

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. DATUM.
- 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 IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1989 ADAMENDMENTS. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- ⊙ REPRESENTS APPROXIMATE LOCATION OF WHERE TEST PITS SHALL BE DUG BY CONTRACTOR TO VERIFY EXACT LOCATION/ELEVATION OF PROPOSED UTILITY CONNECTION. 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 WORK 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: 859-9004
 - BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING: 298-9001
 - MISS UTILITY: 1-559-0100
 - COLONIAL PIPELINE COMPANY: 795-1390
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS: 313-4900
 - C & P TELEPHONE COMPANY: 1-800-257-7777
- 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.
- PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION & MAINTENANCE OPERATIONS.

WATER NOTES

- ALL WATER MAINS TO BE D.I.P. CLASS S2 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 STRAPPED 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 D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C-153: DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTINGS, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS. (STD. DETAIL W.3.21).
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OF SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.

SEWER NOTES

- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVERS STANDARD DETAIL G5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED. SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., OR P.V.C. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDED 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 WITH 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.

QUANTITIES			
ITEM	EST'D	AS-BUILT	SUPPLIER
8" San. (PVC)	4623 L.F.	4619.39 L.F.	ETI
4" SHC	2358 L.F.	2667.0 L.F.	ETI
2" WHC	400 L.F.	448.0 L.F.	CAMBRIDGE LEE
Manholes	26 Ea.	26 Ea.	ATLANTIC CONC.
6" W (D.I.P.)	209 L.F.	171.3 L.F.	ATLANTIC STATES
8" W (D.I.P.)	2042 L.F.	2513.0 L.F.	"
Air Release MH	1 Ea.	1 Ea.	ATLANTIC CONC.
16" x 16" T	2 Ea.	1 Ea.	GRIFFEN
8" x 6" T	4 Ea.	4 Ea.	"
16" x 6" T	2 Ea.	2 Ea.	"
12" x 6" T	2 Ea.	3 Ea.	"
6" Valve	9 Ea.	9 Ea.	MEH KENNEDY
8" Valve	5 Ea.	5 Ea.	"
3/4" WHC	1658 L.F.	1548.0 L.F.	CAMBRIDGE LEE
1/16 Bend	4 Ea.	4 Ea.	GRIFFEN
3" Blowoff	2 Ea.	2 Ea.	KUPFERLE
12" W (D.I.P.)	523 L.F.	509.0 L.F.	ATLANTIC STATES
16" W (D.I.P.)	1468 L.F.	1481.0 L.F.	"
16" x 8" Cross	1 Ea.	1 Ea.	GRIFFEN
Fire Hydrant	8 Ea.	9 Ea.	MEH KENNEDY
16" Valve	4 Ea.	4 Ea.	"
12" Valve	1 Ea.	1 Ea.	"
1" WHC	362 L.F.	387.0 L.F.	CAMBRIDGE LEE
16" x 12" R	1 Ea.	1 Ea.	GRIFFEN
2" Ball Valve	2 Ea.	2 Ea.	FORD METER CO.
8" x 8" Tee	1 Ea.	1 Ea.	HARGO/PLASTIC TRENDS
1-1/2" WHC	282 L.F.	244.0 L.F.	CAMBRIDGE LEE
Smith Blair Cplg	2 Ea.	2 Ea.	GRIFFEN
4" DHC	140 L.F.	140 L.F.	ATLANTIC STATES
1/4" Meter Vault	4 Ea.	4 Ea.	FORD METER CO.
8" San. (DIP)	575 L.F.	572.0 L.F.	ATLANTIC STATES

(INCLUDES MATERIALS AND VERTICALS)

NOTE: THIS CONTRACT WAS COMPLETE
MARCH 4, 1992 BY GAINES UTILITY
COMPANY INC.

SEQUENCE OF OPERATIONS
FOR THE CONSTRUCTION OF THE PROPOSED 16" D.I.P. WATER MAIN

- The contractor shall stake-out the existing 16" A.C.P. water main along its centerline within Crest Road and Clifford Court. Protective fence shall be installed prior to any construction as shown on the Construction Detail on sheet 6 of 9.
- The contractor shall test pit the existing 16" A.C.P. to verify the location and outside diameter of the existing main.
- Construction equipment will cross the existing 16" water main only at selected points protected with appropriate steel plates or ramps over the main.
- Temporary access will be provided to the existing water tower as indicated on sheet 6 of 9. Those portions of Sandy Stream Road and Spring Branch Court in use for this purpose shall be brought to rough grade and surfaced with gravel. This temporary access may be abandoned once Crest Road and Clifford Court are at grade with subbase surfacing.
- The contractor shall notify the Howard County Bureau of Utilities at a minimum of 14 days prior to the connection of the proposed 16" water main in order to adjust water system operation.
- The 16" D.I.P. water main shall be constructed and placed in operation before any other grading or utilities work may be done.
- Install 16" D.I.P. from sta. 33+15 Crest Road to sta. 5+20 Clifford Court. As sections are installed, minimum cover shall be provided as indicated on the Construction Detail shown on sheet 6 of 9.
- Install the 16"x12" reducer, 12" valve and several 12" D.I.P. lengths with temporary cap to approximately sta. 24+00 Crest Road.
- Any and all other connections to the proposed 16" D.I.P. water main will occur after the 16" D.I.P. is placed into service.
- The contractor shall be responsible for notifying the Howard County Bureau of Utilities at (301) 313-4900 at least 48 hours prior to the tie-in of the proposed 16" D.I.P. The Bureau of Utilities will operate all valves during the shut-down and tie-in periods.
- The contractor shall be responsible for notifying all residents along Hammond Drive, Hill Crest Drive, Crest Drive and all other affected area residents at least 48 hours prior to the shut-down.
- The water main tie-in at both ends of the proposed 16" D.I.P. shall occur simultaneously and only between the hours of 11:00 pm to 6:00 am.
- Once the proposed 16" D.I.P. water main is in service the existing 16" A.C.P. shall be abandoned. The existing 16" A.C.P. shall be dewatered and both ends shall be plugged and capped with concrete to prevent water intrusion. Any additional cuts necessary during construction shall also be plugged and capped with concrete.
- Construction to complete the water and sewer contract may continue, as well as mass grading operations over the new water line.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F-90-201

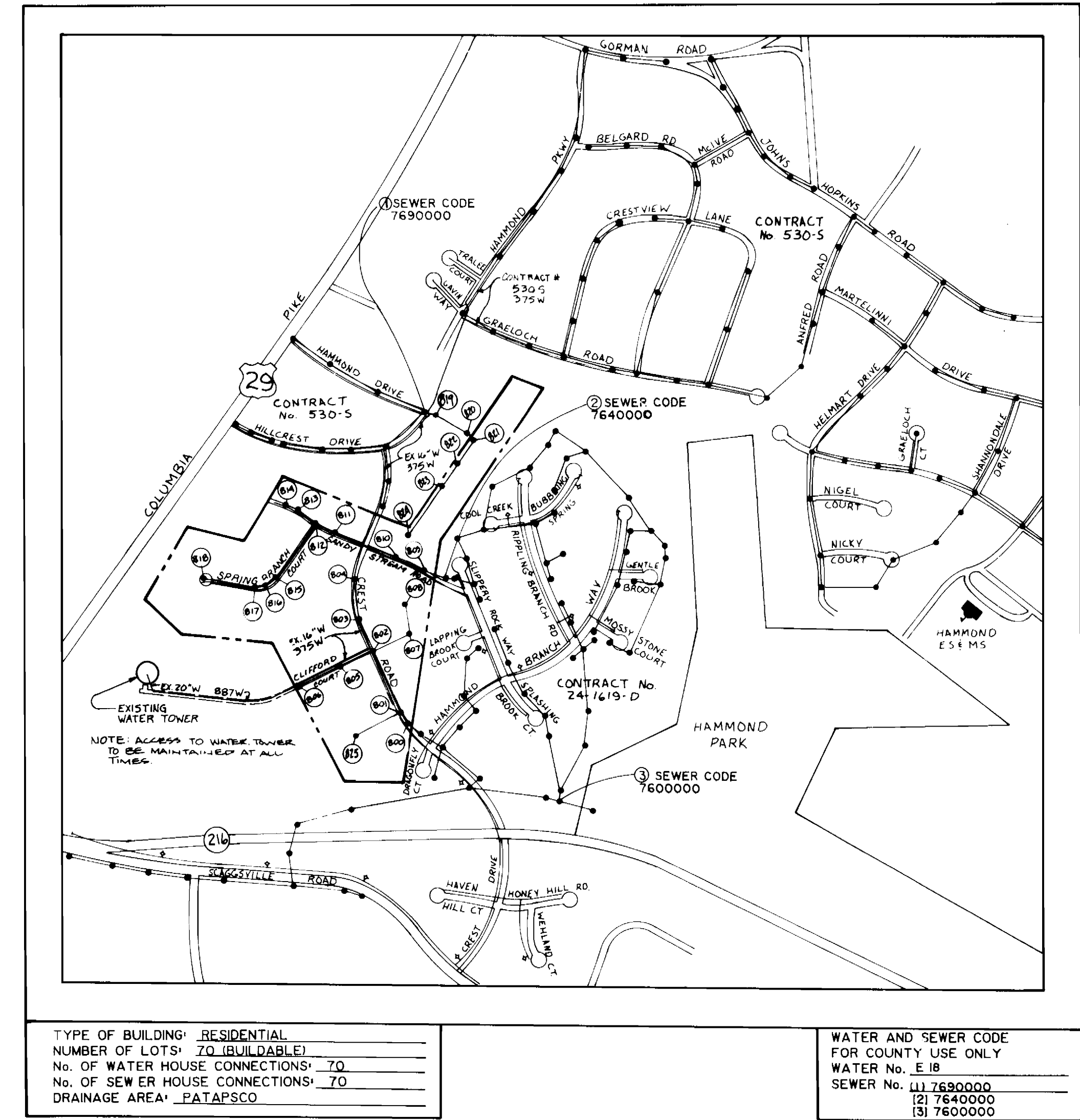
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

John M. H. [Signature] 8/6/91
U.S. SOIL CONSERVATION SERVICE DATE

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

APPROVED:
John R. Robertson [Signature] 8/5/91
HOWARD SOIL CONSERVATION DISTRICT DATE

PLAN REFERENCE NUMBERS
F-90-201



CONTRACT NO. 24-3134-D
PATUXENT SPRINGS

LOTS 1-73
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS



AS-BUILT
COMPLETED 3-6-92

CONTRACT NO. 24-3134-D
PATUXENT SPRINGS
LOTS 1-73
WATER AND SEWER MAIN EXTENSION
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James P. [Signature] 8-9-91
DIRECTOR OF PUBLIC WORKS DATE
Robert E. [Signature] 8/5/91
CHIEF, BUREAU OF ENGINEERING DATE
John R. [Signature] 8/5/91
CHIEF, LAND DEVELOPMENT DIVISION DATE

MILDENBERG, MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro No. (301) 621-5768

DES: DAB					
DRN: MDC					
CHK: PMM	JCM	2	Revise Vicinity Map & Quantities Box, Re-numbered	11/14/91	
PROJ # 89004-04	JCM	1	Revise quantities box - Water main bends & VF of DHC	10/30/91	
DATE: JUNE '90	BY: NO.		REVISION	DATE	

TITLE SHEET

PATUXENT SPRINGS
LOTS 1-73
CONTRACT NO. 24-3134-D
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

