

HIGH RIDGE ESTATES LOTS 1-7 AND OPEN SPACE LOT 8 CONTRACT NO. 24-4952-D

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUF./SUPPLIER
6" PVC C900 DR-18 WATER	370 LF	373 LF	PVC-C-200	ATLANTIC PIPE
6"x8" TS&V	1 EA	1 EA		
1.5" WHC	140 LF	139 LF	TYPE 'K' COPPER	MUELLER
1" METER VAULT	7 EA	7 EA	CONCRETE	
8" PVC SDR-35 SEWER MANHOLES	294 LF	292 LF	PVC SDR-35	ATLANTIC PIPE
4" SHC	2 EA	2 EA	CONCRETE	CONTRACTORS SPECIALTY
	80 LF	78 LF	PVC SDR-35	ATLANTIC PIPE

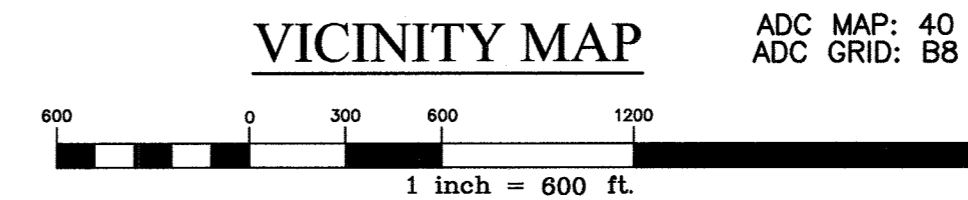
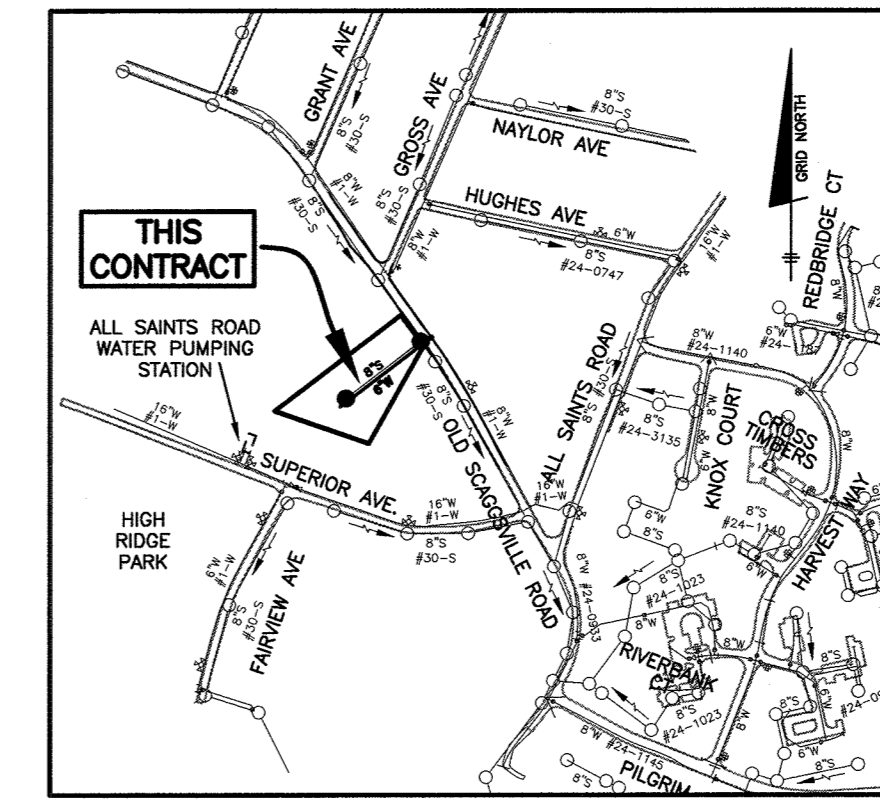
NAME OF UTILITY CONTRACTOR: UTILITIES UNLIMITED
SURVEY AND DRAFTING DIVISION AS-BUILT DATE: 7-1-2019

