

SHEET INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	WATER AND SEWER PLAN
3	WATER AND SEWER PROFILES
4	FENCE LAYOUT PLAN

EMERSON PARCEL B

TAX MAP 47

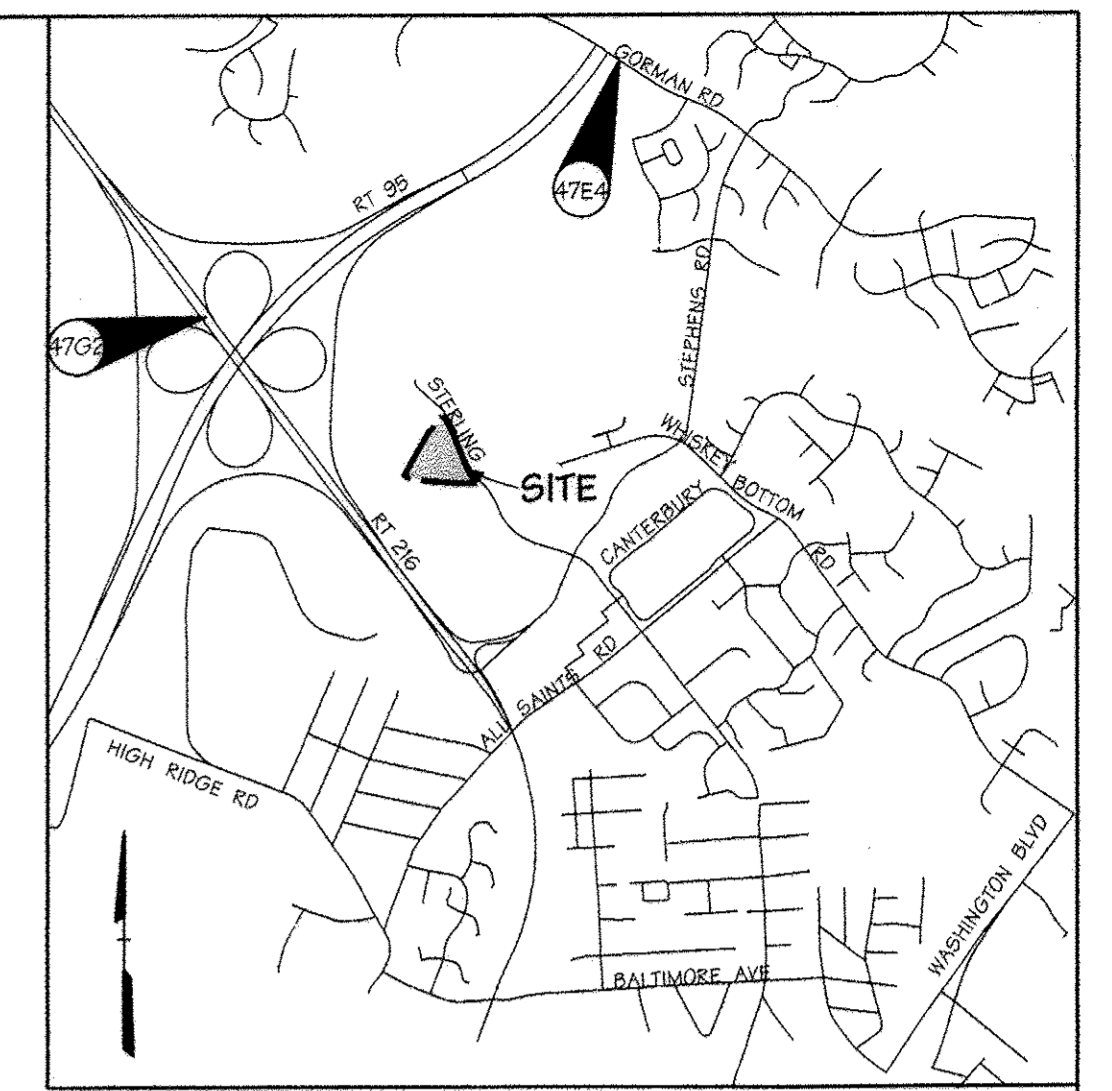
PARCEL 1051

6th ELECTION DISTRICT

WATER & SEWER CONSTRUCTION PLANS

Howard County, Maryland Department of Public Works

CONTRACT NO. 24-4724-D



LOCATION MAP

Scale: 1"=200'
HOWARD COUNTY ADC MAP NUMBER 5053, BLOCK D10

BENCHMARK
DESCRIPTION

COORDINATES IN MARYLAND NAD83(91) (HORIZONTAL) AND NGV029 (VERTICAL) DATUMS	47E4 NORTHING: 162440.1212 EASTING: 410306.2590 ELEVATION: 364.210'	47E4 NORTHING: 163326.2295 EASTING: 410306.2590 ELEVATION: 336.9294'
-----------------------------------------------------------------------------	---------------------------------------------------------------------------	----------------------------------------------------------------------------

