

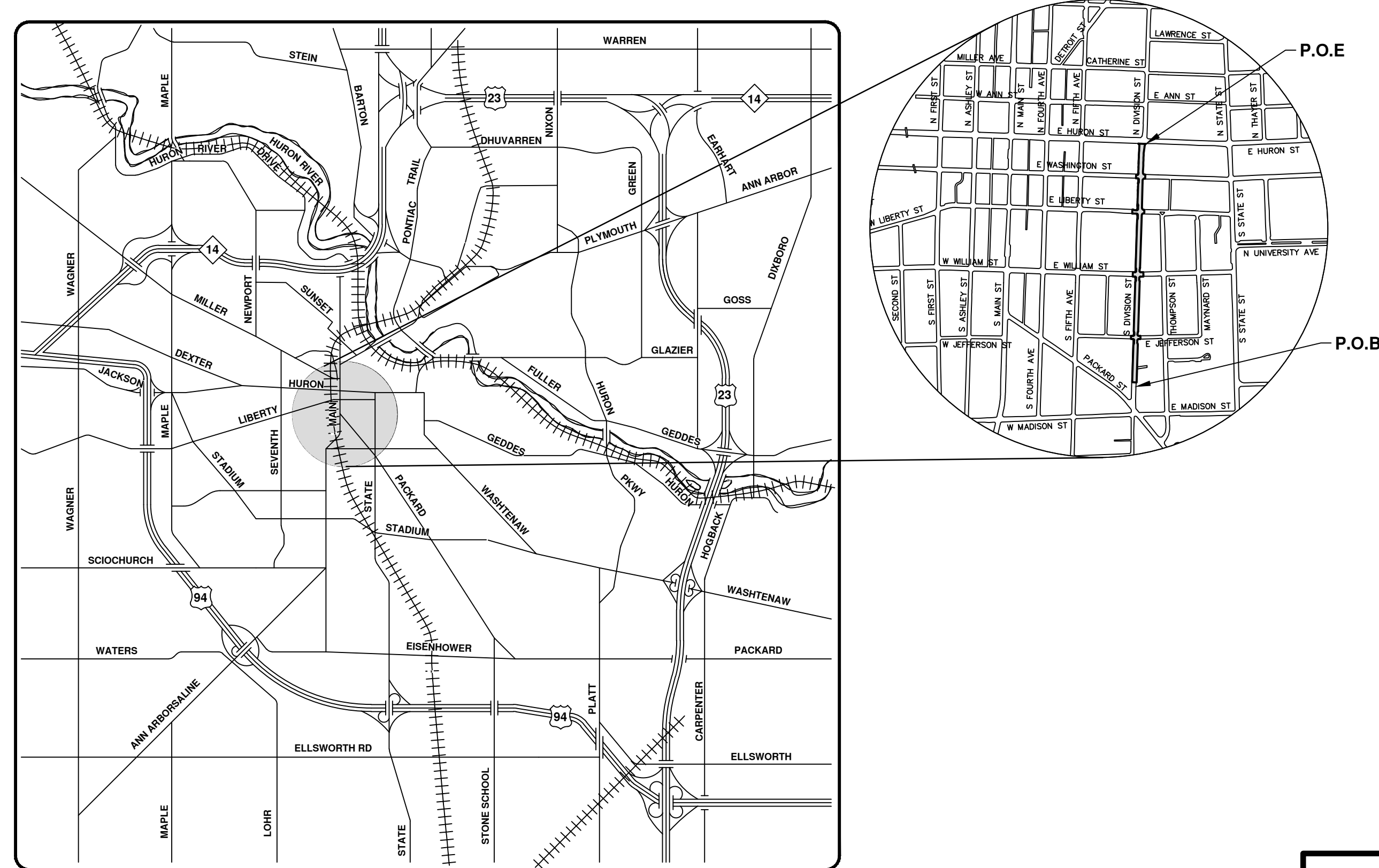
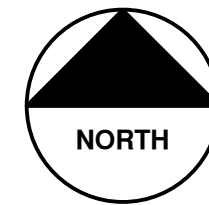


# CITY OF ANN ARBOR PROJECT MANAGEMENT

## S. DIVISION ST. RESURFACING Packard St To E Huron St

BID No. 4429, FILE No. 2015038

SHEET LIST TABLE	
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27-29	PAVEMENT MARKINGS
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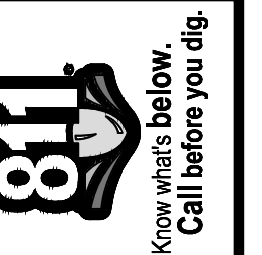
VICINITY MAP

### 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.

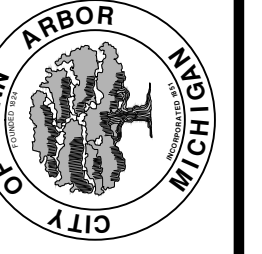
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS, ITS 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
00	10/05/2015	SOIL BORING LOCATION SHEET
01	11/24/2015	PROJECT MANAGER REVIEW
02	1/21/2016	FINAL SUBMITTAL
03	2/22/2016	ADDENDUM 1
04	3/11/2016	RESUBMITTED FOR BID (NO. 4429)

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



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
S. DIVISION STREET RESURFACING, PACKARD ST TO E HURON ST  
SCALE  
DRAWING No. 2015038-1  
SHEET No. 1 OF 41

PROJECT MANAGEMENT SERVICE UNIT

PREPARED UNDER THE SUPERVISION OF

JENNIFER A. NELSON, P.E. - MI LICENSE No. 48125  
PROJECT MANAGER

3/11/2016  
DATE

### EXISTING LEGEND

<p>  FIRE HYDRANT   GATE VALVE IN BOX   GATE VALVE IN WELL   STOP BOX   WATER VAULT   WELL   CATCH BASIN (SQ)   CATCH BASIN (RD)   STORM MANHOLE   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                 </p>	<p>  WATER MAIN   WATER MAIN ABANDONED   STORM SEWER   STORM SEWER ABANDONED   SANITARY SEWER   SANITARY SEWER ABANDONED   GAS MAIN   GAS MAIN (DEAD)   ELECTRICAL OVER HEAD   ELECTRICAL UNDER GROUND   ELECTRICAL DUCT BANK   TELEPHONE OVER HEAD   TELEPHONE UNDER GROUND   TELEPHONE DUCT BANK   CABLE TV OVER HEAD   CABLE TV UNDER GROUND   FIBER OPTIC   FIBER OPTIC DUCT BANK   BOUNDARY   BUILDING   CENTERLINE OF DITCH   CENTERLINE/CROWN OF ROAD   CONTOUR MAJOR   CONTOUR MINOR   EDGE OF WATER   FLOODPLAIN   FENCE   GRAVEL   GUARDRAIL   STONE WALL   R.O.W.   TRELLINE   WETLAND   EDGE OF BRUSH   HEDGE   TREE (DECIDUOUS)   TREE (CONIFEROUS)   SHRUB (DECIDUOUS)   STUMP   TREE TO REMAIN &amp; PROTECT (DECIDUOUS)  <p style="font-size: small;">CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREAST HEIGHT (INCHES) X 10</p>  TREE TO REMAIN &amp; PROTECT (CONIFEROUS)  <p style="font-size: small;">CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREAST HEIGHT (INCHES) X 10</p> </p>	<p>  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   SIGN   PUSH BUTTON   HAND HOLE                 </p>
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### PROPOSED LEGEND

<p>  WATER MAIN   STORM SEWER   SANITARY SEWER   FIBER OPTIC   ELECTRICAL   CENTERLINE OF DITCH   CENTERLINE OF ROAD   FENCE   GRAVEL   SILT FENCE   PROTECTIVE FENCE   GUARDRAIL   LOT/UNIT   CURB   TEMPORARY GRADING PERMIT   CONTOUR MAJOR   CONTOUR MINOR   WATER EASEMENT   STORM EASEMENT   SANITARY EASEMENT   R.O.W.   LIMITS OF CONSTRUCTION   LIMIT OF GRADING   STONE WALL   DETECTABLE WARNING   ASPHALT   CONCRETE   SIDEWALK   TREE (DECIDUOUS)   TREE (CONIFEROUS)   TREE TO BE REMOVED (DECIDUOUS)   TREE TO BE REMOVED (CONIFEROUS)   STUMP TO BE REMOVED                 </p>	<p>  WATER MAIN   STORM SEWER   SANITARY SEWER   FIBER OPTIC   ELECTRICAL   CENTERLINE OF DITCH   CENTERLINE OF ROAD   FENCE   GRAVEL   SILT FENCE   PROTECTIVE FENCE   GUARDRAIL   LOT/UNIT   CURB   TEMPORARY GRADING PERMIT   CONTOUR MAJOR   CONTOUR MINOR   WATER EASEMENT   STORM EASEMENT   SANITARY EASEMENT   R.O.W.   LIMITS OF CONSTRUCTION   LIMIT OF GRADING   STONE WALL   DETECTABLE WARNING   ASPHALT   CONCRETE   SIDEWALK   TREE (DECIDUOUS)   TREE (CONIFEROUS)   TREE TO BE REMOVED (DECIDUOUS)   TREE TO BE REMOVED (CONIFEROUS)   STUMP TO BE REMOVED                 </p>
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811  
Know what's below.  
Call before you dig.

04	RESISSUED FOR BID (NO. 4429)	3/11/2016	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	JAN	
03	ADDENDUM 1	2/22/2016	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA
02	FINAL SUBMITTAL	1/21/2016	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA
01	PROJECT MANAGER REVIEW	11/24/2015	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA
00	SOIL BORING LOCATION SHEET	10/05/2015	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA	JKA
REV.	DESCRIPTION	DATE	DRAWN	CHECKED																			

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

S. DIVISION ST. RESURFACING

COVER AND NOTES

LEGEND

SHEET No.	2 OF 41
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**CONSTRUCTION NOTES:**

1. Driveways and entrances to buildings, real property, and the like shall not be blocked except for short durations and only when approved by the Engineer. Vehicular and pedestrian access shall be maintained at all times. It shall be the Contractor's responsibility to coordinate all necessary driveway closures with the property owner(s) and resident(s) in the areas of construction.
2. The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.
3. Location and depth of utilities as depicted on the plans is approximate and shown according to the best information available. It is the Contractor's responsibility to excavate ahead and adjust depth of conflict utilities accordingly. Any damage to utilities is the Contractor's responsibility to avoid and/or repair as necessary.
4. The Contractor is to take special care to protect the existing water main and be responsible for maintaining consistent water service.
5. During non-working hours no trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the item of work "General Conditions".
6. Trenches for new water services shall be excavated to MIOSHA and City of Ann Arbor Field Services requirements.
7. City of Ann Arbor Field Services 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 Field Services.
8. For the installation of corporations, or any other related activities, the Contractor shall not receive additional compensation for delays due to the scheduling of or coordination with the City of Ann Arbor Field Services.
9. The Contractor shall backfill trenches in accordance with Trench Detail specified on plans. This work shall be included in the item of work "Excavate and Backfill for Water Service Tap and Lead". All concrete removals and replacements required for this work will be paid for separately.
10. All ductile iron pipe and fittings shall be polyethylene wrapped per ANSI/AWWA C105/A21.5.
11. Cor-blw bolts to be used at all mechanical water main joints at hydrants and Megalug fittings
12. The Contractor shall construct, flush, and bacteriologically test the water main per Detailed Specification "Water Main Installation and Testing" 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.
13. 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 pipe pay items.
14. Postal delivery and refuse pickup service shall be maintained at all times by the Contractor.
15. All fittings, hydrants, valves and castings removed during construction are the property

- of the City of Ann Arbor. The Contractor within 48 hours shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
16. Where street curbs are undermined due to construction activities, they shall be removed and replaced as directed by the Engineer.
  17. The Contractor shall be responsible for the continuous maintenance of the temporary road surface and soil erosion control measures within the construction area until the full completion of the project. This work shall be included in the item of work "General Conditions".
  18. All curb, sidewalk, driveway approach removals shall be approved by Engineer before the work is done.
  19. Sawn sewer pipe connections shall be coupled with a Fernco flexible coupling and a stainless steel shear ring.
  20. The location of material stock piles and on-site staging areas to be approved by the Engineer.
  21. For mainline paving, the width of the mat for each pass of the paver shall be not less than 10.5' or greater than 15', as directed by the Engineer. The Engineer will direct the layout of the longitudinal joints during construction.
  22. 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 Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
  23. Payment for drainage structure sumps, where specified, shall be included in the payment for the various drainage structure sizes and or types.
  24. Where sewer pipes of different sizes or materials are joined, Fernco flexible couplings with stainless steel shear rings shall be used. The Contractor's purchase price for these devices, including shipping, shall be paid 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.
  25. Where sewer and water main are to be removed & replaced or added, all pipe shall be installed using Trench Detail I, Modified detailed in the specifications or shown on Plans. Backfill for sewer and water construction shall be MDOT Granular Material, Class II, Modified.
  26. 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."
  27. The pay item of Earth Excavation and Embankment (CIP) shall be paid at plan quantity unless the Engineer determines that there has been a significant change from the work shown on the plans. See the 2012 MDOT Standard Specifications for Construction, section 109.01 for more details.

**GENERAL**  
NOTIFY THE CITY OF ANN ARBOR SOIL EROSION CONTROL OFFICE 48 HOURS PRIOR TO BEGINNING WORK ON THE PROJECT. PHONE: 734-794-6265.

1. 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.
2. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CITY ORDINANCE CHAPTER 63, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
3. 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.
4. 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.
5. 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, WITHIN FOUR (4) HOURS OF BEING SO ORDERED.
6. 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.
7. CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
8. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
9. PROPER DUST CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION BY USE OF WATER TRUCKS AND/OR DUST PALLIATIVE AS REQUIRED.
10. 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.
11. 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.
12. TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE.

**SEQUENCE OF EROSION CONTROL MEASURES:**

1. 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:**

- 1.1. 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.
- 1.2. STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- 1.3. INSTALL WATER MAIN, STORM SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE INLETS.
- 1.4. PERFORM PAVEMENT REPAIR AND CONSTRUCTION OF SIDEWALK AND CURB AND GUTTER.
- 1.5. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- 1.6. INSTALL SLOPE RESTORATION IN ALL DISTURBED AREAS.
- 1.7. CLEAN OUT STORM SEWER SYSTEMS.
- 1.8. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
- 1.9. 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:**

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

BM #	ELEV	DESCRIPTION
1	860.321	NW ANCHOR BOLT FOR LIGHT POLE/SUPPORT POLE FOR SIGNALS @ SE CORNER OF DIVISION & HURON.
2	862.912	TOP NORTH SIDE OF CONC. BASE FOR PED. POLE @ N.E. CORNER OF DIVISION AND WASHINGTON.
3	864.071	TOP EAST SIDE OF CONC. BASE FOR PED. POLE @ N.W. CORNER OF DIVISION AND LIBERTY.
4	866.285	NW ANCHOR BOLT FOR LIGHT POLE ON EAST SIDE OF DIVISION @ HOUSE #333
5	866.820	NE ANCHOR BOLT FOR LIGHT POLE/SIGNAL SUPPORT POLE @ NW CORNER OF DIVISION & WILLIAM.
6	867.032	SE ANCHOR BOLT FOR LIGHT POLE ON WEST SIDE OF DIVISION @ HSE #414
7	869.096	SET RR SPIKE IN WEST SIDE OF LIGHT POLE @ NE CORNER OF DIVISION & JEFFERSON.
8	869.567	SET RR SPIKE IN WEST SIDE OF LIGHT POLE ON EAST SIDE OF DIVISION ACROSS THE STREET FROM HSE #518
9	867.483	SET RR SPIKE IN EAST SIDE OF LIGHT POLE ON WEST SIDE OF DIVISION @ NORTH SIDE OF CORNER PARK AREA.
10	860.114	SE ANCHOR BOLT FOR MAST ARM POLE ON WEST SIDE OF DIVISION @ PACKARD AND MADISON.

**PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.**

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
"NO PARKING" SIGNS PERMIT*	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
* NO COST TO CONTRACTOR	

**PERMITS REQUIRED TO BE OBTAINED BY THE CITY OF ANN ARBOR PRIOR TO THE BEGINNING OF CONSTRUCTION.**

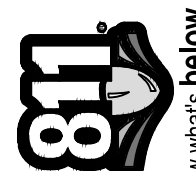
PERMIT	ISSUING AUTHORITY
M.D.E.Q. WATER MAIN CONSTRUCTION PERMIT	MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
M.D.O.T. RIGHT-OF-WAY PERMIT	MICHIGAN DEPARTMENT OF TRANSPORTATION

**CONTACT INFORMATION**

PUBLIC UTILITIES	OWNER	CONTACT
WATER		DAN WOODEN (734) 794-6350
SANITARY		MARK COZART (734) 794-6350
STORM	CITY OF ANN ARBOR FIELD OPERATIONS SERVICE UNIT W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	MATT WALDSMITH (734) 794-6350
FORESTRY		STEVEN GOEBEL (734) 794-6350
SIGNS SIGNALS STREET LIGHTS		CHUCK FOJTIK (734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSKI (734) 544-7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	CLAY COMBEE (734) 397-4112
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	(734) 996-2135
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016

**MISCELLANEOUS QUANTITIES**

ITEM DESCRIPTION	QUANTITY
AGGREGATE BASE, C.I.P., 21AA	25 CYD
BRICK PAVERS, REMOVE AND REPLACE, ANY TYPE	500 SFT
EROSION CONTROL, INLET PROTECTION, FABRIC DROP	17 EA
EMBANKMENT, CIP	239 CYD
EXCAVATION, EARTH	303 CYD
GEOSYNTHETIC PAVING LAYER	9,929 SYD
GRANULAR MATERIAL, CL II	138 CYD
HAND PATCHING, HMA LVSP	346 TONS
PAVEMENT JOINT AND CRACK REPAIR - DETAIL 7	240 FT
PAVEMENT JOINT AND CRACK REPAIR - DETAIL 8	120 FT
POINT EXISTING STRUCTURE	5 EA
PROTECTIVE FENCE	1000 FT



Know what's below.  
Call before you dig.


JAN	JAN	JAN	JAN	AMW	CHECKED
JAN	JAN	JAN	JAN	JAN	DRAWN

3/11/2016  
2/22/2016  
1/21/2016  
11/24/2015  
10/05/2015

RESUBMITTED FOR BID (NO. 4429)  
ADDENDUM 1  
FINAL SUBMITTAL  
PROJECT MANAGER REVIEW  
SOIL BORING LOCATION SHEET  
DESCRIPTION

04  
03  
02  
01  
00

REV.

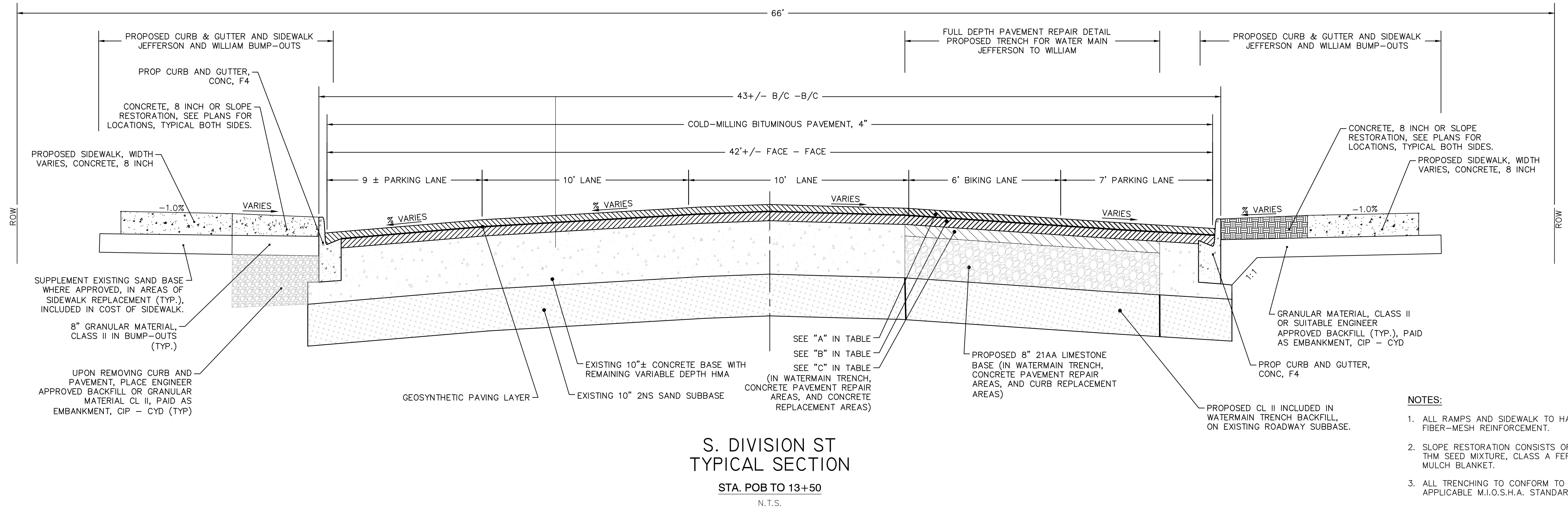


CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
PO BOX 886  
ANN ARBOR MI 48106-0867  
www.aagov.org

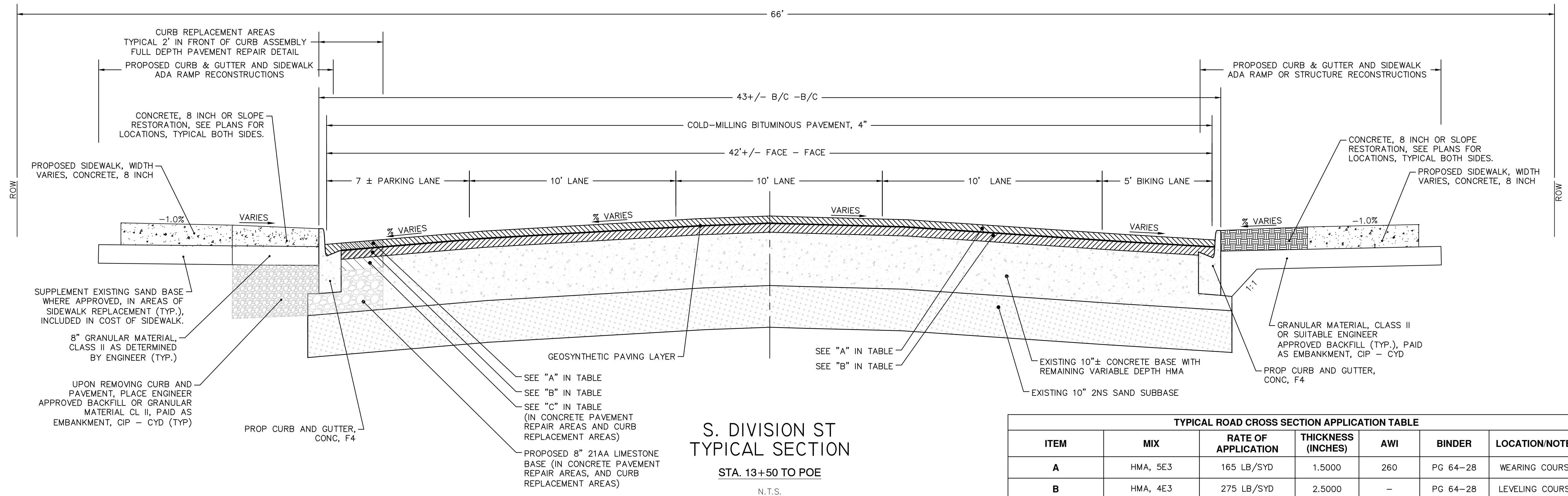
PROJECT MANAGEMENT - CITY OF ANN ARBOR  
S. DIVISION ST. RESURFACING  
COVER AND NOTES  
STD NOTES

SCALE: N/A  
DRAWING No. 2015038-3  
SHEET No. 3 OF 41

S:\Project Management\Design\2015038 Division\Plan Production\2015038 DET.dwg Dwg Created: 4-Jan-16 - \_o2 standard bw.stb - Plot Date: 11-Mar-16



**S. DIVISION ST  
TYPICAL SECTION**  
STA. POB TO 13+50  
N.T.S.



**S. DIVISION ST  
TYPICAL SECTION**  
STA. 13+50 TO POE  
N.T.S.

TYPICAL ROAD CROSS SECTION APPLICATION TABLE						
ITEM	MIX	RATE OF APPLICATION	THICKNESS (INCHES)	AWI	BINDER	LOCATION/NOTES
A	HMA, 5E3	165 LB/SYD	1.5000	260	PG 64-28	WEARING COURSE
B	HMA, 4E3	275 LB/SYD	2.5000	-	PG 64-28	LEVELING COURSE
C	HMA, 3E3	410 LB/SYD	3.75	-	PG-58-22	BASE COURSE

**S DIVISION ST. PROPOSED CROSS SECTION**

- NOTES:**
1. ALL RAMPS AND SIDEWALK TO HAVE FIBER-MESH REINFORCEMENT.
  2. SLOPE RESTORATION CONSISTS OF 4" TOPSOIL, THM SEED MIXTURE, CLASS A FERTILIZER, AND MULCH BLANKET.
  3. ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

S. DIVISION ST. RESURFACING

SCALE PLAN: NTS

DRAWING No. 2015038 - 4

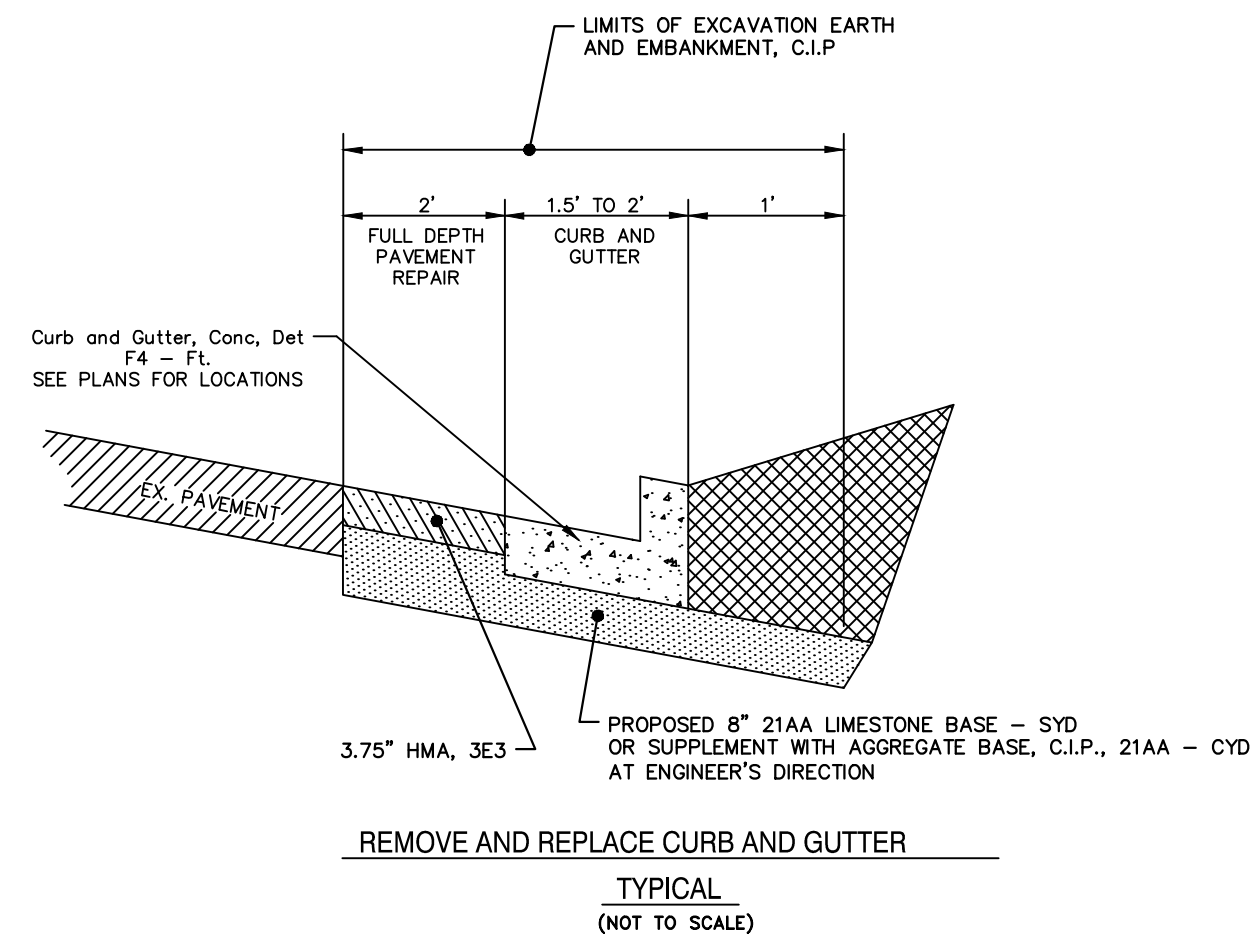
SHEET No. 4 OF 41

**TYPICAL DETAIL**

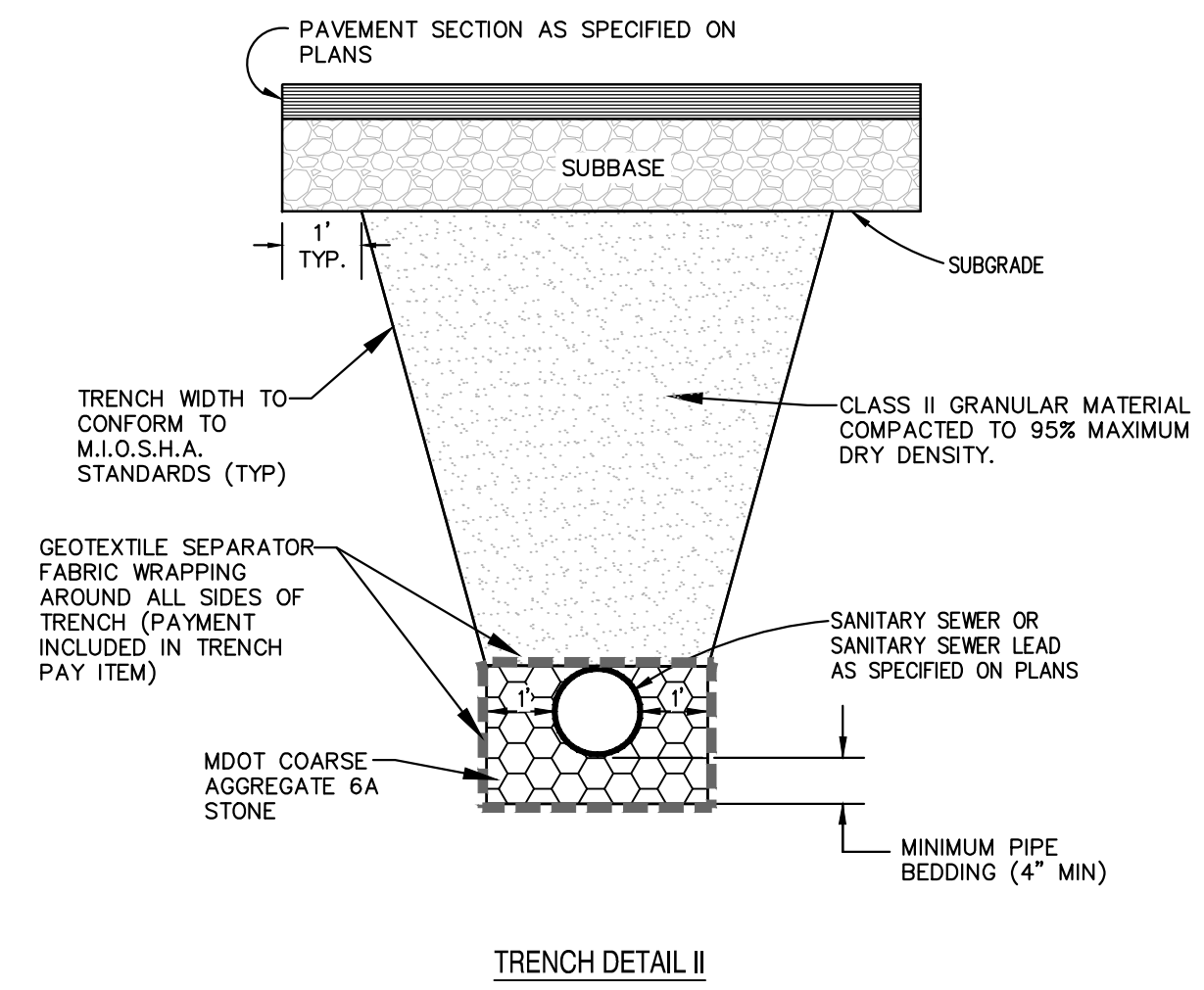
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000	OUT FOR BID	MARCH, 2012	RML:DFE JFK:MAS	

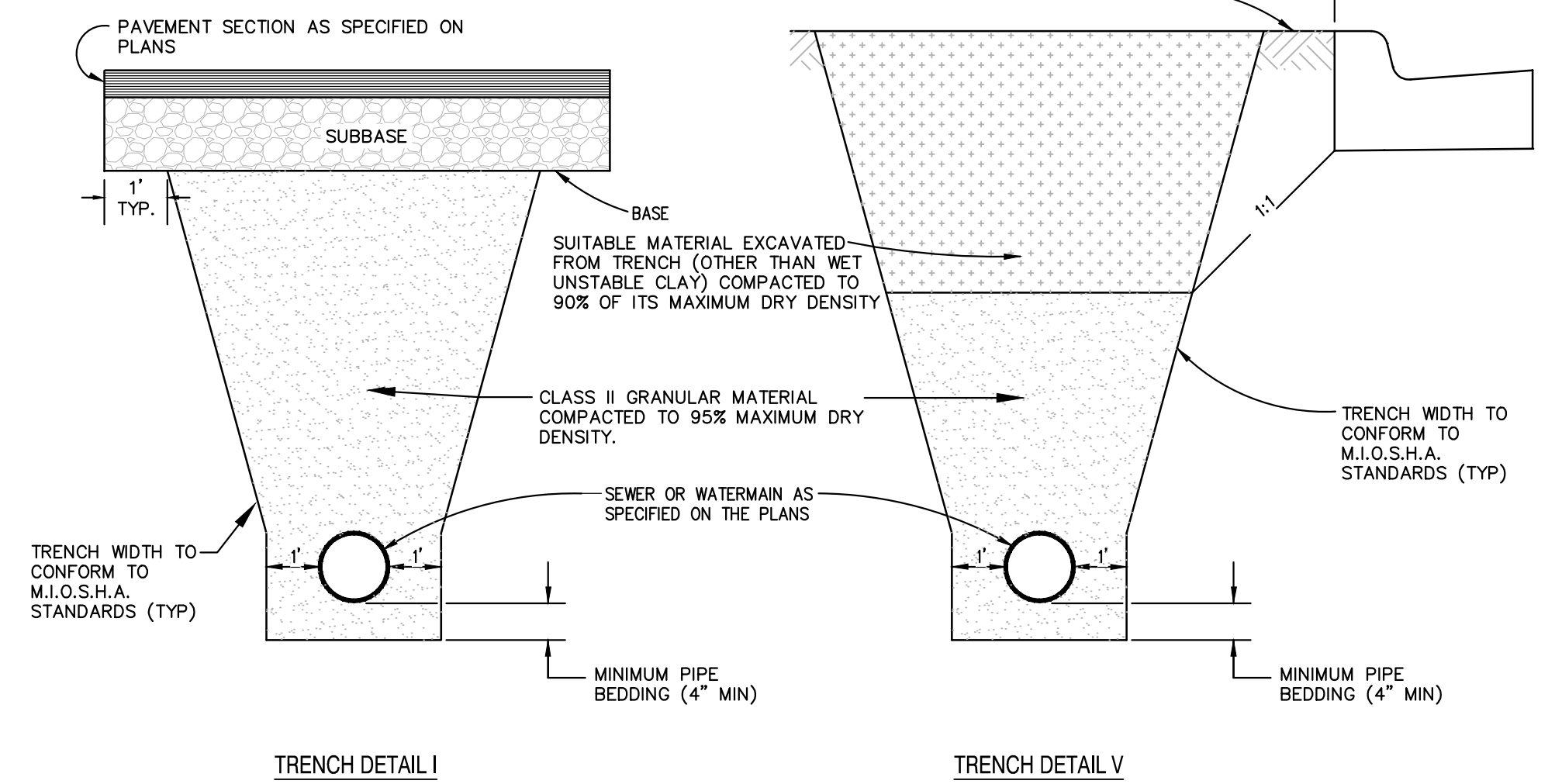
S:\Project Management\Design\2015038 DET.dwg Dwg Created: 4-Jan-16 - -\_02 standard bw.stb - Plot Date: 11-Mar-16



REMOVE AND REPLACE CURB AND GUTTER  
TYPICAL  
(NOT TO SCALE)



TRENCH DETAIL II



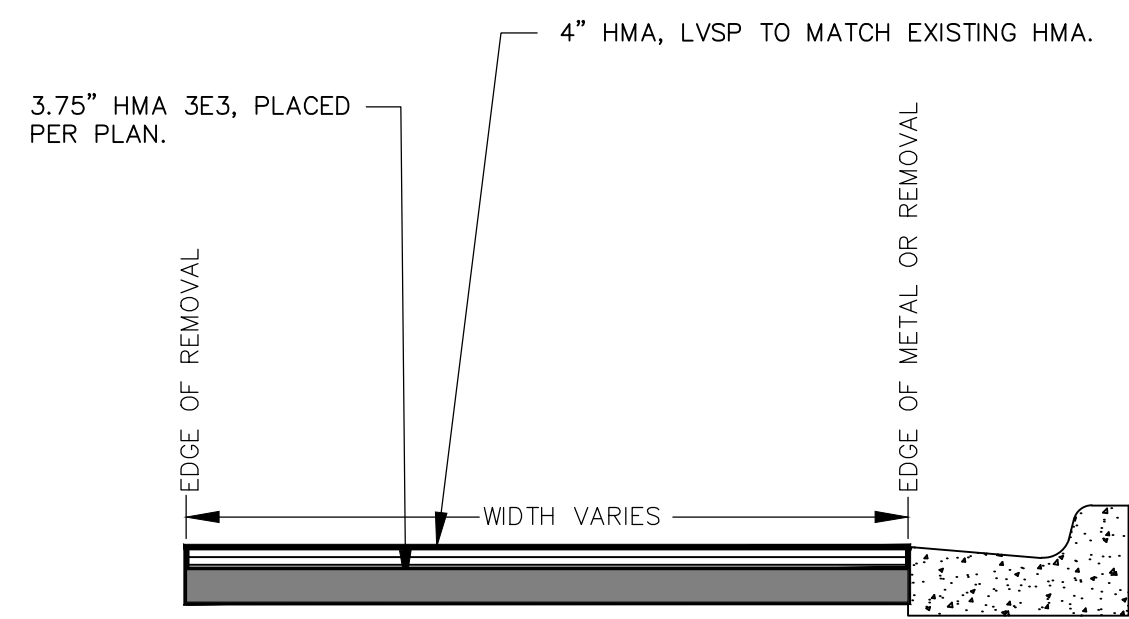
TRENCH DETAIL I

TRENCH DETAIL V

### UTILITY TRENCH DETAILS

#### NOTES:

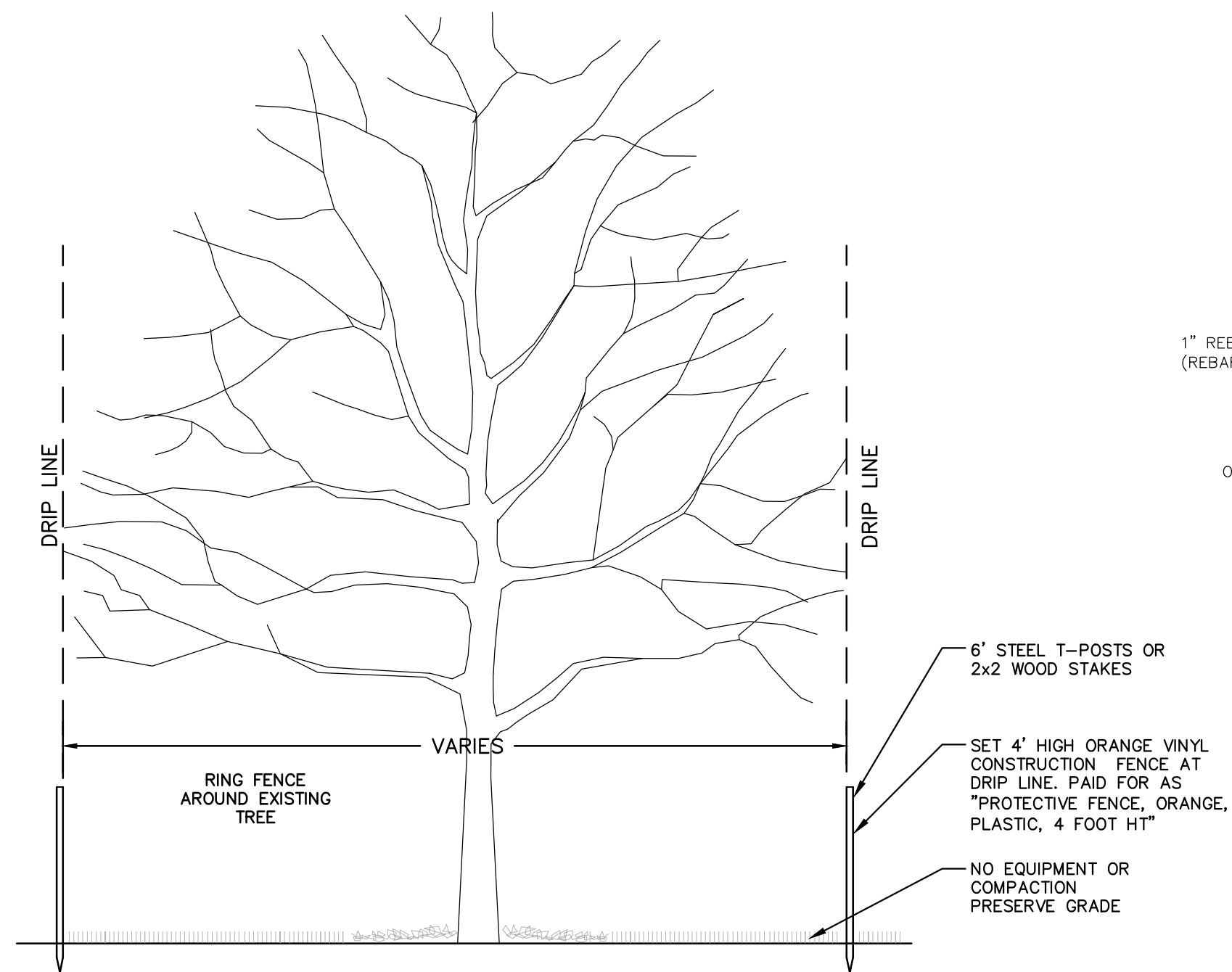
1. PAVEMENT REMOVAL IS INCLUDED IN PRICE OF UTILITY SPECIFICATION
2. DENSITY TESTING PER CITY OF ANN ARBOR SPECIFICATION
3. TRENCH DETAILS SHOW TYPE OF BACKFILL AND SURFACE RESTORATION ONLY.
4. ALL TRENCHING TO CONFORM TO ALL APPLICABLE M.I.O.S.H.A. STANDARDS



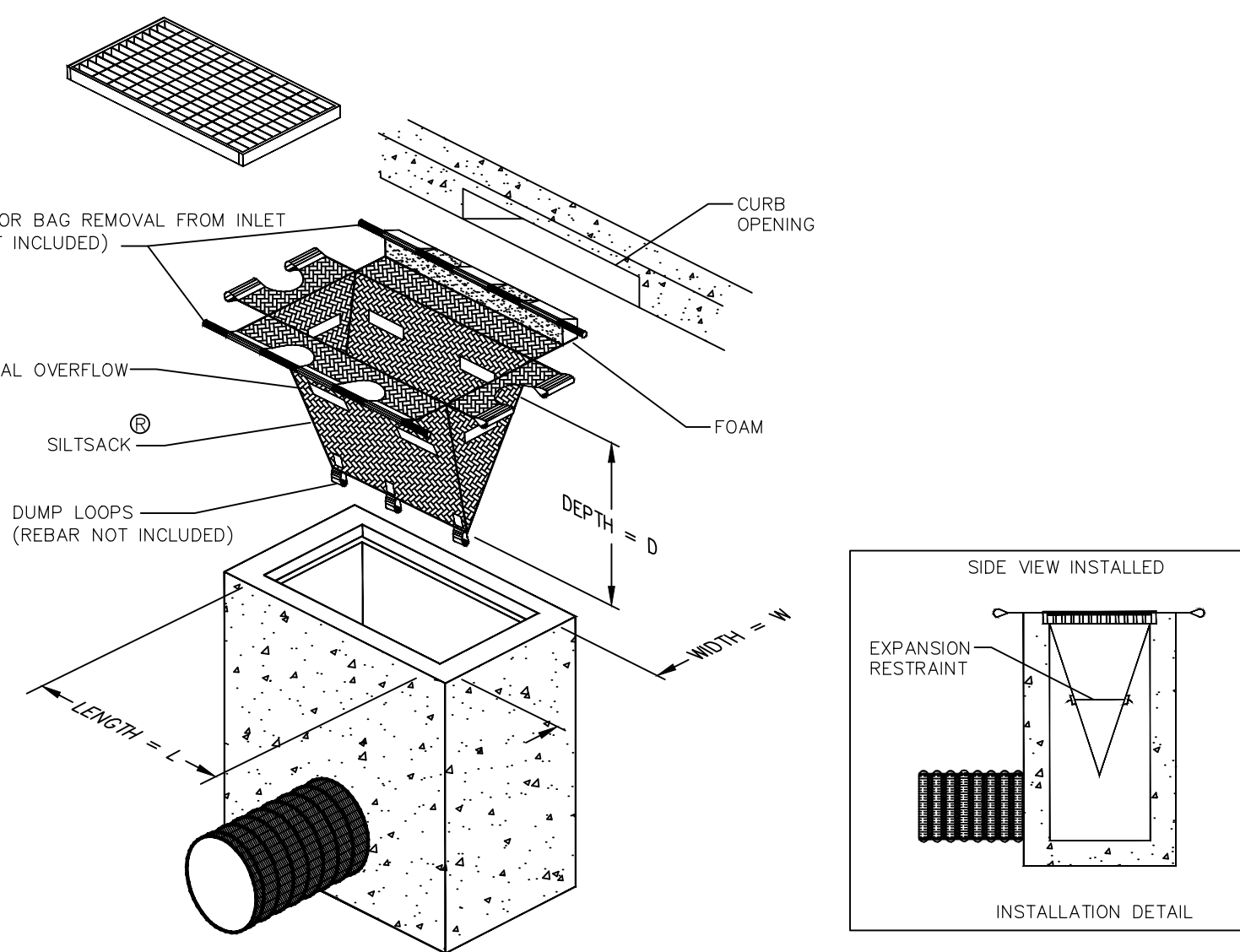
#### HAND PATCH

TO BE APPLIED TO WATER MAIN TRENCHES AND AT BUMP-OUTS TO MAINTAIN TRAFFIC. TO BE USED AT ENGINEER'S DIRECTIVE.

HAND PATCHING



TREE PROTECTION DETAIL



INLET FILTER (MODIFIED)

#### SILTSACK® SPECIFICATIONS

NOTE: THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

#### REGULAR FLOW SILTSACK®

(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

PROPERTIES	REQUIRED VALUE	TEST METHOD
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC <sup>-1</sup>

#### HI-FLOW SILTSACK®

(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	REQUIRED VALUE	TEST METHOD
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC <sup>-1</sup>

#### OIL-ABSORBANT SILTSACK®

(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK® CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT FILLING INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK WITH A WOVEN FILLING INSERT.



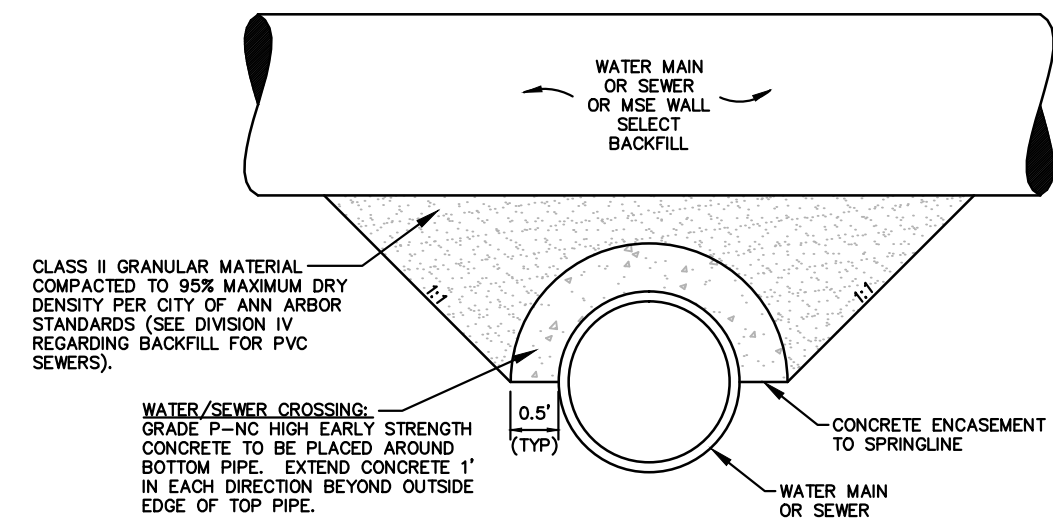
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01	11/24/2015	JKA	JKA
00	10/05/2015	JKA	AMW

NO.	DESCRIPTION
01	PROJECT MANAGER REVIEW
02	FINAL SUBMITTAL
03	ADDENDUM 1
04	RESUBMITTED FOR BID (NO. 4429)



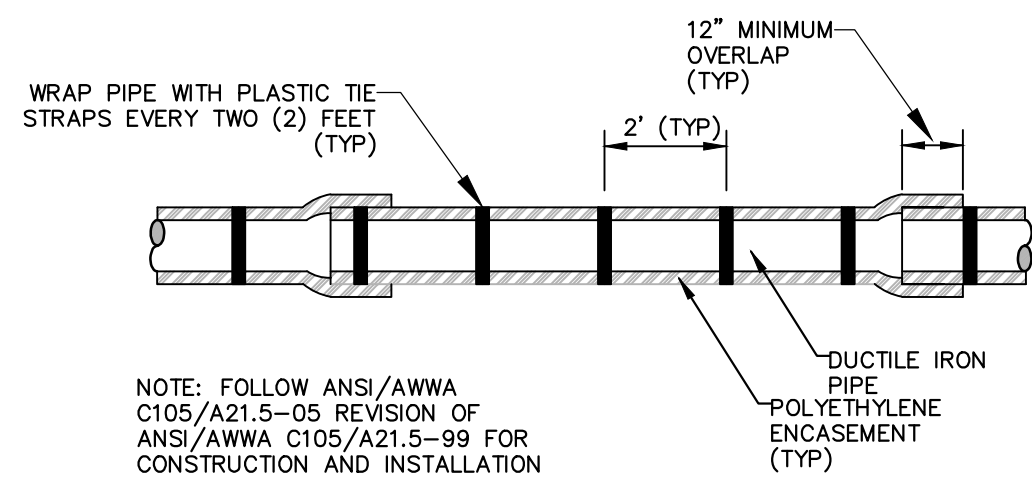
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
S. DIVISION ST. RESURFACING  
ROAD DET  
DRAWING No. 2015038 - 5  
SHEET No.

