

GENERAL NOTES

PART I

- 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.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON AN AERIAL SURVEY BY POTOMAC AERIAL SURVEYS, DATED MAY 15, 2009.
- 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 47DC AND 47EB.
ALL VERTICAL CONTROLS ARE BASED ON (NAVD' 27). VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE:
GEODETIC SURVEY CONTROL 47 DC (N 536615.0163/E 1353679.1189)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, LOCATED AT IN GORMAN ROAD, 1' NORTH OF EDGE OF SIDEWALK, ±21' EAST OF BRIDGE, AND 11.60' NORTH OF GUARDRAIL.
GEODETIC SURVEY CONTROL 47 EB (N 536212.7481/E 1354833.6350)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, LOCATED IN GORMAN ROAD, BETWEEN SKYLARK BLVD AND I-95 BRIDGE, 1.9' NORTH SIDE OF SIDEWALK, AND 48.3' AWAY FROM END OF GUARDRAIL.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED.
- 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 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 LOCATION OF THE TEST PIT. A NOTES 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 OPERATION AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
AT RT _____ 1-800-252-1133
BGE (CONTRACTOR SERVICE) _____ 410-850-4620
BGE (EMERGENCY) _____ 410-685-1400
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 _____ 1-800-743-0033/410-224-9210
- 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 THE CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY 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(a) OF THE HOWARD COUNTY CODE.

PART II - WATER

- ALL WATER MAINS TO BE D.I.P. CLASS 54 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.

PART III - 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 G5.52. WHERE WATERTIGHT MANHOLE FRAME 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.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SITE DEVELOPMENT PLAN SDP-10-013.

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

John R. Robertson 3/12/10
SOIL CONSERVATION DISTRICT DATE

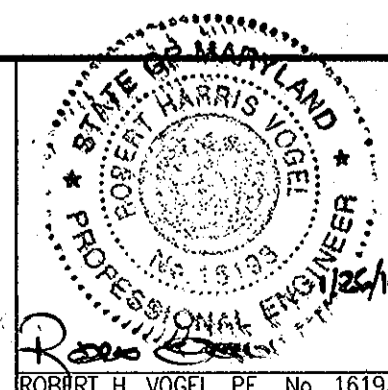
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Shea C. Conner 3/12/10
CHIEF, BUREAU OF UTILITIES DATE

Robert H. Vogel 3/12/10
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELICOTT CITY, MD 21043 FAX: 410.461.8961



PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE 12-31-2010.
DRN: KG DES: DZ
CHK: RHV
DATE: JANUARY 2010

NO. OF LOTS/PARCELS :	1
NO. OF SINGLE WATER HOUSE CONNECTIONS :	12
NO. OF TWIN WATER HOUSE CONNECTIONS :	14
NO. OF SEWER HOUSE CONNECTIONS :	40
DRAINAGE AREA :	LITTLE PATUXENT RIVER
TREATMENT PLANT :	LITTLE PATUXENT WASTEWATER TREATMENT PLANT
REVISION	DATE
1	4-20-11
2	11-09-2010

FINAL WATER CONSTRUCTION PLAN
CONTRACT 44-4644-D
COVER SHEET

THE ENCLAVE AT EMERSON APARTMENTS
PARCEL 'E' (SECTION 2, PHASE 8B)
APARTMENTS AND TOWNHOUSES

600' SCALE MAP NO. 47 BLOCK NO. 8 TAX MAP 47 GRID 8 PARCEL 462 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FINAL WATER CONSTRUCTION PLAN

THE ENCLAVE AT EMERSON APARTMENTS

PARCEL 'E' (SECTION 2, PHASE 8B)

