

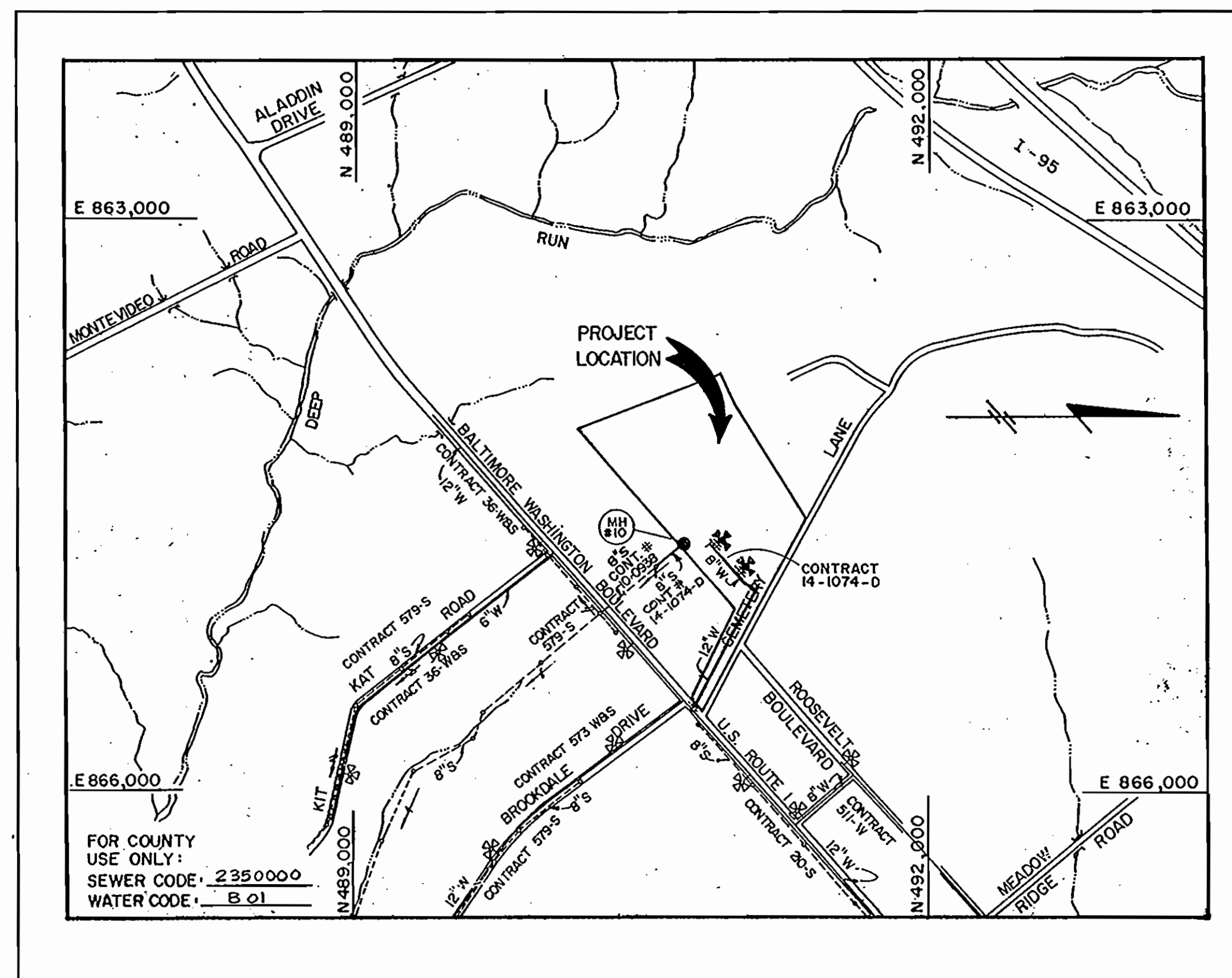
GENERAL NOTES

* CLASS 50 WAS USED FOR WATER MAINS. IN THE EVENT OF TAPPING, TAPPING SADDLES SHALL BE USED. ▲

**RECYCLING FACILITY
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS**

- ALL WATER MAIN TO BE D.R.P. UNLESS OTHERWISE SHOWN. ALL FITTINGS FOR THE 8" MAIN TO BE D.I.P. COMPACT FITTINGS (SEE NOTE NO. 24)
- TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3.5 FT. COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- BLOCK ALL FITTINGS WITH CONCRETE. SEE STANDARDS BOUND IN SPECIFICATIONS.
- BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATIONS SHOWN ON THE DRAININGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTION 1000 & 1005 OF THE STANDARD SPECIFICATIONS.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P. OR V.C.P.X. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER. AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR CONSTRUCTION OF MAIN.
- FOR DETAILS NOT SHOWN ON DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION TRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS, AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
STATE HIGHWAY ADMINISTRATION - 531-5533
BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION (CUSTOMER SERVICE 885-8123)
ENGINEERING, "DAMAGE CONTROL" - 234-5621
BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION (CUSTOMER SERVICE 885-8123)
"MISS UTILITY" - 1-553-8188
CHESAPEAKE & POTOMAC (C&P) TELEPHONE CO. - 725-9976
AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 393-3553
COLONIAL PIPELINE COMPANY - 795-1396
BUREAU OF UTILITIES HOWARD COUNTY - 313-4900
- FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- WATER MAIN AND WATER HOUSE CONNECTION LINES MUST HAVE A MINIMUM OF ONE FOOT SEPARATION FROM THE SANITARY SEWER AND SEWER HOUSE CONNECTIONS AS THEY CROSS EXCEPT AT CROSSINGS. WATER AND SEWER LINES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 18".
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWA SPECIFICATIONS C-153 DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- ALL MANHOLES DESIGNATED "W.T." IN PROFILE SHALL HAVE WATERTIGHT FRAMES & COVERS STANDARD DETAIL # 5.52. WHERE W.T. MANHOLE FRAME & COVER REQUIRED. SET UP TOP OF FRAME 1'-0" ALONG FINISHED GRADE UNLESS OTHERWISE NOTED.

QUANTITIES				
ITEM	UNIT	ESTIMATED	AS BUILT	MATERIAL/SUPPLIER
8" Sewer	L.F.	12		
Manhole	NO.			
* 8" Water	L.F.	480	467.5	CLASS 50 D.I.P. ATLANTIC STATES
* 6" Water	L.F.		8.0	CLASS 50 D.I.P. ATLANTIC STATES
8" Valve	NOS.	1	1	MUELLER
6" Valve (Excluding F.H. Valves)	NO.	1	1	MUELLER
Fire Hydrant	NO.	1		
Air Release Manhole	NO.			



LOCATION PLAN

SCALE: 1" = 600'

TYPE OF BUILDINGS	RECYCLING FACILITY
NUMBER OF LOTS	1
NUMBER OF WATER HOUSE CONNECTIONS	1
NUMBER OF SEWER HOUSE CONNECTIONS	1
DRAINAGE AREA	PATAPSCO

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION-15 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARD SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS. SDP # 91-50

