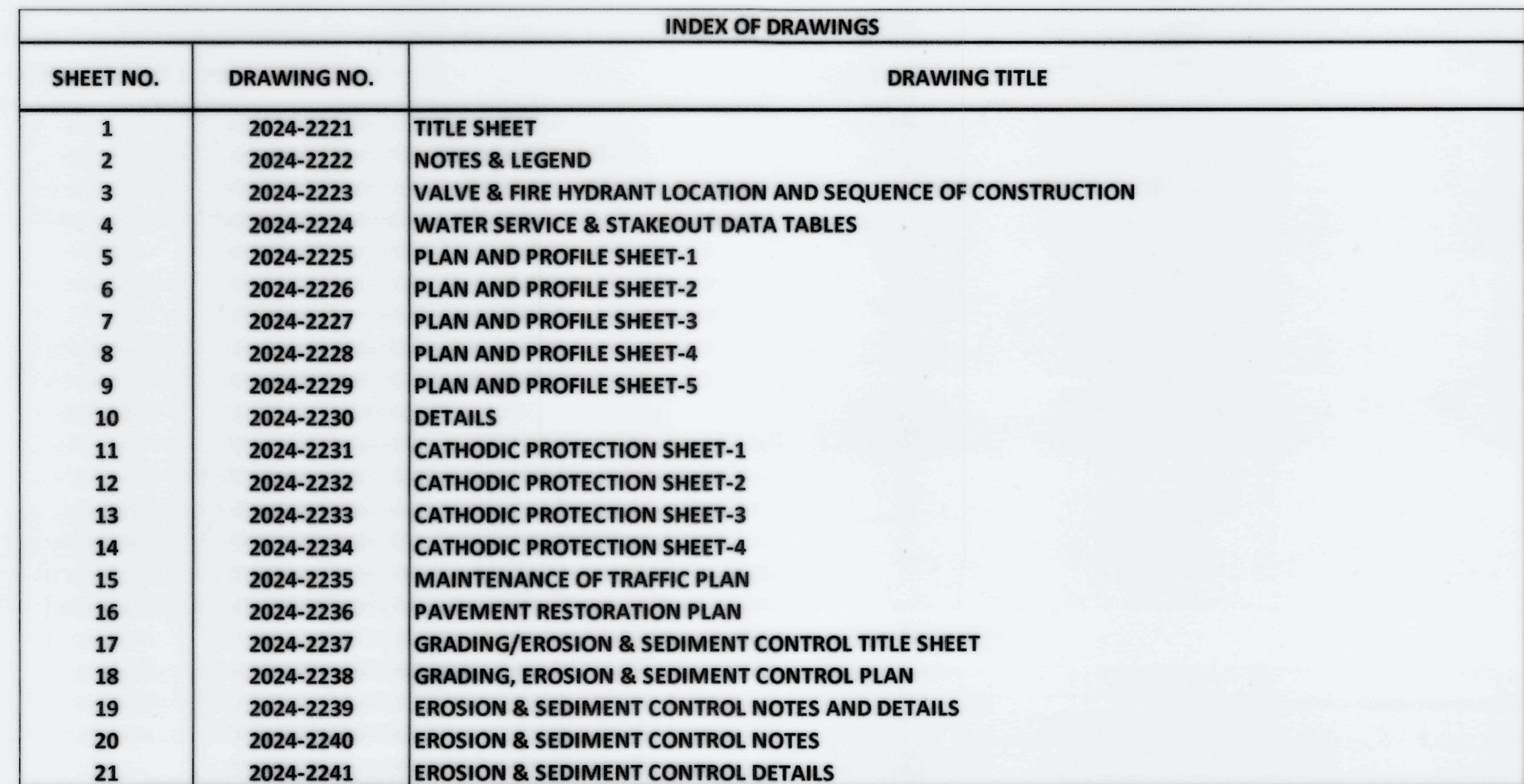


BALTIMORE COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
BUREAU OF ENGINEERING AND CONSTRUCTION
WATER MAIN REPLACEMENT - PHASE 5
YORK ROAD - MD ROUTE 45
(FROM WIGHT AVENUE TO SHAWAN ROAD)
J.O. 231-203-0050-0466
CONTRACT NO. : 24125 W XO
WORKDAY PROJECT NO. 030500466

-
- SHEET 5**
- SHEET 7**
- SHEET 9**
- SHEET 6**
- SHEET 8**
- MD RTE. 45
- YORK ROAD
- MD RTE. 45
- MILL AVENUE
- SHELL ROAD
- ASHLAND ROAD
- SILVER FOX
- NEW PARK ENTRANCE
- LOCATION MAP**
- SCALE 1" = 500'
- 0 1 2
500 0 500
- SCALE: 1" = 500'

1. THE CONTRACTOR SHALL NOTIFY MICHAEL STEIN AT BGE (MICHAEL.STEIN@BGE.COM), AT LEAST TWO (2) FULL WORKING DAYS PRIOR TO CUTTING ANY ABANDONED GAS LINES.
2. IF CAST IRON, STEEL OR PLASTIC GAS MAINS ARE EXPOSED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT BGE AT 410-685-0123 TO ARRANGE FOR ENGINEERING APPROVAL OF THE SUPPORT, PROTECTION AND INSPECTION METHODS FOR THE GAS MAINS.
3. CONTRACTOR SHALL TEST HOLE ALL GAS FACILITY CROSSINGS PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL MAINTAIN EITHER 12" VERTICAL OR 4' HORIZONTAL CLEARANCE FROM ALL GAS FACILITIES.
5. THIS DOCUMENT INCLUDES INFORMATION AND DEPICTIONS OF BALTIMORE GAS AND ELECTRIC COMPANY'S (BGE) ELECTRIC AND/OR GAS UTILITIES LOCATED WITHIN THE PROJECT AREA (THE "BGE UTILITY INFORMATION"). LOCATIONS, DIMENSIONS, DEPTHS, AND OTHER DETAILS OF ANY SUCH UTILITIES MAY NOT BE AS-BUILT, AND THE INFORMATION SHALL NOT BE RELIED UPON WITHOUT FIELD VERIFICATION. EXCAVATORS MUST EMPLOY SAFE DIGGING BEST PRACTICES WHEN APPROACHING BGE ELECTRIC AND GAS UTILITIES AND COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, INCLUDING BUT NOT LIMITED TO, THE "MISS UTILITY LAW." NO REPRESENTATIONS, GUARANTEES, OR WARRANTIES, EXPRESSED OR IMPLIED, ARE MADE BY BGE AS TO THE QUALITY, COMPLETENESS, OR ACCURACY OF THE BGE UTILITIES.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR ADJUSTING FRAMES AND COVERS OVER BGE FACILITIES. PLEASE CONTACT JOE REGAN, PAVING DEPARTMENT, WITH ANY QUESTIONS OR CONCERNS, AT 410-470-6373 OR MAPREQUEST@BGE.COM FOR CURRENT GAS UTILITY MAPS.
7. NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING WORK SO THAT BGE CAN ARRANGE TO MARK THE LOCATION OF THEIR FACILITIES. IN MAKING THIS NOTIFICATION, THE CONTRACTOR SHOULD: 1) STATE THE NATURE OF THE WORK TO BE DONE; 2) GIVE THE LOCATION OF THE JOB; 3) WHEN DIGGING ADJACENT TO AND CROSSING THESE FACILITIES. FOR ANY OVERHEAD FACILITIES IN THE AREA, THE CONTRACTOR SHOULD ADHERE TO MARYLAND HIGH VOLTAGE LINE ACT.
8. BGE RESERVES THE RIGHT TO SEEK REIMBURSEMENT FOR ANY WORK IN THE AREA TO THE EXTENT THAT THE LEGAL STATUS OF BGE FACILITIES JUSTIFIES ACTION.
9. PRIOR TO CONSTRUCTION, A SITE WALK THROUGH SHALL BE ARRANGED WITH THE COUNTY INSPECTOR, CONTRACTOR AND BGE REPRESENTATIVE TO DETERMINE THE EXACT WORK REQUIRED AND TO SEE IF FIELD ADJUSTMENTS CAN BE MADE TO AVOID ANY ELECTRIC CONFLICTS. THE CONTRACTOR MUST MAINTAIN 10' CLEARANCE AT ALL TIMES TO COMPLY WITH THE MARYLAND HIGH VOLTAGE LINE ACT. IF EQUIPMENT IS TOO LARGE TO WORK UNDER ENERGIZED WIRES OR IF DITCH IS TOO WIDE TO SAFELY LEAVE POLES AT THEIR EXISTING LOCATIONS, THEN FURTHER RENEWAL LOCATIONS WILL BE NECESSARY AT THE EXPENSE OF THE CONTRACTOR. THE CONTRACTOR SHALL CONTACT JASON CROSSE, 667-313-2722, JASON.CROSSE@BGE.COM, TO SCHEDULE THE FIELD MEETING.
10. THIRTY (30) DAY NOTICE WILL BE NECESSARY TO STUB POLES AND SIX (6) MONTHS TO DESIGN AND BUILD IF POLE RENEWAL OR RELOCATIONS ARE NECESSARY. ALL COSTS ASSOCIATED WITH POLE REMOVAL, RELOCATION, BRACING SHALL BE INCLUDED IN THE PRICES BID IN THE WATER MAIN BID ITEMS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN PERMISSION FROM LANDOWNERS FOR ANY POLES THAT NEED TO BE BRACED OR RELOCATED BACK ON PRIVATE PROPERTY AND FOR ANY TREES THAT NEED TO BE TRIMMED TO PROVIDE CLEARANCE FOR OUTRIGGER WIRES. NO TRENCH EXCAVATION SHALL BE MADE IF THE NEAREST BOTTOM EDGE OF THE TRENCH IS LESS THAN A 1:1 SLOPE AWAY FROM ANY UTILITY POLES UNLESS SPECIAL ARRANGEMENTS ARE MADE WITH BGE ELECTRIC RELOCATION UNIT.



CONTRACT COMPLETION BOX	
CONTRACTOR:	
DATE COMPLETED:	
INSPECTOR:	
PIPE MATERIAL (Pressure Only)	

SHEET DESIGNATION	CONTRACT NUMBER
GENERAL	24125-WXO

	JOB ORDER NUMBER
	231-203-0050-0466
	SHEET 1 OF 21
	DRAWING NUMBER
	2024-2221
	FILE NO.:

LOWEST ELEV. TOP OF MAIN	ELEV. 282
HIGH HYDRAULIC GRADIENT	600
NORMAL OPERATING PRESSURE	138 PSI
TEST PRESSURE	210 PSI
CITY PLAT NUMBER	B-21,C-21&D-21
WATER ZONE	TOWSON FOURTH

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION

WATER MAIN REPLACEMENT - PHASE 5

YORK ROAD - MD ROUTE 45

(FROM WIGHT AVENUE TO SHAWAN ROAD)

ON: COCKEYSVILLE

TITLE SHEET

ELECTION DIST.

Mar 07, 2025 - 11:59am User: Julio Alarcon
4: 2022\132201868.05\Drawings\132201868.05-G-01 TITLE SHEET.dwg

BGE FACILITIES NOTES

1. DEPICTIONS OF BALTIMORE GAS AND ELECTRIC COMPANY'S ("BGE") ELECTRIC AND/OR GAS UTILITIES LOCATED WITHIN THE PROJECT AREA LOCATIONS, DIMENSIONS, DEPTHS, AND OTHER DETAILS OF ANY SUCH UTILITIES MAY NOT BE AS-BUILT, AND THE INFORMATION SHALL NOT BE RELIED UPON WITHOUT FIELD VERIFICATION. EXCAVATORS MUST EMPLOY SAFE DIGGING BEST PRACTICES WHEN APPROACHING BGE ELECTRIC AND GAS UTILITIES AND COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, INCLUDING, BUT NOT LIMITED TO, THE "MISS UTILITY LAW."
2. NO REPRESENTATIONS, GUARANTEES, OR WARRANTIES, EXPRESS OR IMPLIED, ARE MADE BY BGE AS TO THE QUALITY, COMPLETENESS, OR ACCURACY OF THE BGE UTILITY INFORMATION, AND IN ACCEPTING THIS DOCUMENT, THE RECIPIENT EXPRESSLY ACKNOWLEDGES AND AGREES THAT IT IS NOT RELYING ON THE ACCURACY OF THE SAME.

ABANDONMENT NOTES

1. THE CONTRACTOR SHALL REMOVE FIRE HYDRANTS, WATER VALVES EIGHT INCHES AND LARGER, AND VALVE FRAMES AND COVERS WHICH ARE TO BE ABANDONED/REMOVED AND RETURN THEM TO THE BALTIMORE CITY MAINTENANCE FACILITY AT 2947 WASHINGTON BOULEVARD ON WEEKDAYS BETWEEN 8:30 A.M. AND 4:30 P.M. WATER VALVES LESS THAN EIGHT INCHES MAY BE ABANDONED IN PLACE.
2. THE CONTRACTOR SHALL REMOVE WATER METERS WHICH ARE TO BE ABANDONED AND RETURN THEM TO BALTIMORE CITY AS DIRECTED.
3. THE CONTRACTOR SHALL REMOVE THE TOP PORTIONS OF VALVE VAULTS, METER VAULTS AND ROADWAY BOXES TO BE "ABANDONED" OR "REMOVED" AND BACKFILL THE AREA.
4. THE CONTRACTOR SHALL RECONNECT/TRANSFER EX. WATER SERVICE CONNECTIONS TO THE NEW WATER MAIN AFTER IT HAS BEEN CHARGED AND IS APPROVED BY THE COUNTY FOR PUBLIC USE. PORTIONS OF THE EX. WATER SERVICE CONNECTION BETWEEN THE EX. WATER MAIN AND THE POINT OF RECONNECTION TO THE NEW MAIN MAY BE ABANDONED IN PLACE. THE BEST LOCATION FOR RECONNECTION OF THE SERVICES MAY BE ADJUSTED IN THE FIELD WITH COUNTY APPROVAL.
5. THE CONTRACTOR SHALL RESTORE THE SURFACE WITH MATERIALS APPROPRIATE TO THE SITE AS DIRECTED BY THE ENGINEER.

LEGEND

EXISTING	PROPOSED
SANITARY MANHOLE	WATER VALVE
STORM DRAIN MANHOLE	FIRE HYDRANT
ELECTRIC HAND BOX	WATER VAULT
ELECTRIC MANHOLE	WATER METER
GAS VALVE	CLEANOUT
GAS VAULT	ABANDONED SEWER FORCE MAIN
SIGN	SANITARY SEWER
TELEPHONE MANHOLE	GAS (RECENTLY INSTALLED)
UTILITY POLE	STORM DRAIN
GUY WIRE	TELEPHONE
LIGHT POLE	ELECTRIC
BOLLARD POST	FIBER OPTIC
DECIDUOUS TREE	WATER LINE
CONIFEROUS TREE	ABANDONED WATER LINE
TRAVERSE POINT (FOR SURVEY CONTROLS & TRAVERSE DESCRIPTIONS, SEE PLAN SHEETS)	PROPERTY LINE
	CONTOUR LINE
	FENCE
	VERIZON
	WOOD SHEETING

SHA NOTES

- 1. SHA PERMIT:**
THIS PROJECT IS WITHIN LIMIT OF THE STATE RIGHT OF WAY. ALL WORK WITHIN LIMIT OF THE STATE RIGHT OF WAY SHALL BE IN ACCORDANCE WITH THE STATE UTILITY CONSTRUCTION PERMIT ISSUED FOR THIS PROJECT
- 2. UTILITY TRENCH REPAIR:**
REFER TO LATEST STANDARD NO. MD 578.01 "REPAIRING PAVEMENT OPENINGS FOR UTILITY TRENCHES" OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATIONS (SHA), FOR THE WORK UNDER THIS PROJECT.
- 3. PAVEMENT MARKING:**
UNLESS OTHERWISE NOTED OR DIRECTED BY ENGINEER, ALL EXISTING PAVEMENT MARKINGS SHALL REMAIN IN PLACE DURING AND AFTER CONSTRUCTION OR IT SHALL BE REPLACED IMMEDIATELY IN KIND. THIS WILL INCLUDE BOTH TEMPORARY AND PERMANENT PAVEMENT MARKINGS REQUIRED IN ACCORDANCE WITH THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATIONS (SHA) PREVAILING SPECIFICATIONS. THE COST SHALL BE INCLUDED IN THE BID ITEM FOR MAINTENANCE OF TRAFFIC.
- 4. TRAFFIC CONTROL AND MAINTENANCE OF TRAFFIC** NECESSARY FOR THE PROJECT SHALL BE IN ACCORDANCE WITH STATE UTILITY PERMIT ISSUED FOR THE PROJECT.
5. THE CONTRACTOR MUST HAVE A "CERTIFIED" TRAFFIC CONTROL MANAGER ON SITE DURING ALL PHASES OF CONSTRUCTION AT ALL TIMES. THESE PLANS INCLUDE SUGGESTED CONTROL MEASURES, AND ANY UNSAFE CONDITIONS AND/OR RECOMMENDED MODIFICATIONS TO THE TRAFFIC CONTROL PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE MDSHA/BALTIMORE COUNTY INSPECTOR BY THE TRAFFIC CONTROL MANAGER AND ACTION TAKEN IMMEDIATELY.
6. THE CONTRACTOR MUST HAVE A "CERTIFIED" TRAFFIC CONTROL MANAGER ON SITE DURING ALL PHASES OF CONSTRUCTION AT ALL TIMES. THESE PLANS INCLUDE SUGGESTED CONTROL MEASURES, AND ANY UNSAFE CONDITIONS AND/OR RECOMMENDED MODIFICATIONS TO THE TRAFFIC CONTROL PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE MDSHA/BALTIMORE COUNTY INSPECTOR BY THE TRAFFIC CONTROL MANAGER AND ACTION TAKEN IMMEDIATELY.
7. TRAFFIC SIGNALS, LOOP DETECTORS AND TRAFFIC CAMERAS:
TRAFFIC SIGNAL SYSTEM SHALL REMAIN IN PLACE AND OPERATIONAL DURING AND AFTER CONSTRUCTION. MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATIONS (SHA) SHALL OPERATE AND MAINTAIN THE TRAFFIC SIGNALS, LOOP DETECTORS AND TRAFFIC CAMERAS.
8. ALL BUSINESSES AND RESIDENTS SHALL BE INFORMED AT LEAST SEVEN DAYS PRIOR TO SHUTDOWN OF THEIR SERVICES.
9. ALL SHUTDOWN FOR THE TIE-INS OF THE WATER MAIN SHALL BE BRIEF, AFFECTING THE LEAST POSSIBLE SERVICES AND BETWEEN 9:00 PM AND 6:00 AM ON WEEKENDS OR AS DIRECTED BY THE ENGINEER.

EMERGENCY MANAGEMENT NOTES

1. DPW INSPECTORS WILL NOTIFY THE FIRE DEPARTMENT ADMINISTRATIVE DUTY OFFICER (ADO) OF ANY PLANNED WATER OUTAGE. (CONTACT: FIRE_ADO@BALTIMORECOUNTYMD.GOV OR CALL AT 410-307-2052)
2. DPW INSPECTORS WILL NOTIFY BALTIMORE CITY'S 311 OF ANY PLANNED WATER OUTAGE.
3. FOR OUTAGES AFFECTING MORE THAN 200 SERVICES AND/OR THAT ARE MORE THAN EIGHT(8) HOURS IN DURATION CONTRACTORS WILL NOTE IN THEIR PLANS TO NOTIFY THE FIRE DEPARTMENT ADMINISTRATIVE OFFICER (ADO) AND THE OFFICE OF EMERGENCY MANAGEMENT BY E-MAIL AND BY PHONE.
(emergencymanagement@baltimorecountymd.gov and 410-887-5996.)

BLOCKING/BRACING SIDELINE OR TERMINAL VALVE/WATER MAIN NOTES

1. WHEN EXCAVATING TRENCH OR ACCESS PITS NEAR SIDELINE OR TERMINAL VALVES OR WATER MAINS WHICH ARE TO REMAIN IN SERVICE, THE CONTRACTOR SHALL DESIGN AND INSTALL (AT HIS EXPENSE) A METHOD TO BLOCK OR BRACE THE VALVE, WATER MAIN AND/OR STRUCTURE TO PROTECT THEM FROM BLOWING OFF DUE TO UNBALANCED FORCES WHICH MAY RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY.
2. IF A VALVE, WATER MAIN OR STRUCTURE BLOWS OFF, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECTIFYING ALL DAMAGES AT HIS EXPENSE.

CHLORINATED WATER DISCHARGE NOTES

1. CHLORINATED WATER DISCHARGES TO THE 8" AND 10" SEWERS LOCATED IN THE PROJECT AREA WILL BE LIMITED TO A RATE NOT TO EXCEED **50 GALLONS PER MINUTE**.
2. CHLORINATED WATER DISCHARGES TO THE 12" SEWERS LOCATED IN THE PROJECT AREA WILL BE LIMITED TO A RATE NOT TO EXCEED **100 GALLONS PER MINUTE**.
3. ALL DISCHARGES WILL BE RESTRICTED TO DRY WEATHER AND NOT LESS THAN 24 HOURS AFTER ANY RAIN EVENT.
4. ONE (1) WORKING DAY PRIOR TO DISCHARGE OF ANY CHLORINATED WATER TO THE SANITARY SEWER, THE CONTRACTOR WILL NOTIFY THE SEWER DESIGN SECTION AT 410-887-3781 AND BUREAU OF UTILITIES AT 410- 887-7415 OF THE EXACT LOCATION OF THE PLANNED DISCHARGE. THIS WILL ALLOW THE REMOVAL OF THE FLOW MONITORING EQUIPMENT LOCATED WITHIN THE SANITARY SEWER SYSTEM IN THIS AREA AND GIVE NOTICE IN THE EVENT OF ANY SEWER BACKUPS OR OVERFLOWS CAUSED BY SUCH DISCHARGES.
5. FEDERAL REGULATION REQUIRES DOCUMENTATION OF ANY DISCHARGE FROM THE SANITARY SEWER COLLECTION SYSTEM AND THE CAUSE OF THE DISCHARGE. TO MEET THESE REQUIREMENTS, THE DATE, RATE, AND DURATION OF CHLORINATED WATER DISCHARGES SHALL BE DOCUMENTED BY THE CONTRACTOR AND/OR INSPECTOR.

MDE NOTES

1. PRESSURE AND LEAKAGE TESTING SHALL BE IN ACCORDANCE WITH AWWA C600 & ASTM C969.
2. DISINFECTION OF MAINS & BACTERIOLOGICAL SAMPLING REQUIREMENTS:
- A. THE COMPLETED WATER MAINS MUST BE DISINFECTED AND TESTED IN ACCORDANCE WITH THE LATEST VERSION OF AWWA STANDARD C651.
- B. AFTER DISINFECTION, A SAMPLE SHALL BE COLLECTED AFTER THE REQUIRED MINIMUM TIME PERIOD. SAMPLES MUST BE COLLECTED BY A STATE-CERTIFIED SAMPLER AND ANALYZED AT A STATE-CERTIFIED LABORATORY. THE SAMPLE RESULTS MUST BE REVIEWED BY BALTIMORE CITY, WHICH WILL GIVE AUTHORIZATION TO PLACE THE MAINS INTO SERVICE. THE SAMPLE RESULTS MUST ALSO BE SUBMITTED TO THE MDE WSP FOR APPROVAL AT kristy.jones1@maryland.gov.
3. NSF NOTE:
- A. IN ACCORDANCE WITH CODE OF MARYLAND REGULATIONS (COMAR) 26.04.01.33, DIRECT AND INDIRECT ADDITIVES, SUPPLIERS OF WATER SHALL ONLY USE PRODUCTS (ANY MATERIALS THAT COME IN CONTACT WITH WATER INTENDED FOR USE IN PUBLIC WATER SUPPLY) THAT MEET THE APPLICABLE AMERICAN NATIONAL STANDARDS INSTITUTE / NSF INTERNATIONAL (ANSI / NSF) STANDARDS FOR DIRECT OR INDIRECT DRINKING WATER ADDITIVES. THE PRODUCTS CAN ALSO BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY THE ANSI FOR SUCH TESTING (I.E., INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS RESEARCH AND TESTING, ONTARIO CA, UNDERWRITERS LABORATORY, NORTHBROOK IL, AND WATER QUALITY ASSOCIATION, LISLE IL).
4. LEAD-FREE MATERIAL NOTE:
- A. IN COMPLIANCE WITH COMAR 09.20.01.03 AND THE SAFE DRINKING WATER ACT (SECTION 1417(A)(4)(8)), MATERIALS THAT COME IN CONTACT WITH WATER INTENDED FOR USE IN PUBLIC WATER SUPPLY SHALL COMPLY WITH THE REDUCTION OF LEAD IN DRINKING WATER ACT, WHICH WENT INTO EFFECT IN MARYLAND IN JANUARY 2012.
5. WATER MAIN SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY OR STORM SEWER, SEPTIC TANK OR SUBSOIL TREATMENT SYSTEM. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. WATER MAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. AT CROSSINGS, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE.

- o THE BASELINE USED IS A BEST FIT FOR THE WATER MAINS UNDER CONTRACT, 24125-WX0 ONLY AS LOCATED BY MERCADO CONSULTANTS, INC. OF ASHTON, MD. IT DOES NOT IN ANY WAY REFLECT THE RIGHT-OF-WAY OF YORK ROAD OR ANY OF THE STATE'S BASELINES.

- o DESIGN AND DRAWING BASED ON MARYLAND COORDINATE SYSTEM:
ooo HORIZONTAL - NAD 83/91
ooo VERTICAL - NAVD 88

- o REFERENCE SURVEY BENCHMARK MONUMENTS ON THE SITE:
ooo STATION# EAST NORTH ELEVATION
ooo BCO#769 1,412,253.09 662,710.46 251.47
ooo BCO#770 1,412,024.29 663,540.84 274.78
ooo BCO#878 1,411,579.08 666,420.04 288.03

BASELINE CONTROLS COORDINATES FOR 24-INCH WATER									
POINT	STATION	NORTHING	EASTING	Δ	D	R	T	L	E
BP	231+85.58	664162.5397	1411771.8963						
PI	238+65.43	664804.3262	1411547.8357						
PC	250+17.74	665888.4890	1411157.4392						
PT	252+59.33	666406.0791	1411048.8835	05°55'00.0"	03°00'00.0"	1909.86'	267.00'	530.56'	18.57
PI	256+81.23	666538.7732	1411039.8681						
EP	261+37.39	666995.3902	1411008.8448						

CITY OF BALTIMORE		REVISION - CITY OF BALTIMORE		 Engineers Planners Scientists Construction Managers 3300 Research Drive Baltimore, MD 21218 Phone: 410.336.3889 Fax: 410.336.7817 www.kci.com	
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER		CHIEF, UTILITY ENGINEERING			
DATE		DATE			
CHIEF, WATER ENGINEERING SECTION		DATE			
	PROFESSIONAL CERTIFICATION		REVISION		BY
	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.				DATE
	LICENSE NO. 200436		EXPIRATION DATE 9/30/2027		P.W.A. NO.
	ENGINEER: JOHN A. BLONDELL		DESIGN BY: JCA		KEY SHEET
	AS-BUILT PER RECORD PRINT		DRAWN BY: JCA		POSITION SHOWN
BY: DATE:		CHKD BY: JAB		BUREAU OF ENGINEERING AND CONSTRUCTION	
				BUILDINGS	
				HIGHWAYS	
				STRUCTURES	
				STORM DRAINS	
				SEWER	
				WATER	
				FIELD ENGINEER	
				DPW AND TRANSPORTATION	
				FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	
				BUR. OF ENGINEERING & CONSTRUCTION	
				FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	

BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHOWN	DRAWING SCALE	DPW AND TRANSPORTATION
					PLAN SCALE: N/A	
		R.O.W NO.	VSE & VNE	70NW7 71NW7 72NW7 73NW7	PROFILE SCALE: N/A	FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221
		STATE				BUR. OF ENGINEERING & CONSTRUCTION

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION

WATER MAIN REPLACEMENT - PHASE 5

YORK ROAD - MD ROUTE 45

(FROM WIGHT AVENUE TO SHAWAN ROAD)

SUBDIVISION: COCKEYSVILLE

NOTES & LEGEND

ELECTION DIST. NO.: 8C3

SHEET DESIGNATION	CONTRACT NUMBER
WATER	24125-WX0
	JOB ORDER NUMBER
	231-203-0050-0466
	SHEET 2 OF 21
	DRAWING NUMBER
	2024-2222
	FILE NO.:

WATER HOUSE/SERVICE CONNECTIONS YORK ROAD – FROM WIGHT AVENUE TO SHAWAN ROAD								
STATION	ADDRESS	TYPE OF SERVICE	SIZE OF SERVICE	METER TYPE	METER SIZE	METER ID	PROPOSED LENGTH OF SERVICE	REMARKS/COMMENTS
232+92	11101 YORK ROAD	SINGLE	¾"	AMCO	⅝"	14930002	40	
233+34	11101–A YORK ROAD	RESIDENTIAL	2"	NEPTUNE	1–½"	01105153	48	
236+06	11150 YORK ROAD	COMMERCIAL	6"	HE EDC III	6"	8047062	19	6" WATER SERVICE. RECONNECT TO EX. 6" SERVICE. SEE PROFILE ON SHEET 4
238+50	11200 YORK ROAD	COMMERCIAL	6"	GRINNEL	6"	E22509	33	6" WATER SERVICE. RECONNECT TO EX. 6" SERVICE. SEE PROFILE ON SHEET 5
239+68	11206 YORK ROAD	SINGLE	¾"	NEPTUNE	⅝"	99999999	33	
240+48	11201 YORK ROAD	SINGLE	¾"	ROCKWELL	⅝"	48586564	32	
240+74	11210 YORK ROAD	COMMERCIAL	8"	MFM–MVR	8"	8941683	29	8" WATER SERVICE. RECONNECT TO EX. 8" SERVICE. SEE PROFILE ON SHEET 5
241+26	11212 YORK ROAD	COMMERCIAL	2"	ROCKWELL	1–½"	29724400	36	
242+12	11219 YORK ROAD	SINGLE	¾"	ROCKWELL	⅝"	42810209	34	
242+66	11222 YORK ROAD	OFFICES	2"	ROCKWELL	1–½"	36700318	33	
243+18	11223 YORK ROAD	SINGLE	1"	ROCKWELL	¾"	41089148	34	
244+17	11229 YORK ROAD	RESIDENTIAL	¾"	ROCKWELL	⅝"	48586359	33	
245+00	11234 YORK ROAD	SINGLE	1"	ROCKWELL	¾"	33736589	35	
246+89	11235 YORK ROAD	COMMERCIAL	2"	NEPTUNE	1–½"	01105344	34	1–½" METER WITH REDUCER
249+89	11310 YORK ROAD	COMMERCIAL	2"	ROCKWELL	1–½"	42847015	34	
251+87	NWC YORK RD (VERIZON MARYLAND INC PROPERTY)	COMMERCIAL	6"	MFM TURBO	6"	5417360	34	6" WATER SERVICE. RECONNECT TO EX. 6" SERVICE. SEE PROFILE ON SHEET 6
252+86	11320 YORK ROAD	COMMERCIAL	2"	ROCKWELL	1–½"	42847084	34	
253+43	11317 YORK ROAD	COMMERCIAL	10"	MFM TURBO	10"	8019432	29	10" WATER SERVICE. RECONNECT TO EX. 10" SERVICE. SEE PROFILE ON SHEET 7
254+57	11330 YORK ROAD	SINGLE	¾"	ROCKWELL	⅝"	48594938	34	
257+54	11416 YORK ROAD	COMMERCIAL	2"	ROCKWELL	1–½"	42847039	32	
258+62	11418 YORK ROAD	SINGLE	¾"	ROCKWELL	⅝"	48588335	25	
259+26	11420 YORK ROAD	SINGLE	¾"	AMCO	⅝"	14921875	20	
259+57	11424 YORK ROAD	SINGLE	¾"	SENSUS SR2	⅝"	76346424	17	LOCATION APPROX. METER WAS NOT SURVEYED
260+59	11429 YORK ROAD	RESIDENTIAL	10"	MFM–MVR	10"	7045913	40	10" WATER SERVICE. RECONNECT TO EX. 10" SERVICE. SEE PROFILE ON SHEET 7
260+92	11426 YORK ROAD	OFFICES	6"	HER EDC II	6"	7234869	29	6" WATER SERVICE (DOMESTIC TEES OFF OF 6" DETECTOR CHECK IN THE VAULT). RECONNECT TO EX. 6" SERVICE. SEE PROFILE ON SHEET 7
			2"	ROCKWELL	2"	29724281	–	

WATER HOUSE/SERVICE CONNECTIONS (SHAWAN ROAD)

1+94	1 SHAWAN ROAD	SINGLE	¾"	ROCKWELL	⅝"	32771476	19	
2+23	2 SHAWAN ROAD	SINGLE	¾"	AMCO	⅝"	14903772	12	
2+84	3 SHAWAN ROAD	SINGLE	¾"	ROCKWELL	⅝"	31580991	15	
3+60	5 SHAWAN ROAD	COMMERCIAL	1"	BADGER M	¾"	99409271	09	
5+07	6 SHAWAN ROAD	SINGLE	¾"	BADGER M	⅝"	10012832	10	

NOTES:

- UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL REPLACE WATER SERVICES 2–INCH AND SMALLER WITH COPPER PIPE OF THE SAME SIZE AS EXISTING SERVICE SIZE.
- THE PROPOSED WATER HOUSE CONNECTION (WHO) REPLACEMENT LENGTH FOR WATER METERS THAT WERE NOT SURVEYED OR COULD NOT BE LOCATED IN THE FIELD HAVE BEEN ESTIMATED FROM THE PROPERTY TO THE PROPOSED WATER MAIN.

