

# Contract No. 44-4652D

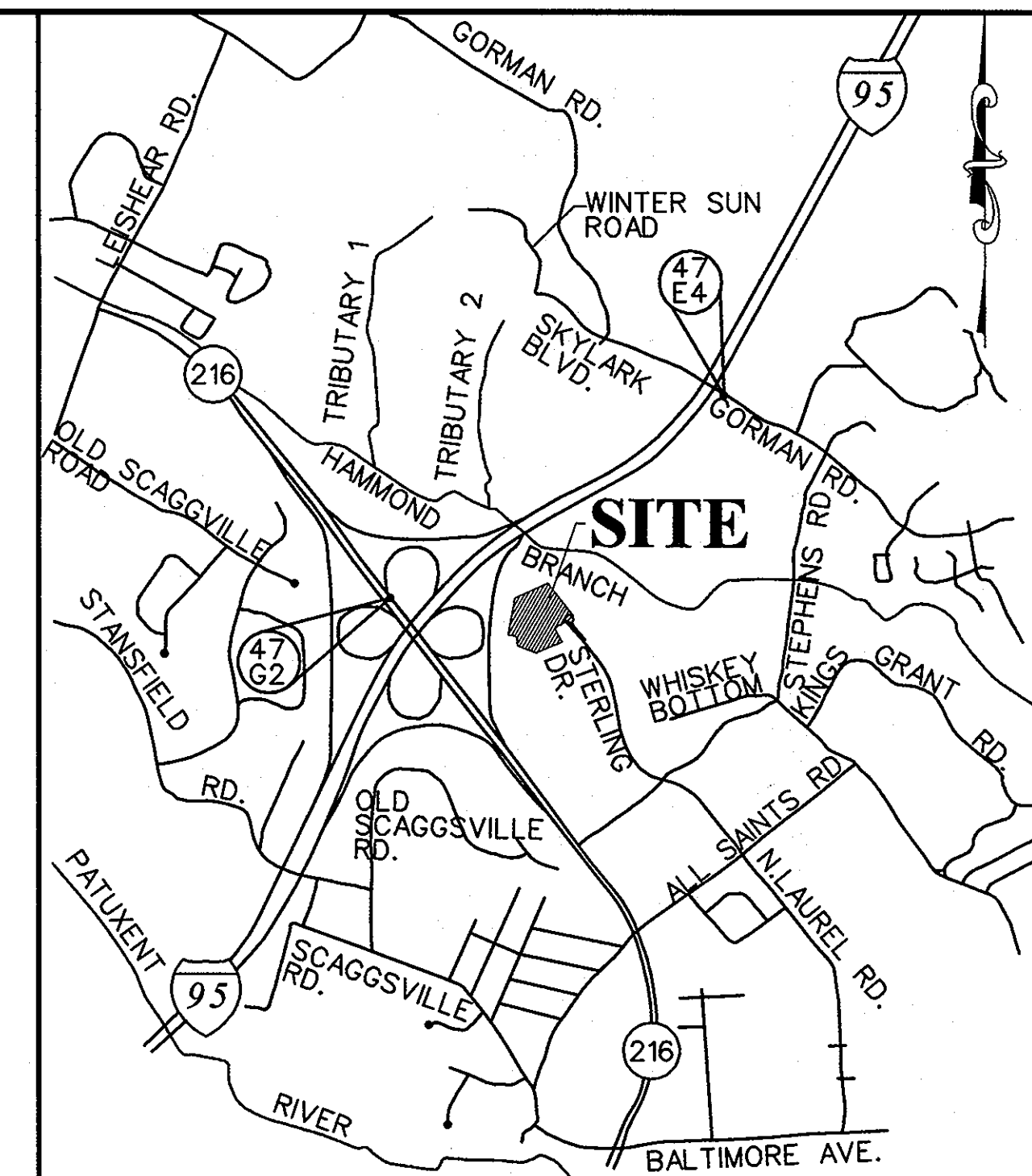
# EMERSON - PARCEL 'C'

