

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

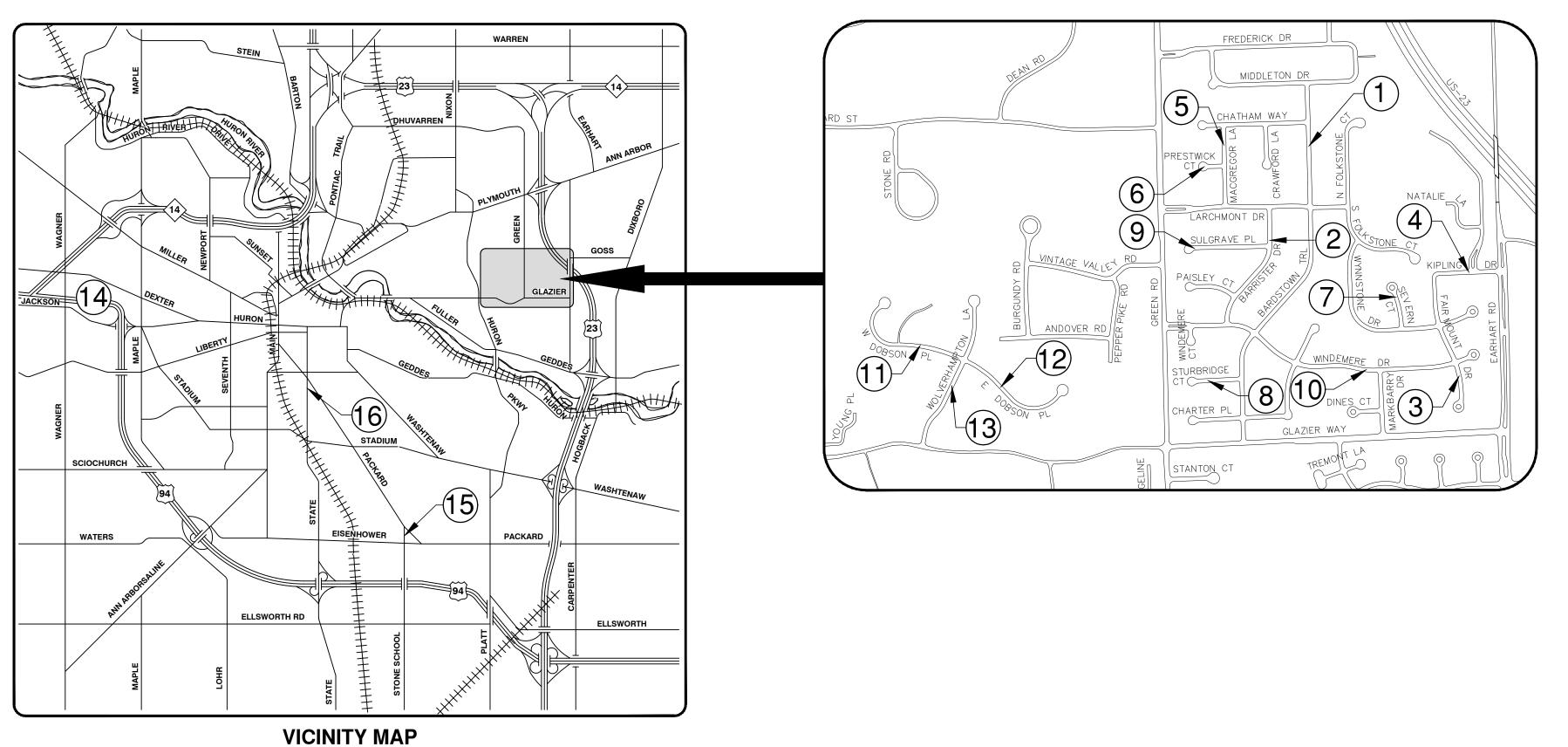
## ANNUAL STREET RESURFACING - 2018

ITB No. 4529 FILE No. 2018004

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DAVID ARTHUR DYKMAN, P.E. - MI LICENSE No. 52912

02/27/2018



### **GENERAL 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. During non-working hours no more than ten (10) feet of trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the items of work being undertaken and will not be paid for separately.
- 4. The location of material stock piles and on-site staging areas shall be approved by the Engineer.
- 5. For mainline HMA Paving, the width of the mat for each pass of the paver shall be not less than 10.5', nor greater than 16', except as noted in the plans and as directed by the Engineer. The Engineer will direct the layout of all HMA Longitudinal Joints during construction.
- 6. All excavation required to construct sidewalk and sidewalk ramps shall be included in the contract pay item "Grading, Sidewalk and Sidewalk Ramps".
- 7. Some storm sewer may unavoidably become damaged during construction, or it may be determined by the Engineer that existing storm sewer needs to be replaced. In either case the Engineer may direct the sewer to be removed and replaced. The removal of existing sewer and drainage structures, as required, shall be included in the respective contract pay items "Sewer, Rem, Less than 24 inch" and Dr Structure, Rem". The replacement sewer shall be installed and paid for at the corresponding contract unit price, if contained within the contract, for the various types and sizes of sewer to be replaced.
- 8. Where existing drainage or utility structures, whether shown or not on the plans, are designated or directed by the Engineer to receive new castings (cover and frame) the existing castings shall be neatly stacked on—site in a single location so that City of Ann Arbor forces can retrieve them at a later date. The Contractor shall assist City forces by loading them into City trucks. All costs associated with storing, stockpiling, and loading castings into City vehicles shall be included in the contract pay item "Dr Structure Cover, Type\_, Modified".
- 9. Payment for drainage structure sumps where specified shall be included in the payment for the various drainage structures sizes and/or types.
- 10. Where 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.

- 11. Where storm sewer is to be removed and replaced or added, all pipe shall be installed using the utility trench details shown elsewhere in the plan sheets and/or detailed in the specifications. Trench Details I and V require the use of MDOT Class II Granular Material.
- 12. If the Contractor encounters existing edge drain(s) during construction of the proposed edge drains, inlet leads, or catch basins, it shall be capped at each end to prevent material from entering the pipe. The cost of this work will not be paid for separately, but shall be included in the particular item of work being performed when existing edge drain(s) are encountered.
- 13. In areas where edge drain cannot be installed in accordance with the details, the edge drain shall be installed at the depth as indicated on the plans, or as directed by the Engineer. In no case shall the edge drain be installed at a grade less than 0.50% or at a depth less than 3.25' below the top of pavement.
- 14. Existing street name signs, guide, bus stop, and regulatory signs 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 the contract pay item "Minor Traf Devices."
- 15. All curb, sidewalk, driveway approach removals shall be approved by the Engineer before the work is performed.
- 16. Place 4" (minimum) thickness Granular Material Class II compacted to 95% of its max. dry density under concrete sidewalk as shown on the details. This work shall be included in the contract item "Subbase, CIP."
- 17. Place 6" (minimum) Granular Material Class II compacted to 95% of its max. dry density under concrete driveway approaches, and 6" (minimum) Dense-Graded Aggregate 21AA compacted to 98% of its max. dry density under HMA driveway approaches. This work shall be included in the respective contract pay items "Subbase, CIP" and "Aggregate Base, 6 inch, Modified".
- 18. A uniform coat(s) of curing compound shall be applied according to the Standard Specifications and Special Provisions regardless of the difficulty involved. The Contractor shall take care to prevent overspray when applying curing compound. Several different methods may need to be developed to protect various situations, but all methods used to prevent overspray of the curing compound shall be completely effective. Methods used shall be approved by the Engineer prior to use, however approval of a method does not guarantee success or acceptability. No additional compensation shall be made for complying with these requirements.

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

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT	CITY OF ANN ARBOR ENGINEERING
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT	CITY OF ANN ARBOR CUSTOMER SERVICE

\* NO COST TO CONTRACTOR

<b>PUBLIC UTILITIES</b>	OWNER	CONTACT
WATER		
SANITARY		
STORM	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD	(734) 794-6350
FORESTRY	ANN ARBOR, MI 48108	
SIGNS SIGNALS STREET LIGHTS		(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
STREET LIGHTING	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	BRANDON FARON (734) 397-4017
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

	PROJECT NAME BENCHMARKS			
BM#	BM # ELEV DESCRIPTION			
4	004.040	CHISELED SQUARE IN CONCRETE ON NORTH SIDE OF STRAIN POLE IN THE SOUTHEAST CORNER OF W.		
1	924.310	STADIUM BLVD. AND S. SEVENTH ST.		
2	921.230	S.W. BOLT LOCATED ON LIGHT POLE ON EAST SIDE OF S . SEVENTH ST. APPROX. 600' SOUTH OF WEST STADIUM BLVD.		



## **ENGINEERING**

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



OF ANN ARBOR

CALF SHEET No.

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
- 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 PALLATIVE 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:**

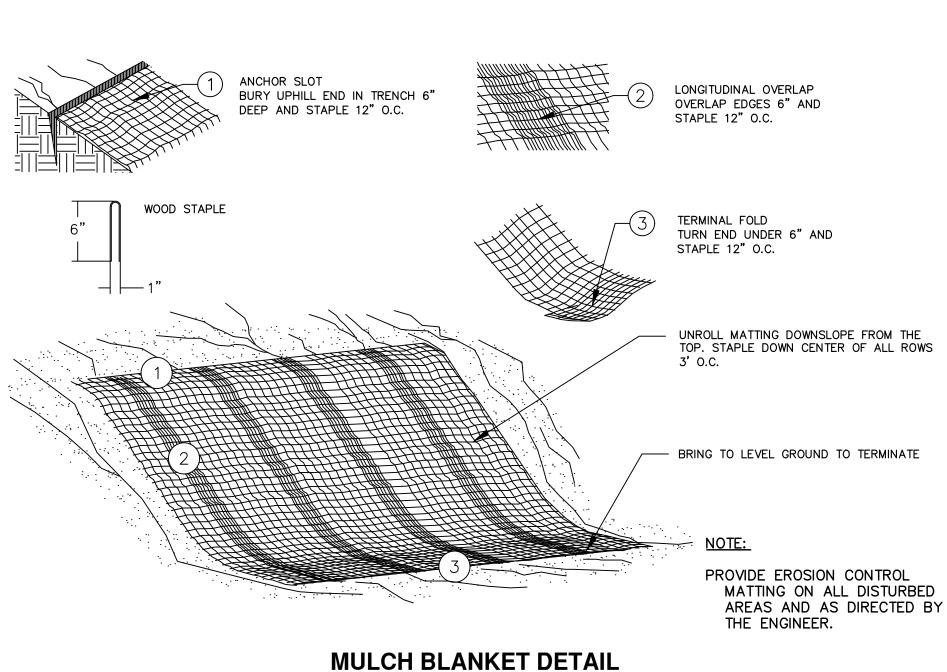
- 1.1. INSTALL SILT FENCE, TREE PROTECTION FENCING, MUD MATS, INLET FILTERS ON EXISTING DRAINAGE FEATURES, AND ALL OTHER TEMPORARY SOIL EROSION CONTROLS, PRIOR TO ANY CLEARING OR EARTH MOVING OPERATION.
- 1.2. STRIP AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE AS REQUIRED.
- 1.3. INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE INLETS.

- 1.4. PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
- 1.5. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- 1.6. COMPLETE ALL BIORETENTION GRADING AND FINE GRADING.
- 1.7. TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
- 1.8. REFER TO LANDSCAPE PLANTING PLANS FOR PERMANENT SITE STABILIZATION.
- 1.9. CLEAN OUT STORM SEWER SYSTEMS.
- 1.10. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
- 1.11. ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL, PRIOR TO FINAL INSPECTION

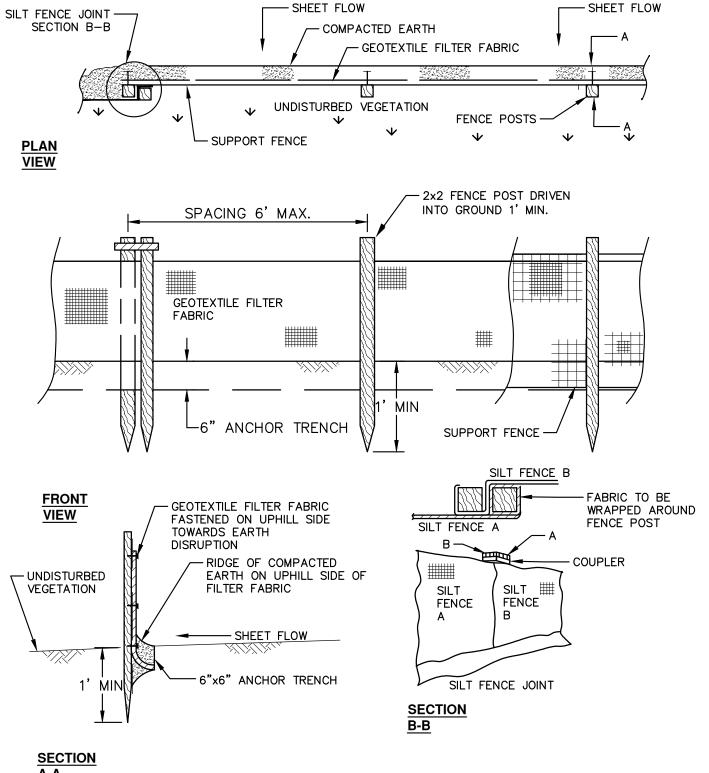
NOTE: THIS SEQUENCE IS FOR INFORMATION ONLY. IT IS INTENDED TO SHOW THE SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THEIR OWN DETAILED CONSTRUCTION SEQUENCE AND SCHEDULE TO THE ENGINEER FOR REVIEW, COMMENT,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



APPLIES TO ALL AREAS TO BE PERMANENTLY RESTORED WITH GRASS. SEE LANDSCAPE PLANS FOR MORE DETAILS.



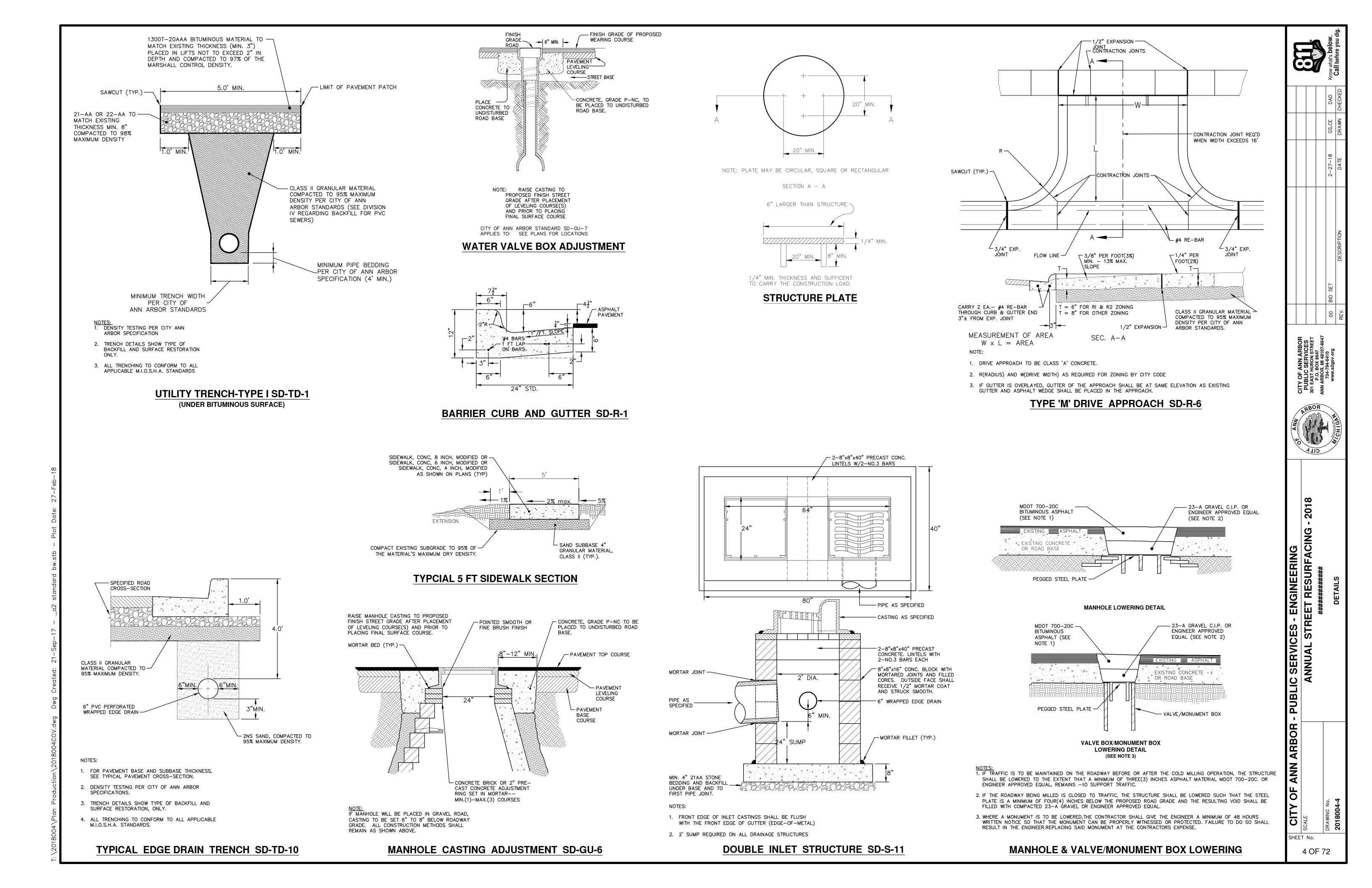
**SILT FENCE SD-EC-3** 

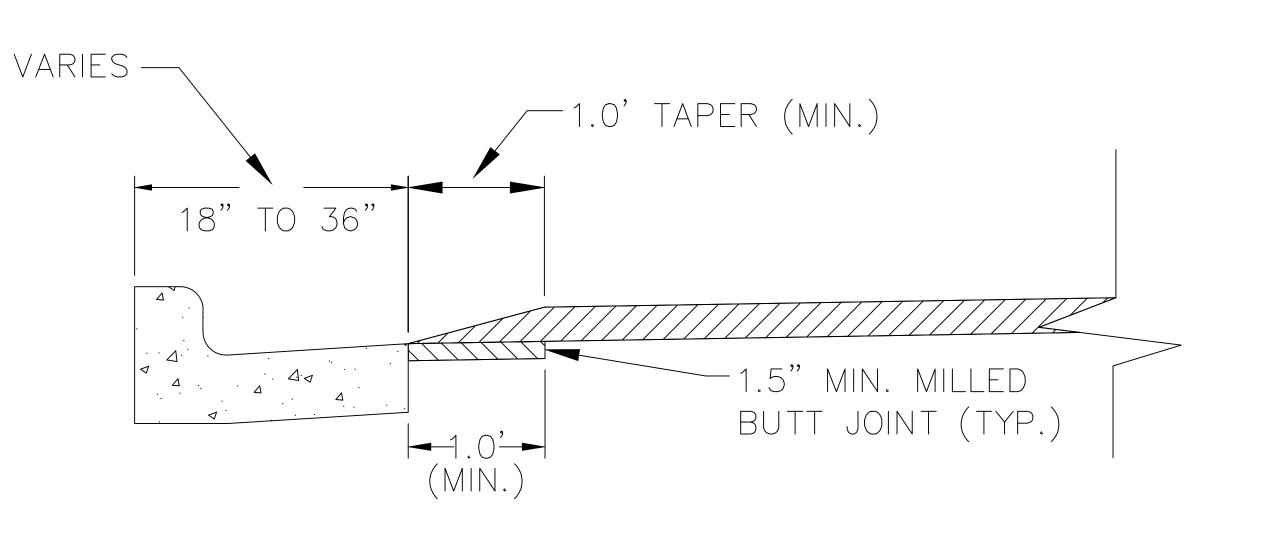


RESURFACIN - ENGINEERIN

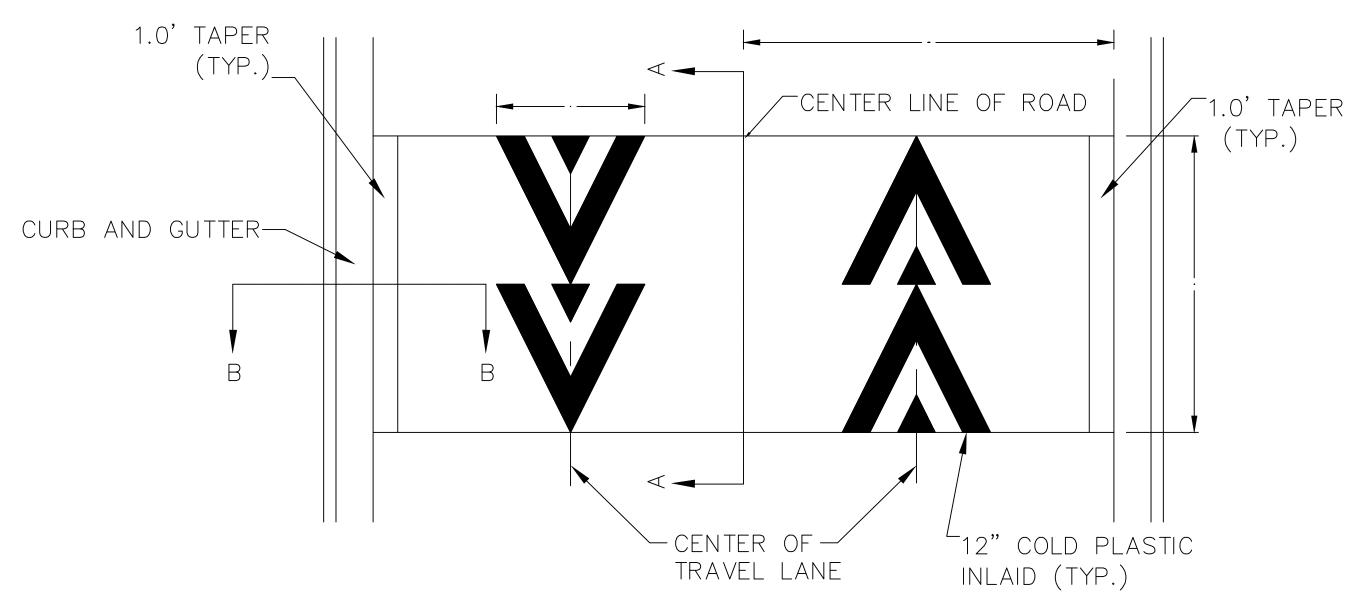
**ANN ARBOR** 

SHEET No.

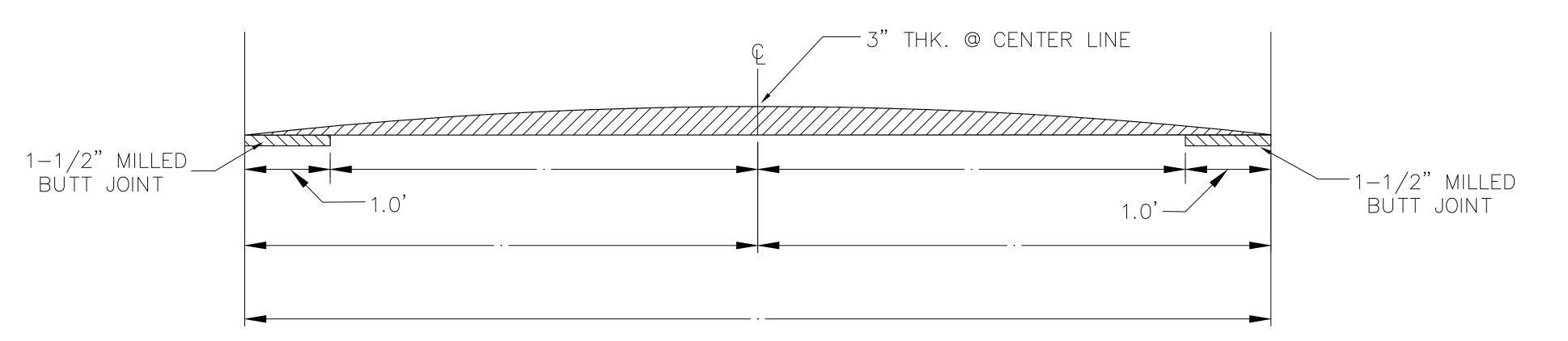




SPEED HUMP CROSS SECTION SECTION B-B



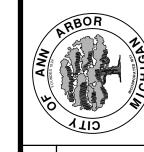
PAVEMENT MARKING DETAIL



SPEED HUMP CROSS SECTION SECTION A-A

## GENERAL NOTES

- 1. RAISED INTERSECTIONS SHALL FOLLOW THE SAME TAPER REQUIREMENT AS THE SPEED HUMPS DETAILED HEREIN.
- 2. PAYMENT FOR PAVEMENT MARKINGS FOR SPEED HUMPS AND RAISED INTERSECTIONS SHALL BE INCLUDED IN THE RESPECTIVE BID ITEMS AND SHALL NOT BE PAID FOR SEPARATELY.





## PROJECT LOCATION: BARDSTOWN TRAIL

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

TRAFFIC CONTROL & SIGN LEGEND					
QTY.	TYPE	DESCRIPTION			
	W20-1	"ROAD WORK AHEAD"			
	W20-3	"ROAD CLOSED AHEAD"			
	D3-1	CONVENTIONAL GUIDE			
	TYPE III	TYPE III LIGHTED BARRICADE			
	R11-4	Road Closed to Thru Traffic			
	TYPE II	TYPE II BARRICADE DRUM			

	CONSTRUCTION KEY
KEY	ASSOCIATED PAY ITEM(S)
	• _Dr Structure, Adj, Case 1, Modified
AA	• _Dr Structure, Adj, Case 2, Modified
	Dr Structure, Temp Lowering, Modified
	Dr Structure, Temp Lowering, Modified
۸Β	• _Gate Box, Adj, Case 1
AB	- Gate Box, Adj, Case 2
	Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
7 (1 (	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
C4	• Grading, Sidewalk
04	Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer
C4HE	• _Grading, Sidewalk
	• Cement
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
	• _Grading, Sidewalk
C6	• _Grading, Sidewalk Ramp
00	Detectable Warning Surface, Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
	Grading, Driveway Approach
C8	Driveway, Nonreinf Conc, 8 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
	• _Grading, Driveway Approach
	• _Grading, Sidewalk
	• Grading, Sidewalk Ramp
	• Cement
C HE	
	• _Driveway, Nonreinf Conc, 6 inch, Modified
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	Detectable Warning Surface, Modified
	- Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C/G	• _Curb, Gutter, and Curb and Gutter, Any Type, Rem
	• _Curb and Gutter, Conc
	• _Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/GHE	• Cement
	Driveway Opening, Conc, Det M, Modified
CP	• _Grading, Sidewalk
UP.	• _Sidewalk, Conc, 4 inch, Modified
CR	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer</li> </ul>
	Dr Structure, Rem
DS	• Sewer, Rem, Less than 24 inch
	Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	• Sewer, Rem, Less than 24 inch
ВОВ	• _Dr Structure, Double Inlet
PT	<u> </u>
ГІ	• _Dr Structure, Point
	Dr Structure Cover, Type B     Dr Structure Cover, Type B
RRA	• _Dr Structure Cover, Type B, Special
	• _Dr Structure, Adj, Case 1, Modified
	_Dr Structure, Temp Lowering, Modified
	Dr Structure Cover, Type K
RRK	• _Dr Structure, Adj, Case 1, Modified
RRK	
RRK RS	• _Dr Structure, Reconstruct
RS	<ul><li>_Dr Structure, Reconstruct</li><li>Plastic Drum, High Intensity, Lighted, Furn</li></ul>
	Plastic Drum, High Intensity, Lighted, Furn
RS	<u> </u>

## **CONSTRUCTION METHOD AND SEQUENCING**

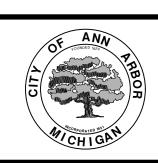
- 1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER
- 2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLA AND AS DIRECTED BY THE ENGINEER.
- 3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS
- 4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES
- . PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND A DIRECTED BY THE ENGINEER.
- 6. MILL 4 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK
- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEE
- 8. GRADE, SHAPE, AND RE—COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 2 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN—UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## 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 IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.



## **ENGINEERING**

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org RIPTION DATE DRAWN CHECKED Call befor

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



VG - 2018

REET RESURFACING

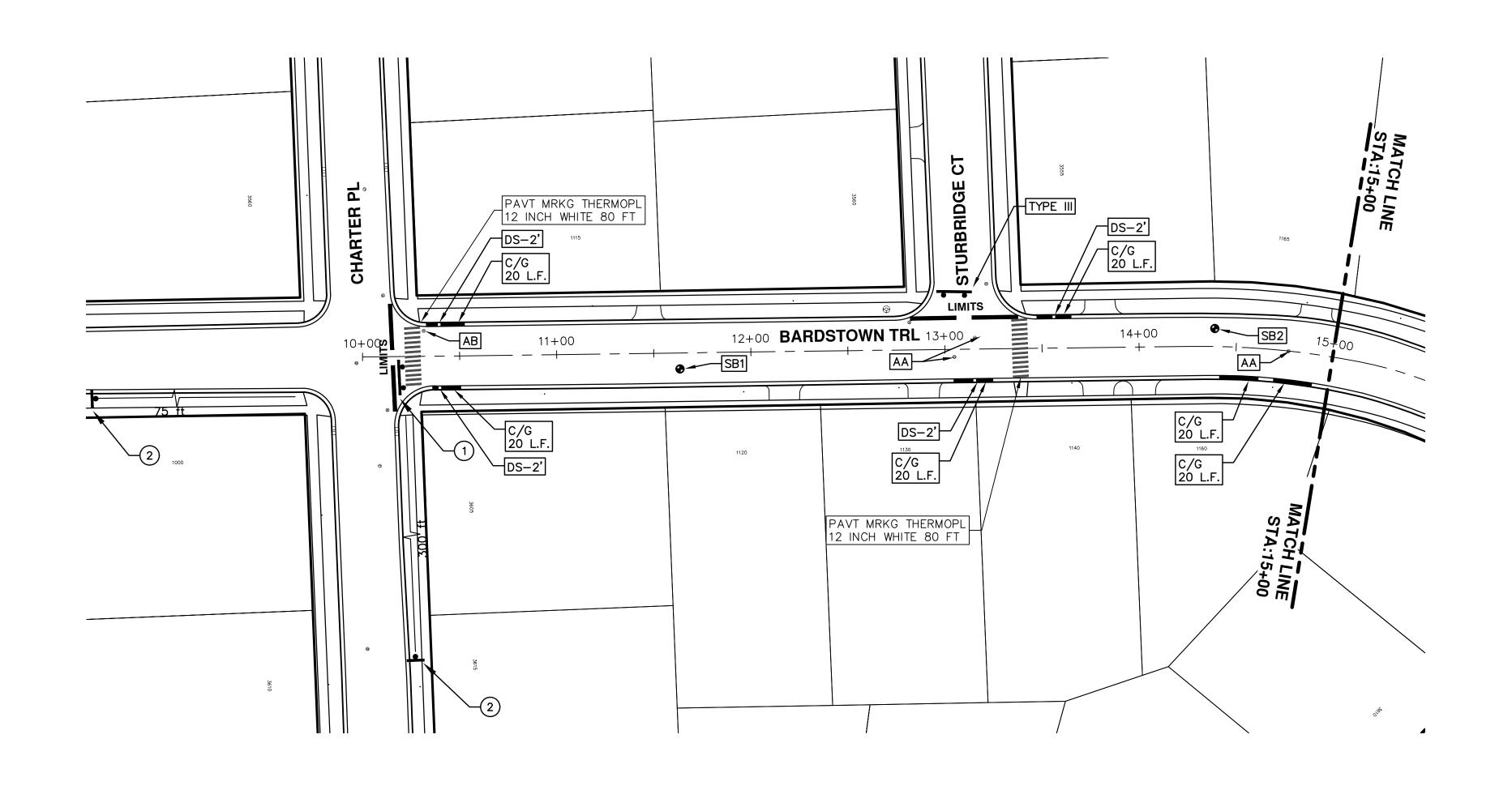
ERVICES - CITY OF ANNUAL STRE

- PUBLIC SERVIC

INEERING - PUB

ENGINEE SCALE

SHEET No.



