



KALAMAZOO, MI



# CITY OF KALAMAZOO, MICHIGAN

## E. ML AVE & S. 35TH ST

### TRANSMISSION WATERMAIN



2025



#### ADMINISTRATION

JAMES RITSEMA - CITY MANAGER  
 JAMES BAKER, PE - PUBLIC SERVICES DIRECTOR  
 ANNA CRANDALL, PE - ASSISTANT CITY ENGINEER - WATER RESOURCES DIVISION  
 DEBBIE JUNG, PE - SENIOR CITY ENGINEER - WATER RESOURCES DIVISION

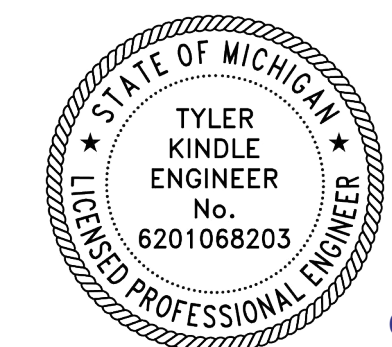


#### MEMBERS OF COMMISSION

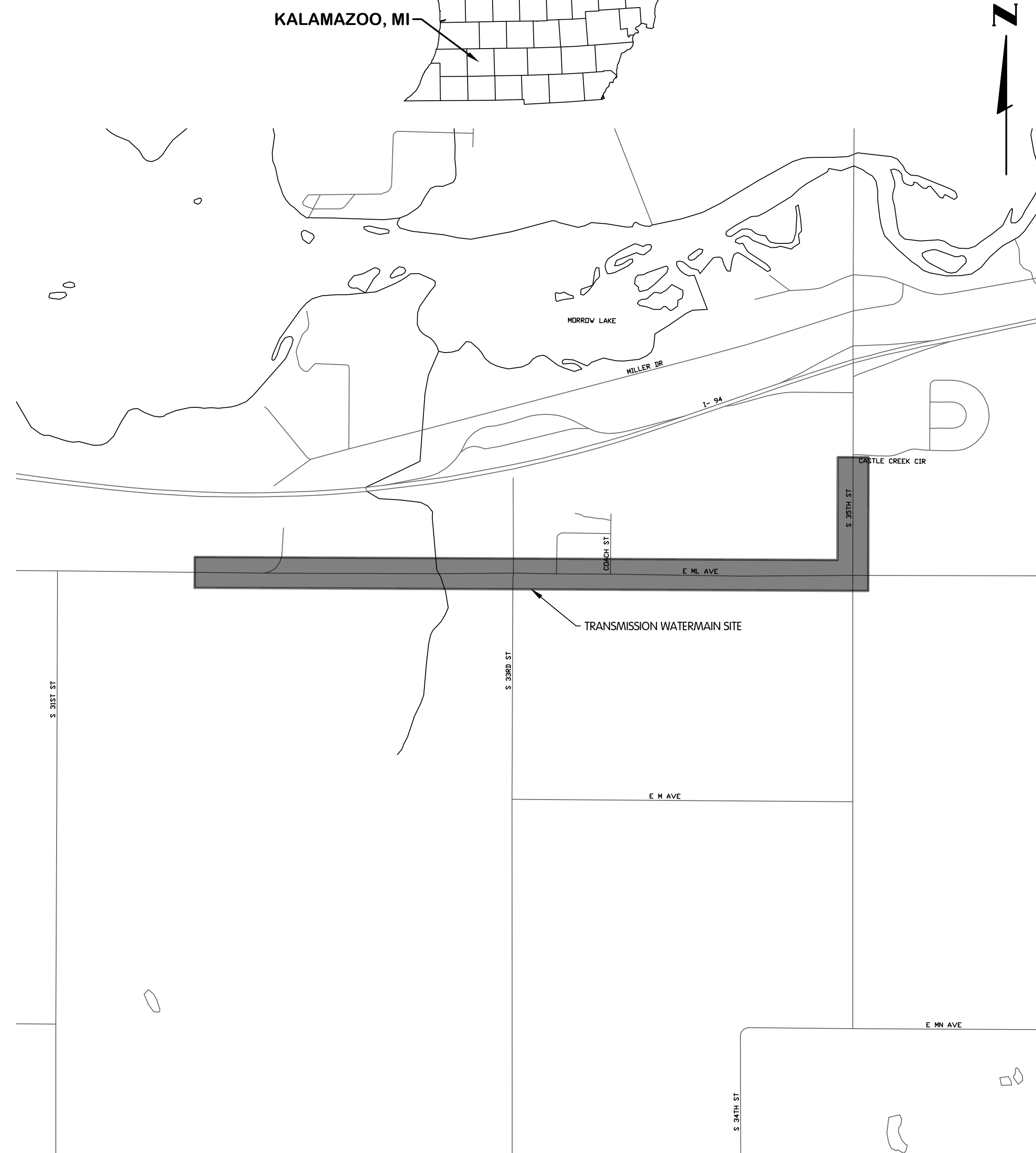
DAVID ANDERSON - MAYOR

JEANNE HESS - VICE MAYOR  
 QIANNA DECKER  
 CHRIS PRAEDEL

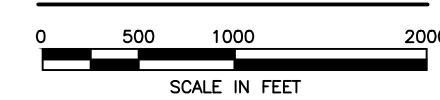
DON COONEY  
 STEPHANIE HOFFMAN  
 ALONZO WILSON



05/27/2025



LOCATION MAP



ENGINEER:  
**JONES & HENRY ENGINEERS, LTD.**  
 4791 CAMPUS DRIVE  
 KALAMAZOO, MICHIGAN 49008

OWNER:  
**CITY OF KALAMAZOO**  
 415 E. STOCKBRIDGE AVENUE  
 KALAMAZOO, MICHIGAN 49001

KAL-8167001COVER-COVER  
 5/21/2025 12:53 PM - CFERRELL  
 5/23/2025 9:25 AM



Jones & Henry  
 Engineers, Ltd.



Fluid thinking®  
 www.JHeng.com

JOB NO. 017-8167.001

STATUS: ISSUE FOR BID

DATE: MAY 2025

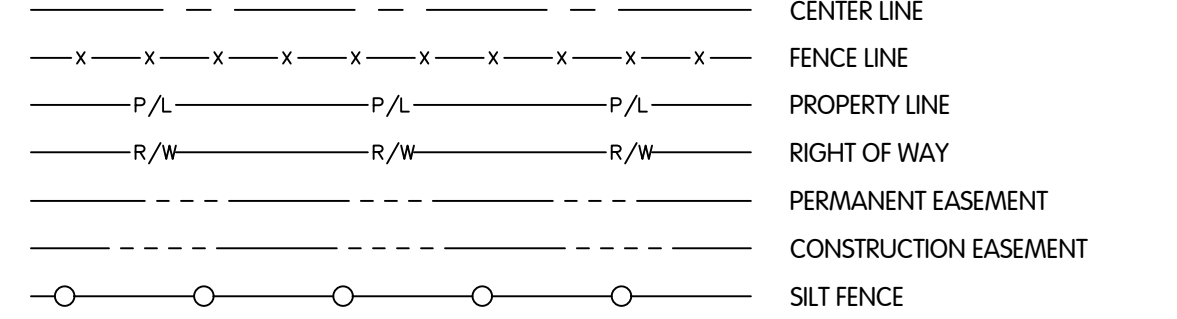
**EXISTING SYMBOLS AND ABBREVIATIONS**

	AERIAL CONTROL POINT	+P	POWER LINE MARKER
	AERIAL WING POINT		POWER POLE
	AIR CONDITIONING UNIT		POWER POLE AND TELEPHONE POLE
	AXLE		RAIL ROAD CROSSING SIGNAL
	BARBEQUE GRILL		RAIL ROAD GATE
	BENCHMARK		RAIL ROAD MILE POST
	BOLLARD		RAIL ROAD SPIKE
	BOLT		RAIL ROAD SPIKE SET
	CABLE TV		SANITARY MANHOLE
	CATCH BASIN		SANITARY VALVE
	CLEAN OUT		SANITARY VENT
	CONCRETE MONUMENT		SANITARY MARKER
	CONIFEROUS TREE		SATELLITE DISH
	CONTROL POINT		SEPTIC TANK
	CONTROLLER POLE MOUNTED		SHRUB
	CURB INLET		SIGN
	DECIDUOUS TREE		SIGNAL
	DECORATIVE ROCK		SOIL BORING
	DRAIN TILE		SPIGOT
	DRILL HOLE		SPRINKLER HEAD
	DRY WELL		SPOT ELEVATION *POINT OF ELEVATION IS DECIMAL
	EDGE OF PAVEMENT		STORM LINE MARKER
	ELECTRIC MANHOLE		STORM MANHOLE
	ELECTRIC METER		STUMP
	ELECTRIC PULLBOX		SUPPORT POLE
	ELECTRIC TRANSFORMER		T-BAR
	ELECTRIC VAULT		TACKED HUB
	EXISTING BUILDING		TANK FILLER CAP
	FIRE HYDRANT OR YARD HYDRANT		TC - TOP OF CURB ELEVATION
	FLAG POLE		G - GUTTER ELEVATION
	FORCE MAIN FLUSHING CONNECTION		TELEPHONE BOOTH
	FOUND MONUMENT BOX		TELEPHONE LINE MARKER
	GAS LINE MARKER		TELEPHONE MANHOLE
	GAS LINE VENT		TELEPHONE PEDESTAL
	GAS MANHOLE		TELEPHONE POLE
	GAS METER		TELEPHONE POLE AND LIGHT POLE
	GAS TEST STATION		TOP OF WALK
	GAS VALVE		TOPO GRADE SHOT (THE OF THE NUMBER SIGNIFIES THE LOCATION OF THE SHOT)
	GAS WELL		TOWER
	GOLF BALL WASHER		TPB
	GUY WIRE		TRAFFIC MANHOLE
	HEAD STONE		TRAFFIC PULL BOX
	INLET PROTECTION		UNKNOWN BOX
	INVERT ELEVATION		UNKNOWN MANHOLE
	IRON PIN (OR LABELED POST, MARKER ETC.)		UNKNOWN PEDESTAL
	LIGHT, POWER POLE AND TELEPHONE POLE		UNKNOWN POLE
	LIGHT POLE		UNKNOWN VALVE
	LIGHT POLE BOX		UNKNOWN WELL
	MAILBOX		VAULT
	METER PIT		VENT PIPE
	MINE SPIKE		WATER LINE MARKER
	MONITORING WELL		WATER MANHOLE
	NEWS PAPER BOX		WATER MAIN PLUG
	OIL TANK		WATER METER
	PARKING METER		WATER METER PIT
	PAVEMENT BORING		WATER WELL
	PAY PHONE		WATER VALVE
	PETROLEUM PUMP		WATER VENT
	POST		YARD LIGHT

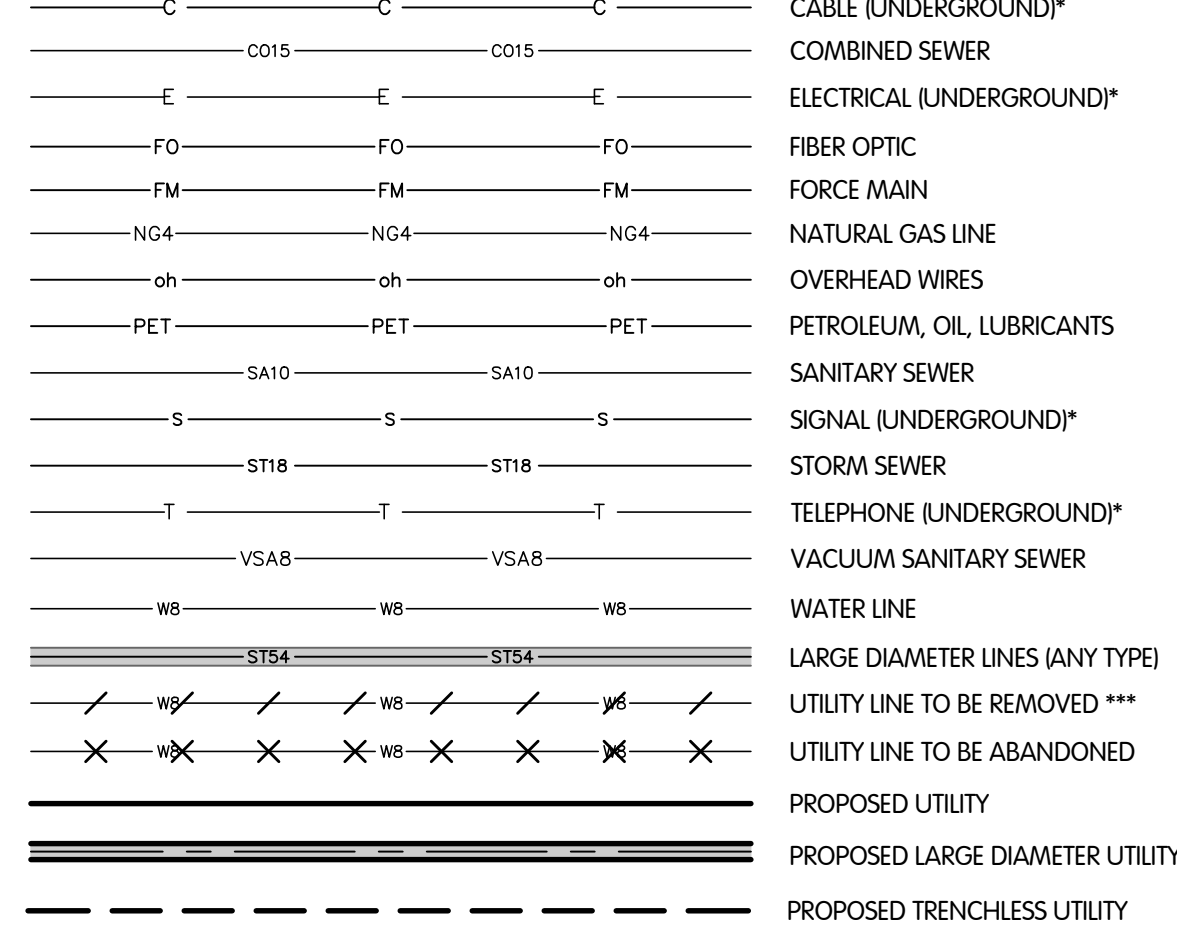
**PROPOSED SYMBOLS**

	ABANDON VALVE BOX		METER PIT
	ABANDON VALVE MANHOLE		PLUG VALVE AND BOX
	AIR RELEASE VALVE AND MANHOLE		PLUG VALVE AND MANHOLE
	BUTTERFLY VALVE AND BOX		POLE TO BE TEMPORARILY SUPPORTED AND PROTECTED BY CONTRACTOR
	BUTTERFLY VALVE AND MANHOLE		REDUCER
	CATCH BASIN		SANITARY MANHOLE
	CLEAN OUT		STORM MANHOLE
	CURB INLET		STUMP TO BE REMOVED
	FIRE HYDRANT ASSEMBLY, TYPE A		TAPPING SLEEVE VALVE (TYPE) AND BOX (LINE SIZE BY VALVE SIZE)
	FIRE HYDRANT ASSEMBLY, TYPE B		TAPPING SLEEVE VALVE (TYPE) AND MANHOLE (LINE SIZE BY VALVE SIZE)
	FIRE HYDRANT TO BE REMOVED		TREE TO BE REMOVED (STUMPS, ROOTS, OTHER PROTRUDING OBSTRUCTIONS SHALL BE REMOVED TO A MIN. OF 6" BELOW FINAL GROUND SURFACE)
	FORCE MAIN FLUSHING CONNECTION		WATER VALVE MANHOLE OR BOX TO BE ABANDONED, SEE SPECIFICATIONS
	GATE VALVE AND BOX		
	GATE VALVE AND MANHOLE		
	INSERTING VALVE AND BOX		
	INSERTING VALVE AND MANHOLE		

**TOPOGRAPHY LINES:**



**UTILITY LINES:**

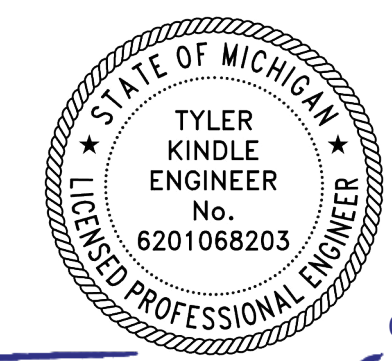


ALPHA DESIGNATION REFERS TO UTILITY TYPE OR SERVICE TYPES, NUMERICAL DESIGNATION REFERS TO PIPE NOMINAL DIAMETER. LINES WITH NO NUMERICAL DESIGNATION ARE OF UNKNOWN SIZE.

\* AERIAL LINES, IF SHOWN, ARE DESIGNATED WITH LOWER CASE LETTERS  
 \*\* FOR ELLIPTICAL SEWERS, THE VERTICAL DIMENSION (RISE) IS CALLED OUT FIRST FOLLOWED BY THE HORIZONTAL DIMENSION (SPAN). EXAMPLE: 45X35 (RISE X SPAN) THE VERTICAL DIMENSION IS 45", THE HORIZONTAL DIMENSION IS 35"  
 \*\*\* INDICATES THE REMOVAL OF ALL SPECIFIED STRUCTURES AND APPURTENANCES.

**DRAWING INDEX**

Sheet List Table		
Page Number	Sheet Number	Sheet Title
GENERAL		
1	G-0.1	LEGEND AND INDEX
2	G-0.2	CIVIL DETAILS
3	G-0.3	EROSION CONTROL DETAILS
4	G-0.4	GEOTECHICAL REPORT - PARTIAL DATA
5	G-0.5	SITE LOCATION MAPS AND SHEETS KEY
CIVIL: TRANSMISSION MAIN - WATER		
6	W-1.1	E. ML AVE. PLAN & PROFILE STA. 0+00 TO 5+50
7	W-1.2	E. ML AVE. PLAN & PROFILE STA. 5+50 TO 11+00
8	W-1.3	E. ML AVE. PLAN & PROFILE STA. 11+00 TO 16+50
9	W-1.4	E. ML AVE. PLAN & PROFILE STA. 16+50 TO 22+00
10	W-1.5	E. ML AVE. PLAN & PROFILE STA. 22+00 TO 27+50
11	W-1.6	E. ML AVE. PLAN & PROFILE STA. 27+50 TO 33+00
12	W-1.7	E. ML AVE. PLAN & PROFILE STA. 33+00 TO 38+50
13	W-1.8	E. ML AVE. PLAN & PROFILE STA. 38+50 TO 44+00
14	W-1.9	E. ML AVE. PLAN & PROFILE STA. 44+00 TO 49+50
15	W-1.10	E. ML AVE. PLAN & PROFILE STA. 49+50 TO 55+00
16	W-1.11	E. ML AVE. PLAN & PROFILE STA. 55+00 TO 60+50
17	W-1.12	E. ML AVE. PLAN & PROFILE STA. 60+50 TO 66+00
18	W-1.13	E. ML AVE. PLAN & PROFILE STA. 66+00 TO 71+50
19	W-2.1	S. 35TH ST. PLAN & PROFILE STA. 0+00 TO 5+50
20	W-2.2	S. 35TH ST. PLAN & PROFILE STA. 5+50 TO 11+00
21	W-2.3	S. 35TH ST. PLAN & PROFILE STA. 11+00 TO 16+50
22	W-3.1	S. 33RD ST. PLAN & PROFILE STA. 0+00 TO 1+00
CIVIL: SURFACE RESTORATION		
23	SR-1.1-2	E. ML AVE. SURFACE RESTORATION STA 0+00 TO 11+00
24	SR-1.3-4	E. ML AVE. SURFACE RESTORATION STA 11+00 TO 22+00
25	SR-1.5-6	E. ML AVE. SURFACE RESTORATION STA 22+00 TO 33+00
26	SR-1.7-8	E. ML AVE. SURFACE RESTORATION STA 33+00 TO 44+00
27	SR-1.9-10	E. ML AVE. SURFACE RESTORATION STA 44+00 TO 55+00
28	SR-1.11-12	E. ML AVE. SURFACE RESTORATION STA 55+00 TO 66+00
29	SR-1.13	E. ML AVE. SURFACE RESTORATION STA 66+00 TO 71+00
30	SR-2.1-2	S. 35TH ST. SURFACE RESTORATION STA 0+00 TO 11+00
31	SR-2.3	S. 35TH ST. SURFACE RESTORATION STA 11+00 TO 17+00
CIVIL: TRAFFIC CONTROL		
32	TC-1.1	E. ML AVE. - TRAFFIC CONTROL & LOCAL RUN AROUND
33	TC-1.2	S. 35TH ST. - TRAFFIC CONTROL & LOCAL RUN AROUND



05/27/2025

**STANDARD ABBREVIATIONS**

Alum. Ave.	Aluminum Avenue	Max.	Maximum
B.M.	Benchmark	M.H.	Manhole
B.F.	Blind Flange	M.J.	Mechanical Joint
Bldg.	Building	Min.	Minimum
c/c	Center To Center	N	North
CK'd Pl.	Checked Plate	NTS	Not To Scale
Conc.	Concrete	OC	On Center
Conc. Dia.	Concrete Diameter	OD	Outside Diameter
Dwg.	Drawing	PE	Plain End
EW	Each Way	R	Radius
EF	Each Face	RR	Railroad
Ecc.	Eccentric	S	South
El.	Elevation	Sch.	Schedule
E	East	Sh	Sheet
Exist.	Existing	SS	Stainless Steel
F	Flange	St.	Street
F	Foot of Foot	Sta.	Station
Gal.	Gallon	T&B	Top And Bottom
Gr.	Grade	Typ.	Typical
Hor.	Horizontal	Vert.	Vertical
"or in.	Inch	W	West
ID	Inside Diameter	W	With
In. El.	Invert Elevation	W	With

**MATERIAL**

ABS	ABS Acrylonitrile-Butadiene-Styrene	HDPE	High Density Polyethylene
ABSC	ABS Composite Sewer Pipe (Truss Pipe)	PCP	Plain Concrete Pipe
BSP	Black Steel Pipe	PE	Polyethylene
CIP	Cast Iron Pipe	PP	Polypropylene
CISP	Cast Iron Soil Pipe	PPVC	Perforated Polyvinyl Chloride Pipe
CMP	Corrugated Metal Pipe	PVC	Polyvinyl Chloride Pipe
CPP	Concrete Pressure Pipe	PVCP	Perforated Vitrified Clay Pipe
CPT	Corrugated Polyethylene Tubing	PVDF	Polyvinylidene Fluoride (Kynar)
CPVC	Chlorinated Polyvinyl Chloride Pipe	RCP	Reinforced Concrete Pipe
Cu	Copper Tubing Or Piping	SP	Steel Pipe
DIP	Ductile Iron Pipe	SSP	Stainless Steel Pipe
FRP	Fiberglass Reinforced Pipe	SWS	Spiral Welded Steel
GLDIP	Glass-Lined Ductile Iron Pipe	UPVC	Unplasticized Polyvinyl Chloride Pipe
GSP	Galvanized Steel Pipe	VCP	Vitrified Clay Pipe

NOTE: SURVEY CONTROL DATA AVAILABLE UPON REQUESTED.

VERTICAL DATUM:  
VERTICAL DATUM IS BASED ON '88 NAVD.

**NOTE: ACCURACY OF EXISTING ELEVATIONS AND DIMENSIONS IS NOT GUARANTEED. FIELD VERIFY BEFORE CONSTRUCTION.**



**LEGEND AND INDEX**  
 CITY OF KALAMAZOO, MICHIGAN  
 E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN

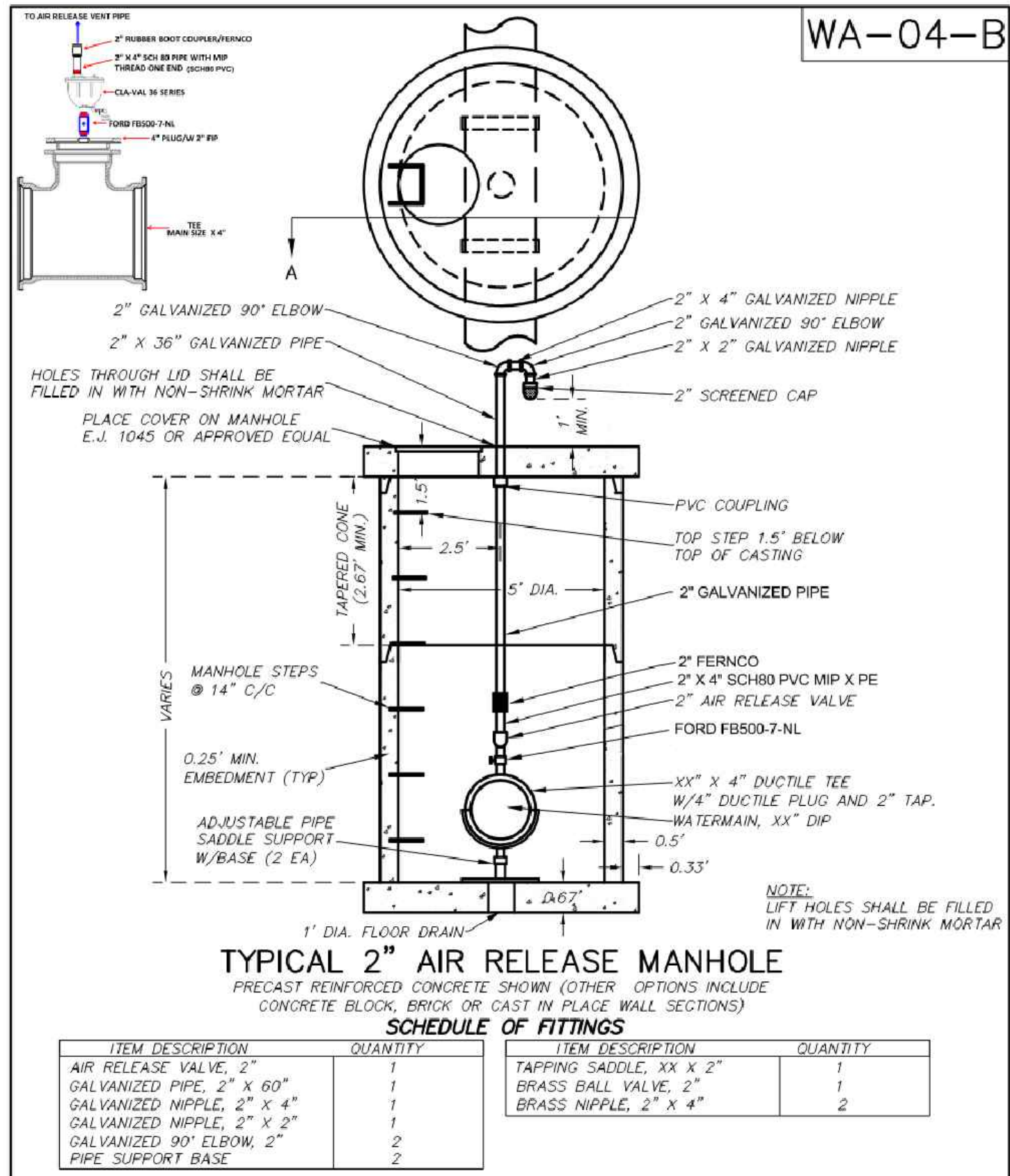
DESIGNED: TLK  
 DRAWN: C.JAF  
 CHECKED: AB

STATUS: ISSUE FOR BID  
 DATE: MAY 2025

SHEET NO.  
**G-0.1**  
 1 OF 33



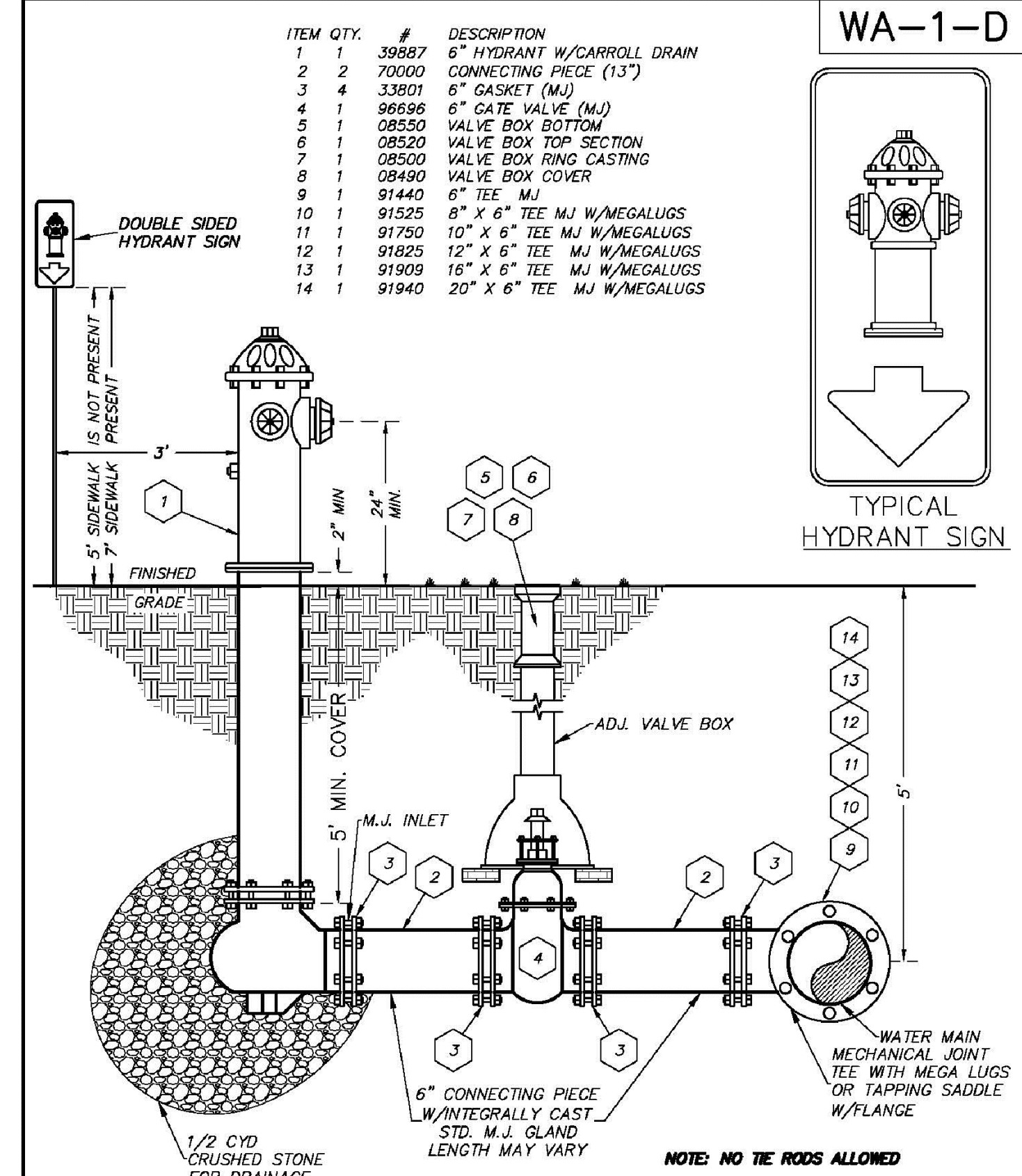
JOB NO. 017-8167.001  
 SCALE AS INDICATED  
 THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE



CITY OF KALAMAZOO  
Department Of Public Services

**AIR RELEASE MANHOLE**

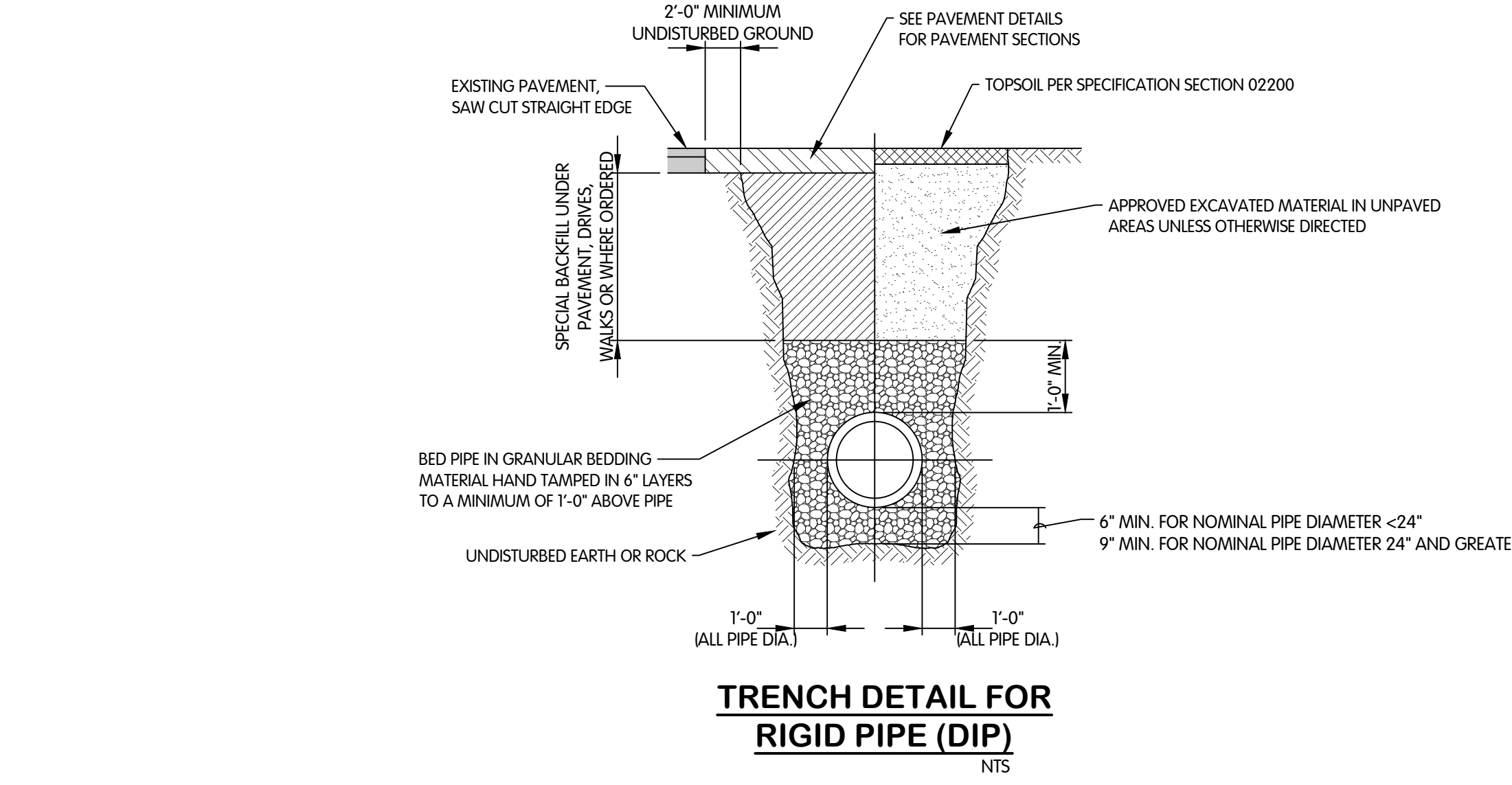
RECOMMENDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_  
ACCEPTED BY: \_\_\_\_\_



