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# PROPOSED WATER MAIN

# AH SMITH PROPERTY

## 6th ELECTION DISTRICT, TAX MAP 47


## HOWARD COUNTY, MARYLAND 21042

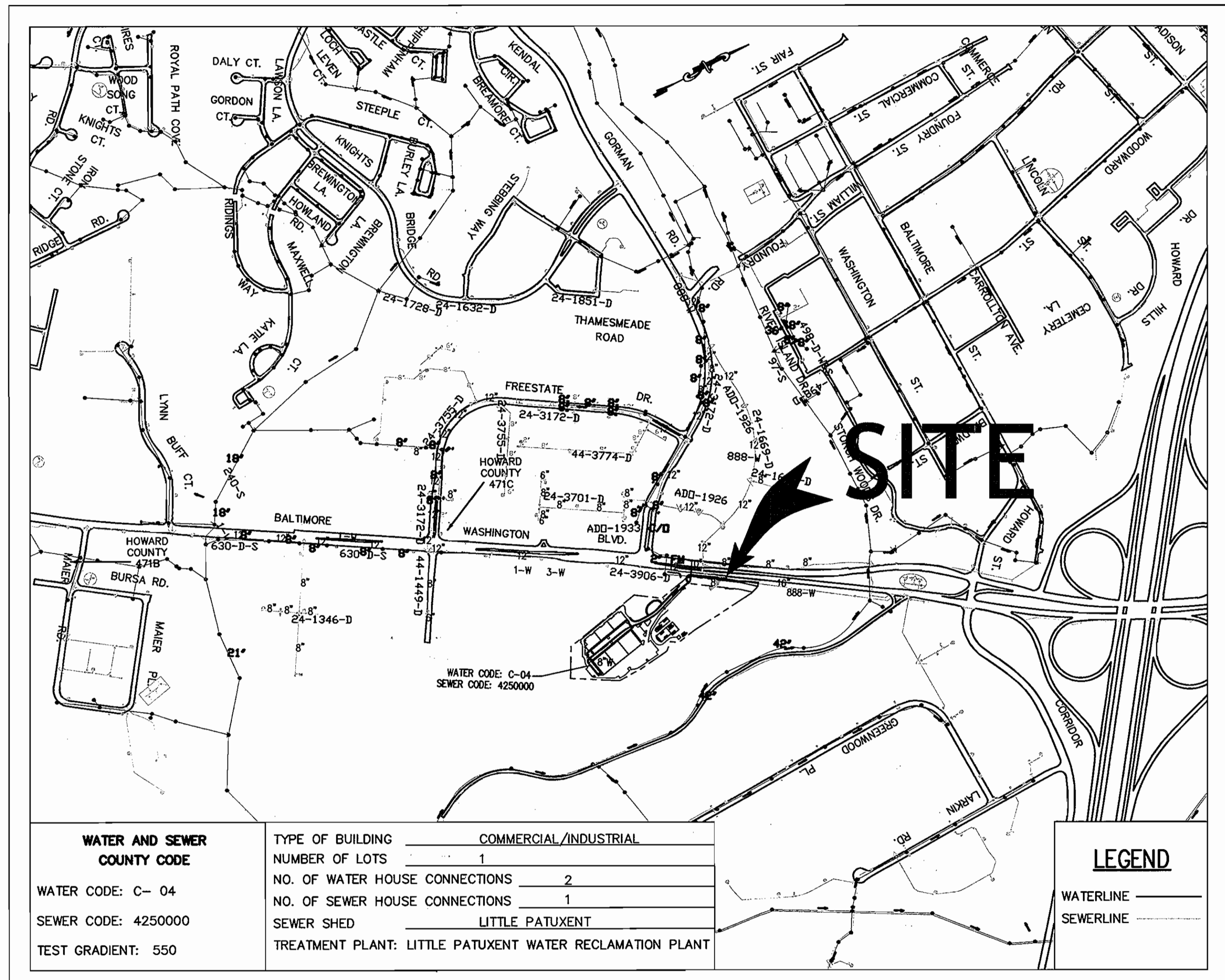
**BENCHMARKS**

HOWARD COUNTY GEODETIC CONTROL # 471 B  
ELEVATION 180.71  
3/4 INCH REBAR WITH ALUMINUM CAP LOCATED 18.7 FEET NORTH OF AN EXISTING FIRE HYDRANT, 2.4 FEET OFF THE EDGE OF THE U.S. ROUTE 1 PAVING ON THE SOUTHWEST QUADRANT OF THE U.S. ROUTE 1/ MAIER ROAD INTERSECTION.