TRAF	FIC CONTROL SIGN	
	SIGN	NUMBER
1	ROAD CLOSED LOCAL TRAFFIC ONLY	R11-3c 60x30
	W/ TYPE III BARRICADE	
2	ROAD CLOSED AHEAD	₩20-3 36"x36"
	BARDSTOWN TRL	D3-1 36"x36

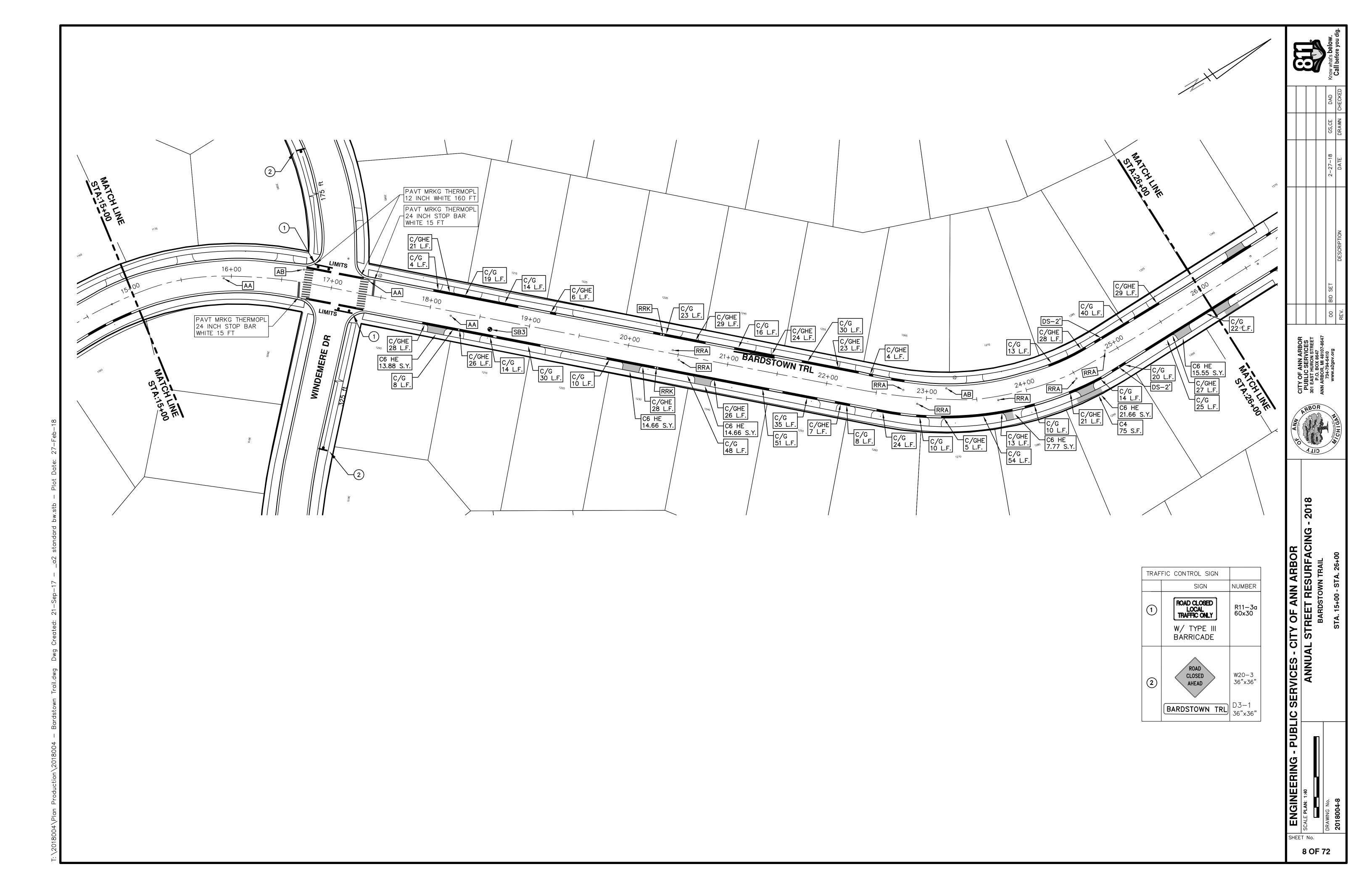
ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

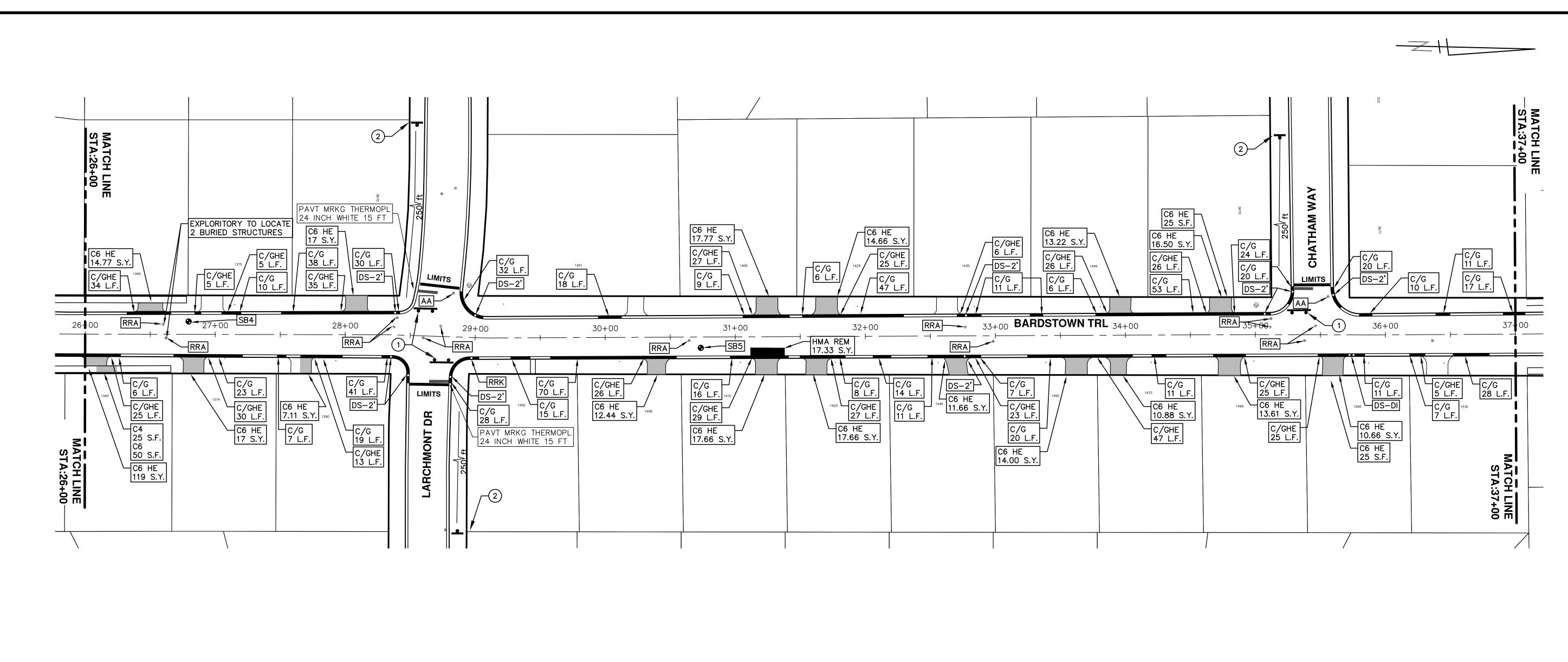
SCALE PLAN: Custom

ANNUAL STREET RESURFACING

BRAWING No.

2018004-7 7 OF 72





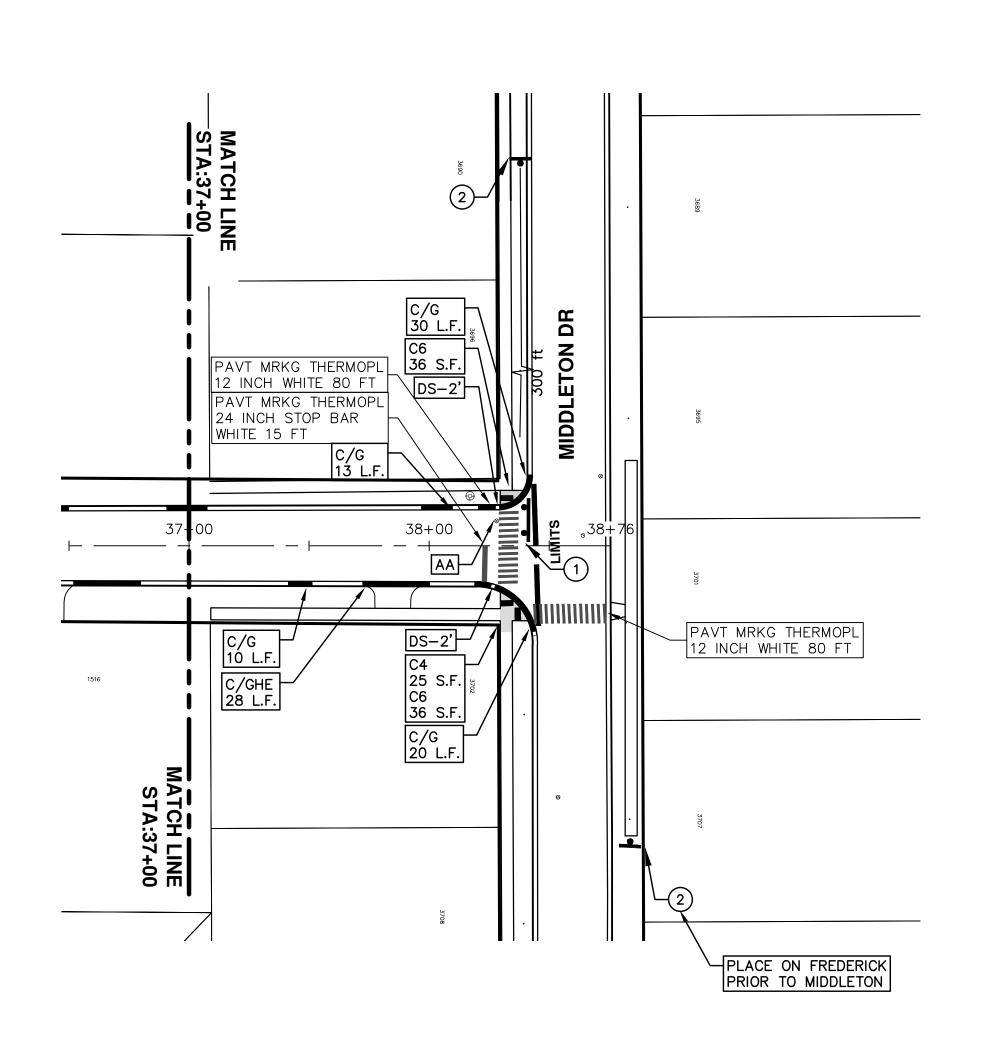
TRAF	FIC CONTROL SIGN	
	SIGN	NUMBER
1	ROAD CLOSED LOCAL TRAFFIC ONLY	R11-3a 60x30
	W/ TYPE III BARRICADE	
2	ROAD CLOSED AHEAD	W20-3 36"x36"
	BARDSTOWN TRL	D3-1 36"x36"

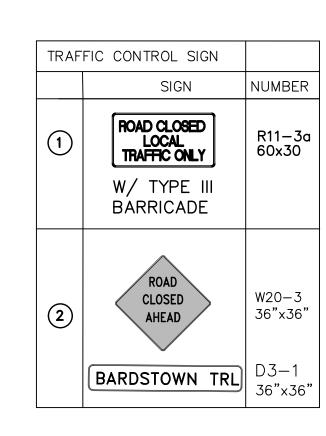
ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

ANNUAL STREET RESURFACING

BARDSTOWN TRAIL 9 OF 72





77 00 BID SET 2-	00 BID SET 2-27-18
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## PROJECT LOCATION: BARRISTER DRIVE

ITB No. 4529 FILE No. 2018004

QUANTITIES			
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	1
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

TRAFFIC CONTROL & SIGN LEGEND					
QTY.	TYPE	DESCRIPTION			
	W20-1	"ROAD WORK AHEAD"			
	W20-3	"ROAD CLOSED AHEAD"			
	D3-1	CONVENTIONAL GUIDE			
	TYPE III	TYPE III LIGHTED BARRICADE			
	R11-4	Road Closed to Thru Traffic			
	TYPE II	TYPE II BARRICADE DRUM			

	CONSTRUCTION KEY
KEY	ASSOCIATED PAY ITEM(S)
	<ul> <li>_Dr Structure, Adj, Case 1, Modified</li> </ul>
AA	<ul> <li>Dr Structure, Adj, Case 2, Modified</li> </ul>
	_ Dr Structure, Temp Lowering, Modified
	Dr Structure, Temp Lowering, Modified
	Gate Box, Adj, Case 1
AB	• _Gate Box, Adj, Case 2
	Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
AIX	<ul> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li> </ul>
C4	<ul> <li>Grading, Sidewalk</li> </ul> Grading, Sidewalk
<b>C4</b>	
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4HE	• _Grading, Sidewalk
	Cement
	<ul> <li>_Sidewalk, Conc, 4 inch, Modified</li> </ul>
	<ul> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li> </ul>
	• _Grading, Sidewalk
C6	<ul> <li>_Grading, Sidewalk Ramp</li> </ul>
00	_Detectable Warning Surface, Modified
	Sidewalk Ramp, Conc, 6 inch, Modified
	_Sidewalk, Conc, 6 inch, Modified
	Grading, Driveway Approach
C8	Driveway, Nonreinf Conc, 8 inch, Modified
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li> </ul>
	Grading, Driveway Approach
	• _Grading, Sidewalk
	Grading, Sidewalk Ramp
	• Cement
C HE	
	• _Driveway, Nonreinf Conc, 6 inch, Modified
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	_Detectable Warning Surface, Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C/G	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
	_Curb and Gutter, Conc
	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
C/GHE	Cement
	<ul> <li>_Driveway Opening, Conc, Det M, Modified</li> </ul>
CP	• _Grading, Sidewalk
OF	<ul> <li>_Sidewalk, Conc, 4 inch, Modified</li> </ul>
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	Dr Structure, Rem
DS	Sewer, Rem, Less than 24 inch
	Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	Sewer, Rem, Less than 24 inch
	Dr Structure, Double Inlet
PT	• _Dr Structure, Point
	Dr Structure Cover, Type B
	_Dr Structure Cover, Type B, Special
RRA	Dr Structure Cover, Type B, Special     Dr Structure, Adj, Case 1, Modified
	• _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K     Dr Structure Adii Cover 1 Madified
	• _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
	Plastic Drum, High Intensity, Lighted, Furn
TYPF II	
TYPE II	Plastic Drum, High Intensity, Lighted, Oper
TYPE II	<ul> <li>Plastic Drum, High Intensity, Lighted, Oper</li> <li>Barricade, Type III, High Intensity, Double Sided, Lighted, Fum</li> </ul>

## **CONSTRUCTION METHOD AND SEQUENCING**

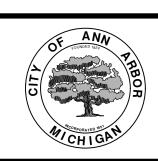
- 1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER
- 2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLAN AND AS DIRECTED BY THE ENGINEER.
- i. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND A DIRECTED BY THE ENGINEER.
- 4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES
- 5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND DIRECTED BY THE ENGINEER.
- 6. MILL 4 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK
- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEE
- 8. GRADE, SHAPE, AND RE—COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 2 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## 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 IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.



## **ENGINEERING**

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org 2–27–18 GS,CE DAD Know what's **be**ON DATE DRAWN CHECKED

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



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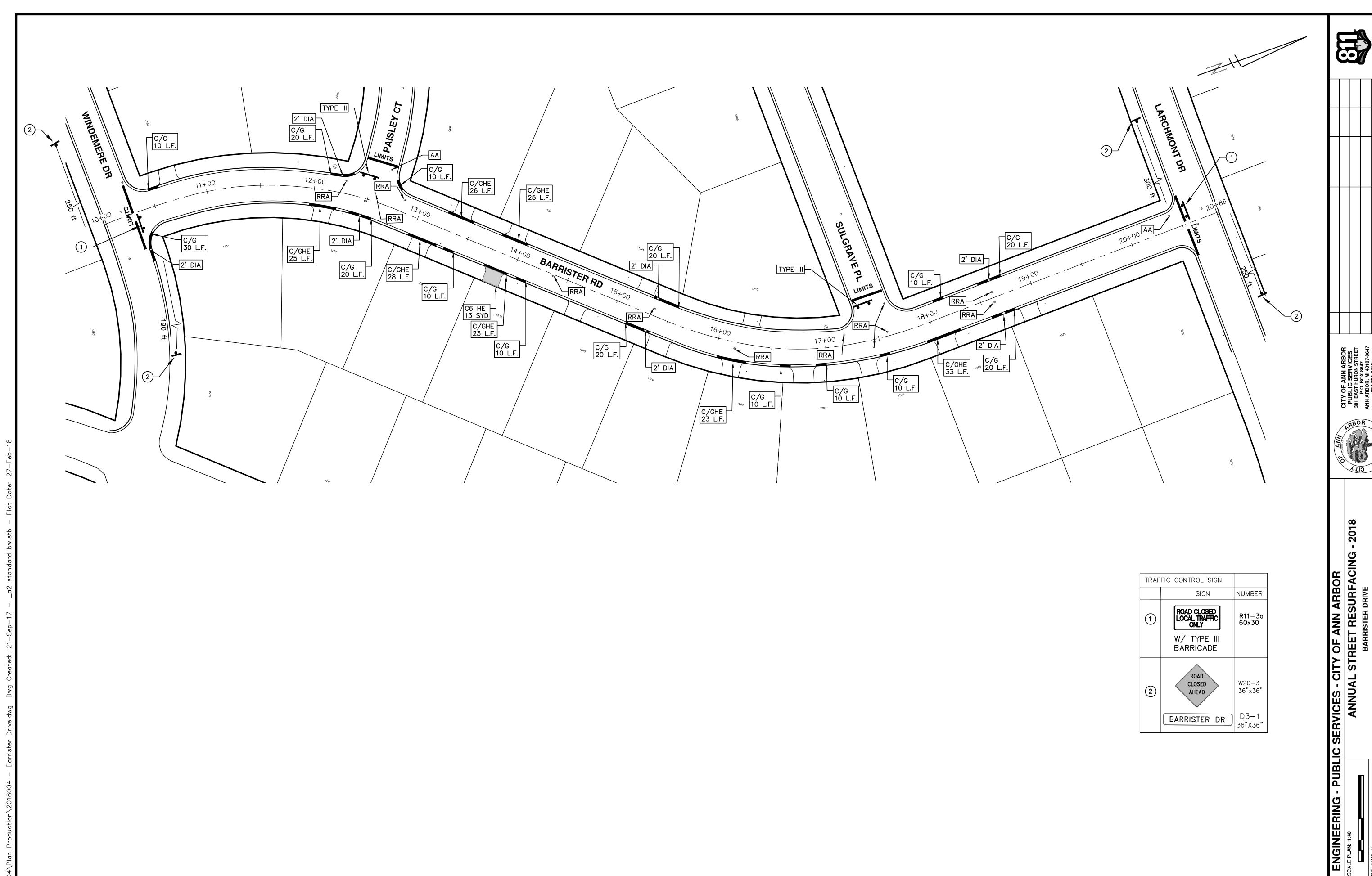
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- PUBLIC SERVICE

NEERING - PUBL

SCALE
DRAWING No.

SHEET No.



ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

DRAWING No.

2018004-12

ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

ANNUAL STREET RESURFACING

BARRISTER DRIVE 12 OF 72



## PROJECT LOCATION: FAIRMOUNT DRIVE

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

	TR	AFFIC CONTROL & SIGN LEGEND
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	D3-1	CONVENTIONAL GUIDE
	TYPE III	TYPE III LIGHTED BARRICADE
	R11-4	Road Closed to Thru Traffic
	TYPE II	TYPE II BARRICADE DRUM

	CONSTRUCTION KEY
KEY	ASSOCIATED PAY ITEM(S)
	<ul> <li>_Dr Structure, Adj, Case 1, Modified</li> </ul>
AA	• _Dr Structure, Adj, Case 2, Modified
	_Dr Structure, Temp Lowering, Modified
	• _Dr Structure, Temp Lowering, Modified
AB	• _Gate Box, Adj, Case 1
	• _Gate Box, Adj, Case 2
	• _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4	• _Grading, Sidewalk
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4HE	• _Grading, Sidewalk
	• Cement
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	• _Grading, Sidewalk
C6	• _Grading, Sidewalk Ramp
	_Detectable Warning Surface, Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C8	• _Grading, Driveway Approach
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	Grading, Driveway Approach
	• _Grading, Sidewalk
	• _Grading, Sidewalk Ramp
C HE	• Cement
	• _Driveway, Nonreinf Conc, 6 inch, Modified
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	Detectable Warning Surface, Modified     Oid awalls Dawn, Originals Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C/G	• _Curb, Gutter, and Curb and Gutter, Any Type, Rem
	• _Curb and Gutter, Conc
CICLIE	• _Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/GHE	Cement     Driveway Opening, Cone. Det M. Medified.
	• _Driveway Opening, Conc, Det M, Modified
CP	• _Grading, Sidewalk
CD	• _Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
De	Dr Structure, Rem     Sewer, Rem, Less than 24 inch
DS	Sewer, Rem, Less than 24 inch     Dr Structure, 24 inch dia
	Dr Structure, 24 inch dia     Dr Structure, Rem
DSDI	Sewer, Rem, Less than 24 inch
וטטט	Sewer, Rem, Less than 24 inch     Dr Structure, Double Inlet
PT	
71	Dr Structure, Point     Dr Structure Cover, Type B
RRA	Dr Structure Cover, Type B, Special     Dr Structure, Adi, Case 1, Medified
	• _Dr Structure, Adj, Case 1, Modified
	• _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K     Dr Structure, Adi, Coco 1, Modified
DC	• _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn     Plastic Drum, High Intensity, Lighted, Open
	Plastic Drum, High Intensity, Lighted, Oper     Pagricada, Type III, High Intensity, Double Sided, Lighted, Furn.
T/DE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper

## **CONSTRUCTION METHOD AND SEQUENCING**

- 1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER
- 2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLANS AND AS DIRECTED BY THE ENGINEER.
- . INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND A DIRECTED BY THE ENGINEER.
- 4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES
- 5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND DIRECTED BY THE ENGINEER.
- 6. MILL 3 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK
- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEE
- 8. GRADE, SHAPE, AND RE—COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 1 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## NOTES:

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## **ENGINEERING**

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

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



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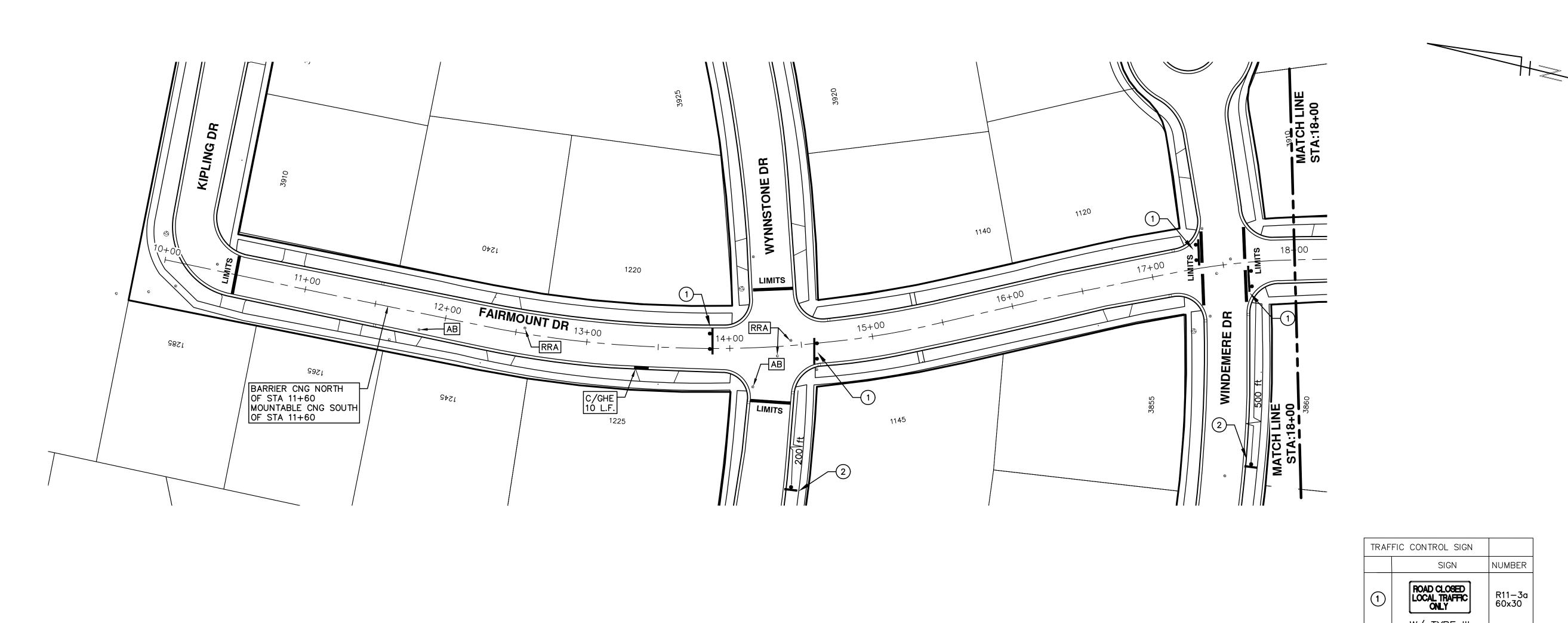
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PUBLIC SERVICE

NEERING - PUBI

SCALE SRAWING No.

SHEET No.



TRAF	FIC CONTROL SIGN	
	SIGN	NUMBER
1	ROAD CLOSED LOCAL TRAFFIC ONLY	R11-3a 60x30
	W/ TYPE III BARRICADE	
2	ROAD CLOSED AHEAD	W20-3 36"x36"
	FAIRMOUNT DR	D3-1 36"X36"

ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

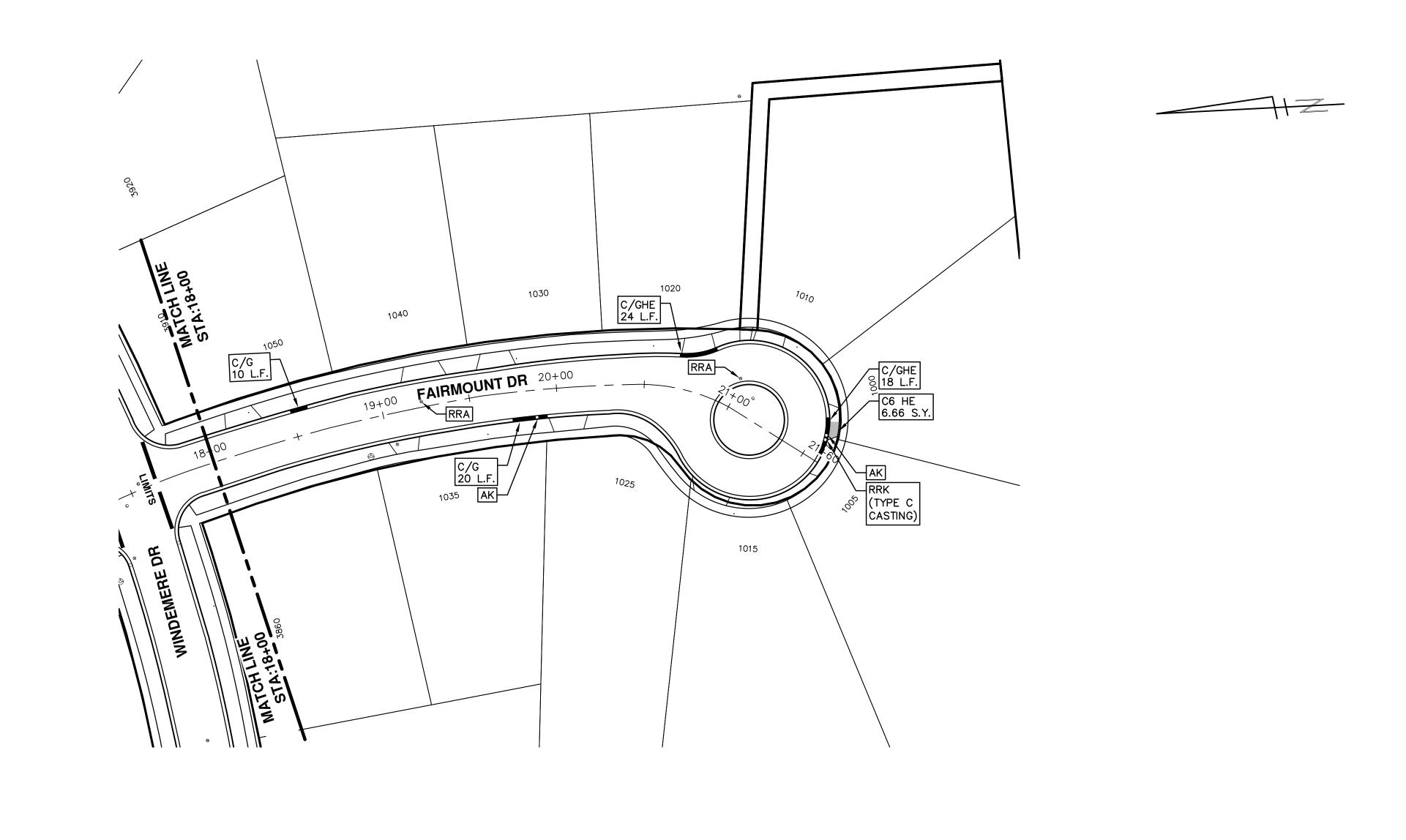
DRAWING No.

2018004-14

ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

ANNUAL STREET RESURFACING
FAIRMOUNT DRIVE

STA. 10+00 - STA. 18+00



ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

BRAWING No.

STA. 18+00 - STA. 21+60



## PROJECT LOCATION: KIPLING DRIVE

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

	TRAFF	FIC CONTROL & SIGN LEGEND
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	D3-1	CONVENTIONAL GUIDE
	TYPE III	TYPE III LIGHTED BARRICADE
	R11-4	Road Closed to Thru Traffic
	TYPE II	TYPE II BARRICADE DRUM

KEY	CONSTRUCTION KEY
KEI	ASSOCIATED PAY ITEM(S)
Λ Λ	• _Dr Structure, Adj, Case 1, Modified
AA	Dr Structure, Adj, Case 2, Modified     Dr Structure, Town I avverting, Modified
	_Dr Structure, Temp Lowering, Modified
	• _Dr Structure, Temp Lowering, Modified
AB	• _Gate Box, Adj, Case 1
	• _Gate Box, Adj, Case 2
	• _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	_Dr Structure, Adj, Case 1, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4	Grading, Sidewalk
	<ul> <li>_Sidewalk, Conc, 4 inch, Modified</li> </ul>
	<ul> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li> </ul>
CALLE	Grading, Sidewalk
C4HE	Cement
	• _Sidewalk, Conc, 4 inch, Modified
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li> </ul>
	Grading, Sidewalk
	Grading, Sidewalk Ramp
C6	Detectable Warning Surface, Modified
	_Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
	Grading, Driveway Approach
C8	
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	• _Grading, Driveway Approach
	• _Grading, Sidewalk
	• _Grading, Sidewalk Ramp
CHE	• Cement
	<ul> <li>_Driveway, Nonreinf Conc, 6 inch, Modified</li> </ul>
	<ul> <li>_Driveway, Nonreinf Conc, 8 inch, Modified</li> </ul>
	_Detectable Warning Surface, Modified
	<ul> <li>_Sidewalk Ramp, Conc, 6 inch, Modified</li> </ul>
	• _Sidewalk, Conc, 6 inch, Modified
C/G	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
0/0	_Curb and Gutter, Conc
	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
C/GHE	Cement
	<ul> <li>_Driveway Opening, Conc, Det M, Modified</li> </ul>
CD	• _Grading, Sidewalk
CP	Sidewalk, Conc, 4 inch, Modified
CR	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
-	• Dr Structure, Rem
DS	• Sewer, Rem, Less than 24 inch
	• Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	Sewer, Rem, Less than 24 inch
בסטו	Dr Structure, Double Inlet
PT	Dr Structure, Point
IT I	
	Dr Structure Cover, Type B     Dr Structure Cover, Type B. Special
RRA	• _Dr Structure Cover, Type B, Special
	• _Dr Structure, Adj, Case 1, Modified
	• _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K
	_Dr Structure, Adj, Case 1, Modified
RS	_Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn
ince 0	Plastic Drum, High Intensity, Lighted, Oper
	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
TYPE III	Barriodae, Type III, Tilgit Interiority, Bodole Glaca, Lightea, Tarri

## CONSTRUCTION METHOD AND SEQUENCING

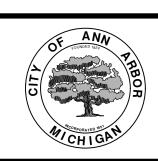
- 1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER
- 2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLA AND AS DIRECTED BY THE ENGINEER.
- i. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND A DIRECTED BY THE ENGINEER.
- 4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES
- 5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 6. MILL 4 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER, PROOF ROLL WITH FULL TRUCK
- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEE
- 8. GRADE, SHAPE, AND RE—COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 2 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## 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 IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.



## **ENGINEERING**

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org SET 2-27-18 GS,CE DAD Know

DESCRIPTION DATE DRAWN CHECKED

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



N ARBOR ESURFACING - 2018

STREET RESURFA

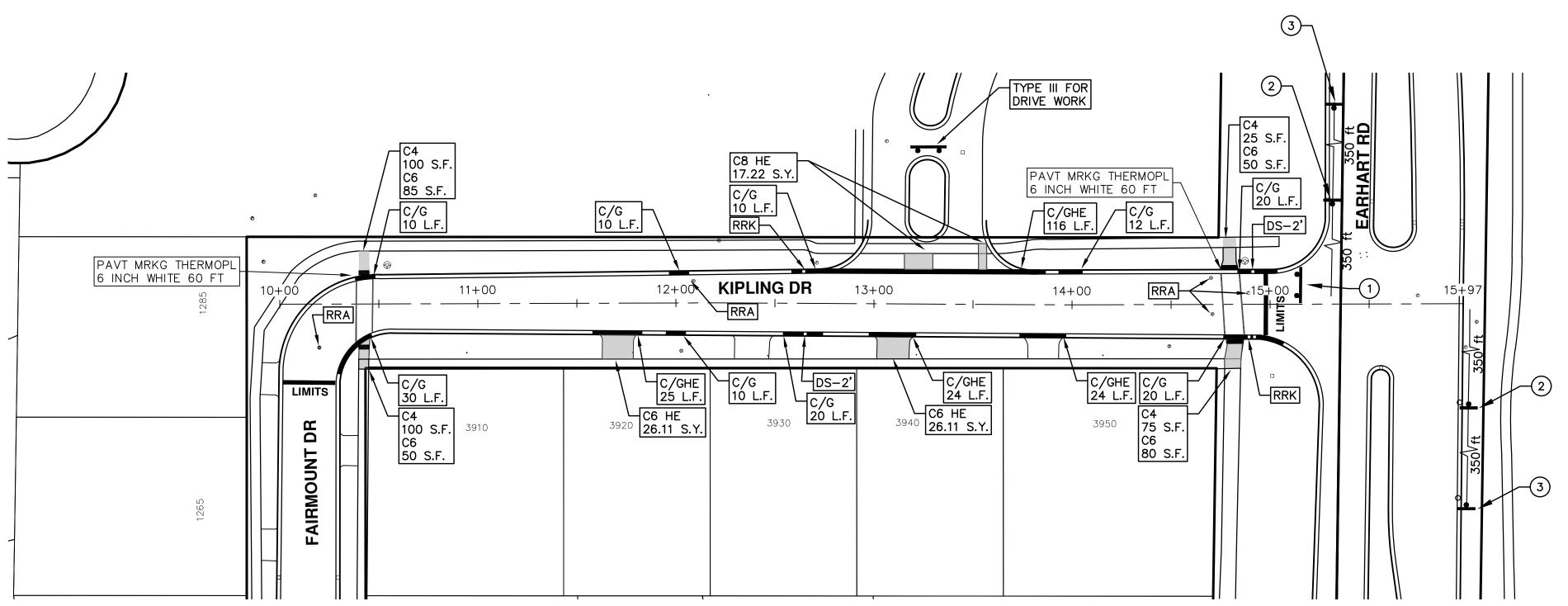
SERVICES - CITY OF ANNUAL STRE

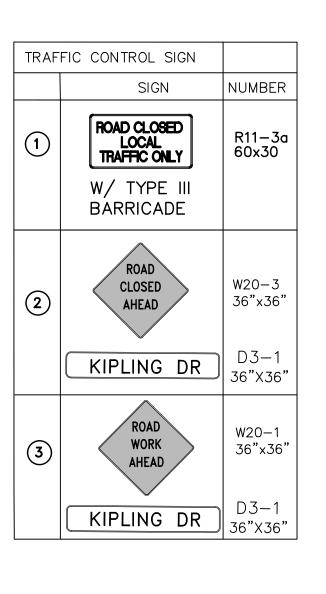
- PUBLIC SERVIC

INEERING - PUI

SCALE
DRAWING No.