CITY OF KALAMAZOO  
Department Of Public Services

**TYPICAL FIRE HYDRANT & GATE VALVE DETAIL**

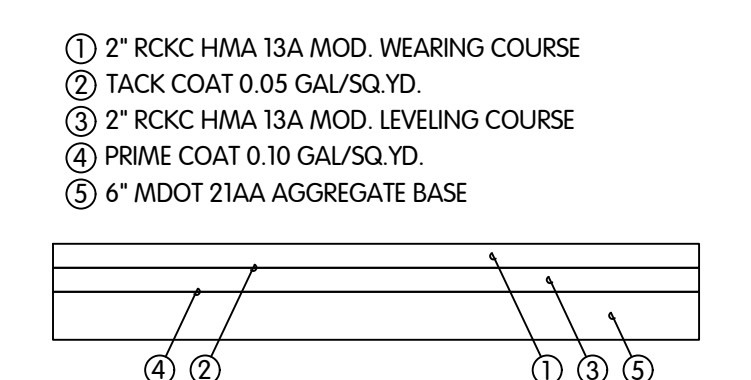
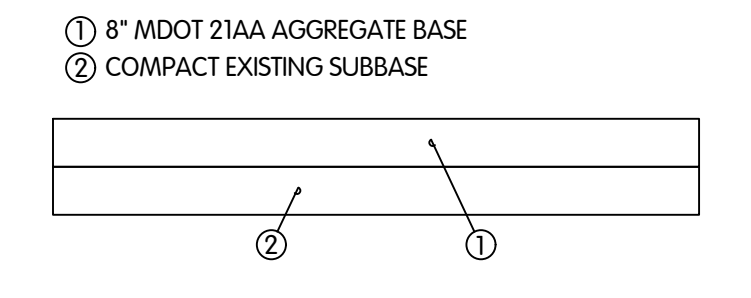
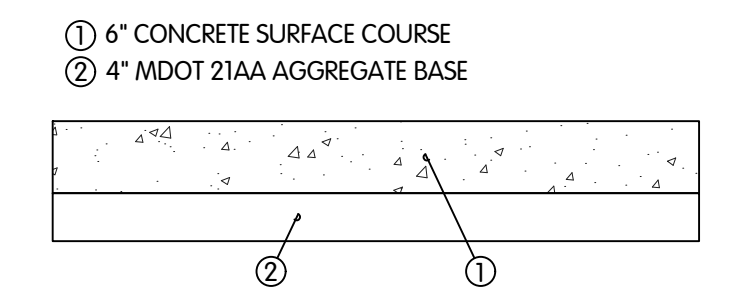
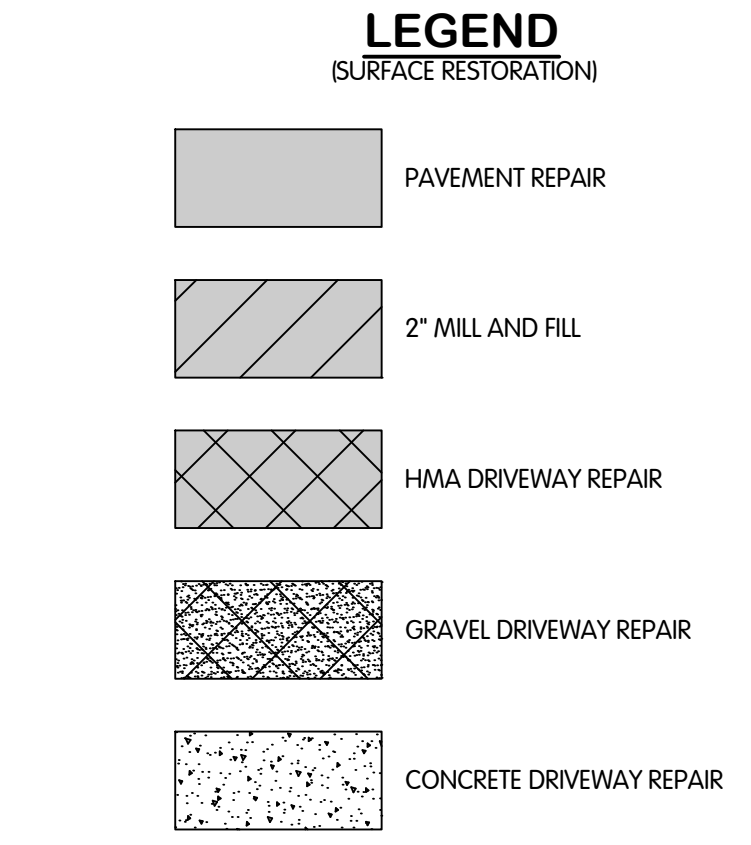
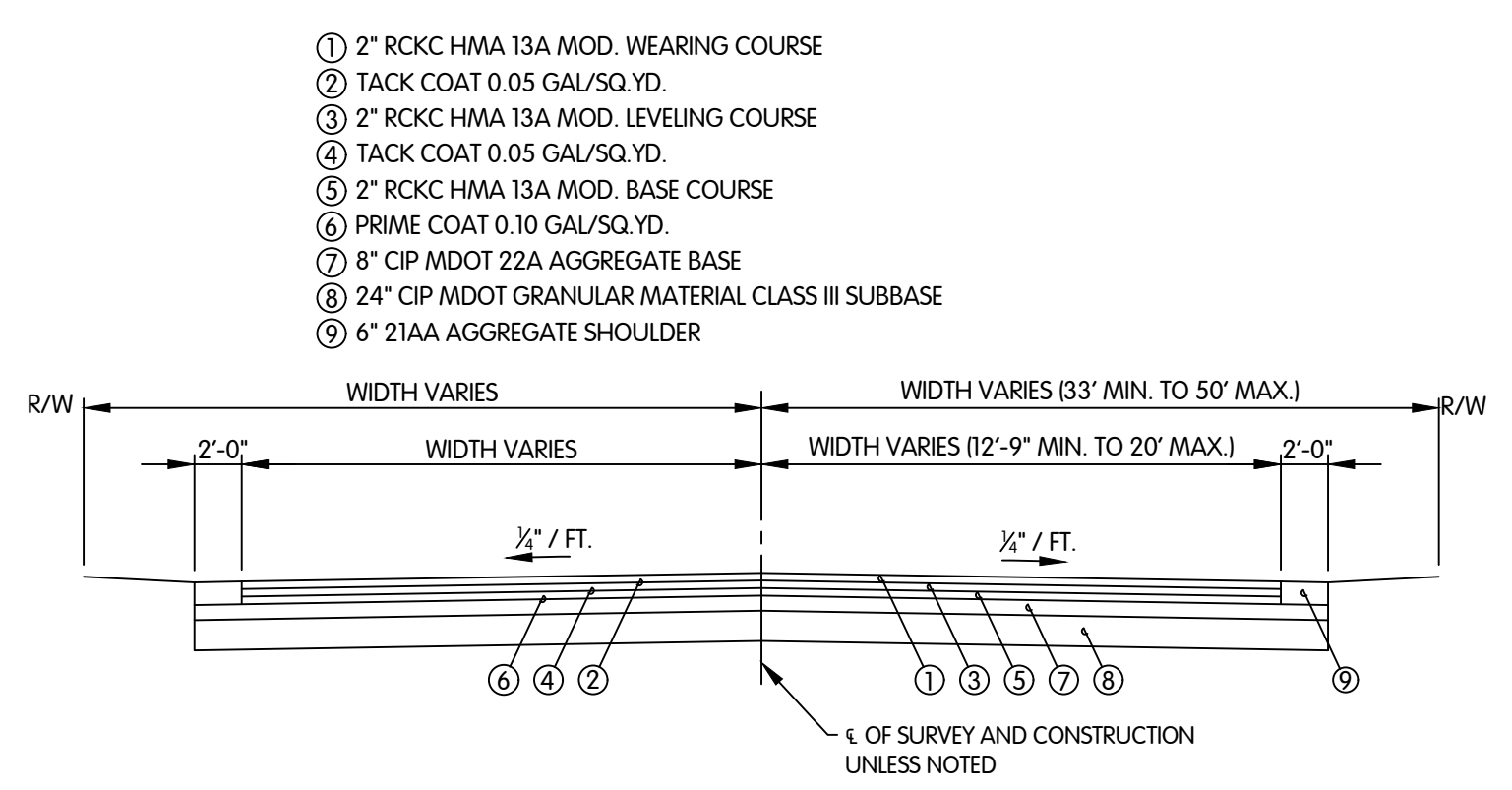
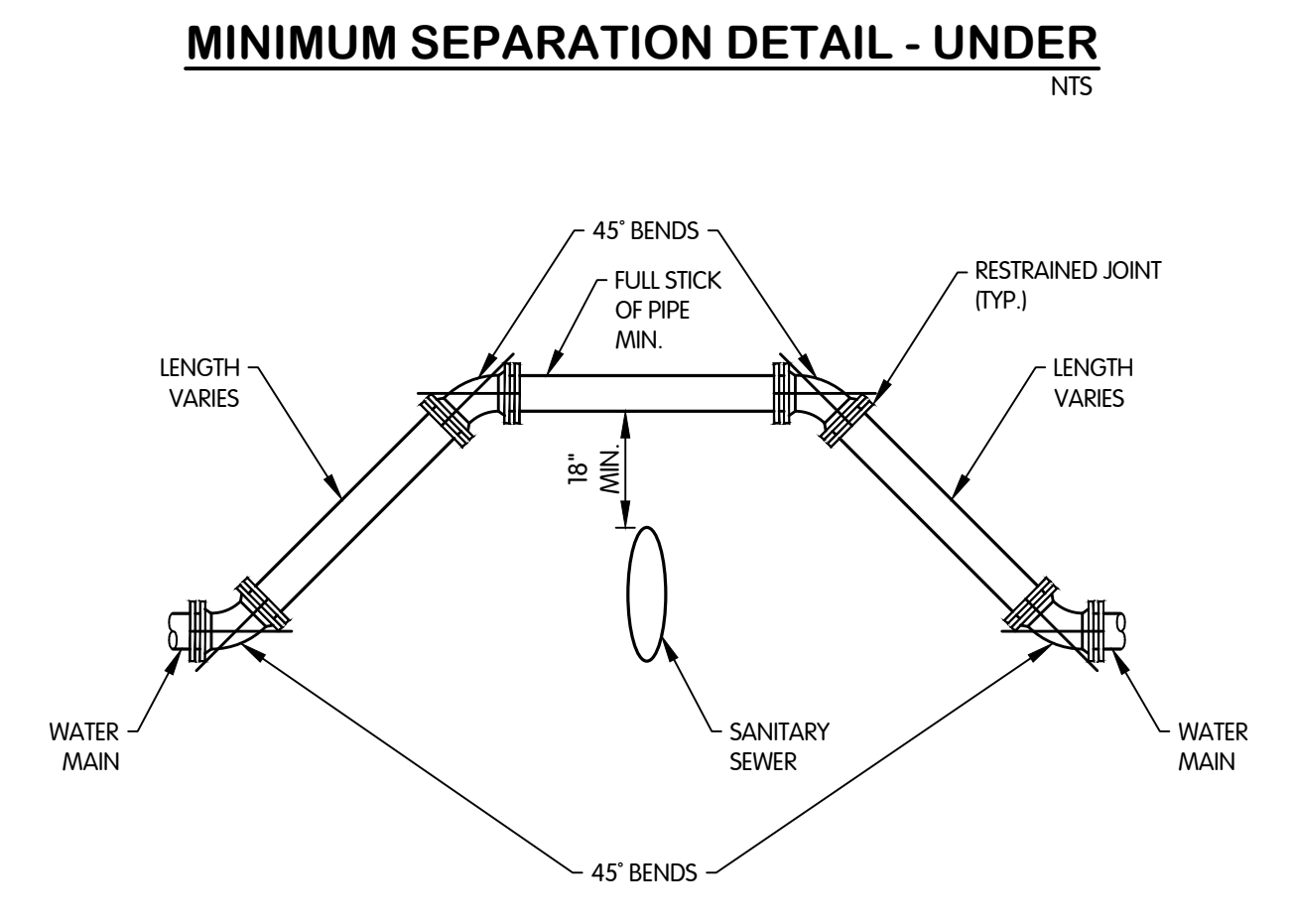
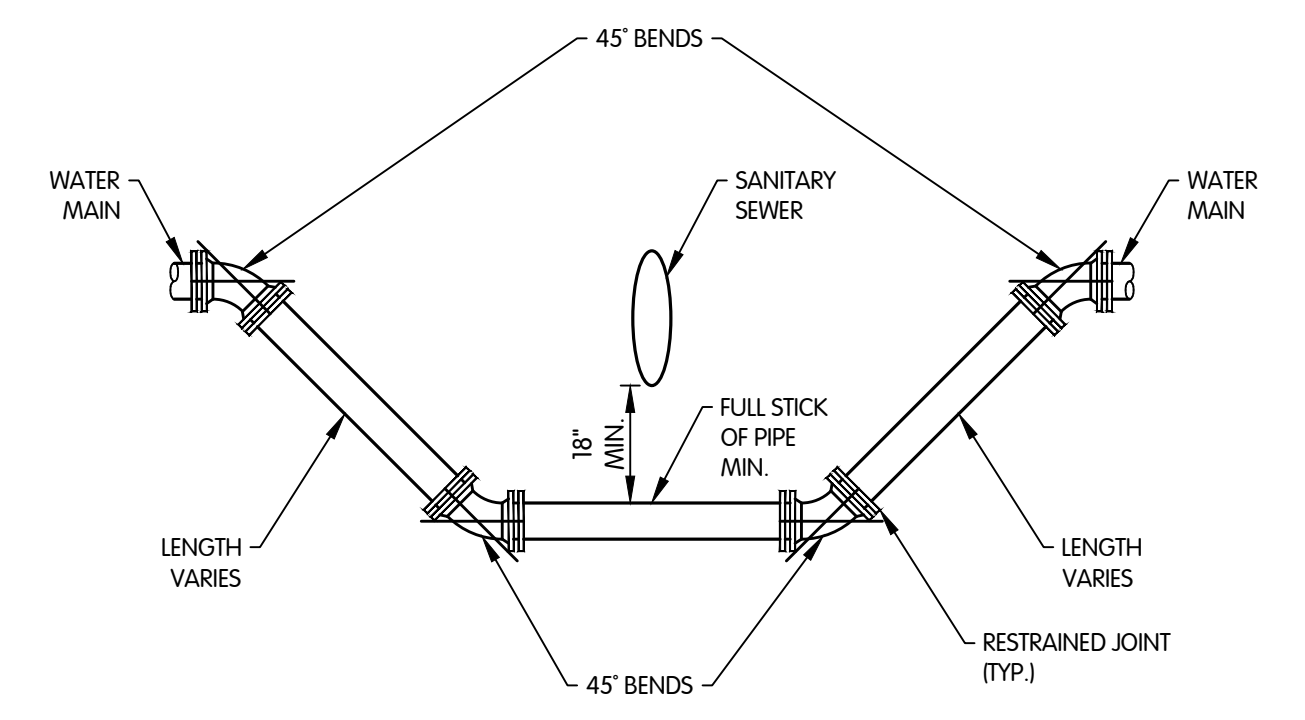
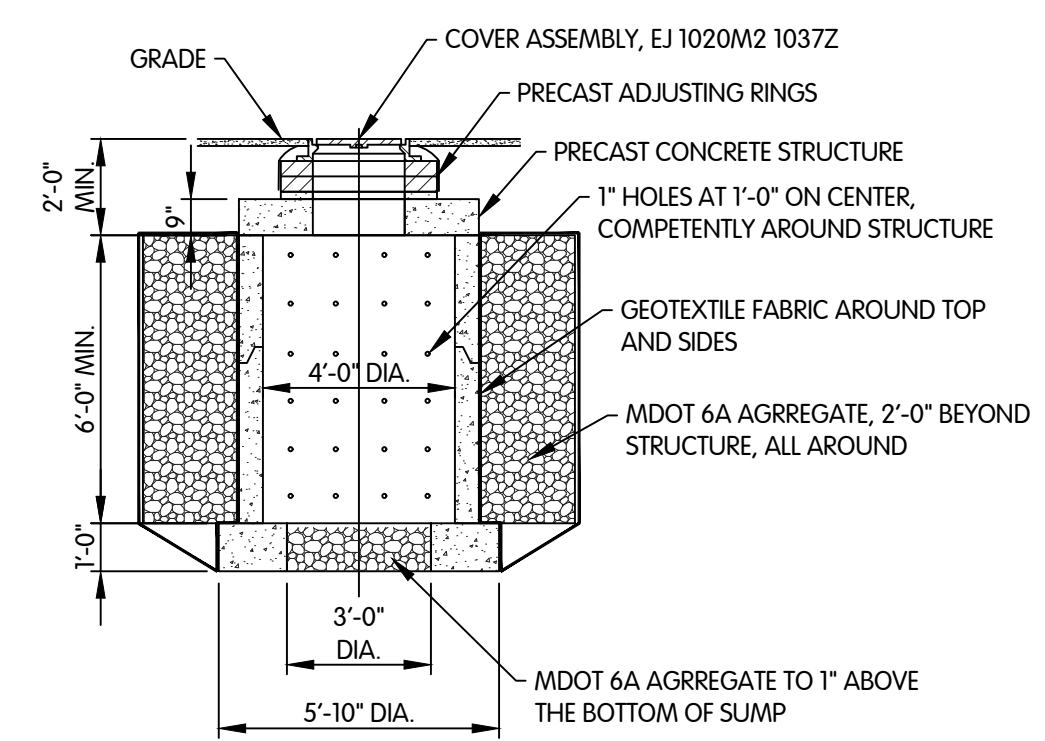
RECOMMENDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_  
ACCEPTED BY: \_\_\_\_\_



**TABLE 3.1 PIPE THRUST RESTRAINT TABLE**

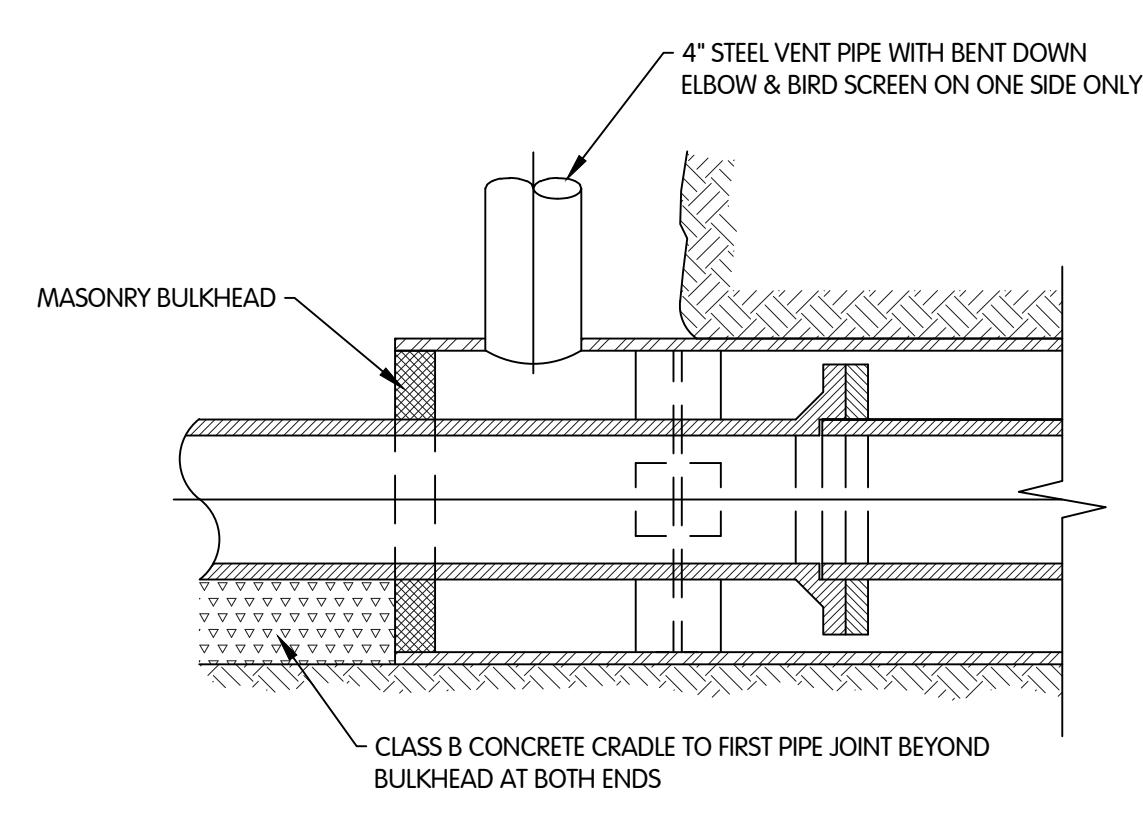
Pipe Size (Inches)	90° Bend	45° Bend	22.5° Bend	11.25° Bend	Tee*	Reducer (One Size)	Reducer (Two Sizes)	Dead End
4	62	26	13	7	60	-	-	60
6	88	37	18	9	84	44	-	84
8	117	49	24	12	111	47	80	111
10	142	59	29	14	133	45	82	133
12	170	71	34	17	158	47	84	158
16	224	93	45	23	203	87	121	203
20	278	116	56	28	247	87	155	247
24	332	138	66	33	291	87	159	291
30	411	171	82	41	351	123	191	351

\* Length of restraint for branch; use the size of the branch  
Consult Engineer for scenarios not included in table.



**TYPICAL PAVEMENT SECTION**  
NTS

**TYPICAL HMA DRIVEWAY SECTION**  
NTS

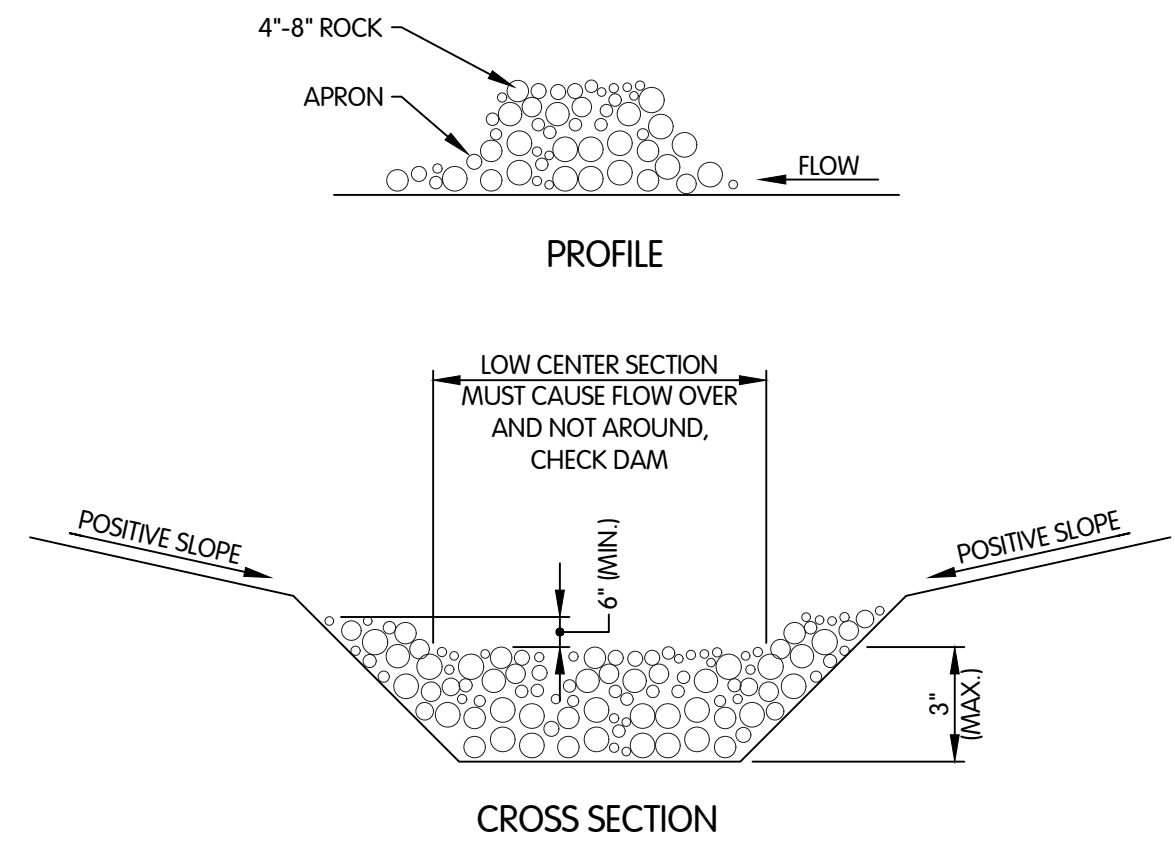


CIVIL DETAILS  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN

Jones & Henry Engineers, Ltd.



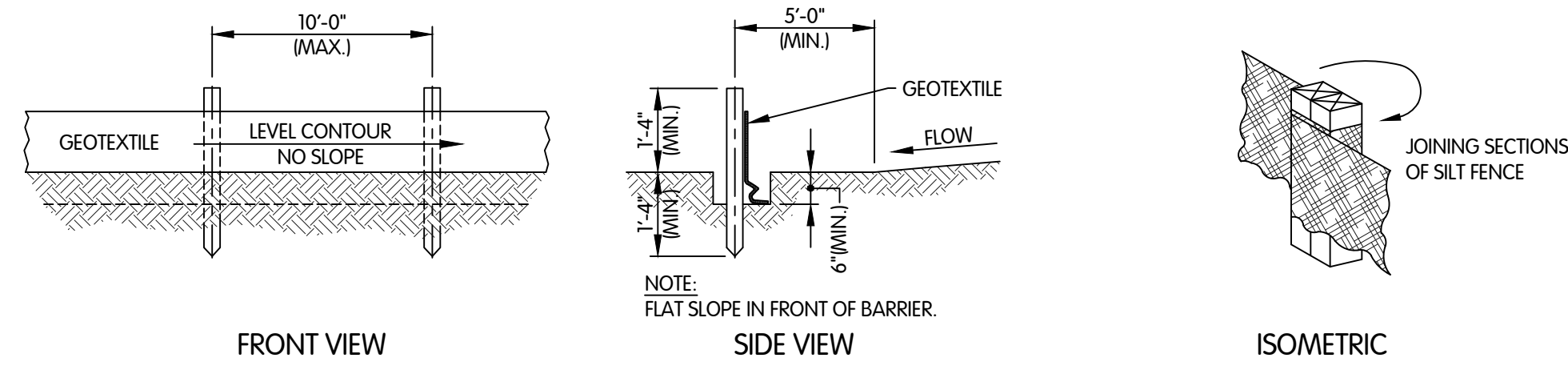
JOB NO. 017-8167.001  
SCALE AS INDICATED  
DESIGNED TLK DRAWN C/JAF CHECKED AB  
STATUS: ISSUE FOR BID  
DATE: MAY 2025



- NOTES:
1. THE CHECK DAM SHALL BE CONSTRUCTED OF 4" TO 8" DIAMETER STONE, PLACED SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL.
  2. THE TOP OF THE CHECK DAM SHALL BE CONSTRUCTED SO THAT THE CENTER IS APPROXIMATELY 6" LOWER THAN THE OUTER EDGES, SO WATER WILL FLOW ACROSS THE CENTER AND NOT AROUND THE ENDS.
  3. THE MAXIMUM HEIGHT OF THE CHECK DAM AT THE CENTER OF THE WEIR SHALL NOT EXCEED 3'-0".
  4. SPACING BETWEEN DAMS SHALL BE AS SHOWN IN THE PLANS OR BY THE FOLLOWING TABLE:

DAM HEIGHT (FT.)	CHECK DAM SPACING			
	CHANNEL SLOPE			
	< 5%	5-10%	10-15%	15-20%
1	65'-0"	30'-0"	20'-0"	15'-0"
2	130'-0"	65'-0"	40'-0"	30'-0"
3	200'-0"	100'-0"	65'-0"	50'-0"

**CHECK DAM**  
NTS



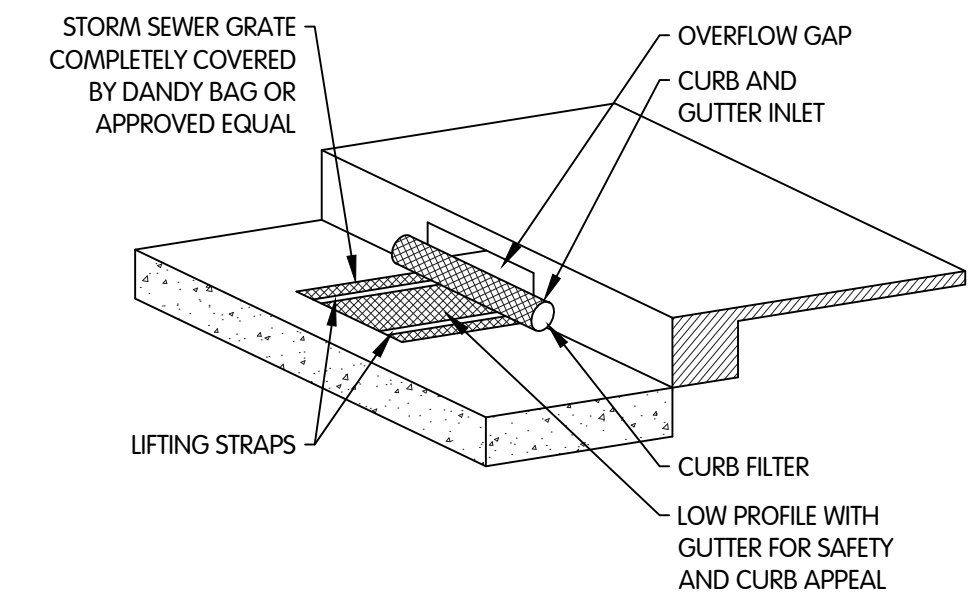
FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D 1682
MULLEN BURST STRENGTH	190 P.S.I. MINIMUM	ASTM D 3786
SLURRY FLOW RATE	0.3 GAL./MIN./FT.² MAX.	-
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM-G-26

- NOTES:
1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
  2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
  3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
  4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
  5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE FENCE.
  6. SOIL STOCKPILES OR OTHER SOURCES OF SEDIMENT SHALL HAVE SILT FENCE PROTECTION.
  7. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6" DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
  8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWN SLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8" OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6" DEEP TRENCH. THE TRENCH SHALL BE BACK FILLED AND COMPACTED.
  9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
  10. MAINTENANCE-- SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVER TOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
    - A. THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED.
    - B. ACCUMULATED SEDIMENT SHALL BE REMOVED.
    - C. OTHER PRACTICES SHALL BE INSTALLED.