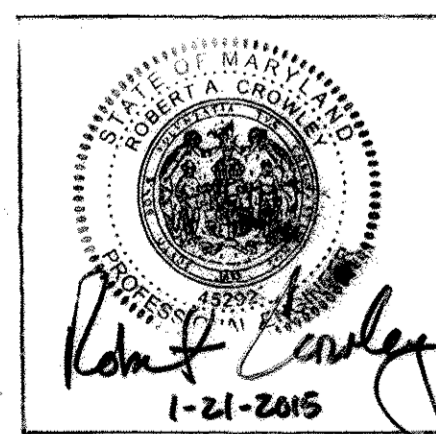
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
6" WATER	43 LF	34 LF	D.S.P.	GRIFFEIN PIPE
8" WATER	71 LF	71 LF	D.S.P.	GRIFFEIN PIPE
8" x 8" TEE	2	2 EA	HYDRANT	STAR PIPE
8" x 8" TEE	1	1 EA	MT	STAR PIPE
8" VALVE	4	4 EA	R.S.O.B.	MUELLER CO.
8" x 8" TAPPING SLEEVE & VALVE	1	1 EA	LP MS	ROMAC INDUSTRIES/MUELLER
8" x 12" TAPPING SLEEVE & VALVE	1	1 EA	LP MS	ROMAC INDUSTRIES/MUELLER
6" VALVE	2	2 EA	R.S.O.B.	MUELLER CO.
8" 1/8" HORIZ BEND	2	2 EA	MS	STAR PIPE
8" 1/16" HORIZ BEND	1	1 EA	MS	STAR PIPE
8" CAP	1	1 EA	MS	STAR PIPE
6" FIRE HYDRANT	2	2 EA	MUELLER	MUELLER CO.
8" DIP SEWER	10 LF	26 LF	D.S.P.	GRIFFEIN PIPE
SEWER MANHOLE TYPE B DROP	1	1 EA		ATLANTIC CONCRETE PRODUCTS

NAME OF UTILITY CONTRACTOR: **COMER CONSTRUCTION CO.**
SURVEY AND DRAFTING DIVISION AS-BUILT DATE: 10-25-12

LEGEND

	PROPERTY BOUNDARY
	EX. RIGHT OF WAY
	ADJACENT PROPERTY BOUNDARY
	EX. ROADS AND WALKS
	EX. MAJOR CONTOUR
	EX. MINOR CONTOUR
	FOREST CONSERVATION EASEMENT
	PROP. BUILDING
	PROP. CURB / EDGE OF PAVING
	PROP. DEPRESSED CURB
	PROP. GROUP LIGHT
	PROP. SINGLE LIGHT
	PROP. LIGHT
	PROP. WATER
	EX. WATER LINE WITH FIRE HYDRANT
	PROP. SANITARY SEWER AND MANHOLE/CLEANOUT
	EX. SANITARY SEWER WITH MANHOLE

THE PURPOSE OF REDLINE REVISION #2 IS:
1. SHOW THE PROPOSED EMERSON CAMPUS SECURITY FENCE.
2. ADD AN ADDITIONAL DRAWING SHEET ASSOCIATED WITH THE PROPOSED EMERSON CAMPUS SECURITY FENCE.

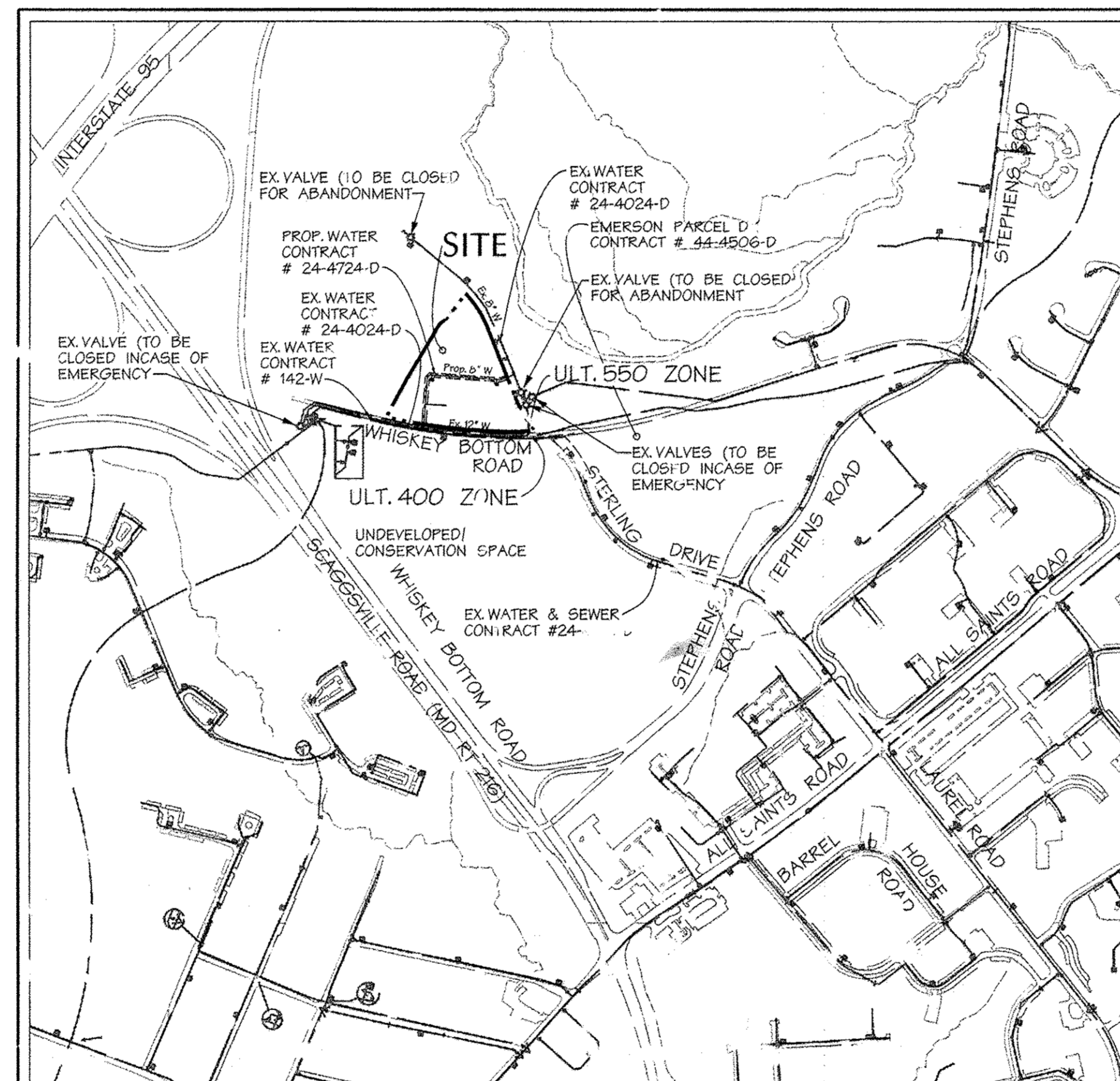


JACOBS
PROFESSIONAL CERTIFICATION

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. 45292
EXPIRATION DATE: 05/31/2016