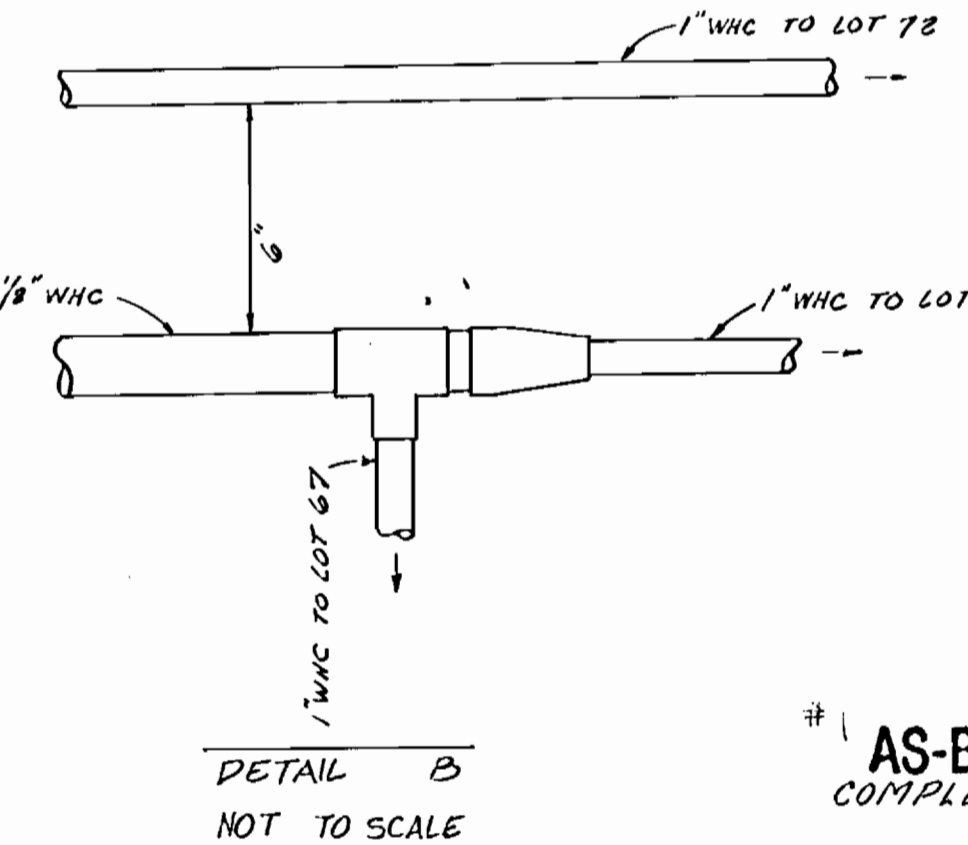
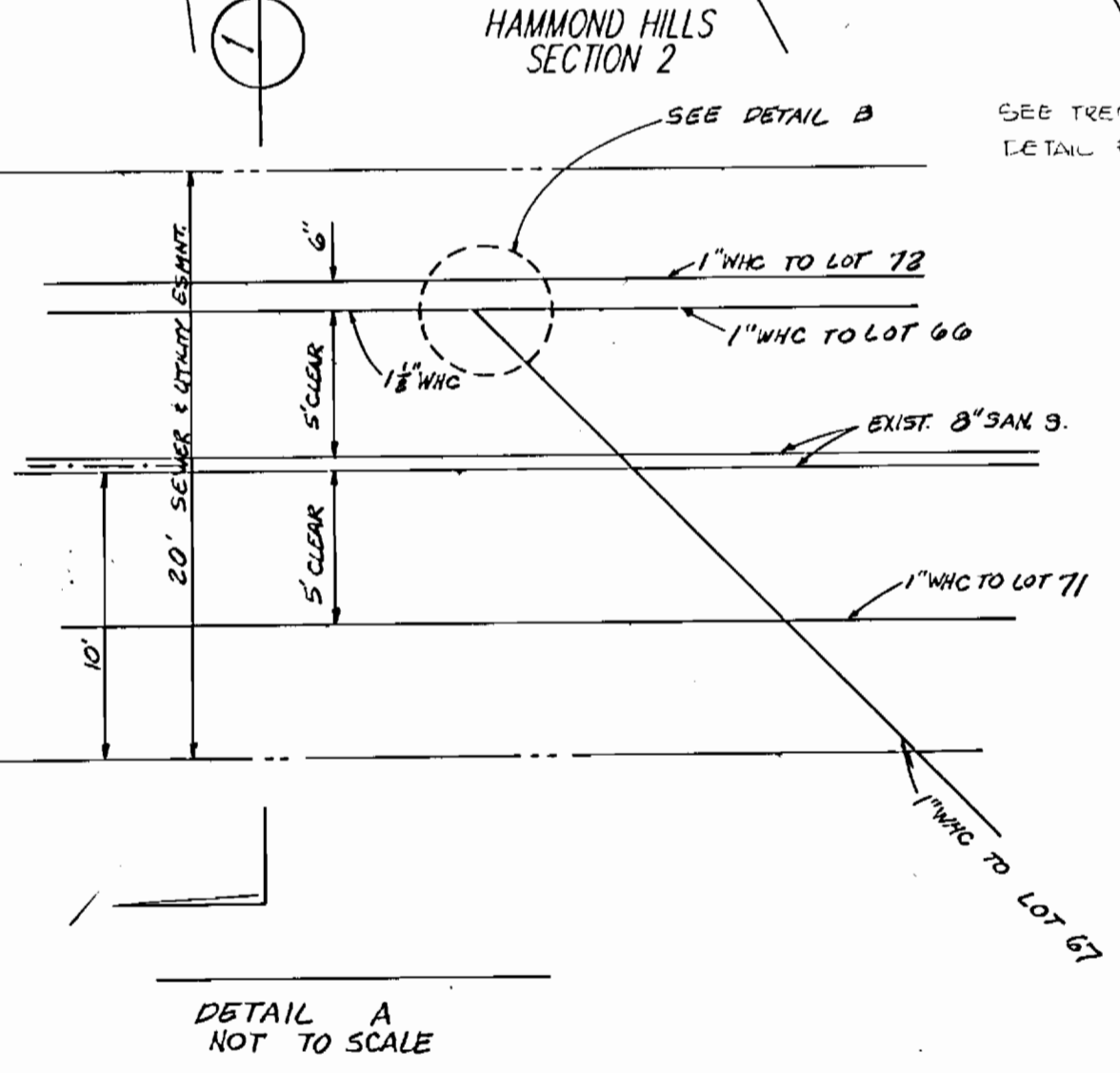
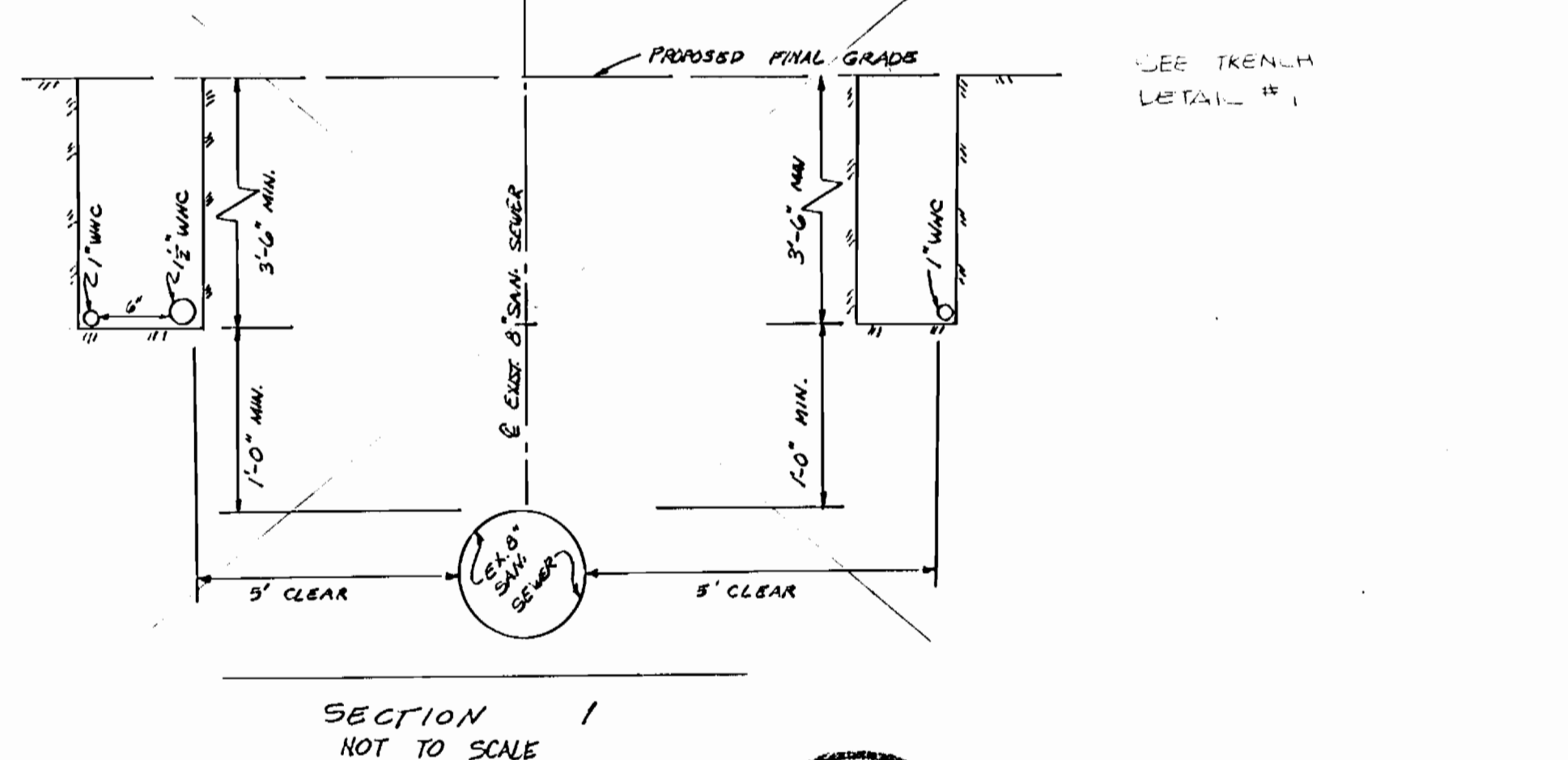
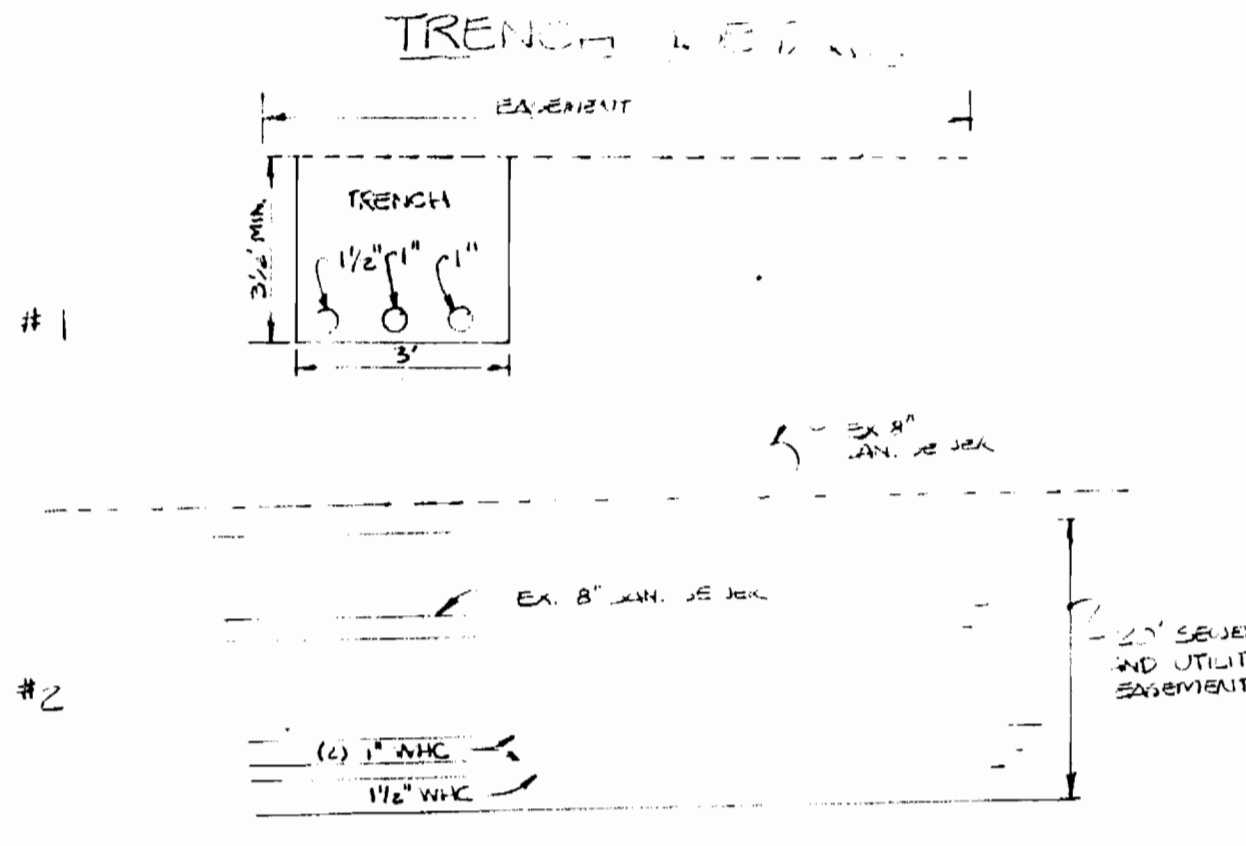
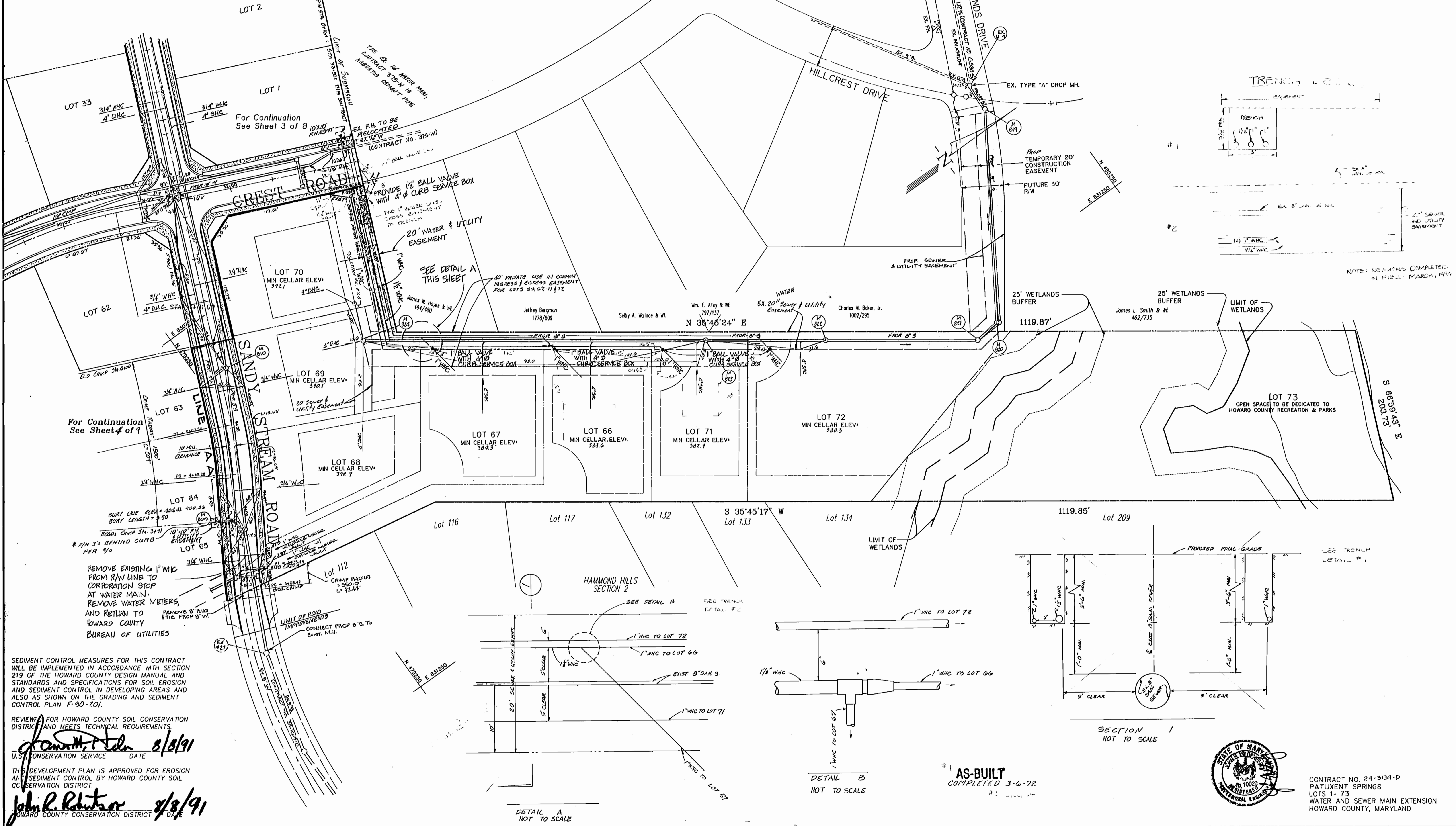
SCALE AS SHOWN
SHEET 1 OF 9