SHEET No.





 $\infty$ ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

SCALE PLAN: 1:40

ANNUAL STREET RESURFACING
DRAWING No.

2018004-17



## PROJECT LOCATION: MACGREGOR LANE

ITB No. 4529 FILE No. 2018004

QUANTITIES			
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

	TR	AFFIC CONTROL & SIGN LEGEND
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	D3-1	CONVENTIONAL GUIDE
	TYPE III	TYPE III LIGHTED BARRICADE
	R11-4	Road Closed to Thru Traffic
	TYPE II	TYPE II BARRICADE DRUM

VEV	CONSTRUCTION KEY
KEY	ASSOCIATED PAY ITEM(S)
	<ul> <li>_Dr Structure, Adj, Case 1, Modified</li> </ul>
AA	• _Dr Structure, Adj, Case 2, Modified
	_Dr Structure, Temp Lowering, Modified
	_Dr Structure, Temp Lowering, Modified
4.5	• _Gate Box, Adj, Case 1
AB	Gate Box, Adj, Case 2
	Monument Box Adjust
ADST	Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
AIX	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4	
04	• _Grading, Sidewalk
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4HE	• _Grading, Sidewalk
	Cement
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	• _Grading, Sidewalk
C6	Grading, Sidewalk Ramp
<u>C0</u>	Detectable Warning Surface, Modified
	Sidewalk Ramp, Conc, 6 inch, Modified
	- Sidewalk, Conc, 6 inch, Modified
1616	Grading, Driveway Approach
C8	Driveway, Nonreinf Conc, 8 inch, Modified
	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	Grading, Driveway Approach     Grading, Driveway Approach
	• _Grading, Sidewalk
	• _Grading, Sidewalk Ramp
C HE	• Cement
	• _Driveway, Nonreinf Conc, 6 inch, Modified
	<ul> <li>_Driveway, Nonreinf Conc, 8 inch, Modified</li> </ul>
	_Detectable Warning Surface, Modified
	<ul> <li>_Sidewalk Ramp, Conc, 6 inch, Modified</li> </ul>
	• _Sidewalk, Conc, 6 inch, Modified
CIC	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
C/G	Curb and Gutter, Conc
	Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/GHE	• Cement
	Driveway Opening, Conc, Det M, Modified
	Grading, Sidewalk
CP	• _Sidewalk, Conc, 4 inch, Modified
CR	
UK	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
DO	• Dr Structure, Rem
DS	• Sewer, Rem, Less than 24 inch
	Dr Structure, 24 inch dia
	• Dr Structure, Rem
DSDI	Sewer, Rem, Less than 24 inch
	• _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
	Dr Structure Cover, Type B
DD 4	Dr Structure Cover, Type B, Special
RRA	• _Dr Structure, Adj, Case 1, Modified
	• _Dr Structure, Temp Lowering, Modified
	Dr Structure, Terrip Lowering, Mounied     Dr Structure Cover, Type K
RRK	
De	Dr Structure, Adj, Case 1, Modified     Dr Structure, Peggenstruct
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn
	Plastic Drum, High Intensity, Lighted, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper

## **CONSTRUCTION METHOD AND SEQUENCING**

- LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES

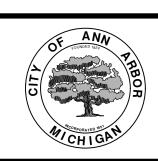
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 2 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE
- COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN—UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## 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.

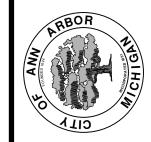
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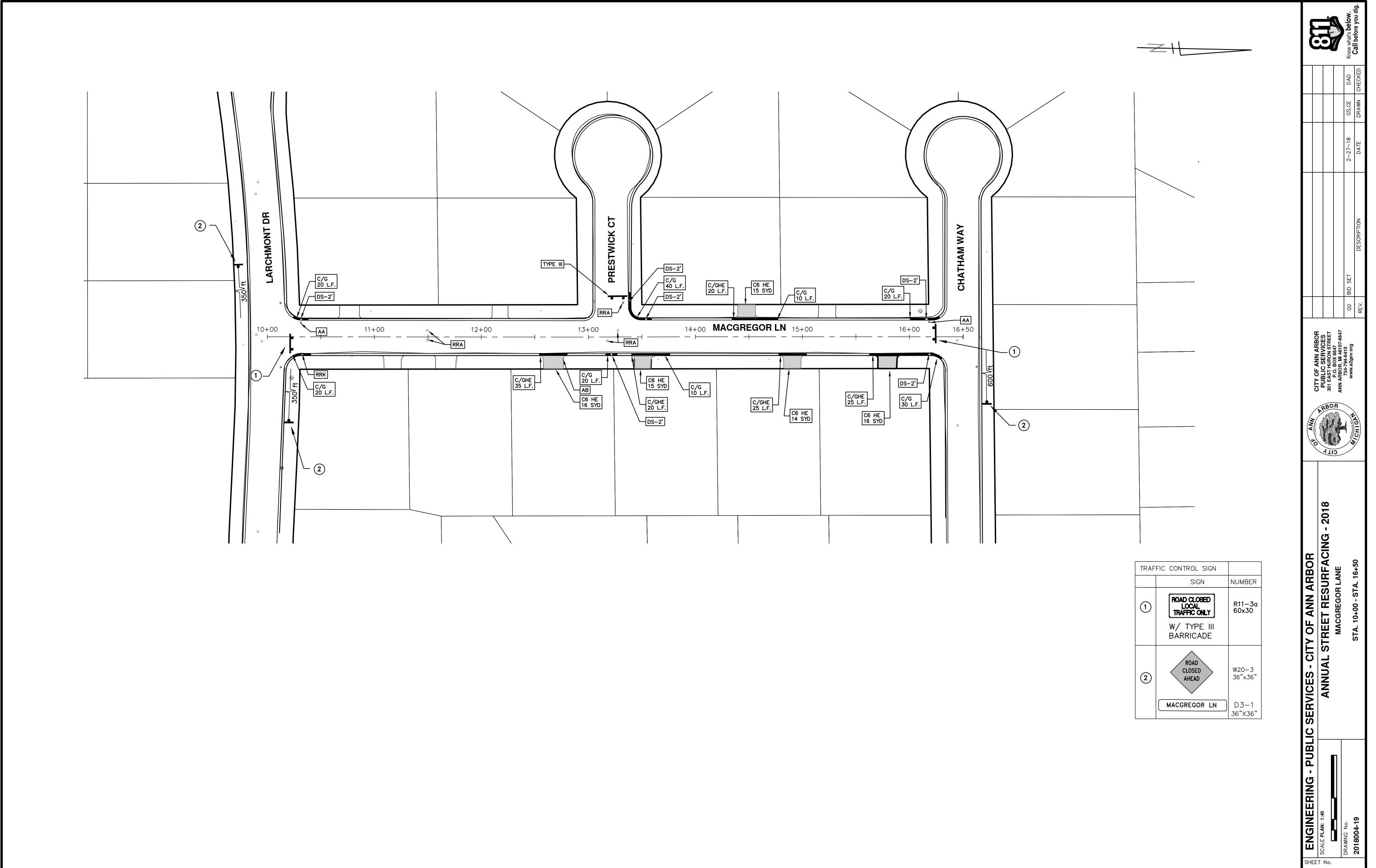


## **ENGINEERING**

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



SHEET No.





## PROJECT LOCATION: PRESTWICK COURT

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

TRAFFIC CONTROL & SIGN LEGEND			
QTY.	TYPE	DESCRIPTION	
	W20-1	"ROAD WORK AHEAD"	
	W20-3	"ROAD CLOSED AHEAD"	
	D3-1	CONVENTIONAL GUIDE	
	TYPE III	TYPE III LIGHTED BARRICADE	
	R11-4	Road Closed to Thru Traffic	
	TYPE II	TYPE II BARRICADE DRUM	

KEY	ASSOCIATED PAY ITEM(S)
	Dr Structure, Adj, Case 1, Modified
AA	• Dr Structure, Adj, Case 2, Modified
	Dr Structure, Temp Lowering, Modified
	Dr Structure, Temp Lowering, Modified
	• _Gate Box, Adj, Case 1
AB	Gate Box, Adj, Case 2
	Monument Box Adjust
ADST	Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer</li> </ul>
C4	Grading, Sidewalk
	Sidewalk, Conc, 4 inch, Modified
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer</li> </ul>
OUIE	Grading, Sidewalk
C4HE	• Cement
	• _Sidewalk, Conc, 4 inch, Modified
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer</li> </ul>
	• _Grading, Sidewalk
00	Grading, Sidewalk Ramp
C6	Detectable Warning Surface, Modified
	Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
	Grading, Driveway Approach
C8	Driveway, Nonreinf Conc, 8 inch, Modified
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer</li> </ul>
	Grading, Driveway Approach
	• _Grading, Sidewalk
	Grading, Sidewalk Ramp
OUE	• Cement
C HE	<ul> <li>_Driveway, Nonreinf Conc, 6 inch, Modified</li> </ul>
	<ul> <li>_Driveway, Nonreinf Conc, 8 inch, Modified</li> </ul>
	_Detectable Warning Surface, Modified
	Sidewalk Ramp, Conc, 6 inch, Modified
	Sidewalk, Conc, 6 inch, Modified
0/0	<ul> <li>Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
C/G	Curb and Gutter, Conc
	_Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/GHE	• Cement
	• _Driveway Opening, Conc, Det M, Modified
- CD	Grading, Sidewalk
CP	• _Sidewalk, Conc, 4 inch, Modified
CR	<ul> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer</li> </ul>
	• Dr Structure, Rem
DS	Sewer, Rem, Less than 24 inch
	Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	Sewer, Rem, Less than 24 inch
	• _Dr Structure, Double Inlet
PT	Dr Structure, Point
	Dr Structure Cover, Type B
D	• _Dr Structure Cover, Type B, Special
RRA	• _Dr Structure, Adj, Case 1, Modified
	• _Dr Structure, Temp Lowering, Modified
	Dr Structure Cover, Type K
RRK	• _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
	Plastic Drum, High Intensity, Lighted, Furn
TYPE II	Plastic Drum, High Intensity, Lighted, Purif     Plastic Drum, High Intensity, Lighted, Oper
	r rasuo Diani, riigii intensity. Liuliteu. Obel
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn

## CONSTRUCTION METHOD AND SEQUENCING

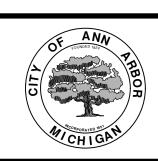
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- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEE
- 8. GRADE, SHAPE, AND RE—COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN
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- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## NOTES:

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## **ENGINEERING**

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org 2–27–18 GS,CE DAD Know what's **b**DATE DRAWN CHECKED

Call before

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



ACING - 2018

REET RESURFACING

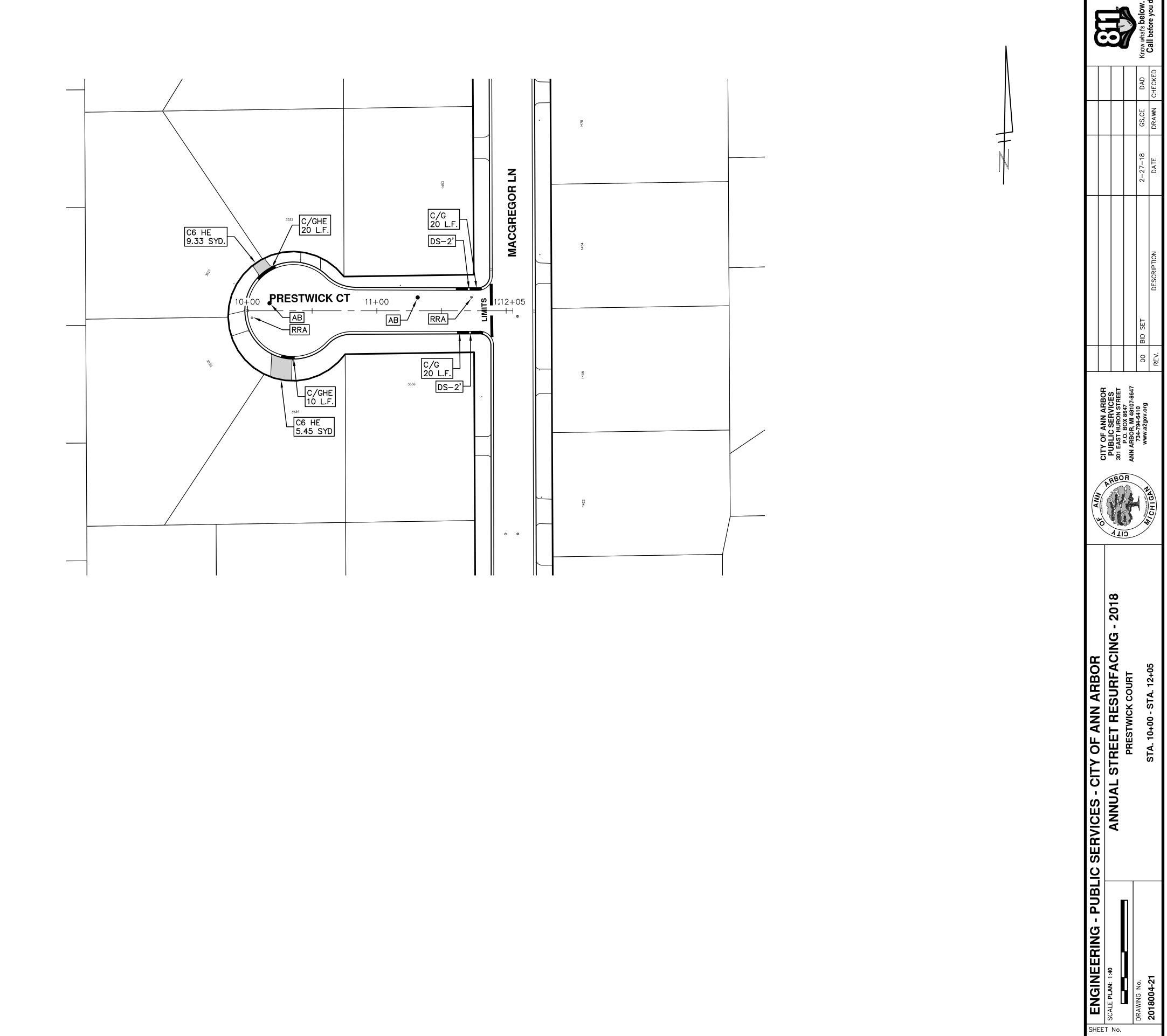
SERVICES - CITY ANNUAL STE

G - PUBLIC SERVI

GINEERING -

DRAWING No.

SHEET No.





## PROJECT LOCATION: SEVERN COURT

ITB No. 4529 FILE No. 2018004

		1	1
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

TRAFFIC CONTROL & SIGN LEGEND			
QTY.	TYPE	DESCRIPTION	
	W20-1	"ROAD WORK AHEAD"	
	W20-3	"ROAD CLOSED AHEAD"	
	D3-1	CONVENTIONAL GUIDE	
	TYPE III	TYPE III LIGHTED BARRICADE	
	R11-4	Road Closed to Thru Traffic	
	TYPE II	TYPE II BARRICADE DRUM	

KEY	ASSOCIATED PAY ITEM(S)
	• _Dr Structure, Adj, Case 1, Modified
AA	• _Dr Structure, Adj, Case 2, Modified
	_Dr Structure, Temp Lowering, Modified
	_Dr Structure, Temp Lowering, Modified
<b>A</b> D	Gate Box, Adj, Case 1
AB	• _Gate Box, Adj, Case 2
	Monument Box Adjust
ADST	_Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
AIX	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
04	
C4	• _Grading, Sidewalk
	• _Sidewalk, Conc, 4 inch, Modified
	<ul> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren</li> </ul>
C4HE	• _Grading, Sidewalk
OIIIL	Cement
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
	• _Grading, Sidewalk
00	Grading, Sidewalk Ramp
C6	Detectable Warning Surface, Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	Sidewalk, Conc, 6 inch, Modified
	Grading, Driveway Approach
C8	
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
	Grading, Driveway Approach
	• _Grading, Sidewalk
	• _Grading, Sidewalk Ramp
C HE	Cement
OTIL	<ul> <li>_Driveway, Nonreinf Conc, 6 inch, Modified</li> </ul>
	<ul> <li>_Driveway, Nonreinf Conc, 8 inch, Modified</li> </ul>
	Detectable Warning Surface, Modified
	Sidewalk Ramp, Conc, 6 inch, Modified
	Sidewalk, Conc, 6 inch, Modified
	Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/G	• _Curb and Gutter, Conc
OVOLUE	_Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/GHE	• Cement
	_Driveway Opening, Conc, Det M, Modified
CP	• _Grading, Sidewalk
	• _Sidewalk, Conc, 4 inch, Modified
CR	<ul> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren</li> </ul>
	Dr Structure, Rem
DS	• Sewer, Rem, Less than 24 inch
	Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	• Sewer, Rem, Less than 24 inch
וטטט	• _Dr Structure, Double Inlet
PT	
FI	• _Dr Structure, Point
	Dr Structure Cover, Type B
RRA	• _Dr Structure Cover, Type B, Special
11111	• _Dr Structure, Adj, Case 1, Modified
	_Dr Structure, Temp Lowering, Modified
DDV	Dr Structure Cover, Type K
RRK	• _Dr Structure, Adj, Case 1, Modified
RS	Dr Structure, Reconstruct
	Plastic Drum, High Intensity, Lighted, Furn
TYPE II	
	Plastic Drum, High Intensity, Lighted, Oper     Paggioods, Type III, High Intensity, Double Sided Lighted Fyrm
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper

CONSTRUCTION KEY

## **CONSTRUCTION METHOD AND SEQUENCING**

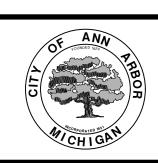
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- 3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES
- 5. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND A DIRECTED BY THE ENGINEER.
- 6. MILL 4 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER, PROOF ROLL WITH FULL TRUCK
- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEER
- 8. GRADE, SHAPE, AND RE—COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
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- 11. PAVE 2 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## NOTES:

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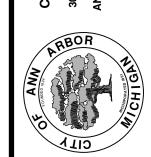
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## **ENGINEERING**

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org 2–27–18 GS,CE DAD Know what's **below.**Call before you compared to the compar

ITY OF ANN ARBOR
PUBLIC SERVICES
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RBOR IRFACING - 2018

SEVERN COURT

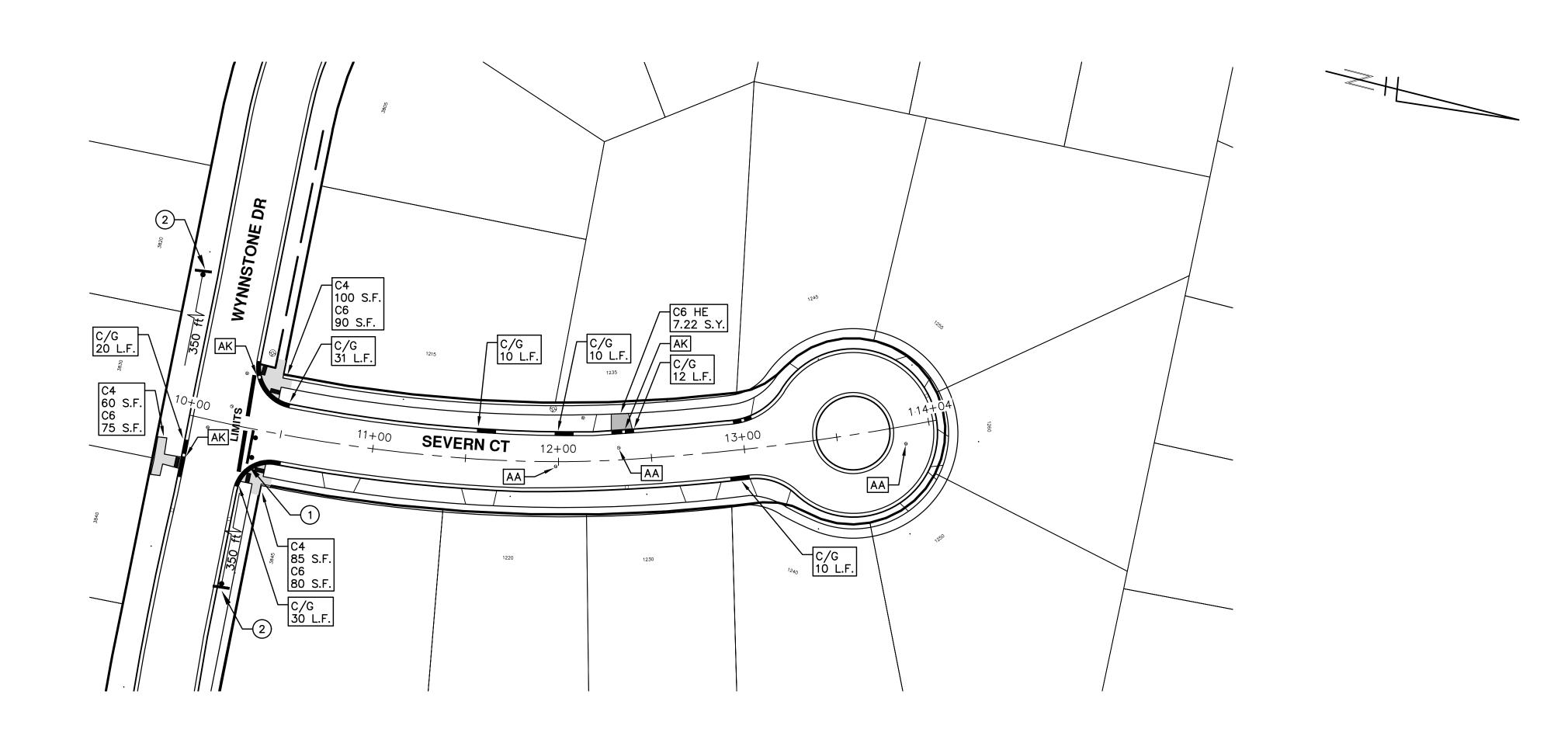
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PUBLIC SERVICES

INEERING - PUB

SCALE
SCALE
SRAWING No.

SHEET No.



TRAFFIC CONTROL SIGN				
	SIGN	NUMBER		
1	ROAD CLOSED LOCAL TRAFFIC ONLY W/ TYPE III BARRICADE	R11-3a 60x30		
2	ROAD WORK AHEAD	W20-1 36"x36"		
	SEVERN CT.	D3-1 36"x36"		

ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

BRAWING No.

STA. 10+00 - STA. 14+04



## PROJECT LOCATION: STURBRIDGE COURT

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

TRAFFIC CONTROL & SIGN LEGEND			
QTY.	TYPE	DESCRIPTION	
	W20-1	"ROAD WORK AHEAD"	
	W20-3	"ROAD CLOSED AHEAD"	
	D3-1	CONVENTIONAL GUIDE	
	TYPE III	TYPE III LIGHTED BARRICADE	
	R11-4	Road Closed to Thru Traffic	
	TYPE II	TYPE II BARRICADE DRUM	

	CONSTRUCTION KEY			
KEY	ASSOCIATED PAY ITEM(S)			
	• _Dr Structure, Adj, Case 1, Modified			
AA	• _Dr Structure, Adj, Case 2, Modified			
	_Dr Structure, Temp Lowering, Modified			
	• _Dr Structure, Temp Lowering, Modified			
AB	• _Gate Box, Adj, Case 1			
	• _Gate Box, Adj, Case 2			
	• _Monument Box Adjust			
ADST	Dr Structure, Adj, Add Depth, Modified			
AK	• _Dr Structure, Adj, Case 1, Modified			
C4	<ul><li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li><li>Grading, Sidewalk</li></ul>			
<b>C4</b>	Sidewalk, Conc, 4 inch, Modified			
	Sidewalk, Conc, 4 inch, Modified     Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem			
	Grading, Sidewalk			
C4HE	Cement			
	• _Sidewalk, Conc, 4 inch, Modified			
	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem			
	• Grading, Sidewalk			
	Grading, Sidewalk Ramp			
C6	Detectable Warning Surface, Modified			
	Sidewalk Ramp, Conc, 6 inch, Modified			
	Sidewalk, Conc, 6 inch, Modified			
C8	Grading, Driveway Approach			
Co	<ul> <li>_Driveway, Nonreinf Conc, 8 inch, Modified</li> </ul>			
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem			
	• _Grading, Driveway Approach			
	• _Grading, Sidewalk			
	• _Grading, Sidewalk Ramp			
C HE	• Cement			
	• _Driveway, Nonreinf Conc, 6 inch, Modified			
	• _Driveway, Nonreinf Conc, 8 inch, Modified			
	Detectable Warning Surface, Modified     Sidewalls Dawn, Care Circle Medified			
	• _Sidewalk Ramp, Conc, 6 inch, Modified			
	<ul> <li>_Sidewalk, Conc, 6 inch, Modified</li> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>			
C/G	• _Curb and Gutter, Conc			
	_Curb, Gutter, and Curb and Gutter, Any Type, Rem			
C/GHE	• Cement			
	_Driveway Opening, Conc, Det M, Modified			
OD	Grading, Sidewalk			
CP	Sidewalk, Conc, 4 inch, Modified  Sidewalk, Conc, 4 inch, Modified			
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem			
	• Dr Structure, Rem			
DS	Sewer, Rem, Less than 24 inch			
	Dr Structure, 24 inch dia			
	Dr Structure, Rem			
DSDI	Sewer, Rem, Less than 24 inch			
	• _Dr Structure, Double Inlet			
PT	• _Dr Structure, Point			
	Dr Structure Cover, Type B			
RRA	Dr Structure Cover, Type B, Special     Dr Structure Additional Additional Section 1. 1			
	• _Dr Structure, Adj, Case 1, Modified			
	Dr Structure, Temp Lowering, Modified     Dr Structure, Cover Type K			
RRK	Dr Structure Cover, Type K     Dr Structure Adi Case 1 Modified			
RS	Dr Structure, Adj, Case 1, Modified     Dr Structure, Reconstruct			
	Plastic Drum, High Intensity, Lighted, Furn			
TYPE II	Plastic Drum, High Intensity, Lighted, Poer     Plastic Drum, High Intensity, Lighted, Oper			
	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn			
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper			
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## **CONSTRUCTION METHOD AND SEQUENCING**

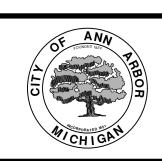
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- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 2 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
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- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

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CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org 2–27–18 GS,CE DAD Know what's **be**OATE DRAWN CHECKED

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



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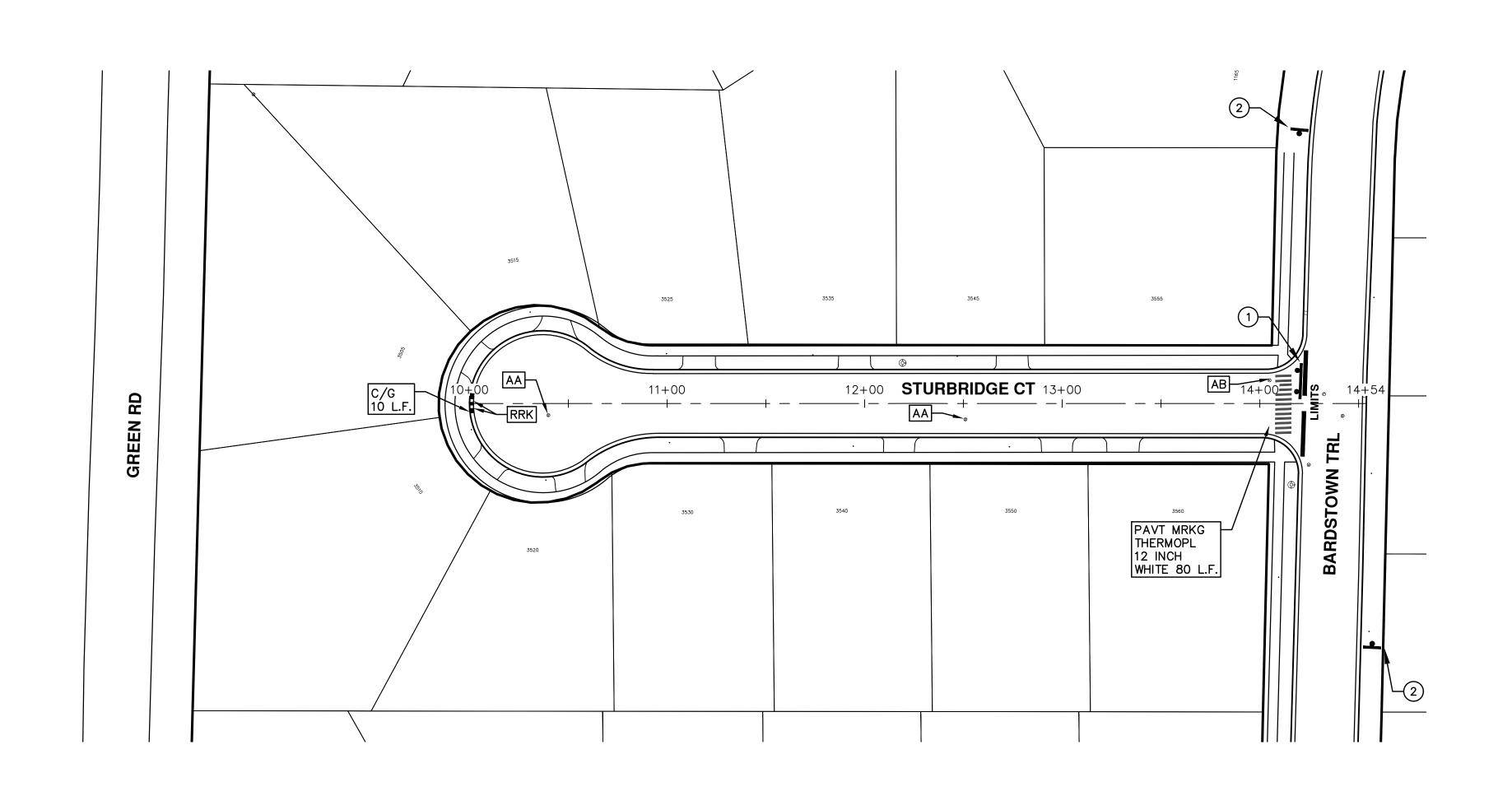
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NEERING - PUBLIC

SCALE DRAWING No.

SHEET No.



TRAF	FIC CONTROL SIGN	
	SIGN	NUMBER
1	ROAD CLOSED LOCAL TRAFFIC ONLY W/ TYPE III BARRICADE	R11-3a 60x30
2	ROAD WORK AHEAD	W20-1 36"x36"
	STURBRIDGE CT	D3-1 36"X36"

ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

BRAWING No.