OWNER/DEVELOPER
EMERSON DEVELOPMENT V LLC
1 TEXAS STATION COURT, SUITE 200
TIMONIUM, MARYLAND 21093-8288

Project background information:
Subdivision Name: Revitz Property Parcel B
Tax Map: 47
Lot/Parcel: 1051
Zoning: PEC - MXD-3
Election District: 6
Total Parcel Area: 6.40 Acres
File Numbers: P-01-25; S-99-12; PB 339;
ZB 979 M, PB-359 PLAT# 15829



TYPE OF BUILDING: OFFICE BUILDING	NO. OF PARCELS: 1	NO. OF WATER CONNECTIONS: 1	NO. OF SEWER CONNECTIONS: 1
DRAINAGE AREA: LITTLE PATUXENT	TREATMENT PLANT: LITTLE PATUXENT WATER QUALITY MANAGEMENT CENTER	WATER ZONE: 550	TEST GRADIENT: 700

TEMPORARY 3" WATER MAIN SHUTDOWN
Existing watermain shutdown for the abandonment of existing 8" lateral stub @ main along Sterling Drive CL sta 23+99.50 per contract no. 24-4024-D. Also, refer to sheet 2 of 3 of this set for plan view location of proposed abandonment. Shutdown sequence as follows:

1. Notify adjacent tenant (9161 Sterling Drive) the day of shutdown and estimated time out of service.
2. Close existing valves as shown on vicinity map and dewater downed main.
3. Remove existing 8" stubline and plug tee at main.
4. Open valves, bleed main and make active.

GENERAL NOTES

A. STANDARD GENERAL NOTES

1. Approximate location of existing utility 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 Owner at the contractor's expense.
2. Topographic field surveys were performed by Daft McCune Walker Inc. on July 2011.
3. The horizontal coordinates shown on the drawings are based on Maryland State Reference System NAD 83(91) as projected by Howard County Geodetic Control Stations No. #31ea and No. #37CA.
4. All vertical controls are based on NGVD 88. Vertical controls provided on the drawings are 47E4 N535846.138, E1355431.196, Elev. 338.909'; 47E2 N532938.964, E1351224.095, Elev. 364.210'.
5. All pipe elevations shown are invert elevations unless otherwise noted.
6. 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.
7. For details not shown on the drawings and for materials and construction methods use Howard County Design Manual, Volume IV, Standard Specifications and Detail for Construction (latest edition). The contractor shall have a copy of Volume IV on the job.
8. 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 are 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.
9. The contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

Miss Utility	1-800-257-7777
BC&E (Construction Services)	410-350-4620
State Highway Administration	410-531-5533
AT&T	1-800-252-1133
BC&E (Emergency)	410-685-1400
Bureau of Utilities	410-313-4900
Colonial Pipeline CO.	410-795-1390
Verizon	1-800-742-0033/410-224-9210
10. 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.
11. 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.
12. The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-7450 at least five working days before any open cut of any county road or boring/jacking of any County roads 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.

B. STANDARD WATER MAIN GENERAL NOTES

1. All water mains to be D.I.P. Class 54 unless otherwise noted.
2. Tops of all water mains to have a minimum of 3'-6" of cover unless otherwise noted.
3. Valves adjacent to tees shall be strapped to tees.
4. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
5. Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be installed and buttressed with concrete 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.
6. The contractor shall not operate any water main valves on the existing water system.
7. Tracer wire and continuity test stations shall be installed on all DIP and PVC water mains in accordance with the Howard County Design Manual.

C. STANDARD SEWER MAIN GENERAL NOTES

1. All sewer mains shall be DIP or P.V.C. unless otherwise noted.
2. All manholes shall be 4'-0" inside diameter unless otherwise noted.
3. Force mains shall be D.I.P. only.
4. Manholes shown with 12" and 16" walls are for brick manholes only.
5. Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G5.52. Where watertight frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.

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

APPROVED:
DATE: 12/20/11

PLAT #

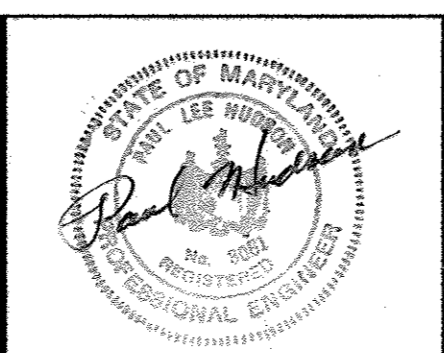
SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AND WITH SDP-12-010

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. 82551, EXPIRATION DATE: 8-26-13

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



DESIGN BY: JBS			
DRAWN BY: JSS			
CHECKED BY: MCB/JDF			
DATE: 12/01/11	BY: JCS	NO. 2	DATE: 11/5/12
	BY: JCS	NO. 1	DATE: 11/5/12

