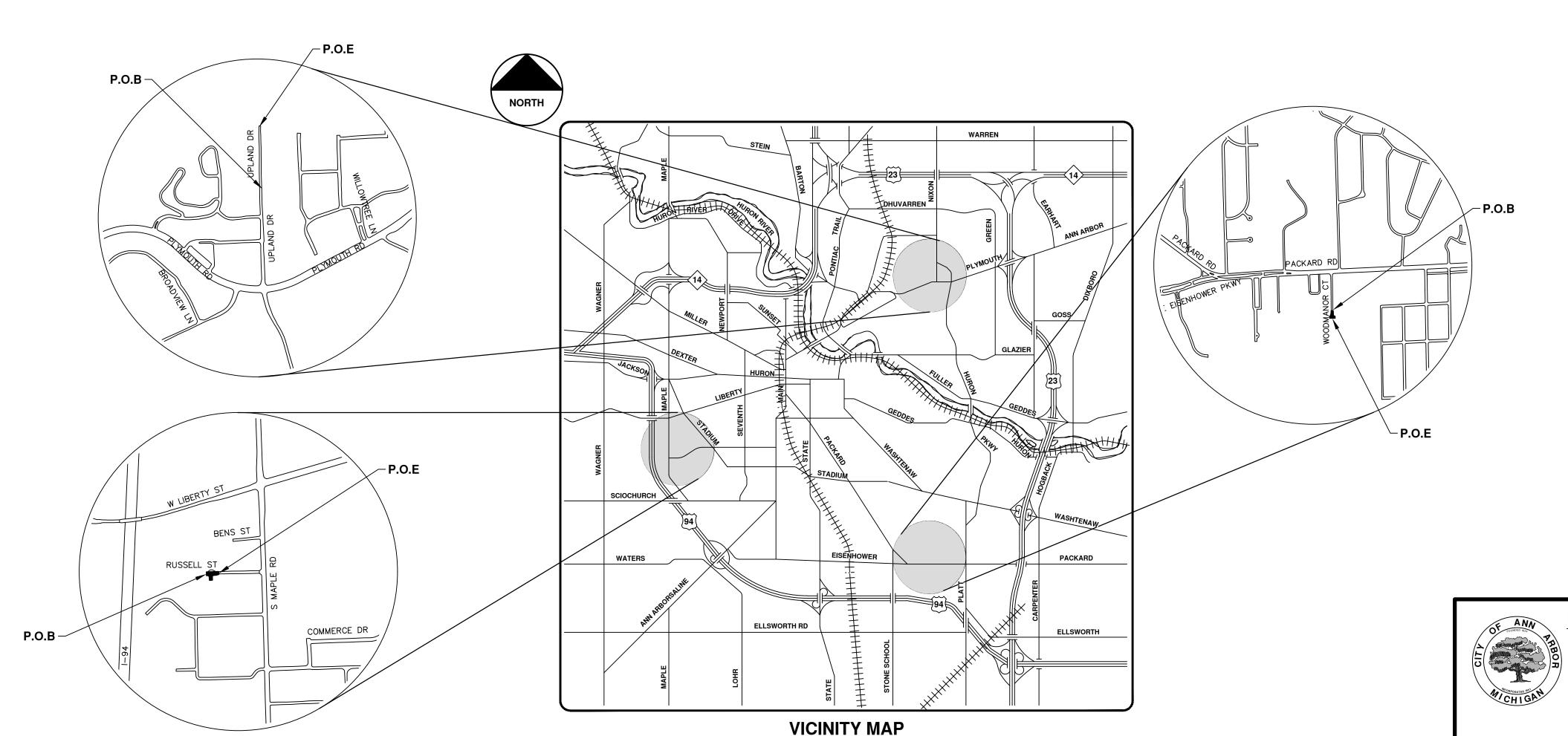


CITY OF ANN ARBOR PROJECT MANAGEMENT

STANDARD SPECIFICATIONS, IT'S DETAILS, WHICH ARE INCLUDED BY REFERENCE, AND THIS PROJECT'S CONTRACT DOCUMENTS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR

RUSSELL ST., UPLAND DR., & WOODMANOR CT. ROAD RECONFIGURATION PROJECT

BID No. 4447, FILE No. 2015028



	SHEET LIST TABLE
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8-10	UPLAND DR REMOVALS, PLAN & PROFILE, AND GRADING
11-13	WOODMANOR CT REMOVALS, PLAN & PROFILE, AND GRADING

PROJECT MANAGEMENT SERVICE UNIT

/ /2016

PREPARED UNDER THE SUPERVISION OF

ANNE WARROW, P.E. - MI LICENSE No. 48239 **PROJECT MANAGER**



CONSTRUCTION NOTES:

- 1. Driveways and entrances to buildings, real property, and the like shall not be blocked except for short durations and only when approved by the Engineer. Vehicular and pedestrian access shall be maintained at all times. It shall be the Contractor's responsibility to coordinate all necessary driveway closures with the property owner(s) and resident(s) in the areas of construction.
- 2. The location and depth of all existing utilities and service leads are to be field verified by the Contractor prior to construction.
- 3. Location and depth of utilities as depicted on the plans is approximate and shown according to the best information available. It is the Contractor's responsibility to excavate ahead and adjust depth of conflict utilities accordingly. Any damage to utilities is the Contractor's responsibility to avoid and/or repair as necessary.
- 4. During non-working hours no trench shall remain open; any open trench shall be properly secured with protective fencing. This work shall be included in the item of work "General Conditions".
- 5. "No Parking" signs shall be installed by the Contractor at locations as approved or directed by the Engineer. All signs shall be installed in accordance with the detailed specifications.
- 6. Postal delivery and refuse pickup service shall be maintained at all times by the Contractor.
- 7. Where street curbs are undermined due to construction activities, they shall be removed and replaced as directed by the Engineer.
- 8. The Contractor shall be responsible for the continuous maintenance of the temporary road surface and soil erosion control measures within the construction area until the full completion of the project. This work shall be included in the item of work "General Conditions".
- 9. All curb, sidewalk, driveway approach removals shall be approved by Engineer before the work is done.
- 10. Sawed sewer pipe connections shall be coupled with a Fernco flexible coupling and a stainless steel shear ring.

