

CITY OF KALAMAZOO

RIVERVIEW DRIVE WATER MAIN LOOP

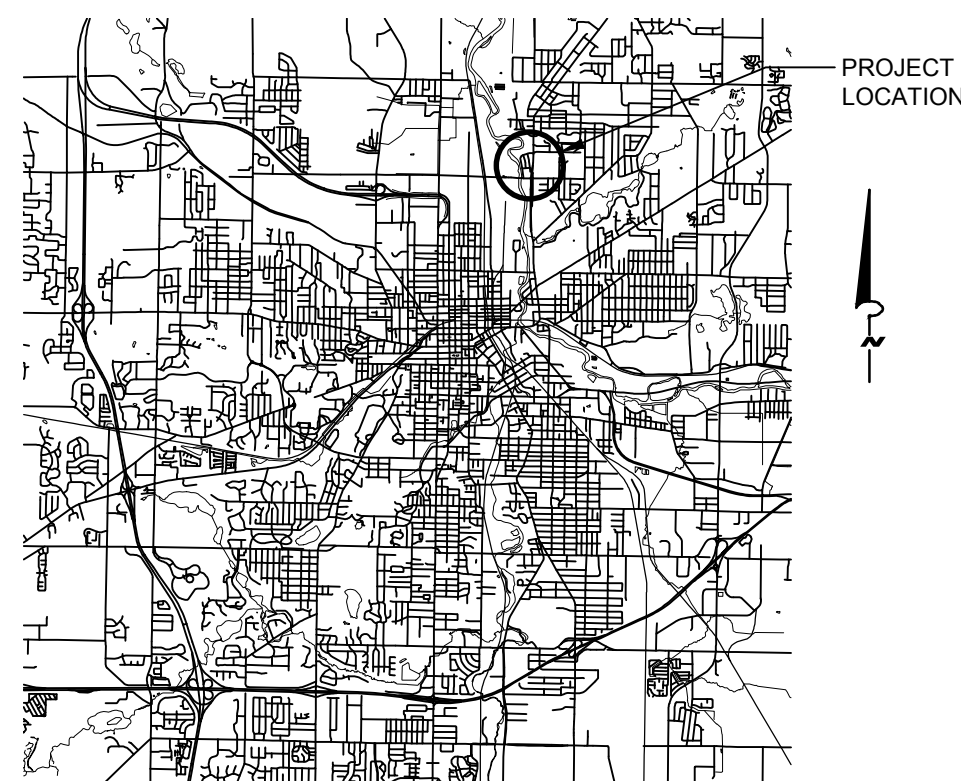
LEGEND

EXISTING	PROPOSED	
C	C	CABLE
E	E	ELECTRIC LINE
OHE	OHE	ELECTRIC LINE (OVERHEAD)
FO	FO	FIBER OPTIC LINE
G	G	GAS LINE
T	T	TELEPHONE LINE
FM	FM	FENCE
SA	SA	FORCEMAIN
ST	ST	GUARDRAIL
W	W	SANITARY SEWER
	ST	STORM SEWER
	W	WATER MAIN
		CENTER LINE
		EXISTING TREE LINE
		EXISTING DITCH LINE
		EASEMENT LINE/GRADING PERMIT
		GRADING LIMITS/LIMITS OF DISTURBANCE
		PROPERTY LINE
		RIGHT-OF-WAY LINE
		SECTION LINE
		TO BE ABANDONED

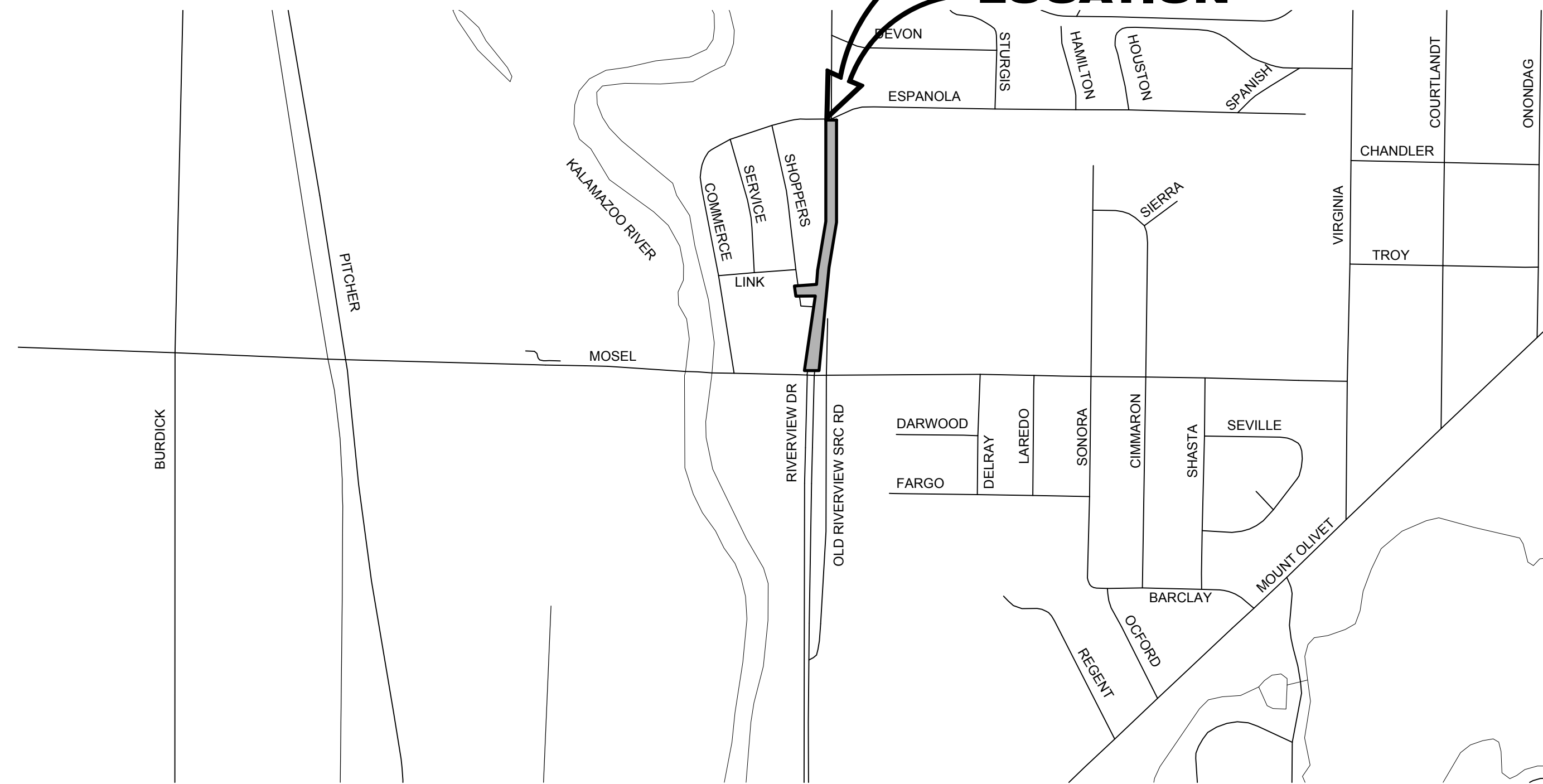
↑	•	= ANTENNA	•	= PAVEMENT/SOIL BORING
□	⊗	= CATCH BASIN	⊗	= PROPOSED HYDRANT
□	⊗	= CABLE RISER BOX	⊗	= PROPOSED GATE VALVE & BOX
○	⊗	= CLEAN OUT	⊗	= PROPOSED GATE VALVE & VAULT
■	⊗	= CURB INLET	⊗	= PROPOSED REDUCER
⊗	⊗	= ELECTRIC MANHOLE	⊗	= PROPOSED SANITARY MANHOLE
⊗	⊗	= FIRE HYDRANT	⊗	= PROPOSED STORM MANHOLE
⊗	⊗	= FOUND IRON PIPE	⊗	= STORM MANHOLE
⊗	⊗	= GAS VALVE	⊗	= TELEPHONE MANHOLE
⊗	⊗	= GUY ANCHOR	⊗	= TELEPHONE RISER BOX
⊗	⊗	= LIGHT POLE	⊗	= TURNING POINT/TRVERSE
⊗	⊗	= MAILBOX	⊗	= UTILITY POLE
⊗	⊗	= MONITORING WELL	⊗	= VAULT
⊗	⊗	= POST	⊗	= WATER ELEVATION
⊗	⊗	= SATELLITE DISH	⊗	= WATER MANHOLE
⊗	⊗	= SANITARY MANHOLE	⊗	= WATER METER
⊗	⊗	= SECTION CORNER	⊗	= WATER VALVE
⊗	⊗	= SIGN	⊗	= WATER SPIGOT
	⊗		⊗	= WELL

TREE DESIGNATORS

☁	☁	= BUSH	☁	= STUMP
☁	☁	= CONIFEROUS TREE	☁	= DECIDUOUS TREE
☁	☁	= CONIFEROUS TREE TO BE REMOVED	☁	= DECIDUOUS TREE TO BE REMOVED



CITY OF KALAMAZOO
VICINITY MAP
SCALE: NONE



PROJECT LOCATION MAP
SCALE: 1"= 600'

NOTES

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED THEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.

THE PLACING OF PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SHALL BE DONE IN ACCORDANCE WITH THE 2011 MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS AMENDED.

IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, ALL CONTRACTORS SHALL CALL MISS DIG @ 811 OR 800-482-7171 FOR PROTECTION OF UNDERGROUND UTILITIES A MINIMUM OF THREE FULL WORKING DAYS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO BEGINNING EACH EXCAVATION IN ANY AREA. 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.

ALL WATER MAIN AND SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF KALAMAZOO STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE INSTALLATION 2021.

INDEX OF PLANS

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C006	PLAN AND PROFILE STA. 30+00 TO STA. 32+50
C007	PAVEMENT MARKINGS
C008	MAINTAINING TRAFFIC PHASE I
C009	MAINTAINING TRAFFIC PHASE II

UTILITIES

CABLE:	CHARTER COMMUNICATIONS 4176 COMMERCIAL AVENUE PORTAGE, MI 49002 BRYAN LONGCORE (269) 459-8746 BRYAN.LONGCORE2@CHARTER.COM
ELECTRIC:	CONSUMERS ENERGY 2500 E. CORK STREET KALAMAZOO, MI 49001 ANDRE TAYLOR (269) 337-2245 ANDRE.TAYLOR@CMSENERGY.COM
GAS:	CONSUMERS ENERGY 2500 E. CORK STREET KALAMAZOO, MI 49001 KYLE OAK (269) 337-2366 KYLE.OAK@CMSENERGY.COM
TELEPHONE:	AT&T 2919 MILLCORK STREET KALAMAZOO, MI 49001 PHIL BARDOCZ (269) 384-4476 PB3132@ATT.COM
WATER:	CITY OF KALAMAZOO 415 E. STOCKBRIDGE AVENUE KALAMAZOO, MI 49001 ANNA CRANDALL (269) 337-8601 CRANDALLA@KALAMAZOOCITY.ORG
SEWER:	CITY OF KALAMAZOO 1415 NORTH HARRISON STREET KALAMAZOO, MI 49007 SOHIL MANJIYANI (269) 337-8551 MANJIYANIS@KALAMAZOOCITY.ORG
PUBLIC WORKS:	CITY OF PARCHEMENT 650 S. RIVERVIEW DRIVE PARCHEMENT, MI 49004 BILL O'HILL (269) 303-2909
"MISS DIG"	811

02/10/2025 PMH
REVISED FOR BIDDING

01/11/2023 PMH
SUBMITTED FOR COK REVIEW

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DATE: JANUARY, 2025
SCALE: AS NOTED

