

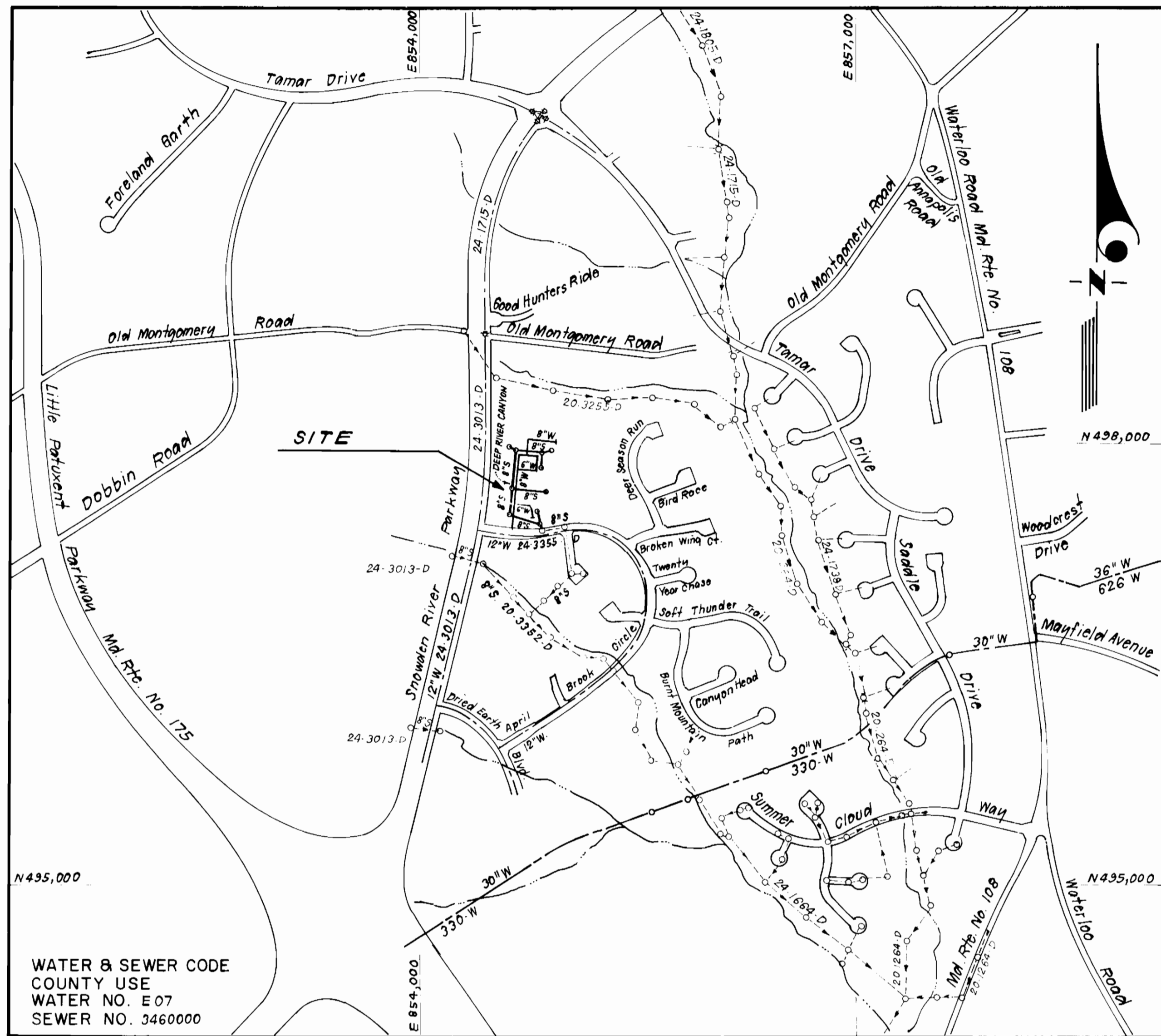
A.S.-BUILT 11-22-95

LOT NO.	INV.	PL.	MIN. CELL.	LOT NO.	INV.	PL.	MIN. CELL.	LOT NO.	INV.	PL.	MIN. CELL.	LOT NO.	INV.	PL.	MIN. CELL.								
1	365.4	368.6	16	378.4	381.6	31	383.5	366.6	46	373.7	376.9	2	365.4	368.6	17	378.8	382.0	32	384.1	387.2	47	373.9	377.1
3	366.8	370.0	18	379.6	382.8	33	384.4	387.5	48	374.0	377.2	4	367.4	370.6	19	380.1	383.3	34	383.0	386.1	49	374.2	377.4
5	368.5	371.7	20	381.8	385.0	35	383.2	386.3	50	374.4	377.6	6	369.1	372.3	21	383.4	386.6	36	383.4	386.5	51	374.5	377.7
7	371.2	374.4	22	382.8	386.0	37	383.6	386.7	52	374.7	377.9	8	371.7	374.9	23	382.0	385.2	38	383.6	386.7	53	374.8	378.0
9	372.9	376.1	24	382.1	385.3	39	374.8	378.0	54	369.1	372.3	10	373.4	376.6	25	382.1	385.3	40	374.8	378.0	55	369.1	372.3
11	374.4	377.6	26	382.2	385.4	41	374.5	377.7	56	368.7	371.9	12	374.8	378.0	27	382.4	385.6	42	374.3	377.5	57	368.4	371.6
13	375.4	378.6	28	382.5	385.7	43	374.2	377.4	58	367.9	371.1	14	376.7	379.9	29	382.6	385.8	44	374.0	377.2			
15	377.5	380.7	30	382.7	385.9	45	373.9	377.1															

TYPE OF BUILDING	TOWNHOUSES
NO. OF LOTS	58
NO. OF WHC's	58
NO. OF SHC's	58
DRAINAGE AREA	LITTLE PATUXENT LITTLE PATUXENT W.W.T.P.

**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 Inspector, 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" clear all poles by 2'-0" minimum or tunnel as required. Any cost incurred to the contractor for tunneling or bracing at poles shall be included in unit prices bid for excavation and backfill.
- For details not shown on the drawings use Howard County Standard Details.
- For materials and construction methods use Howard County Standard Specifications & Details and Howard County Design Manual, Volume IV (Latest Edition) The contractor shall have copies of these on the job site.
- 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.
- 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 - Underground Damage Control - 787-9068  
 Baltimore Gas & Electric Company - Contractor Services - 850-4620  
 Baltimore Gas & Electric Company - Trouble Shooting - 298-9001  
 "Miss Utility" - 1-800-257-7777  
 Chesapeake & Potomac (C & P) Telephone Company - 1-800-257-7777  
 Bureau of Utilities Howard County - 313-4900  
 Colonial Pipeline Company - 795-1390
- Trees are to be protected from damage to maximum extent. Trees 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 as directed by the Inspector. Payment for such removal shall be included in the unit price bid for excavation 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 tees shall be strapped to tees.
- Block all fittings with concrete.
- Bury line elevations on fire hydrants shall be set to the elevations shown on the drawings. All fire hydrants shall be restrained and buttressed with concrete in accordance with S.D. Det. W.I. & W.2.11 Soil around the fire hydrant to be compacted in accordance with Sections 1000 & 1005 of the Standard Specifications.
- All water house connections 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 D.I.P. 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 lines 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'.
- Manholes designated thus : WT, shall have a Watertight Frame and Cover.



**VICINITY MAP**  
SCALE: 1" = 600'

**CONTRACT NO. 24-3400-D**

VILLAGE OF LONGREACH  
SECTION 4 AREA 2 PHASE 1  
LOTS B-1 THRU B-61

**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Construction Plan SDP 95-74; Drawing, Sediment & Erosion Control, 7-95-58

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.  
*Richard Engle* 3/23/95  
SIGNATURE DATE

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

APPROVED:  
*John R. Roberts* 3/23/95  
HOWARD S.C.D. DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Robert J. Brown* 3/24/95  
DIRECTOR OF PUBLIC WORKS DATE

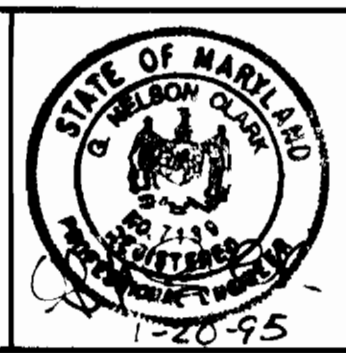
*Robert J. Brown* 3/28/95  
CHIEF, BUREAU OF UTILITIES DATE