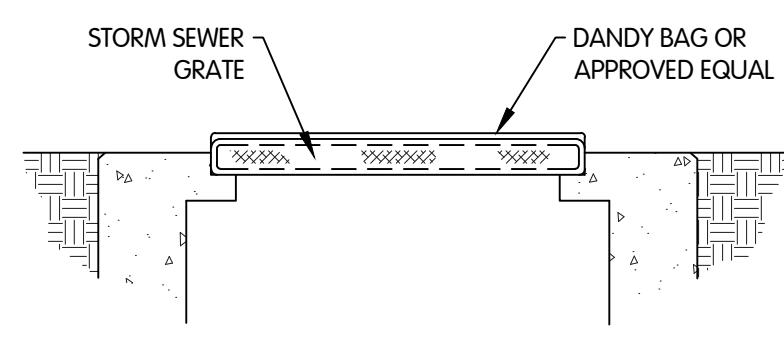
CRITERIA FOR SILT FENCE MATERIALS:

1. FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32" LONG. WOOD POST WILL BE 2" X 2" HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
2. SILT FENCE FABRIC (SEE CHART BELOW):

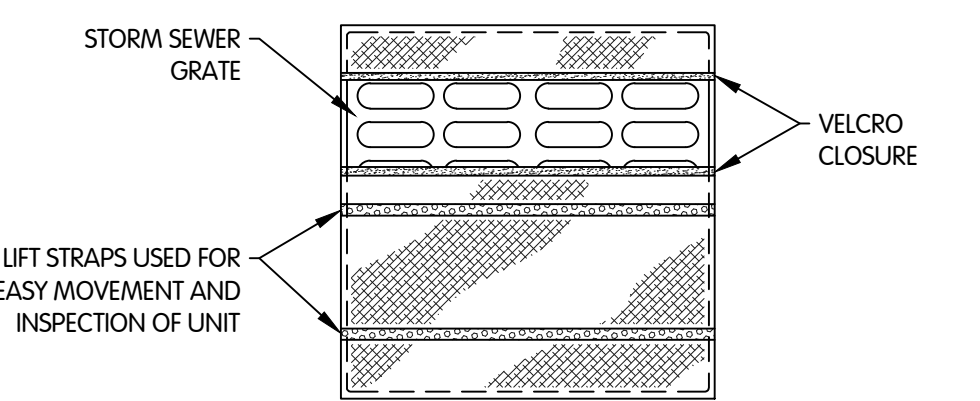
**SILT FENCE**  
NTS



ISOMETRIC



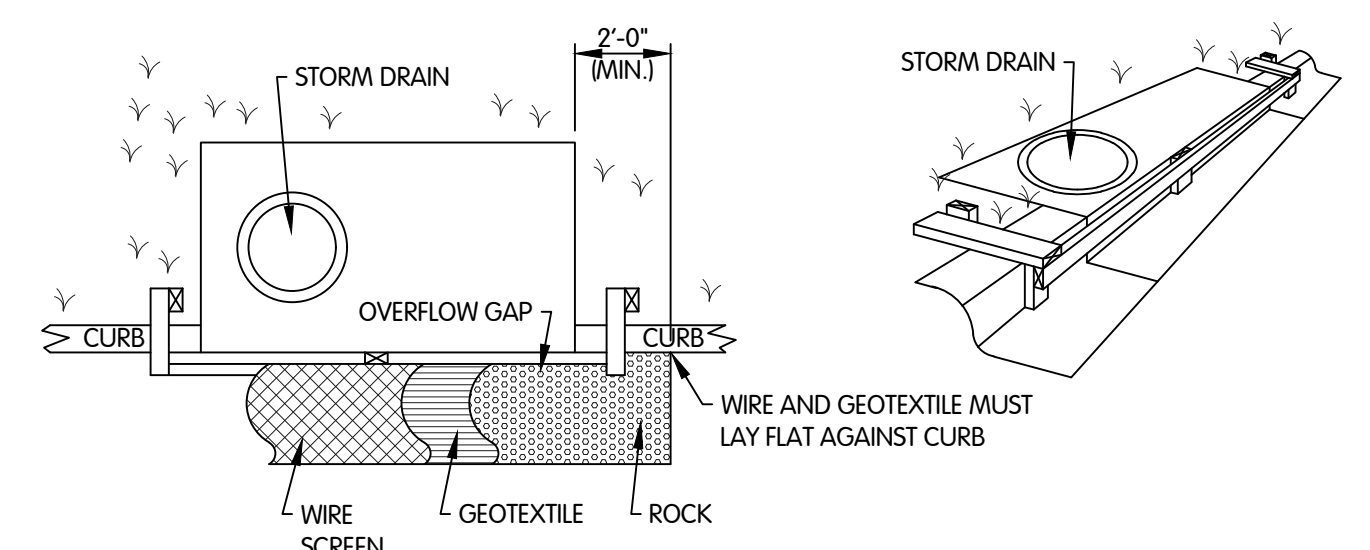
SECTION



PLAN

- NOTE:
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM SEWER BECOMES ACTIVE IN THE CASE OF NEW CONSTRUCTION.

**INLET PROTECTION FOR DRAINS WITHOUT HOODS**  
NTS



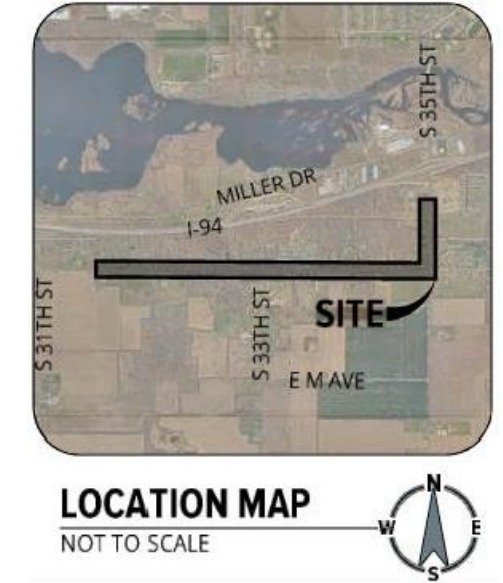
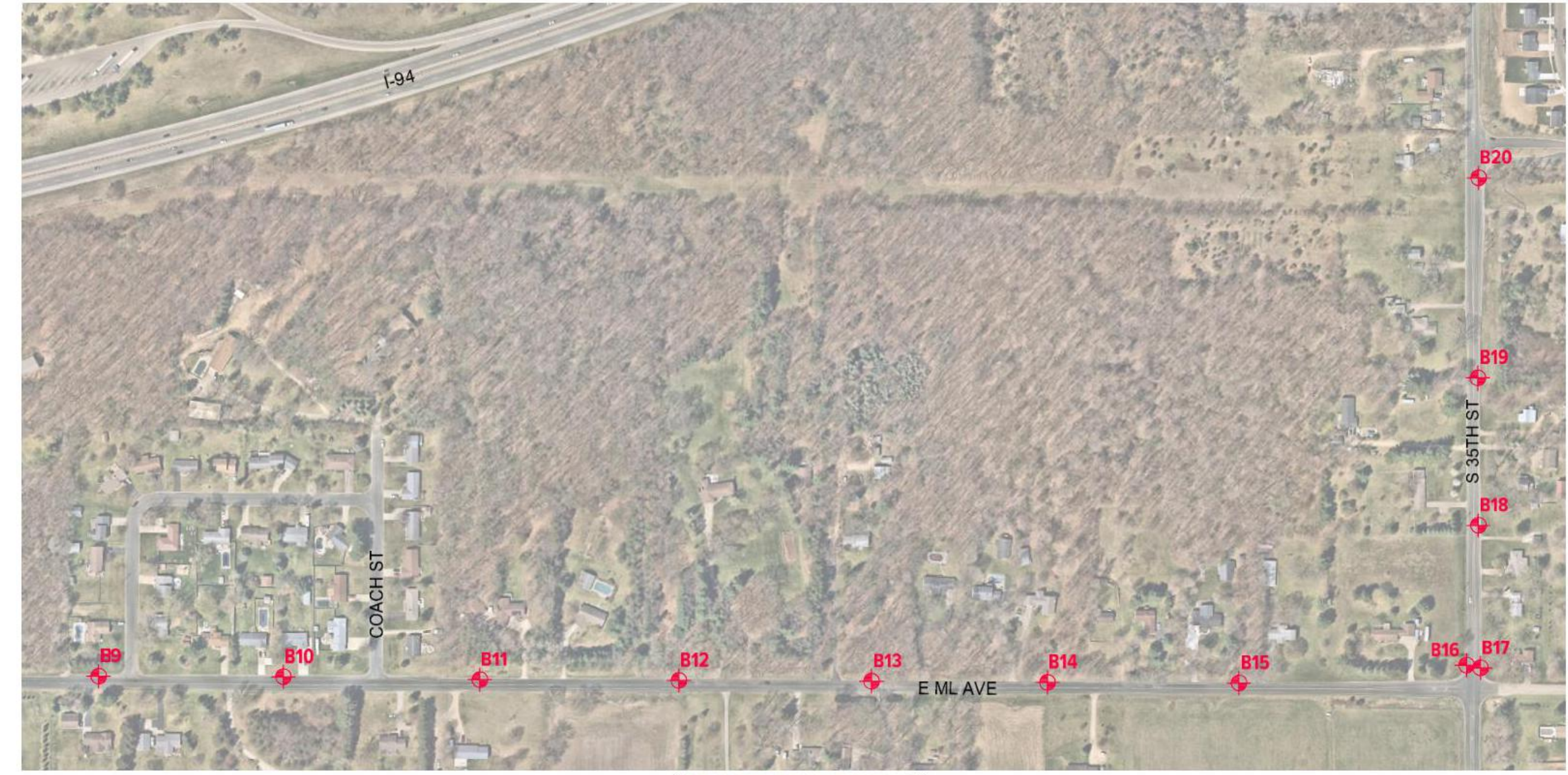
PLAN

ELEVATION

SECTION

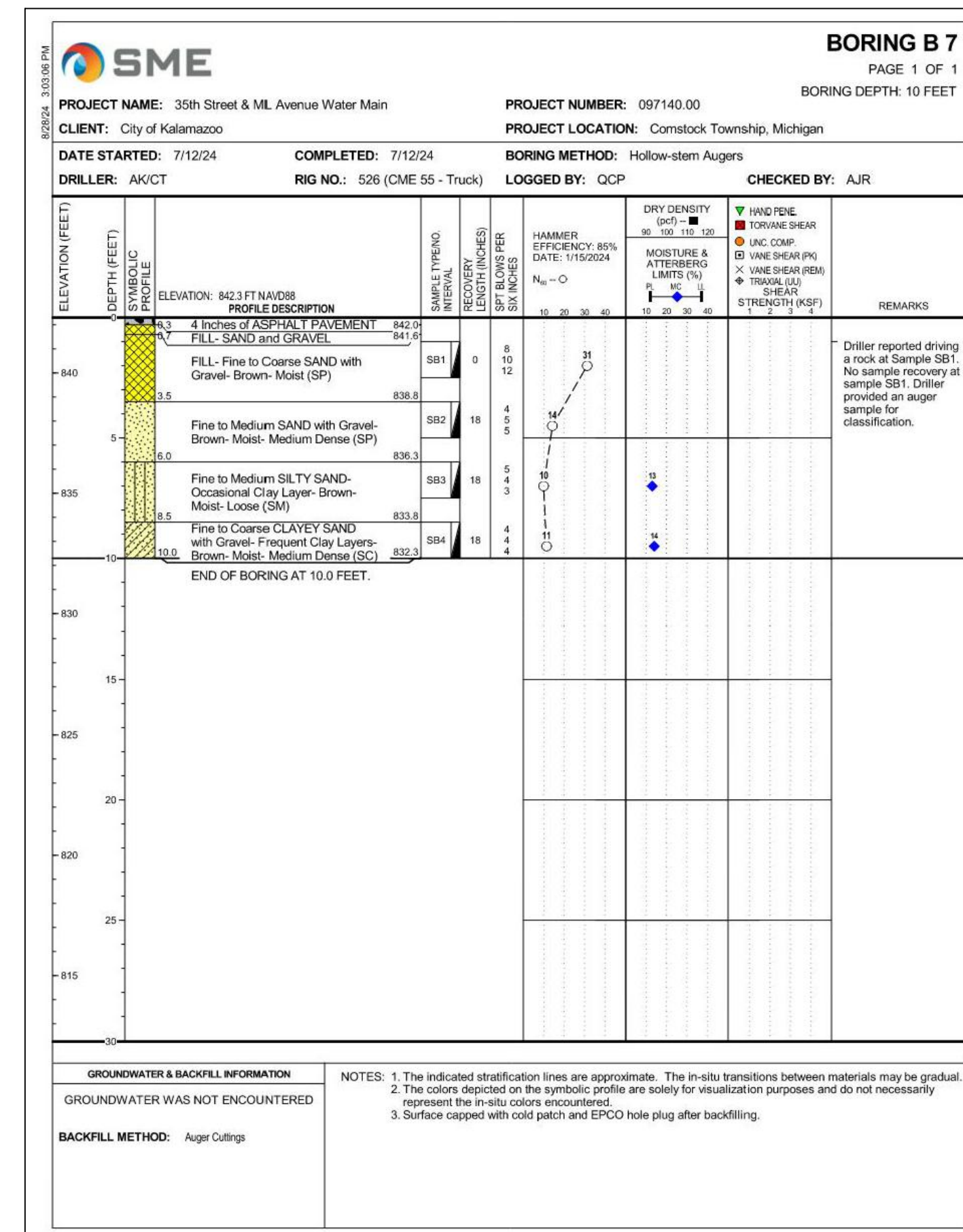
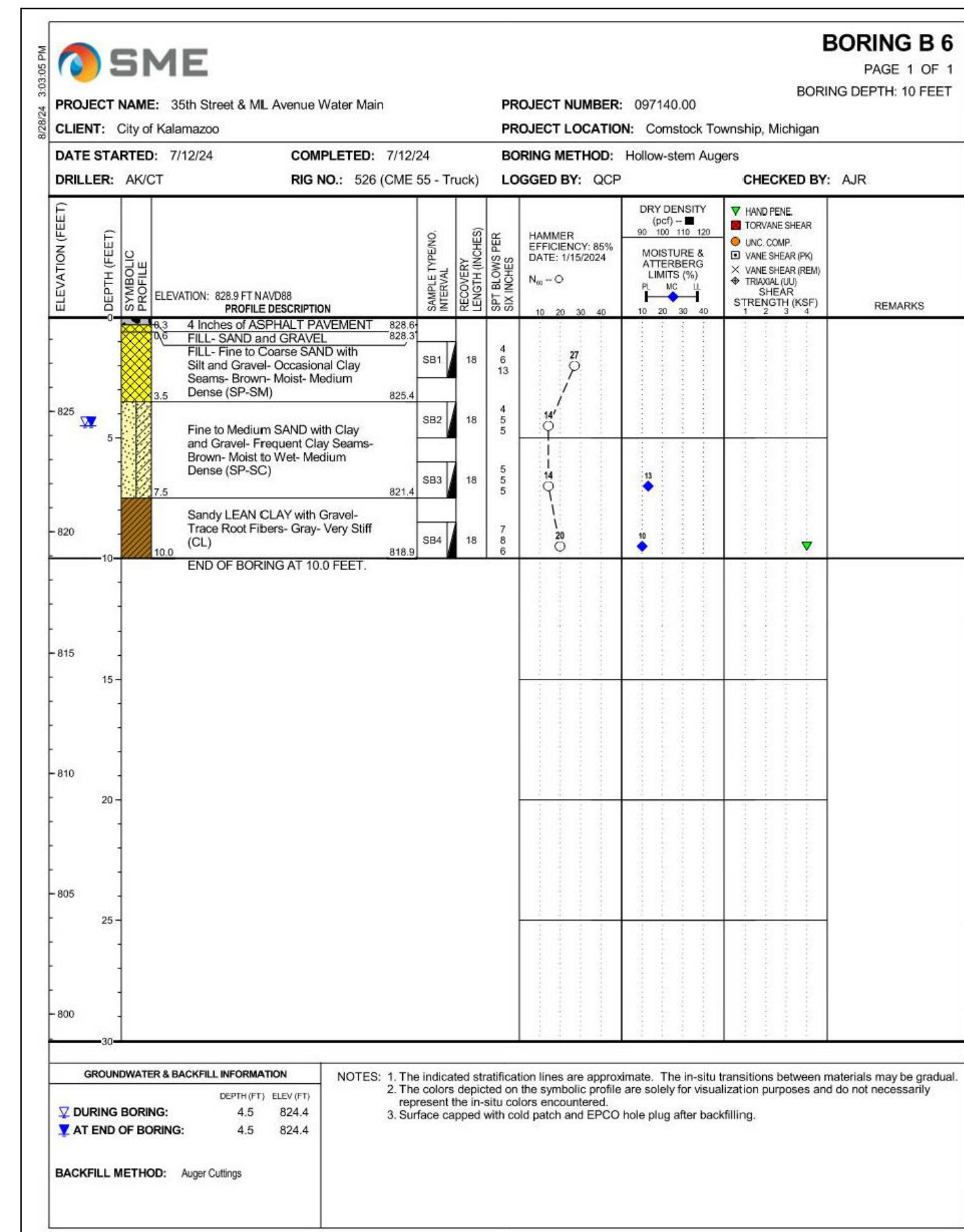
- NOTES:
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
  2. THE WOODEN FRAME IS TO BE CONSTRUCTED OF 2x4 CONSTRUCTION GRADE LUMBER. THE END SPACERS SHALL BE A MINIMUM OF 1 FT. BEYOND BOTH ENDS OF THE THROAT OPENING. THE ANCHORS SHALL BE NAILED TO 2x4 STAKES DRIVEN ON THE OPPOSITE SIDE OF THE CURB.
  3. THE WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC AND STONE. IT SHALL BE A CONTINUOUS PIECE WITH A MINIMUM WIDTH OF 30" AND 4'-0" LONGER THAN THE THROAT LENGTH OF THE INLET, 2'-0" ON EACH SIDE.
  4. GEOTEXTILE CLOTH SHALL HAVE AN EQUIVALENT OPENING SIZE (EOS) OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE AT LEAST THE SAME SIZE AS THE WIRE MESH.
  5. THE WIRE MESH AND GEOTEXTILE CLOTH SHALL BE FORMED TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET AND SECURELY FASTENED TO THE 2x4 FRAME.
  6. 2" STONE SHALL BE PLACED OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE CLOTH.

**CURB INLET PROTECTION**  
NTS



**LEGEND**  
 APPROXIMATE BORING LOCATION

NOTE:  
 1. AERIAL IMAGE TAKEN FROM NEARMAP WITH AN IMAGE DATE OF 4-14-2024.



NOTE:  
 1. SEE SPECS FOR COMPLETE GEOTECHNICAL REPORT.  
 2. BORING LOCATIONS ARE SHOWN ON PLAN AND PROFILE SHEETS.

**BENCHMARK DATA**

BENCHMARK #1 ELEVATION 868.37  
TOP OF NW FLANGE BOLT ON HYDRANT (NAVD88 DATUM)

BENCHMARK #2 ELEVATION 838.98  
TOP SPIKE IN S. SIDE OF POWER POLE (NAVD88 DATUM)

BENCHMARK #3 ELEVATION 868.27  
TOP OF GIN SPIKE IN NE SIDE OF POWER POLE (NAVD88 DATUM)

BENCHMARK #4 ELEVATION 870.27  
TOP OF SPIKE IN S. SIDE OF POWER POLE (NAVD88 DATUM)

BENCHMARK #5 ELEVATION 873.25  
TOP OF SE FLANGE BOLT ON HYDRANT (NAVD88 DATUM)

**ALIGNMENT DATA**

ALIGNMENT: 1-EAST ML AVENUE

Tangent Data	PT Station	Northing	Easting
Description	0	281357.6239	12828882.04
Start:	4+11.564	281354.008	12829293.59
End:	411.564'	Course: "S 89° 29' 47.77" E"	

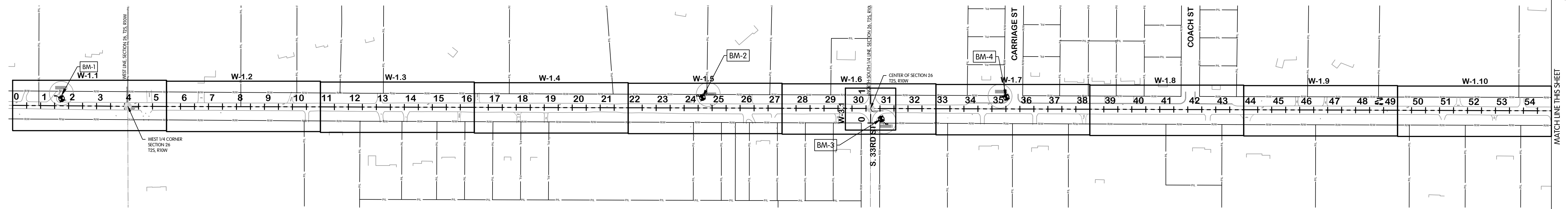
Tangent Data	PT Station	Northing	Easting
Description	4+11.564	281354.008	12829293.59
Start:	30+66.517	281346.432	12831948.53
End:	2654.953'	Course: "S 89° 50' 11.41" E"	

Tangent Data	PT Station	Northing	Easting
Description	30+66.517	281346.432	12831948.53
Start:	57+20.571	281337.459	12834602.57
End:	2654.054'	Course: "S 89° 48' 22.64" E"	

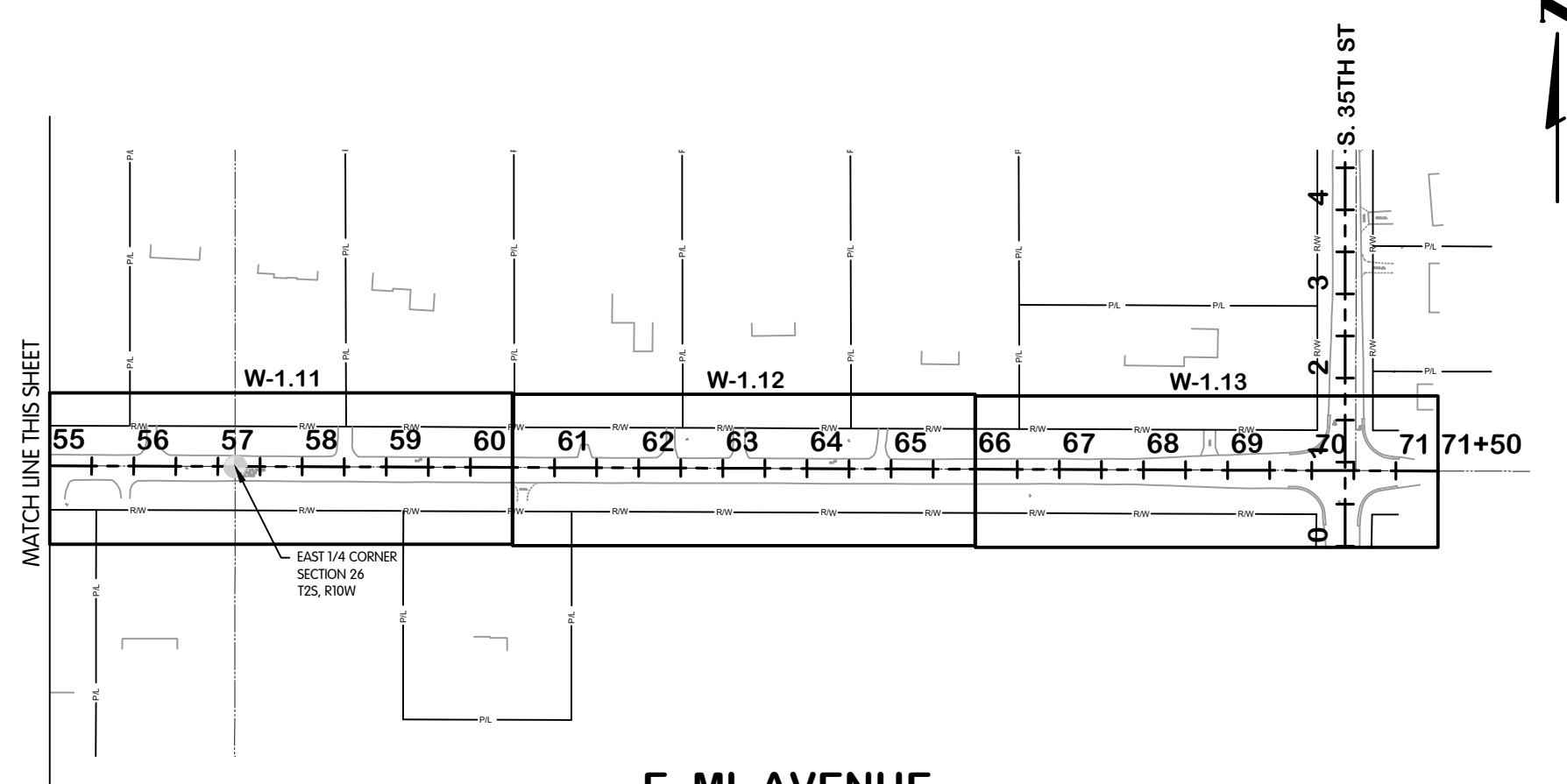
Tangent Data	PT Station	Northing	Easting
Description	57+20.572	281337.459	12834602.57
Start:	71+50.000	281332.0316	12836031.99
End:	1429.428'	Course: "S 89° 46' 56.82" E"	

ALIGNMENT: 2-SOUTH 35TH STREET

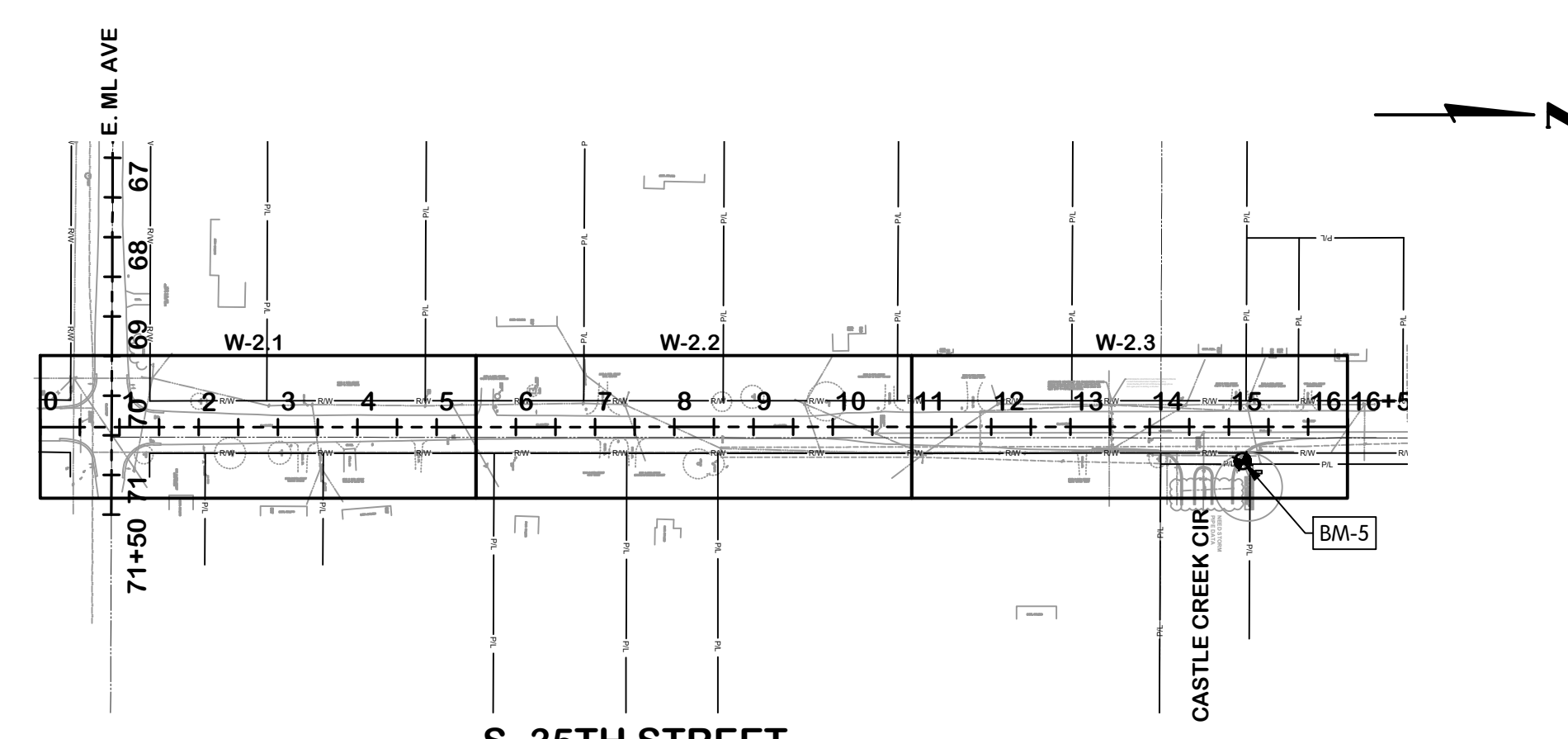
Tangent Data	PT Station	Northing	Easting
Description	0	281242.4112	12835921.55
Start:	16+50.000	282892.4112	12835921.52
End:	1650.00'	Course: "N 00° 00' 04.11" W"	



**E. ML AVENUE**  
**STA. 0+00 TO 55+00**  
1"=200'



**E. ML AVENUE**  
**STA. 55+00 TO 71+50**  
1"=200'



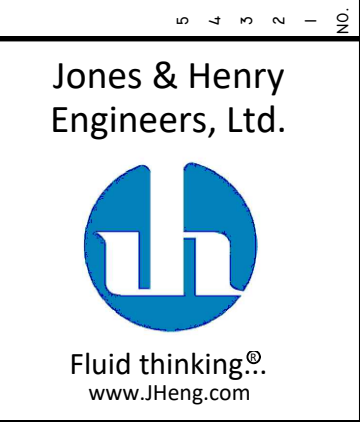
**S. 35TH STREET**  
**STA. 0+00 TO 16+50**  
1"=200'

KAL-8167-001G04-G-0.5  
5/21/2025 4:30 PM - CFERRELL  
5/23/2025 9:28 AM



**SITE LOCATION AND  
ALIGNMENT PLAN AND REPORT  
SURVEY CONTROLS**

CITY OF KALAMAZOO, MICHIGAN  
**E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN**

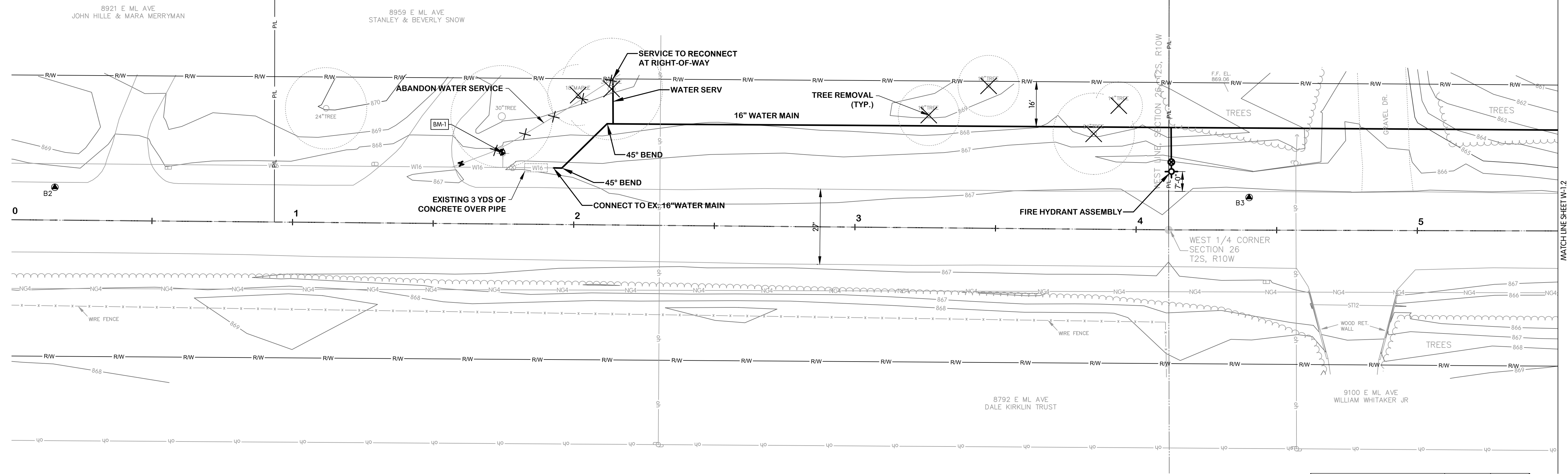


JOB NO.	017-8167.001
SCALE	AS INDICATED
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE	
DESIGNED	TLK
DRAWN	CJAF
CHECKED	AB
STATUS	ISSUE FOR BID
DATE	MAY 2025
SHEET NO.	G-0.5
	5 OF 33

REVISIONS AFTER ISSUED FOR BID

NO.	DATE	BY
1		
2		
3		
4		

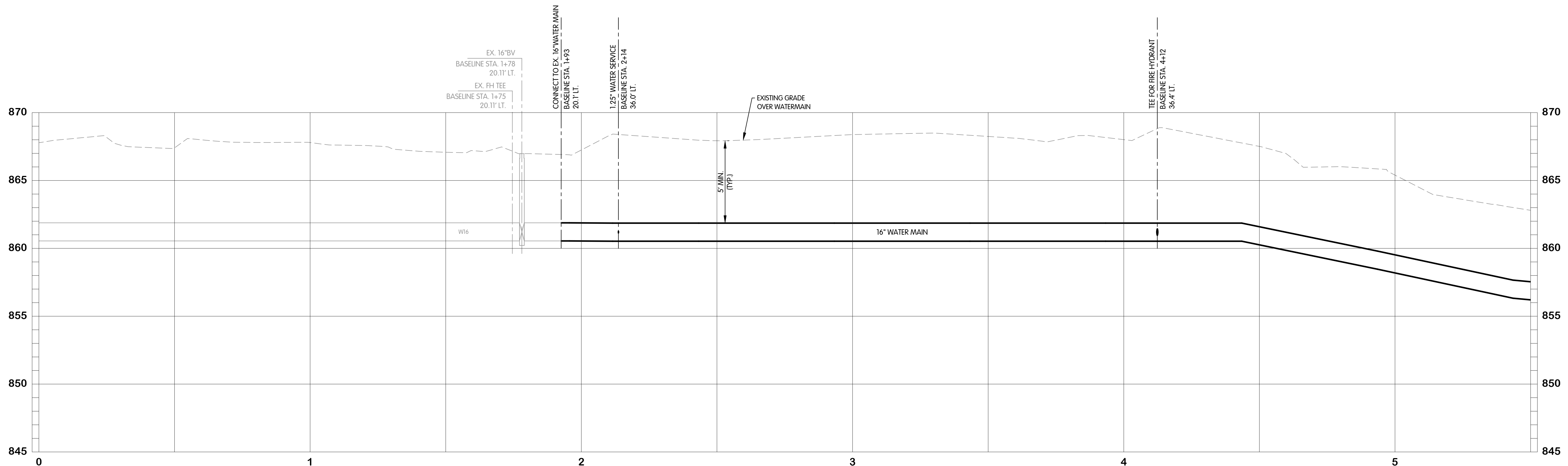
BENCHMARK #1  
ELEVATION 868.37  
TOP OF NW FLANGE BOLT ON  
HYDRANT (NAVD88 DATUM)



- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	0	EA
Butterfly Valve and Box, 16 inch	0	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	364	LF
Polyethylene Encasement	364	LF
Water Serv	1	EA
Fire Hydrant Assembly	1	EA

**E. ML AVENUE**



KAL-8167001W-1.1  
5/22/2025 4:41 PM - CFERRELL  
5/23/2025 9:28 AM



**E. ML AVENUE  
WATER  
PLAN AND PROFILE  
STA. 0+00 TO 5+50**  
 CITY OF KALAMAZOO, MICHIGAN  
**E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN**

Jones & Henry  
Engineers, Ltd.