- 11. The location of material stock piles and on—site staging areas to be approved by the
- 12. For mainline paving, the width of the mat for each pass of the paver shall be not less than 10.5' or greater than 15', as directed by the Engineer. The Engineer will direct the layout of the longitudinal joints during construction.
- 13. All structures shall receive new castings as directed by the Engineer, as specified on the standard casting schedule. The existing castings are the property of the City of Ann Arbor. The Contractor shall deliver to City of Ann Arbor Field Operations and Maintenance Facility at the W.R. Wheeler Service Center located at 4251 Stone School Road.
- 14. Payment for drainage structure sumps, where specified, shall be included in the payment for the various drainage structure sizes and or types.
- 15. Where sewer pipes of different sizes or materials are joined, Fernco flexible couplings with stainless steel shear rings shall be used. The Contractor's purchase price for these devices, including shipping, shall be paid as an extra. Prior to payment for this item, the Contractor shall submit receipts for the Engineer's review and approval. All other costs associated with the installation of these devices shall be included in the payment for the sewer.
- 16. Where sewer and water main are to be removed & replaced or added, all pipe shall be installed using Trench Detail detailed in the specifications or shown on Plans. Backfill for sewer and water construction shall be MDOT Granular Material, Class II, Modified.
- 17. Existing street name, guide, and regulatory signs, and mailboxes which conflict with the proposed construction shall be removed prior to construction, stored in a manner which will prevent damage, and re—set in locations as directed by the Engineer. This work will not be paid for separately, but shall be included in "Machine Grading, Modified"
- 18. In areas where edge drain cannot be installed in accordance with City of Ann Arbor Detail SD-TD-11, the edge drain shall be installed at the depth as indicated on the plans, or as directed by Engineer. In no case shall the edge drain be installed at a grade less than 0.50% or at a depth of less than 2' below top of proposed pavement.

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

- 1. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE SOIL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER AT ALL TIMES DURING CONSTRUCTION. ANY MODIFICATIONS OR ADDITIONS TO THE SOIL EROSION CONTROL MEASURES DUE TO CONSTRUCTION OR CHANGED CONDITIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER.
- 2. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE CITY OF ANN ARBOR, CITY ORDINANCE CHAPTER 63, CITY OF ANN ARBOR STANDARDS DIVISION VII, THE LAWS OF THE STATE OF MICHIGAN, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- 3. DAILY, OR AFTER ANY STORM EVENT, INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE MADE BY THE CONTRACTOR. PERIODIC INSPECTIONS MAY BE MADE BY THE ENGINEER TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES. ANY NECESSARY CORRECTIONS SHALL BE MADE WITHOUT DELAY, AND WITHOUT ADDITIONAL COST TO THE CITY OF ANN ARBOR.
- 4. EROSION AND SEDIMENTATION FROM WORK ON THE SITE SHALL BE CONTAINED ON THE SITE AND NOT BE ALLOWED TO COLLECT ON ANY OFF-SITE AREAS, ROADWAYS OR WATERWAYS.
- 5. ALL MUD/SOIL TRACKED ONTO ROADWAYS FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. IF SO ORDERED, THE CONTRACTOR SHALL PROVIDE AND OPERATE A VACUUM-TYPE STREET SWEEPER, AT NO ADDITIONAL COST TO THE CITY OF ANN ARBOR, WITHIN FOUR (4) HOURS OF BEING SO ORDERED.
- 6. RESTORATION OF ALL DISTURBED AREAS, INCLUDING PLACEMENT OF TOPSOIL, SEED, FERTILIZER AND MULCH AND/OR SOD SHALL BE PERFORMED WITHIN FIVE (5) DAYS OF THE COMPLETION OF FINAL
- 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
- 12. TREE PROTECTION FENCING MUST REMAIN INTACT UNTIL RESTORATION OF THE SITE IS COMPLETE. SEQUENCE OF EROSION CONTROL MEASURES:
- THE CONTRACTOR IS TO SUBMIT TO THE ENGINEER. A SEQUENCE OF CONSTRUCTION WITH RESPECT TO THE SOIL EROSION CONTROL MEASURES FOR REVIEW, COMMENT AND APPROVAL. THIS SCHEDULE IS TO INCLUDE INSPECTION AND REPAIR OF ALL TEMPORARY EROSION CONTROL MEASURES DAILY AND WITHIN 24 HOURS OF A STORM EVENT.
- SAMPLE SOIL EROSION AND SEDIMENTATION CONTROL INSTALLATION MINIMUM REQUIREMENTS:

 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. COMPLETE REQUIRED DITCHING FROM MALLET'S CREEK TO STONE SCHOOL ROAD.
- 1.4. INSTALL WATER MAINS, STORM AND SANITARY SEWERS, AND OTHER ENCLOSED DRAINAGE FEATURES. NEW INLET FILTERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF NEW DRAINAGE
- 1.5. PERFORM MACHINE GRADING OPERATIONS AND CONSTRUCT PAVEMENTS (MAINLINE, SIDEWALKS, DRIVES, ETC.).
- 1.6. COMPLETE MALLET'S CREEK WORK OPERATIONS IN ACCORDANCE WITH CONSTRUCTION SEQUENCE CONTAINED WITHIN THE SPECIAL PROVISION ENTITLED "MAINTAINING TRAFFIC AND CONSTRUCTION METHOD AND SEQUENCING" CONTAINED IN THE CONTRACT PROPOSAL.
- 1.7. CONTINUALLY MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES, AS REQUIRED TO ALLOW DRAINAGE AND SEDIMENT REMOVAL. REMOVE ANY ACCUMULATED SEDIMENT IMMEDIATELY.
- 1.8. COMPLETE ALL BIORETENTION GRADING AND FINE GRADING.
- 1.9. TEMPORARY SEED AND INSTALL EROSION CONTROL BLANKET IN ALL DISTURBED AREAS.
- 1.10. REFER TO LANDSCAPE PLANTING PLANS FOR PERMANENT SITE STABILIZATION.
- 1.11. CLEAN OUT STORM SEWER SYSTEMS.
- 1.12. REMEDY ANY NOTED DEFECTS TO THE SATISFACTION OF THE CITY OF ANN ARBOR'S SOIL EROSION AND SEDIMENTATION CONTROL OFFICIAL.
- 1.13. ALL TEMP. SOIL EROSION CONTROL MEASURES MUST BE REMOVED, WITH ENGINEERS APPROVAL,

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:

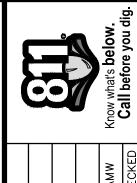
- 1. SEED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
- 2. ANY DISTURBED AREA NOT PAVED, SEEDED, MULCHED, SODDED OR BUILT UPON BY NOVEMBER 15TH OR JUNE 30TH IS TO BE TEMPORARILY STABILIZED PER SPECIFICATIONS.
- THE ESTIMATED COST OF SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, TOPSOIL, SEEDING, AND MULCH = \$29,500.00
- ESTIMATE OF EXCAVATION AND FILL FROM EXISTING TO FINAL GRADE:
- EXCAVATION = 144 CY, FILL = 110 CY
- ON SITE SOILS PER THE USDA SOIL SURVEY OF WASHTENAW COUNTY, MICHIGAN: COB - CONOVER LOAM - IN BROAD AREAS AND ALONG DRAINAGEWAYS OF TILL PLAINS AND
- MORAINES. O TO 4 PERCENT SLOPES. • Ho - HOYTVILLE SILTY CLAY LOAM - IN DEPRESSIONAL AREAS, BROAD LOW-LYING AREAS, AND
- DRAINAGEWAYS OF TILL PLAINS AND LAKE PLAINS. NEARLY LEVEL SOIL. MdA - MATHERTON SANDY LOAM - IN DEPRESSIONAL AREAS, BROAD LOW-LYING AREAS, AND ALONG
- DRAINAGEWAYS, OUTWASH PLAINS, VALLEY TRAINS, AND TERRACES. NEARLY LEVEL TO GENTLY SLOPING. MmB - MIAMI LOAM - IN BROAD UPLAND AREAS AND ON LOW RISES AND SIDE SLOPES. 2 TO 6
- PERCENT SLOPES. • MmC - MIAMI LOAM - IN BROAD AREAS AND ALONG STREAMS AND DRAINAGEWAYS OF TILL PLAINS
- AND MORAINES. 6 TO 12 PERCENT SLOPES. • WdA - WASEPI SAND LOAM - IN DEPRESSIONAL AREAS, ON BROAD LOW-LYING AREAS, AND ALONG DRAINAGEWAYS OF OUTWASH PLAINS, VALLEY TRAINS, AND LAKE PLAINS. O TO 4 PERCENT

