

# WOODLEIGH DRIVE WATER MAIN EXTENSION

## HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS CAPITAL PROJECT NO. W8698 CONTRACT NO. 44-5181



LOCATION MAP  
NOT TO SCALE



WATER ZONE: 550 SOUTH  
TEST GRADIENT: 827 FT  
TEST PRESSURE: 193 PSI  
TYPE OF BUILDINGS: RESIDENTIAL  
NUMBER OF PARCELS: N/A  
WATER HOUSE CONNECTIONS: 3  
SEWER HOUSE CONNECTIONS: N/A  
DRAINAGE AREA: LITTLE PATUXENT

VICINITY MAP  
SCALE: 1" = 600'

STATION#	EAST	NORTH	ELEVATION
35A	1,346,039.778	555,450.556	412.302
36DB	1,350,945.671	559,940.816	344.648
36DF	1,239,924.206	558,122.368	392.348

### INDEX OF DRAWINGS

SHEET NO.	DRAWING NO.	DESCRIPTION
1	G-01	TITLE SHEET, GENERAL NOTES AND INDEX OF DRAWINGS
2	G-02	ABBREVIATIONS, LEGEND, SURVEY CONTROL AND WATER SHUTOFF
3	C-01	WATER PLAN AND PROFILE
4	C-02	WATER DETAILS
5	ES-01	EROSION AND SEDIMENT CONTROL PLAN AND NOTES

### WATER NOTES:

- ALL PROPOSED WATER MAINS SHALL BE POLYVINYL CHLORIDE (PVC) PRESSURE CLASS DR-18 IN ACCORDANCE WITH ANSI/AWWA C900, WITH DUCTILE IRON (DI) FITTINGS.
- ALL HYDRANTS, MAINLINE GATE VALVES, WATER SERVICE VALVES AND PIPING, AND SIMILAR APPURTENANCES (FOR BOTH PERMANENT AND TEMPORARY INSTALLATIONS) SHALL BE RATED FOR A MINIMUM OPERATING PRESSURE OF 250 PSI.
- TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS RESTRAINED JOINTS ARE INSTALLED AS SPECIFIED ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL TIE-INS TO EXISTING WATER MAINS SHALL BE COORDINATED WITH THE HOWARD COUNTY BUREAU OF UTILITIES AT LEAST 10 WORKING DAYS PRIOR TO SCHEDULING THE WORK.
- SALVAGEABLE VALVES AND APPURTENANCES TO BE REMOVED SHALL BE DELIVERED TO THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - BUREAU OF UTILITIES, AS DIRECTED BY THE ENGINEER OR THE COUNTY.
- IN ACCORDANCE WITH THE 10 STATE STANDARD REQUIREMENTS, WHERE PROPOSED WATER MAIN CROSSES EXISTING OR PROPOSED SEWER, THE WATER MAINS SHALL BE INSTALLED WITH MINIMUM 18-INCHES VERTICAL CLEARANCE (BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER). ALL CROSSINGS OF THE NEW WATER MAIN WITH EXISTING SANITARY OR STORM SEWER PIPING SHALL BE ACCOMPLISHED BY CENTERING A FULL LENGTH OF THE NEW WATER MAIN PIPING AT THE CROSSING TO MAXIMIZE THE DISTANCE OF ANY WATER MAIN JOINT FROM THE CROSSING.
- NO WATER SHALL BE DISCHARGED FROM THE EXISTING WATER MAIN TO THE ENVIRONMENT, WITHOUT FIRST DECHLORINATING. THE CONTRACTOR SHALL SUBMIT THE DECHLORINATION METHOD TO THE ENGINEER FOR REVIEW.
- TRACER WIRES AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL DIP AND PVC WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
- FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AWWA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
- UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. SEVENTEEN (17) POUND MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSSES. TWELVE (12) POUND ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL "TEES" USED WITH PVC MAINS SHALL BE DUCTILE IRON.
- PROPER ASSEMBLY OF GASKETED PVC PIPE JOINTS: THE MANUFACTURER'S INSERTION LINE OF GASKETED PVC PIPE JOINTS INDICATES THE MAXIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. AFTER ASSEMBLY OF THE JOINT, THE INSERTION LINE SHALL REMAIN VISIBLE. DUAL INSERTION LINES ON GASKETED PVC PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. THE CONTRACTOR SHALL NOT OVER INSERT OR OVER HOME THE SPIGOT INTO THE BELL OF PVC PIPE.
- ALL CHANGES IN HORIZONTAL OR VERTICAL DIRECTION OF PVC WATER PIPE SHALL BE MADE WITH STANDARD BENDS, 5-DEGREE SWEEPS OR HIGH DEFLECTION (HD) COUPLINGS. NO BENDING OF THE PIPE OR DEFLECTING OF PVC PIPE JOINTS IS PERMITTED. WHERE HIGH DEFLECTION COUPLINGS OR 5-DEGREE SWEEPS ARE TO BE INSTALLED, THE CONTRACTOR SHALL PROVIDE ONE FULL PIPE LENGTH (20-FOOT LONG) ON EITHER SIDE OF THE HIGH DEFLECTION COUPLING OR 5-DEGREE SWEEP. THE CONTRACTOR SHALL USE A VIBRATORY PLATE COMPACTOR OR OTHER APPROVED MEANS TO THOROUGHLY COMPACT THE #57 STONE ON BOTH SIDES OF THE HIGH DEFLECTION COUPLING OR 5-DEGREE SWEEP, TAKING CARE NOT TO USE COMPACTION EQUIPMENT DIRECTLY OVER THE FITTING.
- PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL DEFLECTION OF 3-DEGREES (1-1/2 DEGREE ON EITHER END OF THE COUPLING), SHALL BE RATED FOR A MINIMUM 235 PSI MEETING THE REQUIREMENTS OF AWWA C900, SHALL HAVE A MINIMUM LAY LENGTH OF 9-INCHES AND SHALL HAVE CENTER STOPS. PVC HIGH DEFLECTION COUPLINGS SHALL BE CERTAINTIEED PVC HIGH DEFLECTION (HD) STOP COUPLINGS OR EQUAL. FIVE DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 235 PSI, DR-18, MEETING THE REQUIREMENTS OF ANSI/AWWA C900 AND SHALL BE MULTI FITTINGS (IPEX) BLUE BRUTE DR-18 OR EQUAL.
- WITHIN THE LIMITS OF RESTRAINED JOINTS, RESTRAINED COUPLINGS SHALL BE USED IN LIEU OF HIGH DEFLECTION COUPLINGS. RESTRAINED COUPLINGS SHALL BE LIMITED TO A TOTAL DEFLECTION OF 3-DEGREES (1-1/2 DEGREE ON EITHER END OF THE COUPLING), THE PIPE SHALL BE INSERTED AN EQUAL DEPTH ON BOTH SIDES OF THE COUPLING. THE CONTRACTOR SHALL PROVIDE CORROSION PROTECTION AS PER STANDARD DETAILS AND AS SHOWN IN THESE DRAWINGS. RESTRAINED COUPLINGS SHALL BE RATED FOR A MINIMUM 235 PSI, DR-18, MEETING THE REQUIREMENTS OF ANSI/AWWA C900 AND SHALL BE SERIES 3800 MEGA-COUPLING, AS MANUFACTURED BY EBAA IRON, INC. OR APPROVED EQUAL.