Fluid thinking.  
www.JHeng.com

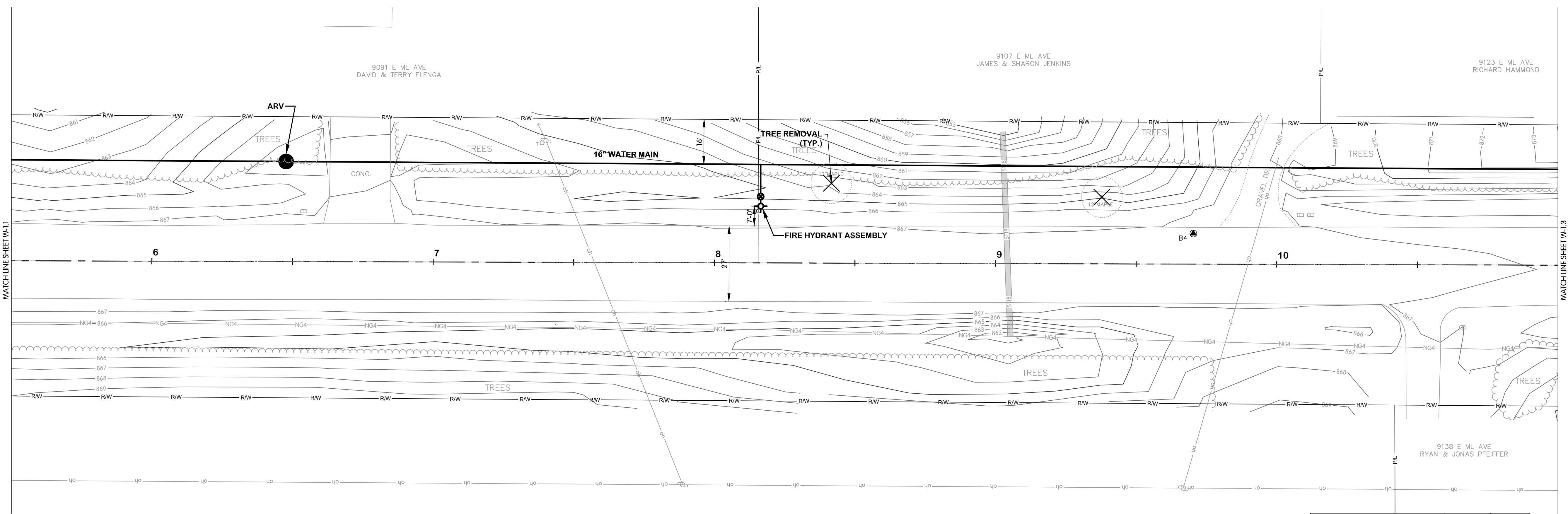
JOB NO. 017-8167.001  
SCALE 1"=20' HOR.  
1"=4' VERT.  
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
TLK	CJAF	AB

STATUS: ISSUE FOR BID  
DATE: MAY 2025  
SHEET NO. W-1.1  
6 OF 33



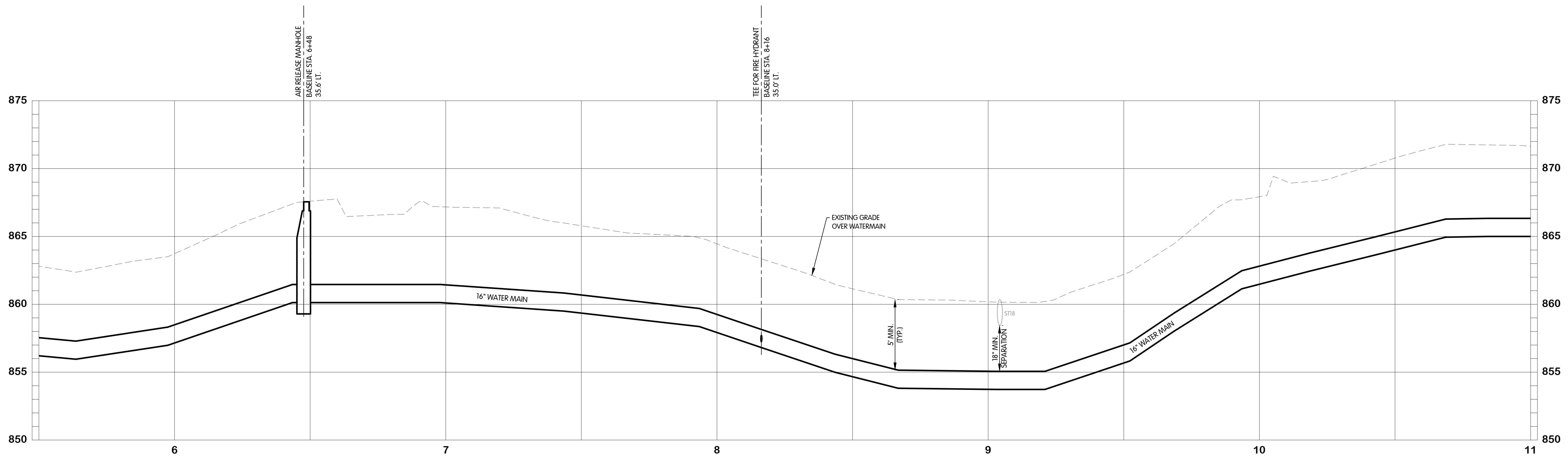
E. ML AVENUE  
WATER  
PLAN AND PROFILE  
STA. 5+50 TO 11+00  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	1	EA
Butterfly Valve and Box, 16 inch	0	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	550	LF
Polyethylene Encasement	550	LF
Water Serv	0	EA
Fire Hydrant Assembly	1	EA

**E. ML AVENUE**



KAL-8167001-W-1.2  
 5/22/2025 4:41 PM - CFERRELL  
 5/23/2025 9:26 AM

NO. 1  
 DATE  
 REVISIONS AFTER ISSUED FOR BID  
 BY

Jones & Henry  
 Engineers, Ltd.  
  
 Fluid thinking.<sup>®</sup>  
 www.JHeng.com

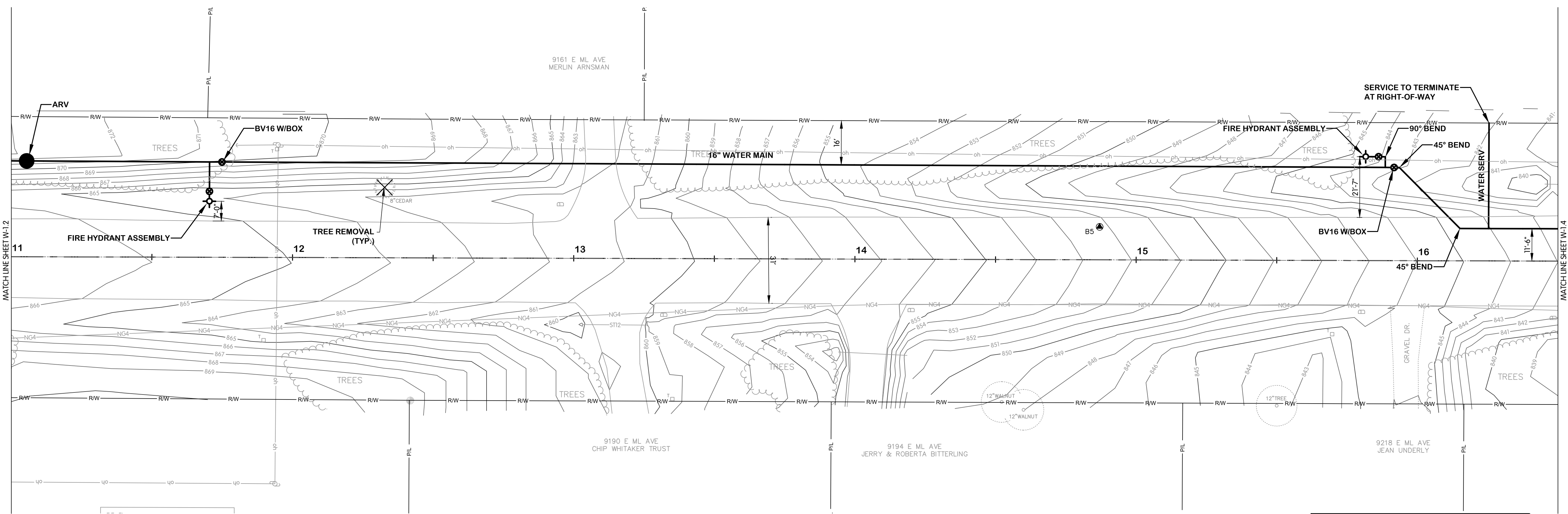
JOB NO. 017-8167.001  
 SCALE 1"=20' HOR.  
 1"=4' VERT.  
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
TLK	CJAF	AB

STATUS: ISSUE FOR BID  
 DATE: MAY 2025  
 SHEET NO. W-1.2  
 7 OF 33

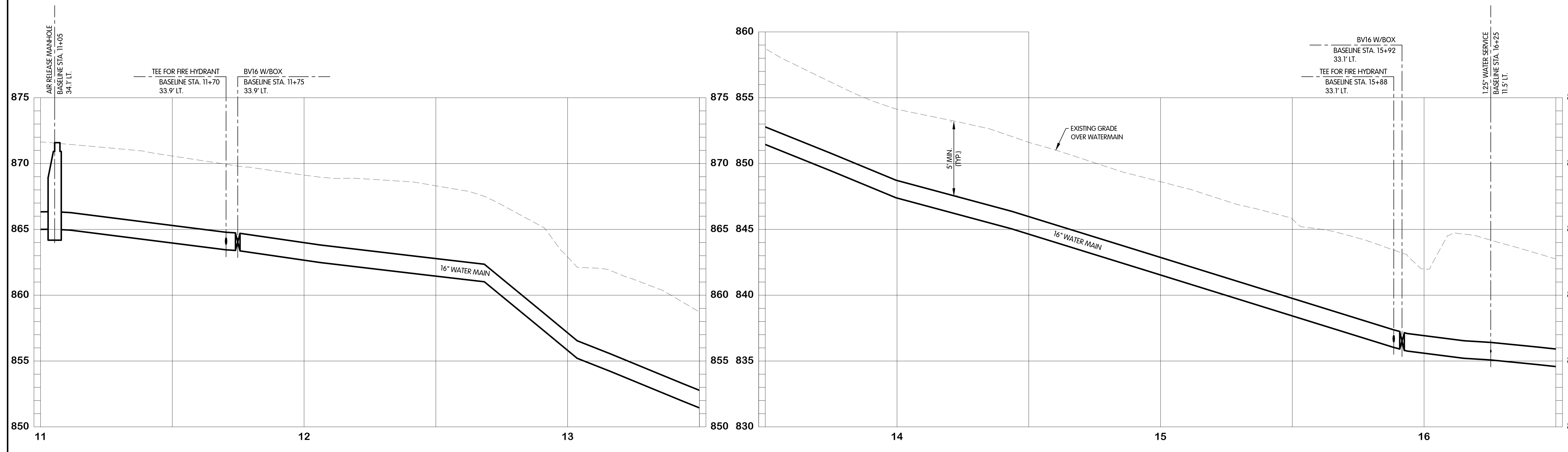


E. ML AVENUE  
WATER  
PLAN AND PROFILE  
STA. 11+00 TO 16+50  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	1	EA
Butterfly Valve and Box, 16 inch	2	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	560	LF
Polyethylene Encasement	560	LF
Water Serv	1	EA
Fire Hydrant Assembly	2	EA



KAL-8167001-W-1.3  
5/22/2025 4:41 PM - CFERRELL  
5/23/2025 9:26 AM

NO. 1  
DATE  
REVISIONS AFTER ISSUED FOR BID  
BY

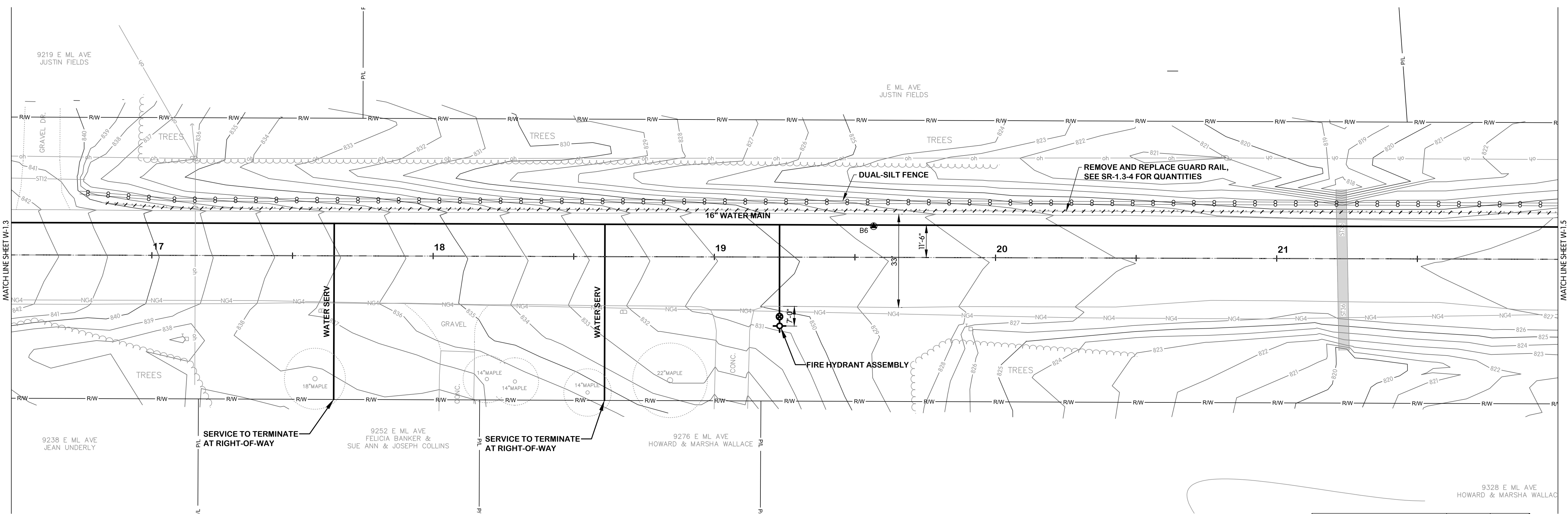
Jones & Henry  
Engineers, Ltd.  
 Fluid thinking.  
www.JHeng.com

JOB NO. 017-8167.001  
SCALE 1"=20' HOR.  
1"=4' VERT.  
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE  
DESIGNED TLK DRAWN CJAF CHECKED AB  
STATUS: ISSUE FOR BID  
DATE: MAY 2025

SHEET NO.  
W-1.3  
8 OF 33

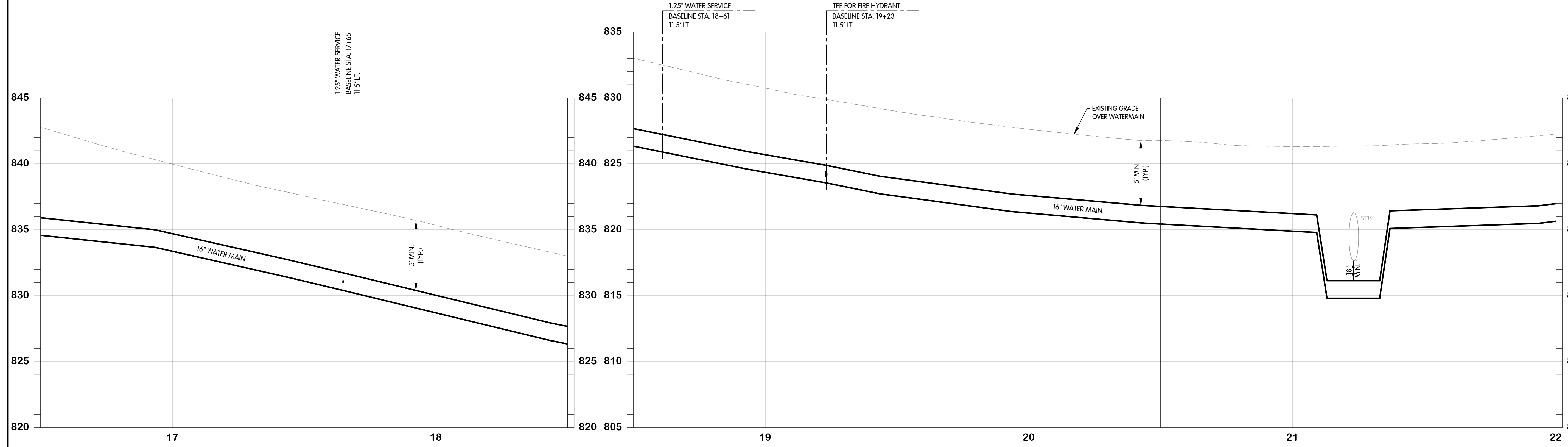


**E. ML AVENUE  
WATER  
PLAN AND PROFILE  
STA. 16+50 TO 22+00**  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	0	EA
Butterfly Valve and Box, 16 inch	0	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	550	LF
Polyethylene Encasement	550	LF
Water Serv	2	EA
Fire Hydrant Assembly	1	EA



KAL-8167001-W-1.4  
5/22/2025 4:41 PM - CFERRELL  
5/23/2025 9:26 AM

NO. 1  
DATE  
REVISIONS AFTER ISSUED FOR BID  
BY

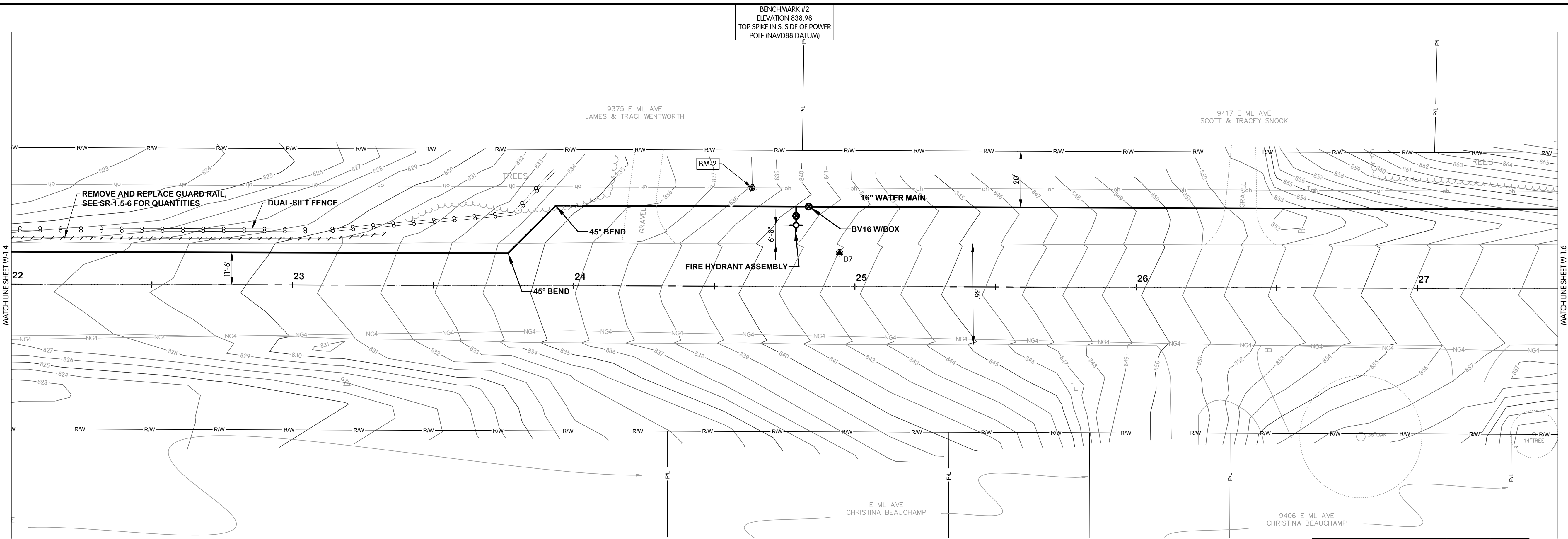
**Jones & Henry  
Engineers, Ltd.**

Fluid thinking.<sup>®</sup>  
www.JHeng.com

JOB NO.	017-8167.001
SCALE	1"=20' HOR. 1"=4' VERT.
<small>THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE</small>	
DESIGNED	TLK
DRAWN	CJAF
CHECKED	AB
STATUS	ISSUE FOR BID
DATE	MAY 2025

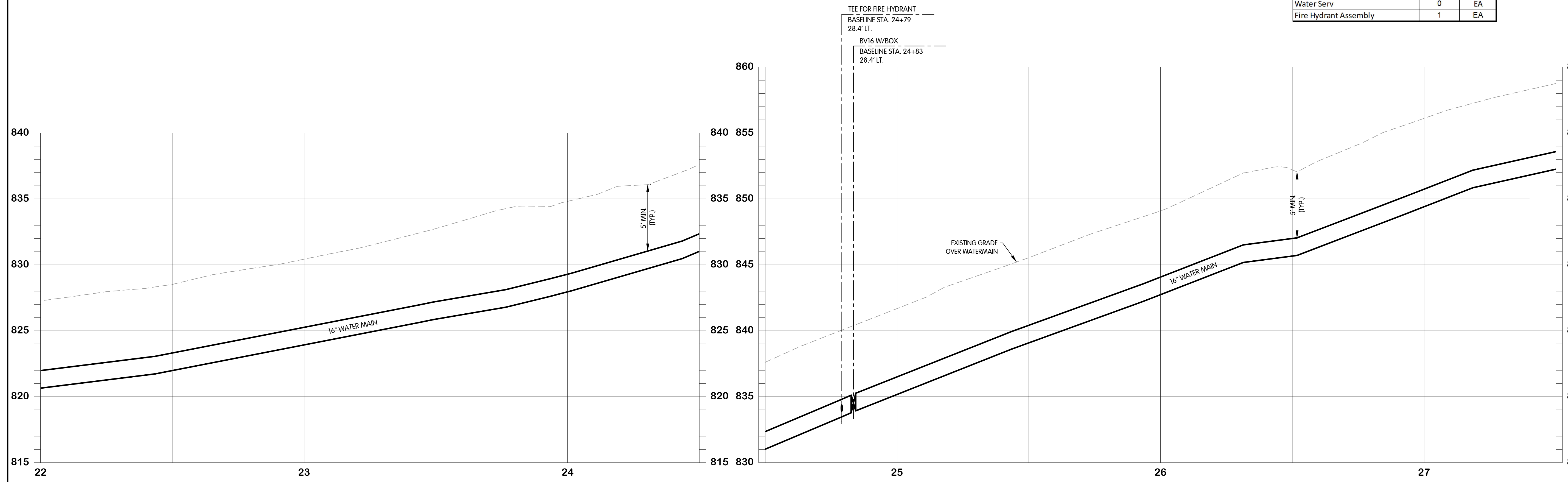


E. ML AVENUE  
WATER  
PLAN AND PROFILE  
STA. 22+00 TO 27+50  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	0	EA
Butterfly Valve and Box, 16 inch	1	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	558	LF
Polyethylene Encasement	558	LF
Water Serv	0	EA
Fire Hydrant Assembly	1	EA



KAL-8167001-W-1.5  
5/22/2025 4:41 PM - CFERRELL  
5/23/2025 9:26 AM

NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

REVISIONS AFTER ISSUED FOR BID

DATE

BY

Jones & Henry  
Engineers, Ltd.

Fluid thinking.<sup>®</sup>  
www.JHeng.com

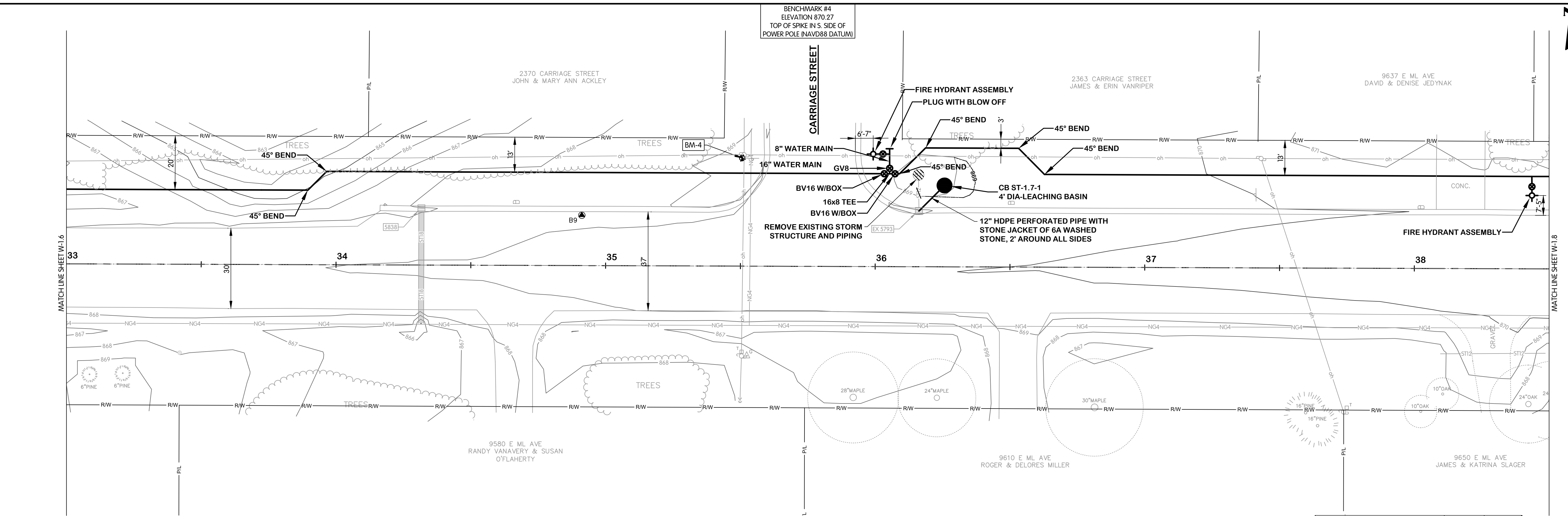
JOB NO. 017-8167.001  
SCALE 1"=20' HOR.  
1"=4' VERT.  
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
TLK	CJAF	AB

STATUS: ISSUE FOR BID  
DATE: MAY 2025

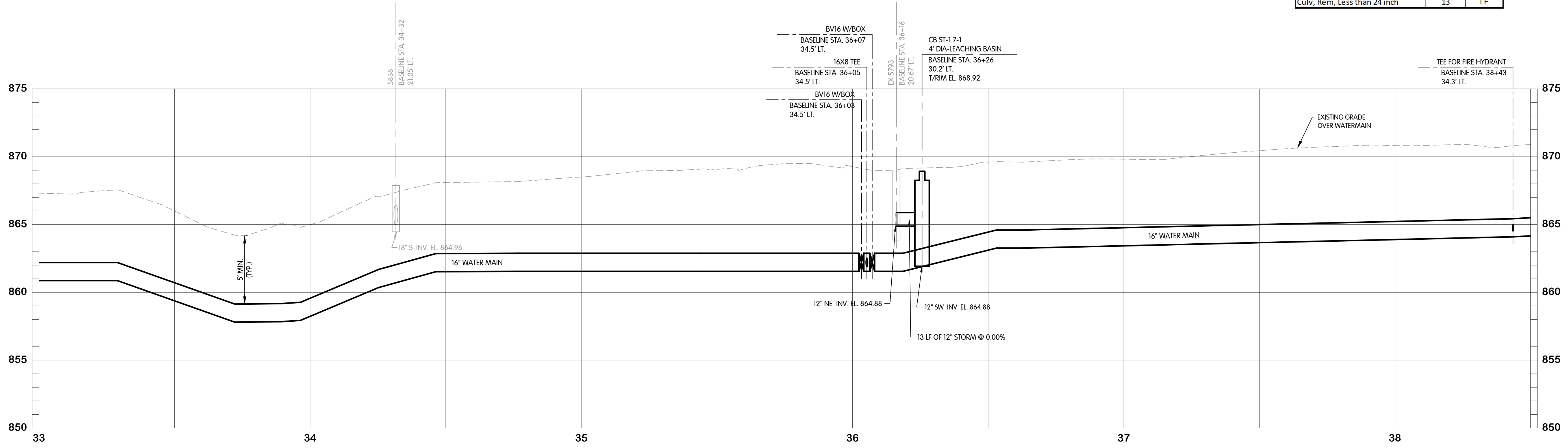
SHEET NO.  
W-1.5  
10 OF 33





- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	0	EA
Butterfly Valve and Box, 16 inch	2	EA
Gate Valve and Box, 8 inch	1	EA
Water Main, DI 8 inch, Tr Det B	10	LF
Sewer, HDPE, 12 inch, Perforated	12	LF
Water Main, DI 16 inch, Tr Det B	560	LF
Polyethylene Encasement	570	LF
Dr Structure, 48 inch dia, Leaching	1	EA
Fire Hydrant Assembly	2	EA
Aggregate, 6A	3	CYD
Dr Structure, Rem	1	EA
Culv, Rem, Less than 24 inch	13	LF



KAL-8167001-W-1.7  
 5/22/2025 4:41 PM - CFERRELL  
 5/23/2025 9:27 AM

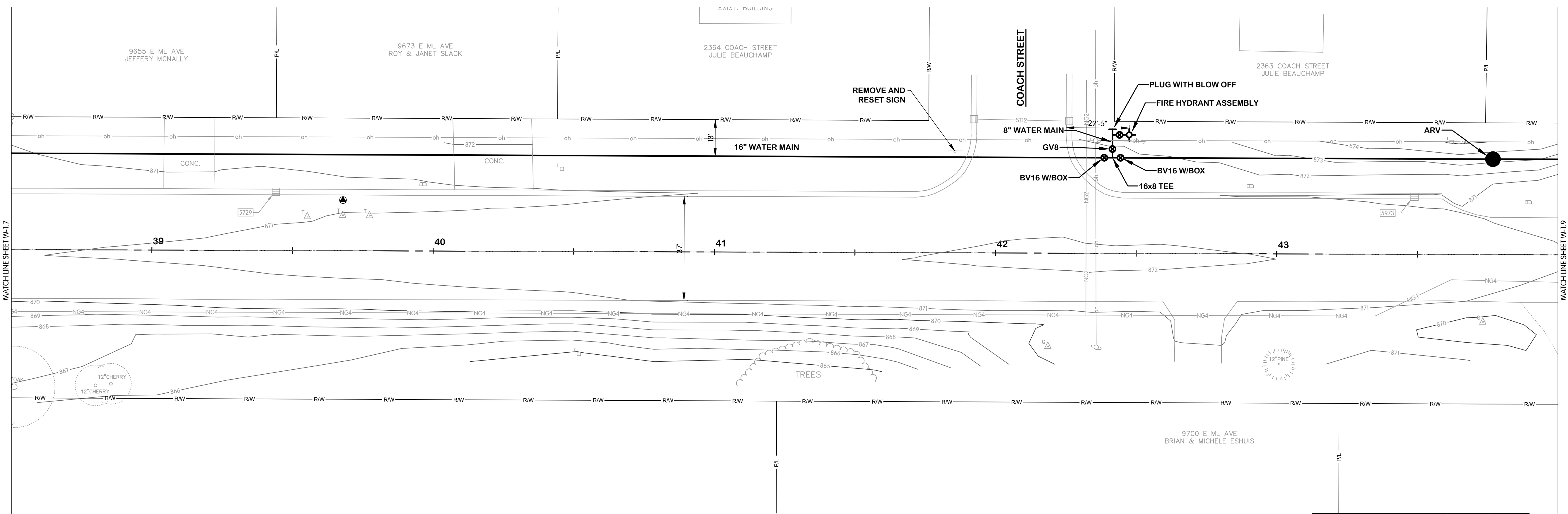


**E. ML AVENUE  
 WATER  
 PLAN AND PROFILE  
 STA. 33+00 TO 38+50**  
 CITY OF KALAMAZOO, MICHIGAN  
**E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN**

Jones & Henry  
 Engineers, Ltd.  
  
