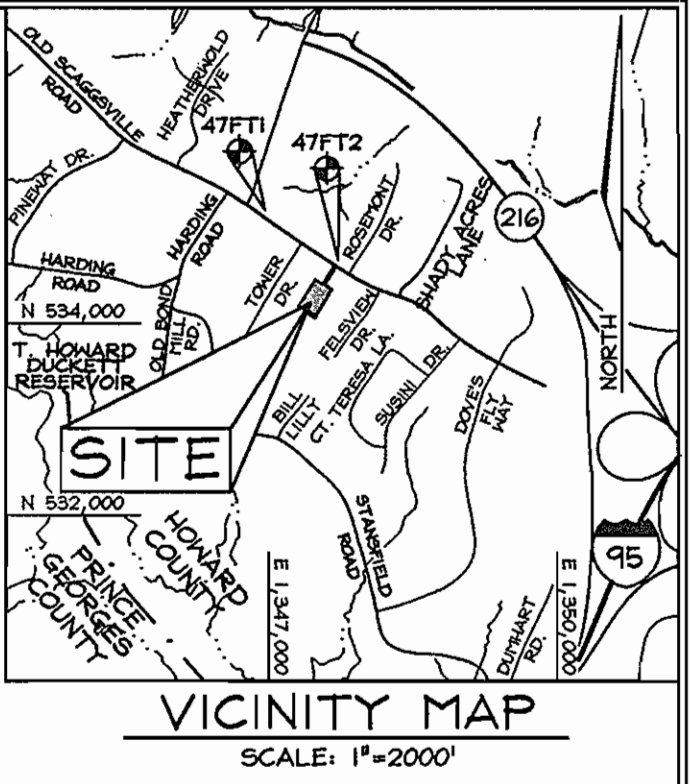


FINAL PUBLIC SEWER & WATER PLAN THE HILLSIDE AT ROCKY GORGE VIII

HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-4428-D



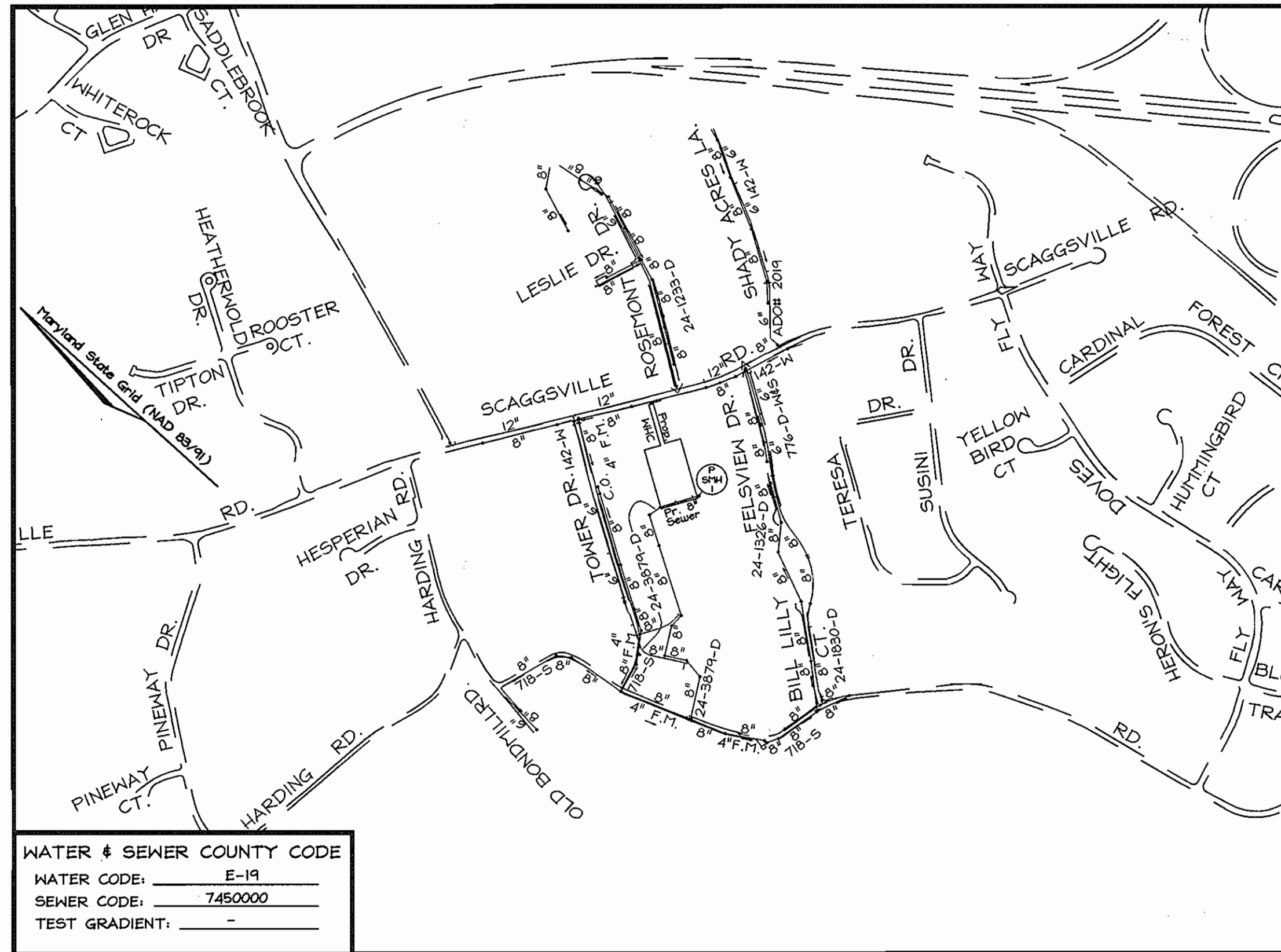
BENCHMARKS
Howard County Monuments:

Sta. 47FT1	N 163,112.0109	E 410,554.3131	El.: 123.1516 (meters)
	N 535,143.3222	E 1,346,960.276	El.: 404.040 (feet)
Sta. 47FT2	N 162,918.7983	E 410,825.8184	El.: 122.2555 (meters)
	N 534,509.424	E 1,347,951.039	El.: 401.100 (feet)

- GENERAL NOTES**
- PART I - GENERAL**
- Approximate locations of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted services. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the contractor's expense.
 - Topography is based on an Aerial Topographic Survey prepared by Wings Aerial Mapping Co., Inc. in 1993, and supplemented by field run topographic by FSH Associates on November, 2001.
 - 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 No. 47FT1 and No. 47FT2.
All vertical controls are based on NAVD '88. Vertical controls provided on the drawings are Sta. 47FT1 - 3/4" Rebar with plastic cap 8' NE of paving edge, 26.7' s of B&E pole; Sta. 47FT2 - 3/4" Rebar with plastic cap 2.0'SE of paving edge, 23'SE of B&E pole.
 - 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 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 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 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 located 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
BGE(Construction Services)	410.850.4620
BGE(Emergency)	410.685.1400
Bureau of Utilities	410.313.4900
Colonial Pipeline Company	410.795.1940
Miss Utility	1.800.257.7777
State Highway Administration	410.531.5533
Verizon	1.800.743.0333 / 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 open cutting or boring/lacking 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.

- 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 frames and covers are used, set top of frame 1'-0" above finished grade unless otherwise noted on the drawings.
 - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
- PART II - WATER**
- All water mains to be D.I.P. Class 54 unless otherwise noted.
 - Tops off all water mains to have a minimum of 3'-0" 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 restrained and buttressed with concrete in accordance with Standard Details. Soil around Fire Hydrant shall be compacted in accordance with Section 1000 of the Standard Specifications.
 - The Contractor shall not operate any water main valves on the exist water system.
 - All water house connections shall be for inside meter settings unless otherwise noted on the plans or in specifications.
 - All W.H.C.s shall be copper.



WATER & SEWER COUNTY CODE

WATER CODE:	E-19
SEWER CODE:	7450000
TEST GRADIENT:	-

LOCATION MAP
Scale: 1"=600'

TYPE OF BUILDING:	RESIDENTIAL
NO. OF LOTS/PARCELS:	2
NO. OF WATER HOUSE CONNECTIONS:	2
NO. OF SEWER HOUSE CONNECTIONS:	2
DRAINAGE AREA:	LITTLE PATUXENT
TREATMENT PLANT:	PATAPSCO

