

ITEMS	ESTIMATED QUANTITIES	QUANTITIES		
		QUANTITIES	AS-BUILT	MANUF./SUPPLIER
8" WATER (PVC C900 DR18)	591 L.F.	591 L.F.	DR-18 C-900 R/C	NATIONAL PIPE
6" WATER (FH LEADS-DIP)	20 L.F.	20 L.F.	D.I.P.	GRIFFIN
1.5" W/C	310 L.F.	310 L.F.	TYPE 'M' COPPER	CAMBRIDGE LEE
8" 1/8" HB	4 EACH	4 EA.	D.I.P.	STAR PIPE
FIRE HYDRANT	2 EACH	2 EA.	5'-0"	MUELLER PIPE
FH TEE & VALVE	2 EACH	2 EA.	GATE	MUELLER PIPE
8"x8" TS&V	1 EACH	1 EA.		
8" SEWER (DIP)	27 L.F.	27 L.F.	D.I.P.	GRIFFIN
8" SEWER (PVC)	552 L.F.	552 L.F.	SDR-35 P.V.C.	NATIONAL PIPE
MH (G-5.15)	1 EACH	1 EA.	PRE-CAST CONC.	ATLANTIC CONCRETE
MH (G-5.12)	4 EACH	4 EA.	PRE-CAST CONC.	ATLANTIC CONCRETE
MH (S-1.31)	1 EACH	1 EA.	PRE-CAST CONC.	ATLANTIC CONCRETE
4" SHC	354 L.F.	354 L.F.	SDR-35 P.V.C.	NATIONAL PIPE