324'	¾" SERVICE
78'	1" SERVICE
251'	2" SERVICE
115'	6" SERVICE
29'	8" SERVICE
69'	10" SERVICE
866'	TOTAL LENGTH OF SERVICES

STAKEOUT DATA YORK ROAD (STA. 232+36 – STA. 261+37)			
BASELINE STATION	FITTING	NORTHING	EASTING
232+36	CONNECTION TO EX. 24" W (PHASE 3B)	664208.7400	1411747.7700
235+81	24"x6" F.H. TEE AND 6" VALVE & DOGHOUSE MH	664533.4768	1411635.0275
236+06	24"x6" TEE AND 6" VALVE & DOGHOUSE MH	664557.3566	1411626.6386
238+14	24"x6" F.H. TEE AND 6" VALVE & DOGHOUSE MH	664756.7100	1411567.6400
238+50	24"x6" TEE AND 6" VALVE & DOGHOUSE MH	664790.1153	1411554.9339
238+87	24"x12" TEE AND 12" VALVE & DOGHOUSE MH	664824.5928	1411541.8202
239+58	24" VALVE & VAULT	664891.6867	1411517.2663
240+74	24"x8" TEE AND 8" VALVE & DOGHOUSE MH	665001.2466	1411478.5187
241+99	24"x6" F.H. TEE AND 6" VALVE & DOGHOUSE MH	665118.6500	1411437.4600
246+33	24"x24" TEE	665528.1411	1411292.3356
246+44	24"–1/8 UPPER VERTICAL BEND (U.V.B.)	665538.5063	1411288.6520
246+49	24"–1/8 LOWER VERTICAL BEND (L.V.B.)	665543.1882	1411287.0006
246+69	24"–1/8 LOWER VERTICAL BEND (L.V.B.)	665562.0386	1411280.3171
246+75	24"–1/8 UPPER VERTICAL BEND (U.V.B.)	665567.6938	1411278.3121
246+82	AIR RELEASE VALVE & DOGHOUSE MH	665573.8400	1411276.1200
249+30	24"x6" F.H. TEE AND 6" VALVE & DOGHOUSE MH	665807.5800	1411190.3600
251+87	24"x6" TEE AND 6" VALVE & DOGHOUSE MH	666049.0900	1411104.0700
252+09	24"x6" F.H. TEE AND 6" VALVE & DOGHOUSE MH	666069.6200	1411097.8300
253+24	24"–1/8 UPPER VERTICAL BEND (U.V.B.)	666181.0710	1411062.9996
253+33	24"–1/8 LOWER VERTICAL BEND (L.V.B.)	666189.7737	1411060.3508
253+43	24"x10" TEE AND 10" VALVE & ROADWAY BOX	666197.7100	1411057.9352
254+04	DEWATERING VALVE & VAULT	666258.3000	1411039.5000
254+41	24"–1/8 LOWER VERTICAL BEND (L.V.B.)	666295.3600	1411028.2000
254+46	24"–1/8 UPPER VERTICAL BEND (U.V.B.)	666300.2200	1411026.7200
255+60	24"x12" TEE AND 12" VALVE & DOGHOUSE MH	666413.5549	1411002.7477
256+50	24" VALVE & VAULT	666504.5500	1410997.1400
259+89	24"x6" F.H. TEE AND 6" VALVE & DOGHOUSE MH	666846.0500	1410985.6900
260+59	24"x10" TEE AND 10" VALVE & DOGHOUSE MH	666916.2400	1410985.6900
260+92	24"x6" TEE AND 6" VALVE & DOGHOUSE MH	666947.4100	1410985.7600
261+06	24"–1/8 UPPER VERTICAL BEND (U.V.B.)	666961.7400	1410985.6900
261+11	24"–1/8 LOWER VERTICAL BEND (L.V.B.)	666965.7500	1410985.6900
261+17	24"x24" TEE	666973.7700	1410985.6900
261+32	24"x6" F.H. TEE AND 6" VALVE & DOGHOUSE MH	666987.1800	1410985.7800
261+37	24" CAP	666993.8200	1410985.6900

STAKEOUT DATA YORK ROAD (BRANCH CONNECTIONS)				
BASELINE STATION ALONG YORK ROAD	STATION ALONG BRANCH CONNECTION	FITTING	NORTHING	EASTING
WIGHT AVENUE				
236+06	0+12	6"–1/8 LOWER VERTICAL BEND (L.V.B.)	664553.4838	1411615.2807
	0+15	6"–1/8 HORIZONTAL BEND	664552.5505	1411612.5436
	0+19	CONNECTION TO EX. 6" WATER	664554.5602	1411608.4543
238+50	0+19	6"–1/8 HORIZONTAL BEND	664783.4505	1411537.2411
	0+28	6"–1/32 UPPER VERTICAL BEND (U.V.B.)	664787.1995	1411528.9602
	0+33	CONNECTION TO EX. 6" WATER	664789.3503	1411524.2095
ASHLAND ROAD				
238+87	0+09	12"–1/8 UPPER VERTICAL BEND (U.V.B.)	664827.5949	1411550.3048
	0+13	12"–1/8 LOWER VERTICAL BEND (L.V.B.)	664828.9292	1411554.0757
	0+31	12"–1/16 LOWER VERTICAL BEND (L.V.B.)	664834.9334	1411571.0447
	0+38	12"–1/8 HORIZONTAL BEND	664837.1515	1411577.3132
	0+52	CONNECTION TO EX. 12" WATER	664849.8465	1411583.4287
240+74	0+13	8"–1/8 HORIZONTAL BEND	664997.0447	1411465.6879
	0+17	8"–1/16 LOWER VERTICAL BEND (L.V.B.)	664997.3106	1411462.1745
	0+24	8"–1/16 UPPER VERTICAL BEND (U.V.B.)	664997.8389	1411455.1945
	0+29	CONNECTION TO EX. 8" WATER	664998.1840	1411450.6347
SCHILLING ROAD				
246+33	0+10	24"–1/32 UPPER VERTICAL BEND (U.V.B.)	665524.7191	1411282.9263
	0+18	24"–1/32 LOWER VERTICAL BEND (L.V.B.)	665521.7300	1411275.5000
	0+50	24" VALVE & VAULT	665516.4300	1411245.5300
	0+61	24"–1/32 LOWER VERTICAL BEND (L.V.B.)	665506.4200	1411235.2500
	0+69	24"–1/32 UPPER VERTICAL BEND (U.V.B.)	665503.5800	1411227.8000
	0+85	24"–1/8 HORIZONTAL BEND	665497.9100	1411212.8800
	1+13	CONNECTION TO EX. 24" WATER	665512.1400	1411181.2400
251+87	0+23	6"–1/8 HORIZONTAL BEND	666041.2900	1411079.9400
	0+33	6"–1/8 HORIZONTAL BEND	666048.6300	1411073.1900
	0+34	CONNECTION TO EX. 6" WATER	666048.4900	1411072.6800
253+43	0+07	10"–1/8 LOWER VERTICAL BEND (L.V.B.)	666199.5543	1411064.6879
	0+22	10"–1/8 HORIZONTAL BEND	666203.3759	1411078.6802
	0+29	CONNECTION TO EX. 10" WATER	666199.8775	1411084.8077
260+59	0+28	10"–1/8 HORIZONTAL BEND	666915.4260	1411013.6883
	0+34	10"–1/8 LOWER VERTICAL BEND (L.V.B.)	666911.0600	1411017.7976
	0+40	CONNECTION TO EX. 10" WATER	666906.3559	1411022.2251
260+92	0+13	6" VALVE & DOGHOUSE MH	666947.3600	1410968.8000
	0+19	6"–1/8 HORIZONTAL BEND	666947.5200	1410965.1100
	0+29	CONNECTION TO EX. 6" WATER	666957.2200	1410959.4000
261+17	0+15	30"x24" TAPPING SLEEVE VALVE & VAULT	666973.7711	1411001.0267
SHAWAN ROAD				
255+60	0+80	12"x6" F.H. TEE AND 6" VALVE & DOGHOUSE MH	666406.2037	1410922.7448
	4+68	12"x6" F.H. TEE AND 6" VALVE & ROADWAY BOX	666378.3600	1410536.6500
	5+83	12"x6" TEE AND 6" VALVE & DOGHOUSE MH	666370.6200	1410420.8200
	6+19	12"–1/8 HORIZONTAL BEND	666368.3300	1410383.9100
	6+22	12"–1/8 LOWER VERTICAL BEND (L.V.B.)	666366.1000	1410381.9000
	6+41	CONNECTION TO EX. 12" WATER	666352.9600	1410370.0800
6" W AT STA. 5+83 (SHAWAN ROAD)				
5+83	0+08	6"–1/8 HORIZONTAL BEND	666380.1800	1410420.2200
	0+11	6"–1/16 LOWER VERTICAL BEND (L.V.B.)	666382.4100	1410422.2300
	0+16	CONNECTION TO EX. 6" WATER	666385.7300	1410425.1100

CITY OF BALTIMORE		REVISION – CITY OF BALTIMORE		 Engineers Planners Scientists Construction Managers 930 Reisterstown Road Baltimore, MD 21215 Phone: 410.316.1800 Fax: 410.316.7817 www.kci.com	
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER		CHIEF, UTILITY ENGINEERING		DATE	
CHIEF, WATER ENGINEERING SECTION		CHIEF, WATER ENGINEERING SECTION		DATE	
SEAL	PROFESSIONAL CERTIFICATION		REVISION	BY	DATE
	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.				
	LICENSE NO. 200436 EXPIRATION DATE 9/30/2027				
	ENGINEER: JOHN A. BLONDELL KCI TECHNOLOGIES, INC.		DESIGN BY: JCA	BUREAU OF ENGINEERING AND CONSTRUCTION	BUILDINGS
	AS-BUILT PER RECORD PRINT		DRAWN BY: JCA	HIGHWAYS	STRUCTURES
	BY: DATE:		CHKD BY: JAB	STORM DRAINS	SEWER
		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024–2221		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024–2221	

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION – BUREAU OF ENGINEERING & CONSTRUCTION

WATER MAIN REPLACEMENT – PHASE 5

YORK ROAD – MD ROUTE 45

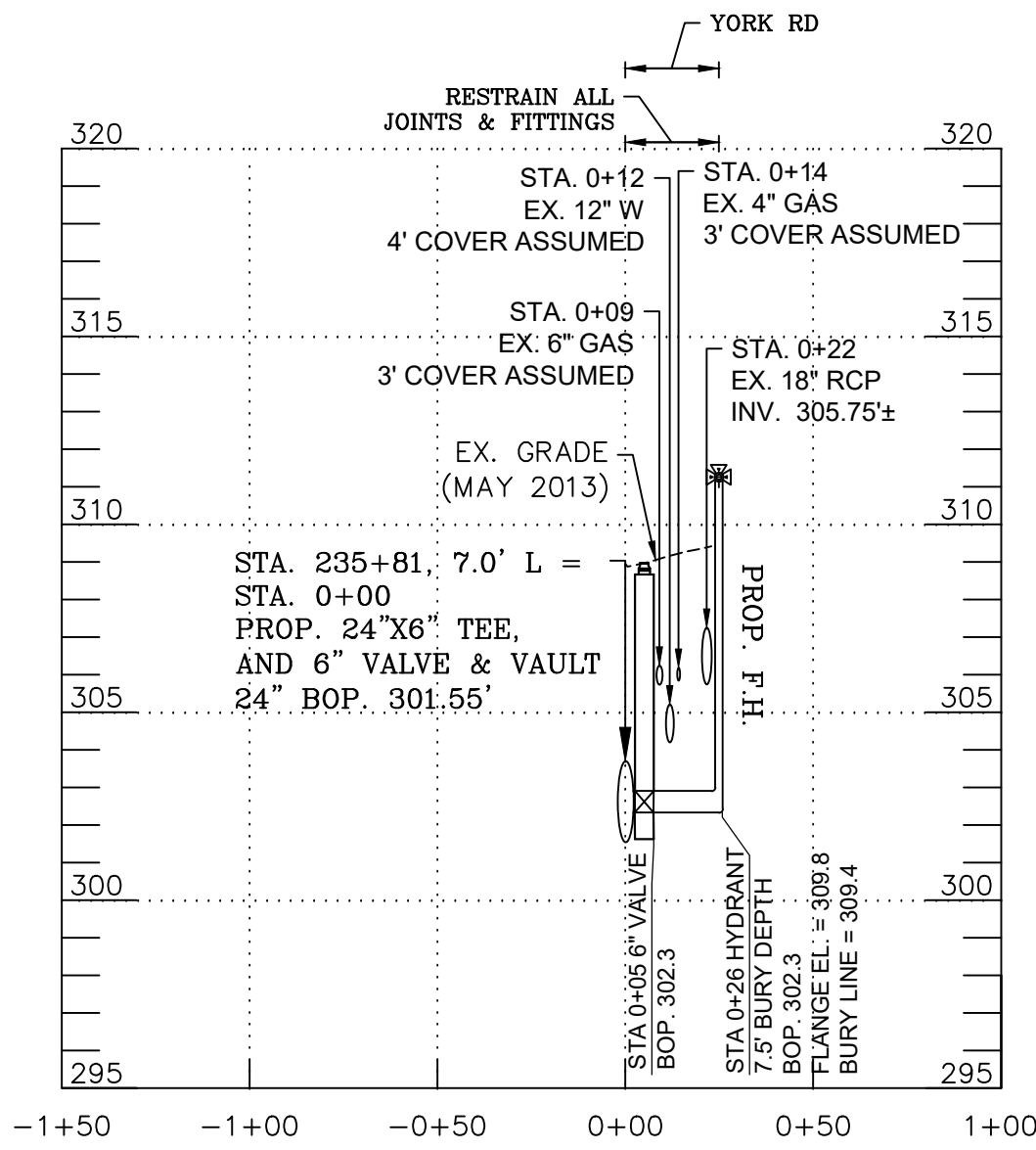
(FROM WIGHT AVENUE TO SHAWAN ROAD)

WATER SERVICE & STAKEOUT DATA TABLES

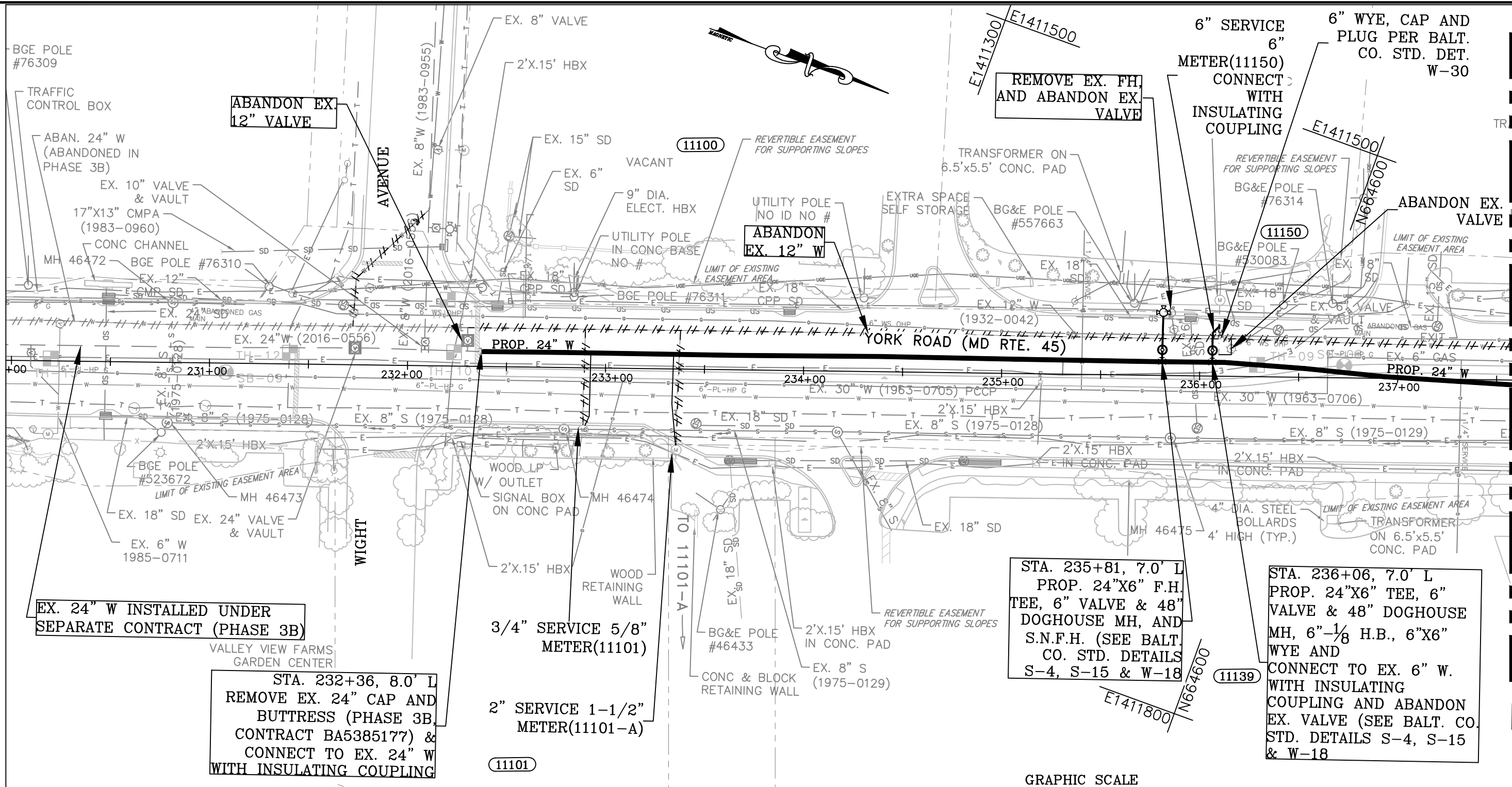
SUBDIVISION: COCKEYSVILLE

ELECTION DIST. NO.: 8C3

SHEET DESIGNATION	CONTRACT NUMBER
WATER	24125–WXO
	JOB ORDER NUMBER
	231–203–0050–0466
	SHEET 4 OF 21
	DRAWING NUMBER
	2024–2224
	FILE NO.:

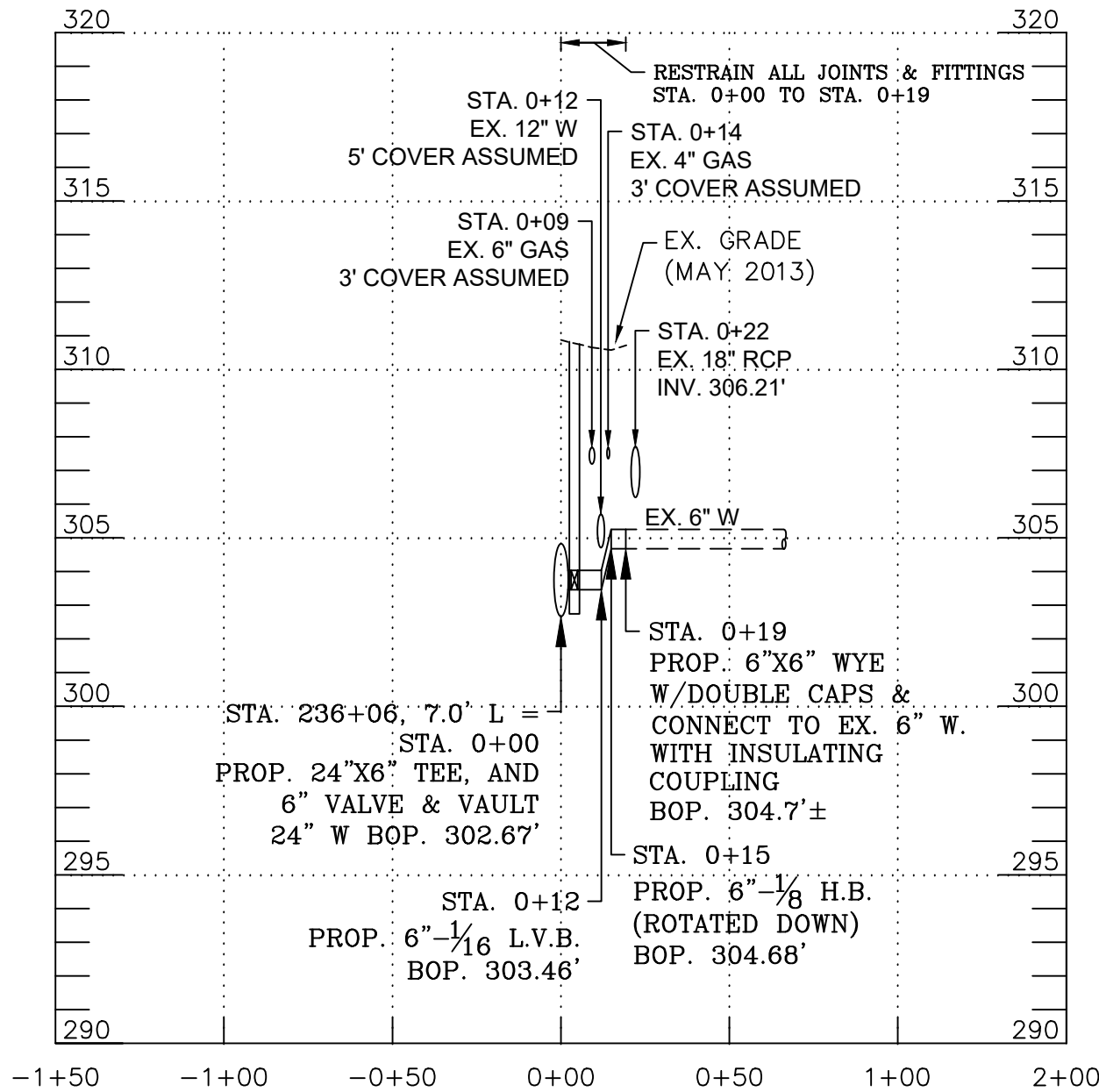


PROFILE-FIRE HYDRANT
PROP. 6" W AT STA. 235+81

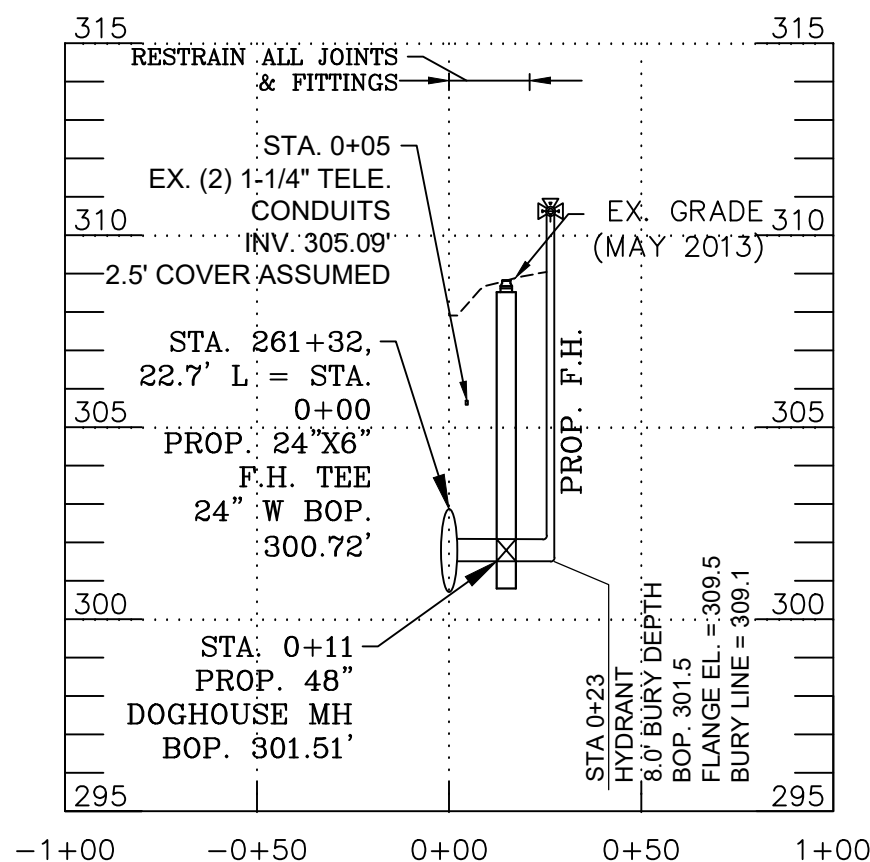


PLAN: 24-INCH WATER MAIN

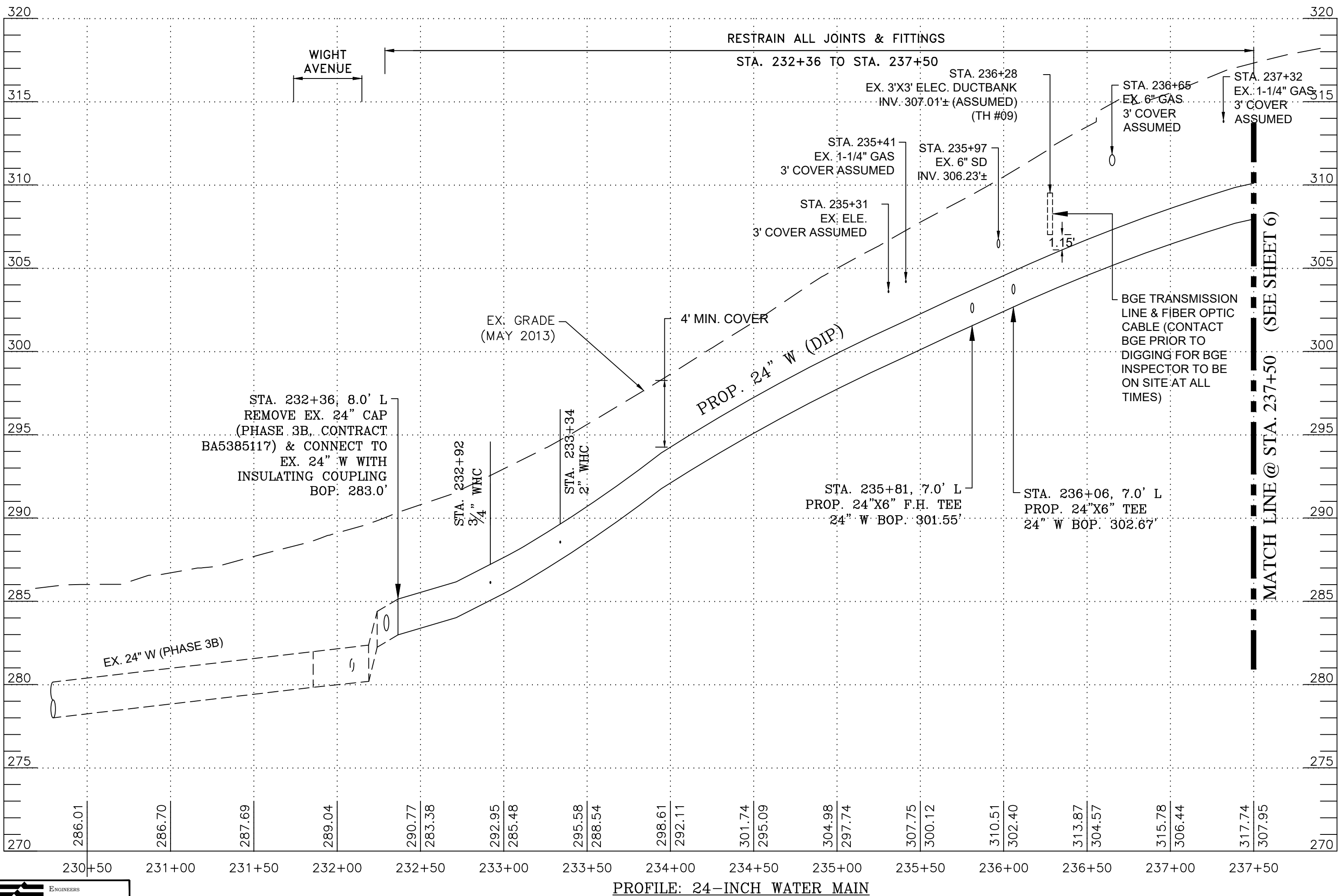
MATCH LINE @ STA. 237+50 (SEE SHEET 6)



PROFILE-CONNECTION
PROP. 6" W AT STA. 236+06



PROFILE-FIRE HYDRANT
PROP. 6" W AT STA. 261+32
SEE SHEET 8 FOR PLAN VIEW



PROFILE: 24-INCH WATER MAIN

MATCH LINE @ STA. 237+50 (SEE SHEET 6)

BILL OF MATERIALS (STA. 232+36 - STA. 237+50)		
NO.	DESCRIPTION	SIZE
514'	DUCTILE IRON PIPE	24"
45'	DUCTILE IRON PIPE	6"
1	TEE	24"x6"
1	FIRE HYDRANT TEE	24"x6"
2	VALVE & DOGHOUSE MH	6"
1	FIRE HYDRANT (S.N.F.H.)	6"
1	1/8 BEND (HORIZONTAL)	6"
1	1/8 BEND (VERTICAL)	6"
1	WYE WITH DOUBLE CAPS	6"x6"
48'	COPPER PIPE (WATER SERVICE)	2"
40'	COPPER PIPE (WATER SERVICE)	3/4"
1	CORPORATION (WATER SERVICE)	2"
1	CORPORATION (WATER SERVICE)	3/4"
1	INSULATING COUPLING	6"
1	INSULATING COUPLING	24"

- NOTES:
- ALL VALVES 12" AND SMALLER SHALL USE 48-INCH PRECAST CONCRETE DOGHOUSE MANHOLES PER BALTIMORE COUNTY STANDARD DETAILS S-4, S-15 & W-18 UNLESS OTHERWISE SHOWN ON THE PLAN.
 - ALL VALVES 16" AND LARGER TO BE CONSTRUCTED IN CAST-IN-PLACE OR PRE-CAST CONCRETE STRUCTURES PER BALTIMORE COUNTY STANDARD DETAILS W-16 & W-16A UNLESS OTHERWISE SHOWN ON THE PLAN.
 - ALL WYE BRANCH CONNECTIONS SHALL BE AS SHOWN ON THE "WYE BRANCH WITH PLUG, CAP, JACK & BUTTRESS DETAIL".

BGE FACILITIES - SEE NOTES ON SHEET 2
REGARDING EXISTING BGE UTILITY INFORMATION

ELEVATION LEFT OF STATION: EXISTING GRADE OVER PROPOSED WATER MAIN.
ELEVATION RIGHT OF STATION: BOTTOM OF PIPE (BOP) OF PROPOSED WATER MAIN.

CITY OF BALTIMORE		REVISION - CITY OF BALTIMORE	
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER	DATE	CHIEF, UTILITY ENGINEERING	DATE
SEAL:		REVISION	
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 200436 EXPIRATION DATE 9/30/2027		BY	DATE
ENGINEER: JOHN A. BLONDELL KCI TECHNOLOGIES, INC.		P.W.A. NO.	KEY SHEET POSITION SH
AS-BUILT PER RECORD PRINT		R.O.W NO.	VSE & VNE
BY: DATE:		STATE	70NN7 71NW7
CHKD BY: JAB		DRAWING SCALE	PLAN SCALE: 1"=50'
FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221		PROFILE SCALE: 1"=5'	FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221
BUREAU OF ENGINEERING AND CONSTRUCTION		WATER	FIELD ENGINEER
BUILDINGS		SEWER	BUR. OF ENGINEERING & CONSTRUCTION
HIGHWAYS		STRUCTURES	FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221
STORM DRAINS		SEWER	



BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION

WATER MAIN REPLACEMENT - PHASE 5

YORK ROAD - MD ROUTE 45

(FROM WIGHT AVENUE TO SHAWAN ROAD)