*Robert J. Brown* 3/24/95  
CHIEF, BUREAU OF ENGINEERING DATE

*Robert J. Brown* 3/28/95  
CHIEF, LAND DEVELOPMENT DIV. DATE

**CFS** CLARK-FINEPROCK & SACKETT, INC.  
ENGINEERS-PLANNERS-SURVEYORS

7155 MINSTREL WAY COLUMBIA MARYLAND 21045  
(301) 381-7500 BALTO. (301) 621-8100 WASH.



DES. CCM.			
DRN.			
CHK: ?W	DFI	AS-BUILTS (ADD SHT. #3)	11-22-95
DATE:	CMS	Delete SHC from MH 1	5-2-95
BY NO.		REVISION	

DATE	600' SCALE MAP NO. 37	BLOCK NO. 7
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ITEM	QUANTITIES		
	ESTIMATED	QUANTITIES	AS BUILT
		TYPE	MANUFACTURER / SUPPLIER
8" SEWER	1,236 LF	1,202 LF	PVC J-M MFG.
8" WATER	819 LF	821 LF	DIP ATLANTIC STATES
6" WATER	488 LF	516 LF	DIP ATLANTIC STATES
4" WATER	900 LF	974 LF	PVC J-M MFG.
1" WHC	685 LF	891 LF	TYPE "K" CERRO COPPER
1 1/2" WHC	430 LF	445 LF	TYPE "K" CERRO COPPER
2" WHC	150 LF	164 LF	TYPE "K" CERRO COPPER
8" V	2 EA.	2 EA.	GATE VALVE MUELLER CO.
6" V (excl. FH)	2 EA.	3 EA.	GATE VALVE MUELLER CO.
F.H.	2 EA.	2 EA.	CAST IRON MUELLER CO.
1 1/2" DRAIN	1 EA.	1 EA.	TYPE "K" CERRO COPPER
TYPE "B" DROP CONN.	2 EA.	2 EA.	PVC J-M MFG.
4'-0" DIA. MH	10 EA.	10 EA.	PRECAST ATLANTIC CONC.
NAME OF UTILITY CONTRACTOR GAINES & CO., INC.			
SURVEY & DRAFTING DIV. AS BUILT DATE			

