

WATER AND SEWER EXTENSIONS

VILLAGE OF RIVER HILL

SECTION 2 AREA 1

5th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

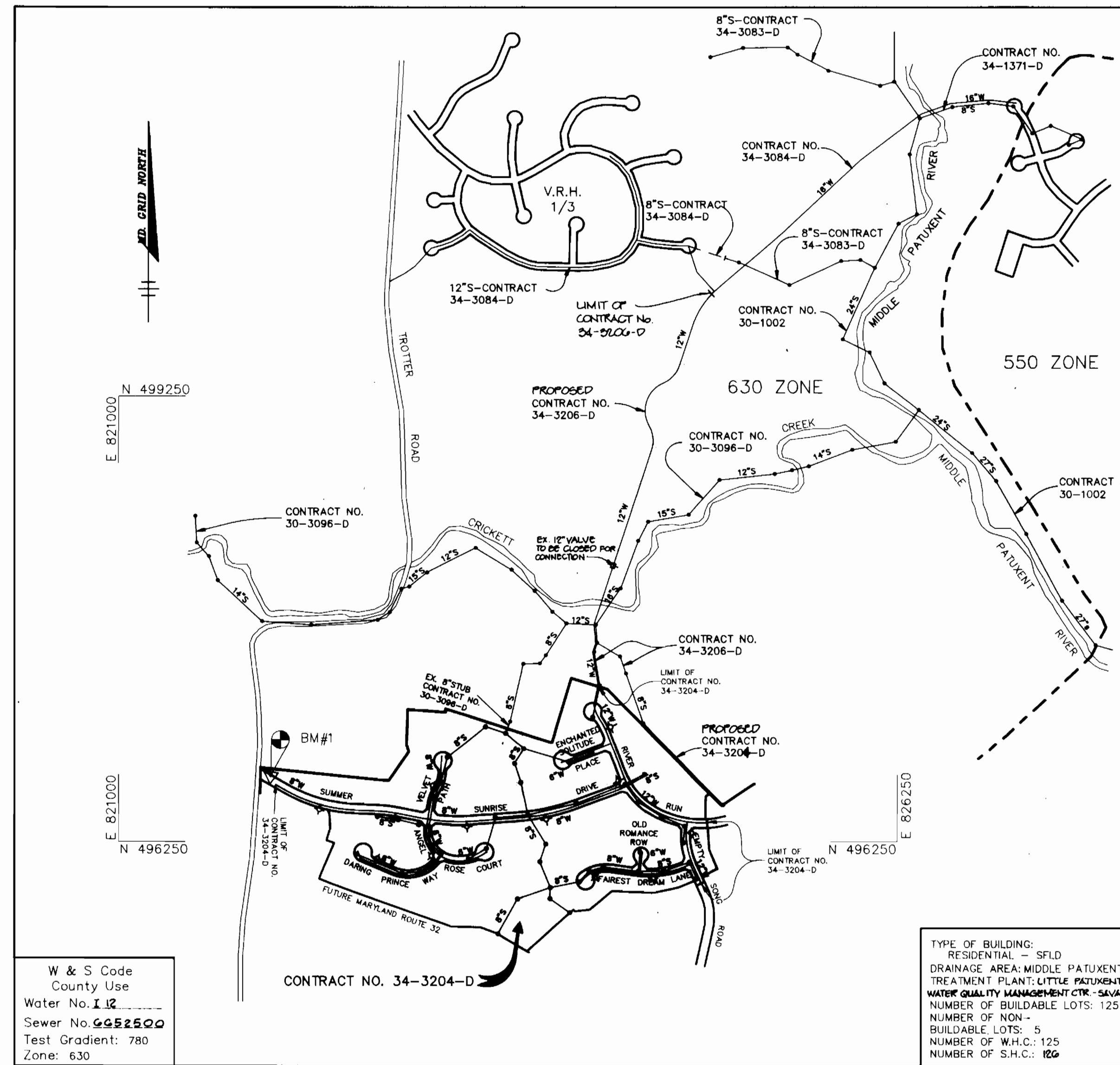
CONTRACT NO. 34-3204-D

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QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
12" WATER	1805 LF	1817.0 LF	5-B. 51 52	GRIFFIN PIPE/BR.
8" WATER	3020 LF	3942.48 LF	5-B. 51 52	GRIFFIN PIPE/BR.
6" WATER	1082 LF	1939.0 LF	5-B. 51 52	GRIFFIN PIPE/BR.
3/4" WHC	410 LF	410.3 LF	"K" COPPER	ORANGE/BR/BR.
8" SEWER	6815 LF	7218.95 LF	SDR 35 PVC	J.M. MANUFACTURING B.K.
8" D.I.P. CL. 52	1164 LF	1157.4 LF	5-B. 51 52	GRIFFIN PIPE/BR.
4" SHC	3046 LF	4659.0 LF	SDR 35 PVC	J.M. MANUFACTURING B.K.
FIRE HYDRANTS	11 EA.	11 EA.	STD.	12.5" P. 3/4" N.
12" VALVES	7 EA.	7 EA.	R. 200/1 GATE	MAGELLAN/BR.
8" VALVES	0 EA.	9 EA.	R. 200/1 GATE	MAGELLAN/BR.
6" VALVES	15 EA.	15 EA.	R. 200/1 GATE	MAGELLAN/BR.
MANHOLES	46 EA, 562.0 VF	46 EA	PRECAST CONCRETE	ATLANTA, MARYLAND
3" BLOWOFF	3 EA.	3 EA.	STD.	K. HAPPEL'S PIPEWORK B.K.
6" PLUG & BUTTRESS	7 EA.	7 EA.	DIP 21 52	GRIFFIN PIPE/BR.
8" PLUG & BUTTRESS	1 EA.	1 EA.	DIP 21 52	GRIFFIN PIPE/BR.
12" PLUG & BUTTRESS	2 EA.	2 EA.	DIP 21 52	GRIFFIN PIPE/BR.
1" WHC	215 LF	250 LF	"K" COPPER	ORANGE/BR/BR.
AIR RELEASE MANHOLES	2 EA, 12.5 VF	2 EA	PRECAST CONCRETE	ATLANTA, MARYLAND

NAME OF UTILITY CONTRACTOR: W.F. WILSON

CHECKBOX	
AS-BUILT DATE	
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.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	787-9068
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 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 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, RCP and P.V.C. 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.
- 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 QS.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-93-18

John R. Robertson 1/26/93
HOWARD SOIL CONSERVATION DISTRICT

Review for Howard Soil Conservation District and meets technical requirements.

James M. Hester 1/26/93
U.S. SOIL CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

HOWARD SOIL CONSERVATION DISTRICT DATE

BENCHMARKS

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

W & S Code
County Use
Water No. 112
Sewer No. 6652500
Test Gradient: 780
Zone: 630

TYPE OF BUILDING:
RESIDENTIAL - SFLD
DRAINAGE AREA: MIDDLE PATUXENT
TREATMENT PLANT: LITTLE PATUXENT
WATER QUALITY MANAGEMENT CTM - SAVAGE
NUMBER OF BUILDABLE LOTS: 125
NUMBER OF NON-BUILDABLE LOTS: 5
NUMBER OF W.H.C.: 125
NUMBER OF S.H.C.: 125

WATER & SEWER AS BUILT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Hester 1/26/93
DIRECTOR OF PUBLIC WORKS DATE

Richard M. Hester 1/26/93
CHIEF, BUREAU OF ENGINEERING DATE

Richard M. Hester 1/26/93
CHIEF, BUREAU OF UTILITIES DATE

Richard M. Hester 1/26/93
CHIEF, LAND DEVELOPMENT DATE

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
410-997-8900 FAX: 410-997-9282

ARTHUR E. MUEGGE 10707

DES: DAM	
DRN: DBS	
CHK: CJR	
DATE: 0-8-01	
WAD BY NO.	1
REVISED NO OF SHC b	2-0-93
REVISION	
DATE	

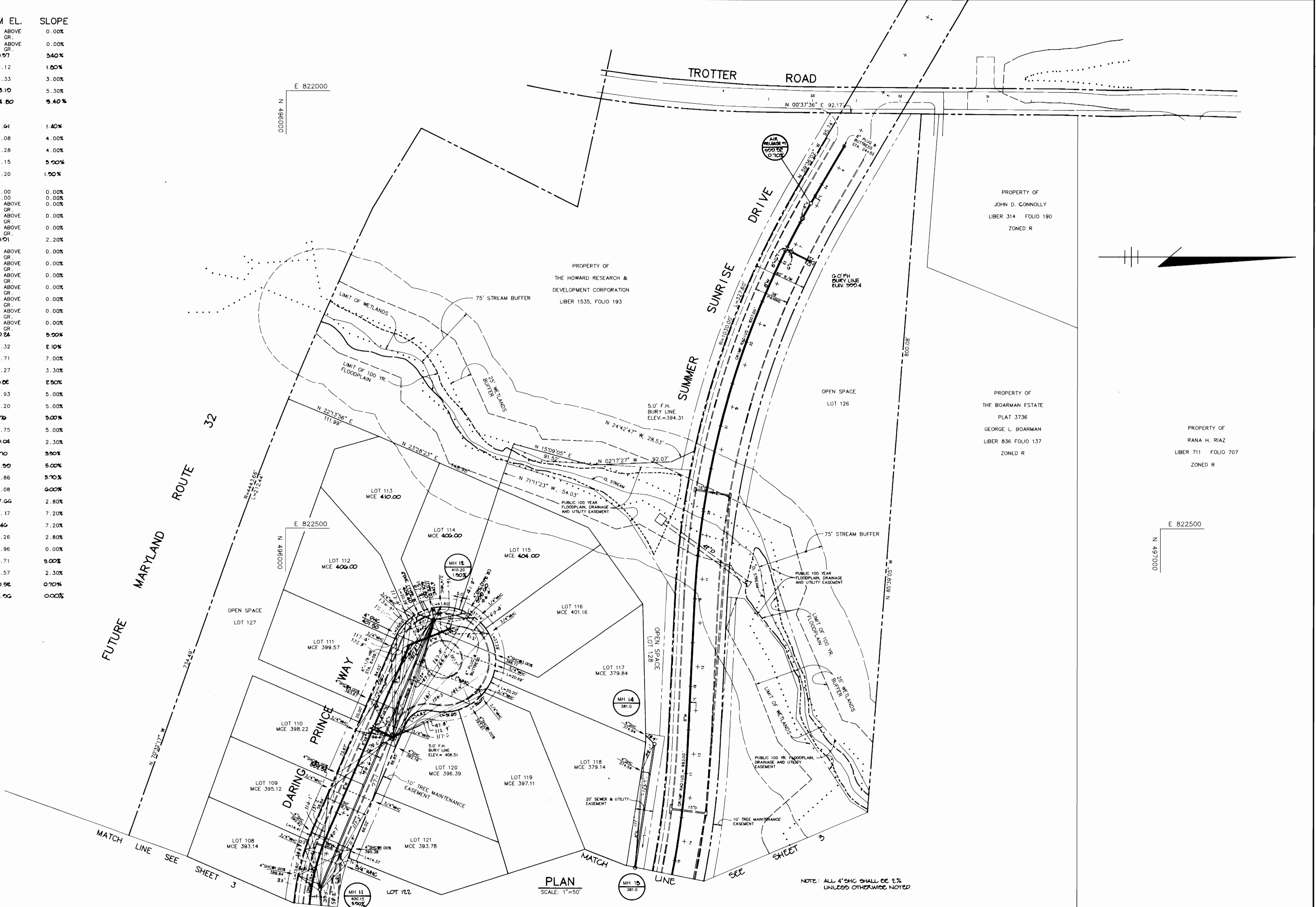
TITLE SHEET

600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL
SECTION 2 AREA 1
LOTS 1 THRU 130
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3204-D

