

EXISTING LEGEND

EX = EXISTING		WATER MAIN
		WATER MAIN ABANDONED
		STORM SEWER
		STORM SEWER ABANDONED
		SANITARY SEWER
		SANITARY SEWER ABANDONED
		GAS MAIN
		GAS MAIN (DEAD)
		ELECTRICAL OVER HEAD
		ELECTRICAL UNDER GROUND
		ELECTRICAL DUCT BANK
		TELEPHONE OVER HEAD
		TELEPHONE UNDER GROUND
		TELEPHONE DUCT BANK
		CABLE TV OVER HEAD
		CABLE TV UNDER GROUND
		FIBER OPTIC
		FIBER OPTIC DUCT BANK
		BOUNDARY
		BUILDING
		CENTERLINE OF DITCH
		CENTERLINE/CROWN OF ROAD
		CONTOUR MAJOR
		CONTOUR MINOR
		EDGE OF WATER
		FLOODPLAIN
		FENCE
		GRAVEL
		GUARDRAIL
		STONE WALL
		R.O.W.
		TREELINE
		WETLAND
		EDGE OF BRUSH
		HEDGE
		TREE (DECIDUOUS)
		TREE (CONIFEROUS)
		SHRUB (DECIDUOUS)
		STUMP
		TREE TO REMAIN & PROTECT (DECIDUOUS) CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREST HEIGHT (INCHES) X 10
		TREE TO REMAIN & PROTECT (CONIFEROUS) CRITICAL ROOT ZONE (C.R.Z.) = DIAMETER BREST HEIGHT (INCHES) X 10

PROPOSED LEGEND

PROP = PROPOSED		HYDRANT (PLAN)
		WATER MAIN
		STORM SEWER
		SANITARY SEWER
		FIBER OPTIC
		ELECTRICAL
		CENTERLINE OF DITCH
		CENTERLINE OF ROAD
		FENCE
		GRAVEL
		SILT FENCE
		PROTECTIVE FENCE
		GUARDRAIL
		LOT/JUNIT
		CURB
		TEMPORARY GRADING PERMIT
		CONTOUR MAJOR
		CONTOUR MINOR
		WATER EASEMENT
		STORM EASEMENT
		SANITARY EASEMENT
		R.O.W.
		LIMITS OF CONSTRUCTION
		LIMIT OF GRADING
		STONE WALL
		DETECTABLE WARNING
		ASPHALT
		CONCRETE
		SIDEWALK
		TREE (DECIDUOUS)
		TREE (CONIFEROUS)
		TREE TO BE REMOVED (DECIDUOUS)
		TREE TO BE REMOVED (CONIFEROUS)
		STUMP TO BE REMOVED



REV	DATE	DESCRIPTION
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		KMB DRAWN
		FDC CHECKED

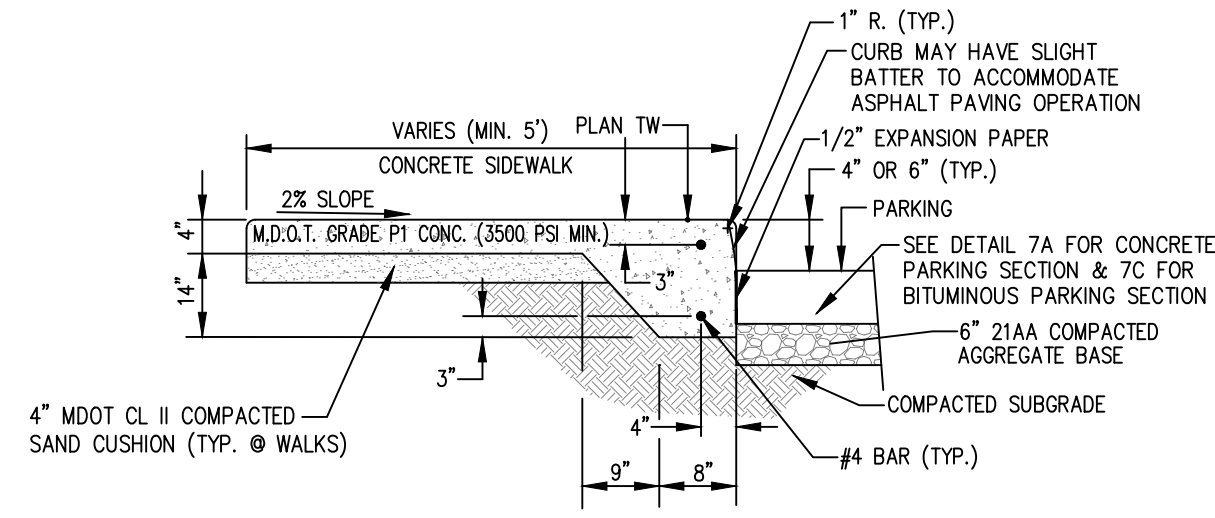
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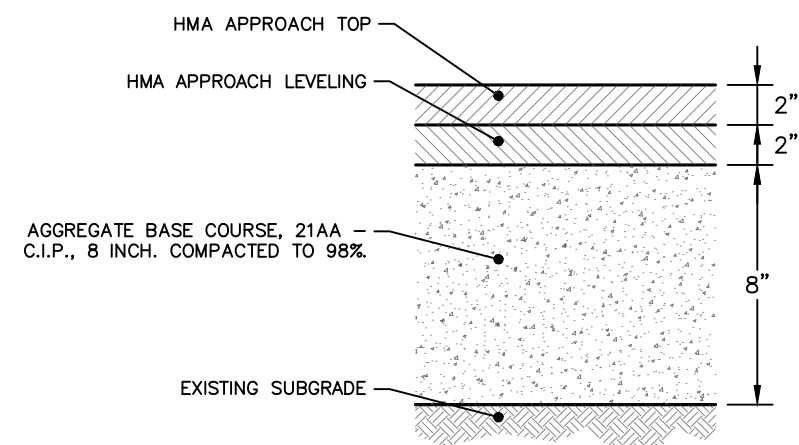
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN

LEGEND

SCALE: NTS
DRAWING No. 2023013-3



**TYPICAL CONCRETE PAVEMENT
INTEGRAL WALK/CURB**

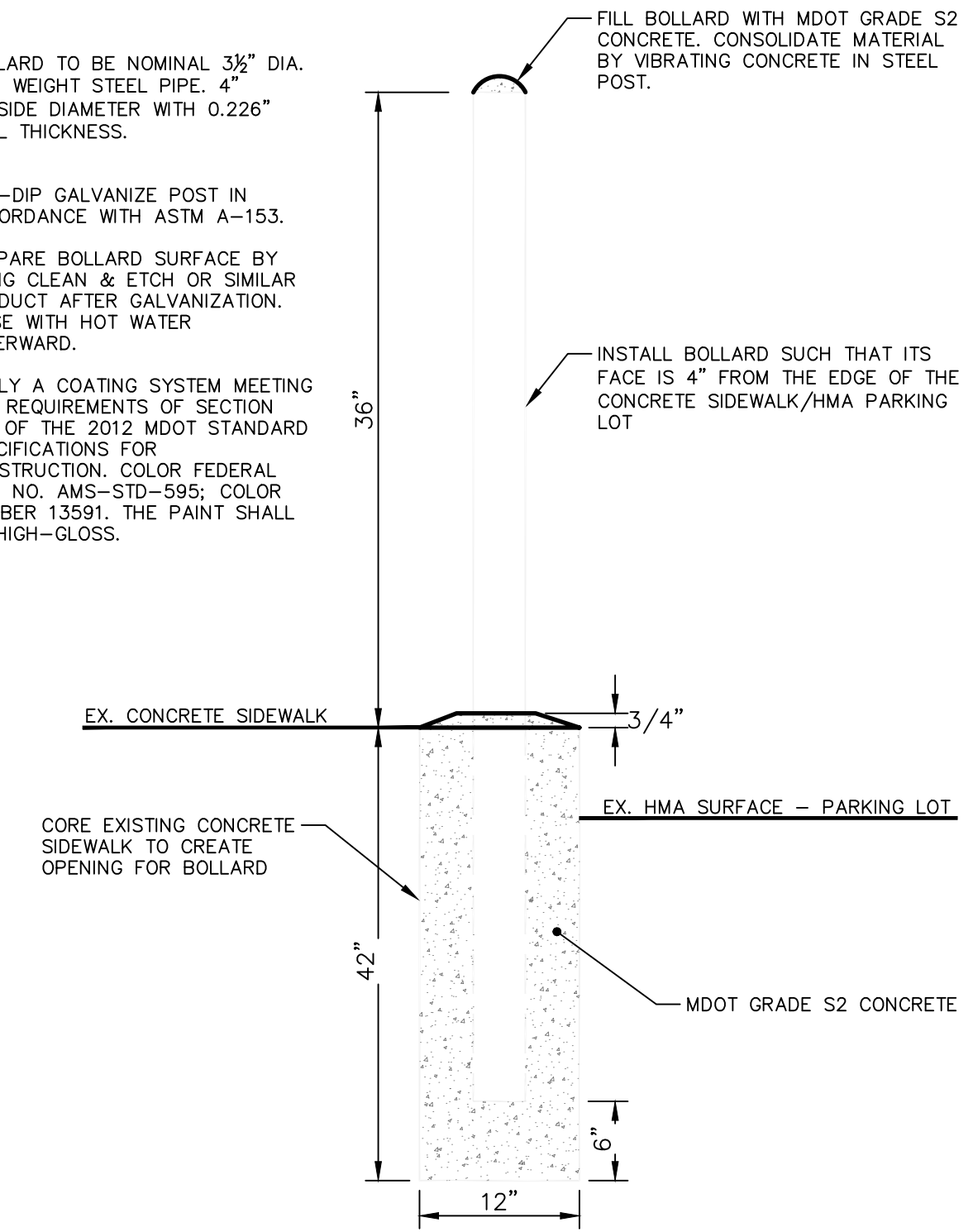


WESTGATE PARKING AREA SECTION
NOT TO SCALE

HMA APPLICATION ESTIMATE						
HMA PAVEMENT	HMA MIX	RATE OF APPLICATION	THICKNESS (INCHES)	AWI (MIN.)	BINDER	LOCATION/NOTES
HMA APPROACH TOP	LVSP	220 LB/SYD	2	220 (TOP)	PG 58-28	TOP COURSE
HMA APPROACH LEVELING	LVSP	220 LB/SYD	2	-	PG 58-28	LEVELING COURSE
HAND PATCHING	LVSP	0 - 440 LB/SYD			PG 58-28	HAND PATCHING
ASPHALT EMULSION	SS-1h	0.05 - 0.15 GAL/SYD			-	INCLUDE IN COST OF HMA ITEM

NOTE:
WESTGATE PARKING AREA TO BE RESTORED AND PAID FOR AS HMA APPROACH.
S MAPLE ROAD AND STADIUM BLVD ASPHALT MIXTURE TO BE HIGH STRESS HOT MIX

- NOTES:**
- BOLLARD TO BE NOMINAL 3 1/2" DIA. STD. WEIGHT STEEL PIPE. 4" OUTSIDE DIAMETER WITH 0.226" WALL THICKNESS.
 - HOT-DIP GALVANIZE POST IN ACCORDANCE WITH ASTM A-153.
 - PREPARE BOLLARD SURFACE BY USING CLEAN & ETCH OR SIMILAR PRODUCT AFTER GALVANIZATION. RINSE WITH HOT WATER AFTERWARD.
 - APPLY A COATING SYSTEM MEETING THE REQUIREMENTS OF SECTION 715 OF THE 2012 MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. COLOR FEDERAL STD. NO. AMS-STD-595; COLOR NUMBER 13581. THE PAINT SHALL BE HIGH-GLOSS.



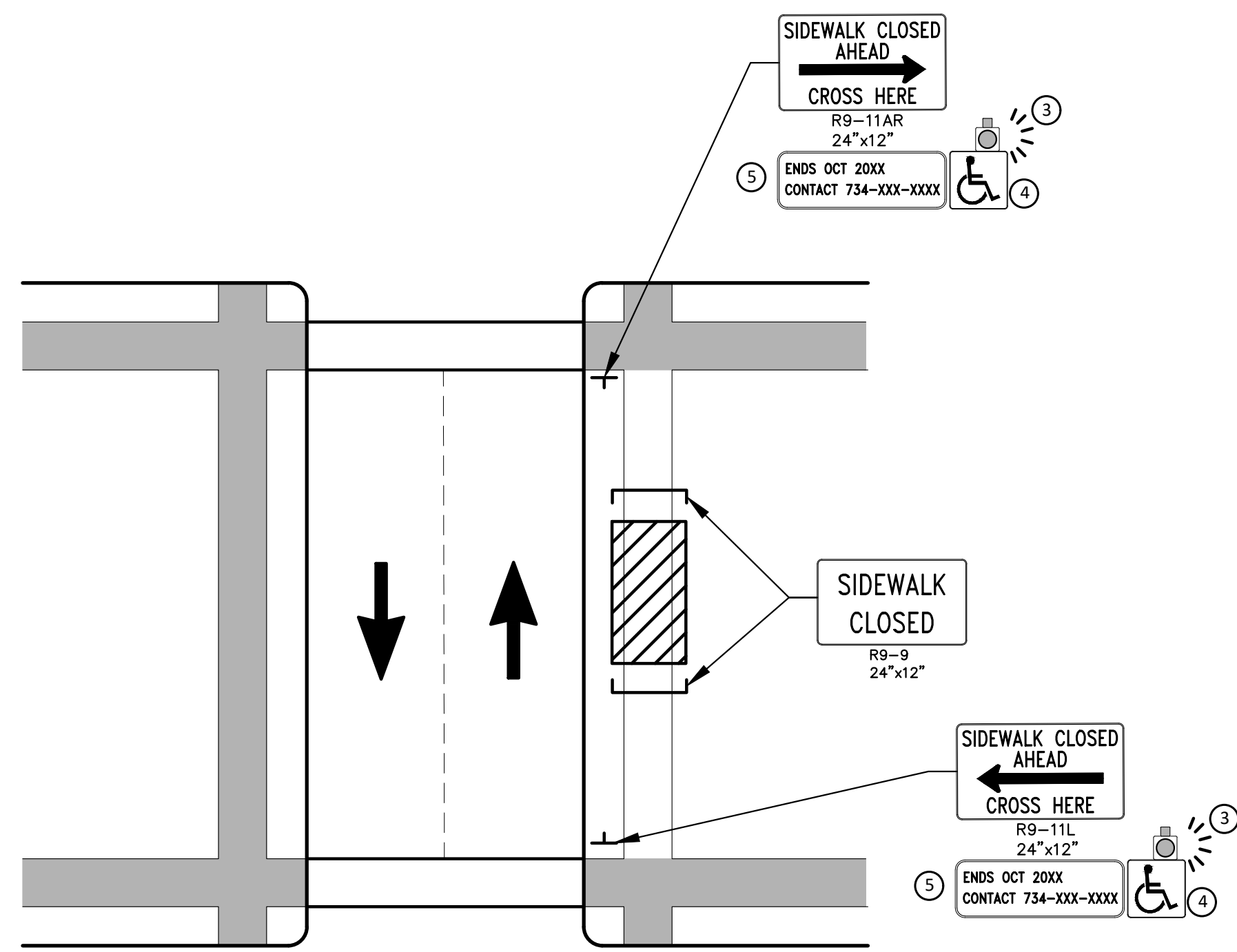
BOLLARD DETAIL



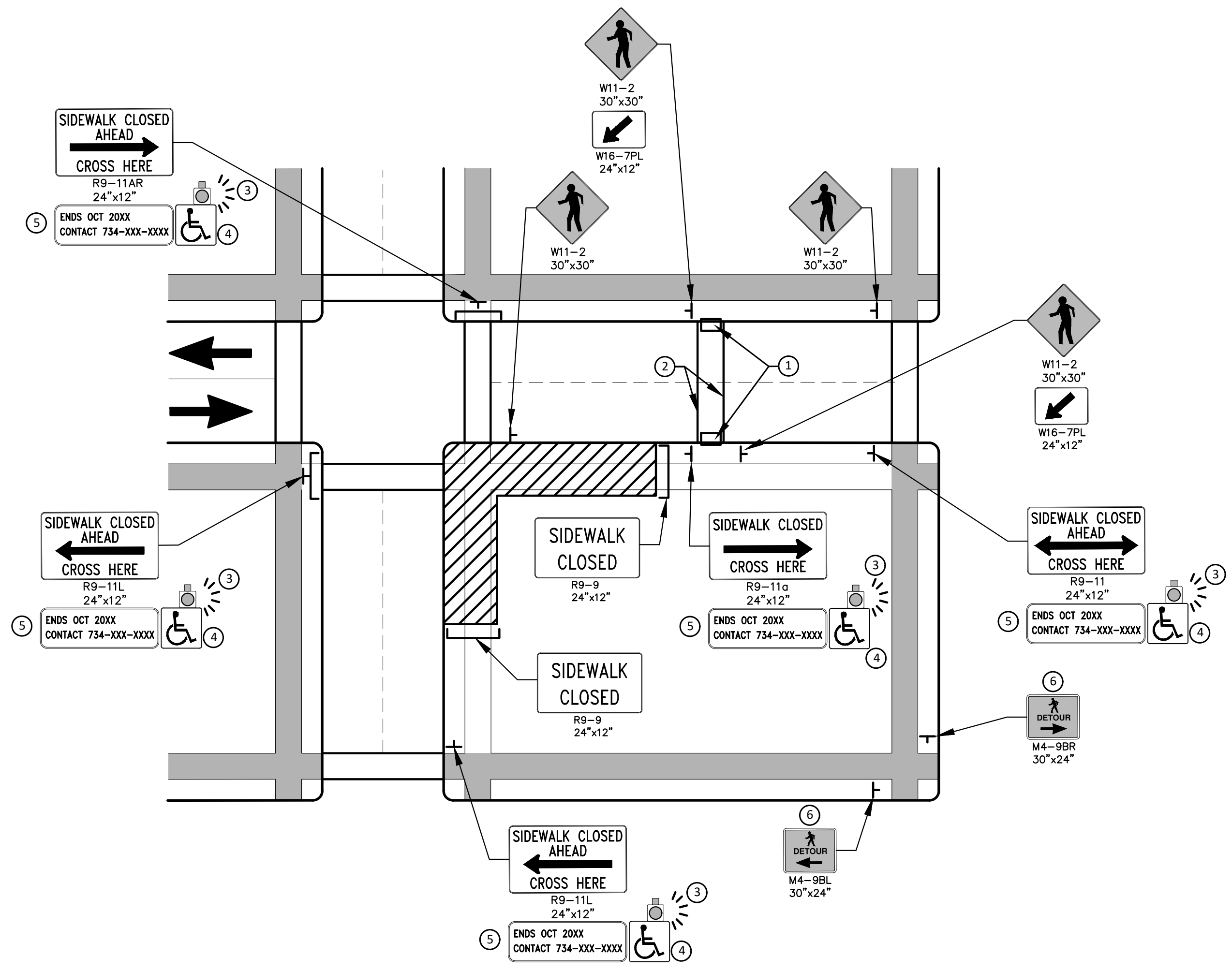
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
PARKING LOT TYPICAL SECTION



PEDESTRIAN DETOUR USING OPPOSITE SIDE OF STREET



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

GENERAL NOTES

- WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, THE CONTRACTOR SHALL PROVIDE DETECTABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.
- TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE AN ALTERNATE PEDESTRIAN ROUTE (APR) AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.
- PROVIDE A SMOOTH, CONTINUOUS, HARD SURFACE THROUGH THE LENGTH OF THE APR. COMPACTED GRAVEL, AGGREGATE, OR SLAG MATERIALS ARE NOT ALLOWED. PROVIDE A FIRM, STABLE, AND SLIP RESISTANT TEMPORARY WALKWAY SURFACE TO COVER SHORT SEGMENTS OF ROUGH, SOFT, OR UNEVEN GROUND.
- THE PEDESTRIAN TRAFFIC SIGNALS CONTROLLING CLOSED CROSSWALKS SHALL BE COVERED OR DEACTIVATED BY THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE THIS WORK WITH THE ENGINEER A MINIMUM OF 72 HOURS (NOT INCLUDING WEEKENDS & HOLIDAYS) PRIOR TO THE BEGINNING OF WORK THAT REQUIRES A SIDEWALK CLOSURE.
- POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.
- WHEN THE ENGINEER DETERMINES THAT THE CONTRACTOR'S OPERATIONS OR PLACEMENT OF TRAFFIC CONTROL DEVICES HAS CAUSED A SITUATION THAT THE VISIBILITY OF IS REDUCED ENOUGH TO CREATE A HAZARD, THE TRAFFIC CONTROL DEVICES SHALL BE DELINEATED WITH FLAGS OR OTHER ENGINEER-APPROVED DEVICES AT NO ADDITIONAL COST TO THE PROJECT.
- MINIMIZE DISRUPTION TO PEDESTRIANS TO THE MAXIMUM EXTENT FEASIBLE BY PROVIDING AN APR IN THE FOLLOWING ORDER OF PREFERENCE:
1. PROVIDE THE APR ON THE SAME SIDE OF THE STREET AS THE DISRUPTED ROUTE UTILIZING BYPASSES.
 2. WHERE IT IS NOT FEASIBLE TO PROVIDE A SAME SIDE APR, PROVIDE A DETOUR ON THE OTHER SIDE OF THE STREET.
 3. WHERE IT IS NOT FEASIBLE TO PROVIDE AN APR ON THE OTHER SIDE OF THE ROADWAY, PROVIDE AN APR DETOUR WITH TRAILBLAZING SIGNS AS SHOWN ON THE PROJECT PLANS.

SPECIFIC NOTES

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

PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES

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

LEGEND

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

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

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WESTGATE WATERMAIN

ALTERNATE PEDESTRIAN ROUTE (APR) DETOUR

SCALE: N.T.S.

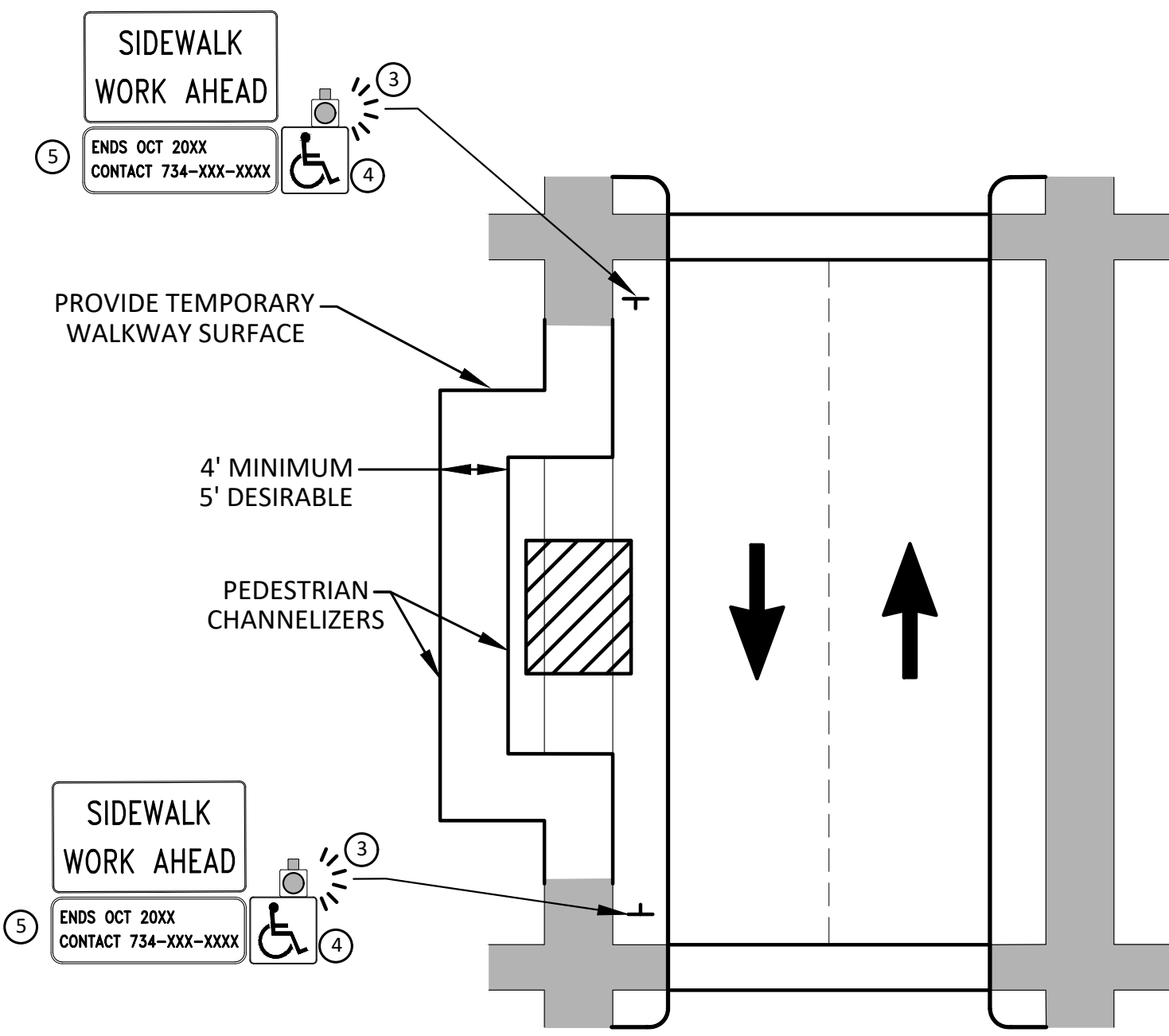
DRAWING No. 2023013-5

SHEET No. 5 OF 37

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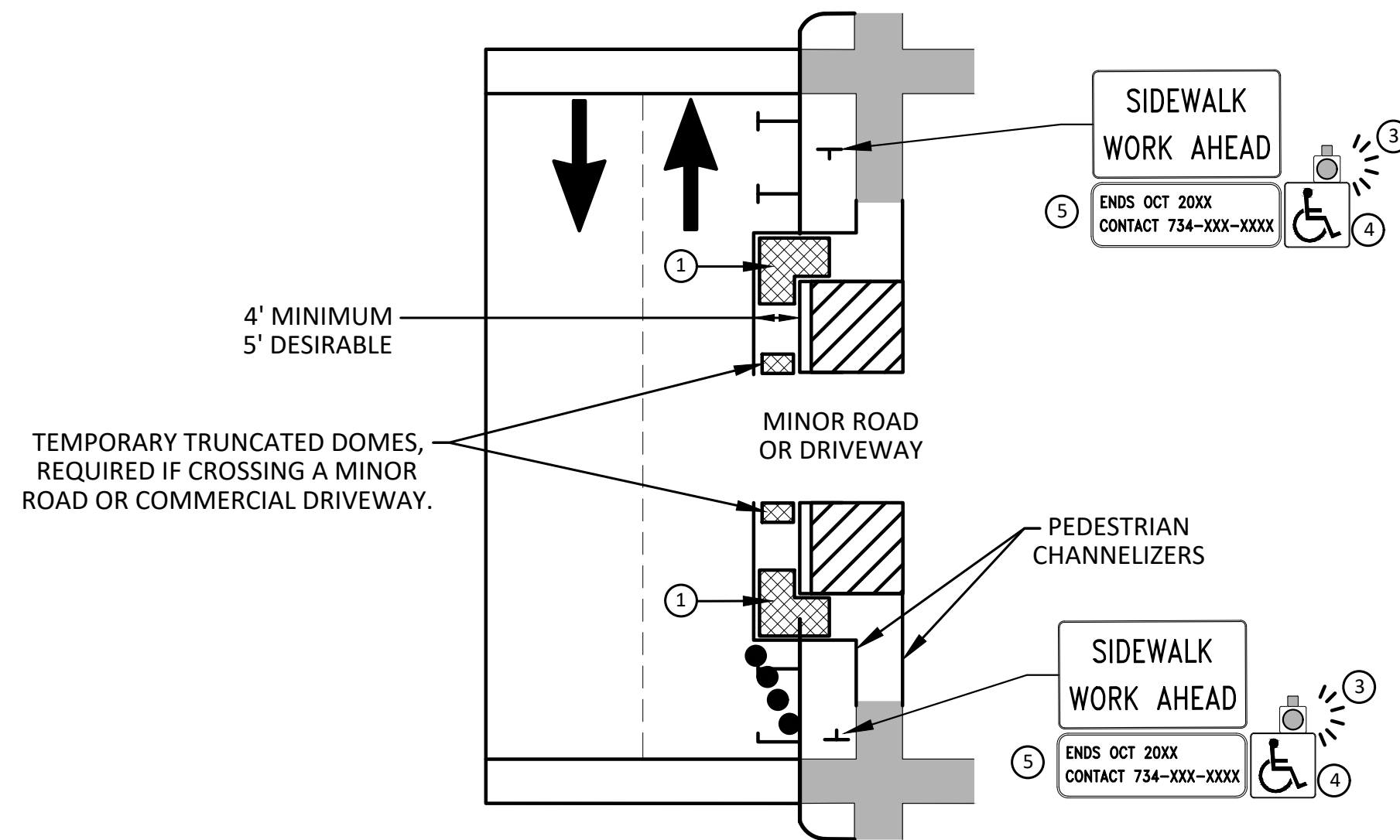
811 Know what's below. Call before you dig.

