

RIVERS CORPORATE PARK

SECTION 1, AREA 2

CONTRACT NO. 34-1146-D

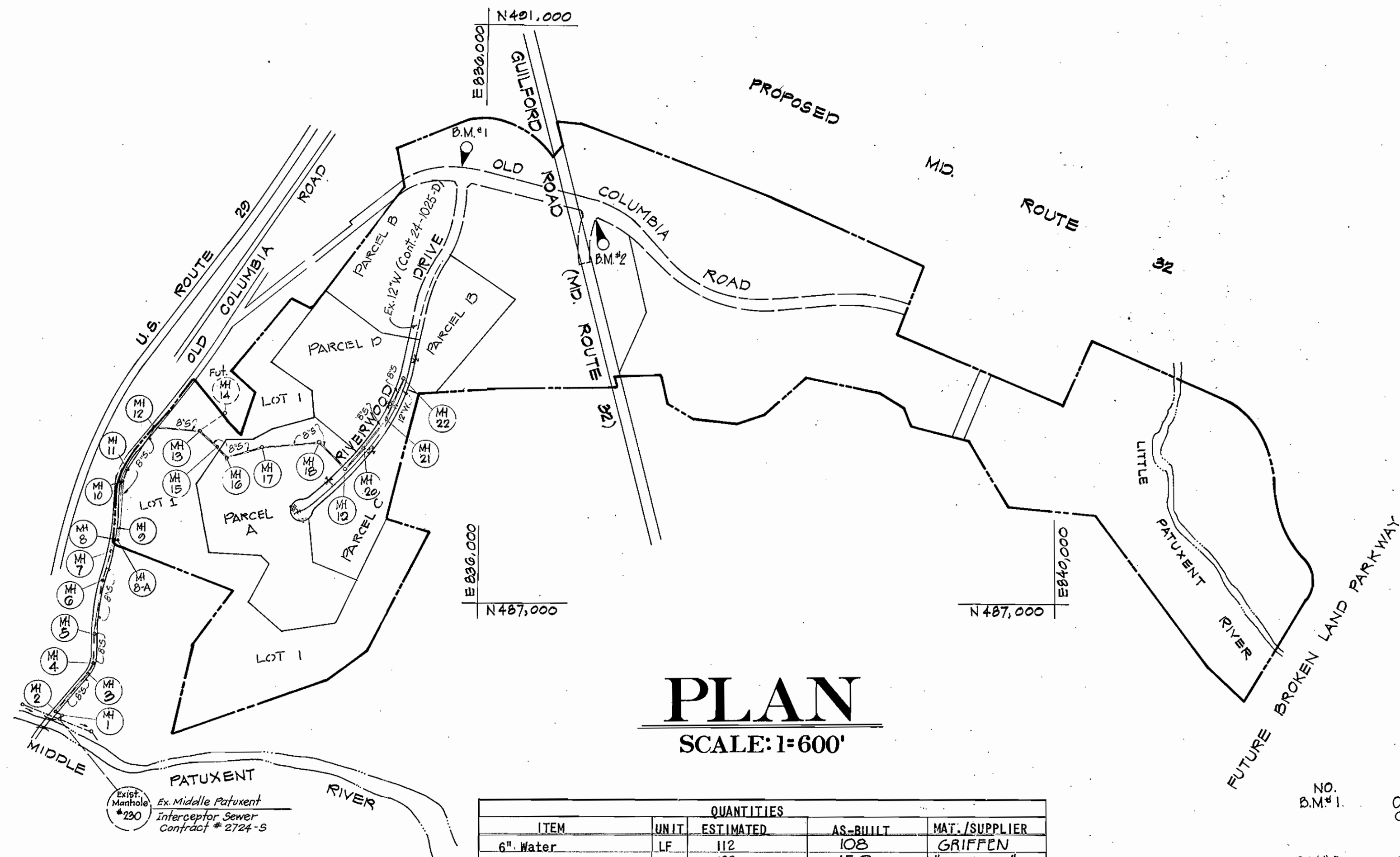
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

GENERAL NOTES

- APPROXIMATE LOCATION 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 EXCAVATION AND BACKFILL.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
- FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- 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.
- 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
 - BALTO. GAS & ELECTRIC CO. (Underground Electric Distribution) Customer Service 685-0123
 - BALTO. GAS & ELECTRIC CO. (Underground Gas Distribution) Customer Service 685-0123
 - ENGINEERING "DAMAGE CONTROL"..... 234-5621
 - "MISS UTILITY"..... (1) 559-0100
 - CHESAPEAKE AND POTOMAC (C & P) TELEPHONE COMPANY 725-3976
 - AMERICAN TELEPHONE AND TELEGRAPH Cable Location Division 393-3553
 - COLONIAL PIPELINE COMPANY 781-4641
 - BUREAU OF UTILITIES HOWARD COUNTY..... 992-2366
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EXCAVATION AND BACKFILL.
- PLACE REGULATION "MEN WORKING" SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- ALL WATER MAINS TO BE C.I.P. OR D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2 FT. COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- BLOCK ALL FITTINGS WITH CONCRETE.
- BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STD. DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTIONS 10-03.40 OF THE STD 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.

GENERAL NOTES: (Continued)

- ALL SEWER MAINS SHALL BE C.S.P.X., V.C.P.X., P.V.C., OR A.C.P. CLASS 2400 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.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STD. DETAIL G.5.92 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED. SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
- WHERE SEWER DEPTH EXCEEDS 12 FT. USE CLASS 3300 A.C.P.
- THE TOP ELEVATION OF ALL OUTFALL MANHOLES SHOULD BE SET A MINIMUM OF 18" ABOVE EXISTING GROUND AS SHOWN ON STD. DETAIL G.5.41
- ALL PVC PIPE IS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S AND HOWARD COUNTY SPECIFICATIONS.
- WATERMAIN AND WATERHOUSE CONNECTIONS MUST HAVE AT LEAST ONE FOOT SEPARATION FROM THE SEWER MAIN AND SEWER HOUSE CONNECTION AS THEY PASS ABOVE IT.



PLAN

SCALE: 1"=600'

ITEM	UNIT	QUANTITIES		MAT. SUPPLIER
		ESTIMATED	AS-BUILT	
6" Water	LF	112	108	GRIFFEN
8" Water	LF	126	150	"
12" Water	LF	1467	1474	"
12" Valves	Ea.	1	1	Dresser
Fire Hydrant	Ea.	5	5	"
8" Valves	Ea.	4	4	"
Manholes	Ea.	23	22	Atlantic Pre.
8" Sewer	LF	4,555	434	American Paper PLASTIC PVC

NO.	DESCRIPTION	ELEVATION
B.M.#1	OLD COLUMBIA RD. STA. 81+20 30' LT. CONC. MON. 2840 N 489908.22 E 835943.93	TOP EL. 392.27
B.M.#2	OLD COLUMBIA RD. STA. 90+70 34' RT. CONC. MON. 1386 N 489553.51 E 836824.07	TOP EL. 364.41

WATER & SEWER CODE

Sewer Code	6440000
Water Code	EIG

Type of Buildings	Industrial
No. of Lots	1
No. of Water Connections	4
No. of Sewer Connections	9
Drainage Area	Little Patuxent

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

Signature: *John W. Stahl* Date: 8-7-84
U.S. SOIL CONSERVATION SERVICE

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

APPROVED: *Robert W. Ziehm* Date: 8-7-84
HOWARD S.C.D.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE 15 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS F-84-02

Date	No.	Revision Description
3/5/85	4	ADD PARCELS TO VICINITY PLAN
11/19/84	3	Deleted MH, 23, 24 & 25 and 8" Sewer between (Sh 3)
9-27-84	2	Revised Sheets 4+5
9-28-83	1	HOWARD COUNTY COMMENTS



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

William F. Neuman 8-21-84
DIRECTOR OF PUBLIC WORKS - DATE

Robert W. Ziehm 8-24-84
CHIEF - BUREAU OF UTILITIES - DATE

William S. P... 8/2/84
CHIEF - BUREAU OF ENGINEERING - DATE

Michael R. ...
CHIEF - LAND DEVELOPMENT DIVISION - DATE

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
TOWSON, MARYLAND 21204

CONTRACT NO. 34-1146 D

TITLE SHEET

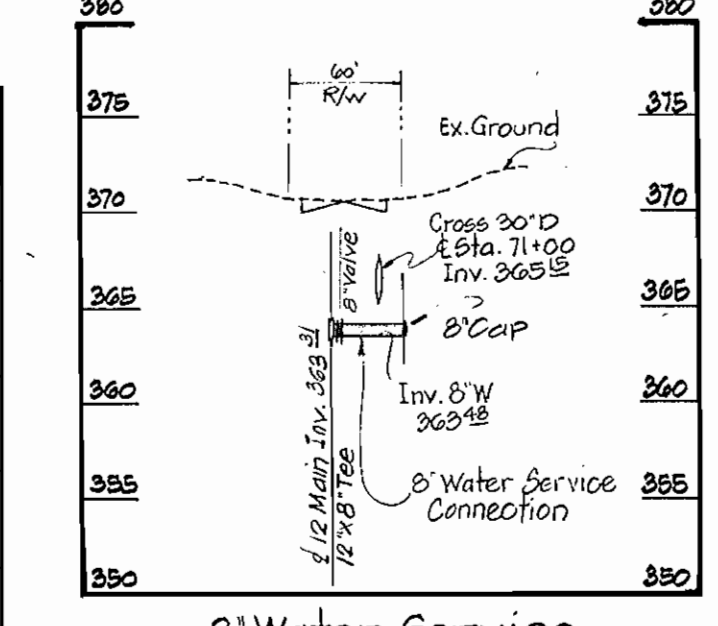
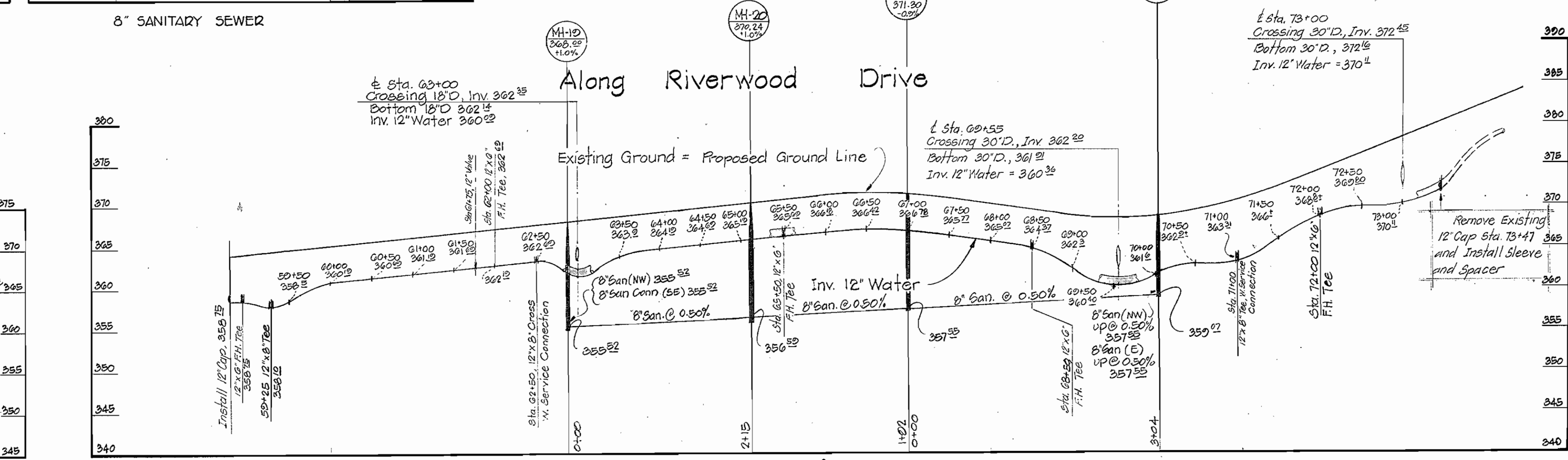
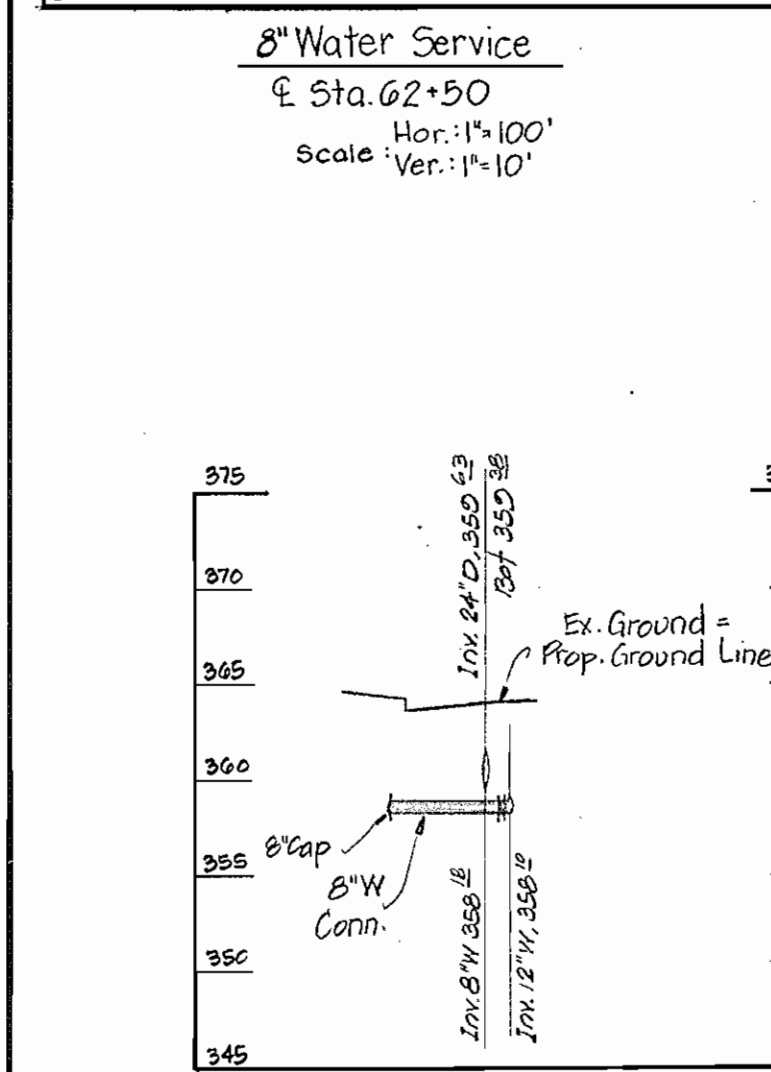
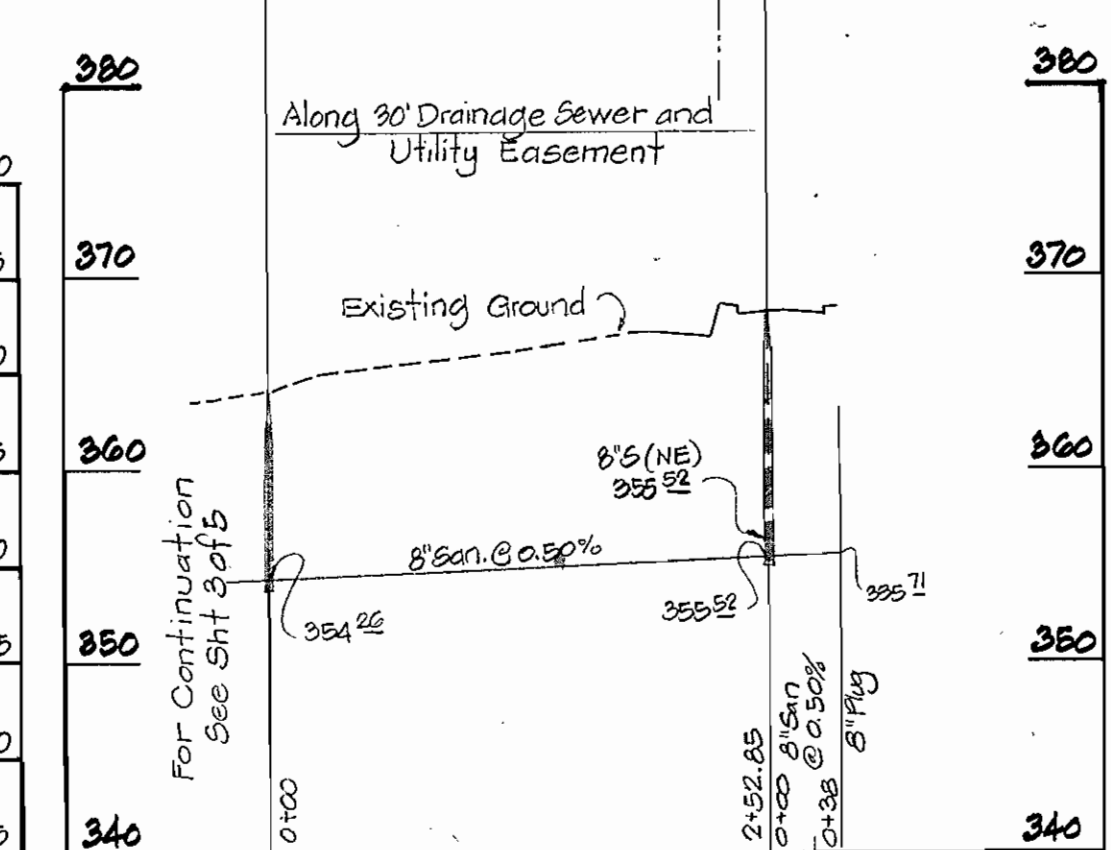
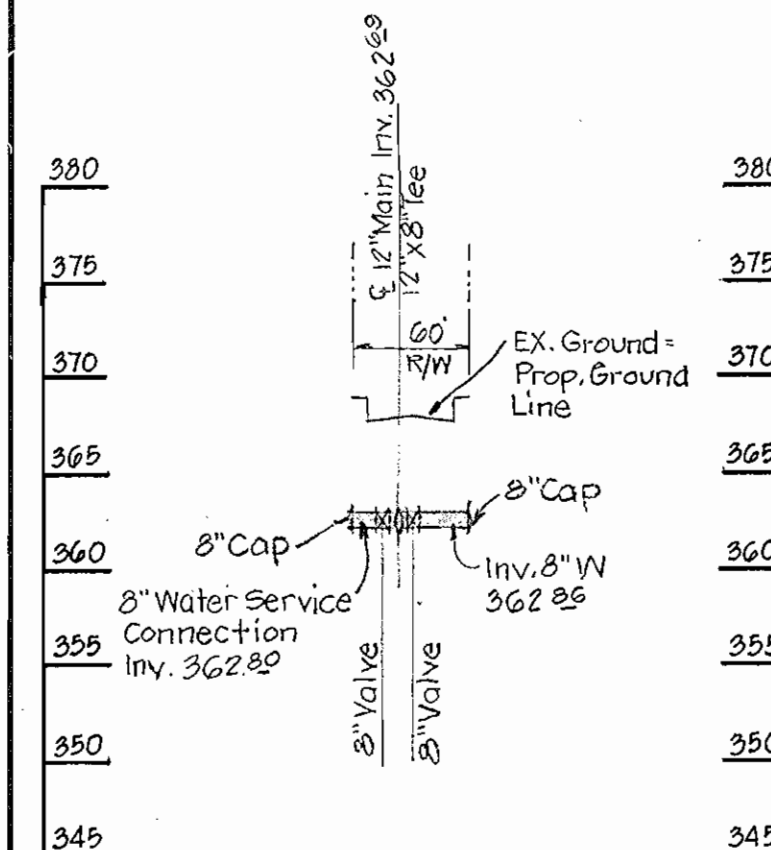
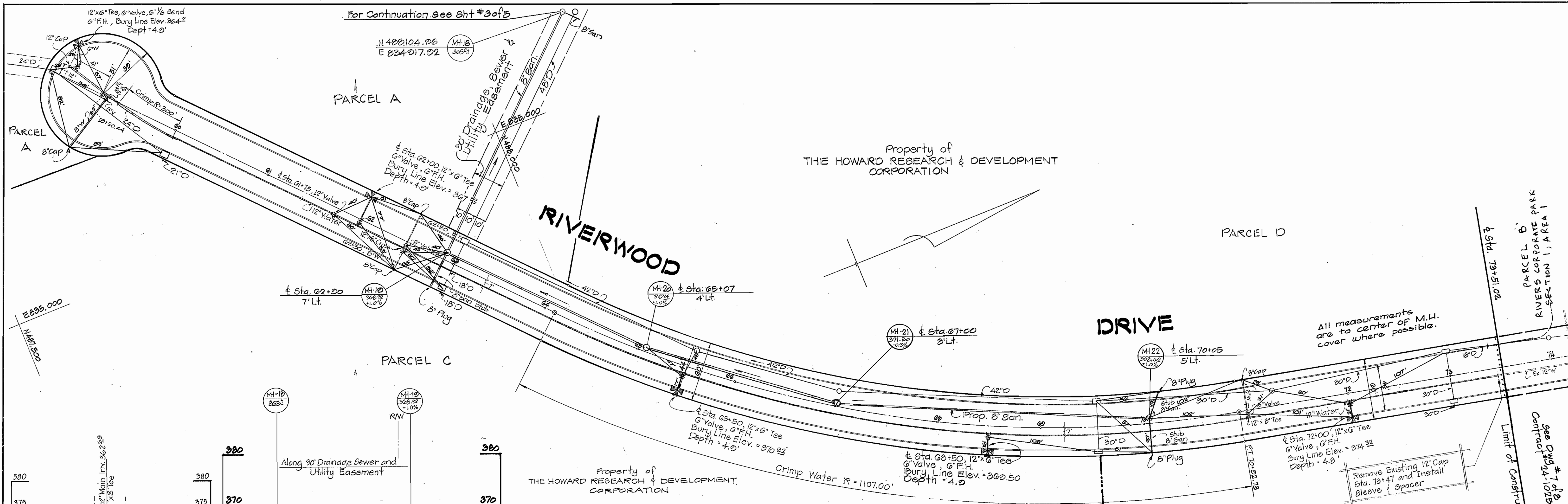
RIVERS CORPORATE PARK
SECTION 1, AREA 2

6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

DRAWING NO. 1 OF 5	SCALE As Shown
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1146/1 WS



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

JOHN E. NUNIS 8-27-84
DIRECTOR OF PUBLIC WORKS DATE

ROBERT W. BESSNER 8-29-84
CHIEF - BUREAU OF UTILITIES DATE

KEVIN S. PERRY 8-27-84
CHIEF - BUREAU OF ENGINEERING DATE

WILLIAM H. PERRY 8-29-84
CHIEF - LAND DEVELOPMENT DIVISION DATE

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
TOWSON, MARYLAND 21204

CONTRACT NO. 34-1146 D

PLAN AND PROFILE
OF
WATER AND SEWER MAINS

RIVERS BUSINESS PARK
SECTION I, AREA 2
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

DATE 8-15-83

STATE OF MARYLAND
GREGORY R. HALL
REGISTERED PROFESSIONAL ENGINEER

Date	No.	Revision Description
3-5-85	2	ADD PARCEL Nos. TO PLAN
3-21-84	1	H.R.D. COMMENTS
9-28-83	1	ADDED 8" WATER SERVICE @ STA. 62+50 AND FLOW DIRECTIONAL ARROWS

Revision Description

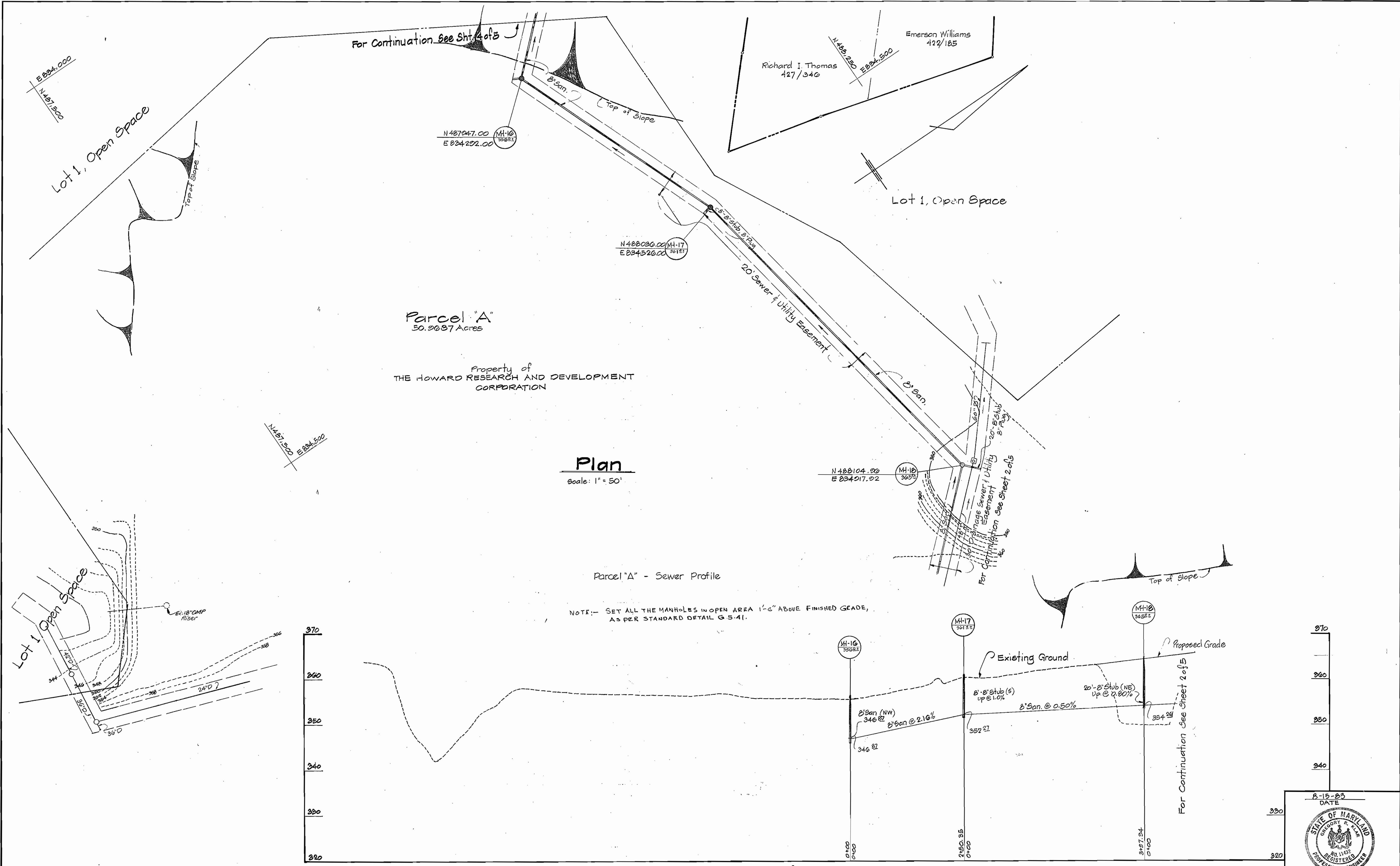
DATE

NO.

OF 5

SCALE

1146/2 WS



1146/3 WS

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert F. Manning 8-27-84
DIRECTOR OF PUBLIC WORKS - DATE

William D. Reddy 8/27/84
CHIEF - BUREAU OF ENGINEERING - DATE

Robert W. Bennett 8-29-84
CHIEF - BUREAU OF UTILITIES - DATE

William D. Reddy
CHIEF - LAND DEVELOPMENT DIVISION - DATE

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
TOWSON, MARYLAND 21204

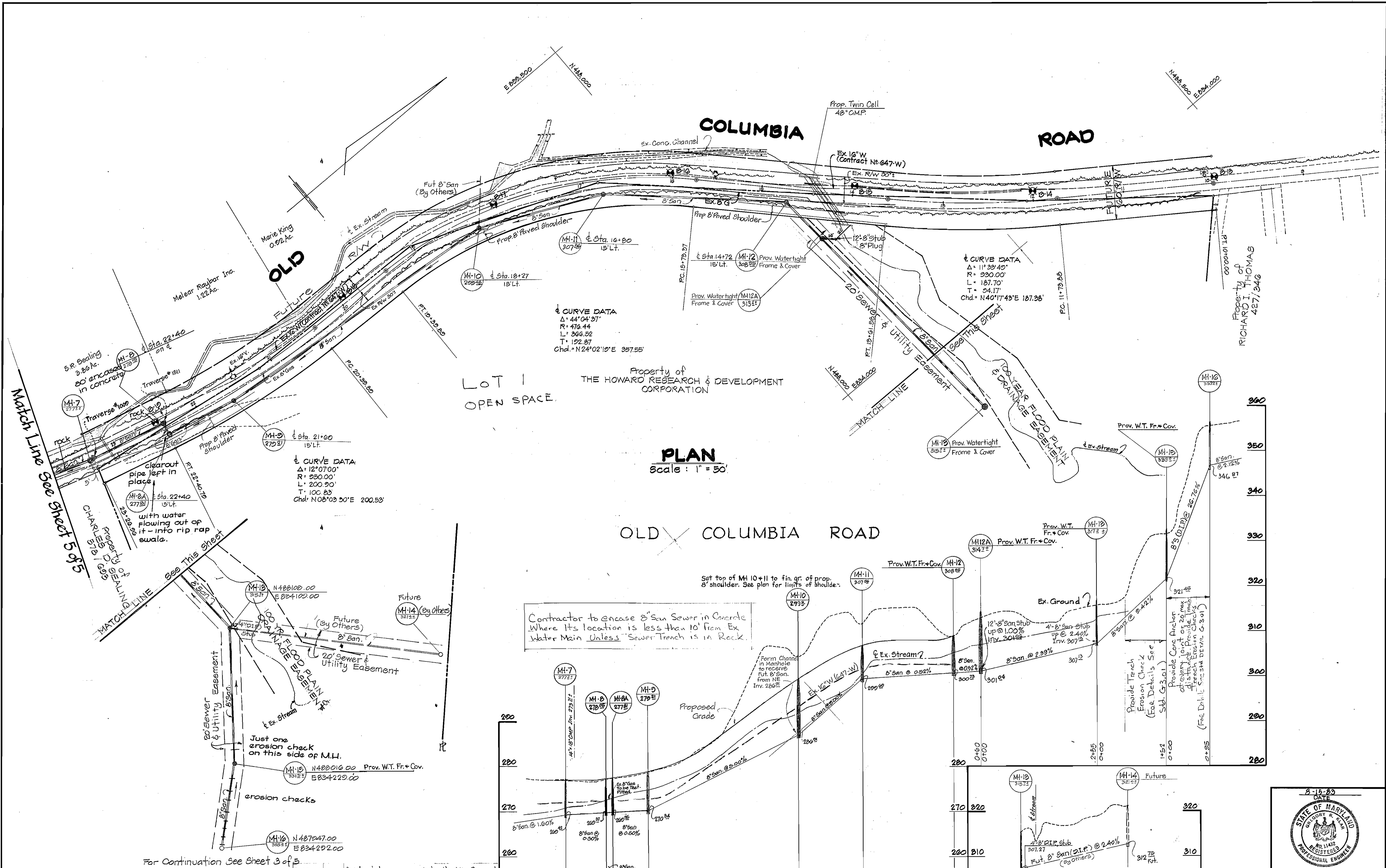
CONTRACT NO. 34-1146 D

RIVERS CORPORATE PARK
SECTION 1, AREA 2
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

DATE: 8-15-83
DRAWING NO. 3 OF 5
SCALE: As Shown

Date	No.	Revision Description
9-28-83	1	HOWARD COUNTY COMMENTS





PLAN
Scale: 1" = 50'

Set top of MH 10+11 to fin. gr. of prop. 8" shoulder. See plan for limits of shoulder.

Contractor to encase 8" San Sewer in Concrete Where Its location is less than 10' from Ex Water Main Unless Sewer Trench is in Rock.

PROFILE
Scale: Hor: 1"=100'
Vert: 1"=10'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *Robert M. Benjamin* 8-24-84
Chief - Bureau of Utilities

Chief - Bureau of Engineering: *William H. ...*
Chief - Land Development Division

Date	No.	Revision Description
9-27-84	2	Add Notes per State Health Councils
9-28-83	1	ADDED MH-12A AND FLOW DIRECTIONAL ARROWS

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
TOWSON, MARYLAND 21204

CONTRACT NO. 34-1146 D

RIVERS CORPORATE PARK
SECTION 1, AREA 2
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

DRAWING NO. 4 OF 5

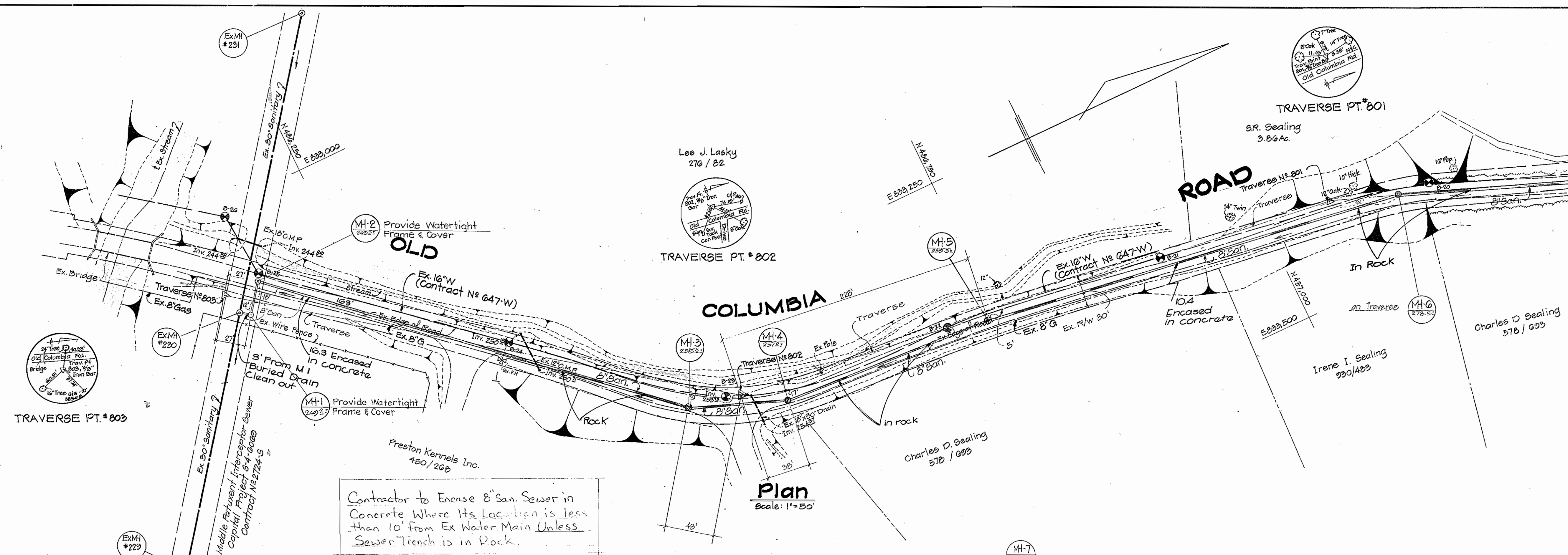
SCALE

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER

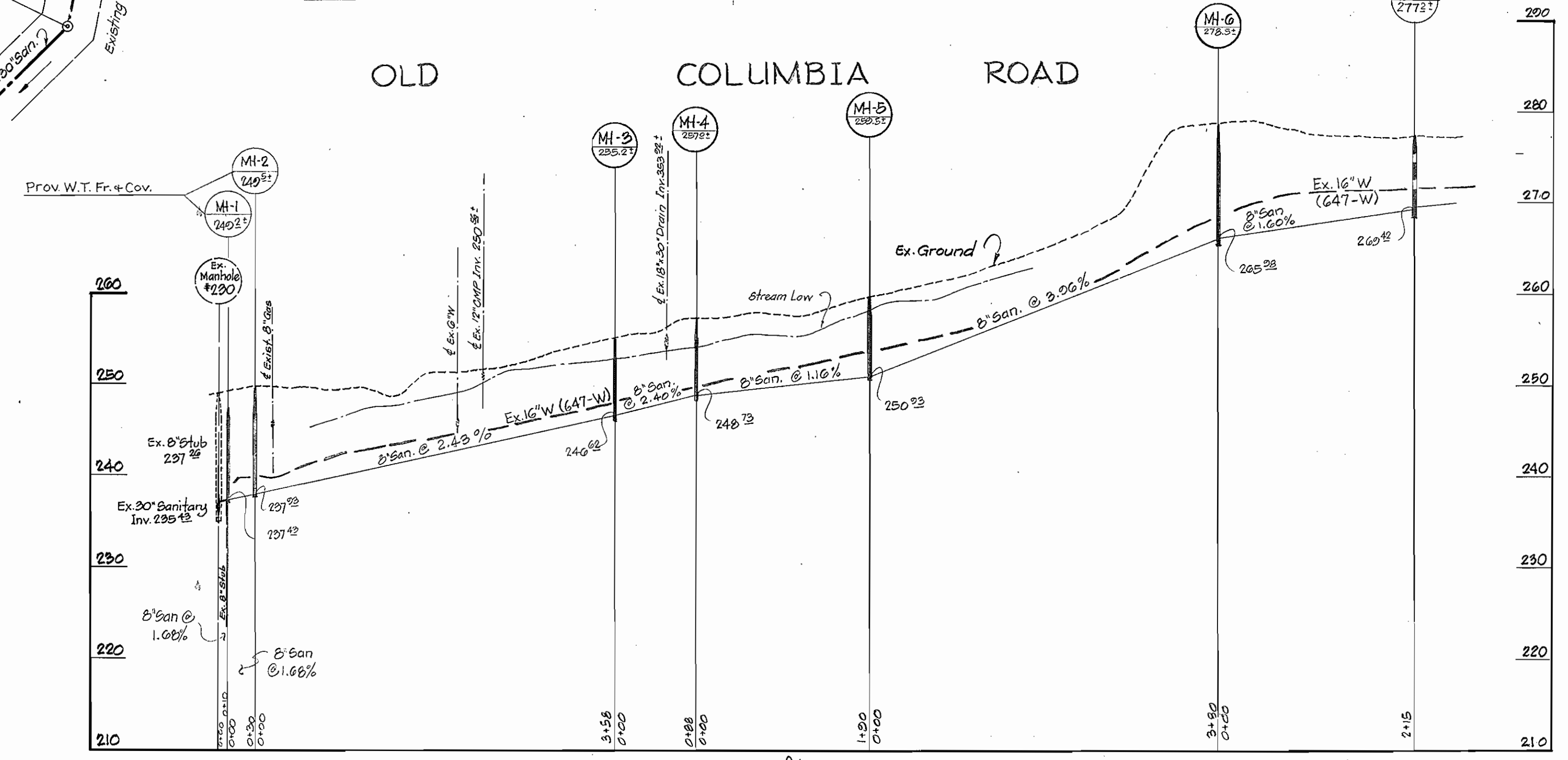
Joseph R. ...

1146/4 WS

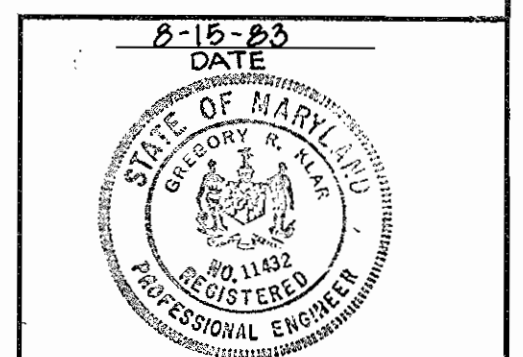
Match Line See Sheet 4 of 5



Contractor to Encase 8" San. Sewer in Concrete Where Its Location is less than 10' from Ex. Water Main Unless Sewer Trench is in Rock.



Profile
Scale: Hor. 1"=100'
Vert. 1"=10'



Date	No.	Revision Description
9-27-84	2	Add Note per State Health Comments
9-28-83	1	HOWARD COUNTY COMMENTS

Gregory R. Star

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John F. Williams 5-27-84
DIRECTOR OF PUBLIC WORKS - DATE

Robert W. Brunner 8-24-84
CHIEF - BUREAU OF UTILITIES - DATE

Richard E. Olan
CHIEF - BUREAU OF ENGINEERING - DATE

Michael H. P. ...
CHIEF - LAND DEVELOPMENT DIVISION - DATE

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CONSULTING ENGINEERS - PLANNERS
TOWSON, MARYLAND 21204

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RIVERS CORPORATE PARK
SECTION I, AREA 2
6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

DRAWING NO. 5 OF 5
SCALE As Shown

1146/5 WS