### GENERAL NOTES:

- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED IN DECEMBER 2020 BY RUMMEL, KLEPPER & KAHL, LLP (RK&K).
- HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '83 (ADJUSTED 2011) AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATION NO. 31EB AND NO. 316. ALL VERTICAL CONTROLS ARE BASED ON NAVD '88.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWING OR DESCRIBED IN THE CONTRACT DOCUMENTS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- ALL EXISTING UTILITIES SHALL BE TEST PITTED/LOCATED AS NECESSARY AND IN ADVANCE OF THE PROPOSED CONSTRUCTION, IN ORDER TO PROPERLY MAKE ALL REQUIRED UTILITY CROSSINGS AND/OR CONNECTIONS. ANY DISCREPANCIES OR UTILITY CONFLICTS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER. TEST PITS SHOWN ON THE PLANS SHALL BE CONDUCTED BY THE CONTRACTOR, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A TABLE ON THE PLAN SHALL BE COMPLETED TO SHOW THE RESULTS OF THE TEST PIT OR PITS. ALL TEST PITS SHALL BE LOCATED BY THE CONTRACTOR TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 

AT&T.....	1-800-252-1133
BGE (CONSTRUCTION SERVICES).....	410-637-8713
BGE (EMERGENCY).....	800-685-0123
BUREAU OF UTILITIES.....	410-313-4900
COLONIAL PIPELINE CO. ....	410-795-1390
MISS UTILITY.....	1-800-257-7777
STATE HIGHWAY ADMINISTRATION.....	410-531-5533
VERIZON.....	1-800-743-0033
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE (5) WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(A) OF THE HOWARD COUNTY CODE.

### OWNER/DEVELOPER CERTIFICATION:

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.

*Zachary C. Knise*  
ZACHARY C. KNISE, PROJECT MANAGER  
OWNER'S/DEVELOPER'S SIGNATURE  
HOWARD COUNTY, MD  
6/24/2021  
DATE

### ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Nizav K. Ghosh*  
NIZAV K. GHOSH, MD #35329  
ENGINEER'S SIGNATURE - REGISTRATION NUMBER  
6/16/2021  
DATE

PURPOSE STATEMENT: IN RESPONSE TO PROPERTY OWNER REQUEST, CONTRACT NO. 41-5181 WILL EXTEND PUBLIC WATER TO WOODLEIGH DRIVE, WHICH IS INCORPORATED IN THE METROPOLITAN DISTRICT AND ELIGIBLE FOR PUBLIC WATER SERVICE.

# AS-BUILT FEB. 2022

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*[Signature]*  
DIRECTOR OF PUBLIC WORKS  
DATE 7-8-21  
*[Signature]*  
CHIEF, BUREAU OF ENGINEERING  
DATE 6/30/2021  
*[Signature]*  
CHIEF, BUREAU OF UTILITIES  
DATE 7-6-21  
*[Signature]*  
CHIEF, UTILITY DESIGN DIVISION  
DATE 7/26/21

**RK&K**  
P: 410.728.2900  
700 East Pratt Street, Suite 500 | Baltimore, MD 21202  
Engineers | Construction Managers | Planners | Scientists  
www.rk.com  
Responsive People | Creative Solutions

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. 35329  
EXPIRATION DATE: 01/14/2022



DES:	REG	BY	NO.	REVISION	DATE
DRN:	REG				
CHK:	NKS				
DATE:					6/15/2021

JUNE 15, 2021  
TITLE SHEET, GENERAL NOTES,  
AND INDEX OF DRAWINGS  
600' SCALE MAP NO. 36  
BLOCK NO. 18  
ELECTION DISTRICT NO. 5

PROJECT NO. W8698  
CONTRACT NO. 44-5181  
WOODLEIGH DRIVE WATER MAIN EXTENSION  
HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN  
SHEET NO. 1 OF 5

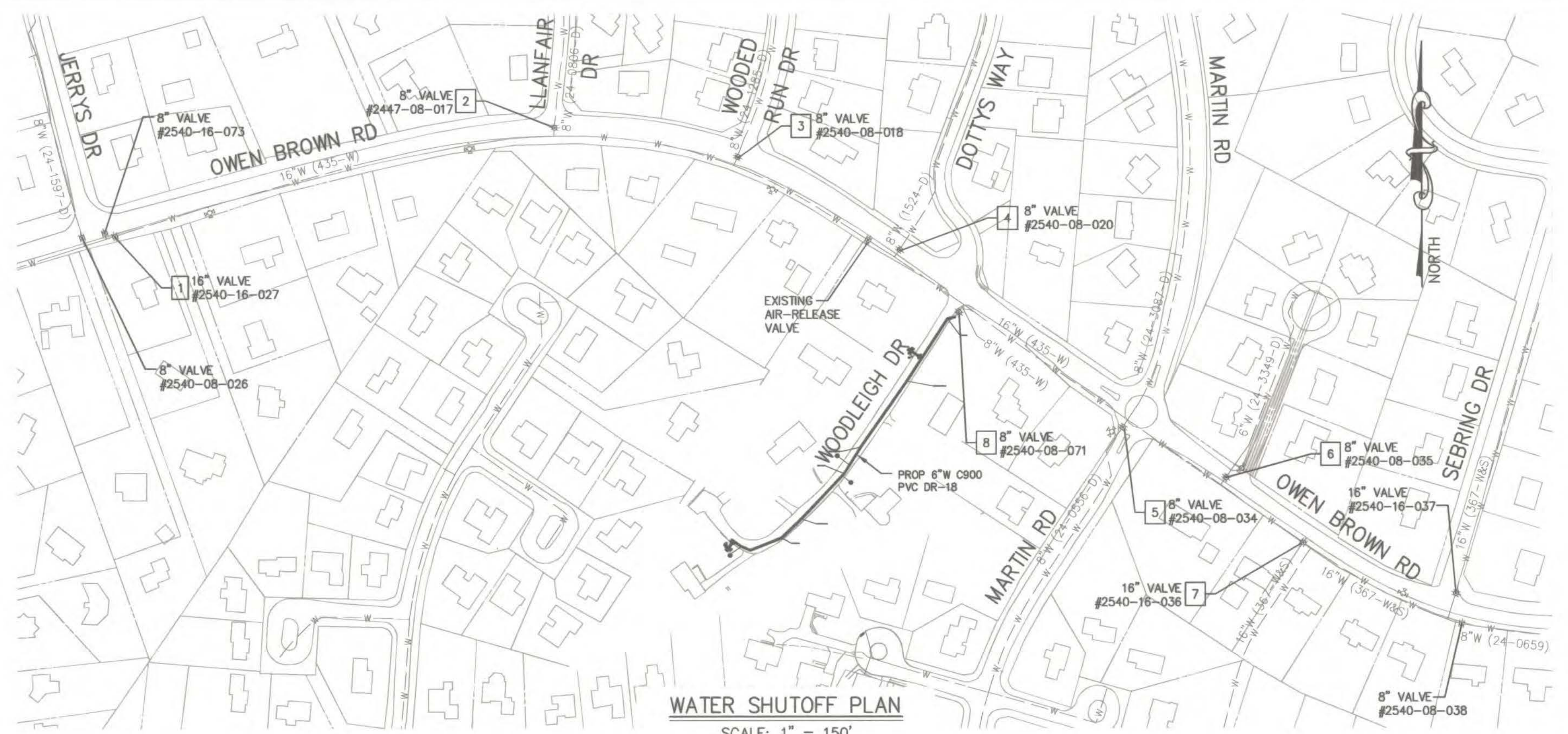
\\balsrv05\2017\17240\_HoCoDrCait\Howard County\Task 18 - Woodleigh Dr. Water Main Ext. (W8698)\CAD\Drawings\01-pgN-001\_WOODLEIGH DR. Rochel E. Green 6/15/2021 1:41 PM

