

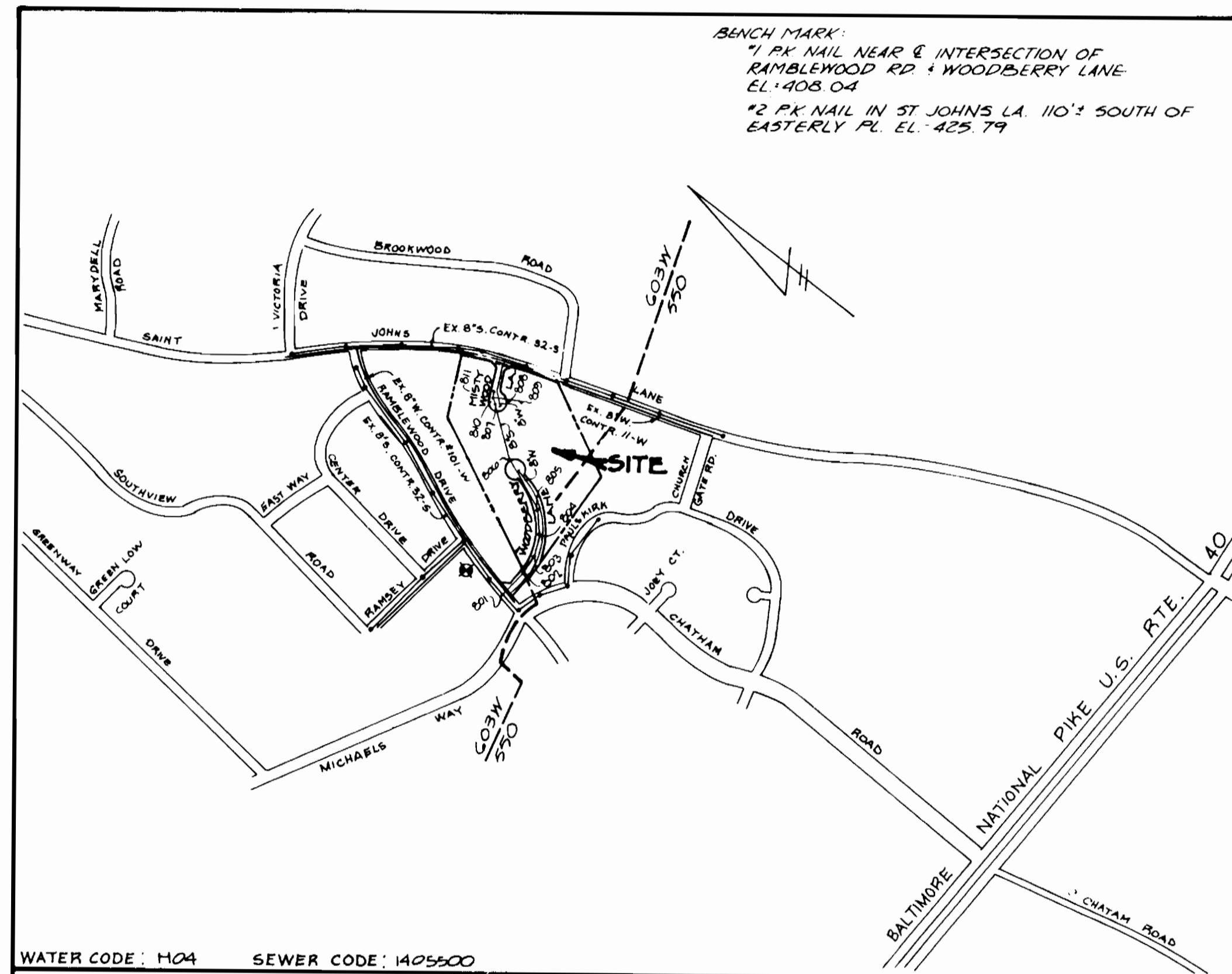
QUANTITIES

ITEM	ESTIMATE	AS-BUILT	SUPPLIER
8" WATER	1,063 FT.		
6" WATER	70 FT. (FOR FIRE HYDRANT)		
8" X 8" TAPPING SLEEVE W/6" W/DE	2 EA.		
3/4" W.H.C.	554 FT.		
1" W.H.C.	66 FT.		
FIRE HYDRANT *	3 EA.		
4" WATER	64 FT.		
8" SEWER	1,251 FT.		
6" SEWER	520 FT.		
MANHOLES	5 EA.		
BLOWOFF	2		

* FIRE HYDRANTS INCLUDE ALL NECESSARY VALVES, FITTINGS, AND STRAPPING

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".
- FOR DETAILS NOT SHOWN ON THE DRAWINGS AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME II, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME II ON THE JOB (2005 AMENDMENTS).
- 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 VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION: 551-5535
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES: 561-2585
 - BALTIMORE GAS & ELECTRIC CO. - UNDERGROUND DAMAGE CONTROL: 234-5621
 - BALTIMORE GAS & ELECTRIC CO. - TROUBLE SHOOTING: 298-5013
 - MISS UTILITY: 1-550-0100
 - COLONIAL PIPELINE COMPANY: 705-1350
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS: 952-2366
- 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 3.5' COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEE.
- 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE 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.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.X.P., A.C.P. CLASS 2400 OR 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.
- MANHOLES SHOWN SHALL BE 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL G5.51.
- ALL WATER HOUSE CONNECTIONS SHALL BE INSIDE METER SETTING, UNLESS OTHERWISE SHOWN.
- ALL DIP FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS, 3" THROUGH 12" FOR WATER AND OTHER LIQUIDS.