TITLE SHEET

EMERSON PARCEL B

TAX MAP 47 PARCEL 1051
6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

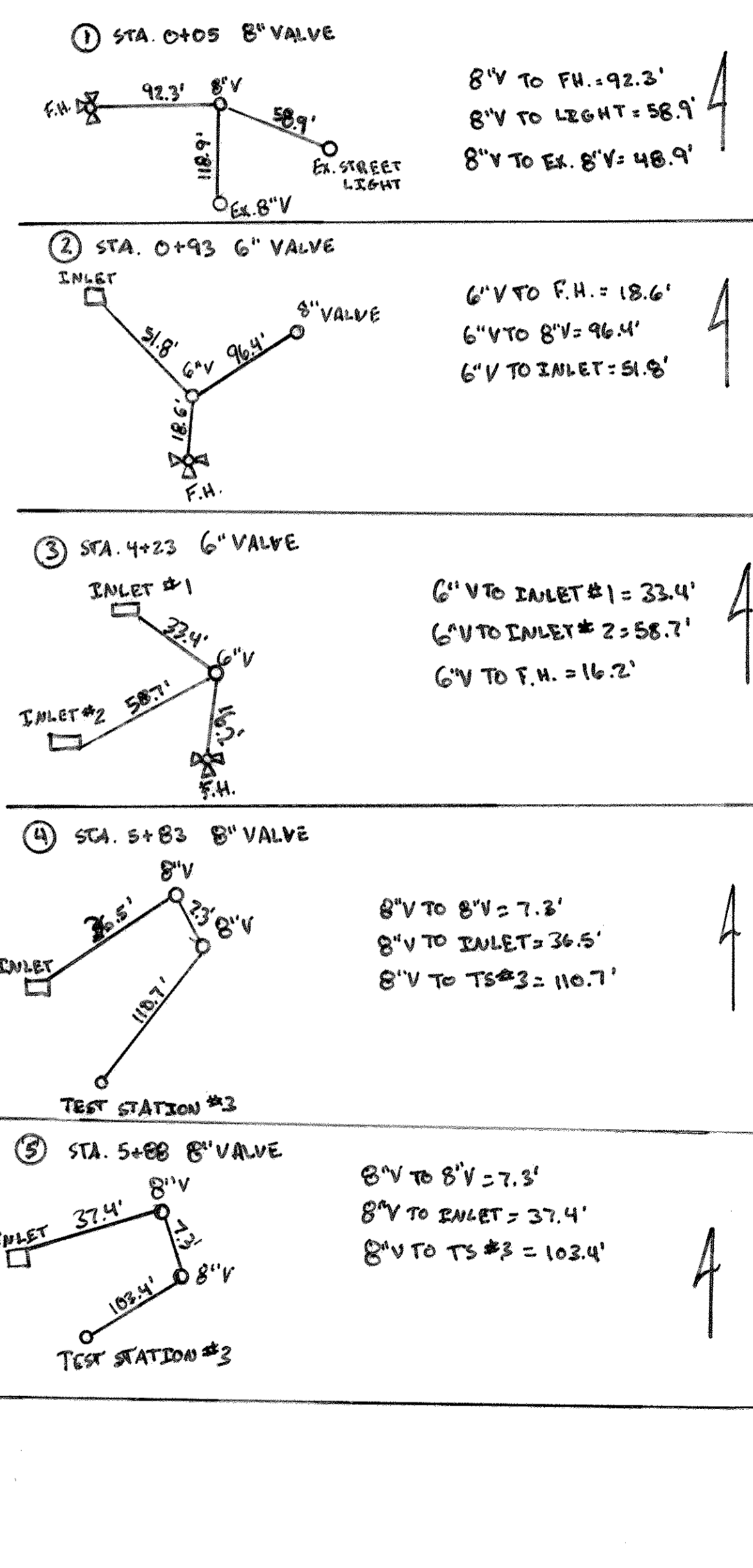
CONTRACT NO. 24-4724-D

SCALE: As Shown

SHEET 1 of 3

LEGEND

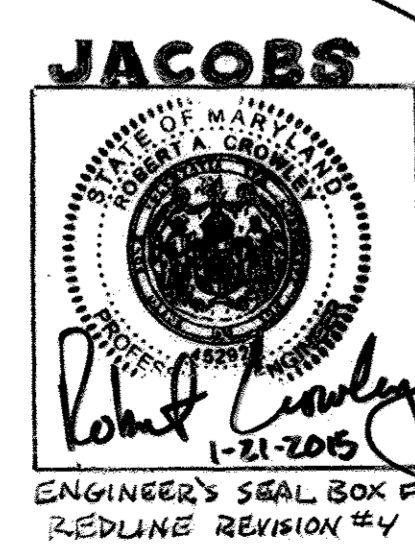
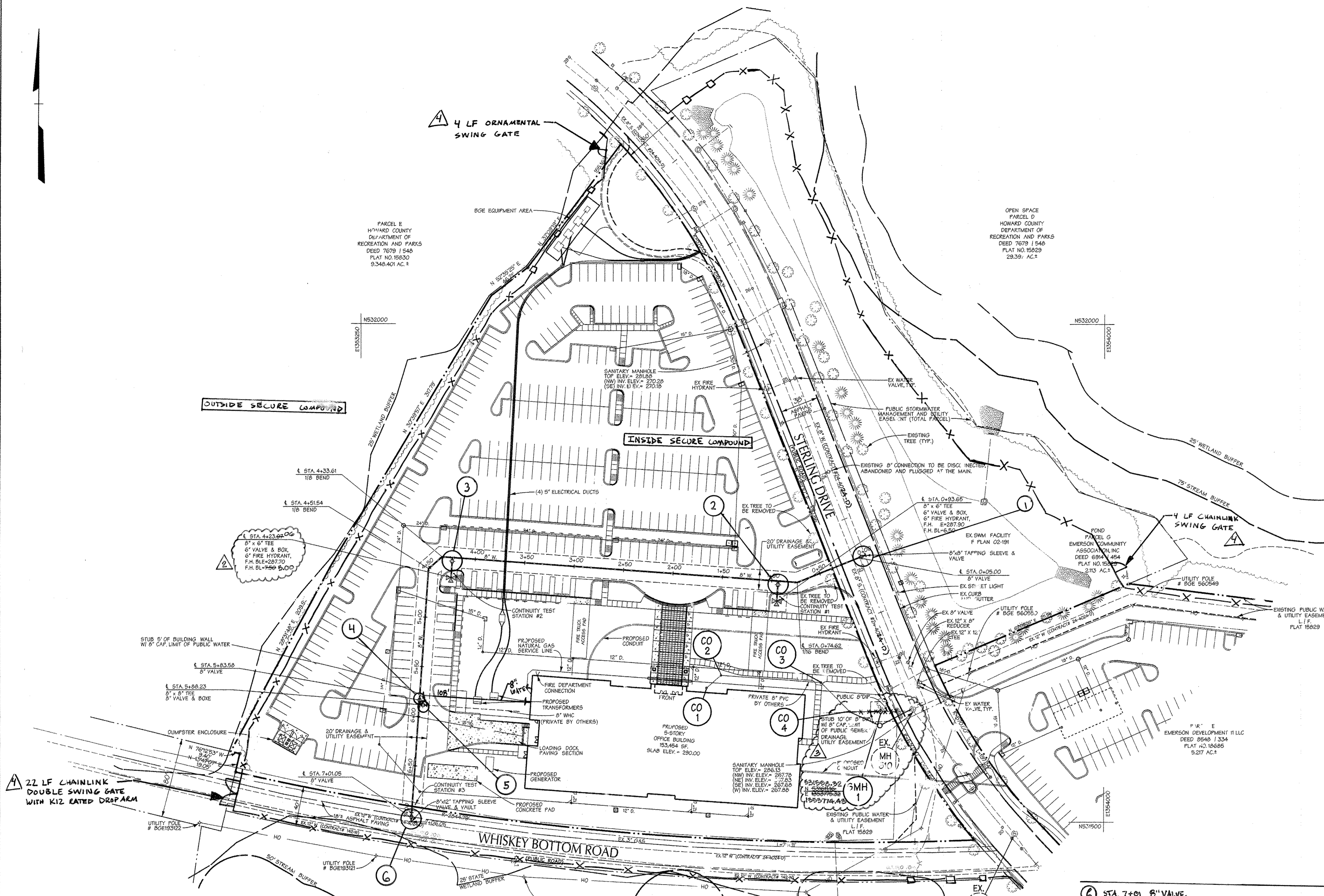
- PROPERTY BOUNDARY
- EX RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- EX ROADS AND WALKS
- PROP. BUILDING
- PROP. CURB / EDGE OF PAVING
- PROP. DEPRESSED CURB
- PROP. GROUP LIGHT
- PROP. SINGLE LIGHT
- PROP. LIGHT
- PROP. SEWER
- PROP. 8" WATER WITH FIRE HYDRANT
- EX WATER LINE WITH FIRE HYDRANT
- EX WATER LINE WITH FIRE HYDRANT
- EX SEWER LINE
- 550/400 WATER ZONE LINE