APARTMENTS AND TOWNHOUSES

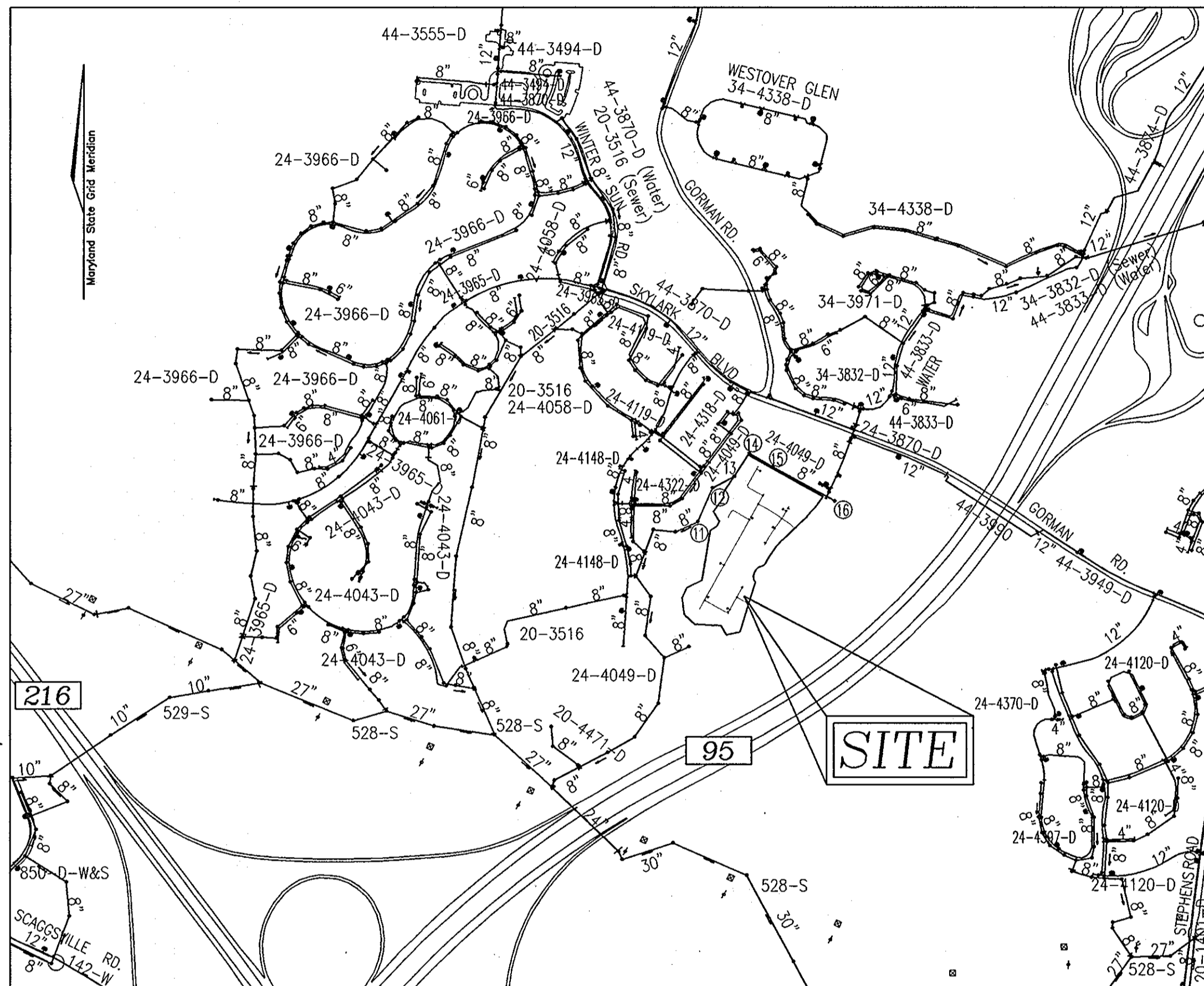
CONTRACT 44-4644-D

PROFILE AS-BUILT DATA

DESCRIPTION	STATION	MEASUREMENT 1	MEASUREMENT 2	MEASUREMENT 3
PROFILE "A"				
6" VALVE	0+04	51' TO INLET-3	76' TO FH	65' TO INLET-2
6" VALVE	0+27	71' TO FH	54' TO FH	49' TO 6" VALVE
6" VALVE	0+95	70' TO FH	51' TO FH	48' TO 6" VALVE
6" VALVE	2+43	23' TO SDMH-10	35' TO FH	19' TO INLET-22
PROFILE "B"				
6" VALVE	0+10	32' TO FH	46' TO INLET-27	79' TO SDMH-1B
6" VALVE	0+29	19' TO FH	45' TO 6" VALVE	20' TO B" VALVE
6" VALVE	0+73	49' TO FH	45' TO 6" VALVE	B" TO B" VALVE
6" VALVE	0+81	66' TO FH	56' TO FH	6' TO B" VALVE
6" VALVE	1+46	99' TO B" VALVE	11' TO FH	65' TO 6" VALVE
6" VALVE	2+44	99' TO FH	35' TO SDMH-8	49' TO SDMH-15
PROFILE "C"				
6" VALVE	0+30	28' TO SDMH-10	8' TO FH	14' TO SDMH-11
6" VALVE	4+59	21' TO FH	98' TO SDMH-11	47' TO SDMH-8
6" VALVE	6+60	23' TO SDMH-5	13' TO SDMH-5	10' TO FH
PROFILE "D"				
6" VALVE	0+04	19' TO SDMH-11	24' TO FH	25' TO INLET-23
6" VALVE	2+12	131' TO SDMH-12	21' TO FH	22' TO SDMH-13
PROFILE "E"				
6" VALVE	0+04	16' TO SDMH-10	36' TO SDMH-8	36' TO INLET-1B
6" VALVE	0+76	21' TO INLET-13	13' TO SDMH-14	89' TO SDMH-10
PROFILE "F"				
6" VALVE	0+10	47' TO SDMH-2	37' TO SDMH-7	86' TO SDMH-7
6" VALVE	1+52	25' TO SDMH-4	15' TO FH	28' TO SDMH-3
6" VALVE	3+15	24' TO SDMH-5	26' TO SDMH-5	27' TO FH
PROFILE "G"				
6" VALVE	0+04	67' TO SDMH-1	26' TO SDMH-104	42' TO SDMH-3
6" VALVE	0+92	57' TO SDMH-3	23' TO SDMH-2	50' TO SDMH-1

WATER AS-BUILT DATA

LOT #	MEASUREMENT 1	MEASUREMENT 2
1	45' TO FH	42' TO SDMH-4
2 & 3	66' TO FH	42' TO SDMH-4
4 & 5	70' TO SDMH-4	56' TO FH
6	54' TO INLET-1	70' TO SDMH-5
7 & 8	28' TO SDMH-6	48' TO SDMH-5
9	48' TO SDMH-6	29' TO SDMH-5
10	20' TO SDMH-5	37' TO FH
11	33' TO SDMH-8	23' TO SDMH-9
12 & 13	33' TO SDMH-9	70' TO INLET-9
14 & 15	68' TO SDMH-9	33' TO INLET-9
16	22' TO INLET-9	130' TO SDMH-10
17 & 18	50' TO INLET-9	99' TO INLET-9
19 & 20	88' TO INLET-9	60' TO SDMH-10
21 & 22	33' TO INLET-13	47' TO SDMH-14
23	51' TO SDMH-15	42' TO INLET-13
24 & 25	44' TO INLET-25	51' TO SDMH-12
26 & 27	58' TO SDMH-12	87' TO FH
28 & 29	95' TO SDMH-12	53' TO FH
30 & 31	36' TO FH	33' TO SDMH-13
32 & 33	58' TO SDMH-12	74' TO FH
34 & 35	98' TO SDMH-12	35' TO FH