WATER CODE: M04 SEWER CODE: 1405500

TYPE OF BUILDINGS	RESIDENTIAL
NUMBER OF LOTS	22 (21 BUILDABLE)
NO. OF WATER HOUSE CONNECTIONS	21
NO. OF SEWER HOUSE CONNECTIONS	21
DRAINAGE AREA	PAIAPDC

VICINITY MAP
SCALE: 1" = 600'

OWNER / DEVELOPER

CHATEAU HOMES INC.
8100 WOODD GLEN CT.
ELLICOTT CITY, MD 21043

SEDIMENT CONTROL MEASURES FROM THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 210 OF THE SPECIFICATIONS AND AS SHOWN ON THE FINAL ROAD CONSTRUCTION PLANS (F-88-179).

HOWARD SOIL CONSERVATION DISTRICT REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
James M. Gales 8-18-89
U.S. SOIL CONSERVATION SERVICE DATE

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Stewart G. Gales 8-18-89
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Gales 8-22-89
DIRECTOR OF PUBLIC WORKS DATE

Robert M. Gales 8-17-89
CHIEF BUREAU OF UTILITIES DATE

William E. Gales 8-22-89
CHIEF BUREAU OF ENGINEERING DATE

William E. Gales 8/22/89
CHIEF LAND DEVELOPMENT DIVISION DATE

D.S. THALER & ASSOC. INC.

11 WARREN ROAD
BALTIMORE, MARYLAND 21208
(301) 484-4100

Henry F. Sadler 8-22-89
HENRY F. SADLER DATE

DES. B.L.C. R.C.					
E.C. J.T.N.					
DRN. J.L.C.					
B.L.C. L.R.C.					
CHK. J.T.N.					
DATE	APRIL, 1989	BY	NO.	REVISION	DATE