Owner
 Vincent L. Vinella
 12631 Circle Drive
 Rockville, Maryland 20850
 (301) 762-0743

Developer
 WINCHESTER HOMES POTOMAC DIVISION
 818 W. Diamond Avenue, Suite 300
 Gaithersburg, Maryland 20878
 (301) 870-1010
 Attn: Mr. Ralph Kice

Engineer
 Mildenberg, Mochi & Associates, Inc.
 3300 N Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (301) 461-0078
 Attn: Robert M. Mochi, P.E.

1 1/2" COPPER W/ 1/2" SDR
 1" COPPER W/ 1/2" SDR
 1 1/2" BALL VALVE & EX. 1"
 1" BALL VALVE & EX. 1"
 (PETERBERG PATENT) 1/2" BALL VALVE
 ADJACENT SERVICE BOX AFTER REMOVING 1"
 YORKLE ASSEMBLY



SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F-90-201.

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

John R. Reuter 8/8/91
 U.S. CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY SOIL CONSERVATION DISTRICT.

John R. Reuter 8/8/91
 HOWARD COUNTY CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James P. ... 8/8/91
 DIRECTOR OF PUBLIC WORKS DATE

Robert ... 8/8/91
 CHIEF, BUREAU OF UTILITIES DATE

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS

3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (301) 461-0078 D.C. Metro No. (301) 621-5788

DES:	CAM				
DRN:	RAR	2	Revised WVC to Lots 66, 67, 71, 72	8/8/91	
CHK:	JEM	1	Revise curb radius for B' Water from 3111 to 3200	8/28/91	
	CAM	0	Sandy Stream Rd., Rebuild Lot 72 SMC		
DATE:	4/18/90	BY:	NO.	REVISION	DATE

WATER AND SEWER MAIN EXTENSION PLAN

600' SCALE MAP NO. 42 BLOCK NO.

PATUXENT SPRINGS LOTS 1 - 73
 CONTRACT NO. 24-3134-D
 ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

SCALE
 1" = 50'

SHEET
 2 of 2



CONTRACT NO. 24-3134-D
 PATUXENT SPRINGS
 LOTS 1-73
 WATER AND SEWER MAIN EXTENSION
 HOWARD COUNTY, MARYLAND

Owner

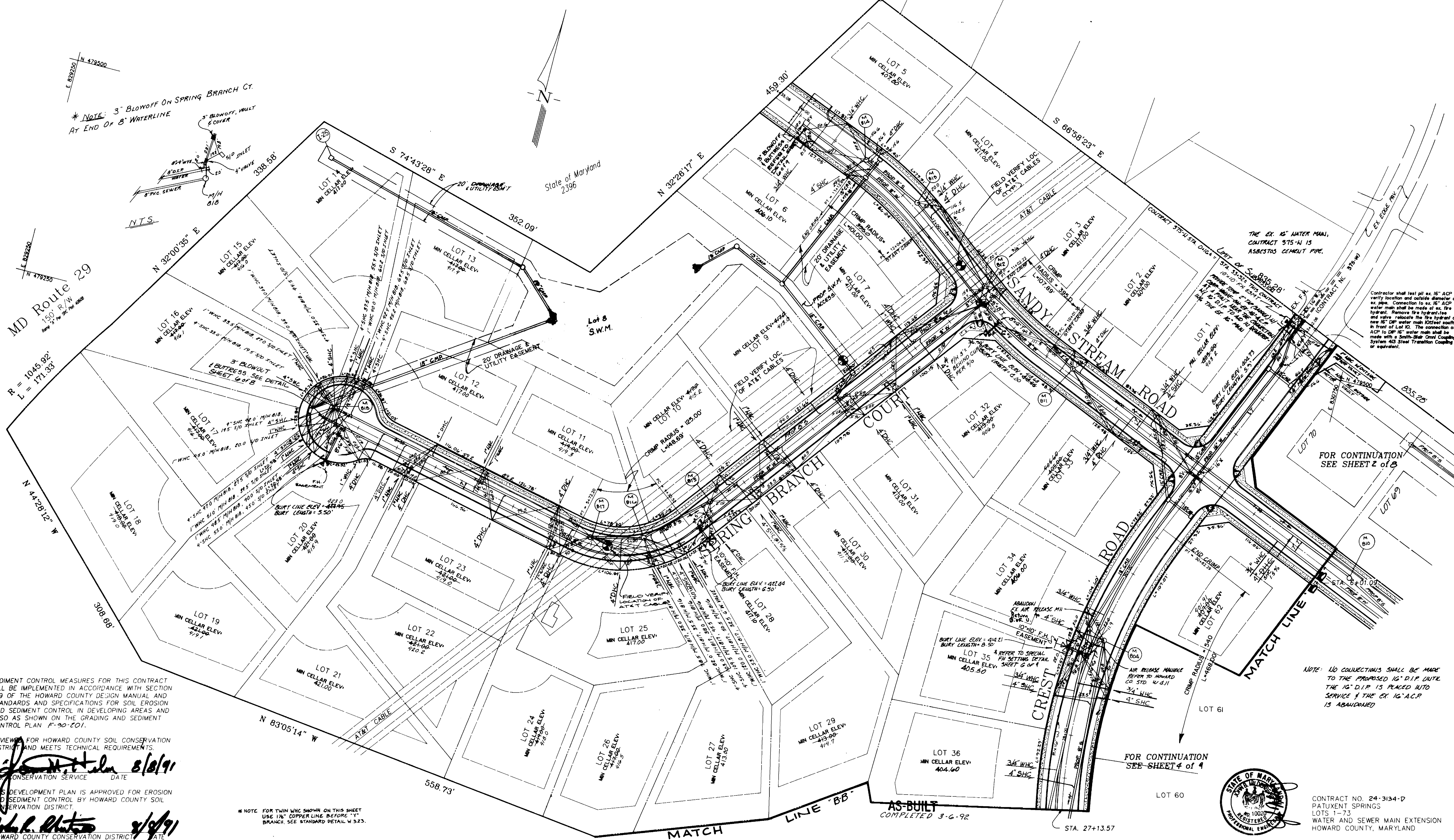
Vincent L. Vinella
12631 Circle Drive
Rockville, Maryland 20850
(301) 762-0743

Developer

WINCHESTER HOMES POTOMAC DIVISION
818 W. Diamond Avenue, Suite 300
Gaithersburg, Maryland 20878
(301) 670-1010
Attn: Mr. Ralph Bice

Engineer

Mildenberg, Mochi & Associates, Inc.
3300 N Ridge Road, Suite 235
Ellicott City, Maryland 21043
(301) 461-0078
Attn: Robert M. Mochi, P.E.



* NOTE: 3" BLOWOFF ON SPRING BRANCH CT.
AT END OF 8" WATERLINE

THE EX. 16" WATER MAIN,
CONTRACT 315-N-13
ASBESTOS CEMENT PIPE.

Contractor shall test all 16" ACP to
verify location and outside diameter of
ex. pipe. Connection to ex. 16" ACP
water main shall be made of ex. fire
hydrant. Remove fire hydrant on
new 16" DP water main located south
in front of Lot 10. The connection of
ACP to DP 16" water main shall be
made with a Smith-Bar Crowl Coupling
System 433 Steel Transition Coupling
or equivalent.

FOR CONTINUATION
SEE SHEET 2 of 3

FOR CONTINUATION
SEE SHEET 4 of 4

NOTE: NO COLLECTIONS SHALL BE MADE
TO THE PROPOSED 16" D.I.P. UNLESS
THE 16" D.I.P. IS PLACED INTO
SERVICE & THE EX. 16" ACP
IS ABANDONED

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT
WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION
219 OF THE HOWARD COUNTY DESIGN MANUAL AND
STANDARDS AND SPECIFICATIONS FOR SOIL EROSION
AND SEDIMENT CONTROL IN DEVELOPING AREAS AND
ALSO AS SHOWN ON THE GRADING AND SEDIMENT
CONTROL PLAN F-90-201.

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

U.S. CONSERVATION SERVICE DATE: 8/18/91

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION
AND SEDIMENT CONTROL BY HOWARD COUNTY SOIL
CONSERVATION DISTRICT.

HOWARD COUNTY CONSERVATION DISTRICT DATE: 8/18/91

* NOTE: FOR TWIN WMC SHOWN ON THIS SHEET
USE 1/4" COPPER LINE BEFORE "Y"
BRANCH. SEE STANDARD DETAIL W-323.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works DATE: 8/12/91

Chief, Bureau of Engineering DATE: 8/29/91

MILDENBERG,
MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro No. (301) 621-5768

DES:	DAB				
DRN:	MDG	JCM	1	Revised as sheet 3 of 4	8/14/91
CRK:	RAM	JCM	1	Revised match line to "B-B", Reference Howard Co. Std. for Air Release M/W, Relocate SHC's for Lots 2, 5, & 6	10/20/91
DATE:	JUNE '90	BY:	NO.	FIRST SUBMISSION TO DPW	
				REVISION	

WATER AND SEWER MAIN
EXTENSION
PLAN.
600' SCALE MAP NO. 46 BLOCK NO.

