


GENERAL NOTES

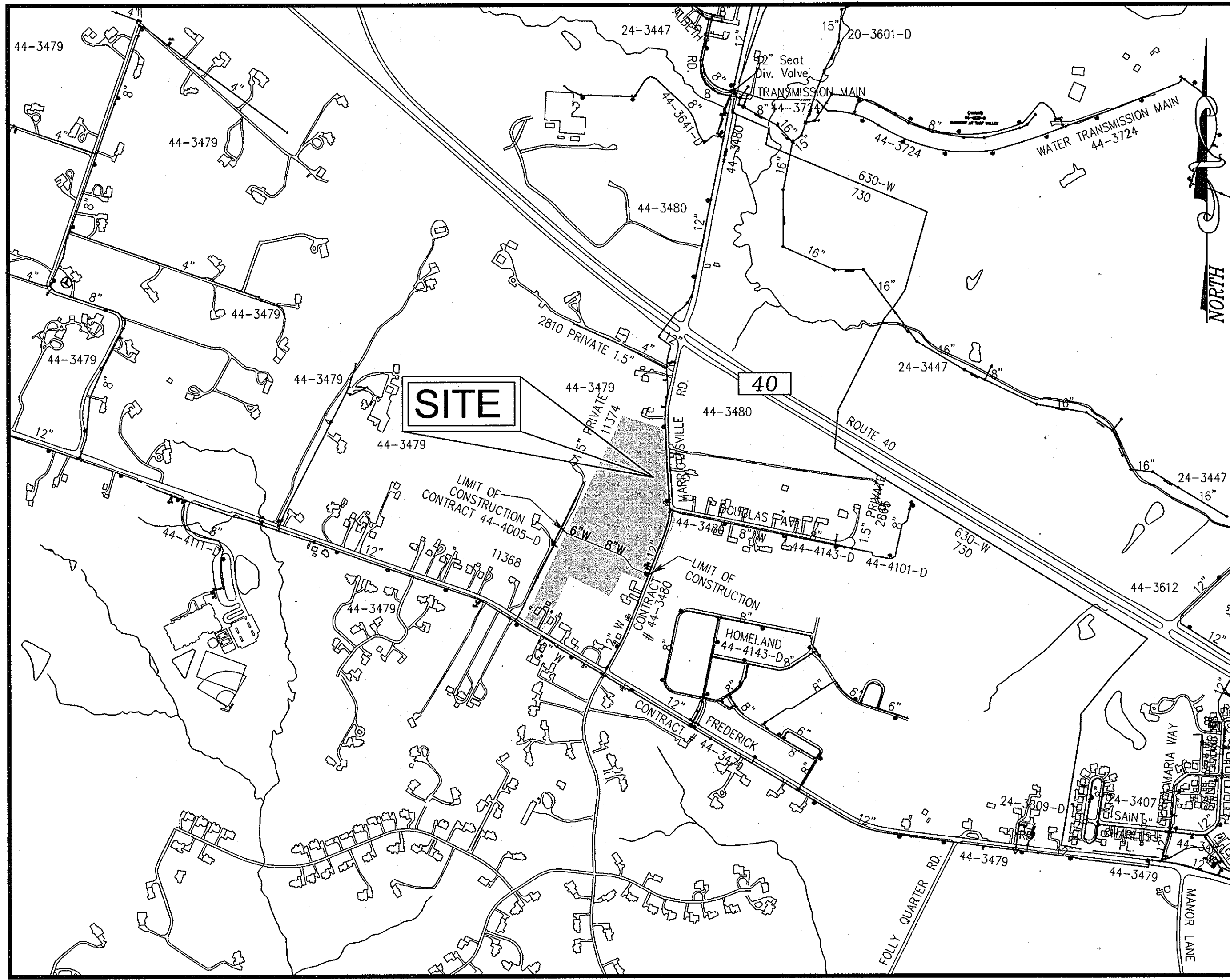
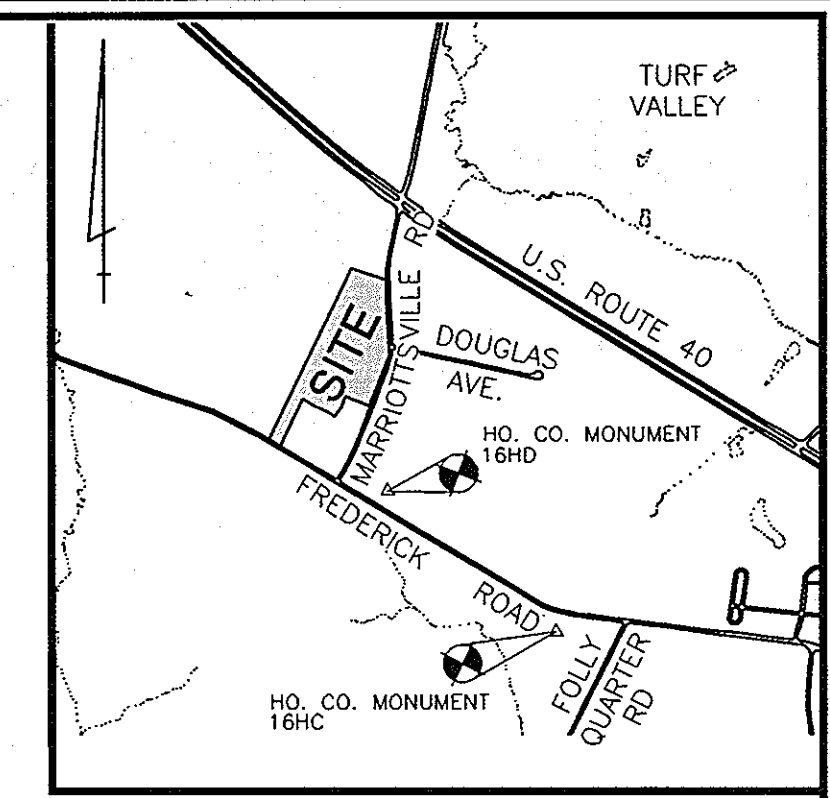
PART I