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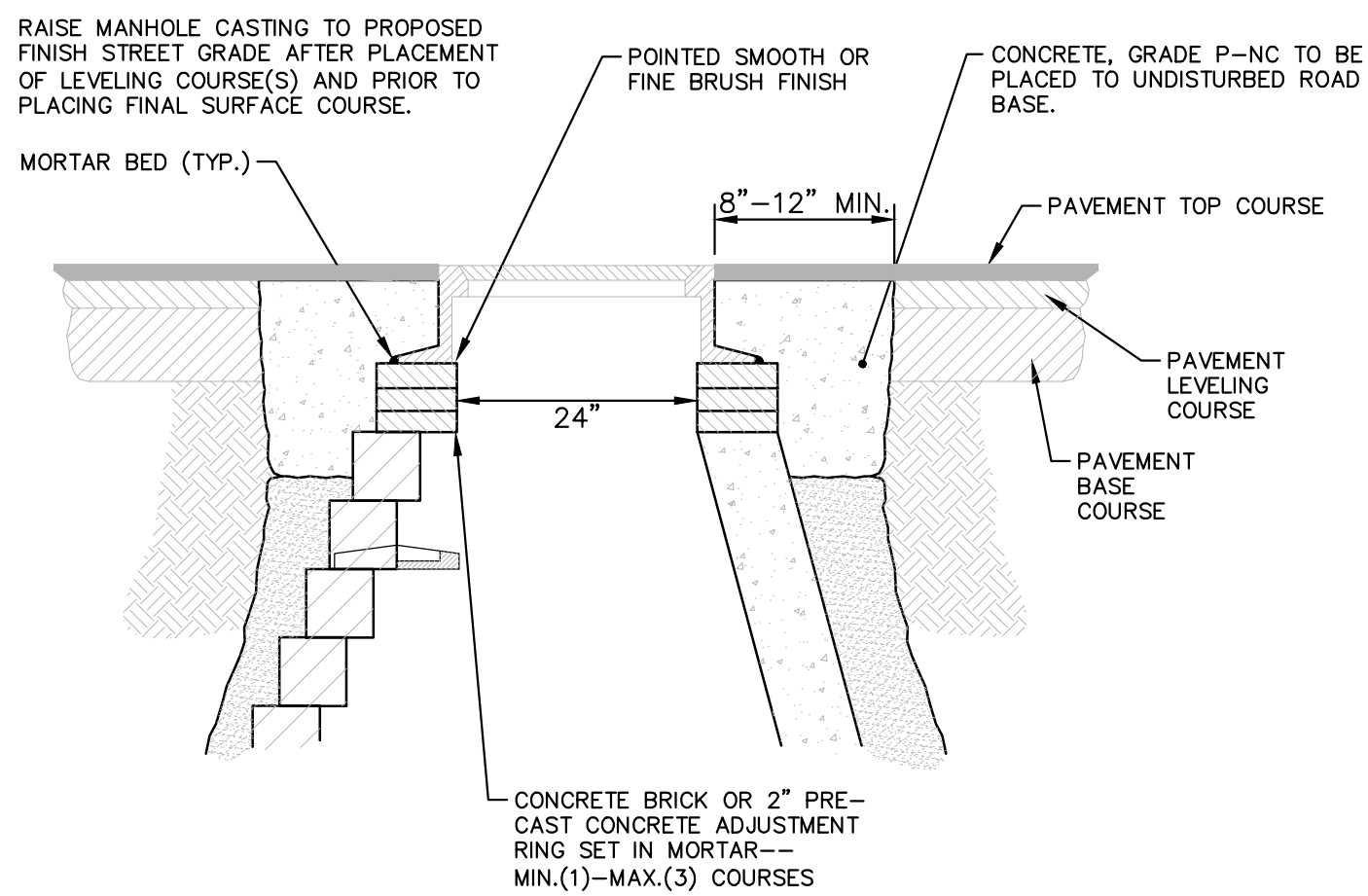
APPLIES TO WATER AND/OR SEWER CROSSINGS WITH LESS THAN 1.5' OF VERTICAL CLEARANCE - SEE PLANS FOR LOCATIONS

**CONCRETE UTILITY SADDLE**



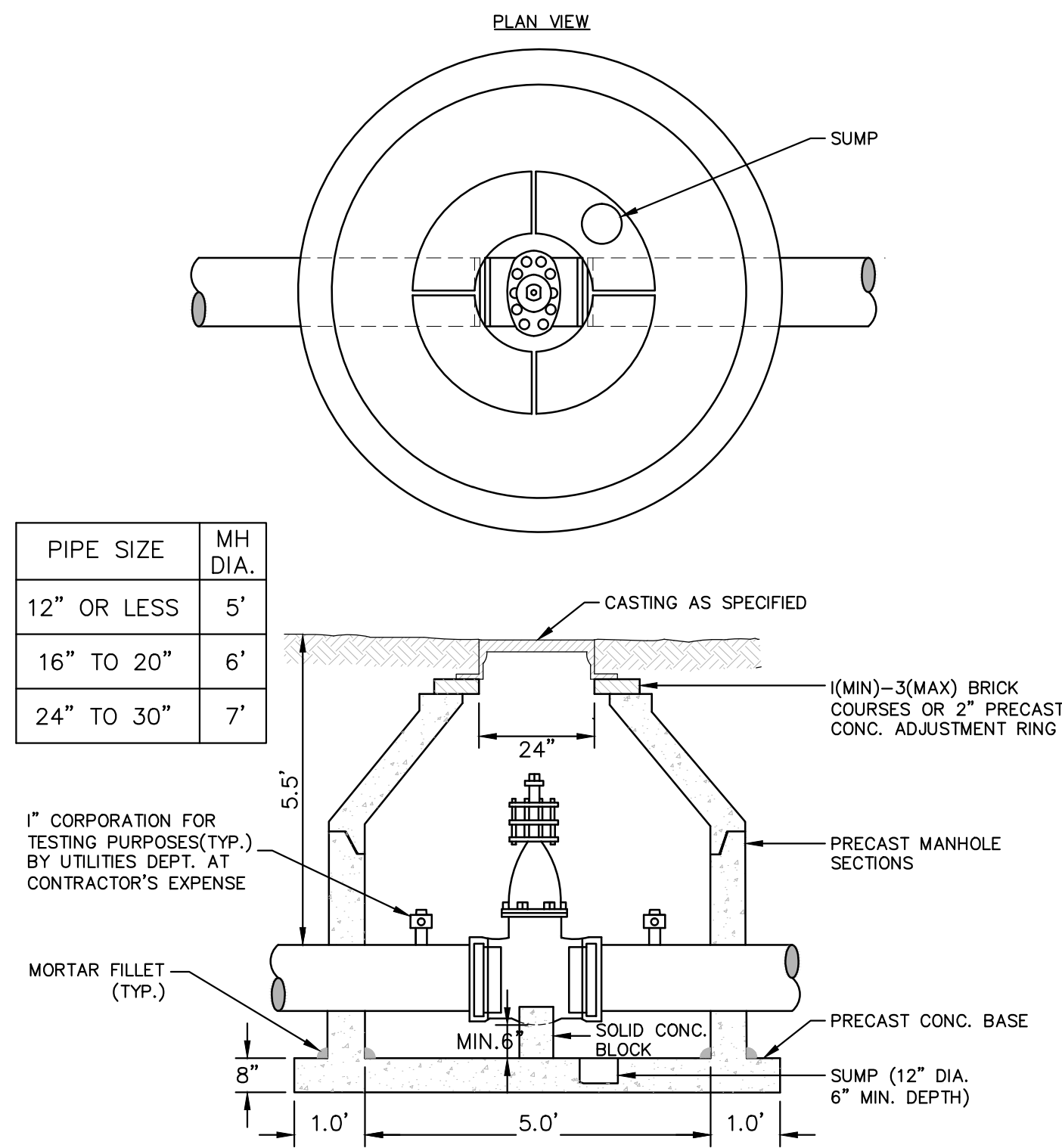
APPLIES TO: POLYETHYLENE WRAPPED D.I. WATERMAIN SEE PLANS FOR LOCATIONS

**POLYETHYLENE ENCASUREMENT**



NOTE: IF MANHOLE WILL BE PLACED IN GRAVEL ROAD, CASTING TO BE SET 6" TO 8" BELOW ROADWAY GRADE. ALL CONSTRUCTION METHODS SHALL REMAIN AS SHOWN ABOVE.

**MANHOLE CASTING ADJUSTMENT SD-GU-6**



PIPE SIZE	MH DIA.
12" OR LESS	5'
16" TO 20"	6'
24" TO 30"	7'

- NOTES:
1. ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.
  2. ALL JOINTS MADE WATER TIGHT WITH RUBBER GASKET JOINTS.
  3. NO STEPS PERMITTED

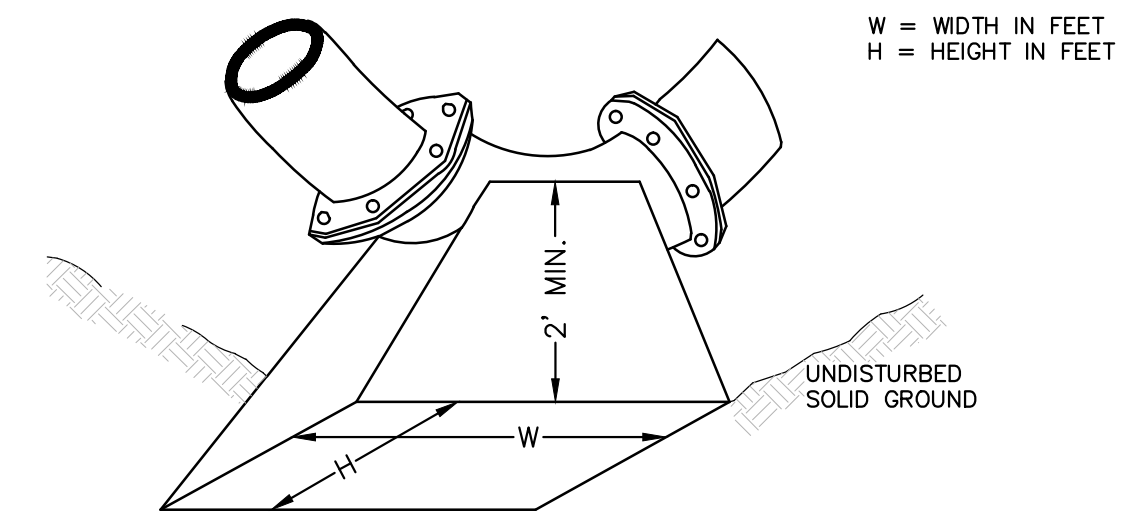
CITY OF ANN ARBOR STANDARD SD-W-3 APPLIES TO: SEE PLANS FOR LOCATIONS

**GATE WELL FOR MAIN 16" & SMALLER**

MINIMUM STANDARDS

REACTION BACKING: The Class "A" concrete at the Fitting face shall extend to within (2) inches of the bell and shall extend from the fitting face a minimum of (2) feet to the UNDISTURBED SOLID GROUND. The dimensions of the reaction backing (thrust block) at the face of the undisturbed solid ground shall be as shown in the Table below. If there isn't sufficient space for the installation of the "thrust block" without interference with other services, another arrangement satisfactory to the engineer shall be used, i.e. encasement.

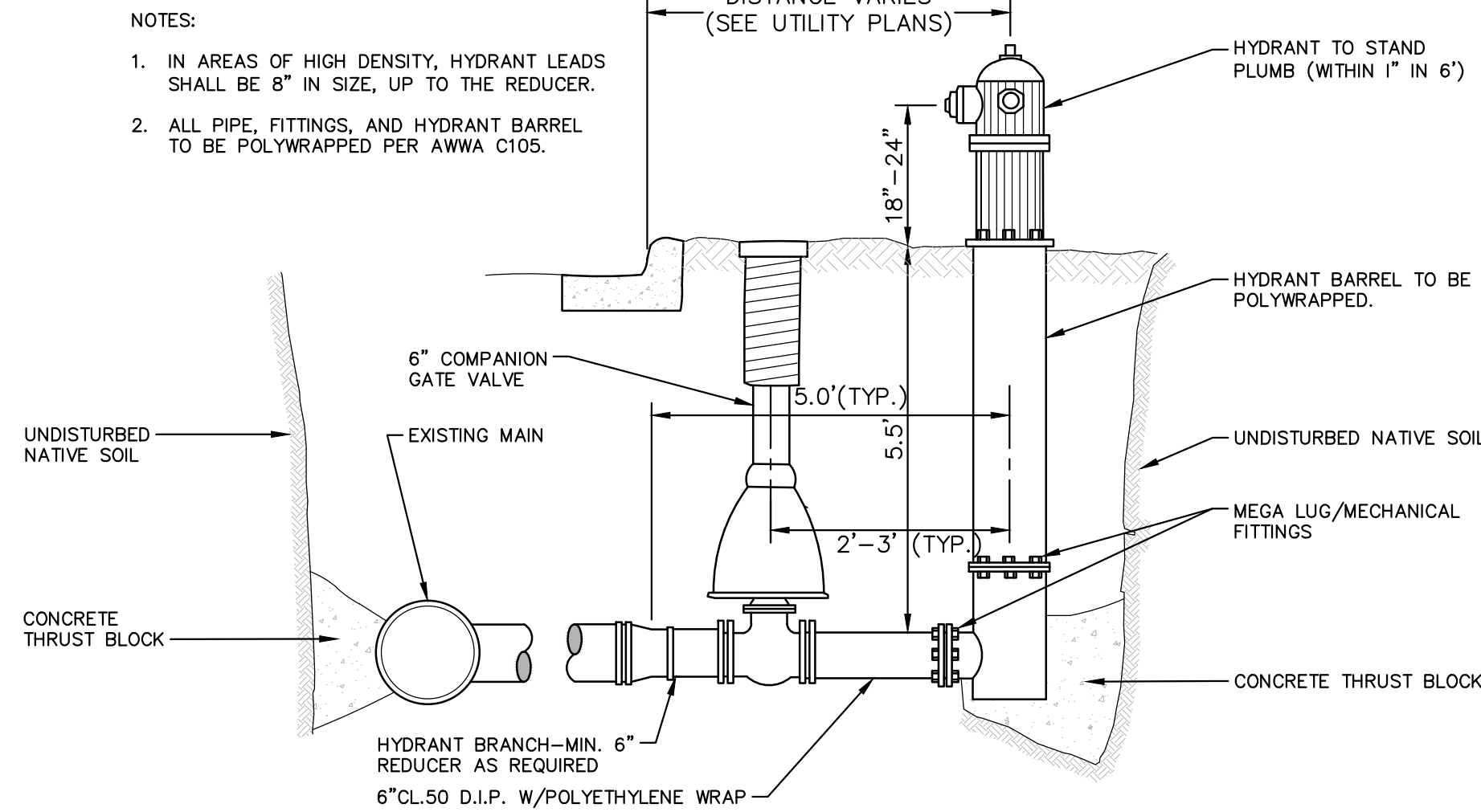
Fittings I.D.	Plug Tee Cross		Bends				Hydrant	
	W	H	90°	45°	22½°	11¼°	W	H
2.5	1	1	1	1	1	1		
4	1	1	1	1	1	1		
6	2	1.5	2	2	2	1	1	2 1.5
8	2.5	2	3.5	2	2	1	1	2.5 2
12	3.5	3	5.5	3	3.5	2.5	2	2 1
16	6	3.5	6	4	5	3	3.5	2 2
20	8	4	12	4	6	4	4	3 2
24	11	4	17	4	9	4	6	4 3.5 2
30	11	4	17	4	9	4	6	4 3.5 2



NOTE: THESE ARE MINIMUM STANDARDS. WHERE SOIL CONDITIONS DICTATE, ADJUSTMENTS IN SIZE SHALL BE MADE BY THE PUBLIC SERVICES DIRECTOR.

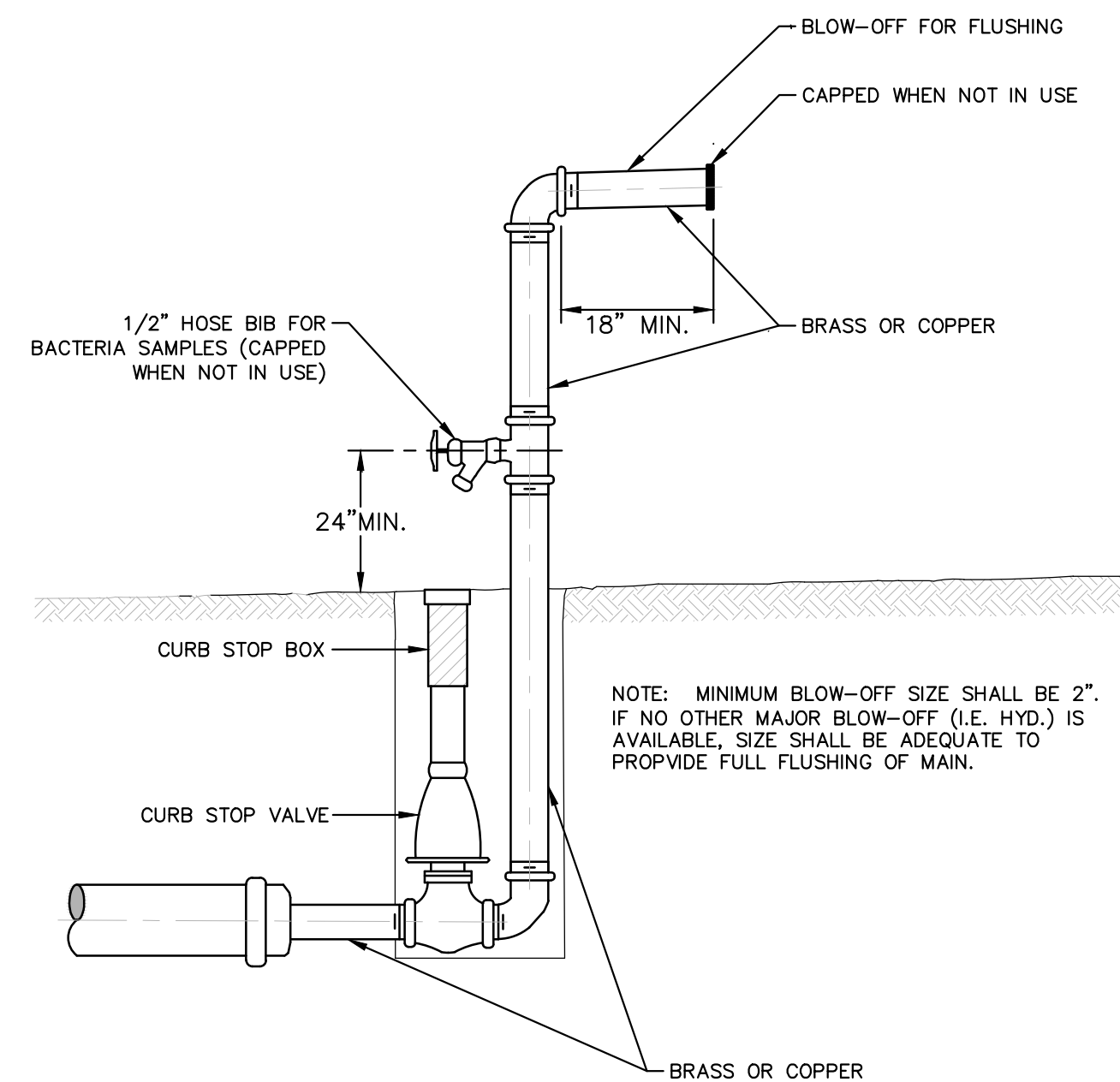
CITY OF ANN ARBOR STANDARD SD-W-2 APPLIES TO: SEE PLANS FOR LOCATIONS

**THRUST BLOCK**



- NOTES:
1. IN AREAS OF HIGH DENSITY, HYDRANT LEADS SHALL BE 8" IN SIZE, UP TO THE REDUCER.
  2. ALL PIPE, FITTINGS, AND HYDRANT BARREL TO BE POLYWRAPPED PER AWWA C105.

**FIRE HYDRANT ASSEMBLY SD-W-1**



NOTE: MINIMUM BLOW-OFF SIZE SHALL BE 2". IF NO OTHER MAJOR BLOW-OFF (I.E. HYD.) IS AVAILABLE, SIZE SHALL BE ADEQUATE TO PROVIDE FULL FLUSHING OF MAIN.

**TEMPORARY TESTING BLOW OFF SD-W-7**

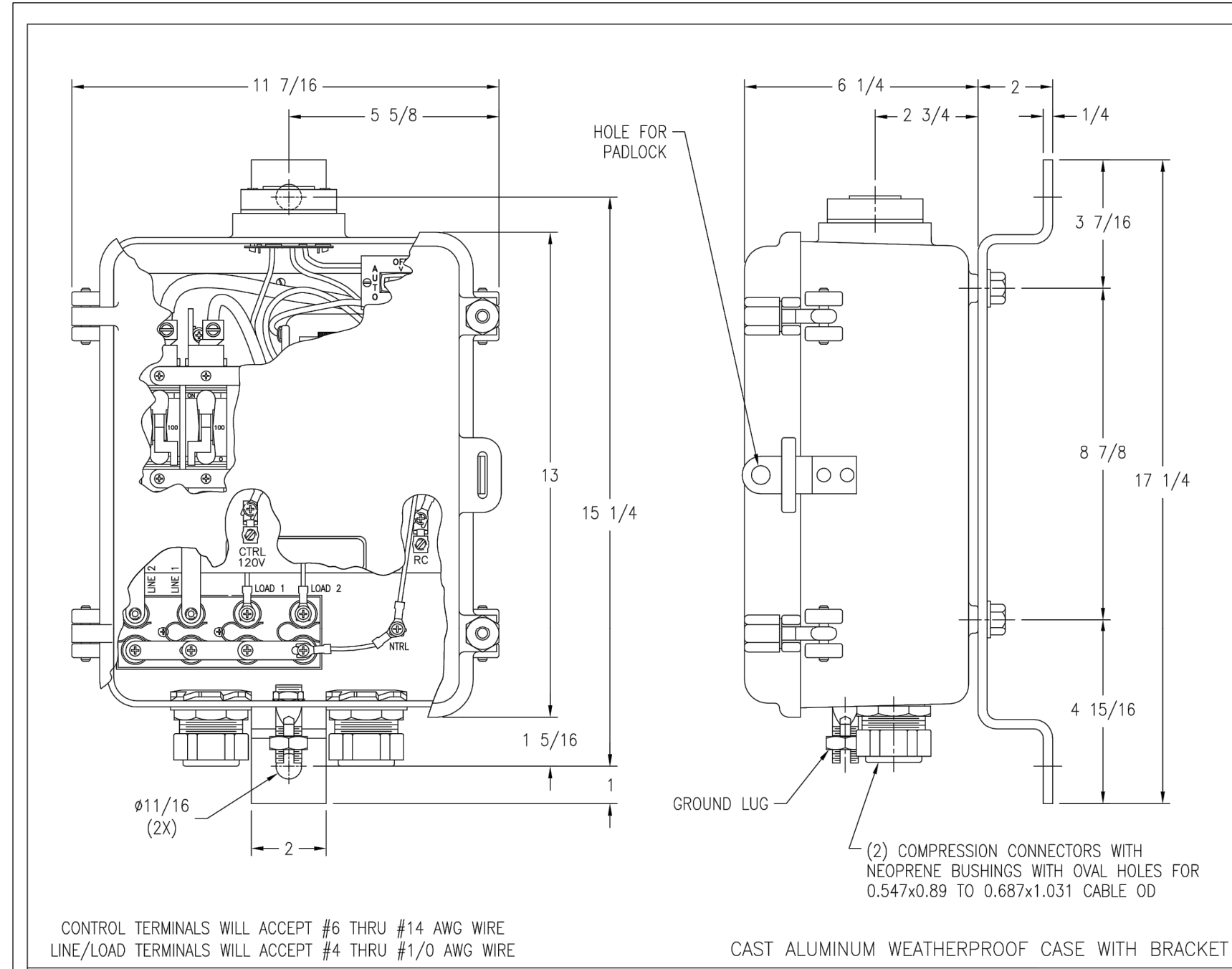
811 Know what's below. Call before you dig.

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR  
S. DIVISION ST. RESURFACING  
WATER DET

SCALE: NTS  
DRAWING No. 2015038-6  
SHEET No. 6 OF 41

REV.	DATE	DESCRIPTION	CHECKED	DRAWN	BY
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00		ADD DESCRIPTION AN MAKE LAYER PLOT			

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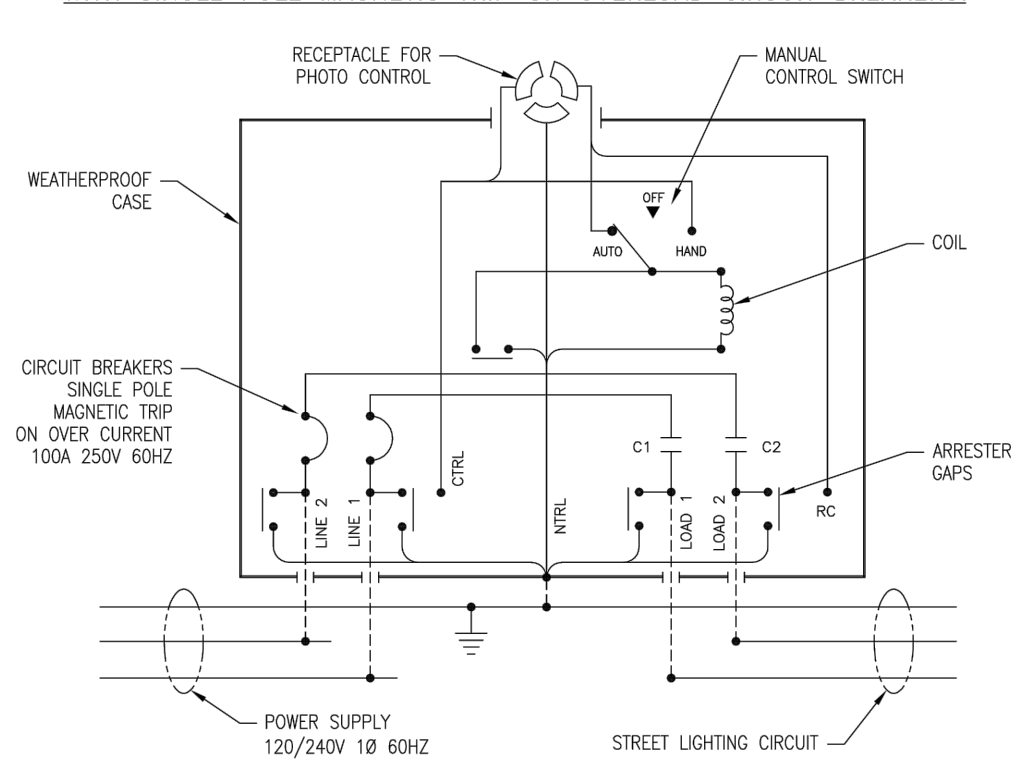


CONTROL TERMINALS WILL ACCEPT #6 THRU #14 AWG WIRE  
LINE/LOAD TERMINALS WILL ACCEPT #4 THRU #1/0 AWG WIRE

CAST ALUMINUM WEATHERPROOF CASE WITH BRACKET

(2) COMPRESSION CONNECTORS WITH NEOPRENE BUSHINGS WITH OVAL HOLES FOR 0.547x0.89 TO 0.687x1.031 CABLE OD

**CONNECTIONS FOR TYPE MR-YO SPEC 6442 STREET LIGHT CONTROL ASS'Y WITH SINGLE POLE MAGNETIC TRIP ON OVERLOAD CIRCUIT BREAKERS.**



TWO POLE STREET LIGHT CONTROL ASS'Y WIRED FOR OPERATION WITH 120V PHOTO CONTROL UNIT AND RATED FOR SWITCHING A STREET LIGHTING LOAD WITH NORMAL CURRENT WHICH DOES NOT EXCEED THE LOAD CURRENT RATING SHOWN ON THE NAMEPLATE. IF SUPPLY IS 240/480V, A SEPARATE 120V SOURCE MUST BE CONNECTED TO "CTRL" TERMINAL FOR PC OPERATION.

THE LOCATION OF THE PHOTO CONTROL UNIT MAY BE EITHER AT THE CONTROL ASS'Y AND PLUGGED INTO THE RECEPTACLE PROVIDED FOR SAME, OR AT A REMOTE POINT SUCH AS AN AUXILIARY PHOTO CONTROL MOUNTING ADAPTER OR ANOTHER STREET LIGHT CONTROL ASS'Y.

WHEN PHOTO CONTROL IS TO BE REMOTE, CLOSE THE SELF CONTAINED RECEPTACLE FOR PHOTO CONTROL WITH AN OPEN CIRCUITED CAP. ESTABLISH THE OPERATING CIRCUIT BY WIRING FROM THE "TRC" TERMINAL TO THE LOAD LEAD OF THE REMOTELY LOCATED AUXILIARY PHOTO CONTROL MOUNTING ADAPTER, OR TO THE "TRC" TERMINAL OF ANOTHER STREET LIGHT CONTROL ASS'Y. INTERCONNECTION OF "TRC" TERMINALS OF TWO OR MORE STREET LIGHT CONTROL ASSEMBLIES PROVIDES GANG OPERATION WITH A SINGLE PC UNIT.

MANUAL CONTROL SWITCH IS SHOWN IN "AUTO" POSITION AND PHOTO CONTROL ESTABLISHES ON-OFF STREET LIGHT OPERATING SCHEDULE. MANUAL CONTROL SWITCH IN HAND OR OFF POSITIONS BY-PASSES PHOTO CONTROL TO PROVIDE, RESPECTIVELY, STREET LIGHT CIRCUIT ON OR OFF OPERATION. REMOTE PC LOCATION OR GANG OPERATION CONNECTIONS ARE NOT AFFECTED BY OPERATION OF INDIVIDUAL MANUAL CONTROL SWITCHES. HOWEVER, 120V MUST BE AVAILABLE AT EACH STREET LIGHT CONTROL ASSEMBLY TO PERMIT HAND-ON CIRCUIT OPERATION WITH RESPECTIVE MANUAL CONTROL SWITCH.

THE RELAY MUST BE ENERGIZED CONTINUOUSLY AT 120V DURING THE TIME OF RELAY CONTACT CLOSURE.

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**TRINETICS** Menomonee Falls, Wisconsin U.S.A.

TYPE MR-YO LINE POLE 2

SPEC. NO. 6442 SERIAL NO. X39X

FOR INSTRUCTIONS REFER IS-11939

CONTROL CIRCUIT RATING

120 VOLTS 60 HZ

A-C LOAD CIRCUIT 100 AMPS 120/240 VOLTS

NAMEPLATE DETAIL

THIRD ANGLE PROJECTION SIZE B 1/8" (F16310010)

DATE PART NUMBER 7/14/11

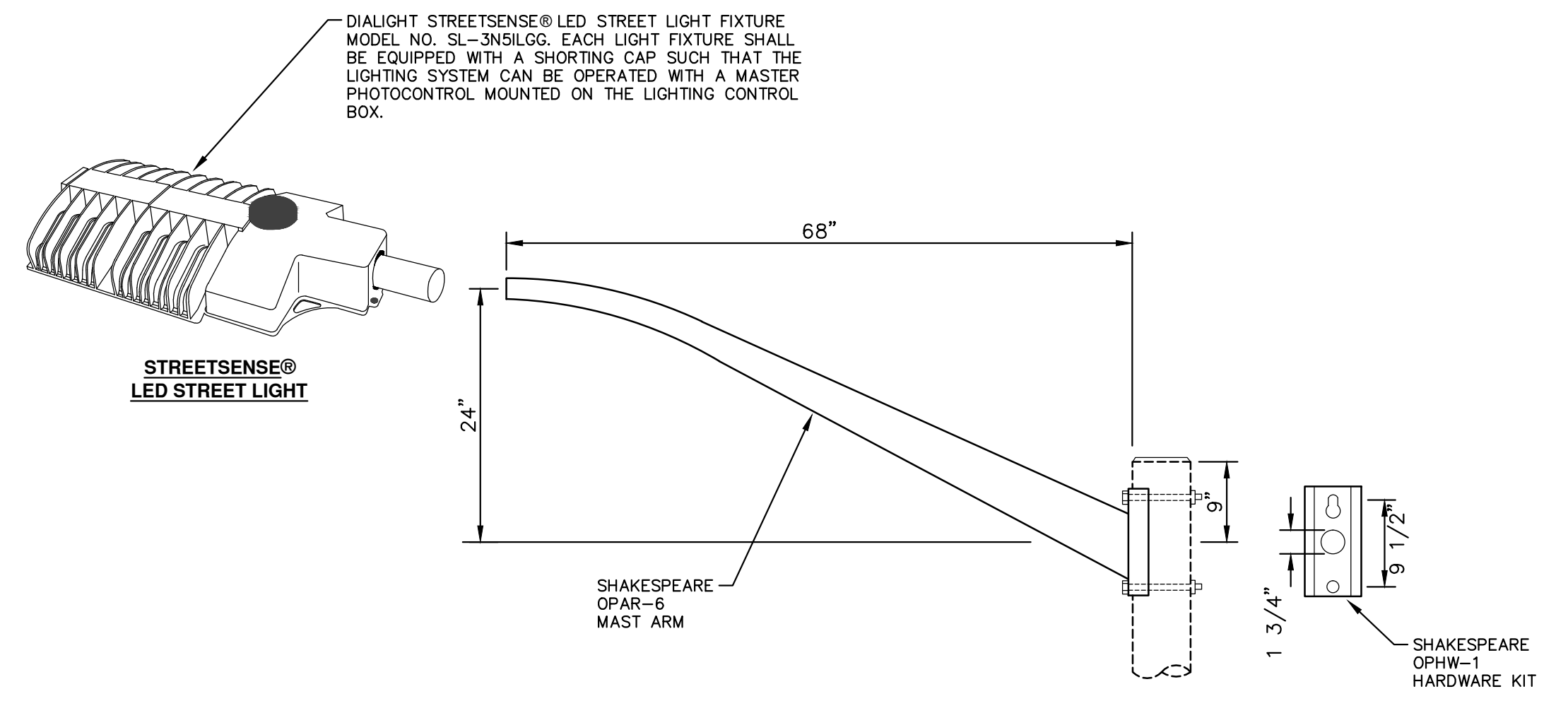
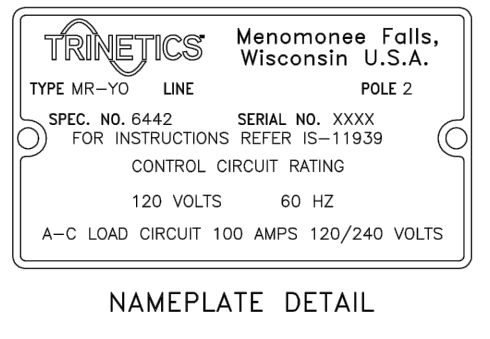
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

FAMILY ID APPROX. WEIGHT SCALE C1643 24 LB 5/16

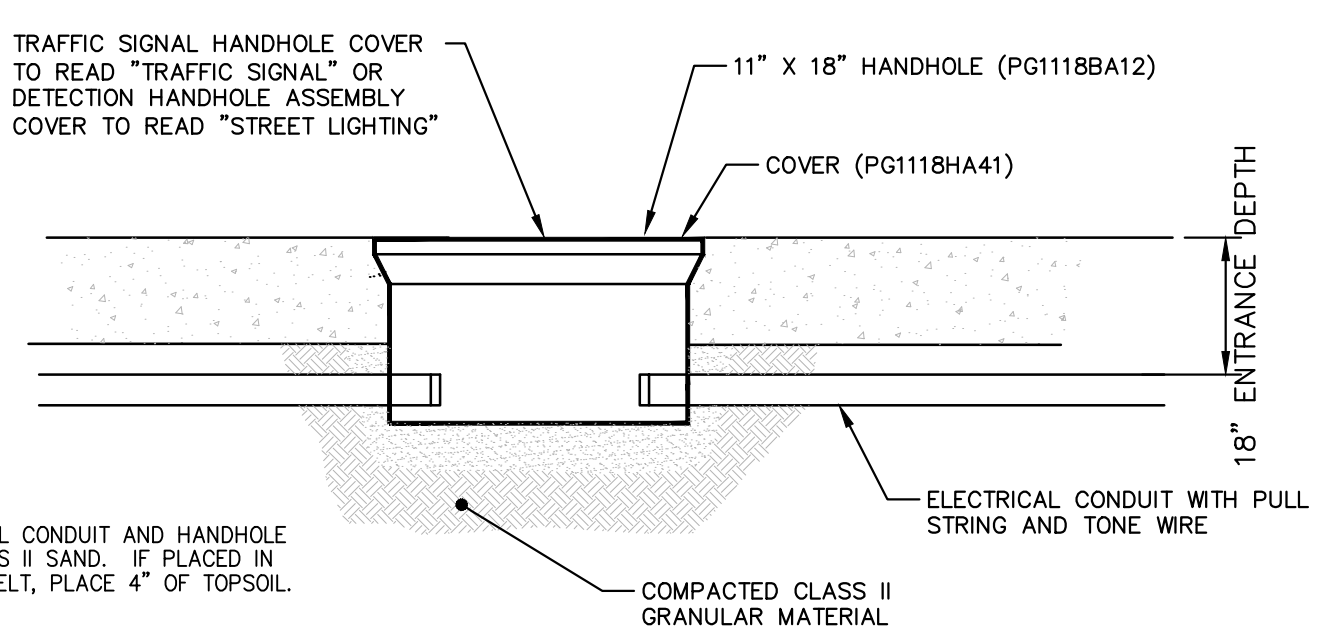
**RELAY ASSEMBLY**  
MR-YO SPEC 6442

31183000

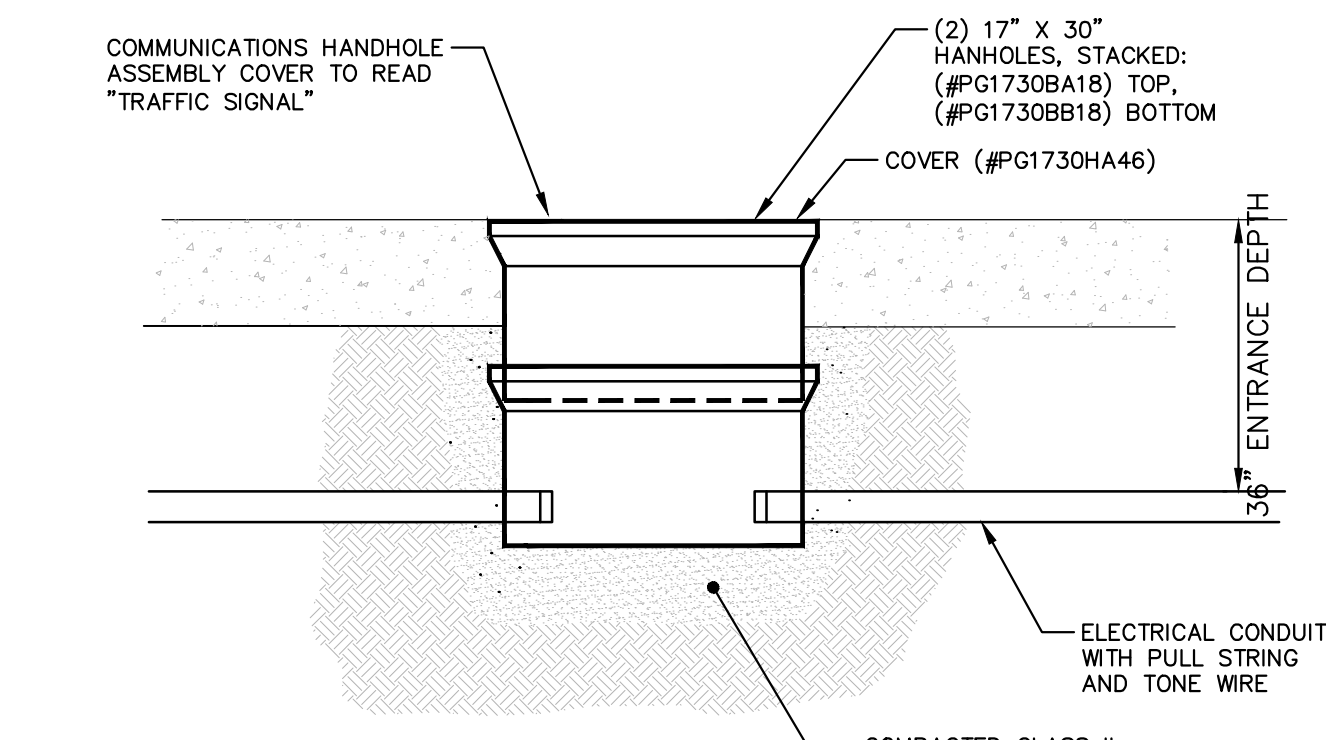
**THE CONTRACTOR SHALL PROVIDE THE STREET LIGHTING DISCONNECT BOX/LIGHTING CONTROLLER SHOWN HERE AND AS SPECIFIED IN THE CONTRACT DOCUMENTS.**



NOTE:  
THE CONTRACTOR SHALL PROVIDE A COMPLETE, FULLY-FUNCTIONING, STREET LIGHT ASSEMBLY INCLUDING ALL WIRING, CONNECTIONS, TAPE, FUSES, AND ALL RELATED APPURTENANCES. ALL COSTS ASSOCIATED WITH THESE REQUIREMENTS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "STREET LIGHT ASSEMBLY, COMPLETE."

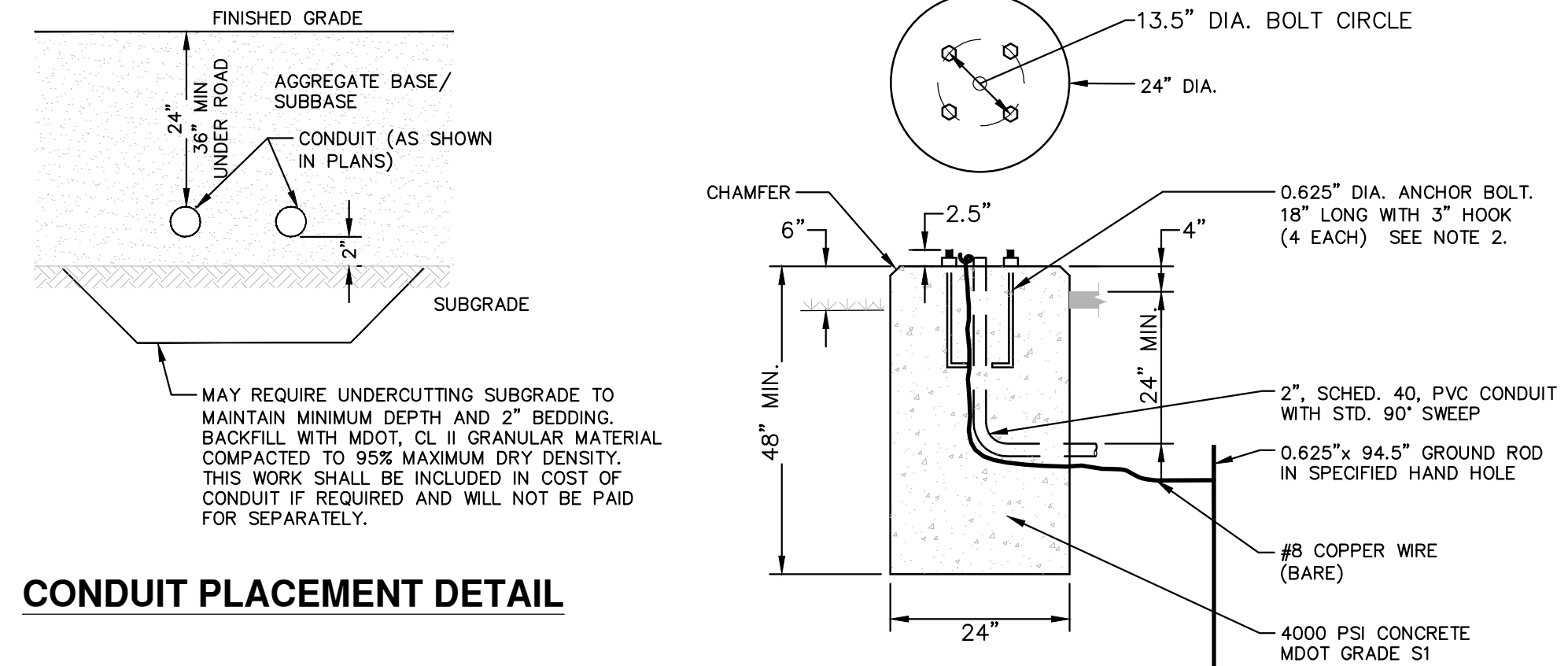


**TRAFFIC SIGNAL OR ELECTRICAL HANDHOLE ASSEMBLY**

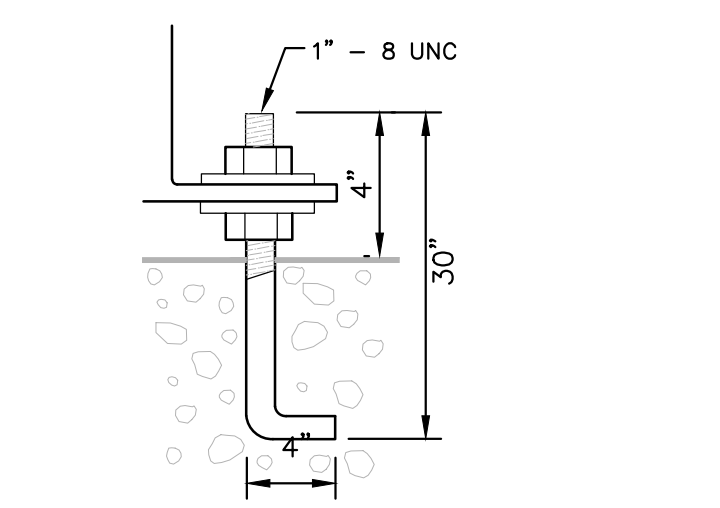


**COMMUNICATIONS HANDHOLE ASSEMBLY**

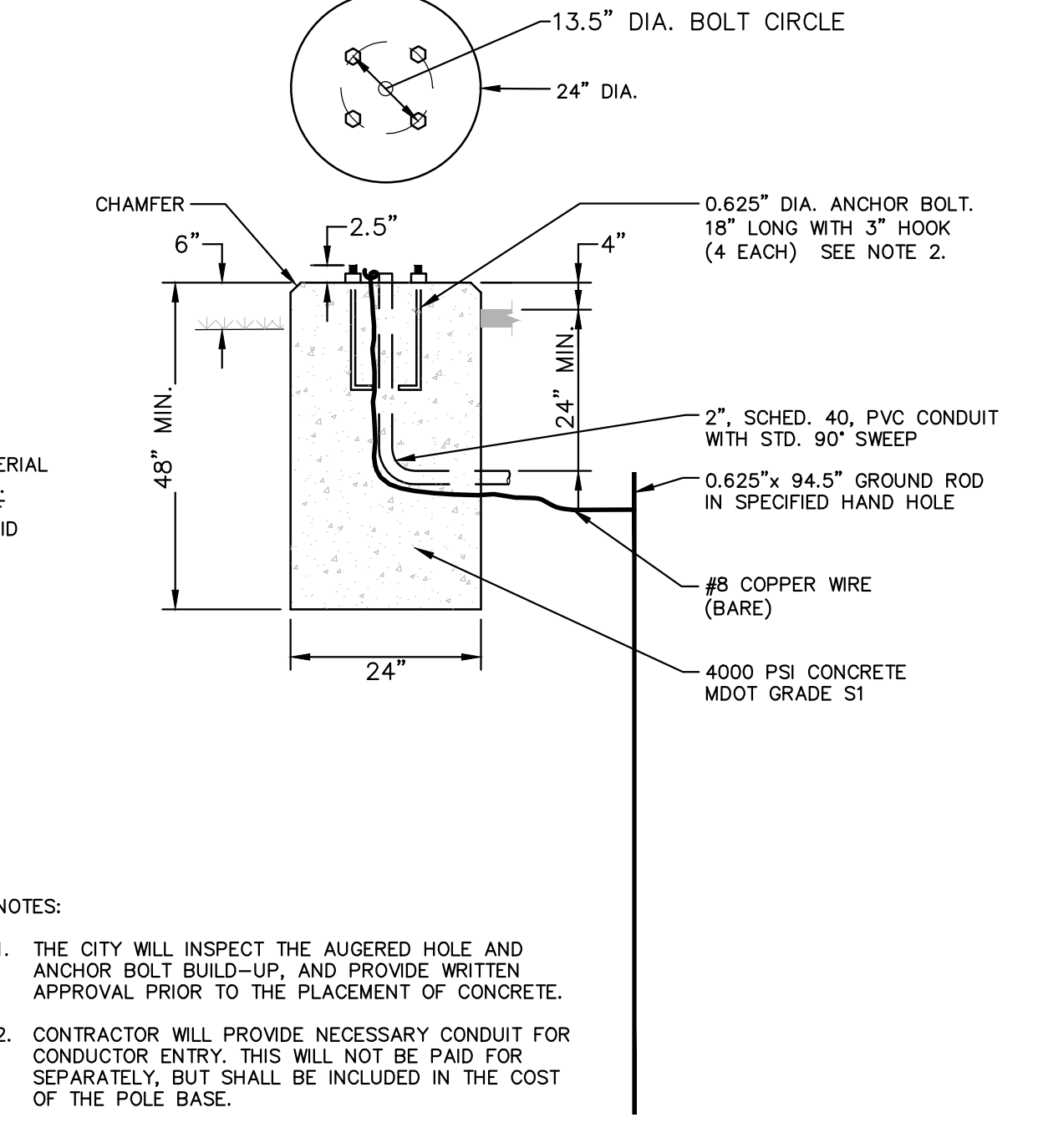
INSTALLATION NOTE:  
THE CONDUIT SHALL BE LOWERED TO A MINIMUM ENTRANCE DEPTH OF 36" BELOW TOP OF THE HAND HOLE OVER A DISTANCE OF 10" ON EACH SIDE OF THE HANDHOLE ASSEMBLY



**CONDUIT PLACEMENT DETAIL**

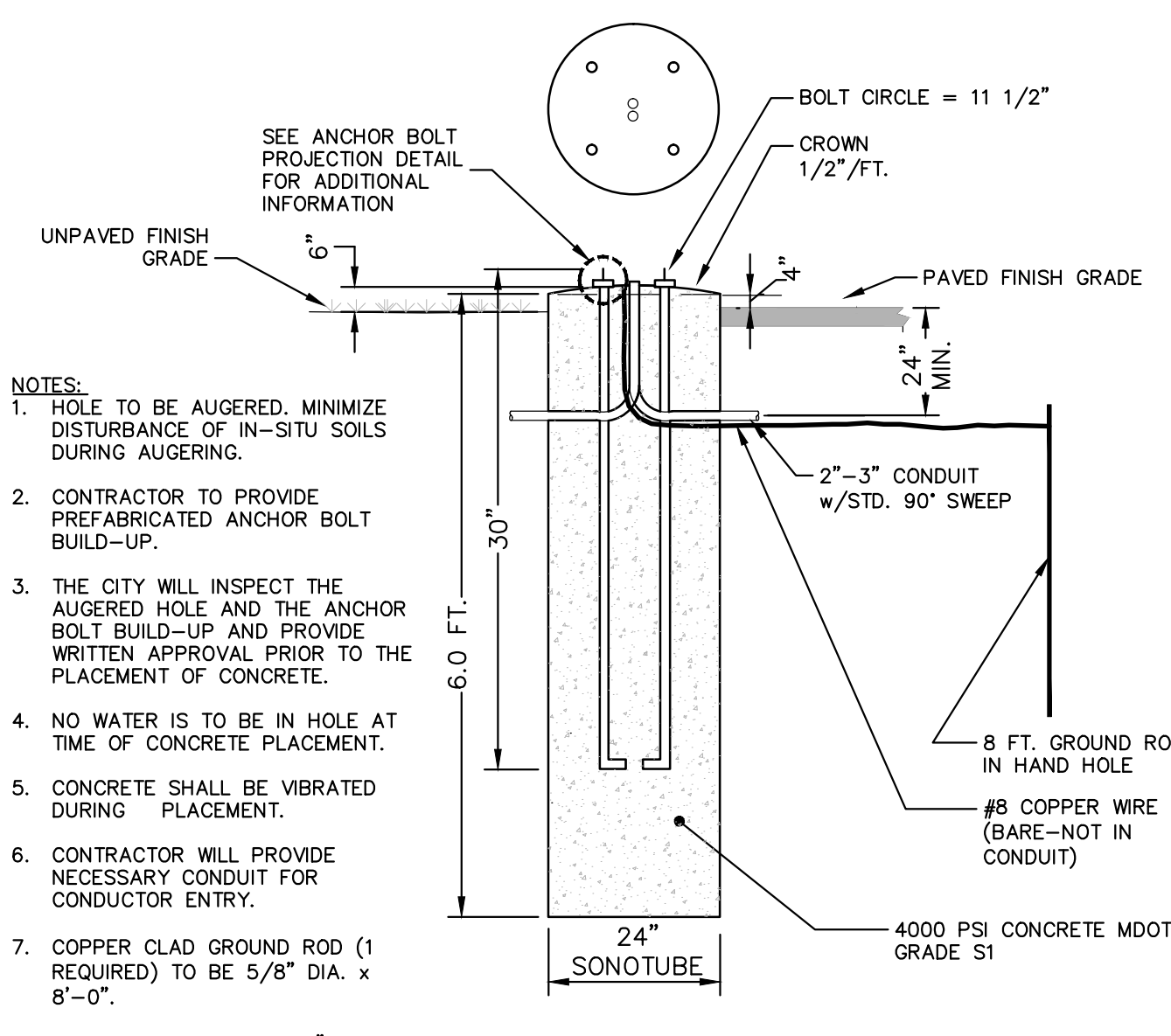


ALSO PROVIDE SHAKESPEARE OPAB-2035 ANCHOR BOLT KIT FOR EACH LIGHT POLE. ANCHOR BOLTS TO BE HOT-DIPPED GALVANIZED, 30" LONG, WITH 4" HOOK, AND A 4" PROJECTION ABOVE FOUNDATION.