SCALE AS SHOWN
SHEET 1 OF 12

NO.	LOCATION	RIM EL.	SLOPE
MH1	N 496900.20 E 825640.50	18" ABOVE EX. GR.	0.00%
MH2	N496926.37 E823349.18	18" ABOVE EX. GR.	0.00%
MH3	10.93' RT OF LP STA 2+12.27 VELVET PATH	370.12	1.00%
MH4	5.01' RT OF CL STA 2+59.86 VELVET PATH	373.33	3.00%
MH5	7.00' RT OF CL STA 1+44.03 VELVET PATH	373.33	3.00%
MH6	5.00' LT OF CL STA 0+58.50 ANGEL ROSE COURT	376.10	5.30%
MH7	5.00' LT OF CL STA 1+07.00 ANGEL ROSE COURT	364.80	5.40%
MH 8	2.00' LT OF CL STA 2+77.30 ANGEL ROSE COURT	388.61	1.40%
MH 9	3.00' RT OF CL STA 0+81.64 DARING PRINCE WAY	391.08	4.00%
MH 10	3.27' RT OF CL STA 1+86.95 DARING PRINCE WAY	395.28	4.00%
MH 11	2.77' RT OF CL STA 3+08.31 DARING PRINCE WAY	400.15	5.00%
MH 12	5.00' RT OF LP STA 1+38.56 DARING PRINCE WAY	410.20	1.50%
MH 13	N496400.13 E822886.53	381.00	0.00%
MH 14	N496422.22 E822745.54	381.00	0.00%
MH 15	N496880.46 E823731.64	18" ABOVE EX. GR.	0.00%
MH 16	N496779.08 E823671.26	18" ABOVE EX. GR.	0.00%
MH 17	N496652.67 E823713.08	18" ABOVE EX. GR.	0.00%
MH 18	8.37' LT OF CL STA 23+10.82 SUMMER SUNRISE DRIVE	350.01	2.20%
MH 19	N496236.59 E823880.85	18" ABOVE EX. GR.	0.00%
MH 20	N496118.19 E823840.99	18" ABOVE EX. GR.	0.00%
MH 21	N495944.25 E823912.25	18" ABOVE EX. GR.	0.00%
MH 22	N495872.33 E823908.77	18" ABOVE EX. GR.	0.00%
MH 23	N495776.46 E824043.03	18" ABOVE EX. GR.	0.00%
MH 24	N495870.64 E823691.36	18" ABOVE EX. GR.	0.00%
MH 25	N495634.59 E823558.47	18" ABOVE EX. GR.	0.00%
MH 26	12.34' RT OF LP STA 0+47.37 ENCHANTED SOLITUDE PLACE	384.32	8.10%
MH 27	7.00' LT OF CL STA 1+35.00 ENCHANTED SOLITUDE PLACE	376.71	7.00%
MH 28	6.28' LT OF CL STA 26+49.20 SUMMER SUNRISE DRIVE	389.27	3.30%
MH 29	8.52' LT OF CL STA 0+06.88 RIVER RUN	389.27	3.30%
MH 30	N496708.16 E824547.74 USE-IN-COMMON LOT 130	395.93	5.00%
MH 31	11.69' RT OF CL STA 1+40.35 RIVER RUN	405.20	5.00%
MH 32	7.00' RT OF CL STA 3+23.06 RIVER RUN	417.75	5.00%
MH 33	6.18' RT OF CL STA 0+23.63 EMPTY SONG ROAD	417.75	5.00%
MH 34	15.11' RT OF CL STA 1+33.79 EMPTY SONG ROAD	417.75	5.00%
MH 35	7.00' LT OF CL STA 20+90.80 SUMMER SUNRISE DRIVE	390.04	2.30%
MH 36	24.13' RT OF LP STA 1+41.43 ANGEL ROSE COURT	370.70	5.50%
MH 37	5.00' FROM CL STA 4+02.00 ANGEL ROSE COURT	385.50	5.00%
MH 38	8.97' RT OF LP STA 2+30.70 FAIREST DREAM LANE	383.86	5.70%
MH 39	9.61' RT OF LP STA 3+50.63 FAIREST DREAM LANE	385.08	6.00%
MH 40	10.00' RT OF CL STA 6+14.00 FAIREST DREAM LANE	387.00	2.80%
MH 41	7.00' RT OF CL STA 3+66.38 FAIREST DREAM LANE	402.17	7.20%
MH 42	6.50' RT OF CL STA 2+10.00 FAIREST DREAM LANE	415.46	7.20%
MH 43	7.00' RT OF CL STA 2+67.60 EMPTY SONG ROAD	423.26	2.80%
MH 44	7.09' RT OF CL STA 3+89.31 EMPTY SONG ROAD	424.96	0.00%
MH 45	19.40' RT OF LP STA 1+15.98 OLD ROMANCE ROW	400.71	5.00%
MH 46	11.87' RT OF LP STA 0+39.35 RIVER RUN	378.57	2.30%
AIR RELEASE #1	7.00' RT OF CL STA 0+00.00 DUMMIE DUNN DRIVE	390.96	0.70%
AIR RELEASE #2	7.00' LT OF CL STA 4+00.00 EMPTY SONG ROAD	424.50	0.00%



PLAN SCALE: 1"=50'

NOTE: ALL 4" DHC SHALL BE 2% UNLESS OTHERWISE NOTED

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Lewis 1/28/93
DIRECTOR OF PUBLIC WORKS DATE

Robert W. Berman 1-25-93
CHIEF, BUREAU OF UTILITIES DATE

Erica... & Ryan... 1-28-93
CHIEF, BUREAU OF ENGINEERING DATE

... 1/26/93
CHIEF, LAND DEVELOPMENT DATE

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410-997-8800 FAX: 410-997-9282

ARTHUR E. MUEGGE 18707



DES: DAM				
DRN: CAD				
CHK: CJR				
DATE: 0-8-02				
BY: NO.	WAD 2	CHANGED DHC% TO TYPE D DHC% FOR LOTS 110, 114 & 115 AND REV. STORM DRAIN SIZE IN DARING PRINCE WAY	5-4-98	
REVISION	WAD 1	REVISED LOT LINE & FRONT FOOTINGS FOR LOTS 110 & 120	8-0-98	

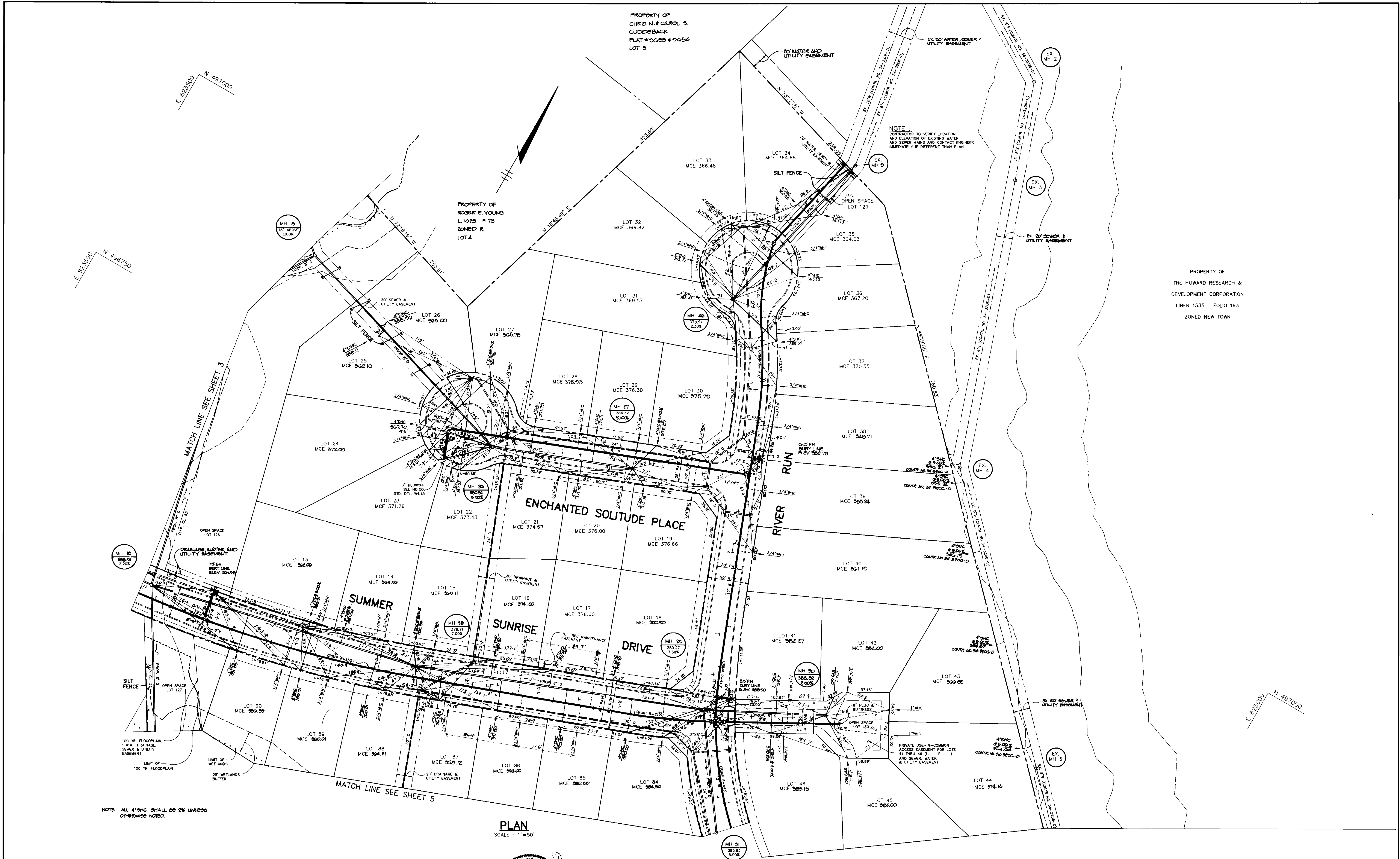
PLAN OF WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL
SECTION 2 AREA 1
LOTS 1 THRU 130
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3204-D

SCALE AS SHOWN

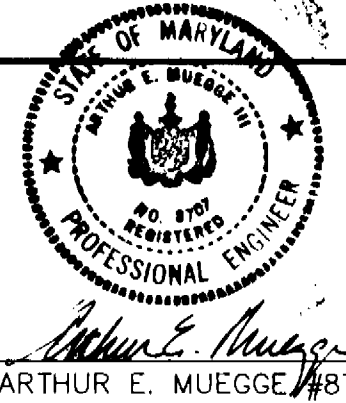
SHEET 2 OF 12



PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

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A Land Planning, Engineering and Consulting Firm
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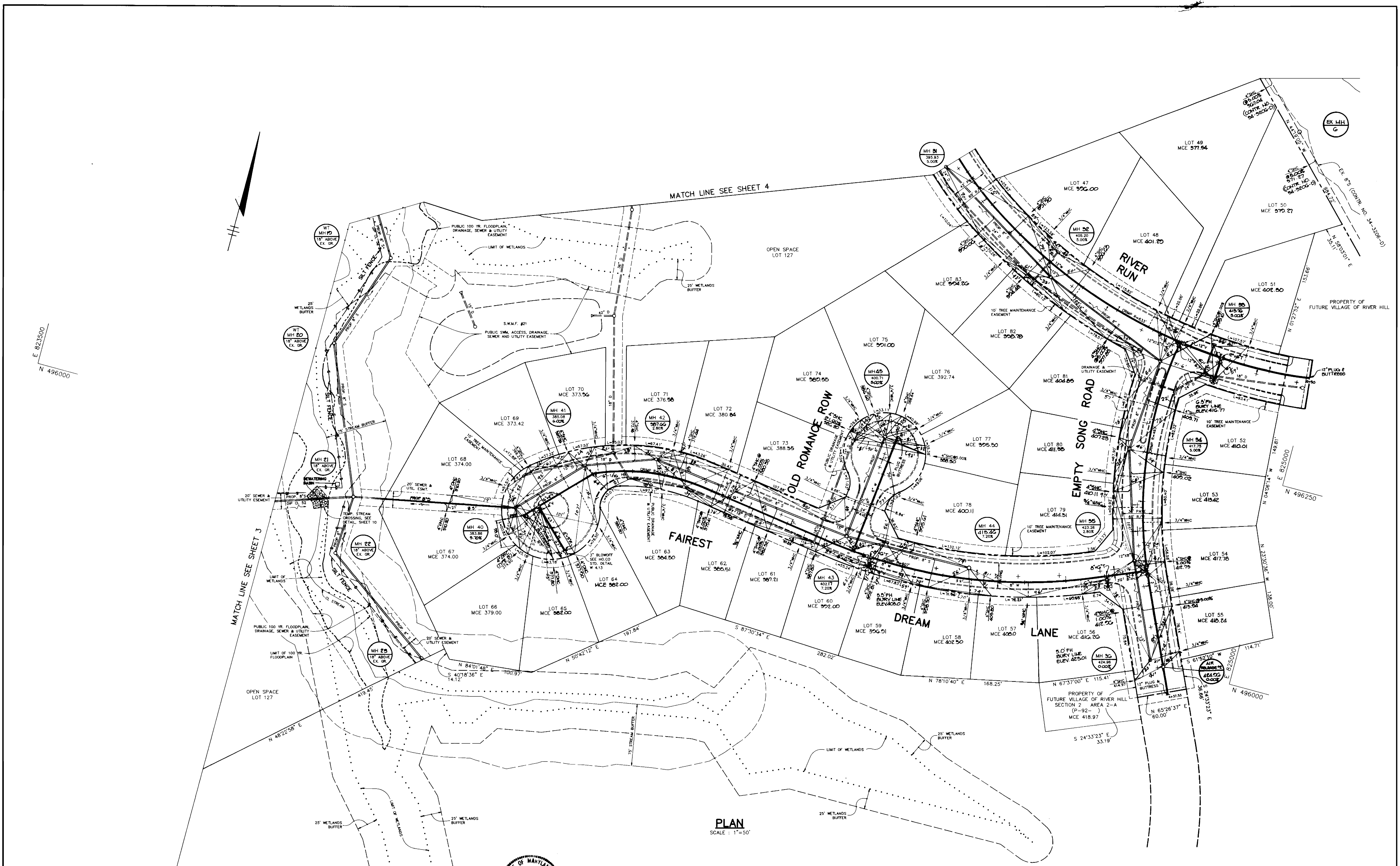
DES: D.A.M.	
DRN: C.A.D.	
CHK: C.J.R.	
DATE: 9-9-92	BY: NO. 1
REV. 04C TO LOT 27, LOT LINE BETWEEN LOTS 26 & 27 & SEWER DRAIN 0-7-92	
REVISION	DATE

