

**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 CONTRACTORS EXPENSE.
- TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON JANUARY, 2004. BY FREDERICK WARD ASSOCIATES.
- 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. 18G1, NO. 24C2.  
ALL VERTICAL CONTROLS ARE BASED ON NAVD '88. VERTICAL CONTROL PROVIDED ON THE DRAWINGS ARE NO. 18G1 & NO. 24C2 (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.
- ALL PROPOSED UTILITIES CONNECTING TO EXISTING UTILITIES WILL BE DONE BY JACK-AND-BORE.

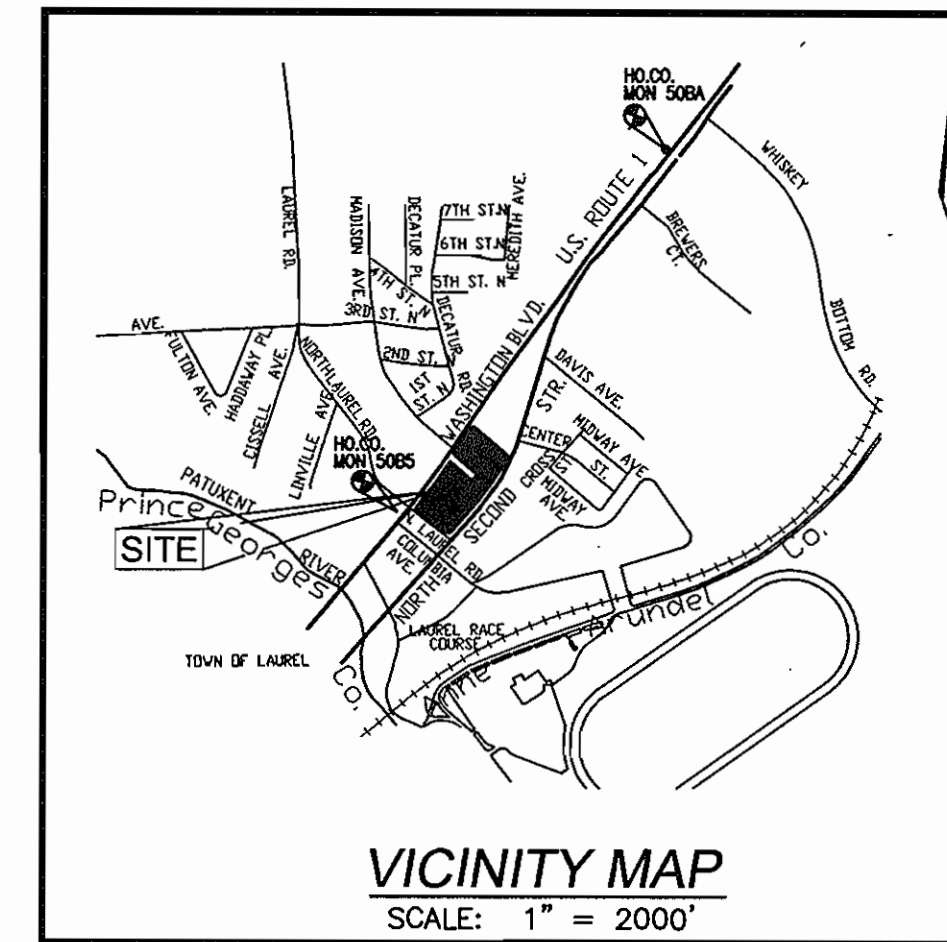
**PART II - WATER**

- 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 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.