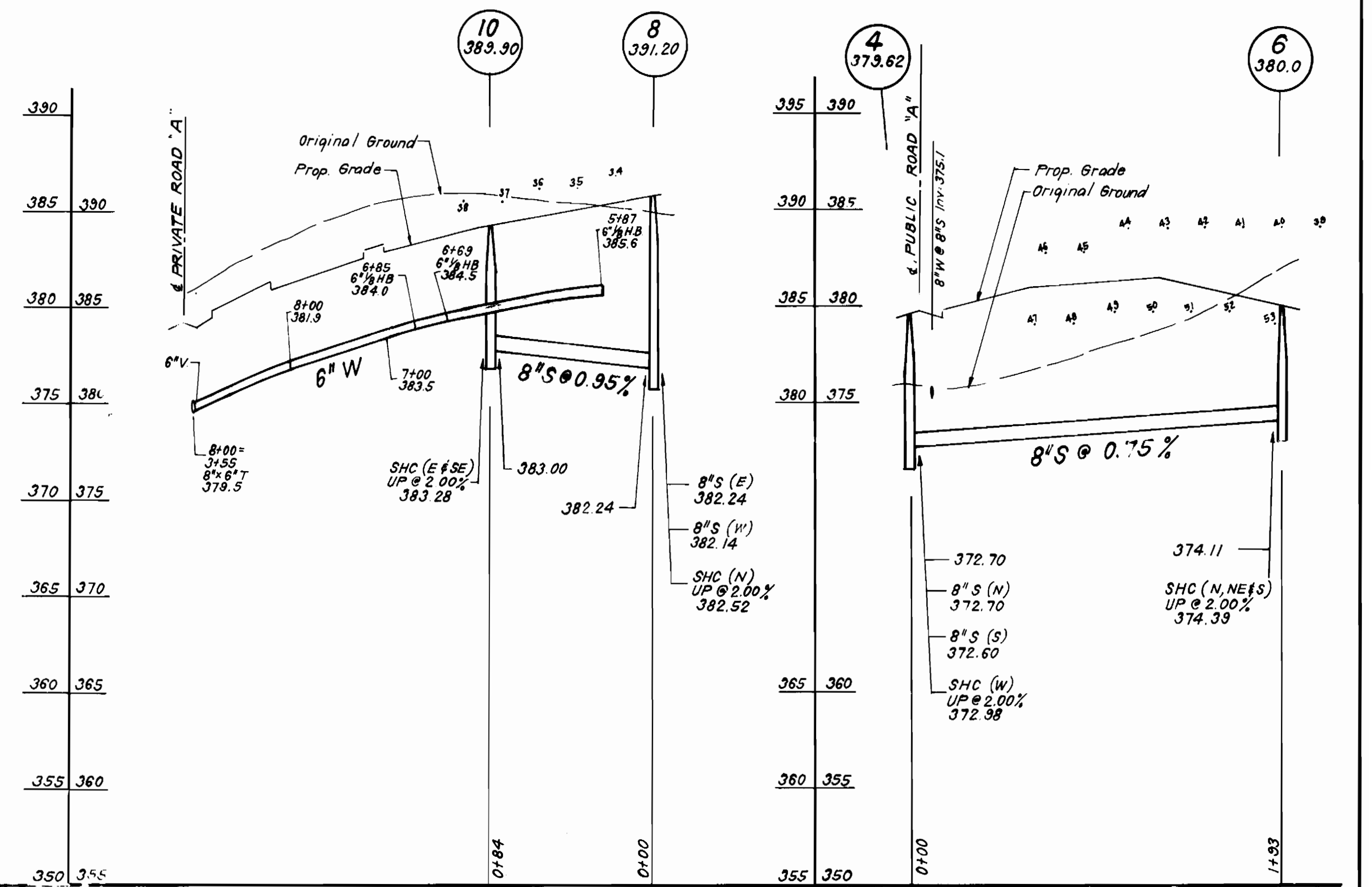
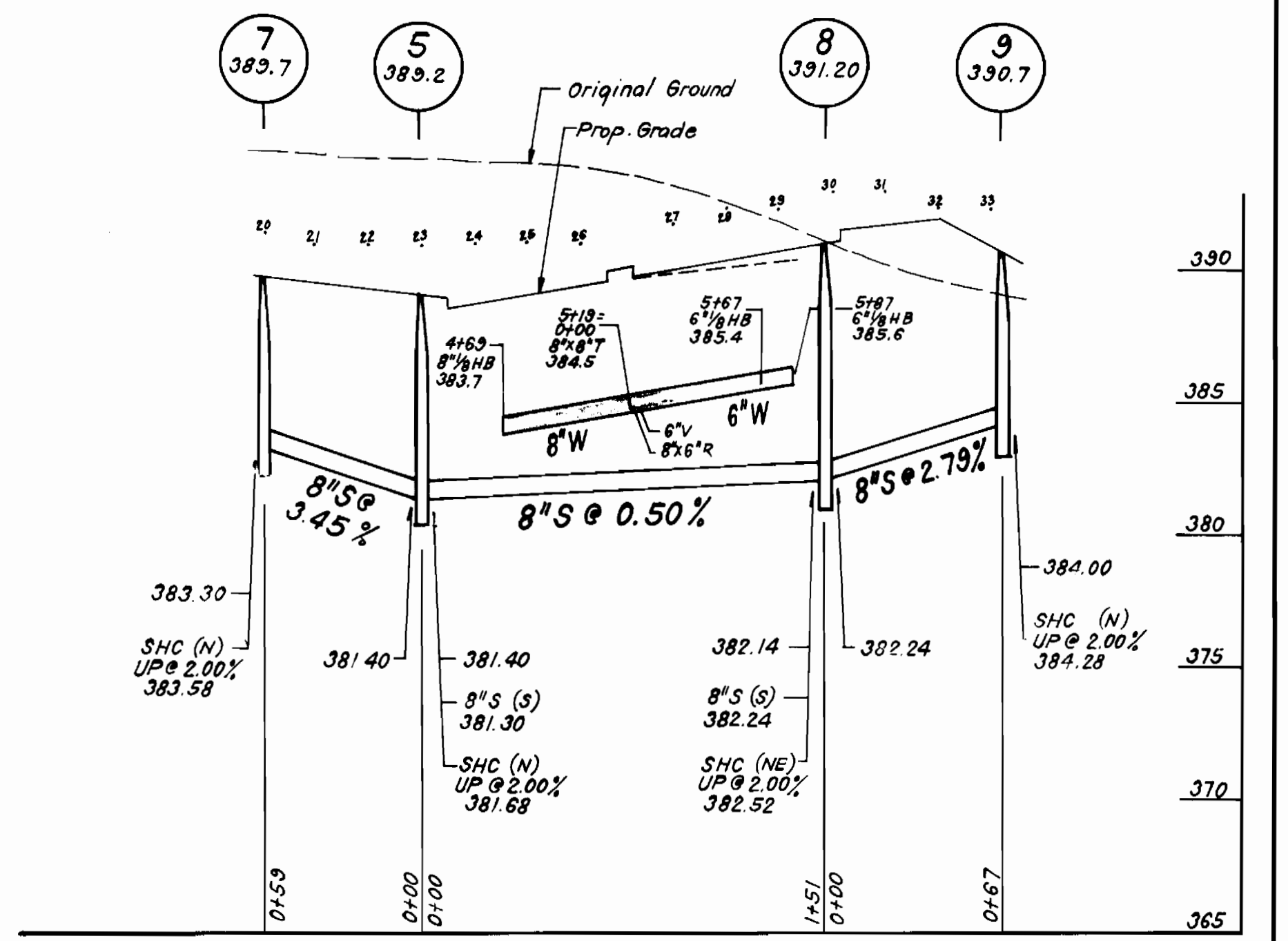