**PLAN OF
WATER AND SEWER MAINS**

VILLAGE OF RIVER HILL
SECTION 2 AREA 1
LOTS 1 THRU 130
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3204-D

SCALE
AS
SHOWN

SHEET
4 OF 12

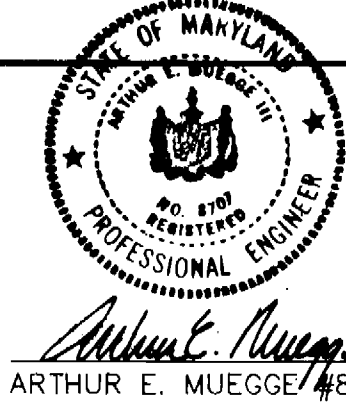


PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Elmer 1/28/93 DIRECTOR OF PUBLIC WORKS
 Michael S. Kelly 1/28/93 CHIEF, BUREAU OF ENGINEERING
 Robert D. Smith 1-25-93 CHIEF, BUREAU OF UTILITIES
 Arthur E. Muegge 1/28/93 CHIEF, LAND DEVELOPMENT

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 Columbia, MD 21045
410-997-8900 FAX: 410-997-9282



DES:	DAM				
DRN:	CAD				
CHK:	CJR				
DATE:	9-8-92				
BY:					
NO.:					
REVISION:					
DATE:					

PLAN OF
WATER AND SEWER MAINS

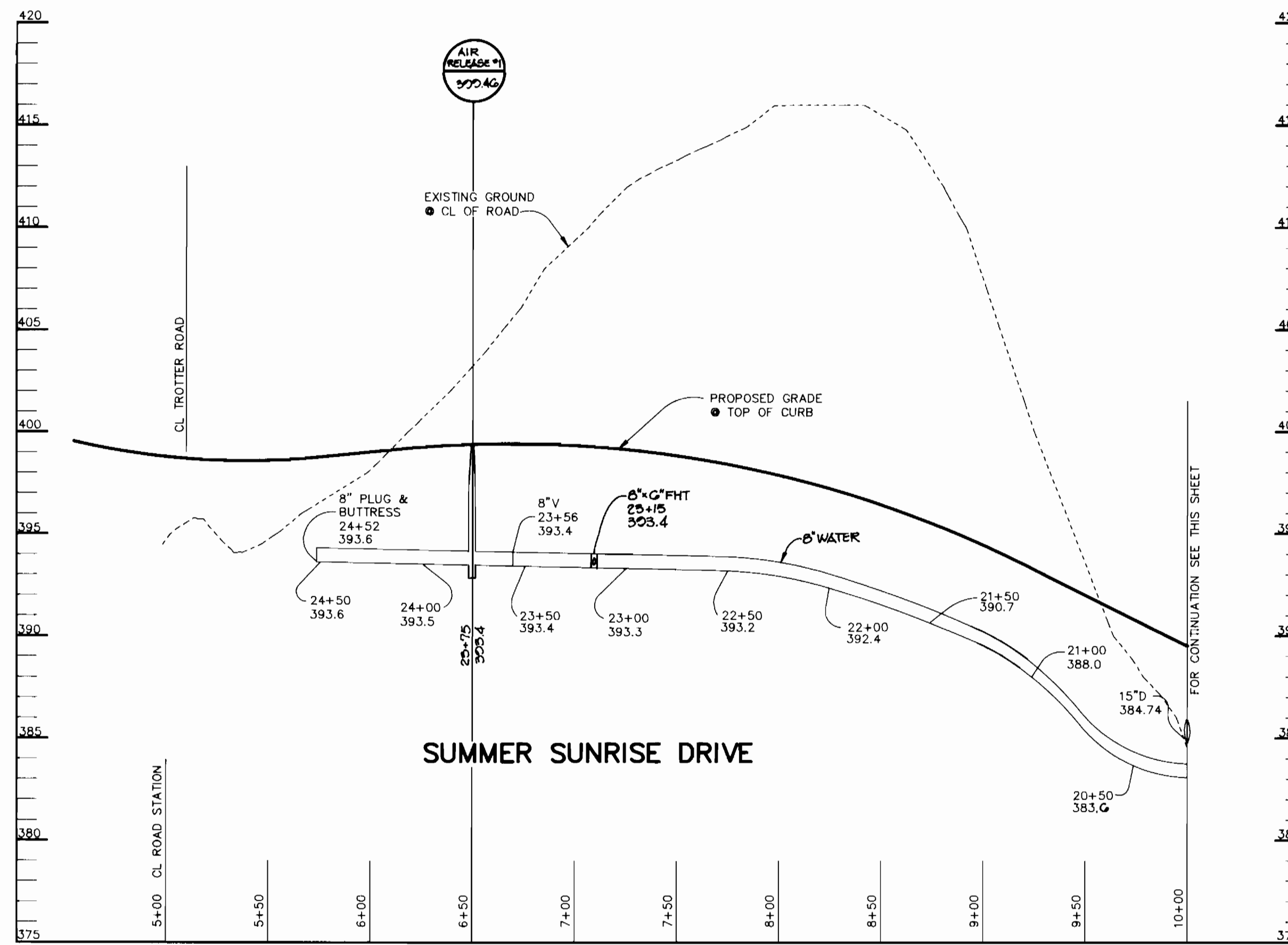
600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL
SECTION 2 AREA 1
LOTS 1 THRU 130
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3204-D

SCALE
AS
SHOWN

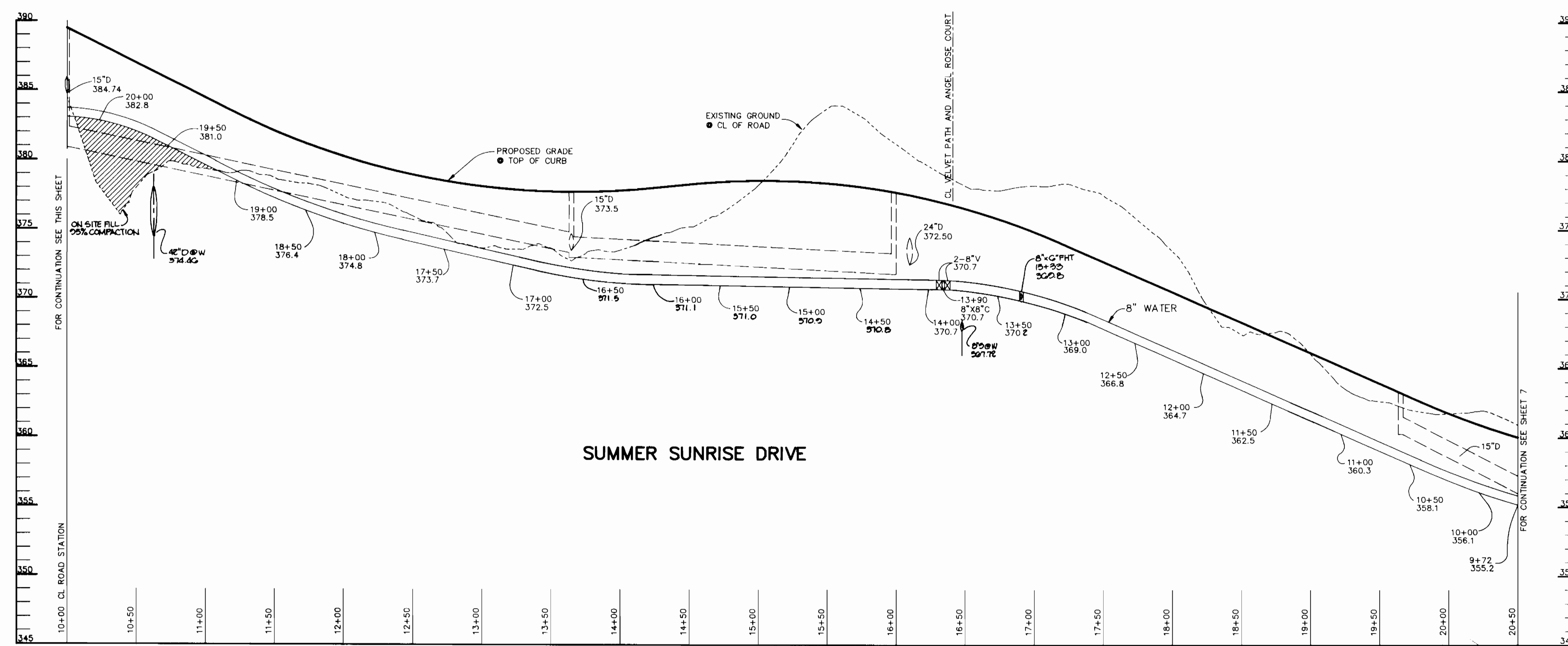
SHEET
5 OF 12

AS-BUILT
12/11/93



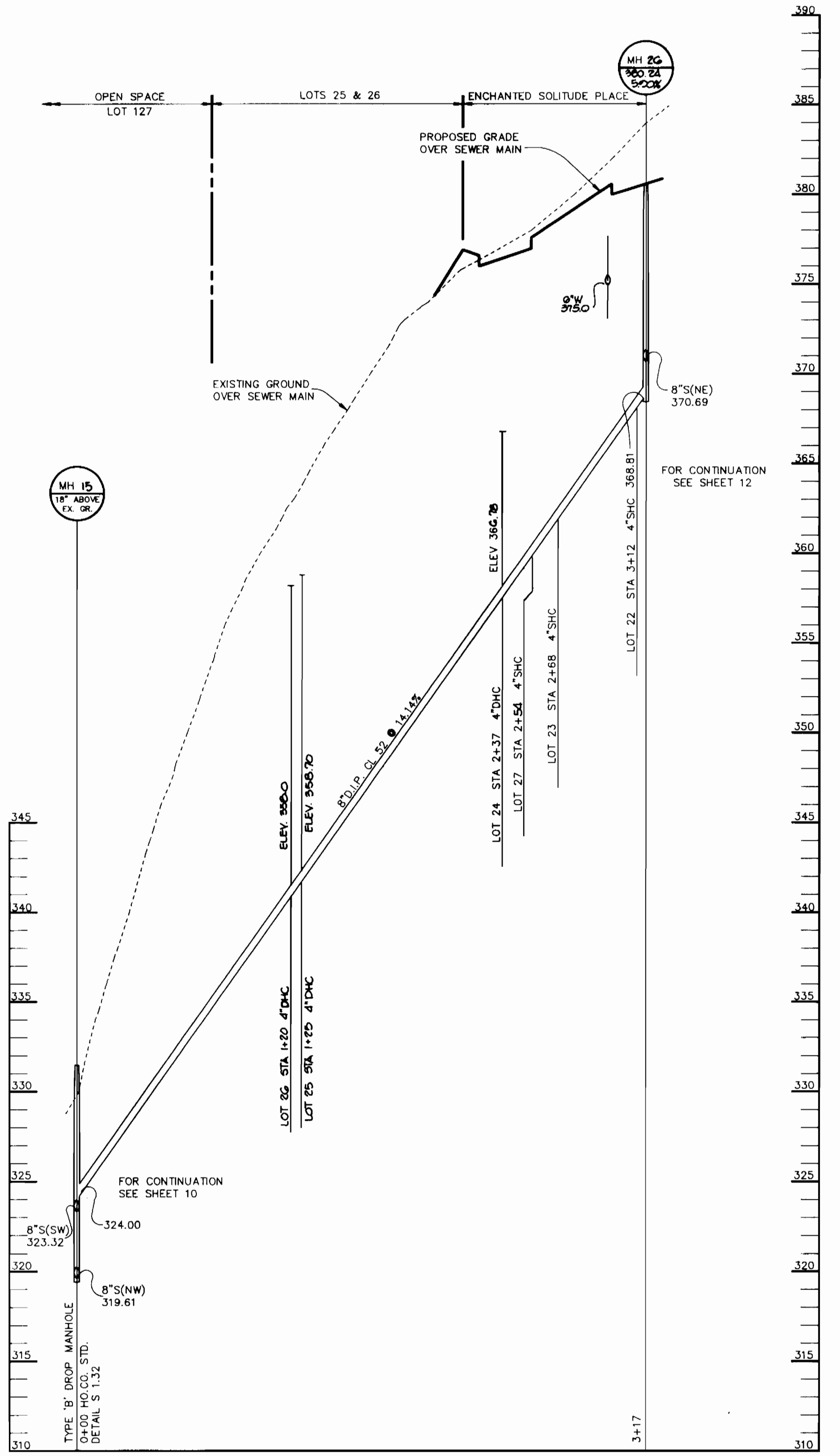
PROFILE

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 M. ... 1/28/93
DIRECTOR OF PUBLIC WORKS DATE

