


GENERAL NOTES

- PART I**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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 83/91.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD 88 UNLESS OTHERWISE NOTED ON THE PLANS.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON DRAWINGS IN THE EVENT 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 MONIES OWED TO 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 NOTES 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 OPERATION AT HIS OWN EXPENSE.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
 AT & T 1-800-252-1133
 BOE (CONTRACTOR SERVICE) 410-850-4620
 BOE (UNDERGROUND DAMAGE CONTROL) 410-787-9056
 BUREAU OF UTILITIES 410-313-4900
 COLONIAL PIPELINE CO. 410-795-1390
 MISS UTILITY 1-800-257-7777
 STATE HIGHWAY ADMINISTRATION 410-531-5533
 VERIZON 1-800-743-0033/410-224-9210
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR
 - THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUTTING OR BORING JACKING OF ANY COUNTY ROAD FOR LAYING BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAIN OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DWPW REQUIREMENTS PER SECTION 18.114(c) OF THE HOWARD COUNTY CODE.
 - PROVIDE CAST IRON ROADWAY BOXES FOR WHO BALL VALVE WITHIN PAVED AREAS.

PART II - WATER

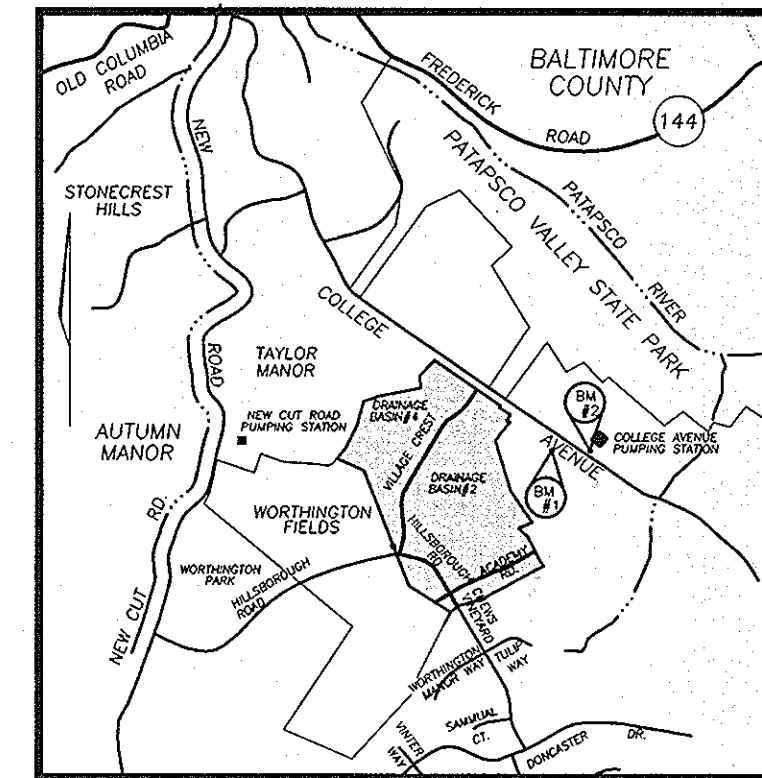
- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS 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 INSTALLED IN ACCORDANCE WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND 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 WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.

PART III - SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAIN 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 WATER TIGHT FRAME AND COVER, STANDARD DETAIL 05.52. WHERE WATER TIGHT MANHOLE FRAMES AND COVERS ARE 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.

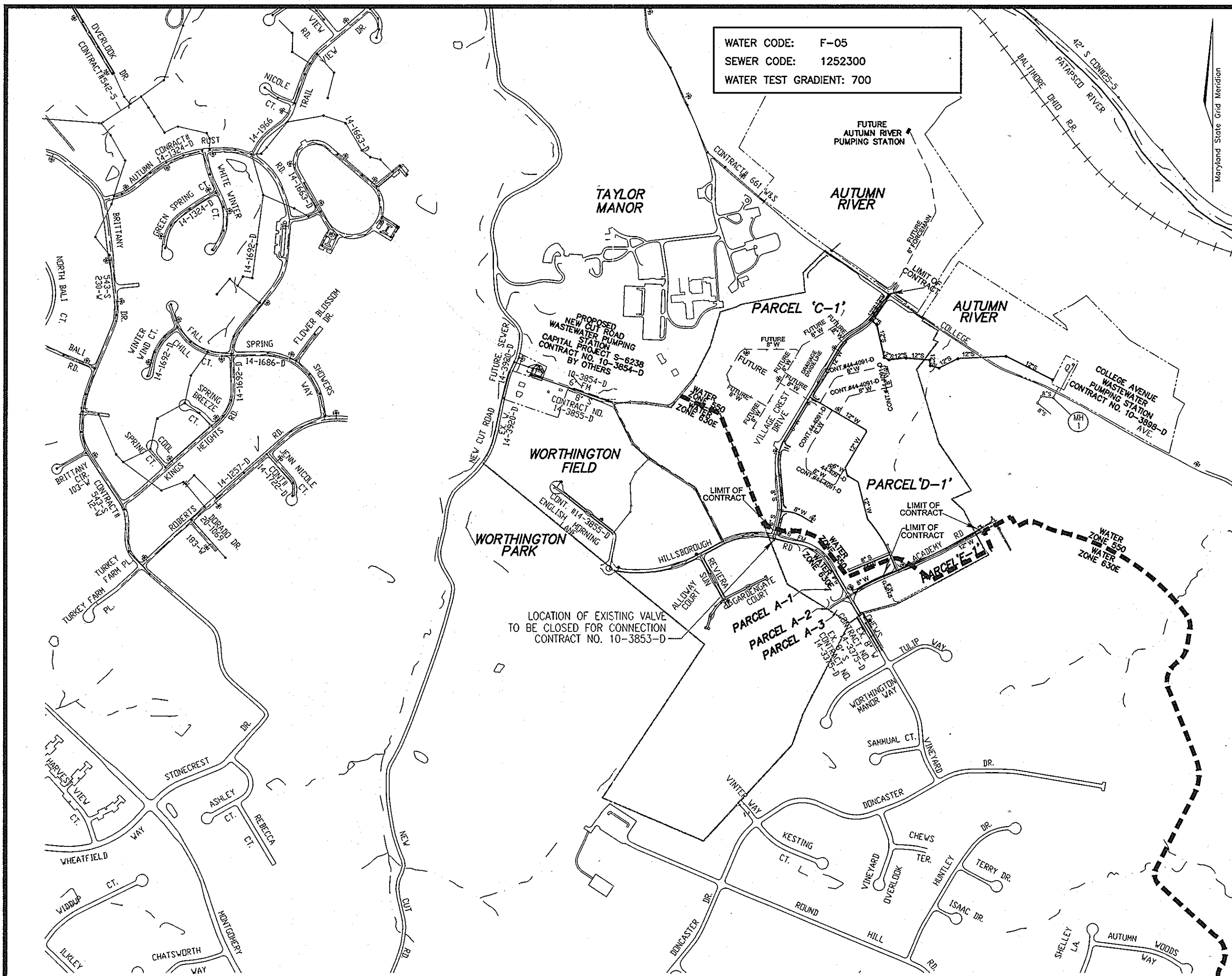
TYPE OF BUILDING:	RESIDENTIAL
NO. OF UNITS/PARCELS:	6 APT. BUILDINGS +51 TOWNHOUSES
NO. OF WATER HOUSE CONNECTIONS:	4(6" WHC) + 45(1" WHC)+6 (EX.1"WHC) CONT#14-3974-D
NO. OF SEWER HOUSE CONNECTIONS:	51(4"SHC)+2(6"SHC)+1(2"WHC)+3(8" SHC)
DRAINAGE AREA:	PATAPSCO
TREATMENT PLANT:	PATAPSCO WRP VIA
	NEW CUT ROAD PUMPING STATION AND COLLEGE AVENUE PUMPING STATION

