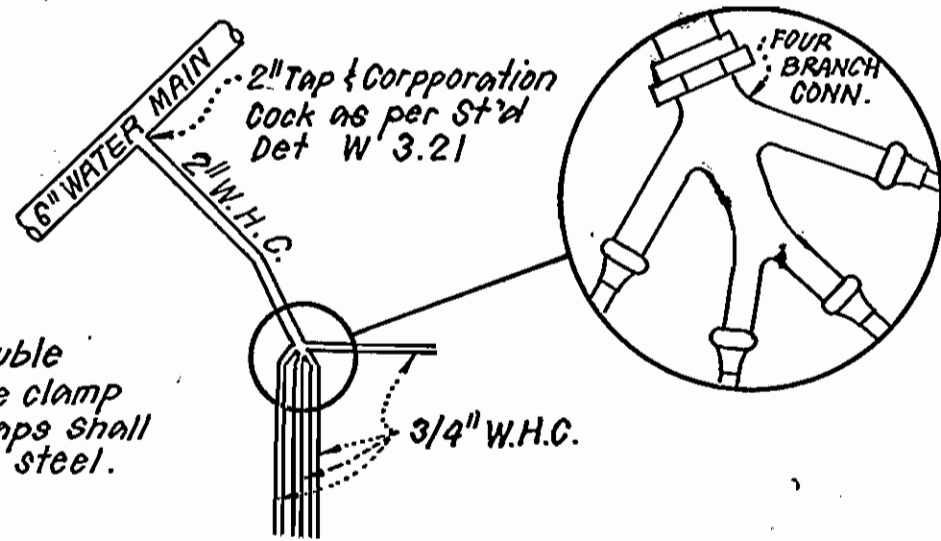


PROFILE SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



NOTE: If double strap service clamp is used, straps shall be stainless steel.

4-WAY W.H.C. DETAIL

LOTS A-24-A-27, A-33-A-36 AND A-53-A-56
NO SCALE

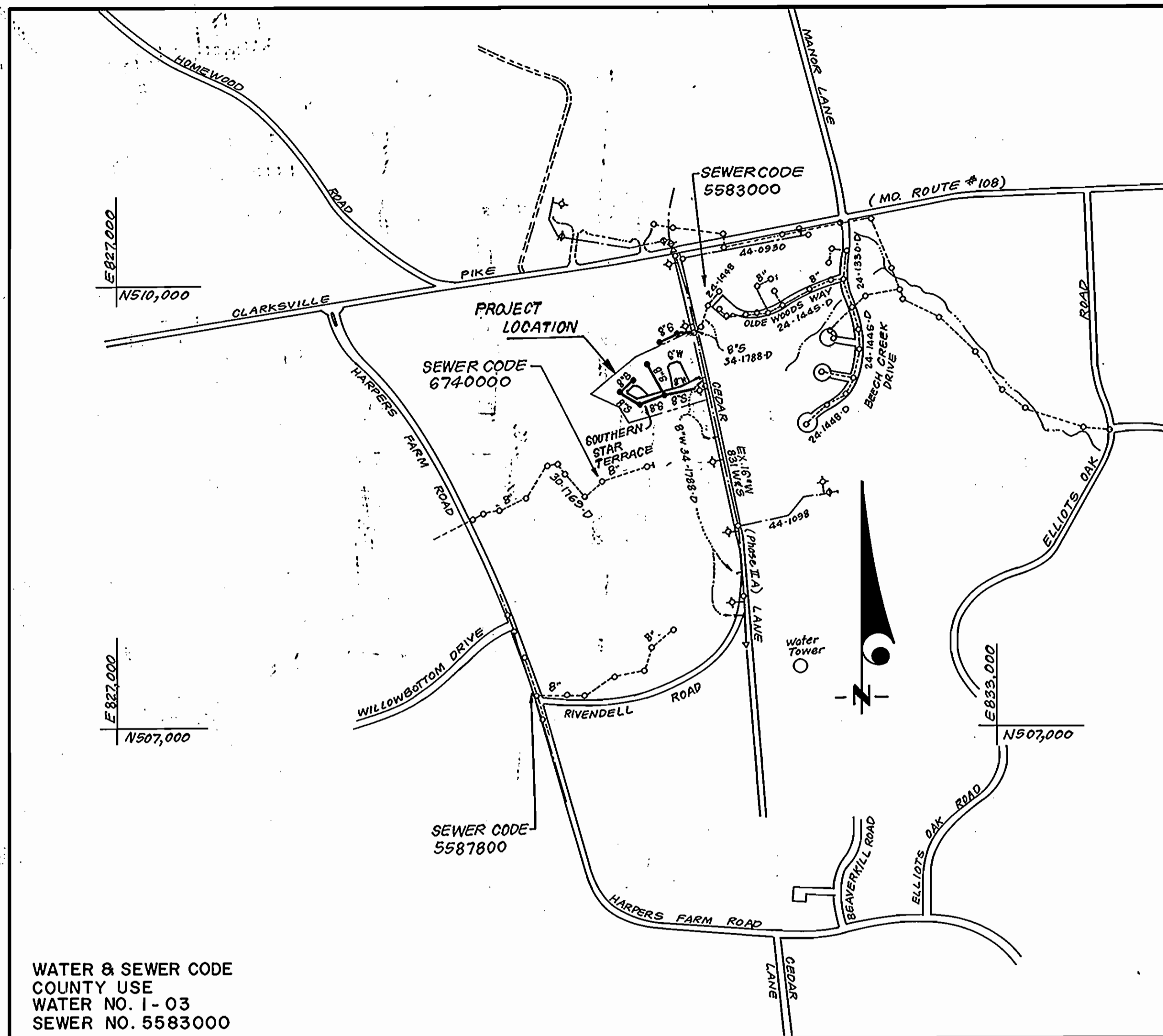
Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Construction Plan E 89-123; Drawing Sediment & Erosion Control.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