 Fluid thinking.<sup>®</sup>  
 www.JHeng.com

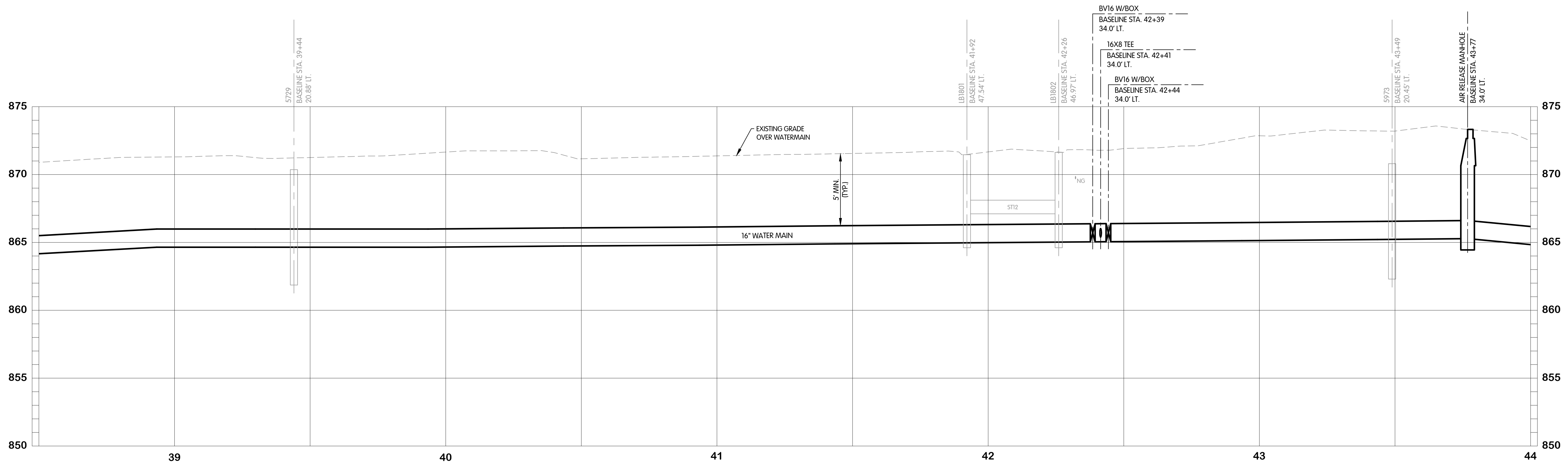
JOB NO. 017-8167.001  
 SCALE 1"=20' HOR.  
 1"=4' VERT.  
 THIS LINE SCALES IF WHEN  
 PLOTTED TO NOTED SCALE  
 DESIGNED TLK DRAWN CJAF CHECKED AB  
 STATUS: ISSUE FOR BID  
 DATE: MAY 2025

SHEET NO.  
**W-1.7**  
 12 OF 33



- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	1	EA
Butterfly Valve and Box, 16 inch	2	EA
Gate Valve and Box, 8 inch	1	EA
Water Main, DI 8 inch, Tr Det B	10	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	550	LF
Polyethylene Encasement	560	LF
Water Serv	0	EA
Fire Hydrant Assembly	1	EA



KAL-8167001W-1.8  
 5/22/2025 4:41 PM - CFERRELL  
 5/23/2025 9:27 AM



**E. ML AVENUE**  
**WATER**  
**PLAN AND PROFILE**  
**STA. 38+50 TO 44+00**  
 CITY OF KALAMAZOO, MICHIGAN  
**E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN**

NO. \_\_\_\_\_  
 DATE \_\_\_\_\_  
 REVISIONS AFTER ISSUED FOR BID

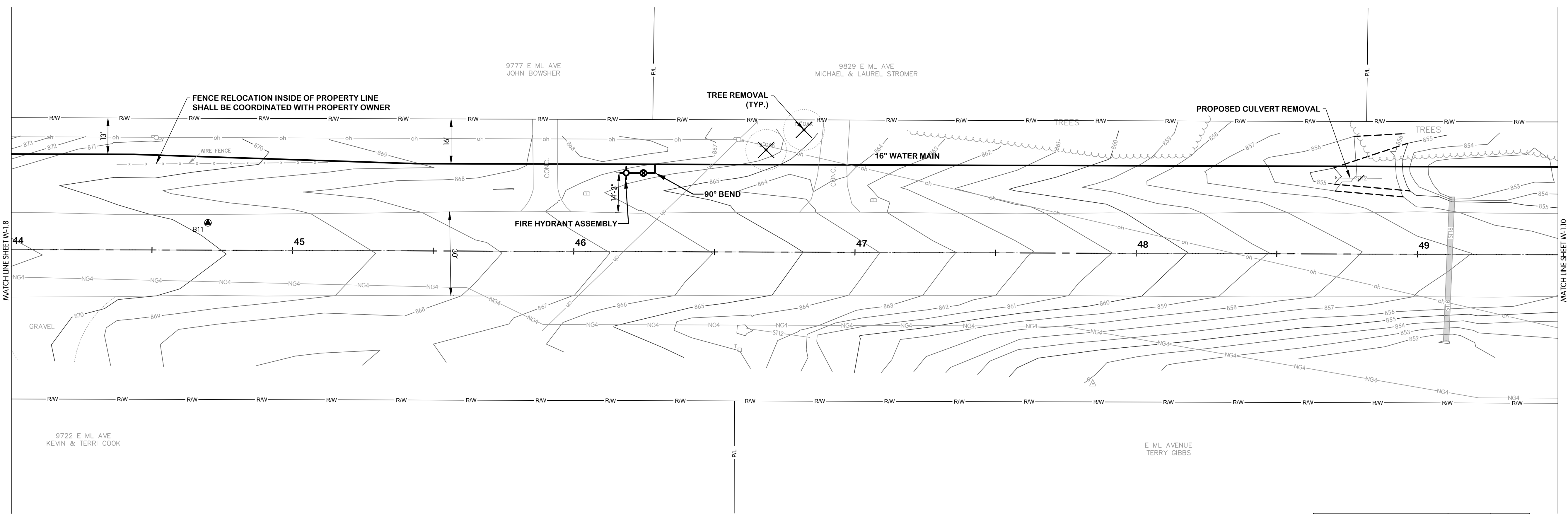
Jones & Henry  
 Engineers, Ltd.  
  
 Fluid thinking.<sup>®</sup>  
 www.JHeng.com

JOB NO. 017-8167.001  
 SCALE 1"=20' HOR.  
 1"=4' VERT.  
 THIS LINE SCALES IF WHEN  
 PLOTTED TO NOTED SCALE  
 DESIGNED TLK DRAWN CJAF CHECKED AB  
 STATUS: ISSUE FOR BID  
 DATE: MAY 2025

SHEET NO.  
**W-1.8**  
 13 OF 33

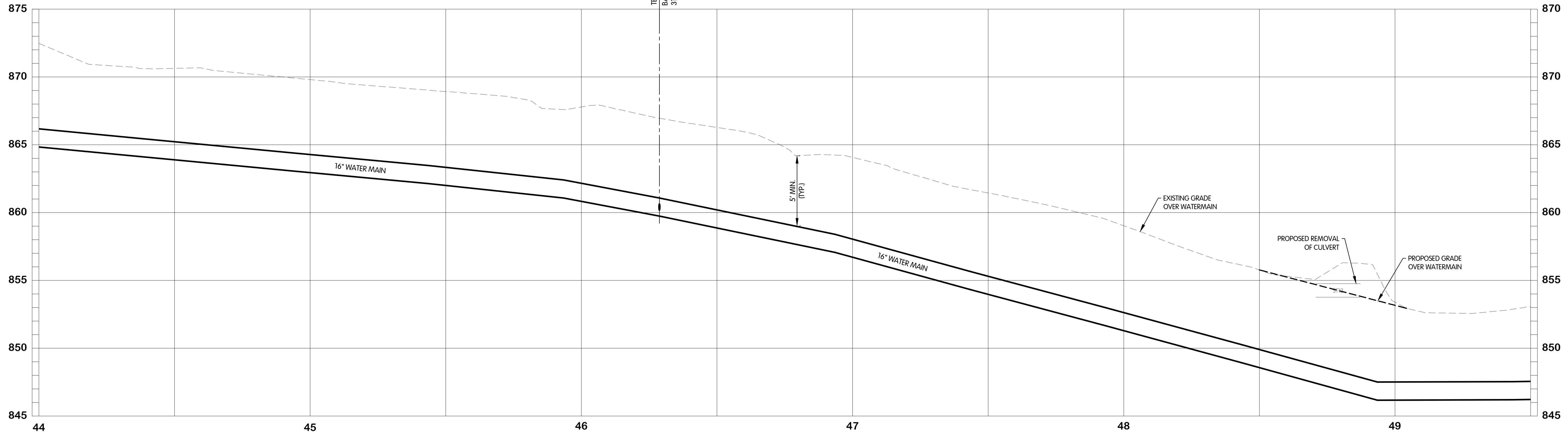


**E. ML AVENUE  
WATER  
PLAN AND PROFILE  
STA. 44+00 TO 49+50**  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	0	EA
Butterfly Valve and Box, 16 inch	0	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	550	LF
Polyethylene Encasement	550	LF
Water Serv	0	EA
Fire Hydrant Assembly	1	EA
Culv, Rem, Less than 24 inch	17	LF



KAL-8167001-W-1.9  
5/22/2025 4:41 PM - CFERRELL  
5/23/2025 9:27 AM

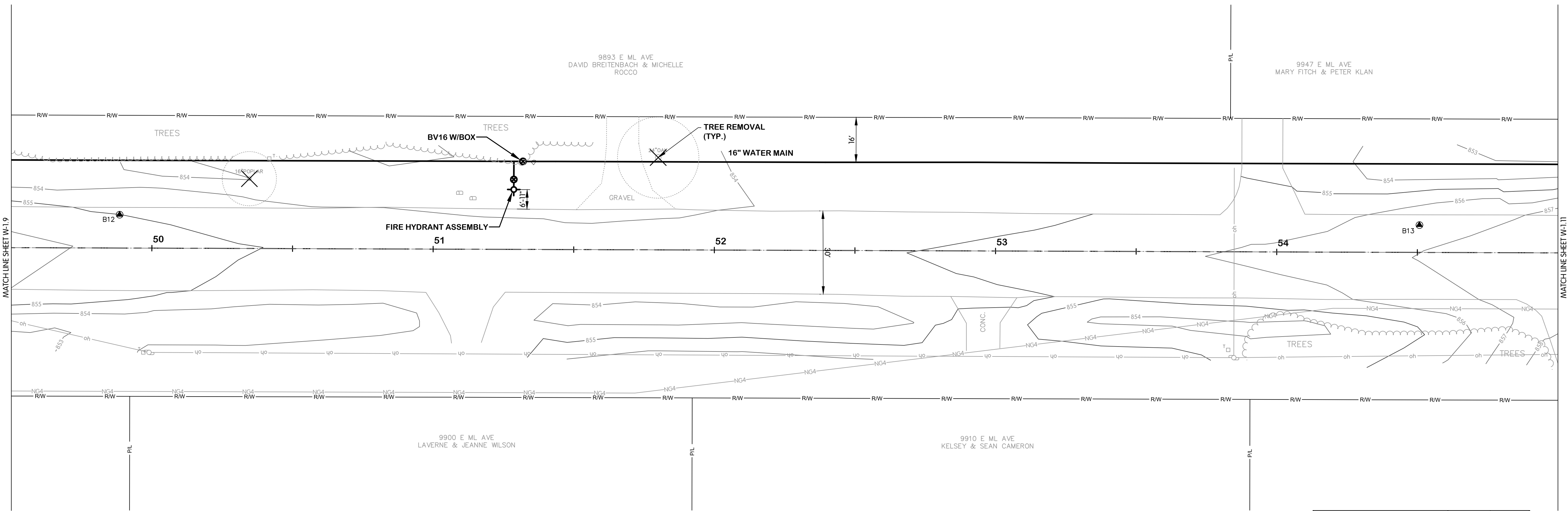
BY \_\_\_\_\_  
REVISIONS AFTER ISSUED FOR BID  
DATE \_\_\_\_\_  
NO. \_\_\_\_\_

Jones & Henry  
Engineers, Ltd.  
  
Fluid thinking.<sup>®</sup>  
www.JHeng.com

JOB NO.	017-8167.001	
SCALE	1"=20' HOR. 1"=4' VERT.	
<small>THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE</small>		
DESIGNED	DRAWN	CHECKED
TLK	CJAF	AB
STATUS:	ISSUE FOR BID	
DATE:	MAY 2025	
SHEET NO.	W-1.9	
	14 OF 33	

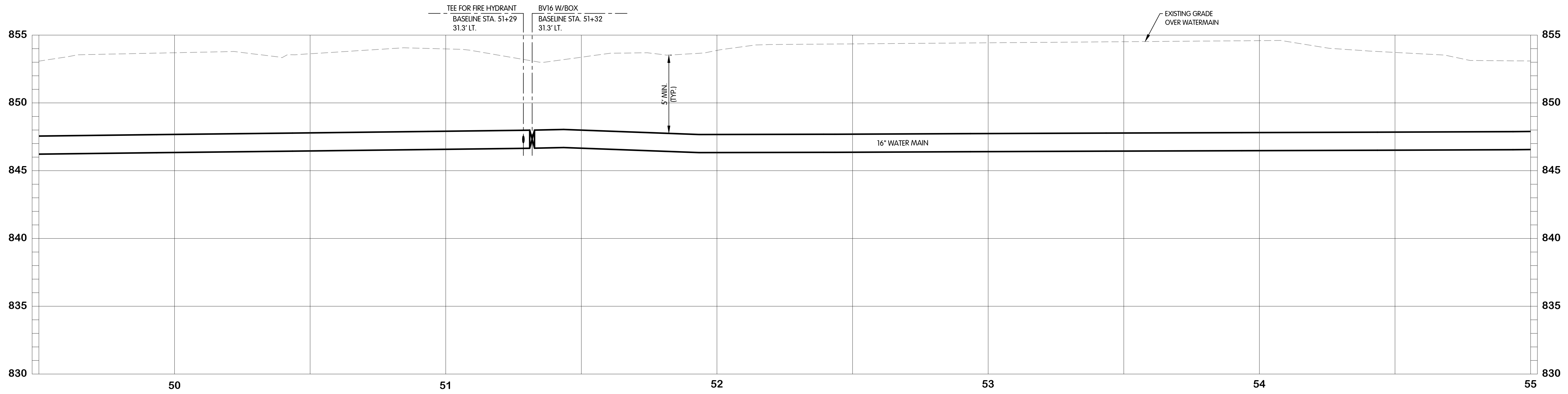


**E. ML AVENUE  
WATER  
PLAN AND PROFILE  
STA. 49+50 TO 55+00**  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	0	EA
Butterfly Valve and Box, 16 inch	1	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	550	LF
Polyethylene Encasement	550	LF
Water Serv	0	EA
Fire Hydrant Assembly	1	EA



KAL-8167001W-1.10  
5/22/2025 4:41 PM - CFERRELL  
5/23/2025 9:27 AM

NO. 1  
DATE  
REVISIONS AFTER ISSUED FOR BID  
BY

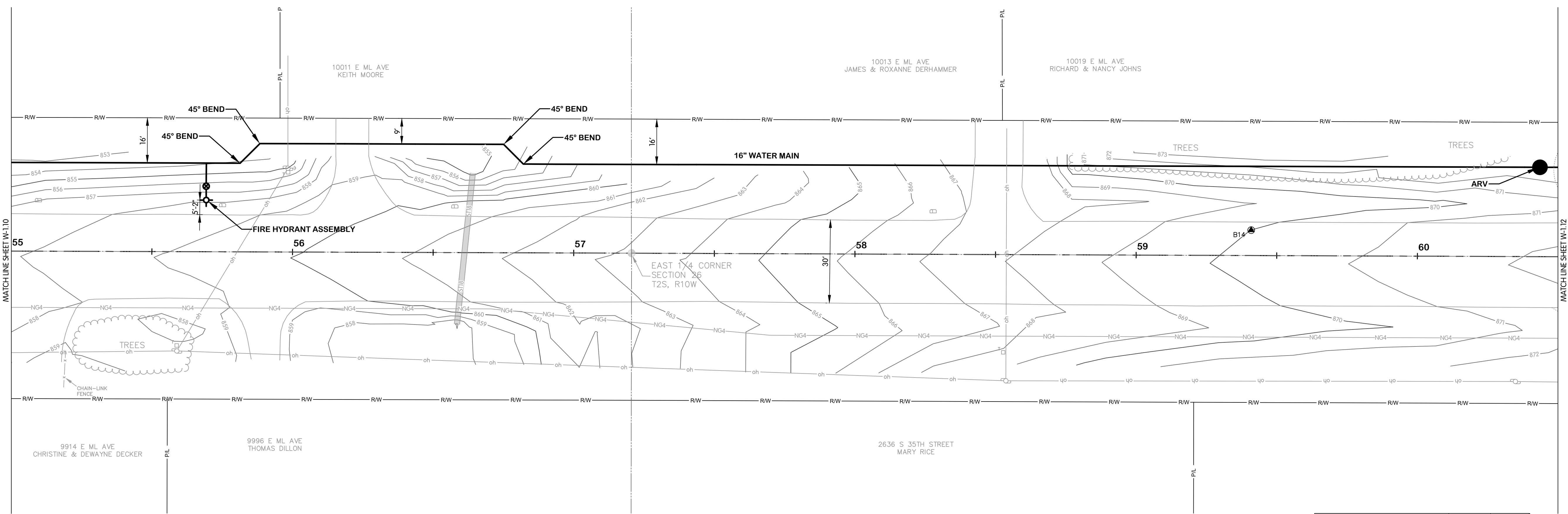
Jones & Henry  
Engineers, Ltd.

Fluid thinking®  
www.JHeng.com

JOB NO.	017-8167.001	
SCALE	1"=20' HOR. 1"=4' VERT.	
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE		
DESIGNED	DRAWN	CHECKED
TLK	CJAF	AB
STATUS: ISSUE FOR BID		
DATE: MAY 2025		
SHEET NO.		
W-1.10		
15 OF 33		



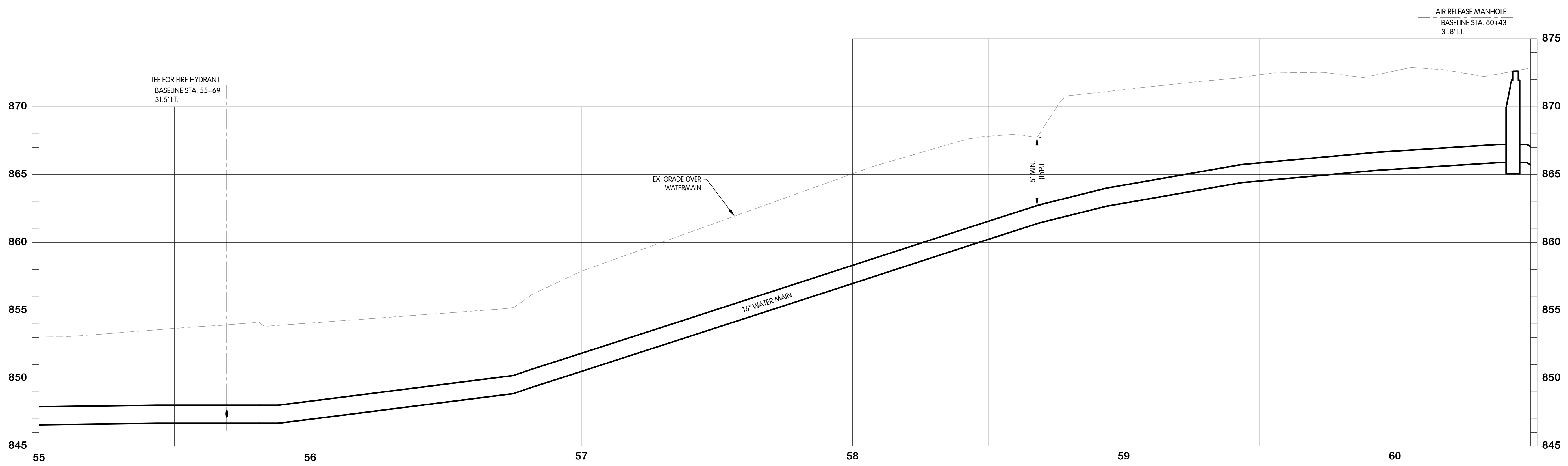
**E. ML AVENUE  
 WATER  
 PLAN AND PROFILE  
 STA. 55+00 TO 60+50**  
 CITY OF KALAMAZOO, MICHIGAN  
 E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASUREMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

**E. ML AVENUE**

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	1	EA
Butterfly Valve and Box, 16 inch	0	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	556	LF
Polyethylene Encasement	556	LF
Water Serv	0	EA
Fire Hydrant Assembly	1	EA



KAL-8167001W-1.11  
 5/22/2025 4:41 PM - CFERRELL  
 5/23/2025 9:27 AM

NO. 1  
 DATE  
 REVISIONS AFTER ISSUED FOR BID  
 BY

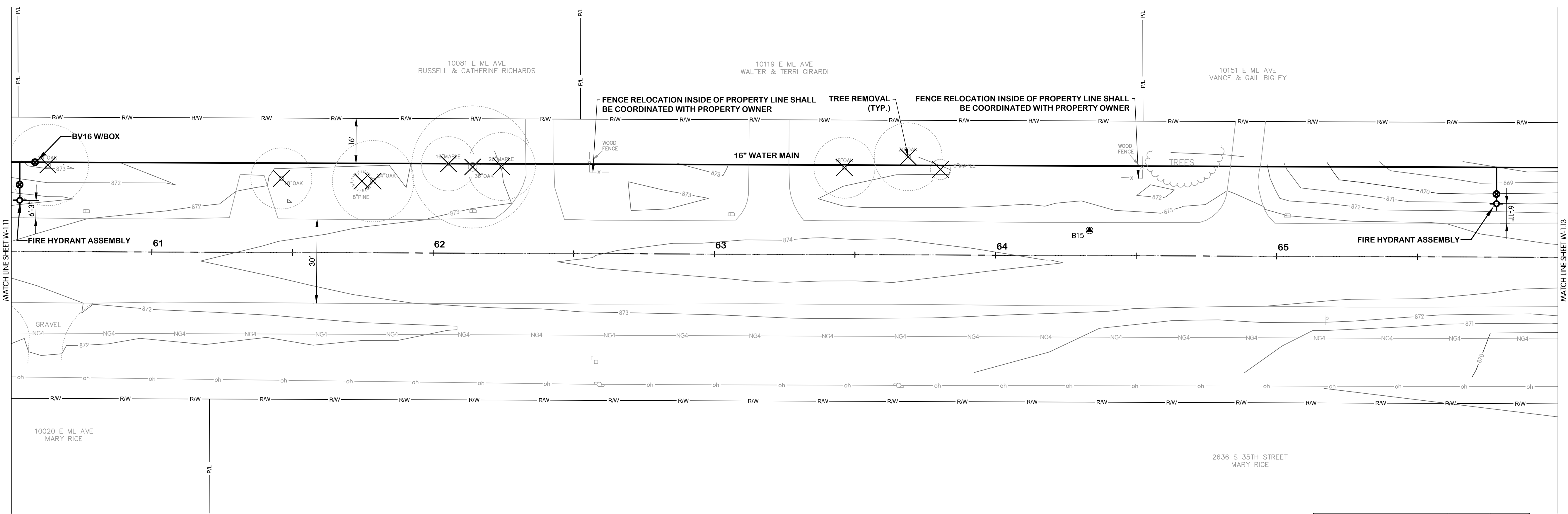
**Jones & Henry  
 Engineers, Ltd.**  
  
 Fluid thinking.<sup>®</sup>  
 www.JHeng.com

JOB NO.	017-8167.001
SCALE	1"=20' HOR. 1"=4' VERT.
<small>THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE</small>	
DESIGNED	DRAWN
TLK	CJAF
CHECKED	AB
STATUS: ISSUE FOR BID	
DATE: MAY 2025	

SHEET NO.  
**W-1.11**  
 16 OF 33



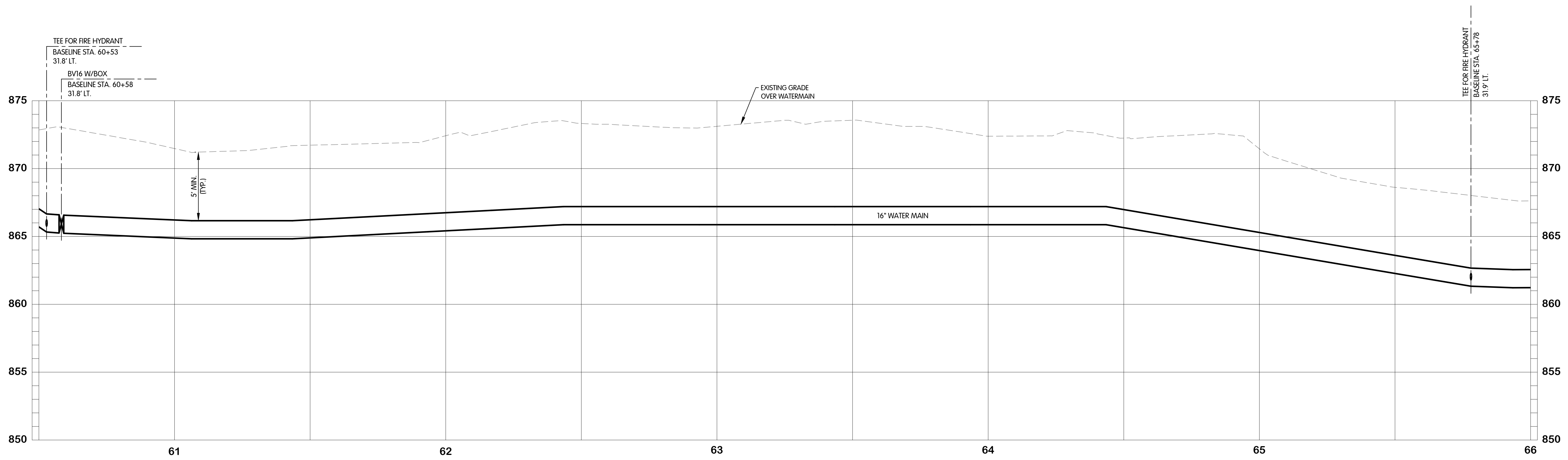
**E. ML AVENUE  
WATER  
PLAN AND PROFILE  
STA. 60+50 TO 66+00**  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

**E. ML AVENUE**

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	0	EA
Butterfly Valve and Box, 16 inch	1	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	550	LF
Polyethylene Encasement	550	LF
Water Serv	0	EA
Fire Hydrant Assembly	2	EA



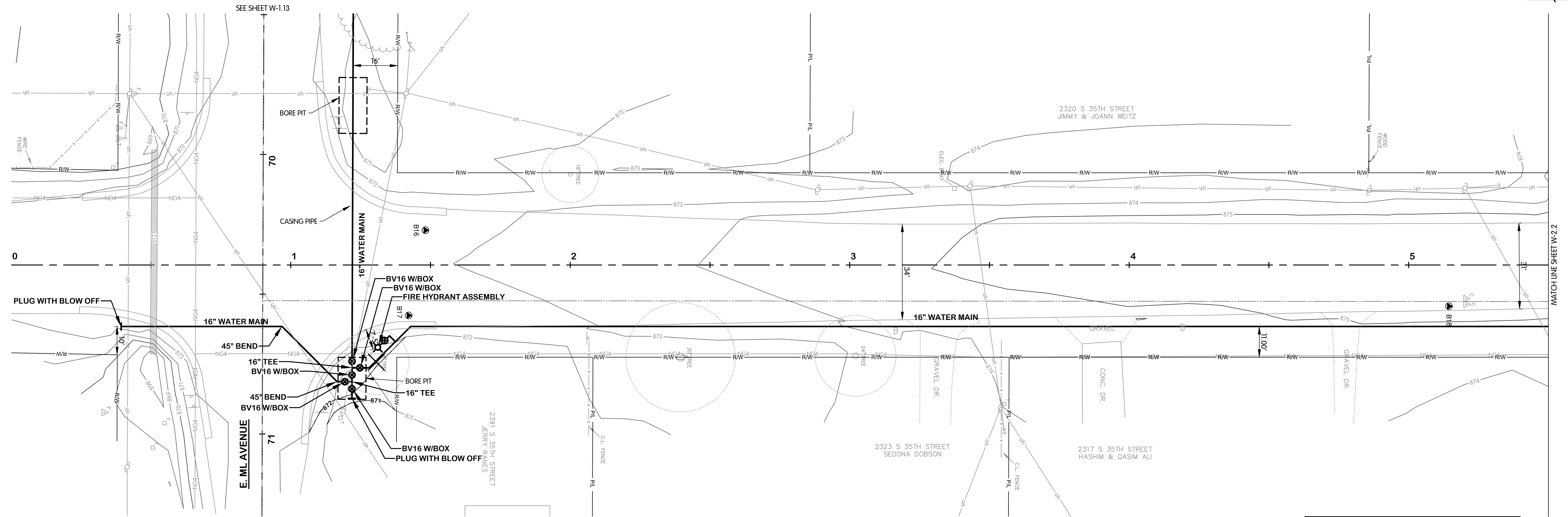
KAL-8167001-W-1.12  
5/22/2025 4:41 PM - CFERRELL  
5/23/2025 9:27 AM

NO. 1  
DATE  
REVISIONS AFTER ISSUED FOR BID  
BY

Jones & Henry  
Engineers, Ltd.  
  
Fluid thinking.<sup>®</sup>  
www.JHeng.com

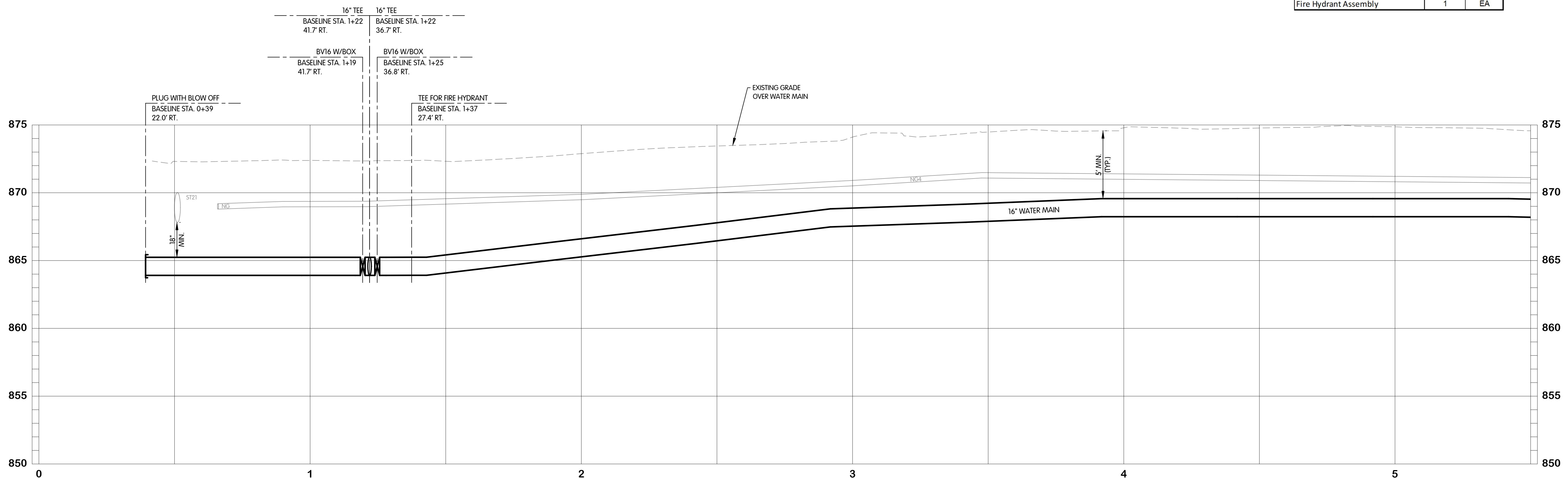
JOB NO. 017-8167.001  
SCALE 1"=20' HOR.  
1"=4' VERT.  
DESIGNED TLK DRAWN CJAF CHECKED AB  
STATUS: ISSUE FOR BID  
DATE: MAY 2025





- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	0	EA
Butterfly Valve and Box, 16 inch	2	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	522	LF
Polyethylene Encasement	522	LF
Water Serv	0	EA
Fire Hydrant Assembly	1	EA



KAL-816700/W2-W-2.1  
 5/21/2025 4:29 PM - CFERRELL  
 5/23/2025 9:28 AM

REVISIONS AFTER ISSUED FOR BID  
 NO. 1  
 DATE

Jones & Henry  
Engineers, Ltd.