R:\2023013 Westgate Watermain\Plan Production\2023013Det.dwg Dwg Created: 26-Apr-24 - a2 standard bw.stb - Plot Date: 23-Jan-25

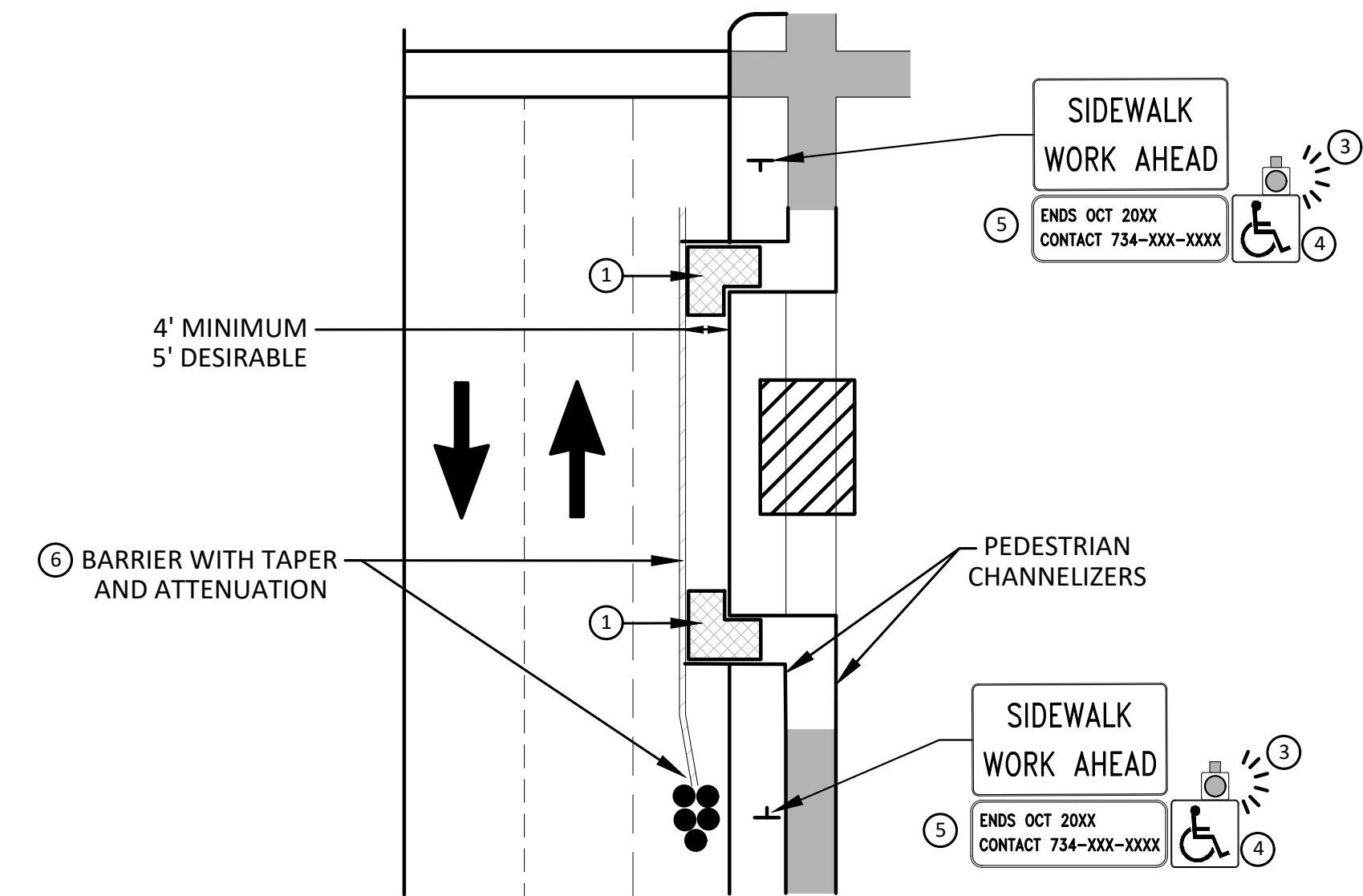


**BYPASS ON ADJACENT AVAILABLE
RIGHT OF WAY**
BYPASS TYPE A

NOTE: MAY ONLY BE USED ON ROADWAY WITH POSTED
SPEED OF 45 MPH OR LESS.



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



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

GENERAL NOTES

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

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

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

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

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

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

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

SPECIFIC NOTES

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

LEGEND

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



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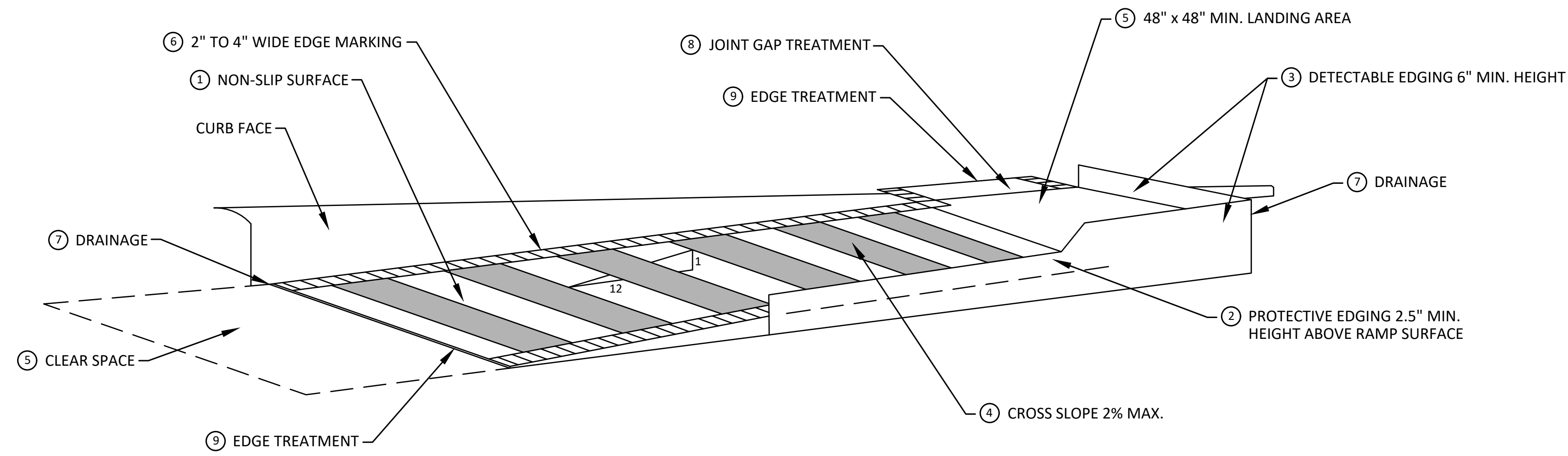
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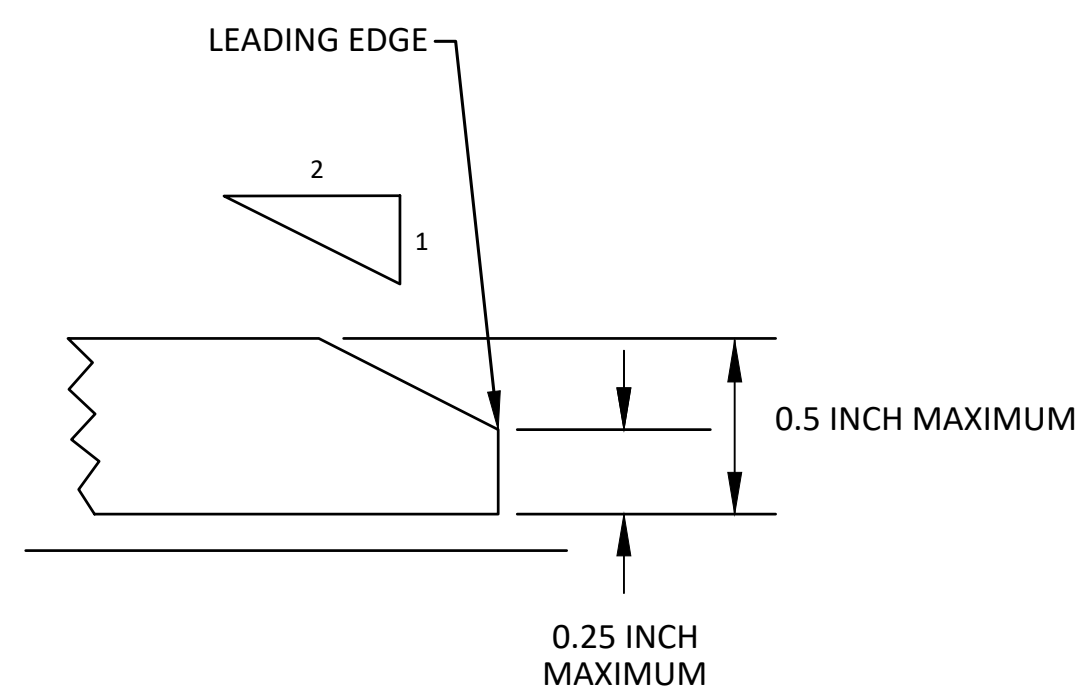
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
ALTERNATE PEDESTRIAN ROUTE (APR) BYPASS

SCALE: N.T.S.
DRAWING No. 2023013-6

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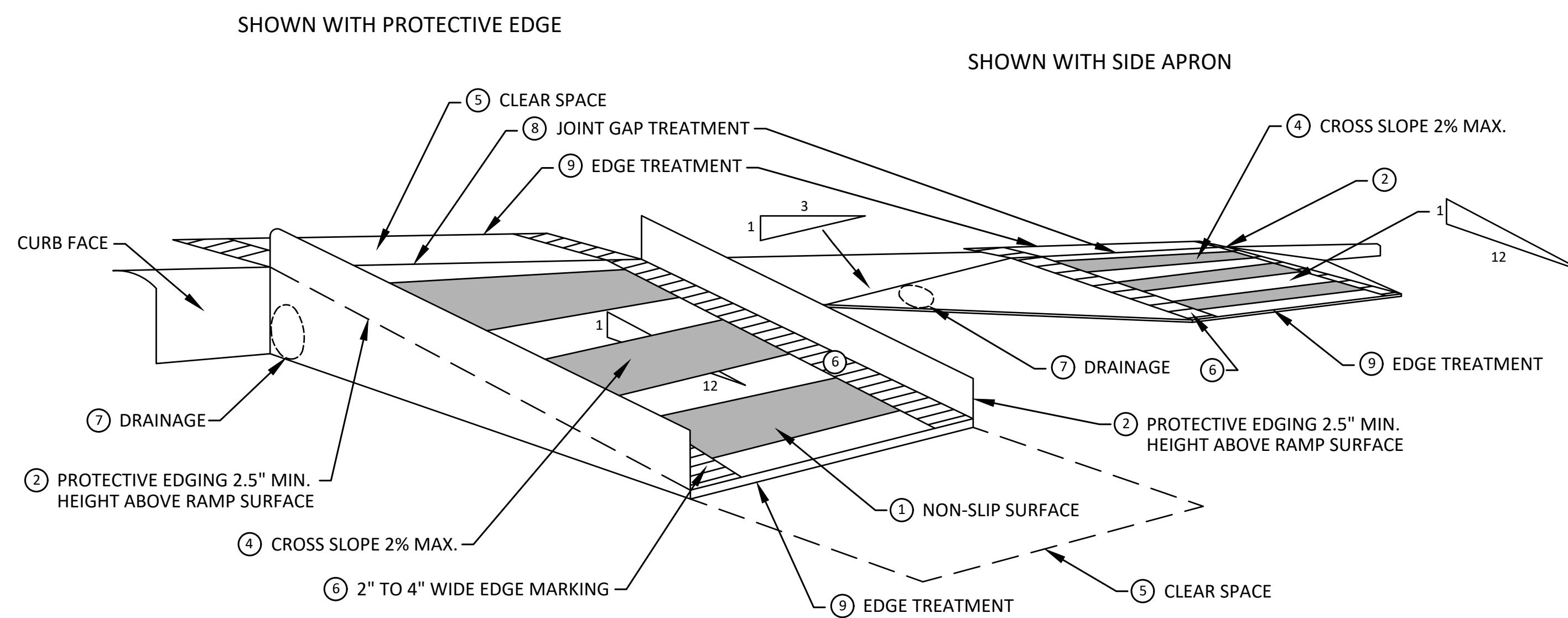
**TEMPORARY CURB RAMP
PARALLEL TO CURB**



EDGE TREATMENT

SPECIFIC NOTES

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



**TEMPORARY CURB RAMP
PERPENDICULAR TO CURB**



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WESTGATE WATERMAIN

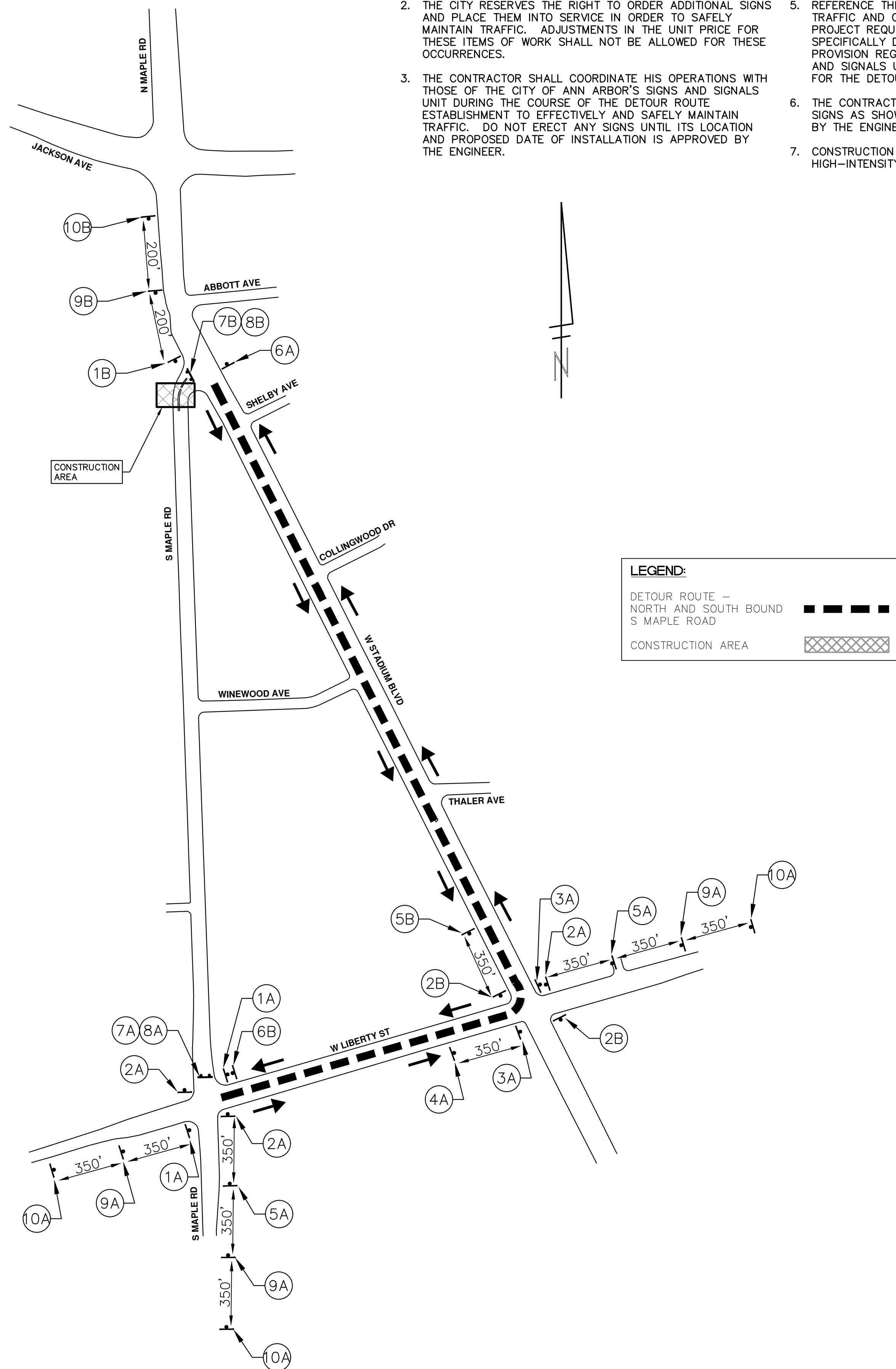
TPAR RAMPS

SCALE: N.T.S.
DRAWING No. 2023013-7

SHEET No.

DETOUR CONSTRUCTION NOTES:

- 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.
- 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.
- 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.
- THE DETOUR IS TO BE IN PLACE DURING S MAPLE RD WATERMAIN TIE IN. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL CLOSE AND DETOUR NORTH AND SOUTH BOUND S MAPLE RD TRAFFIC. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE AND DETOUR LIMITATIONS, AND OTHER DETAILS.
- 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.
- THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN SIGNS AS SHOWN ON THE PLANS OR OTHERWISE DIRECTED BY THE ENGINEER.
- CONSTRUCTION WARNING SIGNS SHALL HAVE AN ORANGE, HIGH-INTENSITY, REFLECTORIZED BACKGROUND.
- SIGNS SHALL CONFORM TO THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 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 & OPER"
- ADVANCE WARNING SIGNS SHALL BE PROVIDED WITH TWO (2) TYPE A FLASHING LIGHTS AND ONE (1) DAY-GLOW ORANGE FLAG.
- CITY TO BE NOTIFIED A MINIMUM OF 7 DAYS PRIOR TO IMPLEMENTING NORTH AND SOUTH BOUND S MAPLE RD DETOUR. MESSAGE BOARDS TO BE PLACED 7 DAYS PRIOR TO IMPLEMENTATION OF DETOUR.



NORTH BOUND S MAPLE RD			SOUTH BOUND S MAPLE RD		
SIGN	NUMBER	QUANTITY	SIGN	NUMBER	QUANTITY
(1A) NB S MAPLE RD DETOUR ↑	D3-1 M4-9S 30"x24"	2	(1B) SB S MAPLE RD DETOUR ↑	D3-1 M4-9S 30"x24"	1
(2A) NB S MAPLE RD DETOUR →	D3-1 M4-9R 30"x24"	3	(2B) SB S MAPLE RD DETOUR →	D3-1 M4-9R 30"x24"	2
(3A) NB S MAPLE RD DETOUR ←	D3-1 M4-9L 30"x24"	2	(3B) SB S MAPLE RD DETOUR ←	D3-1 M4-9L 30"x24"	0
(4A) NB S MAPLE RD DETOUR ↙	D3-1 M4-9L (MOD) 30"x24"	1	(4B) SB S MAPLE RD DETOUR ↙	D3-1 M4-9L (MOD) 30"x24"	0
(5A) NB S MAPLE RD DETOUR ↘	D3-1 M4-9R (MOD) 30"x24"	2	(5B) SB S MAPLE RD DETOUR ↘	D3-1 M4-9R (MOD) 30"x24"	1
(6A) NB S MAPLE RD END DETOUR	D3-1 M4-8A 24"x18"	1	(6B) SB S MAPLE RD END DETOUR	D3-1 M4-8A 24"x18"	1
(7A) ROAD CLOSED TO THRU TRAFFIC	R11-4 60"x30"	1	(7B) ROAD CLOSED TO THRU TRAFFIC	R11-4 60"x30"	1
(8A) DETOUR →	M4-10R 48"x18"	1	(8B) DETOUR ←	M4-10L 48"x18"	1
(9A) DETOUR AHEAD	D3-1 W20-2 36"x36"	3	(9B) DETOUR AHEAD	D3-1 W20-2 36"x36"	1
(10A) ROAD WORK AHEAD	D3-1 W20-1 36"x36"	3	(10B) ROAD WORK AHEAD	D3-1 W20-1 36"x36"	1
BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, FURN & OPER - 2 EACH			BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, FURN & OPER - 2 EACH		
SIGN, PORTABLE, CHANGEABLE MESSAGE, FURN & OPER NTCIP-COMPLIANT - 2 EACH			SIGN, PORTABLE, CHANGEABLE MESSAGE, FURN & OPER NTCIP-COMPLIANT - 2 EACH		
VERIFY EXACT QUANTITY AND LOCATION WITH ENGINEER PRIOR TO ORDERING			VERIFY EXACT QUANTITY AND LOCATION WITH ENGINEER PRIOR TO ORDERING		

PRCMS MESSAGE PHASING		
PRIOR TO CONSTRUCTION	DURING CONSTRUCTION	DURING CONSTRUCTION
S MAPLE RD CONSTRUCTION	NB S MAPLE RD CLSD TO THRU TRAFFIC	SB S MAPLE RD CLSD TO THRU TRAFFIC
MONTH DATE *	FOLLOW POSTED DETOUR	FOLLOW POSTED DETOUR

NOTE: PRCMS 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.

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

REV.	DATE	DRAWN	CHECKED
00	01/23/2025	KMB	FDC

DESCRIPTION

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

CITY OF ANN ARBOR - ENGINEERING
WESTGATE WATERMAIN

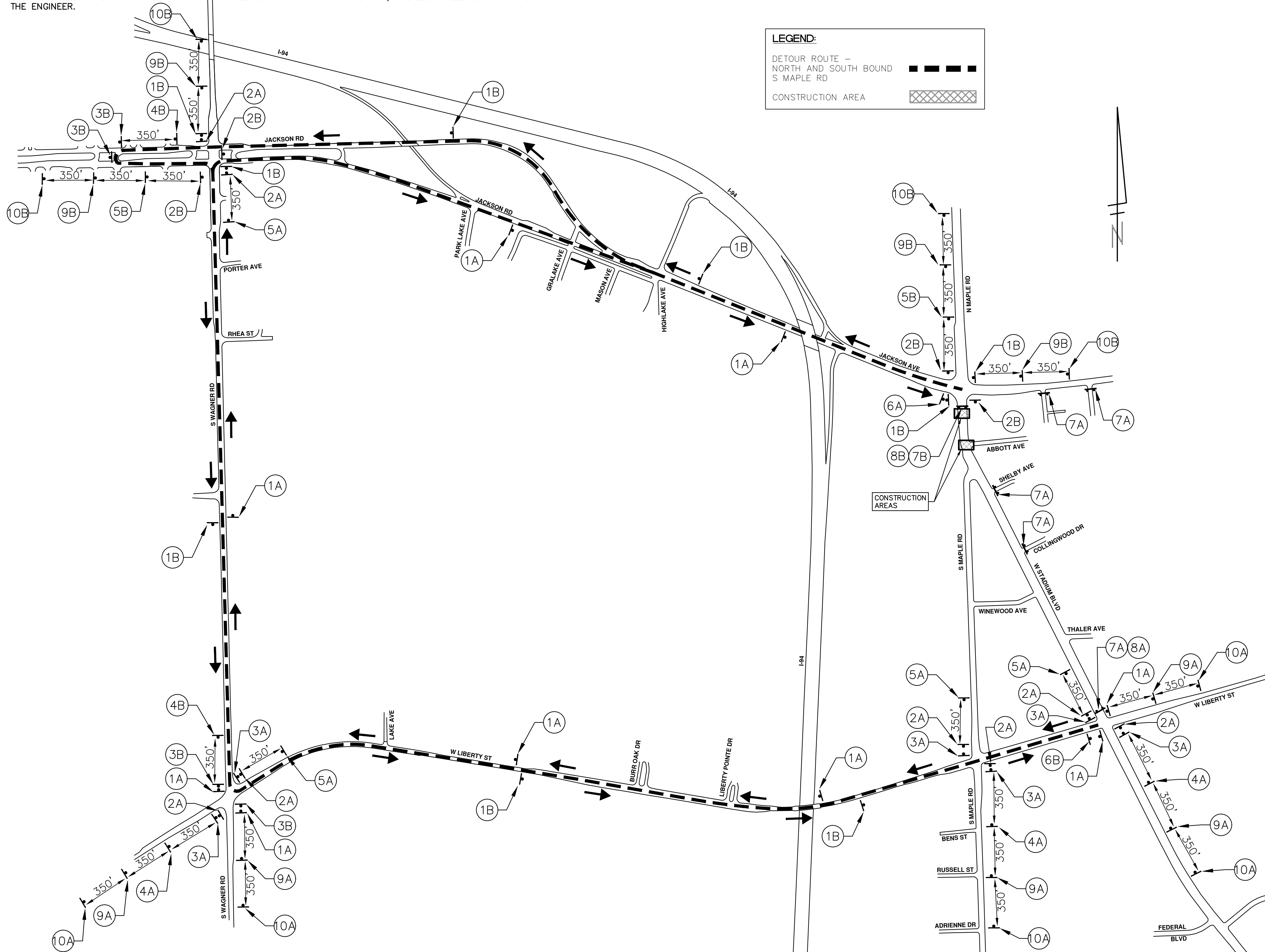
DETOUR ROUTE - LEWIS JEWELLERS WATER MAIN CONNECTION

SCALE PLAN: 1" = 400'
DRAWING No. 2023013-9
SHEET No. 9 OF 37

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 7 DAYS IN ADVANCE OF THE DETOUR ROUTE ESTABLISHMENT, DURING THE COURSE OF THE DETOUR ROUTE, AND WILL NOTIFY 2 DAYS PRIOR TO THE DETOUR SETUP BEING LIFTED 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 S MAPLE RD/ABBOTT AVE WATERMAIN TIE IN. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL CLOSE AND DETOUR NORTH AND SOUTH BOUND S MAPLE RD 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 & OPER"
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 NORTH AND SOUTH BOUND S MAPLE RD DETOUR. MESSAGE BOARDS TO BE PLACED 7 DAYS PRIOR TO IMPLEMENTATION OF DETOUR.



LEGEND:

DETOUR ROUTE - NORTH AND SOUTH BOUND S MAPLE RD

CONSTRUCTION AREA

NORTH BOUND S MAPLE RD		
SIGN	NUMBER	QUANTITY
(1A) NB S MAPLE RD DETOUR	D3-1	9
(1B) NB S MAPLE RD DETOUR	M4-9S 30"x24"	9
(2A) NB S MAPLE RD DETOUR	D3-1	8
(2B) NB S MAPLE RD DETOUR	M4-9R 30"x24"	8
(3A) NB S MAPLE RD DETOUR	D3-1	6
(3B) NB S MAPLE RD DETOUR	M4-9L 30"x24"	6
(4A) NB S MAPLE RD DETOUR	D3-1	3
(4B) NB S MAPLE RD DETOUR	M4-9L (MOD) 30"x24"	3
(5A) NB S MAPLE RD DETOUR	D3-1	4
(5B) NB S MAPLE RD DETOUR	M4-9R (MOD) 30"x24"	4
(6A) NB S MAPLE RD END DETOUR	D3-1	1
(6B) NB S MAPLE RD END DETOUR	M4-8A 24"x18"	1
(7A) ROAD CLOSED TO THRU TRAFFIC	R11-4 60"x30"	5
(7B) ROAD CLOSED TO THRU TRAFFIC	R11-4 60"x30"	1
(8A) DETOUR	M4-10L 48"x18"	1
(8B) DETOUR	M4-10R 48"x18"	1
(9A) DETOUR AHEAD	D3-1	5
(9B) DETOUR AHEAD	W20-2 36"x36"	5
(10A) ROAD WORK AHEAD	D3-1	5
(10B) ROAD WORK AHEAD	W20-1 36"x36"	5

SOUTH BOUND S MAPLE RD		
SIGN	NUMBER	QUANTITY
(1B) SB S MAPLE RD DETOUR	D3-1	9
(2B) SB S MAPLE RD DETOUR	M4-9S 30"x24"	9
(3B) SB S MAPLE RD DETOUR	D3-1	4
(4B) SB S MAPLE RD DETOUR	M4-9R 30"x24"	4
(5B) SB S MAPLE RD DETOUR	D3-1	4
(6B) SB S MAPLE RD DETOUR	M4-9L 30"x24"	4
(7B) SB S MAPLE RD DETOUR	D3-1	2
(8B) SB S MAPLE RD DETOUR	M4-9L (MOD) 30"x24"	2
(9B) SB S MAPLE RD DETOUR	D3-1	2
(10B) SB S MAPLE RD DETOUR	M4-9R (MOD) 30"x24"	2
(11B) SB S MAPLE RD END DETOUR	D3-1	1
(12B) SB S MAPLE RD END DETOUR	M4-8A 24"x18"	1
(13B) ROAD CLOSED TO THRU TRAFFIC	R11-4 60"x30"	1
(14B) ROAD CLOSED TO THRU TRAFFIC	R11-4 60"x30"	1
(15B) DETOUR	M4-10R 48"x18"	1
(16B) DETOUR	M4-10L 48"x18"	1
(17B) DETOUR AHEAD	D3-1	4
(18B) DETOUR AHEAD	W20-2 36"x36"	4
(19B) ROAD WORK AHEAD	D3-1	4
(20B) ROAD WORK AHEAD	W20-1 36"x36"	4

BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, FURN & OPER - 2 EACH

SIGN, PORTABLE, CHANGEABLE MESSAGE, FURN & OPER NTCIP-COMPLIANT - 2 EACH

VERIFY EXACT QUANTITY AND LOCATION WITH ENGINEER PRIOR TO ORDERING

BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, FURN & OPER - 2 EACH

SIGN, PORTABLE, CHANGEABLE MESSAGE, FURN & OPER NTCIP-COMPLIANT - 2 EACH

VERIFY EXACT QUANTITY AND LOCATION WITH ENGINEER PRIOR TO ORDERING

PRCMS MESSAGE PHASING

PRIOR TO CONSTRUCTION	DURING CONSTRUCTION	DURING CONSTRUCTION
S MAPLE RD CONSTRUCTION	NB S MAPLE RD CLSD TO THRU TRAFFIC AT ABBOTT AVE	SB S MAPLE RD CLSD TO THRU TRAFFIC AT ABBOTT AVE
MONTH DATE *	FOLLOW POSTED DETOUR	FOLLOW POSTED DETOUR

NOTE: PRCMS 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.