**PART III - SEWER**

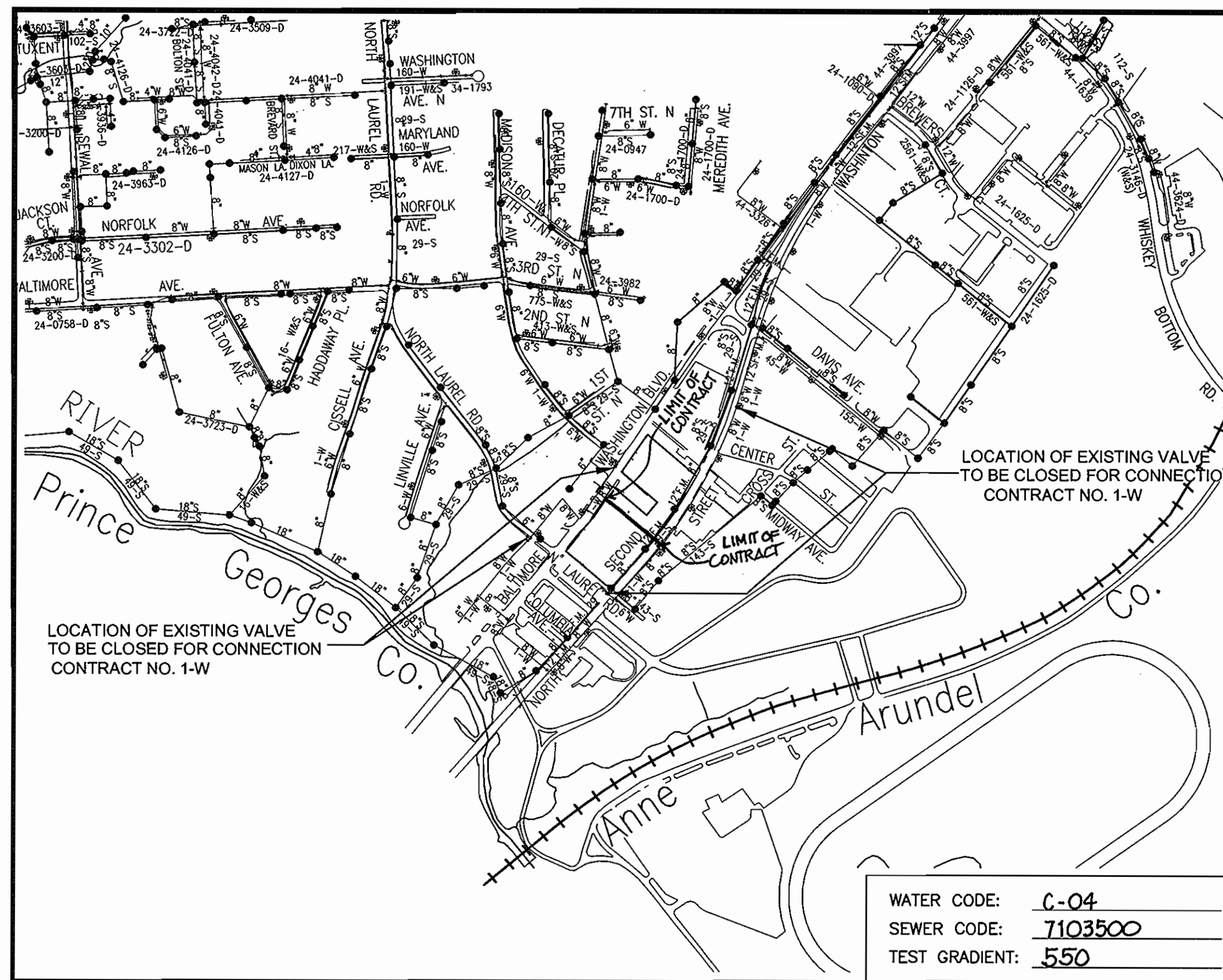
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT 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.

# ASHBURY COURTS RETAIL AND 140 APARTMENT HOUSING UNITS HOWARD COUNTY, MARYLAND CONTRACT NO. 24-4374-D



**BENCHMARK INFORMATION**

THE BEARINGS SHOWN ON THIS PLAT ARE REFERRED TO THE SYSTEM OF COORDINATES ESTABLISHED IN THE MARYLAND COORDINATE SYSTEM (NAD 83) AS PROJECTED BY THE FOLLOWING HOWARD COUNTY GEODETIC CONTROL STATIONS:  
508A (NORTH) 527,561.678 (E) 1,359,772.604 (ELEV.) 249.423'  
5085 (NORTH) 524,999.375 (EAST) 1,357,925.748 (ELEV.) 178.181'



WATER CODE: C-04  
SEWER CODE: 7103500  
TEST GRADIENT: .550

**QUANTITIES**

NAME OF UTILITY CONTRACTOR : GRADELINE CONSTRUCTION CORPORATION				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE : NOVEMBER 2007				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
WATER				
8" WATER	520 L.F.	514 L.F.	D.I.P., CL 52	GRIFFIN PIPE/BELAIR ROAD SUPPLY
8" VALVE	3 EA.	4 EA.	GATE VALVE	MUELLER CO/BELAIR ROAD SUPPLY
8"x8" TEE	1 EA.	1 EA.	MJ SIGMA	SIGMA/BELAIR ROAD SUPPLY
8" CAP AND BUTTRESS	0 EA.	—	—	—
FIRE HYDRANT	1 EA.	1 EA.	HYDRANT ORANGE	MUELLER CO/BELAIR ROAD SUPPLY
8"x6" FIREHYDRANT TS&V	1 EA.	1 EA.	MJ SIGMA	SIGMA/BELAIR ROAD SUPPLY
8"x8" TAPPING SLEEVE & VALVE	2 EA.	2 EA.	SS TAP SLEEVE	JCM INDUSTRIES/BELAIR RD. SUPPLY
8" SEWER	33 L.F.	33 L.F.	P.V.C., SDR35	JM MFG./BELAIR ROAD SUPPLY
45° V BEND	—	4 EA.	—	SIGMA/BELAIR ROAD SUPPLY
8" SLEEVE	—	4 EA.	—	SIGMA/BELAIR ROAD SUPPLY

TYPE OF BUILDING:	APARTMENTS AND RETAIL
NO. OF UNITS/PARCELS:	ONE
NO. OF WATER HOUSE CONNECTIONS:	ONE
NO. OF SEWER HOUSE CONNECTIONS:	—
DRAINAGE AREA:	LITTLE PATUXENT RIVER
TREATMENT PLANT:	ALL SAINTS ROAD

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

Approved: *John R. Blanton* 8/1/06  
Howard S.C.D. Date

Reviewed for HOWARD S.C.D. Name: *Jim Mays* Date: *11/16/07*  
USDA, NATURAL RESOURCES CONSV. SERVICE

