

QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" CLASS 52 D.I.P.	199 L.F.	199 L.F.	DIP	AMERICAN C/I PIPE CO./FERGUSON
8" SEWER	220 L.F.	219 L.F.	PVC	NORTH AMERICAN PIPE CO./FERGUSON
4" SEWER	94 L.F.	112 L.F.	PVC	NORTH AMERICAN PIPE CO./FERGUSON
MANHOLES	5 EACH	5 EACH	PRECAST	AMERICAST
8" WATER	231 L.F.	229 L.F.	PVC	NORTH AMERICAN PIPE CO./FERGUSON
6" WATER	277 L.F.	269 L.F.	PVC	NORTH AMERICAN PIPE CO./FERGUSON
1" W.C.	85 L.F.	100 L.F.	COPPER	MUELLER COMPANY
FIRE HYDRANT	1 EACH	1 EACH	—	MUELLER COMPANY
8" TAPPING VALVE	1 EACH	1 EACH	MJRS	MUELLER COMPANY/FERGUSON
6" VALVE	2 EACH	2 EACH	MJRS	MUELLER COMPANY/FERGUSON
12" X 8" TAPPING SLEEVE	1 EACH	1 EACH	S. STEEL	ROMAC INDUSTRIES/FERGUSON
8" X 6" TEE	1 EACH	1 EACH	MJ	TYLER UNION/FERGUSON
1/16 H.B.	2 EACH	2 EACH	MJ	TYLER UNION/FERGUSON
1/32 H.B.	1 EACH	—	MJXPE	TYLER UNION/FERGUSON
2" DEFLECTION COUPLING	2 EACH	—	—	CERTAINTED PIPE & PLASTICS / FERGUSON
6" PLUG & BUTTRESS	1 EACH	1 EACH	—	MULTI-FITTINGS CORP./FERGUSON
1-1/2" DRAIN	1 EACH	1 EACH	—	—
8" X 6" REDUCER	1 EACH	2 EACH	MJ	TYLER UNION/FERGUSON
4" SEWER	—	10 L.F.	DIP	AMERICAN C/I PIPE CO./FERGUSON

NAME OF UTILITY CONTRACTOR: J & A CONSTRUCTION SERVICES, INC.  
SURVEY & DRAFTING DIVISION AS-BUILT DATE: FEBRUARY 5, 2010

PRIVATE WELL & PRIVATE SEPTIC SYSTEM CHART				
PARCEL NO.	ADDRESS	OWNER	ABANDON WELL	ABANDON SEPTIC
12	10730 SCAGGSVILLE ROAD	STEPHEN & BARBARA FORNEY	N/A	YES

NOTE: WATER METERS WILL NOT BE RELEASED BY HOWARD COUNTY TO ANY NEW BUILDING UNTIL THE EXISTING WELLS AND SEPTIC SYSTEMS HAVE BEEN ABANDONED IN ACCORDANCE WITH HOWARD COUNTY HEALTH DEPARTMENT REGULATIONS AND THE EXISTING BUILDINGS ARE CONNECTED TO THE PUBLIC WATER AND SEWER MAINS.

### DEVELOPER'S CERTIFICATION

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Paul W. Keibel FOR:  
Hamilton Reed  
SIGNATURE OF DEVELOPER  
06/08/09  
DATE

### ENGINEER'S CERTIFICATION

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.

Paul W. Keibel  
SIGNATURE OF ENGINEER  
06/08/09  
DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS.

Paul W. Keibel FOR:  
Hamilton Reed  
SIGNATURE OF DEVELOPER  
06/08/09  
DATE

GP-08-031

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

APPROVED:  
John R. Robertson  
HOWARD SOIL CONSERVATION DISTRICT  
06/30/09  
DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

Stacy C. Bern  
CHIEF, BUREAU OF UTILITIES  
6/10/09  
DATE

Chief, Development Engineering Division  
N.G.  
7/10/09  
DATE

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK • 10272 BALTIMORE NATIONAL FREE  
ELLCOTT CITY, MARYLAND 21042  
410.461.2929