## (FORMERLY THE KEY PROPERTY)

## SECTION 3, AREA 1

### PUBLIC WATER CONSTRUCTION PLANS

Howard County, Maryland Department of Public Works

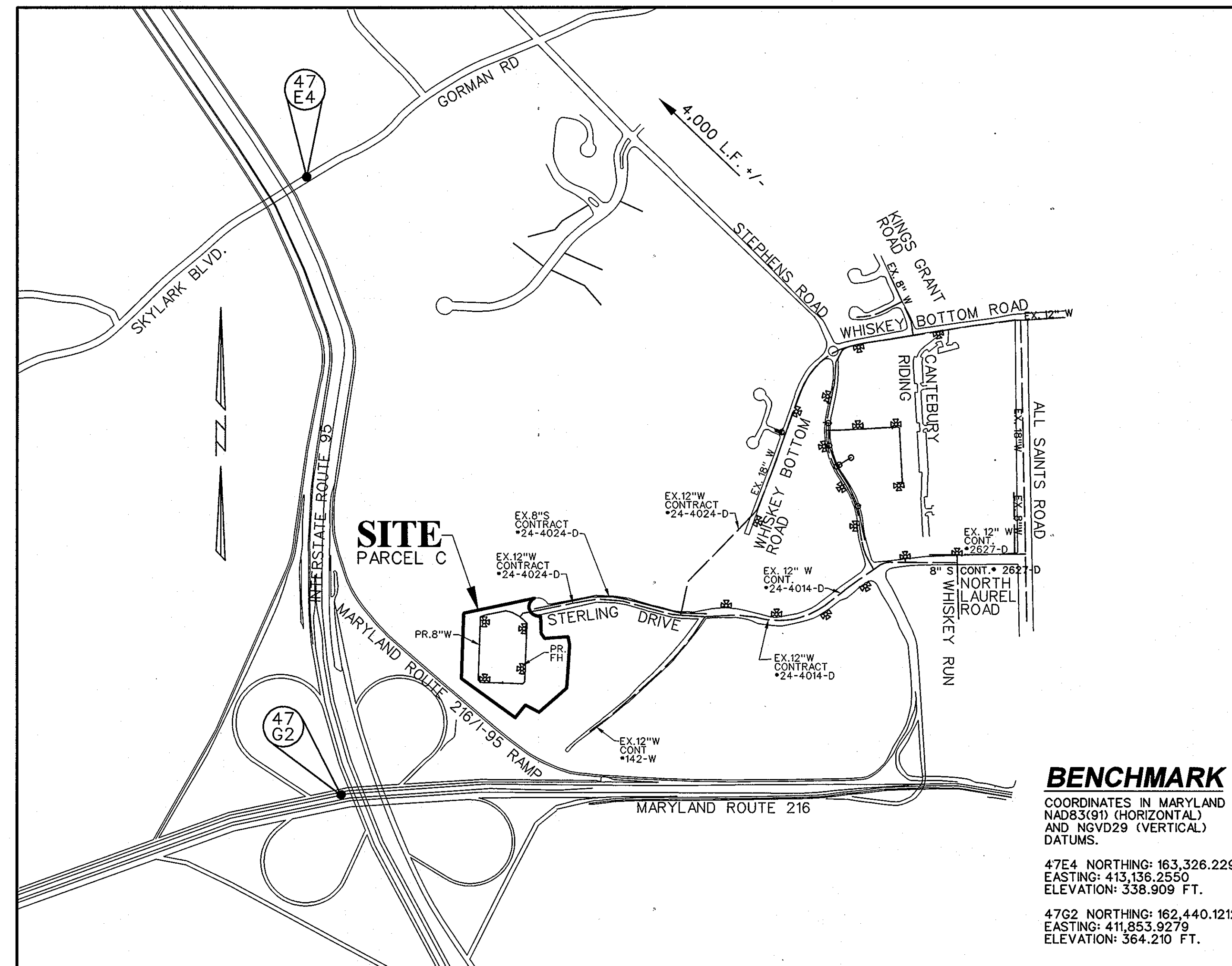


QUANTITIES				
AS-BUILT				
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
6" D.I.P. WATER MAIN	55 LF	47'	DIP CL.54	GRIFFIN PIPE PRODUCTS CO., INC.
8" D.I.P. WATER MAIN	1893 LF	1,009'	DIP CL.54	GRIFFIN PIPE PRODUCTS CO., INC.
6" VALVE & ROADWAY BOX	4 EACH	4 EA.	GATE VALVE	MUELLER CO./BELAIR ROAD SUPPLY
8" VALVE & ROADWAY BOX	6 EACH	6 EA.	GATE VALVE	MUELLER CO./BELAIR ROAD SUPPLY
8" X 6" TEE	4 EACH	4 EA.	HYDRANT TEE	SIGMA CORP./BELAIR ROAD SUPPLY
FIRE HYDRANT	4 EACH	4 EA.	4 1/2 BURY	MUELLER CO./BELAIR ROAD SUPPLY
8" X 8" TEE	2 EACH	2 EA.	MJ TEE	SIGMA CORP./BELAIR ROAD SUPPLY
8" CAP & BUTTRESS	1 EACH	1 EA.	MJ TAPCAP	SIGMA CORP./BELAIR ROAD SUPPLY
8" 1 / 8 HORZ. BEND	8 EACH	8 EA.	MJ BEND	SIGMA CORP./BELAIR ROAD SUPPLY
8" 1 / 16 VERT. BEND	2 EACH	4 EA.	MJ BEND	SIGMA CORP./BELAIR ROAD SUPPLY

NAME OF UTILITY CONTRACTOR: **COMER CONSTRUCTION**  
 SURVEY AND DRAFTING DIVISION AS-BUILT DATE: **7-2-10**

SHEET INDEX	
NO.	SHEET TITLE
1	COVER SHEET
2	WATER PLAN
3	WATER PROFILES

LEGEND	
RIGHT-OF-WAY LINE	---
PROPERTY LINE	---
EX. STORM DRAIN	EX. 15" D
EX. SANITARY SEWER MANHOLE & CLEANOUT	EX. 8" S
EX. WATER MAIN VALVE & FIRE HYDRANT	EX. 8" W
EX. TREE	(Tree symbol)
EX. CONC. C&G	---
PR. CONC. C&G	---
PROP. WATER	PROP. 8" W
PROP. WATER HOUSE CONNECTION	(PRIVATE) 8" W/HC
PROP. SEWER	(PRIVATE) 8" S
PROP. SEWER HOUSE CONNECTION	(PRIVATE) 8" S/HC



**BENCHMARK**  
 COORDINATES IN MARYLAND NAD83(91) (HORIZONTAL) AND NGVD29 (VERTICAL) DATUMS.  
 47E4 NORTHING: 163,326.2295  
 EASTING: 413,136.2550  
 ELEVATION: 338.909 FT.  
 47G2 NORTHING: 162,440.1212  
 EASTING: 411,853.9278  
 ELEVATION: 364.210 FT.

LOCATION MAP	
SCALE: 1"=600'	
TYPE OF BUILDINGS:	OFFICE
NO. OF LOTS / PARCELS:	1
NO. OF WATER HOUSE CONNECTIONS:	1
NO. OF SEWER HOUSE CONNECTIONS:	1
AREA OF COMMERCIAL LOT/PARCEL:	10.764 AC
SEWER SHED:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER QUALITY MANAGEMENT CENTER

- GENERAL NOTES:**
- 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 NOVEMBER 27, 2007 BY SHANABERGER & LANE.
  - 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. 47E4, NO. 47G2.
  - ALL VERTICAL CONTROLS ARE BASED ON NAVD 88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE 47E4 AND 47G2.
  - 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 DEDUCTED 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 (P) 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  
 BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - (410) 850-4620  
 BALTIMORE GAS & ELECTRIC CO. EMERGENCY - (410) 685-1400  
 BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - (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 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.
- WATER:**
- ALL WATER MAINS SHALL BE D.I.P. CLASS 54 UNLESS OTHERWISE NOTED.
  - 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 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 SECTION 1005 OF THE STANDARD SPECIFICATIONS.
  - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
  - ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
  - FOR SPRINKLER SYSTEM FOR ALL TOWN HOMES OR MULTIFAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.