COVER SHEET

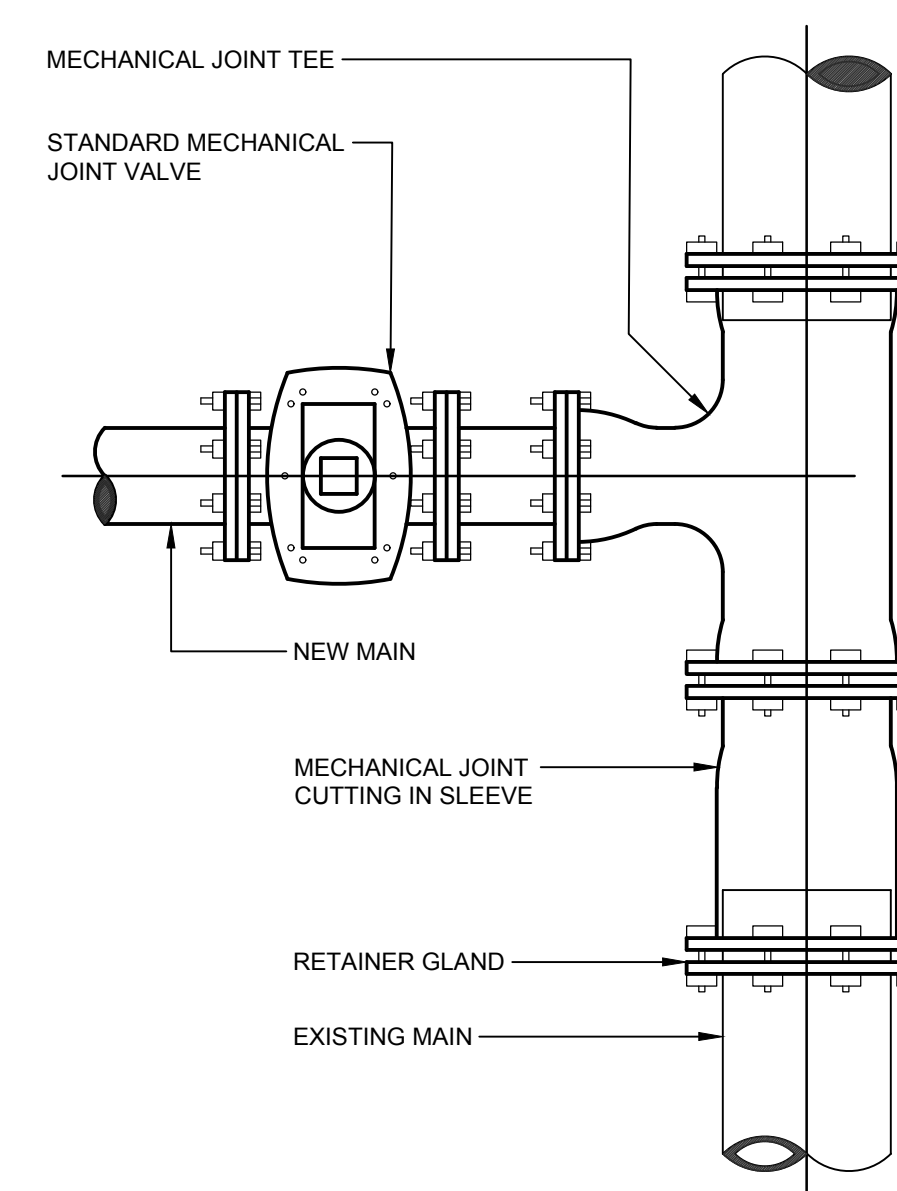
JOB No. 234153
C001

PROJECT NOTES

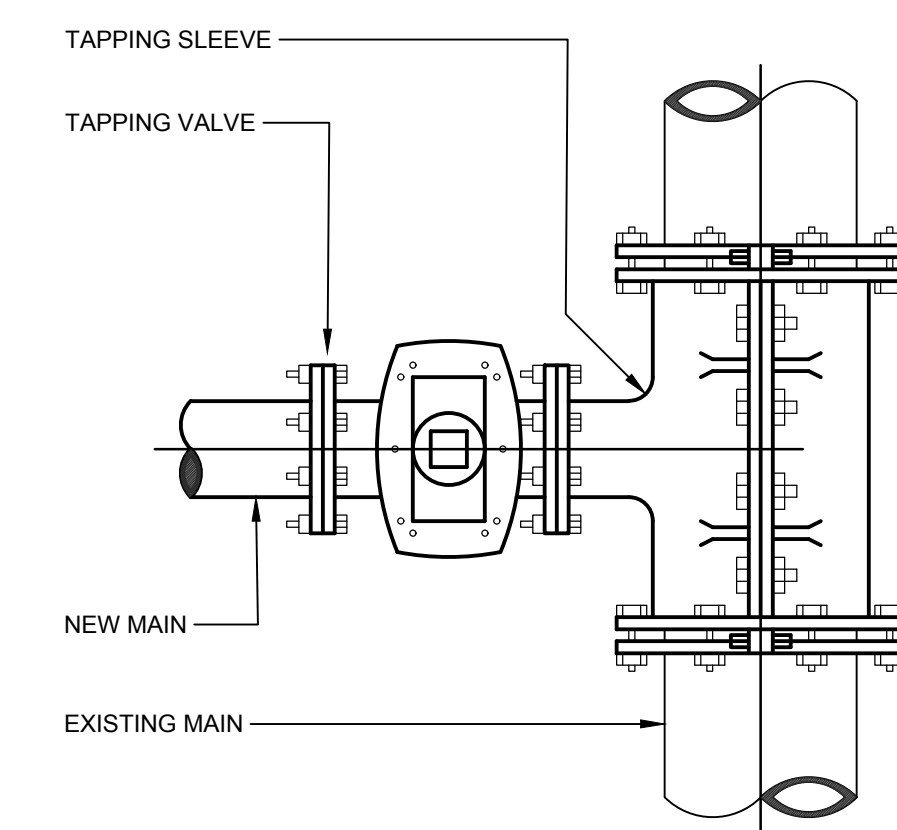
1. THE "2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND "STANDARD PLANS" BY THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) ARE HEREBY INCORPORATED INTO THESE CONTRACT DOCUMENTS. COPIES OF THESE STANDARDS ARE AVAILABLE FOR INSPECTION AT THE OFFICE OF THE ENGINEER.
2. ALL WATER MAIN AND SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF KALAMAZOO STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE INSTALLATION 2021.
3. THE PLACING OF TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE DONE IN ACCORDANCE WITH THE 2011 MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD), AS AMENDED.
4. ALL WORK SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS IN FORCE AT THE TIME OF CONSTRUCTION.
5. IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, ALL CONTRACTORS SHALL CALL MISS DIG @ 811 OR 800-482-7171 FOR PROTECTION OF UNDERGROUND UTILITIES. A MINIMUM OF THREE FULL WORKING DAYS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO BEGINNING EACH EXCAVATION IN ANY AREA. MEMBERS WILL 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.
6. THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK AND SHALL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE CITY OF KALAMAZOO AND THE CITY OF PARCHMENT TO NOTIFY THEM THAT WORK IS COMMENCING.
8. THE SOIL BORINGS WERE TAKEN BY WIGHTMAN ON 11/30/2023.
9. THE TEST BORINGS REPRESENT POINT INFORMATION AND MAY NOT HAVE ENCOUNTERED ALL THE TYPES AND MATERIALS WHICH ARE PRESENT AT THE SITE. THESE BORING LOGS DO NOT CONSTITUTE A GUARANTEE OF THE SOIL OR GROUNDWATER CONDITIONS, OR THAT THE TEST BORINGS ARE AN EXACT REPRESENTATION OF THE SOIL OR GROUNDWATER CONDITIONS AT ALL POINTS ON THE SITE.
10. SEE PLANS FOR SOIL BORING DATA.
11. THE CONTRACTOR SHALL CONDUCT THE WORK IN SUCH A MANNER SO NO EXCAVATIONS ARE LEFT OPEN OVERNIGHT. IF THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL INSTALL A TEMPORARY FENCE TO PROTECT THE EXCAVATION AT THEIR OWN EXPENSE.
12. DRIVE REPLACEMENT SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.
13. ALL GOVERNMENT CORNERS ON THIS PROJECT SHALL BE PRESERVED, WHETHER SHOWN OR NOT. IT MAY BE NECESSARY TO PLACE OR ADJUST MONUMENT BOXES, AS REQUIRED.
14. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EXISTING DRAINAGE PATTERNS, AND SHALL RESOLVE ANY DRAINAGE PROBLEMS ON ADJACENT PROPERTIES WHICH MAY RESULT FROM THE CONTRACTOR'S ACTIVITIES.
15. ADEQUATE DUST CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER IN THE FIELD, TO BE INCLUDED IN THE VARIOUS ITEMS OF WORK.
16. DATUM REFERS TO NAVD 88 DATUM.
17. ALL SCALES FOR DRAWINGS AND DETAILS ARE BASED ON 24"x36" PRINTED PLANS. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
18. TAPER THE CURBS TO ZERO HEIGHT AT SIDEWALKS. SIDEWALK RAMPS SHALL BE BARRIER FREE AND CONSTRUCTED IN ACCORDANCE WITH THE MDOT SIDEWALK RAMP AND DETECTABLE WARNING DETAILS (R-28 SERIES). SIDEWALK JOINTS SHALL BE IN ACCORDANCE WITH THE MDOT DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALKS (R-29 SERIES) UNLESS NOTED OTHERWISE.
19. EXPANSION JOINTS FOR CONCRETE CURB AND GUTTER SHALL BE PLACED AT: CURB CORNERS, BEGINNING AND ENDING OF RADII, ALL CATCH BASINS AND MANHOLES, INTERSECTION OF CURB/SIDEWALK, CURB/RETAINING WALL, CURB/BUILDING, AND EXISTING/NEW CONSTRUCTION, AT LENGTHS OF NOT MORE THAN 120' APART, AND AS SPECIFIED ELSEWHERE.
20. MAINTAIN 10 FOOT MINIMUM HORIZONTAL SEPARATION BETWEEN THE SANITARY OR STORM SEWER AND WATER MAIN UTILITIES. PROVIDE 18" MINIMUM VERTICAL SEPARATION WHERE THE WATER MAIN CROSSES A SANITARY OR STORM SEWER.
21. ANY SANITARY SEWER, SANITARY SEWER SERVICE LEADS, WATER MAIN, WATER SERVICES, OR STORM SEWER THAT IS DAMAGED BY THE CONTRACTOR DURING THEIR OPERATIONS SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AND AT THE CONTRACTOR'S EXPENSE.
22. PROPERTY OWNER'S NAMES, WHERE SHOWN, ARE FOR INFORMATION ONLY, AND THEIR ACCURACY IS NOT GUARANTEED.
23. ANY EXISTING PROPERTY CORNERS SHALL BE PRESERVED. CORNERS THAT ARE DISTURBED SHALL BE REPLACED BY A SURVEYOR LICENSED IN THE STATE OF MICHIGAN AT THE CONTRACTOR'S EXPENSE.
24. IF SITE CONDITIONS ARE SUCH THAT IT IS NOT DESIRABLE FOR HYDRANTS TO DRAIN INTO THE SURROUNDING SOIL (I.E. WHEN HYDRANT HAS LESS THAN 10 FEET OF SEPARATION FROM A SEWER, HIGH GROUND WATER, IMPERVIOUS OR CONTAMINATED SOIL, ECT.), HYDRANT DRIP VALVE PLUG(S) SHALL BE INSTALLED BY THE CONTRACTOR ON SITE. FINAL DETERMINATION ON DRIP VALVE PLUG INSTALLATION SHALL BE MADE BY THE ENGINEER OR HIS REPRESENTATIVE. AS CONSTRUCTED RECORDS SHALL NOTE WHETHER OR NOT THE DRIP VALVE PLUG WAS INSTALLED.