DESIGNED BY:	B.C.R.		
DRAWN BY:	B.C.R.		
CHECKED BY:	P.W.K.		
DATE:	JUNE, 2009		
BY	NO.	REVISION	DATE

**AS BUILT**  
DATE: FEBRUARY 5, 2010

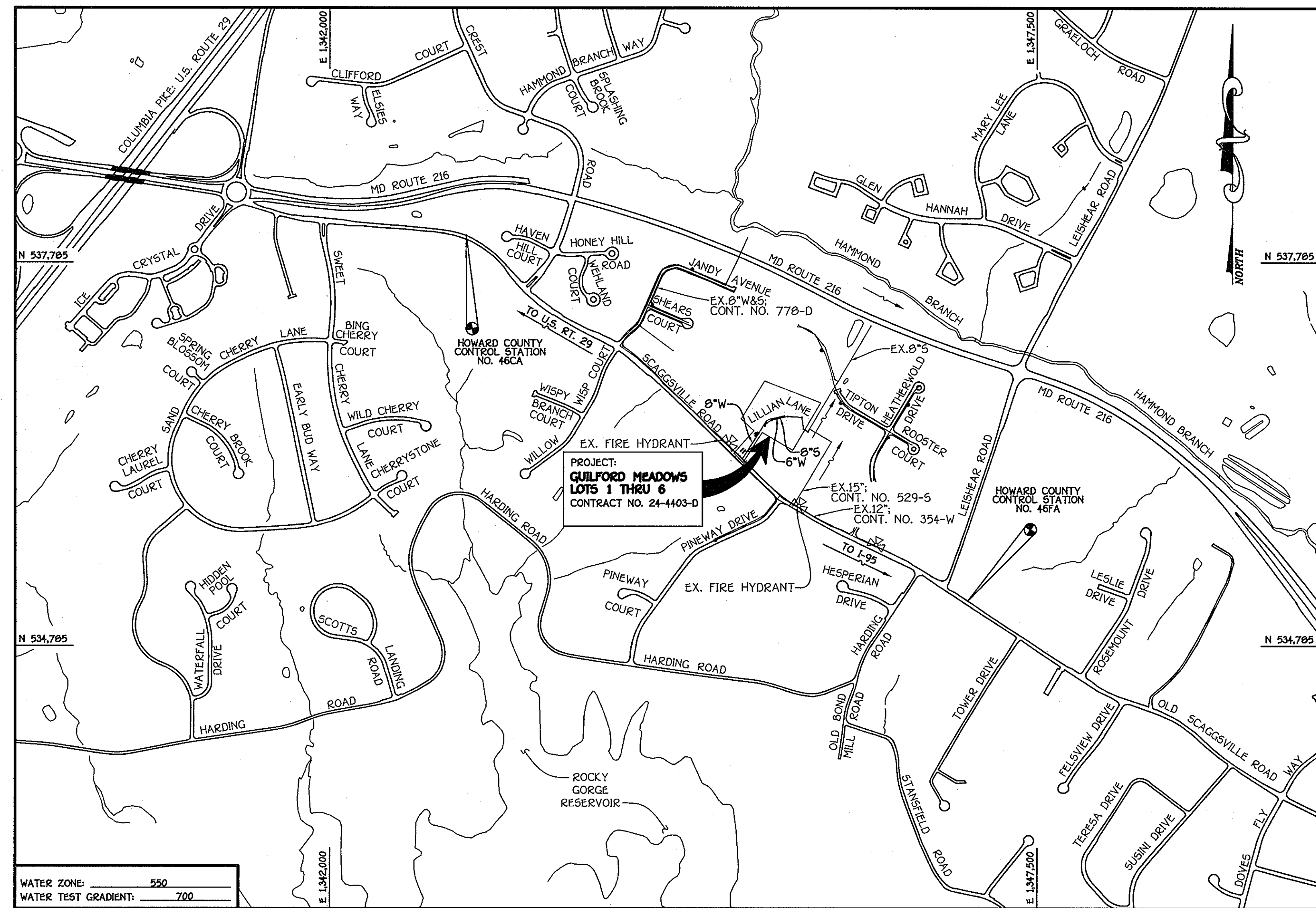
WATER AND SEWER MAINS  
TITLE SHEET

600' SCALE MAP NO. 45 BLOCK NO. 11 & 12  
F.C.C. WORK ORDER NO. 04091  
FILE NAME: WATER AND SEWER TITLE SHEET

**GUILFORD MEADOWS**  
LOTS 1 THRU 6  
CONTRACT NO. 24-4403-D  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE  
AS  
SHOWN