PUBLIC WATER AND SEWER QUANTITIES

NAME OF UTILITY CONTRACTOR: **W.F. WILSON & SONS, Inc.**
SURVEY AND DRAFTING DIVISION AS-BUILT DATE: **AUGUST 15, 2008**

ITEMS	AS-BUILT			
	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
MANHOLE	1	1	PRECAST	ATLANTIC CONC./W.F. WILSON
8" SEWER D.I.P.	221 L.F.	210 L.F.	CL. 52	U.S. PIPE/BELAIR RD. SUPPLY
4" D.I.P.	21 L.F.±	50 L.F.	CL. 52	U.S. PIPE/W.F. WILSON
1-1/2" W.H.C. (COPPER)	55 L.F.	60 L.F.	'K'	READING TUBE/BELAIR RD. SUPPLY
△ FIRE HYDRANT	1EA.	1EA.	5'	MUELLER/BELAIR RD. SUPPLY

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. 22410, Expiration Date: 07/21/09.

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

John R. [Signature] 3/29/07 DATE
SOIL CONSERVATION DISTRICT

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Jim [Signature] 3/29/07 DATE
S.O. SOIL CONSERVATION DISTRICT

AS BUILT
DATE: AUGUST 15, 2008

OWNER/DEVELOPER
Scaggsville Road Investment, LLP
1301 Park Avenue
Baltimore, Maryland 21217

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. [Signature] 3-23-07 DATE
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
[Signature] 4/3/07 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

FSH Associates
Engineers Planners Surveyors
6333 Howard Lane, Elkridge, MD 21075
Tel: 410-567-5200 Fax: 410-796-1562
E-mail: info@fsheri.com