STURBRIDGE COURT

STURBRIDGE COURT

STA. 10+00 - STA. 14+54



## PROJECT LOCATION: SULGRAVE PLACE

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM #	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

TRAFFIC CONTROL & SIGN LEGEND			
QTY.	TYPE	DESCRIPTION	
	W20-1	"ROAD WORK AHEAD"	
	W20-3	"ROAD CLOSED AHEAD"	
	D3-1	CONVENTIONAL GUIDE	
	TYPE III	TYPE III LIGHTED BARRICADE	
	R11-4	Road Closed to Thru Traffic	
	TYPE II	TYPE II BARRICADE DRUM	

KEY	ASSOCIATED PAY ITEM(S)
	Dr Structure, Adj, Case 1, Modified
AA	• Dr Structure, Adj, Case 2, Modified
	Dr Structure, Temp Lowering, Modified
	Dr Structure, Temp Lowering, Modified
	• _Gate Box, Adj, Case 1
AB	• _Gate Box, Adj, Case 2
	Monument Box Adjust
ADST	Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
C4	Grading, Sidewalk
	_Sidewalk, Conc, 4 inch, Modified
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren</li> </ul>
	Grading, Sidewalk
C4HE	• Cement
	• _Sidewalk, Conc, 4 inch, Modified
	<ul> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren</li> </ul>
	Grading, Sidewalk
	Grading, Sidewalk Ramp
C6	Detectable Warning Surface, Modified
	Sidewalk Ramp, Conc, 6 inch, Modified
	Sidewalk, Conc, 6 inch, Modified
	Grading, Driveway Approach
C8	Driveway, Nonreinf Conc, 8 inch, Modified
	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
	Grading, Driveway Approach     Grading, Driveway Approach
	Grading, Sidewalk
	Grading, Sidewalk Ramp
	• Cement
C HE	• _Driveway, Nonreinf Conc, 6 inch, Modified
	Driveway, Nonreinf Conc, 8 inch, Modified
	Detectable Warning Surface, Modified
	_Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
	Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/G	• _Curb and Gutter, Conc
	_Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/GHE	• Cement
J/ JI IL	Driveway Opening, Conc, Det M, Modified
	Grading, Sidewalk
CP	• _Sidewalk, Conc, 4 inch, Modified
CR	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
OIT	Dr Structure, Rem
DS	Sewer, Rem, Less than 24 inch
20	• Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	Sewer, Rem, Less than 24 inch
וטטטו	• _Dr Structure, Double Inlet
PT	Dr Structure, Point
1.1.	Dr Structure Cover, Type B
	Dr Structure Cover, Type B     Dr Structure Cover, Type B, Special
RRA	Dr Structure, Adj. Case 1, Modified
	_Dr Structure, Adj, Case 1, Modified     _Dr Structure, Temp Lowering, Modified
	Dr Structure, Terrip Lowering, Modified     Dr Structure Cover, Type K
RRK	
De	• _Dr Structure, Adj, Case 1, Modified
RS	Dr Structure, Reconstruct     Digital Drum, High Intensity, Lighted Furn
	Plastic Drum, High Intensity, Lighted, Furn
TYPE II	Disatis Dunna High Interactive Hightest Occur
TYPE II	<ul> <li>Plastic Drum, High Intensity, Lighted, Oper</li> <li>Barricade, Type III, High Intensity, Double Sided, Lighted, Furn</li> </ul>

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- 4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES
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- 6. MILL 4 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR
  ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK.
- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEE
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CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org SCRIPTION DATE DRAWN CHECKED Call before

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734-794-6410
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ARBOR SURFACING - 2018

STREET RESURF

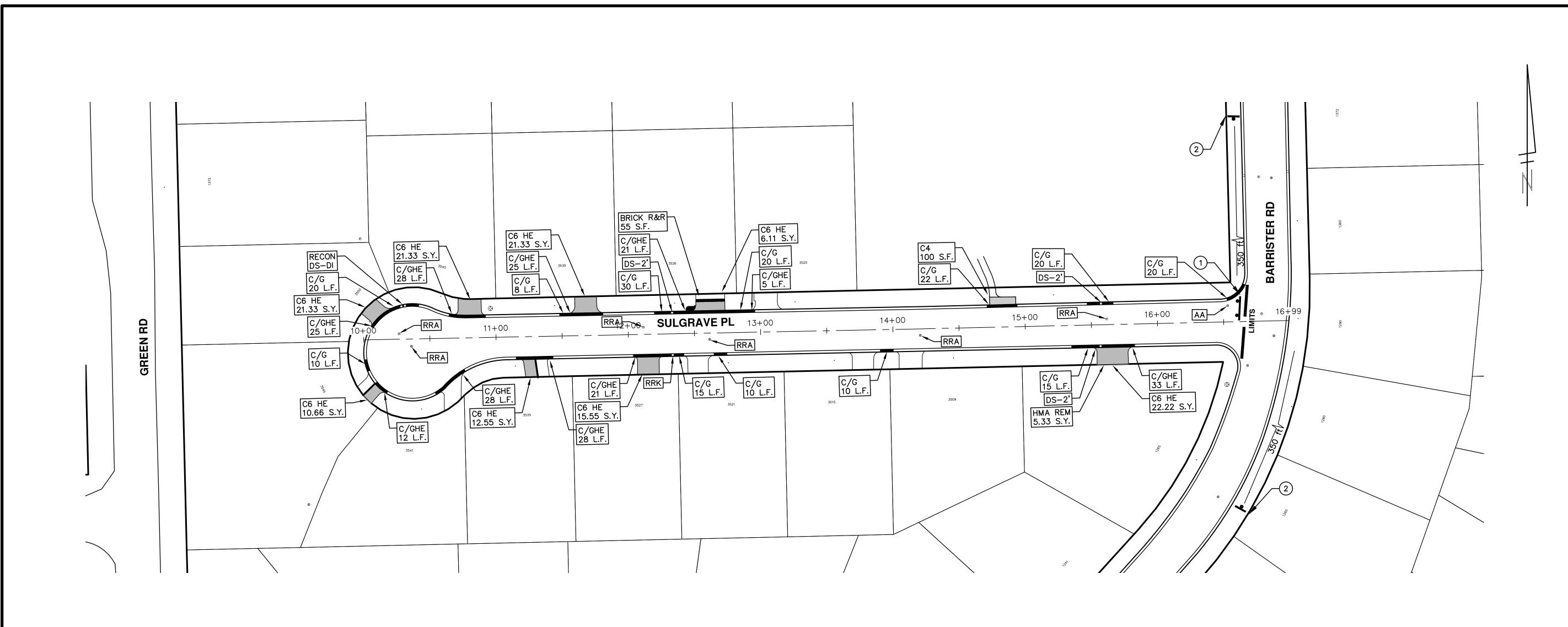
SERVICES - CITY O ANNUAL STRE

PUBLIC SERVICES

INEERING - PUB

SCALE
DRAWING No.

SHEET No.



TRAF	FIC CONTROL SIGN	
	SIGN	NUMBER
1	ROAD CLOSED LOCAL TRAFFIC ONLY	R11-3a 60x30
	BARRICADE	
2	ROAD WORK AHEAD	W20-1 36"x36'
	SULGRAVE PL	D3-1 36"x36

 $\infty$ ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

BRAWING No.

2018004-27 27 OF 72

\2018004\Plan Production\2018004 - Sulgrave Place.dwg Dwg Created: 22-Sep-17 - \_a2 standard bw.stb - Plot Date:



## PROJECT LOCATION: WINDEMERE DRIVE

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

	TR	AFFIC CONTROL & SIGN LEGEND		
QTY.	TYPE	DESCRIPTION		
	W20-1	"ROAD WORK AHEAD"		
	W20-3	"ROAD CLOSED AHEAD"		
	D3-1	CONVENTIONAL GUIDE		
	TYPE III	TYPE III LIGHTED BARRICADE		
	R11-4	Road Closed to Thru Traffic		
	TYPE II	TYPE II BARRICADE DRUM		

KEY	ASSOCIATED PAY ITEM(S)
	Dr Structure, Adj, Case 1, Modified
AA	Dr Structure, Adj, Case 1, Modified     Dr Structure, Adj, Case 2, Modified
AA	=
	_Dr Structure, Temp Lowering, Modified     _Dr Structure, Temp Lowering, Modified
	• _Dr Structure, Temp Lowering, Modified
AB	• _Gate Box, Adj, Case 1
	• _Gate Box, Adj, Case 2
	_Monument Box Adjust
ADST	<ul> <li>_Dr Structure, Adj, Add Depth, Modified</li> </ul>
AK	<ul> <li>_Dr Structure, Adj, Case 1, Modified</li> </ul>
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4	• _Grading, Sidewalk
	<ul> <li>_Sidewalk, Conc, 4 inch, Modified</li> </ul>
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li> </ul>
121 121 122	• _Grading, Sidewalk
C4HE	• Cement
	• _Sidewalk, Conc, 4 inch, Modified
	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	• _Grading, Sidewalk
C6	• _Grading, Sidewalk Ramp
	_Detectable Warning Surface, Modified
	_Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C8	Grading, Driveway Approach
CO	<ul> <li>_Driveway, Nonreinf Conc, 8 inch, Modified</li> </ul>
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	Grading, Driveway Approach
	• _Grading, Sidewalk
	- Grading, Sidewalk Ramp
	• Cement
C HE	<ul> <li>Driveway, Nonreinf Conc, 6 inch, Modified</li> </ul>
	Driveway, Nonreinf Conc, 8 inch, Modified
	Detectable Warning Surface, Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C/G	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
0/0	_Curb and Gutter, Conc
	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
C/GHE	Cement
	<ul> <li>_Driveway Opening, Conc, Det M, Modified</li> </ul>
OD	Grading, Sidewalk
CP	• _Sidewalk, Conc, 4 inch, Modified
CR	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
J. (	Dr Structure, Rem
DS	Sewer, Rem, Less than 24 inch
20	• Dr Structure, 24 inch dia
DOD	• Dr Structure, Rem
DSDI	• Sewer, Rem, Less than 24 inch
****	• _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
	Dr Structure Cover, Type B
DDA	• _Dr Structure Cover, Type B, Special
RRA	Dr Structure, Adj, Case 1, Modified
	Dr Structure, Temp Lowering, Modified
	Dr Structure Cover, Type K
RRK	
DC	• _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn
* * * * * * * * * * * * * * * * * * *	Plastic Drum, High Intensity, Lighted, Oper
	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper

## CONSTRUCTION METHOD AND SEQUENCING

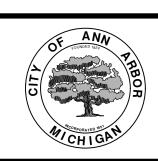
- 1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER
- 2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLAN AND AS DIRECTED BY THE ENGINEER.
- i. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND A DIRECTED BY THE ENGINEER.
- 4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND A DIRECTED BY THE ENGINEER.
- . MILL 4 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER, PROOF ROLL WITH FULL TRUCK.
- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEE
- 8. GRADE, SHAPE, AND RE—COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 2 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## 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 IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.

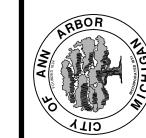


## **ENGINEERING**

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org 2–27–18 GS,CE DAD Know what's **b**DATE DRAWN CHECKED 

Call before

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



3 - 2018

EET RESURFACING

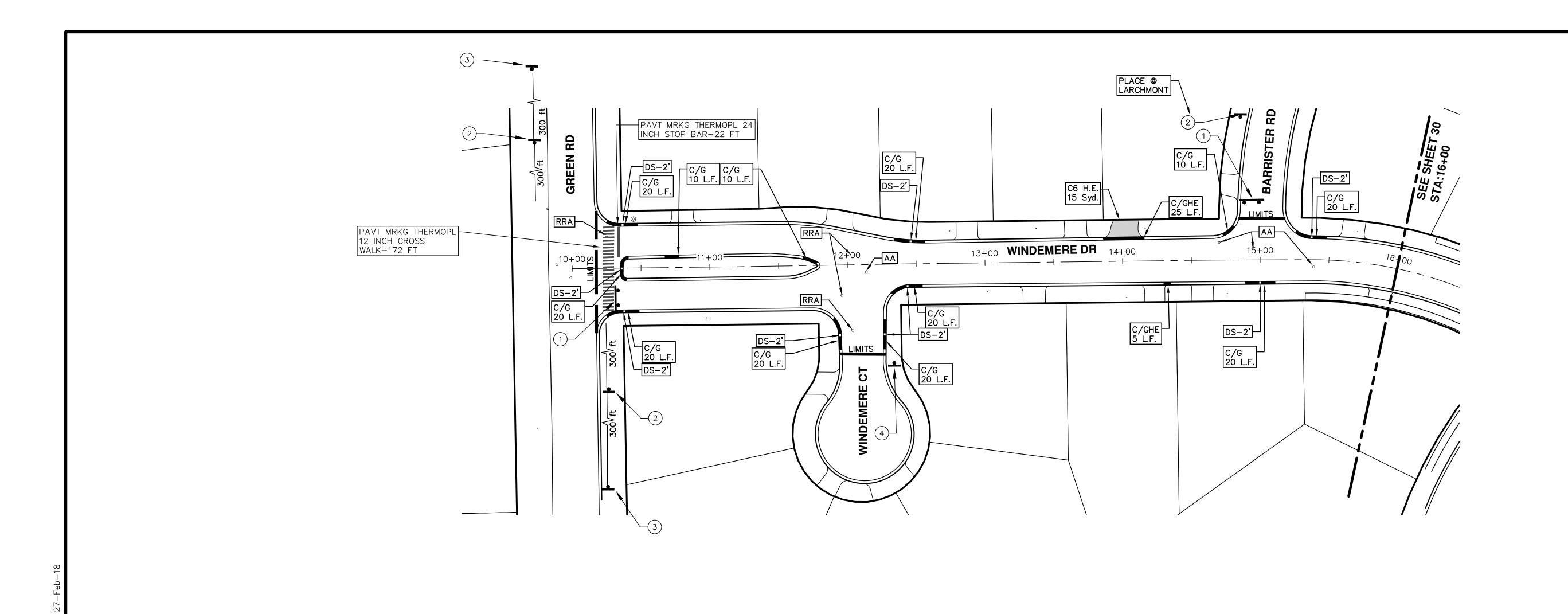
RVICES - CITY OF AI ANNUAL STREET

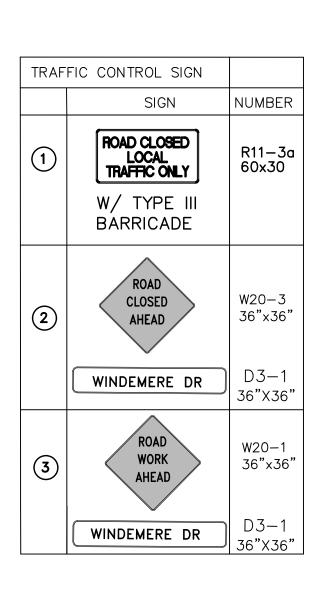
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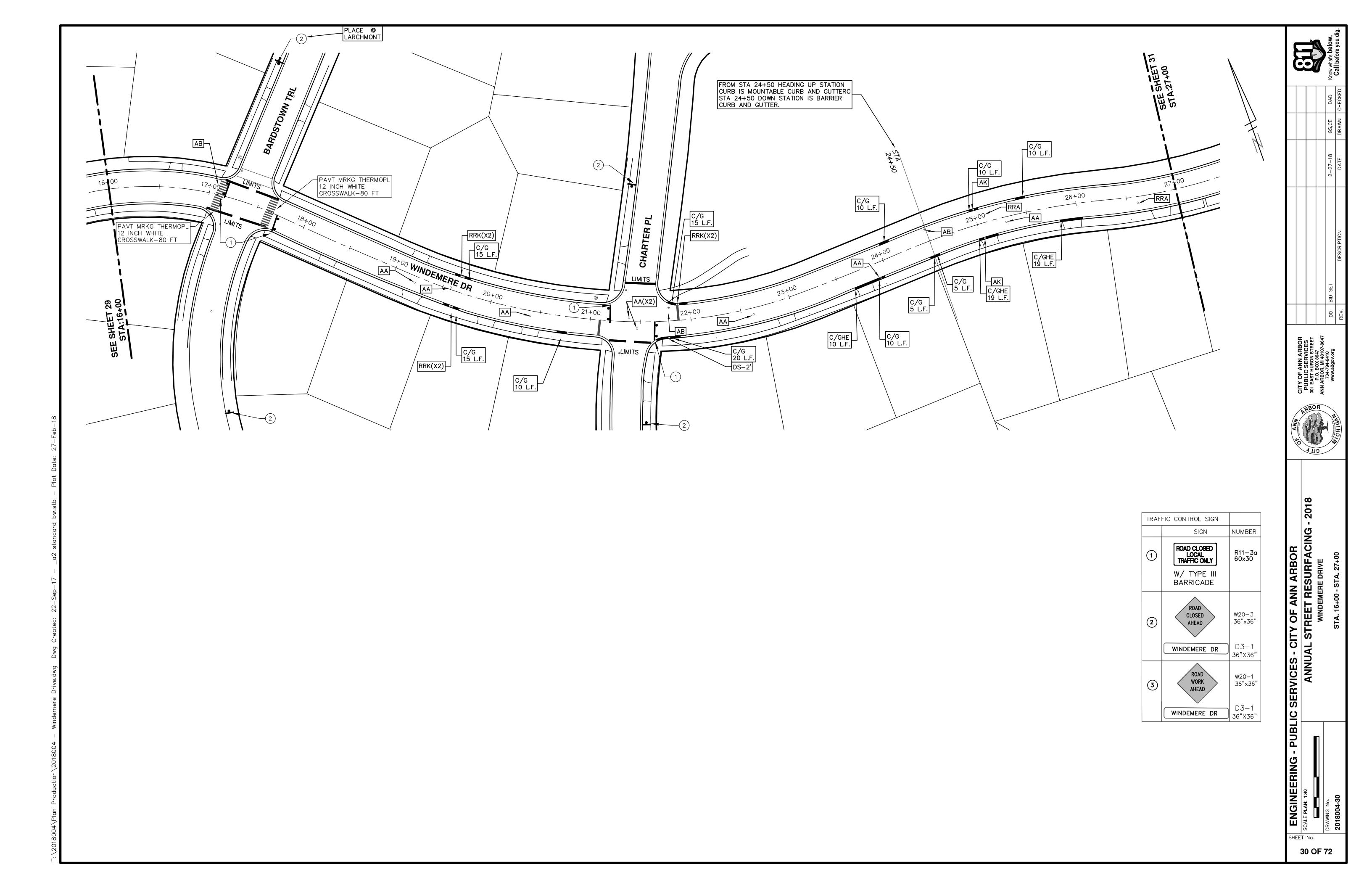
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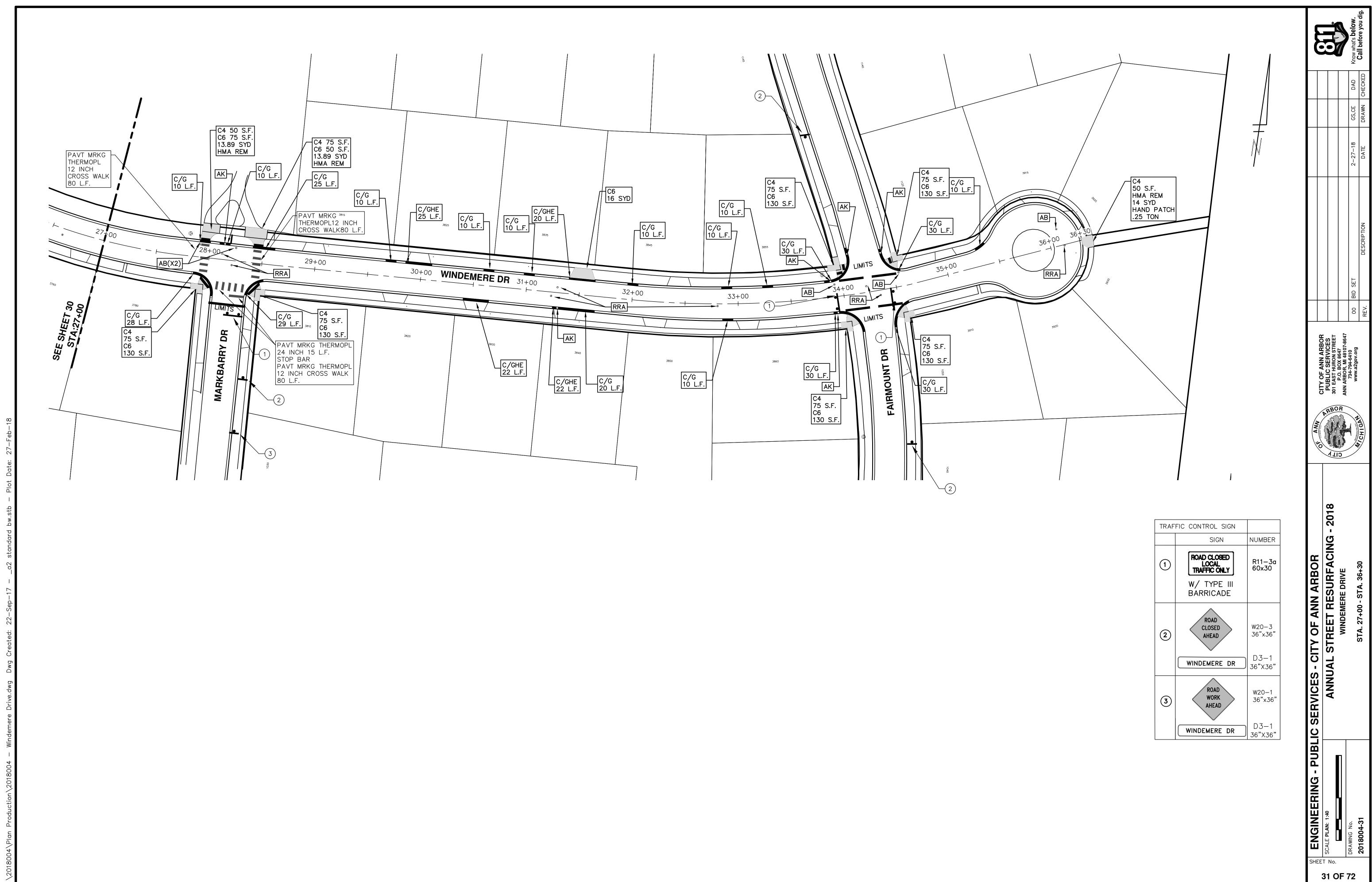
SCALE
DRAWING No.

SHEET No.











## PROJECT LOCATION: WEST DOBSON PL

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

	TF	AFFIC CONTROL & SIGN LEGEND
QTY.	TYPE	DESCRIPTION
	W20-1	"ROAD WORK AHEAD"
	W20-3	"ROAD CLOSED AHEAD"
	D3-1	CONVENTIONAL GUIDE
	TYPE III	TYPE III LIGHTED BARRICADE
	R11-4	Road Closed to Thru Traffic
	TYPE II	TYPE II BARRICADE DRUM

CIATED PAY ITEM(S)		
Structure, Adj, Case 1, Modified		
Structure, Adj, Case 1, Modified		
10.000 (10.000 ) (10.000 ) (10.000 )		
Structure, Temp Lowering, Modified Structure, Temp Lowering, Modified		
e Box, Adj, Case 1		
e Box, Adj, Case 2		
ument Box Adjust		
structure, Adj, Add Depth, Modified		
structure, Adj, Case 1, Modified		
ewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem		
ding, Sidewalk		
ewalk, Conc, 4 inch, Modified		
ewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem		
ding, Sidewalk		
ent		
ewalk, Conc, 4 inch, Modified		
ewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem		
ding, Sidewalk		
ding, Sidewalk Ramp		
ectable Warning Surface, Modified		
ewalk Ramp, Conc, 6 inch, Modified		
• 1 1		
ewalk, Conc, 6 inch, Modified		
ding, Driveway Approach		
eway, Nonreinf Conc, 8 inch, Modified		
ewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem		
ding, Driveway Approach		
ding, Sidewalk		
ding, Sidewalk Ramp		
ent		
eway, Nonreinf Conc, 6 inch, Modified		
eway, Nonreinf Conc, 8 inch, Modified		
ectable Warning Surface, Modified		
ewalk Ramp, Conc, 6 inch, Modified		
ewalk, Conc, 6 inch, Modified		
o, Gutter, and Curb and Gutter, Any Type, Rem		
and Gutter, Conc		
o, Gutter, and Curb and Gutter, Any Type, Rem		
ent		
eway Opening, Conc, Det M, Modified		
ding, Sidewalk		
ewalk, Conc, 4 inch, Modified		
ewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem		
ructure, Rem		
er, Rem, Less than 24 inch		
ructure, 24 inch dia		
ructure, Rem		
r, Rem, Less than 24 inch		
structure, Double Inlet		
Structure, Point		
ructure Cover, Type B		
Structure Cover, Type B, Special		
Structure, Adj, Case 1, Modified		
structure, Temp Lowering, Modified		
ructure Cover, Type K		
Structure, Adj, Case 1, Modified		
Structure, Reconstruct		
,		
Plastic Drum, High Intensity, Lighted, Furn     Plastic Drum, High Intensity, Lighted, Oper     Barricade, Type III, High Intensity, Double Sided, Lighted, Furn     Barricade, Type III, High Intensity, Double Sided, Lighted, Oper		

## **CONSTRUCTION METHOD AND SEQUENCING**

- LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES

- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 2 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE
- COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN—UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## 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.

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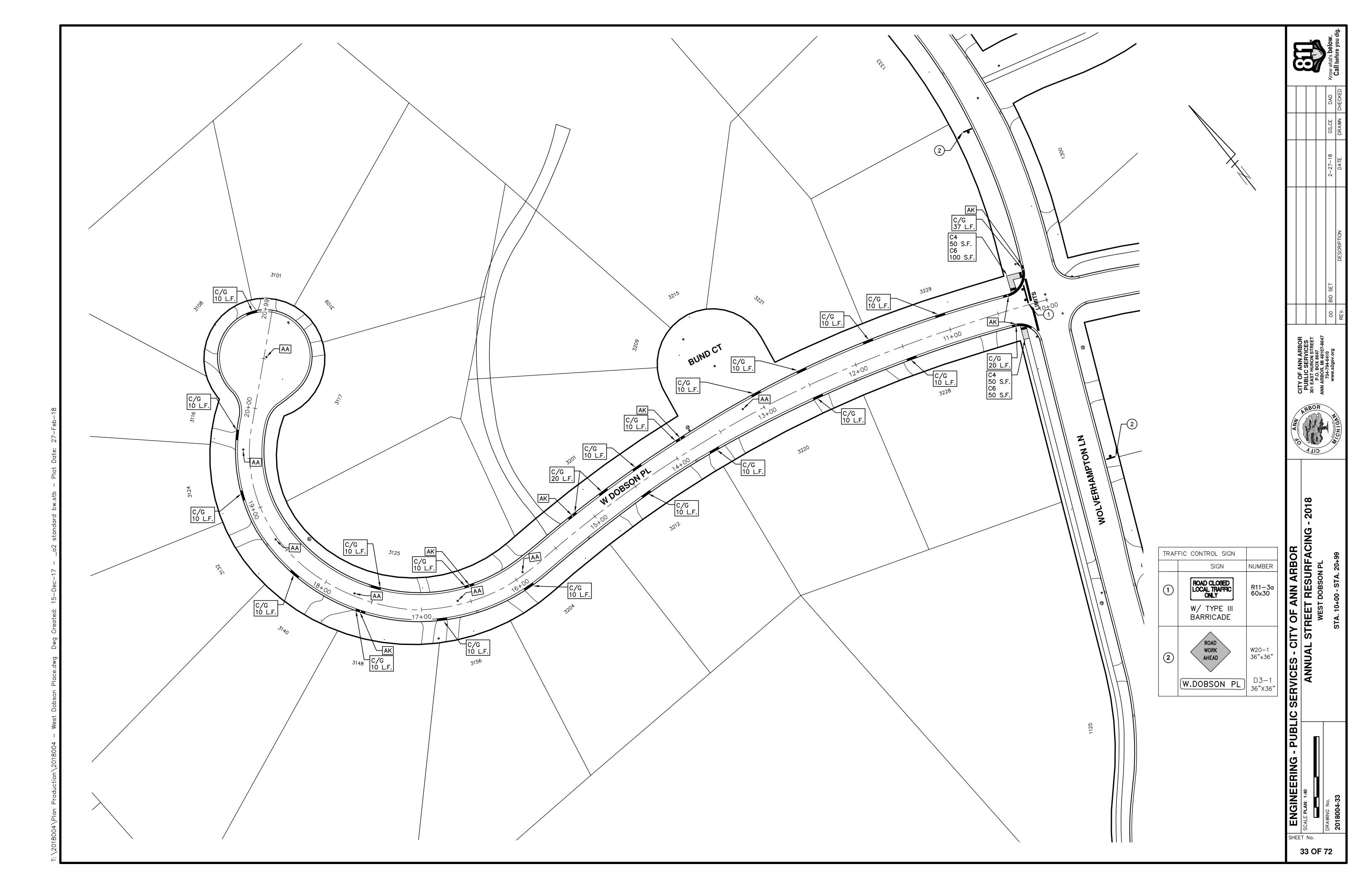


## **ENGINEERING**

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



SHEET No.





## PROJECT LOCATION: EAST DOBSON PL

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	
207	Cold Miling Pavement	S.Y.	
209	Subgrade Undercutting - Type II	C.Y.	
220	HMA Patching	Tons	
222	HMA Pavement Leveling, Regular	Tons	
224	HMA Pavement Wearing, 36A	Tons	
230	Rem. Curb & Gutter, Any Type	L.F.	
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	
240	4" Sidewalk or Ramp	S.F.	
241	6" Drive, Sidewalk or Ramp	S.F.	
245	Detectable Warning, Cast in Place	S.F.	
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	
250	2' Dia. Structure	Each	
254	Lower Structure Cover	Each	
255	Lower Mon./Gate Valve Box	Each	
256	Adjust Structure Cover	Each	
257	Adjust Curb Inlet Structure Cover	Each	
258	Adjust Mon. or Gate Valve Box	Each	
259	Manhole Flange & Cover (MDOT Type A)	Each	
261	Pt. Drain Structures	Each	
264	12" Sewer, Trench Detail I, Modified	L.F.	
268	Flowable Fill	C.Y.	
271	21AA Limestone - C.I.P.	C.Y.	
282	Plastic Drum - Lighted - Furn. & Operate	Each	
283	Barricade Type III - Furn. & Operate	Each	
284	Temp Signs Type - B	S.F.	
285	No Parking Sign	Each	
291	12" Thermo. White or Yellow	L.F.	
594	4" White Thermo.	L.F.	
595	4" Yellow Thermo.	L.F.	
596	6" White Thermo.	L.F.	
597	24" White Thermo.	L.F.	
598	Pvmt. Marking Symbol	Each	

TRAFFIC CONTROL & SIGN LEGEND				
QTY.	TYPE	DESCRIPTION		
	W20-1	"ROAD WORK AHEAD"		
	W20-3	"ROAD CLOSED AHEAD"		
	D3-1	CONVENTIONAL GUIDE		
	TYPE III	TYPE III LIGHTED BARRICADE		
	R11-4	Road Closed to Thru Traffic		
	TYPE II	TYPE II BARRICADE DRUM		

VEV	CONSTRUCTION KEY
KEY	ASSOCIATED PAY ITEM(S)
	• _Dr Structure, Adj, Case 1, Modified
AA	• _Dr Structure, Adj, Case 2, Modified
	_Dr Structure, Temp Lowering, Modified
	_Dr Structure, Temp Lowering, Modified
۸D	• _Gate Box, Adj, Case 1
AB	• _Gate Box, Adj, Case 2
	Monument Box Adjust
ADST	Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li> </ul>
C4	Grading, Sidewalk
04	• _Sidewalk, Conc, 4 inch, Modified
	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4HE	• _Grading, Sidewalk
	• Cement
	• _Sidewalk, Conc, 4 inch, Modified
	<ul> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li> </ul>
	• _Grading, Sidewalk
C6	• _Grading, Sidewalk Ramp
00	_Detectable Warning Surface, Modified
	<ul> <li>_Sidewalk Ramp, Conc, 6 inch, Modified</li> </ul>
	Sidewalk, Conc, 6 inch, Modified
	Grading, Driveway Approach
C8	• _Driveway, Nonreinf Conc, 8 inch, Modified
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li> </ul>
	Grading, Driveway Approach     Grading, Driveway Approach
	Grading, Silveway Approach     Grading, Sidewalk
	• _Grading, Sidewalk Ramp
CHE	• Cement
	• _Driveway, Nonreinf Conc, 6 inch, Modified
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	_Detectable Warning Surface, Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C/G	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
U/G	• _Curb and Gutter, Conc
	Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/GHE	• Cement
	Driveway Opening, Conc, Det M, Modified
	Grading, Sidewalk
CP	• _Sidewalk, Conc, 4 inch, Modified
CR	<ul> <li>_Sidewalk, Conc, 4 inch, Modified</li> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem</li> </ul>
UN	
DO	Dr Structure, Rem     Saver Born Loop than 24 inch
DS	Sewer, Rem, Less than 24 inch
	Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	Sewer, Rem, Less than 24 inch
	• _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
	Dr Structure Cover, Type B
DD *	Dr Structure Cover, Type B, Special
RRA	• _Dr Structure, Adj, Case 1, Modified
	Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K     Dr Structure Adi Copp 1 Modified
	• _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn
"	Plastic Drum, High Intensity, Lighted, Oper
	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
TYPE III	

## **CONSTRUCTION METHOD AND SEQUENCING**

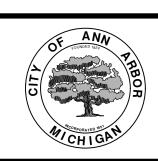
- 1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER
- 2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLA AND AS DIRECTED BY THE ENGINEER.
- 3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS
- 4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND A DIRECTED BY THE ENGINEER.
- 6. MILL 4 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK
- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEE
- 8. GRADE, SHAPE, AND RE—COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 2 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## 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.

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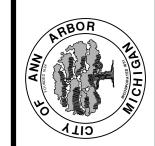
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## **ENGINEERING**

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org RIPTION DATE DRAWN CHECKED Call before

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



I ARBOR SURFACING - 2018

STREET RESURF

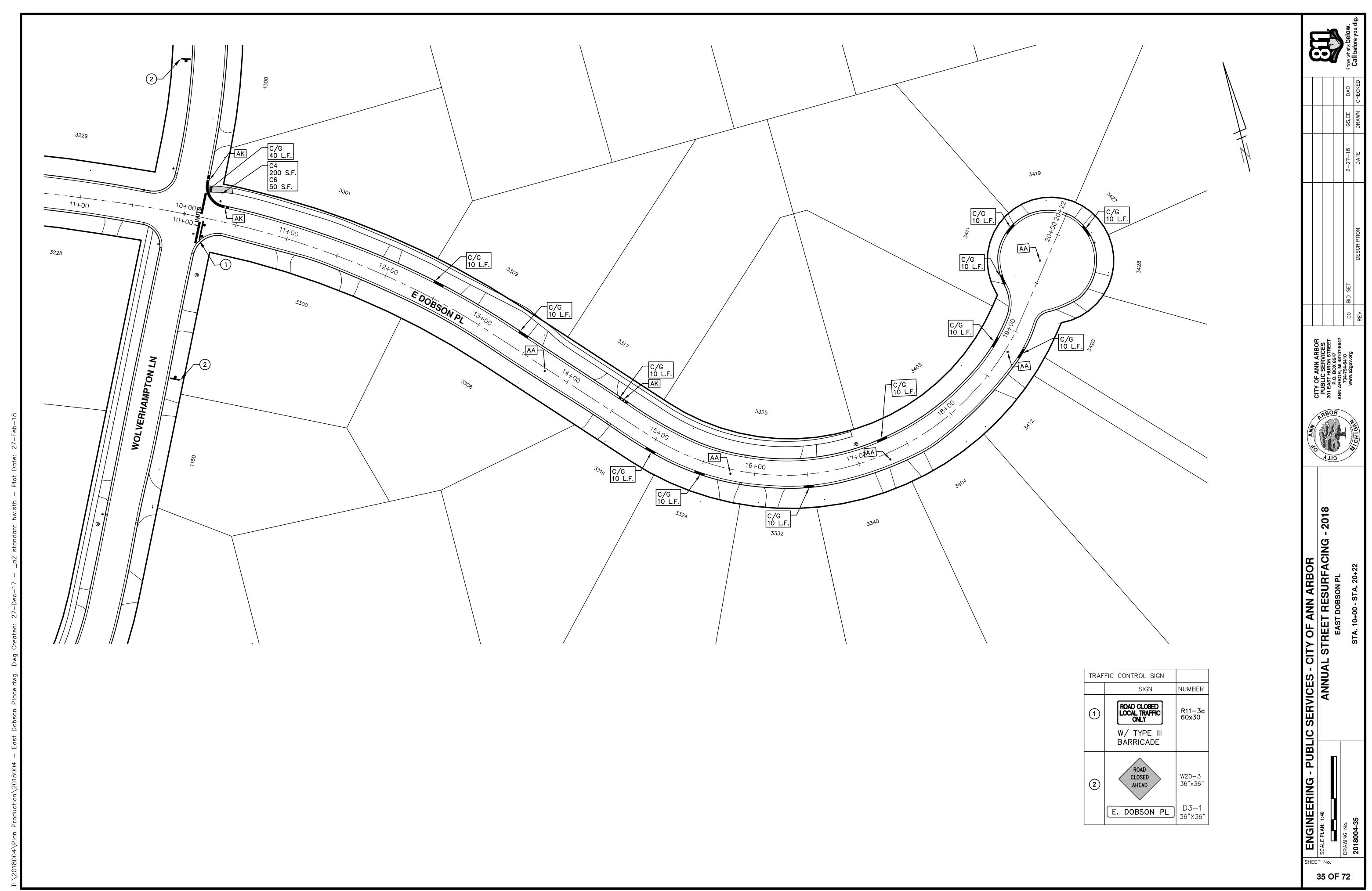
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PUBLIC SERVICE ANN

VEERING - PUBLIC

CALE

SHEET No.