VILLAGE CREST PARCELS C-1, D-1, AND E-1 HOWARD COUNTY, MARYLAND CONTRACT NO. 14-4034-D



VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS
 BENCHMARK NO. 1: COUNTY CONTROL #3044005R
 3/4" REBAR 0.8' BELOW SURFACE
 N. 578233.92, E. 1373142.33
 ELEV. = 374.389
 BENCHMARK NO. 2: COUNTY CONTROL #3044004R
 3/4" REBAR 0.8' BELOW SURFACE
 N. 578128.03, E. 1373460.71
 ELEV. = 362.575




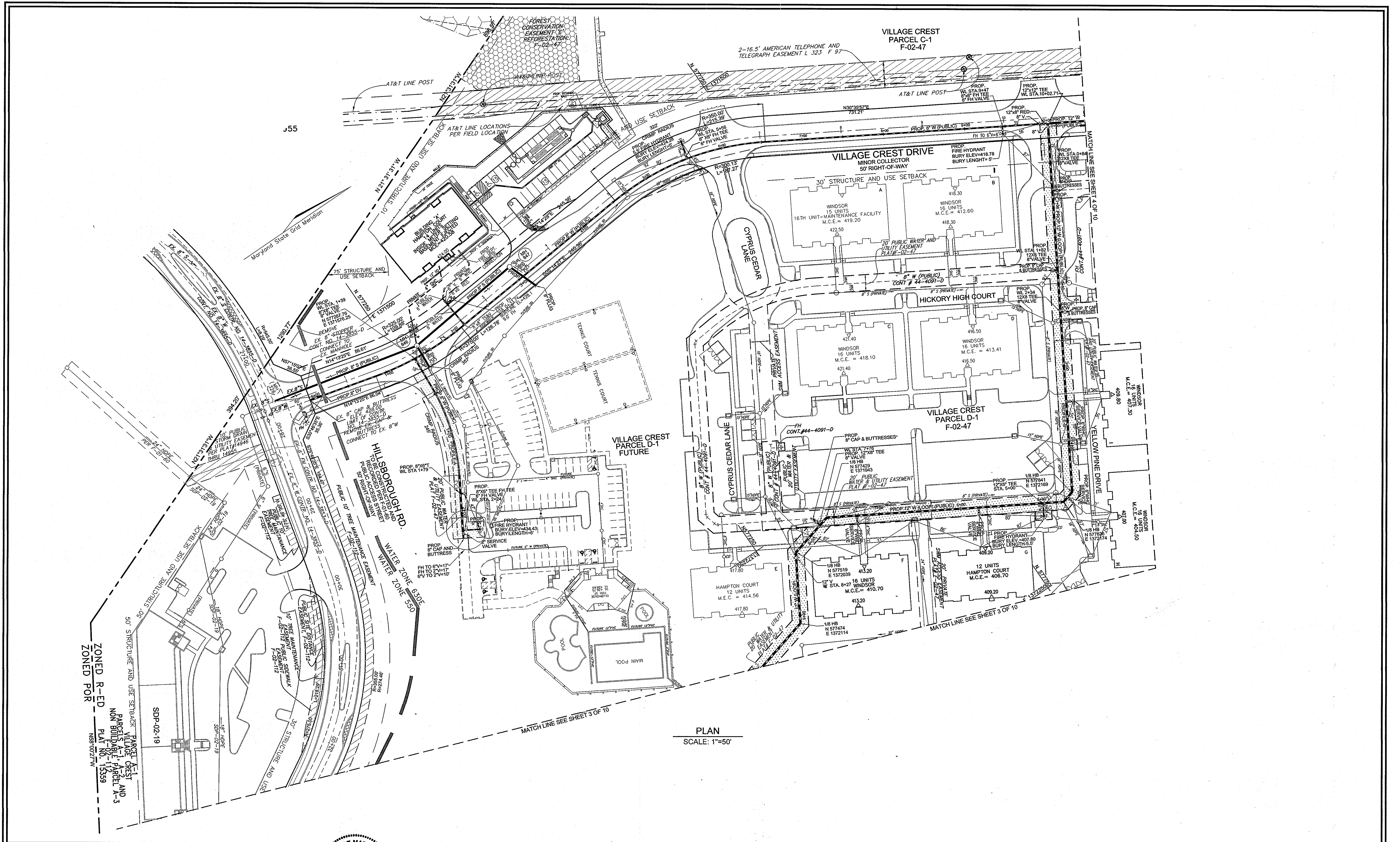
LOCATION PLAN
SCALE: 1"=600'

QUANTITIES				
NAME OF UTILITY CONTRACTOR :				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE :				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
12" W	4,229 LF	4325	OIP CL 52	CRIPPIN PIPE
8" W	1,341 LF	1,352	" "	CRIPPIN
6" W	300 LF	300	" "	CRIPPIN
FIRE HYDRANT	6 EACH	6EA	MUELLER	MUELLER CO.
8" DIVISION VALVE	2 EACH	2EA	M.J.	U.S. PIPE
8"x6" FIRE HYDRANT TEE AND VALVE	3 EACH	3EA	" "	" "
12"x6" FIRE HYDRANT TEE AND VALVE	3 EACH	3EA	" "	" "
12"x8" RED	2 EACH	2EA	" "	" "
12"x12" TEE	1 EACH	1EA	" "	" "
12" VALVE	2 EACH	2EA	" "	" "
12"x8" TEE	4 EACH	4EA	" "	" "
8" VALVE	6 EACH	6EA	" "	" "
8"x8" TEE	1 EACH	1EA	" "	" "
12"x6" TEE	1 EACH	1EA	" "	" "
6" VALVE	1 EACH	1EA	" "	" "
12" CAP & BUTTRESS	2 EACH	2EA	M.J. CAP	" "
8" CAP & BUTTRESS	5 EACH	5EA	" "	" "
6" CAP & BUTTRESS	1 EACH	1EA	" "	" "
12" S	1,797 LF	1,800	P.V.CSDR36	JM MFG.
8" S	1,755 LF	1,765	" "	" "
MANHOLES	23 EACH	23EA	4-FRE CABT	ATLANTIC PRO
1" WHC	1,096 LF	1,110LF	KOOPER	READILD
2" WHC	10 LF	10LF	" "	" "
6" SHC	48 LF	48LF	PVCSDR 25	JM MFG.
4" SHC	916 LF	910LF	" "	" "
8" SHC	70 LF	70LF	" "	" "
12" X 12" T.S. & V	1 EACH	1EA	" "	U.S. PIPE
8"x6" TEE	1 EACH	1EA	PROBAT HJ	ATLANTIC
AIR RELEASE M.H (12")	1 EACH	1EA	" "	U.S. PIPE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH F-02-47 AND WITH THESE PLANS FOR LIMIT OF DISTURBANCE.