DESIGN BY: MLT
DRAWN BY: HK
CHECKED BY: ZYF
DATE: March 9, 2007

NO.	REVISION	DATE
1	INSTALL F.H. WITHIN OLD SCAGGSVILLE RD ± STA. 9+82	11-01-07

FINAL PUBLIC SEWER & WATER COVER SHEET

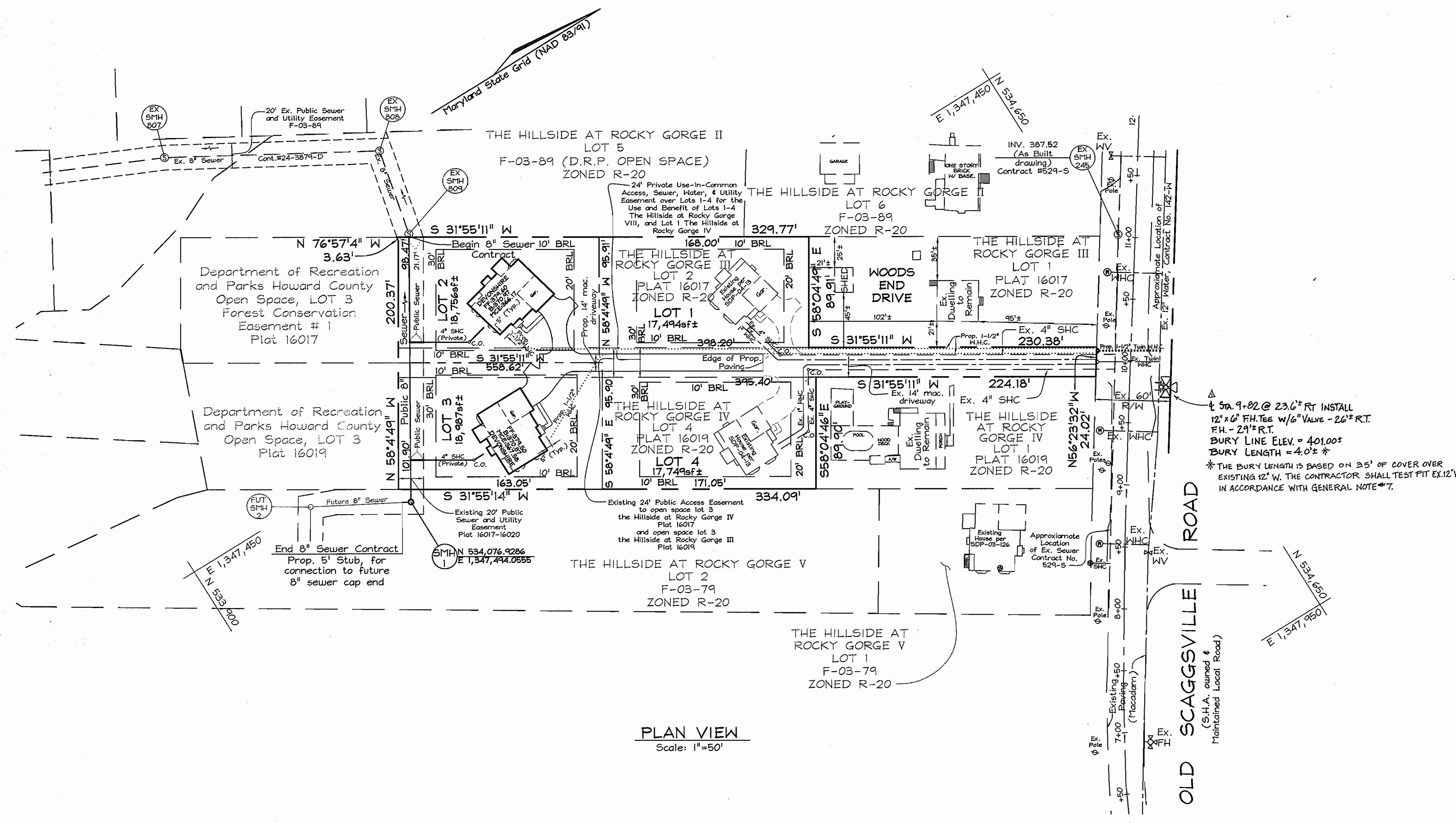
600' SCALE MAP NO.: 46 BLOCK NO.: 18

THE HILLSIDE AT ROCKY GORGE VIII
LOTS 1, 2, 3 AND 4
A RESUBDIVISION OF LOT 2, THE HILLSIDE AT ROCKY GORGE III
PLAT #16017-16018 AND LOT 2, THE HILLSIDE AT ROCKY GORGE IV
PLAT #16019-16020