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

James M. Nelson 4/4/91
S. Soil Conservation District

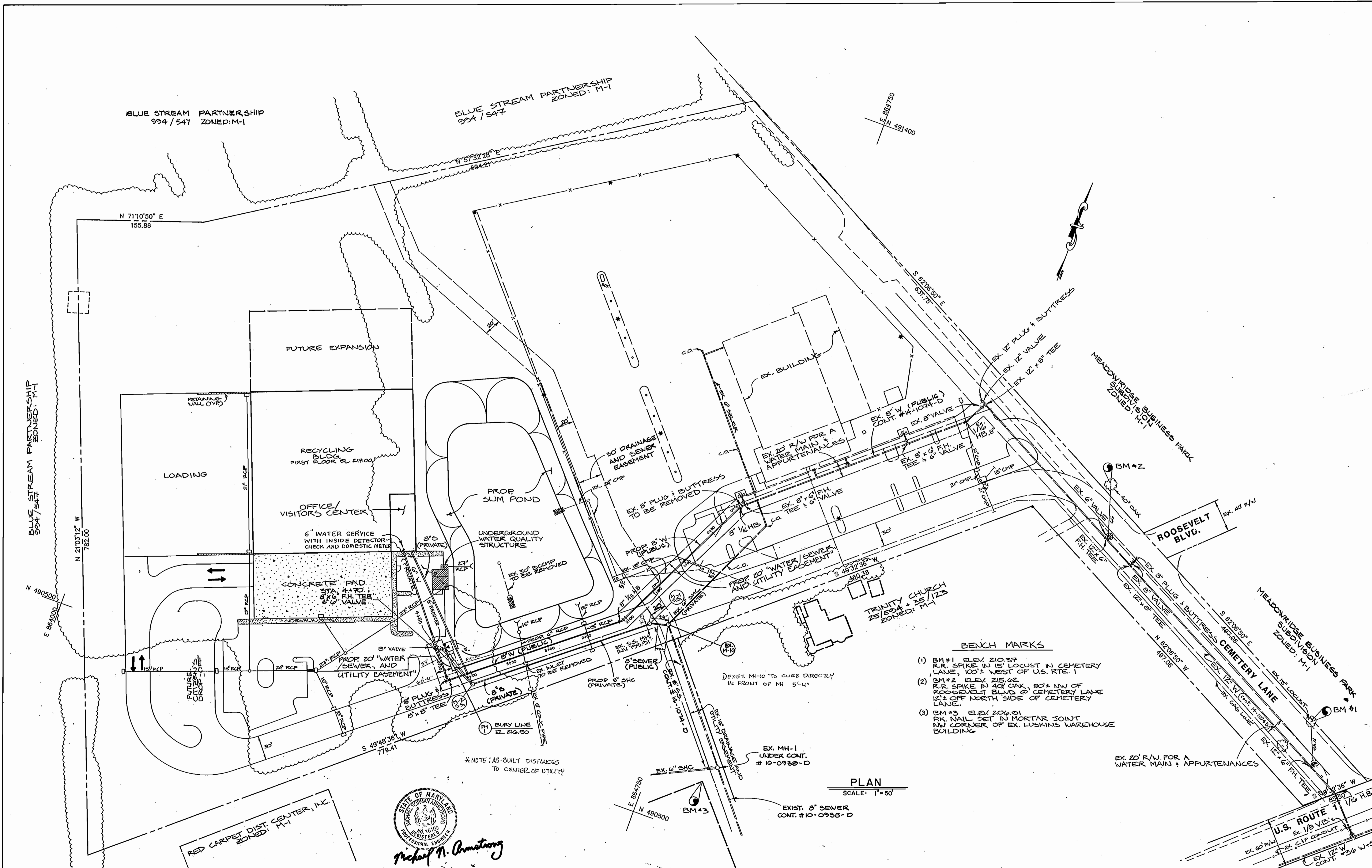
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

John L. Robertson 4/4/91
Howard Soil Conservation District



Michael N. Ammons

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>James M. Nelson</i> 4/4/91 DIRECTOR OF PUBLIC WORKS <i>Robert B. Reisinger</i> 4-8-91 CHIEF, BUREAU OF UTILITIES	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS 3458 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MD. 21043 (301) 481-9920	CONTRACT NO. 14 - 3114 - D	DES:	MCK	▲	ADDED CLASS 50 NOTES	1-17-91	TITLE SHEET WATER AND SEWER MAINS	RECYCLING FACILITY 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND TAX MAP : 43 PARCEL : 599 & 624 BLOCK : 4	SCALE AS SHOWN SHEET 1 OF 3
			DRN:							
			CHK:							
			DATE:	BY	NO.	REVISION	DATE	600 SCALE MAP NO 43	BLOCK NO. 4	