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.	REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
<i>Jim Meyer</i> 4/3/03 SOIL CONSERVATION DISTRICT	<i>John L. Davis</i> 4/3/03 U.S. SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND	 FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-8226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia	DES: RJ JTD 6 REVISE QUANTITIES 6/7/12 DRN: RJ KCI 5 ASBUILT DATA SHOWN ON PLAN 11/06/00 CHK: JCO 4 ADD AIR RELEASE MH #13 3 REVISE WATER MAIN 9+50+0 13+50 12.6.04 1 ADD 8"x6" T TO QUANTITIES DATE: MARCH 2003 BY NO. REVISION DATE	TITLE SHEET VILLAGE CREST PARCELS C-1, D-1, AND E-1 CONTRACT NO. 14-4034-D SCALE AS SHOWN SHEET 1 OF 10
CHIEF, BUREAU OF UTILITIES <i>Ruth Berman</i> 4-1-03	CHIEF, DEVELOPMENT ENGINEERING DIVISION <i>Chad Cameron</i> 4/1/03	ROBERT H. VOGEL P.E. NO. 16193	600' SCALE MAP NO. 25 BLOCK NO. 20	TAX MAP 25 BLOCK 20 2ND ELECTION DISTRICT PARCEL P/O '98 HOWARD COUNTY, MARYLAND



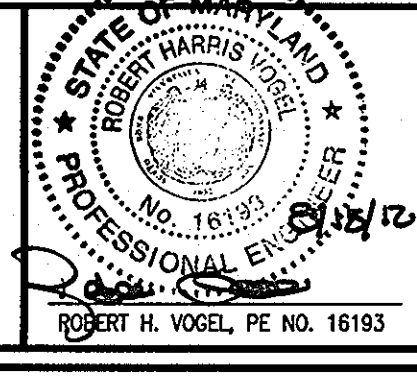
PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Silvia C. Chen
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Robert H. Vogel
CHIEF, DEVELOPMENT ENGINEERING DIVISION



ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET, ELICOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961

DES:	RJ			
DRN:	RJ	JTD 3	ADDED BUILDING, WHC, AND SHC	2/28/12
CHK:	JCO	K.C.I. 2	AS BUILT DATA SHOWN	11/09/06
DATE:	DEC. 2002	BY	NO.	REVISION
			1	ADD 8"X6" T TO WL A

12" WATER	
8" WATER	
8" SEWER	
600' SCALE MAP NO.	25
BLOCK NO.	20

VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT

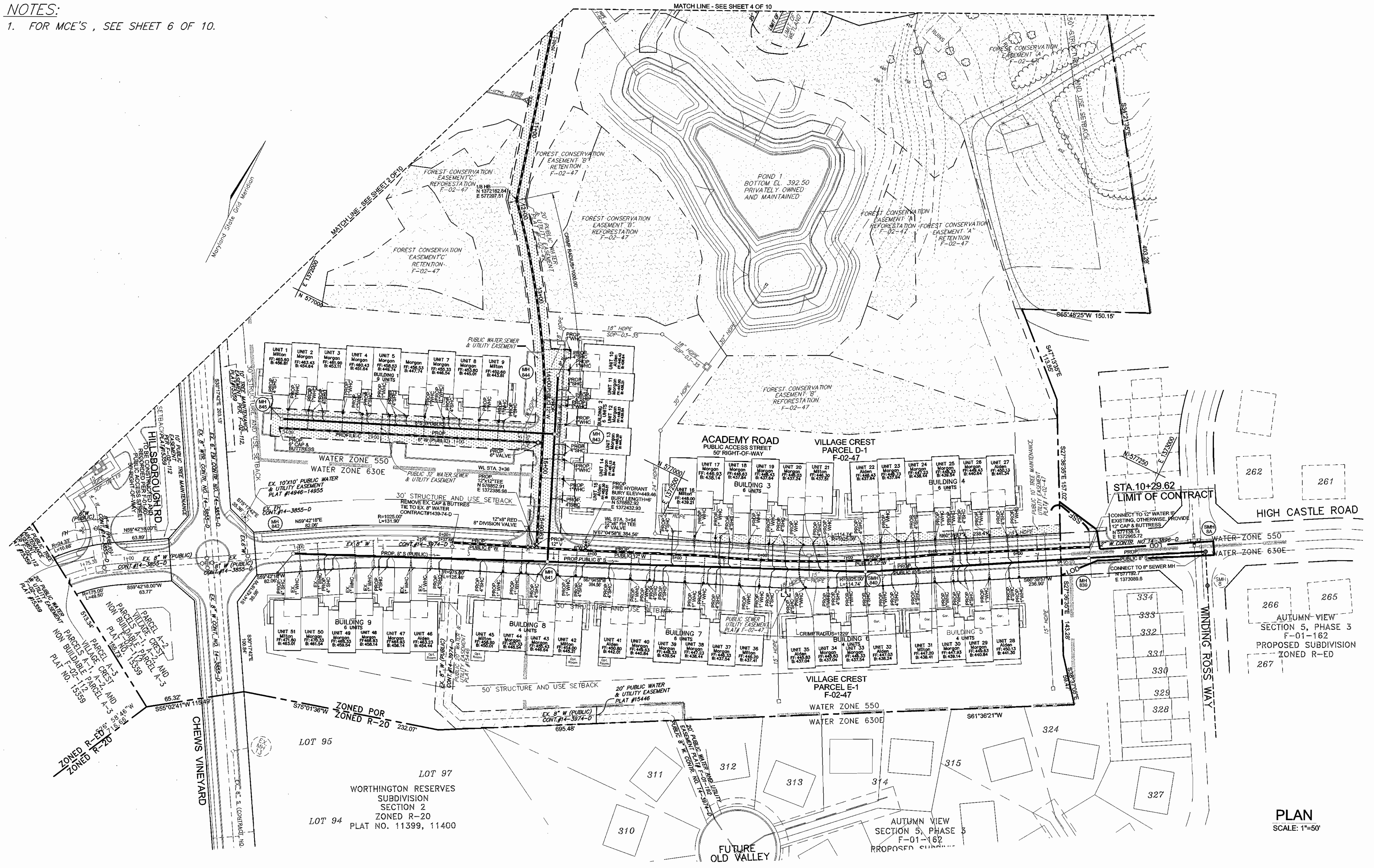
PARCEL PIO '98
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 2 OF 10