HOWARD COUNTY GEODETIC CONTROL # 471 C  
ELEVATION 189.05  
STANDARD HOWARD COUNTY ALUMINUM DISC ON CONCRETE MONUMENT, FLUSH WITH THE GROUND, LOCATED 84.7 FEET SOUTH OF THE EDGE OF AN EXISTING STORM DRAIN INLET ON THE NORTHWEST QUADRANT OF THE FREESTATE DRIVE/ U.S. ROUTE 1 INTERSECTION.

ITEMS	QUANTITIES ESTIMATED	QUANTITIES		
		AS- BUILT	TYPE	MANUF./ SUPPLIER
8" WATER MAIN	1144			
8" X 6" FHT	4			
FIRE HYDRANTS	4			
12" X 8" TS&V	1			
8" X 6" TEE	2			
8-1/8" HB	3			
8" VALVE	2			
6" VALVE	2			
8" CAP	1			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS - BUILT DATE:				

- 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.
  - TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON OCTOBER, 2004 BY AB CONSULTANTS, INC.
  - HORIZONTAL & VERTICAL SURVEY CONTROLS:  
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEMS NAD '83/'91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS HOWARD COUNTY MONUMENT 471B AND 471C.  
ALL VERTICAL CONTROLS ARE BASED ON NAD '88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE HOWARD COUNTY MONUMENTS 471B 3/4 INCH REBAR WITH ALUMINUM CAP AND 471C IS AN ALUMINUM DISC ON CONCRETE MONUMENT, FLUSH WITH THE GROUND.
  - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE 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 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 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 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 VERIFIED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
  - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES 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  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 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 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 OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114 (c) OF THE HOWARD COUNTY CODE.
  - ALL ROADWAY/STREET ARE PRIVATE AND HAS 24' WIDTH, PAVEMENT SECTION IS P2.



- WATER GENERAL NOTES**
- ALL WATER MAINS TO BE D.I.P. CLASS 52 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 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 6" FOR 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SERVING BOTH SPRINKLERS AND DOMESTIC USES. (STD. DETAIL W.3.21.)
  - WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.

<b>WATER AND SEWER COUNTY CODE</b>	TYPE OF BUILDING: <u>COMMERCIAL/INDUSTRIAL</u>	<b>LEGEND</b> WATERLINE ——— SEWERLINE - - - - -
WATER CODE: C- 04	NUMBER OF LOTS: <u>1</u>	
SEWER CODE: 4250000	NO. OF WATER HOUSE CONNECTIONS: <u>2</u>	
TEST GRADIENT: 550	NO. OF SEWER HOUSE CONNECTIONS: <u>1</u>	
	SEWER SHED: <u>LITTLE PATUXENT</u>	
	TREATMENT PLANT: <u>LITTLE PATUXENT WATER RECLAMATION PLANT</u>	

**VICINITY MAP**  
SCALE: 1"=600'  
ADC MAP PAGE 20, GRID C-8



REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

*Jim Mayes* 7/12/07  
U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE DATE