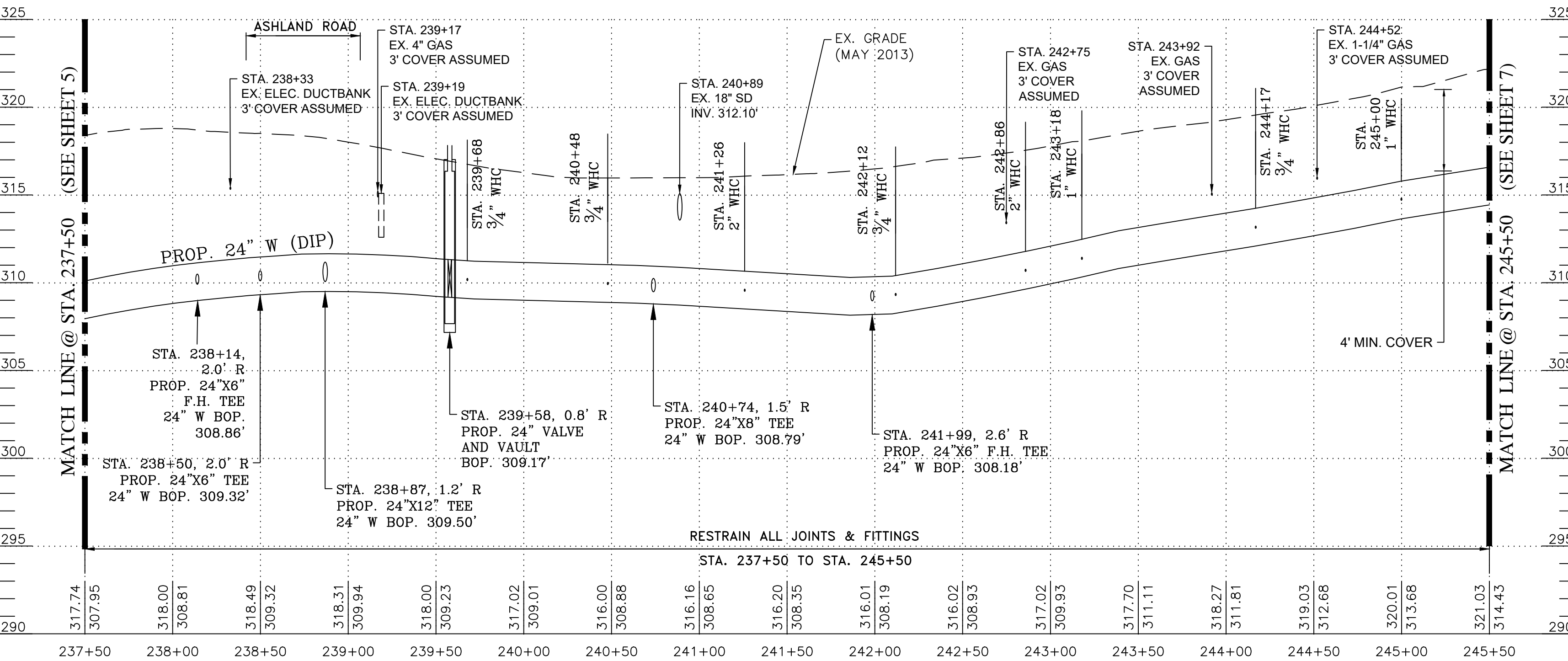
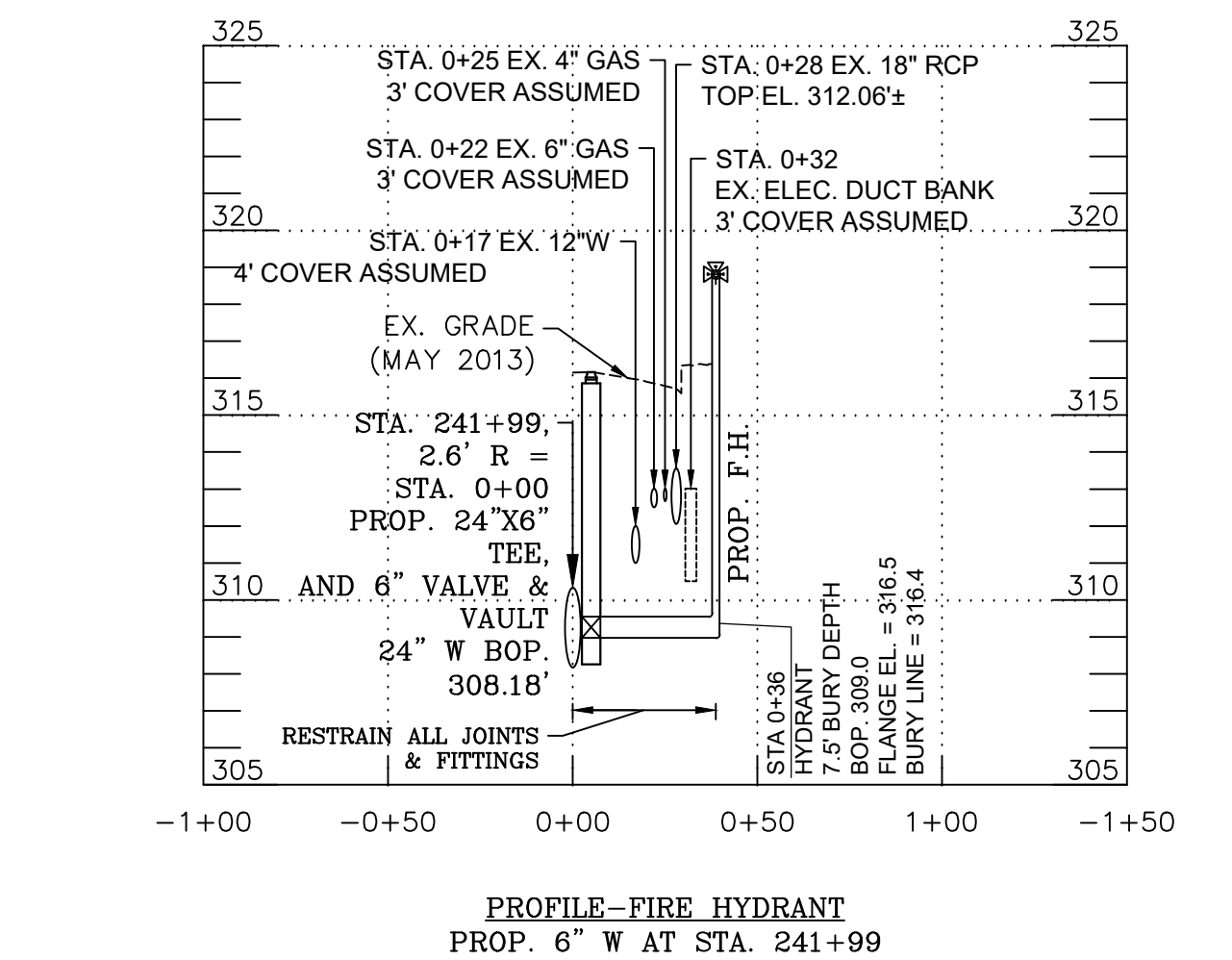
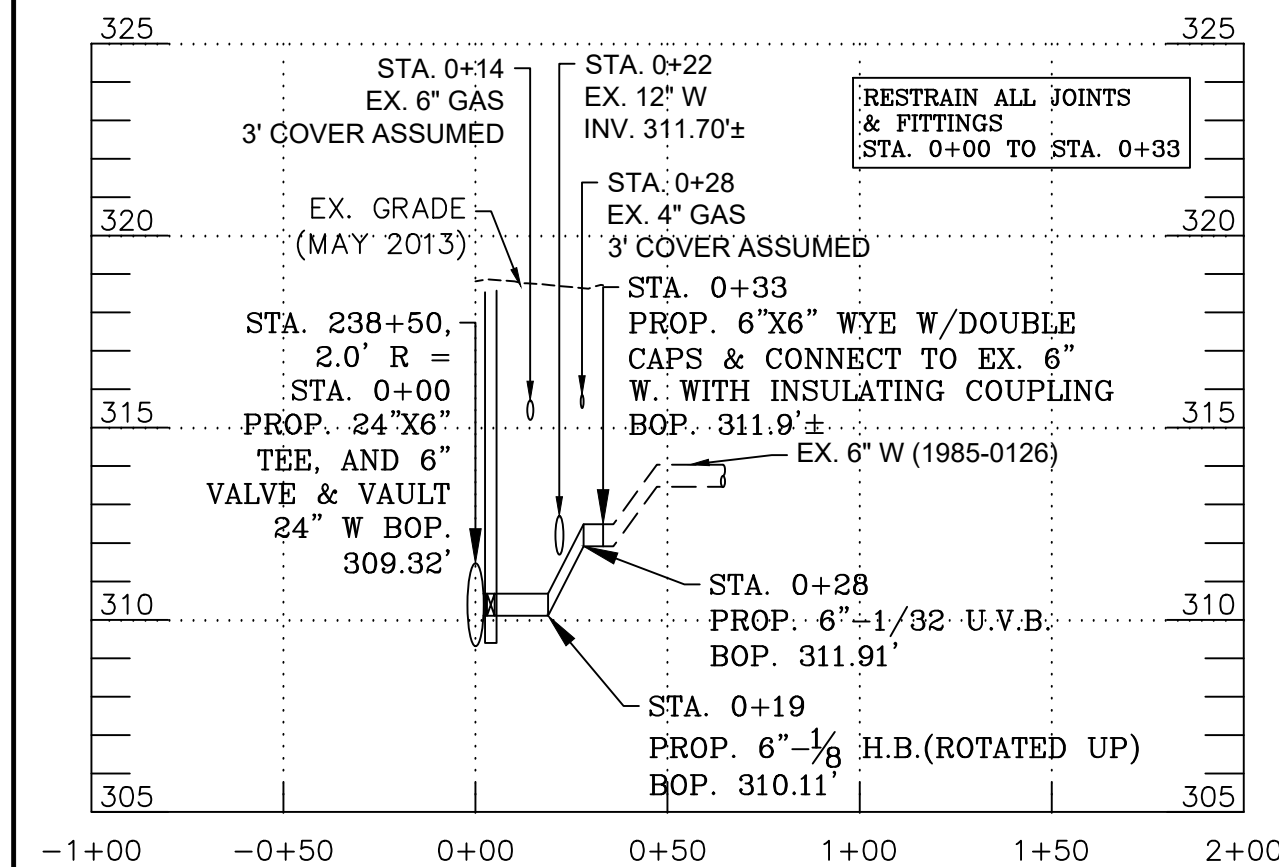
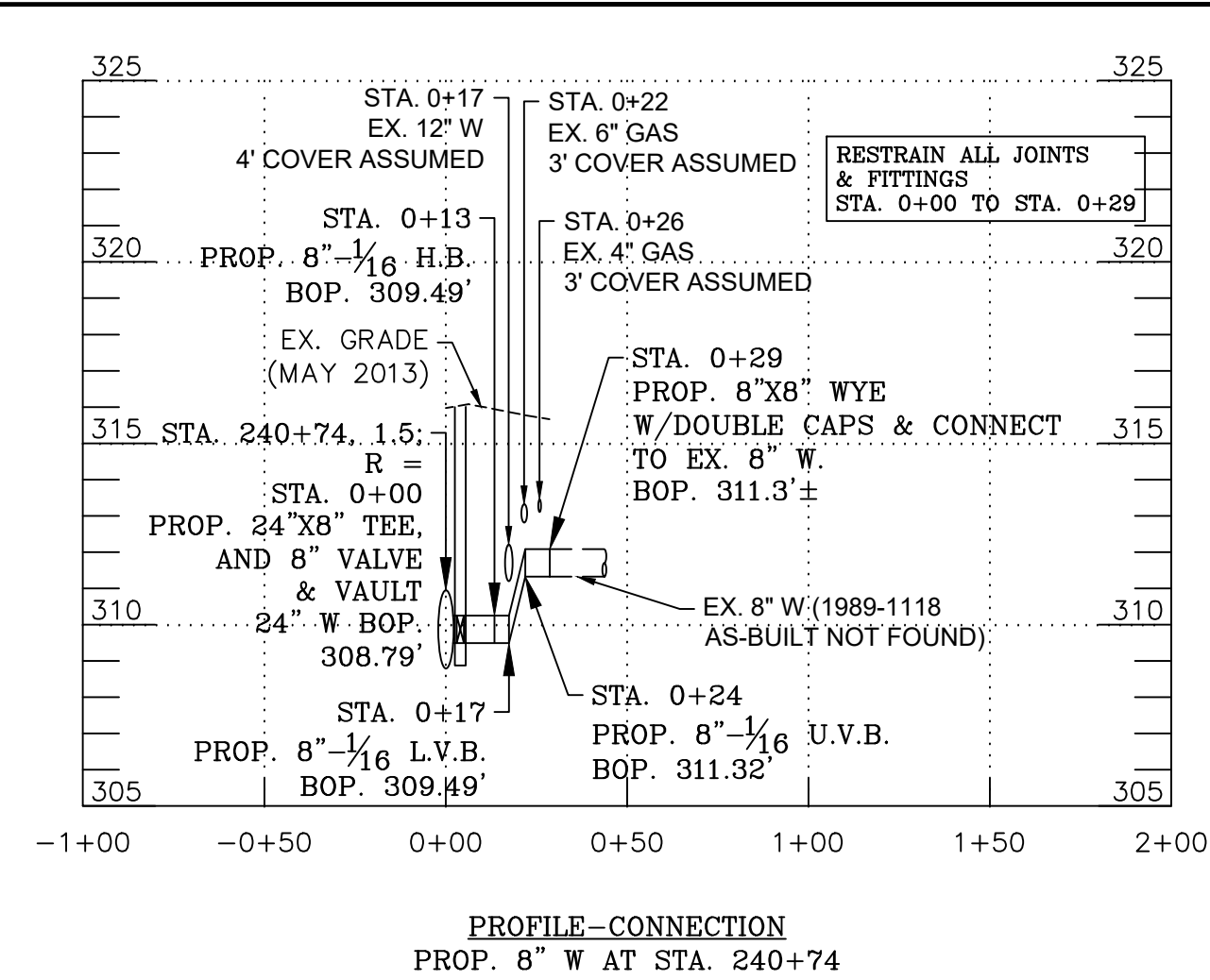
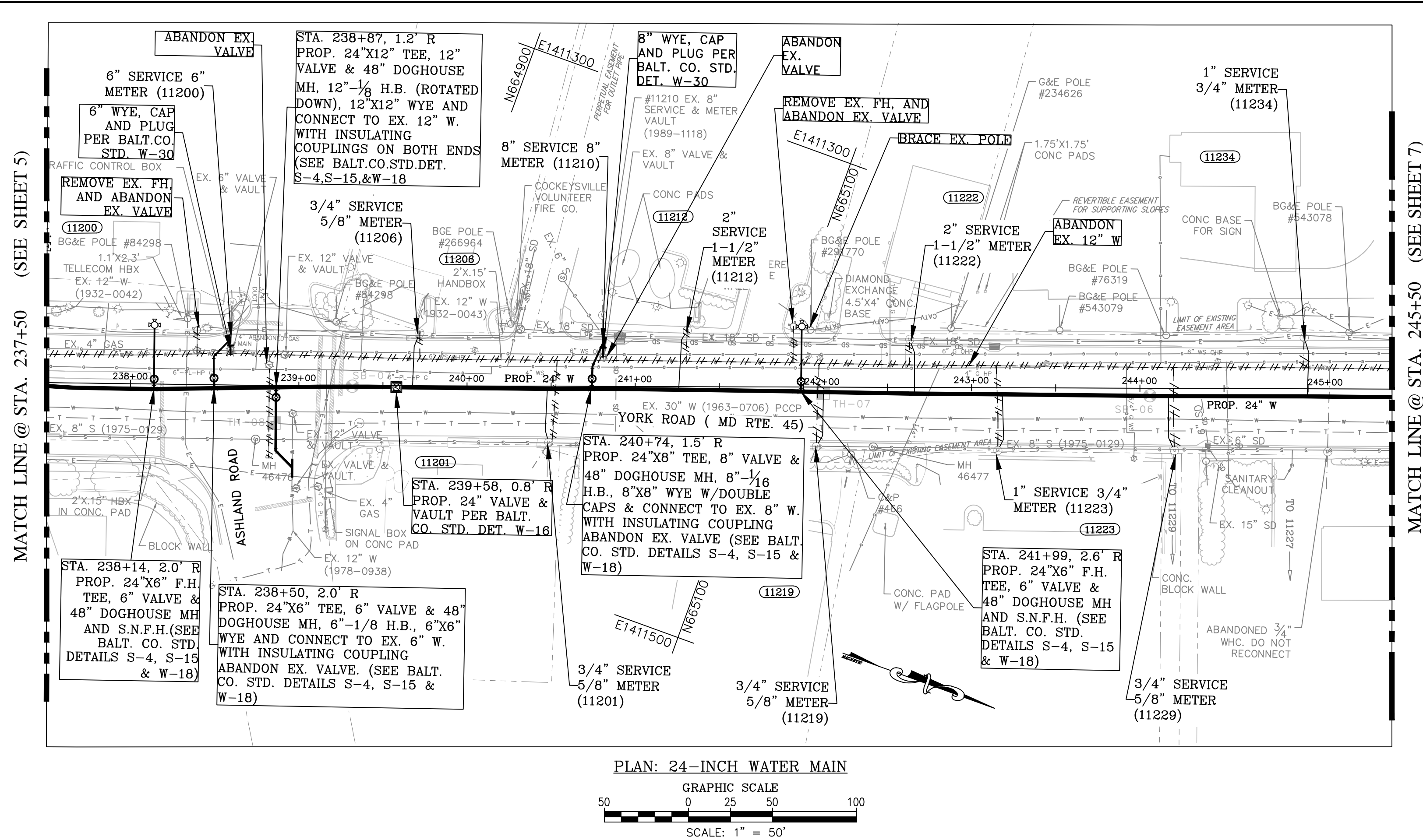
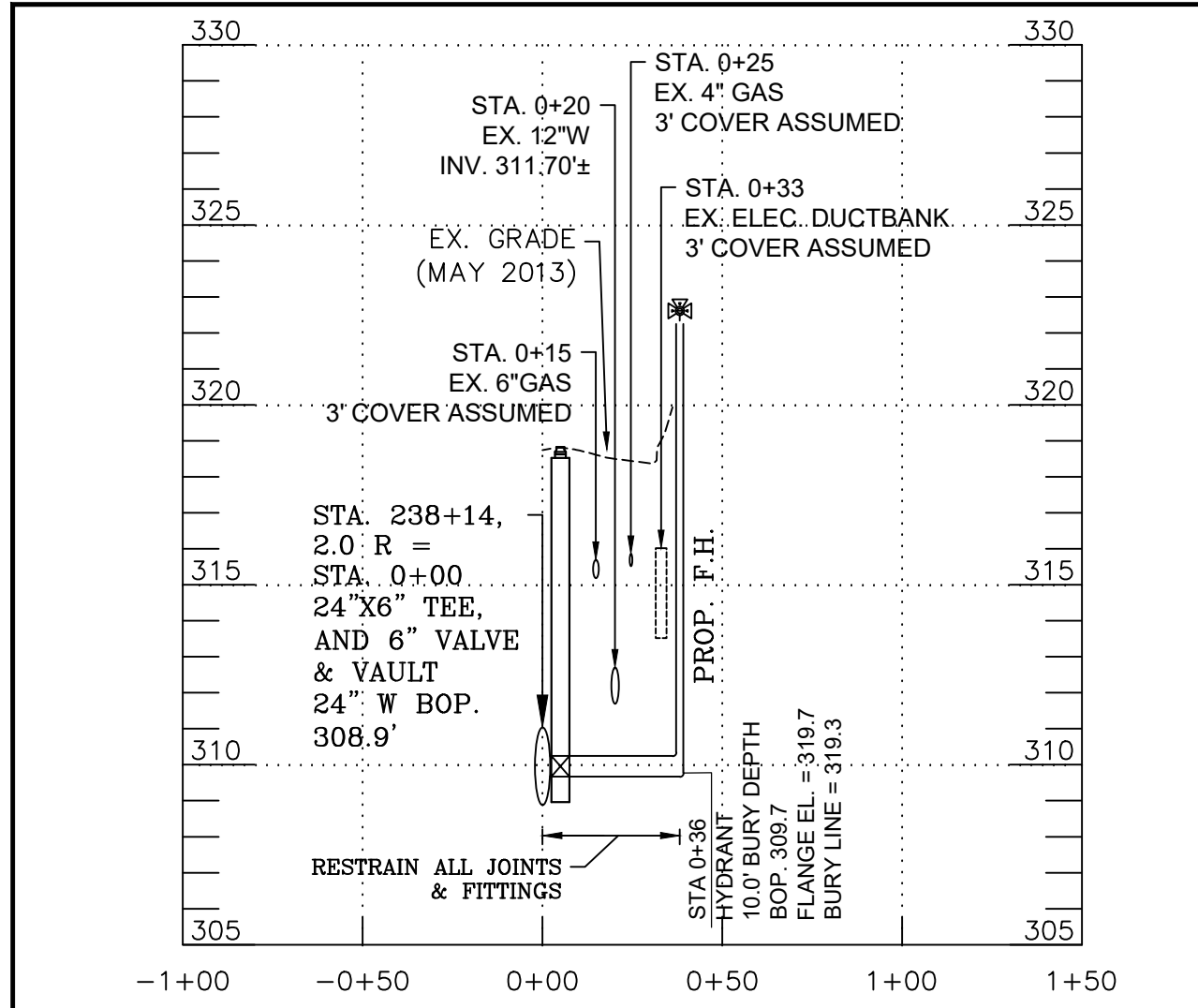
PLAN AND PROFILE SHEET-1

SUBDIVISION: COCKEYSVILLE

ELECTION DIST. NO.: 8C3

SHEET DESIGNATION	CONTRACT NUMBER
WATER	24125-WX0
	JOB ORDER NUMBER
	231-203-0050-0466
	SHEET 5 OF 21
	DRAWING NUMBER
	2024-2225
	FILE NO.:

DWG. FILENAME: 132201868.05 Sub-B.dwg 132201868.05 Proposed.dwg 132201868.05 roads.dwg 132201868.05 Ex. Utilities.dwg 132201868.05 Inv.dwg 132201868.05 Right-way.dwg 132201868.05 Border.dwg 132201868.05 Drawings 132201868.05 C01_100K.dwg



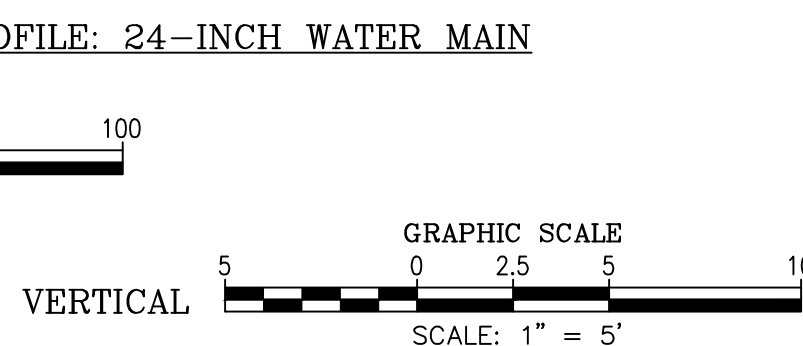
BILL OF MATERIALS (STA. 237+50 - STA. 245+50)		
NO.	DESCRIPTION	SIZE
800'	DUCTILE IRON PIPE	24"
52'	DUCTILE IRON PIPE	12"
29'	DUCTILE IRON PIPE (WATER SERVICE)	8"
110'	DUCTILE IRON PIPE	6"
1	TEE	24"x12"
1	TEE	24"x8"
1	TEE	24"x6"
2	FIRE HYDRANT TEE	24"x6"
1	VALVE & VAULT	24"
1	VALVE & DOGHOUSE MH	12"
1	VALVE & DOGHOUSE MH	8"
3	VALVE & DOGHOUSE MH	6"
2	FIRE HYDRANT (S.N.F.H.)	6"
1	1/8 BEND (HORIZONTAL)	12"
2	1/8 BEND (VERTICAL)	12"
1	1/8 BEND (VERTICAL)	12"
1	1/8 BEND (HORIZONTAL)	8"
2	1/8 BEND (VERTICAL)	8"
1	1/8 BEND (HORIZONTAL)	6"
1	1/32 BEND (VERTICAL)	6"

BILL OF MATERIALS CONT.		
NO.	DESCRIPTION	SIZE
1	WYE	12"x12"
1	WYE WITH DOUBLE CAPS	8"x8"
1	WYE WITH DOUBLE CAPS	6"x6"
69'	COPPER PIPE (WATER SERVICE)	2"
69'	COPPER PIPE (WATER SERVICE)	1"
132'	COPPER PIPE (WATER SERVICE)	3/4"
2	CORPORATION (WATER SERVICE)	2"
2	CORPORATION (WATER SERVICE)	1"
4	CORPORATION (WATER SERVICE)	3/4"
1	INSULATING COUPLING	6"
1	INSULATING COUPLING	8"
2	INSULATING COUPLING	12"

ELEVATION LEFT OF STATION: EXISTING GRADE OVER PROPOSED WATER MAIN.
ELEVATION RIGHT OF STATION: BOTTOM OF PIPE (BOP) OF PROPOSED WATER MAIN.

CITY OF BALTIMORE		REVISION - CITY OF BALTIMORE	
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER	DATE	CHIEF, UTILITY ENGINEERING	DATE
CHIEF, WATER ENGINEERING SECTION	DATE		
PROFESSIONAL CERTIFICATION		REVISION	
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.			
LICENSE NO. 200436 EXPIRATION DATE 9/30/2027			
ENGINEER: JOHN A. BLONDELL KCI TECHNOLOGIES, INC.		DESIGN BY: JCA	
AS-BUILT PER RECORD PRINT		DRAWN BY: JCA	
BY: DATE:		CHKD BY: JAB	

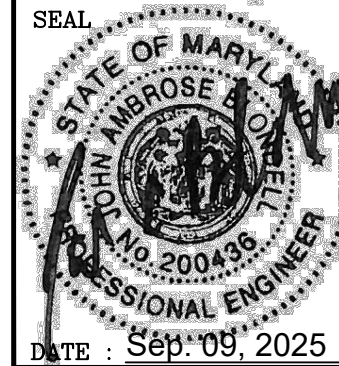
BGE FACILITIES - SEE NOTES ON SHEET 2 REGARDING EXISTING BGE UTILITY INFORMATION		BY DATE P.W.A. NO. KEY SHEET POSITION SH	
		VNE 71HW7 72NW7	
R.O.W. NO.		STATE	
FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221		DRAWING SCALE	
		PLAN SCALE: 1"=50'	
		PROFILE SCALE: 1"=50'	
		DPW AND TRANSPORTATION	
		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	
		BUR. OF ENGINEERING & CONSTRUCTION	
		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	



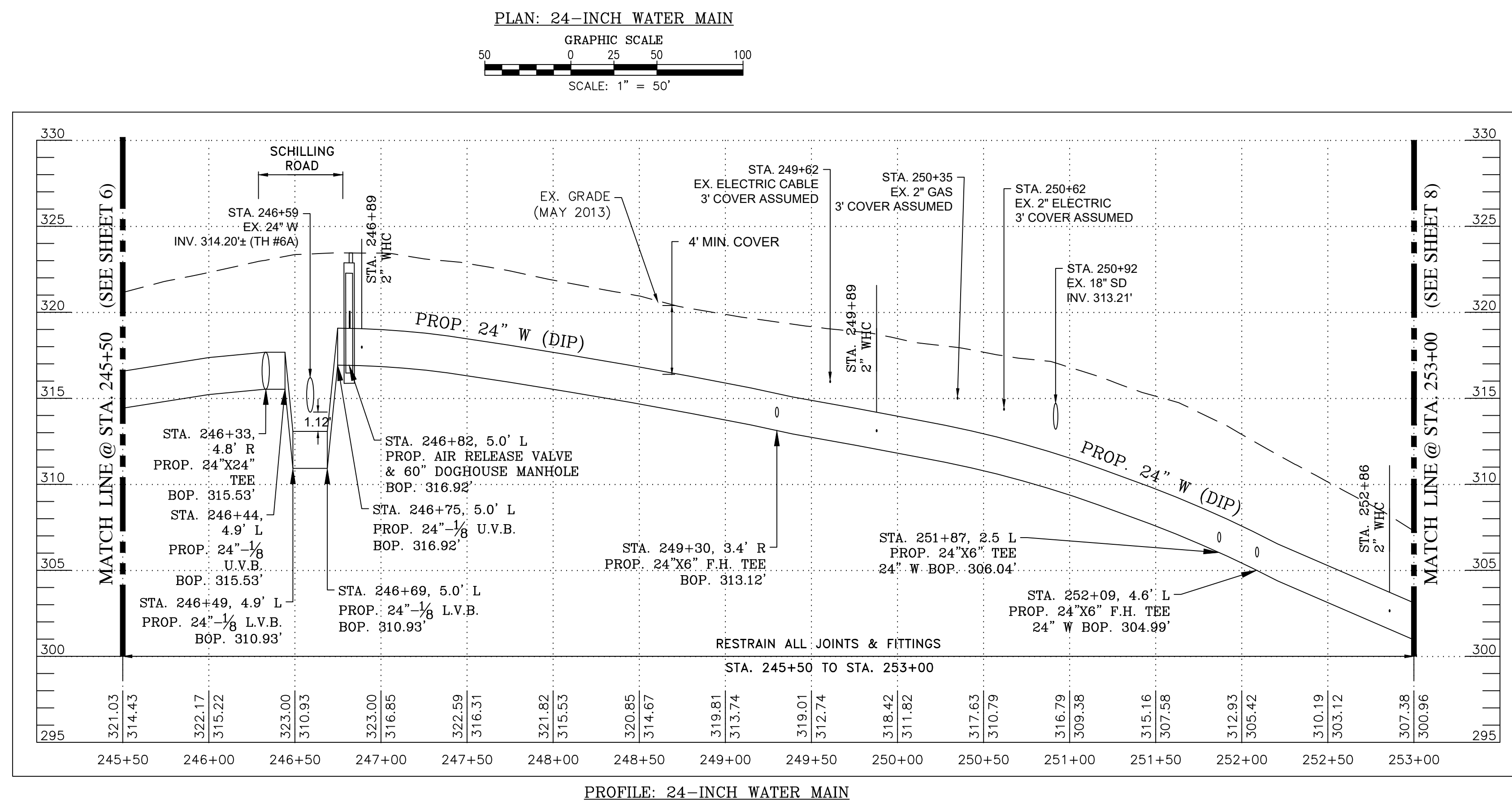
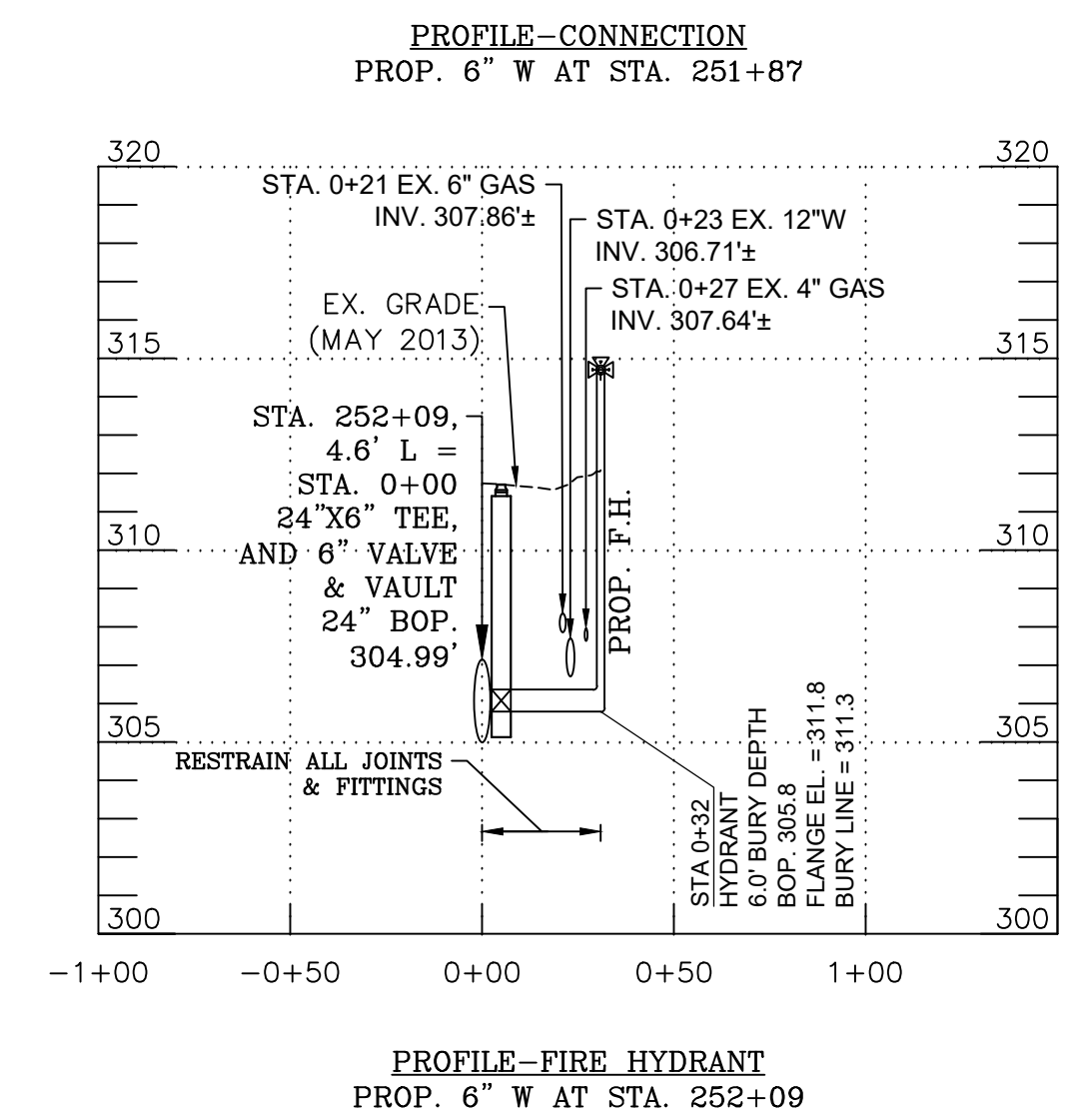
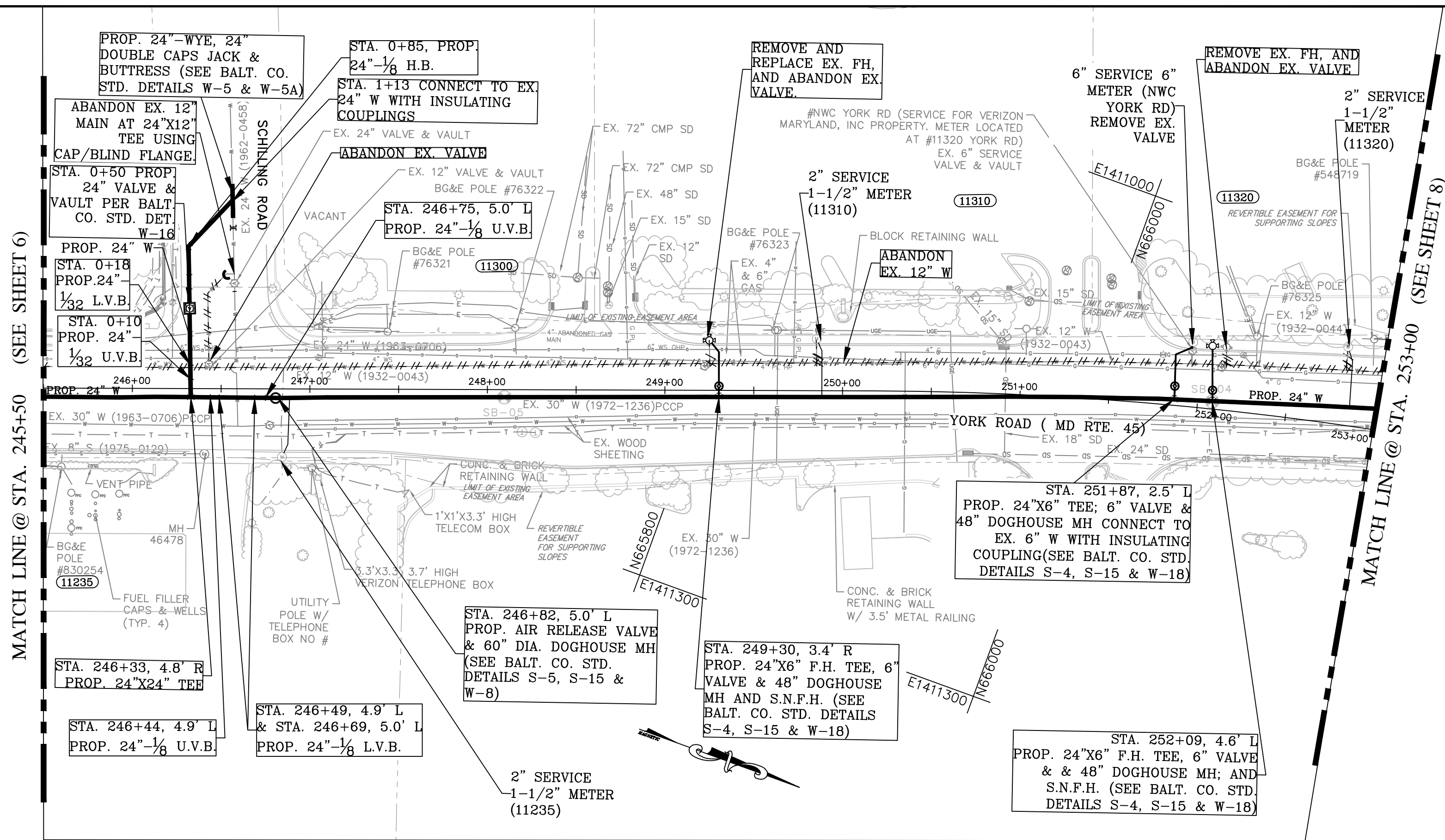
- NOTES:
- ALL VALVES 12" AND SMALLER SHALL USE 48-INCH PRECAST CONCRETE DOGHOUSE MANHOLES PER BALTIMORE COUNTY STANDARD DETAILS S-4, S-15 & W-18 UNLESS OTHERWISE SHOWN ON THE PLAN.
 - ALL VALVES 16" AND LARGER TO BE CONSTRUCTED IN CAST-IN-PLACE OR PRE-CAST CONCRETE STRUCTURES PER BALTIMORE COUNTY STANDARD DETAILS W-16 & W-16A UNLESS OTHERWISE SHOWN ON THE PLAN.
 - ALL WYE BRANCH CONNECTIONS SHALL BE AS SHOWN ON THE "WYE BRANCH WITH PLUG, CAP, JACK & BUTTRESS DETAIL".

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION	
WATER MAIN REPLACEMENT - PHASE 5	
YORK ROAD - MD ROUTE 45	
(FROM WIGHT AVENUE TO SHAWAN ROAD)	
PLAN AND PROFILE SHEET-2	
SUBDIVISION: COCKEYSVILLE	
ELECTION DIST. NO.: 8C3	

SHEET DESIGNATION	CONTRACT NUMBER
WATER	24125-WX0
JOB ORDER NUMBER	231-203-0050-0466
SHEET 6 OF 21	DRAWING NUMBER
2024-2226	
FILE NO.:	

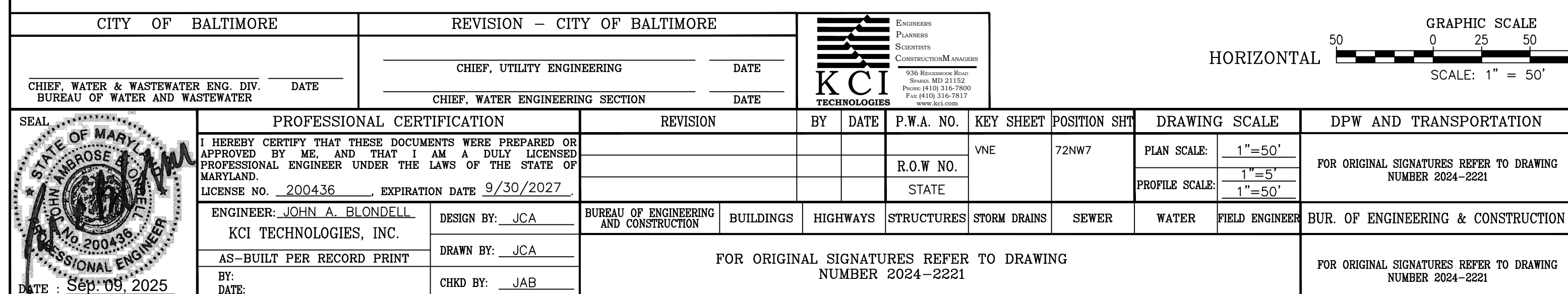


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BILL OF MATERIALS		
(STA. 245+50 - STA. 253+00)		
NO.	DESCRIPTION	SIZE
864'	DUCTILE IRON PIPE	24"
98'	DUCTILE IRON PIPE	6"
1	TEE	24"x24"
1	TEE	24"x6"
2	FIRE HYDRANT TEE	24"x6"
3	VALVE & DOGHOUSE MH	6"
2	FIRE HYDRANT (S.N.F.H.)	6"
1	1/8 BEND (HORIZONTAL)	6"
1	1/8 BEND (HORIZONTAL)	24"
4	1/8 BEND (VERTICAL)	24"
4	1/32 BEND (VERTICAL)	24"
2	INSULATING COUPLING	24"
1	CAP/BLIND FLANGE	12"
102'	COPPER PIPE (WATER SERVICE)	2"
3	CORPORATION (WATER SERVICE)	2"
	WYE	24"x24"
1	INSULATING COUPLING	6"
1	CAP/BLIND FLANGE	12"
1	AIR RELEASE VALVE	2"

- NOTES:
1. ALL VALVES 12" AND SMALLER SHALL USE 48-INCH PRECAST CONCRETE DOGHOUSE MANHOLES PER BALTIMORE COUNTY STANDARD DETAILS S-4, S-15 & W-18 UNLESS OTHERWISE SHOWN ON THE PLAN.
 2. ALL VALVES 16" AND LARGER TO BE CONSTRUCTED IN CAST-IN-PLACE OR PRE-CAST CONCRETE STRUCTURES PER BALTIMORE COUNTY STANDARD DETAILS W-16 & W-16A UNLESS OTHERWISE SHOWN ON THE PLAN.
 3. ALL WYE BRANCH CONNECTIONS SHALL BE AS SHOWN ON THE "WYE BRANCH WITH PLUG, CAP, JACK & BUTTRESS DETAIL".