**ABBREVIATIONS**

⊙	AT
ADDA	AMERICANS WITH DISABILITIES ACT
APPROX.	APPROXIMATE
BGE	BALTIMORE GAS & ELECTRIC
BLDG.	BUILDING
B.M.	BENCHMARK
BOP	BOTTOM OF PIPE
CE	CELLAR ELEVATION
CLR.	CLEAR
CNS	CELLAR NOT SERVED
C.O.	CLEANOUT
CONC.	CONCRETE
CONST.	CONSTRUCTION
CRZ	CRITICAL ROOT ZONE
D.	STORM DRAIN
DIA.	DIAMETER
DIP	DUCTILE IRON PIPE
DWG.	DRAWING
E	ELECTRIC, EAST
ELEV.	ELEVATION
EX.	EXISTING
FFE	FIRST FLOOR ELEVATION
F.O.	FIBEROPTIC
FF	FIRST FLOOR
FLG.	FLANGE
FM	FORCE MAIN
G.	GAS
G.P.M.	GALLONS PER MINUTE
HC	HOWARD COUNTY
HB	HORIZONTAL BEND
HOR.	HORIZONTAL
INV.	INVERT
ICBN	INTER-COUNTY BROADBAND NETWORK
JT.	JOINT
MAX.	MAXIMUM
MIN.	MINIMUM
MDSHA	MARYLAND STATE HIGHWAY ADMINISTRATION
MJ.	MECHANICAL JOINT
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MPH	MILES PER HOUR
OH	OVERHEAD UTILITIES
PC	POINT OF CURVATURE
PCC	POINT OF CONTINUOUS CURVE
PCCP	PRESTRESSED CONCRETE CYLINDER PIPE
PE	PLAIN END
PI	POINT OF INTERSECTION
POL	POINT ON LINE
PROP.	PROPOSED
PRC	POINT OF REVERSE CURVE
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE OR POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
S.	SANITARY SEWER, SOUTH
SHC	SEWER HOUSE CONNECTION
S.S.	STAINLESS STEEL
STA.	STATION
STD.	STANDARD
UG	UNDERGROUND UTILITIES
VB	VERTICAL BEND
VERT.	VERTICAL
W.	WATER (POTABLE), WEST
WHC	WATER HOUSE CONNECTION

**LEGEND**

<b>EXISTING</b>	8" S (0556-D)
SANITARY SEWER	— S — S — S — S — S —
SANITARY SEWER MANHOLE	⊙
SANITARY SEWER CLEANOUT	⊙
SANITARY SEPTIC WELL	⊙
WATER	— W — W — W — W — W —
WATER FIRE HYDRANT	⊙
WATER VALVE	⊙
CURB STOP	⊙
STORM DRAIN	— D — D — D — D — D —
STORM DRAIN INLET	⊙
OVERHEAD ELECTRIC	OHE — OHE
UNDERGROUND ELECTRIC	— E — E — E — E — E —
UTILITY POLE	⊙
LIGHT POLE	⊙
HAND BOX	⊙
UNDERGROUND CABLE	— CATV —
UNDERGROUND TELEPHONE	— T — T — T — T — T —
TELEPHONE JUNCTION BOX	⊙
GAS	— G — G — G — G — G —
GAS VALVE	⊙
PROPERTY LINE (GIS)	---
PROPERTY LINE (SURVEYED)	---
MAJOR CONTOURS (SURVEY, 1-FT)	--- 380 ---
MINOR CONTOURS (SURVEY, 1-FT)	--- 378 ---
TREE LINE OR WOODS	~~~~~
CRITICAL ROOT ZONE	— CRZ — CRZ —
SPECIMEN TREE	⊙
NON-SPECIMEN TREE	⊙
<b>PROPOSED</b>	
WATER MAIN	— W — W — W — W — W —
WATER VALVE	⊙
WATER METER	⊙
CONTINUITY TEST STATION	⊙
WATER FIRE HYDRANT	⊙
WATER HOUSE CONNECTION	⊙
LIMITS OF DISTURBANCE	— LOD — LOD —
SILT FENCE	— SF — SF — SF —
CURB INLET PROTECTION	⊙



**WATER SHUTOFF PLAN**

SCALE: 1" = 150'

**SEQUENCE OF CONSTRUCTION – GENERAL NOTES**

1. THE SUGGESTED SEQUENCE OF CONSTRUCTION DOES NOT INCLUDE CONCURRENT SEDIMENT AND EROSION CONTROL MEASURES, AND MAINTENANCE OF TRAFFIC ACTIVITIES, WHICH SHALL ALSO BE FOLLOWED AS DESCRIBED IN THE CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL VERIFY THAT THE EXISTING WATER MAINS AND VALVES ARE ADEQUATELY RESTRAINED PRIOR TO REMOVAL OF EXISTING WATER MAIN AT THE CONNECTION LOCATIONS. THE CONTRACTOR SHALL PROVIDE TEMPORARY THRUST BLOCKING ON THE EXISTING AND NEW WATER MAINS AS NEEDED TO COMPLETE CONNECTION TO THE NEW WATER MAIN AT NO ADDITIONAL COST TO THE COUNTY.
3. THE CONTRACTOR SHALL NOTIFY ALL PROPERTY OWNERS AFFECTED BY THE PROPOSED WATER SHUTDOWN. SUCH NOTIFICATIONS SHALL BE SENT SUFFICIENTLY IN ADVANCE OF ANY PLANNED WATER SHUTDOWN. ALL WATER SHUTDOWNS MUST BE LIMITED TO MAXIMUM OF EIGHT (8) HOURS AND SHALL BE PERFORMED DURING A LOW WATER DEMAND PERIOD IN CONSULTATION WITH THE COUNTY PERSONNEL AND IMPACTED PROPERTY OWNERS.
4. PER COUNTY RECORD DRAWING 435-W, THE EX. 8" VALVE ON WOODLEIGH DRIVE AT OWEN BROWN ROAD IS STRAPPED TO THE EX. 16"x8" TEE. THE CONTRACTOR SHALL TEST PIT EX. 8" WATER MAIN (TH-01) AS SHOWN PRIOR TO BEGINNING WATER MAIN WORK TO CONFIRM THE PRESENCE/CONDITION OF THE STRAPS. THE CONTRACTOR SHALL ASSESS THE CONDITION OF THE EXISTING STRAPS/RESTRAINT AND CONSULT THE ENGINEER FOR APPROVAL TO PROCEED WITH PROPOSED WATER MAIN WORK.
5. INSTALL WATER MAIN AND BACKFILL. OPEN TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THAT WHICH CAN BE BACKFILLED AND STABILIZED BY THE END OF THE WORK DAY. AT THE END OF EACH WORK DAY, ALL DISTURBED PAVED AREAS SHALL BE RESTORED WITH PERMANENT SUBGRADE AND BASE ASPHALT TO THE EXTENT SHOWN PER HOWARD COUNTY STANDARD DETAIL G-4.01, THEN TEMPORARILY PAVED OR PROPERLY COVERED TO PERMIT VEHICULAR TRAFFIC DURING NON-WORK HOURS. SUBSEQUENT TO WATER MAIN TRENCH RESTORATION, COMPLETE RESTORATION PER HOWARD COUNTY STANDARD DETAIL G-4.01, INCLUDING 2" MILLING AND REPAVING OF THE ENTIRE PAVEMENT WIDTH OF WOODLEIGH DRIVE TO THE LIMITS SHOWN ON THE PLAN.
6. INSTALL TRACER WIRES, CONTINUITY TEST STATIONS, AND CORROSION PROTECTION IN ACCORDANCE WITH THE WATER NOTES AND STANDARD DETAILS.
7. CLEAR AND GRADE 5' RADIUS AROUND FH PER W-1.12. RESTORE LANDSCAPED AREA WITH 6" TOPSOIL AND SEED AND ESTABLISH TURF.

**SUGGESTED SEQUENCE OF CONSTRUCTION**

1. TEST PIT EXISTING 8-INCH WATER MAIN PER GENERAL NOTE 4 ON THIS SHEET.
2. INSTALL NEW 8-INCH AND 6-INCH WATER MAIN ON WOODLEIGH DR AS SHOWN FROM APPROX. STA 0+05 TO STA 6+20, UTILIZING "SAME-DAY TRENCH STABILIZATION" METHODS IN ACCORDANCE WITH GENERAL NOTE 5 ON THIS SHEET. INSTALL TEMPORARY RESTRAINED CAP AT STA 0+05.
3. COMPLETE HYDROSTATIC TEST AND LEAKAGE TESTING. FLUSH AND DISINFECT NEWLY INSTALLED WATER MAIN AND FITTINGS AS REQUIRED.
4. CLOSE VALVE 8. REMOVE TEMPORARY RESTRAINED CAP AND COMPLETE TIE-IN OF NEW 8-INCH WATER MAIN AT STA 0+00. OPEN VALVE 8. RESTORE THE AREA.