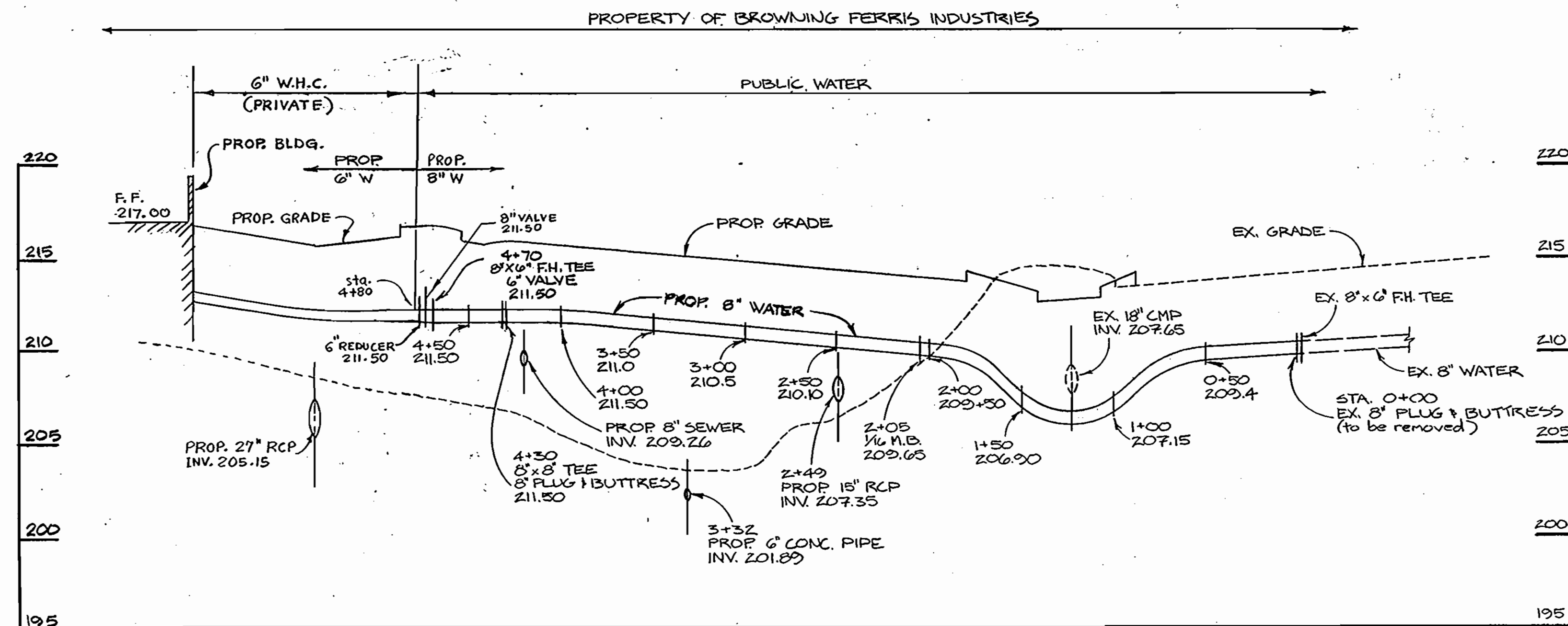
- BENCH MARKS**
- BM #1 ELEV. 210.37
R.R. SPIKE IN 15' LOCUST IN CEMETERY LANE, 100' WEST OF U.S. RTE. 1
 - BM #2 ELEV. 215.02
R.R. SPIKE IN 40' OAK, 80' NW OF ROOSEVELT BLVD & CEMETERY LANE 12' OFF NORTH SIDE OF CEMETERY LANE.
 - BM #3 ELEV. 206.91
PK. NAIL SET IN MORTAR JOINT NW CORNER OF EX. LUSKINS WAREHOUSE BUILDING

PLAN
SCALE: 1" = 50'

