

INDEX OF DRAWINGS

NO.	DESCRIPTION
1.	TITLE SHEET AND VICINITY MAP
2.	PLAN AND PROFILES OF WATER AND SEWER MAINS-
3.	PLAN OF WATER AND SEWER MAINS-
4.	PLAN OF WATER MAIN.



VICINITY MAP
SCALE: 1" = 600'

TYPE OF BUILDING:	SINGLE FAMILY
NO. OF LOTS:	20
NO. OF W.H.C.:	20
NO. OF S.H.C.:	20
PATAPSCO WASTEWATER TREATMENT PLANT VIA RT. 108 PUMPING STATION.	
DRAINAGE AREA:	LITTLE PATUXENT

GENERAL NOTES

- All Construction to be in accordance with the Proposal Form, and the Howard County Standard Details and Specification for Construction (Refer to Volume IV of the Howard Co. Manual) as amended to date.
- Horizontal controls are based on the Maryland State Plane Coordinate System.
- Vertical controls are based on U.S.S. Datum.
- Existing underground utilities are shown from the best available information, but no warranty or guarantee can be given of their correctness or completeness, nor for any conclusions drawn there from. The user shall verify all such information to his satisfaction.
- 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 & Electric Company- Undergroud Electric Distribution
 Customer Service-685-0123
 Baltimore Gas & Electric Company- Undergroud Gas Distribution
 Customer Service-685-0123
 Engineering-Damage Control-234-5621
 Miss Utility-1-559-0100
 Chesapeake & Potomac (C & P) Telephone Company-725-9976
 American Telephone and Telegraph-Cable Location Division-393-3553
 Bureau of Utilities Howard County-992-2366
- Approximate location of existing mains are shown. The contractor shall take necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the inspector, at the contractor's expense.
- Clear all utilities by a minimum of 6" clear all poles by 2'-0" minimum o: tunnel as required. Any cost incurred to the contractor for tunneling or bracing of poles shall be included in the unit price bid for excavating or backfill.
- 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.
- For detail not shown on drawings use Howard County Standard Details.
- All pipe elevations shown are invert elevations.
- Trees are to be protected from damage to maximum extent. Tree located within 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 Inspector. Payment for such removal shall be included in unit price bid for excavating and backfill.
- 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.
- All water mains to be D.I.P. Class 52 unless otherwise noted.
- Top 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.
- Block all water main 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 standard details. Soil around the fire hydrant to be compacted in accordance with Detail W-111 of the Standard Specifications & Details.
- All water house connection shall be for an inside meter setting.
- The contractor shall not operate any water main valves on the existing system.
- 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.
- Water main and water house connection line 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 10'.
- Sediment Control Measures will be implement in accordance with Article No. 15 of the Specification & with Road Construction Plan drawings for Sediment & Erosion Control.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH ANWWA SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS, 3" THROUGH 12" FOR WATER AND OTHER LIQUIDS

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATION AND WITH ROAD CONSTRUCTION PLAN F-87-215, DRAWING SEDIMENT AND EROSION CONTROL.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

[Signature]
SIGNATURE DATE 8/13/89

U.S. SOIL CONSERVATION SERVICE
This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

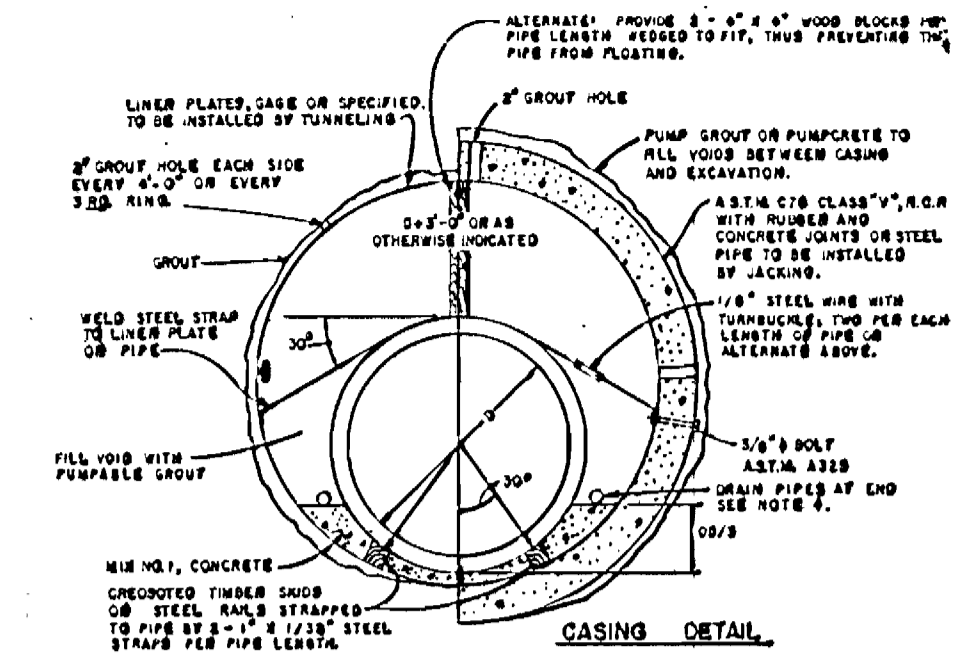
APPROVED:
[Signature]
HOWARD S.C.D. DATE 8/26/89