Michael ... 1-25-93
CHIEF, BUREAU OF UTILITIES DATE

Michael ... 1/28/93
CHIEF, LAND DEVELOPMENT DATE

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8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
410-997-8900 FAX: 410-997-9282

Arthur E. Muegge
ARTHUR E. MUEGGE, #8707
PROFESSIONAL ENGINEER

DES: DAM			
DRN: CAD			
CHK: CJR			
DATE: 08-92			
BY: NO.			
REVISION			
DATE			
REV. LOCATION OF SHC FOR LOT 27			

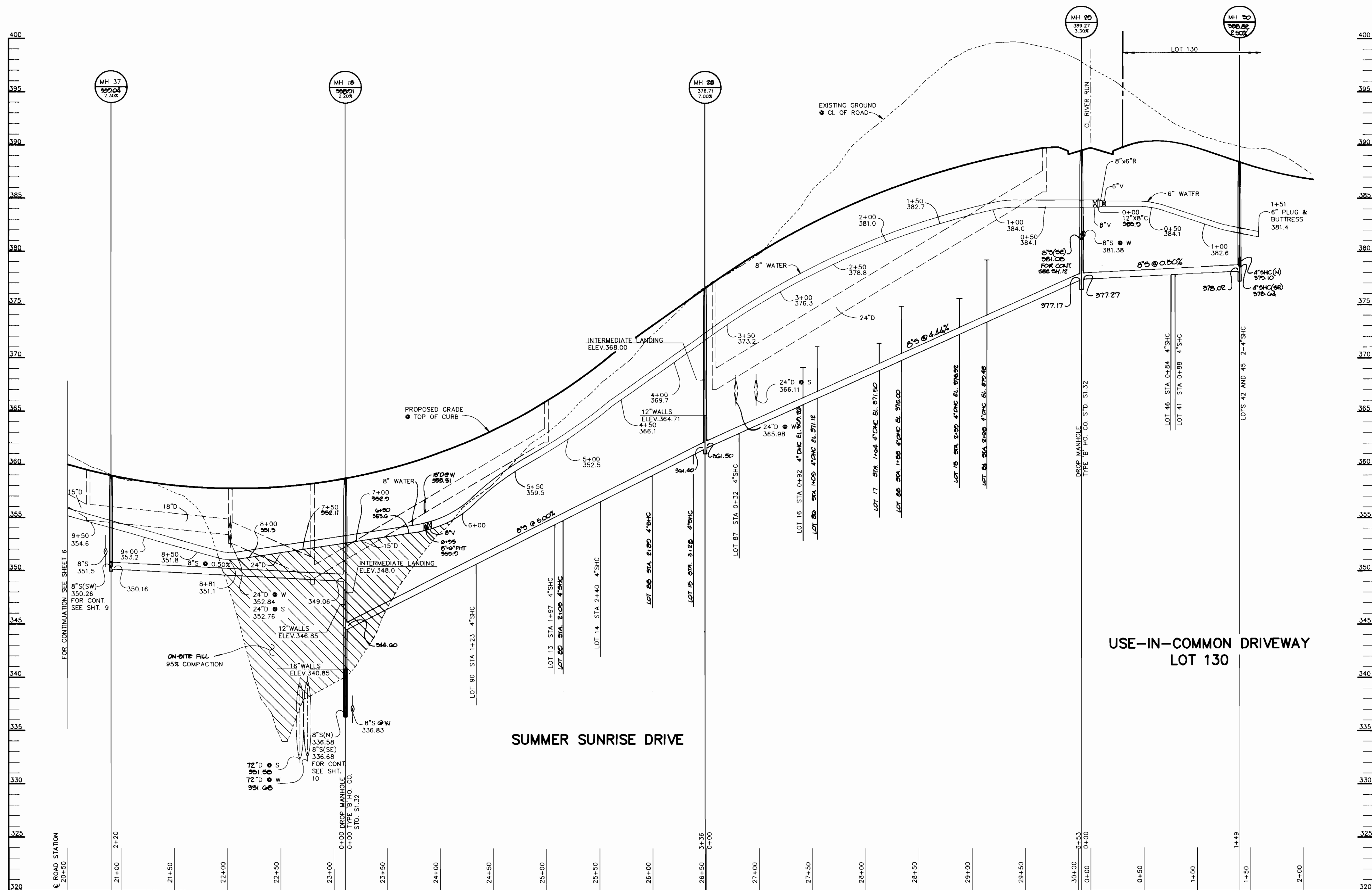
PROFILE OF WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL
SECTION 2 AREA 1
LOTS 1 THRU 130
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3204-D

SCALE AS SHOWN

SHEET 6 OF 12



PROFILE

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Kline 1-28-93 DIRECTOR OF PUBLIC WORKS DATE
 Robert B. Smith 1-25-93 CHIEF, BUREAU OF UTILITIES DATE
 William J. Ryan 1-28-93 CHIEF, BUREAU OF ENGINEERING DATE
 Arthur E. Muegge 1/26/93 CHIEF, LAND DEVELOPMENT DATE

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
410-997-8800 FAX: 410-997-9282



ARTHUR E. MUEGGE/48707

DES: DAM			
DRN: CAD			
CHK: CJR			
DATE: 0-8-92	BY:	NO.:	REVISION:

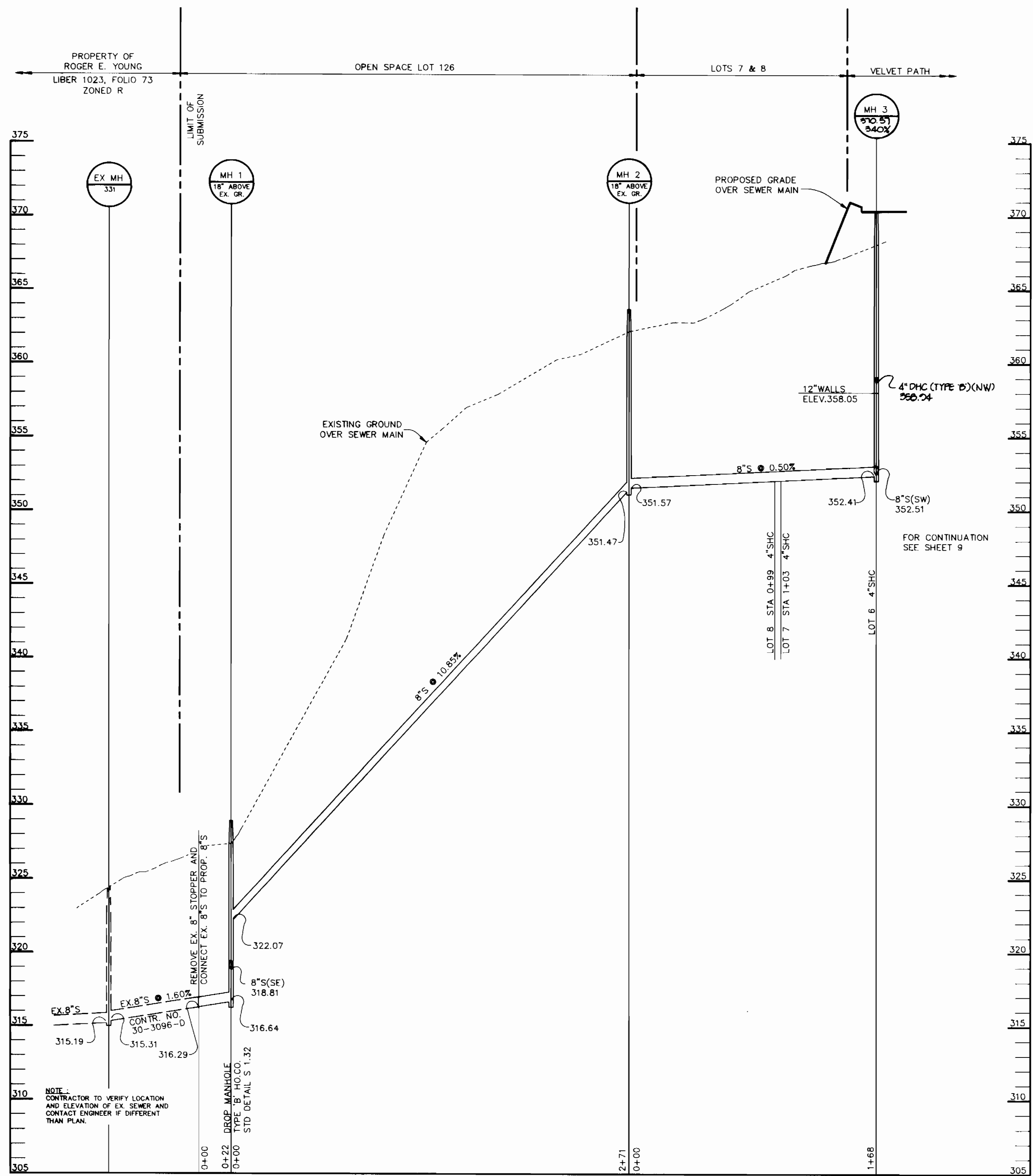
PROFILE OF WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 14