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

PUBLIC WATER AND SEWER MAIN EXTENSIONS

TROTTER POINT

LOTS 1-14 AND

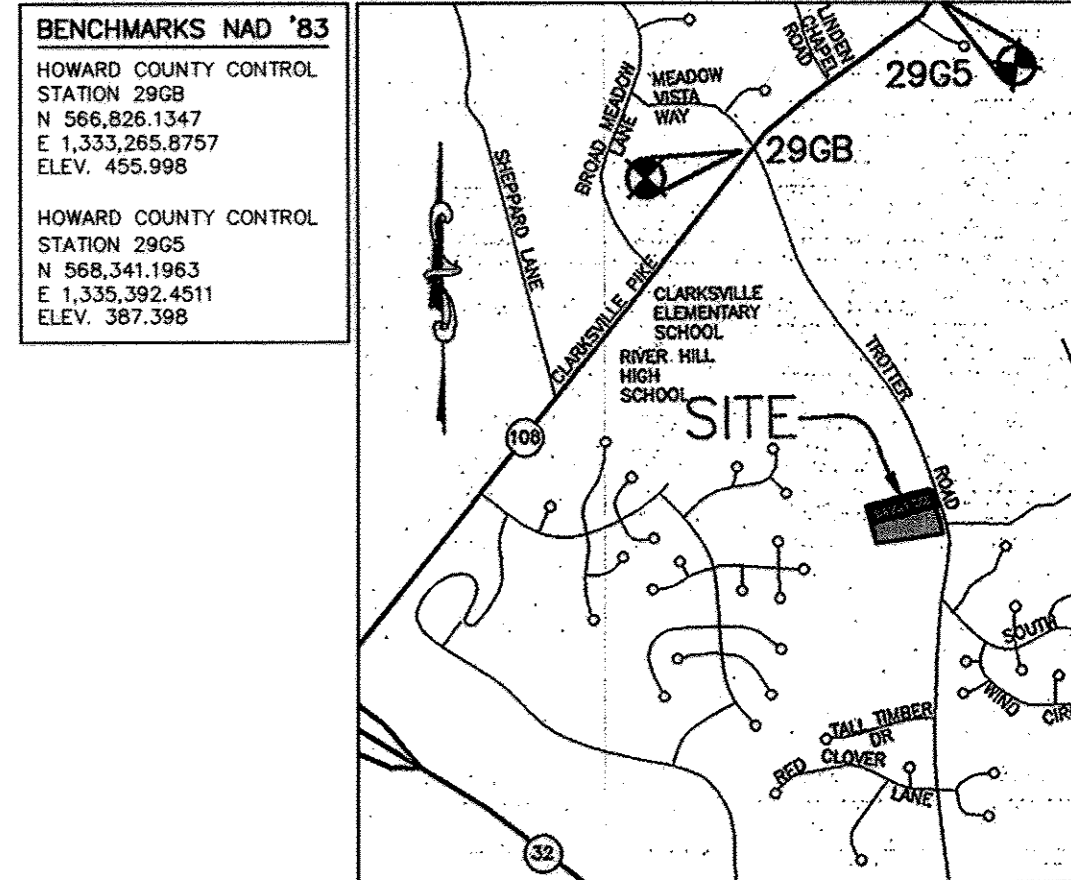
OPEN SPACE LOTS 15-18

TAX MAP 43; PARCELS 8, 9 & 135; GRID 2

1st ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

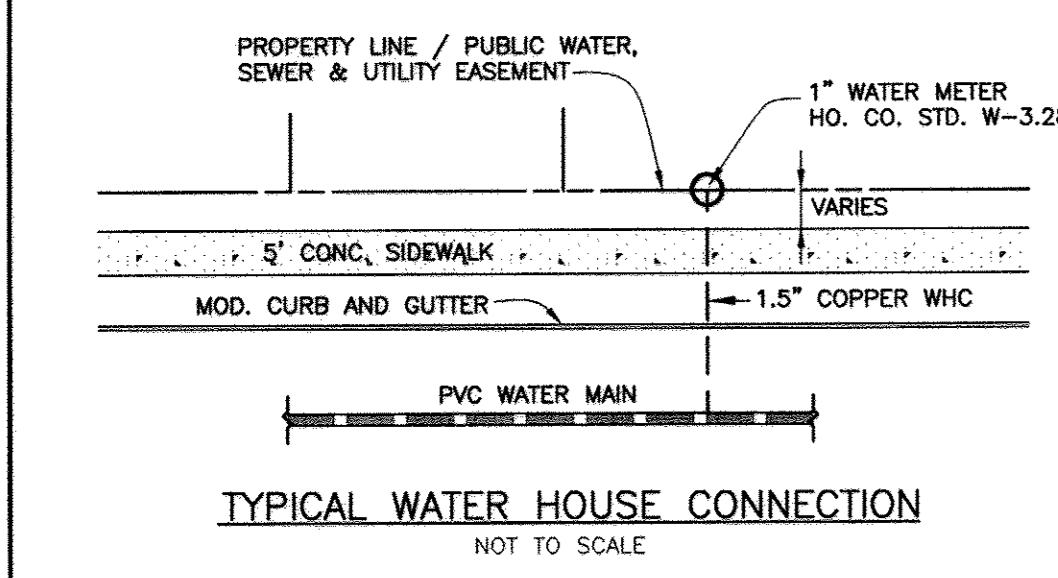
CONTRACT NO.: 34-4728-D



VICINITY MAP
SCALE: 1"=200'
ADC MAP 4934, GRID C-6.7

LEGEND

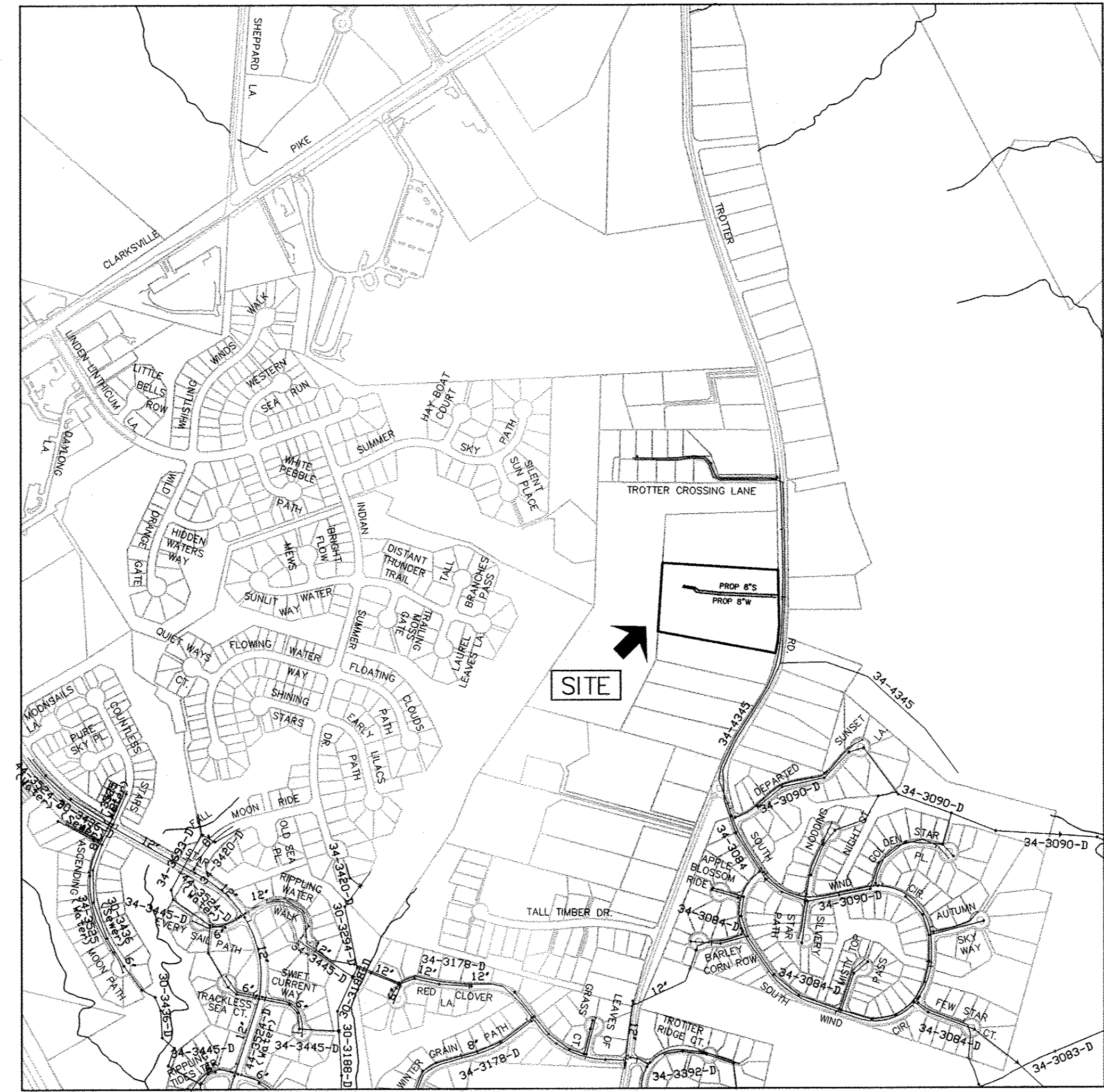
EXIST. WATER MAIN	---
EXIST. SEWER MAIN	---
EXIST. SEWER MANHOLE	○
EXIST. STORM DRAIN	---
PROP. WATER MAIN	==
PROP. SEWER MAIN	==
PROP. STORM DRAIN	---
PROP. SEWER MANHOLE (BY OTHERS)	○
PROP. TERMINAL MANHOLE	○
PROP. SEWER HOUSE CONNECTION	---
PROP. DROP SEWER HOUSE CONN. (SEE PLAN VIEW FOR TYPE)	---
PROP. WATER HOUSE CONNECTION	---
PROP. FIRE HYDRANT	---
PROP. VALVE	---
PROP. PLUG & BUTTRESS	---