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

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING WESTGATE WATERMAIN

DETOUR ROUTE - S MAPLE AND ABBOTT AVE WATER MAIN CONNECTION

SCALE PLAN: 1" = 400'

DRAWING No. 2023013-10

SHEET No. 10 OF 37

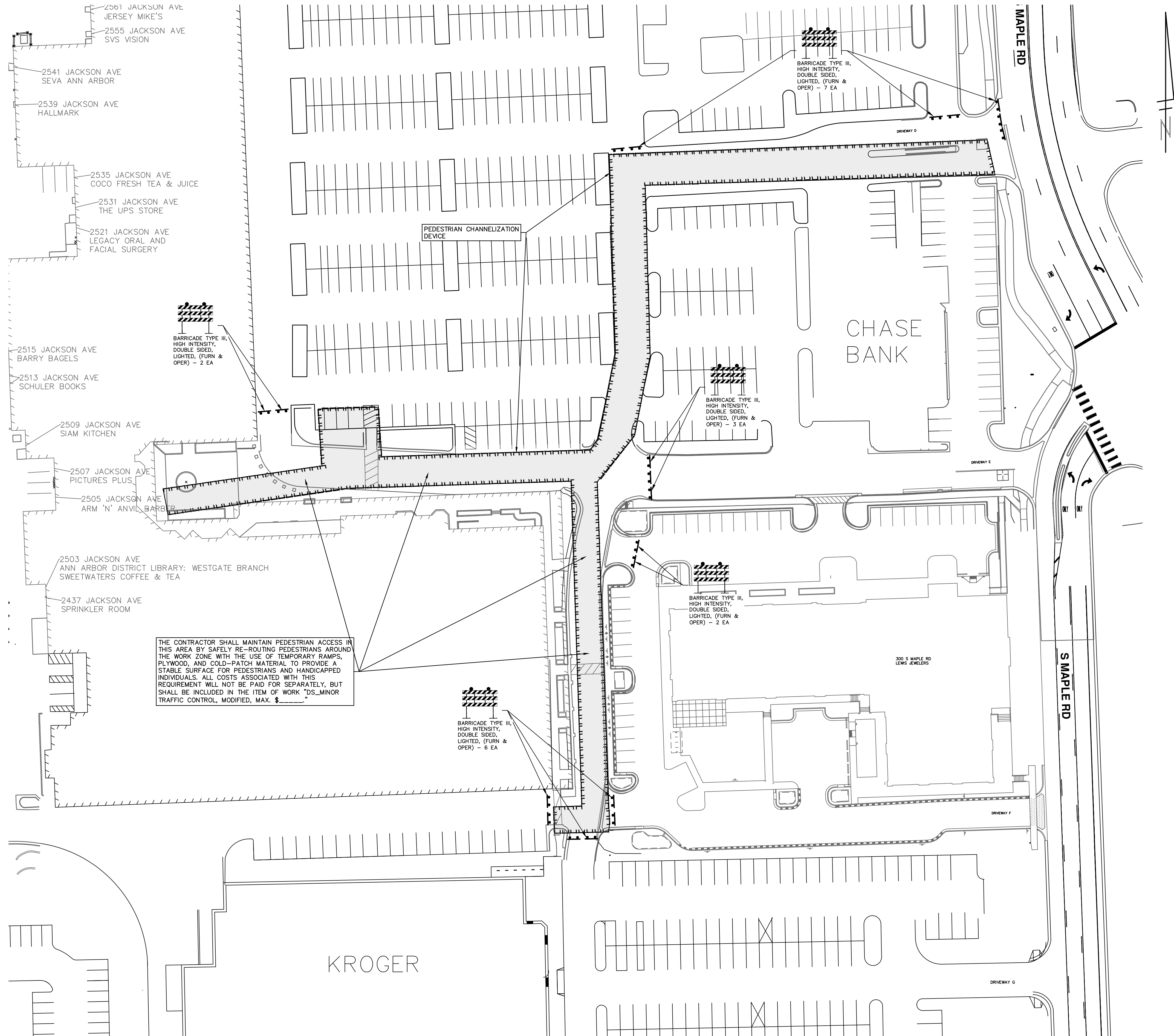
REV. DATE DESCRIPTION

00	BID SET	01/23/2025	KMB	FDC
			DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-1647
ANN ARBOR 734.794.6410
www.a2gov.org

CONSTRUCTION COORDINATION AND MAINTENANCE OF TRAFFIC REQUIREMENTS:

1. THE CONTRACTOR SHALL STAGE AND EXECUTE THE PROJECT'S CONSTRUCTION SUCH THAT NO MORE THAN TWO ROADWAY CONNECTIONS "DRIVEWAYS" BETWEEN JACKSON AVENUE AND MAPLE ROAD ARE CLOSED AT ANY ONE TIME. ADDITIONALLY, IF DRIVEWAY "A" IS CLOSED, THEN DRIVEWAY "B" MUST REMAIN OPEN. SIMILARLY, DRIVEWAY "D" AND "E" CANNOT BOTH BE CLOSED SIMULTANEOUSLY.
2. THE CONTRACTOR MUST MAINTAIN VEHICLE AND PEDESTRIAN ACCESS TO ALL BUSINESSES DURING REGULAR BUSINESS HOURS.
3. WHILE PERFORMING THE WORK ON MAPLE ROAD, THE CONTRACTOR SHALL WORK CONSECUTIVE DAYS TO COMPLETE THE WORK AND OPEN THE ROAD TO TRAFFIC AS SOON AS POSSIBLE.
4. SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE, DETOUR LIMITATIONS, AND OTHER DETAILS.
5. THE CONTRACTOR MUST PROVIDE ALTERNATIVE MAINTENANCE OF TRAFFIC CONFIGURATIONS FOR REVIEW AND APPROVAL. CONFIGURATION MUST MEET CITY OF ANN ARBOR SPECIFICATION REQUIREMENTS.
6. PROPER SIGNAGE:
 - 6.1. ADVANCED WARNING SIGNS
PLACE WARNING SIGNS AT ALL ENTRANCES TO THE SHOPPING PLAZA STATING "CONSTRUCTION AHEAD - EXPECT DELAYS" AND "LANE/SHOPS OPEN - USE CAUTION."
USE STANDARD MUTCD-COMPLIANT SIGNS LIKE "ROAD WORK AHEAD" (W20-1) AND "FLAGGER AHEAD" (W20-7A) IF APPLICABLE.
 - 6.2. DIRECTIONAL SIGNS
INSTALL SIGNS SHOWING DETOUR ROUTES, ALTERNATIVE PARKING, OR TEMPORARY PEDESTRIAN PATHWAYS (IF APPLICABLE).
USE "OPEN DURING CONSTRUCTION" OR "BUSINESS ACCESS OPEN" SIGNS TO REASSURE CUSTOMERS, PAID FOR AS DS_ADDITIONAL SIGNS.
 - 6.3. SPEED REDUCTION SIGNS
IF REQUIRED, PLACE SPEED LIMIT SIGNS TO SLOW DOWN VEHICLES NEAR THE ACTIVE WORK ZONE.
 - 6.4. BARRICADES AND REFLECTIVE TAPE
USE TYPE II OR III BARRICADES WITH REFLECTIVE TAPE AROUND THE WORK ZONE. FOR NIGHTTIME OPERATIONS, INCLUDE FLASHING WARNING LIGHTS.
 - 6.5. PEDESTRIANS AND ADA COMPLIANCE
PLACE "SIDEWALK CLOSED - USE OTHER SIDE" SIGNS WHERE SIDEWALKS ARE IMPACTED.
ENSURE TEMPORARY PEDESTRIAN WALKWAYS HAVE ADA-COMPLIANT ACCESS RAMPS.
7. WORK METHODS:
 - 7.1. SECTIONAL WORK ZONES
DIVIDE THE TRENCHING WORK INTO SMALLER, MANAGEABLE SECTIONS (E.G. 300-500 FEET AT A TIME). THIS KEEPS PARTS OF THE PLAZA OPEN AND ALLOWS FOR CONTINUOUS PROGRESS.
USE STEEL TRENCH PLATES TO COVER OPEN TRENCHES TEMPORARILY FOR VEHICLE AND PEDESTRIAN ACCESS.
 - 7.2. PHASED OPERATIONS
WORK IN PHASES:
PHASE 1: EXCAVATE AND INSTALL WATER MAIN FOR SECTION 1.
PHASE 2: BACKFILL AND RESTORE SECTION 1 WHILE SECTION 2 EXCAVATION BEGINS.
 - 7.3. TRAFFIC MANAGEMENT
USE FLAGGERS OR TEMPORARY TRAFFIC SIGNALS TO MANAGE VEHICLE FLOW.
ESTABLISH A ONE-WAY TRAFFIC SYSTEM IF LANE REDUCTION IS REQUIRED.
 - 7.4. PEDESTRIAN SAFETY
ERECT TEMPORARY BARRIERS SEPARATING PEDESTRIAN WALKWAYS FROM THE CONSTRUCTION ZONE.
USE CLEAR SIGNAGE TO DIRECT PEDESTRIANS TO SAFE CROSSING POINTS.
 - 7.5. STAGING AND STORAGE
KEEP CONSTRUCTION EQUIPMENT, MATERIALS, AND DEBRIS CONFINED TO DESIGNATED AREAS TO AVOID ENCRoACHING ON PARKING OR DRIVING LANES.
 - 7.6. DUST AND NOISE CONTROL
USE WATER SPRAYING TO SUPPRESS DUST.
ADHERE TO LOCAL NOISE ORDINANCES TO AVOID DISRUPTING BUSINESSES.



R:\2023013 Westgate Watermain\Plan Production\2023013Mtrf1.dwg Dwg Created: 16-Jan-25 - a2 standard bw.stb - Plot Date: 23-Jan-25

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

REV.	DATE	DESCRIPTION
00	01/23/2025	BID SET
		KMB DRAWN
		FDC CHECKED

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
TRAFFIC CONTROL
WESTGATE SHOPPING CENTER

SCALE PLAN: 1" = 40'

DRAWING No. 2023013-11

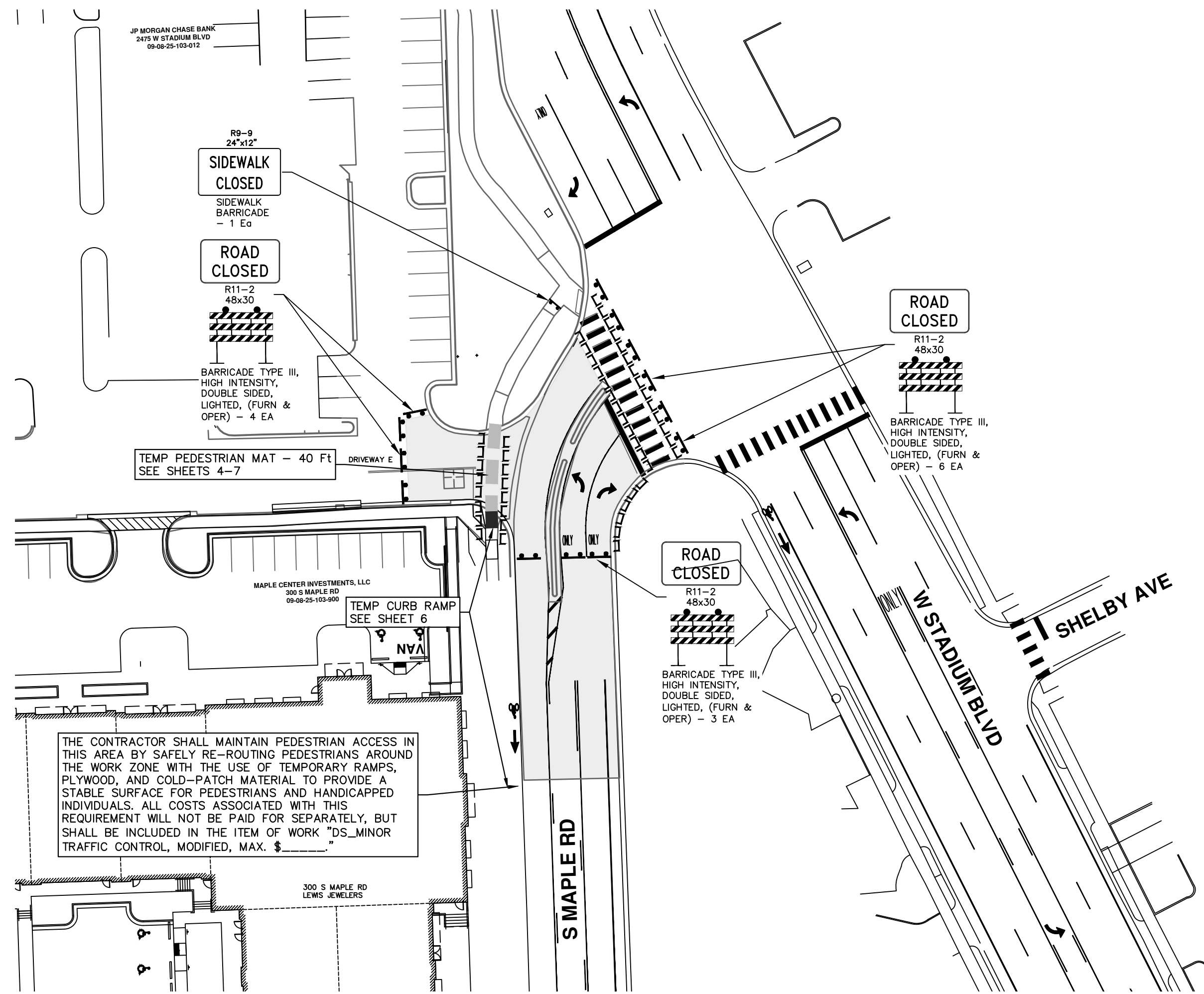
SHEET No. 11 OF 37

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-0647
ANN ARBOR 734.794.6410
www.a2gov.org

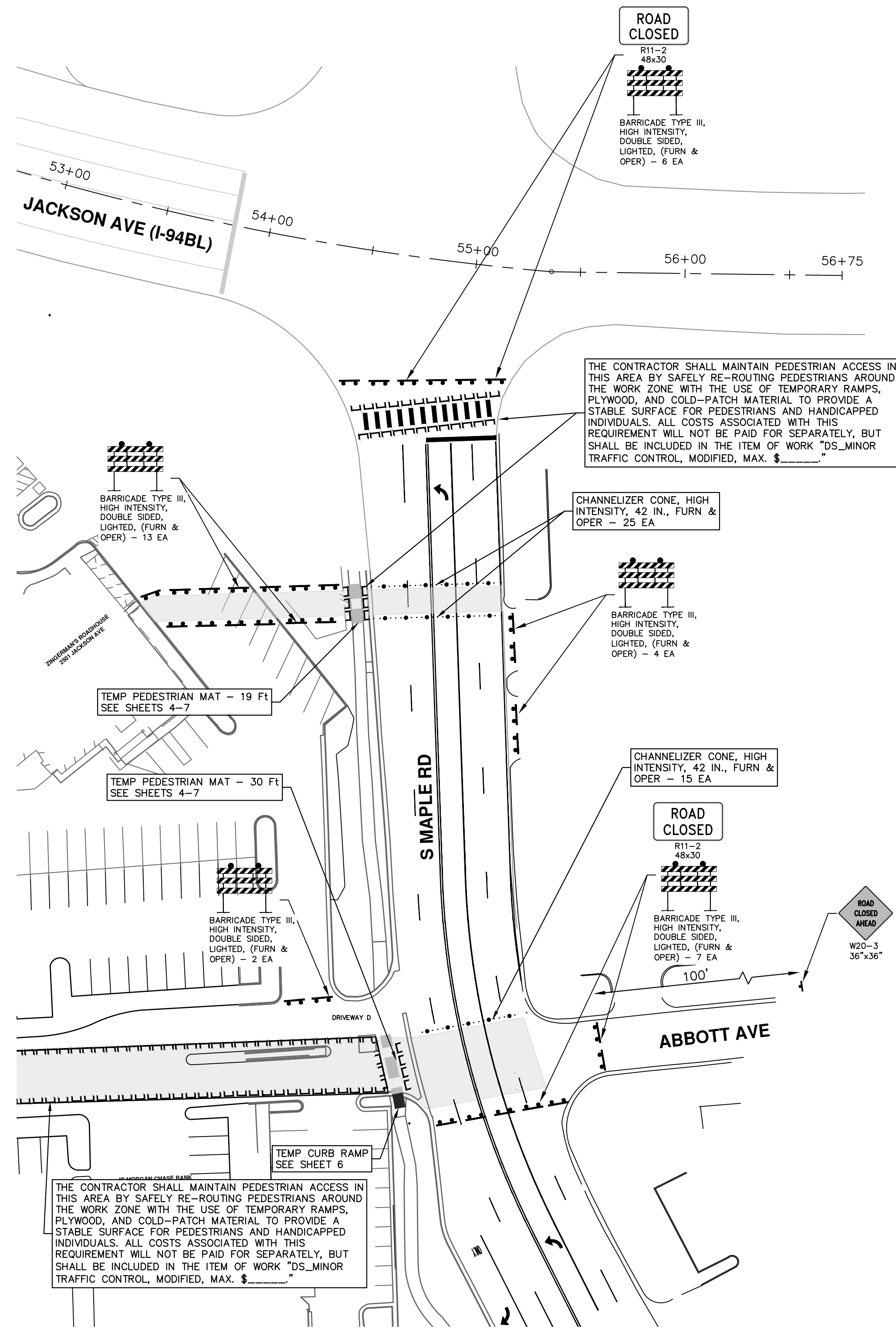
CONSTRUCTION COORDINATION AND MAINTENANCE OF TRAFFIC REQUIREMENTS:

- THE CONTRACTOR SHALL STAGE AND EXECUTE THE PROJECT'S CONSTRUCTION SUCH THAT NO MORE THAN TWO ROADWAY CONNECTIONS "DRIVEWAYS" BETWEEN JACKSON AVENUE AND MAPLE ROAD ARE CLOSED AT ANY ONE TIME. ADDITIONALLY, IF DRIVEWAY "A" IS CLOSED, THEN DRIVEWAY "B" MUST REMAIN OPEN. SIMILARLY, DRIVEWAY "D" AND "E" CANNOT BOTH BE CLOSED SIMULTANEOUSLY.
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- PROPER SIGNAGE:
 - ADVANCED WARNING SIGNS
PLACE WARNING SIGNS AT ALL ENTRANCES TO THE SHOPPING PLAZA STATING "CONSTRUCTION AHEAD - EXPECT DELAYS" AND "LANE/SHOPS OPEN - USE CAUTION."
USE STANDARD MUTCD-COMPLIANT SIGNS LIKE "ROAD WORK AHEAD" (W20-1) AND "FLAGGER AHEAD" (W20-7A) IF APPLICABLE.
 - DIRECTIONAL SIGNS
INSTALL SIGNS SHOWING DETOUR ROUTES, ALTERNATIVE PARKING, OR TEMPORARY PEDESTRIAN PATHWAYS (IF APPLICABLE).
USE "OPEN DURING CONSTRUCTION" OR "BUSINESS ACCESS OPEN" SIGNS TO REASSURE CUSTOMERS, PAID FOR AS DS_ADDITIONAL SIGNS.
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 - BARRICADES AND REFLECTIVE TAPE
USE TYPE II OR III BARRICADES WITH REFLECTIVE TAPE AROUND THE WORK ZONE. FOR NIGHTTIME OPERATIONS, INCLUDE FLASHING WARNING LIGHTS.

- PEDESTRIANS AND ADA COMPLIANCE
PLACE "SIDEWALK CLOSED - USE OTHER SIDE" SIGNS WHERE SIDEWALKS ARE IMPACTED.
ENSURE TEMPORARY PEDESTRIAN WALKWAYS HAVE ADA-COMPLIANT ACCESS RAMPS.
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DIVIDE THE TRENCHING WORK INTO SMALLER, MANAGEABLE SECTIONS (E.G. 300-500 FEET AT A TIME). THIS KEEPS PARTS OF THE PLAZA OPEN AND ALLOWS FOR CONTINUOUS PROGRESS.
USE STEEL TRENCH PLATES TO COVER OPEN TRENCHES TEMPORARILY FOR VEHICLE AND PEDESTRIAN ACCESS.
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WORK IN PHASES:
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USE WATER SPRAYING TO SUPPRESS DUST.
ADHERE TO LOCAL NOISE ORDINANCES TO AVOID DISRUPTING BUSINESSES.



LEWIS JEWELERS WATER MAIN CONNECTION



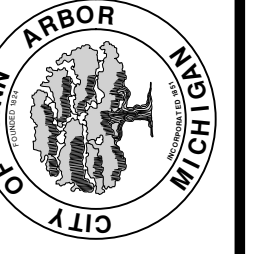
S MAPLE AND ABBOTT AVE WATER MAIN CONNECTION

R:\2023013 Westgate Watermain\Plan Production\2023013Mtrf3.dwg Dwg Created: 22-Jan-25 - _a2 standard b.w.stb - Plot Date: 23-Jan-25



REV.	DATE	DESCRIPTION
00	01/23/2025	BID SET
		KMB DRAWN
		FDC CHECKED

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



CITY OF ANN ARBOR - ENGINEERING
WESTGATE WATERMAIN
TRAFFIC CONTROL
LEWIS JEWELERS AND ABBOTT AVE WATER MAIN CONNECTION

SCALE PLAN: 1" = 40'
DRAWING No. 2023013-12

MDOT LANE CLOSURE NOTIFICATION/REQUEST FORM
(FOR SHIFTS, LANE, SHOULDER, STRUCTURE AND RAMP CLOSURES)

TRANSPORTATION SERVICE CENTER (TSC)	DATE
COUNTY	REQUEST NUMBER
JOB NUMBER	REQUESTOR NAME
PRIME CONTRACTOR	24 HOURS CONTACT

ROUTE	DIRECTION	LOCATION OF CLOSURE (Cross Street to Cross Street, Mile point to Mile point, Exit name and Number)	WORK DESCRIPTION	DETOUR YES/NO	EXISTING NUMBER LINES	CLOSURE TYPE (Place "X" in the boxes that apply)				DURATION OF CLOSURE and TYPE (Place "X" in the boxes that apply)		RESTRICTIONS			SPEED LIMITS	
						LANE NUMBER	RIGHT SHOULDER	ENTRANCE	RAMP	EXIT	DATE MM/DD	TIME	MOVING	HEIGHT	WEIGHT	WIDTH

DETOUR ROUTE

SUMMARY

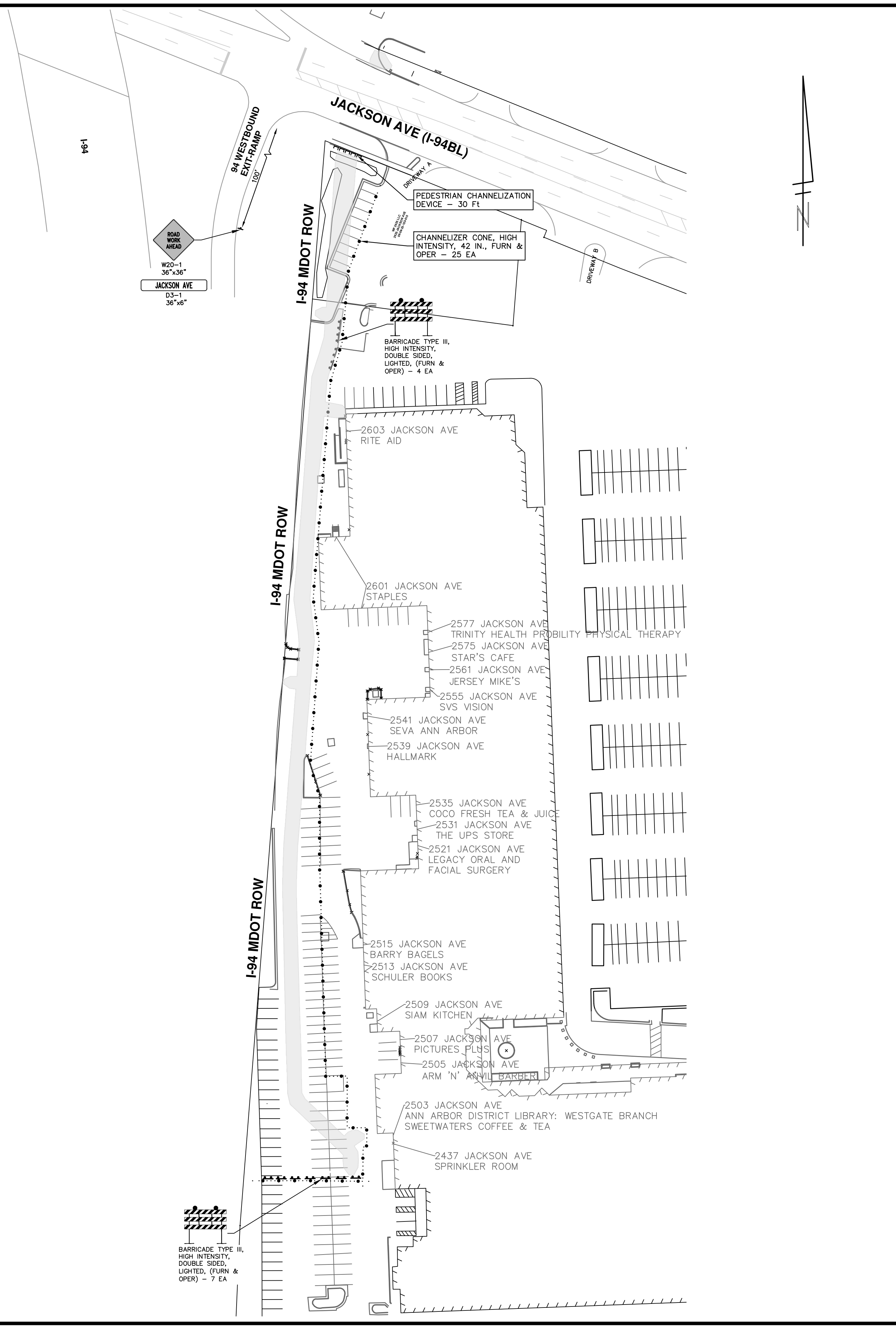
Submit form a minimum of seven (7) calendar days prior to the start of requested closures to the Engineer for approval.

NOTE: Southeast Michigan Transportation Operations Center (SEMTOC) shall be called in 'Real Time' when lane closures are beginning and when lane closures are removed in addition to providing advance notification on this Lane Closure Form. This includes shoulder closures and moving operations. Please notify SEMTOC and refer to the Main Job Number associated with the project.

CONSTRUCTION COORDINATION AND MAINTENANCE OF TRAFFIC REQUIREMENTS:

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- SEE "SPECIAL PROVISION FOR MAINTAINING TRAFFIC AND CONSTRUCTION SEQUENCING" FOR DETAILS ON CONSTRUCTION STAGING, SEQUENCING, CLOSURE, DETOUR LIMITATIONS, AND OTHER DETAILS.
- WHILE PERFORMING THE WORK ON JACKSON AVE, AN MDOT LANE CLOSURE NOTIFICATION/REQUEST FORM (AS SHOWN ON THIS SHEET) TO BE SUBMITTED A MINIMUM OF 7 BUSINESS DAYS IN ADVANCE OF THE PROPOSED CLOSURE TO THE MDOT BRIGHTON TSC OPERATIONS/TRAFFIC AND SAFETY UNIT FOR REVIEW AND APPROVAL. FORM TO BE SUBMITTED VIA EMAIL TO GEORGE SEIF AT SEIFG@MICHIGAN.GOV.
- THE CONTRACTOR MUST PROVIDE MAINTENANCE OF TRAFFIC CONFIGURATION FOR REVIEW AND APPROVAL. CONFIGURATION MUST MEET CITY OF ANN ARBOR SPECIFICATIONS REQUIREMENTS.
- PROPER SIGNAGE:
 - ADVANCED WARNING SIGNS
PLACE WARNING SIGNS AT ALL ENTRANCES TO THE SHOPPING PLAZA STATING "CONSTRUCTION AHEAD - EXPECT DELAYS" AND "LANE/SHOPS OPEN - USE CAUTION."
USE STANDARD MUTCD-COMPLIANT SIGNS LIKE "ROAD WORK AHEAD" (W20-1) AND "FLAGGER AHEAD" (W20-7A) IF APPLICABLE.
 - DIRECTIONAL SIGNS

- INSTALL SIGNS SHOWING DETOUR ROUTES, ALTERNATIVE PARKING, OR TEMPORARY PEDESTRIAN PATHWAYS (IF APPLICABLE).
USE "OPEN DURING CONSTRUCTION" OR "BUSINESS ACCESS OPEN" SIGNS TO REASSURE CUSTOMERS, PAID FOR AS DS_ADDITIONAL SIGNS.
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IF REQUIRED, PLACE SPEED LIMIT SIGNS TO SLOW DOWN VEHICLES NEAR THE ACTIVE WORK ZONE.
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USE TYPE II OR III BARRICADES WITH REFLECTIVE TAPE AROUND THE WORK ZONE. FOR NIGHTTIME OPERATIONS, INCLUDE FLASHING WARNING LIGHTS.
 - PEDESTRIANS AND ADA COMPLIANCE
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 - PHASED OPERATIONS
WORK IN PHASES:
PHASE 1: EXCAVATE AND INSTALL WATER MAIN FOR SECTION 1.
PHASE 2: BACKFILL AND RESTORE SECTION 1 WHILE SECTION 2 EXCAVATION BEGINS.
 - TRAFFIC MANAGEMENT
USE FLAGGERS OR TEMPORARY TRAFFIC SIGNALS TO MANAGE VEHICLE FLOW.
ESTABLISH A ONE-WAY TRAFFIC SYSTEM IF LANE REDUCTION IS REQUIRED.
 - PEDESTRIAN SAFETY
ERECT TEMPORARY BARRIERS SEPARATING PEDESTRIAN WALKWAYS FROM THE CONSTRUCTION ZONE.
USE CLEAR SIGNAGE TO DIRECT PEDESTRIANS TO SAFE CROSSING POINTS.
 - STAGING AND STORAGE
KEEP CONSTRUCTION EQUIPMENT, MATERIALS, AND DEBRIS CONFINED TO DESIGNATED AREAS TO AVOID ENCRDACHING ON PARKING OR DRIVING LANES.
 - DUST AND NOISE CONTROL
USE WATER SPRAYING TO SUPPRESS DUST.
ADHERE TO LOCAL NOISE ORDINANCES TO AVOID DISRUPTING BUSINESSES.