SHEET  
1 of 3

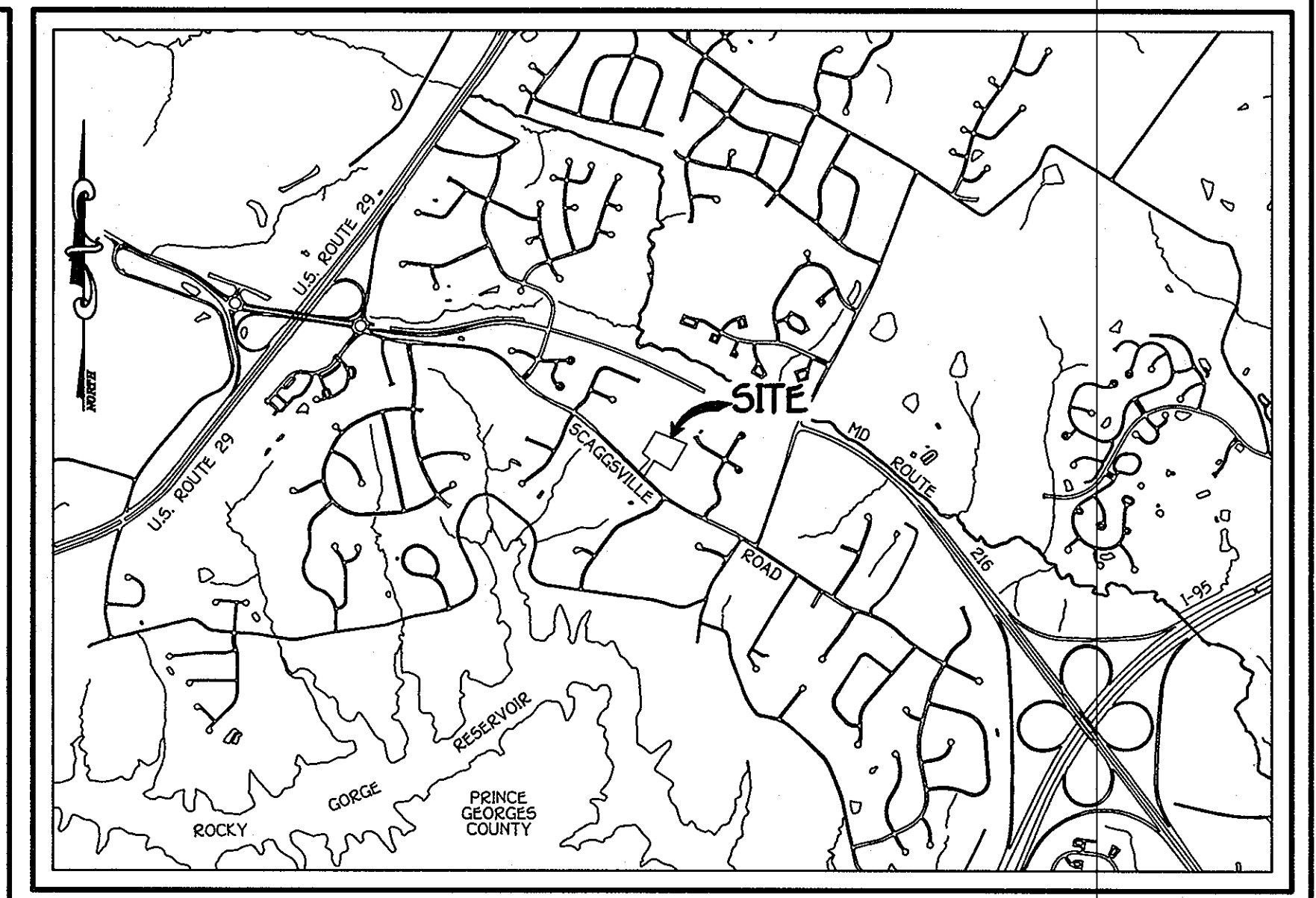


TYPE OF BUILDING:	RESIDENTIAL: SINGLE FAMILY DETACHED
NUMBER OF LOTS:	6
NO. OF WATER HOUSE CONNECTIONS:	6
NO. OF SEWER HOUSE CONNECTIONS:	6
DRAINAGE AREA:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER RECLAMATION PLANT, SAVAGE MD

### VICINITY MAP

SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:  
5-08-017 F-09-XX  
(RECORDED PLAT)



### LOCATION MAP

SCALE: 1" = 2000'