SOIL EROSION & SEDIMENTATION CONTROL NOTES

1. ALL CONSTRUCTION METHODS SHALL BE DONE IN COMPLIANCE WITH THE MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL ACT. EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND SHALL NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR PROVIDING ALL REQUIRED EROSION CONTROL MEASURES.
 2. INSTALLATION OF SESC MEASURES SHALL BE DONE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MDOT/DTMS SOIL EROSION MANUAL AND CURRENT EDITION OF THE MDOT STANDARD SPECIFICATIONS. REFER TO THE APPROPRIATE MANUAL FOR PROPER MAINTENANCE AND INSTALLATION OF SESC MEASURES.
 3. AVOID UNNECESSARY DISTURBING OR REMOVING OF EXISTING VEGETATED TOPSOIL OR EARTH COVER. THESE COVER AREAS ACT AS SEDIMENT FILTERS.
 4. ALL TEMPORARY SOIL EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.
 5. GEOTEXTILE SILT FENCE SHALL BE INSTALLED AS REQUIRED WHEN CROSSING CREEKS OR WHEN ADJACENT TO WETLANDS OR SURFACE WATER BODIES TO PREVENT SILTATION AND ELSEWHERE AS DIRECTED BY THE ENGINEER. SEEDING AND/OR SODDING SHALL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.
 6. MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES SHALL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.
 7. CLEAN ADJACENT ROADWAY WHEN NECESSARY.
 8. WATER SITE WHEN NECESSARY TO PREVENT SEDIMENT TRANSFER.
 9. TO PREVENT OFFSITE TRACKING OF SEDIMENT, SWEEP THE ROADWAY AND CURB WEEKLY OR AS DIRECTED BY THE ENGINEER. IF SWEEPING IS LIKELY TO CREATE EXCESSIVE DUST, WE / DAMPED SEDIMENTS PRIOR TO SWEEPING.
 10. CONTRACTOR TO ENSURE ALL CONSTRUCTION DEBRIS HAS BEEN REMOVED FROM ALL NEW AND EXISTING DRAINAGE STRUCTURES PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
- ## NUMBER IN CIRCLE REFERS TO NUMBERED DETAILS ON MDOT STANDARD PLAN R-96 SERIES, SOIL EROSION & SEDIMENTATION CONTROL MEASURES. "P" DENOTES PERMANENT MEASURE AND "T" DENOTES TEMPORARY MEASURE. SOIL EROSION CONTROL PLANS DENOTE MINIMUM EROSION MEASURES REQUIRED AS DESCRIBED BELOW.
- 3P DENOTES PERMANENT SEEDING. ALL DISTURBED AREAS NOT PAVED OR GRAVELED SHALL BE RESTORED. PLACE TOPSOIL SURFACE, SALV. 3 INCH, MDOT SEEDING MIXTURE TUF APPLIED AT A RATE OF 176 LB/ACRE, FERTILIZER, CHEMICAL NUTRIENT, CL A, APPLIED AT A RATE OF 228 LB/ACRE; MULCH AT A RATE OF 2 TON/ACRE AND MULCH ANCHORING. (APPLIES TO ENTIRE PROJECT)
- 8P DENOTES AGGREGATE COVER/PERMANENT PAVEMENT RESTORATION
- 29I DENOTES INLET PROTECTION FABRIC DROP. SHALL BE INSTALLED AT EXISTING AND PROPOSED STORM SEWER INLETS TO PROVIDE SETTLING AND FILTERING OF SILT LADEN WATER PRIOR TO ENTRY INTO THE DRAINAGE SYSTEM.

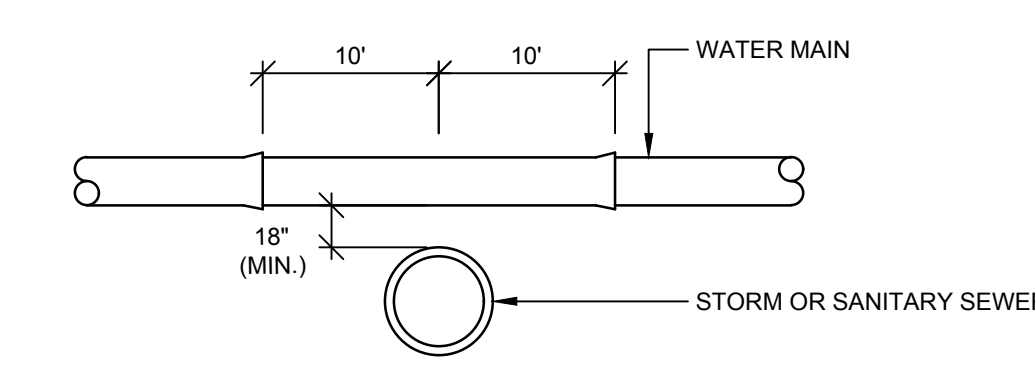


DRY TAP METHOD
CONNECTING NEW MAIN TO EXISTING MAIN

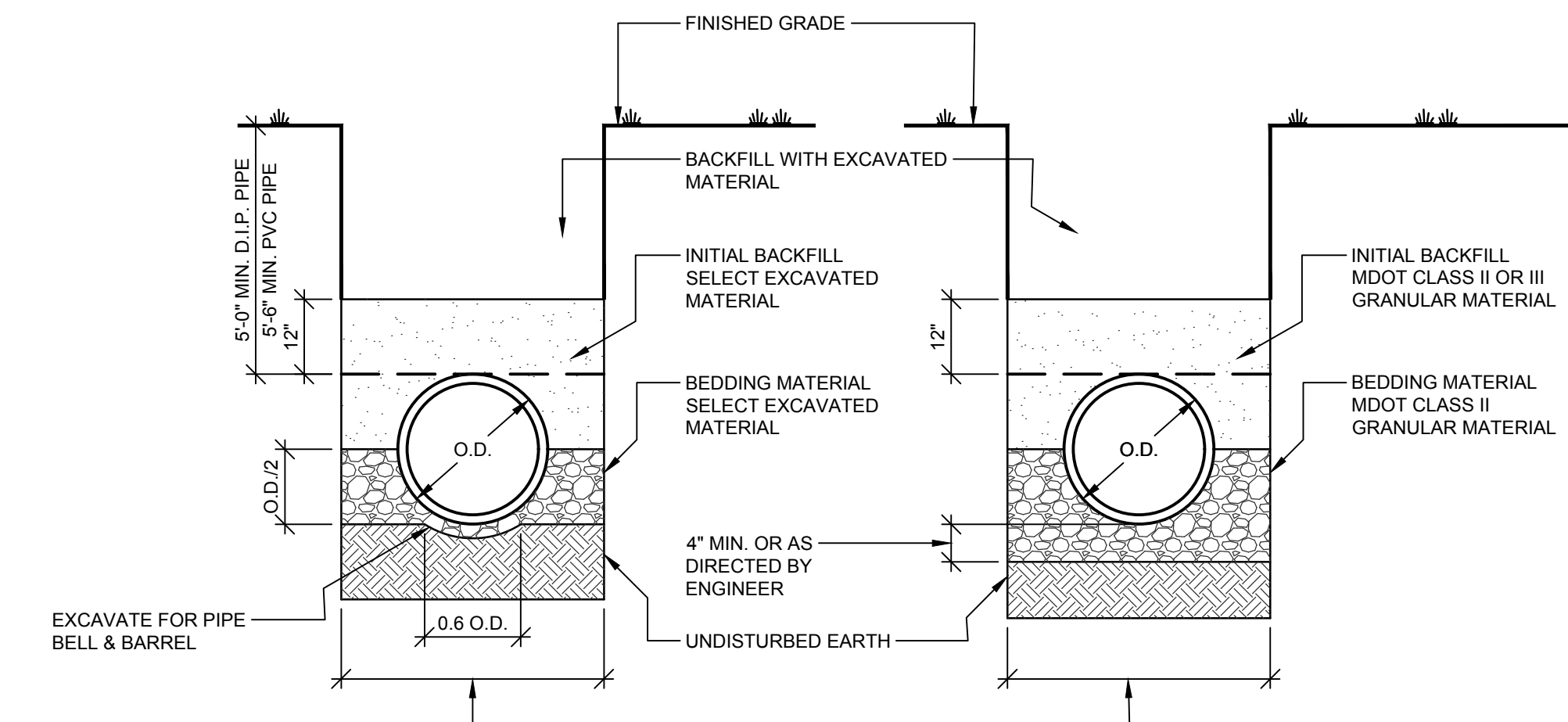


WET TAP METHOD
(UNDER PRESSURE)
CONNECTING NEW MAIN TO EXISTING MAIN

WHERE THE WATER MAIN CROSSES A SEWER LINE, THE WATER MAIN SHALL BE INSTALLED SUCH THAT THE NEAREST WATER MAIN JOINT IS 10' ON EITHER SIDE OF THE SEWER CROSSING AND THE WATER MAIN SHALL BE ENCASED IN POLYETHYLENE.



WATER MAIN CROSSING SEWER



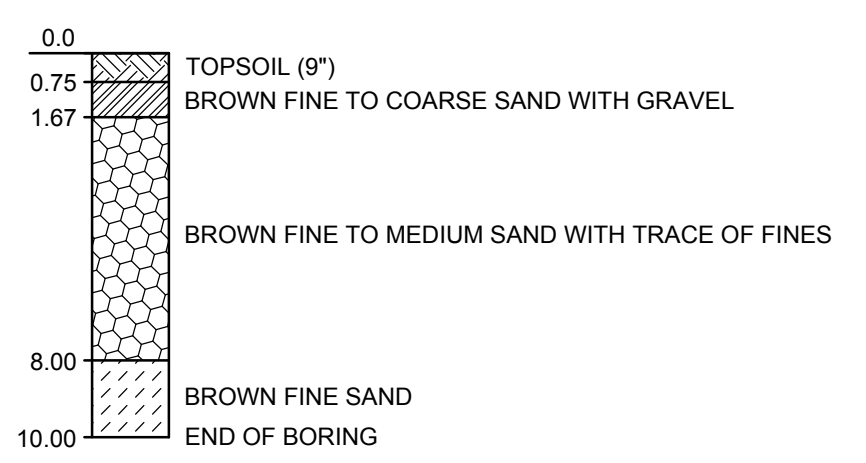
TRENCH DETAIL IN SUITABLE SOIL

TRENCH DETAIL IN UNSUITABLE SOIL

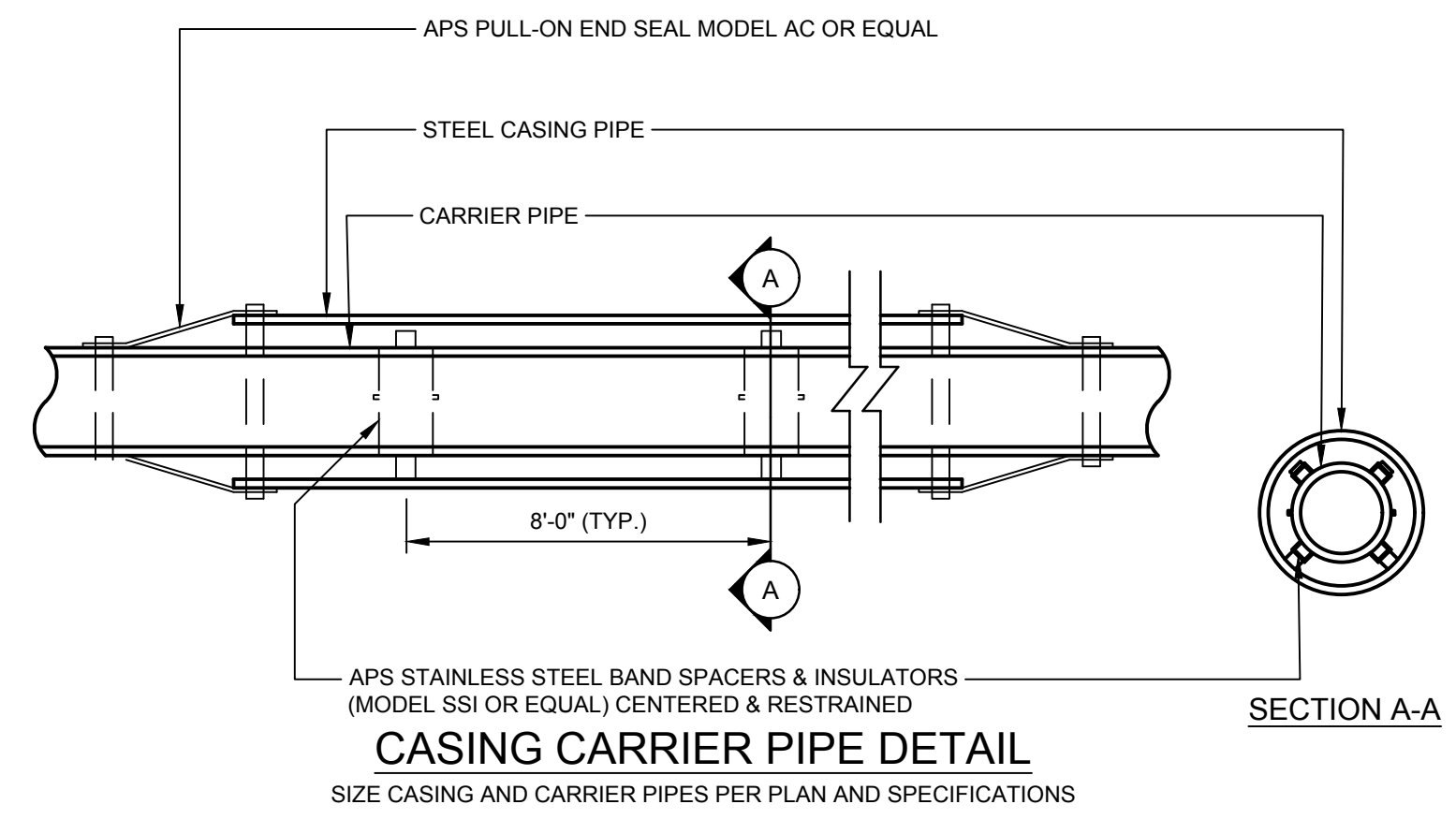
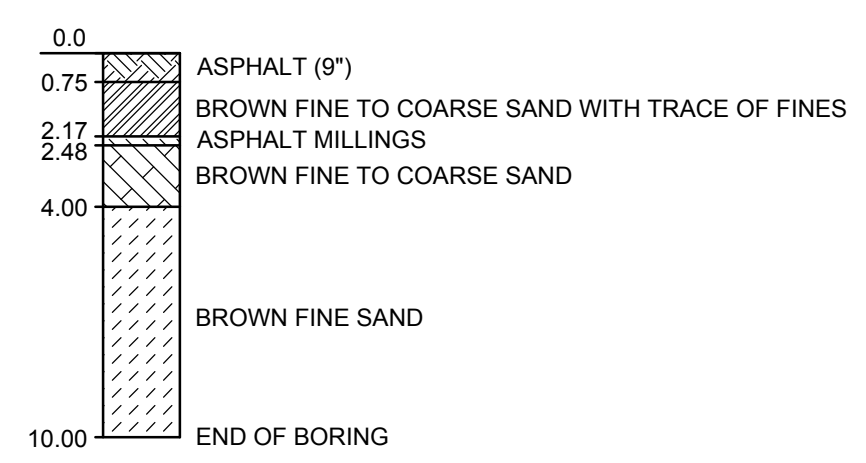
ITEM	AWI	YIELD	PERFORMANCE GRADE	NOTES
HMA, 4EML (LEVELING)		220#/SYD	P.G. 64 - 28	
HMA, 5EML (TOP)	260	220#/SYD	P.G. 64 - 28	
HMA BOND COAT (NOT A PAY ITEM)		0.05 TO 0.15 GAL/SYD	SS - 1h	