- APPROXIMATE LOCATION 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 MAY 2003. BY POTOMAC AERIAL SURVEYS, INC. SUPPLEMENTED BY FIELD RUN TOPOGRAPHY, PERFORMED BY FREDERICK WARD ASSOCIATES, OCTOBER 2003 AND FIELD RUN TOPOGRAPHY PERFORMED BY ROBERT H. VOGEL ENGINEERING, INC. ON DECEMBER 2006.
- 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. 24FB, NO. 2413.
ALL VERTICAL CONTROLS ARE BASED ON NAVE '88 VERTICAL CONTROL PROVIDED ON THE DRAWINGS ARE 24FB AND 2413.(ENGINEER/SURVEY FIRM SHALL PROVIDE DESCRIPTION OF VERTICAL CONTROL POINTS, I.E., IRON BARS, CROSS CUTS ON CONCRETE STRUCTURES, ETC.)
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED.
- 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 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 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 NOTES 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 OPERATION AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
AT &T.....1-800-252-1133
BGE (CONTRACTOR SERVICE).....410-850-4620
BGE (EMERGENCY).....410-685-1400
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 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 ANY 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(g) OF THE HOWARD COUNTY CODE.

TYPE OF BUILDING:	SINGLE HOUSE
NO. OF BUILDINGS:	7
NO. OF WATER HOUSE CONNECTIONS:	7
NO. OF SEWER HOUSE CONNECTIONS:	PRIVATE
DRAINAGE AREA:	PATAPSCO RIVER LOWER NORTH BRANCH
TREATMENT PLANT:	PATAPSCO WASTEWATER TREATMENT

FINAL WATER & SEWER BRANTWOOD OVERLOOK HOWARD COUNTY, MARYLAND CONTRACT NO. 44-4005-D

BENCHMARKS		
NO.	NORTHING	EASTING
16HC	(N) 589,780.908	(E) 1,341,530.147
16HD	(N) 590,674.171	(E) 1,340,043.586



VICINITY MAP
SCALE: 1"=600'

WATER TEST GRADIENT: 700

PART II - WATER

- ALL WATER MAINS TO BE D.I.P. CLASS 54 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 INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE 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.
- FOR SPRINKLER SYSTEM FOR ALL TOWN HOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1' CONNECTION WITH A 3/4" METER.

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 FRAME AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

QUANTITIES

NAME OF UTILITY CONTRACTOR : H.T. I				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE :				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER (D.I.P.)	447 LF	444 LF	TYTON CL54	US PIPE / HD SUPPLY
6" WATER (D.I.P.)	254 LF	231.50 LF	TYTON CL54	US PIPE / HD SUPPLY
1" WHC	107 LF	146 LF	K COPPER	CAMBRIDGE LEE / HD SUPPLY
12" X 6" TAPPING SLEEVE	1 EA	1 EA	STAINLESS	FORD METER BOX / HD SUPPLY
6" FIRE HYDRANT	2 EA	2 EA	(1) MUELLER (1) KENNEDY	/ HD SUPPLY
6" CAP & BUTTRESS	1 EA	1 EA	MJ	SIGMA / HD SUPPLY
8" X 6" REDUCER	1 EA	1 EA	MJ	SIGMA / HD SUPPLY
6" X 8" EXPANDER	1 EA	1 EA	MJ	SIGMA / HD SUPPLY
3/4" METER BOX	7 EA	7 EA		FORD / HD SUPPLY
6" VALVE	1 EA	1 EA	RSQV	KENNEDY VALVE/HD SUPPLY
8" VALVE	1 EA	1 EA	RSQV	KENNEDY VALVE/HD SUPPLY
8" X 6" TEE	1 EA	1 EA	MJ	SIGMA / HD SUPPLY
8" - 1/32 HB	2 EA	2 EA	MJ	SIGMA / HD SUPPLY
8" - 1/16 HB	2 EA	2 EA	MJ	SIGMA / HD SUPPLY
8" SLEEVE	1 EA	1 EA	MJ	SIGMA / HD SUPPLY

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH FINAL ROAD CONSTRUCTION PLAN F-08-42.

