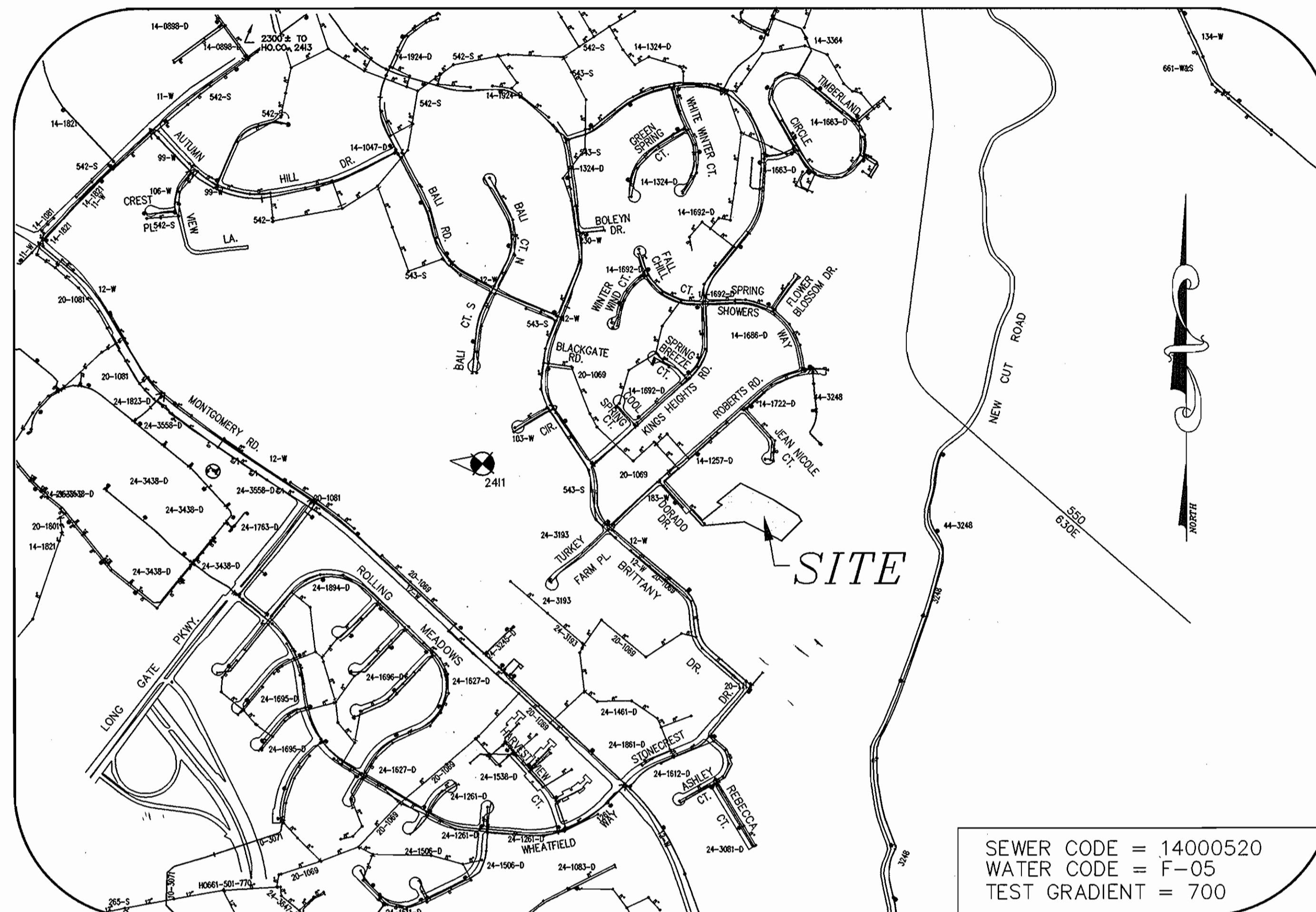


**QUANTITY TABLE**

ITEMS	QUANTITIES		TYPE	MANUFACTURER/SUPPLIER
	ESTIMATED	QUANTITIES		
STANDARD MH (HO.CO. STD. G-5.01)	1 EACH	1EA	4 PRECAST	ATLANTIC
8" SEWER MAIN	120 L.F.	120	SDR 35	J.M. MANUFACTURE
6" WATER MAIN	634 L.F.	638 L.F.	DIP	GRIFFIN PIPE
1" WATER HOUSE CONNECTION	30 L.F.	37 L.F.	K COPPER	
# 1" W/C	4 EACH	4 EA.		READING
6" CAP & BUTTRESS	1 EACH	1EA	M.I. CAP	J.M. MANUFACTURING
1/8 H.B. (6")	1 EACH	1EA		"
1/16 H.B. (6")	6 EACH	6EA		J.M.
1-1/2" DRAIN	1 EACH	1EA		J.M.
F.H.	1 EACH	1EA	MUELLER	MUELLER
6"x6" F.H.T. & V.	1 EACH	1EA		U.S. PIPE

NAME OF UTILITY CONTRACTOR: MARTIN CONSTRUCTION  
SURVEY AND DRAFTING DIVISION AS-BUILT DATE



**VICINITY MAP**

SCALE: 1"=600'

TYPE OF BUILDING	SFD
No. OF UNITS	4
No. OF WATER HOUSE CONNECTION	4
No. OF SEWER HOUSE CONNECTIONS	0
DRAINAGE AREA	PATAPSCO
TREATMENT PLANT	PATAPSCO WWTP

**EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER GP-04-53**

**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 SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES NAD83/91 AS PROJECTED BY HOWARD COUNTY HORIZONTAL AND VERTICAL GEODETIC CONTROL NOS. 2411 & 2413. THESE WATER AND SEWER DRAWINGS ARE BASED ON A FIELD RUN TOPOGRAPHIC STUDY PERFORMED BY MILDENBERG, BOENDER AND ASSOCIATES, INC. ON OR ABOUT MAY 2002.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. 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 MONEY 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 DETAIL 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 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:  
STATE HIGHWAY ADMINISTRATION (410) 531-5533  
BG & E CO. CONTRACTOR SERVICES (410) 850-4620  
BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068  
MISS UTILITY 1-800-257-7777  