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: *Stephen R. Fisher* 3/16/89
Howard S.C.D. DATE



VICINITY MAP
SCALE: 1" = 600'

WATER & SEWER CODE
COUNTY USE
WATER NO. 1-03
SEWER NO. 5583000

TYPE OF BUILDING	Townhouses
NO. OF LOTS	61
NO. OF WHC's	61 WHC
NO. OF SHC's	55 SHC
DRAINAGE AREA	Little Patuxent WWTP

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 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 Specifications and Howard County Design Manual, Volume IV. The Contractor shall have Volume IV on the job.
- 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 - 859-9004
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 - 992-2366
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 strapped and buttressed with concrete in accordance with standard details. Soil around the fire hydrant to be compacted in accordance with Sections 1003 & 1008 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.R.X., V.C.P.X., 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.
- 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.
- 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.

CONTRACT NO. 24-1883-D
VILLAGE OF HARPER'S CHOICE
LOTS A-1 THRU A-63 PARCEL "A"
SECTION 7 AREA 2
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

QUANTITIES

ITEM	EST'D	AS BUILT	MATERIAL / SUPPLIER
8" W	430 LF	441 LF	A+P WATER & SEWER SUPPLIES INC. - ATLANTIC STATES
8" W	830 LF	871.6 LF	" " " " " " " "
8" S	1,222 LF	1191 LF	Municipal & Contractor Sales Inc. - American Pipe
6" S.H.C.	875 LF	800.9 LF	" " " " " " " "
2" WHC	150 LF		
1" WHC	400 LF	729 LF	Municipal & Contractor Sales Inc. - Cambridge-LEE
3/4" WHC	795 LF	783 LF	" " " " " " " "
FH	2 EA	2 EA	" " " " " " " "
4'-0" DIA MH	8 EA	8 EA	ATLANTIC PRECAST CONCRETE
BV	1 EA	1 EA	Municipal & Contractor Sales Inc.
8" V (excl. FH)	6 EA	6 EA	" " " " " " " "

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS DATE
Robert B. Berman 3-14-89
CHIEF, BUREAU OF UTILITIES

CLARK, FINEPROCK & SACKETT, INC.
ENGINEERS - PLANNERS - SURVEYORS
7135 MINSTREL WAY COLUMBIA MARYLAND 21045
(301) 381-7500 BALTO. (301) 621-8100 WASH.



DES: JTR			
DRN: VLM / JTR			
CHK: CQM			
DATE: 5-2-88			
BY	NO.	REVISION	DATE

TITLE SHEET
600' SCALE MAP NO. 29 BLOCK NO.