**OWNER / DEVELOPER**  
 EMERSON DEVELOPMENT III LLC  
 C/O DLA PIPER LLP  
 1 TEXAS STATION COURT, SUITE 200  
 TIMONIUM, MARYLAND 21093-8288  
 (443) 689-8000

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

APPROVED: *[Signature]* 2/9/10  
 HOWARD S.C.6

PLAT # 20960  
 SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDR10-042

**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21245, EXPIRATION DATE: JUNE 9, 2010.

**BLDG**  
 Baltimore Land Design Group Inc.  
 Consulting Engineers  
 222 SCHILLING CIRCLE SUITE 105 HUNT VALLEY, MARYLAND 21030  
 PHONE: 410.229.9851 FAX: 410.229.9865 BLDG@BLDGINC.COM

DESIGNED BY:	DATE:
DG / VZ	01-26-10
DRAWN BY:	CHECKED BY:
DG / PR	VZ
DATE:	BY NO.
01-26-10	

REVISION	DATE
600 SCALE TAX MAP NO. 47	PARCEL: 1051

**AS BUILT**  
 DATE: JULY 2, 2010

ADDRESS CHART				
LOT / PARCEL NO.	STREET ADDRESS			
PARCEL C	9160 STERLING DRIVE			
PERMIT INFORMATION CHART				
SUBDIVISION NAME	SECTION / AREA	LOT / PARCEL NO.		
EMERSON	3 / 1	PAR. C / 1051		
GRID NO.	ZONING	TAX MAP NO.	ELEC. DIST.	CENSUS TRACT
G14	PEC-MXD-3	47	6TH	6069-03
WATER ZONE	TEST GRADIENT			
400	550			

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*[Signature]* 2/12/10  
 CHIEF - BUREAU OF UTILITIES - DATE