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

John R. Roberts 8/21/08
SOIL CONSERVATION DISTRICT DATE

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

[Signature] 8/21/08
SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

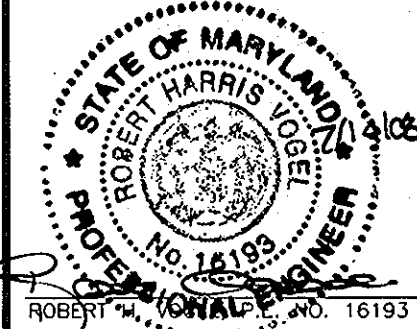
Walter D... 8/21/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE M.G.

DEVELOPER
TRINITY QUALITY HOMES
3575 PARK AVE., STE. 301
ELLCOTT CITY, MARYLAND 21043
(410) 480-0023

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Sally C. Green 8/14/08
CHIEF, BUREAU OF UTILITIES DATE

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELLCOTT CITY, MD 21043 FAX: 410.461.8961



DESIGN BY:	RJ
DRAWN BY:	RJ
CHECKED BY:	RHV
DATE:	JULY 2008
BY	NO
NO	NO
REVISION	REVISION
DATE	DATE
KC 1	2 ASBUILT REVISIONS 7/21/10
RHV	1 REVISE SUBDIVISION NAME & ROAD NAME 8/11/10

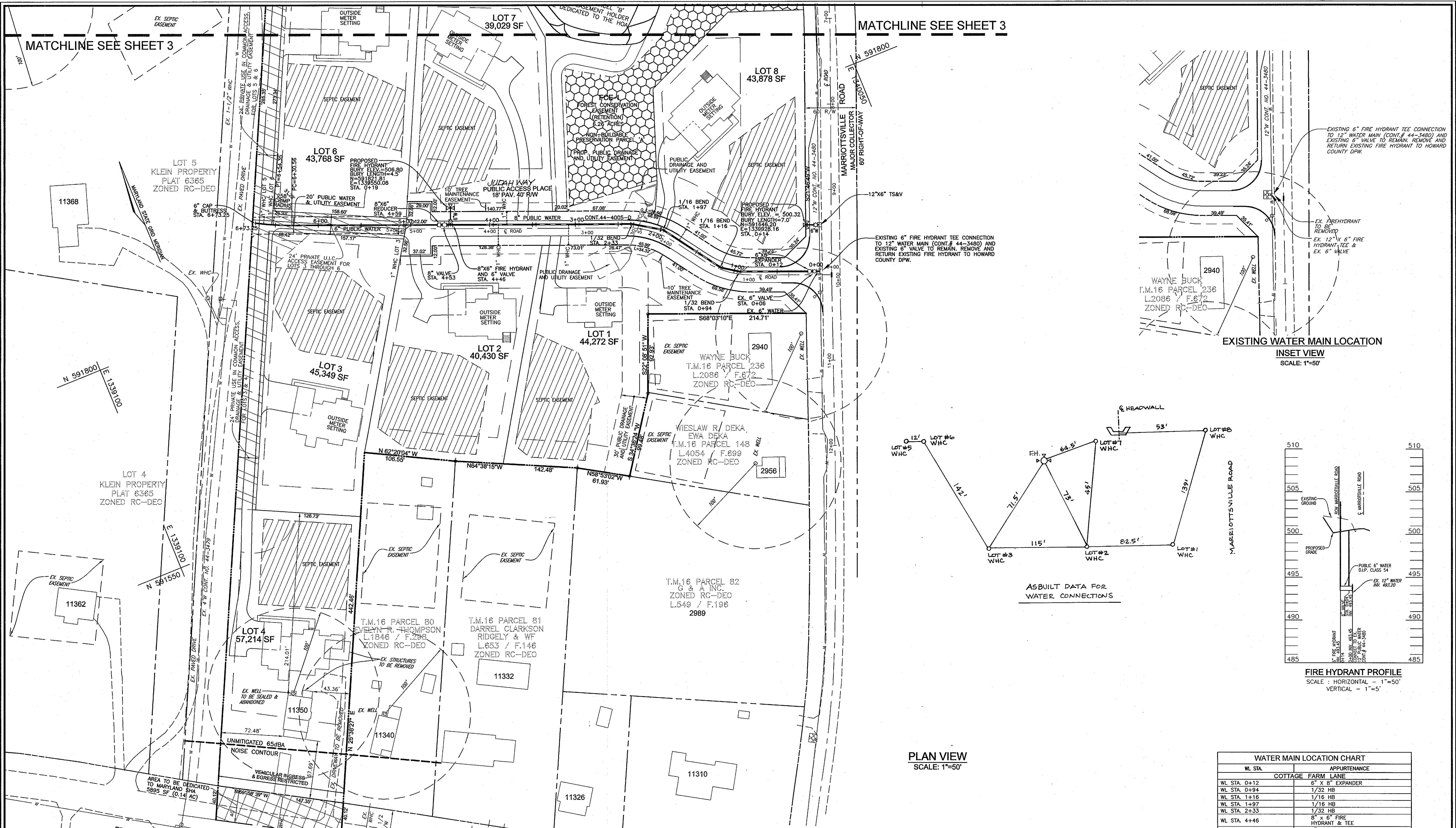
**FINAL WATER & SEWER
CONSTRUCTION PLAN**

