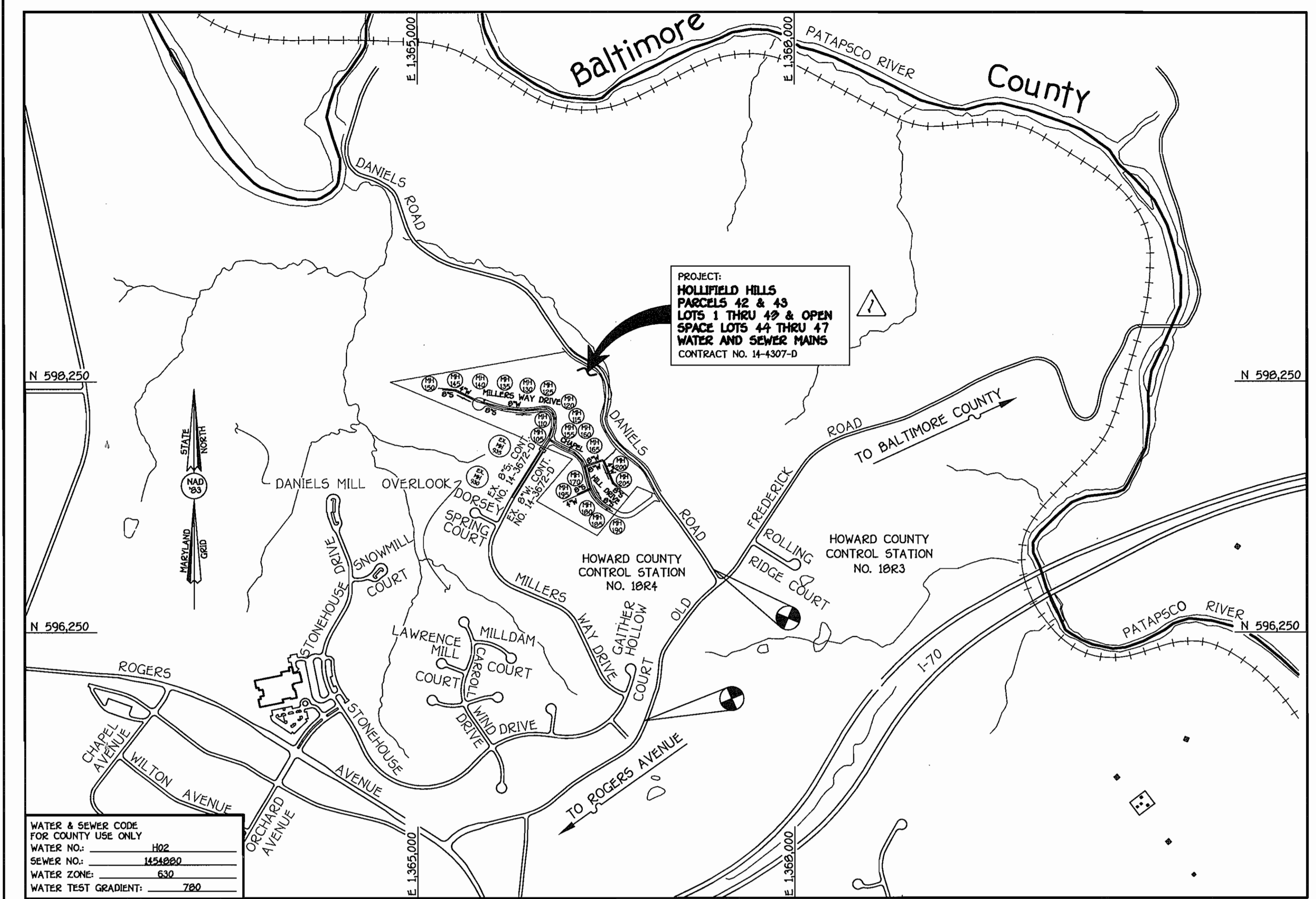


QUANTITIES				
ITEM	ESTIMATED QUANTITIES	AS-BUILT QUANTITIES	TYPE	SUPPLIER
8" SEWER	1875 L.F.			
8" S. CLASS 52 D.I.P.	617 L.F.			
8" PLUG	1 EACH			
4" SEWER	992 L.F.			
MANHOLES	22 EACH			
8" WATER	2,129 L.F.			
6" WATER	71 L.F.			
4" WATER	740 L.F.			
1" W/R	787 L.F.			
FIRE HYDRANTS	4 EACH			
8" VALVES	7 EACH			
6" VALVES	4 EACH			
4" VALVES	2 EACH			
8" X 8" TEE	2 EACH			
8" X 6" TEE	4 EACH			
8" X 4" TEE	2 EACH			
8" X 4" REDUCER	1 EACH			
1/16 H.B.	2 EACH			
1/32 H.B.	2 EACH			
8" PLUG & BUTTRESS	2 EACH			
4" PLUG & BUTTRESS	3 EACH			

NAME OF UTILITY CONTRACTOR:
SURVEY & DRAFTING DIVISION AS-BUILT DATE:

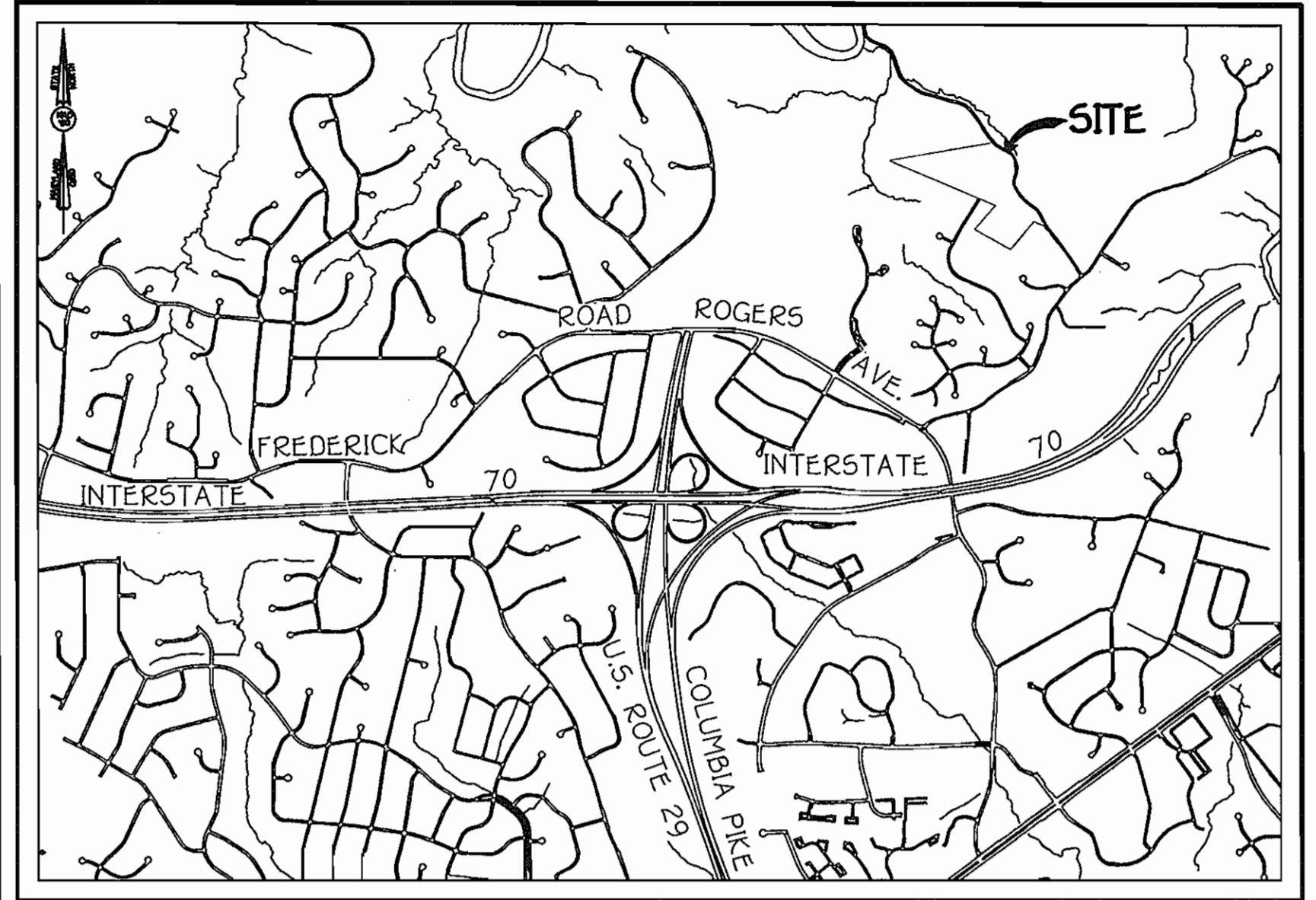


WATER & SEWER CODE FOR COUNTY USE ONLY	102
WATER NO.	154620
SEWER NO.	630
WATER ZONE	780
WATER TEST GRADIENT	

TYPE OF BUILDING: RESIDENTIAL - SINGLE FAMILY DETACHED
NUMBER OF LOTS: 47 (42 BUILDABLE)
NO. OF WATER HOUSE CONNECTIONS: 42
NO. OF SEWER HOUSE CONNECTIONS: 42
DRAINAGE AREA: PATAPSCO
TREATMENT PLANT: PATAPSCO WWTP - CITY OF BALTIMORE VIA THE OLD FREDERICK ROAD WWPS

VICINITY MAP
SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:
SP-01-06; F-06-50



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 FEBRUARY, 2004 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. 10R3 & NO. 10R4. SEE THIS SHEET FOR BENCHMARK INFORMATION. ALL VERTICAL CONTROLS ARE BASED ON NAVD '88. VERTICAL CONTROLS ARE BASED ON TRAVERSE POINT NO. XXXX AN IRON PIPE SET ON THE NORTH SIDE OF DANIELS ROAD, ELEV. 459.68.
 - 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 (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
 - BCE (CONSTRUCTION SERVICES) 410-850-4620
 - BCE (EMERGENCY) 410-685-1400
 - BUREAU OF UTILITIES 410-313-4900
 - COLONIAL PIPELINE CO 410-793-1990
 - NESS 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 18.114(d) OF THE HOWARD COUNTY CODE.