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

SHEET INDEX

NO.	DESCRIPTION
1	TITLE SHEET PUBLIC WATER & SEWER MAINS
2	PLAN VIEW PUBLIC WATER & SEWER MAINS
3	PROFILE VIEWS PUBLIC WATER & SEWER MAINS



LOCATION MAP
SCALE: 1" = 600'

TYPE OF BUILDING:	SFD
NO. OF BUILDABLE LOTS:	14
NUMBER OF SHC'S:	14
NUMBER OF WHC'S:	14
DRAINAGE AREA:	MIDDLE PATUENT
TREATMENT PLANT:	MIDDLE PATUENT WRP
WATER ZONE:	630
TEST GRADIENT:	780

NOTE: CONTRACTORS TO EXERCISE EXTREME CAUTION WHEN WORKING IN AREA OF EXIST. OVERHEAD LINES ALONG TROTTER ROAD

- GENERAL NOTES**
- PART 1 - GENERAL**
- APPROXIMATE LOCATION 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 ON FEBRUARY 2003 BY WINGS AERIAL MAPPING AND SUPPLEMENTED BY TOPOGRAPHIC SURVEY PERFORMED BY MILDENBERG BOENDER & ASSOCIATES IN DECEMBER 2007 AND ARE SHOWN AT 2' INTERVALS.
 - THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM, NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 43R1 AND 43B2. ALL VERTICAL CONTROLS ARE BASED ON NAVD 88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE HO.CO. GEODETIC CONTROL STA. 43R1 & 43B2.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12". 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 BRACING OF ADDITIONAL 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 DRAWINGS, 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.
 - 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
BG&E (CONSTRUCTION SERVICES)	410-850-4620
BG&E (EMERGENCY)	410-885-1400
HO. CO. DPW - BUREAU OF UTILITIES	410-313-4800
COLONIAL PIPELINE CO.	410-785-1390
MISS UTILITY	1-800-257-7777
STATE HIGHWAY ADMINISTRATION	410-531-5533
VERIZON	1-800-743-0033/410-224-9210
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
 - 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 HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

- PART 2 - WATER**
- ALL WATER MAINS TO BE PVC C900 DR18 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" 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 THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR 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 1005 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
 - TRACE WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL D.I.P. AND P.V.C. WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
 - FOR PVC WATER MAINS, ALL RECORDS FOR THE QUANTITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF ANNA STANDARD SPECIFICATIONS SHALL BE INSTALLED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF MATERIAL FOR USE. TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORD RECEIVED.
 - UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SEVENTEEN (17) POUND SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESES. 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.
 - FIRE SPRINKLER SYSTEMS FOR ALL SINGLE FAMILY DWELLINGS SHALL HAVE A MINIMUM OF A 1-1/2" CONNECTION WITH A 1" OUTSIDE METER SETTING.

- PART 3 - SEWER**
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
 - ALL MANHOLES SHALL BE 4' - 0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - FORCE MAINS SHALL BE D.I.P. ONLY.
 - MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G-5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

AS BUILTS
BY: DFI DATE: 12/12/13

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.

John P. Roberts 2/26/13 DATE
HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER APPROVED DEVELOPMENT PLANS F-13-004

OWNER/DEVELOPER
TROTTER POINT, L.L.C.
9695 NORFOLK AVENUE
LAUREL, MD 20723
(410) 792-2565

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. 28559; Expiration Date: 7-23-2013

LOCATION MAP
SCALE: 1" = 600'

NOTE: HOUSE CONNECTIONS TO BE SIZED ACCORDINGLY:
SINGLE WHC = 1-1/2"
SINGLE SHC = 4"

NOTE: HO. CO. STD. DETAILS C-5.01 THRU C-5.03 ARE NOT APPLICABLE; THIS PROJECT IS NOT WITHIN AN AREA IDENTIFIED AS HAVING CORROSIVE SOILS

NOTE: ALL JOINTS AND CONNECTIONS LOCATED WITHIN STRUCTURAL FILL AREAS SHALL BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION)

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Silva Chern 2/13/13 DATE
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Michael... 2/13/13 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.