HMA APPLICATION TABLE

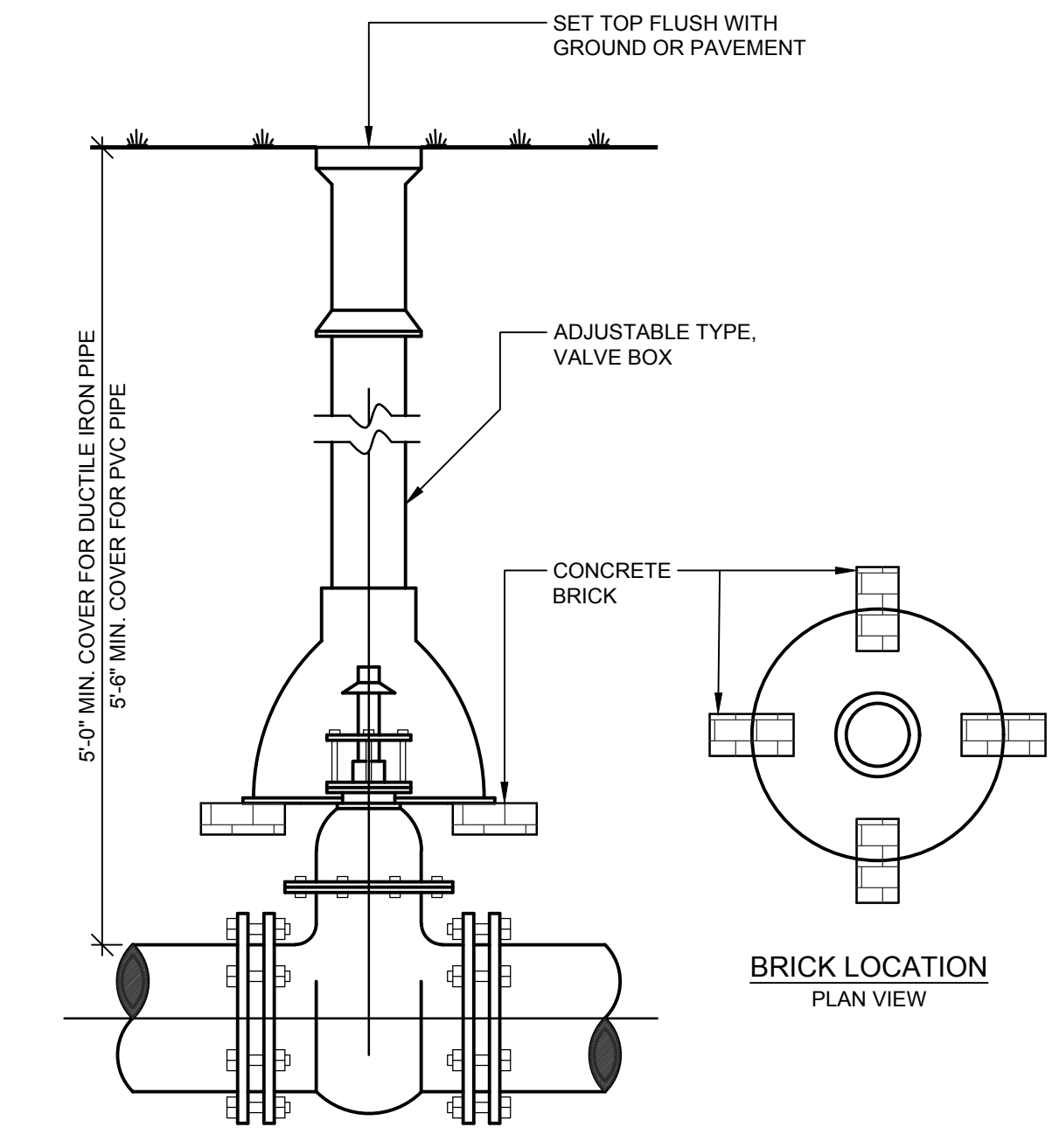
SOIL BORING SB-1



SOIL BORING SB-2



CASING CARRIER PIPE DETAIL
SIZE CASING AND CARRIER PIPES PER PLAN AND SPECIFICATIONS



TYPICAL GATE VALVE & VALVE BOX

QUANTITIES THIS SHEET

ITEM	QTY.
Mobilization, Max 10%	1 LSUM
Sewer, CI E, 12 inch, Tr Det B	20 Ft
Minor Traf Devices	1 LSUM
Traf Regulator Control	1 LSUM
Slope Restoration, Non-Freeway, Type A	50 Syd

WIGHTMAN
433 E. RANSOM ST.
KALAMAZOO, MI. 49007
269.327.3532
www.gowightman.com

PAUL M. HARVEY
6201309889

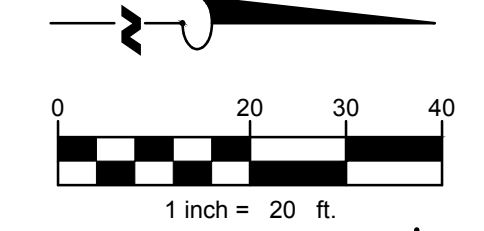
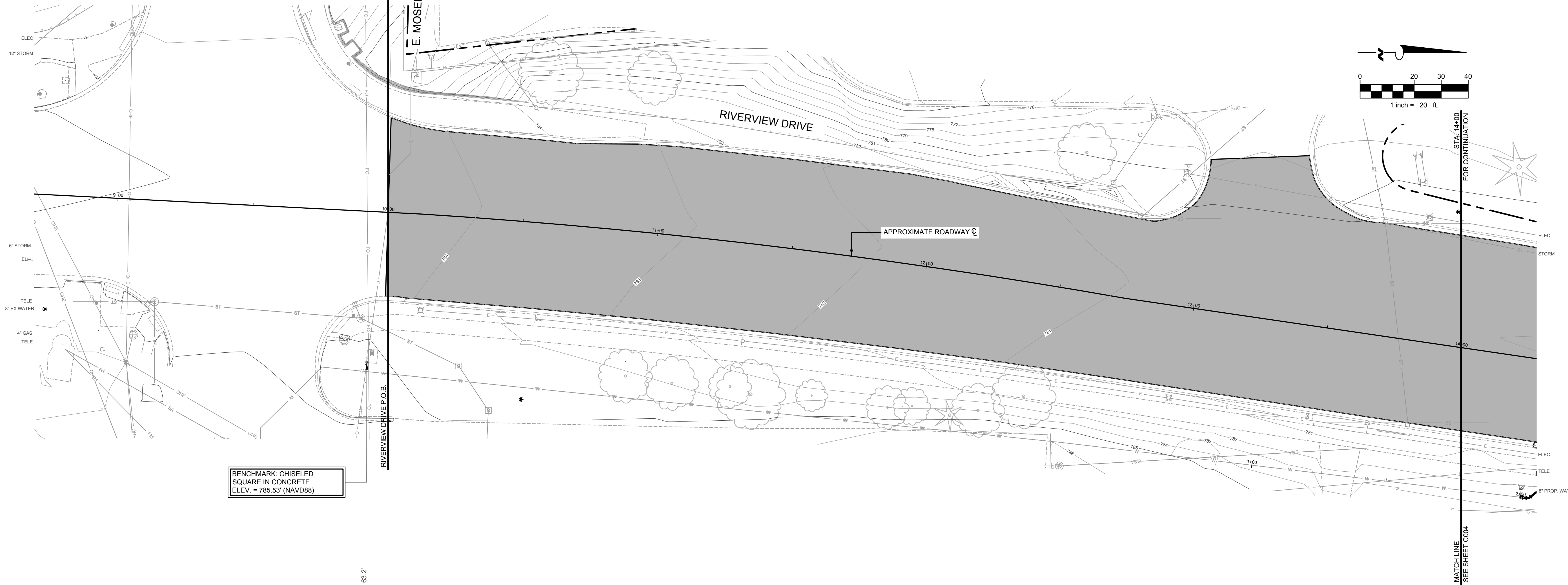
RIVERVIEW DRIVE WATER MAIN LOOP

CITY OF KALAMAZOO
415 E STOCKBRIDGE AVENUE
KALAMAZOO, MI 49001

- 02/01/2025 PMH
REVISED FOR BIDDING
- 01/11/2023 PMH
SUBMITTED FOR COK REVIEW
- REVISIONS**
- DATE: JANUARY, 2025
SCALE: NONE

PROJECT NOTES AND DETAILS

8+78 M PEDESTRIAN SIGNAL CONTROL 42.4'



BENCHMARK: CHISELED
SQUARE IN CONCRETE
ELEV. = 785.53' (NAVD88)

8+88 M CONTROL ST 57.0'
8+88 M CONTROL ST 57.0' PFC 49.2'
8+88 GUY WIRE 56.4'
9+06 POWER POLE 60.4'
9+13 CURB INLET 38.0'
9+15 STORM MH 37.5'

9+89 CURB INLET 33.8'
9+92 STORM MH 39.6'
9+95 M MH MDOT TRAFFIC SIGNALS 63.2'
9+97 TS CONTROL BOX 52.3'

10+14 LIGHT POLE 35.5'
10+30 CATCH BASIN 55.1'
10+49 CATCH BASIN 70.6'
10+59 SIGN, SCH BUS 35.6'

10+93 10" RED CLU 53.5'
11+11 10" RED CLU 54.5'

11+33 8" RED CLU 53.3'
11+38 SIGN, SPEED LIMIT 30 36.1'
11+41 18" OAK 55.3'

11+64 6" RED CLU 53.0'

11+93 8" OAK 53.6'
12+02 7" RED CLU 51.9'

12+17 12" PINE 53.1'