SURVEY CONTROL				
POINT NO.	COORDINATES		ELEVATION (NAVD 88)	DESCRIPTION
	NORTH	EAST		
KPL1	557,983.6064	1,348,727.7434	381.89'	REBAR & CAP
RKK1	557,851.8129	1,349,271.7672	386.89'	MAG NAIL
RKK2	557,946.4430	1,348,871.6943	383.32'	MAG NAIL
RKK3	558,174.5241	1,348,673.3685	386.31'	MAG NAIL
RKK4	558,316.8276	1,348,845.6933	395.19'	MAG NAIL
RKK5	558,672.4386	1,349,069.3842	399.23'	MAG NAIL
MRC1	558,160.6488	1,348,642.1735	385.43'	MAG NAIL

**WATER HOUSE CONNECTION NOTES:**

1. THE CONTRACTOR SHALL INSTALL NEW 1" WATER SERVICE AND SHALL INSTALL NEW METER VAULT WITH 3/4" METER SETTING, IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAIL W-3.27.
2. THE CONTRACTOR SHALL WRAP WATER SERVICE CONNECTIONS WITH A COLD APPLIED PETROLATUM OR PETROLEUM ANTI-CORROSION WAX TAPE COATING SYSTEM. WAX TAPE COATING SYSTEM SHALL BE THREE-PART, COLD APPLIED CONSISTING OF PRIMER, WAX TAPE, AND TAPE OUTERWRAP IN ACCORDANCE WITH AWWA C217 AND AS DESCRIBED IN THE CONTRACT DOCUMENTS.
3. PERMANENT REPAIR OF TRENCHES FOR WATER HOUSE CONNECTIONS SHALL BE COMPLETED IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAIL G-2.11 AND G-4.01. IF THE WATER HOUSE CONNECTION WAS INSTALLED SUCH THAT THE LIMITS OF PAVING ENCOACH UPON PRIVATE PROPERTY, PERMISSION SHALL BE OBTAINED FROM THE PROPERTY OWNER PRIOR TO WORK.

AS-BUILT DRAWINGS:  
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN REVISED TO REFLECT THE AS-BUILT CONDITIONS OF THE CAPITAL PROJECT W8303, ANDERSON AVE/AROUND STREET WATER MAIN RECORDED BY HOWARD COUNTY'S CONTRACTOR AND INSPECTOR.  
*Nizar K. Ghosh* 35329 02/18/2022  
 Engineer's Signature – Registration Number Date

**AS-BUILT FEBRUARY 2022**

**QUANTITIES**

ITEM	ESTIMATED QUANTITY		AS-BUILT		SUPPLIER
8" PVC C900 DR-18	9	LF	8		FERGUSON
6" PVC C900 PIPE (DR-18)	611	LF	610		FERGUSON
6" FIRE HYDRANT ASSEMBLY	2	EA	2		LB WATER
6" RESTRAINED COUPLING	4	EA	-		NOT USED
8" MJ SOLID SLEEVE	1	EA	1		LB WATER
8" - 45' DI HB	1	EA	-		NOT USED
6" - 45' DI HB	2	EA	3		LB WATER
6" - 22.5' DI HB	1	EA	1		LB WATER
6" - 11.25' DI HB	2	EA	2		LB WATER
8"x6" REDUCER	1	EA	1		LB WATER
6" DI CAP	1	EA	1		LB WATER
1" COPPER PIPE	67	LF	77		LB WATER
3/4" METER SETTING & VAULT	3	EA	3		LB WATER
6" DIP		LF	29		LB WATER

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 DATE: 2/21/2022  
 CHIEF, BUREAU OF ENGINEERING  
 DATE: 2/21/2022  
 CHIEF, UTILITY DESIGN DIVISION

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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. 35329, EXPIRATION DATE: 01/14/2022.

DES:	REG	BY:	NO.	REVISION	DATE
DRN:	REG			AS-BUILT	02/22
CHK:	NKS				
DATE:					6/15/2021

ABBREVIATIONS, LEGEND, SURVEY CONTROL AND WATER SHUTOFF  
 600' SCALE MAP NO. 38  
 BLOCK NO. 18  
 ELECTION DISTRICT NO. 5

PROJECT NO. W8698  
 CONTRACT NO. 44-5181  
**WOODLEIGH DRIVE WATER MAIN EXTENSION**  
 HOWARD COUNTY, MARYLAND

AS-BUILT LOCATIONS: METERS, VALVES AND HYDRANT

ITEM	LOCATION	DIMENSION 1	DIMENSION 2	DIMENSION 3	NORTHING	EASTING
FIRE HYDRANT	STA 1+00 (23.5' RT)	WEST STONE COLUMN: 77'	FH VALVE: 18'	EAST STONE COLUMN: 83'	558,522.91	1,348,950.89
FH VALVE	STA 1+00 (5' RT)	WEST STONE COLUMN: 78'	FIRE HYDRANT: 18'	EAST STONE COLUMN: 79'	558,512.80	1,348,966.31
6210 METER	STA 3+34 (28' RT)	6211 MAILBOX: 71'	6211 METER: 56'	N/A	558,331.30	1,348,815.10
6211 METER	STA 3+58 (20' LT)	6211 MAILBOX: 41'	6210 METER: 56'	N/A	558,282.38	1,348,840.38
10401 METER	STA 6+06 (25' LT)	FIRE HYDRANT: 14'	FH VALVE: 25'	N/A	558,149.35	1,348,619.31
FIRE HYDRANT	STA 6+16 (15.5' LT)	10401 METER: 14'	FH VALVE: 12'	N/A	558,163.03	1,348,616.45
FH VALVE	STA 6+16 (3.5' LT)	10401 METER: 25'	FIRE HYDRANT: 12'	N/A	558,172.85	1,348,623.34

UTILITY TEST HOLE

TEST HOLE #	NORTH	EAST	TOP OF UTILITY	SURFACE ELEVATION	DESCRIPTION
TH-01	558,584.70	1,349,031.47			8" DI WATER
TH-02	558,337.25	1,348,856.06			GAS SERVICE

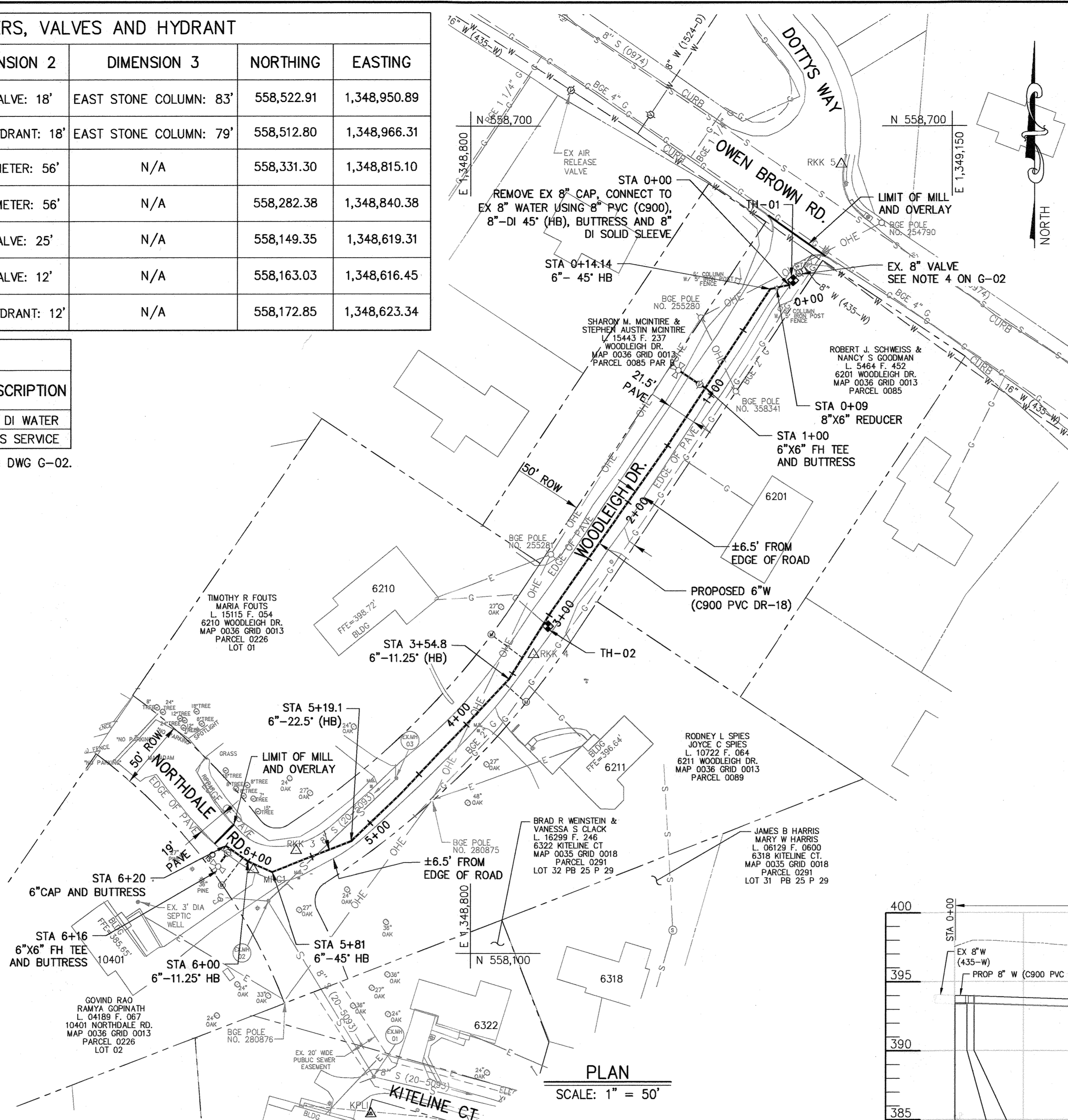
TO BE CONDUCTED BY THE CONTRACTOR; REFER TO GENERAL NOTES ON DWG G-02.

