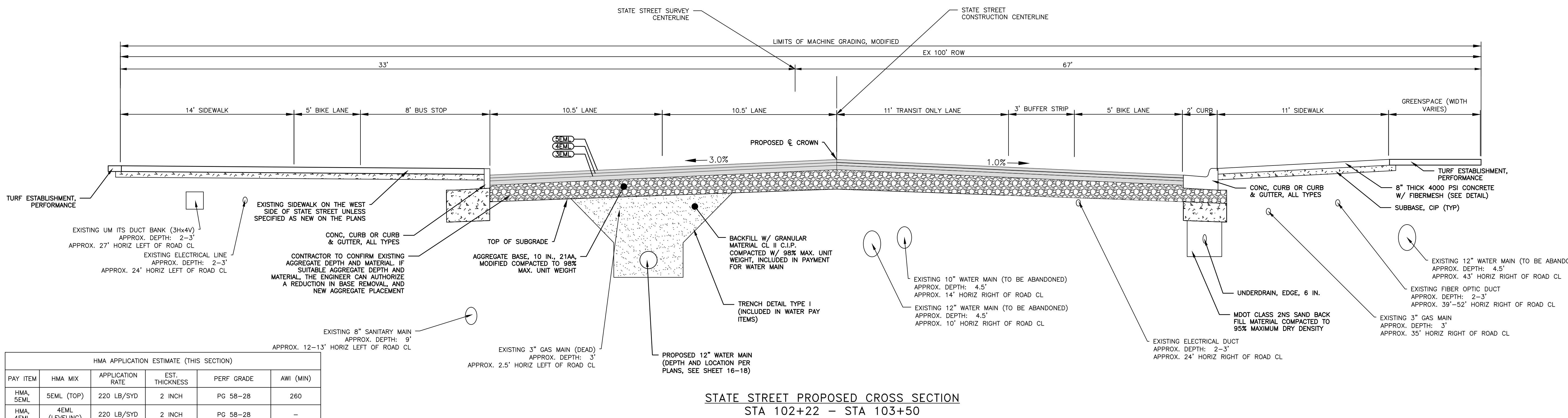
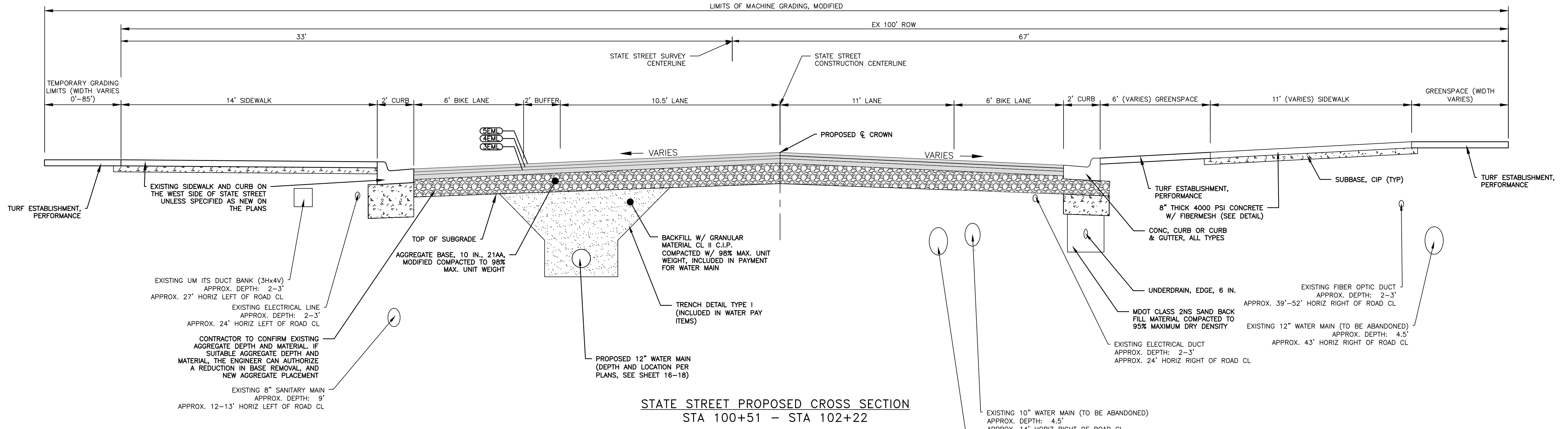
TYPICAL SECTIONS - STATE ST

SCALE PLAN: N.T.S.

DRAWING No. 2023-025-21

SHEET No. 21 OF 75

c:\pwwork\wade-trim_brown\dl1339881\CTP-PLTS-Typicals.dwg Dwg Created: 31-Jan-25 - _a2 standard bw.stb - Plot Date: 3-Feb-25



HMA APPLICATION ESTIMATE (THIS SECTION)

PAY ITEM	HMA MIX	APPLICATION RATE	EST. THICKNESS	PERF GRADE	AWI (MIN)
HMA, 5EML	5EML (TOP)	220 LB/SYD	2 INCH	PG 58-28	260
HMA, 4EML	4EML (LEVELING)	220 LB/SYD	2 INCH	PG 58-28	-
HMA, 3EML	3EML (BASE)	330 LB/SYD	3 INCH	PG 58-28	-

FOR INFORMATION ONLY: APPLY BOND COAT AT 0.05 TO 0.15 GAL/SYD BETWEEN PROPOSED HMA LIFTS (PAYMENT INCLUDED IN PAYMENT FOR HMA MIXTURES).
 HMA PAVING INCLUDES ALL APPROACHES

EXISTING GEOTECHNICAL INFORMATION

B-7: 10' SOIL BORING INDICATES 14" OF HMA PAVEMENT; 42" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND SOME CLAYEY FINES; 64" MOIST BROWN POORLY GRADED SAND W/ MOSTLY COARSE TO FINE SAND, FEW COARSE TO FINE GRAVEL, AND TRACE SILTY FINES.

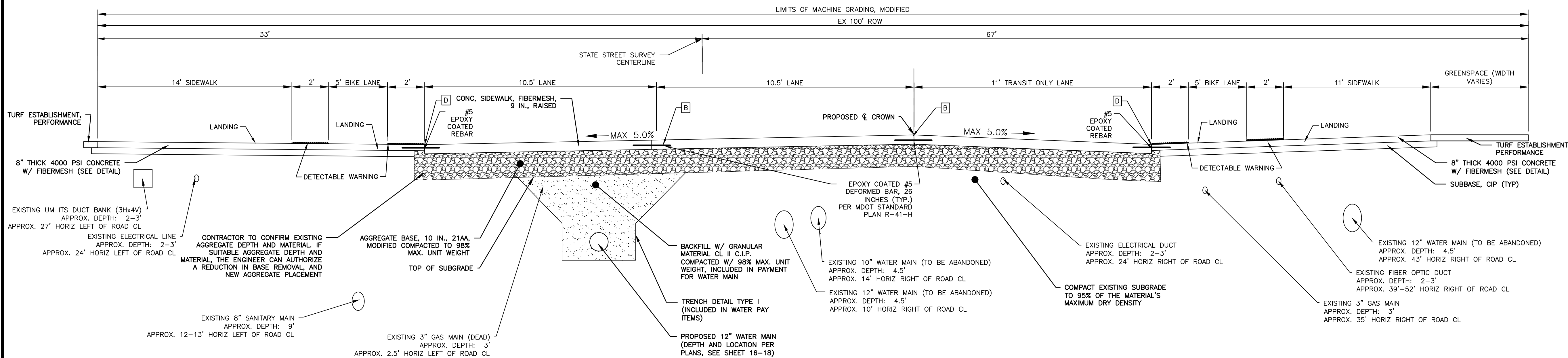
B-8: TWO 5' SOIL BORINGS INDICATES 18 1/4"-24" OF HMA PAVEMENT, 13" OF NATURAL AGGREGATE BASE, AND 29" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL, AND FEW SILTY FINES.

B-9: 10' SOIL BORING INDICATES 8" HMA PAVEMENT, 11" NATURAL AGGREGATE BASE W/ HMA MILLINGS, 7" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND TRACE SILTY FINES, 94" OF GRADES W/ FEW COARSE TO FINE GRAVEL.

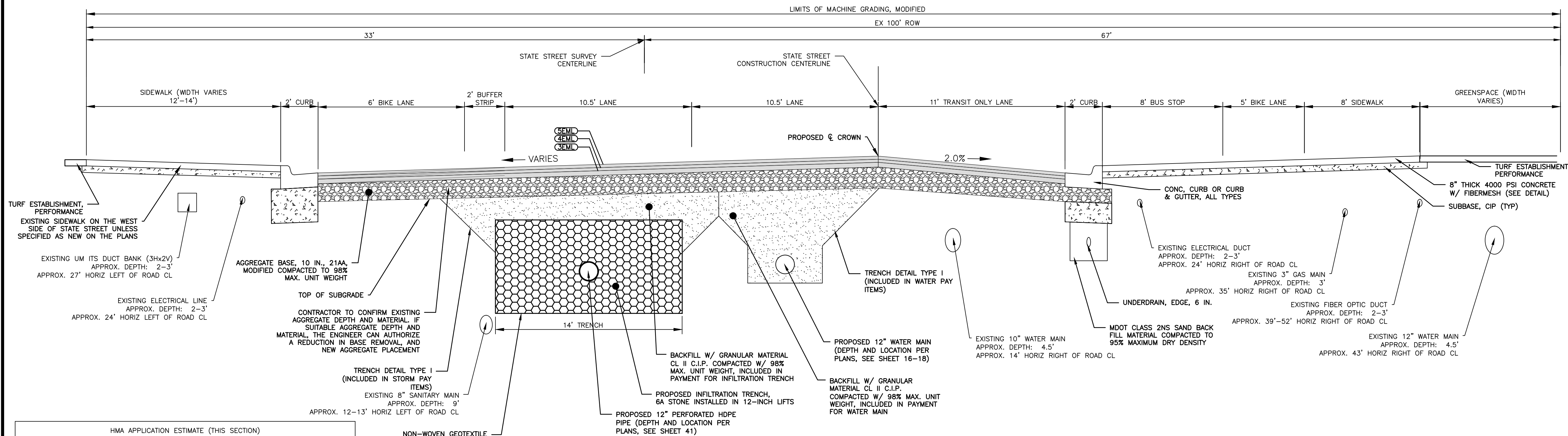
B-10: 5'-10" SOIL BORINGS INDICATES 12"-14" OF HMA PAVEMENT, 6"-24" OF BROWN CLAYEY SAND WITH SOME CLAYEY FINES AND FILL WITH CLAY LENSES, 42"-58" OF BROWN POORLY GRADED SAND WITH FEW COARSE TO FINE GRAVEL AND TRACE CLAYEY FINES, AND 24" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL.

- RAISED CROSSWALK CONCRETE JOINT LEGEND:**
- B - LONGITUDINAL BULKHEAD JOINT, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (B)
 - D - LONGITUDINAL LANE TIE JOINT WITH TIE BARS, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (D)

NOTES:
 HISTORICAL RECORDS INDICATE A TROLLEY TRACK MAY EXIST BURIED IN THE STATE ROAD RIGHT OF WAY. SHOULD THIS BE DISCOVERED DURING CONSTRUCTION, PAY ITEMS DEDICATED TO THE REMOVAL OF THE TROLLEY TRACK WILL APPLY.



STATE STREET PROPOSED CROSS SECTION - RAISED CROSSWALK
 SEE SHEET 8 FOR PLAN VIEW
 STA 103+65



STATE STREET PROPOSED CROSS SECTION
 STA 104+33 - STA 105+93

HMA APPLICATION ESTIMATE (THIS SECTION)

PAY ITEM	HMA MIX	APPLICATION RATE	EST. THICKNESS	PERF GRADE	AWI (MIN)
HMA, 5EML	5EML (TOP)	220 LB/SYD	2 INCH	PG 58-28	260
HMA, 4EML	4EML (LEVELING)	220 LB/SYD	2 INCH	PG 58-28	-
HMA, 3EML	3EML (BASE)	330 LB/SYD	3 INCH	PG 58-28	-

NON-WOVEN GEOTEXTILE (OVERLAPPED AND COVERING ALL SIDES OF TRENCH WITH MINIMUM HYDRAULIC CONDUCTIVITY 3"/HR)

FOR INFORMATION ONLY: APPLY BOND COAT AT 0.05 TO 0.15 GAL/SYD BETWEEN PROPOSED HMA LIFTS (PAYMENT INCLUDED IN PAYMENT FOR HMA MIXTURES).
 HMA PAVING INCLUDES ALL APPROACHES

c:\pwork\wade-trim_fbrown\dl339881\CTP-PLTS-Typicals.dwg Dwg Created: 31-Jan-25 - _a2_standard bw.stb - Plot Date: 3-Feb-25

811 Know what's below. Call before you dig.

NO.	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-1667
 www.a2gov.org

CITY OF ANN ARBOR MICHIGAN

STATE STREET IMPROVEMENTS

TYPICAL SECTIONS - STATE ST

SCALE PLAN: N.T.S.
 DRAWING NO: 2023-025-22
 SHEET NO: 22 OF 75

EXISTING GEOTECHNICAL INFORMATION

B-7: 10' SOIL BORING INDICATES 14" OF HMA PAVEMENT; 42" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND SOME CLAYEY FINES; 64" MOIST BROWN POORLY GRADED SAND W/ MOSTLY COARSE TO FINE SAND, FEW COARSE TO FINE GRAVEL, AND TRACE SILTY FINES.

B-8: TWO 5' SOIL BORINGS INDICATES 18 1/4"-24" OF HMA PAVEMENT, 13" OF NATURAL AGGREGATE BASE, AND 29" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL, AND FEW SILTY FINES.

B-9: 10' SOIL BORING INDICATES 8" HMA PAVEMENT, 11" NATURAL AGGREGATE BASE W/ HMA MILLINGS, 7" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND TRACE SILTY FINES, 94" OF GRADES W/ FEW COARSE TO FINE GRAVEL.

B-10: 5'-10" SOIL BORINGS INDICATES 12"-14" OF HMA PAVEMENT, 6"-24" OF BROWN CLAYEY SAND WITH SOME CLAYEY FINES AND FILL WITH CLAY LENSES, 42"-58" OF BROWN POORLY GRADED SAND WITH FEW COARSE TO FINE GRAVEL AND TRACE CLAYEY FINES, AND 24" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL.

RAISED CONCRETE CONCRETE JOINT LEGEND:

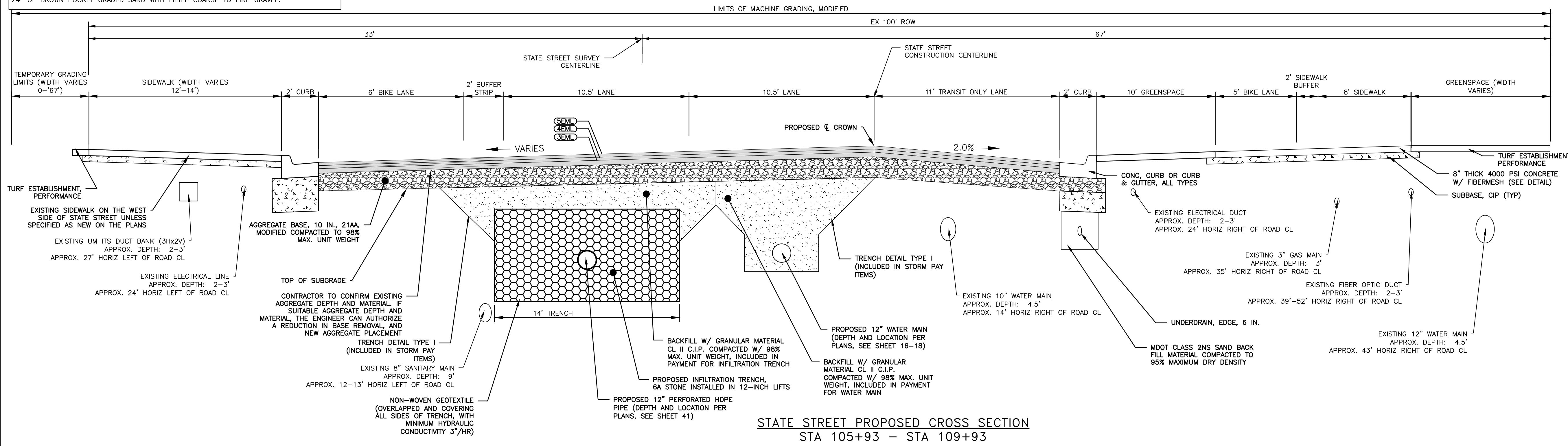
B - LONGITUDINAL BULKHEAD JOINT, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (B)

D - LONGITUDINAL LANE TIE JOINT WITH TIE BARS, SEALED ACCORDING TO MDOT STANDARD PLAN R-41 SERIES, SYMBOL (D)

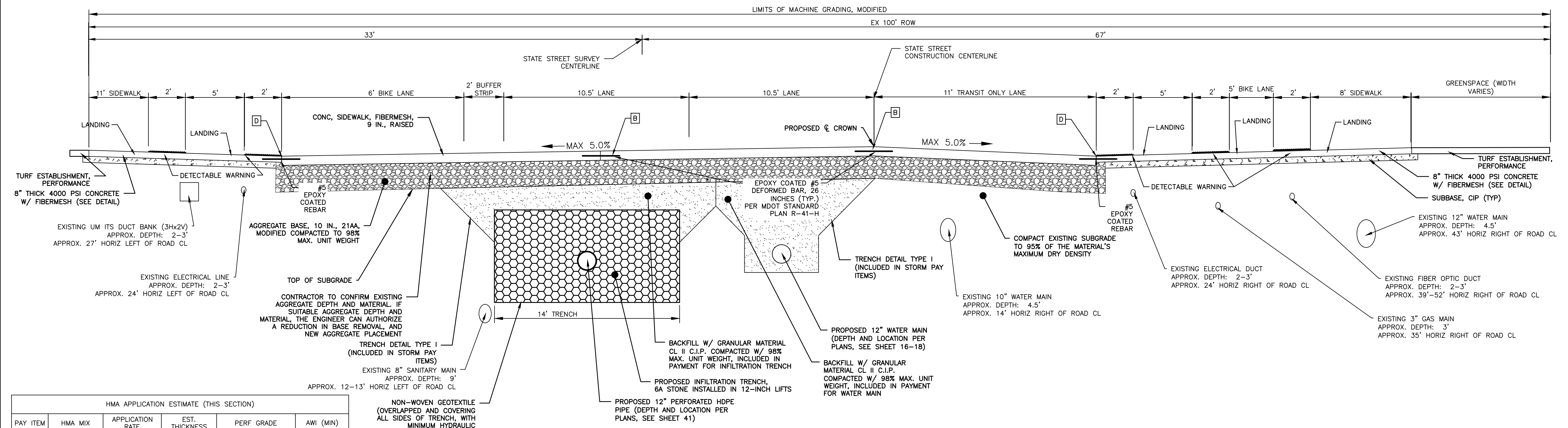
NOTES:

HISTORICAL RECORDS INDICATE A TROLLEY TRACK MAY EXIST BURIED IN THE STATE ROAD RIGHT OF WAY. SHOULD THIS BE DISCOVERED DURING CONSTRUCTION, PAY ITEMS DEDICATED TO THE REMOVAL OF THE TROLLEY TRACK WILL APPLY.

PRIOR TO THE ANN ARBOR ART FAIR, PAVEMENT REMOVAL WILL BE LIMITED TO THE LIMITS OF THE PROPOSED 12" WATER MAIN TRENCH.



**STATE STREET PROPOSED CROSS SECTION
STA 105+93 - STA 109+93**



**STATE STREET PROPOSED CROSS SECTION - RAISED CROSSWALK
SEE SHEET 8 FOR PLAN VIEW
STA 107+19**

HMA APPLICATION ESTIMATE (THIS SECTION)

PAY ITEM	HMA MIX	APPLICATION RATE	EST. THICKNESS	PERF GRADE	AWI (MIN)
HMA, 5EML	5EML (TOP)	220 LB/SYD	2 INCH	PG 58-28	260
HMA, 4EML	4EML (LEVELING)	220 LB/SYD	2 INCH	PG 58-28	-
HMA, 3EML	3EML (BASE)	330 LB/SYD	3 INCH	PG 58-28	-

FOR INFORMATION ONLY: APPLY BOND COAT AT 0.05 TO 0.15 GAL/SYD BETWEEN PROPOSED HMA LIFTS (PAYMENT INCLUDED IN PAYMENT FOR HMA MIXTURES).

HMA PAVING INCLUDES ALL APPROACHES

811 Know what's below. Call before you dig.

CITY OF ANN ARBOR PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a2gov.org

STATE STREET IMPROVEMENTS

TYPICAL SECTIONS - STATE ST

SCALE PLAN: N.T.S.

DRAWING NO. 2023-025-23

SHEET NO. 23 OF 75

DATE: _____

REV. _____

CHECKED _____

DRAWN _____

DESCRIPTION _____

c:\pwwork\wade-trim_fbrown\dl339881\CTP-PLTS-Typicals.dwg Dwg Created: 31-Jan-25 - _a2 standard bw.stb - Plot Date: 3-Feb-25

EXISTING GEOTECHNICAL INFORMATION

B-7: 10' SOIL BORING INDICATES 14" OF HMA PAVEMENT; 42" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND SOME CLAYEY FINES; 64" MOIST BROWN POORLY GRADED SAND W/ MOSTLY COARSE TO FINE SAND, FEW COARSE TO FINE GRAVEL, AND TRACE SILTY FINES.

B-8: TWO 5' SOIL BORINGS INDICATES 18 1/4"-24" OF HMA PAVEMENT, 13" OF NATURAL AGGREGATE BASE, AND 29" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL, AND FEW SILTY FINES.

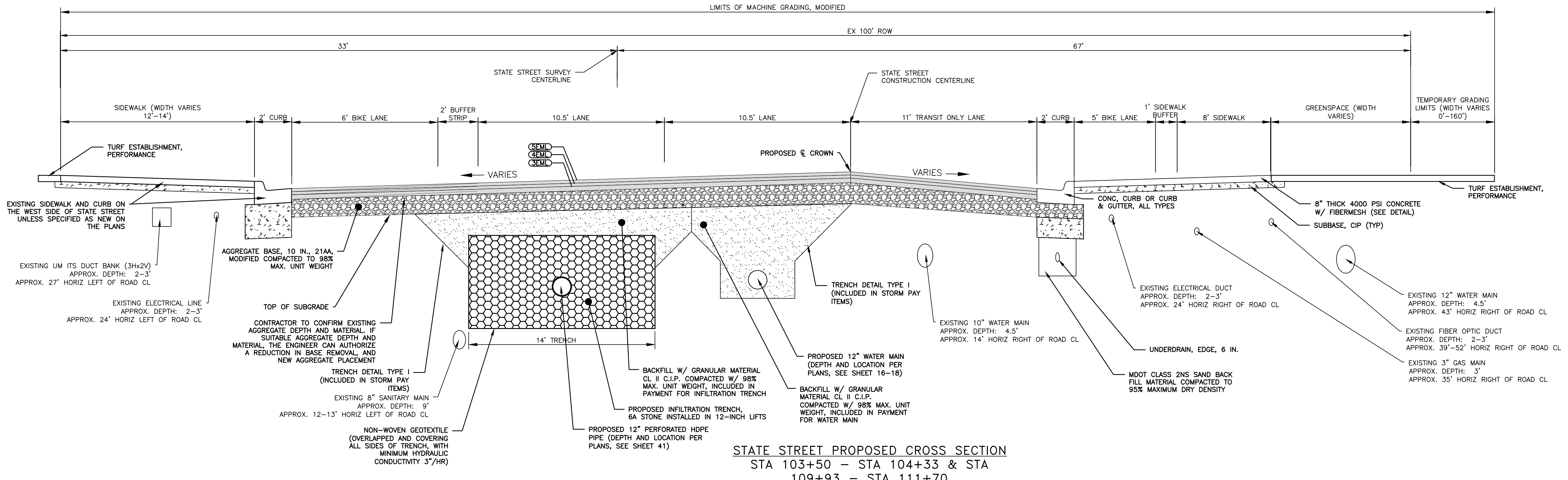
B-9: 10' SOIL BORING INDICATES 8" HMA PAVEMENT, 11" NATURAL AGGREGATE BASE W/ HMA MILLINGS, 7" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND TRACE SILTY FINES, 94" OF GRADES W/ FEW COARSE TO FINE GRAVEL.

B-10: 5'-10' SOIL BORINGS INDICATES 12"-14" OF HMA PAVEMENT, 6"-24" OF BROWN CLAYEY SAND WITH SOME CLAYEY FINES AND FILL WITH CLAY LENSES, 42"-58" OF BROWN POORLY GRADED SAND WITH FEW COARSE TO FINE GRAVEL AND TRACE CLAYEY FINES, AND 24" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL.

NOTES:

HISTORICAL RECORDS INDICATE A TROLLEY TRACK MAY EXIST BURIED IN THE STATE ROAD RIGHT OF WAY. SHOULD THIS BE DISCOVERED DURING CONSTRUCTION, PAY ITEMS DEDICATED TO THE REMOVAL OF THE TROLLEY TRACK WILL APPLY.

PRIOR TO THE ANN ARBOR ART FAIR, PAVEMENT REMOVAL WILL BE LIMITED TO THE LIMITS OF THE PROPOSED 12" WATER MAIN TRENCH.



NOTE:
 STA 111+18 TO STA 111+70 IS THE WILLIAM STREET INTERSECTION AND TRANSITIONS FROM HMA TO CONC PAVT, NON-REINF, 8 IN. SURFACE. WIDTHS AND GRADES WILL VARY. THE INTENT IS TO MATCH THE CURRENT CONDITIONS OF THE CURBLESS ROADWAY.

HMA APPLICATION ESTIMATE (THIS SECTION)

PAY ITEM	HMA MIX	APPLICATION RATE	EST. THICKNESS	PERF GRADE	AWI (MIN)
HMA, 5EML	5EML (TOP)	220 LB/SYD	2 INCH	PG 58-28	260
HMA, 4EML	4EML (LEVELING)	220 LB/SYD	2 INCH	PG 58-28	-
HMA, 3EML	3EML (BASE)	330 LB/SYD	3 INCH	PG 58-28	-

FOR INFORMATION ONLY: APPLY BOND COAT AT 0.05 TO 0.15 GAL/SYD BETWEEN PROPOSED HMA LIFTS (PAYMENT INCLUDED IN PAYMENT FOR HMA MIXTURES).
 HMA PAVING INCLUDES ALL APPROACHES

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

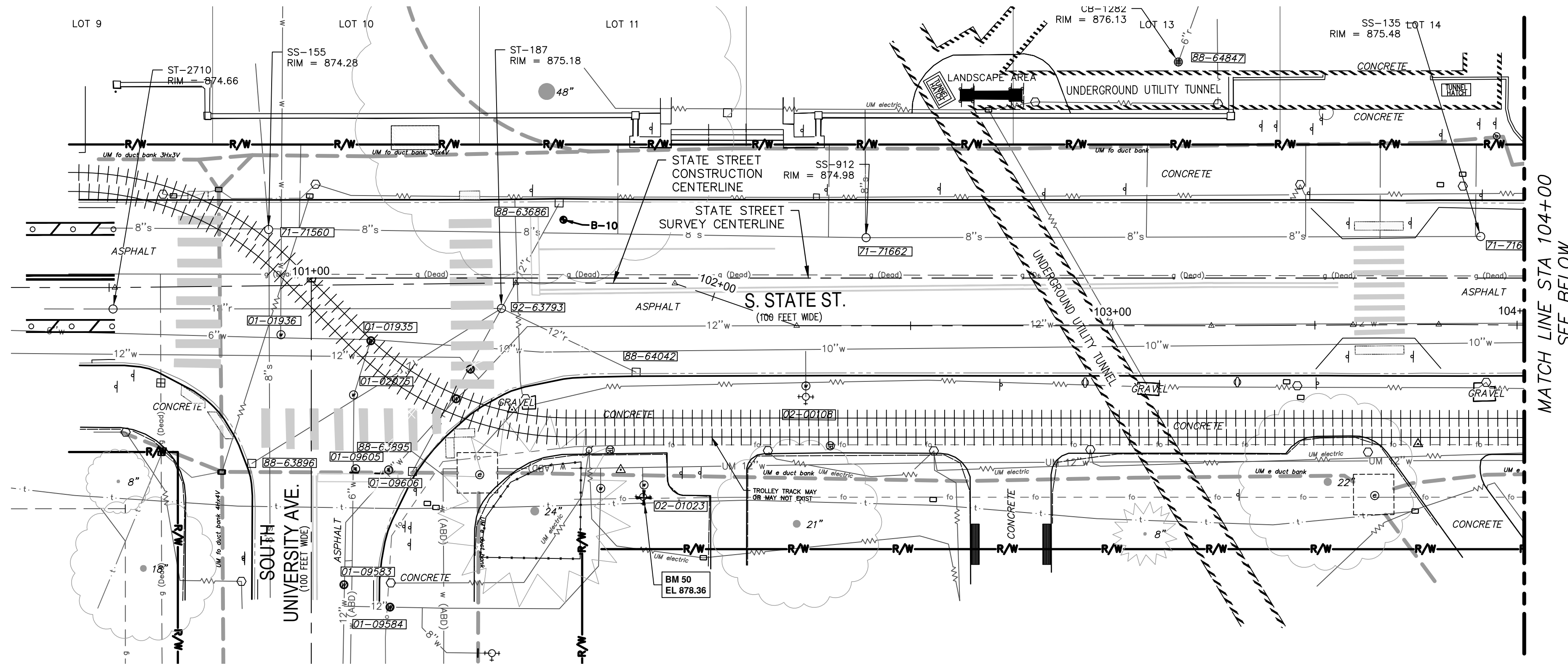
CITY OF ANN ARBOR
 PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48107-0647
 ANN ARBOR: 734.794.4410
 WWW.ANARBOR.MI.GOV

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
 STATE STREET IMPROVEMENTS
 TYPICAL SECTIONS - STATE ST

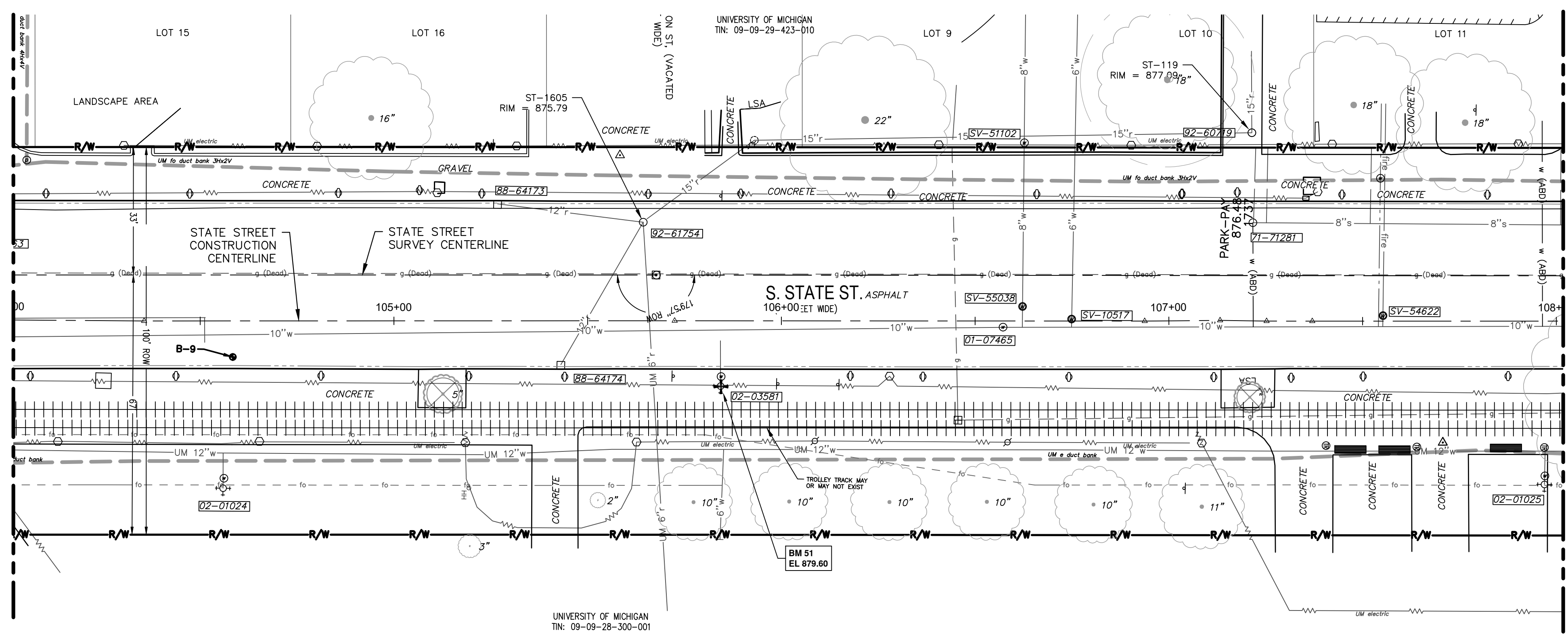
SCALE PLAN: N.T.S.
 DRAWING No. 2023-025-24
 SHEET No. 24 OF 75

c:\pwwork\wade-trim_brown\d1339881\CTP-PLTS-Typicals.dwg Dwg Created: 31-Jan-25 - _a2_standard bw.stb - Plot Date: 3-Feb-25

c:\pwwork\wade--trim_fbrown\dl339881\VSP-PLTS-Existing Conditions.dwg Dwg Created: 30-Jan-25 - _a2_standard bw.stb - Plot Date: 3-Feb-25



MATCH LINE STA 104+00
SEE BELOW

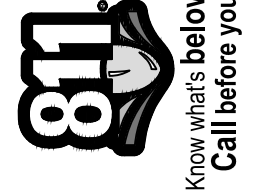


MATCH LINE STA 104+00
SEE ABOVE

MATCH LINE STA 108+00
SEE SHEET 26



HISTORICAL RECORDS INDICATE A TROLLEY TRACK MAY EXIST BURIED IN THE STATE ROAD RIGHT OF WAY ANYWHERE BETWEEN THE POE AND POB OF THIS PROJECT. SHOULD THIS BE DISCOVERED DURING CONSTRUCTION, PAY ITEMS DEDICATED TO THE REMOVAL OF THE TROLLEY TRACK WILL APPLY.



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
www.a3gov.org

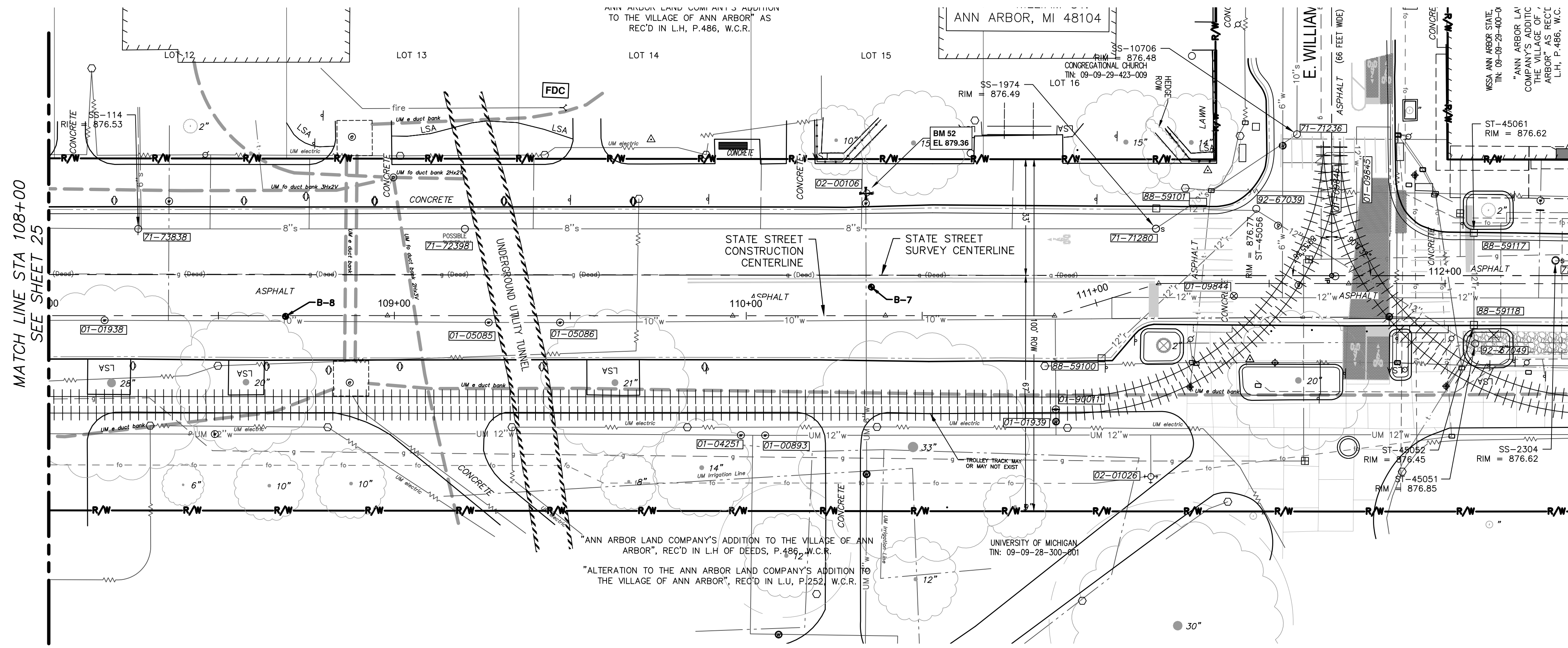


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
EXISTING CONDITIONS - STATE STREET

SCALE: 1"=20'
DRAWING NO. 2023-025-25
SHEET NO.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

EXISTING GEOTECHNICAL INFORMATION	
B-7: 10' SOIL BORING INDICATES 14" OF HMA PAVEMENT, 42" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND SOME CLAYEY FINES, 64" MOIST BROWN POORLY GRADED SAND W/ MOSTLY COARSE TO FINE SAND, FEW COARSE TO FINE GRAVEL, AND TRACE SILTY FINES.	
B-8: TWO 5' SOIL BORINGS INDICATES 18 1/2"-24" OF HMA PAVEMENT, 13" OF NATURAL AGGREGATE BASE, AND 29" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL, AND FEW SILTY FINES.	
B-9: 10' SOIL BORING INDICATES 8" HMA PAVEMENT, 11" NATURAL AGGREGATE BASE W/ HMA MILLINGS, 7" OF MOIST BROWN CLAYEY SAND W/ MOSTLY COARSE TO FINE SAND AND TRACE SILTY FINES, 94" OF GRADES W/ FEW COARSE TO FINE GRAVEL.	
B-10: 5'-10' SOIL BORINGS INDICATES 12"-14" OF HMA PAVEMENT, 6"-24" OF BROWN CLAYEY SAND WITH SOME CLAYEY FINES AND FILL WITH CLAY LENSES, 42"-58" OF BROWN POORLY GRADED SAND WITH FEW COARSE TO FINE GRAVEL AND TRACE CLAYEY FINES, AND 24" OF BROWN POORLY GRADED SAND WITH LITTLE COARSE TO FINE GRAVEL.	



HISTORICAL RECORDS INDICATE A TROLLEY TRACK MAY EXIST BURIED IN THE STATE ROAD RIGHT OF WAY ANYWHERE BETWEEN THE POE AND POB OF THIS PROJECT. SHOULD THIS BE DISCOVERED DURING CONSTRUCTION, PAY ITEMS DEDICATED TO THE REMOVAL OF THE TROLLEY TRACK WILL APPLY.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

EXISTING CONDITIONS - STATE STREET

SCALE: 1"=20'

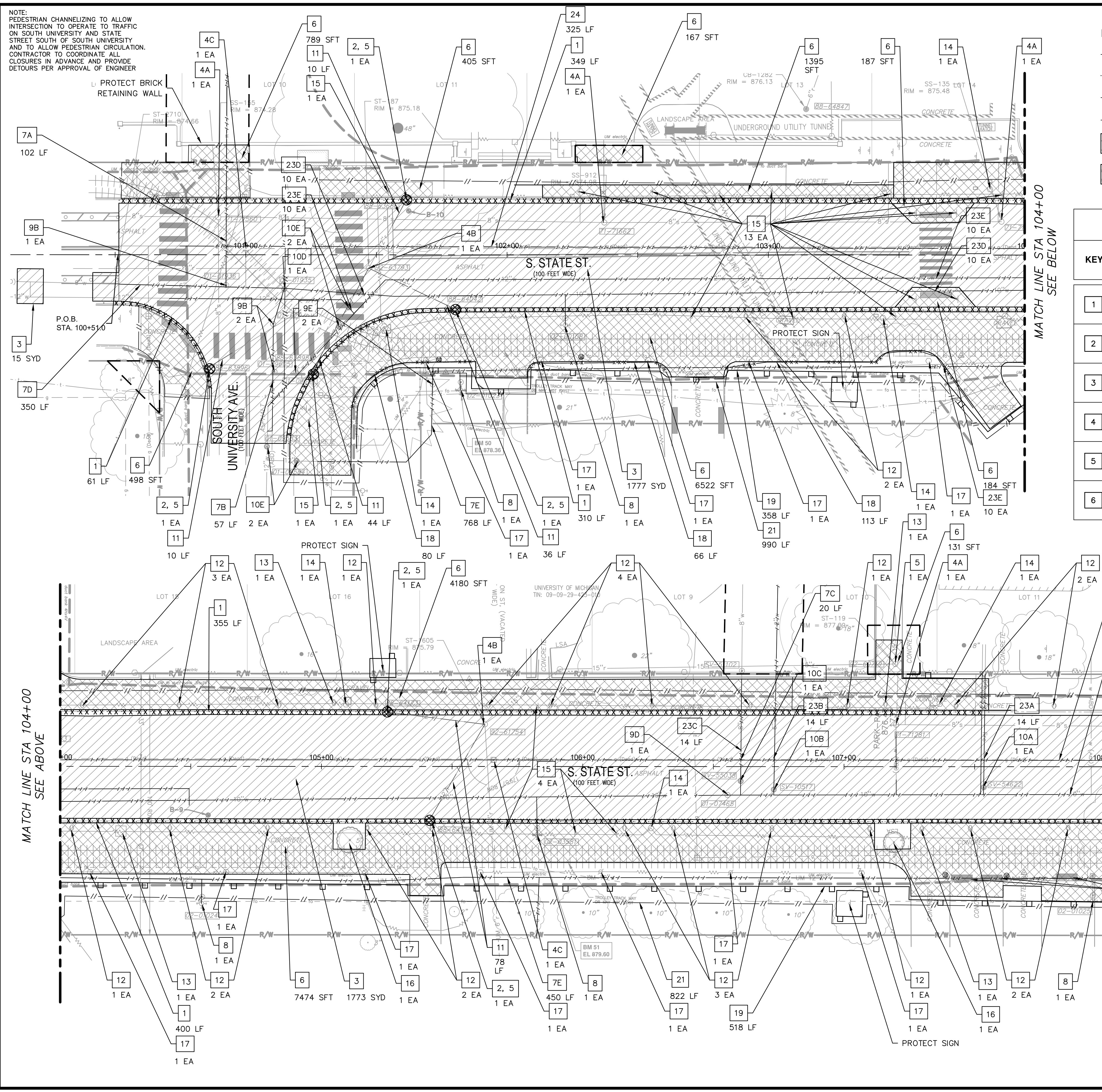
DRAWING No. 2023-025-26

SHEET No. 26 OF 75

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a2gov.org

811
Know what's below.
Call before you dig.

c:\pwwork\wade-trim_rbrown\dl339881\CRP-PLTS-Removal Plan State.dwg Dwg Created: 3-Feb-25 - _a2_standard bw.stb - Plot Date: 3-Feb-25



LEGEND

—//—	PEDESTRIAN CHANNELIZER DEVICE, FURN & OPER
· x x x x x ·	CURB AND GUTTER, ANY TYPE OR SIZE, REM
— x x x —	FENCE, SALVAGE AND RE-ERECT
---	UTILITY REMOVAL OR ABANDON
[Hatched Box]	PAVEMENT, ANY THICKNESS, REM
[Cross-hatched Box]	SIDEWALK, SIDEWALK RAMP, AND DRIVEWAY APPROACH, ANY THICKNESS, REM

REMOVAL KEY

KEY	DESCRIPTION
1	CURB, GUTTER, AND CURB AND GUTTER, ANY TYPE, REM
2	EROSION CONTROL, INLET PROTECTION, FABRIC DROP
3	DS_PAVEMENT, REMOVE
4	A. SANITARY STRUCTURE COVER, ADJUST B. STORM STRUCTURE COVER, ADJUST C. MONUMENT BOX, ADJUST
5	STORM SEWER STRUCTURE, REM
6	SIDEWALK, SIDEWALK RAMP, AND DRIVEWAY APPROACH, ANY THICKNESS, REM

SOIL EROSION NOTES

- STREETS EXTERNAL TO THE PROJECT AREA SHALL BE MONITORED FOR TRACKED MUD AND/OR CONSTRUCTION DEBRIS AND SHALL BE IMMEDIATELY CLEANED FOLLOWING ANY SUCH OCCURRENCE.

BENCHES TO BE REMOVED PRIOR TO PROJECT START


NOTE: WHERE EXISTING TROLLEY TRACK IS ENCOUNTERED TO BE IN CONFLICT WITH UTILITIES AND AS DIRECTED BY ENGINEER THAT IT WILL BE REMOVED, THE REMOVAL SHALL BE PAID FOR AS "TROLLEY TRACK, REMOVE"

7	A. WATER MAIN PIPE, 4 IN. DIA., ABANDON B. WATER MAIN PIPE, 6 IN. DIA., ABANDON C. WATER MAIN PIPE, 8 IN. DIA., ABANDON D. WATER MAIN PIPE, 10 IN. DIA., ABANDON E. WATER MAIN PIPE, 12 IN. DIA., ABANDON
8	FIRE HYDRANT ASSEMBLY, REM
9	A. GATE VALVE IN BOX, 4 IN. DIA., REM B. GATE VALVE IN BOX, 6 IN. DIA., REM C. GATE VALVE IN BOX, 8 IN. DIA., REM D. GATE VALVE IN BOX, 10 IN. DIA., REM E. GATE VALVE IN BOX, 12 IN. DIA., REM
10	A. GATE VALVE IN WELL, 4 IN. DIA., REM B. GATE VALVE IN WELL, 6 IN. DIA., REM C. GATE VALVE IN WELL, 8 IN. DIA., REM D. GATE VALVE IN WELL, 10 IN. DIA., REM E. GATE VALVE IN WELL, 12 IN. DIA., REM
11	STORM SEWER PIPE, 12 IN. DIA., REM
12	DS_PARKING METER POST, REM
13	PAY STATION, REM BY OTHERS
14	FOUNDATION, LIGHT POLE, REM
15	SIGN, REM, SALV
16	TREE, REM, 6 IN. - 12 IN.
17	LIGHT POLE, REM AND SALVAGE BY OTHERS
18	FENCE, SALVAGE AND RE-ERECT
19	EROSION CONTROL, SILT FENCE
20	TREE PROTECTION FENCE
21	PEDESTRIAN CHANNELIZER DEVICE, FURN & OPER
22	BRICK PAVERS, SIDEWALK, REM AND REINSTALL
23	A. WATER MAIN PIPE, 4 IN. DIA., REM B. WATER MAIN PIPE, 6 IN. DIA., REM C. WATER MAIN PIPE, 8 IN. DIA., REM D. WATER MAIN PIPE, 10 IN. DIA., REM E. WATER MAIN PIPE, 12 IN. DIA., REM
24	ABANDONED GAS MAIN PIPE, ANY SIZE, REM (INCLUDED IN PAYMENT FOR DS_MACHINE GRADING, MODIFIED)
25	BOLLARD, REM (INCLUDED IN PAYMENT FOR DS_MACHINE GRADING, MODIFIED)

SOIL EROSION SEQUENCE OF CONSTRUCTION*

- PLACE INLET FILTERS ON EXISTING DRAINAGE FEATURES THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION BEGINS.
- INSTALL WATER MAIN, STORM SEWER, AND PAVEMENT IMPROVEMENTS.
- RESTORE ALL DISTURBED AREAS TO A CONDITION THAT IS BETTER THAN, OR EQUAL TO, THAT WHICH EXISTED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- INSPECT & REPAIR OR REPLACE ALL TEMPORARY SESC MEASURES WEEKLY AND WITHIN 24 HOURS OF A STORM EVENT.
- CLEAN OUT STORM SEWER SYSTEMS.
- REMOVE TEMPORARY SESC FEATURES (CALL FOR FINAL INSPECTION).
- REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY'S SESC OFFICIAL.

*NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT AND ACCEPTANCE.



Know what's below. Call before you dig.

NO.	DATE	DESCRIPTION	REV.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

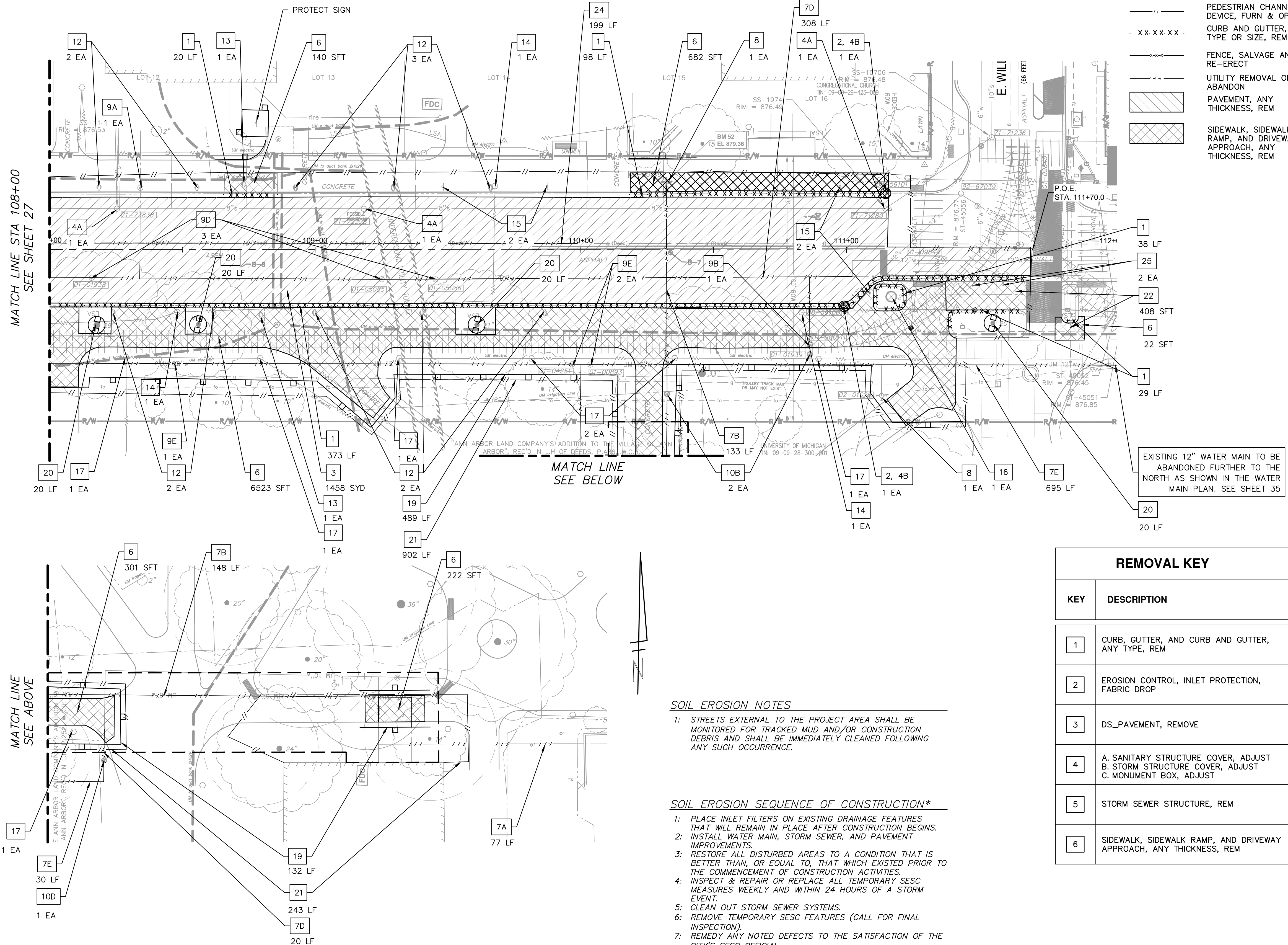
STATE STREET IMPROVEMENTS

REMOVAL & SESC - STATE STREET

SCALE: 1"=20'

DRAWING NO. 2023-025-27

SHEET NO. 27 OF 75



LEGEND

- //— PEDESTRIAN CHANNELIZER DEVICE, FURN & OPER
- xx·xx·xx· CURB AND GUTTER, ANY TYPE OR SIZE, REM
- x—x—x— FENCE, SALVAGE AND RE-ERECT
- /—/—/— UTILITY REMOVAL OR ABANDON
- [Hatched Box] PAVEMENT, ANY THICKNESS, REM
- [Cross-hatched Box] SIDEWALK, SIDEWALK RAMP, AND DRIVEWAY APPROACH, ANY THICKNESS, REM



REMOVAL KEY

KEY	DESCRIPTION
1	CURB, GUTTER, AND CURB AND GUTTER, ANY TYPE, REM
2	EROSION CONTROL, INLET PROTECTION, FABRIC DROP
3	DS_PAVEMENT, REMOVE
4	A. SANITARY STRUCTURE COVER, ADJUST B. STORM STRUCTURE COVER, ADJUST C. MONUMENT BOX, ADJUST
5	STORM SEWER STRUCTURE, REM
6	SIDEWALK, SIDEWALK RAMP, AND DRIVEWAY APPROACH, ANY THICKNESS, REM

SOIL EROSION NOTES

- 1: STREETS EXTERNAL TO THE PROJECT AREA SHALL BE MONITORED FOR TRACKED MUD AND/OR CONSTRUCTION DEBRIS AND SHALL BE IMMEDIATELY CLEANED FOLLOWING ANY SUCH OCCURRENCE.

SOIL EROSION SEQUENCE OF CONSTRUCTION*

- 1: PLACE INLET FILTERS ON EXISTING DRAINAGE FEATURES THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION BEGINS.
- 2: INSTALL WATER MAIN, STORM SEWER, AND PAVEMENT IMPROVEMENTS.
- 3: RESTORE ALL DISTURBED AREAS TO A CONDITION THAT IS BETTER THAN, OR EQUAL TO, THAT WHICH EXISTED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- 4: INSPECT & REPAIR OR REPLACE ALL TEMPORARY SESC MEASURES WEEKLY AND WITHIN 24 HOURS OF A STORM EVENT.
- 5: CLEAN OUT STORM SEWER SYSTEMS.
- 6: REMOVE TEMPORARY SESC FEATURES (CALL FOR FINAL INSPECTION).
- 7: REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY'S SESC OFFICIAL.

*NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT AND ACCEPTANCE.

NOTE: WHERE EXISTING TROLLEY TRACK IS ENCOUNTERED TO BE IN CONFLICT WITH UTILITIES AND AS DIRECTED BY ENGINEER THAT IT WILL BE REMOVED, THE REMOVAL SHALL BE PAID FOR AS "TROLLEY TRACK, REMOVE"

7	A. WATER MAIN PIPE, 4 IN. DIA., ABANDON B. WATER MAIN PIPE, 6 IN. DIA., ABANDON C. WATER MAIN PIPE, 8 IN. DIA., ABANDON D. WATER MAIN PIPE, 10 IN. DIA., ABANDON E. WATER MAIN PIPE, 12 IN. DIA., ABANDON
8	FIRE HYDRANT ASSEMBLY, REM
9	A. GATE VALVE IN BOX, 4 IN. DIA., REM B. GATE VALVE IN BOX, 6 IN. DIA., REM C. GATE VALVE IN BOX, 8 IN. DIA., REM D. GATE VALVE IN BOX, 10 IN. DIA., REM E. GATE VALVE IN BOX, 12 IN. DIA., REM
10	A. GATE VALVE IN WELL, 4 IN. DIA., REM B. GATE VALVE IN WELL, 6 IN. DIA., REM C. GATE VALVE IN WELL, 8 IN. DIA., REM D. GATE VALVE IN WELL, 10 IN. DIA., REM E. GATE VALVE IN WELL, 12 IN. DIA., REM
11	STORM SEWER PIPE, 12 IN. DIA., REM
12	DS_PARKING METER POST, REM
13	PAY STATION, REM BY OTHERS
14	FOUNDATION, LIGHT POLE, REM
15	SIGN, REM, SALV
16	TREE, REM, 6 IN. - 12 IN.
17	LIGHT POLE, REM AND SALVAGE BY OTHERS
18	FENCE, SALVAGE AND RE-ERECT
19	EROSION CONTROL, SILT FENCE
20	TREE PROTECTION FENCE
21	PEDESTRIAN CHANNELIZER DEVICE, FURN & OPER
22	BRICK PAVERS, SIDEWALK, REM AND REINSTALL
23	A. WATER MAIN PIPE, 4 IN. DIA., REM B. WATER MAIN PIPE, 6 IN. DIA., REM C. WATER MAIN PIPE, 8 IN. DIA., REM D. WATER MAIN PIPE, 10 IN. DIA., REM E. WATER MAIN PIPE, 12 IN. DIA., REM
24	ABANDONED GAS MAIN PIPE, ANY SIZE, REM (INCLUDED IN PAYMENT FOR DS_MACHINE GRADING, MODIFIED)
25	BOLLARD, REM (INCLUDED IN PAYMENT FOR DS_MACHINE GRADING, MODIFIED)

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

REMOVAL & SESC - STATE STREET

SCALE: 1"=20'

DRAWING No. 2023-025-28

SHEET No. 28 OF 75

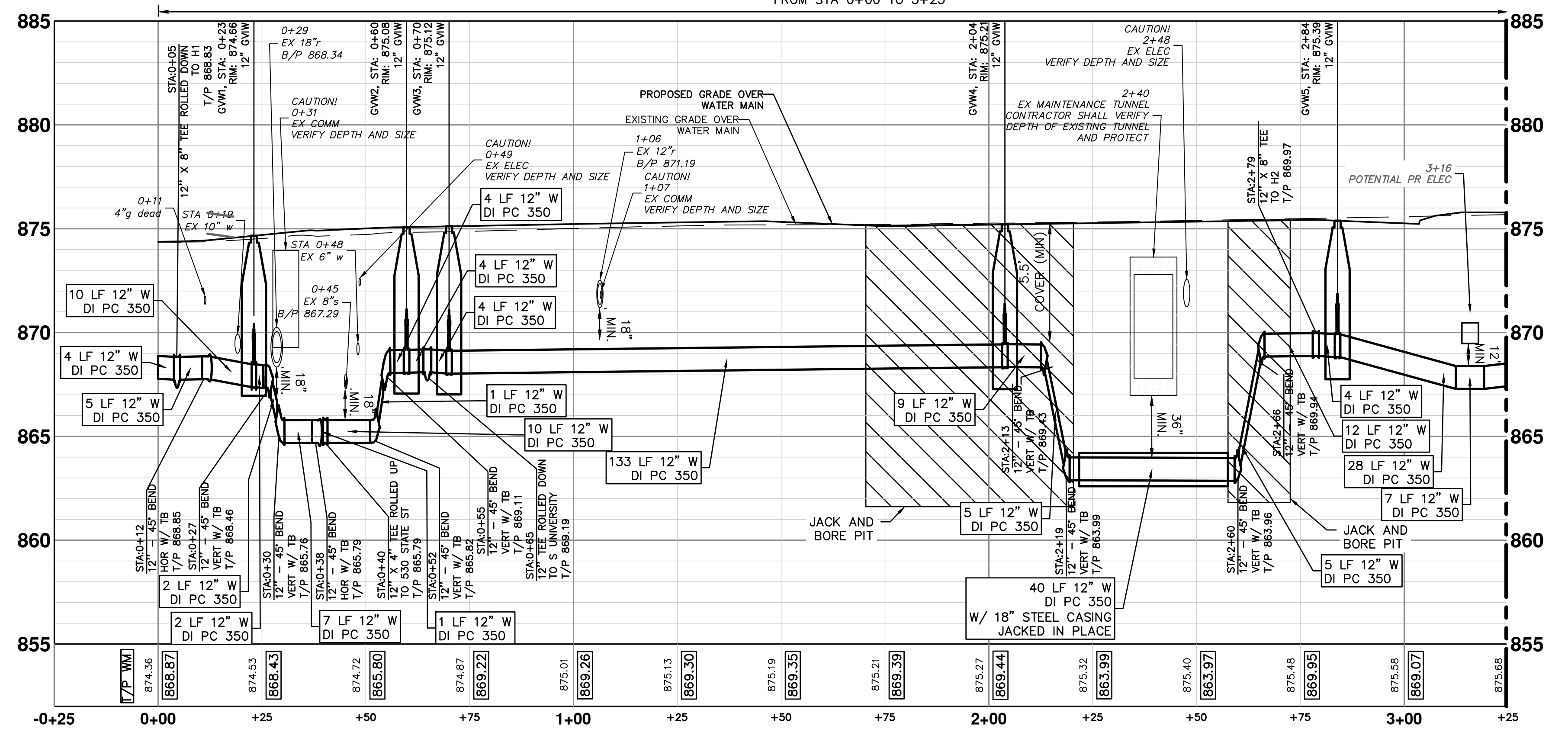
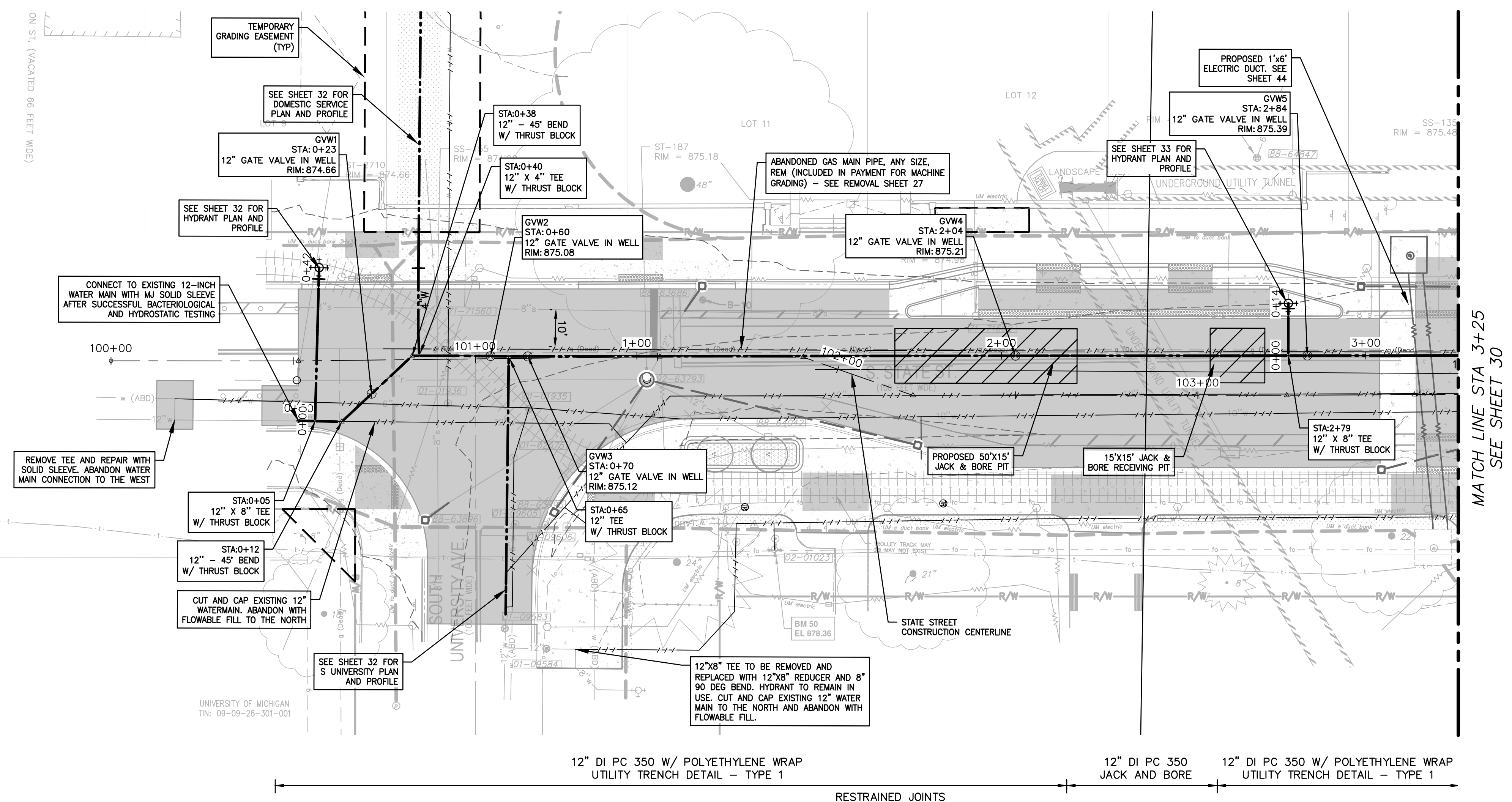
811
Know what's below. Call before you dig.

