

LAUREL COUNTY WATER DISTRICT NO. 2

U.S. HIGHWAY 25

WATER SYSTEM RELOCATION

LAUREL COUNTY, KENTUCKY

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COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
LAUREL COUNTY, KENTUCKY
U.S. HIGHWAY 25
PROJECT NO. JL04 063 0025 009-010
ITEM NO. 11-147.00

BOARD OF COMMISSIONERS

KENNETH FINLEY, CHAIRMAN
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DAVID MOORE
TERESA BREWER

MANAGER
KENNETH FISHER

SEPTEMBER 2025

M
Monarch Engineering, Inc.

556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

LOCATION MAP



LOCATION AND SCOPE OF PROJECT

THE PROJECT SITE IS GENERALLY DEFINED AS LAUREL COUNTY, KENTUCKY. THE WORK TO BE DONE UNDER THIS CONTRACT INCLUDES FURNISHING ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO CONSTRUCT THE U.S. HIGHWAY 25 WATER SYSTEM RELOCATION IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS.

GENERAL NOTES

- IT IS THE INTENTION OF THESE PLANS TO CONSTRUCT ALL WORK IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF LAUREL COUNTY, THE KENTUCKY TRANSPORTATION CABINET, THE KENTUCKY DEPARTMENT FOR ENVIRONMENTAL PROTECTION, AND THE U.S. ARMY CORPS OF ENGINEERS. WHERE THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS, PLANS, AND SPECIFICATIONS AND THE PERMIT REQUIREMENTS OF THE AGENCY CONTROLLING THE UTILITY OR RESPECTIVE RIGHTS-OF-WAY, THE MORE RESTRICTIVE SHALL GOVERN.
- THE CONTRACTOR AND ANY APPLICABLE SUBCONTRACTORS SHALL ATTEND A PRE-CONSTRUCTION MEETING AT A TIME AND PLACE ARRANGED BY THE ENGINEER, IN WHICH THE AFFECTED PARTIES WILL BE PRESENT. ALSO, A PRE-EXCAVATION WALK THROUGH WILL NEED TO BE ATTENDED BY THE CONTRACTOR.
- FOLLOWING THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION FOR INSPECTION COORDINATION. NO WORK CAN COMMENCE UNTIL ALL PERMITS HAVE BEEN OBTAINED AND THE CONTRACTOR HAS BEEN GIVEN THE AUTHORITY TO PROCEED.
- THE CONTRACTOR SHALL NOTIFY KENTUCKY 811 AT LEAST 72 HOURS IN ADVANCE OF CONSTRUCTION, FOR LOCATION AND MARKING OF ALL EXISTING UTILITIES.
- LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING AND VERIFYING THE LOCATION, DEPTH, AND ELEVATION OF THE EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE APPARENT OR IF LOCATIONS AND DEPTHS DIFFER SIGNIFICANTLY FROM THE PLANS.
- ALL ELEVATIONS REFER TO THE CURRENT NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88).
- THE ENGINEER HAS NOT PERFORMED PROPERTY OR RIGHT-OF-WAY SURVEYS FOR ANY OF THE AREAS INCLUDED IN THIS PROJECT. RIGHT-OF-WAY OR PROPERTY LINES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE SHOWN FOR GENERAL ORIENTATION ONLY. PROPERTY CORNERS OR OTHER SURVEY MARKERS HAVE NOT BEEN LOCATED, UNLESS SPECIFICALLY CALLED OUT ON THE PLANS.
- ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DAMAGED BY THE CONTRACTORS OPERATIONS SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION OF THE PROPERTY OR FACILITY BY THE CONTRACTOR AT THEIR OWN EXPENSE.
- IF, IN THE OPINION OF THE ENGINEER, WORK HAS NOT PROGRESSED IN A REASONABLE AND TIMELY MANNER, THE ENGINEER SHALL HAVE THE RIGHT, WITH THE APPROVAL OF THE OWNER, TO DIRECT THE CONTRACTOR TO PROCEED WITH THE WORK OR ANY PORTION THEREOF IMMEDIATELY. IN THE EVENT THAT THE CONTRACTOR DOES NOT PROCEED WITH THE WORK IMMEDIATELY, AS DIRECTED BY THE ENGINEER, THE ENGINEER UNDER THE DIRECTION OF THE OWNER, MAY ORDER ANY OR ALL OTHER OPERATIONS OF THE CONTRACTOR, UNDER THIS CONTRACT, TO CEASE UNTIL THE CLEANUP AND RESTORATION WORK IS COMPLETED. THE OWNER MAY ORDER ANY OR ALL OTHER OPERATIONS OF THE CONTRACTOR, UNDER THIS CONTRACT, TO CEASE UNTIL THE CLEANUP AND RESTORATION WORK IS COMPLETED. THE OWNER MAY, WITH OR WITHOUT NOTICE, CAUSE THE REQUIRED COMPLIANCE WITH THESE PROVISIONS. THE OWNER MAY, WITH OR WITHOUT NOTICE, CAUSE THE REQUIRED COMPLIANCE WITH THESE PROVISIONS. THE OWNER MAY, WITH OR WITHOUT NOTICE, CAUSE THE REQUIRED COMPLIANCE WITH THESE PROVISIONS. THE OWNER MAY, WITH OR WITHOUT NOTICE, CAUSE THE REQUIRED COMPLIANCE WITH THESE PROVISIONS.
- ACTIONS MUST BE TAKEN TO MINIMIZE THE TRACKING OF MUD AND SOIL FROM CONSTRUCTION AREAS ONTO PUBLIC ROADWAYS. SOIL TRACKED ONTO THE ROADWAY SHALL BE REMOVED DAILY.
- ALL WORK SHALL BE INCORPORATED IN TO THOSE UNIT PRICES LISTED IN THE CONTRACT DOCUMENTS. ANY ITEMS NOT SPECIFICALLY LISTED IN THE UNIT PRICES SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL NOT BE ELIGIBLE FOR SEPARATE PAYMENT OR COMPENSATION.

EROSION AND SEDIMENTATION CONTROL NOTES

- THE CONTRACTOR SHALL COMPLY WITH ALL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS OF THE BOTH THE STATE OF KENTUCKY AND THE U.S. ARMY CORPS OF ENGINEERS FOR ALL DISTURBED AREAS INCLUDED IN THE PROJECT.
- THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS IN A MANNER THAT WILL REDUCE ACCELERATED EROSION TO THE PRACTICAL MINIMUM AND PREVENT DAMAGING SILTATION TO EXISTING SEWERS AND WATER COURSES LEADING FROM THE PROJECT AREA.
- THE CONTRACTOR SHALL CONDUCT WORK IN SUCH A MANNER AS TO PREVENT THE ENTRY OF FUELS, OILS, BITUMINOUS MATERIALS, CHEMICALS, SEWAGE, OR OTHER HARMFUL MATERIALS INTO NEARBY LAKES AND STREAMS.
- WASTE DISPOSAL AREAS SHALL BE SELECTED BY THE CONTRACTOR WITH FULL CONSIDERATION OF EROSION AND SEDIMENT CONTROL, SELECTION OF DISPOSAL SITE(S), AND CONTROL OF OPERATIONS, AND THE RESTORATION OF SAID AREAS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
- EXCAVATIONS FROM THE PROJECT AREA INCLUDING CHANNELS AND WATERCOURSES SHALL NOT BE DEPOSITED IN OR NEAR RIVERS, STREAMS, OR PONDS WHERE IT MAY ENTER THE WATERWAY.
- AT THE COMPLETION OF EACH DAYS CONSTRUCTION, CARE SHOULD BE TAKEN TO ENSURE THAT MINIMAL EROSION WILL OCCUR IN TRENCHES AND TO STOCKPILED MATERIALS UNTIL RESUMPTION OF WORK.
- THE CONTRACTOR SHALL CONFINE CONSTRUCTION OPERATIONS TO THE MINIMUM AMOUNT OF WORKING SPACE PRACTICAL TO AID IN THE MINIMIZATION OF SOIL EROSION.
- THE PROJECT WILL BE CONTINUALLY OBSERVED BY VARIOUS STATE & LOCAL REGULATORY AGENCIES FOR EROSION CONTROL COMPLIANCE. DEFICIENCIES WILL BE CORRECTED BY THE CONTRACTOR IMMEDIATELY UPON NOTICE OF SUCH DEFICIENCIES. FAILURE TO CORRECT THE DEFICIENCIES MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER AND THERE WILL BE NO CONTRACT TIME EXTENSION GRANTED FOR THIS TYPE OF STOPPAGE.
- TEMPORARY SOIL EROSION CONTROL MEASURES CONSISTING OF SILT FENCE, MULCHING, AND TARPING SHALL BE IMPLEMENTED THROUGHOUT THE ENTIRE CONSTRUCTION PHASE OF THE PROJECT, AND SHALL BE REMOVED BY THE CONTRACTOR AFTER THE PERMANENT SOIL EROSION MEASURES HAVE BEEN ESTABLISHED.
- PERMANENT SOIL EROSION MEASURES CONSISTING OF AN APPROVED SEED MIXTURE AND MULCH BLANKET SHALL BE COMPLETED WITHIN FIVE (5) CALENDAR DAYS OF FINAL GRADING. IF IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE THE AREA DUE TO SITE CONDITIONS OR SEASONAL LIMITATIONS, THE TEMPORARY MEASURES SHALL REMAIN IN FORCE UNTIL THE PERMANENT MEASURES BY THE CONTRACTOR UNTIL SUCH TIME IT IS PRACTICAL TO COMPLETE THE PERMANENT SOIL EROSION CONTROL MEASURES.
- THE ENGINEER SHALL HAVE FULL AUTHORITY TO TEMPORARILY SUSPEND WORK IN THE EVENT THAT ANY OF THE ABOVE REQUIREMENTS ARE NOT BEING MET BY THE CONTRACTOR, OR IF CONDITIONS INDICATE THAT ADDITIONAL TEMPORARY MEASURES ARE WARRANTED, IN THE OPINION OF THE ENGINEER OR REGULATORY AGENCIES.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL INLET FILTERS AT ALL INLETS IN THE CONSTRUCTION AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ANY REQUIRED ACCESS ROAD SURFACES AND SOIL EROSION CONTROL MEASURES WITHIN THE CONSTRUCTION AREA UNTIL THE FULL COMPLETION OF THE PROJECT.
- ALL NON-PAVED DISTURBED AREAS SHALL BE RESTORED AS INDICATED ON THE PLANS. IF NOT SPECIFICALLY STATED ON THE PLANS, RESTORATION SHALL CONSIST OF TOP SOIL, SEED, FERTILIZER, SEED AND MULCH, UNLESS OTHERWISE STATED, ALL DISTURBED AREAS SHALL BE SEEDDED WITH A SEED MIX APPROVED BY THE ENGINEER.

WORK LIMITS

IF INDICATED ON THE PLANS, THE CONTRACTOR SHALL KEEP ALL OPERATIONS WITHIN THE WORK LIMITS SHOWN. OTHERWISE, THE CONTRACTOR SHALL ESTABLISH CONSTRUCTION LIMITS WITHIN THE EXISTING AND/OR PROPOSED RIGHTS-OF-WAY AND EASEMENTS AS DIRECTED BY THE ENGINEER. THIS REQUIREMENT SHALL INCLUDE MATERIAL STOCKPILING AND EQUIPMENT STORAGE. THE CONTRACTOR MAY NOT EXIT THE ESTABLISHED PROJECT WORK LIMITS WITHOUT EXPLICIT PERMISSION FROM THE OWNER AND THE ENGINEER.