NOTES:

1. FOR MCE'S, SEE SHEET 6 OF 10.



PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R.H.S.
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Chad D...
CHIEF, DEVELOPMENT ENGINEERING DIVISION



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-8228
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ	
DRN: RJ	
CHK: JCO	
DATE: DEC. 2002	
BY: NO.	REVISION

12" WATER
8" WATER
8" SEWER

600' SCALE MAP NO. 25 BLOCK NO. 20

VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

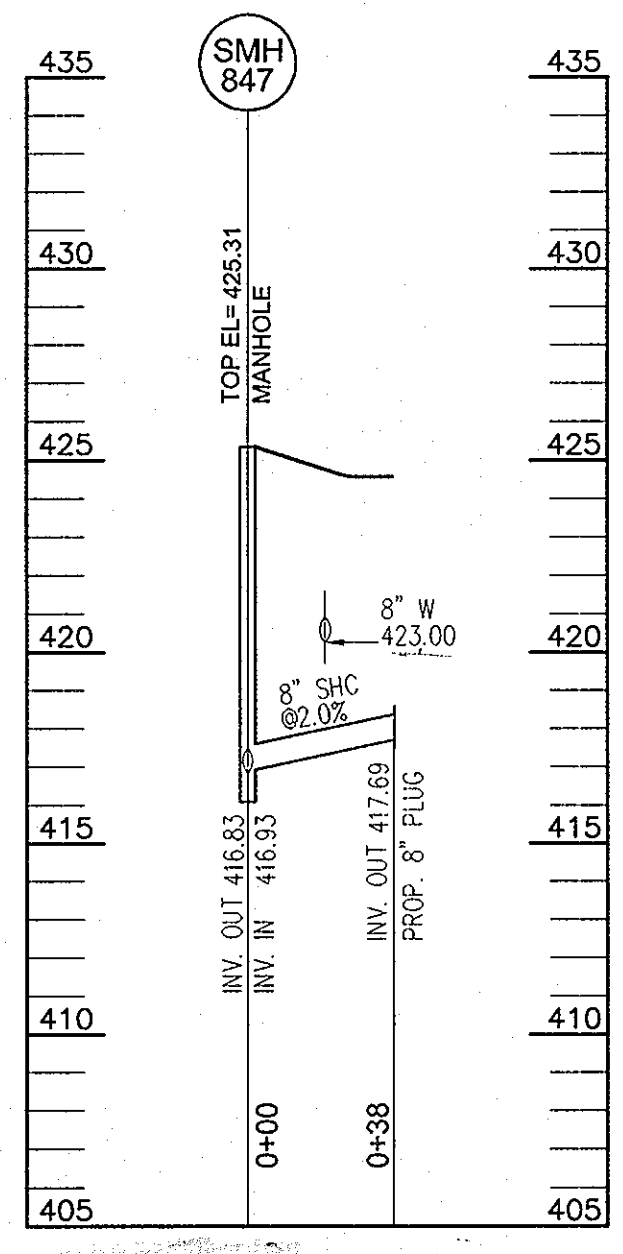
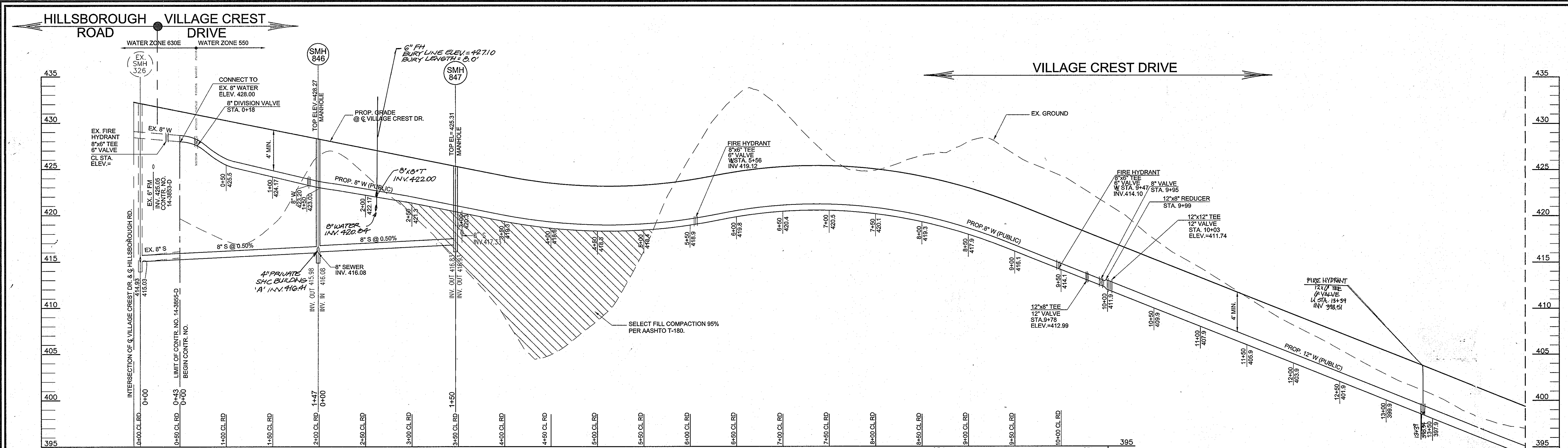
TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT

PARCEL P/O '98
HOWARD COUNTY, MARYLAND

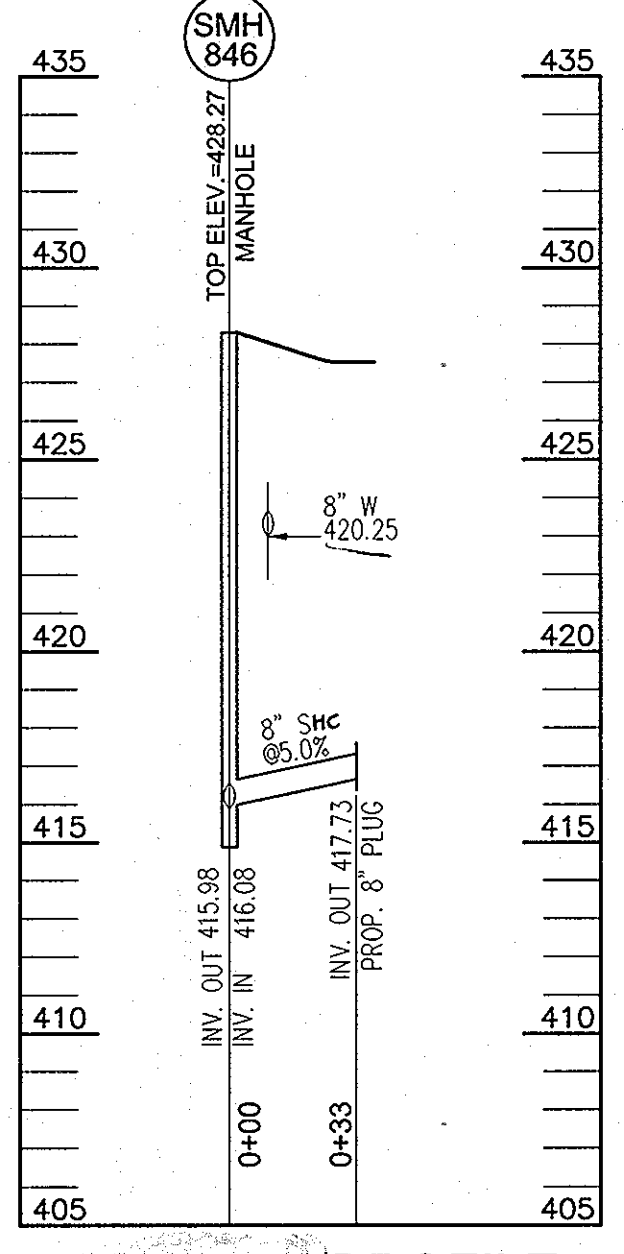
SCALE AS SHOWN

SHEET 3 OF 10

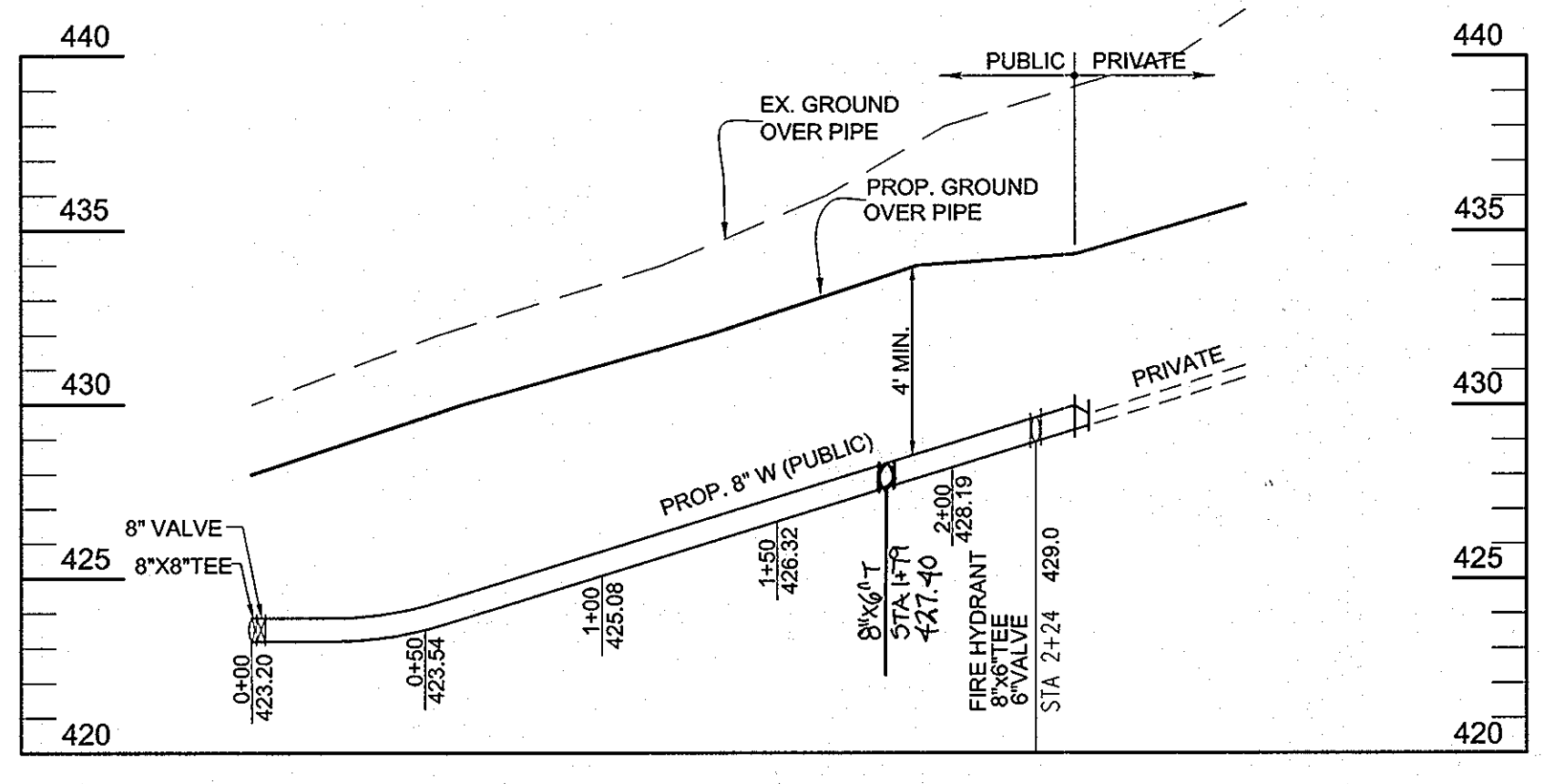
I:\PROJECTS\2018121\ENGR\dwg\FINAL\MS\DWG\PLAN.dwg Tue Apr 08 13:21:29 2003 EA