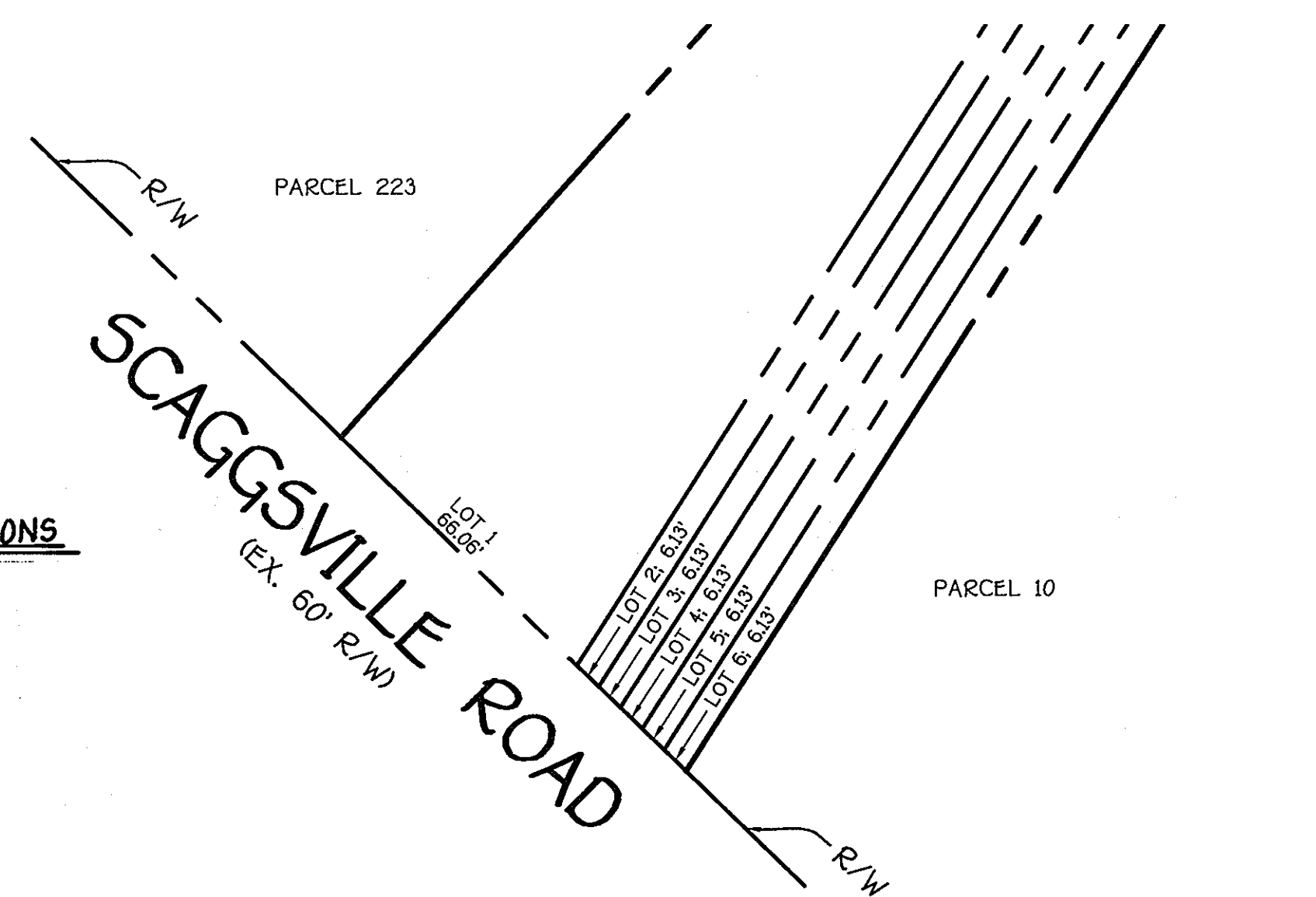
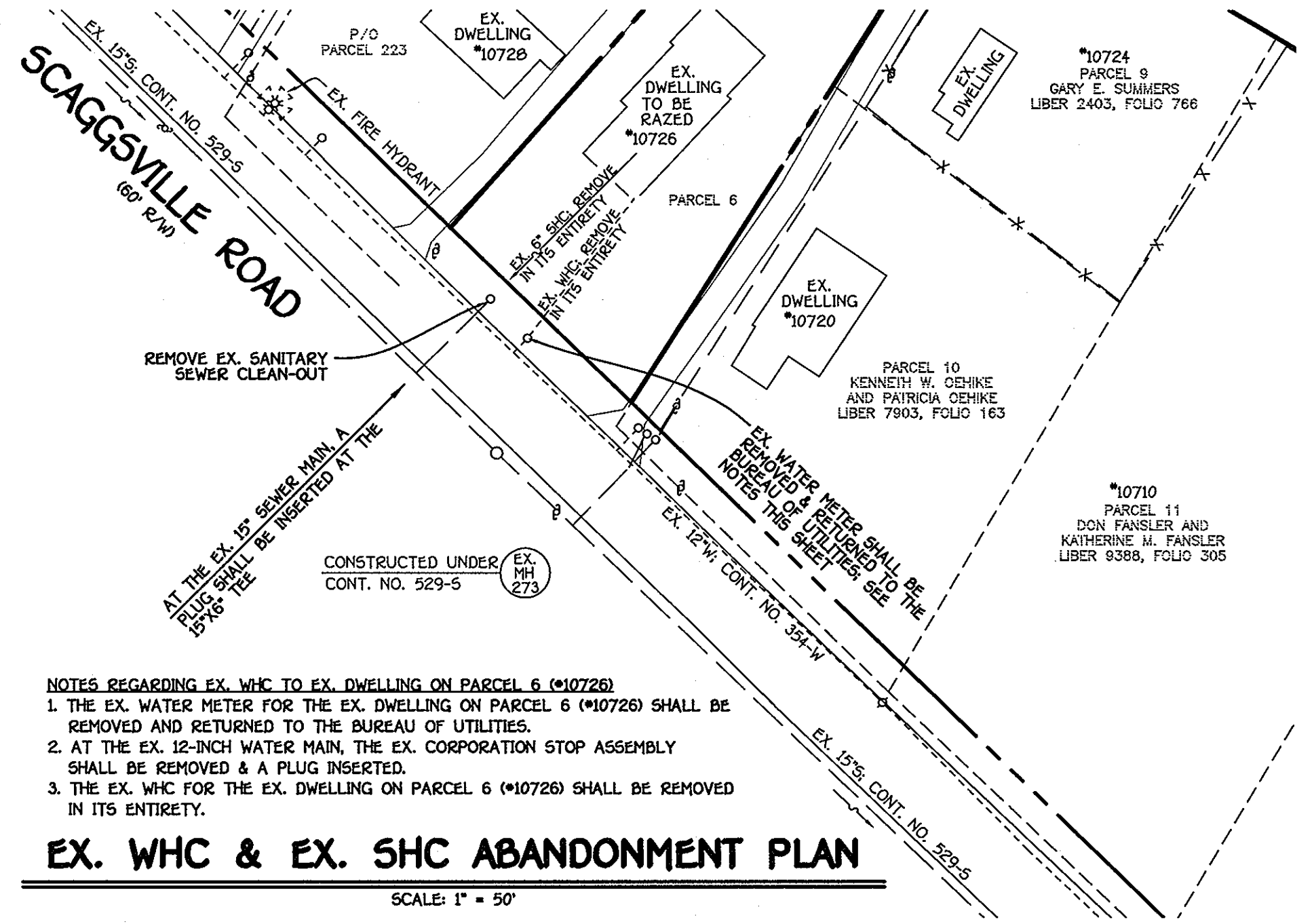
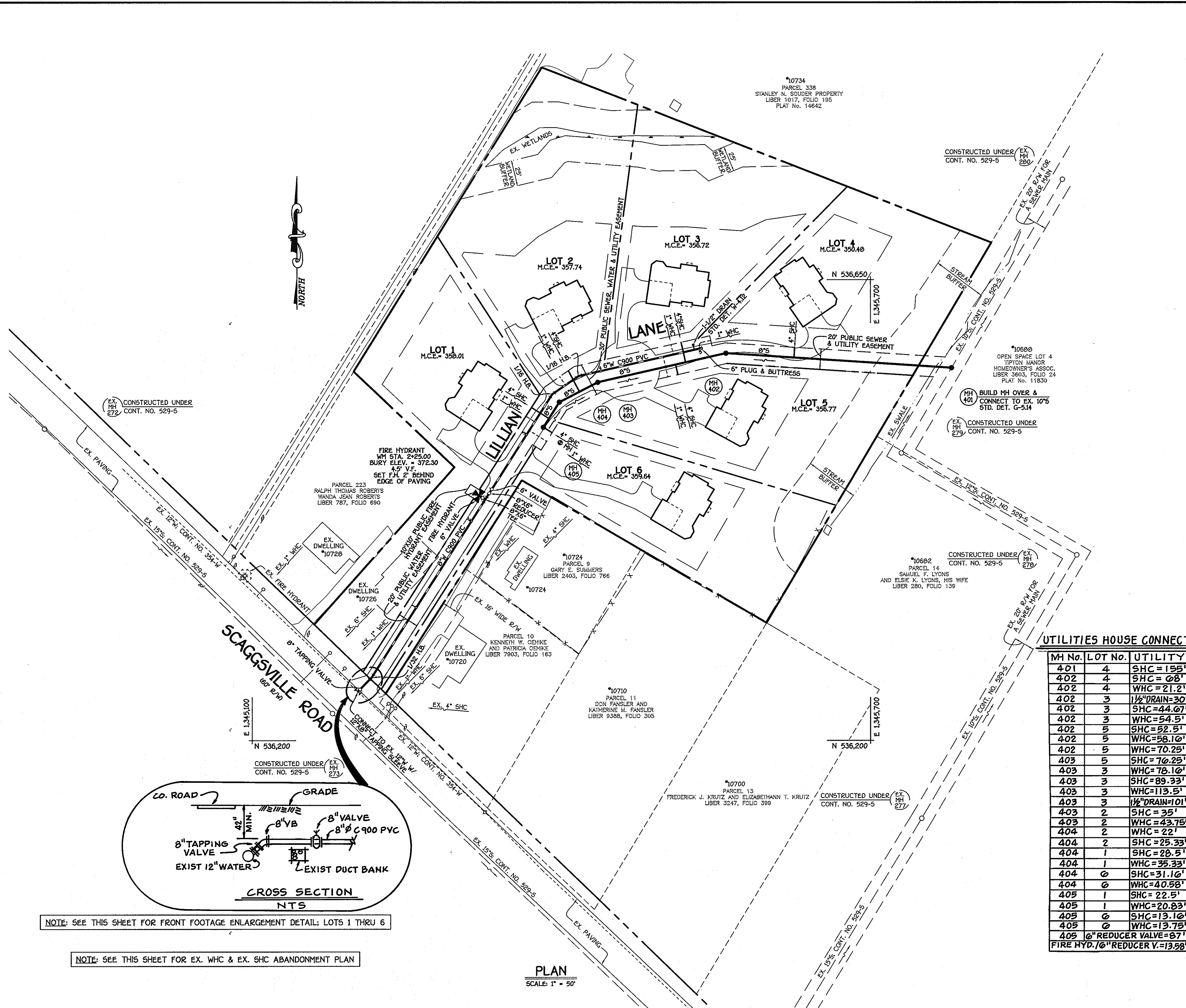
### GENERAL NOTES

