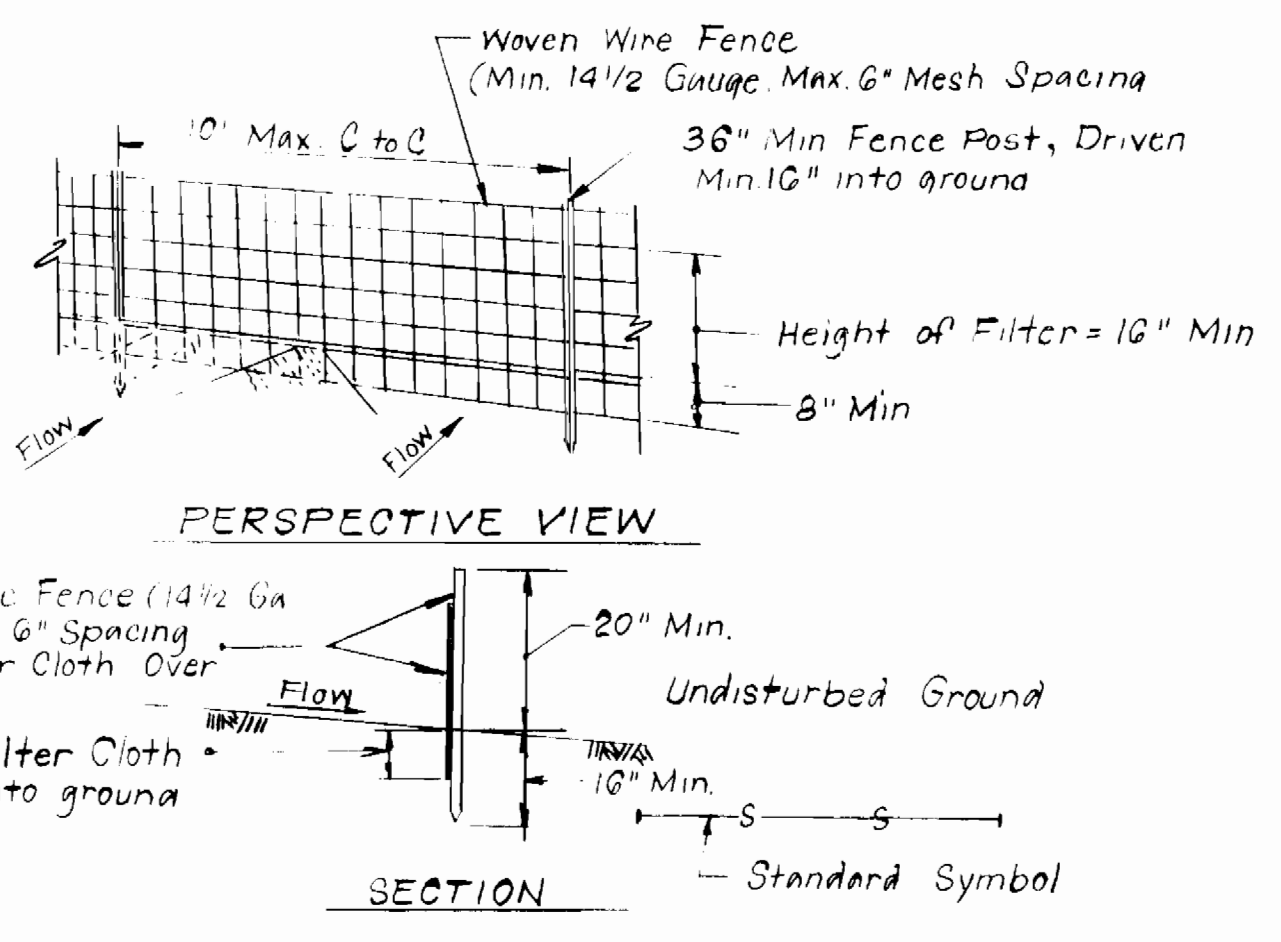


SEWER HOUSE CONNECTION TABLE					
LOTS	INV @ R	MIN. C.	LOTS	INV @ R	MIN. C.
14/15	333.7	337.1	45/46	305.3	308.7
16/17	333.4	330.8	47/48	307.1	310.5
18	333.3	336.7	49/50	310.2	313.6
19/20	333.1	336.5	51/52	314.7	318.1
21/22	332.9	336.3	53/54	317.8	321.2
23	332.8	336.2	55	319.2	322.6
24/25	332.6	336.0	56/57	321.0	325.0
26/27	330.4	333.8	58	323.1	326.5
28	328.9	332.3	59/60	324.4	327.8
29	327.2	330.6	61/62	328.1	331.5
30/31	325.5	328.9	63/64	330.1	333.5
32/33	323.6	327.0	65/66	332.1	335.5
34/35	310.5	313.9	67/68	332.2	335.6
36/37	308.7	312.1	69/70	332.9	336.3
38	306.0	309.4	71/72	333.2	336.6
39/40	306.4	309.8	73/74	333.6	337.1
41/42	306.1	309.5	75/76	333.9	337.3
43/44	305.7	309.1			

TYPE OF BUILDING	Single Family & Townhouses
N° OF LOTS	2 S.F. & 63 T.H.'s
N° OF W.H.C.'s	63
N° OF S.H.C.'s	63
DRAINAGE AREA	Patapsco 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 & Mo. Co. Standard Details, Volume 10. The contractor shall have Volume 10 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 - Contractor Services - 850-4620
 - Baltimore Gas & Electric Company - Underground Damage Control - 859-9004
 - B.G. & E. Company - Trouble Shooting - 298-9001
 - "Miss Utility" - 1-559-0100
 - Chesapeake & Potomac (C & P) Telephone Company - 1-800-257-7777
 - Colonial Pipeline Company - 795-1390
 - Bureau of Utilities Howard County - 992-2366
- 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
- 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.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 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'.



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- Woven Wire Fence to be fastened securely to fence post with wire ties or staples.
 - Filter Cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
 - When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
 - Maintenance shall be performed as needed and material removed when "Bulges" develop in the silt fence.
- POSTS: Steel either T or U type or 2" hardwood
 FENCE: Woven Wire, 14 1/2 Ga min., 6" max. Mesh opening
 FILTER CLOTH: Filter X, Minapi 100X, Stablinka T140N or approved equal.
 PRE-FABRICATED UNIT: Geofab, Envirofence or approved equal.