FINAL PLAT: F-87-215
SITE DEVELOPMENT PLAN:
SDP 88-19

CONTRACT NO.- 24-1733-D
MANORS OF OAKWOOD
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
ON SITE WATER AND SEWER MAINS

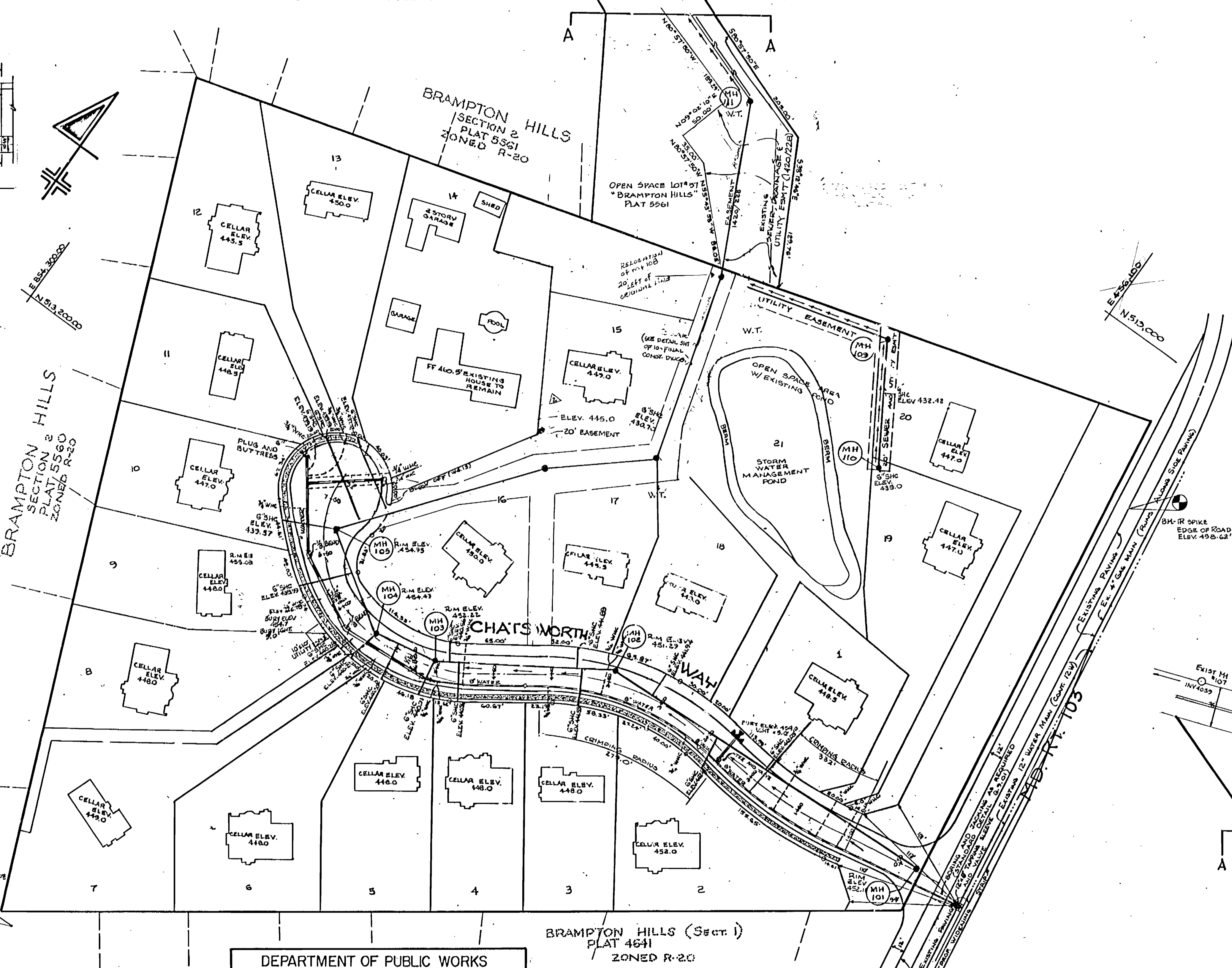
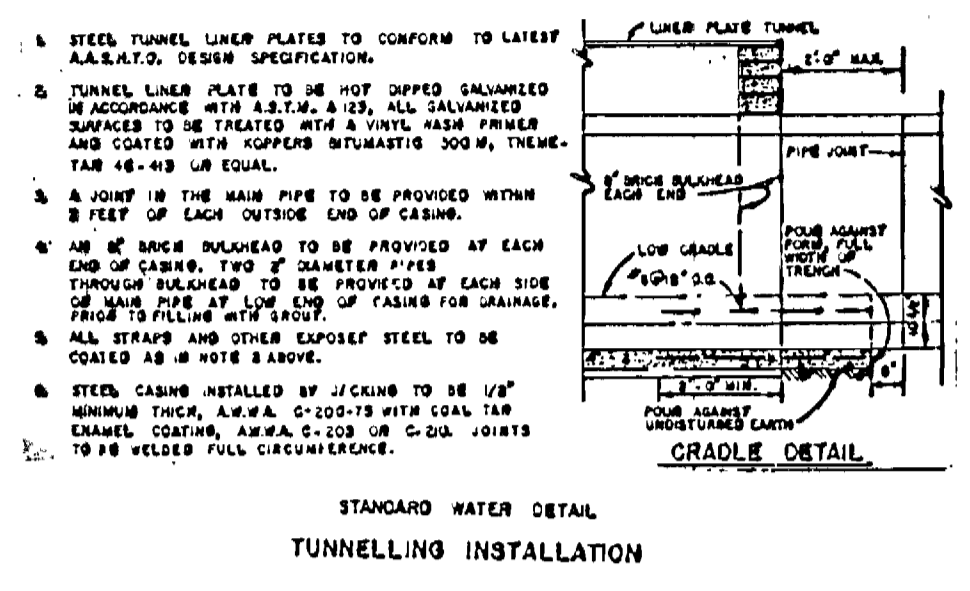
ITEM	QUANTITIES		
	ESTIMATED	AS BUILT	MATERIAL-SUPPLIER
8" SEWER	1724 L.F	1653 L.F.	Belair Road Supply
MANHOLES	12 @ 145.1 LF	12	Melville Concrete Prod
6" SAN HC.	520 L.F	500	Belair Road Supply
12" 8" T.S.V	1 EA.	1	Muller Company
6" WATER	178 L.F	115'	Griffin Pipe
3/4" W.H.C.	538 L.F		Howell Mfg. Co.
6" V.	2 EA.	2	Muller Company
F.H.	2 EA.	2	"
8" V.	2 EA.	2	"
6" PLUG	1 EA.	1	Warrington Corp
8"x6" REDUCER	1 EA.	1	MARPO
BLOW-OFF V.	1 EA.	1	Belair Road Supply
8" WATER	610 LF	605	Melville Comp.
1/8" BENDS	2 EA.	2	Belair Road Supply
"S" BEND	1	1	"