- PART II: WATER
- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TREES SHALL BE STRAPPED TO TREES.
 - 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.

- 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 WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATERTIGHT 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 #10R3 (NAD '83) (APPROX. 100 FT. NORTHWEST FROM THE INTERSECTION OF OLD FREDERICK ROAD AND DANIELS ROAD)	N 595.747870 E 1367.360555 ELEVATION = 459.68
B.M.#2 - HOWARD COUNTY CONTROL STATION #10R4 (NAD '83) (LOCATED ALONG OLD FREDERICK ROAD APPROX. 1,200 FT. EAST OF NORTH ROGERS AVENUE)	N 595.543252 E 1366800.879 ELEVATION = 475.95

Developer
Mid Atlantic Land Development Company
c/o B. James Greenfield
6420 Autumn Sky Way
Columbia, Maryland 21044
410-796-9999

CONTRACT NO. 14-4307-D
HOLLIFIELD HILLS
PARCELS 42 & 43
LOTS 1 THRU 43 & OPEN SPACE
LOTS 44 THRU 47
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

CONTRACT NO. 14-4307-D
HOLLIFIELD HILLS
PARCELS 42 & 43
LOTS 1 THRU 43 & OPEN SPACE
LOTS 44 THRU 47
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

DEVELOPER'S CERTIFICATION
I/WE 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. Koebel FOR:
BRS DEVELOPERS LLC
SIGNATURE OF DEVELOPER
10/02/06
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. Koebel
SIGNATURE OF ENGINEER
10-02-06
DATE

GP-06-95

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Jim Maguire
S.D.A. NATURAL RESOURCES CONSERVATION SERVICE
DATE 10/23/06

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

APPROVED:
Paul W. Koebel
HOWARD SOIL CONSERVATION DISTRICT
DATE 10/23/06

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 AND AS SHOWN ON F-06-50 AND AS SHOWN ON THESE PLANS.

Paul W. Koebel FOR:
BRS DEVELOPERS LLC
SIGNATURE OF DEVELOPER
10/02/06
DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Chief, Bureau of Utilities
10-12-06
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Chief, Development Engineering Division
10/27/06
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
BALTIMORE CITY, MARYLAND 21286
(410) 461-2999

DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: SEPTEMBER, 2006 BY NO. REVISION

WATER AND SEWER MAINS
TITLE SHEET

600' SCALE MAP NO. 17 BLOCK NO. 6
F.C.C. WORK ORDER NO. 04137

FILE NAME: WATER AND SEWER TITLE SH

HOLLIFIELD HILLS
PARCELS 42 & 43
LOTS 1 THRU 43 & OPEN SPACE LOTS 44 THRU 47
CONTRACT NO. 14-4307-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 7

104-137 Rome-Long Property/04137 Water And Sewer.dwg, 8/27/2006 10:42:39 AM, 1:1

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 2 OF 7 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION, DEPARTMENT OF PLANNING AND ZONING, ON OCTOBER 27, 2006.

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
L. 705 P. 533
PARCEL 202

NOTE: M.S.S.E. DENOTES MINIMUM SEWER SERVICE ELEVATION. LOTS 8, 9, 10, 11, 12 & 13 GRAVITY SEWER SERVICE TO FIRST FLOOR ONLY. BASEMENT SEWER SERVICE SHALL BE PROVIDED BY PRIVATE ON-SITE PUMP.

NOTE: SEE SHEET 3 FOR FRONT FRONTAGES, LOTS 9 THRU 12.

EX. PUBLIC FOREST CONSERVATION EASEMENT

DANIELS MILL OVERLOOK
PLAT NO. 12758
OPEN SPACE
LOT 129

DANIELS MILL OVERLOOK
SECTION 2 AREA 2
PLAT NO. 12759
OPEN SPACE
LOT 129

EXISTING WETLANDS
PLAT NO. 12237

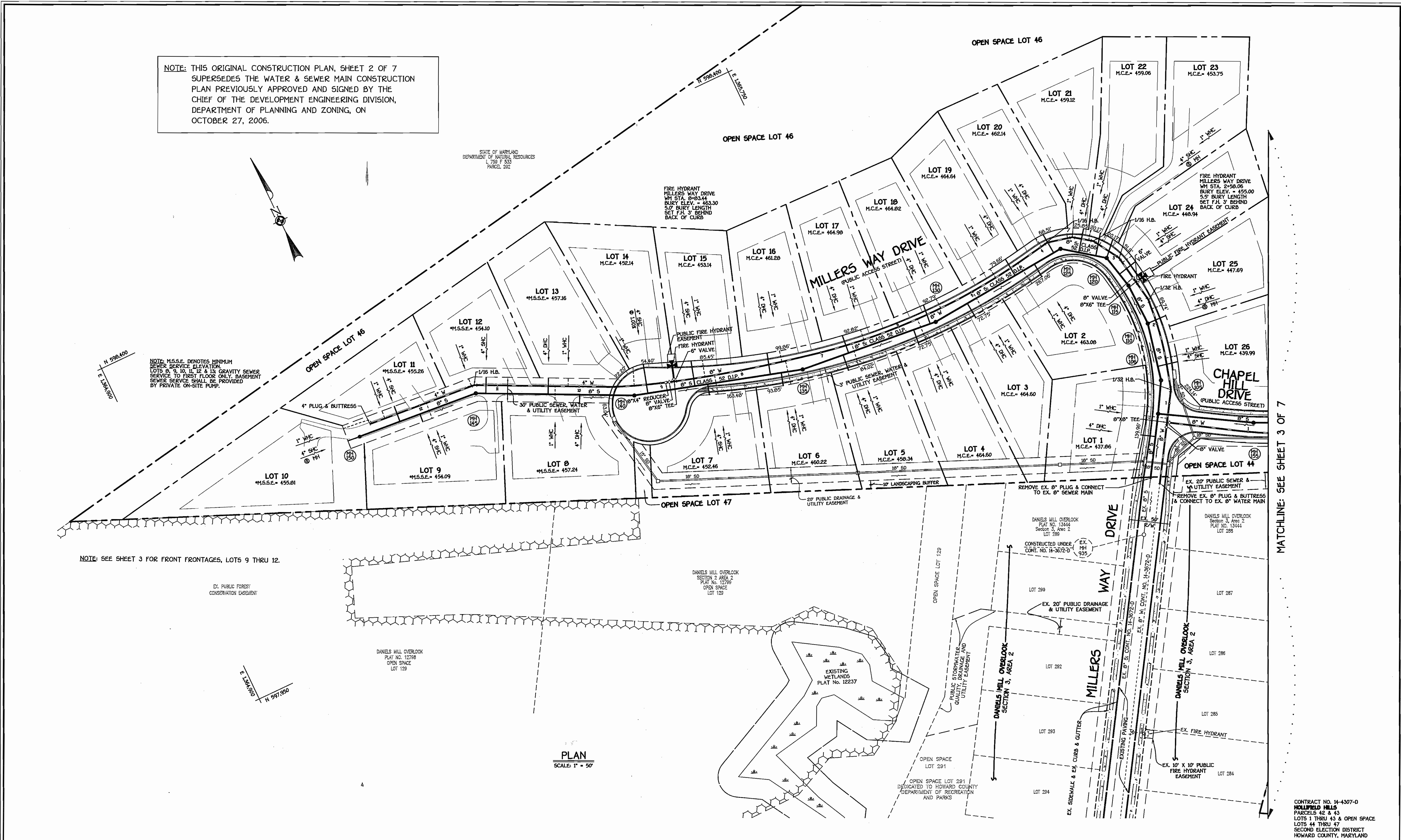
PUBLIC STORMWATER QUALITY EASEMENT

OPEN SPACE LOT 291
DEDICATED TO HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS

DANIELS MILL OVERLOOK
SECTION 3 AREA 2
PLAT NO. 13444
LOT 288

DANIELS MILL OVERLOOK
SECTION 3, AREA 2

CONTRACT NO. 14-4307-D
HOLLIFIELD HILLS
PARCELS 42 & 43
LOTS 1 THRU 43 & OPEN SPACE LOTS 44 THRU 47
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