UTILITIES

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH KENTUCKY LAW, THE CONTRACTOR SHALL SHALL DIAL KENTUCKY 811 A MINIMUM OF THREE (3) FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING WORK IN EACH EXCAVATION AREA WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THIS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE PART OF THE "811" ALERT SYSTEM. UTILITY LOCATIONS SHOWN ON THE PLANS ARE ONLY APPROXIMATE AND SHOULD BE LOCATED IN THE FIELD PRIOR TO ANY EXCAVATION.

WORK WITHIN PUBLIC ROAD RIGHT-OF-WAYS

WHEN PERFORMING WORK ALONG OR ACROSS ANY PUBLIC ROADWAY, THE CONTRACTOR SHALL POST WARNING SIGNS PAINTED ORANGE AND THEY SHALL BE FOUR FEET BY FOUR FEET MOUNTED ON POSTS IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE SIGNS SHALL BE AS FOLLOWS:

- CAUTION PIPELINE CONSTRUCTION 1500 FEET
- CAUTION PIPELINE CONSTRUCTION 1000 FEET
- CAUTION PIPELINE CONSTRUCTION 500 FEET

ALL SIGNS, BARRICADES, LIGHTS, AND TRAFFIC CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CONTRACTOR SHALL MAINTAIN TWO-PLANE TRAFFIC AT ALL TIMES WHERE MAINTENANCE IS IN OPERATION WHERE THE FLOW OF TRAFFIC WILL BE DISTURBED. THERE IS NO EXCEPTION TO THIS REQUIREMENT. THE USE OF RADIOS WILL BE REQUIRED WHEN VISUAL CONTACT BETWEEN THE FLAGMAN DOES NOT EXIST.

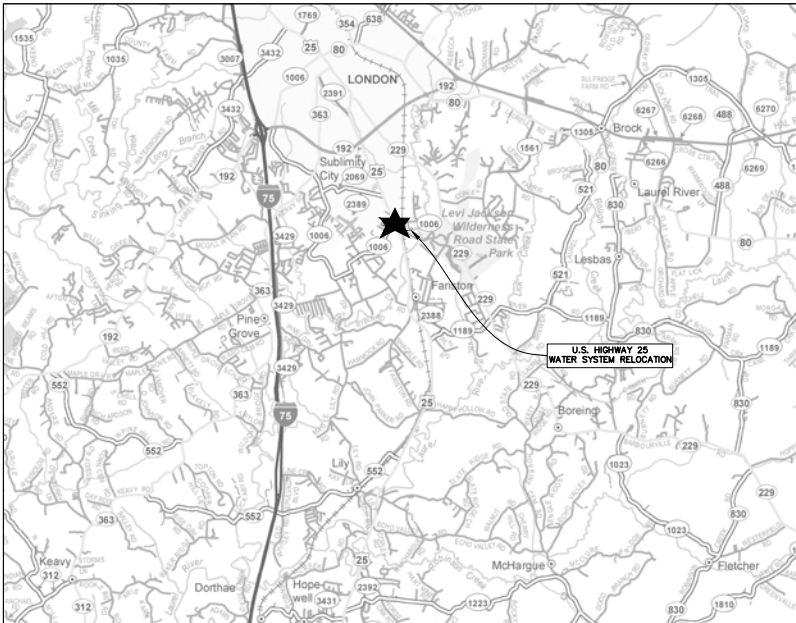
THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ENTIRE ROADWAY FREE AND CLEAR AT THE END OF EACH WORKING DAY. NO EQUIPMENT SHALL BE LEFT ON OR PARKED ALONG THE ROAD RIGHT OF WAY. AT THE COMPLETION OF EACH WORK DAY, THE CONTRACTOR SHALL BACKFILL ALL OPEN TRENCHES AND INSTALL ALL TRAFFIC CONTROL SIGNS, BARRICADES, AND LIGHTS IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

CONSTRUCTION STAKING & LAYOUT

THE WATER MAIN SHALL BE INSTALLED IN THE LOCATIONS AS SHOWN ON THE DRAWINGS OR AS OTHERWISE DIRECTED IN THE FIELD BY THE ENGINEER.

THE CONTRACTOR, AT HIS EXPENSE, SHALL ACQUIRE THE SERVICES OF A LICENSED PROFESSIONAL LAND SURVEYOR (SURVEYOR) TO STAKE THE HORIZONTAL LOCATION OF ALL PROPOSED WATER LINES AND APPURTENANCES. FOR THOSE POINTS WHERE THE VERTICAL LOCATION (ELEVATION) OF THE PROPOSED WATER LINES AND APPURTENANCES IS DENIED CORRECT AND IS SPECIFICALLY NOTED ON THE PLANS, THE SURVEYOR SHALL INCLUDE THIS INFORMATION AS PART OF THE STAKING OPERATIONS AND THEREAFTER CONFIRM THAT THE INSTALLED ELEVATION IS CORRECT. THE ENGINEER, IN ASSOCIATION WITH THE KYTC DEPARTMENT OF HIGHWAYS, WILL SUPPLY THE SURVEYOR WITH HORIZONTAL AND VERTICAL CONTROL POINTS AS REQUIRED.

PROJECT LOCATION MAP



DISRUPTION OF SERVICE

THE CONTRACTOR SHALL COORDINATE ALL DISRUPTIONS OF SERVICE WITH THE OWNER AND ENGINEER. PRIOR TO ANY DISRUPTION, THE CONTRACTOR SHALL INFORM BOTH PARTIES OF HIS INTENTIONS, METHODS AND PROJECTED DURATION OF DISTURBANCE AND RECEIVE THEIR APPROVAL PRIOR TO INITIATING THE SPECIFIC WORK.

WORK WITHIN STREAMS, CREEKS & WATERWAYS

ANY AND ALL WORK TO BE COMPLETED WITHIN STREAMS, CREEKS & WATERWAYS SHALL BE COMPLETED ONLY DURING TIMES OF LOW FLOW AS DETERMINED BY THE ENGINEER. THE CONTRACTOR SHALL STRICTLY LIMIT THE USE OF HEAVY EQUIPMENT WITHIN THE WATERCOURSE AT ALL TIMES. STREAM FLOW SHALL NOT BE RESTRICTED OR IMPEDED AT ANY TIME DURING THE COURSE OF CONSTRUCTION.

WORK WITHIN RAILROAD RIGHT-OF-WAYS

IF APPLICABLE, THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS INCLUDED IN THE FACILITY ENCROACHMENT PERMIT ISSUED BY CSX TRANSPORTATION, INC. (CSXT), IF APPLICABLE. A COPY OF THIS PERMIT HAS BEEN INCLUDED IN THE CONTRACT DOCUMENTS FOR THE CONTRACTOR'S REFERENCE.

ALL OPERATIONS SHALL BE CONDUCTED SO AS NOT TO INTERFERE WITH, INTERRUPT, OR ENDANGER THE OPERATION OF TRAINS NOR DAMAGE, DESTROY, OR ENDANGER THE INTEGRITY OF RAILROAD FACILITIES. ALL WORK ON OR NEAR CSXT PROPERTY SHALL BE CONDUCTED IN ACCORDANCE WITH CSXT SAFETY RULES AND REGULATIONS. SPECIFICALLY ALL CONTRACTOR EMPLOYEES AND AGENTS, WHILE ON CSXT PROPERTY, SHALL BE REQUIRED TO WEAR AN ORANGE HARD HAT, SAFETY GLASSES WITH SIDE SHIELDS, 4" LACE UP BOOTS WITH A DISTINCT HEEL, SHIRTS WITH SLEEVES, AND LONG PANTS. THE CONTRACTOR AND ITS EMPLOYEES SHALL COMPLY WITH THE CSXT SAFETY RULES AT ALL TIMES WHILE OCCUPYING CSXT'S PROPERTY. OPERATIONS WILL BE SUBJECT TO CSXT INSPECTION AT ANY AND ALL TIMES.

ALL CRANES, LIFTS, OR OTHER EQUIPMENT THAT WILL BE OPERATED IN THE VICINITY OF THE RAILROAD'S ELECTRIFICATION AND POWER TRANSMISSION FACILITIES SHALL BE ELECTRICALLY GROUNDING AS DIRECTED BY CSXT.

WHENEVER EQUIPMENT OR PERSONNEL ARE WORKING CLOSER THAN 25 FEET FROM THE CENTERLINE OF AN ADJACENT TRACK, THAT TRACK SHALL BE CONSIDERED AS BEING OBSTRUCTED. WORK AS POSSIBLE, ALL OPERATIONS SHALL BE CONDUCTED NO LESS THAN THIS DISTANCE. ALL OPERATIONS SHALL BE CONDUCTED ONLY WITH THE PERMISSION OF AND AS DIRECTED BY A DULY QUALIFIED RAILROAD EMPLOYEE PRESENT AT THE SITE OF THE WORK. ALL COSTS RELATED TO RAILROAD PROTECTION WILL BE PASSED ON TO THE APPLICANT.

CROSSING OF TRACKS AT GRADE BY EQUIPMENT AND PERSONNEL IS PROHIBITED EXCEPT AT EXISTING PUBLIC ROADWAY CROSSINGS OR BY PRIOR ARRANGEMENT WITH AND AS DIRECTED BY, CSXT.

WATER & SEWER MAIN SEPARATION

WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. FOR GRAVITY SEWERS WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10 FOOT SEPARATION, THE KENTUCKY DIVISION OF WATER MAY ALLOW DEVIATION ON A CASE-BY-CASE BASIS. SUCH DEVIATION MAY ALLOW INSTALLATION OF A WATER MAIN CLOSER TO A GRAVITY SEWER, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR IS INSTALLED ON AN UNDISTURBED EARTHEN SHELVE LOCATED ON ONE SIDE OF THE GRAVITY SEWER AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

WATER MAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN JOINTS WILL BE EQUIVALENT AND AS FAR AS POSSIBLE FROM THE SEWER PIPE JOINTS. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.

Monarch Engineering, Inc.

556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

GENERAL NOTES
U.S. HIGHWAY 25 WATER SYSTEM RELOCATION

CUSTOMER:
LAUREL COUNTY WATER DISTRICT NO. 2
LAUREL COUNTY, KENTUCKY

DESCRIPTION:

PROJECT NO. 1604
DATE: AUG 2025
DRAWN BY: JLM
CHECKED BY: DSB
CHECKED BY: DMB
SCALE: AS NOTED

SHEET:

GN-1



PROPOSED LINE
EXISTING LINE TO REMAIN
EXISTING LINE TO BE ABANDONED

SHEET 1 QUANTITIES				
ITEM NO.	ITEM	QUANTITY	ABANDON	
3	6-Inch PVC SDR-17 Water Line	200	LF	LF
10	3/4-Inch PE Service Tubing	20	LF	40 LF
21	6-Inch Gate Valve	1	EA	EA
24	Type I Connection	1	EA	EA
27	Flush Hydrant Assembly	1	EA	EA
31	Traffic Rated Meter Setting	1	EA	1 EA
32	Service Line Reconnection	1	EA	EA
36	Pavement Replacement	900	SF	SF
37	Exploration	4	HR	HR
-	6-Inch AC Water Line		LF	180 LF

COUNTY OF	ITEM NO.	SHEET NO.
LAUREL	11-141.00	R5
REVISION DATE: 02-12-2021		

BEGIN CONSTRUCTION
RELOCATED U.S. 25
STA. 288+00.00

PI STA. 288+11.76
Δ = 02°26'19" LT.