DEVELOPER  
10071 WBO LLC  
C/O PATRIOT GROUP  
1003 K STREET, NW  
SUITE 207  
WASHINGTON, DC 20001

**AS BUILT**  
DATE: NOVEMBER 2007

SEDIMENT CONTROL - SDP-06-107

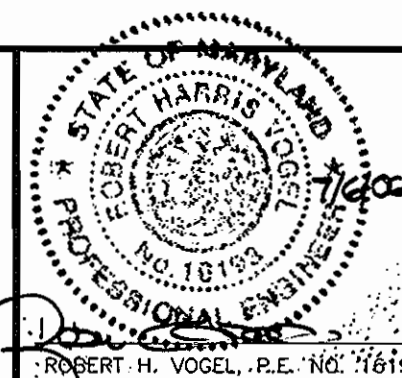
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*William J. Dammann* 8/1/06  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Robert H. Vogels* 7-31-06  
CHIEF, BUREAU OF UTILITIES DATE

**ROBERT H. VOGEL ENGINEERING, INC.**  
ENGINEERS • SURVEYORS • PLANNERS  
8407 MAIN STREET ELLICOTT CITY, MD 211043 TEL: 410.461.7666 FAX: 410.461.8961



DESIGN BY: RJ/MY				
DRAWN BY: RJ/MY				