LOCATION MAP
SCALE: 1"=600'

WATER ZONE: 550
TEST GRADIENT: 700

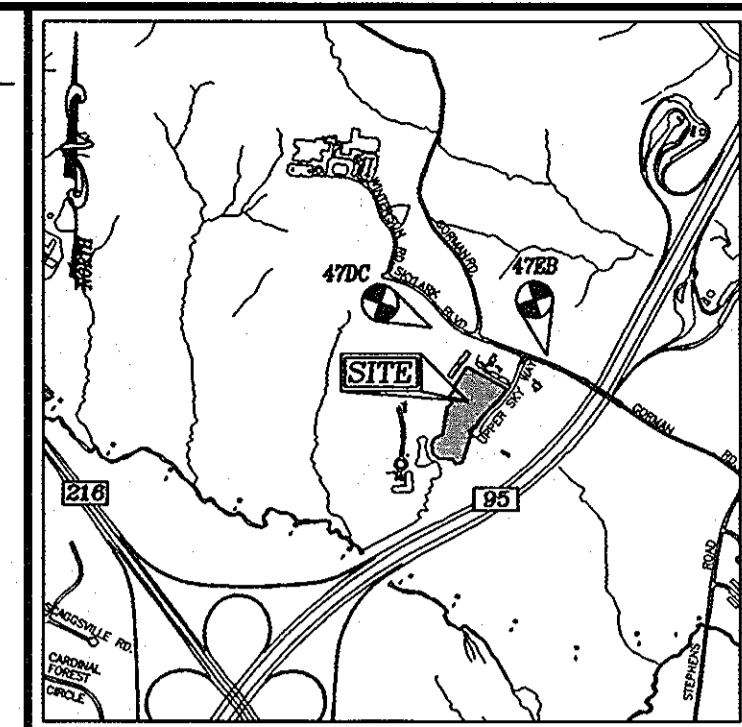
TYPE OF BUILDING :	RESIDENTIAL
NO. OF LOTS/PARCELS :	1
NO. OF SINGLE WATER HOUSE CONNECTIONS :	12
NO. OF TWIN WATER HOUSE CONNECTIONS :	14
NO. OF SEWER HOUSE CONNECTIONS :	40
DRAINAGE AREA :	LITTLE PATUXENT RIVER
TREATMENT PLANT :	LITTLE PATUXENT WASTEWATER TREATMENT PLANT

SEWER AS-BUILT DATA

LOT #	MEASUREMENT 1	MEASUREMENT 2
1	37' TO SDMH-4	132' TO SDMH-5
2	47' TO SDMH-4	116' TO SDMH-5
3	5' TO SDMH-4	47' TO SDMH-5
4	65' TO SDMH-4	80' TO SDMH-5
5	80' TO SDMH-4	63' TO SDMH-5
6	27' TO SDMH-6	59' TO SDMH-5
7	38' TO SDMH-6	47' TO SDMH-5
8	39' TO SDMH-6	27' TO SDMH-5
9	60' TO SDMH-6	18' TO SDMH-5
10	17' TO SDMH-5	47' TO INLET-7
11	43' TO SDMH-8	27' TO INLET-8
12	33' TO SDMH-9	81' TO INLET-9
13	45' TO SDMH-9	60' TO INLET-9
14	43' TO SDMH-9	62' TO INLET-9
15	88' TO SDMH-9	24' TO INLET-9
16	32' TO INLET-9	120' TO SDMH-10
17	42' TO INLET-9	110' TO SDMH-10
18	61' TO INLET-9	89' TO SDMH-10
19	72' TO SDMH-10	80' TO SDMH-8
20	58' TO SDMH-10	68' TO SDMH-8
21	43' TO INLET-13	59' TO SDMH-14
22	39' TO SDMH-15	46' TO SDMH-14
23	50' TO INLET-13	40' TO SDMH-12
24	47' TO INLET-25	16' TO 6" VALVE
25	56' TO INLET-25	43' TO SDMH-12
26	68' TO INLET-25	54' TO SDMH-12
27	79' TO SDMH-12	79' TO FH
28	56' TO 6" VALVE	67' TO FH
29	32' TO 6" VALVE	49' TO FH
30	27' TO 6" VALVE	47' TO FH
31	29' TO 6" VALVE	47' TO FH
32	42' TO SDMH-12	52' TO INLET-25
33	68' TO SDMH-12	68' TO FH
34	78' TO SDMH-12	50' TO FH
35	39' TO SDMH-13	21' TO FH

BENCHMARKS

HOWARD COUNTY BENCHMARK 47DC
N 536615.0163 E 1353679.1189 ELEV. 343.236
HOWARD COUNTY BENCHMARK 47EB
N 536212.7481 E 1354833.6350 ELEV. 354.284