## PROJECT LOCATION: WOLVERHAMPTON LN

ITB No. 4529 FILE No. 2018004

QUANTITIES					
ITEM #	DESCRIPTION	Units	Total		
206	Remove HMA Pavement	S.Y.			
207	Cold Miling Pavement	S.Y.			
209	Subgrade Undercutting - Type II	C.Y.			
220	HMA Patching	Tons			
222	HMA Pavement Leveling, Regular	Tons			
224	HMA Pavement Wearing, 36A	Tons			
230	Rem. Curb & Gutter, Any Type	L.F.			
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.			
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.			
240	4" Sidewalk or Ramp	S.F.			
241	6" Drive, Sidewalk or Ramp	S.F.			
245	Detectable Warning, Cast in Place	S.F.			
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.			
250	2' Dia. Structure	Each			
254	Lower Structure Cover	Each			
255	Lower Mon./Gate Valve Box	Each			
256	Adjust Structure Cover	Each			
257	Adjust Curb Inlet Structure Cover	Each			
258	Adjust Mon. or Gate Valve Box	Each			
259	Manhole Flange & Cover (MDOT Type A)	Each			
261	Pt. Drain Structures	Each			
264	12" Sewer, Trench Detail I, Modified	L.F.			
268	Flowable Fill	C.Y.			
271	21AA Limestone - C.I.P.	C.Y.			
282	Plastic Drum - Lighted - Furn. & Operate	Each			
283	Barricade Type III - Furn. & Operate	Each			
284	Temp Signs Type - B	S.F.			
285	No Parking Sign	Each			
291	12" Thermo. White or Yellow	L.F.			
594	4" White Thermo.	L.F.			
595	4" Yellow Thermo.	L.F.			
596	6" White Thermo.	L.F.			
597	24" White Thermo.	L.F.			
598	Pvmt. Marking Symbol	Each			

TRAFFIC CONTROL & SIGN LEGEND					
QTY.	TYPE	DESCRIPTION			
	W20-1	"ROAD WORK AHEAD"			
	W20-3	"ROAD CLOSED AHEAD"			
	D3-1	CONVENTIONAL GUIDE			
	TYPE III	TYPE III LIGHTED BARRICADE			
	R11-4	Road Closed to Thru Traffic			
	TYPE II	TYPE II BARRICADE DRUM			

KEY	ASSOCIATED PAY ITEM(S)
IXLI	Dr Structure, Adj, Case 1, Modified
Λ Λ	
AA	• _Dr Structure, Adj, Case 2, Modified
	• _Dr Structure, Temp Lowering, Modified
	• _Dr Structure, Temp Lowering, Modified
AB	• _Gate Box, Adj, Case 1
	• _Gate Box, Adj, Case 2
	• _Monument Box Adjust
ADST	_Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
	<ul> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer</li> </ul>
C4	• _Grading, Sidewalk
	• _Sidewalk, Conc, 4 inch, Modified
	<ul> <li>_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer</li> </ul>
C4HE	• _Grading, Sidewalk
OHIL	Cement
	• _Sidewalk, Conc, 4 inch, Modified
	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer
	• Grading, Sidewalk
-00	Grading, Sidewalk Ramp
C6	Detectable Warning Surface, Modified
	Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
	Grading, Driveway Approach
C8	Driveway, Nonreinf Conc, 8 inch, Modified
	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer
	Grading, Driveway Approach     Grading, Driveway Approach
	• _Grading, Sidewalk
	• _Grading, Sidewalk Ramp
CHE	Cement     Discussion Company Climate Madified
	• _Driveway, Nonreinf Conc, 6 inch, Modified
	<ul> <li>_Driveway, Nonreinf Conc, 8 inch, Modified</li> </ul>
	_Detectable Warning Surface, Modified
	<ul> <li>_Sidewalk Ramp, Conc, 6 inch, Modified</li> </ul>
	• _Sidewalk, Conc, 6 inch, Modified
C/G	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
0/0	• _Curb and Gutter, Conc
	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
C/GHE	Cement
	<ul> <li>_Driveway Opening, Conc, Det M, Modified</li> </ul>
	Grading, Sidewalk
CP	• _Sidewalk, Conc, 4 inch, Modified
CR	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer
<u> </u>	• Dr Structure, Rem
DS	Sewer, Rem, Less than 24 inch
50	Dr Structure, 24 inch dia
	Di Structure, 24 inch dia      Dr Structure, Rem
Debi	
DSDI	Sewer, Rem, Less than 24 inch     Dr Structure, Double Inlet
DT	• _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
	Dr Structure Cover, Type B
RRA	• _Dr Structure Cover, Type B, Special
	• _Dr Structure, Adj, Case 1, Modified
	_Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K
INIMX	• _Dr Structure, Adj, Case 1, Modified
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn
	Plastic Drum, High Intensity, Lighted, Oper
	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
TYPE III	• Dailicade, Type III, High Intensity, Double Sided, Lidhted, Fulli

## **CONSTRUCTION METHOD AND SEQUENCING**

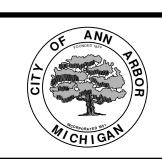
- 1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER
- 2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLA AND AS DIRECTED BY THE ENGINEER.
- 3. INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS
- 4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES
- . PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND A DIRECTED BY THE ENGINEER.
- . MILL 4 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER, PROOF ROLL WITH FULL TRUCK.
- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEE
- 8. GRADE, SHAPE, AND RE—COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 2 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

## NOTES:

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## **ENGINEERING**

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org 2-27-18 GS,CE DAD Know what's belong the control of the control of

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



STREET RESURFACING - 2

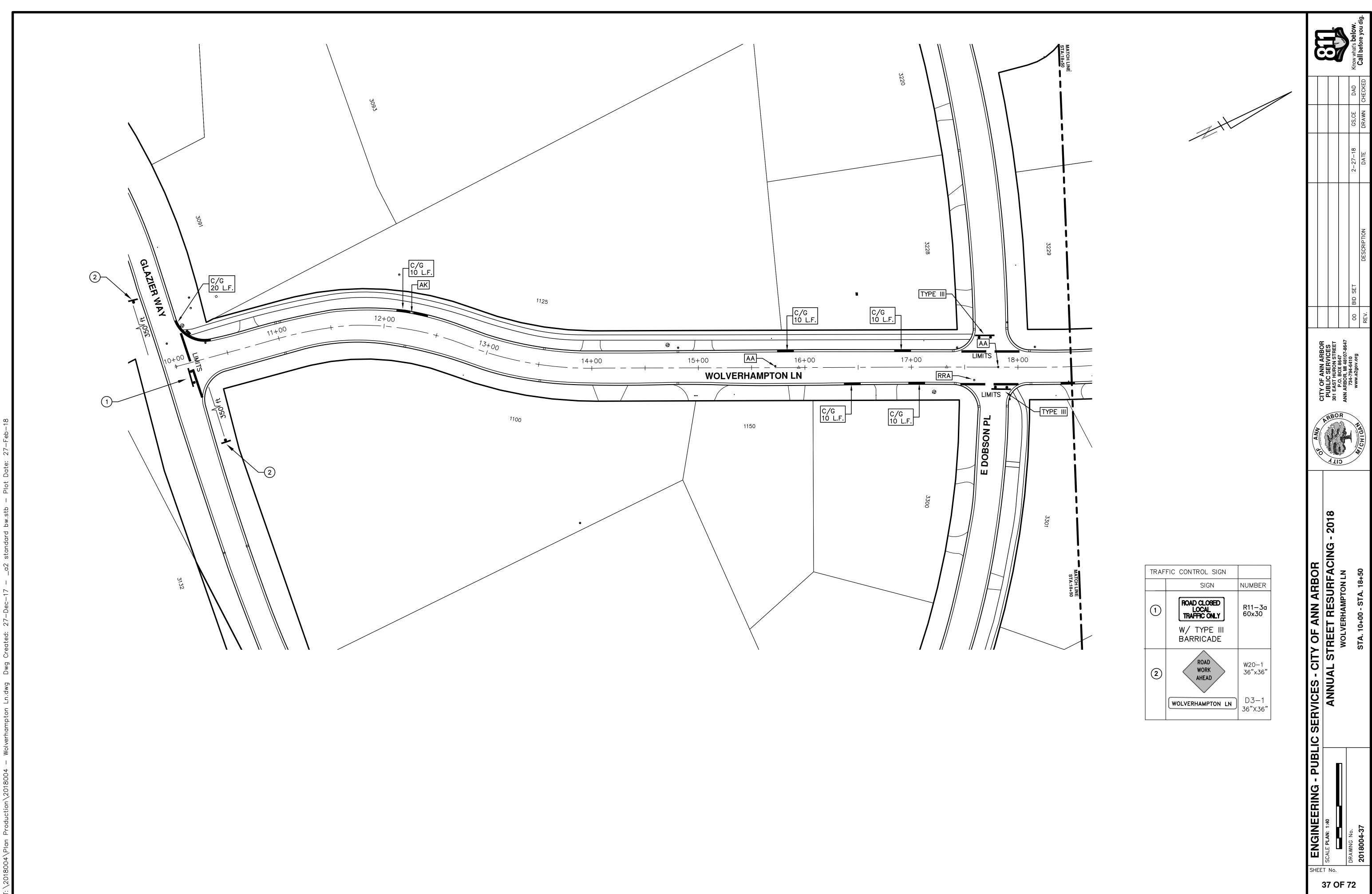
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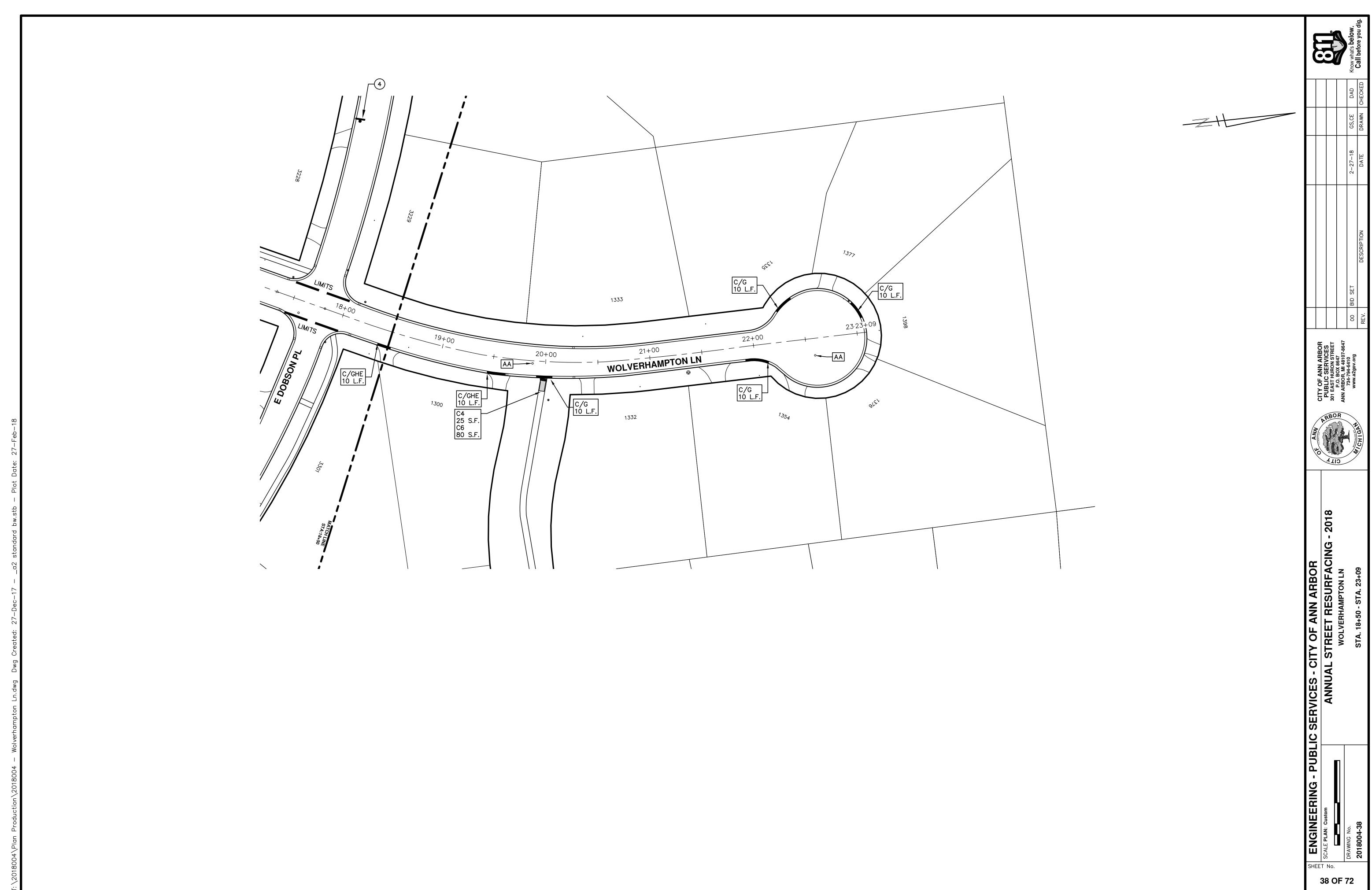
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SCALE
DRAWING No.

SHEET No.

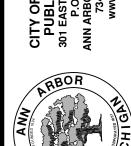






# CITY OF ANN ARBOR ENGINEERING

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		GS,CE	DRAWN	
		2-27-18	DATE	
			TION	



SHEET No.

39 OF 72

# PROJECT LOCATION: EB & WB JACKSON AVENUE

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	28
207	Cold Miling Pavement	Tons	270
209	Subgrade Undercutting - Type II	C.Y.	160
220	HMA Patching	Tons	3
222	HMA Pavement Leveling, Regular	Tons	180
224	HMA Pavement Wearing, 36A	Tons	90
230	Rem. Curb & Gutter, Any Type	L.F.	490
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	300
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	490
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	300
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	4
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	4
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	3
261	Pt. Drain Structures	Each	2
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	14
271	21AA Limestone - C.I.P.	C.Y.	160
282	Plastic Drum - Lighted - Furn. & Operate	Each	18
283	Barricade Type III - Furn. & Operate	Each	2
284	Temp Signs Type - B	S.F.	101
285	No Parking Sign	Each	13
291	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	70
597	24" White Thermo.	L.F.	15
598	Pvmt. Marking Symbol	Each	0

	TRAFF	FIC CONTROL & SIGN LEGEND
QTY.	TYPE	DESCRIPTION
2	W20-1	"ROAD WORK AHEAD"
2	W20-3	"ROAD CLOSED AHEAD"
3	D3-1	CONVENTIONAL GUIDE
2	TYPE III	TYPE III LIGHTED BARRICADE
2	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

KEY	ASSOCIATED PAY ITEM(S)
IXL.	Dr Structure, Adj, Case 1, Modified
AA	Dr Structure, Adj, Case 1, Modified     Dr Structure, Adj, Case 2, Modified
~~	_Dr Structure, Temp Lowering, Modified
	Dr Structure, Temp Lowering, Modified
	• _Gate Box, Adj, Case 1
AB	• _Gate Box, Adj, Case 2
	Monument Box Adjust
ADST	_Dr Structure, Adj, Add Depth, Modified
AK	Dr Structure, Adj, Case 1, Modified
7 (1)	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer
C4	Grading, Sidewalk     Grading, Sidewalk
01	_Sidewalk, Conc, 4 inch, Modified
	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer
	Grading, Sidewalk
C4HE	• Cement
	Sidewalk, Conc, 4 inch, Modified
	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer
	Grading, Sidewalk     Grading, Sidewalk
	Grading, Sidewalk     Grading, Sidewalk Ramp
C6	_ Detectable Warning Surface, Modified
	_Sidewalk Ramp, Conc, 6 inch, Modified
	Sidewalk, Conc, 6 inch, Modified
	Grading, Driveway Approach
C8	Driveway, Nonreinf Conc, 8 inch, Modified
	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer
	Grading, Driveway Approach     Grading, Driveway Approach
	Grading, Sidewalk
	Grading, Sidewalk Ramp
	• Cement
C HE	Driveway, Nonreinf Conc, 6 inch, Modified
	Driveway, Nonreinf Conc, 8 inch, Modified
	Detectable Warning Surface, Modified
	_Sidewalk Ramp, Conc, 6 inch, Modified
	_Sidewalk, Conc, 6 inch, Modified
	_Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/G	• _Curb and Gutter, Conc
	_Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/GHE	• Cement
OFOTIL	_Driveway Opening, Conc, Det M, Modified
	Grading, Sidewalk
CP	• _Sidewalk, Conc, 4 inch, Modified
CR	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rer
OIX	Dr Structure, Rem
DS	Sewer, Rem, Less than 24 inch
20	• Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	• Sewer, Rem, Less than 24 inch
505.	• _Dr Structure, Double Inlet
PT	Dr Structure, Point
	Dr Structure Cover, Type B
	Dr Structure Cover, Type B, Special
RRA	• _Dr Structure, Adj, Case 1, Modified
	_Dr Structure, Temp Lowering, Modified
	Dr Structure Cover, Type K
RRK	Dr Structure Cover, Type R     Dr Structure, Adj, Case 1, Modified
RS	_Dr Structure, Reconstruct
170	
TYPE II	Plastic Drum, High Intensity, Lighted, Furn     Plastic Drum, High Intensity, Lighted, Open
	Plastic Drum, High Intensity, Lighted, Oper     Pagricada, Type III, High Intensity, Double Sided, Lighted, European Company
TYPE III	<ul> <li>Barricade, Type III, High Intensity, Double Sided, Lighted, Furn</li> <li>Barricade, Type III, High Intensity, Double Sided, Lighted, Oper</li> </ul>
	A MORRISON LUNG III MIGH INTONCITY LIQUING MIGON LIGHTON (INC.

# CONSTRUCTION METHOD AND SEQUENCING

- 4. PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION
- 5. TEMPORARY LOWER ALL STRUCTURE COVERS LOCATED WITHIN THE EXISTING PAVEMENT AREA, INCLUDING GATE AND MONUMENT BOXES.

- REMOVE 3.5 INCHES OF EXISTING HMA SURFACE BY COLDMILLING. THIS MAY INCLUDE GRANULAR BASE
- 8. PERFORM ALL JOINT AND CRACK CLEANOUT. HMA/HAND PATCHING, UNDERCUTS AND/OR BASE REPAIRS AS REQUIRED.
- 9. GRADE, SHAPE, AND COMPACT THE EXISTING BASE MATERIAL AS REQUIRED.
- 10. ADJUST ALL STRUCTURE COVERS, INCLUDING GATE AND MONUMENT BOXES, TO THEIR FINISH ELEVATION.
- 11. CLEAN PAVEMENT AND PLACE 2.0 INCH LEVELING COURSE HMA MIX (MAJOR STREETS).
- 12. CLEAN PAVEMENT AND PLACE 1.5 INCH TOP COURSE HMA MIX (MAJOR STREETS).
- 13. CLEAN PAVEMENT AND PLACE HMA APPROACHES AS REQUIRED.
- 14. CLEAN PAVEMENT AND COMPLETE ALL PAVEMENT MARKINGS.
- 15. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN UP AND FINAL RESTORATION.
- 16. REMOVE ALL TRAFFIC CONTROL DEVICES, AND MISS DIG FLAGS.

# NOTES:

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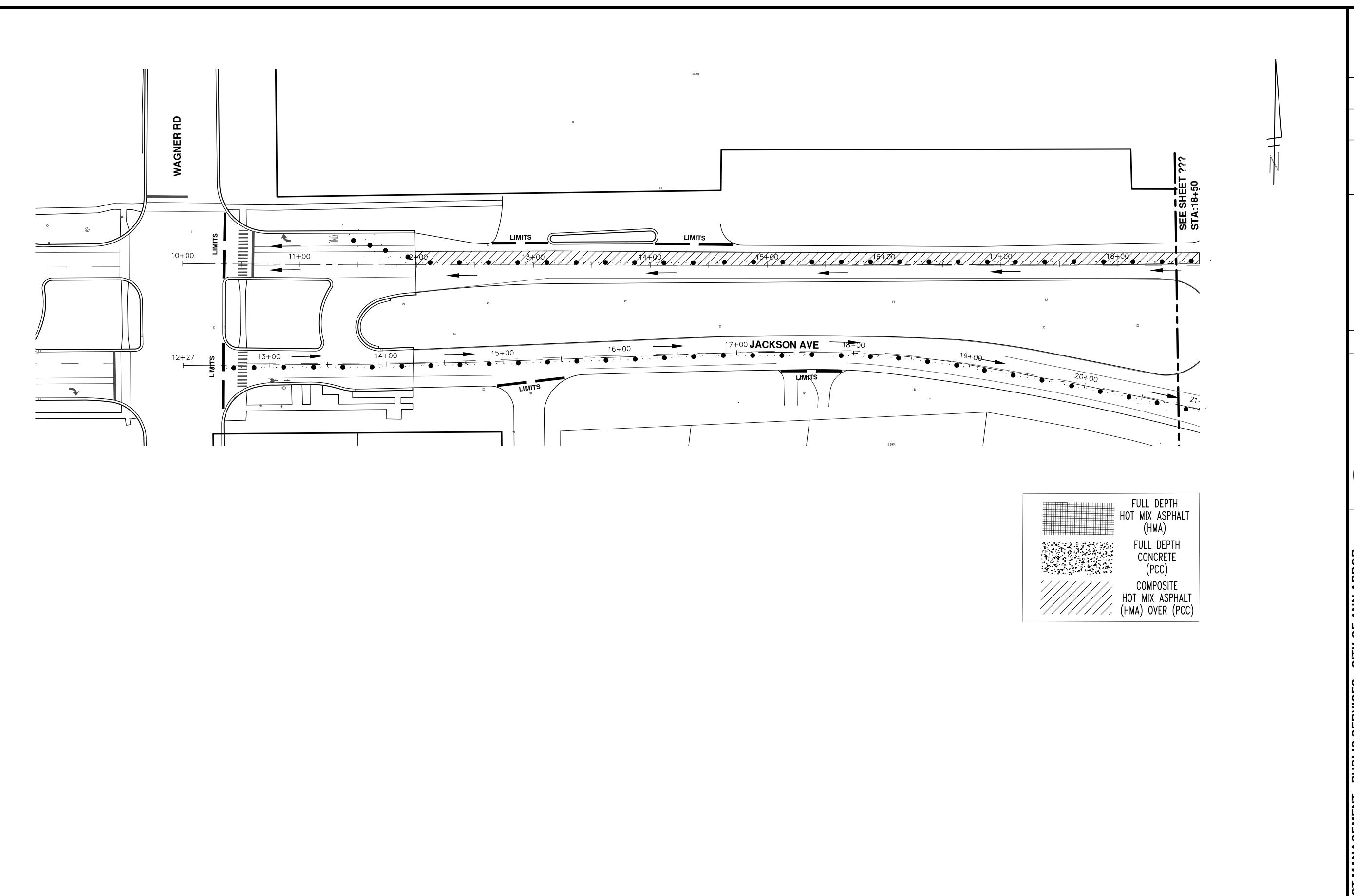
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**CITY OF ANN ARBOR PUBLIC SERVICES** 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org



PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

BRAWING No.

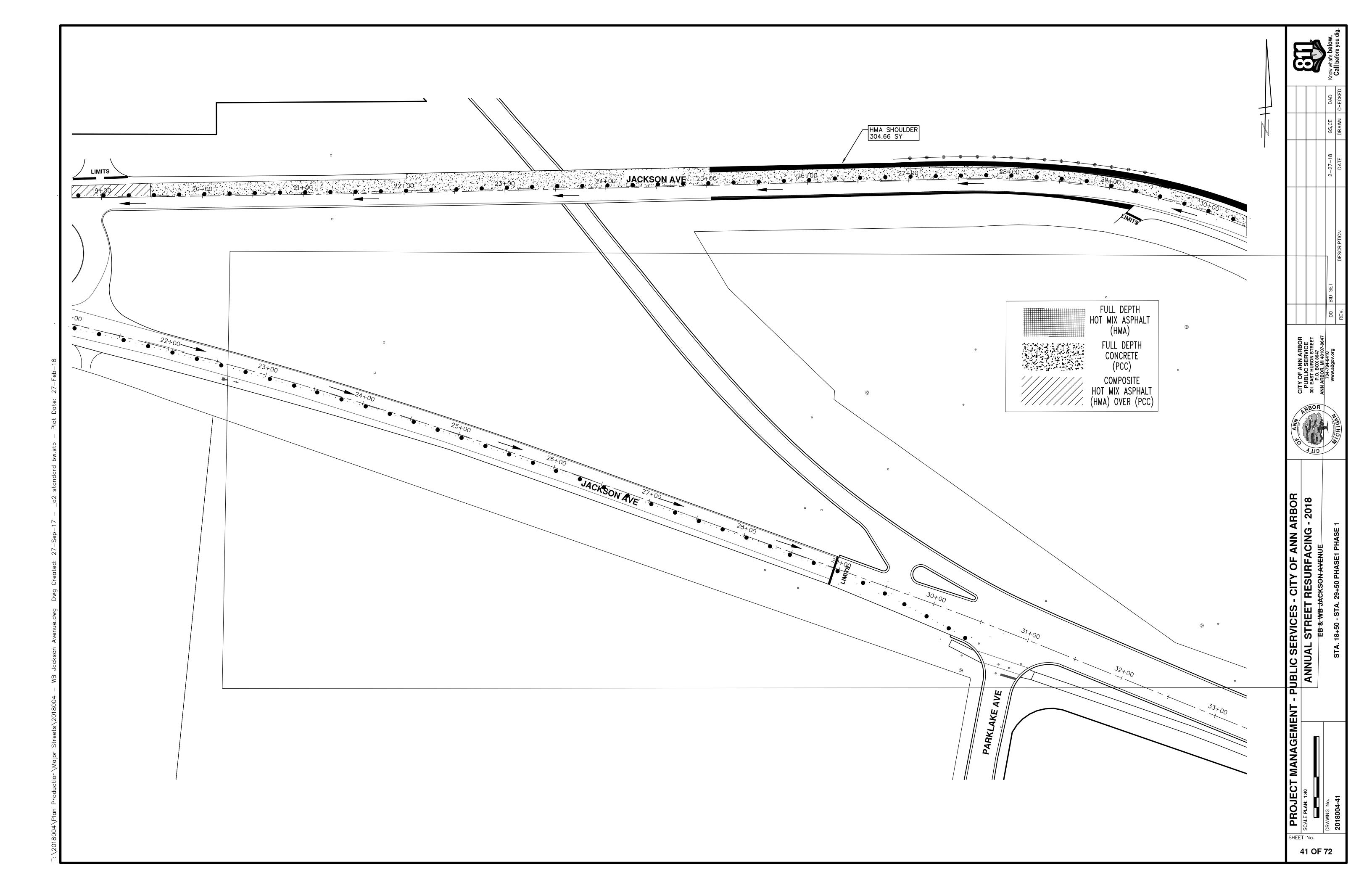
STA. 10+00 - STA. 18+50 PHASE 1

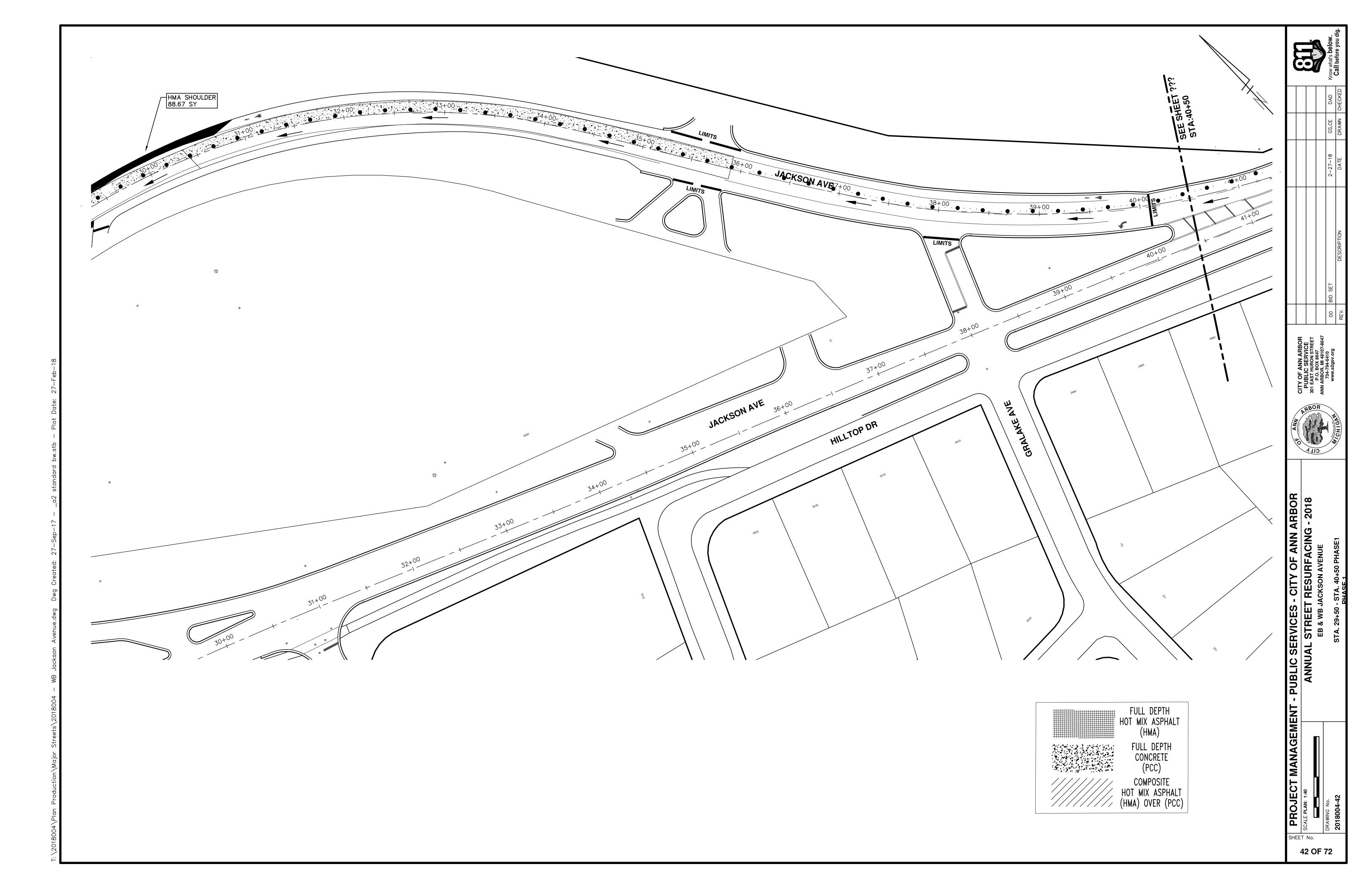
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