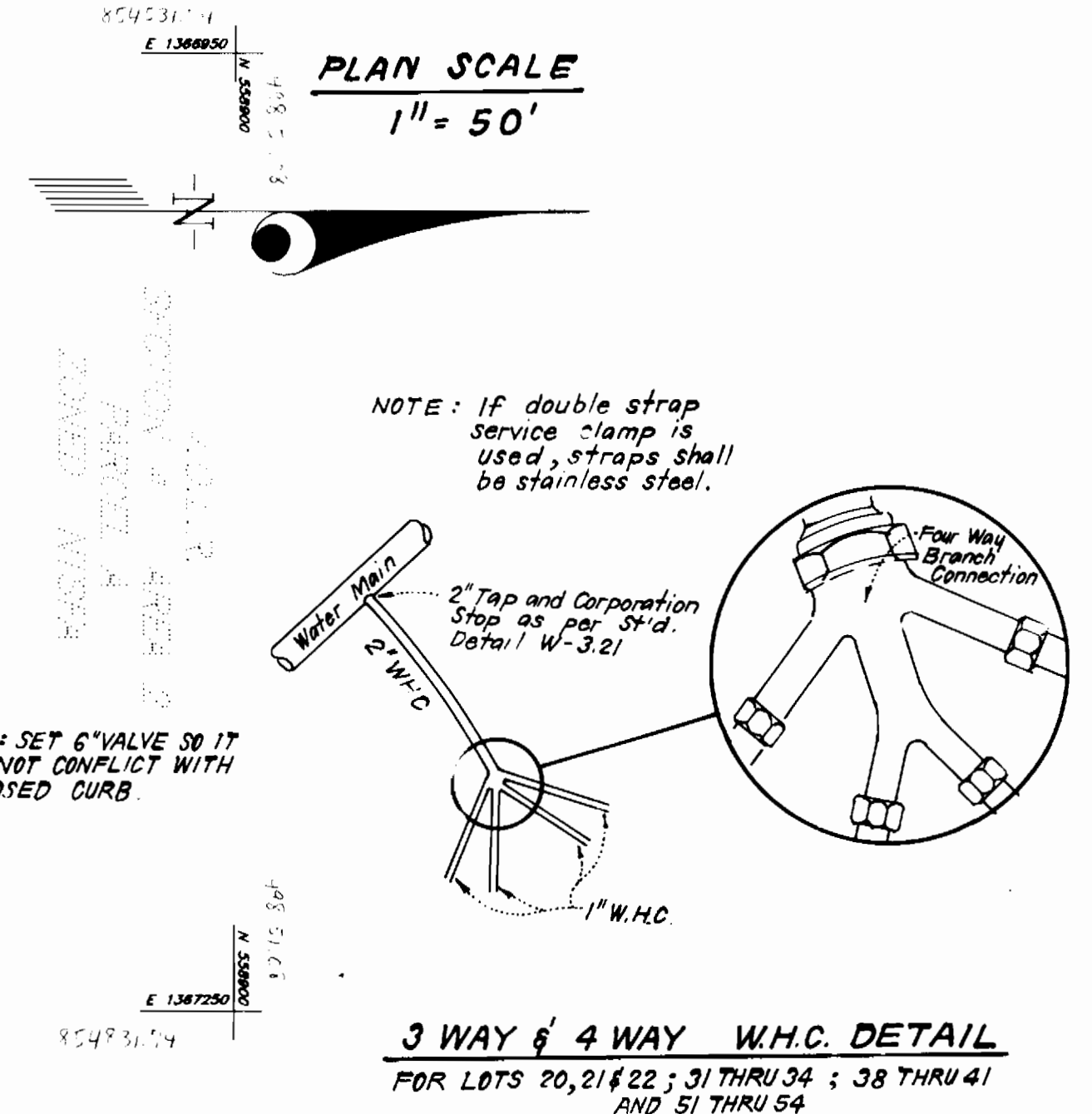
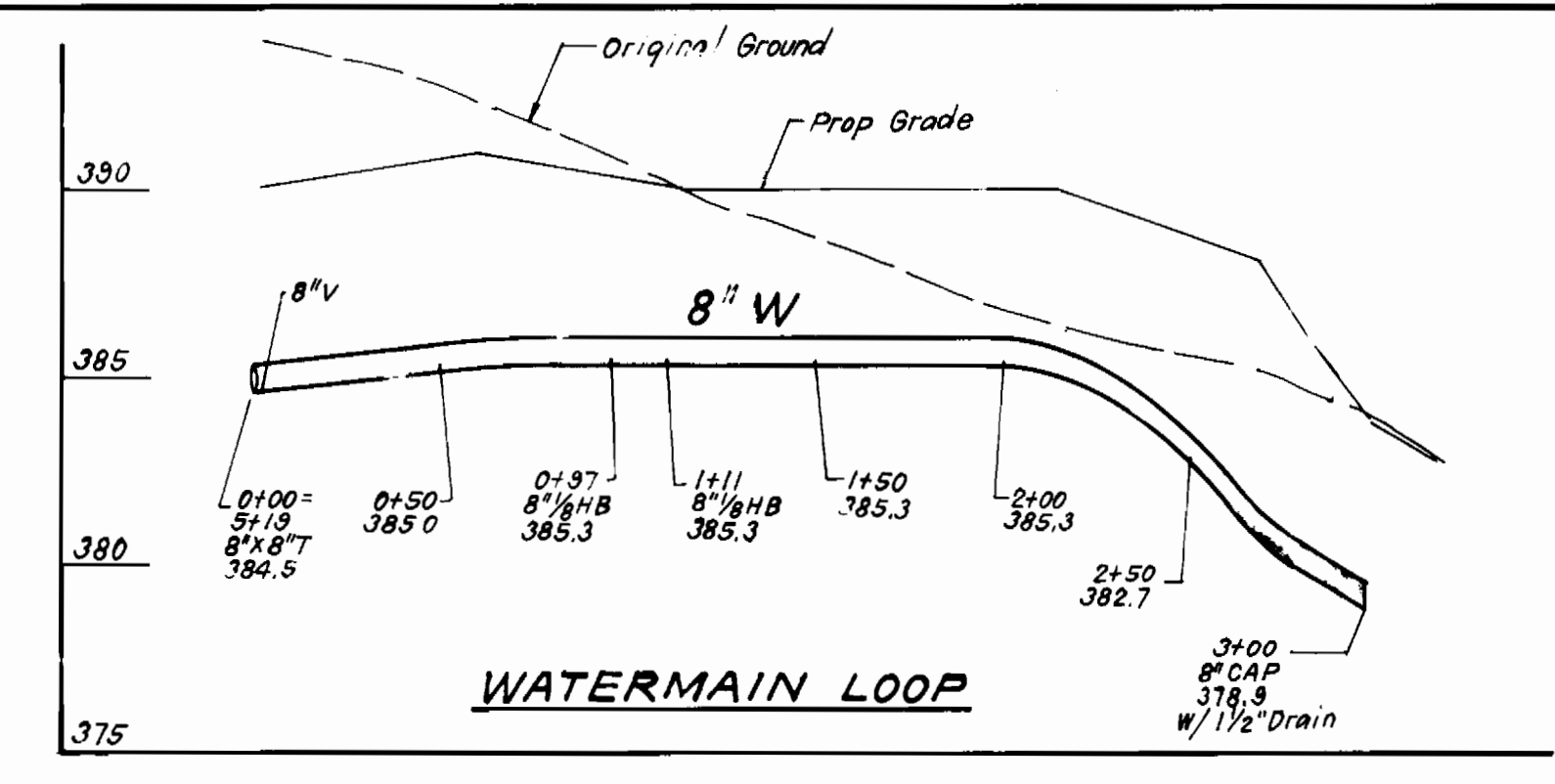
