

GENERAL NOTES

PART I - GENERAL

- 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. [North American Datum of 1983 (NAD '83)].
- 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". Clear all poles by 2'-0" minimum or tunnel as required. The owner has contacted the utility companies and has made arrangements for bracing of poles as shown on the drawings. In the event that the contractor's work requires the bracing of additional poles, any cost incurred by the owner for bracing of additional poles or damages shall be deducted from money owed the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
- 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 (Latest Edition). The contractor shall have a copy of Volume IV on the job.
- 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 located by the contractor two weeks in advance of construction operations at his own expense.
- Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

State Highway Administration	531-5533
BG&E Co. Contractor Services	850-4620
BG&E Co. Under Ground Damage Control	787-9068
Miss Utility	1-800-257-7777
Colonial Pipeline Co.	795-1390
Howard County Department of Public Works Bureau of Utilities	313-4900
- 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.
- The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five working days before any open cut of any County road or boring/jacking operation in County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirements per Section 18.114(a) of the Howard County Code.

PART II - WATER

- All water mains to be D.I.P. Class 52 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 restrained and buttressed with concrete in accordance with Standard Details. Soil around the fire hydrant shall be compacted in accordance with Sections 1000 and 1005 of the Standard Specifications.
- The contractor shall not operate any water main valves on the existing water system.
- All water house connections shall be 1" with 3/4" inside meter setting unless otherwise noted on plans or in specifications. WHC's for lots 2-10, 13, 14 and 20-22 will require Pressure Reducing Valves.
- For sprinkler system for all townhomes or multi-family dwelling units shall have a minimum of 1" connection with a 3/4" meter.

PART III - SEWER

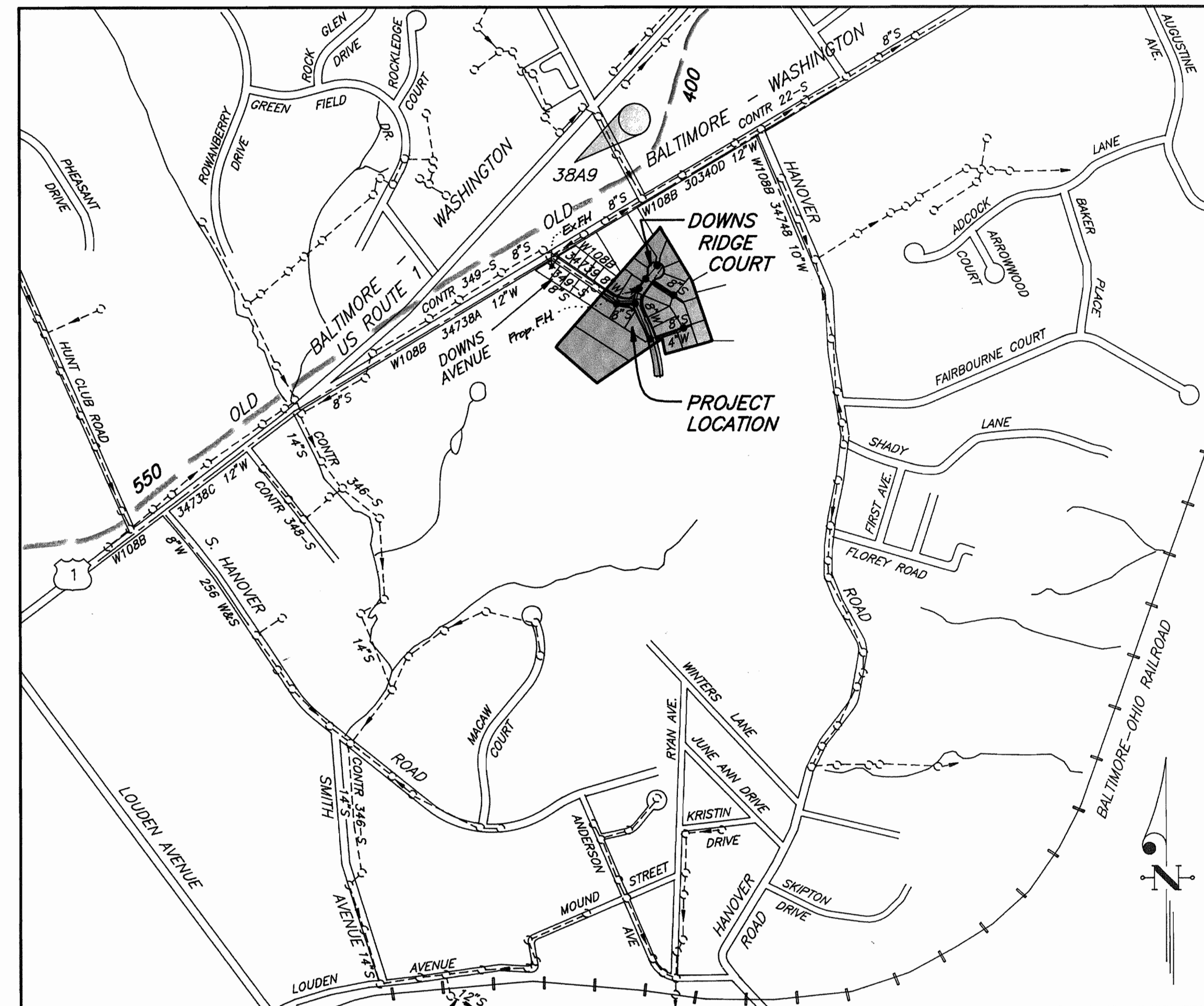
- All sewer mains shall be DIP or P.V.C. unless otherwise noted.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Force mains shall be D.I.P. only.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight 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.
- House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