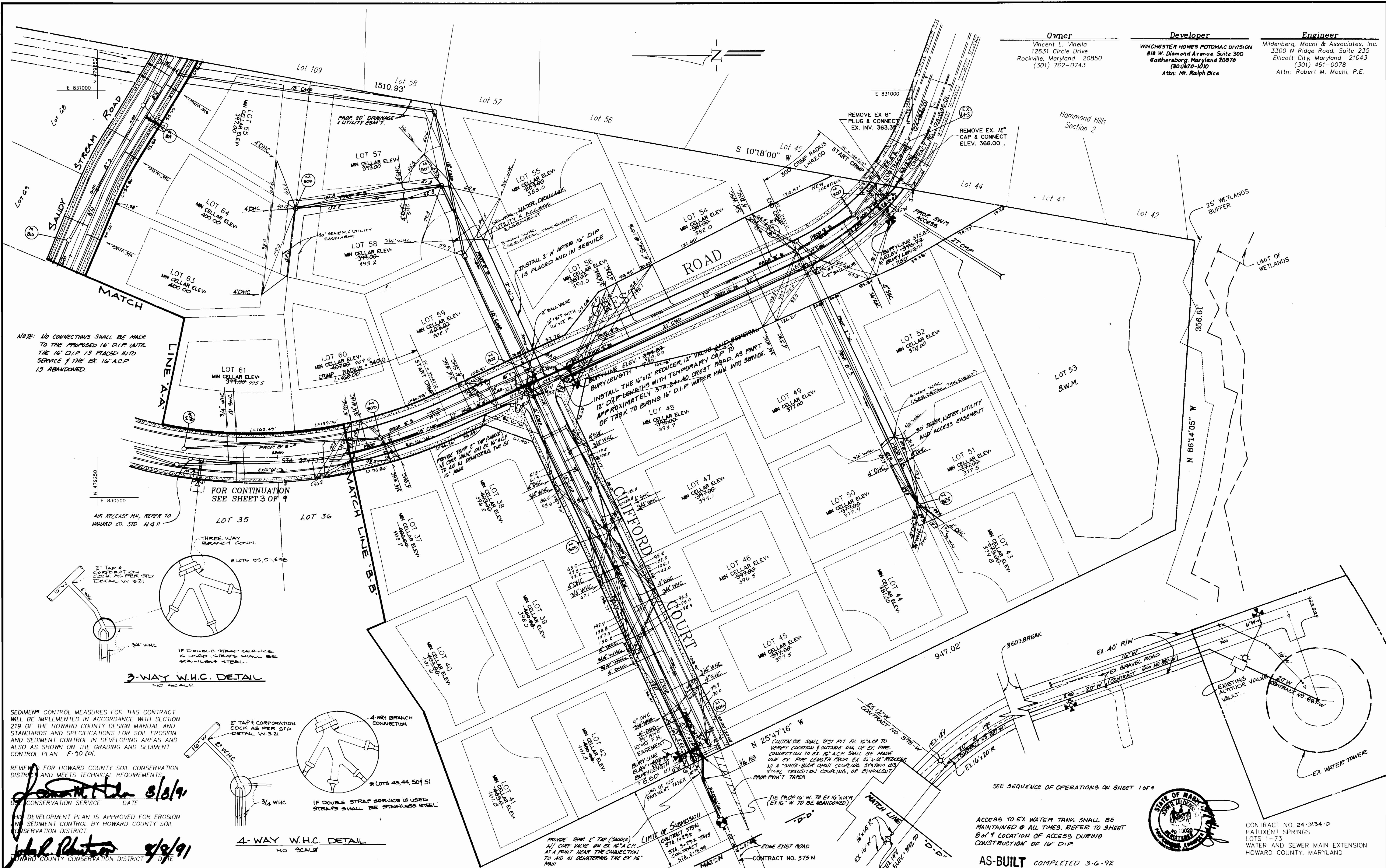
PATUXENT SPRINGS
LOTS 1-73
CONTRACT NO. 24-3134-D
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND
SCALE 1" = 50'
SHEET 3 of 9



Owner
Vincent L. Vinella
12631 Circle Drive
Rockville, Maryland 20850
(301) 762-0743

Developer
WINCHESTER HOMES POTOMAC DIVISION
818 W. Diamond Avenue, Suite 300
Gaithersburg, Maryland 20878
(301) 870-1010
Attn: Mr. Ralph Dice

Engineer
Mildenberg, Mochi & Associates, Inc.
3300 N. Ridge Road, Suite 235
Ellicott City, Maryland 21043
(301) 461-0078
Attn: Robert M. Mochi, P.E.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works DATE 8/21/91

Chief, Bureau of Engineering DATE 8/9/91

Chief, Bureau of Utilities DATE 8/9/91

Chief, Land Development Division DATE 8/9/91

MILDENBERG, MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro No. (301) 621-5768

DES:	DAB	JEM	2	Remember as sheet 4 of 9	11/14/91
DRN:	MDG	JEM	1	Reference Manual Co. Sheet No. 44-10-10-10, Change from 1/2" to 1/4" in Cliff Court, Replace Lot 32 S.W.C. Change Lot 49 D.H.C. to S.H.C. Show ex. 12" Water as dashed	10/29/91
CHK:	RAM				
DATE:	JUNE '90	BY:	NO.	FIRST SUBMISSION TO DPW	
		REVISION			

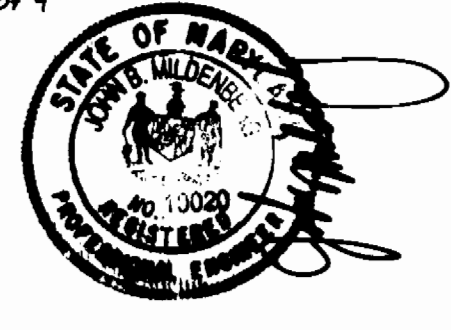
WATER AND SEWER MAIN EXTENSION PLAN

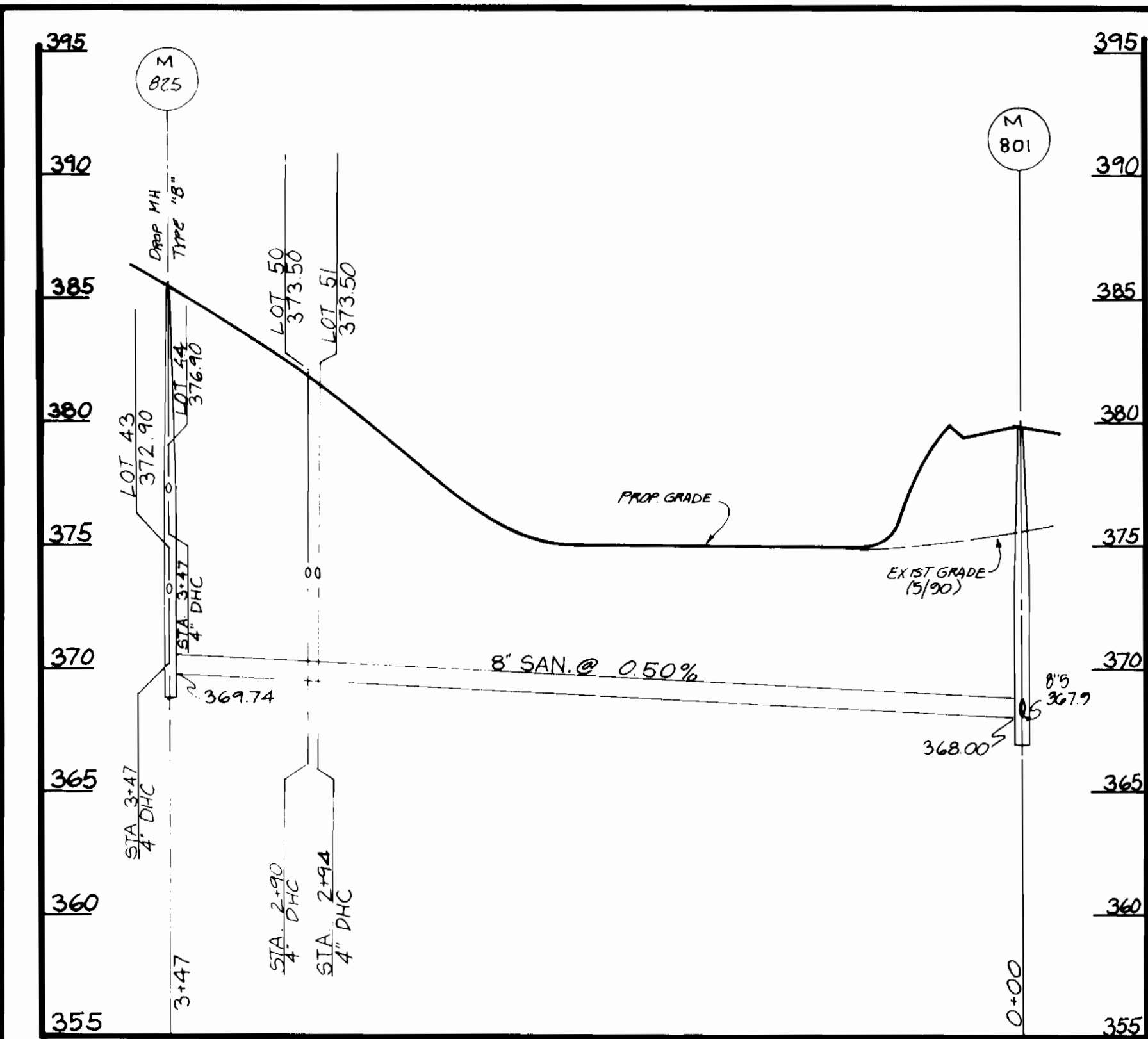
600' SCALE MAP NO. 4C BLOCK NO.

PATUXENT SPRINGS LOTS 1-73
CONTRACT NO. 24-3134-D
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

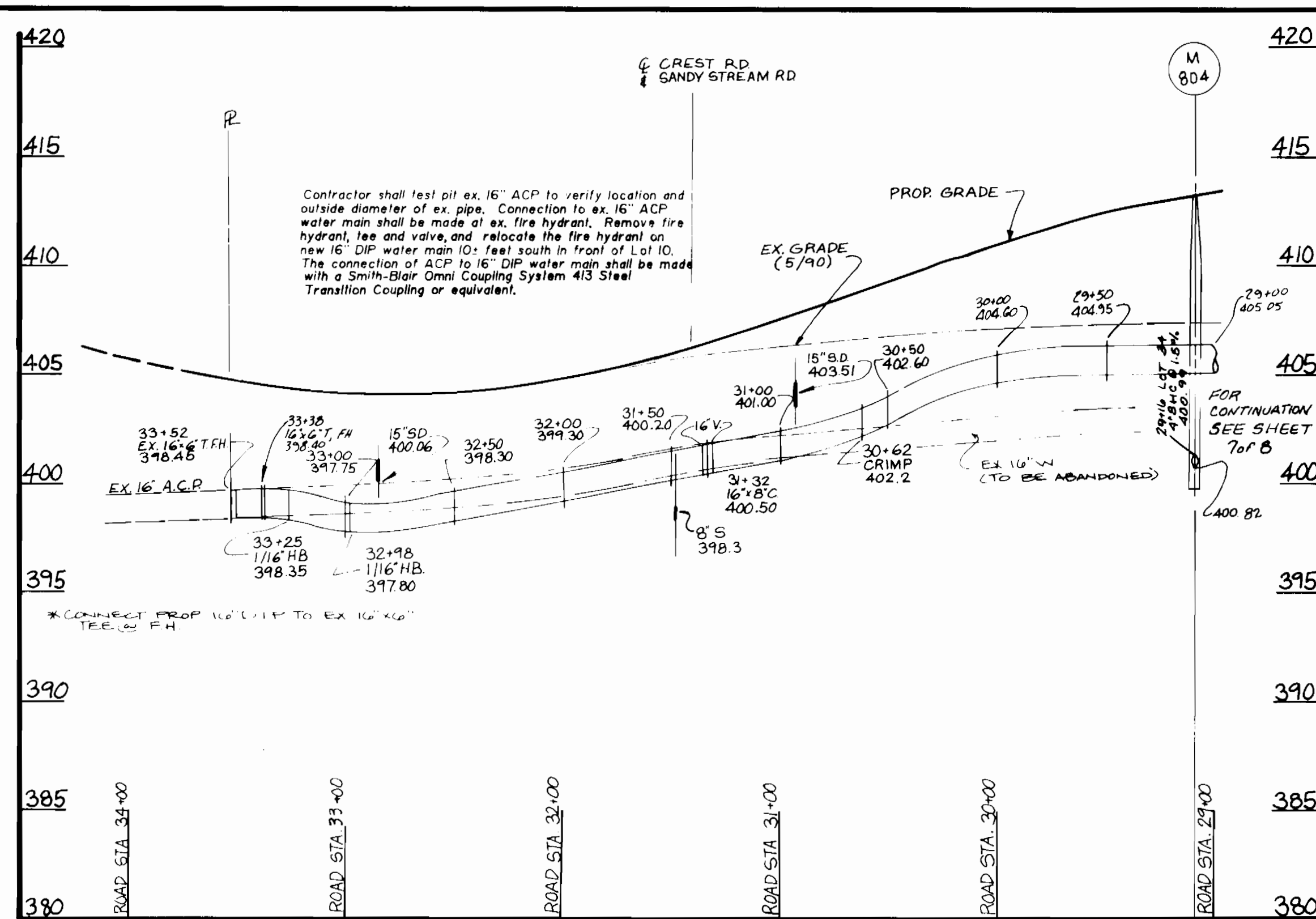
SCALE 1" = 50'