* Quantities changed from Belair Road Supply



EXISTING WELL & SEPTIC ON LOT 14 TO BE ABANDONED; ABANDONMENT REPORT TO BE FILED.

SEWER HOUSE CONNECTION INVERT @ PROPERTY LINE		MANHOLE TABLE			
STATION	LOT ELEV	NO. (FEET)	DIAM. (IN)	SLOPE	TYPE
MH#1 TO MH#102	443.03	10'	24"	2.1%	STD. PC G. 12
MH#102 TO MH#103	441.80	10'	24"	2.1%	STD. PC G. 12
MH#103 TO MH#104	440.50	10'	24"	2.1%	STD. PC G. 12
MH#104 TO MH#105	439.25	10'	24"	2.1%	STD. PC G. 12
MH#105 TO MH#106	438.00	10'	24"	2.1%	STD. PC G. 12
MH#106 TO MH#107	436.75	10'	24"	2.1%	STD. PC G. 12
MH#107 TO MH#108	435.50	10'	24"	2.1%	STD. PC G. 12
MH#108 TO MH#109	434.25	10'	24"	2.1%	STD. PC G. 12
MH#109 TO MH#110	433.00	10'	24"	2.1%	STD. PC G. 12
MH#110 TO MH#111	431.75	10'	24"	2.1%	STD. PC G. 12
MH#111 TO MH#112	430.50	10'	24"	2.1%	STD. PC G. 12