VICINITY MAP
SCALE: 1"=2000'
ADC MAP COORDINATE: 19 H 7

LEGEND

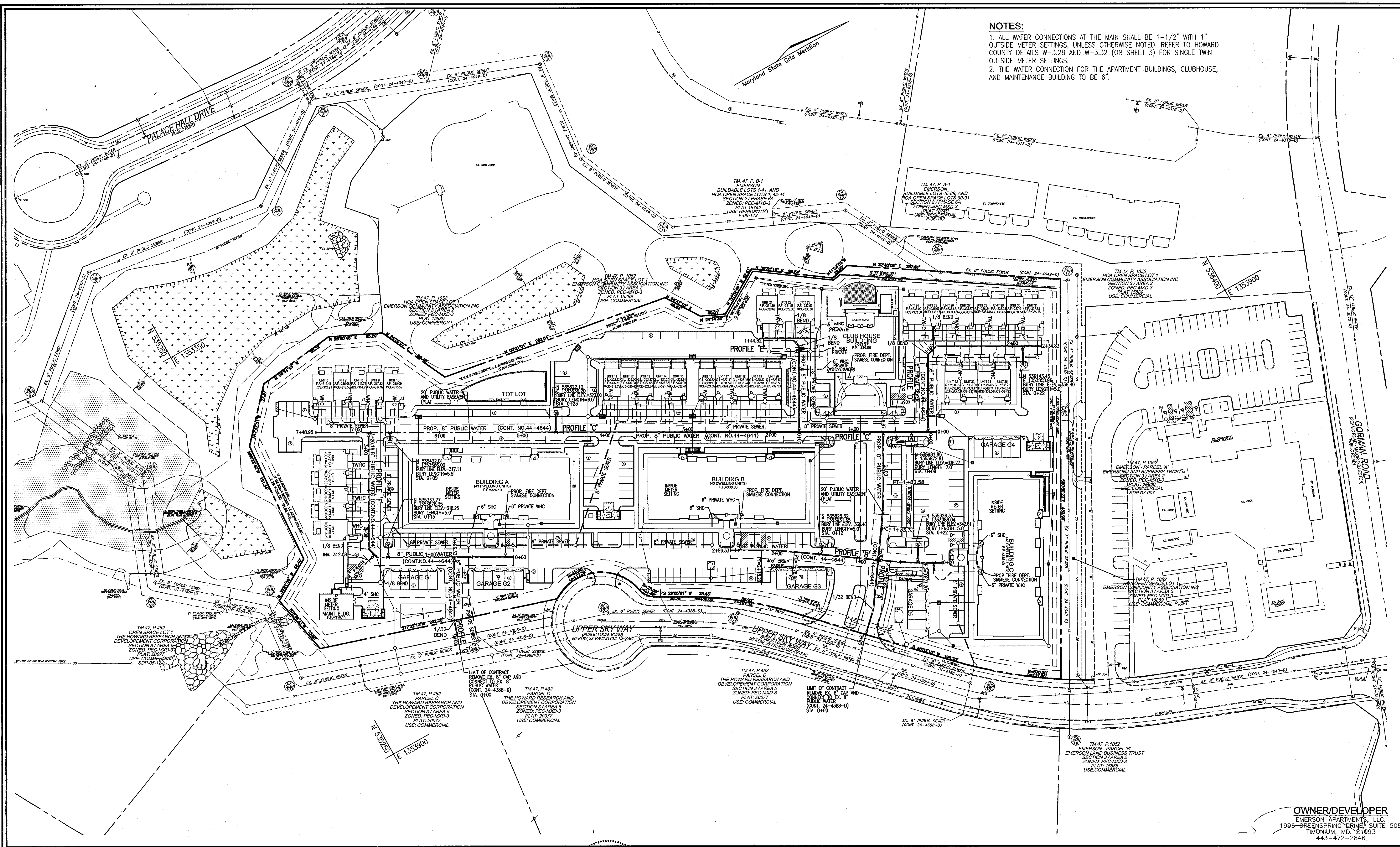
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- FIRE HYDRANT
- PROPOSED VALVE
- PROPOSED TEE
- PROPOSED STORM DRAIN
- EXISTING STORM DRAIN
- PROPOSED PRIVATE SEWER
- EXISTING SEWER
- SEWER MANHOLE
- WATER HOUSE CONNECTION
- SEWER HOUSE CONNECTION
- PROPOSED SIGN
- PROPOSED LIGHT

QUANTITIES

NAME OF UTILITY CONTRACTOR : C.J. MILLER, LLC		SURVEY AND DRAFTING DIVISION AS-BUILT DATE : APRIL 1, 2011	
ITEMS	ESTIMATED	QUANTITIES	AS-BUILT
WATER			
8" WATER	2048 LF	1,481 LF	DIP CL-54 ATLANTIC STATES / FERGUSON
6" WATER	152 LF	215 LF	DIP CL-54 ATLANTIC STATES / FERGUSON
8" x 8" TEE	5 EA	5 EA	MJ C 153 TYLER / UNION FOUNDRY / FERGUSON
8" x 8" CROSS	1 EA	1 EA	MJ C 153 TYLER / UNION FOUNDRY / FERGUSON
8" x 6" TEE	11 EA	11 EA	MJ C 153 TYLER / UNION FOUNDRY / FERGUSON
6" VALVE	11 EA	11 EA	MJ RW ORGATE MUELLER CO. / FERGUSON
6" VALVE	11 EA	11 EA	MJ RW ORGATE MUELLER CO. / FERGUSON
6" FIRE HYDRANT	7 EA	7 EA	MJ C 153 TYLER / UNION FOUNDRY / FERGUSON
8" CAP AND BUTTRESS	7 EA	7 EA	MJ C 153 TYLER / UNION FOUNDRY / FERGUSON
6" CAP AND BUTTRESS	4 EA	4 EA	MJ C 153 TYLER / UNION FOUNDRY / FERGUSON
1" WHC	10 LF	60 LF	1X100K SOFT MUELLER INDUSTRIES / FERGUSON
1-1/2" WHC	522 LF	484 LF	1 1/2 X 100K SOFT MUELLER INDUSTRIES / FERGUSON
1" OUTSIDE METER VAULT	21 EA	21 EA	24X30 CONCRETE VAULT 1 MUELLER CO. / FERGUSON