8460 BALTIMORE NATIONAL PIKE & SUITE 418 & ELICOTT CITY, MARYLAND 21043
(P) 410-485-8100 (F) 410-485-6844
60 THOMAS JOHNSON DRIVE FREDERICK, MARYLAND 21702
(P) 301-371-3505 (F) 301-371-3506
WWW.BE1-CHEMENGINEERING.COM

STATE OF MARYLAND
BRIAN F. CLEARY
PROFESSIONAL ENGINEER
LICENSE NO. 28559
EXPIRES 7/23/2013

DES:	DRN:	CHK:	DATE:	BY:	NO.	REVISIONS	DATE:
MCR/BFC	MCR/BFC	BFC	2/01/2013				

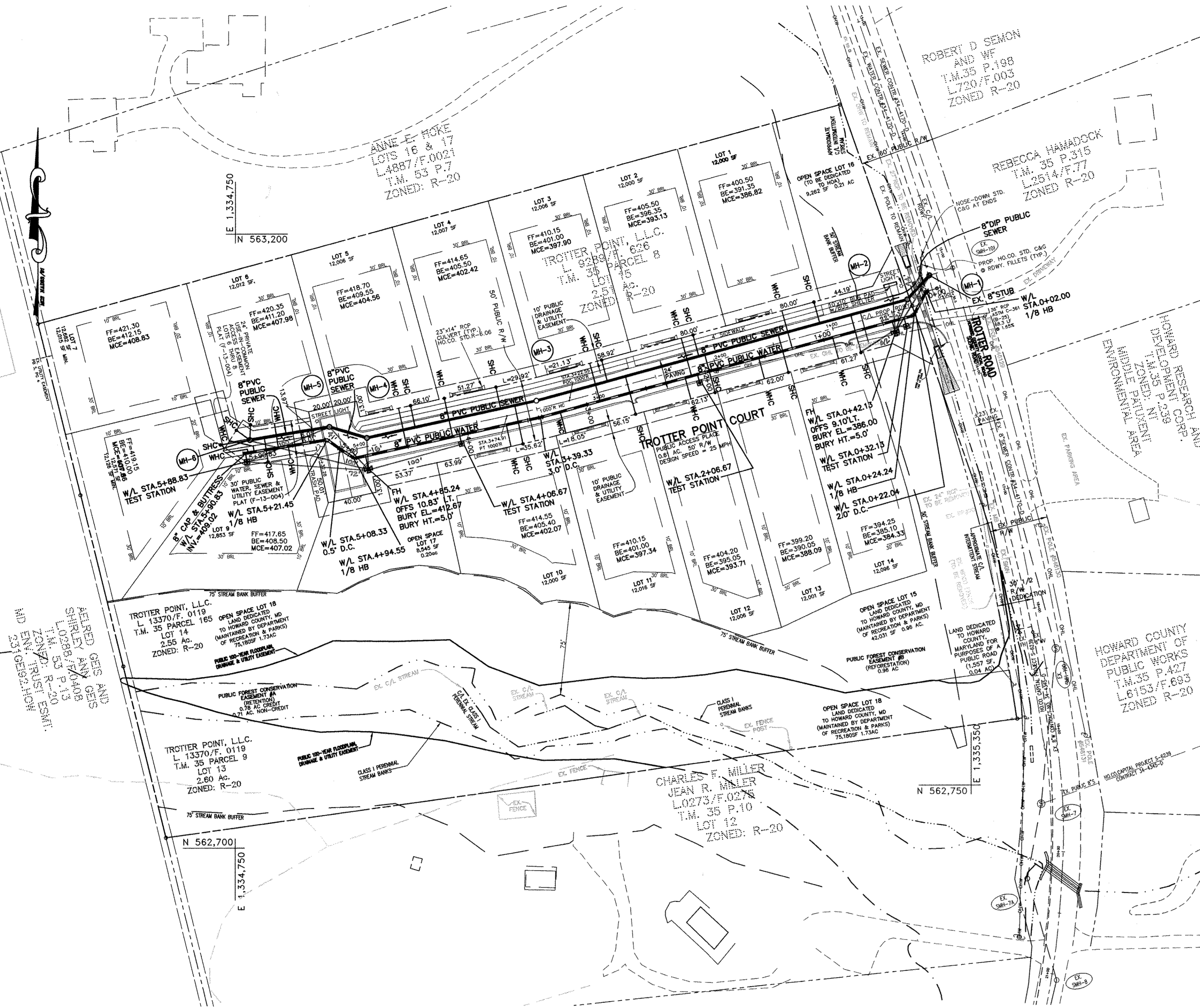
PUBLIC WATER AND SEWER TITLE SHEET

600 SCALE MAPS: 35
BLOCKS: 2

TROTTER POINT
LOTS 1-14 & OPEN SPACE LOTS 15-18
TAX MAP 43; PARCELS 8, 9 & 135; GRID 2
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT No. 34-4728-D