NOTE: CONTRACTOR TO TEST PIT FOR EXISTING WATER CONNECTION AND SEWER CONNECTION FOR THIS PARCEL AND CONFIRM ITS SIZE PRIOR TO MAKING CONNECTION IN FIELD.

ANY DISTURBANCE TO THE EX. PAVING, CURB AND/OR SIDEWALK ALONG STERLING DRIVE SHALL BE REPAIRED TO HOWARD COUNTY SPECIFICATIONS AS PART OF THIS CONTRACT.

CONTRACTOR TO MAINTAIN TRAFFIC ALONG STERLING DRIVE WHEN MAKING CONNECTIONS.



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. 45292 EXPIRATION DATE: 05/21/2016

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. 25061 EXPIRATION DATE: 05-26-13

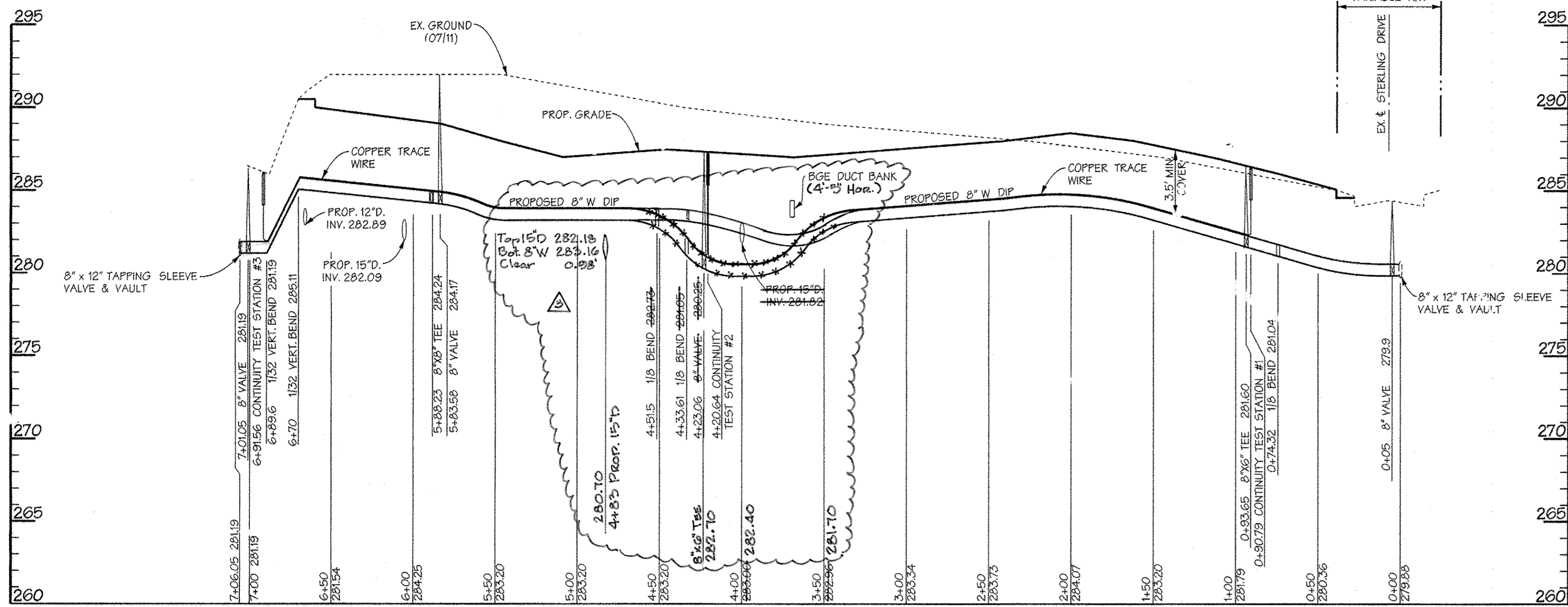
- FENCE LEGEND**
- X- CHAINLINK FENCE
 - DECORATIVE FENCE (NON-RATED)
 - ▲- DECORATIVE FENCE (1/2 RATED)