CONNECT NEW 6-INCH WATER LINE TO
EXISTING 6-INCH WATER LINE
VIA TYPE I CONNECTION
STA. 289+20 (RELOCATED US 25) / R 20 LF

EXISTING 6-INCH
WATER LINE
(TO REMAIN)

INSTALL 3-WAY FLUSH
HYDRANT ASSEMBLY

INSTALL 6-INCH PVC SDR-17 WATER LINE
MINIMUM COVER SHALL BE 42"
BELOW EXISTING GRADE

INSTALL TRAFFIC RATED
METER SETTING AND SERVICE LINE
RECONNECTION (TYP.)

JACK BROWN
& DEBBIE OWF
EASEMENT
OBTAINED

EXISTING 6-INCH WATER LINE
(TO BE ABANDONED)

EXISTING METER SETTING
(TO BE ABANDONED) (TYP.)

ASHER PROPERTIES,
LLC
EASEMENT
OBTAINED

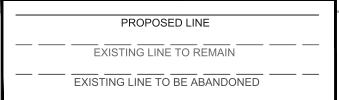
RIGHT OF WAY
PLANS

WATER SYSTEM RELOCATION
LAUREL COUNTY WATER DISTRICT #2
LAUREL COUNTY, KENTUCKY

U.S. HIGHWAY 25

Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

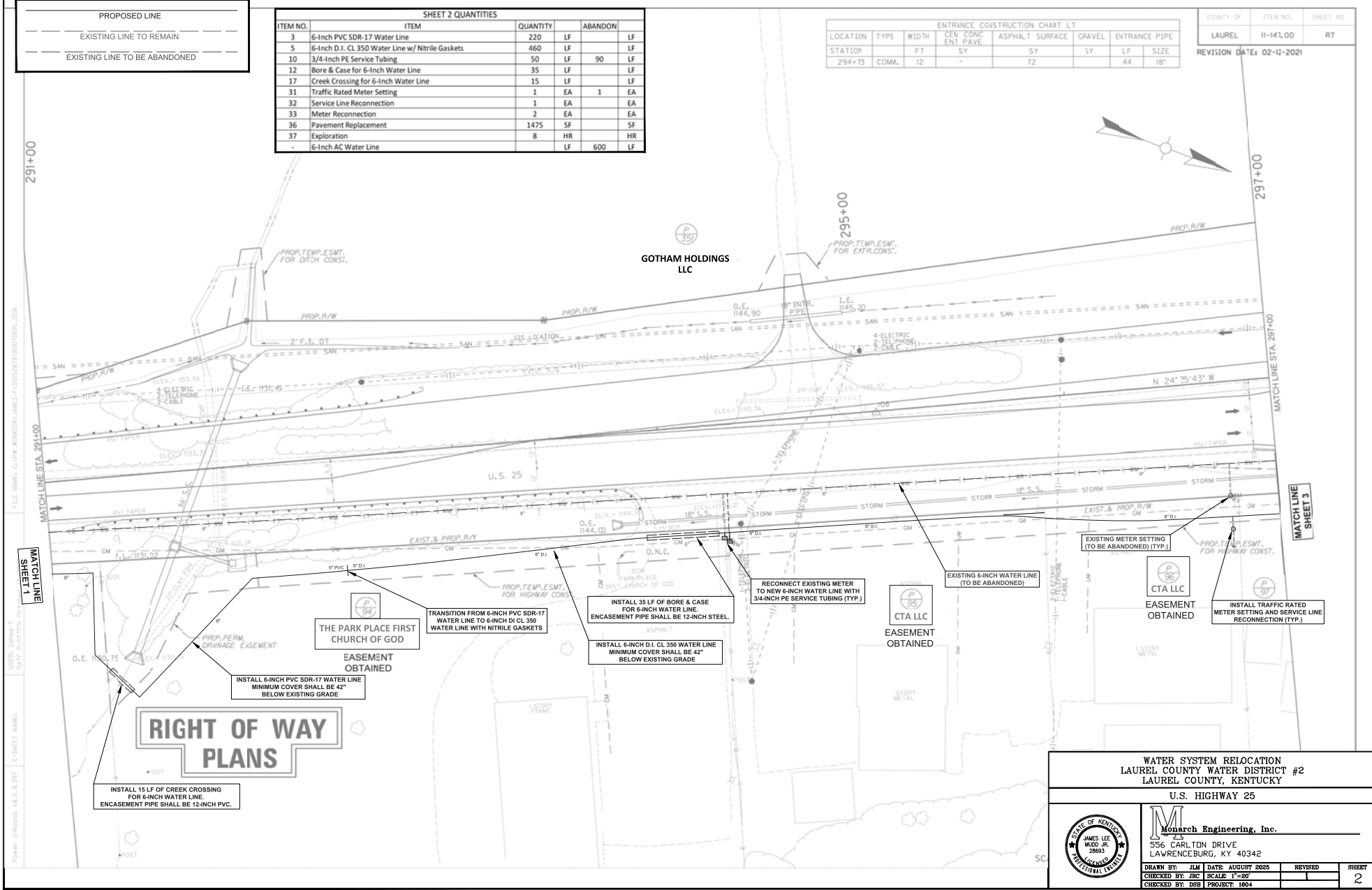
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CHECKED BY: USB	PROJECT: 1804		



SHEET 2 QUANTITIES					
ITEM NO.	ITEM	QUANTITY	ABANDON		
3	6-Inch PVC SDR-17 Water Line	220	LF	LF	
5	6-Inch D.I. CL 350 Water Line w/ Nitrile Gaskets	460	LF	LF	
10	3/4-Inch PE Service Tubing	50	LF	90	LF
12	Bore & Case for 6-Inch Water Line	35	LF	LF	
17	Creek Crossing for 6-Inch Water Line	15	LF	LF	
31	Traffic Rated Meter Setting	1	EA	1	EA
32	Service Line Reconnection	1	EA		EA
33	Meter Reconnection	2	EA		EA
36	Pavement Replacement	1475	SF		SF
37	Exploration	8	HR		HR
-	6-Inch AC Water Line		LF	600	LF

ENTRANCE CONSTRUCTION CHART LT						
LOCATION	TYPE	WIDTH	CEN CONC ENT PAVE	ASPHALT SURFACE	GRAVEL	ENTRANCE PIPE
STATION	FT	SY	SY	SY	LF	SIZE
294+75	COMM.	12	-	T2	44	18"

COUNTY OF	ITEM NO.	SHEET NO.
LAUREL	II-141.00	R7
REVISION DATE: 02-12-2021		



RIGHT OF WAY PLANS

WATER SYSTEM RELOCATION
LAUREL COUNTY WATER DISTRICT #2
LAUREL COUNTY, KENTUCKY

U.S. HIGHWAY 25

Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

DRAWN BY: JLM	DATE: AUGUST 2025	REVISED	SHEET
CHECKED BY: JRC	SCALE: 1"=50'		2
CHECKED BY: USB	PROJECT: 1804		

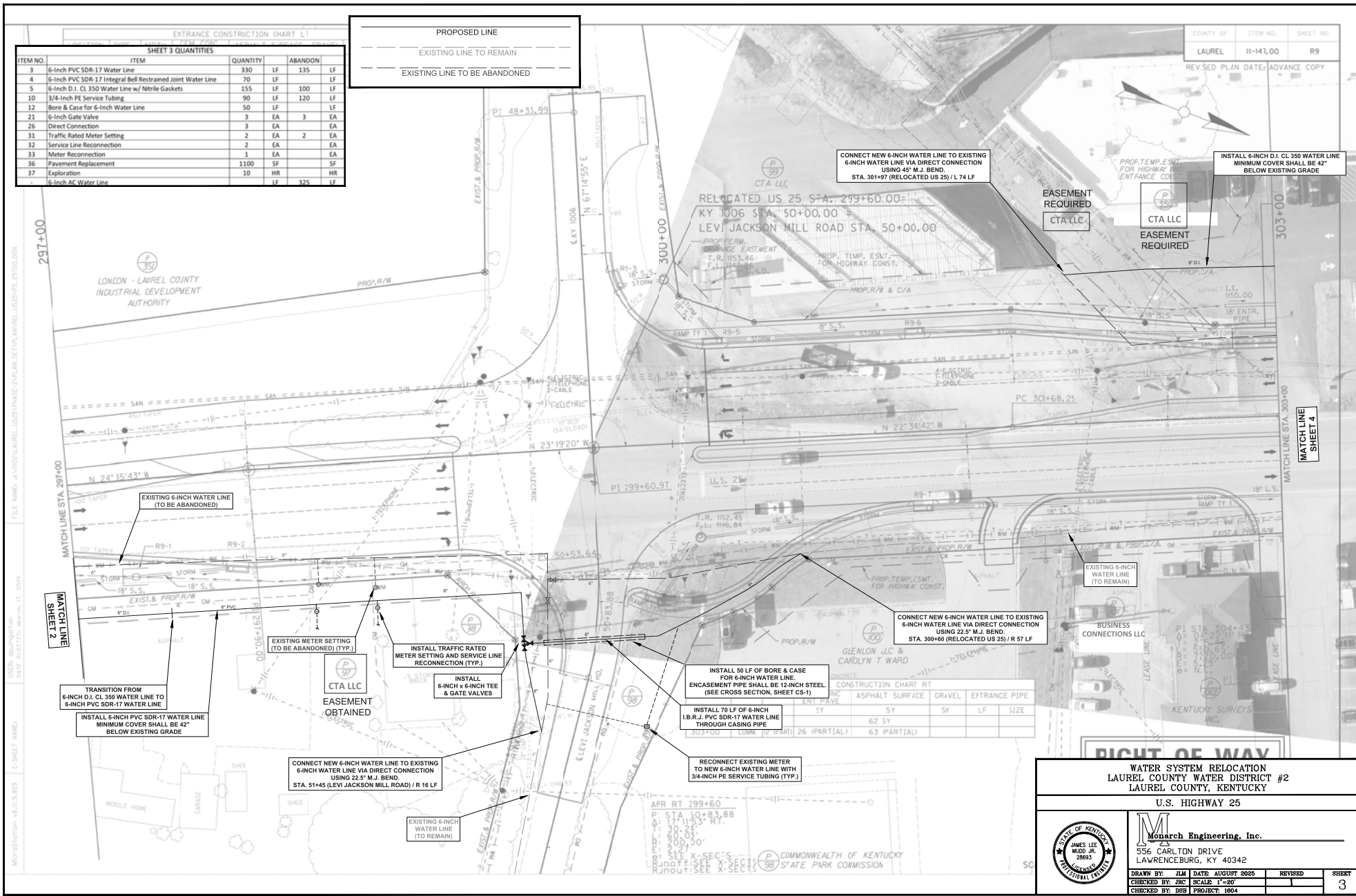
SHEET 3 QUANTITIES				
ITEM NO.	ITEM	QUANTITY	ABANDON	
3	6-Inch PVC SDR-17 Water Line	330 LF	135 LF	LF
4	6-Inch PVC SDR-17 Integral Bell Restrained Joint Water Line	70 LF	LF	LF
5	6-Inch D.I. CL 350 Water Line w/ Nitrile Gaskets	155 LF	100 LF	LF
10	3/4-Inch PE Service Tubing	90 LF	120 LF	LF
12	Bore & Case for 6-Inch Water Line	50 LF	LF	LF
21	6-Inch Gate Valve	3 EA	3 EA	EA
26	Direct Connection	3 EA	EA	EA
31	Traffic Rated Meter Setting	2 EA	2 EA	EA
32	Service Line Reconnection	2 EA	EA	EA
33	Water Reconnection	1 EA	EA	EA
36	Pavement Replacement	1100 SF	SF	SF
37	Exploration	10 HR	HR	HR
-	6-Inch AC Water Line	LF	325 LF	LF

PROPOSED LINE

EXISTING LINE TO REMAIN

EXISTING LINE TO BE ABANDONED

COUNTY OF	ITEM NO.	SHEET NO.
LAUREL	11-141.00	R9



RIGHT OF WAY

WATER SYSTEM RELOCATION

LAUREL COUNTY WATER DISTRICT #2

LAUREL COUNTY, KENTUCKY

U.S. HIGHWAY 25

STATE OF KENTUCKY

SEAL

REGISTERED PROFESSIONAL ENGINEER

James Lee

10000

10000

Monarch Engineering, Inc.