CHECKED BY: RHV				
DATE: 05-16-2006	BY	NO	REVISION	DATE

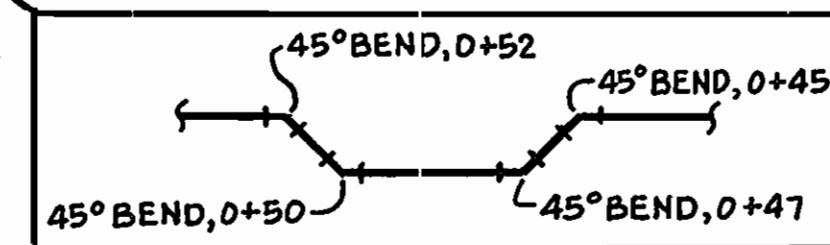
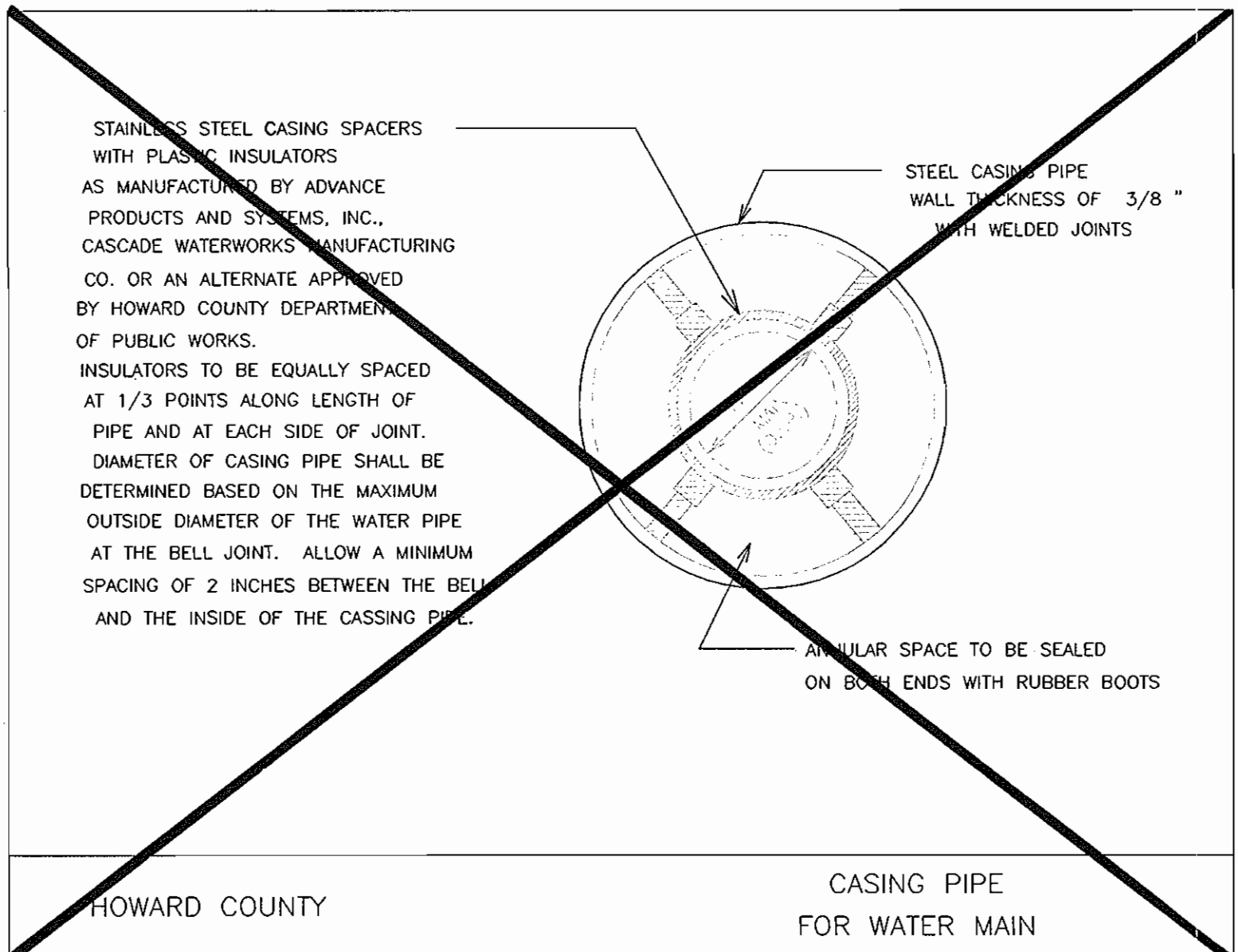
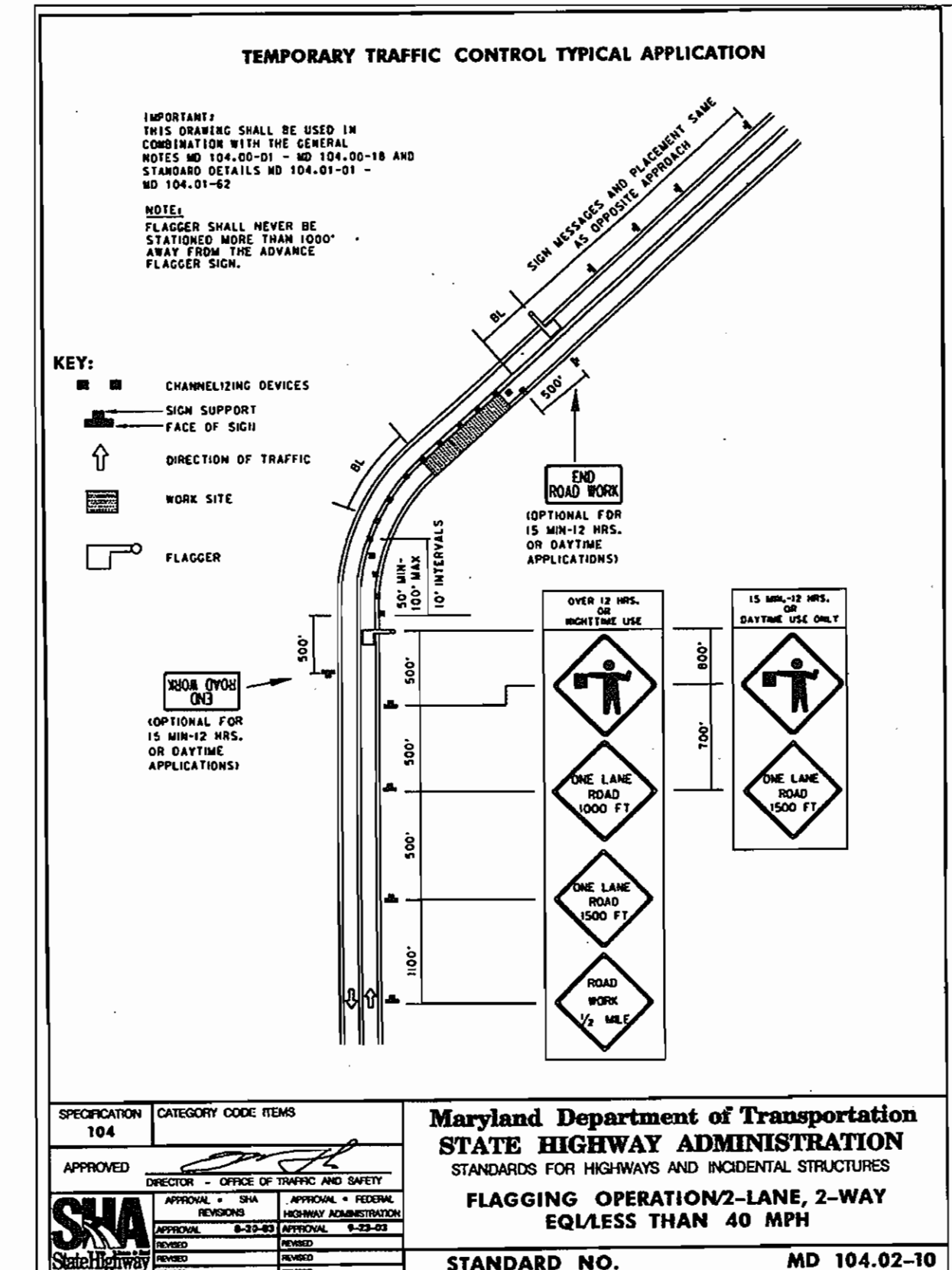
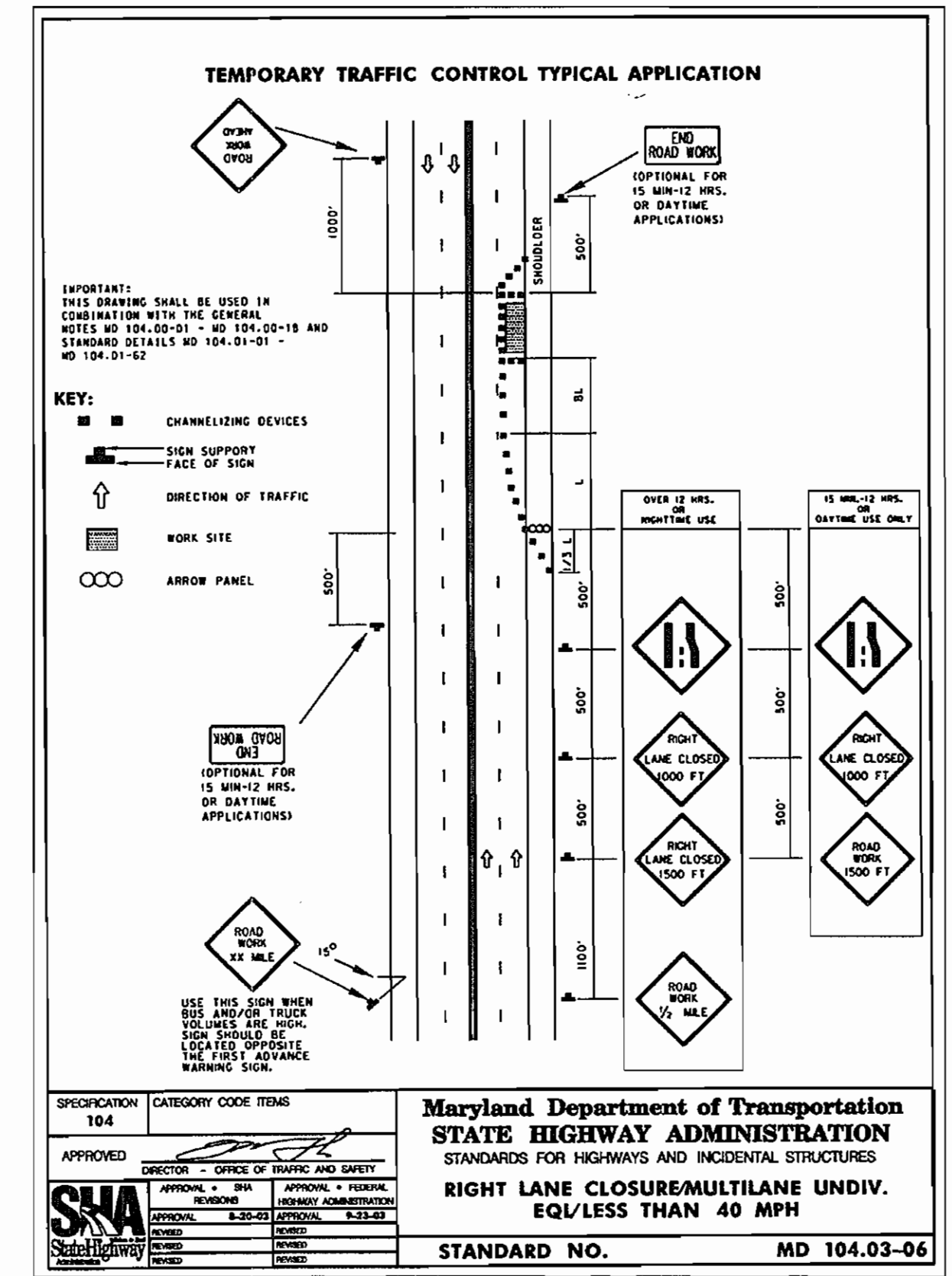
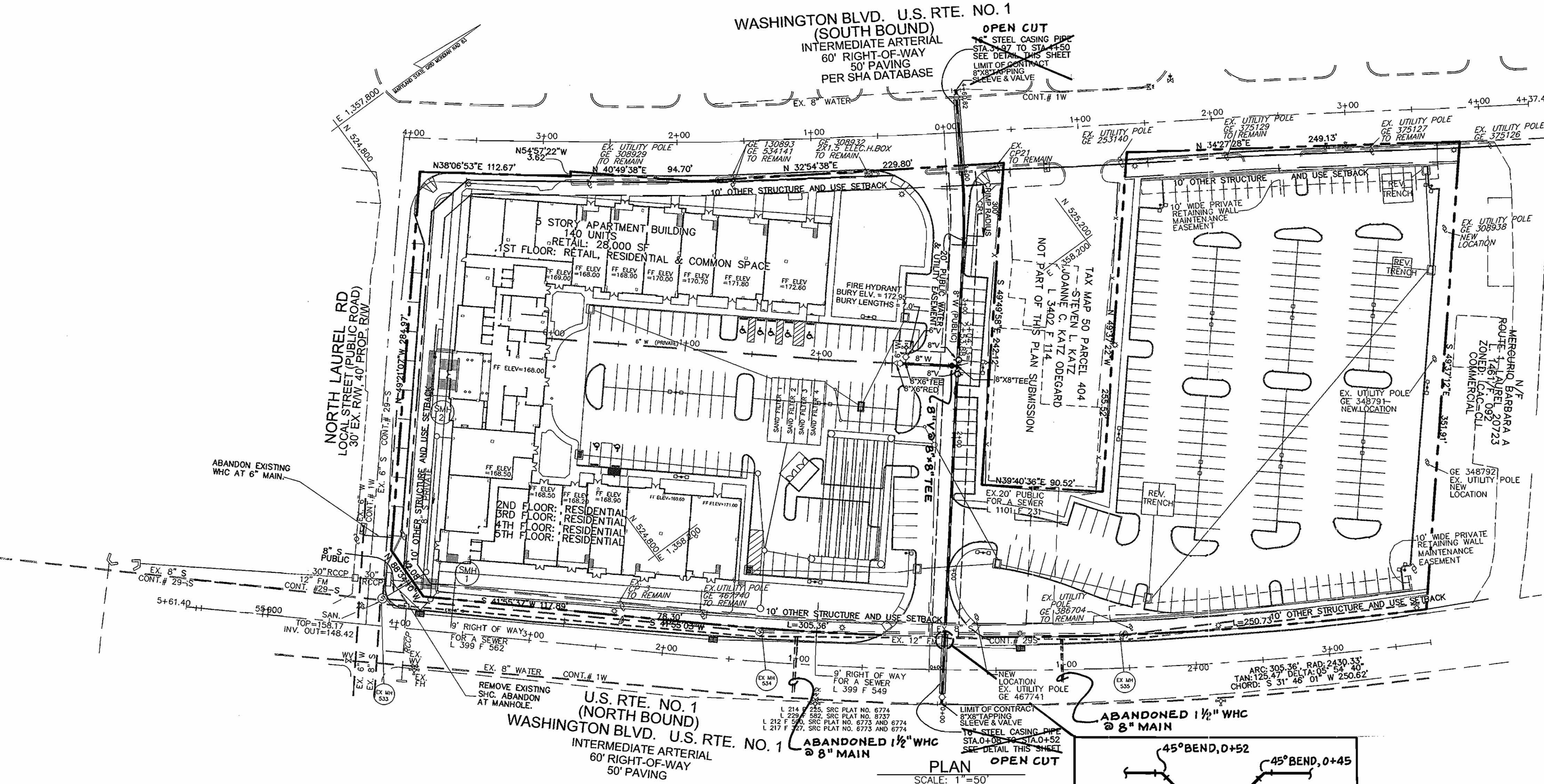
**FINAL WATER  
CONSTRUCTION PLAN**