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
www.a2gov.org

CITY OF ANN ARBOR

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

c:\pw_work\wade-trim_rbrown\dl1339881\CWM-PLTS-Prop WM-States.dwg WM-States.dwg Dwg Created: 2-Feb-25 -- a2 standard bw.stb -- Plot Date: 3-Feb-25



Existing Water Services
Address Station Size (in)
530 0+43 4

WATER MAIN STRUCTURE TABLE					
STRUCTURE	TYPE	STATION	RIM	WELL DEPTH	T/P
GVW1	12" GVW	0+23	874.66	7.20	5.66
GVW2	12" GVW	0+60	875.08	7.52	5.98
GVW3	12" GVW	0+70	875.12	7.60	6.06
GVW4	12" GVW	2+04	875.21	7.43	5.89
GVW5	12" GVW	2+84	875.39	7.14	5.60

*EXACT DEPTH OF CROSSING SANITARY LEADS IS UNKNOWN. CONTRACTOR TO FIELD VERIFY LEADS AND MAINTAIN CLEARANCE AS APPROVED BY CITY ENGINEER. (TYP)

THE DEPTH AND SIZE OF EXISTING ELECTRICAL, TELEPHONE AND FIBER OPTIC CONDUITS/DUCTS AND THE DEPTH OF GAS MAINS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY, SUPPORT AND PROTECT DURING CONSTRUCTION AND ADJUST WATER MAIN WHERE NECESSARY TO MAINTAIN 12-INCHES VERTICAL CLEARANCE FROM ALL UTILITIES (EXCEPT SANITARY AND STORM SEWER WHERE 18-INCHES IS REQUIRED). THIS WORK IS PAID FOR UNDER ASSOCIATED WATERMAIN PAY ITEMS

811
Know what's below. Call before you dig.

REV.	DATE	DRAWN	CHECKED

DESCRIPTION

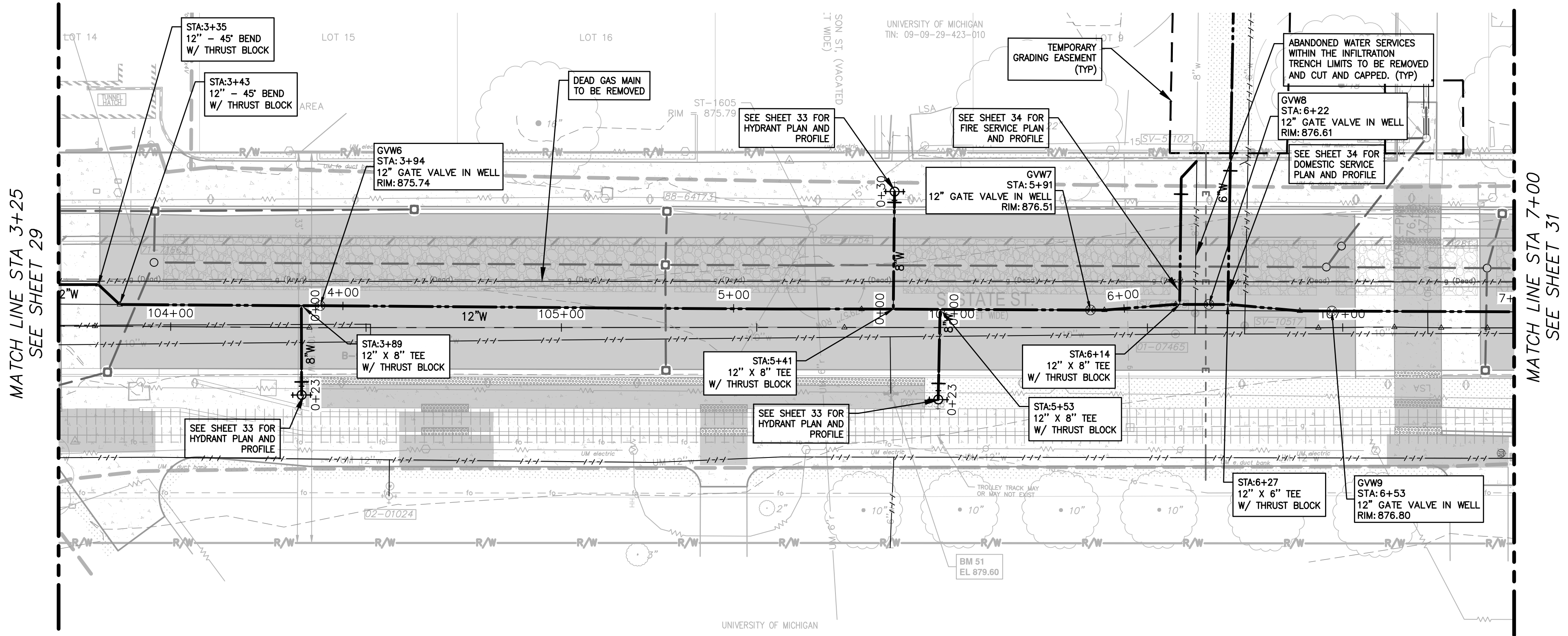
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
PROPOSED WATER MAIN PLAN & PROFILE - STATE ST

CITY OF ANN ARBOR - PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-0647
www.a2gov.org

CITY OF ANN ARBOR MICHIGAN

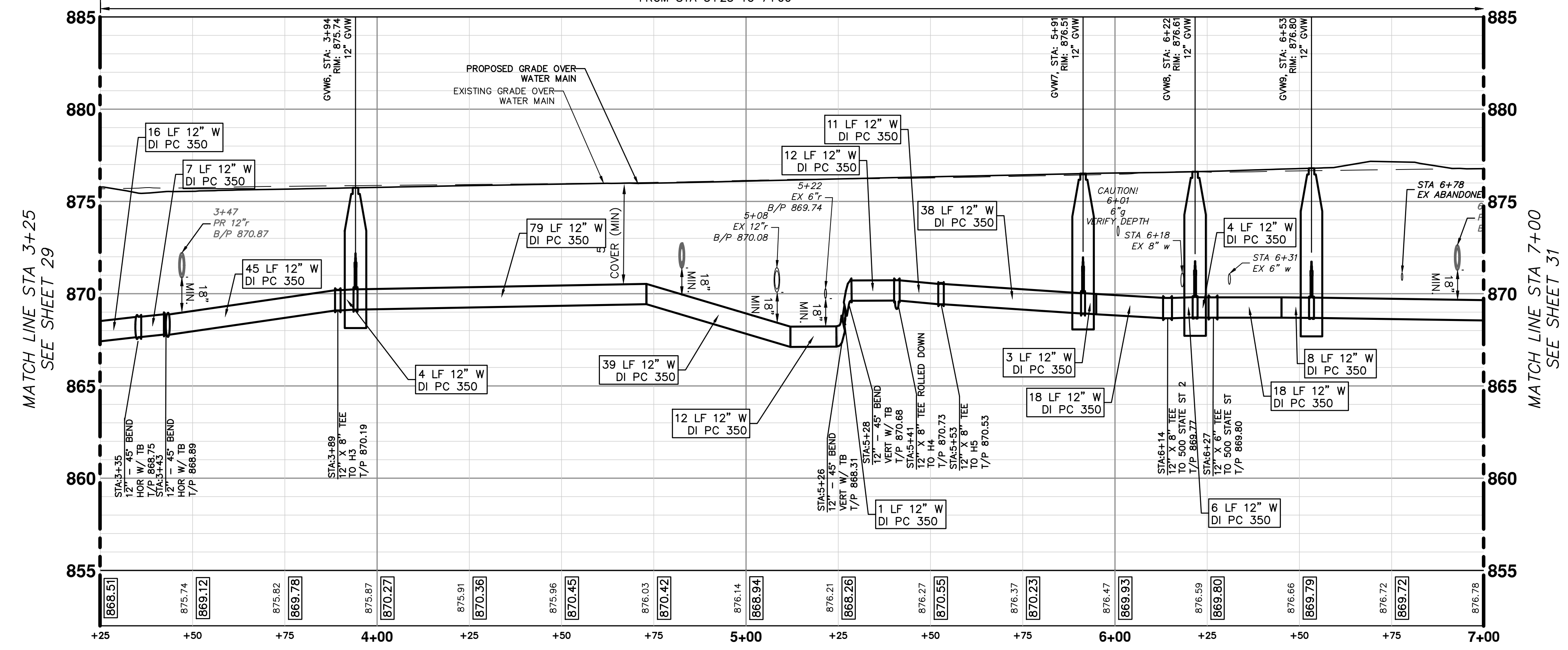
SCALE: 1"=20'
DRAWING NO. 2023-025-29
SHEET NO. 29 OF 75

c:\pwork\wade-trim_rbrown\dl339881\CWM-PLTS-Prop WM-State.dwg Dwg Created: 2-Feb-25 - _a2 standard bw.stb - Plot Date: 3-Feb-25



12" DI PC 350 W/ POLYETHYLENE WRAP
UTILITY TRENCH DETAIL - TYPE 1

RESTRAINED JOINTS
FROM STA 3+25 TO 7+00



Existing Water Services


Address	Station	Size (in)
500	6+14	8
500	6+27	6

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	WELL DEPTH	T/P
GVW6	12" GVW	3+94	875.74	7.10	5.56
GVW7	12" GVW	5+91	876.51	7.95	6.41
GVW8	12" GVW	6+22	876.61	8.39	6.85
GVW9	12" GVW	6+53	876.80	8.61	7.07


*EXACT DEPTH OF CROSSING SANITARY LEADS IS UNKNOWN. CONTRACTOR TO FIELD VERIFY LEADS AND MAINTAIN CLEARANCE AS APPROVED BY CITY ENGINEER. (TYP)

THE DEPTH AND SIZE OF EXISTING ELECTRICAL, TELEPHONE AND FIBER OPTIC CONDUITS/DUCTS AND THE DEPTH OF GAS MAINS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY, SUPPORT AND PROTECT DURING CONSTRUCTION AND ADJUST WATER MAIN WHERE NECESSARY TO MAINTAIN 12-INCHES VERTICAL CLEARANCE FROM ALL UTILITIES (EXCEPT SANITARY AND STORM SEWER WHERE 18-INCHES IS REQUIRED). THIS WORK IS PAID FOR UNDER ASSOCIATED WATERMAIN PAY ITEMS



Know what's below.
Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

PROPOSED WATER MAIN PLAN & PROFILE - STATE ST

SCALE: 1"=20'

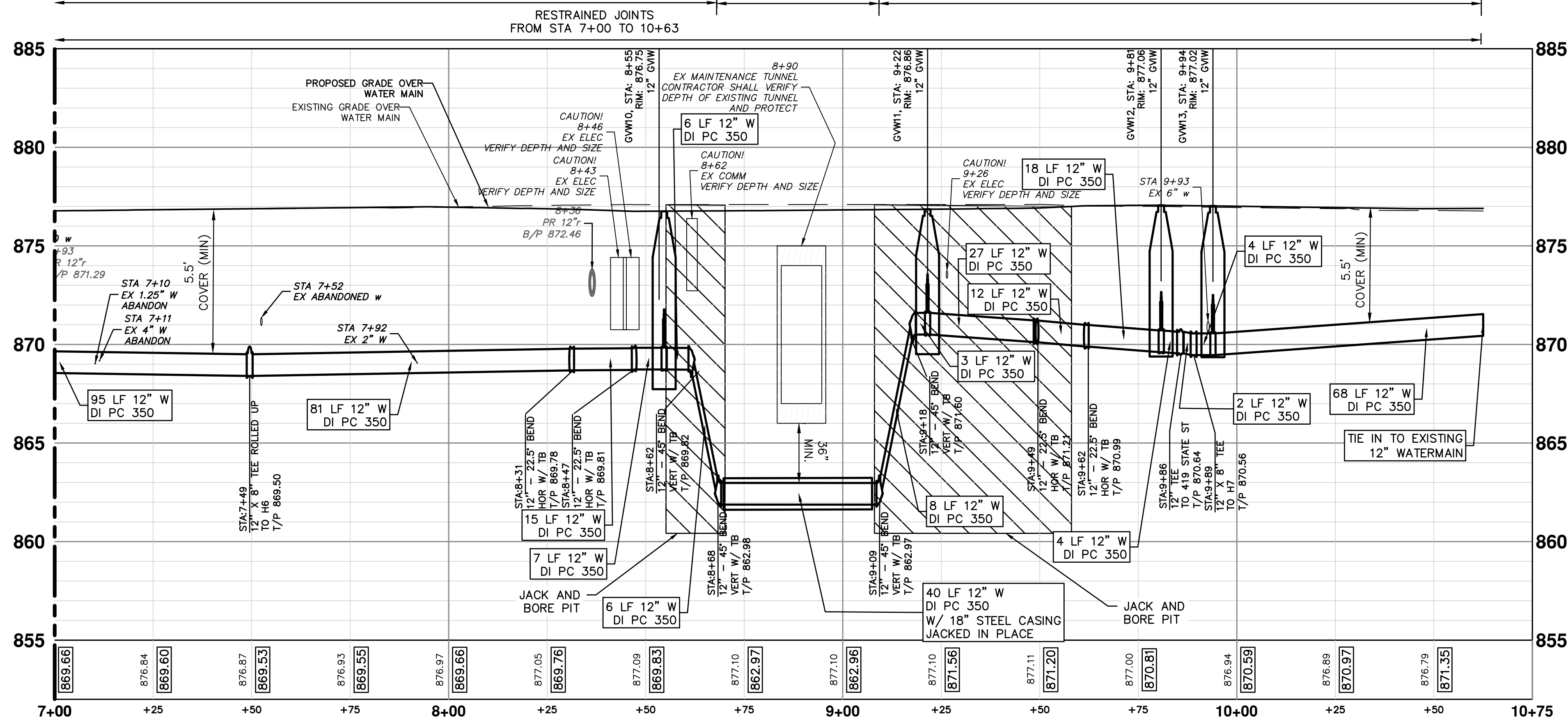
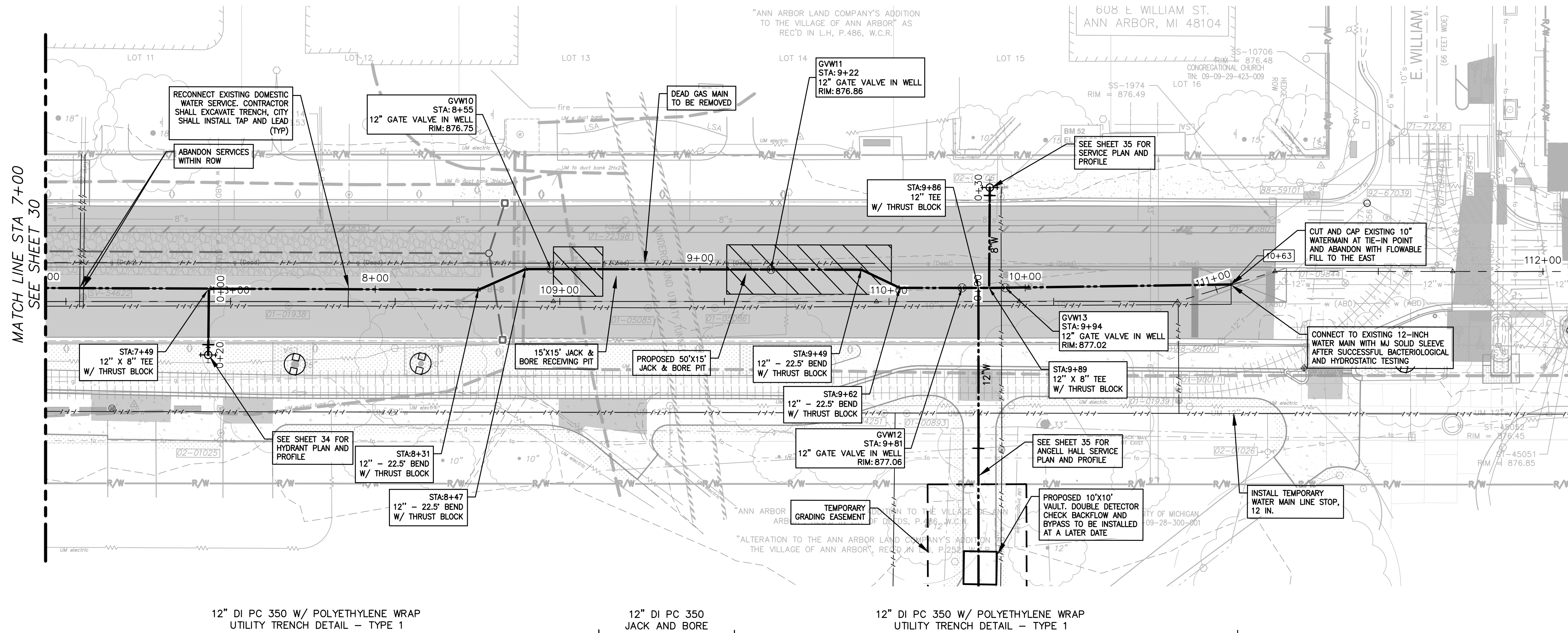
DRAWING NO. 2023-023-30

SHEET No. 30 OF 75

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
ANN ARBOR 734.794.6410
www.a2gov.org

c:\pwwork\wade-trim_rbrown\dl339881\CWM-PLTS-Prop WM-States.dwg WM-States.dwg Dwg Created: 2-Feb-25 - _a2 standard b.w.stb - Plot Date: 3-Feb-25

MATCH LINE STA 7+00
SEE SHEET 30



Existing Water Services

Address	Station	Size (in)
434	7+10	1.25
434	7+11	4
428	7+92	2
419	9+89	12

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	WELL DEPTH	T/P
GVW10	12" GVW	8+55	876.75	8.52	6.98
GVW11	12" GVW	9+22	876.86	6.85	5.31
GVW12	12" GVW	9+81	877.06	7.17	5.63
GVW13	12" GVW	9+94	877.02	7.17	5.63

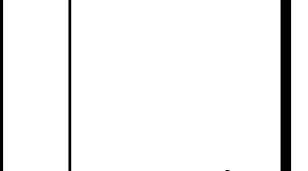
*EXACT DEPTH OF CROSSING SANITARY LEADS IS UNKNOWN. CONTRACTOR TO FIELD VERIFY LEADS AND MAINTAIN CLEARANCE AS APPROVED BY CITY ENGINEER. (TYP)

THE DEPTH AND SIZE OF EXISTING ELECTRICAL, TELEPHONE AND FIBER OPTIC CONDUITS/DUCTS AND THE DEPTH OF GAS MAINS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY, SUPPORT AND PROTECT DURING CONSTRUCTION AND ADJUST WATER MAIN WHERE NECESSARY TO MAINTAIN 12-INCHES VERTICAL CLEARANCE FROM ALL UTILITIES (EXCEPT SANITARY AND STORM SEWER WHERE 18-INCHES IS REQUIRED). THIS WORK IS PAID FOR UNDER ASSOCIATED WATERMAIN PAY ITEMS



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

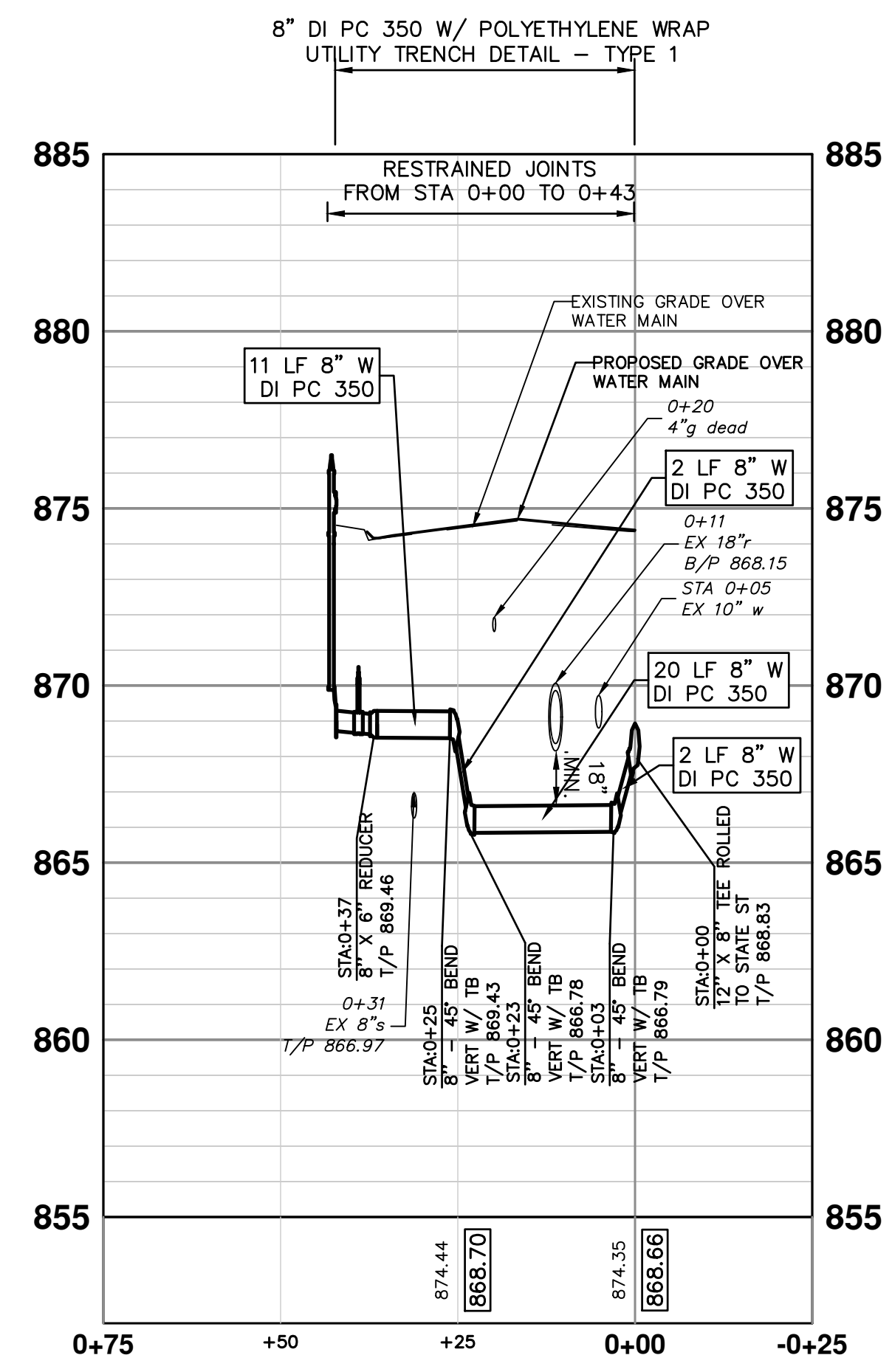
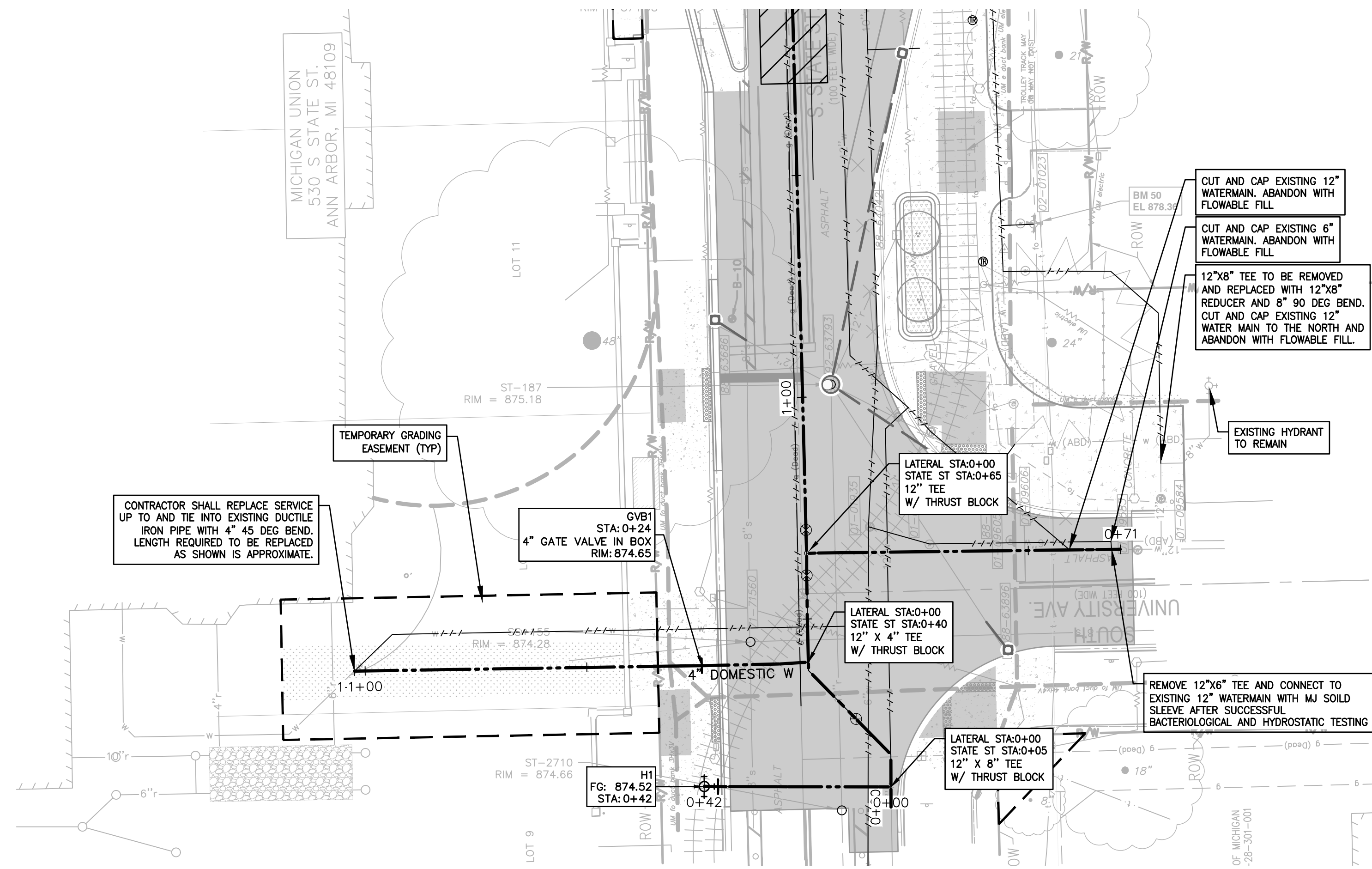
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.aagov.org



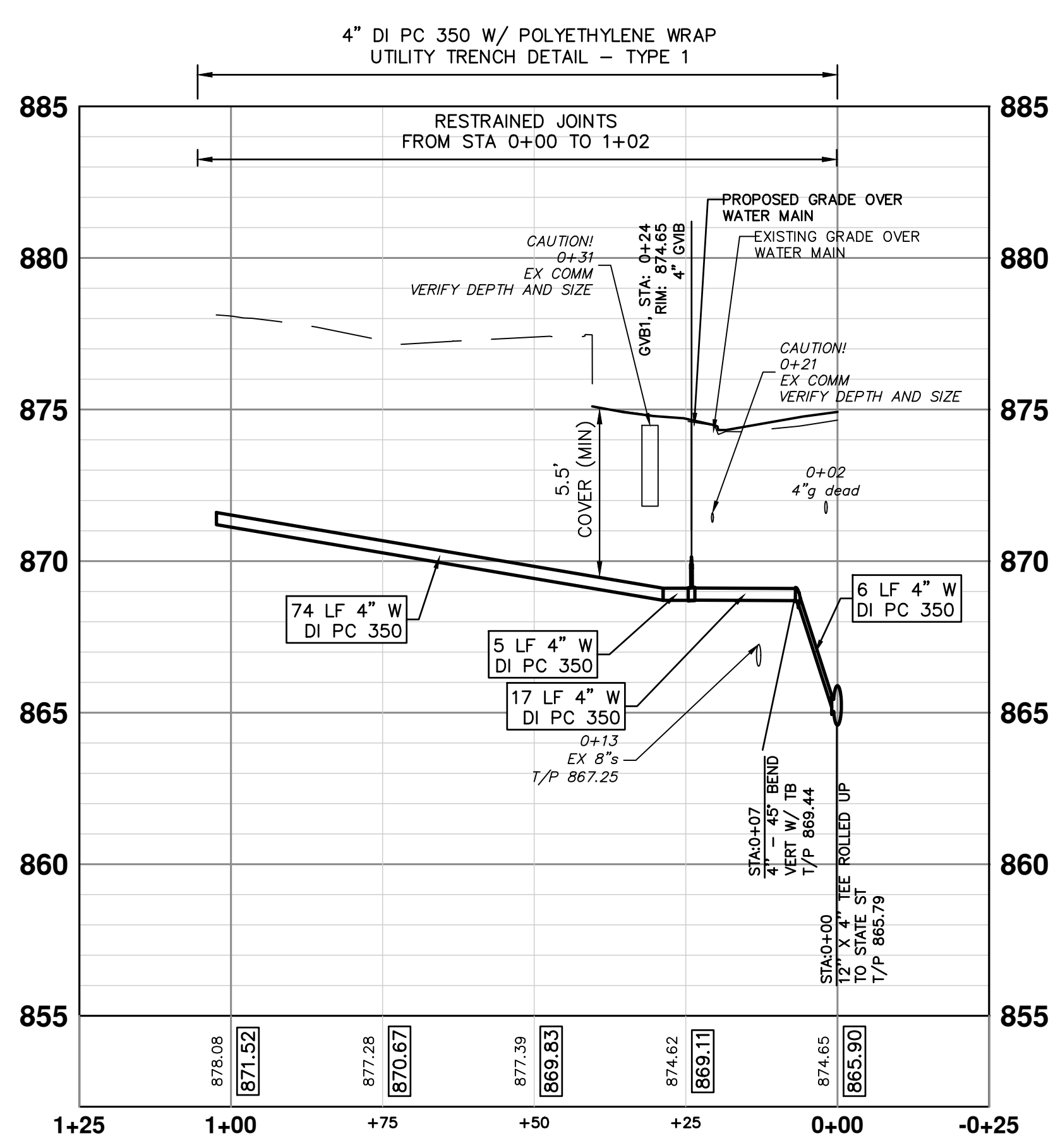
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
PROPOSED WATER MAIN PLAN & PROFILE - STATE ST

SCALE: 1"=20'
DRAWING NO.: 2023-023-31
SHEET NO.

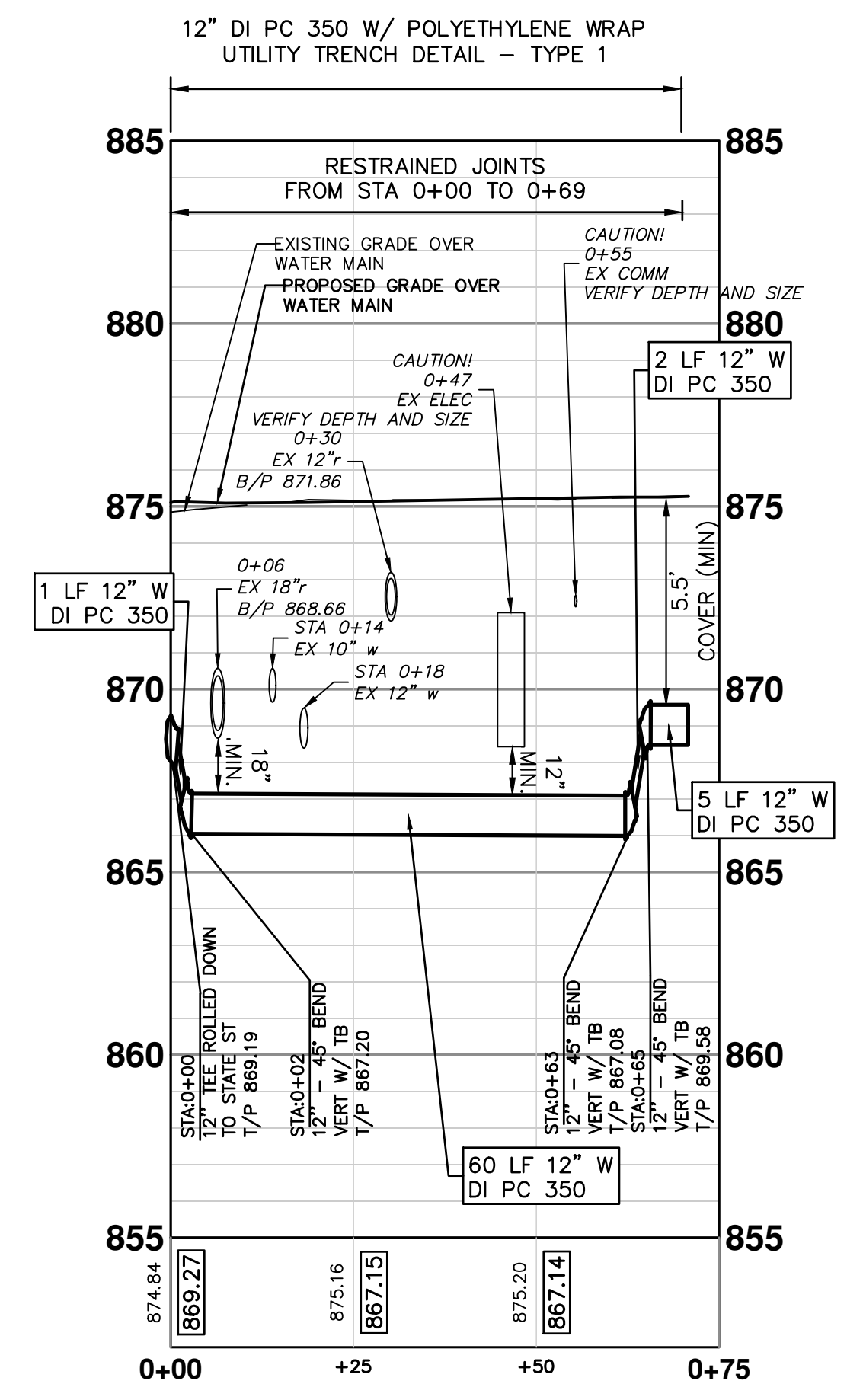
c:\pw_work\wade-trim_rbrown\dl1339881\CW-PLTS-Prop WM-State Laterals.dwg Dwg Created: 3-Feb-25 - _a2 standard bw.stb - Plot Date: 3-Feb-25



HYDRANT 1



530 STATE STREET DOMESTIC WATER SERVICE



SOUTH U LATERAL WM

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	T/P
GVB1	4" GVB	0+24	874.65	5.61

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	FG	T/P
H1	HYD	0+42	874.52	5.50

*EXACT DEPTH OF CROSSING SANITARY LEADS IS UNKNOWN. CONTRACTOR TO FIELD VERIFY LEADS AND MAINTAIN CLEARANCE AS APPROVED BY CITY ENGINEER. (TYP)

THE DEPTH AND SIZE OF EXISTING ELECTRICAL, TELEPHONE AND FIBER OPTIC CONDUITS/DUCTS AND THE DEPTH OF GAS MAINS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY, SUPPORT AND PROTECT DURING CONSTRUCTION AND ADJUST WATER MAIN WHERE NECESSARY TO MAINTAIN 12-INCHES VERTICAL CLEARANCE FROM ALL UTILITIES (EXCEPT SANITARY AND STORM SEWER WHERE 18-INCHES IS REQUIRED). THIS WORK IS PAID FOR UNDER ASSOCIATED WATERMAIN PAY ITEMS

811
Know what's below. Call before you dig.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
PROPOSED WATER MAIN PLAN & PROFILE - STATE ST LATERALS

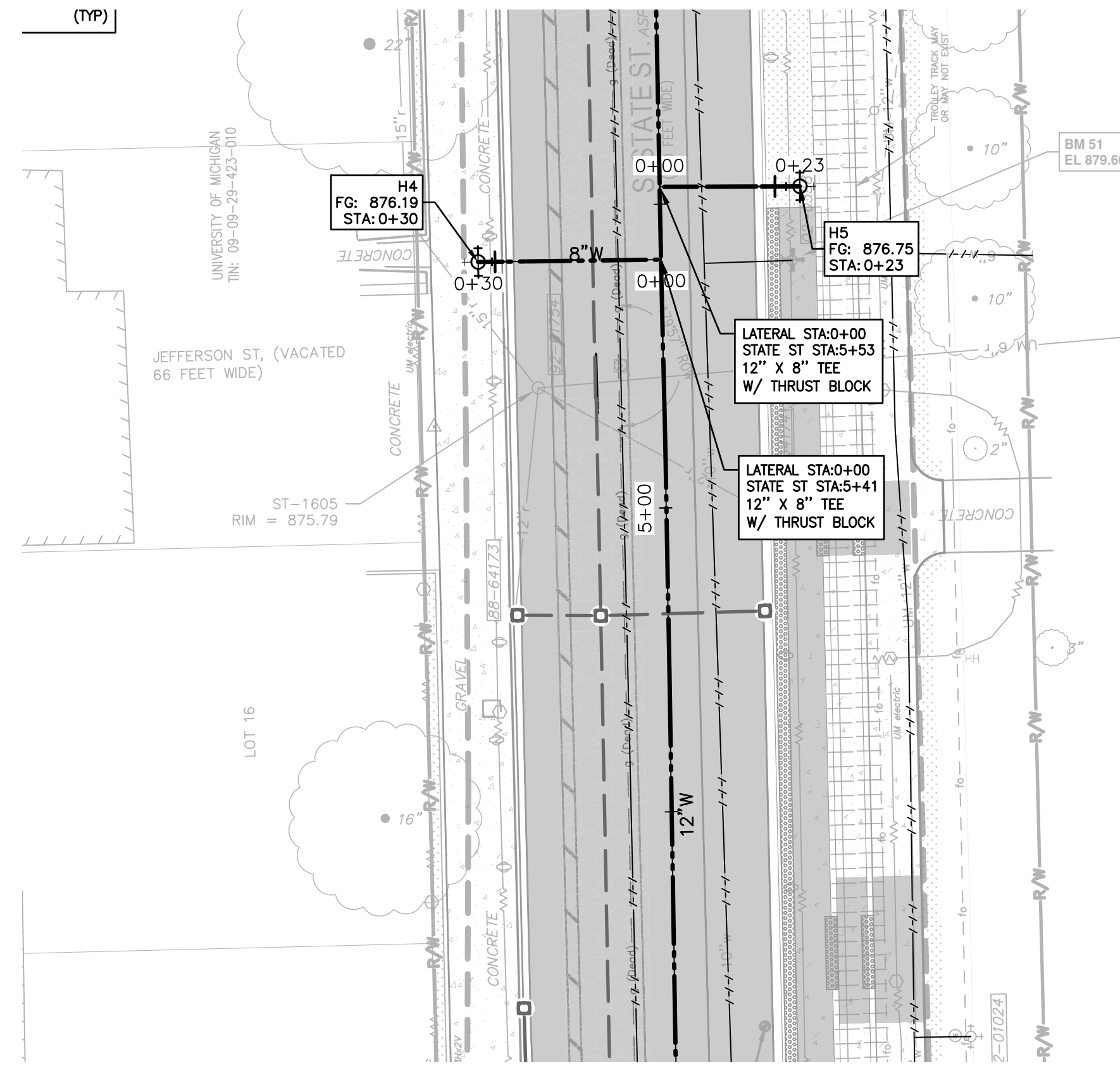
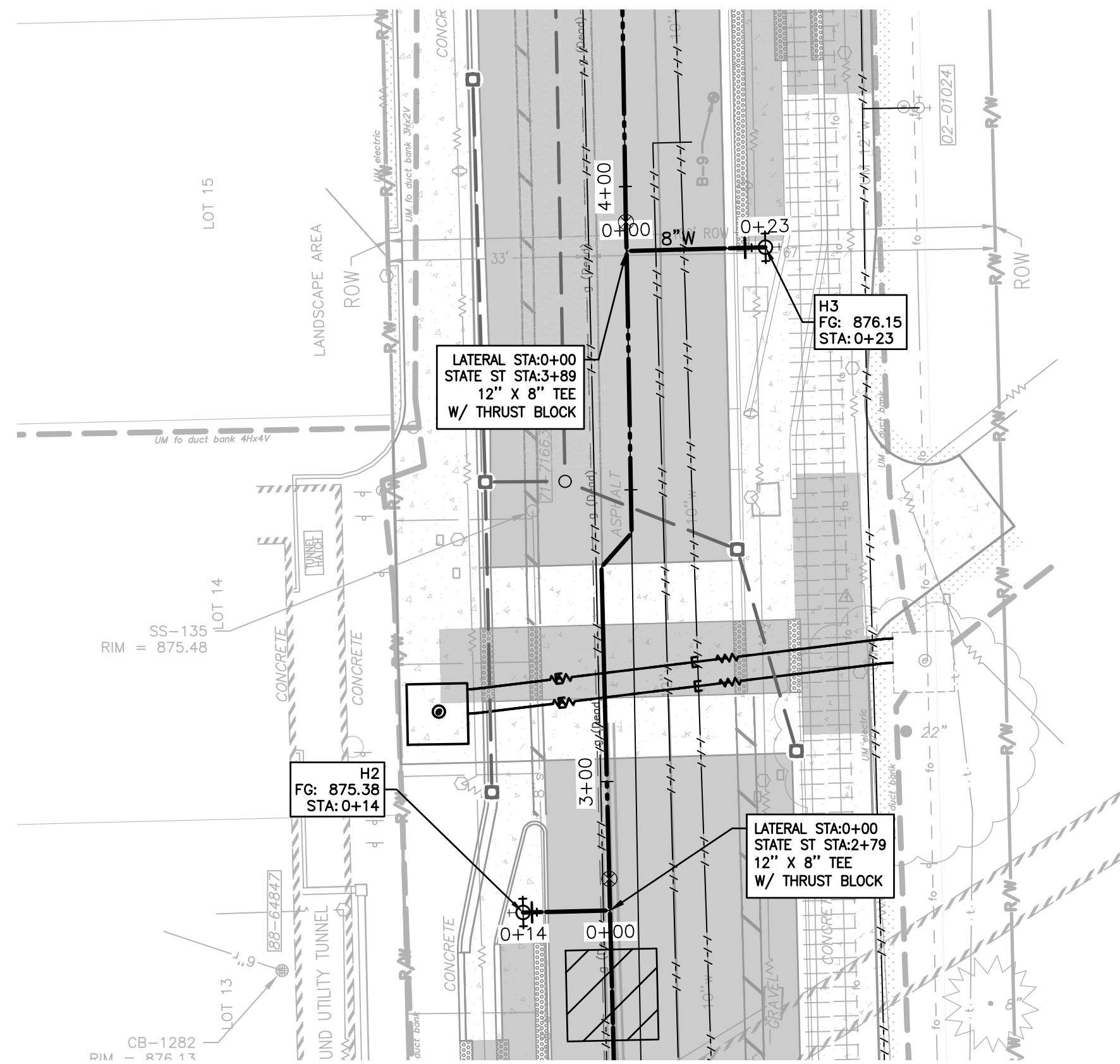
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
ANN ARBOR
734.794.4410
www.a2gov.org

CITY OF ANN ARBOR
MICHI-
GAN

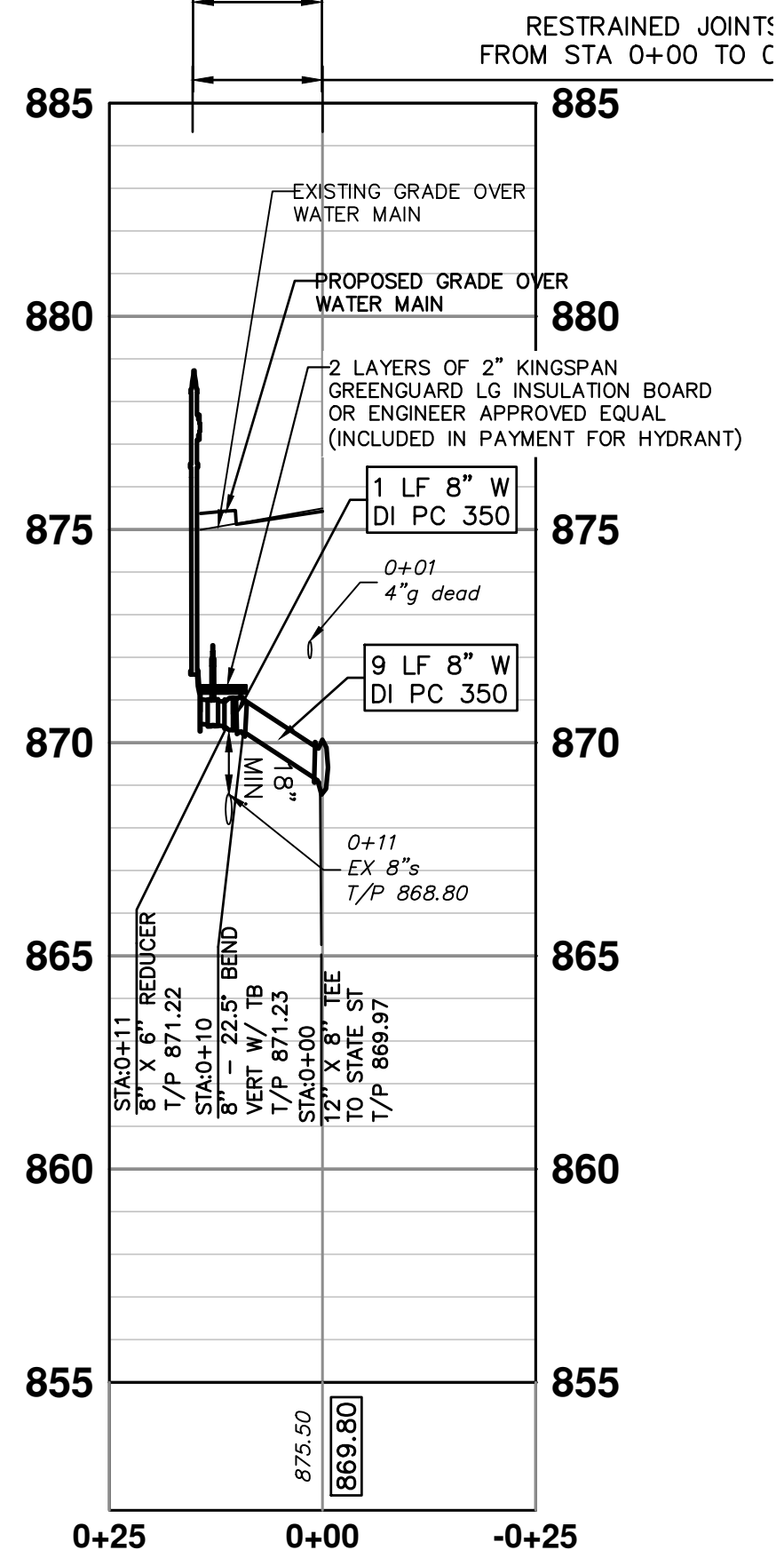
SCALE: 1"=20'
DRAWING NO. 2023-023-32
SHEET NO. 32 OF 75

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

c:\pw_work\wade-trim_rbrown\d1339881\CW-PLTS-Prop WM-State Laterals.dwg Dwg Created: 3-Feb-25 --_a2 standard bw.stb -- Plot Date: 3-Feb-25

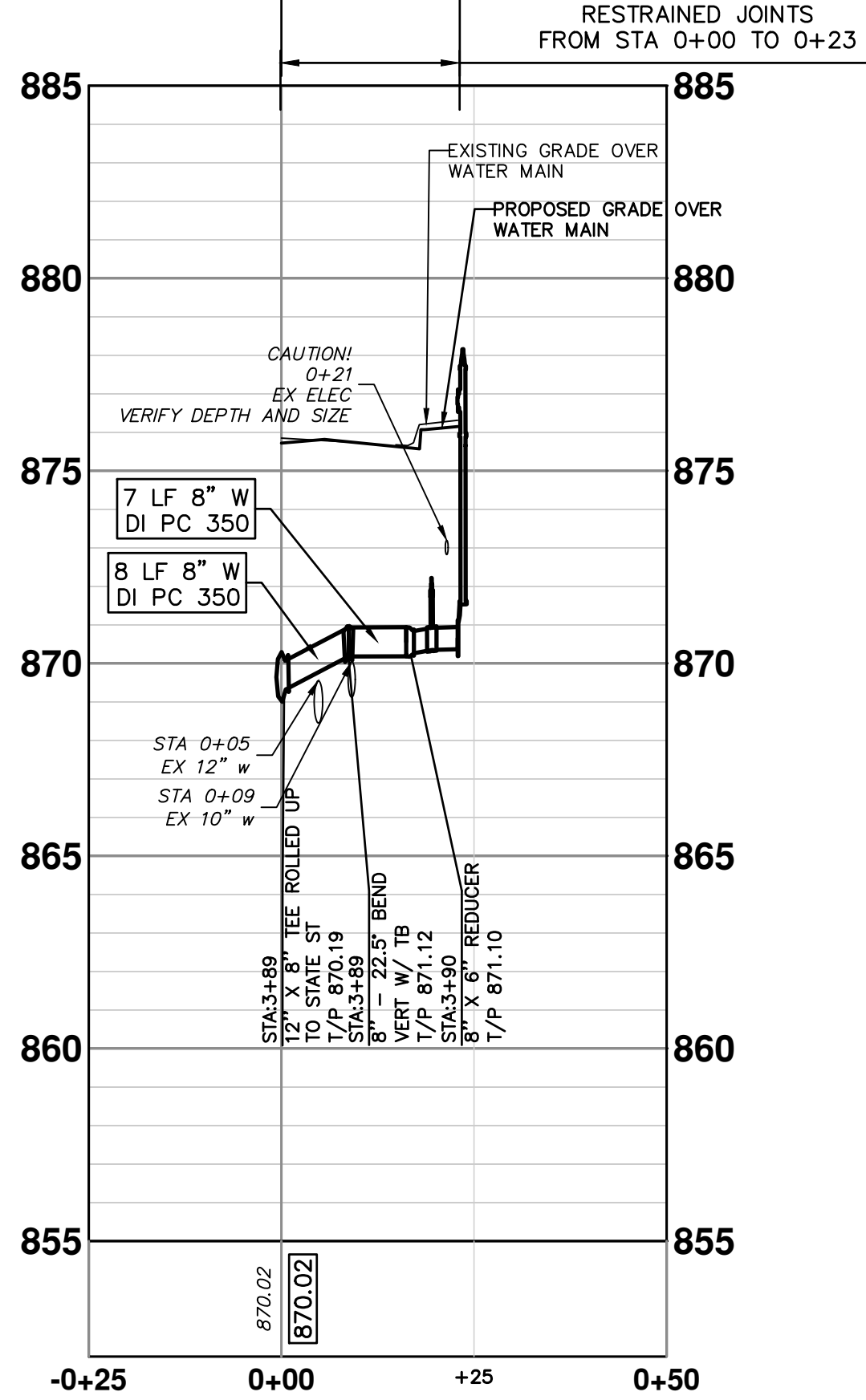


8" DI PC 350 W/ POLYETHYLENE WRAP
UTILITY TRENCH DETAIL - TYPE 1



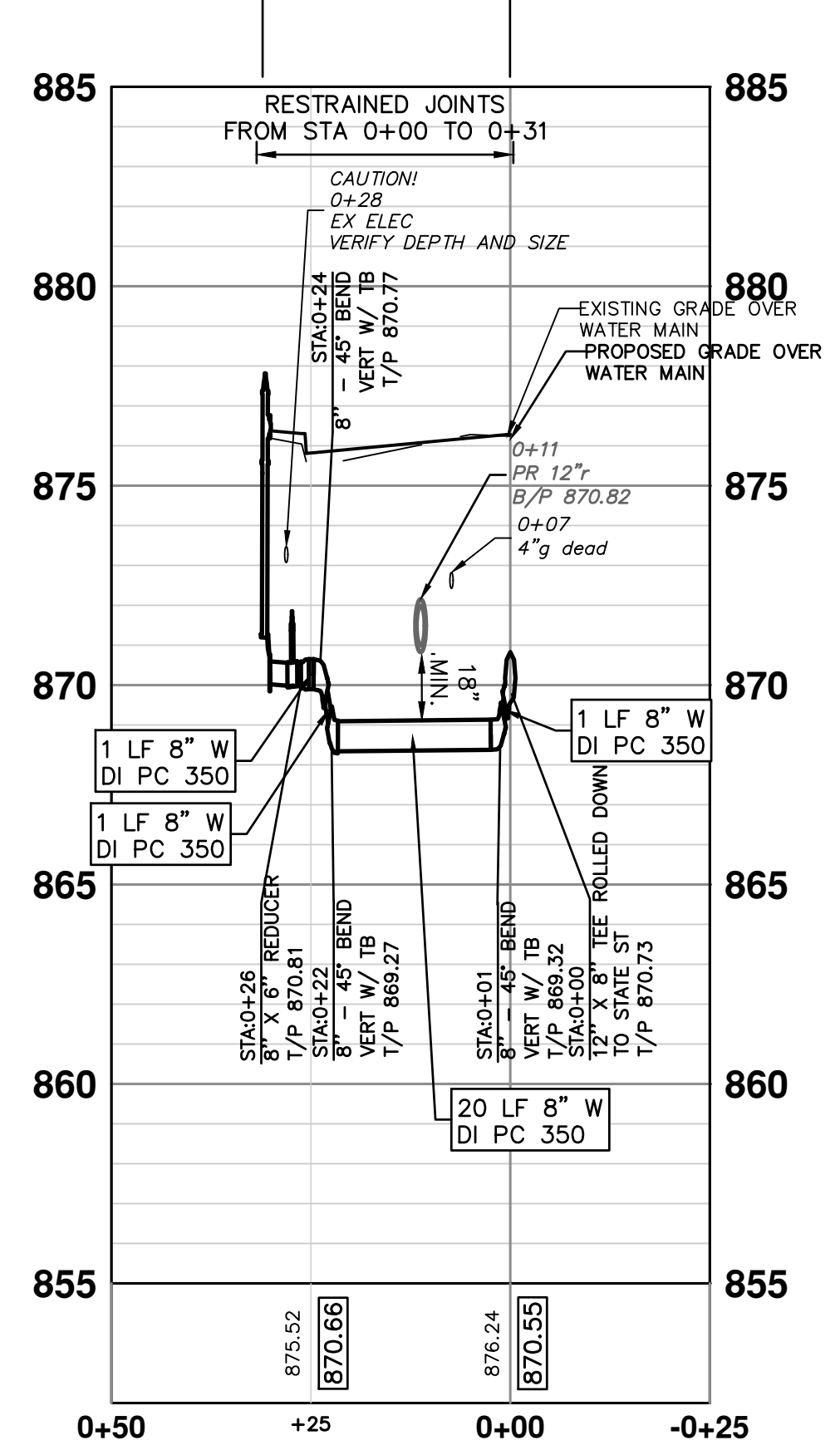
HYDRANT 2

8" DI PC 350 W/ POLYETHYLENE WRAP
UTILITY TRENCH DETAIL - TYPE 1



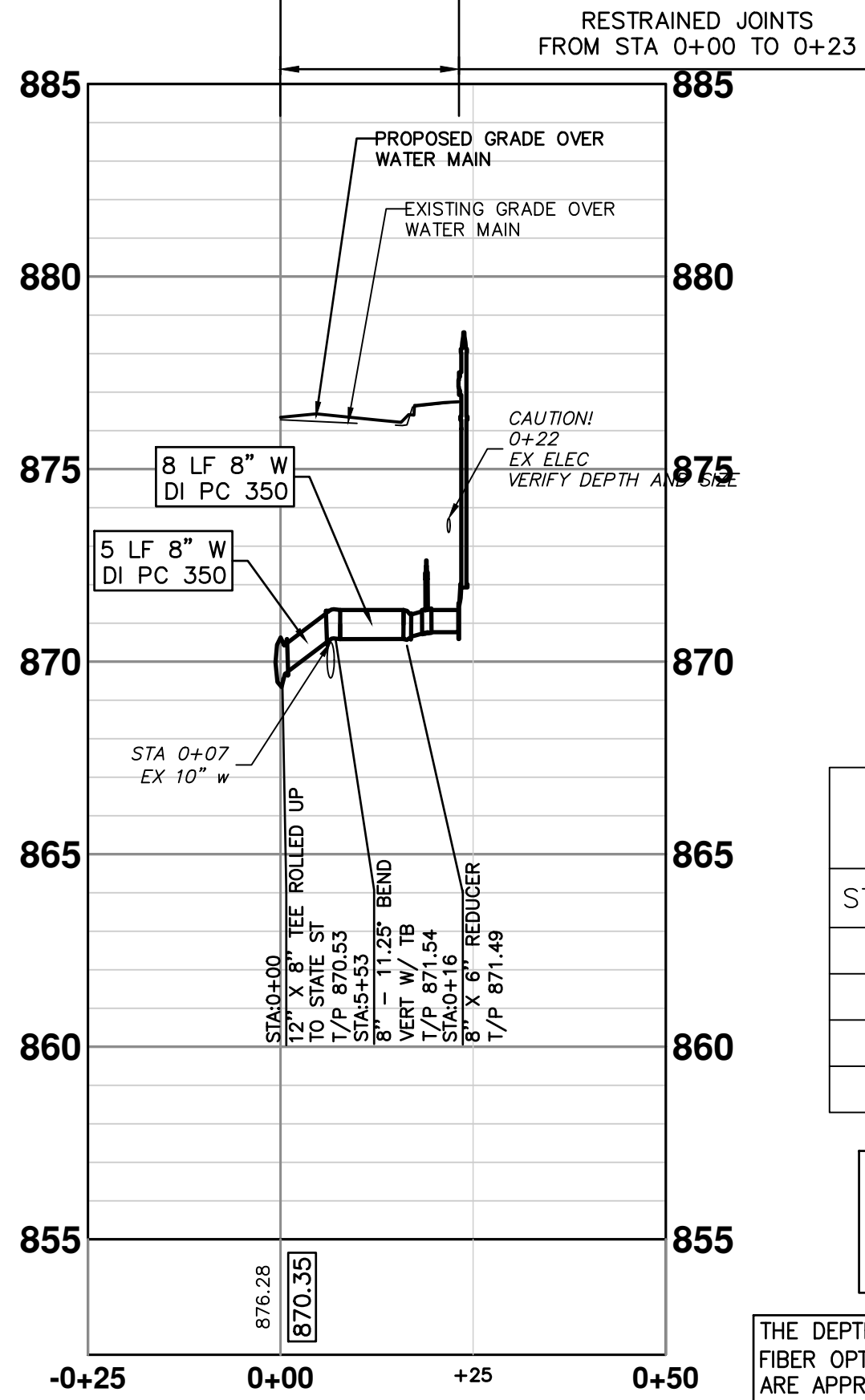
HYDRANT 3

8" DI PC 350 W/ POLYETHYLENE WRAP
UTILITY TRENCH DETAIL - TYPE 1



HYDRANT 4

8" DI PC 350 W/ POLYETHYLENE WRAP
UTILITY TRENCH DETAIL - TYPE 1



HYDRANT 5

WATER MAIN STRUCTURE TABLE				
STRUCTURE	TYPE	STATION	FG	T/P
H2	HYD	0+14	875.38	5.50
H3	HYD	0+23	876.15	5.50
H4	HYD	0+30	876.19	5.50
H5	HYD	0+23	876.75	5.50

*EXACT DEPTH OF CROSSING SANITARY LEADS IS UNKNOWN. CONTRACTOR TO FIELD VERIFY LEADS AND MAINTAIN CLEARANCE AS APPROVED BY CITY ENGINEER. (TYP)

THE DEPTH AND SIZE OF EXISTING ELECTRICAL, TELEPHONE AND FIBER OPTIC CONDUITS/DUCTS AND THE DEPTH OF GAS MAINS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY, SUPPORT AND PROTECT DURING CONSTRUCTION AND ADJUST WATER MAIN WHERE NECESSARY TO MAINTAIN 12-INCHES VERTICAL CLEARANCE FROM ALL UTILITIES (EXCEPT SANITARY AND STORM SEWER WHERE 18-INCHES IS REQUIRED). THIS WORK IS PAID FOR UNDER ASSOCIATED WATERMAIN PAY ITEMS



811
Know what's below.
Call before you dig.

REV.	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

PROPOSED WATER MAIN PLAN & PROFILE - STATE ST LATERALS

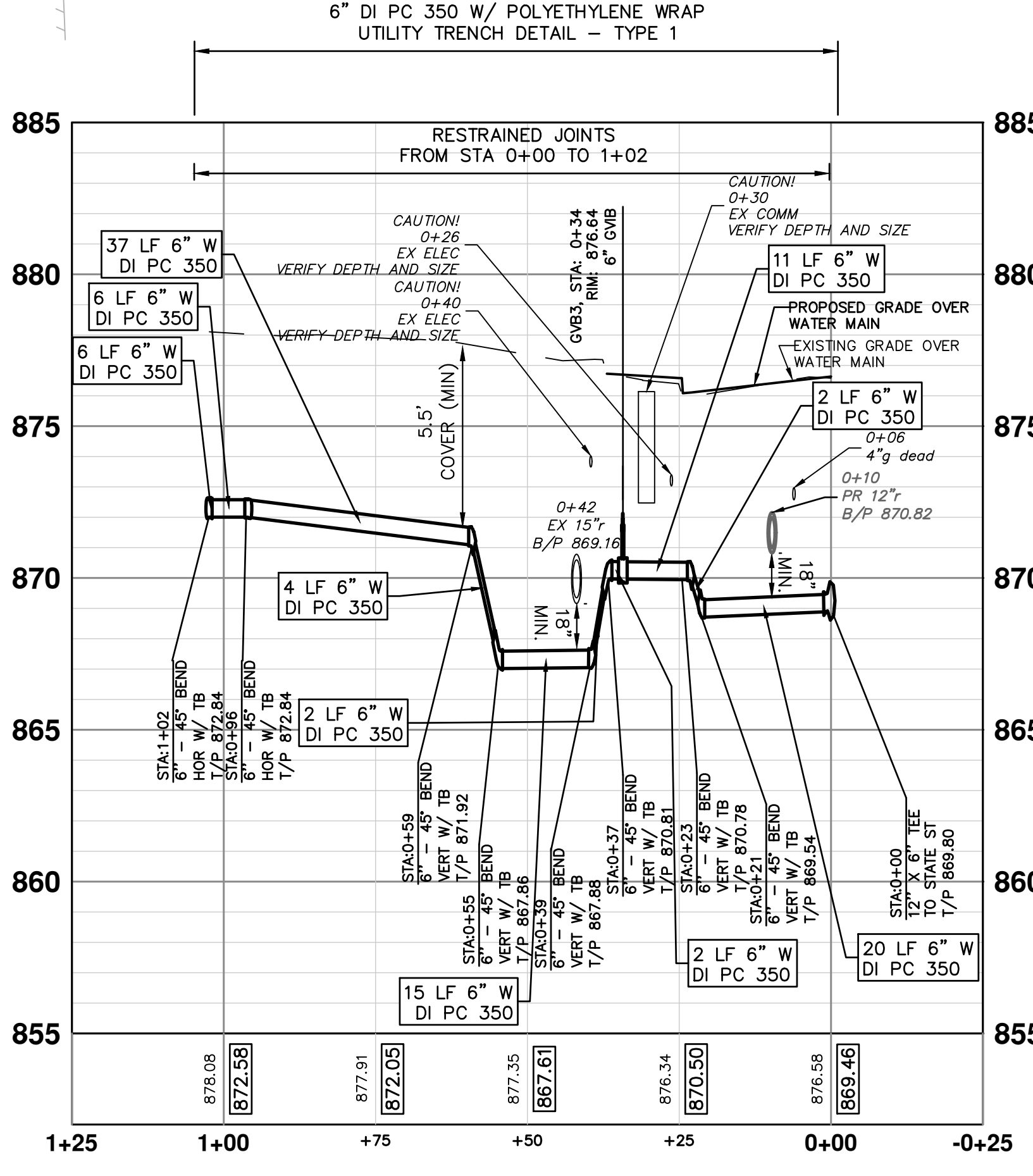
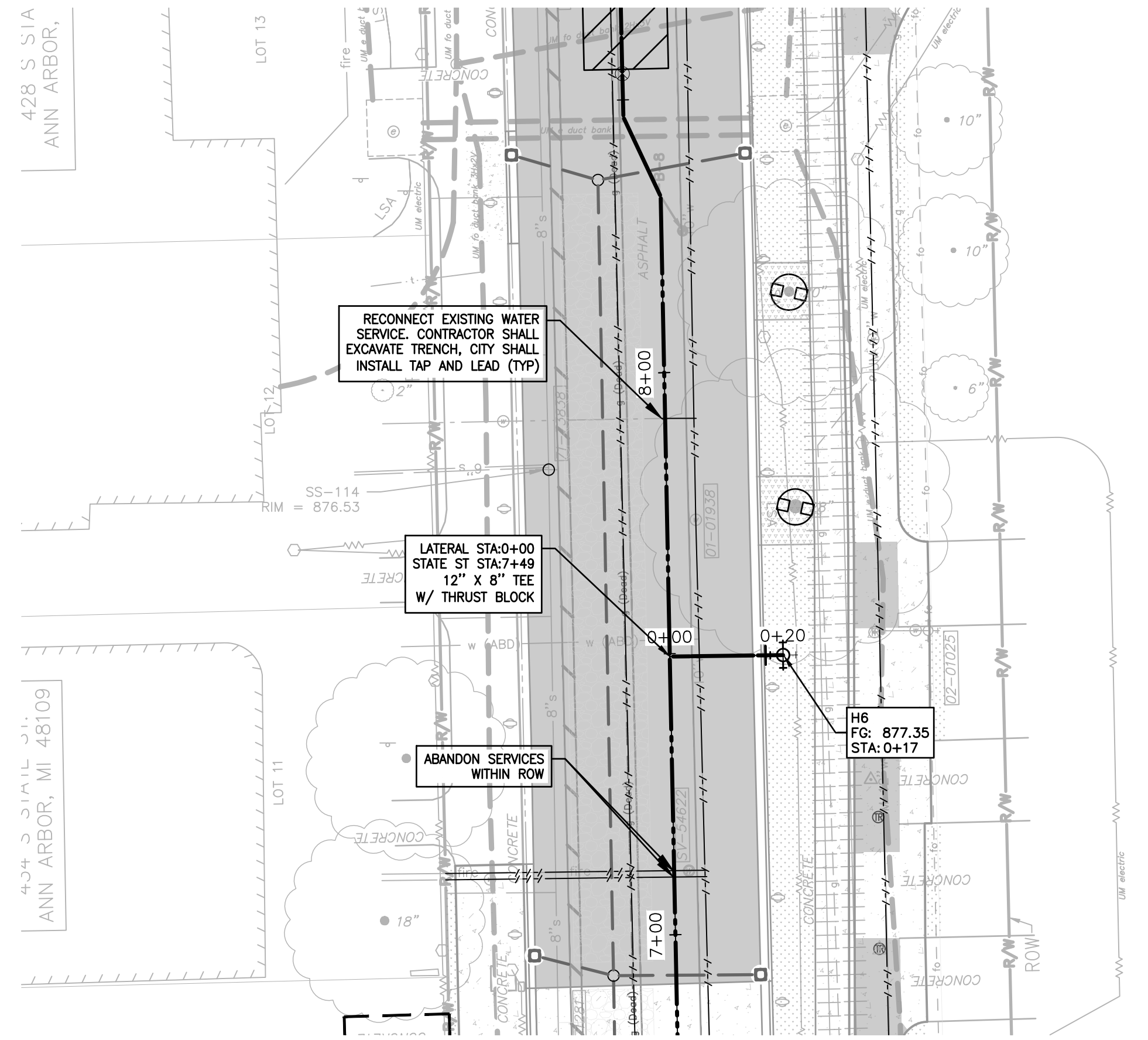
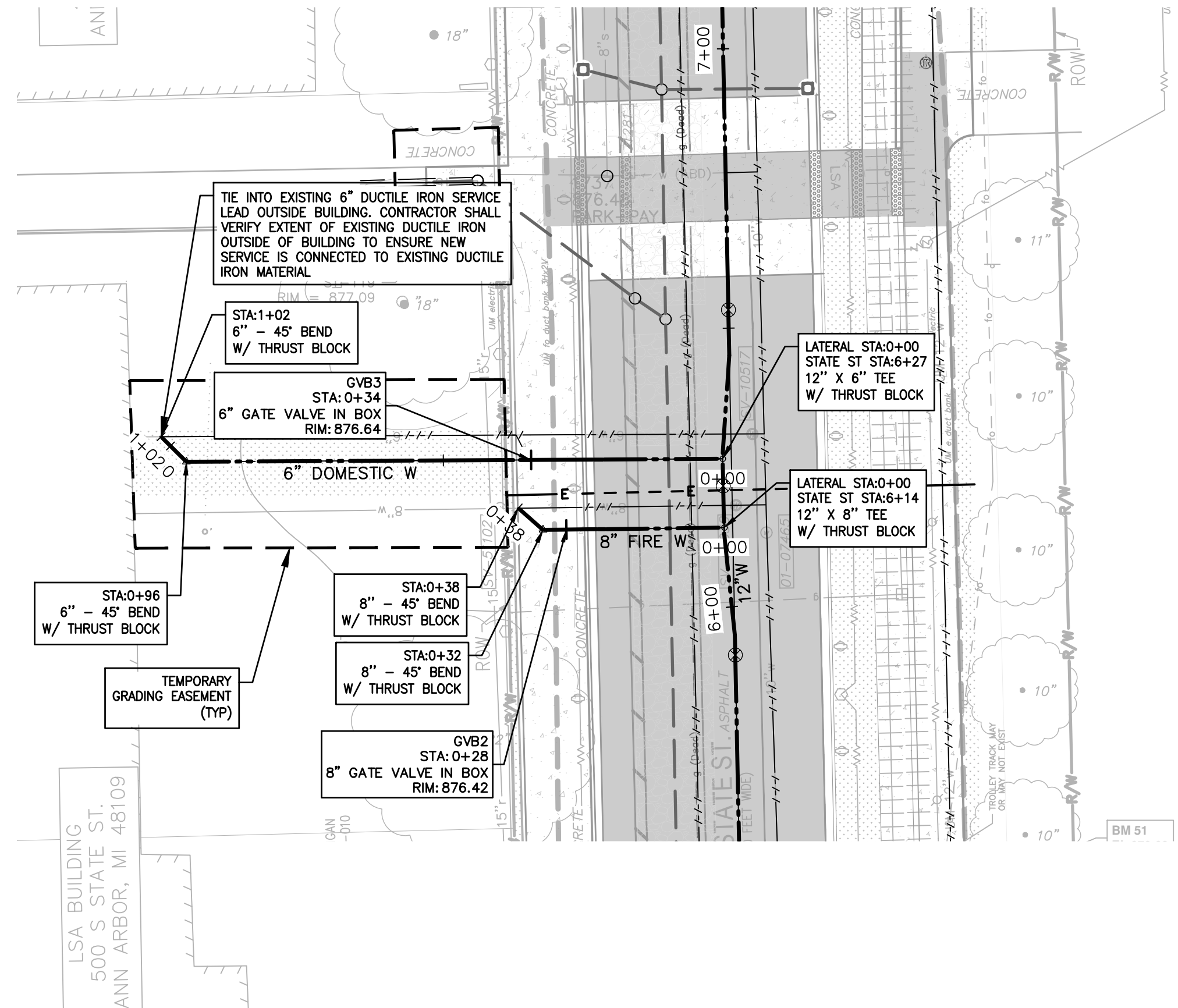
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
ANN ARBOR: 734.794.4410
www.a2gov.org

SCALE: 1"=20'

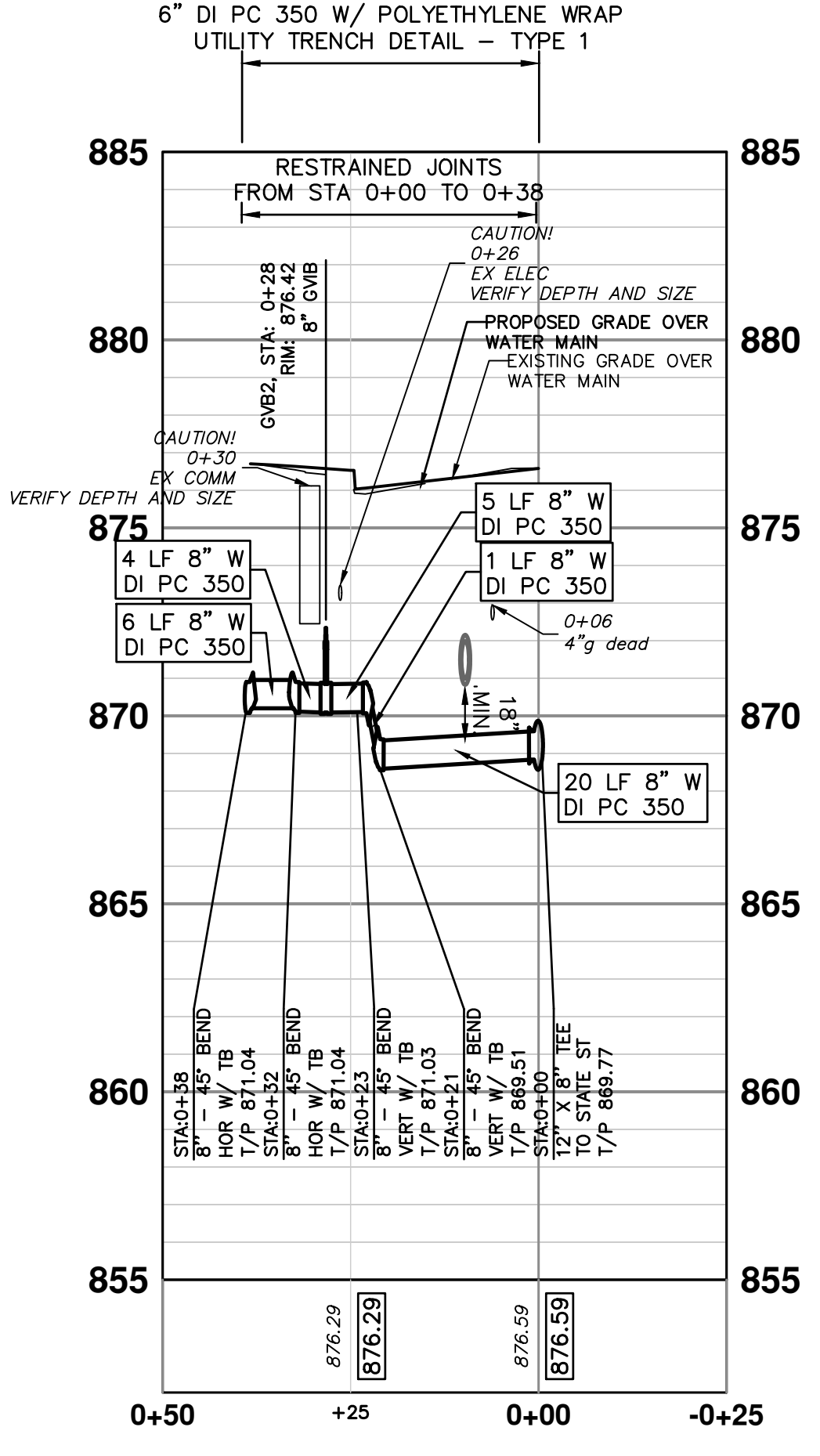
DRAWING NO. 2023-023-33

SHEET NO. 33 OF 75

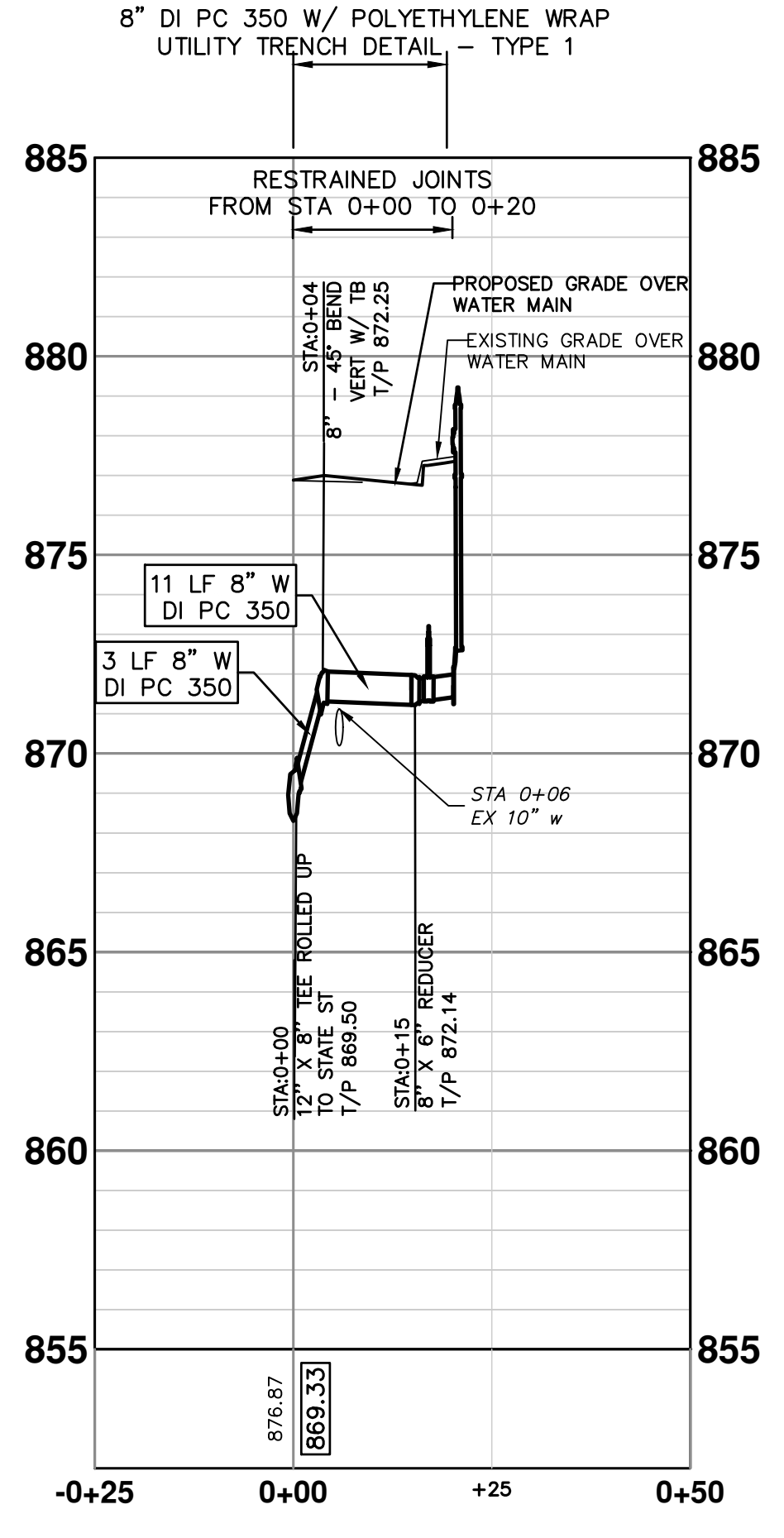
c:\pwwork\wade-trim_rbrown\d1339881\CWM-PLTS-Prop WM-State Laterals.dwg Dwg Created: 3-Feb-25 --_a2 standard bw.stb -- Plot Date: 3-Feb-25



500 STATE STREET DOMESTIC WATER SERVICE 4



500 STATE STREET FIRE WATER SERVICE 5



HYDRANT 6

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	T/P
GVB2	8" GVB	0+28	876.42	5.85

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	T/P
GVB3	6" GVB	0+34	876.64	6.18

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	FG	T/P
H6	HYD	???	877.35	5.50

*EXACT DEPTH OF CROSSING SANITARY LEADS IS UNKNOWN. CONTRACTOR TO FIELD VERIFY LEADS AND MAINTAIN CLEARANCE AS APPROVED BY CITY ENGINEER. (TYP)

THE DEPTH AND SIZE OF EXISTING ELECTRICAL, TELEPHONE AND FIBER OPTIC CONDUITS/DUCTS AND THE DEPTH OF GAS MAINS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY, SUPPORT AND PROTECT DURING CONSTRUCTION AND ADJUST WATER MAIN WHERE NECESSARY TO MAINTAIN 12-INCHES VERTICAL CLEARANCE FROM ALL UTILITIES (EXCEPT SANITARY AND STORM SEWER WHERE 18-INCHES IS REQUIRED). THIS WORK IS PAID FOR UNDER ASSOCIATED WATERMAIN PAY ITEMS

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

PROPOSED WATER MAIN PLAN & PROFILE - STATE ST LATERALS

SCALE: 1"=20'

DRAWING NO. 2023-025-34

SHEET NO. 34 OF 75

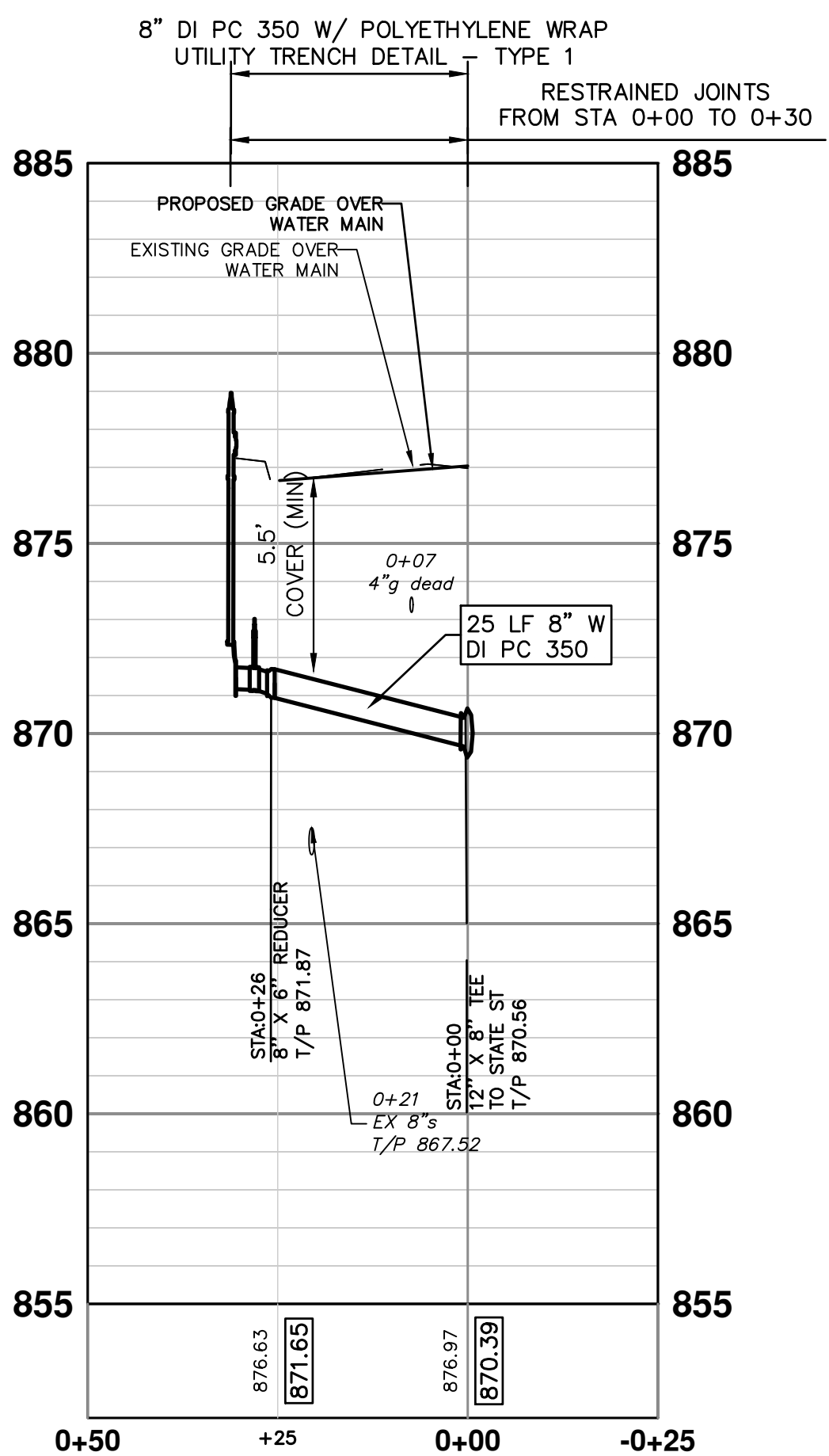
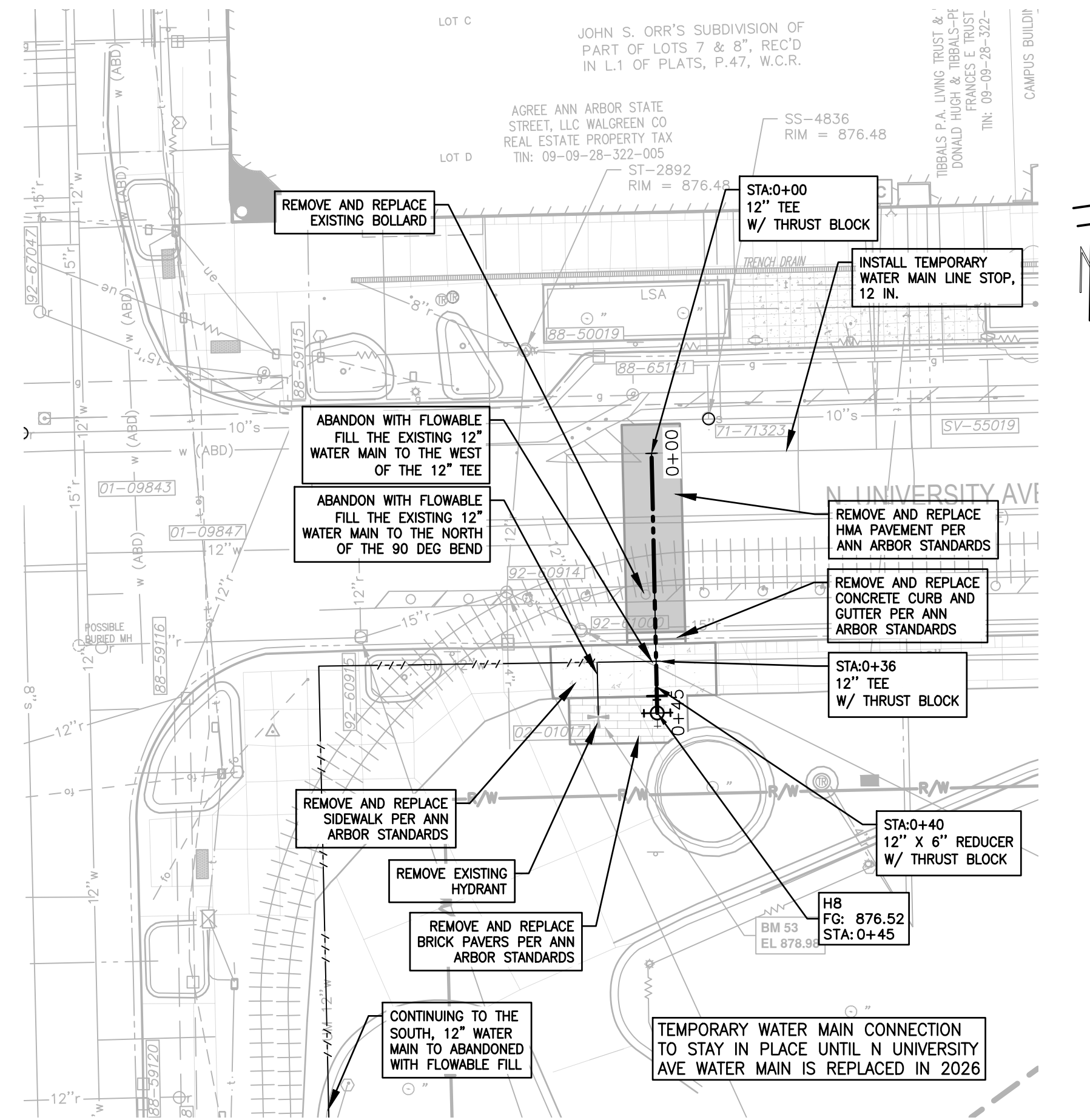
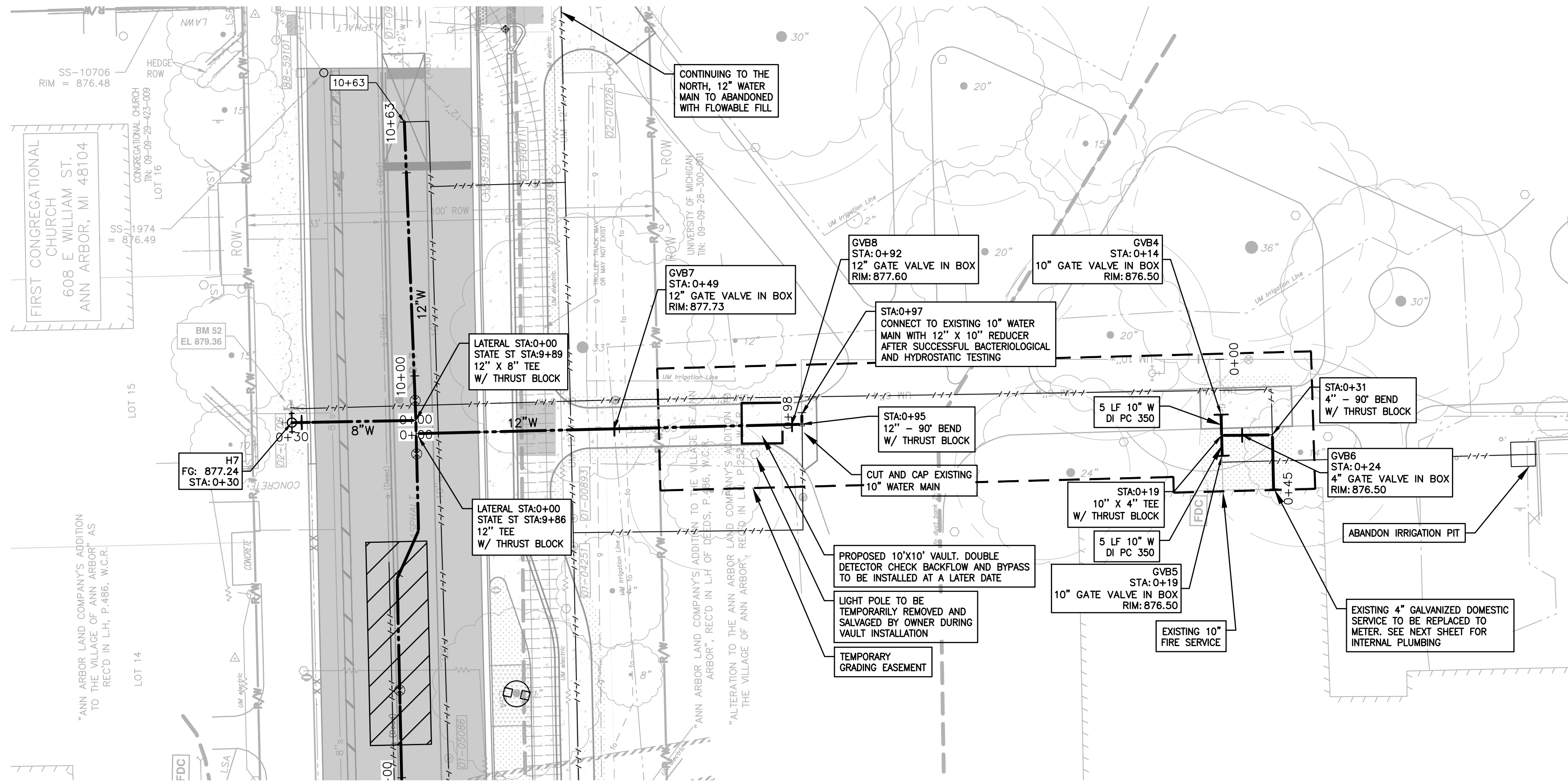
811
Know what's below. Call before you dig.