LOT NO.	INV. @ PL	MIN. CELL.	LOT NO.	INV. @ PL	MIN. CELL.
2	237.3	240.9	13	255.1	258.0
3	248.5	251.9	14	253.6	257.2
4	254.2	257.0	15	255.2	259.2
5	250.7	253.0	16	259.2	263.2
6	250.8	255.0	17	277.6	281.1
7	250.7	253.0	18	274.0	277.4
8	250.8	254.2	19	268.3	271.7
9	250.9	254.6	20	255.2	258.6
10	271.5	275.3	21	245.0	248.3
11	277.4	281.4	22	239.2	242.7
12	271.5	275.9			

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" W	1121 L.F.	1177 L.F.	DIP	Griffin Pipe Products Co.
LAMPHOLE	1 EA.	1 EA.	PVC	JM-Manufacturing
4" W	249 L.F.	250 L.F.	DIP	Griffin Pipe Products Co.
1" WHC	391 L.F.	369 L.F.	K Copper	Cambridge Lee
FIRE HYDRANT	1 EA.	1 EA.	Cast Iron	Mueller Co.
8" S	1933 L.F.	1334 L.F.	PVC	JM-Manufacturing
4" S	480 L.F.	533 L.F.	PVC	JM-Manufacturing
4'-0" MANHOLE	8 EA.	3 EA.	PRECAST CONCRETE	Atlantic Concrete Products, Inc.
1 1/2" WHC	88 L.F.	115 L.F.	K Copper	Cambridge Lee
4" VALVE	1 EA.	1 EA.	CAST IRON	Mueller Co.
8" VALVE	3 EA.	13 EA.	CAST IRON	Mueller Co.

NAME OF UTILITY CONTRACTOR: _____

SURVEY AND DRAFTING DIVISION AS-BUILT DATE: 11-13-97



VICINITY MAP
SCALE: 1" = 600'

WATER & SEWER CODE:
COUNTY USE:
WATER NO.: 401
SEWER NO.: 2150529
TEST GRADIENT: 550

BENCHMARK:
HOWARD COUNTY MONUMENT NO. 38A9
ELEVATION = 222.67

TYPE OF BUILDING	SINGLE FAMILY RESIDENTIAL
NO. OF LOTS/PARCELS	23
NO. OF WATER HOUSE CONNECTIONS	21
NO. OF SEWER HOUSE CONNECTIONS	21
DRAINAGE AREA	PATAPSCO RIVER
TREATMENT PLANT	PATAPSCO W.T.P.