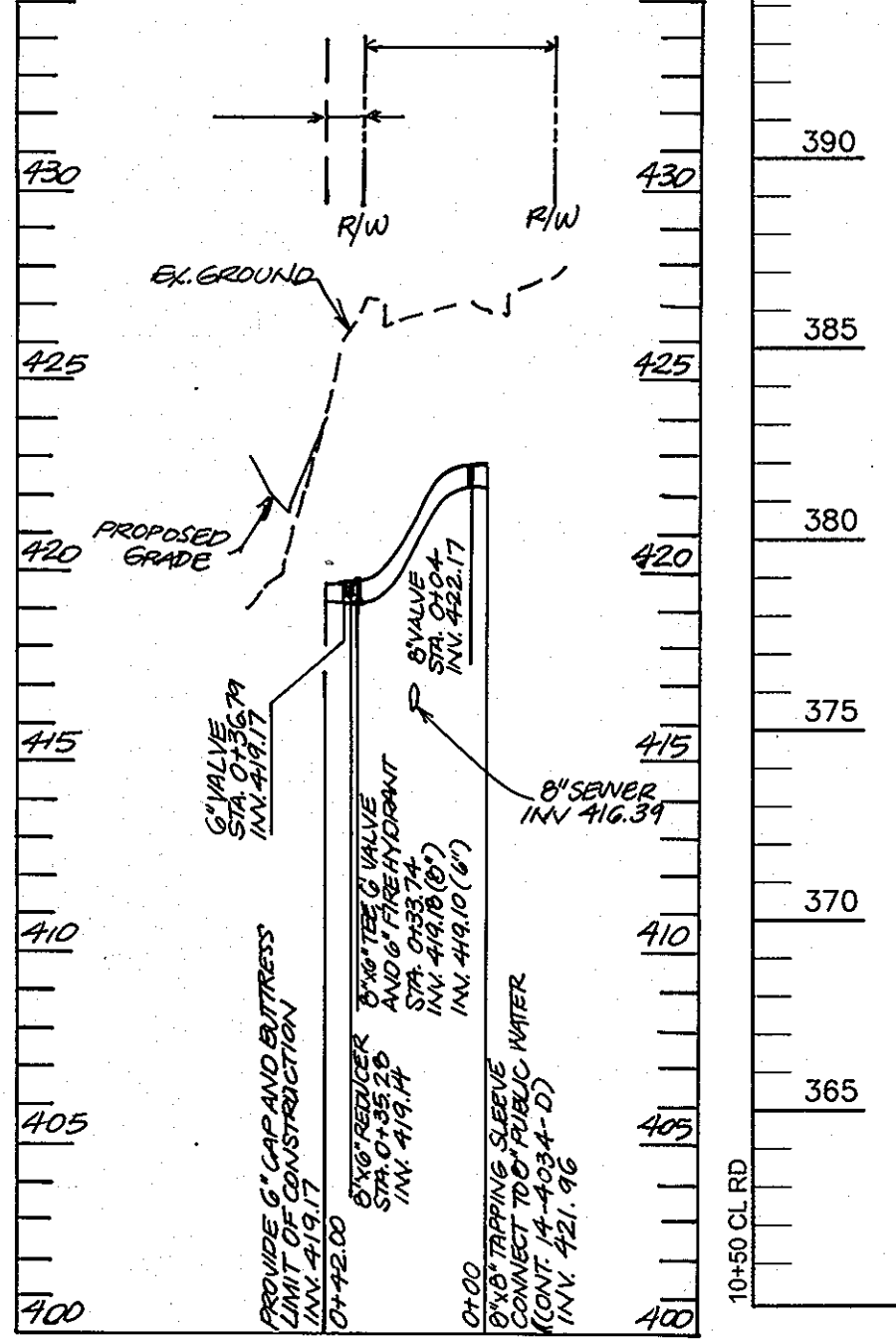
SEWER PROFILE
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.



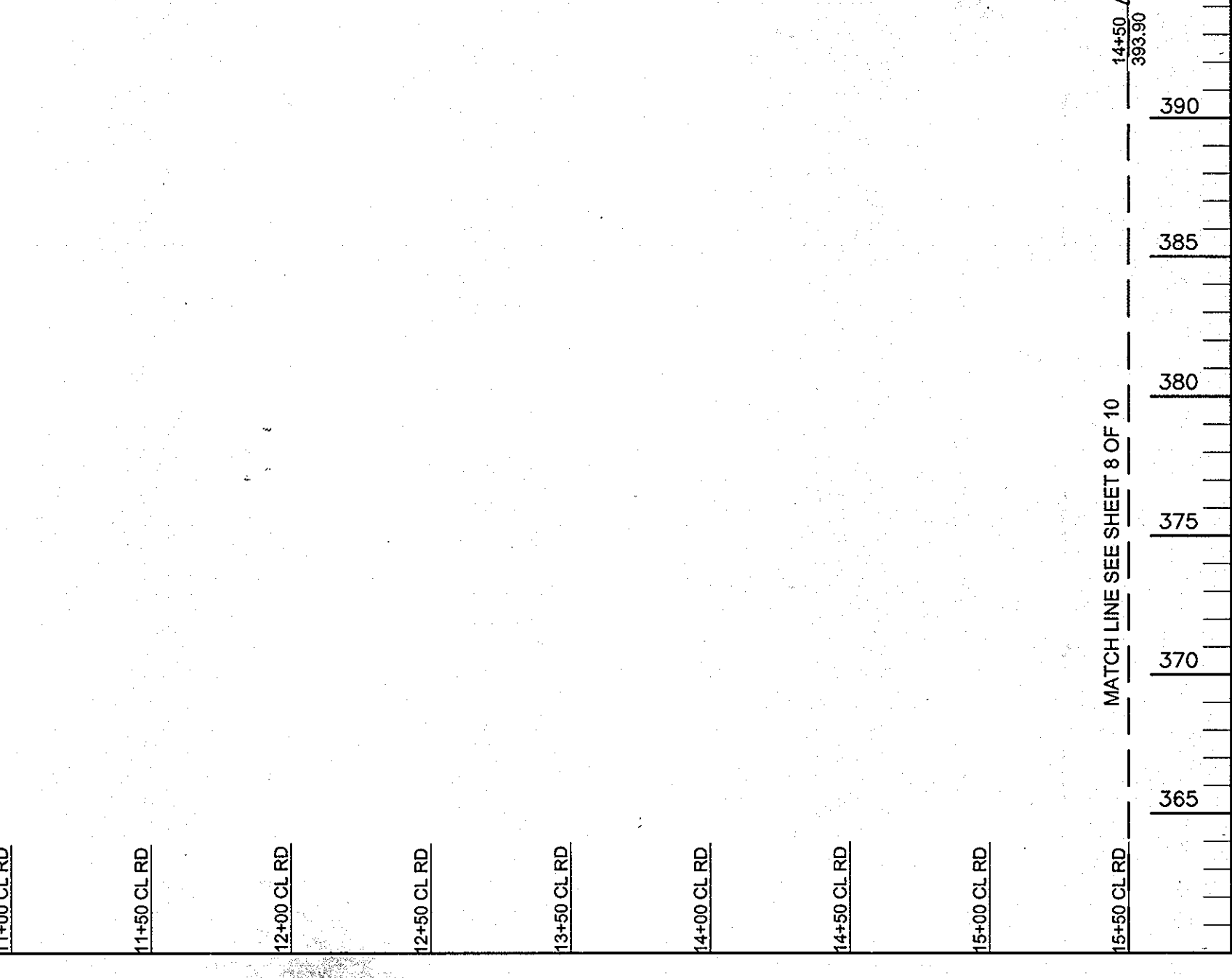
SEWER PROFILE
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.



PROFILE-A WATER PROFILE
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.



PUBLIC WATER PROFILE
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.