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE REGINNING OF CONSTRUCTION

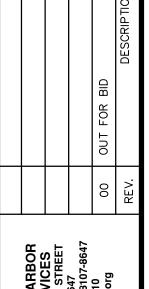
PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
"NO PARKING" SIGNS PERMIT*	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE

CONTACT INFORMATION

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



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		7/19/2016	DATE





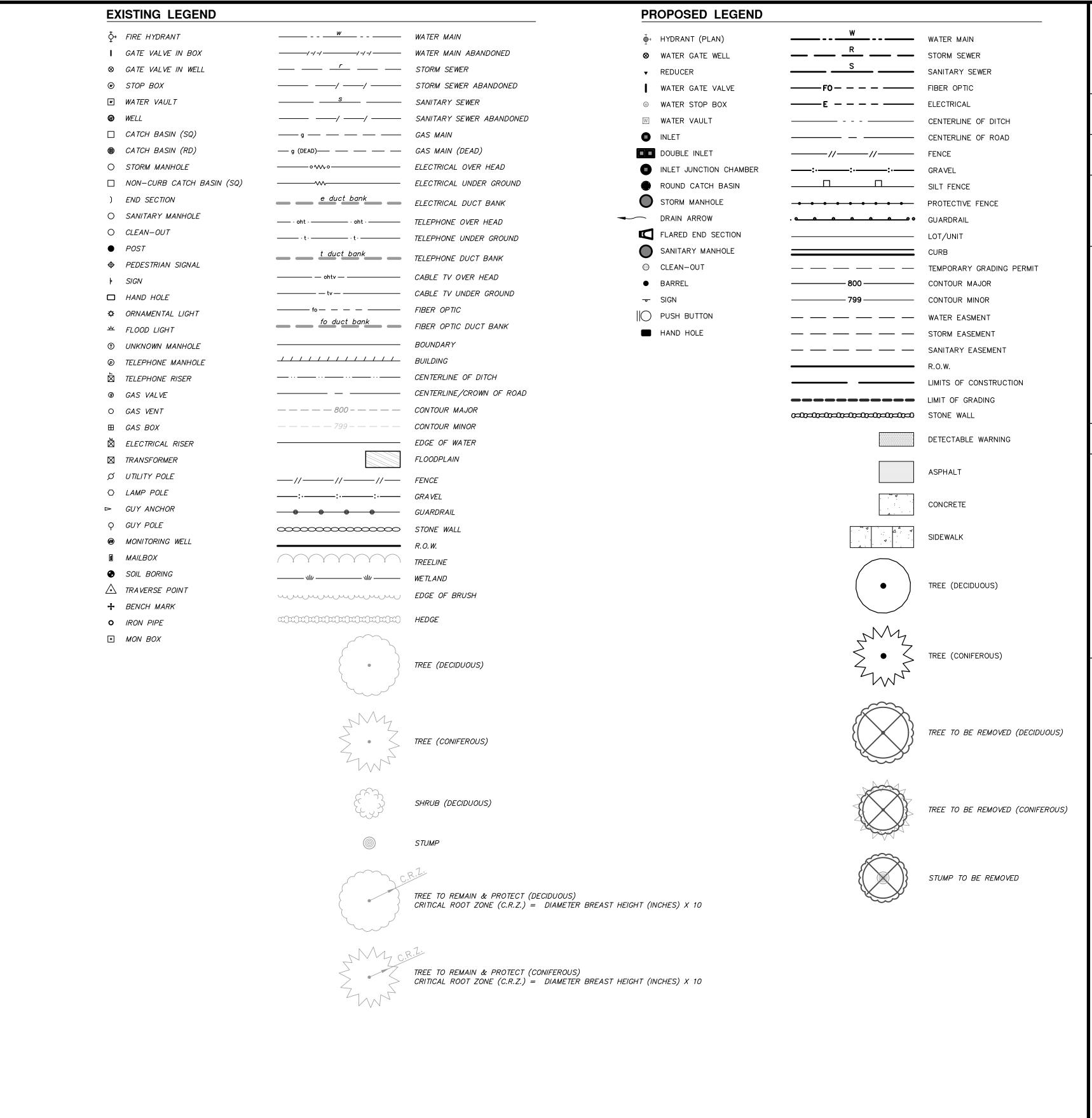


 $\mathbf{\alpha}$ r., UPLAND DR., & WOODMANG RECONFIGURATION PROJECT **ANN ARB**

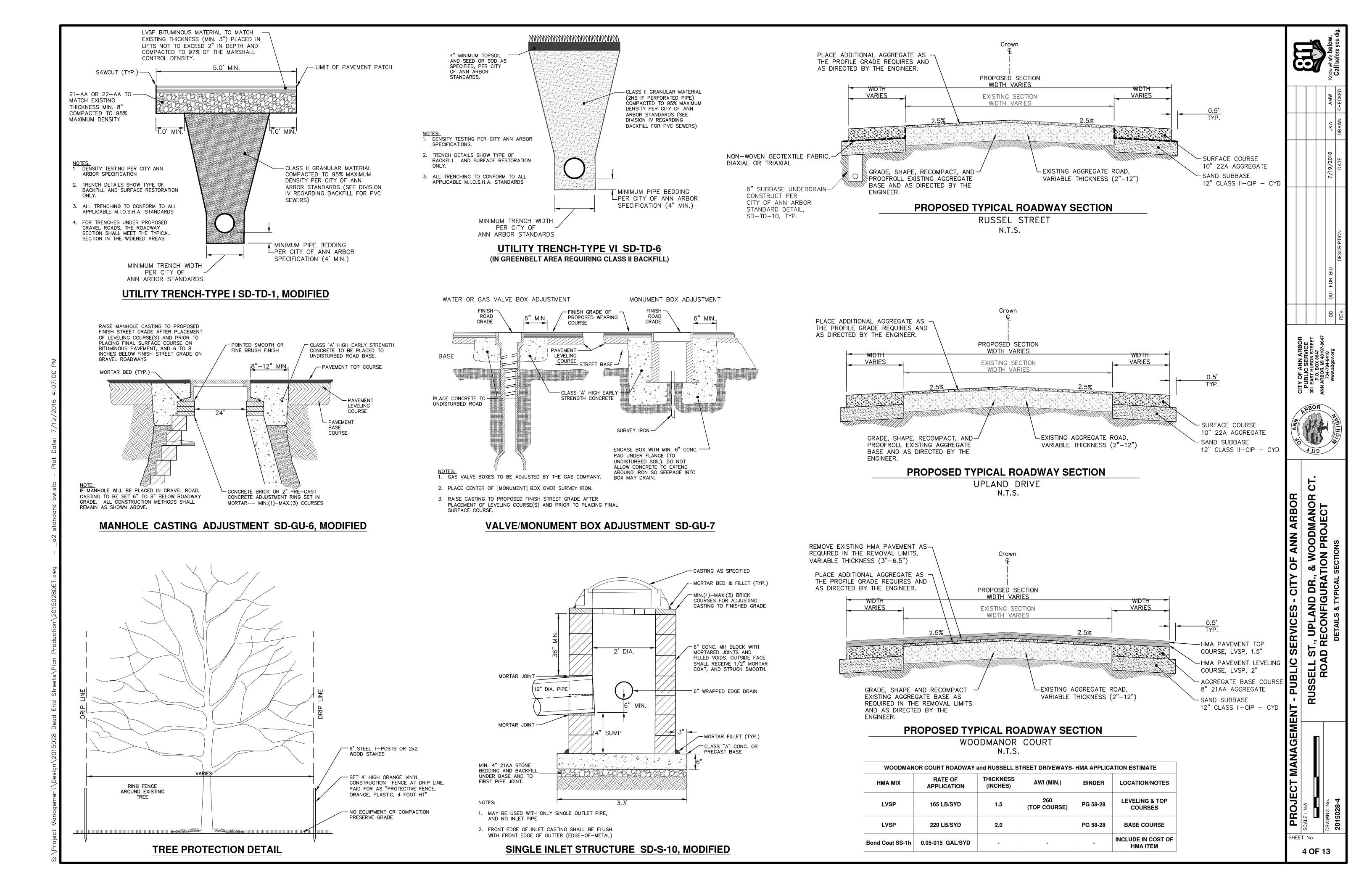
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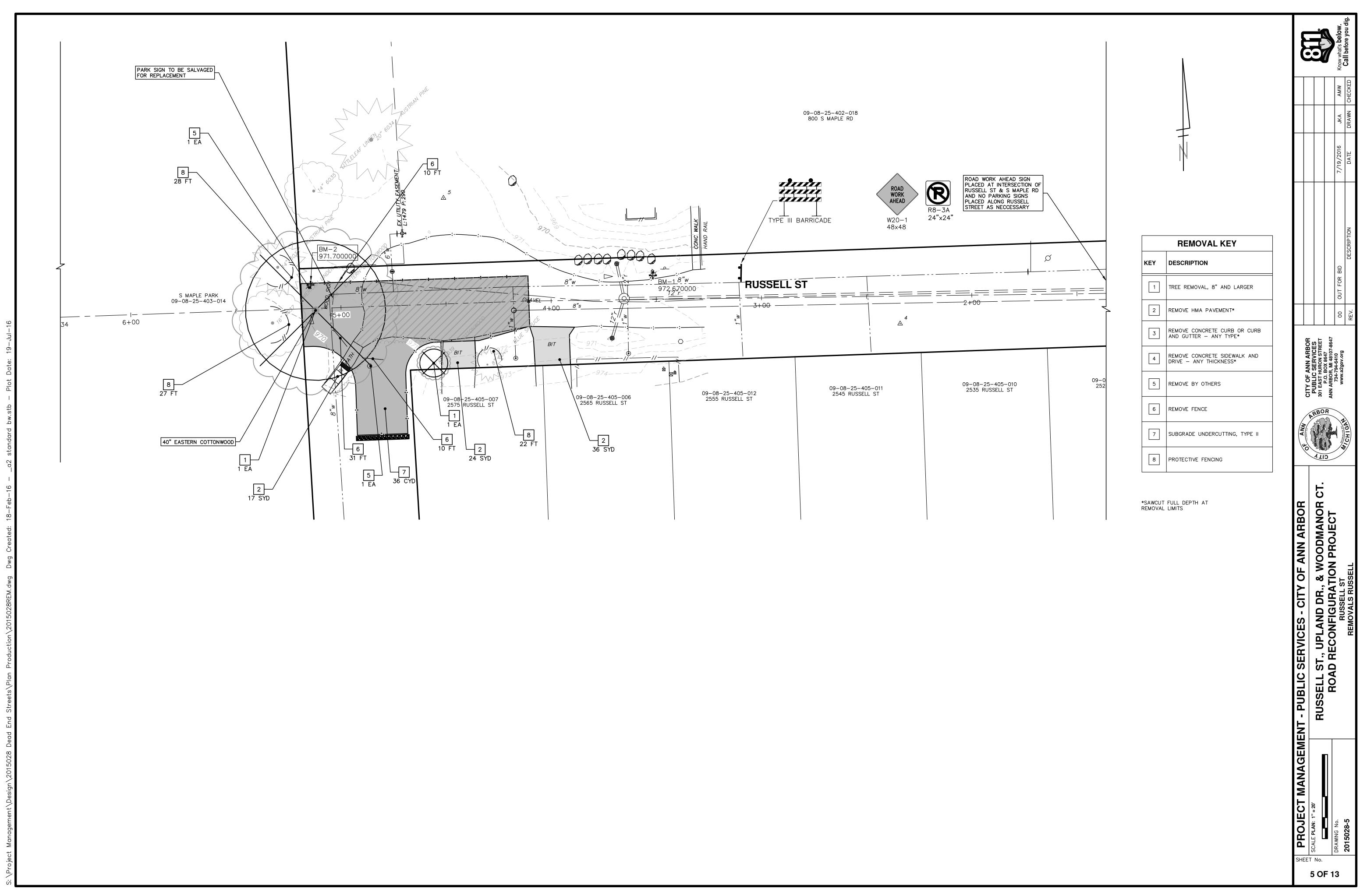
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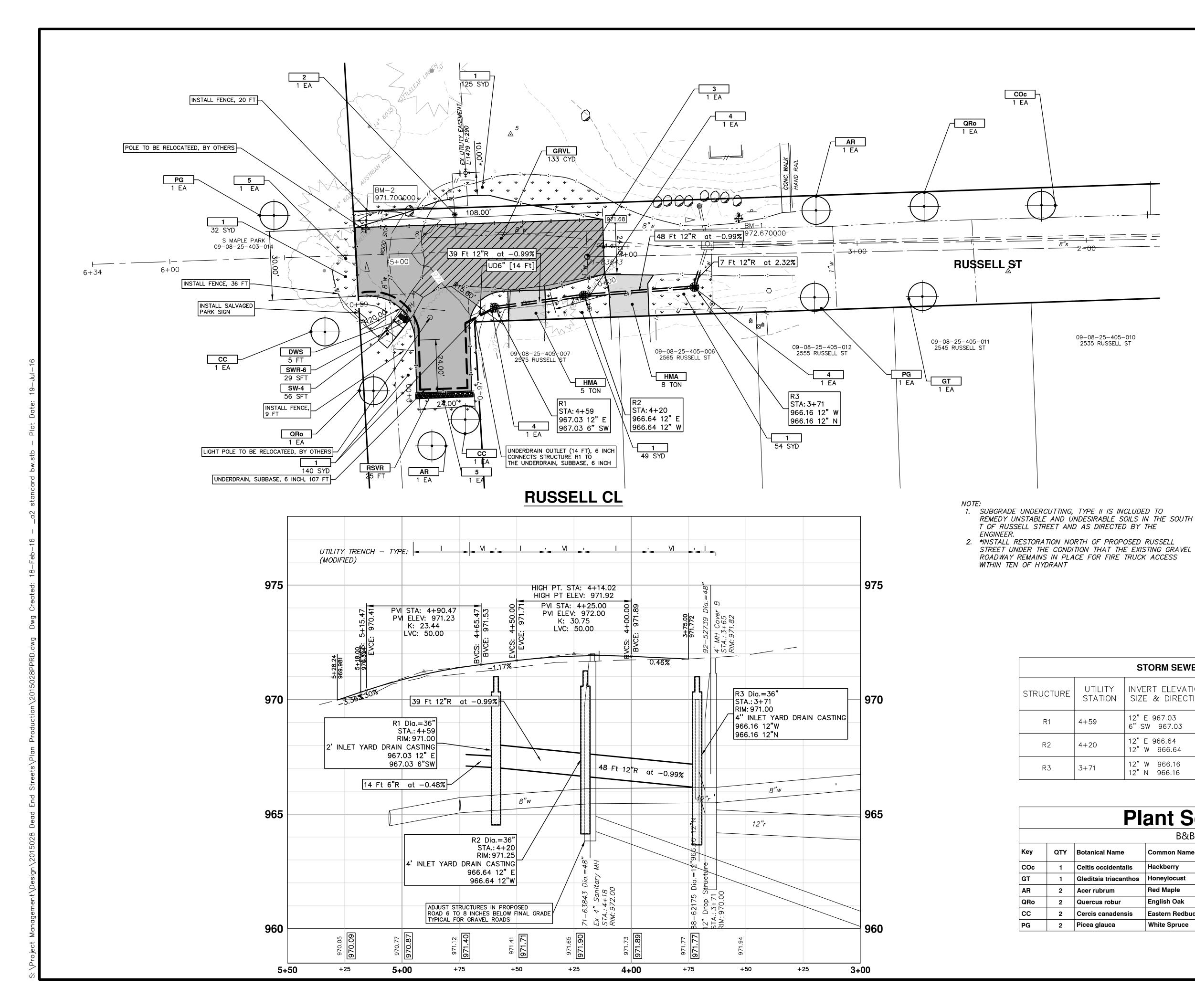