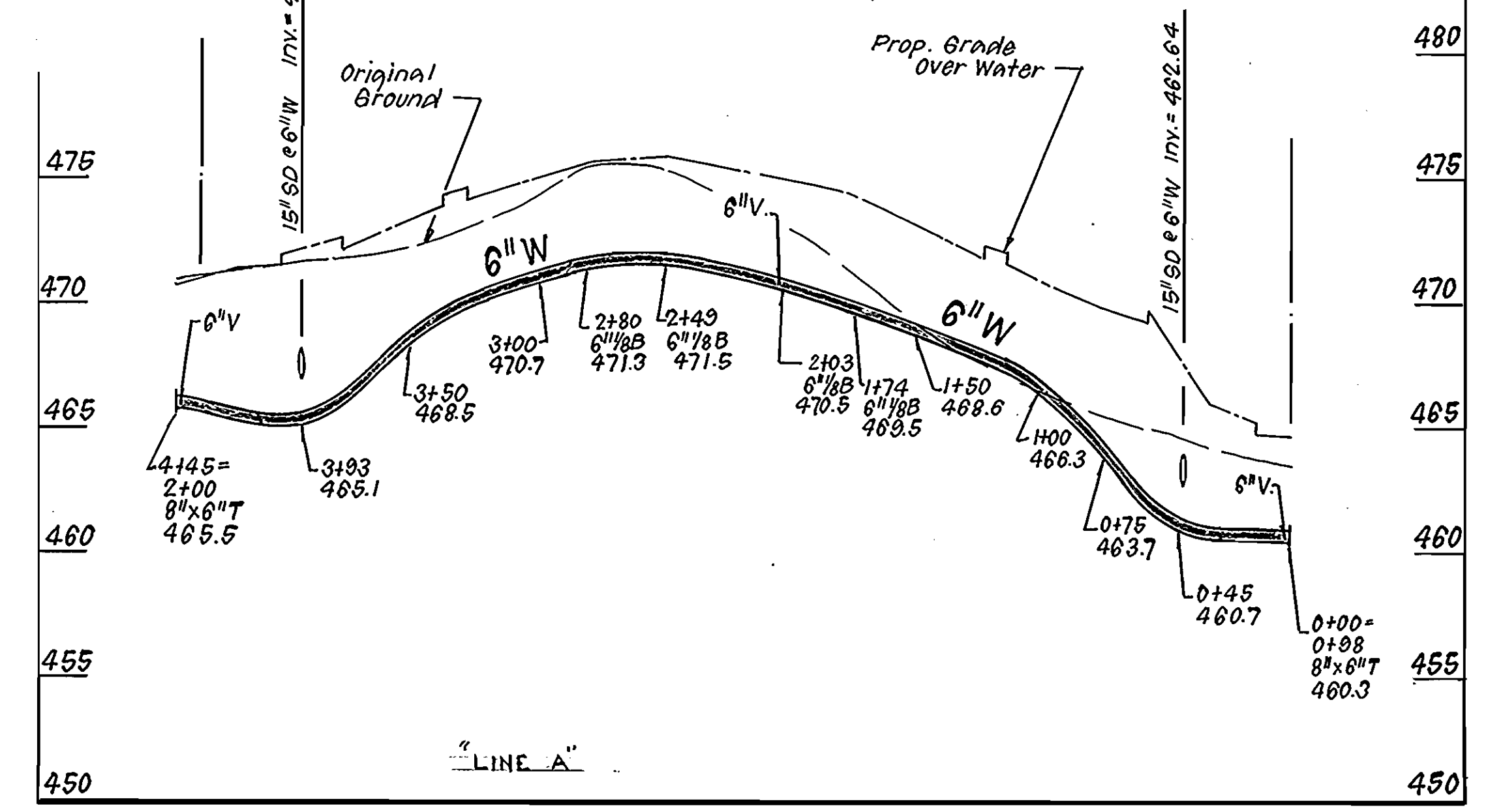
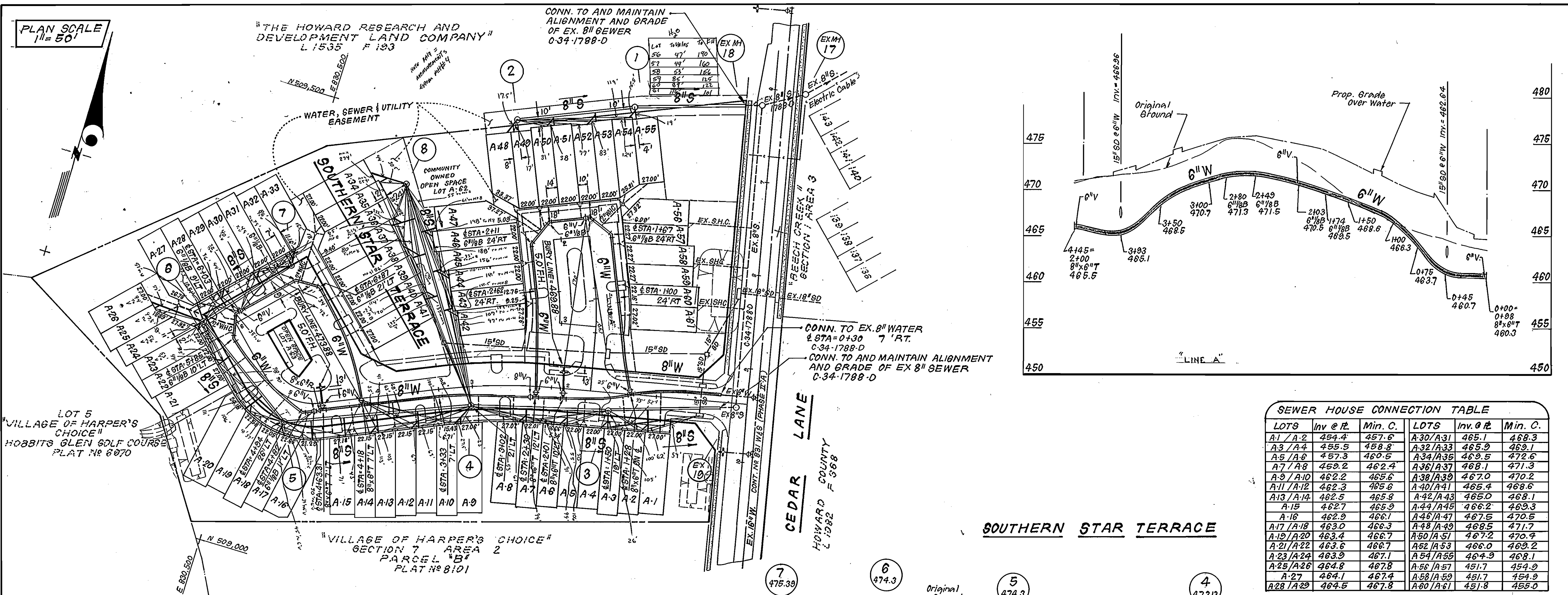
COLUMBIA
VILLAGE OF HARPER'S CHOICE
SECTION 7 AREA 2
LOTS A-1 THRU A-63 PARCEL "A"
5TH ELECTION DISTRICT
CONTRACT NO. 24-1883-D
SCALE AS SHOWN
SHEET 1 OF 2