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

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND				FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-6226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia		DES: RJ DRN: RJ CHK: JCO DATE: DEC. 2002		<table border="1"> <tr> <th>BY</th> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> <tr> <td>JTD</td> <td>6</td> <td>ADD SHC & WATER PROFILE</td> <td>6/7/12</td> </tr> <tr> <td>JTD</td> <td>7</td> <td>REVISE LOCATION OF FIRE HYDRANT</td> <td>4/2/04</td> </tr> <tr> <td>JTD</td> <td>1</td> <td>ADD 8" X 6" T UL PROFILE A</td> <td></td> </tr> </table>		BY	NO.	REVISION	DATE	JTD	6	ADD SHC & WATER PROFILE	6/7/12	JTD	7	REVISE LOCATION OF FIRE HYDRANT	4/2/04	JTD	1	ADD 8" X 6" T UL PROFILE A		12" WATER 8" WATER 8" SEWER		VILLAGE CREST PARCELS C-1, D-1, AND E-1 CONTRACT NO. 14-4034-D		SCALE AS SHOWN SHEET 5 OF 10	
BY	NO.	REVISION	DATE																														
JTD	6	ADD SHC & WATER PROFILE	6/7/12																														
JTD	7	REVISE LOCATION OF FIRE HYDRANT	4/2/04																														
JTD	1	ADD 8" X 6" T UL PROFILE A																															
CHIEF, BUREAU OF UTILITIES DATE: 4-1-03		CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 4/10/03		ROBERT H. VORHEIS LICENSE NO. 16193		600' SCALE MAP NO. 25 BLOCK NO. 20		TAX MAP 25 BLOCK 20 2ND ELECTION DISTRICT		PARCEL P/O '98 HOWARD COUNTY, MARYLAND																							

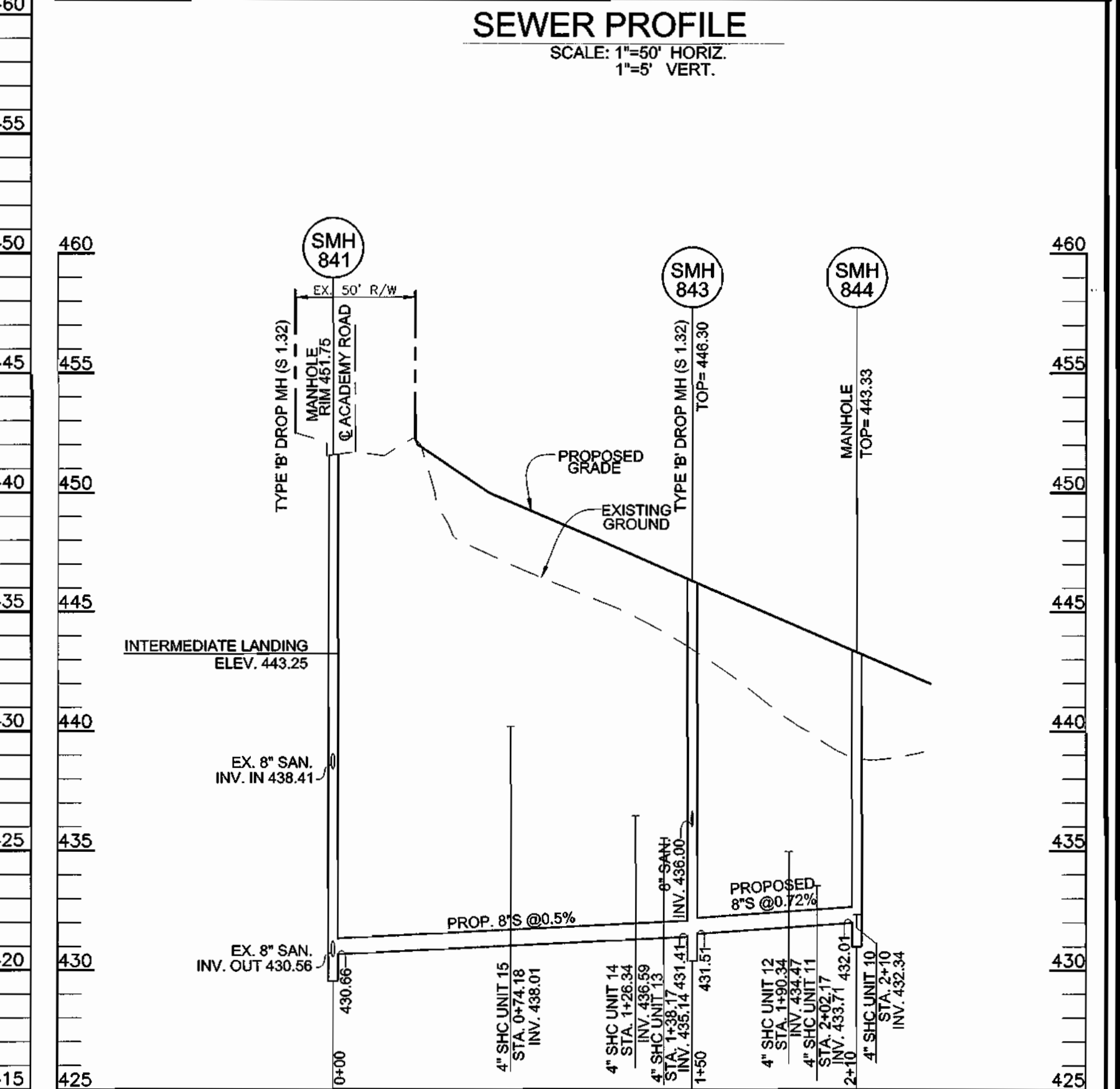
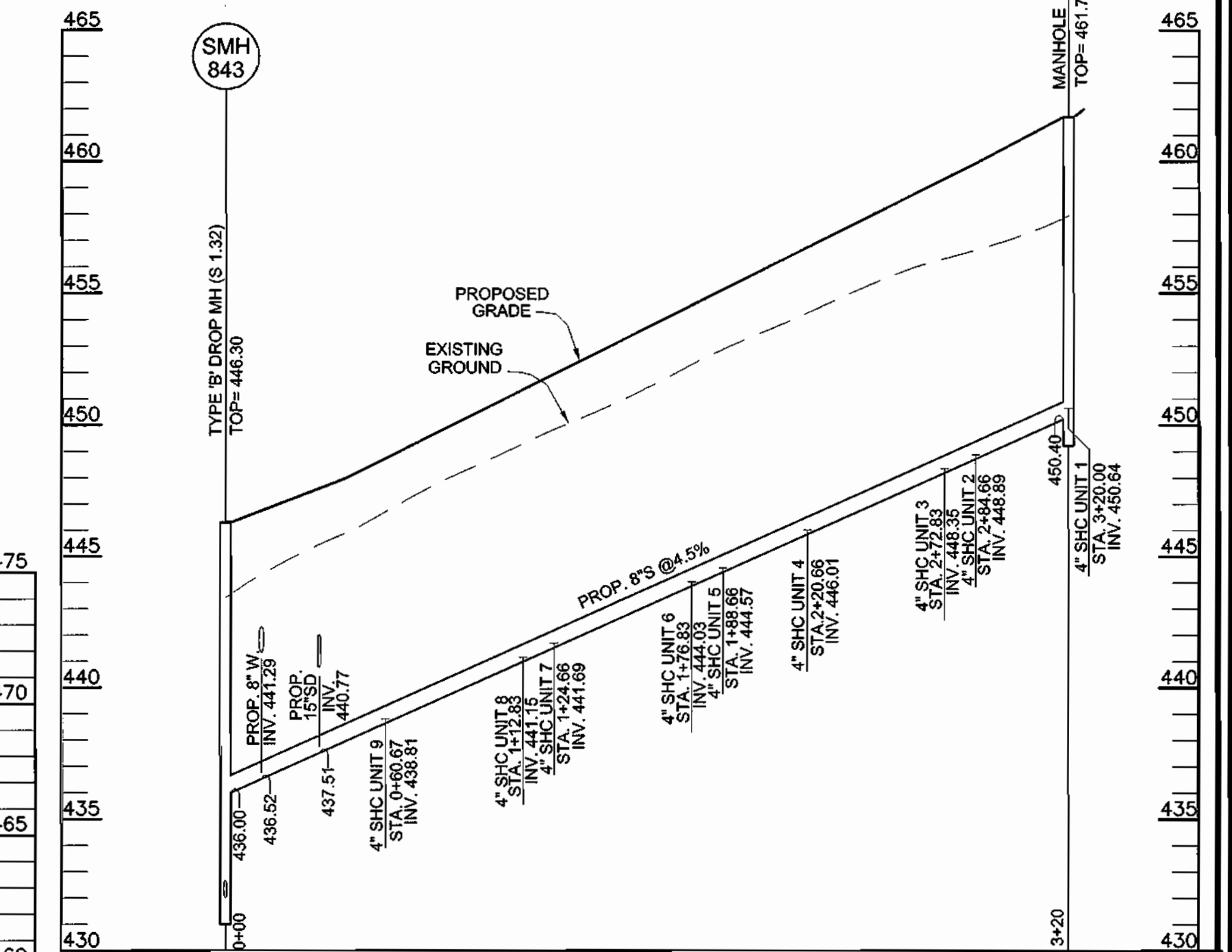
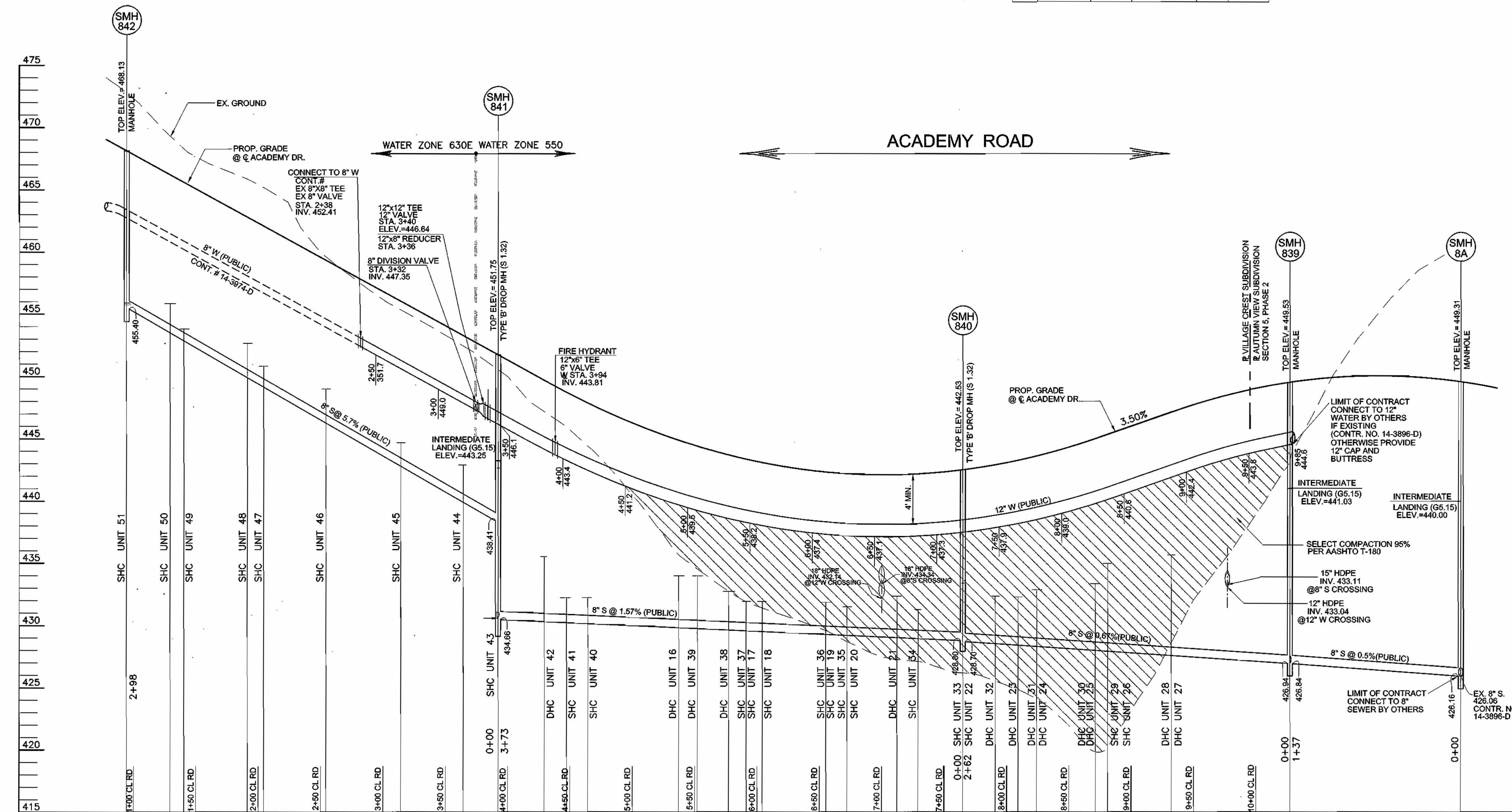
M:\PROJECTS\20181211\Engg\dwg\VT\VALMS\05166PROF.dwg Mod Mar 26 08:43:43 2003 e1w