556 CARLTON DRIVE

LAWRENCEBURG, KY 40342

DRAWN BY: JLM DATE: AUGUST 2025

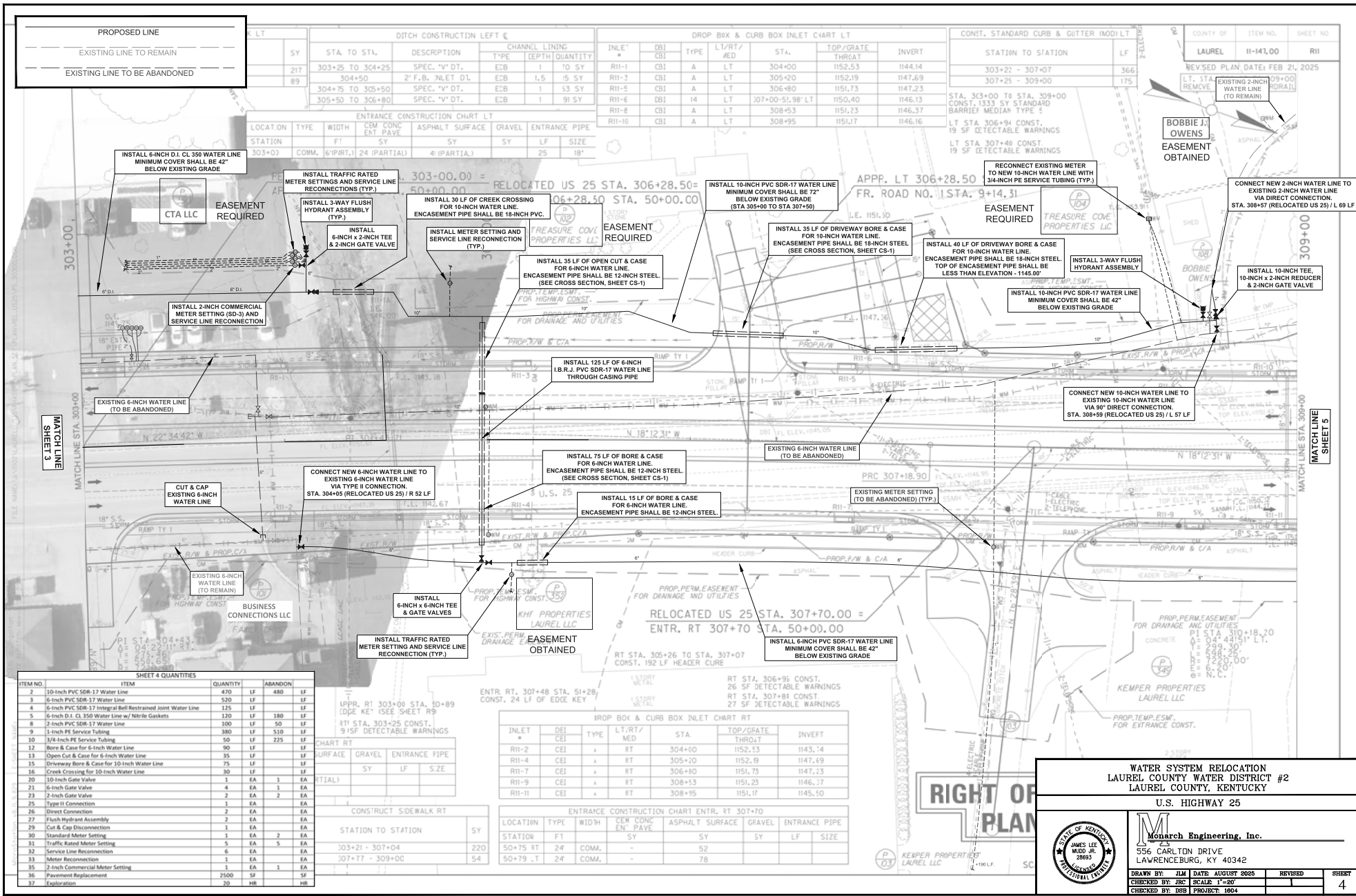
CHECKED BY: JRS SCALE: 1"=20'

CHECKED BY: USB PROJECT: 1804

REVISED

SHEET

3



PROPOSED LINE
EXISTING LINE TO REMAIN
EXISTING LINE TO BE ABANDONED

SHEET 4 QUANTITIES			
ITEM NO.	ITEM	QUANTITY	ABANDON
2	10-Inch PVC SDR-17 Water Line	470 LF	480 LF
3	6-Inch PVC SDR-17 Water Line	520 LF	LF
4	6-Inch PVC SDR-17 Integral Bell Restrained Joint Water Line	125 LF	LF
5	6-Inch D.I. CL 350 Water Line w/ Nitrile Gaskets	120 LF	180 LF
8	2-Inch PVC SDR-17 Water Line	100 LF	50 LF
9	1-Inch PE Service Tubing	380 LF	510 LF
10	3/4-Inch PE Service Tubing	50 LF	225 LF
12	Bore & Case for 6-Inch Water Line	90 LF	LF
13	Open Cut & Case for 6-Inch Water Line	35 LF	LF
15	Driveway Bore & Case for 10-Inch Water Line	75 LF	LF
16	Creek Crossing for 10-Inch Water Line	30 LF	LF
20	10-Inch Gate Valve	1 EA	1 EA
21	6-Inch Gate Valve	4 EA	1 EA
23	2-Inch Gate Valve	2 EA	2 EA
25	Type B Connection	1 EA	EA
26	Direct Connection	2 EA	EA
27	Flush Hydrant Assembly	2 EA	EA
29	Cut & Cap Disconnection	1 EA	EA
30	Standard Meter Setting	1 EA	2 EA
31	Traffic Rated Meter Setting	5 EA	5 EA
32	Service Line Reconnection	6 EA	EA
33	Meter Reconnection	1 EA	EA
35	2-Inch Commercial Meter Setting	1 EA	1 EA
36	Pavement Replacement	2500 SF	SF
37	Exploration	20 HR	HR

DROP BOX & CURB BOX INLET CHART RT					
INLET	DEI	TYPE	LT/RT/ MED	STA.	TOP/GRATE THROAT
R11-2	CEI	A	RT	304+00	1152.53 1143.74
R11-4	CEI	A	RT	305+20	1152.79 1147.69
R11-7	CEI	A	RT	306+80	1151.73 1147.23
R11-9	CEI	A	RT	308+13	1151.23 1146.17
R11-11	CEI	A	RT	308+95	1151.17 1145.50

ENTRANCE CONSTRUCTION CHART ENTR. RT 307+70					
LOCATION	TYPE	WIDTH	CEM CONC. ENT. PAYE	ASPHALT SURFACE	GRAVEL
STATION	FT	SY	SY	SY	LF
30+75 RT	24	COMM.	-	52	SY
30+79 LT	24	COMM.	-	78	SY

WATER SYSTEM RELOCATION
LAUREL COUNTY WATER DISTRICT #2
LAUREL COUNTY, KENTUCKY
U.S. HIGHWAY 25

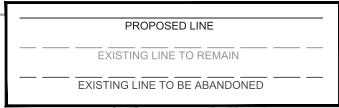
Mourner Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

DRAWN BY: JLM DATE: AUGUST 2025 REVISED: SHEET: 4

CHECKED BY: DRC SCALE: 1"=50' PROJECT: 1904

RIGHT OF WAY PLAN

LAUREL COUNTY



ENTRANCE CONSTRUCTION CHART APPR. LT 314+90							
LOCATION	TYPE	WIDTH	CEM CONC ENT PAVE	ASPHALT SURFACE	GRAVEL	ENTRANCE PIPE	
STATION	FT	SY	SY	SY	SY	LF	SIZE
48+57	COMM.	27	-	75		56	15"

EASEMENT REQUIRED



PROPT. EASEMENT FOR HIGHWAY CONST.

EXISTING 10-INCH WATER LINE (TO REMAIN)

INSTALL 45 LF OF BORE & CASE FOR 10-INCH WATER LINE. ENCASEMENT PIPE SHALL BE 18-INCH STEEL. (SEE CROSS SECTION, SHEET CS-2)

RELOCATED US 25 STA. 314+90.00
APPR. LT 314+90 STA. 50+00.00
APPR. RT 314+90 STA. 50+00.00

INSTALL 10-INCH PVC SDR-17 WATER LINE TOP OF PIPE SHALL BE LESS THAN ELEVATION - 1148.19' (STA 48+95 TO STA 49+05)

INSTALL TRAFFIC RATED METER SETTING AND SERVICE LINE RECONNECTION

CONNECT NEW 10-INCH WATER LINE TO EXISTING 10-INCH WATER LINE VIA TYPE I CONNECTION. STA. 314+28 (RELOCATED US 25) / L 52 LF

EXISTING MASTER METER VAULT (TO BE ABANDONED)

INSTALL 6-INCH PVC SDR-17 WATER LINE MINIMUM COVER SHALL BE 42" BELOW EXISTING GRADE
INSTALL 6-INCH PVC SDR-35 VAULT DRAIN TO DAYLIGHT. MINIMUM COVER SHALL BE 48" BELOW EXISTING GRADE

SHEET 5 QUANTITIES				
ITEM NO.	ITEM	QUANTITY	ABANDON	
2	10-Inch PVC SDR-17 Water Line	110 LF	20	LF
3	6-Inch PVC SDR-17 Water Line	70 LF		LF
6	6-Inch PVC SDR-35 Vault Drain	60 LF		LF
8	2-Inch PVC SDR-17 Water Line		115	LF
9	1-Inch PE Service Tubing	420 LF		LF
10	3/4-Inch PE Service Tubing	280 LF	280	LF
11	Bore & Case for 10-Inch Water Line	45 LF		LF
20	10-Inch Gate Valve	1 EA	1	EA
21	6-Inch Gate Valve		1	EA
23	2-Inch Gate Valve		1	EA
24	Type I Connection	1 EA		EA
27	Flush Hydrant Assembly	1 EA		EA
29	Cut & Cap Disconnection	1 EA		EA
30	Standard Meter Setting	5 EA	4	EA
31	Traffic Rated Meter Setting	1 EA	1	EA
32	Service Line Reconnection	6 EA		EA
34	Master Meter Vault	1 LS	1	LS
36	Pavement Replacement	50 SF		SF
37	Exploration	6 HR		HR
-	6-Inch AC Water Line		200	LF