TITLE SHEET

CONTRACT NO. 14-1604-D
WOODBERRY
LOTS 1 THRU 22
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN SHEET 1 OF 2

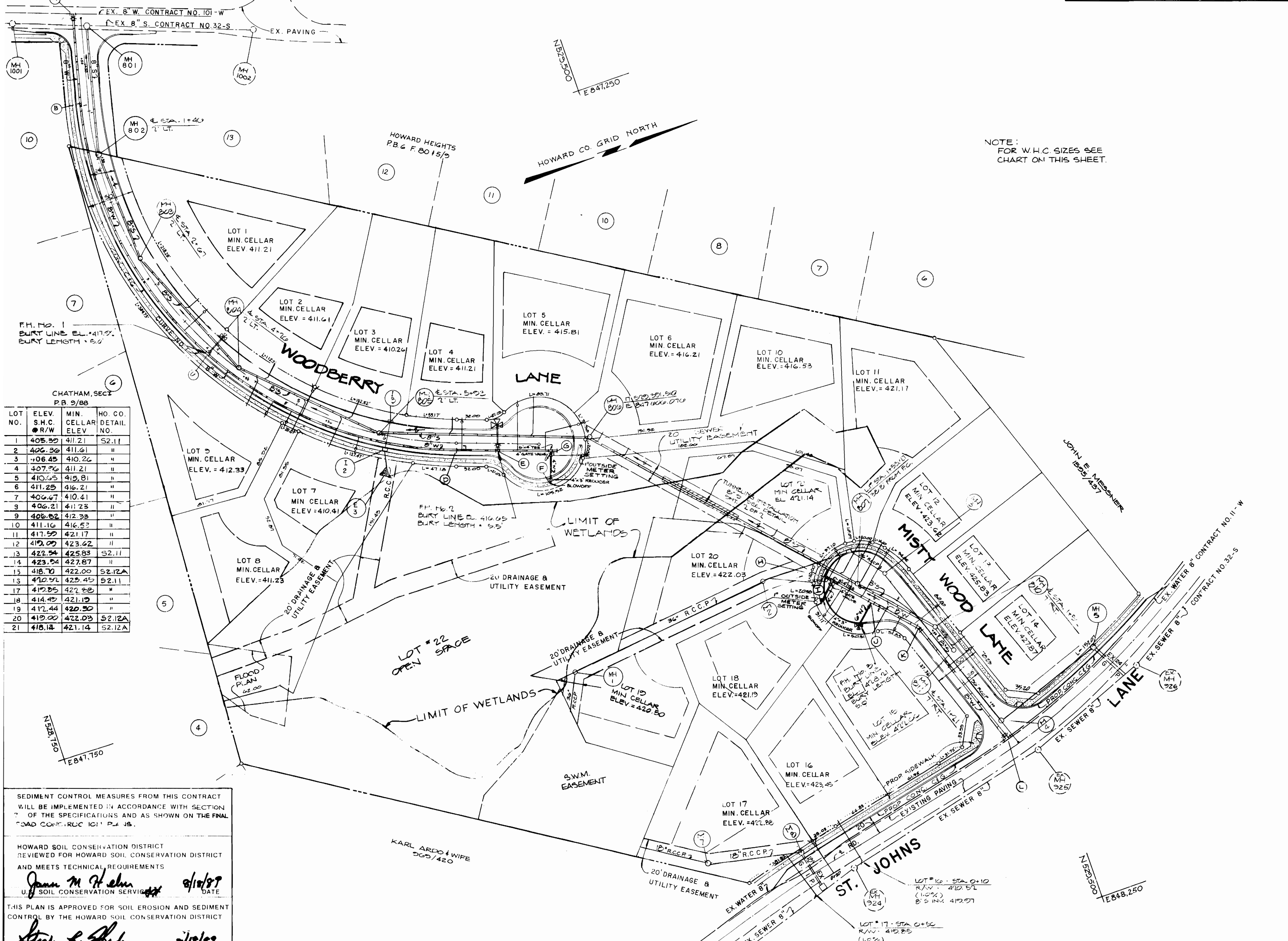
RAMBLEWOOD ROAD

WATER MAIN CURVE DATA

CURVE #	RADIUS	LENGTH	TANGENT	DELTA	CHORD
1	407.00	558.66	368.25	84° 16' 38"	546.14
2	230.00	156.20	81.25	38° 54' 43"	153.22

WATER MAIN APPURTENANCES

IDENT.	DESCRIPTIONS	COORDINATES	
		NORTH	EAST
WOODBERRY LANE			
A	W.M. STA. 0+00 - 8" TAPPING SLEEVE, VALVE	529,016.111	847,555.248
B	W.M. STA. 0+75 - P.C. OF CRIMP RADIUS *1	529,039.511	847,001.521
C	W.M. STA. 4+03 - 6" x 8" TEE	529,034.932	847,389.358
D	W.M. STA. 6+94 - P.T. OF CRIMP RADIUS *1	529,253.070	847,512.034
E	W.M. STA. 7+38 - 6" x 8" TEE	529,294.550	847,586.710
F	W.M. STA. 7+93 - 3" BLOW-OFF ASSEMBLY	529,346.401	847,606.056
G	W.M. STA. 8+00 - 8" CAP & BUTTRESS	529,353.000	847,607.951
MISTY WOOD LANE			
H	W.M. STA. 2+63 - 8" CAP & BUTTRESS	529,583.478	847,832.361
I	W.M. STA. 2+50 - 3" BLOW-OFF ASSEMBLY	529,588.179	847,801.543
J	W.M. STA. 2+00 - 6" x 8" TEE	529,620.446	847,873.079
K	W.M. STA. 1+50 - 8" 1/2 BEND	529,699.430	847,916.019
L	W.M. STA. 0+00 - 8" TAPPING SLEEVE &	529,710.059	848,051.204



NOTE:
FOR W.H.C. SIZES SEE
CHART ON THIS SHEET.

WATER MAIN HOUSE CONNECTIONS

LOT #	W.M. STATION	HOUSE CONNECTION SIZE
1	3+67 (WOODBERRY CT.)	W.H.C. 3/4"
2-3	5+21 (WOODBERRY CT.)	W.H.C. 1" TWIN
4	6+98 (WOODBERRY CT.)	W.H.C. 3/4"
5	7+57 (WOODBERRY CT.)	W.H.C. 3/4"
6	7+86 (WOODBERRY CT.)	W.H.C. 3/4"
7	5+87 (WOODBERRY CT.)	W.H.C. 3/4"
8	5+09 (WOODBERRY CT.)	W.H.C. 3/4"
9	4+88 (WOODBERRY CT.)	W.H.C. 3/4"
10	7+96 (WOODBERRY CT.)	W.H.C. 1" OUTSIDE METER SETTING
11	2+41 (MISTY WOOD LANE)	W.H.C. 1/4"
12	2+19 (MISTY WOOD LANE)	W.H.C. 3/4"
13	1+58 (MISTY WOOD LANE)	W.H.C. 3/4"
14	1+00 (MISTY WOOD LANE)	W.H.C. 3/4"
15	1+74 (MISTY WOOD LANE)	W.H.C. 3/4"
16-17	TAP TO EXISTING 8" WATER IN ST. JOHNS & PROSPERITY LANE	W.H.C. 1" TWIN
18	2+42 (MISTY WOOD LANE)	W.H.C. 3/4"
19	2+53 (MISTY WOOD LANE)	W.H.C. 1" OUTSIDE METER SETTING
20	2+61 (MISTY WOOD LANE)	W.H.C. 3/4"
21	2+62 (MISTY WOOD LANE)	W.H.C. 3/4"