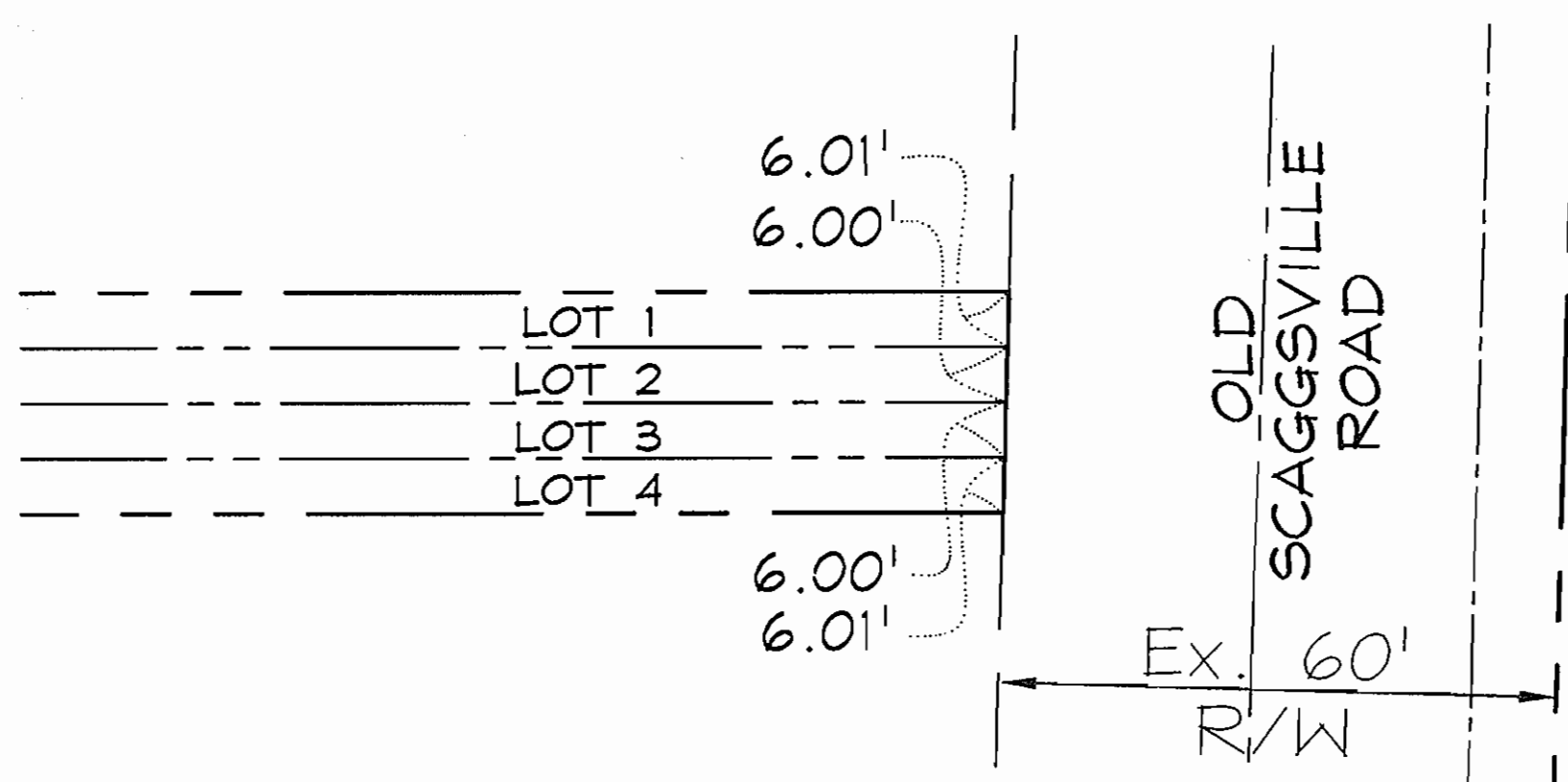
CONTRACT NO. 24-4428-D

TAX MAP 46 GRID 18 PARCELS 326
6TH ELECTION DISTRICT ZONING R-20 HOWARD COUNTY, MARYLAND

SCALE: As Shown
SHEET NO. 1 OF 2



PLAN VIEW
Scale: 1"=50'



DETAIL VIEW OF LOT FRONTAGES ON OLD SCAGGSVILLE ROAD
Scale: 1"=20'

LEGEND

Existing Power Pole	⊗