PLAN SCALE
1" = 50'

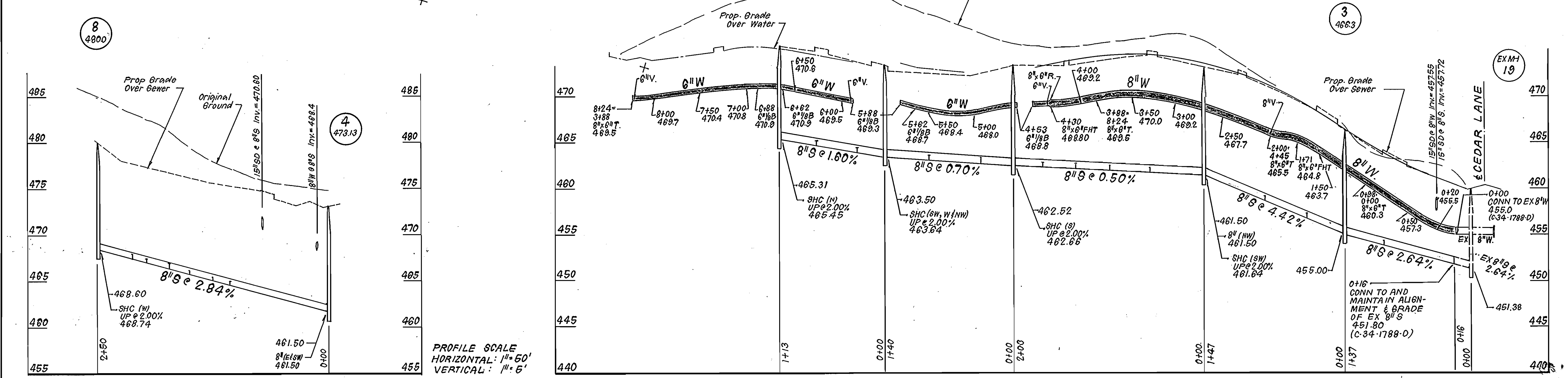
"THE HOWARD RESEARCH AND
DEVELOPMENT LAND COMPANY"
L 1535 F 123