CHATHAM, SECT. P.B. 2/88

LOT NO.	ELEV. S.H.C. @ R/W	MIN. CELLAR ELEV.	HO. CO. DETAIL NO.
1	405.30	411.21	S2.11
2	406.30	411.61	"
3	408.45	410.26	"
4	407.96	411.21	"
5	410.65	415.81	"
6	411.25	416.21	"
7	406.67	410.41	"
8	406.21	411.23	"
9	406.62	412.33	"
10	411.16	416.53	"
11	417.50	421.17	"
12	419.00	423.22	"
13	422.54	425.83	S2.11
14	423.04	427.87	"
15	418.70	422.00	S2.12A
16	410.51	423.45	S2.11
17	410.85	422.88	"
18	414.40	421.10	"
19	412.44	420.30	"
20	419.00	422.03	S2.12A
21	418.12	421.14	S2.12A

SEDIMENT CONTROL MEASURES FROM THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 7 OF THE SPECIFICATIONS AND AS SHOWN ON THE FINAL ROAD CONSTRUCTION PLAN.

HOWARD SOIL CONSERVATION DISTRICT REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

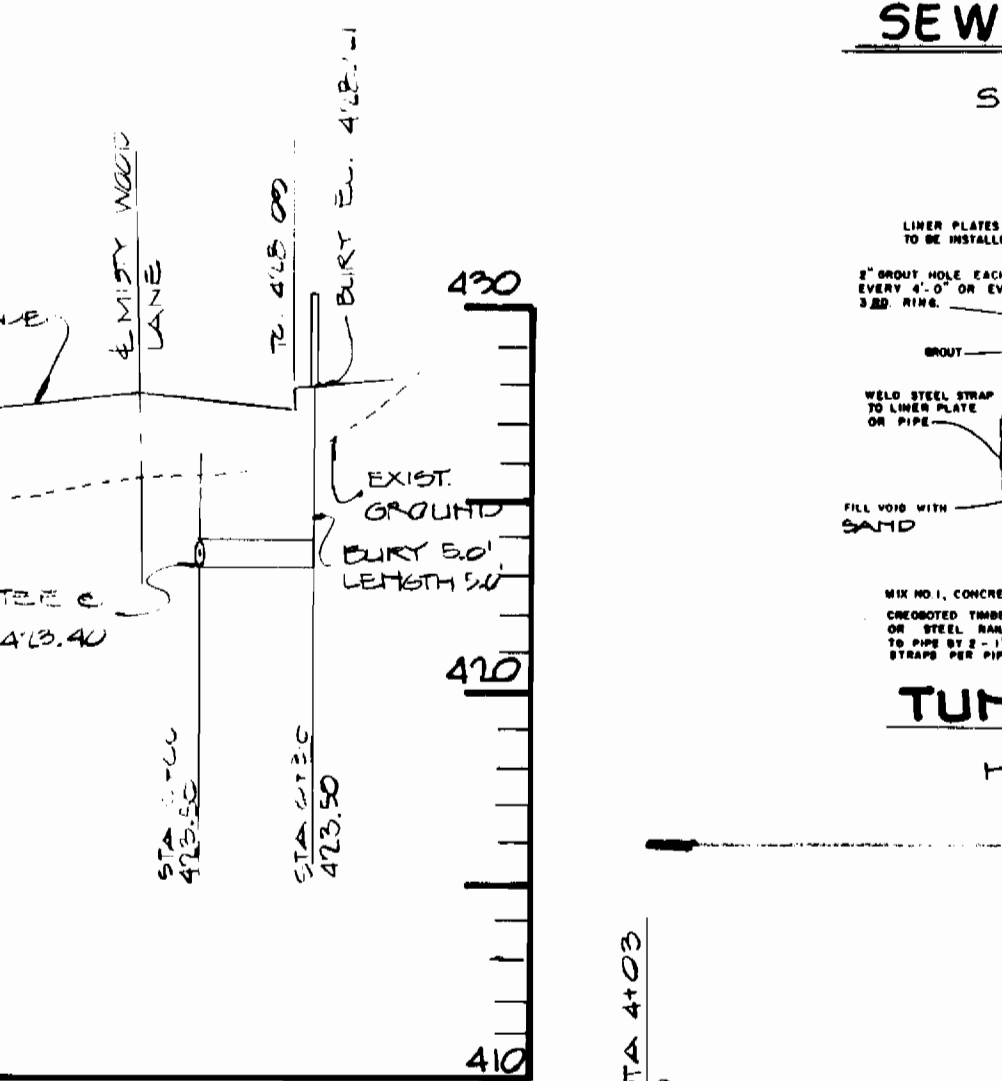
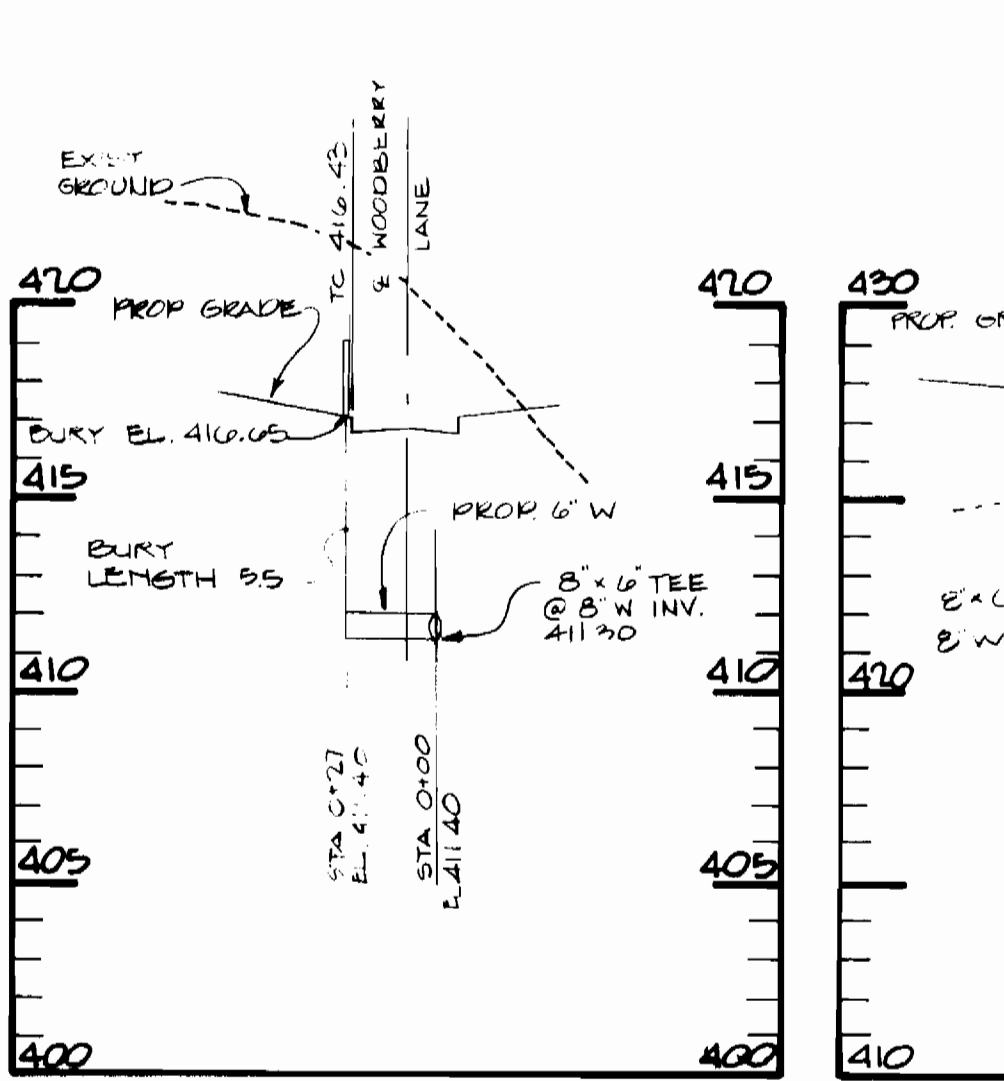
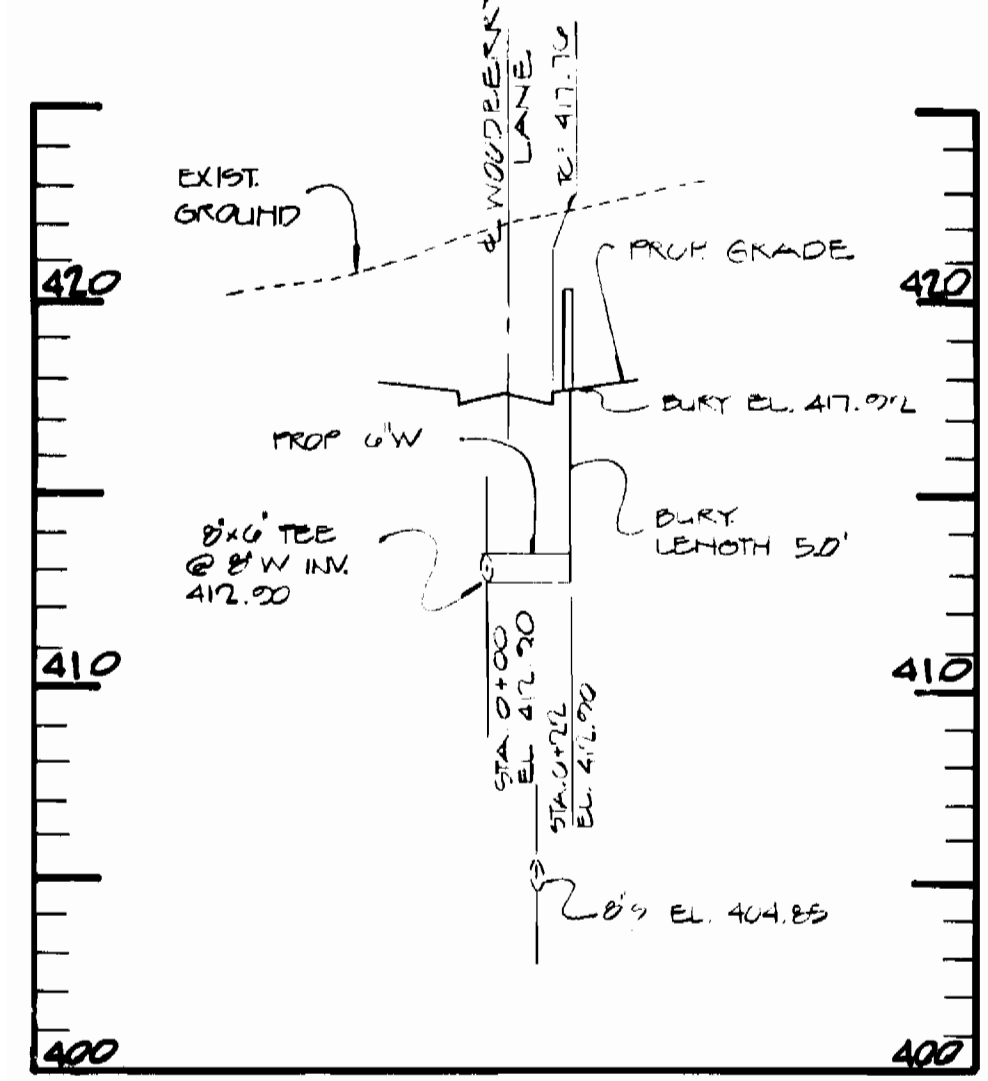
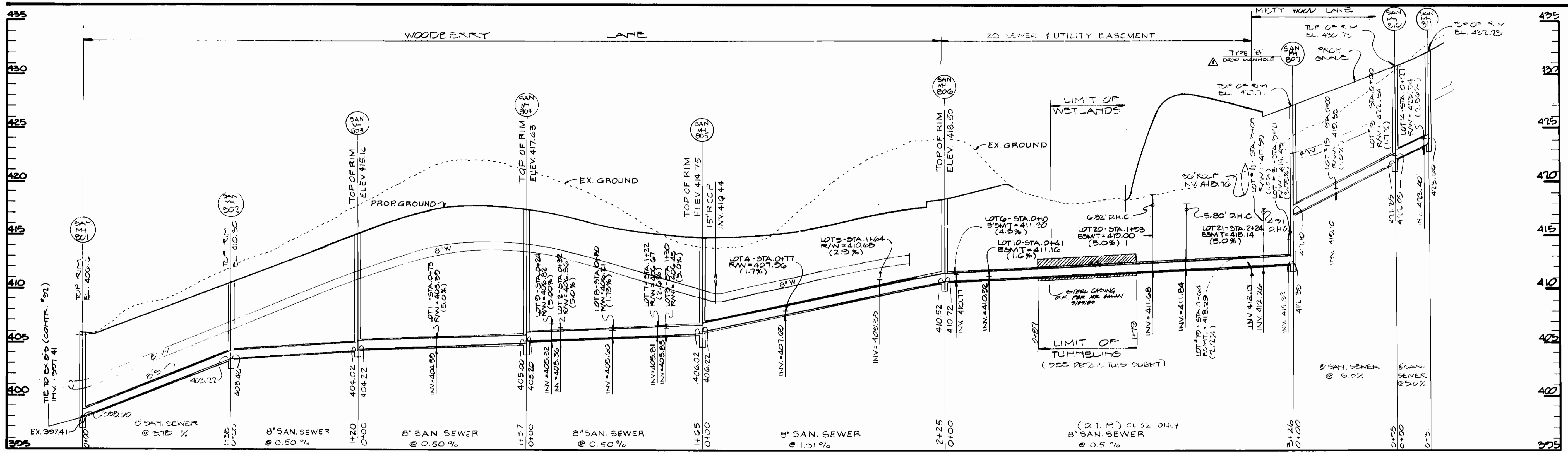
James M. Helms 8/10/87 DATE
U.S. SOIL CONSERVATION SERVICE