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-6647
www.a3gov.org

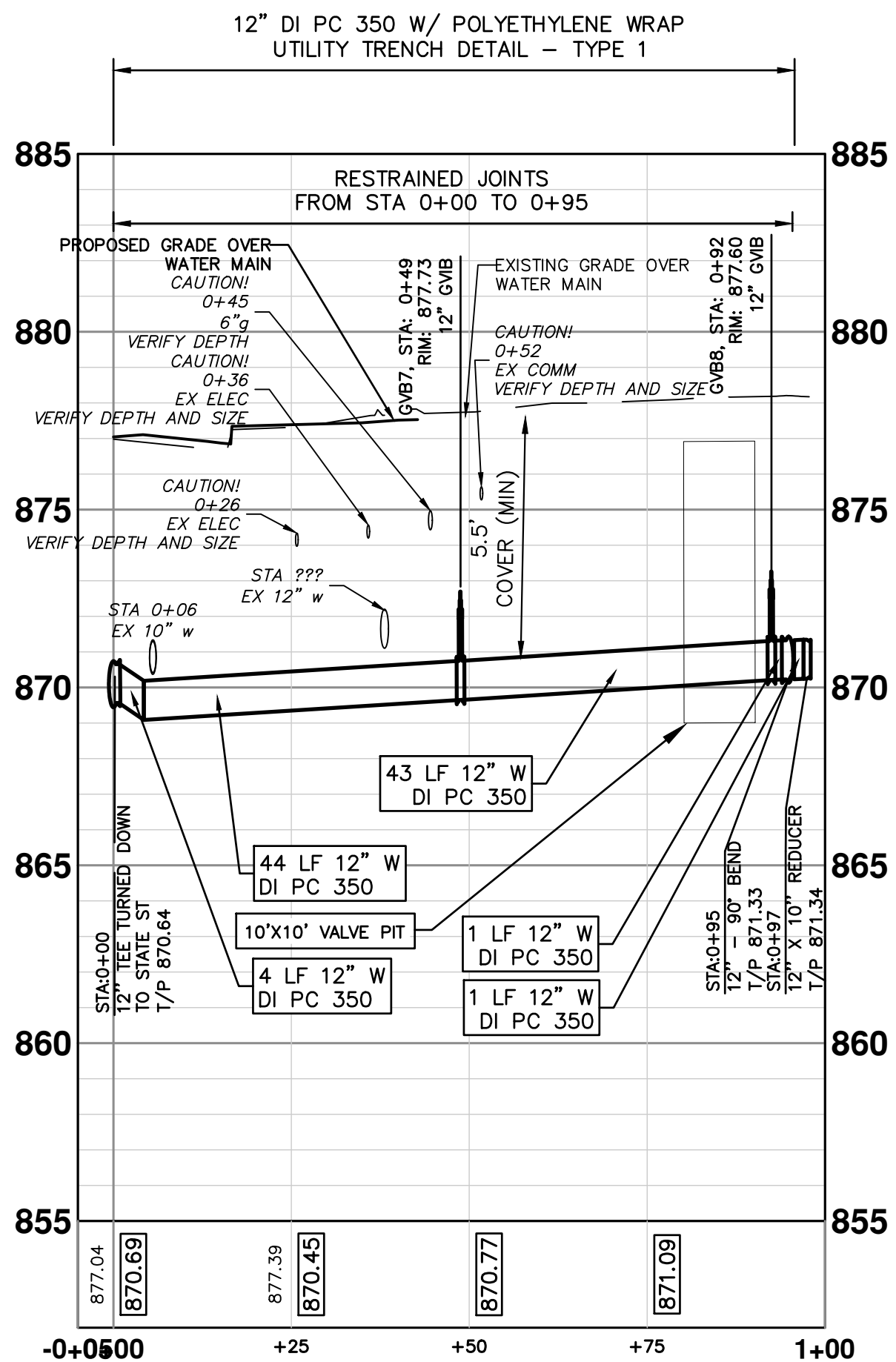
ANN ARBOR MICHIGAN

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

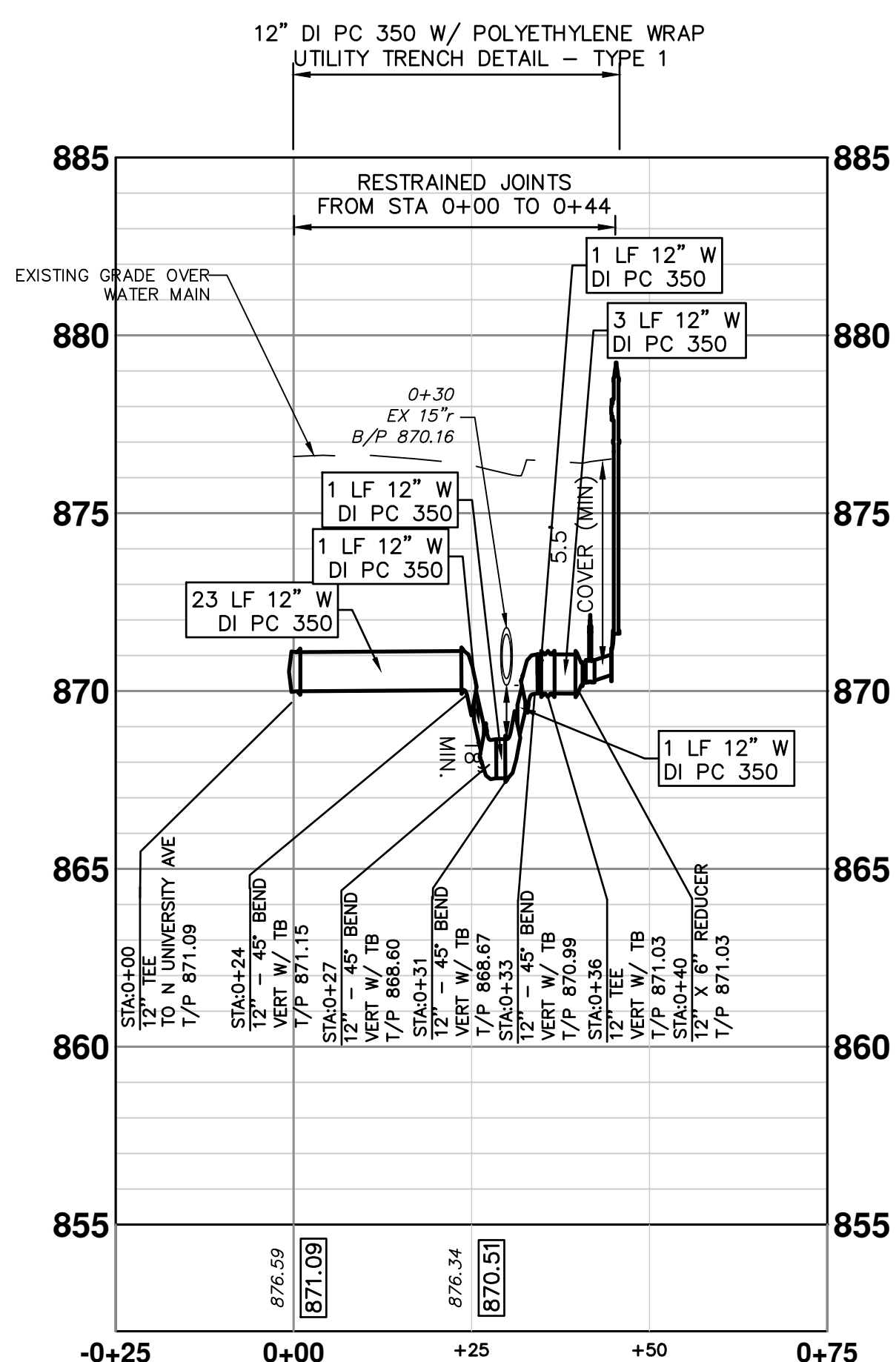
c:\pwork\work\wade-trim_rbrown\1339881\CWM-PLTS-Prop WM-State Laterals.dwg Dwg Created: 3-Feb-25 - _a2 standard bw.stb - Plot Date: 3-Feb-25



HYDRANT 7



419 STATE STREET WATER SERVICE 6



HYDRANT 8

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	RIM	T/P
GVB7	12" GVB	0+49	877.73	7.09
GVB8	12" GVB	0+92	877.60	6.39

WATER MAIN STRUCTURE TABLE


STRUCTURE	TYPE	STATION	RIM	T/P
GVB4	4" GVB	0+14	876.50	5.50
GVB5	4" GVB	0+19	876.50	5.50
GVB6	4" GVB	0+24	876.50	5.50

WATER MAIN STRUCTURE TABLE

STRUCTURE	TYPE	STATION	FG	T/P
H7	HYD	0+30	877.24	5.50
H8	HYD	0+45	876.52	5.50


*EXACT DEPTH OF CROSSING SANITARY LEADS IS UNKNOWN. CONTRACTOR TO FIELD VERIFY LEADS AND MAINTAIN CLEARANCE AS APPROVED BY CITY ENGINEER. (TYP)

THE DEPTH AND SIZE OF EXISTING ELECTRICAL, TELEPHONE AND FIBER OPTIC CONDUITS/DUCTS AND THE DEPTH OF GAS MAINS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY, SUPPORT AND PROTECT DURING CONSTRUCTION AND ADJUST WATER MAIN WHERE NECESSARY TO MAINTAIN 12-INCHES VERTICAL CLEARANCE FROM ALL UTILITIES (EXCEPT SANITARY AND STORM SEWER WHERE 18-INCHES IS REQUIRED). THIS WORK IS PAID FOR UNDER ASSOCIATED WATERMAIN PAY ITEMS



Know what's below.
Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a3gov.org

STATE STREET IMPROVEMENTS

PROPOSED WATER MAIN PLAN & PROFILE - STATE ST LATERALS

SCALE: 1"=20'

DRAWING NO. 2023-025-35

SHEET NO. 35 OF 75

PLUMBING ABBREVIATION LIST

Table with 4 columns: ABBREVIATION, DESCRIPTION, ABBREVIATION, DESCRIPTION. Lists various plumbing symbols and their meanings, such as ACU (AIR COOLED CONDENSING UNIT), AD (ACCESS DOOR), and various pipe materials.

TEMPERATURE CONTROL - PARTIAL SYMBOLS LIST

Table with 4 columns: SYMBOL, DESCRIPTION, SYMBOL, DESCRIPTION. Lists symbols for temperature controls like CO2 (CARBON DIOXIDE SENSOR), PT (PRESSURE TRANSMITTER), and V (VALVE).

NOTE: LIST OF ADDITIONAL SYMBOLS & ABBREVIATIONS ASSOCIATED WITH TEMPERATURE CONTROLS ARE IDENTIFIED ON TC DRAWINGS.

PLUMBING SYMBOL LIST

Table with 4 columns: SYMBOL, DESCRIPTION, SYMBOL, DESCRIPTION. Lists plumbing symbols for piping, ductwork, and double line piping, including symbols for air vents, backflow preventers, catch basins, and various valves.

PLUMBING DRAWING INDEX

Table with 2 columns: SHEET NO., SHEET TITLE. Lists sheet numbers and titles such as 2023-023-1 PLUMBING STANDARDS AND DRAWING INDEX.

STANDARD METHODS OF NOTATION

Table with 2 columns: SYMBOL, DESCRIPTION. Lists standard notation symbols for diffusers, registers, elbows, and various pipe fittings.

NOTE: SOME SYMBOLS AND ABBREVIATIONS SHOWN MAY NOT APPLY TO THIS PROJECT.

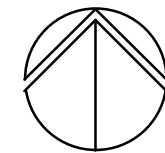
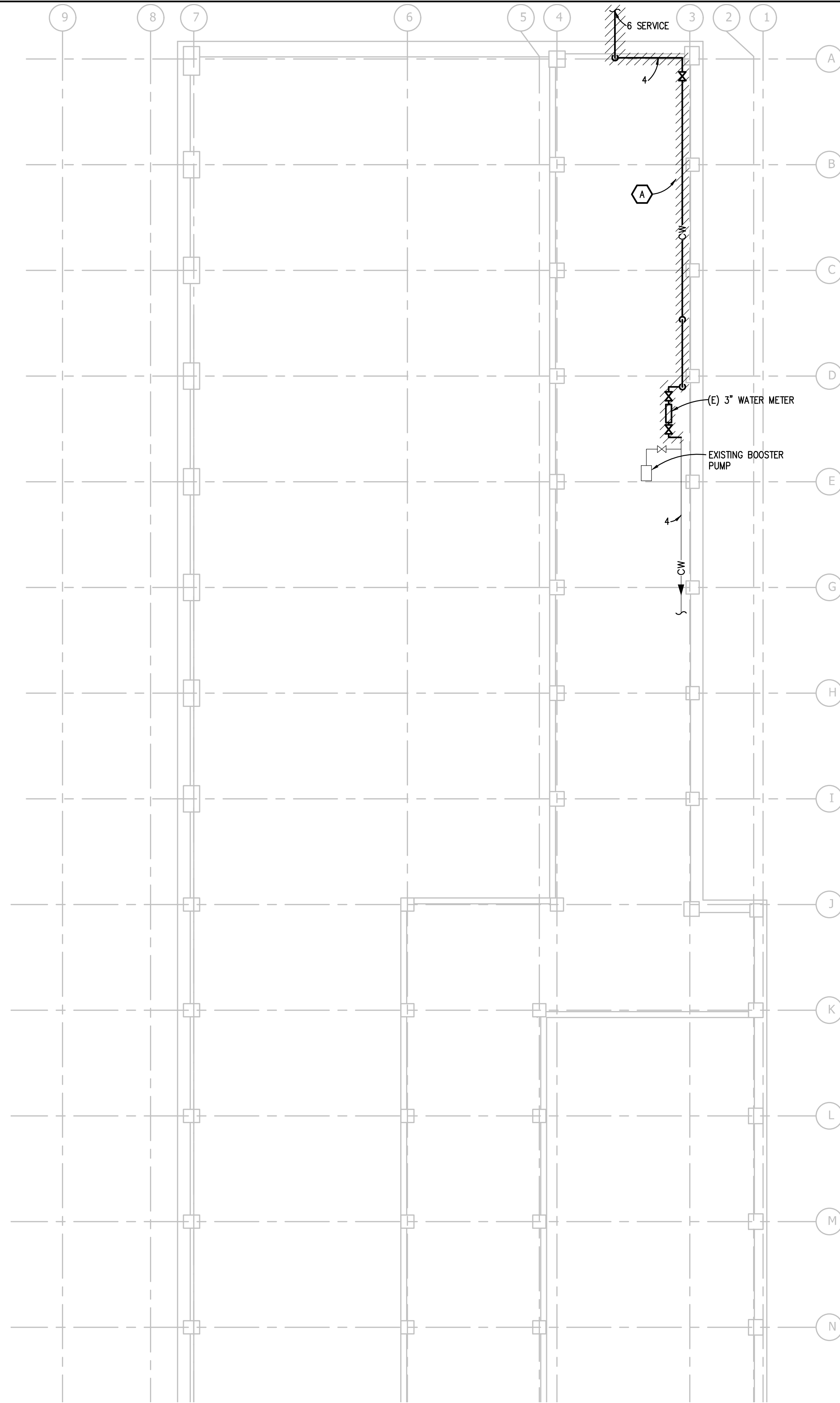
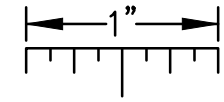
Peter Basso Associates logo and contact information: 5145 Livernois, Suite 100, Troy, Michigan 48068-3276.

Project information and logos. Includes City of Ann Arbor Public Services logo, City of Ann Arbor logo, and project title: PROPOSED ANGELL HALL WATER SERVICE PLUMBING PLANS. Includes drawing number 2023-023-1 and page number 36 OF 75.

Not For Construction

g:\2024\2024-0314-00\CAD\2024-0314-MD2-PL-B.dwg, PD2.0, 1/30/2025 2:17:50 PM, William Edgerton, Peter Basso Associates Inc.

THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



BASEMENT PLUMBING DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

MECHANICAL DEMOLITION GENERAL NOTES:

1. ANY INTERRUPTION OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE.
2. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. ACTUAL ROUTING AND SIZES OF EXISTING PIPING AND DUCTWORK MIGHT DIFFER TO A LIMITED EXTENT FROM WHAT IS SHOWN. MAJOR DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL EXISTING CONDITIONS SHALL BE REPORTED TO THE ENGINEER.
3. THE EXACT EXTENT OF DEMOLITION SHALL BE AS REQUIRED BY THE NEW WORK.
4. ALL MECHANICAL ITEMS TO BE REMOVED SHALL BE REMOVED COMPLETE, INCLUDING ALL RELATED ITEMS SUCH AS HANGERS, SUPPORTS, CONTROLS, ETC. CAP ALL OPEN ENDED PIPES AND DUCTWORK.

DEMOLITION KEY NOTES:

- A. PIPING TO BE REMOVED AFTER INSTALLATION OF NEW PIPING TO AVOID LONG TERM SERVICE SHUT DOWN.

Peter Basso Associates
CONSULTING ENGINEERS
5145 Livernois, Suite 100
Troy, Michigan 48098-3276
Tel: 248-879-5666
www.PeterBassoAssociates.com
PBA Project No.: 2024.0314



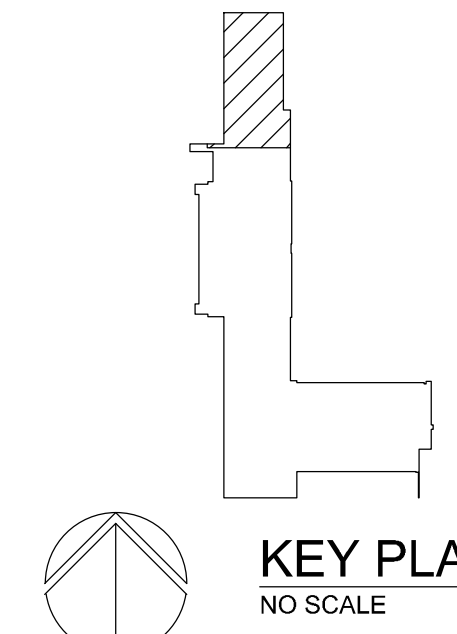
REV.	DATE	DESCRIPTION
00	01/31/2025	BID DOCUMENTS
		LCB DRAWN
		WSE CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-8647
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE, NORTH UNIVERSITY & SOUTH THAYER
STREET IMPROVEMENTS
PROPOSED ANGELL HALL WATER SERVICE PLUMBING PLANS

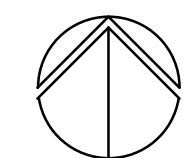
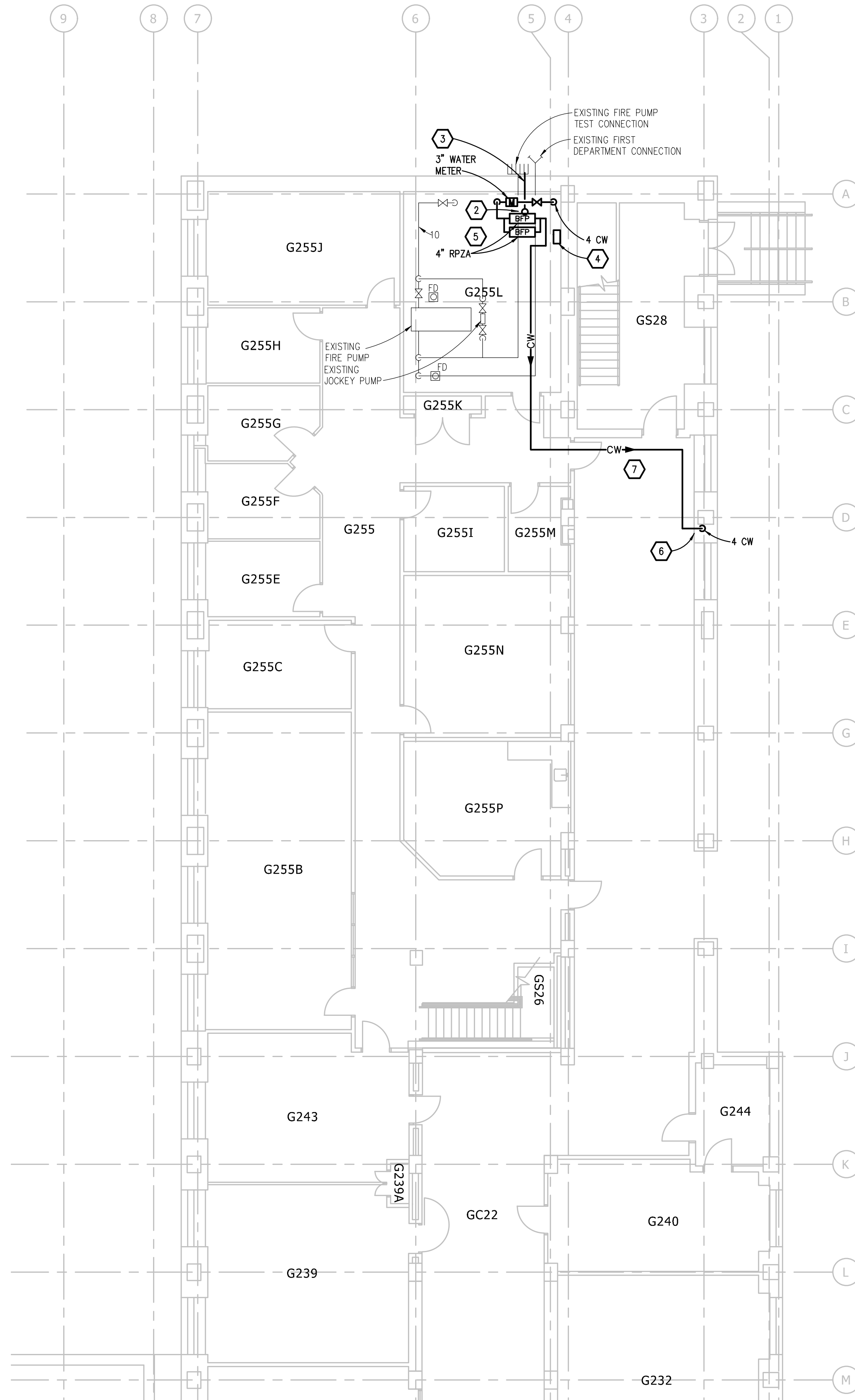
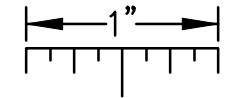
SHEET No. **37 OF 75**
DRAWING No. **2023-023-2**



KEY PLAN
NO SCALE

Not For Construction

THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



GROUND FLOOR PLUMBING PLAN
SCALE: 1/8" = 1'-0"

PLUMBING GENERAL NOTES:

- THESE DRAWINGS ARE DIAGRAMMATIC, AND REPRESENT THE GENERAL INTENT AND ARRANGEMENT OF SYSTEMS. THEY ARE NOT TO BE CONSIDERED FABRICATION/COORDINATION/SHOP DRAWINGS. COORDINATION WITH OTHER TRADES IS REQUIRED. PROVIDE THE ADDITIONAL FITTINGS AND OFFSETS THAT WILL BE REQUIRED TO COMPLETE EACH SYSTEM AND TO AVOID INTERFERENCES WITH ALL OTHER SYSTEMS INCLUDING THE STRUCTURE, SHEET METAL, OTHER PIPING SYSTEMS, ELECTRICAL CONDUITS, BUS DUCTS, CABLE TRAY, LIGHT FIXTURES, ETC. AND/OR OTHER SPACE CONSTRAINTS.
- INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
- PIPING SHALL NOT BE INSTALLED ABOVE ELECTRICAL TRANSFORMERS, SWITCHBOARDS, PANELBOARDS OR MOTOR CONTROL CENTERS.
- COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
- PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
- REFER TO ARCHITECTURAL PLANS FOR DIMENSIONED LOCATIONS OF PLUMBING FIXTURES.
- HOT AND COLD WATER PIPING RUN-OUTS TO LAVATORIES AND SINKS SHALL BE 1/2" UNLESS OTHERWISE NOTED.
- PLUMBING VENT PIPING THROUGH ROOF SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ANY FRESH AIR INTAKE LOCATION AND A MINIMUM OF 18" CLEAR FROM THE INSIDE FACE OF PARAPET.
- PROVIDE CODE REQUIRED CLEARANCE FOR ALL CLEANOUTS INSTALLED IN SANITARY WASTE AND VENT PIPING.
- MINIMUM UNDERGROUND PIPE SIZE SHALL BE 3".
- WATER SERVICE ENTRANCE PIPING SHALL BE BURIED WITH DEPTH OF COVER OVER TOP OF PIPE OF AT LEAST 72", OR WITH TOP OF PIPE AT LEAST 12" BELOW LEVEL OF MAXIMUM FROST PENETRATION, OR AS REQUIRED BY AUTHORITIES HAVING JURISDICTION, WHICHEVER IS DEEPEST.

CONSTRUCTION KEY NOTES:

- NEW PIPING TO BE INSTALLED PRIOR TO DEMOLITION OF EXISTING PIPING TO DECREASE SERVICE DOWN TIME.
- 6" HUB OUTLET W/ 8" RECEPTOR 18" TALL, SERVING BFP AIR GAP FITTING. ROUTE HUB OUTLET TO DISCHARGE TO SPLASH BLOCK EXTERIOR OF THE BUILDING.
- PROVIDE HEAT TRACE FOR HUB OUTLET DISCHARGE. MANU/MODEL: RAYCHEM - nVent Electric plc; XL Trace. PROVIDE SPLASH BLOCK ON GRADE.
- HEAT TRACE CONTROLLER.
- DOMESTIC WATER BACKFLOW PREVENTOR AND METER TO BE STACKED AGAINST WALL. REFER TO DOMESTIC WATER SERVICE DETAIL ON SHEET M6.1 FOR FURTHER INFORMATION.
- REMOVE WALL AND REPAIR AS NECESSARY TO UNIVERSITY STANDARDS.
- REMOVE CEILING TILES WITHOUT DAMAGING, REPLACE TILES IF DAMAGED.

Peter Basso Associates
CONSULTING ENGINEERS
5145 Livernois, Suite 100
Troy, Michigan 48098-3276
Tel: 248-879-5666
www.PeterBassoAssociates.com
PBA Project No.: 2024.0314



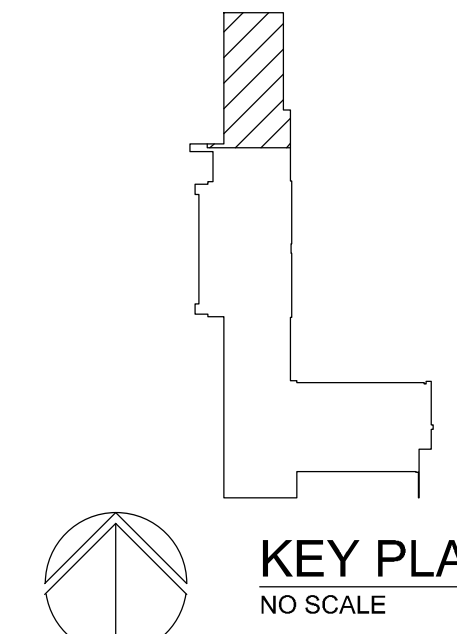
REV.	DATE	DESCRIPTION
00	01/31/2025	BID DOCUMENTS
		LCB DRAWN
		WSE CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-8647
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE, NORTH UNIVERSITY & SOUTH THAYER
STREET IMPROVEMENTS
PROPOSED ANGELL HALL WATER SERVICE PLUMBING PLANS

SCALE: 1/8" = 1'-0"
DRAWING No. 2023-023-3
SHEET No. 38 OF 75



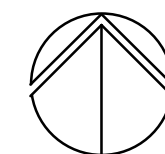
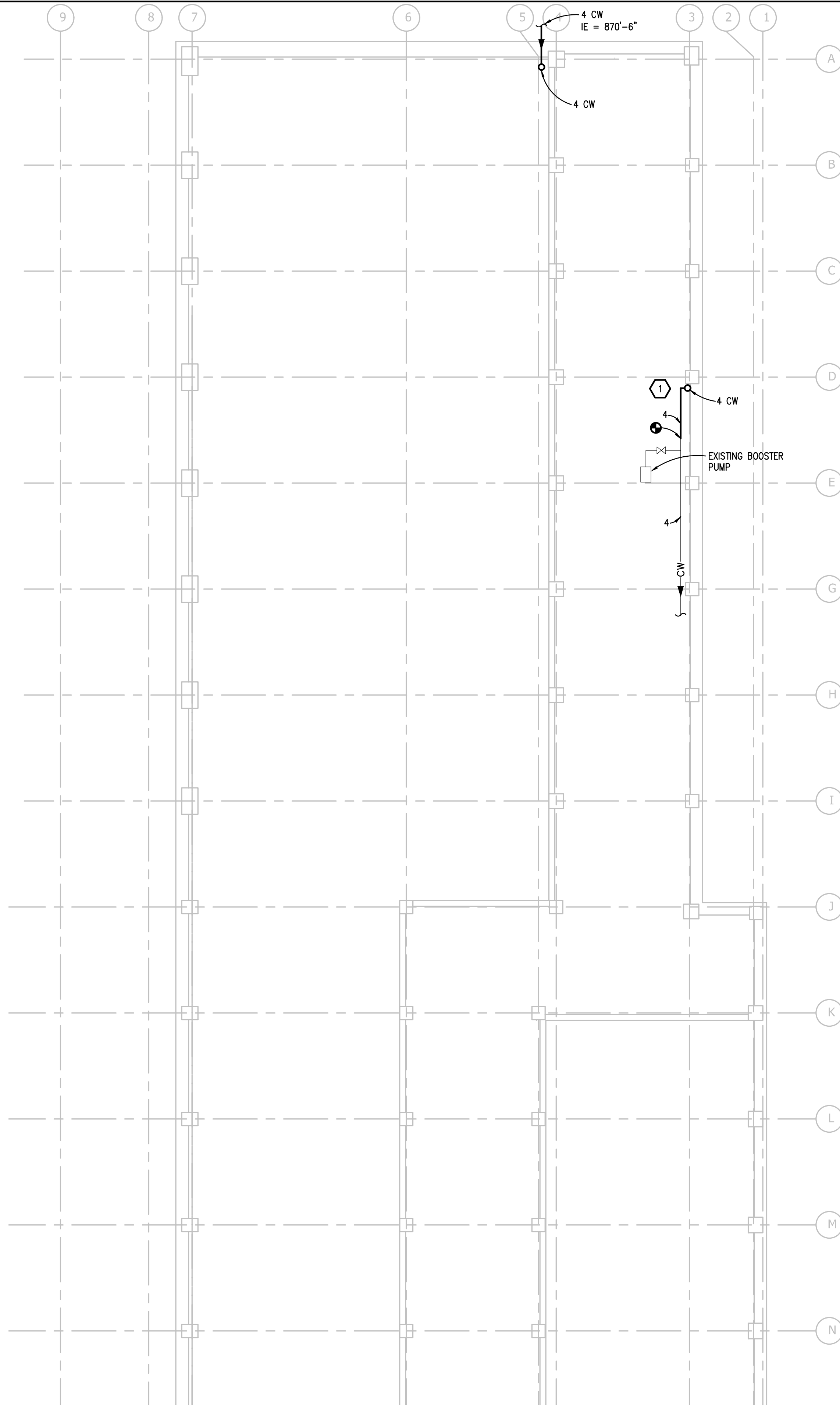
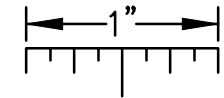
KEY PLAN
NO SCALE

Not For Construction

q:\2024\2024-0314-00\CAD\2024-0314-M2-PL-G.dwg, P2.1, 1/30/2025 2:18:12 PM, William Edgerton, Peter Basso Associates Inc.

q:\2024\2024-0314-00\CAD\2024-0314-M2-PL-B.dwg, P2.0, 1/30/2025 2:18:38 PM, William Edgerton, Peter Basso Associates Inc.

THE FOLLOWING DIMENSION EQUALS ONE INCH WHEN PRINTED TO SCALE.



BASEMENT PLUMBING PLAN
SCALE: 1/8" = 1' - 0"

PLUMBING GENERAL NOTES:

- THESE DRAWINGS ARE DIAGRAMMATIC, AND REPRESENT THE GENERAL INTENT AND ARRANGEMENT OF SYSTEMS. THEY ARE NOT TO BE CONSIDERED FABRICATION/COORDINATION/SHOP DRAWINGS. COORDINATION WITH OTHER TRADES IS REQUIRED. PROVIDE THE ADDITIONAL FITTINGS AND OFFSETS THAT WILL BE REQUIRED TO COMPLETE EACH SYSTEM AND TO AVOID INTERFERENCES WITH ALL OTHER SYSTEMS INCLUDING THE STRUCTURE, SHEET METAL, OTHER PIPING SYSTEMS, ELECTRICAL CONDUITS, BUS DUCTS, CABLE TRAY, LIGHT FIXTURES, ETC. AND/OR OTHER SPACE CONSTRAINTS.
- INSTALL SYSTEMS SUCH THAT REQUIRED CLEARANCE AND SERVICE ACCESS SPACE IS PROVIDED AROUND ALL MECHANICAL AND ELECTRICAL EQUIPMENT, AND AROUND ANY COMPONENTS WHICH REQUIRE SERVICE ACCESS.
- PIPING SHALL NOT BE INSTALLED ABOVE ELECTRICAL TRANSFORMERS, SWITCHBOARDS, PANELBOARDS OR MOTOR CONTROL CENTERS.
- COORDINATE AND PROVIDE ACCESS DOORS WITHIN INACCESSIBLE CEILING, SHAFT, AND CHASE AREAS FOR ALL COMPONENTS WHICH REQUIRE SERVICE ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
- PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL SYSTEMS.
- REFER TO ARCHITECTURAL PLANS FOR DIMENSIONED LOCATIONS OF PLUMBING FIXTURES.
- HOT AND COLD WATER PIPING RUN-OUTS TO LAVATORIES AND SINKS SHALL BE 1/2" UNLESS OTHERWISE NOTED.
- PLUMBING VENT PIPING THROUGH ROOF SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ANY FRESH AIR INTAKE LOCATION AND A MINIMUM OF 18" CLEAR FROM THE INSIDE FACE OF PARAPET.
- PROVIDE CODE REQUIRED CLEARANCE FOR ALL CLEANOUTS INSTALLED IN SANITARY WASTE AND VENT PIPING.
- MINIMUM UNDERGROUND PIPE SIZE SHALL BE 3".
- WATER SERVICE ENTRANCE PIPING SHALL BE BURIED WITH DEPTH OF COVER OVER TOP OF PIPE OF AT LEAST 72", OR WITH TOP OF PIPE AT LEAST 12" BELOW LEVEL OF MAXIMUM FROST PENETRATION, OR AS REQUIRED BY AUTHORITIES HAVING JURISDICTION, WHICHEVER IS DEEPEST.

CONSTRUCTION KEY NOTES:

- NEW PIPING TO BE INSTALLED PRIOR TO DEMOLITION OF EXISTING PIPING TO DECREASE SERVICE DOWN TIME.
- 6" HUB OUTLET W/ 8" RECEPTOR 18" TALL, SERVING BFP AIR GAP FITTING. ROUTE HUB OUTLET TO DISCHARGE TO SPLASH BLOCK EXTERIOR OF THE BUILDING.
- PROVIDE HEAT TRACE FOR HUB OUTLET DISCHARGE. MANU/MODEL: RAYCHEM - nVent Electric plc; XL Trace. PROVIDE SPLASH BLOCK ON GRADE.
- HEAT TRACE CONTROLLER.
- DOMESTIC WATER BACKFLOW PREVENTOR AND METER TO BE STACKED AGAINST WALL. REFER TO DOMESTIC WATER SERVICE DETAIL ON SHEET M6.1 FOR FURTHER INFORMATION.
- REMOVE WALL AND REPAIR AS NECESSARY TO UNIVERSITY STANDARDS.
- REMOVE CEILING TILES WITHOUT DAMAGING, REPLACE TILES IF DAMAGED.

Peter Basso Associates
CONSULTING ENGINEERS
5145 Livernois, Suite 100
Troy, Michigan 48098-3276
Tel: 248-879-5666
www.PeterBassoAssociates.com
PBA Project No.: 2023-023-4



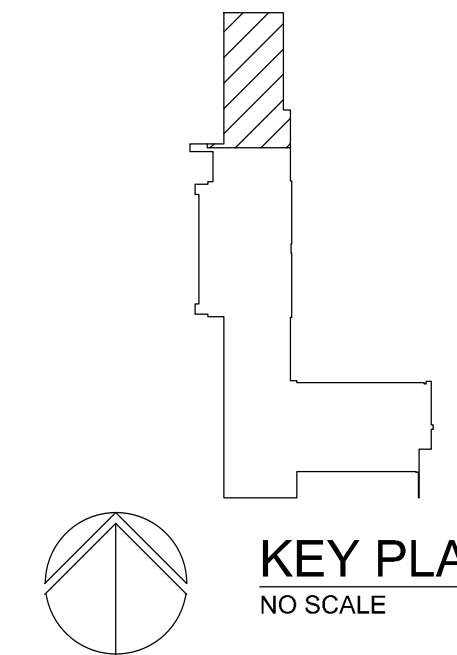
NO	REV.	DESCRIPTION	DATE	DRAWN	CHECKED
01	01/31/2025	BID DOCUMENTS		LCB	WSE

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-8647
ANN ARBOR 734-794-4410
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE, NORTH UNIVERSITY & SOUTH THAYER
STREET IMPROVEMENTS
PROPOSED ANGELL HALL WATER SERVICE PLUMBING PLANS

SHEET No. **39 OF 75**
DRAWING No. **2023-023-4**
SCALE: 1/8" = 1'-0"



Not For Construction

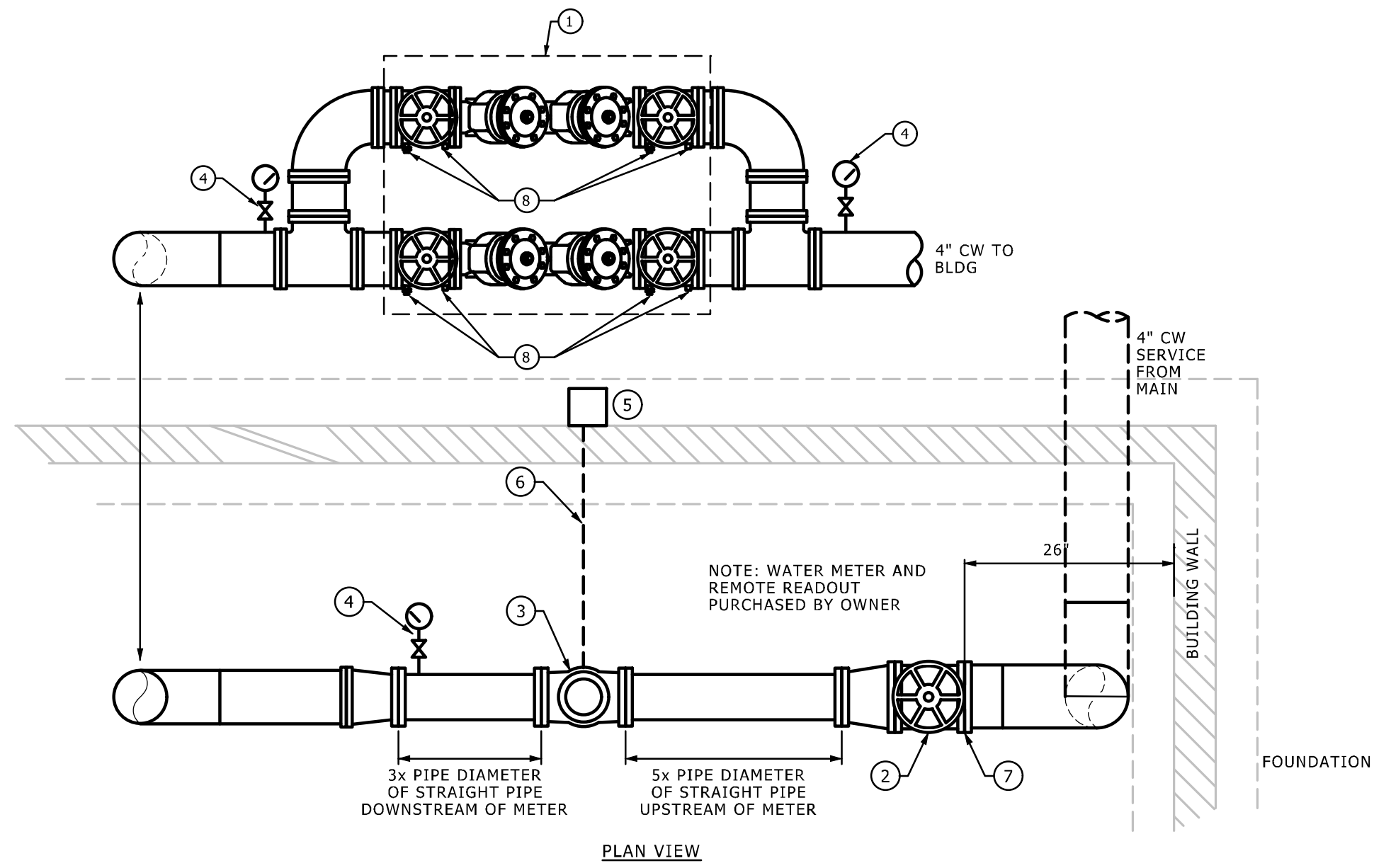
q:\2024\2024-0314-00\CAD\2024-0314-M6-D1.dwg, Pg.1, 1/30/2025 2:18:55 PM, William Edgerton, Peter Basso Associates Inc.

PLUMBING PIPING & VALVE APPLICATION SCHEDULE

PIPE SIZE (INCHES)	MATERIAL																		PRESSURE CONNECTIONS										GRAVITY DWV CONNECTIONS						ISOLATION VALVES						KEYED NOTES	
	SOFT COPPER TYPE K	HARD COPPER TYPE L	HARD COPPER TYPE M	CARBON STEEL (SCHED. 40)	CARBON STEEL (STD.)	GALV. STEEL (SCHED. 40)	STAINLESS STEEL (SCHED. 10)	PEX	PE PIPE	PE SHEATHED CARBON STEEL PIPE	CSST	NO-HUB CISP	PVC TYPE DWV	PP DRAINAGE PIPE	COPPER TYPE DWV	CLASS 53 DUCTILE IRON PIPE	SOLDERED	BRAZED	WELDED	THREADED	FLANGED	GROOVED	INSERT & CRIMP	FUSION	PRESSURE-SEAL	MECHANICALLY-FORMED TEE	MECHANICAL JOINT	PUSH-ON-JOINT	SOLVENT WELDED	SOLDERED	FUSION	CSP HUBLESS	HEAVY-DUTY HUBLESS	BALL	AGA BALL	H.P. BUTTERFLY VALVE	LUBRICATED PLUG	GATE				
UP TO 6	X					X										X	X		X	X																						A,B
UP TO 8			X												X														X													

- GENERAL NOTES**
- "X" INDICATES ACCEPTABLE SELECTION. IF MORE THAN ONE SELECTION IS INDICATED FOR A PIPING SYSTEM, CONTRACTOR MAY SELECT FROM THOSE INDICATED SELECTIONS.
 - DISSIMILAR-METAL PIPING JOINTS: CONSTRUCT JOINTS USING DIELECTRIC FITTINGS COMPATIBLE WITH BOTH PIPING MATERIALS.
 - a. NPS 2 AND SMALLER: USE DIELECTRIC NIPPLE/WATERWAY.
 - b. NPS 2-1/2 AND LARGER: USE DIELECTRIC FLANGE KITS.
 - USE UNIONS OR FLANGES AT VALVE AND EQUIPMENT CONNECTIONS.
 - PLUMBING EQUIPMENT DRAINS, VENTS, SAFETY VALVE PIPING, BLOWDOWN PIPING AND THE LIKE SHALL BE SAME PIPING MATERIAL AS ASSOCIATED PIPING SYSTEM.
 - GROOVED END VALVES MAY BE USED WITH GROOVED PIPING.

- KEYED NOTES**
- GROOVED AND FLANGED VALVES, FITTINGS, JOINTS, AND COUPLINGS, IF INDICATED AS AN ACCEPTABLE SELECTION, MAY BE USED IN ACCESSIBLE LOCATIONS ONLY FOR THIS PIPING SYSTEM. ACCESSIBLE LOCATIONS ARE DEFINED AS EXPOSED CONSTRUCTION OR ABOVE LAY-IN CEILINGS.
 - COPPER PIPING WITH GROOVED FITTINGS SHALL BE REQUIRED FOR PIPING IN TUNNEL, UPSTREAM OF METER ASSEMBLY.



- U.L. APPROVED ASSE CERTIFIED REDUCED PRESSURE ZONE BACKFLOW PREVENTION ASSEMBLIES. WATTS MODEL 957, 4". PROVIDE WITH OS&Y GATE VALVES.
- HIGH PERFORMANCE BUTTERFLY VALVE
- WATER METER (OBTAINED FROM CITY OF ANN ARBOR, INSTALLED BY CONTRACTOR)
- PRESSURE GAUGE AND BALL VALVE
- REMOTE READOUT (OBTAINED FROM CITY OF ANN ARBOR, INSTALLED BY CONTRACTOR)

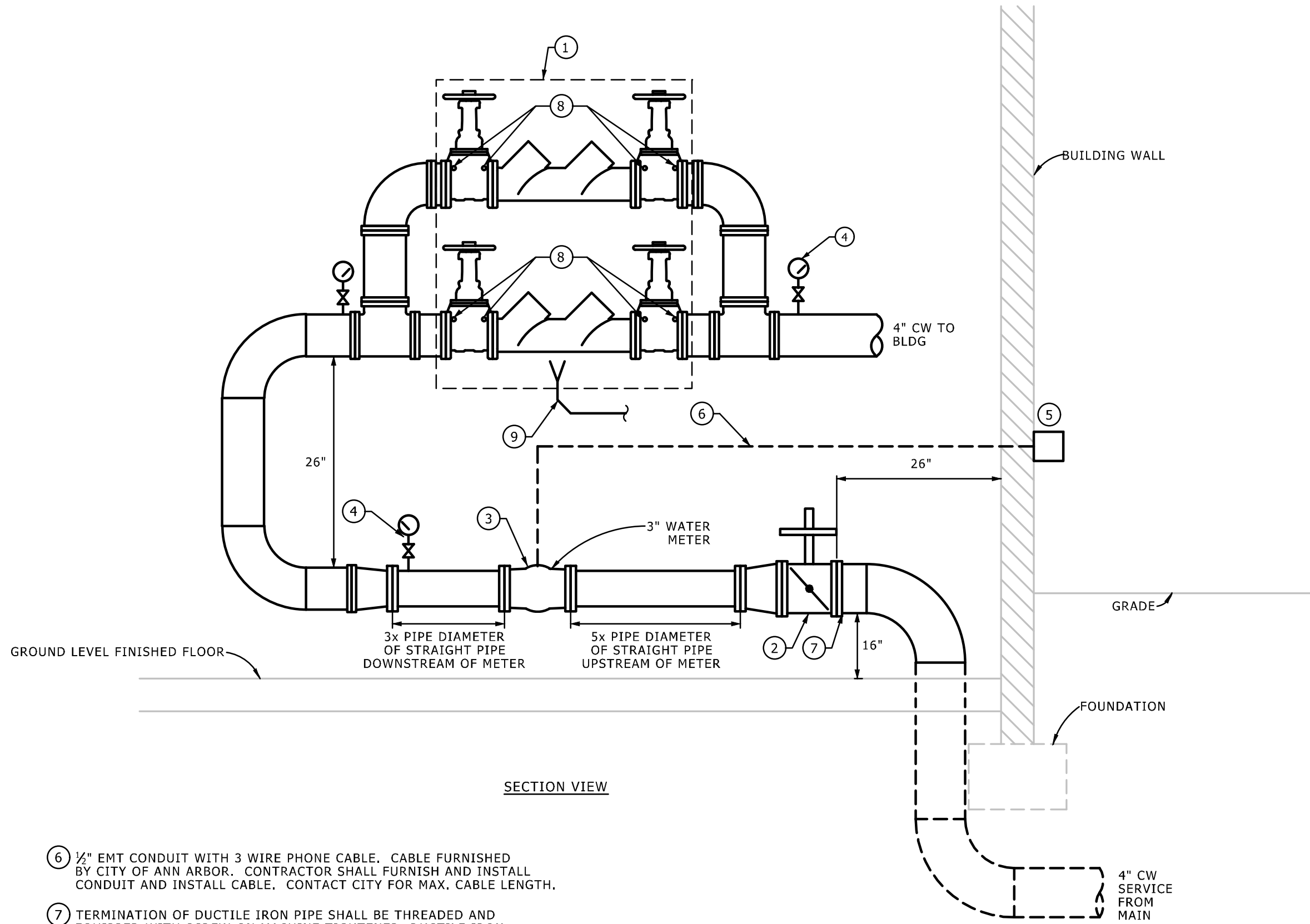
DOMESTIC WATER SYSTEM SERVICE DETAIL
NO SCALE

ABOVEGROUND PLUMBING PIPE & ACCESSORY INSULATION APPLICATION SCHEDULE

INDOOR PIPE SYSTEM AND SIZE (INCHES)	INSULATION MATERIAL & THICKNESS (INCHES)							FIELD-APPLIED JACKET MATERIAL							KEYED NOTES
	FLEXIBLE ELASTOMERIC	FIBERGLASS	MINERAL WOOL	POLYISOCYANURATE	PHENOLIC	CELLULAR GLASS	CALCIUM SILICATE	ALUMINUM	STAINLESS STEEL	PVC	SELF-ADHESIVE (FOR OUTDOOR APPLICATIONS)	PVDC (INDOOR)	PVDC (OUTDOOR)		
DOMESTIC COLD WATER	1	1						X		X				A	
OUTDOOR (ABOVEGROUND) AND TUNNEL PIPE SYSTEM AND SIZE (INCHES)															
SANITARY WHERE HEAT TRACING IS INSTALLED		2						X		X	X			B	

- GENERAL NOTES**
- "X" OR THICKNESS IN INCHES INDICATES ACCEPTABLE SELECTION. IF MORE THAN ONE SELECTION IS INDICATED FOR A SYSTEM, CONTRACTOR MAY SELECT FROM THOSE INDICATED SELECTIONS.
 - INSULATE PIPING WITHIN AIR HANDLING EQUIPMENT THE SAME AS INDOOR PIPING. PROVIDE ALUMINUM OR STAINLESS STEEL JACKET.

- KEYED NOTES**
- PROVIDE FIELD APPLIED JACKET FOR PIPING EXPOSED IN EQUIPMENT ROOMS, STORAGE ROOMS, JANITORS CLOSETS, RECEIVING ROOMS, TEST AREAS, CIRCULATION AREAS AND SUCH AREAS SUBJECT TO DAMAGE, WITHIN 10 FEET (3 METERS) OF FINISHED FLOOR.



- 1/2" EMT CONDUIT WITH 3 WIRE PHONE CABLE. CABLE FURNISHED BY CITY OF ANN ARBOR. CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND INSTALL CABLE. CONTACT CITY FOR MAX. CABLE LENGTH.
- TERMINATION OF DUCTILE IRON PIPE SHALL BE THREADED AND EQUIPPED WITH SCREW-ON MACHINE TIGHTENED, DUCTILE IRON FLANGE COMPLYING WITH ANSI/AWWA C110 AND C115.
- PROVIDE ALL CONNECTIONS, VALVES AND FITTINGS REQUIRED TO PROPERLY TEST THE BACKFLOW PREVENTION DEVICE.
- 8" SANITARY PIPING WITH AIR GAP FITTING. SANITARY PIPING TO SPILL TO GRADE EXTERIOR TO THE BUILDING, APPROXIMATELY 1' ABOVE GRADE. PROVIDE HEAT TRACE FOR SANITARY PIPING.

Peter Basso Associates
CONSULTING ENGINEERS
5145 Livernois, Suite 100
Troy, Michigan 48098-3276
Tel: 248-879-5666
www.PeterBassoAssociates.com
PBA Project No.: 2024.0314

Know what's below.
Call Before you dig.

DO	BID DOCUMENTS	07/31/2025	LCS	DATE	WSE	CHECKED
REV.	DESCRIPTION		LCB	DATE	WSE	CHECKED

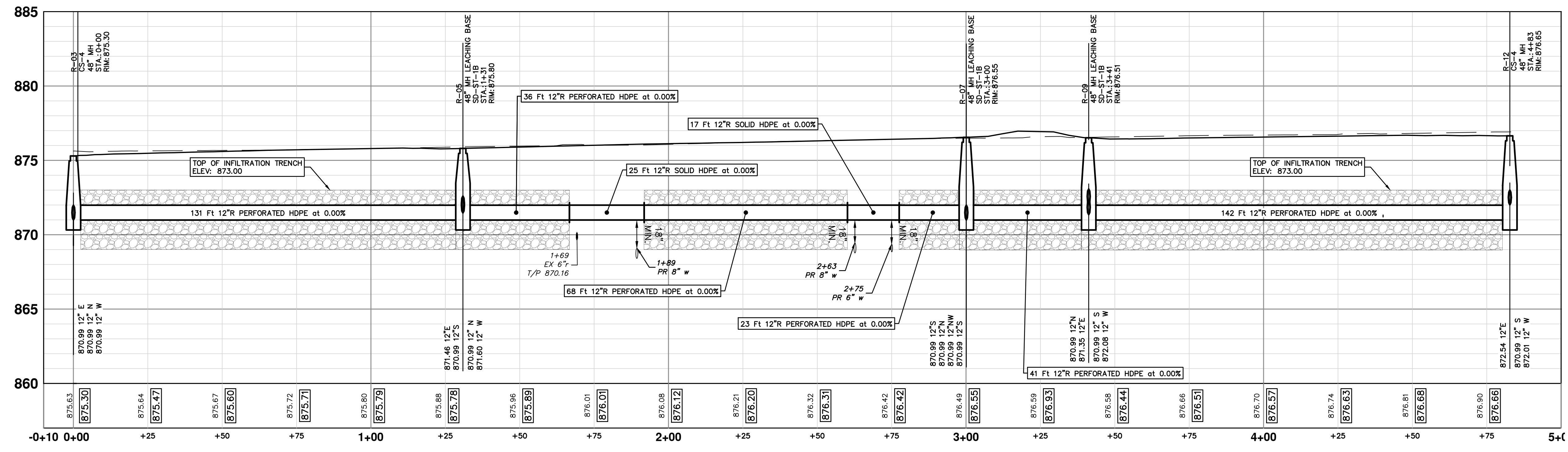
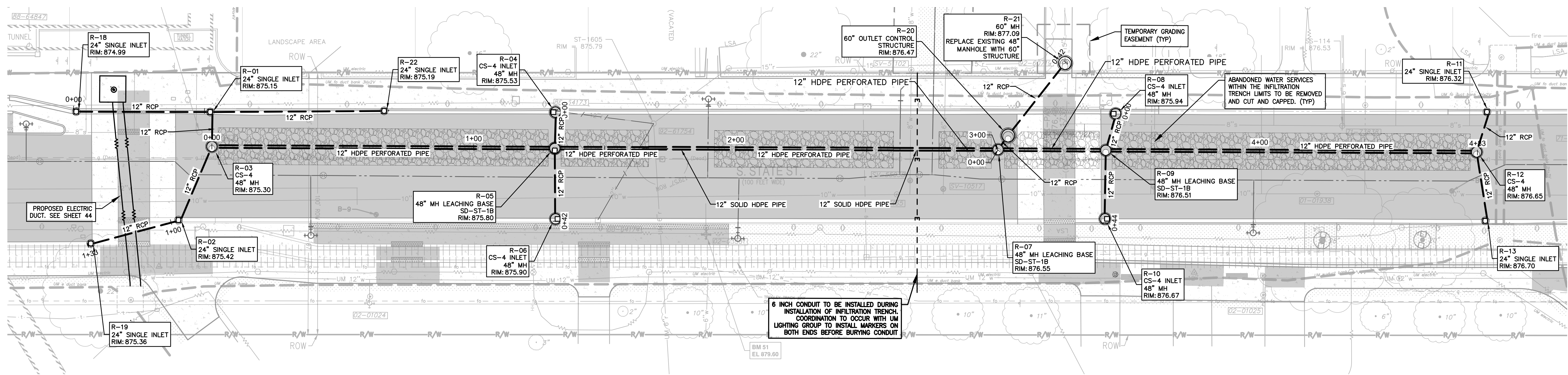
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48106-8647
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE, NORTH UNIVERSITY & SOUTH THAYER
STREET IMPROVEMENTS
PROPOSED ANGELL HALL WATER SERVICE PLUMBING PLANS