- PART I
- APPROXIMATE LOCATIONS 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 OR ABOUT APRIL, 2006 BY FISHER, COLLINS & CARTER, INC.
  - HORIZONTAL AND VERTICAL 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. 47CA & NO. 47FA. SEE THIS SHEET FOR BENCHMARK INFORMATION. ALL VERTICAL CONTROLS ARE BASED ON NAVD '88. VERTICAL CONTROLS ARE BASED ON TRAVERSE POINT NO. 70000 AN IRON PIPE SET ON THE NORTH SIDE OF SCAGGSVILLE ROAD, ELEV. 48.69.
  - 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE 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 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 SITE.
  - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL 'X' 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  
BCE CONSTRUCTION SERVICES . . . . . 410-850-4620  
BCE EMERGENCY . . . . . 410-850-1400  
BUREAU OF UTILITIES . . . . . 410-313-4900  
COLONIAL PIPELINE CO . . . . . 410-795-1390  
MESS 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.
  - 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/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 10.10(d) OF THE HOWARD COUNTY CODE.
- PART II: WATER
- EXCEPT FOR THE 12" X 8" TAPPING SLEEVE & VALVE, WM. STA. 0+00.00 TO 0+03.00; ALL WATER MAINS SHALL AWWA C900 PVC PIPE 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 1009 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 THE PLANS OR IN THE SPECIFICATIONS.
- 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 18" WALLS ARE FOR BRICK MANHOLES ONLY.
  - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATER-TIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
  - HOUSES WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.