FROM: exsist.	TO:	DIST.	FROM:	TO:	DIST.	FROM:	TO:	DIST.
MH 6273	Lot 2	118'	MH 17	Lot 11	9'	MH 2	Lot 20	105'
MH 1	Lot 2	50'	Lot 17	Lot 11	25'	MH 6	Lot 20	122'
MH 3	Lot 3	19'	MH 8	Lot 12	14'	MH 1	Lot 21	52'
F.H. 1	Lot 3	48'	Lot 10	Lot 12	17'	MH 2	Lot 21	70'
MH 4	Lot 4	20'	MH 3	Lot 13	60'	MH 6273	Lot 22	133'
MH 5	Lot 4	63'	MH 4	Lot 13	53'	MH 1	Lot 22	35'
MH 4	Lot 5	99'	MH 2	Lot 14	68'			
MH 5	Lot 5	44'	F.H. 1	Lot 14	37'			
MH 5	Lot 6	45'	MH 6	Lot 15	123'			
LH 2	Lot 6	123'	MH 2	Lot 15	104'			
MH 5	Lot 7	68'	MH 6	Lot 16	40'			
LH 3	Lot 7	78'	4" M.L. VALVE	Lot 16	45'			
MH 5	Lot 8	68'	MH 7	Lot 17	19'			
MH 3	Lot 8	83'	Lot 11	Lot 17	25'			
MH 4	Lot 9	82'	MH 7	Lot 18	60'			
MH 5	Lot 9	38'	Lot 17	Lot 18	68'			
MH 8	Lot 10	15'	MH 6	Lot 19	127'			
Lot 12	Lot 10	17'	4" VALVE	Lot 19	107'			

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH ROAD CONSTRUCTION PLAN F-96-120 ; DRAWING 5 & 6, SEDIMENT AND EROSION CONTROL.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

John K. Robertson 10/2/96
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:
J. W. Field 10/2/96
HOWARD COUNTY C. D. DATE

CONTRACT NO. 14-3520-D

DOWNS RIDGE

LOTS 2 THRU 24

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

SEWER & WATER AS-BUILT

WATER AS-BUILT

FROM:	TO:	DIST.	FROM:	TO:	DIST.	FROM:	TO:	DIST.	FROM:	TO:	DIST.
MH 6273	Lot 2	105'	MH 4	Lot 8	105'	MH 6	Lot 15	68'	MH 1	Lot 21	43'
MH 1	Lot 2	63'	MH 5	Lot 8	57'	8" M.L. VALVE	Lot 15	77'	MH 2	Lot 21	81'
F.H. 1	Lot 3	38'	MH 4	Lot 9	100'	MH 6	Lot 16	63'	MH 6273	Lot 22	123'
MH 3	Lot 3	20'	MH 5	Lot 9	58'	8" M.L. VALVE	Lot 16	73'	MH 1	Lot 22	44'
MH 4	Lot 4	25'	MH 5	Lot 10	81'	MH 7	Lot 17	25'	MH 2	8" VALVE	15'
MH 5	Lot 4	59'	MH 4	Lot 10	38'	Lot 12	Lot 17	48'	F.H. 1	6" VALVE	27'
MH 4	Lot 5	113'	MH 7	Lot 12	46'	MH 7	Lot 18	27'	MH 5	8" VALVE	47'
MH 5	Lot 5	44'	Lot 12	Lot 12	46'	Lot 12	Lot 18	44'	LH 9	8" VALVE	95'
MH 4	Lot 6	115'	MH 3	Lot 13	52'	MH 6	Lot 19	117'	MH 6	8" VALVE	218'
MH 5	Lot 6	45'	MH 4	Lot 13	62'	8" M.L. VALVE	Lot 19	100'	MH 6	4" VALVE	21'
MH 5	Lot 7	48'	F.H. 1	Lot 14	37'	MH 6	Lot 20	132'	Lot 16	4" VALVE	73'
LH 9	Lot 7	104'	MH 2	Lot 14	66'	MH 2	Lot 20	95'	F.H. 1	6" VALVE	21'
									MH 2	6" VALVE	33'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