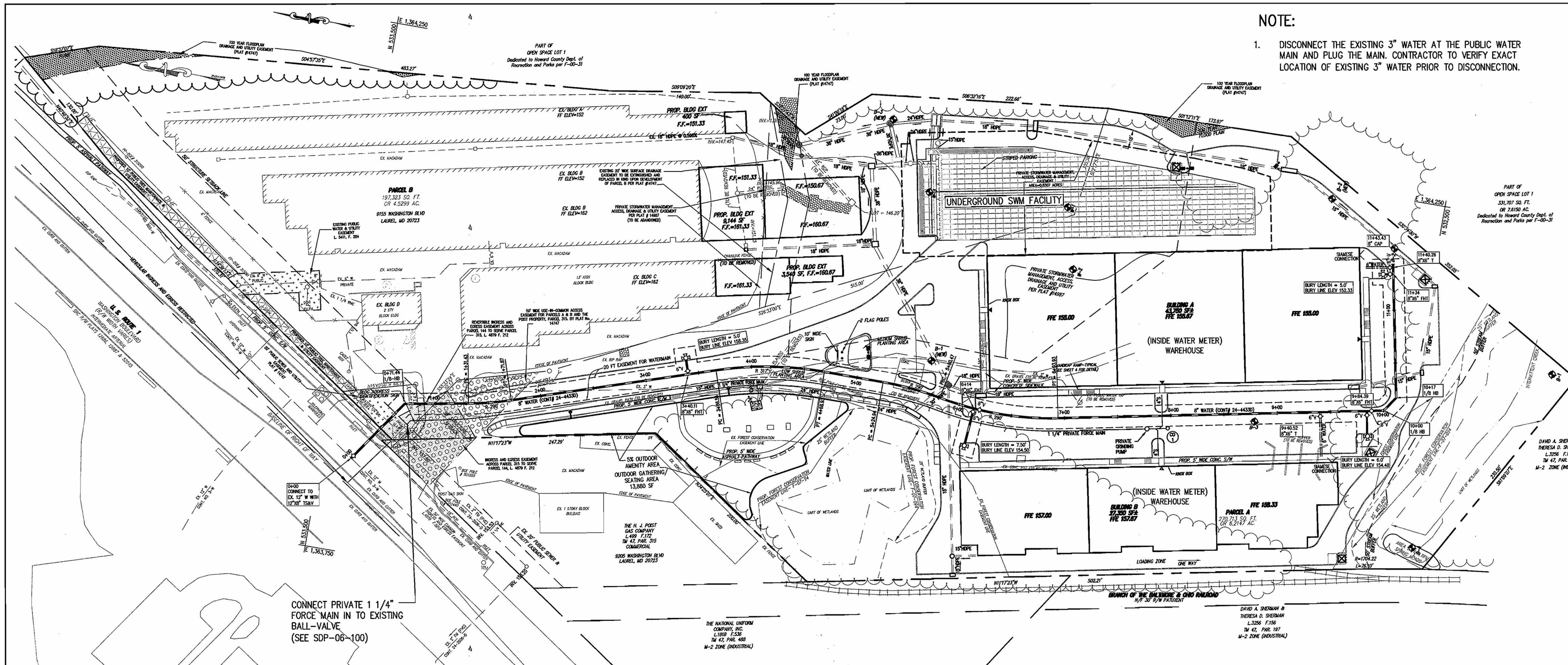
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. REFERENCE F-07-94, SDP 06-100

*John R. Roberts* 7/12/07  
HOWARD SCD DATE

**DEVELOPER CONTACT INFORMATION**  
DOUG CHAMBERLAIN  
CHAMBERLAIN CONSTRUCTION INC  
3138 ROGERS AVENUE  
ELLCOTT CITY, MARYLAND 21043  
TELEPHONE: 410-203-2460