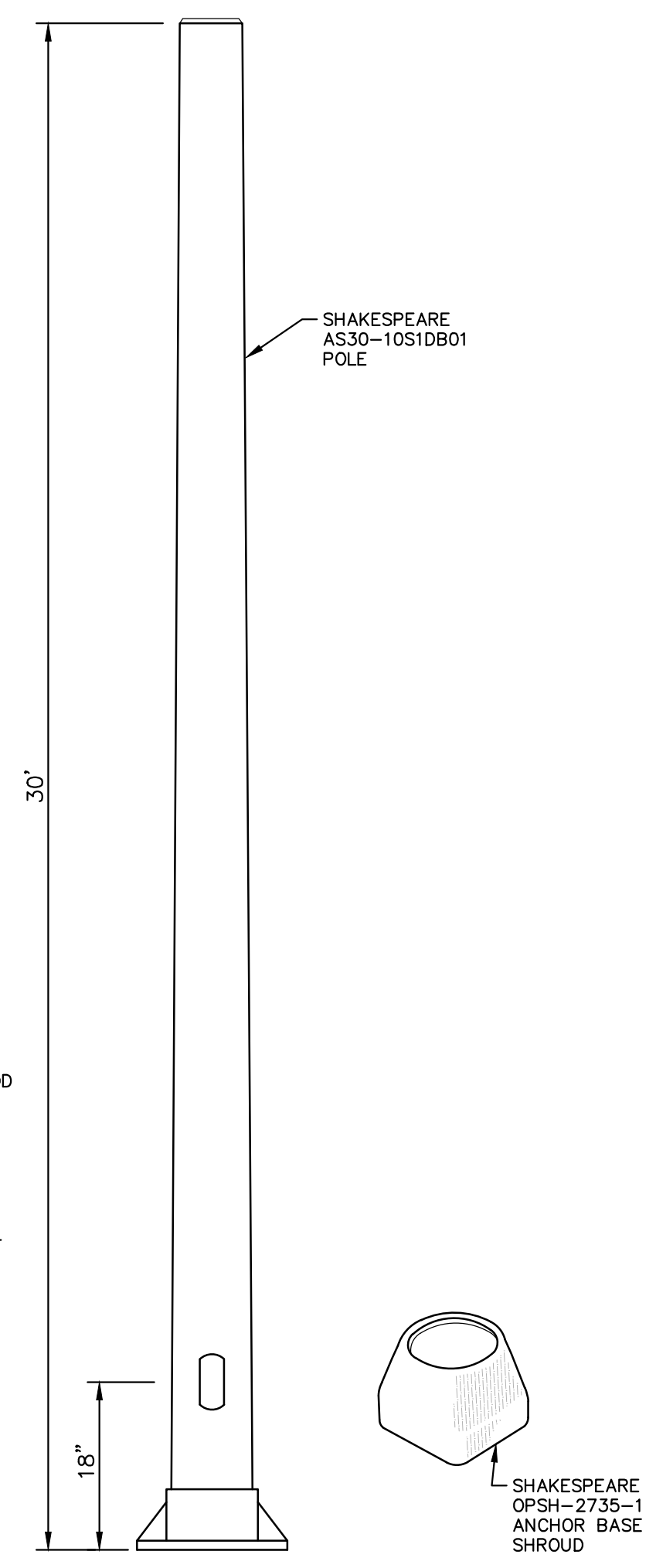
**PEDESTRIAN SIGNAL POLE FOUNDATION SD-SL-3**

NOTES:  
1. THE CITY WILL INSPECT THE AUGERED HOLE AND ANCHOR BOLT BUILD-UP, AND PROVIDE WRITTEN APPROVAL PRIOR TO THE PLACEMENT OF CONCRETE.  
2. CONTRACTOR WILL PROVIDE NECESSARY CONDUIT FOR CONDUCTOR ENTRY. THIS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE POLE BASE.



**STREETLIGHT FOUNDATION SD-SL-1**

NOTES:  
1. HOLE TO BE AUGERED. MINIMIZE DISTURBANCE OF IN-SITU SOILS DURING AUGERING.  
2. CONTRACTOR TO PROVIDE PREFABRICATED ANCHOR BOLT BUILD-UP.  
3. THE CITY WILL INSPECT THE AUGERED HOLE AND THE ANCHOR BOLT BUILD-UP AND PROVIDE WRITTEN APPROVAL PRIOR TO THE PLACEMENT OF CONCRETE.  
4. NO WATER IS TO BE IN HOLE AT TIME OF CONCRETE PLACEMENT.  
5. CONCRETE SHALL BE VIBRATED DURING PLACEMENT.  
6. CONTRACTOR WILL PROVIDE NECESSARY CONDUIT FOR CONDUCTOR ENTRY.  
7. COPPER CLAD GROUND ROD (1 REQUIRED) TO BE 5/8" DIA. x 8'-0".  
8. CONDUIT TO EXTEND 1-2" ABOVE BASE. CABLES TO EXTEND 6" OUTSIDE OF HAND HOLE.  
9. GROUND CABLE SHALL BE #6 SOFT BARE COPPER WIRE WELDED TO GROUND ROD WITH 24" SLACK ABOVE FOUNDATION TOP. THE NEUTRAL AT THE POLE IS TO BE CONNECTED TO THIS GROUND CABLE.



**STREETLIGHT DETAIL**

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

BY	DATE	DESCRIPTION
BY	DATE	DESCRIPTION
01		ADD DESCRIPTION AN MAKE LAYER PLOT
00		ADD DESCRIPTION AN MAKE LAYER PLOT
REV.	DATE	DESCRIPTION

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

**S. DIVISION ST. RESURFACING**

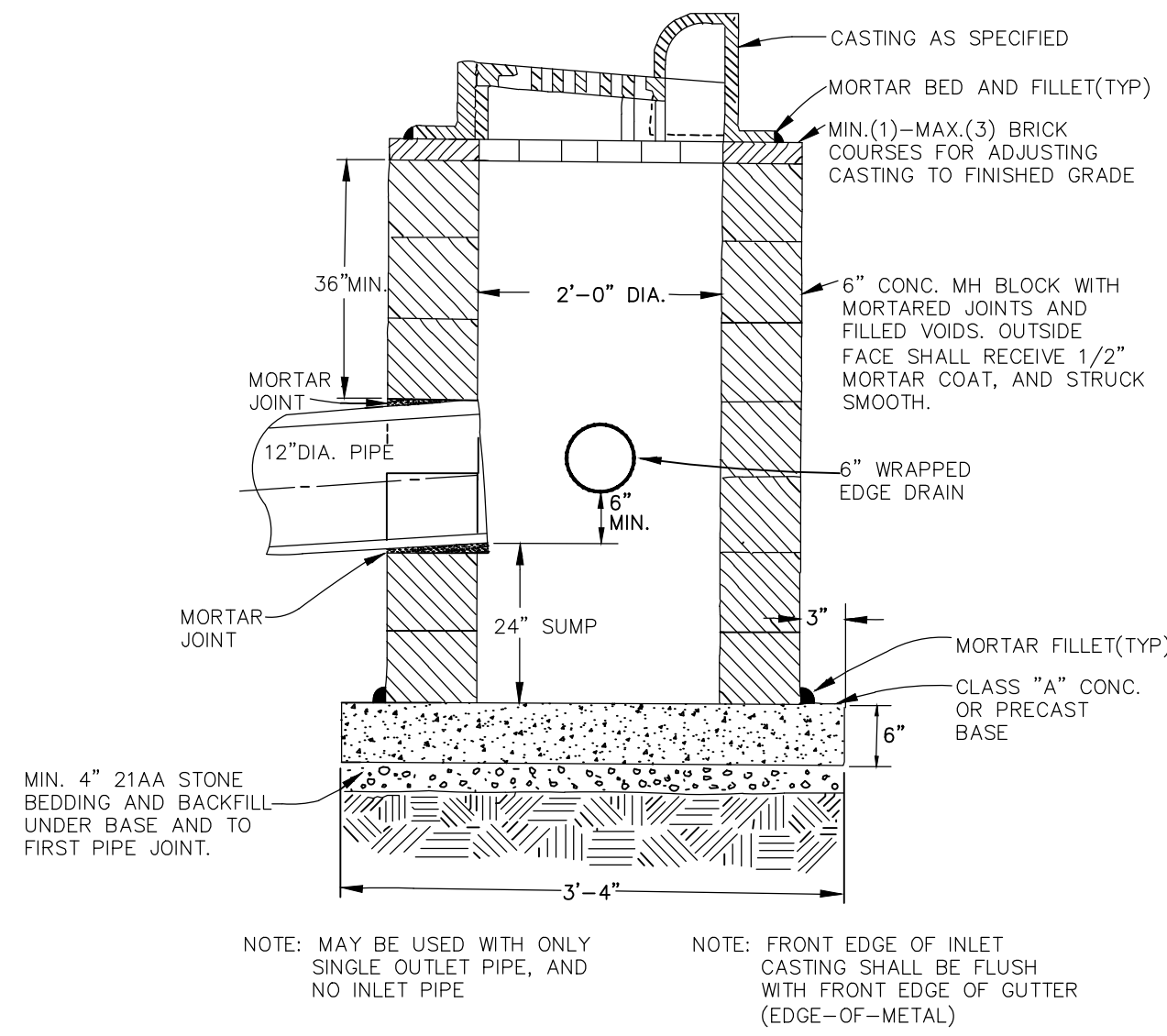
LIGHTING DET

SCALE: NTS

DRAWING No. 2015038-7

SHEET No. 7 OF 41

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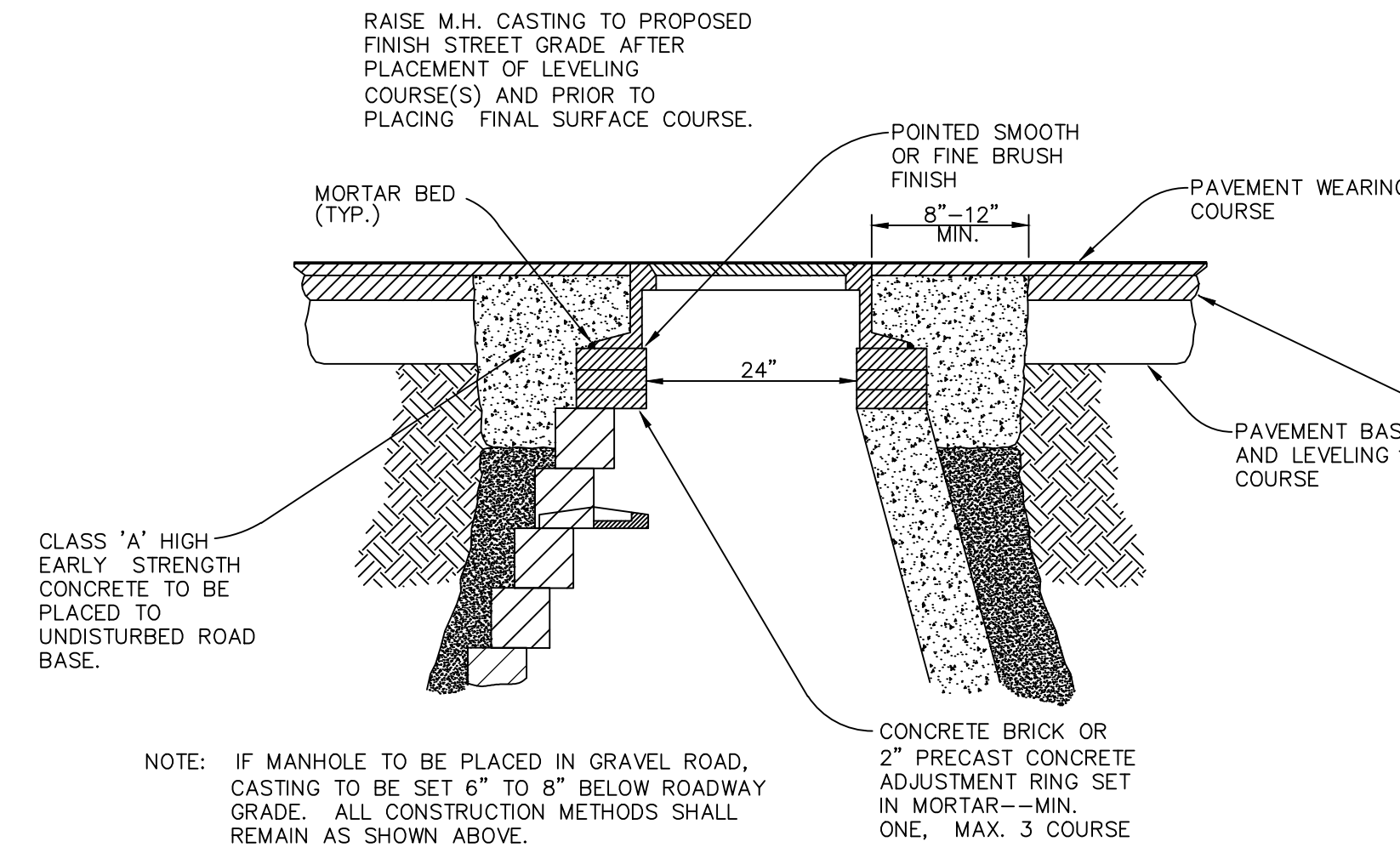


**SINGLE INLET STRUCTURE**

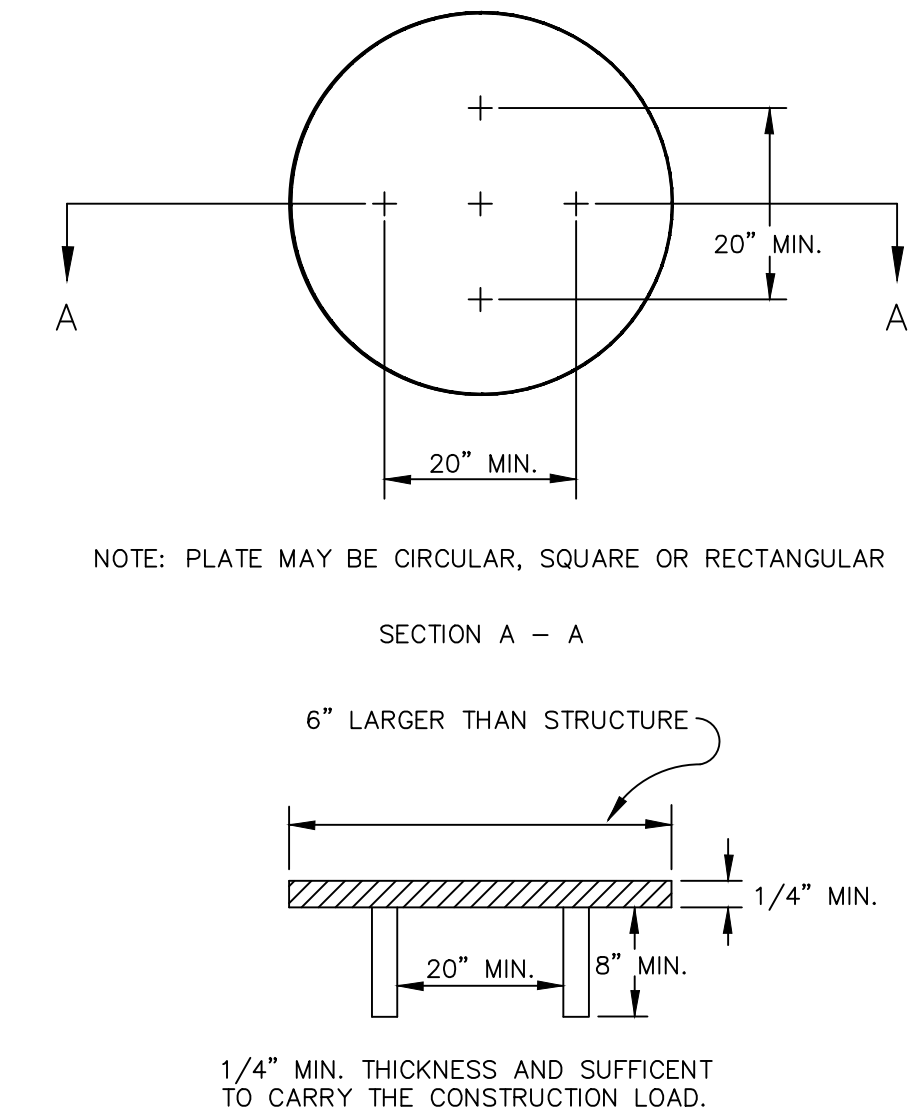
TYPE OF CASTING	NEEHAH FOUNDRY	EAST JORDAN IRON WORKS
Barrier Curb Inlet for 24 and 30 inch curb	R-3013B, Type S grate (500 Pounds)	7045, Type M1 grate (490 Pounds)
Barrier Curb Inlet for 18 inch curb		7210, Type M2 grate (490 Pounds)
*Manhole Frame & Cover	R-1642, Type C Cover (380 Pounds)	1040, Type A Cover (400 Pounds)
**Watertight Manhole Frame and Cover	N/A	1040-WT (400 Pounds)
Monument Box	N/A	8360 (100 Pounds)

**STANDARD CASTING SCHEDULE**

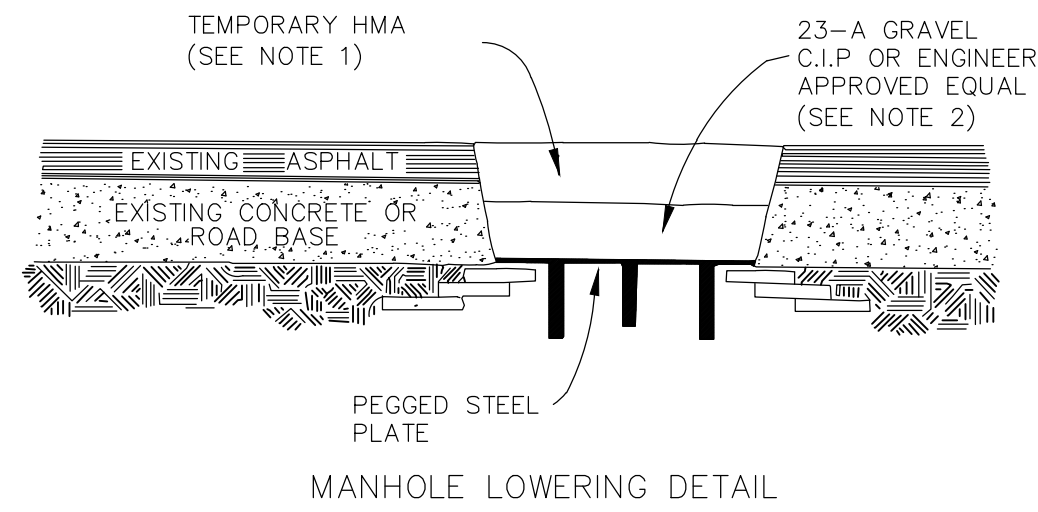
\*Frames and covers must have machined bearing surfaces. Covers must have two (2) 1" vent holes located opposite each other and 6" from the edge of the cover. Each cover shall have "Sewer", "S" or "Water", "W" cast in the surface, whichever is applicable.  
 \*\*Frames and covers must have machined bearing surfaces. Each cover shall have "Sewer", "S" or "Water", "W" cast in the surface, whichever is applicable.



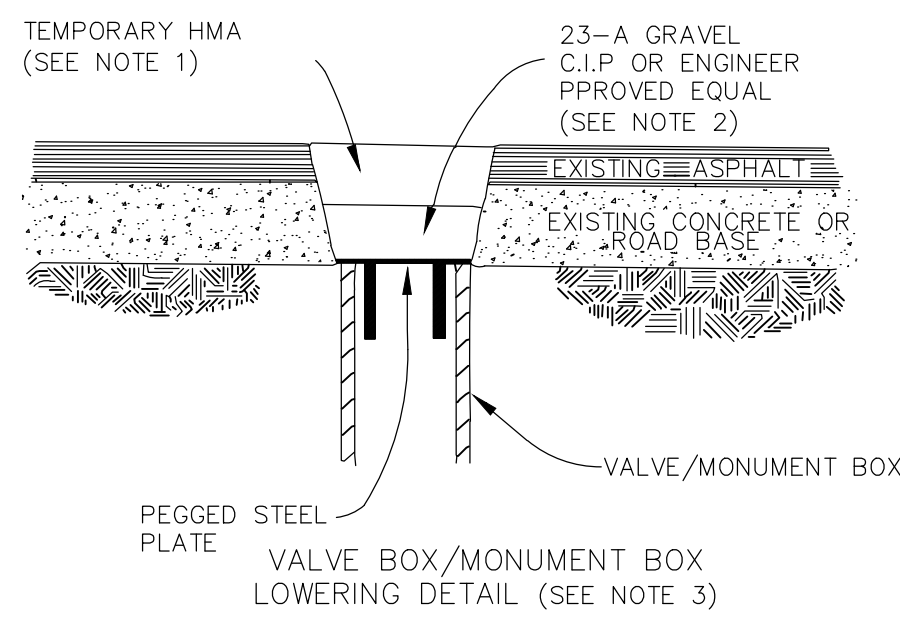
**MANHOLE CASTING ADJUSTMENT**



**STRUCTURE PLATE**



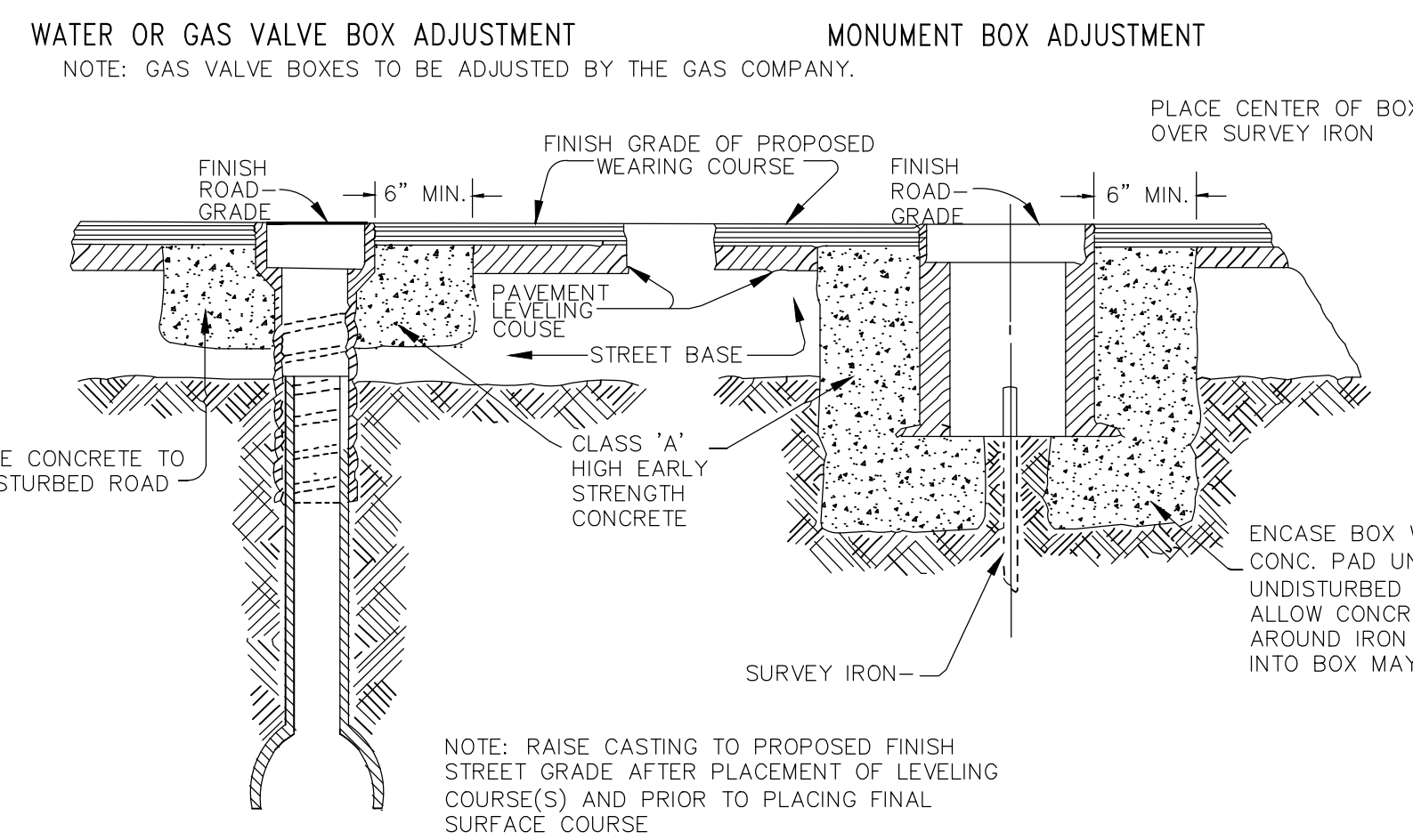
**MANHOLE LOWERING DETAIL**



**VALVE/MONUMENT BOX LOWERING DETAIL**

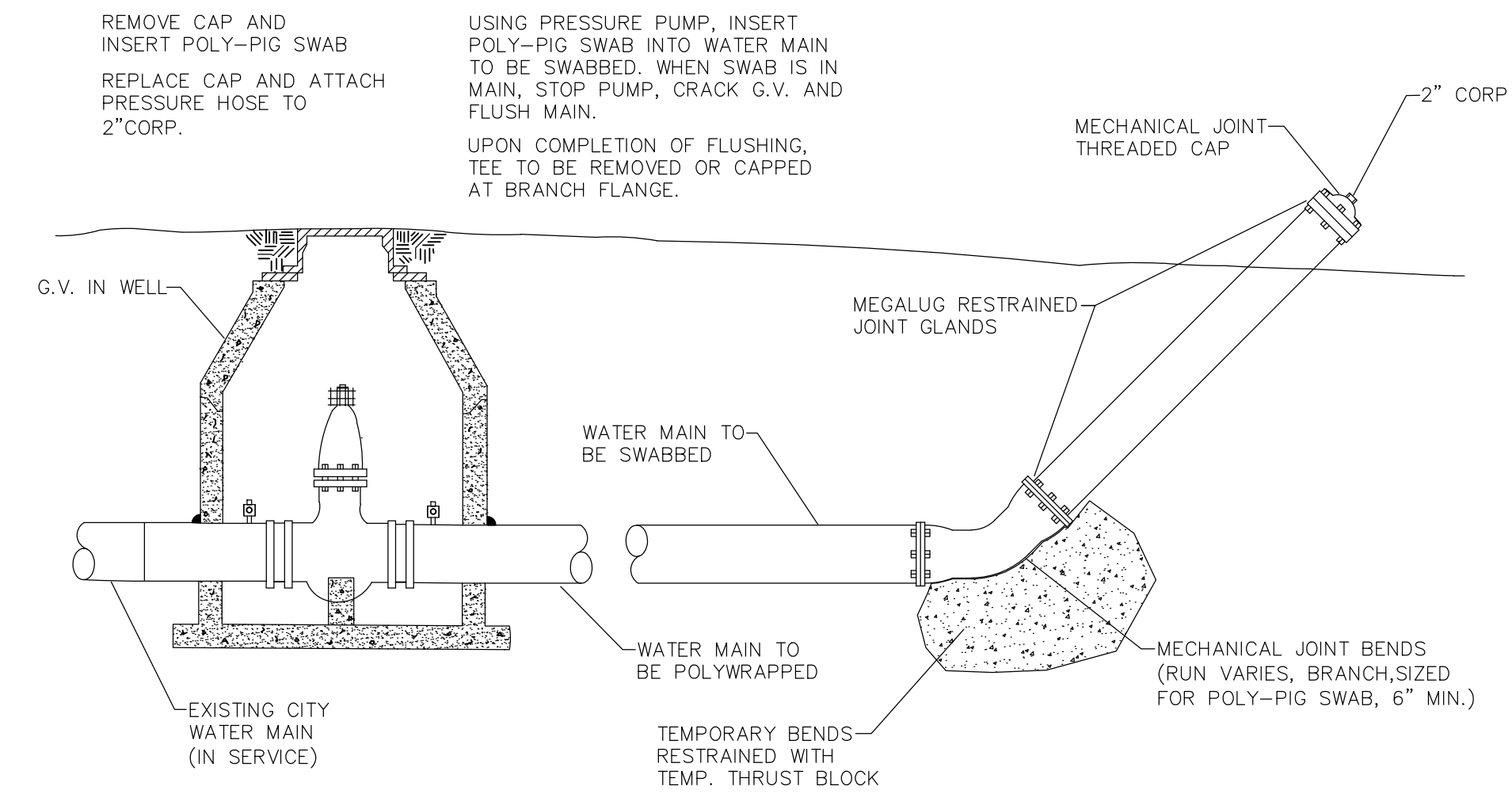
NOTE 1: IF TRAFFIC IS TO BE MAINTAINED ON THE ROADWAY BEFORE OR AFTER THE COLD MILLING OPERATION, THE STRUCTURE SHALL BE LOWERED TO THE EXTENT THAT A MINIMUM OF THREE(3) INCHES HMA 3C, HMA 4E3, OR ENGINEER APPROVED EQUAL REMAINS TO SUPPORT TRAFFIC.  
 NOTE 2: IF THE ROADWAY BEING MILLED IS CLOSED TO TRAFFIC, THE STRUCTURE SHALL BE LOWERED SUCH THAT THE STEEL PLATE IS A MINIMUM OF FOUR(4) INCHES BELOW THE PROPOSED ROAD GRADE AND THE RESULTING VOID SHALL BE FILLED WITH COMPACTED 23-A GRAVEL OR ENGINEER APPROVED EQUAL.  
 NOTE 3: WHERE A MONUMENT IS TO BE LOWERED, THE CONTRACTOR SHALL GIVE THE ENGINEER A MINIMUM OF 48 HOURS WRITTEN NOTICE SO THAT THE MONUMENT CAN BE PROPERLY WITNESSED OR PROTECTED. FAILURE TO DO SO SHALL RESULT IN THE REPLACING SAID MONUMENT AT THE CONTRACTORS EXPENSE.

**MANHOLE & VALVE/MONUMENT BOX LOWERING**



**VALVE/MONUMENT BOX ADJUSTMENT**

NOTE: GAS VALVE BOXES TO BE ADJUSTED BY THE GAS COMPANY.  
 NOTE: RAISE CASTING TO PROPOSED FINISH STREET GRADE AFTER PLACEMENT OF LEVELING COURSE(S) AND PRIOR TO PLACING FINAL SURFACE COURSE.  
 ENCASE BOX WITH MIN. 6" CONC. PAD UNDER FLANGE (TO UNDISTURBED SOIL.) DO NOT ALLOW CONCRETE TO EXTEND AROUND IRON SO SEEPAGE INTO BOX MAY DRAIN.



**SWAB LAUNCHING, MODIFIED**



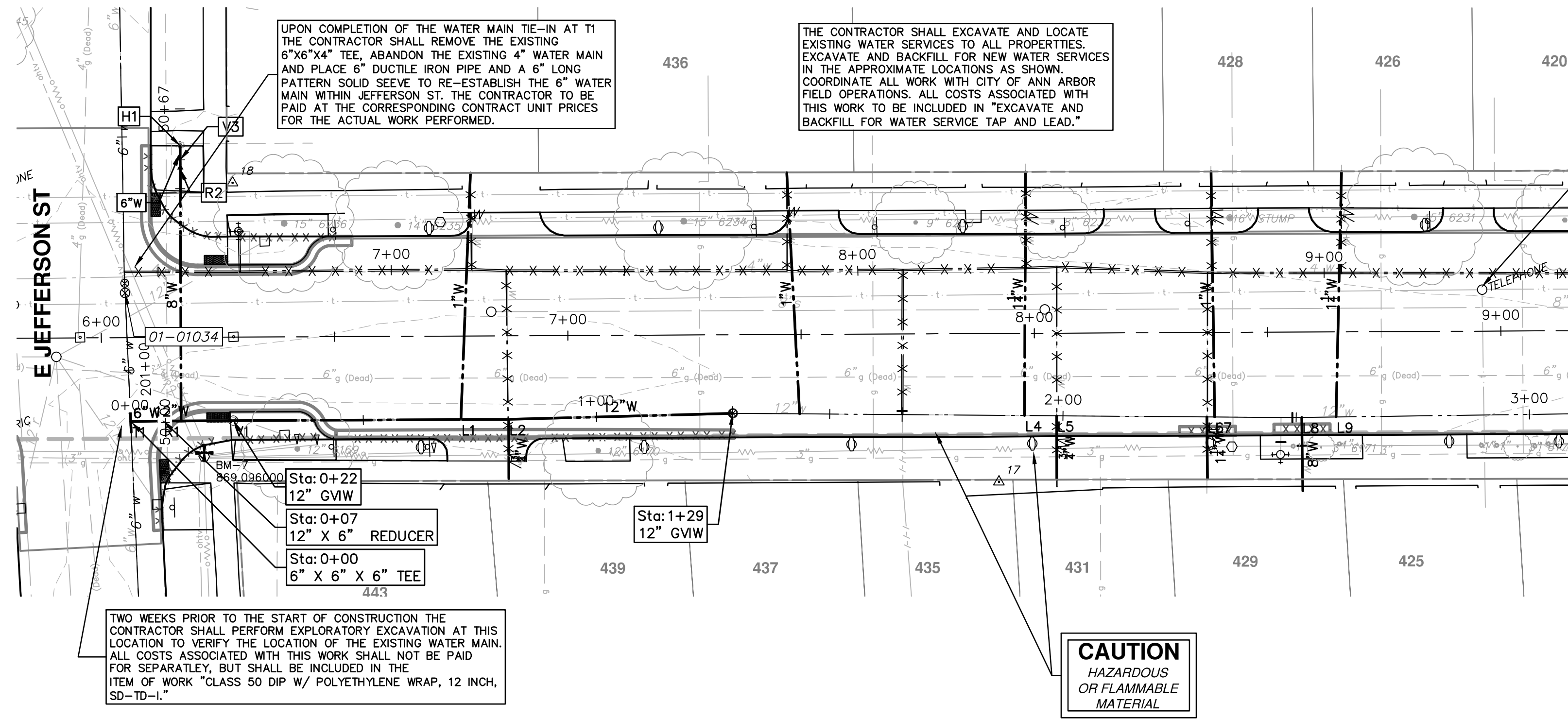
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	MAY, 2012	
	JUNE, 2012	
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	AUGUST, 2012	
	SEPTEMBER, 2012	
	OCTOBER, 2012	
	NOVEMBER, 2012	
	DECEMBER, 2012	
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	MARCH, 2013	
	APRIL, 2013	
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	AUGUST, 2013	
	SEPTEMBER, 2013	
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	DECEMBER, 2013	
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	DECEMBER, 2015	
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	DECEMBER, 2020	
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	DECEMBER, 2021	
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	JANUARY, 2025	
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	JULY, 2025	
	AUGUST, 2025	
	SEPTEMBER, 2025	
	OCTOBER, 2025	
	NOVEMBER, 2025	
	DECEMBER, 2025	



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**

SCALE PLAN: NTS  
 DRAWING No. 2015038 - 8  
 SHEET No. 8 OF 41





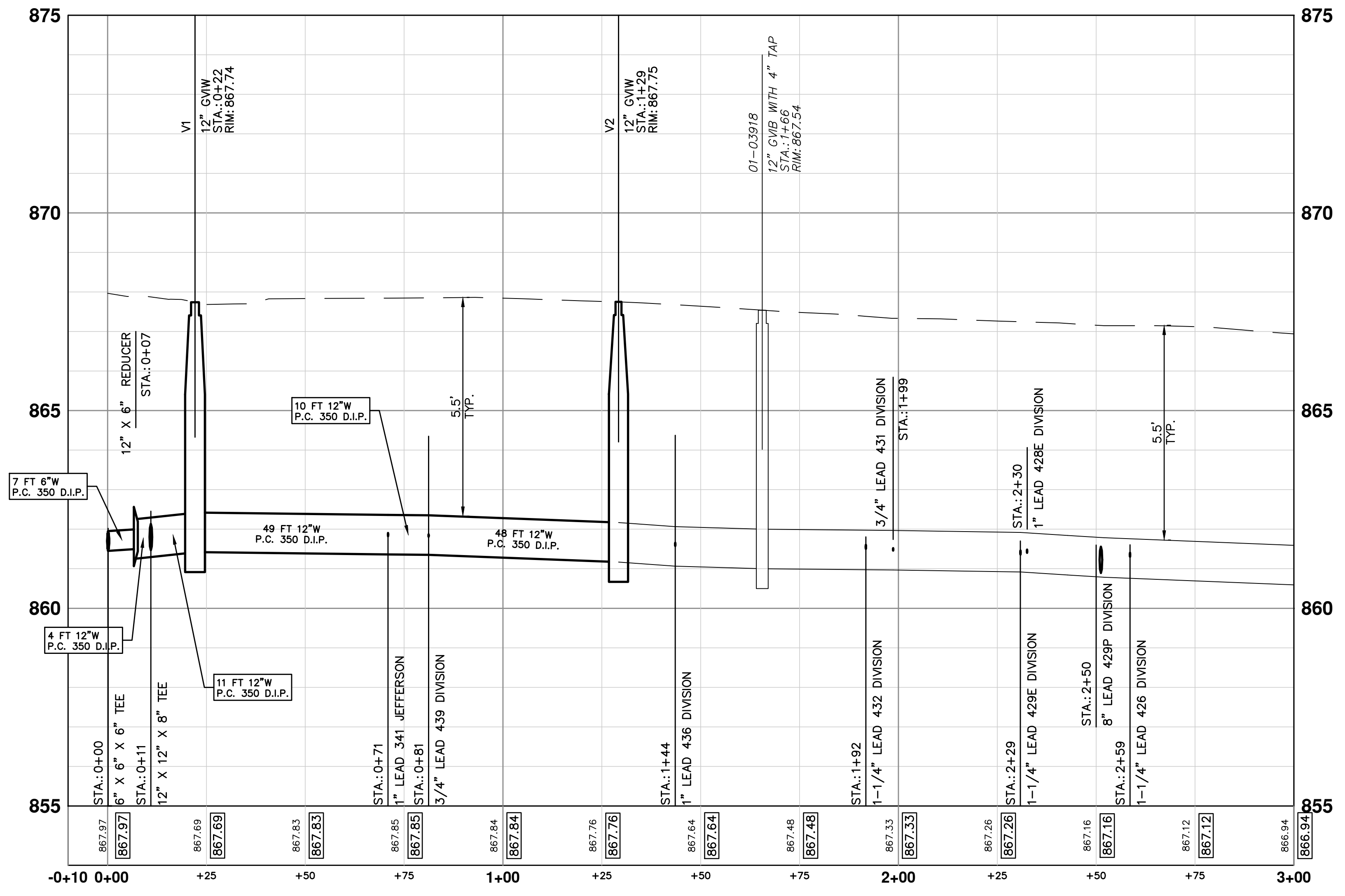
**CAUTION**  
CRITICAL UTILITY

**CAUTION**  
HAZARDOUS  
OR FLAMMABLE  
MATERIAL

**NOTES**  
QUANTITIES FOR SDR 35 PVC TO REPAIR ANY MIS-MARKED SANITARY LEADS ENCOUNTERED DURING WATER MAIN CONSTRUCTION ARE INCLUDED IN THE PROJECT. LEADS THAT ARE PROPERLY MARKED AND DAMAGED WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

WATER MAIN STRUCTURE TABLE					
STRUCTURE	TYPE	STATION	ALIGNMENT	RIM	DEPTH
T1	6" X 6" X 6" TEE	0+00	PrWatrDivision	862.02	???
R1	12" X 6" REDUCER	0+07	PrWatrDivision	867.89	6.93
V1	12" GVIW	0+22	PrWatrDivision	867.74	6.32
V2	12" GVIW	1+29	PrWatrDivision	867.75	6.58

**PRWATRDIVISION**



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
S. DIVISION ST. RESURFACING  
WATER  
PRWATR DIVISION

SHEET No. **9 OF 41**

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

REISSUED FOR BID (NO. 4429)  
ADDENDUM 1  
3/11/2016  
JKA  
JAN

FINAL SUBMITTAL  
2/22/2016  
JKA  
JAN

PROJECT MANAGER REVIEW  
1/21/2016  
JKA  
JAN

SOIL BORING LOCATION SHEET  
10/05/2015  
JKA  
AMW

DATE  
10/05/2015  
JKA  
AMW

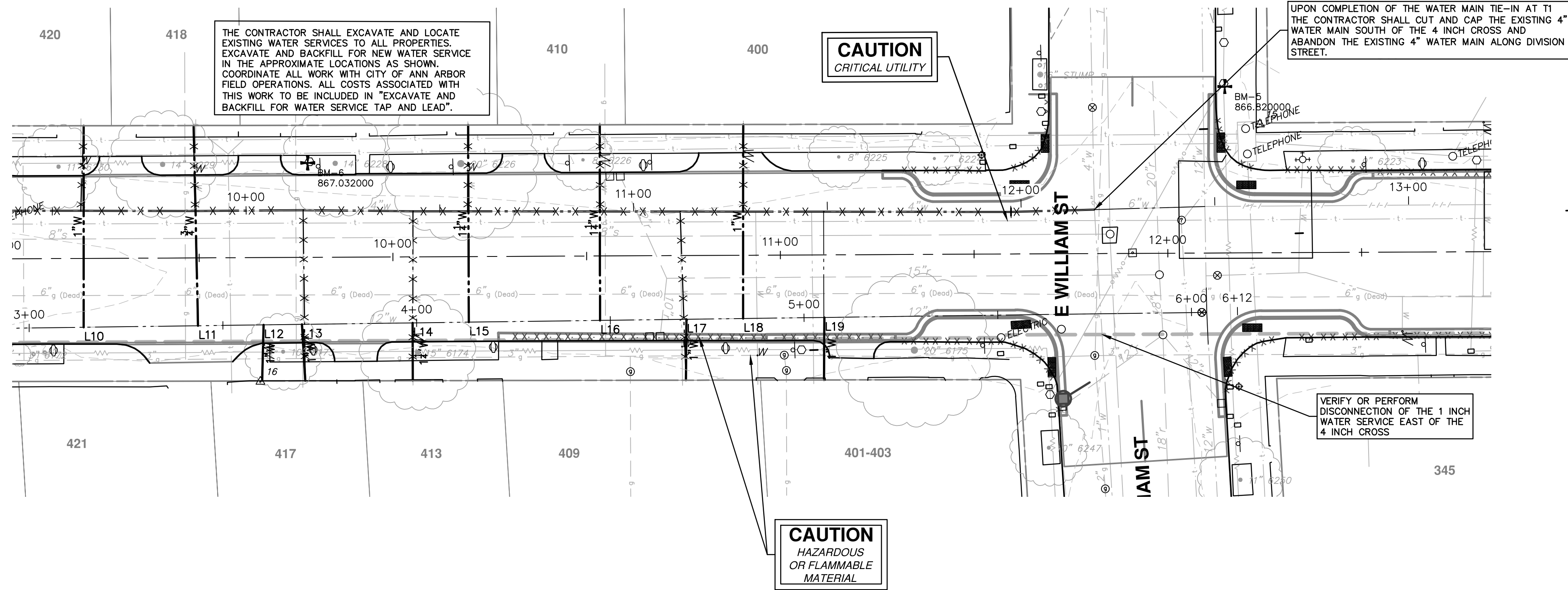
DESCRIPTION  
DRAWN  
JKA  
CHECKED  
JKA

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-0667  
ANN ARBOR 734-794-4410  
www.a2gov.org