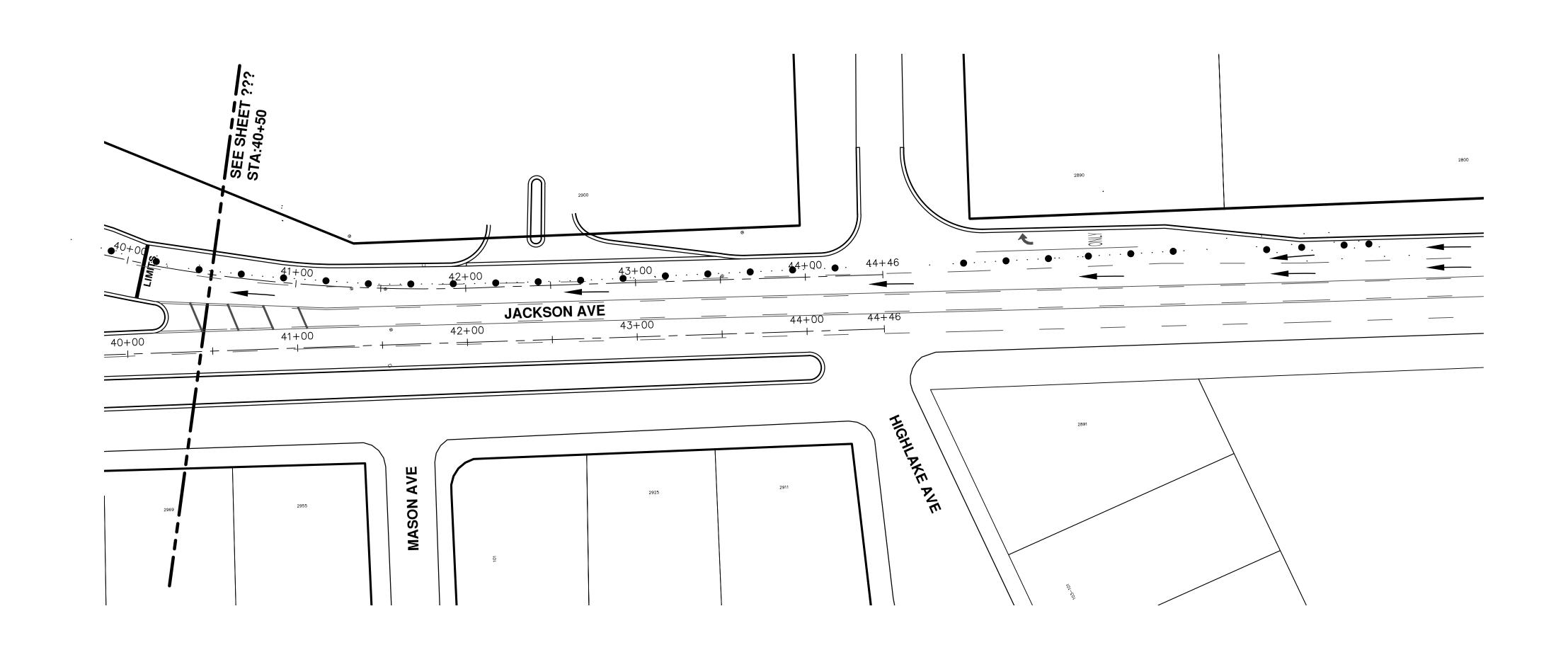
ANNUAL STREET RESURFACING - 2018

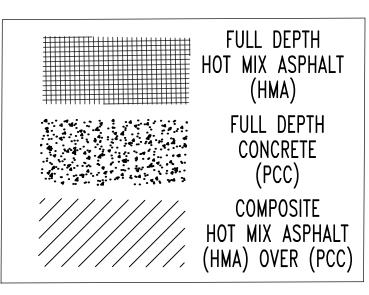
JACKSON AVENUE

STA. 10+00 - STA. 18+50 PHASE 1 40 OF 72









PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

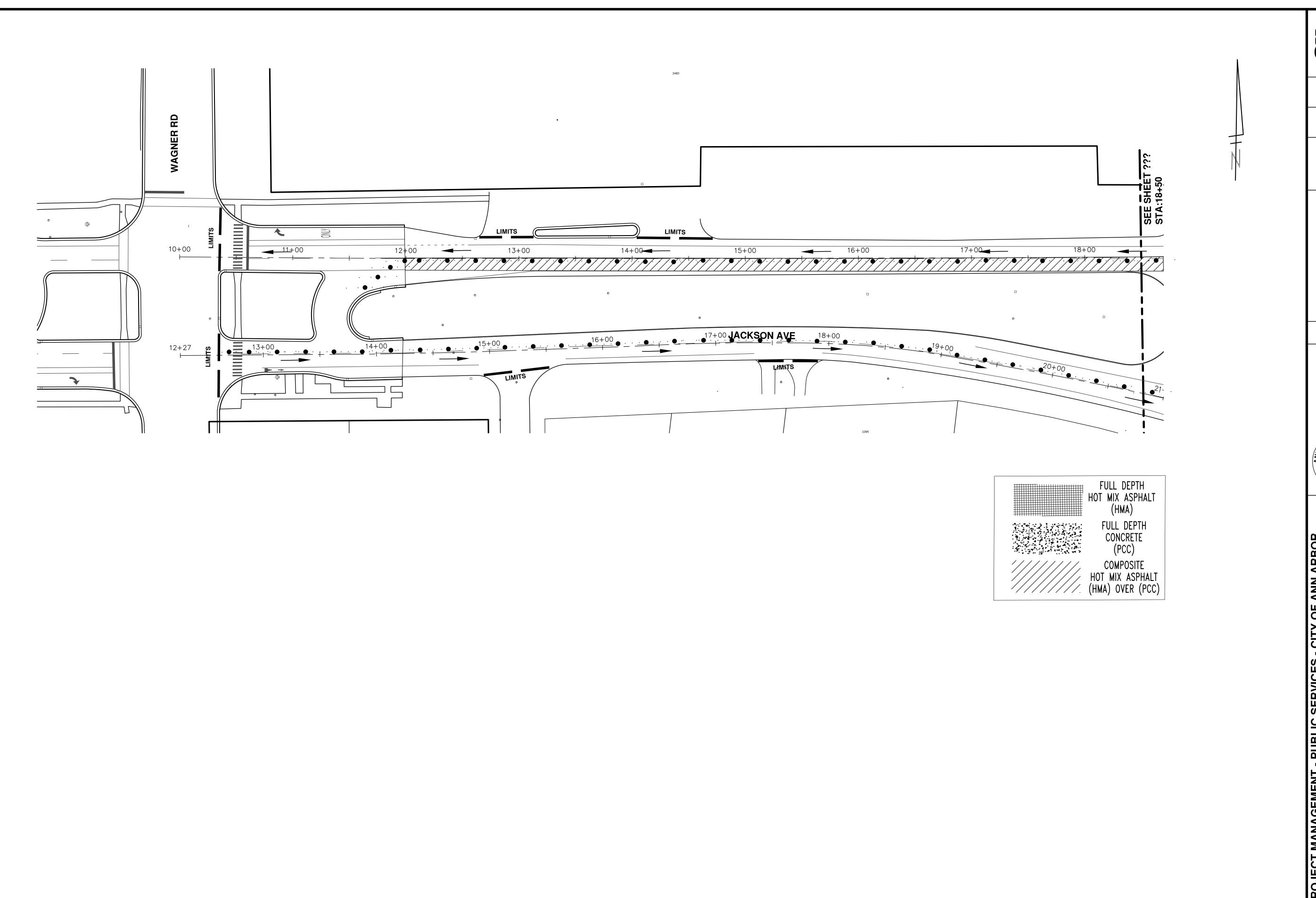
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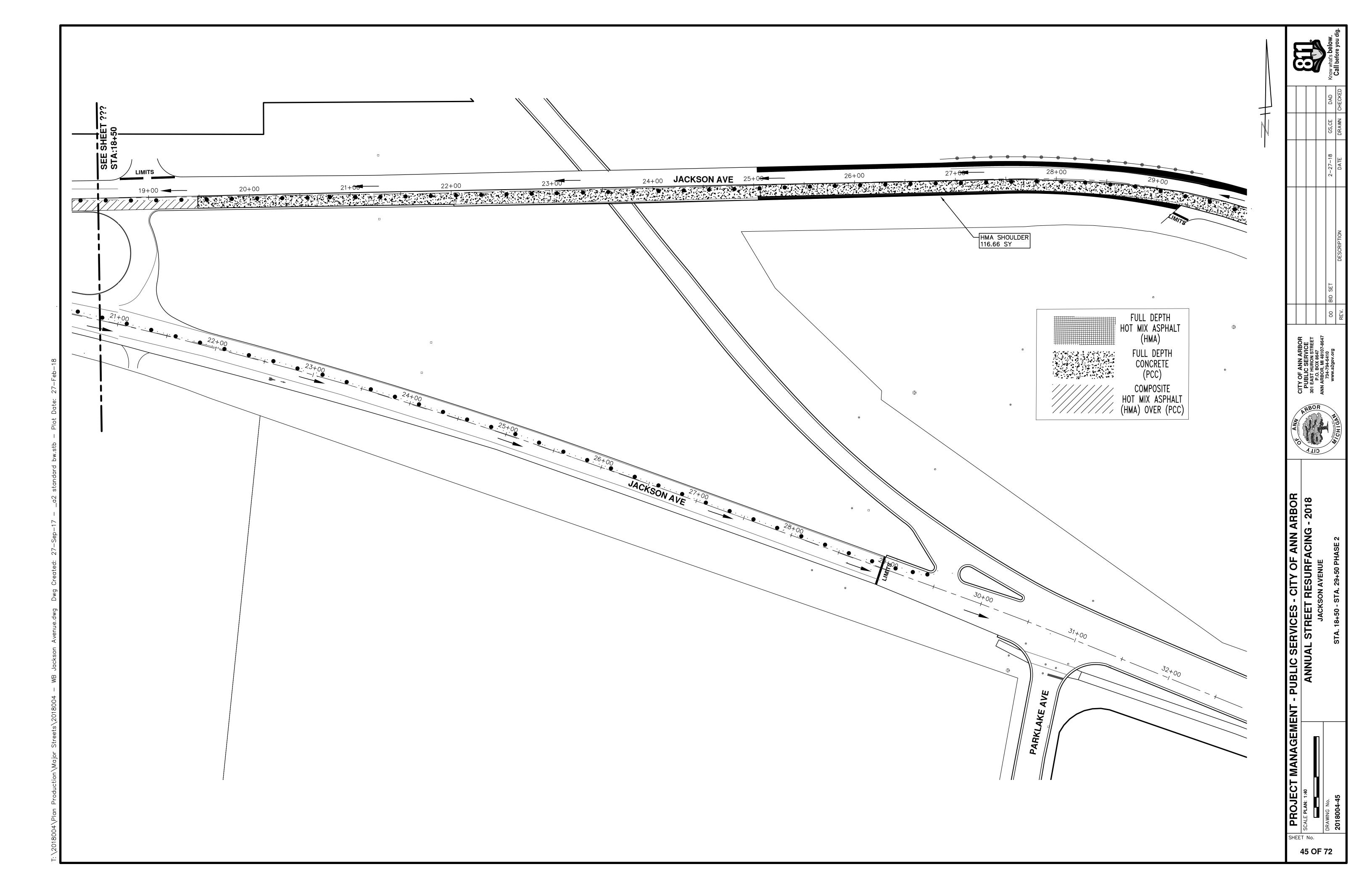
STA. 40+50 - STA. 44+46 PHASE1 PHASE 1

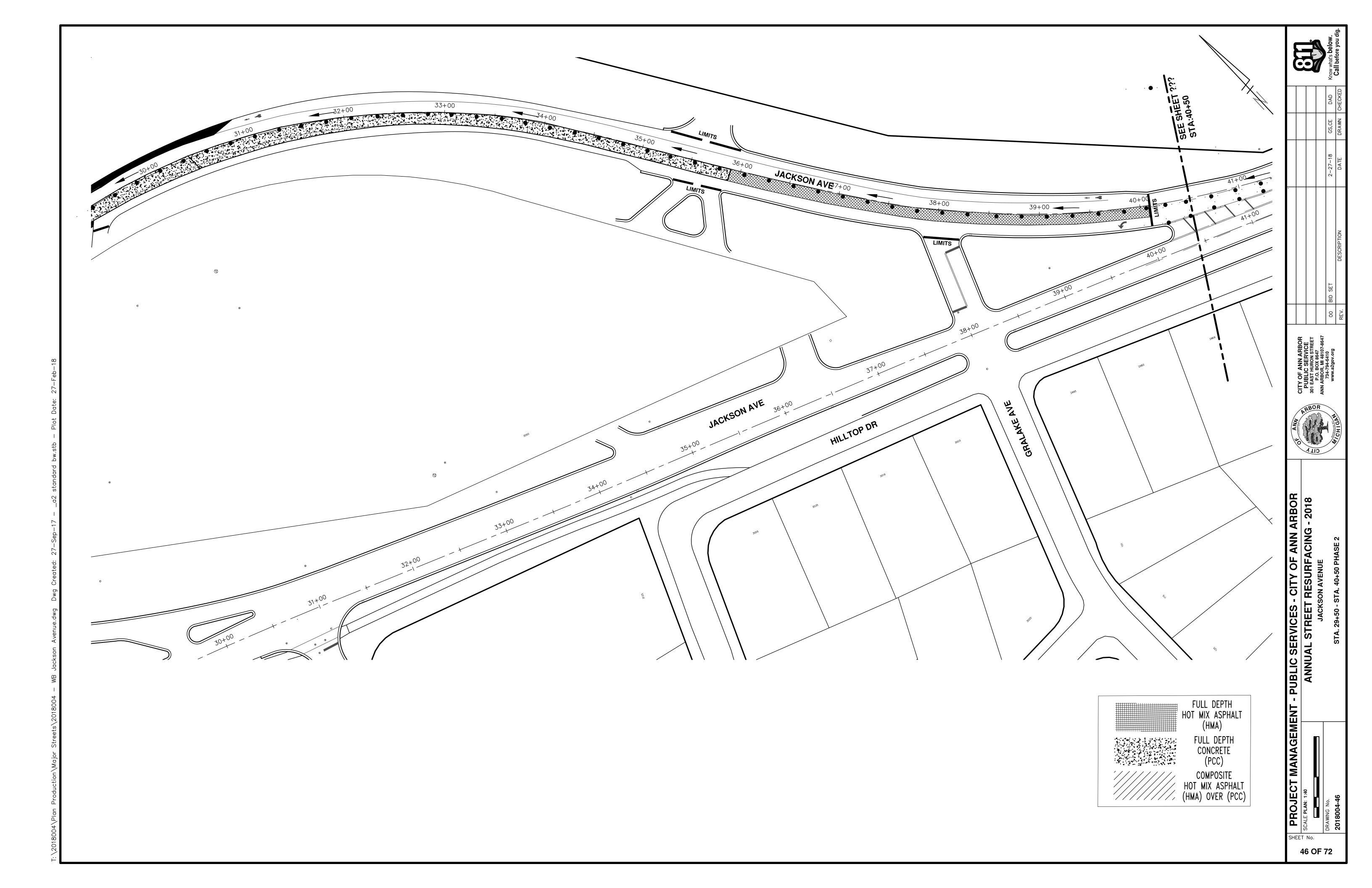
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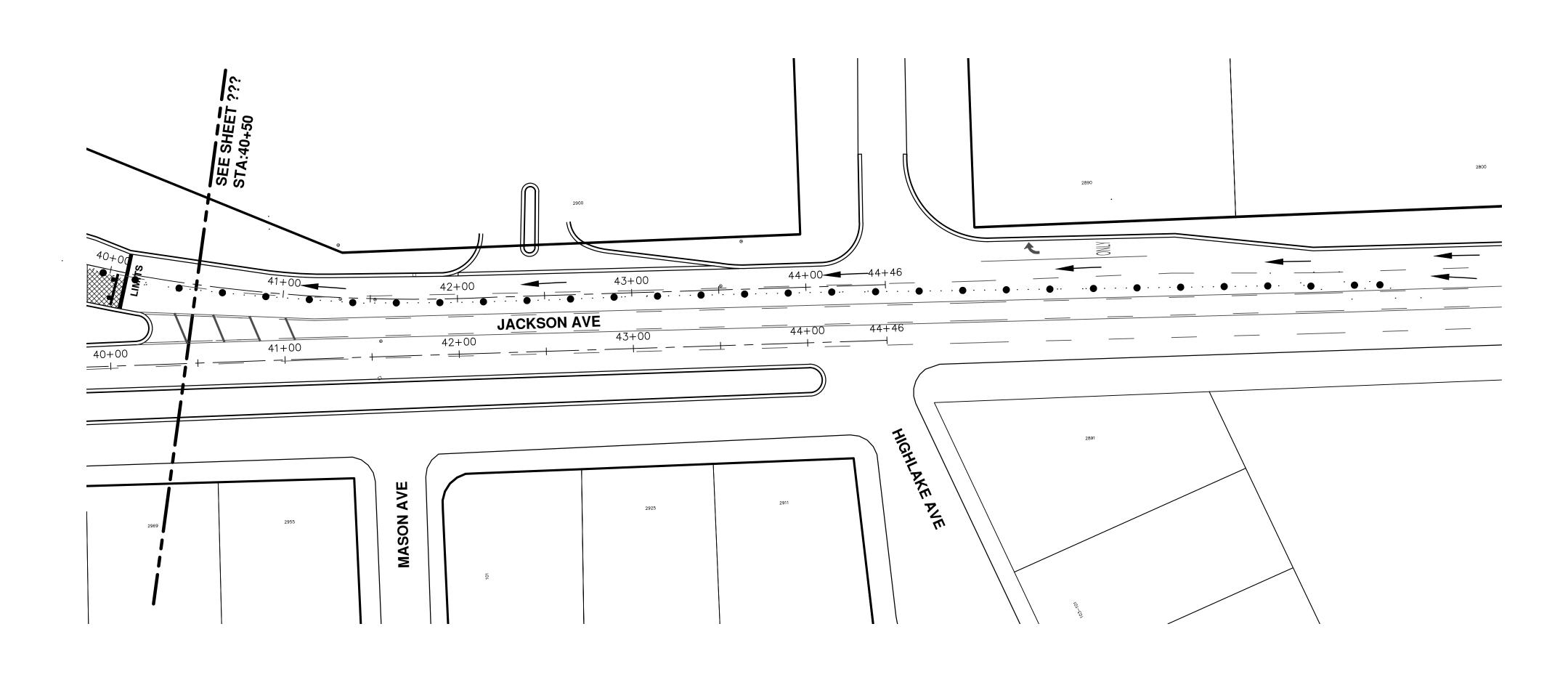
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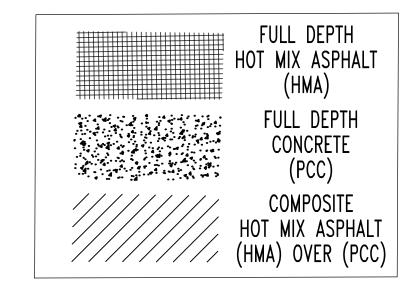
STA. 40+50 - STA. 44+46 PHASE1 PHASE 1











PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

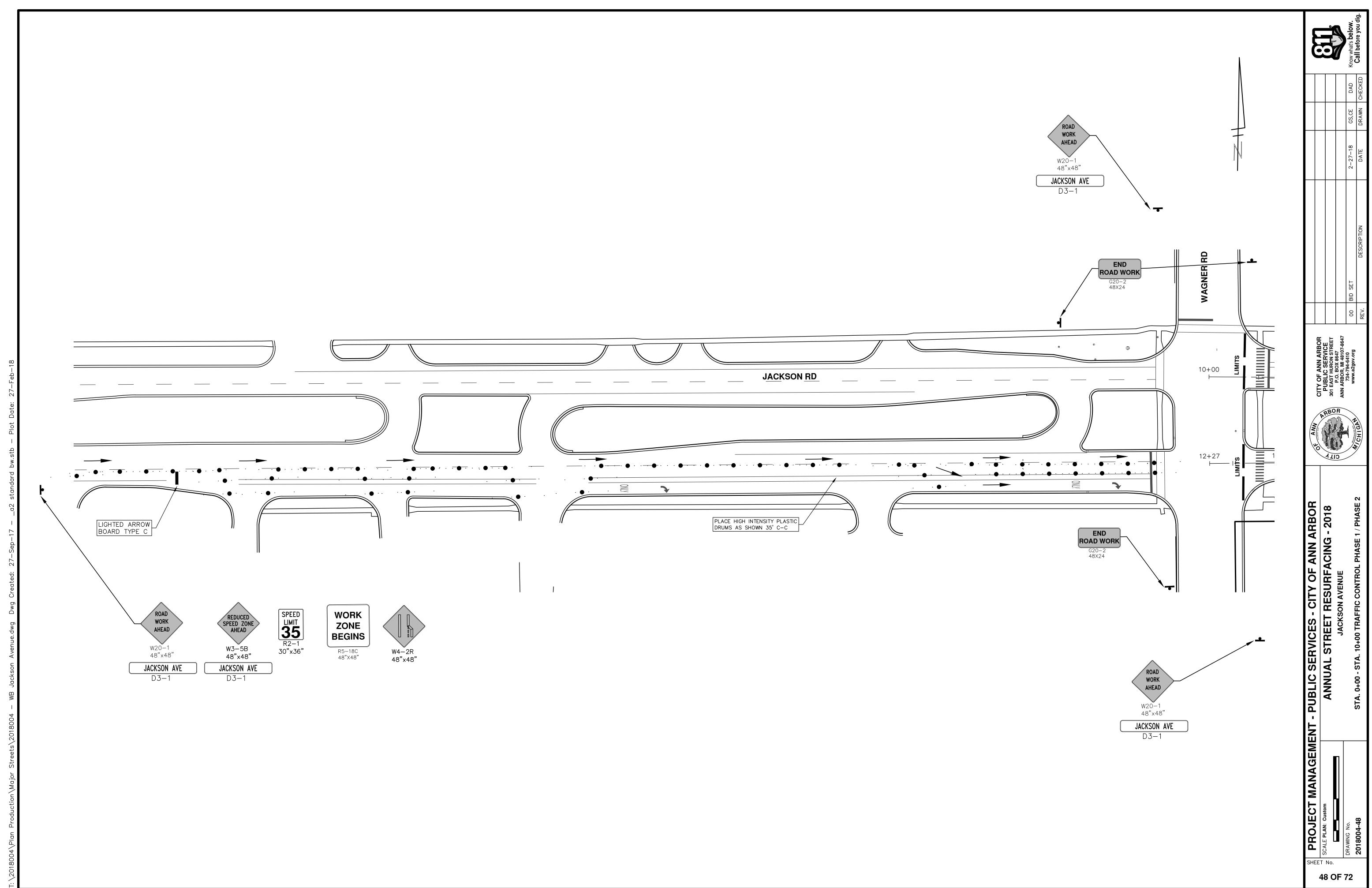
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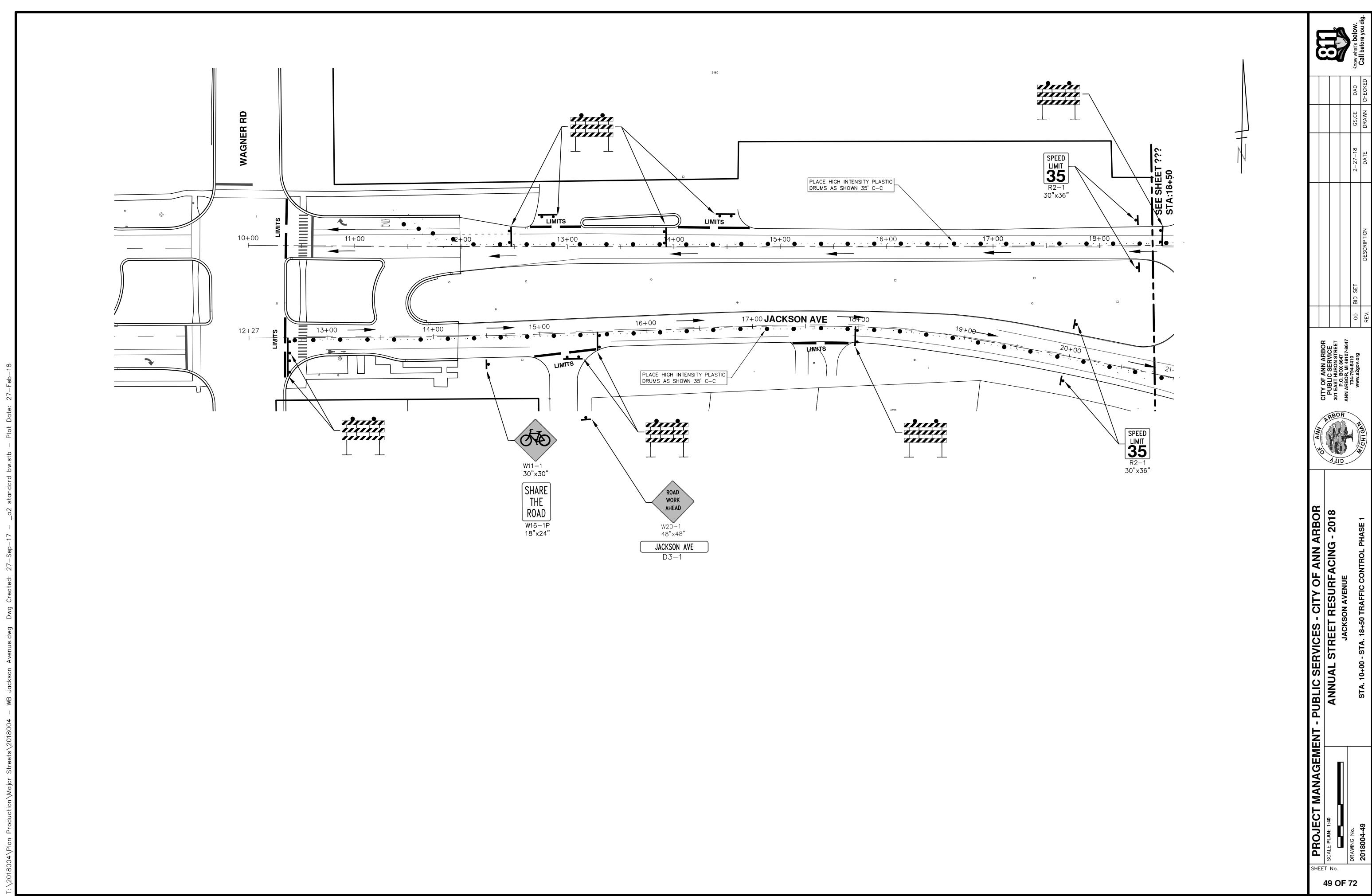
ANNUAL STREET RESURFACING - 2018