OWNER/DEVELOPER
EMERSON APARTMENTS, LLC
1996 GREENSPRING DRIVE, SUITE 508
TIMONIUM, MD. 21093
443-472-2846

SCALE AS SHOWN
SHEET 1 OF 3



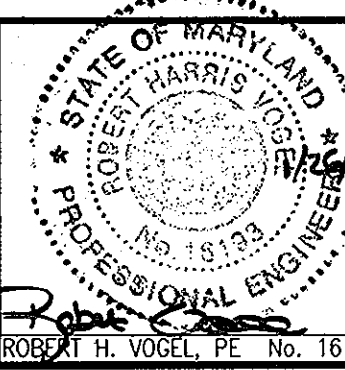
NOTES:
 1. ALL WATER CONNECTIONS AT THE MAIN SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED, REFER TO HOWARD COUNTY DETAILS W-3.28 AND W-3.32 (ON SHEET 3) FOR SINGLE TWIN OUTSIDE METER SETTINGS.
 2. THE WATER CONNECTION FOR THE APARTMENT BUILDINGS, CLUBHOUSE, AND MAINTENANCE BUILDING TO BE 6".

OWNER/DEVELOPER
 EMERSON APARTMENTS, LLC
 1996 GREENSPRING DRIVE, SUITE 508
 TIMONHUM, MD 21093
 443-472-2846

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
Shea C. Coen
 CHIEF, BUREAU OF UTILITIES
 DATE: 2/10/10

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
Michael J. Coen
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 2/10/10