AS-BUILT DRAWINGS:

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN REVISED TO REFLECT THE AS-BUILT CONDITIONS OF THE CAPITAL PROJECT W8303, ANDERSON AVE/MOUND STREET WATER MAIN RECORDED BY HOWARD COUNTY'S CONTRACTOR AND INSPECTOR.

*Nizar K. Shah*  
 Engineer's Signature - Registration Number 35329 Date 02/18/2022

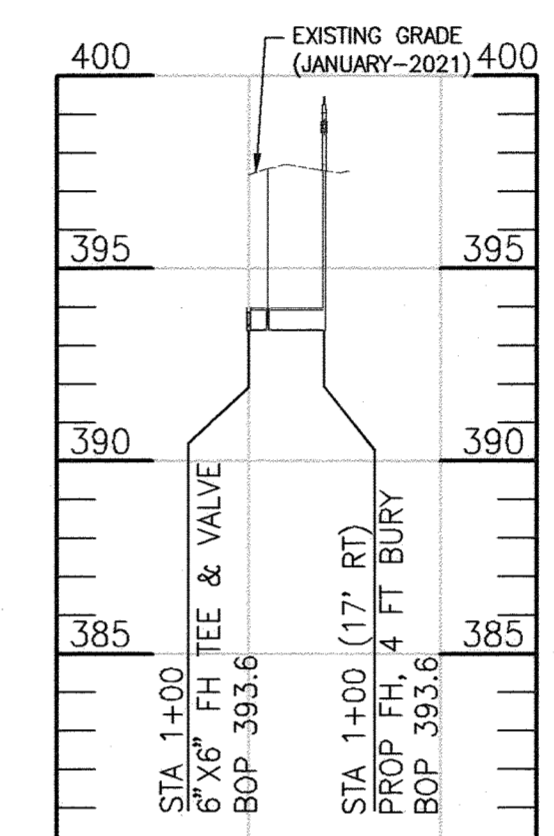
AS-BUILT FEBRUARY 2022



PLAN SCALE: 1" = 50'

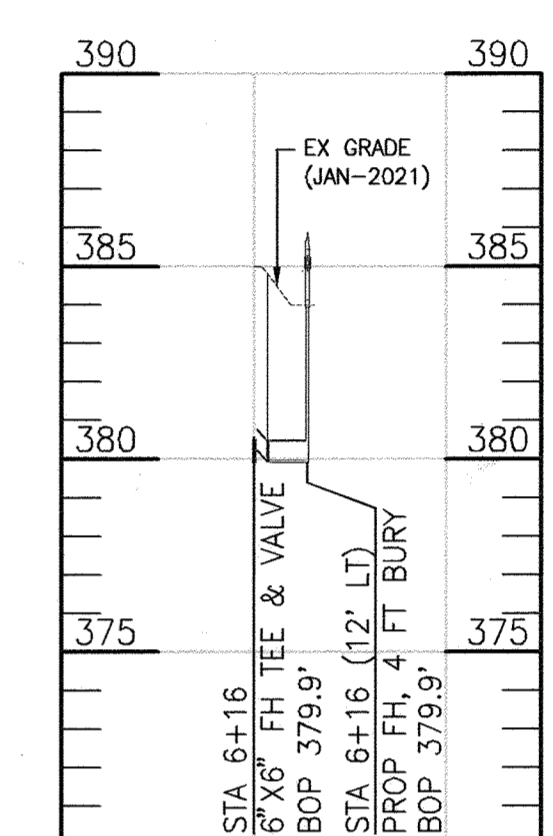
FITTING SCHEDULE - WOODLEIGH DRIVE

STATION	FITTING	NORTHING	EASTING
0+09	8"x6" REDUCER	1,349,022.66	558,582.88
0+14.14	6"-45" DI HB	1,349,017.62	558,581.83
1+00	6"x6" FH TEE	1,348,970.48	558,510.07
3+54.8	6"-11.25" DI HB	1,348,827.95	558,298.98
5+19.1	6"-22.5" DI HB	1,348,713.39	558,181.21
5+81	6"-45" DI HB	1,348,655.82	558,158.87
6+00	6"-11.25" DI HB	1,348,638.44	558,166.54
6+16	6"x6" FH TEE	1,348,625.34	558,175.73
6+20	6" DI CAP	1,348,622.06	558,178.02



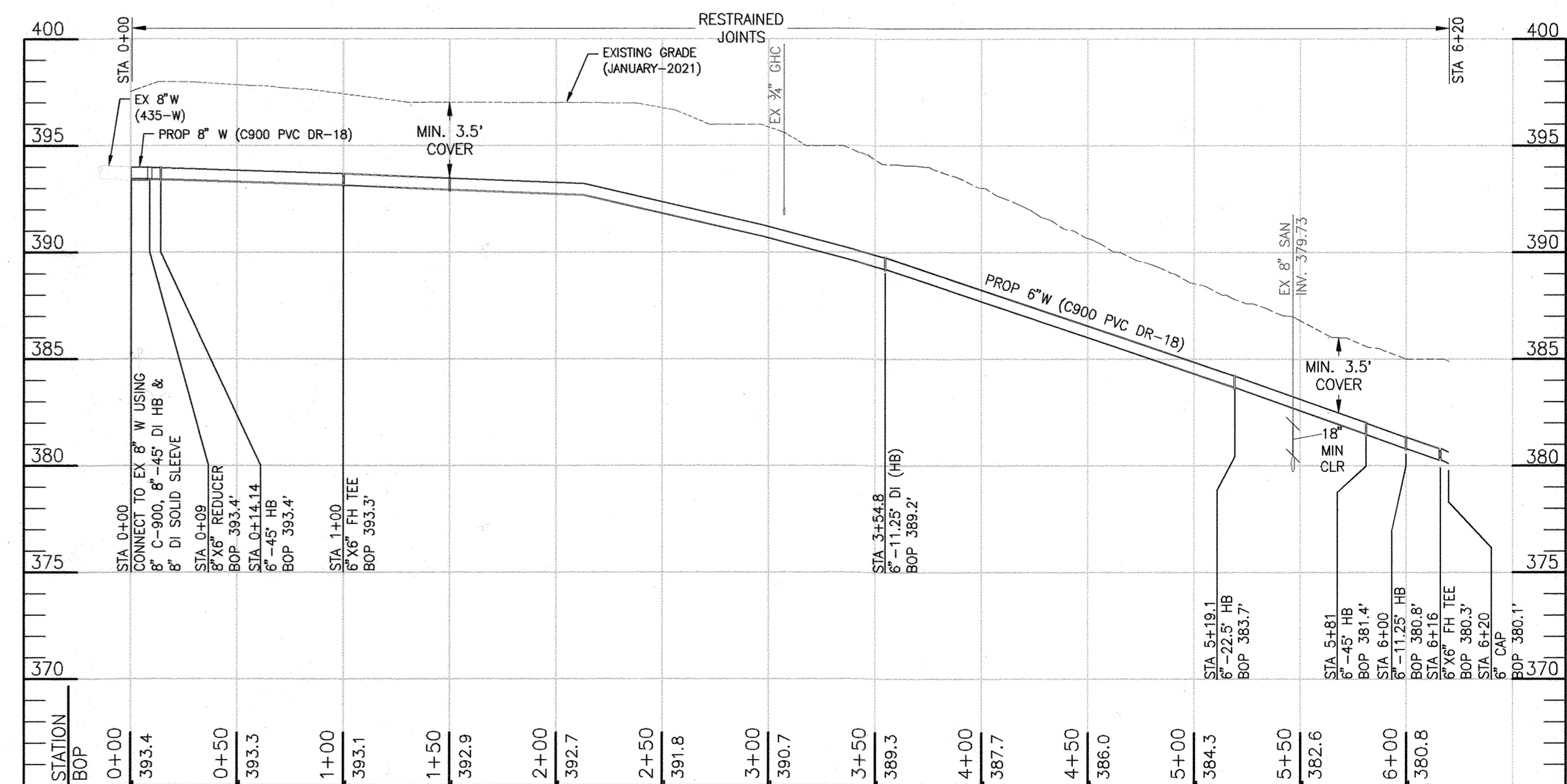
PROFILE - FH (STA 1+00)