DRAWING No. 2023-023-5
SHEET No. 40 OF 75

Not For Construction



STORM SEWER PROFILE: R-03, R-05, R-07, R-09, R-12

811
Know what's below. Call before you dig.

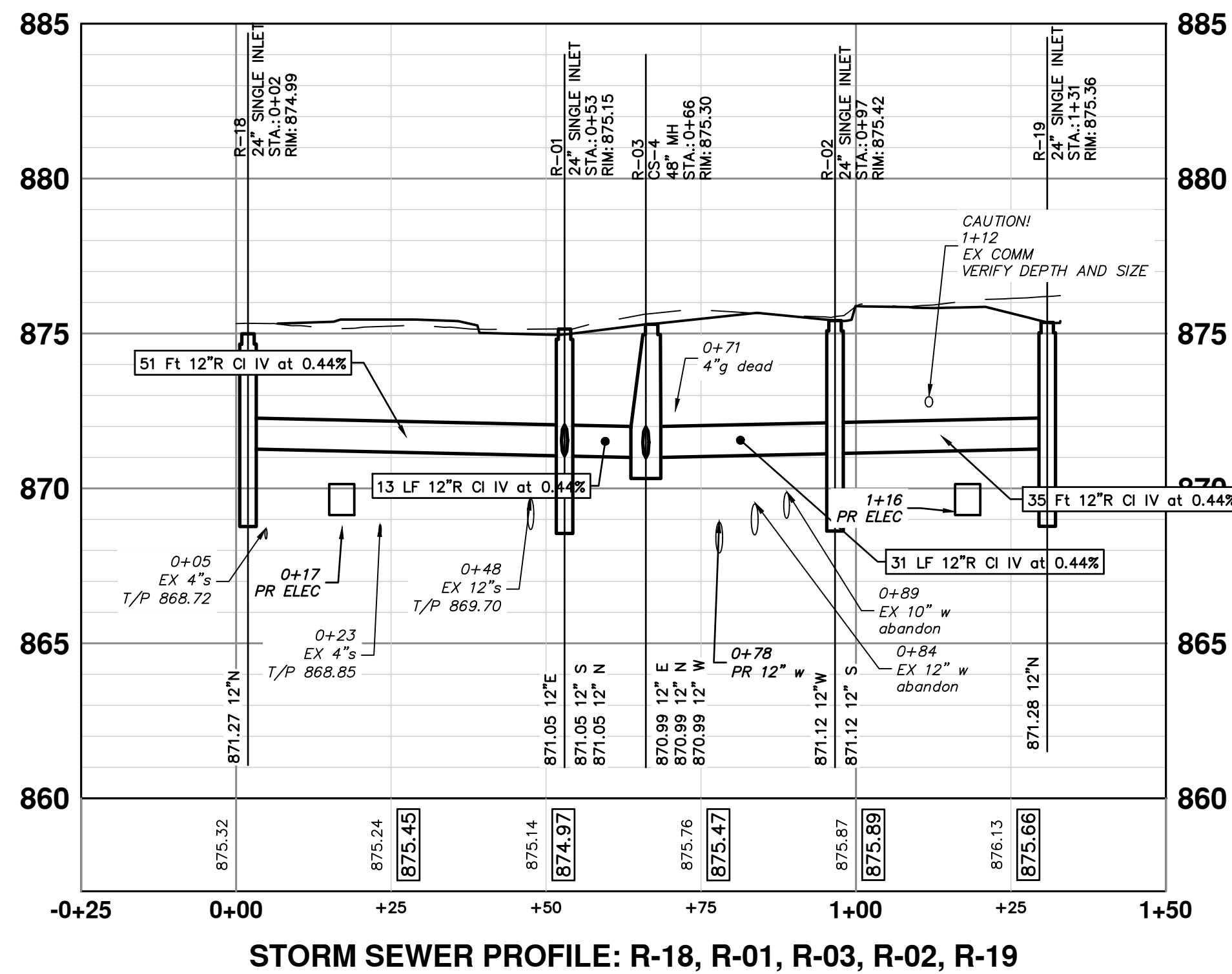
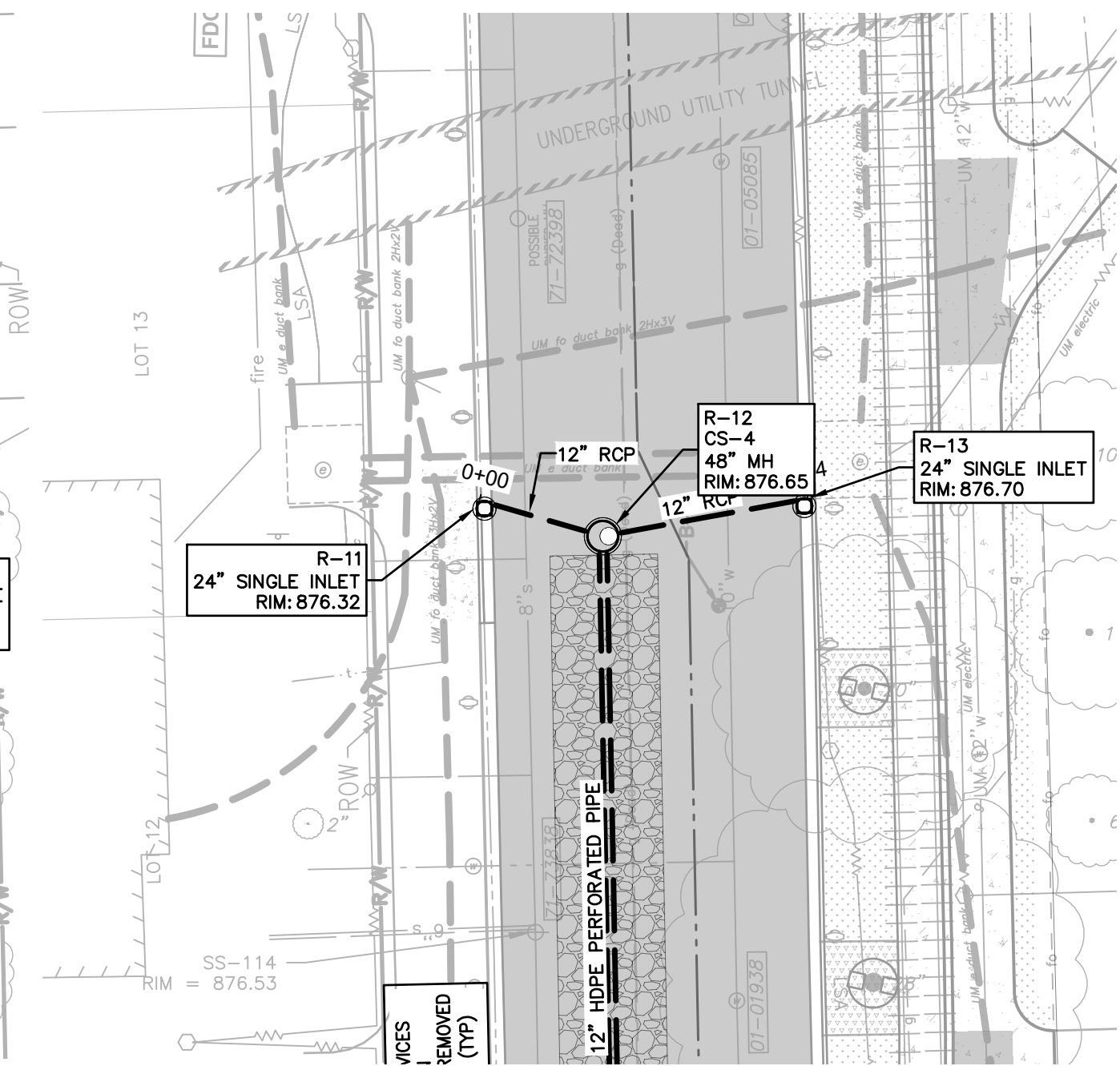
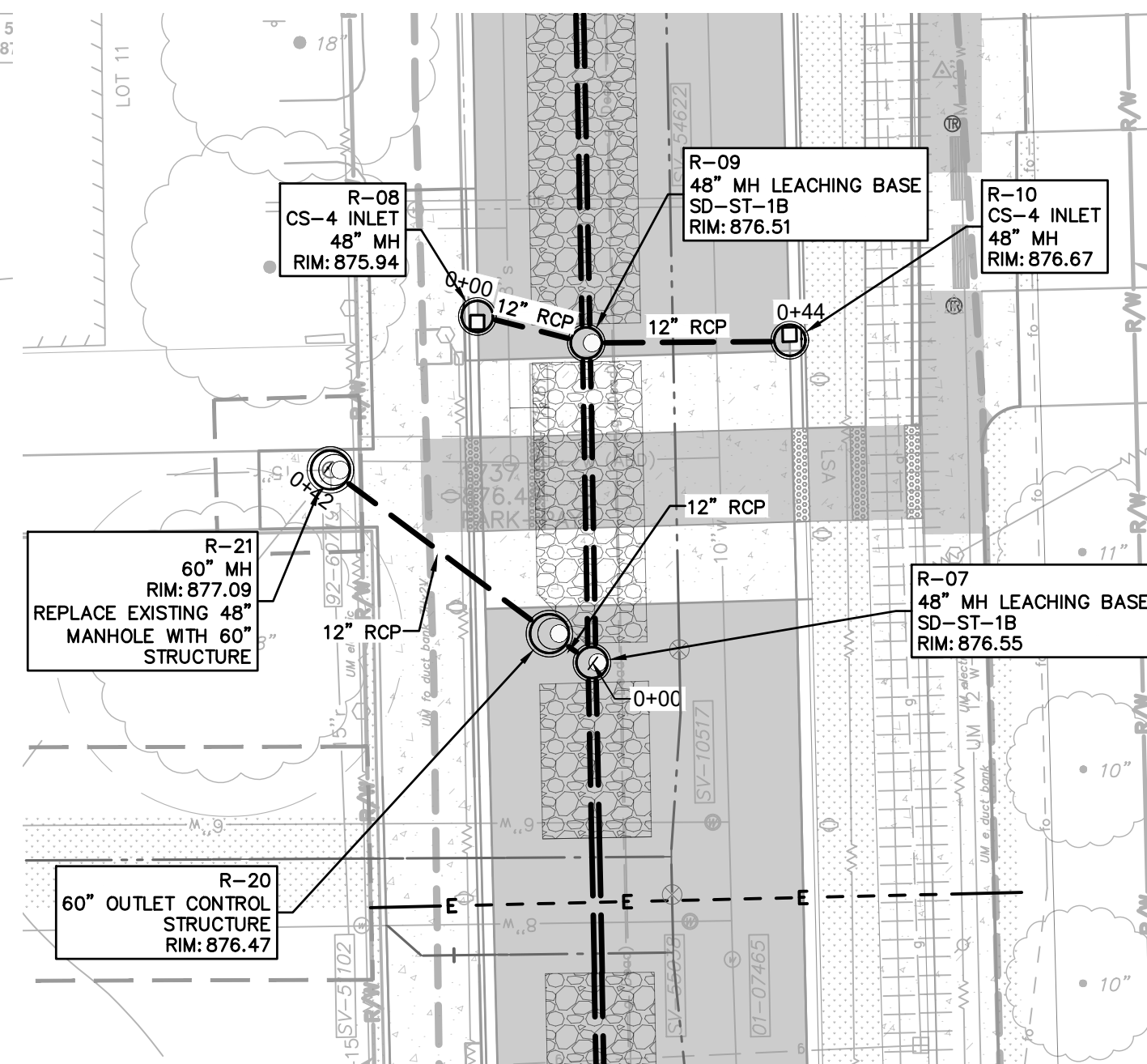
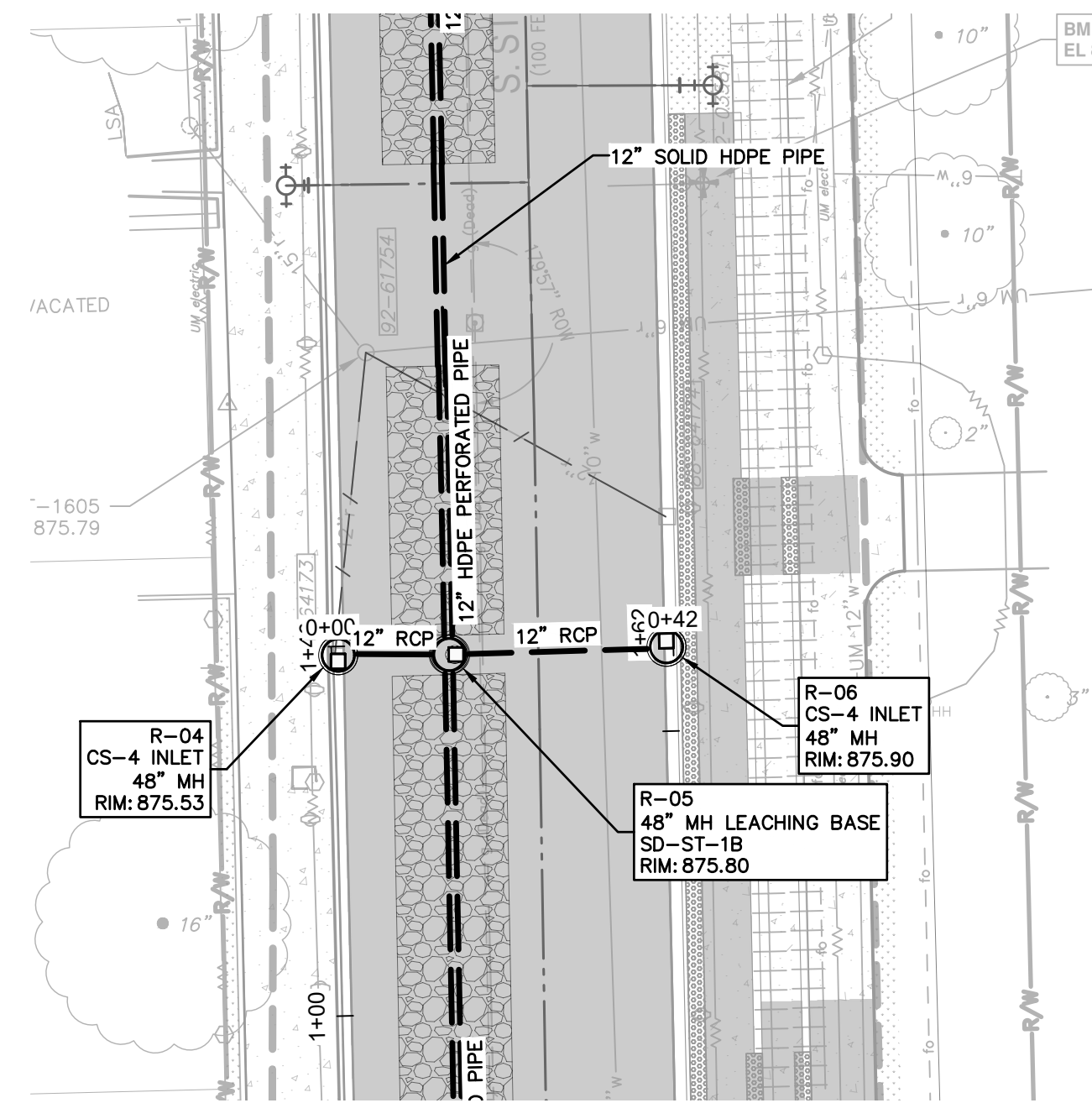
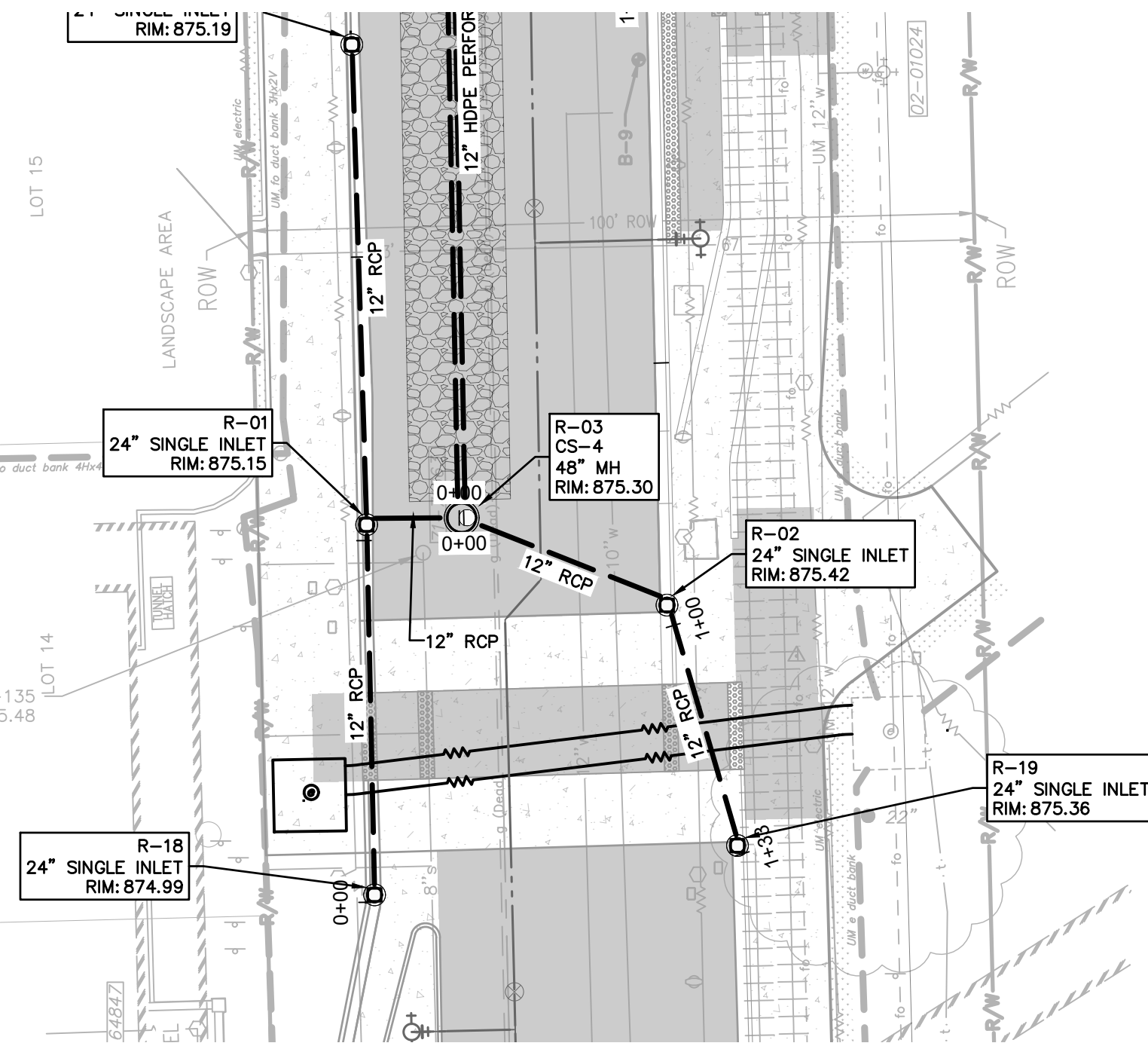
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
PROPOSED STORM PLAN & PROFILE - STATE ST

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

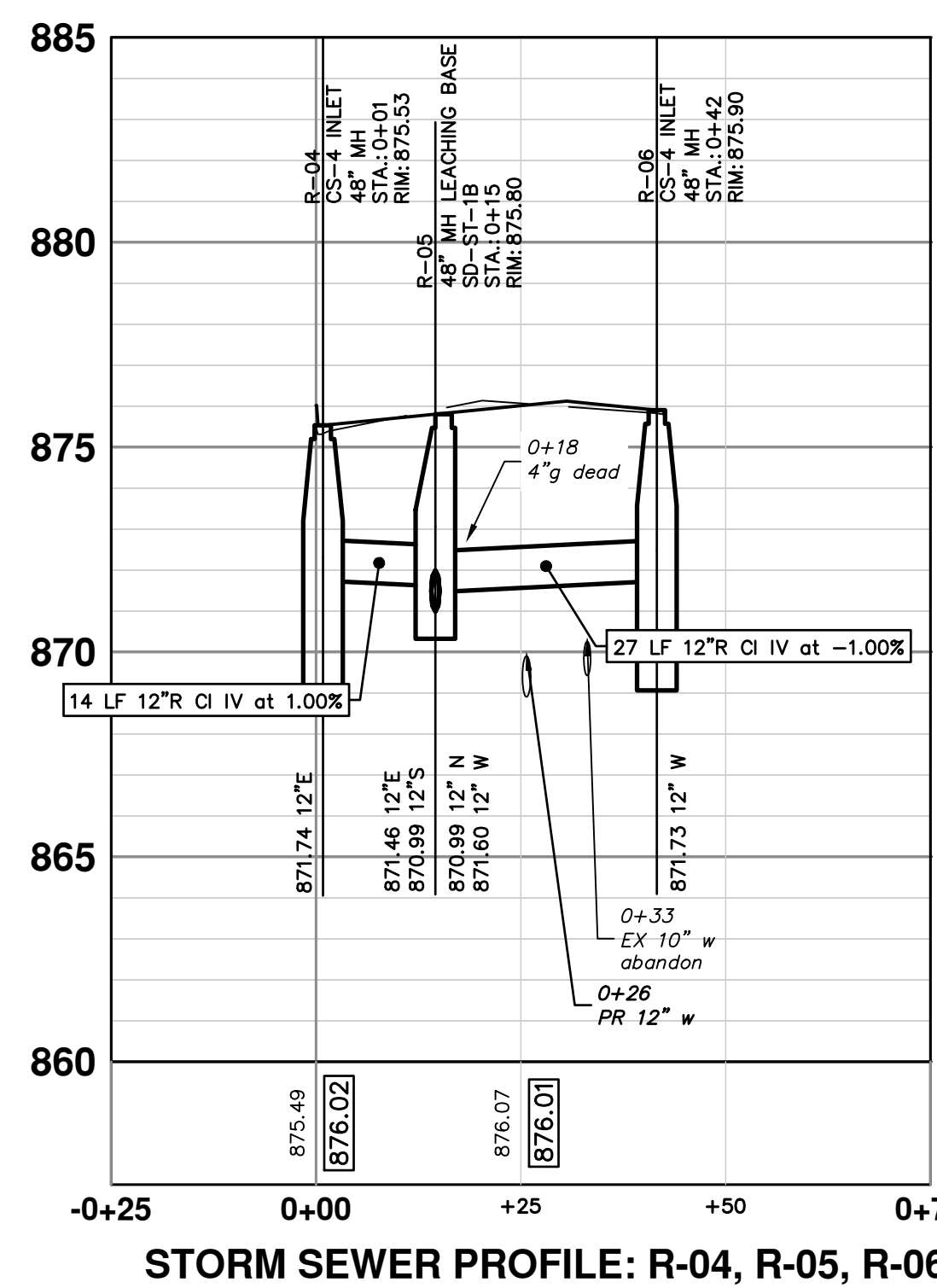
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
www.a2gov.org

SCALE: 1"=20'
DRAWING No. 2023-023-41
SHEET No. 41 OF 75

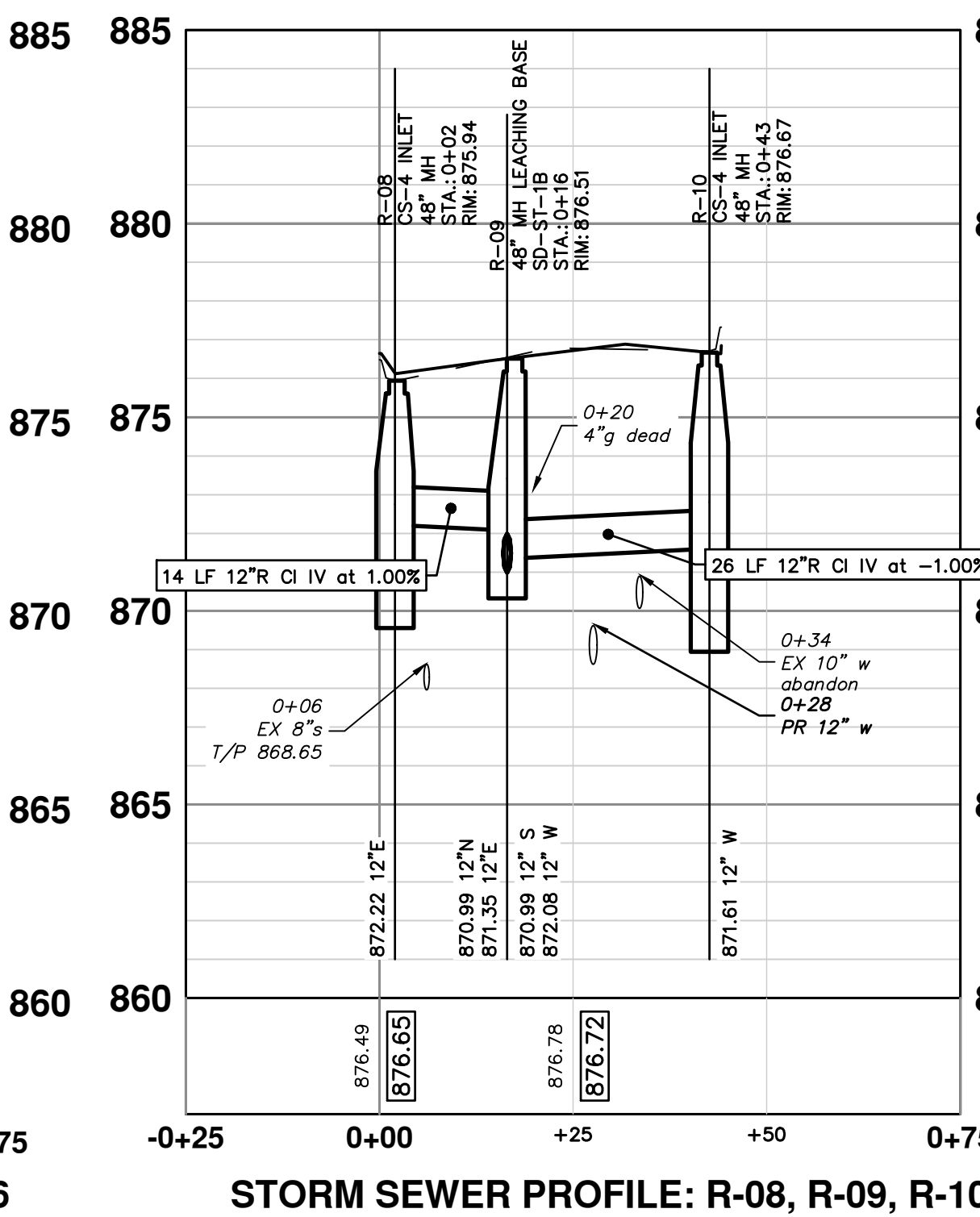
c:\pw_work\wade-trim_brown\d1339881\CST-PLTS-Prop STM-State.dwg Dwg Created: 3-Feb-25 --_a2_standard.bw.stb -- Plot Date: 3-Feb-25



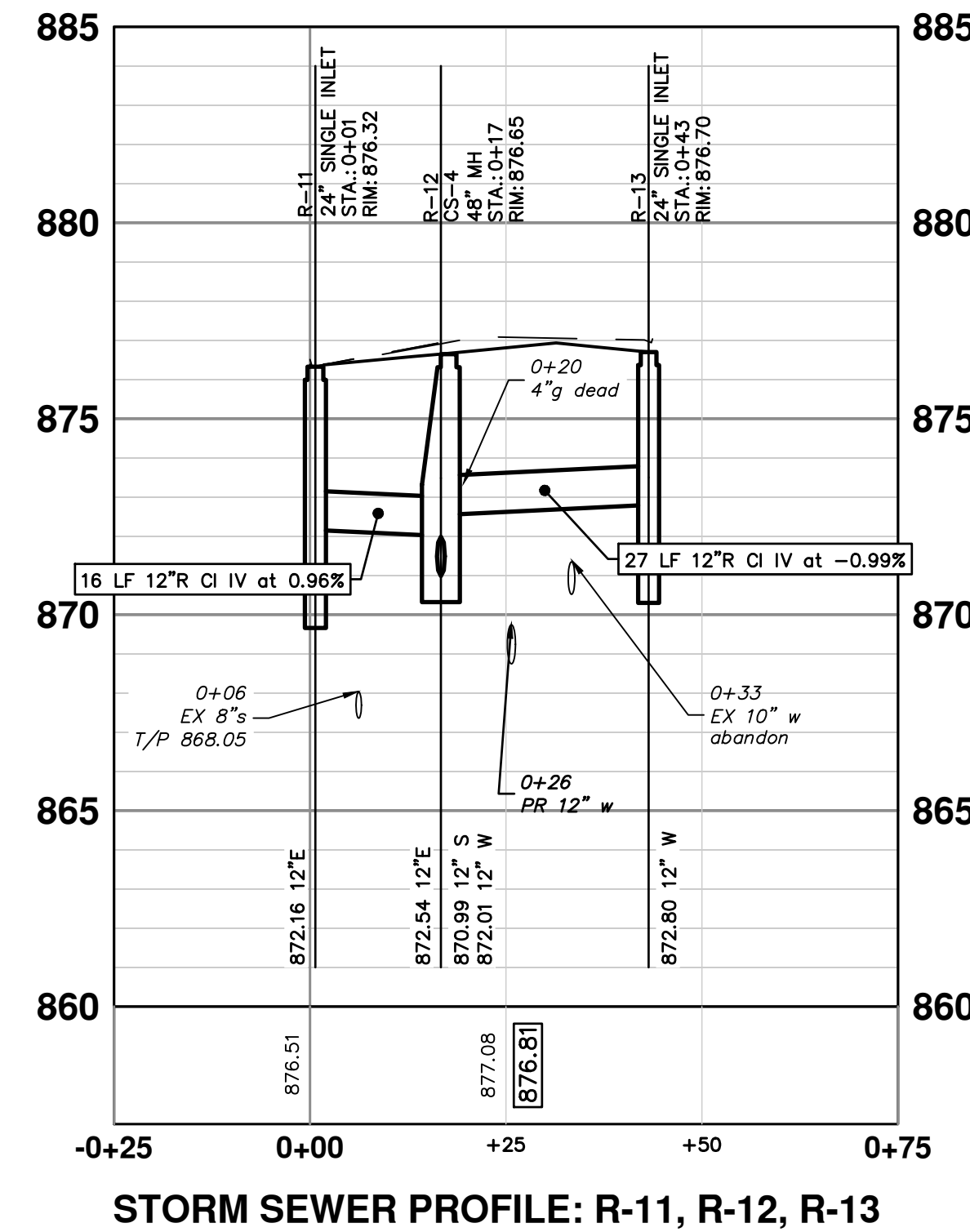
STORM SEWER PROFILE: R-18, R-01, R-03, R-02, R-19



STORM SEWER PROFILE: R-04, R-05, R-06



STORM SEWER PROFILE: R-08, R-09, R-10

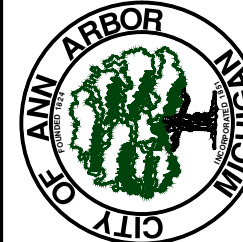


STORM SEWER PROFILE: R-11, R-12, R-13



Know what's below. Call before you dig.

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
www.a3gov.org

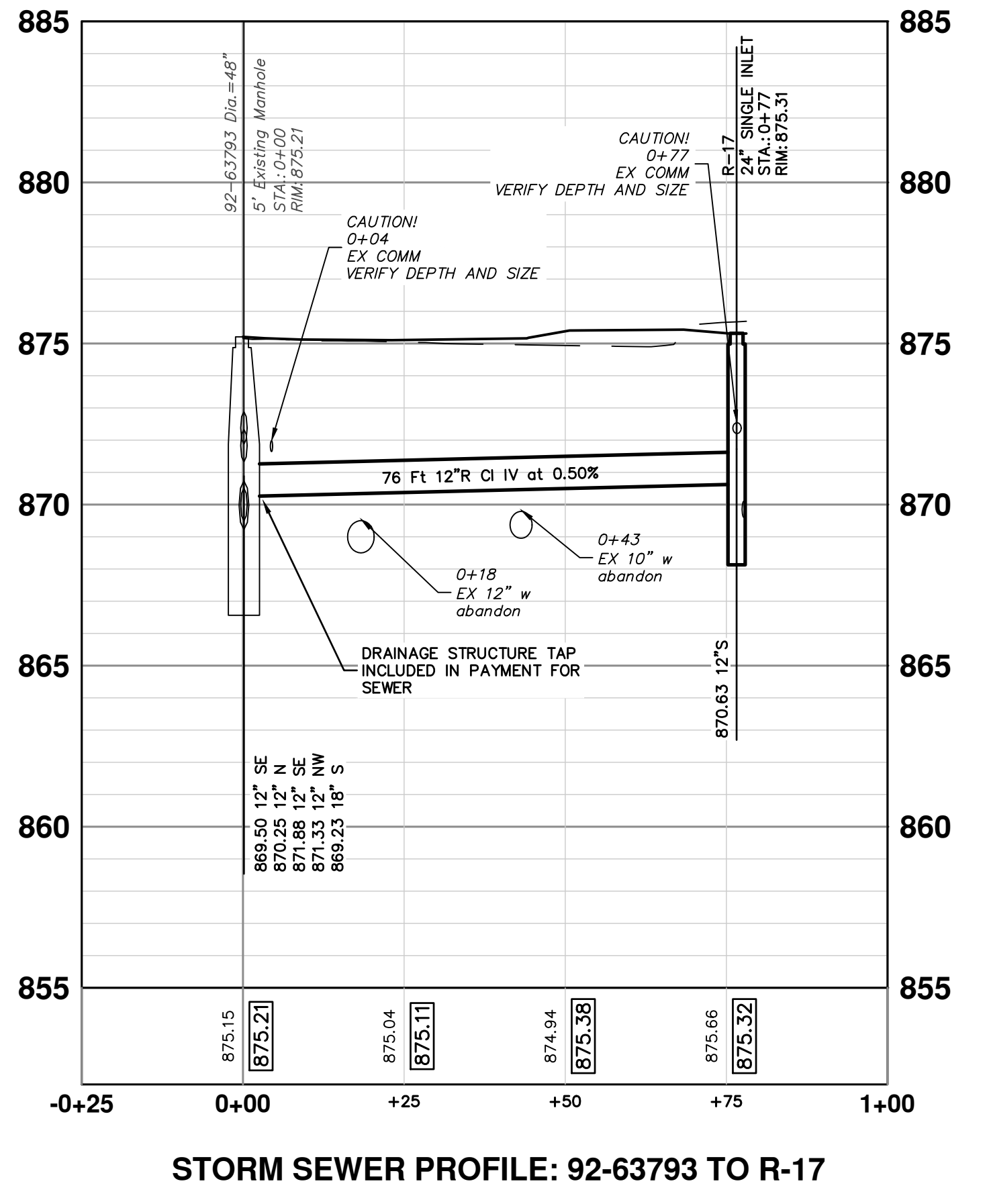
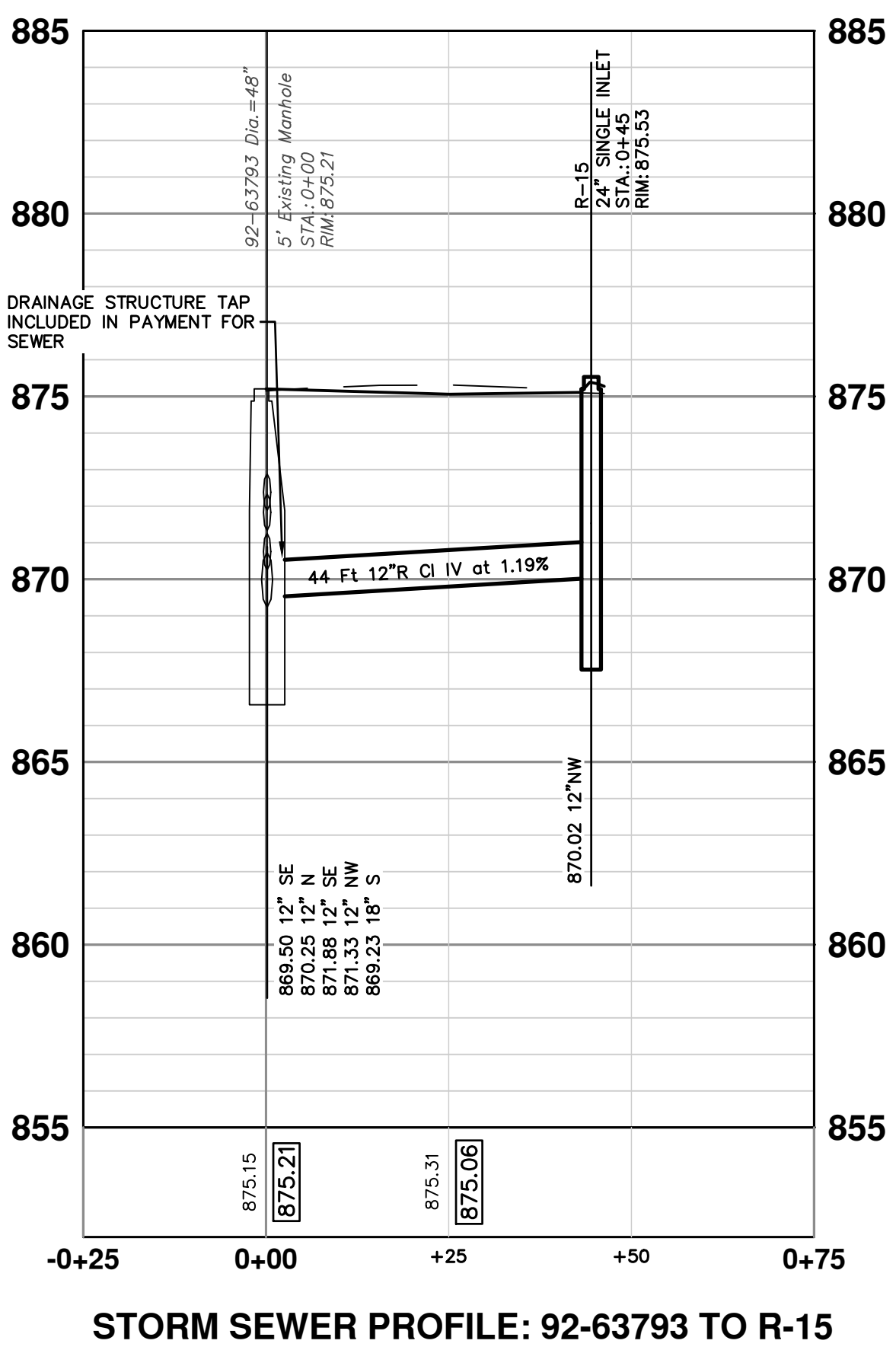
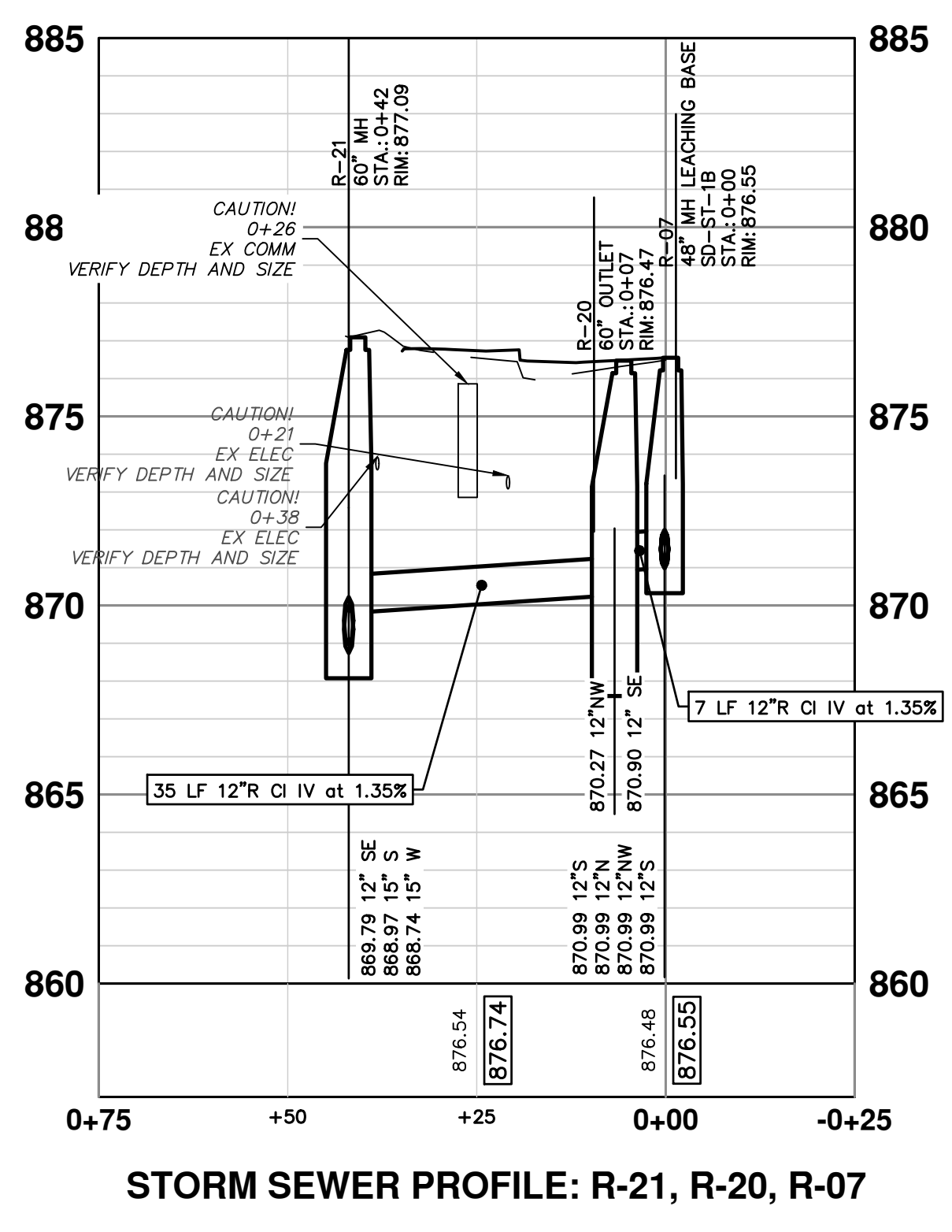
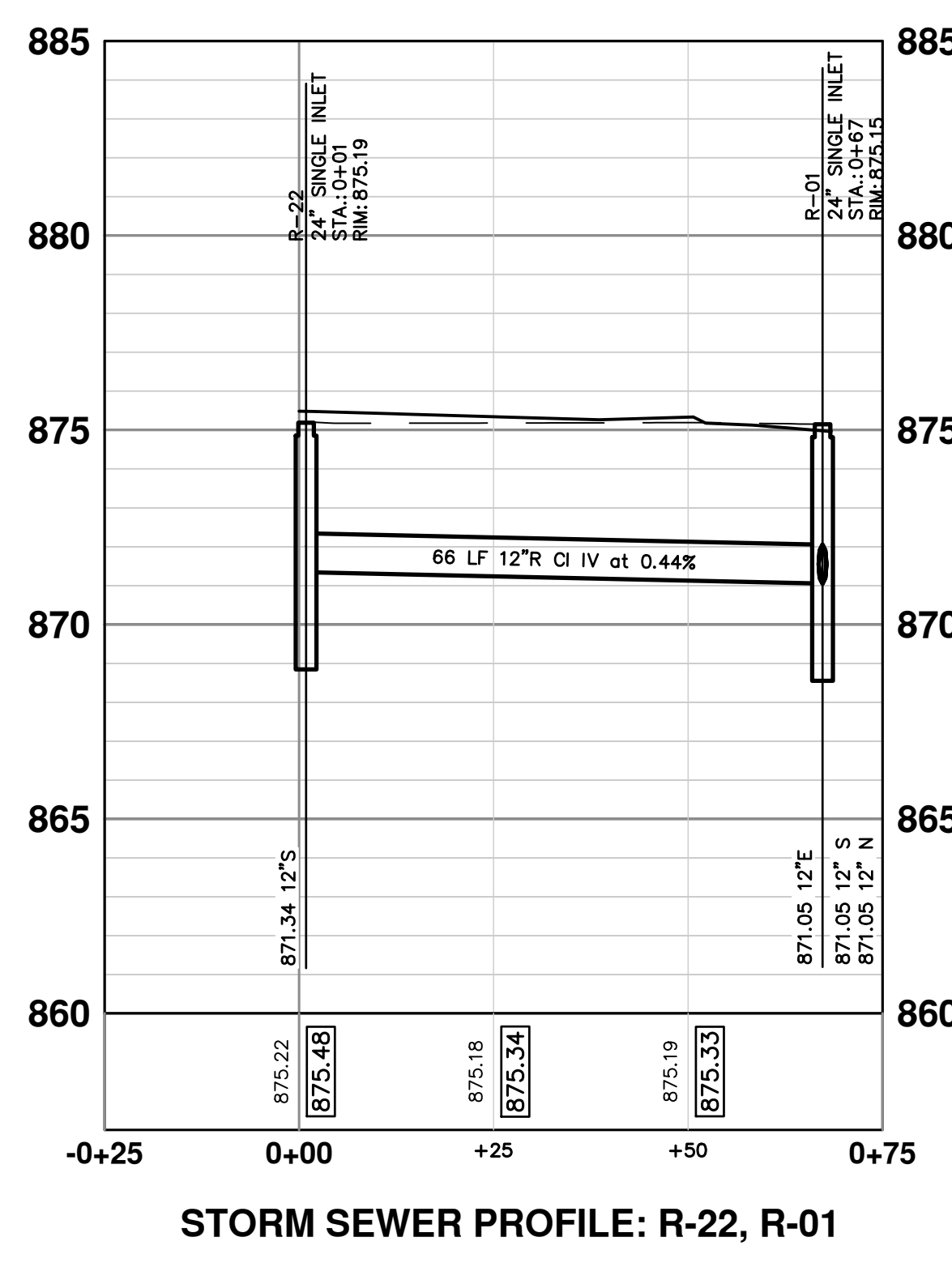
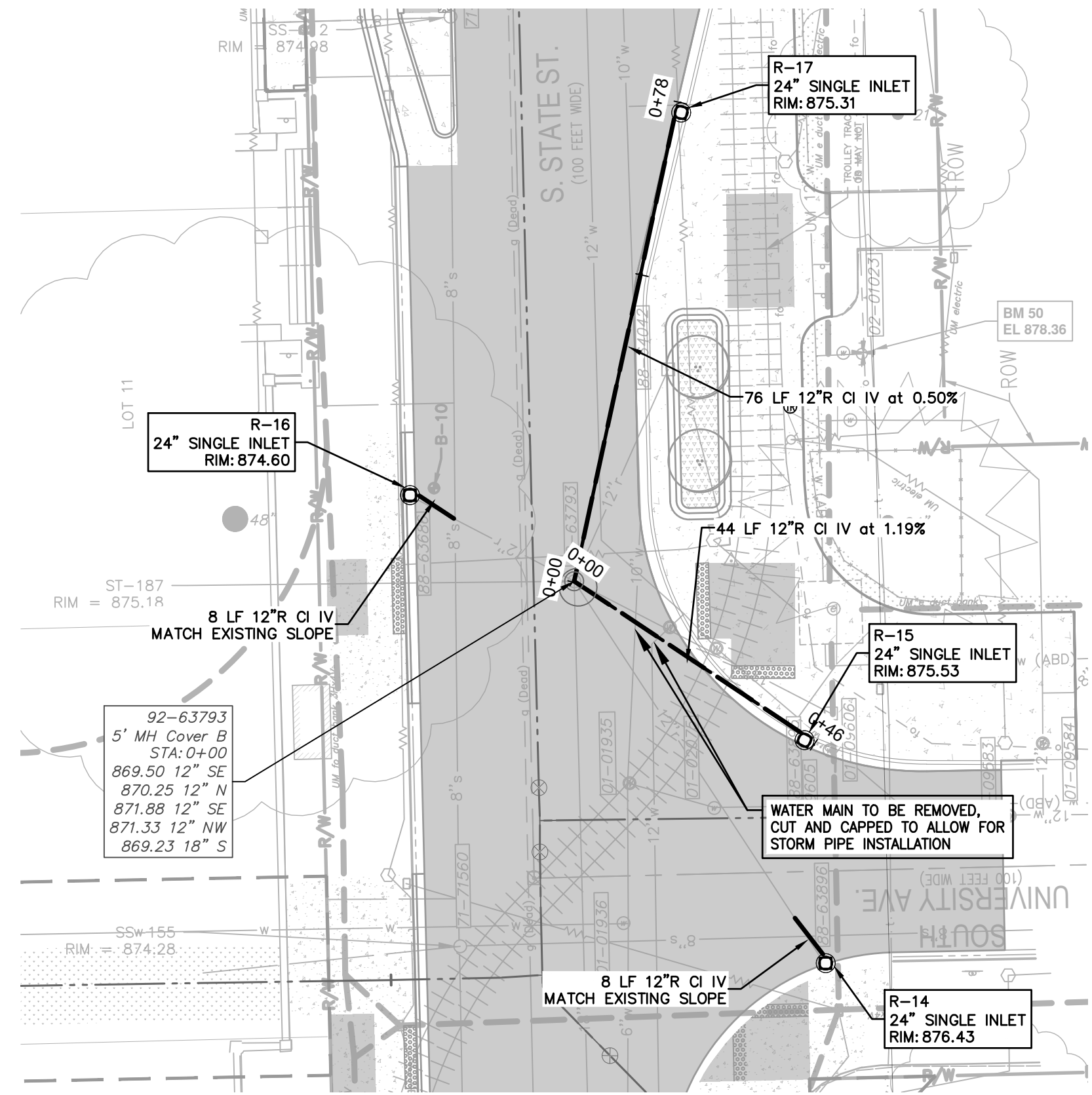
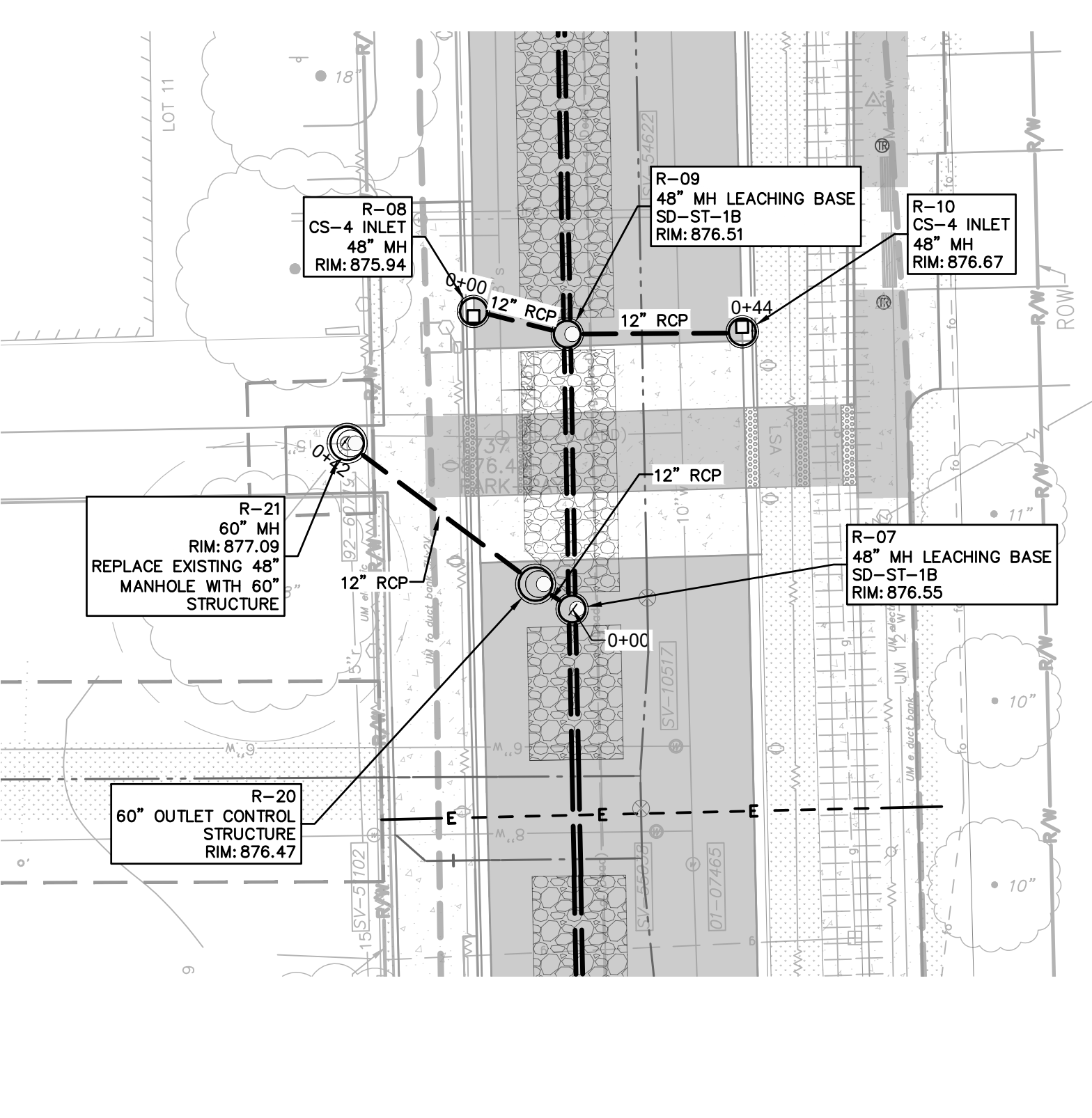
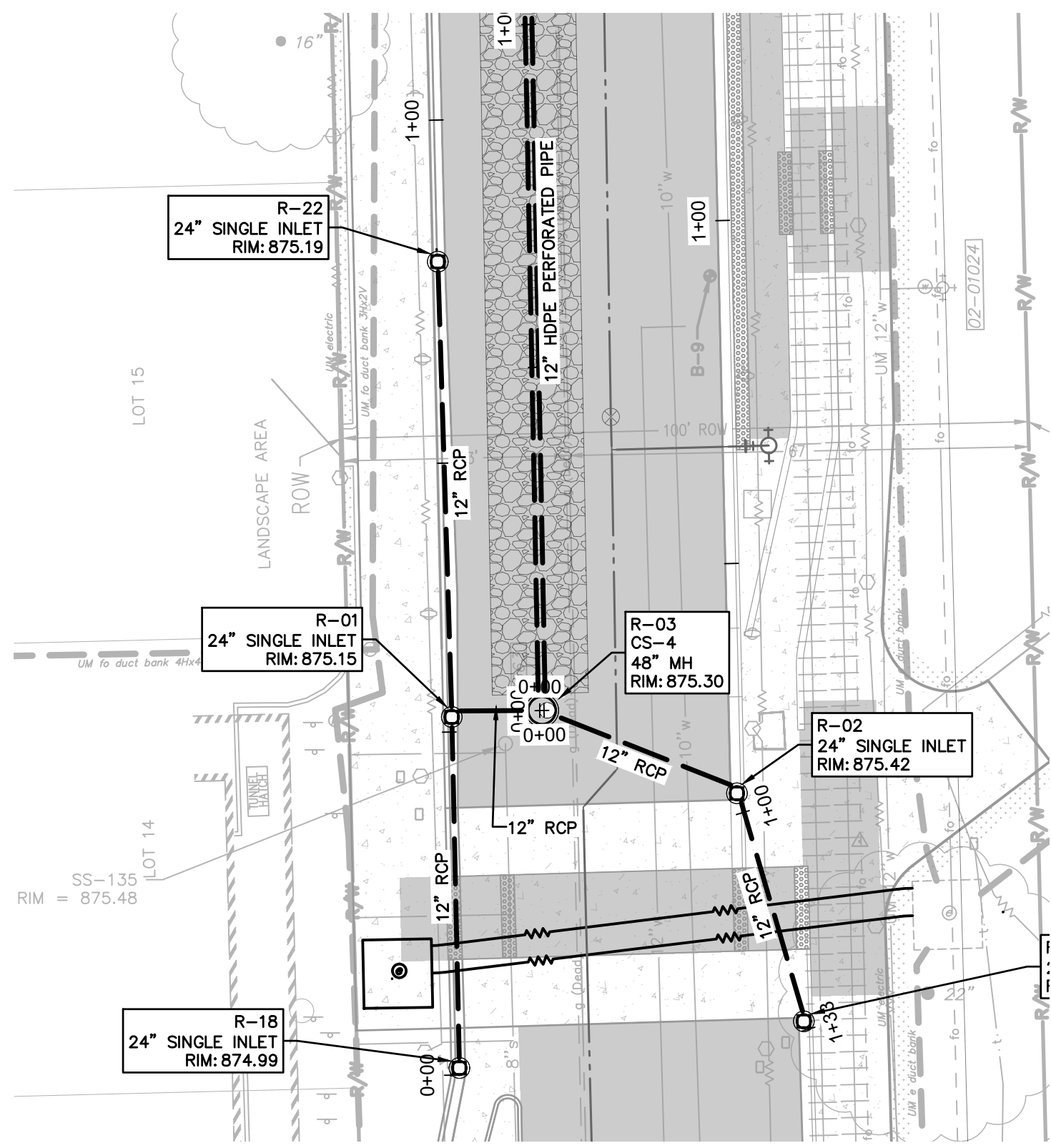


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
PROPOSED STORM PLAN & PROFILE - STATE ST

SCALE: 1"=20'
DRAWING No. 2023-023-42

SHEET No. 42 OF 75

REV.	DESCRIPTION	DATE	DRAWN	CHECKED



811
Know what's below. Call before you dig.

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
www.a3gov.org

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

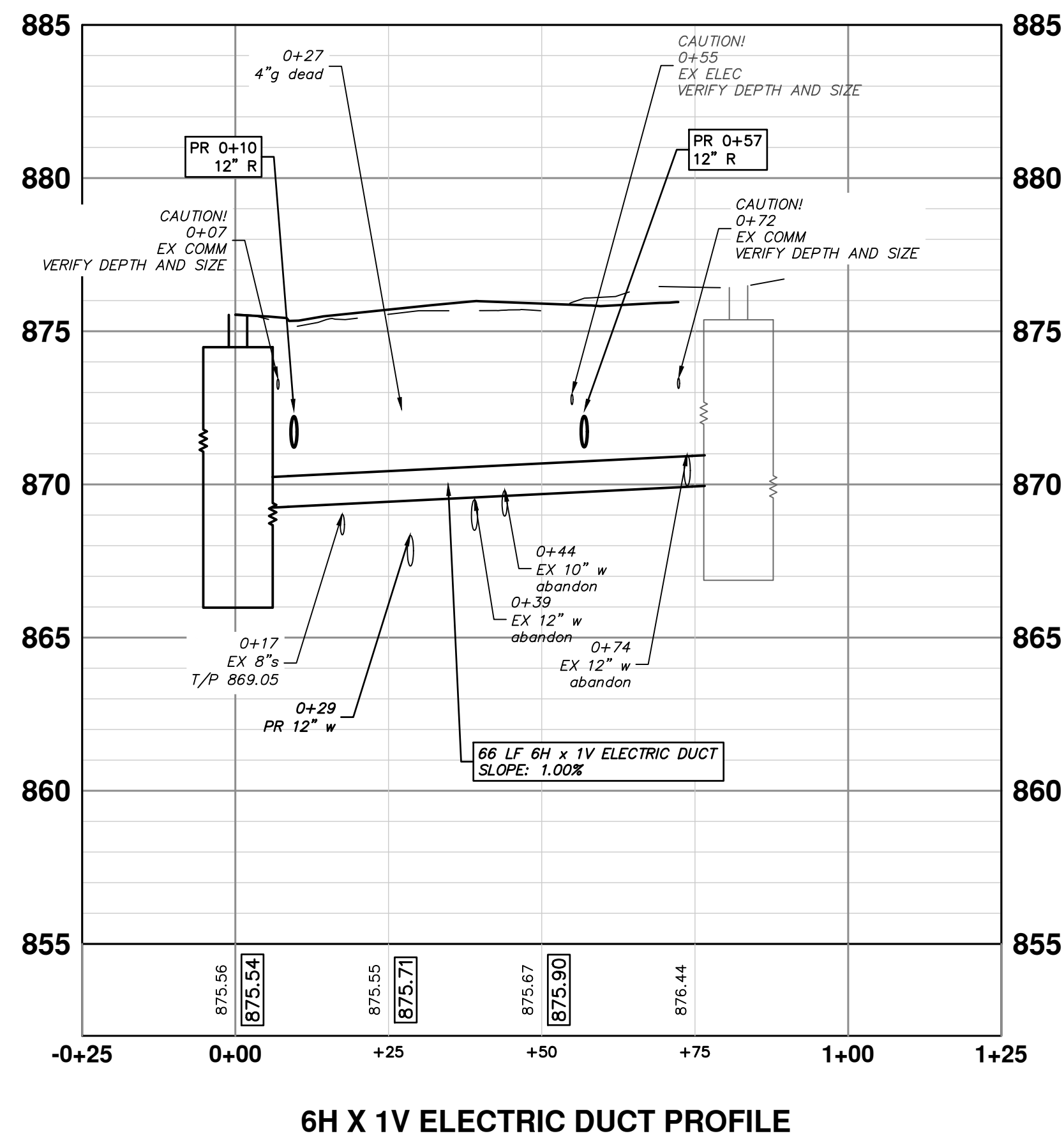
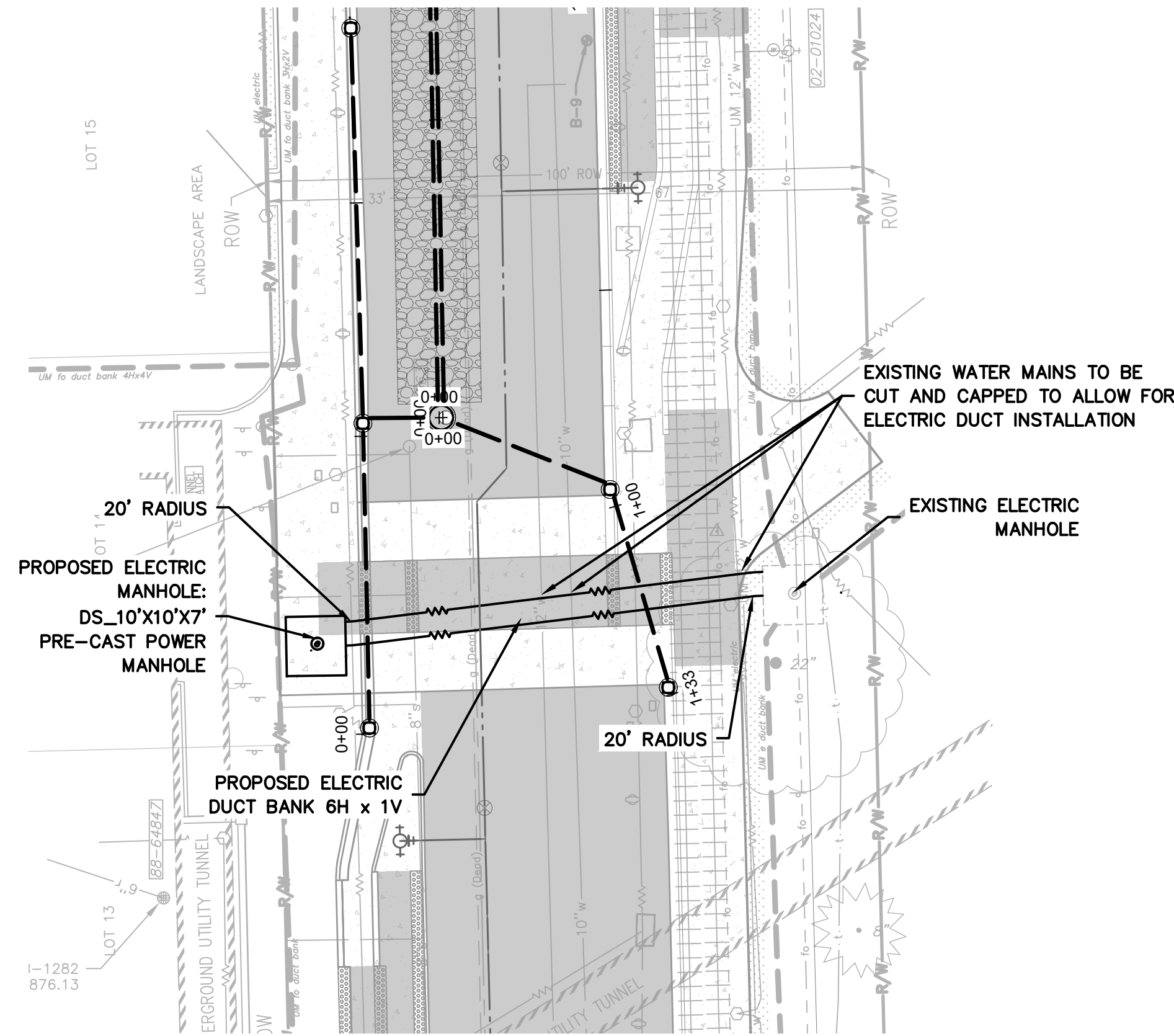
PROPOSED STORM PLAN & PROFILE - STATE ST

SCALE: 1"=20'

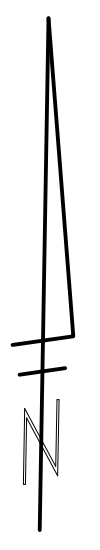
DRAWING No. 2023-023-43

SHEET No. 43 OF 75

STORM SEWER STRUCTURE TABLE						
STRUCTURE	UTILITY STATION	INVERT ELEVATION, SIZE & DIRECTION	SUMP ELEVATION	TOP OF CASTING ELEVATION	DEPTH (Feet)	DESCRIPTION
92-63793	0+00	12" SE 869.50 12" N 870.25 12" SE 871.88 12" NW 871.33 18" S 869.23	867.23	875.21	7.98	5' Existing Manhole
R-01	0+53	12" S 871.05 12" N 871.05 12" E 871.05	869.05	875.15	6.10	2' Inlet
R-02	0+97	12" S 871.12 12" W 871.12	869.12	875.42	6.29	2' Inlet
R-03	0+00	12" E 870.99 12" N 870.99 12" W 870.99	870.99	875.30	4.31	4' Manhole
R-04	0+01	12" E 871.74	869.74	875.53	5.79	CS-4 Inlet
R-05	1+31	12" N 870.99 12" W 871.60 12" E 871.46 12" S 870.99	870.99	875.80	4.81	4' Manhole
R-06	0+42	12" W 871.73	869.73	875.90	6.17	CS-4 Inlet
R-07	3+00	12" S 870.99 12" N 870.99 12" NW 870.99 12" S 870.99	870.99	876.55	5.56	4' Manhole
R-08	0+02	12" E 872.22	870.22	875.94	5.72	CS-4 Inlet
R-09	3+41	12" S 870.99 12" W 872.08 12" N 870.99 12" E 871.35	870.99	876.51	5.53	4' Manhole
R-10	0+43	12" W 871.61	869.61	876.67	7.06	CS-4 Inlet
R-11	0+01	12" E 872.16	870.16	876.32	6.16	2' Inlet
R-12	4+83	12" S 870.99 12" W 872.01 12" E 872.54	870.99	876.65	5.66	4' Manhole
R-13	0+43	12" W 872.80	870.80	876.70	5.90	2' Inlet
R-14	0+00	12" NW 874.76	872.76	876.43	3.67	2' Inlet
R-15	0+45	12" NW 870.02	868.02	875.53	7.51	2' Inlet
R-16	0+00	12" SE 871.27	869.27	874.60	5.33	2' Inlet
R-17	0+77	12" S 870.63	868.63	875.31	6.68	2' Inlet
R-18	0+02	12" N 871.27	869.27	874.99	5.72	2' Inlet
R-19	1+31	12" N 871.28	869.28	875.36	6.08	2' Inlet
R-20	0+07	12" SE 870.90 12" NW 870.27	868.27	876.47	8.20	5' Manhole
R-21	0+42	12" SE 869.79 15" S 868.97 15" W 868.74	868.74	877.09	8.35	5' Manhole
R-22	0+01	12" S 871.34	869.34	875.19	5.84	2' Inlet



6H X 1V ELECTRIC DUCT PROFILE



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-8647
www.a2gov.org



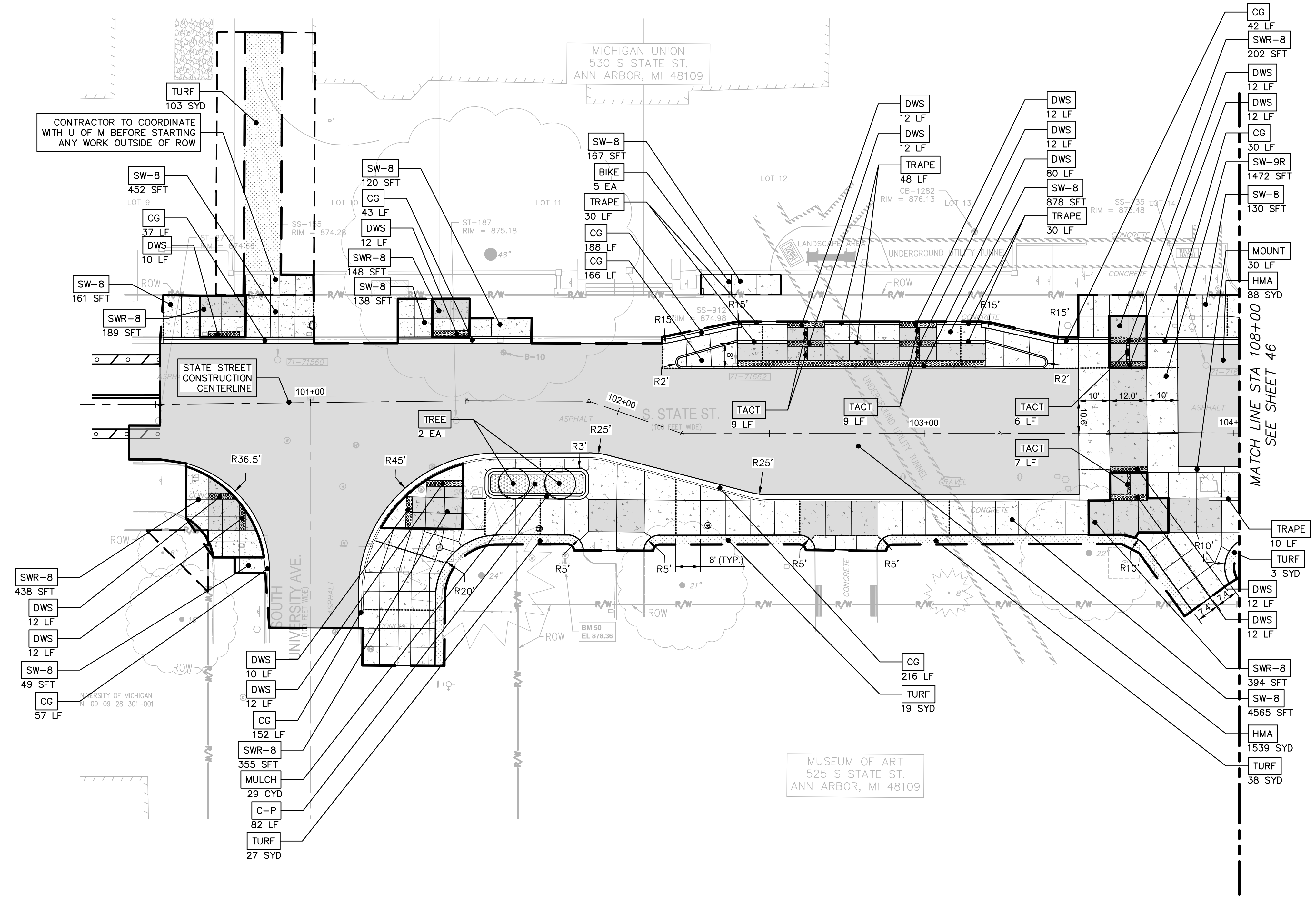
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
PROPOSED STORM PLAN & PROFILE - STATE ST

SCALE: 1"=20'
DRAWING No. 2023-023-44
SHEET No. 44 OF 75

c:\pwwork\wade--trim_rbrown\dl339881\CRD-PLTS-Construction-State.dwg Dwg Created: 3--Feb-25 --_02 standard bw.stb - Plot Date: 3--Feb-25



REV.	DESCRIPTION	DATE	DRAWN	CHECKED



LEGEND

	PROPOSED 8-INCH CONCRETE LEVEL LANDING
	PROPOSED 8-INCH CONCRETE SIDEWALK
	TURF ESTABLISHMENT, PERFORMANCE
	PROPOSED PAVEMENT LIMITS
	MULCH
	PROPOSED SLOPE STAKE LINE
	PROPOSED SIDEWALK RAMP
	PROPOSED GRADING EASEMENT
	CONTROL JOINT
	EXPANSION JOINT

CONSTRUCTION KEY

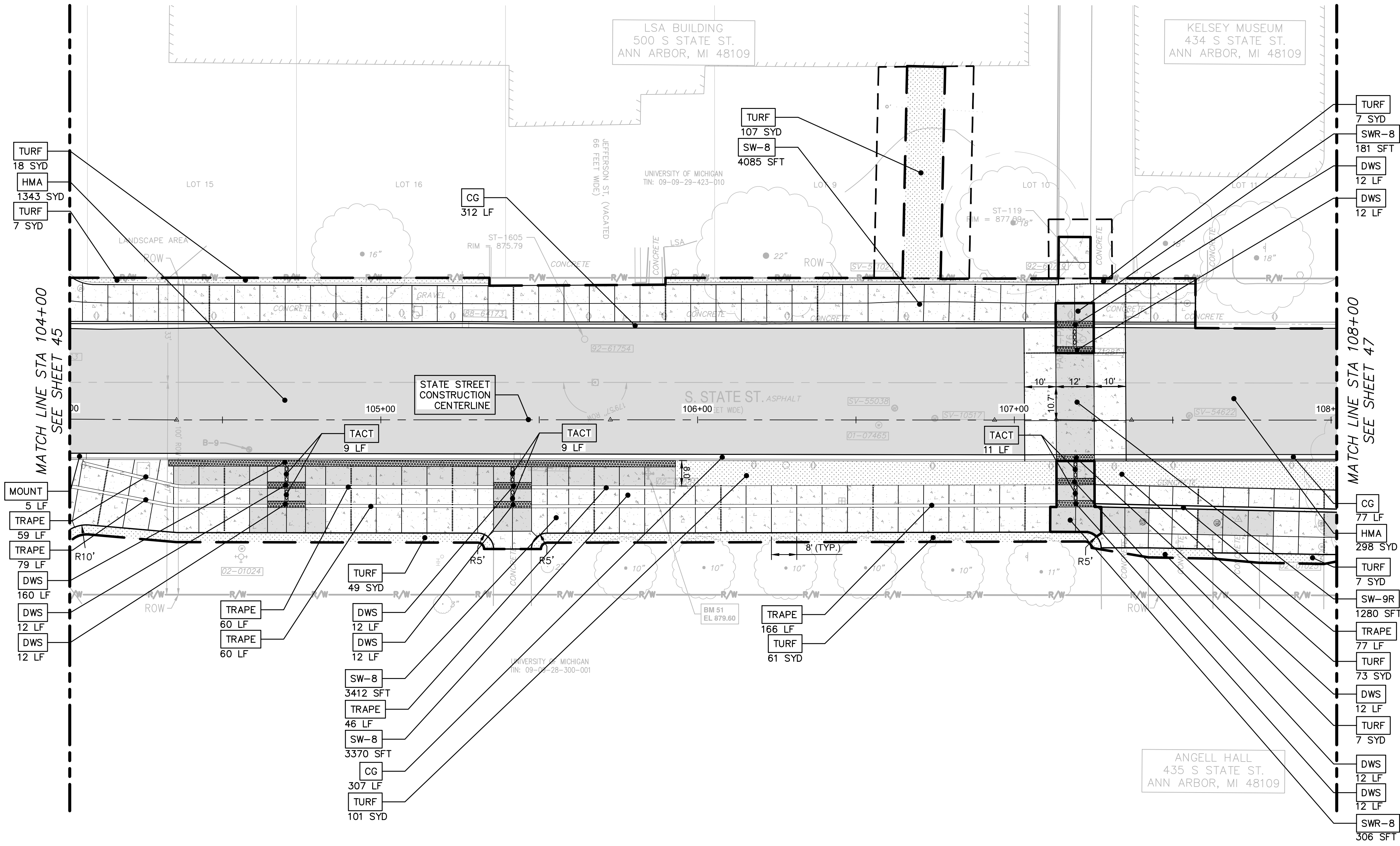
KEY	DESCRIPTION
[HMA]	SURFACE AREA FOR HMA
[CG]	CONC. CURB OR CURB & GUTTER, ALL TYPES
[MOUNT]	DS_MOUNTABLE CURB AND GUTTER
[SW-8]	DS_CONC, SIDEWALK, FIBERMESH, 8 IN.
[DWS]	DETECTABLE WARNING SURFACE
[C-P]	DS_PLANTER CURB
[CG-M]	CONC. DRIVEWAY OPENING, TYPE M. PAID FOR AS CONC, CURB, CURB & GUTTER, ALL TYPES
[SWR-8]	DS_CONC, SIDEWALK RAMP, FIBERMESH, 8 IN.
[SW-9R]	DS_CONC, SIDEWALK, FIBERMESH, 9 IN., RAISED
[TURF]	DS_TURF ESTABLISHMENT, PERFORMANCE
[TRAPE]	DS_TRAPEZOID DELINEATOR, ANY SIZE
[MULCH]	DS_PLANTING SOIL AND MULCH
[TREE]	TREE, MEDIUM, B&B INSTALL CERCIS CANADENSIS (EASTERN REDBUD) 2" CALIPER, MULTI-STEM
[BIKE]	BIKE HOOP, CORED
[TACT]	DS_TACTILE DIRECTIONAL INDICATOR

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
www.a3gov.org

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
PROPOSED ROAD CONSTRUCTION PLAN

SCALE: 1"=20'
DRAWING No. 2023-023-45
SHEET No. 45 OF 75

c:\pw_work\wade--trim_rbrown\dl339881\CRD--PLTS--Construction--State.dwg Dwg Created: 3--Feb--25 --_02 standard bw.stb - Plot Date: 3--Feb--25



LEGEND

	PROPOSED 8-INCH CONCRETE LEVEL LANDING
	PROPOSED 8-INCH CONCRETE SIDEWALK
	TURF ESTABLISHMENT, PERFORMANCE
	PROPOSED PAVEMENT LIMITS
	PROPOSED SLOPE STAKE LINE
	PROPOSED SIDEWALK RAMP
	PROPOSED GRADING EASEMENT
	CONTROL JOINT
	EXPANSION JOINT

CONSTRUCTION KEY

KEY	DESCRIPTION
HMA	SURFACE AREA FOR HMA
CG	CONC, CURB OR CURB & GUTTER, ALL TYPES
MOUNT	DS_MOUNTABLE CURB AND GUTTER
SW-8	DS_CONC, SIDEWALK, FIBERMESH, 8 IN.
DWS	DETECTABLE WARNING SURFACE
C-P	DS_PLANTER CURB
CG-M	CONC, DRIVEWAY OPENING, TYPE M. PAID FOR AS CONC, CURB, CURB & GUTTER, ALL TYPES
SW-8	DS_CONC, SIDEWALK RAMP, FIBERMESH, 8 IN.
SW-9R	DS_CONC, SIDEWALK, FIBERMESH, 9 IN., RAISED
TURF	DS_TURF ESTABLISHMENT, PERFORMANCE
TRAPE	DS_TRAPEZOID DELINEATOR, ANY SIZE
MULCH	DS_PLANTING SOIL AND MULCH
TACT	DS_TACTILE DIRECTIONAL INDICATOR



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

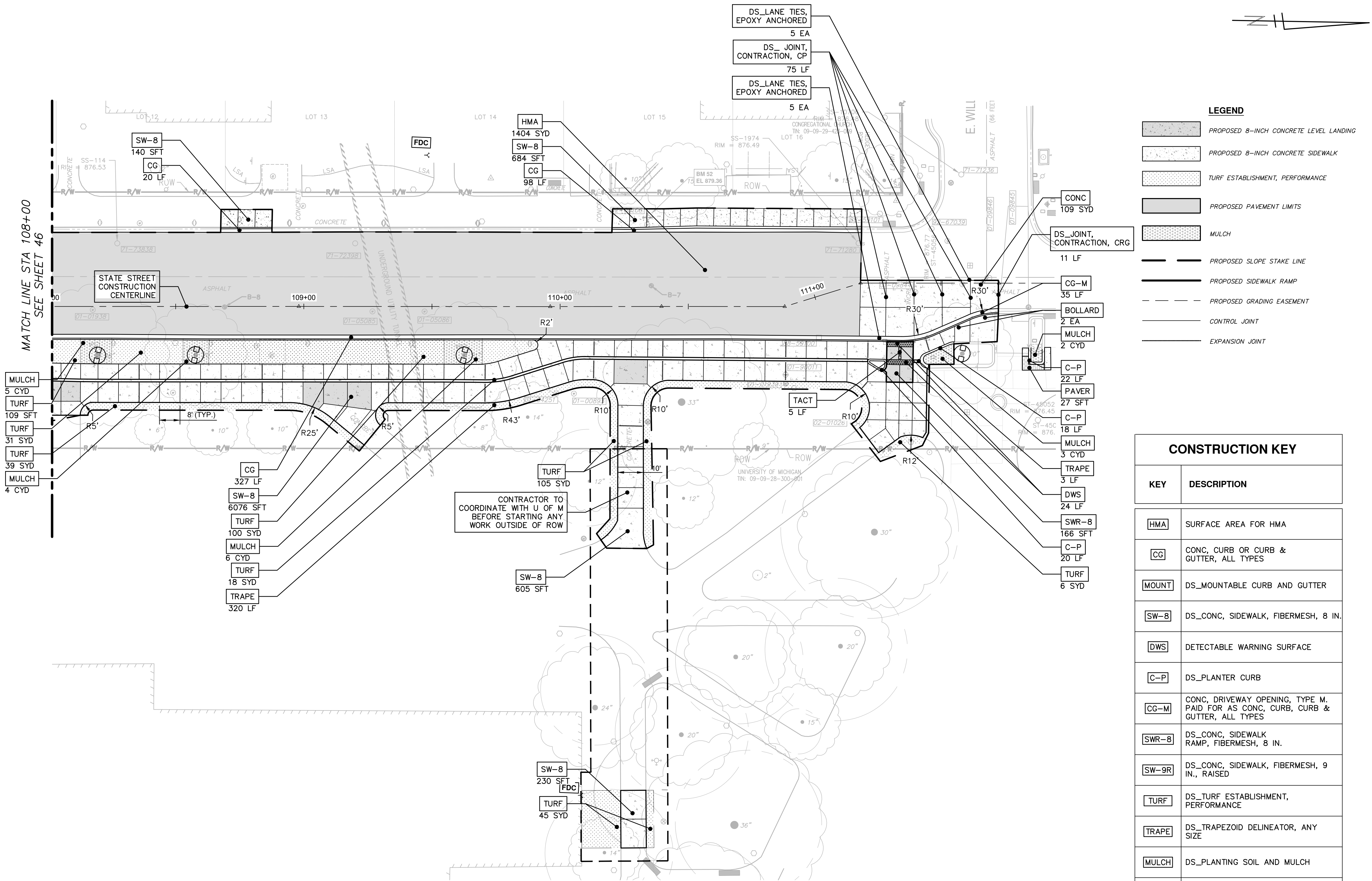
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a3gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
PROPOSED ROAD CONSTRUCTION PLAN

SCALE: 1"=20'
DRAWING No. 2023-023-46
SHEET No.

c:\pwork\wade-trim_rbrown\dl339881\CRD-PLTS-Construction-State.dwg Dwg Created: 3-Feb-25 - _02 standard bw.stb - Plot Date: 3-Feb-25



MATCH LINE STA 108+00
SEE SHEET 46

- MULCH 5 CYD
- TURF 109 SFT
- TURF 31 SYD
- TURF 39 SYD
- MULCH 4 CYD

- CG 327 LF
- SW-8 6076 SFT
- TURF 100 SYD
- MULCH 6 CYD
- TURF 18 SYD
- TRAPE 320 LF

- SW-8 230 SFT [FDC]
- TURF 45 SYD

CONTRACTOR TO COORDINATE WITH U OF M BEFORE STARTING ANY WORK OUTSIDE OF ROW

- DS_LANE TIES, EPOXY ANCHORED 5 EA
- DS_JOINT, CONTRACTION, CP 75 LF
- DS_LANE TIES, EPOXY ANCHORED 5 EA

- CONC 109 SYD
- DS_JOINT, CONTRACTION, CRG 11 LF
- CG-M 35 LF
- BOLLARD 2 EA
- MULCH 2 CYD
- C-P 22 LF
- PAVER 27 SFT
- C-P 18 LF
- MULCH 3 CYD
- TRAPE 3 LF
- DWS 24 LF
- SWR-8 166 SFT
- C-P 20 LF
- TURF 6 SYD

LEGEND

- PROPOSED 8-INCH CONCRETE LEVEL LANDING
- PROPOSED 8-INCH CONCRETE SIDEWALK
- TURF ESTABLISHMENT, PERFORMANCE
- PROPOSED PAVEMENT LIMITS
- MULCH
- PROPOSED SLOPE STAKE LINE
- PROPOSED SIDEWALK RAMP
- PROPOSED GRADING EASEMENT
- CONTROL JOINT
- EXPANSION JOINT

CONSTRUCTION KEY

KEY	DESCRIPTION
HMA	SURFACE AREA FOR HMA
CG	CONC, CURB OR CURB & GUTTER, ALL TYPES
MOUNT	DS_MOUNTABLE CURB AND GUTTER
SW-8	DS_CONC, SIDEWALK, FIBERMESH, 8 IN.
DWS	DETECTABLE WARNING SURFACE
C-P	DS_PLANTER CURB
CG-M	CONC, DRIVEWAY OPENING, TYPE M. PAID FOR AS CONC, CURB, CURB & GUTTER, ALL TYPES
SWR-8	DS_CONC, SIDEWALK RAMP, FIBERMESH, 8 IN.
SW-9R	DS_CONC, SIDEWALK, FIBERMESH, 9 IN., RAISED
TURF	DS_TURF ESTABLISHMENT, PERFORMANCE
TRAPE	DS_TRAPEZOID DELINEATOR, ANY SIZE
MULCH	DS_PLANTING SOIL AND MULCH
BOLLARD	DS_STEEL BOLLARD
PAVER	BRICK PAVERS, SIDEWALK, REM AND REINSTALL
TACT	DS_TACTILE DIRECTIONAL INDICATOR
CONC	CONC PAVT, NON-REINF, 8 IN.