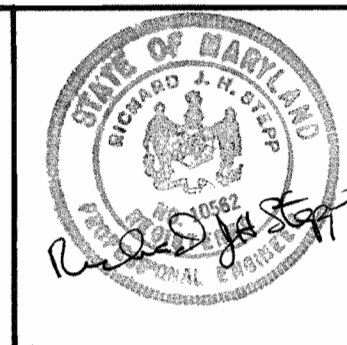
Robert Berman 9-27-96
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

William Dammann 10/2/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

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

7135 MINSTREL WAY COLUMBIA, MD 21045
(410) 381-7500 BALT. (301) 621-8100 WASH.



DES:	RJS	Approved revision shown	10-24-97
DRN:	PS		
CHK:	JTR	CFS 3 Add WHC to serve Lot 11 - Abandon Ex. WHC to Lot 11	10-2-00
		CFS 2 Revise Inv @ R. and Min. Cel. Elev. for lots 14, 15, 16, 18, 19, 20	11-6-97
DATE:	MARCH 96	CFS 1 Rev quantities & no. of water hse conn's	11-12-96
BY:	NO.	REVISION	DATE

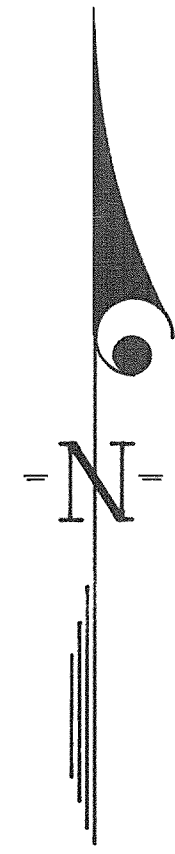
TITLE SHEET

600' SCALE MAP NO. 38 BLOCK NO. 8

**DOWNS RIDGE
LOTS 2 THRU 24
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT No. 14-3520-D**

SCALE:
AS SHOWN

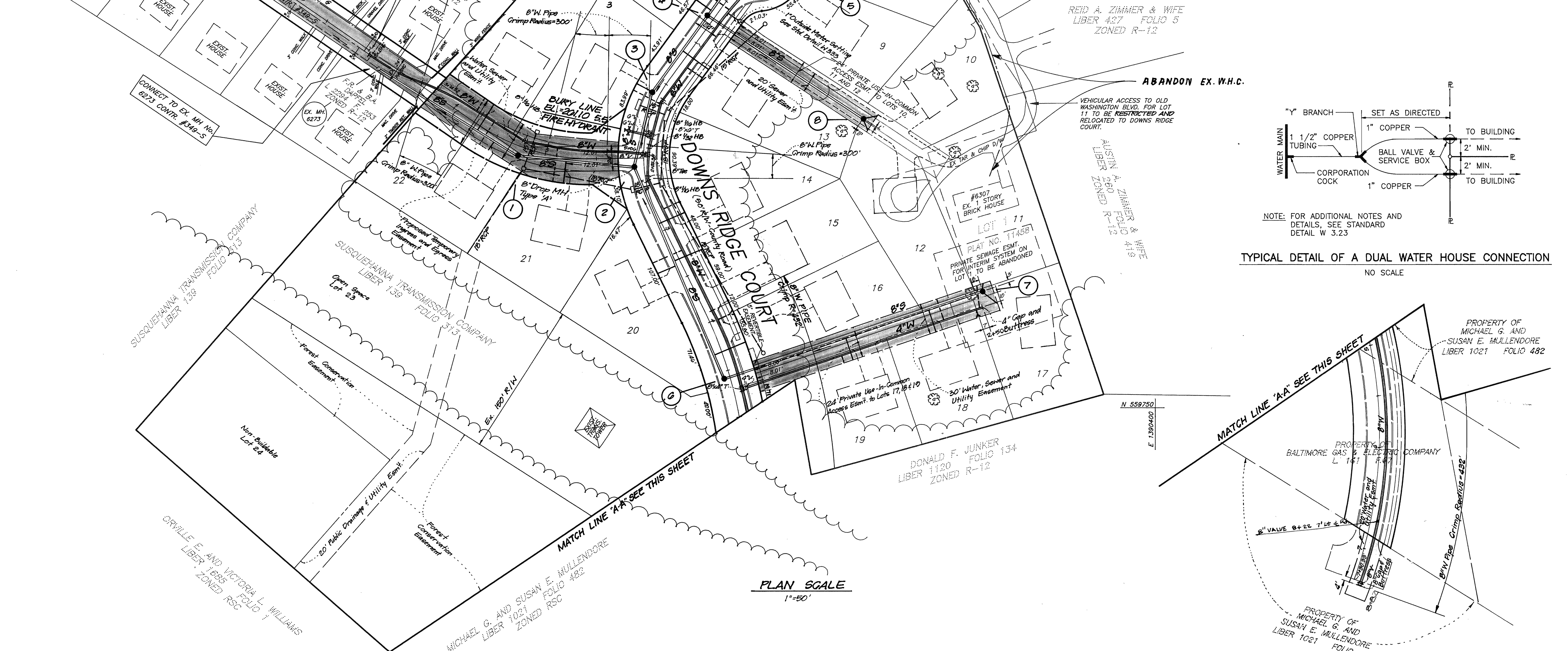
SHEET
1 OF 3



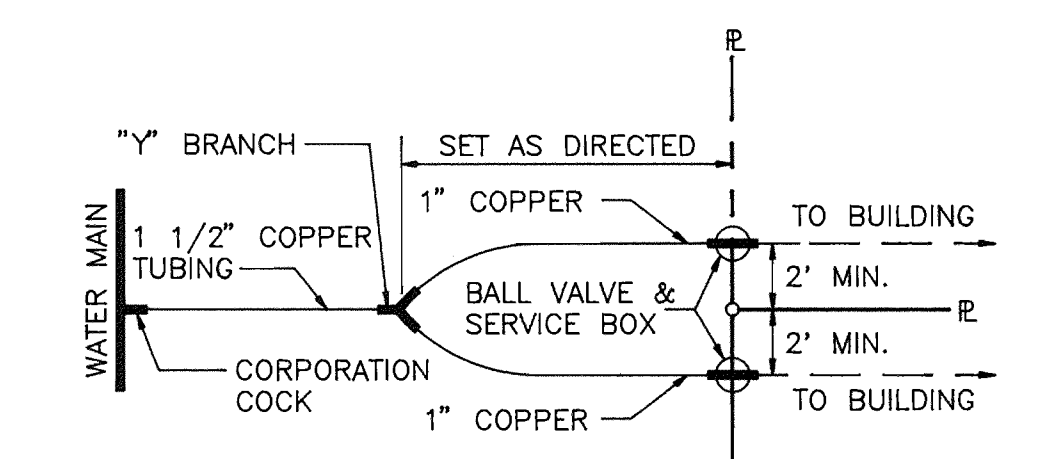
OLD WASHINGTON BOULEVARD
 EX. 12" W CONTR. # 24730
 EX. 8" S CONTR. # 24945