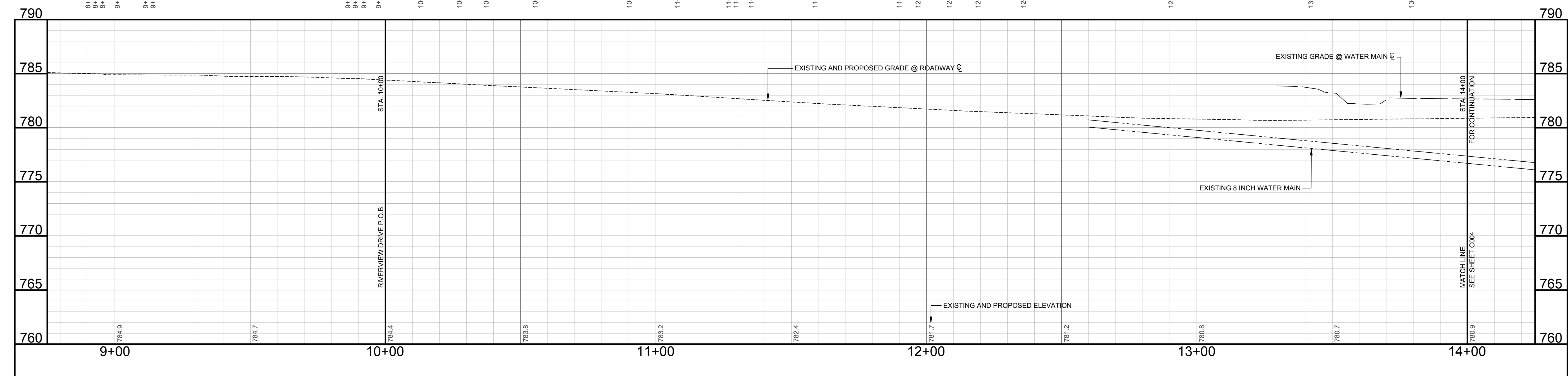
12+27 10" RED CLU 49.7'

12+43 12" TRIRED 41.9'

12+98 LIGHT POLE 34.1'

13+47 MAILBOX 33.2'

13+85 CURB INLET 30.4'



QUANTITIES THIS SHEET	
ITEM	QTY.
Erosion Control, Inlet Protection, Fabric Drop, Modified	4 Ea
Cold Milling HMA Surface	3,000 Syd
HMA, 4EML	350 Ton
HMA, 5EML	350 Ton

WIGHTMAN

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KALAMAZOO, MI. 49007
269.327.3532

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PROJECT NAME:
**RIVERVIEW DRIVE
WATER MAIN LOOP**

CITY OF
KALAMAZOO
415 E STOCKBRIDGE AVENUE
KALAMAZOO, MI 49001

- LEGEND**
- WATER MAIN TRENCH AREA. PLACE SUBBASE, CIP (12"); AGGREGATE BASE, 8 INCH; 330#/SYD HMA, 3EML (BASE); 220#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA 5EML (TOP).
 - REMOVE AND REPLACE SIDEWALK AS SHOWN ON THE PLANS WITH "SIDEWALK, CONC, 4 INCH" AND "SIDEWALK, CONC, 6 INCH" (AT DRIVEWAYS)
 - SAWCUT AND REMOVE EXISTING PAVEMENT. REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH "DRIVEWAY, NONREI" CONC, 6 INCH". MATCH EXISTING GRADE AT SAWCUT LINE.
 - MILL EXISTING ROADWAY TO AN AVERAGE DEPTH OF 4 INCHES AND REPLACE WITH 220#/SYD HMA, 4EML (LEVELING) AND 220#/SYD HMA, 5EML (TOP).
 - INSTALL WATER SERVICE FROM THE NEW MAIN TO THE R.O.W. PAID FOR AS "WATER SERVICE, 1 1/4 INCH" AND "COPPER WATER SERVICE PIPE, 1 1/4 INCH". COORDINATE WITH OWNER AND ENGINEER ON SERVICE LOCATION.

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01/11/2023 PMH
SUBMITTED FOR COK
REVIEW

REVISIONS

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DATE: JANUARY, 2025
SCALE: 1" = 20H, 5V

PLAN AND PROFILE
STA. 14+00 TO STA. 19+00

JOB No. 234153
C003

QUANTITIES THIS SHEET

ITEM	QTY.
Curb and Gutter, Rem	50 Ft
Pavt, Rem	10 Syd
Sidewalk, Rem	30 Syd
Erosion Control, Inlet Protection, Fabric Drop, Modified	2 Ea
Subbase, CIP	180 Cyd
Aggregate Base, 8 inch	530 Syd
Cold Milling HMA Surface	2,600 Syd
HMA Surface, Rem	530 Syd
HMA, 3EML	90 Ton
HMA, 4EML	360 Ton
HMA, 5EML	360 Ton
Driveway, Nonreinf Conc, 6 inch	10 Syd
Curb and Gutter, Conc, Det C4	50 Ft
Sidewalk, Conc, 4 inch	120 Sft
Sidewalk, Conc, 6 inch	120 Sft
Slope Restoration, Non-Freeway, Type A	30 Syd
Fire Hydrant	2 Ea
Water Main, DI, 6 inch, Tr Det G	40 Ft
Water Main, DI, 8 inch, Tr Det G	510 Ft
Connect to Existing Main, 8 inch	1 Ea
Gate Valve and Box, 8 inch, Modified	3 Ea

W+
WIGHTMAN
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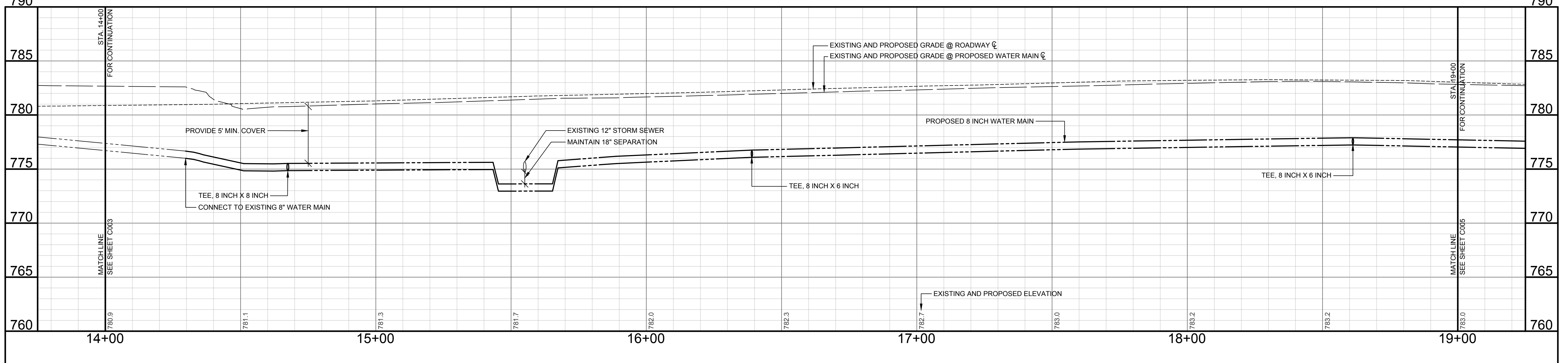
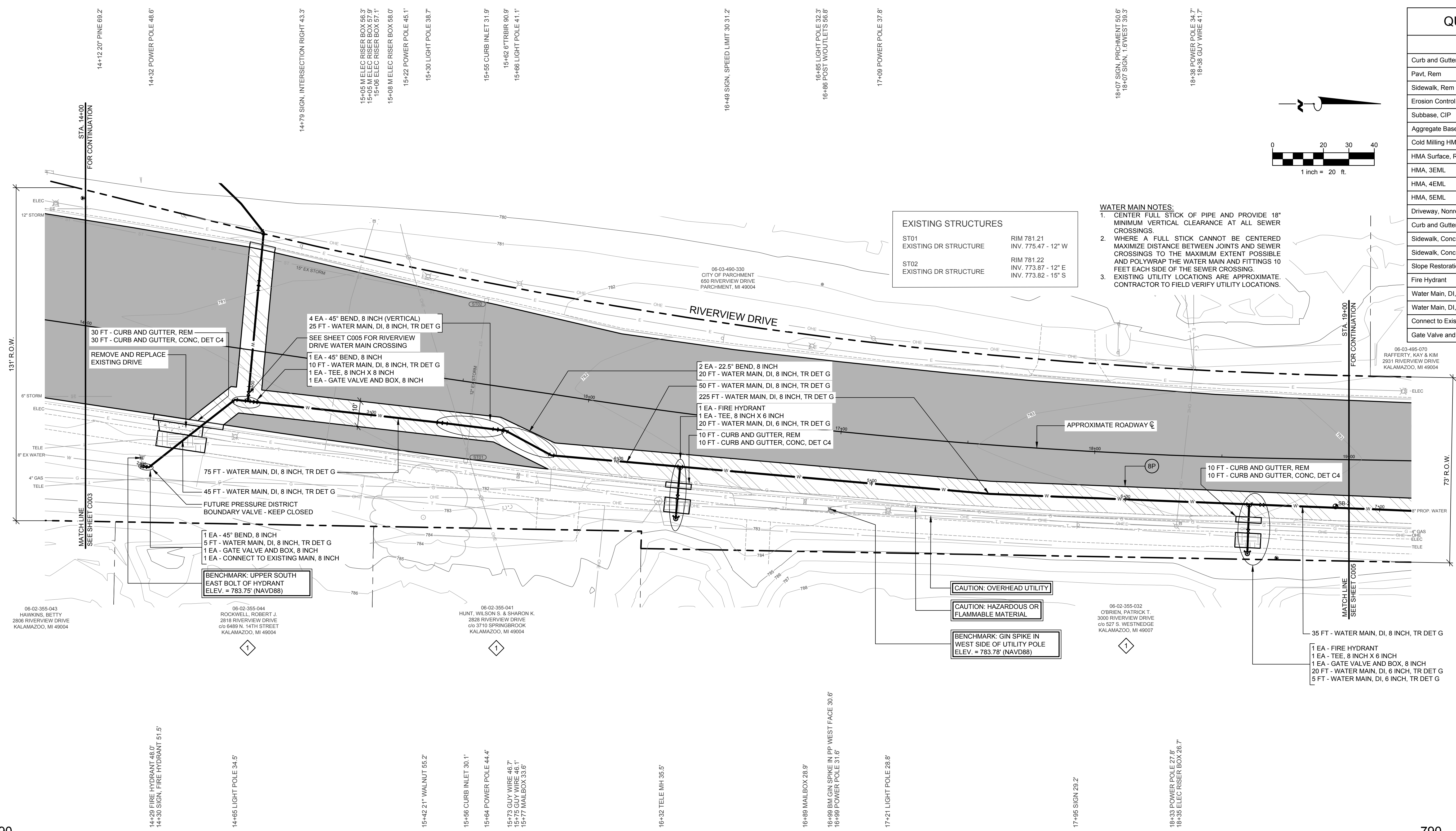
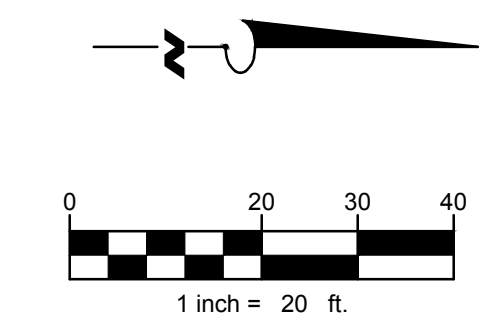
PAUL M. HARVEY
6201309889
PROJECT NAME:
**RIVERVIEW DRIVE
WATER MAIN LOOP**

**CITY OF
KALAMAZOO**
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KALAMAZOO, MI 49001

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DATE: JANUARY, 2025
SCALE: 1" = 20'H, 5'V

PLAN AND PROFILE
STA. 14+00 TO STA. 19+00

JOB No. 234153
C004



LEGEND

- WATER MAIN TRENCH AREA. PLACE SUBBASE, CIP (12"); AGGREGATE BASE, 8 INCH; 330#/SYD HMA, 3EML (BASE); 220#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA 5EML (TOP).
- REMOVE AND REPLACE SIDEWALK AS SHOWN ON THE PLANS WITH "SIDEWALK, CONC, 4 INCH" AND "SIDEWALK, CONC, 6 INCH" (AT DRIVEWAYS)
- SAWCUT AND REMOVE EXISTING PAVEMENT, REGRADE EXISTING DRIVE AS REQUIRED AND SURFACE WITH "DRIVEWAY, NONREIF CONC, 6 INCH". MATCH EXISTING GRADE AT SAWCUT LINE.
- MILL EXISTING ROADWAY TO AN AVERAGE DEPTH OF 4 INCHES AND REPLACE WITH 220#/SYD HMA, 4EML (LEVELING) AND 220#/SYD HMA, 5EML (TOP).
- INSTALL WATER SERVICE FROM THE NEW MAIN TO THE R.O.W. PAID FOR AS "WATER SERVICE, 1 1/4 INCH" AND "COPPER WATER SERVICE PIPE, 1 1/4 INCH". COORDINATE WITH OWNER AND ENGINEER ON SERVICE LOCATION.