CONN. TO AND MAINTAIN
ALIGNMENT AND GRADE
OF EX. 8" SEWER
C-34-1788-D

LOT	AREA	AREA	AREA
56	47	190	
57	47	160	
58	57	166	
59	87	135	
60	87	132	
61	75	101	



LOTS	Inv @ R.	Min. C.	LOTS	Inv @ R.	Min. C.
A1/A2	454.4	457.6	A30/A31	465.1	468.3
A3/A4	455.5	458.8	A32/A33	465.9	469.1
A5/A6	457.3	460.5	A34/A35	469.5	472.6
A7/A8	459.2	462.4	A36/A37	468.1	471.3
A9/A10	462.2	465.6	A38/A39	467.0	470.2
A11/A12	462.3	465.6	A40/A41	465.4	469.6
A13/A14	462.5	465.8	A42/A43	465.0	468.1
A15	462.7	465.9	A44/A45	466.2	469.3
A16	462.9	466.1	A46/A47	467.5	470.5
A17/A18	463.0	466.3	A48/A49	468.5	471.7
A19/A20	463.4	466.7	A50/A51	467.2	470.9
A21/A22	463.6	466.7	A52/A53	466.0	469.2
A23/A24	463.9	467.1	A54/A55	464.9	468.1
A25/A26	464.8	467.8	A56/A57	451.7	454.9
A27	464.1	467.4	A58/A59	451.7	454.9
A28/A29	464.5	467.8	A60/A61	451.8	455.0



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. ... 3/24/89
DIRECTOR OF PUBLIC WORKS DATE