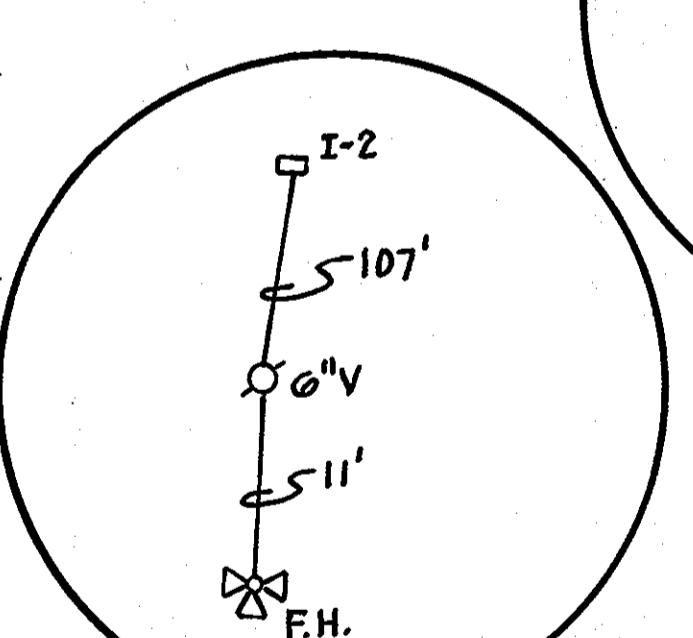
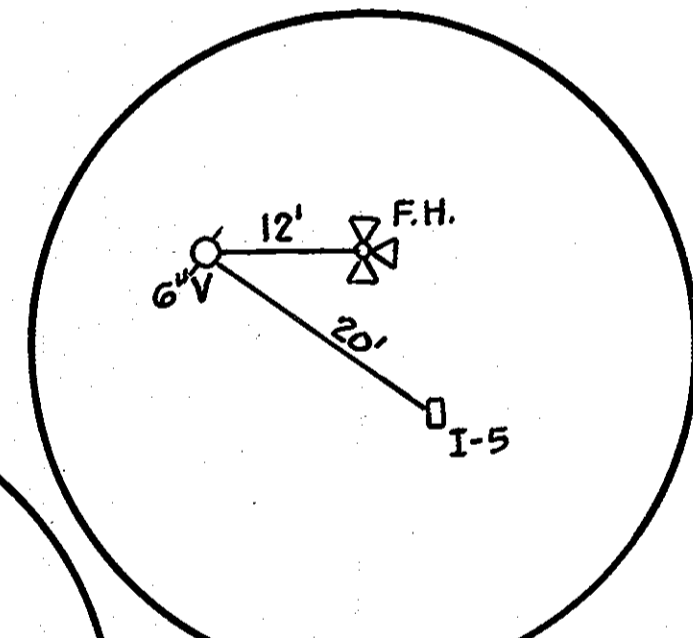
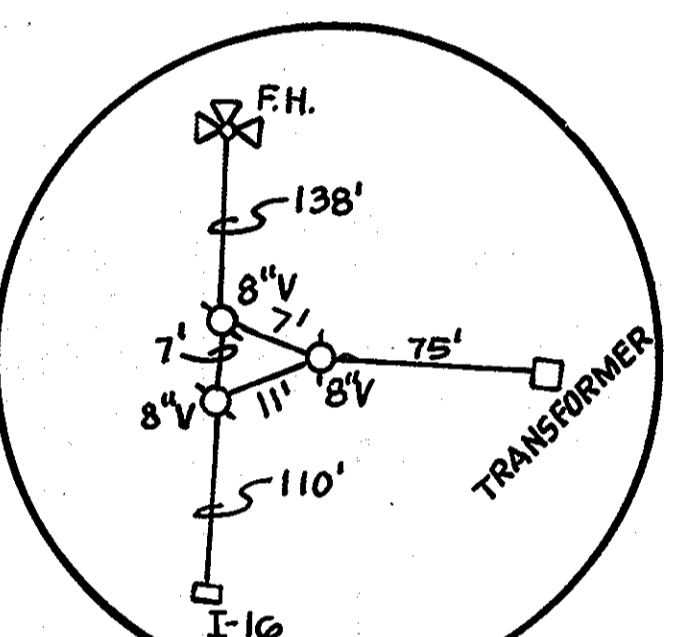
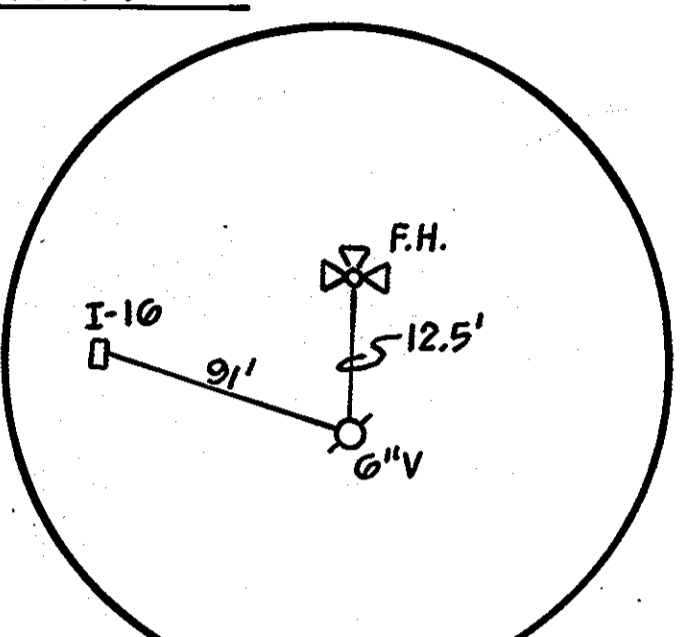
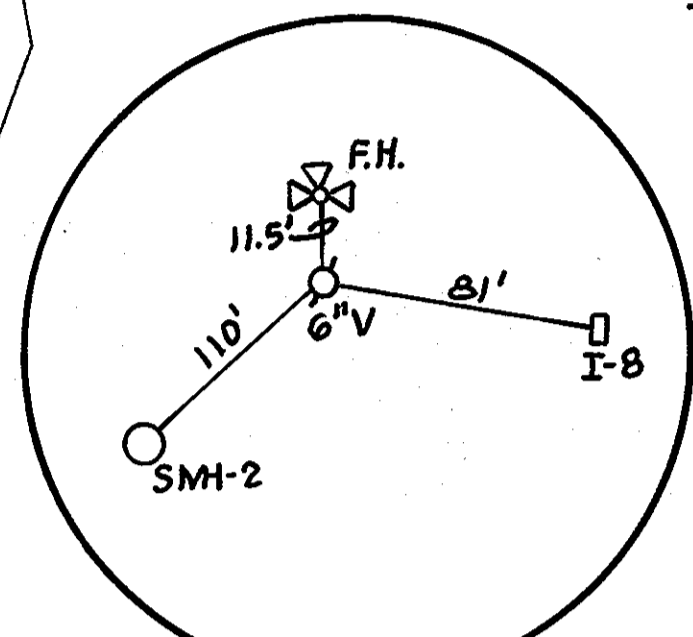
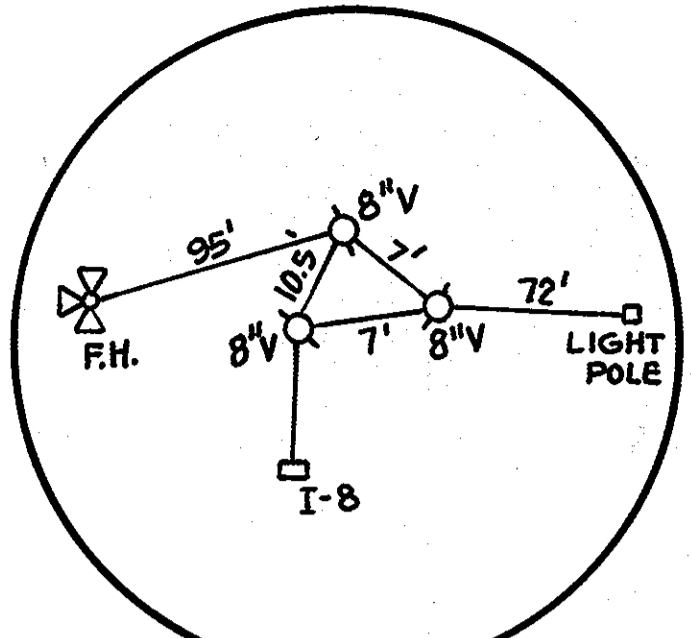
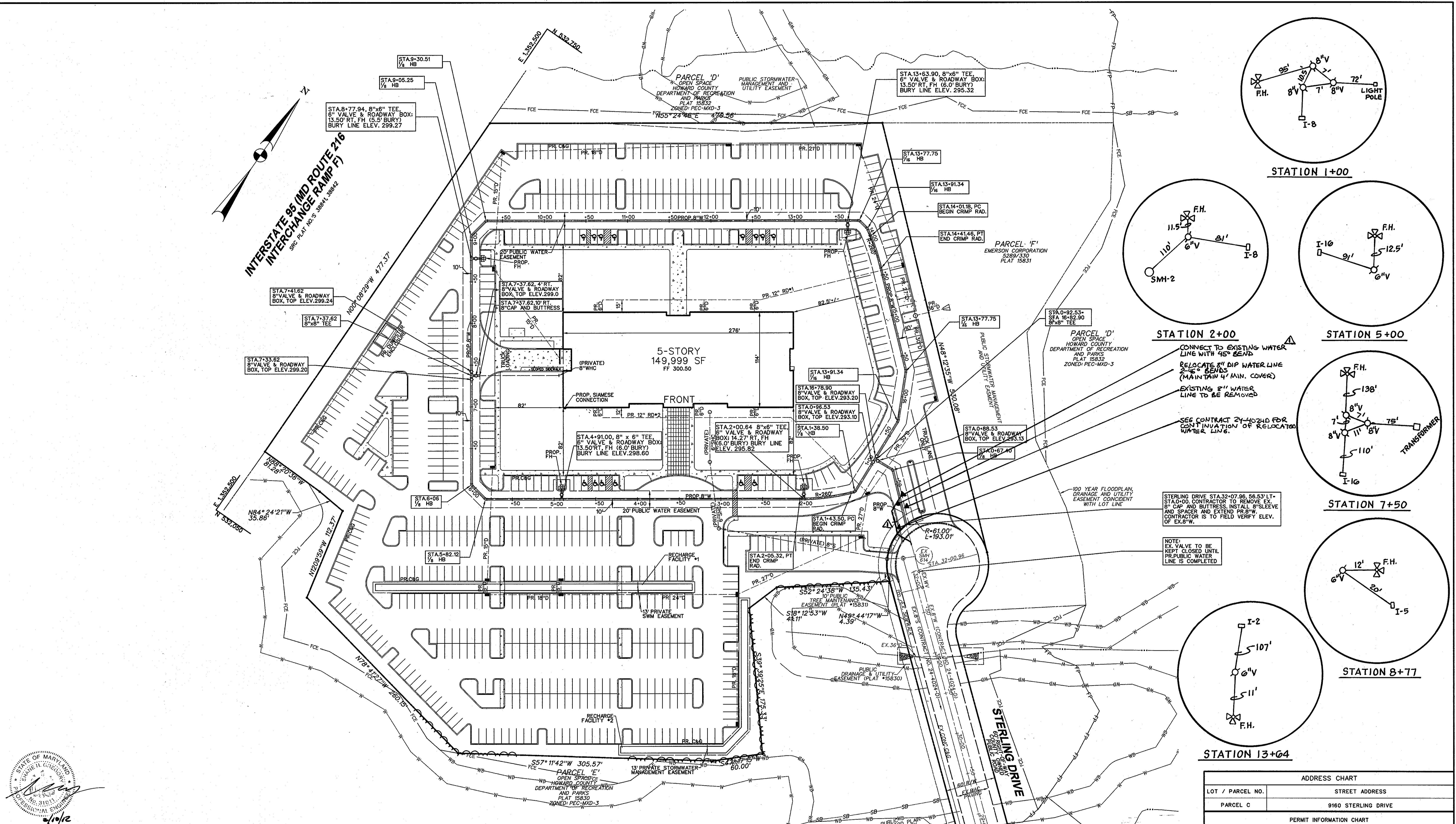
DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND

*[Signature]* 2/12/10  
 CHIEF - DEVELOPMENT ENGINEERING DIVISION DATE

**EMERSON - PARCEL 'C'**  
 (FORMERLY KEY PROPERTY)  
 SECTION 3, AREA 1  
 CONTRACT NO. 44-4652D

SCALE AS SHOWN  
 SHEET 1 OF 3  
 HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50'  
 DATE: JANUARY, 2010





CONNECT TO EXISTING WATER LINE WITH 45' BEAD  
 RELOCATE 8" DIP WATER LINE 2'-4" BEHIND (MAINTAIN 4" MIN. COVER)  
 EXISTING 8" WATER LINE TO BE REMOVED  
 SEE CONTRACT 24-4624D FOR CONTINUATION OF RELOCATED WATER LINE.

NOTE:  
 EX. VALVE TO BE KEPT CLOSED UNTIL PUBLIC WATER LINE IS COMPLETED

100 YEAR FLOODPLAIN, DRAINAGE AND UTILITY EASEMENT COINCIDENT WITH LOT LINE

ADDRESS CHART			
LOT / PARCEL NO.	STREET ADDRESS		
PARCEL C	9160 STERLING DRIVE		
PERMIT INFORMATION CHART			
SUBDIVISION NAME EMERSON	SECTION / AREA 3 / 1	LOT / PARCEL NO. PAR. C / 1051	
GRID NO. G14	ZONING PEC-MXD-3	TAX MAP NO. 47	ELEC. DIST. 6TH CENSUS TRACT 6069-03
WATER ZONE 400	TEST GRADIENT 550		

**OWNER / DEVELOPER**  
 EMERSON DEVELOPMENT III LLC  
 C/O DLA PIPER LLP  
 1 TEXAS STATION COURT, SUITE 200  
 TIMONIUM, MARYLAND 21093-8288  
 (443) 689-8000

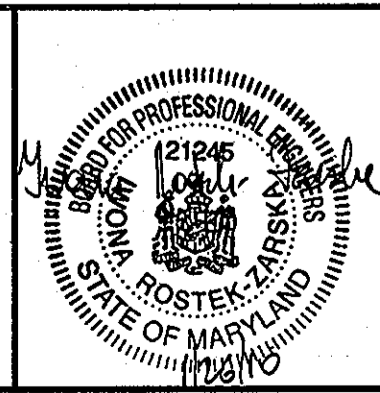
PLAT # 20460  
 SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP10-042

**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21245, EXPIRATION DATE: JUNE 9, 2010.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief - Bureau of Utilities - DATE: 2/12/10

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
 Chief - Development Engineering Division - DATE: 2/12/10