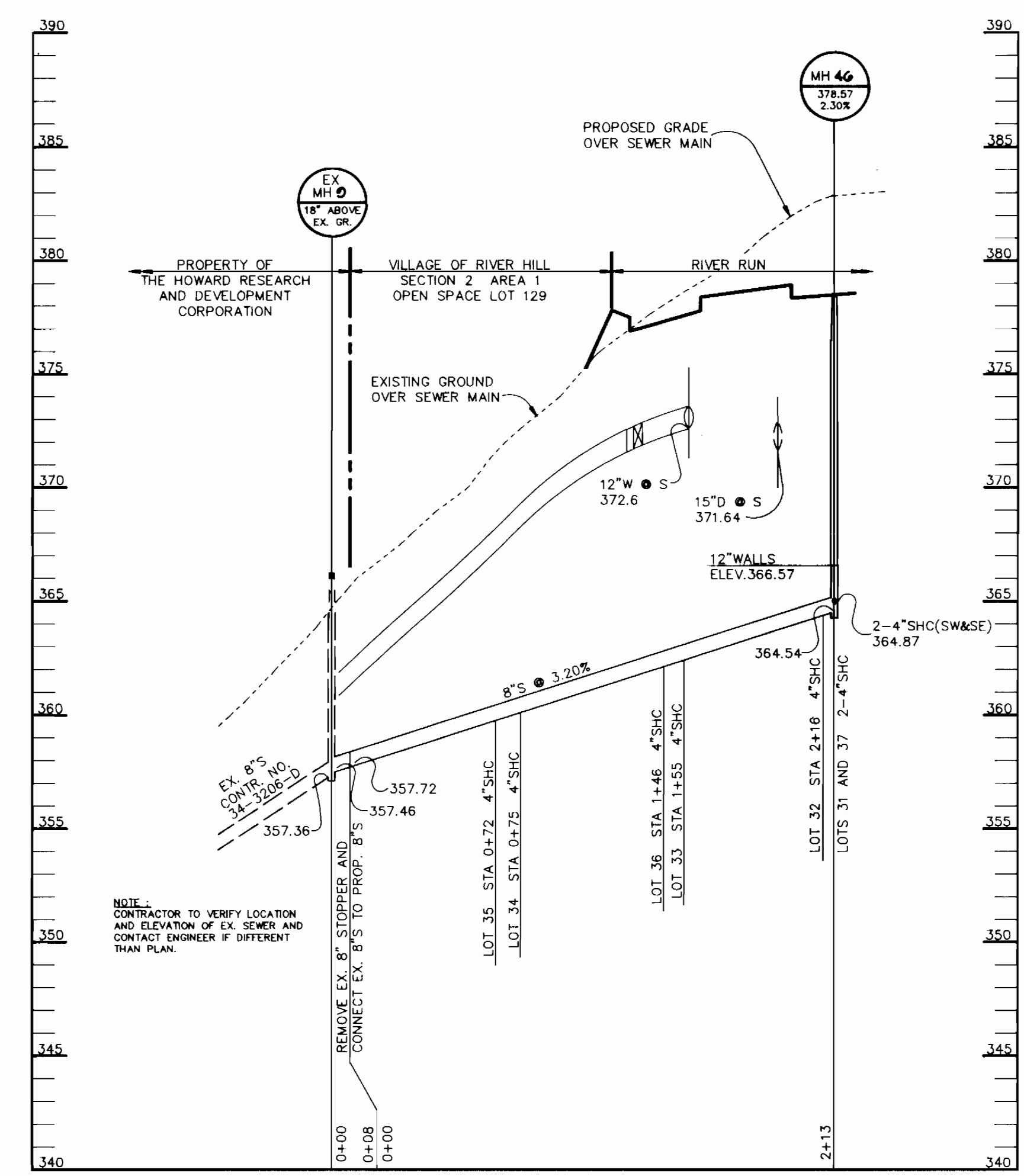
VILLAGE OF RIVER HILL
SECTION 2 AREA 1
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5th ELECTION DISTRICT
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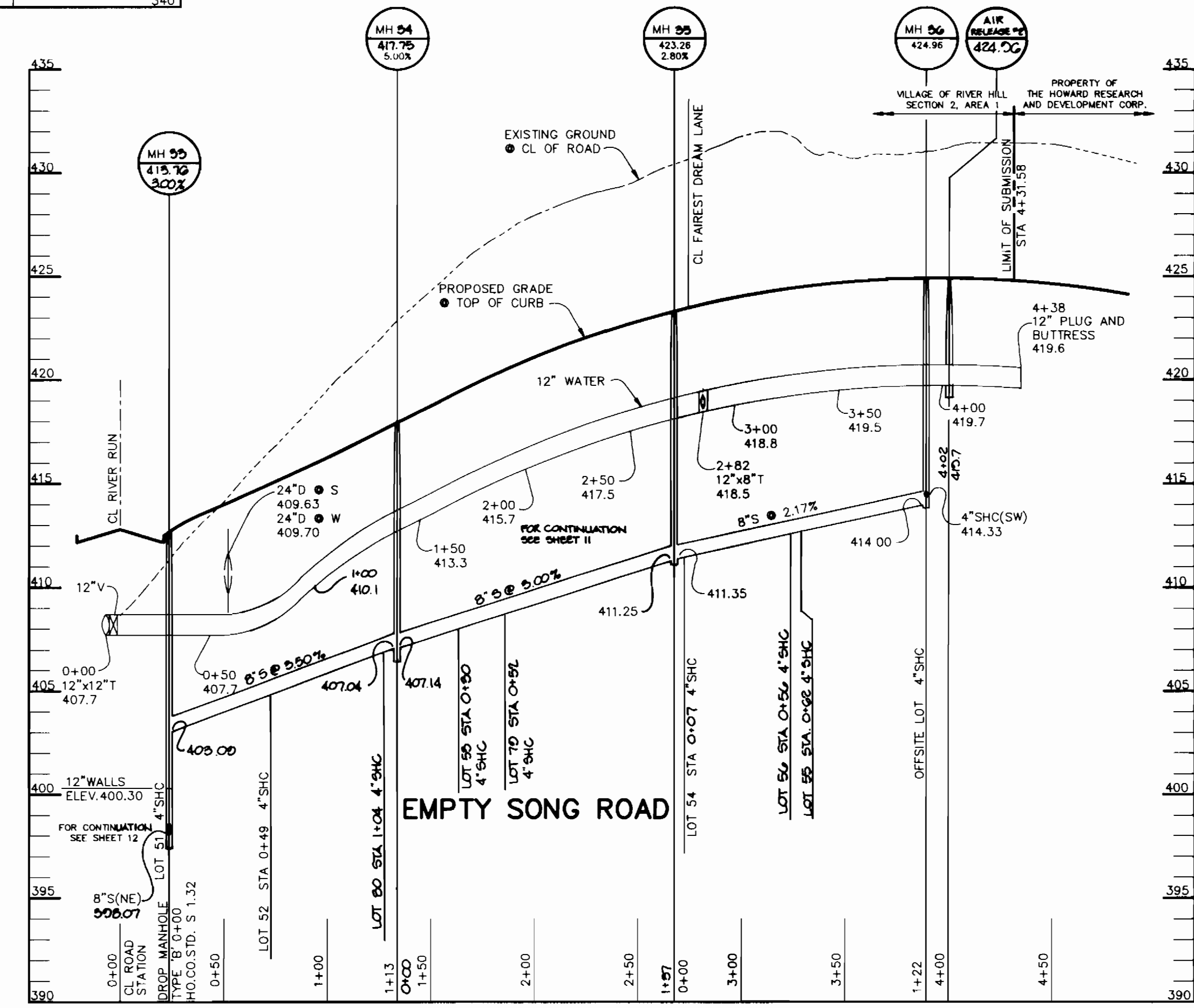
SHEET 7 OF 12



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 M. Linn 1/28/93
DIRECTOR OF PUBLIC WORKS DATE

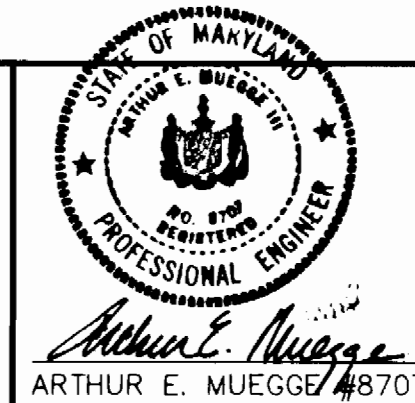
Robert A. Bauman 1-25-93
CHIEF, BUREAU OF UTILITIES DATE

William B. Ray 1-28-93
CHIEF, BUREAU OF ENGINEERING DATE

Arthur E. Muegge 1/28/93
CHIEF, LAND DEVELOPMENT DATE

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8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
410-997-8900 FAX: 410-997-9282

ARTHUR E. MUEGGE #8707
PROFESSIONAL ENGINEER



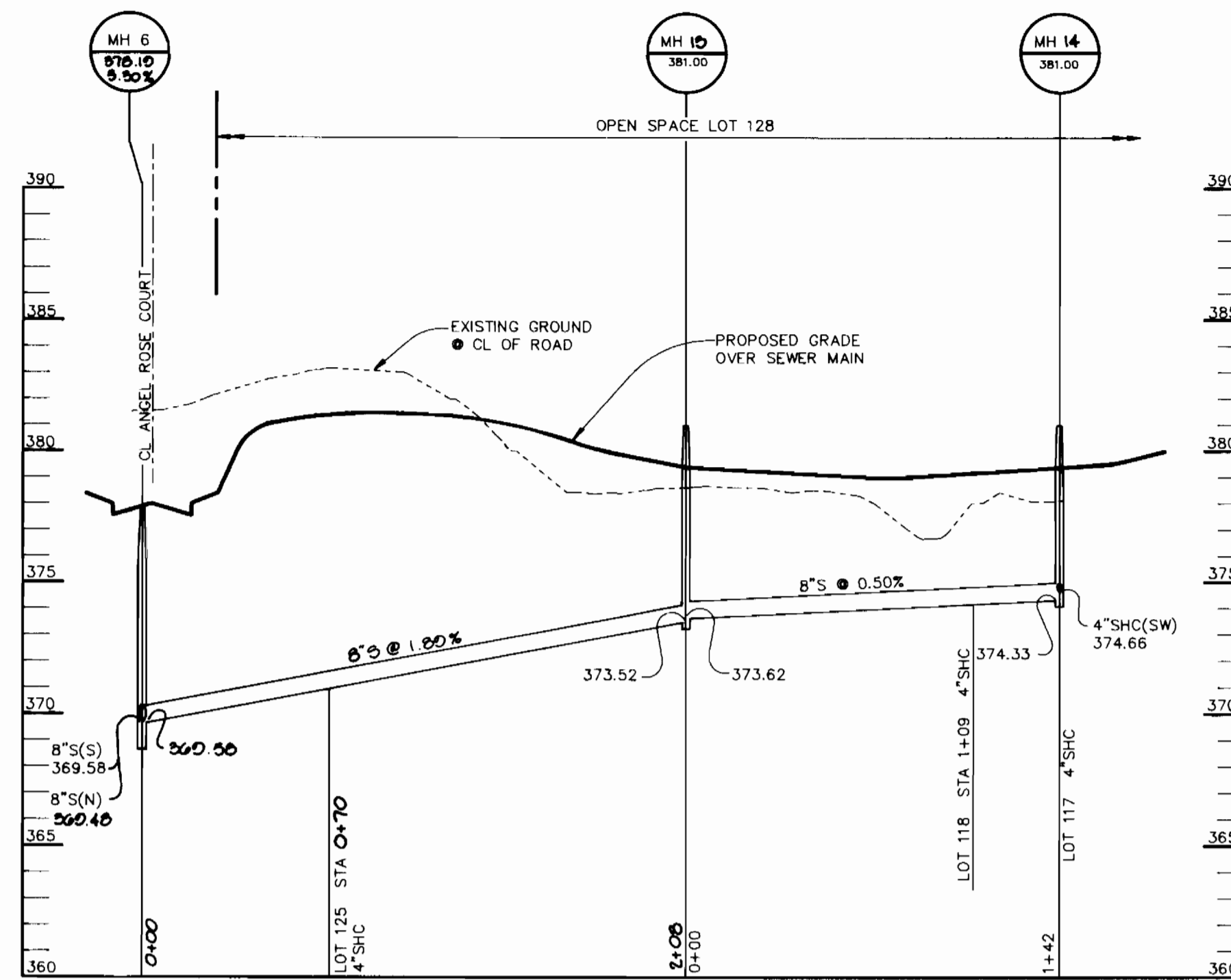
DES:	DAM		
DRN:	CAD		
CHK:	CJR		
DATE:	0-0-01		
BY:	NO.	REVISION	DATE
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PROFILE OF WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 14

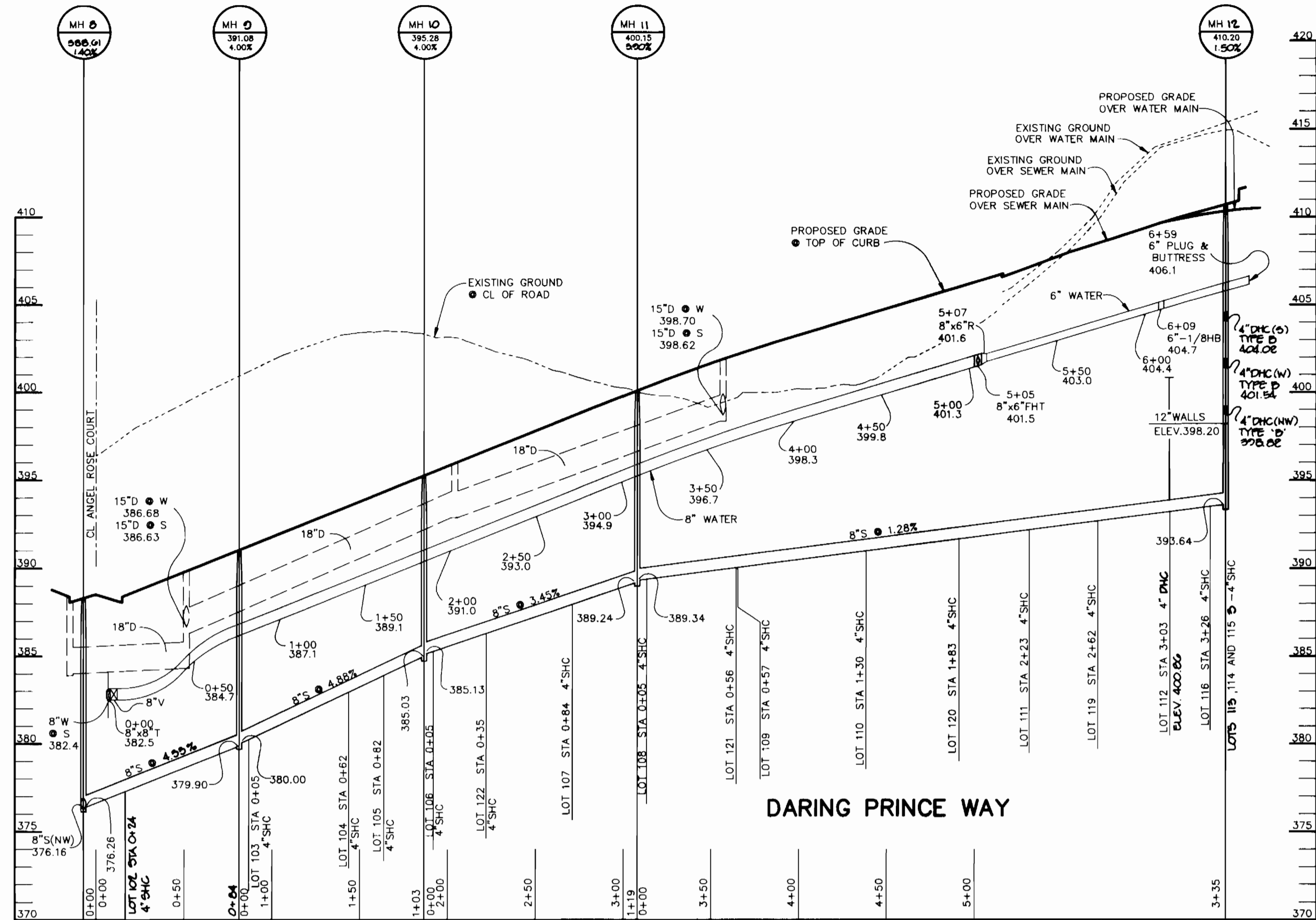
VILLAGE OF RIVER HILL
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SCALE AS SHOWN
SHEET 8 OF 12