SHEET 4 OF 9

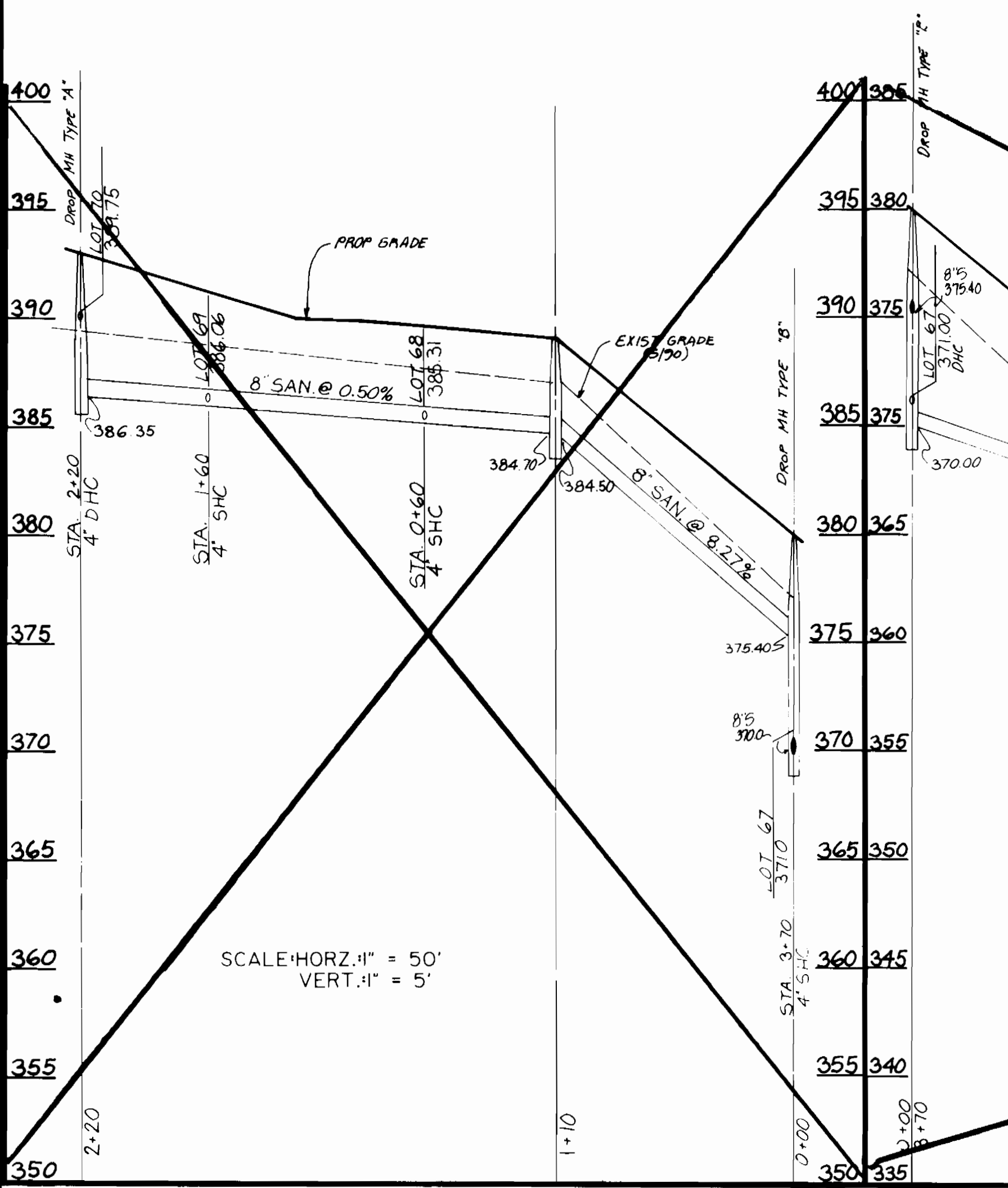




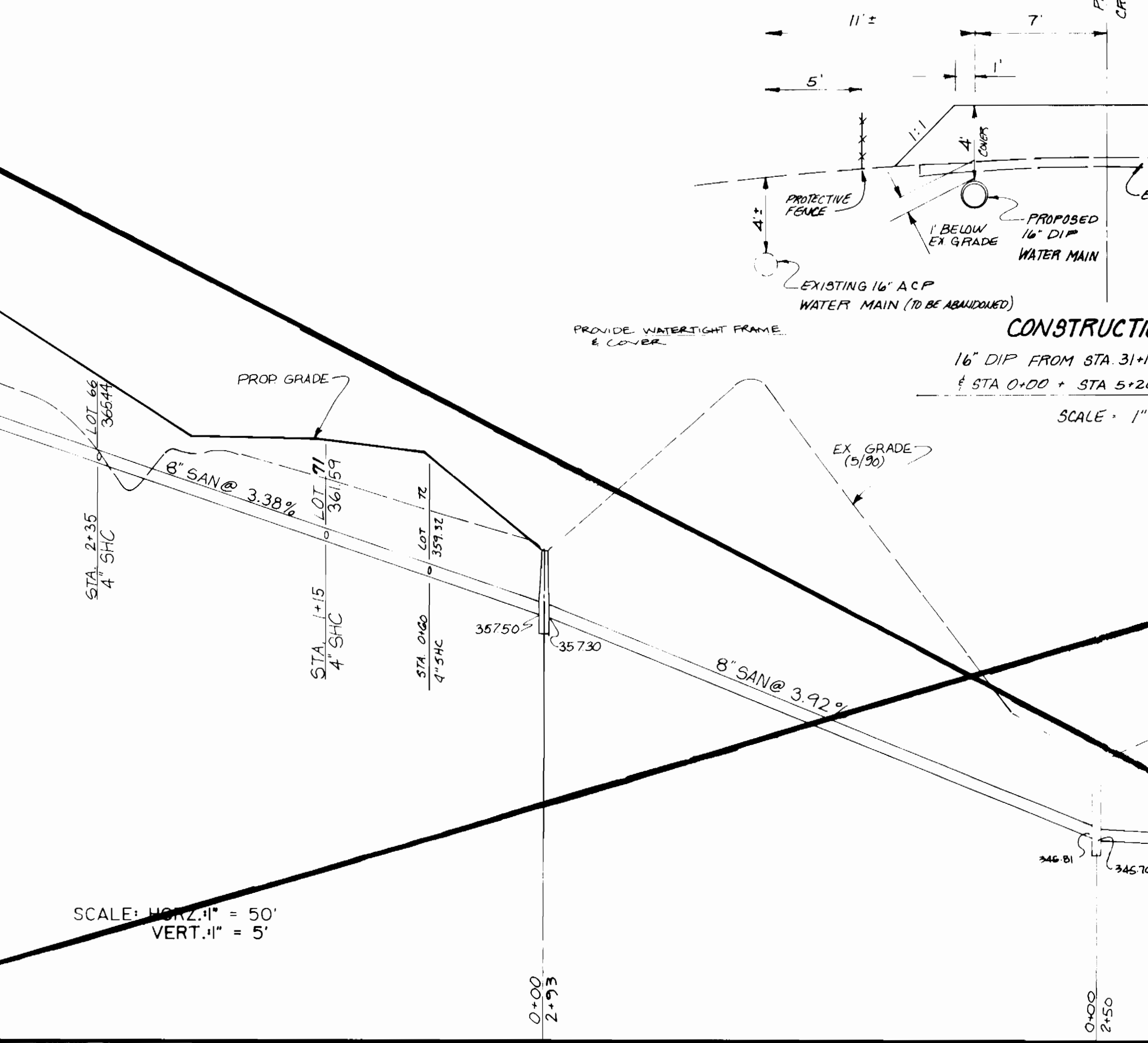
WITHIN 20' UTILITY EASEMENT
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'



CREST ROAD CONTINUED
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'



WITHIN 20' UTILITY EASEMENT
(CONTINUED)