BENCHMARK INFORMATION	
B.M.#1 - HOWARD COUNTY CONTROL STATION #46A (NAD '83)	(LOCATED ON THE NORTH SIDE OF SCAGGSVILLE ROAD, APPROX. 100' EAST FROM THE INTERSECTION OF SCAGGSVILLE ROAD AND LEISHEAR ROAD)
N 535,140.866	E 1,346,962.69
ELEVATION = 403.65	
B.M.#2 - HOWARD COUNTY CONTROL STATION #46CA (NAD '83)	(LOCATED ALONG THE NORTH SIDE OF SCAGGSVILLE ROAD, DIRECTLY IN FRONT OF HOUSE NO. 10946 APPROX. 10' OFF THE EDGE OF PAVING)
N 538,092.953	E 1,343,059.945
ELEVATION = 399.965	

DEVELOPER  
HAMILTON REED  
8000 MAIN STREET  
ELLCOTT CITY, MARYLAND 21045  
410-480-9105

CONTRACT NO. 24-4403-D  
GUILFORD MEADOWS  
LOTS 1 THRU 6  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND



**UTILITIES HOUSE CONNECTIONS**

MH No.	LOT No.	UTILITY
401	4	SHC=155'
402	4	SHC=08'
402	4	WHC=21.2'
402	3	1 1/2" DRAIN=30'
402	3	SHC=44.07'
402	3	WHC=54.5'
402	5	SHC=52.5'
402	5	WHC=58.10'
402	5	WHC=70.25'
403	5	SHC=70.25'
403	3	WHC=78.10'
403	3	SHC=89.33'
403	3	WHC=113.5'
403	3	1 1/2" DRAIN=101'
403	2	SHC=35'
403	2	WHC=43.75'
404	2	WHC=22'
404	2	SHC=25.33'
404	1	SHC=28.5'
404	1	WHC=35.33'
404	0	SHC=31.10'
404	0	WHC=40.58'
405	1	WHC=22.5'
405	1	WHC=20.83'
405	0	SHC=13.10'
405	0	WHC=13.75'
405	0	REDUCER VALVE=87'
405	0	FIRE HYD. 7/6" REDUCER V.=13.58'

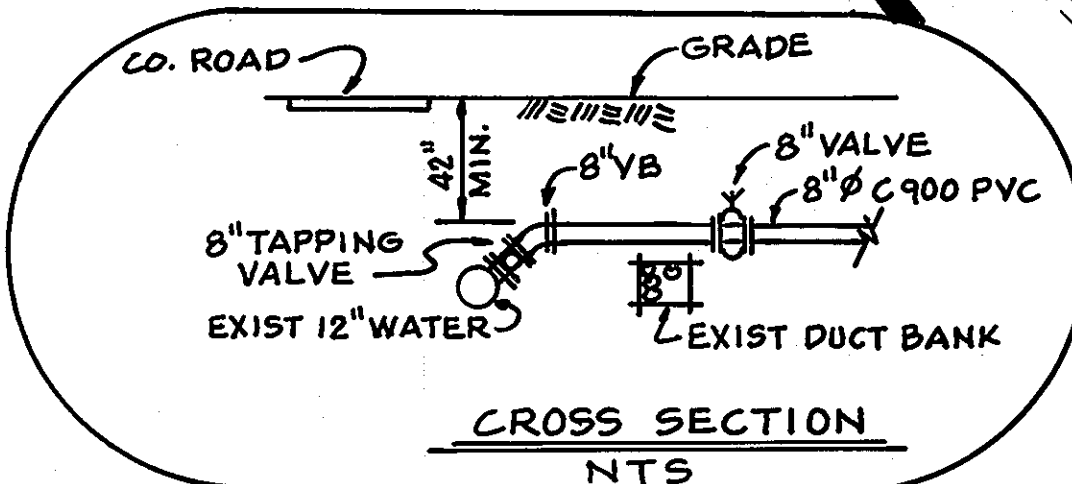
**EROSION & SEDIMENT CONTROL NOTES:**  
 1. SEE SHEET 4 FOR EROSION & SEDIMENT CONTROL PLAN  
 2. SPOILS FROM THE TRENCHING OPERATIONS SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