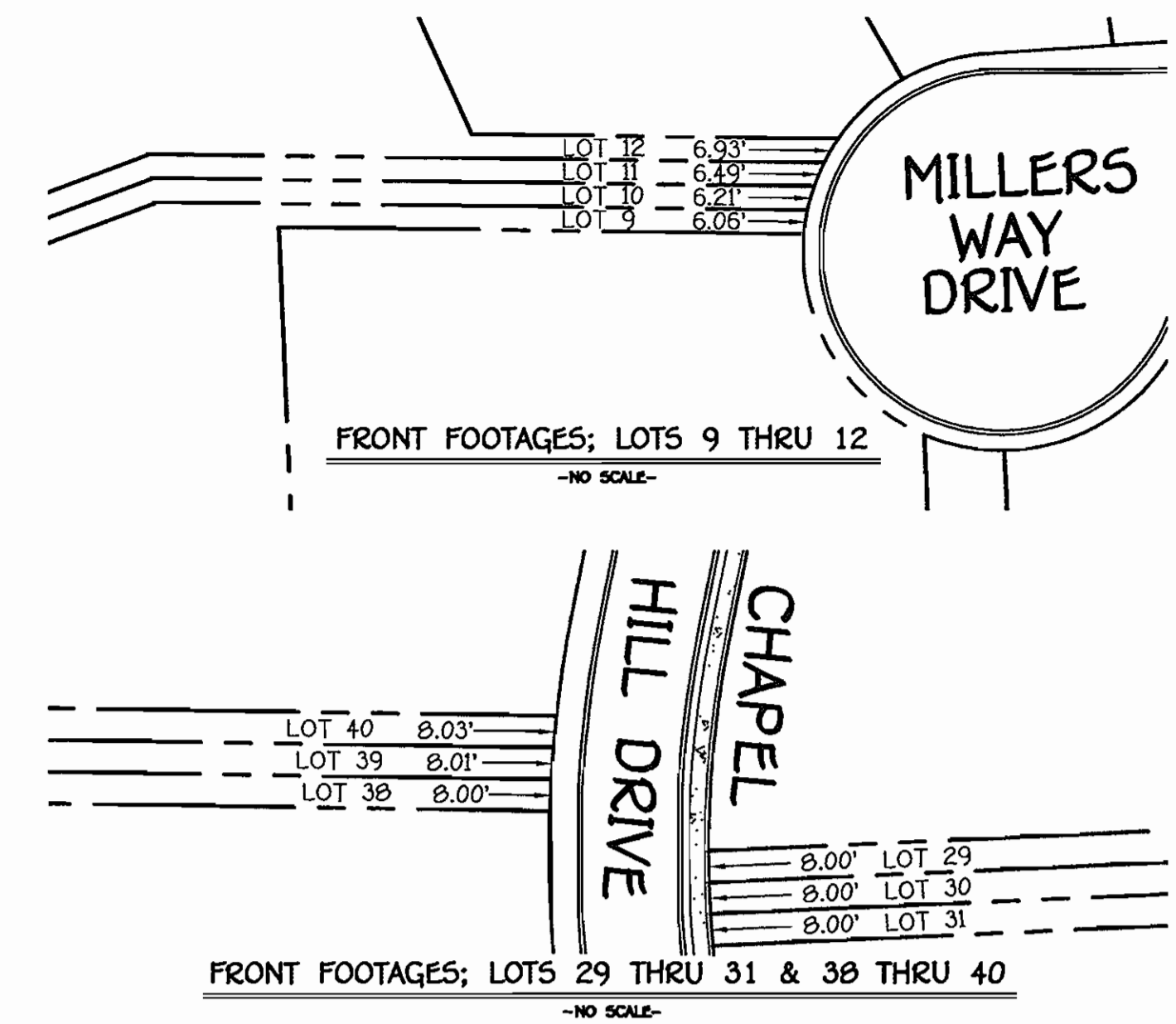
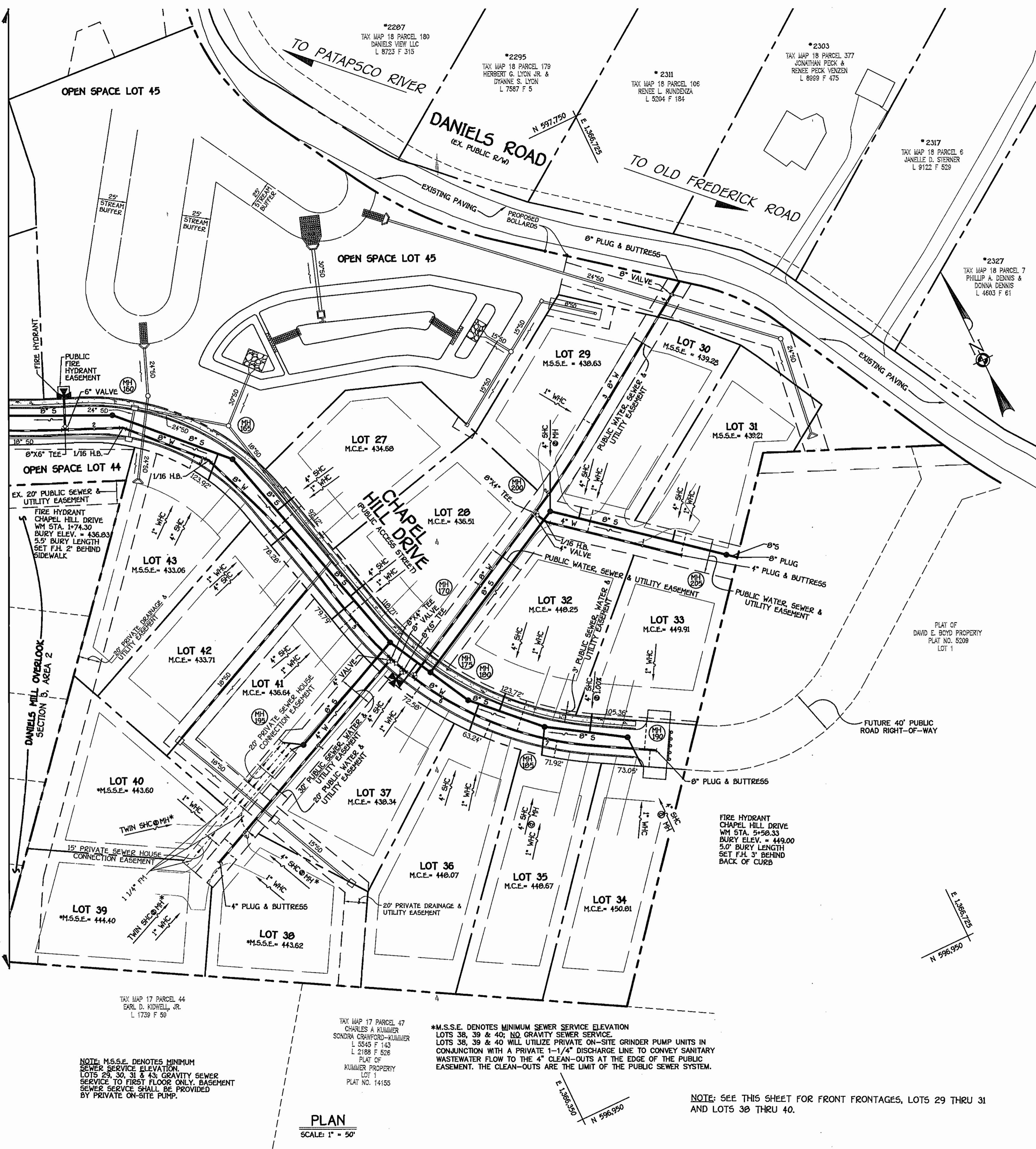
PLAN
SCALE: 1" = 50'

MATCHLINE: SEE SHEET 3 OF 7

<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>Nicholas A. Giovanniello</i> 10/1/07 CHIEF, BUREAU OF UTILITIES</p>	<p>DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> 10/1/07 CHIEF, DEVELOPMENT ENGINEERING DIVISION</p>	<p>FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PRZ. ELLSWORTH CITY, MARYLAND 21042 (410) 461-2899</p>	<p>9757 STATE OF MARYLAND TERRELL A. FISHER</p>	<p>DESIGNED BY: B.C.R. DRAWN BY: B.C.R. CHECKED BY: F.W.K. DATE: SEPTEMBER, 2007</p>	<p>WATER AND SEWER MAINS PLAN</p> <p>600' SCALE MAP NO. 17 BLOCK NO. 6 F.C.C. WORK ORDER NO. 04137 FILE NAME: WATER AND SEWER PLAN SHT 1</p>	<p>HOLLIFIELD HILLS PARCELS 42 & 43 LOTS 1 THRU 43 & OPEN SPACE LOTS 44 THRU 47 CONTRACT NO. 14-4307-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>	<p>SCALE AS SHOWN SHEET 2 OF 7</p>
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137 Rome-Long Property (Long) (REQUIRES) (M1) (37) (REDLINE) Water And Sewer.dwg, 9/26/2007 8:05:19 AM

MATCHLINE: SEE SHEET 2 OF 7



NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 3 OF 7 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION, DEPARTMENT OF PLANNING AND ZONING, ON OCTOBER 27, 2006.

NOTE: M.S.S.E. DENOTES MINIMUM SEWER SERVICE ELEVATION LOTS 29, 30, 31 & 43. GRAVITY SEWER SERVICE TO FIRST FLOOR ONLY. BASEMENT SEWER SERVICE SHALL BE PROVIDED BY PRIVATE ON-SITE PUMP.

*M.S.S.E. DENOTES MINIMUM SEWER SERVICE ELEVATION LOTS 38, 39 & 40; NO GRAVITY SEWER SERVICE. LOTS 38, 39 & 40 WILL UTILIZE PRIVATE ON-SITE GRINDER PUMP UNITS IN CONJUNCTION WITH A PRIVATE 1-1/4" DISCHARGE LINE TO CONVEY SANITARY WASTEWATER FLOW TO THE 4" CLEAN-OUTS AT THE EDGE OF THE PUBLIC EASEMENT. THE CLEAN-OUTS ARE THE LIMIT OF THE PUBLIC SEWER SYSTEM.

NOTE: SEE THIS SHEET FOR FRONT FRONTAGES, LOTS 29 THRU 31 AND LOTS 38 THRU 40.