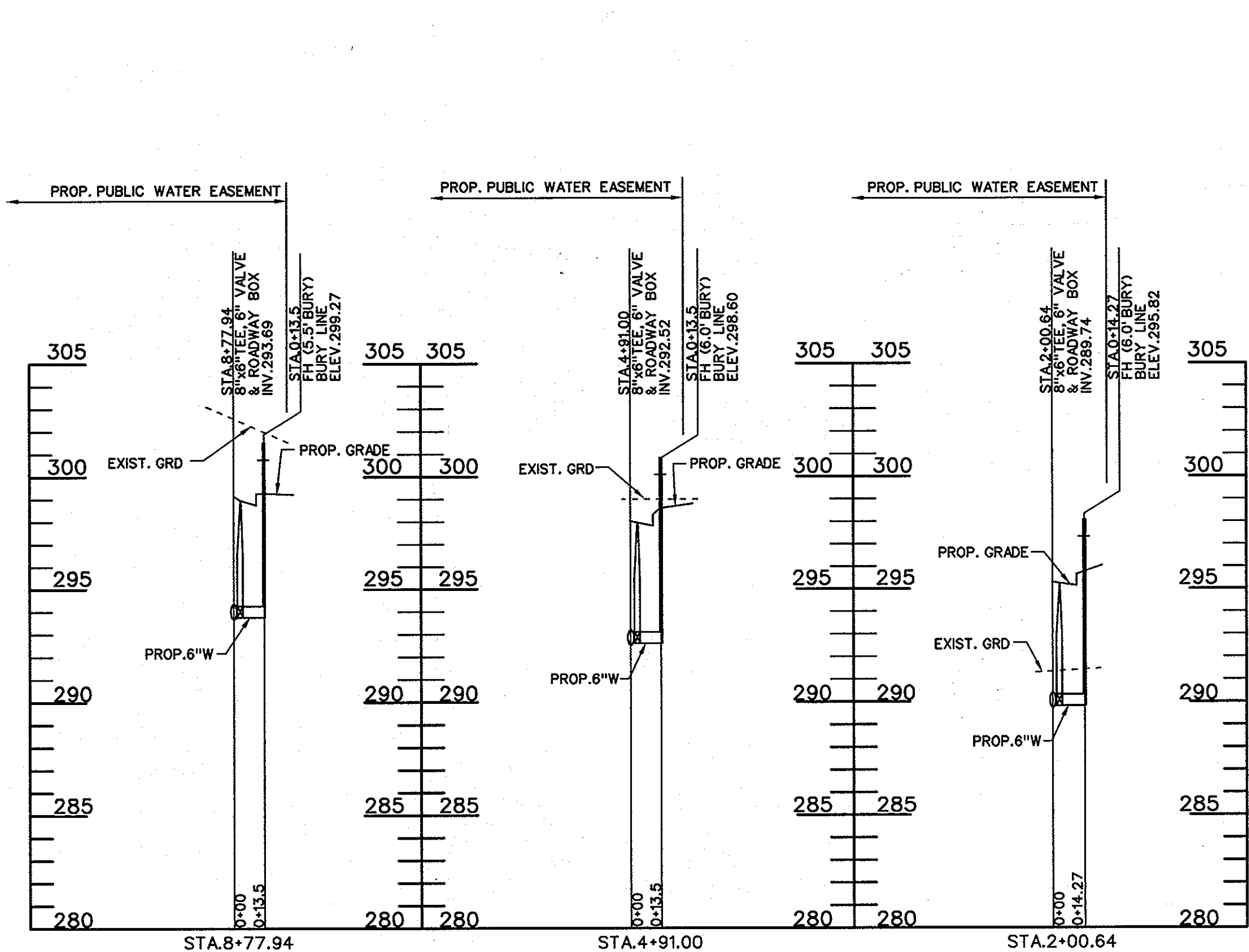
**BLDG**  
 Baltimore Land Design Group Inc.  
 Consulting Engineers  
 222 SCHILING CIRCLE SUITE 105 HUNT VALLEY, MARYLAND 21089  
 PHONE: 410.229.9851 FAX: 410.229.9865 BLDG@BLDGR.COM



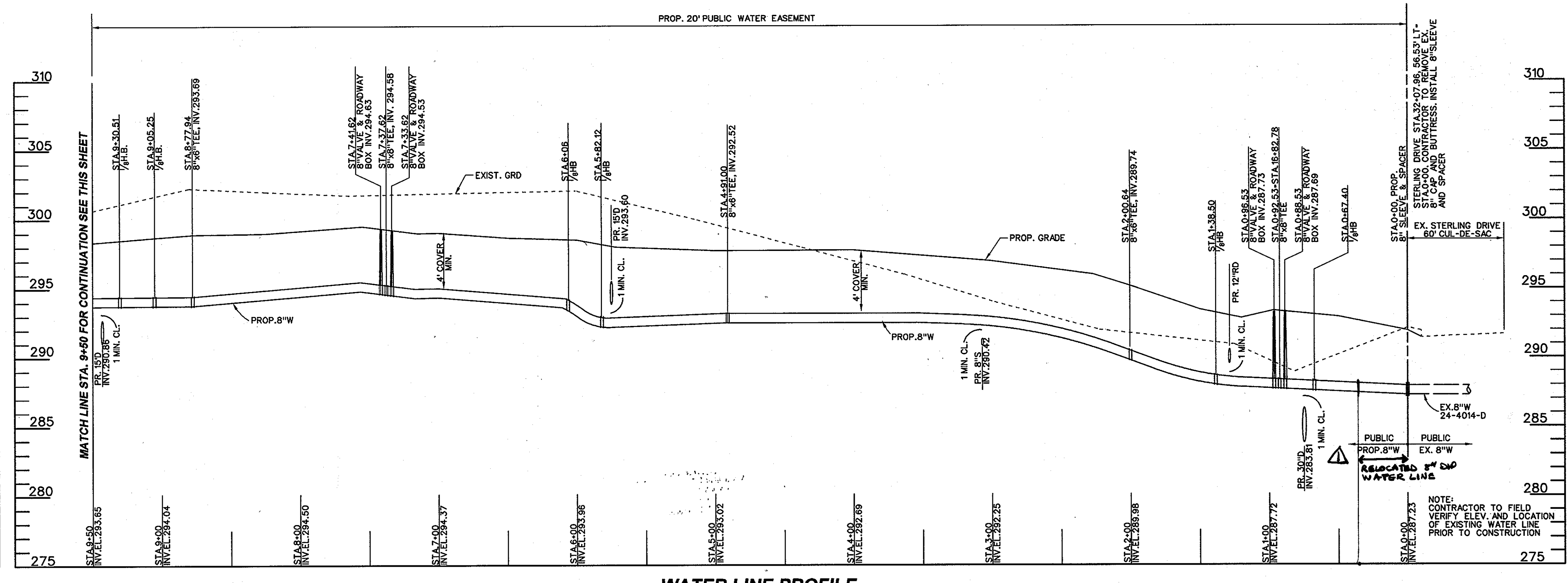
DESIGNED BY: DG / VZ	
DRAWN BY: DG / PR	
CHECKED BY: VZ	
DATE: 01-26-10	
BY NO.	
RELOCATE WATER LINE	
REVISION	
DATE: 2/12	
600 SCALE TAX MAP NO. 47	PARCEL: 1051