OF WAY
LAN

WATER SYSTEM RELOCATION
LAUREL COUNTY WATER DISTRICT #2
LAUREL COUNTY, KENTUCKY

U.S. HIGHWAY 25



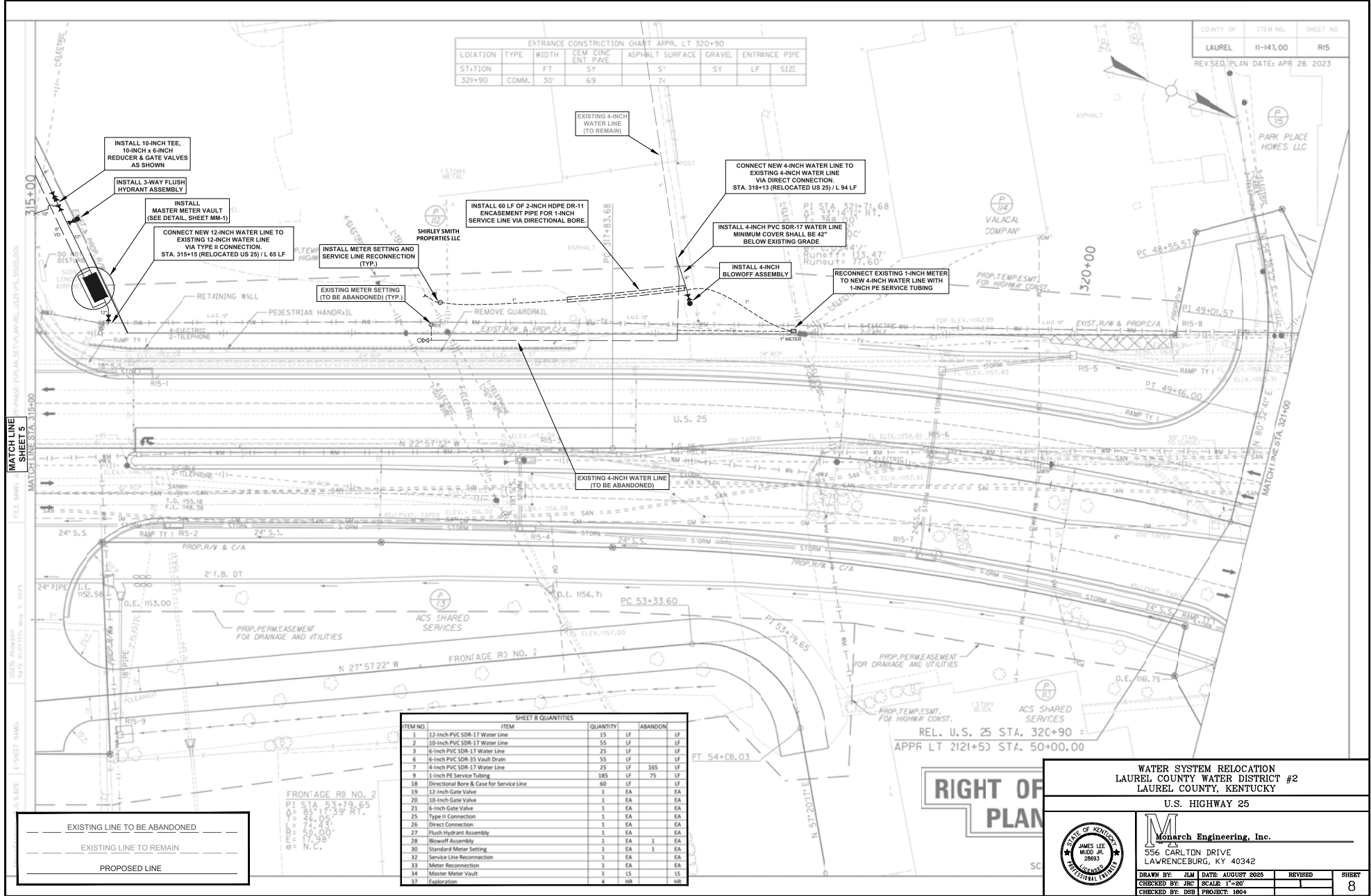
Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

DRAWN BY: JLM DATE: AUGUST 2025 REVISED: SHEET: 5
CHECKED BY: DBR SCALE: 1"=20'
CHECKED BY: DBR PROJECT: 1804

ENTRANCE CONSTRUCTION CHART APPR. LT 320+90						
LOCATION	TYPE	WIDTH	CEM CONC ENT PIPE	ASPHALT SURFACE	GRAVEL	ENTRANCE PIPE
STATION		FT	SY	S'	SY	LF
320+90	COMM.	30'	69	74		

COUNTY OF	ITEM NO.	SHEET NO.
LAUREL	11-141.00	R15

REVISED PLAN DATE: APR 28, 2023



SHEET 8 QUANTITIES				
ITEM NO.	ITEM	QUANTITY	ABANDON	
1	12-Inch PVC SDR-17 Water Line	15 LF		LF
2	10-Inch PVC SDR-17 Water Line	55 LF		LF
3	6-Inch PVC SDR-17 Water Line	25 LF		LF
6	6-Inch PVC SDR-15 Vault Drain	55 LF		LF
7	4-Inch PVC SDR-17 Water Line	25 LF	165 LF	
9	1-Inch PE Service Tubing	185 LF	75 LF	
18	Directional Bore & Case for Service Line	60 LF		LF
19	12-Inch Gate Valve	1 EA	EA	EA
20	10-Inch Gate Valve	1 EA	EA	EA
21	6-Inch Gate Valve	1 EA	EA	EA
25	Type II Connection	1 EA	EA	EA
26	Direct Connection	1 EA	EA	EA
27	Flush Hydrant Assembly	1 EA	EA	EA
28	Blowoff Assembly	1 EA	EA	EA
30	Standard Meter Setting	1 EA	EA	EA
32	Service Line Reconnection	1 EA	EA	EA
33	Master Meter Vault	1 EA	EA	EA
34	Master Meter Vault	1 LS	LS	
37	Excavation	4 HB	HB	

RIGHT OF PLAN

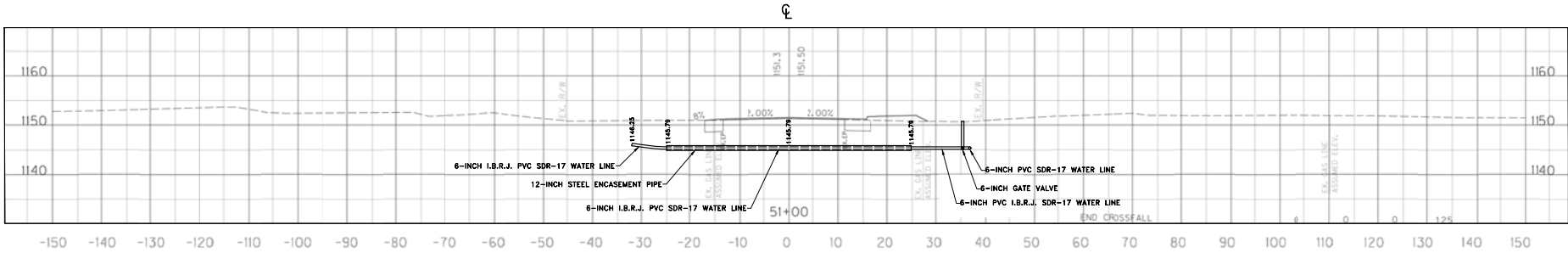
WATER SYSTEM RELOCATION
LAUREL COUNTY WATER DISTRICT #2
LAUREL COUNTY, KENTUCKY

U.S. HIGHWAY 25

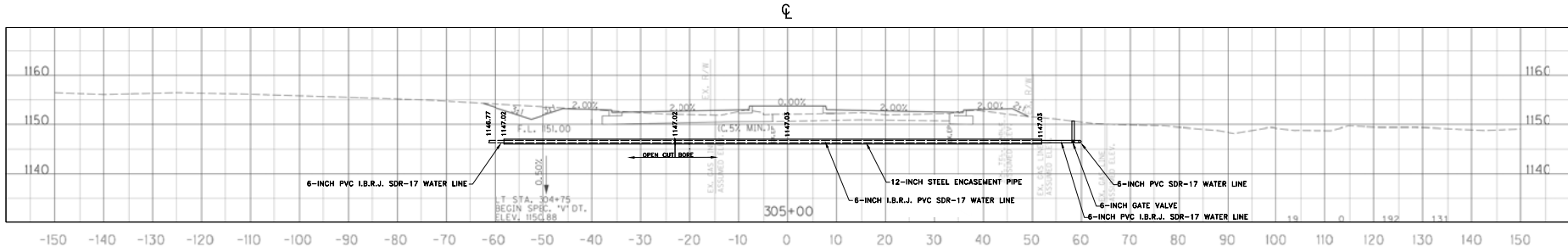


Mouerch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

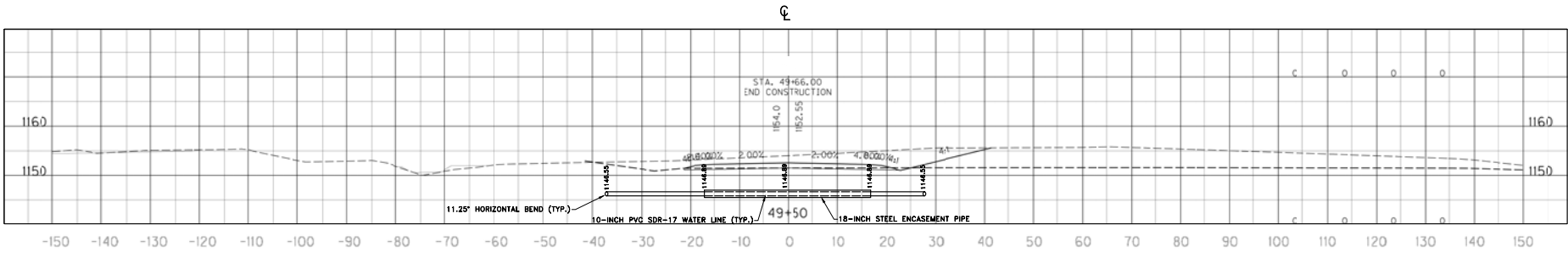
DRAWN BY: JLM	DATE: AUGUST 2025	REVISED	SHEET
CHECKED BY: JRC	SCALE: 1"=20'		8
CHECKED BY: USB	PROJECT: 1804		