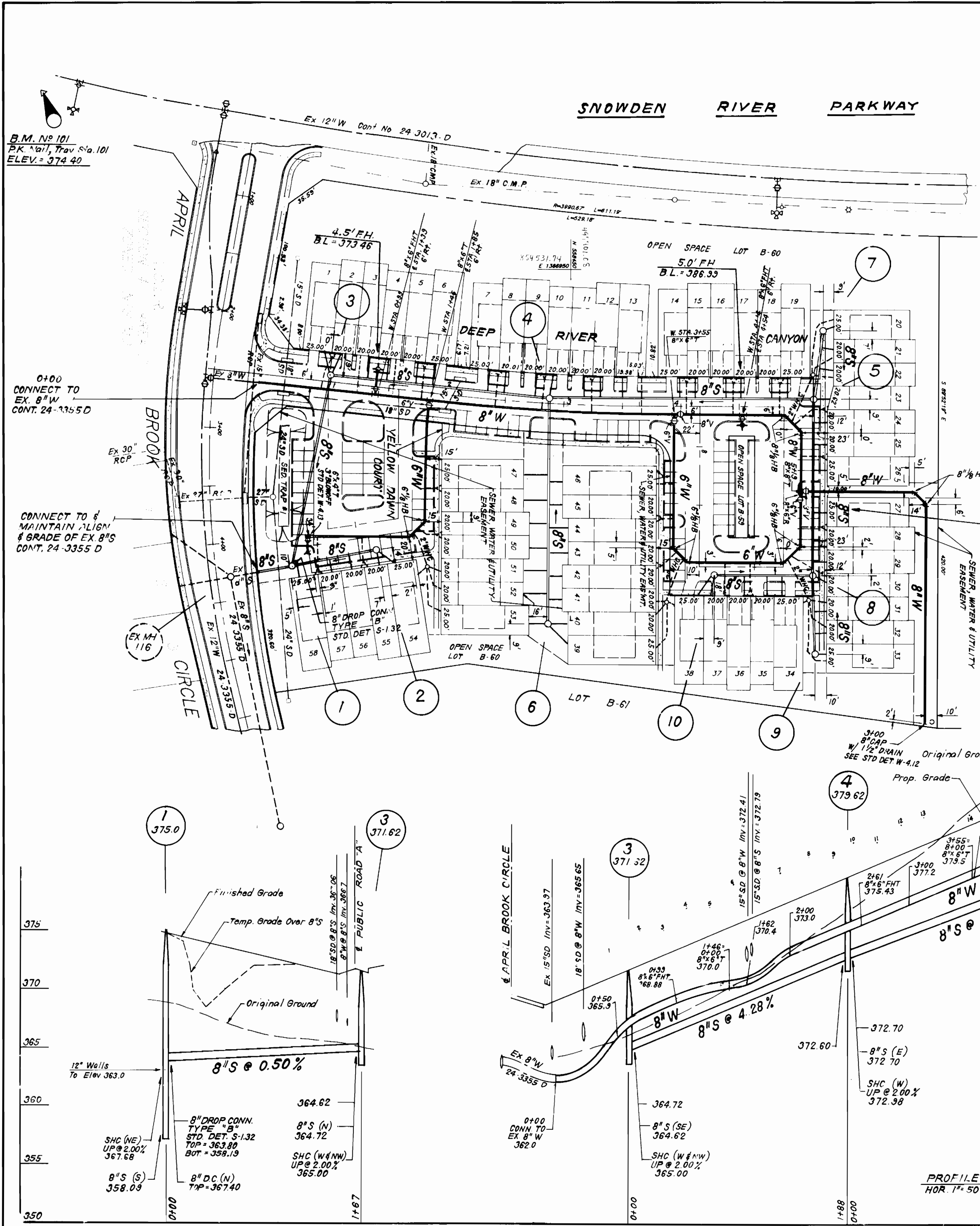
COLUMBIA, VILLAGE OF LONGREACH  
SECTION 4 AREA 2 PHASE 1  
LOTS B-1 THRU B-61  
6TH ELECTION DISTRICT  
CONTRACT No. 24-3400-D