SCALE:
AS SHOWN

SHEET NO.
1 OF 3



WATER AND SEWER PLAN
SCALE: 1" = 50'

WATER SERVICE AS-BUILT LOCATION TABLE				
LOCATION DIMENSION #3	LOT	ADDRESS	LOCATION DIMENSION #1	LOCATION DIMENSION #2
WHC #1 TO WHC #11 = 79.0'	1	- TROTTER POINT COURT	WHC #1 TO WHC #2 = 87.0'	WHC #1 TO WHC #13 = 76.0'
WHC #2 TO WHC #3 = 71.0'	2	- TROTTER POINT COURT	WHC #2 TO WHC #3 = 78.0'	WHC #2 TO CURB OPEN INLET #2 = 46'
WHC #3 TO MH #3 = 56.0'	3	- TROTTER POINT COURT	WHC #3 TO CURB OPEN INLET #2 = 35'	WHC #3 TO WHC #7 = 78.0'
WHC #4 TO MH #3 = 80.0'	4	- TROTTER POINT COURT	WHC #4 TO WHC #5 = 38.0'	WHC #4 TO WHC #10 = 86.0'
WHC #5 TO WHC #4 = 38.0'	5	- TROTTER POINT COURT	WHC #5 TO MH #5 = 42.0'	WHC #5 TO MH #5 = 59.0'
WHC #6 TO MH #5 = 45.0'	6	- TROTTER POINT COURT	WHC #6 TO MH #6 = 24.0'	WHC #6 TO WHC #7 = 38.0'
WHC #7 TO MH #6 = 15.0'	7	- TROTTER POINT COURT	WHC #7 TO MH #6 = 16.0'	WHC #7 TO WHC #8 = 10.0'
WHC #8 TO WHC #6 = 46.0'	8	- TROTTER POINT COURT	WHC #8 TO WHC #7 = 10.0'	WHC #8 TO MH #6 = 22.0'
WHC #9 TO WHC #8 = 54.0'	9	- TROTTER POINT COURT	WHC #9 TO MH #6 = 36.0'	WHC #9 TO MH #5 = 41.0'
WHC #10 TO MH #3 = 51.0'	10	- TROTTER POINT COURT	WHC #10 TO WHC #11 = 47.0'	WHC #10 TO TEST STATION (6.0) = 45'
WHC #11 TO WHC #3 = 78.0'	11	- TROTTER POINT COURT	WHC #11 TO WHC #10 = 47.0'	WHC #11 TO MH #3 = 46.0'
WHC #12 TO CURB OPEN INLET #2 = 62.0'	12	- TROTTER POINT COURT	WHC #12 TO WHC #13 = 62.0'	WHC #12 TO WHC #2 = 71.0'
WHC #13 TO WHC #2 = 90.0'	13	- TROTTER POINT COURT	WHC #13 TO WHC #14 = 64.0'	WHC #13 TO WHC #12 = 62.0'
WHC #14 TO WHC #13 = 64.0'	14	- TROTTER POINT COURT	WHC #14 TO FH #1 = 53.0'	WHC #14 TO CURB OPEN INLET #1 = 49'

SEWER SERVICE AS-BUILT LOCATION TABLE				
LOCATION DIMENSION #3	LOT	ADDRESS	LOCATION DIMENSION #1	LOCATION DIMENSION #2
SHC #1 TO CURB OPEN INLET #1 = 17'	1	- TROTTER POINT COURT	SHC #1 TO SHC #14 = 77.0'	SHC #1 TO MH #2 = 91.0'
SHC #2 TO CURB OPEN INLET #2 = 33'	2	- TROTTER POINT COURT	SHC #2 TO MH #3 = 52.0'	SHC #2 TO SHC #4 = 72.0'
SHC #3 TO CURB OPEN INLET #2 = 24'	3	- TROTTER POINT COURT	SHC #3 TO MH #3 = 67.0'	SHC #3 TO SHC #4 = 89.0'
SHC #4 TO SHC #2 = 71.0'	4	- TROTTER POINT COURT	SHC #4 TO MH #3 = 49.0'	SHC #4 TO SHC #3 = 89.0'
SHC #5 TO MH #5 = 50.0'	5	- TROTTER POINT COURT	SHC #5 TO FH #2 = 69.0'	SHC #5 TO MH #2 = 69.0'
SHC #6 TO WHC #7 = 21.0'	6	- TROTTER POINT COURT	SHC #6 TO MH #6 = 14.0'	SHC #6 TO WHC #6 = 19.0'
SHC #7 TO WHC #8 = 20.0'	7	- TROTTER POINT COURT	SHC #7 TO MH #6 = 14.0'	SHC #7 TO WHC #6 = 31.0'
SHC #8 TO TEST STATION #2 = 22.0'	8	- TROTTER POINT COURT	SHC #8 TO MH #6 = 20.0'	SHC #8 TO WHC #7 = 5.0'
SHC #9 TO MH #5 = 45.0'	9	- TROTTER POINT COURT	SHC #9 TO MH #6 = 39.0'	SHC #9 TO WHC #6 = 37.0'
SHC #10 TO TEST STATION #1 = 54.0'	10	- TROTTER POINT COURT	SHC #10 TO MH #3 = 85.0'	SHC #10 TO WHC #11 = 37.0'
SHC #11 TO CURB OPEN INLET #2 = 50'	11	- TROTTER POINT COURT	SHC #11 TO MH #3 = 85.0'	SHC #11 TO SHC #10 = 93.0'
SHC #12 TO WHC #13 = 43.0'	12	- TROTTER POINT COURT	SHC #12 TO WHC #13 = 63.0'	SHC #12 TO TEST STATION #1 = 24.0'
SHC #13 TO SHC #12 = 43.0'	13	- TROTTER POINT COURT	SHC #13 TO SHC #12 = 63.0'	SHC #13 TO WHC #12 = 83.0'
SHC #14 TO SHC #13 = 62.0'	14	- TROTTER POINT COURT	SHC #14 TO FH #2 = 37.0'	SHC #14 TO SHC #1 = 77.0'