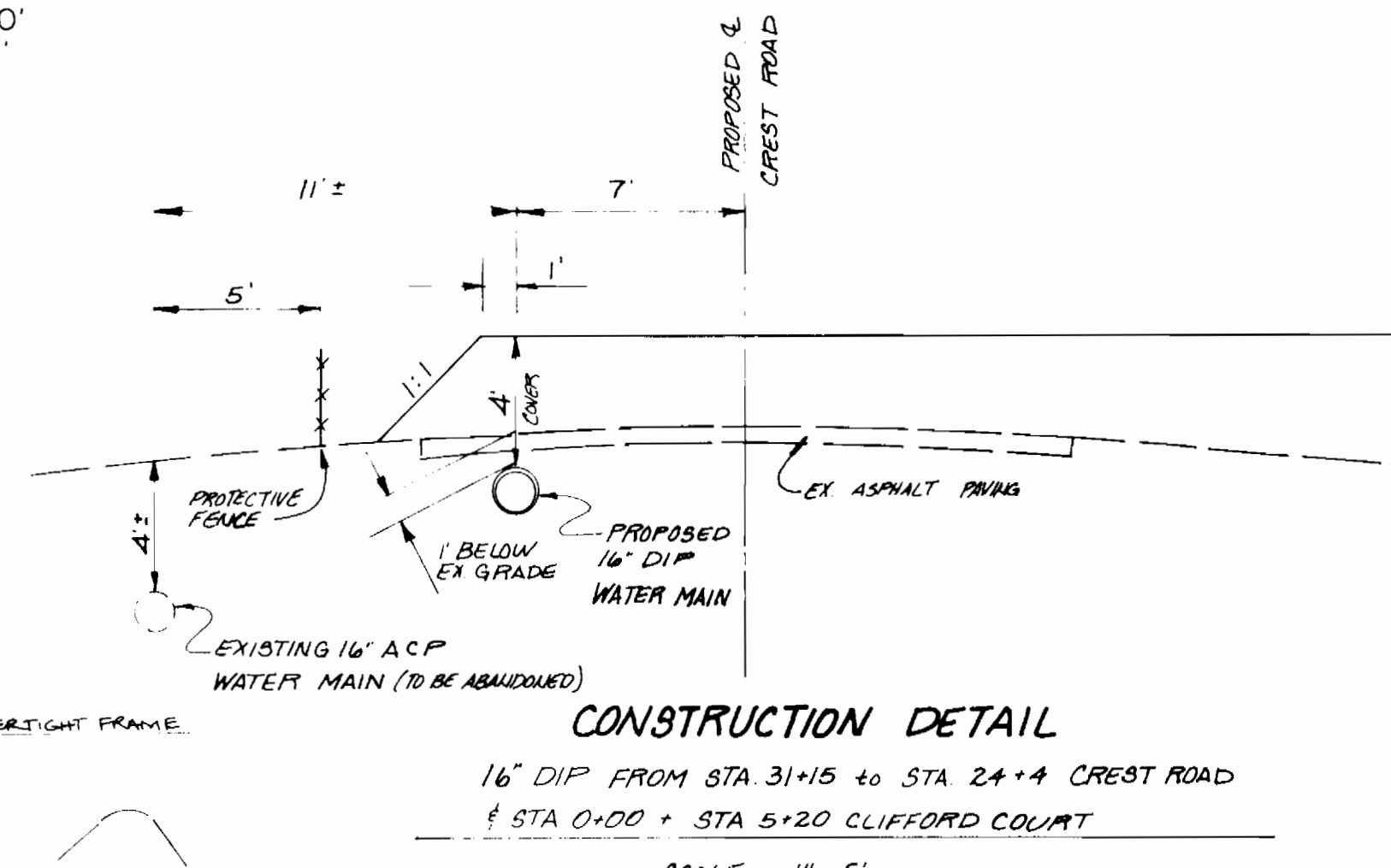


SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

WITHIN 20' UTILITY EASEMENT

SEWER HOUSE CONNECTIONS
INVERT ELEVATIONS AT PROPERTY LINE

LOCATION at SEWER MAIN	LOT No.	ELEVATION at R/W	REMARKS
STA 8+59 from MH 810 to MH 811	1	399.31 2%	STA - CL of ROAD
STA 9+00 from MH 810 to MH 811	2	405.06 2%	STA - CL of ROAD
STA 10+90 from MH 811 to MH 812	3	407.02 2%	STA - CL of ROAD
STA 12+10 from MH 812 to MH 813	4	407.28 2%	STA - CL of ROAD
STA 13+25 from MH 813 to MH 814	5	403.44 2%	STA - CL of ROAD
STA 13+08 at MH 814	5	402.19 2%	STA - CL of ROAD
STA 0+00 from MH 812 to MH 815	7	408.66 2%	STA - CL of ROAD
	8		SWM AREA
STA 2+33 from MH 812 to MH 815	9	409.06 2%	STA - CL of ROAD
STA 3+66 from MH 812 to MH 815	10	411.26 2%	STA - CL of ROAD
STA 6+03 from MH 817 to MH 818	11	415.36 2%	STA - CL of ROAD
STA 7+60 from MH 817 to MH 818	12	413.26 2%	STA - CL of ROAD
STA 8+63 from MH 817 to MH 818	13	411.52 2%	STA - CL of ROAD
STA 8+75 from MH 817 to MH 818	14	411.58 2%	STA - CL of ROAD
STA 0+00 at MH 818	15	411.68 2%	STA - CL of PIPE
STA 0+00 at MH 818	16	411.70 2%	STA - CL of PIPE
STA 0+00 at MH 818	17	411.88 2%	STA - CL of PIPE
STA 8+70 from MH 817 to MH 818	18	411.94 2%	STA - CL of ROAD
STA 8+66 from MH 817 to MH 818	19	411.98 2%	STA - CL of ROAD
STA 8+20 from MH 817 to MH 818	20	416.64 2%	STA - CL of ROAD
STA 7+92 from MH 817 to MH 818	21	413.54 2%	STA - CL of ROAD
STA 7+64 from MH 817 to MH 818	22	413.54 2%	STA - CL of ROAD
STA 6+65 from MH 817 to MH 818	23	417.14 2%	STA - CL of ROAD
STA 5+77 from MH 817 to MH 818	24	411.64 2%	STA - CL of ROAD
STA 5+14 from MH 816 to MH 817	25	412.47 2%	STA - CL of ROAD
STA 4+78 from MH 815 to MH 816	26	408.94 2%	STA - CL of ROAD
STA 4+61 from MH 815 to MH 816	27	408.36 1%	STA - CL of ROAD
STA 3+05 from MH 815 to MH 816	28	412.70 2%	STA - CL of ROAD
STA 3+52 from MH 812 to MH 815	29	406.29 2%	STA - CL of ROAD
STA 2+93 from MH 812 to MH 815	30	407.14 2%	STA - CL of ROAD
STA 1+92 from MH 812 to MH 815	31	408.44 2%	STA - CL of ROAD
STA 0+87 from MH 812 to MH 815	32	408.94 2%	STA - CL of ROAD
STA 8+79 from MH 810 to MH 811	33	401.54 2%	STA - CL of ROAD
STA 29+16 at MH 804	34	401.80 2%	STA - CL of ROAD
STA 28+42 from MH 803 to MH 804	35	401.32 2%	STA - CL of ROAD
STA 27+43 from MH 803 to MH 804	36	400.56 2%	STA - CL of ROAD
STA 26+62 from MH 802 to MH 803	37	399.65 2%	STA - CL of ROAD
STA 1+25 from MH 802 to MH 805	38	395.74 2%	STA - CL of ROAD
STA 2+55 from MH 805 to MH 806	39	395.74 2%	STA - CL of ROAD
STA 3+43 from MH 805 to MH 806	40	395.74 2%	STA - CL of ROAD
STA 3+71 from MH 805 to MH 806	41	395.74 2%	STA - CL of ROAD
STA 4+56 from MH 805 to MH 806	42	395.74 2%	STA - CL of ROAD
STA 3+47 at MH 824	43	373.70 2%	STA - CL of PIPE
STA 3+47 at MH 824	44	378.00 2%	STA - CL of PIPE
STA 4+29 from MH 805 to MH 806	45	393.25 2%	STA - CL of ROAD
STA 2+98 from MH 805 to MH 806	46	392.29 2%	STA - CL of ROAD
STA 1+92 from MH 802 to MH 805	47	391.04 2%	STA - CL of ROAD
STA 1+00 from MH 802 to MH 805	48	389.51 2%	STA - CL of ROAD
STA 21+72 from MH 801 to MH 802	49	372.69 2%	STA - CL of ROAD
STA 2+90 from MH 801 to MH 824	50	373.70 2%	STA - CL of PIPE
STA 2+90 from MH 801 to MH 824	51	373.90 2%	STA - CL of PIPE
STA 20+45 from MH 800 to MH 801	52	367.51 2%	STA - CL of ROAD
	53		OPEN SPACE
STA 21+45 from MH 801 to MH 802	54	377.36 2%	STA - CL of ROAD
STA 22+80 from MH 801 to MH 802	55	378.14 1.5%	STA - CL of ROAD
STA 23+30 from MH 801 to MH 802	56	385.84 2%	STA - CL of ROAD
STA 1+33 from MH 807 to MH 808	57	389.83 2%	STA - CL of PIPE
STA 1+33 from MH 807 to MH 808	58	393.92 2%	STA - CL of PIPE
STA 25+48 from MH 802 to MH 803	59	398.56 2%	STA - CL of ROAD
STA 27+05 from MH 803 to MH 804	60	399.26 2%	STA - CL of ROAD
STA 28+49 from MH 803 to MH 804	61	400.78 2%	STA - CL of ROAD
STA 0+51 from MH 810 to MH 811	62	403.54 2%	STA - CL of ROAD
STA 0+00 at MH 808	63	395.80 2%	STA - CL of PIPE
STA 0+00 at MH 808	64	395.80 2%	STA - CL of PIPE
STA 0+00 at MH 808	65	394.00 2%	STA - CL of PIPE
STA 1+35 from MH 803 to MH 804	66	390.65 2%	STA - CL of PIPE
STA 2+60 from MH 803 to MH 804	67	391.67 2%	STA - CL of PIPE
STA 4+00 at MH 804	68	388.90 2%	STA - CL of PIPE
STA 4+00 at MH 804	69	387.60 2%	STA - CL of PIPE
STA 4+00 at MH 804	70	388.60 2%	STA - CL of PIPE
STA 0+10 from MH 803 to MH 804	71	372.82 2%	STA - CL of PIPE
STA 0+10 from MH 803 to MH 804	72	372.78 2%	STA - CL of PIPE
	73		OPEN SPACE



CONSTRUCTION DETAIL
16" DIP FROM STA 31+15 TO STA 24+4 CREST ROAD
@ STA 0+00 @ STA 5+20 CLIFFORD COURT
SCALE: 1" = 5'

SANITARY MANHOLE TABULATION

800 RD STA 20+33, R-5'	376.52	G. 5.01
801 RD STA 21+13, R-7'	379.67	G. 5.01
802 RD STA 24+68, R-7'	402.24	S. 1.32
803 RD STA 26+71, R-5'	412.15	G. 5.01
804 RD STA 29+13, R-7'	413.24	G. 5.01
805 RD STA 2+12, R-4'	403.81	G. 5.01
806 RD STA 5+00, R-4'	401.75	S. 1.31
807 ALONG ESMT THRU LOTS 55-59	397.00	G. 5.01
808 ALONG ESMT THRU LOTS 55-59	404.00	S. 1.32
809 RD STA 3+79, R-7'	403.70	G. 5.01
810 RD STA 5+69, R-7'	406.28	G. 5.01
811 RD STA 9+69, R-7'	414.50	G. 5.01
812 RD STA 11+09, R-7'	418.52	G. 5.01
813 RD STA 12+32, R-7'	416.91	G. 5.01
814 RD STA 13+09, R-4'	413.56	S. 1.31
815 RD STA 3+93, R-7'	420.53	G. 5.01
816 RD STA 4+88, R-10'	424.49	G. 5.01
817 RD STA 5+55, R-7'	425.05	G. 5.01
818 CP STA 0+85, 7' FROM CENTER	423.10	S. 1.31
819 ALONG ESMT THRU FUTURE HAMMOND DR	360.50	G. 5.01
820 " " " " " "	360.00	G. 5.01
821 ALONG ESMT THRU LOTS G-72	351.70	G. 5.01
822 " " " " " "	351.14	G. 5.01
823 " " " " " "	349.54	G. 5.01
824 " " " " " "	349.00	S. 1.32
825 ALONG ESMT THRU LOTS 41, 42, 44, 42	385.50	S. 1.32

* RIM ELEVATION TO BE SET IN FIELD

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works: Robert J. Berman 8-6-91
Chief, Bureau of Engineering: [Signature]
Chief, Land Development Division: [Signature]

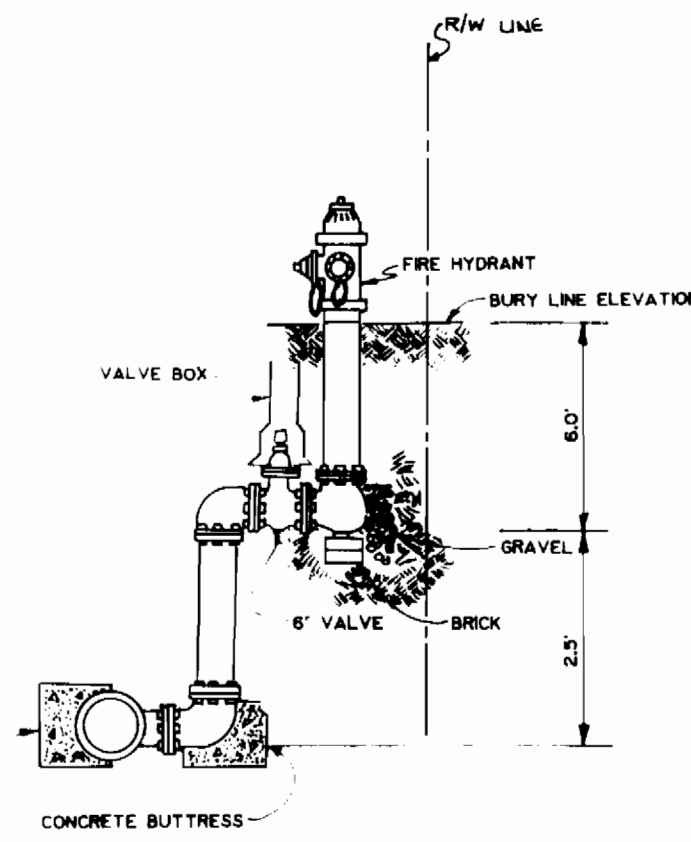
MILDENBERG,
MOCHI & ASSOCIATES, INC.
ENGINEERS & SURVEYORS - PLANNERS
3300 North Ridge Road, Suite 235, Elkton City, Maryland 21441-1350
(301) 461-0078 F. 2 Metro No. 1207 A21-5168

DES.	JAB	JUN	2	Remove Profile Ex M-4 to M-83, add to sheet 907-9	11/14/91
DRN.	JUN	1		Revise SHC & Manhole Charts, Re-number sheets 5 of 9	10/29/91
CHK.	MM			Revise SHC & Sanitary Sewer MH Tabulation Charts, Show 15' SD & B-San Crossings along Crest Rd Profile, Reference M-82, M-83 & M-84 as Prop. MH's, Revise location of Lot 72 SHC	
				FIRST SUBMISSION TO DPM	
				REVISION	

WATER AND SEWER MAIN
EXTENSION
PROFILES

PATUXENT SPRINGS
LOTS 1-73
CONTRACT NO. 24-3134-D
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND
SCALE: 1" = 5' VERT.
1" = 50' HORIZ.
SHEET 5 OF 9

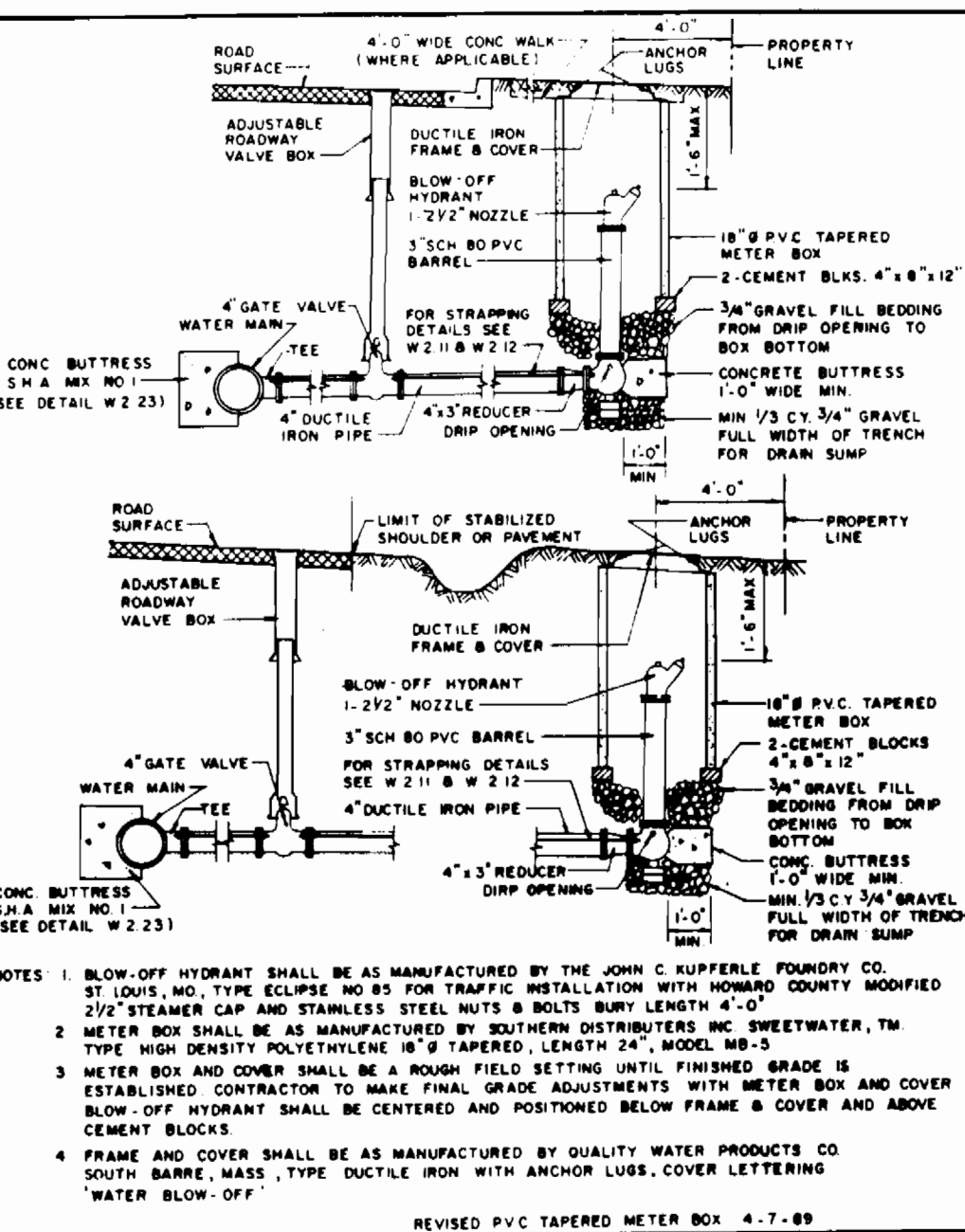
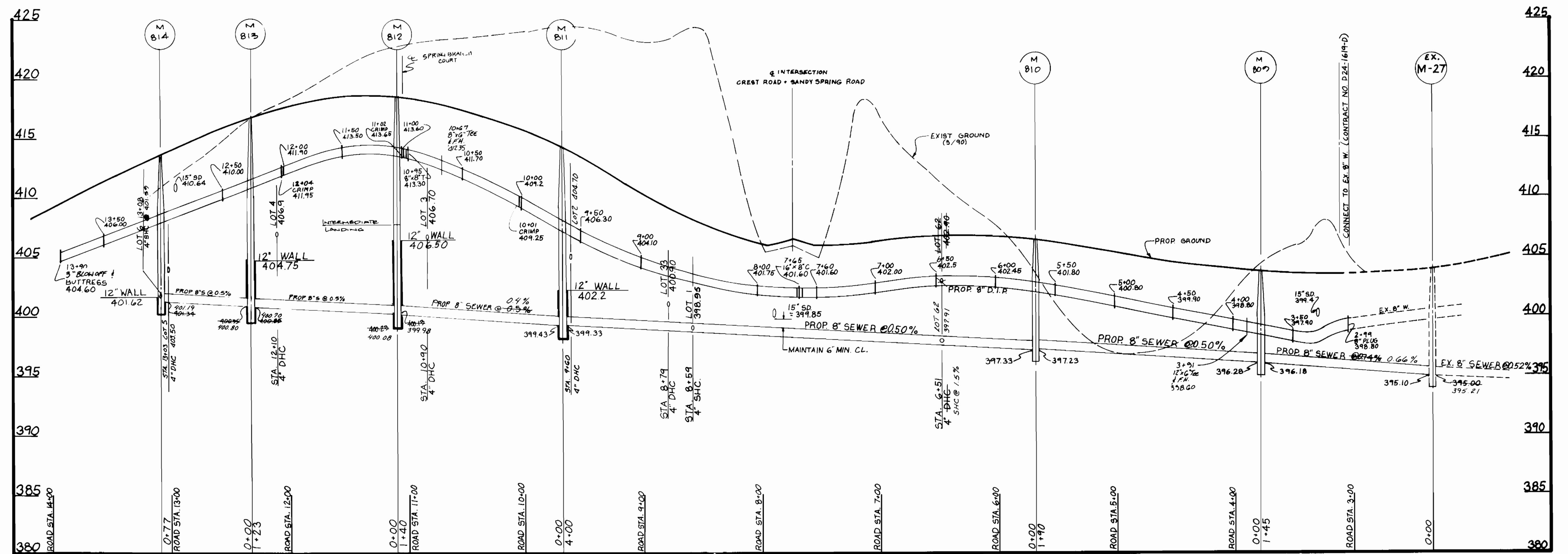
THIS DETAIL IS FOR USE IN LOCATIONS WHERE FH BURLYLENGTH IS GREATER THAN 8'-0".



