

# WATER AND SEWER EXTENSIONS

## VILLAGE OF RIVER HILL

### SECTION 2 AREA 4

#### 5th ELECTION DISTRICT

#### HOWARD COUNTY, MARYLAND

#### CONTRACT NO. 34-3356-D

AS-BUILT  
2-22-96

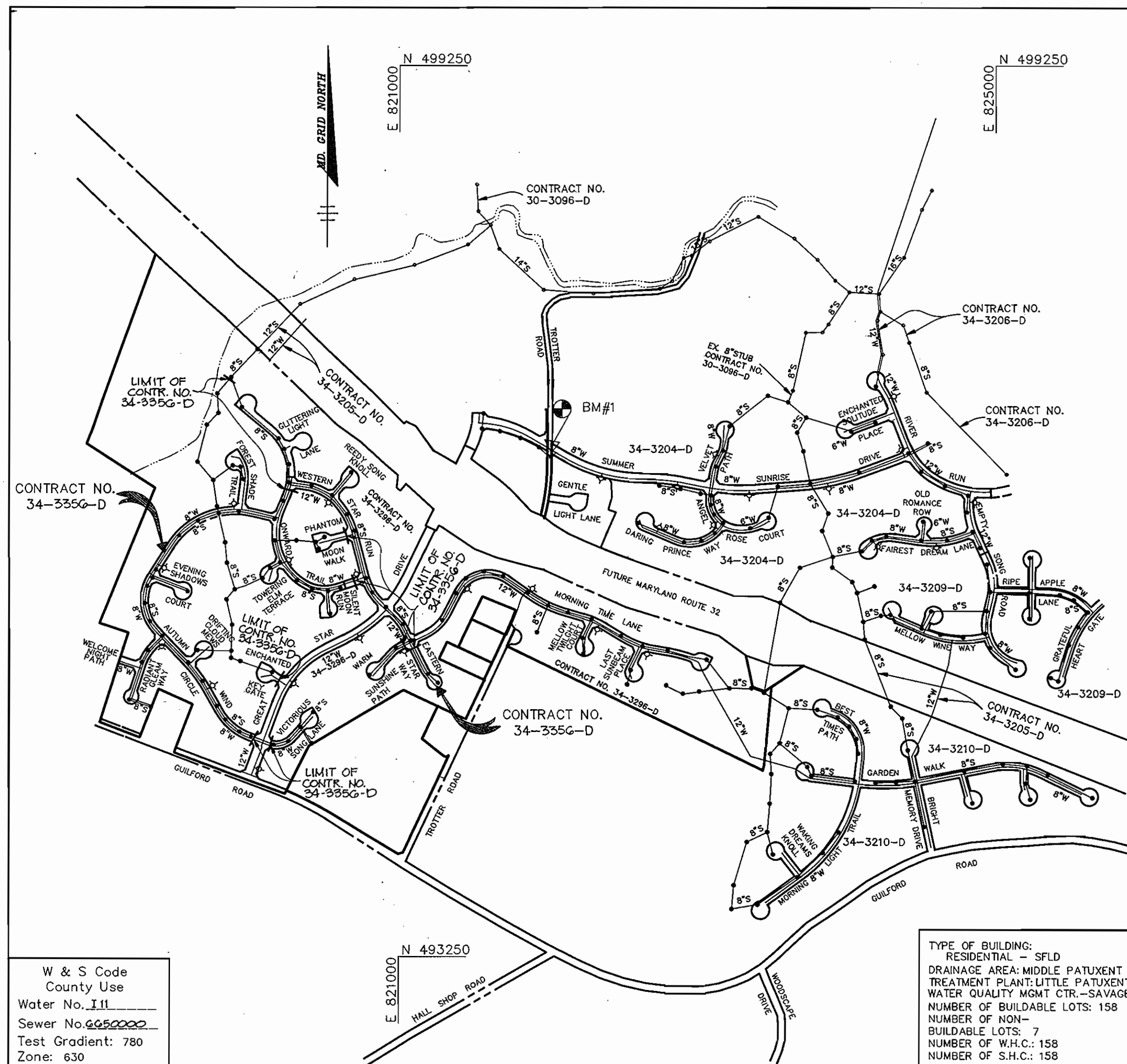
3356 ws/1 V.R.H. 2/4

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11	PROFILES OF WATER AND SEWER MAINS

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	4341 LF	4338 LF	CL 52	ATLANTIC STATES
6" WATER	2737 LF	2735 LF	CL 52	ATLANTIC STATES
3/4" W/C	5223 LF	5746 LF	TYPE "K"	CERRO COPPER
8" SEWER	7550 LF	6426 LF	SDR 35	J-M MFG.
8" D.I.P. CL. 52	1860 LF	1869 LF	CL 52	ATLANTIC STATES
4" SHC	4010 LF	5373 LF	SDR 35	J-M MFG.
FIRE HYDRANTS	7 EA.	7 EA.	AJWA OS02-85	MUELLER CO.
8" VALVES	7 EA.	7 EA.	AJWA CS09	MUELLER CO.
6" VALVES	14 EA.	14 EA.	AJWA CS09	MUELLER CO.
SEWER MANHOLES	67 EA.	67 EA.	PRECAST	ATLANTIC CONC.
3" BLOWOFF	3 EA.	3 EA.		KUPFERLE
AIR RELEASE MANHOLES	4 EA.	4 EA.	PRECAST	ATLANTIC CONC.
1 1/2" DRAIN	2 EA.	2 EA.		MUELLER
4" WATER	123 LF	152 LF	CL 52	ATLANTIC STATES
OUTSIDE WATER METER	1 EA.	1 EA.		
4" SHC - DIP		797 LF	CL 52	ATLANTIC STATES
3" WATER		97 LF	CL 52	ATLANTIC STATES
4" VALVES		4 EA.	AJWA CS09	MUELLER CO.
AIR RELEASE / AIR VACUUM VALVE		4 EA.	NO. 201/C.2	VAL-MATIC VALVE

NAME OF UTILITY CONTRACTOR: IACOBONI SITE SPECIALISTS, INC.

CHECKBOX	
AS-BUILT DATE	02-22-96
SURVEY AND DRAFTING DIVISION	



VICINITY MAP  
SCALE: 1"=600'

- #### 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.C.S. data.
  - 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. 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 the bracing of additional poles, any cost incurred by the owner for bracing of additional poles or damages shall be deducted from money 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 Detail 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 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.
  - Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:
 

State Highway Administration	531-5533
Baltimore Gas & Electric Co. Contractor Services	850-4620
Baltimore Gas & Electric Co. Underground Damage Control	787-9068
Miss Utility	1-800-257-7777
Colonial Pipeline Co.	795-1390
Bureau of Utilities, Howard County Department of Public Works	313-4900
  - Trees and shrubs are to be protected from damage to 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 line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
  - All water mains to be D.I.P. Class 52 unless otherwise noted.
  - Tops of all water mains to have a minimum of 3-1/2' 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 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 restrained and buttressed with concrete in accordance with Standard Details. 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.
  - All sewer mains shall be DIP, RCP, VCPX, CSPX, RCCP and 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 covers, Standard Detail GS.52. Where watertight manhole frame and cover is 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.
  - Manholes can be either brick or precast concrete structures.

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on F-94-108

HOWARD SOIL CONSERVATION DISTRICT:  
Review for Howard Soil Conservation District and meet technical requirements.  
*Fabian Egan* 9/27/94  
U.S. SOIL CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.  
*John R. Roberts* 9/27/94  
HOWARD SOIL CONSERVATION DISTRICT DATE

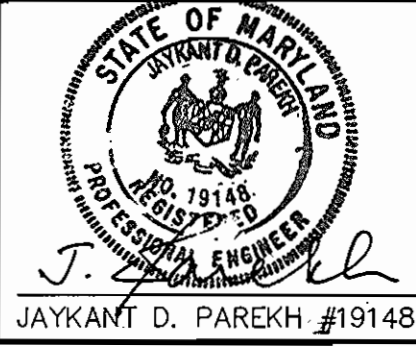
**BENCHMARKS**  
BM#1 RAILROAD SPIKE IN POLE #525680  
TROTTER ROAD ELEV. 393.27  
N 496697.02 E 822026.81  
BM#2 RAILROAD SPIKE IN POPLAR  
ELEV. 438.92  
N 495551.90 E 820727.80

W & S Code  
County Use  
Water No. 111  
Sewer No. 6650000  
Test Gradient: 780  
Zone: 630

TYPE OF BUILDING:  
RESIDENTIAL - SFLD  
DRAINAGE AREA: MIDDLE PATUXENT  
TREATMENT PLANT: LITTLE PATUXENT  
WATER QUALITY MGMT CTR. - SAVAGE  
NUMBER OF BUILDABLE LOTS: 158  
NUMBER OF NON-BUILDABLE LOTS: 7  
NUMBER OF W.H.C.: 158  
NUMBER OF S.H.C.: 158

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*James M. Shaw* 9/28/94  
DIRECTOR OF PUBLIC WORKS DATE  
*Robert A. Benning* 9-26-94  
CHIEF, BUREAU OF UTILITIES DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
Planners • Engineers • Surveyors  
8818 Centre Park Drive • Suite 200 • Columbia, MD 21046  
410-997-8900 FAX: 410-997-9282



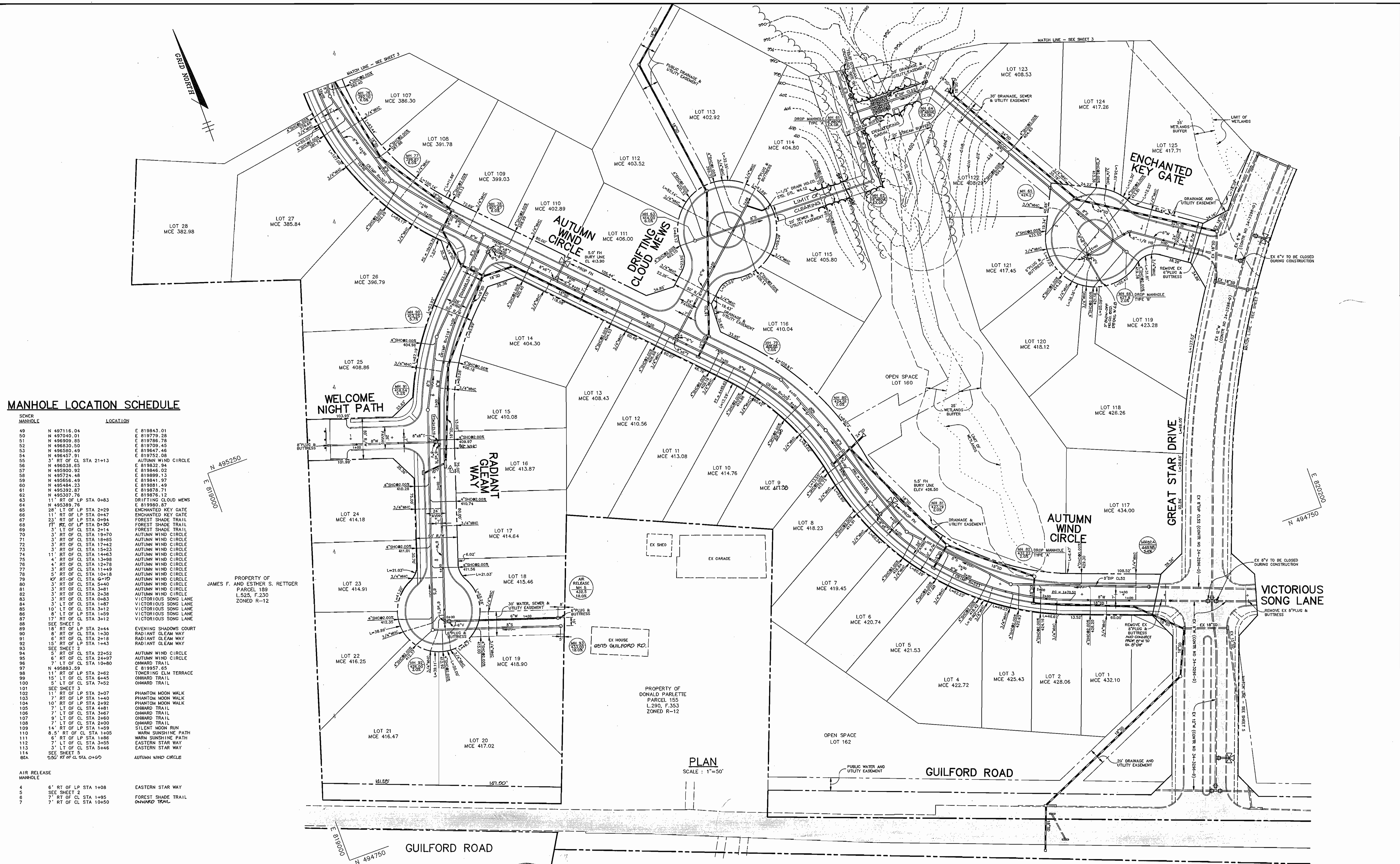
DES: C.J.R.  
DRN: D.A.M.  
CHK: C.J.R.  
DATE: 0-10-04  
BY NO. \_\_\_\_\_

AS-BUILT DRAWINGS (SHEET 0008 OF 11)  
REVISION \_\_\_\_\_  
DATE \_\_\_\_\_

TITLE SHEET

VILLAGE OF RIVER HILL  
SECTION 2 AREA 4  
LOTS 1 THRU 165  
5th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 34-3356-D  
SCALE AS SHOWN  
SHEET 1 OF 11

3356 WS/2 V.R.H. 2/4



**MANHOLE LOCATION SCHEDULE**

SEWER MANHOLE	LOCATION
49	N 497116.04
50	N 497040.01
51	N 496909.85
52	N 496830.50
53	N 496880.49
54	N 496457.91
55	3" RT OF CL STA 21+13
56	N 496038.65
57	N 495900.92
58	N 495724.48
59	N 495656.49
60	N 495484.23
61	N 495392.87
62	N 495307.76
63	11" RT OF LP STA 0+83
64	N 495389.76
65	28' LT OF LP STA 2+29
66	11" RT OF LP STA 0+47
67	23' RT OF LP STA 0+94
68	17' RL OF LP STA 0+50
69	3' LT OF CL STA 2+14
70	3' RT OF CL STA 19+70
71	3' RT OF CL STA 18+85
72	3' RT OF CL STA 17+42
73	3' RT OF CL STA 15+23
74	11" RT OF CL STA 14+63
75	4' RT OF CL STA 13+98
76	4' RT OF CL STA 12+78
77	3' RT OF CL STA 11+49
78	5' RT OF CL STA 10+18
79	5' RT OF CL STA 9+10
80	3' RT OF CL STA 8+40
81	3' RT OF CL STA 3+81
82	3' RT OF CL STA 2+38
83	3' RT OF CL STA 0+83
84	3' LT OF CL STA 1+87
85	10' LT OF CL STA 3+12
86	8' LT OF LP STA 1+59
87	17' RT OF CL STA 3+12
88	SEE SHEET 5
89	18' RT OF LP STA 2+44
90	8' RT OF CL STA 1+30
91	6' RT OF CL STA 2+18
92	15' RT OF LP STA 1+43
93	SEE SHEET 2
94	5' RT OF CL STA 22+52
95	6' RT OF CL STA 24+97
96	7' LT OF CL STA 10+80
97	N 495893.59
98	11' RT OF LP STA 2+62
99	15' LT OF CL STA 6+45
100	5' LT OF CL STA 7+52
101	SEE SHEET 3
102	11' RT OF LP STA 2+07
103	7' RT OF LP STA 1+40
104	10' RT OF LP STA 2+92
105	7' LT OF CL STA 4+81
106	7' LT OF CL STA 3+67
107	9' LT OF CL STA 2+60
108	7' LT OF CL STA 2+00
109	14' RT OF LP STA 1+59
110	8.5' RT OF CL STA 1+05
111	6' RT OF LP STA 1+88
112	7' LT OF CL STA 3+55
113	3' LT OF CL STA 5+46
114	SEE SHEET 5
88A	5.5' RT OF CL STA 0+00
4	6' RT OF LP STA 1+08
5	SEE SHEET 2
6	7' RT OF CL STA 1+85
7	7' RT OF CL STA 10+50

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James M. Lee* 9/28/94  
DIRECTOR OF PUBLIC WORKS DATE

*Donald S. Sporn* 9/29/94  
CHIEF, BUREAU OF ENGINEERING DATE

*Robert W. Daulton* 9-26-94  
CHIEF, BUREAU OF UTILITIES DATE

*John D. Daulton* 9/29/94  
CHIEF, LAND DEVELOPMENT DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
Planners • Engineers • Surveyors  
8818 Centre Park Drive • Suite 500 • Columbia, Md 21045  
410-997-8900 FAX: 410-997-9282



DES :	D.A.M				
DRN :	D.A.M				
CHK :	C.J.R	WAD	RELOCATED INLET & WHC IN RADIANT GLEAM WAY	4-7-05	
		WAD	RELOCATED M470	10-31-04	
DATE :	9-10-94	BY :	NO.	REVISION	DATE

PLAN OF  
WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL  
SECTION 2 AREA 4  
LOTS 1 THRU 165  
5th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 34-3356-D

SCALE AS SHOWN  
SHEET 2 OF 11

3356  
ws/3  
V.R.H. 2/4



PLAN  
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

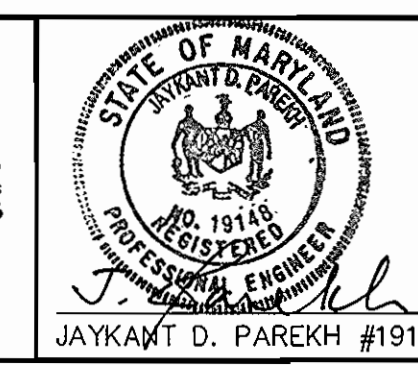
*James P. Shaw* 9/29/94  
DIRECTOR OF PUBLIC WORKS DATE

*Robert J. Danner* 9-26-94  
CHIEF, BUREAU OF UTILITIES DATE

*Robert J. Danner* 9/29/94  
CHIEF, BUREAU OF ENGINEERING DATE

*Robert J. Danner* 9/29/94  
CHIEF, LAND DEVELOPMENT DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
Planners + Engineers + Surveyors  
8618 Centre Park Drive • Suite 200 • Columbia, Md 21045  
410-997-8900 FAX: 410-997-9282



DES : D.A.M					
DRN : D.A.M					
CHK : C.J.R					
DATE: 9-10-94	BY NO.	REVISION	DATE	600' SCALE MAP NO. 35	BLOCK NO. 14

PLAN OF  
WATER AND SEWER MAINS

VILLAGE OF RIVER HILL  
SECTION 2 AREA 4  
LOTS 1 THRU 165  
5th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 34-3356-D

SCALE AS SHOWN

SHEET 3 OF 11

3356  
ws/4  
V.R.H. 3/4



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

RIEMER MUEGGEL & ASSOCIATES, INC.  
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045  
410-997-8900 FAX: 410-997-9282



DES: D.A.M.	
DRN: D.A.M.	
CHK: C.J.R.	
DATE: 10-10-04	BY NO. _____
	REVISION _____
	DATE _____

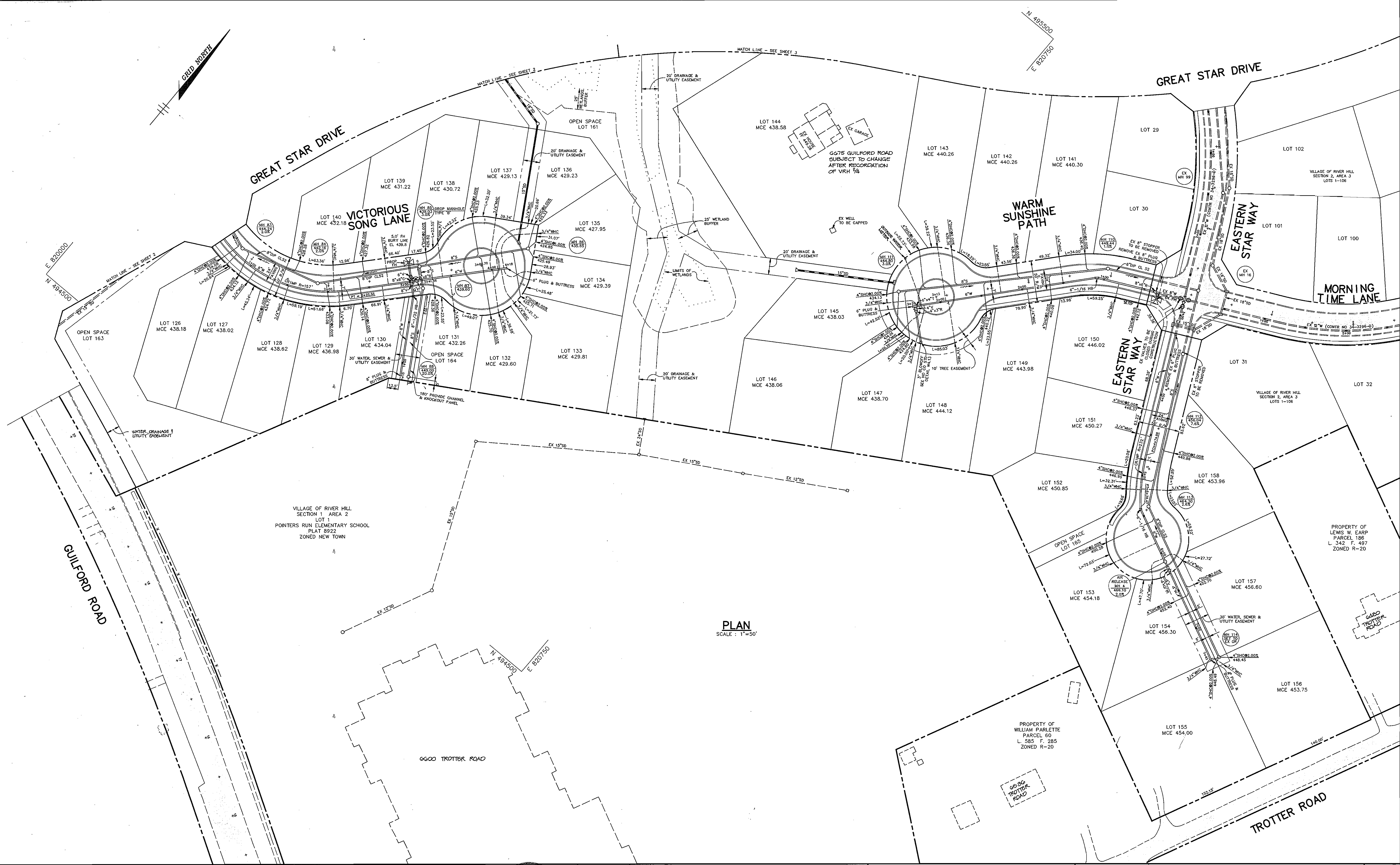
PLAN OF  
WATER AND SEWER MAINS

VILLAGE OF RIVER HILL  
SECTION 2 AREA 4  
LOTS 1 THRU 165  
5th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 34-3356-D

SCALE AS SHOWN  
SHEET 4 OF 11

600' SCALE MAP NO. 35 BLOCK NO. 14

3356 ws/s V.R.H. 2/4



PLAN  
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

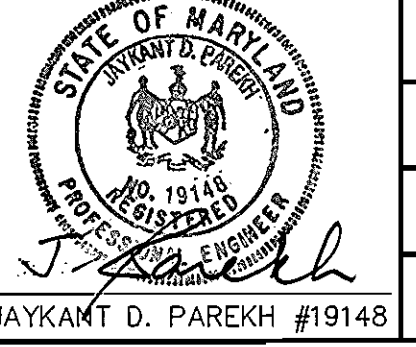
*James J. Lewis* 9/29/94  
DIRECTOR OF PUBLIC WORKS DATE

*Paul S. Sporn* 9/29/94  
CHIEF, BUREAU OF ENGINEERING DATE

*Robert Baizer* 9-26-94  
CHIEF, BUREAU OF UTILITIES DATE

*John Deussen* 9/29/94  
CHIEF, LAND DEVELOPMENT DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
Planners Engineers Surveyors  
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045  
410-997-8900 FAX: 410-997-9282



DES: D.A.M.					
DRN: D.A.M.					
CHK: C.J.R.					
DATE: 9-10-94	BY: NO.	CHANGED 6" P10 TO 6" P10 @ END EASTERN STAR WAY	10-29-94		
		REVISION			

PLAN OF  
WATER AND SEWER MAINS

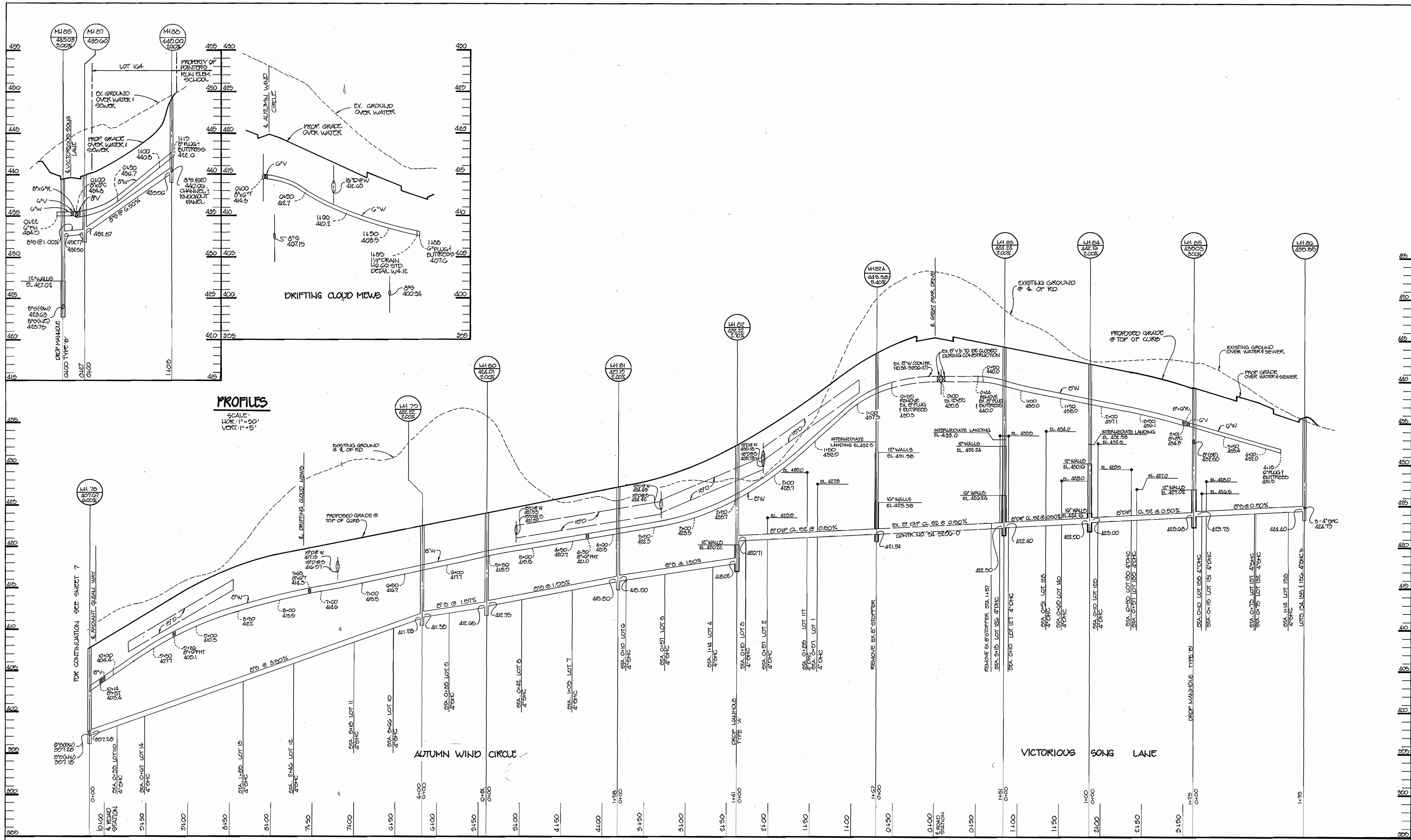
600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL  
SECTION 2 AREA 4  
LOTS 1 THRU 165  
5th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 34-3356-D

SCALE AS SHOWN

SHEET 5 OF 11

3356 w/s/c V.R.H. 2/4



**PROFILES**  
SCALE:  
HOR. 1"=50'  
VERT. 1"=5'

**PROFILE**  
SCALE:  
HOR. 1"=50' VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James J. Lee* 9/29/94  
DIRECTOR OF PUBLIC WORKS DATE

*Robert M. Davis* 9-26-94  
CHIEF, BUREAU OF UTILITIES DATE

*Donald J. Sorenson* 9/29/94  
CHIEF, BUREAU OF ENGINEERING DATE

*Chris W. ...* 9/29/94  
CHIEF, LAND DEVELOPMENT DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
A Land Planning, Engineering and Consulting Firm  
8818 Centre Park Drive • Suite 200 • Columbia, Md 21046  
410-997-8900 FAX: 410-997-9282

STATE OF MARYLAND  
REGISTERED PROFESSIONAL ENGINEER  
JAYKANT D. PAREKH #19148

DES : D.A.M	
DRN : M.A.D	
CHK : C.J.R	
DATE : 9-19-94	
BY : WAO	1
NO. :	RELOCATED LH 70
REVISION :	
DATE :	10-31-94

PROFILES OF  
WATER AND SEWER MAINS

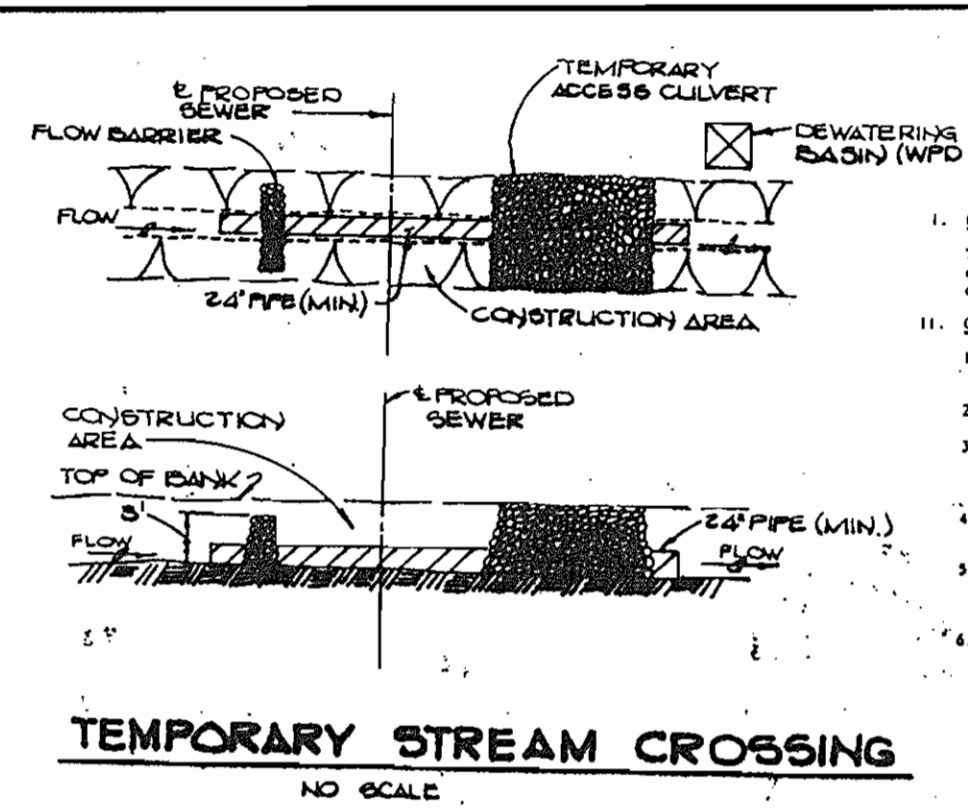
600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL  
SECTION 2 AREA 4  
LOTS 1 THRU 165  
5th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 34-3356-D

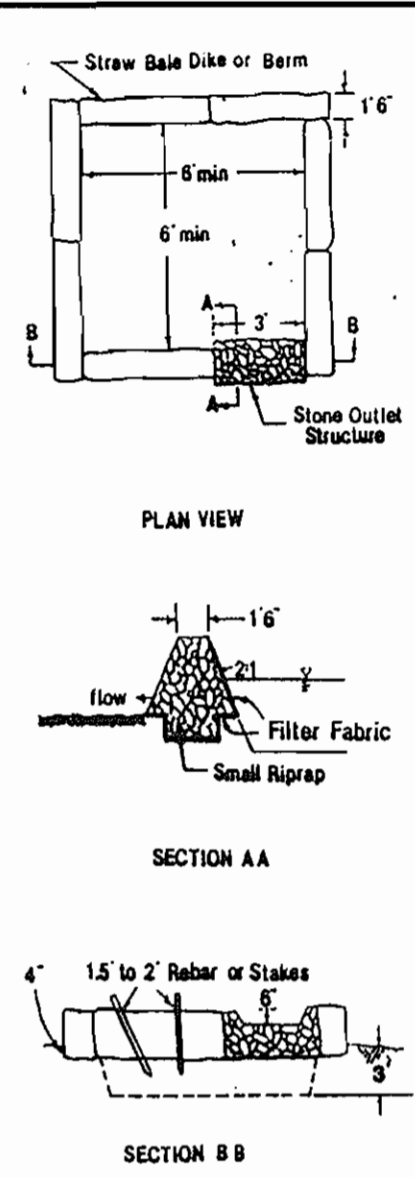
SCALE AS SHOWN

SHEET 6 OF 11

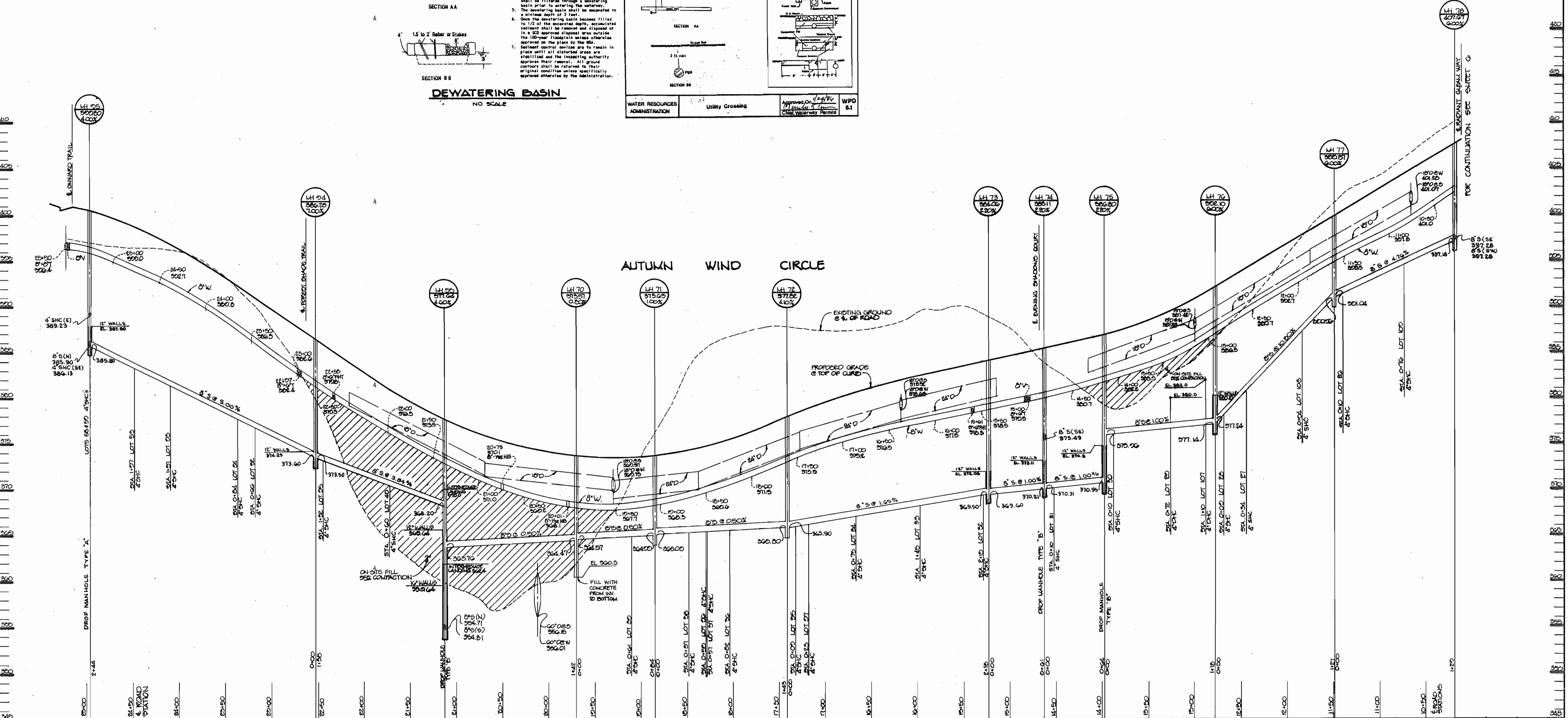
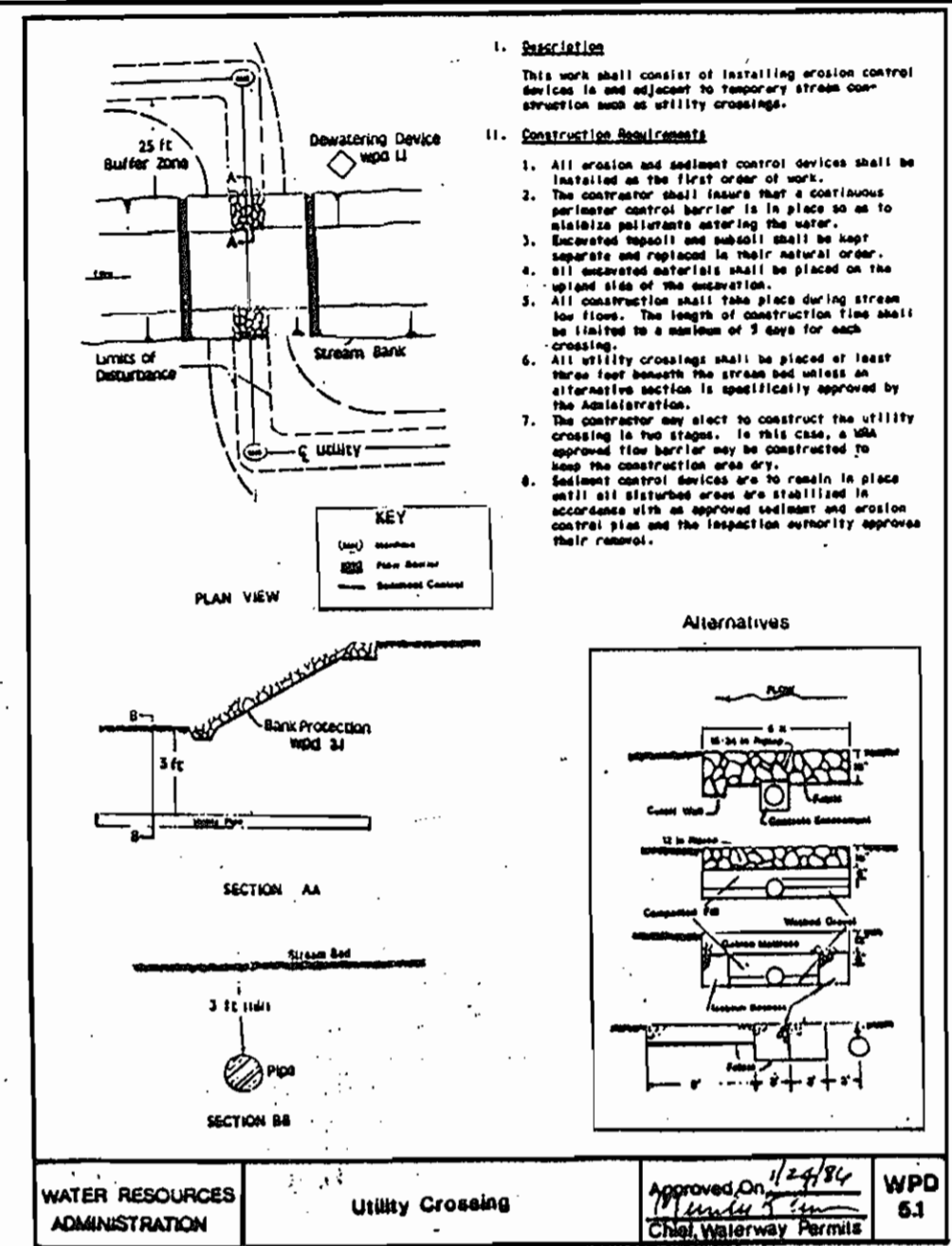
3356 WS/7 Y.R.H. 2/4 L/cm



- 1. Description**  
The work shall consist of installing a flow diversion structure in conjunction with a temporary culvert crossing during construction such as utility crossing.
- 1.1. Construction Requirements**
- All erosion and sediment control devices shall be installed as the first order of business.
  - Pipes must be sized to accommodate normal stream flow.
  - The flow barrier shall be constructed of sandbags, washed riprap, or other approved material as per MDOT. The materials shall be sized to withstand normal stream flow velocities.
  - All dewatering of the construction area shall be pumped to a dewatering basin (WPD 1) prior to re-entering the stream.
  - The temporary culvert crossing shall be constructed in accordance with Standard Detail (SDC) 1, 1963 Maryland Standards and Specifications for Sediment and Erosion Control.
  - Sediment control devices shall remain in place until all disturbed areas have been stabilized in accordance with an approved sediment and erosion control plan and the inspecting authority approves their removal.



- 1. Description**  
The work shall consist of the construction of a dewatering basin for the purpose of receiving sediment-laden water pumped from a construction site to allow filtration before the water re-enters the waterway.
- 1.1. Material Specifications**
- Riprap: Riprap shall consist of 4-8 inch washed stone or gravel.
  - Filter Fabric: The filter cloth shall be a woven or nonwoven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The fabric shall be inert to commonly encountered chemicals, hydrocarbons, acids, and not resistant. No. 4 stone (ASDSD 23) may be used on the lower-face for filtering instead of fabric.
  - Straw Mats: Straw mats shall meet the criteria as specified in the Maryland Standard Specifications for Soil Erosion and Sediment Control.
- 1.1.1. Construction Requirements**
- The contractor shall install all sediment and erosion control devices as the first order of business.
  - Excavated materials shall be stored such that sediments are prevented from entering the waterway. i.e., sediment perimeter controls may be necessary.
  - Excavated material and topsoil shall be kept separate and replaced in their natural order.
  - Any dewatering of the construction area shall be filtered through a dewatering basin prior to entering the waterway.
  - The dewatering basin shall be constructed to a minimum depth of 3 feet.
  - Once the dewatering basin becomes filled to 1/2 of the excavated depth, accumulated sediment shall be removed and disposed of in a SD approved disposal area outside the 100-year floodplain unless otherwise approved on the plan by the SD.
  - Sediment control devices are to remain in place until all disturbed areas are stabilized and the inspecting authority approves their removal. All ground contours shall be returned to their original condition unless specifically approved otherwise by the Administration.



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*[Signature]* 2/22/94  
DIRECTOR OF PUBLIC WORKS DATE

*[Signature]* 2/22/94  
CHIEF, BUREAU OF ENGINEERING DATE

*[Signature]* 2/22/94  
CHIEF, BUREAU OF UTILITIES DATE

*[Signature]* 2/22/94  
CHIEF, LAND DEVELOPMENT DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
A Land Planning, Engineering and Consulting Firm  
8818 Centre Park Drive - Suite 300 - Columbia, Md 21045  
410-997-8800 FAX: 410-997-9283

JAYKANT D. PAREKH #19148

DES: D.A.M					
DRN: M.A.D					
CHK: C.J.R					
DATE: 2-10-94	BY: NO.	REVISION	DATE	600' SCALE MAP NO. 35	BLOCK NO. 14

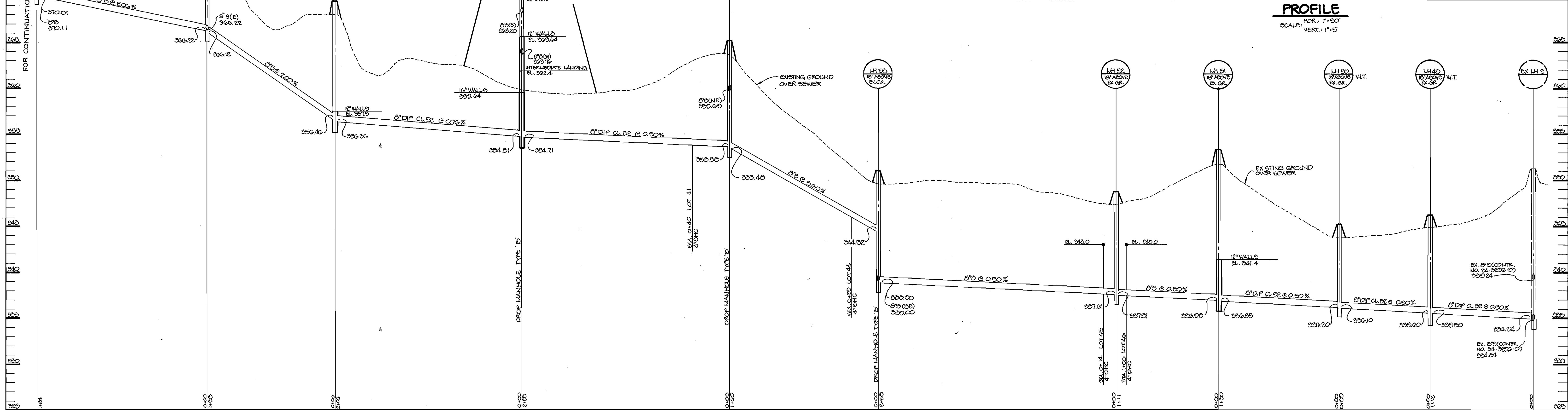
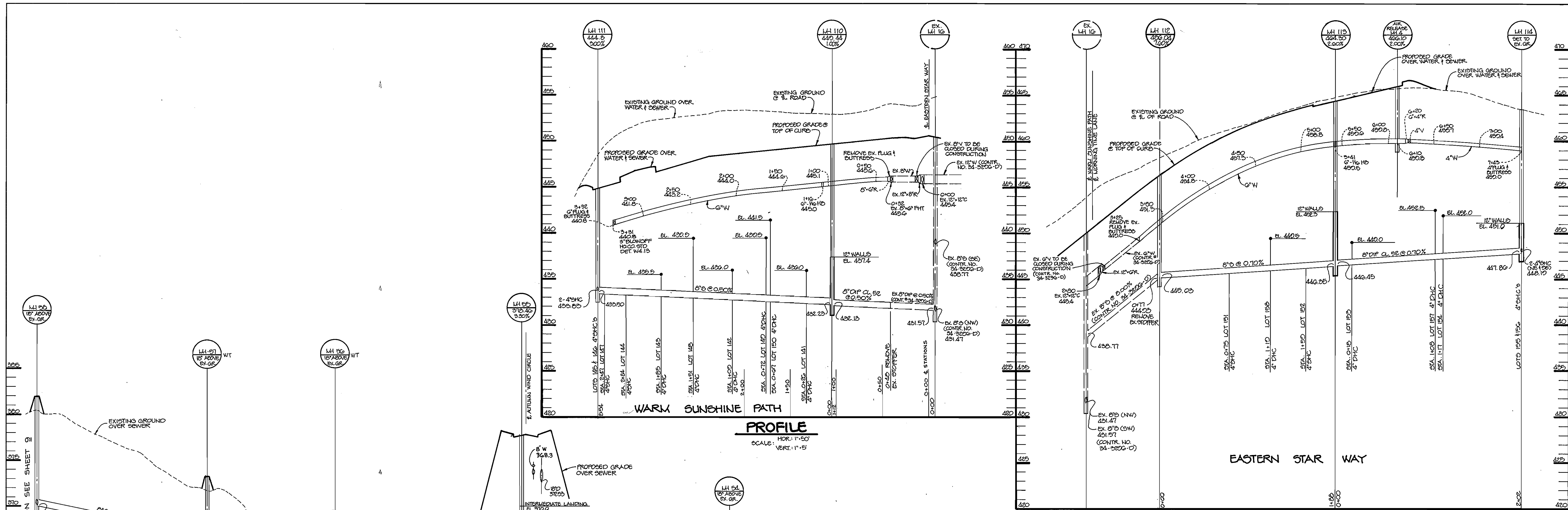
PROFILES OF WATER AND SEWER MAINS

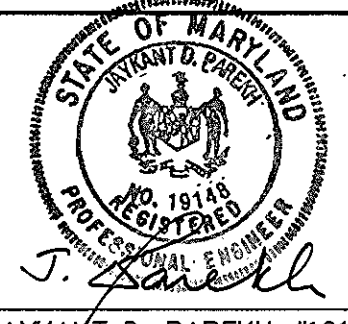
VILLAGE OF RIVER HILL  
SECTION 2 AREA 4  
LOTS 1 THRU 165  
5th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 34-3356-D

SCALE AS SHOWN

SHEET 7 OF 11

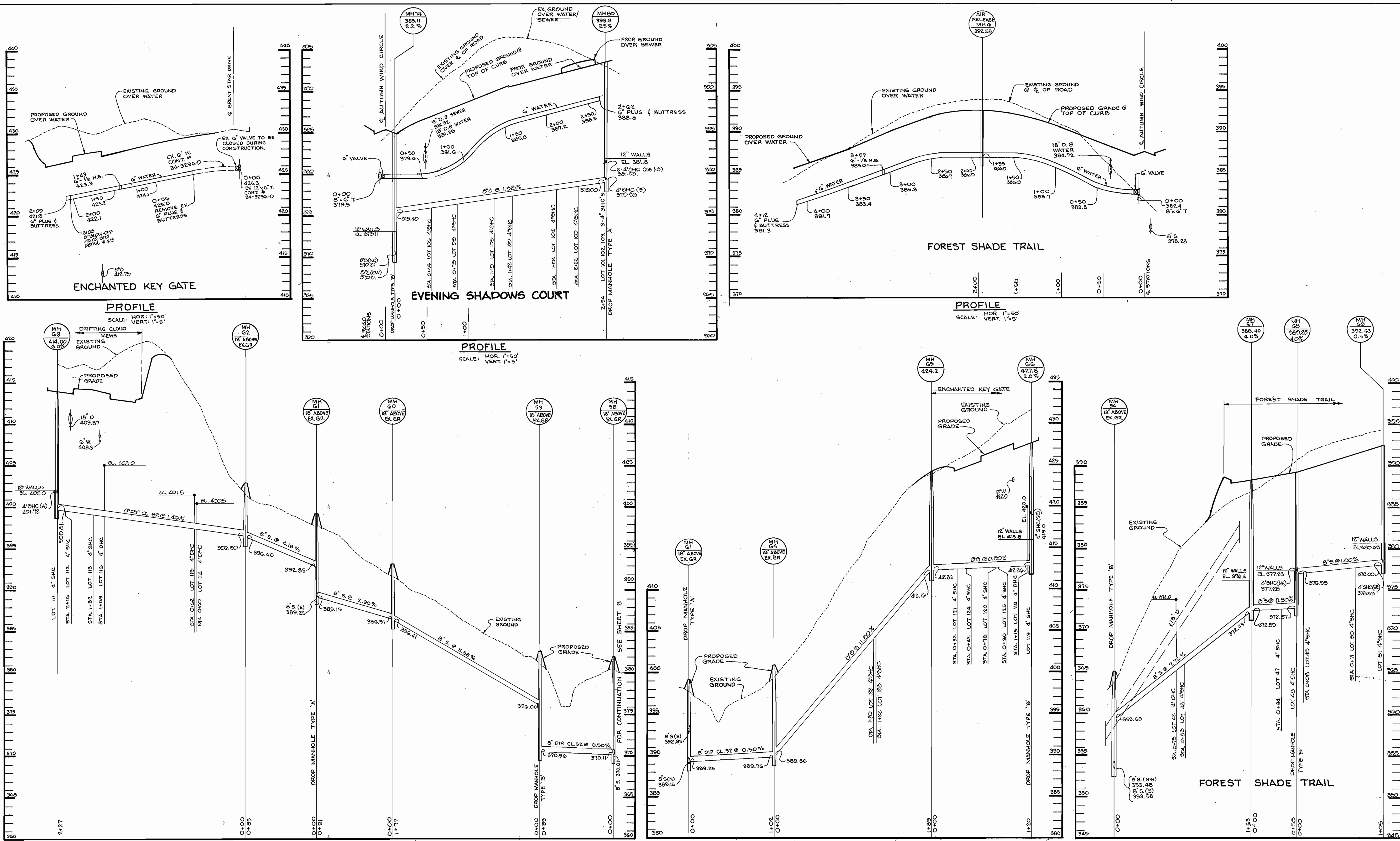
3356 ws/8 V.R.H. 2/4



<b>DEPARTMENT OF PUBLIC WORKS</b> HOWARD COUNTY, MARYLAND		<b>RIEMER MUEGGE &amp; ASSOCIATES, INC.</b> A Land Planning, Engineering and Consulting Firm 8818 Centre Park Drive • Suite 200 • Columbia, Md 21045 410-997-8900 FAX: 410-997-9282		 <b>JAYKANT D. PAREKH #19148</b>		DES : D.A.M. DRN : M.A.D. CHK : C.J.R. DATE: 0-10-04		REV. 08'05' INV. IN LH 55 DATE: 10-01-04		<b>PROFILES OF</b> <b>WATER AND SEWER MAINS</b>		<b>VILLAGE OF RIVER HILL</b> SECTION 2 AREA 4 LOTS 1 THRU 165 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3356-D		SCALE AS SHOWN  SHEET 8 OF 11
Director of Public Works: <i>James P. Lewis</i> 9/26/04 Chief, Bureau of Utilities: <i>Robert Benjamin</i> 9-26-04		Chief, Bureau of Engineering: <i>William Sporn</i> 9/29/04 Chief, Land Development: <i>William Sporn</i> 9/29/04		State of Maryland Seal		Revision Table		Date: 10-01-04		Scale Map No. 35 Block No. 14		Scale as Shown		

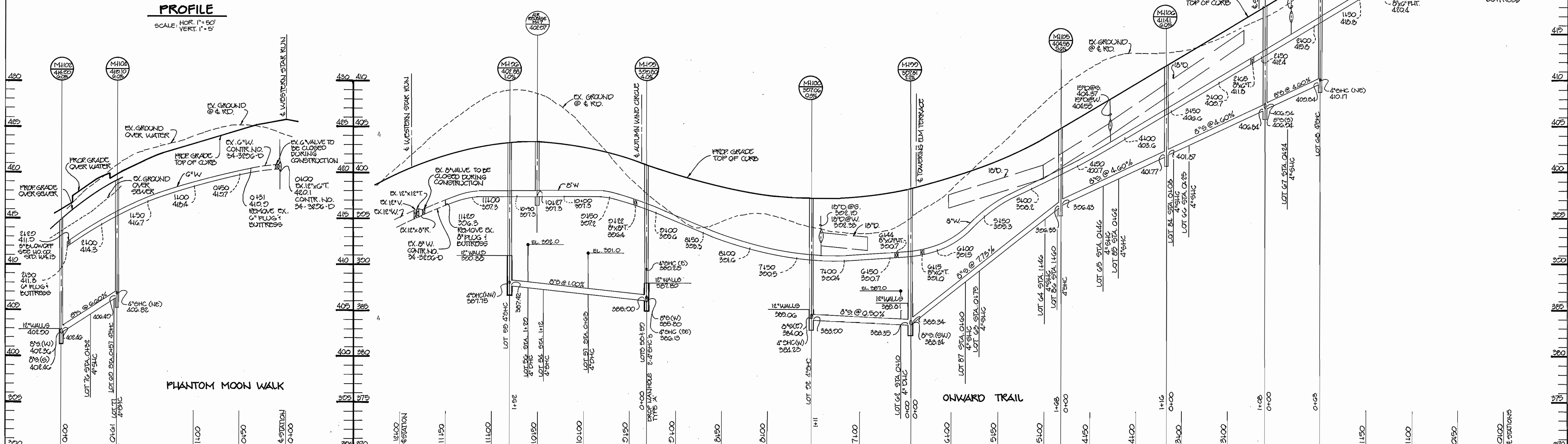
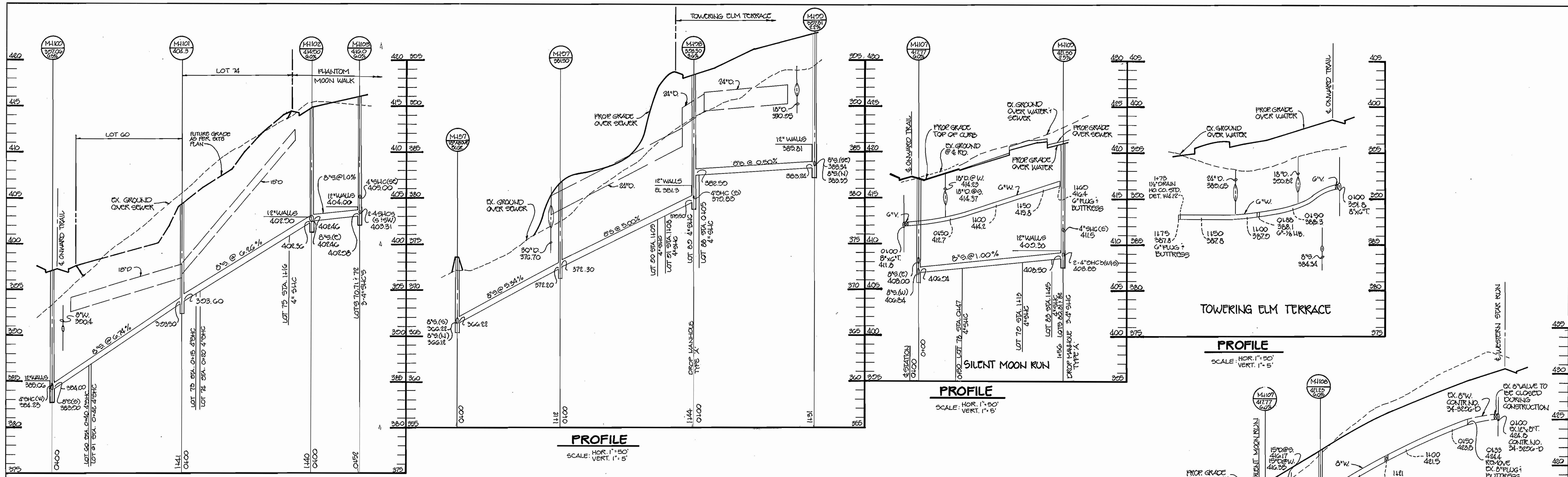


3356 WS/9 V.R.H. 2/4 6/5M



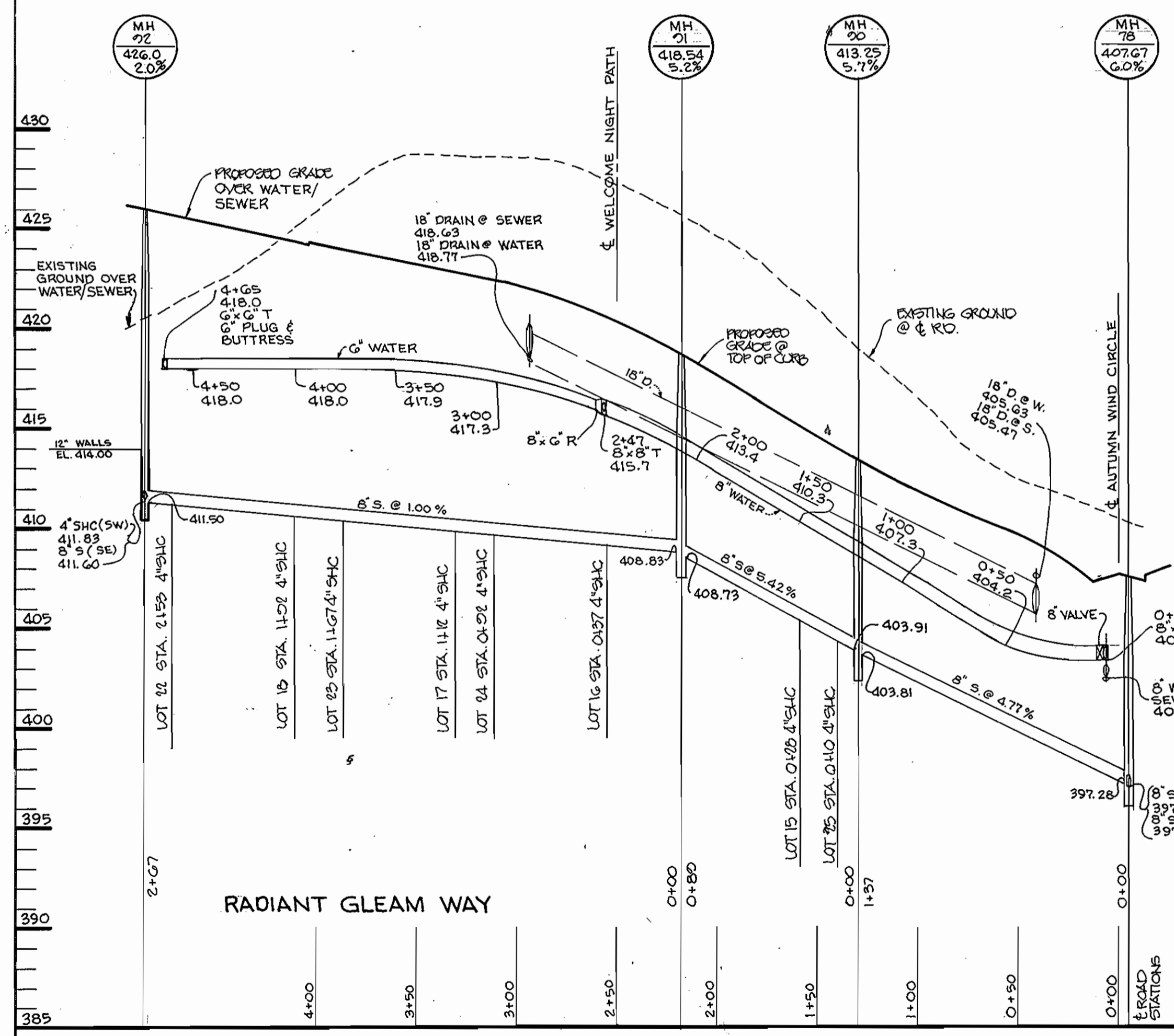
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		RIEMER MUEGGE & ASSOCIATES, INC. A Land Planning, Engineering and Consulting Firm 8818 Centre Park Drive • Suite 200 • Columbia, Md 21045 410-997-8900 FAX: 410-997-9292		 JAYKANT D. PAREKH #19148		DES : D.A.M. DRN : R.J.C. CHK : C.J.R. DATE: 0-10-04		BY NO. REVISION DATE		PROFILES OF WATER AND SEWER MAINS 600' SCALE MAP NO. 35 BLOCK NO. 14		VILLAGE OF RIVER HILL SECTION 2 AREA 4 LOTS 1 THRU 165 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3356-D		SCALE AS SHOWN  SHEET 9 OF 11
Director of Public Works <i>James J. Chew</i> 9/28/04	Chief, Bureau of Engineering <i>Charles J. Sporn</i> 7/22/04	Chief, Bureau of Utilities <i>Robert W. Dawson</i> 7-26-04	Chief, Land Development <i>J. J. Dawson</i> 9/20/04											

3356 ws/10 V.R.H. 2/4

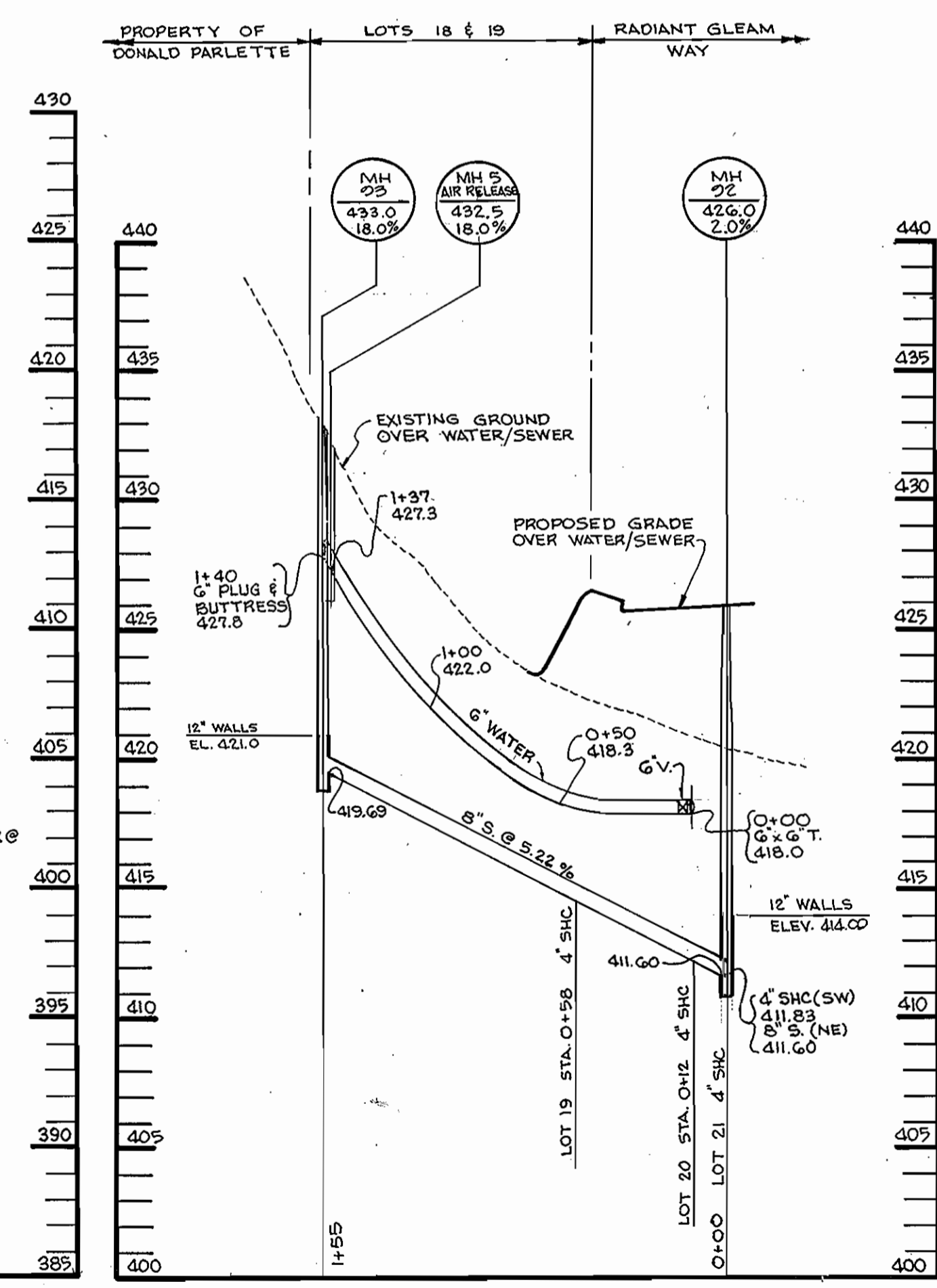


<p><b>DEPARTMENT OF PUBLIC WORKS</b> HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> 9/29/94 <i>[Signature]</i> 9/29/94 DIRECTOR OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE</p> <p><i>[Signature]</i> 9-26-94 <i>[Signature]</i> 9/29/94 CHIEF, BUREAU OF UTILITIES DATE CHIEF, LAND DEVELOPMENT DATE</p>		<p><b>RIEMER MUEGGE &amp; ASSOCIATES, INC.</b> A Land Planning, Engineering and Consulting Firm 8818 Centre Park Drive • Suite 200 • Columbia, Md 21046 410-997-8900 FAX: 410-997-9282</p> <p><i>[Signature]</i> JAYKANT D. PAREKH #19148</p>		<p>DES: D.A.M. DRN: J.C.O. CHK: C.J.R. DATE: 7-10-94</p>		<p><b>PROFILES OF WATER AND SEWER MAINS</b></p> <p>600' SCALE MAP NO. 35 BLOCK NO. 14</p>		<p>VILLAGE OF RIVER HILL SECTION 2 AREA 4 LOTS 1 THRU 165 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3356-D</p> <p>SCALE AS SHOWN SHEET 10 OF 11</p>	
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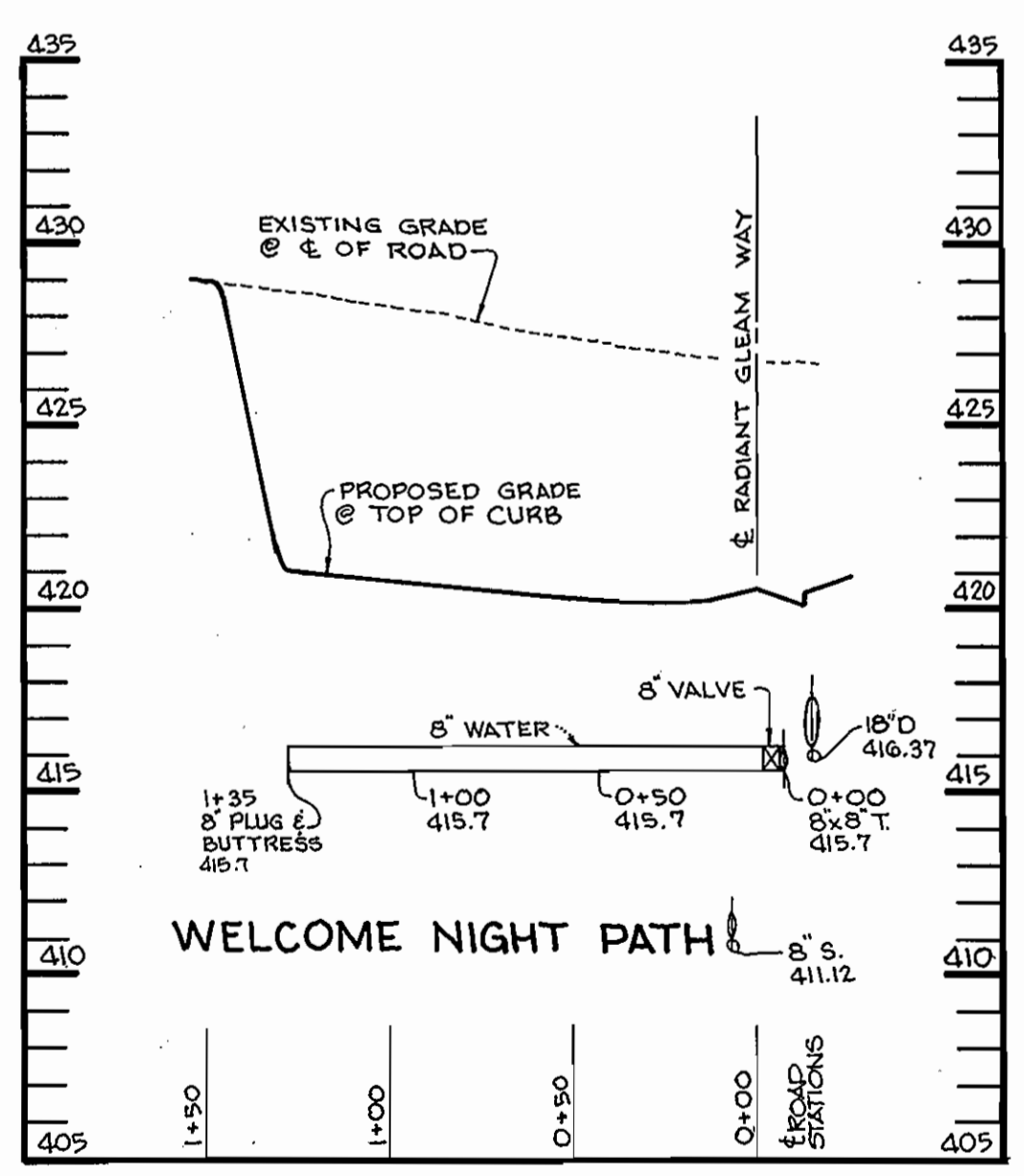
3356  
 WS/11  
 V.R.H. 2/4



PROFILE  
 SCALE: HOR. 1"=50'  
 VERT. 1"=5'



PROFILE  
 SCALE: HOR. 1"=50'  
 VERT. 1"=5'



PROFILE  
 SCALE: HOR. 1"=50'  
 VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

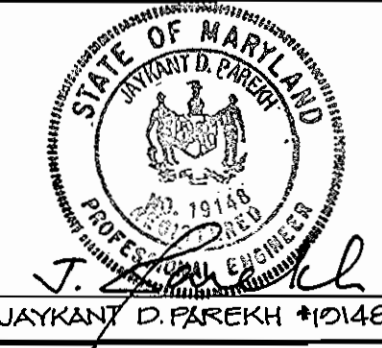
*James J. Shaw* 9/29/94  
 DIRECTOR OF PUBLIC WORKS DATE

*Robert J. Davis* 9-26-94  
 CHIEF, BUREAU OF UTILITIES DATE

*Paul J. ...* 2/23/94  
 CHIEF, BUREAU OF ENGINEERING DATE

*...* 9/29/94  
 CHIEF, LAND DEVELOPMENT DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
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 410-997-8900 FAX: 410-997-9282



DES: D.A.M.			
DRN: R.J.C.			
CHK: C.J.R.			
DATE: 5-10-94	BY NO.	REVISION	DATE

PROFILES OF  
 WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL  
 SECTION 2 AREA 4  
 LOTS 1 THRU 105  
 5th ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 CONTRACT NO. 34-3356-D

SCALE AS SHOWN  
 SHEET 11 OF 11