GRAPHIC SCALE

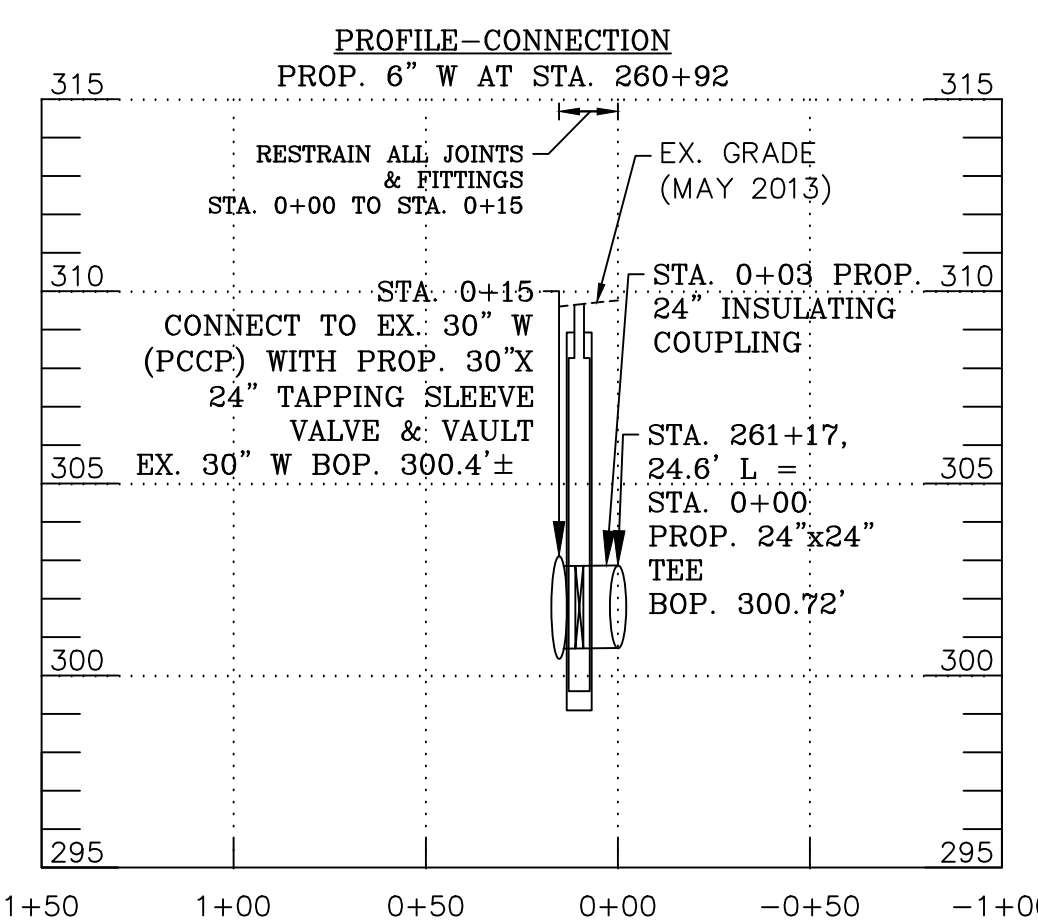
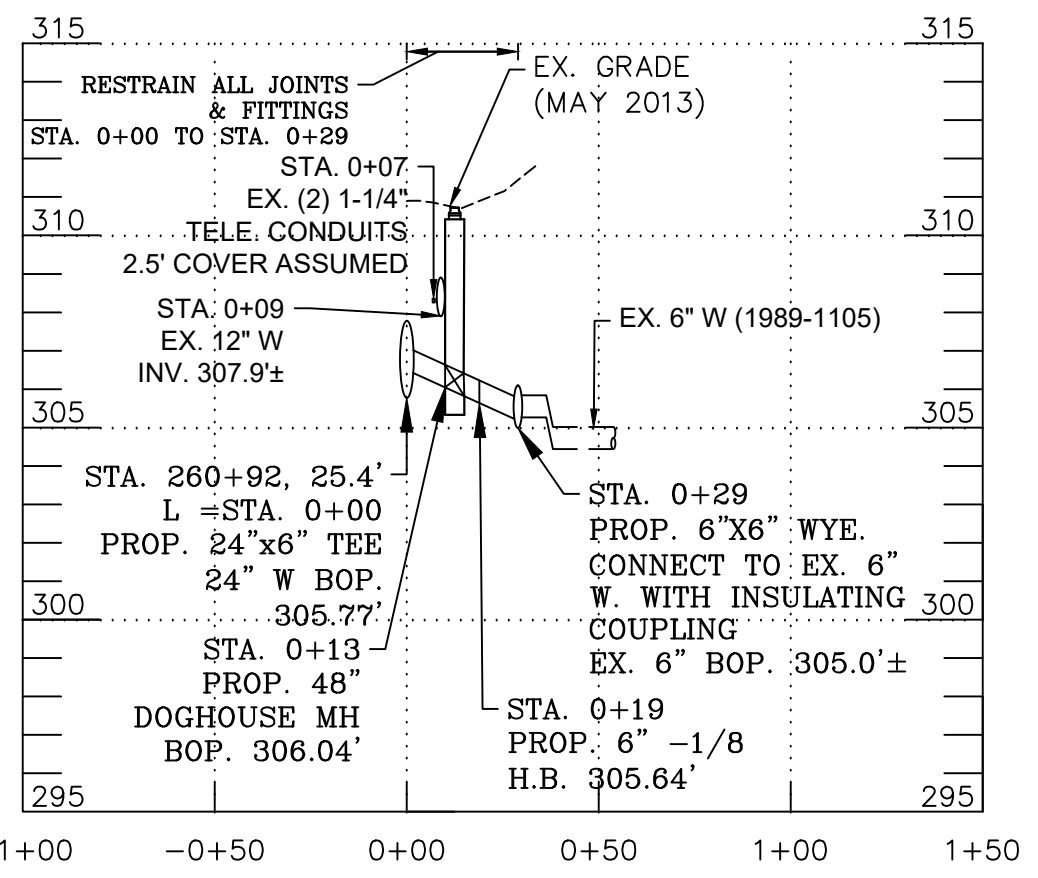
VERTICAL

SCALE: 1" = 5'

ELEVATION LEFT OF STATION: EXISTING GRADE OVER PROPOSED WATER MAIN.
ELEVATION RIGHT OF STATION: BOTTOM OF PIPE (BOP) OF PROPOSED WATER MAIN.

BGE FACILITIES – SEE NOTES ON SHEET 2
REGARDING EXISTING BGE UTILITY INFORMATION

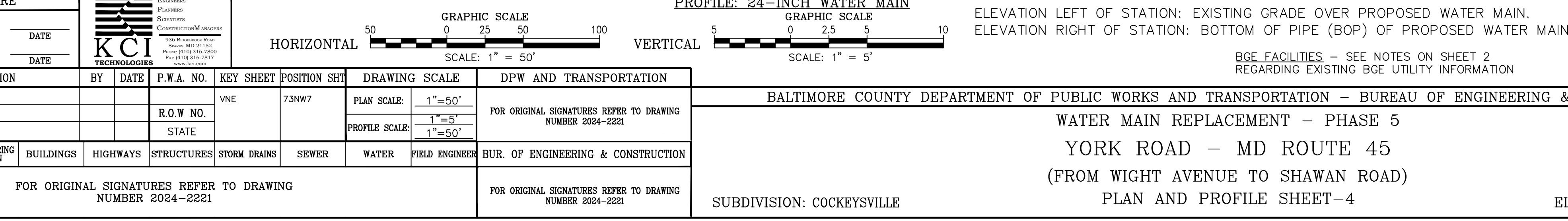
SHEET DESIGNATION	CONTRACT NUMBER
WATER	24125-WXO
	JOB ORDER NUMBER
	231-203-0050-0466
	SHEET 7 OF 21
	DRAWING NUMBER
	2024-2227
	FILE NO. 



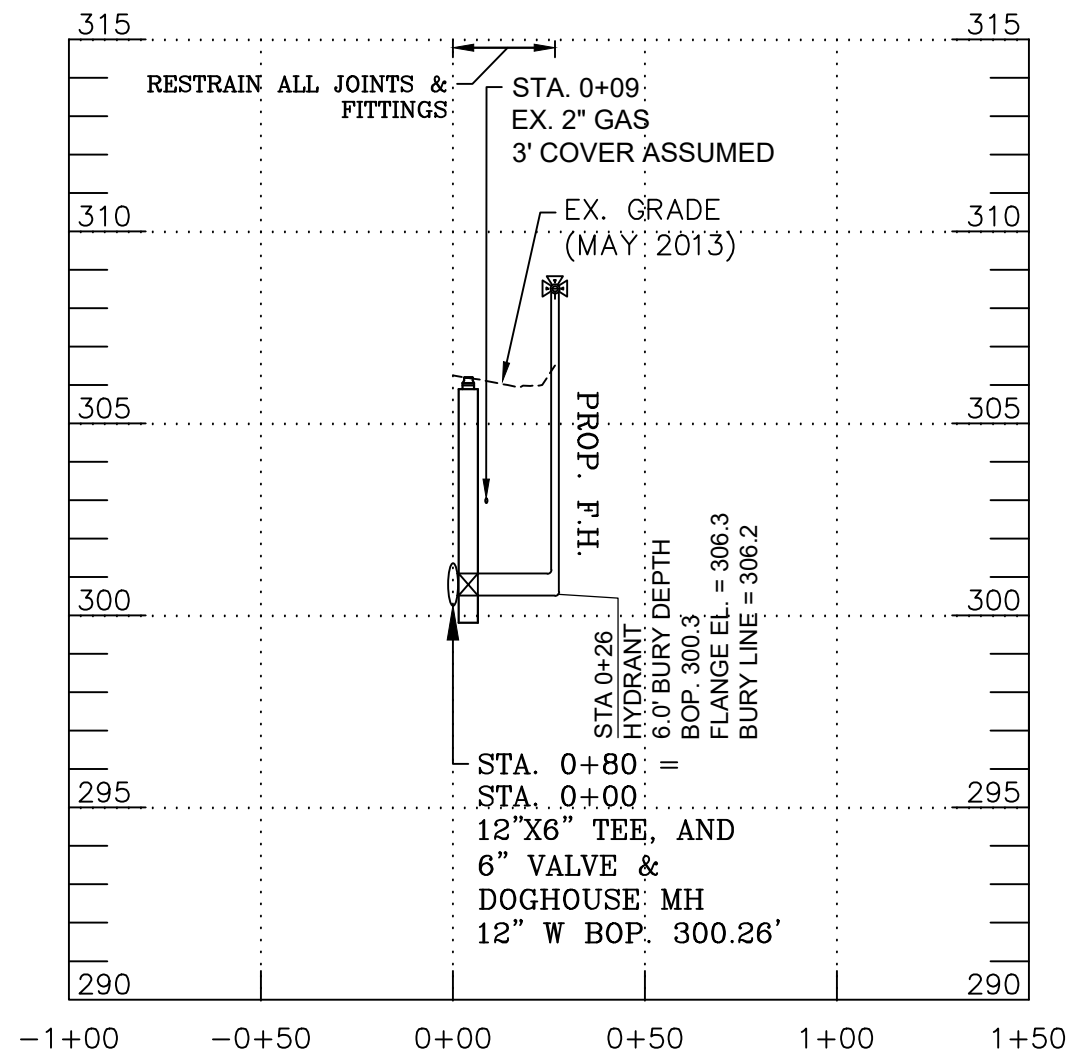
PROFILE-CONNECTION		
PROP. 24" W AT STA. 261+17		
BILL OF MATERIALS		
(STA. 253+00 – STA. 261+37)		
NO.	DESCRIPTION	SIZE
860'	DUCTILE IRON PIPE	24"
69'	DUCTILE IRON PIPE	10"
73'	DUCTILE IRON PIPE	6"
1	TEE	24"x24"
1	TEE	24"x12"
2	TEE	24"x10"
1	TEE	24"x6"
2	FIRE HYDRANT TEE	24"x6"
2	VALVE & VAULT	24"
1	VALVE & DOGHOUSE MH	10"
3	VALVE & DOGHOUSE MH	6"
1	TAPPING SLEEVE VALVE & VAULT (PCCP)	30"x24"
2	FIRE HYDRANT (S.N.F.H.)	6"
2	$\frac{1}{8}$ BEND (HORIZONTAL)	10"
6	$\frac{1}{8}$ BEND (VERTICAL)	24"
4	$\frac{1}{8}$ BEND (VERTICAL)	10"
1	DEWATERING VALVE & VAULT	4"
1	CAP	24"
1	WYE WITH DOUBLE CAPS	10"x10"
32'	COPPER PIPE (WATER SERVICE)	2"
96'	COPPER PIPE (WATER SERVICE)	$\frac{3}{4}$ "
1	CORPORATION (WATER SERVICE)	2"
4	CORPORATION (WATER SERVICE)	$\frac{3}{4}$ "
1	INSULATING COUPLING	6"
2	INSULATING COUPLING	10"
1	INSULATING COUPLING	24"
1	$\frac{1}{8}$ BEND (HORIZONTAL)	6"
1	VALVE & ROADWAY BOX	10"

NOTES:

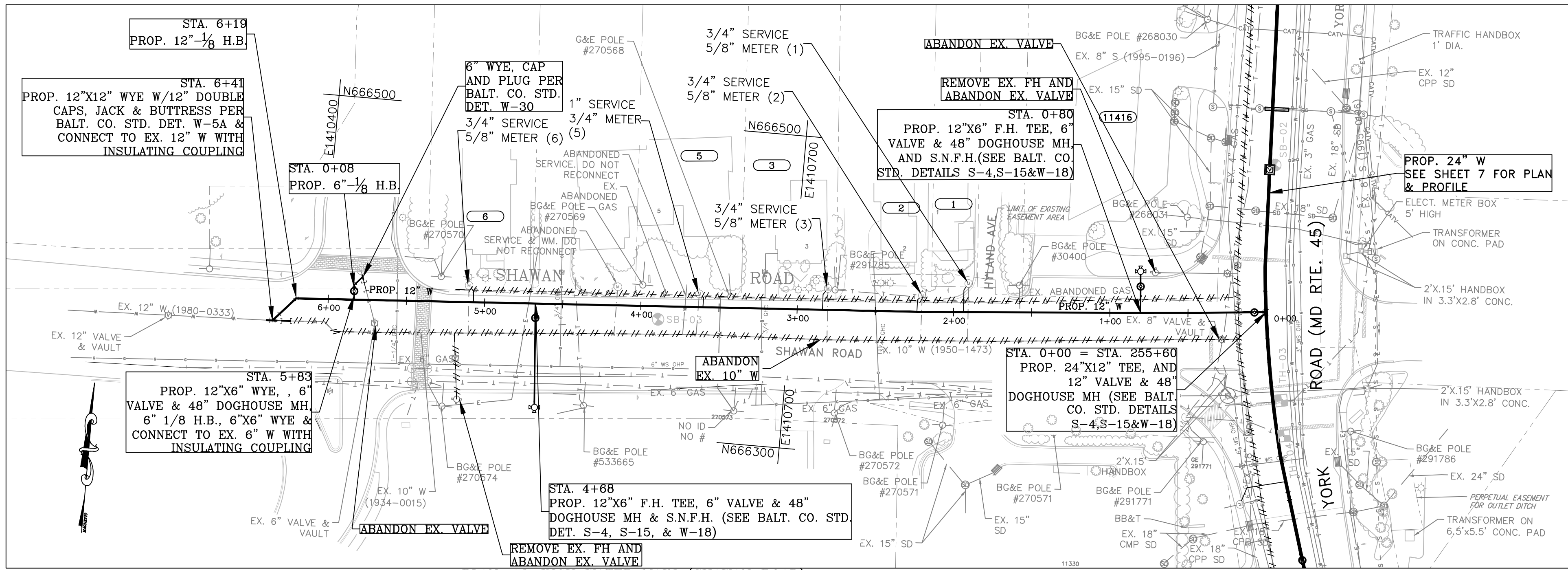
1. ALL VALVES 12" AND SMALLER SHALL USE 48-INCH PRECAST CONCRETE DOGHOUSE MANHOLES PER BALTIMORE COUNTY STANDARD DETAILS S-4, S-15 & W-18 UNLESS OTHERWISE SHOWN ON THE PLAN.
2. ALL VALVES 16" AND LARGER TO BE CONSTRUCTED IN CAST-IN-PLACE OR PRE-CAST CONCRETE STRUCTURES PER BALTIMORE COUNTY STANDARD DETAILS W-16 & W-16A UNLESS OTHERWISE SHOWN ON THE PLAN.
3. ALL WYE BRANCH CONNECTIONS SHALL BE AS SHOWN ON THE "WYE BRANCH WITH PLUG, CAP, JACK & BUTTRESS DETAIL".



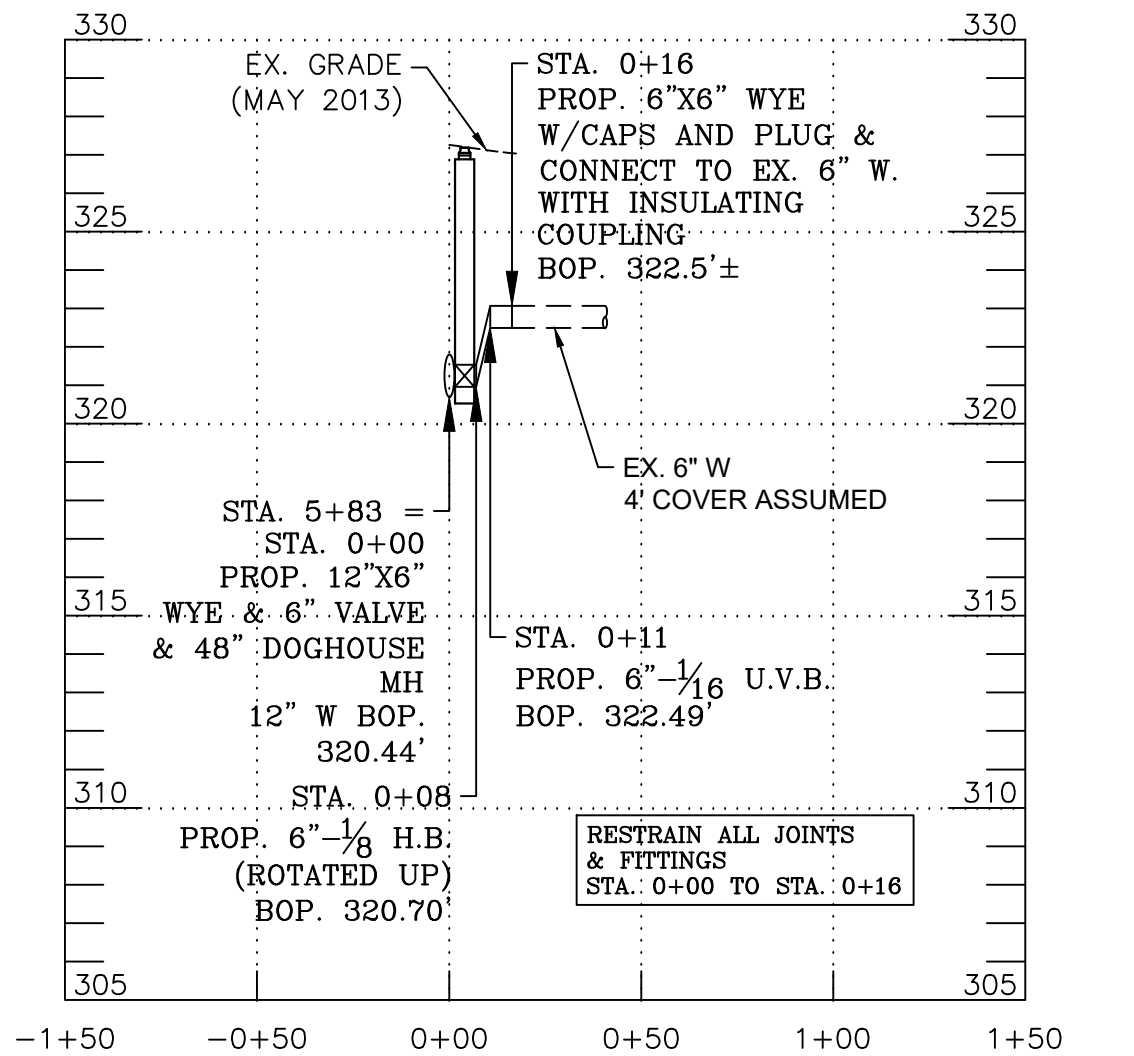
SHEET DESIGNATION	CONTRACT NUMBER
WATER	24125-WX0
	JOB ORDER NUMBER
	231-203-0050-04
	SHEET 8 OF 2
	DRAWING NUMBER
	2024-2228
	FILE NO.:



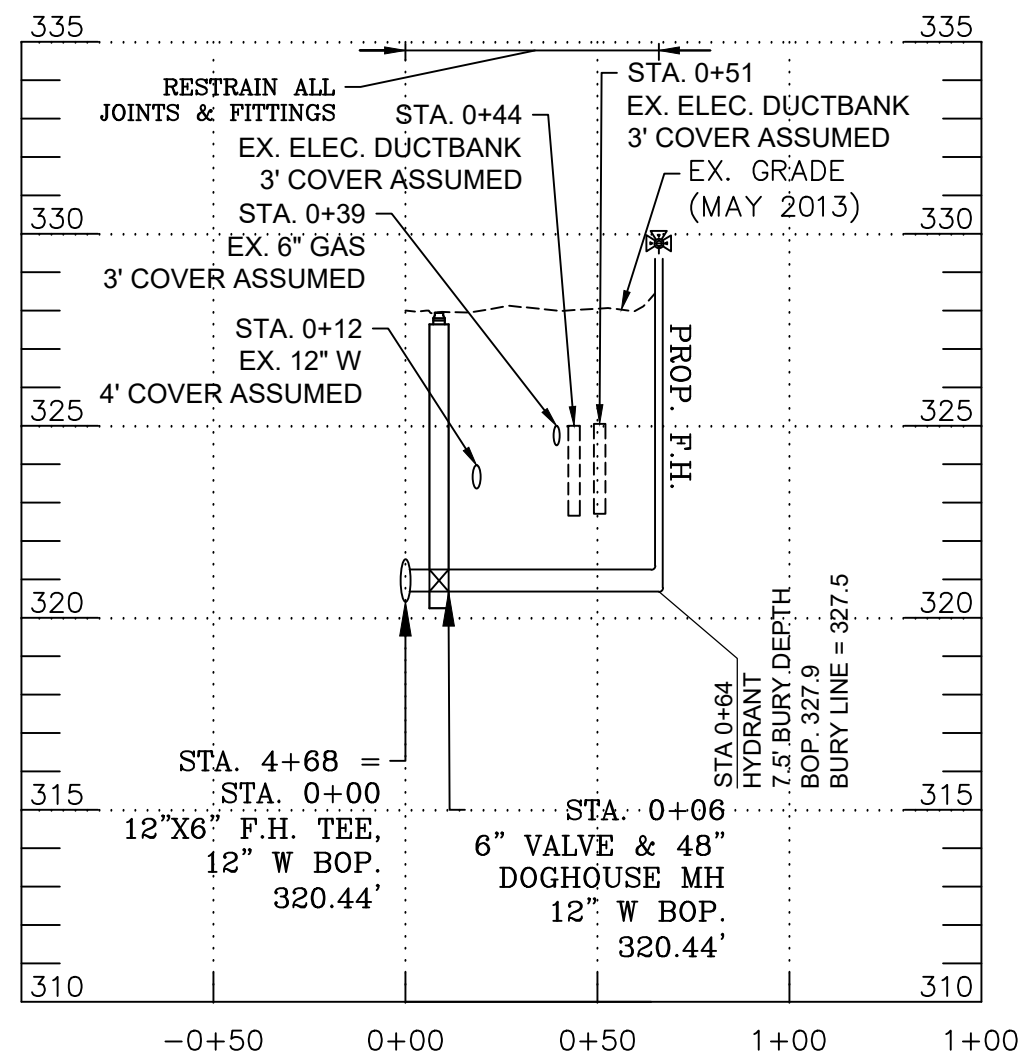
PROFILE-FIRE HYDRANT
PROP. 6" W AT STA. 0+80



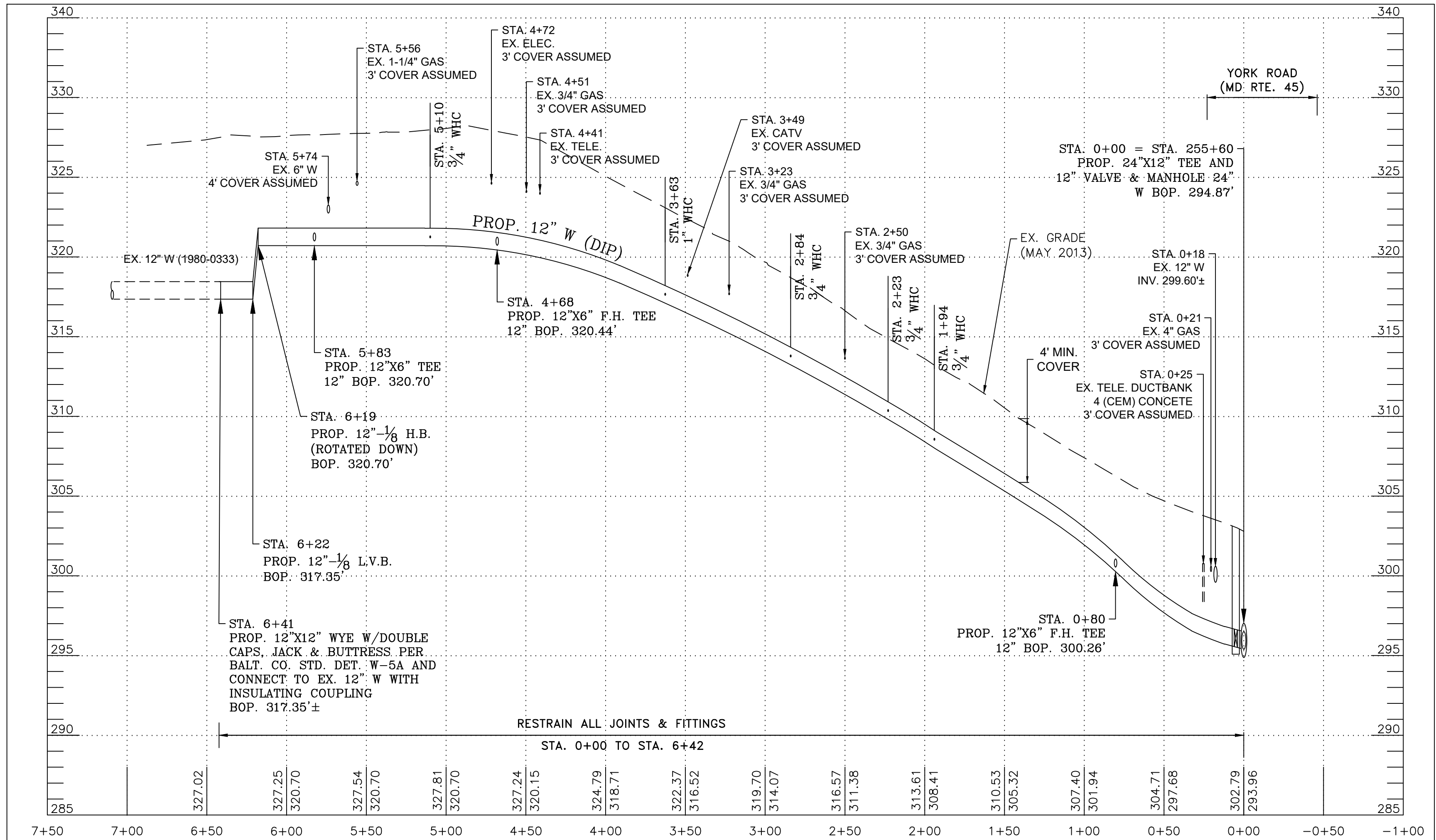
PLAN: 12-INCH WATER MAIN (SHAWAN ROAD)



PROFILE-CONNECTION
PROP. 6" W AT STA. 5+83



PROFILE-FIRE HYDRANT
PROP. 6" W AT STA. 4+68



PROFILE: 12-INCH WATER MAIN (SHAWAN ROAD)

BILL OF MATERIALS (SHAWAN ROAD STA. 0+00-STA. 6+42)		
NO.	DESCRIPTION	SIZE
642'	DUCTILE IRON PIPE	12"
106'	DUCTILE IRON PIPE	6"
1	TEE	12"x6"
2	FIRE HYDRANT TEE	12"x6"
1	VALVE & DOGHOUSE MH	12"
3	VALVE & DOGHOUSE MH	6"
2	DIRECT BURIED VALVE & ROADWAY BOX	6"
2	FIRE HYDRANT (S.N.F.H.)	6"
1	1/8 BEND (HORIZONTAL)	12"
1	1/8 BEND (VERTICAL)	6"
1	1/8 BEND (VERTICAL)	12"
1	1/8 BEND (VERTICAL)	6"
1	WYE WITH DOUBLE CAPS	12"x12"
1	WYE WITH DOUBLE CAPS	6"x6"
9'	COPPER PIPE (WATER SERVICE)	1"
56'	COPPER PIPE (WATER SERVICE)	3/4"
1	CORPORATION (WATER SERVICE)	1"
4	CORPORATION (WATER SERVICE)	3/4"
1	INSULATING COUPLING	6"
1	INSULATING COUPLING	12"

- NOTES:
- ALL VALVES 12" AND SMALLER SHALL USE 48-INCH PRECAST CONCRETE DOGHOUSE MANHOLES PER BALTIMORE COUNTY STANDARD DETAILS S-4, S-15 & W-18 UNLESS OTHERWISE SHOWN ON THE PLAN.
 - ALL VALVES 16" AND LARGER TO BE CONSTRUCTED IN CAST-IN-PLACE OR PRE-CAST CONCRETE STRUCTURES PER BALTIMORE COUNTY STANDARD DETAILS W-16 & W-16A UNLESS OTHERWISE SHOWN ON THE PLAN.
 - ALL WYE BRANCH CONNECTIONS SHALL BE AS SHOWN ON THE "WYE BRANCH WITH PLUG, CAP, JACK & BUTTRESS DETAIL".

BGE FACILITIES - SEE NOTES ON SHEET 2
REGARDING EXISTING BGE UTILITY INFORMATION

CITY OF BALTIMORE
CHIEF, WATER & WASTEWATER ENG. DIV.
BUREAU OF WATER AND WASTEWATER

REVISION - CITY OF BALTIMORE
CHIEF, UTILITY ENGINEERING
CHIEF, WATER ENGINEERING SECTION



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 200436 EXPIRATION DATE 9/30/2027
ENGINEER: JOHN A. BLONDELL
KCI TECHNOLOGIES, INC.
AS-BUILT PER RECORD PRINT
BY: DATE
DESIGN BY: JCA
DRAWN BY: JCA
CHKD BY: JAB

REVISION
BY DATE P.W.A. NO. KEY SHEET POSITION SHI
R.O.W. NO.
STATE
BUREAU OF ENGINEERING AND CONSTRUCTION
BUILDINGS HIGHWAYS STRUCTURES STORM DRAINS SEWER
FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221

DRAWING SCALE
PLAN SCALE: 1"=50'
PROFILE SCALE: 1"=5'
1"=50'
DPW AND TRANSPORTATION
FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221

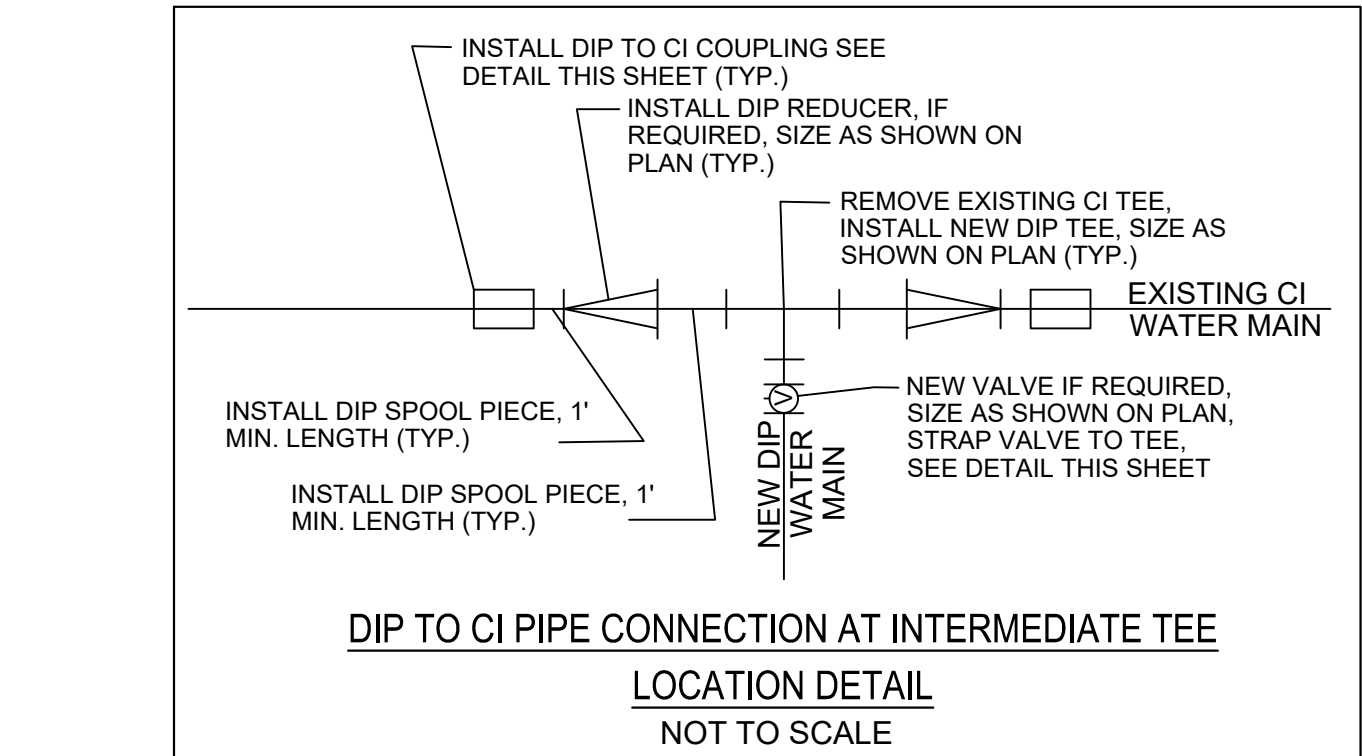
BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION
WATER MAIN REPLACEMENT - PHASE 5
YORK ROAD - MD ROUTE 45
FROM YORK ROAD TO 642' WEST OF YORK ROAD
PLAN AND PROFILE SHEET-5
SUBDIVISION: COCKEYSVILLE

ELEVATION LEFT OF STATION: EXISTING GRADE OVER PROPOSED WATER MAIN.
ELEVATION RIGHT OF STATION: BOTTOM OF PIPE (BOP) OF PROPOSED WATER MAIN.