SCALE: 1" = 50' HORIZ.  
1" = 5' VERT.



PROFILE - FH (STA 6+16)

SCALE: 1" = 50' HORIZ.  
1" = 5' VERT.



PROFILE - 6"W WOODLEIGH DRIVE

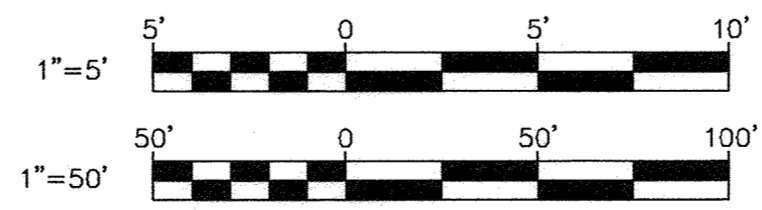
SCALE: 1" = 50' HORIZ.  
1" = 5' VERT.

WATER HOUSE CONNECTIONS

SERVICE ADDRESS	EX. WHC SIZE	EX. WHC MATERIAL	EX. METER LOCATION	EX. METER SIZE	APPROX. LENGTH OF EX. WHC (LF)	PROP. TAP/WHC SIZE	NEW METER SIZE	APPROX. LENGTH OF PROP. WHC (LF)	STANDARD DETAIL	REMARKS/NOTES
6210 WOODLEIGH DRIVE	N/A	N/A	N/A	N/A	N/A	1"	3/4"	27	W-3.27	INSTALL NEW OUTSIDE METER SETTING & VAULT
6211 WOODLEIGH DRIVE	N/A	N/A	N/A	N/A	N/A	1"	3/4"	17	W-3.27	INSTALL NEW OUTSIDE METER SETTING & VAULT
10401 NORTHDAL ROAD	N/A	N/A	N/A	N/A	N/A	1"	3/4"	23	W-3.27	INSTALL NEW OUTSIDE METER SETTING & VAULT

PAVEMENT RESTORATION NOTE

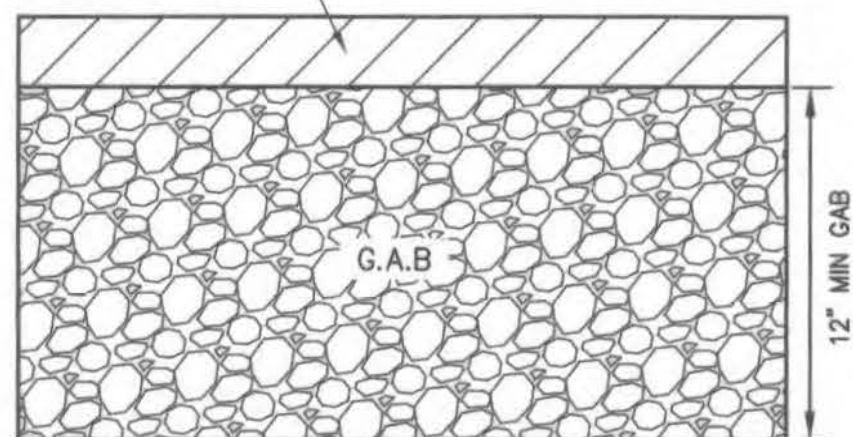
LIMITS OF PAVEMENT RESTORATION INCLUDE 2" MILLING AND REPAVING THE ENTIRE PAVEMENT WIDTH OF WOODLEIGH DRIVE FROM NORTHDAL ROAD TO OWEN BROWN ROAD TO THE LIMITS SHOWN ON PLAN.



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>[Signature]</i> DATE: 2-6-21 Chief, Bureau of Engineering: <i>[Signature]</i> DATE: 2/30/2021 Chief, Bureau of Utilities: <i>[Signature]</i> DATE: 2-6-21 Chief, Utility Design Division: <i>[Signature]</i> DATE:		RKK P: 410.728.2900 700 East Pratt Street, Suite 500   Baltimore, MD 21202 Engineers   Construction Managers   Planners   Scientists www.rkk.com Responsive People   Creative Solutions		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. 35329 EXPIRATION DATE: 01/14/2022		DES. REG BY NO. DATE DRN. REG REG AS-BUILT 02/22 CHK. NKS DATE: 6/15/2021		REVISION AS-BUILT		JUNE 15, 2021 PROJECT NO. W8698 CONTRACT NO. 44-5181 SCALE AS SHOWN SHEET NO. 3 OF 5	
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\\baler-v05v2017\17240\_HoCoData\Construction Phase\As-Built\CADD\Plans\003-p\UT-P001\_WOODLEIGH\_DR\_Rachel\_E\_Green\_3/18/2022\_3:32 PM

3" TEMPORARY BITUMINOUS CONCRETE (HOT PATCH) OR HMA SUPERPAVE BASE 19MM, PG-22S.