**AS BUILT**  
 DATE: FEBRUARY 5, 2010

CONTRACT NO. 24-4403-D  
 GUILFORD MEADOWS  
 LOTS 1 THRU 6  
 SIXTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

NOTE: SEE THIS SHEET FOR FRONT FOOTAGE ENLARGEMENT DETAIL; LOTS 1 THRU 6

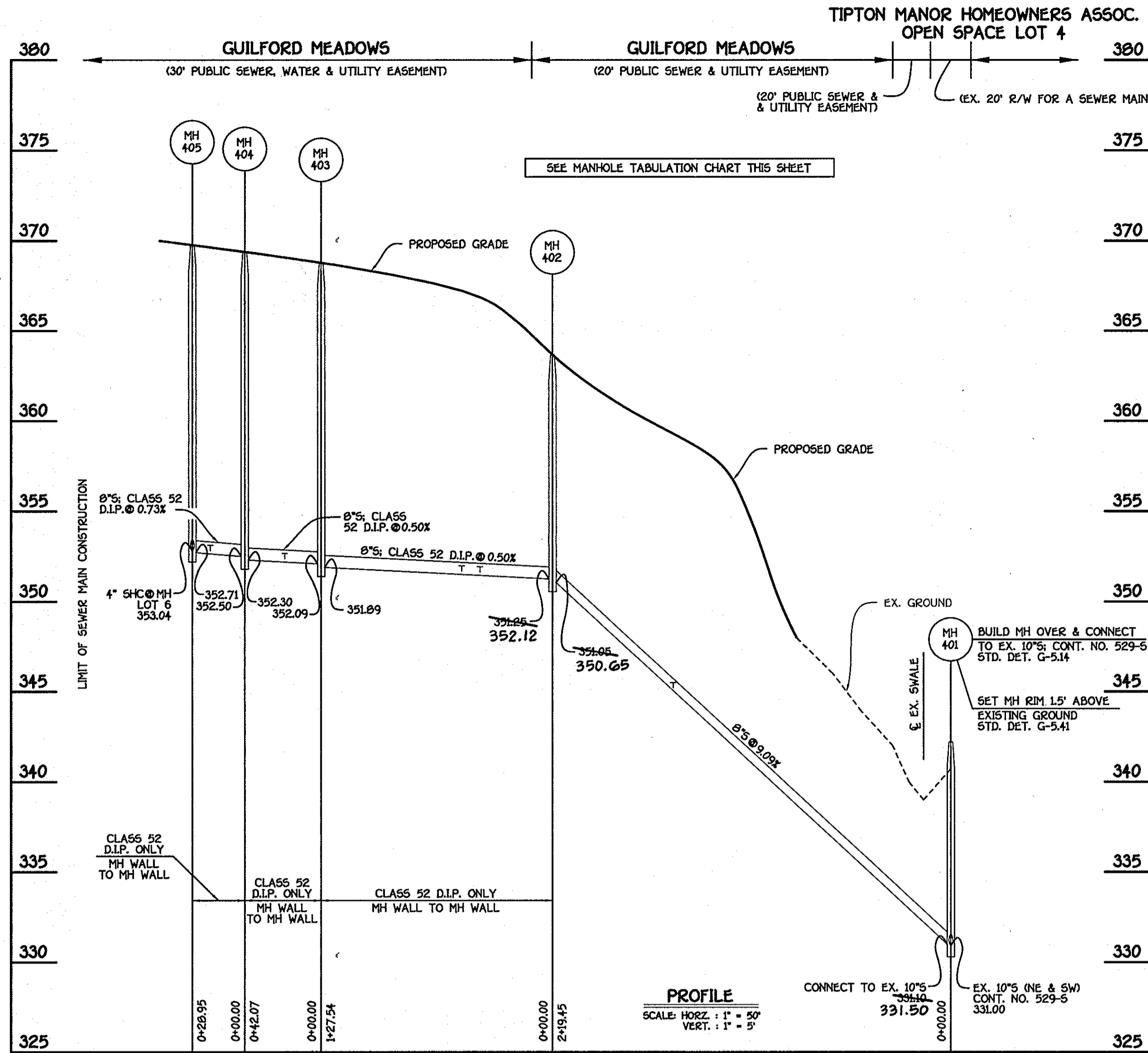
NOTE: SEE THIS SHEET FOR EX. WHC & EX. SHC ABANDONMENT PLAN



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND [Signature] CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND [Signature] CHIEF, DEVELOPMENT ENGINEERING DIVISION	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELICOTT CITY, MARYLAND 21042 (410) 461-2200	*9757 	DESIGNED BY: B.C.R.	DATE: JUNE, 2009	BY NO.	REVISION	DATE	FILE NAME: WATER AND SEWER PLAN SHEET
				DRAWN BY: B.C.R.					
<b>WATER AND SEWER MAINS PLAN</b>									
600' SCALE MAP NO. 46 BLOCK NO. 11 & 12 F.C.C. WORK ORDER NO. 04061									

**GUILFORD MEADOWS**  
 LOTS 1 THRU 6  
 CONTRACT NO. 24-4403-D  
 SIXTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 2 OF 3