SILT FENCE DETAIL

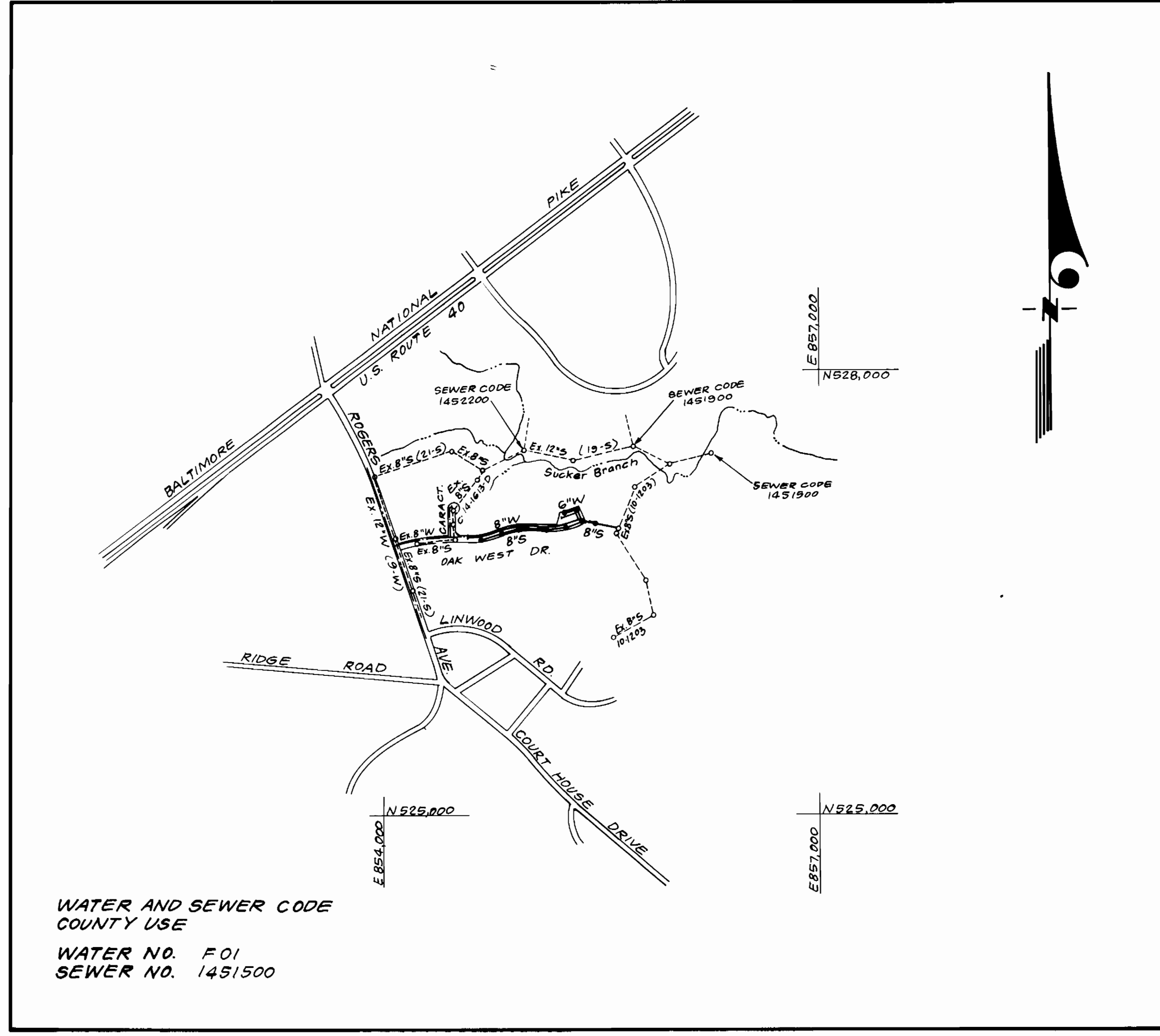
NO SCALE

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Construction Plan F 88-26; Drawing, Sediment & Erosion Control.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT
 Signature: *Charles McNeely* DATE: 11-12-87

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

APPROVED:
 Signature: *Stephen L. John* DATE: 11/12/87
 Howard S.C.D.