STA. 51+00 (SHEET 3)
LEVI JACKSON MILL ROAD



STA. 305+00 (SHEET 4)
RELOCATED U.S. 25



STA. 49+50 (SHEET 4)
APPR LT 306+28.50

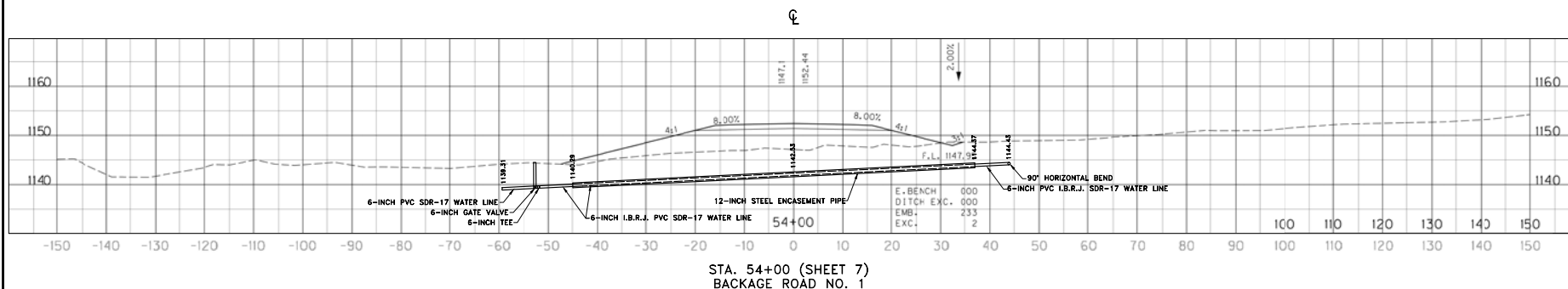
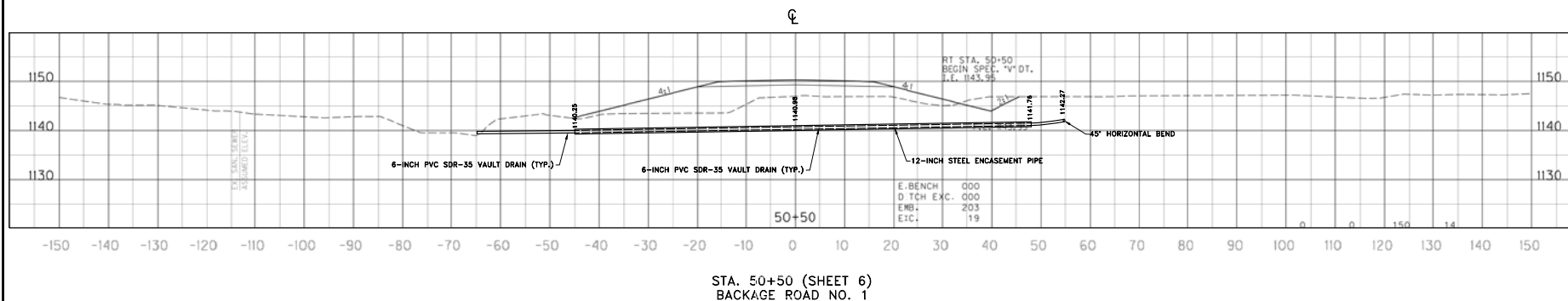
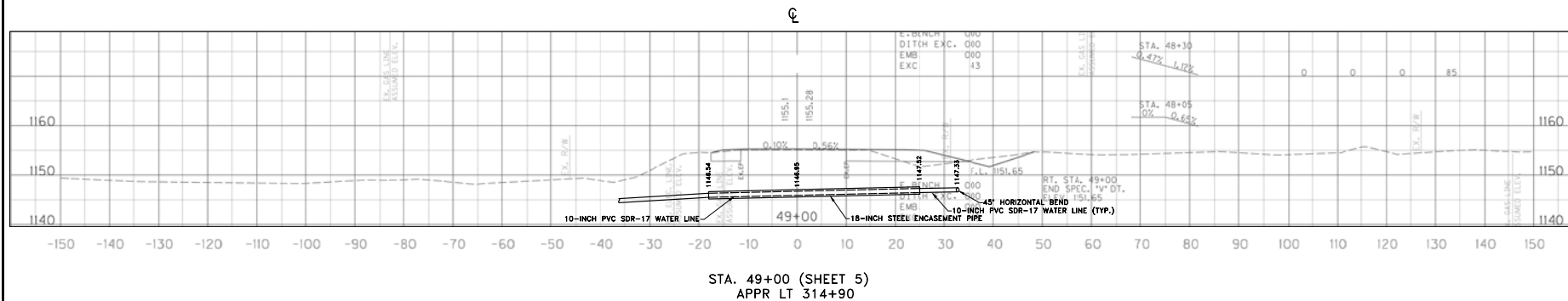
Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

CROSS SECTIONS
U.S. HIGHWAY 25
WATER SYSTEM RELOCATION
LAUREL COUNTY WATER DISTRICT NO. 2
LAUREL COUNTY, KENTUCKY

PROJECT NO. 1604
DATE: AUG 2025
DRAWN BY: JLM
CHECKED BY: DSB
CHECKED BY: DMB
SCALE: 1"=10'

SHEET:
CS-1





Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

DESCRIPTION:	CROSS SECTIONS U.S. HIGHWAY 25 WATER SYSTEM RELOCATION
CUSTOMER:	LAUREL COUNTY WATER DISTRICT NO. 2 LAUREL COUNTY, KENTUCKY

PROJECT NO. 1604
DATE: AUG 2025
DRAWN BY: JLM
CHECKED BY: DSB
CHECKED BY: DMB
SCALE: 1"=10'

SHEET:
CS-2



PROPOSED QUANTITIES

LAUREL COUNTY WATER DISTRICT NO. 2										
U.S. 25 WATER SYSTEM RELOCATION										
JL04 0063 0025 009-010, ITEM NO. 11-147.00										
ITEM	DESCRIPTION	1	2	3	4	5	6	7	8	TOTALS
BASE CONTRACT										
1	12-inch PVC SDR 17 Water Line								15	15
2	10-inch PVC SDR 17 Water Line				470	110			55	635
3	6-inch PVC SDR-17 Water Line	200	220	330	520	70	420	70	25	1,885
4	6-inch PVC SDR-17 Integral Bell Restrained Joint Water Line			70	125			100		295
5	6-inch D.I. CL 350 Water Line w/ Nitrile Gaskets		460	155	120					735
6	6-inch PVC SDR-35 Vault Drain					60	180		55	295
7	4-inch PVC SDR-17 Water Line						15		25	40
8	2-inch PVC SDR-17 Water Line				100					100
9	1-inch PE Service Tubing				380	420	80		185	1,065
10	3/4-inch PE Service Tubing	20	50	90	50	280	50			540
11	Bore & Case for 10-inch Water Line					45				45
12	Bore & Case for 6-inch Water Line		35	50	90					175
13	Open Cut & Case for 6-inch Water Line				35		75	80		190
14	Open Cut & Case for 6-inch Vault Drain						95			95
15	Driveway Bore & Case for 10-inch Water Line				75					75
16	Creek Crossing for 10-inch Water Line				30					30
17	Creek Crossing for 6-inch Water Line		15							15
18	Directional Bore & Case for Service Line								60	60
19	12-inch Gate Valve								1	1
20	10-inch Gate Valve				1	1			1	3
21	6-inch Gate Valve	1		3	4			1	1	10
22	4-inch Gate Valve						1			1
23	2-inch Gate Valve				2					2
24	Type I Connection	1				1				2
25	Type I Connection				1				1	2
26	Direct Connection			3	2		1	1	1	8
27	Flush Hydrant Assembly	1			2	1		1	1	6
28	Blowoff Assembly						1		1	2
29	Cut & Cap Disconnection				1	1				2
30	Standard Meter Setting				1	5	2		1	9
31	Traffic Rated Meter Setting	1	1	2	5	1				10
32	Service Line Reconnection	1	1	2	6	6	2		1	19
33	Meter Reconnection		2	1	1				1	5
34	Master Meter Vault								1	1
35	2-inch Commercial Meter Setting				1					1
36	Pavement Replacement	900	1,475	1,100	2,500	50				6,025
37	Exploration	4	8	10	20	6	10	3	4	65

QUANTITIES TO BE ABANDONED

LAUREL COUNTY WATER DISTRICT NO. 2										
U.S. 25 WATER SYSTEM RELOCATION										
JL04 0063 0025 009-010, ITEM NO. 11-147.00										
ITEM	DESCRIPTION	1	2	3	4	5	6	7	8	TOTALS
ABANDONED										
1	12-inch PVC SDR 17 Water Line									0
2	10-inch PVC SDR 17 Water Line				480	20				500
3	6-inch PVC SDR-17 Water Line			135						135
4	6-inch PVC SDR-17 Integral Bell Restrained Joint Water Line									0
5	6-inch D.I. CL 350 Water Line w/ Nitrile Gaskets			100	180					280
6	6-inch PVC SDR-35 Vault Drain									0
7	4-inch PVC SDR-17 Water Line						35	130	165	330
8	2-inch PVC SDR-17 Water Line				50	115	105			270
9	1-inch PE Service Tubing				510				75	585
10	3/4-inch PE Service Tubing	40	90	120	225	280	40			795
11	Bore & Case for 10-inch Water Line									0
12	Bore & Case for 6-inch Water Line									0
13	Open Cut & Case for 6-inch Water Line									0
14	Open Cut & Case for 6-inch Vault Drain									0
15	Driveway Bore & Case for 10-inch Water Line									0
16	Creek Crossing for 10-inch Water Line									0
17	Creek Crossing for 6-inch Water Line									0
18	Directional Bore & Case for Service Line									0
19	12-inch Gate Valve									0
20	10-inch Gate Valve				1	1				2
21	6-inch Gate Valve			3	1	1	1	1		7
22	4-inch Gate Valve									0
23	2-inch Gate Valve				2	1				3
24	Type I Connection									0
25	Type I Connection									0
26	Direct Connection									0
27	Flush Hydrant Assembly									0
28	Blowoff Assembly								1	1
29	Cut & Cap Disconnection									0
30	Standard Meter Setting				2	4	2		1	9
31	Traffic Rated Meter Setting	1	1	2	5	1				10
32	Service Line Reconnection									0
33	Meter Reconnection									0
34	Master Meter Vault					1				1
35	2-inch Commercial Meter Setting				1					1
36	Pavement Replacement									0
37	Exploration									0
-	6-inch AC Water Line	180	600	325		200	480	20		1,805