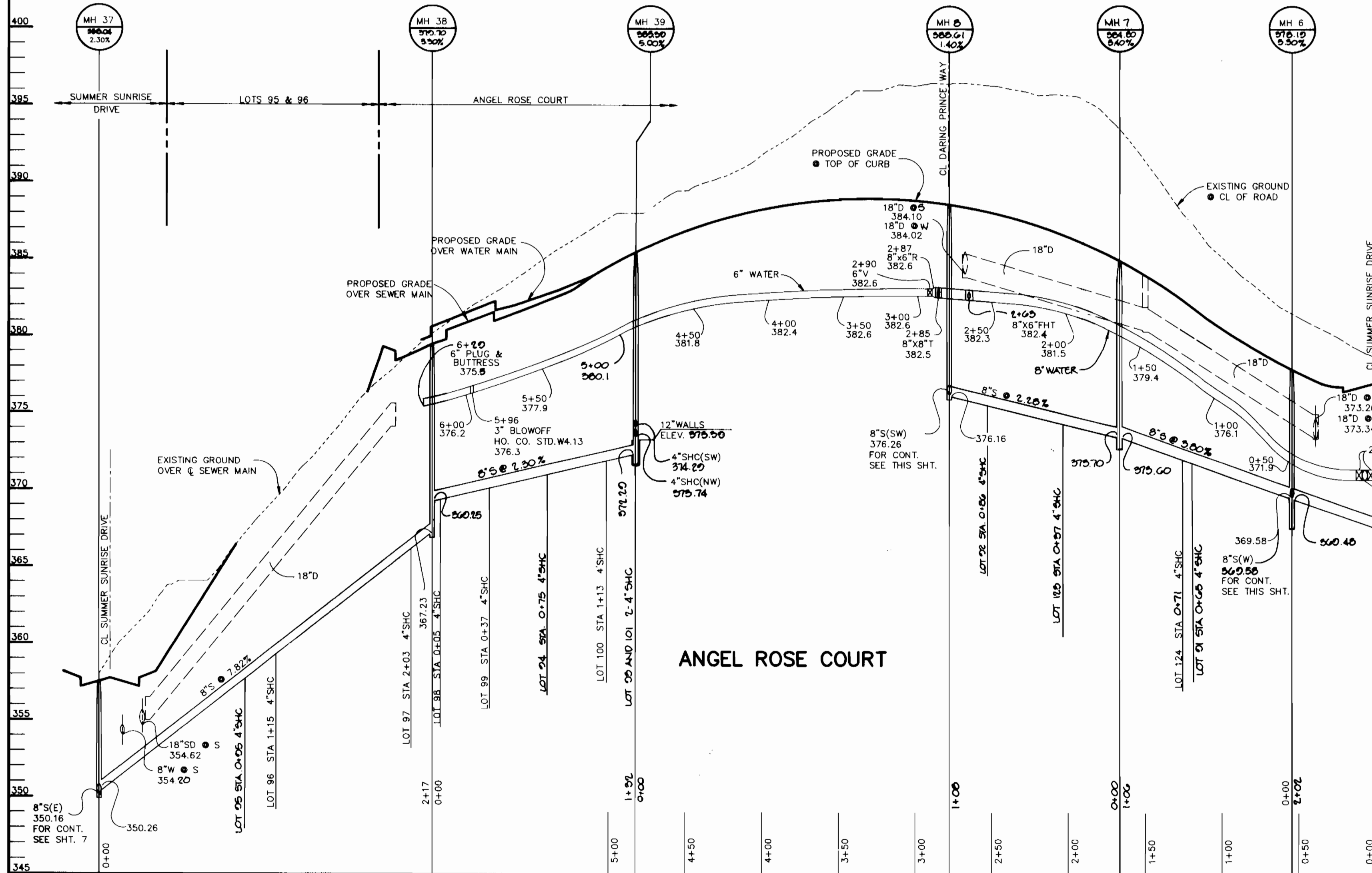
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SCALE: HOR. 1" = 50'
VERT. 1" = 5'



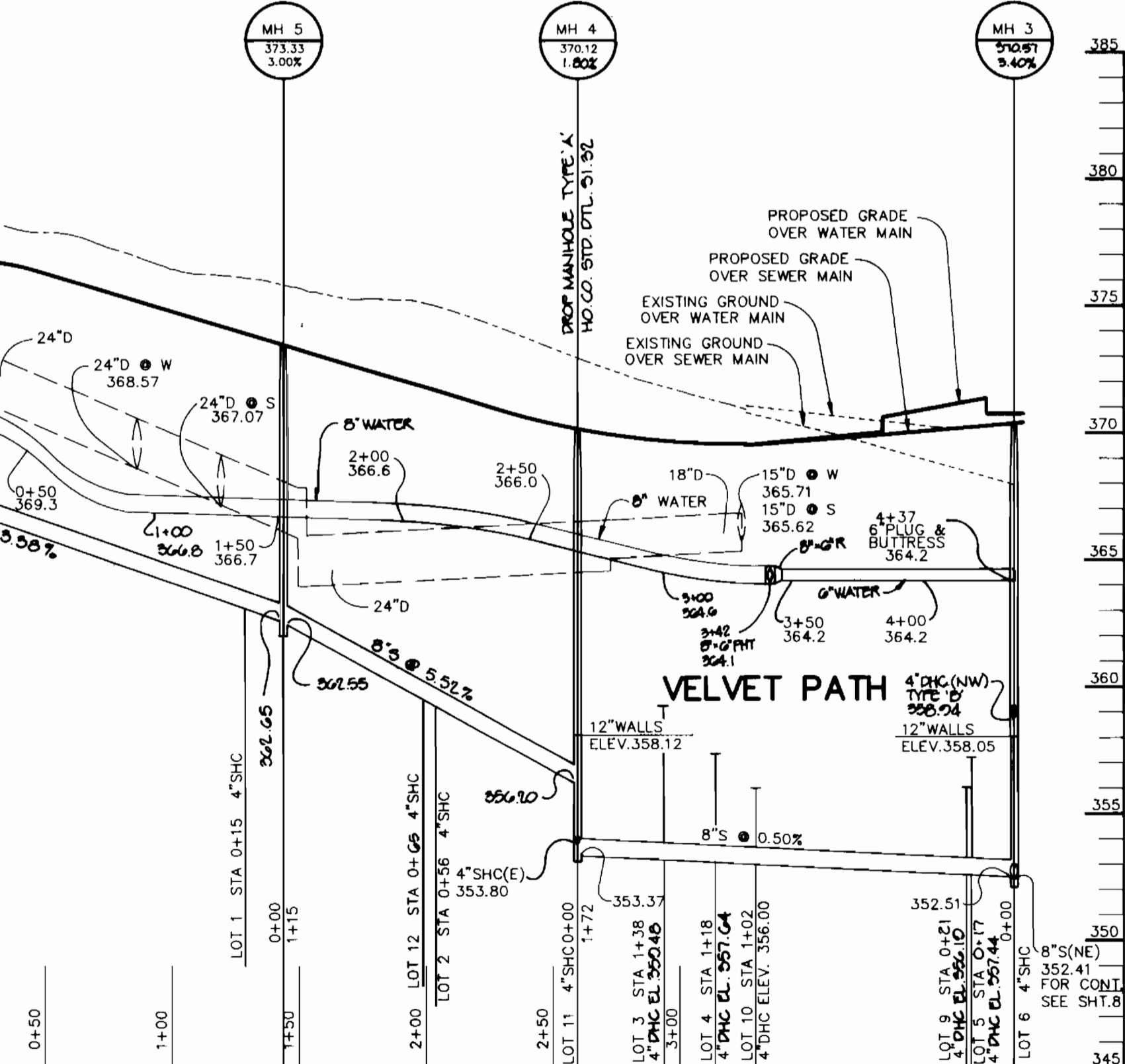
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VERT. 1" = 5'



PROFILE

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



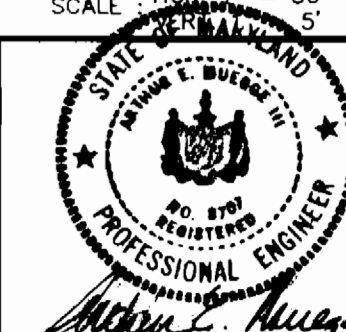
PROFILE

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. ... 1/28/93
DIRECTOR OF PUBLIC WORKS DATE
Robert ... 1-25-93
CHIEF, BUREAU OF UTILITIES DATE

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8800 FAX: 410-997-9282



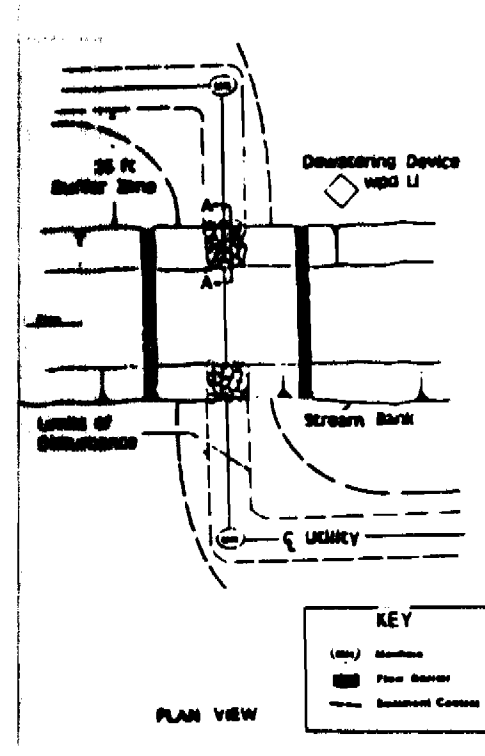
DES: DAM	
DRN: CAD	
CHK: CJR	
DATE: 0-0-00	
BY: NO.	
REVISION	

PROFILE OF WATER AND SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL
SECTION 2 AREA 1
LOTS 1 THRU 130
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3204-D

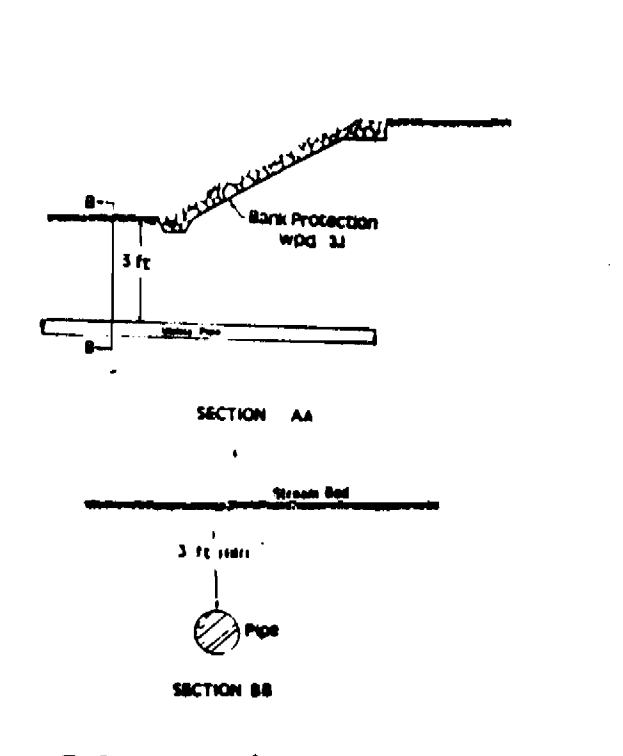
SCALE AS SHOWN
SHEET 9 OF 12



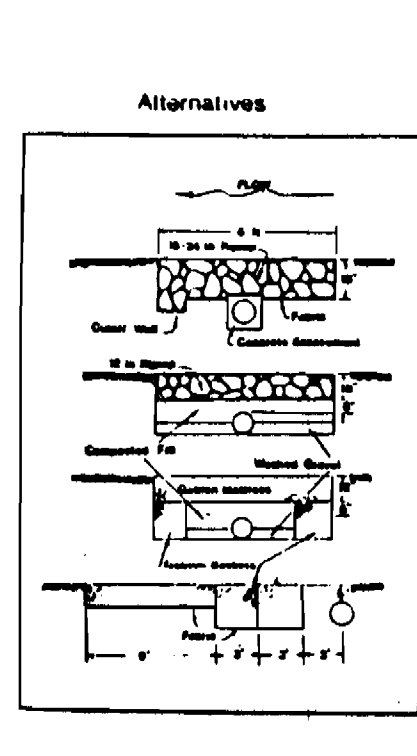
1. Description
This work shall consist of installing erosion control devices to and adjacent to temporary stream construction such as utility crossings.

2. Construction Requirements

- All erosion and sediment control devices shall be installed as the first order of work.
- The contractor shall insure that a continuous perimeter control barrier is in place so as to delineate and prevent erosion during the work.
- Erosion control devices shall be kept separate and replaced in their natural order.
- All erosion control devices shall be placed on the up-drain side of the structure.
- All construction shall take place during stream low flow. The length of construction time shall be limited to a maximum of 3 days for each crossing.
- All utility crossings shall be placed at least three feet below the stream bed unless an alternative section is specifically approved by the Administration.
- The contractor may elect to construct the utility crossing in the stream. In this case, a flow barrier shall be constructed to keep the construction area dry.
- Sediment control devices are to remain in place until all disturbed areas are stabilized in accordance with an approved sediment and erosion control plan and the inspecting authority approves their removal.