PLAN
 SCALE: 1" = 50'

CONTRACT NO. 14-4307-D
 HOLLIFIELD HILLS
 PARCELS 42 & 43
 LOTS 1 THRU 43 & OPEN SPACE
 LOTS 44 THRU 47
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK • 10772 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2000



DESIGNED BY:	B.C.R.				
DRAWN BY:	B.C.R.				
CHECKED BY:	P.W.K.				
DATE:	SEPTEMBER, 2007	BY	NO.	REVISION	DATE

WATER AND SEWER MAINS PLAN

600' SCALE MAP NO. 17 BLOCK NO. 6
 F.C.C. WORK ORDER NO. 04137
 FILE NAME: WATER AND SEWER PLAN SHT 2

HOLLIFIELD HILLS
 PARCELS 42 & 43
 LOTS 1 THRU 43 & OPEN SPACE LOTS 44 THRU 47
 CONTRACT NO. 14-4307-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 3 OF 7

Richard A. Stovall
 CHIEF, BUREAU OF UTILITIES
 DATE: 10/1/07

DATE: 10/1/07
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE: 10/1/07

TERRELL A. FISHER

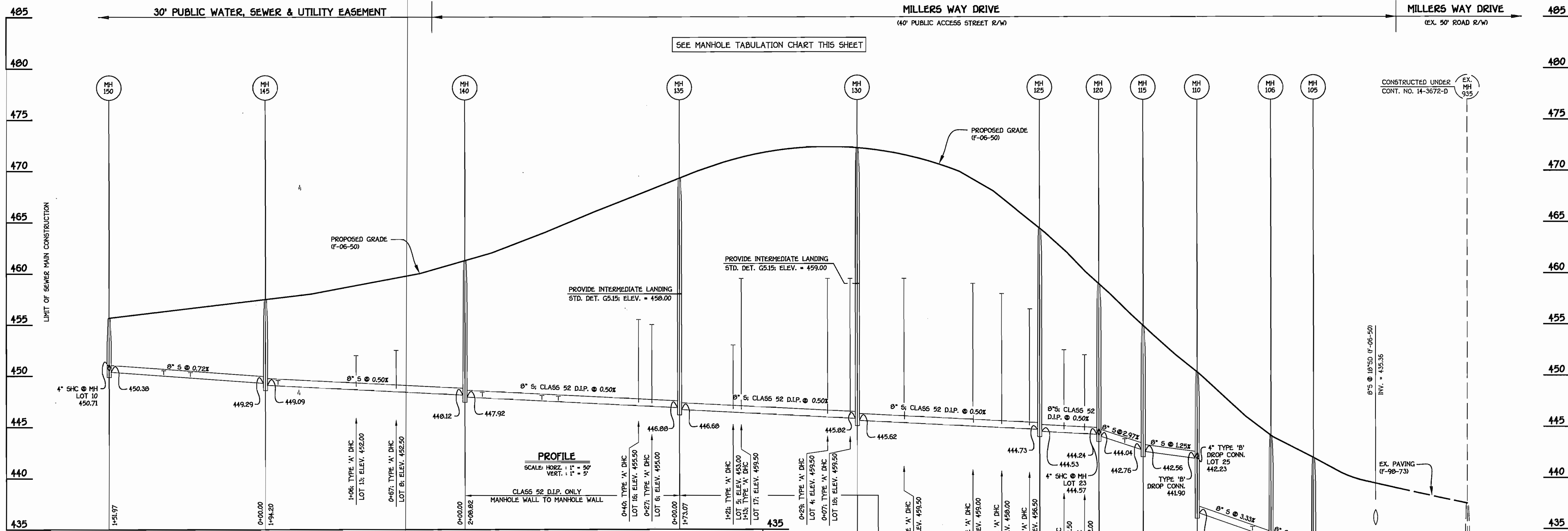
DATE: SEPTEMBER, 2007

FILE NAME: WATER AND SEWER PLAN SHT 2

DATE: 10/1/07

DATE: 10/1/07

137 Rome-Long Property (Avg) (REDLINE) Water And Sewer.dwg, 9/26/2007 9:03:19 AM

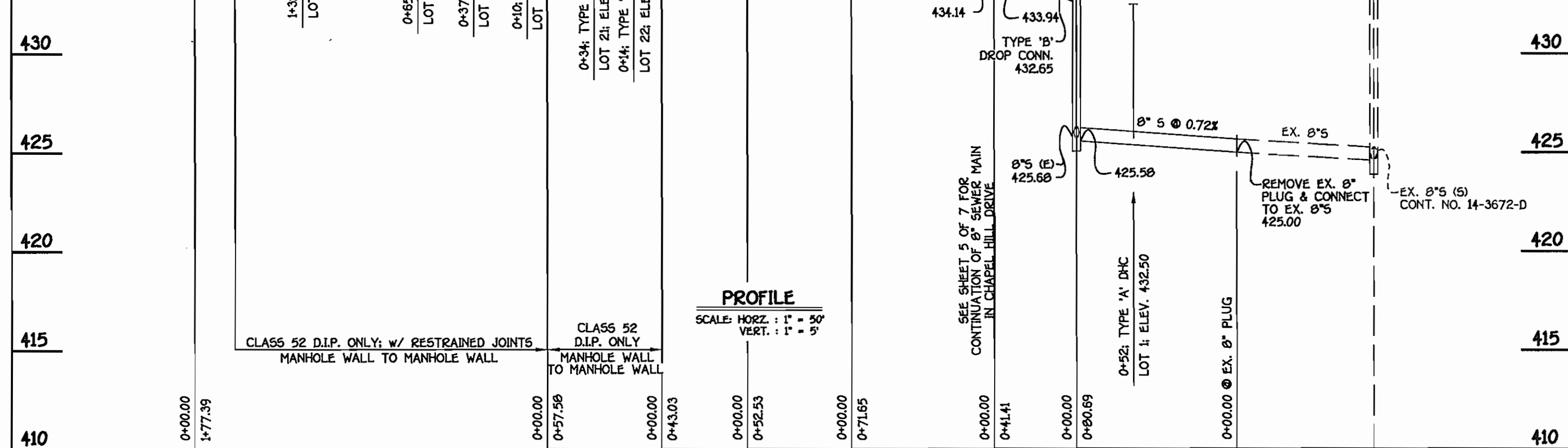


8" SEWER MAIN; MILLERS WAY DRIVE

STATION	LOT	ELEVATION
EX. 8" PLUG TO MH 105		
0+52 LT.	1 (DHC)	432.86
0+10 RT.	26	435.41
⊙ MH 110 RT.	25 (DHC)	442.71
MH 115 TO MH 120		
0+10 RT.	24	443.96
⊙ MH 120 RT.	23	445.07
0+14 RT.	22 (DHC)	452.58
0+34 RT.	21 (DHC)	453.10
MH 125 TO MH 130		
0+10 RT.	20 (DHC)	457.02
0+37 LT.	2 (DHC)	458.36
0+65 RT.	19 (DHC)	459.48
1+32 LT.	3 (DHC)	459.92
MH 130 TO MH 135		
0+07 RT.	18 (DHC)	460.00
0+29 LT.	4 (DHC)	459.90
1+13 RT.	17 (DHC)	459.96
1+21 LT.	5 (DHC)	453.40
MH 135 TO MH 140		
0+27 LT.	6 (DHC)	455.32
0+40 RT.	16 (DHC)	456.04
1+18 LT.	7	447.92
1+34 RT.	15	448.34
1+92 RT.	14	448.36
MH 140 TO MH 145		
0+67 LT.	8 (DHC)	452.68
1+06 RT.	13 (DHC)	452.40
1+82 RT.	12	449.60
MH 145 TO MH 150		
0+73 LT.	9	450.19
0+99 RT.	11	450.58
⊙ MH 150 CT.	10	450.91

NO.	NORTHING	EASTING	RIM ELEVATION
105	597794.47	1366044.96	441.97
106	597830.20	1366065.89	444.29
110	597900.19	1366081.22	450.32
115	597952.71	1366079.98	454.86
120	597994.65	1366070.38	458.83
125	598029.06	1366024.22	464.39
130	598033.31	1365847.53	473.16
135	598030.46	1365675.31	469.21
140	598090.02	1365475.16	461.24
145	598175.76	1365300.07	457.50
150	598184.29	1365202.06	456.30
155	597734.34	1366145.78	437.67
160	597888.07	1366244.59	436.19
165	597887.49	1366229.19	437.00
170	597402.18	1366278.32	447.00
175	597383.08	1366288.97	450.00
180	597385.61	1366418.23	453.03
185	597276.52	1366468.64	456.27
190	597236.79	1366530.52	457.58
195	597353.39	1366270.88	440.67
200	597447.88	1366545.41	438.95
205	597396.65	1366671.79	440.00
210	597336.65	1366671.79	441.00
8" PLUG	597330.30	1366679.85	---