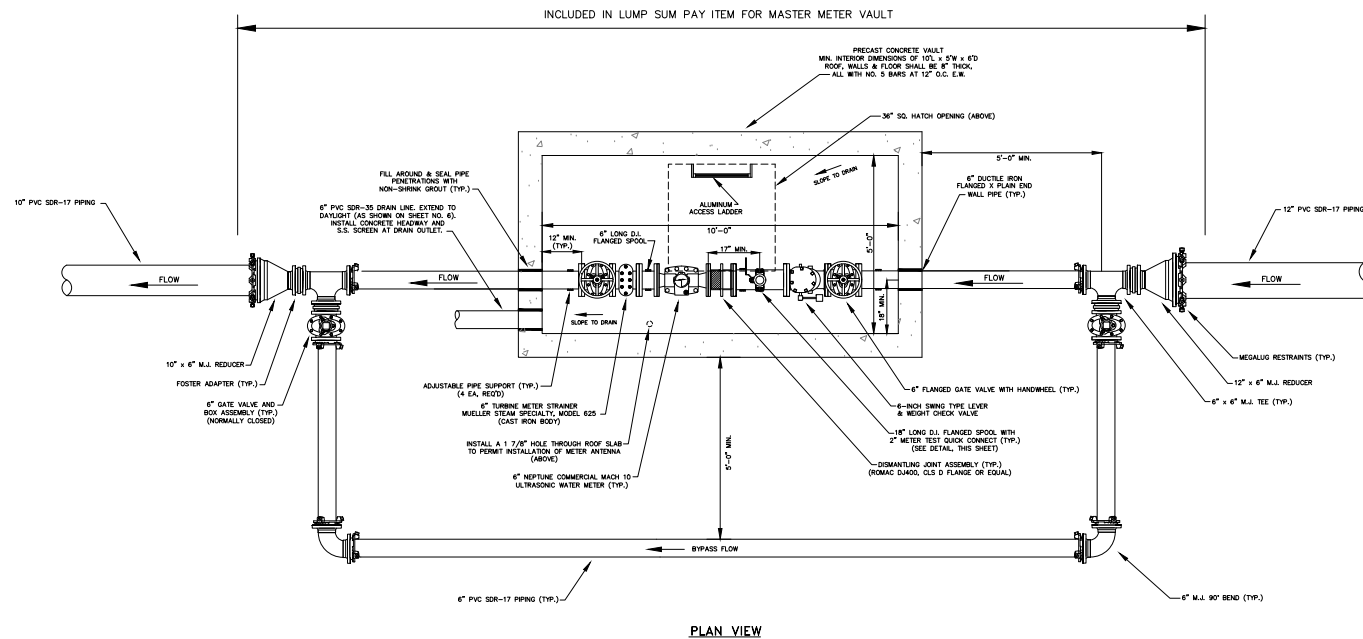
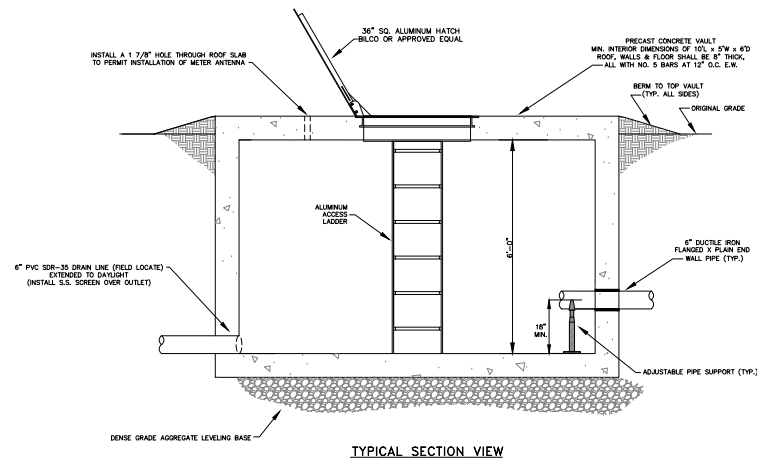
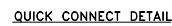
WATER SYSTEM RELOCATION
LAUREL COUNTY WATER DISTRICT #2
LAUREL COUNTY, KENTUCKY

U.S. HIGHWAY 25



M
Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

DRAWN BY: JLM	DATE: AUGUST 2025	REVISED	SHEET
CHECKED BY: JRC	SCALE: NTS		GS-1
CHECKED BY: USB	PROJECT: 1904		



Monarch Engineering, Inc.

556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

MASTER METER VAULT DETAILS

CUSTOMER:

LAUREL COUNTY WATER DISTRICT #2
LAUREL COUNTY, KENTUCKY

DESCRIPTION:

PROJECT NO. 1604

DATE: AUG 2025

DRAWN BY: JLM

CHECKED BY: DSB

CHECKED BY: ESB
CHECKED BY: DMB

CHECKED BY: DMB

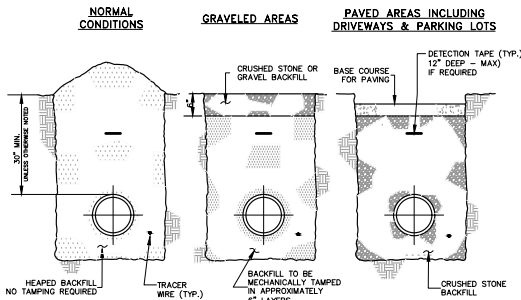
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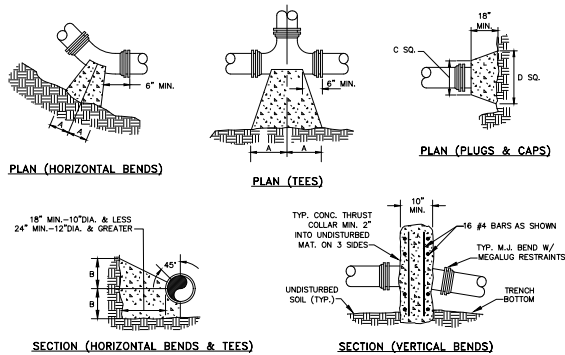
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MM-1





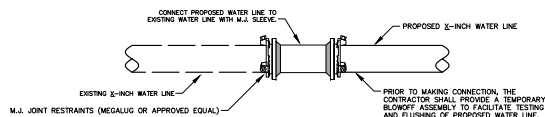
BACKFILLING



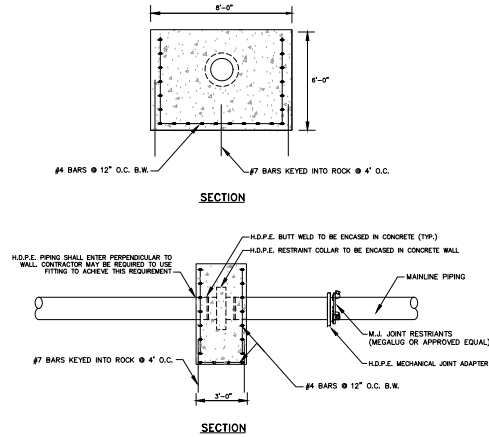
DIMENSION CHART		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE		PLUG	
PIPE SIZE	90° BEND	A	B	A	B	A	B	A	B	C	D
4"	8"	12"	8"	8"	6"	6"	6"	11"	9"	10"	6"
6"	18"	12"	8"	10"	8"	8"	8"	11"	10"	12"	18"
8"	18"	13"	10"	10"	8"	8"	8"	11"	12"	12"	24"
10"	20"	16"	12"	14"	8"	12"	8"	14"	16"	16"	30"
12"	20"	16"	12"	14"	8"	12"	8"	14"	16"	16"	30"
16"	26"	20"	16"	18"	11"	13"	11"	18"	20"	20"	36"
24"	82"	42"	62"	30"	44"	22"	22"	16"	82"	42"	82"
30"	185"	42"	100"	42"	52"	42"	40"	30"	185"	42"	185"

- NOTES:**
- FOR VERT. BEND DOWN IN EXCESS OF 11 1/4° BEND, ANCHORAGE SHALL BE DESIGNED BY ENGINEER.
 - FOR VERT. BEND UPWARD, BLOCKING TO BE SIMILAR TO THAT FOR HORIZ. BEND.
 - GLANDS & BOLTS SHALL REMAIN ACCESSIBLE AND MUST BE PROTECTED FROM CONCRETE BY PLASTIC SHEETING OR OTHERWISE.
 - ALL THRUST BLOCK & SUPPORT CONCRETE SHALL BE 3000 PSI READY MIX.
 - THRUST BLOCKS WITH "B" DIMENSION GREATER THAN 30" SHALL HAVE THE RESTRAINED PIPE INSTALLED WITH A MINIMUM OF 4' OF COVER.
 - DESIGN CRITERIA:
LINE PRESSURE = 200 psi
SOIL BEARING CAPACITY = 2000 psf
FACTOR OF SAFETY = 1.5

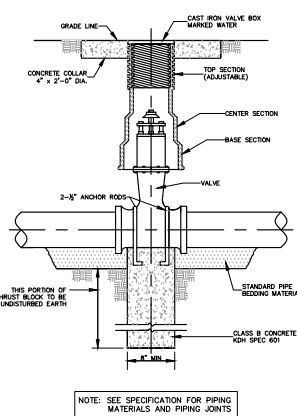
THRUST BLOCK DETAILS



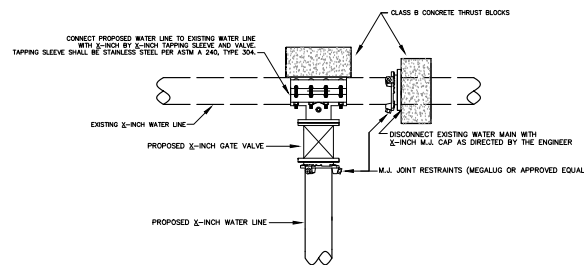
DIRECT CONNECTION



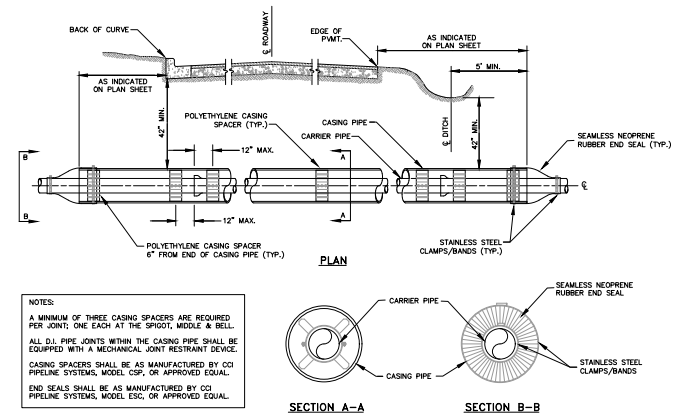
HDPE RESTRAINT WALL



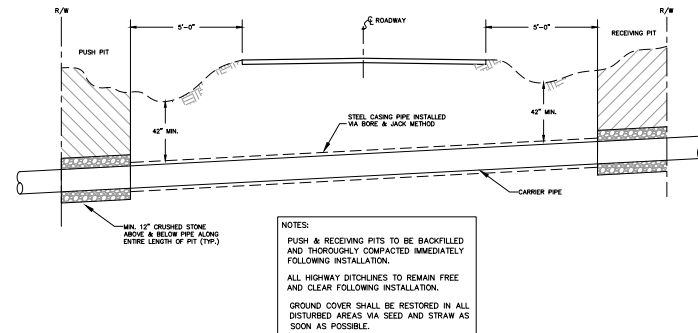
GATE VALVE



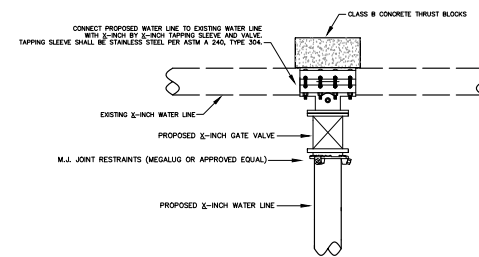
TYPE I CONNECTION



ENCASEMENT PIPE DETAILS



STATE HIGHWAY ENCASED BORE CROSSING



TYPE II CONNECTION

Monarch Engineering, Inc.

556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

STANDARD DETAIL DRAWINGS

CUSTOMER:

LAUREL COUNTY WATER DISTRICT NO. 2
LAUREL COUNTY, KENTUCKY

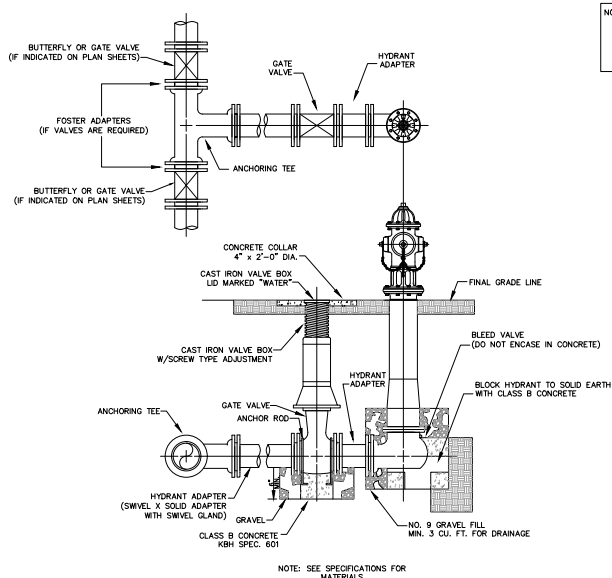
DESCRIPTION:

PROJECT NO: 1604
DATE: AUG 2025
DRAWN BY: JLM
CHECKED BY: DSB
CHECKED BY: DMB
SCALE: N.T.S.