**AS BUILT**  
 DATE: JULY 2, 2010

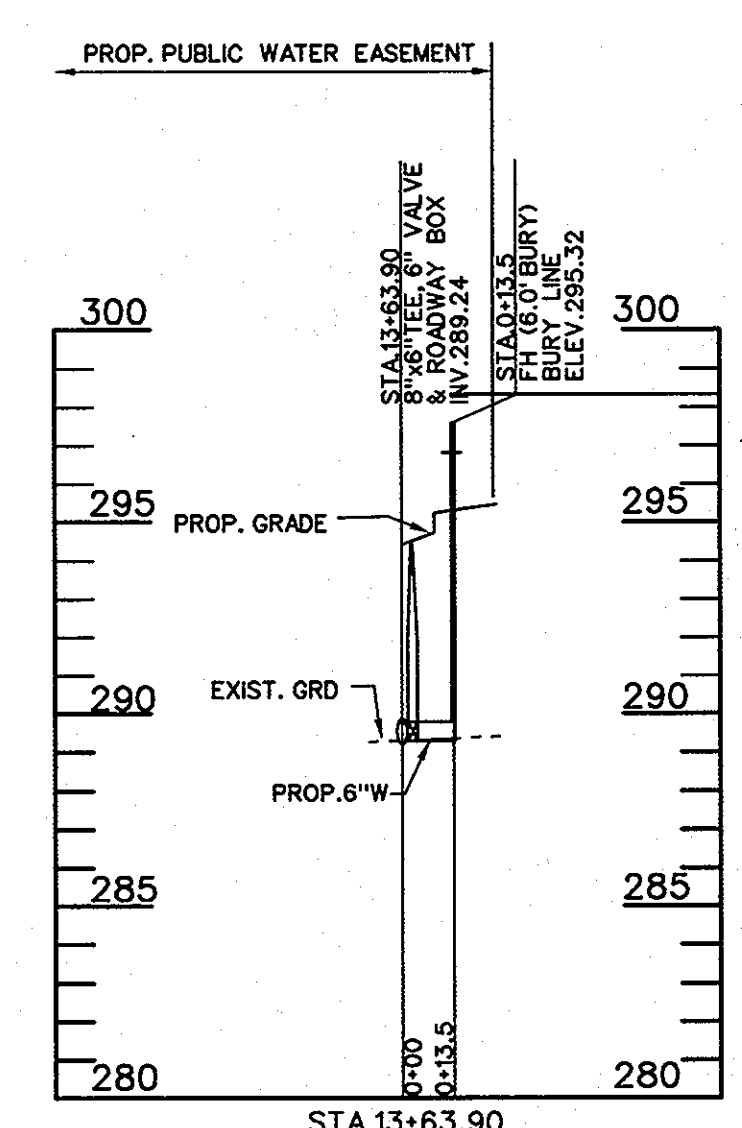
**EMERSON - PARCEL 'C'**  
 (FORMERLY KEY PROPERTY)  
 SECTION 3, AREA 1  
 CONTRACT NO. 44-4652D  
 HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50'  
 SHEET 2 OF 3  
 DATE: JANUARY, 2010