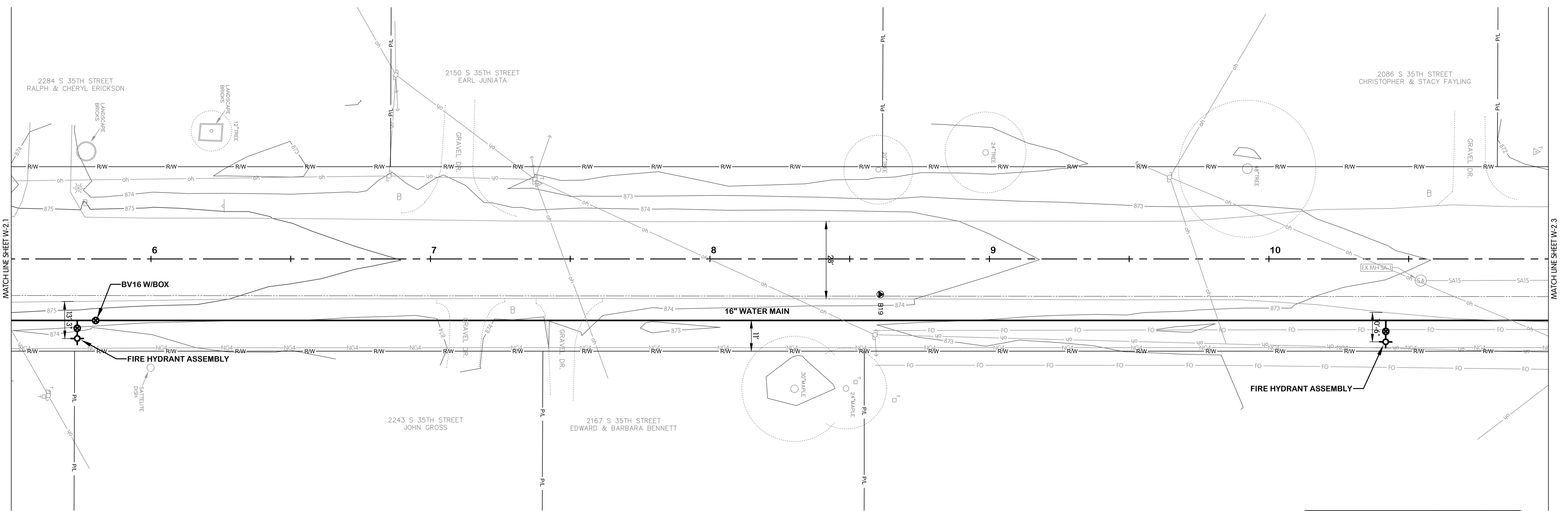
Fluid thinking.<sup>®</sup>  
www.JHeng.com

JOB NO. 017-8167.001  
 SCALE 1"=20' HOR.  
 1"=4' VERT.  
 THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE  
 DESIGNED TLK DRAWN CJAF CHECKED AB  
 STATUS: ISSUE FOR BID  
 DATE: MAY 2025



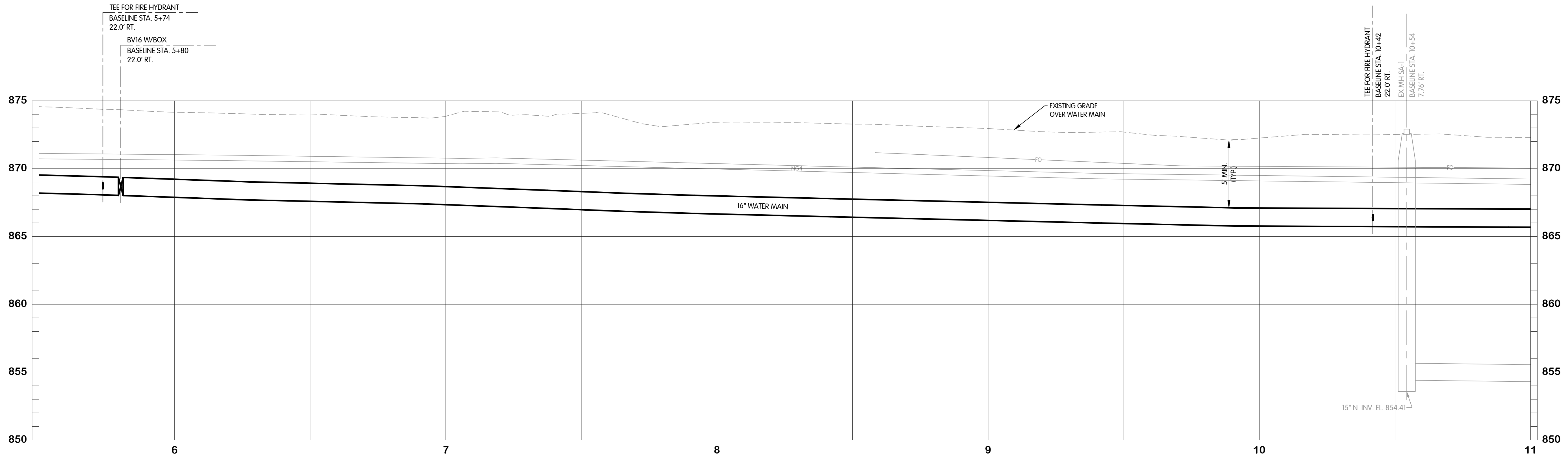
**S. 35TH STREET  
WATER  
PLAN AND PROFILE  
STA. 5+50 TO 11+00**

CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



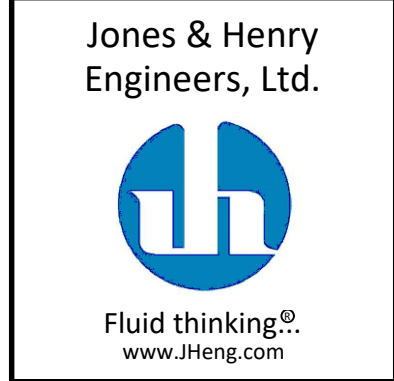
- NOTES:**
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	0	EA
Butterfly Valve and Box, 16 inch	1	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	0	LF
Water Main, DI 16 inch, Tr Det B	550	LF
Polyethylene Encasement	550	LF
Water Serv	0	EA
Fire Hydrant Assembly	2	EA



KAL-816700/W2-W-2.2  
5/21/2025 4:29 PM - CFERRELL  
5/23/2025 9:28 AM

NO. 1  
DATE  
REVISIONS AFTER ISSUED FOR BID  
BY

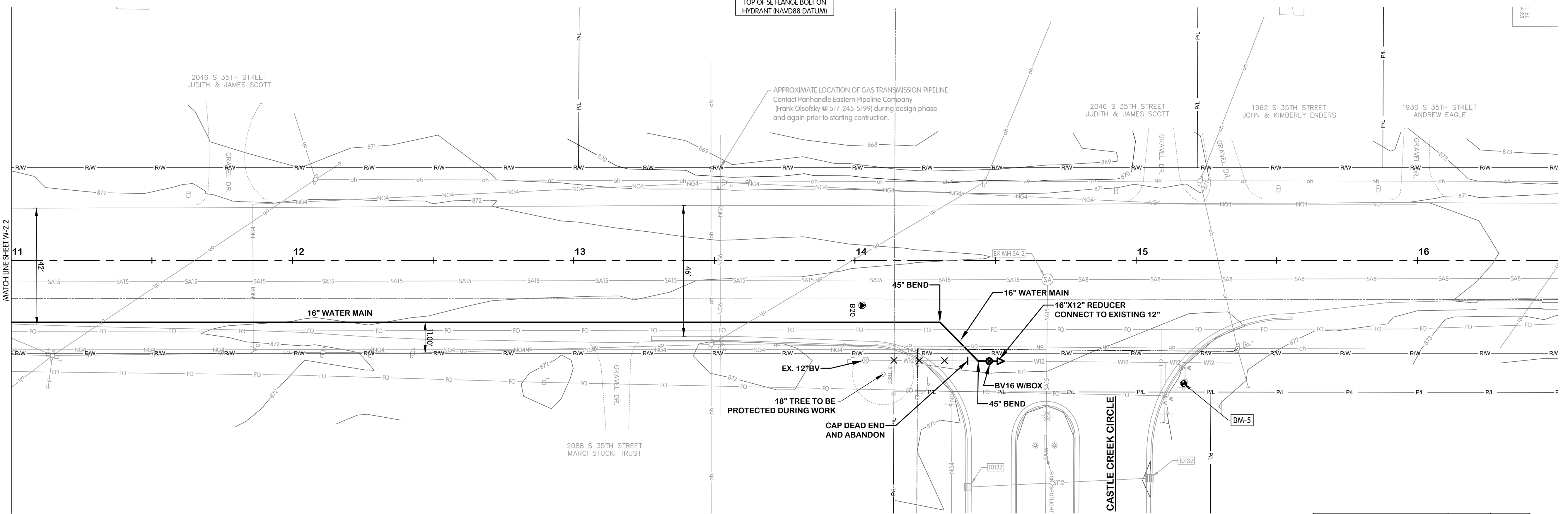
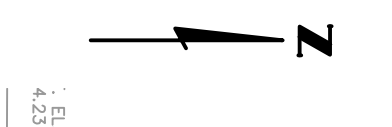


JOB NO. 017-8167.001  
SCALE 1"=20' HOR.  
1"=4' VERT.  
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
TLK	CJAF	AB

STATUS: ISSUE FOR BID  
DATE: MAY 2025  
SHEET NO. W-2.2  
20 OF 33

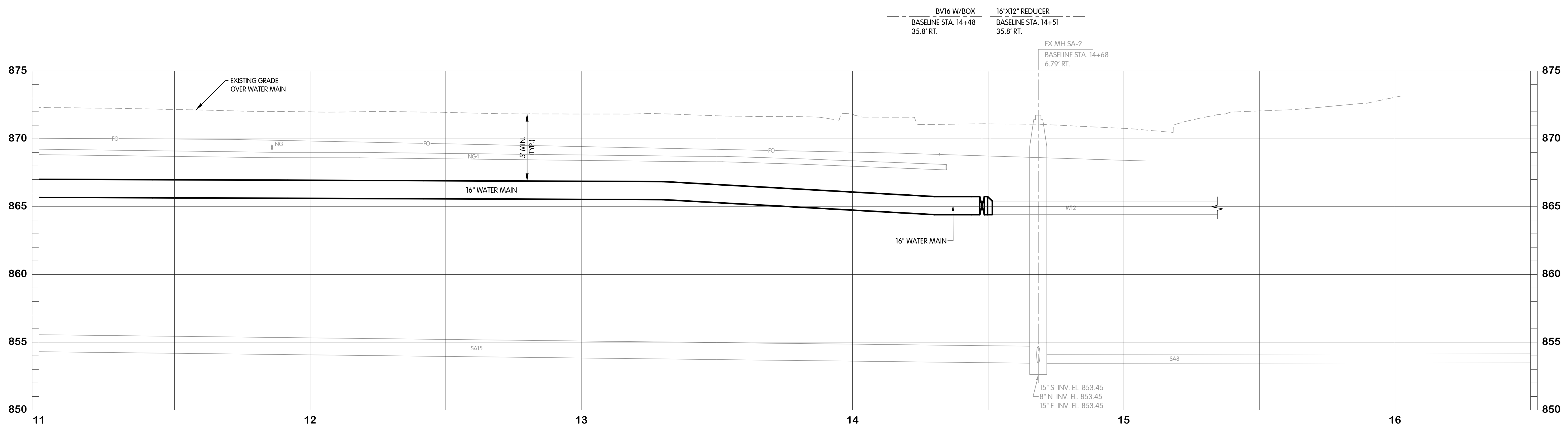
BENCHMARK #5  
ELEVATION 873.25  
TOP OF SE FLANGE BOLT ON  
HYDRANT (NAVD88 DATUM)




- NOTES:
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  2. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.

Description	Estimated Quantity	Unit
Water Main, Air Release Manhole	0	EA
Butterfly Valve and Box, 16 inch	1	EA
Gate Valve and Box, 8 inch	0	EA
Water Main, DI 8 inch, Tr Det B	0	LF
Water Main, DI 12 inch, Tr Det B	18	LF
Water Main, DI 16 inch, Tr Det B	356	LF
Polyethylene Encasement	374	LF
Water Serv	0	EA
Fire Hydrant Assembly	0	EA

S. 35TH STREET



S. 35TH STREET  
WATER  
PLAN AND PROFILE  
STA. 11+00 TO 16+50  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN

Jones & Henry  
Engineers, Ltd.  
  
Fluid thinking.<sup>®</sup>  
www.JHeng.com

JOB NO. 017-8167.001  
SCALE 1"=20' HOR.  
1"=4' VERT.  
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

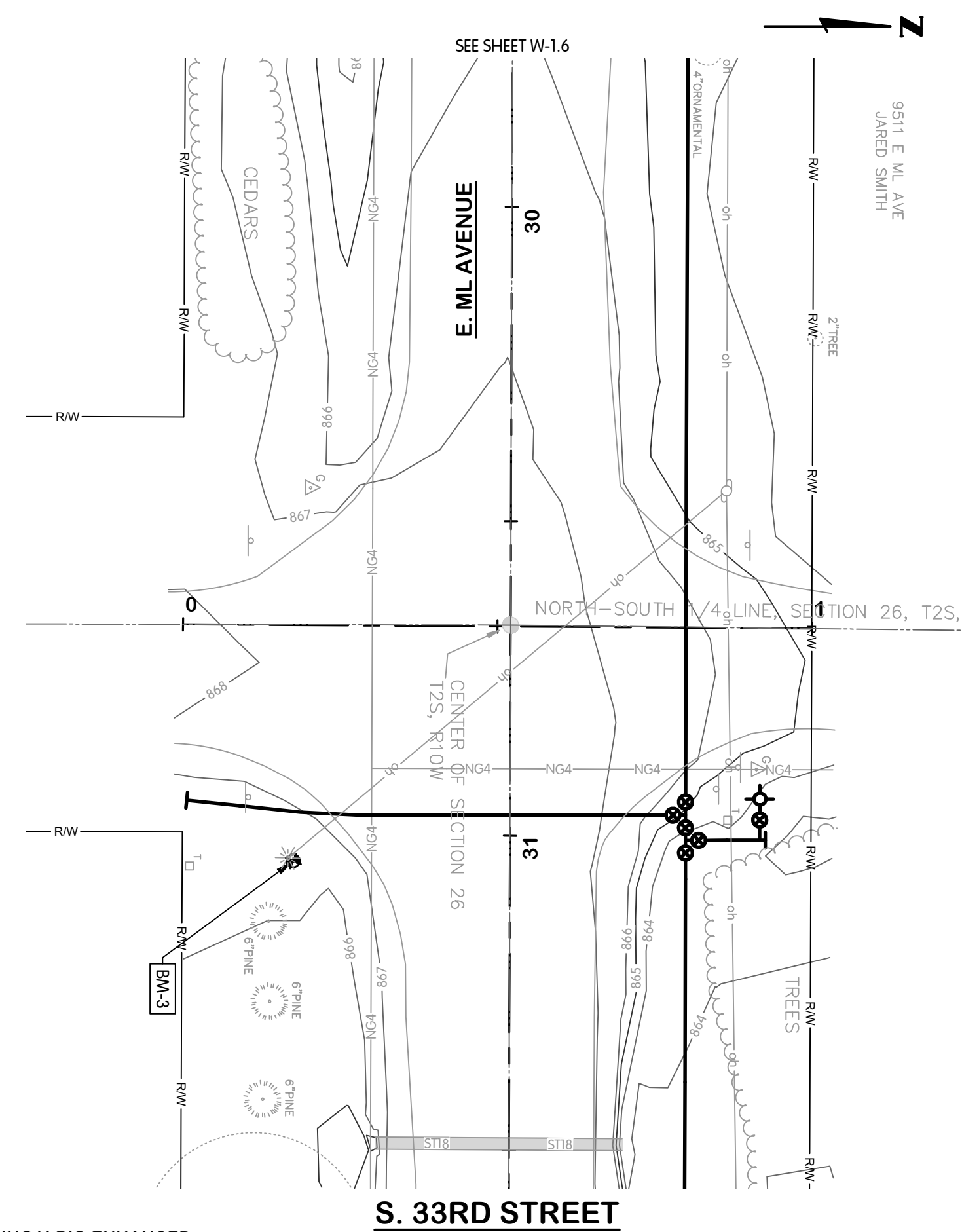
DESIGNED	DRAWN	CHECKED
TLK	CJAF	AB

STATUS: ISSUE FOR BID  
DATE: MAY 2025

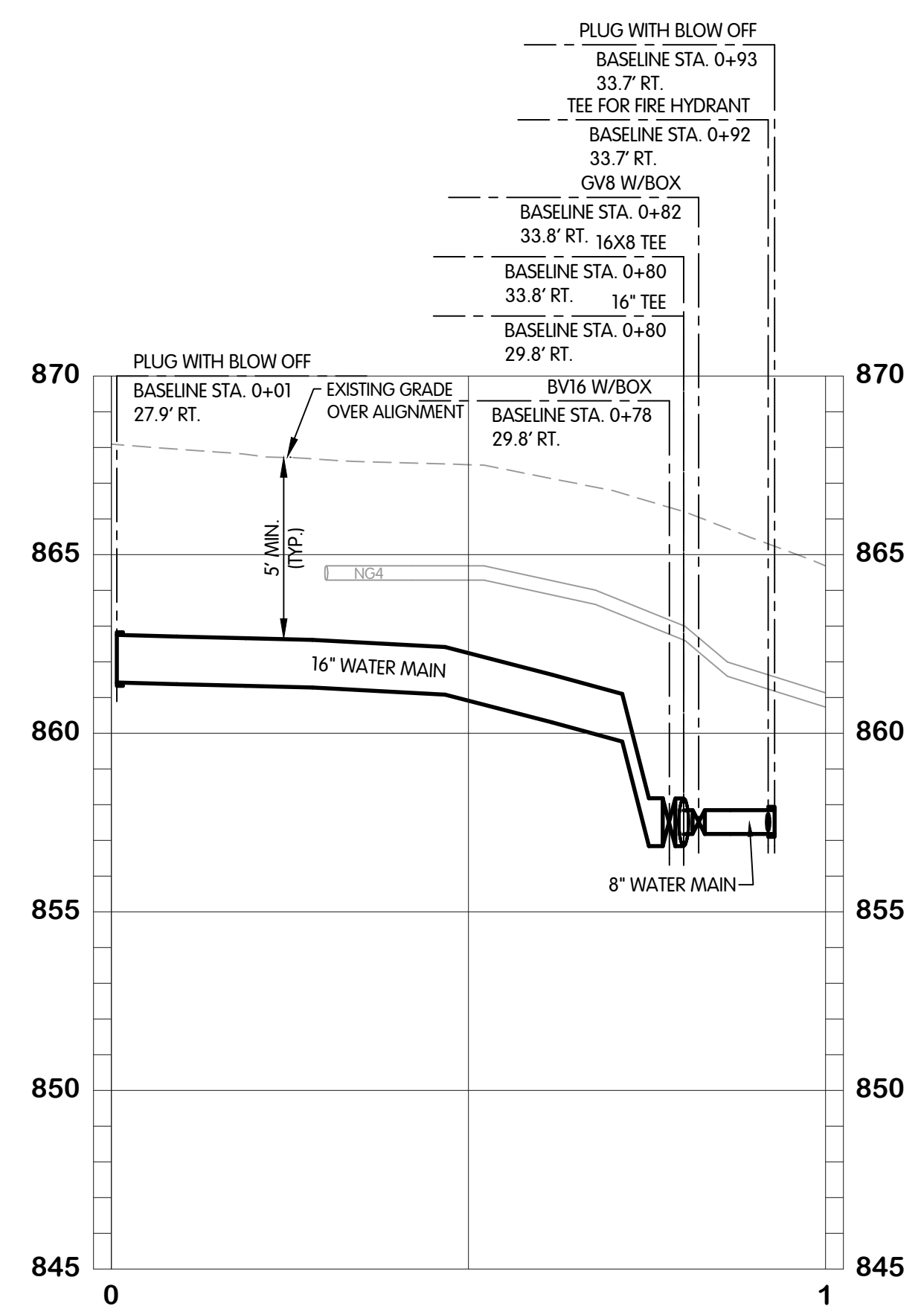
SHEET NO.  
W-2.3  
21 OF 33

KAL-8167001W2-W-2.3  
5/21/2025 4:29 PM - CFERRELL  
5/23/2025 9:28 AM

KAL-816700WZ-W-3.1  
 5/21/2025 4:29 PM - CFERRELL  
 5/23/2025 9:28 AM



- NOTES:
1. ALL WATERMAIN SHALL BE POLYETHYLENE ENCASED USING V-BIO ENHANCED POLYETHYLENE ENCASEMENT. INSTALLATION SHALL BE PER DIPRA STANDARDS.
  2. WATERMAIN FITTING CALLOUTS ARE NOT ALL INCLUSIVE. CONTRACTOR TO USE ADDITIONAL FITTINGS AS NECESSARY TO CONSTRUCT.
  3. NOT ALL TREES SCHEDULED FOR REMOVAL ARE SHOWN. COORDINATE IN FIELD WITH THE OWNER/ENGINEER TO DETERMINE/MARK TREES SCHEDULED FOR REMOVAL. TREE REMOVAL QUANTITIES LISTED IN THE QUANTITIES TABLE REPRESENT THE ACTUAL QUANTITIES SCHEDULED TO BE REMOVED.
  4. ESTIMATED QUANTITIES ARE COMBINED WITH ESTIMATE ON SHEET W-1.6.

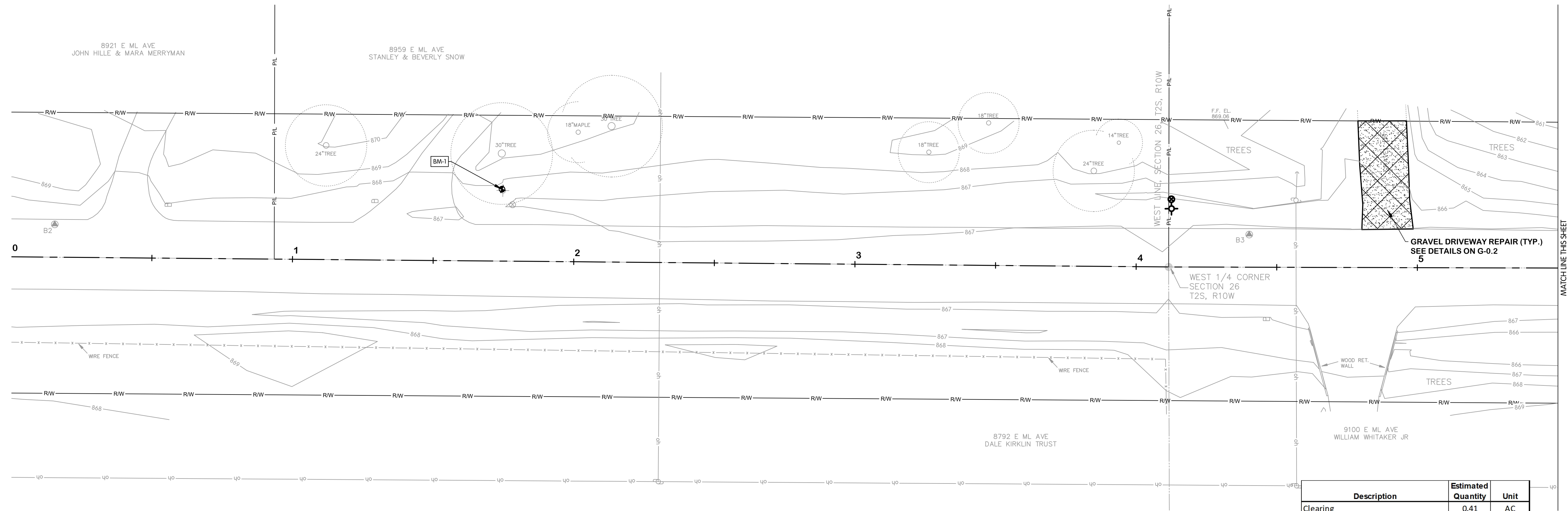


S. 33RD STREET  
 WATER  
 PLAN AND PROFILE  
 STA. 0+00 TO 1+00  
 CITY OF KALAMAZOO, MICHIGAN  
 E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN

NO. 1  
 DATE  
 REVISIONS AFTER ISSUED FOR BID

Jones & Henry  
 Engineers, Ltd.  
  
 Fluid thinking.<sup>®</sup>  
 www.JHeng.com

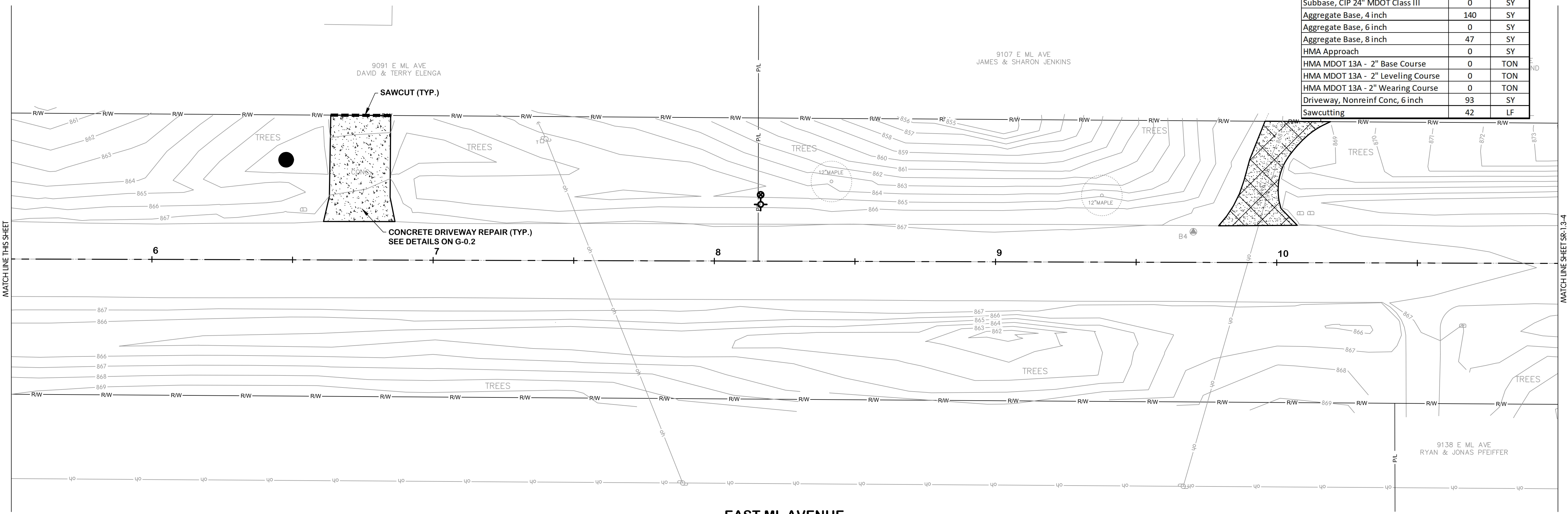
JOB NO.	017-8167.001	
SCALE	1"=20' HOR. 1"=4' VERT.	
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE		
DESIGNED	DRAWN	CHECKED
TLK	CJAF	AB
STATUS: ISSUE FOR BID		
DATE: MAY 2025		
SHEET NO.		
W-3.1		
22 OF 33		



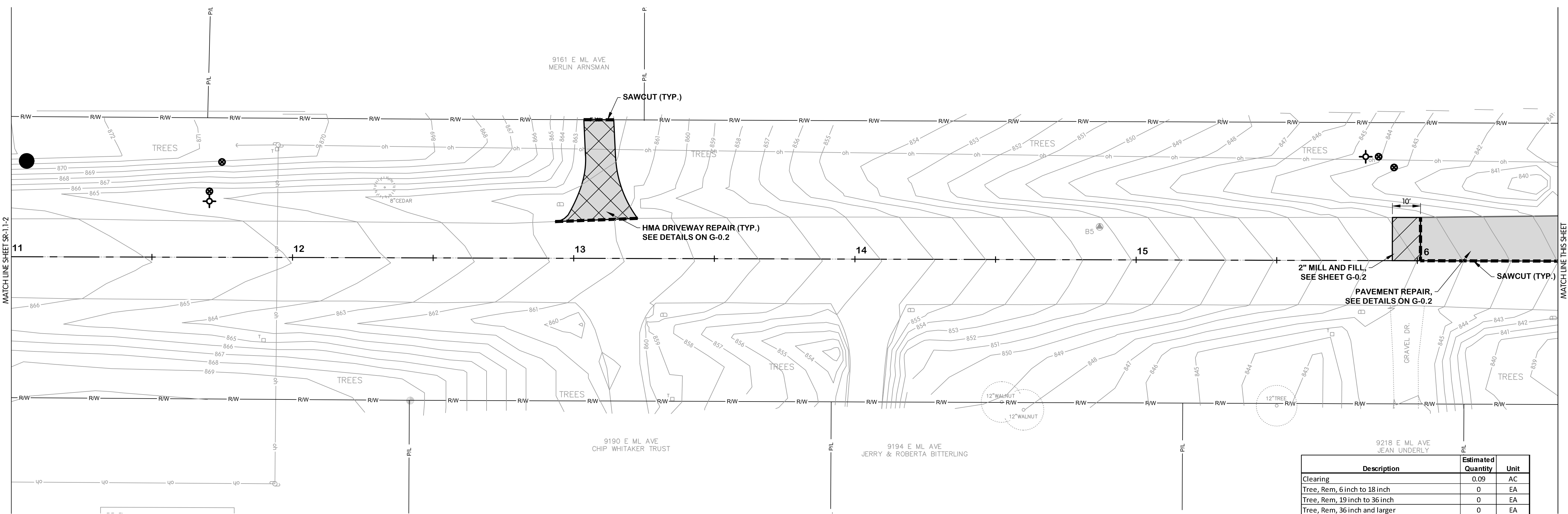
**NOTES:**  
1. WHERE CONCRETE DRIVEWAY IS REMOVED AND REPLACED, REMOVAL SHALL BE TO THE NEAREST JOINT IN THE CONCRETE WITHIN THE RIGHT-OF-WAY.

**EAST ML AVENUE  
STA. 0+00 TO 5+50**  
1"=20'

Description	Estimated Quantity	Unit
Clearing	0.41	AC
Tree, Rem, 6 inch to 18 inch	46	EA
Tree, Rem, 19 inch to 36 inch	15	EA
Tree, Rem, 36 inch and larger	0	EA
Curb and Gutter, Rem	0	LF
Curb and Gutter, Replace	0	LF
Pavt, Rem, Mod	233	SY
Cold Milling HMA Surface	0	SY
Subbase, CIP 24" MDOT Class III	0	SY
Aggregate Base, 4 inch	140	SY
Aggregate Base, 6 inch	0	SY
Aggregate Base, 8 inch	47	SY
HMA Approach	0	SY
HMA MDOT 13A - 2" Base Course	0	TON
HMA MDOT 13A - 2" Leveling Course	0	TON
HMA MDOT 13A - 2" Wearing Course	0	TON
Driveway, Nonreinf Conc, 6 inch	93	SY
Sawcutting	42	LF



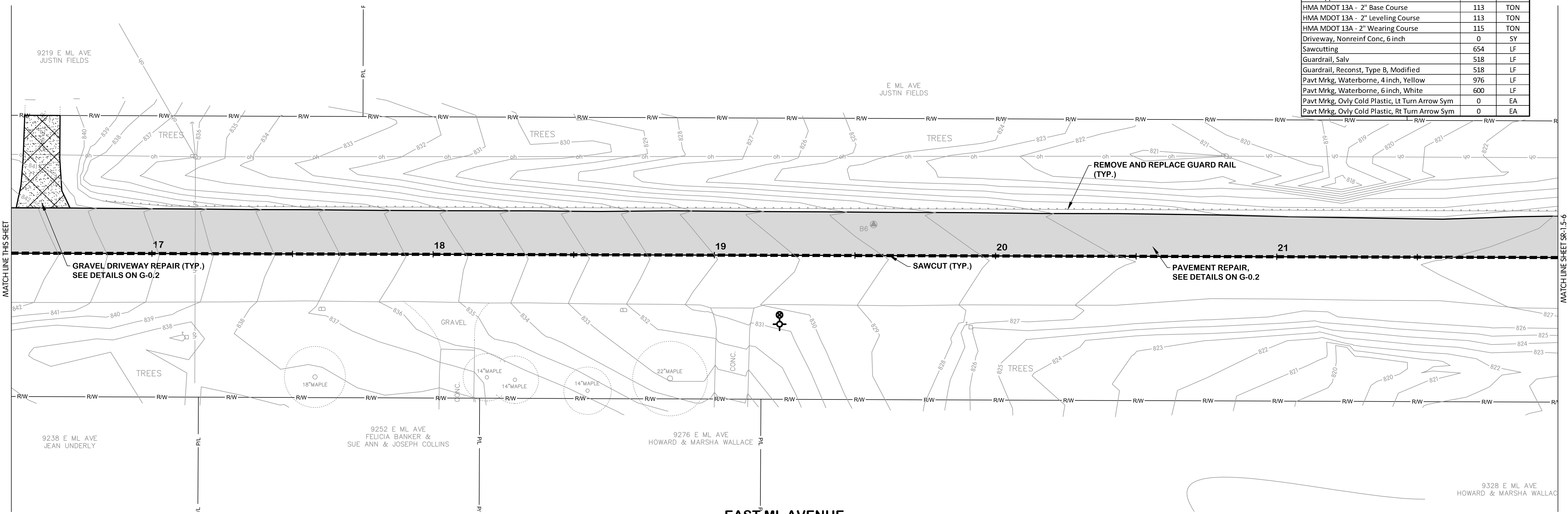
**EAST ML AVENUE  
STA. 5+50 TO 11+00**  
1"=20'



**NOTES:**  
1. WHERE CONCRETE DRIVEWAY IS REMOVED AND REPLACED, REMOVAL SHALL BE TO THE NEAREST JOINT IN THE CONCRETE WITHIN THE RIGHT-OF-WAY.