UTILITY CROSSING
NO SCALE



1. Description
The work shall consist of installing flow diversion for the purpose of erosion control when construction activities take place within the stream channel such as bank stabilization or bridge abutment construction.

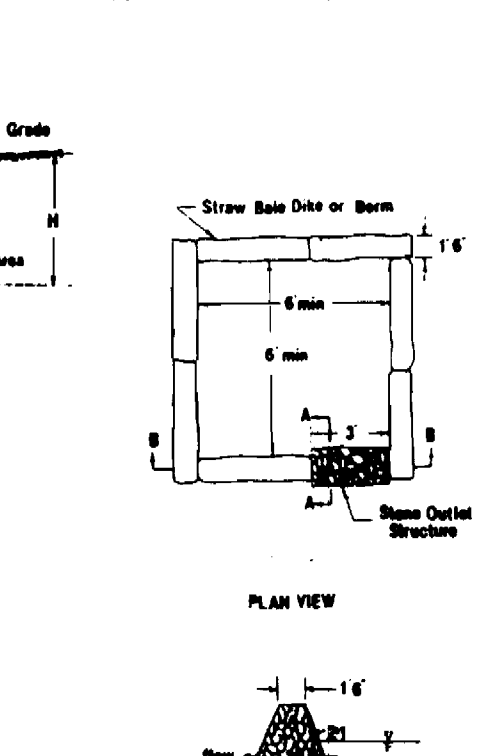
2. Material Specifications

- Sandbags: Sandbags shall consist of materials which are resistant to ultraviolet radiation, tearing and puncture and sewn tightly enough to prevent leakage of fill material (i.e., sand, fine gravel, etc.).
- Stones: Stone shall be washed and have a minimum diameter of 6 inches.
- Sheeting: Sheeting shall consist of polyethylene or other material which is impermeable and resistant to puncture and tearing.

3. Construction Requirements

- All erosion and sediment control devices shall be installed as the first order of work.
- The diversion structure shall be installed from upstream to downstream.
- The height of the diversion structure shall be one half the distance from stream bed to stream bank plus one foot, as indicated on the construction plan.
- All excavated materials shall be disposed of in a SCD approved disposal area outside the 100-year floodplain unless otherwise approved on the plans by the M&A.
- All dewatering of the construction area shall be pumped to a dewatering basin prior to re-entering the stream.
- Sheeting shall be overlapped such that the upstream portion covers the downstream portion with at least an 18-inch overlap.
- Sediment control devices are to remain in place until all disturbed areas are stabilized in accordance with an approved sediment and erosion control plan and the inspecting authority approves their removal.

SANDBAG/STONE DIVERSION
NO SCALE



1. Description
The work shall consist of the construction of a dewatering basin for the purpose of reducing groundwater water content from a construction site to allow infiltration into the water table.

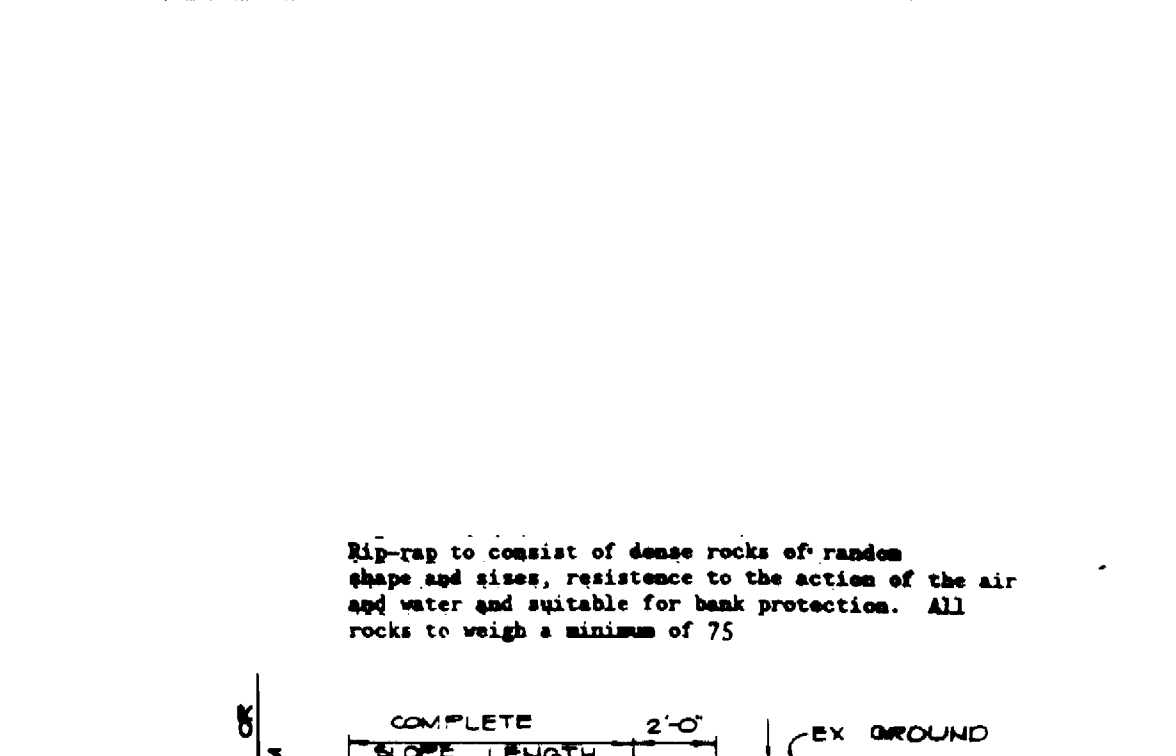
2. Material Specifications

- Riprap: Riprap shall consist of 4-6 inch rounded stones or gravel.
- Filter Fabric: The filter cloth shall be a woven or nonwoven fabric consisting of a continuous chain of fibers or filaments or yarns of polyester. The fabric shall be impervious to water, resistant to ultraviolet radiation, tearing and puncture, and shall be placed on the surface of the riprap.
- Structures: Structures shall meet the criteria as specified in the Materials Specifications and Specifications for Soil Erosion and Sediment Control.

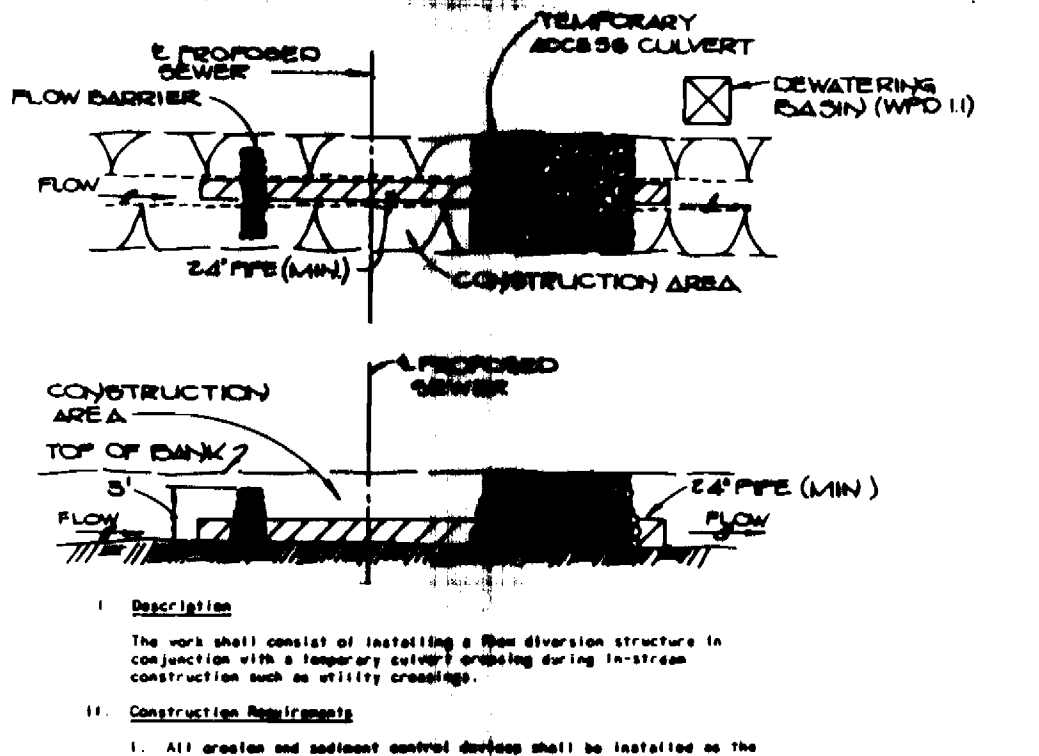
3. Construction Requirements

- The contractor shall install all sediment and erosion control devices on the first order of work.
- Excavated materials shall be stored such that sediments are prevented from entering the structure. If a sediment and erosion control device is necessary, it 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 re-entering the stream.
- The dewatering basin shall be constructed to a minimum depth of 1 foot.
- Over the dewatering basin become filled to the 100-year floodplain unless otherwise approved on the plans by the M&A.
- Sediment control devices are to remain in place until all disturbed areas are stabilized in accordance with an approved sediment and erosion control plan and the inspecting authority approves their removal. All ground conditions shall be reported to the inspecting authority.