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief - Bureau of Utilities - DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief - Development Engineering Division - DATE	DMW DAFT MCCUNE WALKER INC 200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS	DESIGN BY: JBS DRAWN BY: JSS CHECKED BY: MCB/PLH DATE: 12/01/11	STABLOS CAMPUS PERIMETER SECURITY FENCE 1/24/15 Relocate MH1 (As Built) 9/24/12 F.H. @ 4+23.00 - Busy 9-4-12 AS-BUILT 11/15/12	WATER & SEWER PLAN REVISION	EMERSON PARCEL B TAX MAP 47 PARCEL 1051 6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND CONTRACT NO. 24-4724-D	SCALE: 1"=50' SHEET 2 of 84
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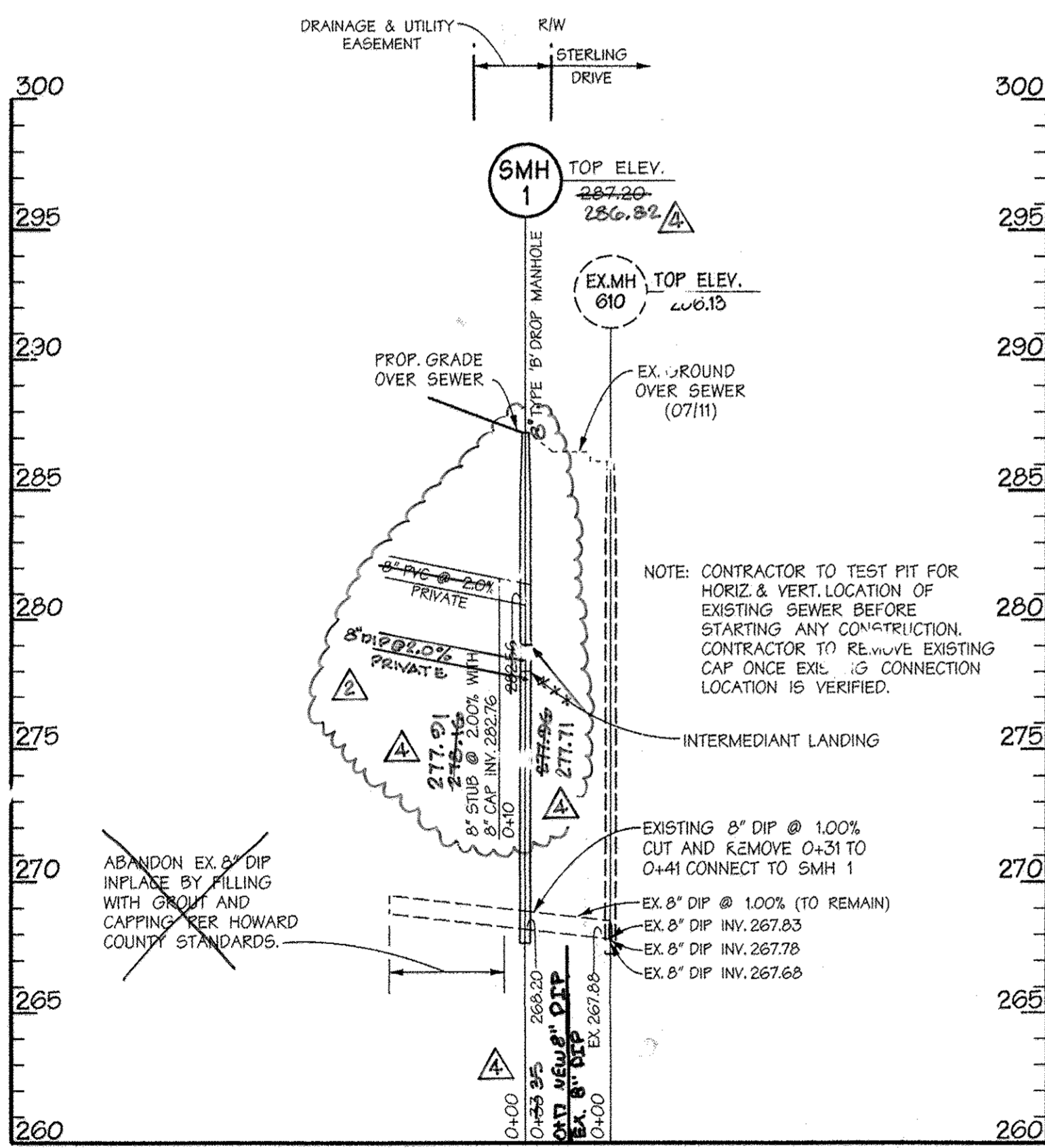
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NOTE: CONTRACTOR TO MAINTAIN A MINIMUM OF 3.5' OF COVER OVER WATERLINE.