DOWN'S AVENUE
 EXIST. 40' R/W
 EXIST. 8" WATER CONTR. # 24730 and 24945
 EXIST. 12" SEWER CONTR. # 24945

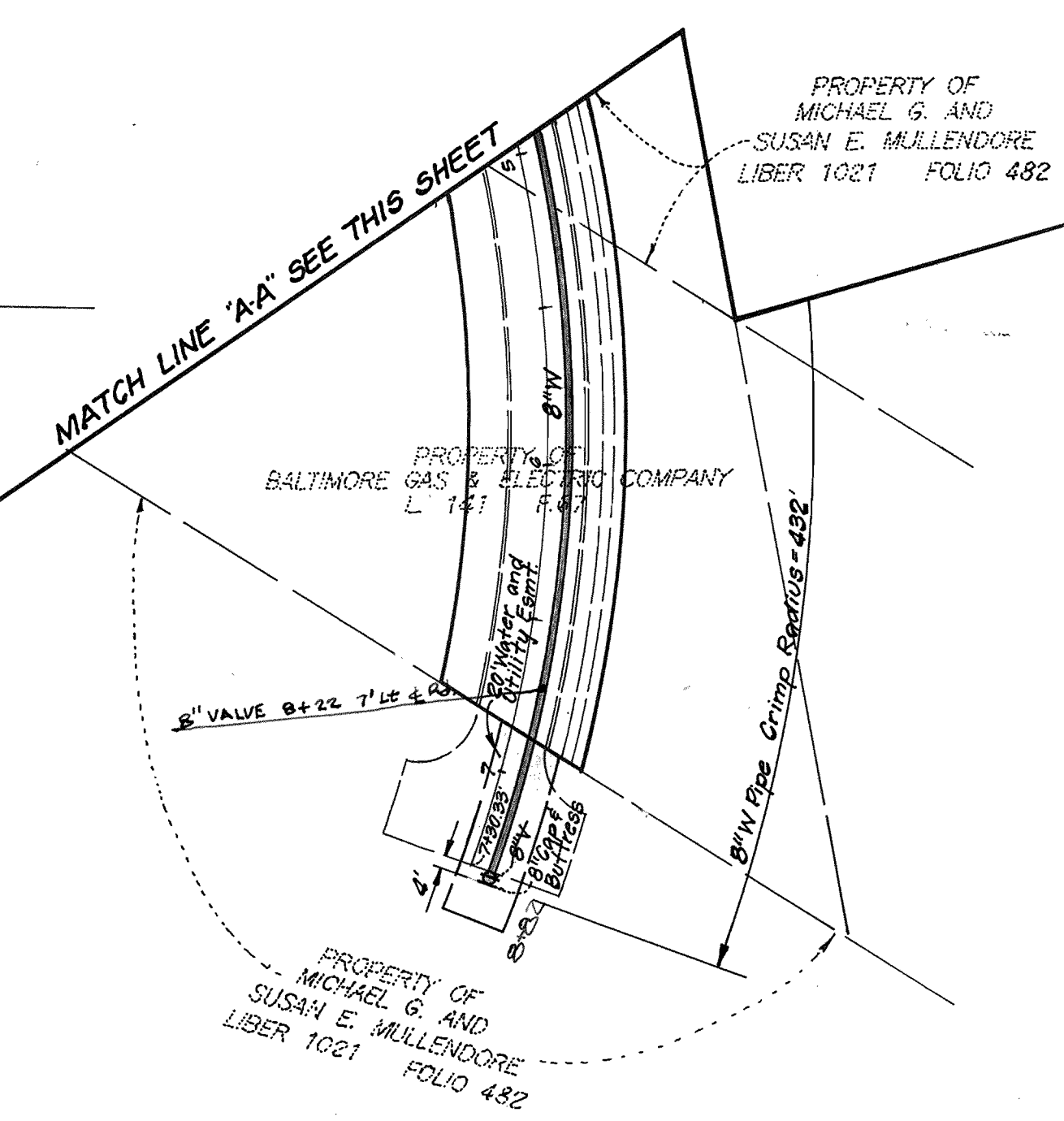
DOWN'S RIDGE COURT
 EX. 12" W CONTR. # 24730
 EX. 8" S CONTR. # 24945