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

Steven S. Stahl 8/10/87 DATE
HOWARD SOIL CONSERVATION DISTRICT

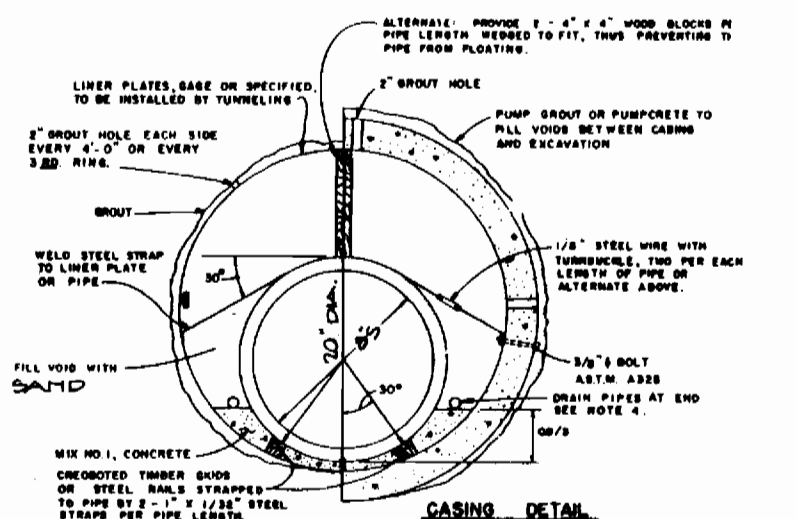
<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>James M. Helms</i> 8/22/87 DATE DIRECTOR OF PUBLIC WORKS</p> <p><i>Robert M. Beatty</i> 8-10-87 DATE CHIEF BUREAU OF UTILITIES</p>	<p>D.S. THALER & ASSOC. INC.</p> <p>11 WARREN ROAD BALTIMORE, MARYLAND 21208 (301) 484-4100</p> <p><i>David F. Thaler</i></p>	<p>DESIGNED BY: [Signature]</p> <p>DRN. BY: [Signature]</p> <p>IN CHARGE: [Signature]</p> <p>DATE: 11/12/87</p>	<p style="text-align:center">PLAN</p> <p style="text-align:center">SEWER AND WATER MAINS</p>	<p style="text-align:center">CONTRACT NO. 14-1694-D</p> <p style="text-align:center">WOODBERRY LOTS 1 THRU 22</p> <p style="text-align:center">SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>	<p>SCALE: AS SHOWN</p> <p>SHEET: 2 OF 3</p>
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SEWER AS-BUILT 7/1/80