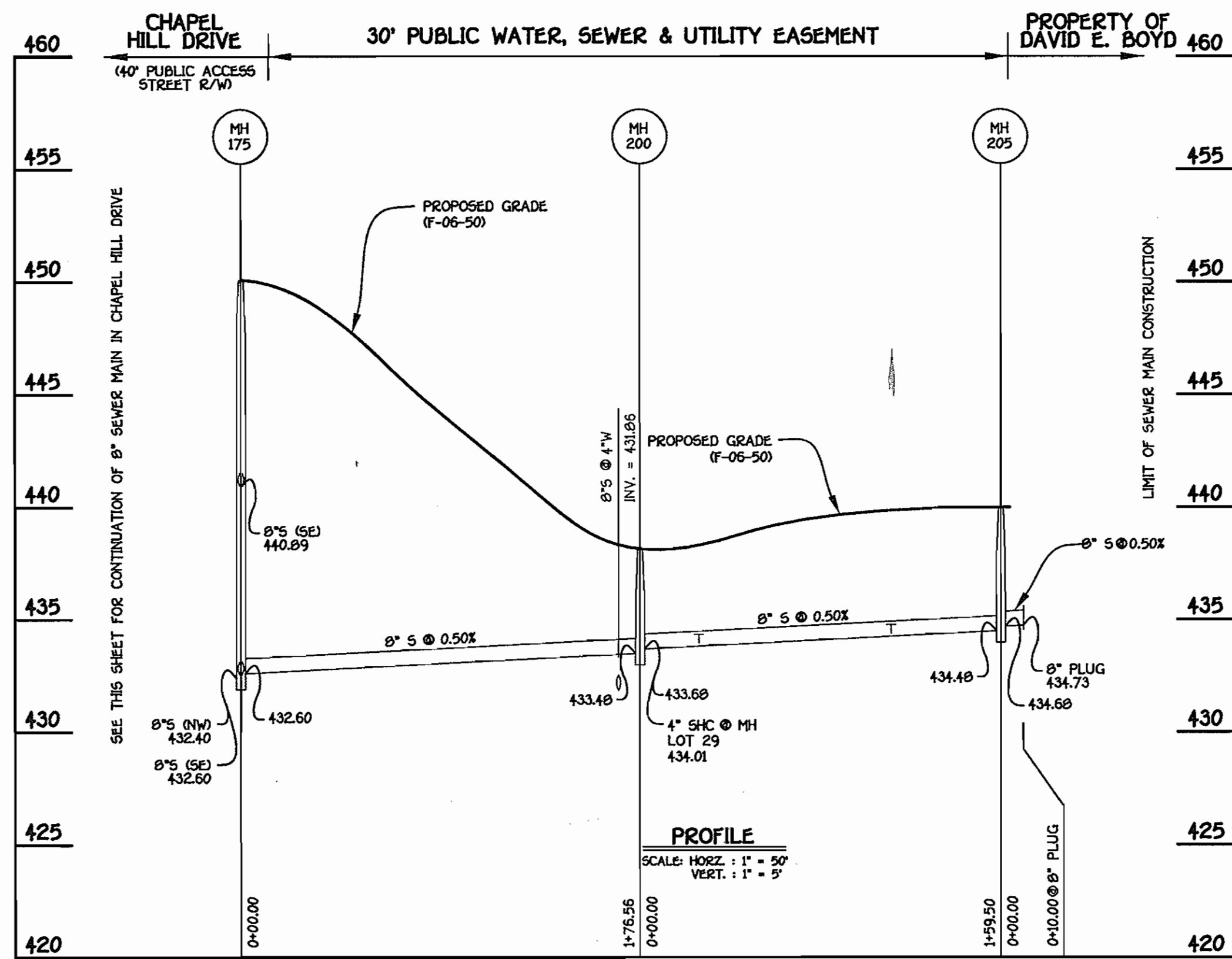
NOTE: SET ALL MH RIMS FLUSH W/ PROPOSED FINISHED GRADE.



8" SEWER MAIN; MILLERS WAY DRIVE

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND R. L. M. B... CHIEF, BUREAU OF UTILITIES DATE: 10-12-06	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND ... CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 10/21/06	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS 9757 STATE OF MARYLAND PROFESSIONAL ENGINEER TERRELL A. FISHER	DESIGNED BY: B.C.R. DRAWN BY: B.C.R. CHECKED BY: P.W.K. DATE: SEPTEMBER, 2006 BY NO. _____ REVISION _____ DATE _____	WATER AND SEWER MAINS PROFILES 600' SCALE MAP NO. 17 BLOCK NO. 6 F.C.C. WORK ORDER NO. 04137 FILE NAME: WATER AND SEWER PROFILE SHT 1	HOLLIFIELD HILLS PARCELS 42 & 43 LOTS 1 THRU 43 & OPEN SPACE LOTS 44 THRU 47 CONTRACT NO. 14-4307-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 4 OF 7
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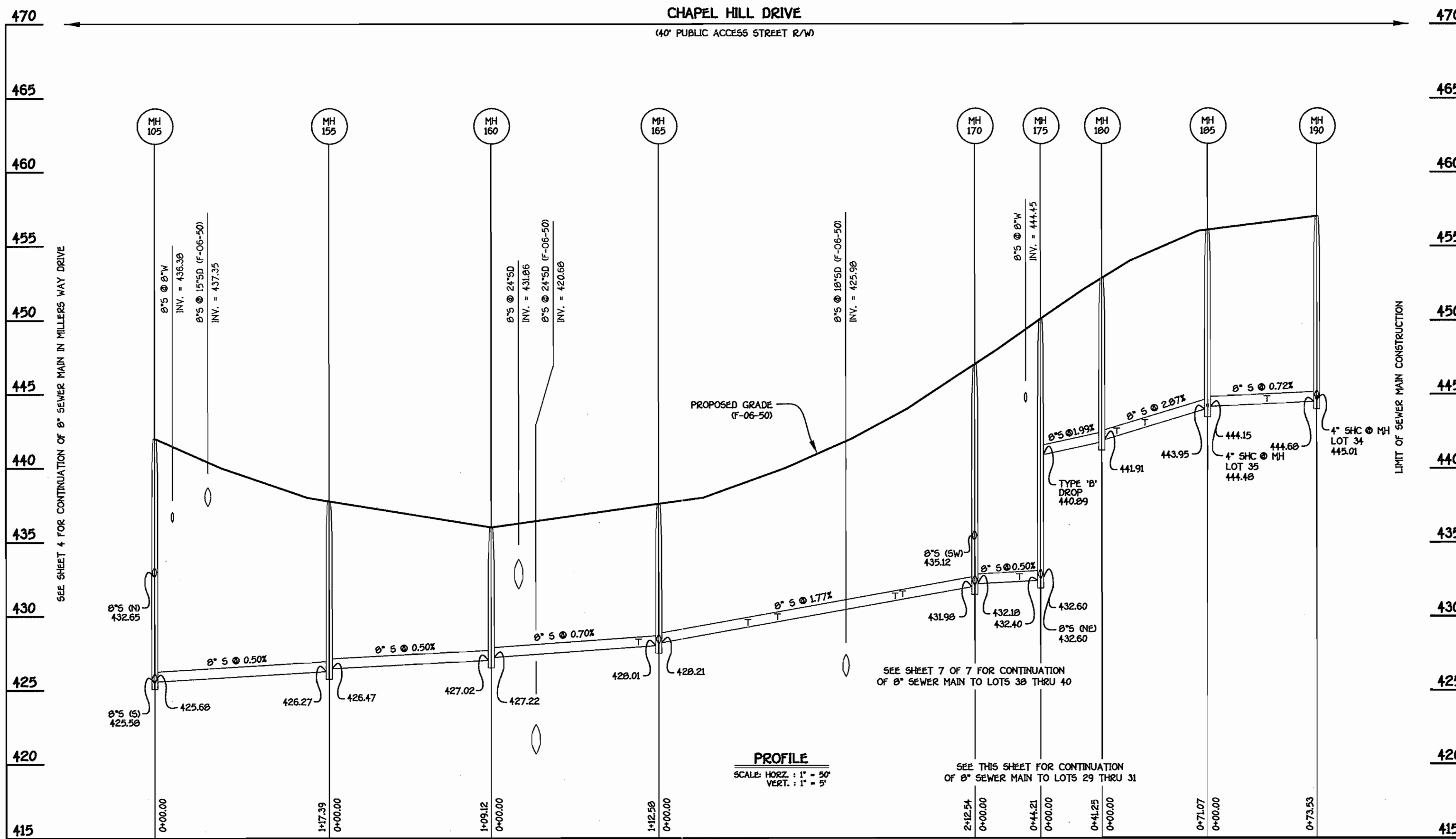
CONTRACT NO. 14-4307-D
 HOLLIFIELD HILLS
 PARCELS 42 & 43
 LOTS 1 THRU 43 & OPEN SPACE
 LOTS 44 THRU 47
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND



8" SEWER MAIN TO LOTS 29 THRU 31

SHC INVERT @ PROPERTY LINE CHART		
STATION	LOT	ELEVATION
MH 200 TO MH 205		
0+MH 200 LT.	29	434.63
0+26 LT.	30	434.18
1+11 LT.	31	434.04

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 5 OF 7 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION, DEPARTMENT OF PLANNING AND ZONING, ON OCTOBER 27, 2006.



8" SEWER MAIN; CHAPEL HILL DRIVE

SHC INVERT @ PROPERTY LINE CHART		
STATION	LOT	ELEVATION
MH 160 TO MH 165		
0+99 RT.	43	428.58
MH 165 TO MH 170		
0+60 LT.	27	429.84
0+80 RT.	42	430.04
1+59 LT.	28	431.55
1+64 RT.	41	431.80
MH 170 TO MH 175		
0+30 RT.	37	433.06
MH 180 TO MH 185		
0+10 RT.	36	442.87
0+29 LT.	32	443.23
MH 185 TO MH 190		
0+MH 185 RT.	35	444.98
0+40 LT.	33 (@1.00%)	444.77
0+MH 190 RT.	34	445.51

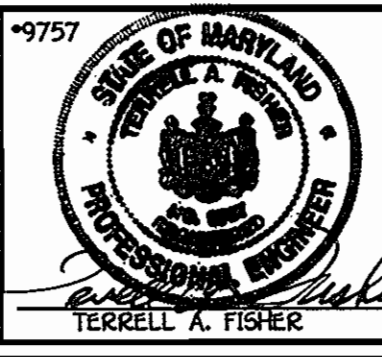
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Michael J. ...
10/11/07
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

...
10/11/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION

FISHER, COLLINS & CARTER, INC.
CIVIL, ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PRZ.
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2255



DESIGNED BY :
B.C.R.

DRAWN BY :
B.C.R.

CHECKED BY :
P.W.K.