SUPPLIER
L.B. WATER
L.B. WATER

BENCH MARKS (NAD83)

HO. CO. No. 47GD ELEV. 312.32'
NEAR 9028 OLD SCAGGSVILLE ROAD
6 FEET FROM FIRE HYDRANT
33.9 FEET FROM BGE 315258
N 530494.447 E 1350872.301

HO. CO. No. 47GE ELEV. 335.756'
BY 9160 OLD SCAGGSVILLE ROAD
19.8 FEET FROM WATER METER
76.5 FEET FROM BGE 31000
N 529044.964 E 1350854.953



TYPE OF BUILDING:	SFD
NUMBER OF WHC'S:	7
NUMBER OF SHC'S:	7
DRAINAGE AREA:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WRP
WATER ZONE:	400
TEST GRADIENT:	550

FILE REFERENCES: ECP-15-063, S-15-004, F-16-030

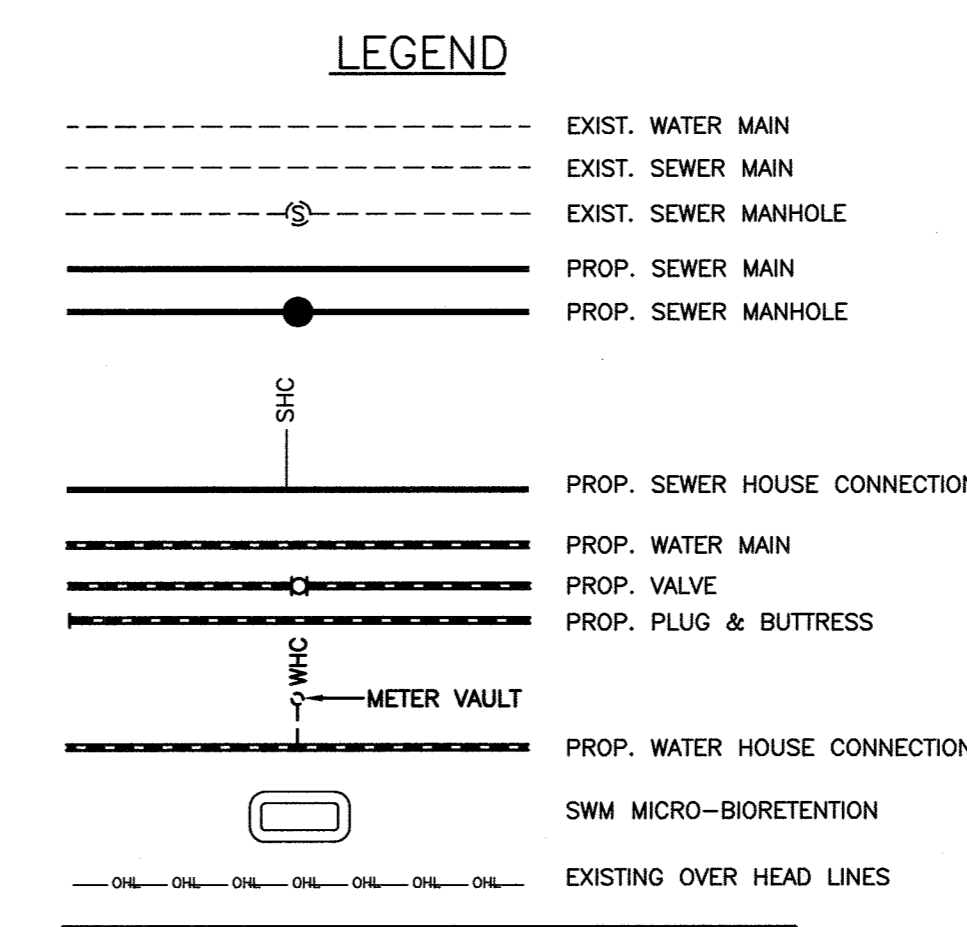
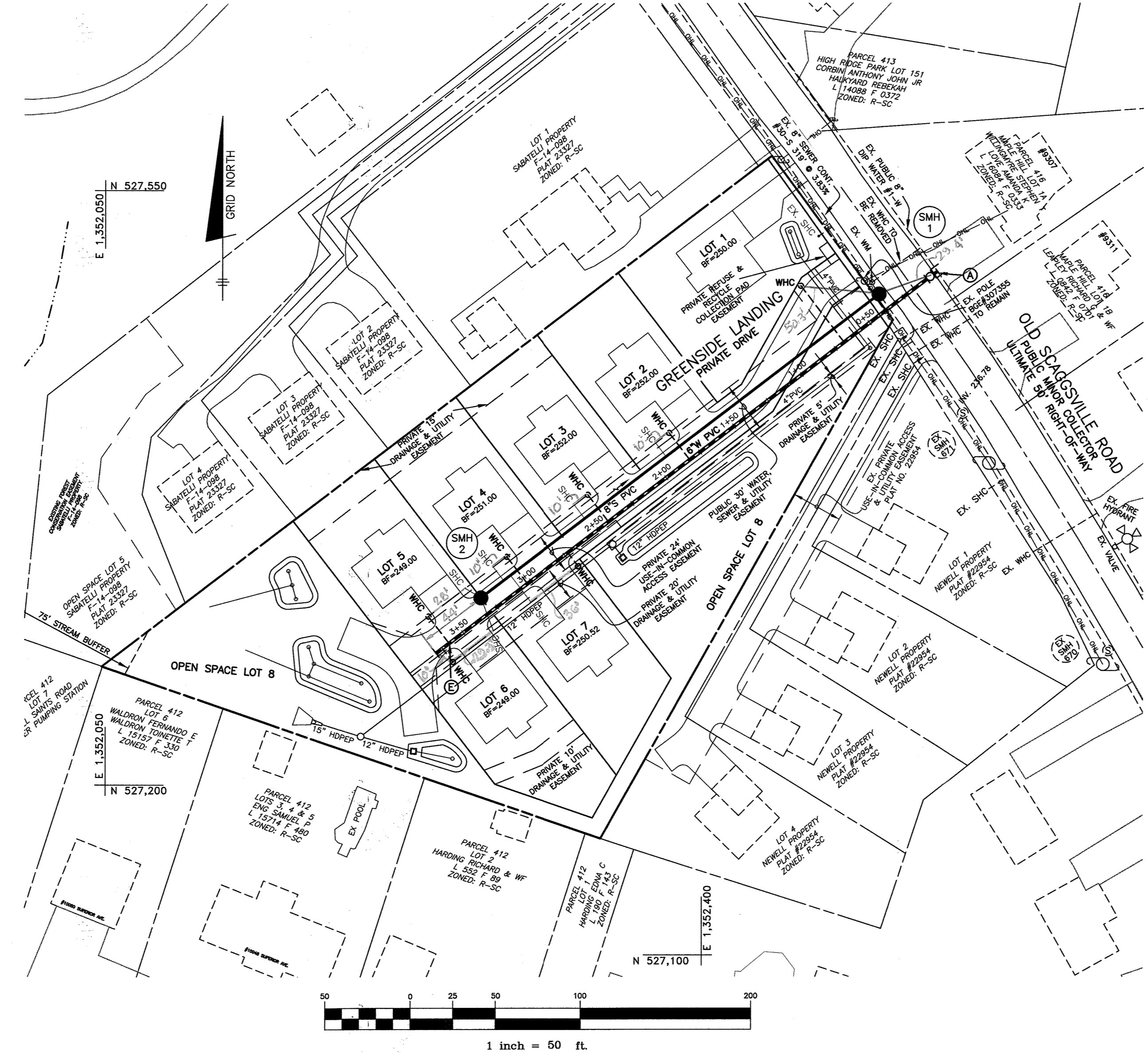