VICINITY MAP

WATER AND SEWER CODE COUNTY USE
 WATER NO. F01
 SEWER NO. 1451500

CONTRACT NO. 14-1723-D

OAK WEST

SECTION I AREA 2, LOTS 12 THRU 80

HOWARD COUNTY, MARYLAND

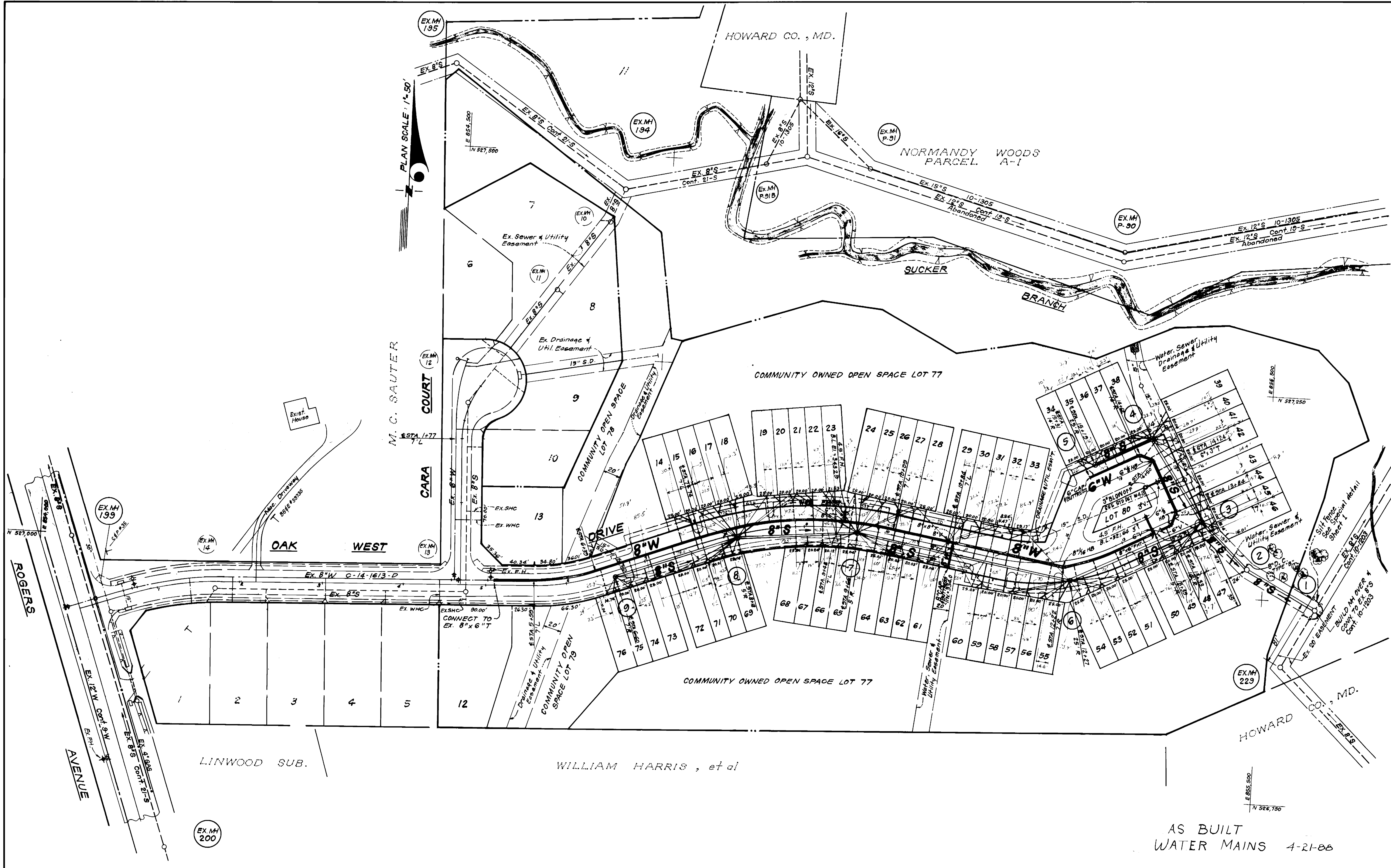
DEPARTMENT OF PUBLIC WORKS

SEWER & WATER AS BUILT 4-21-88

ITEM	QUANTITIES		MATERIAL / SUPPLIER
	EST'D	AS-BUILT	
6" WATER	197 LF	172 LF	A&P WATER & SEWER SUPPLY, INC. DIP SETS ATLANTIC STATES
8" WATER	834 LF	871 LF	" " " " " " " " " " CHARLOTT PIPE
8" SEWER	1,121 LF	1,225 LF	" " " " " " " " " " SDR 35
6" SHC	1,254 LF	1,145 LF	" " " " " " " " " " SDR 35
1" WHC	667 LF	594 LF	A&P WATER & SEWER SUPPLY, INC. VINCENT BRASS
3/4" WHC	1,007 LF	1,064 LF	" " " " " " " " " " HALSEAD, IND.
F.H.	2 EA	2 EA	" " " " " " " " " " CL 125 AMERICAN DAWLING
4'-0" DIA. MH	9 EA	9 EA	ATLANTIC CONCRETE PRODUCTS ASTM C400 KENNEDY
6" V (incl. F.H.)	1 EA	1 EA	A&P WATER & SEWER SUPPLY, INC. ATLANTIC STATES
8" V	2 EA	2 EA	" " " " " " " " " " ATLANTIC STATES
8" DC TYPE B	1 EA	1 EA	" " " " " " " " " " ATLANTIC STATES
3" BLOWOFF	1 EA	1 EA	A&P WATER & SEWER SUPPLY, INC. WINGHAM & TAYLOR