Existing Fire Hydrant	⊗
Existing Water Valve	⊗
Existing Sanitary Manhole	⊗
Existing Clean Out	⊗
Prop. 1 1/2" WHC	-----
Prop. 4" SHC	-----
Ex. 1" WHC	-----
Ex. 4" SHC	-----

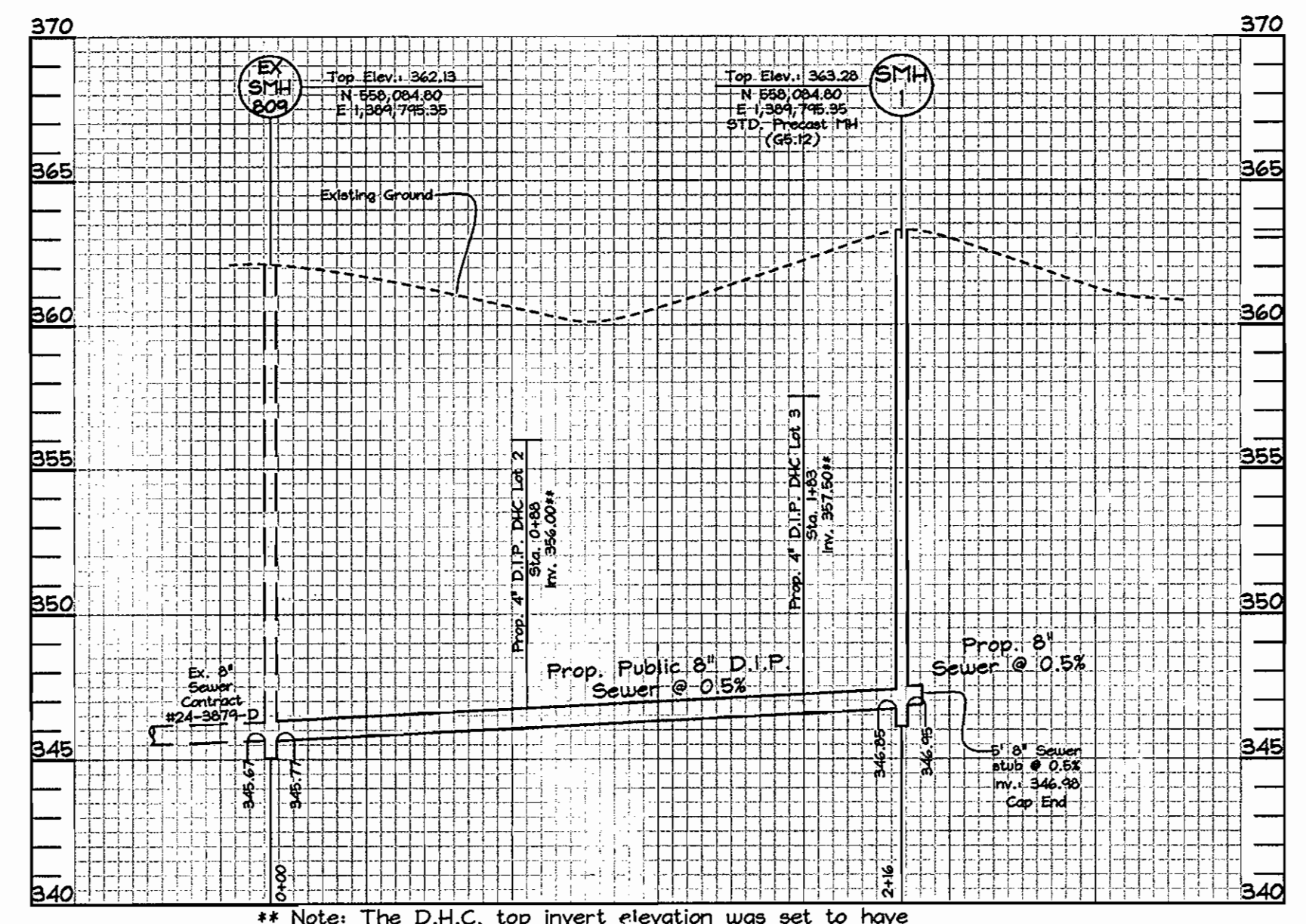
Note: Water Meters shall be installed in outside Meter Boxes located in a grassy area at the edge of the easement.