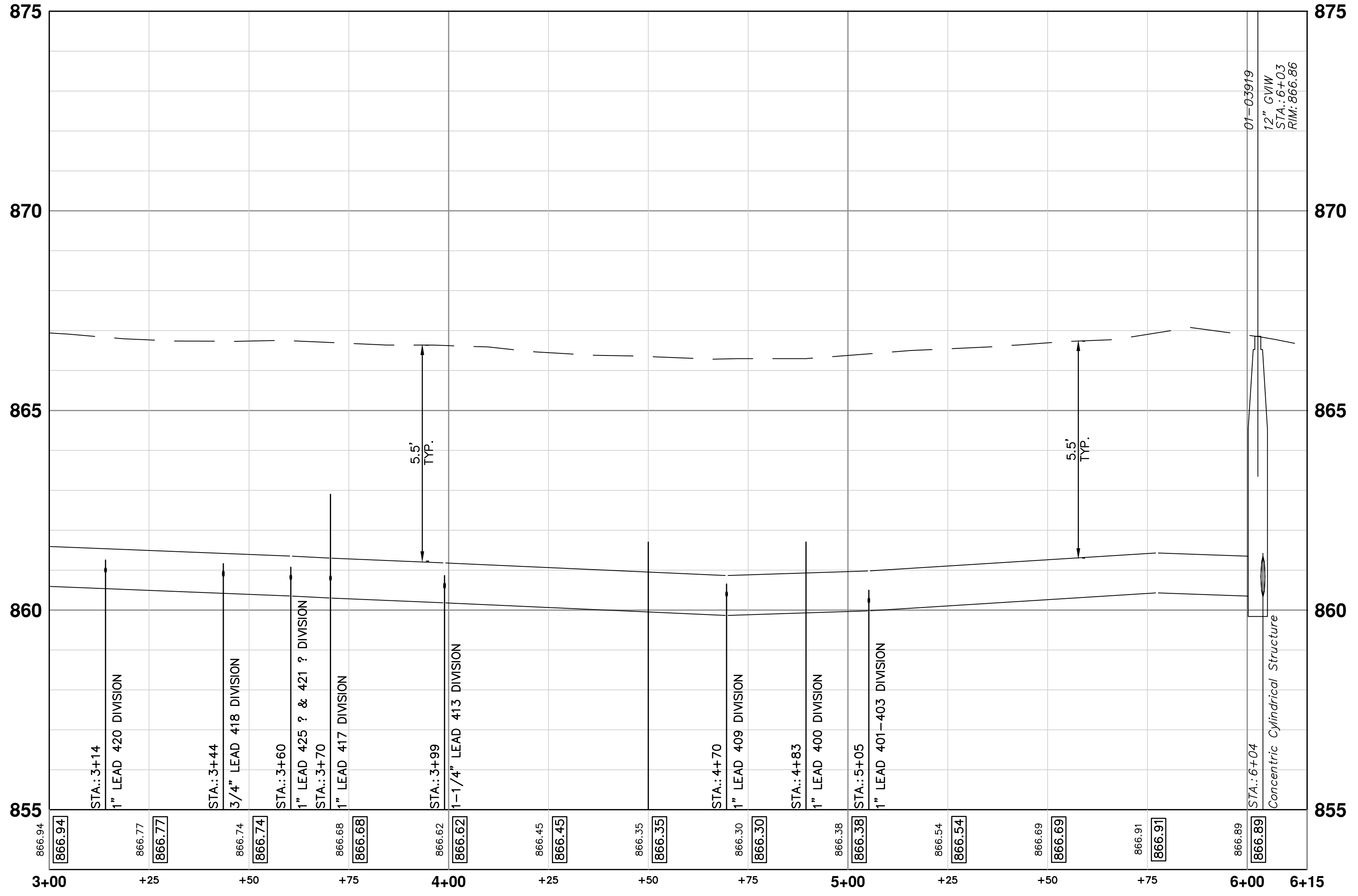
CITY OF ANN ARBOR  
MICHIGAN

SCALE PLAN: #####  
PROFILE: 1" = 4'  
DRAWING No. **2015038-9**

S:\Project Management\Design\2015038 Division\Plan Production\2015038 WATER.dwg Dwg Created: 23-Nov-15 - \_a2 standard bw.stb - Plot Date: 11-Mar-16



**PRWATRDIVISION**



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
 WATER  
 PRWATR DIVISION (2)

SCALE PLAN: #####  
 PROFILE: 1" = 4'

DRAWING No. 2015038-10

SHEET No. 10 OF 41

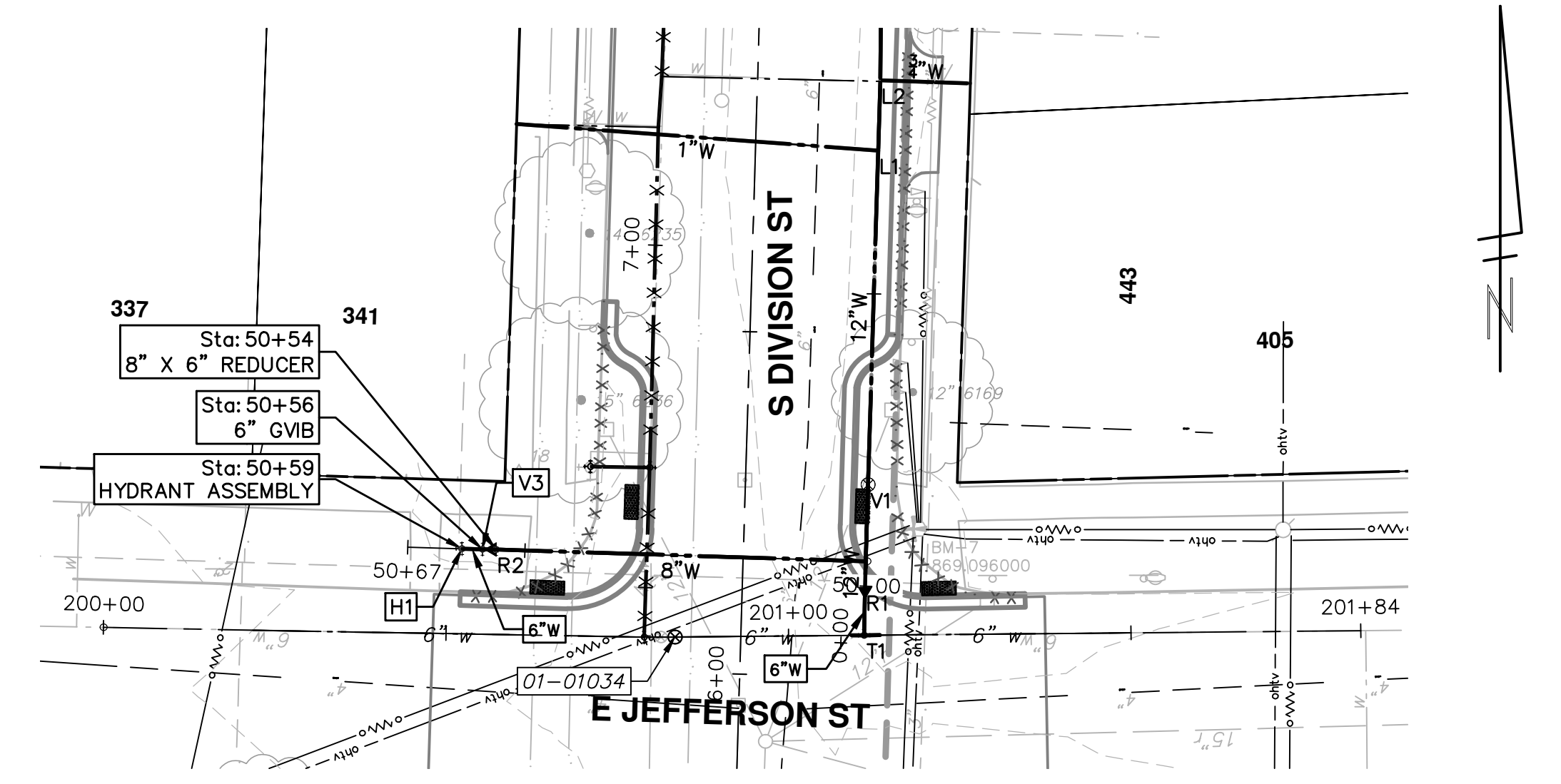
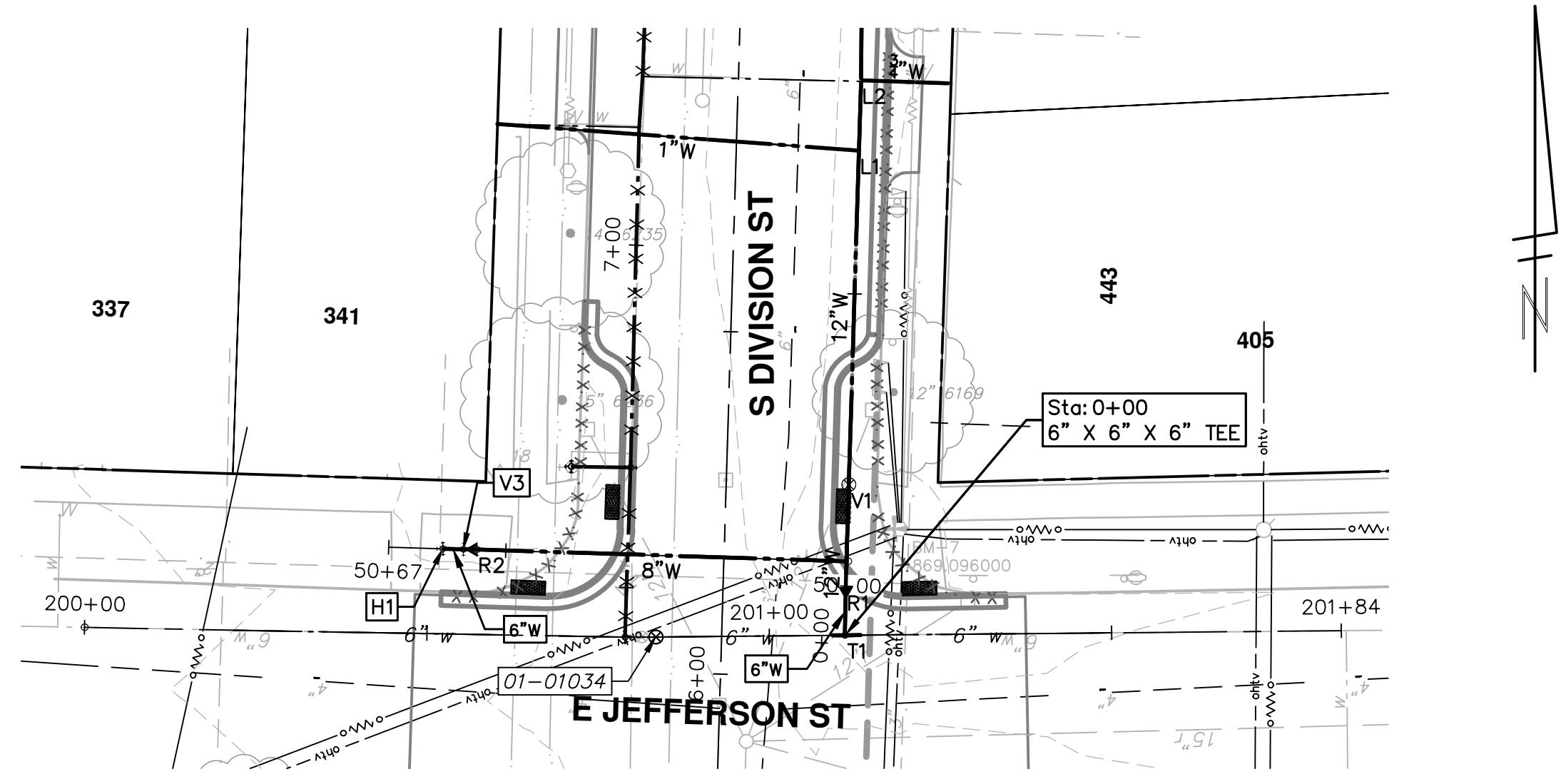
**811**  
 Know what's below.  
 Call before you dig.

04	REISSUED FOR BID (NO. 4429)	3/11/2016	JKA	JAN
03	ADDENDUM 1	2/22/2016	JKA	JAN
02	FINAL SUBMITTAL	1/21/2016	JKA	JAN
01	PROJECT MANAGER REVIEW	11/24/2015	JKA	JAN
00	SOIL BORING LOCATION SHEET	10/05/2015	JKA	AMW
REV.	DESCRIPTION	DATE	DRAWN	CHECKED

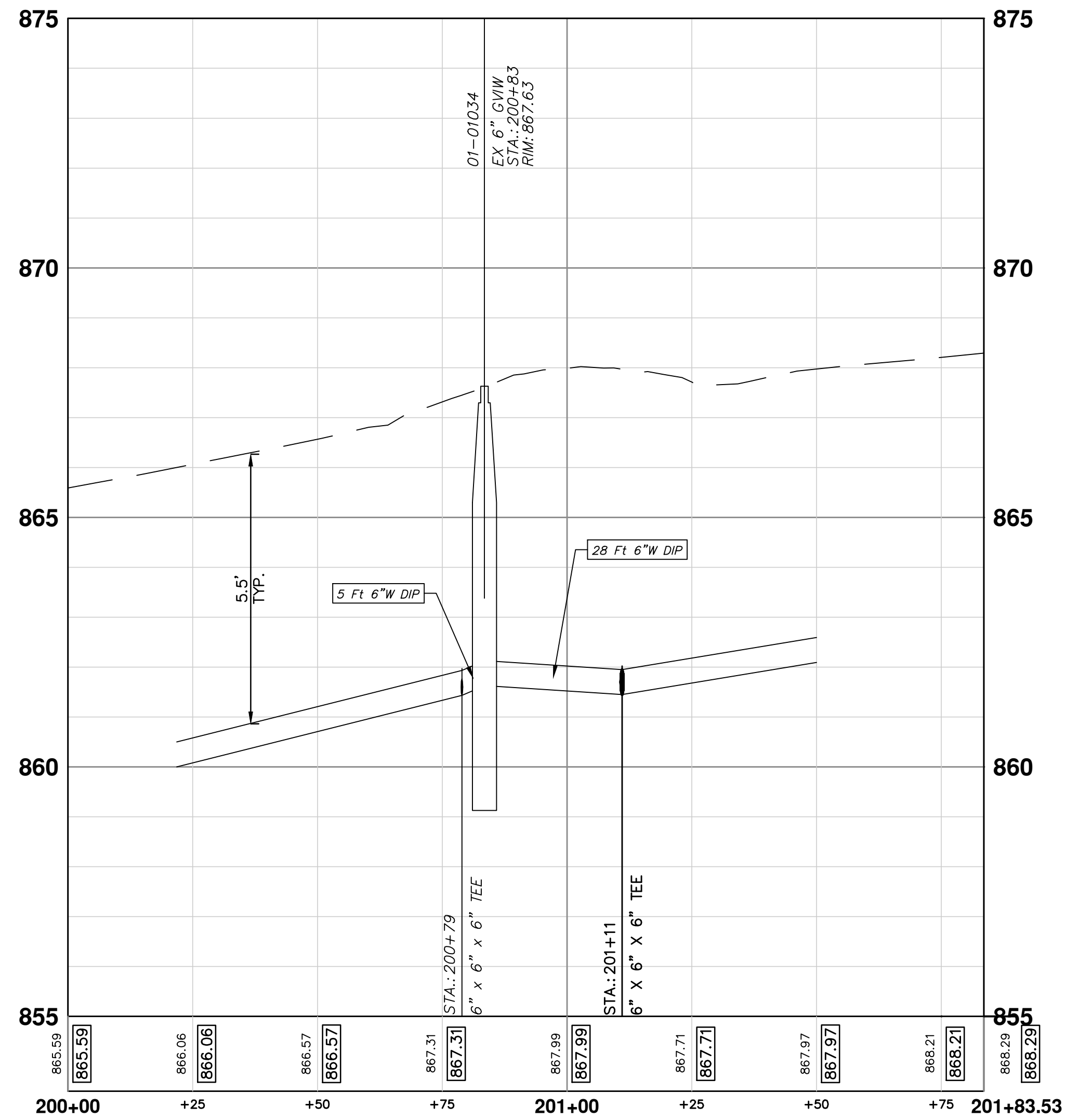
CITY OF ANN ARBOR  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-8647  
 www.a2gov.org

CITY OF ANN ARBOR  
 MICHIGAN

S:\Project Management\Design\20150338 Division\Plan Production\20150338 AUX.dwg Dwg Created: 28-Dec-15 - \_a2\_standard bw.stb - Plot Date: 11-Mar-16



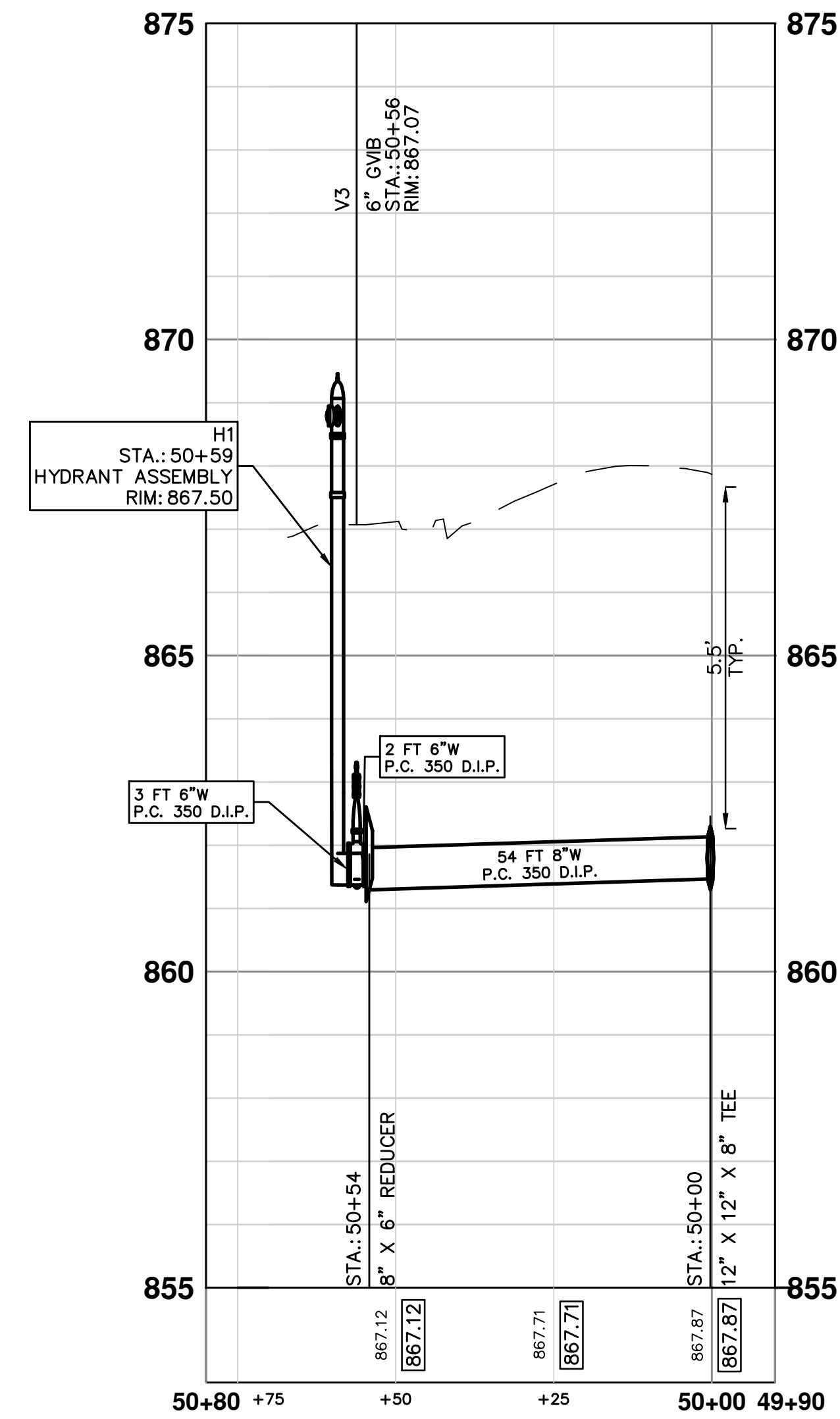
**PRWATR JEFFERSON**



WATER MAIN STRUCTURE TABLE					
STRUCTURE	TYPE	STATION	ALIGNMENT	RIM	DEPTH
T1	6" X 6" X 6" TEE	0+00	PrWatrDivision	862.02	???
01-01034	EX 6" GVIW	200+83	PrWatr Jefferson	867.63	8.00

WATER MAIN STRUCTURE TABLE					
STRUCTURE	TYPE	STATION	ALIGNMENT	RIM	DEPTH
R2	8" X 6" REDUCER	50+54	HYDRANT 1	862.01	1.02
V3	6" CVIB	50+56	HYDRANT 1	867.07	5.70
H1	HYDRANT ASSEMBLY	50+59	HYDRANT 1	867.50	6.13

**HYDRANT 1**



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

S. DIVISION ST. RESURFACING

WATER

PRWATR JEFFERSON H1

SHEET No. 11 OF 41

PROFILE: 1" = 2'

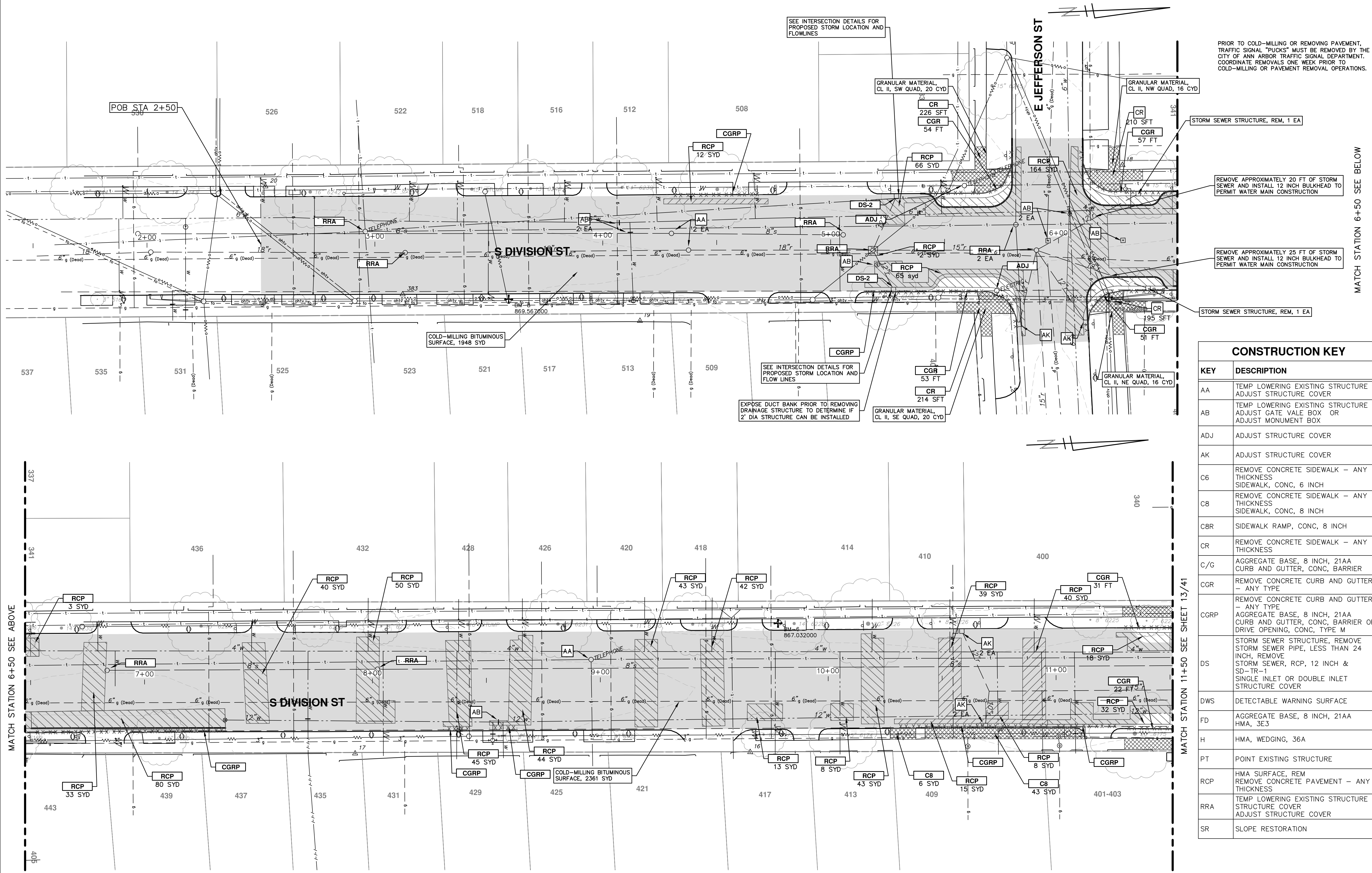
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CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-0647  
www.a2gov.org

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
03	ADDENDUM 1	2/22/2016	JKA	JAN
02	FINAL SUBMITTAL	1/21/2016	JKA	JAN
01	PROJECT MANAGER REVIEW	11/24/2015	JKA	JAN
00	SOIL BORING LOCATION SHEET	10/05/2015	JKA	AMW

Know what's below. Call Before you dig.

S:\Project Management\Design\2015038 Division\Plan Production\2015038 REM.dwg Dwg Created: 19-Jan-16 - \_a2 standard bw.stb - Plot Date: 11-Mar-16



SEE INTERSECTION DETAILS FOR PROPOSED STORM LOCATION AND FLOWLINES

SEE INTERSECTION DETAILS FOR PROPOSED STORM LOCATION AND FLOWLINES

EXPOSE DUCT BANK PRIOR TO REMOVING DRAINAGE STRUCTURE TO DETERMINE IF 2' DIA STRUCTURE CAN BE INSTALLED

PRIOR TO COLD-MILLING OR REMOVING PAVEMENT, TRAFFIC SIGNAL "PLUCKS" MUST BE REMOVED BY THE CITY OF ANN ARBOR TRAFFIC SIGNAL DEPARTMENT. COORDINATE REMOVALS ONE WEEK PRIOR TO COLD-MILLING OR PAVEMENT REMOVAL OPERATIONS.

MATCH STATION 6+50 SEE BELOW

MATCH STATION 6+50 SEE ABOVE

MATCH STATION 11+50 SEE SHEET 13/41

CONSTRUCTION KEY	
KEY	DESCRIPTION
AA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
AB	TEMP LOWERING EXISTING STRUCTURE ADJUST GATE VALE BOX OR ADJUST MONUMENT BOX
ADJ	ADJUST STRUCTURE COVER
AK	ADJUST STRUCTURE COVER
C6	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 6 INCH
C8	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 8 INCH
C8R	SIDEWALK RAMP, CONC, 8 INCH
CR	REMOVE CONCRETE SIDEWALK - ANY THICKNESS
C/G	AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER
CGR	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE
CGRP	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE
DS	STORM SEWER STRUCTURE, REMOVE STORM SEWER PIPE, LESS THAN 24 INCH, REMOVE STORM SEWER, RCP, 12 INCH & SD-TR-1 SINGLE INLET OR DOUBLE INLET STRUCTURE COVER
DWS	DETECTABLE WARNING SURFACE
FD	AGGREGATE BASE, 8 INCH, 21AA HMA, 3E3
H	HMA, WEDGING, 36A
PT	POINT EXISTING STRUCTURE
RCP	HMA SURFACE, REM REMOVE CONCRETE PAVEMENT - ANY THICKNESS
RRA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
SR	SLOPE RESTORATION

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

**S. DIVISION ST. RESURFACING**

REMOVALS & ADJUSTMENTS

PROFILE: 1" = 2'

SCALE PLAN: 1" = 20'

DRAWING No. 2015038-12

SHEET No. 12 OF 41

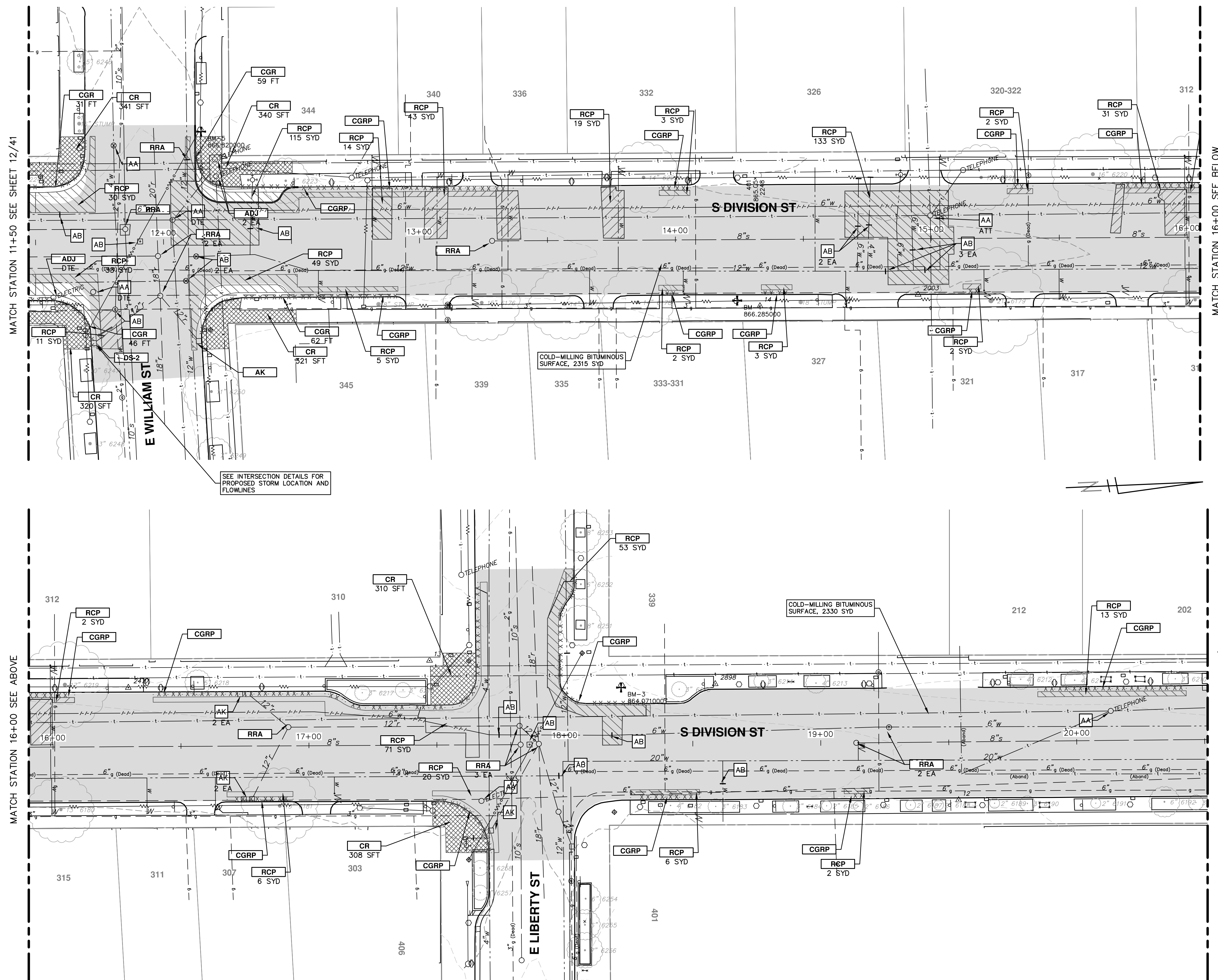
**811**

Know what's below. Call before you dig.

REV.	DATE	DESCRIPTION
04	3/11/2016	RESUBMITTED FOR BID (NO. 4429)
03	2/22/2016	ADDENDUM 1
02	1/21/2016	FINAL SUBMITTAL
01	11/24/2015	PROJECT MANAGER REVIEW
00	10/05/2015	SOIL BORING LOCATION SHEET

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

CITY OF ANN ARBOR  
MICHIGAN



PRIOR TO COLD-MILLING OR REMOVING PAVEMENT, TRAFFIC SIGNAL "PUCKS" MUST BE REMOVED BY THE CITY OF ANN ARBOR TRAFFIC SIGNAL DEPARTMENT. COORDINATE REMOVALS ONE WEEK PRIOR TO COLD-MILLING OR PAVEMENT REMOVAL OPERATIONS.

CONSTRUCTION KEY	
KEY	DESCRIPTION
AA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
AB	TEMP LOWERING EXISTING STRUCTURE ADJUST GATE VALE BOX OR ADJUST MONUMENT BOX
ADJ	ADJUST STRUCTURE COVER
AK	ADJUST STRUCTURE COVER
C6	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 6 INCH
C8	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 8 INCH
C8R	SIDEWALK RAMP, CONC, 8 INCH
CR	REMOVE CONCRETE SIDEWALK - ANY THICKNESS
C/G	AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER
CGR	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE
CGRP	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER OR DRIVE OPENING, CONC, TYPE M
DS	STORM SEWER STRUCTURE, REMOVE STORM SEWER PIPE, LESS THAN 24 INCH, REMOVE STORM SEWER, RCP, 12 INCH & SD-TR-1 SINGLE INLET OR DOUBLE INLET STRUCTURE COVER
DWS	DETECTABLE WARNING SURFACE
FD	AGGREGATE BASE, 8 INCH, 21AA HMA, 3E3
H	HMA, WEDGING, 36A
PT	POINT EXISTING STRUCTURE
RCP	HMA SURFACE, REM REMOVE CONCRETE PAVEMENT - ANY THICKNESS
RRA	TEMP LOWERING EXISTING STRUCTURE STRUCTURE COVER ADJUST STRUCTURE COVER
SR	SLOPE RESTORATION

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
 REMOVALS & ADJUSTMENTS

SCALE PLAN: 1" = 20'  
 PROFILE: 1" = 2'

DRAWING No. 20150338-13  
 SHEET No. 13 OF 41

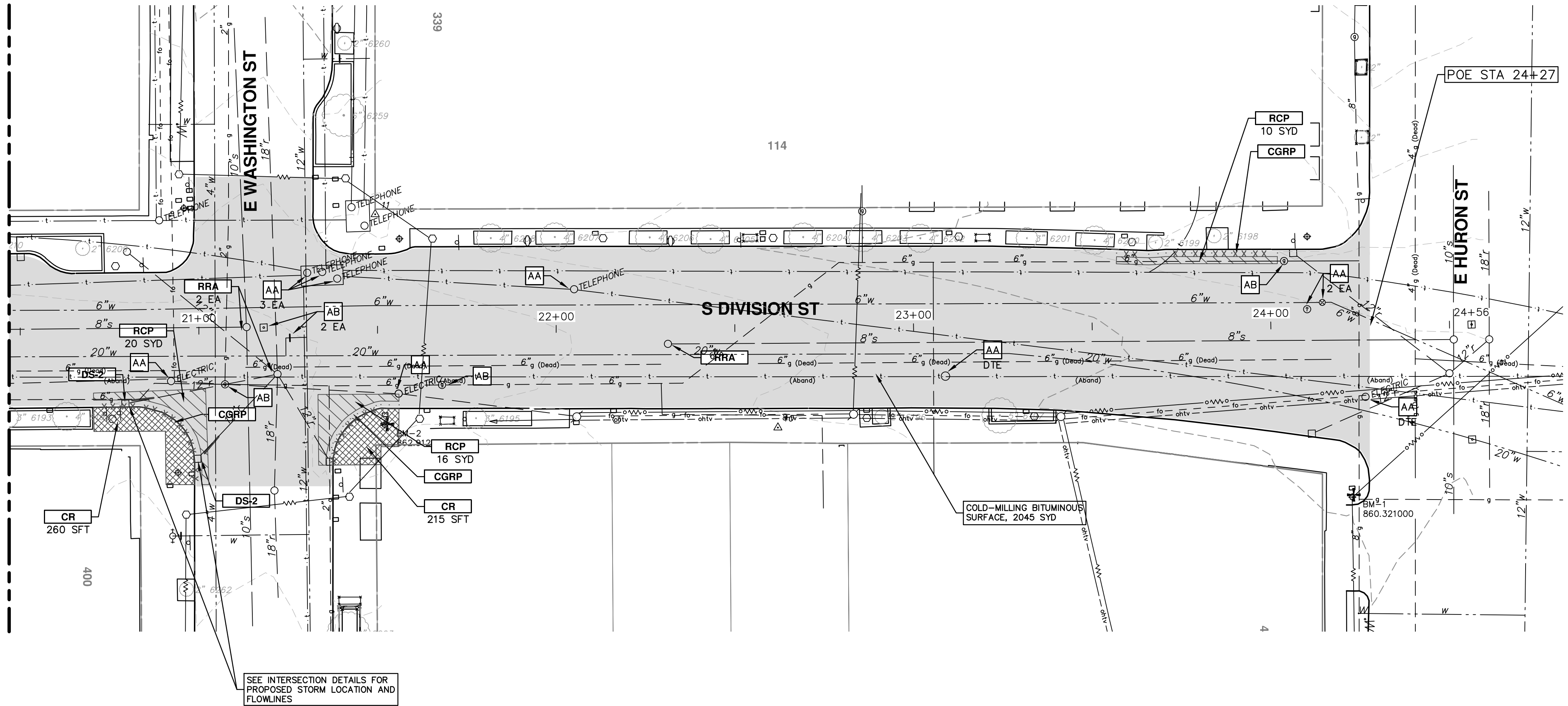
REVISIONS:

REV.	DATE	DESCRIPTION
04	3/11/2016	RESUBMITTED FOR BID (NO. 4429)
03	2/22/2016	ADDENDUM 1
02	1/21/2016	FINAL SUBMITTAL
01	11/24/2015	PROJECT MANAGER REVIEW
00	10/05/2015	SOIL BORING LOCATION SHEET

DATE: 10/05/2015  
 DRAWN: JKA  
 CHECKED: JKA

CITY OF ANN ARBOR  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-8647  
 WWW.A2GOV.ORG

MATCH STATION 20+50 SEE SHEET 13/41



SEE INTERSECTION DETAILS FOR PROPOSED STORM LOCATION AND FLOWLINES

PRIOR TO COLD-MILLING OR REMOVING PAVEMENT, TRAFFIC SIGNAL "PUCKS" MUST BE REMOVED BY THE CITY OF ANN ARBOR TRAFFIC SIGNAL DEPARTMENT. COORDINATE REMOVALS ONE WEEK PRIOR TO COLD-MILLING OR PAVEMENT REMOVAL OPERATIONS.

CONSTRUCTION KEY	
KEY	DESCRIPTION
AA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
AB	TEMP LOWERING EXISTING STRUCTURE ADJUST GATE VALE BOX OR ADJUST MONUMENT BOX
ADJ	ADJUST STRUCTURE COVER
AK	ADJUST STRUCTURE COVER
C6	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 6 INCH
C8	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 8 INCH
C8R	SIDEWALK RAMP, CONC, 8 INCH
CR	REMOVE CONCRETE SIDEWALK - ANY THICKNESS
C/G	AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER
CGR	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE
CGRP	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER OR DRIVE OPENING, CONC, TYPE M
DS	STORM SEWER STRUCTURE, REMOVE STORM SEWER PIPE, LESS THAN 24 INCH, REMOVE STORM SEWER, RCP, 12 INCH & SD-TR-1 SINGLE INLET OR DOUBLE INLET STRUCTURE COVER
DWS	DETECTABLE WARNING SURFACE
FD	AGGREGATE BASE, 8 INCH, 21AA HMA, 3E3
H	HMA, WEDGING, 36A
PT	POINT EXISTING STRUCTURE
RCP	HMA SURFACE, REM REMOVE CONCRETE PAVEMENT - ANY THICKNESS
RRA	TEMP LOWERING EXISTING STRUCTURE STRUCTURE COVER ADJUST STRUCTURE COVER
SR	SLOPE RESTORATION

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

**S. DIVISION ST. RESURFACING**

REMOVALS & ADJUSTMENTS

REM 20+50 TO 24+50

SHEET No. 14 OF 41

PROFILE: 1" = 2'

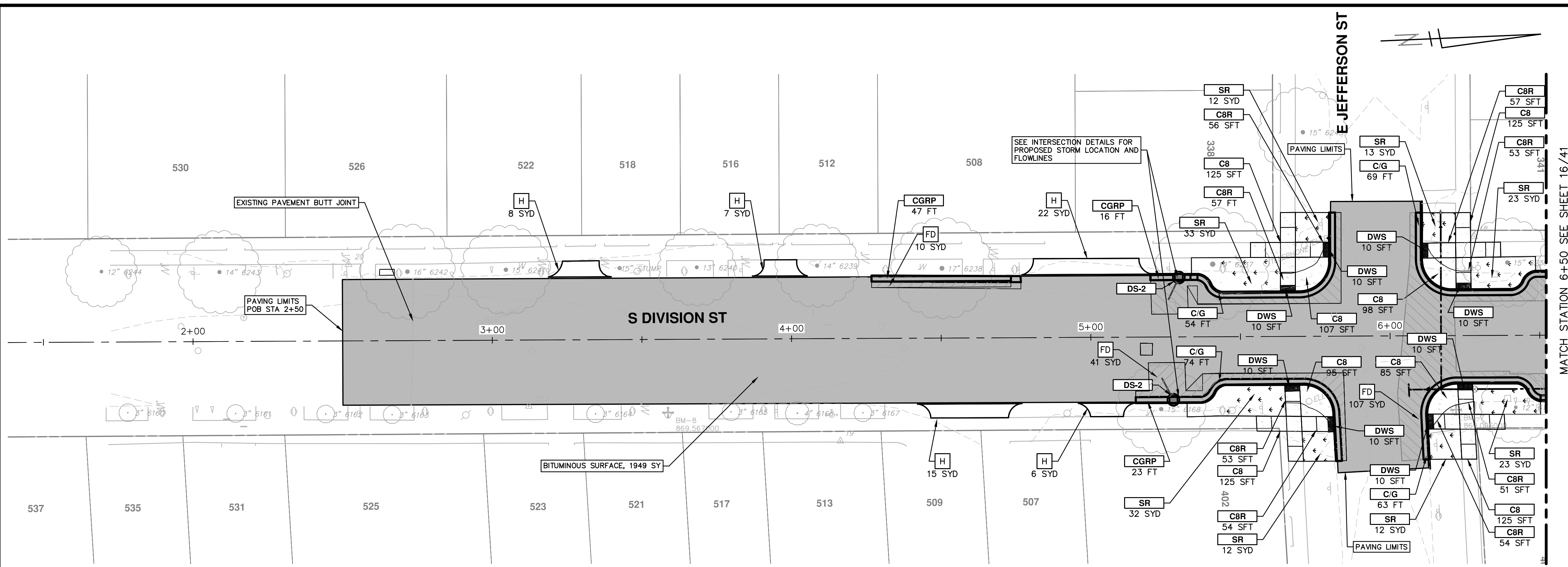
SCALE PLAN: 1" = 20'

DRAWING No. 2015038-14

CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR, MI 48106-0667  
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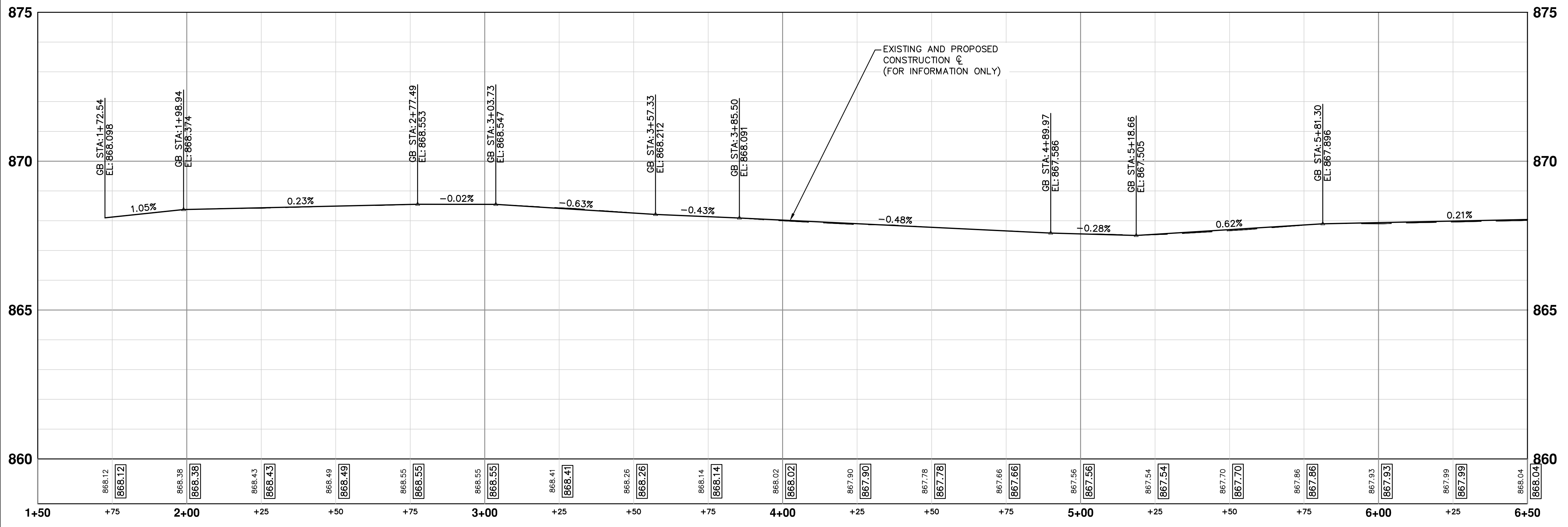
REV.	DESCRIPTION	DATE	DRAWN	CHECKED	JAN	JAN	JAN	JAN	JAN	JAN
04	RESUBMITTED FOR BID (NO. 4429)	3/11/2016	JKA	JKA						
03	ADDENDUM 1	2/22/2016	JKA	JKA						
02	FINAL SUBMITTAL	1/21/2016	JKA	JKA						
01	PROJECT MANAGER REVIEW	11/24/2015	JKA	JKA						
00	SOIL BORING LOCATION SHEET	10/05/2015	JKA	JKA						

S:\Project Management\Design\2015038 - Division\Plan Production\2015038 PPRD.dwg Dwg Created: 24-Nov-15 - a2 standard bw.stb - Plot Date: 11-Mar-16




- NOTES**
1. QUANTITIES FOR HAND HOLES HAVE BEEN PROVIDED TO REPLACE HAND HOLES AFFECTED BY BUMP OUT CONSTRUCTION.
  2. EMBANKMENT CIP QUANTITIES INCLUDES ALL WORK AND MATERIALS TO CONSTRUCT, EXTEND BUMP OUT, SIDEWALK, AND CURB THROUGH SUBBASE.
  3. ALL CURB AND GUTTER IS TO BE HIGH EARLY CONCRETE.
  4. ALL SIDEWALK AND RAMPS TO BE CONSTRUCTED WITH HIGH EARLY FIBER-MESH REINFORCED CONCRETE.
  5. AT ALL INTERSECTIONS INSTALL GEO-SYNTHETIC PAVING LAYER WITHIN DIVISION ST. ONLY. DO NOT PLACE IN LEGS OF SIDE INTERSECTIONS.

**DIVISION (1)**



CONSTRUCTION KEY	
KEY	DESCRIPTION
AA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
AB	TEMP LOWERING EXISTING STRUCTURE ADJUST GATE VALE BOX OR ADJUST MONUMENT BOX
ADJ	ADJUST STRUCTURE COVER
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CR	REMOVE CONCRETE SIDEWALK - ANY THICKNESS
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CGR	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE
CGRP	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER OR DRIVE OPENING, CONC, TYPE M
DS	STORM SEWER STRUCTURE, REMOVE STORM SEWER PIPE, LESS THAN 24 INCH, REMOVE STORM SEWER, RCP, 12 INCH & SD-TR-1 SINGLE INLET OR DOUBLE INLET STRUCTURE COVER
DWS	DETECTABLE WARNING SURFACE
FD	AGGREGATE BASE, 8 INCH, 21AA HMA, 3E3
H	HMA, WEDGING, 36A
PT	POINT EXISTING STRUCTURE
RCP	HMA SURFACE, REM REMOVE CONCRETE PAVEMENT - ANY THICKNESS
RRA	TEMP LOWERING EXISTING STRUCTURE STRUCTURE COVER ADJUST STRUCTURE COVER
SR	SLOPE RESTORATION



Know what's below. Call before you dig.