SHEET DESIGNATION	CONTRACT NUMBER
WATER	24125-WX0
JOB ORDER NUMBER	
231-203-0050-0466	
SHEET 9 OF 21	
DRAWING NUMBER	
2024-2229	
FILE NO.:	



DWG. FILENAME: 13201868.05 Sub-B.dwg 13201868.05 Proposed.dwg 13201868.05 E. Utilities.dwg 13201868.05 key.dwg 13201868.05 Profiles.dwg 13201868.05 Border.dwg 13201868.05 Right-way.dwg 13201868.05 E. Utilities.dwg 13201868.05 Profiles.dwg 13201868.05 Border.dwg 13201868.05 Right-way.dwg
Date: 09/09/2025 10:20:25
Drawing Title: WATER MAIN REPLACEMENT - PHASE 5



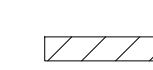
DRAWING SCALE		DPW AND TRANSPORTATION
PLAN SCALE:	N/A	FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221
PROFILE SCALE:	N/A	
	N/A	
WATER	FIELD ENGINEER	BUR. OF ENGINEERING & CONSTRUCTION
		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221

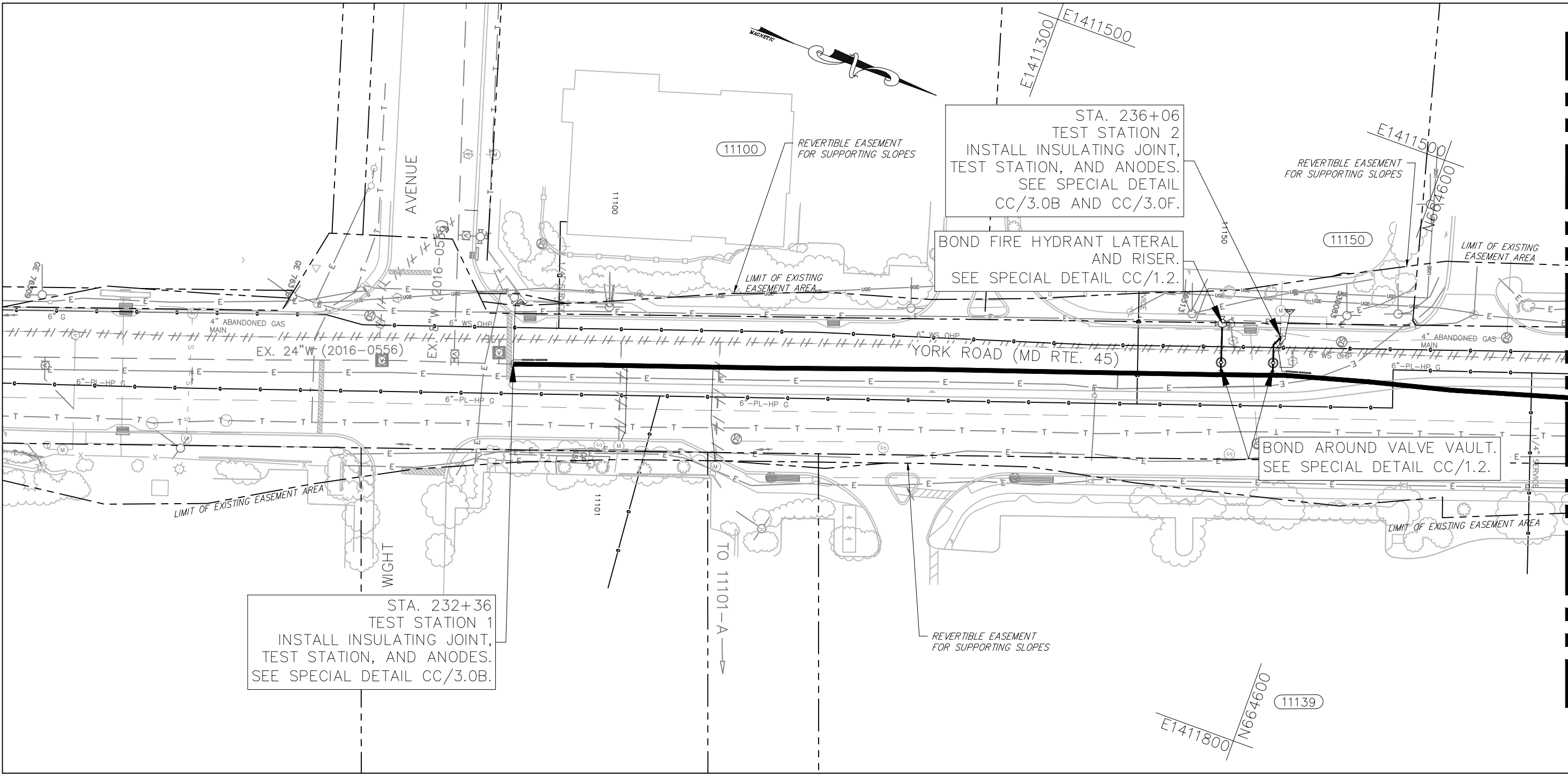
BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION – BUREAU OF ENGINEERING & CONSTRUCTION			WATER	24125–WXO
WATER MAIN REPLACEMENT – PHASE 5			JOB ORDER NUMBER	231–203–0050–0466
YORK ROAD – MD ROUTE 45			SHEET 10 OF 21	
(FROM WIGHT AVENUE TO SHAWAN ROAD)			DRAWING NUMBER	
SUBDIVISION: COCKEYSVILLE			2024–2230	
DETAILS		ELECTION DIST. NO.: 8C3	FILE NO.:	

GENERAL CORROSION NOTES

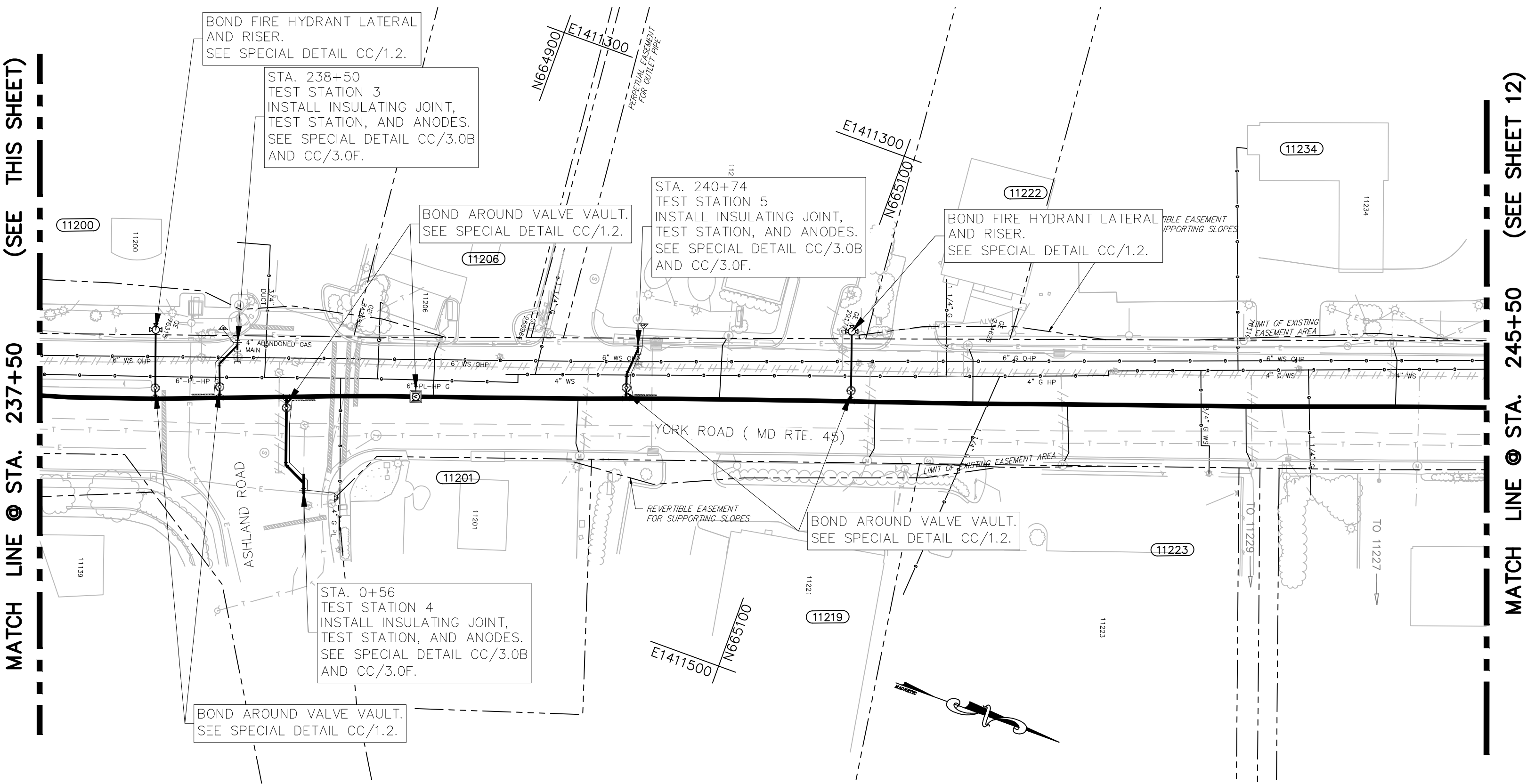
1. ALL NEW DUCTILE IRON WATER MAINS AND FIRE HYDRANT BRANCHES (INCLUDING RISERS) TO BE COATED AND CATHODICALLY PROTECTED PER BALTIMORE COUNTY SPECIFICATIONS 16640 AND AS SHOWN ON PLANS.
2. BOND ALL JOINTS ON DUCTILE PIPE UP TO BUT NOT ACROSS INSULATING JOINTS INCLUDING ANY TIE-INS UP TO INSULATING JOINTS. SEE DETAIL CC/1.0 AND CC/1.1.
3. BOND ALL FIRE HYDRANTS. SEE DETAIL CC/1.1.
4. BOND AROUND VALVE VAULTS. SEE DETAIL CC/1.2.
5. INSTALL INSULATING COUPLINGS AT PIPE CONNECTIONS WHERE SPECIFIED ON PLANS. SEE DETAIL CC/3.0B.
6. INSTALL INSULATING CORPORATION STOPS AT WATER SERVICE CONNECTIONS. SEE DETAIL CC/3.0E.
7. FIELD COAT ALL BONDED JOINTS. SEE DETAIL CC/3.1A.
8. INSTALL SEPARATOR MESH ON WATER MAIN AT EXISTING UTILITY CROSSING IF THERE IS LESS THAN 12-INCHES OF CLEARANCE BETWEEN THE TWO UTILITIES. SEE DETAIL CC/3.2.
9. USE LINKED RUBBER SEAL ON VALVE VAULTS. SEE DETAIL CC/3.4.
10. ALL ANODE BEDS TO BE TWO (2), 40-POUND MAGNESIUM ANODES INSTALLED HORIZONTALLY AND SPACED ONE (1) FOOT APART END TO END.
11. NO ANODES SHALL BE LOCATED SO THAT THEY LIE DIRECTLY OVER OR OBSTRUCT ACCESS TO OTHER UTILITIES.
12. BURY ALL TEST LEAD WIRES TO TOP OF PIPE DEPTH AND ROUTE THROUGH PVC CONDUIT TO FINAL TEST BOX LOCATION.
13. SPLICES SHALL NOT BE PERMITTED IN ANODE LEAD WIRES. ALL WIRES SHALL BE OF SUFFICIENT LENGTH TO REACH JUNCTION BOX WITHOUT SPLICING.
14. PAINT ALL TEST BOX LIDS BLUE AND LABEL INTERIOR WITH THE CONTRACT AND TEST STATION NUMBER.

LEGEND

- INSULATING JOINT TEST STATION
- INSULATING JOINT
- MAGNESIUM ANODE



PLAN: 24-INCH WATER MAIN
GRAPHIC SCALE
50 0 25 50 100
SCALE: 1" = 50'



PLAN: 24-INCH WATER MAIN

CITY OF BALTIMORE		REVISION - CITY OF BALTIMORE		DSI 10240 Old Columbia Road Columbia, MD 21046 PHONE: (410) 381-5475 FAX: (410) 381-9643 www.dsinc.com DACCO SCI, INC.
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER	DATE	CHIEF, UTILITY ENGINEERING	DATE	
		CHIEF, WATER ENGINEERING SECTION	DATE	

SEAL  DATE: 7/31/2025	PROFESSIONAL CERTIFICATION		REVISION	BY	DATE	P.W.A. NO.	KEY SHEET POSITION SHT	DRAWING SCALE	DPW AND TRANSPORTATION	
	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.							PLAN SCALE: 1"=50'	FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	
	LICENSE NO. 12679, EXPIRATION DATE 10/27/2025							PROFILE SCALE:		
	ENGINEER: JOHN W. MARSHALL DACCO SCI, INC.	DESIGN BY: RC	BUREAU OF ENGINEERING AND CONSTRUCTION	BUILDINGS	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
	AS-BUILT PER RECORD PRINT	DRAWN BY: RC	FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221				FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221			

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION

WATER MAIN REPLACEMENT - PHASE 5

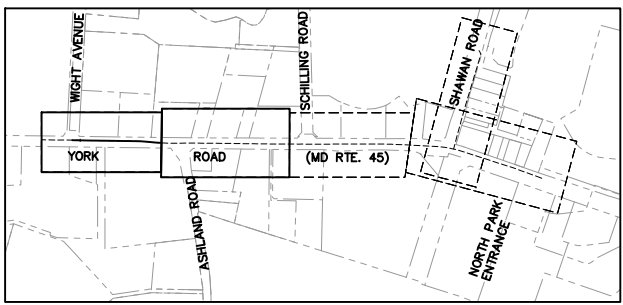
YORK ROAD - MD ROUTE 45

(FROM WIGHT AVENUE TO SHAWAN ROAD)

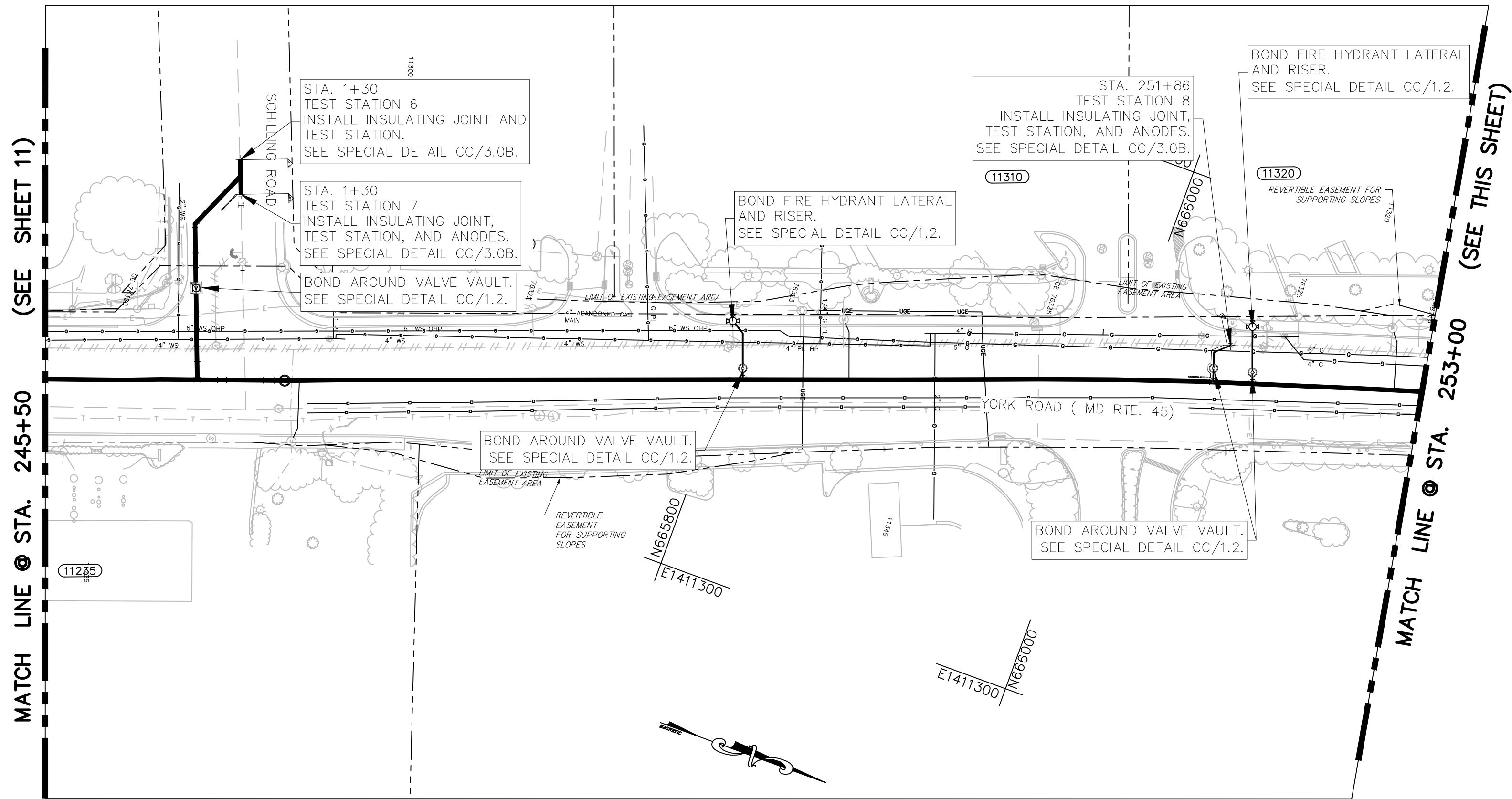
CATHODIC PROTECTION SHEET-1

SUBDIVISION: COCKEYSVILLE

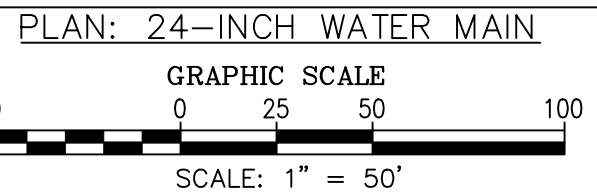
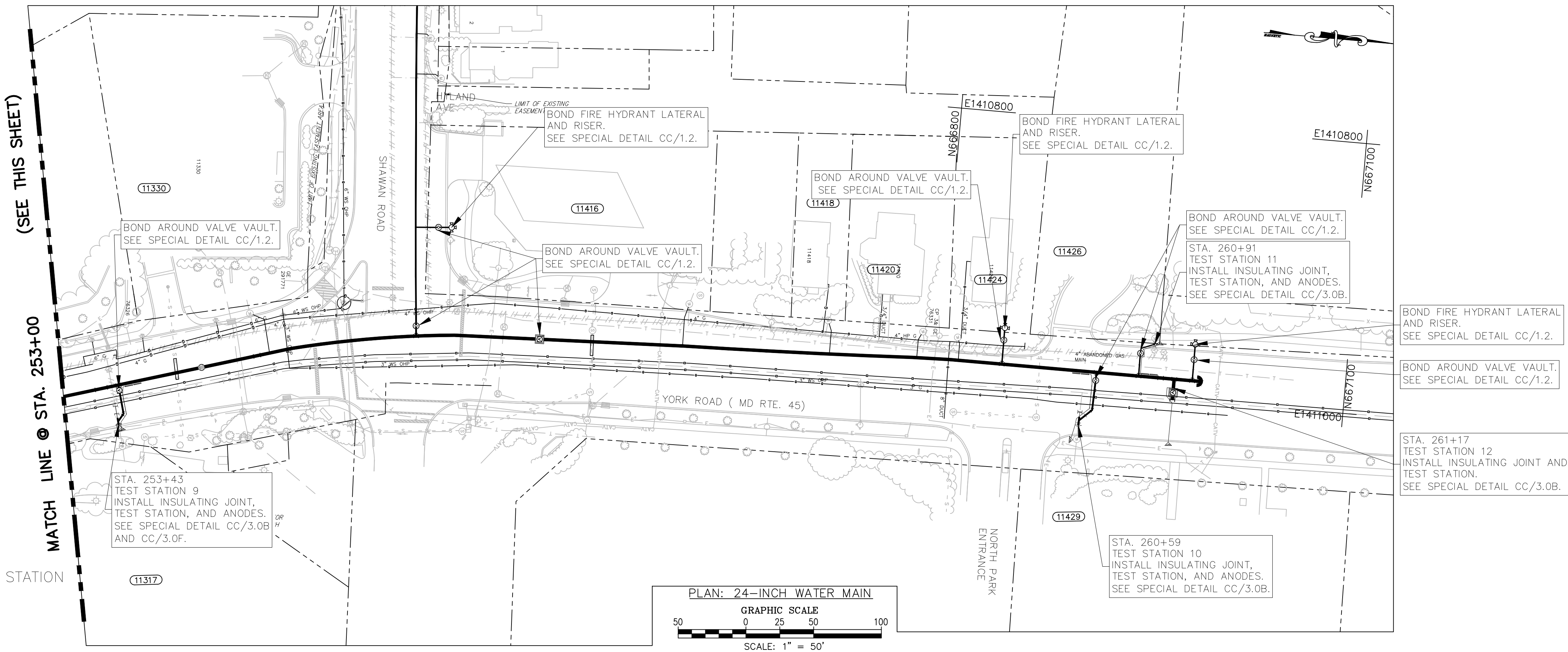
ELECTION DIST. NO.: 8C3



SHEET DESIGNATION	CONTRACT NUMBER
CATHODIC PROTECTION	24125-WX0
JOB ORDER NUMBER	231-203-0050-0466
SHEET 11 OF 21	DRAWING NUMBER
2024-2231	FILE NO.:



PLAN: 24-INCH WATER MAIN



LEGEND

- INSULATING JOINT TEST STATION
- INSULATING JOINT
- MAGNESIUM ANODE

CITY OF BALTIMORE	REVISION - CITY OF BALTIMORE	DSI
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER	CHIEF, UTILITY ENGINEERING CHIEF, WATER ENGINEERING SECTION	10240 Old Columbia Road Columbia, MD 21046 PHONE: (410) 381-5475 FAX: (410) 381-9643 www.dsinc.com

SEAL	PROFESSIONAL CERTIFICATION		REVISION		BY	DATE	P.W.A. NO.	KEY SHEET	POSITION	SHT	DRAWING SCALE	DPW AND TRANSPORTATION			
	HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.														
	LICENSE NO. 12679, EXPIRATION DATE 10/27/2025						R.O.W NO.	VNE	72NW7	73NW7	PLAN SCALE: 1"=50'	FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221			
							STATE				PROFILE SCALE:				
	ENGINEER: JOHN W. MARSHALL DACCO SCI, INC.		DESIGN BY: RC		BUREAU OF ENGINEERING AND CONSTRUCTION		BUILDINGS	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	BUR. OF ENGINEERING & CONSTRUCTION	
AS-BUILT PER RECORD PRINT		DRAWN BY: RC		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221										FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	
BY: DATE:		CHKD BY: JWM													
DATE: 7/31/2025															

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION

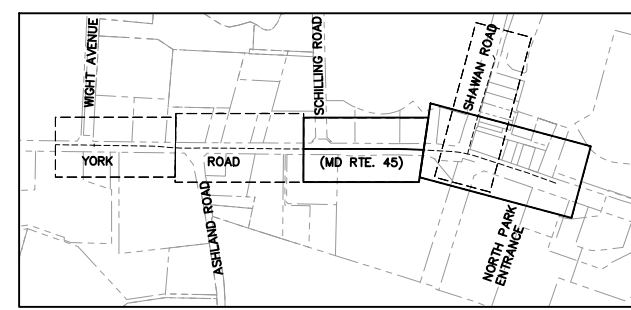
WATER MAIN REPLACEMENT - PHASE 5

YORK ROAD - MD ROUTE 45

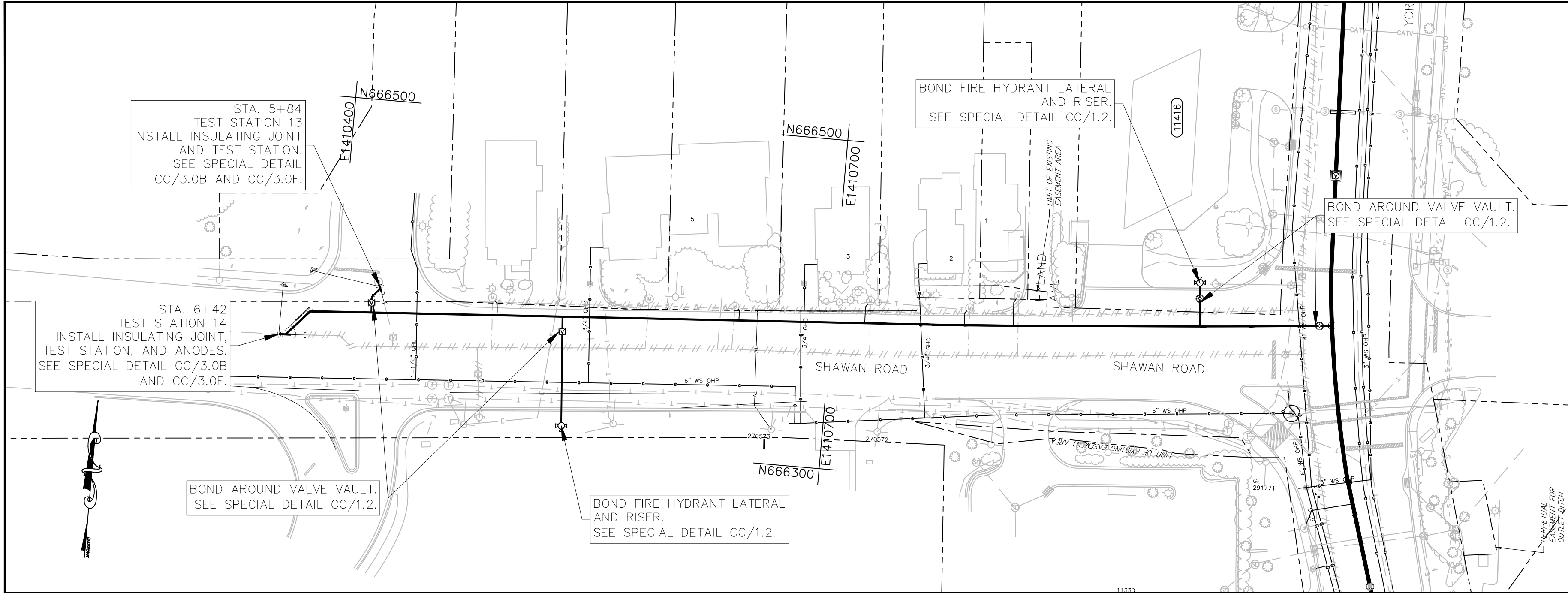
(FROM WIGHT AVENUE TO SHAWAN ROAD)

CATHODIC PROTECTION SHEET-2

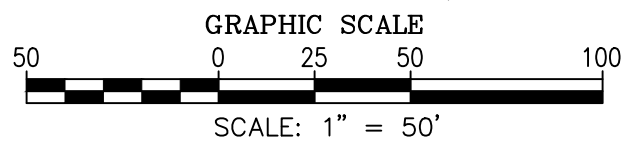
SUBDIVISION: COCKEYSVILLE



SHEET DESIGNATION	CONTRACT NUMBER
CATHODIC PROTECTION	24125-WX0
JOB ORDER NUMBER	231-203-0050-0466
SHEET 12 OF 21	DRAWING NUMBER
2024-2232	FILE NO.:



PLAN: 12-INCH WATER MAIN (SHAWAN ROAD)



TEST STATION SCHEDULE FOR CONTRACT NO. 24125-WXO - York Road WMR Phase 5							
SHEET NO.	TEST STATION NO.	LOCATION	TYPE	QUANTITY	ANODES SIZE (LB)	MATERIAL	PIPE DIAMETER (IN) STATION NO.
11	1	YORK ROAD	IJA	2	40	MAGNESIUM	24 232+36
11	2	YORK ROAD	IJA	2	40	MAGNESIUM	6 236+06
11	3	YORK ROAD	IJA	2	40	MAGNESIUM	6 238+50
11	4	ASHLAND ROAD AND YORK ROAD	IJA	2	40	MAGNESIUM	12 0+56
11	5	YORK ROAD	IJA	2	40	MAGNESIUM	8 240+74
12	6	SCHILLING ROAD AND YORK ROAD	IJA	2	40	MAGNESIUM	24 1+30
12	7	SCHILLING ROAD AND YORK ROAD	IJA	2	40	MAGNESIUM	24 1+30
12	8	YORK ROAD	IJA	2	40	MAGNESIUM	6 251+86
12	9	YORK ROAD	IJA	2	40	MAGNESIUM	10 253+43
12	10	YORK ROAD	IJA	2	40	MAGNESIUM	10 260+59
12	11	YORK ROAD	IJA	2	40	MAGNESIUM	6 260+91
12	12	YORK ROAD	IJ				30 261+17
13	13	SHAWAN ROAD	IJ				6 5+84
13	14	SHAWAN ROAD	IJA	2	40	MAGNESIUM	12 6+42

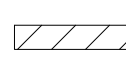
LEGEND



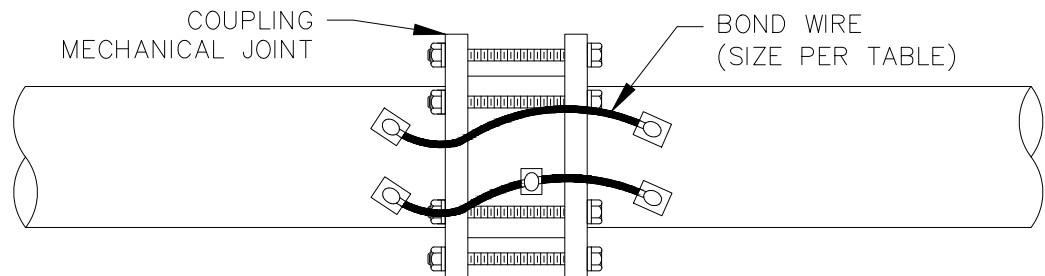
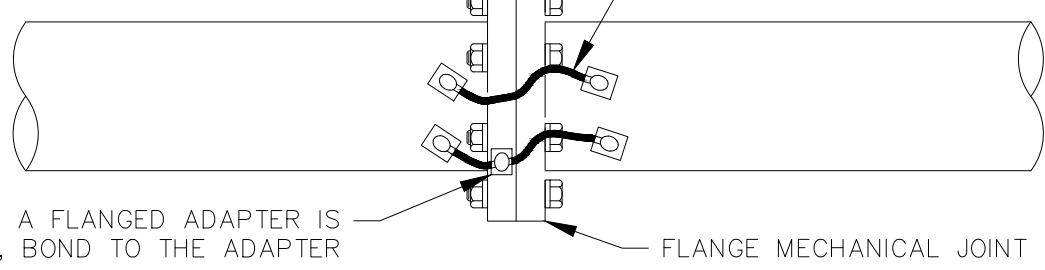
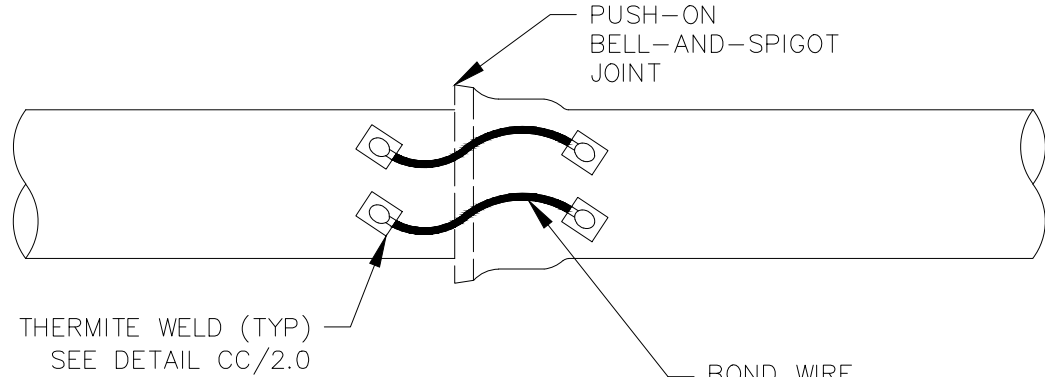
IJS INSULATING JOINT TEST STATION



IJ INSULATING JOINT



MAGNESIUM ANODE



BOND WIRE SIZE	
PIPE DIAMETER	WIRE SIZE
SMALLER THAN 16"	#6 AWG
16" THROUGH 36"	#4 AWG
LARGER THAN 36"	#2 AWG

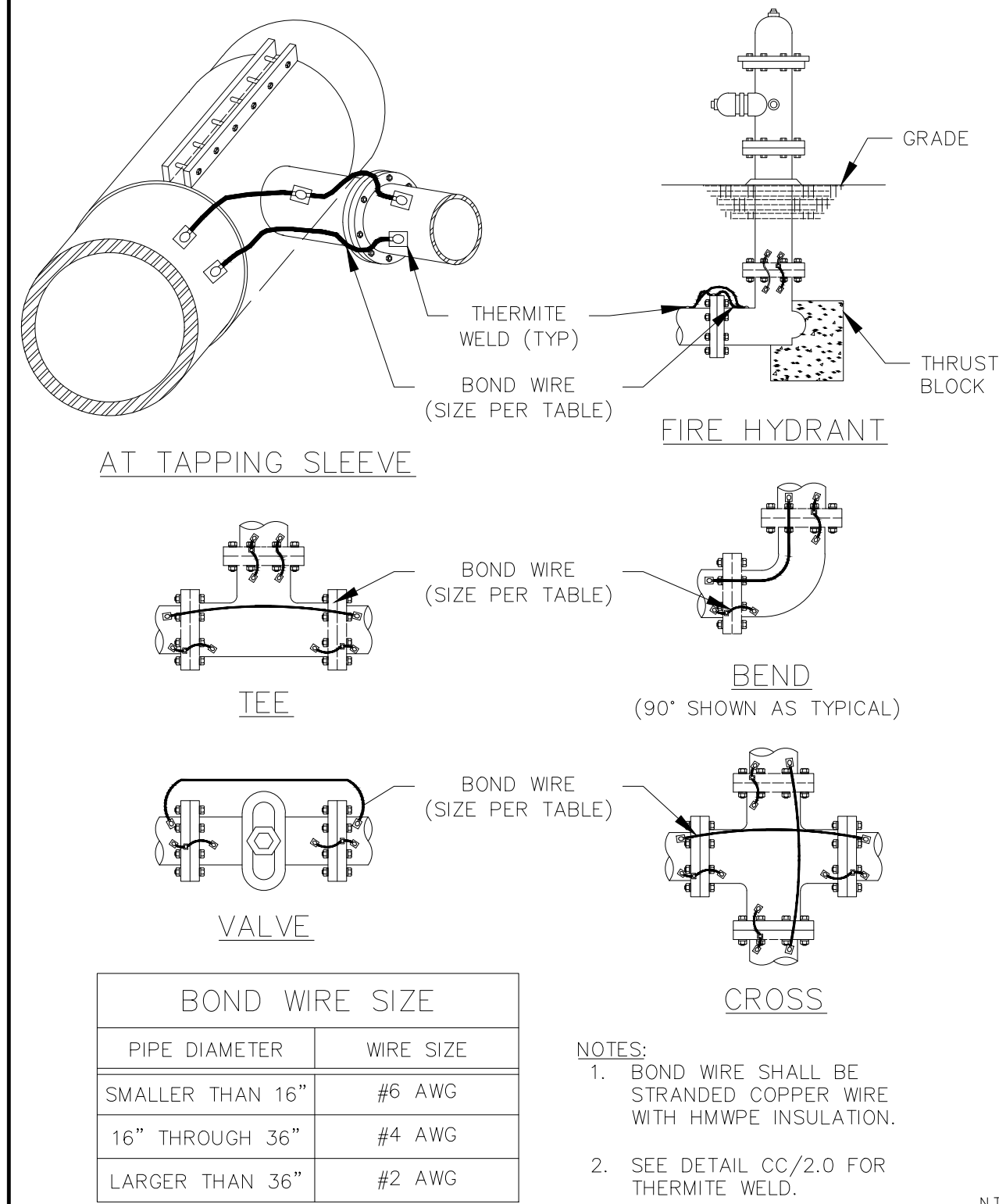
NOTE: BOND WIRE SHALL BE STRANDED COPPER WIRE WITH HMWPE INSULATION.