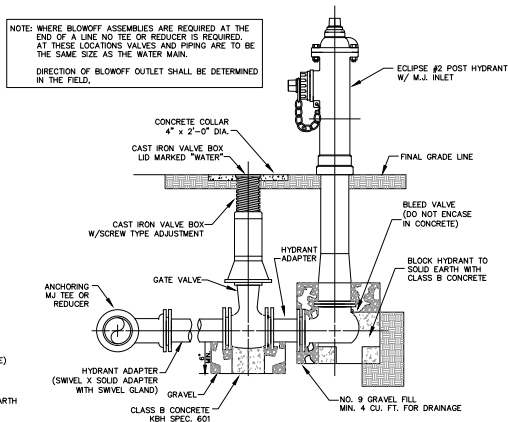
SHEET:

SD-1

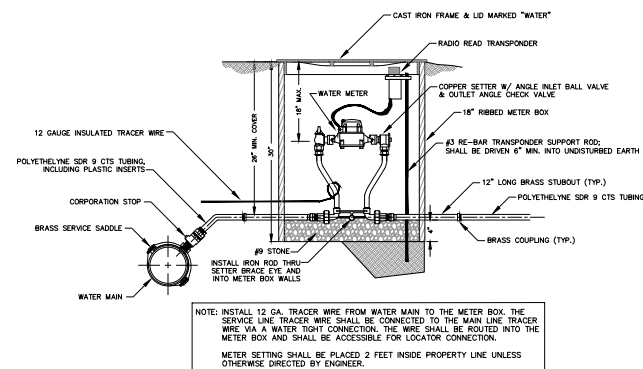




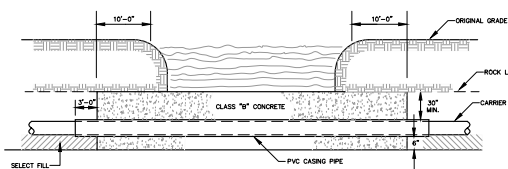
FLUSH HYDRANT ASSEMBLY



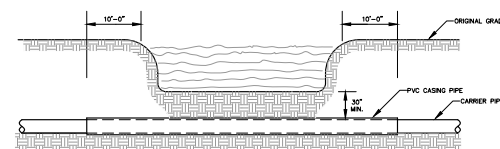
BLOWOFF ASSEMBLY



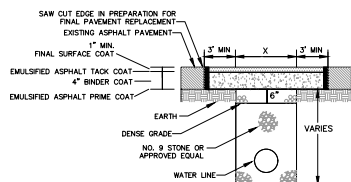
STANDARD METER SETTING



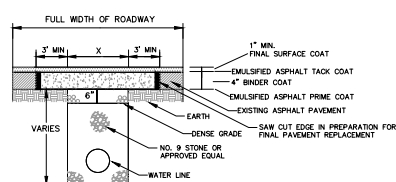
CREEK CROSSING IN ROCK



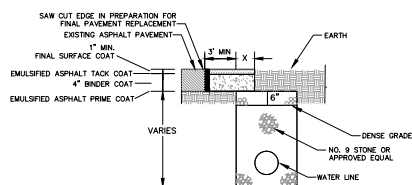
CREEK CROSSING IN SOIL



PAVEMENT REPLACEMENT



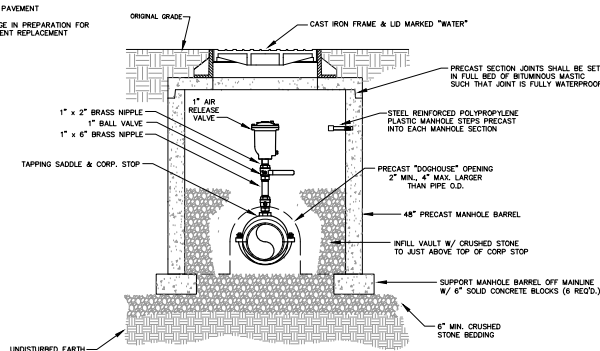
FULL WIDTH PAVEMENT REPLACEMENT



PARTIAL PAVEMENT REPLACEMENT

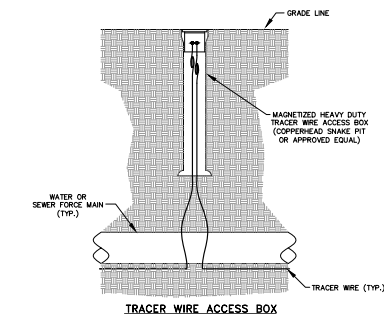
NOTES:
ANY TRENCH THAT DISTURBS PAVEMENT SHALL BE BACKFILLED WITH STONE
REPLACE BITUMINOUS PAVEMENT WITH SAME TYPE AND DEPTH AS EXISTING PAVEMENT
ANY PUBLICLY TRAVELED AREA (I.E. COUNTY ROADS, BUSINESS ENTRANCES, BUSINESS
AND PUBLIC PARKING LOTS, ETC.) SHALL BE TEMPORARILY RESTORED AT THE END OF
EACH WORK DAY USING AN APPROVED COLD PATCH ASPHALT PAVEMENT

BITUMINOUS PAVEMENT REPLACEMENT

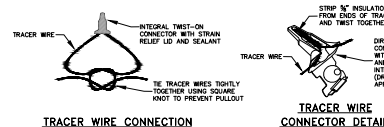


AIR RELEASE VALVE

NOTE:
WHERE THE WATER LINE IS LOCATED IN A STREET OR ROAD, THE AIR RELEASE VALVE AND BOX ARE TO BE LOCATED OFF THE ROAD AS DIRECTED BY THE ENGINEER AND CONNECTED TO THE MAINLINE BY 1\"/>



TRACER WIRE ACCESS BOX

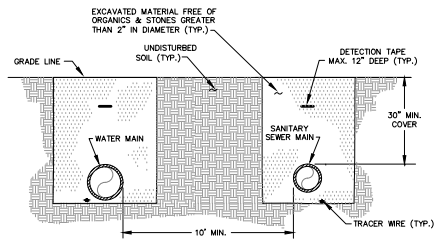


TRACER WIRE CONNECTION

TRACER WIRE CONNECTOR DETAIL

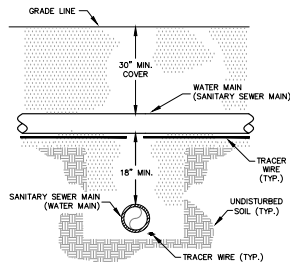
NOTES:
FOR OPEN CUT INSTALLATION, TRACER WIRE IS TO BE #12 AWG SOLID COPPER WITH 30 MIL BLUE HUMPE INSULATION. FOR TRENCHLESS INSTALLATION, TRACER WIRE IS TO BE #12 AWG SOLID COPPER CLAD STEEL CORE WITH 45 MIL BLUE HDPE INSULATION.
TRACER WIRE SHALL BE INSTALLED WITH THE PIPE AT THE TRENCH BOTTOM. ACCESS BOXES SHALL BE INSTALLED AT EACH VALVE, HYDRANT AND AIR RELEASE VALVE. TRACER WIRE ACCESS BOXES SHALL BE SPACED NO FURTHER THAN 1000' APART. A MINIMUM OF 3 FEET OF TRACER WIRE SHOULD BE COILED UP INSIDE OF EACH ACCESS BOX.

TRACER WIRE DETAILS



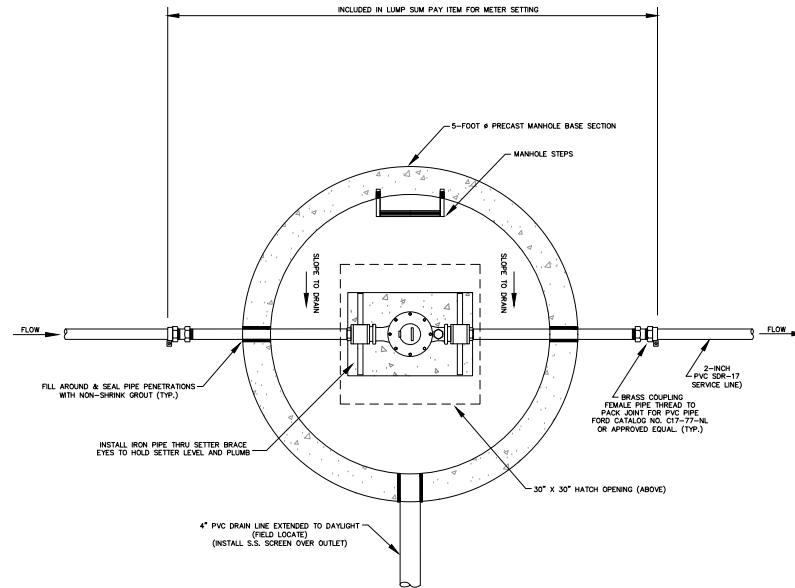
NOTES:
A MINIMUM OF 10' OF HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER LINES AND SEWER FORCE MAINS.

PARALLEL WATER MAIN & SANITARY SEWER MAIN

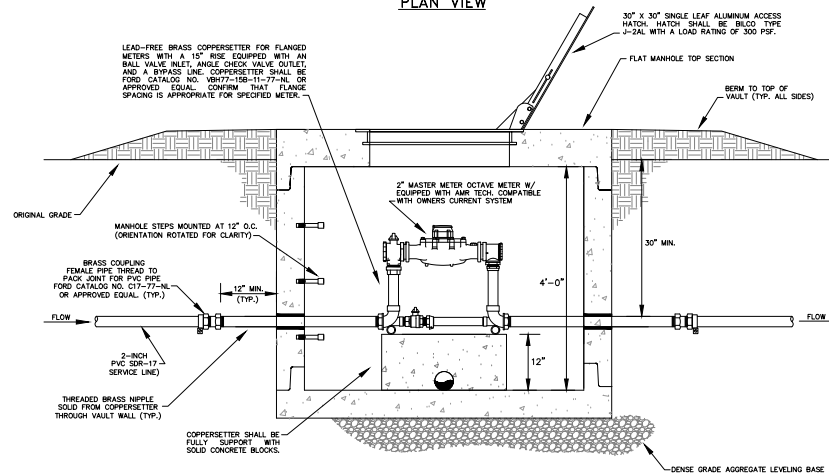


NOTES:
WHERE 18\"/>

SANITARY SEWER MAIN & WATER MAIN CROSSING



PLAN VIEW



SECTION VIEW

2-INCH COMMERCIAL METER VAULT

Monarch Engineering, Inc.
556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

STANDARD DETAIL DRAWINGS

CUSTOMER:
LAUREL COUNTY WATER DISTRICT NO. 2
LAUREL COUNTY, KENTUCKY

DESCRIPTION:

PROJECT NO: 1604
DATE: AUG 2025
DRAWN BY: JLM
CHECKED BY: DSB
CHECKED BY: DMB
SCALE: N.T.S.

SHEET:

SD-3