Ċ $\mathbf{\alpha}$ - PUBLIC SERVICES - CITY OF ANN ARBO RUSSELL ST., UPLAND DR., & WOODMANC ROAD RECONFIGURATION PROJECT PROJECT MANAGEMENT SHEET No. 3 OF 13









COI	NSTRUCTION KEY
KEY	DESCRIPTION
НМА	SURFACE AREA FOR HMA
GRVL	SURFACE FOR GRAVEL
SW-4	SIDEWALK, CONC, 4 INCH
SW-6	SIDEWALK, CONC, 6 INCH
SWR-6	SIDEWALK RAMP, CONC, 6 INCH
DWS	DETECTABLE WARNING SURFACE
АВО	ADJUST BY OTHERS
RSVR	INFILTRATION TRENCH WITH STONE RESERVOIR
1	SLOPE RESTORATION
2	ADJUST GATE VALVE BOX, MONUMENT BOX, OR GAS BOX.
3	ADJUST STRUCTURE COVER
4	DR STRUCTURE & YARD DRAIN CASTING
5	NO PARKING SIGN

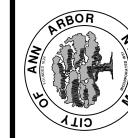
		STORM SEWER S	TRUCTURE TA	ABLE		
STRUCTURE	UTILITY STATION	INVERT ELEVATION, SIZE & DIRECTION	TOP OF CASTING ELEVATION	DEPTH (Feet)	SIZE	APPLICATION/ CONSTRUCTION
R1	4+59	12" E 967.03 6" SW 967.03	971.00	5.97	36" Dia.	2' INLET YARD DRAIN CASTING
R2	4+20	12" E 966.64 12" W 966.64	971.25	6.61	36" Dia.	4' INLET YARD DRAIN CASTING
R3	3+71	12" W 966.16 12" N 966.16	971.00	6.84	36" Dia.	4" INLET YARD DRAIN CASTING

09-08-25-405-010 2535 RUSSELL ST

		PI	ant Sc	hedu	le	
			B&B Tr	ees		
Key	QTY	Botanical Name	Common Name	Spacing	Form	Mature Height
COc	1	Celtis occidentalis	Hackberry	see plan	4" caliper B and B	>40'
GT	1	Gleditsia triacanthos	Honeylocust	see plan	4" caliper B and B	>40'
AR	2	Acer rubrum	Red Maple	see plan	4" caliper B and B	>40'
QRo	2	Quercus robur	English Oak	see plan	4" caliper B and B	25' - 40'
СС	2	Cercis canadensis	Eastern Redbud	see plan	4" caliper B and B	<30'
PG	2	Picea glauca	White Spruce	see plan	4 caliper B and B	>40'