01	PROJECT MANAGER REVIEW	JKA	11/24/2015	JKA	AMW	CHECKED			
00	SOIL BORING LOCATION SHEET	JKA	10/05/2015	JKA	AMW	DRAWN			
	REV.		DATE						

**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

**S. DIVISION ST. RESURFACING**

ROAD

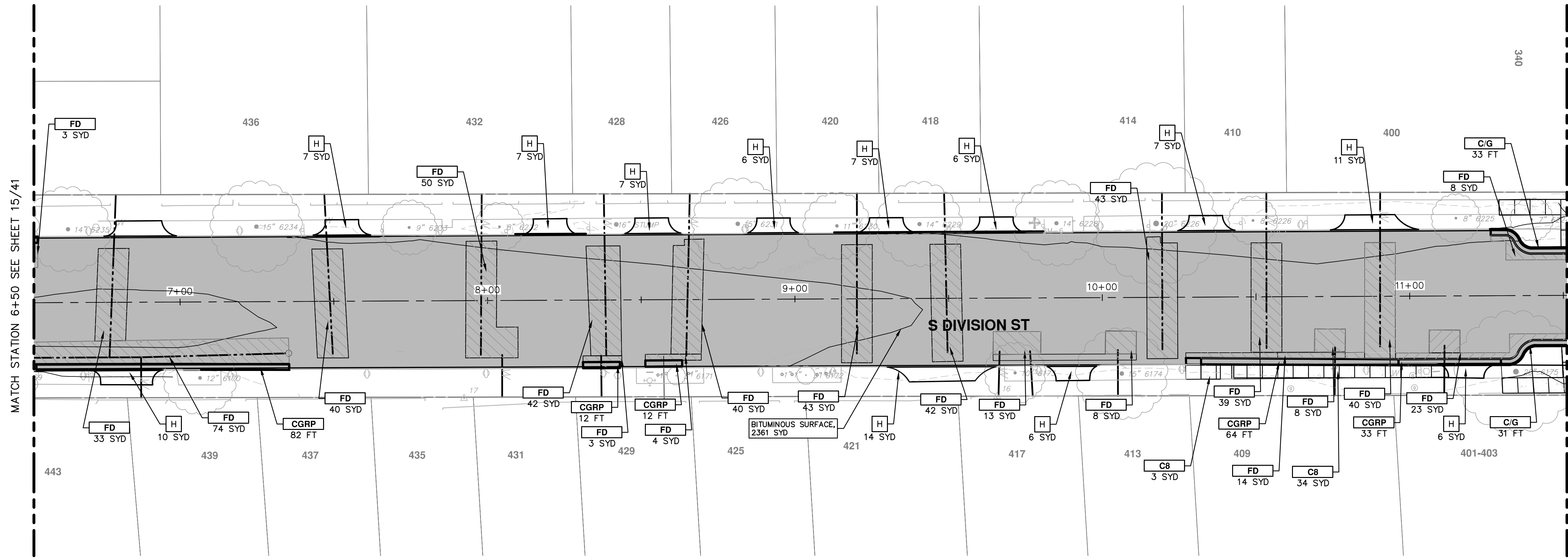
ROAD 1+50 TO 6+50

SCALE PLAN: 1" = 20'

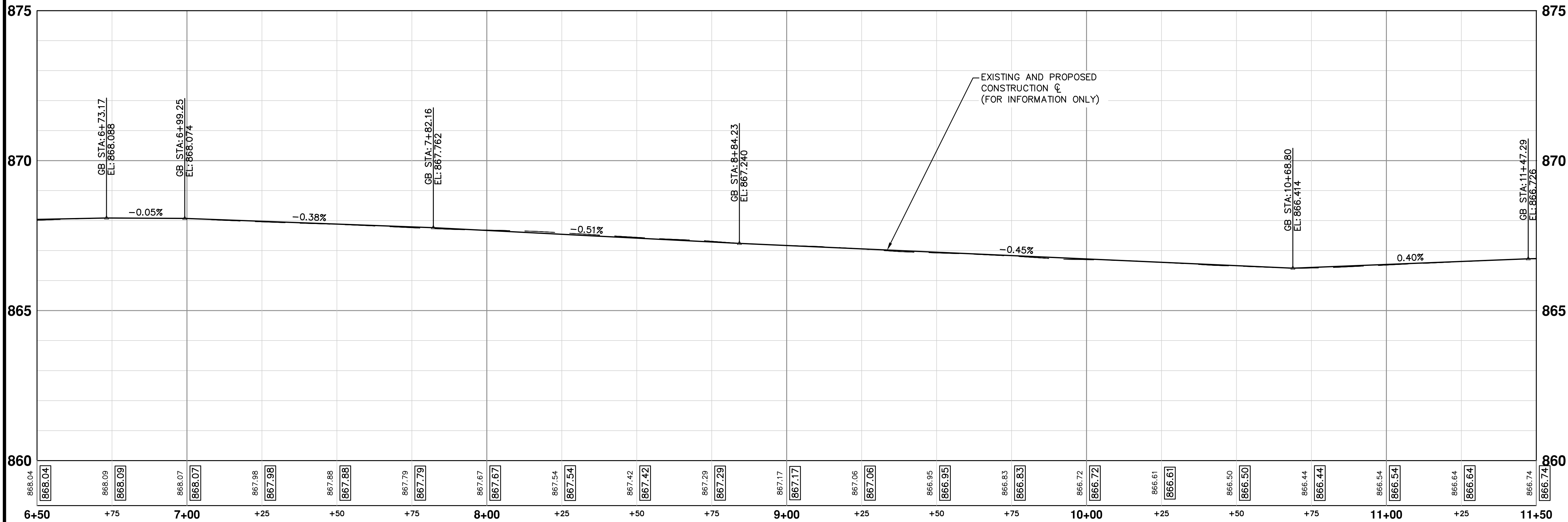
PROFILE: 1" = 2'

DRAWING No. 2015038-15

SHEET No. 15 OF 41



**DIVISION (1)**

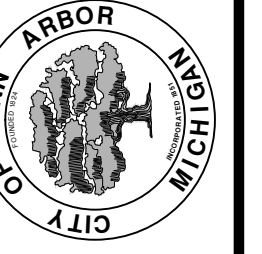


- NOTES**
1. QUANTITIES FOR HAND HOLES HAVE BEEN PROVIDED TO REPLACE HAND HOLES AFFECTED BY BUMP OUT CONSTRUCTION.
  2. EMBANKMENT CIP QUANTITIES INCLUDES ALL WORK AND MATERIALS TO CONSTRUCT, EXTEND BUMP OUT, SIDEWALK, AND CURB THROUGH SUBBASE.
  3. ALL CURB AND GUTTER IS TO BE HIGH EARLY CONCRETE.
  4. ALL SIDEWALK AND RAMPS TO BE CONSTRUCTED WITH HIGH EARLY FIBER-MESH REINFORCED CONCRETE.
  5. AT ALL INTERSECTIONS INSTALL GEO-SYNTHETIC PAVING LAYER WITHIN DIVISION ST. ONLY, DO NOT PLACE IN LEGS OF SIDE INTERSECTIONS.

CONSTRUCTION KEY	
KEY	DESCRIPTION
AA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
AB	TEMP LOWERING EXISTING STRUCTURE ADJUST GATE VALE BOX OR ADJUST MONUMENT BOX
ADJ	ADJUST STRUCTURE COVER
AK	ADJUST STRUCTURE COVER
C6	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 6 INCH
C8	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 8 INCH
C8R	SIDEWALK RAMP, CONC, 8 INCH
CR	REMOVE CONCRETE SIDEWALK - ANY THICKNESS
C/G	AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER
CGR	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE
CGRP	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER OR DRIVE OPENING, CONC, TYPE M
DS	STORM SEWER STRUCTURE, REMOVE STORM SEWER PIPE, LESS THAN 24 INCH, REMOVE STORM SEWER, RCP, 12 INCH & SD-TR-1 SINGLE INLET OR DOUBLE INLET STRUCTURE COVER
DWS	DETECTABLE WARNING SURFACE
FD	AGGREGATE BASE, 8 INCH, 21AA HMA, 3E3
H	HMA, WEDGING, 36A
PT	POINT EXISTING STRUCTURE
RCP	HMA SURFACE, REM REMOVE CONCRETE PAVEMENT - ANY THICKNESS
RRA	TEMP LOWERING EXISTING STRUCTURE STRUCTURE COVER ADJUST STRUCTURE COVER
SR	SLOPE RESTORATION



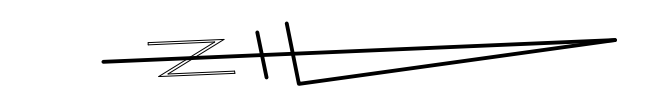
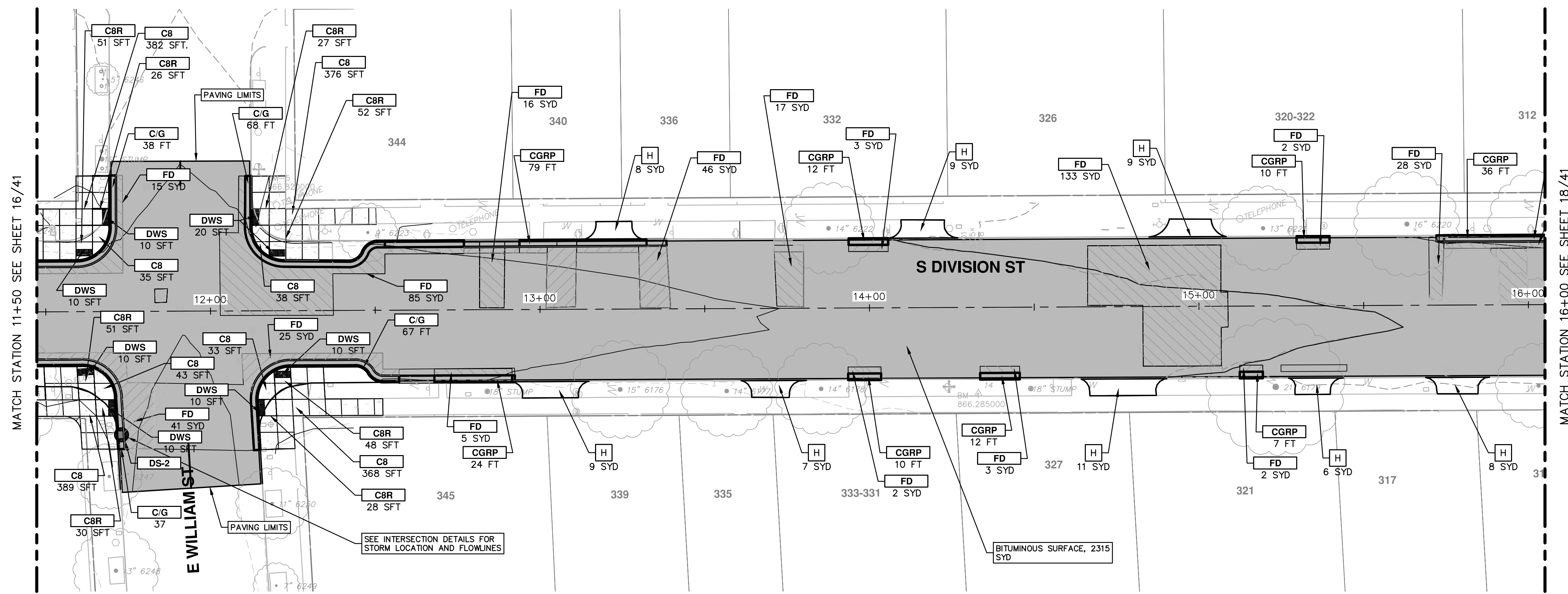
CITY OF ANN ARBOR  
PUBLIC SERVICES  
301 EAST HURON STREET  
ANN ARBOR MI 48106-0667  
www.a3gov.org



**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
ROAD  
**S. DIVISION ST. RESURFACING**  
ROAD 6+50 TO 11+50

SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'  
DRAWING No. 2015038-16  
SHEET No.



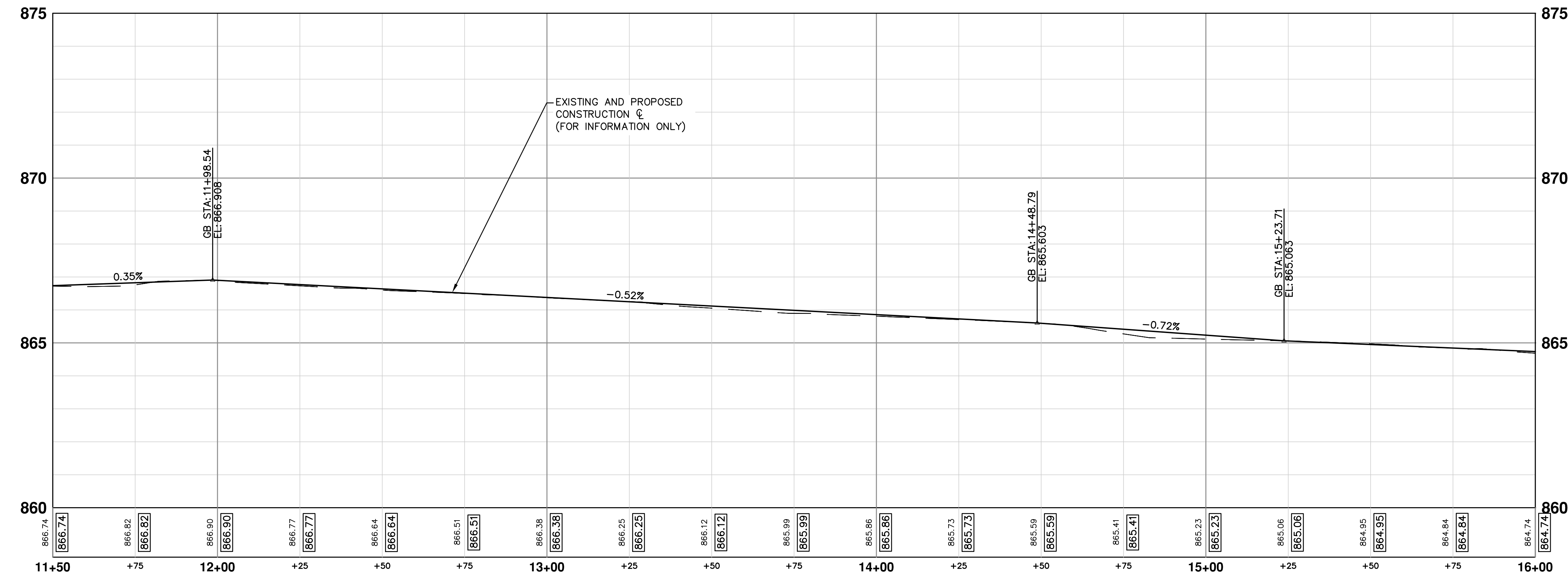


- NOTES**
- QUANTITIES FOR HAND HOLES HAVE BEEN PROVIDED TO REPLACE HAND HOLES AFFECTED BY BUMP OUT CONSTRUCTION.
  - EMBANKMENT CIP QUANTITIES INCLUDES ALL WORK AND MATERIALS TO CONSTRUCT, EXTEND BUMP OUT, SIDEWALK, AND CURB THROUGH SUBBASE.
  - ALL CURB AND GUTTER IS TO BE HIGH EARLY CONCRETE.
  - ALL SIDEWALK AND RAMPS TO BE CONSTRUCTED WITH HIGH EARLY FIBER-MESH REINFORCED CONCRETE.
  - AT ALL INTERSECTIONS INSTALL GEO-SYNTHETIC PAVING LAYER WITHIN DIVISION ST. ONLY. DO NOT PLACE IN LEGS OF SIDE INTERSECTIONS.
  - ON WILLIAM AND DIVISION INTERSECTION QUADRANTS ONLY, DETECTABLE WARNING SURFACE (DWS) SHALL BE CAST IRON. (80 SFT).

**CONSTRUCTION KEY**

KEY	DESCRIPTION
AA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
AB	TEMP LOWERING EXISTING STRUCTURE ADJUST GATE VALE BOX OR ADJUST MONUMENT BOX
ADJ	ADJUST STRUCTURE COVER
AK	ADJUST STRUCTURE COVER
C6	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 6 INCH
C8	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 8 INCH
C8R	SIDEWALK RAMP, CONC, 8 INCH
CR	REMOVE CONCRETE SIDEWALK - ANY THICKNESS
C/G	AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER
CGR	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE
CGRP	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER OR DRIVE OPENING, CONC, TYPE M
DS	STORM SEWER STRUCTURE, REMOVE STORM SEWER PIPE, LESS THAN 24 INCH, REMOVE STORM SEWER, RCP, 12 INCH & SD-TR-1 SINGLE INLET OR DOUBLE INLET STRUCTURE COVER
DWS	DETECTABLE WARNING SURFACE
FD	AGGREGATE BASE, 8 INCH, 21AA HMA, 3E3
H	HMA, WEDGING, 36A
PT	POINT EXISTING STRUCTURE
RCP	HMA SURFACE, REM REMOVE CONCRETE PAVEMENT - ANY THICKNESS
RRA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
SR	SLOPE RESTORATION

**DIVISION (1)**



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Know what's below.  
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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

**S. DIVISION ST. RESURFACING**

ROAD ROAD 11+50 TO 16+00

SCALE PLAN: 1" = 20'  
PROFILE: 1" = 2'

DRAWING No. 2015038-17

PROJECT MANAGER REVIEW 11/24/2015 JKA  
SOIL BORING LOCATION SHEET 10/05/2015 JKA  
DATE DATE

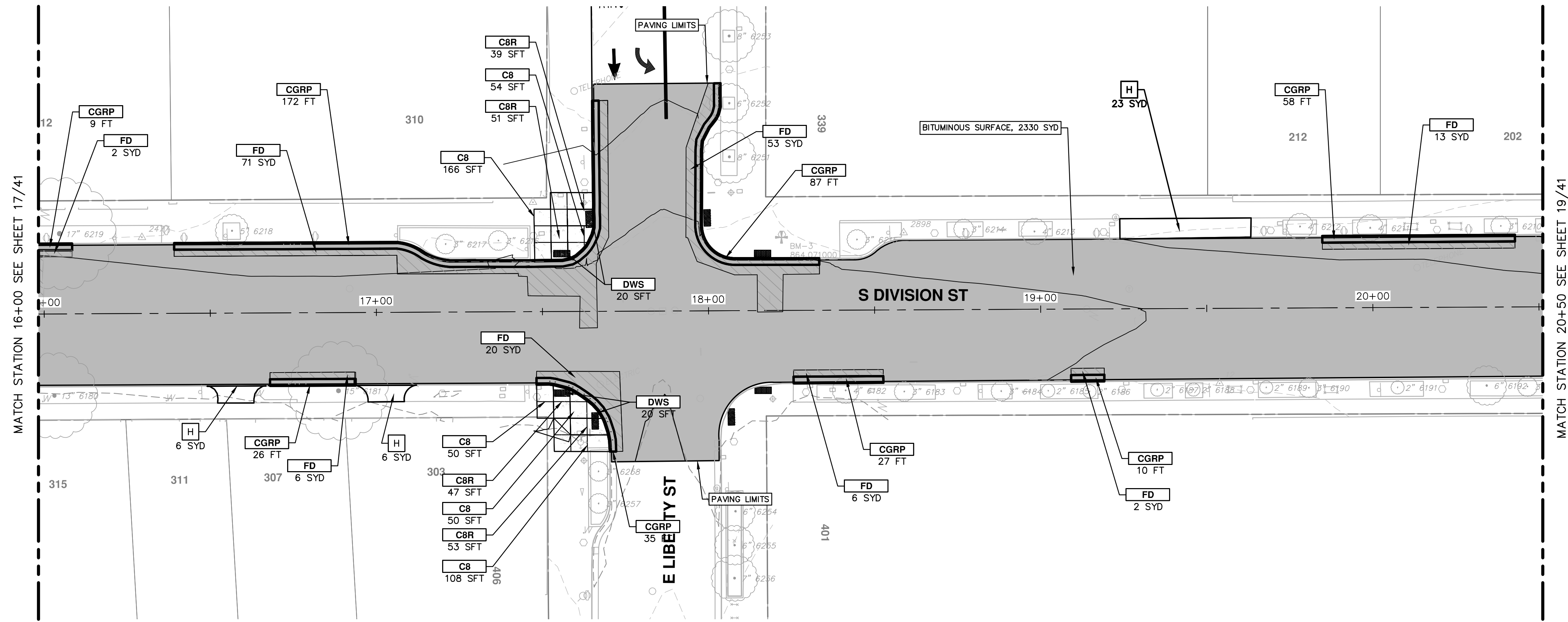
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01  
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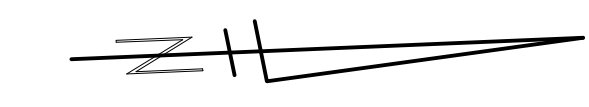
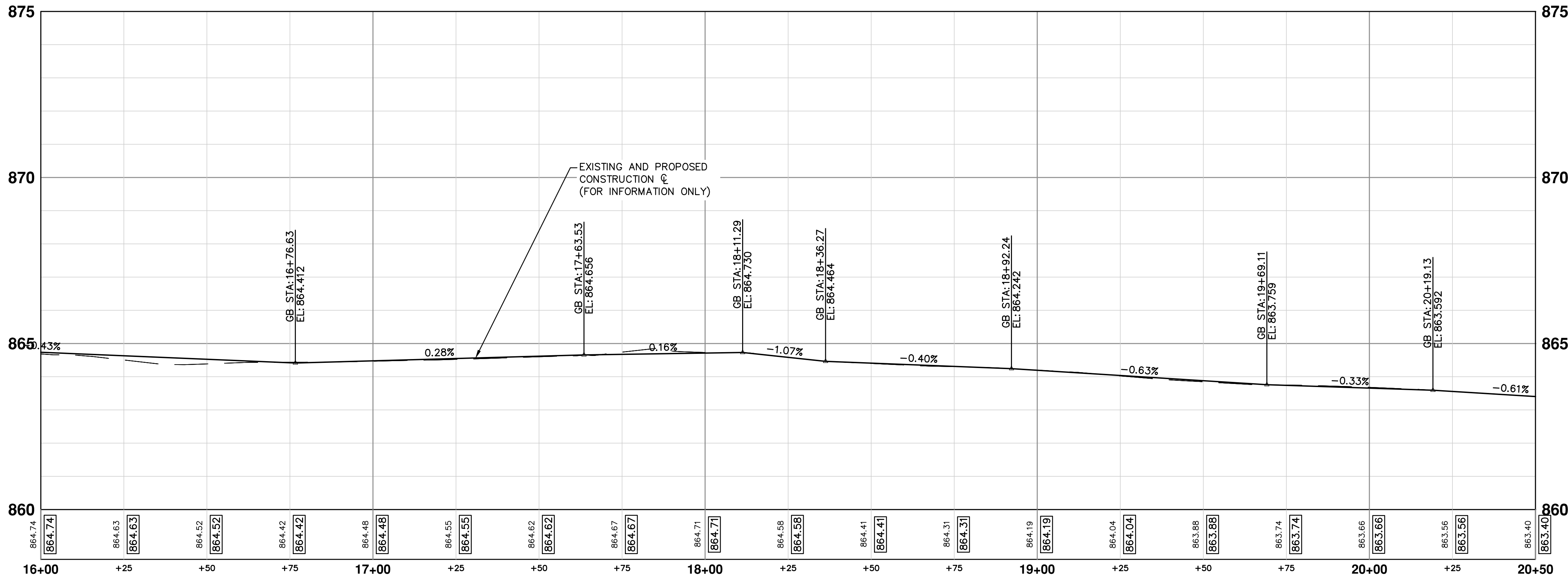
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SHEET No. 17 OF 41

S:\Project Management\Design\2015038 Division\Plan Production\2015038 PPRD.dwg Dwg Created: 24-Nov-15 - \_a2 standard bw.stb - Plot Date: 11-Mar-16




**DIVISION (1)**




- NOTES**
1. QUANTITIES FOR HAND HOLES HAVE BEEN PROVIDED TO REPLACE HAND HOLES AFFECTED BY BUMP OUT CONSTRUCTION.
  2. EMBANKMENT CIP QUANTITIES INCLUDES ALL WORK AND MATERIALS TO CONSTRUCT, EXTEND BUMP OUT, SIDEWALK, AND CURB THROUGH SUBBASE.
  3. ALL CURB AND GUTTER IS TO BE HIGH EARLY CONCRETE.
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  5. AT ALL INTERSECTIONS INSTALL GEO-SYNTHETIC PAVING LAYER WITHIN DIVISION ST. ONLY. DO NOT PLACE IN LEGS OF SIDE INTERSECTIONS.

CONSTRUCTION KEY	
KEY	DESCRIPTION
AA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
AB	TEMP LOWERING EXISTING STRUCTURE ADJUST GATE VALE BOX OR ADJUST MONUMENT BOX
ADJ	ADJUST STRUCTURE COVER
AK	ADJUST STRUCTURE COVER
C6	REMOVE CONCRETE SIDEWALK - ANY THICKNESS SIDEWALK, CONC, 6 INCH
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C8R	SIDEWALK RAMP, CONC, 8 INCH
CR	REMOVE CONCRETE SIDEWALK - ANY THICKNESS
C/G	AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER
CGR	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE
CGRP	REMOVE CONCRETE CURB AND GUTTER - ANY TYPE AGGREGATE BASE, 8 INCH, 21AA CURB AND GUTTER, CONC, BARRIER OR DRIVE OPENING, CONC, TYPE M
DS	STORM SEWER STRUCTURE, REMOVE STORM SEWER PIPE, LESS THAN 24 INCH, REMOVE STORM SEWER, RCP, 12 INCH & SD-TR-1 SINGLE INLET OR DOUBLE INLET STRUCTURE COVER
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PT	POINT EXISTING STRUCTURE
RCP	HMA SURFACE, REM REMOVE CONCRETE PAVEMENT - ANY THICKNESS
RRA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
SR	SLOPE RESTORATION



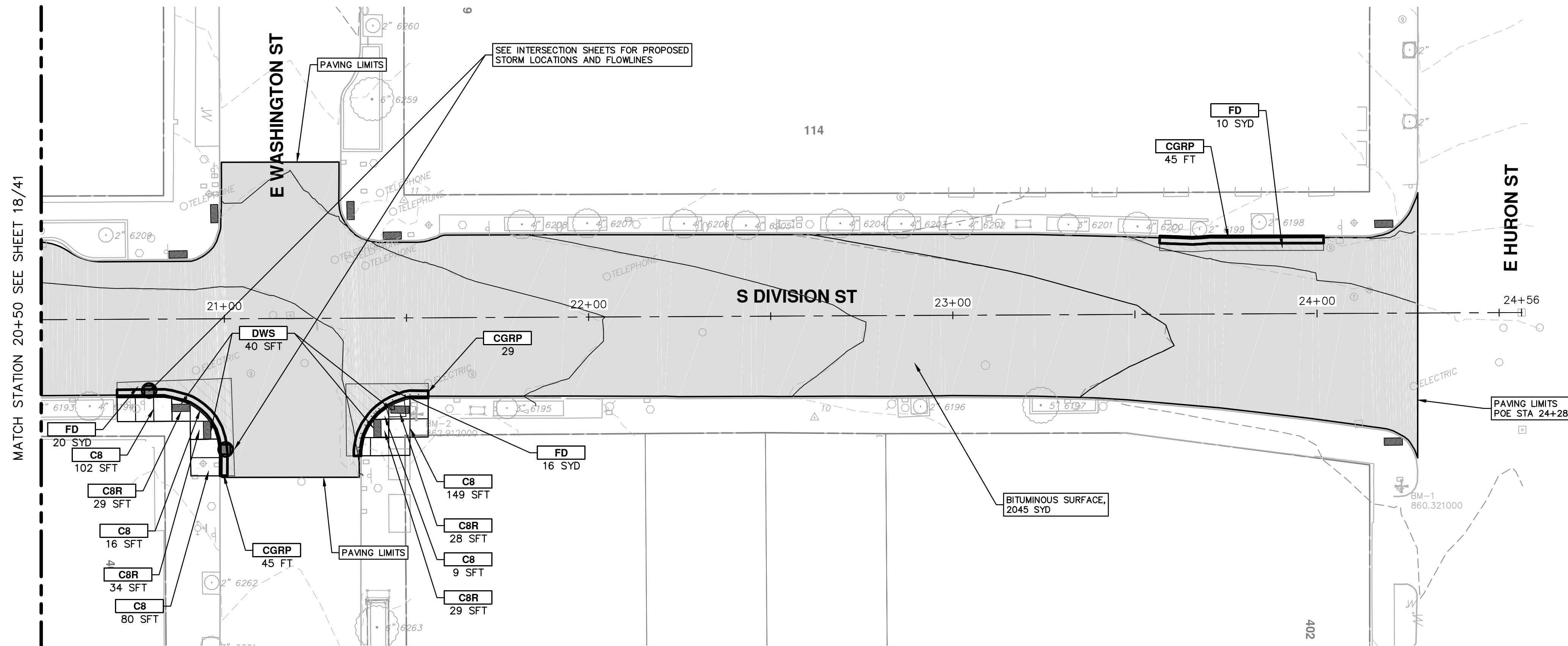
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00	SOIL BORING LOCATION SHEET			10/05/2015	JKA	JKA	AMW	DRAWN	
									DATE
									DESCRIPTION



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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
 ROAD 16+00 TO 20+50

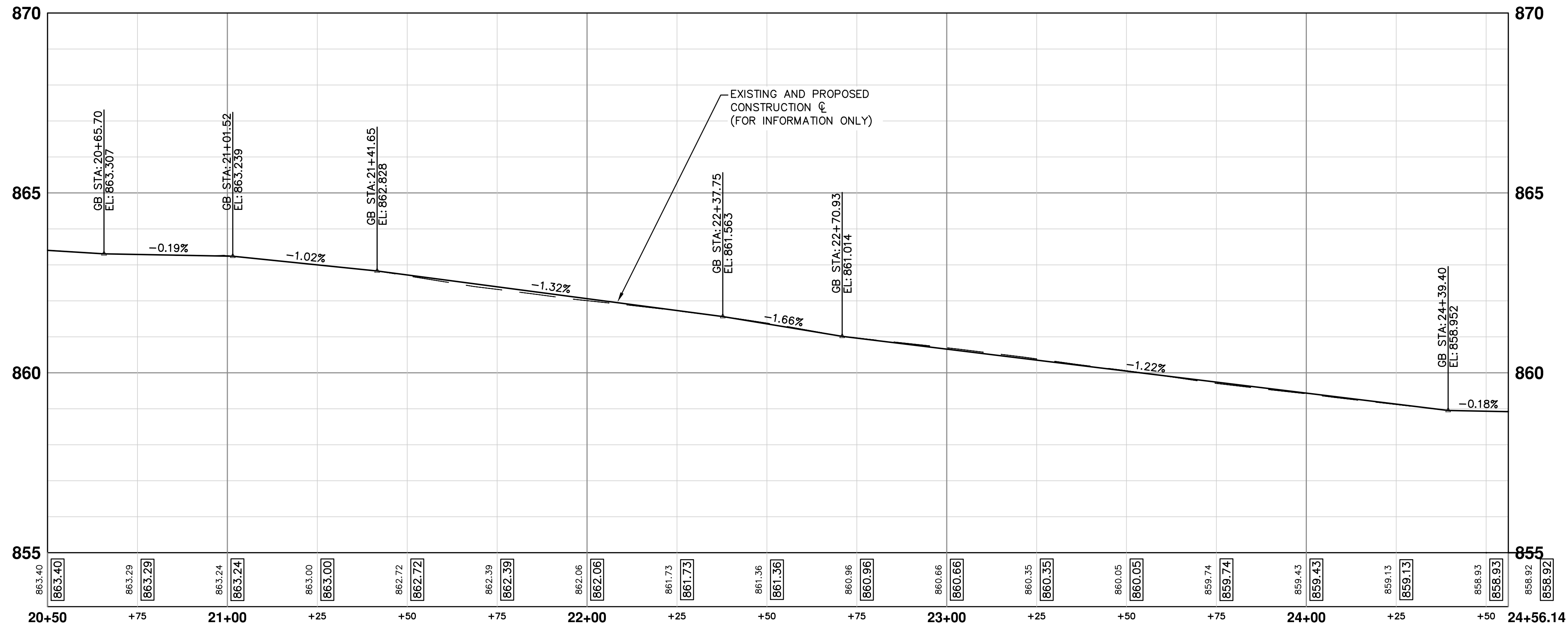
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 PROFILE: 1" = 2'  
 DRAWING No. 2015038-18  
 SHEET No. 18 OF 41



- NOTES**
1. QUANTITIES FOR HAND HOLES HAVE BEEN PROVIDED TO REPLACE HAND HOLES AFFECTED BY BUMP OUT CONSTRUCTION.
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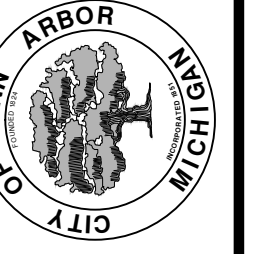
CONSTRUCTION KEY	
KEY	DESCRIPTION
AA	TEMP LOWERING EXISTING STRUCTURE ADJUST STRUCTURE COVER
AB	TEMP LOWERING EXISTING STRUCTURE ADJUST GATE VALE BOX OR ADJUST MONUMENT BOX
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RCP	HMA SURFACE, REM REMOVE CONCRETE PAVEMENT - ANY THICKNESS
RRA	TEMP LOWERING EXISTING STRUCTURE STRUCTURE COVER ADJUST STRUCTURE COVER
SR	SLOPE RESTORATION

**DIVISION (1)**



REV.	DATE	DESCRIPTION
01	11/24/2015	PROJECT MANAGER REVIEW
00	10/05/2015	SOIL BORING LOCATION SHEET

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PUBLIC SERVICES  
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PO BOX 866  
ANN ARBOR MI 48106-0867  
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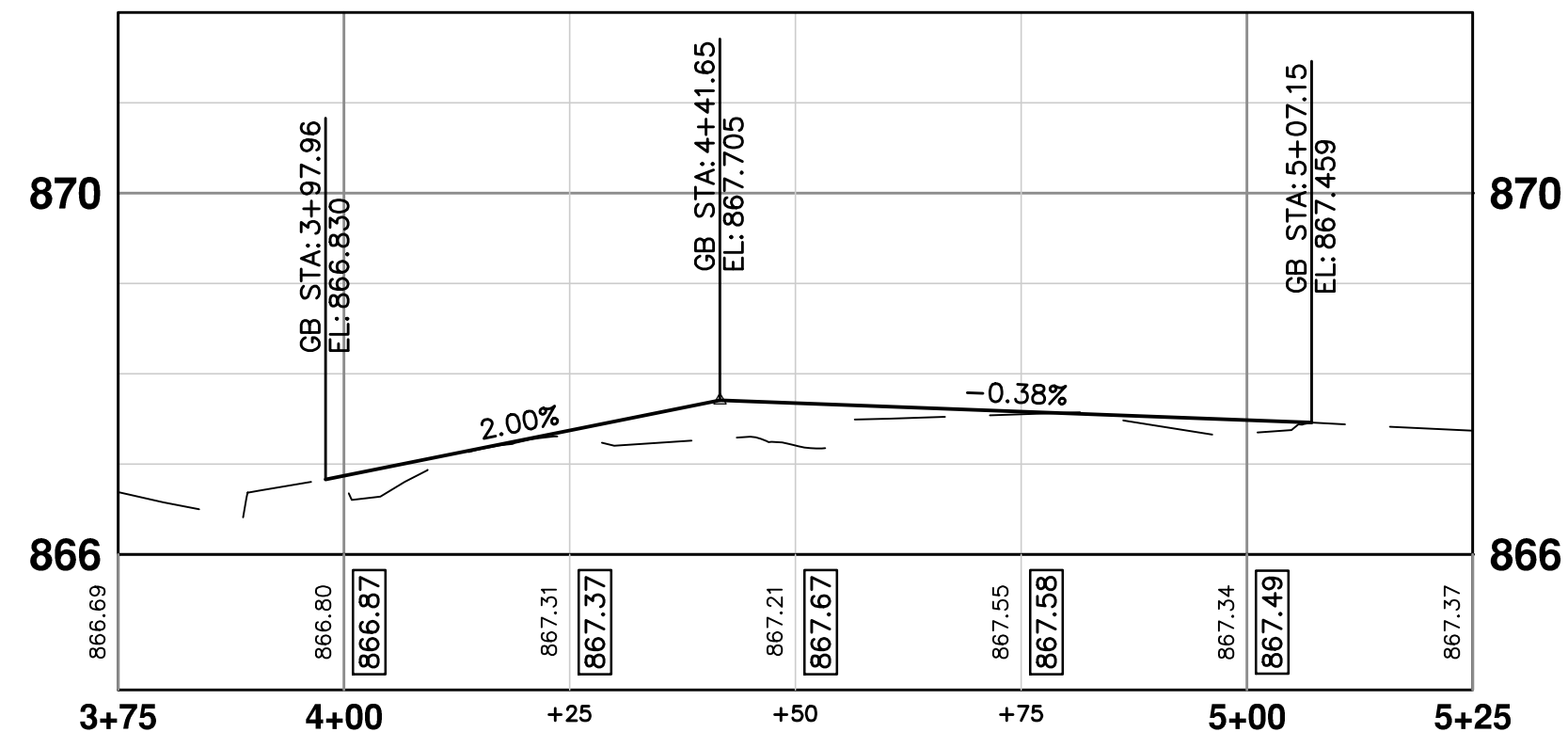


**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
ROAD  
ROAD 20+50 TO 24+50

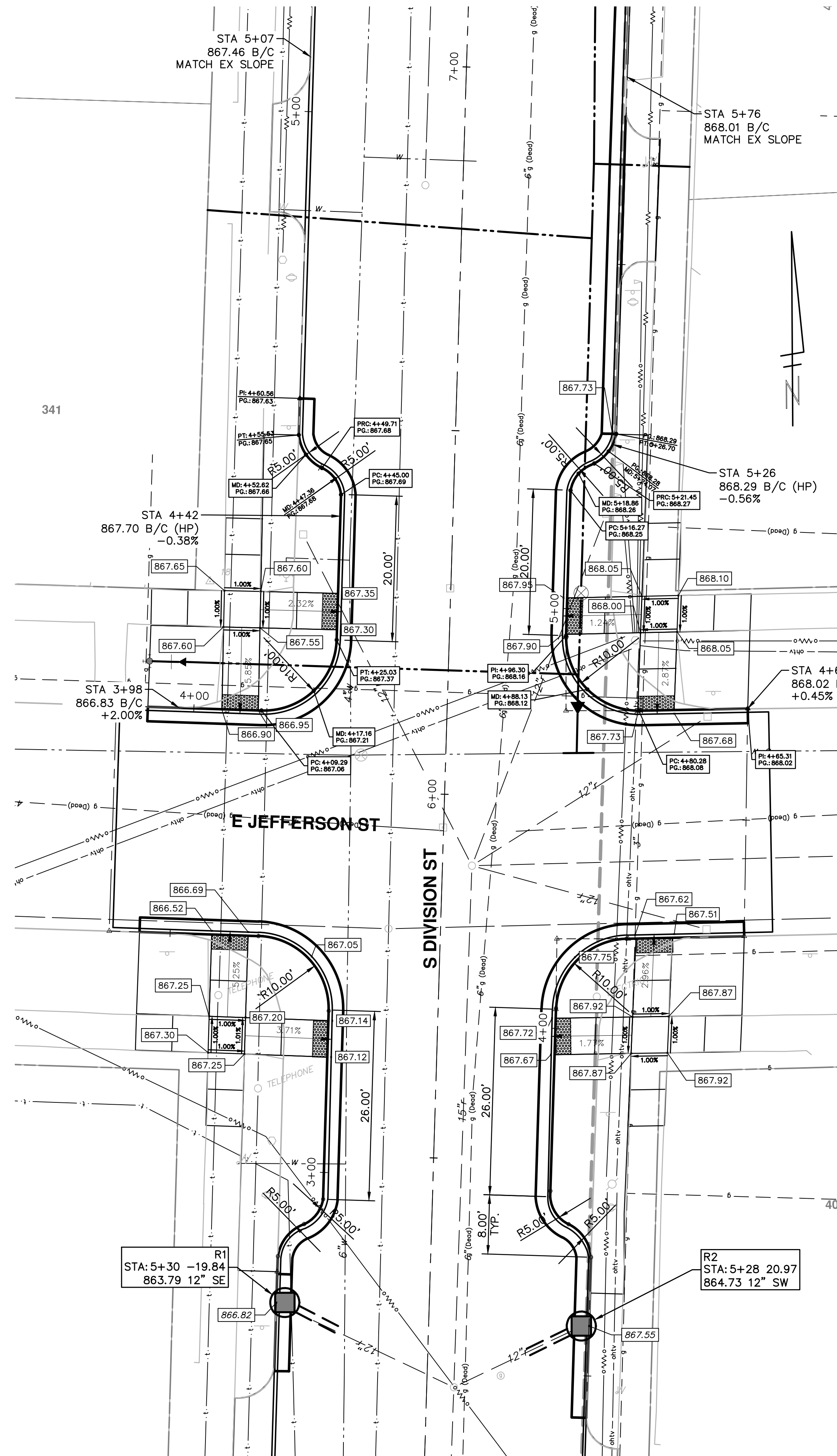
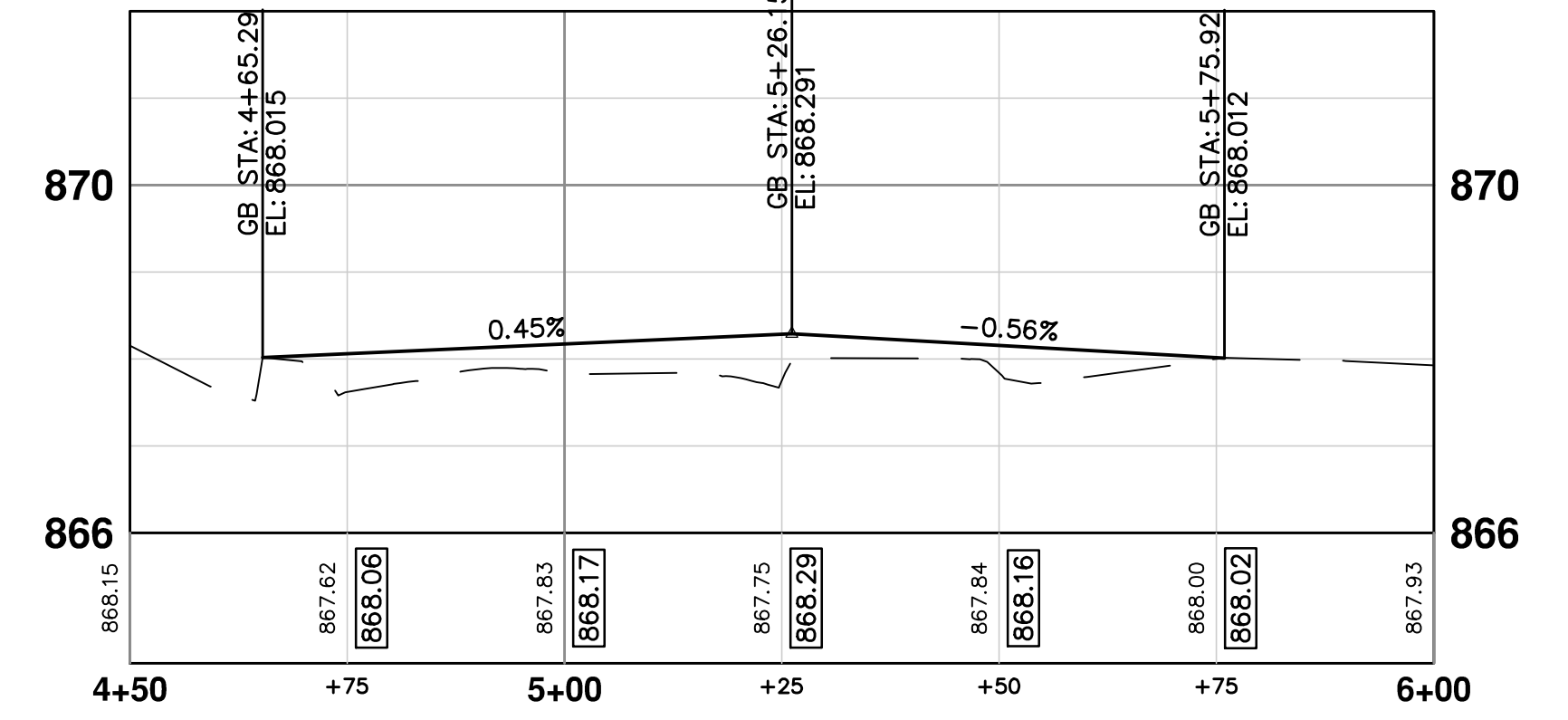
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DRAWING No. 2015038-19

S:\Project Management\Design\2015038 Division\Plan Production\2015038 INT.dwg Dwg Created: 30-Dec-15 - \_a2\_standard bw.stb - Plot Date: 11-Mar-16

### LEFT BOC (1)



### RIGHT BOC



#### NOTES

1. PROPOSED GUTTER PAN TO BE OVERLAID UPON PAVING. ELEVATIONS SHOWN ARE TO TOP COURSE OF PROPOSED HMA OVERLAY.

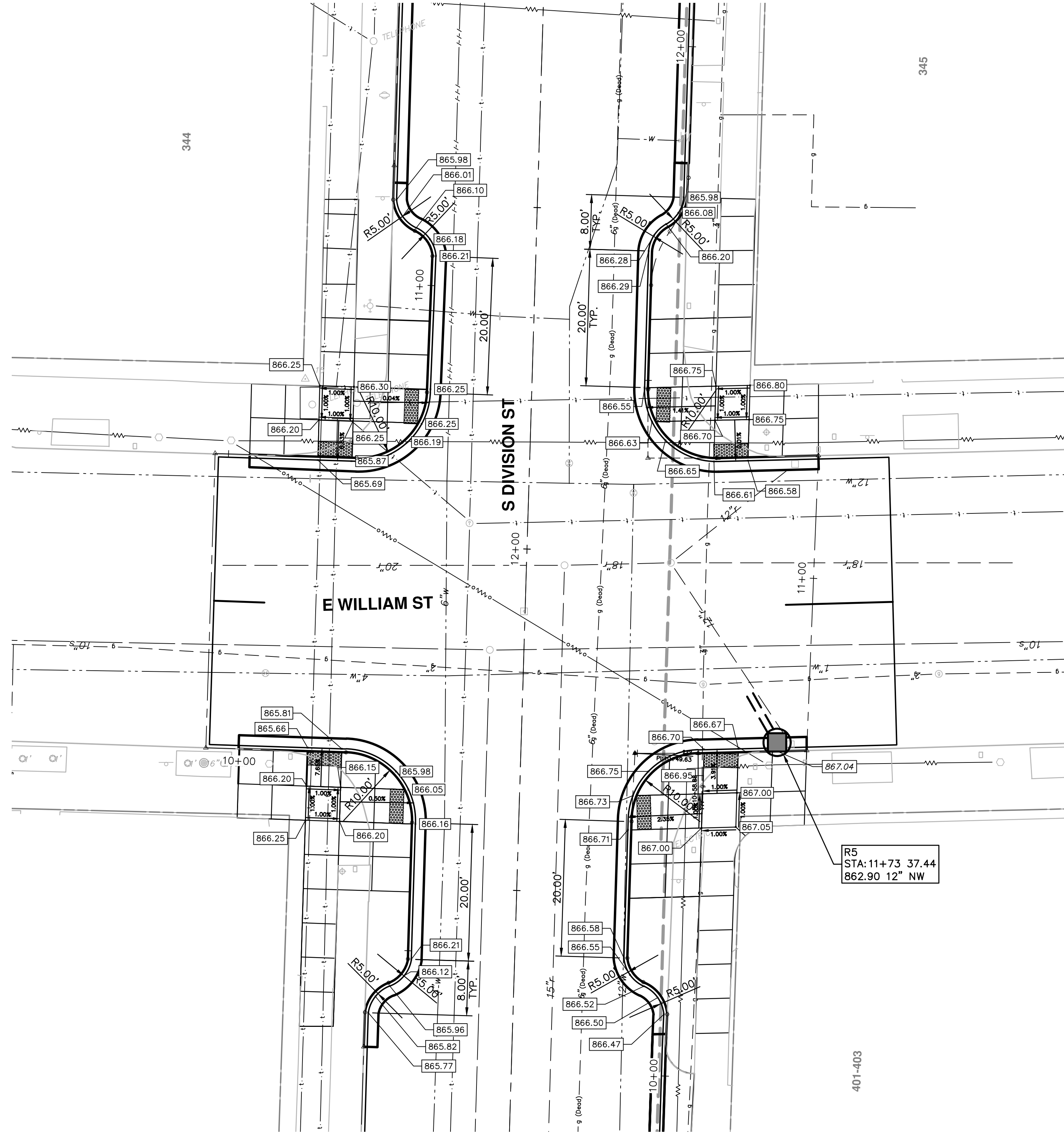


REV.	DATE	DESCRIPTION
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03	2/22/2016	ADDENDUM 1
02	1/21/2016	FINAL SUBMITTAL
01	11/24/2015	PROJECT MANAGER REVIEW
00	10/05/2015	SOIL BORING LOCATION SHEET

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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING INTERSECTIONS**  
 JEFFERSON ST

SHEET No. **20 OF 41**  
 SCALE PLAN: 1" = 10'  
 PROFILE: 1" = 2'  
 DRAWING No. **2015038-20**

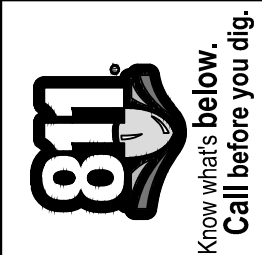


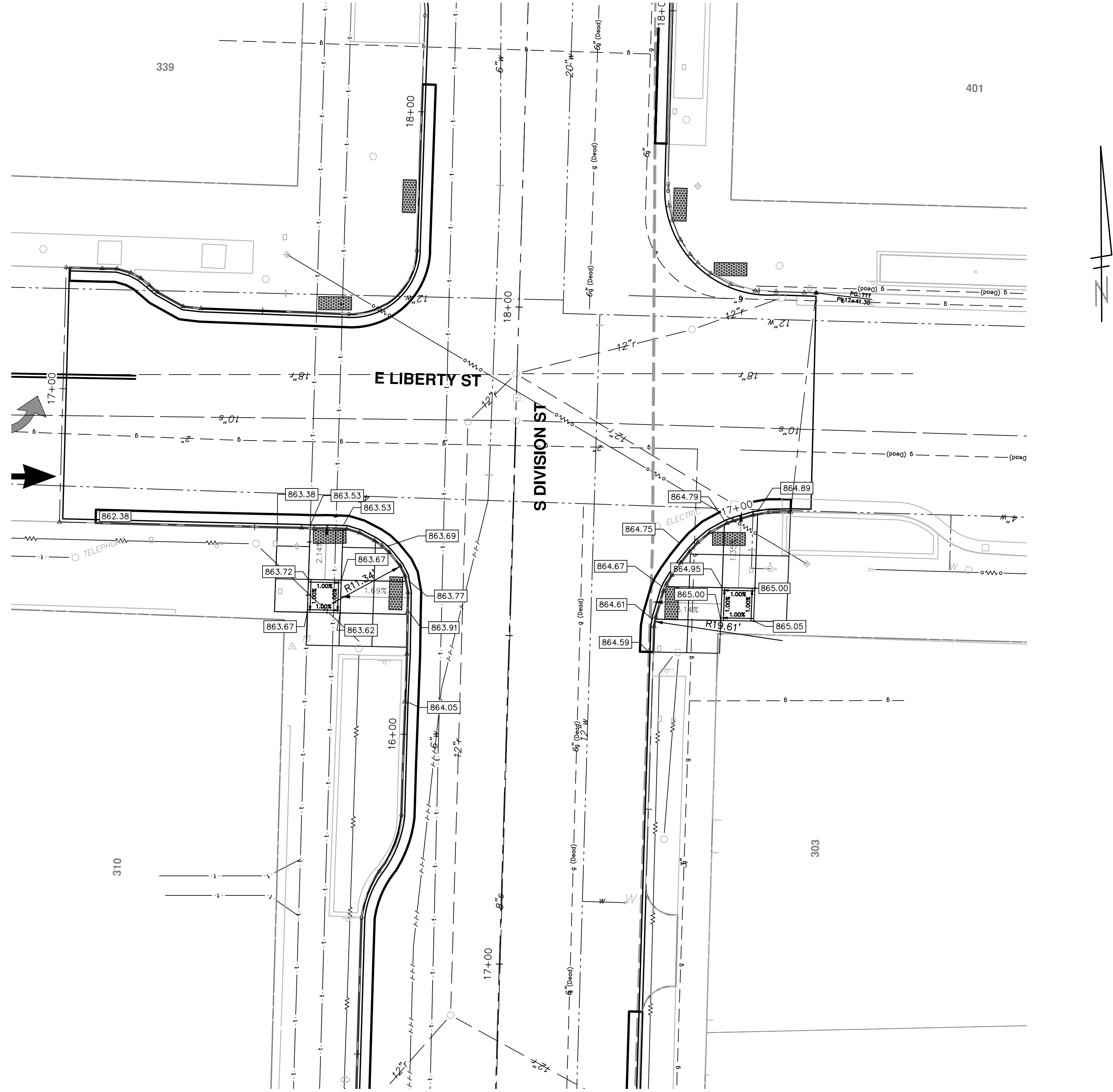
**NOTES**

1. PROPOSED GUTTER PAN TO BE OVERLAID UPON PAVING. ELEVATIONS SHOWN ARE TO TOP COURSE OF PROPOSED HMA OVERLAY.
2. ON WILLIAM AND DIVISION INTERSECTION QUADRANTS ONLY, DETECTABLE WARNING SURFACE (DWS) SHALL BE CAST IRON. (80 SFT).