**EAST ML AVENUE  
STA. 11+00 TO 16+50**  
1"=20'

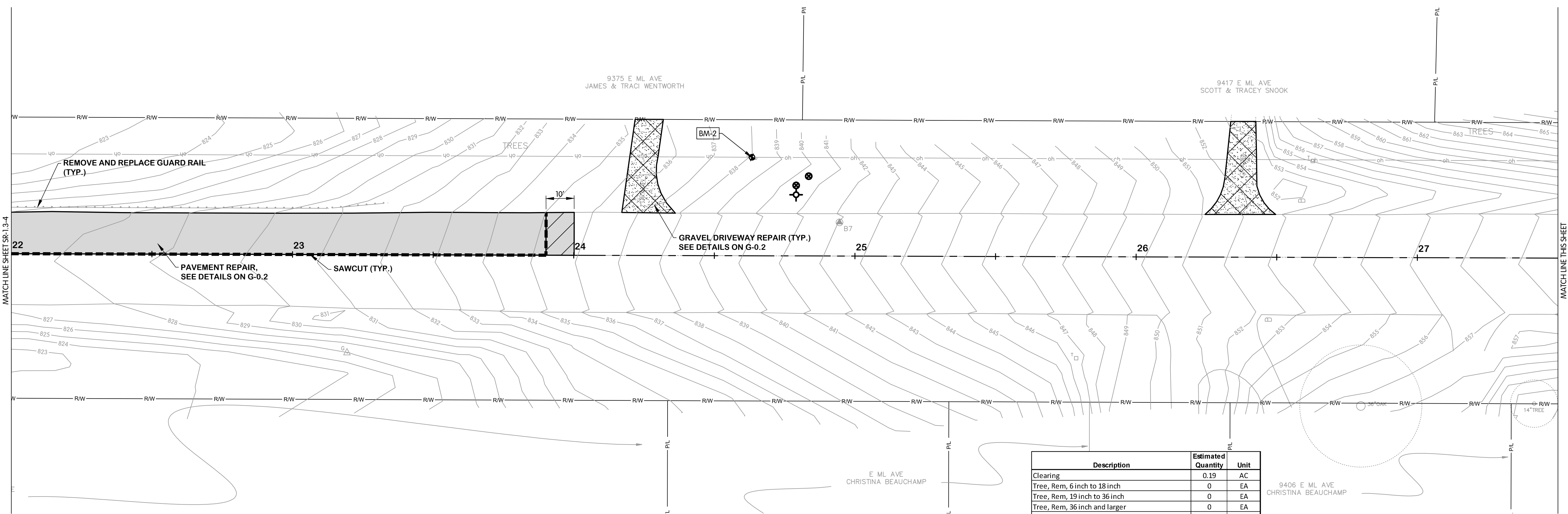
Description	Estimated Quantity	Unit
Clearing	0.09	AC
Tree, Rem, 6 inch to 18 inch	0	EA
Tree, Rem, 19 inch to 36 inch	0	EA
Tree, Rem, 36 inch and larger	0	EA
Curb and Gutter, Rem	0	LF
Curb and Gutter, Replace	0	LF
Pavt, Rem, Mod	1030	SY
Cold Milling HMA Surface	18	SY
Subbase, CIP 24" MDOT Class III	1030	SY
Aggregate Base, 4 inch	0	SY
Aggregate Base, 6 inch	56	SY
Aggregate Base, 8 inch	1082	SY
HMA Approach	56	SY
HMA MDOT 13A - 2" Base Course	113	TON
HMA MDOT 13A - 2" Leveling Course	113	TON
HMA MDOT 13A - 2" Wearing Course	115	TON
Driveway, Nonreinf Conc, 6 inch	0	SY
Sawcutting	654	LF
Guardrail, Salv	518	LF
Guardrail, Reconst, Type B, Modified	518	LF
Pavt Mkg, Waterborne, 4 inch, Yellow	976	LF
Pavt Mkg, Waterborne, 6 inch, White	600	LF
Pavt Mkg, Ovlly Cold Plastic, Lt Turn Arrow Sym	0	EA
Pavt Mkg, Ovlly Cold Plastic, Rt Turn Arrow Sym	0	EA



**EAST ML AVENUE  
STA. 16+50 TO 22+00**  
1"=20'



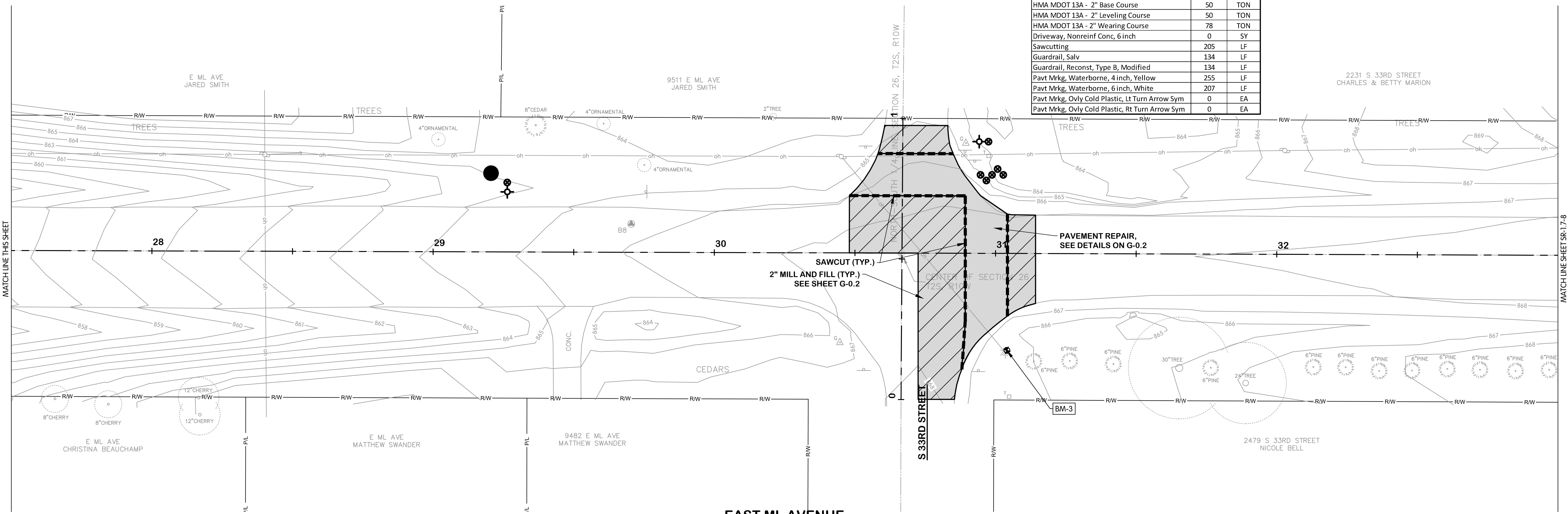
**EAST ML AVENUE  
SURFACE RESTORATION  
STA 22+00 TO 33+00**  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



**NOTES:**  
1. WHERE CONCRETE DRIVEWAY IS REMOVED AND REPLACED, REMOVAL SHALL BE TO THE NEAREST JOINT IN THE CONCRETE WITHIN THE RIGHT-OF-WAY.

**EAST ML AVENUE  
STA. 22+00 TO 27+50**  
1"=20'

Description	Estimated Quantity	Unit
Clearing	0.19	AC
Tree, Rem, 6 inch to 18 inch	0	EA
Tree, Rem, 19 inch to 36 inch	0	EA
Tree, Rem, 36 inch and larger	0	EA
Curb and Gutter, Rem	0	LF
Curb and Gutter, Replace	0	LF
Pavt, Rem, Mod	456	SY
Cold Milling HMA Surface	252	SY
Subbase, CIP 24" MDOT Class III	456	SY
Aggregate Base, 4 inch	0	SY
Aggregate Base, 6 inch	0	SY
Aggregate Base, 8 inch	544	SY
HMA Approach	0	SY
HMA MDOT 13A - 2" Base Course	50	TON
HMA MDOT 13A - 2" Leveling Course	50	TON
HMA MDOT 13A - 2" Wearing Course	78	TON
Driveway, Nonrein Conc, 6 inch	0	SY
Sawcutting	205	LF
Guardrail, Salv	134	LF
Guardrail, Reconst, Type B, Modified	134	LF
Pavt Mrkg, Waterborne, 4 inch, Yellow	255	LF
Pavt Mrkg, Waterborne, 6 inch, White	207	LF
Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	0	EA
Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	0	EA



**EAST ML AVENUE  
STA. 27+50 TO 33+00**  
1"=20'

KAL-816700SR1-SR-1.5-6  
5/22/2025 4:36 PM - CFERRELL  
5/23/2025 9:28 AM

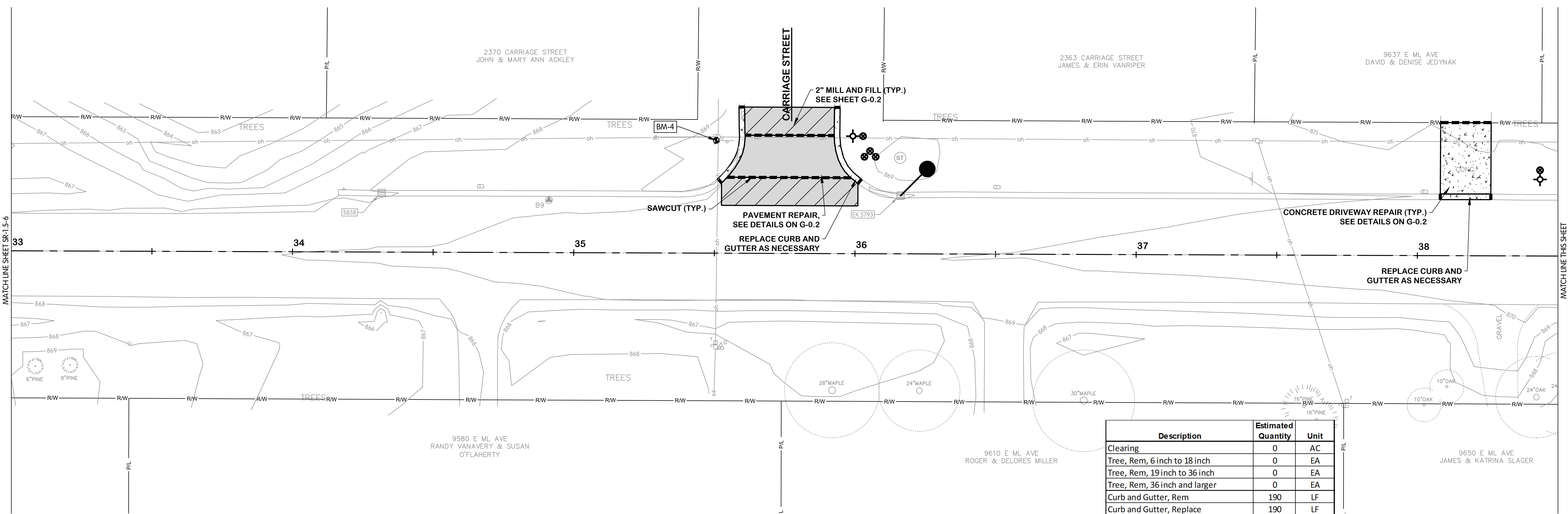
DESIGNED: TLK  
DRAWN: AJB  
CHECKED: AB  
STATUS: ISSUE FOR BID  
DATE: MAY 2025  
SHEET NO. 33



JOB NO. 017-8167.001  
SCALE AS INDICATED  
THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE  
DATE: MAY 2025  
SHEET NO. 33



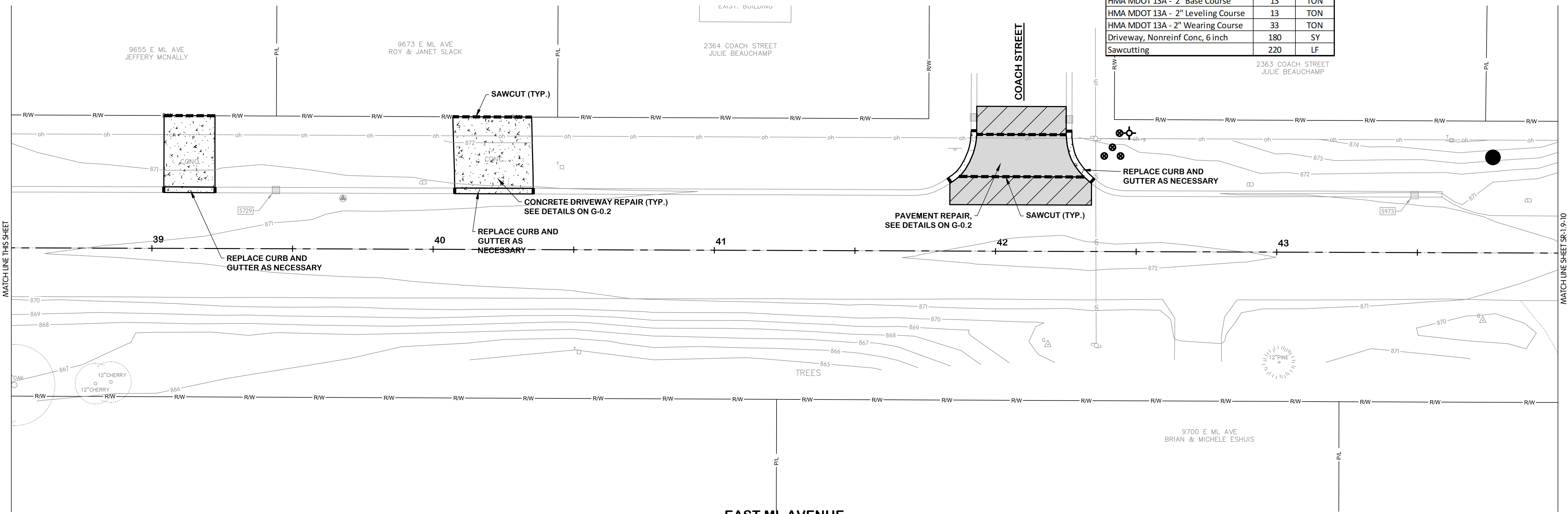
**EAST ML AVENUE  
SURFACE RESTORATION  
STA 33+00 TO 44+00**  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



Description	Estimated Quantity	Unit
Clearing	0	AC
Tree, Rem, 6 inch to 18 inch	0	EA
Tree, Rem, 19 inch to 36 inch	0	EA
Tree, Rem, 36 inch and larger	0	EA
Curb and Gutter, Rem	190	LF
Curb and Gutter, Replace	190	LF
Pavt, Rem, Mod	301	SY
Cold Milling HMA Surface	178	SY
Subbase, CIP 24" MDOT Class III	121	SY
Aggregate Base, 4 inch	180	SY
Aggregate Base, 6 inch	0	SY
Aggregate Base, 8 inch	121	SY
HMA Approach	0	SY
HMA MDOT 13A - 2" Base Course	13	TON
HMA MDOT 13A - 2" Leveling Course	13	TON
HMA MDOT 13A - 2" Wearing Course	33	TON
Driveway, Nonreinf Conc, 6 inch	180	SY
Sawcutting	220	LF

**NOTES:**  
1. WHERE CONCRETE DRIVEWAY IS REMOVED AND REPLACED, REMOVAL SHALL BE TO THE NEAREST JOINT IN THE CONCRETE WITHIN THE RIGHT-OF-WAY.

**EAST ML AVENUE  
STA. 33+00 TO 38+50**  
1"=20'



**EAST ML AVENUE  
STA. 38+50 TO 44+00**  
1"=20'

KAL-8167001SR1-SR-1.7-8  
5/22/2025 4:36 PM - CFERRELL  
5/23/2025 9:28 AM

NO. 1 2 3 4 5 6 7 8 9 10 11 12  
DATE  
REVISIONS AFTER ISSUED FOR BID  
BY

Jones & Henry  
Engineers, Ltd.  
  
Fluid thinking.  
www.JHeng.com

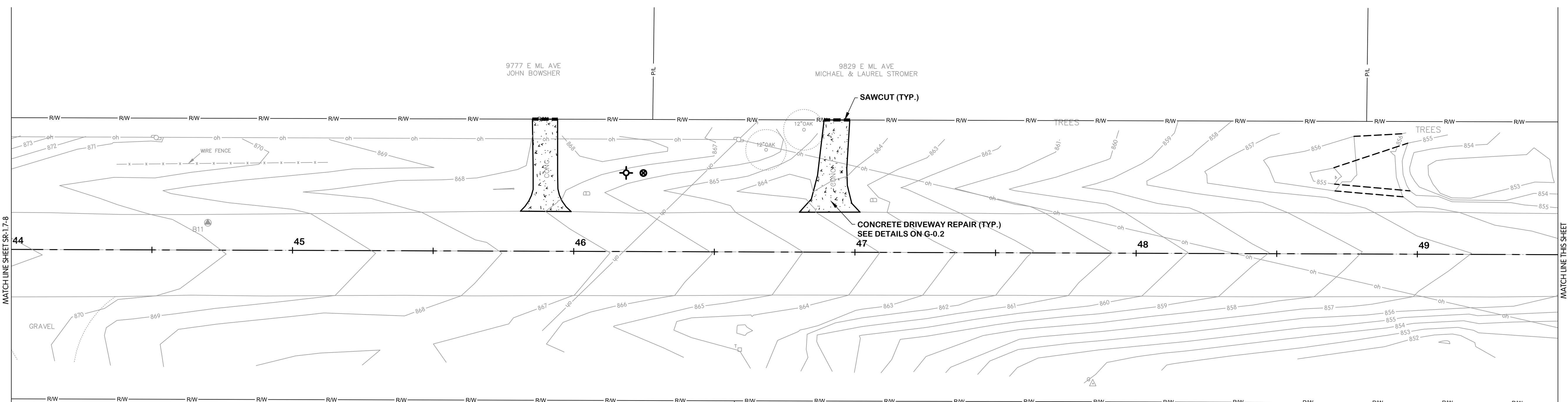
JOB NO. 017-8167.001  
SCALE AS INDICATED  
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
TLK	AJB	AB

STATUS: ISSUE FOR BID  
DATE: MAY 2025  
SHEET NO.

**EAST ML AVENUE  
SURFACE RESTORATION  
STA 44+00 TO 55+00**

CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



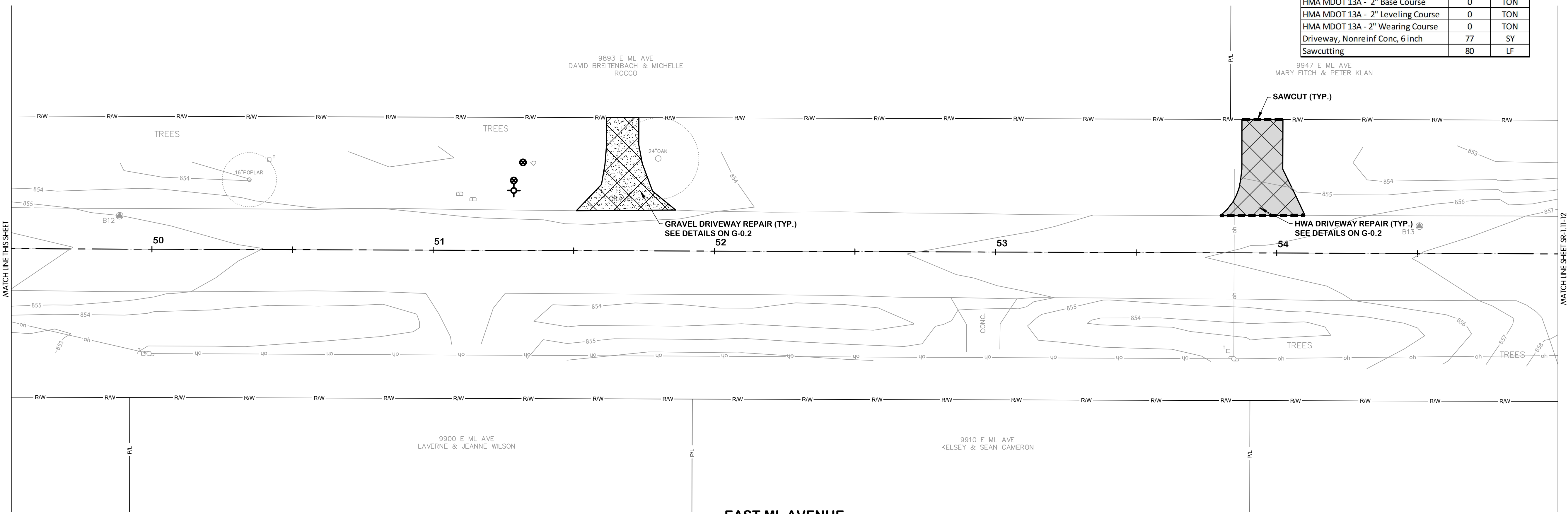
9722 E ML AVE  
KEVIN & TERRI COOK

E ML AVENUE  
TERRY GIBBS

**NOTES:**  
1. WHERE CONCRETE DRIVEWAY IS REMOVED AND REPLACED, REMOVAL SHALL BE TO THE NEAREST JOINT IN THE CONCRETE WITHIN THE RIGHT-OF-WAY.

**EAST ML AVENUE  
STA. 44+00 TO 49+50**  
1"=20'

Description	Estimated Quantity	Unit
Clearing	0.19	AC
Tree, Rem, 6 inch to 18 inch	30	EA
Tree, Rem, 19 inch to 36 inch	6	EA
Tree, Rem, 36 inch and larger	0	EA
Curb and Gutter, Rem	0	LF
Curb and Gutter, Replace	0	LF
Pavt, Rem, Mod	143	SY
Cold Milling HMA Surface	0	SY
Subbase, CIP 24" MDOT Class III	0	SY
Aggregate Base, 4 inch	77	SY
Aggregate Base, 6 inch	67	SY
Aggregate Base, 8 inch	61	SY
HMA Approach	67	SY
HMA MDOT 13A - 2" Base Course	0	TON
HMA MDOT 13A - 2" Leveling Course	0	TON
HMA MDOT 13A - 2" Wearing Course	0	TON
Driveway, Nonreinf Conc, 6 inch	77	SY
Sawcutting	80	LF



9900 E ML AVE  
LAVERNE & JEANNE WILSON

9910 E ML AVE  
KELSEY & SEAN CAMERON

**EAST ML AVENUE  
STA. 49+50 TO 55+00**  
1"=20'

KAL-8167001SR-1.9-10  
5/22/2025 4:36 PM - CFERRELL  
5/23/2025 9:28 AM

NO. 1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

Jones & Henry  
Engineers, Ltd.

Fluid thinking.<sup>®</sup>  
www.JHeng.com

JOB NO. 017-8167.001

SCALE AS INDICATED

THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
TLK	AJB	AB

STATUS: ISSUE FOR BID

DATE: MAY 2025

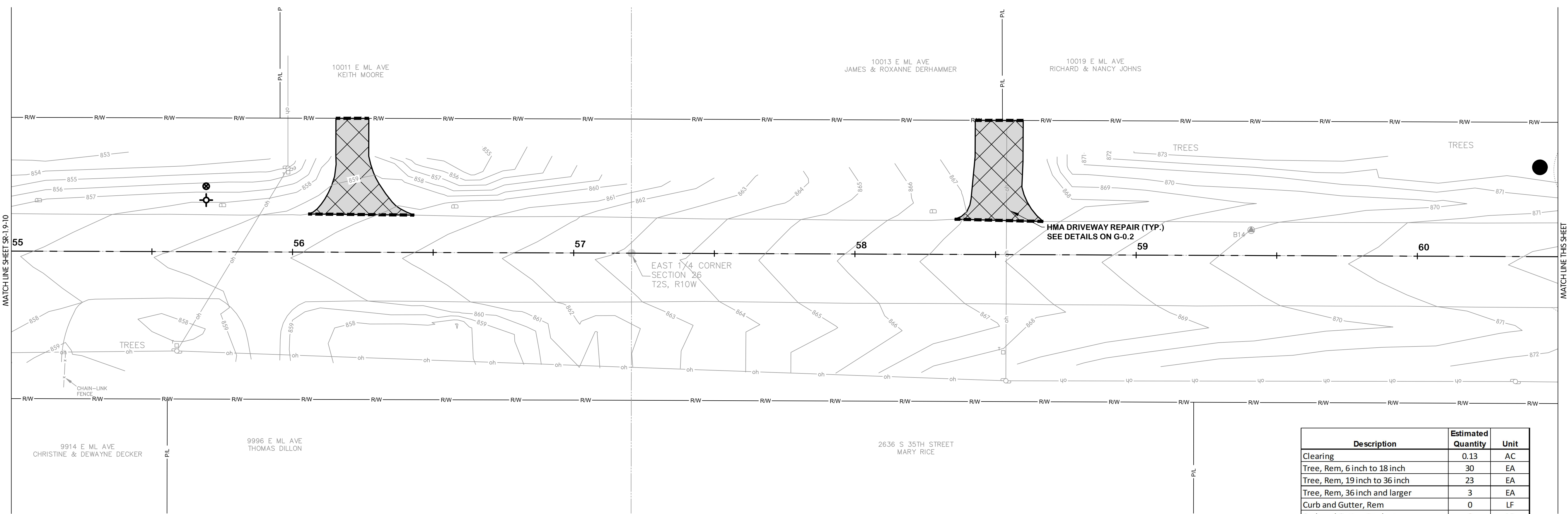
SHEET NO. SR-1.9-10

27 OF 33



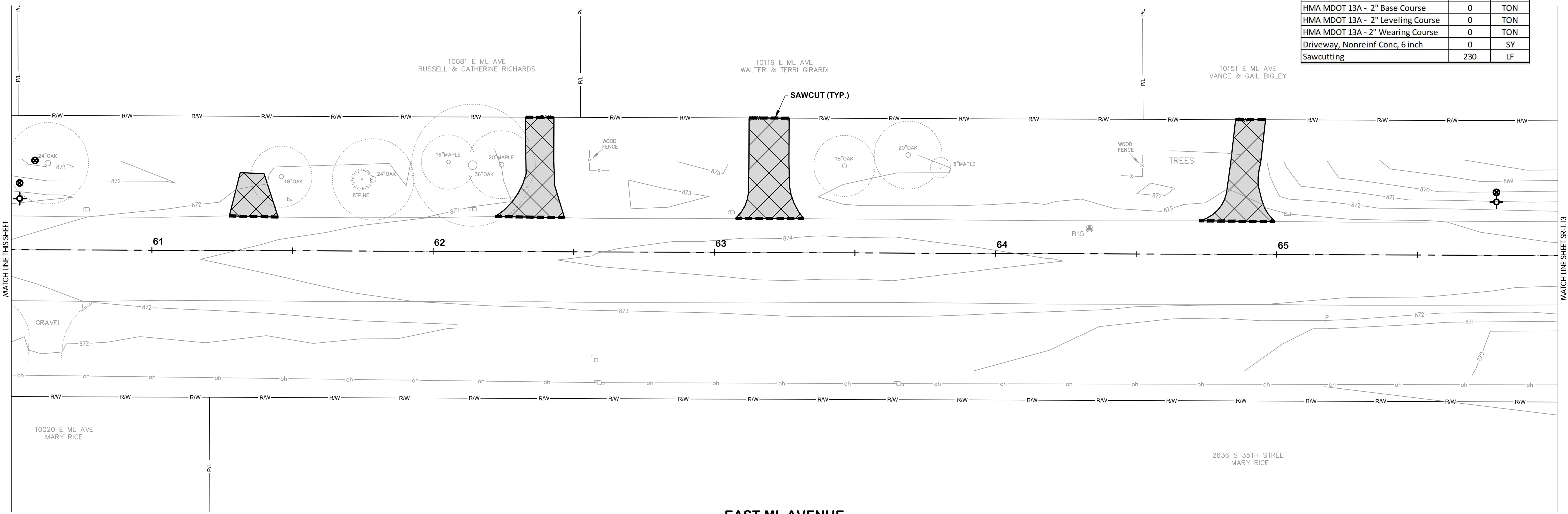
**EAST ML AVENUE  
SURFACE RESTORATION  
STA 55+00 TO 66+00**

CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



**EAST ML AVENUE  
STA. 55+00 TO 60+50**  
1"=20'

Description	Estimated Quantity	Unit
Clearing	0.13	AC
Tree, Rem, 6 inch to 18 inch	30	EA
Tree, Rem, 19 inch to 36 inch	23	EA
Tree, Rem, 36 inch and larger	3	EA
Curb and Gutter, Rem	0	LF
Curb and Gutter, Replace	0	LF
Pavt, Rem, Mod	318	SY
Cold Milling HMA Surface	0	SY
Subbase, CIP 24" MDOT Class III	0	SY
Aggregate Base, 4 inch	0	SY
Aggregate Base, 6 inch	318	SY
Aggregate Base, 8 inch	0	SY
HMA Approach	318	SY
HMA MDOT 13A - 2" Base Course	0	TON
HMA MDOT 13A - 2" Leveling Course	0	TON
HMA MDOT 13A - 2" Wearing Course	0	TON
Driveway, Nonreinf Conc, 6 inch	0	SY
Sawcutting	230	LF



KAL-8167001SR1-SR-1.11-2  
5/22/2025 4:36 PM - CFERRELL  
5/23/2025 9:29 AM

BY \_\_\_\_\_  
DATE \_\_\_\_\_  
NO. \_\_\_\_\_  
REVISIONS AFTER ISSUED FOR BID



JOB NO. 017-8167.001

SCALE AS INDICATED

THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

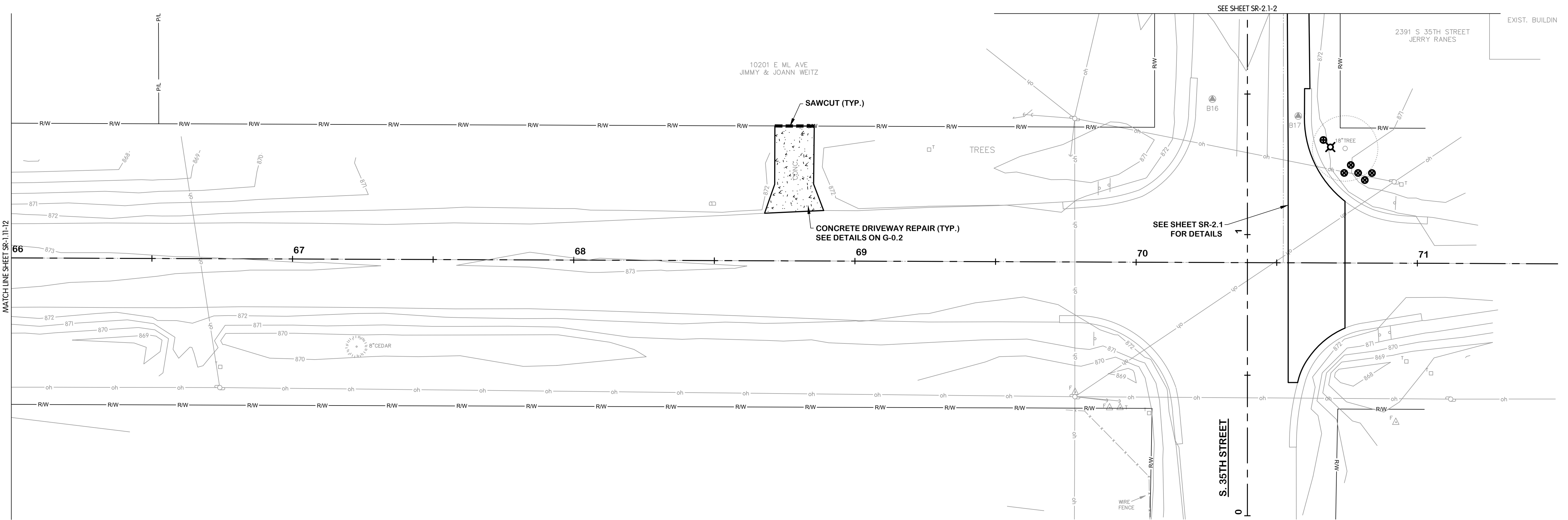
DESIGNED	DRAWN	CHECKED
TLK	AJB	AB

STATUS: ISSUE FOR BID

DATE: MAY 2025

SHEET NO. SR-1.11-12

28 OF 33



NOTES:  
 1. WHERE CONCRETE DRIVEWAY IS REMOVED AND REPLACED, REMOVAL SHALL BE TO THE NEAREST JOINT IN THE CONCRETE WITHIN THE RIGHT-OF-WAY.