COLONIAL PIPELINE CO. (410) 795-1390  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS (410) 313-4900  
BUREAU OF UTILITIES (800) 446-5266  
VERIZON
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE 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) 313-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN 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(g) OF HOWARD COUNTY CODE.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2' 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. 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.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- STATIONING SHOWN IS WATER MAIN STATIONING.
- SEDIMENT CONTROL TO BE PROVIDED BY GP-04-53.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.
- ALL CONNECTIONS TO THE MANHOLE MUST BE MADE AT THE INVERT OF THE MANHOLE WITH THE BENCH OF THE MANHOLE CHANNELLED FOR CONNECTION.

**CONTRACT NO.: 14-4188-D  
GIBSON PROPERTY  
WATER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS**

**INDEX OF DRAWINGS**

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER & SEWER PLAN & PROFILES

**OWNER**

ELLCOTT CITY LANDHOLDING, INC.  
8000 MAIN STREET  
ELLCOTT CITY, MARYLAND 21043  
(410) 450-9105

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

DEVELOPER'S NAME \_\_\_\_\_

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEER'S SIGNATURE *Dr. Jacob Thiemat* DATE *3/14/04*

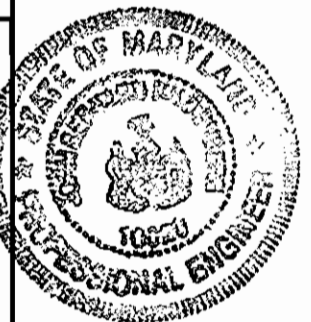
ENGINEER'S NAME \_\_\_\_\_

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE *3/12/04*

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

HOWARD SCD DATE *3/14/04*

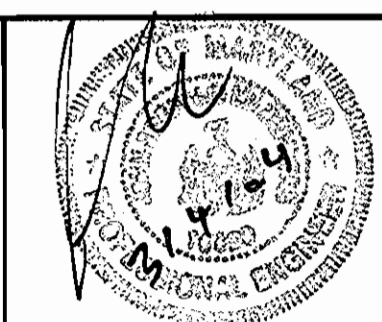


PLAN REFERENCE NUMBERS:  
F-02-181  
GP-04-53

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5972 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Ball. (301) 821-5321 Wash. (410) 997-0298 Fax.