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
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03	ADDENDUM 1	2/22/2016	JKA	JAN
02	FINAL SUBMITTAL	1/21/2016	JKA	JAN
01	PROJECT MANAGER REVIEW	11/24/2015	JKA	JAN
00	SOIL BORING LOCATION SHEET	10/05/2015	JKA	AMW





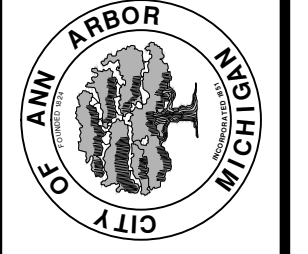
**NOTES**

1. PROPOSED GUTTER PAN TO BE OVERLAID UPON PAVING. ELEVATIONS SHOWN ARE TO TOP COURSE OF PROPOSED HMA OVERLAY.



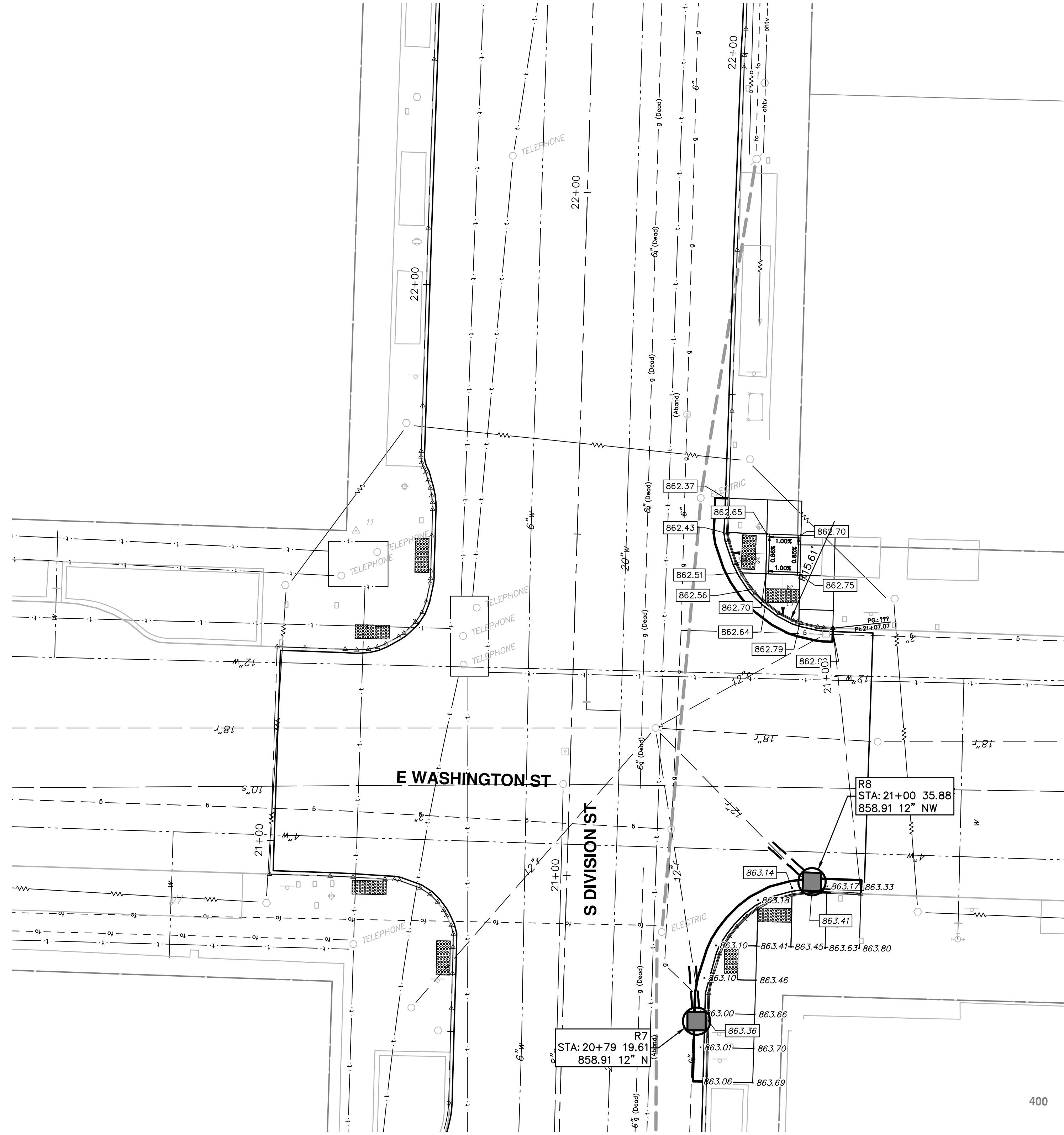
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03	ADDENDUM 1	2/22/2016	JKA	JAN
02	FINAL SUBMITTAL	1/21/2016	JKA	JAN
01	PROJECT MANAGER REVIEW	11/24/2015	JKA	JAN
00	SOIL BORING LOCATION SHEET	10/05/2015	JKA	AMW

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 ANN ARBOR: 734-794-4410  
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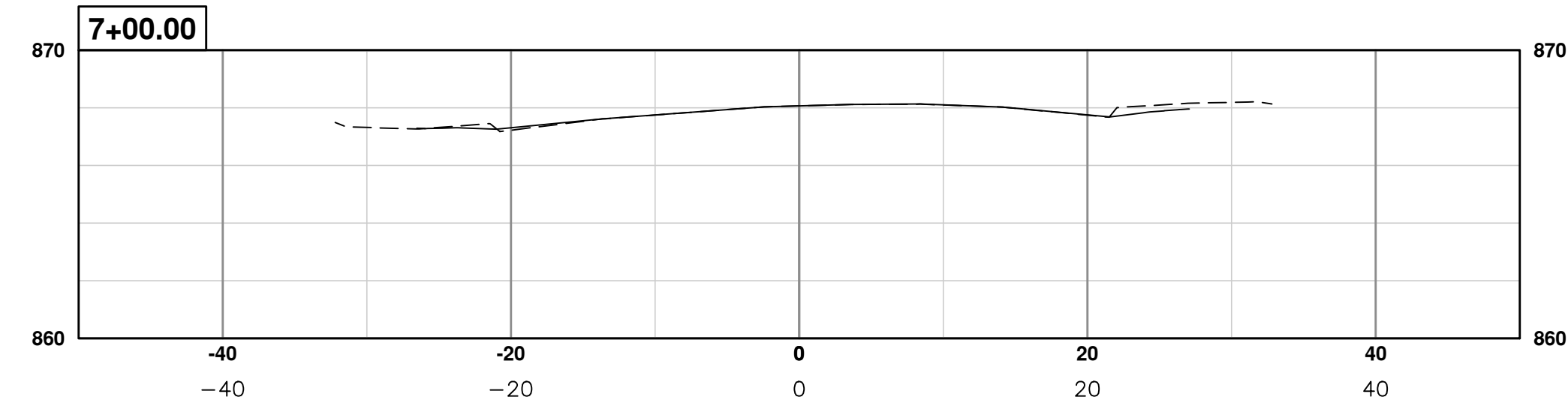
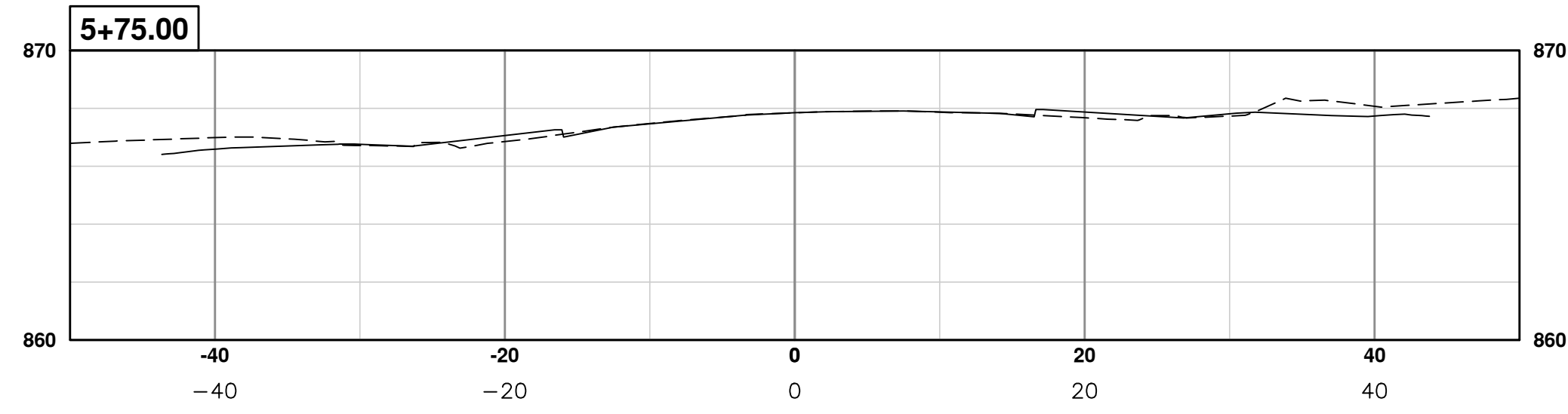
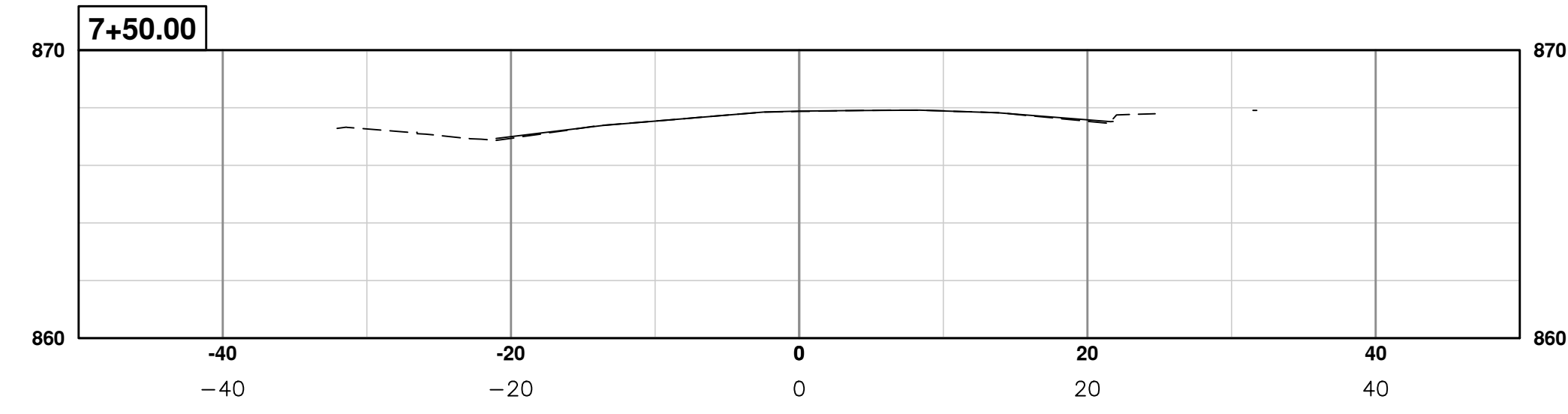
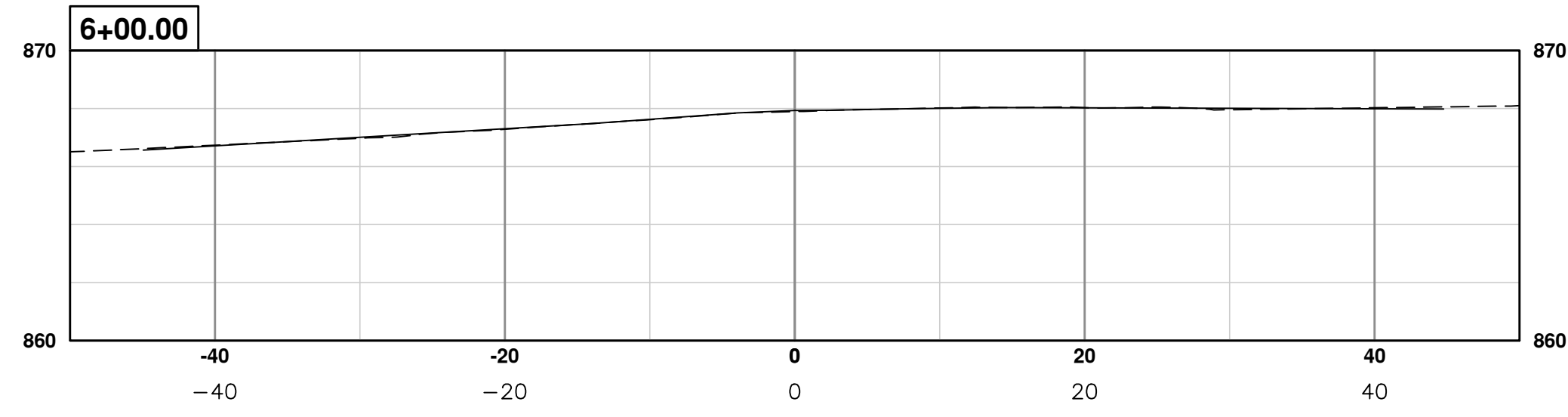
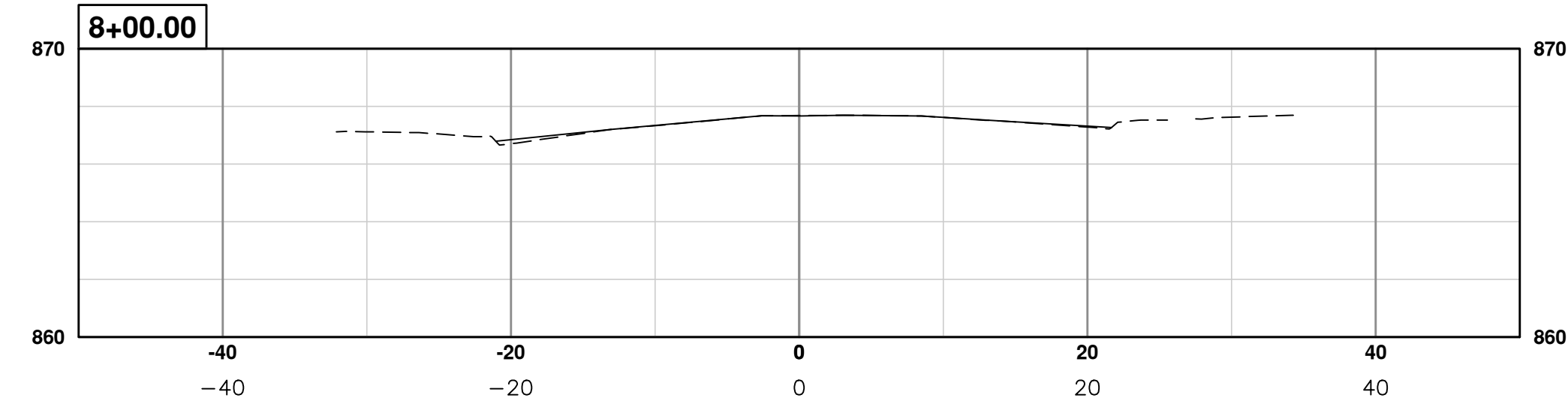
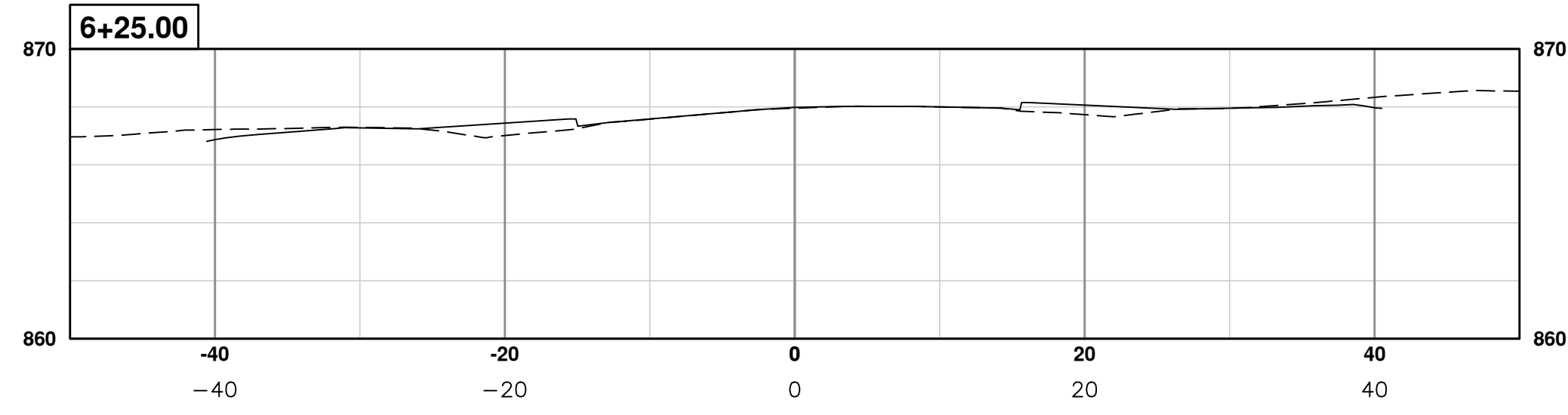
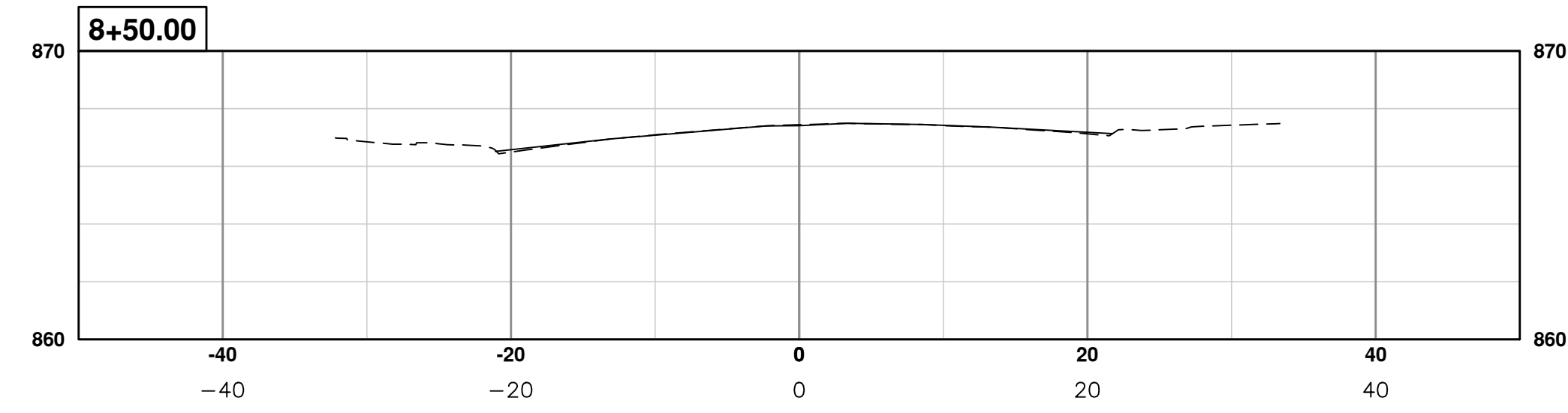
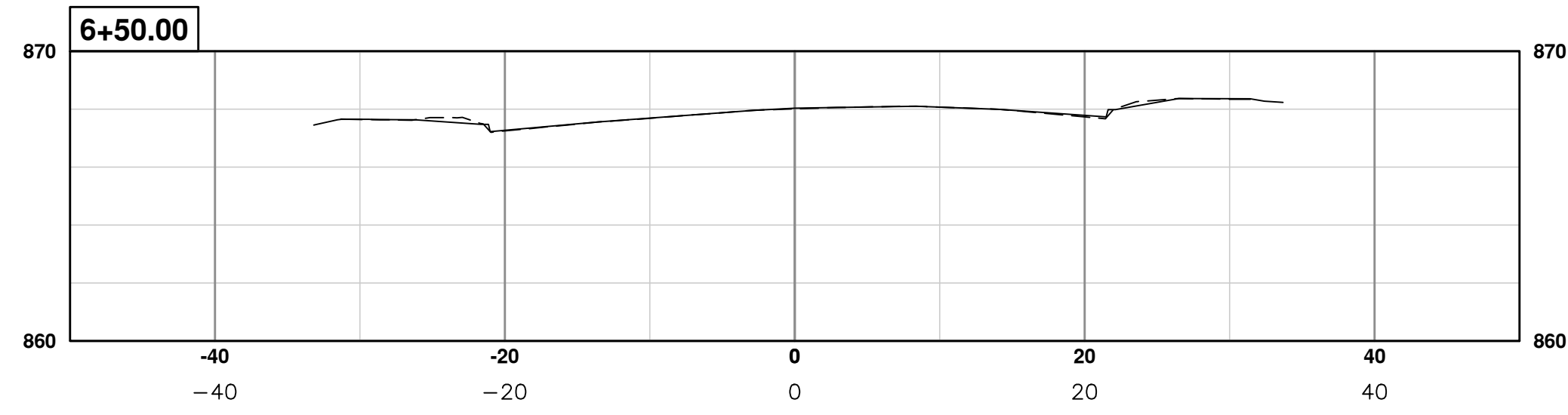
**PROJECT MANAGEMENT - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
 INTERSECTIONS  
 E LIBERTY ST

SCALE PLAN: 1" = 10'  
 DRAWING No. 2015038-22



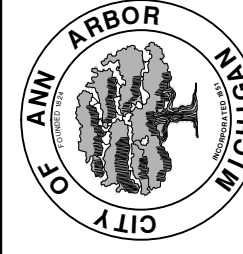
**NOTES**  
 1. PROPOSED GUTTER PAN TO BE OVERLAID UPON PAVING. ELEVATIONS SHOWN ARE TO TOP COURSE OF PROPOSED HMA OVERLAY.

 <p><b>CITY OF ANN ARBOR</b>                  PUBLIC SERVICES                  301 EAST HURON STREET                  ANN ARBOR, MI 48106-0667                  www.a2gov.org</p>		<p>REISSUED FOR BID (NO. 4429)</p>		<p>3/11/2016</p>	<p>JKA</p>	<p>JAN</p>
<p><b>PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR</b></p>		<p>ADDENDUM 1</p>		<p>2/22/2016</p>	<p>JKA</p>	<p>JAN</p>
<p><b>S. DIVISION ST. RESURFACING INTERSECTIONS</b></p>		<p>FINAL SUBMITTAL</p>		<p>1/21/2016</p>	<p>JKA</p>	<p>JAN</p>
<p><b>E WASHINGTON ST</b></p>		<p>PROJECT MANAGER REVIEW</p>		<p>11/24/2015</p>	<p>JKA</p>	<p>JAN</p>
<p>SCALE PLAN: 1" = 10'</p>		<p>SOIL BORING LOCATION SHEET</p>		<p>10/05/2015</p>	<p>JKA</p>	<p>AMW</p>
<p>DRAWING No. 2015038-23</p>		<p>REV.</p>		<p>DATE</p>	<p>DRAWN</p>	<p>CHECKED</p>
<p>SHEET No. 23 OF 41</p>		<p>DESCRIPTION</p>		<p>Know what's below. Call before you dig.</p>		



REV.	DESCRIPTION	DATE	BY	CHECKED
04	TURN G--TEBLK--REV LAY ON AND EDIT TEXT		BY	
03	TURN G--TEBLK--REV LAY ON AND EDIT TEXT		BY	
02	TURN G--TEBLK--REV LAY ON AND EDIT TEXT		BY	
01	TURN G--TEBLK--REV LAY ON AND EDIT TEXT		BY	
00	TURN G--TEBLK--REV LAY ON AND EDIT TEXT		BY	

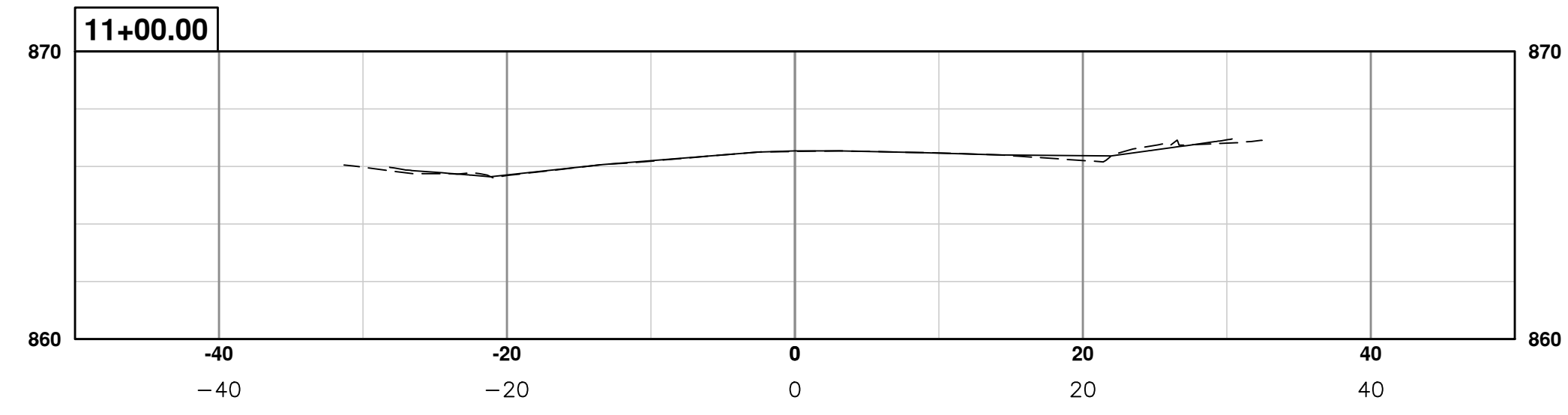
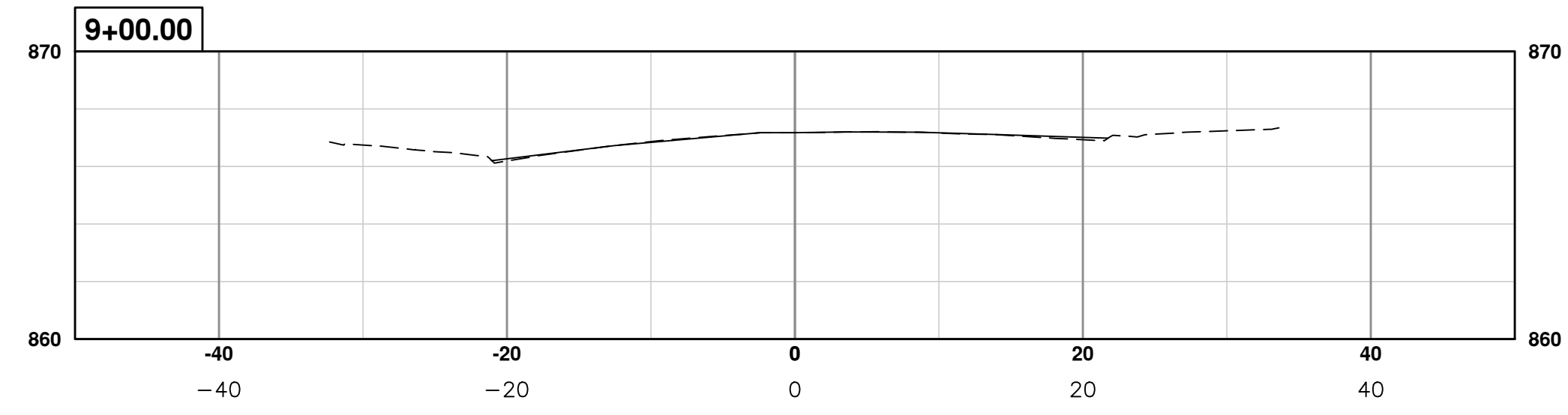
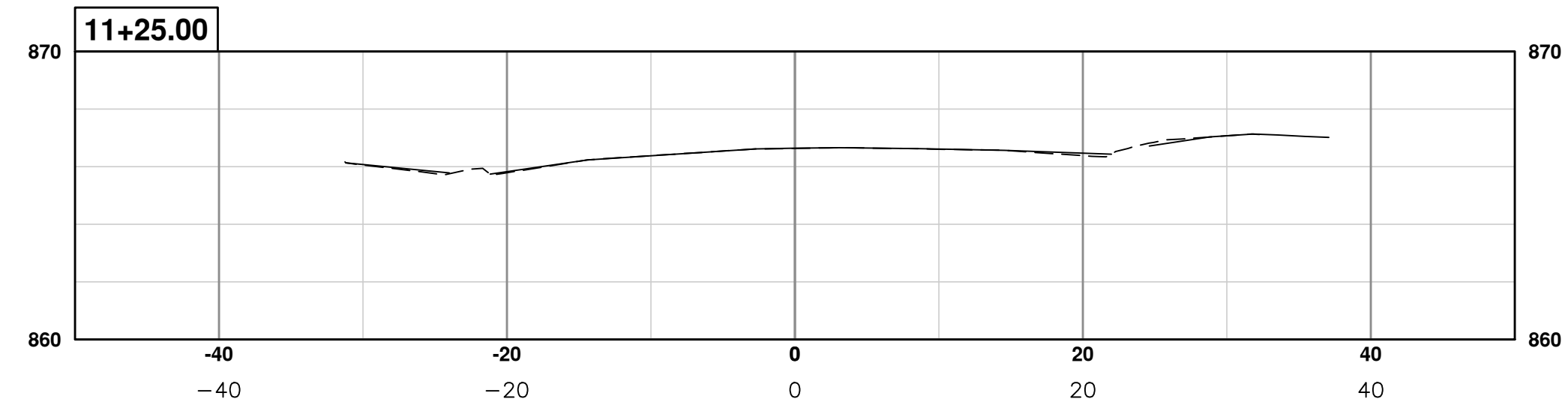
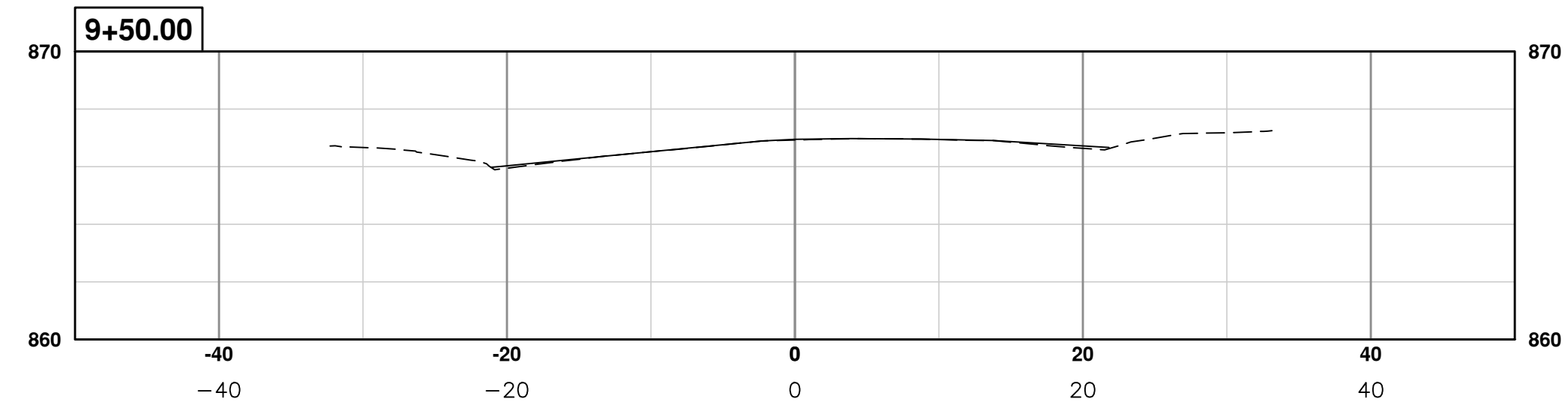
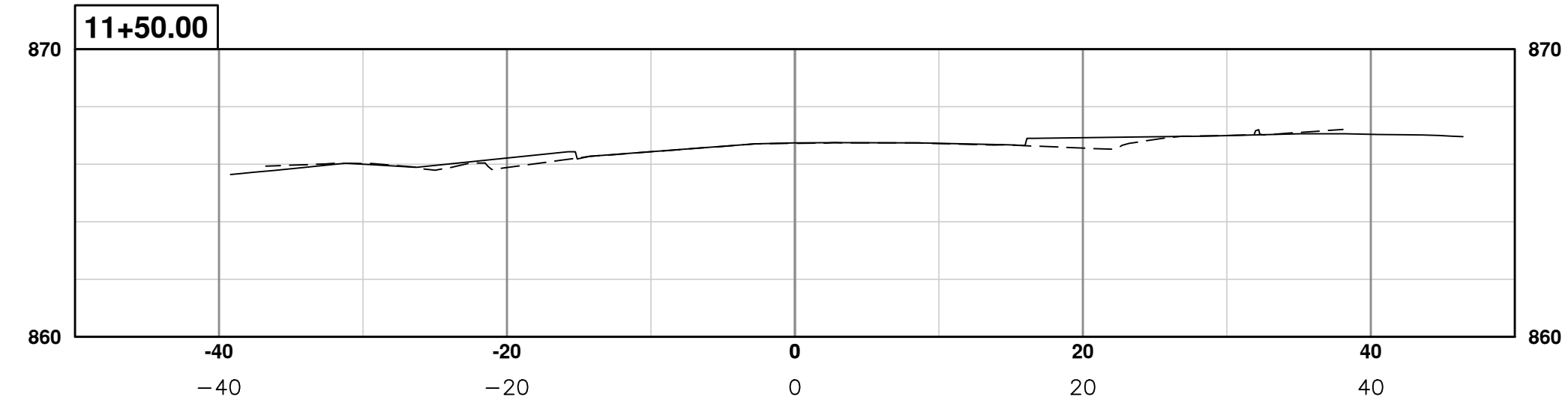
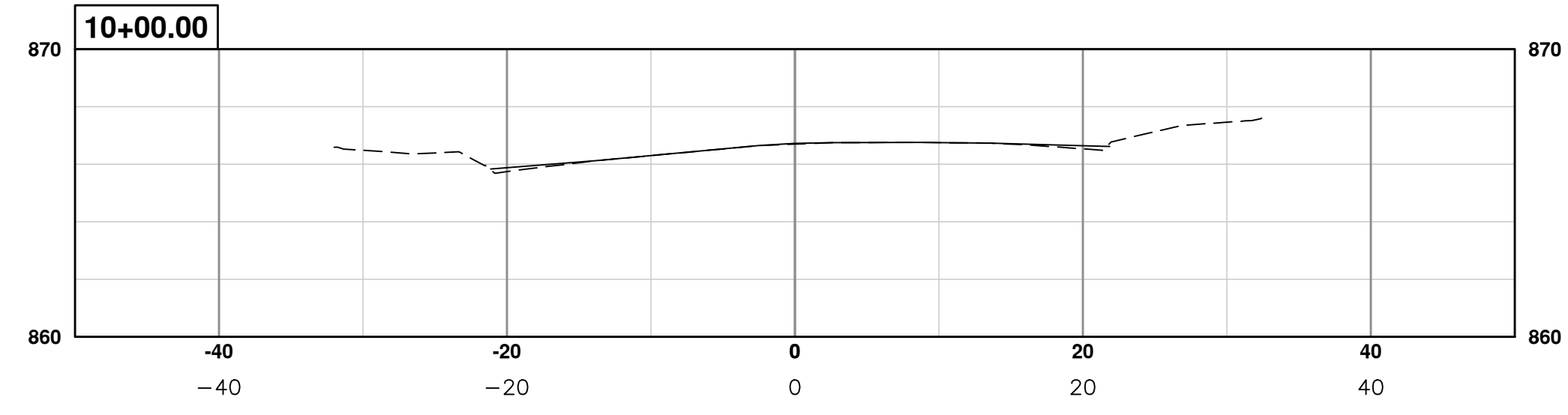
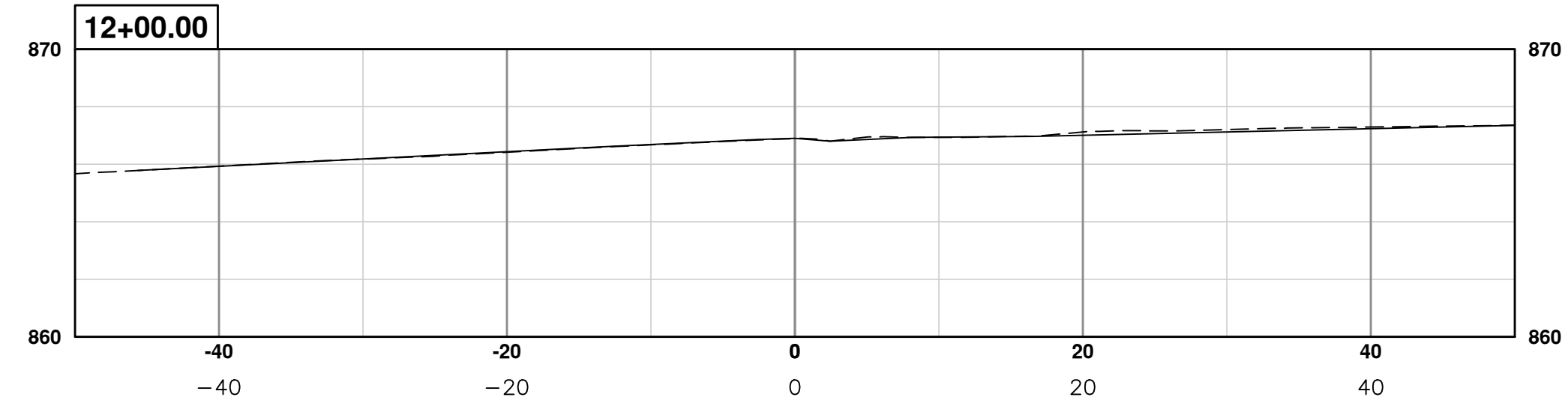
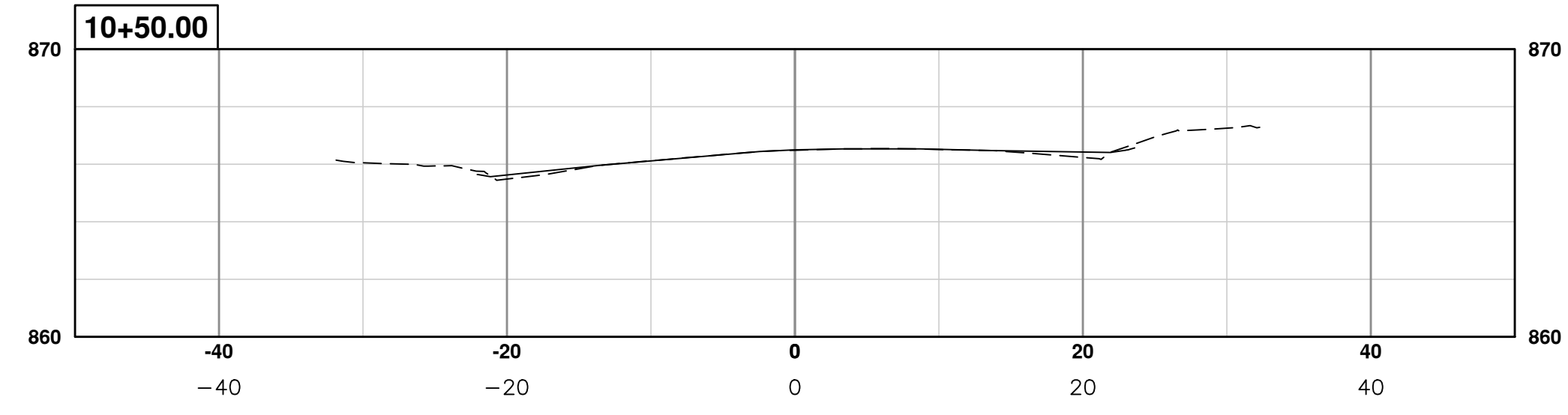
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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
SECTIONS  
SECT 5+75 TO 8+50

SCALE PLAN: 1" = 10'  
PROFILE: 1" = 5'  
DRAWING No. 2015038-24





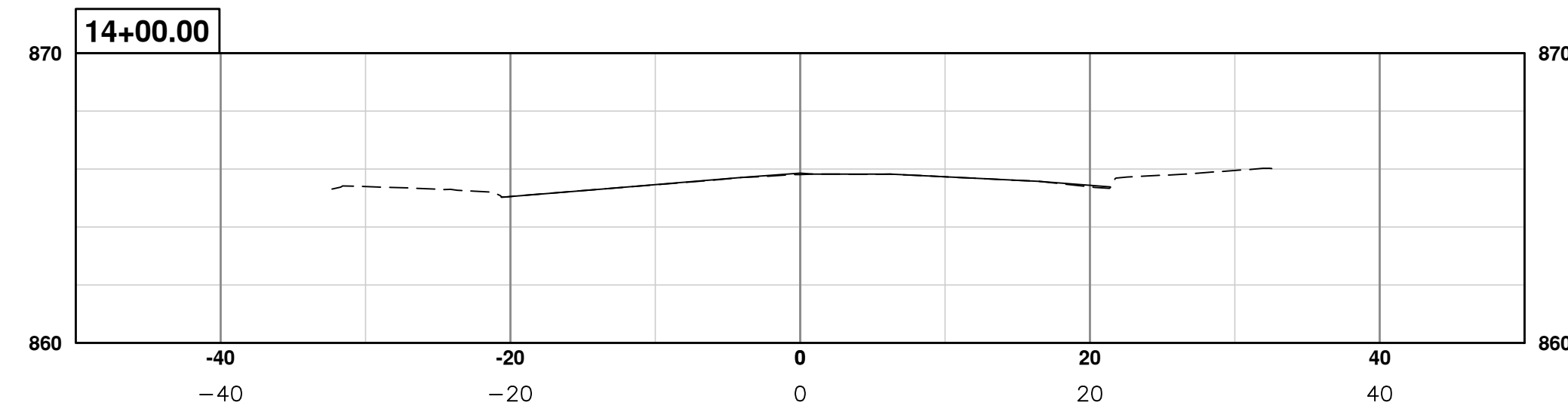
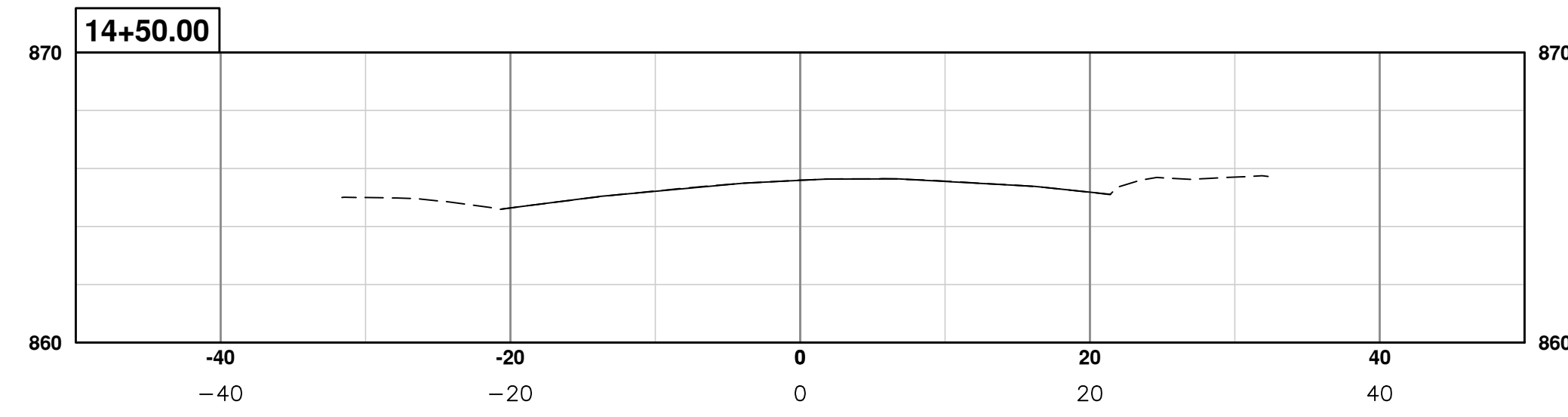
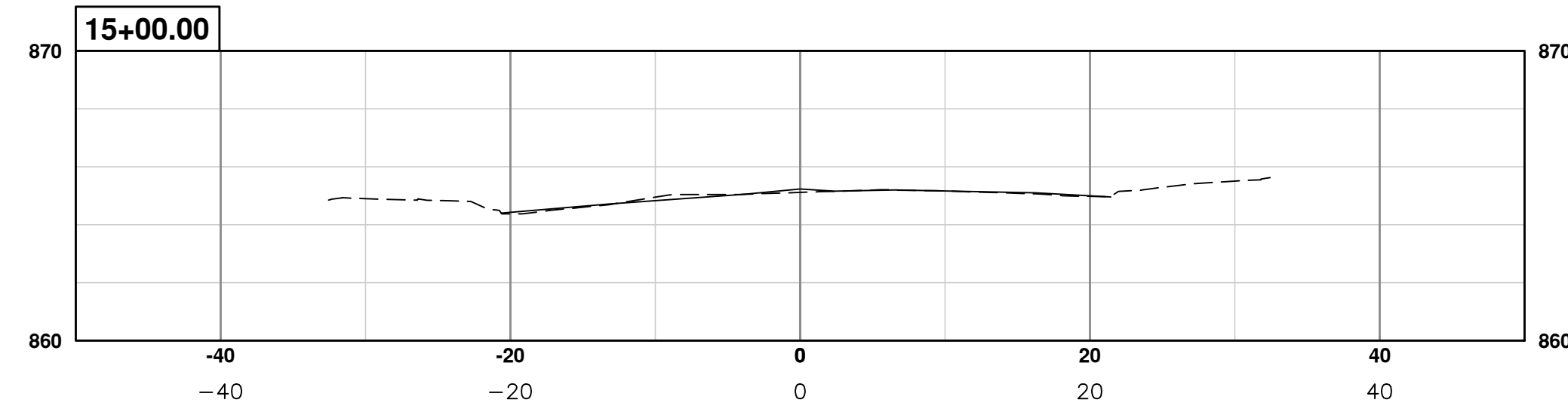
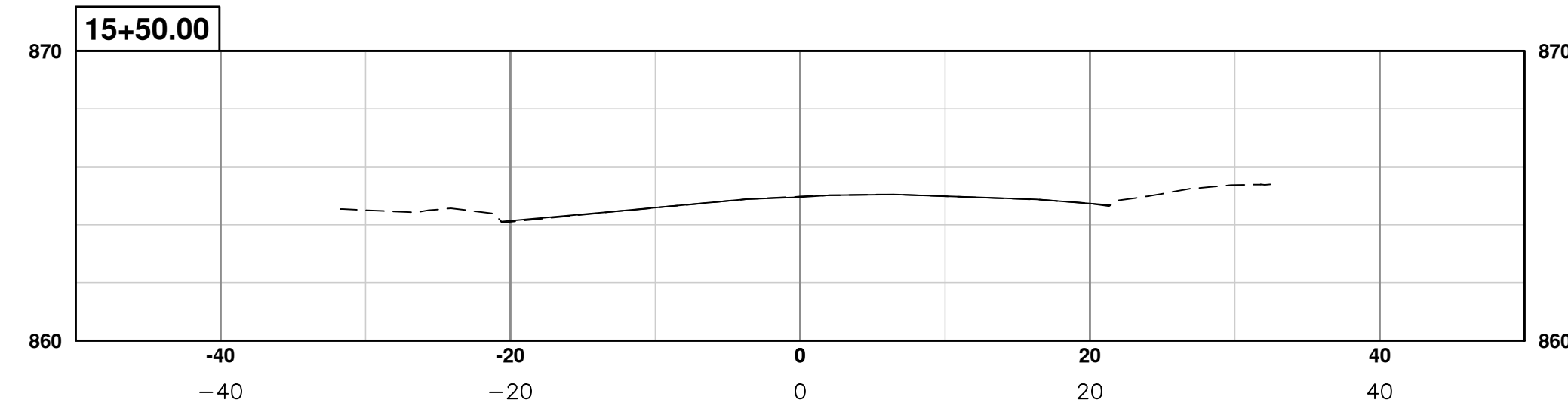
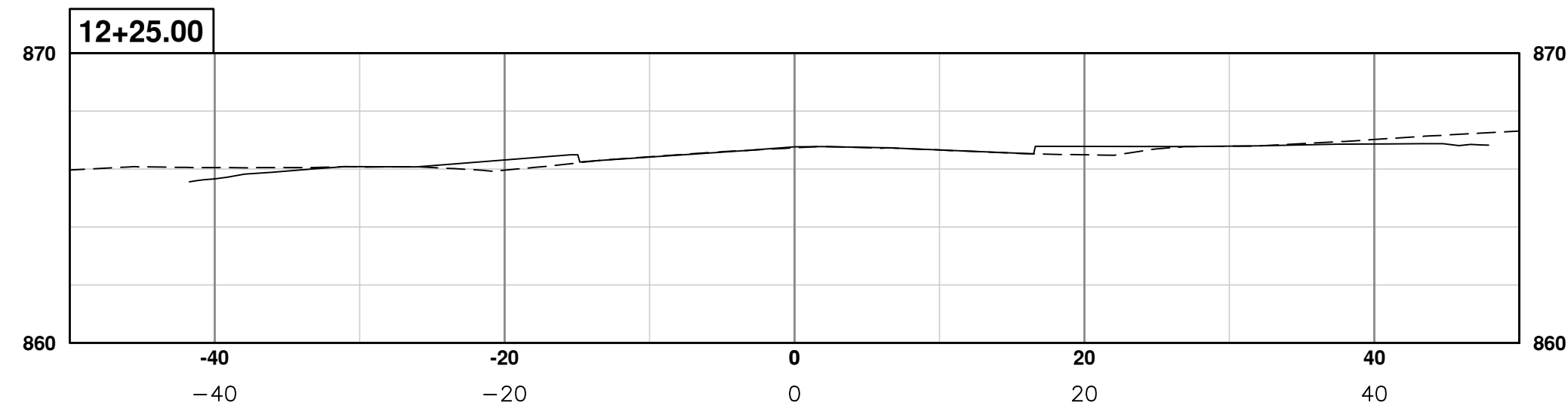
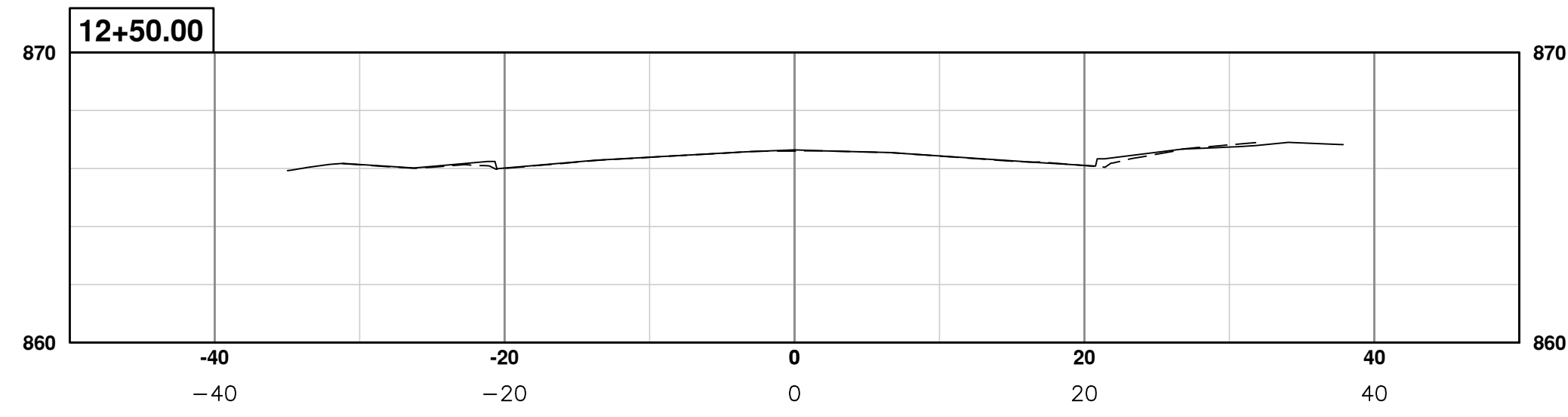
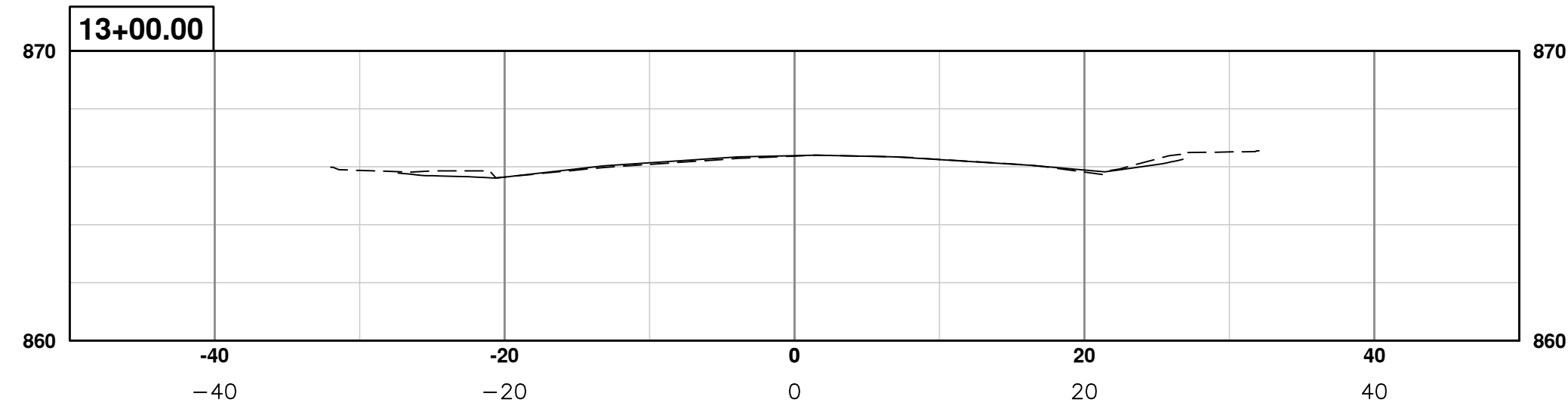
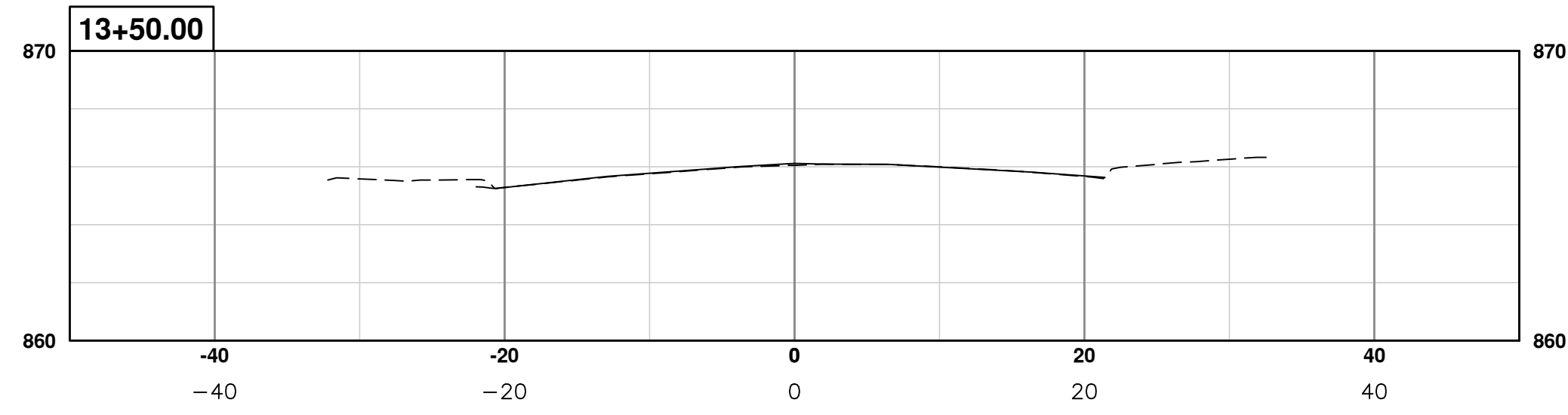
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03	TURN G--TEBLK--REV LAY ON AND EDIT TEXT		BY	
02	TURN G--TEBLK--REV LAY ON AND EDIT TEXT		BY	
01	TURN G--TEBLK--REV LAY ON AND EDIT TEXT		BY	
00	TURN G--TEBLK--REV LAY ON AND EDIT TEXT		BY	