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 FAX: 410.461.8961



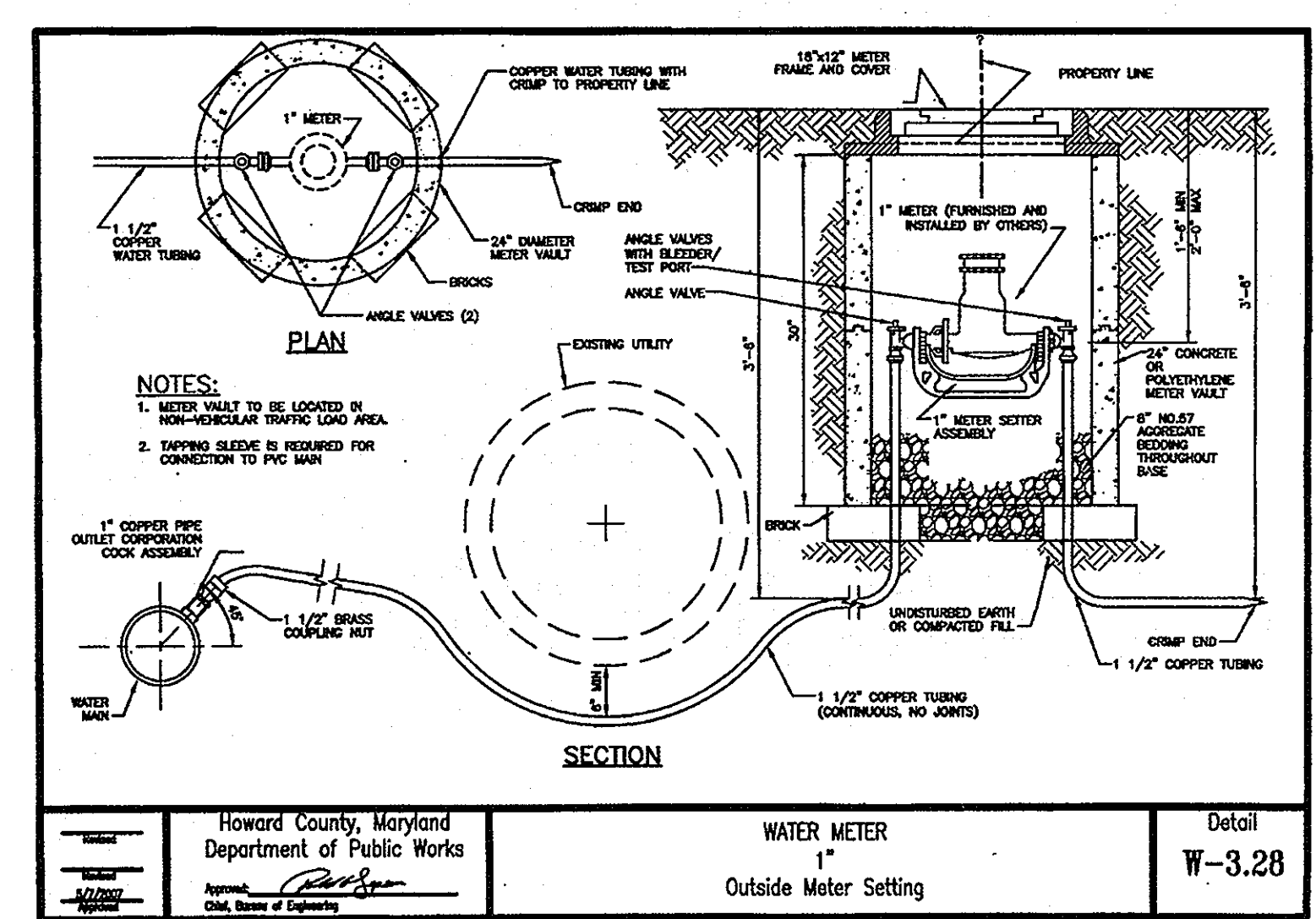
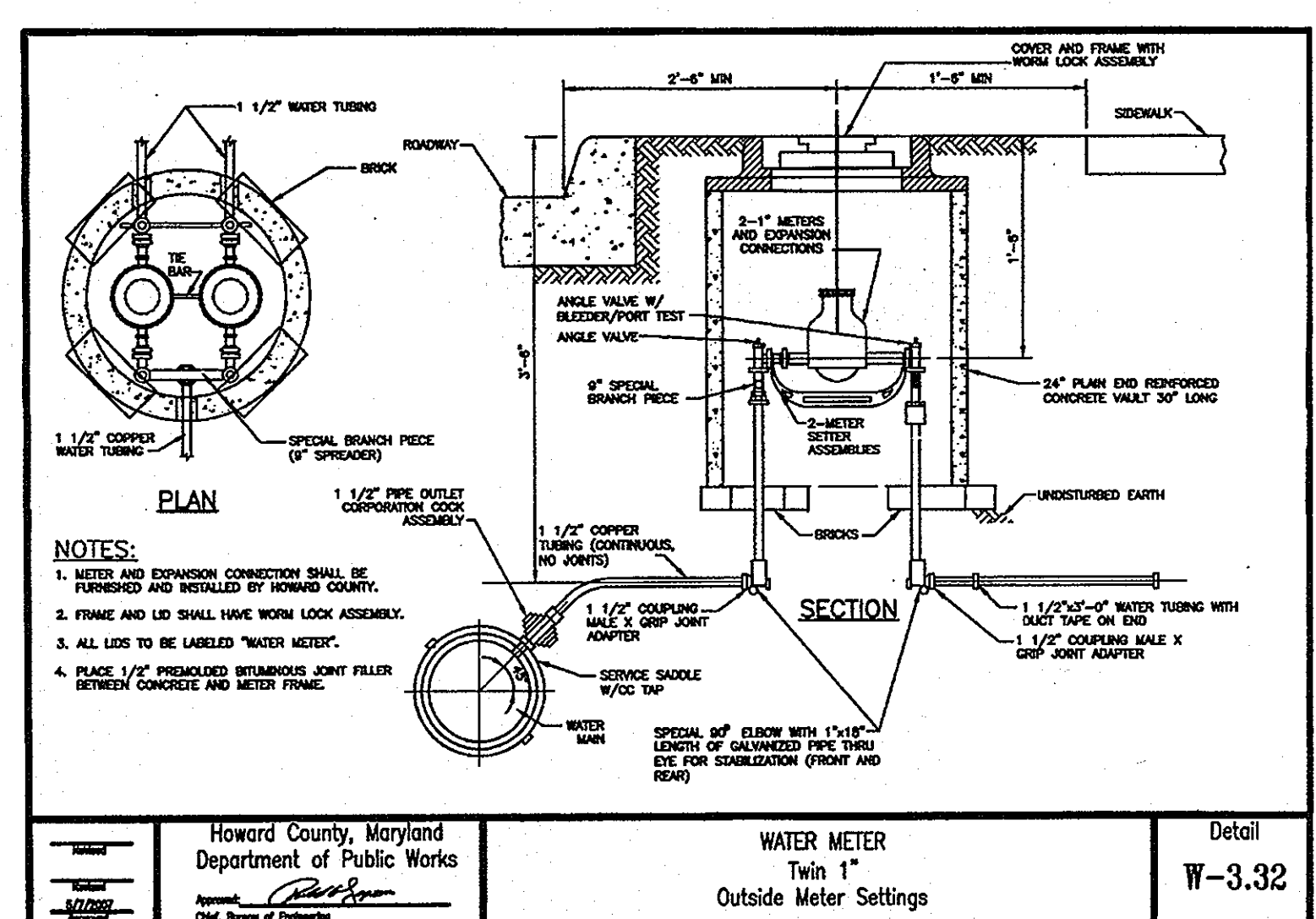
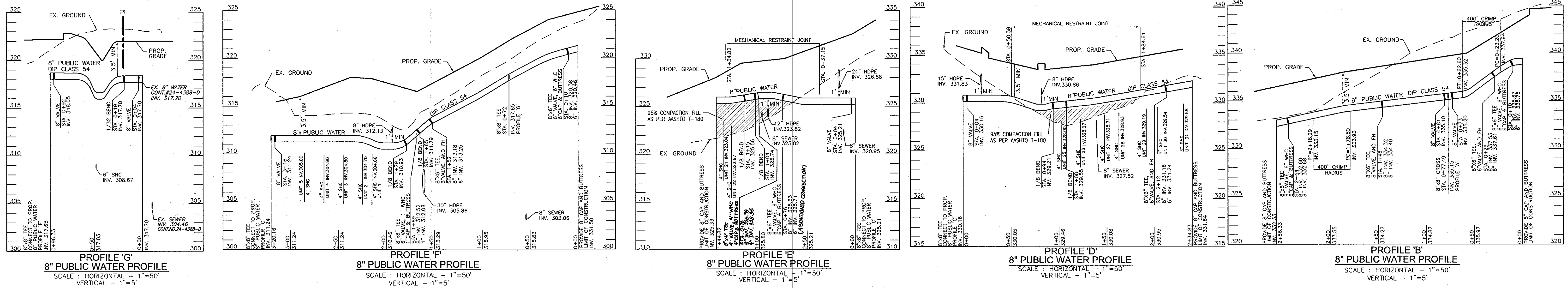
PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 10-27-2010.