BRANTWOOD OVERLOOK
LOTS 1-3 AND NON-BUILDABLE
PRESERVATION PARCELS 'A' & 'B'
CONTRACT NO. 44-4005-D

TAX MAP 16 BLOCK 15, 16, 21 & 22
3RD ELECTION DISTRICT
REF: F-02-41, F-02-42, SP-02-08,
RE-06-03, F-08-42

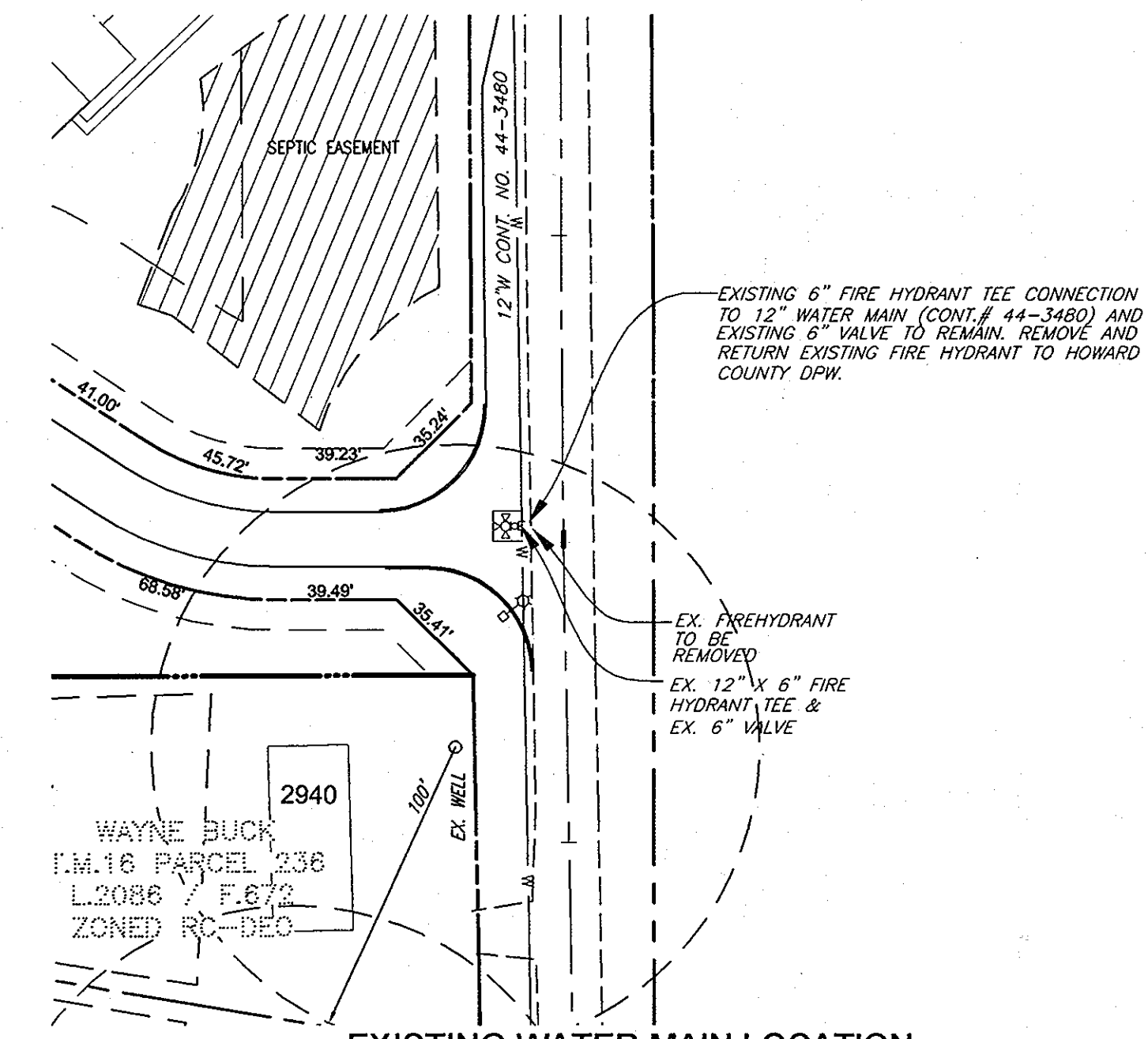
PARCELS 'A' & 'B'
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 3