NOTE
APPLY COAL TAR PROTECTIVE COATING TO ALL EXPOSED STEEL PER A.S.M.A. C-203

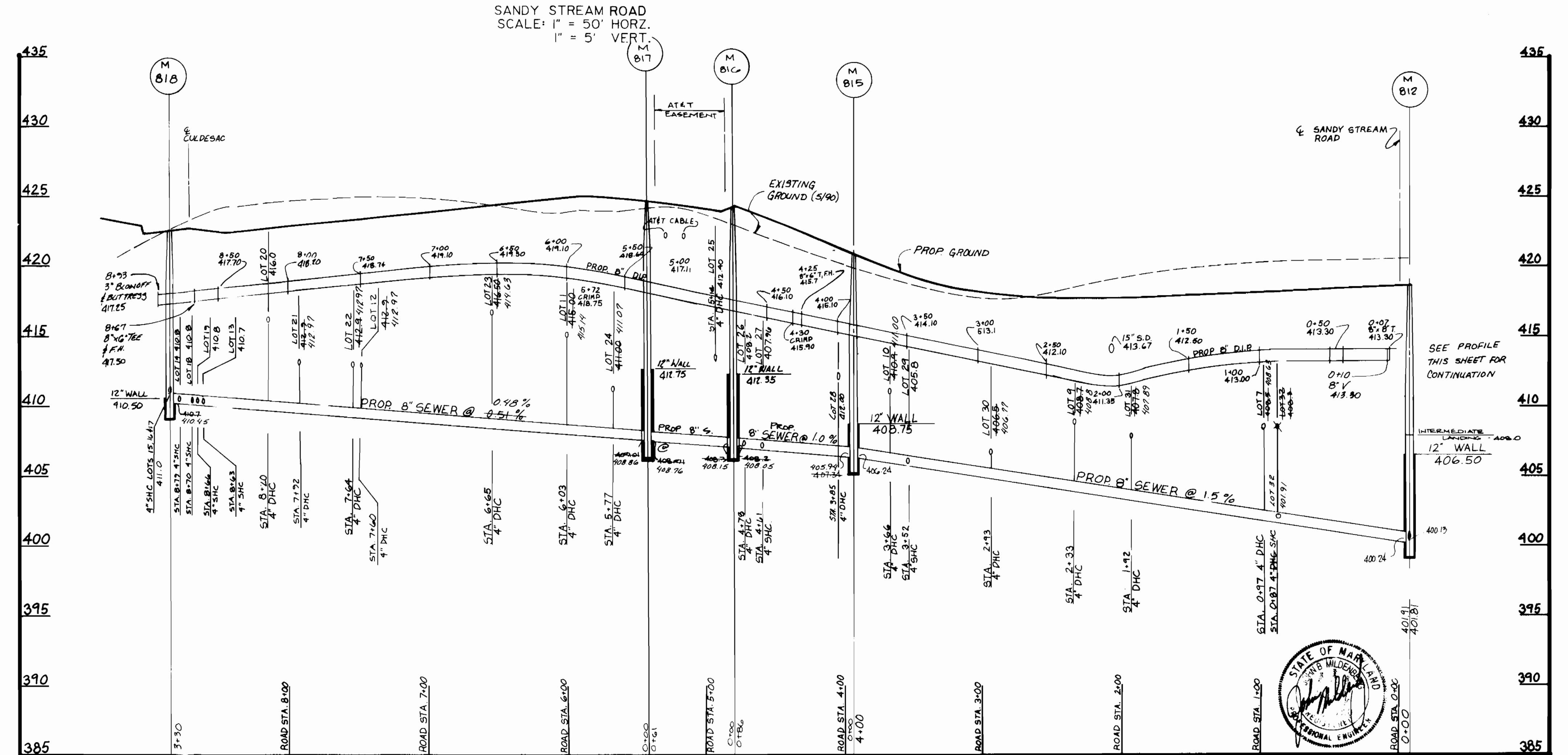
ALL JOINTS SHALL BE RESTRAINED MECHANICAL JOINTS AS SHOWN ON W.I. AND SPECIFIED IN SECTION 905.11 (c) OF VOLUME IV STANDARDS.

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS
SPECIAL FIRE HYDRANTS SETTING (FOR FIRE HYDRANT @ STA. 28+90 CREST ROAD).



HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS
BLOW-OFF FOR 6" THRU 12" WATER MAINS

AS-BUILT
COMPLETED 3-6-92



SPRING BRANCH COURT
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

CONTRACT NO. 24-3134-D
PATUXENT SPRINGS LOTS 1-73
WATER & SEWER MAIN EXTENSION
HOWARD COUNTY, MD

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works: Robert J. ...
Chief, Bureau of Engineering: ...
Chief, Land Development Division: ...

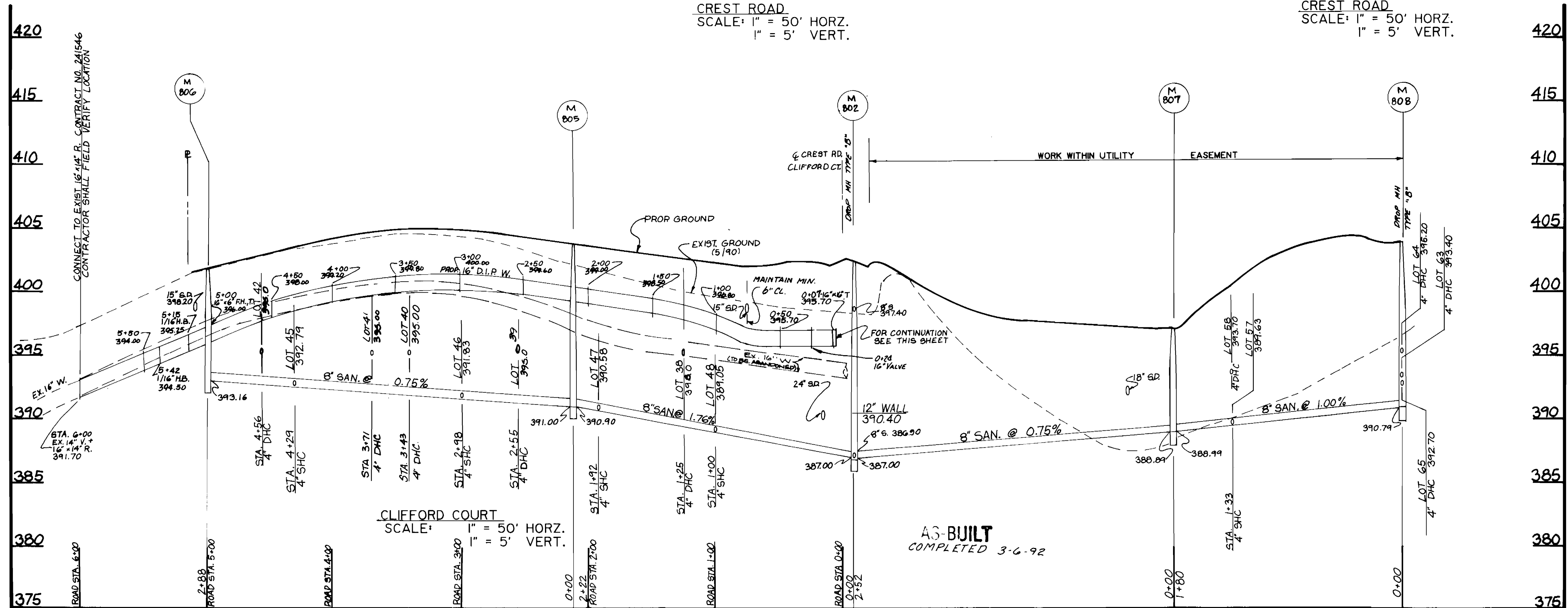
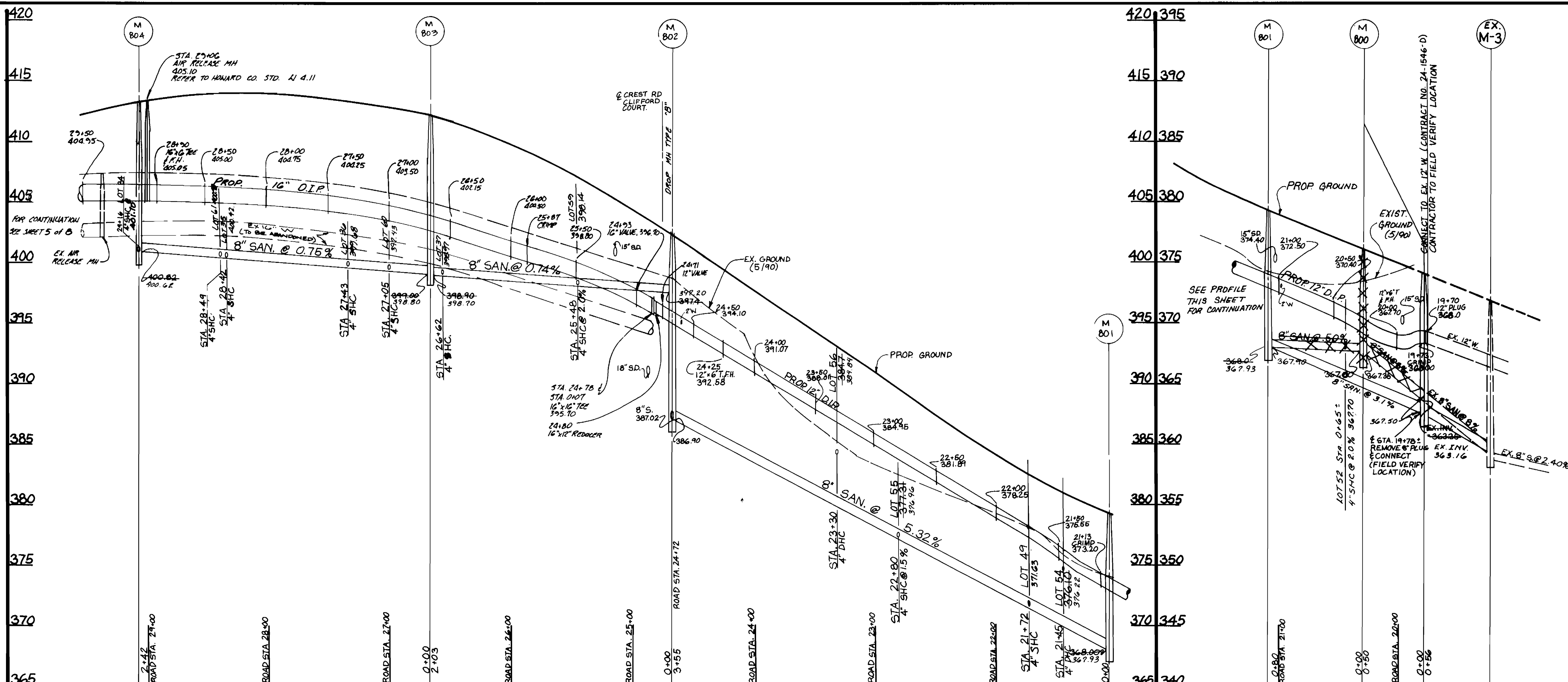
MILDENBERG, MOCHI & ASSOCIATES, INC.
ENGINEERS & SURVEYORS & PLANNERS
3300 North Ridge Road, Suite 235, Elkton City, Maryland 21043-3150
(301) 461-0078 D.C. Metro No. (301) 621-5168

DES	DAB	DRN	MDG	CHK	RAM	PKWL	# 89004 04	JLM	Z	Remember as sheet G of 9	11/24/91
								JLM	J	Revised location of DHC's - Lots 2, 5 & 8	10/26/91
DATE:	JUNE '90	BY:	NO.			REVISION					DATE

WATER AND SEWER MAIN EXTENSION PROFILES
600' SCALE MAP NO. 46
BLOCK NO.