DRN:	KG	DES:	DZ
CHK:	RHV		
DATE:	JANUARY 2010		

NO.	REVISION	DATE
1	REVISE PLAN TO ABANDON WHC TO CLUBHOUSE, AND PROVIDE NEW WHC	11.08.2010

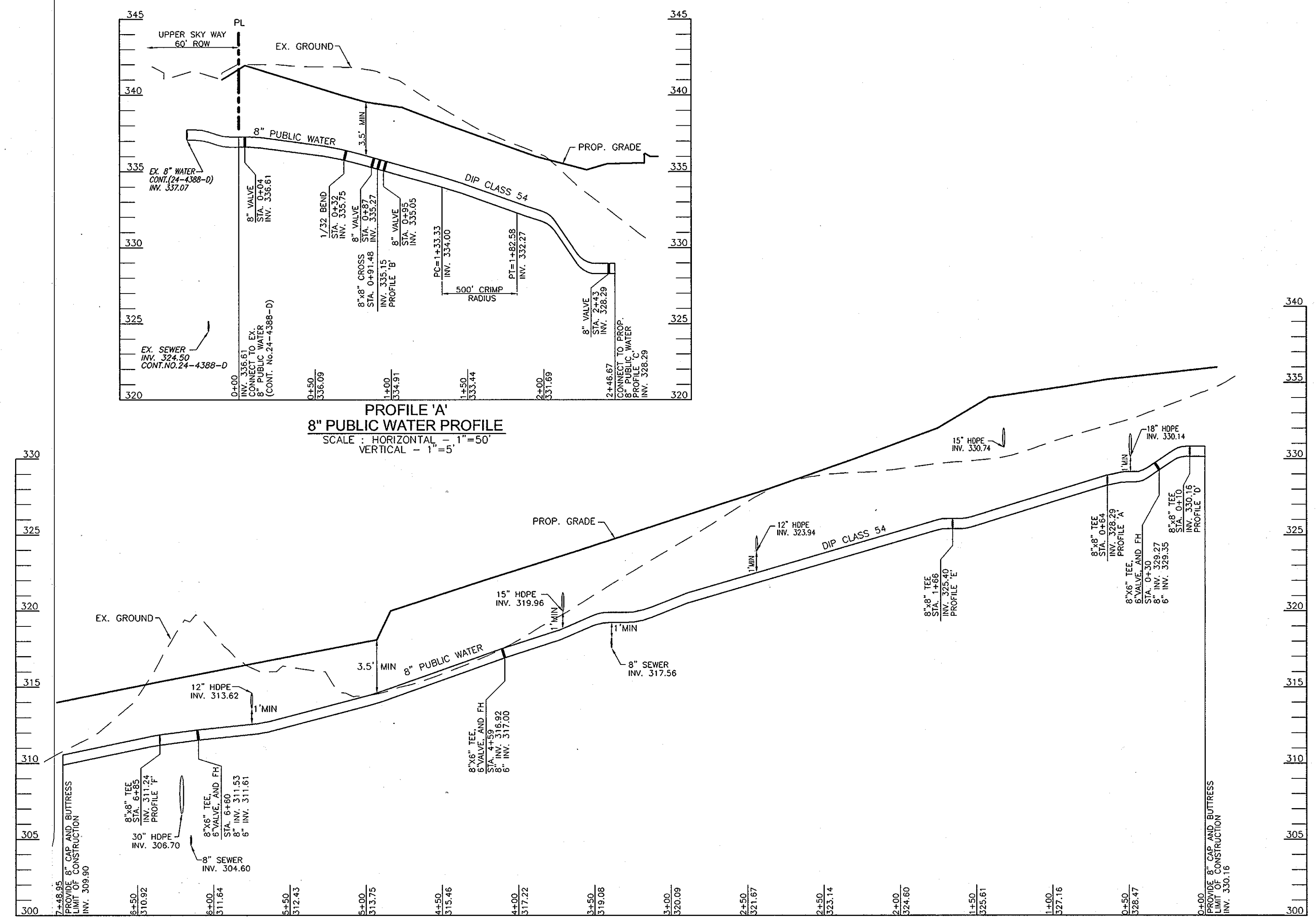
FINAL WATER CONSTRUCTION PLAN
CONTRACT 44-4644-D
LAYOUT SHEET
 600' SCALE MAP NO. 47
 BLOCK NO. 8

THE ENCLAVE AT EMERSON APARTMENTS
 PARCEL 'E' (SECTION 2, PHASE 8B)
 APARTMENTS AND TOWNHOUSES
 SCALE AS SHOWN
 SHEET 2 OF 3
 TMAP 47 GRID 8
 6TH ELECTION DISTRICT
 PARCEL 462
 HOWARD COUNTY, MARYLAND