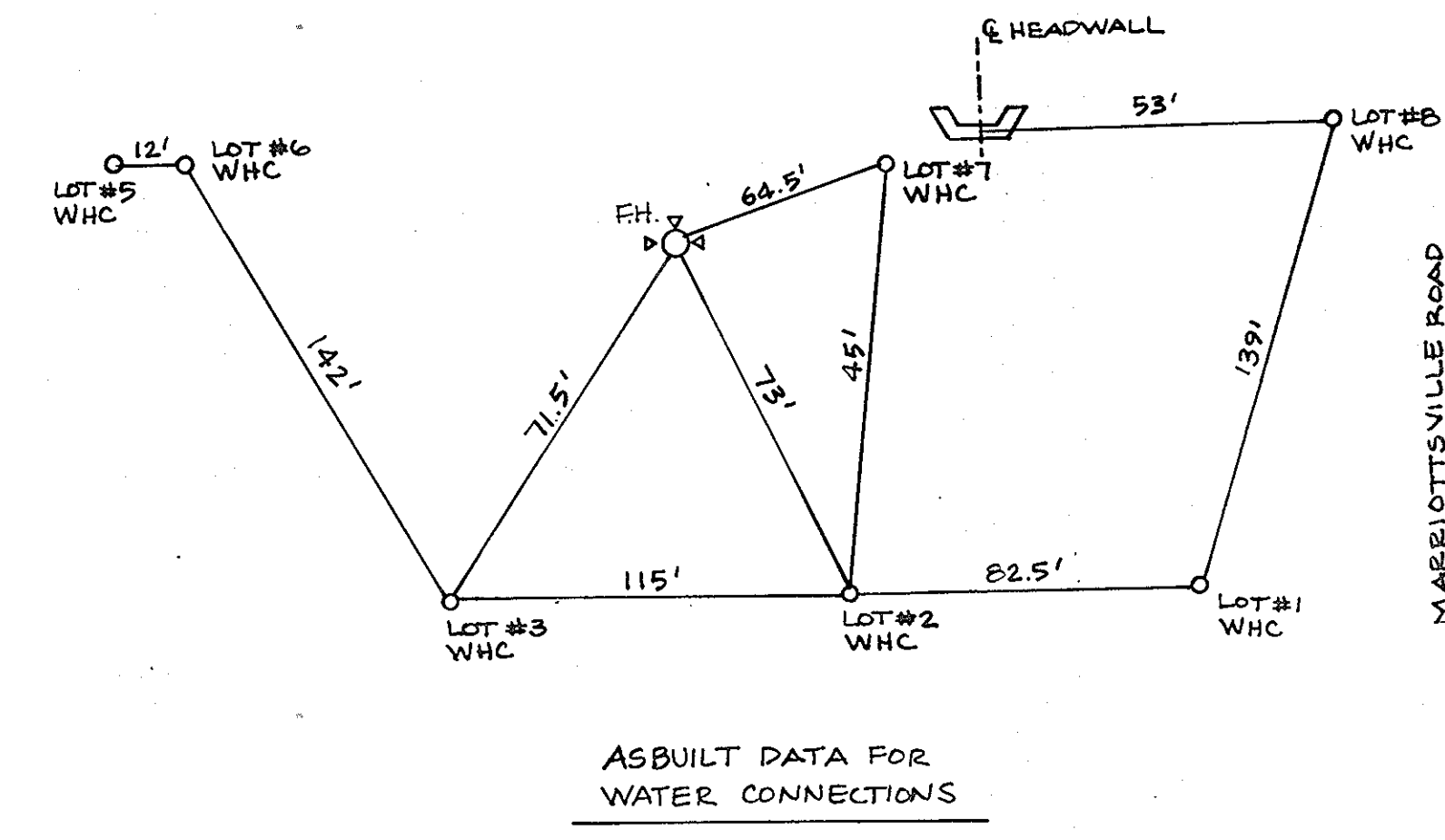


MATCHLINE SEE SHEET 3

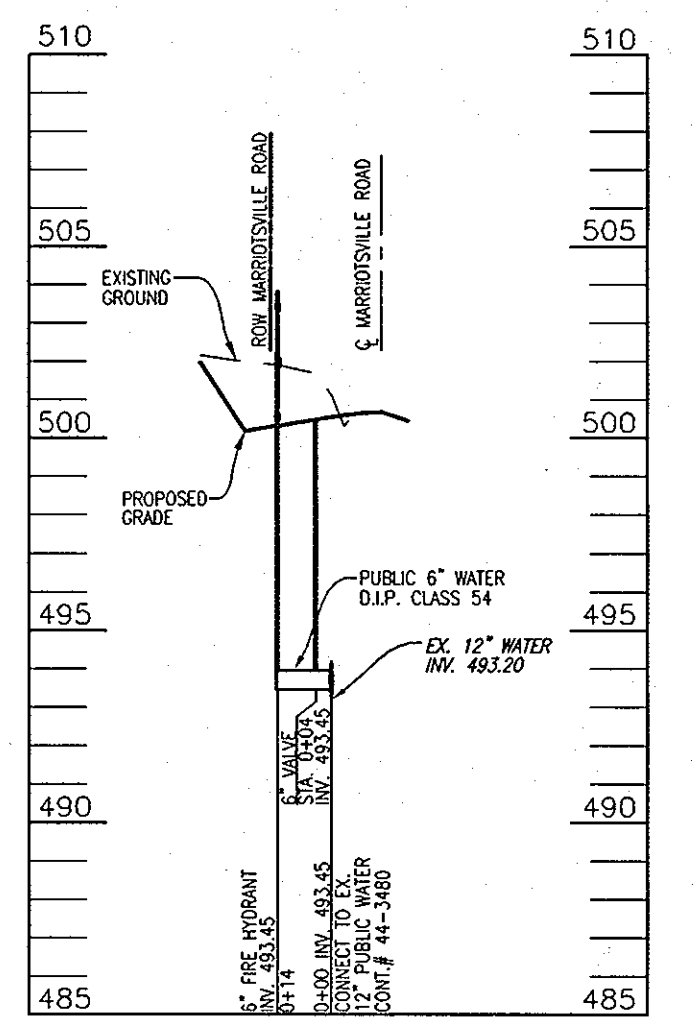
MATCHLINE SEE SHEET 3



EXISTING WATER MAIN LOCATION
INSET VIEW
SCALE: 1"=50'



ASBUILT DATA FOR
WATER CONNECTIONS



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

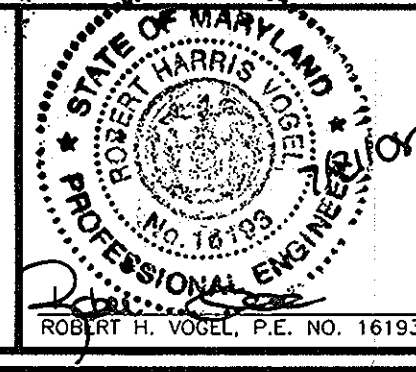
WATER MAIN LOCATION CHART	
WL STA.	APPURTENANCE
COTTAGE FARM LANE	
WL STA. 0+12	6" X 8" EXPANDER
WL STA. 0+94	1/32 HB
WL STA. 1+16	1/16 HB
WL STA. 1+97	1/16 HB
WL STA. 2+33	1/32 HB
WL STA. 4+46	8" X 6" FIRE HYDRANT & TEE
WL STA. 4+53	8" VALVE
WL STA. 4+59	8" X 6" REDUCER
WL STA. 6+73	6" CAP & BUTTRESS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Chad Decker
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 8/26/08

NOTE:
1. FOR OUTSIDE METER SETTING FOR ALL LOTS, REFER TO DETAIL W-3.27.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Shane C. Green
CHIEF, BUREAU OF UTILITIES
DATE: 8/14/08