R:\2023013 Westgate Watermain\Plan Production\2023013Mtrf2.dwg Dwg Created: 12-Jan-25 - _a2 standard bw.stb - Plot Date: 23-Jan-25

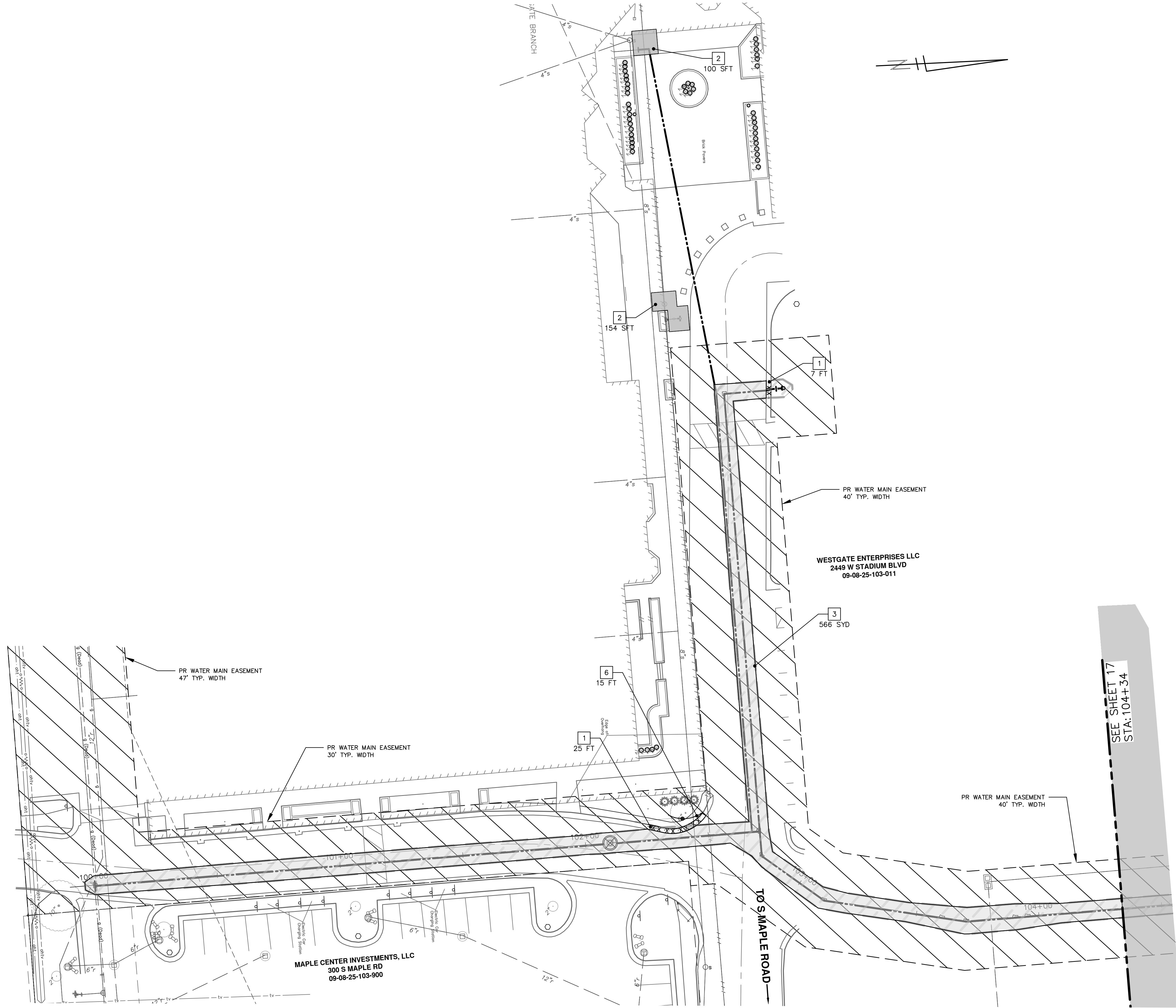
811 Know what's below. Call Before you dig.


REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	BID SET	01/23/2025	KMB	FDC

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
TRAFFIC CONTROL
WESTGATE SHOPPING CENTER BEHIND BUILDINGS

SCALE PLAN: 1" = 60'
DRAWING No. 2023013-13
SHEET No. 13 OF 37

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ANN ARBOR, MI 48107-8647
ANN ARBOR: 734.794.4410
WWW.A2G.OV.GOV



REMOVAL KEY	
KEY	DESCRIPTION
1	Curb, Gutter, and Curb and Gutter, Any Type, Rem *
2	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
3	HMA, Any Thickness, Rem *
4	Concrete Bollard, Rem
5	Erosion Control, Inlet Protection, Fabric Drop
6	Protective Fencing
7	Light Pole, Rem and Salvage
8	Concrete Pavt, Any Thickness, Rem
9	Cold-Milling HMA Surface
10	Fence, Salvage and Re-Erect
	Approx. Limits of Water Trench

- * SAWCUT FULL DEPTH AT REMOVAL LIMITS AS DIRECTED BY ENGINEER
- * WATER MAIN REMOVALS SHOWN ON WATER MAIN SHEETS

SEE SHEET 17
STA: 104+34

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING


SCALE PLAN: 1" = 20'

DRAWING No. 2023013-16

SHEET No. 16 OF 37

WESTGATE WATERMAIN REMOVALS

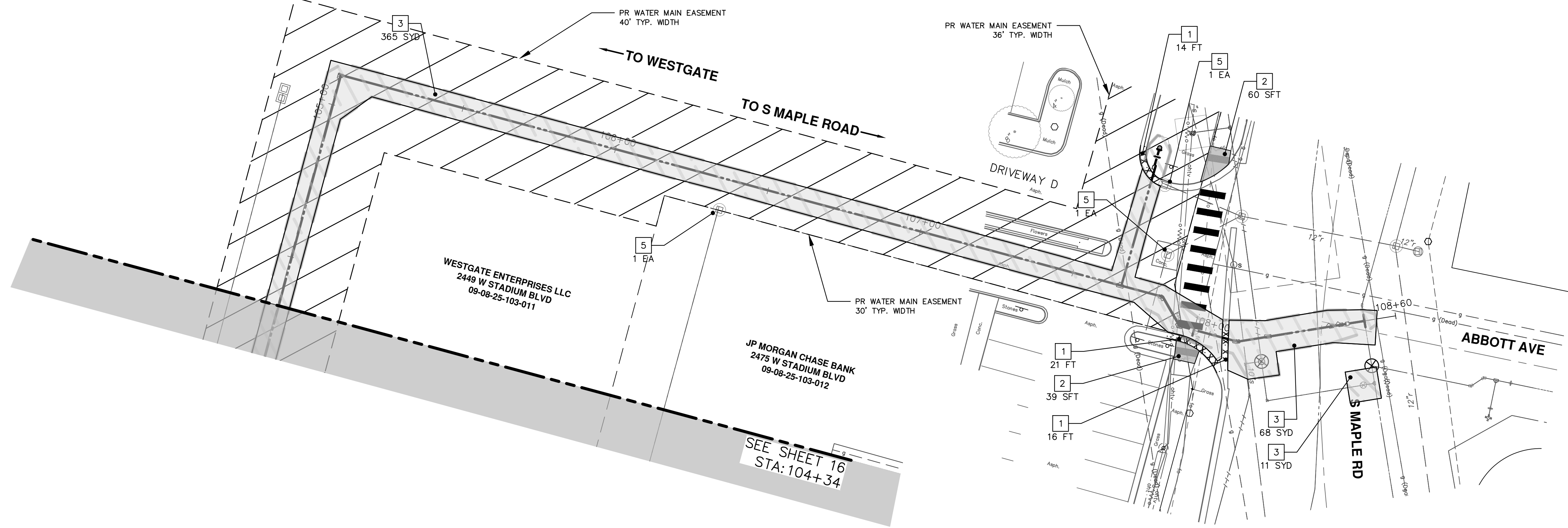
SE WATER MAIN REROUTE STA. 100+00 - STA. 104+50



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ANN ARBOR, MI 48106-6647
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00	REVISE THIS WHEN GOING OUT FOR BID				
	COPY A2REVDATE.DWG TO PROJECT FOLDER AND				

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SEE SHEET 16
STA: 104+34

NOTES:

- SEE SHEET 20 FOR ADDITIONAL REMOVALS ON S MAPLE RD.

REMOVAL KEY	
KEY	DESCRIPTION
1	Curb, Gutter, and Curb and Gutter, Any Type, Rem *
2	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
3	HMA, Any Thickness, Rem *
4	Concrete Bollard, Rem
5	Erosion Control, Inlet Protection, Fabric Drop
6	Protective Fencing
7	Light Pole, Rem and Salvage
8	Concrete Pavt, Any Thickness, Rem
9	Cold-Milling HMA Surface
10	Fence, Salvage and Re-Erect
	Approx. Limits of Water Trench

- * SAWCUT FULL DEPTH AT REMOVAL LIMITS AS DIRECTED BY ENGINEER
- * WATER MAIN REMOVALS SHOWN ON WATER MAIN SHEETS

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00	REVISE THIS WHEN GOING OUT FOR BID	DATE	BY	CHECKED
COPY 2:REVDATE:DWG TO PROJECT FOLDER AND				

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
REMOVALS

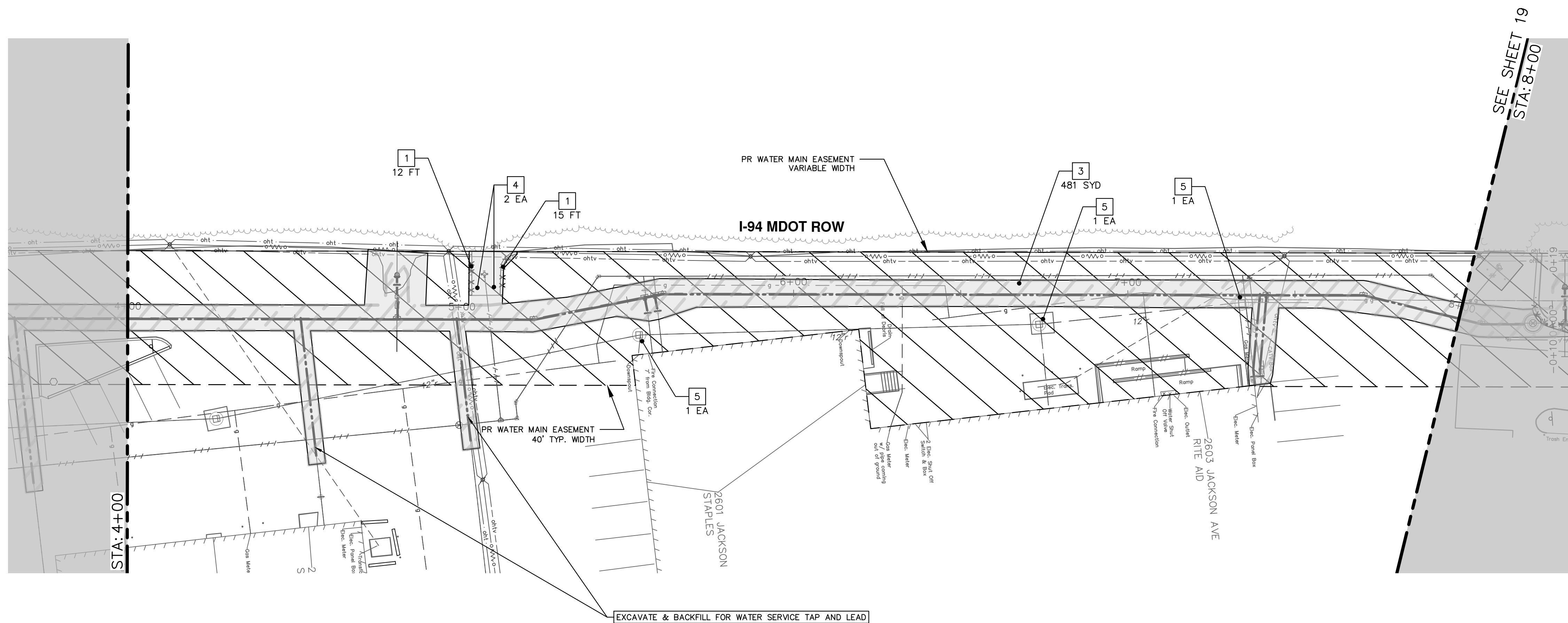
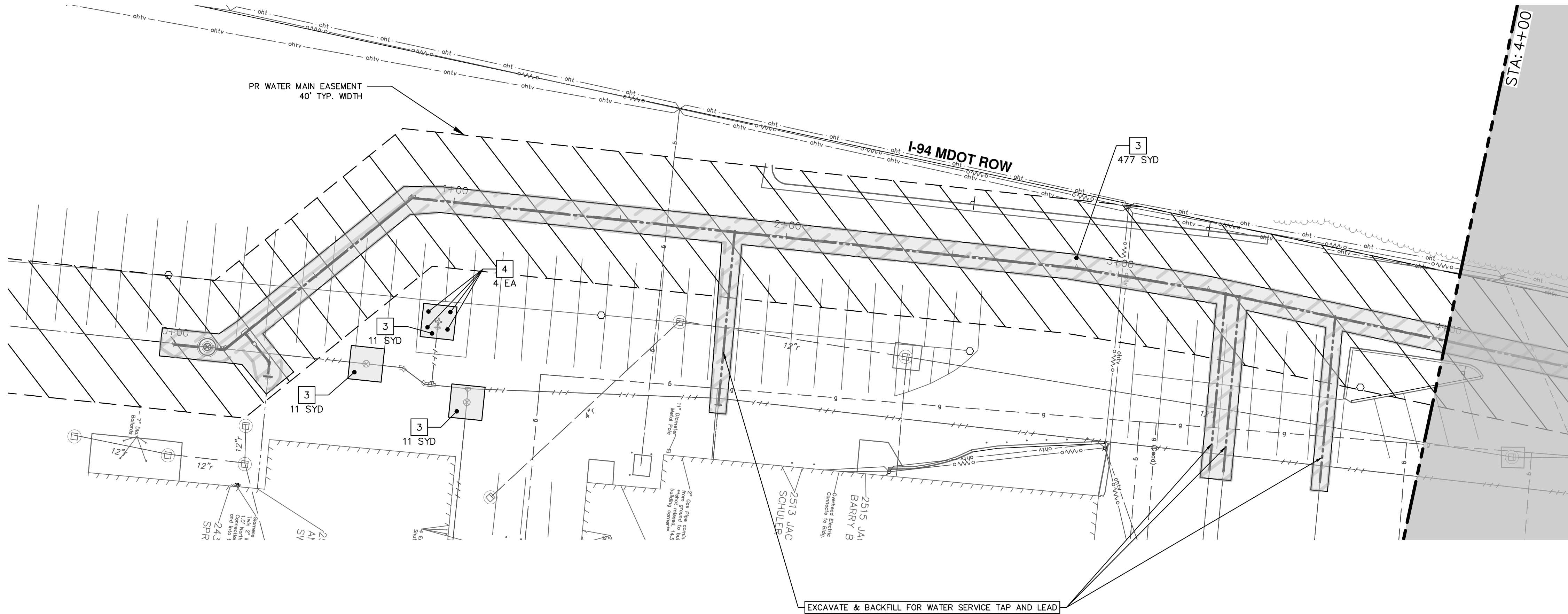
SCALE PLAN: 1" = 20'
PROFILE: 1" = 4'


DRAWING No.
2023013-17

SE WATER MAIN REROUTE STA. 104+50 - STA. 108+76

SHEET No.

17 OF 37



REMOVAL KEY	
KEY	DESCRIPTION
1	Curb, Gutter, and Curb and Gutter, Any Type, Rem *
2	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
3	HMA, Any Thickness, Rem *
4	Concrete Bollard, Rem
5	Erosion Control, Inlet Protection, Fabric Drop
6	Protective Fencing
7	Light Pole, Rem and Salvage
8	Concrete Pavt, Any Thickness, Rem
9	Cold-Milling HMA Surface
10	Fence, Salvage and Re-Erect
	Approx. Limits of Water Trench

- SAWCUT FULL DEPTH AT REMOVAL LIMITS AS DIRECTED BY ENGINEER
- WATER MAIN REMOVALS SHOWN ON WATER MAIN SHEETS

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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

WESTGATE WATERMAIN REMOVALS

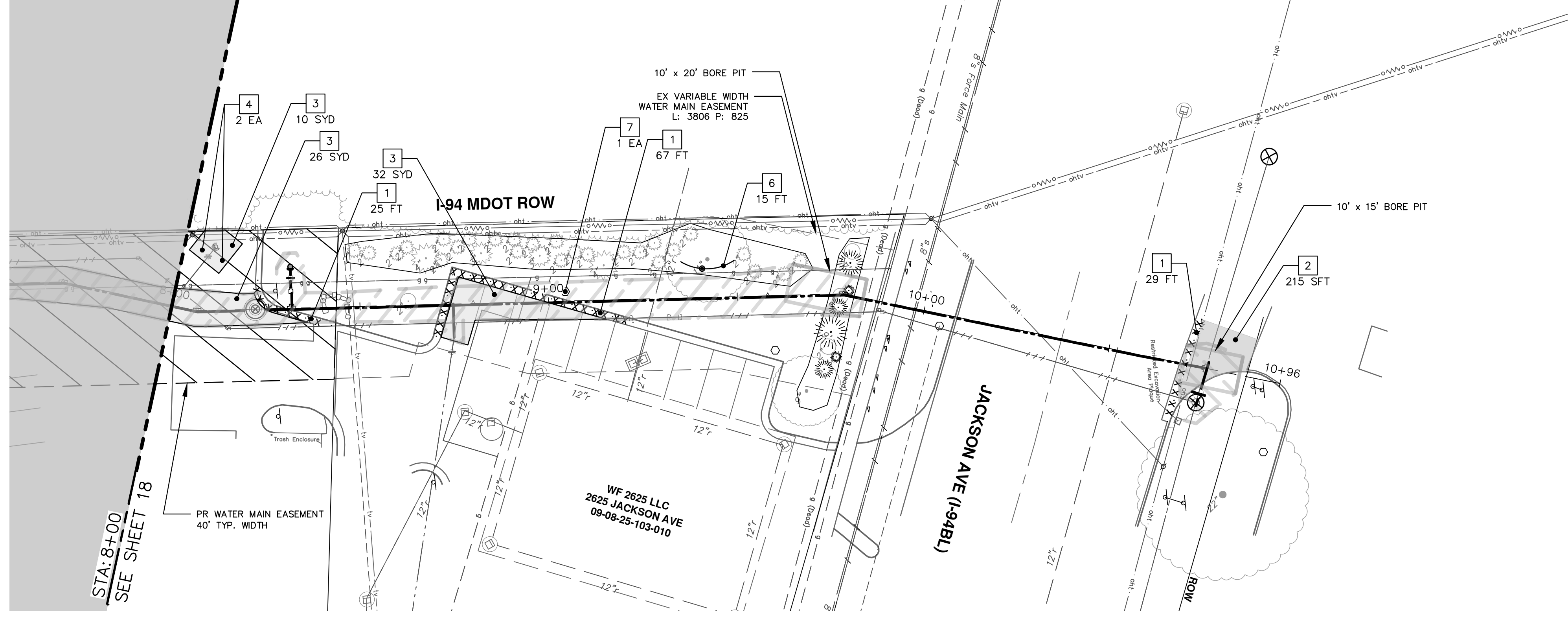
WEST SIDE STA. 0+00 - STA. 8+00

SCALE: 1" = 20'

DRAWING No. 2023013-18

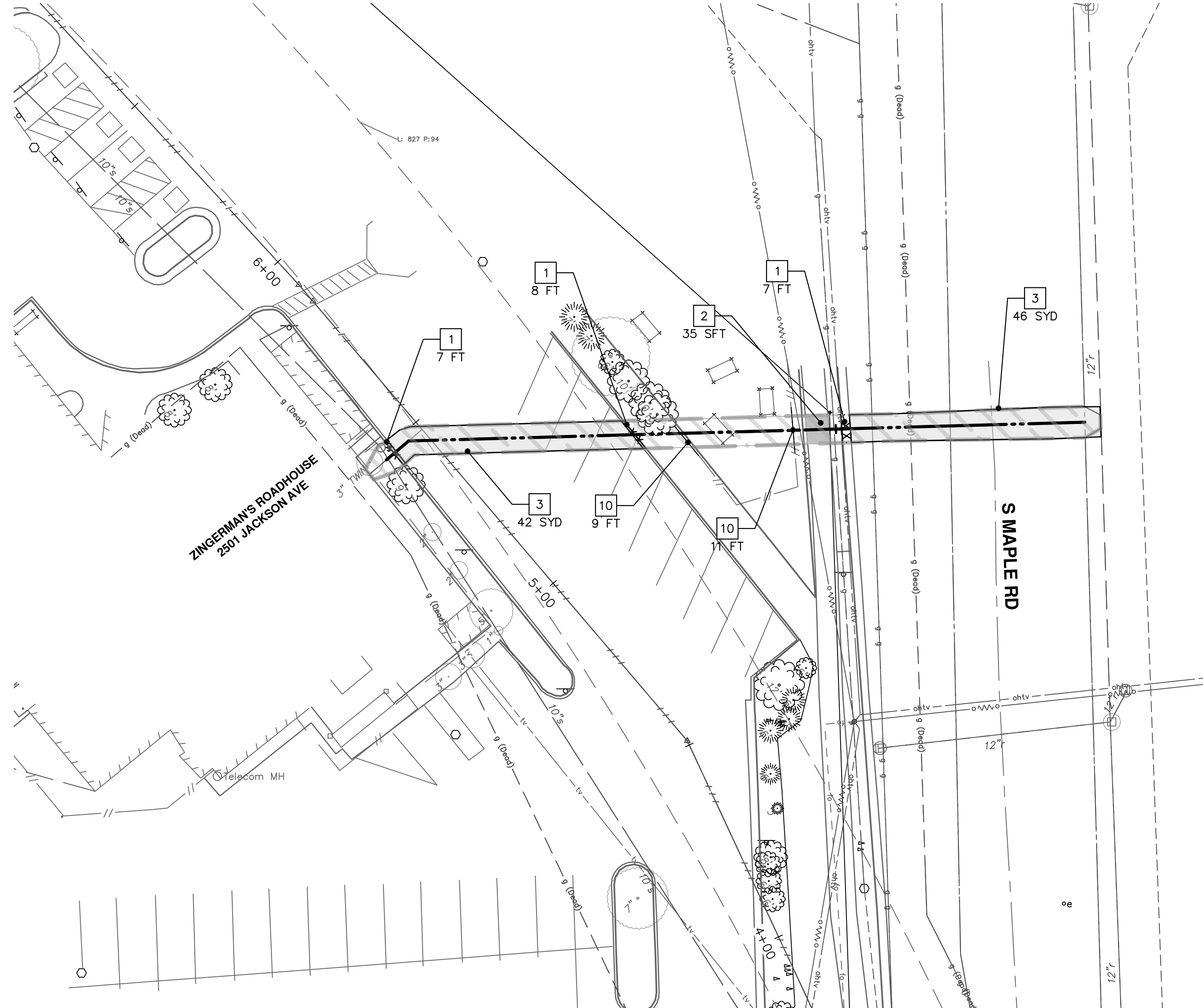
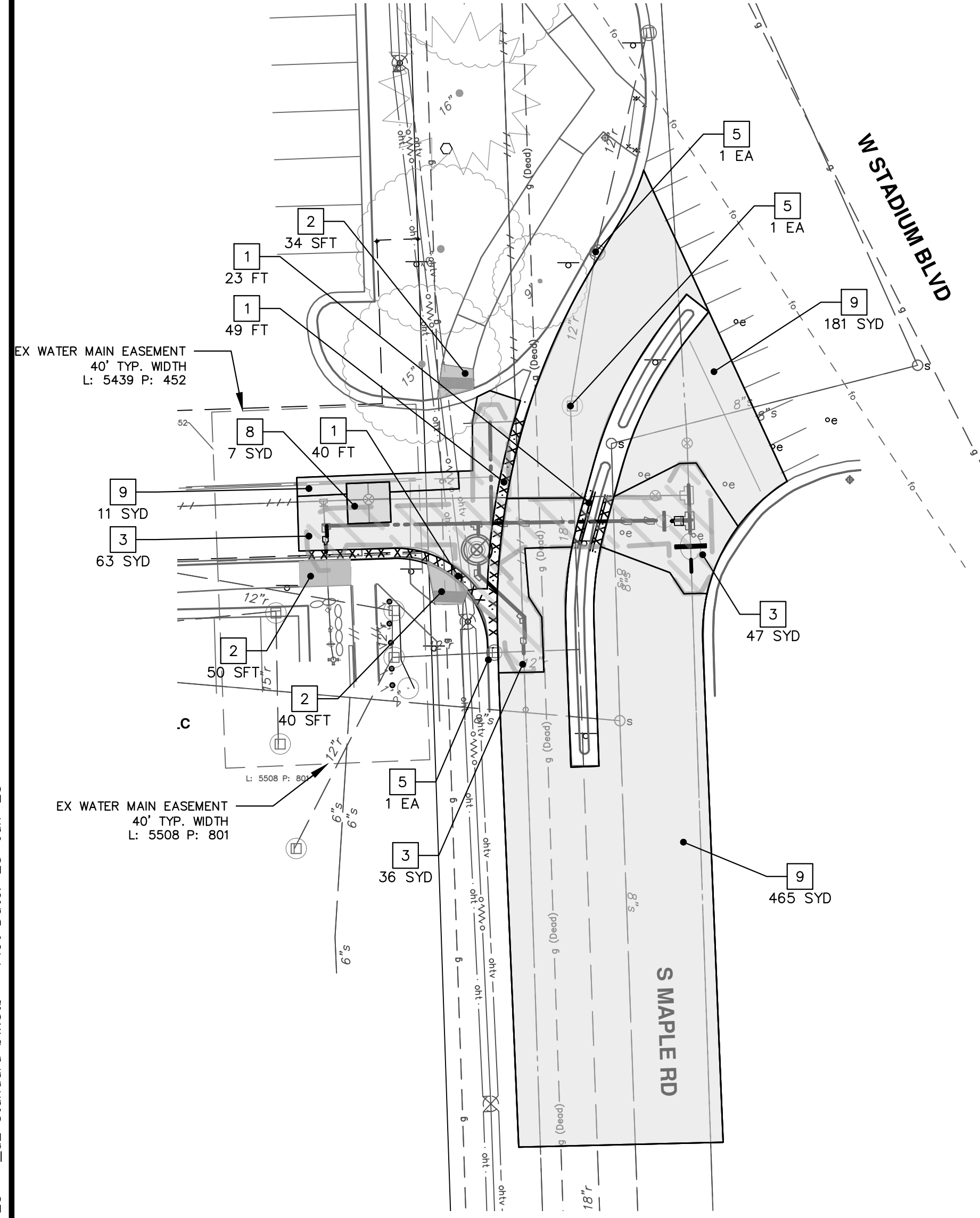
SHEET No.