PROFILE

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



PUBLIC SANITARY SEWER PROFILE

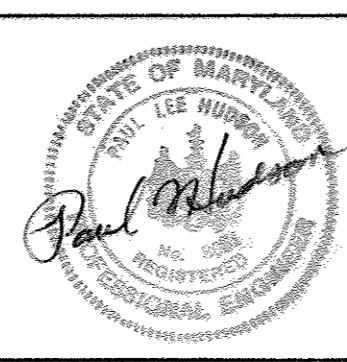
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

PROFESSIONAL CERTIFICATION
I, THE SIGNER, 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. 8021, EXPIRATION DATE: 8-26-13

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

DMW
DAFT MCCUNE WALKER INC
200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS



DESIGN BY:	JBS			
DRAWN BY:	JSS	DMW	As-Built San. MHI	10-24-12
CHECKED BY:	DMW	DMW	Adjust 8" W for 15" D Reloc.	9-4-12
MCP/PLH	DMW	DMW	Lower Invert	8-31-12
DATE:	12/10/11	KCI	AS-BUILT Public Sanitary	1/15/12
BY NO.				
REVISION				
DATE				

WATER & SEWER PROFILES

EMERSON PARCEL B

TAX MAP 47 PARCEL 1051
6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

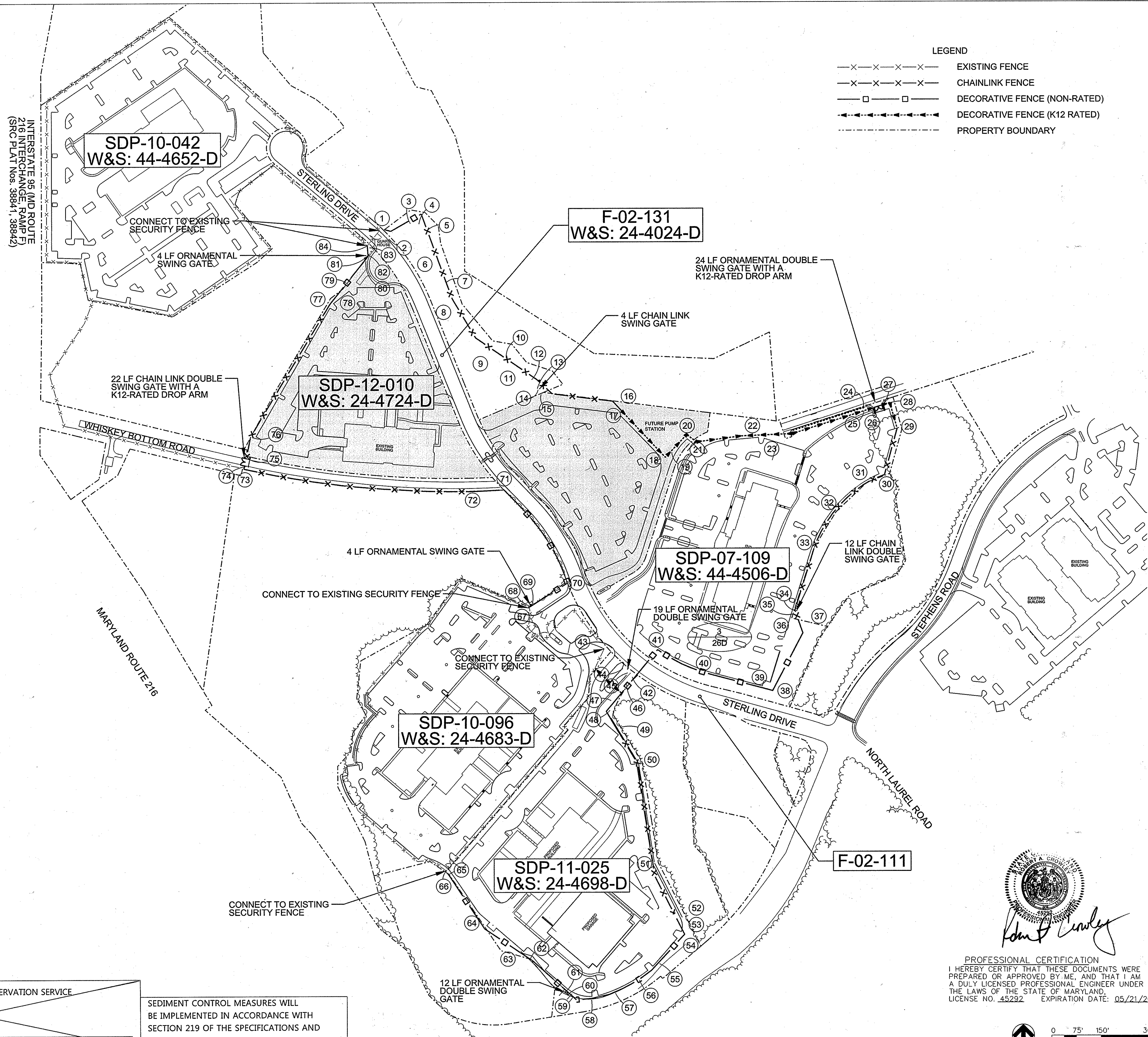
CONTRACT NO. 24-4724-D

SCALE: 1"=5'
SHEET 3 of 34

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Sheet\3505\Final\02 08-18-00 2011