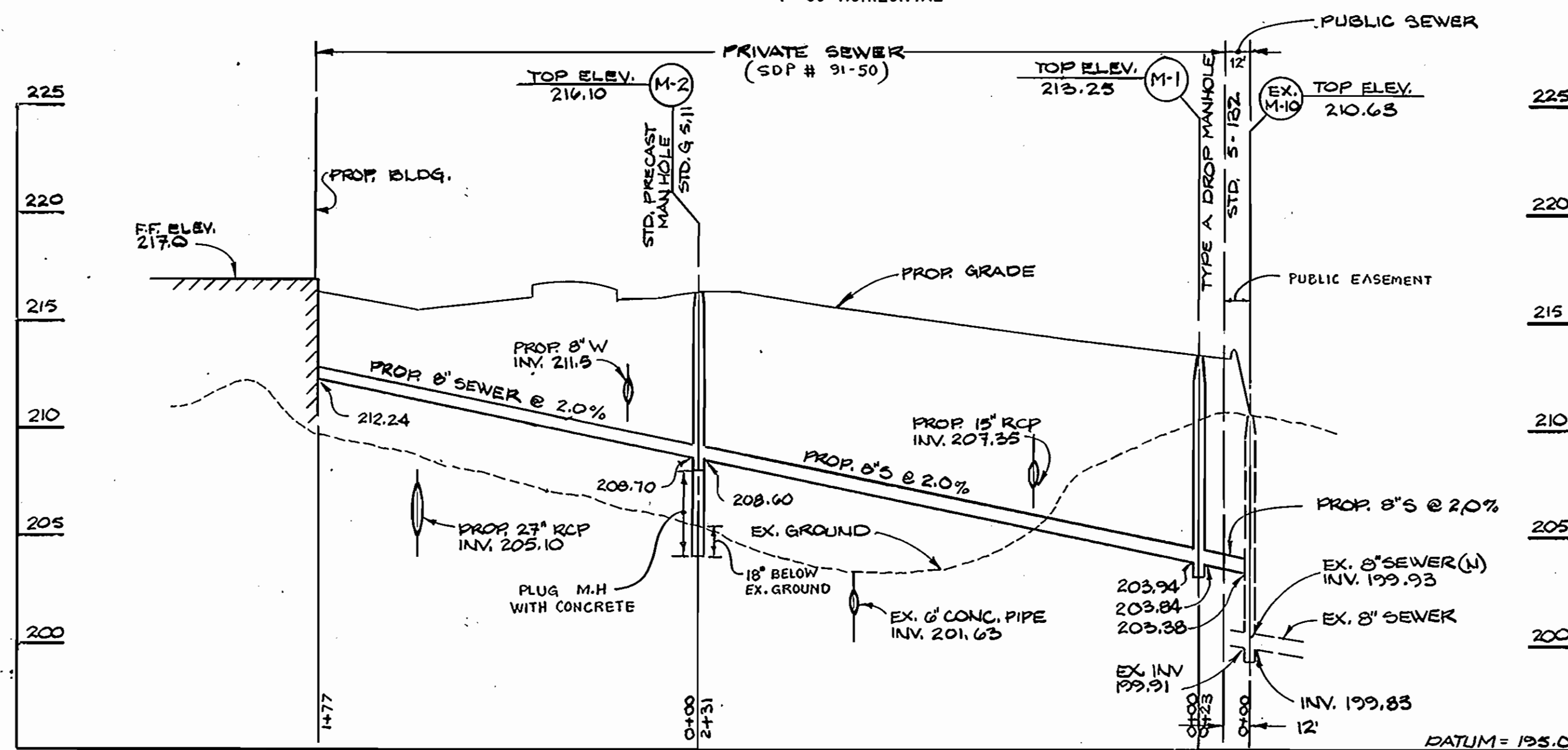
STATE OF MARYLAND
MICHAEL B. ARMSTRONG
REGISTERED PROFESSIONAL ENGINEER
No. 16100
ELICOTT CITY, MD. 21043
(301) 481-9920

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>James P. Ryan</i> 4-8-91 Chief, Bureau of Engineering: <i>Richard M. Armstrong</i> 4-8-91 Chief, Bureau of Utilities: <i>Robert M. Ryan</i> 4-8-91 Chief, Land Development Division: <i>William J. Ryan</i> 4-8-91		ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS 3458 ELLICOTT CENTER DRIVE, SUITE 101 ELICOTT CITY, MD. 21043 (301) 481-9920		CONTRACT NO. 14-3114-D		DES: _____ DRN: _____ CHK: _____ DATE: _____		PLAN WATER AND SEWER MAINS 600' SCALE MAP NO. 43 BLOCK NO. 4		RECYCLING FACILITY 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND TAX MAP: 43 PARCEL: 599 & 624 BLOCK: 4		SCALE AS SHOWN SHEET 2 OF 3
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AS-BUILT 12-10-91



WATER PROFILE
SCALE: 1" = 5' VERTICAL
1" = 50' HORIZONTAL



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



Michael A. Armstrong

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. ...
DIRECTOR OF PUBLIC WORKS
DATE 4-8-91

Michael A. Armstrong
CHIEF, BUREAU OF ENGINEERING
DATE 4/1/91

John ...
CHIEF, LAND DEVELOPMENT DIVISION
DATE 4/1/91

ENGINEERING TECHNOLOGIES
ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS
3438 ELLICOTT CENTER DRIVE SUITE 101
ELICOTT CITY, MD 21043
(301) 481-1992

CONTRACT NO.
14-3114-D

DES:					
DRN:	3-4-P				
CHK:					
DATE:					
BY:		NO.		REVISION	DATE

PROFILE
WATER AND SEWER MAINS

600' SCALE MAP NO. 43 BLOCK NO. 4

RECYCLING FACILITY
1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TAX MAP : 43 PARCEL : 599 & 624 BLOCK : 4

SCALE AS SHOWN
SHEET 3 OF 3