Lot #	OFFER AS ABANDONED	LOCATION	DIST
Lot #1	6" Valve	311' 21" E	70'
Lot #2	6" Valve	311' 21" E	59'
Lot #3	6" Valve	311' 21" E	70'
Lot #4	6" Valve	311' 21" E	28'
Lot #5	6" Valve	311' 21" E	64'
Lot #6	6" Valve	311' 21" E	75'
Lot #7	6" Valve	311' 21" E	37'
Lot #8	6" Valve	311' 21" E	80'
Lot #9	6" Valve	311' 21" E	75'
Lot #10	6" Valve	311' 21" E	82'
Lot #11	6" Valve	311' 21" E	48'
Lot #12	6" Valve	311' 21" E	30'
Lot #13	6" Valve	311' 21" E	37'
Lot #14	6" Valve	311' 21" E	72'
Lot #15	6" Valve	311' 21" E	69'
Lot #16	6" Valve	311' 21" E	72'
Lot #17	6" Valve	311' 21" E	70'
Lot #18	6" Valve	311' 21" E	78'
Lot #19	6" Valve	311' 21" E	77'
Lot #20	6" Valve	311' 21" E	70'
Lot #21	6" Valve	311' 21" E	71'
Lot #22	6" Valve	311' 21" E	30'
Lot #23	6" Valve	311' 21" E	63'
Lot #24	6" Valve	311' 21" E	133'
Lot #25	6" Valve	311' 21" E	70'
Lot #26	6" Valve	311' 21" E	70'
Lot #27	6" Valve	311' 21" E	107'
Lot #28	6" Valve	311' 21" E	110'
Lot #29	6" Valve	311' 21" E	70'
Lot #30	6" Valve	311' 21" E	71'
Lot #31	6" Valve	311' 21" E	110'
Lot #32	6" Valve	311' 21" E	21.5'
Lot #33	6" Valve	311' 21" E	20.3'
Lot #34	6" Valve	311' 21" E	20.3'
Lot #35	6" Valve	311' 21" E	32'
Lot #36	6" Valve	311' 21" E	39.4'
Lot #37	6" Valve	311' 21" E	18.7'
Lot #38	6" Valve	311' 21" E	151.1'
Lot #39	6" Valve	311' 21" E	42'
Lot #40	6" Valve	311' 21" E	31.2'
Lot #41	6" Valve	311' 21" E	47.4'
Lot #42	6" Valve	311' 21" E	47.2'
Lot #43	6" Valve	311' 21" E	44.4'
Lot #44	6" Valve	311' 21" E	56.3'
Lot #45	6" Valve	311' 21" E	46.5'
Lot #46	6" Valve	311' 21" E	37.4'
Lot #47	6" Valve	311' 21" E	42.6'
Lot #48	6" Valve	311' 21" E	77.9'
Lot #49	6" Valve	311' 21" E	42'
Lot #50	6" Valve	311' 21" E	35.3'
Lot #51	6" Valve	311' 21" E	38'
Lot #52	6" Valve	311' 21" E	38.2'
Lot #53	6" Valve	311' 21" E	31.2'
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Lot #55	6" Valve	311' 21" E	31.2'
Lot #56	6" Valve	311' 21" E	31.2'
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Lot #59	6" Valve	311' 21" E	31.2'
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Lot #67	6" Valve	311' 21" E	31.2'
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Lot #69	6" Valve	311' 21" E	31.2'
Lot #70	6" Valve	311' 21" E	31.2'
Lot #71	6" Valve	311' 21" E	31.2'
Lot #72	6" Valve	311' 21" E	31.2'
Lot #73	6" Valve	311' 21" E	31.2'
Lot #74	6" Valve	311' 21" E	31.2'
Lot #75	6" Valve	311' 21" E	31.2'
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Lot #77	6" Valve	311' 21" E	31.2'
Lot #78	6" Valve	311' 21" E	31.2'
Lot #79	6" Valve	311' 21" E	31.2'
Lot #80	6" Valve	311' 21" E	31.2'
Lot #81	6" Valve	311' 21" E	31.2'
Lot #82	6" Valve	311' 21" E	31.2'
Lot #83	6" Valve	311' 21" E	31.2'
Lot #84	6" Valve	311' 21" E	31.2'
Lot #85	6" Valve	311' 21" E	31.2'
Lot #86	6" Valve	311' 21" E	31.2'
Lot #87	6" Valve	311' 21" E	31.2'
Lot #88	6" Valve	311' 21" E	31.2'
Lot #89	6" Valve	311' 21" E	31.2'
Lot #90	6" Valve	311' 21" E	31.2'
Lot #91	6" Valve	311' 21" E	31.2'
Lot #92	6" Valve	311' 21" E	31.2'
Lot #93	6" Valve	311' 21" E	31.2'
Lot #94	6" Valve	311' 21" E	31.2'
Lot #95	6" Valve	311' 21" E	31.2'
Lot #96	6" Valve	311' 21" E	31.2'
Lot #97	6" Valve	311' 21" E	31.2'
Lot #98	6" Valve	311' 21" E	31.2'
Lot #99	6" Valve	311' 21" E	31.2'
Lot #100	6" Valve	311' 21" E	31.2'

ATLANTIC ENGINEERING Corp.
CONSULTING ENGINEERS PLANNERS
198 PENNSYLVANIA AVE WESTMINSTER, MD 876-1288

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS - DATE
CHIEF BUREAU OF ENGINEERING - DATE
CHIEF BUREAU OF UTILITIES - DATE
CHIEF LAND DEVELOPMENT - DATE