* COVERS BY B&C UTILITY SUPPLY, INC.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Signature: <i>James H. ...</i> DATE: 11/12/87 DIRECTOR OF PUBLIC WORKS		CLARK FINEPROCK & SACKETT ENGINEERS - PLANNERS - SURVEYORS 7135 MINSTREL WAY, COLUMBIA, MD. 21045 (301) 381-7500 BALT. (301) 621-8100 WASH.		STATE OF MARYLAND G. NELSON CLARK PROFESSIONAL SURVEYOR DATE: 6-87		TITLE SHEET		OAK WEST SECTION I AREA 2 LOTS 12 THRU 80 2 ND ELECTION DISTRICT CONTRACT 14-1723-D		SCALE 1" = 600' SHEET 1 OF 3	
Signature: <i>Robert H. ...</i> DATE: 11-5-87 CHIEF, BUREAU OF UTILITIES		Signature: <i>Walter ...</i> DATE: 11-16-87 CHIEF, LAND DEVELOPMENT DIV.		DES: JTR DRN: VLM CHK: JTR DATE: 6-87		REVISION BY NO. DATE		600' SCALE MAP NO. 25 BLOCK NO.		AS-BUILT	



AS BUILT
WATER MAINS 4-21-88

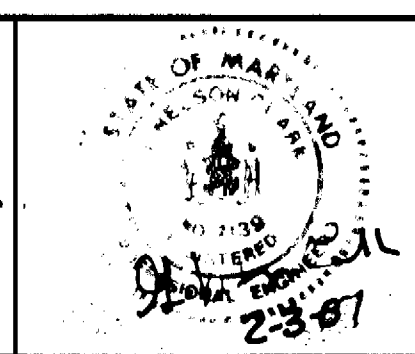
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 4/17/87
DIRECTOR OF PUBLIC WORKS DATE

[Signature] 11-5-87
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 4-16-87
CHIEF, LAND DEVELOPMENT DIV. DATE

CFE CLARK · FINEROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
7135 MINSTREL WAY, COLUMBIA, MD 21045
(BALT.) 381-7500 (WASH) 621-8100