engineering HSP					
illustration HSP					
approval MAP					
project 02-027	KCI	1	AGBLIC DATA SHOWN		
date MAR 2004	BY	NO.	REVISION	DATE	

**TITLE SHEET**

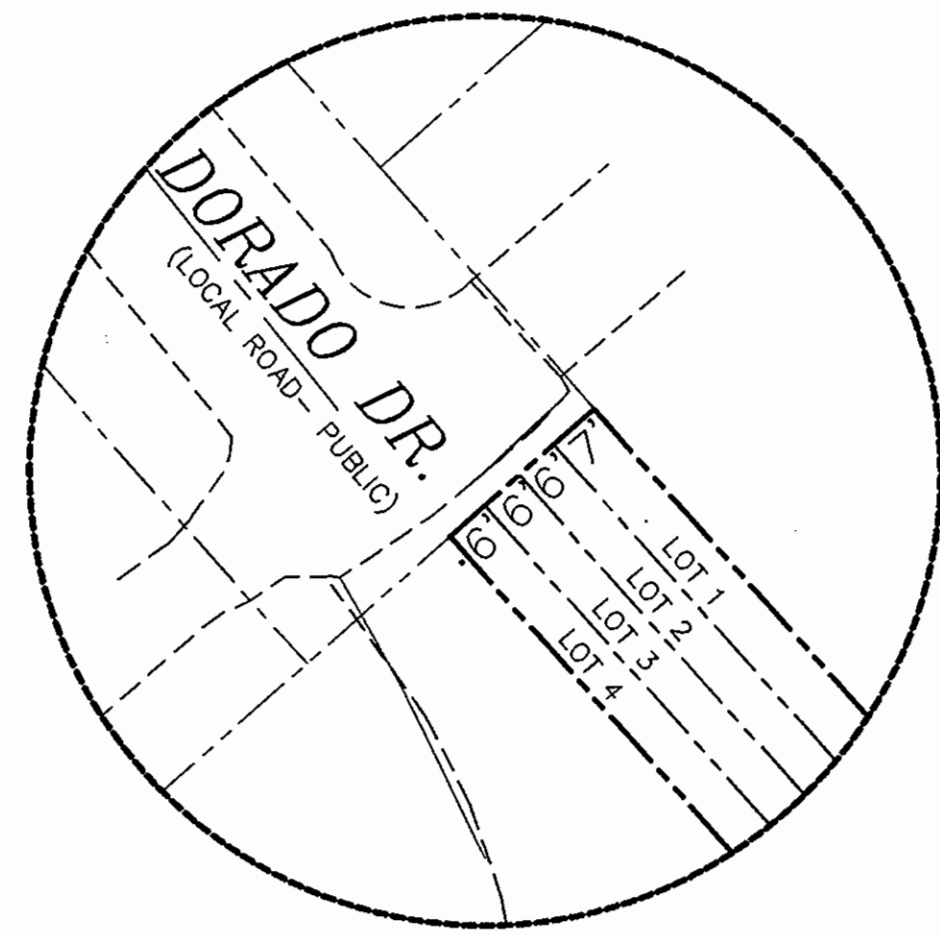
600' SCALE MAP NO. 25 BLOCK NO. 19

**GIBSON PROPERTY  
LOTS 1 THRU 5**  
CONTRACT NO.: 14-4188-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

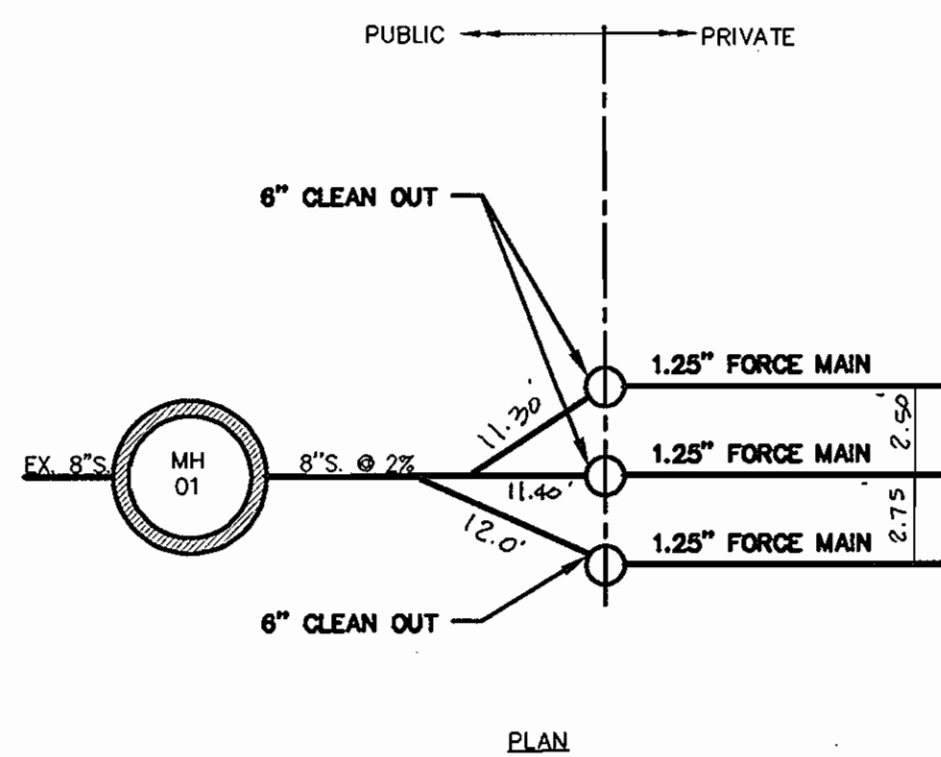
scale AS SHOWN  
1 OF 2

02027 DWG WATER 02027-COVER.DWG

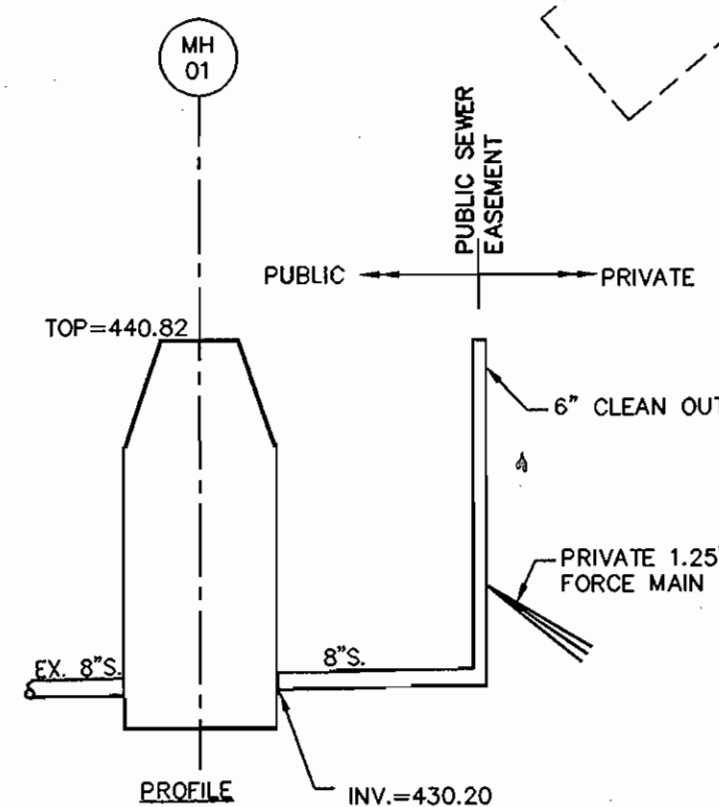




**FRONTAGE DETAIL**  
NTS



**DETAILS PUBLIC SEWER CONNECTIONS FOR PRIVATE FORCE MAINS**  
SCALE: NTS



I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

DEVELOPER'S NAME \_\_\_\_\_

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

ENGINEER'S NAME **R. Jacob Hymat**

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

Jim Meyer 3/18/04

USD NATURAL RESOURCES CONSERVATION SERVICE

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

John R. Roberts 3/18/04

HOWARD SCD

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0288 Fax



engineering	HSP				
illustration	HSP				
approval	MAP				
project	02-027	KCI	1	ASBUILT DATA SHOWN	10/9/04
date	MAR 2004	BY	NO.	REVISION	DATE