19-21 LIGHT POLE 27.2'

20-29 45" TREE 33.8'
20-36 MAILBOX 27.5'

21-06 SIGN, SPEED LIMIT 30 27.8'
21-08 POST 47.4'
21-08 POWER POLE 48.3'

21-54 CURB INLET 23.5'
21-60 LIGHT POLE 27.1'
21-68 POST 39.6'
21-72 POST 34.0'

22-02 GUY WIRE 42.8'
22-04 POWER POLE 36.6'

23-16 CONT FENCE 44.4'
23-17 6 WOOD FENCE 36.1'
23-17 POST 40.1'
23-19 SIGN, TANK 37.3'
23-19 POST 37.3'
23-19 POST 43.2'
23-21 CURB INLET 23.0'

23-45 POST 39.9'
23-46 ELECTRICAL HANDHOLE 36.7'

QUANTITIES THIS SHEET

ITEM	QTY.
Curb and Gutter, Rem	10 Ft
Sidewalk, Rem	10 Syd
Erosion Control, Inlet Protection, Fabric Drop, Modified	5 Ea
Subbase, CIP	170 Cyd
Aggregate Base, 8 inch	510 Syd
Cold Milling HMA Surface	1,880 Syd
HMA Surface, Rem	510 Syd
HMA, 3EML	90 Ton
HMA, 4EML	275 Ton
HMA, 5EML	275 Ton
Curb and Gutter, Conc, Det C4	10 Ft
Sidewalk, Conc, 4 inch	60 Sft
Slope Restoration, Non-Freeway, Type A	15 Syd
Fire Hydrant	1 Ea
Water Main, DI, 6 inch, Tr Det G	30 Ft
Water Main, DI, 8 inch, Tr Det G	445 Ft
Live Tap, 8 inch x 8 inch	1 Ea

WIGHTMAN

433 E. RANSOM ST.
KALAMAZOO, MI. 49007
269.327.3532

www.gowightman.com

PROJECT NAME:
RIVERVIEW DRIVE WATER MAIN LOOP

CITY OF KALAMAZOO
415 E STOCKBRIDGE AVENUE
KALAMAZOO, MI 49001

PAUL M. HARVEY
6201309889

02/10/2025 PMH
REVISED FOR BIDDING

01/12/2023 PMH
SUBMITTED FOR COK REVIEW

REVISIONS

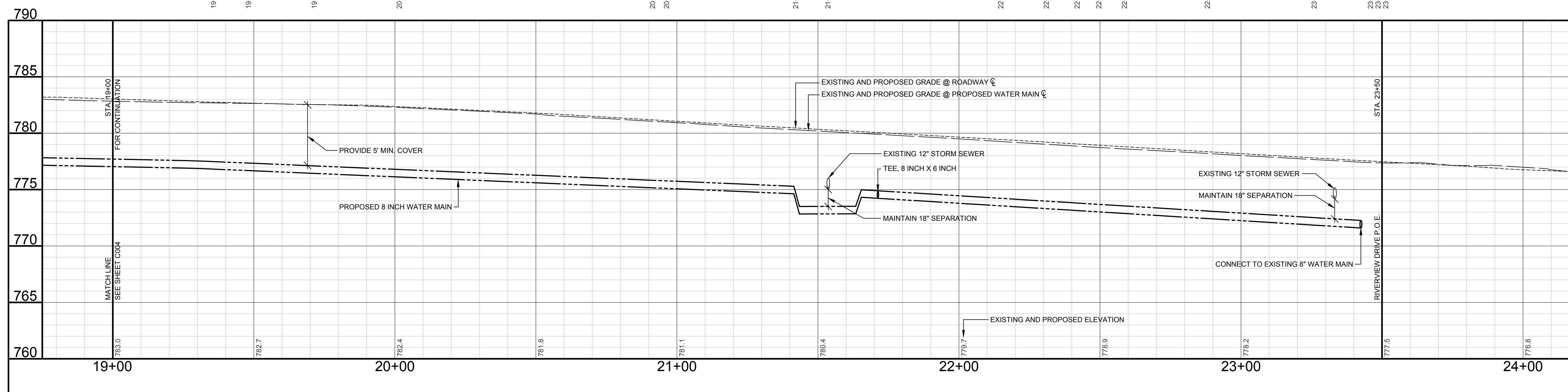
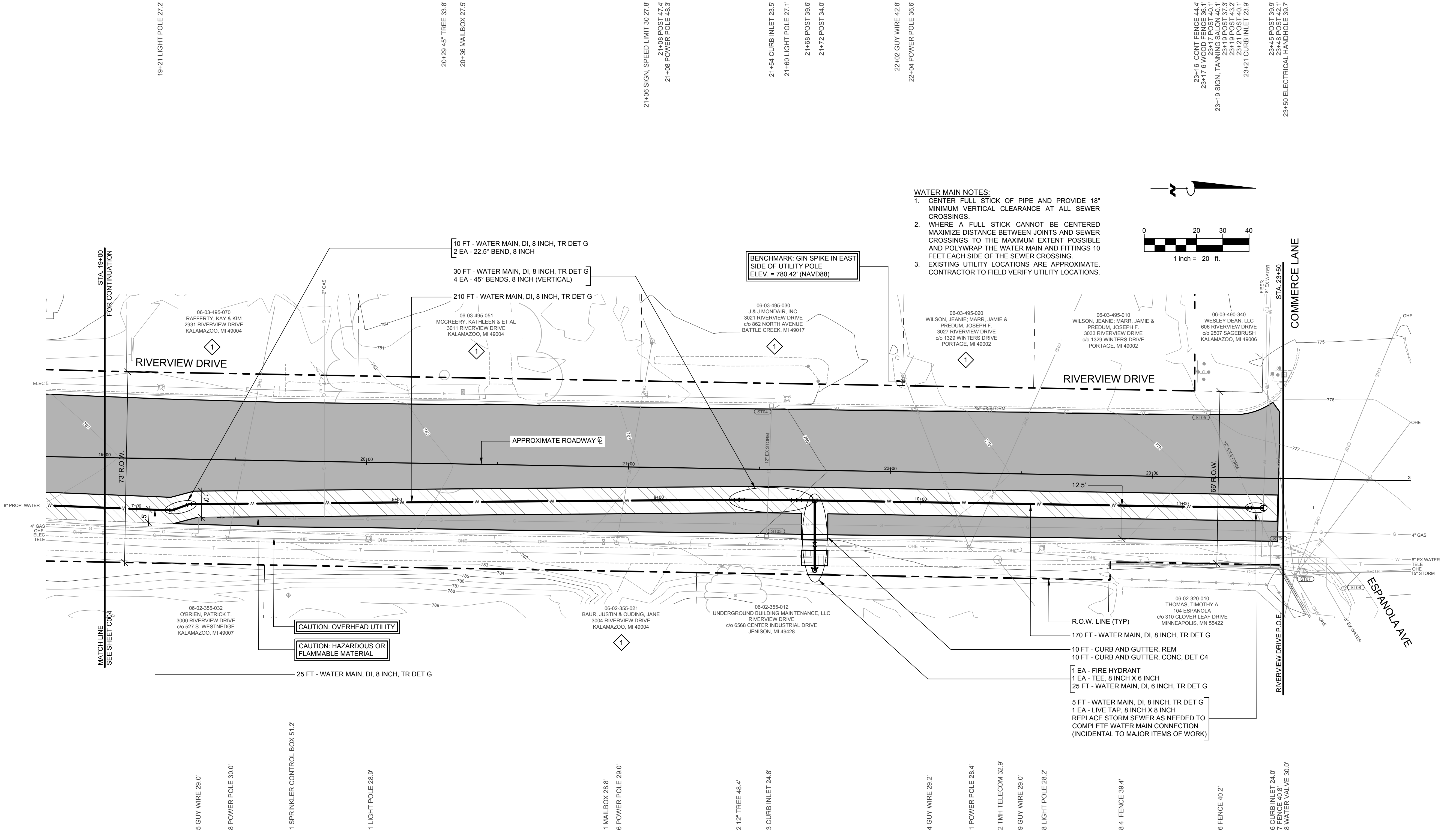
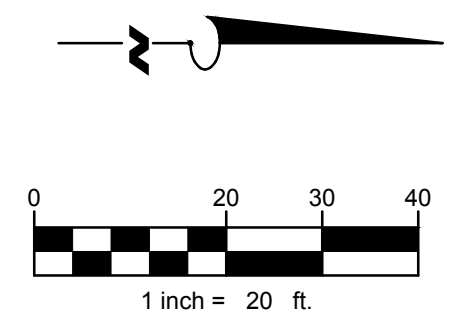
DATE: JANUARY, 2025
SCALE: 1" = 20'H, 5'V

PLAN AND PROFILE
STA. 19+00 TO STA. 23+50
(POE)

JOB No. 234153
C005

WATER MAIN NOTES:

- CENTER FULL STICK OF PIPE AND PROVIDE 18" MINIMUM VERTICAL CLEARANCE AT ALL SEWER CROSSINGS.
- WHERE A FULL STICK CANNOT BE CENTERED MAXIMIZE DISTANCE BETWEEN JOINTS AND SEWER CROSSINGS TO THE MAXIMUM EXTENT POSSIBLE AND POLYWRAP THE WATER MAIN AND FITTINGS 10 FEET EACH SIDE OF THE SEWER CROSSING.
- EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY UTILITY LOCATIONS.



EXISTING STRUCTURES

ST03	RIM 779.96
EXISTING DR STRUCTURE	INV. 775.04 - 12" W
ST04	RIM 780.02
EXISTING DR STRUCTURE	INV. 775.03 - 12" E
	INV. 774.77 - 12" N
ST05	RIM 777.00
EXISTING DR STRUCTURE	INV. 774.28 - 12" S
	INV. 774.24 - 12" NE
ST06	RIM 777.20
EXISTING DR STRUCTURE	INV. 774.09 - 12" SW
	INV. 773.50 - 12" E
ST07	RIM 777.35
EXISTING DR STRUCTURE	INV. 772.79 - 15" N
ST08	RIM 776.21
EXISTING DR STRUCTURE	INV. 773.36 - 15" NW

LEGEND

- WATER MAIN TRENCH AREA. PLACE SUBBASE, CIP (12"); AGGREGATE BASE, 8 INCH; 330#/SYD HMA, 3EML (BASE); 220#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA 5EML (TOP).
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QUANTITIES THIS SHEET

ITEM	QTY.
Curb and Gutter, Rem	10 Ft
Subbase, CIP	25 Cyd
Aggregate Base, 8 inch	65 Syd
HMA Surface, Rem	65 Syd
HMA, 3EML	15 Ton
HMA, 4EML	10 Ton
HMA, 5EML	10 Ton
Curb and Gutter, Conc, Det C4	10 Ft
Slope Restoration, Non-Freeway, Type A	100 Syd
Fire Hydrant	1 Ea
Water Main, DI, 6 inch, Tr Det G	10 Ft
Water Main, DI, 8 inch, Tr Det G	140 Ft
Insulation Board, 2 inch	64 Sft
Gate Valve and Box, 8 inch, Modified	1 Ea
Live Tap, 6 inch x 6 inch	1 Ea