DES: JTR			
DRN: VLM			
CHK: JTR			
DATE: 6-87	BY NO.	REVISION	DATE

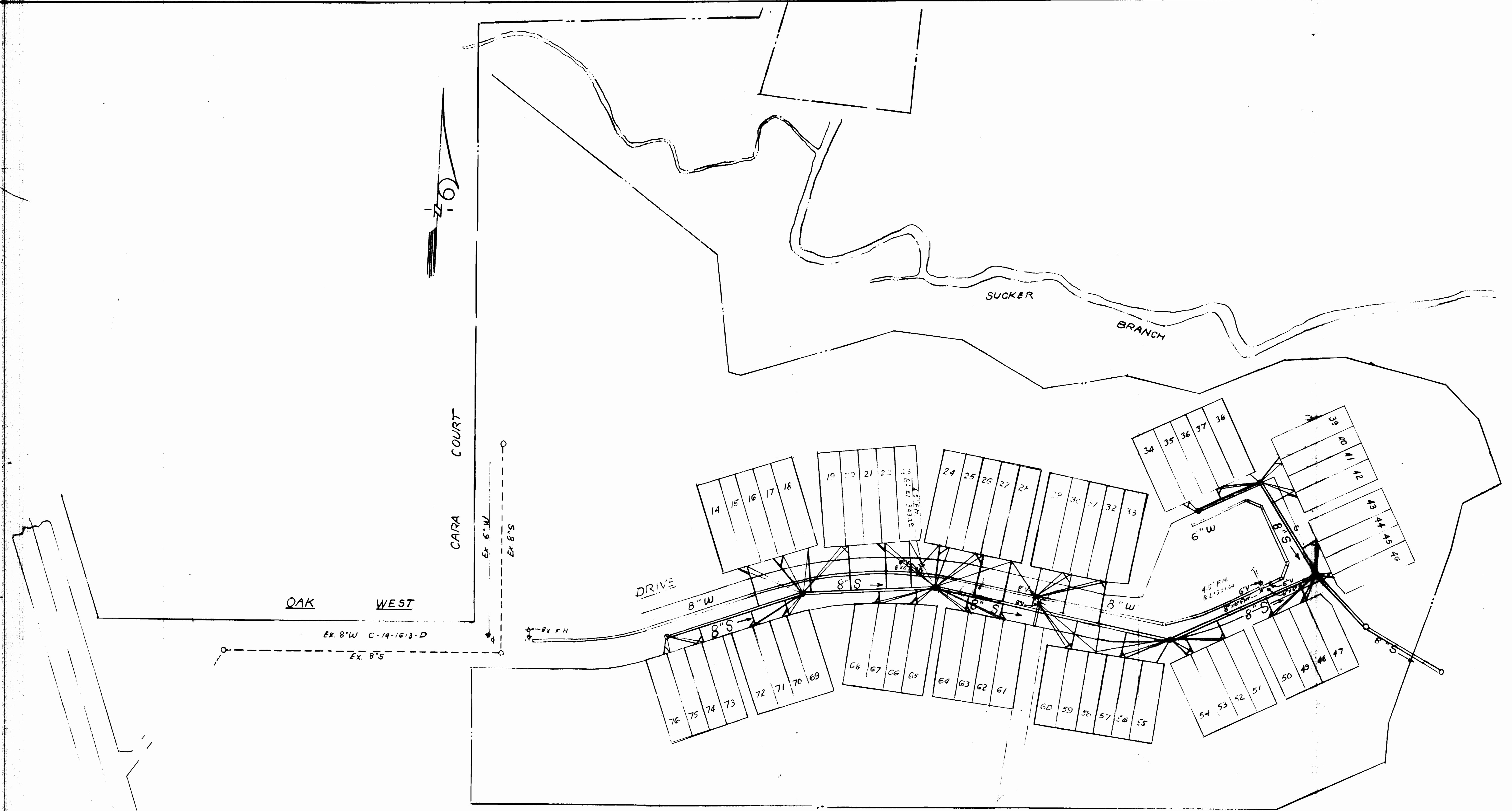
PLAN OF
WATER & SEWER MAINS

60' SCALE MAP NO. 25 BLOCK NO.

OAK WEST
SECTION 1 AREA 2
LOTS 12 THRU 80
2ND ELECTION DISTRICT
CONTRACT 14-1723-D

SCALE
AS SHOWN

SHEET
2 OF 3



AS BUILT
SEWER 4-21-88

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DATE _____
DATE _____

DES:				
DRN:				
CHK:				
DATE:				

BY	NO.	REVISION	DATE	600' SCALE MAP NO.	BLOCK NO.
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OAK WEST
SECTION 1 AREA 2
LOTS 12 THRU 80