SEWER MANHOLE - STRUCTURE SCHEDULE									
NO.	TYPE	LOCATION	INVERT IN	SHC INV.	INVERT OUT	TOP ELEV.	HO.CO. STD.	REMARKS	
MH-1	4.0'x 4.0' "DOGHOUSE"	TROTTER POINT COURT STA.0+12.63 OFFS 21.33' RT.	378.28	-	378.28	385.02	G-5.15	EX. CONTR. #34-4170-D	
MH-2	STD. 4.0'x 4.0' PRE-CAST	TROTTER POINT COURT STA.0+35.16 OFFS 7.0' RT.	376.90	-	376.80	384.87	G-5.12	-	
MH-3	STD. 4.0'x 4.0' PRE-CAST	TROTTER POINT COURT STA.3+48.73 OFFS 6.7' RT.	396.25	-	396.15	407.05	G-5.12	-	
MH-4	STD. 4.0'x 4.0' PRE-CAST	TROTTER POINT COURT STA.4+90.28 OFFS 7.0' RT.	400.60	400.93	400.50	412.78	G-5.12	-	
MH-5	STD. 4.0'x 4.0' PRE-CAST	TROTTER POINT COURT STA.5+18.28 OFFS 22.3' RT.	401.35	-	401.25	412.95	G-5.12	-	
MH-6	TERMINAL	UC DRIVEWAY N 563,031.8 E 1,334,761.9	-	(3)402.98	402.65	415.40	S-1.31	-	

NOTES:
1. STRUCTURE LOCATION FOR MANHOLES IS AT THE CENTER OF THE STRUCTURE.

OWNER/DEVELOPER
TROTTER POINT, L.L.C.
9695 NORFOLK AVENUE
LAUREL, MD 20723
(410) 792-2565

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. 28579, Expiration Date: 7-22-2013



BENCHMARK ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644

DES:	MCR/BFC				
DRN:	MCR/BFC				
CHK:	BFC				
DATE:	2/01/2013	BY:	NO.	REVISIONS	DATE

NOTE: SIZE CONNECTIONS TO BE USED ACCORDINGLY:
SINGLE WHC = 1-1/2"
SINGLE SHC = 4"