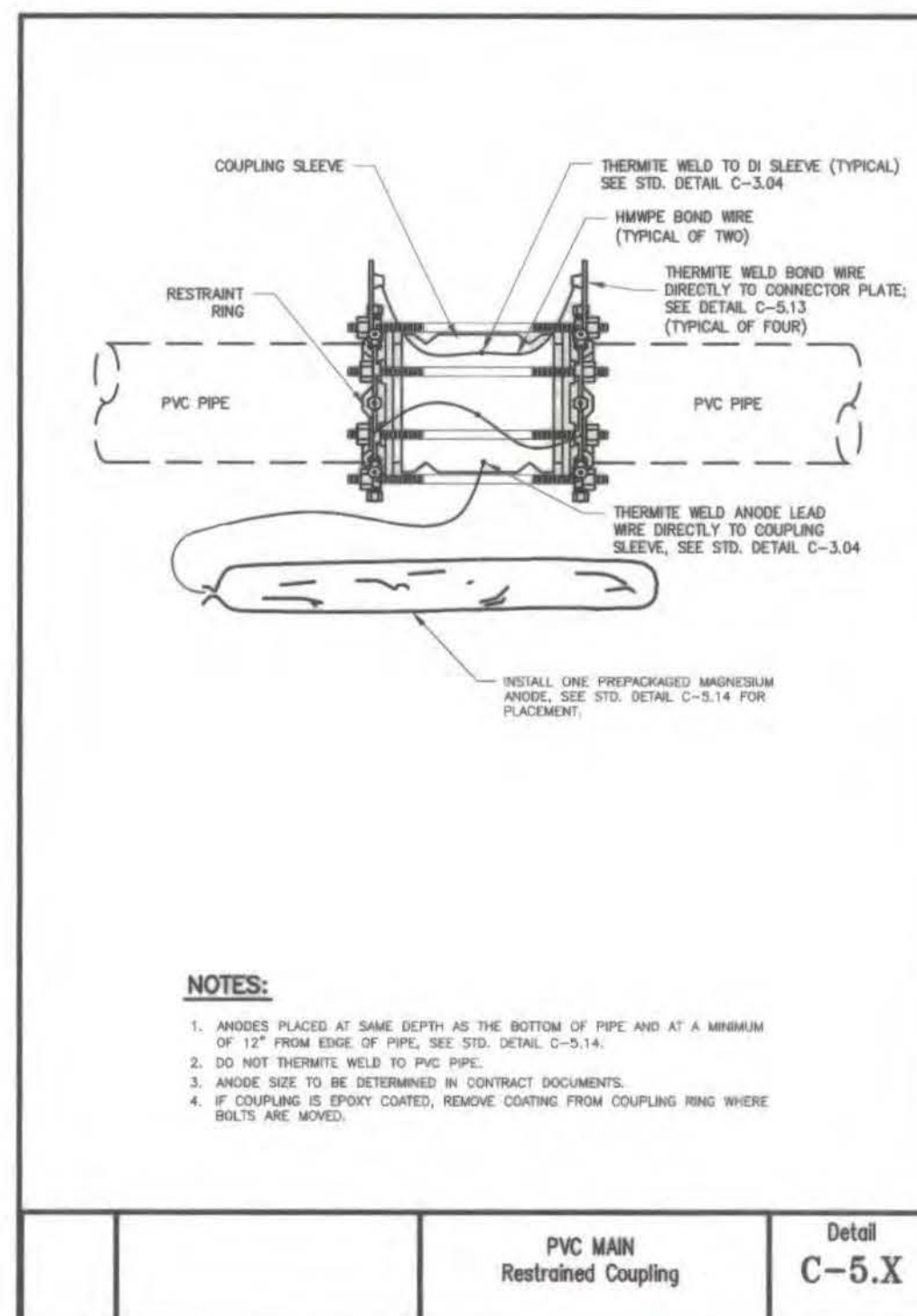
TEMPORARY TRENCH RESTORATION

**PERMANENT PAVEMENT REPAIR:**

REFER TO THE LATEST EDITION HOWARD COUNTY STANDARD SPECIFICATION SECTION 504 ASPHALT PAVEMENT, STANDARD DETAILS G-4.01 UTILITY TRENCH ROADWAY REPAVING, AND R-2.01/2.02 PAVING SECTIONS, SECTION P2, CBR 10.

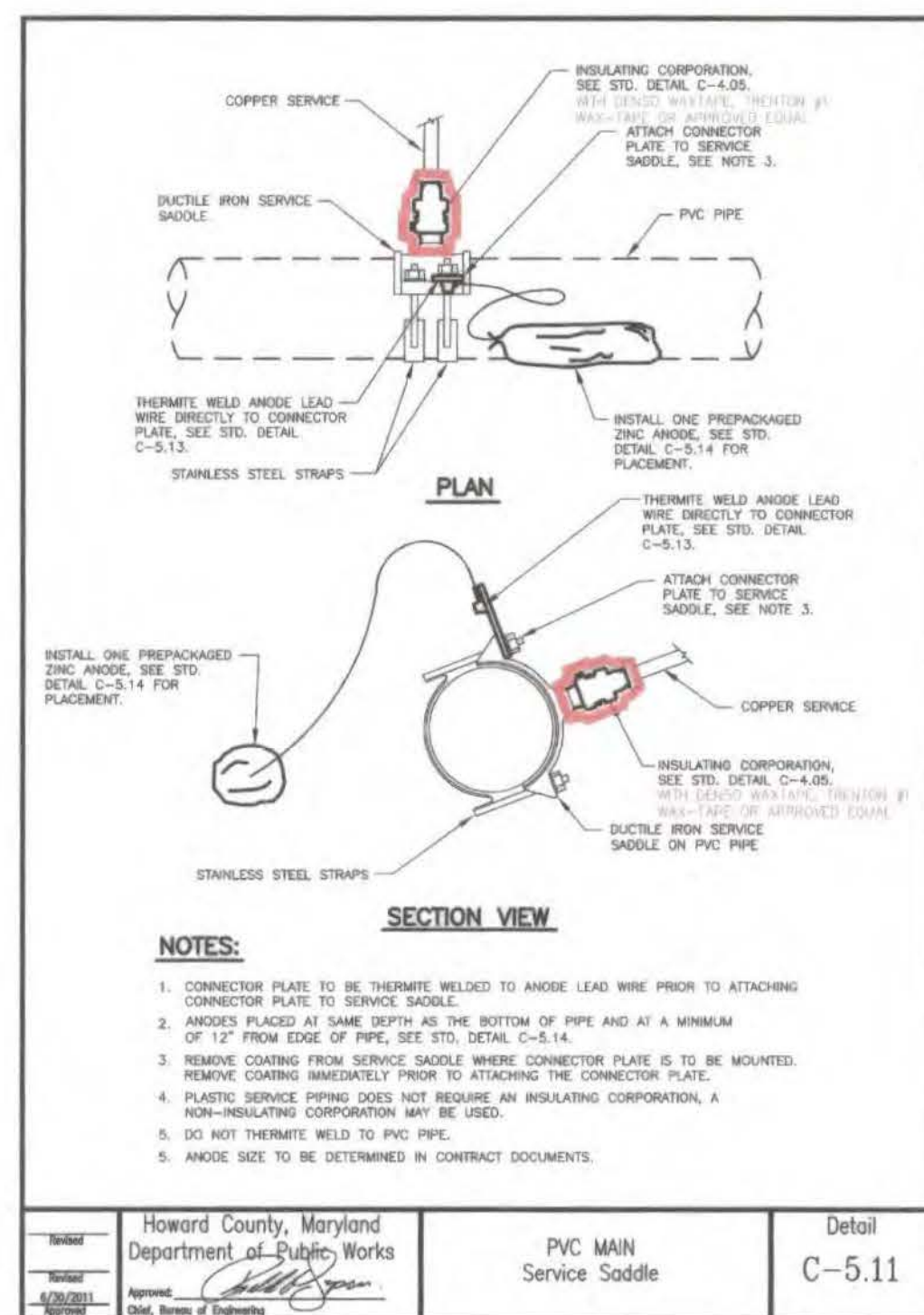
**A. UTILITY TRENCH PAVING RESTORATION**

SCALE: NTS  
FOR TRENCH DETAIL REFER TO HOWARD COUNTY STANDARD DETAIL G-2.12 AND G-4.01



**B. CATHODIC PROTECTION FOR RESTRAINED COUPLING**

SCALE: NTS



**C. PVC MAIN SERVICE SADDLE**

SCALE: NTS

**AS-BUILT  
FEB. 2022**

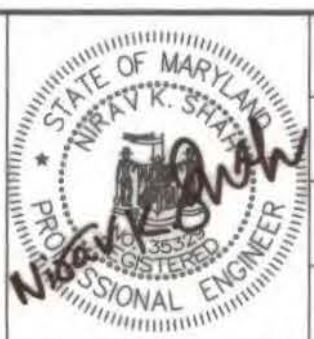
C-02

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* 7-6-21  
 Chief, Bureau of Engineering: *[Signature]* 6/30/2021  
 Chief, Bureau of Utilities: *[Signature]* 7-6-21  
 Chief, Utility Design Division: *[Signature]*

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DES:	REG	BY	NO.	REVISION	DATE
DRN:	REG				
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DATE:					6/15/2021