**EAST ML AVENUE**  
**STA. 66+00 TO 71+00**  
 1"=20'

Description	Estimated Quantity	Unit
Clearing	0	AC
Tree, Rem, 6 inch to 18 inch	0	EA
Tree, Rem, 19 inch to 36 inch	1	EA
Tree, Rem, 36 inch and larger	0	EA
Curb and Gutter, Rem	0	LF
Curb and Gutter, Replace	0	LF
Pavt, Rem, Mod	52	SY
Cold Milling HMA Surface	0	SY
Subbase, CIP 24" MDOT Class III	0	SY
Aggregate Base, 4 inch	52	SY
Aggregate Base, 6 inch	0	SY
Aggregate Base, 8 inch	0	SY
HMA Approach	0	SY
HMA MDOT 13A - 2" Base Course	0	TON
HMA MDOT 13A - 2" Leveling Course	0	TON
HMA MDOT 13A - 2" Wearing Course	0	TON
Driveway, Nonreinf Conc, 6 inch	52	SY
Sawcutting	15	LF

KAL-816700SR1-SR-1.13  
 5/22/2025 4:36 PM - CFERRELL  
 5/23/2025 9:29 AM



**EAST ML AVENUE**  
**SURFACE RESTORATION**  
**STA 66+00 TO 71+00**  
 CITY OF KALAMAZOO, MICHIGAN  
 E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN

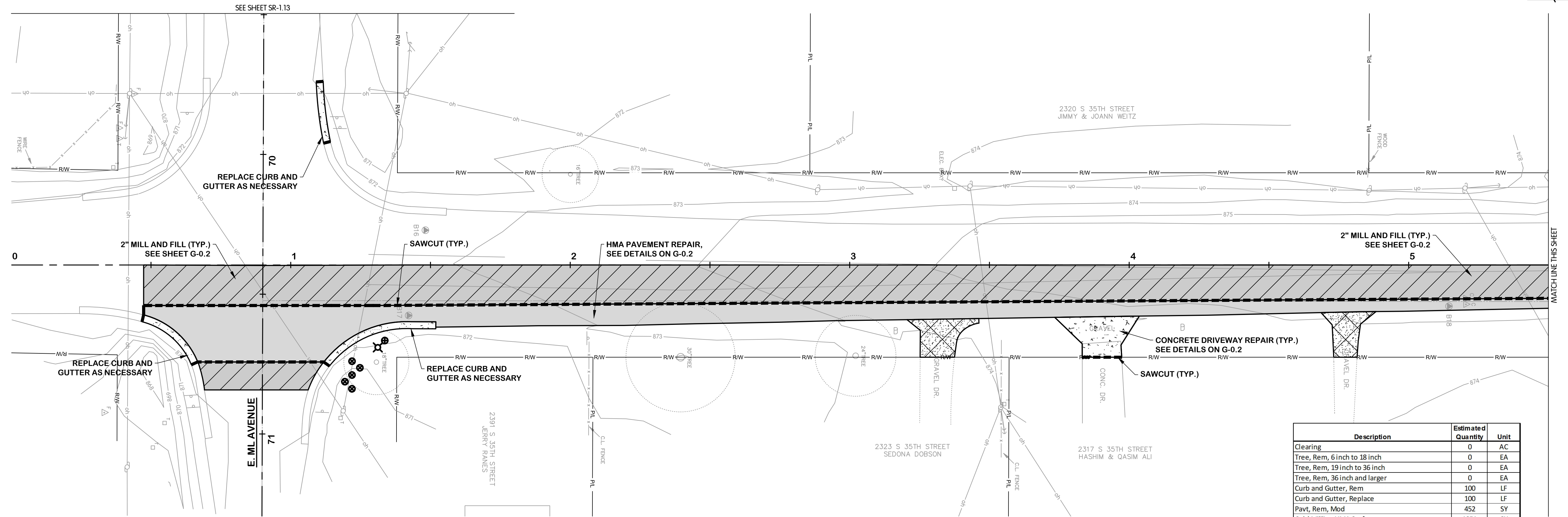
NO. 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76  
 77  
 78  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100  
 101  
 102  
 103  
 104  
 105  
 106  
 107  
 108  
 109  
 110  
 111  
 112  
 113  
 114  
 115  
 116  
 117  
 118  
 119  
 120  
 121  
 122  
 123  
 124  
 125  
 126  
 127  
 128  
 129  
 130  
 131  
 132  
 133  
 134  
 135  
 136  
 137  
 138  
 139  
 140  
 141  
 142  
 143  
 144  
 145  
 146  
 147  
 148  
 149  
 150  
 151  
 152  
 153  
 154  
 155  
 156  
 157  
 158  
 159  
 160  
 161  
 162  
 163  
 164  
 165  
 166  
 167  
 168  
 169  
 170  
 171  
 172  
 173  
 174  
 175  
 176  
 177  
 178  
 179  
 180  
 181  
 182  
 183  
 184  
 185  
 186  
 187  
 188  
 189  
 190  
 191  
 192  
 193  
 194  
 195  
 196  
 197  
 198  
 199  
 200  
 201  
 202  
 203  
 204  
 205  
 206  
 207  
 208  
 209  
 210  
 211  
 212  
 213  
 214  
 215  
 216  
 217  
 218  
 219  
 220  
 221  
 222  
 223  
 224  
 225  
 226  
 227  
 228  
 229  
 230  
 231  
 232  
 233  
 234  
 235  
 236  
 237  
 238  
 239  
 240  
 241  
 242  
 243  
 244  
 245  
 246  
 247  
 248  
 249  
 250  
 251  
 252  
 253  
 254  
 255  
 256  
 257  
 258  
 259  
 260  
 261  
 262  
 263  
 264  
 265  
 266  
 267  
 268  
 269  
 270  
 271  
 272  
 273  
 274  
 275  
 276  
 277  
 278  
 279  
 280  
 281  
 282  
 283  
 284  
 285  
 286  
 287  
 288  
 289  
 290  
 291  
 292  
 293  
 294  
 295  
 296  
 297  
 298  
 299  
 300  
 301  
 302  
 303  
 304  
 305  
 306  
 307  
 308  
 309  
 310  
 311  
 312  
 313  
 314  
 315  
 316  
 317  
 318  
 319  
 320  
 321  
 322  
 323  
 324  
 325  
 326  
 327  
 328  
 329  
 330  
 331  
 332  
 333  
 334  
 335  
 336  
 337  
 338  
 339  
 340  
 341  
 342  
 343  
 344  
 345  
 346  
 347  
 348  
 349  
 350  
 351  
 352  
 353  
 354  
 355  
 356  
 357  
 358  
 359  
 360  
 361  
 362  
 363  
 364  
 365  
 366  
 367  
 368  
 369  
 370  
 371  
 372  
 373  
 374  
 375  
 376  
 377  
 378  
 379  
 380  
 381  
 382  
 383  
 384  
 385  
 386  
 387  
 388  
 389  
 390  
 391  
 392  
 393  
 394  
 395  
 396  
 397  
 398  
 399  
 400  
 401  
 402  
 403  
 404  
 405  
 406  
 407  
 408  
 409  
 410  
 411  
 412  
 413  
 414  
 415  
 416  
 417  
 418  
 419  
 420  
 421  
 422  
 423  
 424  
 425  
 426  
 427  
 428  
 429  
 430  
 431  
 432  
 433  
 434  
 435  
 436  
 437  
 438  
 439  
 440  
 441  
 442  
 443  
 444  
 445  
 446  
 447  
 448  
 449  
 450  
 451  
 452  
 453  
 454  
 455  
 456  
 457  
 458  
 459  
 460  
 461  
 462  
 463  
 464  
 465  
 466  
 467  
 468  
 469  
 470  
 471  
 472  
 473  
 474  
 475  
 476  
 477  
 478  
 479  
 480  
 481  
 482  
 483  
 484  
 485  
 486  
 487  
 488  
 489  
 490  
 491  
 492  
 493  
 494  
 495  
 496  
 497  
 498  
 499  
 500  
 501  
 502  
 503  
 504  
 505  
 506  
 507  
 508  
 509  
 510  
 511  
 512  
 513  
 514  
 515  
 516  
 517  
 518  
 519  
 520  
 521  
 522  
 523  
 524  
 525  
 526  
 527  
 528  
 529  
 530  
 531  
 532  
 533  
 534  
 535  
 536  
 537  
 538  
 539  
 540  
 541  
 542  
 543  
 544  
 545  
 546  
 547  
 548  
 549  
 550  
 551  
 552  
 553  
 554  
 555  
 556  
 557  
 558  
 559  
 560  
 561  
 562  
 563  
 564  
 565  
 566  
 567  
 568  
 569  
 570  
 571  
 572  
 573  
 574  
 575  
 576  
 577  
 578  
 579  
 580  
 581  
 582  
 583  
 584  
 585  
 586  
 587  
 588  
 589  
 590  
 591  
 592  
 593  
 594  
 595  
 596  
 597  
 598  
 599  
 600  
 601  
 602  
 603  
 604  
 605  
 606  
 607  
 608  
 609  
 610  
 611  
 612  
 613  
 614  
 615  
 616  
 617  
 618  
 619  
 620  
 621  
 622  
 623  
 624  
 625  
 626  
 627  
 628  
 629  
 630  
 631  
 632  
 633  
 634  
 635  
 636  
 637  
 638  
 639  
 640  
 641  
 642  
 643  
 644  
 645  
 646  
 647  
 648  
 649  
 650  
 651  
 652  
 653  
 654  
 655  
 656  
 657  
 658  
 659  
 660  
 661  
 662  
 663  
 664  
 665  
 666  
 667  
 668  
 669  
 670  
 671  
 672  
 673  
 674  
 675  
 676  
 677  
 678  
 679  
 680  
 681  
 682  
 683  
 684  
 685  
 686  
 687  
 688  
 689  
 690  
 691  
 692  
 693  
 694  
 695  
 696  
 697  
 698  
 699  
 700  
 701  
 702  
 703  
 704  
 705  
 706  
 707  
 708  
 709  
 710  
 711  
 712  
 713  
 714  
 715  
 716  
 717  
 718  
 719  
 720  
 721  
 722  
 723  
 724  
 725  
 726  
 727  
 728  
 729  
 730  
 731  
 732  
 733  
 734  
 735  
 736  
 737  
 738  
 739  
 740  
 741  
 742  
 743  
 744  
 745  
 746  
 747  
 748  
 749  
 750  
 751  
 752  
 753  
 754  
 755  
 756  
 757  
 758  
 759  
 760  
 761  
 762  
 763  
 764  
 765  
 766  
 767  
 768  
 769  
 770  
 771  
 772  
 773  
 774  
 775  
 776  
 777  
 778  
 779  
 780  
 781  
 782  
 783  
 784  
 785  
 786  
 787  
 788  
 789  
 790  
 791  
 792  
 793  
 794  
 795  
 796  
 797  
 798  
 799  
 800  
 801  
 802  
 803  
 804  
 805  
 806  
 807  
 808  
 809  
 810  
 811  
 812  
 813  
 814  
 815  
 816  
 817  
 818  
 819  
 820  
 821  
 822  
 823  
 824  
 825  
 826  
 827  
 828  
 829  
 830  
 831  
 832  
 833  
 834  
 835  
 836  
 837  
 838  
 839  
 840  
 841  
 842  
 843  
 844  
 845  
 846  
 847  
 848  
 849  
 850  
 851  
 852  
 853  
 854  
 855  
 856  
 857  
 858  
 859  
 860  
 861  
 862  
 863  
 864  
 865  
 866  
 867  
 868  
 869  
 870  
 871  
 872  
 873  
 874  
 875  
 876  
 877  
 878  
 879  
 880  
 881  
 882  
 883  
 884  
 885  
 886  
 887  
 888  
 889  
 890  
 891  
 892  
 893  
 894  
 895  
 896  
 897  
 898  
 899  
 900  
 901  
 902  
 903  
 904  
 905  
 906  
 907  
 908  
 909  
 910  
 911  
 912  
 913  
 914  
 915  
 916  
 917  
 918  
 919  
 920  
 921  
 922  
 923  
 924  
 925  
 926  
 927  
 928  
 929  
 930  
 931  
 932  
 933  
 934  
 935  
 936  
 937  
 938  
 939  
 940  
 941  
 942  
 943  
 944  
 945  
 946  
 947  
 948  
 949  
 950  
 951  
 952  
 953  
 954  
 955  
 956  
 957  
 958  
 959  
 960  
 961  
 962  
 963  
 964  
 965  
 966  
 967  
 968  
 969  
 970  
 971  
 972  
 973  
 974  
 975  
 976  
 977  
 978  
 979  
 980  
 981  
 982  
 983  
 984  
 985  
 986  
 987  
 988  
 989  
 990  
 991  
 992  
 993  
 994  
 995  
 996  
 997  
 998  
 999  
 1000

Jones & Henry  
 Engineers, Ltd.  
  
 Fluid thinking.<sup>®</sup>  
 www.JHeng.com

JOB NO. 017-8167.001  
 SCALE AS INDICATED  
 THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE  

DESIGNED	DRAWN	CHECKED
TLK	AJB	AB

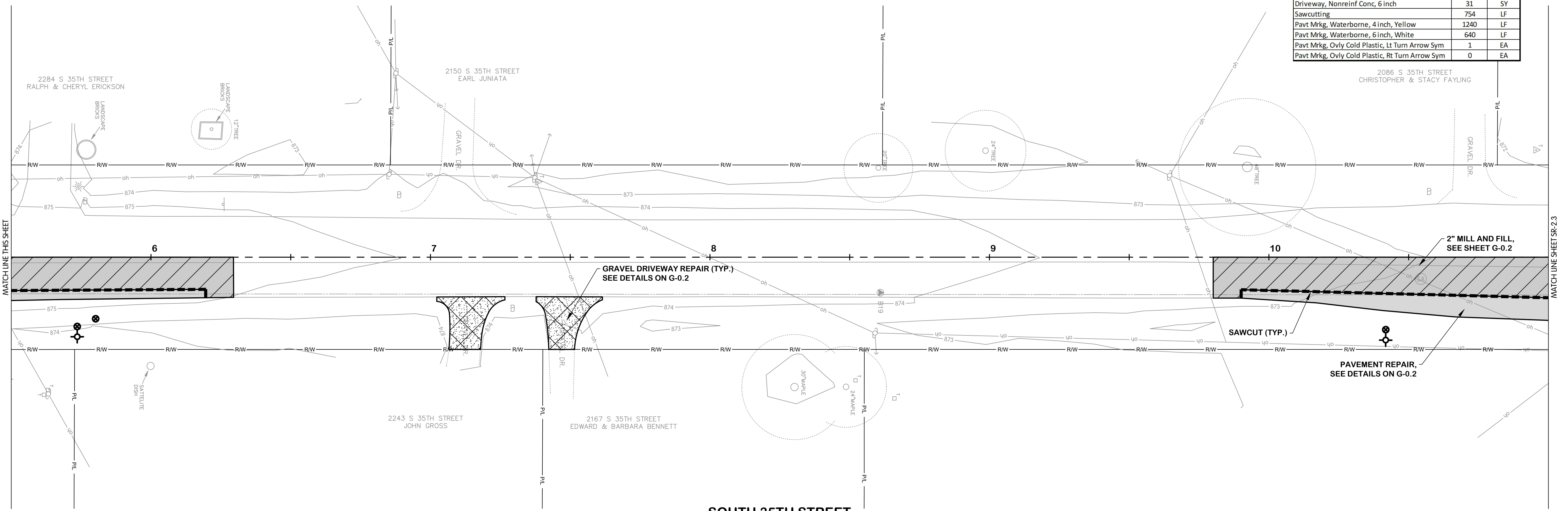
 STATUS: ISSUE FOR BID  
 DATE: MAY 2025  
 SHEET NO.  
**SR-1.13**  
 29 OF 33



- NOTES:**
1. WHERE CONCRETE DRIVEWAY IS REMOVED AND REPLACED, REMOVAL SHALL BE TO THE NEAREST JOINT IN THE CONCRETE WITHIN THE RIGHT-OF-WAY.
  2. VALVE BOXES INSTALLED IN THE ROADWAY SHALL BE INSTALLED WITH A CONCRETE COLLAR.

**SOUTH 35TH STREET  
STA. 0+00 TO 5+50**  
1"=20'

Description	Estimated Quantity	Unit
Clearing	0	AC
Tree, Rem, 6 inch to 18 inch	0	EA
Tree, Rem, 19 inch to 36 inch	0	EA
Tree, Rem, 36 inch and larger	0	EA
Curb and Gutter, Rem	100	LF
Curb and Gutter, Replace	100	LF
Pavt, Rem, Mod	452	SY
Cold Milling HMA Surface	1051	SY
Subbase, CIP 24" MDOT Class III	421	SY
Aggregate Base, 4 inch	31	SY
Aggregate Base, 6 inch	0	SY
Aggregate Base, 8 inch	522	SY
HMA Approach	0	SY
HMA MDOT 13A - 2" Base Course	46	TON
HMA MDOT 13A - 2" Leveling Course	46	TON
HMA MDOT 13A - 2" Wearing Course	162	TON
Driveway, Nonreinf Conc, 6 inch	31	SY
Sawcutting	754	LF
Pavt Mrkg, Waterborne, 4 inch, Yellow	1240	LF
Pavt Mrkg, Waterborne, 6 inch, White	640	LF
Pavt Mrkg, Ovlv Cold Plastic, Lt Turn Arrow Sym	1	EA
Pavt Mrkg, Ovlv Cold Plastic, Rt Turn Arrow Sym	0	EA



**SOUTH 35TH STREET  
STA. 5+50 TO 11+00**  
1"=20'

KAL-816700SR2-SR-2.1-2  
5/21/2025 4:30 PM - CFERRELL  
5/23/2025 9:29 AM

NO. 1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

BY \_\_\_\_\_  
REVISIONS AFTER ISSUED FOR BID \_\_\_\_\_  
DATE \_\_\_\_\_

**Jones & Henry  
Engineers, Ltd.**

Fluid thinking.<sup>®</sup>  
www.JHeng.com

JOB NO. 017-8167.001  
SCALE AS INDICATED  
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

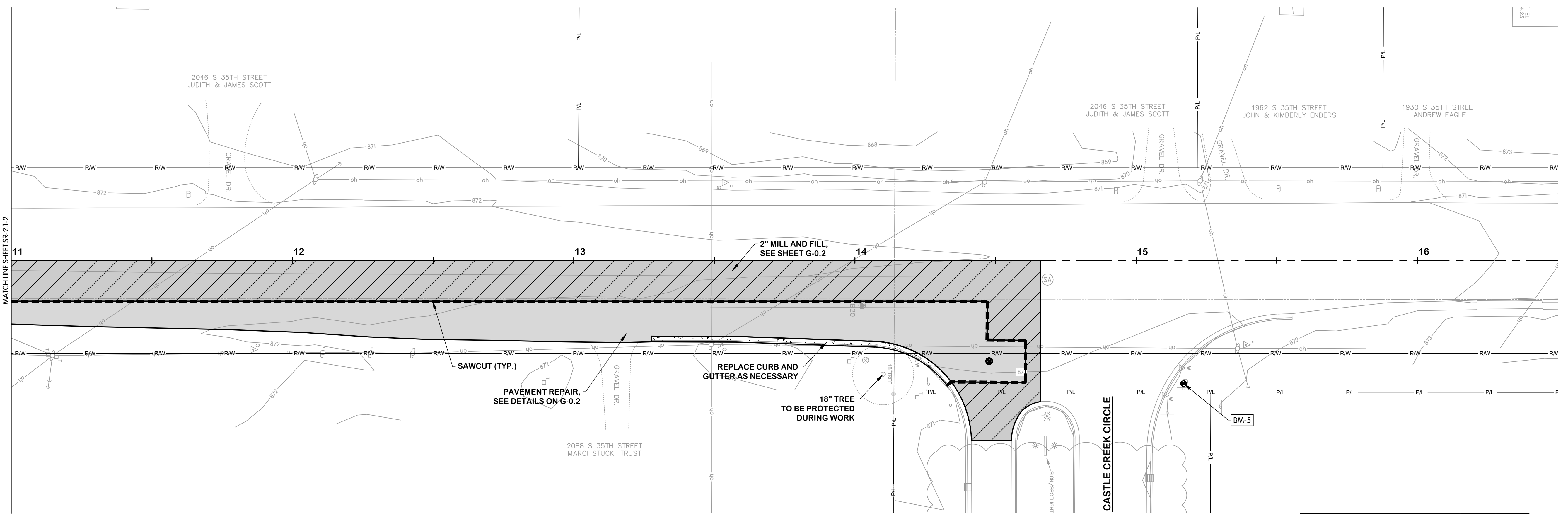
DESIGNED	DRAWN	CHECKED
TLK	AJB	AB

STATUS: ISSUE FOR BID  
DATE: MAY 2025  
SHEET NO. SR-2.1-2  
30 OF 33



**SOUTH 35TH STREET  
SURFACE RESTORATION  
STA 11+00 TO 16+50**

CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN



- NOTES:**
- WHERE CONCRETE DRIVEWAY IS REMOVED AND REPLACED, REMOVAL SHALL BE TO THE NEAREST JOINT IN THE CONCRETE WITHIN THE RIGHT-OF-WAY. VALVE BOXES INSTALLED IN THE ROADWAY SHALL BE INSTALLED WITH A CONCRETE COLLAR.

**SOUTH 35TH STREET  
STA. 11+00 TO 16+50**  
1"=20'

Description	Estimated Quantity	Unit
Clearing	0	AC
Tree, Rem, 6 inch to 18 inch	0	EA
Tree, Rem, 19 inch to 36 inch	0	EA
Tree, Rem, 36 inch and larger	0	EA
Curb and Gutter, Rem	109	LF
Curb and Gutter, Replace	109	LF
Pavt, Rem, Mod	533	SY
Cold Milling HMA Surface	680	SY
Subbase, CIP 24" MDOT Class III	533	SY
Aggregate Base, 4 inch	0	SY
Aggregate Base, 6 inch	0	SY
Aggregate Base, 8 inch	533	SY
HMA Approach	0	SY
HMA MDOT 13A - 2" Base Course	59	TON
HMA MDOT 13A - 2" Leveling Course	59	TON
HMA MDOT 13A - 2" Wearing Course	133	TON
Driveway, Nonreinf Conc, 6 inch	0	SY
Sawcutting	408	LF
Pavt M'kg, Waterborne, 4 inch, Yellow	650	LF
Pavt M'kg, Waterborne, 6 inch, White	315	LF
Pavt M'kg, Ovlly Cold Plastic, Lt Turn Arrow Sym	0	EA
Pavt M'kg, Ovlly Cold Plastic, Rt Turn Arrow Sym	1	EA

KAL-816700SR2-SR-2.3  
5/21/2025 4:30 PM - CFERRELL  
5/23/2025 9:29 AM

NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
REVISIONS AFTER ISSUED FOR BID  
DATE

Jones & Henry  
Engineers, Ltd.

Fluid thinking.<sup>®</sup>  
www.JHeng.com

JOB NO. 017-8167.001

SCALE AS INDICATED

THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE

DESIGNED	DRAWN	CHECKED
TLK	AJB	AB

STATUS: ISSUE FOR BID  
DATE: MAY 2025

SHEET NO.  
**SR-2.3**  
31 OF 33

**LEGEND**

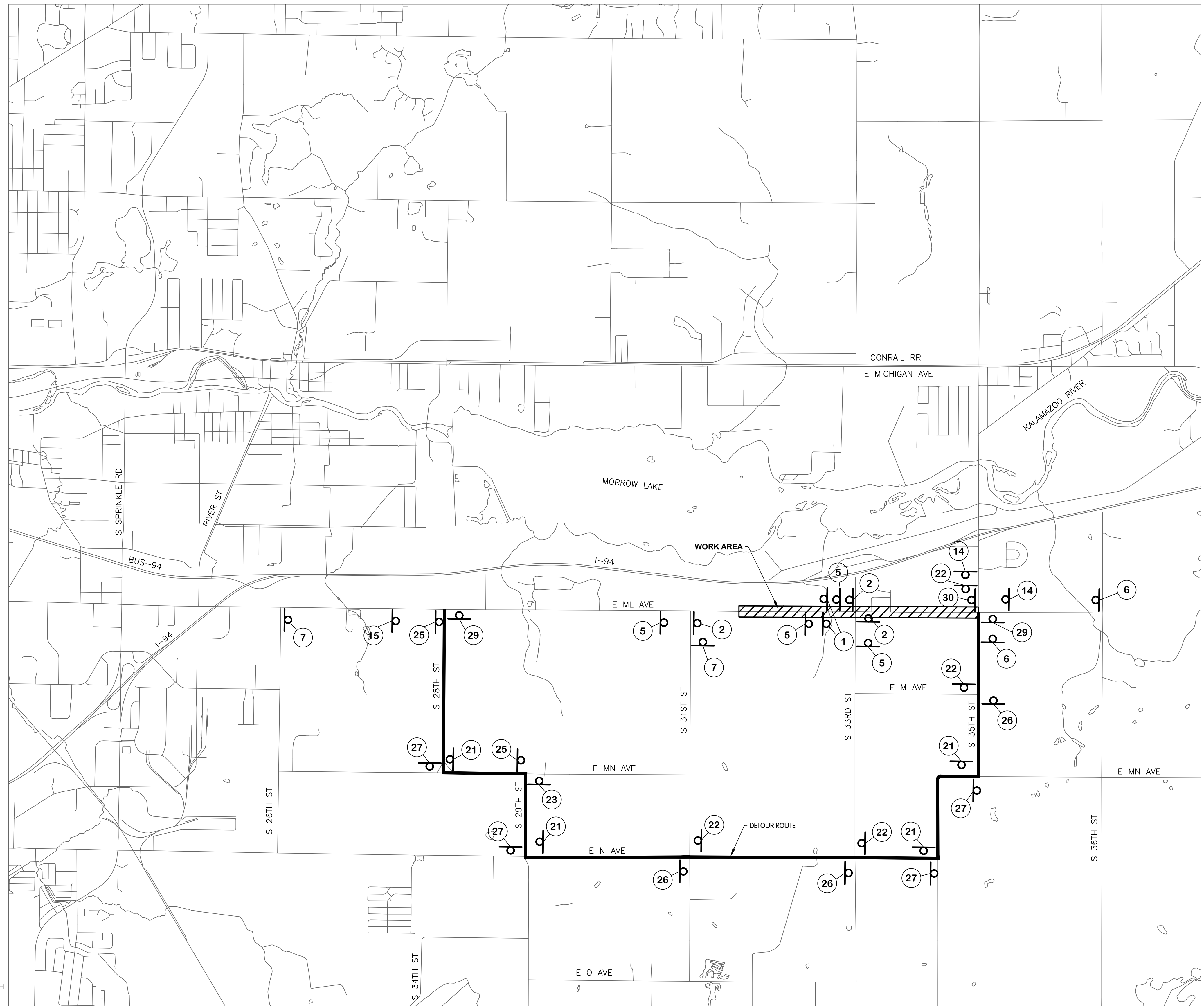
Ω = SIGN LOCATION

— = ROUTE

1 (2 Required)	2 (3 Required)	3 (X Required)	4 (X Required)
5 (4 Required)	6 (2 Required)	7 (2 Required)	8 (X Required)
9 (X Required)	10 (X Required)	11 (X Required)	12 (X Required)
13 (X Required)	14 (2 Required)	15 (1 Required)	16 (X Required)
17 (X Required)	18 (X Required)	19 (X Required)	20 (X Required)
21 (4 Required)	22 (4 Required)	23 (1 Required)	24 (X Required)
25 (2 Required)	26 (3 Required)	27 (4 Required)	28 (X Required)
29 (2 Required)	(Use In Place Of Street Name For State Highway)	(Use In Place Of Street Name For Federal Highway)	(Use In Place Of Street Name For Interstate Highway)
30 (1 Required)			

**DETOUR ROUTE AND LANE/ROADWAY CLOSURES**

- ACCESS FOR EMERGENCY VEHICLES MUST BE PROVIDED AT ALL TIMES.
- ACCESS FOR LOCAL TRAFFIC AND SCHOOL TRAFFIC MUST BE PROVIDED AT ALL TIMES.
- THE KALAMAZOO COUNTY CONSOLIDATED DISPATCH AUTHORITY SHALL BE NOTIFIED, VIA THEIR NON-EMERGENCY NUMBER, OF ALL LANE CLOSURES AND CLOSURE DURATION. CONTACT CENTRAL DISPATCH AT (269)-488-8911.
- IF COMPLETE ROADWAY CLOSURE IS REQUIRED, CONTRACTOR SHALL CONTACT THE KALAMAZOO COUNTY CONSOLIDATED DISPATCH AUTHORITY AT LEAST 24 BUSINESS HOURS PRIOR TO THE CLOSURE. CONTRACTOR SHALL RECEIVE APPROVAL OF THE CLOSURE FROM THE KALAMAZOO COUNTY CONSOLIDATED DISPATCH AUTHORITY PRIOR TO MOVING FORWARD WITH THE CLOSURE.
- ROADWAY REMOVED FOR WATER MAIN INSTALLATION SHALL BE RESTORED AND MADE TRAVERSABLE NO MORE THAN TWO WEEKS AFTER SUCCESSFUL PRESSURE AND BACTERIOLOGICAL TESTING OF WATER MAIN PASSING UNDERNEATH REMOVED ROADWAY SECTION(S).
- ALL WORK PERFORMED ON ML AVE MUST BE COMPLETED AND RESTORED PRIOR TO DETOUR SET-UP AND START OF WORK ON 35TH ST.
- ALL WORK PERFORMED ON 35TH ST MUST BE COMPLETED AND RESTORED PRIOR TO DETOUR SET-UP AND START OF WORK ON ML AVE.
- WORK ALONG 35TH ST SHALL ALLOW FOR A SINGLE LANE OF TRAFFIC TO REMAIN OPERATIONAL AT ALL TIMES. CONTRACTOR SHALL PROVIDE APPROPRIATE TRAFFIC CONTROL TO MAINTAIN THIS OPERATION, PER THE "TRAFFIC CONTROL" PAY ITEM. THE USE OF A TEMPORARY TRAFFIC SIGNAL IS RECOMMENDED.



**E. ML AVENUE  
TRAFFIC CONTROL AND LOCAL RUN AROUND  
CITY OF KALAMAZOO, MICHIGAN  
E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN**

DESIGNED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISIONS AFTER ISSUED FOR BID: \_\_\_\_\_

**Jones & Henry Engineers, Ltd.**  
Fluid thinking...  
www.jheng.com

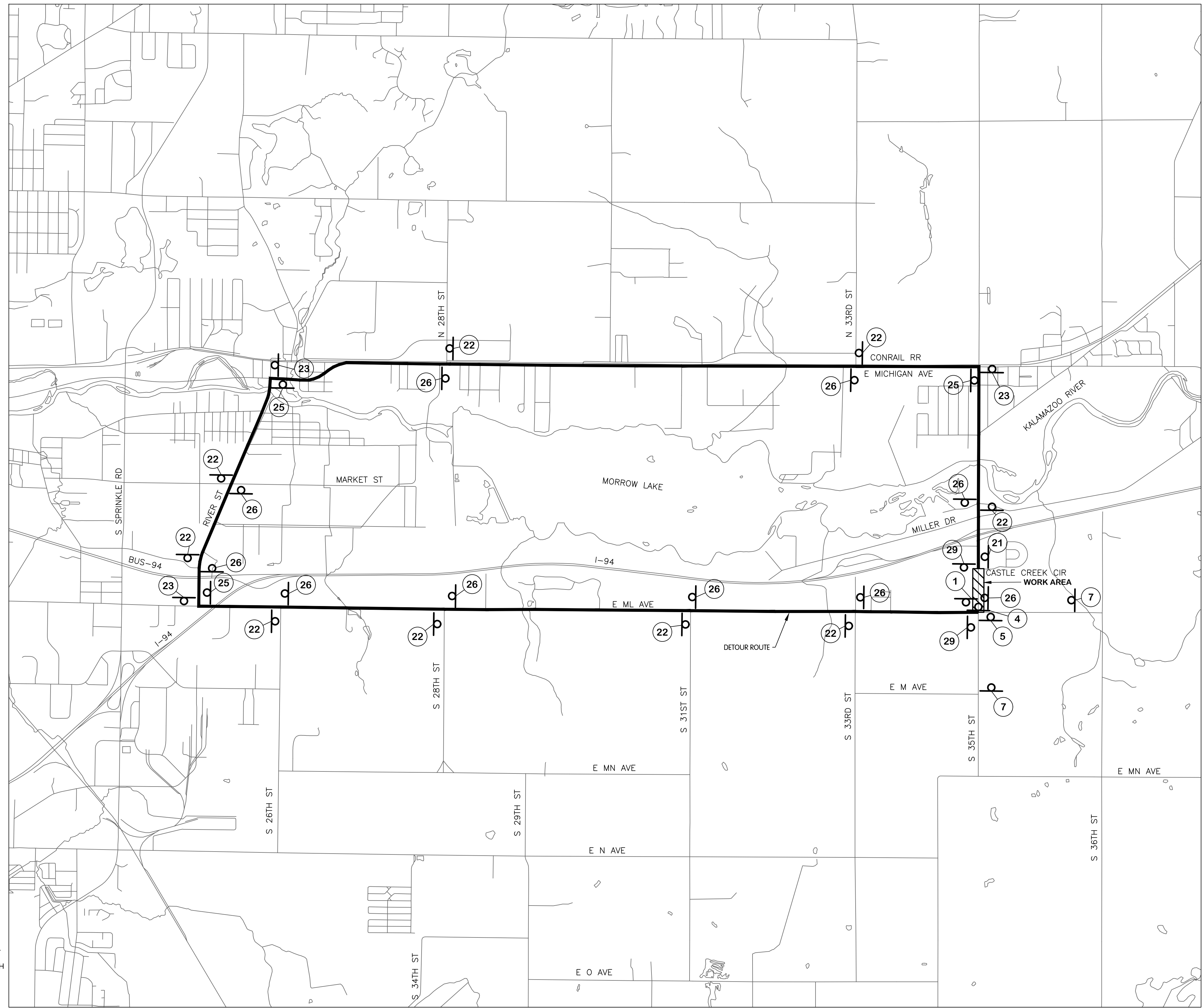
JOB NO. 017-8167.001  
SCALE 1"=180'  
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE  
DESIGNED ERF DRAWN C.JAF CHECKED AB  
STATUS: ISSUE FOR BID  
DATE: MAY 2025  
SHEET NO. \_\_\_\_\_

KAL-8167001TC-1.1  
5/22/2025 8:15 AM - CERRELL  
5/23/2025 9:29 AM

**LEGEND**

= SIGN LOCATION      = ROUTE

 1 (I Required)	 2 (X Required)	 3 (X Required)	 4 (I Required)
 5 (I Required)	 6 (X Required)	 7 (2 Required)	 8 (X Required)
 9 (X Required)	 10 (X Required)	 11 (X Required)	 12 (X Required)
 13 (X Required)	 14 (X Required)	 15 (X Required)	 16 (X Required)
 17 (X Required)	 18 (X Required)	 19 (X Required)	 20 (X Required)
 21 (I Required)	 22 (9 Required)	 23 (3 Required)	 24 (X Required)
 25 (3 Required)	 26 (9 Required)	 27 (X Required)	 28 (X Required)
 29 (2 Required)	 MI-X	 XXX	 XXX



**DETOUR ROUTE AND LANE/ROADWAY CLOSURES**

- ACCESS FOR EMERGENCY VEHICLES MUST BE PROVIDED AT ALL TIMES.
- ACCESS FOR LOCAL TRAFFIC AND SCHOOL TRAFFIC MUST BE PROVIDED AT ALL TIMES.
- THE KALAMAZOO COUNTY CONSOLIDATED DISPATCH AUTHORITY SHALL BE NOTIFIED, VIA THEIR NON-EMERGENCY NUMBER, OF ALL LANE CLOSURES AND CLOSURE DURATION. CONTACT CENTRAL DISPATCH AT (269)-488-8911.
- IF COMPLETE ROADWAY CLOSURE IS REQUIRED, CONTRACTOR SHALL CONTACT THE KALAMAZOO COUNTY CONSOLIDATED DISPATCH AUTHORITY AT LEAST 24 BUSINESS HOURS PRIOR TO THE CLOSURE. CONTRACTOR SHALL RECEIVE APPROVAL OF THE CLOSURE FROM THE KALAMAZOO COUNTY CONSOLIDATED DISPATCH AUTHORITY PRIOR TO MOVING FORWARD WITH THE CLOSURE.
- ROADWAY REMOVED FOR WATER MAIN INSTALLATION SHALL BE RESTORED AND MADE TRAVERSABLE NO MORE THAN TWO WEEKS AFTER SUCCESSFUL PRESSURE AND BACTERIOLOGICAL TESTING OF WATER MAIN PASSING UNDERNEATH REMOVED ROADWAY SECTIONS.
- ALL WORK PERFORMED ON ML AVE MUST BE COMPLETED AND RESTORED PRIOR TO DETOUR SET-UP AND START OF WORK ON 35TH ST.
- ALL WORK PERFORMED ON 35TH ST MUST BE COMPLETED AND RESTORED PRIOR TO DETOUR SET-UP AND START OF WORK ON ML AVE.
- WORK ALONG 35TH ST SHALL ALLOW FOR A SINGLE LANE OF TRAFFIC TO REMAIN OPERATIONAL AT ALL TIMES. CONTRACTOR SHALL PROVIDE APPROPRIATE TRAFFIC CONTROL TO MAINTAIN THIS OPERATION, PER THE "TRAFFIC CONTROL" PAY ITEM. THE USE OF A TEMPORARY TRAFFIC SIGNAL IS RECOMMENDED.

KAL-816700100-TC-1.2  
5/22/2025 8:15 AM - CERRELL  
5/23/2025 9:29 AM



**S. 35TH STREET**  
**TRAFFIC CONTROL AND LOCAL RUN AROUND**  
**CITY OF KALAMAZOO, MICHIGAN**  
**E. ML AVE & S. 35TH ST TRANSMISSION WATERMAIN**

DESIGNED BY: ERF  
 DRAWN BY: CJAF  
 CHECKED BY: AB  
 STATUS: ISSUE FOR BID  
 DATE: MAY 2025  
 SHEET NO.: TC-1.2  
 33 OF 33

Jones & Henry  
 Engineers, Ltd.  
  
 Fluid thinking...  
 www.JHeng.com

JOB NO.: 017-8167.001  
 SCALE: 1"=1800'  
 THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE  
 REVISIONS AFTER ISSUED FOR BID