**WATER & SEWER PLAN & PROFILES**

600' SCALE MAP NO. 25 BLOCK NO. 19

**GIBSON PROPERTY LOTS 1 THRU 5**

CONTRACT NO.: 14-4188-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

scale AS SHOWN

2 OF 2

**6" WATER MAIN TABULATION CHART**

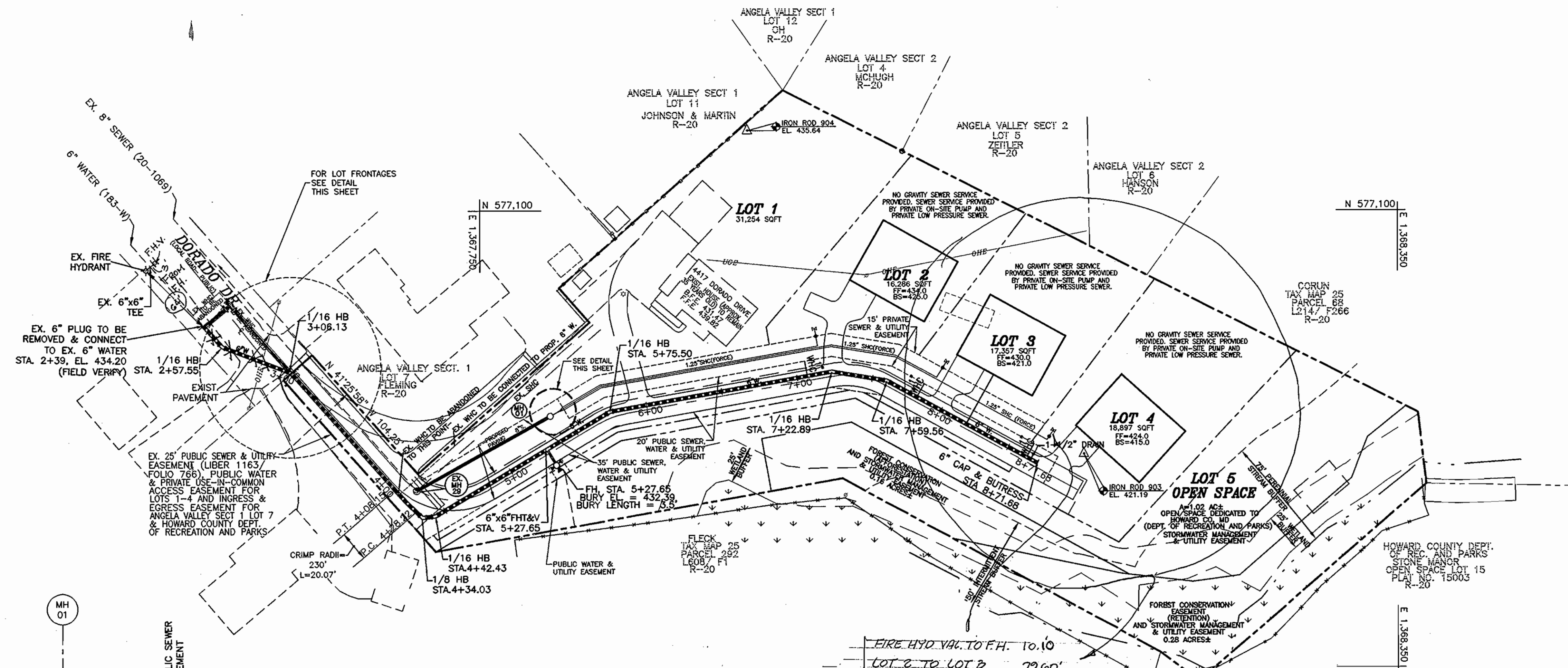
APPURTENANCE	NORTHING	EASTING
1/16 H.B.	577011.1597	1367581.2302
1/16 H.B.	576993.6966	1367626.5634
1/8 H.B.	576898.7647	1367712.1947
1/16 H.B.	576899.7063	1367834.7324
F.H.T. & V.	576943.4723	1367793.6782
F.H.	576933.1753	1367799.8404
1/16 H.B.	576968.0413	1367834.7324
1/16 H.B.	576993.9836	1367979.8251
1/16 H.B.	576988.0363	1368016.0071
6" CAP & BUTTRESS	576934.0102	1368114.2553