811
Know what's below.
Call before you dig.

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-0647
www.aagov.org

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

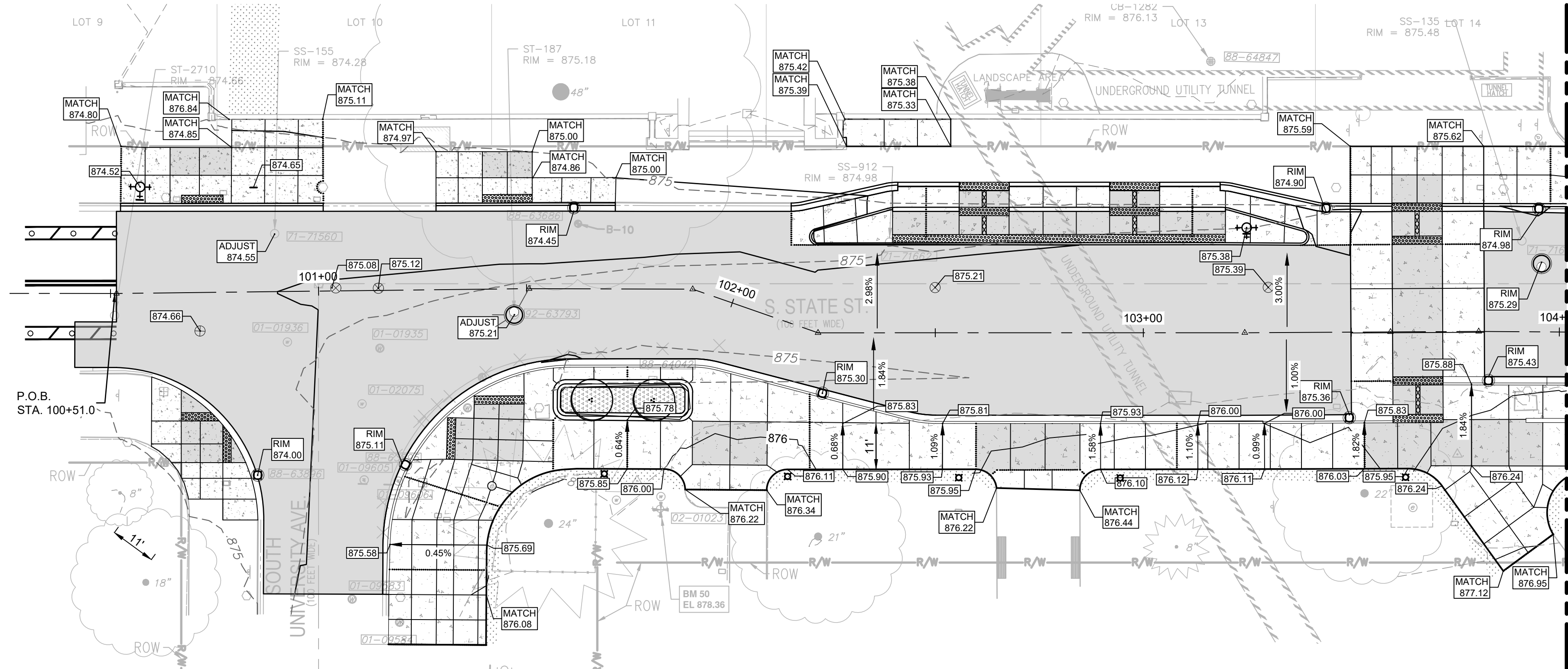
STATE STREET IMPROVEMENTS

PROPOSED ROAD CONSTRUCTION PLAN

SCALE: 1"=20'

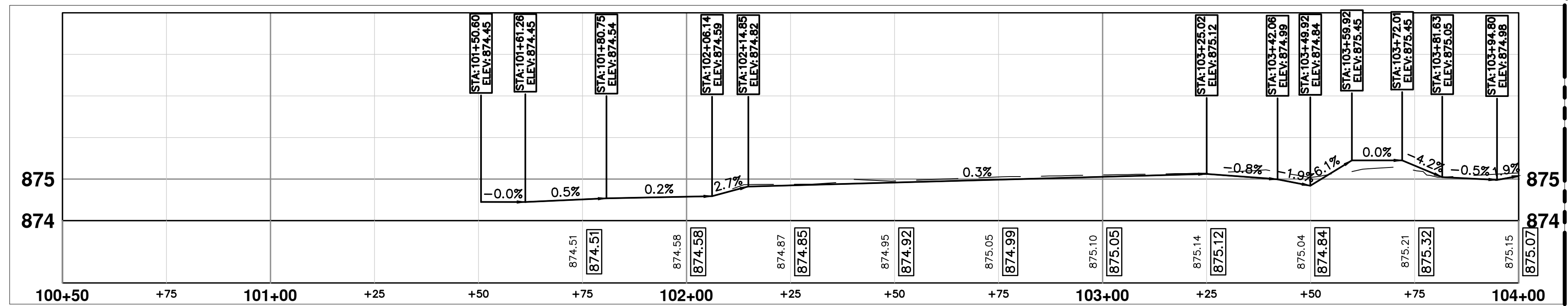
DRAWING No. 2023-023-47

SHEET No. 47 OF 75

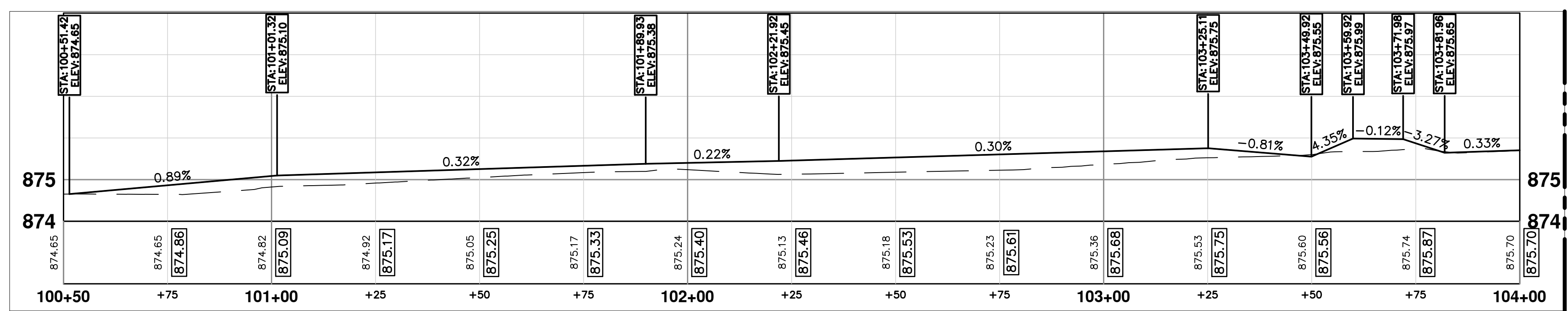


MATCH LINE STA 104+00
SEE SHEET 48

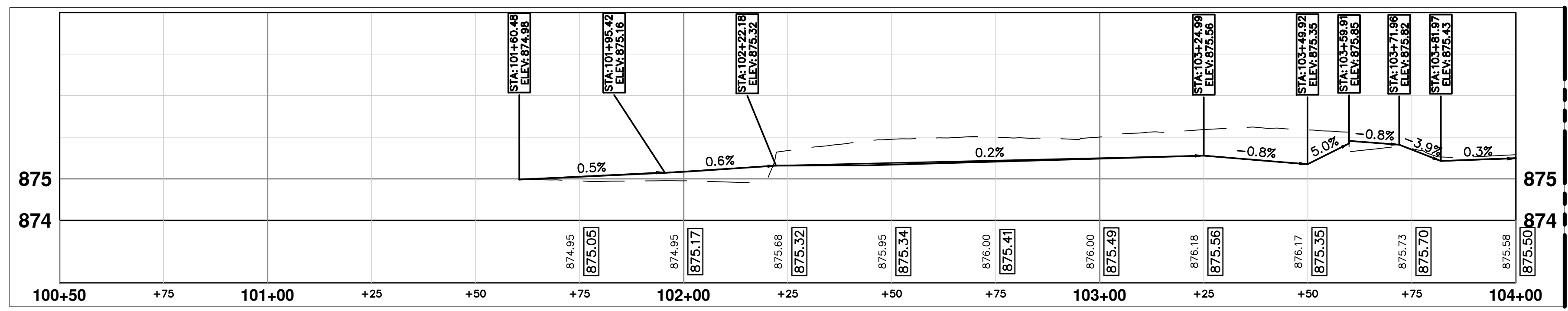
LEFT



CENTER



RIGHT



MATCH LINE STA 104+00
SEE SHEET 48

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

PAVING PLAN & PROFILE - STATE ST

SCALE: 1"=20'

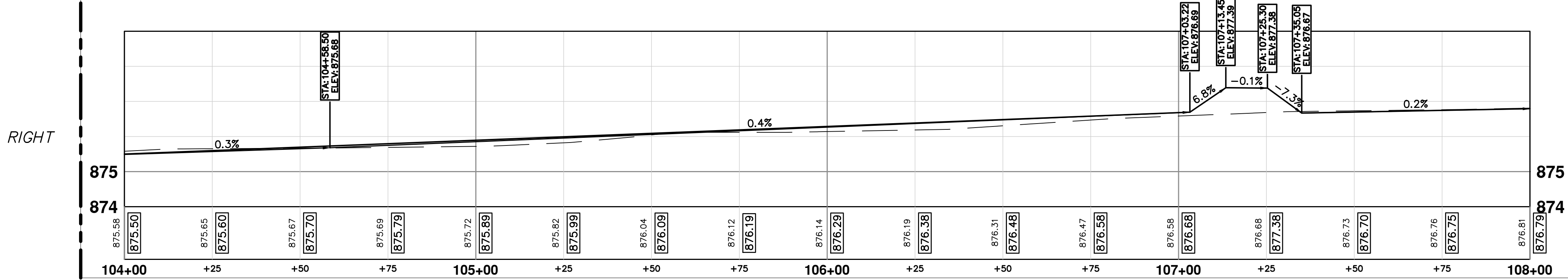
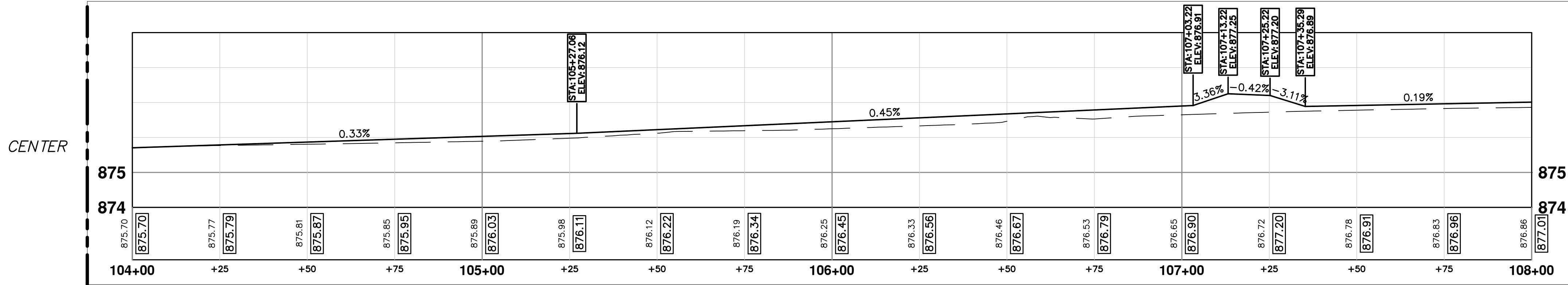
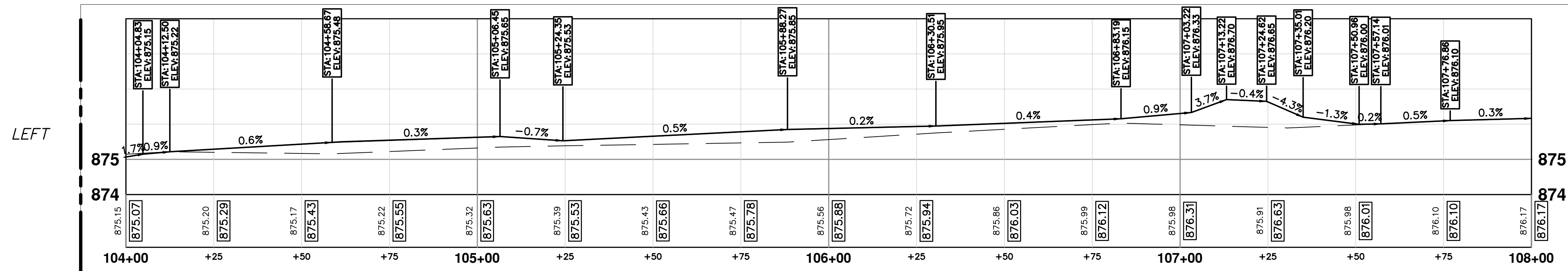
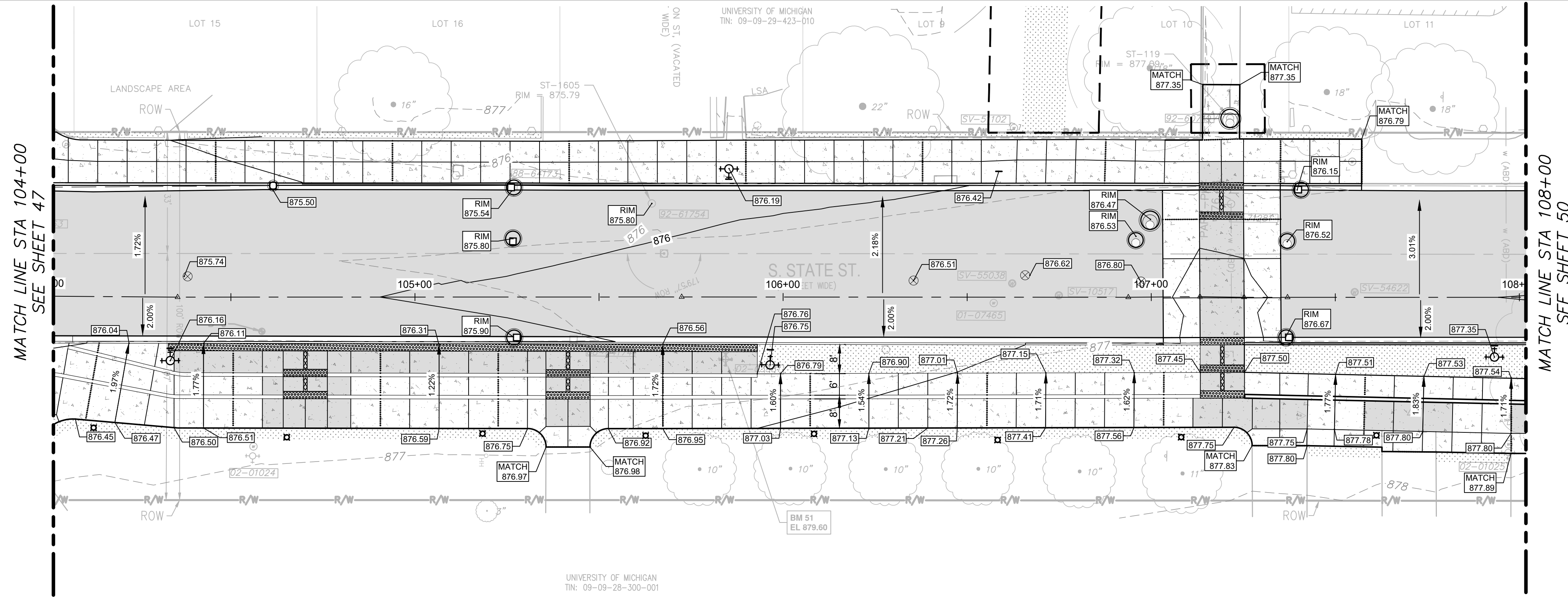
DRAWING No. 2023-023-48

SHEET No. 48 OF 75

811
Know what's below.
Call before you dig.

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-6647
www.a3gov.org

REV.	DESCRIPTION	DATE	DRAWN	CHECKED



MATCH LINE STA 104+00
SEE SHEET 47

MATCH LINE STA 108+00
SEE SHEET 50



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

PAVING PLAN & PROFILE - STATE ST

SCALE: 1"=20'

DRAWING No. 2023-023-49

SHEET No. 49 OF 75

811
Know what's below.
Call Before you dig.

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-6647
ANN ARBOR 734.794.6410
www.a2gov.org

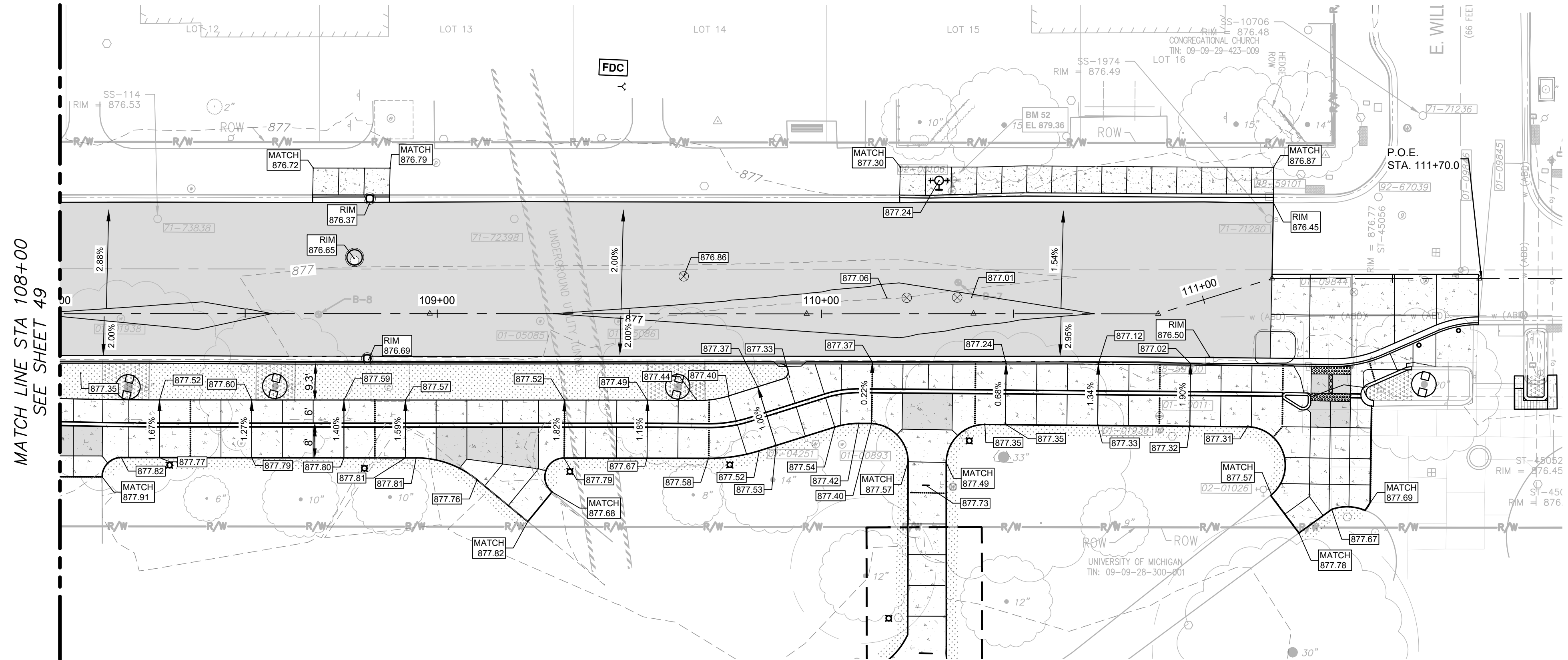
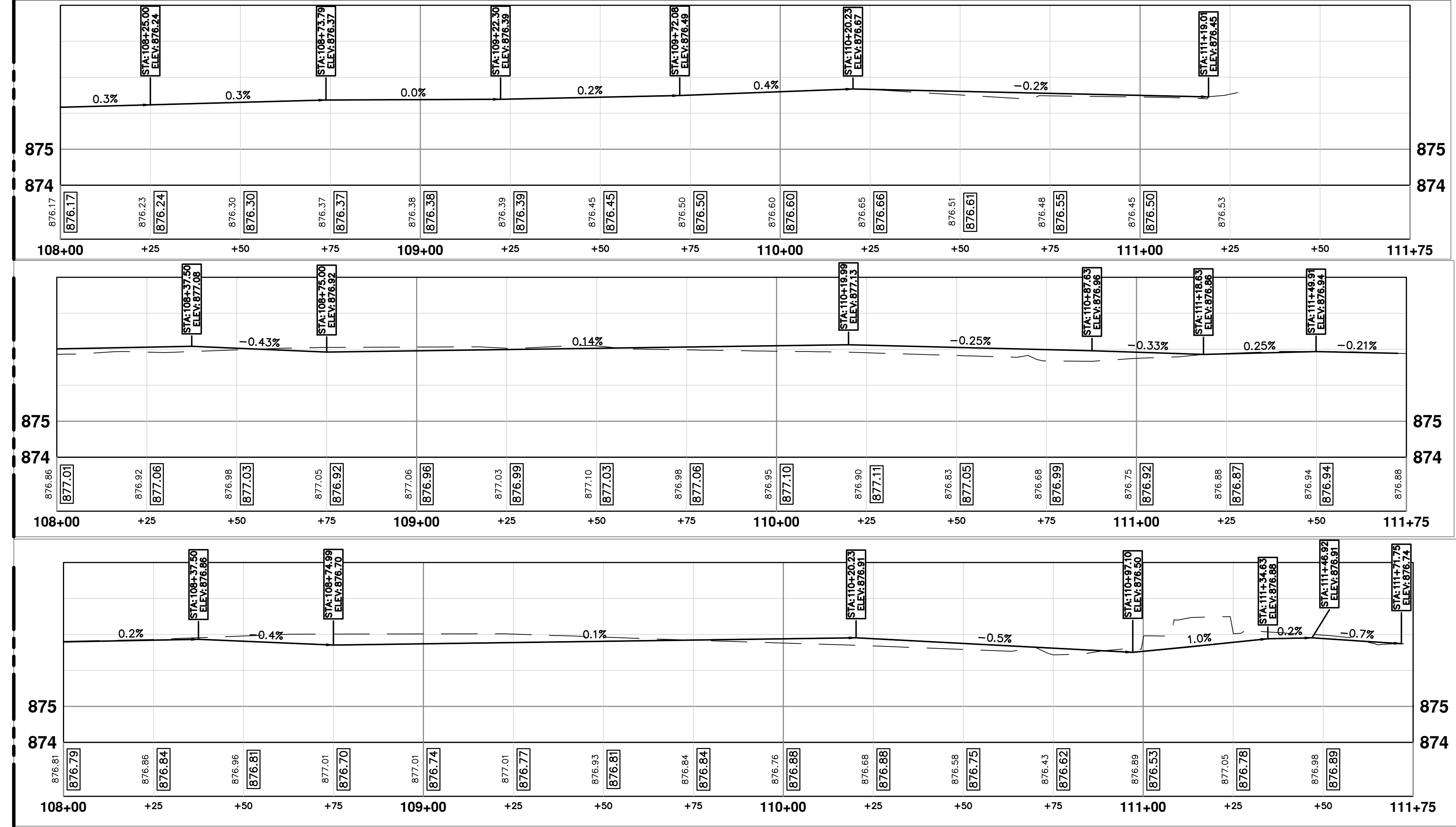
REV.	DESCRIPTION	DATE	DRAWN	CHECKED

MATCH LINE STA 108+00
SEE SHEET 49

LEFT

CENTER

RIGHT



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING


STATE STREET IMPROVEMENTS

PAVING PLAN & PROFILE - STATE ST

SCALE: 1"=20'

DRAWING No. 2023-023-50

SHEET No. 50 OF 75

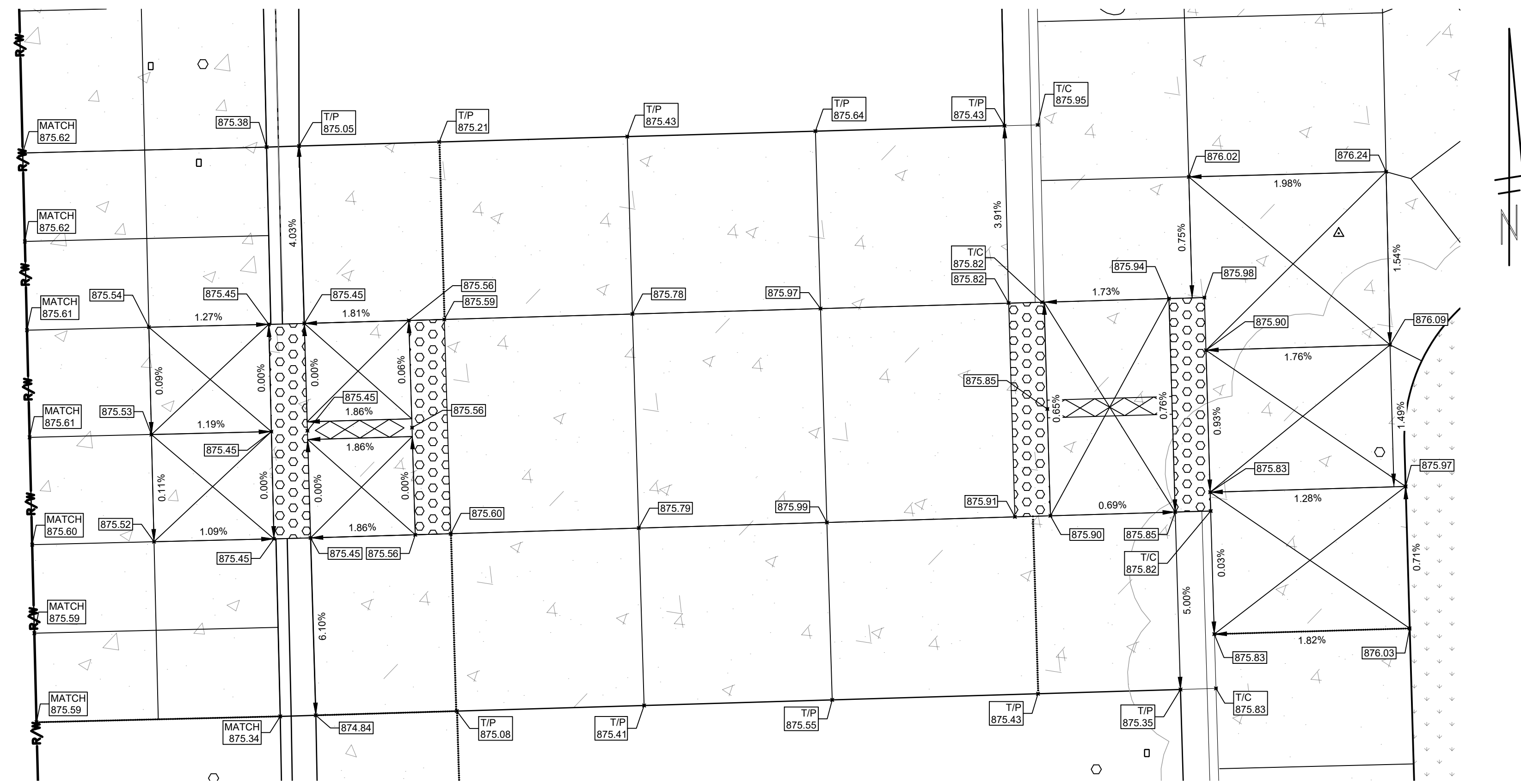


CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
www.a2gov.org

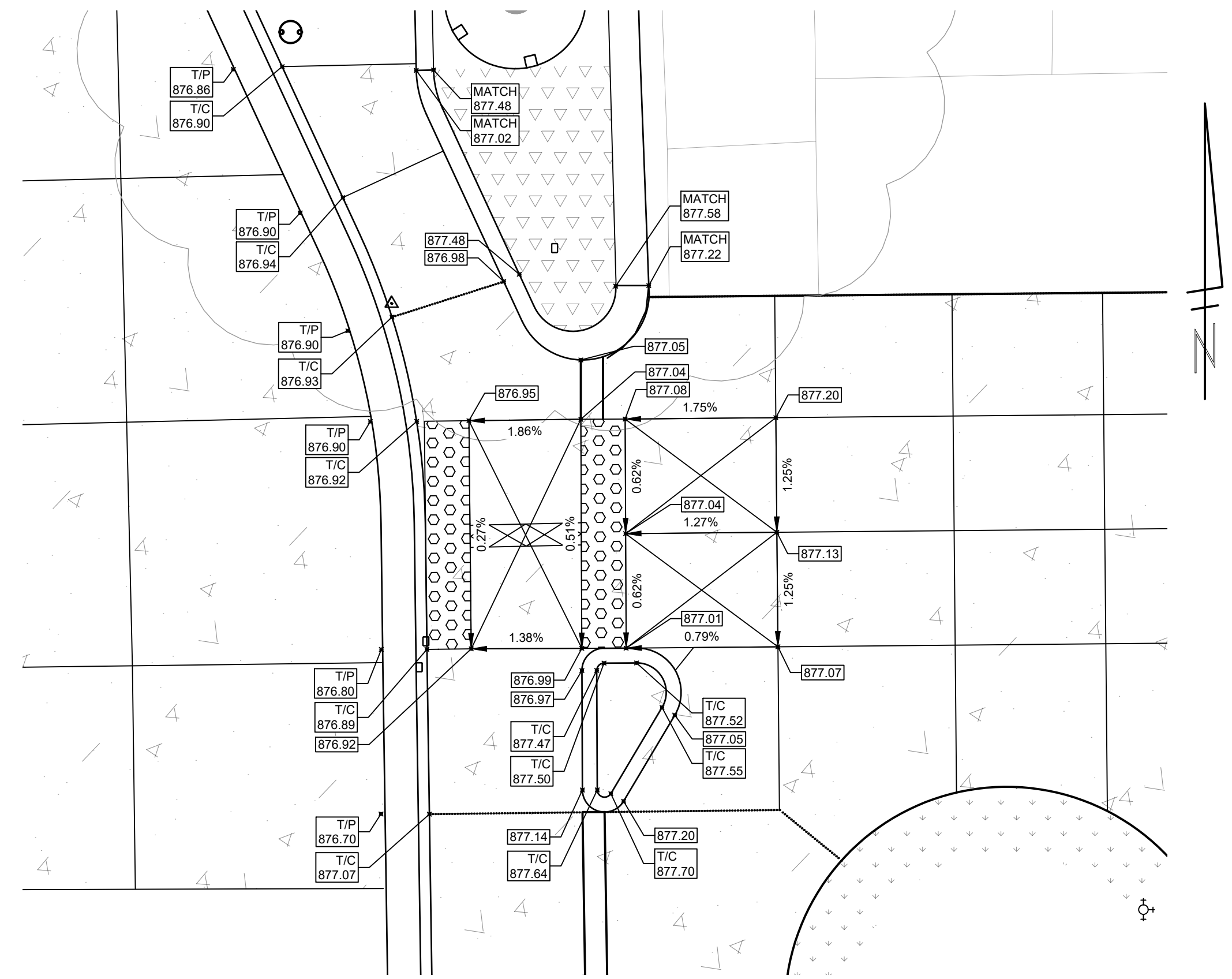
REV.	DESCRIPTION	DATE	DRAWN	CHECKED

Know what's below.
Call Before you dig.

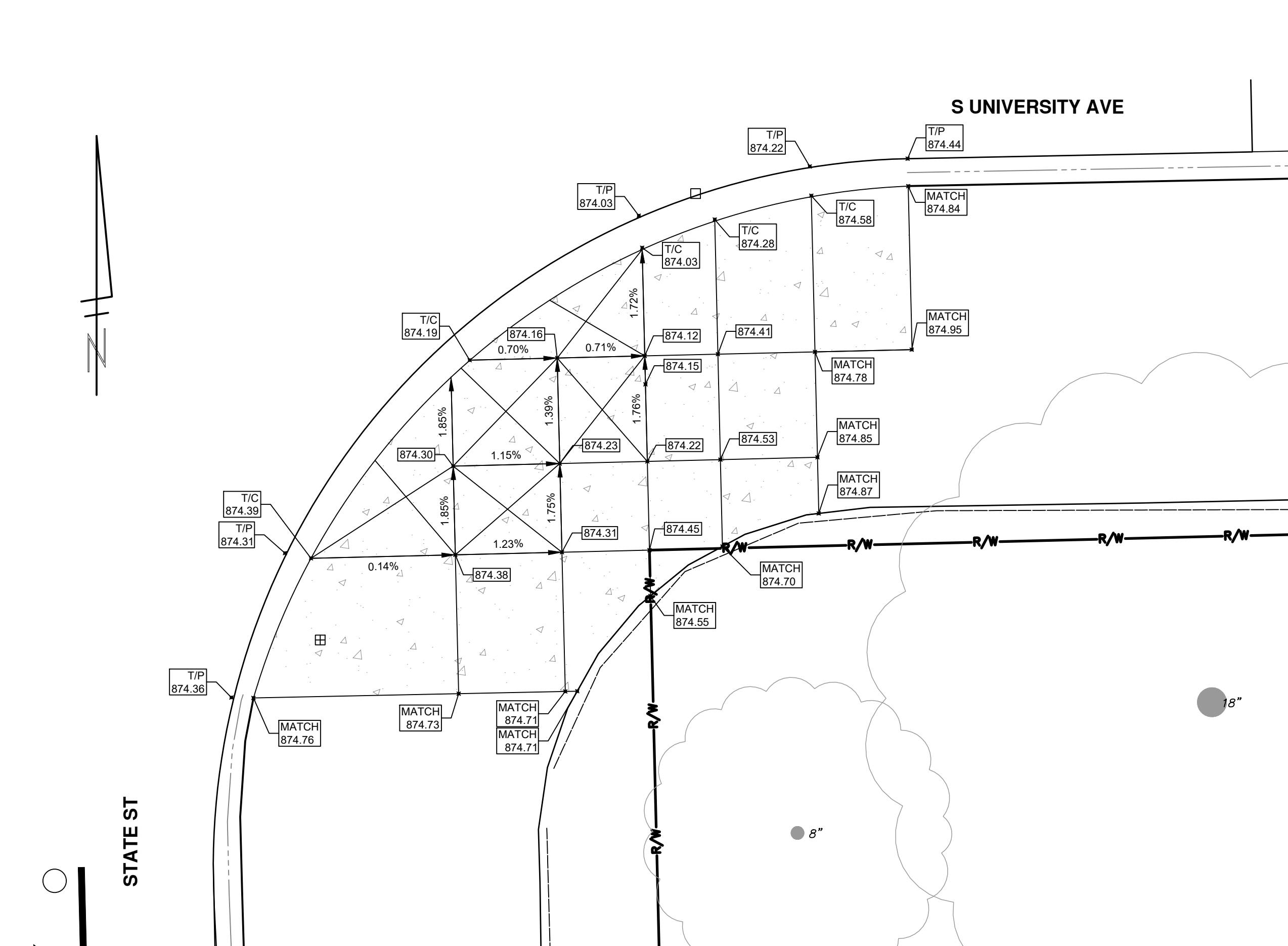
c:\pw_work\wade-trim_rbrown\1\CS-PLTS-ADA RAMPS.dwg Dwg Created: 3-Feb-25 - _a2_standard bw.sib - Plot Date: 3-Feb-25



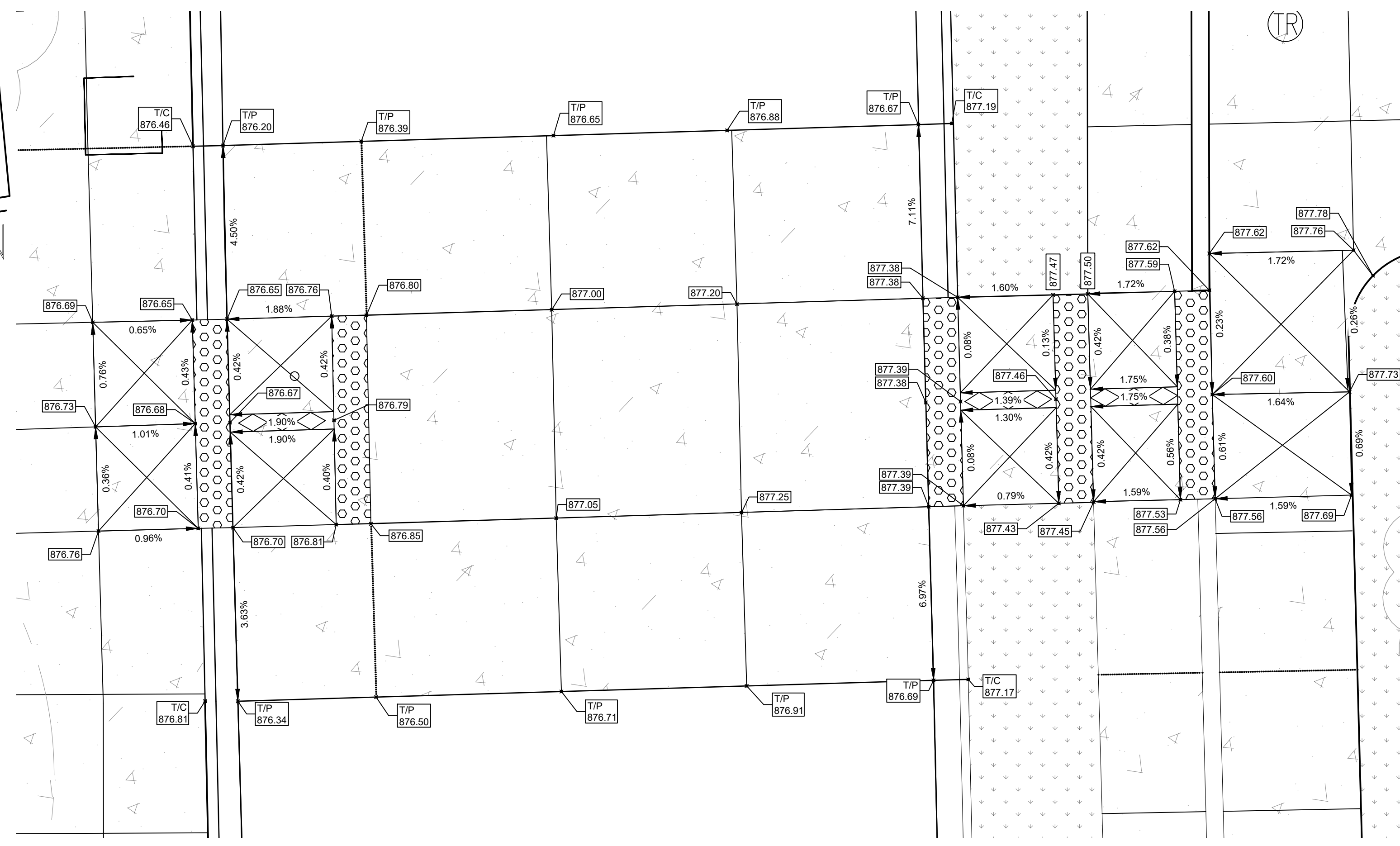
STATE ST - SOUTH CROSSWALK



STATE ST - E WILLIAM ST - SE SIDEWALK RAMP



STATE ST - S UNIVERSITY AVE - SE CORNER



STATE ST - NORTH CROSSWALK

811
Know what's below. Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

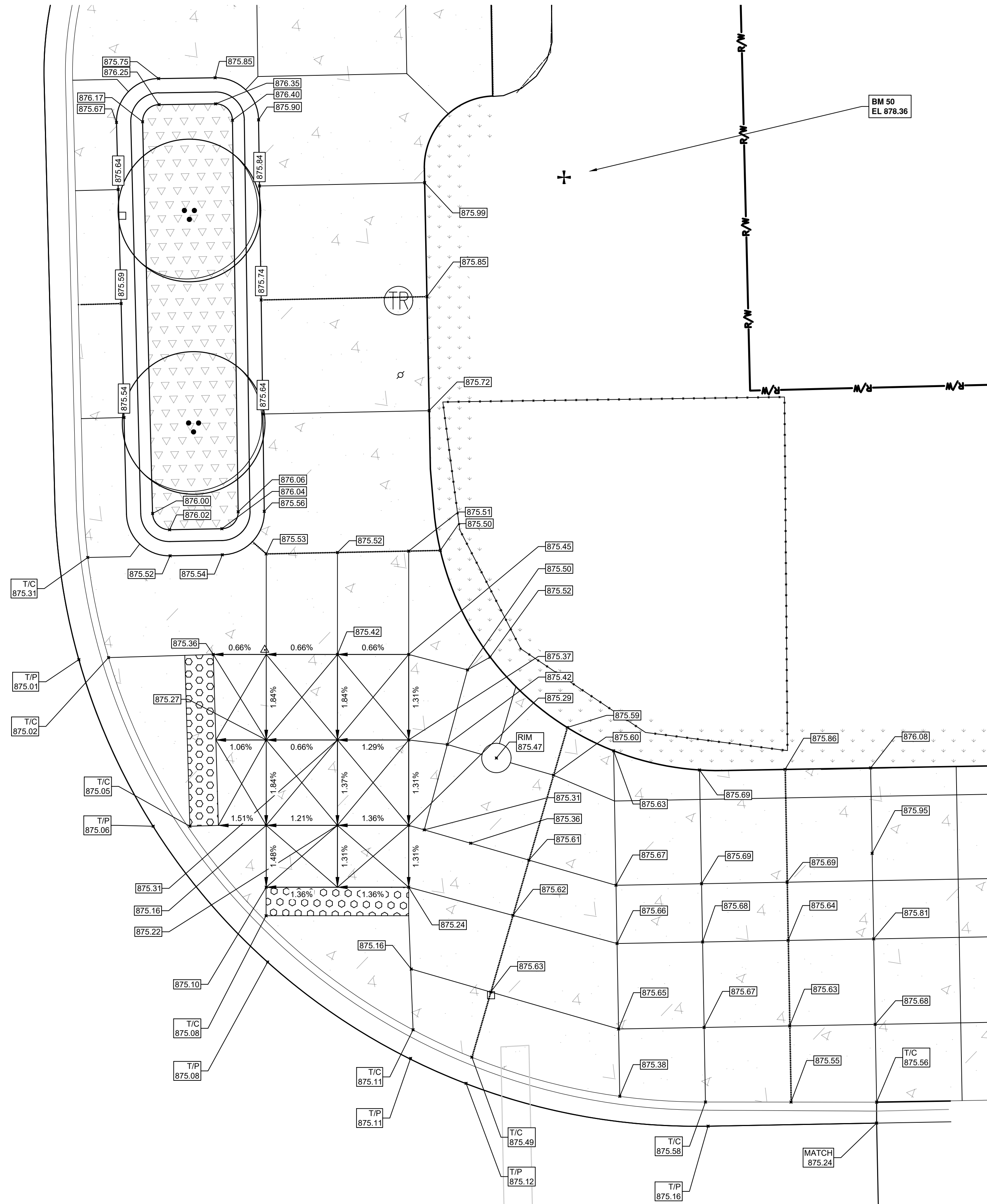
CITY OF ANN ARBOR PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a2gov.org

CITY OF ANN ARBOR MICHIGAN

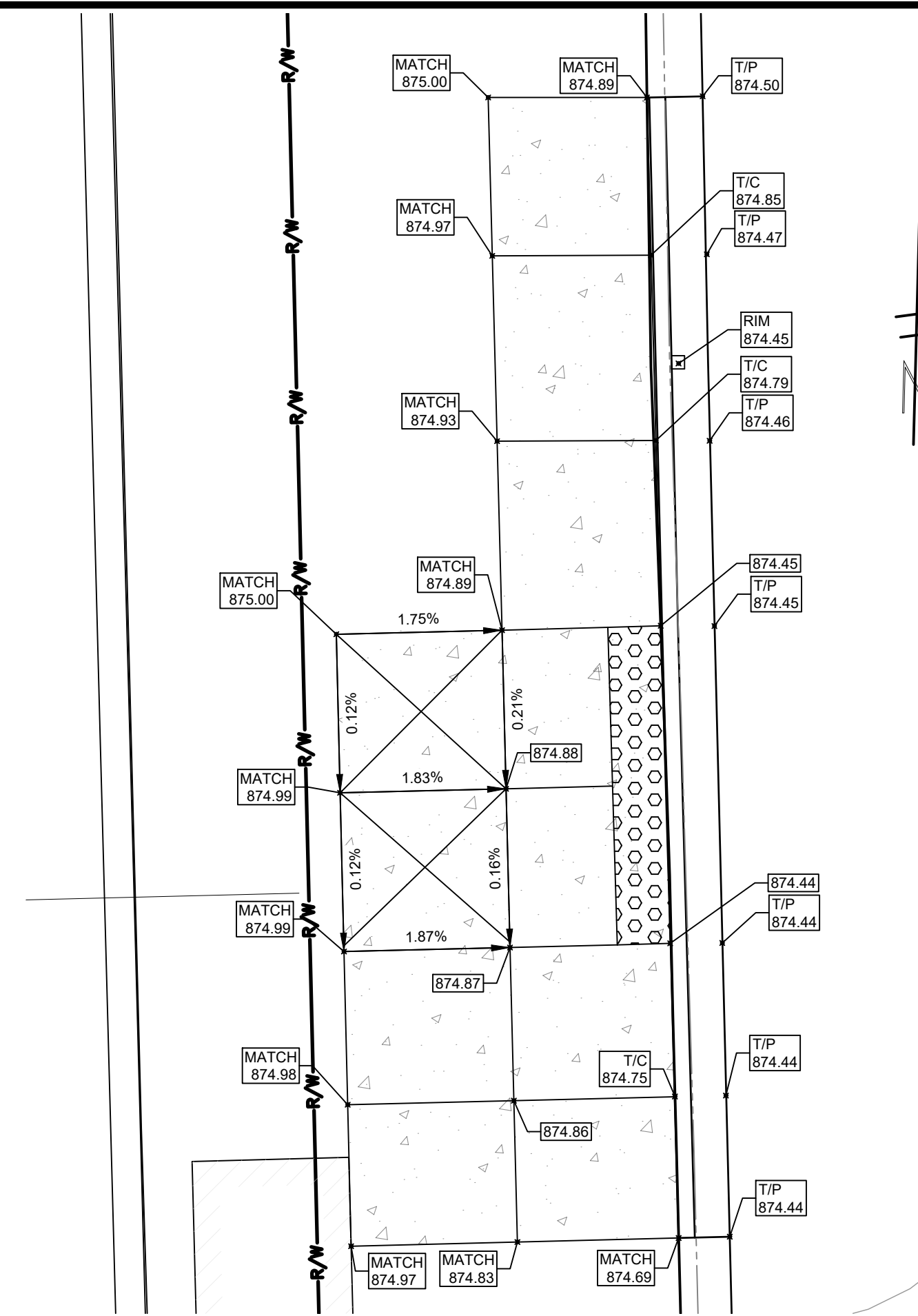
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
DETAILED GRADING

SCALE PLAN: 1"=4'
DRAWING No. 2023-023-51
SHEET No. 51 OF 75

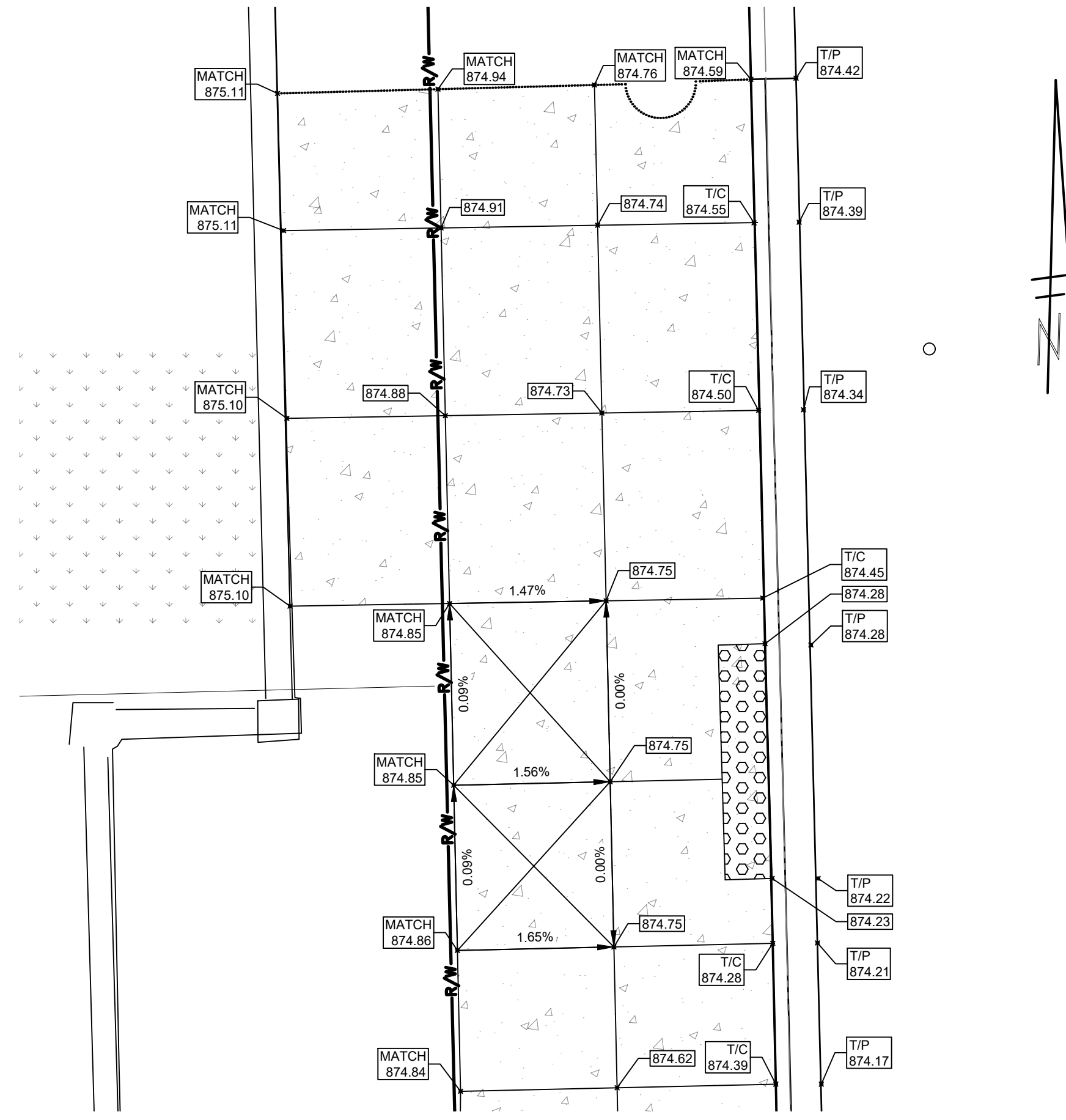
c:\pw_work\wade-trim_rbrown\dl339881\CSP-PLTS-ADA RAMPS.dwg Dwg Created: 3-Feb-25 - _a2 standard bw.sib - Plot Date: 3-Feb-25



STATE ST & S. UNIVERISTY NORTHEAST RAMP



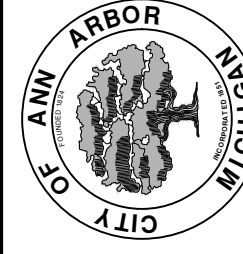
STATE ST & S. UNIVERSITY NORTHWEST RAMP



STATE ST & S. UNIVERSITY SOUTHWEST RAMP



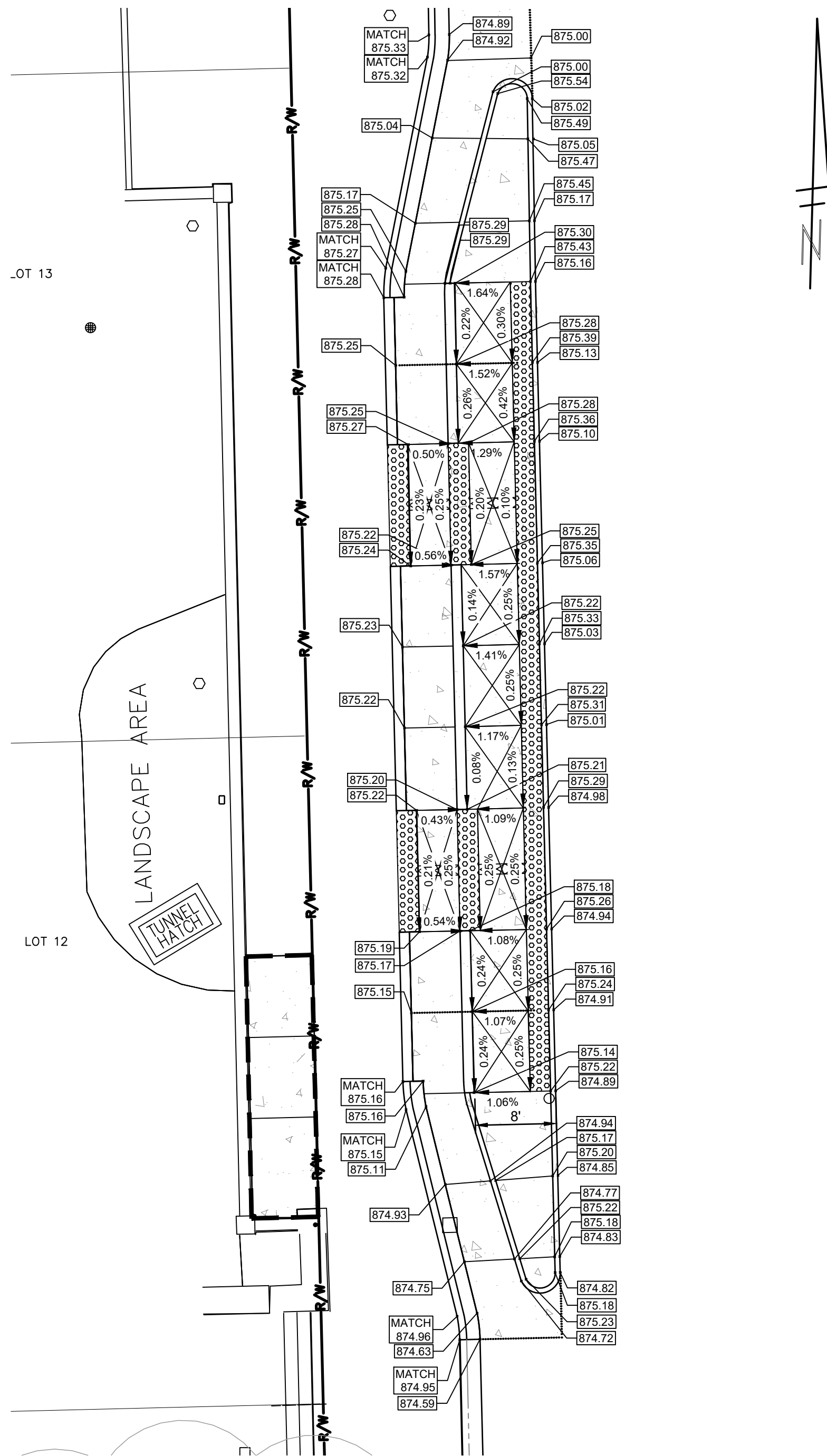
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48106-0647
www.a3gov.org



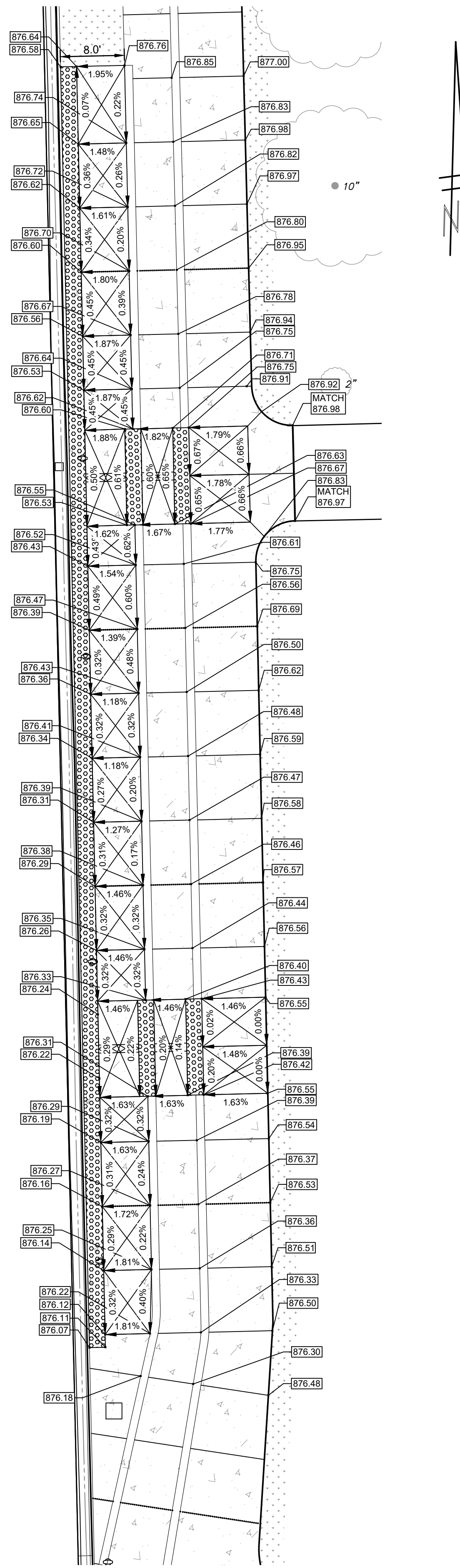
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
DETAILED GRADING

SCALE PLAN: 1"=5'
DRAWING No. 2023-023-52
SHEET No.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED



STATE ST WEST BUS STOP



STATE ST EAST BUS STOP



**CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48107-8647
ANN ARBOR MI 734.794.6410
www.a2gov.org**



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

DETAILED GRADING

SCALE PLAN: 1"=10'

DRAWING No.
2023-023-53

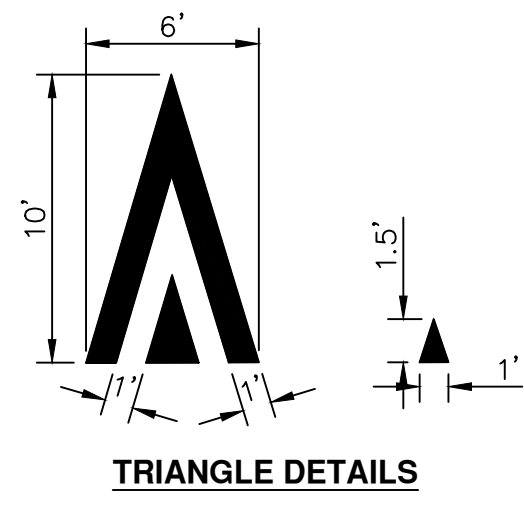
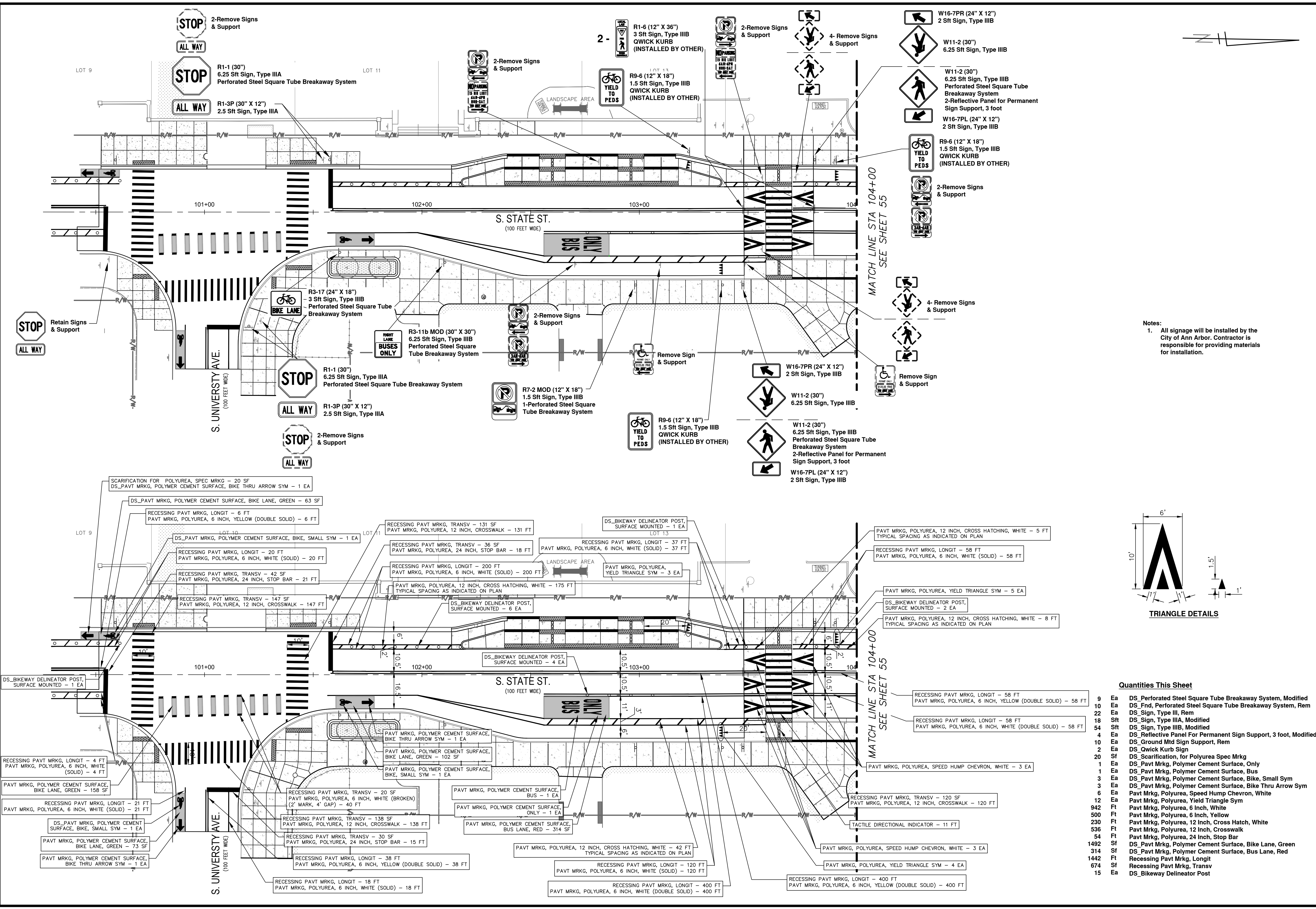
SHEET No.

53 OF 75

REV.	DATE	DRAWN	CHECKED

DESCRIPTION

c:\pwwork\wade-trim_brown\dl339881\CPM-PLTS-Pavement Markings.dwg Dwg Created: 2-Feb-25 - _g2 standard bw.stb - Plot Date: 3-Feb-25



Quantities This Sheet

9	Ea	DS Perforated Steel Square Tube Breakaway System, Modified
10	Ea	DS Fnd, Perforated Steel Square Tube Breakaway System, Rem
12	Sft	DS Sign, Type III, Rem
18	Sft	DS Sign, Type IIIA, Modified
54	Sft	DS Sign, Type IIIB, Modified
4	Ea	DS Reflective Panel For Permanent Sign Support, 3 foot, Modified
10	Ea	DS Ground Mtd Sign Support, Rem
2	Ea	DS Qwick Kurb Sign
20	Sf	DS Scarification, for Polyurea Spec Mrkg
1	Ea	DS Pavt Mrkg, Polymer Cement Surface, Only
1	Ea	DS Pavt Mrkg, Polymer Cement Surface, Bus
3	Ea	DS Pavt Mrkg, Polymer Cement Surface, Bike, Small Sym
3	Ea	DS Pavt Mrkg, Polymer Cement Surface, Bike Thru Arrow Sym
6	Ea	Pavt Mrkg, Polyurea, Speed Hump Chevron, White
12	Ea	Pavt Mrkg, Polyurea, Yield Triangle Sym
942	Ft	Pavt Mrkg, Polyurea, 6 Inch, White
500	Ft	Pavt Mrkg, Polyurea, 6 Inch, Yellow
230	Ft	Pavt Mrkg, Polyurea, 12 Inch, Cross Hatch, White
536	Ft	Pavt Mrkg, Polyurea, 12 Inch, Crosswalk
54	Ft	Pavt Mrkg, Polyurea, 24 Inch, Stop Bar
1492	Sf	DS Pavt Mrkg, Polymer Cement Surface, Bike Lane, Green
314	Sf	DS Pavt Mrkg, Polymer Cement Surface, Bus Lane, Red
1442	Sf	Recessing Pavt Mrkg, Longit
674	Sf	Recessing Pavt Mrkg, Transv
15	Ea	DS Bikeway Delineator Post

Notes:
 1. All signage will be installed by the City of Ann Arbor. Contractor is responsible for providing materials for installation.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

PROPOSED PAVEMENT MARKING - STATE ST

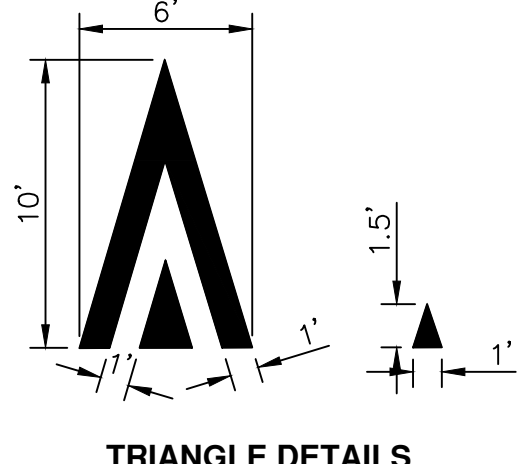
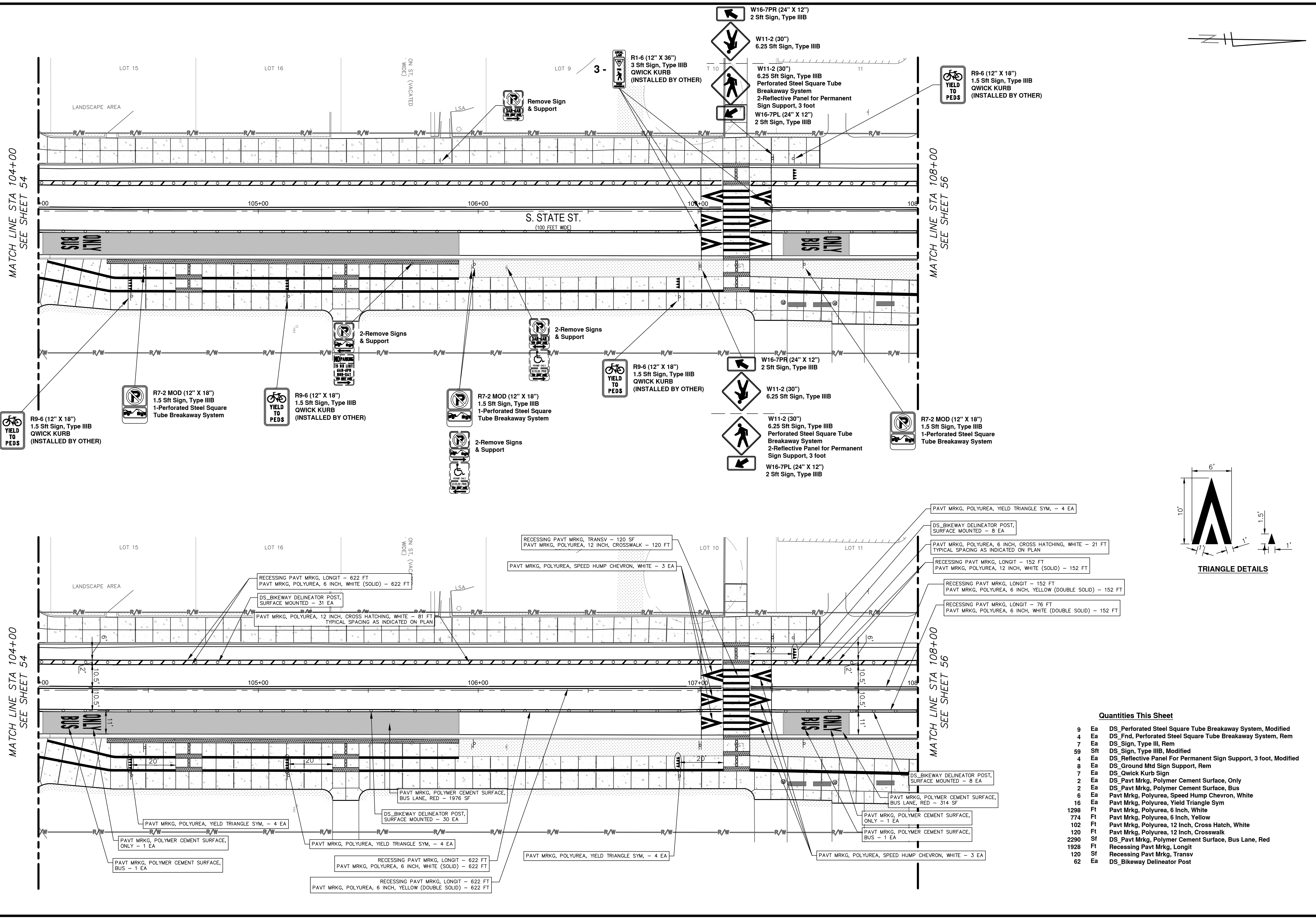
REV.	DATE	DESCRIPTION	CHECKED	DRAWN

SCALE: 1"=20'

DRAWING NO. 2023-025-54


SHEET NO. 54 OF 75

c:\pw_work\wade-trim\339881\CPM-PLTS-Pavement Markings.dwg Dwg Created: 2-Feb-25 - _g2 standard bw.stb - Plot Date: 3-Feb-25




Quantities This Sheet

9	Ea	DS Perforated Steel Square Tube Breakaway System, Modified
4	Ea	DS Frnd, Perforated Steel Square Tube Breakaway System, Rem
7	Ea	DS Sign, Type III, Rem
59	Sft	DS Sign, Type III, Modified
4	Ea	DS Reflective Panel For Permanent Sign Support, 3 foot, Modified
8	Ea	DS Ground Mtd Sign Support, Rem
7	Ea	DS Qwick Kurb Sign
2	Ea	DS Pavt Mrkg, Polymer Cement Surface, Only
2	Ea	DS Pavt Mrkg, Polymer Cement Surface, Bus
6	Ea	Pavt Mrkg, Polyurea, Speed Hump Chevron, White
16	Ea	Pavt Mrkg, Polyurea, Yield Triangle Sym
1298	Ft	Pavt Mrkg, Polyurea, 6 Inch, White
774	Ft	Pavt Mrkg, Polyurea, 6 Inch, Yellow
102	Ft	Pavt Mrkg, Polyurea, 12 Inch, Cross Hatch, White
120	Ft	Pavt Mrkg, Polyurea, 12 Inch, Crosswalk
2290	Sf	DS Pavt Mrkg, Polymer Cement Surface, Bus Lane, Red
1928	Ft	Recessing Pavt Mrkg, Longit
120	Sf	Recessing Pavt Mrkg, Transv
62	Ea	DS Bikeway Delineator Post



Know what's below.
Call Before you dig.