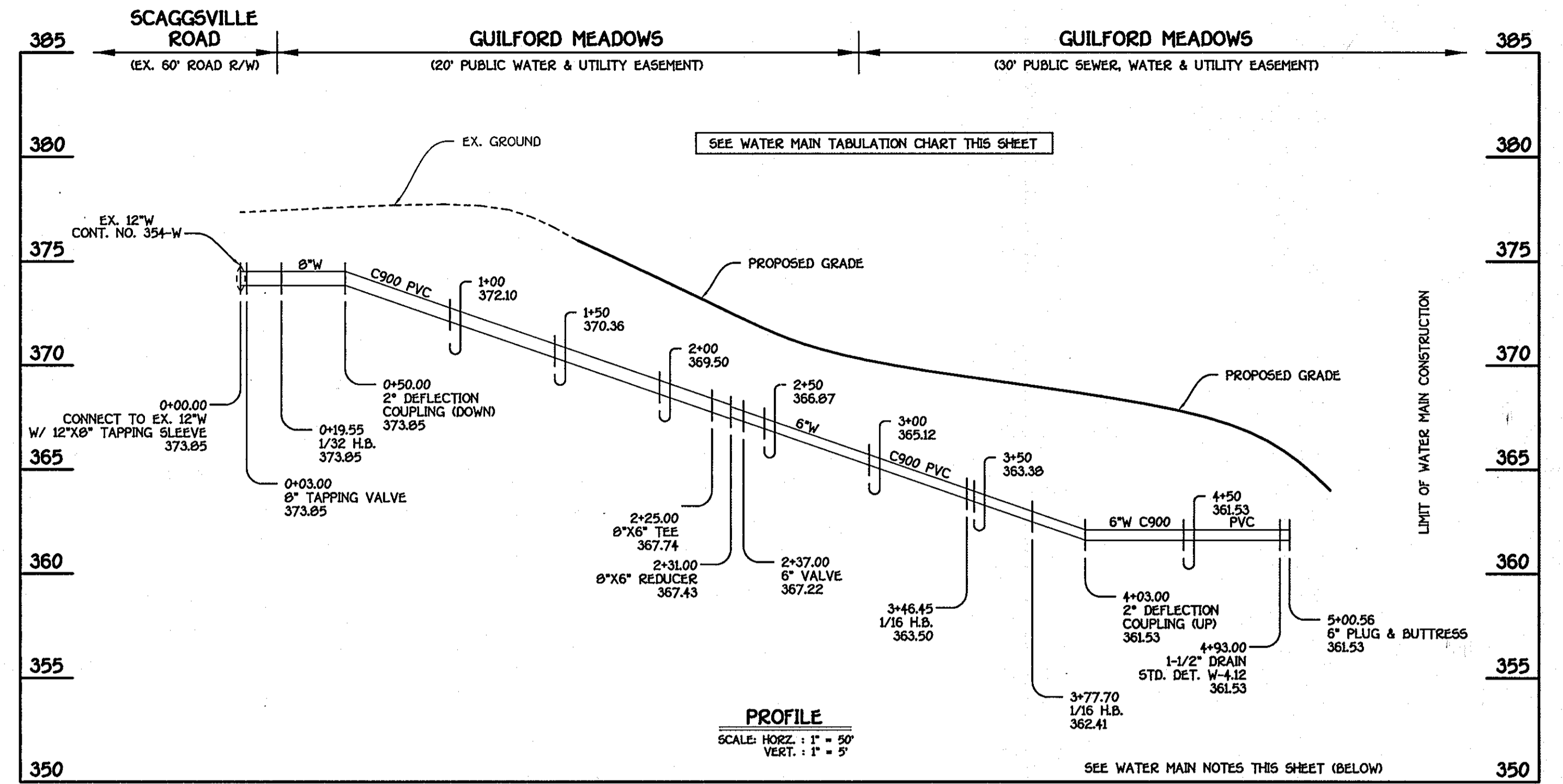


**8" SEWER MAIN: LOTS 1 THRU 6**

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
401	536563.90	1345778.60	342.00*
402	536578.21	1345559.61	363.67**
403	536549.85	1345435.26	368.78**
404	536530.39	1345397.95	369.39**
405	536505.94	1345302.45	369.77**

NOTE: \*SET MH RIM 1.5' ABOVE EXISTING GROUND; STD. DET. G-5.41  
 \*\*SET MH RIM FLUSH W/PROPOSED GRADE

SHC INVERT @ PROPERTY LINE CHART		
STATION	LOT	ELEVATION
1+53 RT.	MH 401 TO MH 402	345.38
0+40 RT.	MH 402 TO MH 403	352.02
0+70 LT.	MH 403 TO MH 404	351.87
0+20 RT.	MH 404 TO MH 405	352.83
0+19 RT.		353.21
0+MH 405 LT.		353.24



**8" & 6" WATER MAIN: LOTS 1 THRU 6**

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" & 6" WATER MAIN: LOTS 1 THRU 6			
0+00.00	12"x8" TAPPING SLEEVE	536247.77	1345202.42
0+03.00	8" TAPPING VALVE	536249.94	1345204.50
0+19.55	1/32 H.B.	536261.91	1345215.92
2+25.00	8"x6" TEE	536435.44	1345325.92
2+31.00	8"x6" REDUCER	536440.51	1345329.13
2+37.00	6" VALVE	536445.67	1345332.35
3+46.45	1/16 H.B.	536538.01	1345390.94
3+77.70	1/16 H.B.	536555.85	1345416.61
4+93.00	1-1/2" DRAIN	536581.49	1345529.02
5+00.56	6" PLUG & BUTTRESS	536583.17	1345536.40

WATER MAIN NOTES:  
 1. EXCEPT FOR THE 12"x10" TAPPING SLEEVE & VALVE (WM STA. 0+00.00 TO WM STA. 0+03.00; SCAGGSVILLE ROAD), ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE.  
 2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.  
 3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS.  
 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

**AS BUILT**  
 DATE: FEBRUARY 5, 2010

CONTRACT NO. 24-4403-D  
 GUILFORD MEADOWS  
 LOTS 1 THRU 6  
 SIXTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief, Bureau of Utilities

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
 Chief, Development Engineering Division

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 CONFEDERATE SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE  
 ELICOTT CITY, MARYLAND 21042  
 410.466.2292

DESIGNED BY: B.C.R.  
 DRAWN BY: B.C.R.  
 CHECKED BY: P.W.K.  
 DATE: JUNE, 2009

WATER AND SEWER MAINS PROFILES  
 600' SCALE MAP NO. 46 BLOCK NO. 11 & 12  
 F.C.C. WORK ORDER NO. 04061  
 FILE NAME: WATER AND SEWER PROFILE SHEET

REVISION  
 DATE

GUILFORD MEADOWS  
 LOTS 1 THRU 6  
 CONTRACT NO. 24-4403-D  
 SIXTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 3 OF 3