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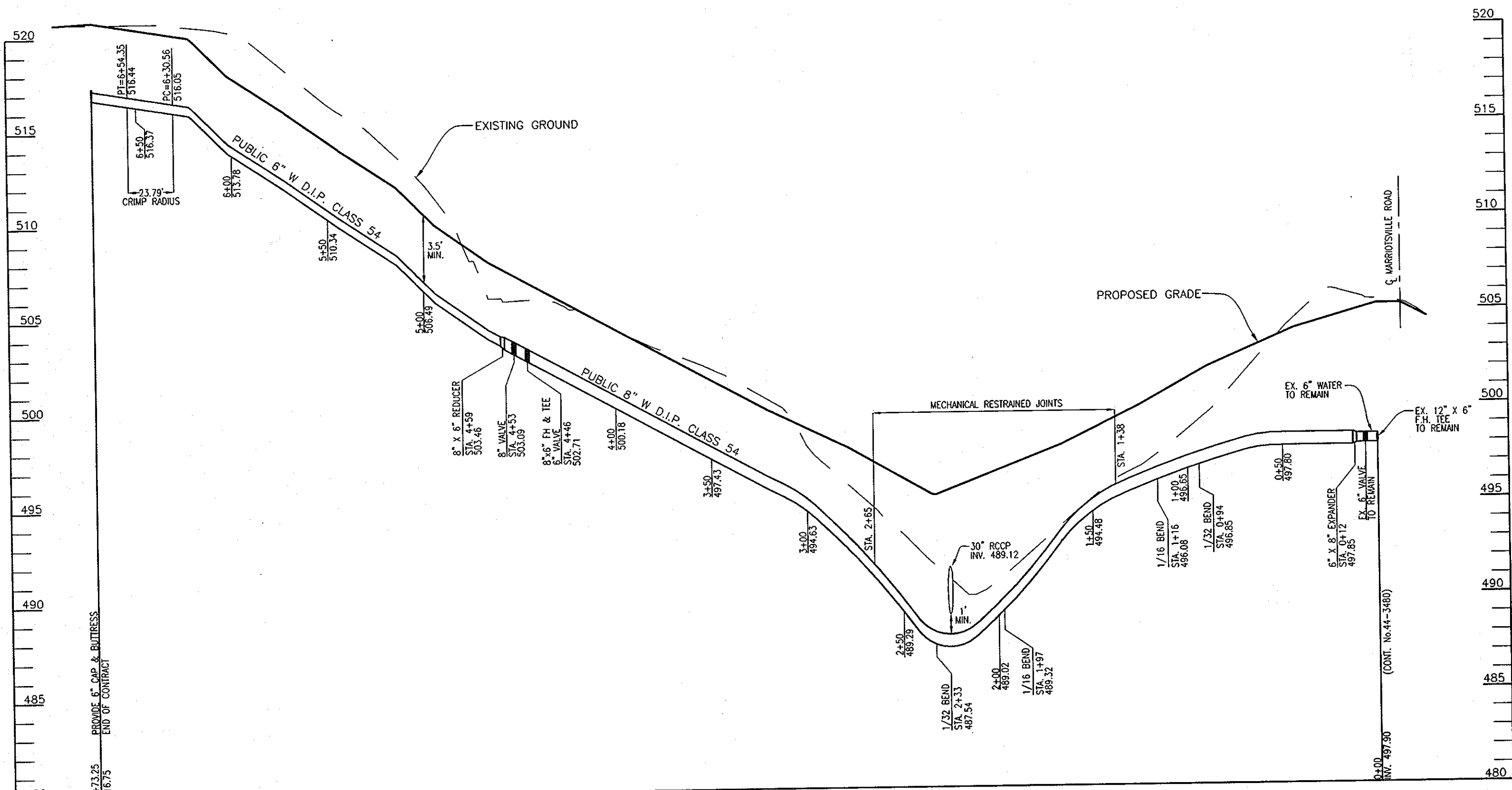
DESIGN BY: RJ			
DRAWN BY: RJ			
CHECKED BY: RHV	KCI	2	ASBUILT REVISIONS 7/22/10
DATE: JULY 2008	RHV	1	REVISE SUBDIVISION NAME & ROAD NAME 3/11/10
BY: NO			REVISION DATE