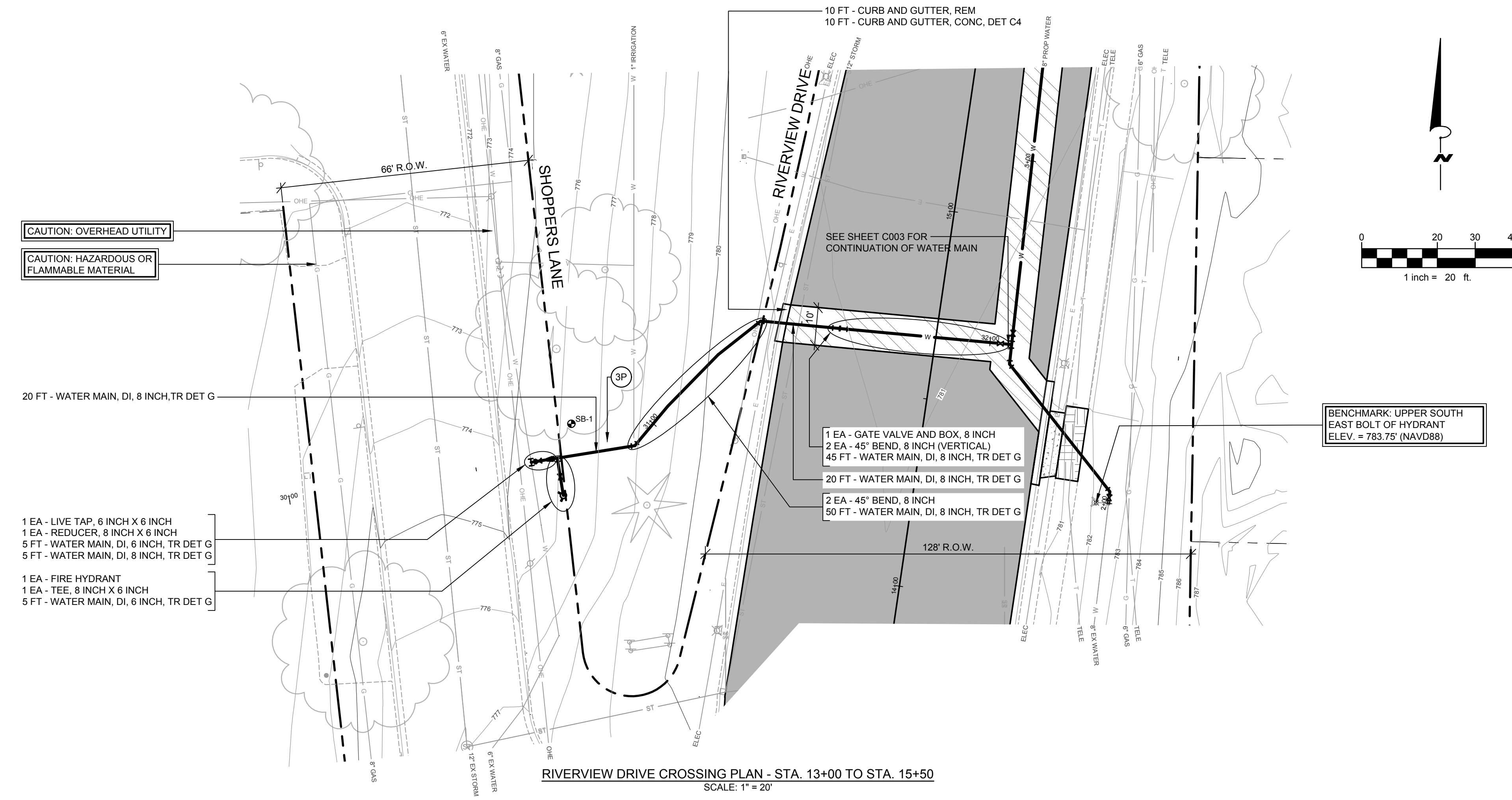


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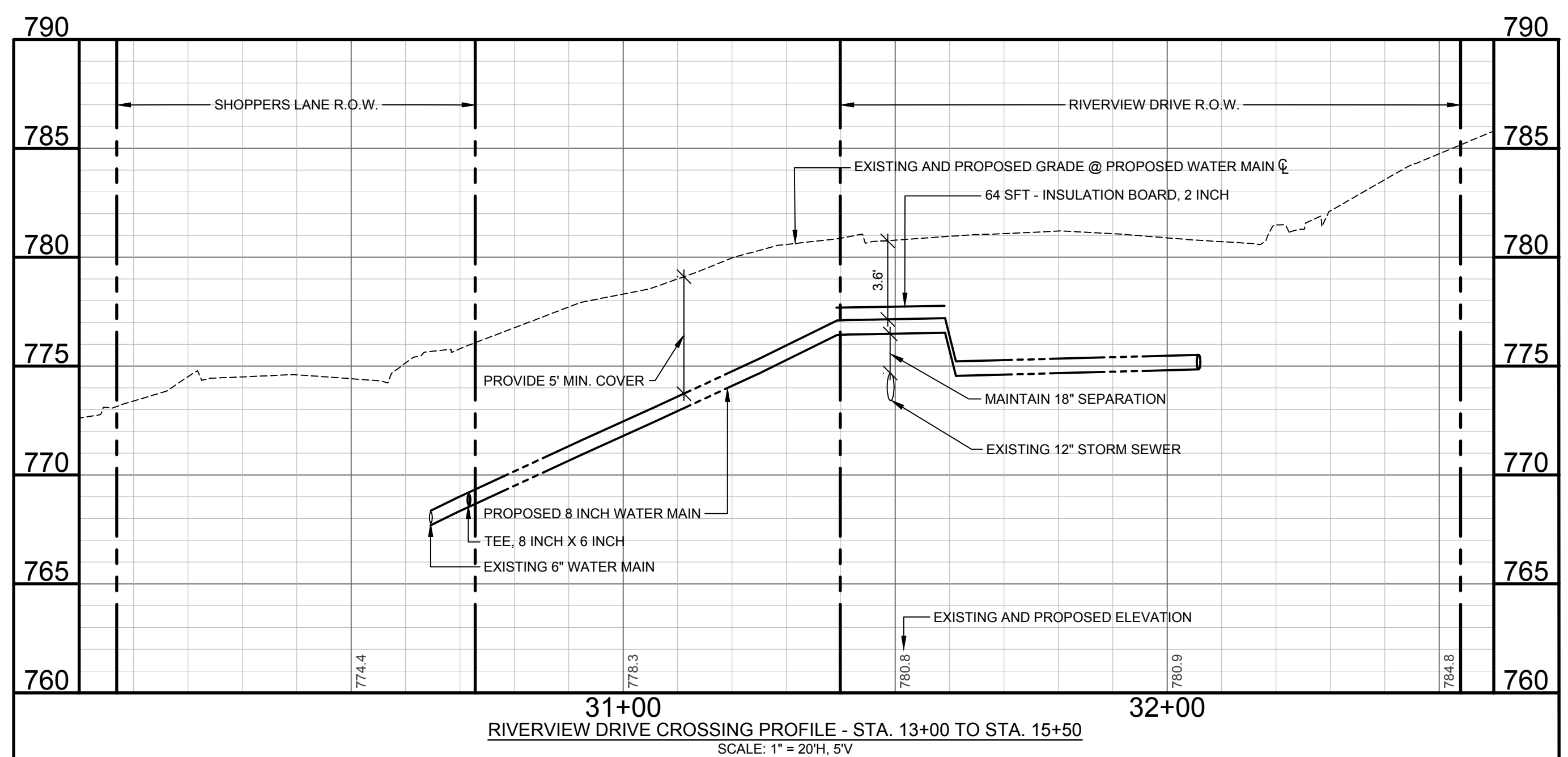
PROJECT NAME:
**RIVERVIEW DRIVE
WATER MAIN LOOP**

CITY OF
KALAMAZOO
415 E STOCKBRIDGE AVENUE
KALAMAZOO, MI 49001



RIVERVIEW DRIVE CROSSING PLAN - STA. 13+00 TO STA. 15+50
SCALE: 1" = 20'

- WATER MAIN NOTES:**
- CENTER FULL STICK OF PIPE AND PROVIDE 18" MINIMUM VERTICAL CLEARANCE AT ALL SEWER CROSSINGS.
 - WHERE A FULL STICK CANNOT BE CENTERED MAXIMIZE DISTANCE BETWEEN JOINTS AND SEWER CROSSINGS TO THE MAXIMUM EXTENT POSSIBLE AND POLYWRAP THE WATER MAIN AND FITTINGS 10 FEET EACH SIDE OF THE SEWER CROSSING.
 - EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY UTILITY LOCATIONS.



RIVERVIEW DRIVE CROSSING PROFILE - STA. 13+00 TO STA. 15+50
SCALE: 1" = 20'H, 5'V

- LEGEND**
- WATER MAIN TRENCH AREA. PLACE SUBBASE, CIP (12"); AGGREGATE BASE, 8 INCH; 330#/SYD HMA, 3EML (BASE); 220#/SYD HMA, 4EML (LEVELING); AND 165#/SYD HMA SEMI (TOP).
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02/01/2025 PMH
REVISED FOR BIDDING
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REVIEW

REVISIONS

DATE: JANUARY, 2025
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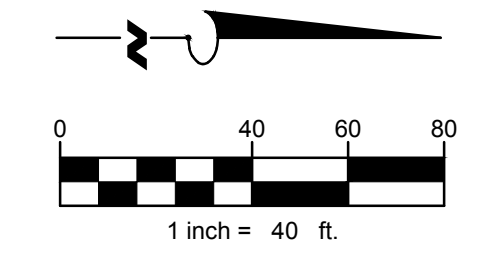
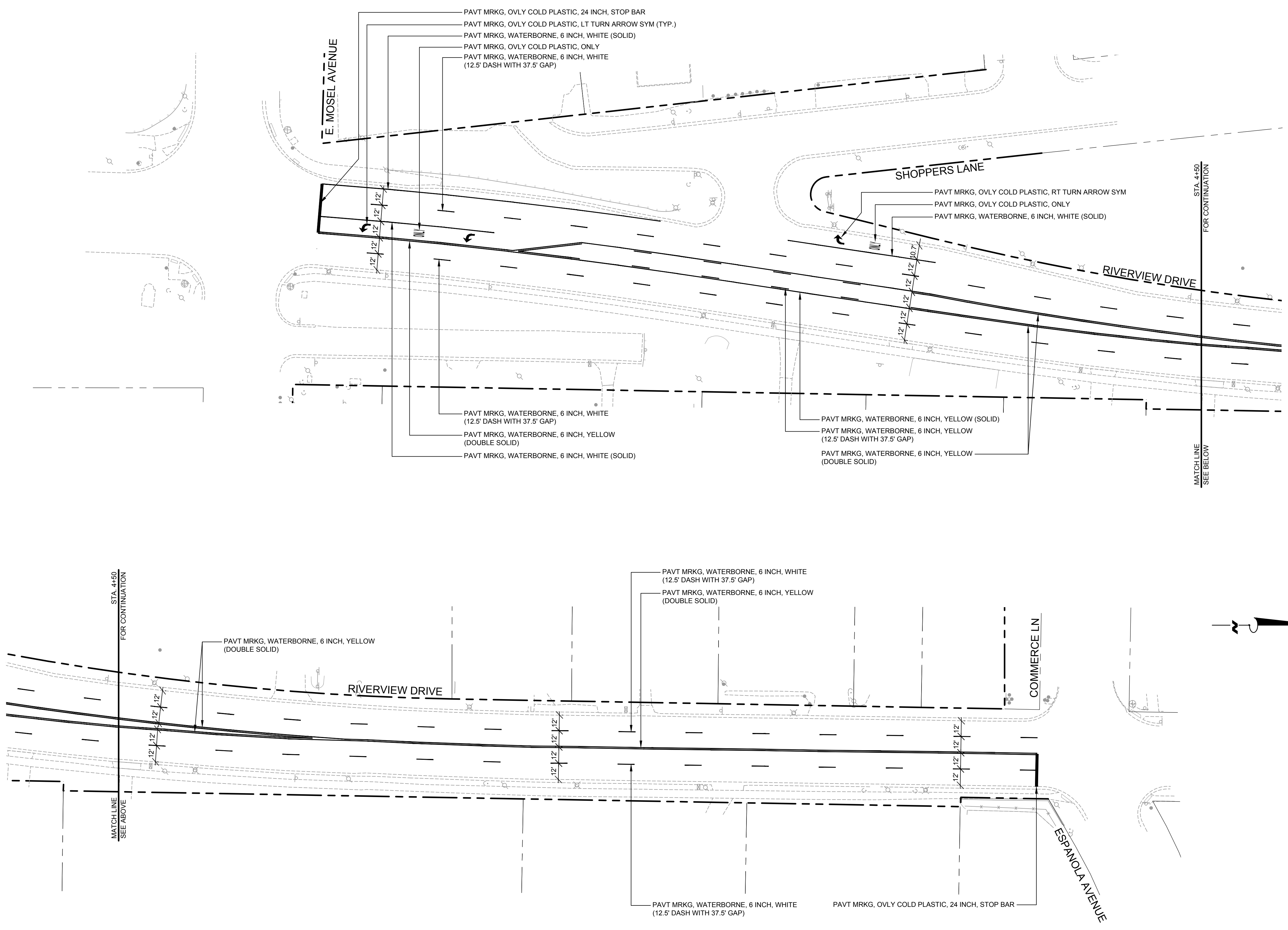
PLAN AND PROFILE
STA. 30+00 TO STA. 32+50