Robert H. ... 3-14-89
CHIEF, BUREAU OF UTILITIES DATE

... 3-22-89
CHIEF, BUREAU OF ENGINEERING DATE

... 3/22/89
CHIEF, LAND DEVELOPMENT DIV. DATE

CFS CLARK · FINEPROCK & SACKETT, INC.
ENGINEERS · PLANNERS · SURVEYORS

7135 MINSTREL WAY COLUMBIA MARYLAND 21045
(301) 381-7500 BALTO. (301) 621-8100 WASH.

DES: JTR
DRN: JTR
CHK: C.G.M.
DATE: DEC 88

BY NO. REVISION DATE

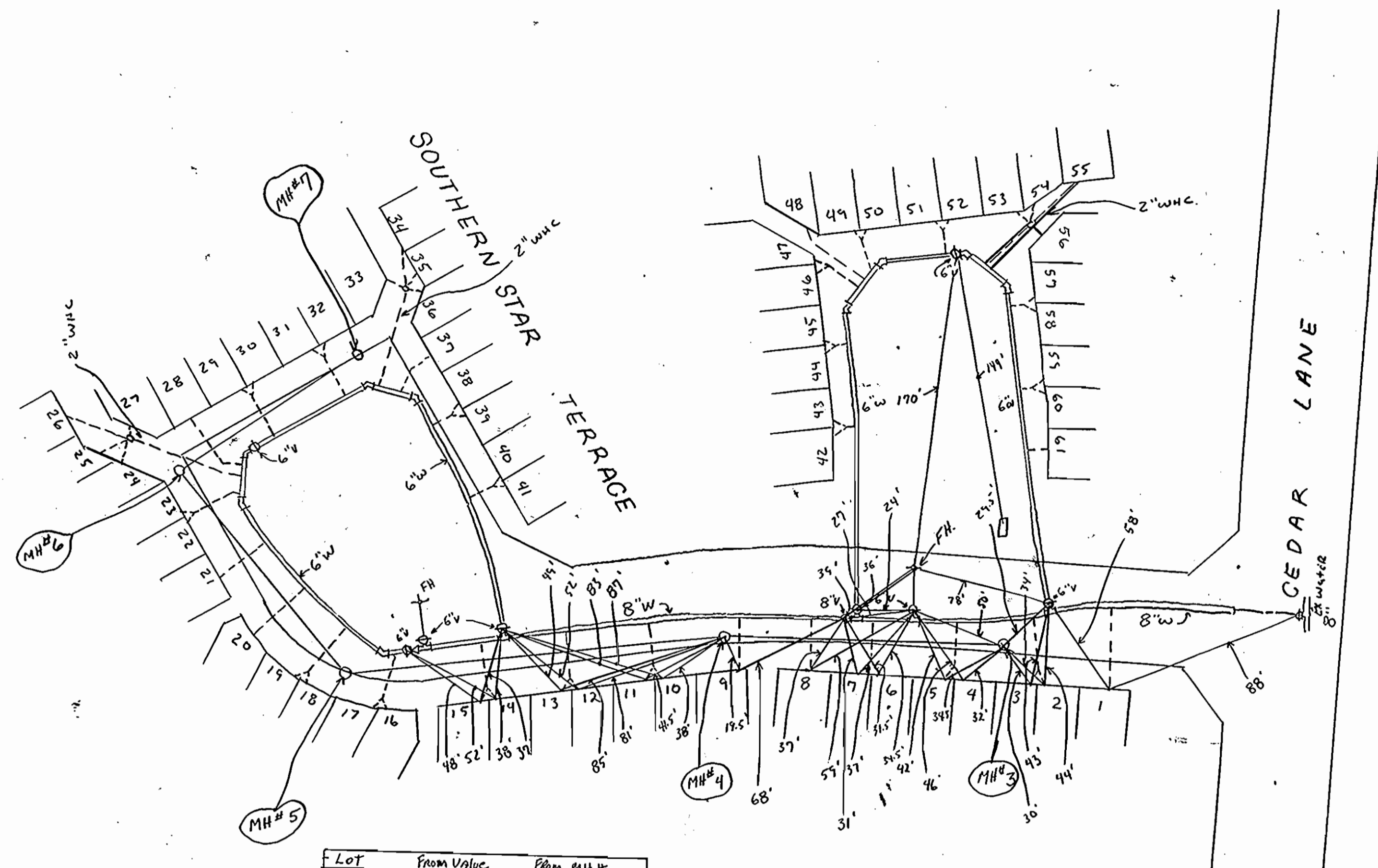
PLAN & PROFILE OF
WATER & SEWER

600'SCALE MAP NO. 29 BLOCK NO.

COLUMBIA
VILLAGE OF HARPERS CHOICE
SECTION 7 AREA 2
LOTS A-1 THRU A-63 PARCEL "A"
5TH ELECTION DISTRICT
CONTRACT NO. 24-1883-D

SCALE AS SHOWN
1 SHEET 2 OF 2

AS-BUILT 10-19-89



Lot	To Valve	To F.H.
42	117'	82'
43	114'	87'
44	89'	124'
45	87'	128'
46	79'	167'
47	79'	172'
48	81'	190'
49	57'	184'
50	53'	184'
51	24'	184'
52	21'	184'
53	40'	200'
54	45'	208.5'
55	74'	231'
56	47'	190'
57	49'	160'
58	53'	156'
59	85'	125'
60	89'	122'
61	116'	101'

NOTE: LOTS
 24-25-26-27-33-34-35-36
 53, 54, 55, 56.
 2-1" Taps were made
 INSTEAD of A 2" LINE

LOT	From Valve	From MH #
22	59'	26' 6
23	58.5'	24' 6
24	74'	32' 6
25	88.5'	48' 6
26	106'	69' 6
27	69'	27' 6
28	41'	32' 6
29	34'	65' 7
30	26'	60' 7
31	60'	26' 7
32	64'	22' 7
	FROM F.H.	
33	174'	43.5' 7
34	191'	65' 7
35	177'	55.5' 7
36	164'	50' 7

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE

DES:			
DRN:			
CHK:			
DATE:	BY	NO.	REVISION

PLAN & PROFILE OF
 WATER & SEWER

DATE 600' SCALE MAP NO. BLOCK NO.

COLUMBIA
 VILLAGE OF HARPERS CHOICE
 SECTION 7 AREA 2
 LOTS A-1 THRU A-63 PARCEL "A"
 5TH ELECTION DISTRICT
 CONTRACT NO. 24-1883-D

SCALE
 AS
 SHOWN

SHEET
 2A OF 2

ADDITION 2/10/90