REV.	DATE	DRAWN	CHECKED	DESCRIPTION



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

PROPOSED PAVEMENT MARKING - STATE ST

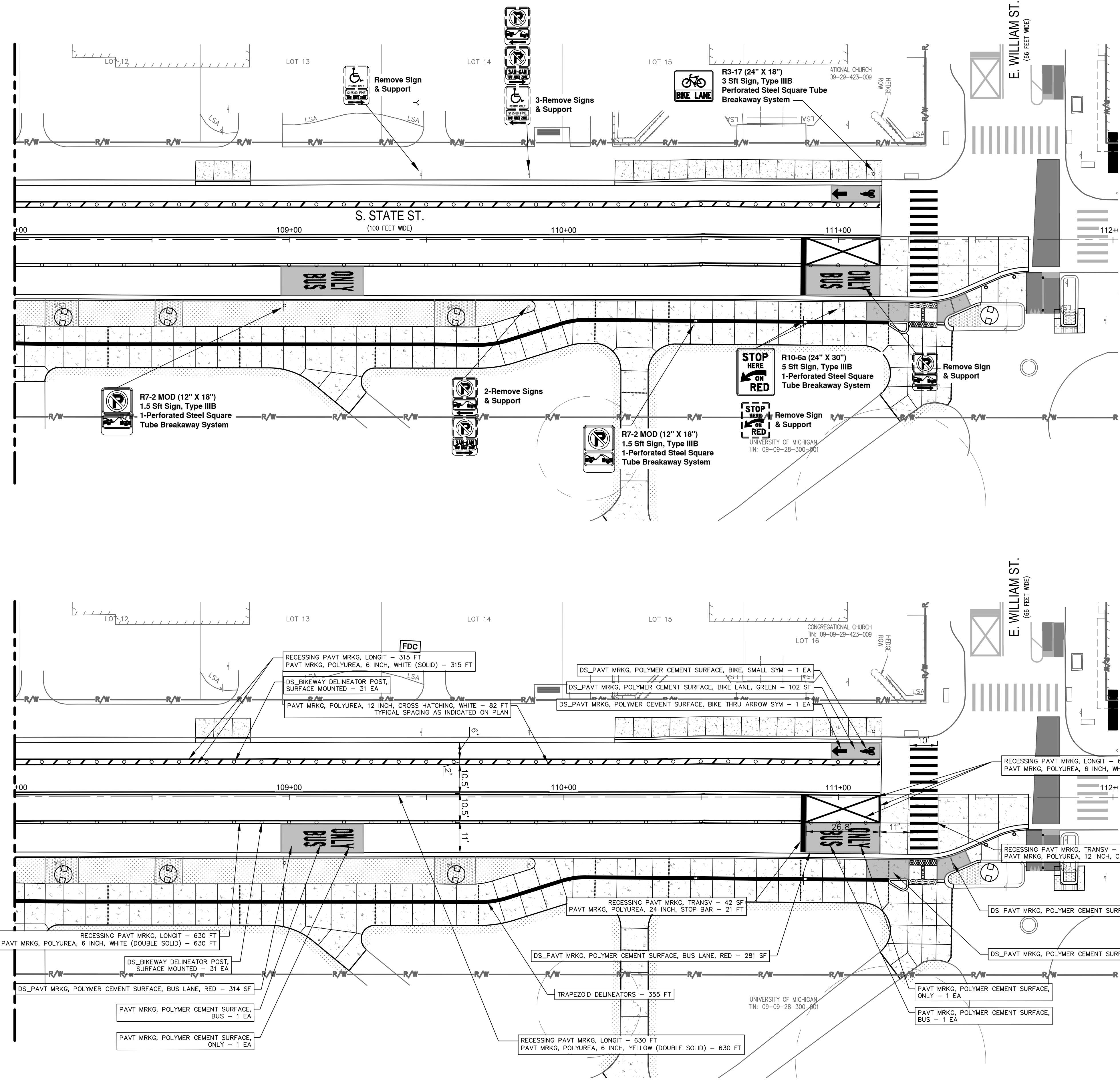
SCALE: 1"=20'

DRAWING NO. 2023-025-55

SHEET NO. 55 OF 75

MATCH LINE STA 108+00
SEE SHEET 55

MATCH LINE STA 108+00
SEE SHEET 55



Quantities This Sheet

4	Ea	DS Perforated Steel Square Tube Breakaway System, Modified
5	Ea	DS Fnd, Perforated Steel Square Tube Breakaway System, Rem
8	Ea	DS Sign, Type III, Rem
11	Sft	DS Sign, Type IIIB, Modified
4	Ea	DS Ground Mtd Sign Support, Rem
2	Ea	DS Pavt Mrkg, Polymer Cement Surface, Only
2	Ea	DS Pavt Mrkg, Polymer Cement Surface, Bus
1	Ea	DS Pavt Mrkg, Polymer Cement Surface, Bike, Small Sym
1	Ea	DS Pavt Mrkg, Polymer Cement Surface, Bike Thru Arrow Sym
1298	Ft	Pavtrk, Polyurea, 6 Inch, White
630	Ft	Pavtrk, Polyurea, 6 Inch, Yellow
82	Ft	Pavtrk, Polyurea, 12 Inch, Cross Hatch, White
130	Ft	Pavtrk, Polyurea, 12 Inch, Crosswalk
21	Ft	Pavtrk, Polyurea, 24 Inch, Stop Bar
278	Sf	DS Pavt Mrkg, Polymer Cement Surface, Bike Lane, Green
596	Sf	DS Pavt Mrkg, Polymer Cement Surface, Bus Lane, Red
1928	Ft	Recessing Pavtrk, Longit
172	Sf	Recessing Pavtrk, Transv
62	Ea	DS Bikeway Delineator Post



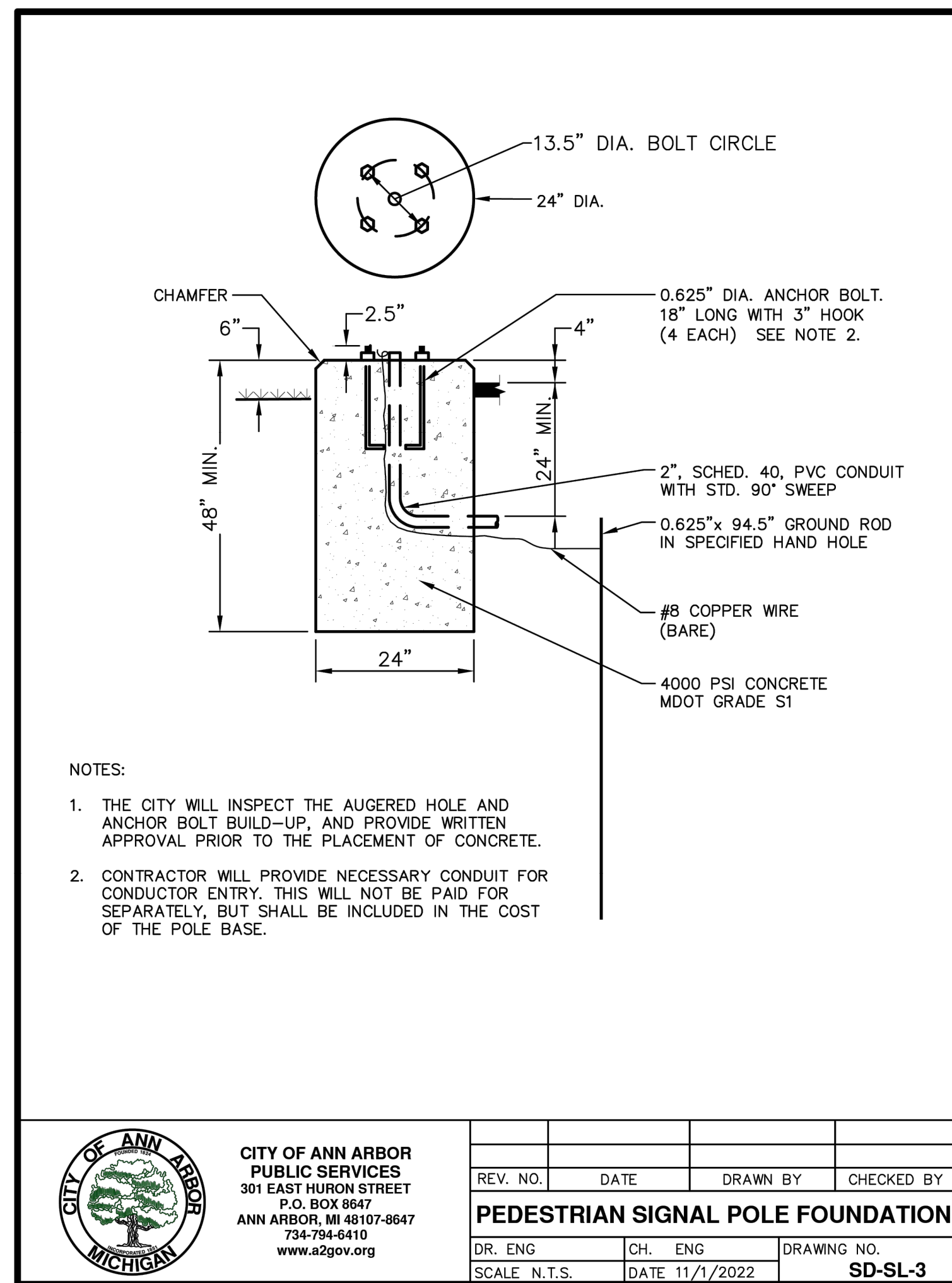
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 864707-8647
ANN ARBOR MI 48107-8647
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
PROPOSED PAVEMENT MARKING - STATE ST

SCALE: 1"=20'
DRAWING No. 2023-025-56

c:\pw_work\wade-trim_rbrown\d1339881\CTS-PLTS-TrafficSignals-StateSt.dwg Dwg Created: 3-Feb-25 -- 02 standard bw.stb -- Plot Date: 3-Feb-25



**CITY OF ANN ARBOR
PUBLIC SERVICES**
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

REV. NO.	DATE	DRAWN BY	CHECKED BY
PEDESTRIAN SIGNAL POLE FOUNDATION			
DR. ENG	CH. ENG	DRAWING NO.	
SCALE N.T.S.	DATE 11/1/2022	SD-SL-3	

TRAFFIC SIGNAL EQUIPMENT SYMBOLS

- 12" L.E.D. VEHICLE TRAFFIC SIGNAL (ONE WAY)
- 12" L.E.D. VEHICLE TRAFFIC SIGNAL (TWO WAY: BACK TO BACK)
- 12" L.E.D. VEHICLE TRAFFIC SIGNAL (THREE WAY)
- 12" L.E.D. VEHICLE TRAFFIC SIGNAL (FOUR WAY)
- 12" L.E.D. PEDESTRIAN TRAFFIC SIGNAL (ONE WAY)
- 12" L.E.D. PEDESTRIAN TRAFFIC SIGNAL (TWO WAY: AT ANGLE TO EACH OTHER)
- PEDESTRIAN PUSHBUTTON
- 30 INCH ROUND PRECAST TRAFFIC SIGNAL HANDHOLE
- 36 INCH ROUND PRECAST TRAFFIC SIGNAL HANDHOLE
- ALUMINUM PEDESTRIAN PEDESTAL
- ANCHOR BASE STEEL STRAIN POLE (POLE LENGTH & FOUNDATION SIZE AS CALLED OUT)
- MAST ARM STANDARD AND FOUNDATION (POLE LENGTH & FOUNDATION SIZE AS CALLED OUT)
- BASE MOUNTED TRAFFIC CONTROLLER
- POLE MOUNTED TRAFFIC CONTROLLER
- CASE SIGN (1 WAY OR 2 WAY)
- CASE SIGN (3 WAY OR 4 WAY)
- COILED UP WIRE (FOR CONNECTION BY OTHERS)
- STAINLESS STEEL SERVICE DISCONNECT
- METERED ELECTRIC SERVICE
- ELECTRIC GROUND
- SIGNAL HEAD
- ILLUMINATED CASE SIGN
- PROPOSED/SALVAGED WIRELESS VEHICLE SENSOR NODE
- EXISTING/REMOVED WIRELESS VEHICLE SENSOR NODE
- SPP RADIO
- EXISTING ANTENNA

SIGNALS

MAINTAINING AGENCY CONTACT INFORMATION
• CITY OF ANN ARBOR: (734) 794-6361

NOTIFICATIONS TO MAINTAINING AGENCIES
CONTACT THE CITY OF ANN ARBOR SEVEN WORKING DAYS PRIOR TO START OF CONSTRUCTION AND SEVEN WORKING DAYS PRIOR TO SIGNAL ACTIVATION.

FACILITIES NOT ON PLANS
EXISTING O.H. & T.S. FACILITIES ARE NOT NECESSARILY SHOWN ON PLANS.

UNDERGROUND UTILITY SEPARATION
A MINIMUM CLEARANCE OF 3'-6" HORIZONTAL & 1'-0" VERTICAL MUST BE MAINTAINED BETWEEN PROPOSED FACILITIES & EXISTING U.G. WATER FACILITIES.

SIGNAL EQUIPMENT DISPOSAL
DISPOSAL OF ALL TRAFFIC SIGNAL EQUIPMENT IS INCLUDED IN THE REMOVAL PAY ITEMS AND SHALL ALSO INCLUDE THE FOLLOWING:
• NOTIFICATION TO THE CITY OF ANN ARBOR THAT TRAFFIC SIGNAL EQUIPMENT IS BEING REMOVED.
• TEMPORARY STORAGE OF EQUIPMENT IN A DUMPSTER ON SITE (OR AS DIRECTED BY THE ENGINEER) ALLOWING THE CITY OF ANN ARBOR 48 HOURS TO SALVAGE ANY EQUIPMENT.
• PROPER DISPOSAL OF ANY EQUIPMENT CONTAINING ENVIRONMENTALLY SENSITIVE MATERIALS (MERCURY RELAY SWITCHES FOR EXAMPLE)
• DISABLING OR DESTRUCTION OF ALL REMAINING EQUIPMENT TO THE SATISFACTION OF THE ENGINEER SUCH THAT IT CANNOT BE REUSED OR RESOLD.
• PROPER DISPOSAL OF ALL REMAINING EQUIPMENT.

PLAN DEVIATIONS DURING CONSTRUCTION
NO CHANGES FROM PLANS IN LOCATION OF SUPPORTING STRUCTURES SIGNAL HEAD PLACEMENT OR TRAFFIC SIGNAL EQUIPMENT WILL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE CITY OF ANN ARBOR.

INNERDUCT
CONTRACTOR MUST INSTALL A CONTINUOUS FLEXIBLE NON-METALLIC TUBING (INNERDUCT) FOR LOW VOLTAGE COMMUNICATION TYPE CABLE FROM THE DEVICE TO THE CONTROLLER CABINET. INNERDUCT IS NOT REQUIRED IF COMMUNICATION CABLE IS 600V RATED.

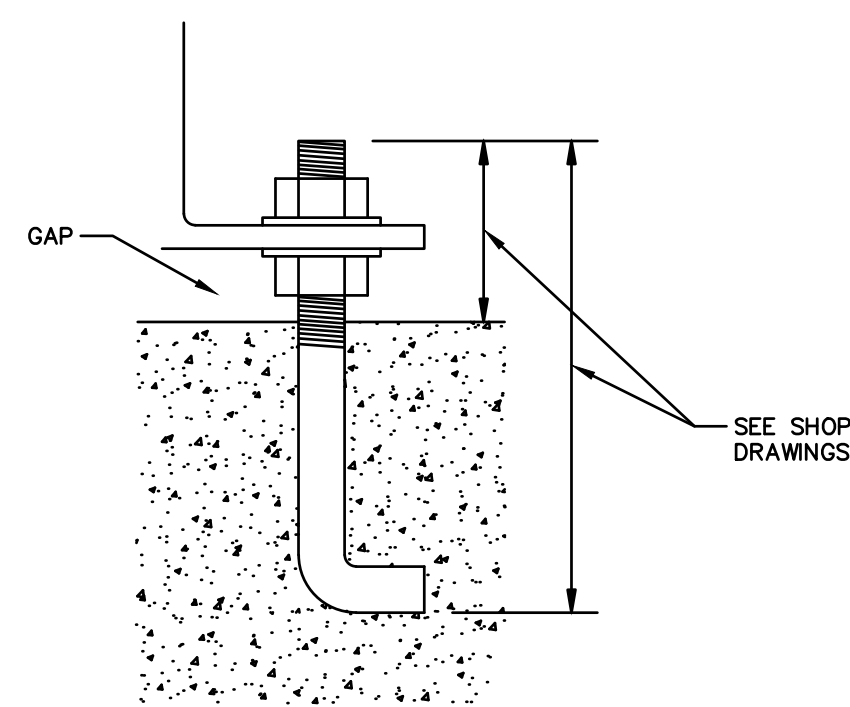
MDOT SIGNAL STANDARD PLANS

WHERE THE FOLLOWING ITEMS ARE CALLED FOR IN THE PLANS THEY ARE TO BE CONSTRUCTED ACCORDING TO THE STANDARDS GIVEN BELOW, OPPOSITE EACH ITEM, UNLESS OTHERWISE INDICATED.

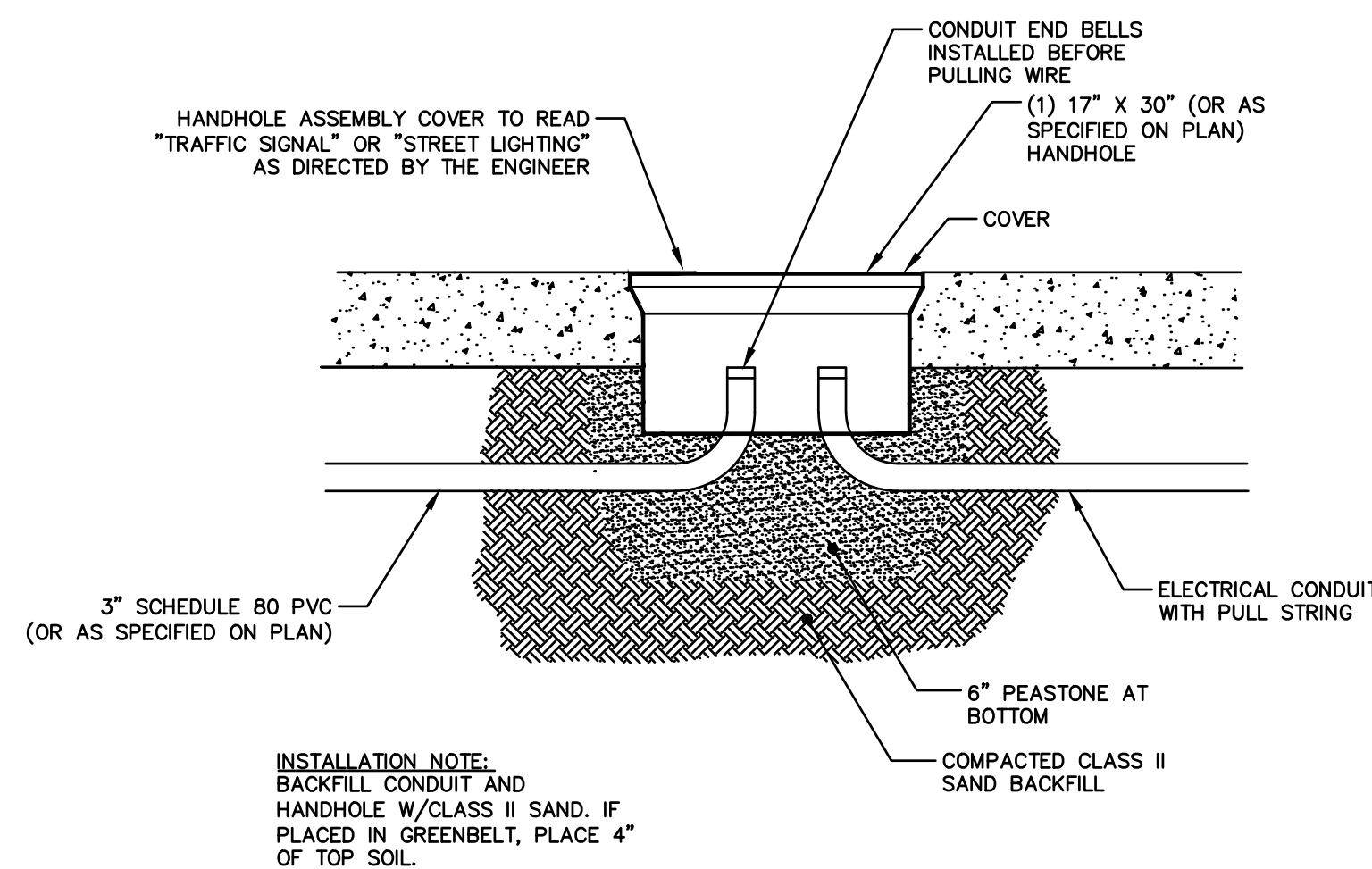
- *SIG-070-A PEDESTAL FOUNDATION
- *SIG-071-A PEDESTAL BASE ALTERNATE ANCHORAGE DETAILS
- *SIG-110-A BASE MOUNTED T.S. CONTROLLER CABINET/FOUNDATIONS
- *SIG-201-A SECONDARY SERVICE/DISCONNECT FOR STEEL POLES
- *SIG-230-A COLOR CODE WIRING/EQUIPMENT GROUNDING CONDUIT (DIRECT BURIAL/ENCASED)
- *SIG-250-A MAST ARM MOUNTED T.S. BRACKET ASSEMBLY
- *SIG-301-A TRAFFIC SIGNAL BACKPLATES
- *SIG-304-A PEDESTAL MOUNTED SIGNAL DISPLAYS
- *SIG-331-A PEDESTAL MOUNTING FOR SIGNALS
- *SIG-400-A PEDESTRIAN PUSHBUTTON DETAILS
- *SIG-420-A WIRELESS VEHICLE DETECTION SYSTEM

*MDOT SPECIAL DETAILS - LOCATED IN PROPOSAL

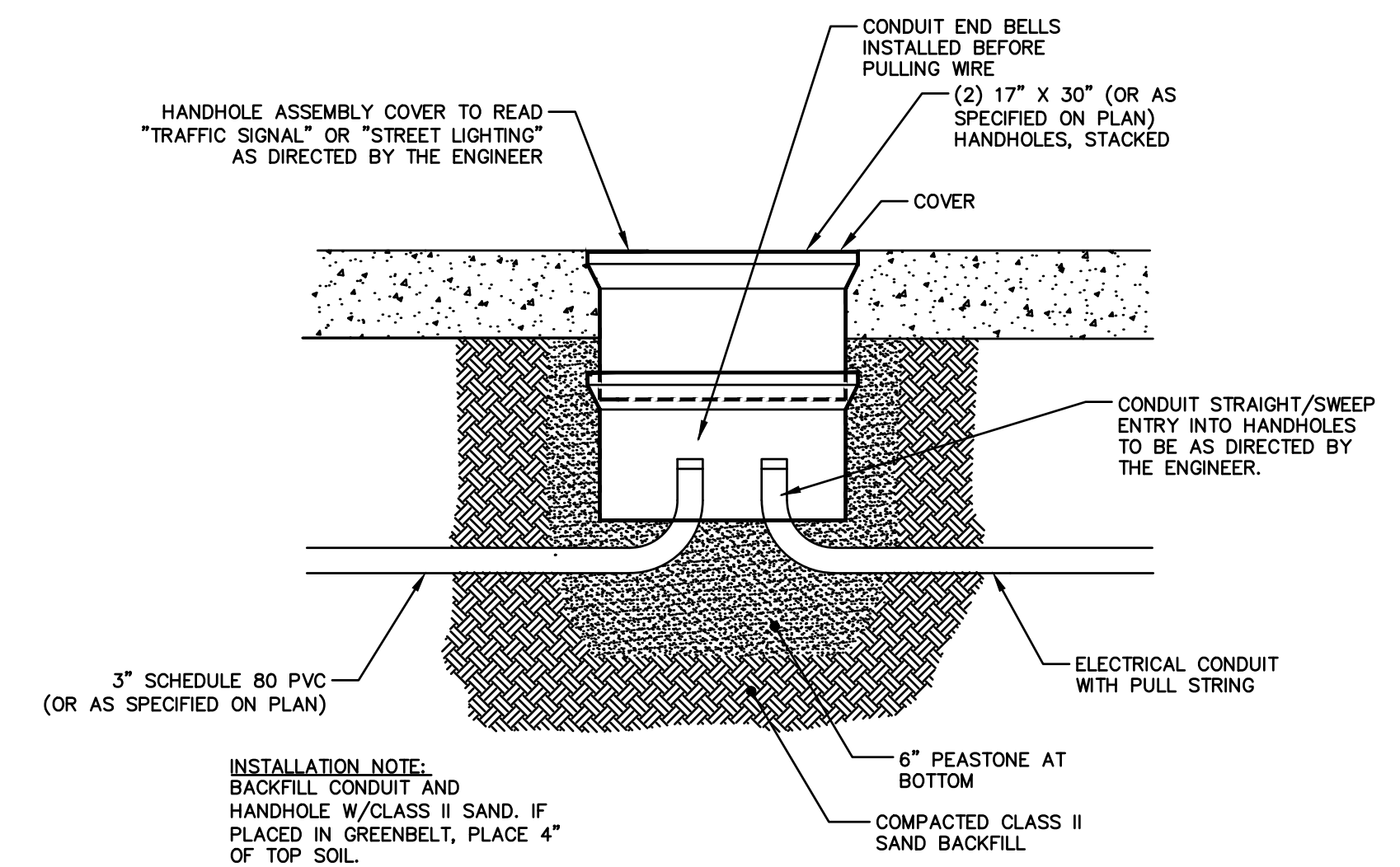
ANCHOR BOLT PROJECTION DETAIL



SINGLE STACK HANDHOLE DETAIL



DOUBLE STACK HANDHOLE DETAIL



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

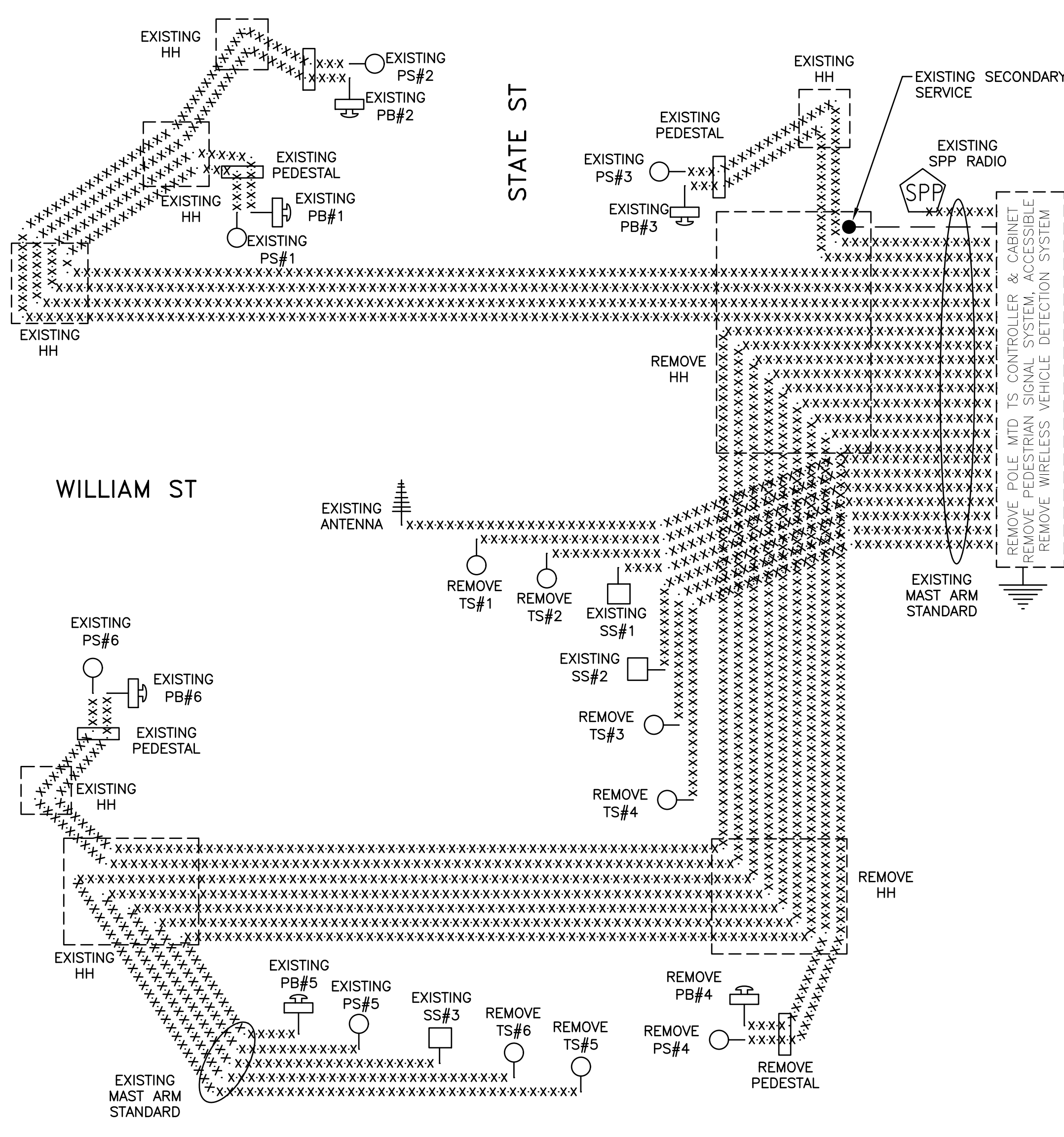
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
TRAFFIC SIGNAL - LEGEND & NOTES

SCALE PLAN: #####
DRAWING No. 2023-023-57
SHEET No. 57 OF 75

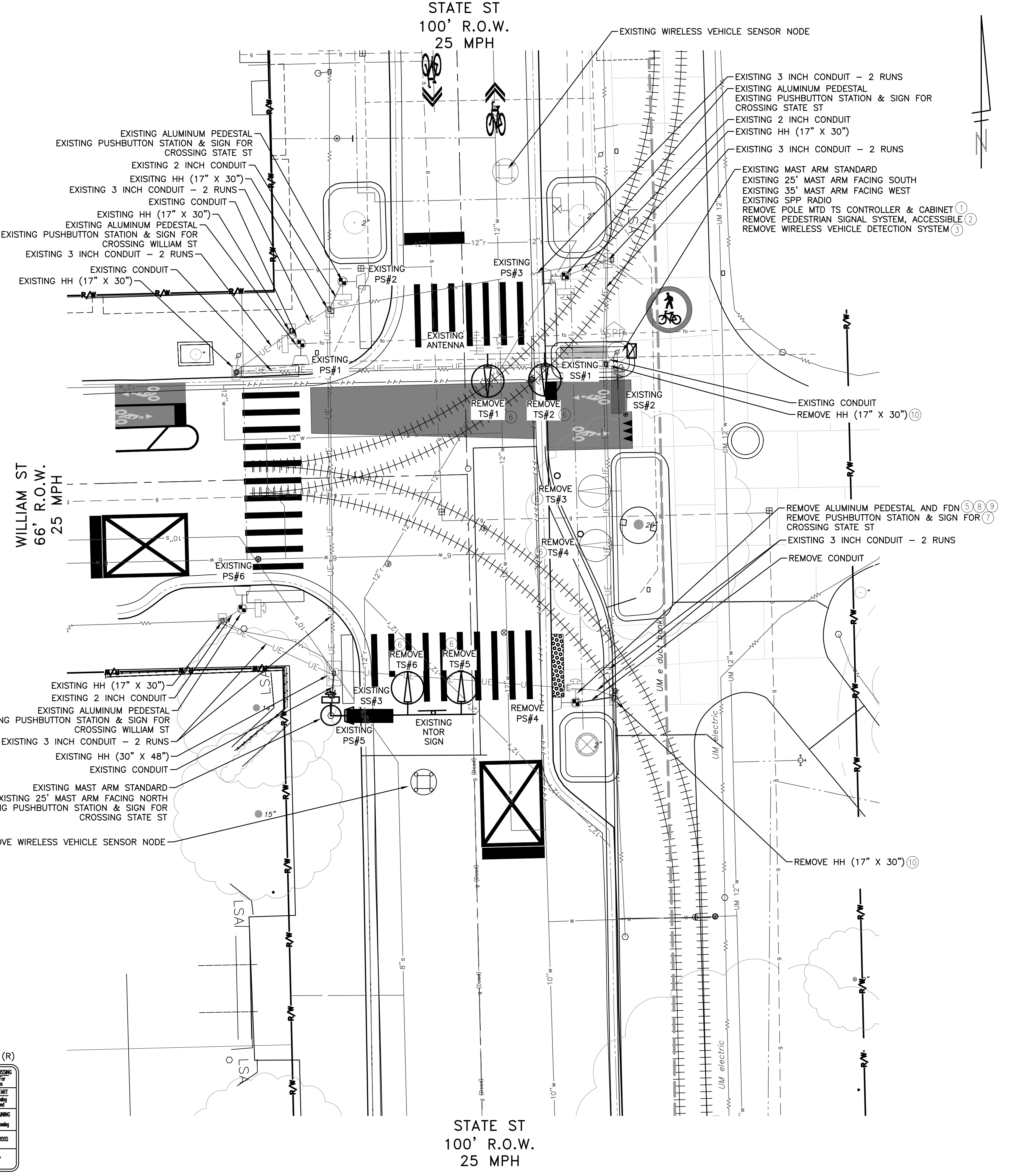
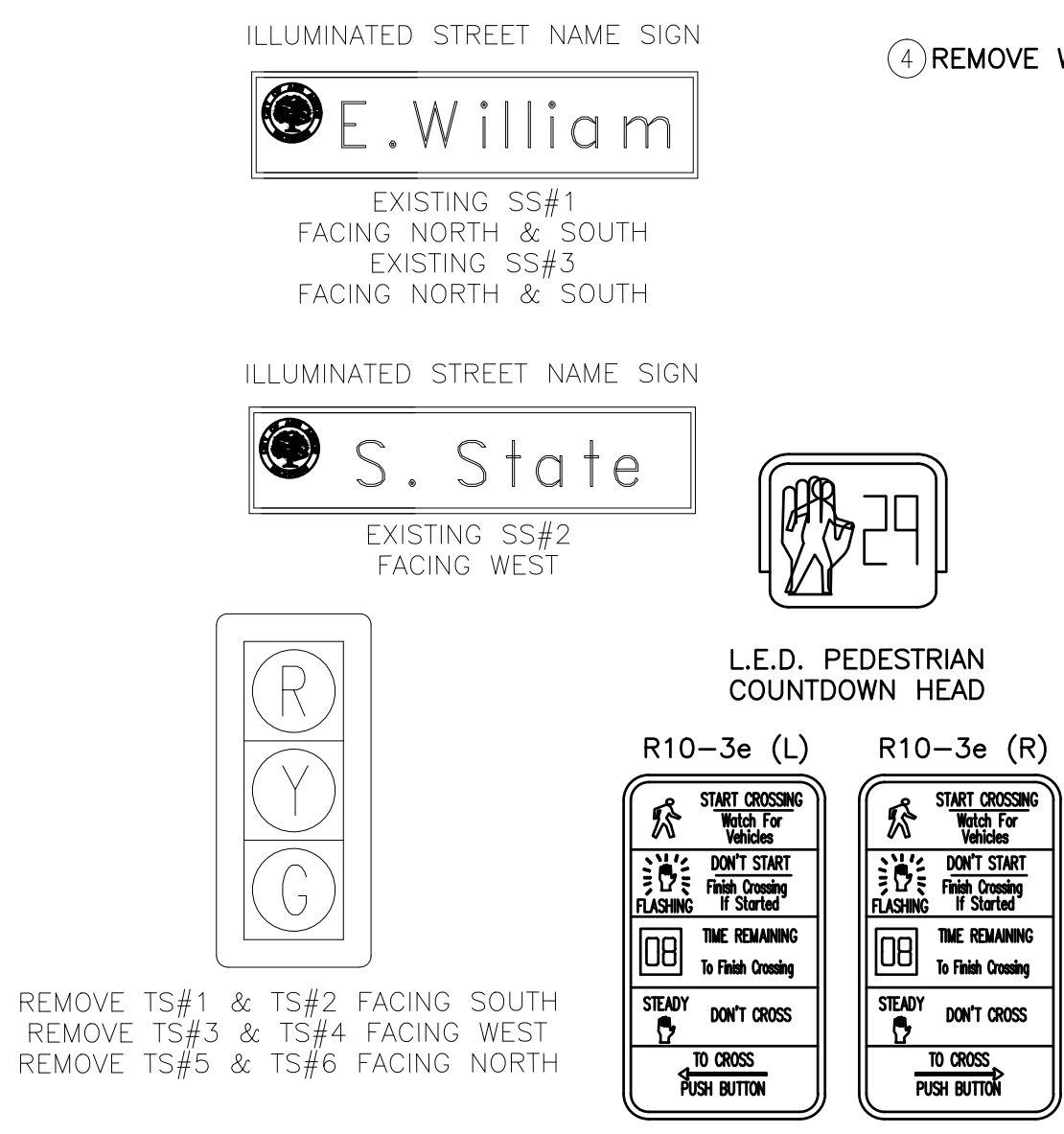
c:\pwork\wade-trim_rbrown\dl339881\CTS-PLTS-TrafficSignals-StateSt.dwg Dwg Created: 3-Feb-25 - _g2 standard bw.stb - Plot Date: 3-Feb-25




CABLING REMOVAL DIAGRAM
NOT TO SCALE

INTERSECTION SPECIFIC NOTES
CONTACT: XXX XXX OF DTE AT (XXX) XXX-XXXX FOR ELECTRICAL SERVICE DISCONNECTION. SEE TRAFFIC SIGNAL CONSTRUCTION SHET FOR ESTIMATED COST TO CONTRACTOR.
REMOVAL OF TRAFFIC SIGNAL EQUIPMENT MUST BE COORDINATED WITH ROAD CONSTRUCTION. TIME OF REMOVAL WILL BE AS DIRECTED BY THE ENGINEER.
CONTACT MARC MORENO, SIGNS & SIGNALS SUPERVISOR FOR THE CITY OF ANN ARBOR, AT (734) 794-6350, EXT 43322, PRIOR TO ANY SIGNAL WORK. PROVIDE 5 WORKING DAYS NOTICE.


LIST OF MATERIAL -- REMOVAL		
NO.	ITEM	QUANTITIES
①	DS_Controller and Cabinet, Rem	1 Ea
②	DS_Pedestrian Signal System, Accessible, Rem	1 Ea
③	DS_Wireless Vehicle Detection System, Rem	1 Ea
④	DS_Wireless Vehicle Sensor Node, Rem	1 Ea
⑤	DS_TS, Pedestrian, Pedestal Mtd, Rem	1 Ea
⑥	DS_TS, Mast Arm Mtd, Rem	6 Ea
⑦	DS_Pushbutton Station, Rem	1 Ea
⑧	DS_Pedestal, Rem	1 Ea
⑨	DS_Pedestal Fdn, Rem	1 Ea
⑩	Handhole, Rem	2 Ea
○	DS_Conduit, Rem	10 Ft
○	DS_Cable, Rem	2300 Ft





Know what's below.
Call before you dig.

REV.	DATE	DRAWN	CHECKED	DESCRIPTION



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS

TRAFFIC SIGNAL - REMOVAL SHEET STATE @ WILLIAM ST

SCALE PLAN: 1" = 10'
DRAWING NO.: 2023-025-58
SHEET NO.: 58 OF 75

c:\pwwork\wade-trim_rbrown\d1339881\CTS-PLTS-TrafficSignals-StateSt.dwg Dwg Created: 3-Feb-25 10:02 standard bw.stb - Plot Date: 3-Feb-25

ILLUMINATED STREET NAME SIGN

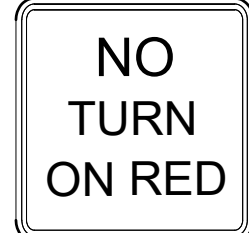


EXISTING SS#1
FACING NORTH & SOUTH
EXISTING SS#3
FACING NORTH & SOUTH

ILLUMINATED STREET NAME SIGN



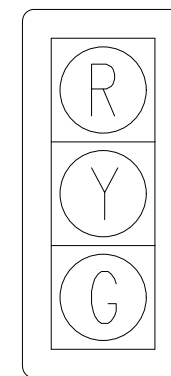
EXISTING SS#2
FACING WEST



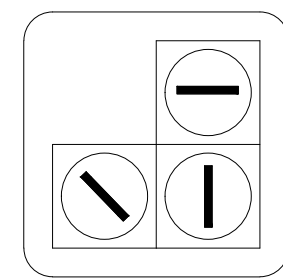
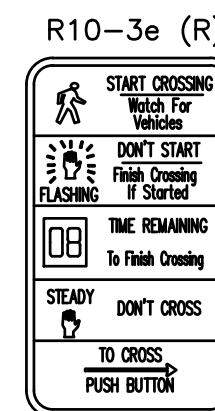
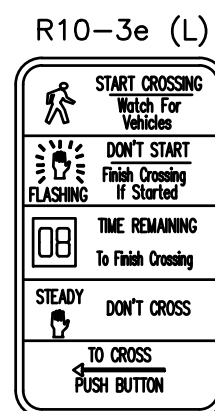
EXISTING NTOB SIGN
FACING NORTH



INSTALL BPS FACING SOUTH
R109-2 (30" X 35")
7.3 Sft SIGN, TYPE IIIb



INSTALL TS#1 & TS#2 FACING SOUTH
INSTALL TS#3 & TS#4 FACING WEST
INSTALL TS#5 & TS#6 FACING NORTH



INSTALL BS#1
FACING SOUTH

INTERSECTION SPECIFIC NOTES

CONTACT: XXX XXX OF DTE AT (XXX) XXX-XXXX FOR ELECTRICAL SERVICE RECONNECTION. ESTIMATED COST TO CONTRACTOR: \$XXXX.

UTILIZE EXISTING CONDUIT & HANDHOLES WHERE POSSIBLE OTHERWISE INSTALL NEW AS DIRECTED BY ENGINEER.

INSTALLATION OF TRAFFIC SIGNAL EQUIPMENT SHALL BE COORDINATED WITH THE ROAD CONSTRUCTION. TIME OF INSTALLATION SHALL BE AS DIRECTED BY THE ENGINEER.

TRAFFIC SIGNAL CONTROLLER SHALL BE SCOOT COMPATIBLE.

CONTACT MARC MORENO, SIGNS & SIGNALS SUPERVISOR FOR THE CITY OF ANN ARBOR, AT (734) 794-6350, EXT 43322, PRIOR TO ANY SIGNAL WORK. PROVIDE 5 WORKING DAYS NOTICE.

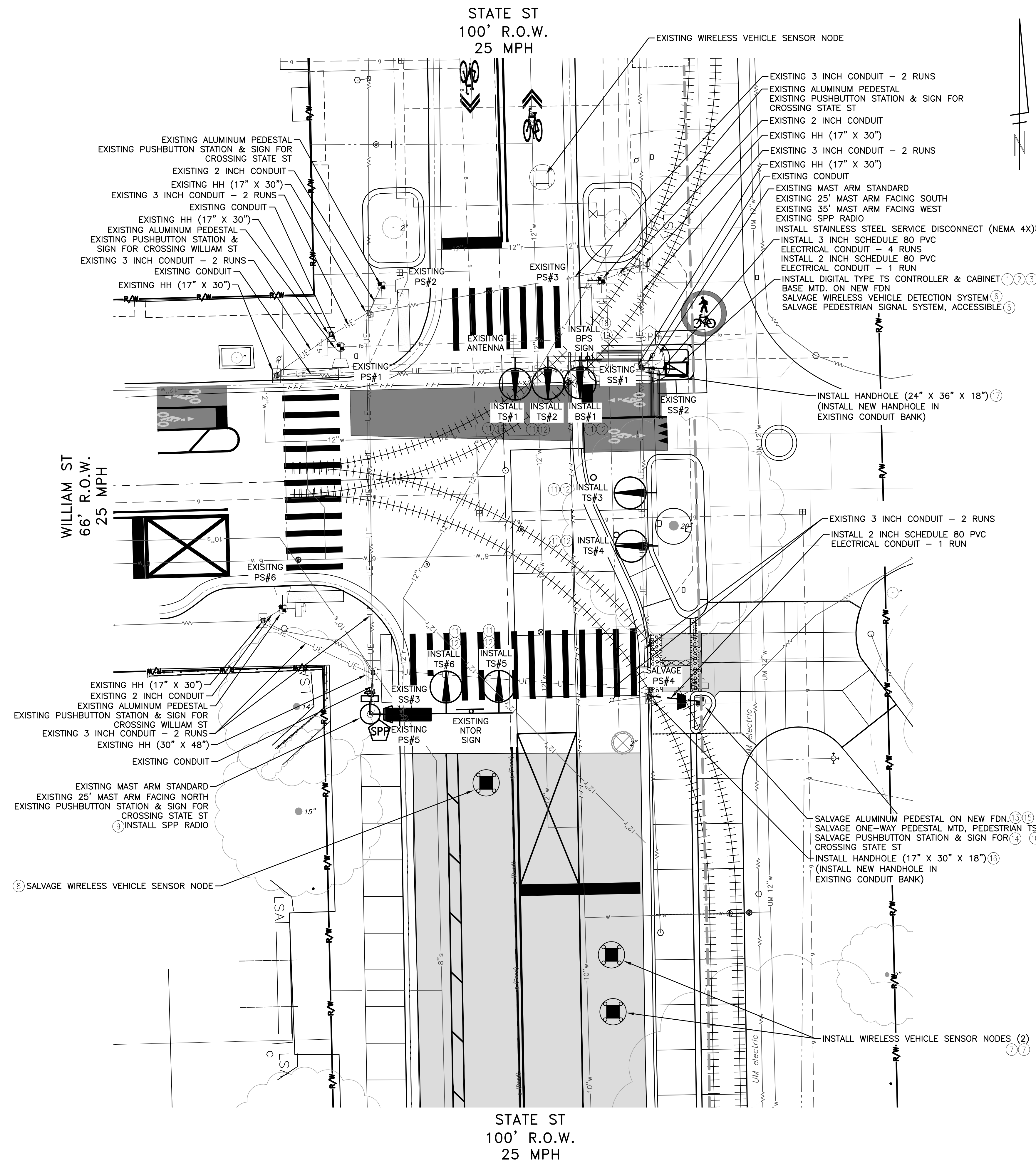
CABINET, NEMA TYPE MUST BE AN EAGLE SMART P NEMA SIZE 6 CABINET, AND CONTROLLER, NEMA, ATC TYPE. CITY OF ANN ARBOR MUST BE A YURATRAFFIC BLADE EDGE CAPABLE ADVANCED TRAFFIC CONTROLLER, PER CITY SPECIFICATIONS.

INSTALLATION OF POLES/PEDESTALS WITH PUSHBUTTONS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE NEW SIDEWALK RAMPS AND CROSSWALK PAVEMENT MARKINGS. LOCATIONS SHALL MEET CURRENT ADA REQUIREMENTS AND CRITERIA.

FOR SIDEWALK AND ADA GRADING INFORMATION SEE ROADWAY DESIGN PLANS.

LIST OF MATERIAL - CONSTRUCTION

NO.	ITEM	QUANTITIES
1	DS_Cabinet, NEMA Type	1 Ea
2	DS_Controller, NEMA, ATC Type, City of Ann Arbor	1 Ea
3	DS_Controller Fdn, Base Mtd	1 Ea
4	DS_Serv Disconnect	1 Ea
5	DS_Pedestrian Signal System, Accessible, Salv	1 Ea
6	DS_Wireless Vehicle Detection System, Salv	1 Ea
7	DS_Wireless Vehicle Sensor Node	2 Ea
8	DS_Wireless Vehicle Sensor Node, Salv	1 Ea
9	DS_Wireless Repeater	1 Ea
10	DS_TS, Pedestrian, One Way Pedestal Mtd, Salv	1 Ea
11	DS_TS, One Way Mast Arm Mtd (LED)	7 Ea
12	DS_Backplate, TS	7 Ea
13	DS_Pedestal, Fdn	1 Ea
14	DS_Pushbutton Station and Sign, Salv	1 Ea
15	DS_Pedestal, Alum, Salv	1 Ea
16	Handhole Assembly, 17 in. x 30 in. x 18 in.	1 Ea
17	Handhole Assembly, 24 in. x 36 in. x 18 in.	1 Ea
18	DS_Sign, Type IIIb, Modified	8 Sft
19	DS_Pelco Sign-Brac, Galaxy Cable Mount, Formed Tube	1 Ea
	Conduit, Schedule 80 PVC, 2 in.	20 Lft
	Conduit, Schedule 80 PVC, 3 in.	40 Lft
	DS_Recable, TS	2300 Ft
	DS_Cable, Sec. 600V, 1, 3/C#6	100 Ft



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

TRAFFIC SIGNAL - CONSTRUCTION SHEET STATE @ WILLIAM ST

SCALE PLAN: 1" = 10'

DRAWING NO: 2023-025-59

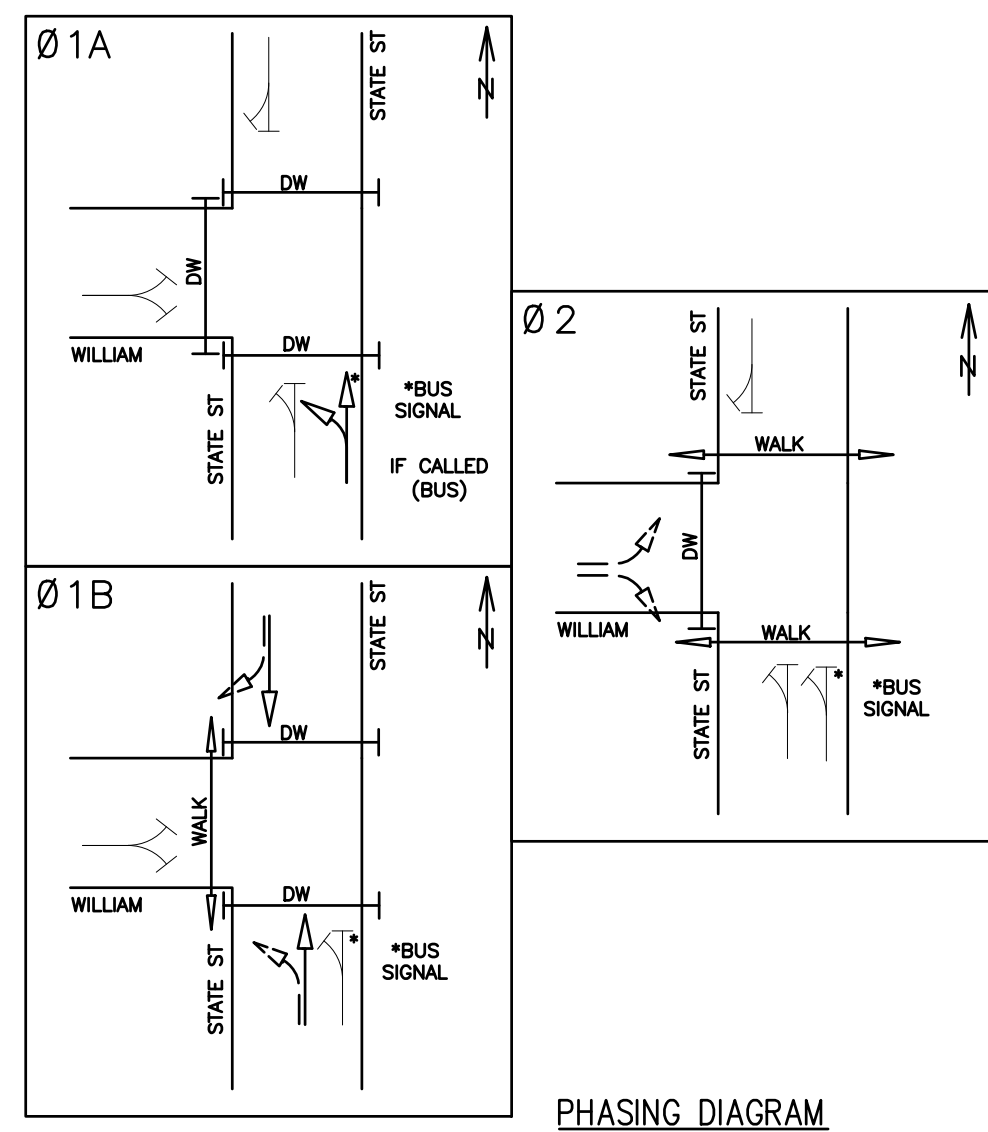
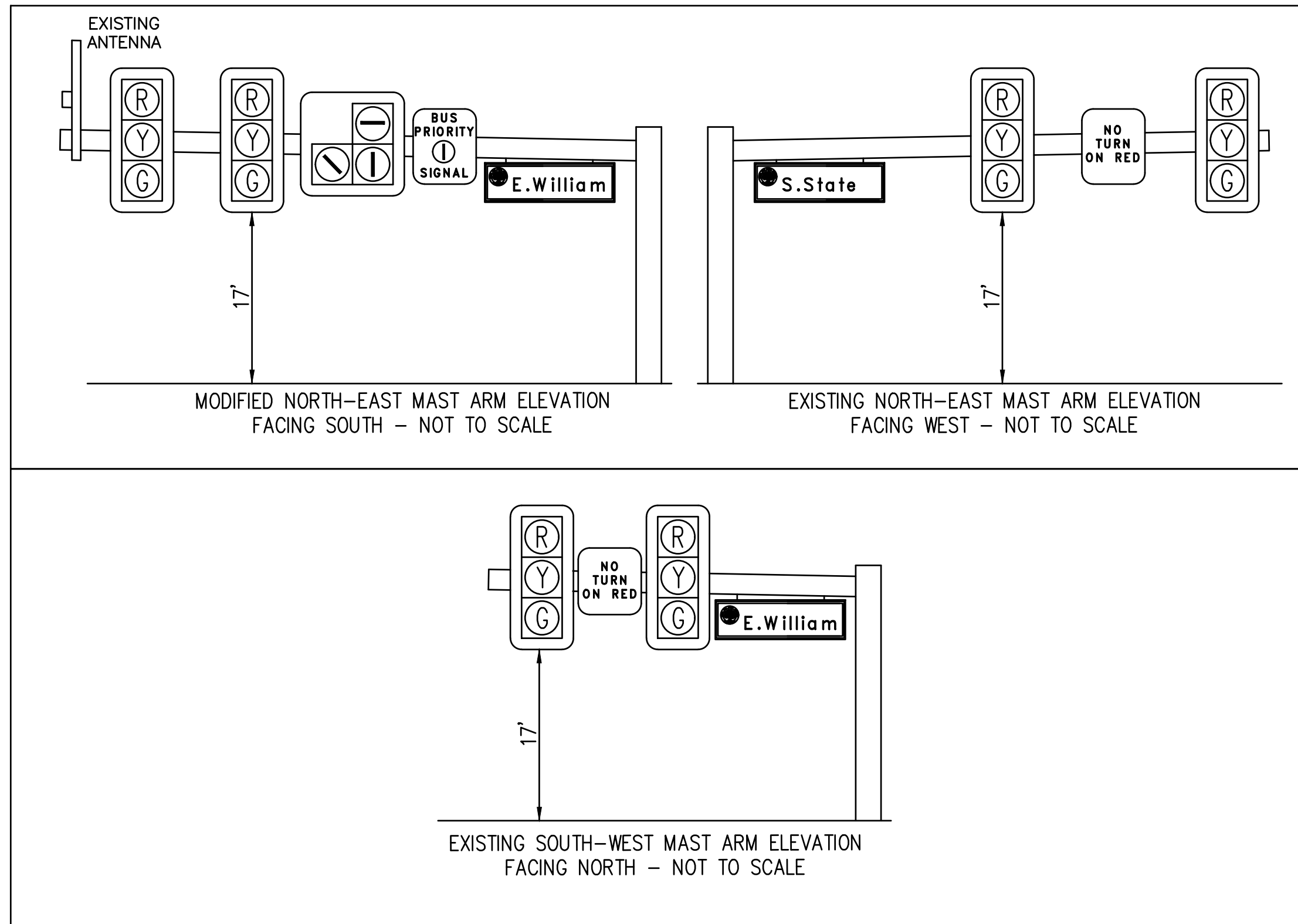
SHEET NO. 59 OF 75

811
Know what's below.
Call before you dig.

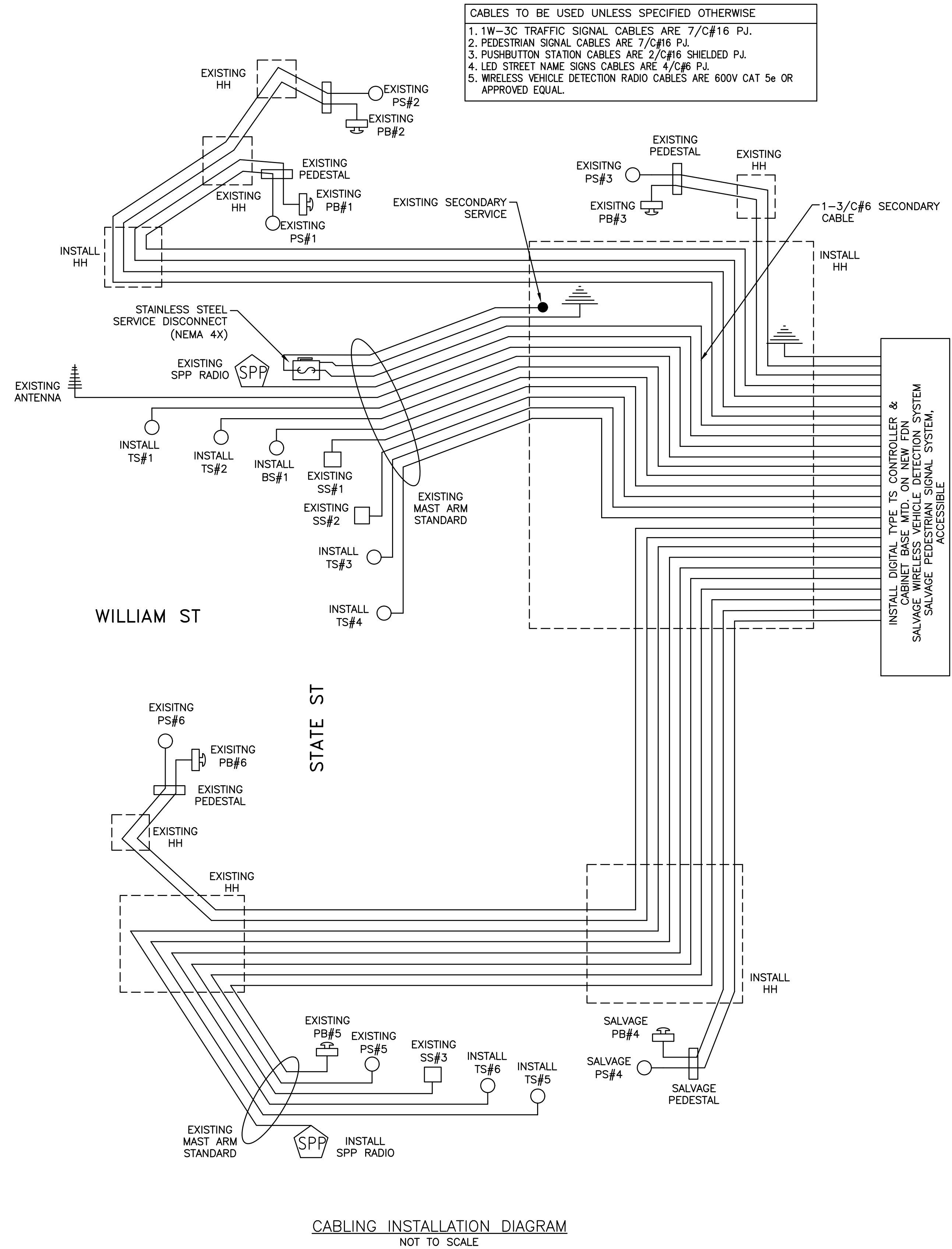
REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1067
www.a2gov.org

c:\pw_work\wade--trim_rbrown\dl339881\CTS-PLTS-TrafficSignals--StateSt.dwg Dwg Created: 3-Feb-25 -- _a2 standard bw.stb -- Plot Date: 3-Feb-25



PHASING DIAGRAM



CABLING INSTALLATION DIAGRAM
NOT TO SCALE

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS

TRAFFIC SIGNAL - CONSTRUCTION SHEET STATE @ WILLIAM ST DETAILS

SCALE PLAN: #####
DRAWING No. 2023-023-60

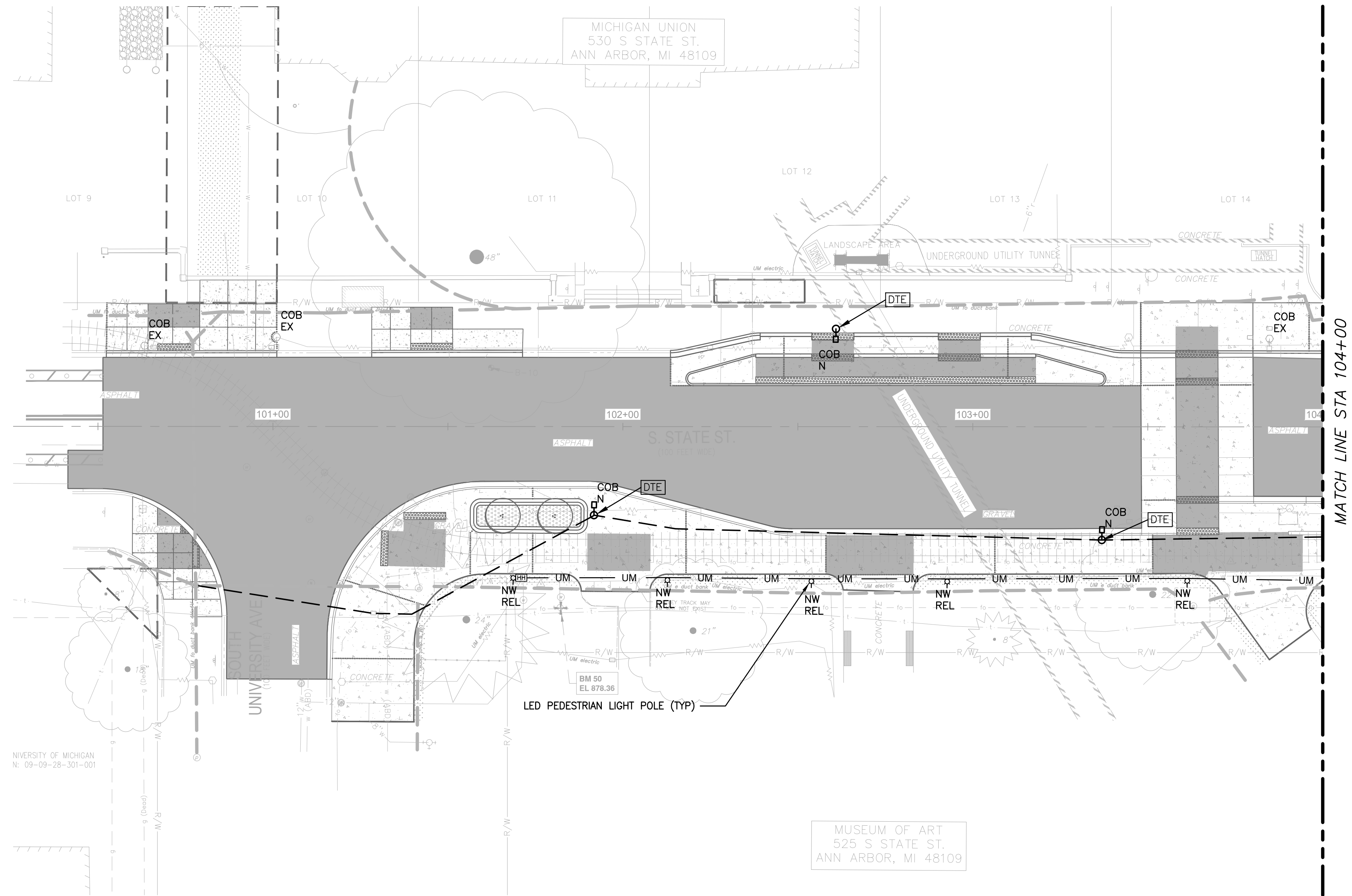
811
Know what's below.
Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED



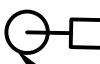



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-0647
www.a2gov.org

CITY OF ANN ARBOR MICHIGAN

c:\pwork\wade-trim_rbrown\d1339881\ELP-PLTS-Lighting Plan.dwg Dwg Created: 31-Jan-25 - _a2_standard_bw.stb - Plot Date: 3-Feb-25



LEGEND

-  PEDESTRIAN LIGHT - POLE-MOUNTED
-  EXISTING ROADWAY LIGHT - POLE-MOUNTED
-  PROPOSED DTE OWNED COBRA LIGHT
-  HANDHOLE
-  UNDERGROUND CONDUIT, UM ELECTRICAL
-  UNDERGROUND CONDUIT, DTE ELECTRICAL

GENERAL NOTES:

1. CONTRACTOR IS TO COORDINATE THE INSTALLATION OF UM OWNED UNDERGROUND INFRASTRUCTURE BY CONTACTING JIMMY CAMPBELL AT 517-977-5746.
2. UNIVERSITY OF MICHIGAN (UM) WILL REMOVE AND SALVAGE GLOBE LIGHTS TO BE RELOCATED. THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING EXISTING FOUNDATIONS, INSTALLING NEW FOUNDATIONS, CONDUIT AND HANDHOLES PER PLAN. UPON COMPLETION, UM WILL REINSTALL SALVAGED POLES AND GLOBES, STRING WIRE THROUGH CONDUIT, AND ENERGIZE THE LIGHTS.
3. REFER TO UM ELECTRICAL SPECIFICATION SECTION 265600 EXTERIOR LIGHTING.
4. REFER TO SHEET 64 FOR LIGHTING SCHEDULE AND DETAILS.
5. ALL ELECTRICAL EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ANY LOCAL AMENDMENTS.
6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACQUISITION OF AN ELECTRICAL PERMIT AND SCHEDULING OF THE NECESSARY INSPECTIONS.
7. DTE WILL REMOVE EXISTING COBRAS LIGHTS ON EAST SIDE OF STATE STREET. THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING THE EXISTING FOUNDATIONS, INSTALLING NEW FOUNDATIONS, CONDUIT AND HANDHOLES PER PLAN. UPON COMPLETION, DTE ENERGY WILL INSTALL NEW COBRAS LIGHTS, STRING LINE THROUGH THE CONDUIT, AND ENERGIZE THE LIGHTS.
8. DTE LIGHTS WILL USE 2 INCH CONDUIT. UM LIGHTS WILL USE 1-1/4 INCH CONDUIT.

QUANTITIES

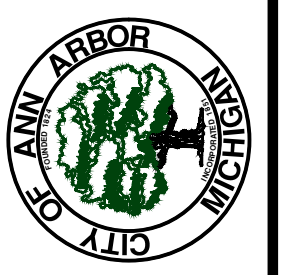
TOTAL	UNIT	DESCRIPTION
525	FT	DS_CONDUIT, SCHEDULE 40 PVC, 1-1/4 IN.
1	EA	DS_U OF M HANDHOLE
5	EA	DS_LIGHT POLE FOUNDATION
3	EA	DS_DTE STREETLIGHT POLE FOUNDATION
360	FT	CONDUIT, SCHEDULE 80 PVC, 2 IN.

MATCH LINE STA 104+00
SEE SHEET 62



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

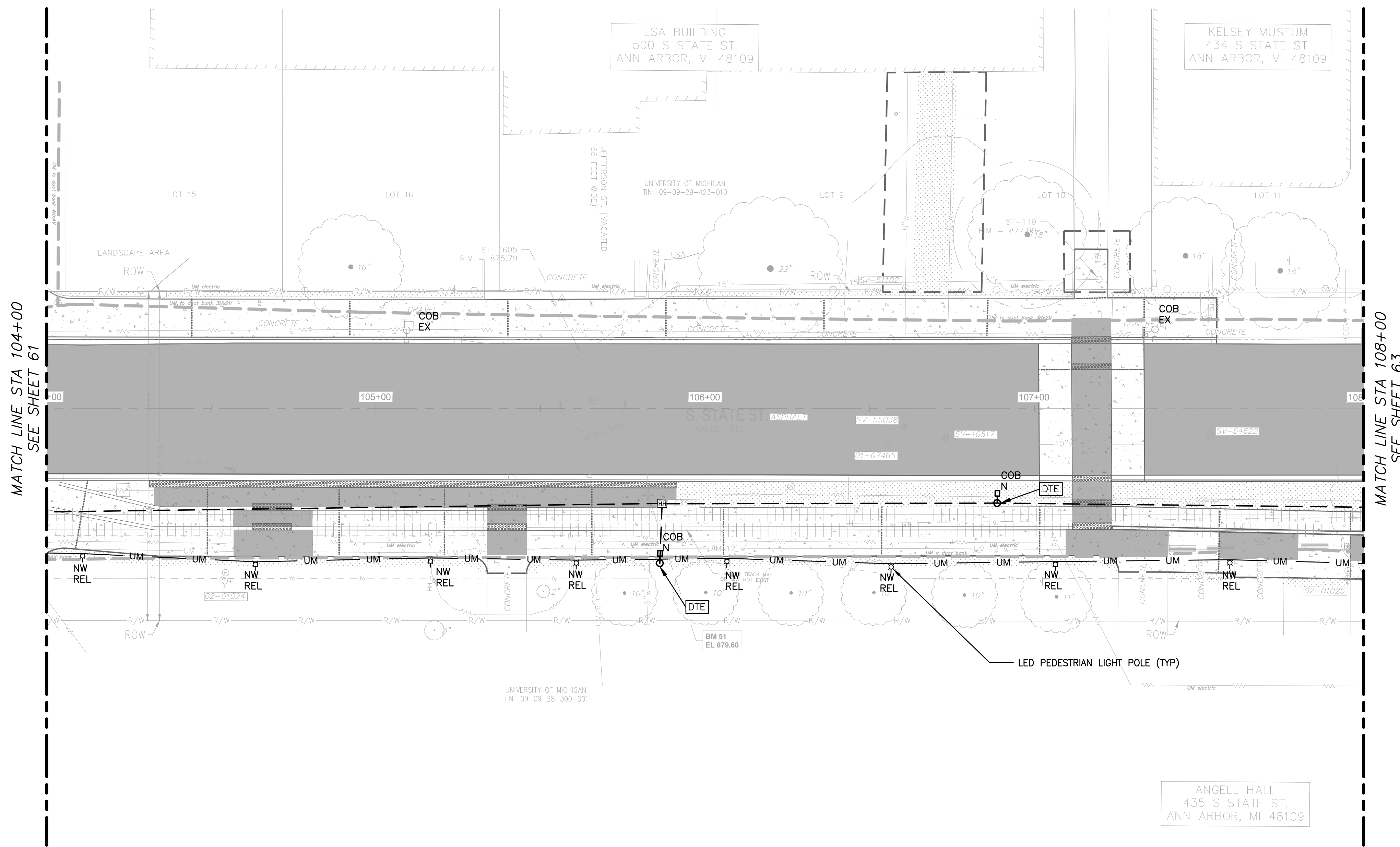
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.aagov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
LIGHTING PLAN

SCALE: 1"=20'
DRAWING No. 2023-023-61

c:\pw_work\wade-trim_fbrown\dl339881\ELP-PLTS-Lighting Plan.dwg Dwg Created: 31-Jan-25 - _a2 standard bw.stb - Plot Date: 3-Feb-25



MATCH LINE STA 104+00
SEE SHEET 61

MATCH LINE STA 108+00
SEE SHEET 63

LEGEND

- PEDESTRIAN LIGHT - POLE-MOUNTED
- EXISTING ROADWAY LIGHT - POLE-MOUNTED
- PROPOSED DTE OWNED COBRA LIGHT
- HANDHOLE
- UNDERGROUND CONDUIT, UM ELECTRICAL
- UNDERGROUND CONDUIT, DTE ELECTRICAL

GENERAL NOTES:

1. CONTRACTOR IS TO COORDINATE THE INSTALLATION OF UM OWNED UNDERGROUND INFRASTRUCTURE BY CONTACTING JIMMY CAMPBELL AT 517-977-5746.
2. UNIVERSITY OF MICHIGAN (UM) WILL REMOVE AND SALVAGE GLOBE LIGHTS TO BE RELOCATED. THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING EXISTING FOUNDATIONS, INSTALLING NEW FOUNDATIONS, CONDUIT AND HANDHOLES PER PLAN. UPON COMPLETION, UM WILL REINSTALL SALVAGED POLES AND GLOBES, STRING WIRE THROUGH CONDUIT, AND ENERGIZE THE LIGHTS.
3. REFER TO UM ELECTRICAL SPECIFICATION SECTION 265600 EXTERIOR LIGHTING.
4. REFER TO SHEET 64 FOR LIGHTING SCHEDULE AND DETAILS.
5. ALL ELECTRICAL EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ANY LOCAL AMENDMENTS.
6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACQUISITION OF AN ELECTRICAL PERMIT AND SCHEDULING OF THE NECESSARY INSPECTIONS.
7. DTE WILL REMOVE EXISTING COBRAS LIGHTS ON EAST SIDE OF STATE STREET. THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING THE EXISTING FOUNDATIONS, INSTALLING NEW FOUNDATIONS, CONDUIT AND HANDHOLES PER PLAN. UPON COMPLETION, DTE ENERGY WILL INSTALL NEW COBRAS LIGHTS, STRING LINE THROUGH THE CONDUIT, AND ENERGIZE THE LIGHTS.
8. DTE LIGHTS WILL USE 2 INCH CONDUIT. UM LIGHTS WILL USE 1-1/4 INCH CONDUIT.