		Know what's below .	Call before you dig.
		AMW	CHECKED
		₹	NW

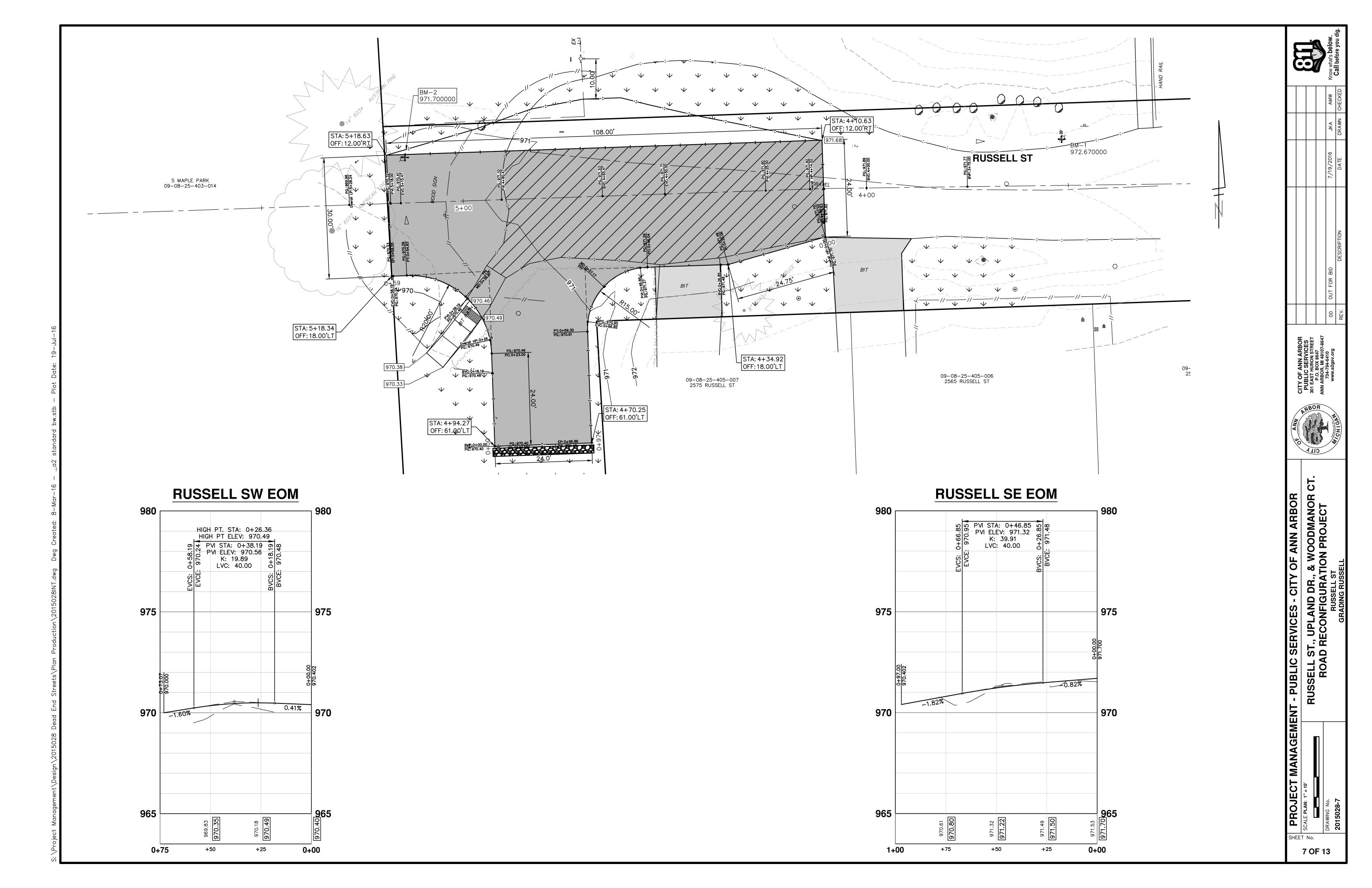
	OUT FOR BID	7/19/2016	JKA	\MA
٠,	DESCRIPTION	DATE	DRAWN CHECK	CHEC

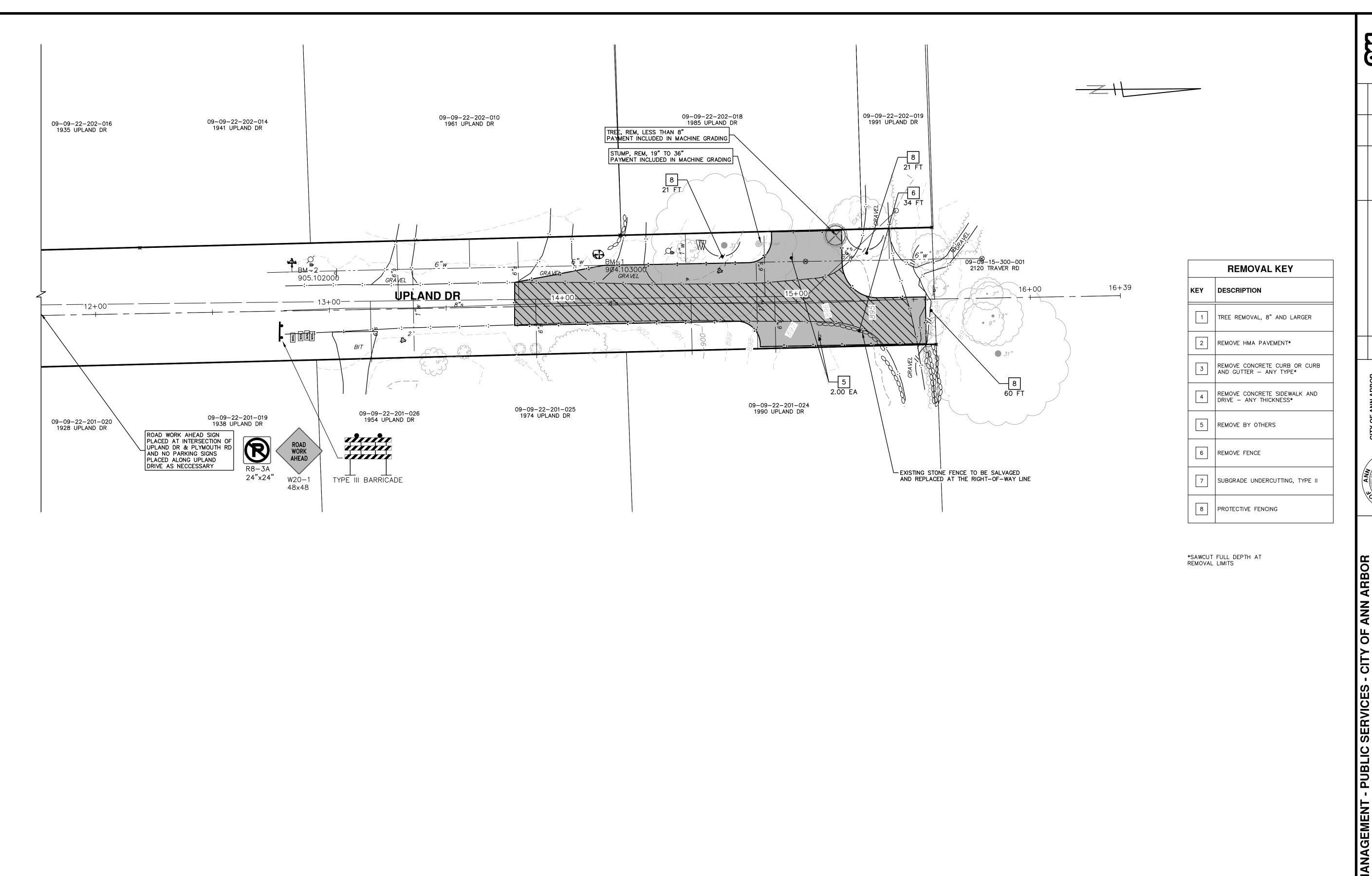


T - PUBLIC SERVICES - CITY OF ANN ARBC RUSSELL ST., UPLAND DR., & WOODMANO ROAD RECONFIGURATION PROJECT PLAN AND PROFILE RUSSELL

PROJECT MANAGEMENT
SCALE PLAN: 1"=20' PROFILE: 1"=2" F

SHEET No.





PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1" = 20

BRAWING No.

DRAWING No.

2015028-8

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

RUSSELL ST., UPLAND DR., & WOODMANOR

ROAD RECONFIGURATION PROJECT

UPLAND DR.

BRAWNOR NO.

UPLAND DR.

SCALE PLAN: 1" = 20

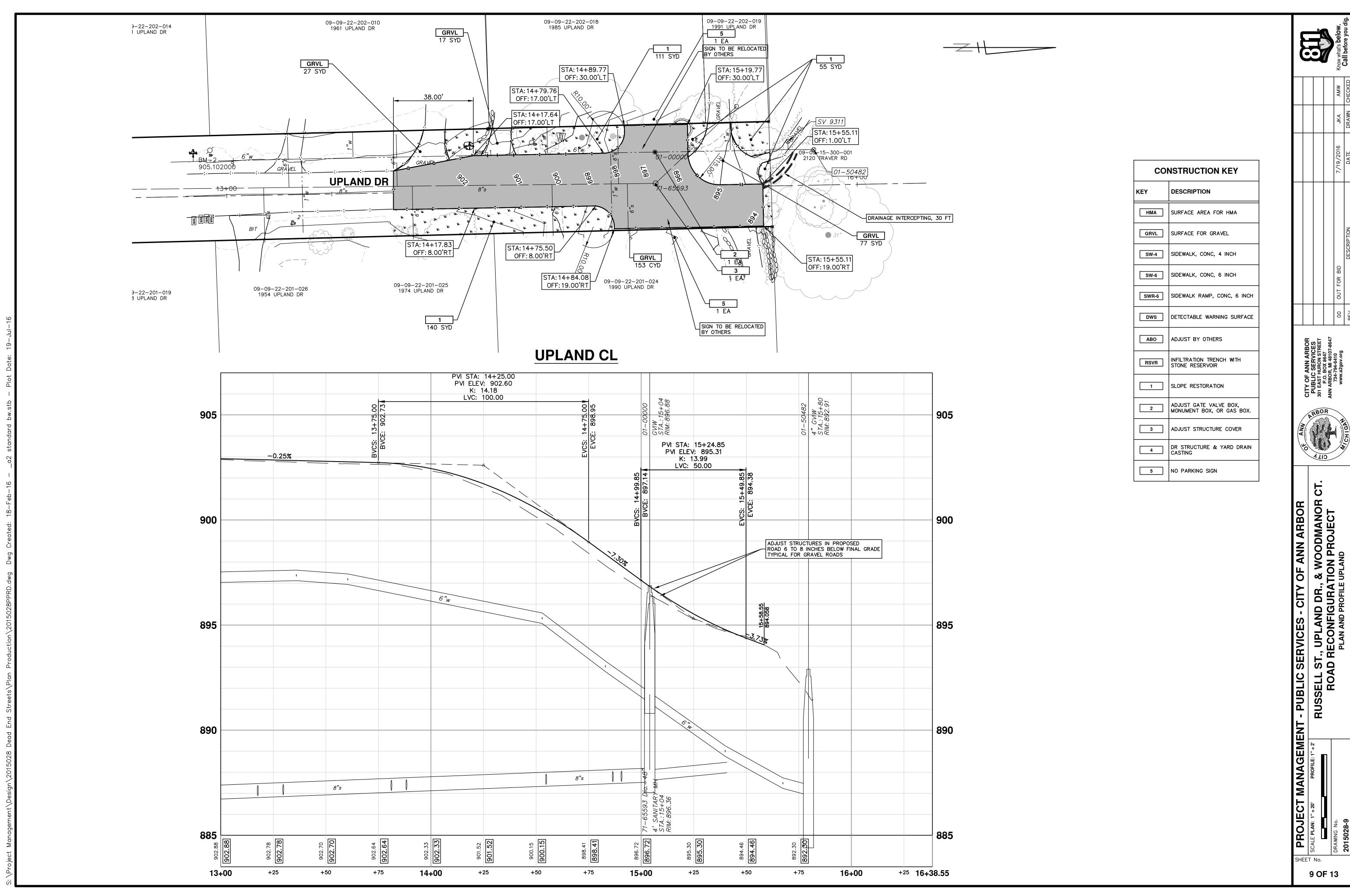
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UPLAND DR.

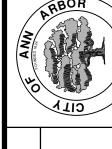
BRAWNOR NO.