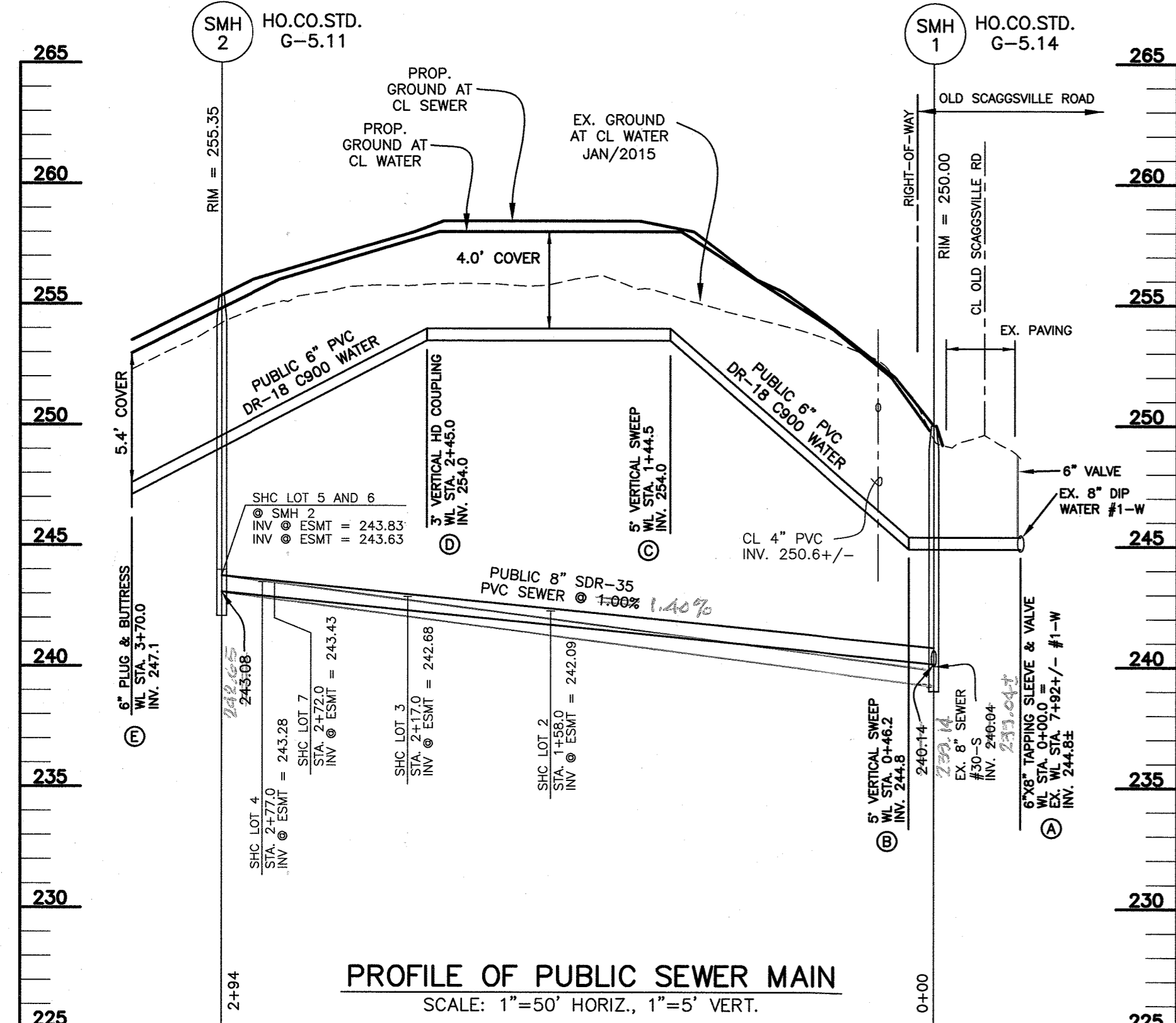
- ### PART I GENERAL NOTES
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
 - TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED IN JANUARY, 2015 BY BENCHMARK ENGINEERING, INC.
 - HORIZONTAL AND VERTICAL SURVEY CONTROLS:
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 47GD AND NO. 47GE.
ALL VERTICAL CONTROLS ARE BASED ON NAVD '88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE 0012 AND 16E1.
 - 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. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE RECOVERED FROM MONIES OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
 - FOR DETAILS NOT SHOWN ON THE DRAWING, 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.
 - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL [] AT THE LOCATIONS OF THE TEST PITS. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
AT&T.....1-800-252-1133
BOE (CONTRACTOR SERVICES).....410-683-8713
BOE (EMERGENCY).....410-685-0123
BUREAU OF UTILITIES.....410-313-9900
COLONIAL PIPELINE CO.....410-783-1500
MISS UTILITY.....1-800-257-7777
STATE HIGHWAY ADMINISTRATION OPERATIONS AT HIS OWN EXPENSE.....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 LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(c) OF THE HOWARD COUNTY CODE.