NOTE: CONTRACTORS TO EXERCISE EXTREME CAUTION WHEN WORKING IN AREA OF EXIST. OVERHEAD LINES ALONG TROTTER ROAD

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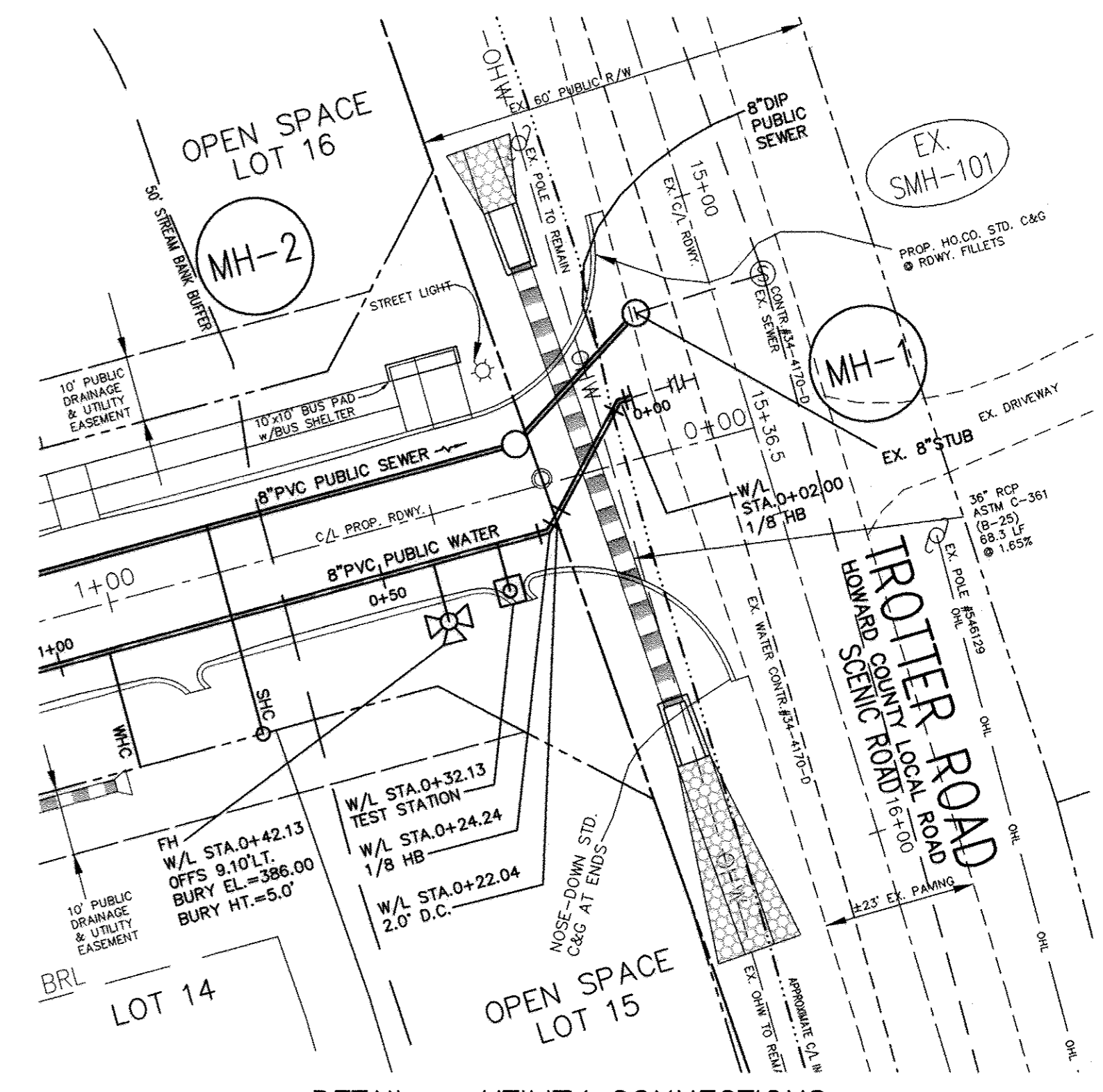
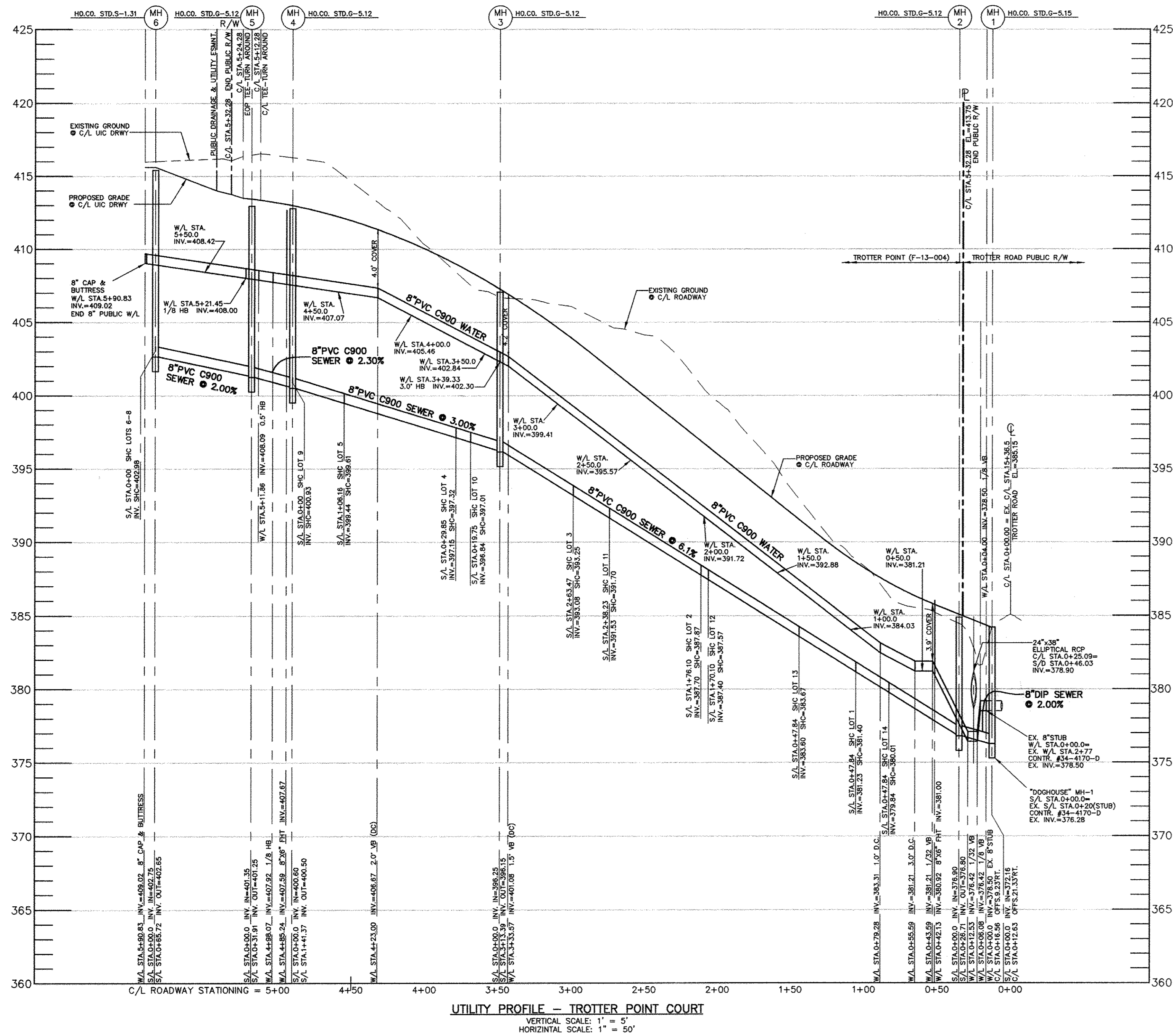
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE: 2/18/13