STAKEOUT TABLE			
STREET	Q STA.	OFFSET	REMARKS
DOWNS RIDGE COURT	0-39.52	31.11' LT	8" 1/32 HB
	0-02	7' RT	MH No. 5
	0+71.35	7' RT	MH No. 4
	1+63	8' RT	MH No. 3
	1+66	4' LT	8" 1/16 HB
	1+78	6' LT	8" W @ SD CROSSING
	2+04	7' LT	8" x 6" FHT
	2+04	16.1' RT	FIRE HYDRANT
	2+14	5' LT	8" 1/32 HB
	2+23	5' LT	8" x 8" TEE
2+35	9' RT	MH No. 2	
2+46	2' LT	8" 1/16 HB	
2+53	3' LT	8" W @ SD CROSSING	
4+55.64	6' RT	MH No. 6	
4+69.71	7' LT	8" x 4" TEE	
7+94.93	7' LT	8" CAP AND BUTTRISS	
DOWN'S AVE. (EXT.)	4+75	8' RT	MH No. 1
	4+77	6' LT	8" 1/16 HB
	4+86	7' LT	8" W @ SD CROSSING



NOTE: FOR ADDITIONAL NOTES AND DETAILS, SEE STANDARD DETAIL W 3.23
 TYPICAL DETAIL OF A DUAL WATER HOUSE CONNECTION
 NO SCALE

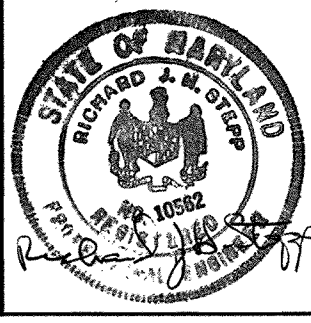


PLAN SCALE
 1"=50'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Chief, Bureau of Utilities
 9-27-96

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 Chief, Development Engineering Division
 10/3/96