18 OF 37



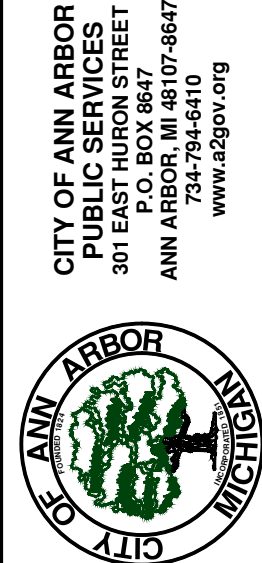
REMOVAL KEY	
KEY	DESCRIPTION
1	Curb, Gutter, and Curb and Gutter, Any Type, Rem *
2	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
3	HMA, Any Thickness, Rem *
4	Concrete Bollard, Rem
5	Erosion Control, Inlet Protection, Fabric Drop
6	Protective Fencing
7	Light Pole, Rem and Salvage
8	Concrete Pavt, Any Thickness, Rem
9	Cold-Milling HMA Surface
10	Fence, Salvage and Re-Erect
	Approx. Limits of Water Trench

- * SAWCUT FULL DEPTH AT REMOVAL LIMITS AS DIRECTED BY ENGINEER
- * WATER MAIN REMOVALS SHOWN ON WATER MAIN SHEETS



REMOVAL KEY	
KEY	DESCRIPTION
1	Curb, Gutter, and Curb and Gutter, Any Type, Rem *
2	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
3	HMA, Any Thickness, Rem *
4	Concrete Ballard, Rem
5	Erosion Control, Inlet Protection, Fabric Drop
6	Protective Fencing
7	Light Pole, Rem and Salvage
8	Concrete Pavt, Any Thickness, Rem
9	Cold-Milling HMA Surface
10	Fence, Salvage and Re-Erect
	Approx. Limits of Water Trench

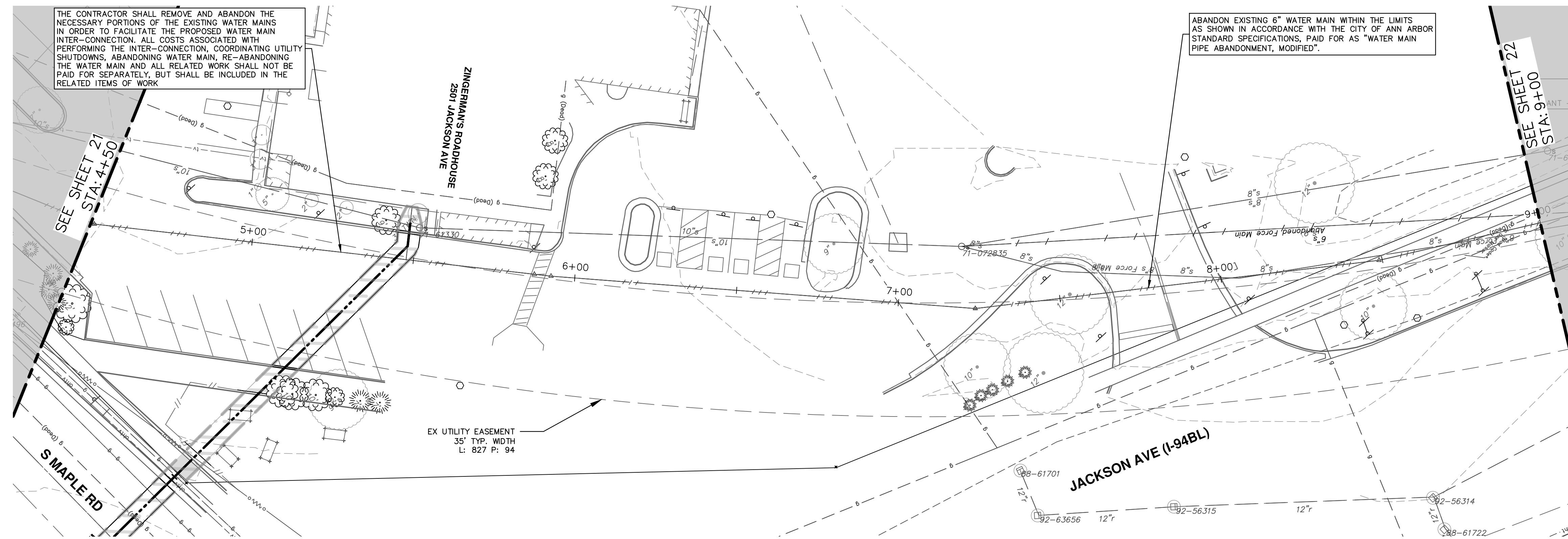
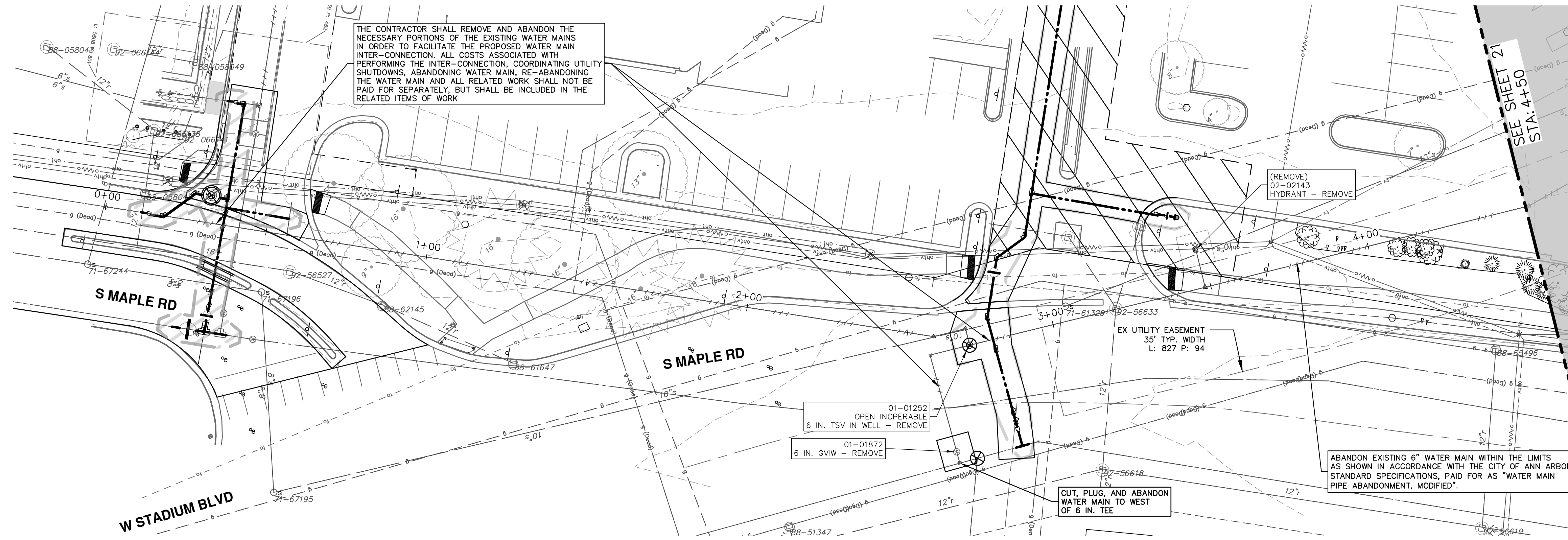
- * SAWCUT FULL DEPTH AT REMOVAL LIMITS AS DIRECTED BY ENGINEER
- * WATER MAIN REMOVALS SHOWN ON WATER MAIN SHEETS



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	COPY A2REVDATE.DWG TO PROJECT FOLDER AND			





REMOVAL KEY	
KEY	DESCRIPTION
1	Curb, Gutter, and Curb and Gutter, Any Type, Rem *
2	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
3	HMA, Any Thickness, Rem *
4	Concrete Ballard, Rem
5	Erosion Control, Inlet Protection, Fabric Drop
6	Protective Fencing
7	Light Pole, Rem and Salvage
8	Concrete Pavt, Any Thickness, Rem
9	Cold-Milling HMA Surface
10	Fence, Salvage and Re-Erect
	Approx. Limits of Water Trench

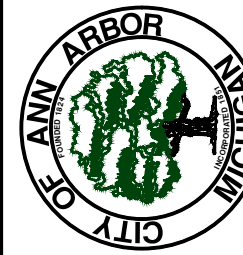
- SAWCUT FULL DEPTH AT REMOVAL LIMITS AS DIRECTED BY ENGINEER
- WATER MAIN REMOVALS SHOWN ON WATER MAIN SHEETS

WATER MAIN STRUCTURE REMOVALS	
STRUCTURE	TYPE
01-01872	6 in. GVIW - Remove
01-01252 OPEN INOPERABLE	6 in. TSV in Well - Remove
02-02143	HYDRANT - Remove



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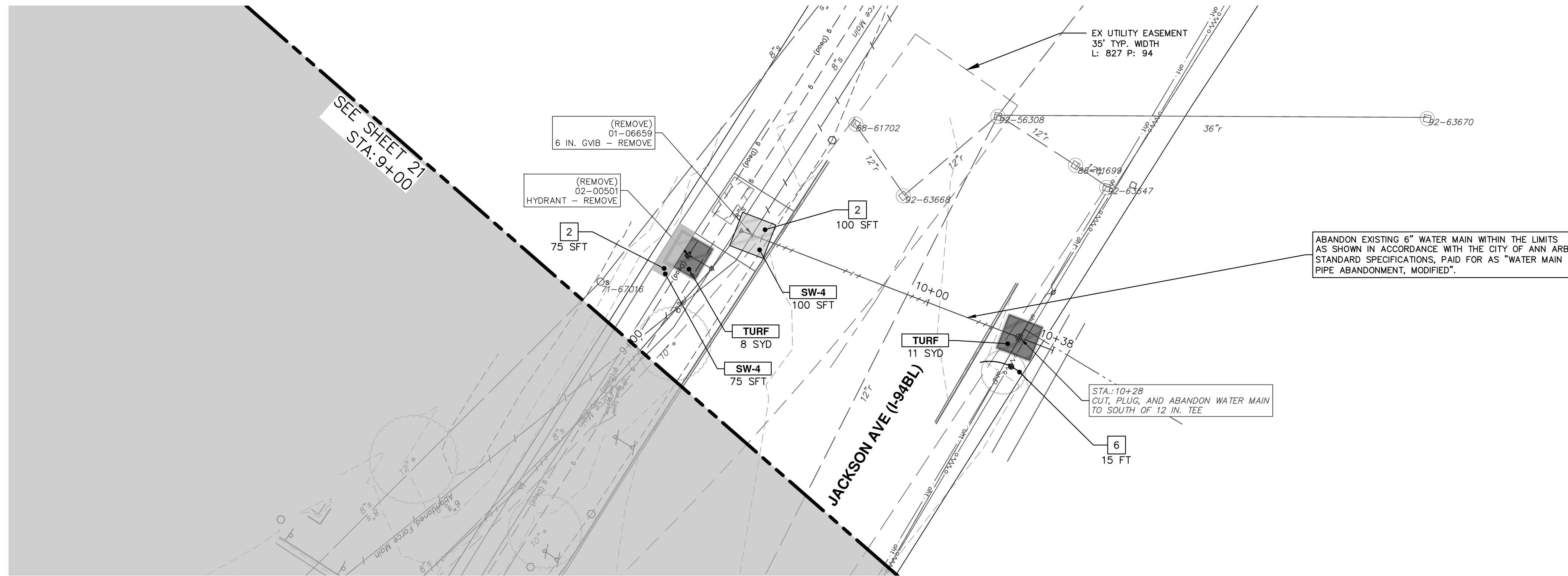
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
6 IN WATER MAIN ABANDON

S MAPLE 6IN WATER MAIN ABANDON STA 0+00 TO 9+00

SCALE: 1" = 20'
DRAWING No. 2023013-21



WATER MAIN STRUCTURE REMOVALS	
STRUCTURE	TYPE
01-06659	6 in. GVB - Remove
02-00501	HYDRANT - Remove

REMOVAL KEY	
KEY	DESCRIPTION
1	Curb, Gutter, and Curb and Gutter, Any Type, Rem *
2	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem
3	HMA, Any Thickness, Rem *
4	Concrete Ballard, Rem
5	Erosion Control, Inlet Protection, Fabric Drop
6	Protective Fencing
7	Light Pole, Rem and Salvage
8	Concrete Pavt, Any Thickness, Rem
9	Cold-Milling HMA Surface
10	Fence, Salvage and Re-Erect
	Approx. Limits of Water Trench

- * SAWCUT FULL DEPTH AT REMOVAL LIMITS AS DIRECTED BY ENGINEER
- * WATER MAIN REMOVALS SHOWN ON WATER MAIN SHEETS

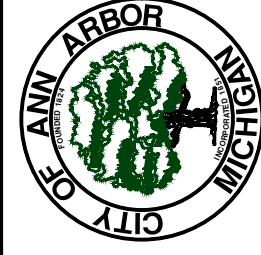
CONSTRUCTION KEY	
KEY	DESCRIPTION
	PLACE HMA, PLACE MATERIAL IN LIFTS ACCORDING TO THE TYPICAL SECTION AND AS DIRECTED BY THE ENGINEER.
	Conc, Curb or Curb & Gutter, All Types
	Conc, Driveway Opening, Type M
	Conc, Sidewalk, 4 In.
	Conc, Sidewalk, Drive Approach, or Ramp, 6 In.
	Adjust Structure Cover
	Structure Cover
	Steel Bollard
	Turf Restoration
	Detectable Warning Surface

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

WESTGATE WATERMAIN

6 IN WATER MAIN ABANDON

S MAPLE 6IN WATER MAIN ABANDON STA 9+00 TO 10+38



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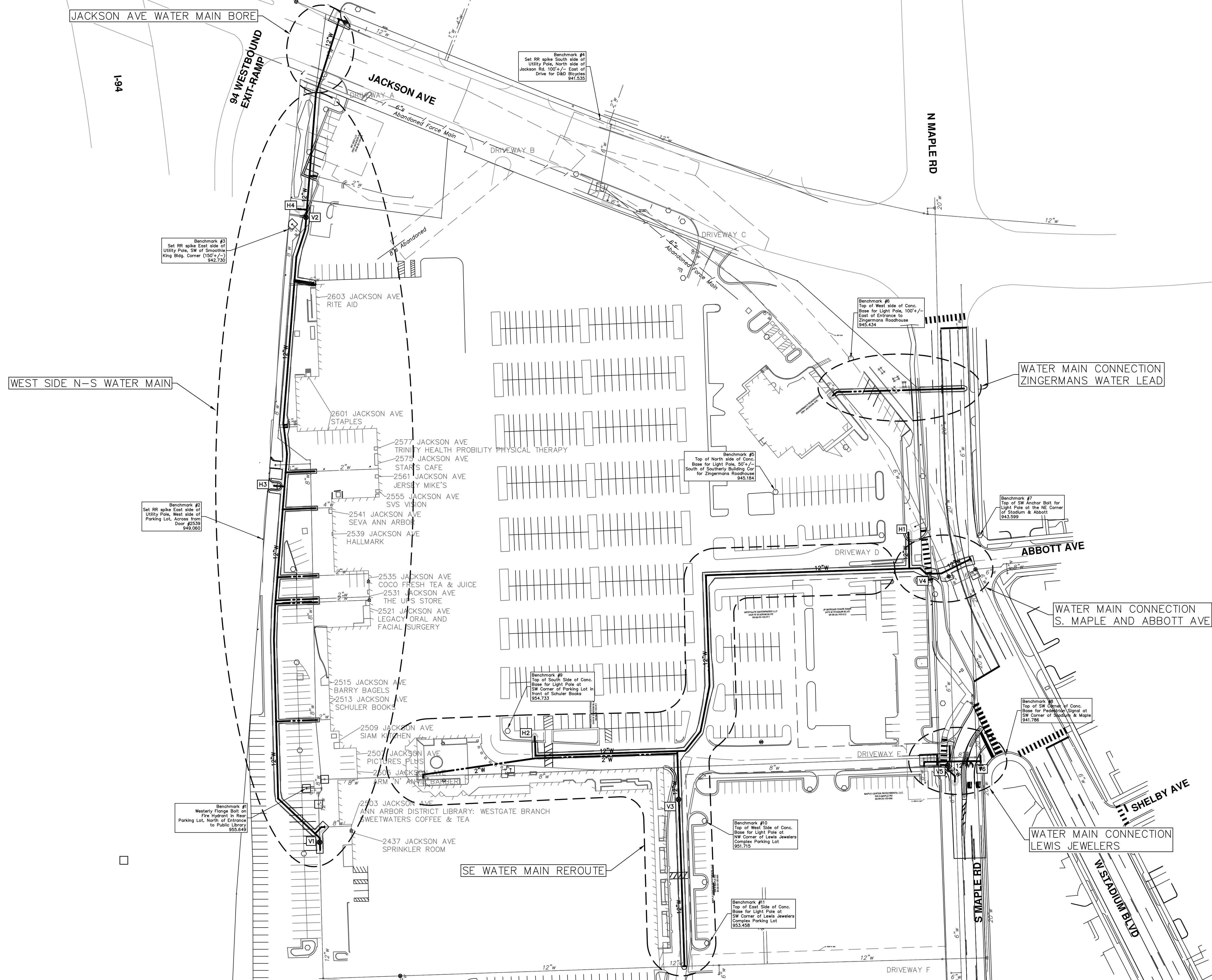
NO.	DATE	BY	CHECKED

SCALE: 1" = 20'

DRAWING No. 2023013-22

SHEET No. 22 OF 37

R:\2023013 Westgate Watermain\Plan Production\20230130vrutil.dwg Dwg Created: 18-Sep-24 - _a2 standard bw.stb - Plot Date: 23-Jan-25



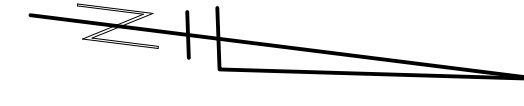
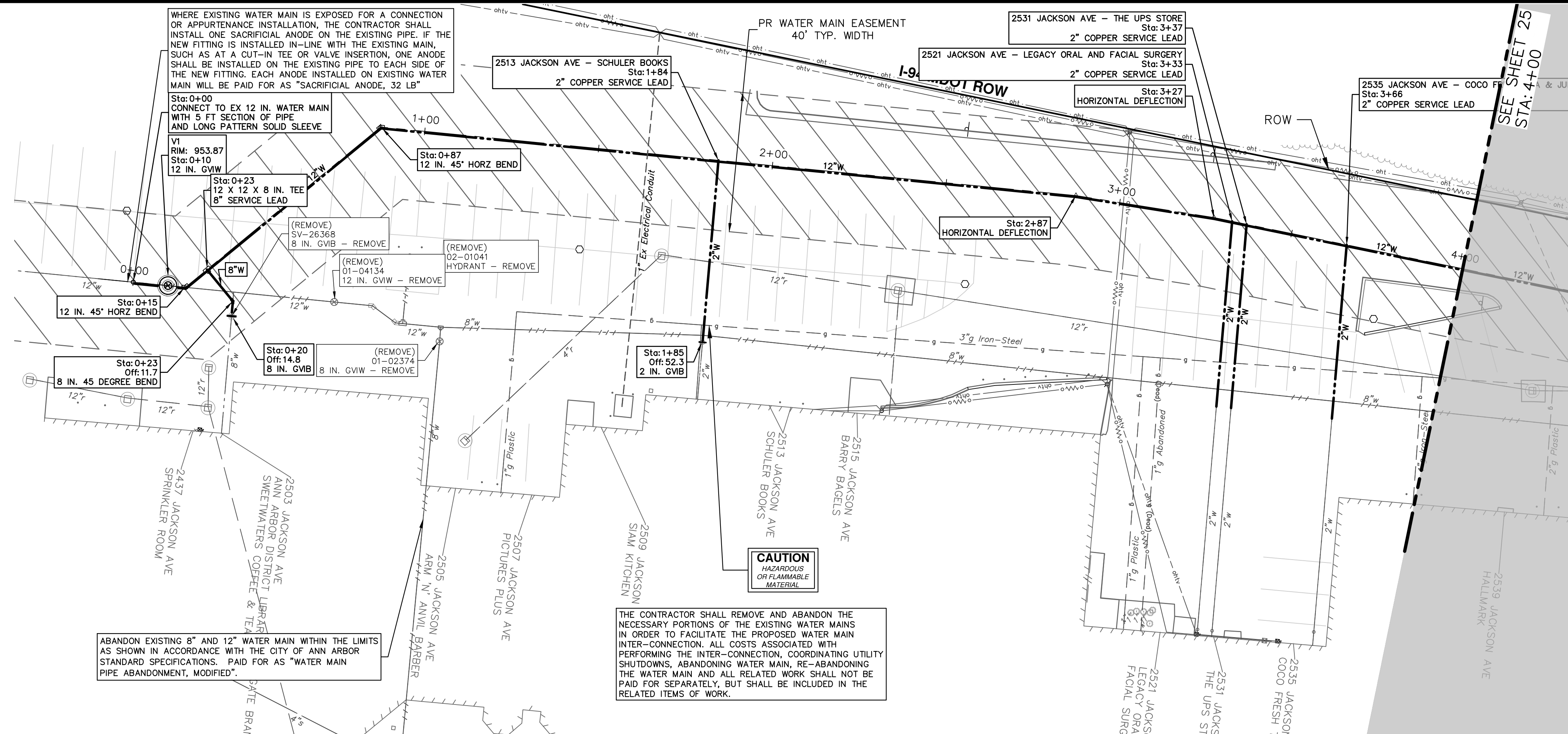
REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	BID SET	01/23/2025	KMB	FDC

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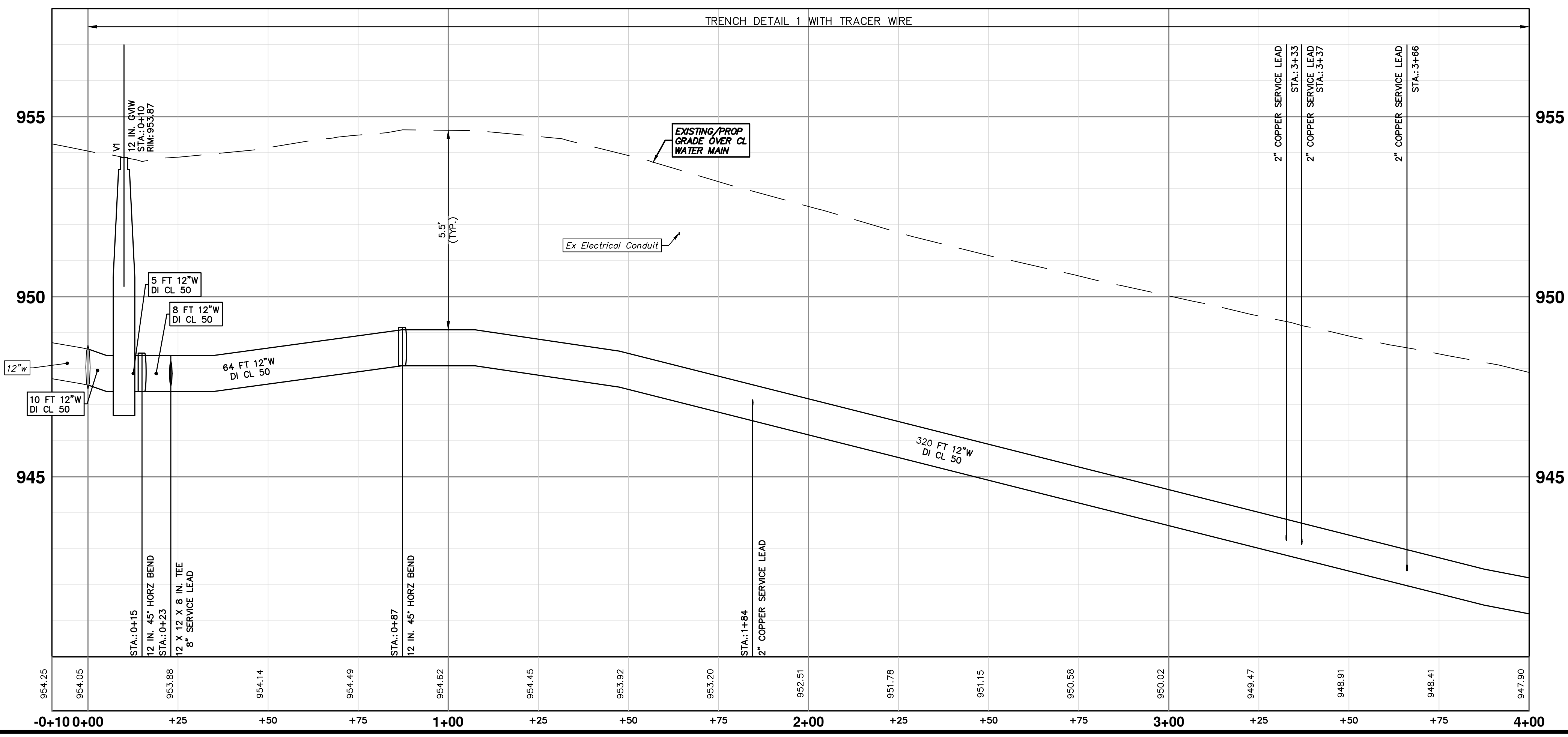
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
OVERALL WATER MAIN LAYOUT

SCALE PLAN: 1" = 60'
DRAWING No. 2023013-23



WATER MAIN STRUCTURES			
STRUCTURE	TYPE	STATION	RIM
V1	12 in. GVIW	0+10	953.87

WATER MAIN STRUCTURE REMOVALS	
STRUCTURE	TYPE
SV-26368	8 in. GVB - Remove
01-02374	8 in. GVIW - Remove
01-04134	12 in. GVIW - Remove
02-01041	HYDRANT - Remove



- NOTES:**
- THE WATER SERVICE LEADS ARE SHOWN IN ACCORDANCE WITH EXISTING CITY OF ANN ARBOR RECORDS. COMMUNICATION SHALL BE MAINTAINED WITH WESTGATE TENANTS TO ENSURE PROPER SERVICE IS PROVIDED DURING AND UPON COMPLETION OF WATER MAIN CONSTRUCTION.