QUANTITIES

TOTAL	UNIT	DESCRIPTION
950	FT	DS_CONDUIT, SCHEDULE 40 PVC, 1-1/4 IN.
8	EA	DS_LIGHT POLE FOUNDATION
1	EA	DS_U OF M HANDHOLE
2	EA	DS_DTE STREETLIGHT POLE FOUNDATION
430	FT	CONDUIT, SCHEDULE 80 PVC, 2 IN.



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

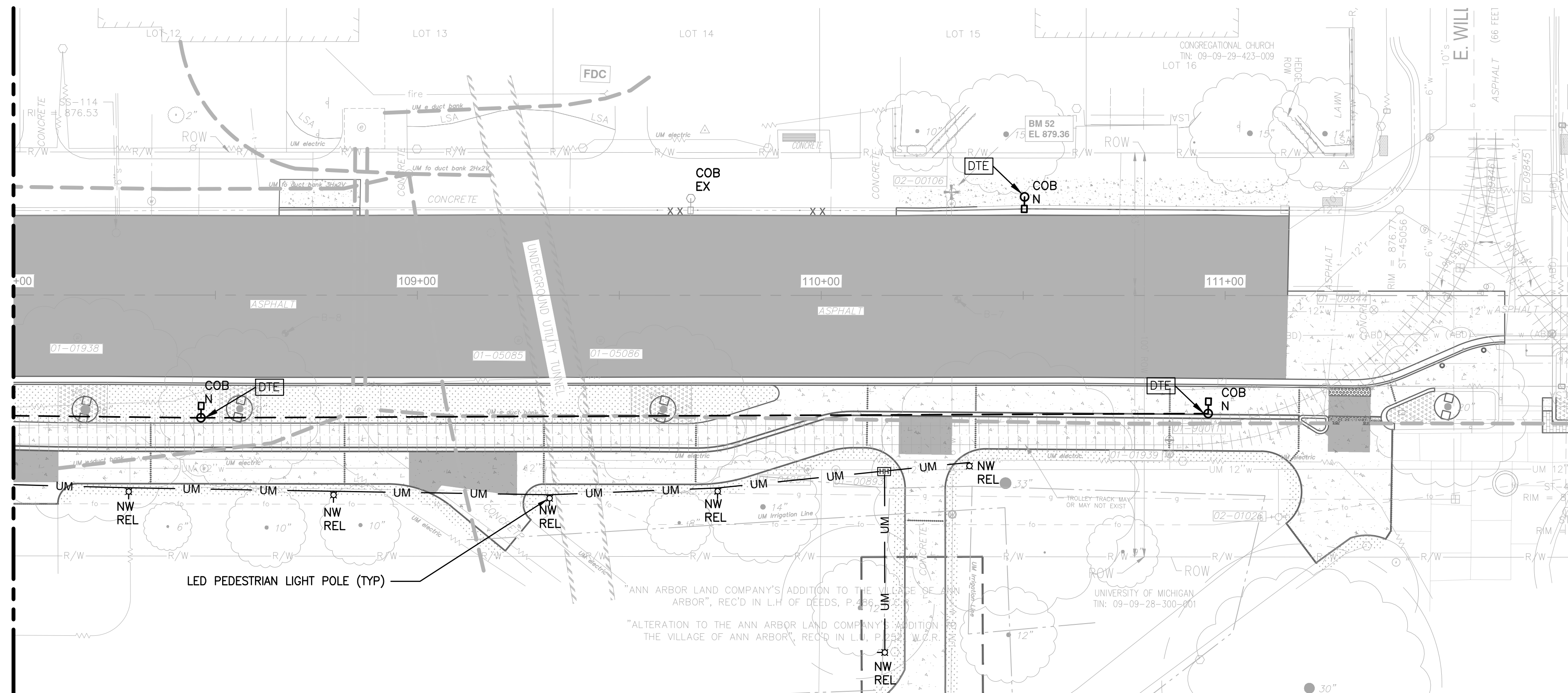
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a2gov.org





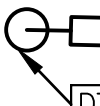

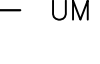
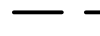
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
LIGHTING PLAN

SCALE: 1"=20'
DRAWING No. 2023-023-62

MATCH LINE STA 108+00
SEE SHEET 62



LEGEND

-  PEDESTRIAN LIGHT - POLE-MOUNTED
-  EXISTING ROADWAY LIGHT - POLE-MOUNTED
-  PROPOSED DTE OWNED COBRA LIGHT
-  HANDHOLE
-  UNDERGROUND CONDUIT, UM ELECTRICAL
-  UNDERGROUND CONDUIT, DTE ELECTRICAL

GENERAL NOTES:

1. CONTRACTOR IS TO COORDINATE THE INSTALLATION OF UM OWNED UNDERGROUND INFRASTRUCTURE BY CONTACTING JIMMY CAMPBELL AT 517-977-5746.
2. UNIVERSITY OF MICHIGAN (UM) WILL REMOVE AND SALVAGE GLOBE LIGHTS TO BE RELOCATED. THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING EXISTING FOUNDATIONS, INSTALLING NEW FOUNDATIONS, CONDUIT AND HANDHOLES PER PLAN. UPON COMPLETION, UM WILL REINSTALL SALVAGED POLES AND GLOBES, STRING WIRE THROUGH CONDUIT, AND ENERGIZE THE LIGHTS.
3. REFER TO UM ELECTRICAL SPECIFICATION SECTION 265600 EXTERIOR LIGHTING.
4. REFER TO SHEET 64 FOR LIGHTING SCHEDULE AND DETAILS.
5. ALL ELECTRICAL EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ANY LOCAL AMENDMENTS.
6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACQUISITION OF AN ELECTRICAL PERMIT AND SCHEDULING OF THE NECESSARY INSPECTIONS.
7. DTE WILL REMOVE EXISTING COBRAS LIGHTS ON EAST SIDE OF STATE STREET. THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING THE EXISTING FOUNDATIONS, INSTALLING NEW FOUNDATIONS, CONDUIT AND HANDHOLES PER PLAN. UPON COMPLETION, DTE ENERGY WILL INSTALL NEW COBRAS LIGHTS, STRING LINE THROUGH THE CONDUIT, AND ENERGIZE THE LIGHTS.
8. DTE LIGHTS WILL USE 2 INCH CONDUIT. UM LIGHTS WILL USE 1-1/4 INCH CONDUIT.

QUANTITIES

TOTAL	UNIT	DESCRIPTION
700	FT	DS_CONDUIT, SCHEDULE 40 PVC, 1-1/4 IN.
1	EA	DS_U OF M HANDHOLE
6	EA	DS_LIGHT POLE FOUNDATION
2	EA	DS_DTE STREETLIGHT POLE FOUNDATION
320	FT	CONDUIT, SCHEDULE 80 PVC, 2 IN.



CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
www.a2gov.org

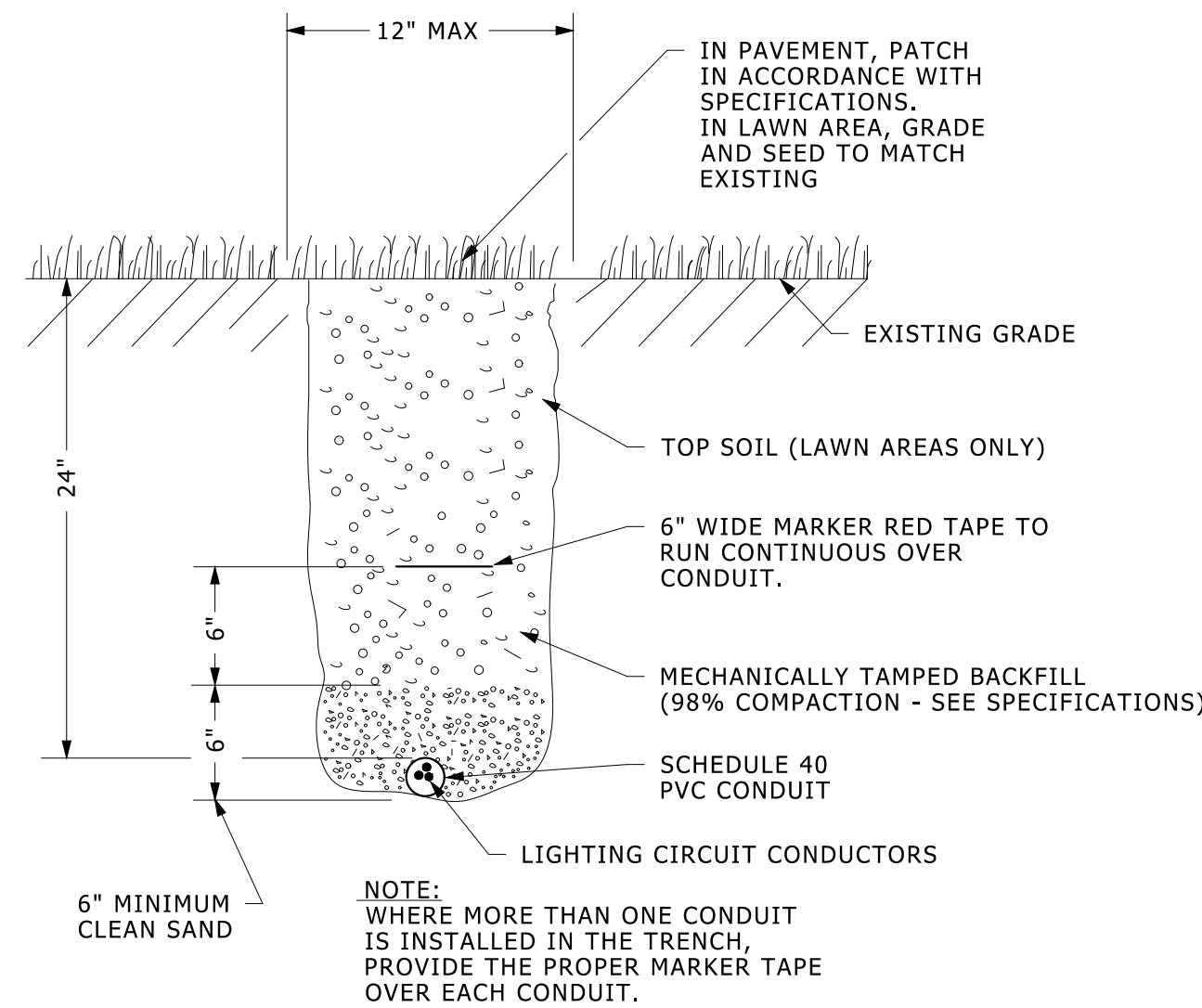


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
LIGHTING PLAN

SCALE: 1"=20'
DRAWING No.
2023-023-63

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

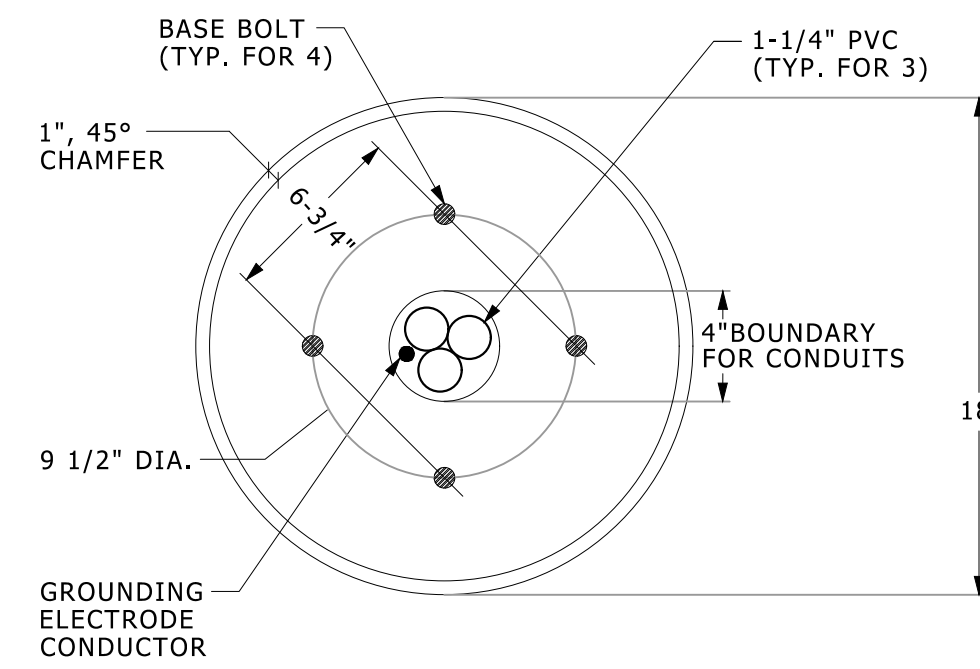
LUMINAIRE SCHEDULE								
SYMBOL	TAG	QTY	LABEL	ARRANGEMENT	LLF	LUMINAIRE LUMENS	LUMINAIRE WATTS	DESCRIPTION
	COB N	7	LDS-SAL-80-DB-T3-1-40-MAS	Single	0.850	10610	80.8	NEW COBRA LIGHT POLE (BY OTHERS)
	NW-NEW	1	NW-65W42LED4K-R	Single	0.850	5609	70.2	LITHONIA NEW WESTMINSTER (NW) LED GLOBE LIGHT. POLE MODEL APR4F-12-GFI-BA-BKTX BY LITHONIA
	NW-REL	17	NW-65W42LED4K-R	Single	0.850	5609	70.2	RELOCATED NEW WESTMINSTER (NW)LED GLOBE LIGHT POLE
	NW-EX	19	NW-65W42LED4K-R	Single	0.850	5609	70.2	EXISTING NEW WESTMINSTER (NW) LED GLOBE LIGHT POLE



TYPICAL SITE LIGHTING TRENCH DETAIL

NO SCALE

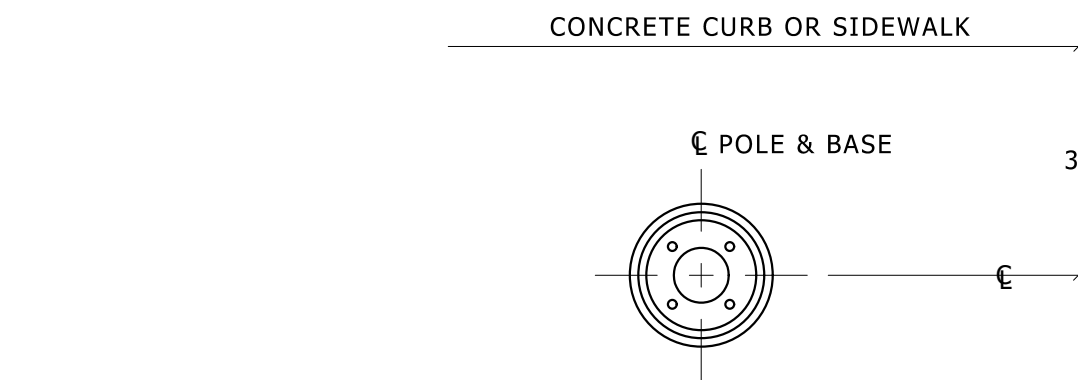
26560004.dwg



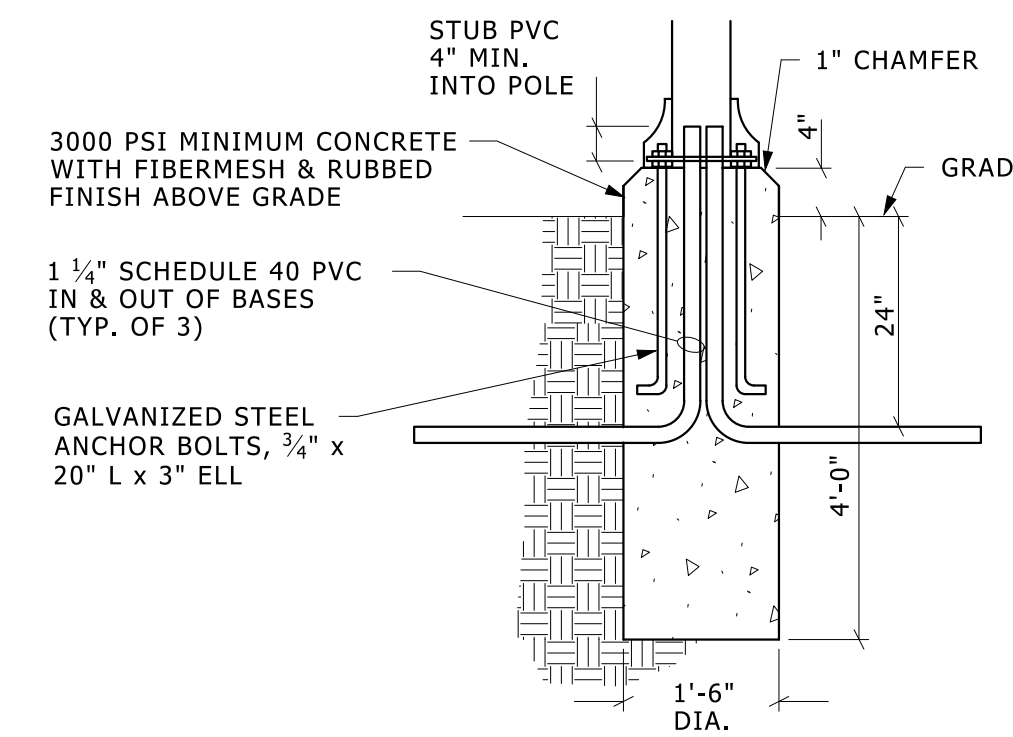
PEDESTRIAN POLE BASE - PLAN VIEW

NO SCALE

26560017.DGN



BASE PLAN VIEW



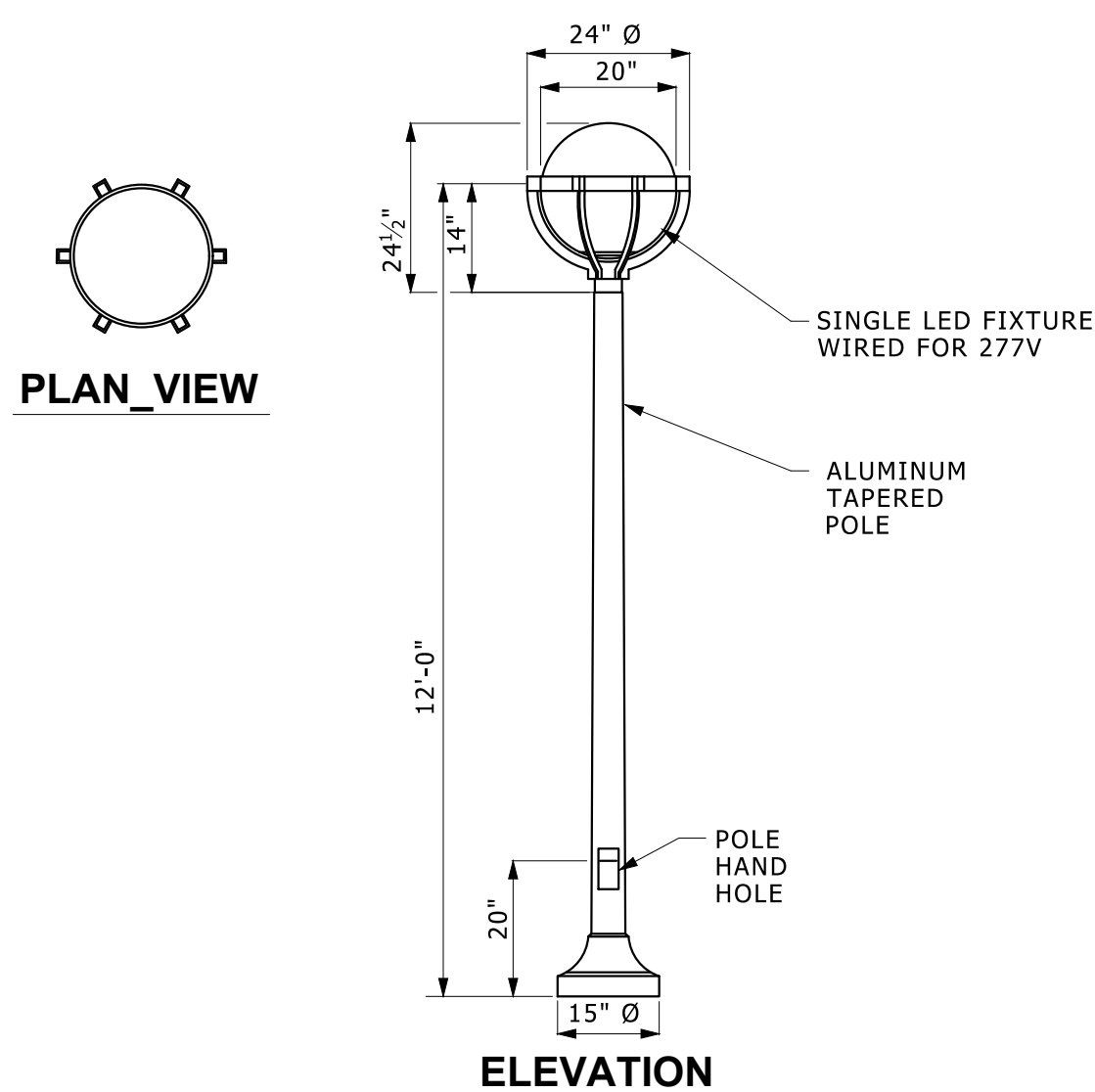
TYPICAL PEDESTRIAN LIGHT POLE BASE IN LAWN

NO SCALE

26560013.DWG

GENERAL NOTES:

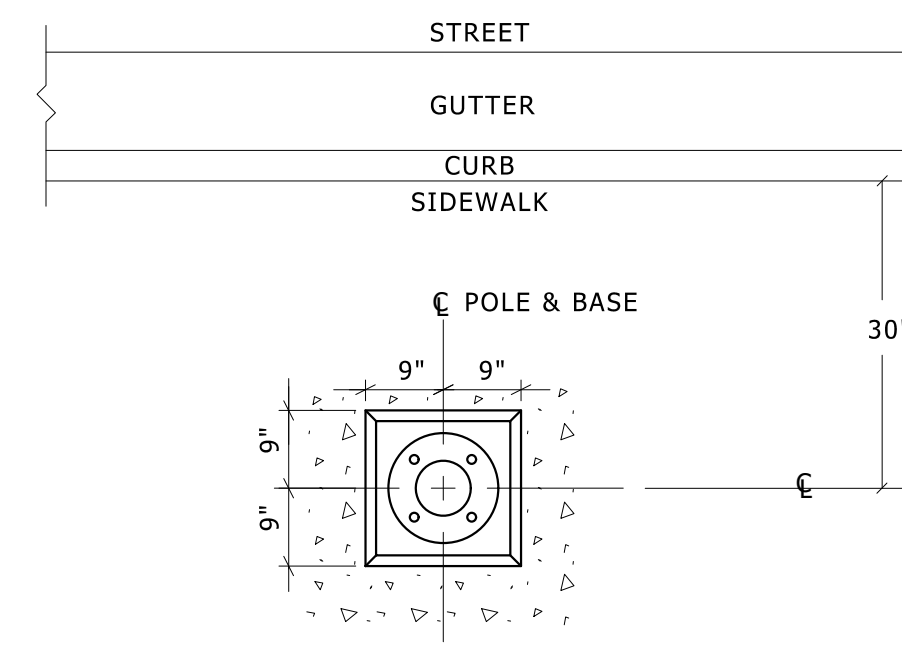
- CONTRACTOR IS TO COORDINATE THE INSTALLATION OF UM OWNED UNDERGROUND INFRASTRUCTURE BY CONTACTING JIMMY CAMPBELL AT 517-977-5746.



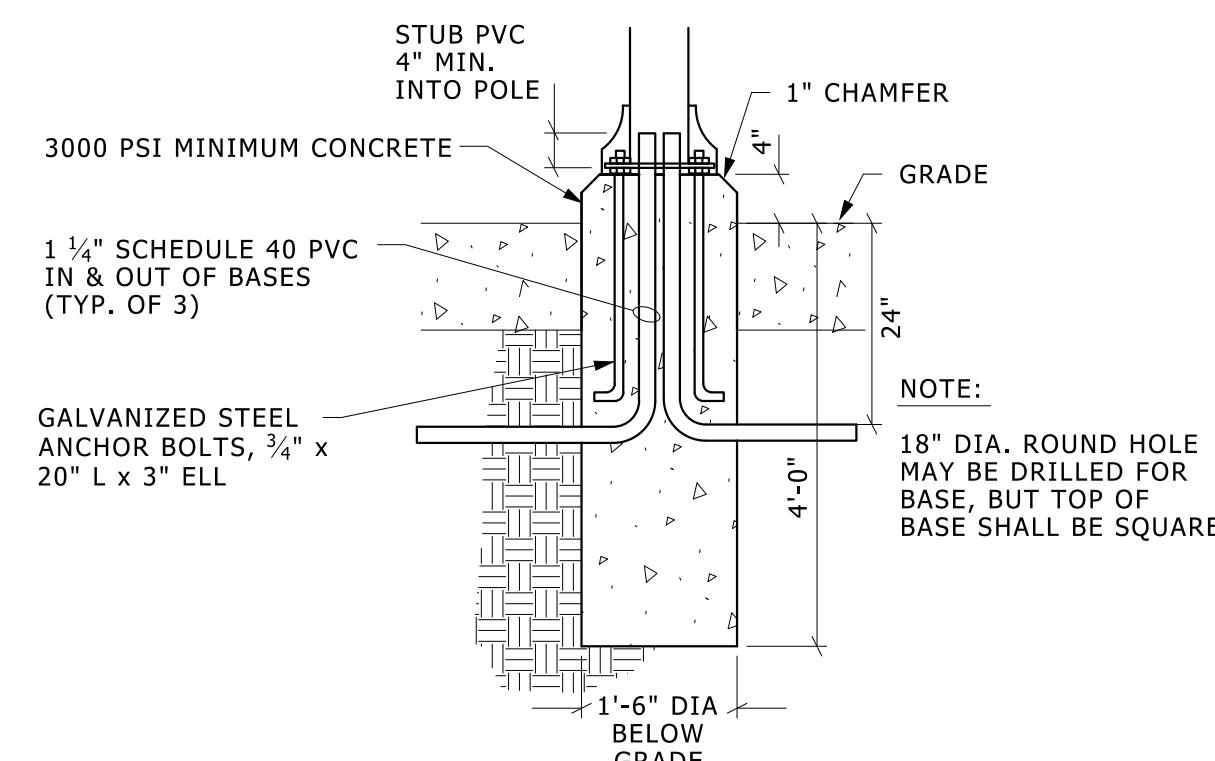
SINGLE GLOBE UNIT

NO SCALE

26560007.dwg



BASE PLAN VIEW



TYPICAL PEDESTRIAN LIGHT POLE BASE IN PAVEMENT

NO SCALE

26560011.DWG



NO.	DATE	DESCRIPTION	REV.

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48107-8647
www.a3gov.org

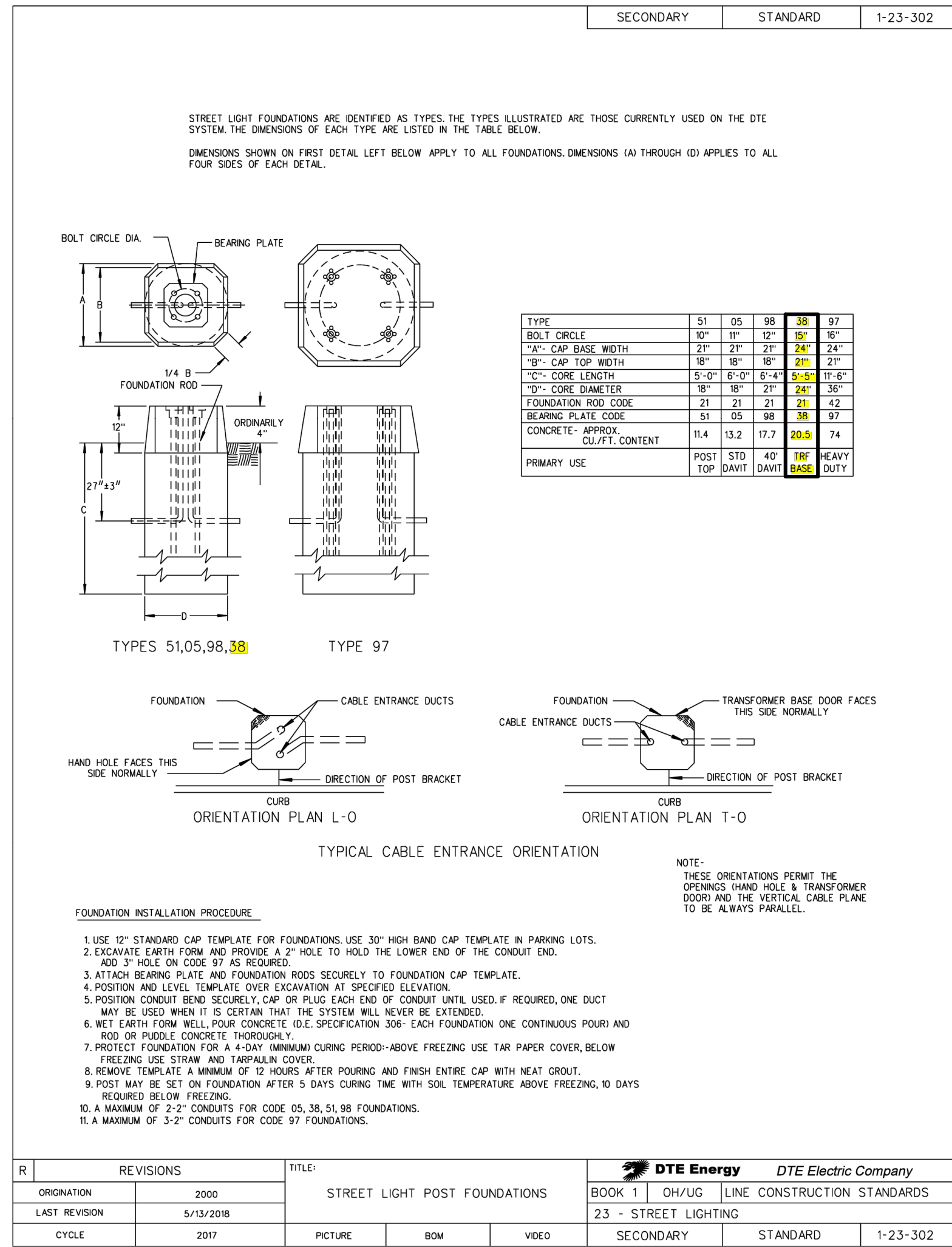
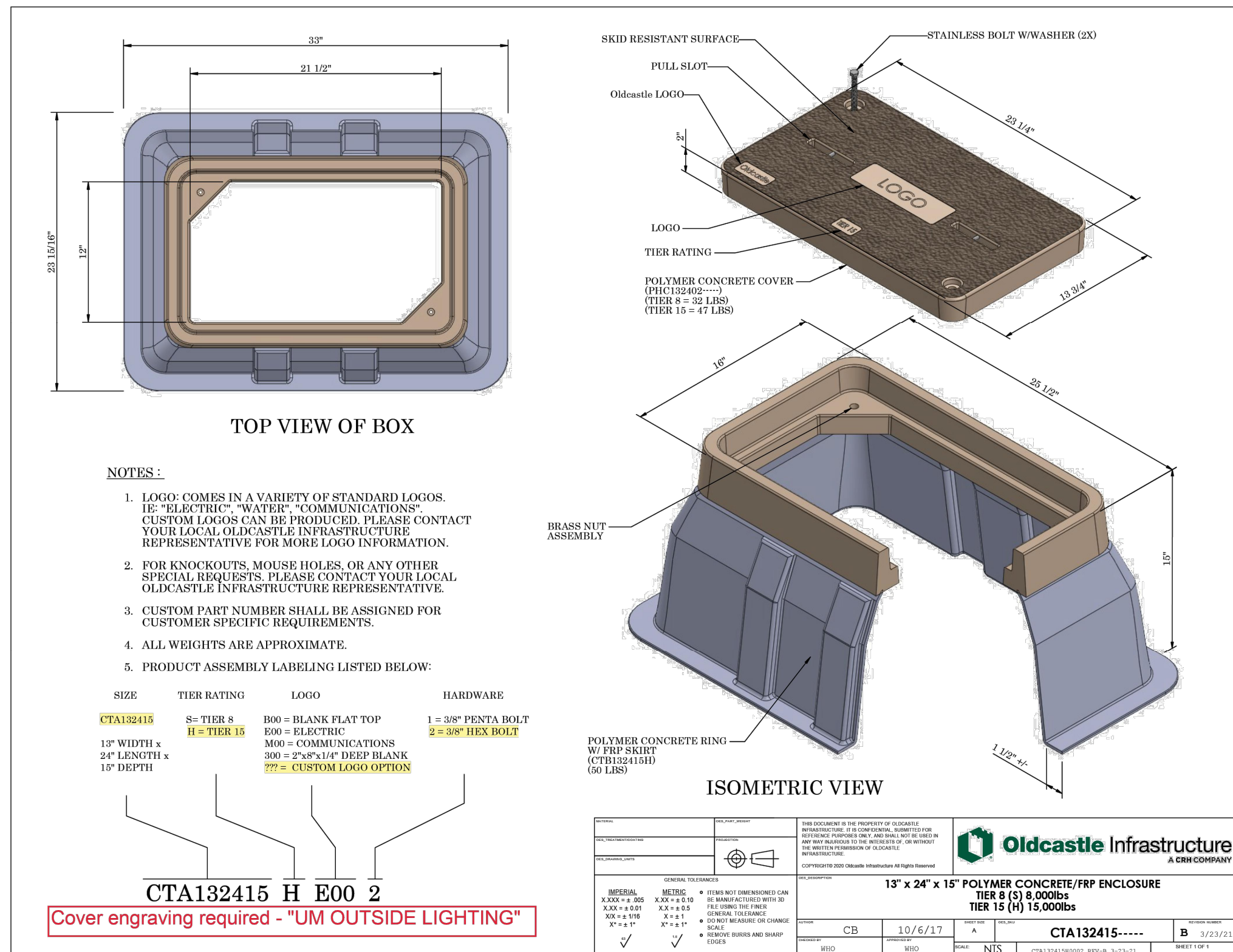


CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
LIGHTING DETAILS

SCALE: 1"=20'
DRAWING No. 2023-023-64

SHEET No.

c:\pw_work\wade-trim_rbrown\d1339881\ELP-PLTS-Lighting Plan.dwg Dwg Created: 31-Jan-25 -- _a2 standard bw.stb -- Plot Date: 3-Feb-25



DTE STREET LIGHT POLE FOUNDATION

NO SCALE

GENERAL NOTES:

- CONTRACTOR IS TO COORDINATE THE INSTALLATION OF UM OWNED UNDERGROUND INFRASTRUCTURE BY CONTACTING JIMMY CAMPBELL AT 517-977-5746.



CITY OF ANN ARBOR PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-1667
 ANN ARBOR 734.794.6410
 www.a2gov.org

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

LIGHTING DETAILS

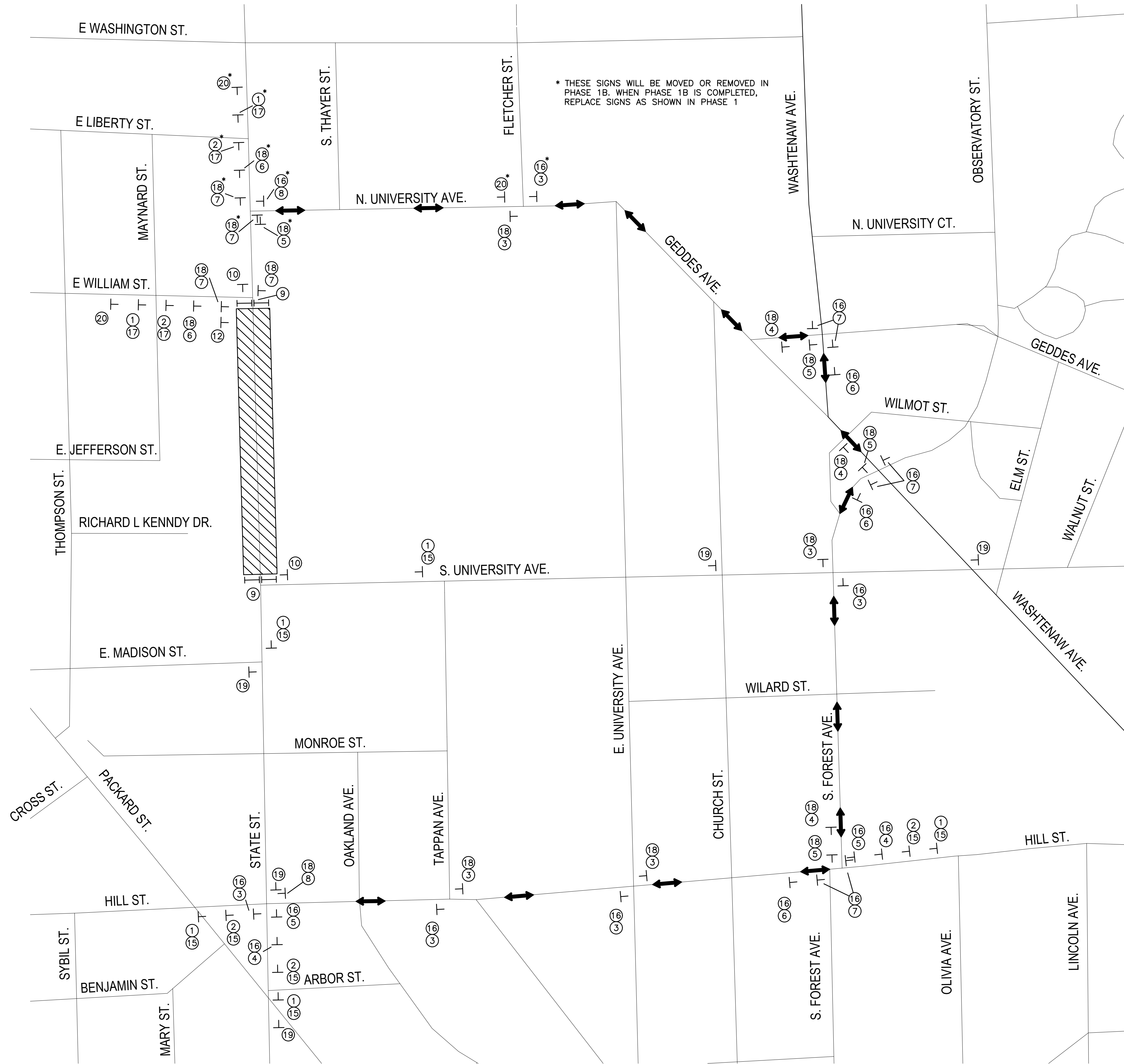
SCALE: 1"=20'

DRAWING No. 2023-023-65

SHEET No. 65 OF 75

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

c:\pw_work\wade-trim_rbrown\dl339881\CPM-PLTS-Maintenance Of Traffic.dwg Dwg Created: 31-Jan-25 - _02 standard bw.stb - Plot Date: 3-Feb-25



PHASE 1 AND 2
STATE ST CLOSURE OF NORTH OF SOUTH UNIVERSITY AVE
TO SOUTH OF WILLIAM STATE ST

* THESE SIGNS WILL BE MOVED OR REMOVED IN
PHASE 1B. WHEN PHASE 1B IS COMPLETED,
REPLACE SIGNS AS SHOWN IN PHASE 1

1	ROAD CLOSED AHEAD W20-3 48"x48"	2	DETOUR AHEAD W20-2 48"x48"	3	DETOUR M4-9j 30"x24"	4	DETOUR M4-9kR 30"x30"	5	DETOUR M4-9R 30"x24"
6	DETOUR M4-9kL 30"x30"	7	DETOUR M4-9L 30"x24"	8	END DETOUR M4-8a 24"x18"	9	ROAD CLOSED R11-2 48"x30"	10	TURN RIGHT ONLY R3-31R 24"x30"
11	R3-2 30"x30"	12	TURN LEFT ONLY R3-31L 24"x30"	13	R3-1 36"x36"	14	ROAD CLOSED TO THRU TRAFFIC R11-4 60"x30"	15	NB STATE ST W20-13P 48"x18"
16	NB STATE ST W20-12P 30"x12"	17	SB STATE ST W20-13P 48"x18"	18	SB STATE ST W20-12P 30"x12"	19	STATE ST CLOSED AT S UNIVERSITY AVE R11-4 MOD 60"x30"		
20	STATE ST CLOSED AT WILLIAM ST R11-4 MOD 48"x30"	21	M4-9h 12"x24"	22	M4-9gR 12"x18"	23	M4-9gL 12"x18"	24	SIDEWALK CLOSED R9-9 24"x12"
25	SIDEWALK CLOSED CROSS HERE R9-11aR 48"x24"	26	SIDEWALK CLOSED CROSS HERE R9-11aL 48"x24"	27	BIKE LANE CLOSED AHEAD W20-5 48"x48"	28	BIKE DETOUR AHEAD W20-2 MOD 48"x48"		
29	M4-9e 12"x18"	30	M4-9dR 12"x18"	31	M4-9dL 12"x18"	32	M4-9f 12"x18"	33	SHARE THE ROAD W20-2 MOD 48"x48"

- NOTES:**
- CONSTRUCTION, WARNING, REGULATORY, AND GUIDE SIGNS SHOWN MUST BE PLACED ACCORDING TO MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND MAY REQUIRE FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
 - TRAFFIC SHALL BE MAINTAINED ACCORDING TO MDT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING ANY SUPPLEMENTAL SPECIFICATIONS, MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND AS SPECIFIED IN THIS PLAN SHEET.
 - SEE PEDESTRIAN AND BICYCLE DETOURS FOR NON-MOTORIZED TRAFFIC CONTROL.

LEGEND

- T TEMPORARY TRAFFIC SIGN
- ||| BARRICADE, TYPE III, HIGH INTENSITY
- ▨ WORK ZONE
- DETOUR ROUTE

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

MOT PLAN - PHASE 1 AND 2

SCALE: 1"=200'

DRAWING No. 2023-023-66

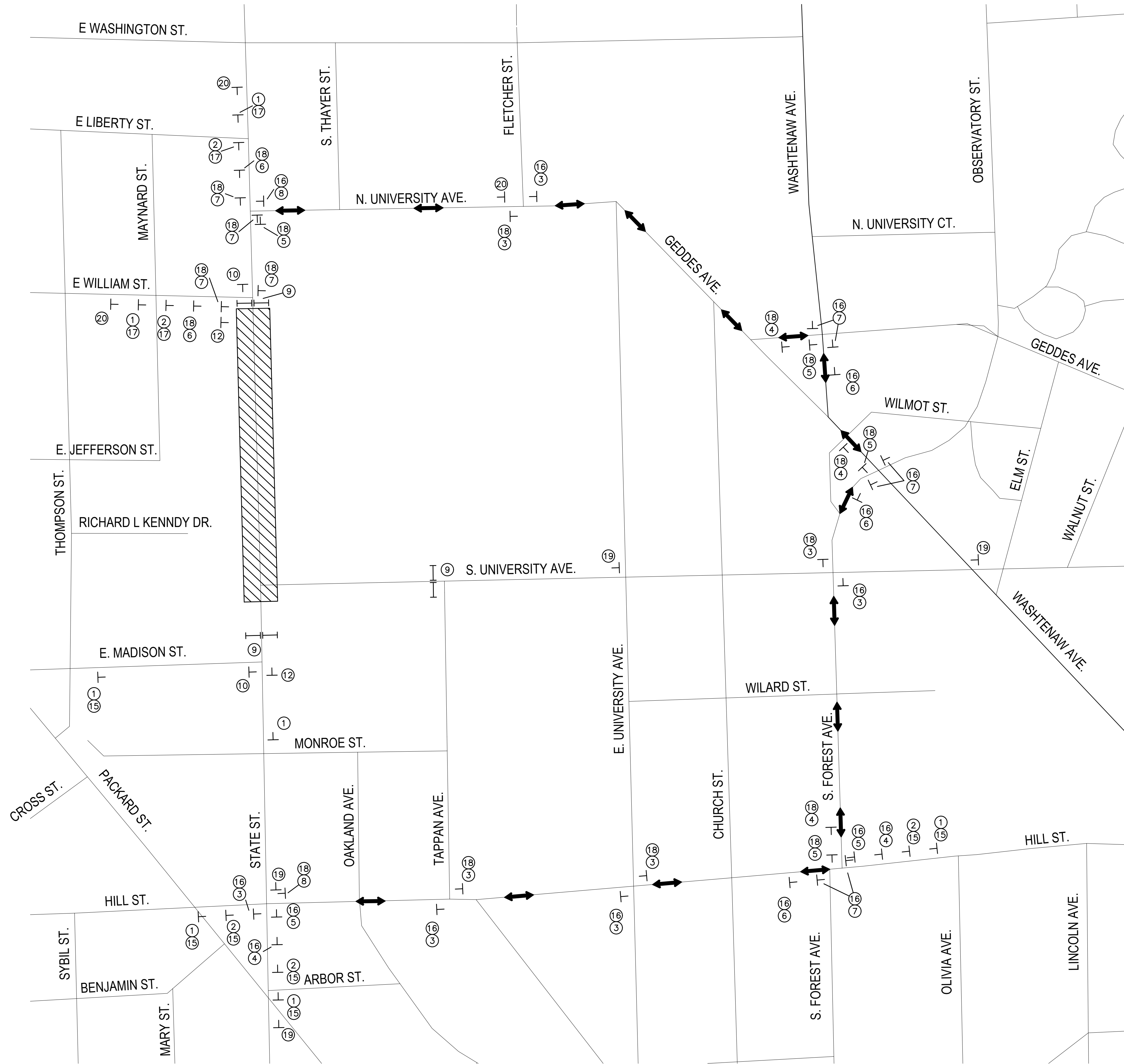
SHEET No. 66 OF 75

811
Know what's below.
Call Before you dig.

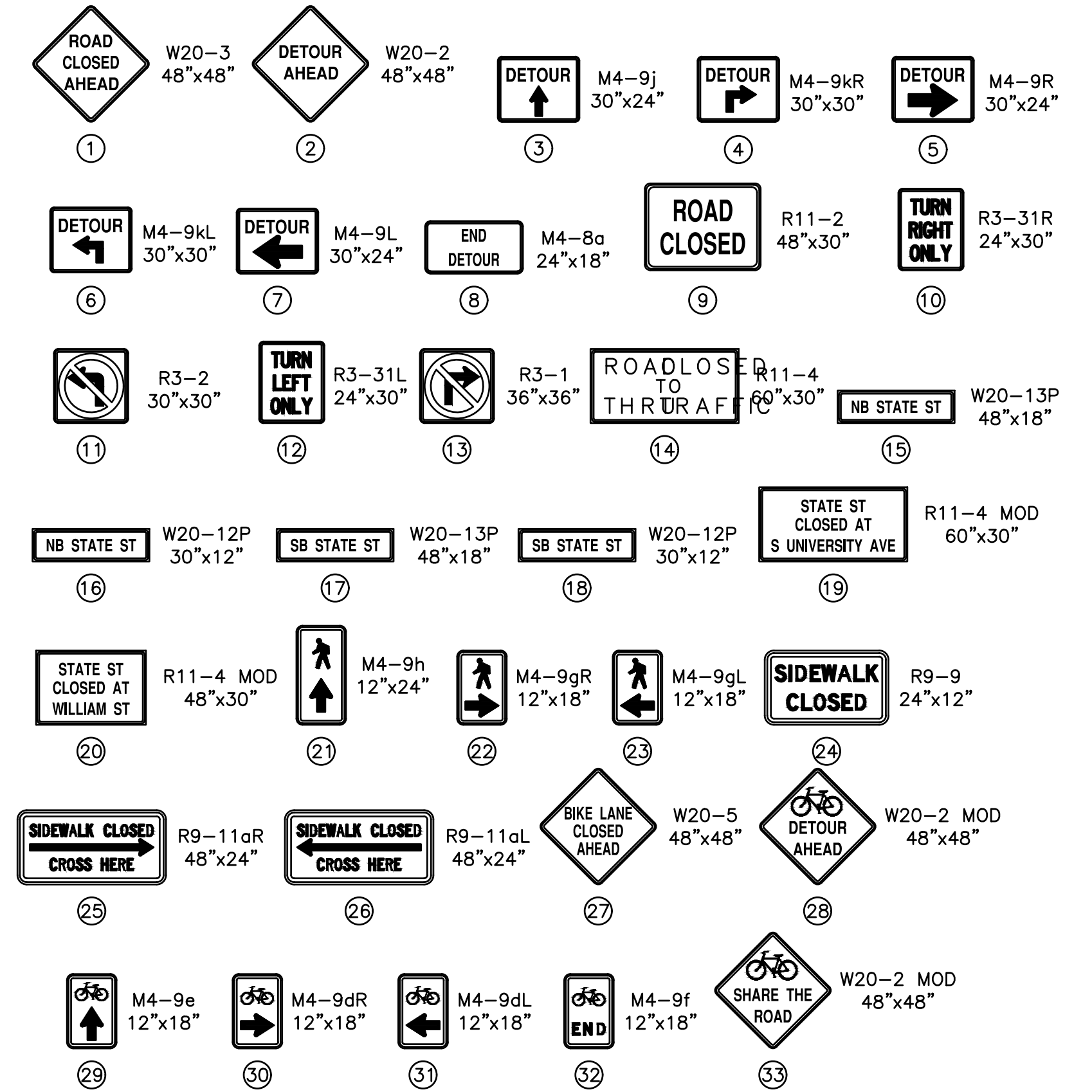
REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-6647
www.a3gov.org

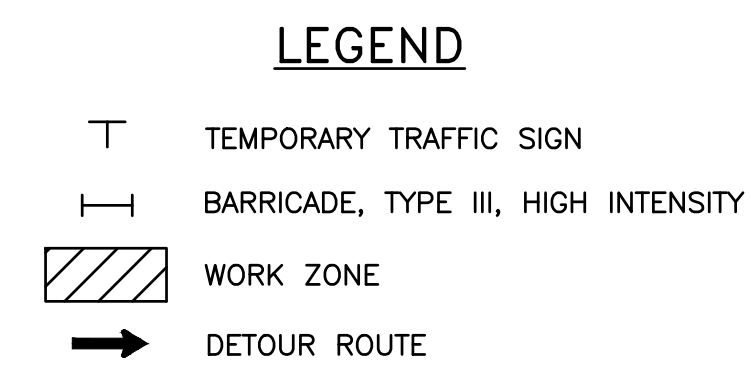
c:\pw_work\wade-trim_rbrown\dl339881\CPM-PLTS-Maintenance Of Traffic.dwg Dwg Created: 31-Jan-25 - _02 standard bw.stb - Plot Date: 3-Feb-25



PHASE 1A
ADDITIONAL CLOSURE OF NORTH UNIVERSITY AVE AT STATE ST INTERSECTION



- NOTES:**
- CONSTRUCTION, WARNING, REGULATORY, AND GUIDE SIGNS SHOWN MUST BE PLACED ACCORDING TO MDOT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND MAY REQUIRE FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
 - TRAFFIC SHALL BE MAINTAINED ACCORDING TO MDOT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING ANY SUPPLEMENTAL SPECIFICATIONS, MDOT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND AS SPECIFIED IN THIS PLAN SHEET.
 - SEE PEDESTRIAN AND BICYCLE DETOURS FOR NON-MOTORIZED TRAFFIC CONTROL.



811
Know what's below.
Call Before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

MOT PLAN - PHASE 1A

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-6647
www.a3gov.org

SCALE: 1"=20'

DRAWING No. **2023-023-67**

SHEET No. **67 OF 75**

c:\pw_work\wade--trim_rbrown\d1339881\CPM--PLTS--Maintenance Of Traffic.dwg Dwg Created: 31-Jan-25 - _02 standard bw.stb - Plot Date: 3-Feb-25



PHASE 1B
ADDITIONAL CLOSURE OF NORTH UNIVERSITY AVE AT STATE ST INTERSECTION

1	ROAD CLOSED AHEAD W20-3 48"x48"	2	DETOUR AHEAD W20-2 48"x48"	3	DETOUR M4-9j 30"x24"	4	DETOUR M4-9kR 30"x30"	5	DETOUR M4-9R 30"x24"
6	DETOUR M4-9kL 30"x30"	7	DETOUR M4-9L 30"x24"	8	END DETOUR M4-8a 24"x18"	9	ROAD CLOSED R11-2 48"x30"	10	TURN RIGHT ONLY R3-31R 24"x30"
11	R3-2 30"x30"	12	TURN LEFT ONLY R3-31L 24"x30"	13	R3-1 36"x36"	14	ROAD CLOSED TO THRU TRAFFIC R11-4 48"x30"	15	NB STATE ST W20-13P 48"x18"
16	NB STATE ST W20-12P 30"x12"	17	SB STATE ST W20-13P 48"x18"	18	SB STATE ST W20-12P 30"x12"	19	STATE ST CLOSED AT S UNIVERSITY AVE R11-4 MOD 60"x30"		
20	STATE ST CLOSED AT WILLIAM ST R11-4 MOD 48"x30"	21	M4-9h 12"x24"	22	M4-9gR 12"x18"	23	M4-9gL 12"x18"	24	SIDEWALK CLOSED R9-9 24"x12"
25	SIDEWALK CLOSED CROSS HERE R9-11aR 48"x24"	26	SIDEWALK CLOSED CROSS HERE R9-11aL 48"x24"	27	BIKE LANE CLOSED AHEAD W20-5 48"x48"	28	DETOUR AHEAD W20-2 MOD 48"x48"		
29	M4-9e 12"x18"	30	M4-9dR 12"x18"	31	M4-9dL 12"x18"	32	END M4-9f 12"x18"	33	SHARE THE ROAD W20-2 MOD 48"x48"

- NOTES:
- CONSTRUCTION, WARNING, REGULATORY, AND GUIDE SIGNS SHOWN MUST BE PLACED ACCORDING TO MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND MAY REQUIRE FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
 - TRAFFIC SHALL BE MAINTAINED ACCORDING TO MDT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING ANY SUPPLEMENTAL SPECIFICATIONS, MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND AS SPECIFIED IN THIS PLAN SHEET.
 - SEE PEDESTRIAN AND BICYCLE DETOURS FOR NON-MOTORIZED TRAFFIC CONTROL.

LEGEND

- T TEMPORARY TRAFFIC SIGN
- I BARRICADE, TYPE III, HIGH INTENSITY
- ▨ WORK ZONE
- DETOUR ROUTE

Know what's below.
Call before you dig.

REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
MOT PLAN - PHASE 1B

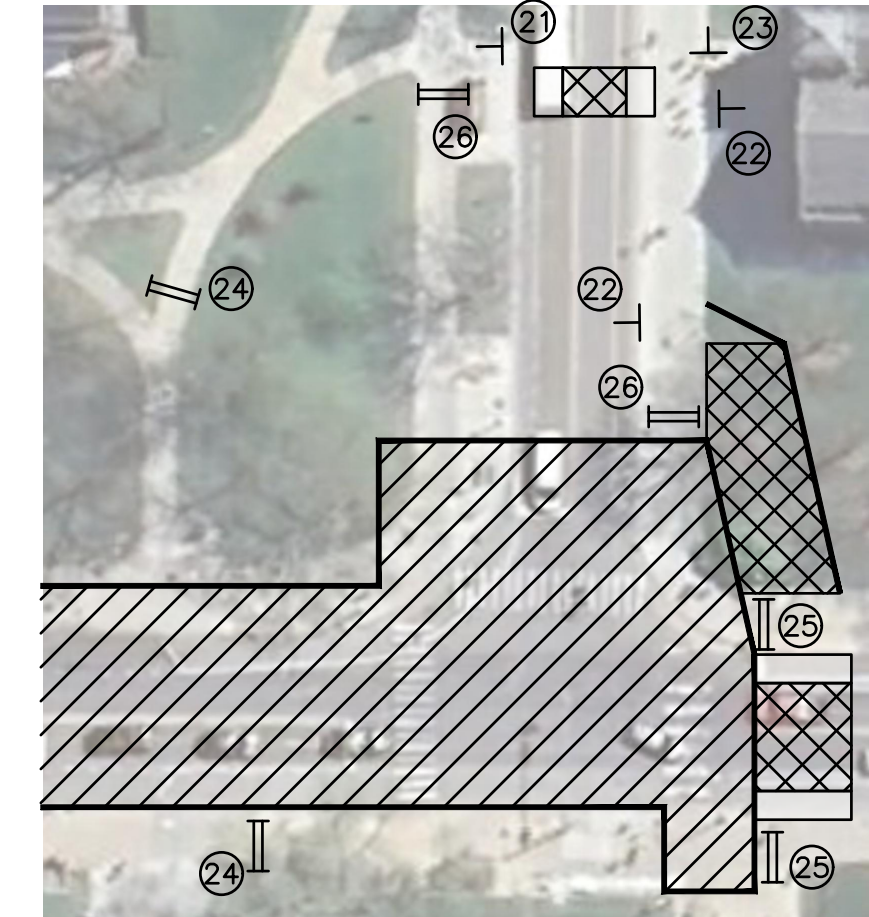
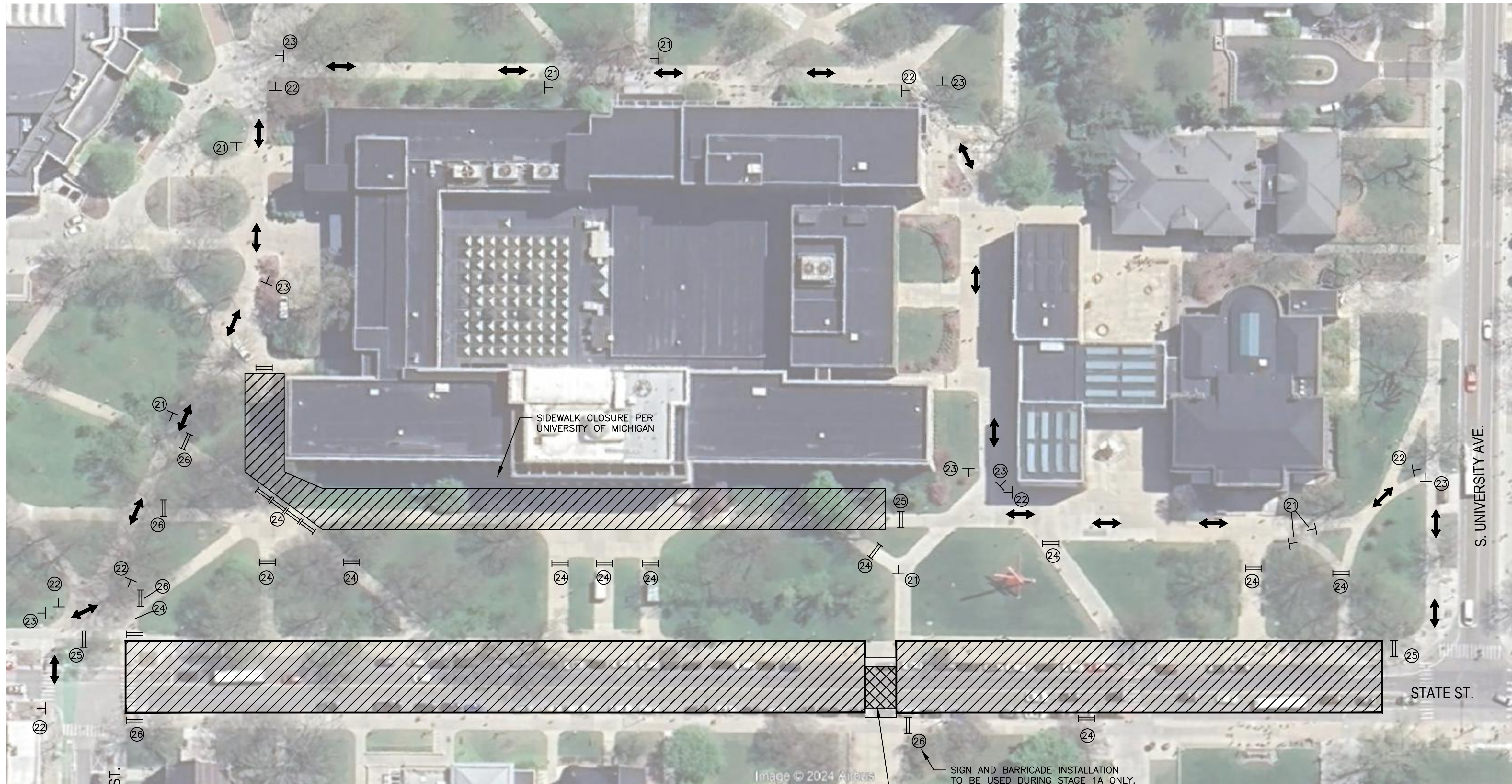
SCALE: 1"=20'

DRAWING No. 2023-023-68

SHEET No. 68 OF 75

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-0647
www.a2gov.org

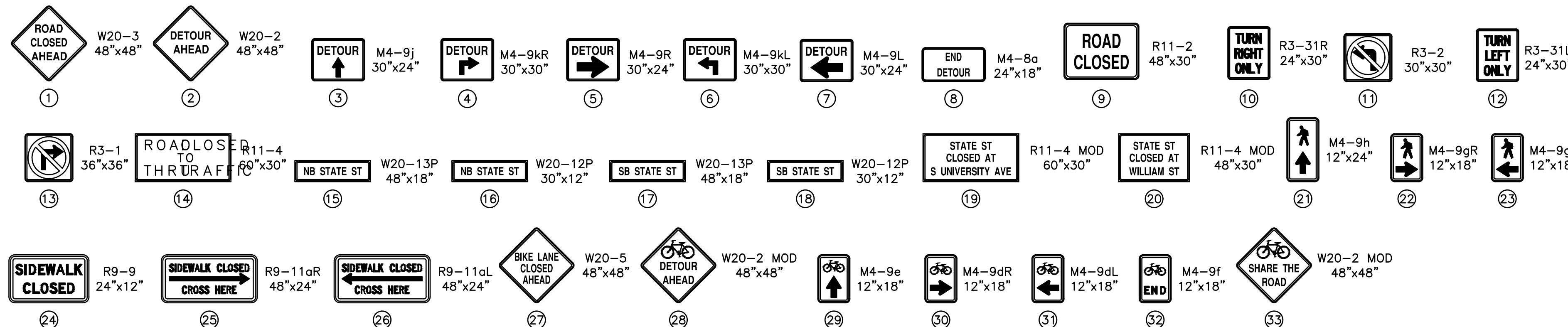
c:\pwwork\wade-trim\CPM-PLTS-Maintenance Of Traffic.dwg Dwg Created: 31-Jan-25 - _g2 standard bw.stb - Plot Date: 3-Feb-25



PEDESTRIAN DETOUR PHASE 1A
FULL CLOSURE OF STATE ST AND SOUTH UNIVERSITY INTERSECTION

PEDESTRIAN DETOUR PHASE 1

NOTE: LOCATION OF MIDBLOCK CROSSING MAY CHANGE THROUGHOUT CONSTRUCTION. CONTRACTOR MUST MAINTAIN ONE MIDBLOCK CROSSING BETWEEN SOUTH UNIVERSITY AND WILLIAM ST AT ALL TIMES AND AS DIRECTED BY THE ENGINEER.

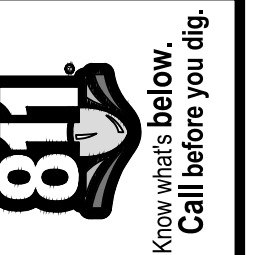


NOTES:

- CONSTRUCTION, WARNING, REGULATORY, AND GUIDE SIGNS SHOWN MUST BE PLACED ACCORDING TO MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND MAY REQUIRE FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
- TRAFFIC SHALL BE MAINTAINED ACCORDING TO MDT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING ANY SUPPLEMENTAL SPECIFICATIONS, MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND AS SPECIFIED IN THIS PLAN SHEET.
- ADDITIONAL PEDESTRIAN CLOSURES AND ACCESS MAY BE REQUIRED. UTILIZE THE CITY OF ANN ARBOR PEDESTRIAN TYPICALS WHEN NEEDED.