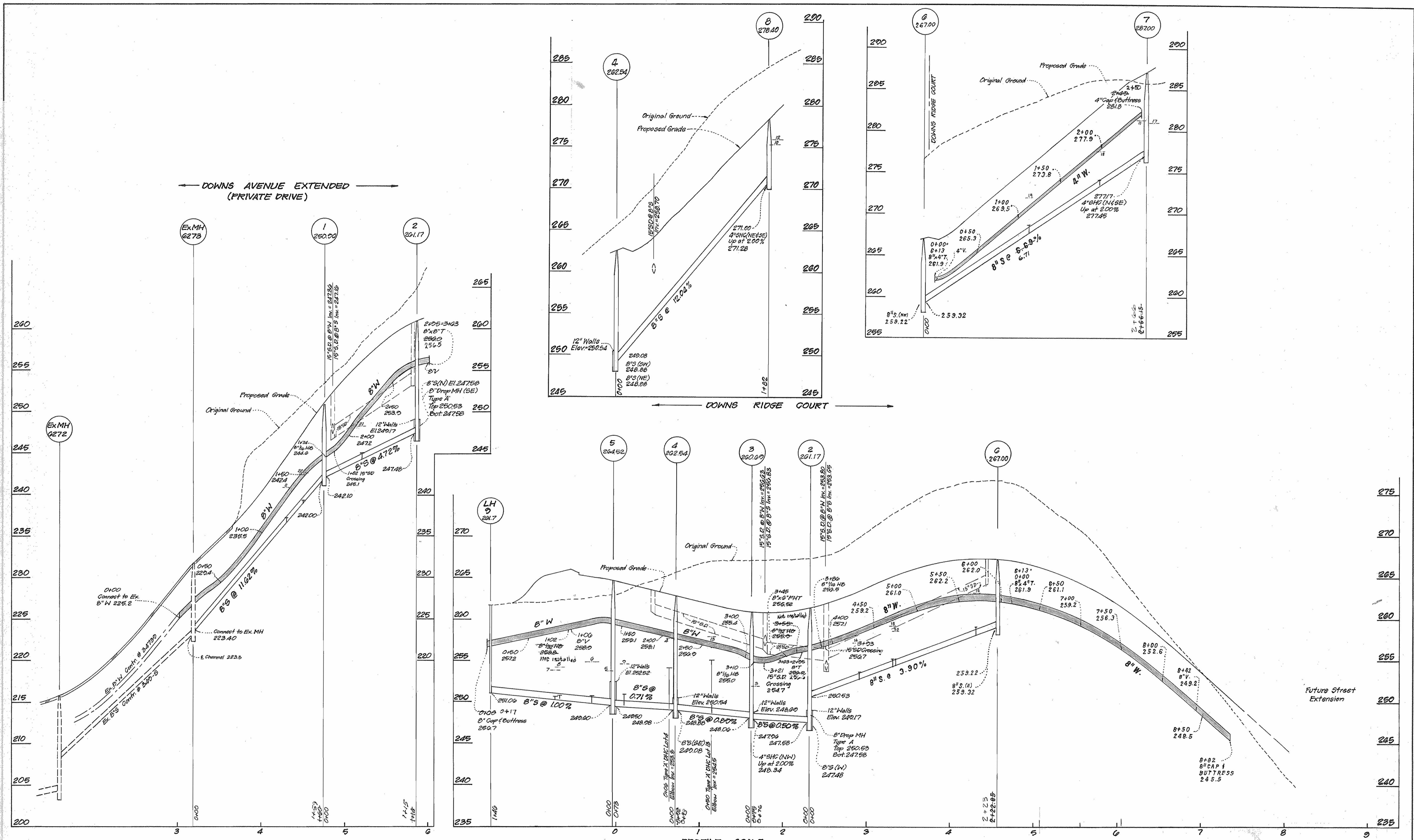
CLARK · FINEROCK & SACKETT, INC.
 ENGINEERS · PLANNERS · SURVEYORS
 7135 MINSTREL WAY COLUMBIA, MD 21045
 (410) 381-7500 BALT. (301) 621-8100 WASH.



DES: RUS				
DRN: PS				
CHK: JTR	CFS 3	Add WHC to Lot 11 - Abandon Ex. WHC to Lot 11	10-2-00	
DATE: MARCH 90	CFS 1	Added Ex. WHC to Lot 11, Delete Prop. WHC to Lot 11	11-12-96	
	BY NO.	REVISION	DATE	

WATER AND SEWER
 PLAN VIEW
 600' SCALE MAP NO. 30 BLOCK NO. 8

SCALE: AS SHOWN
 SHEET 2 OF 3
 DOWNS RIDGE
 LOTS 2 THRU 24
 A RESUBDIVISION OF LOT 1 PARCEL A
 1ST ELECTION DISTRICT
 CONTRACT No. 14-3520-D



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

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 9-27-96
 CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 DATE: 10/3/96
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

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 ENGINEERS · PLANNERS · SURVEYORS
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DES:	RJS		
DRN:	PS		
CHK:	JTR		
DATE:	MARCH 96		
BY	NO.	REVISION	DATE
CFJS	2	Revised 8" W from sta 0+00 to 6+13 to 2+49	11-6-97
CFJS	2	Revised 8" W from sta 4+50 to 8+82	11-6-97
CFJS	2	Revised 8" Sewer grades between MIs 2+8 and 6+7	11-6-97

WATER AND SEWER
 PROFILES
 600' SCALE MAP NO. 38 BLOCK NO. 8

SCALE:
 AS SHOWN
 SHEET
 3 OF 3
 DOWNS RIDGE
 LOTS 2 THRU 4
 A RESUBDIVISION OF LOT 1 PARCEL A
 1ST ELECTION DISTRICT
 CONTRACT No. 14-3520-D