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REV.	DATE	BY	CHECKED
00			

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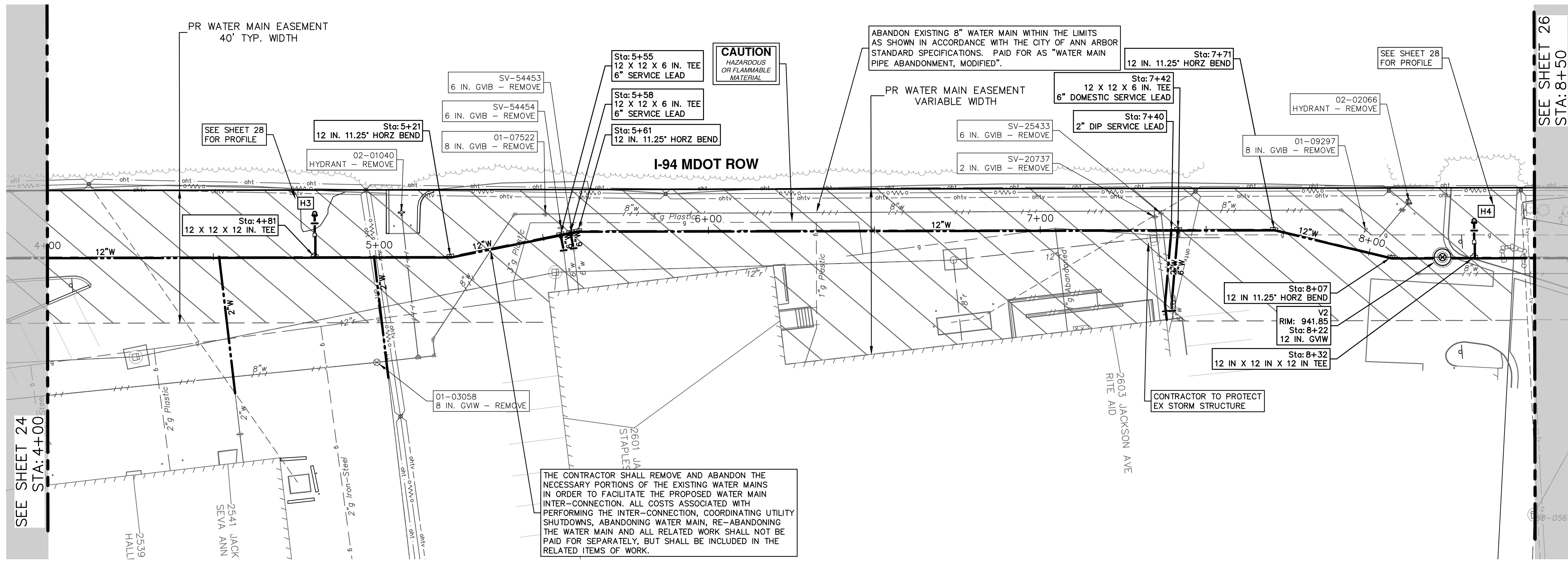
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
 WEST SIDE NORTH-SOUTH WATER MAIN
 STA. 0+00 - STA. 4+00

SHEET No. 24 OF 37

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

DRAWING No. 2023013-24

R:\2023013 Westgate Watermain\Plan Production\2023013Watr1.dwg Dwg Created: 16-Jan-25 - _a2 standard bw.stb - Plot Date: 23-Jan-25



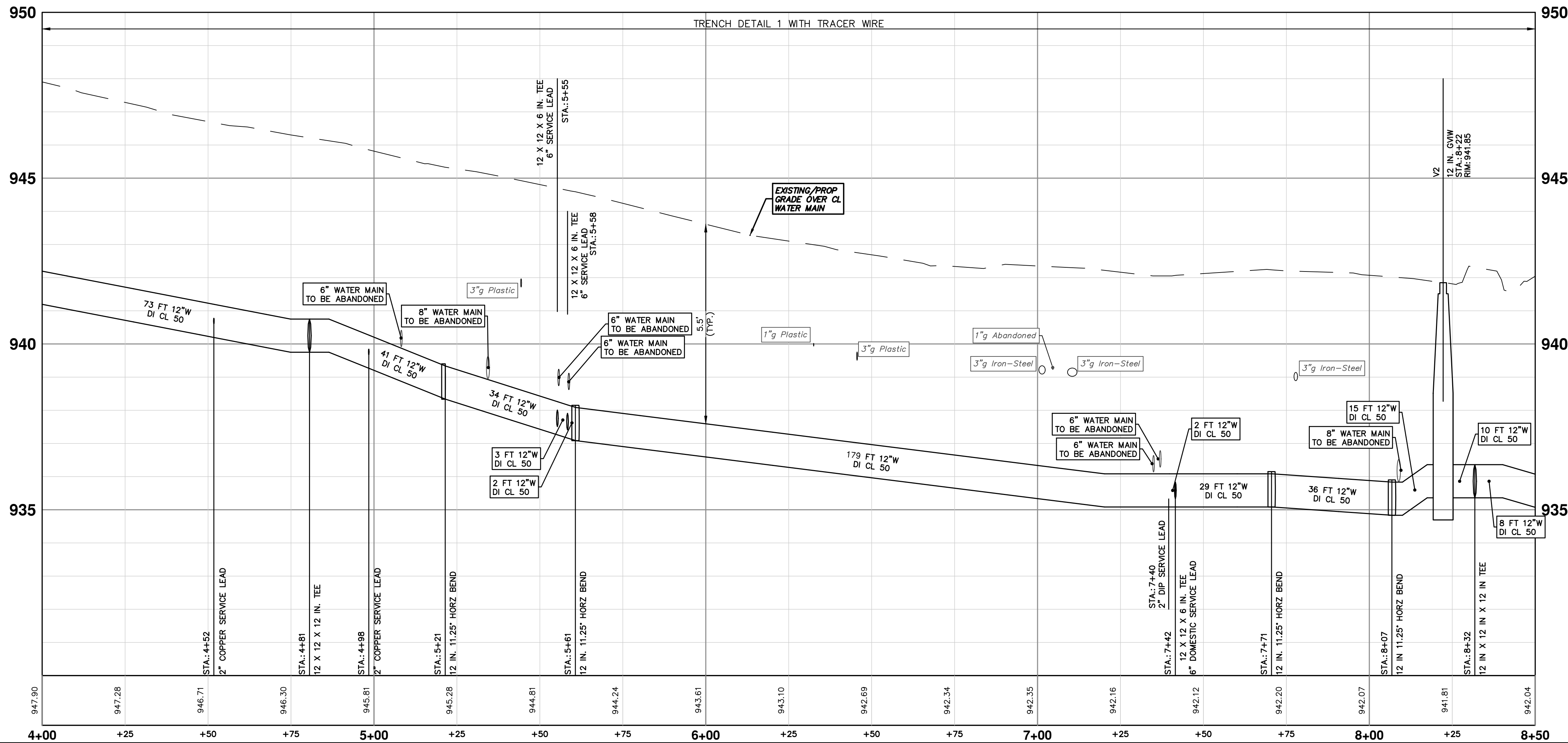
SEE SHEET 26
STA: 8+50


WATER MAIN STRUCTURES			
STRUCTURE	TYPE	STATION	RIM
V2	12 in. G.VIW	8+22	941.85

WATER MAIN STRUCTURE REMOVALS	
STRUCTURE	TYPE
SV-20737	2 in. G.VIB - Remove
SV-25433	6 in. G.VIB - Remove
SV-54453	6 in. G.VIB - Remove
SV-54454	6 in. G.VIB - Remove
01-09297	8 in. G.VIB - Remove
01-07522	8 in. G.VIB - Remove
01-03058	8 in. G.VIW - Remove
02-02066	HYDRANT - Remove
02-01040	HYDRANT - Remove


NOTES:

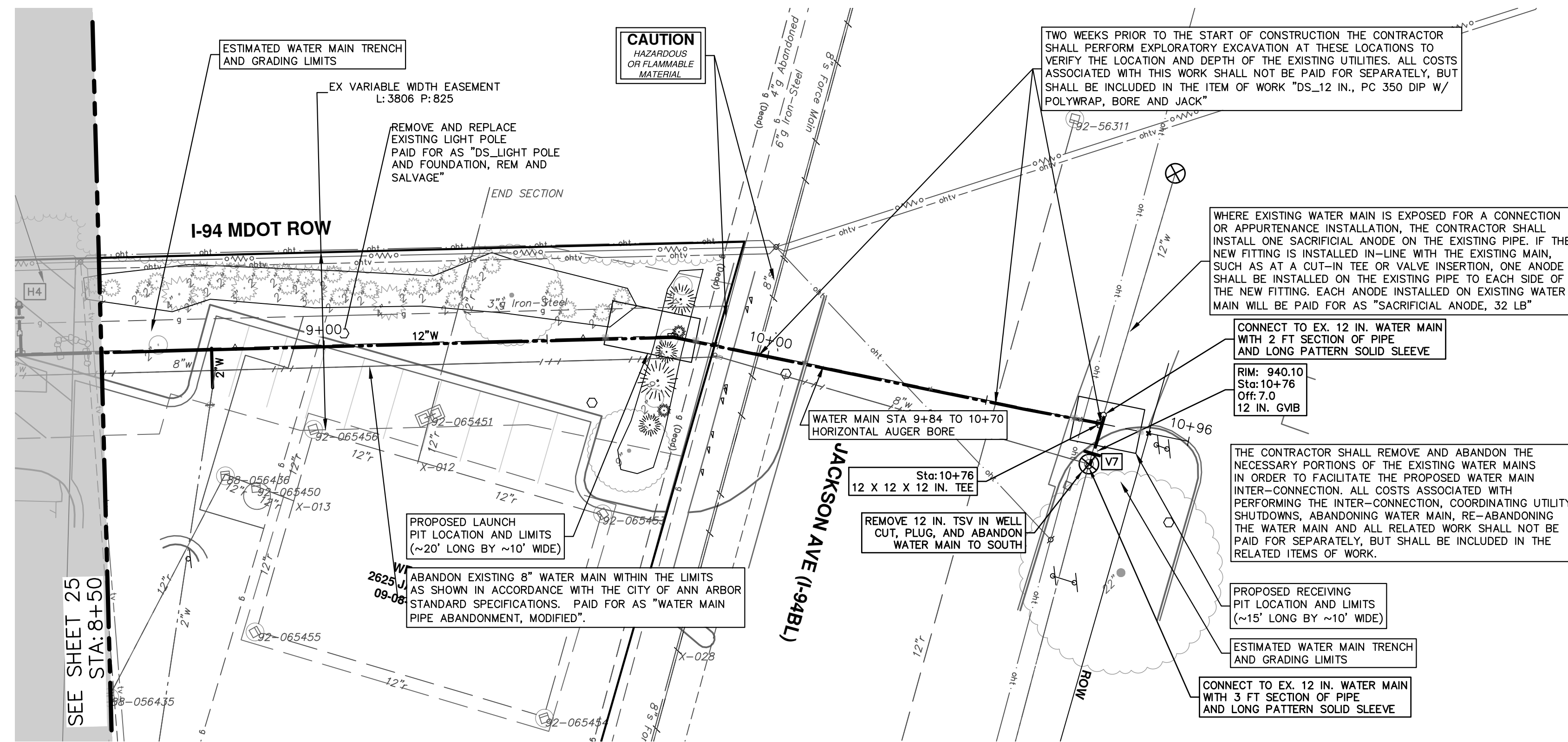
1. THE WATER SERVICE LEADS ARE SHOWN IN ACCORDANCE WITH EXISTING CITY OF ANN ARBOR RECORDS. COMMUNICATION SHALL BE MAINTAINED WITH WESTGATE TENANTS TO ENSURE PROPER SERVICE IS PROVIDED DURING AND UPON COMPLETION OF WATER MAIN CONSTRUCTION.





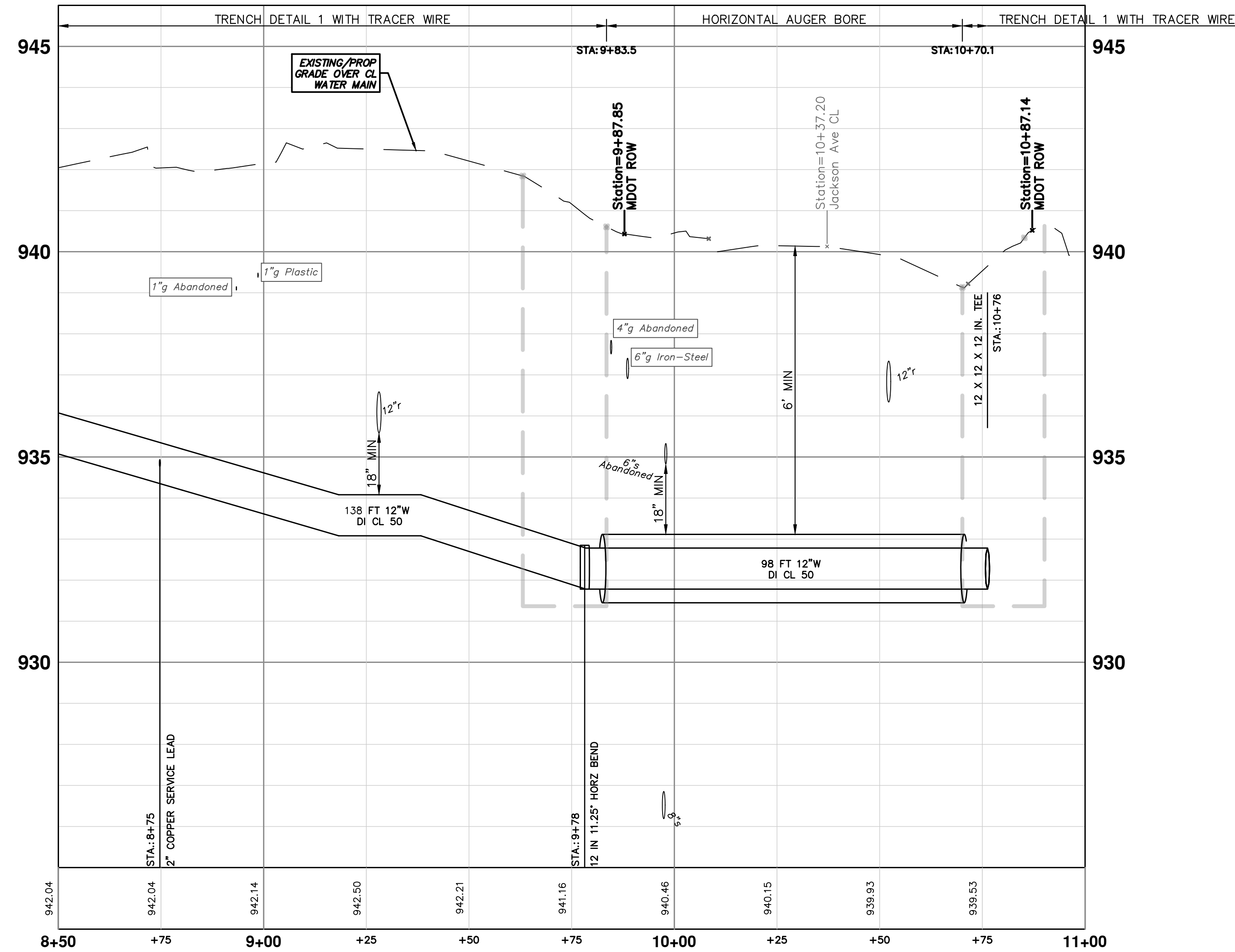
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WATER MAIN STRUCTURES			
STRUCTURE	TYPE	STATION	RIM
V7	12 in. G.VIB	10+76	940.10

WATER MAIN STRUCTURE REMOVALS	
STRUCTURE	TYPE
01-03225	REMOVE 12 IN. TSV IN WELL CUT, PLUG, AND ABANDON WATER MAIN TO SOUTH



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REV. DESCRIPTION

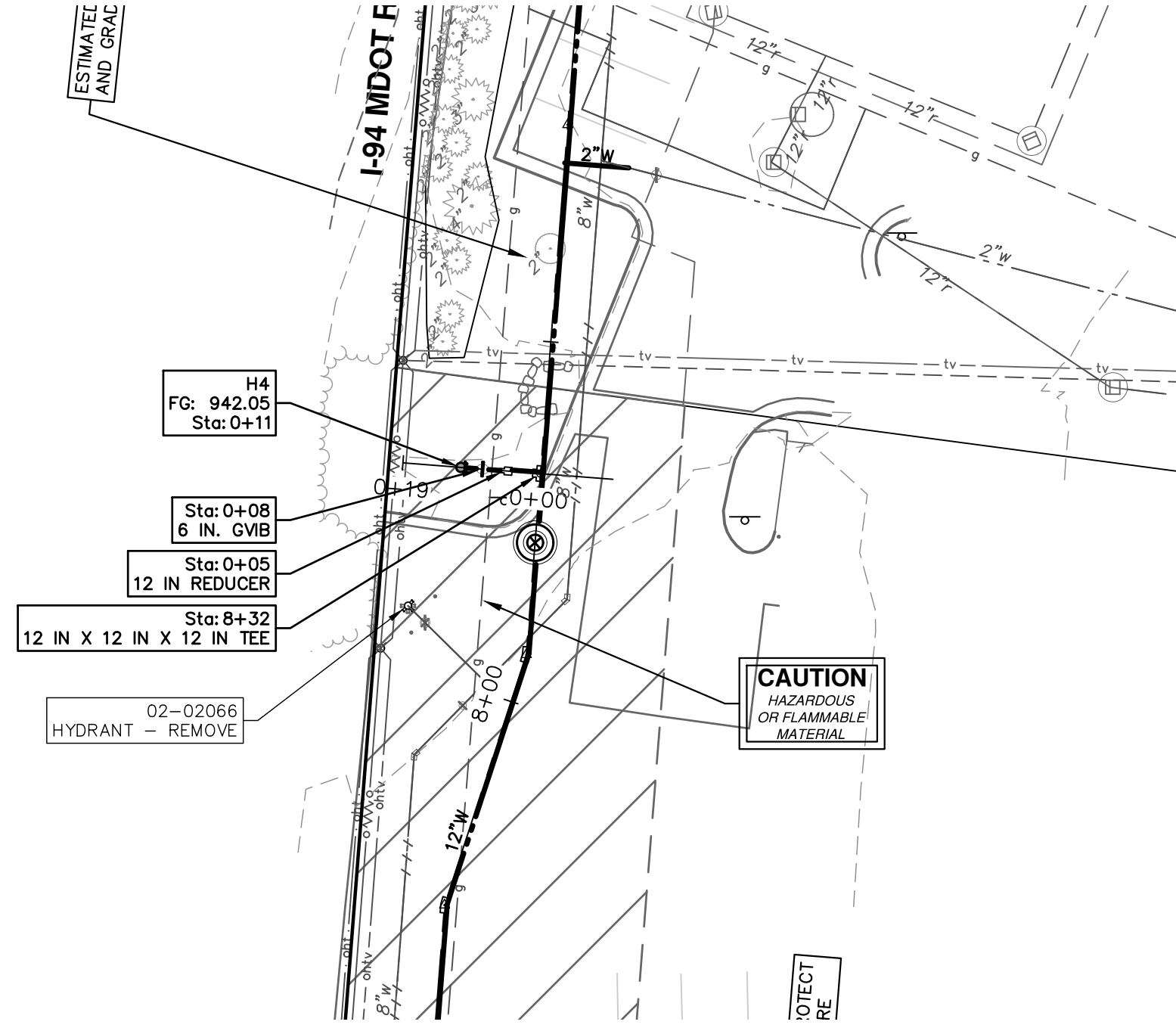
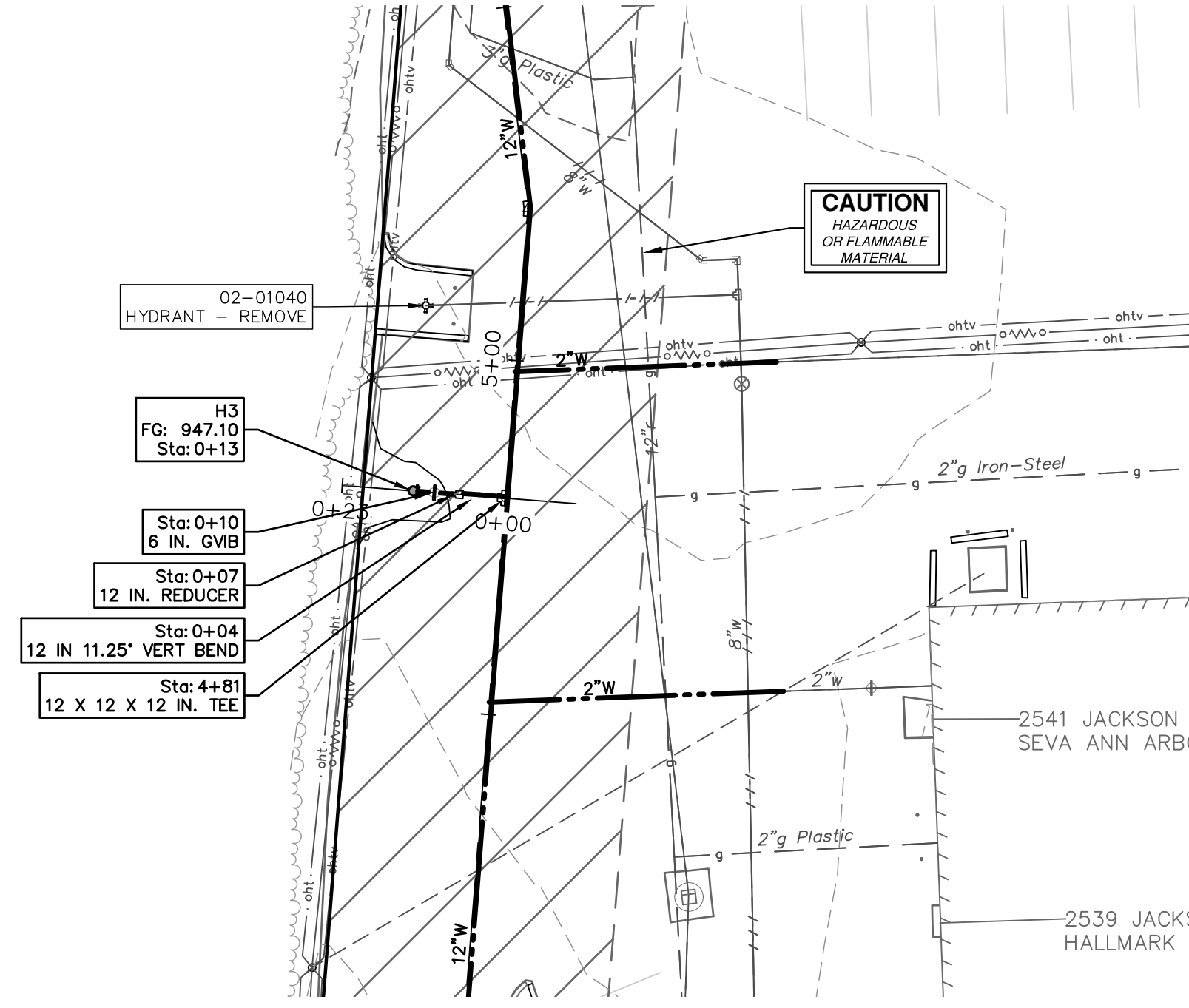
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WESTGATE WATERMAIN
WEST SIDE NORTH-SOUTH WATER MAIN
STA. 8+50 - STA. 10+81

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

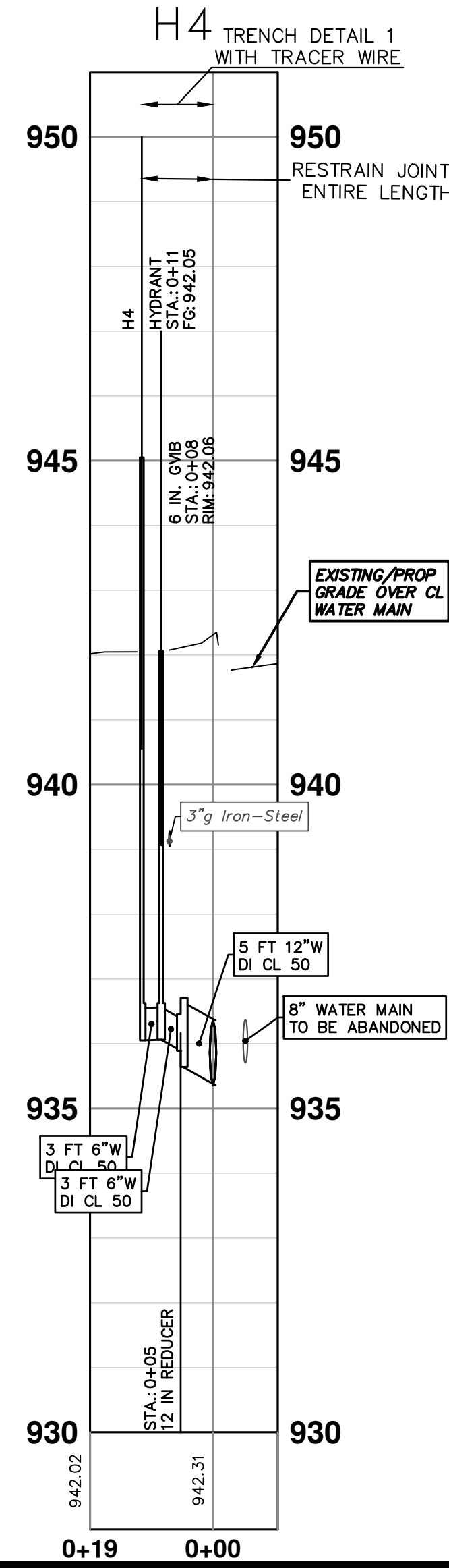
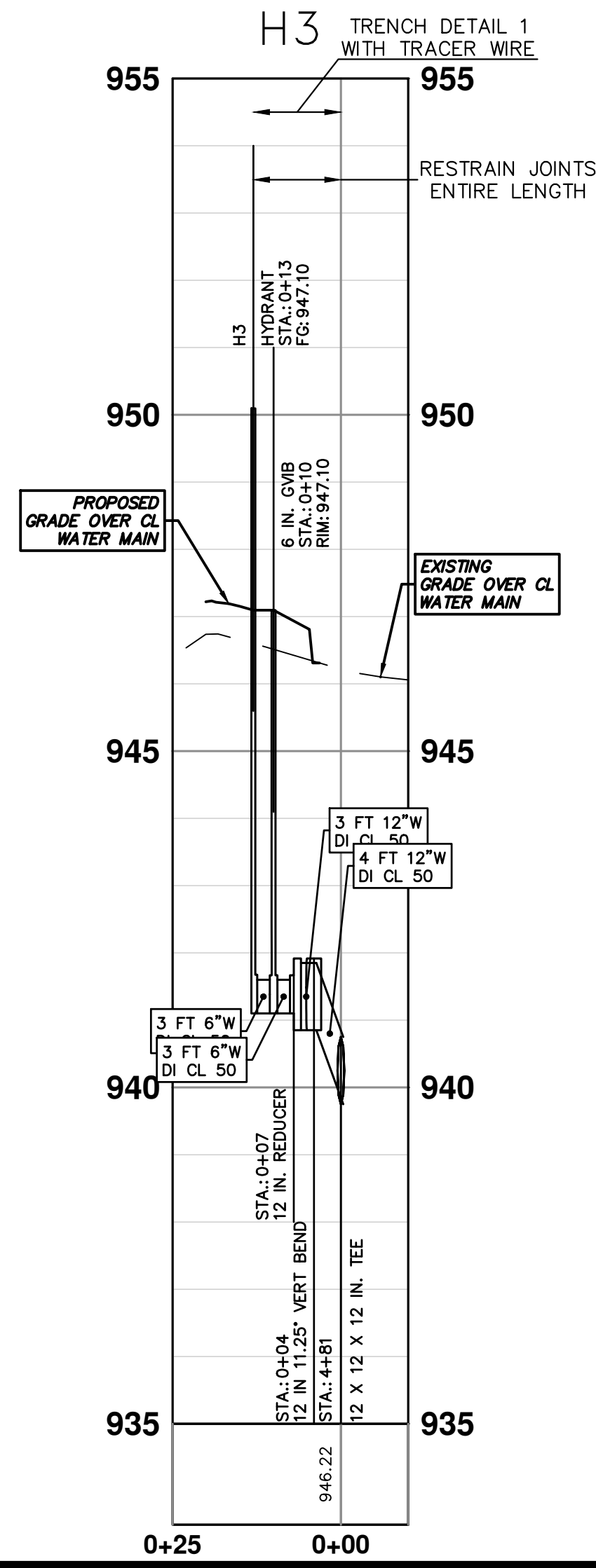
DRAWING No. 2023013-26

SHEET No. 26 OF 37



THE CONTRACTOR SHALL REMOVE AND ABANDON THE NECESSARY PORTIONS OF THE EXISTING WATER MAINS IN ORDER TO FACILITATE THE PROPOSED WATER MAIN INTER-CONNECTION. ALL COSTS ASSOCIATED WITH PERFORMING THE INTER-CONNECTION, COORDINATING UTILITY SHUTDOWNS, ABANDONING WATER MAIN, RE-ABANDONING THE WATER MAIN AND ALL RELATED WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.