**MANHOLE LOCATION CHART**

MANHOLE NUMBER	NORTHING	EASTING
01	576965.2171	1367799.8404

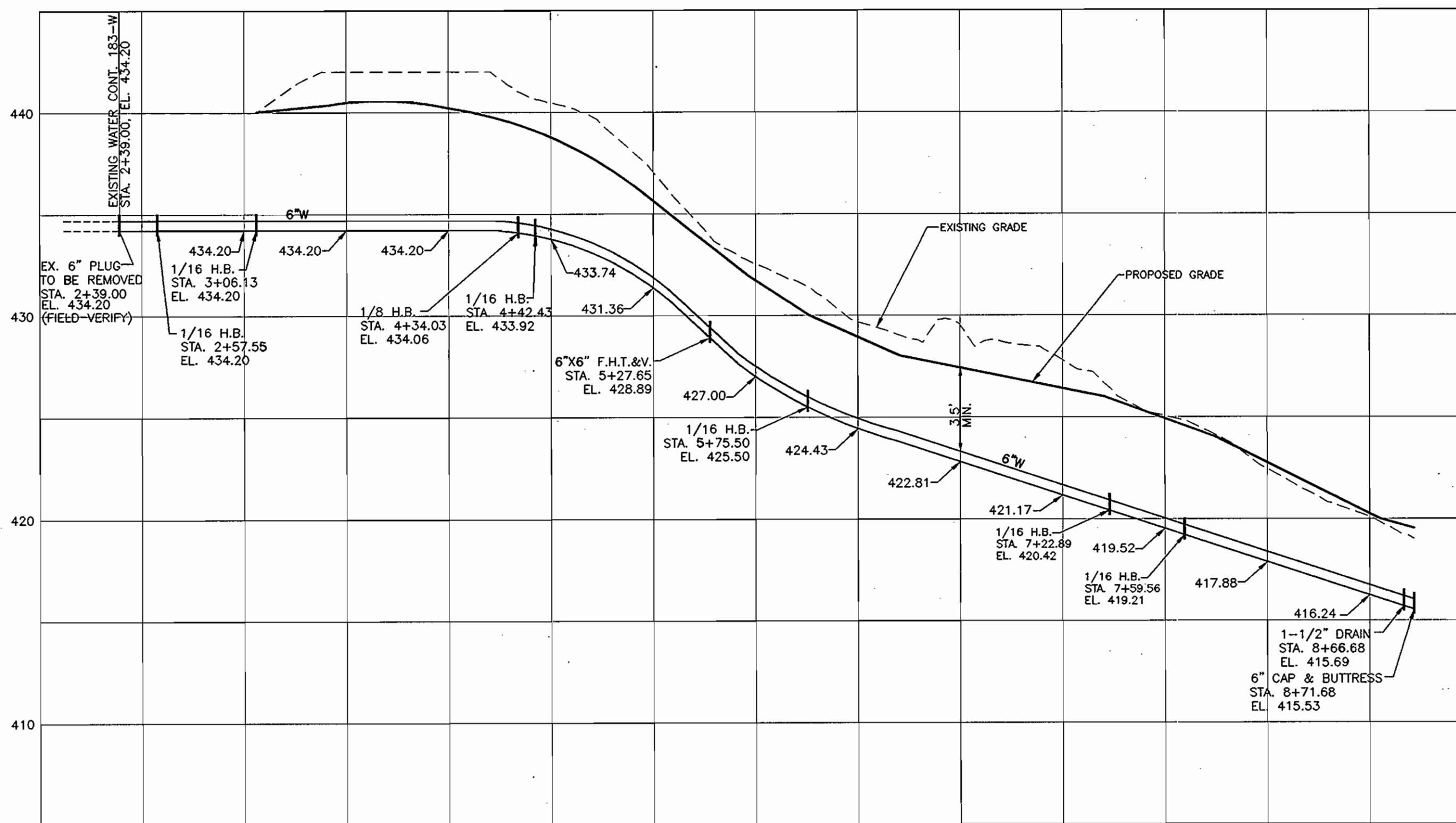
**LEGEND**

- WETLANDS
- PRIVATE GRINDER PUMP FOR LOW PRESSURE SEWER



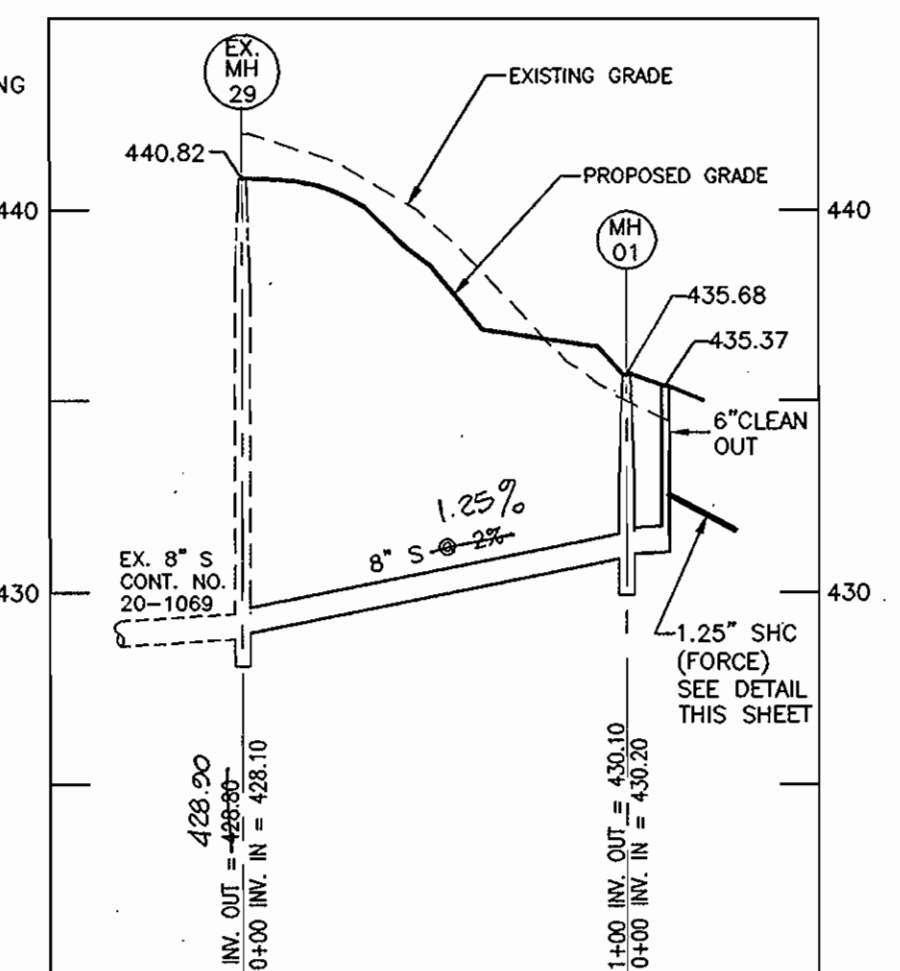
**PLAN VIEW**  
SCALE: 1"=50'

EX. HYD. VAL. TO F.H. 10.10'  
LOT 2 TO LOT 1 79.60'  
LOT 5 TO LOT 4 82.75'  
LOT 4 TO 1 1/2' SLOPOFF 2.40'  
1 1/2' BLOW-OFF TO FRONT LEFT CORNER OF HOUSE 30.05'



**6" WATER MAIN**  
SCALE: HOR. 1"=50'  
VER. 1"=5'

NOTE: THE ELEVATION OF THE TOP OF EXISTING MANHOLE 29 SHALL BE LOWERED TO MATCH PROPOSED GRADE.



**8" SEWER MAIN**  
SCALE: HOR. 1"=50'  
VER. 1"=5'

**OWNER**  
ELLCOTT CITY LANDHOLDING, INC.  
8000 MAIN STREET  
ELLCOTT CITY, MARYLAND 21043  
(410)480-9105