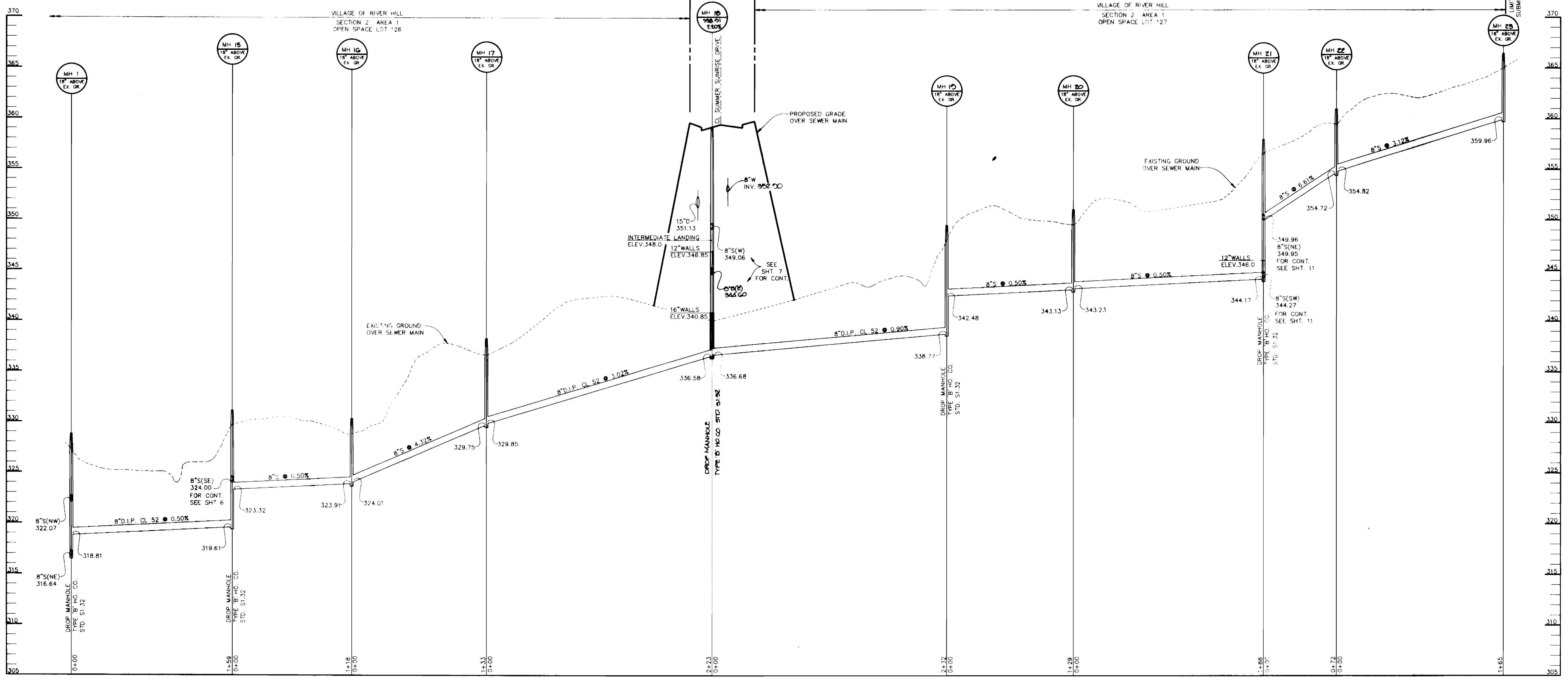
DEWATERING BASIN
NO SCALE



RIP RAP DETAIL
NO SCALE

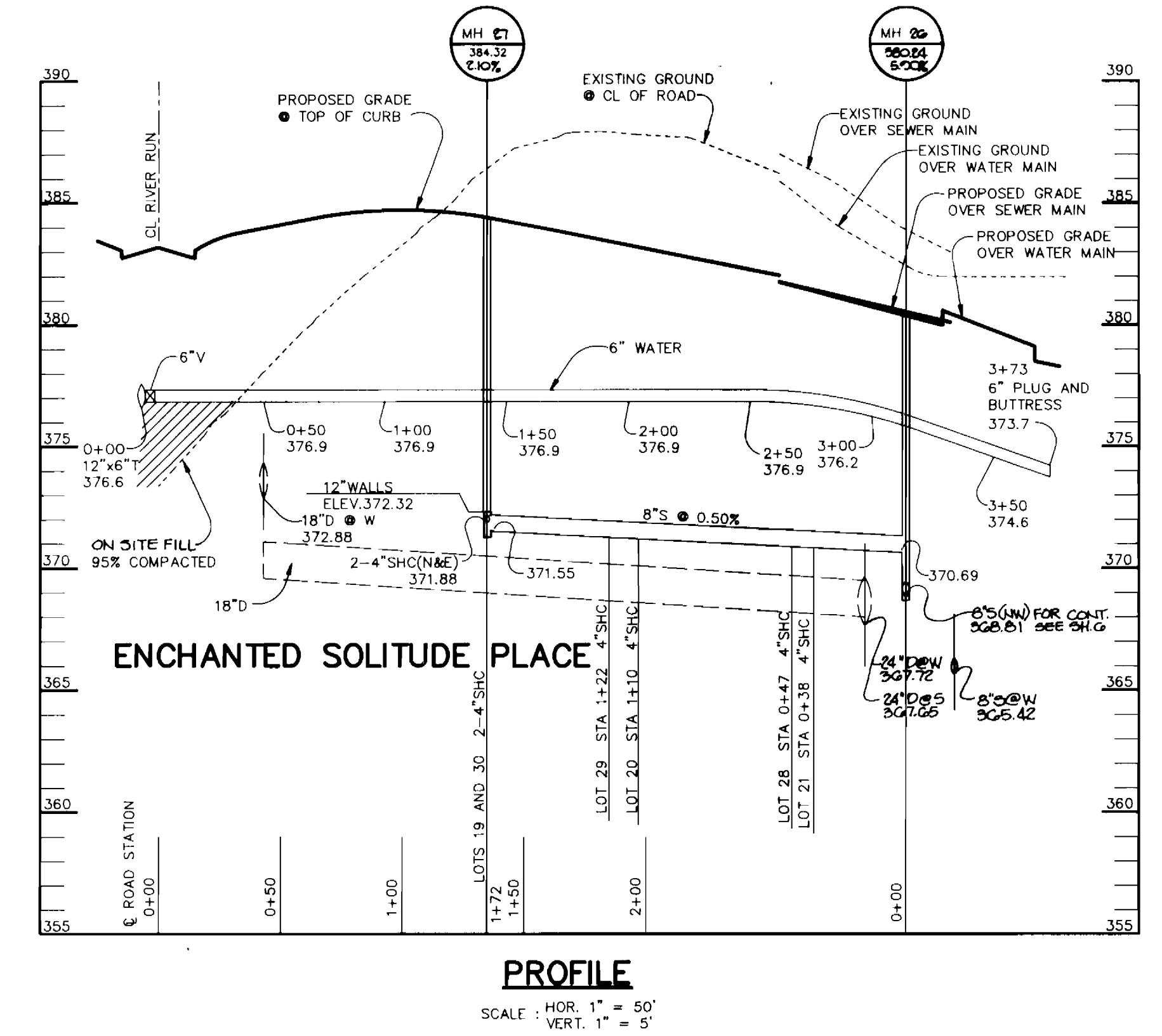
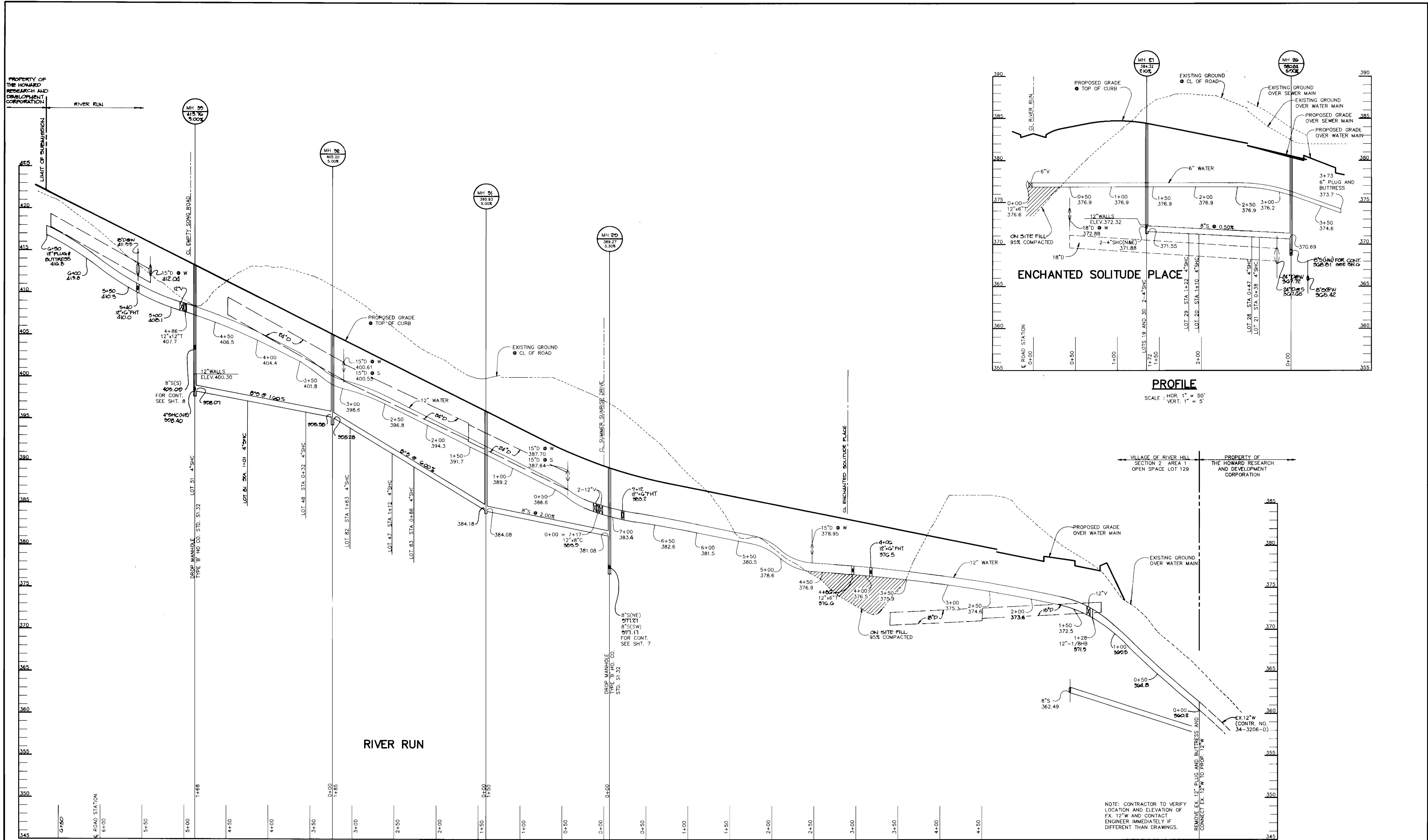


TEMPORARY STREAM CROSSING
NO SCALE



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

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>James M. ...</i> 1/28/93 Chief, Bureau of Engineering: <i>...</i> 2/24/93 Chief, Bureau of Utilities: <i>...</i> 1-25-93 Chief, Land Development: <i>...</i> 4/24/93		RIEMER MUEGGE & ASSOCIATES, INC. A Land Planning, Engineering and Consulting Firm 8016 Centre Park Drive • Suite 200 • Columbia, Md 21045 410-997-8900 FAX: 410-997-9282 J. F. ... JAYKANT D. PAREKH #10140		DES: DAM DRN: CAD CHK: CJR DATE: 5-8-92		PROFILE OF SEWER MAINS 600' SCALE MAP NO. 35 BLOCK NO. 14		VILLAGE OF RIVER HILL SECTION 2 AREA 1 LOTS 1 THRU 130 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3204-D SCALE AS SHOWN SHEET 10 OF 12	
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HOWARD COUNTY, MARYLAND

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DES: DAM					
DRN: CAD					
CHK: CJR					
DATE: 0-5-02	BY: MAD	NO. 1	REV: MH 20		3-4-02
			REVISION		

PROFILE OF
WATER AND SEWER MAINS

VILLAGE OF RIVER HILL
SECTION 2 AREA 1
LOTS 1 THRU 130
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3204-D

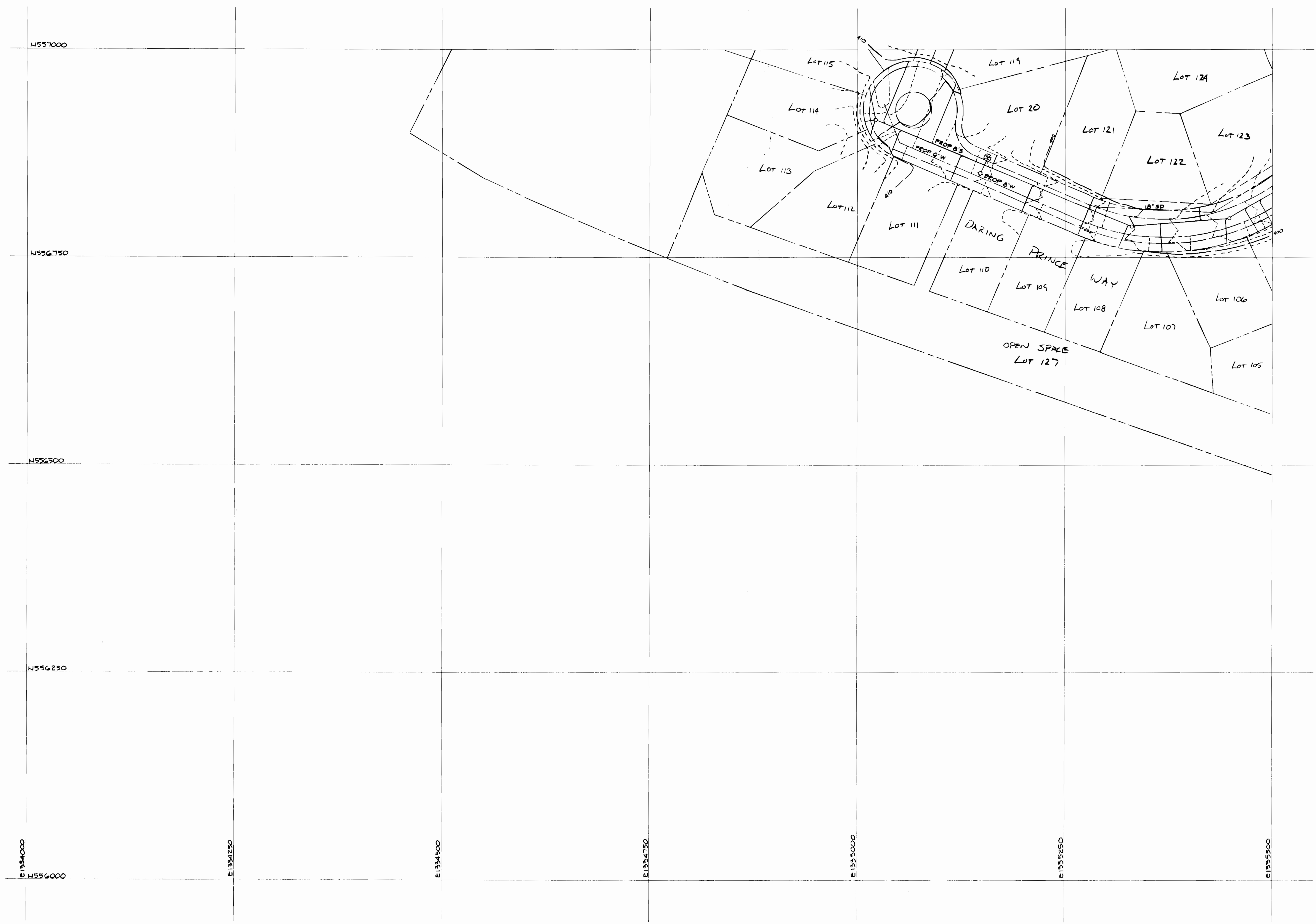
SCALE
AS
SHOWN

SHEET
12 OF 12

James P. Lane 1/20/93 1-25-93
DIRECTOR OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE
Robert D. Danner 1-25-93
CHIEF, BUREAU OF UTILITIES DATE CHIEF, LAND DEVELOPMENT DATE

600' SCALE MAP NO. 35 BLOCK NO. 14

3204 w/s Pas SHT #1/2



3204 W/S P/S SHT #2/R