WATER MAIN STRUCTURES			
STRUCTURE	TYPE	STATION	FG
H3	HYDRANT	0+13	947.10
H4	HYDRANT	0+11	942.05



NO.	DESCRIPTION	DATE	BY	CHECKED
00	REVISE THIS WHEN GOING OUT FOR BID			
01	COPY A2REVDATE:DWG TO PROJECT FOLDER AND			

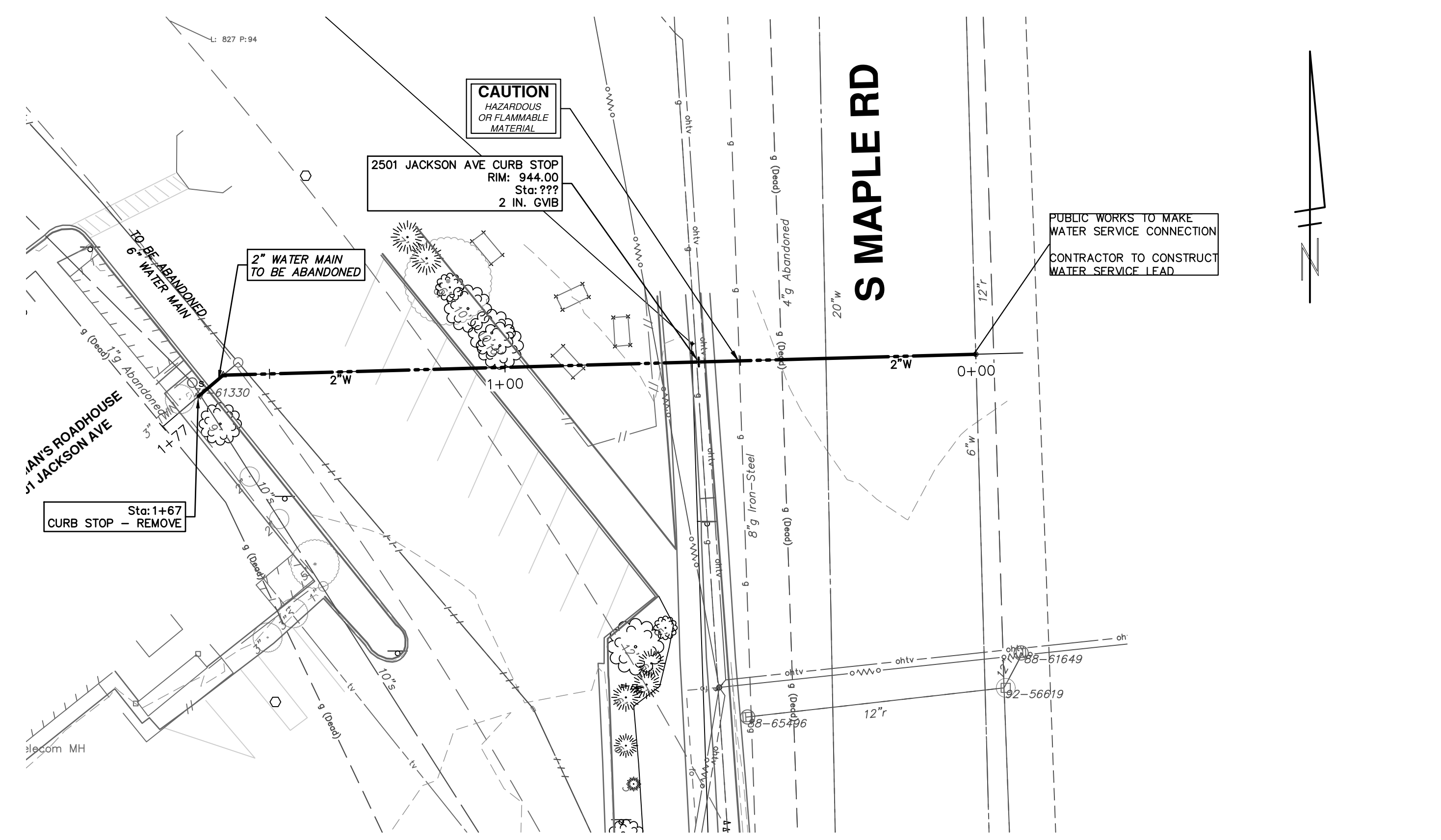
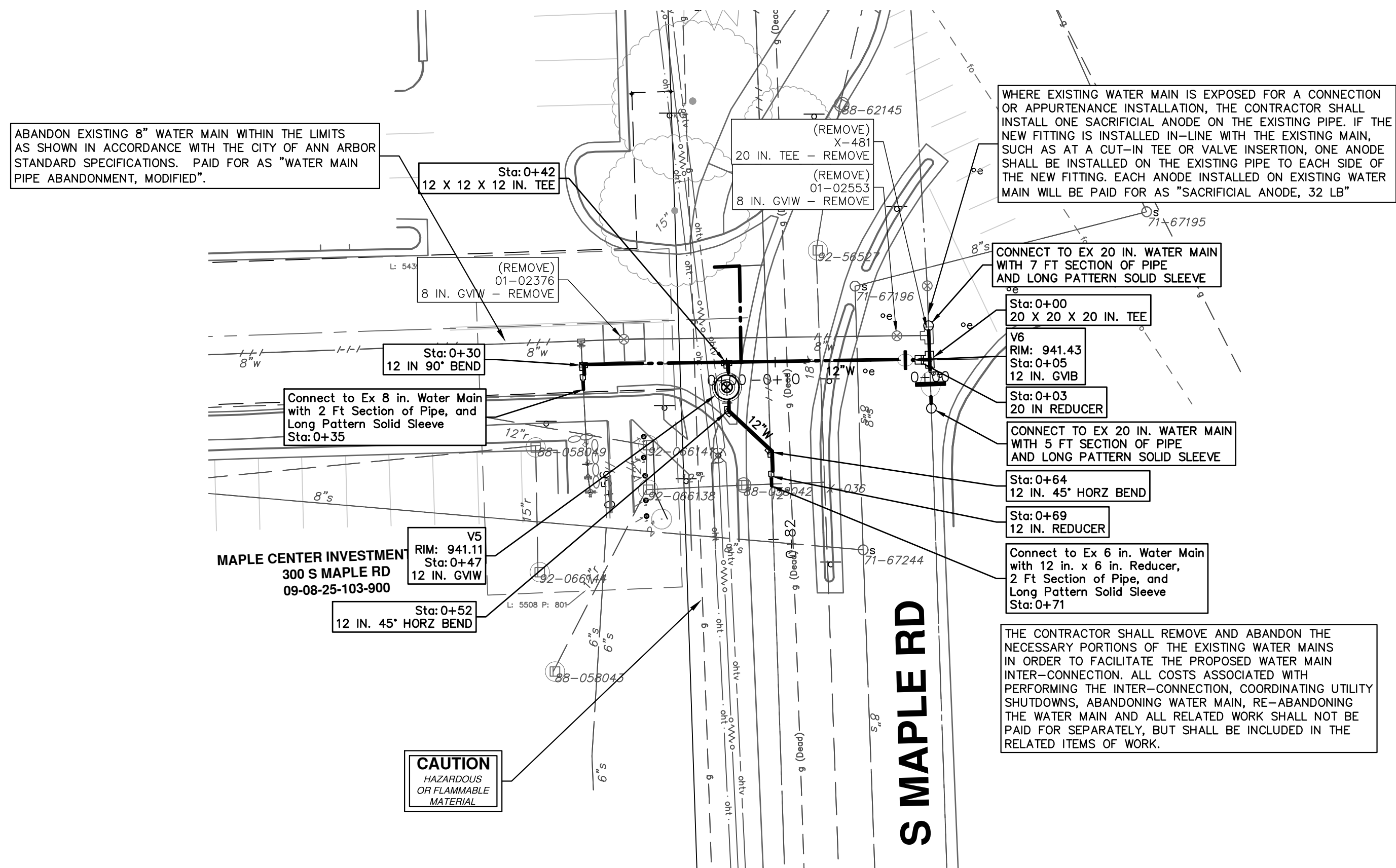
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PUBLIC SERVICES
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ANN ARBOR, MI 48107-8647
ANN ARBOR 734.794.4410
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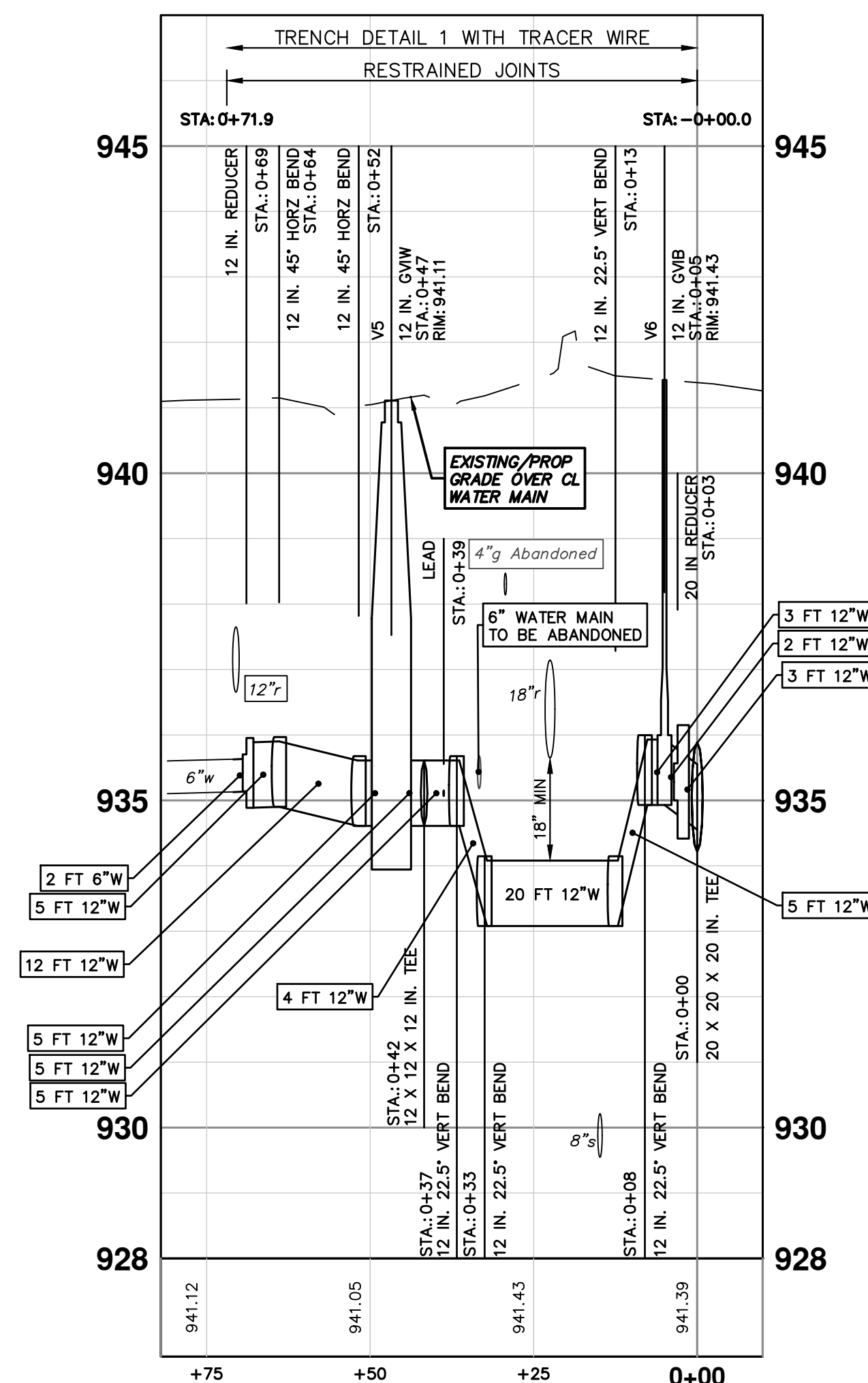
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
WEST SIDE NORTH-SOUTH WATER MAIN
HYDRANTS H3, H4

SHEET No. 28 OF 37
SCALE PLAN: 1" = 20'
PROFILE: 1" = 2'
DRAWING No. 2023013-28

R:\2023013 Westgate Watermain\Plan Production\2023013Watr3.dwg Dwg Created: 16-Jan-25 -- a2 standard bw.stb -- Plot Date: 23-Jan-25



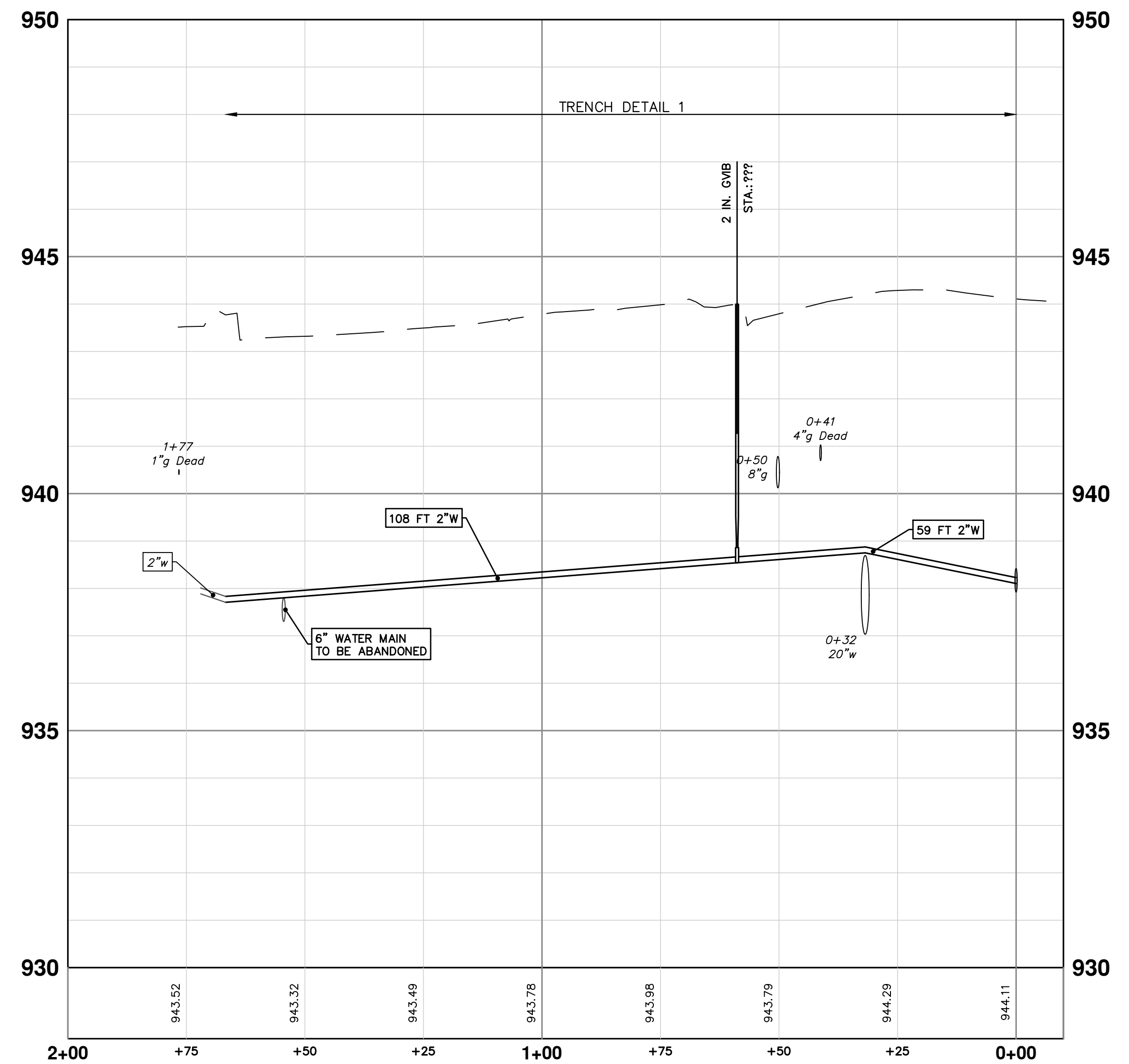
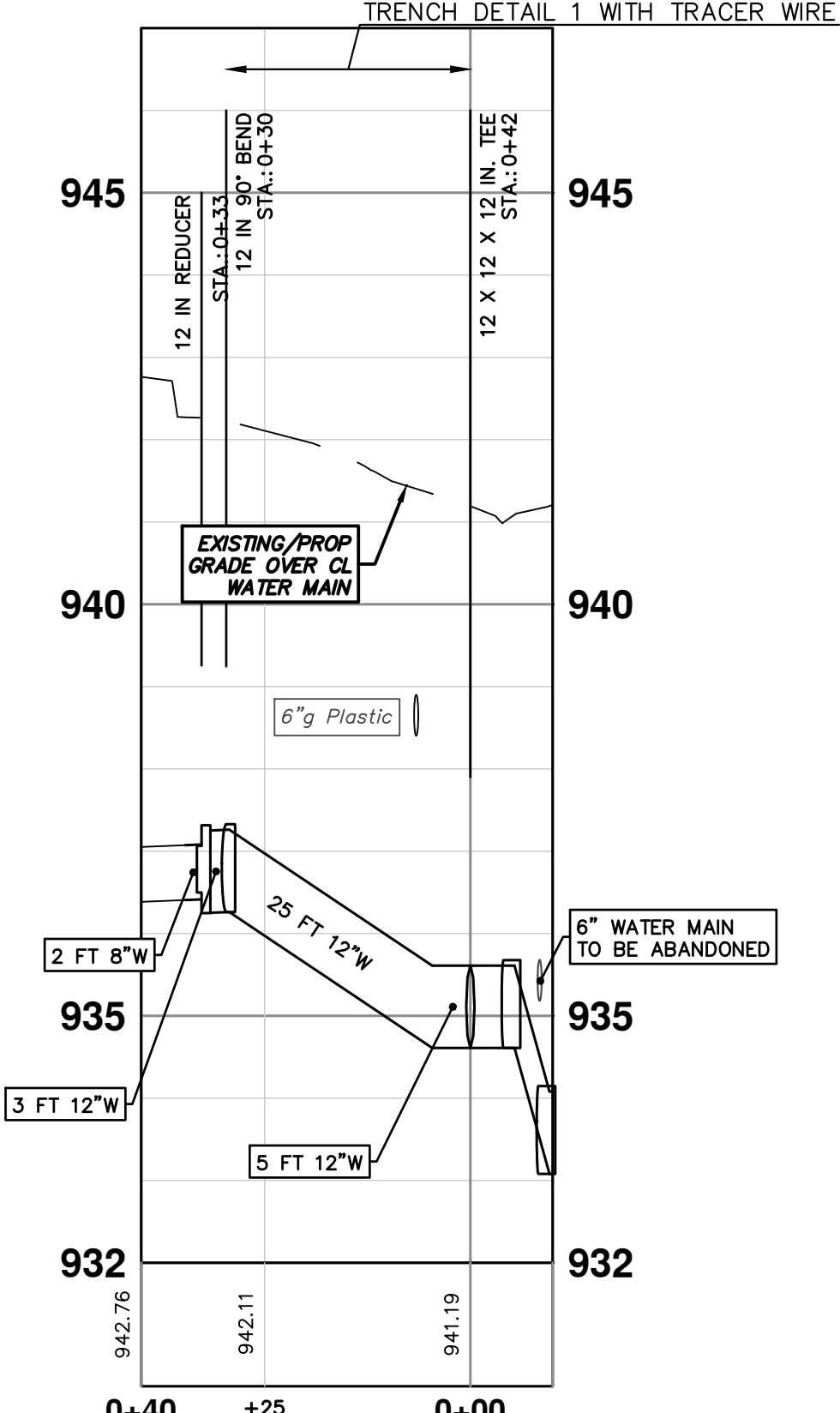
S MAPLE WATER TIE-IN




WATER MAIN STRUCTURES			
STRUCTURE	TYPE	STATION	RIM
V6	12 in. G.V.B	0+05	941.43
V5	12 in. G.V.W	0+47	941.11

WATER MAIN STRUCTURE REMOVALS	
STRUCTURE	TYPE
01-02553	8 in. G.V.W - Remove
01-02376	8 in. G.V.W - Remove

LEWIS JEWELERS HYDRANT RECONNECTION






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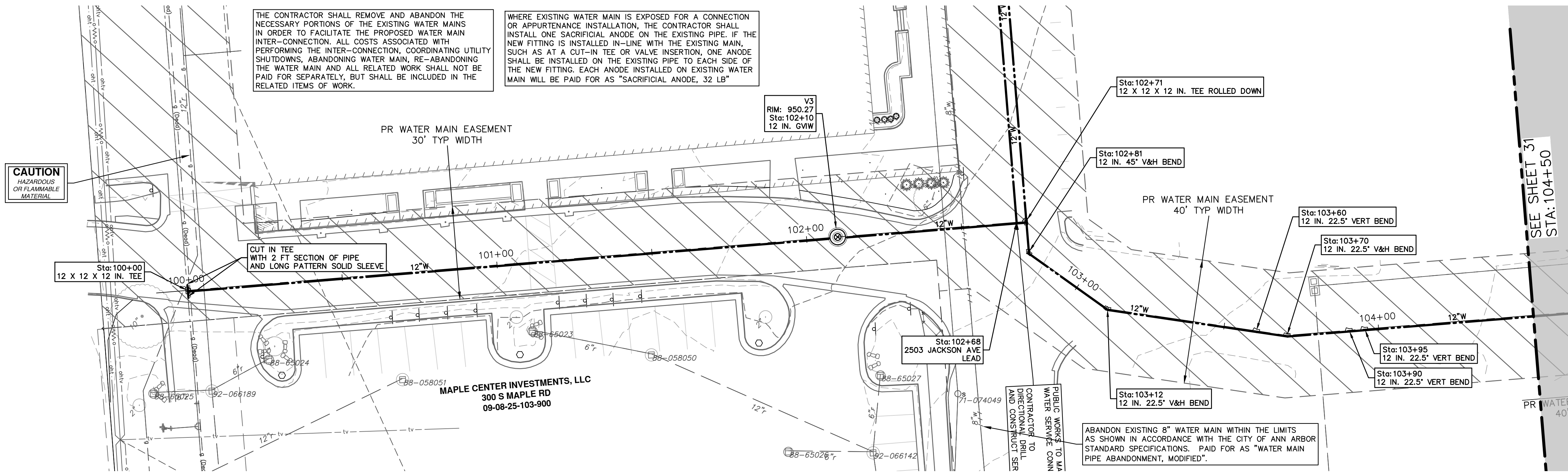
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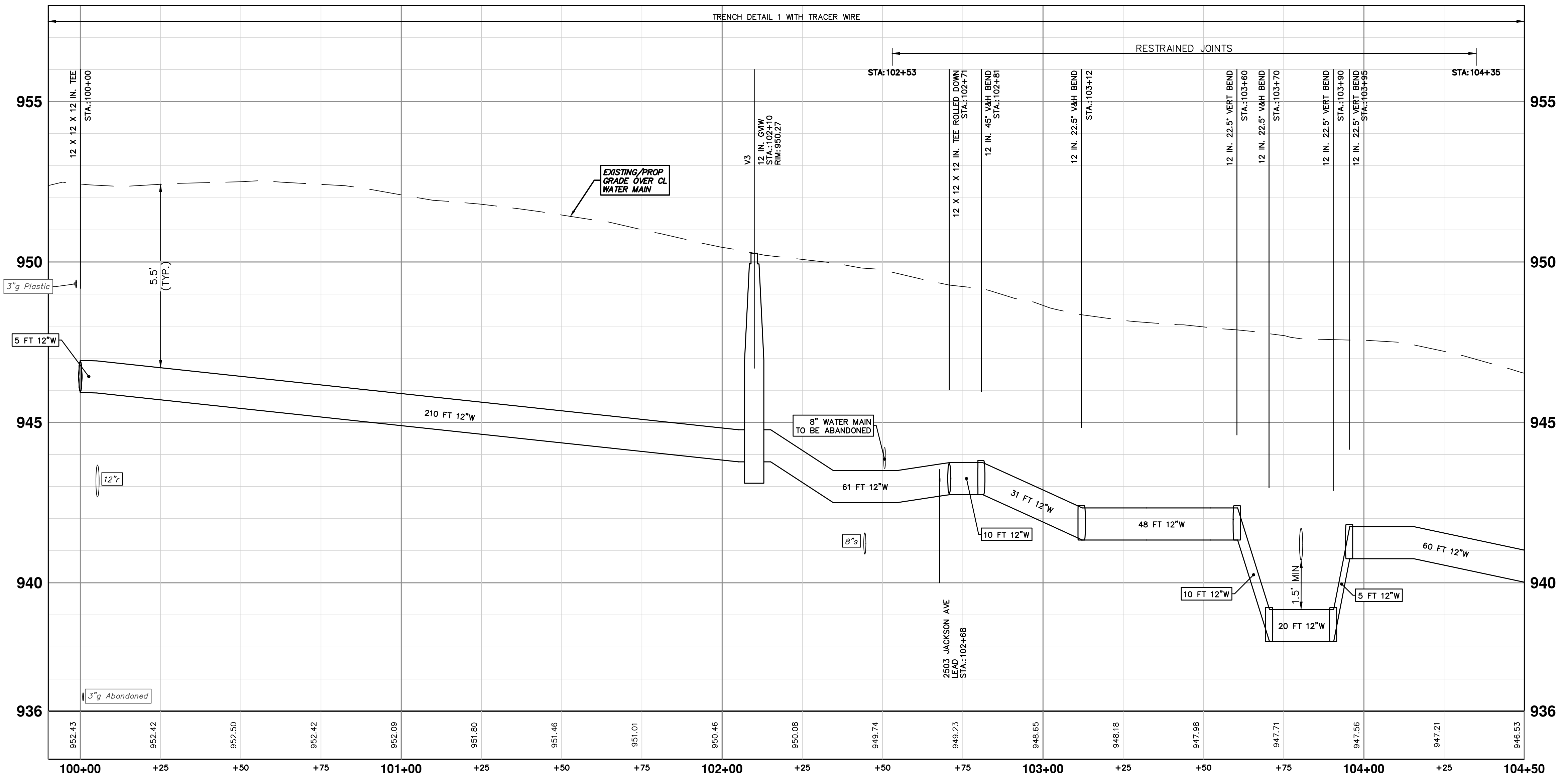
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
 S MAPLE WATER TIE-IN
 S MAPLE RECONNECTIONS AND ZINGERMANS WATER LEAD

SCALE PLAN: #####
 PROFILE: 1" = 2'
 DRAWING NO.: 2023013-29
 SHEET NO.: 29 OF 37

R:\2023013 Westgate Watermain\Plan Production\2023013Watr2.dwg Dwg Created: 16-Jan-25 -- _a2 standard bw.stb -- Plot Date: 23-Jan-25



WATER MAIN STRUCTURE TABLE			
STRUCTURE	TYPE	STATION	RIM
V3	12 in. GVW	102+10	950.27



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

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

CITY OF ANN ARBOR
PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
SE WATER MAIN REROUTE
STA. 100+00 - STA. 104+50

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

DRAWING No.
2023013-30

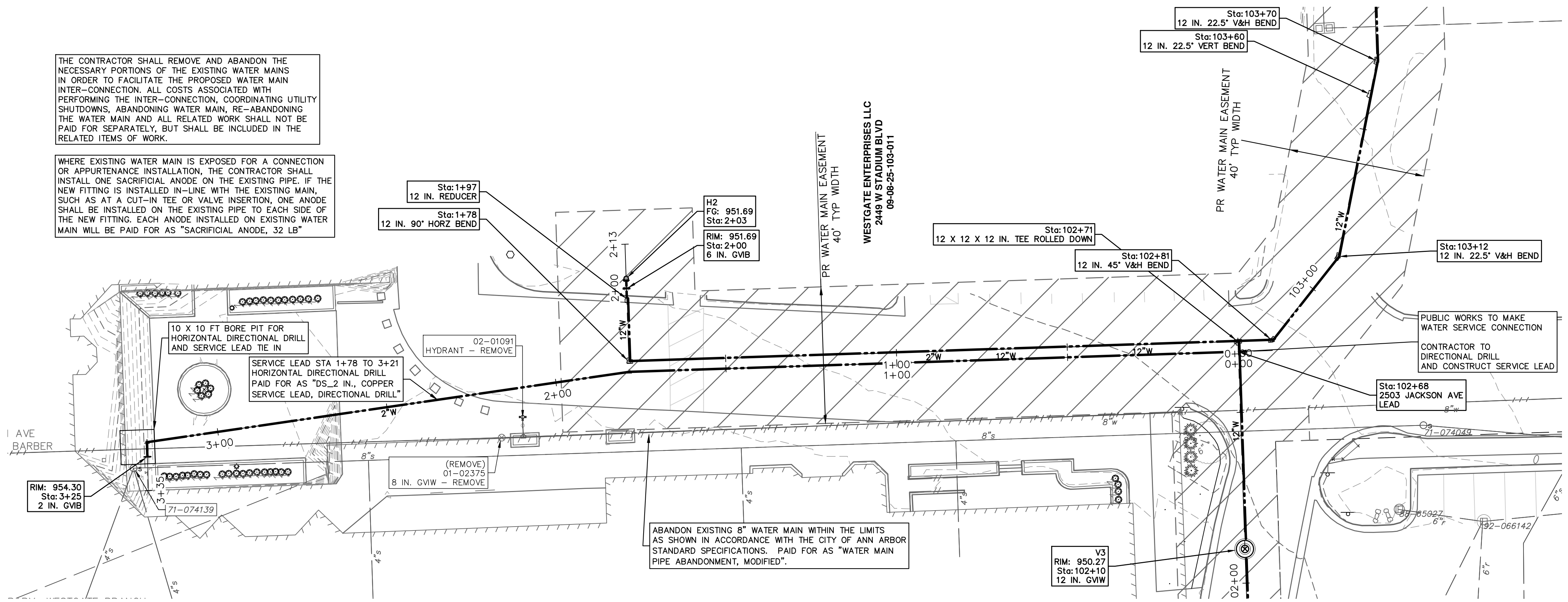
SHEET No.
30 OF 37

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	BID SET	01/23/2025	KMB	FDC

R:\2023013 Westgate Watermain\Plan Production\2023013Watr2.dwg Dwg Created: 16-Jan-25 -- a2 standard bw.stb -- Plot Date: 23-Jan-25

THE CONTRACTOR SHALL REMOVE AND ABANDON THE NECESSARY PORTIONS OF THE EXISTING WATER MAINS IN ORDER TO FACILITATE THE PROPOSED WATER MAIN INTER-CONNECTION. ALL COSTS ASSOCIATED WITH PERFORMING THE INTER-CONNECTION, COORDINATING UTILITY SHUTDOWNS, ABANDONING WATER MAIN, RE-ABANDONING THE WATER MAIN AND ALL RELATED WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.