CONTRACT NO. 24-1733-D

PLAN & PROFILES OF WATER & SEWER MAINS

MANORS OF OAKWOOD LOTS 1-20
ELECTION DISTRICT - ELLICOTT CITY NO. 2

DRAWING NO. 2 OF 4
SCALE AS NOTED
DES. BY: RHC
DRN. BY: GAG



VOID

2-24-89

Brampton Hills
Sect 2 Area 1
Plot 583d

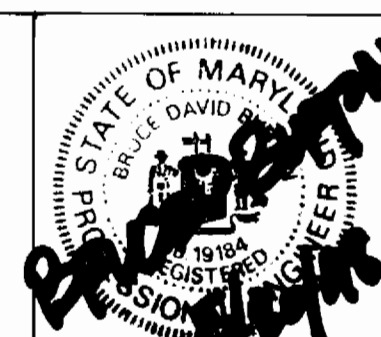


NOTE: THIS PLAN SUPERCEDES PREVIOUSLY APPROVED PLAN SHEET 2 CONTRACT NO. 24-1733D

DEPARTMENT OF PUBLIC WORKS
R. B. ...
 CHIEF - BUREAU OF UTILITIES
 DATE 5-22-98

DEPARTMENT OF PLANNING & ZONING
... ..
 CHIEF - DEVELOPMENT ENGINEERING DIVISION
 DATE 5/19/98

LDE, INC.
 9250 RUMSEY ROAD SUITE 106
 COLUMBIA, MARYLAND 21045
 (410) 715-1070 (301) 596-3424



DESIGN	WKS				
DRAWN	BEI				
CHECK	BDB				
DATE	12/97				
BY	NO.				
REVISION					
DATE					

PLAN SHEET