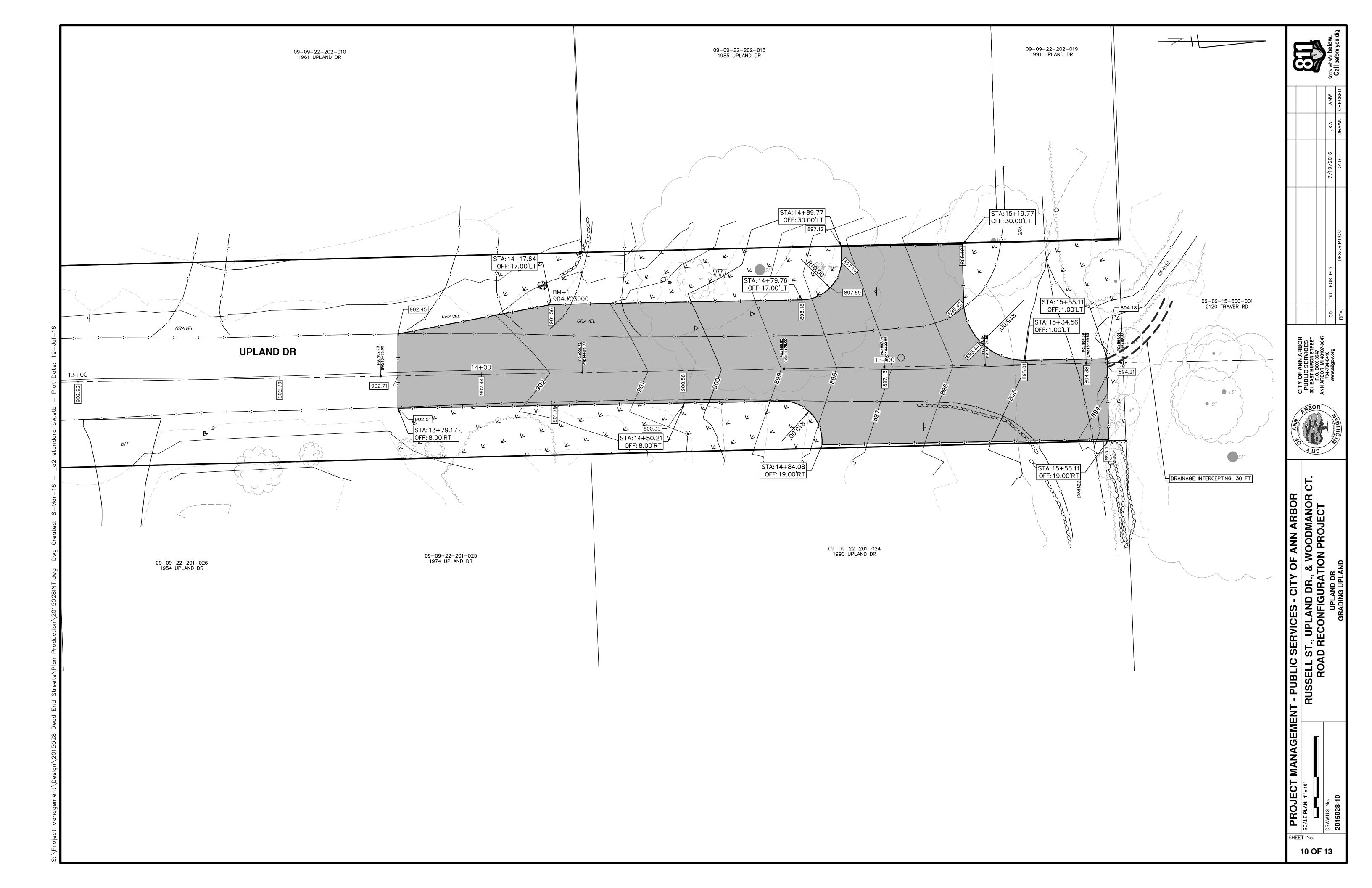
UPLAND DR.

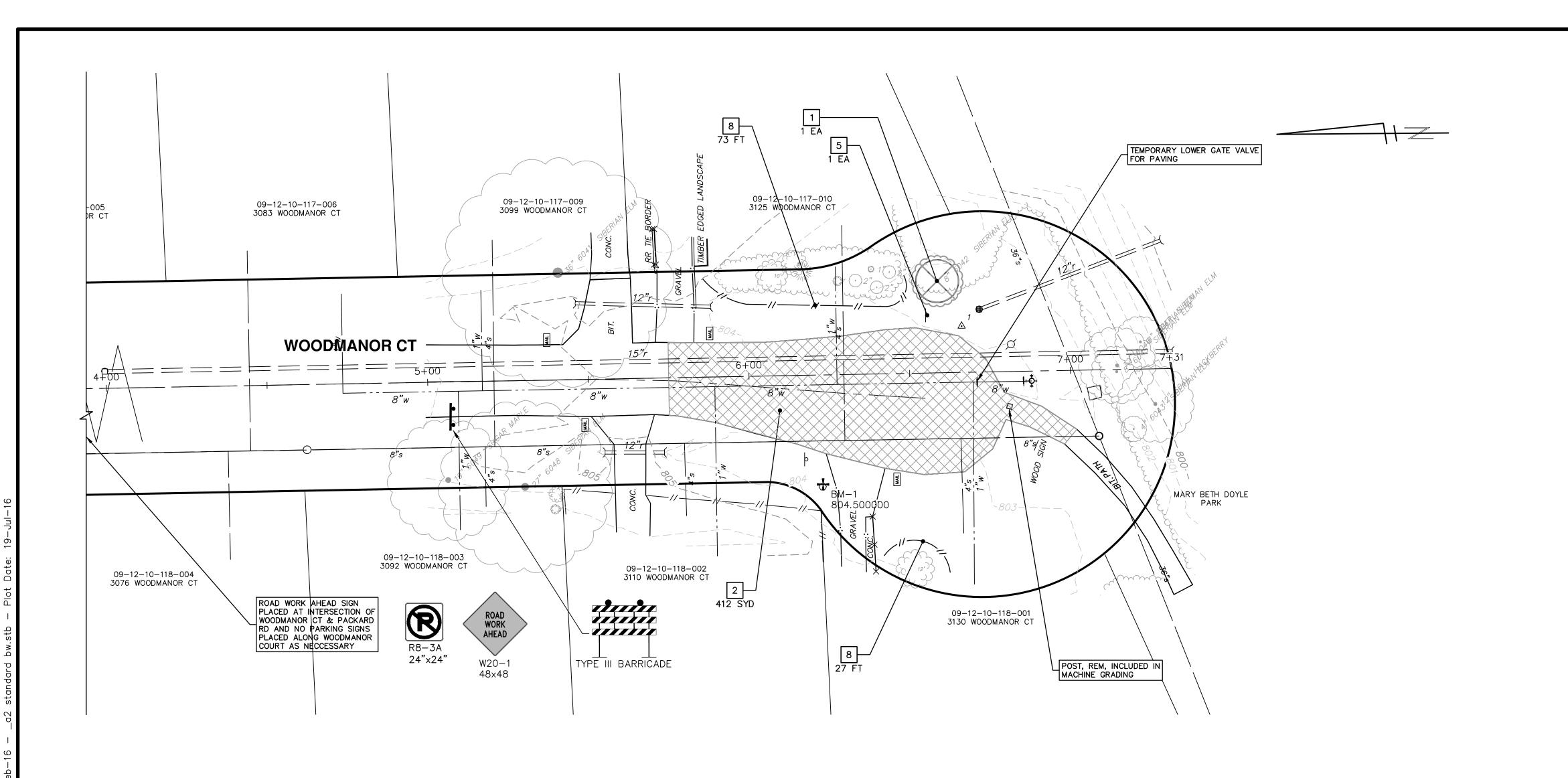
REMOVALS UPLAND



	7/19/2016	JKA	AMW
DESCRIPTION	DATE	DRAWN	DRAWN CHECKED







REMOVAL KEY KEY DESCRIPTION TREE REMOVAL, 8" AND LARGER 2 REMOVE HMA PAVEMENT* REMOVE CONCRETE CURB OR CURB AND GUTTER — ANY TYPE* REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS* 5 REMOVE BY OTHERS 6 REMOVE FENCE SUBGRADE UNDERCUTTING, TYPE II 8 PROTECTIVE FENCING

*SAWCUT FULL DEPTH AT REMOVAL LIMITS

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

SCALE PLAN: 1" = 20

BRAWING NO.

PROMOBINANOR CT

ROAD RECONFIGURATION PROJECT

WOODMANOR CT

ROAD RECONFIGURATION PROJECT

WOODMANOR CT

REMOVALS WOODMANOR 11 OF 13