PATUXENT SPRINGS LOTS 1-73
CONTRACT NO. 24-3134-D
ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND

SCALE
1" = 5' VERT.
1" = 50' HORIZ.
SHEET
6 of 9



SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN

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

[Signature] 8/18/91
 SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY SOIL CONSERVATION DISTRICT.

[Signature] 8/18/91
 HOWARD COUNTY CONSERVATION DISTRICT DATE



CONTRACT NO. 24-3134-D
 PATUXENT SPRINGS
 LOTS 1-73
 WATER AND SEWER MAIN EXTENSION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

[Signature] 8/18/91
 DIRECTOR OF PUBLIC WORKS DATE

[Signature] 8/18/91
 CHIEF, BUREAU OF UTILITIES DATE

[Signature] 8/18/91
 CHIEF, LAND DEVELOPMENT DIVISION DATE

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS

3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (301) 461-0078 D.C. Metro No. (301) 621-5768

DES.	CAM	BY	NO.	REVISION	DATE
JLM	E	JLM	1	Remember as sheet 7 of 9	01/91
RAR	I	JLM	2	Revised for 2" dia. sta. 19+70/19+73. Rebuild Lot 49	09/91
JBM				152 SHC's, Reference Howard Co Std. for Air Release MH, Reference MBOE 14003 as Drop MH's	
CAM	O			FIRST SUBMISSION TO DPW	
DATE:	4/18/90	BY:			

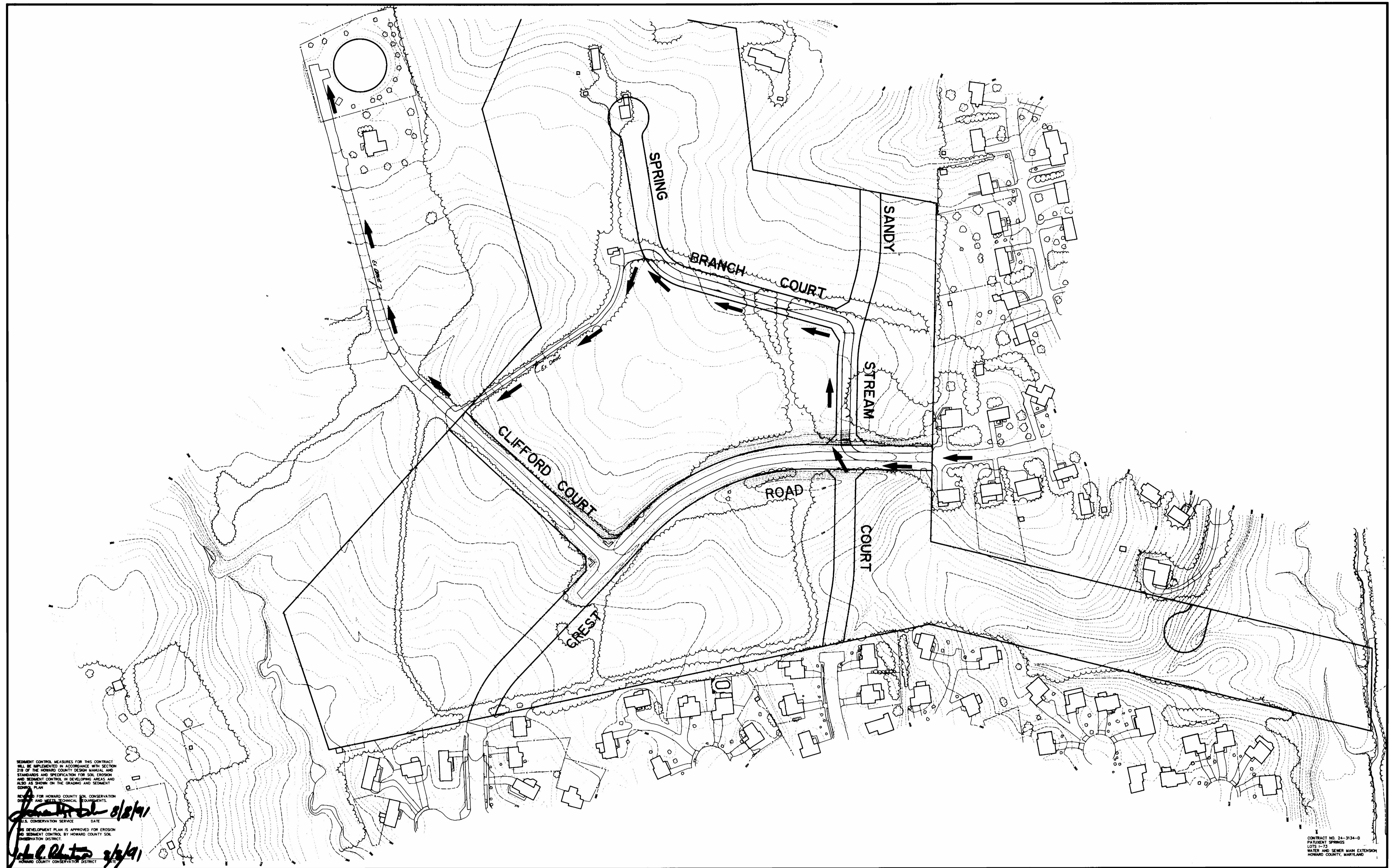
WATER AND SEWER MAIN
 EXTENSION
 PROFILES

600' SCALE MAP NO. 4G
 BLOCK NO.

PATUXENT SPRINGS
 LOTS 1-73
 CONTRACT NO. 24-3134-D
 ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

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

SHEET
 7 OF 9



SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 218 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN.

NEED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND NEEDS TECHNICAL COURSEMENTS.

[Signature] 8/28/91
DATE

ALL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY SOIL CONSERVATION DISTRICT.

[Signature] 8/28/91
DATE

HOWARD COUNTY CONSERVATION DISTRICT

CONTRACT NO. 24-3134-D
PATUXENT SPRINGS
LOTS 1-73
WATER AND SEWER MAIN EXTENSION
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 8/28/91
DIRECTOR OF PUBLIC WORKS DATE

[Signature] 8-2-91
DATE

[Signature] 8/28/91
DATE

MILDENBERG MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro No. (301) 621-5788

DES: CAM					
DRN: MWZ					
CHK: JSM					
PROJ. # 91015.00					
DATE: 7/1/91	BY: JLM	NO. 1	REVISION: Remember 8 of 9	DATE: 11/21/91	

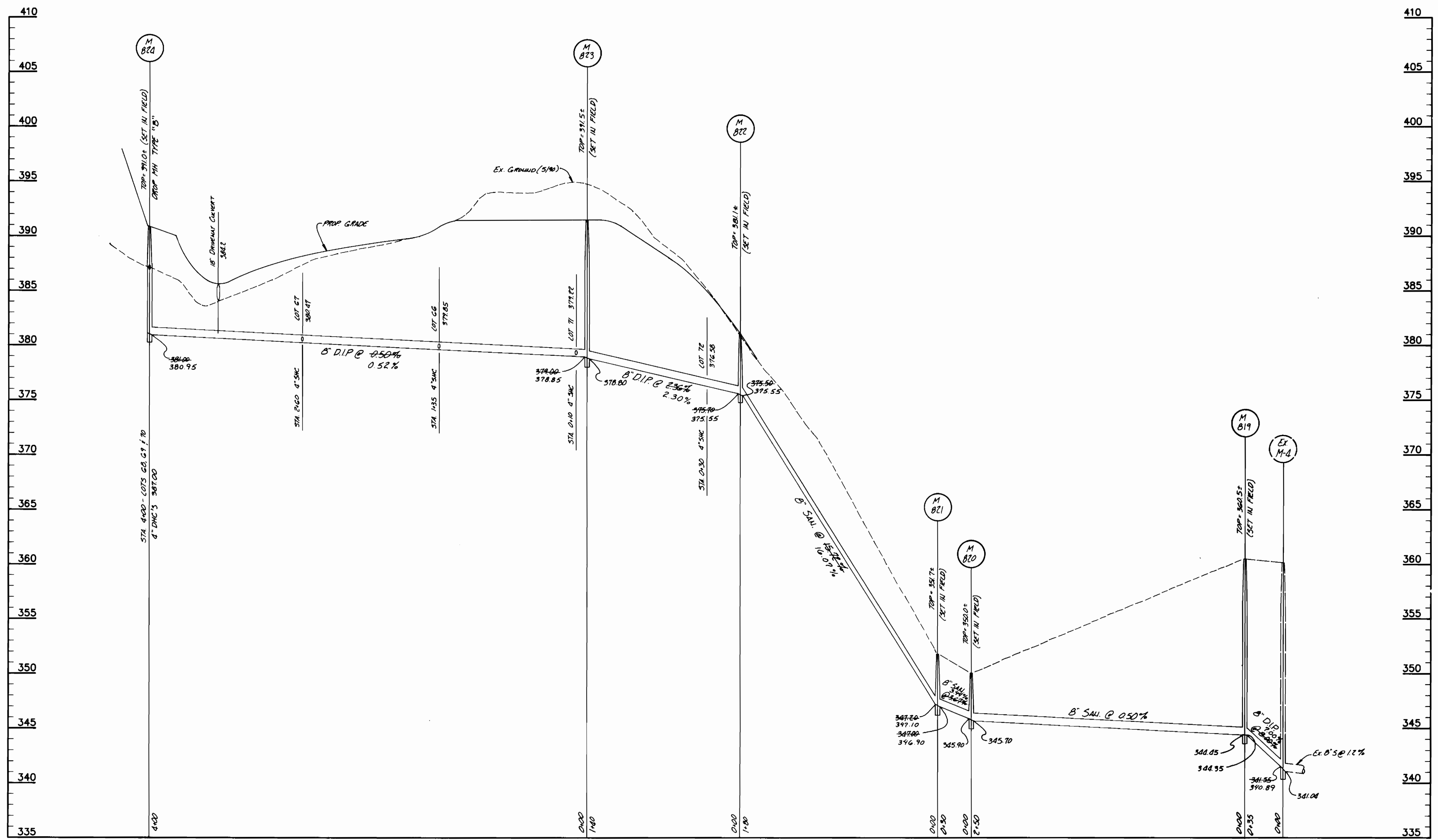
WATER AND SEWER MAIN EXTENSION
TEMPORARY ACCESS TO WATER TOWER

600' SCALE MAP NO. 46 BLOCK NO.

PATUXENT SPRINGS
LOTS 1-73
CONTRACT NO. 24-3134-D
ELECTION DISTRICT No. 2
HOWARD COUNTY, MARYLAND

SCALE
1" = 100'

8 SHEET
OF 9



WITHIN 20' UTILITY EASEMENT
(LOTS 66 - 72)
For plan see sheet 2 of 9

AS-BUILT
COMPLETED 3-6-92

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* DATE: 11-13-91
 Chief, Bureau of Engineering: *[Signature]* DATE: 11-13-91
 Chief, Bureau of Utilities: *[Signature]* DATE: 11-13-91

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (301) 461-0078 D.C. Metro No. (301) 621-5768

DES:	JLM				
DRN:	JLM				
CHK:	JLM				
PROJ. #	91015.01	JLM	2	Insert as sheet 9 of 9	11/14/91
		JLM	1	REVISE SEWER MAIN PROFILE TO SERVICE LOTS 66 - 72	11/11/91
DATE:	11/91	BY	NO.	REVISION	DATE

WATER AND SEWER MAIN
EXTENSION
PROFILES

600' SCALE MAP NO. _____ BLOCK NO. _____

PATUXENT SPRINGS
LOTS 1 - 73
CONTRACT NO. 24-3134-D
ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND

SCALE
1" = 50' Horiz.
1" = 5' Vert.

SHEET
9 OF 9