SCALE AS SHOWN  
SHEET 1 OF 3

3400 WS/1 VLR A12



3400w/2VLR 4/12



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James Shaw* 3/24/95  
DIRECTOR OF PUBLIC WORKS DATE

*Robert Deacon* 3/15/95  
CHIEF, BUREAU OF UTILITIES DATE

*Robert Deacon* 3/15/95  
CHIEF, BUREAU OF ENGINEERING DATE

*William G. ...* 3/23/95  
CHIEF, LAND DEVELOPMENT DIV. DATE

**CFE** CLARK · FINEFROCK & SACKETT, INC.  
ENGINEERS · PLANNERS · SURVEYORS

7135 MINSTREL WAY COLUMBIA MARYLAND 21045  
(410) 381-7500 BALTO (301) 821-8100 WASH.



DES:	CCM		
DRN:			
CHK:	CM		
DATE:	01/5	Rev. SHC location Per/ot 58	5-8-95
BY:	NO.	REVISION	DATE

PLAN AND PROFILES OF  
WATER AND SEWER MAINS

COLUMBIA, VILLAGE OF LONGREACH  
SECTION 4 AREA 2 PHASE 1  
LOTS B-1 THRU B-61  
6TH ELECTION DISTRICT  
CONTRACT No. 24-3400-D

SCALE AS SHOWN  
SHEET 2 OF 3

3400 AS-BUILT INFORMATION

WHC LOCATIONS	
LOT 1	20' TO MH3 46' TO FH.1
LOT 2	20' TO MH3 40' TO FH.1
LOT 3	33' TO MH3 20' TO FH.1
LOT 4	57' TO MH3 18' TO FH.1
LOT 5	80' TO MH3 39' TO FH.1
LOT 6	85' TO MH3 44' TO FH.1
LOT 7	66' TO 6"V 52' TO MH4
LOT 8	68' TO 6"V 48' TO MH4
LOT 9	102' TO 6"V 23' TO MH4
LOT 10	104' TO 6"V 22' TO MH4
LOT 11	85' TO 8"V 40' TO MH4
LOT 12	82' TO 8"V 43' TO MH4
LOT 13	80' TO MH4 47' TO 8"V
LOT 14	33' TO 8"V 65' TO FH.2
LOT 15	43' TO 8"V 61' TO FH.2
LOT 16	47' TO FH.2 74' TO MH5
LOT 17	43' TO FH.2 70' TO MH5
LOT 18	35' TO MH5 51' TO FH.2
LOT 19	30' TO MH5 55' TO FH.2
LOT 20	15' TO MH7 72' TO MH5
LOT 21	25' TO MH7 40' TO MH5
LOT 22	56' TO MH7 25' TO MH5
LOT 23	65' TO MH7 18' TO MH5
LOT 24	70' TO MH7 19' TO MH5
LOT 25	48' TO MH6 36' TO 8"V
LOT 26	53' TO MH5 32' TO 8"V
LOT 27	44' TO MH8 35' TO 8"V
LOT 28	41' TO MH8 39' TO 8"V
LOT 29	13' TO MH8 72' TO MH9
LOT 30	11' TO MH8 67' TO MH9
LOT 31	28' TO MH8 45' TO MH9
LOT 32	47' TO MH8 23' TO MH9
LOT 33	76' TO MH8 12' TO MH9
LOT 34	24' TO MH8 43' TO MH9