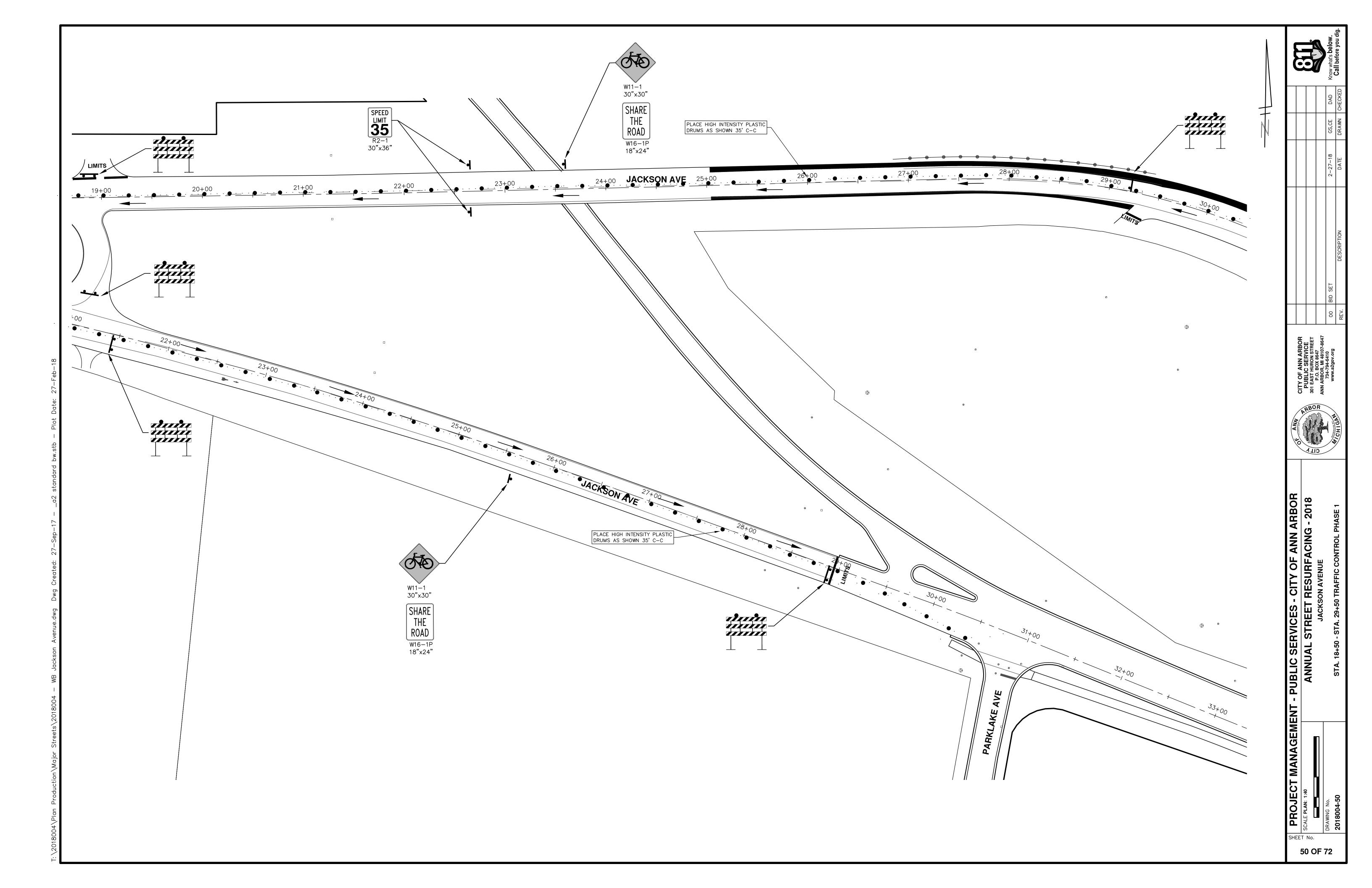
JACKSON AVENUE

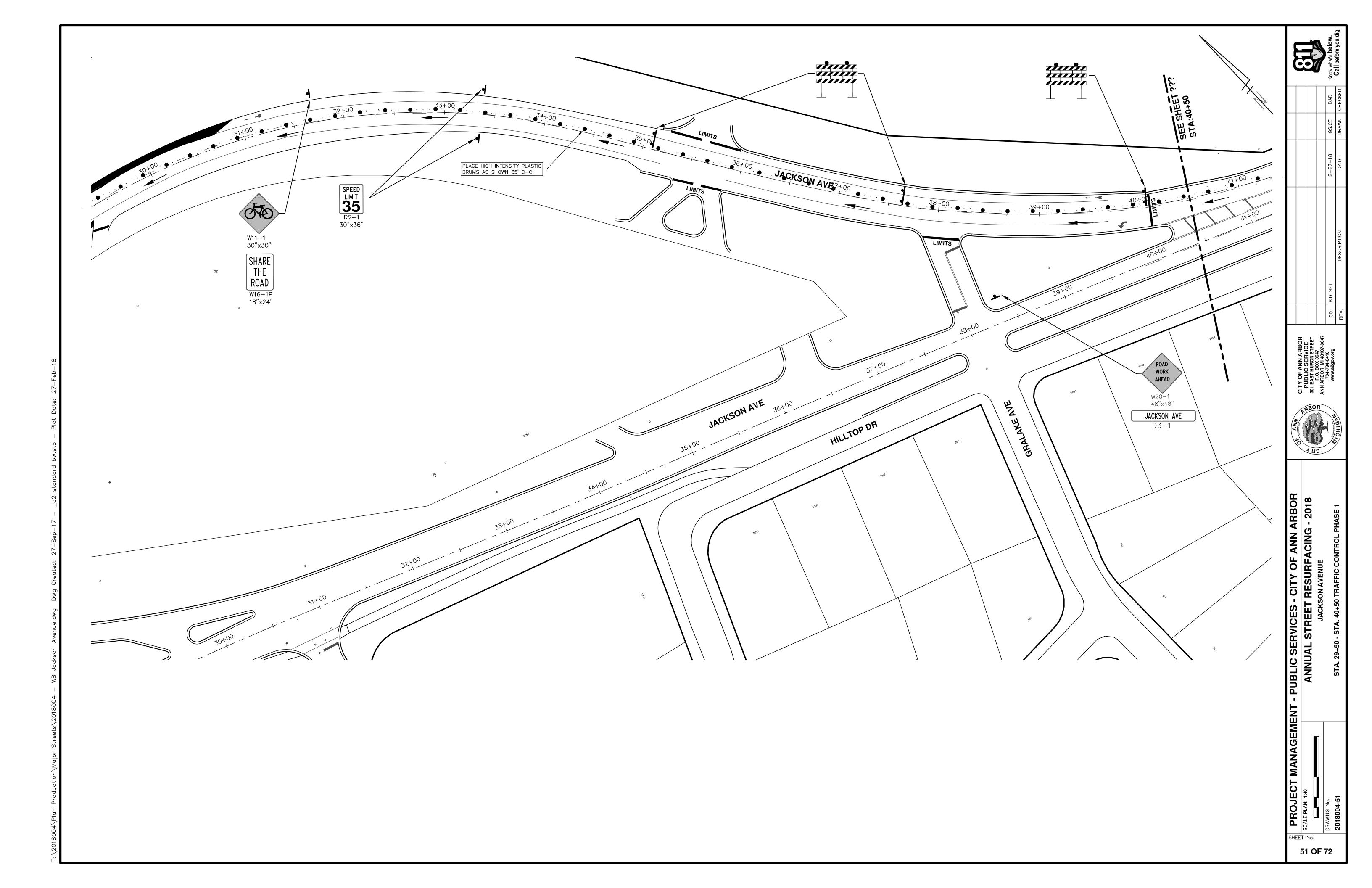
2018004-47

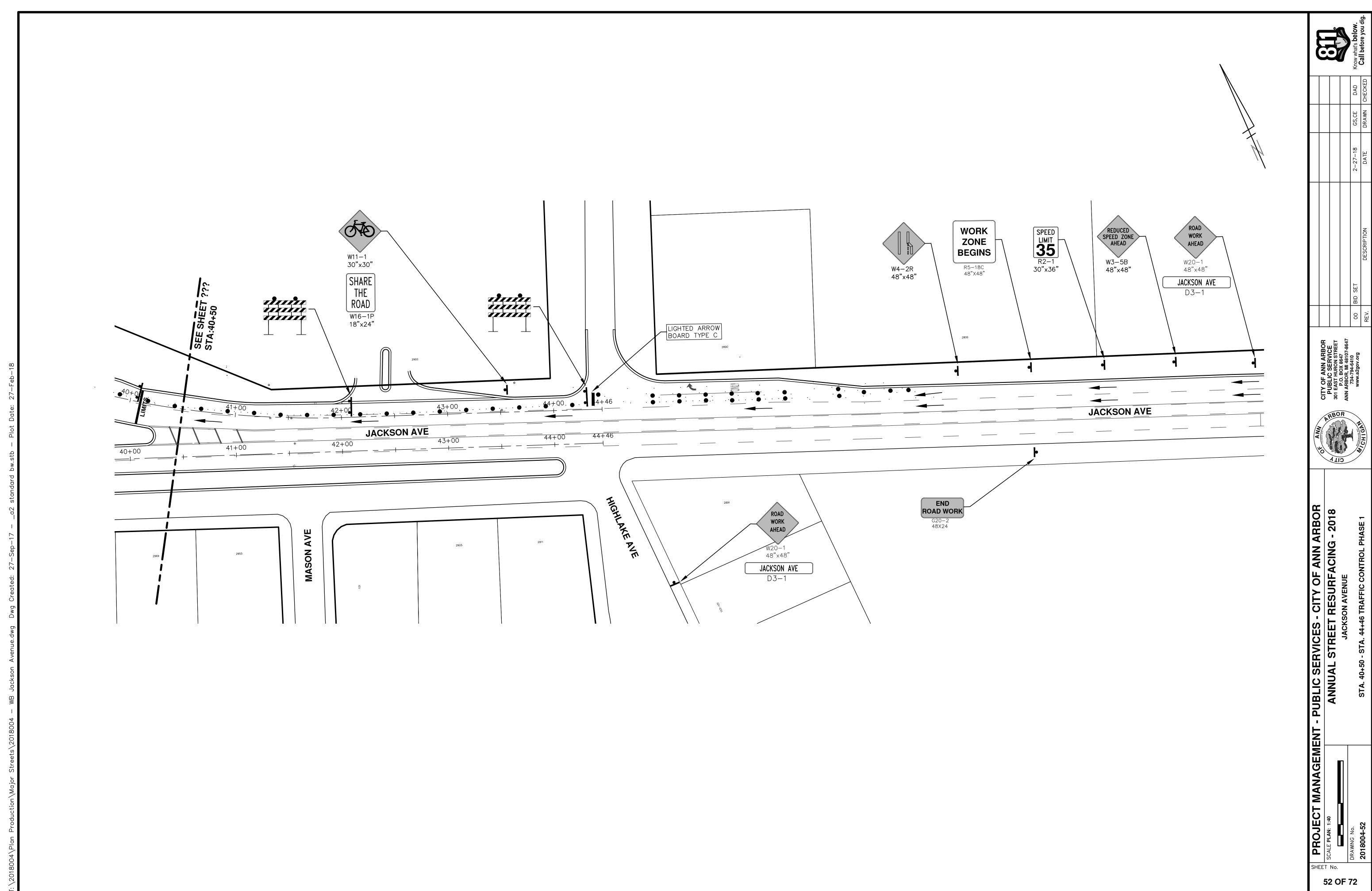
STA. 40+50 - 44+46 PHASE 2

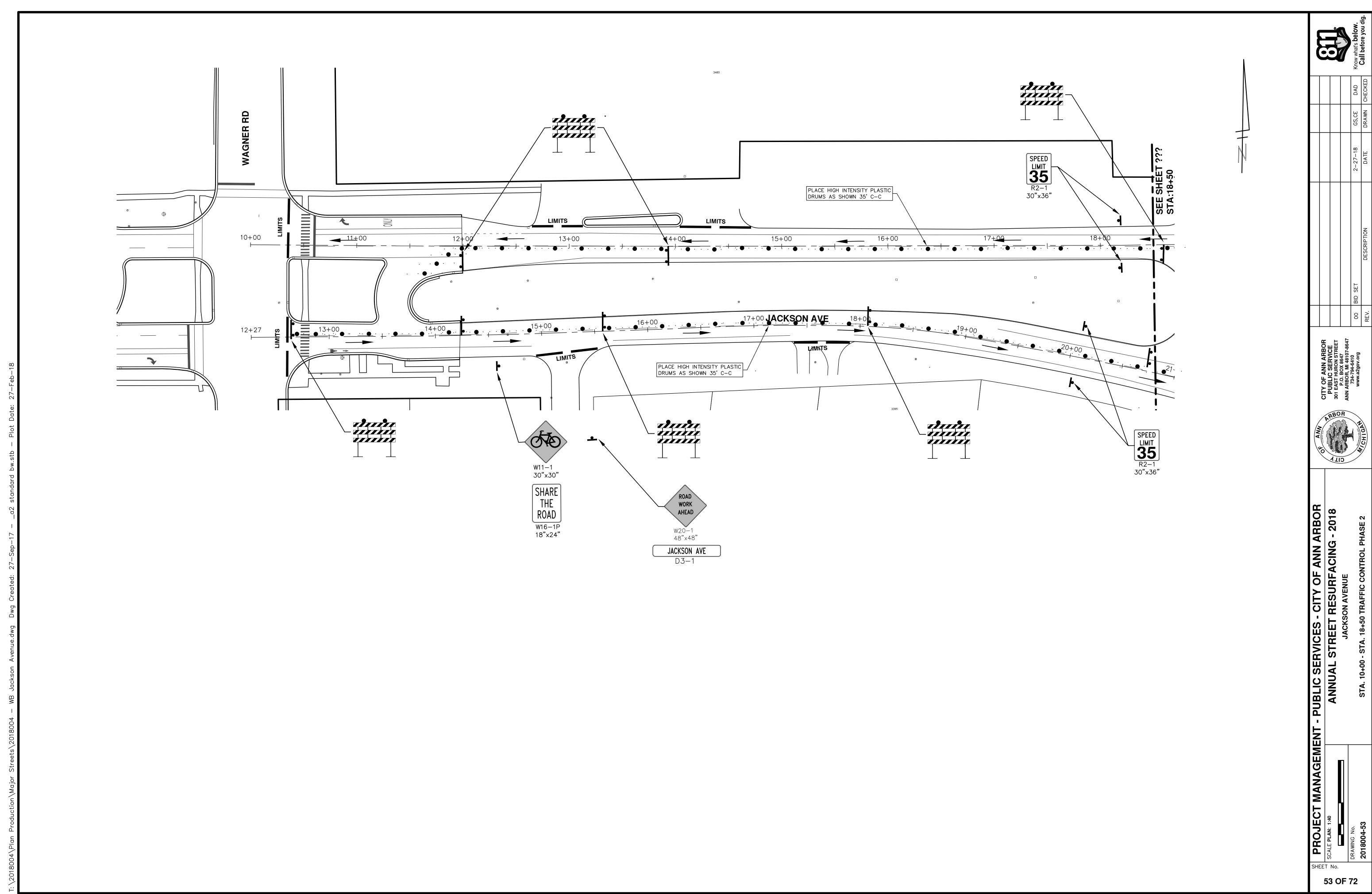


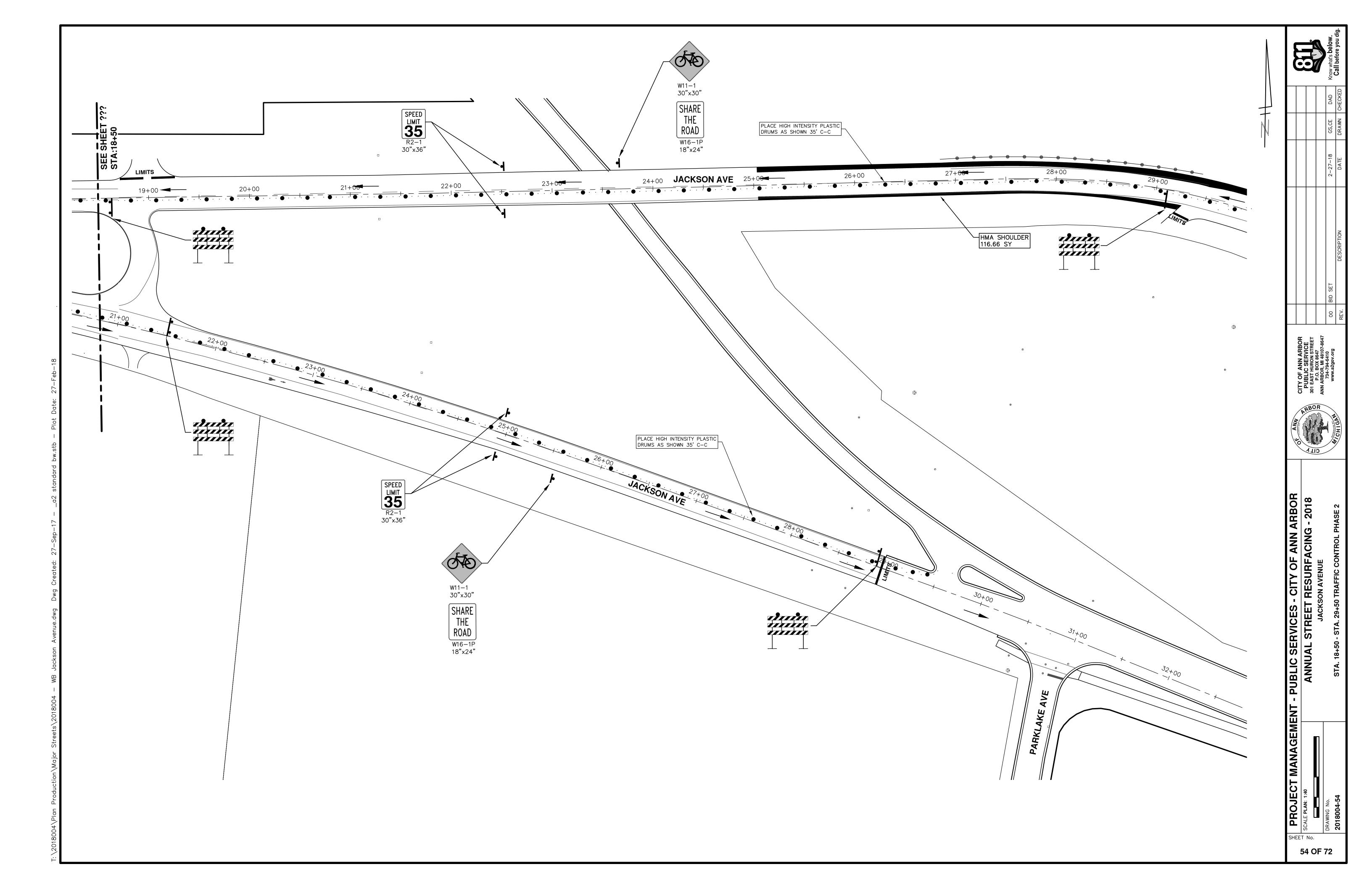


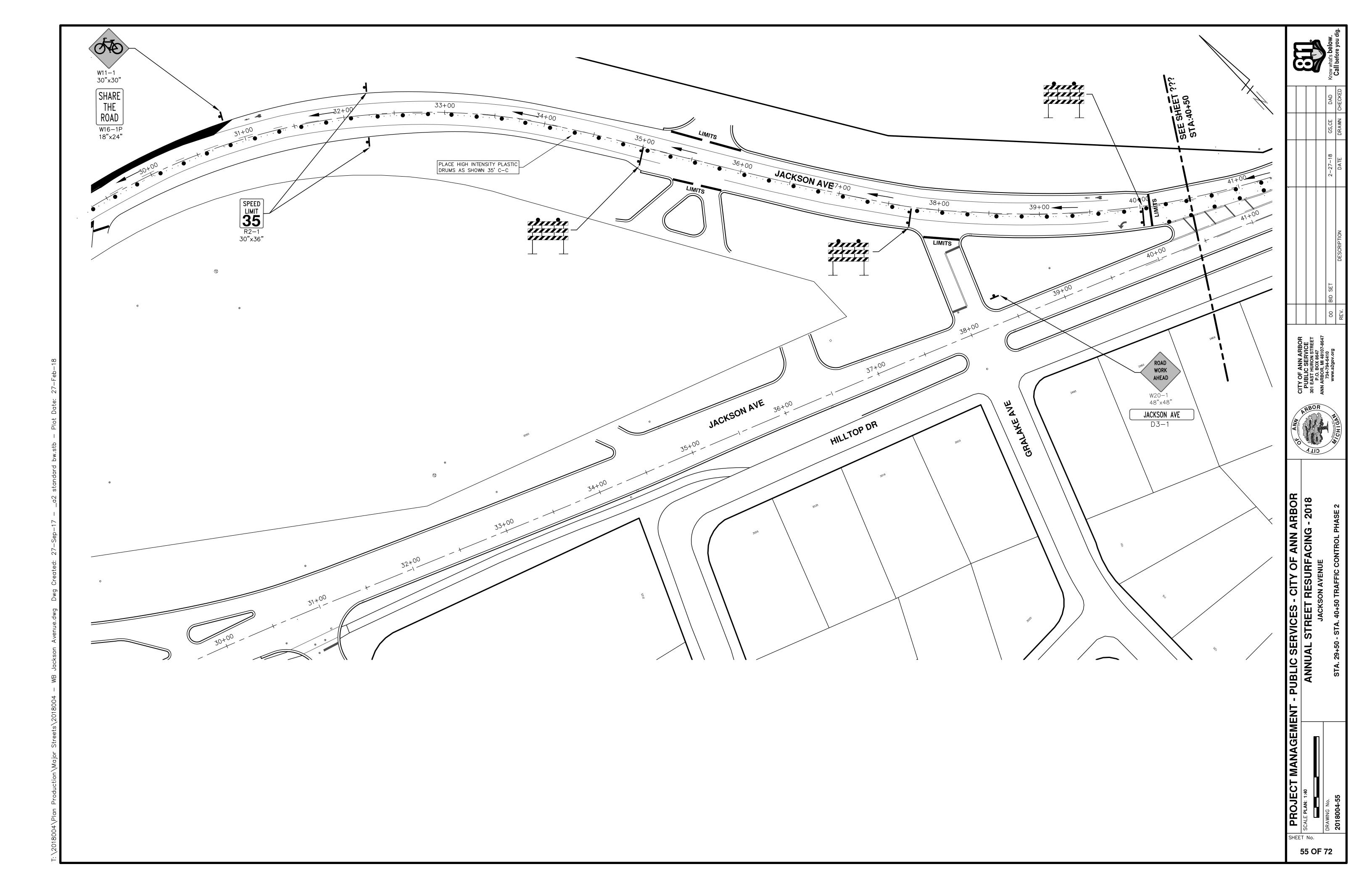


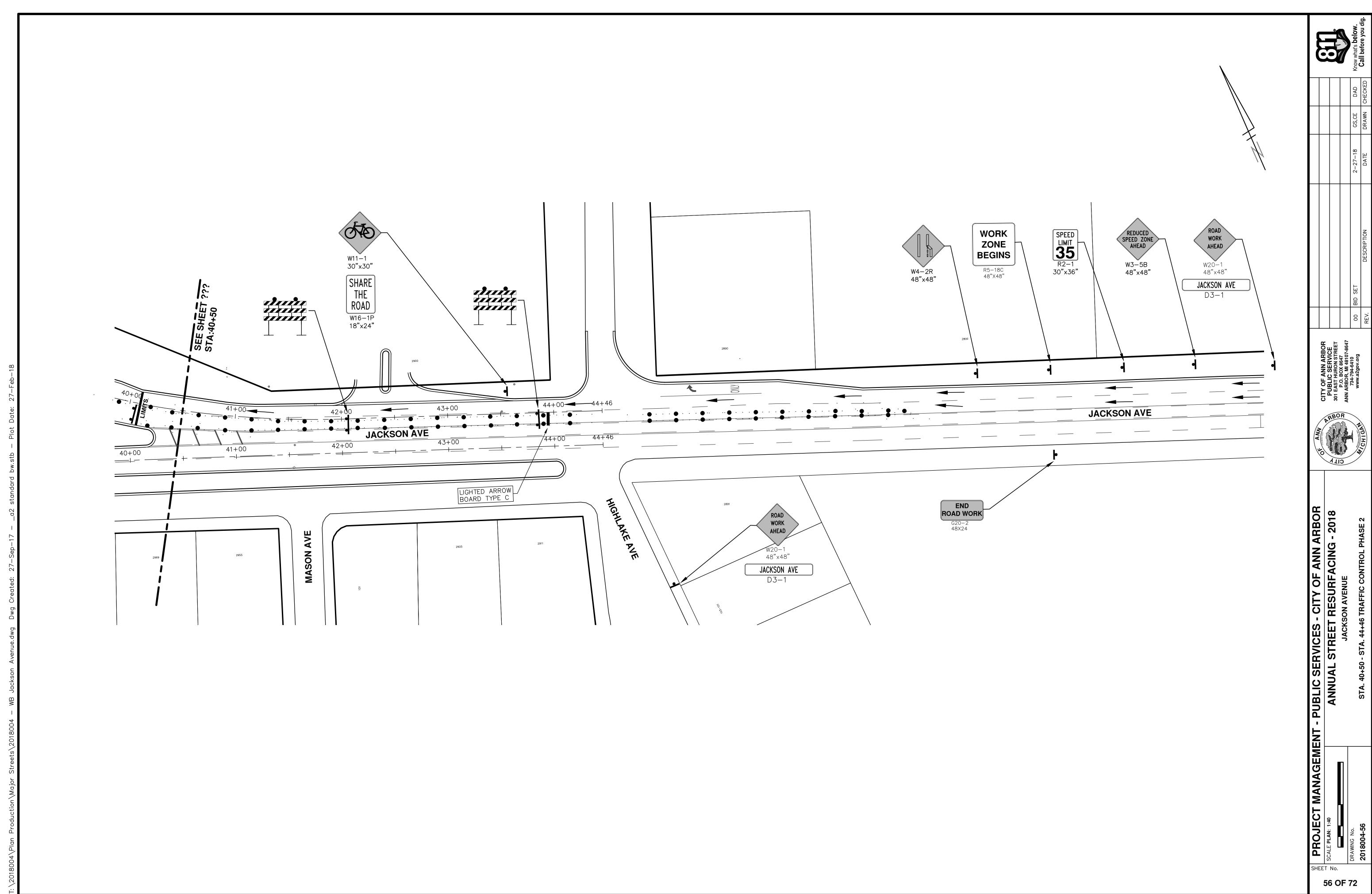


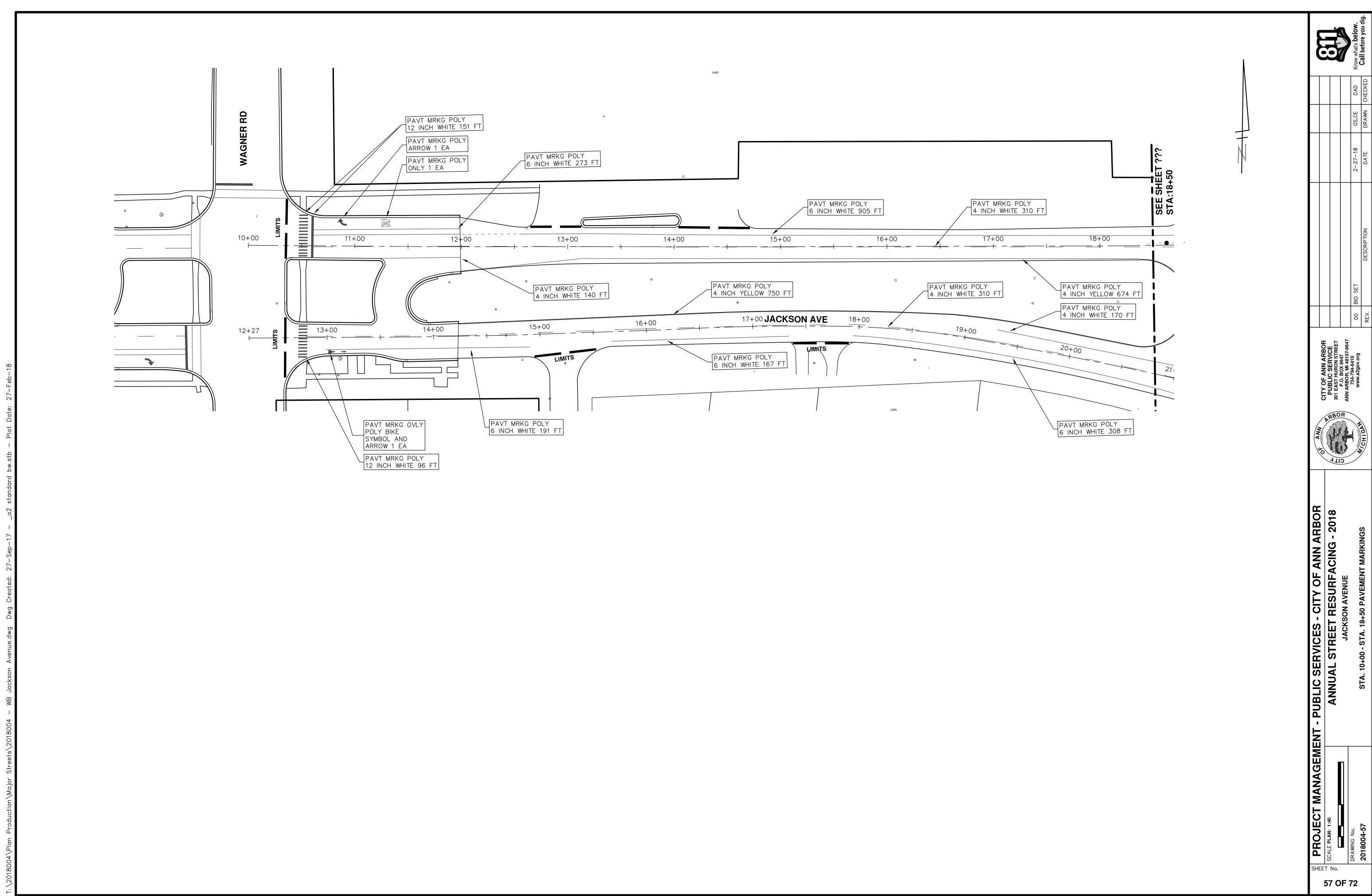


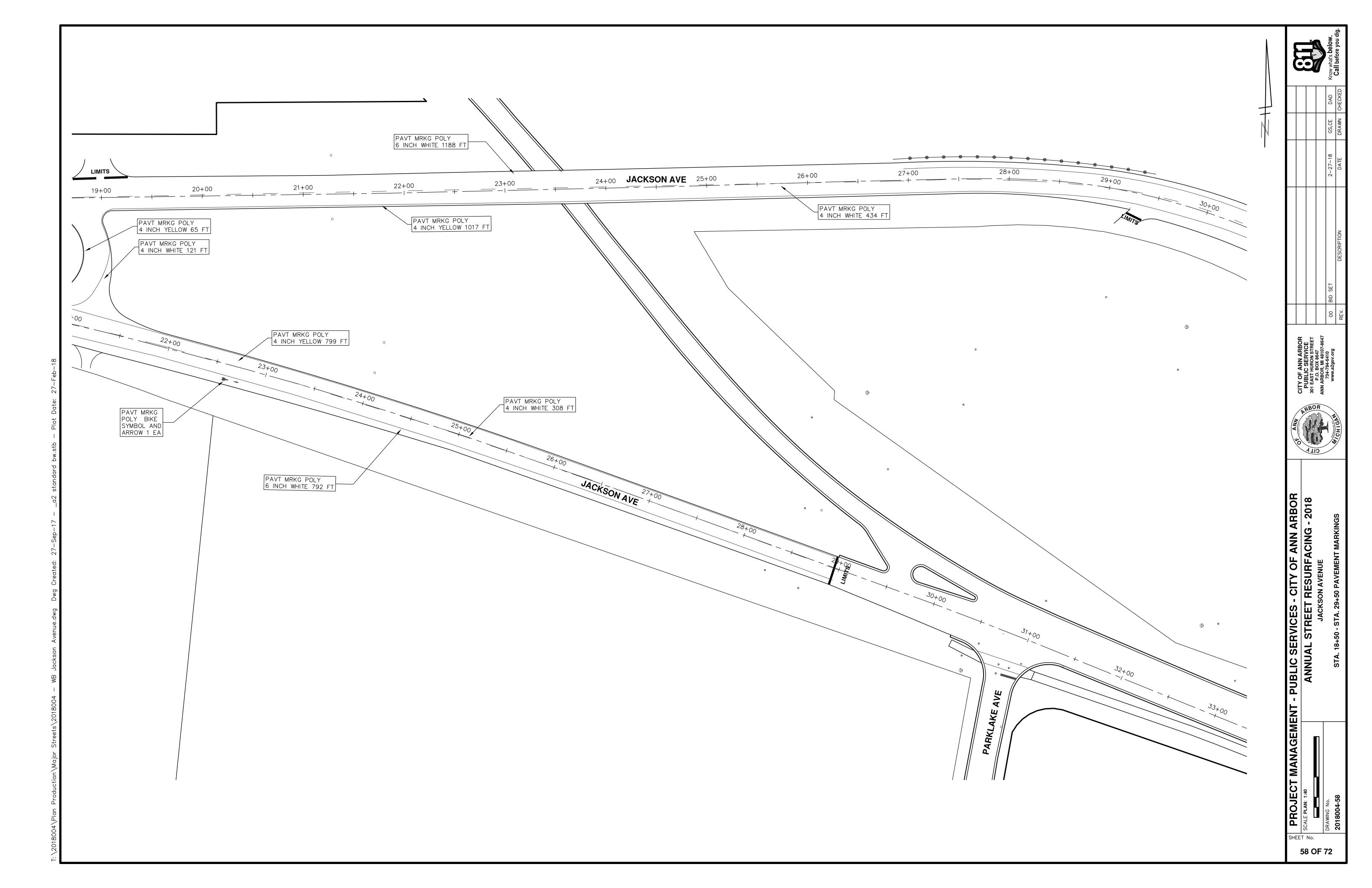


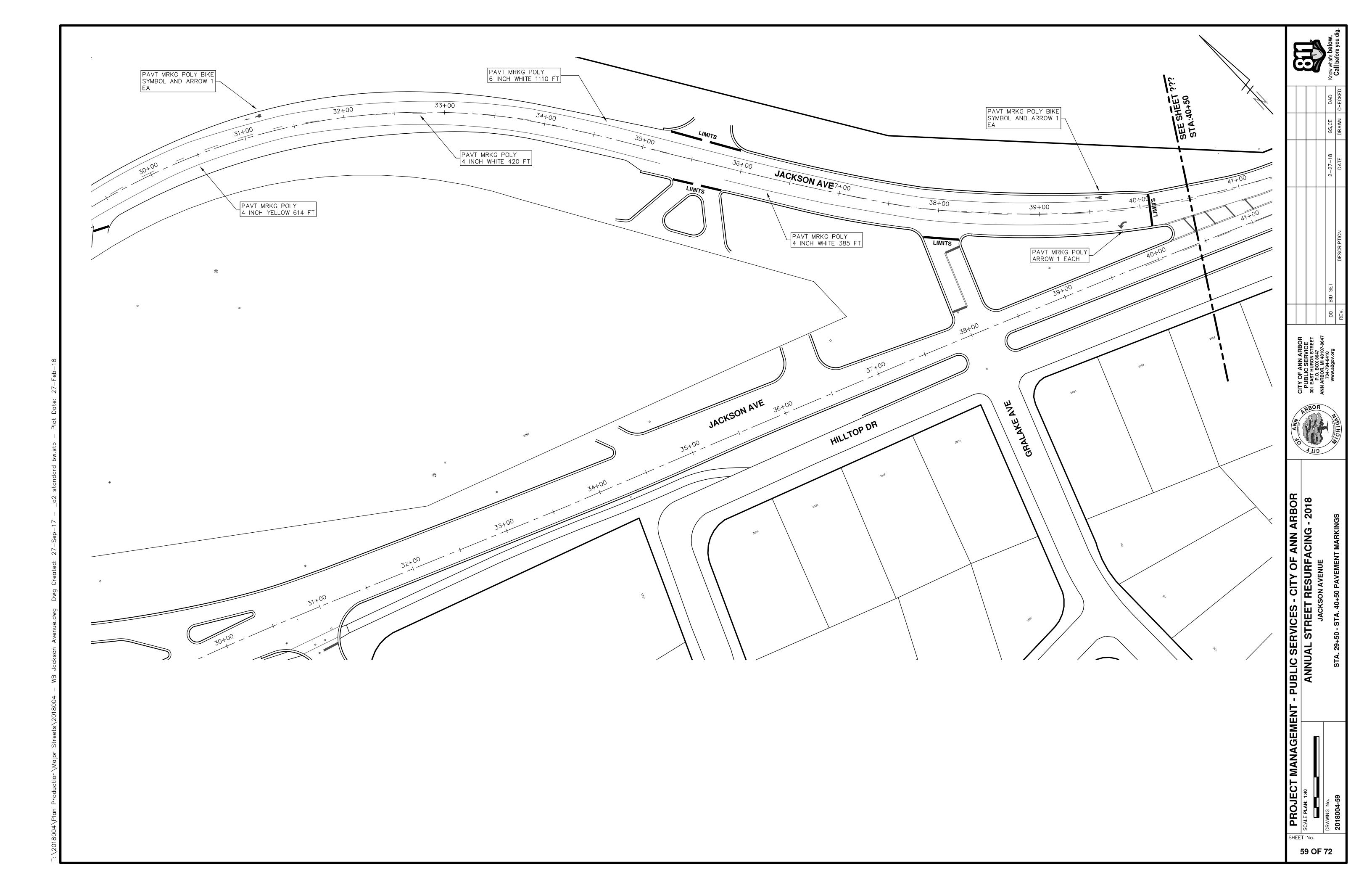














# CITY OF ANN ARBOR ENGINEERING

# PROJECT LOCATION: STONE SCHOOL RD

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	28
207	Cold Miling Pavement	Tons	270
209	Subgrade Undercutting - Type II	C.Y.	160
220	HMA Patching	Tons	3
222	HMA Pavement Leveling, Regular	Tons	180
224	HMA Pavement Wearing, 36A	Tons	90
230	Rem. Curb & Gutter, Any Type	L.F.	490
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	300
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	490
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	300
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	4
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	4
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	3
261	Pt. Drain Structures	Each	2
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	14
271	21AA Limestone - C.I.P.	C.Y.	160
282	Plastic Drum - Lighted - Furn. & Operate	Each	18
283	Barricade Type III - Furn. & Operate	Each	2
284	Temp Signs Type - B	S.F.	101
285	No Parking Sign	Each	13
291	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	70
597	24" White Thermo.	L.F.	15
598	Pvmt. Marking Symbol	Each	0

	TRAF	FIC CONTROL & SIGN LEGEND
QTY.	ТҮРЕ	DESCRIPTION
2	W20-1	"ROAD WORK AHEAD"
2	W20-3	"ROAD CLOSED AHEAD"
3	D3-1	CONVENTIONAL GUIDE
2	TYPE III	TYPE III LIGHTED BARRICADE
2	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

KEY	ASSOCIATED PAY ITEM(S)
KEI	
Λ Λ	Dr Structure, Adj, Case 1, Modified     De Structure, Adj, Case 0, Modified
AA	• _Dr Structure, Adj, Case 2, Modified
	• _Dr Structure, Temp Lowering, Modified
	_Dr Structure, Temp Lowering, Modified
AB	• _Gate Box, Adj, Case 1
710	• _Gate Box, Adj, Case 2
	_Monument Box Adjust
ADST	<ul> <li>_Dr Structure, Adj, Add Depth, Modified</li> </ul>
AK	• _Dr Structure, Adj, Case 1, Modified
	• Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
C4	Grading, Sidewalk
	_Sidewalk, Conc, 4 inch, Modified
	<ul> <li>Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren</li> </ul>
	Grading, Sidewalk
C4HE	• Cement
	Sidewalk, Conc, 4 inch, Modified
	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
	• _Grading, Sidewalk
C6	• _Grading, Sidewalk Ramp
	_Detectable Warning Surface, Modified
	<ul> <li>_Sidewalk Ramp, Conc, 6 inch, Modified</li> </ul>
	• _Sidewalk, Conc, 6 inch, Modified
C8	Grading, Driveway Approach
Co	<ul> <li>_Driveway, Nonreinf Conc, 8 inch, Modified</li> </ul>
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
	Grading, Driveway Approach
	• _Grading, Sidewalk
	Grading, Sidewalk Ramp
	• Cement
C HE	Driveway, Nonreinf Conc, 6 inch, Modified
	Driveway, Nonreinf Conc, 8 inch, Modified
	Detectable Warning Surface, Modified     Oid world Barray Organ Organ Modified
	• _Sidewalk Ramp, Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C/G	• _Curb, Gutter, and Curb and Gutter, Any Type, Rem
	_Curb and Gutter, Conc
	<ul> <li>_Curb, Gutter, and Curb and Gutter, Any Type, Rem</li> </ul>
C/GHE	Cement
	<ul> <li>_Driveway Opening, Conc, Det M, Modified</li> </ul>
CP	• _Grading, Sidewalk
OF.	• _Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
	• Dr Structure, Rem
DS	Sewer, Rem, Less than 24 inch
	• Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	Sewer, Rem, Less than 24 inch
וטטטו	
DT	• _Dr Structure, Double Inlet
PT	• _Dr Structure, Point
	Dr Structure Cover, Type B
RRA	• _Dr Structure Cover, Type B, Special
	<ul> <li>_Dr Structure, Adj, Case 1, Modified</li> </ul>
	_Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K
INIM	• _Dr Structure, Adj, Case 1, Modified
RS	Dr Structure, Reconstruct
	Plastic Drum, High Intensity, Lighted, Furn
T/DE ::	and the second s
TYPE II	Plastic Drum, High Intensity, Lighted, Oper
TYPE II	Plastic Drum, High Intensity, Lighted, Oper     Barricade, Type III, High Intensity, Double Sided, Lighted, Furn

# **CONSTRUCTION METHOD AND SEQUENCING**

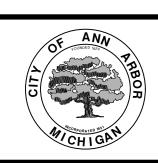
- 1. THE WORK TO BE COMPLETED ON THIS STREET SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS. THE ORDER OF CONSTRUCTION SHALL BE AS GIVEN UNLESS OTHERWISE AUTHORIZED OR DIRECTED BY THE ENGINEER
- 2. IMPLEMENT TRAFFIC MAINTENANCE, AND SOIL EROSION CONTROLS IN ACCORDANCE WITH THE PLA AND AS DIRECTED BY THE ENGINEER.
- INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 4. LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES
- PERFORM ALL CONCRETE WORK, INCLUDING RESTORATION, IN ACCORDANCE WITH THE PLANS, AND A DIRECTED BY THE ENGINEER.
- 6. MILL 3 INCHES OF BITUMINOUS MATERIAL FROM EXISTING ROADWAY. THIS MAY INCLUDE GRANULAR ROAD BASE MATERIAL. DEPTH TO BE DETERMINED BY THE ENGINEER. PROOF ROLL WITH FULL TRUCK
- 7. PERFORM UNDERCUTS AND/OR BASE REPAIRS AS DIRECTED BY THE ENGINEE
- 8. GRADE, SHAPE, AND RE—COMPACT THE EXISTING ROAD BASE AS REQUIRED, AND AS DIRECTED BY THE ENGINEER.
- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN ONE LIFT.
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 1 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE LIFT.
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE ENGINEER.
- 13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN-UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

# 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 IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, INCLUDING REFERENCED MDOT PUBLICATIONS, AND THE PROJECT CONTRACT DOCUMENTS.