 600 SCALE MAP NO. 31
 BLOCK

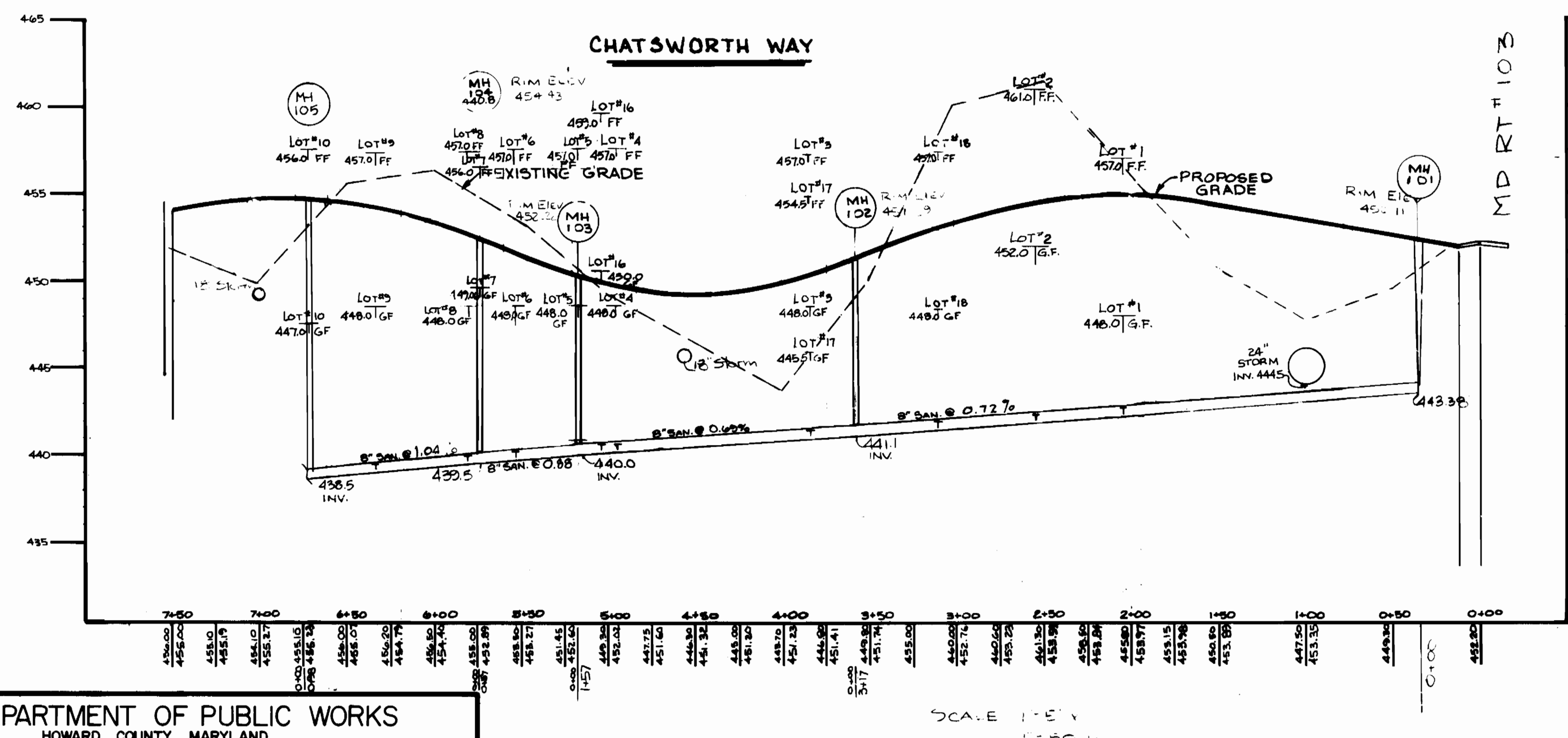
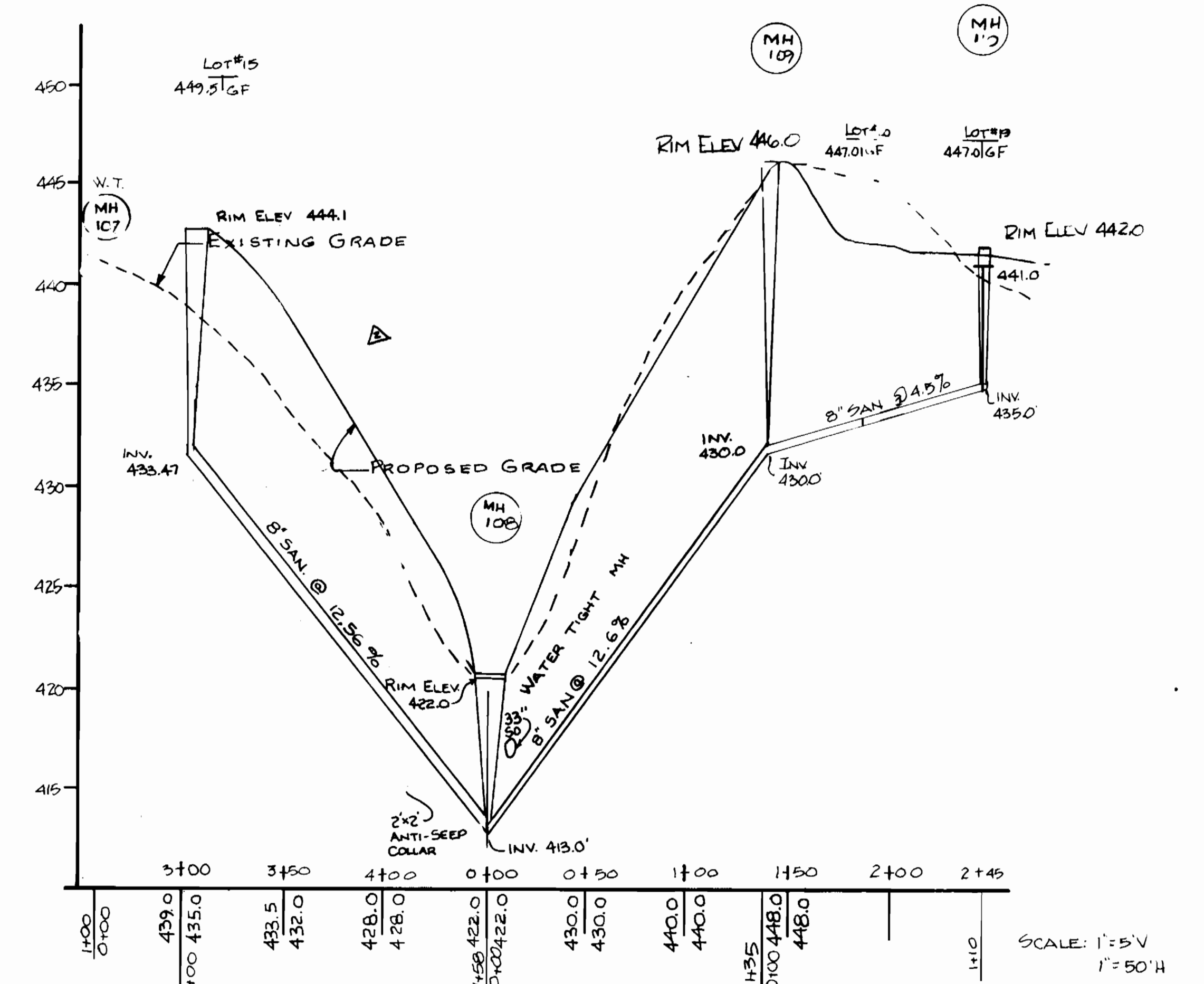
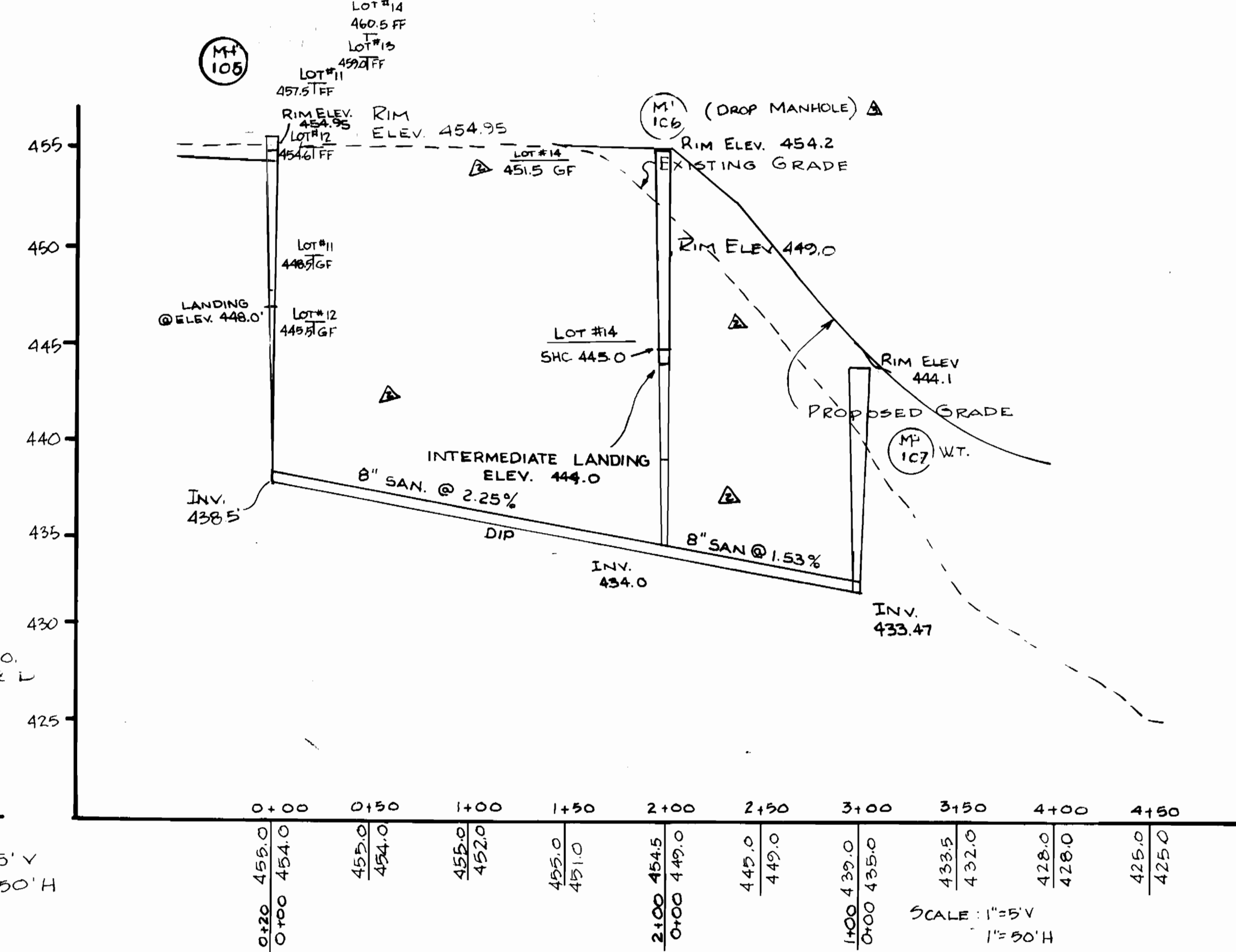
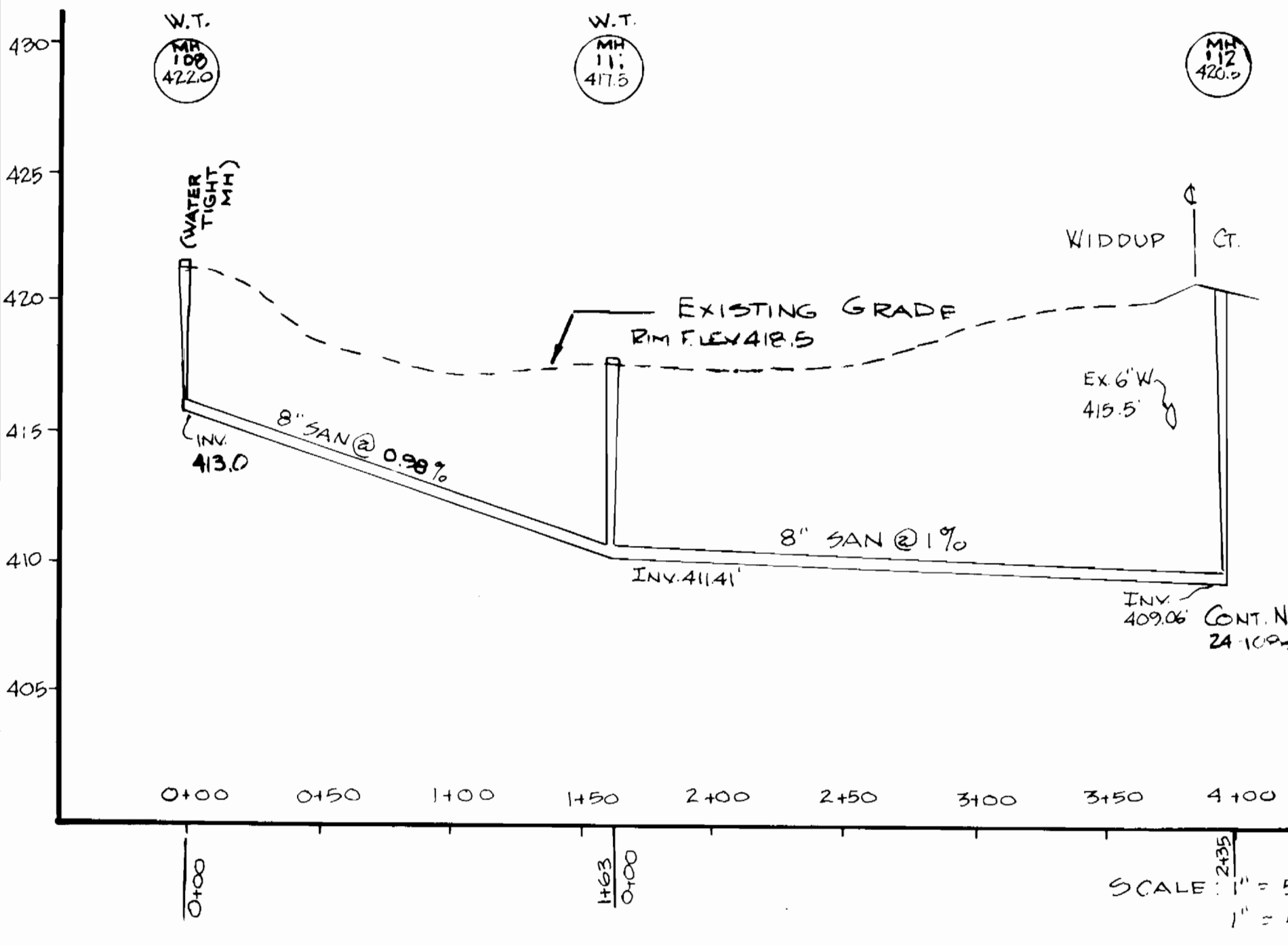
WATER and SEWER PLAN
MANORS OF OAKWOOD
 CONTRACT NO. 24-1733-D
 LOTS 23 THRU 44
 A RESUBDIVISION OF LOTS 1 THRU 22
 Tax Map 31 Parcel 583
 2nd election District Howard County, MD