Note: Contractor shall investigate overhead lines in field to ensure no interference with construction equipment.

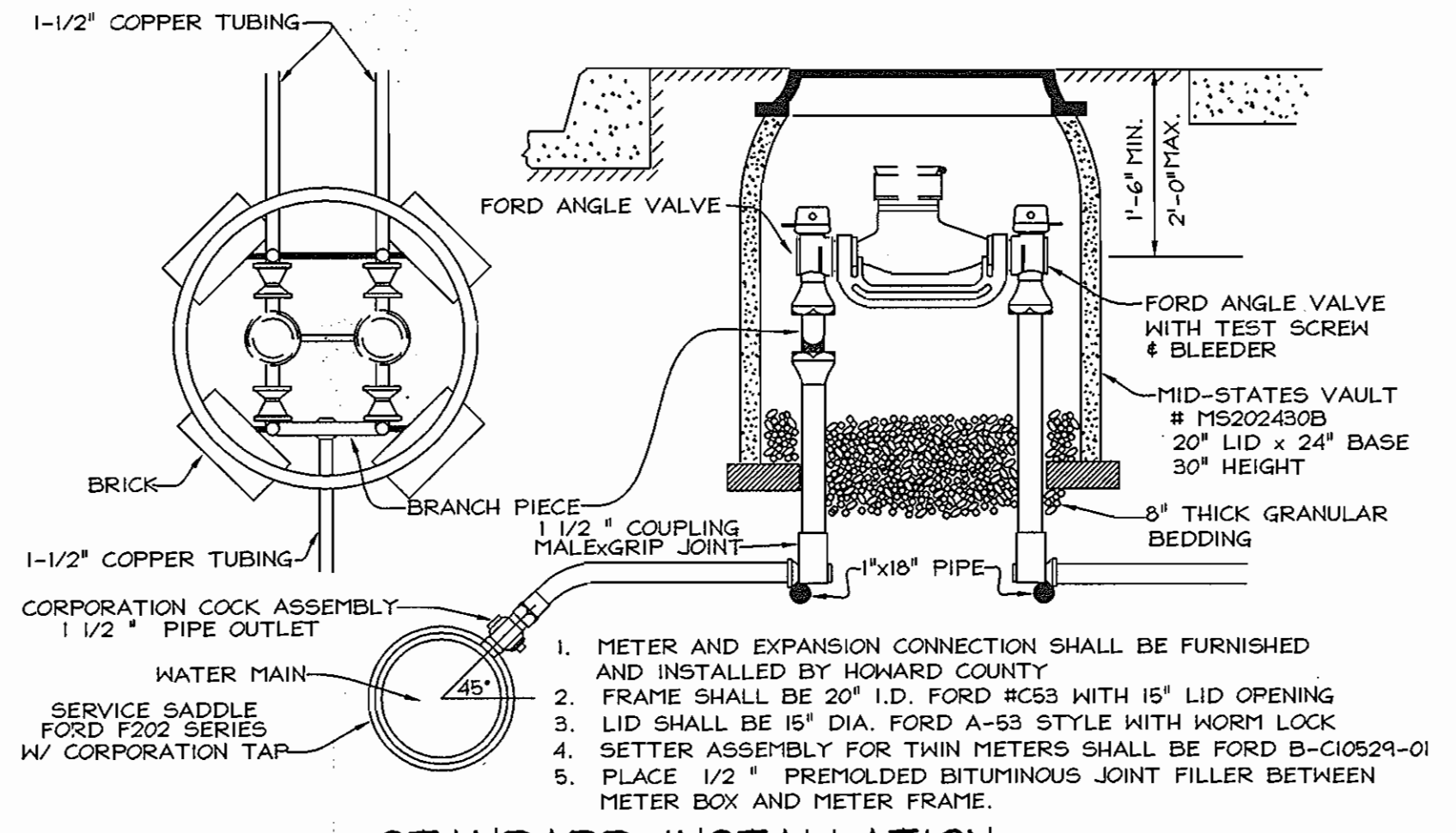
SEWER HOUSE CONNECTION CHART

LOT #	INVERT @ TOP D.H.C.	INVERT @ EASEMENT (@2.0%)	MINIMUM BASEMENT ELEVATION	ACTUAL BASEMENT ELEVATION
2	356.00	356.20	366.17*	370.97
3	357.50	357.70	367.58*	370.87

* Note: Minimum basement elevations are based on 5.0% slopes from the easement.



SEWER PROFILE
SCALE- HORIZONTAL: 1"=50'
VERTICAL: 1"=5'



STANDARD INSTALLATION
1 1/2" WATER SUPPLY & TWIN 1-1/2"
METER SETTING
Not To Scale
HOWARD COUNTY, MARYLAND

WATER AND SEWER AS-BUILTS FROM / TO DISTANCE

VALVE TO FIRE HYDRANT	10.5'
FH VALVE TO WATER METER	53.5'
(2) WATER METER TO (2) WATER VALVE	780' (390' x 2)
LOT 2 SEWER HC TO LOT 3 SEWER HC	94.5'
LOT 2 SEWER HC TO EXISTING MH	90.4'
LOT 3 SEWER HC TO LOT 2 SEWER HC	94.5'
LOT 3 SEWER HC TO NEW SMH-1	35.0'

AS BUILT
DATE: AUGUST 15, 2008

OWNER/DEVELOPER
Scaggsville Road Investment, LLP
1301 Park Avenue
Baltimore, Maryland 21217

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. J. B. 3-23-07
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
4567
CHIEF, DEVELOPMENT ENGINEERING DIVISION

FSH Associates
Engineers Planners Surveyors
6339 Howard Lane Elkridge, MD 21075
Tel: 410-587-5200 Fax: 410-796-1562
E-mail: info@fsh.com

DESIGN BY: MLT
DRAWN BY: HK
CHECKED BY: ZYF
DATE: March 9, 2007

NO.	REVISION	DATE
1	INSTALL FIRE HYDRANT ALONG OLD SCAGGSVILLE RD @ Sta. 9+82	10-31-07

FINAL PUBLIC SEWER & WATER PLAN AND PROFILES
600' SCALE MAP NO.: 46 BLOCK NO.: 18

THE HILLSIDE AT ROCKY GORGE VIII
LOTS 1, 2, 3 AND 4
A RESUBDIVISION OF LOT 2, THE HILLSIDE AT ROCKY GORGE III
PLAT #16017-16018 AND LOT 2, THE HILLSIDE AT ROCKY GORGE IV
PLAT #16019-16020
CONTRACT NO. 24-4428-D
TAX MAP 46 GRID 18
6TH ELECTION DISTRICT
ZONING R-20
PARCELS 326
HOWARD COUNTY, MARYLAND

SCALE:
As Shown
SHEET NO.
2 OF 2