WATER MAIN LOCATION CHART

WL STA.	APPURTENANCE
PROFILE 'A'	
WL STA. 0+04	8" VALVE
WL STA. 0+32	1/32 HB
WL STA. 0+87	8" VALVE
WL STA. 0+91.48	8"x8" CROSS
WL STA. 0+95	8" VALVE
WL STA. 1+33.33	PC 500 CRIMP RADIUS
WL STA. 1+42.58	PT 500 CRIMP RADIUS
WL STA. 2+43	8" VALVE
WL STA. 2+46.67	8"x8" TEE
PROFILE 'B'	
WL STA. 0+00	8" CAP AND BUTTRESS
WL STA. 0+10	8"x6" TEE, AND 6" VALVE, 10LF 6" WHC, 6" CAP AND BUTTRESS
WL STA. 0+23.20	PC 400 CRIMP RADIUS
WL STA. 0+29	8"x6" TEE, VALVE & FH
WL STA. 0+62.60	PT 400 CRIMP RADIUS
WL STA. 0+73	8" VALVE
WL STA. 0+77	8"x8" CROSS
WL STA. 0+81	8" VALVE
WL STA. 1+46	8"x8" TEE, VALVE & FH
WL STA. 1+78.79	PC 400 CRIMP RADIUS
WL STA. 2+18.29	PT 400 CRIMP RADIUS
WL STA. 2+44	8"x6" TEE, AND 6" VALVE, 10LF 6" WHC, 6" CAP AND BUTTRESS
WL STA. 2+56.33	8" CAP AND BUTTRESS
PROFILE 'C'	
WL STA. 0+00	8" CAP AND BUTTRESS
WL STA. 0+10	8"x8" TEE
WL STA. 0+30	8"x6" TEE, VALVE & FH
WL STA. 0+64	8"x8" TEE
WL STA. 1+66	8"x8" TEE
WL STA. 4+59	8"x6" TEE, VALVE & FH
WL STA. 6+90	8"x6" TEE, VALVE & FH
WL STA. 6+85	8"x8" TEE
WL STA. 7+48.95	8" CAP AND BUTTRESS
PROFILE 'D'	
WL STA. 0+00	8"x8" TEE
WL STA. 0+04	8" VALVE
WL STA. 0+94	1/8 HB
WL STA. 1+08	1/8 HB
WL STA. 2+12	8"x6" TEE, VALVE & FH
WL STA. 2+34.83	8" CAP AND BUTTRESS
PROFILE 'E'	
WL STA. 0+00	8"x8" TEE
WL STA. 0+04	8" VALVE
WL STA. 0+76	8"x6" TEE, AND 6" VALVE, 10LF 6" WHC, 6" CAP AND BUTTRESS
WL STA. 1+04	1/8 HB
WL STA. 1+15	1/8 HB
WL STA. 1+44.82	8" CAP AND BUTTRESS
PROFILE 'F'	
WL STA. 0+00	8" CAP AND BUTTRESS
WL STA. 0+10	8"x6" TEE, AND 6" VALVE, 10LF 6" WHC, 6" CAP AND BUTTRESS
WL STA. 0+72	8"x8" TEE
WL STA. 1+52	8"x6" TEE, VALVE & FH
WL STA. 1+65	1/8 HB
WL STA. 1+69	1" TAP, 10LF 1" WHC, 1" CAP
WL STA. 1+79	1/8 HB
WL STA. 3+16	8" VALVE
WL STA. 3+20.16	8"x8" TEE
PROFILE 'G'	
WL STA. 0+04	8" VALVE
WL STA. 0+19	1/32 HB
WL STA. 0+52	8" VALVE
WL STA. 0+96.33	8"x8" TEE

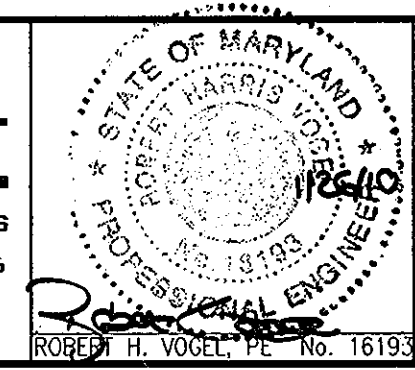


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DEPARTMENT OF PUBLIC WORKS
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CHIEF, BUREAU OF UTILITIES
2/16/10

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
CHIEF, DEVELOPMENT ENGINEERING DIVISION
3/8/10

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FAX: 410.461.8961



PROFESSIONAL CERTIFICATE

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. 16193, EXPIRATION DATE: 08-27-2010.

DRN:	KG	DES:	DZ
CHK:	RHV		
DATE:	JANUARY 2010		

REVISION

NO.	1	REVISION	REVISE PLAN TO ABANDON WHC TO CLUBHOUSE, AND PROVIDE NEW WHC. 11.08.2010
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FINAL WATER CONSTRUCTION PLAN
CONTRACT 44-4644-D
WATER PROFILES

THE ENCLAVE AT EMERSON APARTMENTS
PARCEL 'E' (SECTION 2, PHASE 8B)
APARTMENTS AND TOWNHOUSES

SCALE AS SHOWN
SHEET 3 OF 3

TAX MAP 47 GRID 8
6TH ELECTION DISTRICT
PARCEL 462
HOWARD COUNTY, MARYLAND