SHC LOCATIONS	
LOT 1	49' TO FH.1 22' TO MH3
LOT 2	20' TO MH3 36' TO FH.1
LOT 3	38' TO MH3 13' TO FH.1
LOT 4	51' TO MH3 14' TO FH.1
LOT 5	76' TO MH3 35' TO FH.1
LOT 6	91' TO MH3 50' TO FH.1
LOT 7	61' TO 6"V 59' TO MH4
LOT 8	73' TO 6"V 44' TO MH4
LOT 9	97' TO 6"V 25' TO MH4
LOT 10	22' TO MH4 111' TO 6"V
LOT 11	36' TO MH4 88' TO 8"V
LOT 12	74' TO 8"V 49' TO MH4
LOT 13	58' TO 8"V 67' TO MH4
LOT 14	33' TO 8"V 113' TO MH4
LOT 15	36' TO 8"V 108' TO MH5
LOT 16	62' TO 8"V 78' TO MH5
LOT 17	66' TO MH5 40' TO FH.2
LOT 18	39' TO MH5 48' TO FH.2
LOT 19	30' TO MH5 57' TO FH.2
LOT 20	12' TO MH7 66' TO MH5
LOT 21	18' TO MH7 45' TO MH5
LOT 22	37' TO MH7 30' TO MH5
LOT 23	58' TO MH7 15' TO MH5
LOT 24	77' TO MH7 25' TO MH5
LOT 25	98' TO MH7 40' TO MH5
LOT 26	94' TO FH.2 42' TO MH5
LOT 27	98' TO MH5 55' TO MH8
LOT 28	35' TO MH8 98' TO MH9
LOT 29	18' TO MH8 80' TO MH9
LOT 30	13' TO MH8 62' TO MH9
LOT 31	34' TO MH8 38' TO MH9
LOT 32	52' TO MH8 22' TO MH9
LOT 33	68' TO MH8 11' TO MH9
LOT 34	38' TO MH8 60' TO MH10
LOT 35	43' TO MH8 48' TO MH10
LOT 36	NO DATA
LOT 37	70' TO MH8 19' TO MH10
LOT 38	99' TO MH8 24' TO MH10
LOT 39	211' TO MH4 24' TO MH6
LOT 40	192' TO MH4 18' TO MH6
LOT 41	172' TO MH4 24' TO MH6
LOT 42	153' TO MH4 43' TO MH6
LOT 43	134' TO MH4 63' TO MH6
LOT 44	113' TO MH4 85' TO MH6
LOT 45	93' TO MH4 104' TO MH6
LOT 46	73' TO MH4 123' TO MH6
LOT 47	70' TO MH4 129' TO MH6
LOT 48	88' TO MH4 107' TO MH6
LOT 49	108' TO MH4 88' TO MH6
LOT 50	128' TO MH4 65' TO MH6
LOT 51	149' TO MH4 50' TO MH6
LOT 52	168' TO MH4 35' TO MH6
LOT 53	196' TO MH4 17' TO MH6
LOT 54	86' TO MH1 20' TO MH2
LOT 55	13' TO MH1 74' TO MH2
LOT 56	49' TO MH1 27' TO MH2
LOT 57	35' TO MH1 42' TO MH2
LOT 58	11' TO MH1 66' TO MH2

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS \_\_\_\_\_ DATE \_\_\_\_\_  
CHIEF, BUREAU OF ENGINEERING \_\_\_\_\_ DATE \_\_\_\_\_

DES:					
DRN:					
CHK:					
DATE:	DFI	AS-BUILTS	11/95		
BY:	NO.	REVISION	DATE		

SHC & WHC LOCATIONS

600' SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

COLUMBIA, VILLAGE OF LONGREACH  
SECTION 4 AREA 2 PHASE 1  
LOTS B-1 THRU B-61

CONTRACT No. 24-3400-D

SCALE AS SHOWN  
3 SHEETS OF 3