JUNE 15, 2021

WATER DETAILS

600' SCALE MAP NO. 36

PROJECT NO. W8698  
 CONTRACT NO. 44-5181

WOODLEIGH DRIVE WATER MAIN EXTENSION

BLOCK NO. 18  
 ELECTION DISTRICT NO. 5  
 HOWARD COUNTY, MARYLAND

SCALE  
AS SHOWN

SHEET NO.  
4 OF 5

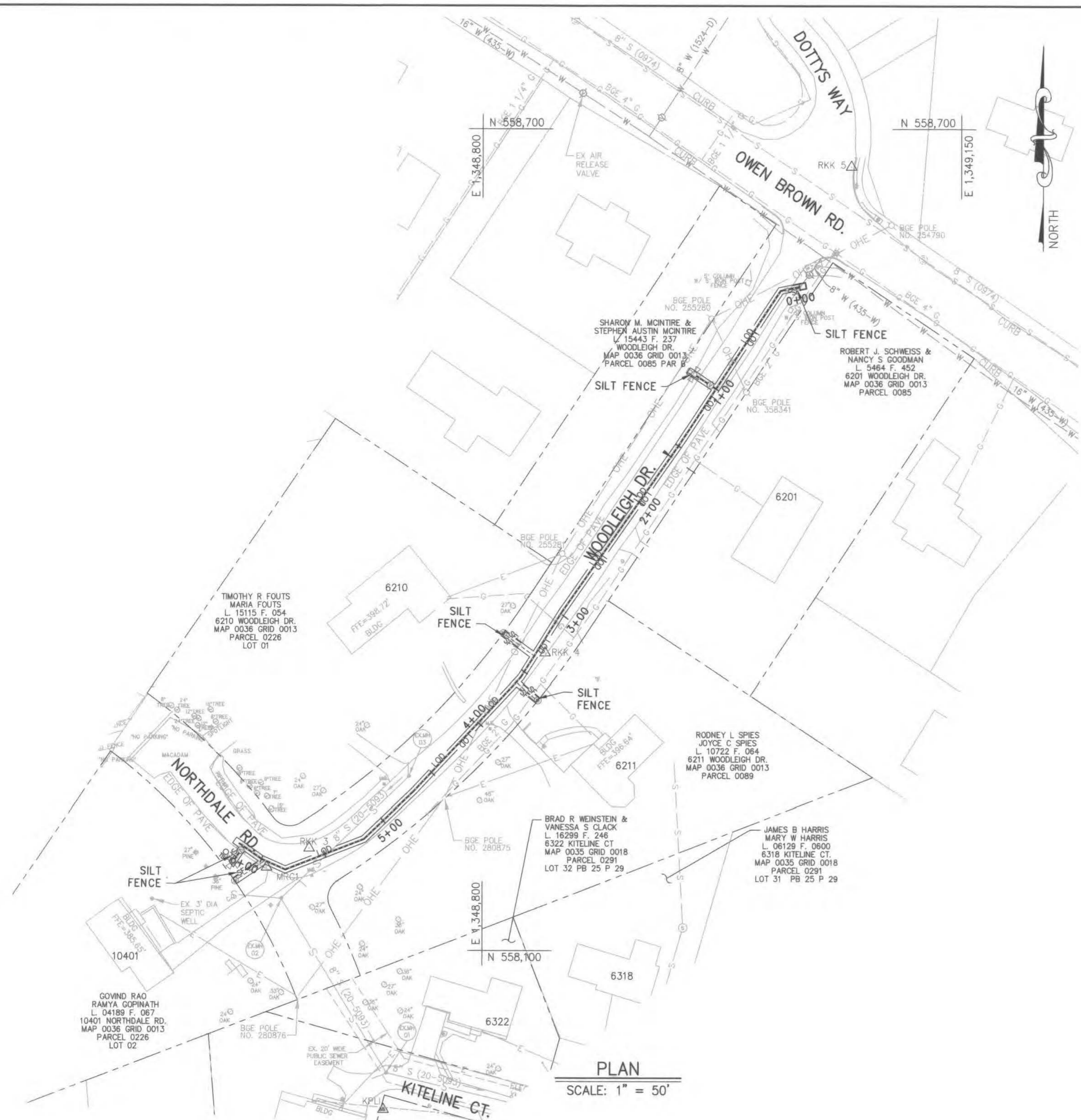
\\nasrv05\v5\2017\17240\_HoCoDrCat\Howard County\Task 18 - Woodleigh Dr Water Main Ext (W8698)\CADD\Plan\004-plt-P01-WOODLEIGH DR Rachel E. Green 6/15/2021 1:52 PM

HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

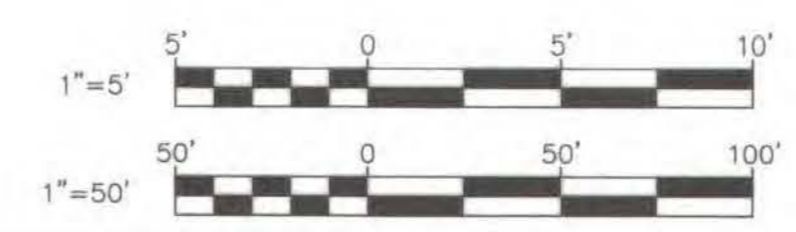
- A PRECONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOD AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOURS NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES:
  - PRIOR TO THE START OF EACH DISTURBANCE
  - UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING
  - PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT,
  - PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES.

OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS PLAN.
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH > 15' OF CUT AND/OR FILL. STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST BE BENCHED WITH STABLE OUTLET. ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6).
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 

TOTAL AREA OF SITE:	0.08 ACRES	(LINEAR PUBLIC UTILITY PROJECT)
AREA DISTURBED:	0.08 ACRES	
AREA TO BE ROOFED OR PAVED:	0.07 ACRES	
AREA TO BE VEGETATIVELY STABILIZED:	0.01 ACRES	
TOTAL CUT:	545 CU. YDS.	
TOTAL FILL:	545 CU. YDS.	
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY, AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE:
  - INSPECTION DATE
  - INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT)
  - NAME AND TITLE OF INSPECTOR
  - WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION)
  - BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES
  - EVIDENCE OF SEDIMENT DISCHARGES
  - IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE
  - IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS
  - COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS
  - PHOTOGRAPHS
  - MONITORING/SAMPLING
  - MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED
  - OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORM ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDE).
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED BY THE END OF EACH WORK DAY, WHICHEVER IS SHORTER.
- ANY MAJOR CHANGES OR REVISIONS ON THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISIONS MAY ALLOWED BY THE CID PER LIST OF HSCD-APPROVED FIELD CHANGES.
- DISTURBANCE SHALL NOT OCCUR OUTSIDE THE LOD. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE HSCD, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.
- WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.
- TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE.
- ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE IMBRICATED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2' IN ELEVATION.
- STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE):
  - USE I AND II MARCH 1 - JUNE 15
  - USE III AND IIII OCTOBER 1 - APRIL 30
  - USE IV MARCH 1 - MAY 31
- A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND ASSOCIATED PERMITS SHALL BE ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE.



PLAN  
SCALE: 1" = 50'



**AS-BUILT FEB. 2022**

ES-01

\\nasr-v05\2017\201717240\_HoCoDnColl\Howard County\Task 18 - Woodleigh Dr. Water Main Ext (W8698)\CADD\Plan\005-pES-P001\_WOODLEIGH DR. RKK E. Green 6/15/2021 1:56 PM

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	
<i>[Signature]</i> DIRECTOR OF PUBLIC WORKS	<i>[Signature]</i> CHIEF, BUREAU OF ENGINEERING
DATE: 7-6-21	DATE: 6/30/2021
<i>[Signature]</i> CHIEF, BUREAU OF UTILITIES	<i>[Signature]</i> CHIEF, UTILITY DESIGN DIVISION
DATE: 7-6-21	DATE: 6/30/2021

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*[Signature]*  
PROFESSIONAL ENGINEER

DES:	REG	BY	NO.	REVISION	DATE
DRN:	REG				
CHK:	NKS				
DATE:	6/15/2021				

JUNE 15, 2021

EROSION AND SEDIMENT CONTROL PLAN AND NOTES

600' SCALE MAP NO. 36

PROJECT NO. W8698  
CONTRACT NO. 44-5181

WOODLEIGH DRIVE WATER MAIN EXTENSION

ELECTION DISTRICT NO. 5

HOWARD COUNTY, MARYLAND

SCALE  
AS SHOWN

SHEET NO.  
5 OF 5