DATE :
SEPTEMBER, 2007

WATER AND SEWER MAINS
PROFILES

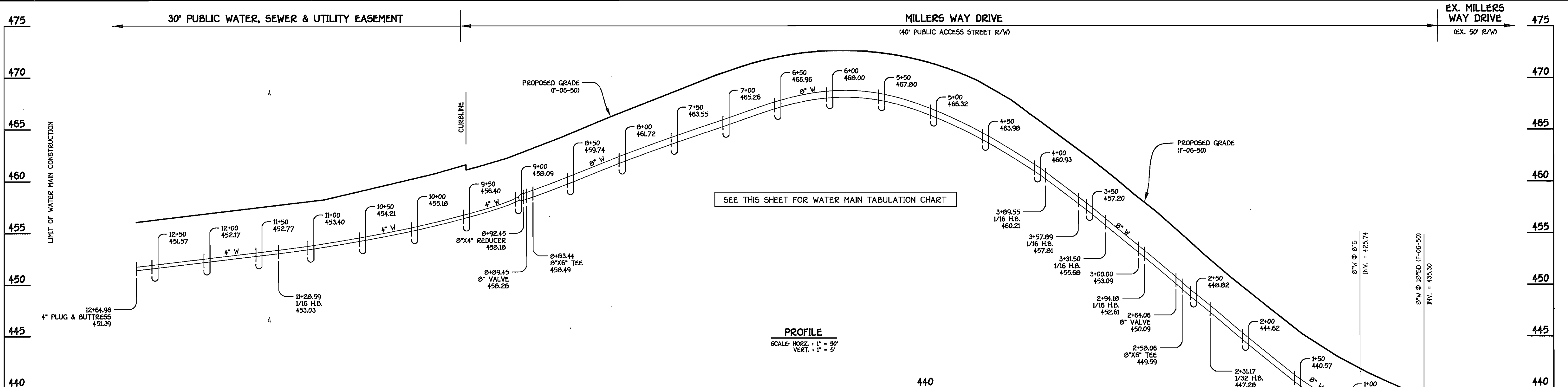
600' SCALE MAP NO. 17 BLOCK NO. 6
F.C.C. WORK ORDER NO. 04137
FILE NAME : WATER AND SEWER PROFILE SHT 2

HOLLIFIELD HILLS
PARCELS 42 & 43
LOTS 1 THRU 43 & OPEN SPACE LOTS 44 THRU 47
CONTRACT NO. 14-4307-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

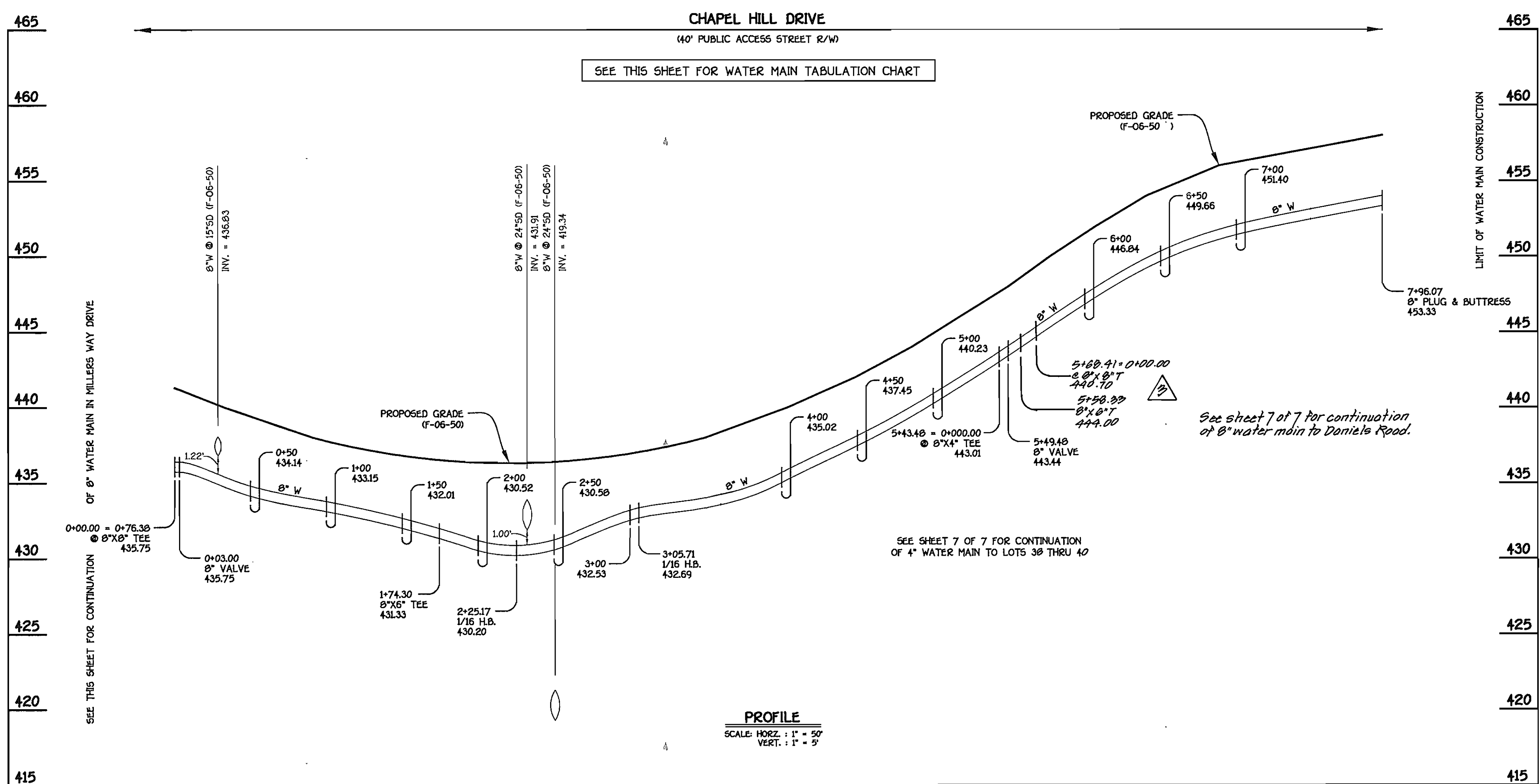
SCALE
AS
SHOWN

SHEET
5 OF 7

CONTRACT NO. 14-4307-D
HOLLIFIELD HILLS
PARCELS 42 & 43
LOTS 1 THRU 43 & OPEN SPACE
LOTS 44 THRU 47
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



8" & 4" WATER MAIN; MILLERS WAY DRIVE



8" WATER MAIN; CHAPEL HILL DRIVE

WATER MAIN TABULATION CHART

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN; CHAPEL HILL DRIVE			
0+00.00	8"x8" TEE	597780.18	1366050.21
0+03.00	8" VALVE	597778.59	1366052.75
0+90.00	PC (CRIMP RADIUS 486.79')	597732.29	1366126.41
1+60.62	PT (CRIMP RADIUS 486.79')	597699.75	1366109.02
1+74.30	8"x6" TEE	597694.29	1366201.56
2+25.17	1/16 H.B.	597673.98	1366249.20
3+05.71	1/16 H.B.	597615.69	1366303.77
5+19.88	8"x6" TEE	597971.08	1366378.74
3+60.83	PC (CRIMP RADIUS 557.37')	597564.16	1366323.35
4+57.01	PCC (CRIMP RADIUS 557.37')	597471.62	1366349.13
4+57.01	PCC (CRIMP RADIUS 646.86')	597471.62	1366349.13
5+24.40	PCC (CRIMP RADIUS 646.86')	597406.47	1366366.23
5+24.40	PCC (CRIMP RADIUS 296.65')	597406.47	1366366.23
5+43.48	8"x4" TEE	597388.69	1366372.81
5+49.48	8" VALVE	597383.16	1366375.12
7+40.38	PT (CRIMP RADIUS 296.65')	597243.13	1366499.99
5+68.41	8"x8" TEE	597966.02	1366398.16
7+96.07	8" PLUG & BUTTRESS	597215.35	1366548.40

WATER MAIN TABULATION CHART

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" & 4" WATER MAIN; MILLERS WAY DRIVE			
0+00.00	CONNECT TO EX. 8" W	597715.51	1366009.56
0+76.38	8" VALVE	597775.10	1366047.01
0+76.38	8"x8" TEE	597780.18	1366050.21
1+17.17	1/32 H.B.	597814.72	1366071.91
1+44.82	PC (CRIMP RADIUS 355.80')	597841.33	1366079.43
2+22.17	PT (CRIMP RADIUS 355.80')	597917.23	1366093.50
2+31.17	1/32 H.B.	597926.18	1366094.44
2+58.06	8"x6" TEE	597952.72	1366090.11
2+64.06	8" VALVE	597958.64	1366099.11
2+94.18	1/16 H.B.	597988.33	1366084.09
3+31.50	1/16 H.B.	598020.24	1366064.74
3+57.89	1/16 H.B.	598035.73	1366043.37
3+69.55	1/16 H.B.	598042.90	1366021.53
4+28.06	PC (CRIMP RADIUS 757.29')	598036.39	1365974.57
7+20.53	PCC (CRIMP RADIUS 757.29')	598043.92	1365884.01
7+20.53	PCC (CRIMP RADIUS 1651.42')	598043.92	1365884.01
8+80.42	PT (CRIMP RADIUS 1651.42')	598083.67	1365529.55
8+83.44	8"x6" TEE	598084.62	1365526.68
8+89.45	8" VALVE	598086.48	1365520.97
8+92.45	8"x4" REDUCER	598087.46	1365518.14
9+01.18	PC (CRIMP RADIUS 597.04')	598090.22	1365509.85
9+60.83	PT (CRIMP RADIUS 597.04')	598111.68	1365454.22
11+28.59	1/16 H.B.	598185.56	1365303.60
12+64.96	4" PLUG & BUTTRESS	598197.32	1365167.42