600' SCALE MAP NO. 50 BLOCK NO. 10

**ASHBURY COURTS**  
RETAIL AND  
140 APARTMENT HOUSING UNITS  
BUILDABLE BULK PARCEL A  
CONTRACT NO. 24-4374-D

PARCEL 379, 408, 423  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 1 OF 3



- NOTES**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY.
  - THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN VICINITY OF UTILITIES.
  - BUILD ALL MANHOLES TO EXISTING GROUND OR PAVING UNLESS OTHERWISE NOTED.
  - EXISTING 12" FORCEMAIN IS CLASS 23CIP.
  - EXISTING WATER IS CIP.
  - EXISTING SEWER IS CSPX.
  - EXISTING STORM DRAIN IS RCP.

**AS BUILT**  
DATE: NOVEMBER 2007

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*[Signature]* 8/9/08  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 7-31-06  
CHIEF, BUREAU OF UTILITIES DATE

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



DESIGN BY:	DATE:	BY:	NO:	REVISION:	DATE:
RJMY	05-16-2006				
RJMY					
RHV					

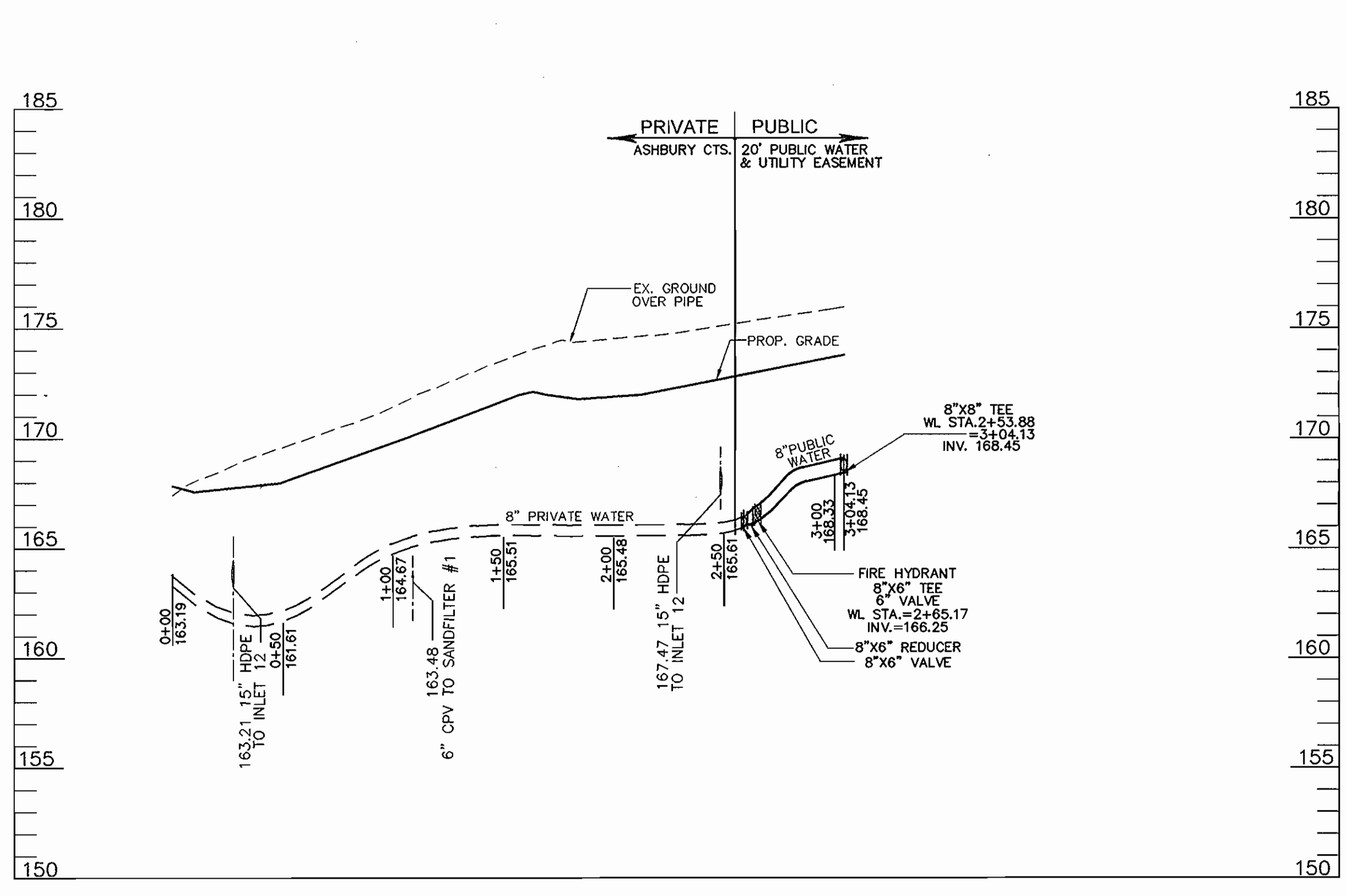
**FINAL WATER CONSTRUCTION PLAN**

600' SCALE MAP NO. 50 BLOCK NO. 10

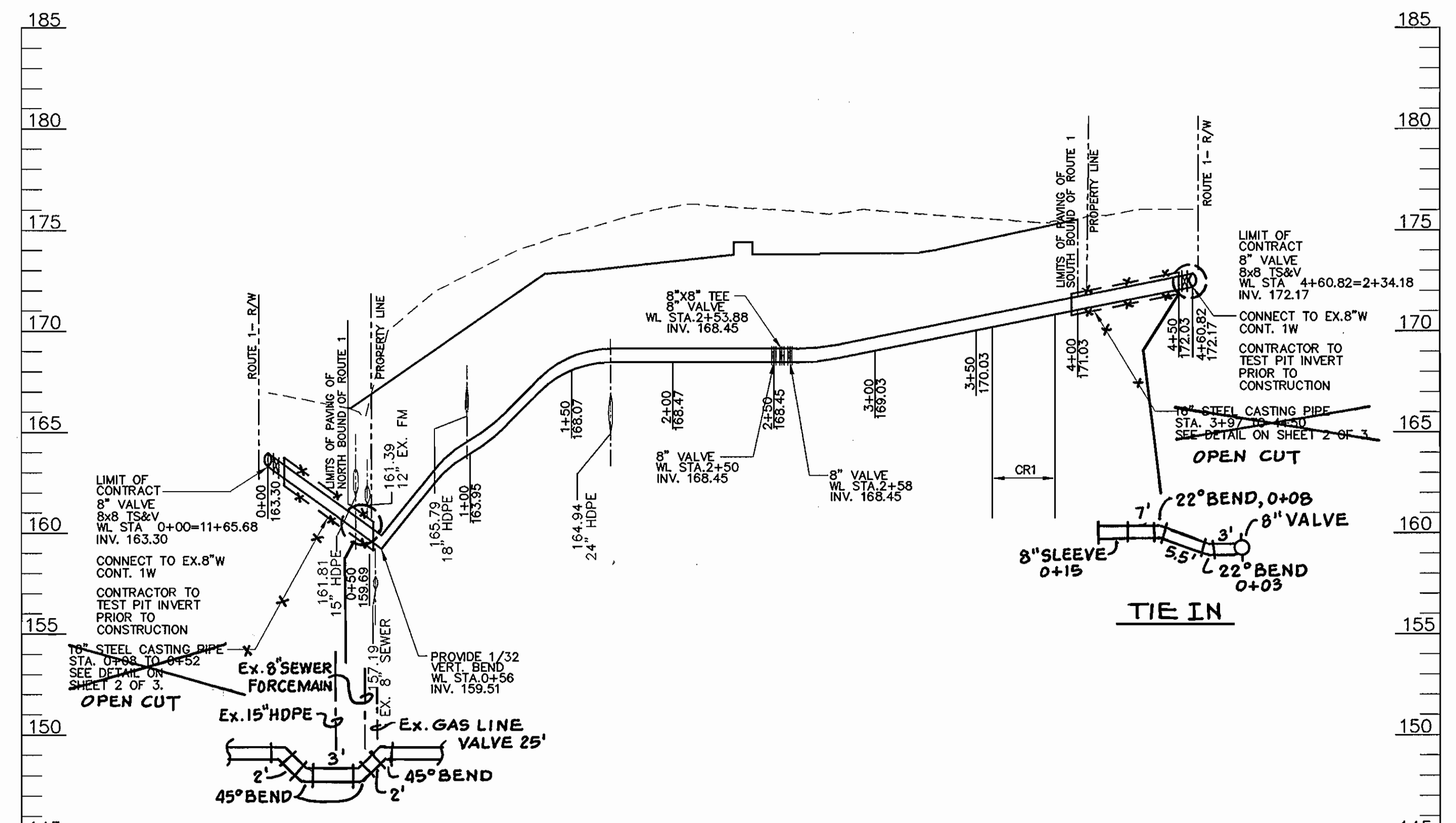
**ASHBURY COURTS**  
RETAIL AND 140 APARTMENT HOUSING UNITS  
BUILDABLE BULK PARCEL A  
CONTRACT NO. 24-4374-D

TAX MAP 50 GRID 10, 6TH ELECTION DISTRICT PARCEL 379, 408, 423 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN SHEET 2 OF 3