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**S. DIVISION ST. RESURFACING**  
SECTIONS  
SECT 9+00 TO 12+00

SCALE PLAN: 1" = 10'  
PROFILE: 1" = 5'  
DRAWING No. 2015038-25



REV.	DESCRIPTION	DATE	BY	CHECKED
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02	TURN G--TBLK--REV LAY ON AND EDIT TEXT		BY	
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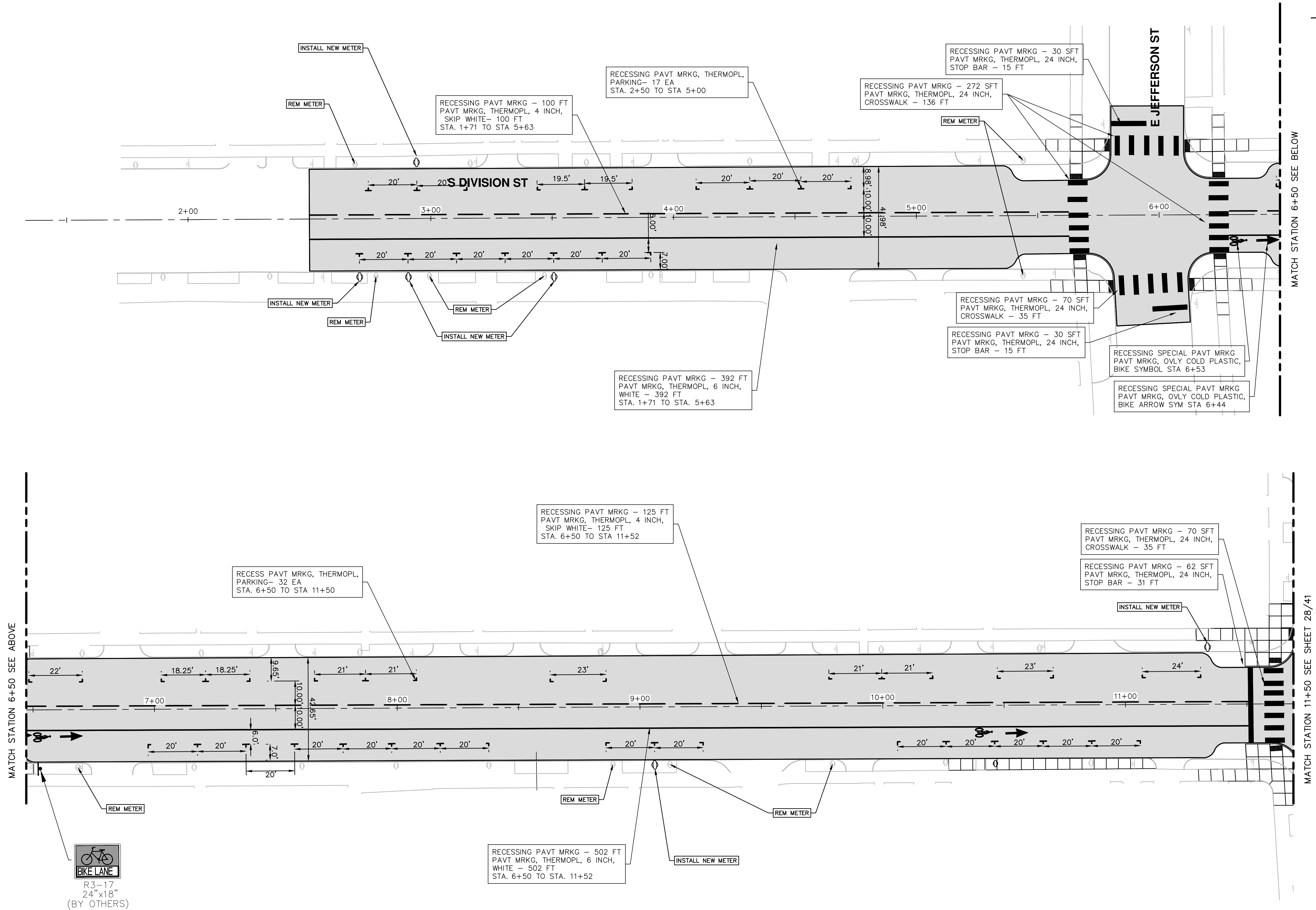
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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
SECTIONS  
SECT 12+25 TO 15+50

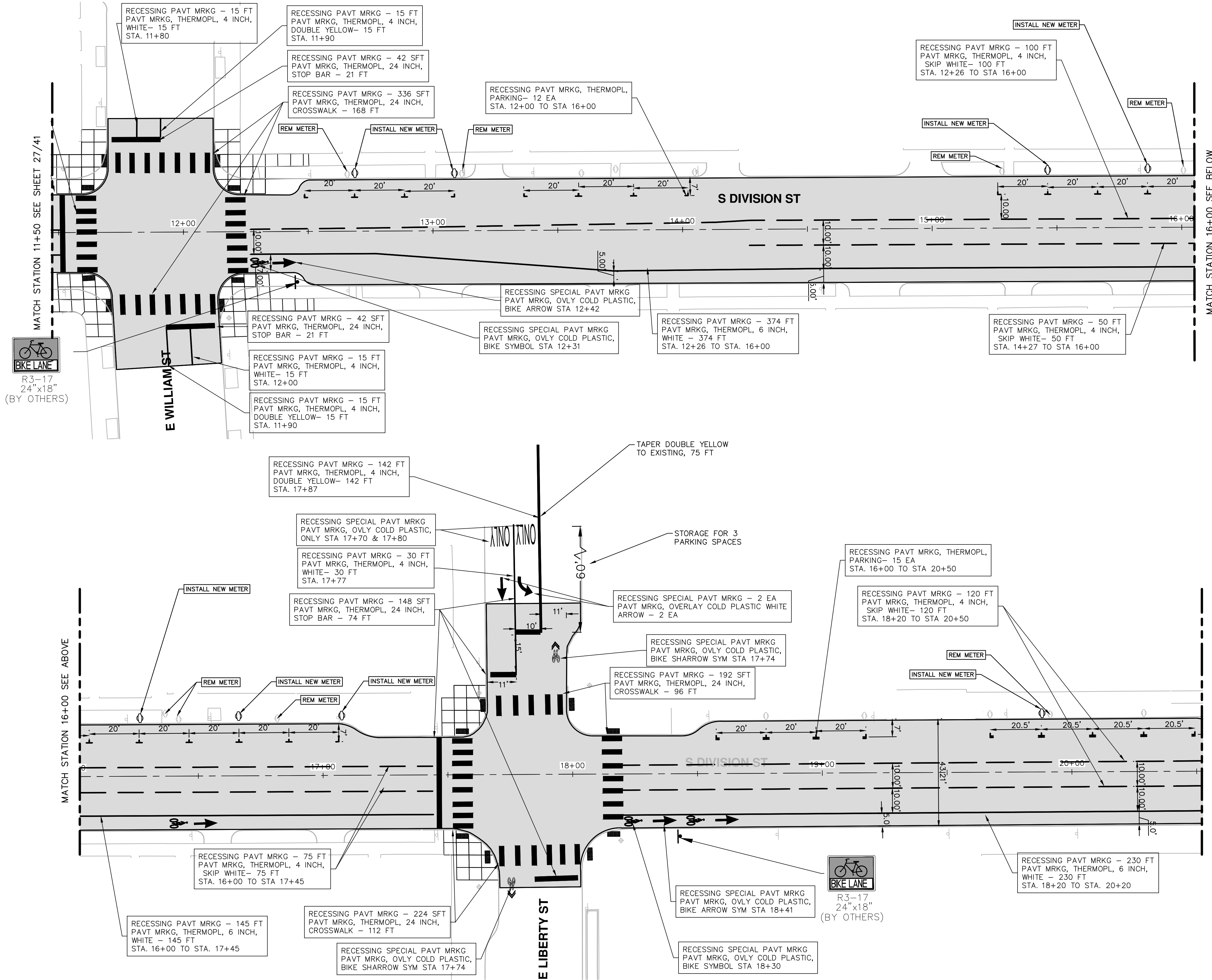
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PROFILE: 1" = 5'  
DRAWING No.  
**2015038-26**

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<b>PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR</b> <b>S. DIVISION ST. RESURFACING</b> PAVEMENT MARKINGS PHARK POB TO 11+50	
SCALE PLAN: 1" = 20' DRAWING No. 2015038-27	
SHEET No. 27 OF 41	
04 REISSUED FOR BID (NO. 4429) 03 ADDENDUM 1 02 FINAL SUBMITTAL 01 PROJECT MANAGER REVIEW 00 SOIL BORING LOCATION SHEET	3/11/2016 2/22/2016 1/21/2016 11/24/2015 10/05/2015
CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET P.O. BOX 8647 ANN ARBOR, MI 48106-8647 www.a2gov.org	JKA JKA JKA JKA JKA AMW DATE DRAWN CHECKED

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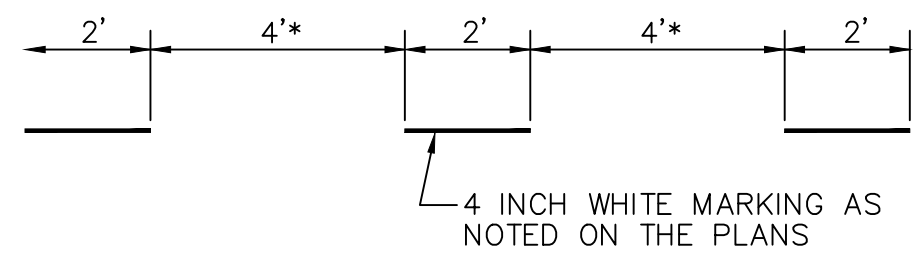
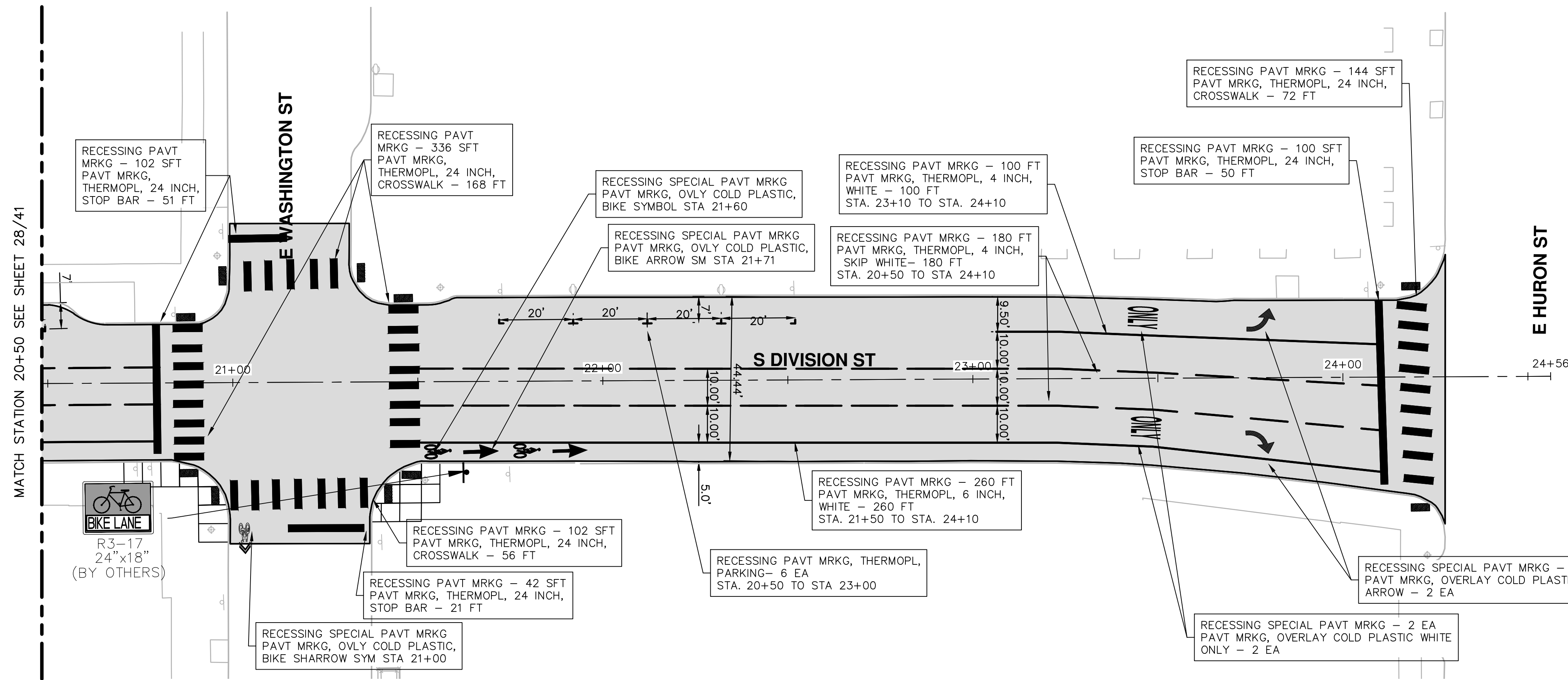


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04	REISSUED FOR BID (NO. 4429)	3/11/2016	JKA	JAN
03	ADDENDUM 1	2/22/2016	JKA	JAN
02	FINAL SUBMITTAL	1/21/2016	JKA	JAN
01	PROJECT MANAGER REVIEW	11/24/2015	JKA	JAN
00	SOIL BORING LOCATION SHEET	10/05/2015	JKA	AMW

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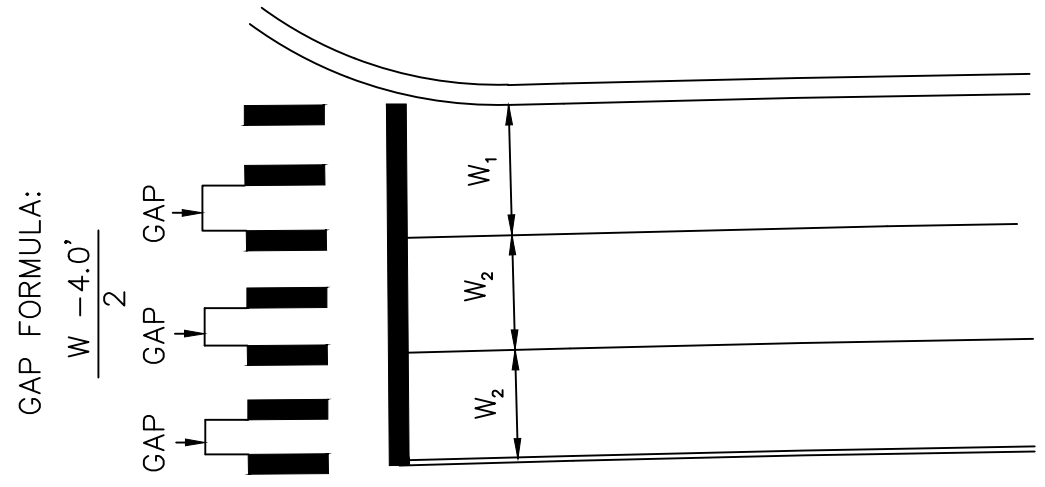
**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
**PAVEMENT MARKINGS**

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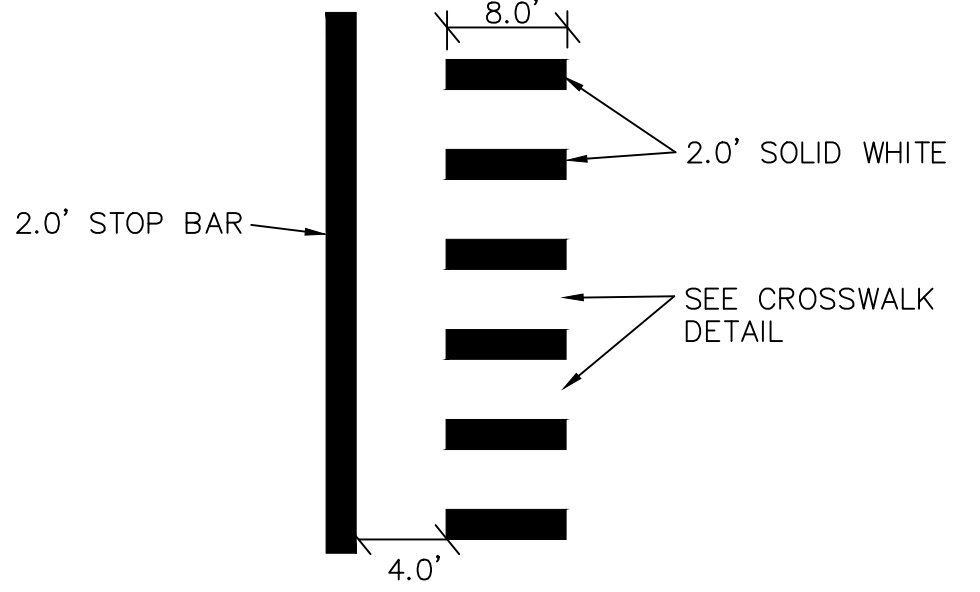


**DOTTED LINE DETAIL**

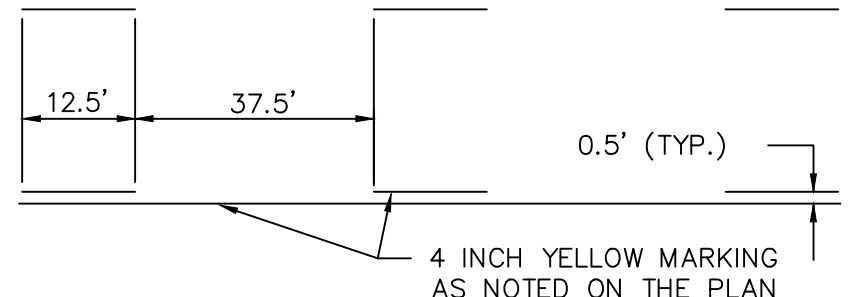
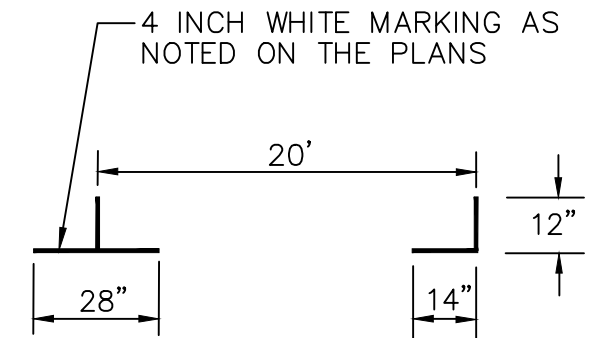
\* NOTE FOR BROKEN LINE, USE 6" GAPS.



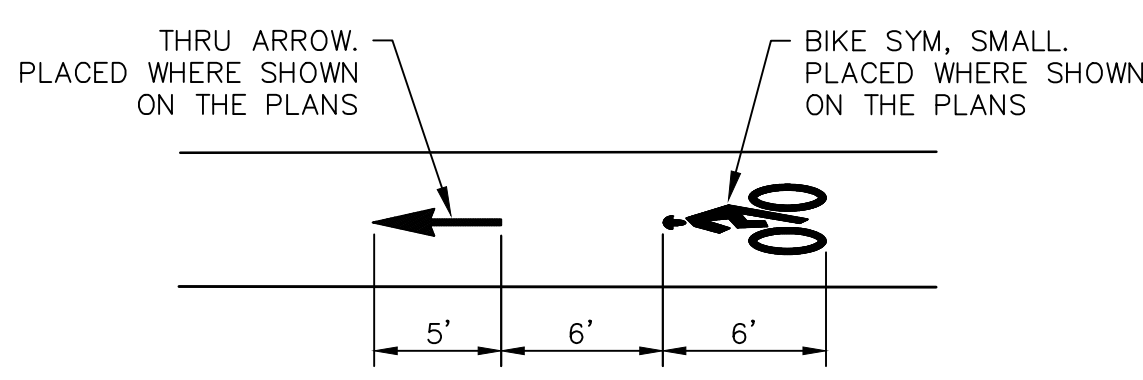
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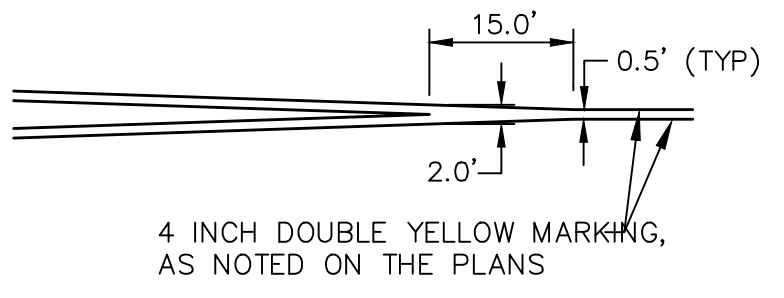
**STOP BAR DETAIL**



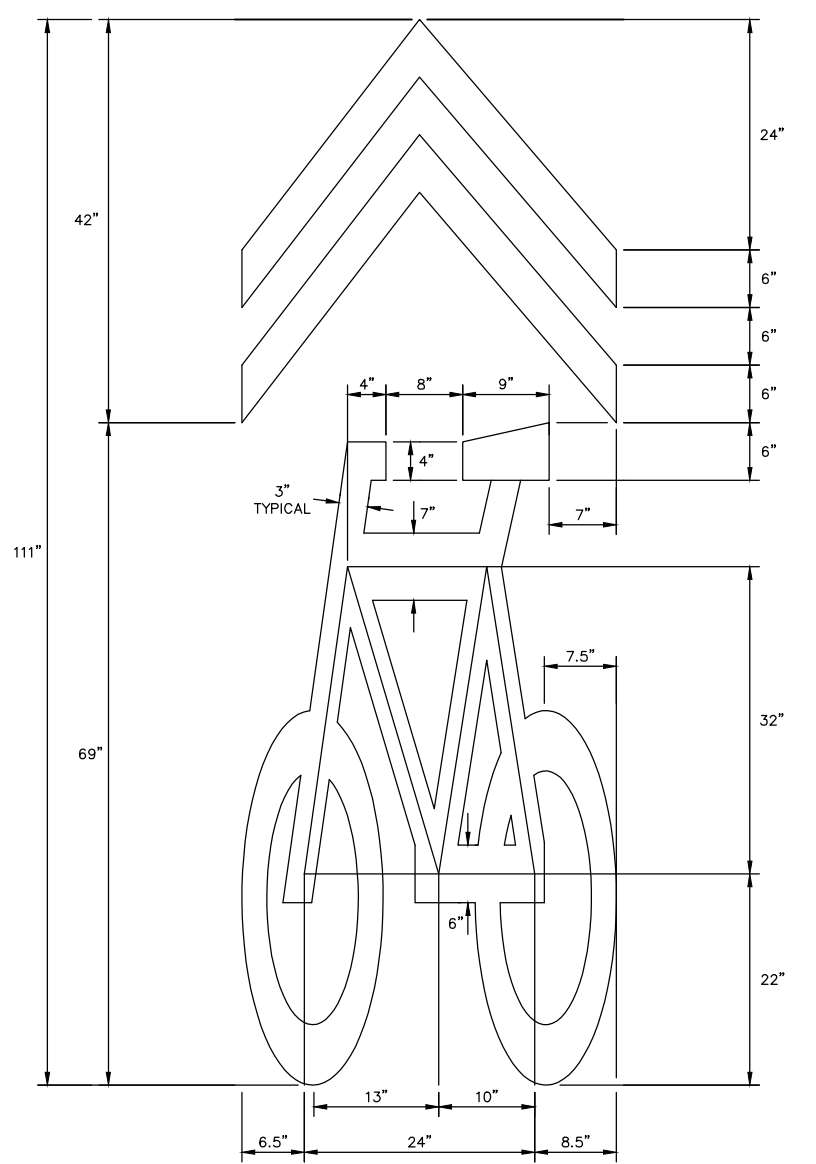
**DASHED SEGMENT DETAIL**



**BIKE SYMBOL DETAIL**



**TYPICAL DOUBLE YELLOW SEPARATION DETAIL**



**SHARROW BIKE SYMBOL DETAIL**



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REV.	DATE	DRAWN	CHECKED	JAN	JAN	JAN	JAN	JAN	JAN
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03	2/22/2016	JKA	JKA	JAN	JAN	JAN	JAN	JAN	JAN
02	1/21/2016	JKA	JKA	JAN	JAN	JAN	JAN	JAN	JAN
01	11/24/2015	JKA	JKA	JAN	JAN	JAN	JAN	JAN	JAN
00	10/05/2015	JKA	JKA	AMW	AMW	AMW	AMW	AMW	AMW

ISSUED FOR BID (NO. 4429)  
 ADDENDUM 1  
 FINAL SUBMITTAL  
 PROJECT MANAGER REVIEW  
 SOIL BORING LOCATION SHEET

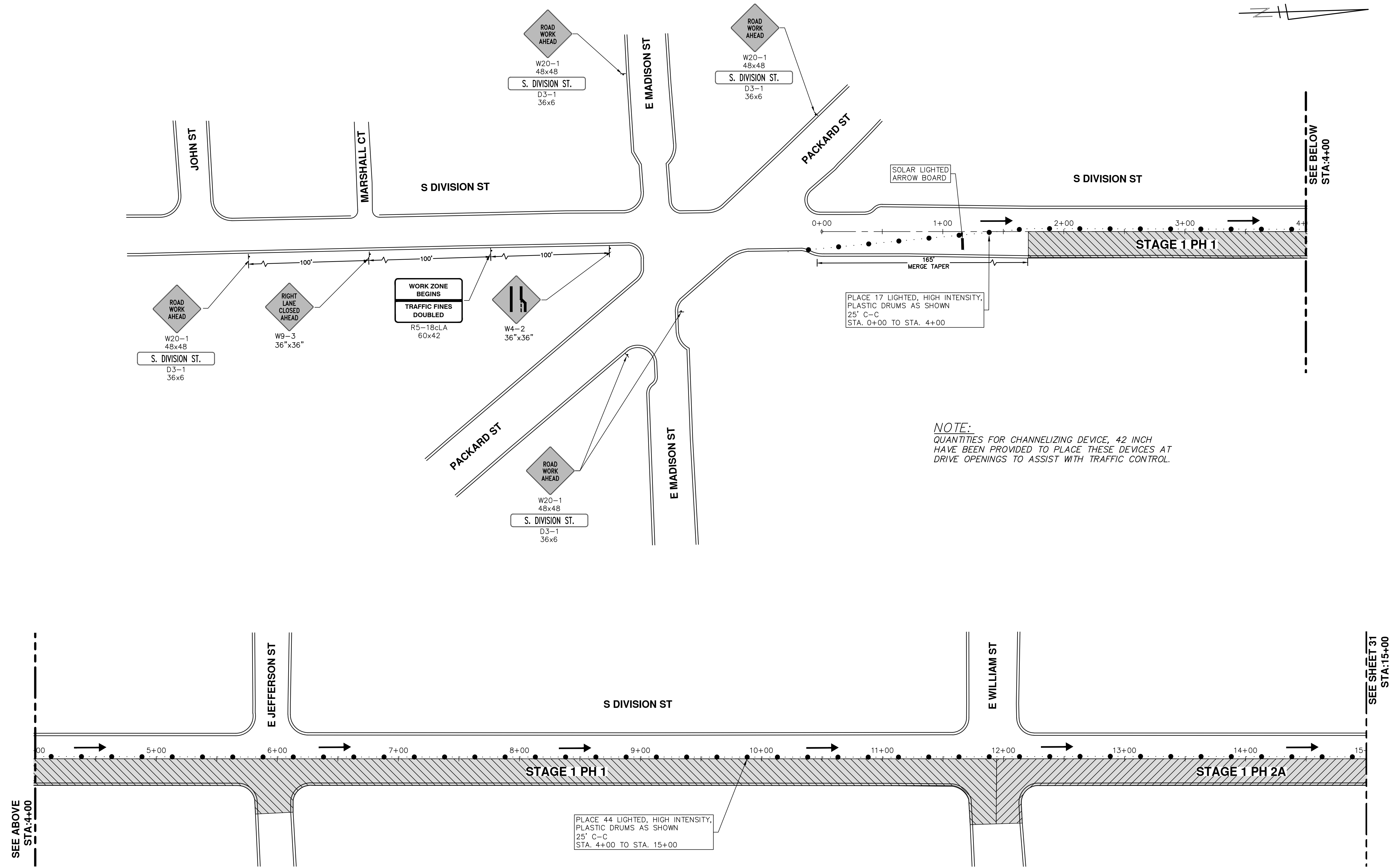
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 ANN ARBOR: 734-794-4410  
 WWW.ANARBOR.MI.GOV

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**PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
 PAVEMENT MARKINGS  
 PMARK 20+50 TO POE

SCALE PLAN: 1" = 20'  
 DRAWING No. 2015038-29

SHEET No. 29 OF 41

S:\Project Management\Design\2015038 Division\Plan Production\2015038STAGE1.dwg Dwg Created: 4-Jan-16 - \_a2 standard bw.stb - Plot Date: 11-Mar-16



**NOTE:**  
 QUANTITIES FOR CHANNELIZING DEVICE, 42 INCH  
 HAVE BEEN PROVIDED TO PLACE THESE DEVICES AT  
 DRIVE OPENINGS TO ASSIST WITH TRAFFIC CONTROL.

**811**  
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REV.	DESCRIPTION	DATE	DRAWN	CHECKED

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**CITY OF ANN ARBOR**  
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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
 S. DIVISION ST. RESURFACING  
 MAINTENANCE OF TRAFFIC

STAGE 1

SCALE PLAN: 1" = 40'

DRAWING No.  
**2015038-30**

SHEET No.

30 OF 41

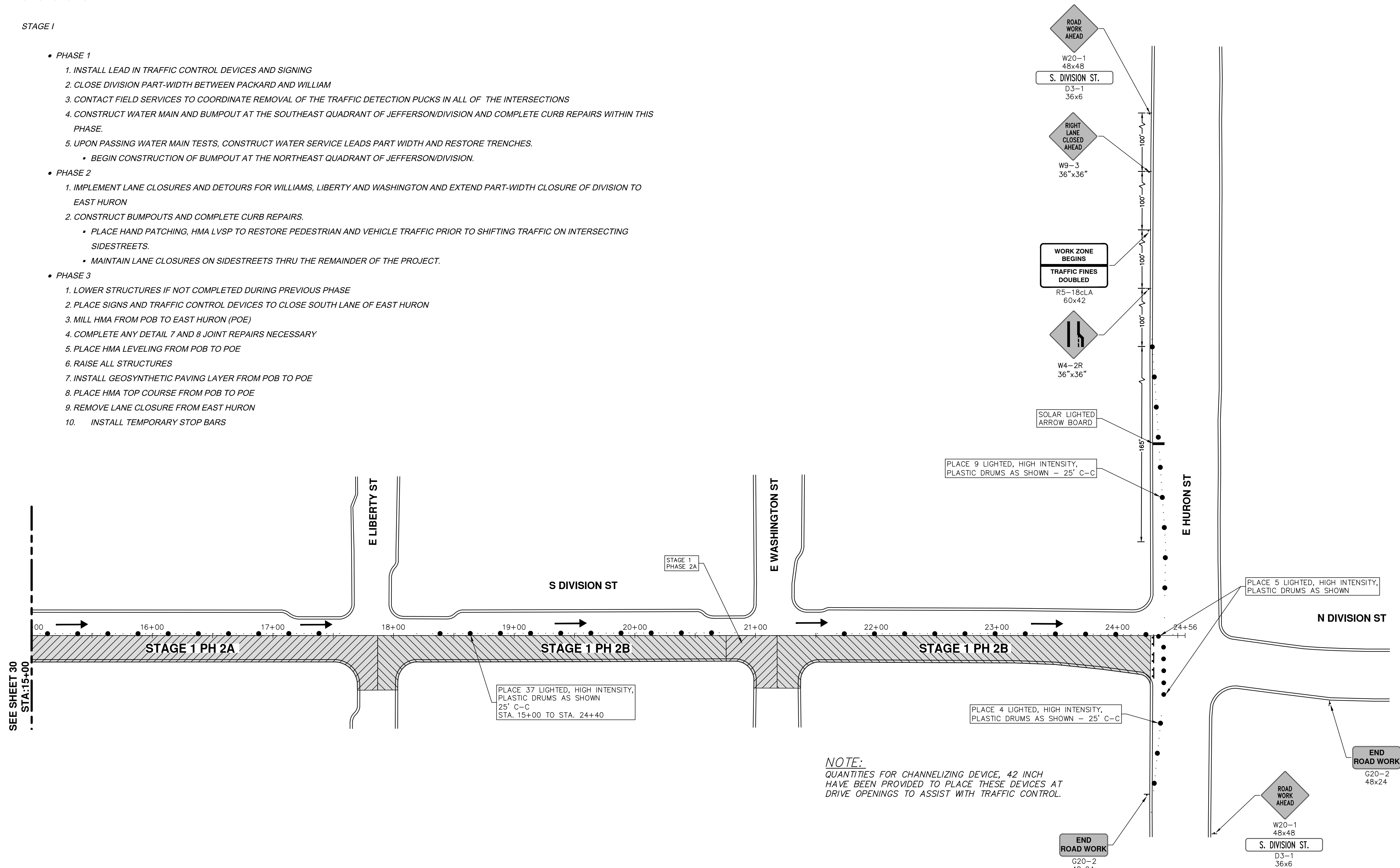
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STAGING NOTES:

STAGING NOTES:

STAGE 1

- PHASE 1
  1. INSTALL LEAD IN TRAFFIC CONTROL DEVICES AND SIGNING
  2. CLOSE DIVISION PART-WIDTH BETWEEN PACKARD AND WILLIAM
  3. CONTACT FIELD SERVICES TO COORDINATE REMOVAL OF THE TRAFFIC DETECTION PUCKS IN ALL OF THE INTERSECTIONS
  4. CONSTRUCT WATER MAIN AND BUMPOUT AT THE SOUTHEAST QUADRANT OF JEFFERSON/DIVISION AND COMPLETE CURB REPAIRS WITHIN THIS PHASE.
  5. UPON PASSING WATER MAIN TESTS, CONSTRUCT WATER SERVICE LEADS PART WIDTH AND RESTORE TRENCHES.
    - BEGIN CONSTRUCTION OF BUMPOUT AT THE NORTHEAST QUADRANT OF JEFFERSON/DIVISION.
- PHASE 2
  1. IMPLEMENT LANE CLOSURES AND DETOURS FOR WILLIAMS, LIBERTY AND WASHINGTON AND EXTEND PART-WIDTH CLOSURE OF DIVISION TO EAST HURON
  2. CONSTRUCT BUMPOUTS AND COMPLETE CURB REPAIRS.
    - PLACE HAND PATCHING, HMA LVSP TO RESTORE PEDESTRIAN AND VEHICLE TRAFFIC PRIOR TO SHIFTING TRAFFIC ON INTERSECTING SIDESTREETS.
    - MAINTAIN LANE CLOSURES ON SIDESTREETS THRU THE REMAINDER OF THE PROJECT.
- PHASE 3
  1. LOWER STRUCTURES IF NOT COMPLETED DURING PREVIOUS PHASE
  2. PLACE SIGNS AND TRAFFIC CONTROL DEVICES TO CLOSE SOUTH LANE OF EAST HURON
  3. MILL HMA FROM POB TO EAST HURON (POE)
  4. COMPLETE ANY DETAIL 7 AND 8 JOINT REPAIRS NECESSARY
  5. PLACE HMA LEVELING FROM POB TO POE
  6. RAISE ALL STRUCTURES
  7. INSTALL GEOSYNTHETIC PAVING LAYER FROM POB TO POE
  8. PLACE HMA TOP COURSE FROM POB TO POE
  9. REMOVE LANE CLOSURE FROM EAST HURON
  10. INSTALL TEMPORARY STOP BARS

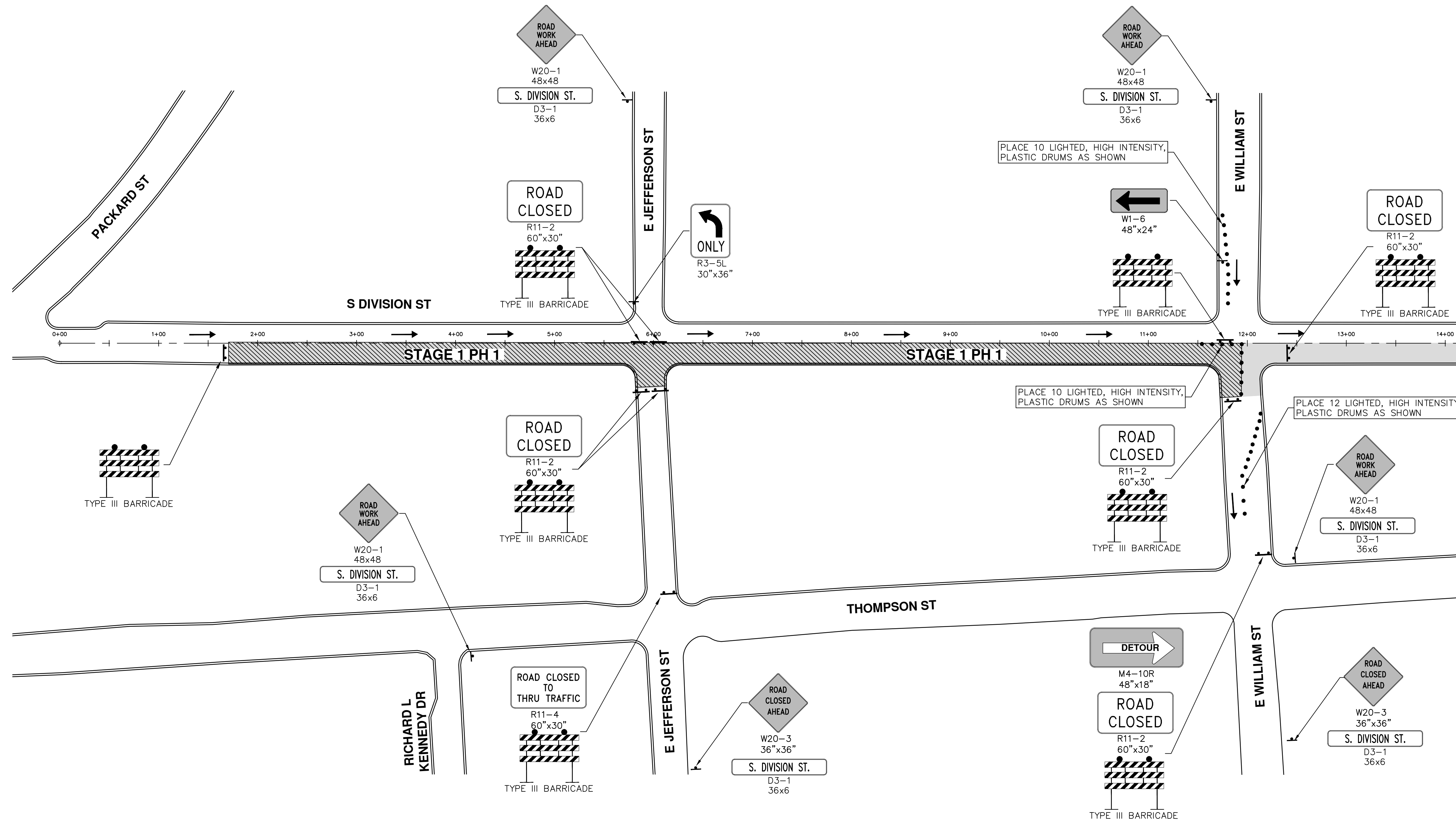


**NOTE:**  
 QUANTITIES FOR CHANNELIZING DEVICE, 42 INCH  
 HAVE BEEN PROVIDED TO PLACE THESE DEVICES AT  
 DRIVE OPENINGS TO ASSIST WITH TRAFFIC CONTROL.