APPROVED: _____

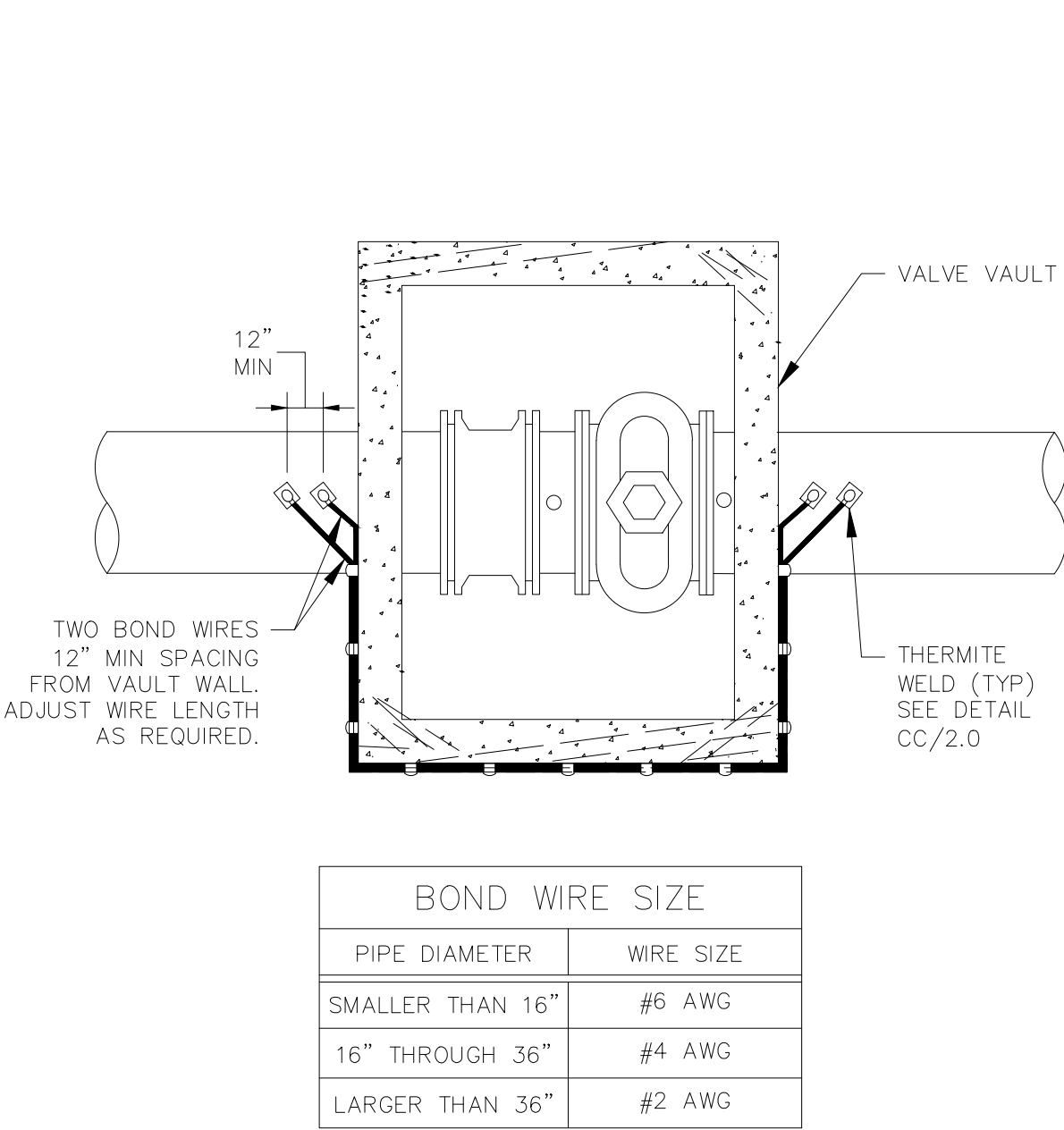
STANDARD DETAIL
BOND
PIPE JOINT

REVISIONS:	CC
1.0	1.0



BOND WIRE SIZE	
PIPE DIAMETER	WIRE SIZE
SMALLER THAN 16"	#6 AWG
16" THROUGH 36"	#4 AWG
LARGER THAN 36"	#2 AWG

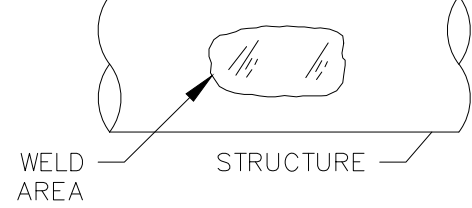
NOTES:
1. BOND WIRE SHALL BE STRANDED COPPER WIRE WITH HMWPE INSULATION.
2. SEE DETAIL CC/2.0 FOR THERMITE WELD.



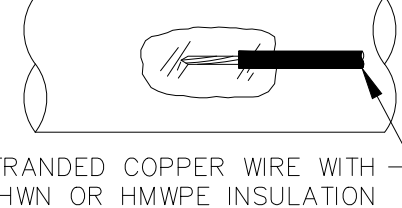
BOND WIRE SIZE	
PIPE DIAMETER	WIRE SIZE
SMALLER THAN 16"	#6 AWG
16" THROUGH 36"	#4 AWG
LARGER THAN 36"	#2 AWG

NOTES:
1. BOND WIRE SHALL BE STRANDED COPPER WIRE WITH HMWPE INSULATION.
2. PROVIDE SLACK IN WIRES AND FASTEN TO VAULT TO PROTECT WIRES FROM DAMAGE.

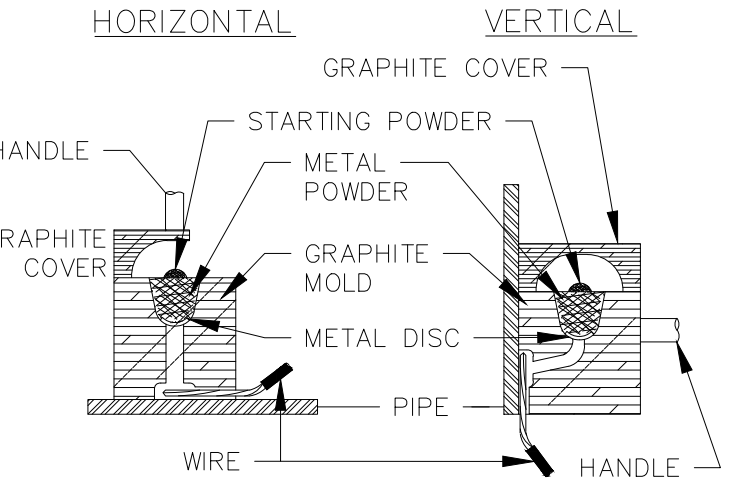
STEP 1
EXPOSE BRIGHT METAL AND CLEAN.



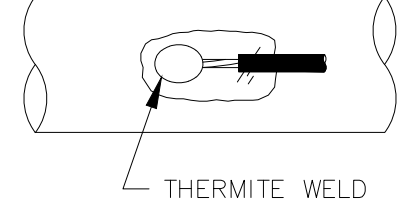
STEP 2
STRIP INSULATION FROM WIRE.



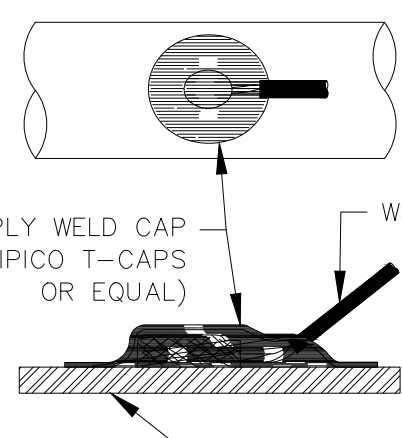
STEP 3
HOLD MOLD FIRMLY WITH OPENING AWAY FROM OPERATOR - IGNITE STARTING POWDER. USE HORIZONTAL OR VERTICAL WELD WHEN APPROPRIATE.



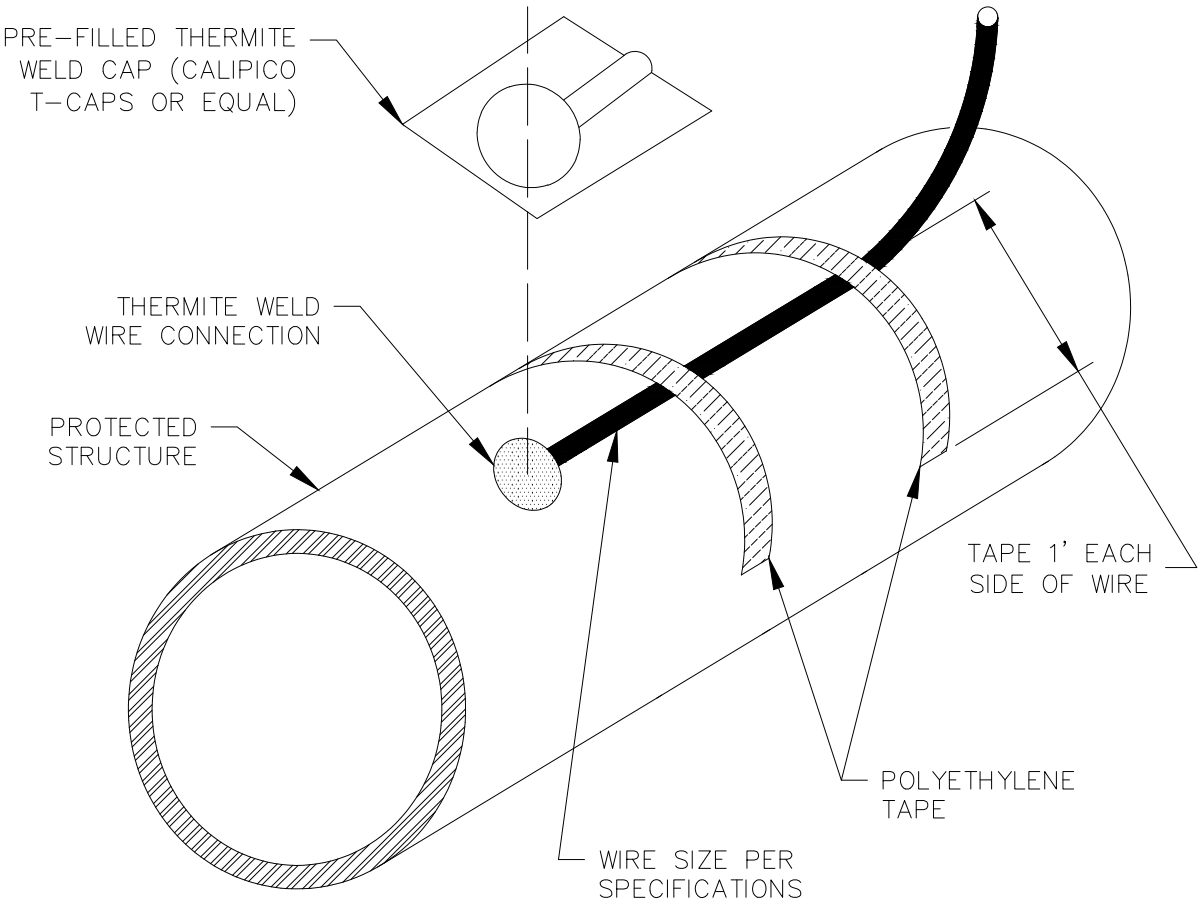
STEP 4
REMOVE SLAG FROM CONNECTION.



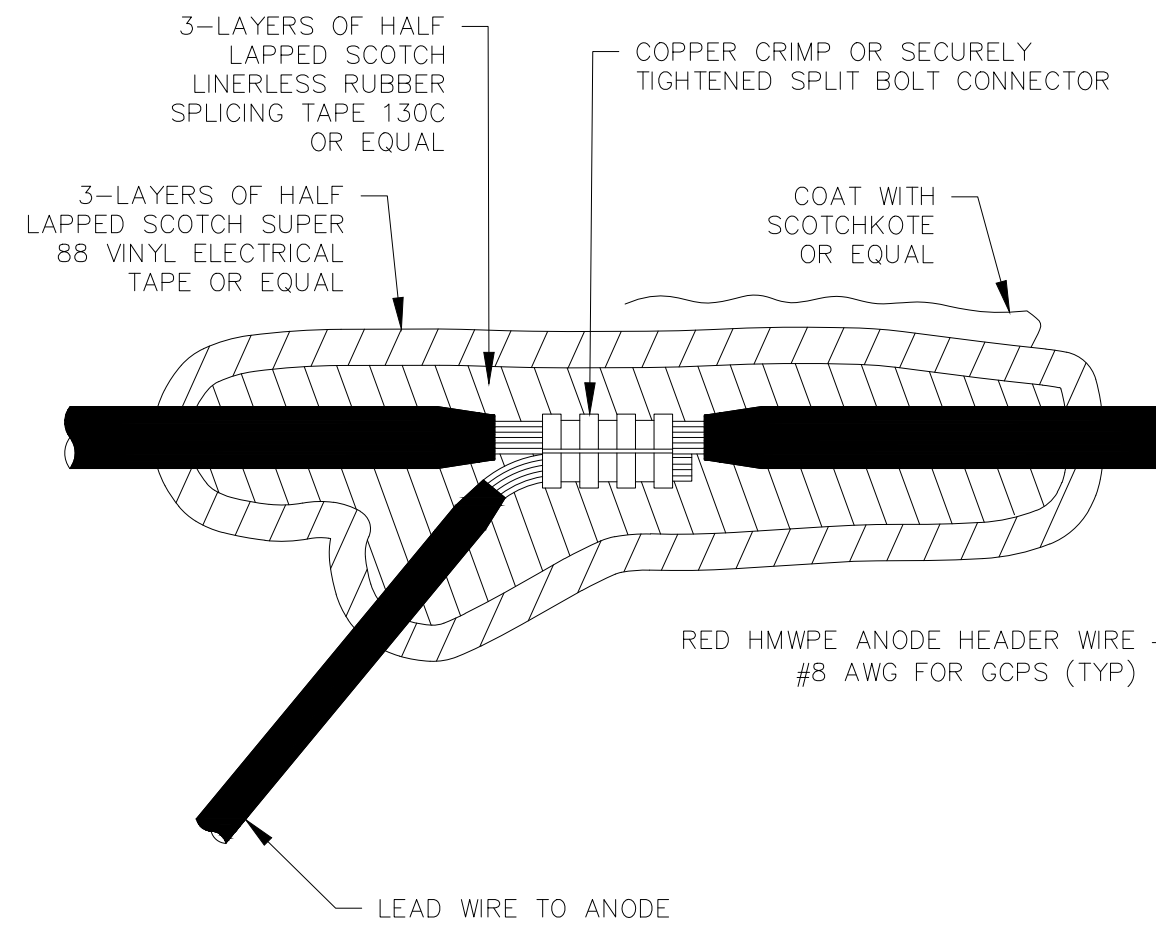
STEP 5
COAT ALL EXPOSED METAL AND WELD AREA WITH COLD APPLIED COAL TAR EPOXY (KOPPERS NO. 50 OR EQUAL).



NOTES:
SEE DETAIL CC/2.0N FOR ADDITIONAL NOTES.



NOTES:
1. FOLLOW MFG RECOMMENDATIONS FOR PREPARING WELD AREA.
2. USE CHARGE AND SIZE AS REQUIRED IN SPECIFICATIONS FOR DUCTILE IRON, CAST IRON, OR STEEL PIPE.
3. USE A COPPER SLEEVE FOR THERMITE WELD WIRE CONNECTIONS WITH #12 AWG OR SMALLER WIRE.
4. SECURE WIRE TO PIPE WITH TAPE OR OTHER APPROVED METHOD WITHOUT DAMAGING PIPE COATING.
5. APPLY WELD CAP TO COAT BARE WELD AREA AND FILL RECESS IN THERMITE WELD CAP AS REQUIRED IN SPECIFICATIONS.
6. COAT THERMITE WELDS MADE TO STEEL STRUCTURES WITH BRUSH APPLIED MASTIC (10 MILS MIN THICKNESS). FOR STEEL PLATES, DRY THE MASTIC BEFORE THERMITE WELDS ARE COVERED OVER WITH GROUT.



NOTE: ALL WIRES TO BE STRANDED COPPER WIRE.



APPROVED: _____

STANDARD DETAIL
BOND
PIPE FITTINGS

REVISIONS:	CC
1.1	1.1



APPROVED: _____

STANDARD DETAIL
BOND
VAULT

REVISIONS:	CC
1.2	1.2



APPROVED: _____

STANDARD DETAIL
THERMITE WELD

REVISIONS:	CC
2.0	2.0



APPROVED: _____

STANDARD DETAIL
THERMITE WELD
NOTES

REVISIONS:	CC
2.0N	2.0N



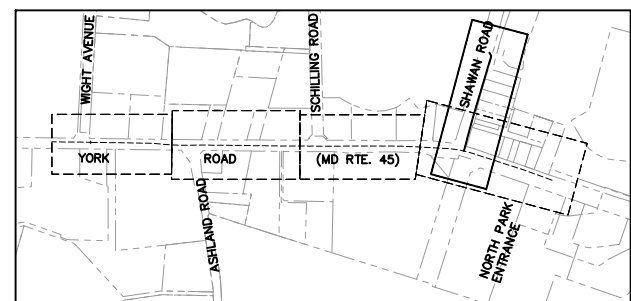
APPROVED: _____

STANDARD DETAIL
SPLICE CABLE

REVISIONS:	CC
2.2	2.2

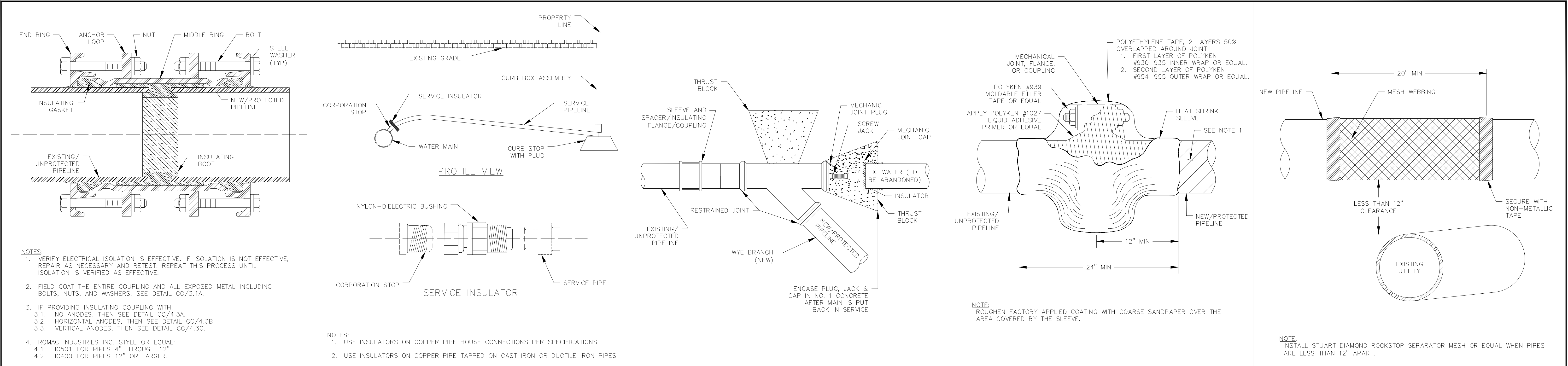
CITY OF BALTIMORE		REVISION - CITY OF BALTIMORE		DSI 10260 Old Columbia Road Columbia, MD 21046 PHONE: (410) 381-8475 FAX: (410) 381-7643 www.dsicons.com
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER	DATE	CHIEF, UTILITY ENGINEERING	DATE	
CHIEF, WATER ENGINEERING SECTION	DATE	CHIEF, WATER ENGINEERING SECTION	DATE	

SEAL  DATE: <u>7/31/2025</u>	PROFESSIONAL CERTIFICATION		REVISION		BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE	DPW AND TRANSPORTATION	
	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.									PLAN SCALE: <u>1"=50'</u>	FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	
							R.O.W. NO.	VNE	73NW7	PROFILE SCALE:		
	LICENSE NO. <u>12679</u> EXPIRATION DATE <u>10/27/2025</u>							STATE				
	ENGINEER: <u>JOHN W. MARSHALL</u> <u>DACC SCI, INC.</u>		DESIGN BY: <u>RC</u>		BUREAU OF ENGINEERING AND CONSTRUCTION	BUILDINGS	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
AS-BUILT PER RECORD PRINT		DRAWN BY: <u>RC</u>		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221								FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221
BY: <u>DATE:</u>		CHKD BY: <u>JWM</u>										

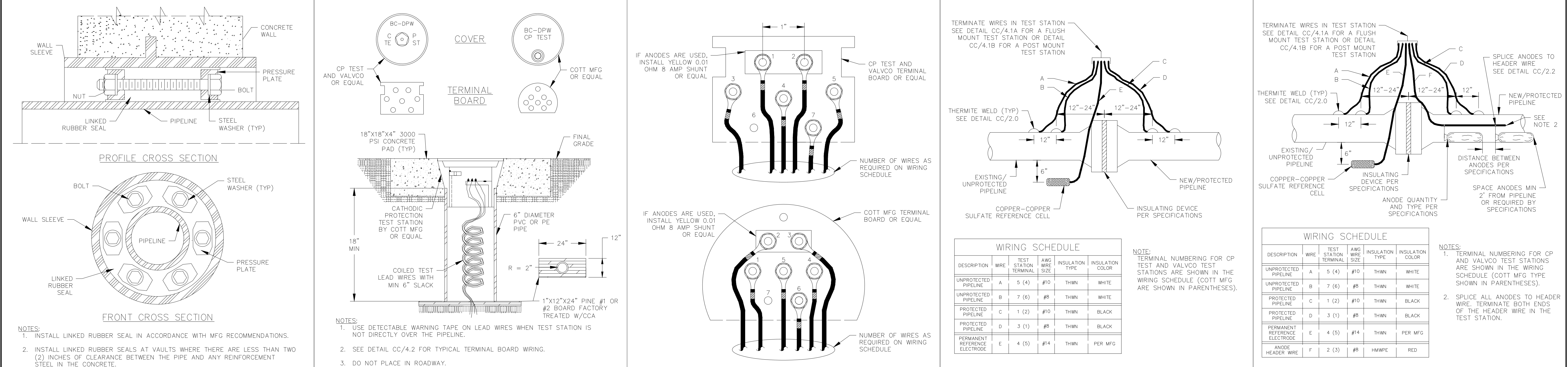


BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION
WATER MAIN REPLACEMENT - PHASE 5
YORK ROAD - MD ROUTE 45
(FROM WIGHT AVENUE TO SHAWAN ROAD)
CATHODIC PROTECTION SHEET-3
SUBDIVISION: COCKEYSVILLE

SHEET DESIGNATION	CONTRACT NUMBER
CATHODIC PROTECTION	24125-WXO
Baltimore County Maryland	
231-203-0050-0466	
SHEET 13 OF 21	
DRAWING NUMBER	
2024-2233	
FILE NO.:	



DSI DACC SCI, INC.	APPROVED: _____	STANDARD DETAIL INSULATING JOINT COUPLING	REVISIONS: _____ CC 3.0B	DSI DACC SCI, INC.	APPROVED: _____	STANDARD DETAIL INSULATING JOINT SERVICE CONNECTIONS (CORPORATION STOP)	REVISIONS: _____ CC 3.0E	DSI DACC SCI, INC.	APPROVED: _____	STANDARD DETAIL INSULATING JOINT DOUBLE END CAP	REVISIONS: _____ CC 3.0F	DSI DACC SCI, INC.	APPROVED: _____	STANDARD DETAIL FIELD COATING JOINT	REVISIONS: _____ CC 3.1A	DSI DACC SCI, INC.	APPROVED: _____	STANDARD DETAIL SEPARATOR MESH	REVISIONS: _____ CC 3.2
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DSI DACC SCI, INC.	APPROVED: _____	STANDARD DETAIL LINKED RUBBER SEAL	REVISIONS: _____ CC 3.4	DSI DACC SCI, INC.	APPROVED: _____	STANDARD DETAIL TEST STATION FLUSH MOUNT	REVISIONS: _____ CC 4.1A	DSI DACC SCI, INC.	APPROVED: _____	STANDARD DETAIL TEST STATION TERMINAL WIRING BOARD	REVISIONS: _____ CC 4.2	DSI DACC SCI, INC.	APPROVED: _____	STANDARD DETAIL TEST STATION INSULATING JOINT	REVISIONS: _____ CC 4.3A	DSI DACC SCI, INC.	APPROVED: _____	STANDARD DETAIL TEST STATION INSULATING JOINT w/HORIZONTAL ANODES	REVISIONS: _____ CC 4.3B
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CITY OF BALTIMORE		REVISION – CITY OF BALTIMORE		DSI DACC SCI, INC.	
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER		CHIEF, UTILITY ENGINEERING		10260 Old Columbia Road Columbia, MD 21046 PHONE: (410) 381-8475 FAX: (410) 381-7643 www.daccsci.com	
DATE: _____		DATE: _____		DATE: _____	
CHIEF, WATER ENGINEERING SECTION		DATE: _____		DATE: _____	
SEAL		PROFESSIONAL CERTIFICATION		REVISION	
BY: _____		DATE: _____		BY: _____	
P.W.A. NO. _____		KEY SHEET _____		POSITION SHT _____	
DRAWING SCALE: _____		PLAN SCALE: _____		PROFILE SCALE: _____	
DPW AND TRANSPORTATION		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	
BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION – BUREAU OF ENGINEERING & CONSTRUCTION		WATER MAIN REPLACEMENT – PHASE 5		YORK ROAD – MD ROUTE 45	
(FROM WIGHT AVENUE TO SHAWAN ROAD)		CATHODIC PROTECTION SHEET-4		SUBDIVISION: COCKEYSVILLE	
ELECTION DIST. NO.: 8C3		SHEET DESIGNATION		CONTRACT NUMBER	
CATHODIC PROTECTION		24125-WX0		JOB ORDER NUMBER	
231-203-0050-0466		SHEET 14 OF 21		DRAWING NUMBER	
2024-2234		FILE NO.:		FILE NO.:	

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES AND PRACTICES SHALL CONFORM WITH THE GUIDELINES OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MD MUTCD) (LATEST EDITION), THE MDSHA "STANDARD SIGN BOOK", THE MDSHA "BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES" (LATEST EDITION).

2. THE TRAFFIC CONTROL SEQUENCE DEPICTS THE MINIMUM TRAFFIC CONTROLS REQUIRED DURING CONSTRUCTION TO MAINTAIN VEHICULAR TRAFFIC AND THE SAFETY OF VEHICLES AND WORKERS. ADDITIONAL DEVICES OR ADJUSTMENT OF THE LOCATION OF DEVICES SHALL BE INCORPORATED AS DIRECTED BY THE ENGINEER.

3. IN THE EVENT THAT ADJACENT CONSTRUCTION PROJECTS OCCUR SIMULTANEOUSLY WITH THIS PROJECT, COORDINATION OF THE TRAFFIC CONTROL PLANS FOR EACH PROJECT WILL BE REQUIRED. SPECIFICALLY THE LOCATION OF OVERLAPPING ADVANCE WARNING SIGNS SHALL BE ADJUSTED AS REQUIRED.

4. ALL TEMPORARY SIGNS INSTALLED FOR THIS PROJECT SHALL BE HIGH INTENSITY GRADE RETROREFLECTIVE SHEETING.

5. CONTRACTOR SHALL MAINTAIN DROP-OFF PROTECTION IN ACCORDANCE WITH MDSHA TYPICAL STANDARDS. DROP-OFFS GREATER THAN 2.5-INCHES TO 5-INCHES SHALL BE MAINTAINED ACCORDING TO MD 104.06-17 AT THE END OF EACH WORK PERIOD.

6. EXISTING SIGNS NOT APPLICABLE DURING WORK PERIOD SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

7. TEMPORARY SIGNS NOT APPLICABLE DURING NON-WORK PERIODS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

8. THE CONTRACTOR SHALL REPAIR/REPLACE ALL TEMPORARY PAVEMENT MARKINGS AT THE END OF EACH WORK SHIFT. ALL DISTURBED LANE STRIPING WILL BE RESTORED AT THE COMPLETION OF THE PROJECT. PAVEMENT MARKINGS SHALL BE RESTORED IN KIND (EX. THERMOPLASTIC SHALL BE REPLACED BY NEW THERMOPLASTIC, EX. PAINT SHALL BE RE-PAINTED).

9. SEE CONTRACT SPECIAL PROVISIONS FOR LANE CLOSURE RESTRICTIONS. ROADWAY AND LANE CLOSURES NOT SPECIFICALLY IDENTIFIED IN THE CONTRACT SPECIAL PROVISIONS SHALL BE AT THE DISCRETION OF THE ENGINEER.

10. ALL TRAVEL LANES THROUGHOUT CONSTRUCTION MUST BE A MINIMUM OF 11 FEET WIDE.

11. ALL TRAVEL LANES THROUGHOUT CONSTRUCTION MUST BE OPEN FROM THE END OF THE WORK DAY TO THE BEGINNING OF WORK THE FOLLOWING DAY.

13. THE CONTRACTOR MUST OBTAIN A LANE CLOSURE PERMIT FROM THE STATE HIGHWAY ADMINISTRATION DISTRICT 4 TRAFFIC A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO PERFORMING ANY WORK ON A STATE OWNED ROADWAY.

14. WORK HOURS ARE FROM 9 PM TO 5 AM, MONDAY THROUGH FRIDAY. NIGHTTIME WORKING HOURS ARE 9PM TO 5AM SUNDAY THROUGH THURSDAY NIGHT.

15. CONTRACTOR SHALL INSTALL PAVEMENT DROP-OFF SIGNING AND STEEL PLATE SIGNING IN ACCORDANCE WITH MD SHA STANDARD NOS. MD 104.06-15 AND MD 104.06-16.

16. COORDINATE WITH MDOT STATE HIGHWAY UTILITY INSPECTOR TO PLACE TRAFFIC SIGNALS IN FLASH MODE DURING WORK HOURS. THE CONTRACTOR SHALL NOTIFY THE SHA INSPECTOR 48 HRS IN ADVANCE OF THE WORK.