	COORDINATE ID	NORTHING	EASTING	FEET OFFSET FROM PROPERTY LINE
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	1	532233.7	1353530.0	9.3
	2	532207.6	1353557.9	7.5
	3	532254.3	1353623.0	32.3
	4	532253.0	1353648.8	37.7
8' HIGH CHAIN LINK FENCE WITH 1' DOUBLE OUTRIGGER	5	532232.6	1353672.5	35.5
	6	532150.6	1353690.4	37.6
	7	532074.1	1353729.9	25.6
	8	531998.0	1353749.7	30.5
	9	531857.1	1353847.0	43.8
	10	531845.2	1353912.5	39.6
	11	531802.7	1353938.5	45.9
	12	531778.8	1353989.5	44.9
	13	531751.5	1354006.8	68.9
	14	531747.9	1354009.1	69.3
	15	531733.7	1354018.0	6.9
	16	531703.5	1354263.8	6.2
	17	531681.1	1354261.0	28.8
	8' HIGH IMPASSE K12 RATED ORNAMENTAL FENCE	18	531559.4	1354378.6
19		531557.3	1354413.3	132.7
20		531610.8	1354459.0	73.8
21		531594.4	1354480.8	0.3
22		531612.3	1354683.1	44.4
23		531600.0	1354722.0	51.8
24		531686.8	1354994.2	6.0
25		531678.9	1354996.7	14.2
26		531689.1	1355028.8	14.2
27		531696.4	1355051.5	14.2
28		531704.0	1355075.4	14.2
29		531625.6	1355097.0	14.4
8' HIGH CHAIN LINK FENCE WITH 1' DOUBLE OUTRIGGER		30	531487.3	1355058.4
	31	531466.2	1355003.9	2.5
	32	531375.2	1354908.7	2.5
	33	531266.0	1354845.0	0.0
	34	531075.5	1354783.8	0.0
	35	531063.8	1354780.1	0.0
	36	531045.8	1354774.3	6.0
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	37	531033.3	1354827.1	6.0
	38	530846.1	1354723.0	50.0
	39	530837.3	1354691.9	33.0
	40	530891.5	1354495.6	34.4
	41	530953.0	1354360.7	26.5
	42	530874.1	1354291.6	14.5
	43	530959.6	1354206.6	13.4
	44	530900.0	1354263.2	12.8
	45	530886.4	1354277.9	10.0
	46	530854.5	1354274.0	7.5
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	47	530802.1	1354227.0	20.0
	48	530771.7	1354223.7	12.3
	49	530720.0	1354255.0	2.0
8' HIGH CHAIN LINK FENCE WITH 1' DOUBLE OUTRIGGER	50	530615.3	1354318.4	2.0
	51	530308.5	1354367.5	2.0
	52	530158.1	1354440.4	4.7
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	53	530119.6	1354450.4	13.0
	54	530090.6	1354444.4	31.4
	55	530001.4	1354372.7	40.2
	56	529952.2	1354311.7	29.6
	57	529912.6	1354238.4	28.6
	58	529892.6	1354166.4	31.3
	59	529903.4	1354111.0	51.6
	60	529912.9	1354100.1	46.3
	61	529920.8	1354091.1	36.4
	62	530016.4	1353981.6	0.0
	63	530042.7	1353942.5	14.2
	64	530141.4	1353828.3	2.2
	65	530275.8	1353737.0	1.9
	66	530286.0	1353726.9	4.4
	67	531084.8	1353977.6	3.7
	68	531089.6	1353984.8	0.0
	69	531092.0	1353988.4	0.0
	70	531164.5	1354095.9	0.9
	71	531443.9	1353905.8	0.9
	72	531440.2	1353802.7	0.0
8' HIGH CHAIN LINK FENCE WITH 1' DOUBLE OUTRIGGER	73	531508.5	1353124.3	0.0
	74	531518.5	1353126.4	10.2
	75	531540.6	1353131.8	7.0
	76	531605.3	1353145.4	6.4
	77	532012.6	1353378.9	5.7
	78	532035.8	1353407.9	10.0
	79	532070.3	1353434.3	4.4
	80	532140.6	1353488.1	4.7
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	81	532155.9	1353492.3	1.1
	82	532160.1	1353493.5	2.7
	83	532181.5	1353499.4	7.9
	84	532187.4	1353492.6	8.5



LEGEND

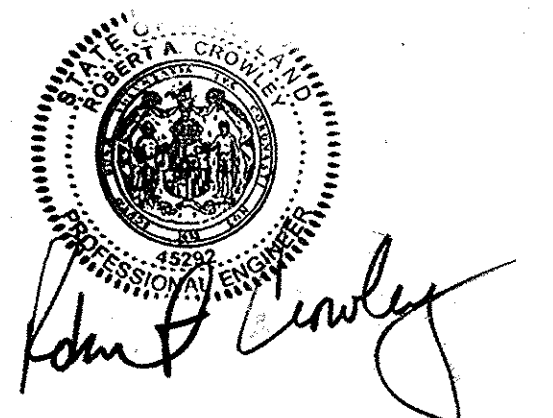
- x-x-x-x- EXISTING FENCE
- x-x-x-x- CHAINLINK FENCE
- DECORATIVE FENCE (NON-RATED)
- ▲-▲-▲- DECORATIVE FENCE (K12 RATED)
- - - - - PROPERTY BOUNDARY

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

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH ROAD CONSTRUCTION PLANS F-100, SDP-12-010

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. 45292 EXPIRATION DATE: 05/21/2016



HOWARD S.C.D.	DATE	SIGNATURE	DATE	DESIGN BY: M. WERDER	EMERSON - CAMPUS FENCE	EMERSON PARCEL B OWNER DEVELOPER: EMERSON DEVELOPMENT V, LLC 1 TEXAS STATION COURT, SUITE 200 TIMONIUM, MD 21093	SCALE: 1"=150'
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND				DRAWN BY: M. WERDER			
				CHECKED BY: R. CROWLEY			
				DATE: JANUARY 5, 2015			
DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND				BY NO.	REVISION	DATE	600 SCALE MAP NO. 47 BLOCK NO. 20
		1100 NORTH GLEBE ROAD SUITE 500 ARLINGTON, VA 22201 P: 571-218-1000 F: 571-218-1600		CAMPUS PERIMETER SECURITY FENCE		JACOBS CONTRACT NO. 31435	SHEET 4 of 4
				24-4724-D			