JOB No. 234153
C006

QUANTITIES THIS SHEET	
ITEM	QTY.
Pav't Mrkg, Ovly Cold Plastic, 24 inch, Stop Bar	60 Ft
Pav't Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	2 Ea
Pav't Mrkg, Ovly Cold Plastic, Only	2 Ea
Pav't Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	1 Ea
Pav't Mrkg, Waterborne, 6 inch, White	1,160 Ft
Pav't Mrkg, Waterborne, 6 inch, Yellow	3,710 Ft

W+
WIGHTMAN
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 6201309889
 PROJECT NAME:
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 WATER MAIN LOOP**
 CITY OF
KALAMAZOO
 415 E STOCKBRIDGE AVENUE
 KALAMAZOO, MI 49001



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 01 11/27/2023 PMH
 SUBMITTED FOR COK
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REVISIONS
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PAVEMENT MARKINGS

JOB No. 234153
C007

QUANTITIES THIS SHEET	
ITEM	QTY.
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	10 Ea
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	10 Ea
Channelizing Device, 42 inch, Fluorescent, Furn	100 Ea
Channelizing Device, 42 inch, Fluorescent, Oper	100 Ea
Lighted Arrow, Type C, Furn	2 Ea
Lighted Arrow, Type C, Oper	2 Ea
Sign, Type B, Temp, Prismatic, Furn	350 Sft
Sign, Type B, Temp, Prismatic, Oper	350 Sft

W+
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**CITY OF
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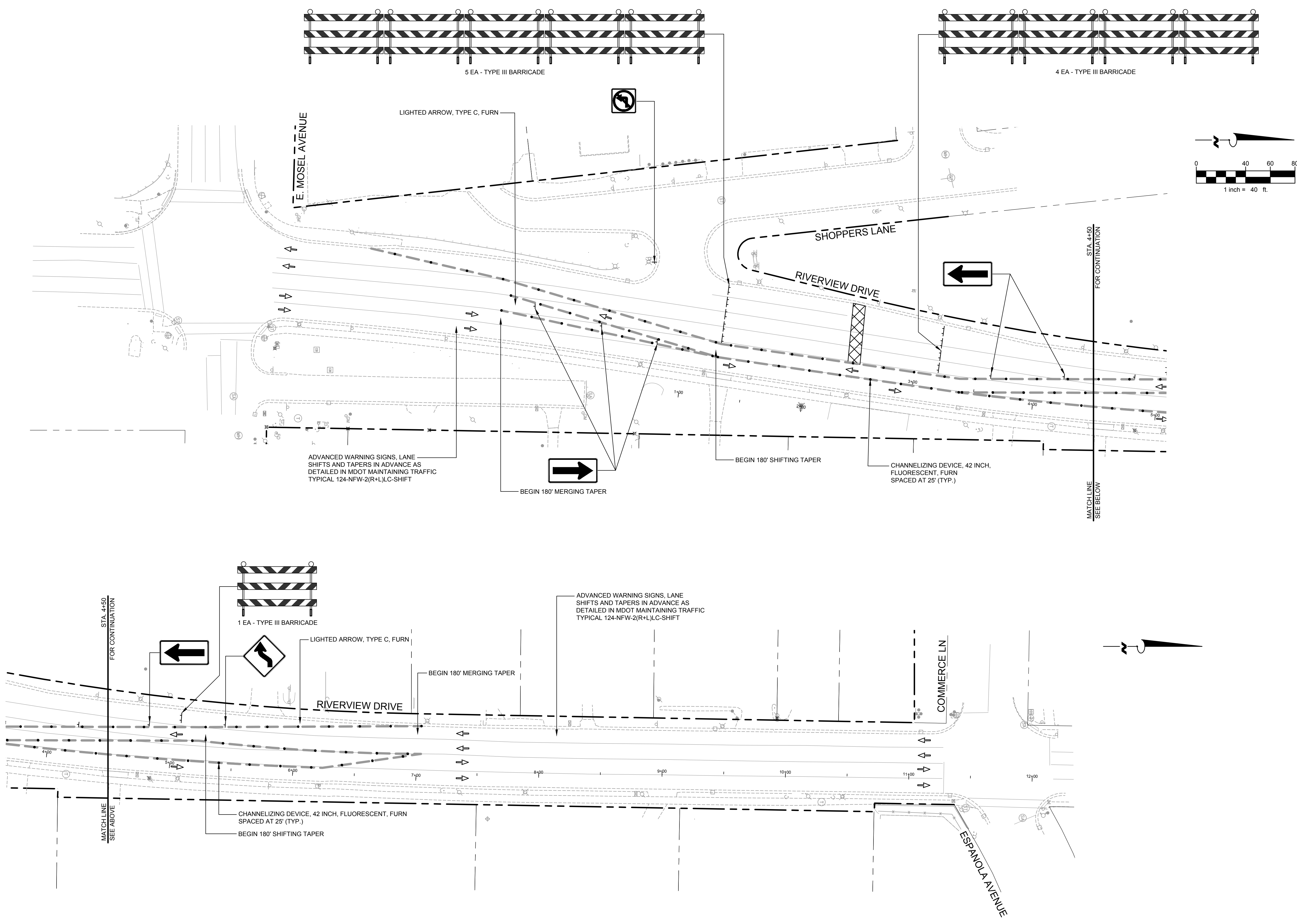
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MAINTAINING TRAFFIC
 PHASE I

JOB No. 234153
C008



MISCELLANEOUS SIGNS

QTY	SIGN	SIZE	TOTAL AREA
2 EA	R9-9	30 INCH X 18 INCH	7.5 SFT

NOTE:
 CONTRACTOR SHALL UTILIZE PEDESTRIAN TYPE II BARRICADE, TEMP AND R9-9 "SIDEWALK CLOSED" SIGNS TO CLOSE SIDEWALKS AS NEEDED FOR WATER MAIN INSTALLATION.

LEGEND

	WORK AREA
	CHANNELIZING DEVICES
	TRAFFIC FLOW

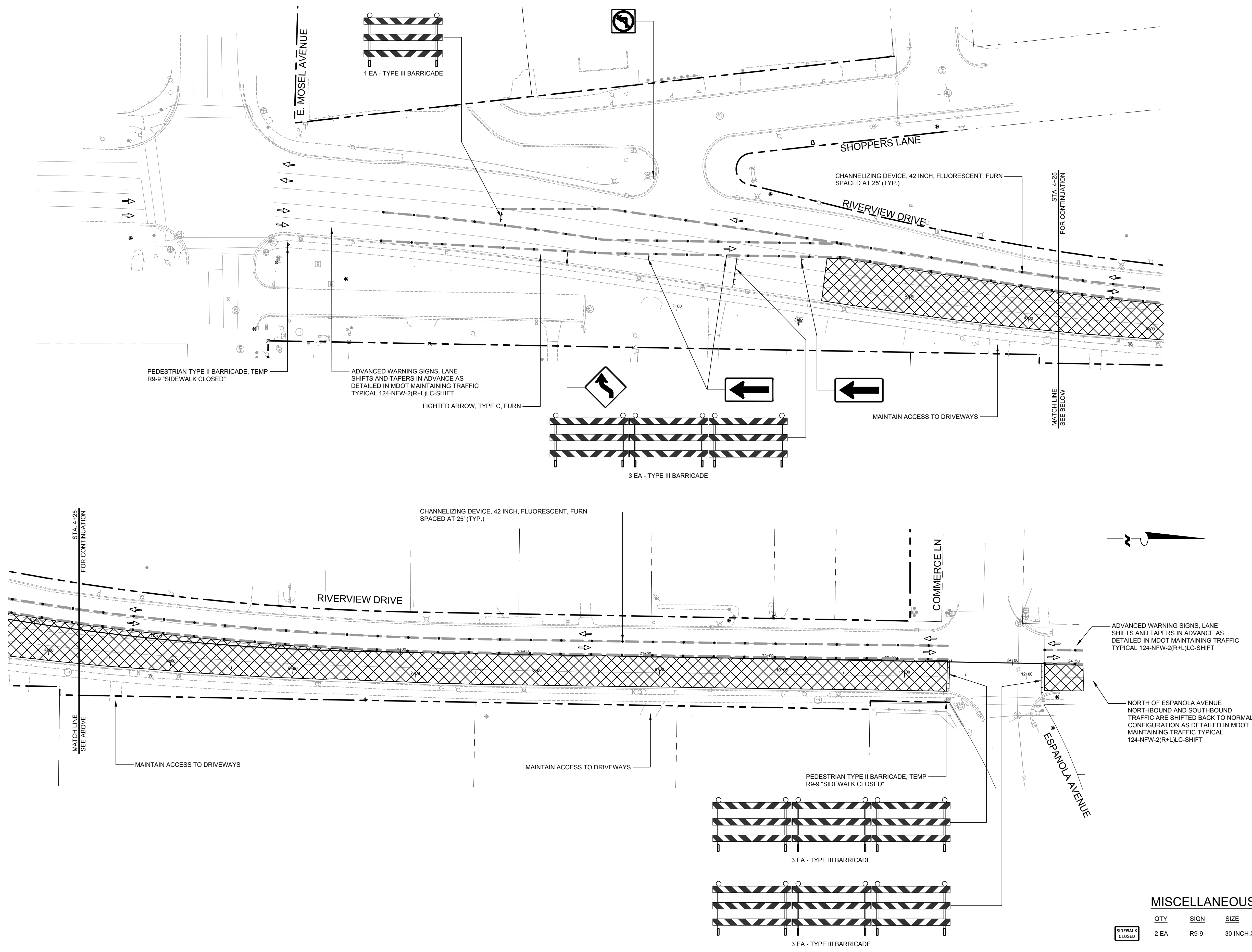
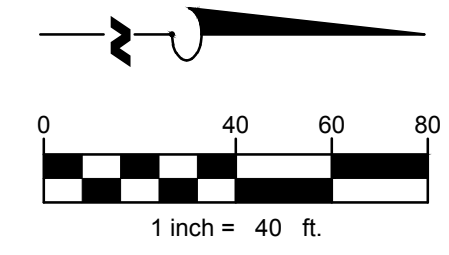
QUANTITIES THIS SHEET

ITEM	QTY.
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	10 Ea
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	10 Ea
Pedestrian Type II Barricade, Temp	2 Ea
Channelizing Device, 42 inch, Fluorescent, Furn	150 Ea
Channelizing Device, 42 inch, Fluorescent, Oper	150 Ea
Lighted Arrow, Type C, Furn	2 Ea
Lighted Arrow, Type C, Oper	2 Ea
Sign, Type B, Temp, Prismatic, Furn	350 Sft
Sign, Type B, Temp, Prismatic, Oper	350 Sft



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 KALAMAZOO, MI 49001



MISCELLANEOUS SIGNS

QTY	SIGN	SIZE	TOTAL AREA
2 EA	R9-9	30 INCH X 18 INCH	7.5 SFT

LEGEND

- WORK AREA
- CHANNELIZING DEVICES
- TRAFFIC FLOW

NOTE:
 CONTRACTOR SHALL UTILIZE PEDESTRIAN TYPE II BARRICADE, TEMP
 AND R9-9 "SIDEWALK CLOSED" SIGNS TO CLOSE SIDEWALKS AS
 NEEDED FOR WATER MAIN INSTALLATION.

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MAINTAINING TRAFFIC
 PHASE II

JOB No. 234153
C009