Sewer Manhole Schedule

Manhole Number	Location (NAD '83)	Invert In	Invert Out	Rim Elevation	Ho.Co.Std. Detail
1	N 527488.59 E 1352503.89	240.14	240.04	250.00	G-5-14
2	N 527320.14 E 1352270.31	-	243.08	255.35	G-5-11

Water Appurtenance Schedule

No.	Appurtenance	WL Station	Location (NAD '83)
A	8"x8" TAPPING SLEEVE & VALVE	7+92 (EX) = 0+00	N 527502.14 E 1352538.09
B	5 DEGREE VERTICAL SWEEP	0+46.2	N 527474.09 E 1352501.37
C	5 DEGREE VERTICAL SWEEP	1+44.5	N 527414.41 E 1352423.26
D	3 DEGREE VERTICAL HD COUPLING	2+45.0	N 527353.40 E 1352343.40
E	6" PLUG AND BUTTRISS	3+70	N 527277.51 E 1352244.07



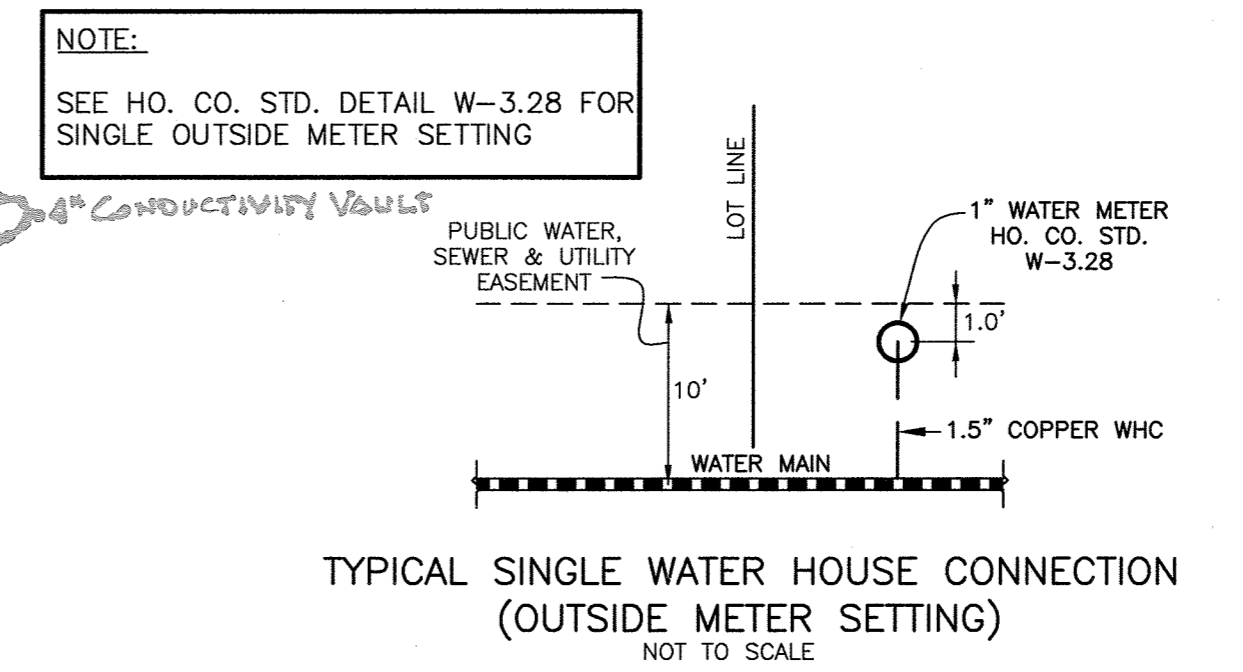
NOTE:
ALL WATER HOUSE CONNECTIONS ARE TO BE 1.5" WITH A 1" METER (OUTSIDE SETTING).
ALL SEWER HOUSE CONNECTIONS SHALL BE 4" PVC.

WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE

LOT	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1	9304 OLD SCAGGSVILLE ROAD	80.5' TO SMH #1	60' TO WHC LOT #3
2	9206 GREENSIDE LANDING	73.5' TO SDMH #2	88.4' TO SMH #2
3	9210 GREENSIDE LANDING	28.7' TO SDMH #2	48.7' TO WHC LOT #7
4	9214 GREENSIDE LANDING	26.8' TO SMH #2	28.7' TO WHC LOT #6
5	9218 GREENSIDE LANDING	28.7' TO SMH #2	30' TO SHC #2
6	9219 GREENSIDE LANDING	24.8' TO SMH #2	25' TO SDMH #2
7	9215 GREENSIDE LANDING	4' TO WHC LOT #6	46.5' TO SMH #2

SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE

LOT	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1	9304 OLD SCAGGSVILLE ROAD	65' TO SDMH #2	50' TO WHC LOT #3
2	9206 GREENSIDE LANDING	28.7' TO SDMH #2	78.4' TO SMH #2
3	9210 GREENSIDE LANDING	12.5' TO SDMH #2	51.1' TO WHC LOT #7
4	9214 GREENSIDE LANDING	7.5' TO SDMH #2	28.1' TO WHC LOT #6
5	9218 GREENSIDE LANDING	26.1' TO SMH #2	34' TO CONDUCTIVITY VAULT
6	9219 GREENSIDE LANDING	24.8' TO SMH #2	30' TO WHC LOT #7
7	9215 GREENSIDE LANDING		

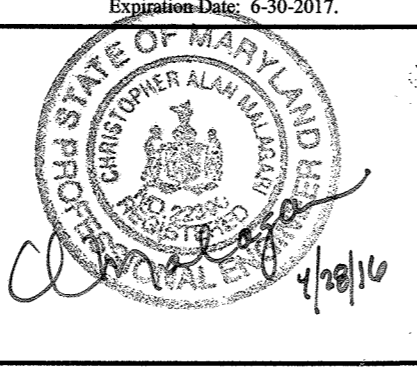


THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Roberts
HOWARD SOIL CONSERVATION DISTRICT
DATE: 6/9/16

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CHIEF, BUREAU OF UTILITIES
DATE: 6-23-16

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 6-23-16

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
(P) 410-465-8100 (F) 410-465-8644
WWW.BE-CVLENGINEERING.COM



DES:	DBT			
DRAFT:	DBT			
CHK:	CAM			
DATE:	04/2016	BY:	NO.	REVISIONS

PUBLIC WATER AND SEWER PLAN,
PROFILES, NOTES AND DETAILS
600 SCALE MAP #.
BLOCK:

HIGH RIDGE ESTATES
LOTS 1-7 AND OPEN SPACE LOT 8
CONTRACT NO. 24-4952-D
SCALE: AS SHOWN
SHEET NO. 1 OF 1
TAX MAP: 50 - BLOCK: 2 - PARCEL: 75 AND 258 - ZONED: R-SC - ELECTION DISTRICT: 6