SEWER MAIN PROFILES

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



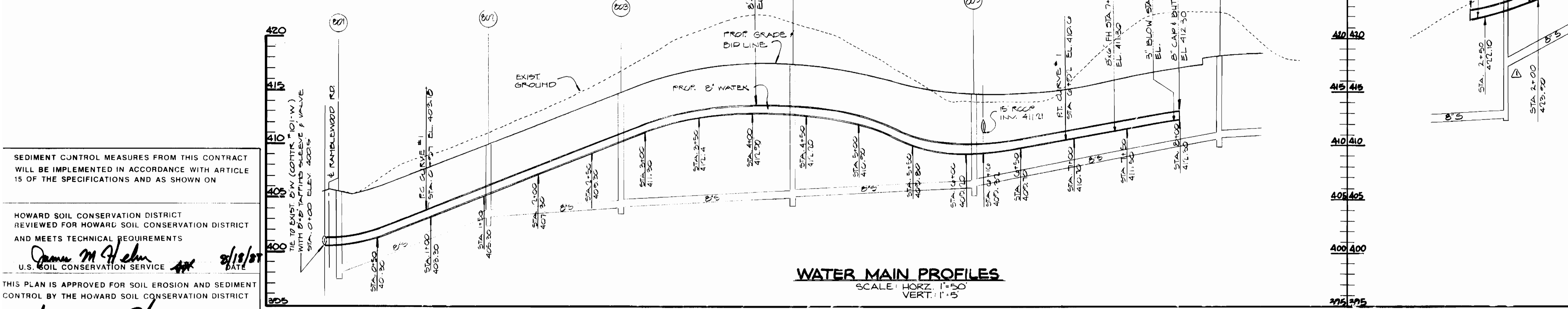
TUNNELING DETAIL

SCALE: H.C.S.D. 6991

FIRE HYDRANT #1
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

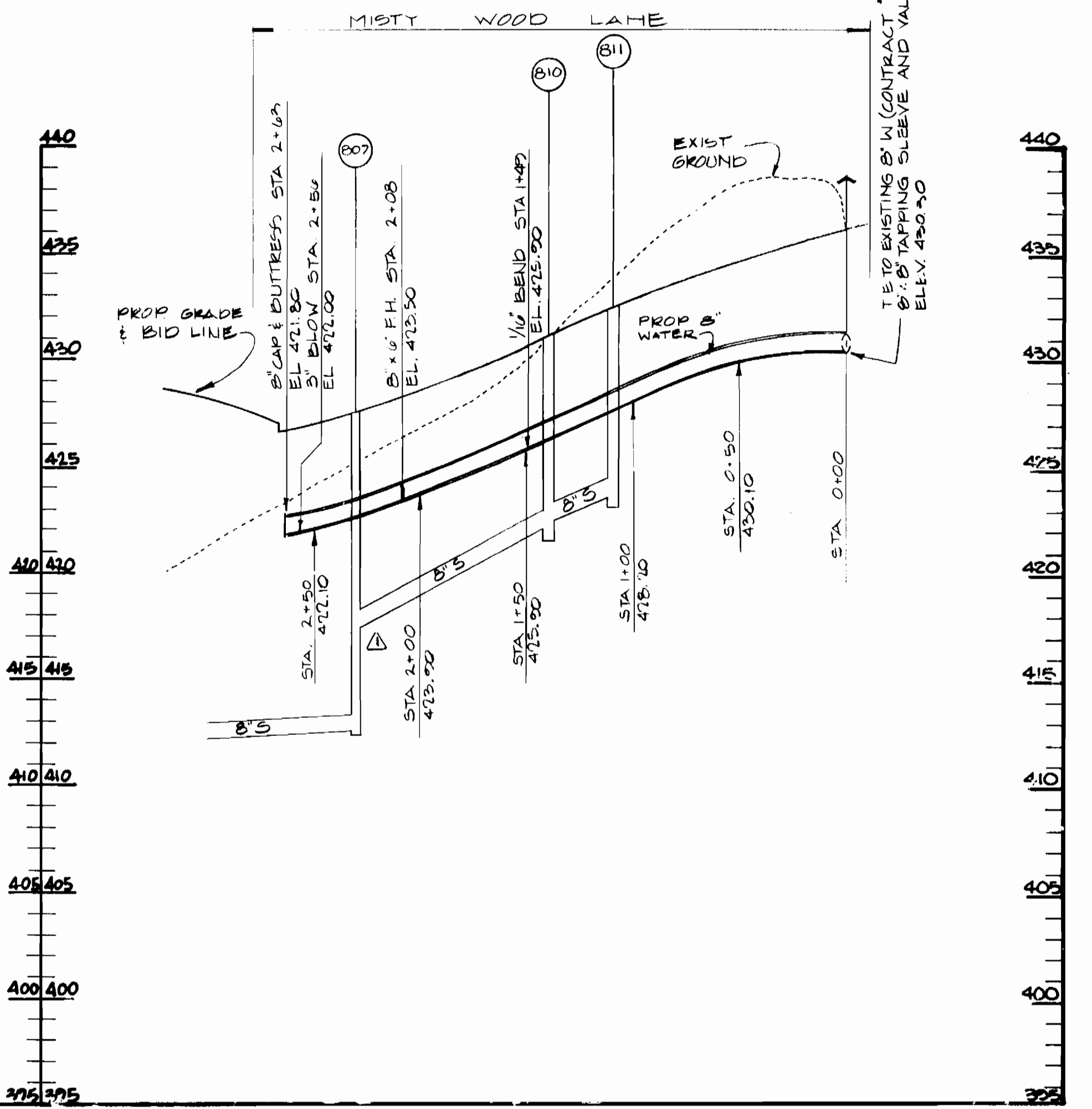
FIRE HYDRANT #2
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

FIRE HYDRANT #3
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'



WATER MAIN PROFILES

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



SEDIMENT CONTROL MEASURES FROM THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE 15 OF THE SPECIFICATIONS AND AS SHOWN ON

HOWARD SOIL CONSERVATION DISTRICT REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

James M. G. Elm 8/18/89 DATE
U.S. SOIL CONSERVATION SERVICE

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

Stephen L. Thaler 8/19/89 DATE
HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. G. Elm 8/22/89 DATE
DIRECTOR OF PUBLIC WORKS

William E. Reilly 8/22/89 DATE
CHIEF BUREAU OF ENGINEERING

Robert J. Bennett 8/22/89 DATE
CHIEF BUREAU OF UTILITIES

William E. Reilly 8/22/89 DATE
CHIEF LAND DEVELOPMENT DIVISION

D.S. THALER & ASSOC. INC.

11 WARREN ROAD
BALTIMORE, MARYLAND 21208
(301) 484-4100

REV. 01/10/88
E.C. 01/10/88
M.D. 01/10/88
H.S. 01/10/88
A.L. 01/10/88

L.R.C. Δ REVISE M4 & B07 ON WATER & SEWER PROFILES
OCT. 1989

PROFILES
SEWER AND WATER MAINS

CONTRACT NO. 14-1694-D
WOODBERRY
LOTS 1 THRU 22
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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

WATER & SEWER AS-BUILT 7/17/90