WHERE EXISTING WATER MAIN IS EXPOSED FOR A CONNECTION OR APPURTENANCE INSTALLATION, THE CONTRACTOR SHALL INSTALL ONE SACRIFICIAL ANODE ON THE EXISTING PIPE. IF THE NEW FITTING IS INSTALLED IN-LINE WITH THE EXISTING MAIN, SUCH AS AT A CUT-IN TEE OR VALVE INSERTION, ONE ANODE SHALL BE INSTALLED ON THE EXISTING PIPE TO EACH SIDE OF THE NEW FITTING. EACH ANODE INSTALLED ON EXISTING WATER MAIN WILL BE PAID FOR AS "SACRIFICIAL ANODE, 32 LB"

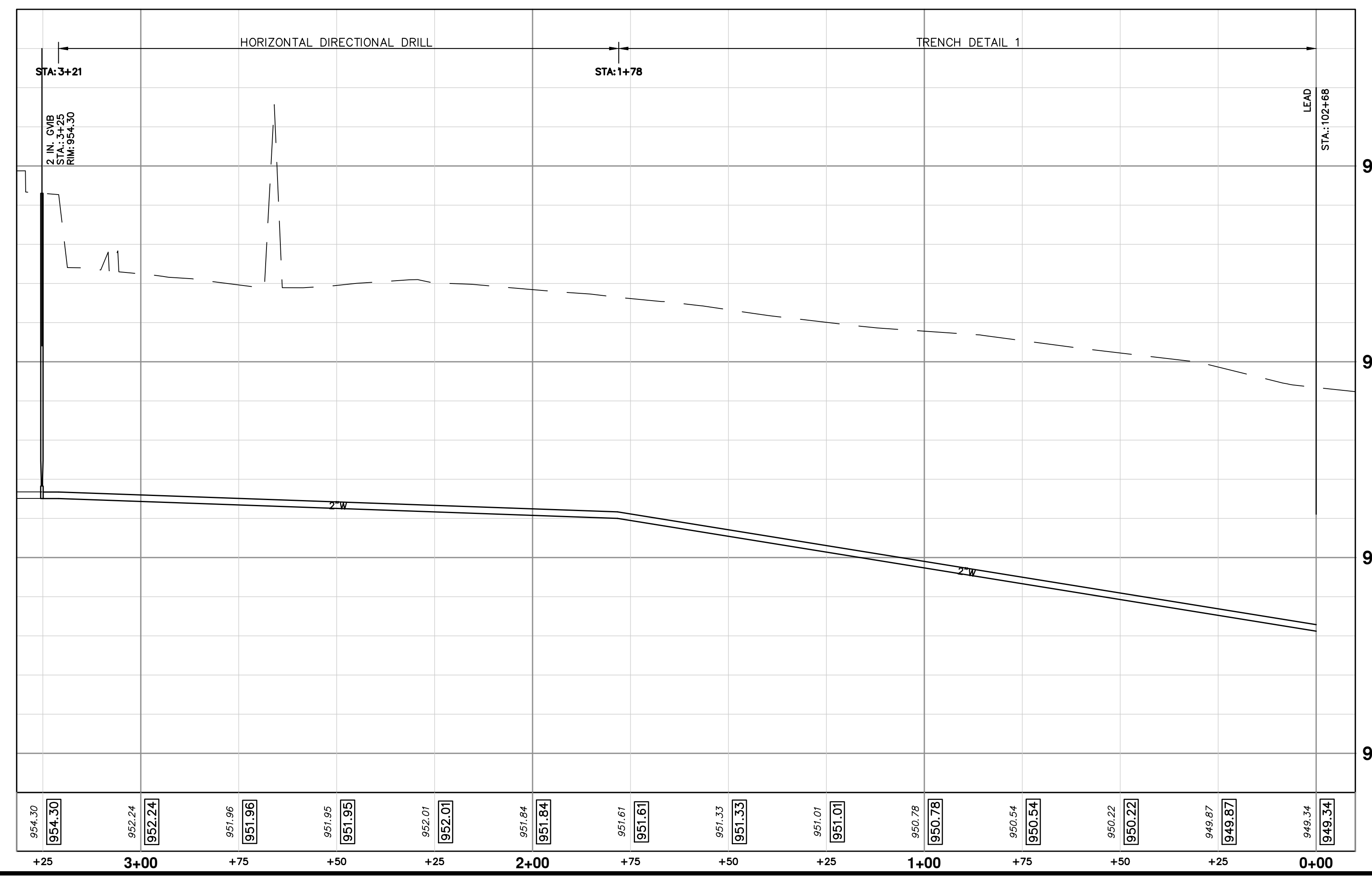
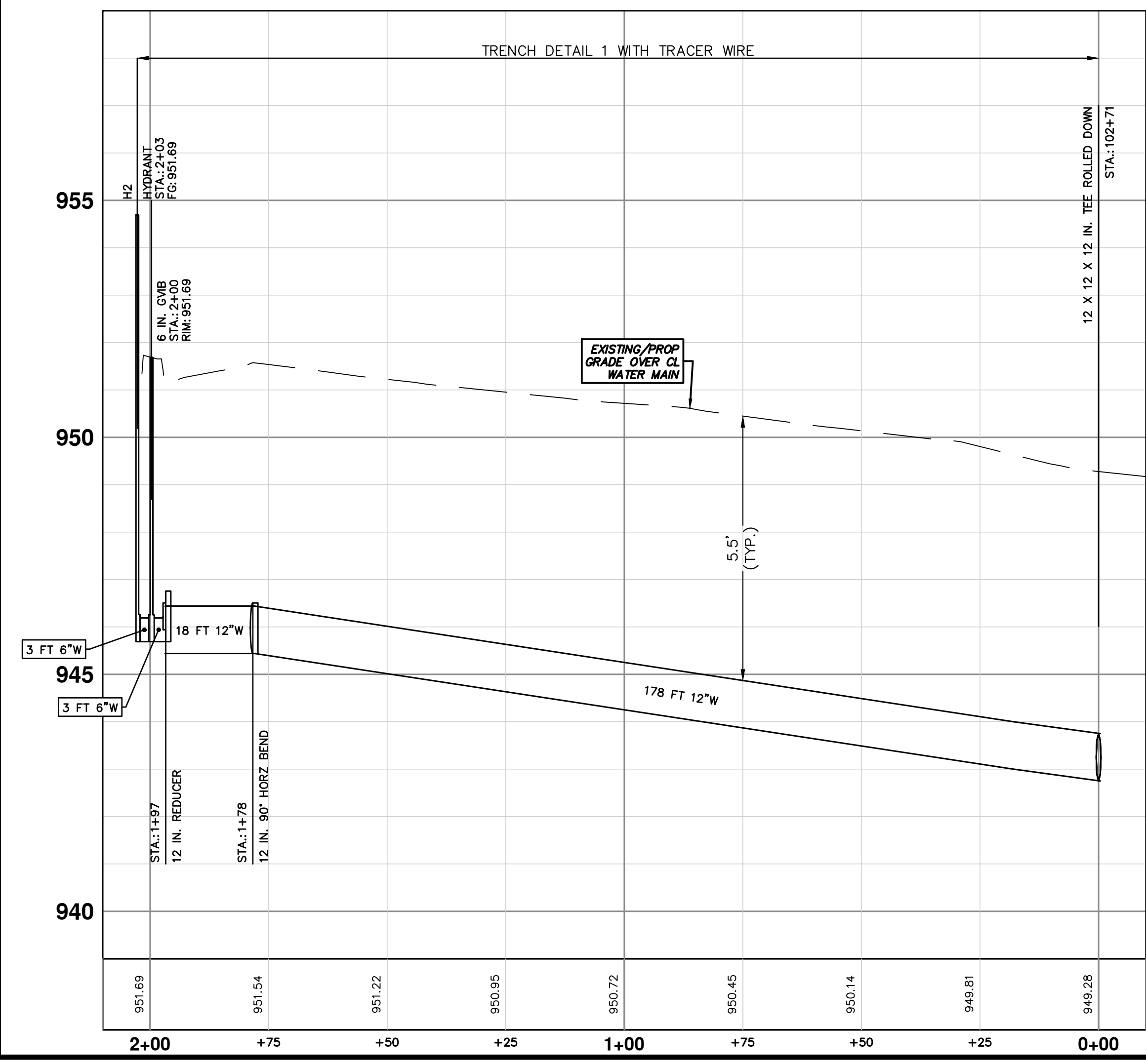


WATER MAIN STRUCTURES			
STRUCTURE	TYPE	STATION	FG
H2	HYDRANT	2+03	951.69

WATER MAIN STRUCTURE REMOVALS	
STRUCTURE	TYPE
01-02375	8 in. GVIW - Remove
02-01091	HYDRANT - Remove

H2

2503 JACKSON WATER SERVICE



Know what's below. Call before you dig.

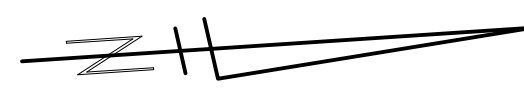
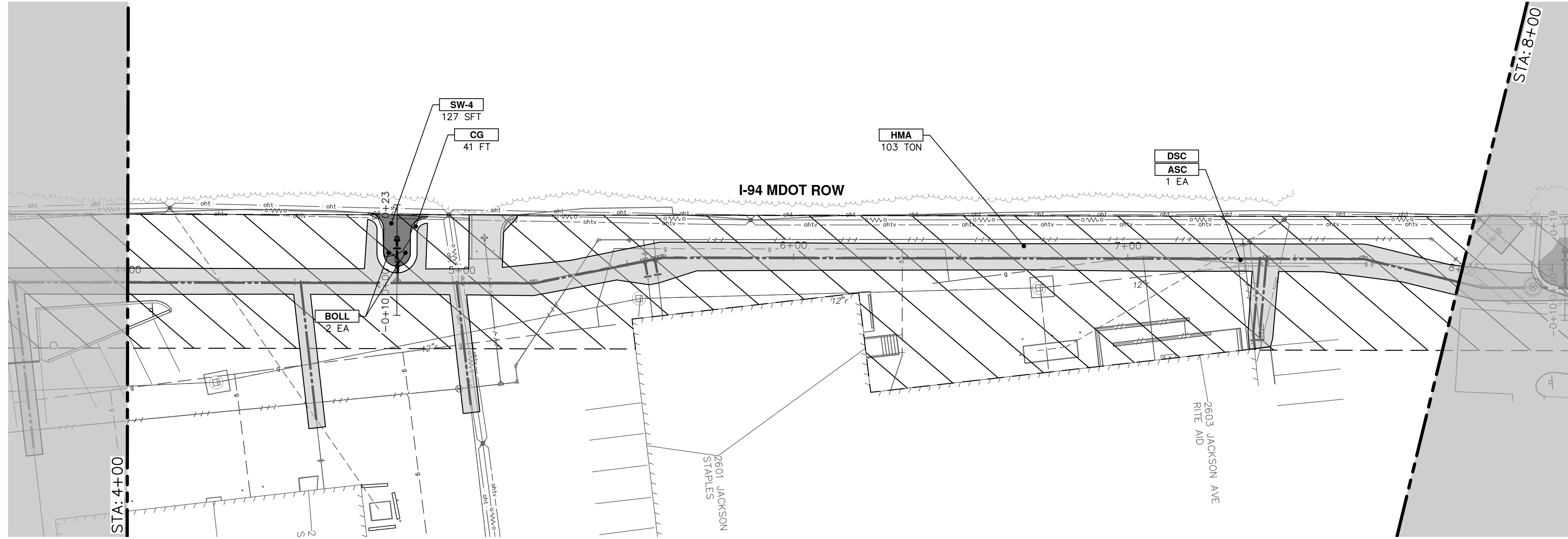
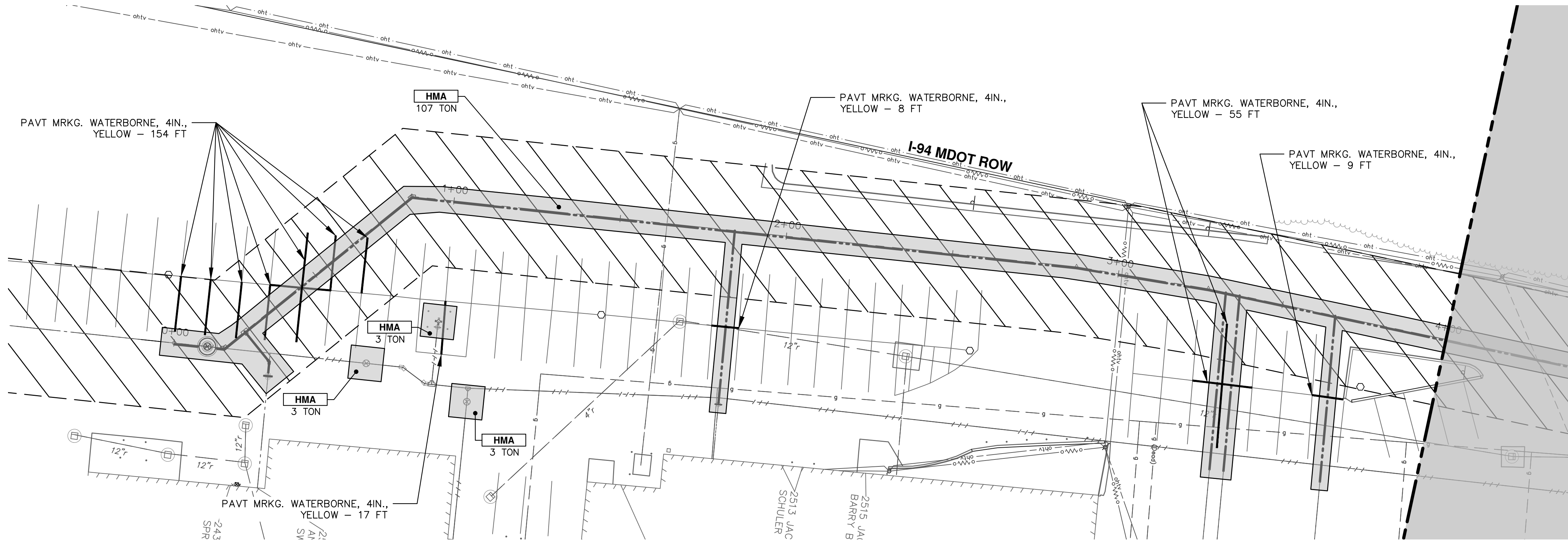
00	BID SET	DATE	DESCRIPTION	REV.
		01/23/2025		

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
 SE WATER MAIN REROUTE
 HYDRANT H2 & 2503 JACKSON AVE SERVICE LEAD

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

DRAWING No. **2023013-32**
 SHEET No. **32 OF 37**

R:\2023013 Westgate Watermain\Plan Production\2023013PPrd1.dwg Dwg Created: 21-Jan-25 - _a2 standard bw.stb - Plot Date: 23-Jan-25



CONSTRUCTION KEY	
KEY	DESCRIPTION
HMA	PLACE HMA. PLACE MATERIAL IN LIFTS ACCORDING TO THE TYPICAL SECTION AND AS DIRECTED BY THE ENGINEER.
CG	Conc. Curb or Curb & Gutter, All Types
DOM	Conc. Driveway Opening, Type M
SW-4	Conc. Sidewalk, 4 In.
SWR-6	Conc. Sidewalk, Drive Approach, or Ramp, 6 In.
ASC	Adjust Structure Cover
DSC	Structure Cover
BOLL	Steel Bollard
TURF	Turf Restoration
DWS	Detectable Warning Surface

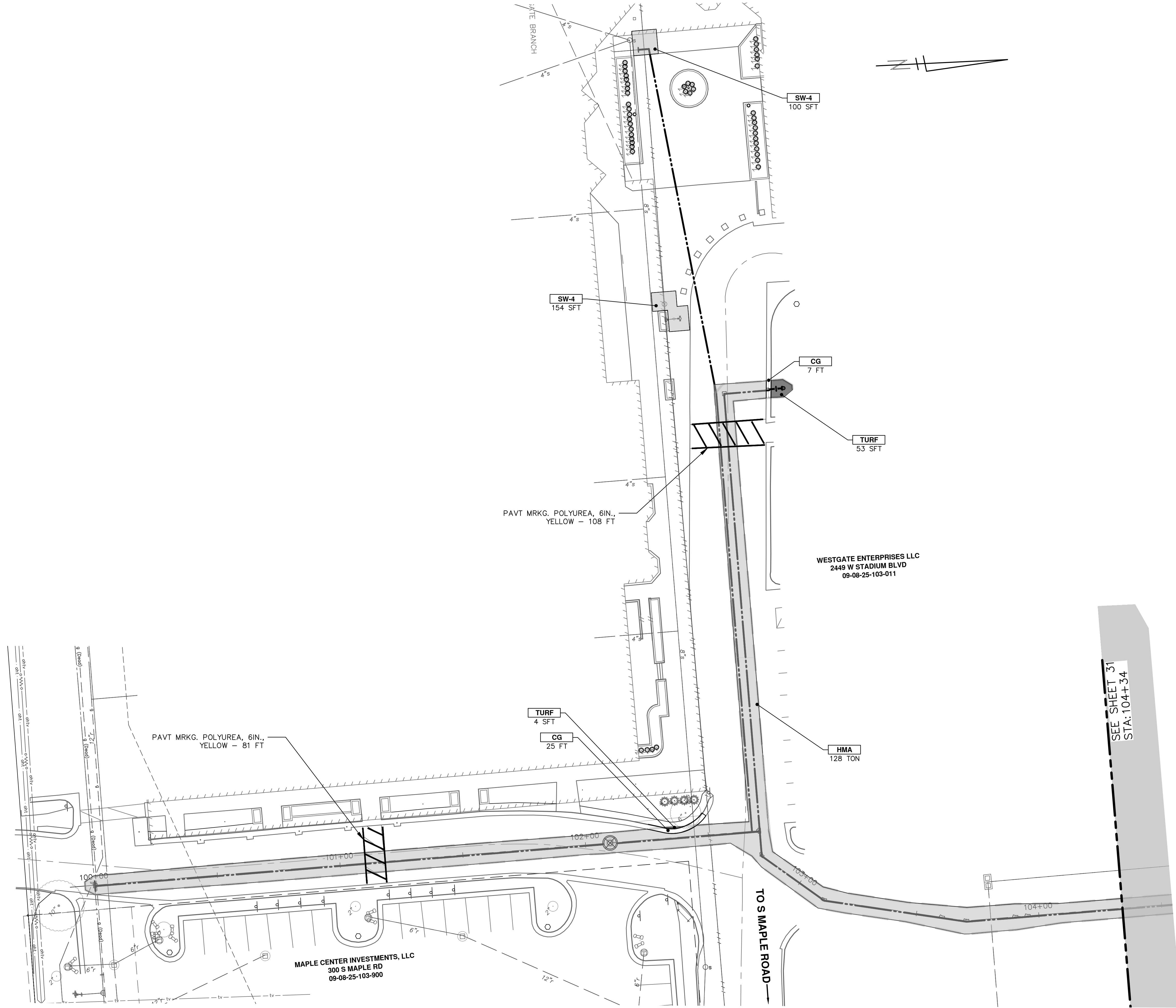


NO.	DATE	BY	CHECKED

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 PUBLIC SERVICES
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
 WESTGATE WATERMAIN
 RESTORATION
 WEST SIDE RESTORATION STA. 0+00 - STA. 8+00

SCALE: 1" = 20'
 DRAWING No. 2023013-33



CONSTRUCTION KEY	
KEY	DESCRIPTION
HMA	PLACE HMA, PLACE MATERIAL IN LIFTS ACCORDING TO THE TYPICAL SECTION AND AS DIRECTED BY THE ENGINEER.
CG	Conc. Curb or Curb & Gutter, All Types
DOM	Conc. Driveway Opening, Type M
SW-4	Conc. Sidewalk, 4 In.
SWR-6	Conc. Sidewalk, Drive Approach, or Ramp, 6 In.
ASC	Adjust Structure Cover
DSC	Structure Cover
BOLL	Steel Bollard
TURF	Turf Restoration
DWS	Detectable Warning Surface



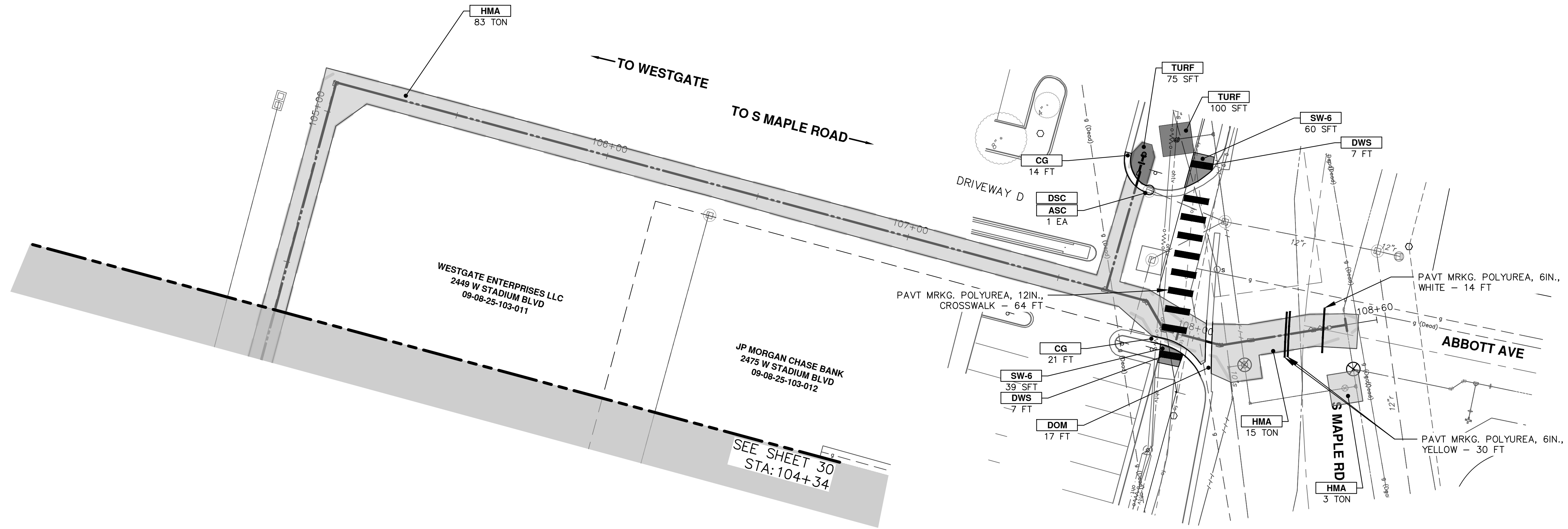
REV.	DATE	BY	CHECKED
00			

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-8647
734.794.4410
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CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
WESTGATE WATERMAIN
RESTORATION
SE WATER MAIN REROUTE RESTORATION STA. 100+00 - STA. 104+50

SHEET No. 35 OF 37
SCALE PLAN: 1" = 20'
DRAWING No. 2023013-35



CONSTRUCTION KEY	
KEY	DESCRIPTION
HMA	PLACE HMA, PLACE MATERIAL IN LIFTS ACCORDING TO THE TYPICAL SECTION AND AS DIRECTED BY THE ENGINEER.
CG	Conc. Curb or Curb & Gutter, All Types
DOM	Conc. Driveway Opening, Type M
SW-4	Conc. Sidewalk, 4 In.
SWR-6	Conc. Sidewalk, Drive Approach, or Ramp, 6 In.
ASC	Adjust Structure Cover
DSC	Structure Cover
BOLL	Steel Bollard
TURF	Turf Restoration
DWS	Detectable Warning Surface

SEE SHEET 30
STA: 104+34

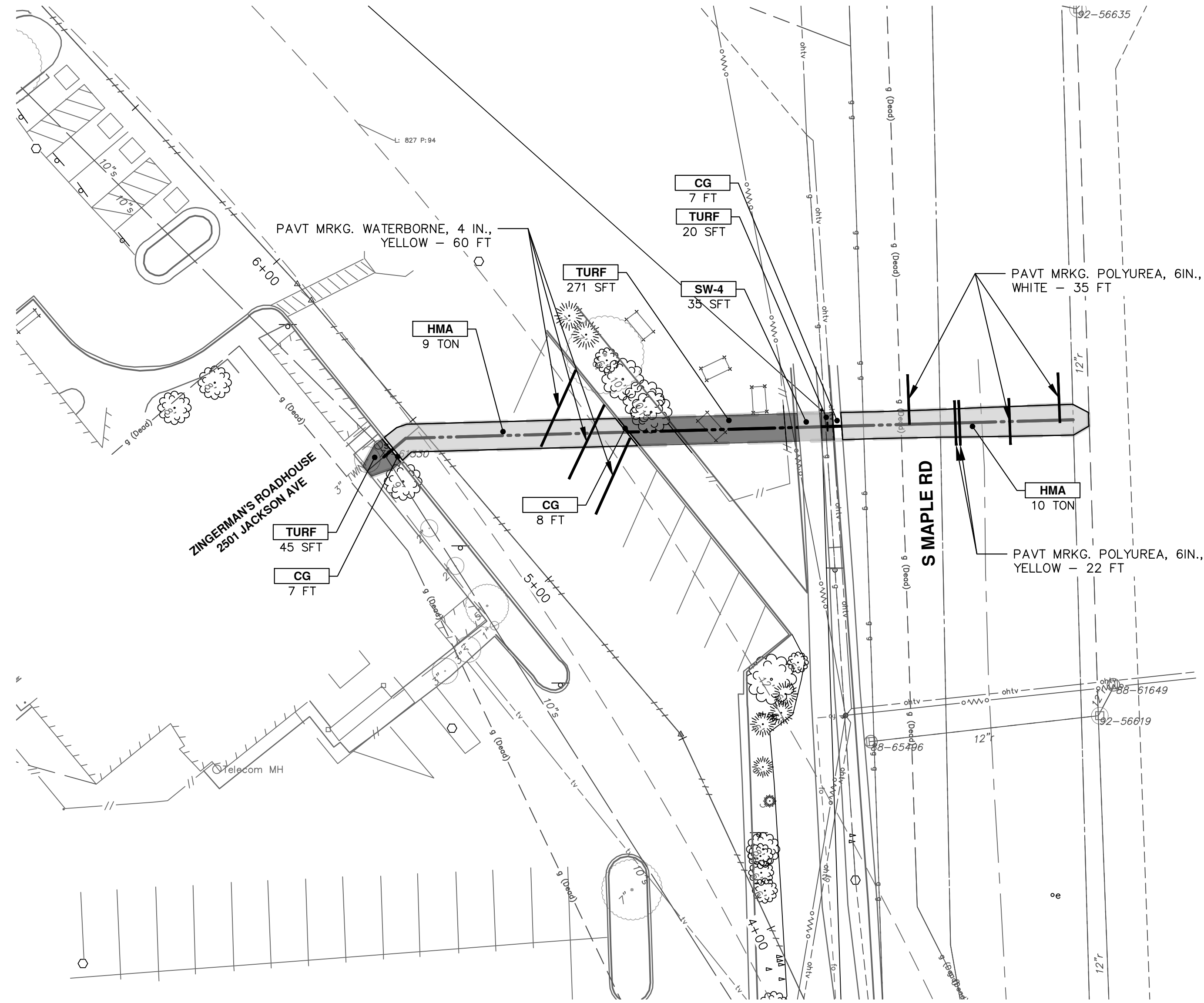
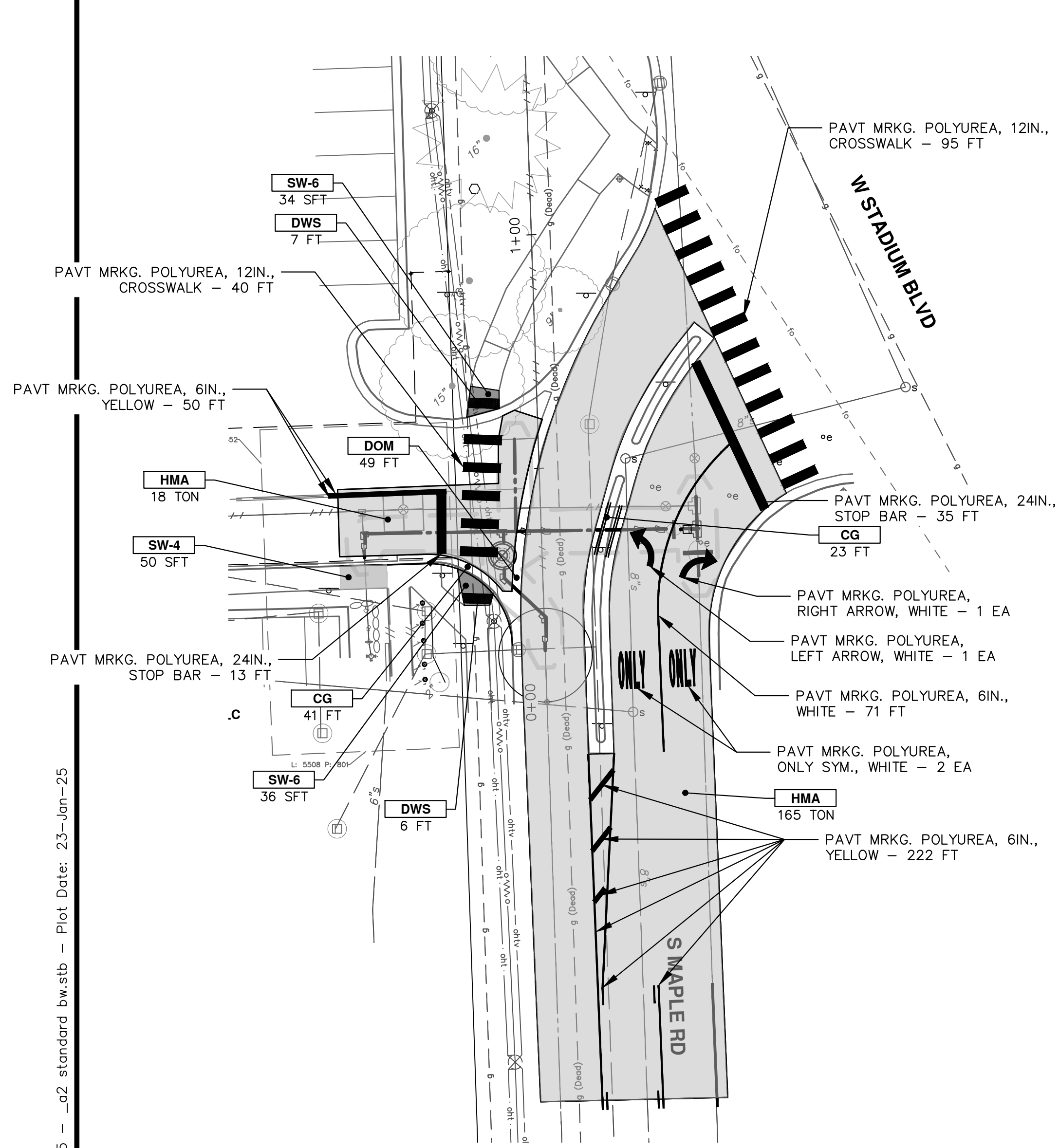
WESTGATE ENTERPRISES LLC
2449 W STADIUM BLVD
09-08-25-103-011

JP MORGAN CHASE BANK
2475 W STADIUM BLVD
09-08-25-103-012



REV.	DESCRIPTION	DATE	BY	CHECKED
00	REVISE THIS WHEN GOING OUT FOR BID			
	COPY A2REVDATE.DWG TO PROJECT FOLDER AND			

R:\2023013 Westgate Watermain\Plan Production\2023013Prd3.dwg Dwg Created: 20-Jan-25 - _a2_standard bw.stb - Plot Date: 23-Jan-25



CONSTRUCTION KEY	
KEY	DESCRIPTION
HMA	PLACE HMA, PLACE MATERIAL IN LIFTS ACCORDING TO THE TYPICAL SECTION AND AS DIRECTED BY THE ENGINEER.
CG	Conc. Curb or Curb & Gutter, All Types
DOM	Conc. Driveway Opening, Type M
SW-4	Conc. Sidewalk, 4 In.
SWR-6	Conc. Sidewalk, Drive Approach, or Ramp, 6 In.
ASC	Adjust Structure Cover
DSC	Structure Cover
BOLL	Steel Bollard
TURF	Turf Restoration
DWS	Detectable Warning Surface