FINAL WATER & SEWER CONSTRUCTION PLAN

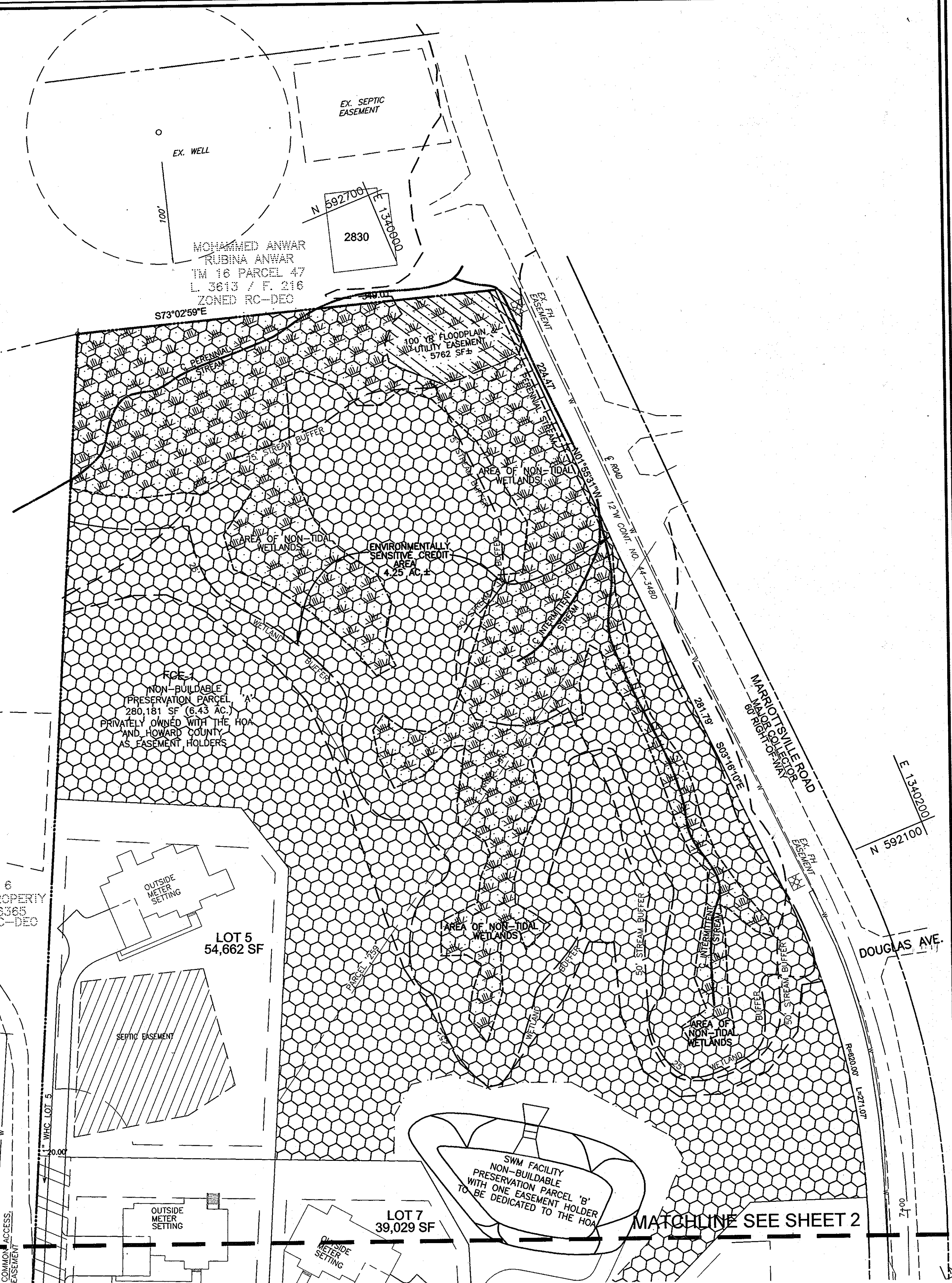
BRANTWOOD OVERLOOK
LOTS 1-8 AND NON-BUILDABLE PRESERVATION PARCELS 'A' & 'B'
CONTRACT NO. 44-4005-D
SCALE AS SHOWN
SHEET 2 OF 3

TAX MAP 16, BLOCK 15, 16, 21 & 22
3RD ELECTION DISTRICT
REF: F-02-01, F-02-02, SP-02-08, RE-06-03, F-08-02
PARCELS 'A' & 'B'
HOWARD COUNTY, MARYLAND

600' SCALE MAP NO. 16 BLOCK NO. 16



PUBLIC 8" PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



PLAN VIEW
SCALE: 1"=50'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[Signature] 8/26/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DESIGN BY: RJ	
DRAWN BY: RJ	
CHECKED BY: RHV	
DATE: JULY 2008	
BY NO	REVISION
1	REVISE SUBDIVISION NAME & ROAD NAME 8/1/10

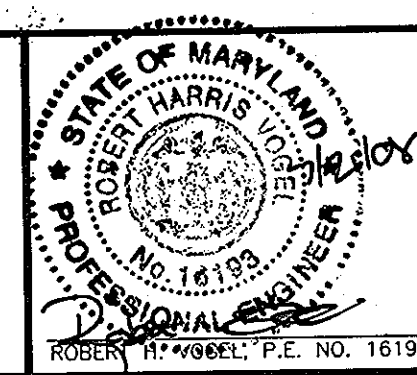
FINAL WATER & SEWER CONSTRUCTION PLAN

BRANTWOOD OVERLOOK
LOTS 1-8 AND NON-BUILDABLE PRESERVATION PARCELS 'A' & 'B'
CONTRACT NO. 44-4005-D

SCALE AS SHOWN
SHEET 3 OF 3

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

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ELLICOTT CITY, MD 21043 FAX: 410.461.8961



[Signature] DATE
CHIEF, BUREAU OF UTILITIES

TAX MAP 16 BLOCK 15, 16, 21 & 22
3RD ELECTION DISTRICT
REF: F-02-41, F-02-42, SP-02-06,
RE-06-03, F-08-42

PARCELS 94 & 259
HOWARD COUNTY, MARYLAND