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

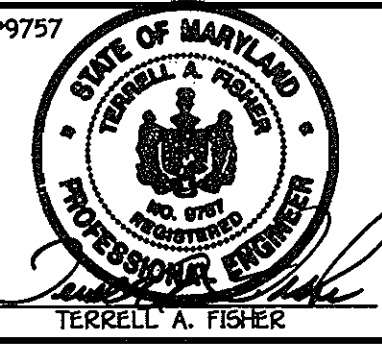
R. H. B...
10-12-06

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

...
10/27/06

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

1000 CENTRAL SQUARE OFFICE PARK - 10025 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2095



DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: SEPTEMBER, 2006

REVISION: *Revise WM profile: county comment & revised alignment. 9/26/07*
Revise NM coordinates based on revised alignment. 9/26/07
Revise contract title based on revised no. of lots. 9/26/07

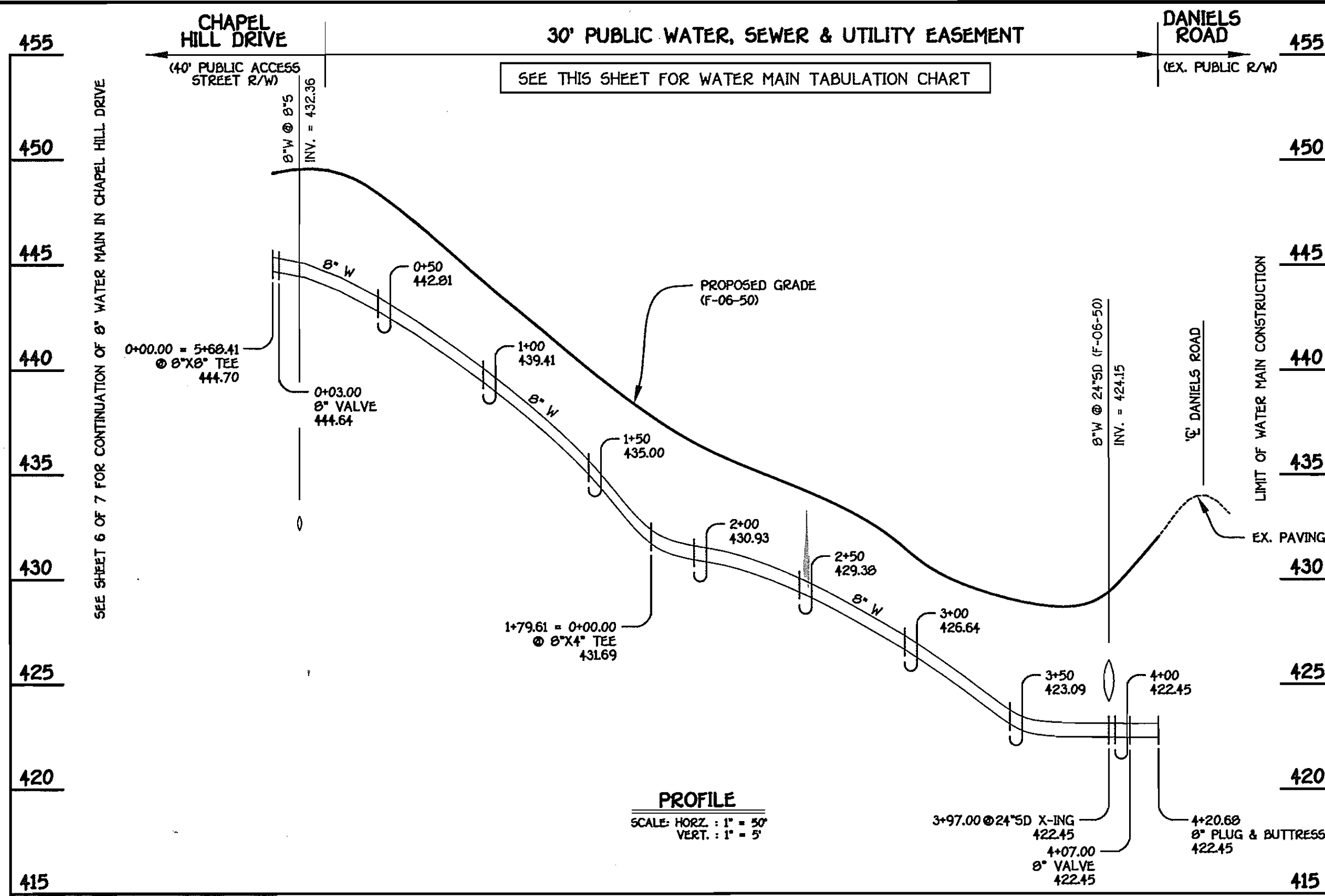
WATER AND SEWER MAINS PROFILES

600' SCALE MAP NO. 17 BLOCK NO. 6
F.C.C. WORK ORDER NO. 04137
FILE NAME: WATER AND SEWER PROFILE SHT 3

HOLLIFIELD HILLS
PARCELS 42 & 43
LOTS 1 THRU 43 & OPEN SPACE
LOTS 44 THRU 47
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 6 OF 7

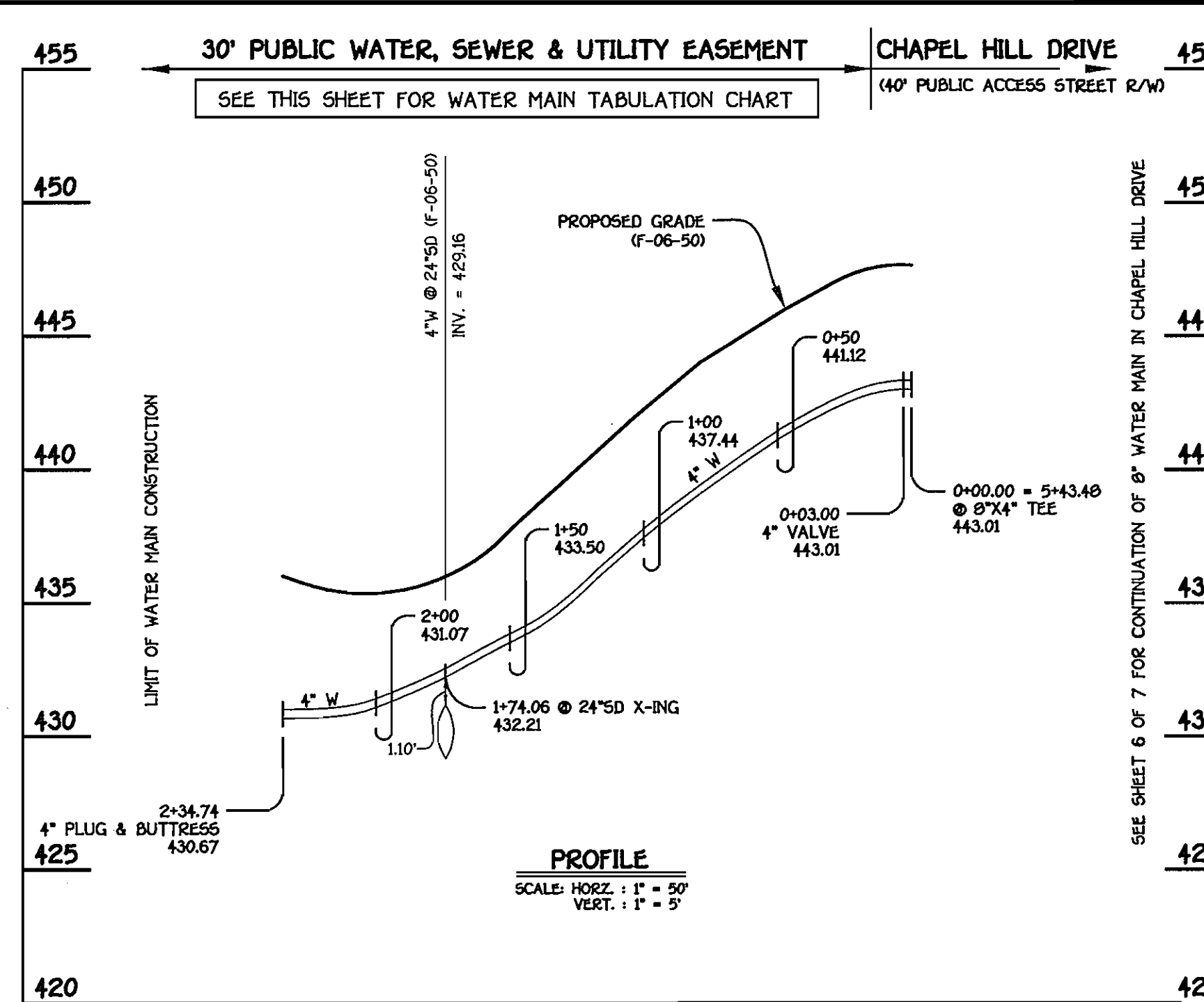
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8" WATER MAIN TO DANIELS ROAD