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
DATE: 2/14/13

PUBLIC WATER AND SEWER PLAN VIEW

TROTTER POINT
LOTS 1-14 & OPEN SPACE LOTS 15-18
TAX MAP 43; PARCELS 8, 9 & 165; GRID 2
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT No. 34-4728-D

SCALE:
AS SHOWN
SHEET NO.
2 OF 3



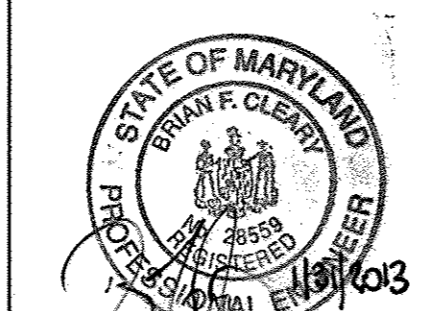
Lot Number	W/L Sta.	Invert @ W/M	Invert @ RW/PUE	Notes
1	1+26.54	388.52	388.82	
2	2+11.68	392.63	392.93	
3	2+89.04	398.58	398.88	
4	4+12.64	406.13	406.43	
5	4+50.86	407.08	407.38	
6	5+61.81	408.73	409.03	
7	5+81.83	408.89	409.19	
8	5+86.83	408.96	409.26	
9	5+53.47	408.60	408.90	
10	3+67.78	403.78	404.08	
11	3+22.67	401.17	401.47	
12	2+17.00	393.04	393.34	
13	1+54.93	388.27	388.57	
14	0+92.43	383.47	383.77	

Lot Number	S/L Sta.	Invert @ main or manhole	Invert @ SHC	Drop House	Invert @ top of standpipe	SHC Slope	Invert @ RW/PUE	Minimum Cellar	Notes
1	0+73.97	381.45	381.62	no	381.98	2.00%	381.98	386.82	
2	1+76.10	387.70	387.87	no	388.23	2.00%	388.23	393.13	
3	2+53.47	392.63	392.80	no	393.16	2.00%	393.16	397.90	
4	0+29.85	397.15	397.32	no	397.68	2.00%	397.68	402.42	
5	1+01.16	399.29	399.46	no	399.82	2.00%	399.82	404.56	
6	MH-6	402.98	N/A	no	403.23	2.00%	403.23	407.98	
7	MH-6	402.98	N/A	no	403.26	2.00%	403.26	408.83	
8	MH-6	402.98	N/A	no	403.43	2.00%	403.43	407.86	
9	0+53.85	402.43	402.60	no	403.00	2.00%	403.00	407.02	
10	0+18.10	396.80	396.97	no	397.61	2.00%	397.61	402.07	
11	2+38.23	391.53	391.70	no	392.34	2.00%	392.34	397.34	
12	1+71.10	387.40	387.57	no	388.21	2.00%	388.21	393.71	
13	1+09.10	383.60	383.77	no	384.09	1.00%	384.09	388.09	SHC @ 1.0%
14	0+47.84	379.84	380.01	no	380.33	1.00%	380.33	384.33	SHC @ 1.0%

OWNER/DEVELOPER
TROTTER POINT, L.L.C.
 9695 NORFOLK AVENUE
 LAUREL, MD 20723
 (410) 792-2565

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. 28599; Expiration Date: 7-22-2013

BENCHMARK ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELICOTT CITY, MARYLAND 21043
 PHONE: 410-465-8105 FAX: 410-465-6644



DES:	MCR/BFC				
DRN:	MCR/BFC				
CHK:	BFC				
DATE:	2/01/2013				
BY:		NO.		REVISIONS	
DATE:					

NOTE: HOUSE CONNECTIONS TO BE SIZED ACCORDINGLY:
 SINGLE WHC = 1-1/2"
 SINGLE SHC = 4"

NOTE: CONTRACTORS TO EXERCISE EXTREME CAUTION WHEN WORKING IN AREA OF EXIST. OVERHEAD LINES ALONG TROTTER ROAD

NOTE: ALL JOINTS AND CONNECTIONS LOCATED WITHIN STRUCTURAL FILL AREAS SHALL BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION)

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES
 DATE: 2/12/13

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 3/11/13

PUBLIC WATER AND SEWER PROFILE VIEW

TROTTER POINT
 LOTS 1-14 & OPEN SPACE LOTS 15-18

TAX MAP 43; PARCELS 8, 9 & 165; GRID 2
 FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

CONTRACT No. 34-4728-D

SCALE:
 AS SHOWN

SHEET NO.
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