17. THE CONTRACTOR WILL NEED TO SETUP A PRECONSTRUCTION MEETING WITH SHA PRIOR TO ANY WORK PERFORMED ON MD 45 OR MD 145.

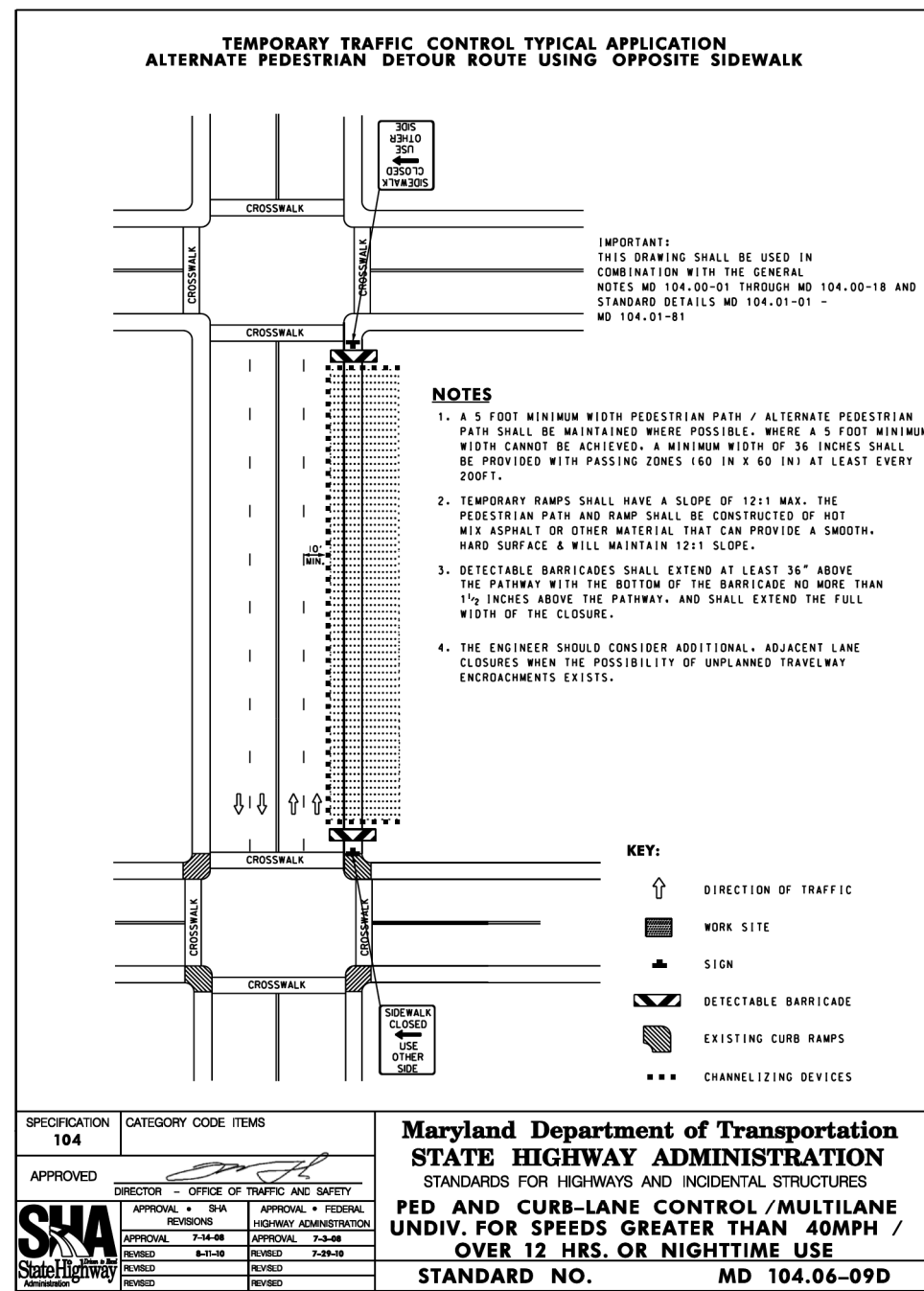
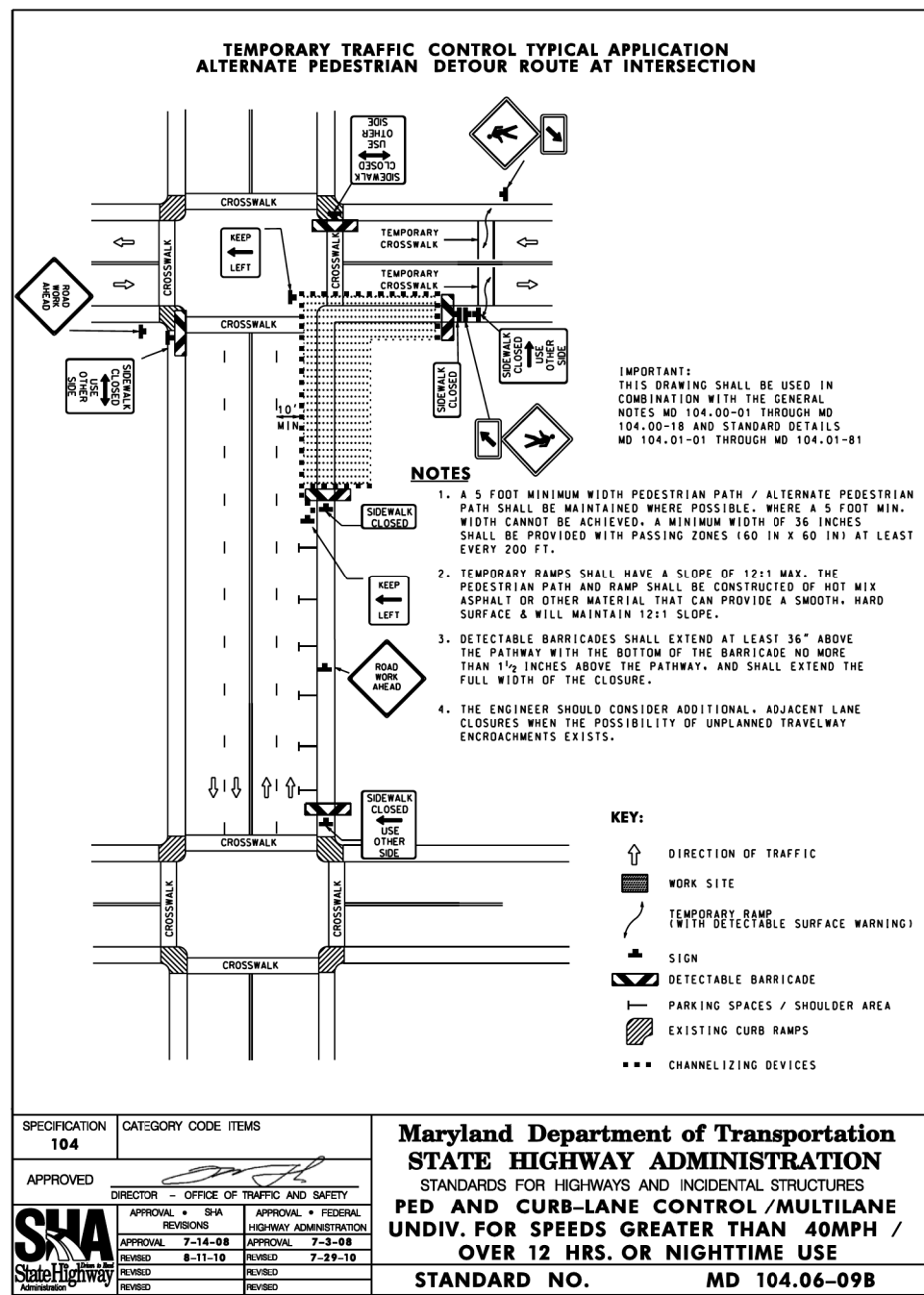
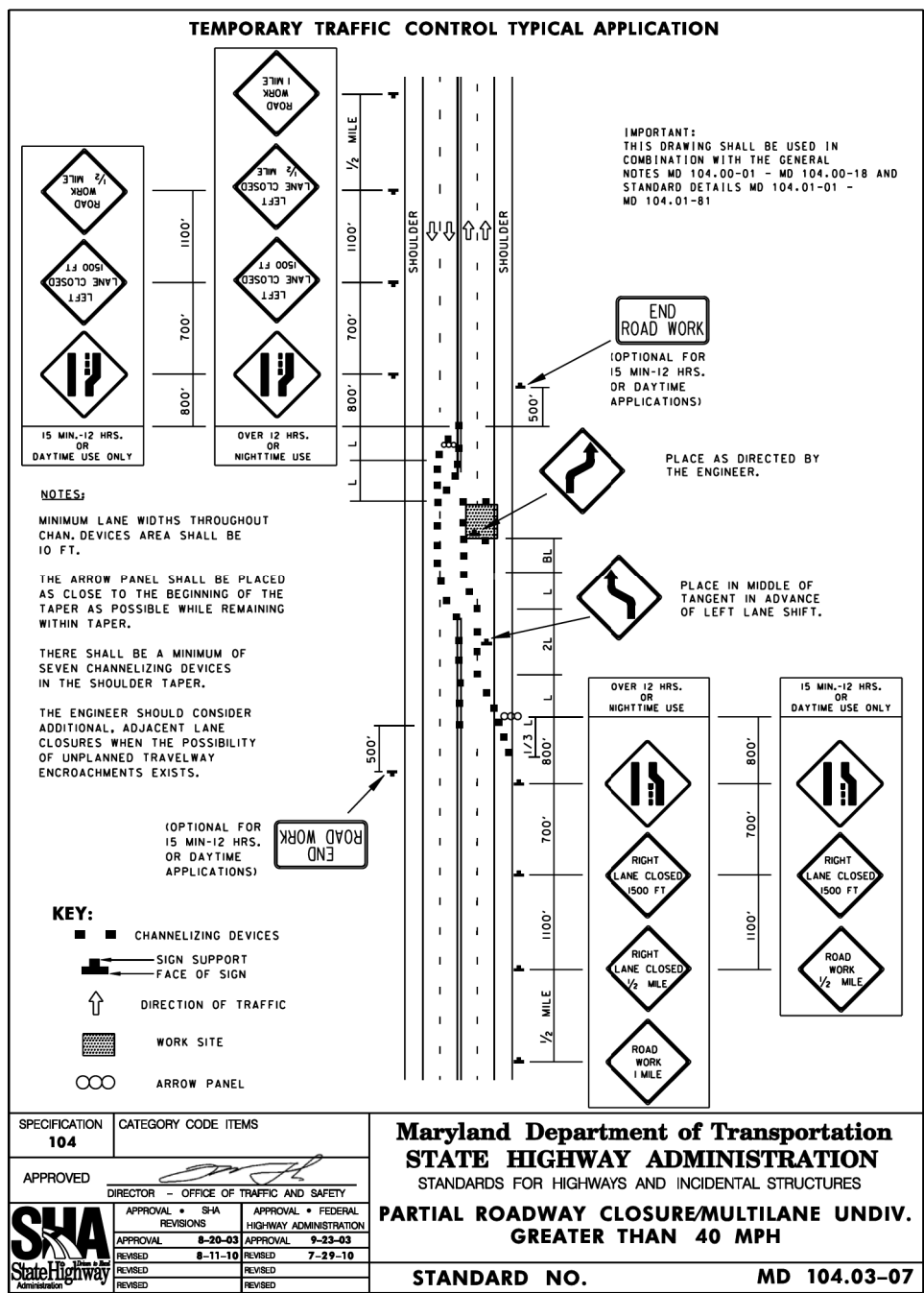
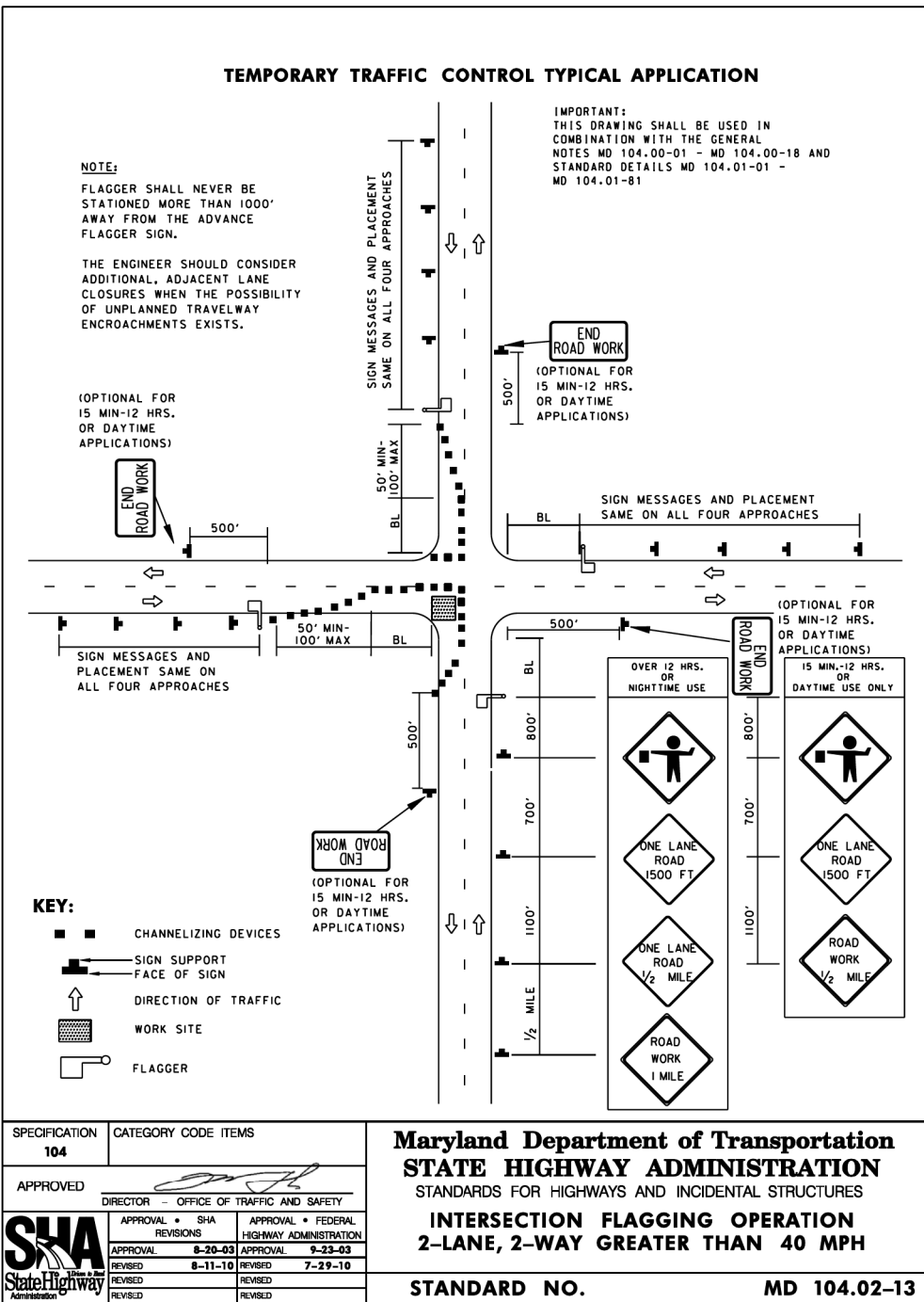
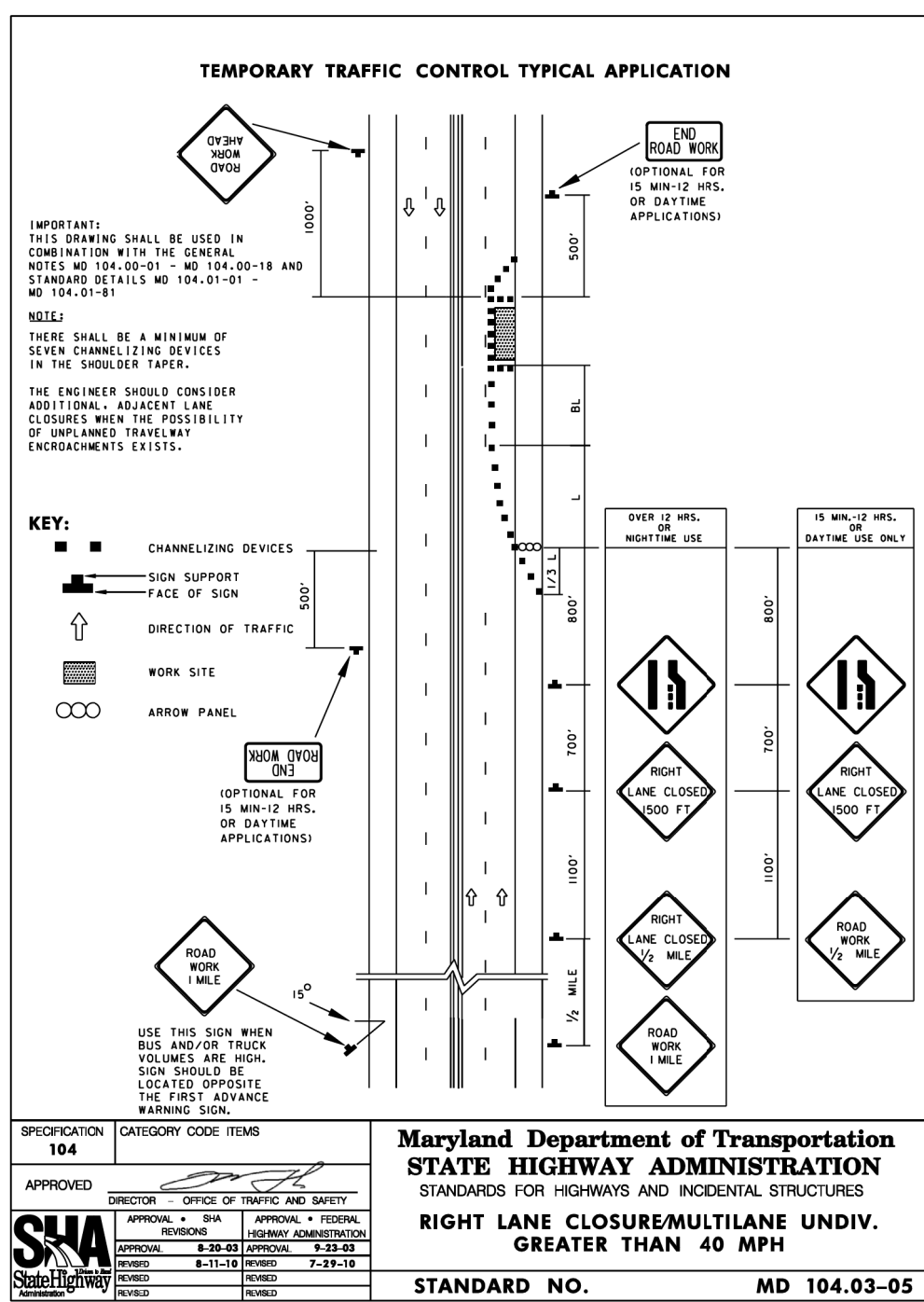
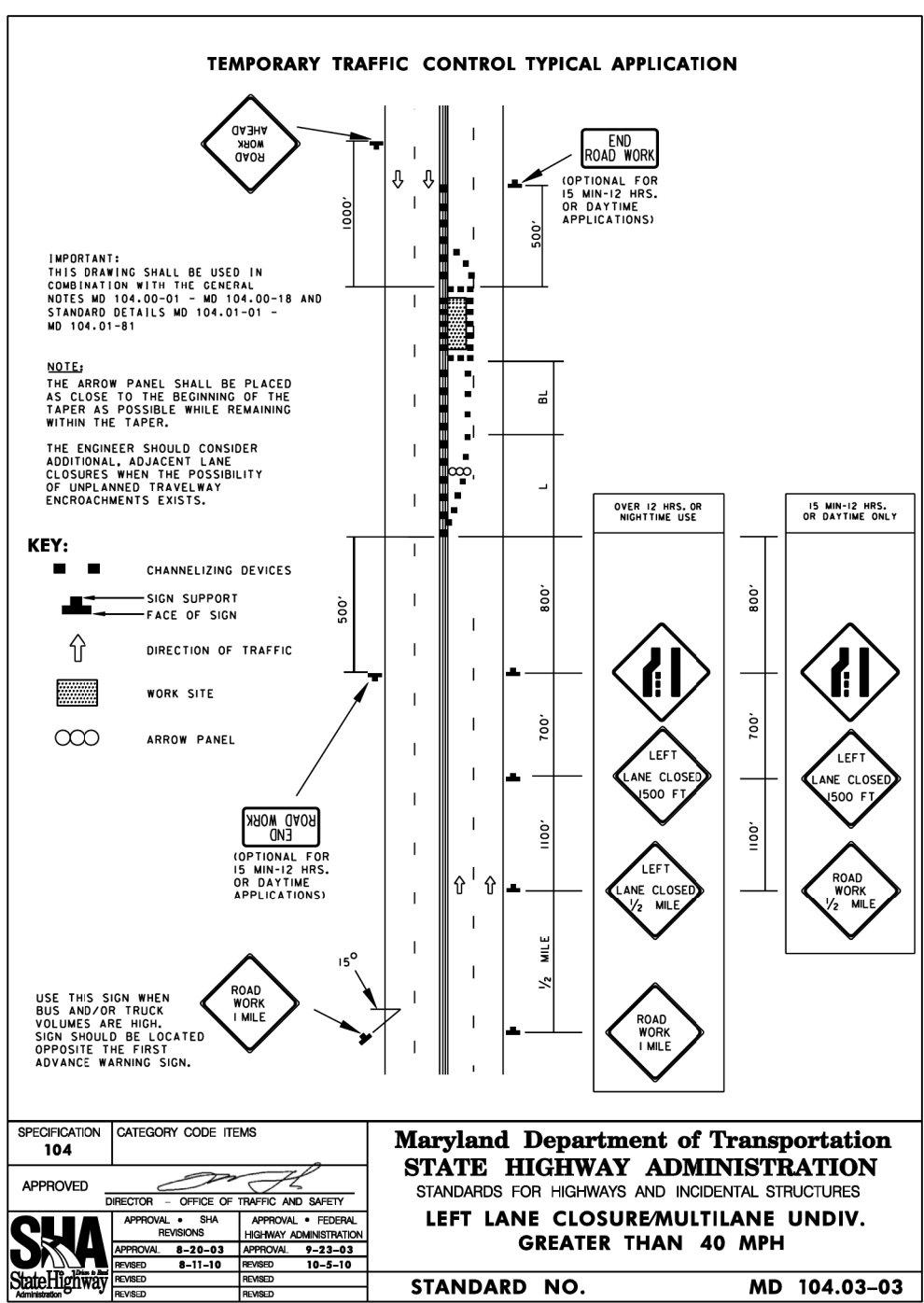
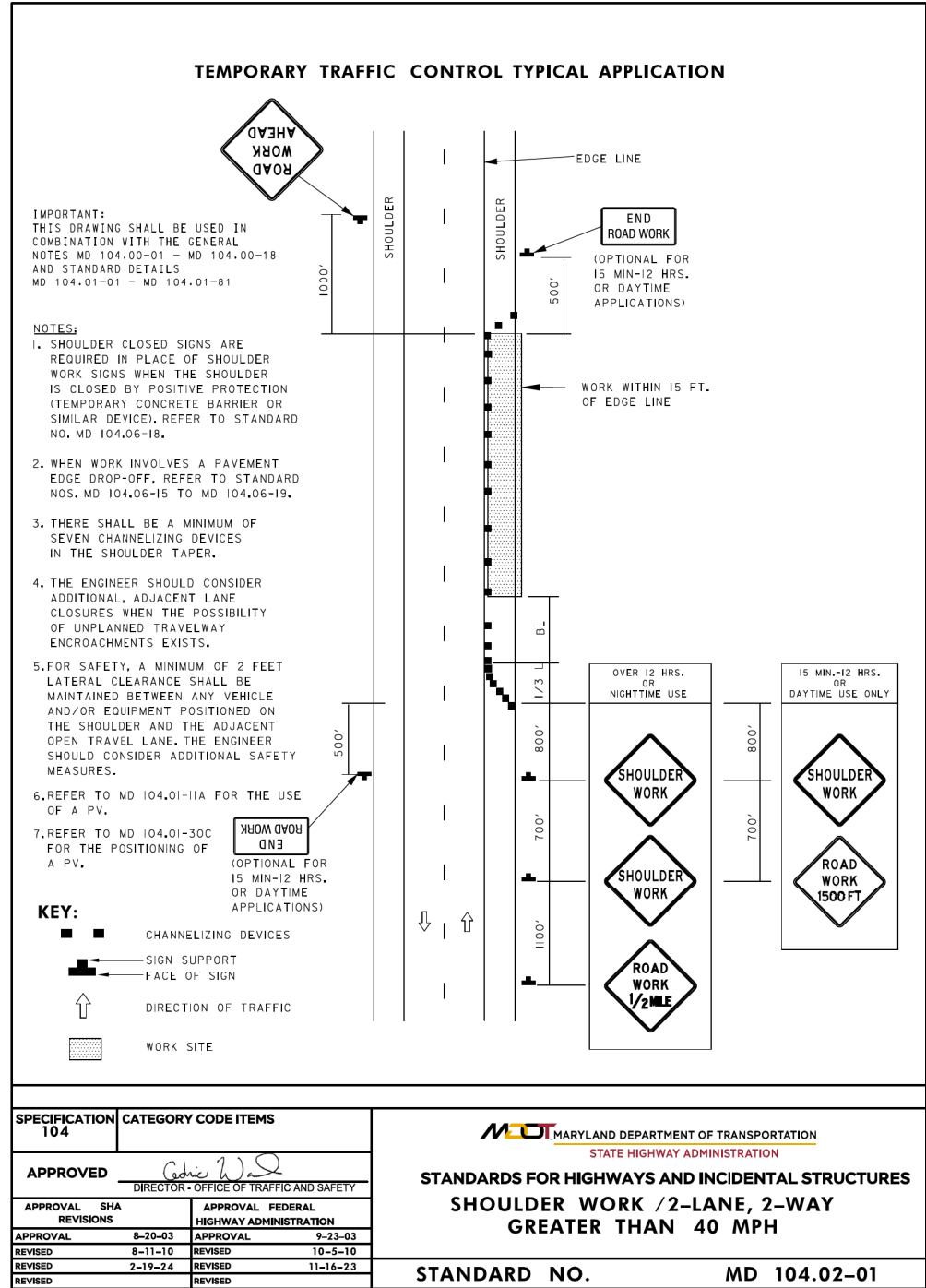
18. COORDINATE WITH BALTIMORE COUNTY UTILITY INSPECTOR TO PLACE TRAFFIC SIGNALS IN FLASH MODE DURING WORK HOURS. THE CONTRACTOR SHALL NOTIFY THE COUNTY INSPECTOR 48 HRS IN ADVANCE OF THE WORK.

19. THE CONTRACTOR WILL NEED TO SETUP A PRECONSTRUCTION MEETING WITH BALTIMORE COUNTY PRIOR TO ANY WORK PERFORMED ON SHAWAN ROAD OR OTHER COUNTY ROADS. THIS MEETING SHALL BE COORDINATED WITH THE MEETING WITH MARYLAND STATE HIGHWAY WHEN TRAFFIC PATTERNS AFFECT MD 45 AND MD 145.

20. ANY SIDEWALK DISTURBANCE DURING CONSTRUCTION SHALL HAVE A SUITABLE MATERIAL/SURFACE IN PLACE TO MAINTAIN ADA ACCESS.

21. MAINTAIN A 60 INCH SIDEWALK WHEN ADDING A NEW FIRE HYDRANT.

22. ALL LANE MARKINGS, STOP BARS AND CROSSWALKS MUST BE RESTORED IN KIND WITH TEMPORARY PAVEMENT MARKINGS.



CITY OF BALTIMORE		REVISION - CITY OF BALTIMORE	
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER	DATE	CHIEF, UTILITY ENGINEERING	DATE
CHIEF, WATER ENGINEERING SECTION	DATE		

SEAL	PROFESSIONAL CERTIFICATION	REVISION	BY	DATE	P.W.A. NO.	KEY SHEET POSITION SHI	DRAWING SCALE	DEPARTMENT OF PUBLIC WORKS	
	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.				R.O.W NO.		PLAN SCALE:	APPROVED BY: DIRECTOR	
	LICENSE NO. 16303, EXPIRATION DATE 12/21/2026				STATE		PROFILE SCALE:	DATE:	
	ENGINEER: _____	DESIGN BY: CK	BUREAU OF ENGINEERING AND CONSTRUCTION	BUILDINGS	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	BUR. OF ENGINEERING & CONSTRUCTION
	AS-BUILT PER RECORD PRINT	DRAWN BY: CK	REVIEWED BY:						APPROVED BY: CHIEF
BY: DATE:	CHKD BY: AMH	DATE REVIEWED:						DATE:	

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING & CONSTRUCTION

24-INCH WATER TRANSMISSION MAIN REPLACEMENT-PHASE 5

YORK ROAD (MARYLAND ROUTE 45)

FROM WIGHT AVENUE TO SHAWAN ROAD

MAINTENANCE OF TRAFFIC PLAN

SUBDIVISION: COCKEYSVILLE

ELECTION DIST. NO.: 8C3

SHEET DESIGNATION	CONTRACT NUMBER
MOT SHEET 01 OF 01	24125-WX0
	JOB ORDER NUMBER
	231-203-0050-0466
	SHEET 15 OF 21
	DRAWING NUMBER
2024-2235	FILE NO.:

DWG. FILENAME:

0:\DWG\2024\2024-2235\2024-2235-0050-0466\MOT TRAFFIC PLAN MD 1322066825.dwg

BALTIMORE COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
BUREAU OF ENGINEERING AND CONSTRUCTION
WATER MAIN REPLACEMENT - PHASE 5
YORK ROAD - MD ROUTE 45
(FROM WIGHT AVENUE TO SHAWAN ROAD)
J.O. 231-203-0050-0466
CONTRACT NO. : 24125 W XO
WORKDAY PROJECT NO. 030500466

INDEX OF DRAWINGS		
SHEET NO.	DRAWING NO.	DRAWING TITLE
17	2024-2237	GRADING/EROSION & SEDIMENT CONTROL TITLE SHEET
18	2024-2238	GRADING, EROSION & SEDIMENT CONTROL PLAN
19	2024-2239	EROSION & SEDIMENT CONTROL NOTES AND DETAILS
20	2024-2240	EROSION & SEDIMENT CONTROL NOTES
21	2024-2241	EROSION & SEDIMENT CONTROL DETAILS

- GRADING NOTES-(DEPS)**
- THE PROPOSED GRADING SHOWN ON THIS PLAN MEETS THE REQUIREMENTS SET FORTH BY BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND COMPLIES WITH ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE. HOWEVER, DUE TO BUILDING TYPES AND LAYOUT, SOME FIELD ADJUSTMENTS MAY BE REQUIRED, ALL CHANGES MUST COMPLY WITH THE ABOVE MENTIONED REQUIREMENTS.
 - ALL SWALES HAVE BEEN DESIGNED BY THE ENGINEER TO CONVEY RUNOFF ACCORDING TO BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS DESIGN STANDARDS.
 - THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FORSET BUFFER EASEMENT OF OTHER FORSET RETENTION AREAS, EXCEPT AS PERMITTED BY BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY.

GRADING NOTE-(SCD)

THE DEVELOPMENT AS PROPOSED WILL INCLUDE PROTECTIVE MEASURES ADEQUATE TO PREVENT EROSION OR SLOUGHING OF ANY STEEP SLOPES AS DEFINED BY SECTION 32-4-101 OF THE BALTIMORE COUNTY CODE AND PROMOTE THE PRESERVATION OF THE NATURAL TOPOGRAPHIC FEATURES OF THE STEEP SLOPE. THIS WILL BE ACHIEVED BY PROVIDING EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT AND THE CURRENT STATE OF MARYLAND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

EXISTING		PROPOSED	
	SANITARY MANHOLE		WATER VALVE
	STORM DRAIN MANHOLE		FIRE HYDRANT
	ELECTRIC HAND BOX		WATER VAULT
	ELECTRIC MANHOLE		WATER METER
	GAS VALVE		CLEANOUT
	GAS VAULT		SANITARY SEWER
	SIGN		GAS
	TELEPHONE MANHOLE		STORM DRAIN
	UTILITY POLE		UNDERGROUND TELEPHONE(MAPPED)
	GUY WIRE		UNDERGROUND TELEPHONE(DESIGNATED)
	LIGHT POLE		UNDERGROUND ELECTRIC(MAPPED)
	BOLLARD POST		UNDERGROUND ELECTRIC(DESIGNATED)
	DECIDUOUS TREE		UNDERGROUND FIBER OPTIC
	CONIFEROUS TREE		UNDERGROUND CABLE TV
	TRAVERSE POINT (FOR SURVEY CONTROLS & TRAVERSE DESCRIPTIONS, SEE PLAN SHEETS)		WATER LINE
			EX. ABANDONED WATER LINE
			PROPERTY LINE
			CONTOUR LINE
			FENCE

SITE INFORMATION	
AREA DISTURBED	0.81 ± ACRES / 35,308 ± SQ.FT.
AREA TO BE ROOFED OR PAVED	0.79 ± ACRES / 34,479 ± SQ.FT.
AREA TO BE VEGETATIVELY STABILIZED	0.02 ± ACRES / 829 ± SQ.FT.
TOTAL CUT	4,540 CU. YD.
TOTAL FILL	4,100 CU. YD.

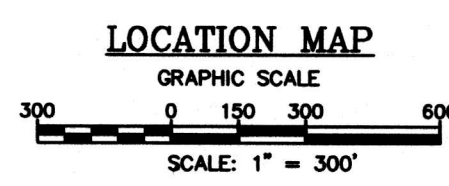
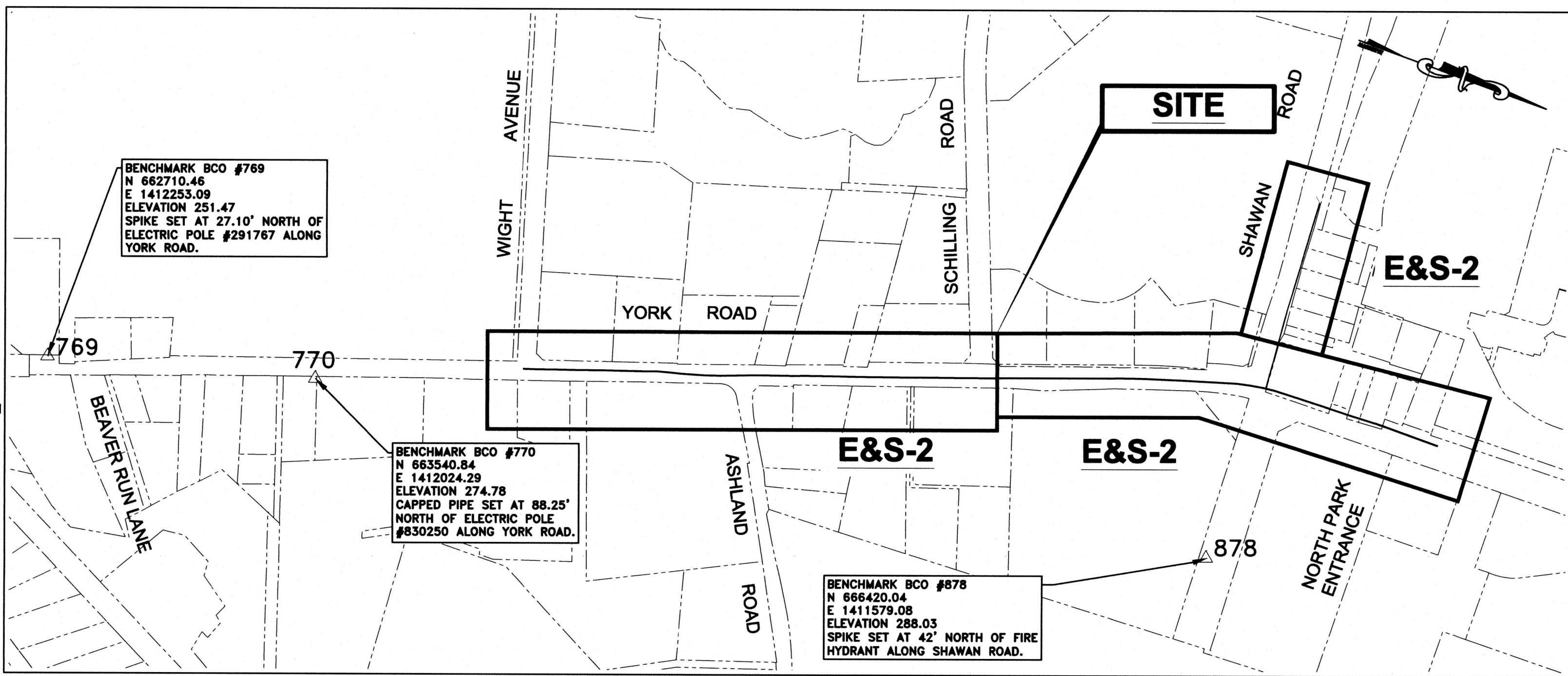
* FOR SEDIMENT AND EROSION CONTROL PURPOSES ONLY

**SURVEY CONTROL DATA
(US SURVEY FEET):**

BCO 769 SPIKE:
NORTHING: 662,710.46
EASTING: 1,412,253.09
ELEVATION: 251.47

BCO 770 CAPPED PIPE:
NORTHING: 663,540.84
EASTING: 1,412,024.29
ELEVATION: 274.78

BCO 878 SPIKE:
NORTHING: 666,420.04
EASTING: 1,411,579.08
ELEVATION: 288.03



OWNER/DEVELOPER: BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
BUREAU OF ENGINEERING AND CONSTRUCTION
WATER DESIGN SECTION
111 WEST CHESAPEAKE AVENUE, ROOM 205
TOWSON, MD 21204
PHONE: 410-887-3783

OWNER'S/DEVELOPER'S CERTIFICATION

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE ALSO CERTIFY THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, AND THAT ANY NEEDED MAINTENANCE WILL BE COMPLETED SO AS TO ENSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATIONS BY THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.

OWNER'S/DEVELOPER'S SIGNATURE: *Sara C. Oulina* DATE: 3/19/2025
PRINT NAME: Sara C. Oulina TITLE: Deputy Director

CONSULTANT'S CERTIFICATION

I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT AND THE CURRENT STATE OF MARYLAND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

CONSULTANT'S SIGNATURE: *John A. Blondell* DATE: 03/07/2025
PRINT NAME: JOHN A. BLONDELL TITLE: 200436
MD LICENSE NO.

OWNER'S/DEVELOPER'S CERTIFICATION - AIR QUALITY

I ACKNOWLEDGE THAT I AM RESPONSIBLE UNDER THE CODE OF MARYLAND REGULATIONS (26.11.06.03) TO PREVENT PARTICULATE MATTER FROM BECOMING AIRBORNE DUE TO GRADING, LAND CLEARING, EXCAVATION, CONSTRUCTION OR OTHER RELATED ACTIVITIES. I WILL CONTACT THE ENVIRONMENTAL HEALTH SECTION AT 410-887-4065 AT LEAST THREE DAYS PRIOR TO BEGINNING WORK.