SCALE
 1" = 50'
 SHEET
 2A OF 4

PROFILES: OPEN SPACE LOT #57 TO WIDDUP COURT

PROFILES: LOTS 15,16,17,18,21

PROFILES: LOTS 15,17,18,19,20,21



REVISION BLOCK			
NO.	DESCRIPTION	DATE	BY
1	MH 106	6-22-88	GBL/GAG
2	105 TO 109	6-20-88	GBL/GAG
3	MH 105 TO 109	REV 5-26-88	GAG
4	LOCATION		DWN



ATLANTIC ENGINEERING Corp.
CONSULTING ENGINEERS - PLANNERS
198 PENNSYLVANIA AVE WESTMINSTER, MD 876-1288

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS - DATE
CHIEF, BUREAU OF ENGINEERING - DATE
CHIEF, BUREAU OF UTILITIES - DATE
CHIEF, LAND DEVELOPMENT - DATE

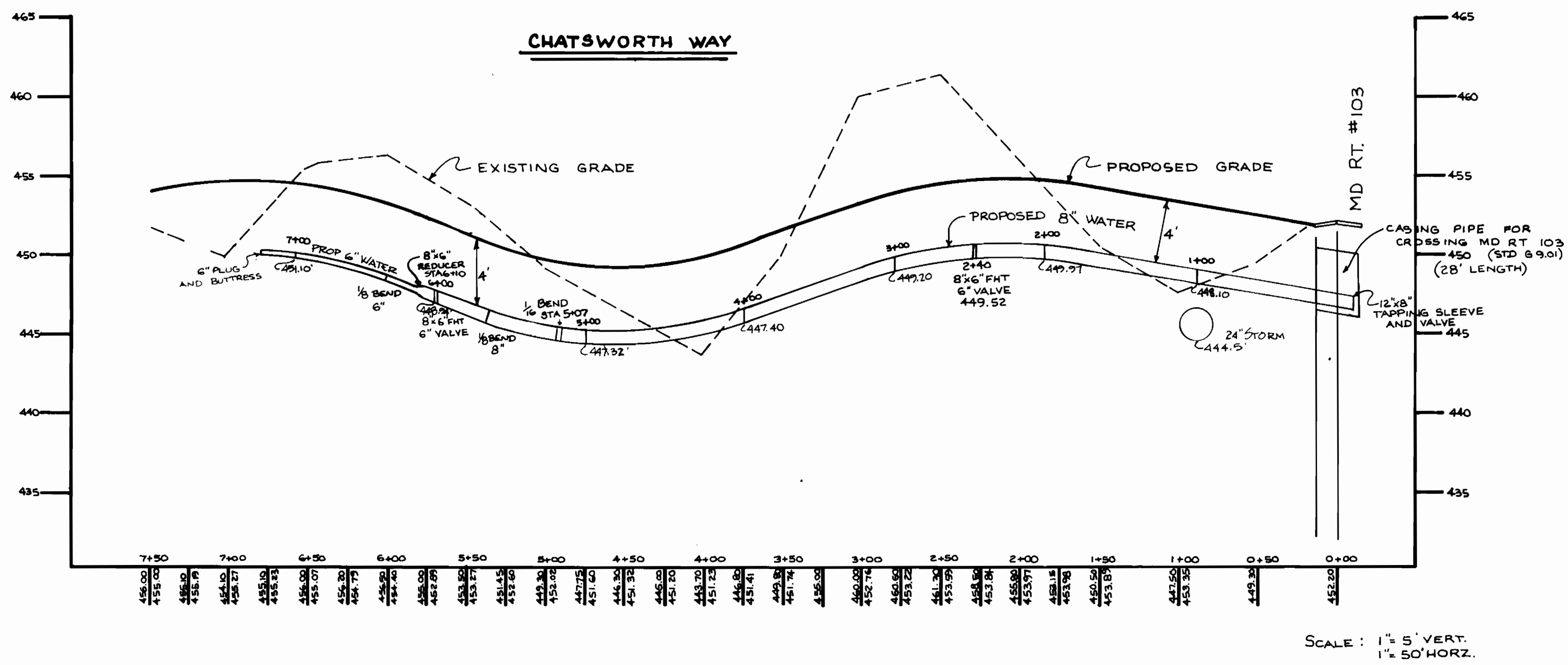
CONTRACT NO. 24-1733-D

PLAN & PROFILES OF
WATER & SEWER MAINS

MANORS OF OAKWOOD LOTS 1-20
ELECTION DISTRICT - ELLICOTT CITY NO. 2

DRAWING NO. 3 OF 4
SCALE AS NOTED

AS BUILT 9-24-89



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS - DATE
CHIEF, BUREAU OF ENGINEERING - DATE

CHIEF, BUREAU OF UTILITIES - DATE
CHIEF, LAND DEVELOPMENT - DATE

CONTRACT NO. 24-1733-D

PLAN & PROFILES OF
WATER & SEWER MAINS

MANORS OF OAKWOOD LOTS 1-20
ELECTION DISTRICT - ELLICOTT CITY NO. 2

DRAWING NO. 4 OF 4
SCALE AS NOTED

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REV 5-26-88 GAG