CONTRACT 14-1723-D

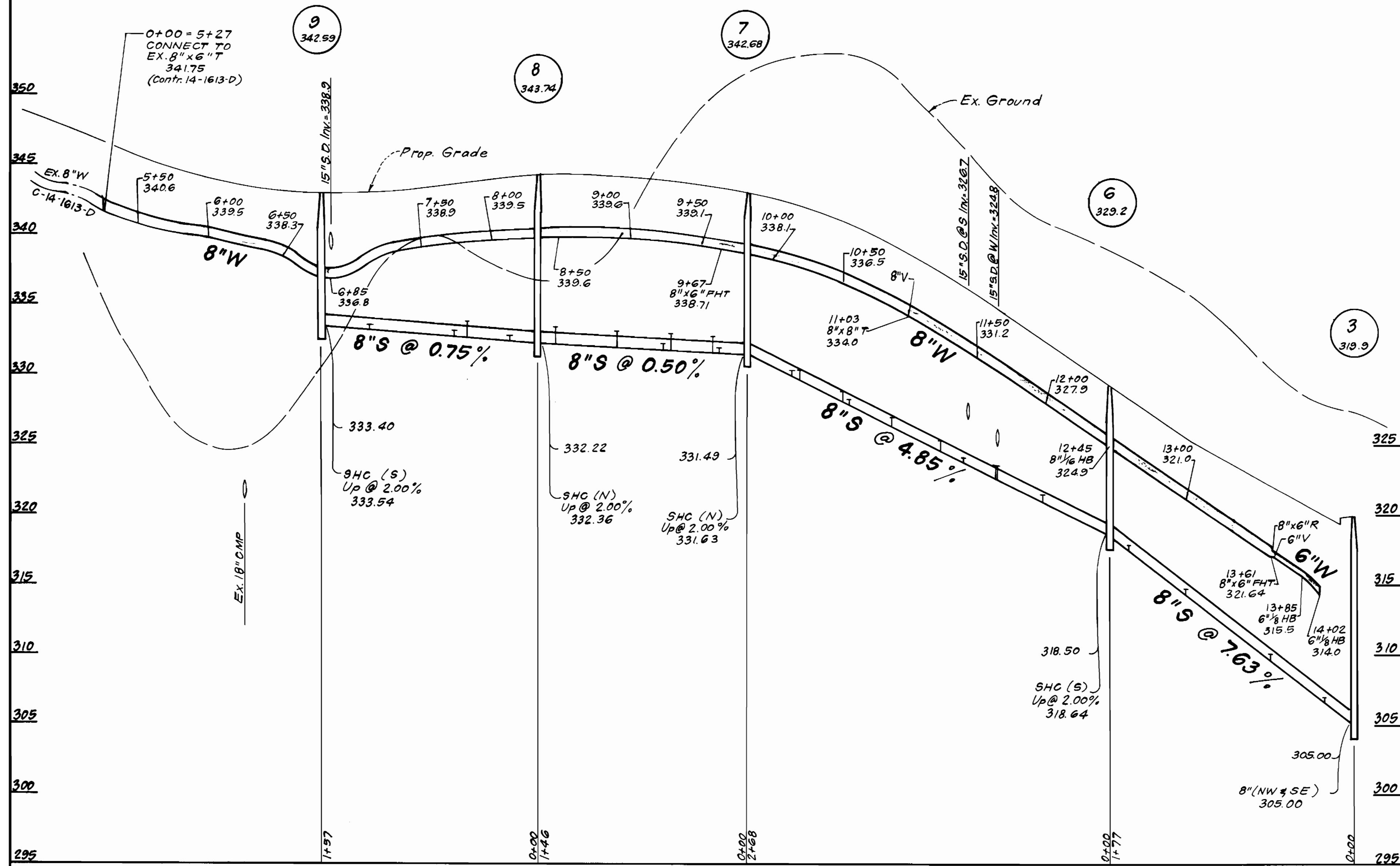
SCALE
AS
SHOWN

SHEET
1A OF 2

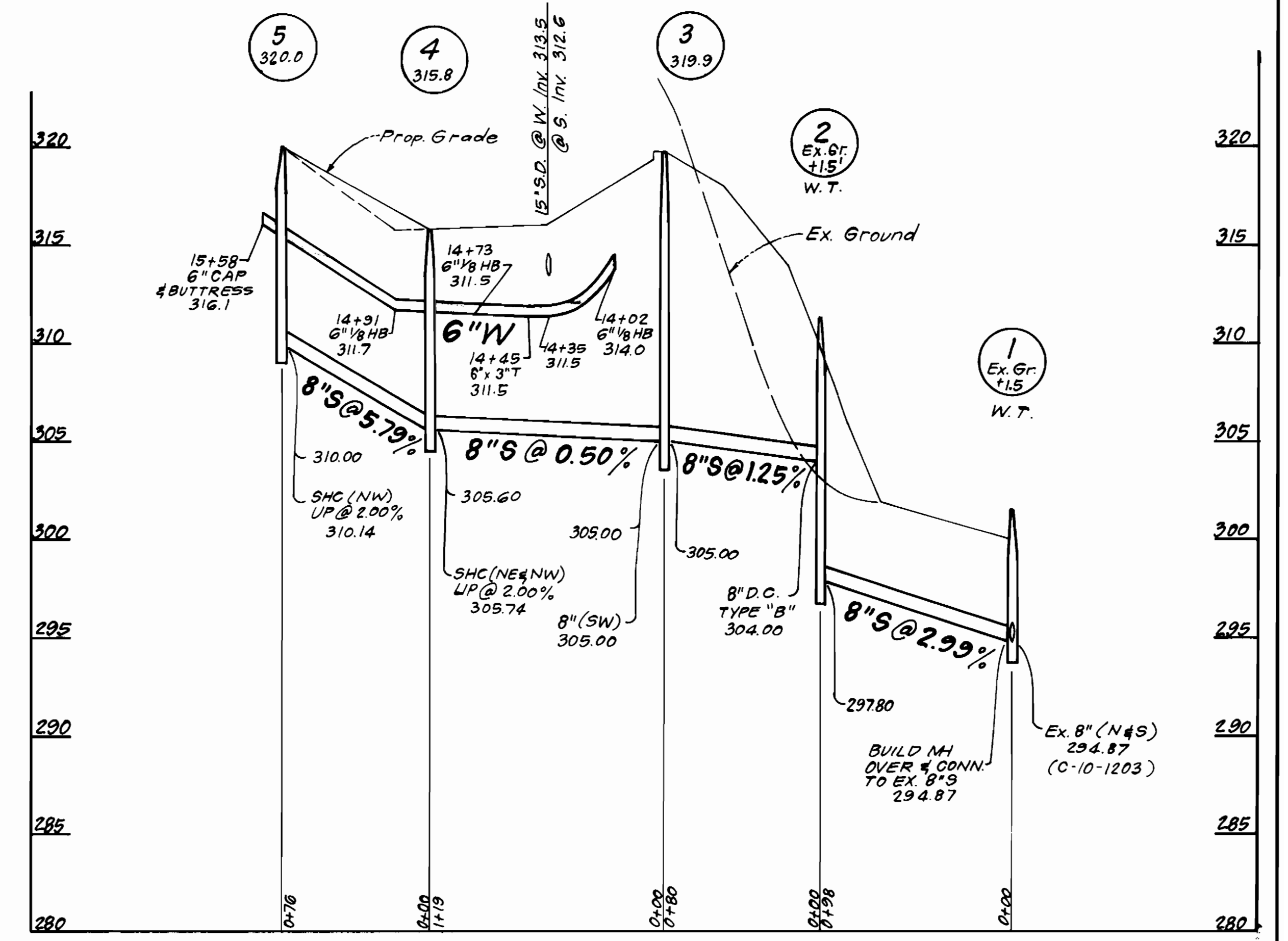
AS-BUILT

EQUALITY
0+00=5+27

OAK WEST DRIVE



NOTE: "W.T." DENOTES WATERTIGHT FRAME AND COVER.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. ...
DIRECTOR OF PUBLIC WORKS
DATE: 11-5-87

William F. ...
CHIEF, BUREAU OF ENGINEERING
DATE: 11-16-87

William F. ...
CHIEF, LAND DEVELOPMENT DIV.
DATE: 11-16-87

CF CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
7135 MINSTREL WAY COLUMBIA, MD. 21045
(BALT) 381-7500
(WASH) 621-8100



DES: V.T.R.			
DRN: V.L.M.			
CHK: V.T.R.			
DATE:	BY:	NO.	REVISION

PROFILES OF
WATER & SEWER MAINS

60' SCALE MAP NO. 25 BLOCK NO.

OAK WEST
SECTION 1 AREA 2
LOTS 12 THRU 80
2ND ELECTION DISTRICT
CONTRACT 14-1723-D

SCALE
HORZ: 1"=50'
VERT: 1"=5'

SHEET
3 OF 3

AS-BUILT