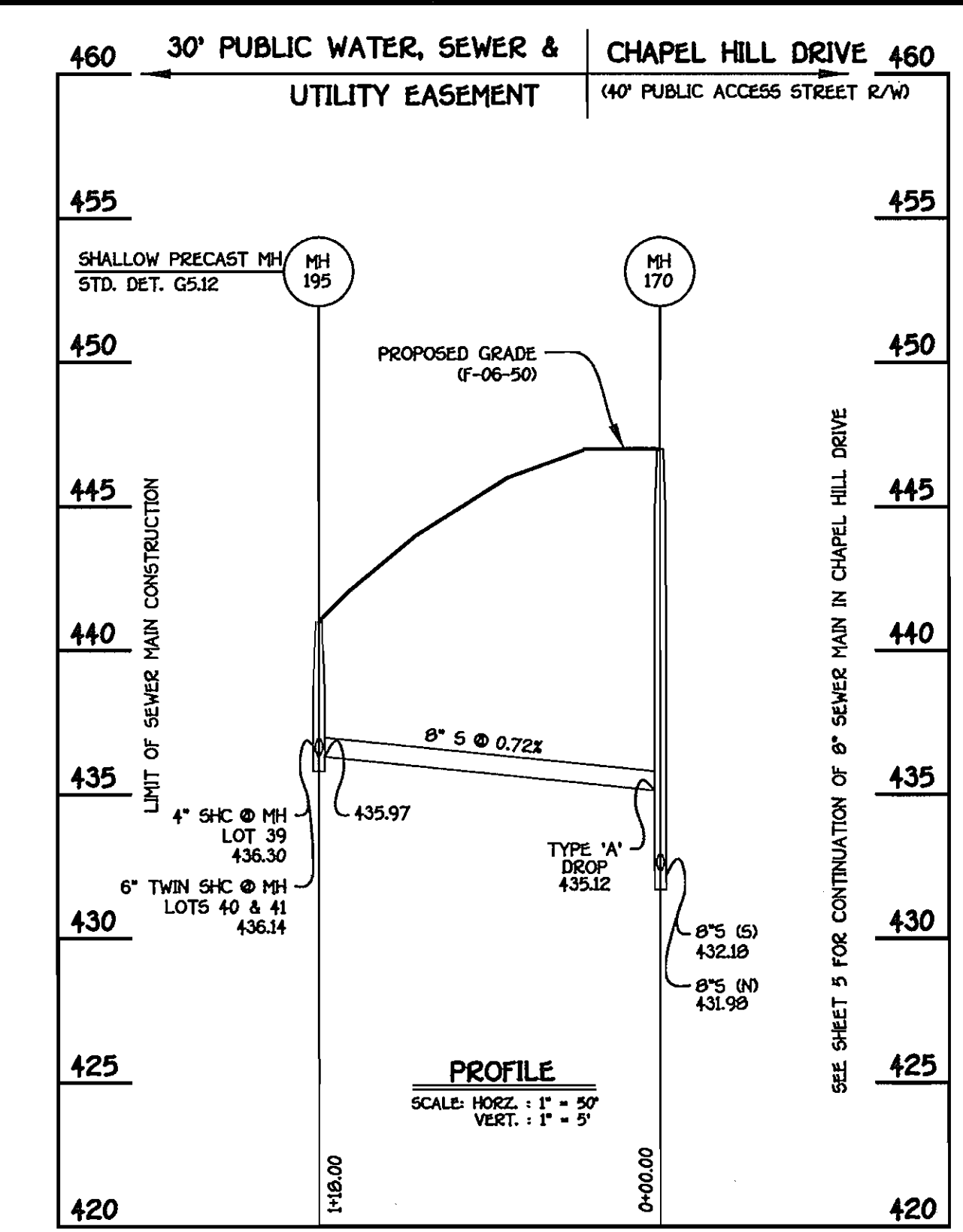
WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN TO DANIELS ROAD			
0+00.00	8"X8" TEE	597366.02	1366383.16
0+03.00	8" VALVE	597367.42	1366385.81
1+79.61	8"X4" TEE	597450.10	1366541.87
2+03.00	PC (CRIMP RADIUS 060')	597461.05	1366562.55
2+74.84	PT (CRIMP RADIUS 060')	597499.29	1366623.34
4+07.00	8" VALVE	597572.19	1366733.60
4+20.68	8" PLUG & BUTTRESS	597579.79	1366744.99

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 7 OF 7 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION, DEPARTMENT OF PLANNING AND ZONING, ON OCTOBER 27, 2006.



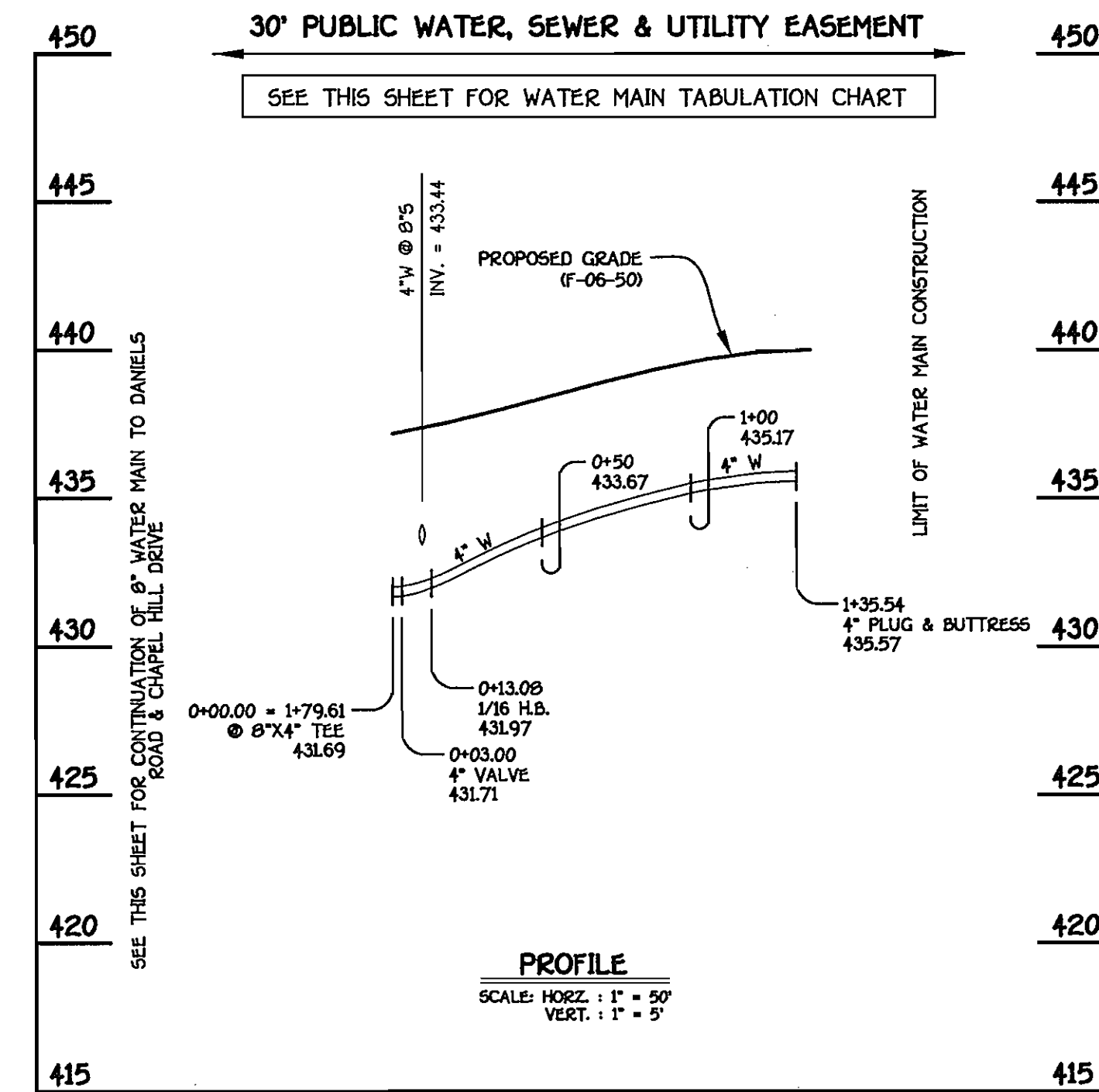
4" WATER MAIN TO LOTS 38 THRU 40

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
4" WATER MAIN TO LOTS 38 THRU 40			
0+00.00	8"X4" TEE	597388.69	1366372.81
0+03.00	4" VALVE	597387.51	1366370.05
2+34.74	4" PLUG & BUTTRESS	597291.64	1366199.07



8" SEWER MAIN TO LOTS 38 THRU 40

SHC INVERT @ PROPERTY LINE CHART		
STATION	LOT	ELEVATION
MH 170 TO MH 195		
@ MH 195 LT.	38	436.52
@ MH 195 CENT.	39	436.50
@ MH 195 RT.	40	436.50



4" WATER MAIN TO LOTS 30 & 31

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
4" WATER MAIN TO LOTS 30 & 31			
0+00.00	8"X4" TEE	597450.10	1366541.87
0+03.00	4" VALVE	597447.44	1366543.27
0+13.08	1/16 H.B.	597438.54	1366547.99
1+35.54	4" PLUG & BUTTRESS	597360.72	1366642.55

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 10/1/07 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND DATE: 10/1/07 CHIEF, DEVELOPMENT ENGINEERING DIVISION	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS 4100 W. BELT ROAD, SUITE 200 ELICOTT CITY, MARYLAND 21042 (410) 481-2855	DESIGNED BY: B.C.R. DRAWN BY: B.C.R. CHECKED BY: P.W.K. DATE: SEPTEMBER, 2007	WATER AND SEWER MAINS PROFILES 600' SCALE MAP NO. 17 BLOCK NO. 6 F.C.C. WORK ORDER NO. 04137 FILE NAME: WATER AND SEWER PROFILE SHT 4	CONTRACT NO. 14-4307-D HOLLIFIELD HILLS PARCELS 42 & 43 LOTS 1 THRU 43 & OPEN SPACE LOTS 44 THRU 47 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 7 OF 7
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