LEGEND

- T TEMPORARY TRAFFIC SIGN
- ||| BARRICADE, TYPE II, HIGH INTENSITY
- ▨ WORK ZONE
- ▭ TEMPORARY RAMP
- ▩ TEMPORARY PATH
- DETOUR ROUTE
- PEDESTRIAN CHANNELIZER



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

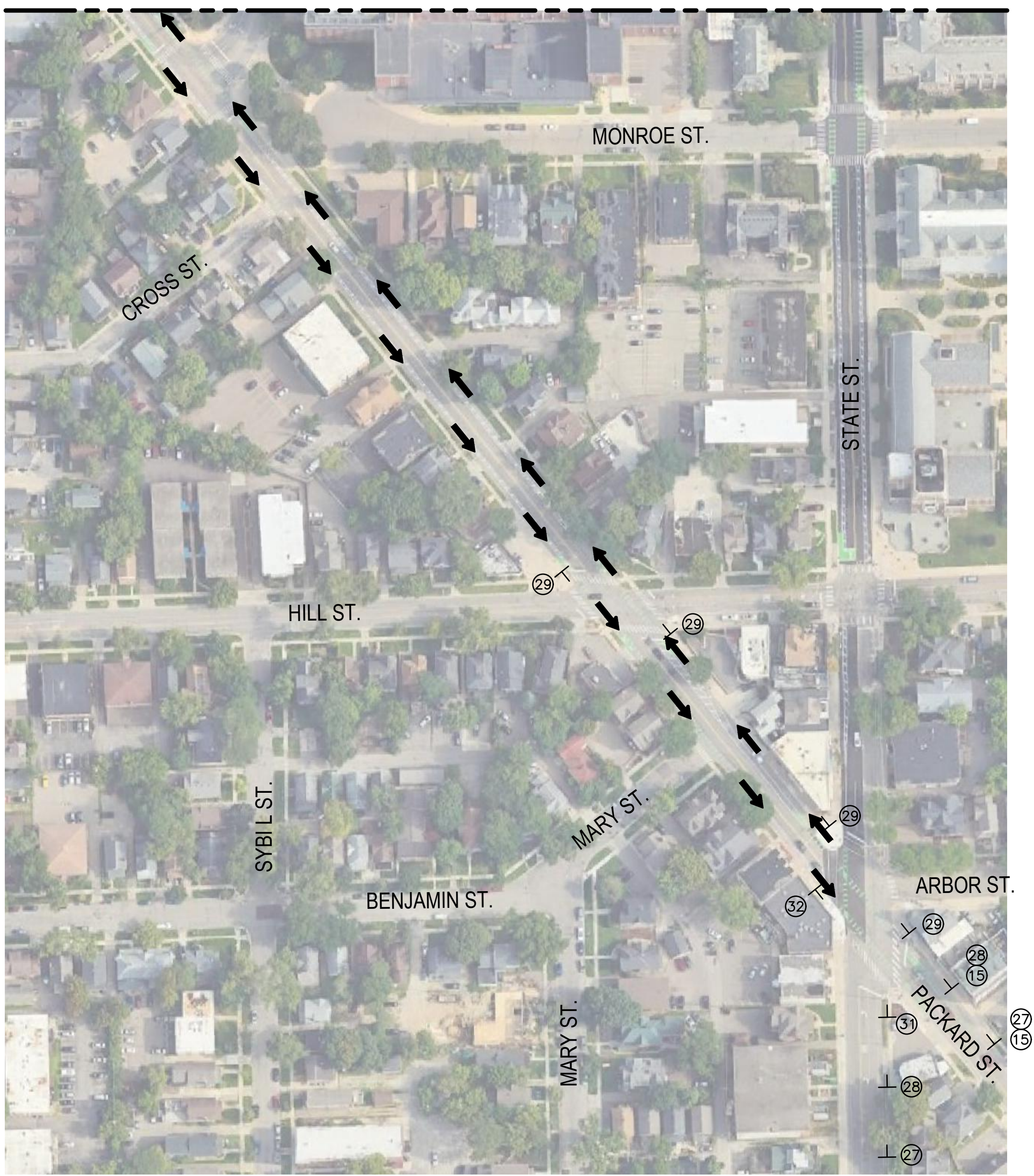
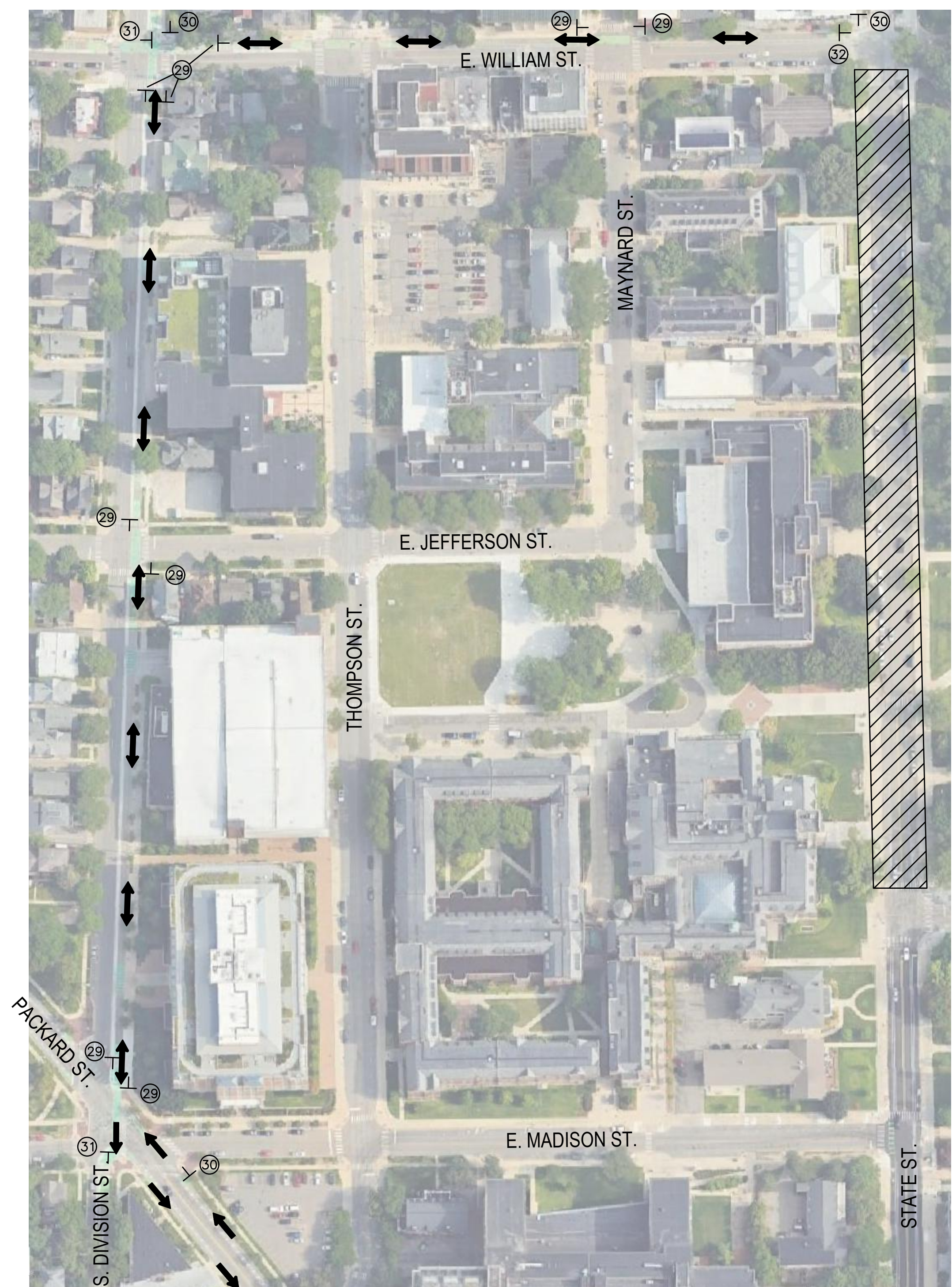
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a3gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
MOT PLAN - PEDESTRIAN DETOUR

SCALE: 1"=20'
DRAWING No. 2023-023-69
SHEET No.

c:\pw_work\wade-trim_fbrown\dl339881\CPM-PLTS-Maintenance Of Traffic.dwg Dwg Created: 31-Jan-25 - _02 standard bw.stb - Plot Date: 3-Feb-25



MATCH LINE THIS SHEET

MATCH LINE THIS SHEET

BICYCLE DETOUR FOR ALL PHASES

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22
23	24	25	26	27	28	29	30	31	32	33

LEGEND

- T TEMPORARY TRAFFIC SIGN
- || BARRICADE, TYPE II, HIGH INTENSITY
- ▨ WORK ZONE
- ➔ DETOUR ROUTE

- NOTES:**
- CONSTRUCTION, WARNING, REGULATORY, AND GUIDE SIGNS SHOWN MUST BE PLACED ACCORDING TO MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND MAY REQUIRE FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER.
 - TRAFFIC SHALL BE MAINTAINED ACCORDING TO MDT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING ANY SUPPLEMENTAL SPECIFICATIONS, MDT'S WORK ZONE SAFETY AND MOBILITY MANUAL AND AS SPECIFIED IN THIS PLAN SHEET.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

MOT PLAN - BICYCLE DETOUR

SCALE: 1"=100'

DRAWING No. 2023-023-70

SHEET No. 70 OF 75

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a2gov.org

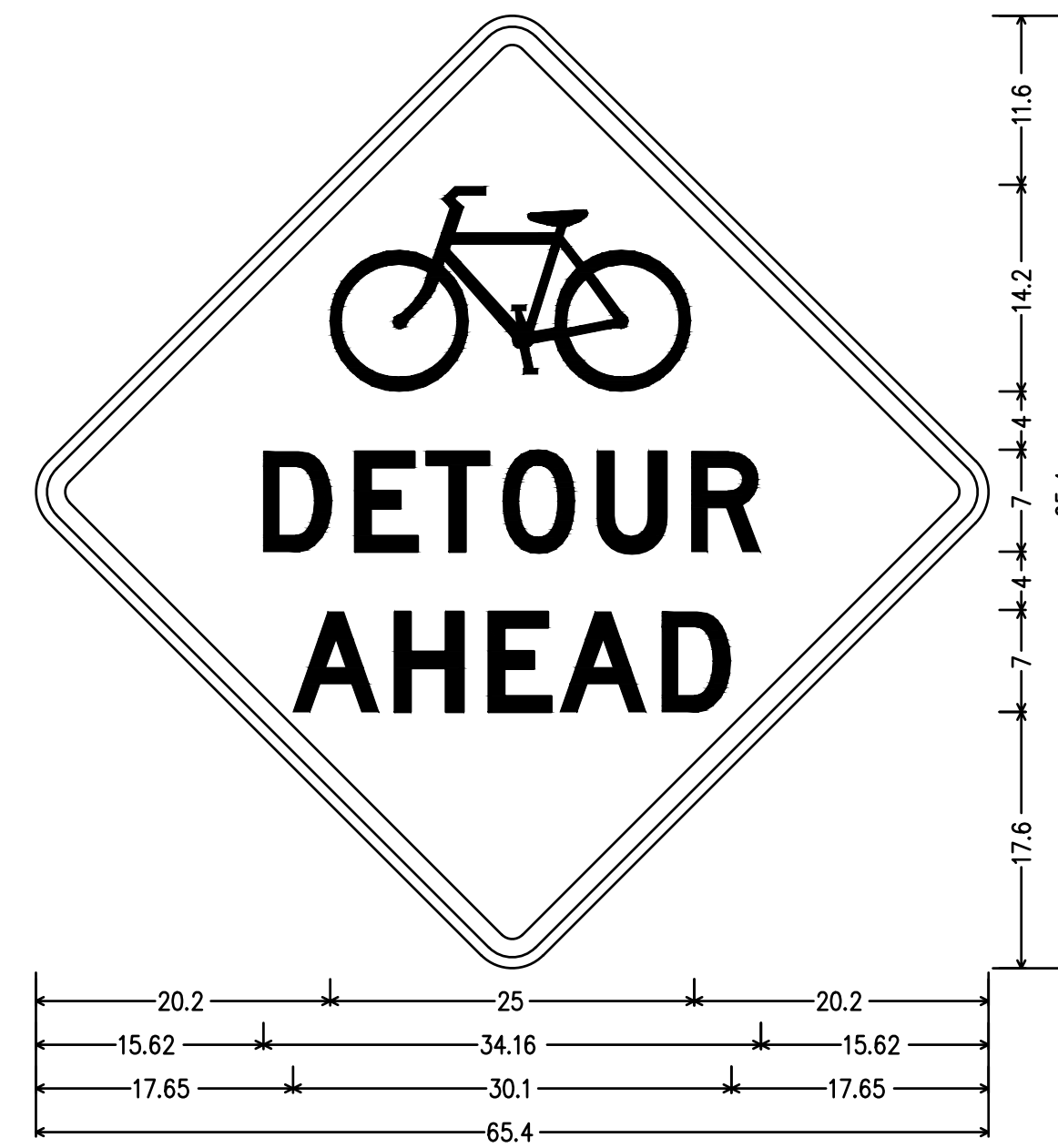
REV.	DESCRIPTION	DATE	DRAWN	CHECKED



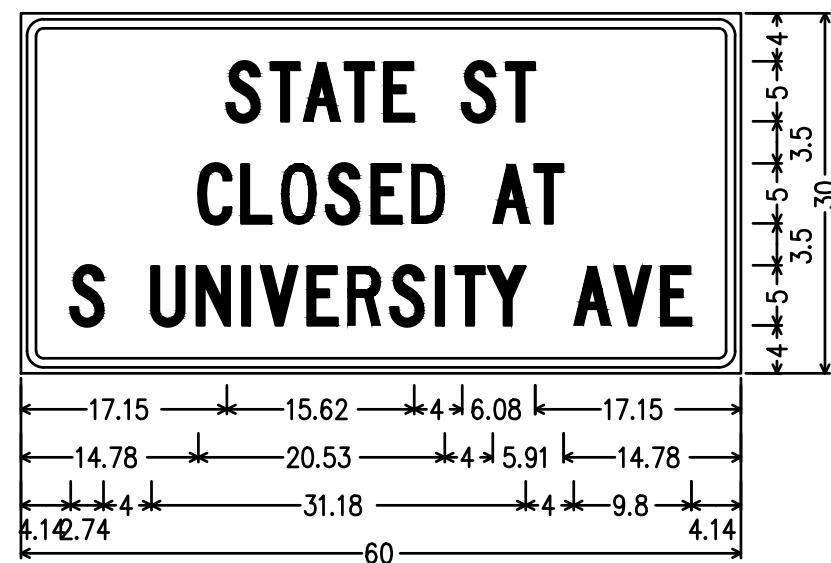
W21-6 MOD;
48.00" across sides 3.00" Radius, 1.25" Border, 0.75" Indent, Black on, Orange;
Symbol RG025; "SHARE", C 2K; "THE", C 2K; "ROAD", C 2K;



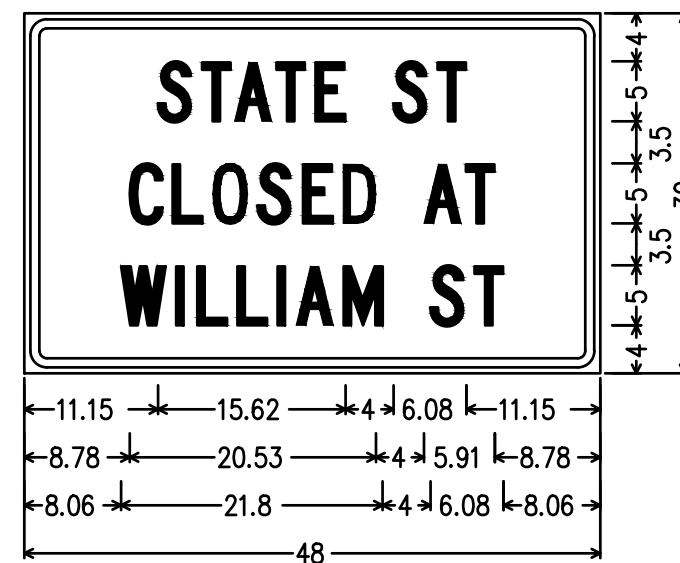
W20-5 MOD;
48.00" across sides 3.00" Radius, 1.25" Border, 0.75" Indent, Black on, Orange;
"BIKE", C 2K; "LANE", C 2K; "CLOSED", C 2K; "AHEAD", C 2K;



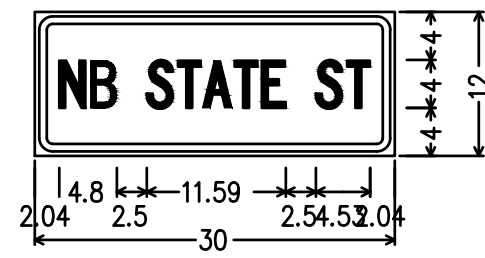
W21-6 MOD;
48.00" across sides 3.00" Radius, 1.25" Border, 0.75" Indent, Black on, Orange;
Symbol RG025; "DETOUR", D 2K; "AHEAD", D 2K;



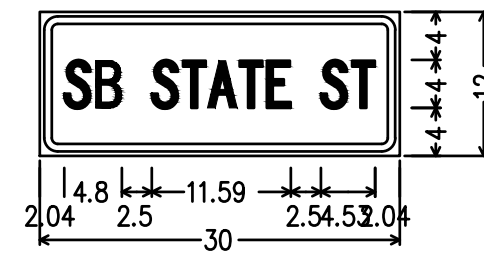
R11-4 MOD;
1.88" Radius, 0.75" Border, 0.50" Indent, Black on, Orange;
"STATE", C; "ST", C; "CLOSED", C; "AT", C;
"S", C; "UNIVERSITY", C; "AVE", C;



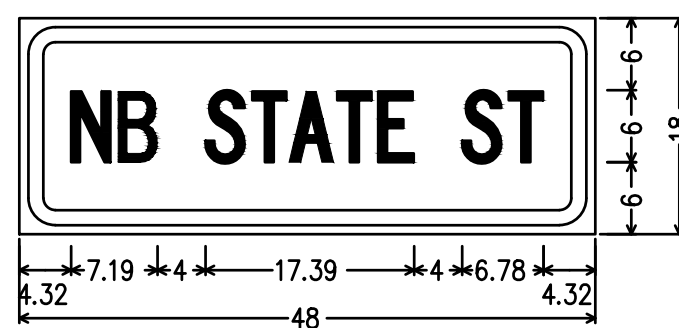
R11-4 MOD;
1.88" Radius, 0.75" Border, 0.50" Indent, Black on, Orange;
"STATE", C; "ST", C; "CLOSED", C;
"AT", C; "WILLIAM", C; "ST", C;



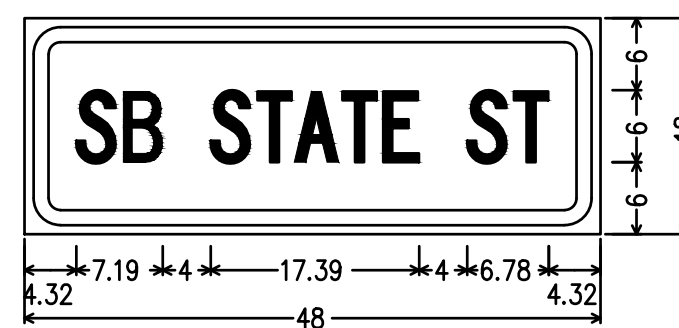
W20-13P;
1.50" Radius, 0.63" Border, 0.38" Indent, Black on, Orange;
"NB", C 50% spacing;
"STATE", C 50% spacing;
"ST", C 50% spacing;



W20-13P;
1.50" Radius, 0.63" Border, 0.38" Indent, Black on, Orange;
"SB", C 50% spacing;
"STATE", C 50% spacing;
"ST", C 50% spacing;



W20-13P;
3.00" Radius, 1.25" Border, 0.75" Indent, Black on, Orange;
"NB", C 50% spacing;
"STATE", C 50% spacing;
"ST", C 50% spacing;



W20-13P;
3.00" Radius, 1.25" Border, 0.75" Indent, Black on, Orange;
"SB", C 50% spacing;
"STATE", C 50% spacing;
"ST", C 50% spacing;



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

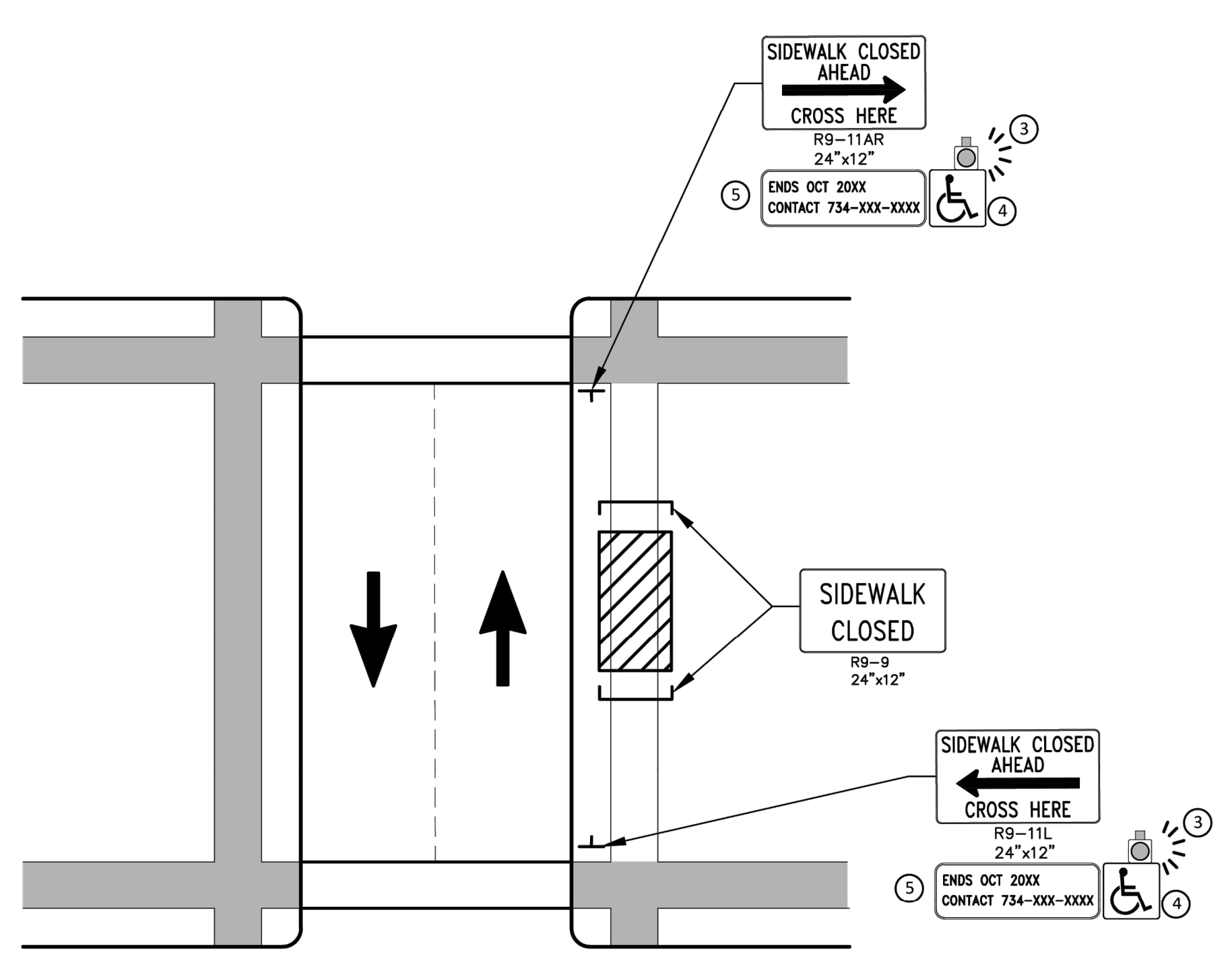
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-8647
www.a2gov.org



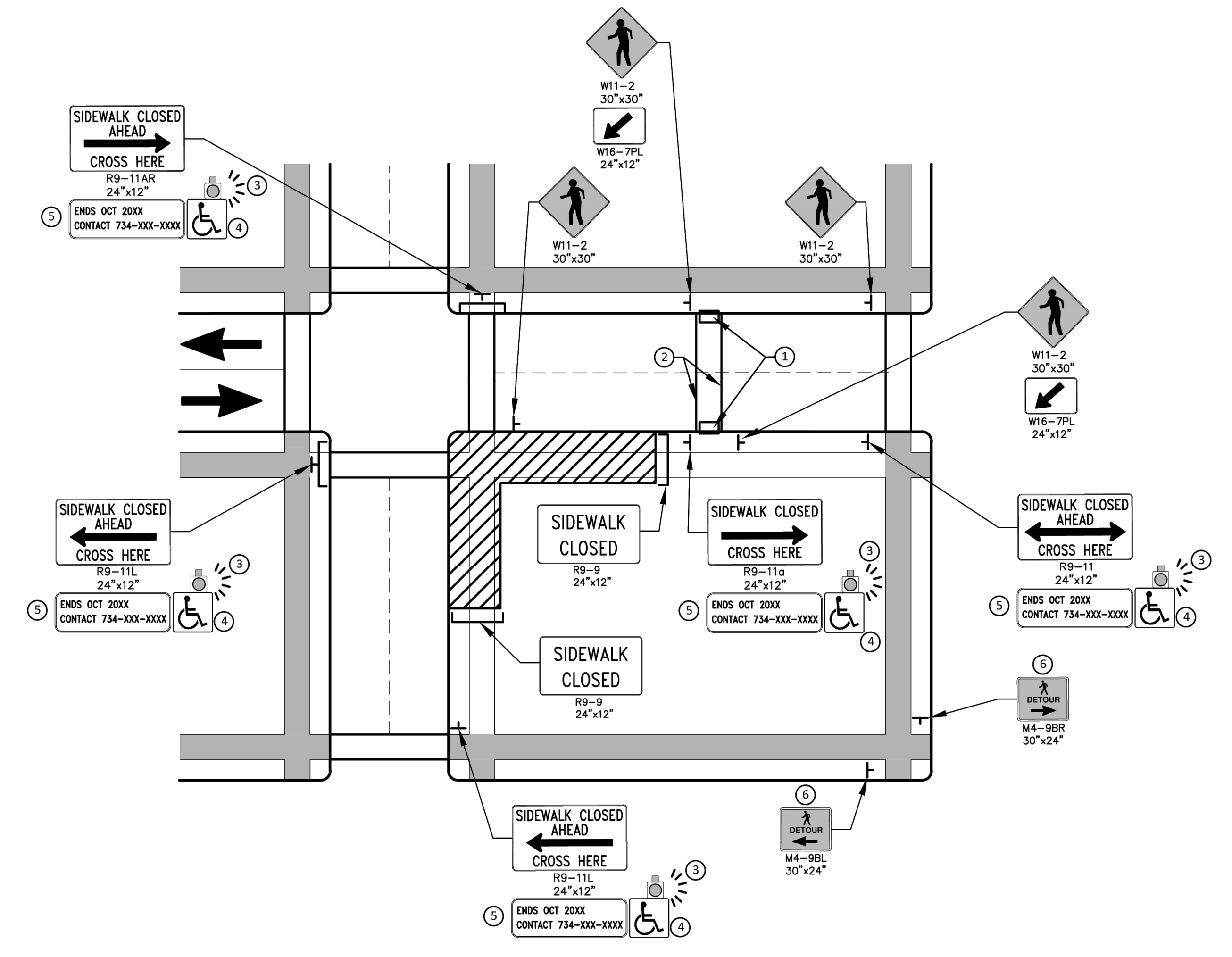
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
MOT SIGN SPECIAL DETAILS

SCALE: 1"=100'
DRAWING No.
2023-023-71

c:\pw_work\wade-trim_fbrown\dl339881\CPM-PLTS-Maintenance Of Traffic.dwg Dwg Created: 31-Jan-25 - _02 standard bw.stb - Plot Date: 3-Feb-25



PEDESTRIAN DETOUR USING OPPOSITE SIDE OF STREET



OTHER SIDE OF STREET DETOUR OR DETOUR WITH TRAILBLAZING SIGNS
(FOR CORNER SIDEWALK CLOSURE WITH OPTIONAL TEMPORARY CROSSWALK)

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, THE CONTRACTOR SHALL PROVIDE DETECTABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE AN ALTERNATE PEDESTRIAN ROUTE (APR) AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

PROVIDE A SMOOTH, CONTINUOUS, HARD SURFACE THROUGH THE LENGTH OF THE APR. COMPACTED GRAVEL, AGGREGATE, OR SLAG MATERIALS ARE NOT ALLOWED. PROVIDE A FIRM, STABLE, AND SLIP RESISTANT TEMPORARY WALKWAY SURFACE TO COVER SHORT SEGMENTS OF ROUGH, SOFT, OR UNEVEN GROUND.

THE PEDESTRIAN TRAFFIC SIGNALS CONTROLLING CLOSED CROSSWALKS SHALL BE COVERED OR DEACTIVATED BY THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE THIS WORK WITH THE ENGINEER A MINIMUM OF 72 HOURS (NOT INCLUDING WEEKENDS & HOLIDAYS) PRIOR TO THE BEGINNING OF WORK THAT REQUIRES A SIDEWALK CLOSURE.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

WHEN THE ENGINEER DETERMINES THAT THE CONTRACTOR'S OPERATIONS OR PLACEMENT OF TRAFFIC CONTROL DEVICES HAS CAUSED A SITUATION THAT THE VISIBILITY OF IS REDUCED ENOUGH TO CREATE A HAZARD, THE TRAFFIC CONTROL DEVICES SHALL BE DELINEATED WITH FLAGS OR OTHER ENGINEER-APPROVED DEVICES AT NO ADDITIONAL COST TO THE PROJECT.

MINIMIZE DISRUPTION TO PEDESTRIANS TO THE MAXIMUM EXTENT FEASIBLE BY PROVIDING AN APR IN THE FOLLOWING ORDER OF PREFERENCE:

1. PROVIDE THE APR ON THE SAME SIDE OF THE STREET AS THE DISRUPTED ROUTE UTILIZING BYPASSES.
2. WHERE IT IS NOT FEASIBLE TO PROVIDE A SAME SIDE APR, PROVIDE A DETOUR ON THE OTHER SIDE OF THE STREET.
3. WHERE IT IS NOT FEASIBLE TO PROVIDE AN APR ON THE OTHER SIDE OF THE ROADWAY, PROVIDE AN APR DETOUR WITH TRAILBLAZING SIGNS AS SHOWN ON THE PROJECT PLANS.

SPECIFIC NOTES

1. TEMPORARY CURB RAMPS WITH DETECTABLE WARNINGS.
2. TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
3. AN APPROVED AUDIBLE MESSAGE DEVICE OR TACTILE MESSAGE SHALL BE PROVIDED FOR SIGHT-IMPAIRED PEDESTRIANS.
4. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHOULD BE DISPLAYED WHEN ANY WALKWAY THROUGH A WORK ZONE HAS BEEN DETERMINED TO BE TPAR COMPLIANT. THE SYMBOL OF ACCESSIBILITY SHALL NOT BE DISPLAYED IF PERSONS WITH DISABILITIES SHOULD NOT USE THE PRIMARY TEMPORARY PEDESTRIAN DETOUR. THE REASON FOR THE NON-COMPLIANCE SHALL BE POSTED AND AN ALTERNATE ROUTE SHALL BE POSTED WHEN THE PRIMARY TEMPORARY PEDESTRIAN DETOUR IS NON-COMPLIANT TO TPAR STANDARDS.
5. TYPICAL SIGN MESSAGE FOR A TEMPORARY PEDESTRIAN DETOUR SHALL INCLUDE INFORMATION SUCH AS THE DURATION OF THE WALKWAY RESTRICTIONS (BEGINNING AND/OR END DATES) AND A PROJECT CONTACT NUMBER FOR 24 / 7 QUESTIONS OR REPORTING HAZARDS.
6. PEDESTRIAN DETOUR TRAILBLAZING SIGNS SHALL BE USED IF THE PEDESTRIAN DETOUR IS IN A LOCATION OTHER THAN ACROSS THE STREET FROM THE SIDEWALK CLOSURE.

PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES

1. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN THROUGH MOVEMENTS FROM ONE END OF THE CONSTRUCTION AREA TO THE OTHER, ON AT LEAST ONE SIDE OF THE STREET DURING CONSTRUCTION. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MMUTCD, PART 6.
2. PEDESTRIAN ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROPERTIES, BUILDINGS, RESIDENCES AND COMMERCIAL PROPERTIES AT ALL TIMES. THIS MAY INCLUDE TEMPORARY WALKWAYS SPANNING THE CONSTRUCTION AREA.
3. IF SIDEWALKS ARE CLOSED, A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) SHALL BE PROVIDED ON THE SAME SIDE OF THE ROAD AS THE CLOSED SIDEWALK, IF POSSIBLE. SIGNS AND BARRICADES SHALL BE USED TO PROVIDE ADVANCE NOTICE OF THE CLOSURE AND THE ROUTE OF ANY PEDESTRIAN DETOURS. THE TPAR SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4 FEET. IF THE TPAR IS LESS THAN 5 FEET IN WIDTH, A 5 FOOT BY 5 FOOT PASSING SPACE SHALL BE PROVIDED AT LEAST EVERY 200 FEET. THE SURFACE OF THE TPAR SHALL BE SMOOTH AND CONTINUOUS FOR THE LENGTH OF THE TPAR. THE TPAR SHALL MAINTAIN THE SAME LEVEL OF ACCESSIBILITY AND DETECTABILITY AS THE FACILITY THAT IS BEING CLOSED. THE TPAR SHALL NOT LEAD PEDESTRIANS INTO CONFLICTS WITH VEHICLES, EQUIPMENT, OR CONSTRUCTION OPERATIONS.
4. IF THE TPAR IS ADJACENT TO MOVING TRAFFIC, CONSTRUCTION OPERATIONS/EQUIPMENT, OR DROP-OFFS, THEN CRASH WORTHY CHANNELIZING DEVICES THAT MEET THE REQUIREMENTS OF NCHRP 350 AND THE MMUTCD SHALL BE USED.
5. THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION MATERIALS, EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.
6. THE CONTRACTOR'S OPERATIONS SHALL NOT OCCUPY SIDEWALKS EXCEPT WHERE PROPER PROTECTION AND A TPAR HAVE BEEN PROVIDED.
7. WHEN DIRECTED BY THE ENGINEER, OR STATED ON THE PLANS, THE CONTRACTOR SHALL PROVIDE A TEMPORARY PEDESTRIAN TRAFFIC CONTROL PLAN FOR REVIEW AND WRITTEN APPROVAL BY THE ENGINEER A MINIMUM OF THREE WEEKS BEFORE SUCH PLAN IS IMPLEMENTED. THIS PLAN SHALL DETAIL THE CONSTRUCTION PHASING AND SCHEDULE AND THE SPECIFIC METHODS OF MAINTAINING SAFE PEDESTRIAN ACCESS THROUGHOUT THE CONSTRUCTION AREA. THIS PLAN SHALL PROVIDE THE LOCATION AND DETAILS OF TEMPORARY CONSTRUCTION SIGNING, MARKINGS, BARRICADES, CHANNELIZING DEVICES, TPARS AND METHODS TO MAINTAIN ACCESS TO ADJACENT PROPERTIES, BUSINESSES, RESIDENCES, ETC. NO WORK SHALL BE ALLOWED TO BEGIN UNTIL THIS PLAN IS APPROVED BY THE ENGINEER IN WRITING.
8. PROVISION OF THE TPAR AND ALL OF ITS ELEMENTS, INCLUDING BUT NOT LIMITED TO, CREATION OF THE TEMPORARY PEDESTRIAN CONTROL PLAN, SIGNS, CHANNELIZING DEVICES, BARRICADES, TEMPORARY PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "MINOR TRAF DEVICES."

LEGEND

- SIGN
- ▨ EXISTING PEDESTRIAN SURFACE
- ▨ WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- BARRIER
- SIDEWALK BARRICADE
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DEVICE

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

STATE STREET IMPROVEMENTS

MOT AA PEDESTRIAN DETOUR DETAILS

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-8647
ANN ARBOR: 734.794.6410
www.aagov.org

811
Know what's below.
Call before you dig.

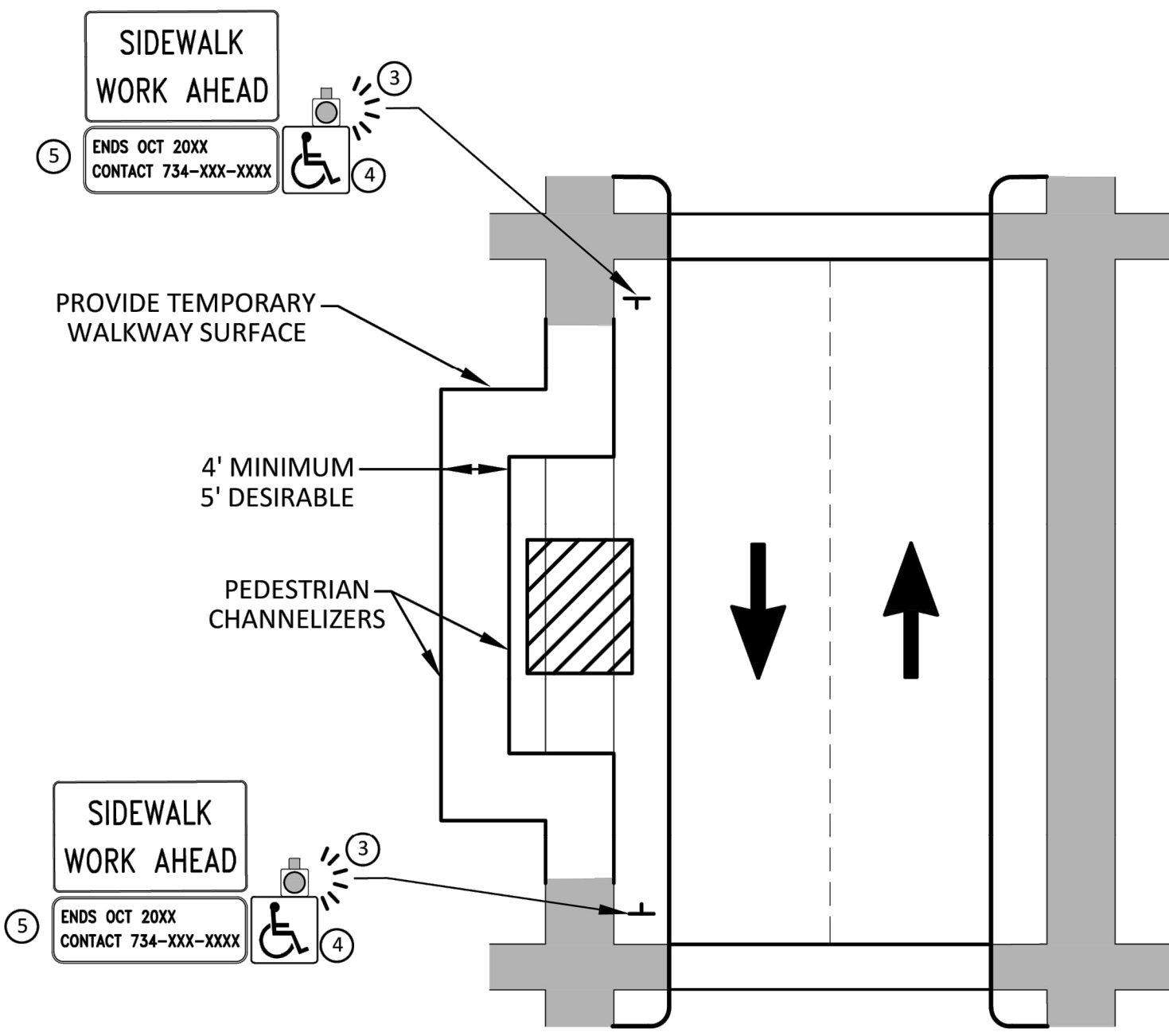
REV.	DESCRIPTION	DATE	DRAWN	CHECKED

SCALE: 1"=100'

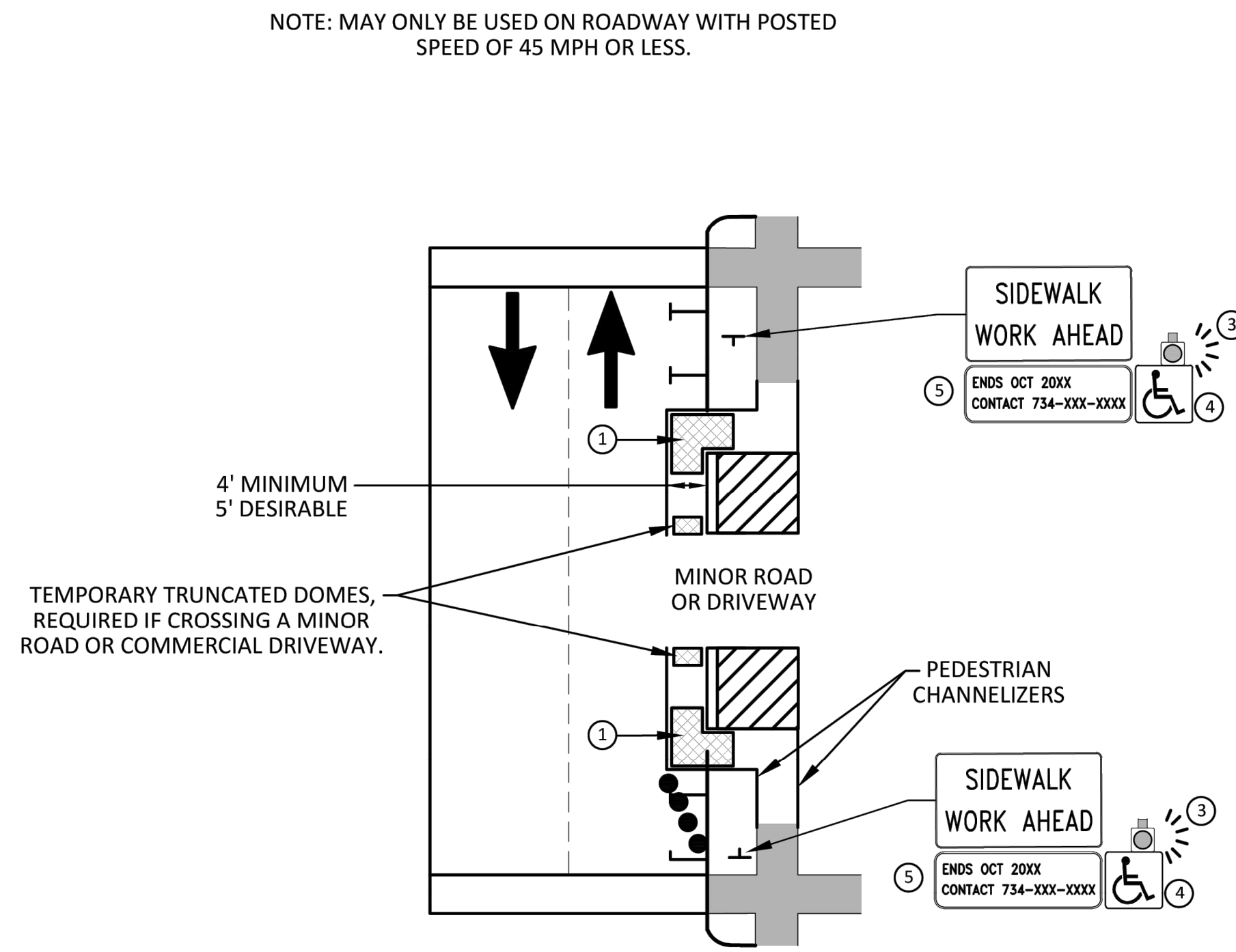
DRAWING No. 2023-023-72

SHEET No. 72 OF 75

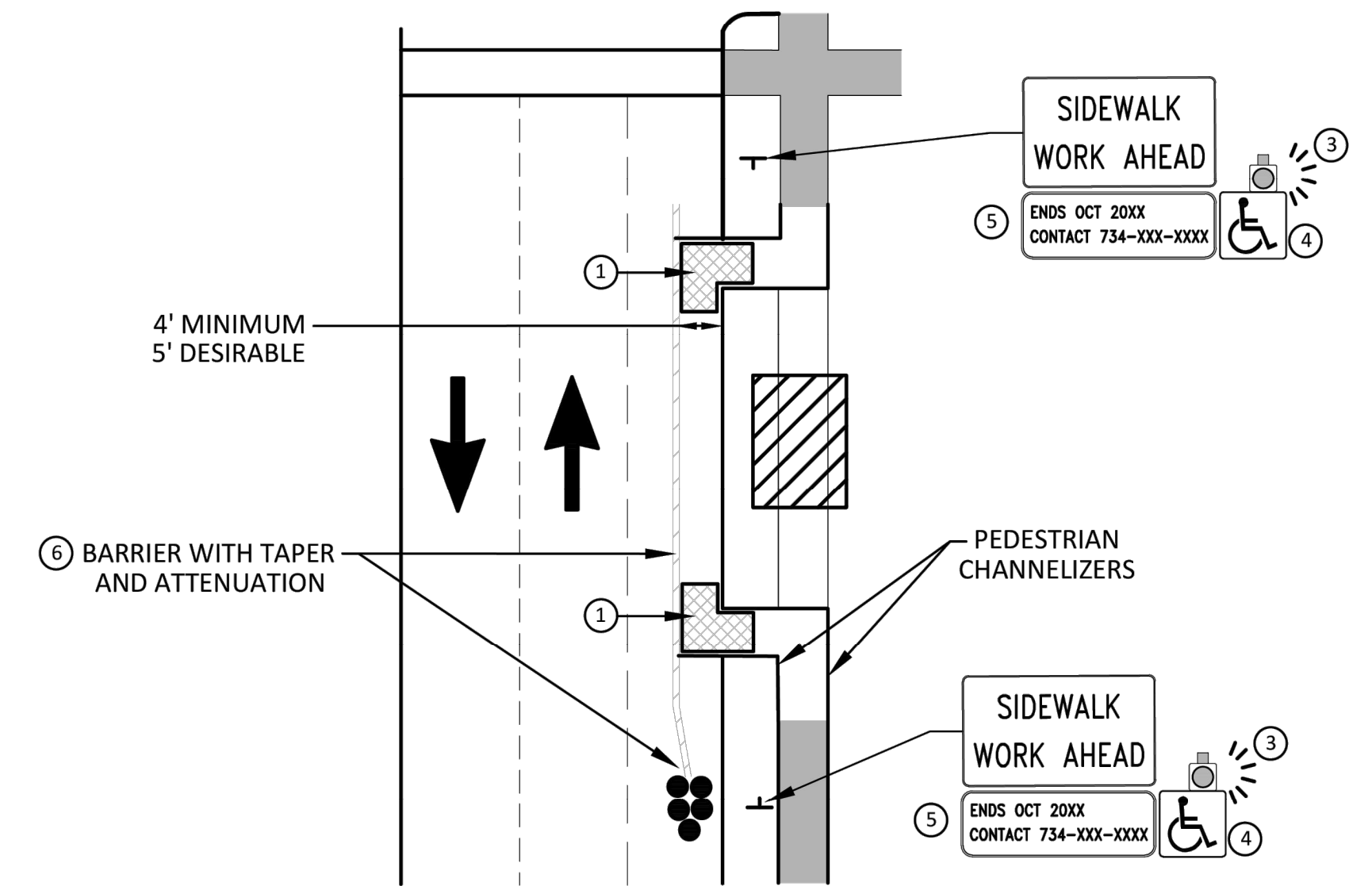
c:\pw_work\wade-trim_brown\01.339881\CPM-PLTS-Maintenance Of Traffic.dwg Dwg Created: 31-Jan-25 - 02 standard bw.stb - Plot Date: 3-Feb-25



**BYPASS ON ADJACENT AVAILABLE
RIGHT OF WAY
BYPASS TYPE A**



**SIDEWALK BYPASS USING PARKING OR
SHOULDER ON LOW SPEED ROADWAY
BYPASS TYPE B**



**SIDEWALK BYPASS USING
SHOULDER OR PARKING LANE ON
HIGH SPEED ROADWAY
BYPASS TYPE C**

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, THE CONTRACTOR SHALL PROVIDE DETECTABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE AN ALTERNATE PEDESTRIAN ROUTE (APR) AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

PROVIDE A SMOOTH, CONTINUOUS, HARD SURFACE THROUGH THE LENGTH OF THE APR. COMPACTED GRAVEL, AGGREGATE, OR SLAG MATERIALS ARE NOT ALLOWED. PROVIDE A FIRM, STABLE, AND SLIP RESISTANT TEMPORARY WALKWAY SURFACE TO COVER SHORT SEGMENTS OF ROUGH, SOFT, OR UNEVEN GROUND.

THE PEDESTRIAN TRAFFIC SIGNALS CONTROLLING CLOSED CROSSWALKS SHALL BE COVERED OR DEACTIVATED BY THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE THIS WORK WITH THE ENGINEER A MINIMUM OF 72 HOURS (NOT INCLUDING WEEKENDS & HOLIDAYS) PRIOR TO THE BEGINNING OF WORK THAT REQUIRES A SIDEWALK CLOSURE.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

WHEN THE ENGINEER DETERMINES THAT THE CONTRACTOR'S OPERATIONS OR PLACEMENT OF TRAFFIC CONTROL DEVICES HAS CAUSED A SITUATION THAT THE VISIBILITY OF A TRAFFIC CONTROL DEVICE IS REDUCED ENOUGH TO CREATE A HAZARD, THE TRAFFIC CONTROL DEVICES SHALL BE DELINEATED WITH FLAGS OR OTHER ENGINEER-APPROVED DEVICES AT NO ADDITIONAL COST TO THE PROJECT.

MINIMIZE DISRUPTION TO PEDESTRIANS TO THE MAXIMUM EXTENT FEASIBLE BY PROVIDING AN APR IN THE FOLLOWING ORDER OF PREFERENCE:

1. PROVIDE THE APR ON THE SAME SIDE OF THE STREET AS THE DISRUPTED ROUTE UTILIZING BYPASSES.
2. WHERE IT IS NOT FEASIBLE TO PROVIDE A SAME SIDE APR, PROVIDE A DETOUR ON THE OTHER SIDE OF THE STREET.
3. WHERE IT IS NOT FEASIBLE TO PROVIDE AN APR ON THE OTHER SIDE OF THE ROADWAY, PROVIDE AN APR DETOUR WITH TRAILBLAZING SIGNS AS SHOWN ON THE PROJECT PLANS.

SPECIFIC NOTES

1. TEMPORARY CURB RAMPS WITH DETECTABLE WARNINGS.
2. 5 DEVICE TAPER 25 FEET LONG, RECOMMENDED WHEN THE CLOSED AREA WAS USED AS AN INTERMITTENT TRAFFIC LANE OR BYPASS LANE. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
3. AN APPROVED AUDIBLE MESSAGE DEVICE OR TACTILE MESSAGE SHOULD BE PROVIDED FOR SIGHT-IMPAIRED PEDESTRIANS.
4. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE DISPLAYED WHEN ANY WALKWAY THROUGH A WORK ZONE HAS BEEN DETERMINED TO BE TPAR COMPLIANT. THE SYMBOL OF ACCESSIBILITY SHALL NOT BE DISPLAYED IF PERSONS WITH DISABILITIES SHOULD NOT USE THE PRIMARY TEMPORARY PEDESTRIAN DETOUR. THE REASON FOR THE NON-COMPLIANCE SHALL BE POSTED AND AN ALTERNATE ROUTE SHALL BE POSTED WHEN THE PRIMARY TEMPORARY PEDESTRIAN DETOUR IS NON-COMPLIANT TO TPAR STANDARDS.
5. TYPICAL SIGN MESSAGE FOR A TEMPORARY PEDESTRIAN DETOUR SHALL INCLUDE INFORMATION SUCH AS THE DURATION OF THE WALKWAY RESTRICTIONS (BEGINNING AND/OR END DATES) AND A PROJECT CONTACT NUMBER FOR 24 / 7 QUESTIONS OR REPORTING HAZARDS.
6. SEE MMUTCD FOR GUIDANCE ON PLACEMENT AND USAGE OF BARRIER.

LEGEND

- SIGN
- ▨ EXISTING PEDESTRIAN SURFACE
- ▨ WORK AREA
- ▨ PEDESTRIAN CHANNELIZATION DEVICE
- ▨ BARRIER
- SIDEWALK BARRICADE
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DEVICE



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

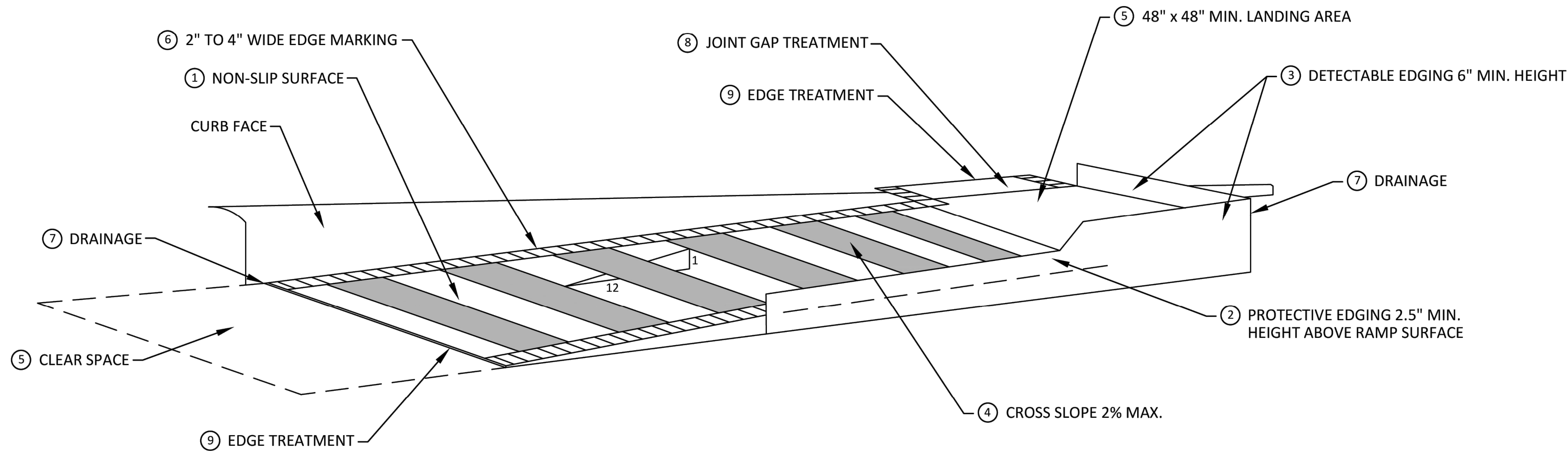
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a3gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
MOT AA PEDESTRIAN DETOUR DETAILS

SCALE: 1"=100'
DRAWING No. 2023-023-73

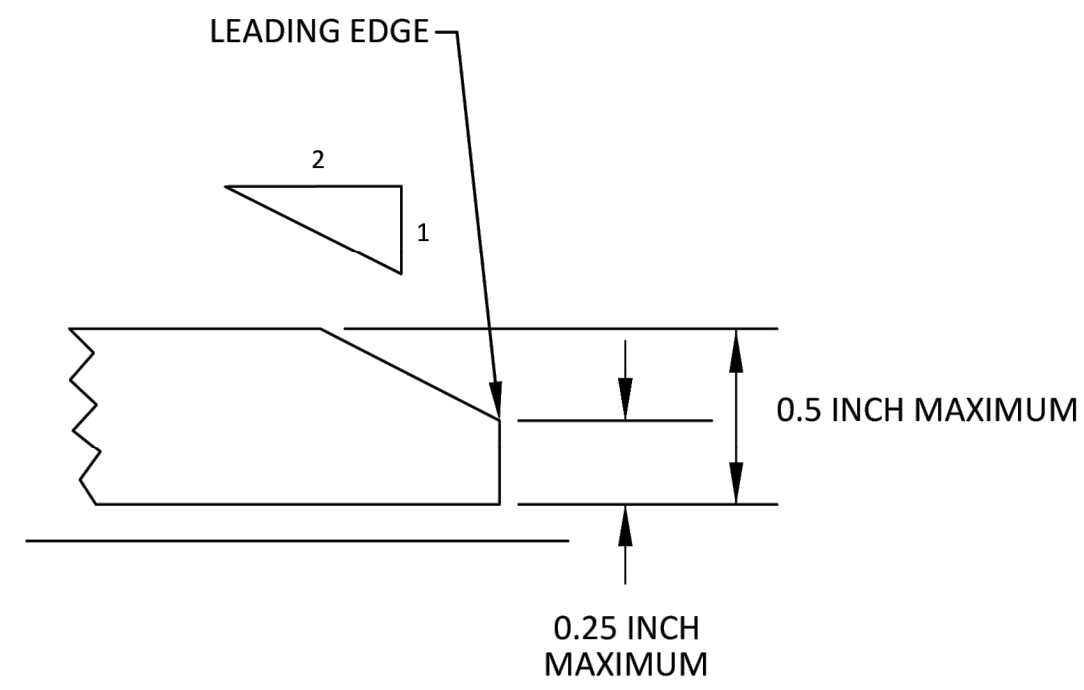
c:\pwork\work--trim_rbrown\1339881\CPM--PLTS--Maintenance Of Traffic.dwg Dwg Created: 31-Jan-25 --_02 standard bw.stb -- Plot Date: 3-Feb-25



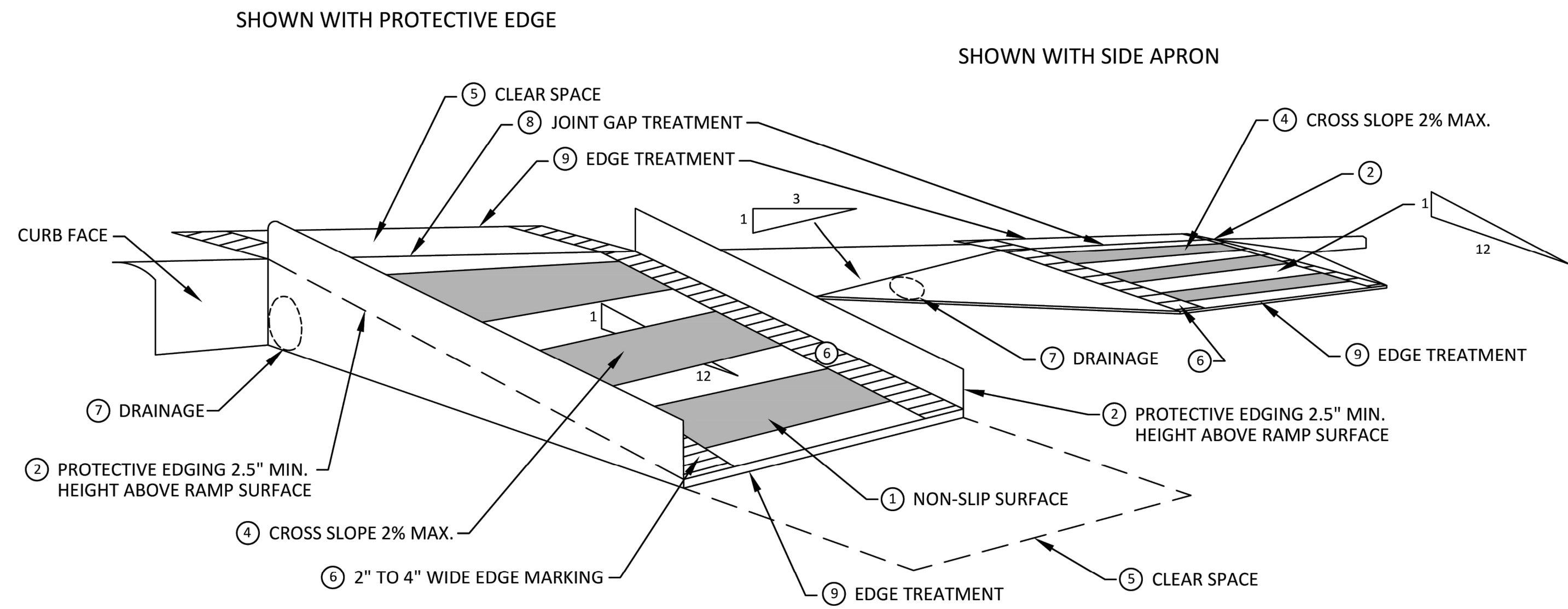
**TEMPORARY CURB RAMP
PARALLEL TO CURB**

SPECIFIC NOTES

- ① CURB RAMP SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. PROTECTIVE EDGING WITH A 2.5" MIN. HEIGHT ABOVE THE RAMP SHALL BE PLACED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3. PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMP OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ② DETECTABLE EDGING ANYTIME A HANDRAIL IS REQUIRED, AND ANYTIME THE PATH CHANGES DIRECTION. THIS INCLUDES A TURN ONTO THE RAMP FROM THE PATH. DETECTABLE EDGING MUST BEGIN A MAXIMUM OF 2.5" ABOVE THE RAMP SURFACE, AND EXTEND AT LEAST 6" ABOVE THE RAMP SURFACE. CONTRASTING COLOR SHALL BE PLACED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ③ CURB RAMP AND LANDINGS SHALL HAVE A 2% MAX. CROSS SLOPE.
- ④ CLEAR SPACE OF 48" x 48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- ⑤ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A CONTRASTING COLOR, 2" TO 4" WIDE MARKING. THE MARKING IS OPTIONAL WHERE COLOR CONTRASTING EDGING IS USED.
- ⑥ WATER FLOW IN THE GUTTER SYSTEM SHALL NOT BE IMPEDED.
- ⑦ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
- ⑧ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHOULD BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2" HEIGHT.



⑨ EDGE TREATMENT



**TEMPORARY CURB RAMP
PERPENDICULAR TO CURB**



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

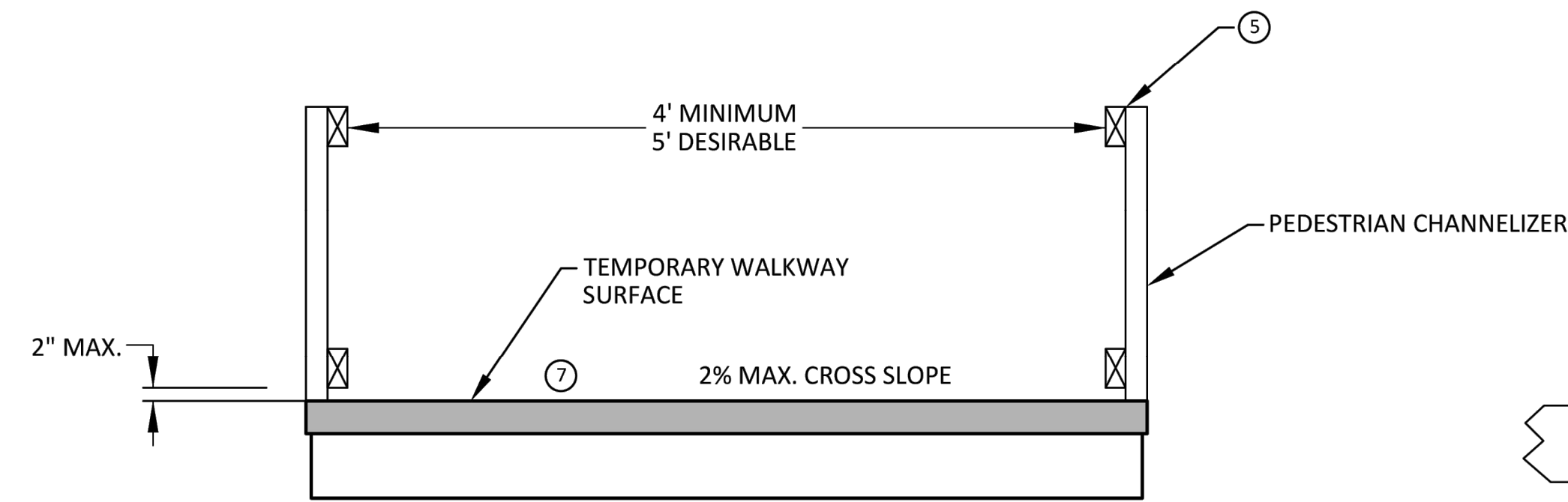
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-0647
www.a3gov.org



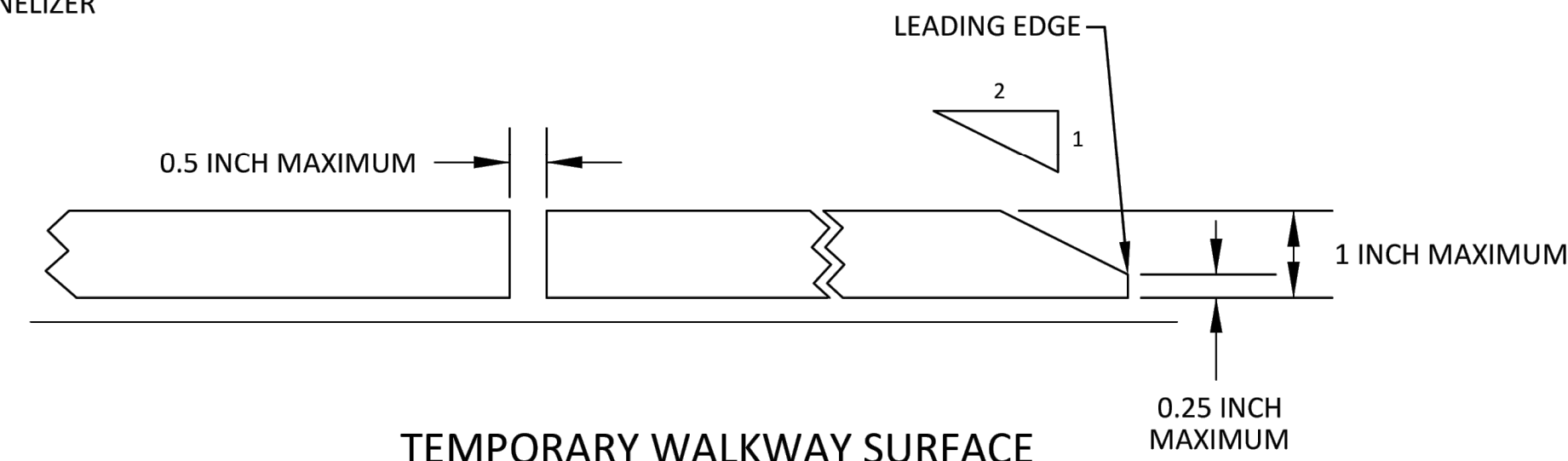
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
MOT AA PEDESTRIAN DETOUR DETAILS

SCALE: 1"=100'
DRAWING No. 2023-023-74

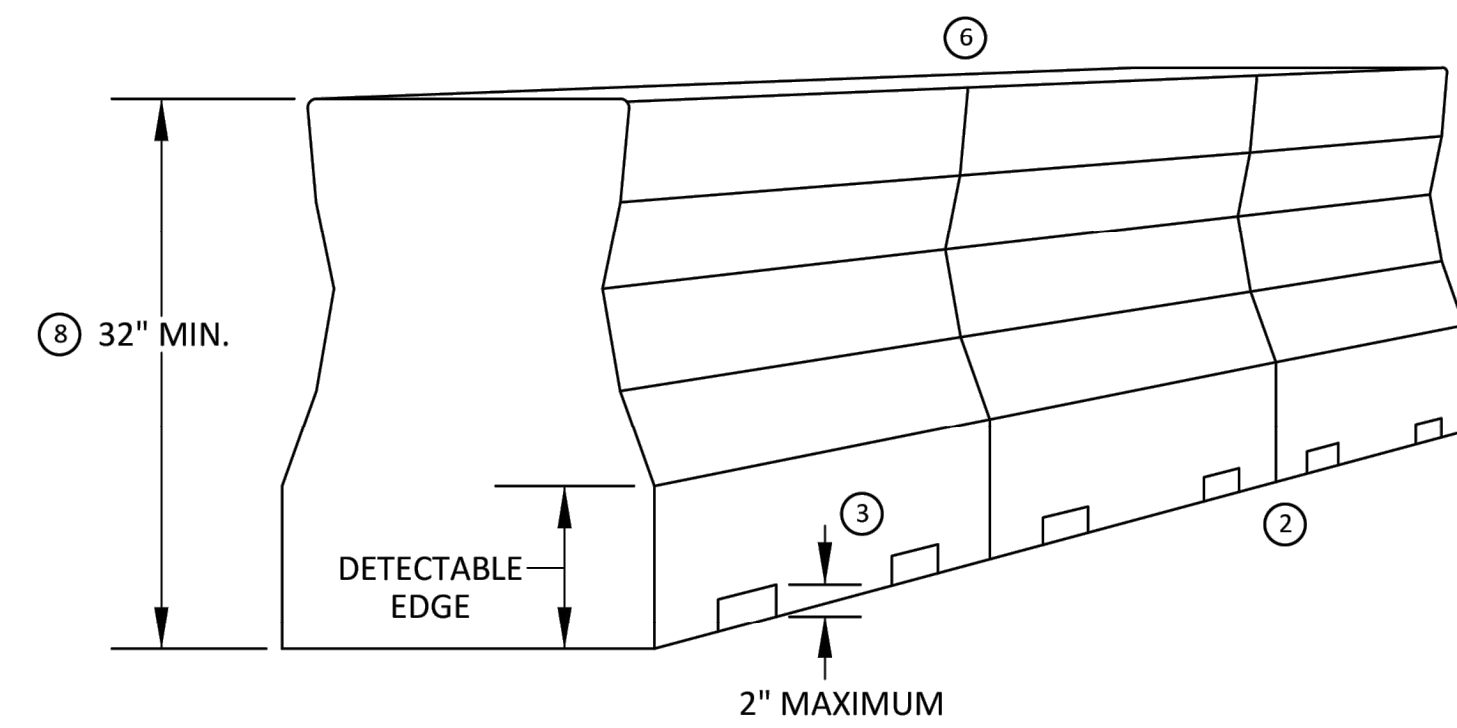
c:\pwwork\wade-trim_rbrown\dl339881\CPM-PLTS-Maintenance Of Traffic.dwg Dwg Created: 31-Jan-25 - _02 standard bw.stb - Plot Date: 3-Feb-25



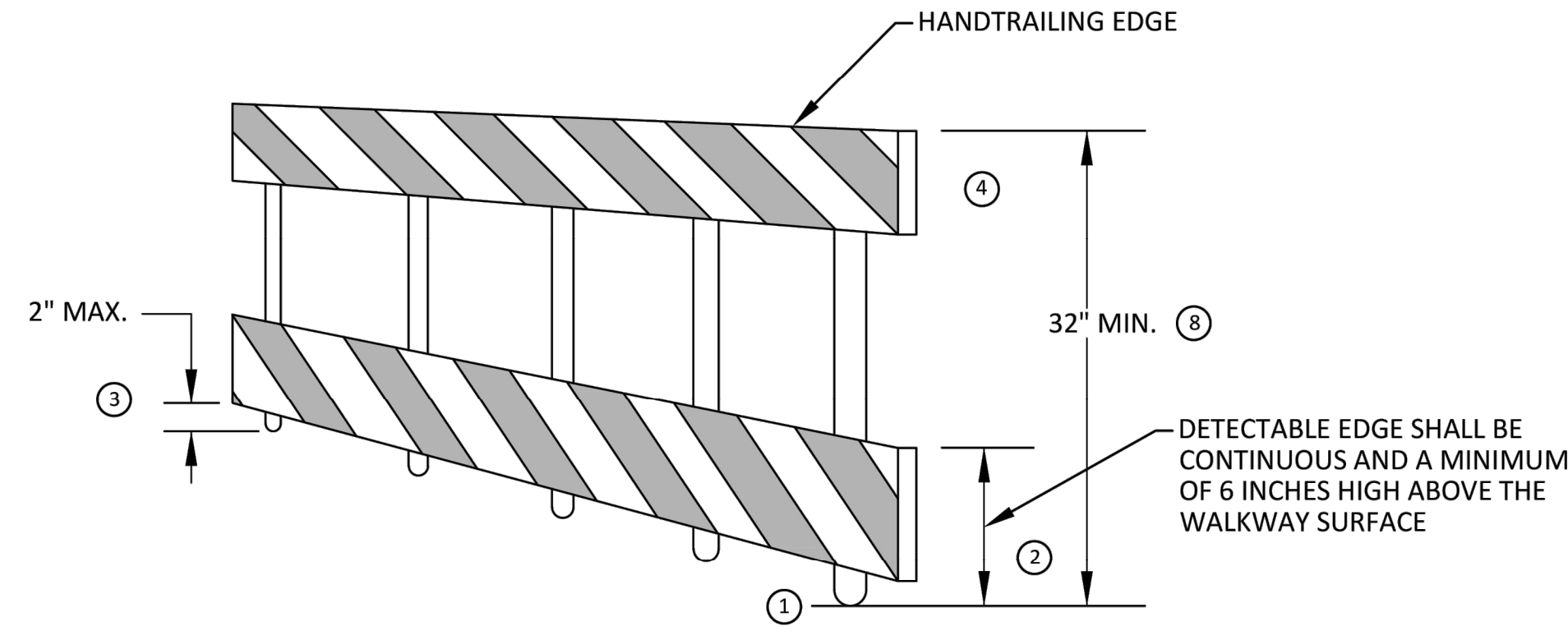
TEMPORARY PEDESTRIAN ACCESS



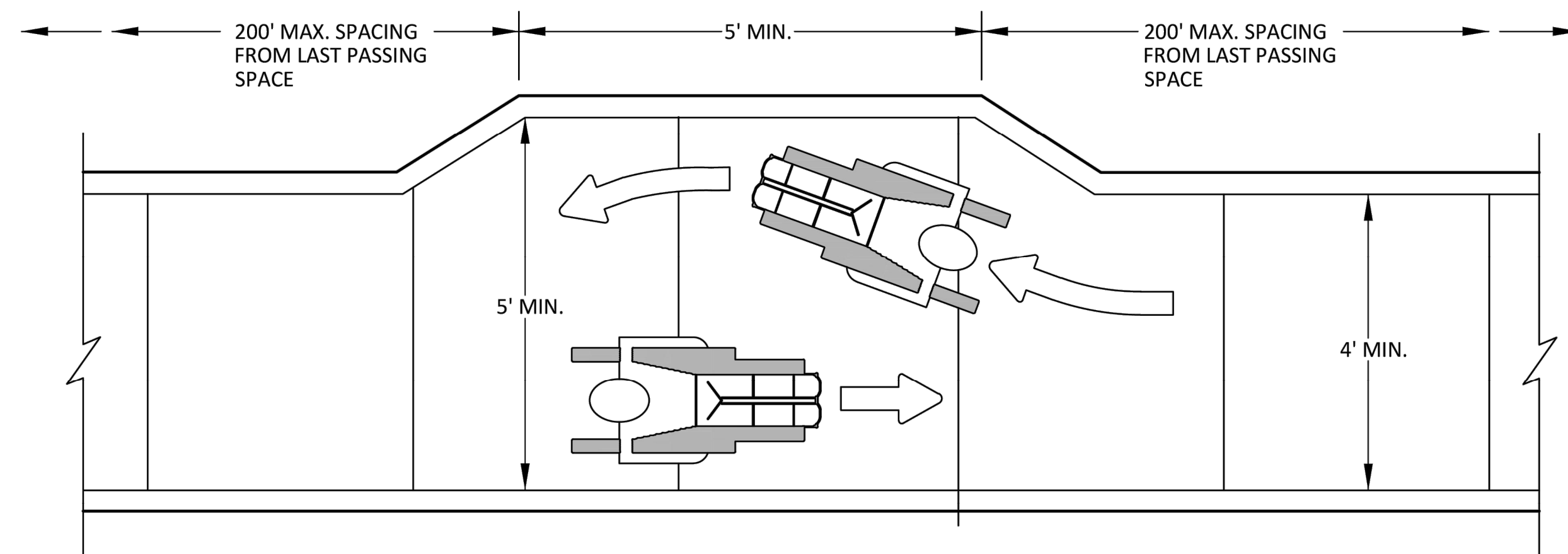
TEMPORARY WALKWAY SURFACE



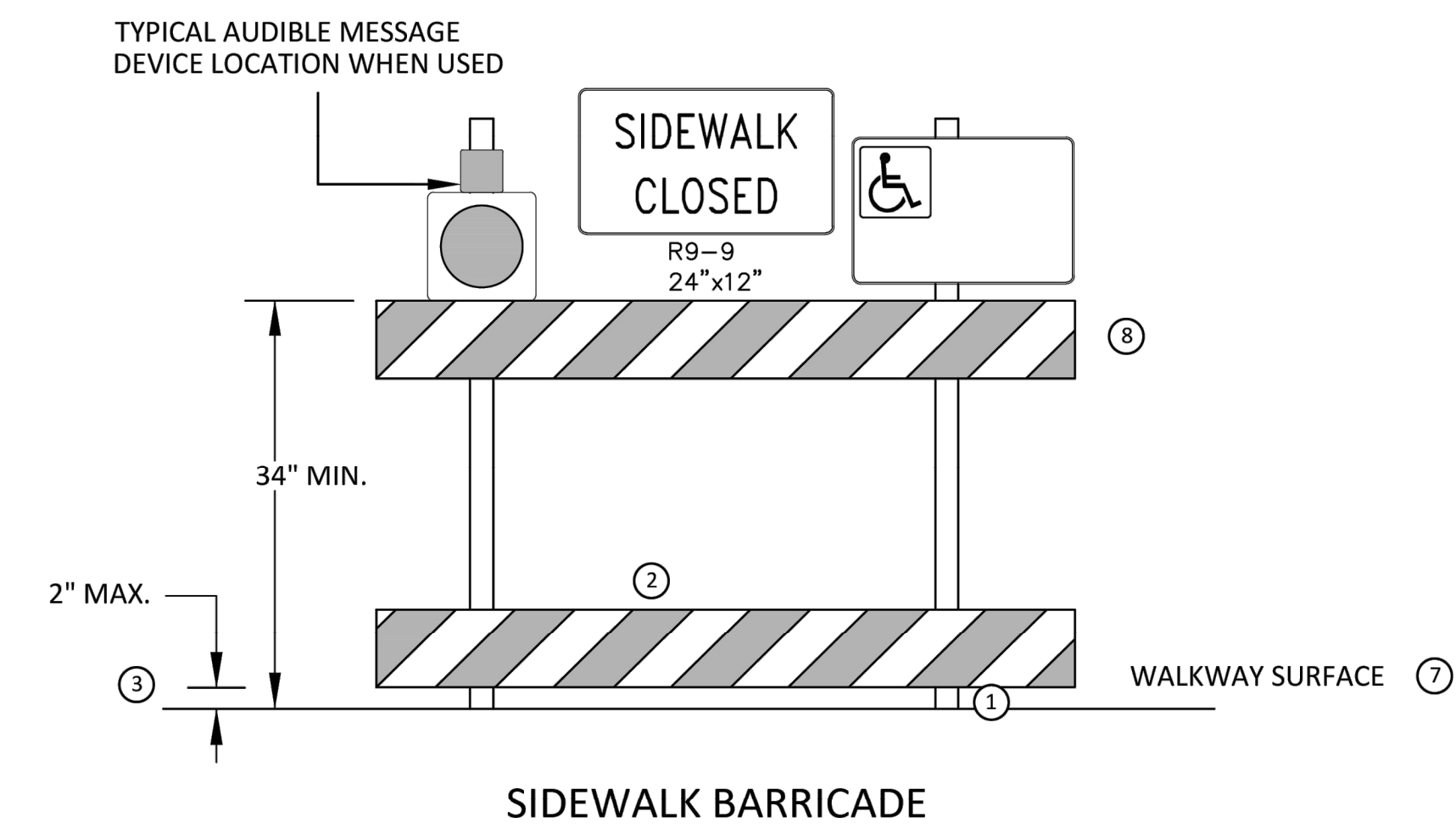
PEDESTRIAN CHANNELIZER USING A BARRIER
(MINIMUM REQUIREMENTS)



PEDESTRIAN CHANNELIZER
(MINIMUM REQUIREMENTS)



NARROW TEMPORARY PEDESTRIAN ACCESS ROUTE PASSING DETAIL



GENERAL NOTES

RAILINGS OR OTHER OBJECTS MAY PROTRUDE A MAXIMUM OF 4 INCHES INTO THE WALKWAY CLEAR SPACE WHEN LOCATED A MINIMUM OF 27 INCHES ABOVE THE WALKWAY SURFACE.

ANY PEDESTRIAN DEVICES USED TO PROVIDE POSITIVE PROTECTION FOR PEDESTRIANS OR WORKERS SHALL MEET NCHRP 350 CRASHWORTHY REQUIREMENTS APPROPRIATE FOR THE BARRIER'S APPLICATION.

BARRICADES SHALL BE PLACED CONTINUOUSLY ACROSS THE ENTIRE WIDTH OF THE WALKWAY SURFACE BEING CLOSED.

SPECIFIC NOTES

1 ANY TRIPPING HAZARD IN THE WALKWAY NEEDS A DETECTABLE EDGE. BALLAST SHALL BE LOCATED BEHIND OR INTERNAL TO THE DEVICE. ANY SUPPORT ON THE FRONT OF THE DEVICE SHALL NOT EXTEND INTO THE 48 INCH MINIMUM WALKWAY CLEAR SPACE AND SHALL NOT EXCEED 0.5 INCHES IN HEIGHT ABOVE THE WALKWAY SURFACE.

2 DETECTABLE EDGES SHALL BE CONTINUOUS AND A MINIMUM OF 6 INCHES IN HEIGHT ABOVE WALKWAY SURFACE AND HAVE COLOR MARKINGS CONTRASTING WITH THE WALKWAY SURFACE.

3 DEVICES SHALL NOT BLOCK WATER DRAINAGE FROM THE WALKWAY. A GAP HEIGHT OR OPENING FROM THE WALKWAY SURFACE UP TO A MAXIMUM OF 2 INCHES IS ALLOWED FOR DRAINAGE PURPOSES.

4 PROVIDE A HANDRAIL ON BOTH SIDES OF THE RAMP IF THE RAMP IS NOT EXPOSED TO VEHICLE TRAFFIC AND HAS A TOTAL RISE GREATER THAN 6 INCHES, AND A LENGTH GREATER THAN 72 INCHES.

- ENSURE THE HANDRAIL IS 1.25 AND 1.5 INCHES WIDE AND CONFIGURED TO BE A "GRASPABLE" CROSS-SECTION.

SEE CONSTRUCTION SUBSECTION 2.A FOR ADDITIONAL DETAILS.

WHEN THE RAMP IS EXPOSED TO TRAFFIC, IN LIEU OF HANDRAILS, USE A PROTECTIVE EDGE 2.5 INCHES MINIMUM HEIGHT ABOVE THE RAMP SURFACE OR 1:10 FLARE ON BOTH SIDES OF THE RAMP.

5 ALL DEVICES SHALL BE FREE OF SHARP OR ROUGH EDGES, AND FASTENERS (BOLTS) SHALL BE ROUNDED TO PREVENT HARM TO HANDS, ARMS OR CLOTHING OF PEDESTRIANS.

6 ALL DEVICES USED TO CHANNELIZE PEDESTRIAN FLOW SHOULD INTERLOCK SUCH THAT GAPS DO NOT ALLOW PEDESTRIANS TO STRAY FROM THE INTENDED CHANNELIZED PATH.

7 A WALKWAY SURFACE SHALL BE FIRM, STABLE, AND SLIP RESISTANT. COMPACTED GRAVEL, AGGREGATE, OR SLAG MATERIALS ARE NOT ALLOWED.

8 LONGITUDINAL CHANNELIZING DEVICES FOR PEDESTRIANS SHALL BE 32 INCHES IN HEIGHT OR GREATER.



REV.	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1667
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
STATE STREET IMPROVEMENTS
MOT AA PEDESTRIAN DETOUR DETAILS

SCALE: 1"=100'
DRAWING No. 2023-023-75