## **ENGINEERING**

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET, P.O. BOX 8647 ANN ARBOR, MICHIGAN 48107-8647 734-794-6410 www.a2gov.org SCRIPTION DATE DRAWN CHECKED Call before

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



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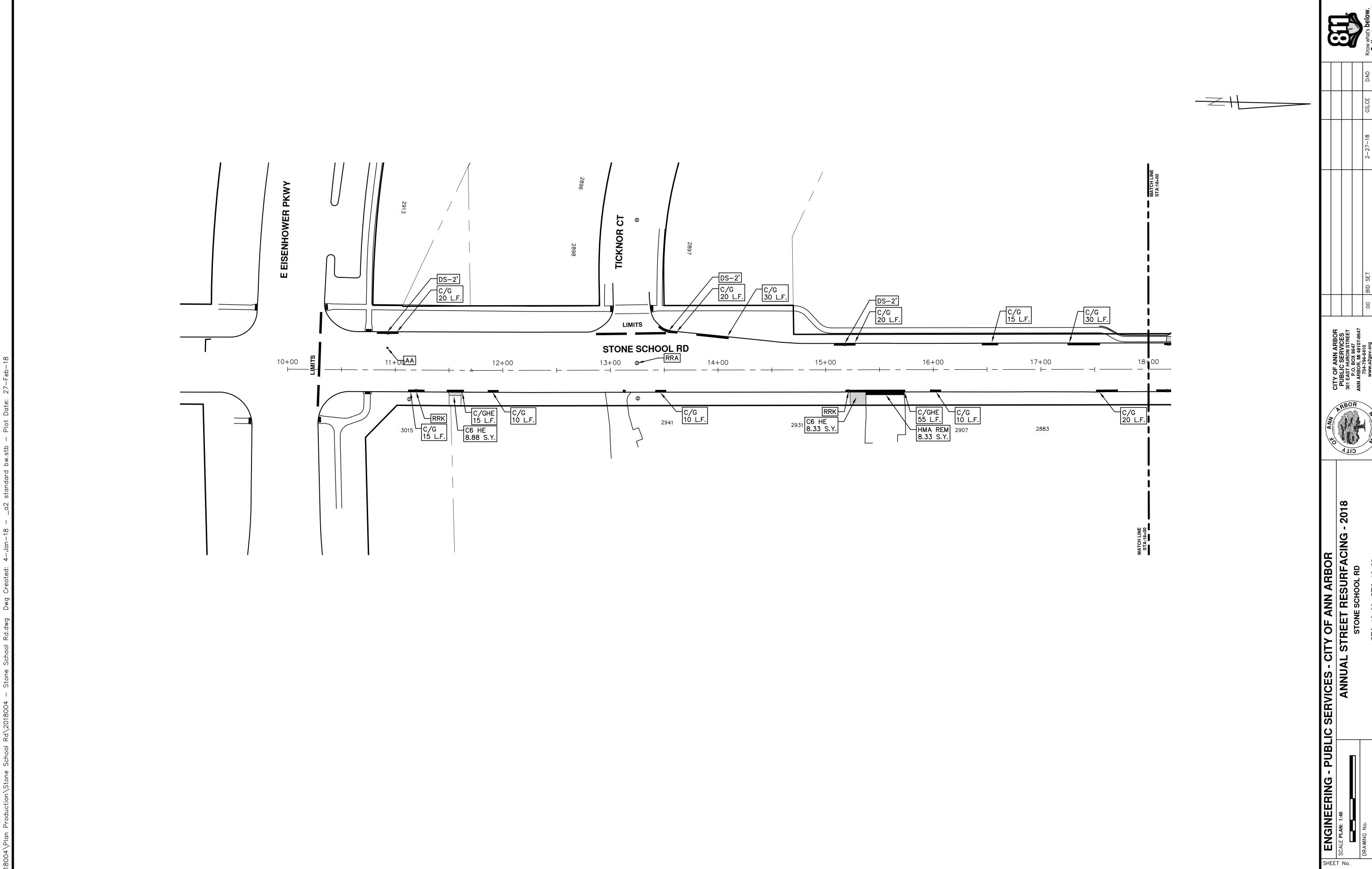
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ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

DRAWING No.

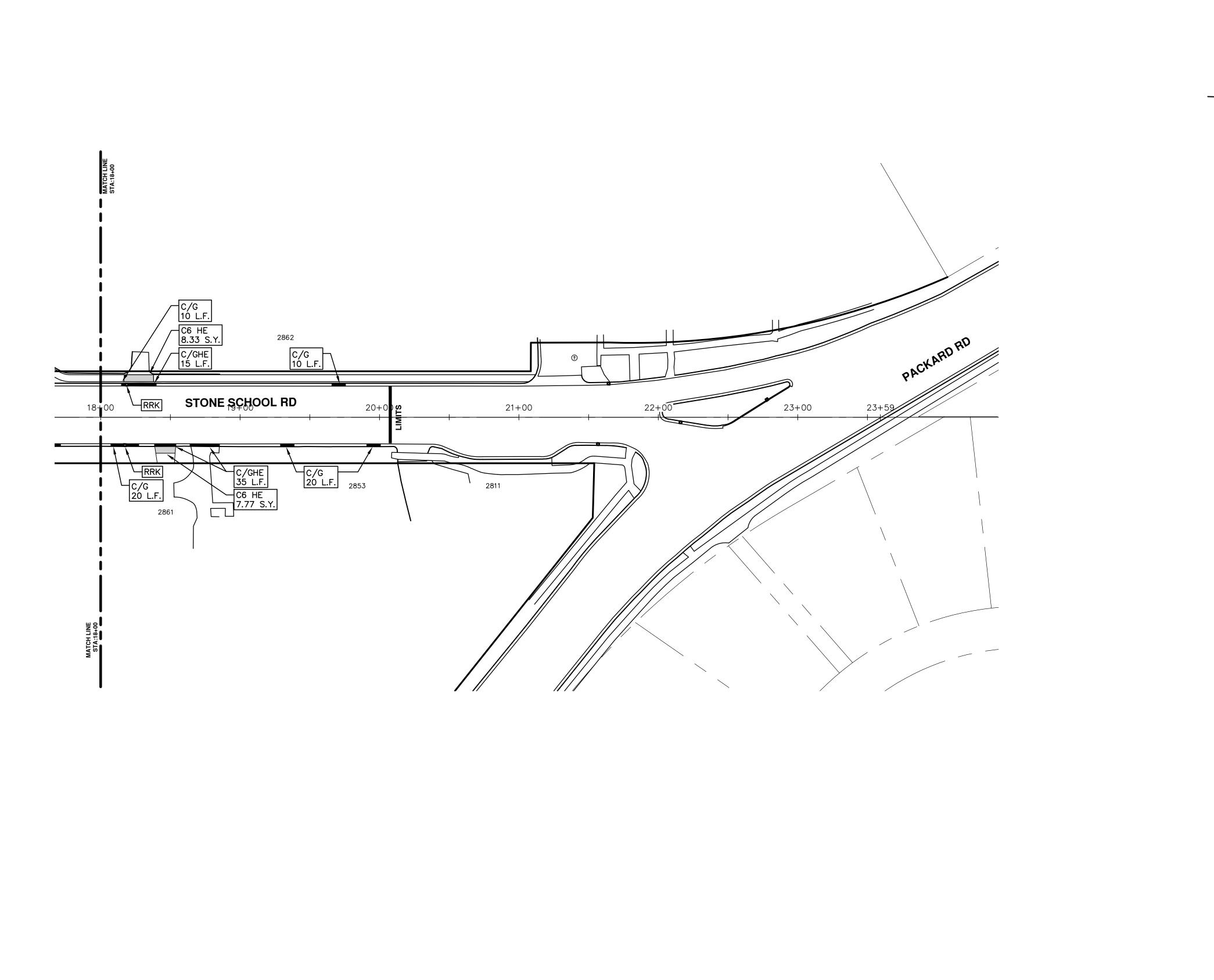
2018004-61

ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

ANNUAL STREET RESURFACING

STONE SCHOOL RD

STA. 10+00 - STA. 18+00



ENGINEERING - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1:40

BRAWING No.

STONE SCHOOL RD

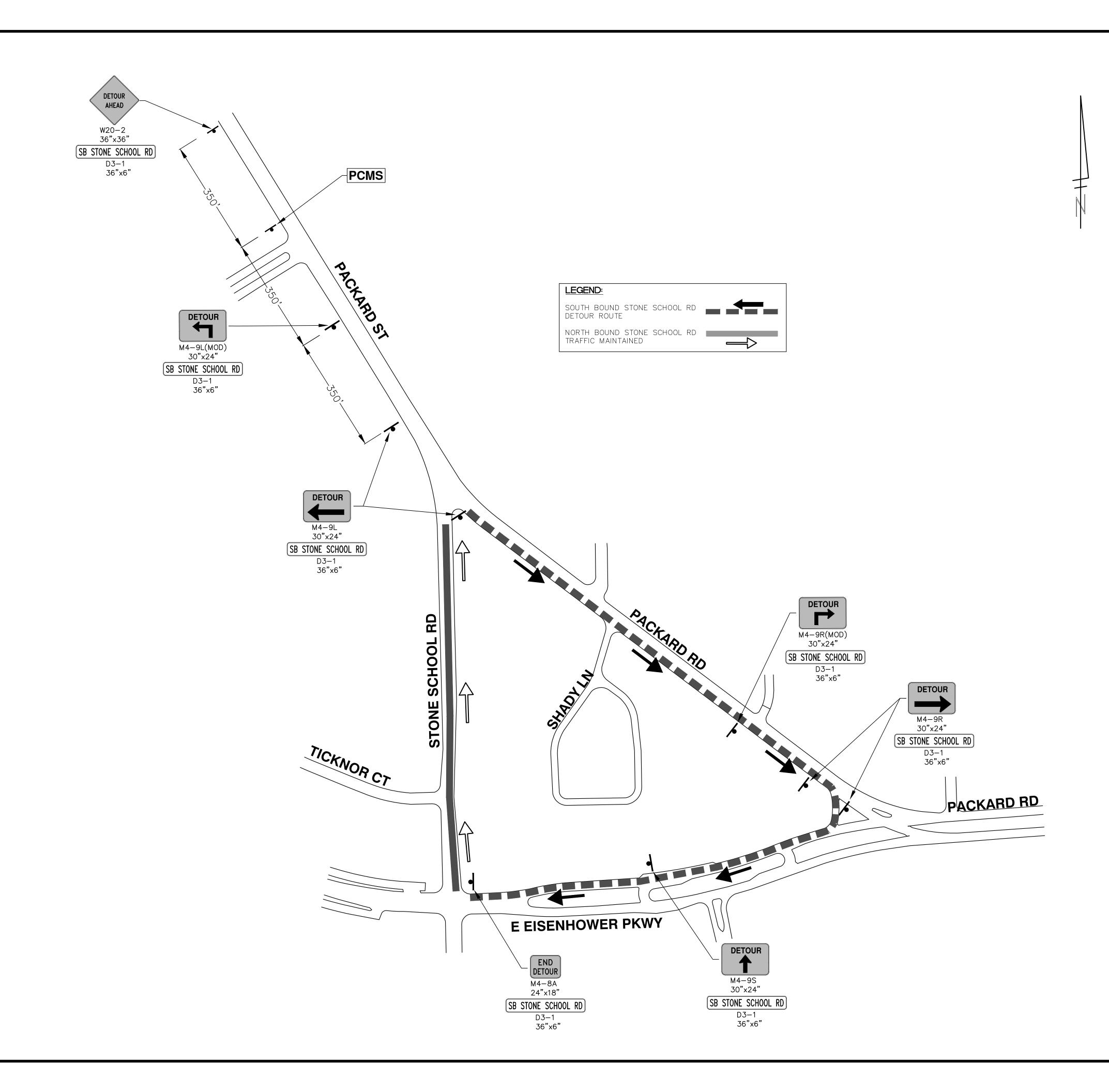
## **DETOUR CONSTRUCTION NOTES:**

- 1. DEPENDING ON THE DETOUR ROUTE THAT IS PUT IN PLACE, CONFLICTING SIGNS MAY BE PRESENT. PRIOR TO THE ORDERING OR PLACEMENT OF ANY SIGNS, MEET WITH THE ENGINEER TO VERIFY THE EXACT NUMBER AND LOCATION OF THE SIGNS TO BE PLACED. THE ENGINEER AND THE CONTRACTOR SHALL WORK TOGETHER TO ELIMINATE ALL CONFLICTS.
- 2. THE CITY RESERVES THE RIGHT TO ORDER ADDITIONAL SIGNS AND PLACE THEM INTO SERVICE IN ORDER TO SAFELY MAINTAIN TRAFFIC. ADJUSTMENTS IN THE UNIT PRICE FOR THESE ITEMS OF WORK SHALL NOT BE ALLOWED FOR THESE OCCURRENCES.
- 3. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS WITH THOSE OF THE CITY OF ANN ARBOR'S SIGNS AND SIGNALS UNIT DURING THE COURSE OF THE DETOUR ROUTE ESTABLISHMENT TO EFFECTIVELY AND SAFELY MAINTAIN TRAFFIC. DO NOT ERECT ANY SIGNS UNTIL ITS LOCATION AND PROPOSED DATE OF INSTALLATION IS APPROVED BY THE ENGINEER.
- 4. THE DETOUR IS TO BE IN PLACE DURING STONE SCHOOL ROAD SANITARY PROJECT. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL CLOSE AND DETOUR SOUTH BOUND STONE SCHOOL ROAD TRAFFIC. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE AND DETOUR LIMITATIONS, AND OTHER DETAILS.
- 5. REFERENCE THE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR ADDITIONAL PROJECT REQUIREMENTS. THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DIRECTED TO THE SECTION OF SAME SPECIAL PROVISION REGARDING COORDINATION WITH THE CITY SIGNS AND SIGNALS UNIT FOR MODIFICATIONS TO TRAFFIC SIGNALS FOR THE DETOUR.
- 6. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN SIGNS AS SHOWN ON THE PLANS OR OTHERWISE DIRECTED BY THE ENGINEER.
- 7. CONSTRUCTION WARNING SIGNS SHALL HAVE AN ORANGE, HIGH-INTENSITY, REFLECTORIZED BACKGROUND.
- 8. SIGNS SHALL CONFORM TO THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 9. THE CONTRACTOR SHALL DRIVE ALL SIGNS INTO EXPOSED GROUND OR INSERT INTO A BORED HOLE IN PAVEMENT AS NECESSARY TO PERMANENTLY SECURE. ALL HOLES IN PAVEMENT SHALL BE FILLED WITH ENGINEER—APPROVED MORTAR WHEN THE SIGN IS REMOVED AND NO LONGER NEEDED. COSTS FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "SIGN, TYPE B, TEMP, PRISMATIC, FURN" OR "SIGN, TYPE B, TEMP, PRISMATIC, FURN, SPECIAL".
- 10. ADVANCE WARNING SIGNS SHALL BE PROVIDED WITH TWO (2) TYPE A FLASHING LIGHTS AND ONE (1) DAY-GLOW ORANGE FLAG.
- 11. CITY TO BE NOTIFIED A MINIMUM OF 7 DAYS PRIOR TO IMPLEMENTING SB STONE SCHOOL ROAD DETOUR.

  MESSAGE BOARDS TO BE PLACED 7 DAYS PRIOR TO IMPLEMENTATION OF DETOUR.

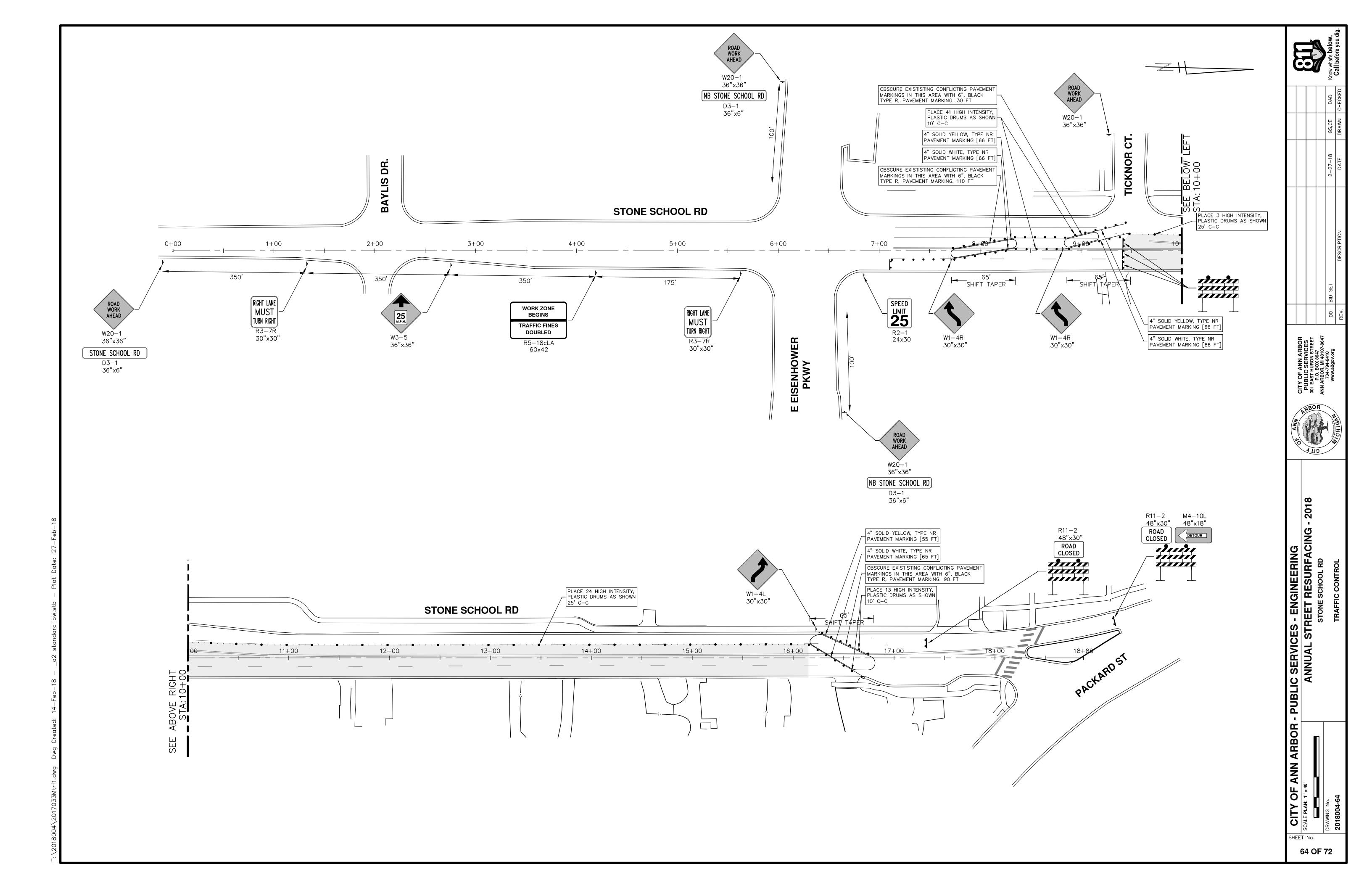
PCMS	MESSAGE I	PHASING	
PRIOR TO CONSTRUCT	ION DU	RING CONSTRUCTION	
STONE SCHOOL ROAD CONSTRUCTION		SB STONE SCHOOL CLSD AT PACKARD	
MONTH DATE	*	FOLLOW POSTED DETOUR	

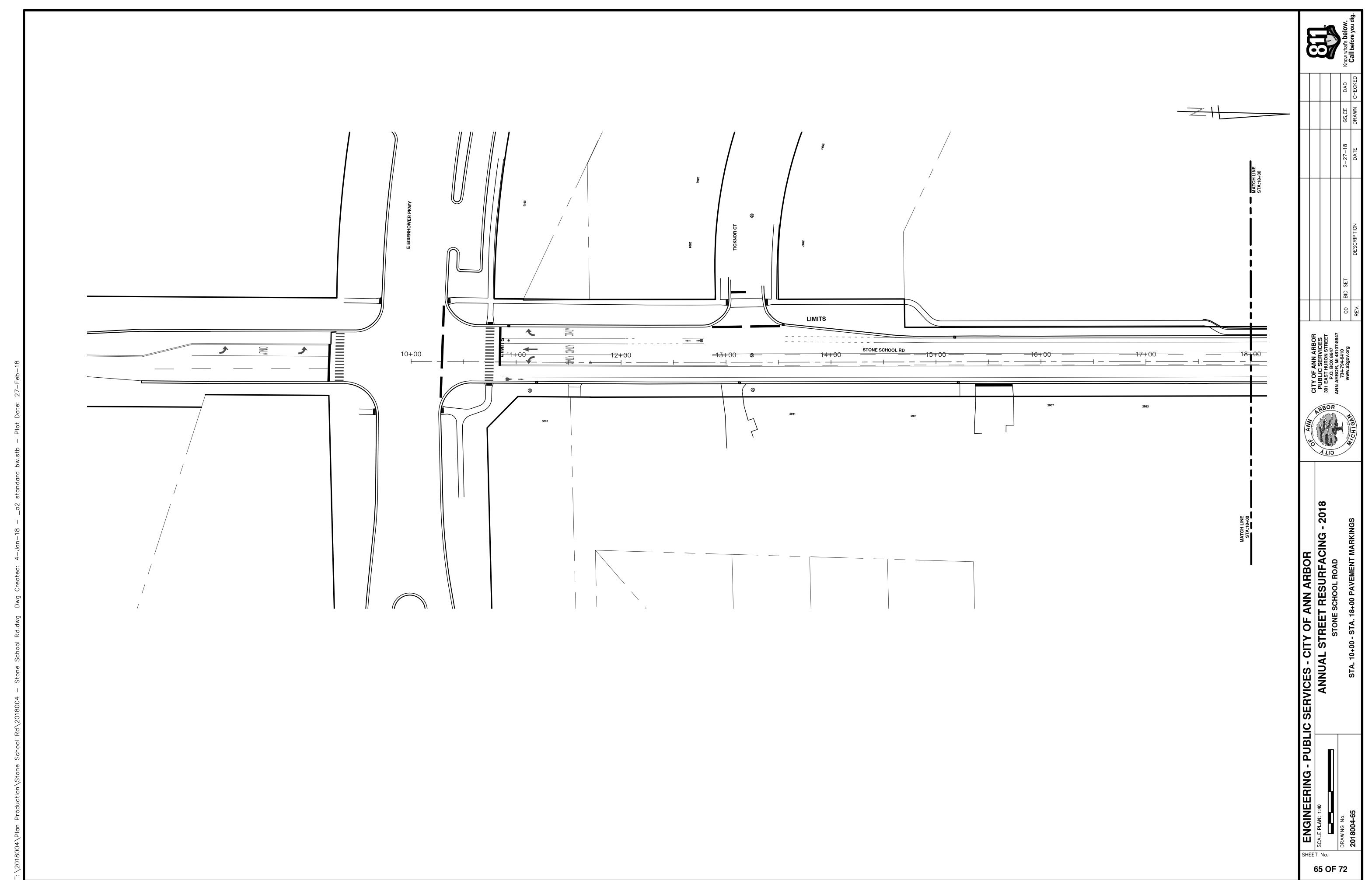
- NOTE: PCMS LOCATIONS AND MESSAGES WILL BE AS DIRECTED BY THE ENGINEER. TO BE PLACED ONE WEEK PRIOR TO CONSTRUCTION.
- \*THE CONTRACTOR SHALL PLACE THE APPROPRIATE DATE AS APPROVED BY THE ENGINEER.

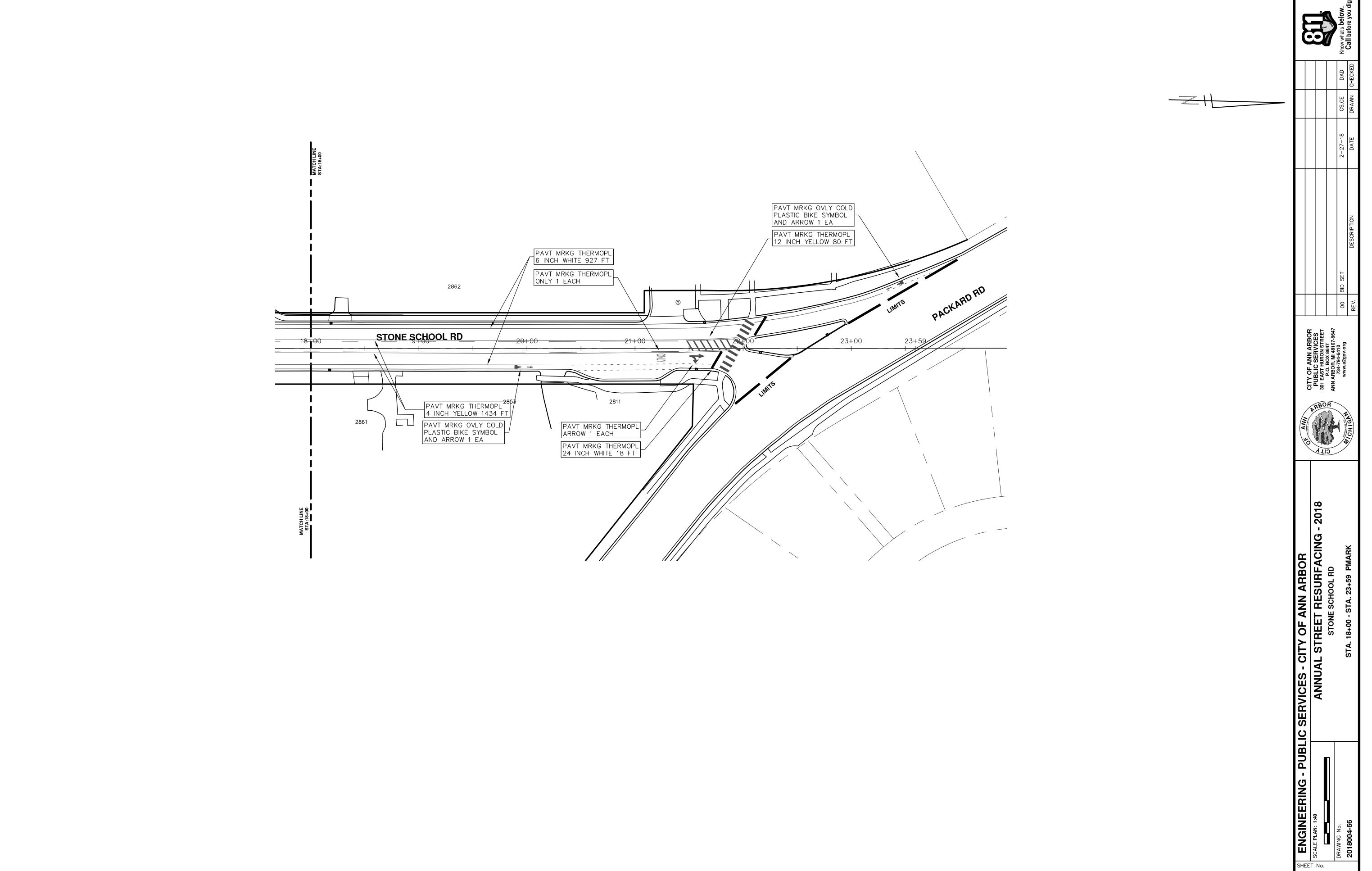


**ANN ARBOR** 

CITY OF /









# CITY OF ANN ARBOR ENGINEERING

# PROJECT LOCATION: STATE ST

ITB No. 4529 FILE No. 2018004

	QUANTITIES		
ITEM#	DESCRIPTION	Units	Total
206	Remove HMA Pavement	S.Y.	28
207	Cold Miling Pavement	Tons	270
209	Subgrade Undercutting - Type II	C.Y.	160
220	HMA Patching	Tons	3
222	HMA Pavement Leveling, Regular	Tons	180
224	HMA Pavement Wearing, 36A	Tons	90
230	Rem. Curb & Gutter, Any Type	L.F.	490
232	Rem. Conc. Sidewalk & Drive - Any Thickness	S.F.	300
237	Conc. Curb & Gutter - Any Type - Fixed Form	L.F.	490
240	4" Sidewalk or Ramp	S.F.	0
241	6" Drive, Sidewalk or Ramp	S.F.	300
245	Detectable Warning, Cast in Place	S.F.	0
247	Integral Sidewalk Ret. Wall (6"-18")	S.F.	0
250	2' Dia. Structure	Each	0
254	Lower Structure Cover	Each	4
255	Lower Mon./Gate Valve Box	Each	0
256	Adjust Structure Cover	Each	4
257	Adjust Curb Inlet Structure Cover	Each	0
258	Adjust Mon. or Gate Valve Box	Each	0
259	Manhole Flange & Cover (MDOT Type A)	Each	3
261	Pt. Drain Structures	Each	2
264	12" Sewer, Trench Detail I, Modified	L.F.	0
268	Flowable Fill	C.Y.	14
271	21AA Limestone - C.I.P.	C.Y.	160
282	Plastic Drum - Lighted - Furn. & Operate	Each	18
283	Barricade Type III - Furn. & Operate	Each	2
284	Temp Signs Type - B	S.F.	101
285	No Parking Sign	Each	13
291	12" Thermo. White or Yellow	L.F.	0
594	4" White Thermo.	L.F.	0
595	4" Yellow Thermo.	L.F.	0
596	6" White Thermo.	L.F.	70
597	24" White Thermo.	L.F.	15
598	Pvmt. Marking Symbol	Each	0

	TRAFF	FIC CONTROL & SIGN LEGEND
QTY.	TYPE	DESCRIPTION
2	W20-1	"ROAD WORK AHEAD"
2	W20-3	"ROAD CLOSED AHEAD"
3	D3-1	CONVENTIONAL GUIDE
2	TYPE III	TYPE III LIGHTED BARRICADE
2	R11-4	Road Closed to Thru Traffic
0	TYPE II	TYPE II BARRICADE DRUM

KEY	ASSOCIATED PAY ITEM(S)
	Dr Structure, Adj, Case 1, Modified
AA	Dr Structure, Adj, Case 2, Modified
///	• _Dr Structure, Temp Lowering, Modified
	Dr Structure, Temp Lowering, Modified
AB	• _Gate Box, Adj, Case 1
	Gate Box, Adj, Case 2     Adj. Adj. Adj. Adj. Adj. Adj. Adj. A
ADOT	• _Monument Box Adjust
ADST	• _Dr Structure, Adj, Add Depth, Modified
AK	• _Dr Structure, Adj, Case 1, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
C4	Grading, Sidewalk
	• _Sidewalk, Conc, 4 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
C4HE	Grading, Sidewalk
CAHE	Cement
	• _Sidewalk, Conc, 4 inch, Modified
	_Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	Grading, Sidewalk
	Grading, Sidewalk Ramp
C6	_ Detectable Warning Surface, Modified
	Sidewalk Ramp, Conc, 6 inch, Modified      Sidewalk Conc, 6 inch, Modified
	• _Sidewalk, Conc, 6 inch, Modified
C8	• _Grading, Driveway Approach
	• _Driveway, Nonreinf Conc, 8 inch, Modified
	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Ren
	Grading, Driveway Approach
	Grading, Sidewalk
	Grading, Sidewalk Ramp
CHE	Cement
C HE	<ul> <li>_Driveway, Nonreinf Conc, 6 inch, Modified</li> </ul>
	Driveway, Nonreinf Conc, 8 inch, Modified
	Detectable Warning Surface, Modified
	Sidewalk Ramp, Conc, 6 inch, Modified
	Sidewalk, Conc, 6 inch, Modified
	_Curb, Gutter, and Curb and Gutter, Any Type, Rem
C/G	• _Curb and Gutter, Conc
	1 1 110 (100 1 100 1 10 1 100 100 100 10
CICILE	_Curb, Gutter, and Curb and Gutter, Any Type, Rem     _Compart
C/GHE	• Cement
	Driveway Opening, Conc, Det M, Modified
CP	• _Grading, Sidewalk
	• _Sidewalk, Conc, 4 inch, Modified
CR	• _Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
	Dr Structure, Rem
DS	Sewer, Rem, Less than 24 inch
	Dr Structure, 24 inch dia
	Dr Structure, Rem
DSDI	• Sewer, Rem, Less than 24 inch
	Dr Structure, Double Inlet
PT	Dr Structure, Point
1 1	Dr Structure, Form     Dr Structure Cover, Type B
RRA	• _Dr Structure Cover, Type B, Special
	• _Dr Structure, Adj, Case 1, Modified
	• _Dr Structure, Temp Lowering, Modified
RRK	Dr Structure Cover, Type K
	<ul> <li>_Dr Structure, Adj, Case 1, Modified</li> </ul>
RS	• _Dr Structure, Reconstruct
TYPE II	Plastic Drum, High Intensity, Lighted, Furn
	Plastic Drum, High Intensity, Lighted, Oper
	r lastic Diam, riigh intensity, Lightea, Oper
TYPE III	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn

# **CONSTRUCTION METHOD AND SEQUENCING**

- INSTALL ANY PROPOSED STORM SEWER, AND UNDERDRAIN AS SHOWN ON THE PLANS, AND AS
- LOWER ALL STRUCTURE COVERS, INCLUDING VALVE AND MONUMENT BOXES.

- 9. PAVE 2 INCHES OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE LEVELING COURSE, IN
- 10. ADJUST ALL STRUCTURE COVERS, MONUMENT BOXES, AND VALVE BOXES TO THEIR FINISHED ELEVATIONS.
- 11. PAVE 1 INCH OF THE BITUMINOUS MIX AS SPECIFIED OR DIRECTED, AS THE WEARING COURSE, IN ONE
- 12. COMPLETE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE PLANS, AND AS DIRECTED BY THE
- 13. COMPLETE ALL MISCELLANEOUS CONSTRUCTION INCLUDING ALL CLEAN—UP AND FINAL RESTORATION.
- 14. REMOVE ALL TRAFFIC CONTROL DEVICES. REMOVE MISS DIG FLAGS.

# NOTES:

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## **ENGINEERING**

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



SHEET No.