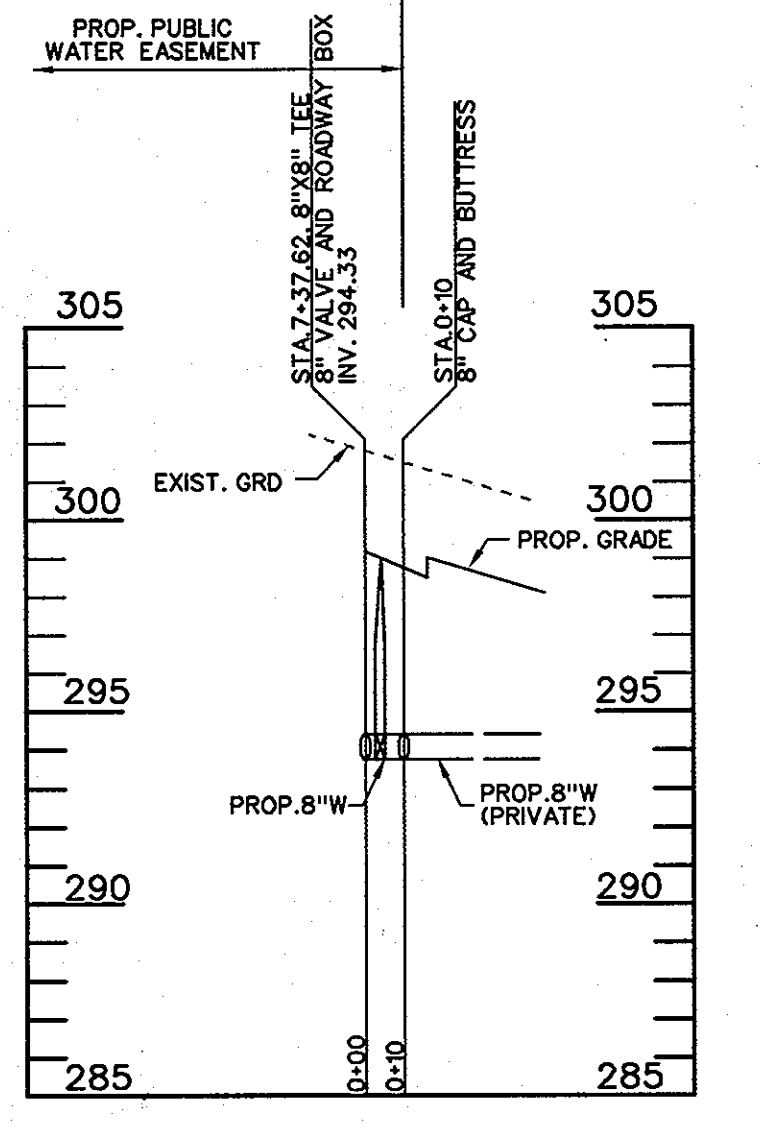
**FIRE HYDRANTS PROFILE**



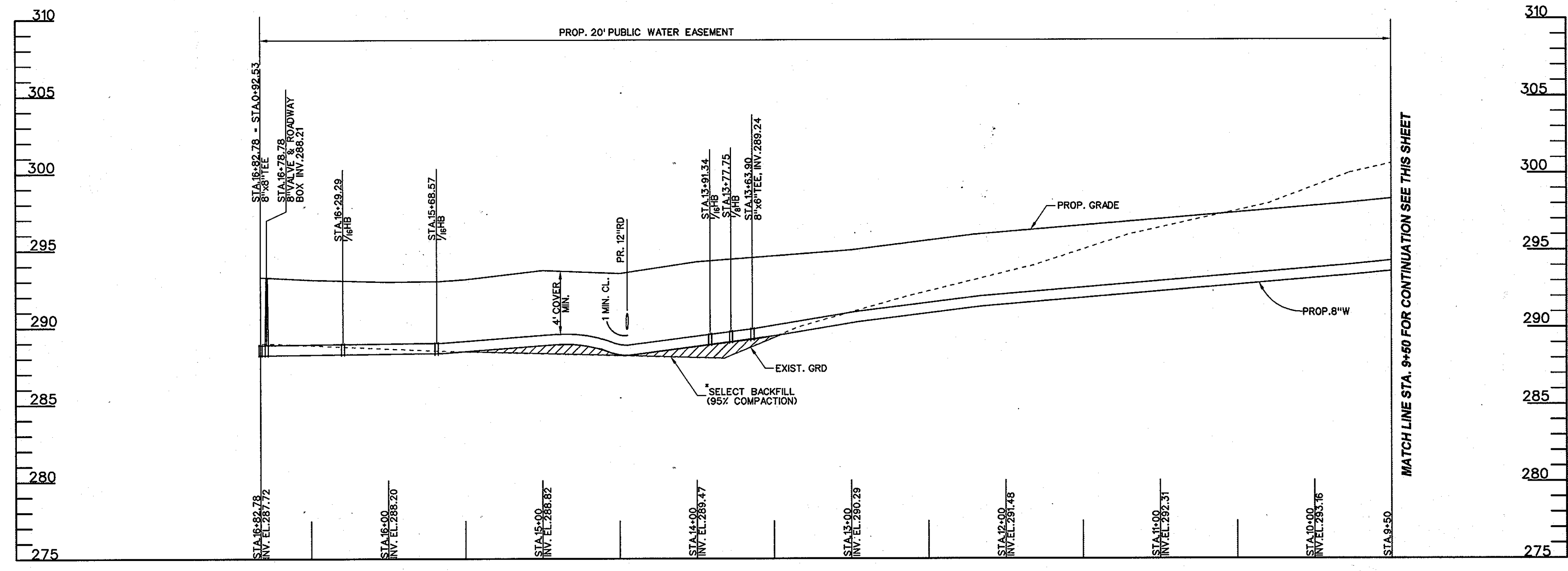
**WATER LINE PROFILE**



**FIRE HYDRANTS PROFILE**



**WATER SERVICE TO BUILDING**



**WATER LINE PROFILE**

**NOTE:**  
FOR SECTIONS OF PIPE IN FILL AREAS, AND 20' BEYOND ON BOTH SIDES OF FILL, PROVIDE A MINIMUM COMPACTION OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED AND VERIFIED IN ACCORDANCE WITH ASHTO T-180 OR AS SPECIFIED BY THE GEOTECH ENGINEER.



**OWNER / DEVELOPER**  
EMERSON DEVELOPMENT III LLC  
C/O DLA PIPER LLP  
1 TEXAS STATION COURT, SUITE 200  
TIMONIUM, MARYLAND 21093-8288  
(443) 689-8000

PLAT # 20960  
SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP-10-042

**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21245, EXPIRATION DATE: JUNE 9, 2010.

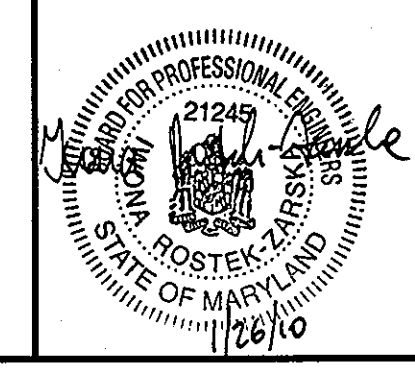
**AS BUILT**  
DATE: JULY 2, 2010

ADDRESS CHART			
LOT / PARCEL NO.	STREET ADDRESS		
PARCEL C	9160 STERLING DRIVE		
PERMIT INFORMATION CHART			
SUBDIVISION NAME EMERSON	SECTION / AREA 3 / 1	LOT / PARCEL NO. PAR. C / 1051	
GRID NO. G14	ZONING PEC-MXD-3	TAX MAP NO. 47	ELEC. DIST. 6TH
WATER ZONE 400	TEST GRADIENT 550	CENSUS TRACT 6069-03	

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Shane H. Gregory* 2/12/10  
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*Shane H. Gregory* 2/12/10  
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

**BLDG**  
Baltimore Land Design Group Inc.  
Consulting Engineers  
222 SCHILLING CIRCLE SUITE 105 HUNT VALLEY, MARYLAND 21030  
PHONE: 410.229.9851 FAX: 410.229.9865 BLDG@BLDGC.COM



DESIGNED BY: DG / VZ			
DRAWN BY: DG / PR			
CHECKED BY: VZ			
DATE: 01-26-10	BY NO.	RELOCATED WATER LINE	DATE 2/12/10

**WATER PROFILE**  
600 SCALE TAX MAP NO. 47 PARCEL: 1051

**EMERSON - PARCEL 'C'**  
(FORMERLY KEY PROPERTY)  
SECTION 3, AREA 1  
CONTRACT NO. 44-4652D  
HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN  
DATE: JANUARY, 2010

SCALE AS SHOWN  
SHEET 3 OF 3