OWNER'S/DEVELOPER'S SIGNATURE: *Sara C. Oulina* DATE: 3/19/2025
PRINT NAME: Sara C. Oulina TITLE: Deputy Director

OWNER'S/DEVELOPER'S CERTIFICATION - GRADING

I/WE HEREBY CERTIFY THAT ALL GRADING ON THIS SITE WILL BE DONE IN ACCORDANCE WITH THE CURRENT GRADING REQUIREMENTS AS SET FORTH BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND WITH THE REQUIREMENTS SPECIFIED IN ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE.

OWNER'S/DEVELOPER'S SIGNATURE: *Sara C. Oulina* DATE: 3/19/2025
PRINT NAME: Sara C. Oulina TITLE: Deputy Director

STORMWATER MANAGEMENT NOTE:

STORMWATER MANAGEMENT HAS BEEN ADDRESSED THROUGH A STORMWATER MANAGEMENT VARIANCE.
APPROVAL GRANTED PER LETTER DATED DECEMBER 31, 2024. (EPS TRACKING NUMBER 03-24-4250)

BALTIMORE COUNTY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AND SUSTAINABILITY
APPROVED FOR GRADING
DATE: 04-24-25

BALTIMORE COUNTY SOIL CONSERVATION DISTRICT
APPROVED FOR SEDIMENT CONTROL 3-24-25
DATE
DISTRICT OFFICIAL: *Sara C. Oulina*
PLAN NO. 03B-1862, 3-25
TECHNICAL REVIEW FOR THE DISTRICT BY: *Sara C. Oulina*
THIS PLAN APPROVAL WILL EXPIRE THREE (3) YEARS FROM THE APPROVAL DATE.

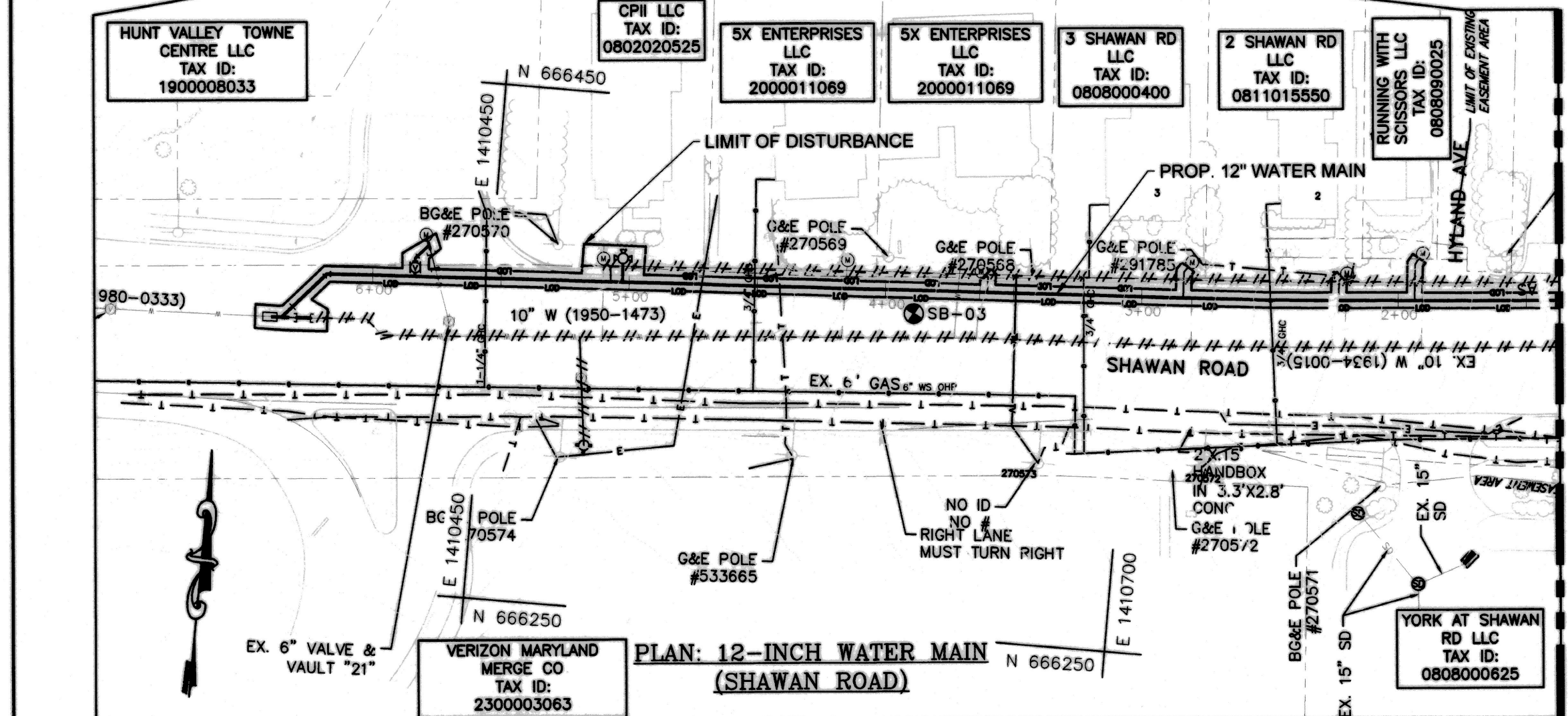
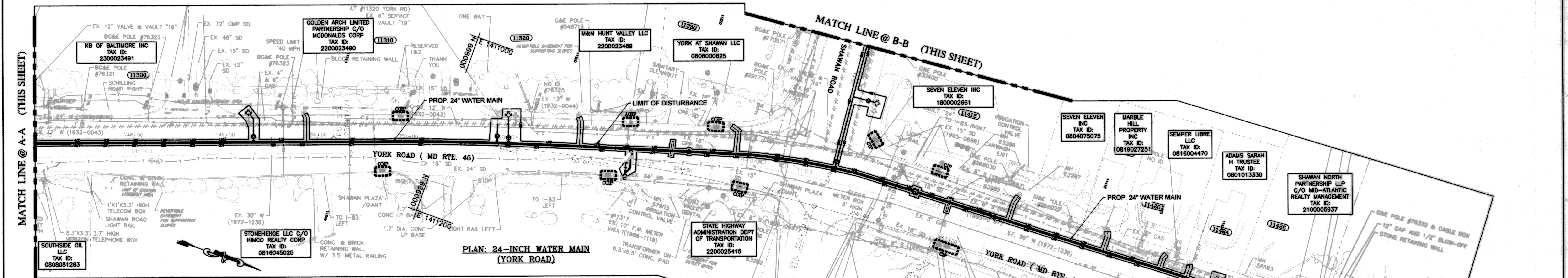
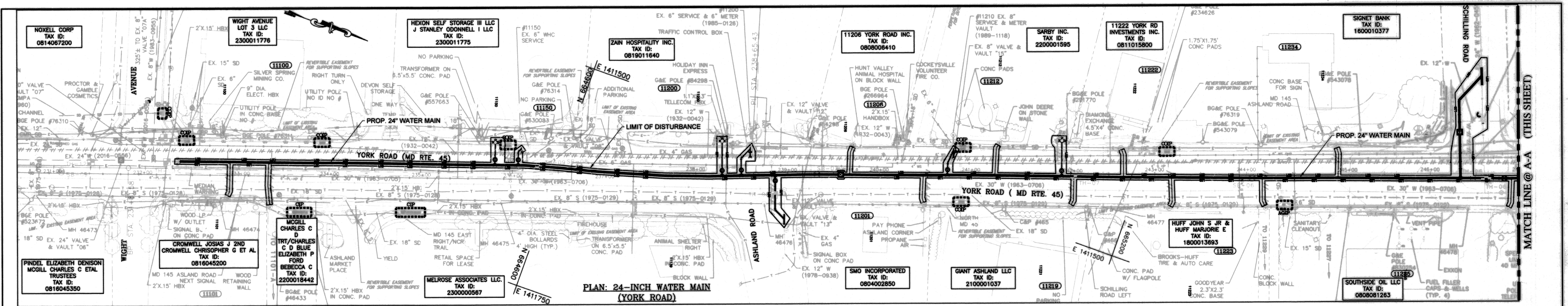
STORMWATER MANAGEMENT PERMIT
NOT REQUIRED

CITY OF BALTIMORE	REVISION - CITY OF BALTIMORE	
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER	CHIEF, UTILITY ENGINEERING DATE	
SEAL OF MARYLAND PROFESSIONAL ENGINEER DATE: Mar 07, 2025	PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 200436, EXPIRATION DATE 9/30/2025	REVISION
ENGINEER: JOHN A. BLONDELL KCI TECHNOLOGIES, INC. AS-BUILT PER RECORD PRINT	DESIGN BY: JCA DRAWN BY: JCA CHKD BY: JAB	BY DATE P.W.A. NO. KEY SHEET POSITION SHI DRAWING SCALE DPW AND TRANSPORTATION
BUREAU OF ENGINEERING AND CONSTRUCTION	BUILDINGS HIGHWAYS STRUCTURES STORM DRAINS SEWER WATER FIELD ENGINEERS	FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION	WATER MAIN REPLACEMENT - PHASE 5 YORK ROAD - MD ROUTE 45 (FROM WIGHT AVENUE TO SHAWAN ROAD)	SUBDIVISION: COCKEYSVILLE	GRADING/EROSION & SEDIMENT CONTROL TITLE SHEET	ELECTION DIST. NO.: 8C3
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SHEET DESIGNATION E&S SHEET 01 OF 05	CONTRACT NUMBER 24125-WXO
JOB ORDER NUMBER 231-203-0050-0466	SHEET 17 OF 21
DRAWING NUMBER 2024-2237	FILE NO.:

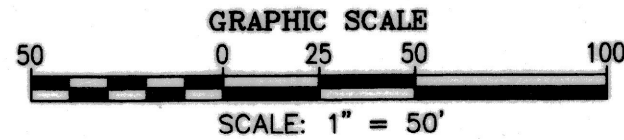
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Date: 03/07/2025 User: John.A.Blondell
Drawing Path: M:\2024\132201868.05\Drawings\132201868.05 E&S-01 E&S TITLE SHEET.dwg



EROSION AND SEDIMENT CONTROL
WILL BE STRICTLY ENFORCED.

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West
3-24-25
DATE

DESIGN AND DRAWING BASED ON
MARYLAND COORDINATE SYSTEM:
HORIZONTAL - NAD 83/91
VERTICAL - NAVD 88



CITY OF BALTIMORE		REVISION - CITY OF BALTIMORE		KCI TECHNOLOGIES	
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER	DATE	CHIEF, UTILITY ENGINEERING	DATE	DESIGNER	DATE
CHIEF, WATER ENGINEERING SECTION	DATE	CHIEF, WATER ENGINEERING SECTION	DATE	DESIGNER	DATE
SEAL OF MARYLAND PROFESSIONAL ENGINEER		REVISION		BY DATE P.W.A. NO. KEY SHEET POSITION SET DRAWING SCALE DPW AND TRANSPORTATION	
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 200436 EXPIRATION DATE 9/30/2025		REVISION		R.O.W. NO. VSE VNE 70NW7 71NW7 72NW7 73NW7 PLAN SCALE: AS SHOWN PROFILE SCALE: AS SHOWN FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	
ENGINEER: JOHN A. BLONDELL KCI TECHNOLOGIES, INC. DESIGN BY: JCA		BUREAU OF ENGINEERING AND CONSTRUCTION BUILDINGS HIGHWAYS STRUCTURES STORM DRAINS SEWER WATER FIELD ENGINEERS BUR. OF ENGINEERING & CONSTRUCTION		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	
AS-BUILT PER RECORD PRINT DRAWN BY: JCA		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221		FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221	
CHKD BY: JAB					

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION		SHEET DESIGNATION CONTRACT NUMBER	
WATER MAIN REPLACEMENT - PHASE 5		E&S SHEET 02 OF 05 24125-WX0	
YORK ROAD - MD ROUTE 45		JOB ORDER NUMBER	
(FROM WIGHT AVENUE TO SHAWAN ROAD)		231-203-0050-0466	
GRADING, EROSION AND SEDIMENT CONTROL PLAN		SHEET 16 OF 21	
SUBDIVISION: COCKEYSVILLE		DRAWING NUMBER	
		2024-2238	
		FILE NO.:	

DWG. FILENAME: 132201868.05 E&S-02.dwg User: JAB Date: 03/07/2025 Drawing Path: R:\2023\132201868.05 Drawings\132201868.05 E&S-02.dwg

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- REFER TO "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
- WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT.
- AT THE END OF EACH WORKING DAY, ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN OPERATIONAL CONDITION.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
A.) THREE (3) CALENDAR DAYS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1), AND B.) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
- ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO BALTIMORE COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
- DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PG. H.22, FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
- ANY VARIATIONS FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.
- EXCESS CUT OR BORROW MATERIAL SHALL GO TO, OR COME FROM, RESPECTIVELY, A SITE WITH AN OPEN GRADING PERMIT AND APPROVED SEDIMENT CONTROL PLAN.
- THE FOLLOWING ITEM MAY BE USED AS APPLICABLE: REFER TO "MARYLAND'S GUIDELINES TO WATERWAY CONSTRUCTION" BY THE WATER MANAGEMENT ADMINISTRATION (WMA) OF THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, REVISED NOVEMBER, 2000, FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN FOR WATERWAY CONSTRUCTION.
- PUMPING SEDIMENT LADEN WATER INTO WATERS OF THE STATE IS STRICTLY PROHIBITED. ANY PORTABLE DEWATERING DEVICE MUST BE LOCATED WITHIN THE LIMIT OF DISTURBANCE.
- UPON INSTALLATION OF THE BASE PAVEMENT AND AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR, RELOCATE THE STABILIZED CONSTRUCTION ENTRANCE(S) AND INSTALL ADDITIONAL CONTROL MEASURES (STABILIZED CONSTRUCTION ENTRANCES, SILT FENCES, SUPER SILT FENCES) AS NEEDED TO CONTROL SEDIMENT RUNOFF FROM DISTURBED AREAS. THE ADDITIONAL CONTROLS MUST NOT ALTER DRAINAGE PATTERNS.

PROJECT DESCRIPTION

THIS PROJECT IS A LINEAR UNDERGROUND WATER INSTALLATION CONSISTING OF 3/4-INCH THROUGH 24-INCH WATER MAIN FOR APPROXIMATELY 3,000 FEET WITHIN THE PAVED LIMITS OF YORK ROAD AND ASSOCIATED SIDE STREETS FROM WIGHT AVENUE TO SHAWAN ROAD AND APPROXIMATELY 650 FEET OF 12-INCH WATER MAIN WITHIN THE PAVED LIMITS OF SHAWAN ROAD EXTENDING WEST FROM YORK ROAD.

EROSION AND SEDIMENT CONTROL NOTES

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN. REFERENCE MANUALS INCLUDE: 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, MARYLAND GUIDELINES FOR WATERWAY CONSTRUCTION, DATE 2000, AND BALTIMORE COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS DATED JANUARY 2000, AND BALTIMORE COUNTY STANDARD DETAILS FOR CONSTRUCTION DATED 2007.
- THE CONTRACTOR SHALL NOT BEGIN CONSTRUCTION ON ANY INDIVIDUAL PARCEL OF LAND UNTIL BALTIMORE COUNTY HAS OBTAINED THE LEGAL RIGHTS FOR THAT PARCEL.
- SEQUENCE OF CONSTRUCTION
 - CONTRACTOR SHALL OBTAIN ANY NECESSARY EASEMENTS OR RIGHT-OF-WAYS PRIOR TO BEGINNING WORK.
 - ALL FEDERAL, STATE AND LOCAL PERMITS MUST BE OBTAINED PRIOR TO THE PRE-CONSTRUCTION MEETING.
 - NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS (DPAI, SEDIMENT CONTROL) (410-887-3228); AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
 - IF APPLICABLE, ORANGE HIGH VISIBILITY FENCE SHALL BE MANUALLY INSTALLED ALONG THE LIMIT OF DISTURBANCE, WHERE THE LIMIT IS WITHIN 50 FEET OF THE FOREST BUFFER/CONSERVATION EASEMENT. THIS SHALL BE COMPLETED BY AND INSPECTED AT THE PRE-CONSTRUCTION MEETING. THE LIMIT OF DISTURBANCE (LOD) WILL BE CLEARLY DEFINED IN THE FIELD. THIS DEMARCATION SHALL BE INSPECTED AND APPROVED BY THE BALTIMORE COUNTY SEDIMENT CONTROL INSPECTOR AT THE PRE-CONSTRUCTION MEETING.
 - IF NECESSARY CLEAR AND GRUB AS NECESSARY FOR THE INSTALLATION OF ALL SEDIMENT CONTROL MEASURES OR DEVICES. THE IMPLEMENTATION AND LOCATION OF ANY STABILIZED CONSTRUCTION ENTRANCE/S SHALL BE AT THE SOLE DISCRETION OF THE SEDIMENT CONTROL INSPECTOR. INSTALLATION OF INLET PROTECTION/S IN ROADWAYS SHALL ONLY BE AT THE SOLE DISCRETION OF THE SEDIMENT CONTROL INSPECTOR.
 - IF NECESSARY INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES.
 - NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL (DPAI, SC) UPON COMPLETION OF SAID INSTALLATION.
 - WITH THE APPROVAL OF BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL, AND THE SEDIMENT CONTROL INSPECTOR, PROCEED TO STEP 9.
 - INSTALL WATER MAIN/SERVICES/FIRE HYDRANTS AND APPURTENANCES. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE UTILITY NOTES AND DAILY STABILIZATION NOTE ON THIS SHEET. SEE ALL OTHER NOTES/GUIDELINES ON THE APPROVED PLANS. FINE GRADE & PROVIDE PERMANENT STABILIZATION AS REQUIRED.
 - UPON COMPLETION AND STABILIZATION OF THE SITE WITH ESTABLISHED VEGETATION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL MEASURES AND STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS.
- EXCAVATED TOPSOIL AND SUBSOIL SHALL BE KEPT SEPARATE AND PROTECTED AS FOLLOWS:
 - TEMPORARY STOCKPILES (IF EMPLOYED IN LIEU OF TRUCKS) SHALL BE LOCATED WITHIN THE LIMIT OF DISTURBANCE (LOD).
 - TEMPORARY STOCKPILES (IF EMPLOYED IN LIEU OF TRUCKS) SHALL DRAIN TO A FUNCTIONING SEDIMENT CONTROL DEVICE.
 - TEMPORARY STOCKPILES (IF EMPLOYED IN LIEU OF TRUCKS) SHALL BE POSITIONED TO NOT IMPEDE UPON, OR IMPAIR THE FUNCTION OF SAID DEVICE.
 - TEMPORARY STOCKPILES (IF EMPLOYED IN LIEU OF TRUCKS) SHALL BE POSITIONED TO NOT ALTER DRAINAGE DIVIDES.
- POINT OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED TO PREVENT THE TRACKING OF SOIL ONTO PUBLIC WAYS BY USING STABILIZED CONSTRUCTION ENTRANCE AT THE INTERFACES WITH PUBLIC ROADWAYS.
- ANY DEWATERING DISCHARGE SHALL BE PLACED INTO AN APPROVED DEWATERING STRUCTURE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD DETAILS.

INLET PROTECTION NOTE

THE CONTRACTOR IS REQUIRED TO INSTALL INLET PROTECTION ON ALL STORM DRAIN INLETS WITH THE EXCEPTION OF THE FOLLOWING:

- ANY INLET OUTFALLING DIRECTLY INTO A SEDIMENT TRAPPING DEVICE.
- INLETS ON PRIVATE OR PUBLIC PAVED ROADWAYS OPEN TO THE PUBLIC.

ALL INLET PROTECTION WILL BE INSTALLED AS DIRECTED BY THE INSPECTOR IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL PAGE E.23 (OR AS MAY BE AMENDED). THE REMOVAL OF ANY INLET PROTECTION DEVICES WILL REQUIRE APPROVAL FROM THE INSPECTOR.

- STORM DRAINS TO BE FLUSHED PRIOR TO TRAPPING DEVICE REMOVAL.

DAILY STABILIZATION NOTE

THE CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHALL BE AS FOLLOWS:

- FOR AREAS TO BE PAVED, THE APPLICATION OF STONE BASE.
- FOR AREAS TO BE VEGETATIVELY STABILIZED:
 - PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOD FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
 - PERMANENT SEED AND MULCH FOR ALL OTHER AREAS.
- ANY AREAS THAT CANNOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWNSLOPE SIDE.

UTILITY NOTES

- CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY. IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY, SILT FENCE SHALL BE PLACED BELOW (DOWNSLOPE OF) OR THE STEEL PLATES SHALL BE PLACED ON THE TRENCH, AS APPROPRIATE..
- PLACE ALL EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH.
- ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

SEDIMENT CONTROL TRAFFIC NOTE

ANY TRAVEL LANE CLOSED BEFORE 9:00 A.M. OR AFTER 3:30 P.M. MUST BE APPROVED BY BALTIMORE COUNTY BUREAU OF TRAFFIC ENGINEERING AND TRANSPORTATION PLANNING AT 410-887-3554. REFER TO SHA PERMIT FOR STATE ROADS.

MAINTENANCE NOTE

CONTRACTOR SHALL INSPECT AND MAINTAIN ALL SEDIMENT CONTROL MEASURES AND DEVICES AFTER EVERY STORM EVENT. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO THE REMOVAL OF ALL ACCUMULATED SEDIMENT. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED TO ENSURE PROPER FUNCTION.

H-1 STANDARDS AND SPECIFICATIONS

FOR
MATERIALS

Table H.1: Geotextile Fabrics

PROPERTY	TEST METHOD	WOVEN SPLIT FILM GEOTEXTILE		WOVEN MONOFILAMENT GEOTEXTILE		NONWOVEN GEOTEXTILE	
		MINIMUM AVERAGE ROLL VALUE ¹					
		MD	CD	MD	CD	MD	CD
Grab Tensile Strength	ASTM D-4632	200 lb	200 lb	370 lb	250 lb	200 lb	200 lb
Grab Tensile Elongation	ASTM D-4632	15%	10%	15%	15%	50%	50%
Trapezoidal Tear Strength	ASTM D-4533	75 lb	75 lb	100 lb	60 lb	80 lb	80 lb
Puncture Strength	ASTM D-6241	450 lb		900 lb		450 lb	
Apparent Opening Size ²	ASTM D-4751	U.S. Sieve 30 (0.59 mm)		U.S. Sieve 70 (0.21 mm)		U.S. Sieve 70 (0.21 mm)	
Permittivity	ASTM D-4491	0.05 sec ⁻¹		0.28 sec ⁻¹		1.1 sec ⁻¹	
Ultraviolet Resistance Retained at 500 hours	ASTM D-4355	70% strength		70% strength		70% strength	

¹ All numeric values except apparent opening size (AOS) represent minimum average roll values (MARV). MARV is calculated as the typical minus two standard deviations. MD is machine direction; CD is cross direction.

² Values for AOS represent the average maximum opening.

Geotextiles must be evaluated by the National Transportation Product Evaluation Program (NTPPE) and conform to the values in Table H.1.

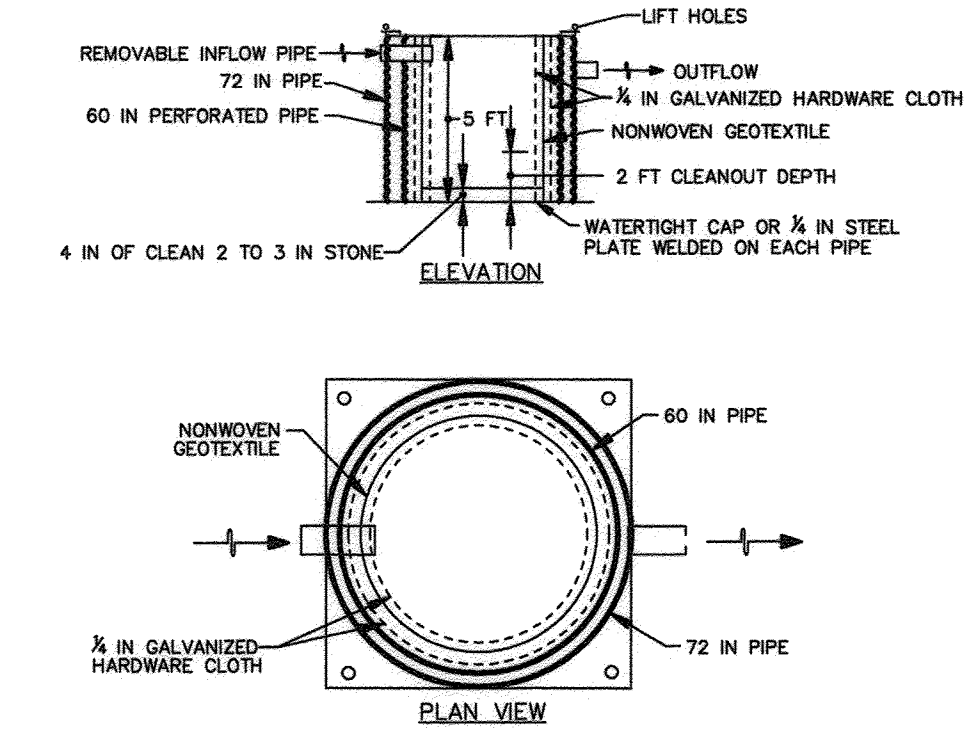
The geotextile must be inert to commonly encountered chemicals and hydrocarbons and must be rot and mildew resistant. The geotextile must be manufactured from fibers consisting of long chain synthetic polymers and composed of a minimum of 95 percent by weight of polyolefins or polyesters, and formed into a stable network so the filaments or yarns retain their dimensional stability relative to each other, including selvages.

When more than one section of geotextile is necessary, overlap the sections by at least one foot. The geotextile must be pulled taut over the applied surface. Equipment must not run over exposed fabric. When placing riprap on geotextile, do not exceed a one foot drop height.

H.1

DETAIL F-3 PORTABLE SEDIMENT TANK

STANDARD SYMBOL



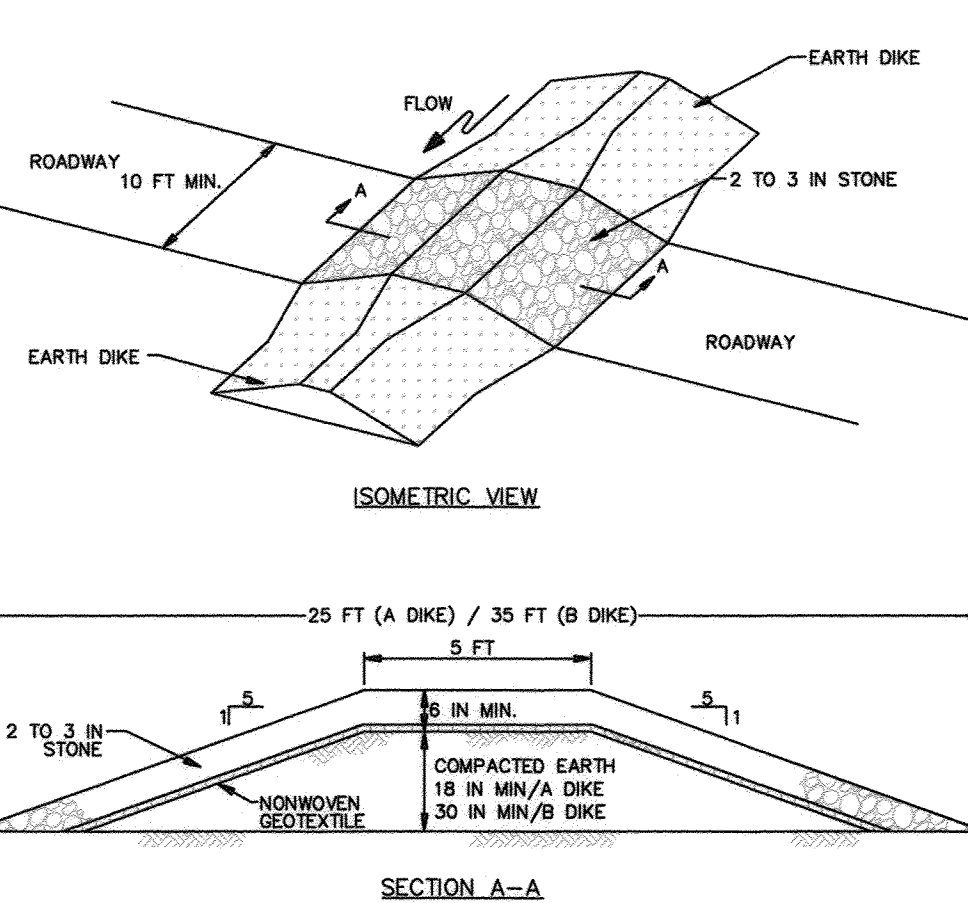
CONSTRUCTION SPECIFICATIONS

- PROVIDE 1 CUBIC FOOT OF STORAGE FOR EACH GALLON PER MINUTE OF PUMP CAPACITY. REQUIRED STORAGE VOLUME MAY BE ATTAINED BY PLACEMENT OF TANKS IN PARALLEL, WITH INFLOW EVENLY DISTRIBUTED AMONG TANKS. OVERTOPPING OF TANKS IS NOT PERMITTED.
- USE 60 INCH CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS, 6 INCHES ON CENTER FOR THE INNER PIPE. LINE PIPE WITH NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, SANDWICHED BETWEEN, AND ATTACHED TO, 1/2 INCH HARDWARE CLOTH.
- OVERLAP GEOTEXTILE 8 INCHES MINIMUM AT VERTICAL SEAM AND AT THE BOTTOM PLATE.
- ANCHOR GEOTEXTILE AT BOTTOM OF TANK WITH 4 INCHES OF 2 TO 3 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE.
- USE 72 INCH CORRUGATED METAL OR PLASTIC OUTER PIPE WITH PERMANENT OUTFLOW PIPE WITH INVERT LOWER THAN INFLOW PIPE.
- INFLOW PIPE MUST DISCHARGE INTO INNER PIPE AND BE REMOVABLE.
- PLACE TANK ON LEVEL SURFACE AND DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
- A PORTABLE SEDIMENT TANK REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT FROM INNER PIPE WHEN IT REACHES TWO FEET IN DEPTH. IF SYSTEM CLOGS, PULL OUT INNER PIPE, REMOVE ACCUMULATED SEDIMENT, AND REPLACE GEOTEXTILE. KEEP POINT OF DISCHARGE FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
F.7		

DETAIL C-8 MOUNTABLE BERM

STANDARD SYMBOL



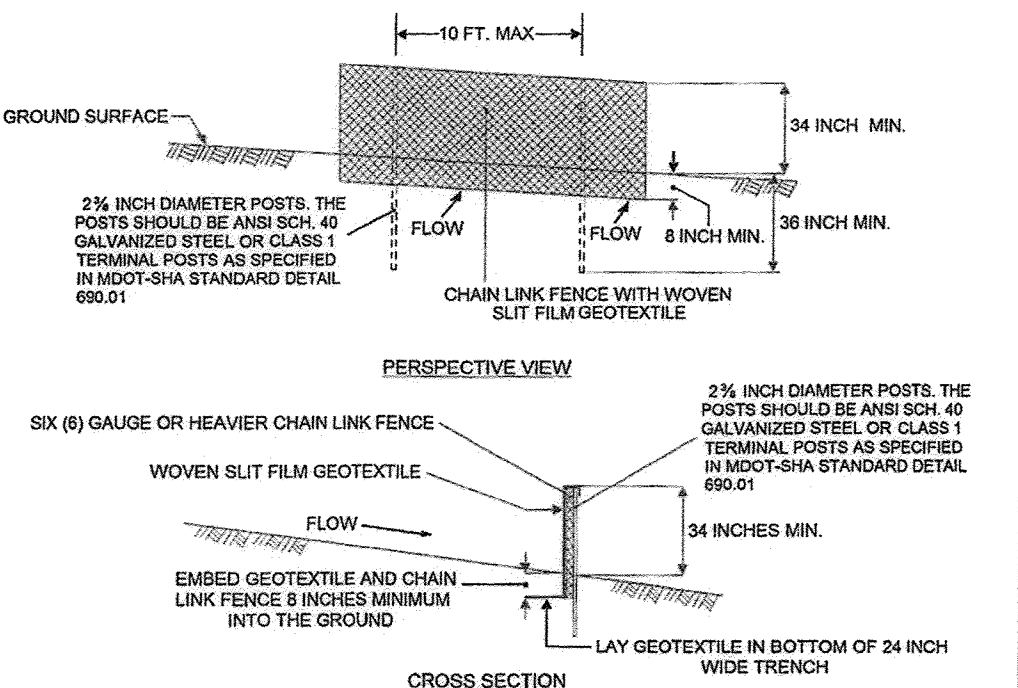
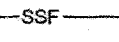
CONSTRUCTION SPECIFICATIONS

- USE MINIMUM WIDTH OF 10 FEET TO ALLOW FOR VEHICULAR PASSAGE.
- PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE EARTH MOUND PRIOR TO PLACING STONE.
- PLACE 2 TO 3 INCH STONE OR EQUIVALENT RECYCLED CONCRETE AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE MOUNTABLE BERM.
- MAINTAIN LINE, GRADE, AND CROSS SECTION. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN SPECIFIED DIMENSIONS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
C.24		

DETAIL E-3 SUPER SILT FENCE

STANDARD SYMBOL



CONSTRUCTION SPECIFICATIONS

- INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.15 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
- FASTEN 6 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
- FASTEN WOVEN SPLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND. LAY THE GEOTEXTILE IN THE BOTTOM OF THE 24 INCH WIDE TRENCH.
- WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BYPASS.
- EXTEND BOTH ENDS OF THE SUPER SILT FENCE UPHILL A MINIMUM OF 3 VERTICAL FEET TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
- PROVIDE MANUFACTURERS CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 50% OF THE FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED - 2012 REVISED - 5/2003	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

APPENDIX 17

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West
3-24-25
DATE

CITY OF BALTIMORE		REVISION - CITY OF BALTIMORE		 KCI TECHNOLOGIES 908 Baltimore Ave. Baltimore, MD 21102 Phone: 410-336-7800 Fax: 410-336-7817 www.kci.com
CHIEF, WATER & WASTEWATER ENG. DIV. BUREAU OF WATER AND WASTEWATER		CHIEF, UTILITY ENGINEERING		
DATE: _____		DATE: _____		
CHIEF, WATER ENGINEERING SECTION		DATE: _____		
SEAL: STATE OF MARYLAND PROFESSIONAL ENGINEER I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 200436 EXPIRATION DATE 9/30/2025 ENGINEER: JOHN A. BLONDELL KCI TECHNOLOGIES, INC. AS-BUILT PER RECORD PRINT BY: _____ DATE: _____ DESIGN BY: JCA DRAWN BY: JCA CHKD BY: JAB				
FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221				

BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SH	DRAWING SCALE	DPW AND TRANSPORTATION
					PLAN SCALE: N/A	
		R.O.W NO.	VSE & VNE		PROFILE SCALE: N/A	FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221
		STATE				
BUREAU OF ENGINEERING AND CONSTRUCTION	BUILDINGS	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER
						FIELD ENGINEER
FOR ORIGINAL SIGNATURES REFER TO DRAWING NUMBER 2024-2221						

SUBDIVISION: COCKEYSVILLE

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION - BUREAU OF ENGINEERING & CONSTRUCTION
WATER MAIN REPLACEMENT - PHASE 5
YORK ROAD - MD ROUTE 45
(FROM WIGHT AVENUE TO SHAWAN ROAD)
EROSION & SEDIMENT CONTROL NOTES AND DETAILS

ELECTION DIST. NO.: 8C3

SHEET DESIGNATION	CONTRACT NUMBER
E&S SHEET 03 OF 05	24125-WX0
	JOB ORDER NUMBER
	231-203-0050-0466
	SHEET 19 OF 21
	DRAWING NUMBER
	2024-2239
	FILE NO.:

