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WATER AND SEWER EXTENSIONS

VILLAGE OF RIVER HILL

SECTION 2 AREA 6 PHASE 2

5th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

CONTRACT NO. 34-3561-D

QUANTITIES		AS-BUILT	
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	
		TYPE	MANUFACTURER / SUPPLIER
12" WATER	528 LF ✓	628 LF	D.I.P. CL. 52
12"x8" CROSS	1 EA ✓	1 EA	M.J. CROSS
12"x6" TEE	1 EA ✓	" "	M.J. HYDR. T.
12" VALVES	1 EA ✓	" "	M.J. GATE VAL.
12"x8" REDUCER	1 EA ✓	" "	LEB. REDUCER
8" WATER	5790 LF ✓	5,741 LF	D.I.P. CL. 52
8"x8" TEE	3 EA ✓	3 EA	M.J. TEE
8"x6" TEE	11 EA ✓	11 "	M.J. HYDR. TEE
8"x4" TEE	1 EA ✓	1 "	M.J. TEE
8"x8" CROSS	1 EA ✓	" "	M.J. CROSS
8"x6" CROSS	2 EA ✓	2 "	" "
8"x6" REDUCER	3 EA ✓	3 "	LEB. RBD
8" VALVE	13 EA ✓	13 "	8" RES. WEDGE GATE VALVE
8"-1/8 HB	1 EA ✓	1 "	M.J. VALVE
8"-1/16 HB	2 EA ✓	2 "	" "
AIR RELEASE MANHOLE	4 EA ✓	4 "	PRECAST CONC.
4" WATER	120 LF ✓	120 LF ±	D.I.P. CL. 52
6" WATER	1708 LF ✓	1,708 "	" "
FIRE HYDRANT	11 EA ✓	11	CENTURION F.H.
6" VALVE	13 EA ✓	13	8" WEDGE GATE VALVE
6"-1/8 HB	2 EA ✓	2	M.J. BEND
6" PLUG & BUTTRESS	7 EA ✓	7	M.J.
3/4" WHC	4096 LF ✓	4,396 LF ±	TYPE "K" COPPER
1" BLOWOFF	4 EA ✓	4 EA	" "
1" WHC	48 LF ✓	48 LF ±	TYPE "K" COPPER
8" SEWER P.V.C.	8110 LF ✓	8,024 LF ±	P.V.C. S.D.E.-85
8" D.I.P. CL. 52 SEWER	470 LF ✓	464 LF	D.I.P. CL. 52
4" SHC	3032 LF ✓	3,922 LF	D.I.P. CL. 52
4"-0" DIA. MANHOLES	57 EA ✓	57	PRECAST CONC.
4'-0" DIA. MANHOLES	309 VF ✓	309 VF ±	PRECAST CONC.
TYPE 'A' DROP MANHOLES	2 EA ✓	2 EA	" "
TYPE 'B' DROP MANHOLES	5 EA ✓	5 "	" "
4" VALVE	4 EA ✓	4 "	" "

NAME OF UTILITY CONTRACTOR: **GAINES AND COMPANY**

CHECKBOX

AS-BUILT DATE: **3-14-97**

SURVEY AND DRAFTING DIVISION

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on F-96-138

Review for Howard Soil Conservation District and meets technical requirements.

J. H. Wafield / JHW 9/3/96 DATE

John R. Roberts / JRR 9/3/96 DATE

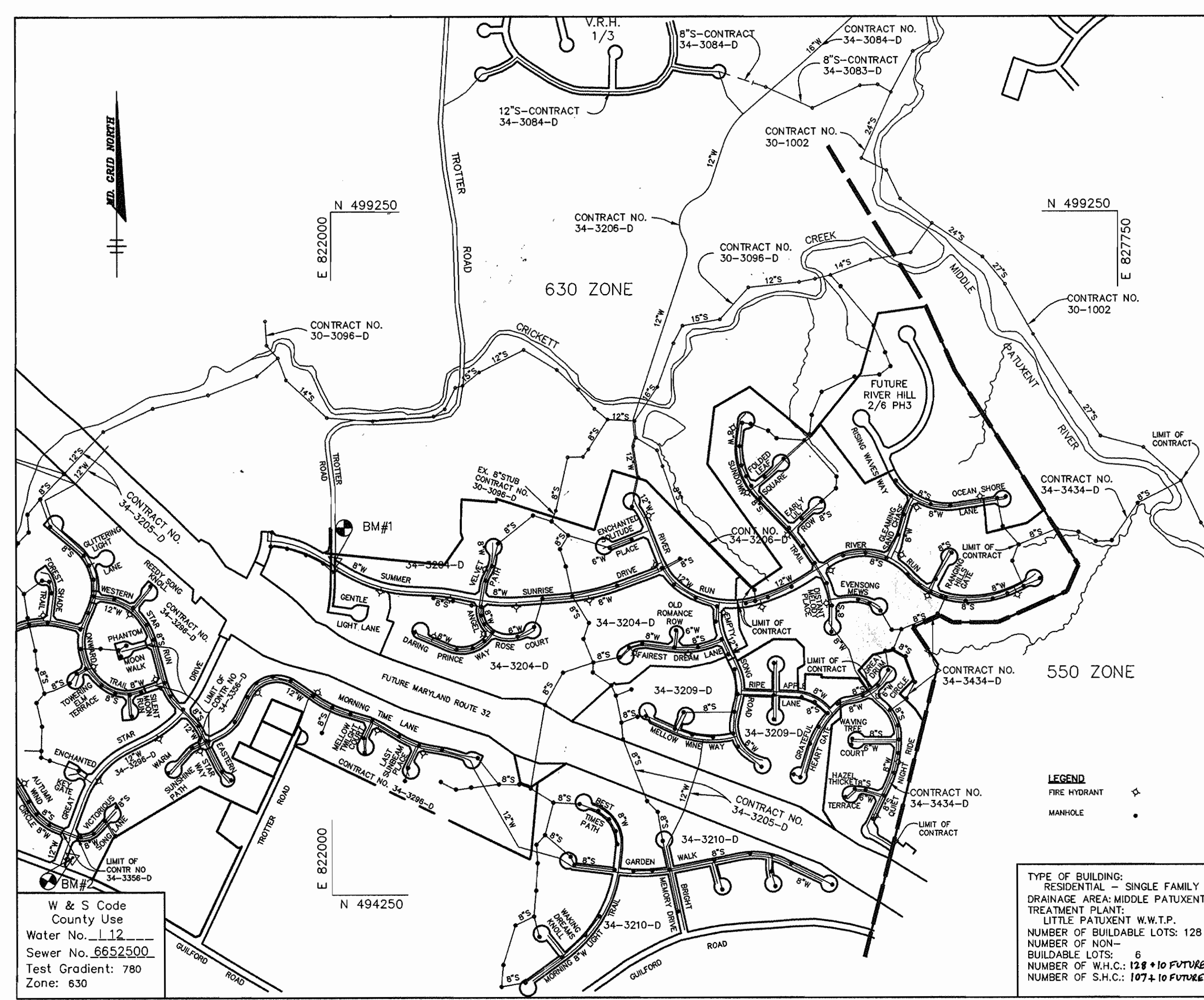
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND

BENCHMARKS

BM#1 RAILROAD SPIKE IN POLE # 525680 (TROTTER ROAD) ELEV. 393.27
N 496697.02
E 822026.81

BM#2 HOWARD COUNTY MONUMENT NO. 2437003 ELEV. 472.12
CONCRETE MONUMENT

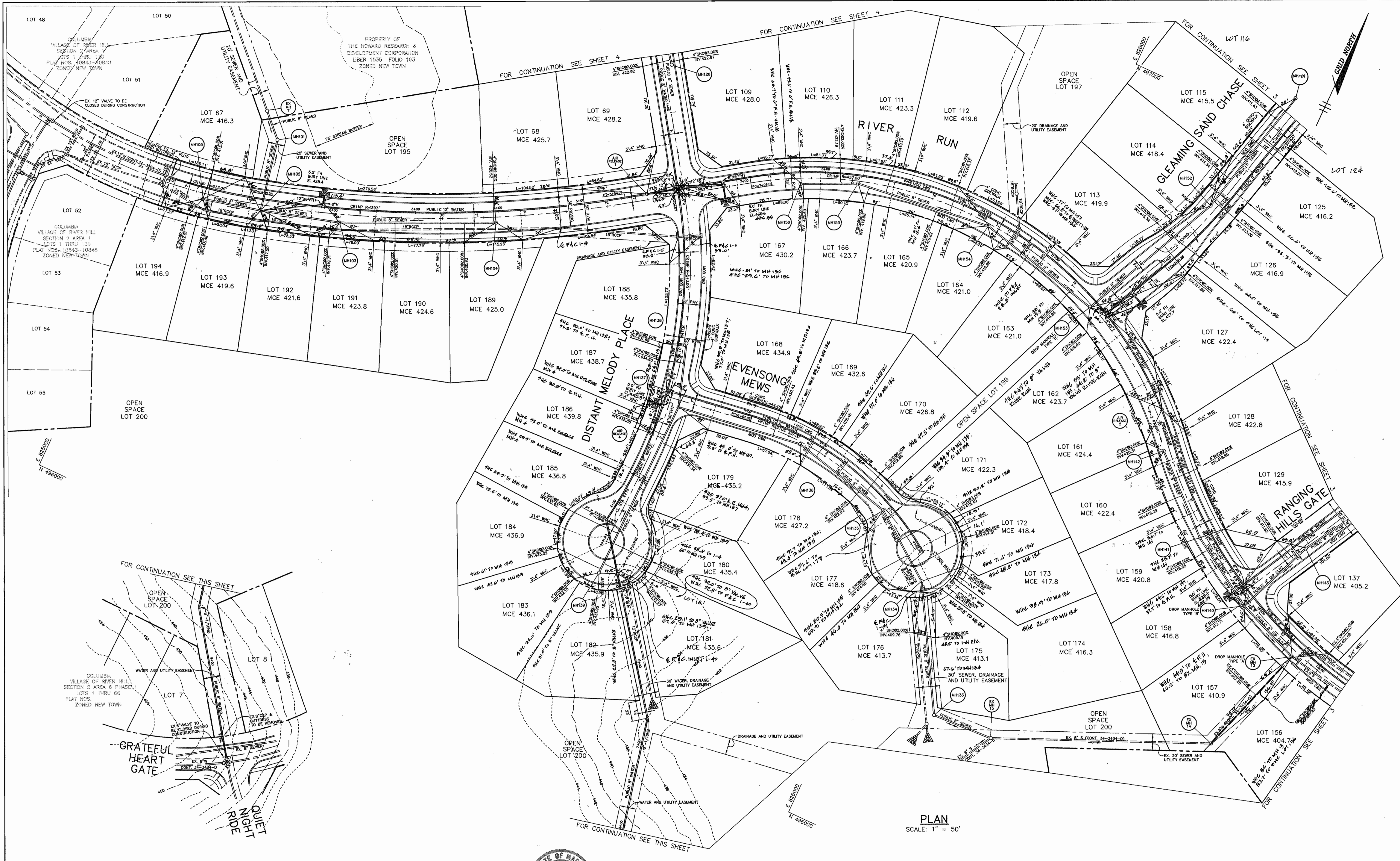


GENERAL NOTES

- 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. 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 787-9088
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 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 restrained and buttressed with concrete in accordance with Standard Detail 65.52. 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 D.I.P. 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 18" walls are for brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail 65.52. 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.
- Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
- The fire hydrant shall be installed as per standard detail W.1.11.
- Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.

RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-997-8900 FAX: 410-997-9282 HCCO\102800\FH2\51.DWG	DES: DAM DRN: DAM CHK: C.J.R. DATE: 8/6/96	TITLE SHEET	VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3561-D	SCALE AS SHOWN SHEET 1 OF 13
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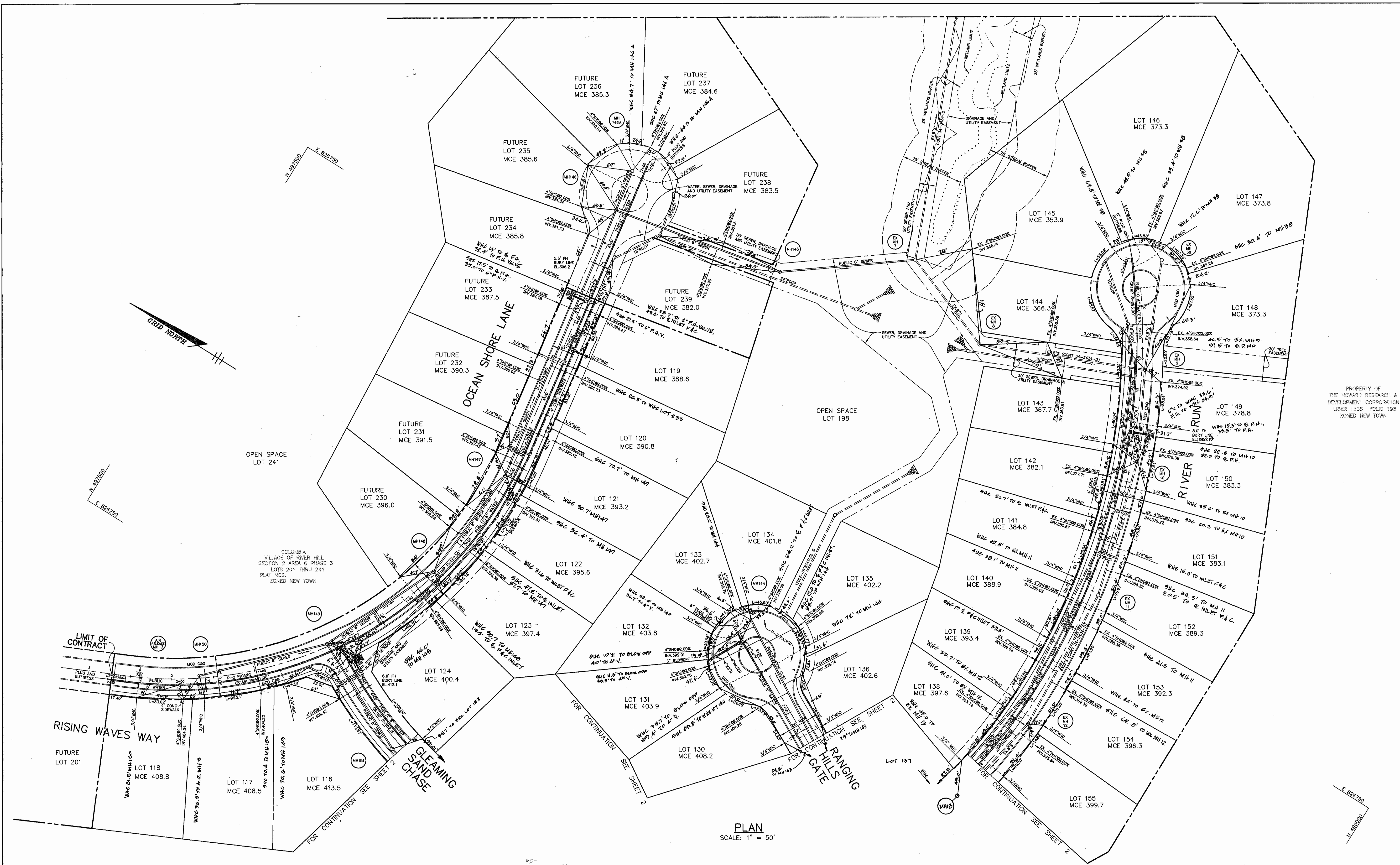
W&S AS-BUILT 5/7/97



PLAN
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities 8-24-96	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division 9/1/96	RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-897-8000 FAX: 410-897-8282 HCCD\102800\PH2\MS2.DWG		DES: DAM DRN: DAM CHK: C.J.R. DATE: 8/6/96 BY NO. REVISION DATE	PLAN OF WATER AND SEWER MAINS 600' SCALE MAP NO. 35 BLOCK NO. 15 & 21	VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3561-D	SCALE AS SHOWN SHEET 2 OF 13
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W&S AS-BUILT 5/7/97



PLAN
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Edwin S. ...
CHIEF, BUREAU OF UTILITIES
8-24-96
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION
9/19/96
DATE

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-8282
HOC0102800.PW2WS3.DWG

JAYKANT D. PAREKH # 19148

DES: DAM					
DRN: DAM					
CHK: C.J.R.					
DATE: 8/6/96					
BY NO.		REVISION		DATE	

PLAN OF WATER
AND SEWER MAINS

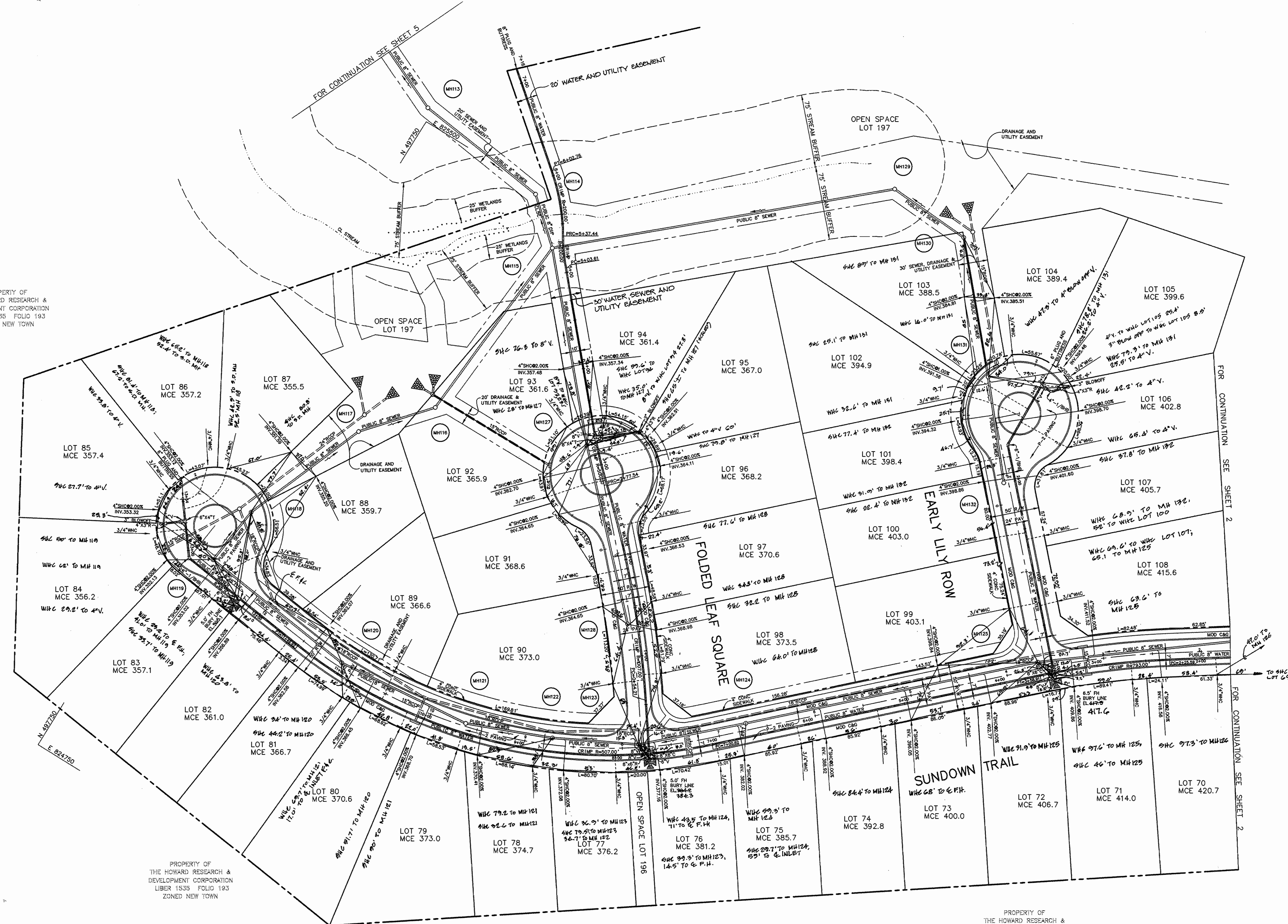
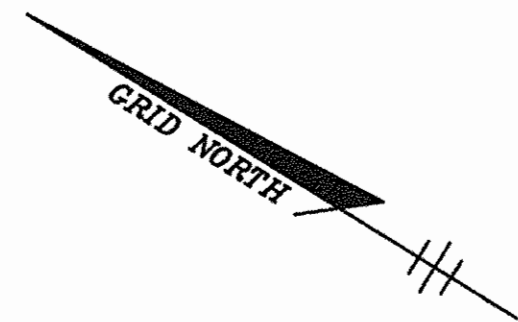
60' SCALE MAP NO. 35 BLOCK NO. 15 & 21

VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3561-D

SCALE AS SHOWN
SHEET 3 OF 13

WAS AS BUILT 5/7/07

PROPERTY OF THE HOWARD RESEARCH & DEVELOPMENT CORPORATION
LIBER 1535 FOLIO 193
ZONED NEW TOWN

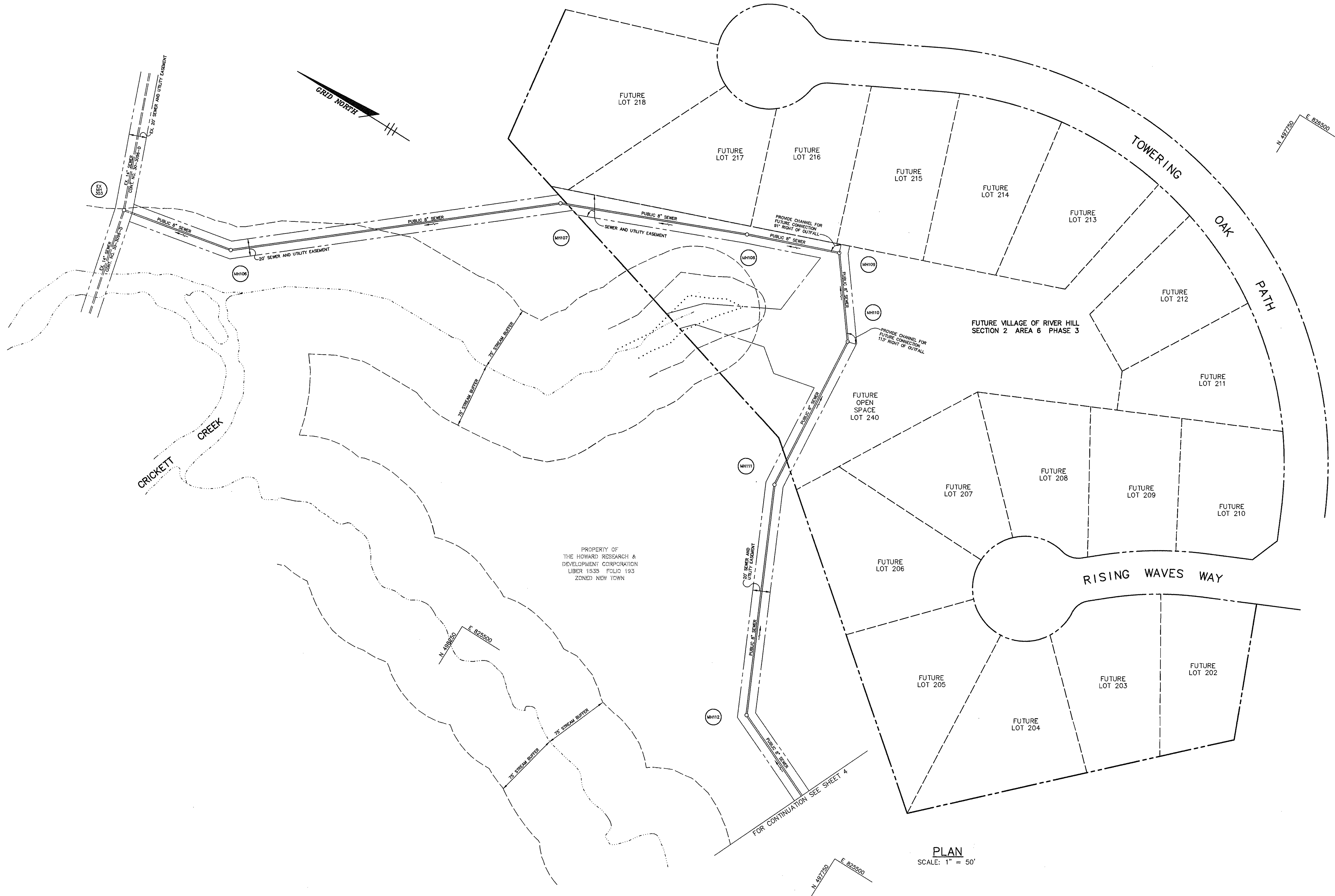


PLAN
SCALE: 1" = 50'

PROPERTY OF THE HOWARD RESEARCH & DEVELOPMENT CORPORATION
LIBER 1535 FOLIO 193
ZONED NEW TOWN

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R. D. Sami</i> 8-24-96 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>M. D. Sami</i> 9/6/96 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-997-8000 FAX: 410-997-9282 HOCO\102800\PH254.DWG	 J. Parekh JAYKANT D. PAREKH # 19148	DES: DAM DRN: DAM CHK: C.J.R. DATE: 8/6/96 BY NO. REVISION DATE	PLAN OF WATER AND SEWER MAINS 600' SCALE MAP NO. 35 BLOCK NO. 15 & 21	VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3561-D	SCALE AS SHOWN SHEET 4 OF 13
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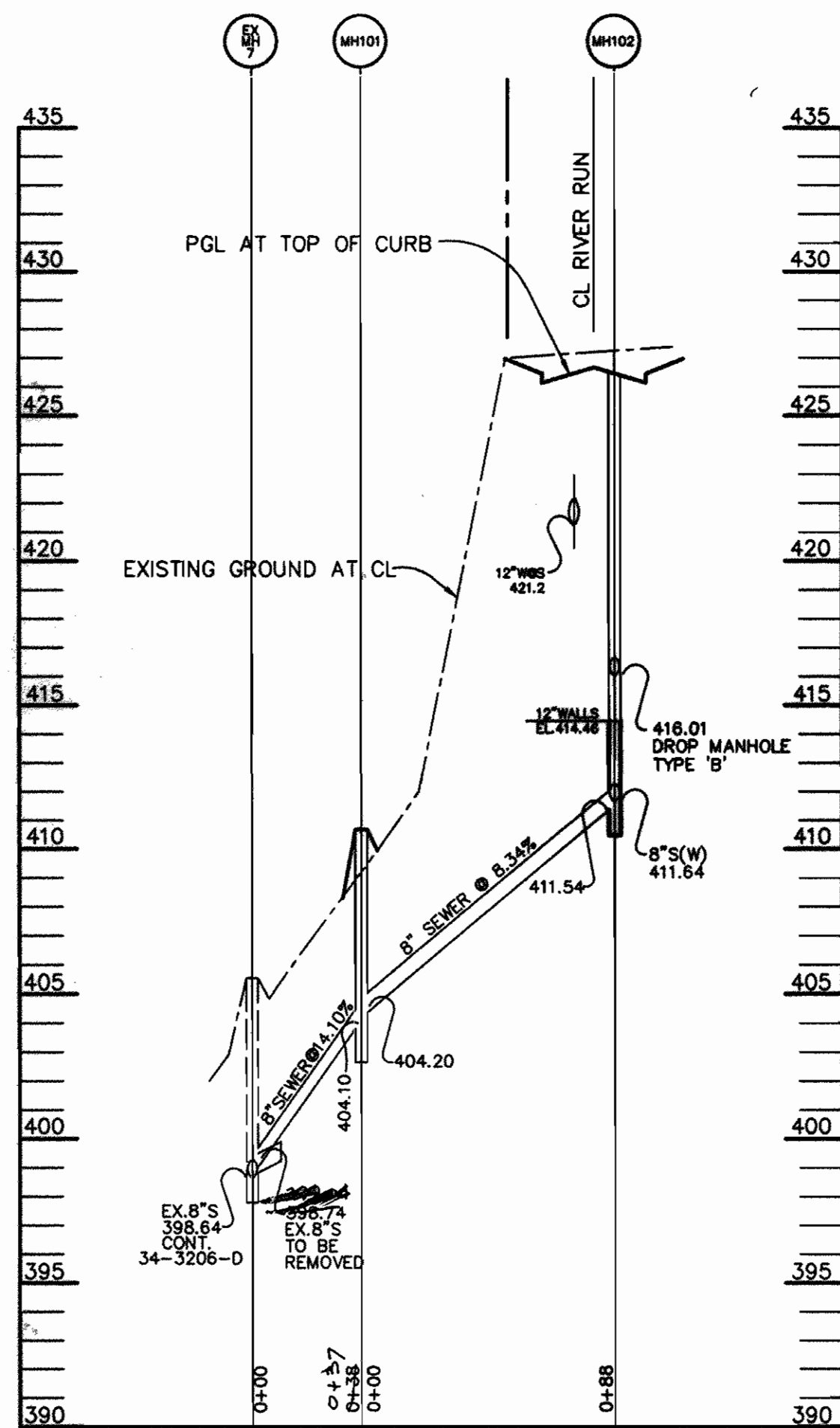
W&S AS-BUILT 5/7/97



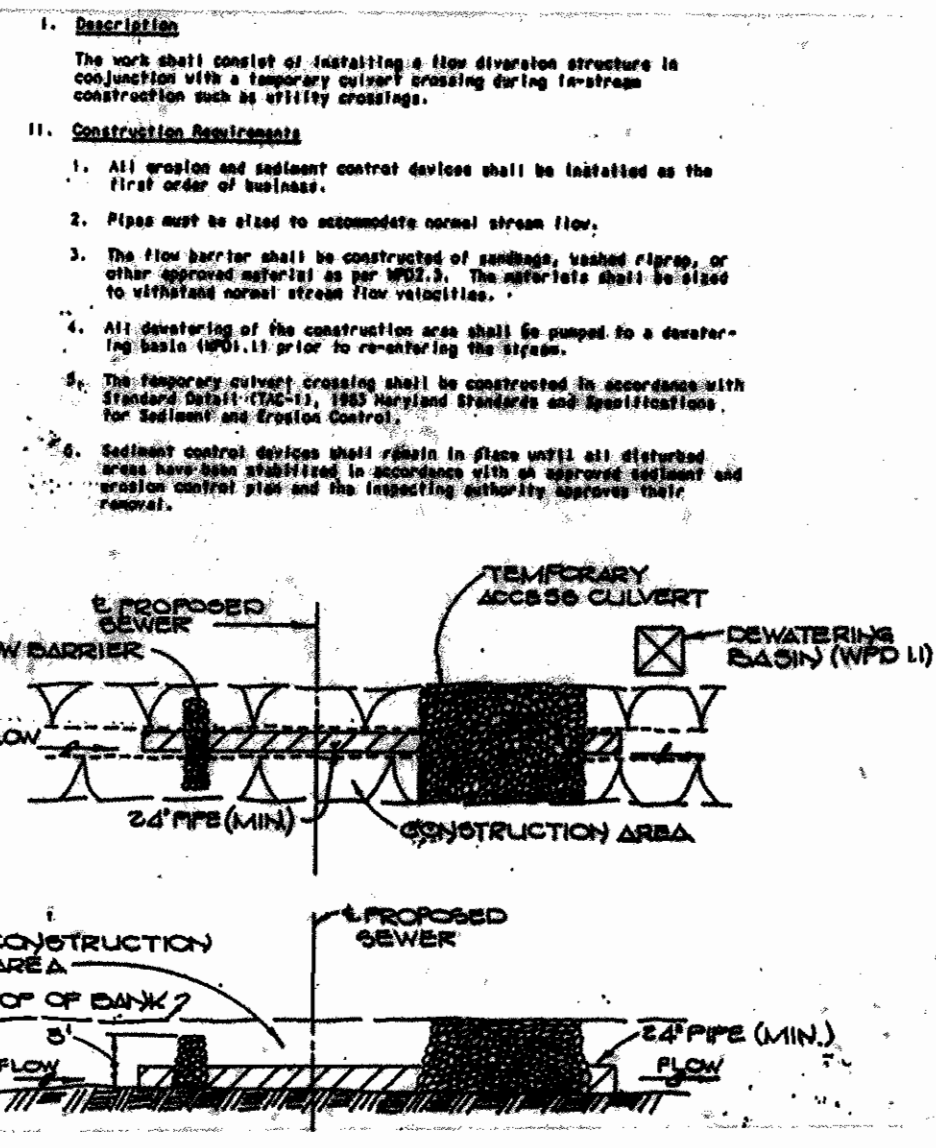
PROPERTY OF
THE HOWARD RESEARCH &
DEVELOPMENT CORPORATION
LIBER 1935 FOLIO 193
ZONED NEW TOWN

PLAN
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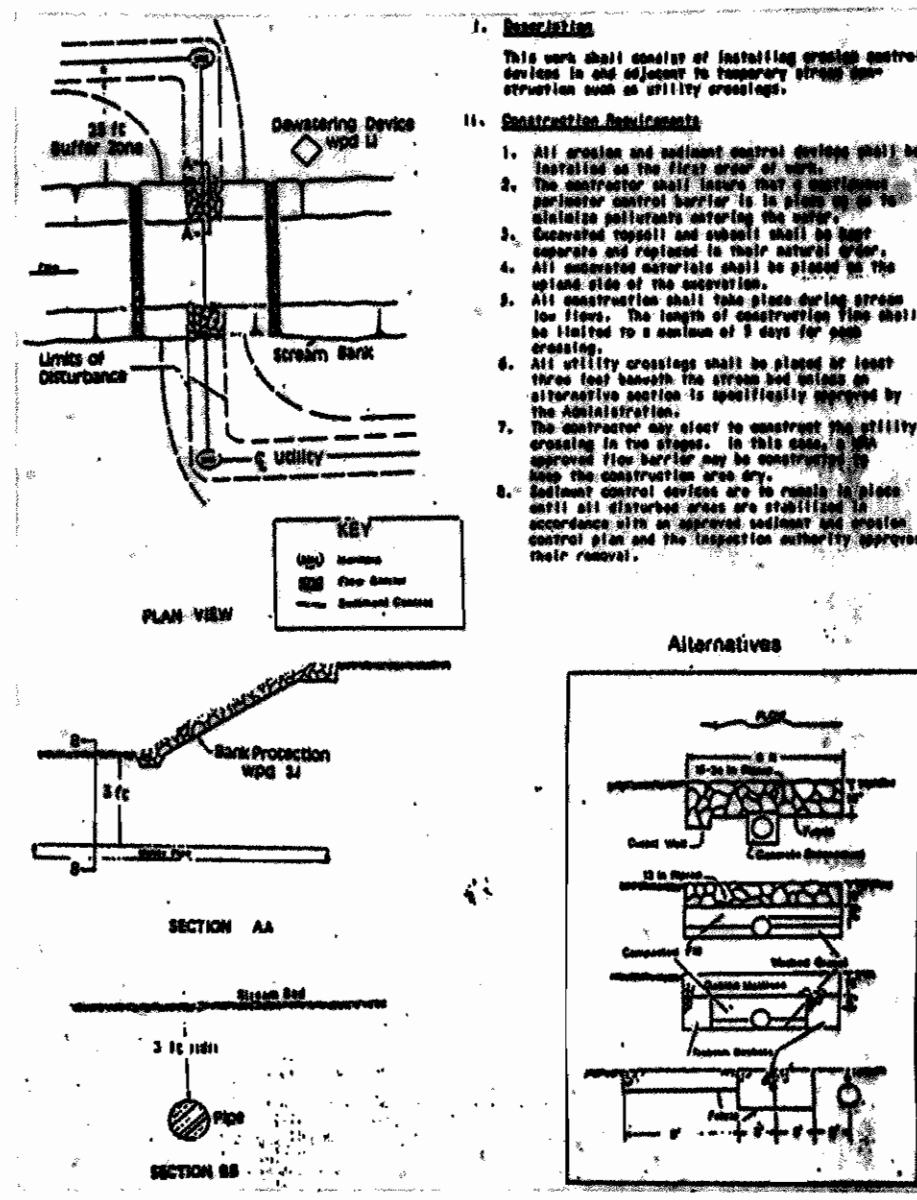
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R. L. Semin</i> 8-24-96 <small>CHIEF, BUREAU OF UTILITIES</small>	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>Al Dammus</i> 7/6/96 <small>CHIEF, DEVELOPMENT ENGINEERING DIVISION</small>	RIEMER MUEGGE & ASSOCIATES, INC. <small>ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING</small> 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-997-8900 FAX: 410-997-9282 <small>HOCO\102800\PH2WSS.DWG</small> 	DES: DAM			PLAN OF SEWER MAINS	VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3561-D	SCALE AS SHOWN
			DRN: DAM					DATE: 8/6/96



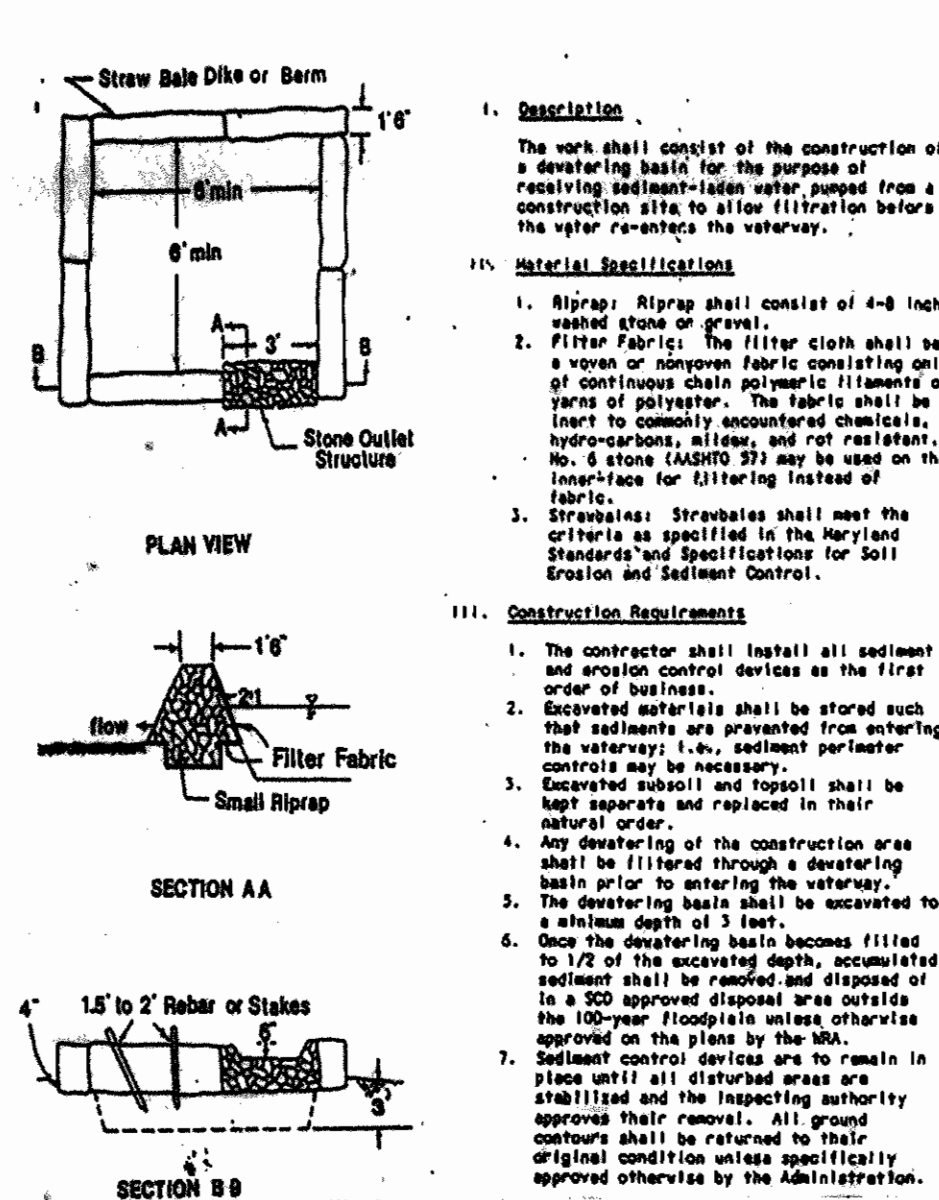
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SCALE: HOR. 1" = 50'
VERT. 1" = 5'



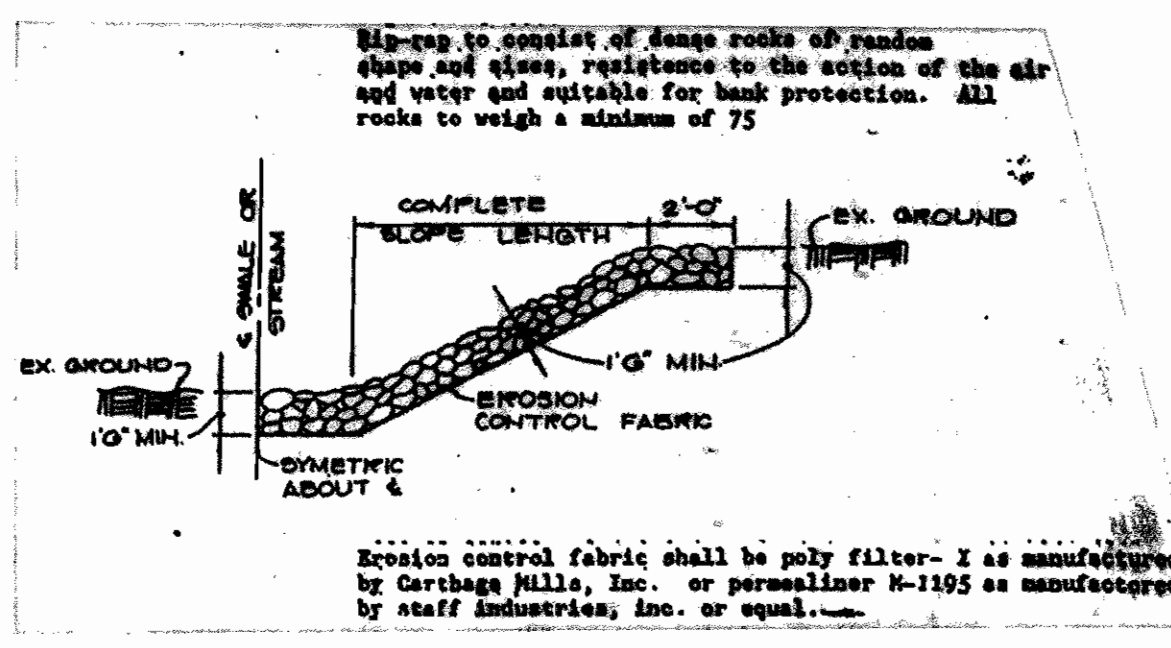
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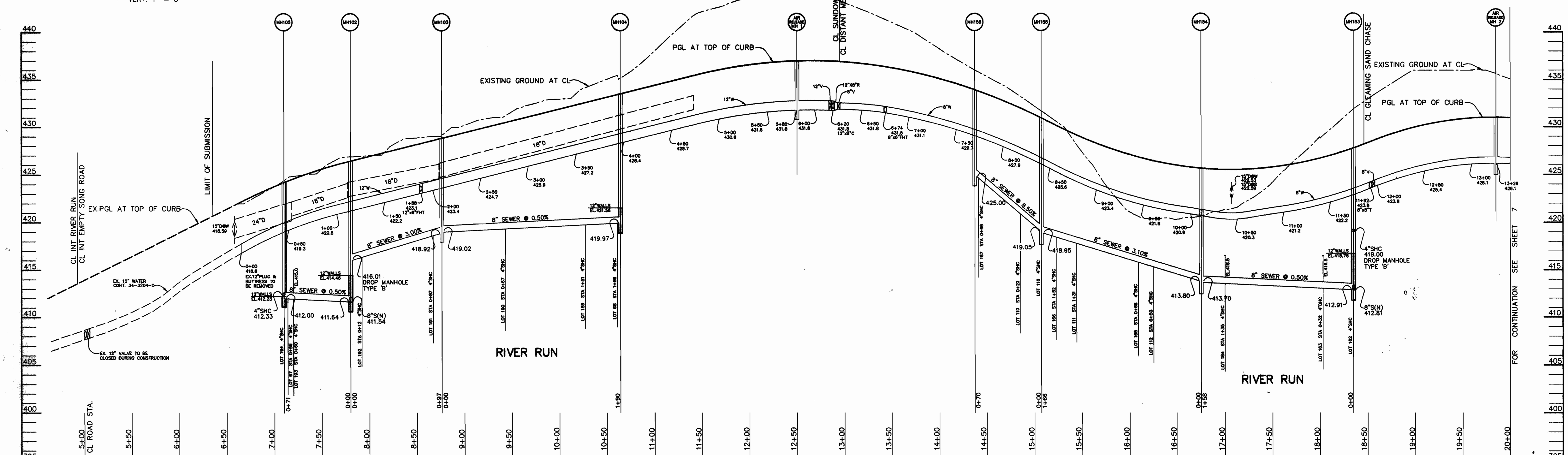
UTILITY CROSSING



DEWATERING BASIN



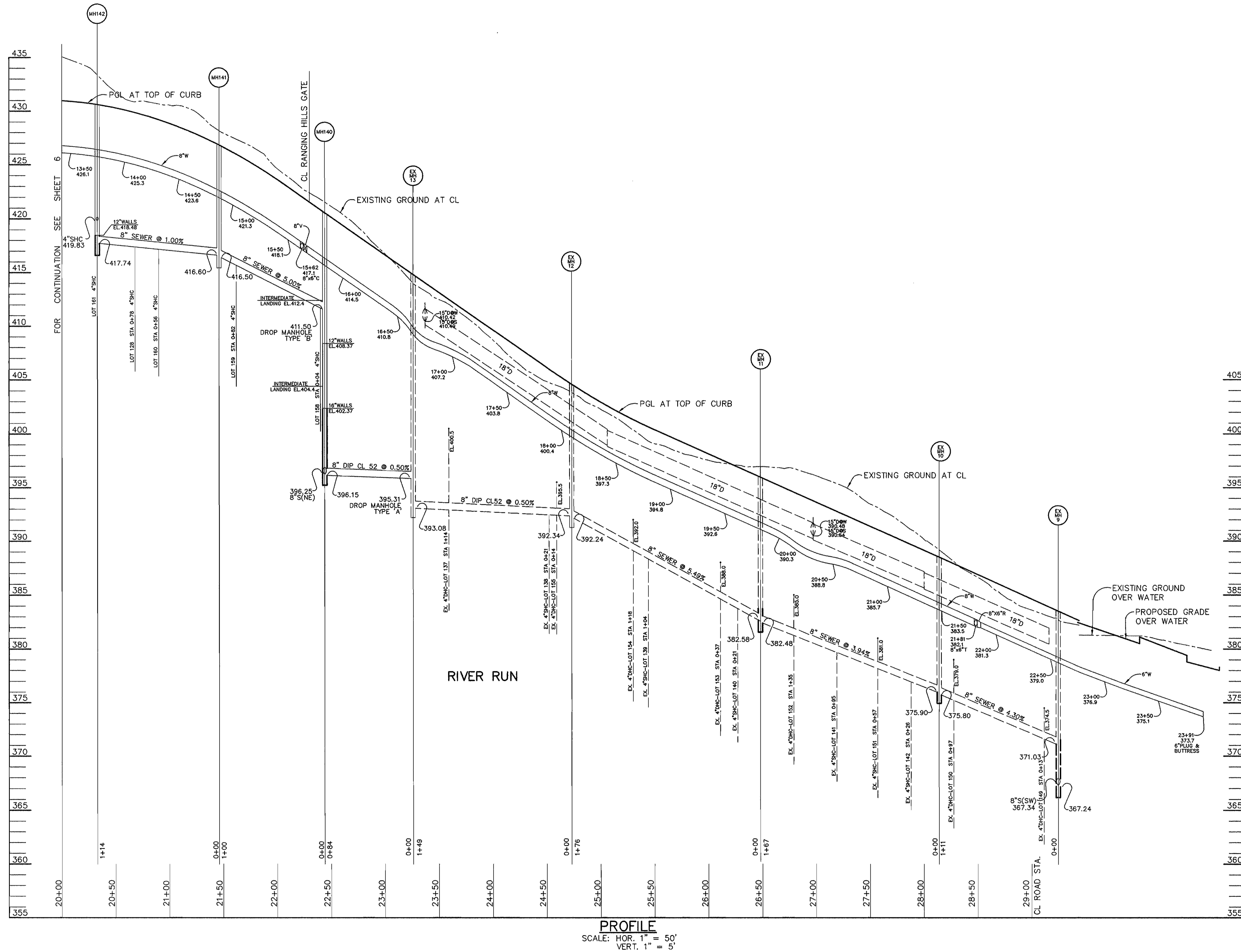
RIPRAP DETAIL



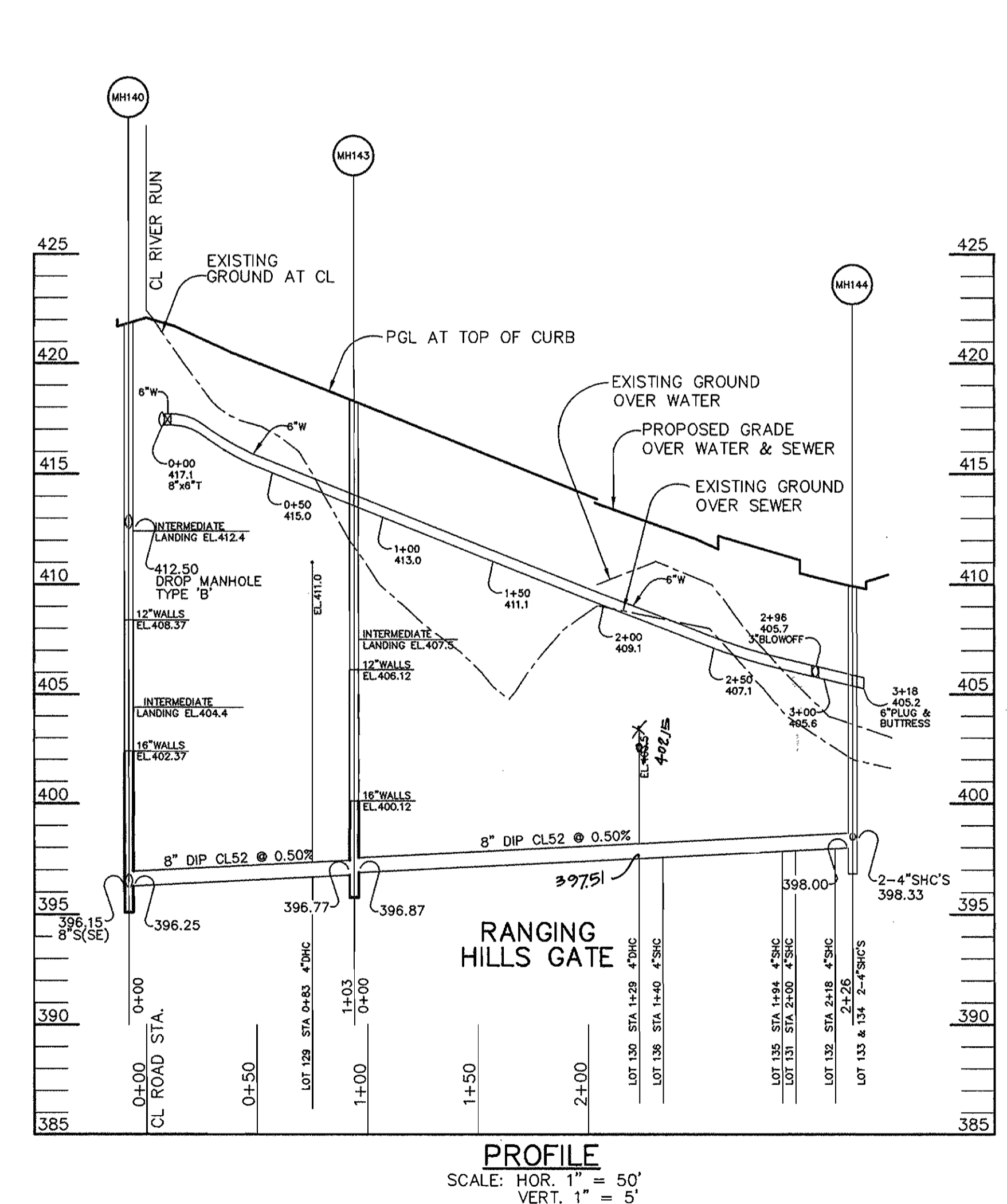
PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 8-24-96 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND 9/2/96 CHIEF, DEVELOPMENT ENGINEERING DIVISION	RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive • Suite 200 • Columbia, MD 21046 410-997-8900 FAX: 410-997-9282 HOC0102800 PH2WS6.DWG	DES: DAM DRN: DAM CHK: C.J.R. DATE: 8/6/96 BY: NO. REVISION DATE	PROFILES OF WATER AND SEWER MAINS AND DETAIL SHEET	VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3561-D	SCALE AS SHOWN SHEET 6 OF 13
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WAS AS-BUILT 5/7/97



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

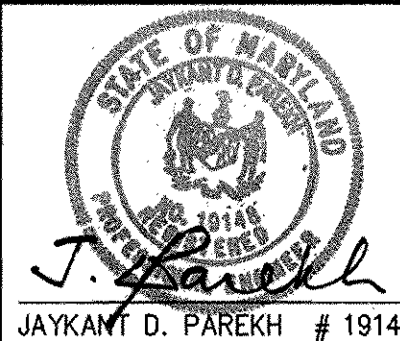


PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

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8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-9282
HDC0102800 PH0267.DWG



DES: DAM

DRN: DAM

CHK: C.J.R.

DATE: 8/6/96

BY NO. REVISION DATE

PROFILES OF
WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 15 & 21

VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3561-D

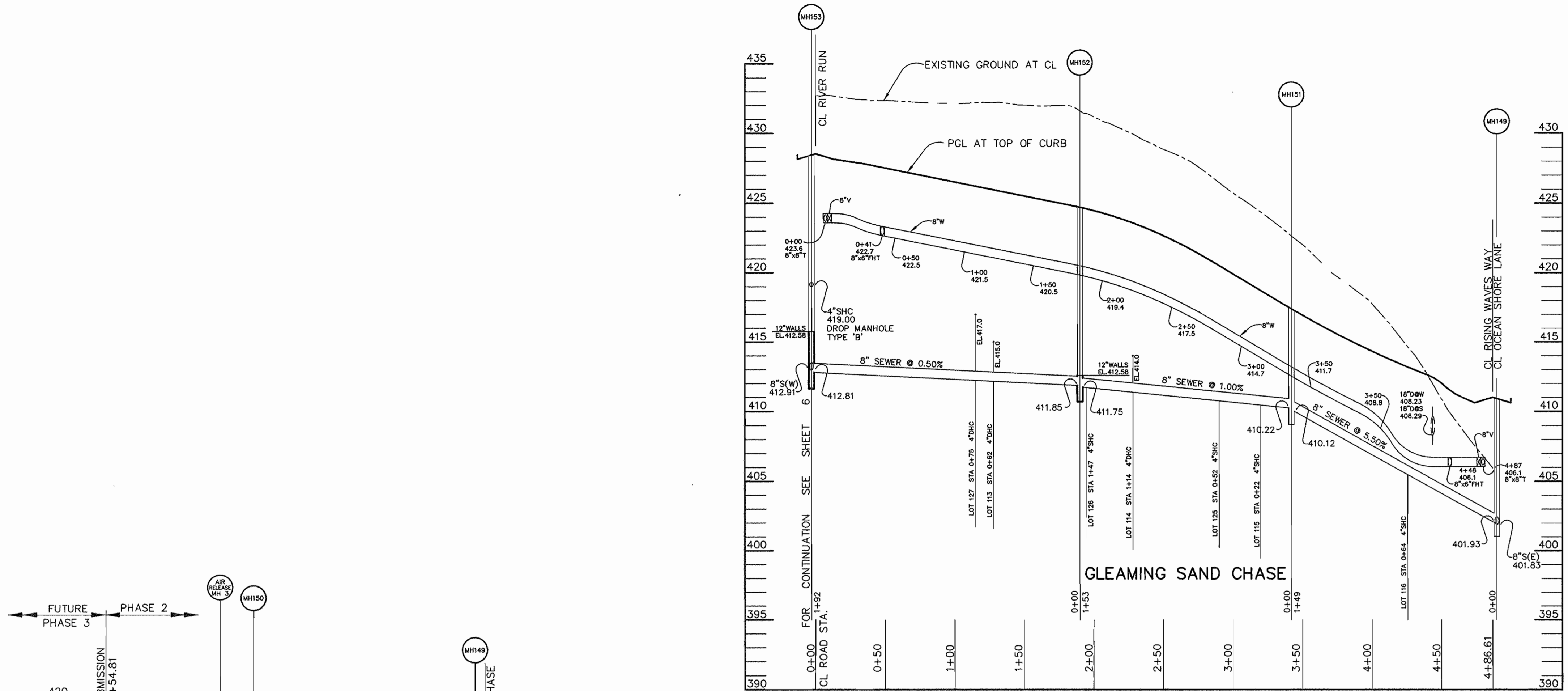
SCALE
AS
SHOWN

SHEET
7 OF 13

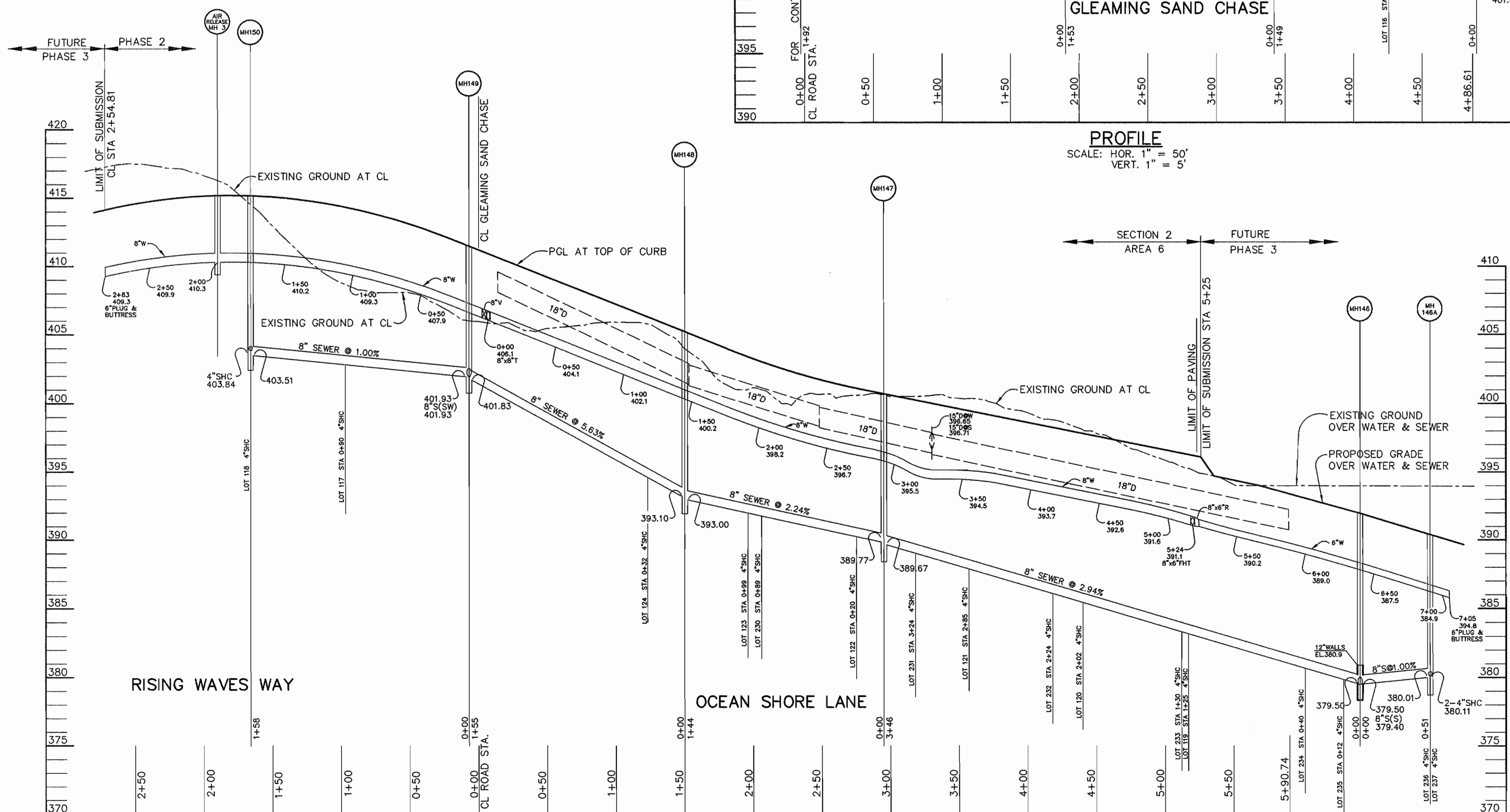
W&S AS BUILT 5/7/97

Robert Berman 8-14-96
CHIEF, BUREAU OF UTILITIES DATE

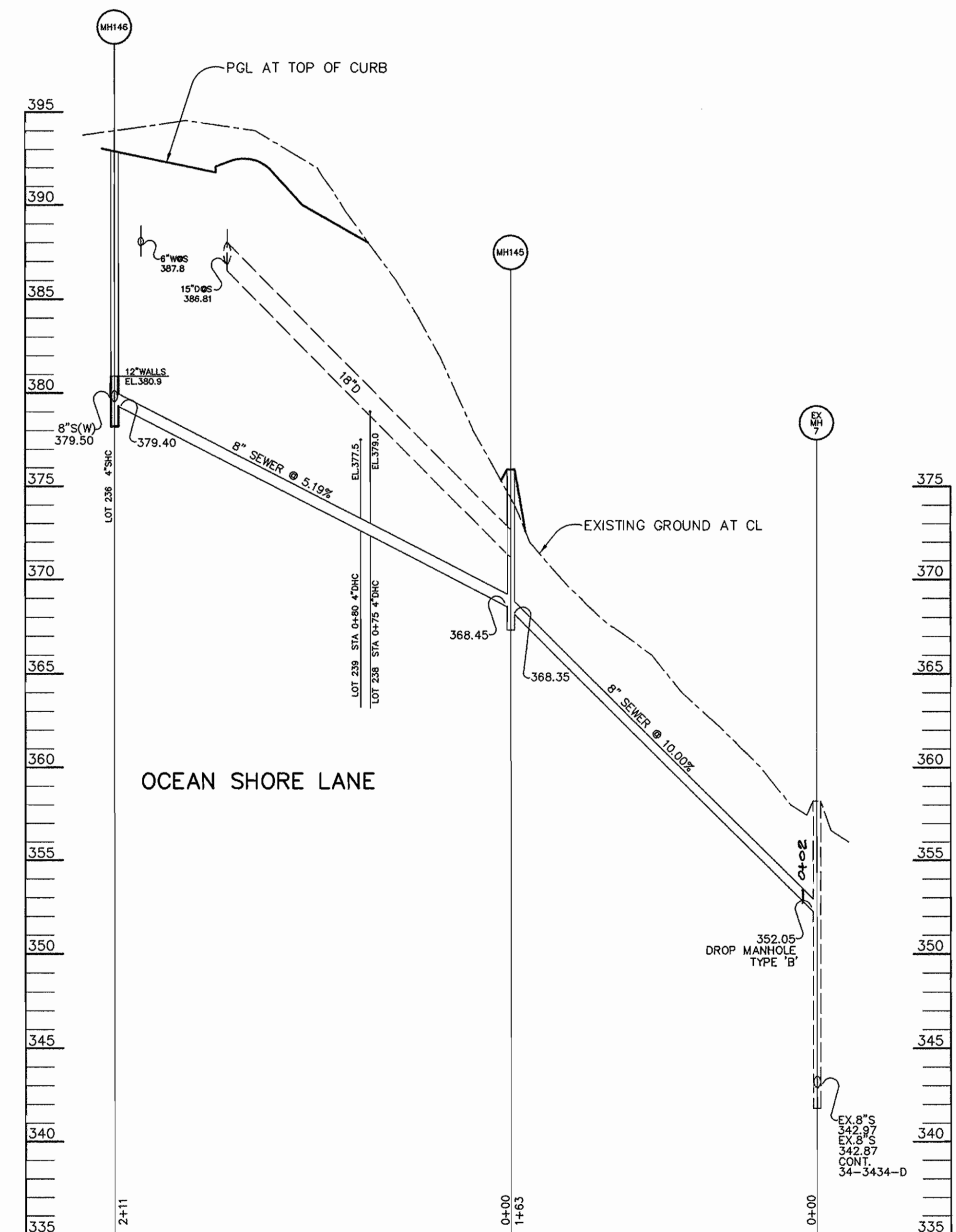
John J. ... 9/6/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



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



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



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DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert D. Quinn
CHIEF, BUREAU OF UTILITIES
8-24-96
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
John D. Parekh
CHIEF, DEVELOPMENT ENGINEERING DIVISION
9/9/96
DATE

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-9282
H000102800 PH2WS6.DWG

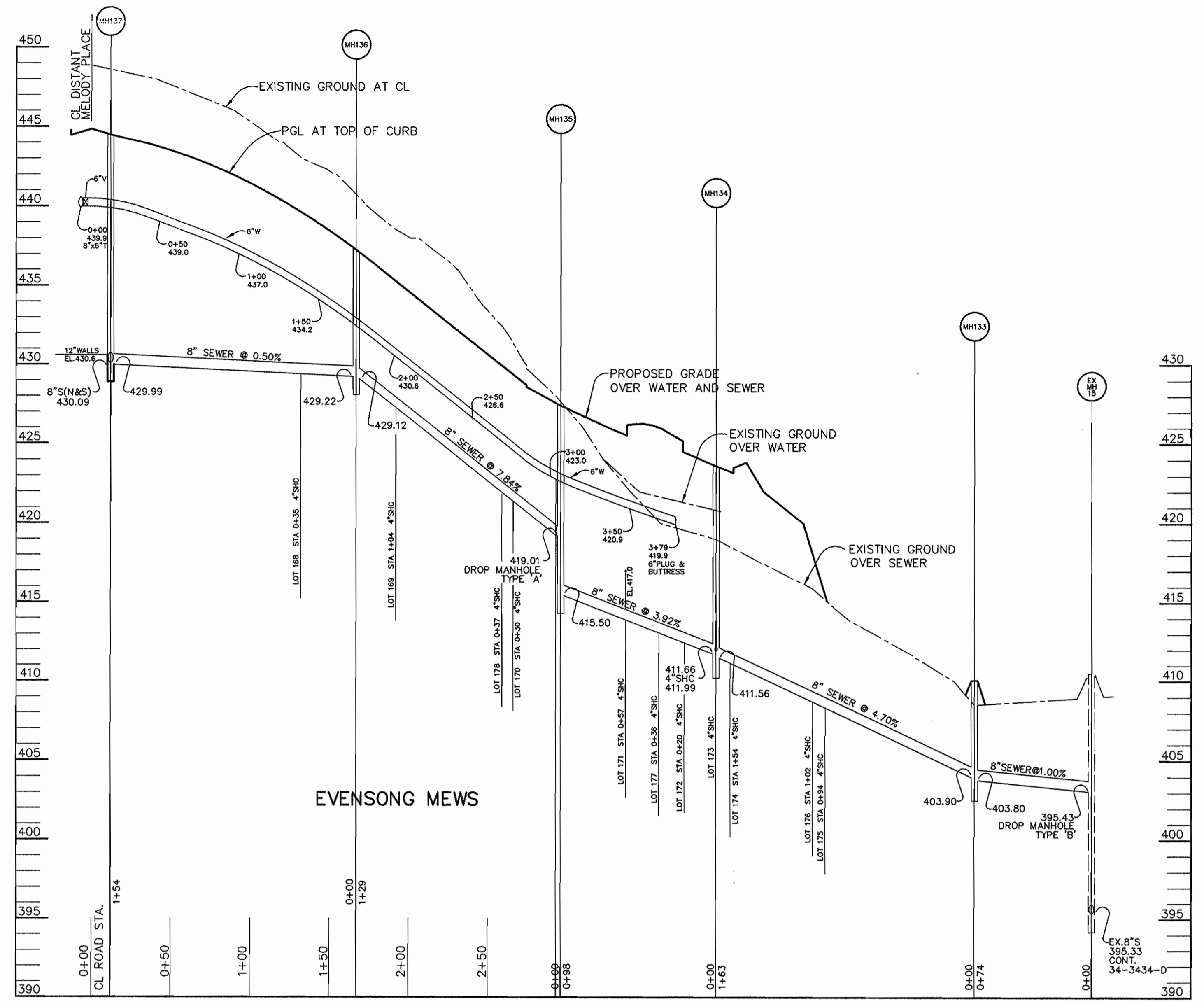
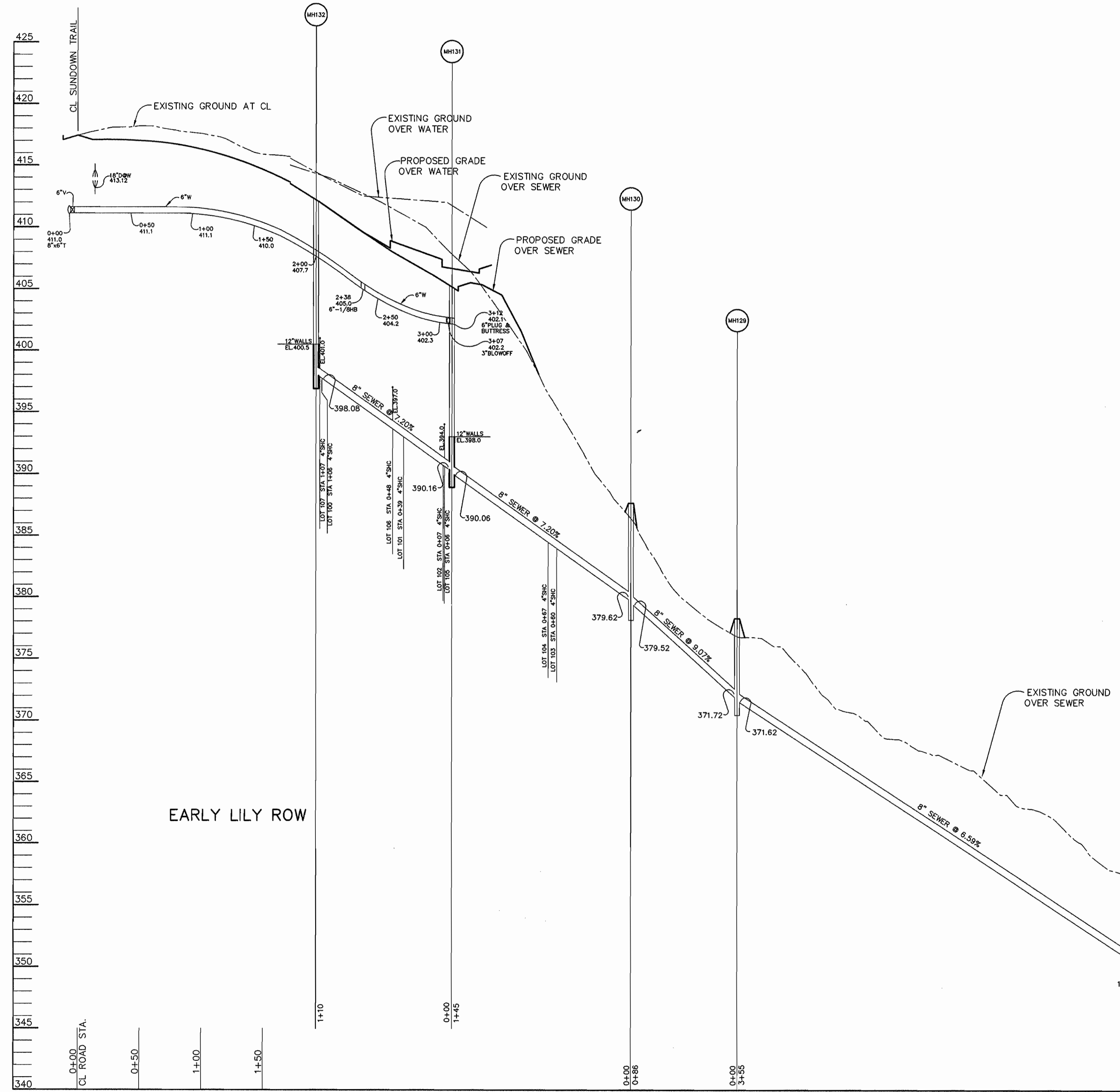
STATE OF MARYLAND
JAYKANT D. PAREKH # 19148

DES: DAM					
DRN: DAM					
CHK: C.J.R.					
DATE: 8/6/96	BY NO.	REVISION	DATE		

PROFILES OF
WATER AND SEWER MAINS
600' SCALE MAP NO. 35 BLOCK NO. 15 & 21

VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3561-D
SCALE AS SHOWN
SHEET 8 OF 13

W&S AS-BUILT 5/7/97



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

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R. A. Bauman
CHIEF, BUREAU OF UTILITIES
8-24-96
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

M. D. Bauman
CHIEF, DEVELOPMENT ENGINEERING DIVISION
9/1/96
DATE

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX 410-997-9282
HOCO\102800 P12WS9.DWG

STATE OF MARYLAND
JAYKANT D. PAREKH # 19148

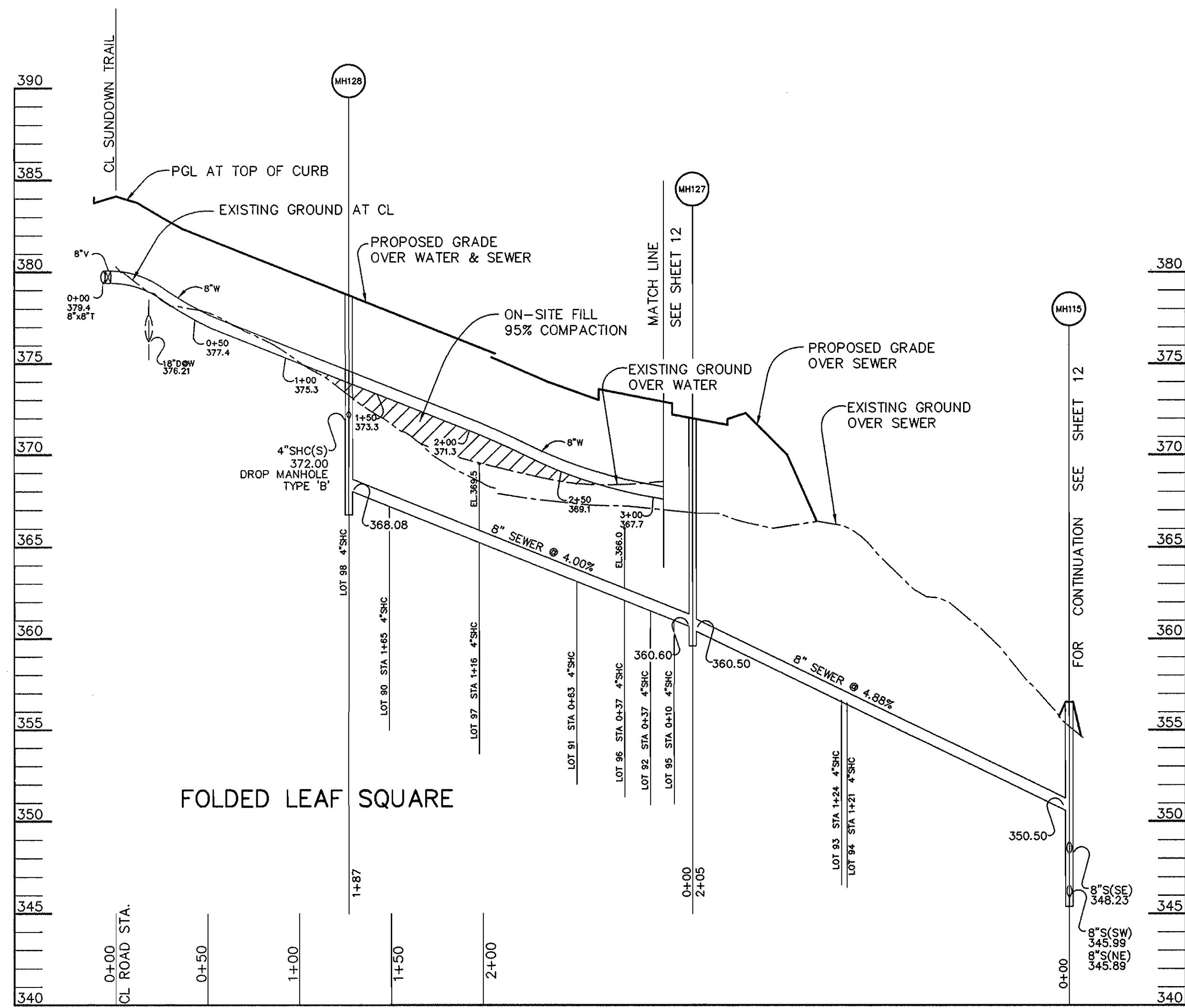
DES: DAM				
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CHK: C.J.R.				
DATE: 8/9/96				
BY: NO.		REVISION		DATE

PROFILES OF WATER AND SEWER MAINS

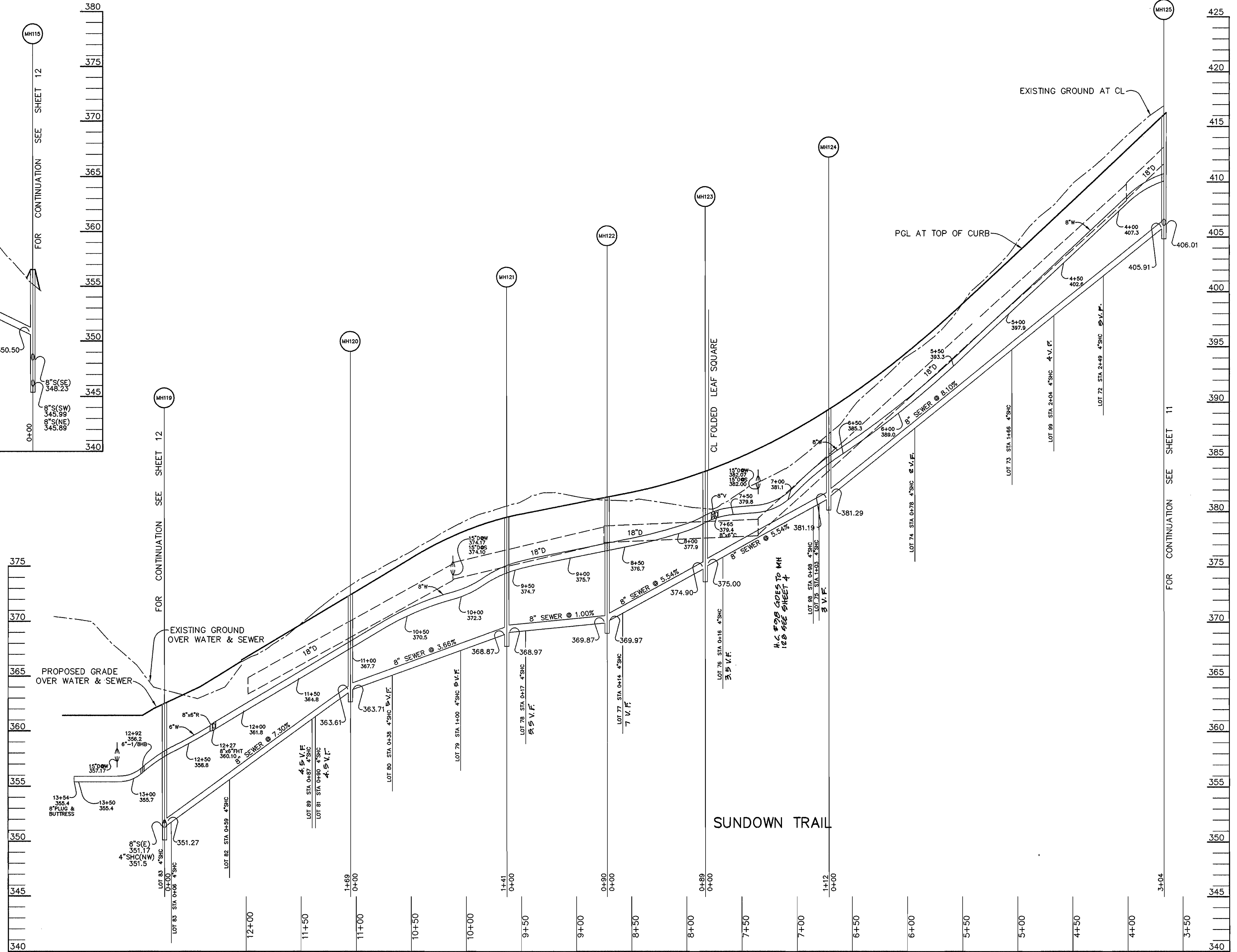
600' SCALE MAP NO. 35 BLOCK NO. 15 & 21

VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3561-D

SCALE AS SHOWN
SHEET 9 OF 13



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

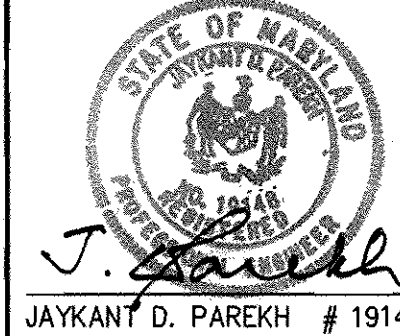


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DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

RIEMER MUEGGE & ASSOCIATES, INC.
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8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-9282
HOCV102800 P12K151.DWG



DES: DAM					
DRN: DAM					
CHK: C.J.R.					
DATE: 8/6/96	BY	NO.	REVISION	DATE	

PROFILES OF
WATER AND SEWER MAINS

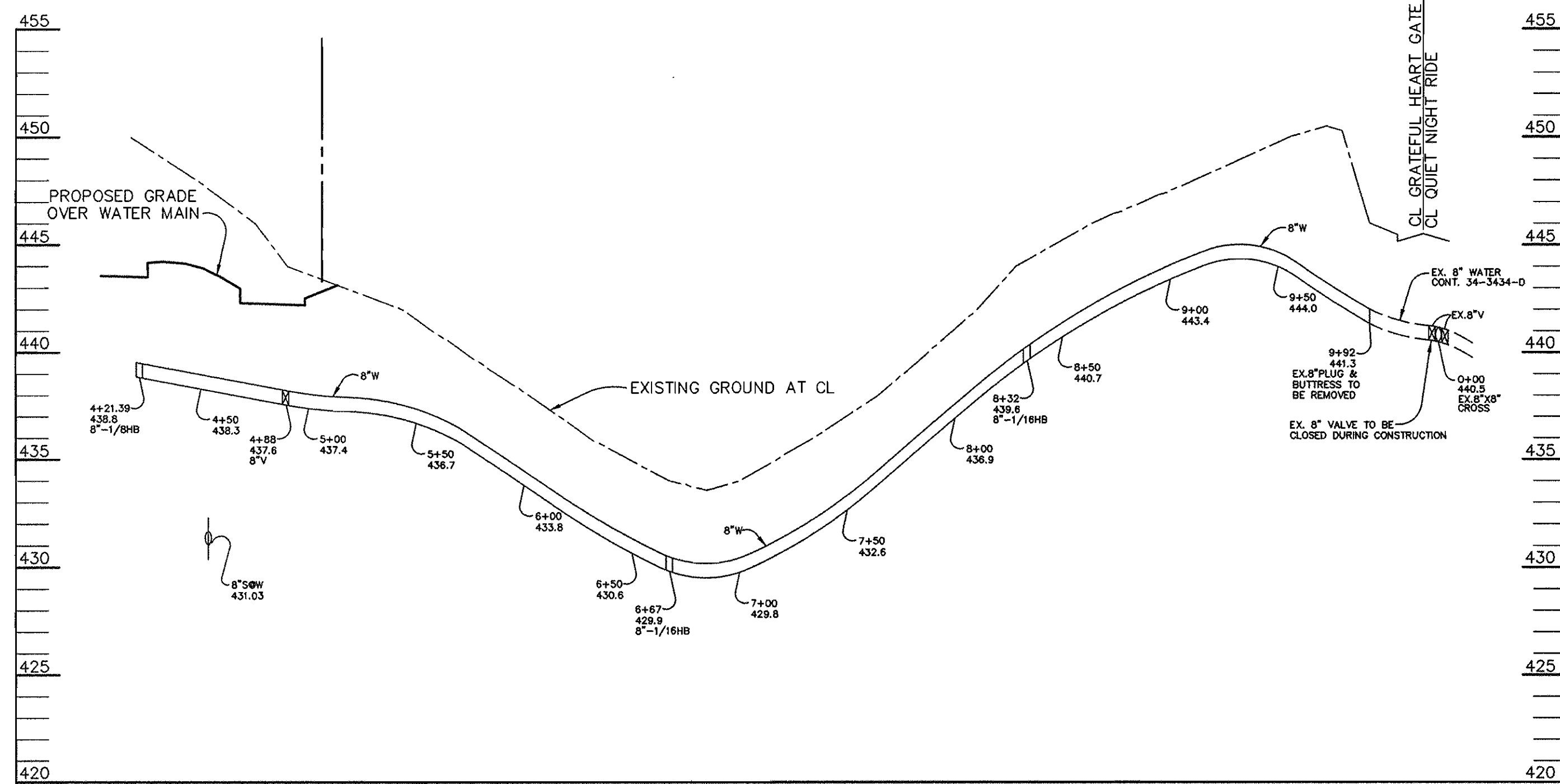
60' SCALE MAP NO. 35 BLOCK NO. 15 & 21

VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3561-D

SCALE
AS
SHOWN

SHEET
10 OF 13

W&S AS-BUILT 5/7/97

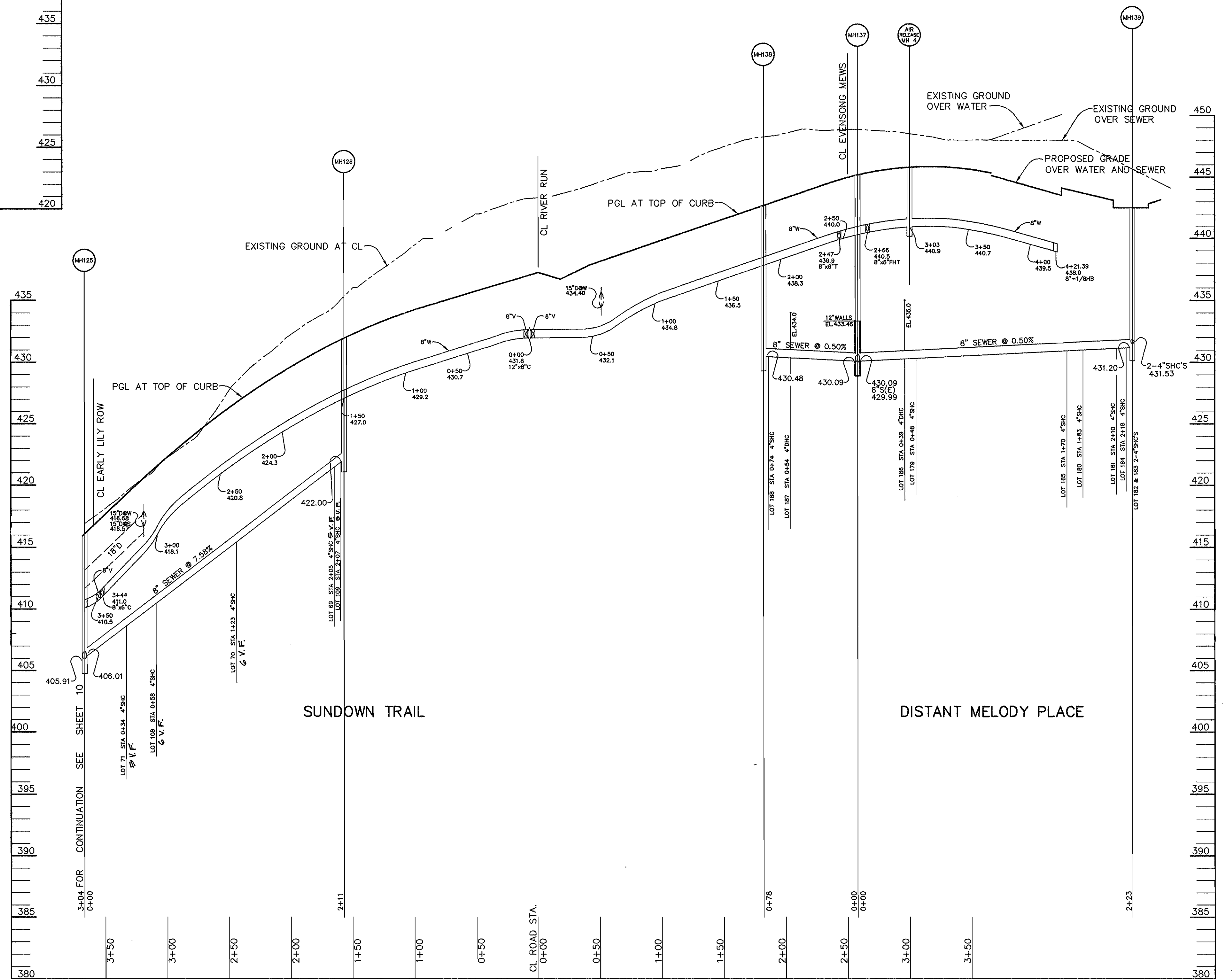


PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'

SEWER MANHOLE	LOCATION	RIM ELEV.	SLOPE
101	N 496479.09 E 825096.04	18" ABOVE EX. GR.	0.0%
102	7' RT OF CL STA 7+80 RIVER RUN	426.46	2.5%
103	10' RT OF CL STA 8+76 RIVER RUN	428.77	2.5%
104	7' RT OF CL STA 10+64 RIVER RUN	433.56	2.5%
105	7' RT OF CL STA 7+10 RIVER RUN	424.23	3.9%
106	N 498700.60 E 825725.26	18" ABOVE EX. GR.	0.0%
107	N 498410.52 E 825969.18	18" ABOVE EX. GR.	0.0%
108	N 498211.45 E 826051.43	18" ABOVE EX. GR.	0.0%
109	N 498111.17 E 826089.13	18" ABOVE EX. GR.	0.0%
110	N 498049.48 E 826008.48	18" ABOVE EX. GR.	0.0%
111	N 498033.93 E 825825.77	18" ABOVE EX. GR.	0.0%
112	N 497921.94 E 825585.80	18" ABOVE EX. GR.	0.0%
113	N 497756.14 E 825572.91	18" ABOVE EX. GR.	0.0%
114	N 497616.13 E 825496.08	18" ABOVE EX. GR.	0.0%
115	N 497572.58 E 825458.43	18" ABOVE EX. GR.	0.0%
116	N 497587.97 E 825256.91	18" ABOVE EX. GR.	0.0%
117	N 497641.47 E 825194.64	18" ABOVE EX. GR.	0.0%
118	13' RT OF LP STA 2+82 SUNDOWN TRAIL	363.4	2.0%
119	7' RT OF CL STA 12+74 SUNDOWN TRAIL	362.5	4.5%
120	5' RT OF CL STA 11+05 SUNDOWN TRAIL	372.36	6.0%
121	3' RT OF CL STA 9+63 SUNDOWN TRAIL	379.43	2.5%
122	7' RT OF CL STA 8+72 SUNDOWN TRAIL	381.16	2.0%
123	3' RT OF CL STA 7+83 SUNDOWN TRAIL	383.53	3.6%
124	7' RT OF CL STA 6+71 SUNDOWN TRAIL	389.20	6.6%
125	7' RT OF CL STA 3+67 SUNDOWN TRAIL	415.93	9.4%
126	10' RT OF CL STA 1+57 SUNDOWN TRAIL	431.71	5.0%
127	18' RT OF LP STA. 1+57 FOLDED LEAF SQUARE	371.6	2.4%
128	3' LT OF CL STA. 1+27 FOLDED LEAF SQUARE	378.54	4.0%

SEWER MANHOLE	LOCATION	RIM ELEV.	SLOPE
129	N 497307.83 E 825694.24	18" ABOVE EX. GR.	0.0%
130	N 497221.92 E 825689.51	18" ABOVE EX. GR.	0.0%
131	3' RT OF LP STA. 1+47 EARLY LILY ROW	405.0	0.5%
132	5' LT OF CL STA 1+93 EARLY LILY ROW	412.10	6.0%
133	N 496180.81 E 826110.33	18" ABOVE EX. GR.	0.0%
134	11' RT OF LP STA 2+01 EVENSONG MEWS	423.6	4.1%
135	3' RT OF CL STA. 2+96 EVENSONG MEWS	427.5	4.0%
136	3' RT OF CL STA. 1+67 EVENSONG MEWS	437.22	7.4%
137	12' LT OF CL STA. 2+58 DISTANT MELODY PLACE	444.84	2.2%
138	3' LT OF CL STA. 1+82 DISTANT MELODY PLACE	442.66	3.5%
139	13' RT OF LP STA 1+59 DISTANT MELODY PLACE	442.5	3.2%
140	8' RT OF CL STA. 22+44 RIVER RUN	420.37	7.0%
141	7' RT OF CL STA. 21+46 RIVER RUN	426.69	4.8%
142	7' RT OF CL STA. 20+33 RIVER RUN	430.48	1.4%
143	3' RT OF CL STA. 0+94 RANGING HILLS GATE	418.12	4.0%
144	10' RT OF LP STA. 1+90 RANGING HILLS GATE	409.5	2.0%
145	N 496940.05 E 826922.81	18" ABOVE EX. GR.	0.0%
146	7' LT OF CL STA. 6+42 OCEAN SHORE LANE	392.9	2.0%
146A	N 497154.53 E 826931.88	391.7	2.0%
147	3' LT OF CL STA 2+95 OCEAN SHORE LANE	400.65	2.0%
148	3' LT OF CL STA 1+50 OCEAN SHORE LANE	405.15	4.0%
149	3' RT OF CL STA. 0+07 RISING WAVES WAY	411.43	4.0%
150	3' RT OF CL STA 1+66 RISING WAVES WAY	415.13	0.4%
151	10' LT OF CL STA. 3+42 GLEAMING SAND CHASE	417.17	5.8%
152	7' LT OF CL STA. 1+90 GLEAMING SAND CHASE	424.58	2.2%
153	3' RT OF CL STA. 18+35 RIVER RUN	427.76	3.6%
154	3' RT OF CL STA. 16+75 RIVER RUN	425.66	1.8%
155	3' RT OF CL STA. 15+07 RIVER RUN	430.97	5.2%
156	7' RT OF CL STA. 14+37 RIVER RUN	433.81	3.6%

AIR RELEASE MANHOLE	LOCATION	RIM ELEV.	SLOPE
1	7' LT OF CL STA. 12+50 RIVER RUN	437.03	0.0%
2	7' LT OF CL STA. 19+86 RIVER RUN	430.89	0.0%
3	7' LT OF CL STA. 1+90 RISING WAVES WAY	415.05	0.0%
4	7' RT OF CL STA. 3+00 DISTANT MELODY PLACE	445.66	0.0%



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
8-24-16
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
9/16/16
DATE

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-9282
HCC0102800 PH2021.DWG

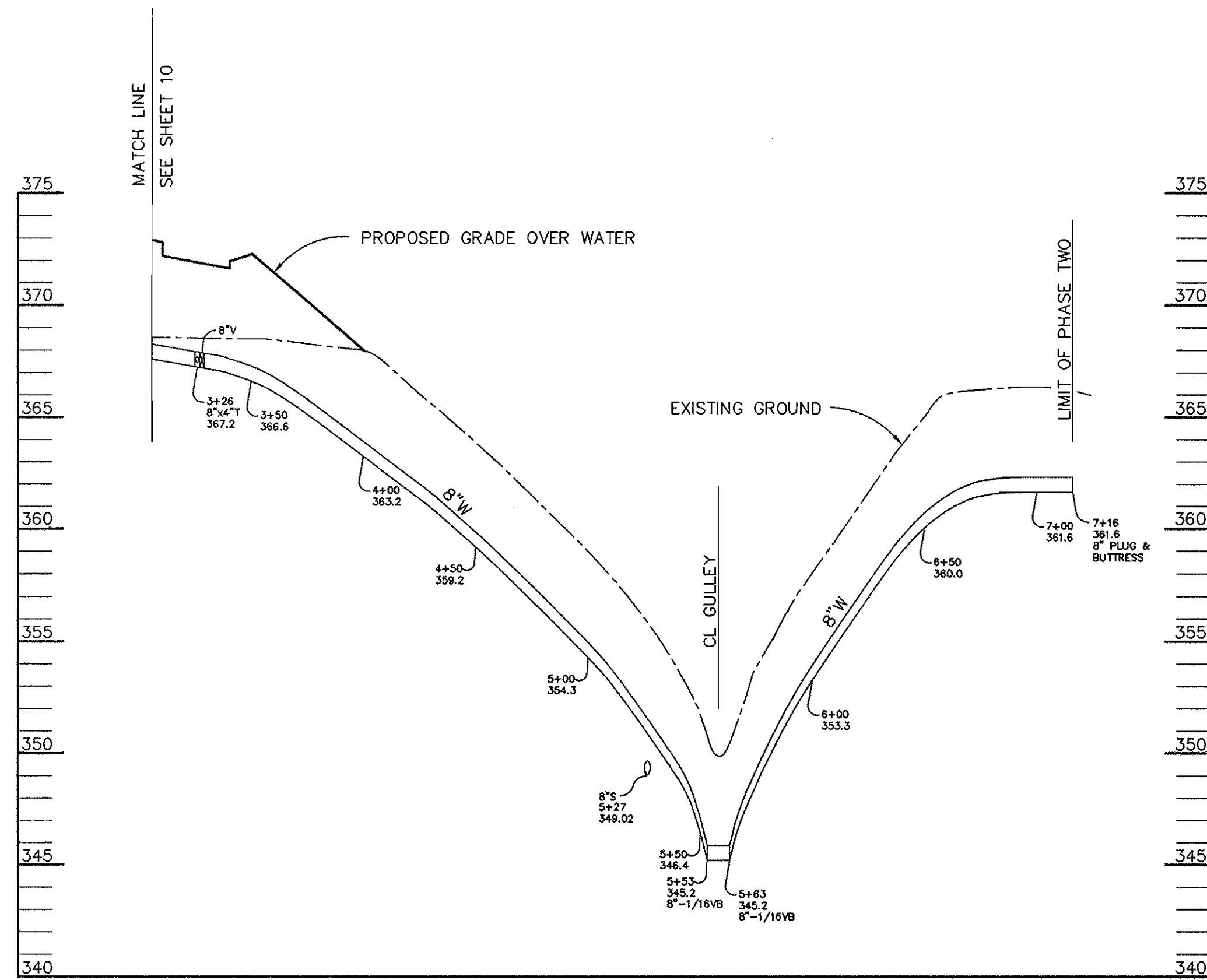
JAYKANT D. PAREKH # 19148

DES: DAM					
DRN: DAM					
CHK: C.J.R.					
DATE: 8/6/96	BY	NO.	REVISION	DATE	

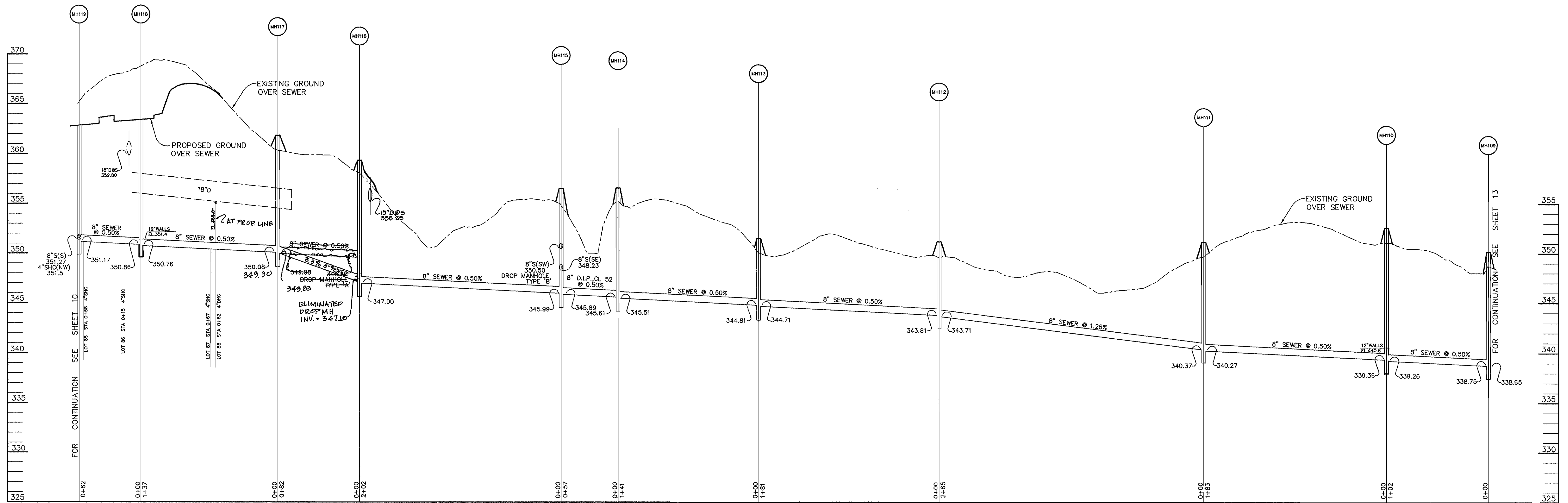
PROFILES OF WATER AND SEWER MAINS AND STRUCTURE SCHEDULE
600' SCALE MAP NO. 35 BLOCK NO. 15 & 21

VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3561-D
SCALE AS SHOWN
SHEET 11 OF 13

W&S AS-BUILT 5/1/97



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

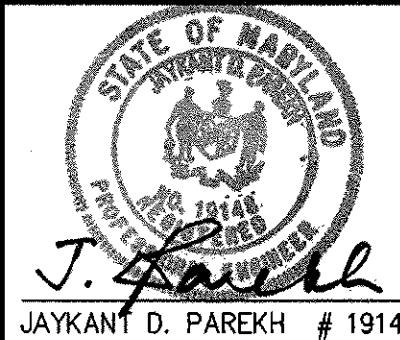


PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

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H000102000 P12W512.DWG



DES: DAM

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CHK: C.J.R.

DATE: 8/6/96

BY NO. REVISION DATE

PROFILES OF
WATER AND SEWER MAINS

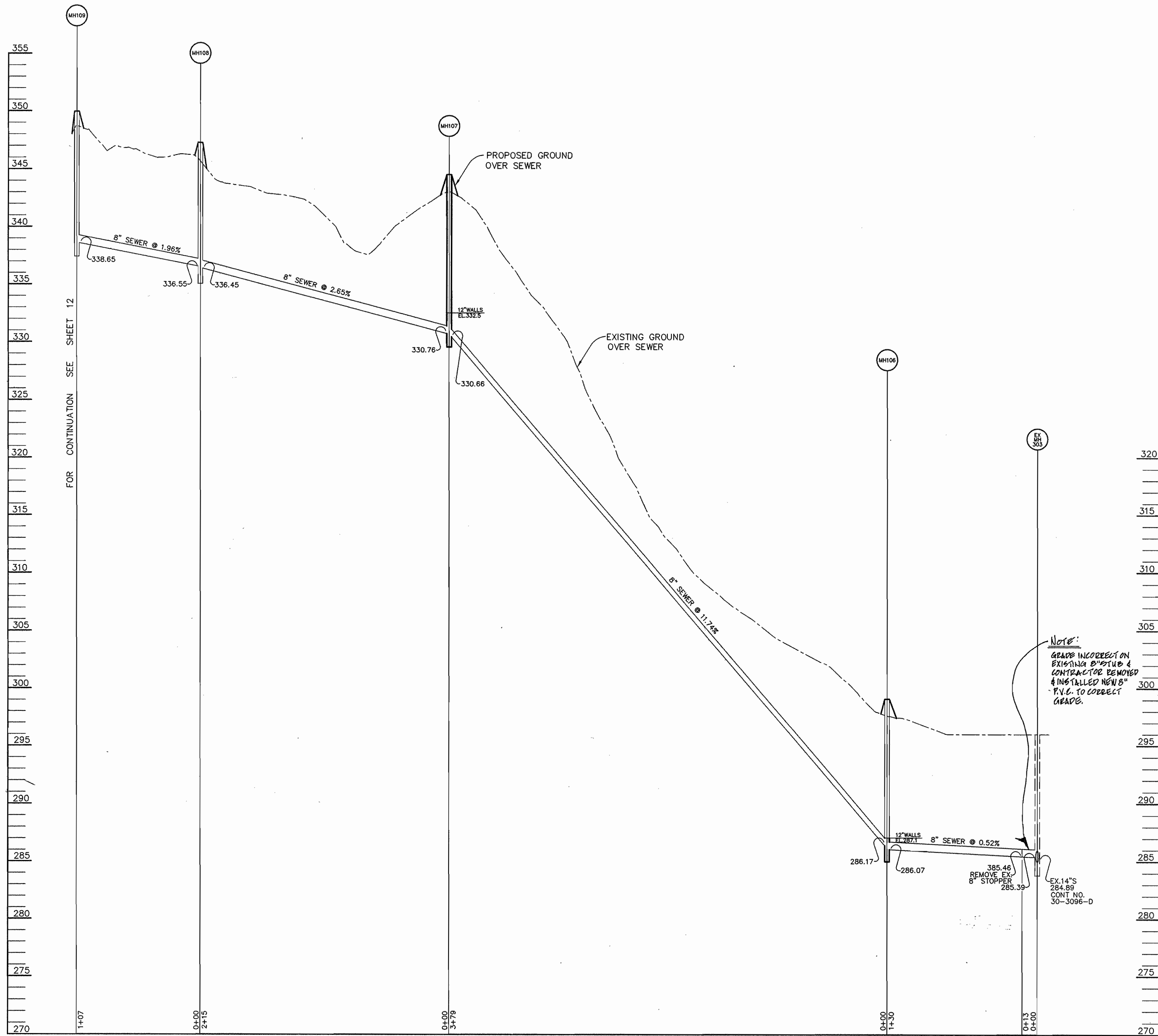
600' SCALE MAP NO. 35 BLOCK NO. 15 & 21

VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3561-D

SCALE
AS
SHOWN


SHEET
12 OF 13

W4S AS-BUILT 5/7/97



Note:
 GRADE INCORRECT ON
 EXISTING 8" STUB &
 CONTRACTOR REMOVED
 & INSTALLED NEW 8"
 P.V.C. TO CORRECT
 GRADE.

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

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Edna Berman</i> 8-14-96 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>John D. Parekh</i> 9/1/96 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-997-8900 FAX: 410-997-9282 <small>1000\102800 PR29613.DWG</small>	 J. Parekh JAYKANT D. PAREKH #19148	DES: DAM				PROFILES OF WATER AND SEWER MAINS	VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3561-D	SCALE AS SHOWN
				DRN: DAM						CHK: C.J.R.
				DATE: 8/6/96	BY: NO.	REVISION	DATE	600' SCALE MAP NO. 35	BLOCK NO. 15 & 21	

W&S AS BUILT 5/7/97