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND	 <b>AB CONSULTANTS, INC.</b> 9450 ANNAPOLIS ROAD LANHAM, MARYLAND 20706 PHONE: (301) 306-3091 FAX: (301) 306-3092		DES.: HRP DRN.: SRP/HRP CHK.: SBP DATE: 06-28-07	BY: _____ NO. _____ REVISIONS _____ DATE _____	50' SCALE MAP NO. 17	BLOCK NO. 8 & 14	STORAGE USA FACILITY (PAR 'B') AND PARCEL 'A' OF THE A.H. SMITH SUBDIVISION SELF-STORAGE FACILITY EXPANSION AND PROPOSED FLEX SPACE BUILDING 6th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND TAX MAP 47, PARCEL A & B, GRID 18, P/O PARCEL 144 CONTRACT NO. : 24-4433-D	SCALE: AS SHOWN	SHEET NO. 1 OF 2
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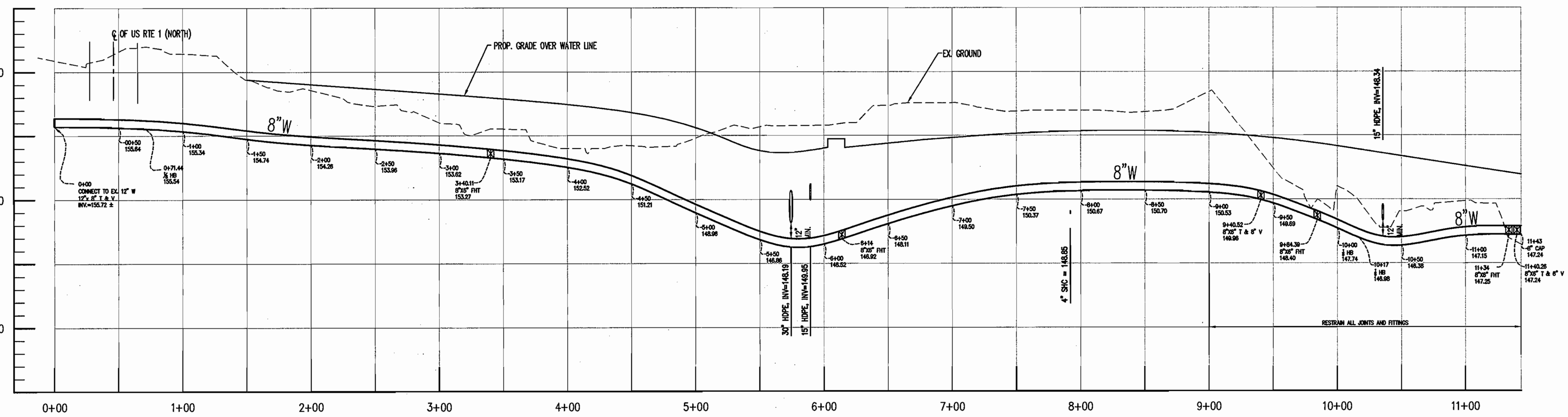


**NOTE:**  
 1. DISCONNECT THE EXISTING 3" WATER AT THE PUBLIC WATER MAIN AND PLUG THE MAIN. CONTRACTOR TO VERIFY EXACT LOCATION OF EXISTING 3" WATER PRIOR TO DISCONNECTION.

NUMBER	FIXTURE	WATERLINE STATION
1	12"x8" T	0+00
2	1/8" HB	0+71.44
3	8" X 6" FHT	3+40.11
4	8" X 6" FHT	6+14
5	8" X 6" T	9+40.52
6	8" X 6" FHT	9+84.39
7	1/8" HB	10+00
8	1/8" HB	10+17
9	8" X 6" FHT	11+34
10	8" X 6" T	11+40.26
11	8" CAP	11+43.43

**GRINDER PUMP DESIGN DATA**  
 GRINDER PUMP SHALL BE "E-ONE" MODEL 2015 WITH DUPLEX 1 HP 1.725 RPM PUMPS  
 DISCHARGE= 13 GPM PER PUMP  
 TANK CAPACITY = 275 GALLONS  
 LOW PRESSURE FORCE MAIN DIAMETER = 1 1/4 INCHES  
 TOTAL DYNAMIC HEAD = 33.3 FT.  
 RETENTION TIME = 1.82 HRS.  
 (FOR FURTHER DETAILS SEE SDP NO. 06-100)

**UTILITY NOTES**  
 NOTIFY MISS UTILITY AT 1-800-257-7777- 48 HOURS PRIOR TO DOING ANY EXCAVATION IN THIS AREA.  
 THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 7-6-07 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND DATE: 7/6/07 CHIEF, DEVELOPMENT ENGINEERING DIVISION	<b>AB CONSULTANTS, INC.</b> 9450 ANNAPOLIS ROAD LANHAM, MARYLAND 20706 PHONE: (301) 306-3091 FAX: (301) 306-3092 CONTACT: SANJAY PATEL PHONE: 301-306-3091 x21	DES.: HRP DRN.: SRP/HRP CHK.: SBP DATE: 06-28-07	<b>PLAN AND PROFILE</b> 50' SCALE MAP NO. 17 BLOCK NO. 8 & 14	<b>STORAGE USA FACILITY (PAR 'B') AND PARCEL 'A' OF THE A.H. SMITH SUBDIVISION SELF-STORAGE FACILITY EXPANSION AND PROPOSED FLEX SPACE BUILDING</b> 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND PARCEL 144 CONTRACT NO.: 24-4433-D	SCALE: 1"=50' (HOR.) 1"=5' (VERT.) SHEET NO. 2 OF 2
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