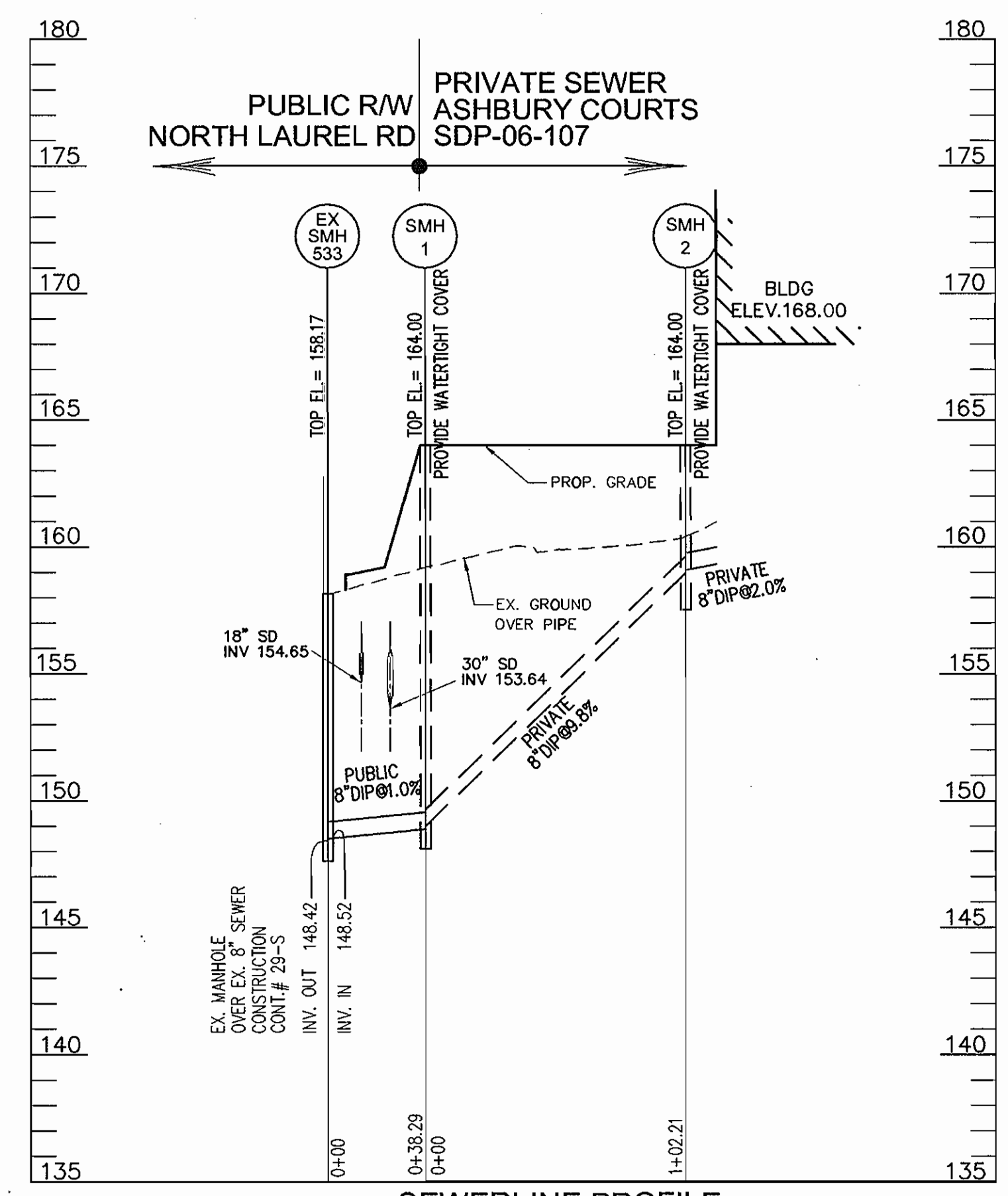
**WATERLINE PROFILE**  
SCALE: 1"=50'



**WATERLINE PROFILE**  
SCALE: 1"=50'

WATER MAIN LOCATION CHART	
WL STA.	APPURTENANCE
PUBLIC WATER EASEMENT	
WL STA. 0+00	8"X8" TAPPING SLEEVE & VALVE
WL STA. 0+56	8" 1/32 VERT. BEND
WL STA. 2+65.17	FIRE HYDRANT
WL STA. 2+63	8" VALVE
WL STA. 2+62	8"X6" REDUCER
WL STA. 1+31.40	8"X8" TEE & VALVE
WL STA. 2+46.35	8" CAP & BUTTRESS
WL STA. 4+60.82	8"X8" TAPPING SLEEVE & VALVE
WL STA. 2+53.28	8" CAP & BUTTRESS

CRIMP TABLE				
CRIMP	LENGTH	RADIUS	PC STA.	PT STA.
CR1	36.93'	300.00	3+57.83	3+88.77



**SEWERLINE PROFILE**  
SCALE: 1"=50'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]*  
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DESIGN BY: RJMY					
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DATE: 05-16-2006	BY	NO	REVISION	DATE	

DEVELOPER  
10071 WBO LLC  
C/O PATRIOT GROUP  
1003 K STREET, NW  
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**FINAL WATER CONSTRUCTION PLAN**

**ASHBURY COURTS**  
RETAIL AND 140 APARTMENT HOUSING UNITS  
BUILDABLE BULK PARCEL A  
CONTRACT NO. 24-4374-D  
TAX MAP 50 GRID 10, 6TH ELECTION DISTRICT  
PARCEL 379, 408, 423  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 3 OF 3