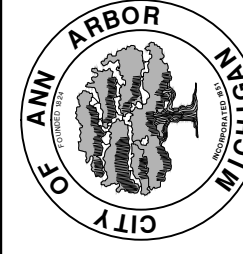
<b>811</b> Know what's below. Call Before you dig.					
	REV.	DESCRIPTION	DATE	DRAWN	CHECKED
CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET ANN ARBOR, MI 48106-1667 www.a2gov.org					
<b>PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR</b> <b>S. DIVISION ST. RESURFACING</b> MAINTENANCE OF TRAFFIC STAGE 1					
SCALE PLAN: 1" = 40' DRAWING No. <b>2015038-31</b>					
SHEET No. <b>31 OF 41</b>					

S:\Project Management\Design\20150338 Division\Plan Production\20150338S1PH1.dwg Dwg Created: 20-Jan-16 - \_a2 standard bw.stb - Plot Date: 11-Mar-16



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
02	FINAL SUBMITTAL	1/21/2016	JKA	JAN
01	PROJECT MANAGER REVIEW	11/24/2015	JKA	JAN
00	SOIL BORING LOCATION SHEET	10/05/2015	JKA	AMW

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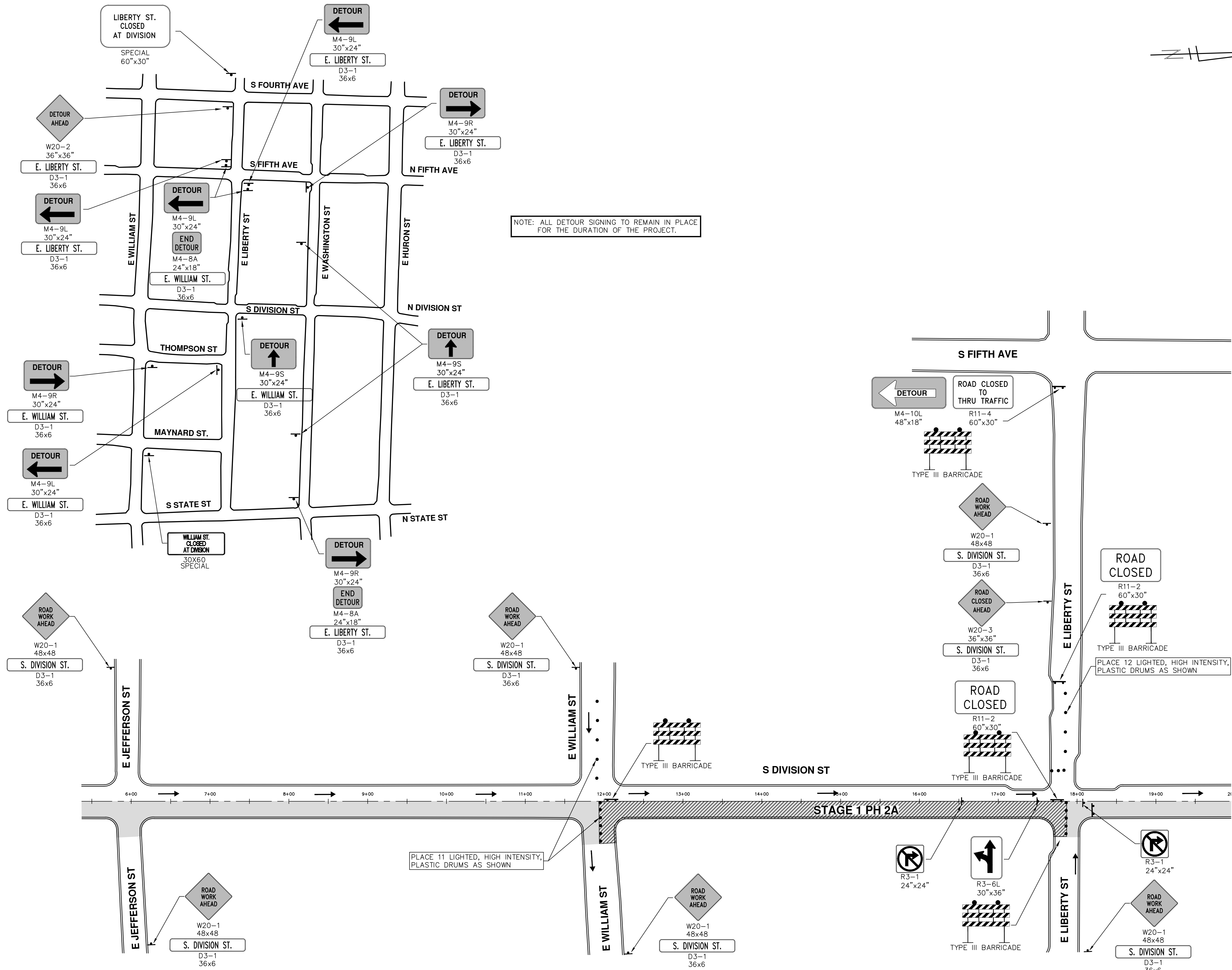


**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
MAINTENANCE OF TRAFFIC  
INTERSECTION PHASING - STAGE 1 PHASE 1

SCALE PLAN: 1" = 60'  
DRAWING No. 20150338-32



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**S. DIVISION ST. RESURFACING**  
 MAINTENANCE OF TRAFFIC  
 INTERSECTION PHASING - STAGE 1 PHASE 2A

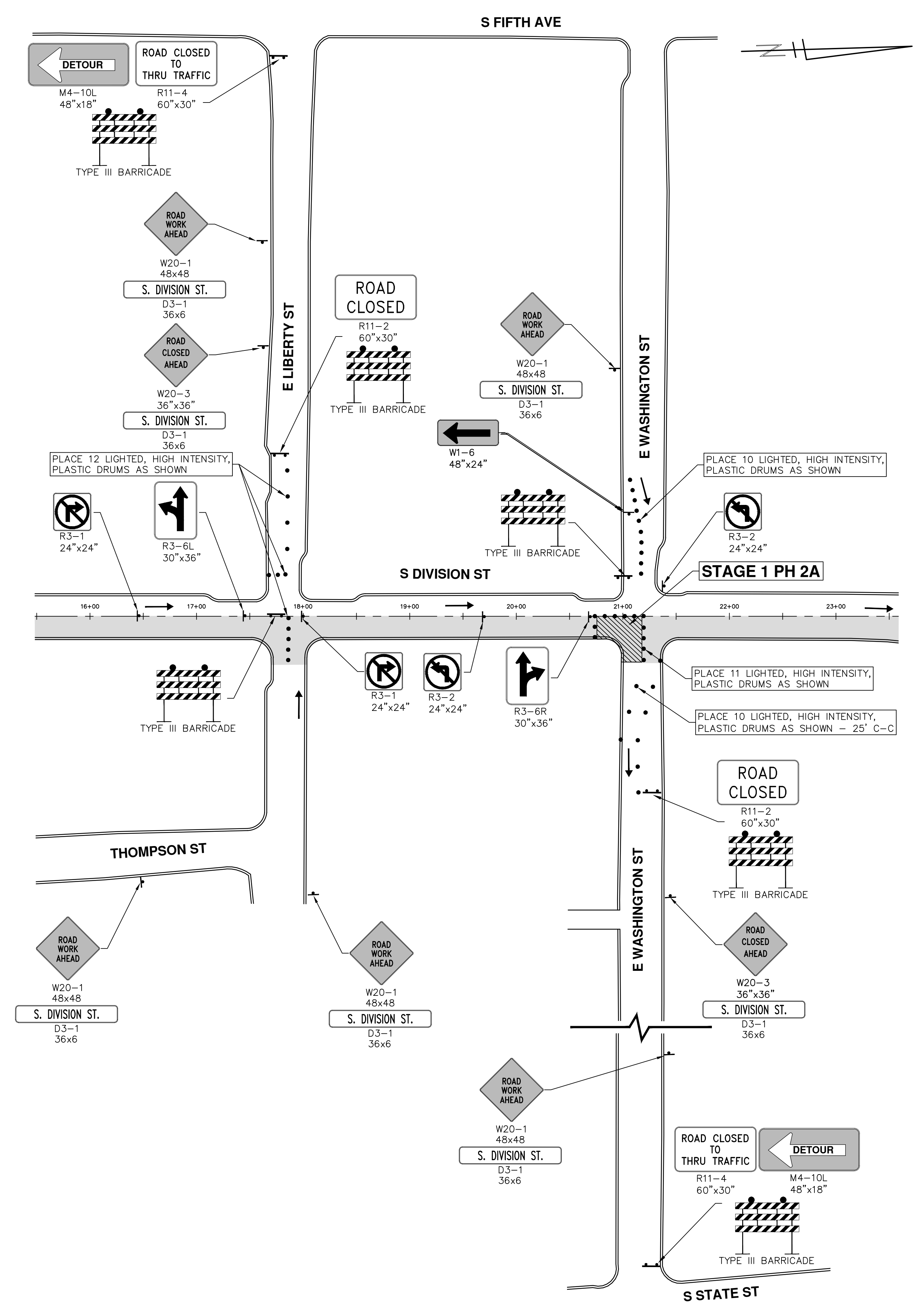
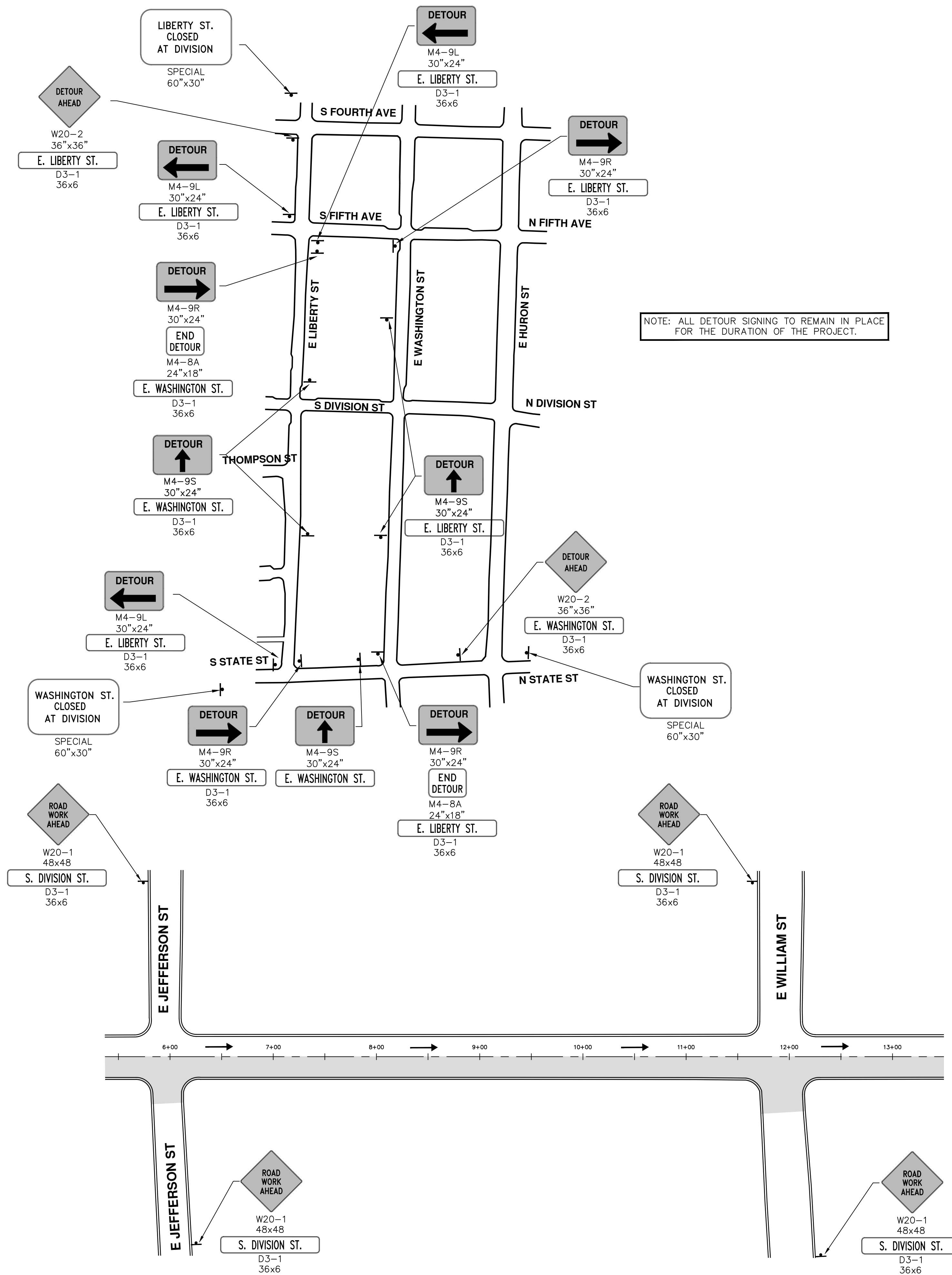
SCALE PLAN: 1" = 60'  
 DRAWING NO. 20150338-33

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03	2/22/2016	ADDENDUM 1
02	1/21/2016	FINAL SUBMITTAL
01	11/24/2015	PROJECT MANAGER REVIEW
00	10/05/2015	SOIL BORING LOCATION SHEET

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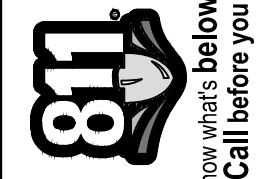
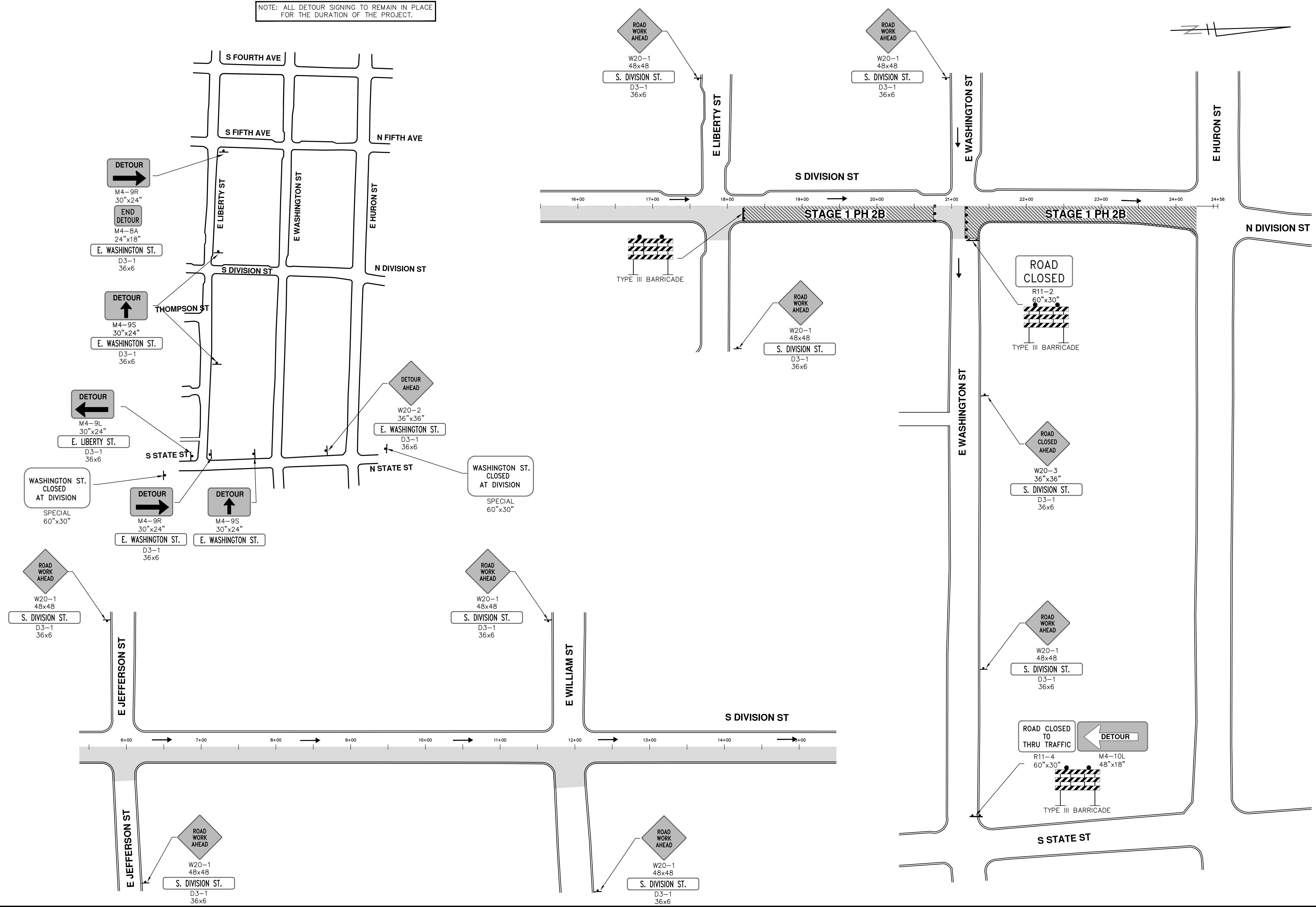
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JAN	JAN
JAN	JAN
JAN	JAN
JAN	JAN
AMW	AMW
DATE	DATE
DRAWN	DRAWN
CHECKED	CHECKED
REV.	DESCRIPTION
04	RESUBMITTED FOR BID (NO. 4429)
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01	PROJECT MANAGER REVIEW
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SCALE PLAN: 1" = 60' DRAWING No. 20150338-34 SHEET No. 34 OF 41	

S:\Project Management\Design\20150338 Division\Plan Production\20150338S1PH3.dwg Dwg Created: 20-Jan-16 - \_a2 standard bw.stb - Plot Date: 11-Mar-16

NOTE: ALL DETOUR SIGNING TO REMAIN IN PLACE FOR THE DURATION OF THE PROJECT.



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04	RESUBMITTED FOR BID (NO. 4429)	3/11/2016	JKA	JKA
03	ADDENDUM 1	2/22/2016	JKA	JKA
02	FINAL SUBMITTAL	1/21/2016	JKA	JKA
01	PROJECT MANAGER REVIEW	11/24/2015	JKA	JKA
00	SOIL BORING LOCATION SHEET	10/05/2015	AMW	JKA

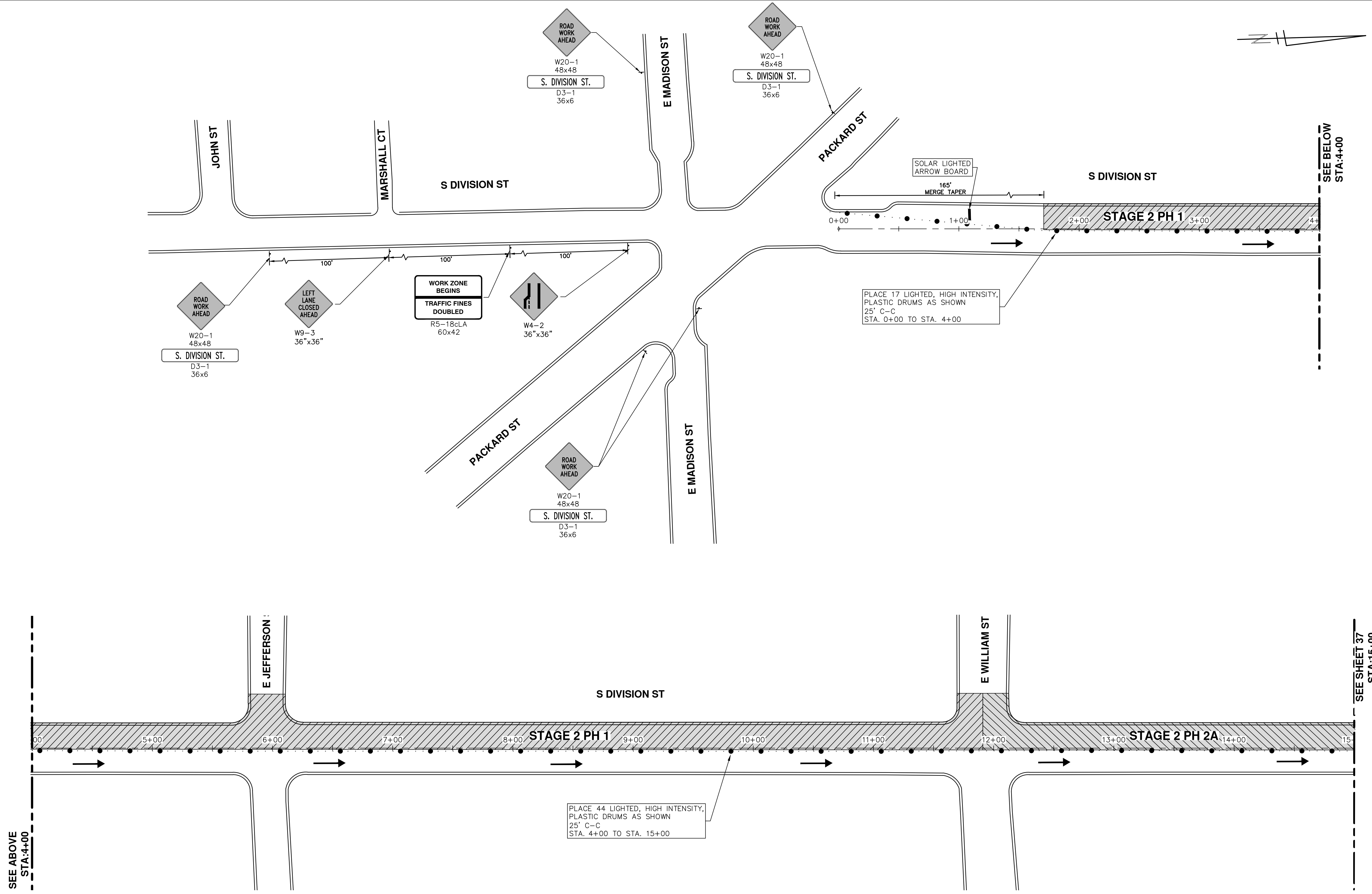
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**S. DIVISION ST. RESURFACING**  
MAINTENANCE OF TRAFFIC  
INTERSECTION PHASING - STAGE 1 PHASE 2B

SCALE PLAN: 1" = 60'  
DRAWING No. 20150338-35

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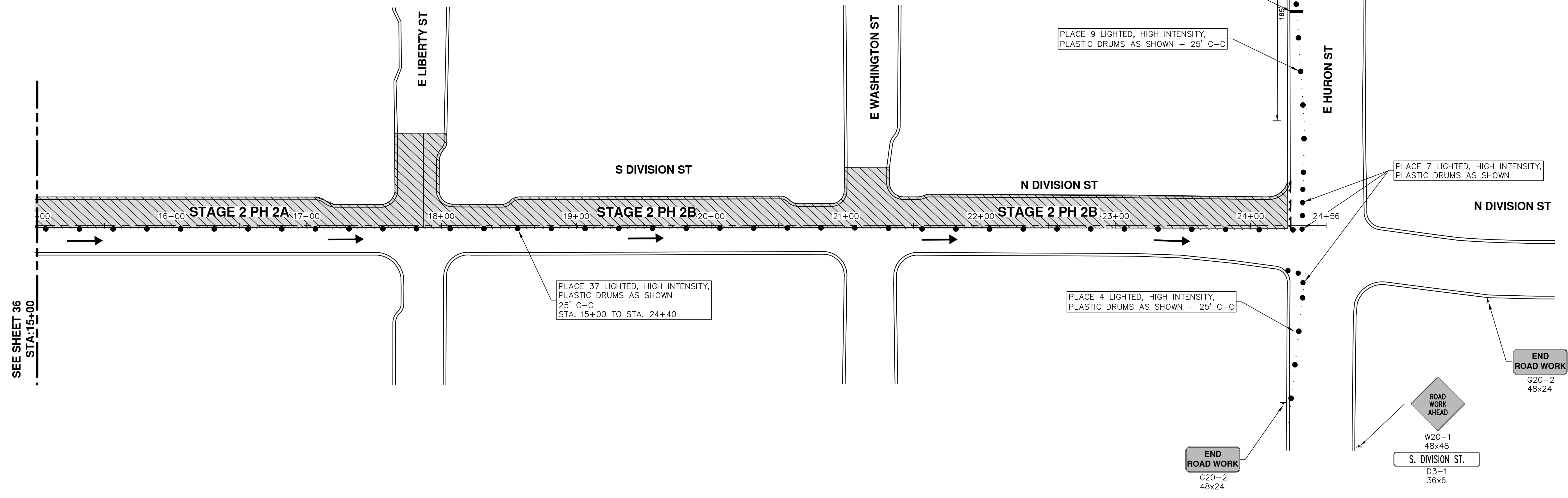


	
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SCALE PLAN: 1" = 40' DRAWING No. 2015038-36	
SHEET No. 36 OF 41	
04 REISSUED FOR BID (NO. 4429) 03 ADDENDUM 1 02 FINAL SUBMITTAL 01 PROJECT MANAGER REVIEW 00 SOIL BORING LOCATION SHEET	3/11/2016 JKA 2/22/2016 JKA 1/21/2016 JKA 11/24/2015 JKA 10/05/2015 JKA DATE DRAWN CHECKED
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STAGING NOTES:

STAGE II

- PHASE 1
  1. INSTALL TRAFFIC CONTROL DEVICES AND SIGNING TO SWITCH THE PART-WIDTH CLOSURE OF DIVISION BETWEEN PACKARD AND EAST HURON
  2. COMPLETE INSTALLATION OF HYDRANT AND LEADS AND ALL CONCRETE WORK WITH THE EXCEPTION OF THE BUMPOUT AT THE SOUTHWEST QUADRANT OF WILLIAM/DIVISION
    - PLACE HAND PATCHING, HMA LVSP TO RESTORE PEDESTRIAN AND VEHICLE TRAFFIC PRIOR TO SHIFTING TRAFFIC ON INTERSECTING SIDESTREETS.
    - UPON COMPLETION, ABANDON 4" WATER MAIN
  3. UPON ABANDONING THE WATER MAIN, COMPLETE CONSTRUCTION OF BUMPOUT AT THE SOUTHWEST QUADRANT OF WILLIAM/DIVISION.
- PHASE 2
  1. CONSTRUCT BUMPOUTS AND COMPLETE CURB REPAIRS.
    - PLACE HAND PATCHING, HMA LVSP TO RESTORE PEDESTRIAN AND VEHICLE TRAFFIC PRIOR TO SHIFTING TRAFFIC ON INTERSECTING SIDESTREETS.
    - CONTINUE TO MAINTAIN LANE CLOSURES ON SIDESTREETS THRU THE REMAINDER OF THE PROJECT.
- PHASE 3
  1. LOWER STRUCTURES IF NOT COMPLETED DURING PREVIOUS PHASES
  2. PLACE SIGNS AND TRAFFIC CONTROL DEVICES TO CLOSE SOUTH LANE OF EAST HURON
  3. MILL HMA FROM POB TO EAST HURON (POE)
  4. COMPLETE ANY DETAIL 7 AND 8 JOINT REPAIRS NECESSARY
  5. PLACE HMA LEVELING FROM POB TO POE
  6. RAISE ALL STRUCTURES
  7. INSTALL GEOSYNTHETIC PAVING LAYER FROM POB TO POE
  8. PLACE HMA TOP COURSE FROM POB TO POE
  9. REMOVE LANE CLOSURE FROM EAST HURON
  10. INSTALL PERMANENT PAVEMENT MARKINGS



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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**

**S. DIVISION ST. RESURFACING**

MAINTENANCE OF TRAFFIC

STAGE 2

SCALE PLAN: 1" = 40'

DRAWING No. 2015038-37

SHEET No. 37 OF 41

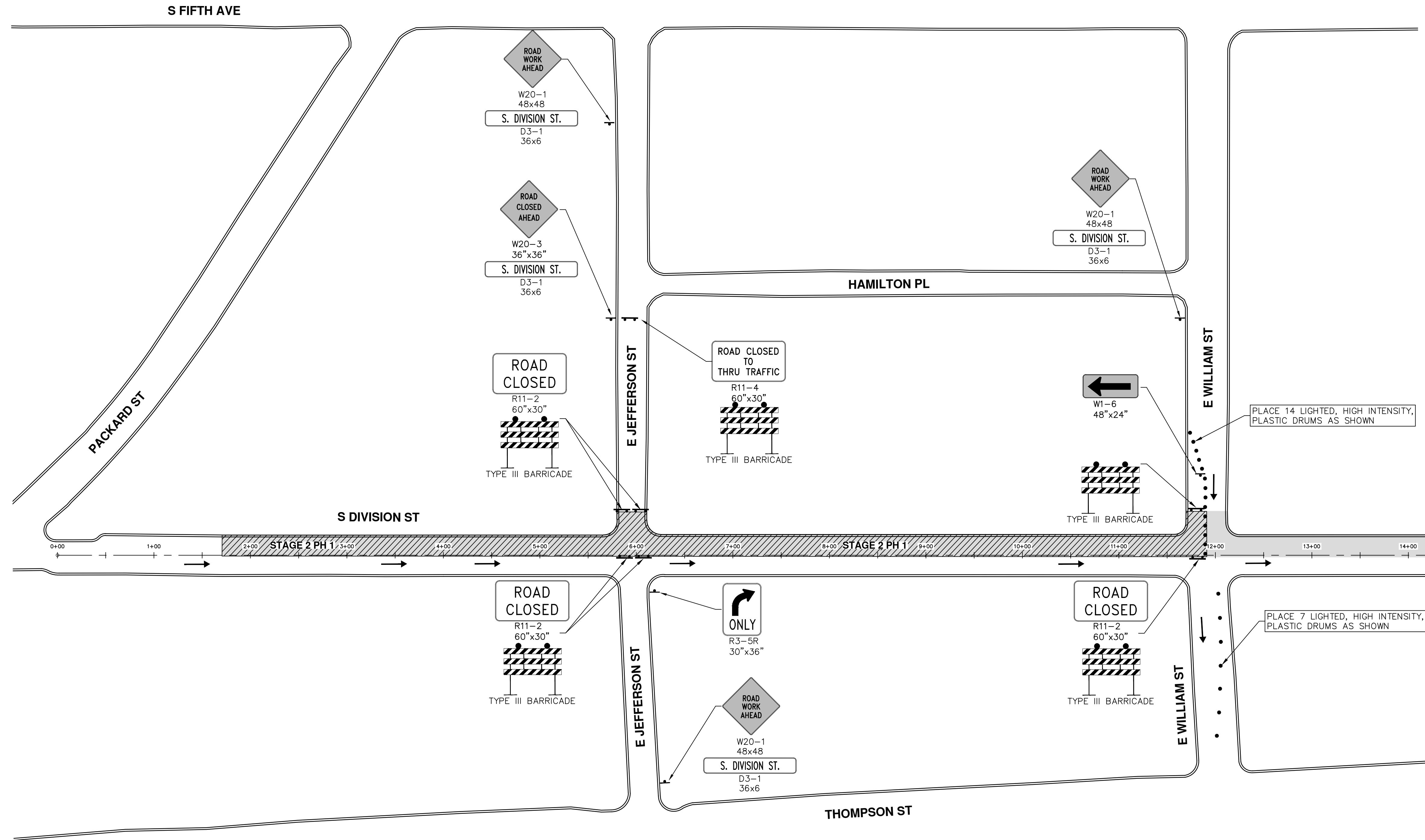
**811**  
Know what's below.  
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REV.	DATE	DESCRIPTION
04	3/11/2016	RESUBMITTED FOR BID (NO. 4429)
03	2/22/2016	ADDENDUM 1
02	1/21/2016	FINAL SUBMITTAL
01	11/24/2015	PROJECT MANAGER REVIEW
00	10/05/2015	SOIL BORING LOCATION SHEET

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NOTE: SIGNS SHOWN ARE MAINTAINED FROM PREVIOUS STAGE



REV.	DATE	DESCRIPTION
04	3/11/2016	RESUBMITTED FOR BID (NO. 4429)
03	2/22/2016	ADDENDUM 1
02	1/21/2016	FINAL SUBMITTAL
01	11/24/2015	PROJECT MANAGER REVIEW
00	10/05/2015	SOIL BORING LOCATION SHEET

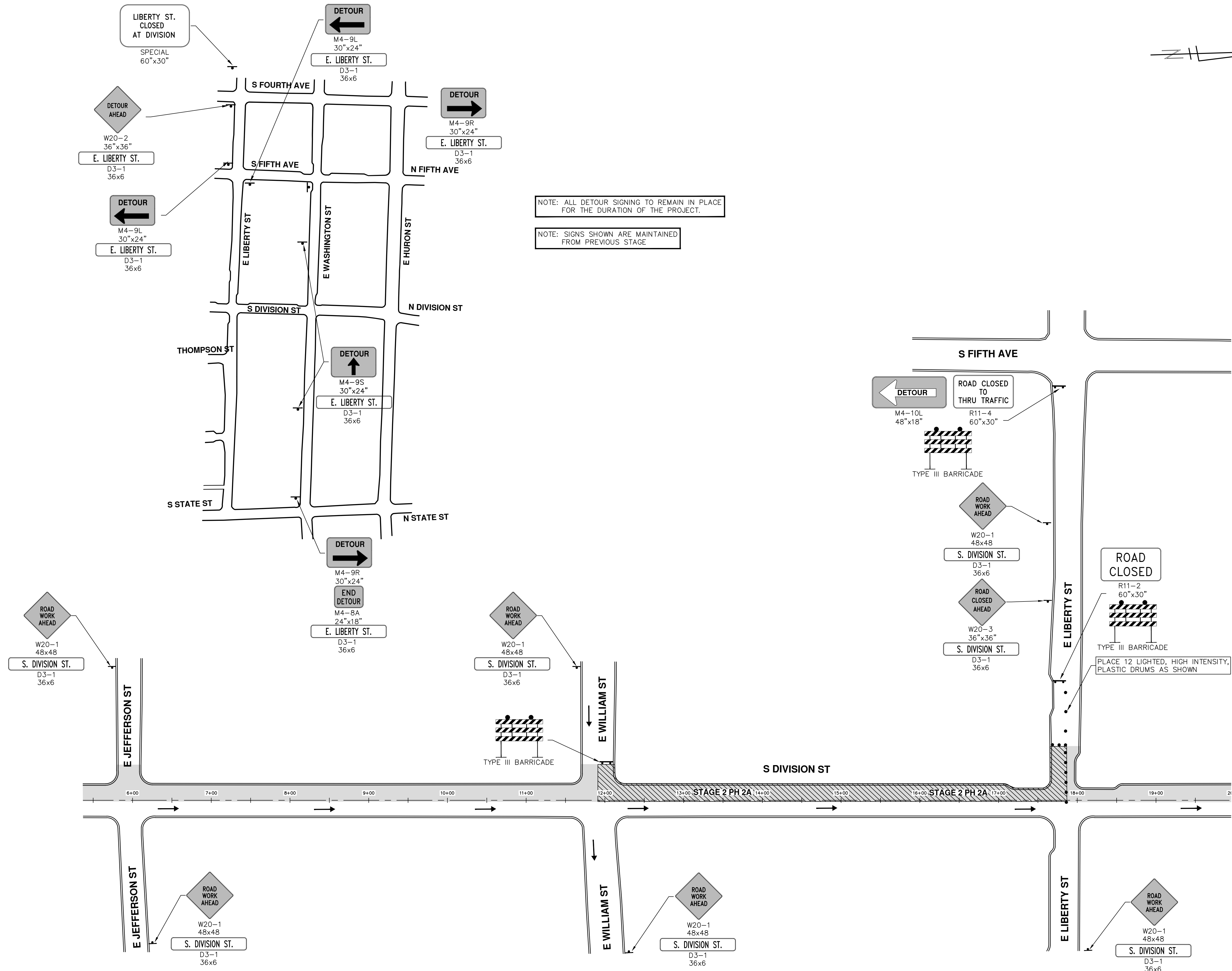
CITY OF ANN ARBOR  
 PUBLIC SERVICES  
 301 EAST HURON STREET  
 ANN ARBOR, MI 48106-0667  
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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
 MAINTENANCE OF TRAFFIC  
 INTERSECTION PHASING - STAGE 2 PHASE 1

SHEET No. **38 OF 41**  
 SCALE PLAN: 1" = 60'  
 DRAWING No. **2015038-38**

S:\Project Management\Design\20150338 Division\Plan Production\20150338ST2PH2.dwg Dwg Created: 21-Jan-16 - \_a2\_standard bw.stb - Plot Date: 11-Mar-16



NOTE: ALL DETOUR SIGNING TO REMAIN IN PLACE FOR THE DURATION OF THE PROJECT.

NOTE: SIGNS SHOWN ARE MAINTAINED FROM PREVIOUS STAGE



REV.	DATE	DESCRIPTION
04	3/11/2016	REVISED FOR BID (NO. 4429)
03	2/22/2016	ADDENDUM 1
02	1/21/2016	FINAL SUBMITTAL
01	11/24/2015	PROJECT MANAGER REVIEW
00	10/05/2015	SOIL BORING LOCATION SHEET

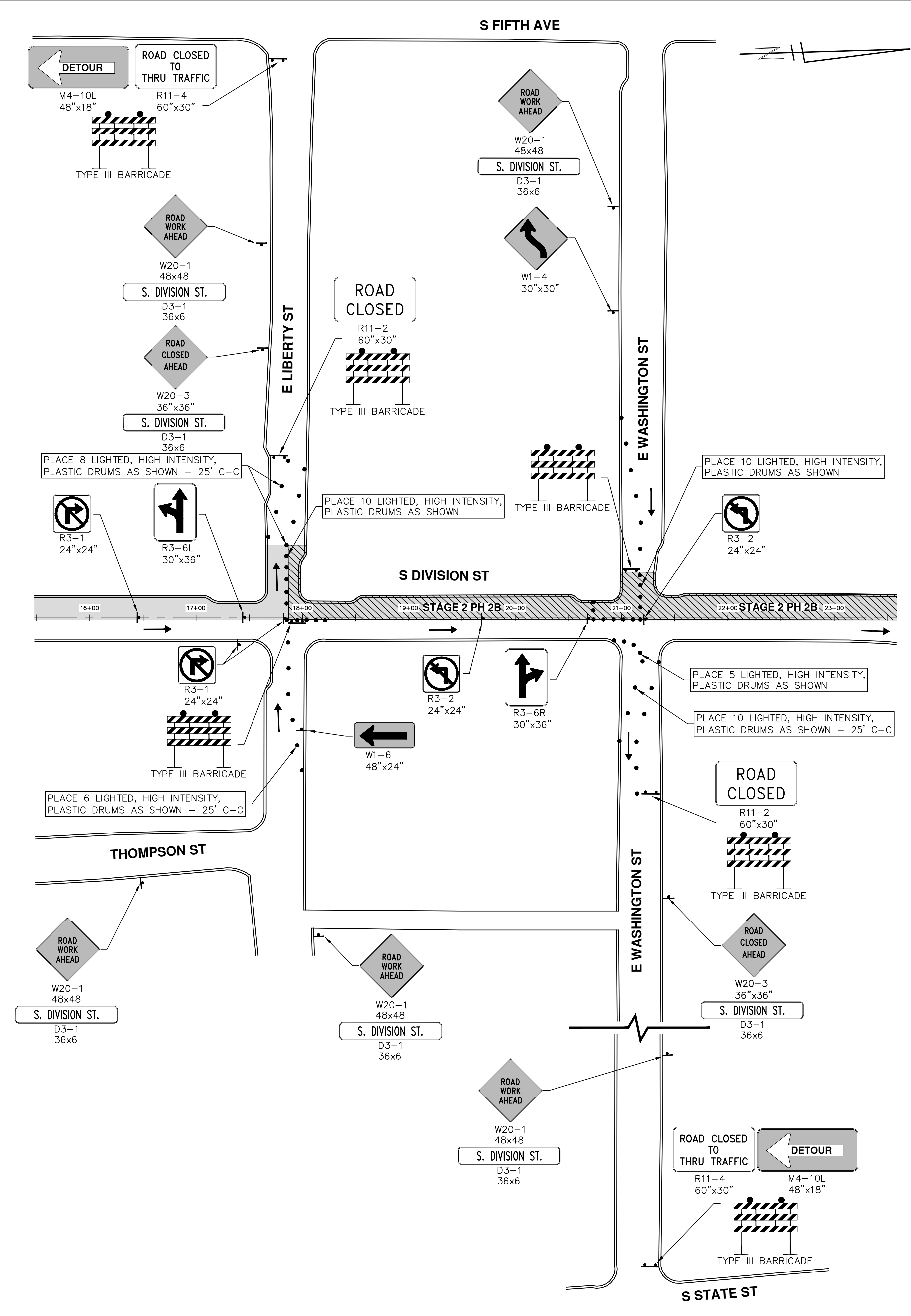
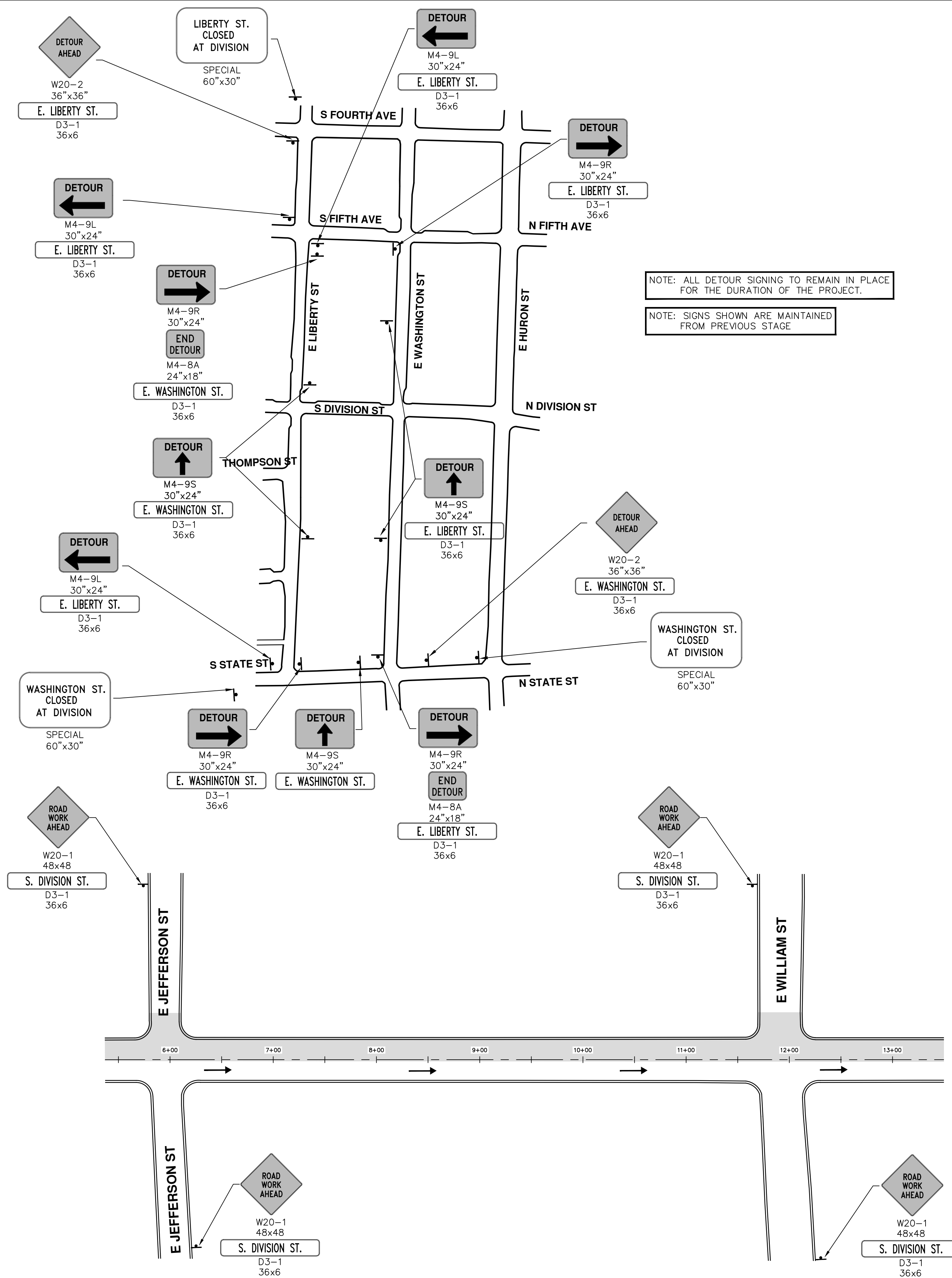
CITY OF ANN ARBOR  
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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
 MAINTENANCE OF TRAFFIC  
 INTERSECTION PHASING - STAGE 2 PHASE 2A

SHEET No. **39 OF 41**  
 SCALE PLAN: 1" = 60'  
 DRAWING No. **20150338-39**

S:\Project Management\Design\2015038 Division\Plan Production\2015038ST2PH2A.dwg Dwg Created: 21-Jan-16 --g2 standard bw.stb - Plot Date: 11-Mar-16



NOTE: ALL DETOUR SIGNING TO REMAIN IN PLACE FOR THE DURATION OF THE PROJECT.  
NOTE: SIGNS SHOWN ARE MAINTAINED FROM PREVIOUS STAGE.

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

REV.	DATE	DESCRIPTION
04	3/11/2016	RESUBMITTED FOR BID (NO. 4429)
03	2/22/2016	ADDENDUM 1
02	1/21/2016	FINAL SUBMITTAL
01	11/24/2015	PROJECT MANAGER REVIEW
00	10/05/2015	SOIL BORING LOCATION SHEET

**CITY OF ANN ARBOR PUBLIC SERVICES**  
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**PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR**  
**S. DIVISION ST. RESURFACING**  
MAINTENANCE OF TRAFFIC

**INTERSECTION PHASING - STAGE 2 PHASE 2B**

SCALE PLAN: 1" = 60'  
DRAWING No. 2015038-40  
SHEET No. 40 OF 41



Line Number	Description	Units	Total Quantity	Misc	WM 1	WM 2	WM 3	Rem 1	Rem 2	Rem 3	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Pvmt Mkgs 1	Pvmt Mkgs 2	Pvmt Mkgs 3	MOT
1	General Conditions, Maximum \$	LS	1	1															
2	Project Supervision, Maximum \$	LS	1	1															
3	Audiovisual Tape Coverage	LS	1	1															
4	Storm Sewer Pipe, Less than 24 Inch, Remove	Fl	56					32	8	16									
5	Storm Sewer Structure, Remove	Ea	7					4	1	2									
6	Water Main Pipe, 6 Inch, Abandonment	Fl	565		315	250													
7	Water Main Pipe, 12 Inch, Abandonment	Fl	10		10														
8	6 Gate Valve In Box, Abandon	Ea	2		2														
9	12 Gate Valve In Box, Abandon	Ea	1		1														
10	Remove Concrete Pavement - Any Thickness	Syd	1733					974	713	46									
11	Remove Concrete Curb & Gutter - Any Type	Fl	1337					783	435	119									
12	Remove Concrete Sidewalk - Any Thickness	Sft	3314					884	1955	475									
13	Embankment, CIP	Cyd	239	239															
14	Excavation, Earth	Cyd	303	303															
15	Granular Material, CII	Cyd	138	138															
16	Exploratory Excavation (0-10' Deep) Tr Det I	Ea	5	5															
17	Erosion Control, Inlet Protection, Fabric Drop	Ea	17	17															
18	Aggregate Base, 8 Inch, 21AA	Syd	1773								281	497	645	278	72				
19	Aggregate Base, C.I.P., 21AA	Cyd	25	25															
20	Storm Sewer, RCP, 12 Inch & SD-TR-1	Fl	72								47		25						
21	Single Inlet	Ea	6								4		2						
22	Structure Cover	Lb	12000					4800	5200	2000									
23	Adjust Structure Cover	Ea	57					19	25	13									
24	Adjust Monument Box	Ea	5					2	2	1									
25	Adjust Gate Valve Box	Ea	23					5	14	4									
26	Temp Lowering Existing Structure	Ea	57					19	25	13									
27	Temp Lowering Existing Box	Ea	28					7	16	5									
28	Point Existing Structure	Ea	5	5															
29	Pavement Joint and Crack Repair - Detail 7	Fl	240	240															
30	Pavement Joint and Crack Repair - Detail 8	Fl	120	120															
31	HMA, 3E3	Ton	277																
32	HMA, 4E3	Ton	1512								41	102	83	37	14				
33	HMA, 5E3	Ton	942								268	325	318	320	281				
34	Geosynthetic Paving Layer	Syd	9929								161	195	203	204	179				
35	Cold Milling Bituminous Pavement	Ton	3768								1730	2361	1977	2023	1838				
36	HMA Surface, Rem	Syd	1252																
37	Hand Patching, HMA LVSP	Ton	346	346															
38	HMA, Wedging, 36A	Ton	21								6	9	4	2					
39	Curb & Gutter, Conc, Barrier	Fl	1634								406	275	412	422	119				
40	Drive Opening, Conc, Type M	Fl	110								50	60							
41	Sidewalk, Conc, 8 Inch	Sft	3601								885	39	1893	428	356				
42	Sidewalk Ramp, Conc, 8 Inch	Sft	1058								435		313	190	120				
43	Detectable Warning Surface	Sft	160								80			40	40				
44	Detectable Warning Surface, Cast Iron	Sft	80																
45	Protective Fence	Fl	1000	1000												225	405	280	
46	Pav Mfkg, Hot-Applied, Thermoplastic, 4 Inch White	Fl	910														314		
47	Pav Mfkg, Hot-Applied, Thermoplastic, 4 Inch Yellow	Fl	314													884	749	260	
48	Pav Mfkg, Hot-Applied, Thermoplastic, 6 Inch White	Fl	1903																
49	Pav Mfkg, Hot-Applied, Thermoplastic, Symbol White, 24 Crosswalk	Fl	878													206	376	296	
50	Pav Mfkg, Hot-Applied, Thermoplastic, Symbol White, 24 Stop Bar	Fl	403													91	190	122	
51	Pav Mfkg, Overlay Cold Plastic, Legend White, Only	Ea	4													2	2	2	
52	Pav Mfkg, Overlay Cold Plastic, Symbol White, Bike Arrow	Ea	7													3	3	3	1
53	Pav Mfkg, Overlay Cold Plastic, Symbol White, Bike Sym	Ea	10													3	5	2	
54	Pav Mfkg, Overlay Cold Plastic, Symbol White, Left Arrow	Ea	2														1		
55	Pav Mfkg, Overlay Cold Plastic, Symbol White, Right Arrow	Ea	1															1	
56	Pav Mfkg, Overlay Cold Plastic, Symbol White, Sharrow	Ea	3																
57	Pav Mfkg, Overlay Cold Plastic, Symbol White, Thru Arrow	Ea	1																
58	Recessed Pav Mfkg, Thermoplastic, Parking	Ea	82																
59	Recessing Pavement Markings Longitudinal	Fl	3127													1119	1468	540	
60	Recessing Pavement Markings Transverse	Sft	2144													594	1132	418	
61	Recessing Special Pavement Markings	Sft	630													75	317	238	
62	Remove Parking Meter	Ea	18													9	9		
63	Install Parking Meter	Ea	14													6	8		
64	Minor Traffic Control, Maximum \$	LS	1	1															
65	Traffic Regulator Control	LS	1	1															
66	Sign, Type B, Temp, Prismatic, Furn	Sft	1118.5																1118.5
67	Sign, Type B, Temp, Prismatic, Oper	Sft	1118.5																1118.5
68	Sign, Type B, Temp, Prismatic, Special, Furn	Sft	62.5																62.5
69	Sign, Type B, Temp, Prismatic, Special, Oper	Sft	62.5																62.5
70	Sign Cover	Ea	26																26
71	Lighted Arrow, Type C, Furn	Ea	2																2
72	Lighted Arrow, Type C, Oper	Ea	2																2
73	Sign, Portable, Changeable Message, Furn	Ea	4																4
74	Sign, Portable, Changeable Message, Oper	Ea	4																4
75	Plastic Drum, High Intensity, Lighted, Furn	Ea	201																201
76	Plastic Drum, High Intensity, Lighted, Oper	Ea	201																201
77	Channelizing Device, 42 Inch, Furn	Ea	48																48
78	Channelizing Device, 42 Inch, Oper	Ea	48																48
79	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	21																21
80	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	21																21
81	Pav Mfkg, Temp, Type R, 24 Inch, White	Fl	420																420
82	Slope Restoration	Syd	143	143															
83	Project Clean-Up	LS	1	1															
84	Handhole Assembly, 12 Inch X 18 Inch	Ea	2	2															
85	Handhole Assembly, 17 Inch X 30 Inch	Ea	2	2															
86	Handhole Assembly, 24 Inch X 36 Inch	Ea	2	2															
87	Class 50 DIP W/ Polyethylene Wrap, 4 Inch & SD-TR-1	Fl	10	10															
88	Class 50 DIP W/ Polyethylene Wrap, 6 Inch & SD-TR-1	Fl	18	18															
89	Class 50 DIP W/ Polyethylene Wrap, 8 Inch & SD-TR-1	Fl	54				54												
90	Class 50 DIP W/ Polyethylene Wrap, 12 Inch & SD-TR-1	Fl	118																
91	DIP, 8 Inch 45 Degree Bend	Ea	2	2															
92	DIP, 8 Inch 22.5 Degree Bend	Ea	2	2															
93	DIP, 12 Inch 45 Degree Bend	Ea	2	2															
94	DIP, 12 Inch 22.5 Degree Bend	Ea	2	2															
95	DIP, 6 X 8 Reducer	Ea	1	1															
96	DIP, 6 X 12 Reducer	Ea	1	1															
97	DIP, 6 X 6 Tee	Ea	1	1															
98	DIP, 8 X 12 Tee	Ea	1	1															
99	12 Gate Valve In Well	Ea	2	2															
100	Excavate & Backfill For Water Service Tap And Lead	Fl	590		290	300													
101	Fire Hydrant Assembly	Ea	1	1															
102	Fire Hydrant Assembly, Remove	Ea	1	1															
103	Line Stop, 4 Inch, Temp	Ea	2	2															
104	Line Stop, 6 Inch, Temp	Ea	3	3															
105	SDR 35 PVC Sanitary Service Lead, 4 Inch	Fl	88	88															