WATER MAIN TABULATION CHART				
CL. STATION	APPURTENANCE	OFFSET	WL. STATION	APPURTENANCE
VILLAGE CREST DRIVE PROFILE-A				
1+39	8"X6" FH TEE	7.6' LT.	2+24	8"X6" FH TEE
1+39	6" VALVE		2+24	6" VALVE
5+56	8"X6" FH TEE	7' LT.	2+30	8" VALVE
5+56	6" VALVE			
PROFILE-B				
9+47	8"X6" FH TEE	7' LT.		
9+47	6" FH VALVE		0+84	12"X8" TEE
10+50	12"X12" TEE	7' LT.	0+84	8" VALVE
10+46	12"X8" RED.		1+82	12"X8" TEE
10+13	12" V		1+82	8" VALVE
14+03	12"X6" FH TEE	7' LT.	2+34	12"X8" TEE
14+03	6" V		2+34	8" VALVE
19+34	12"X12" TEE	7' LT.	4+98	12"X6" FH TEE
19+34	12" V		4+98	6" VALVE
			7+22	6" VALVE
			7+76	12"X8" TEE
			7+76	8" VALVE
ACADEMY ROAD				
3+94	12"X6" FH TEE	6' LT.	8+62	12" V
3+94	6" V		14+73	12"X6" TEE
3+83	12" V		14+73	6" VALVE
3+79	12"X8" RED.		6' LT.	
3+75	8" DIVISION VALVE		6' LT.	
3+83	12"X12" TEE		10' LT.	
3+37	12"X6" TEE		6' LT.	
3+37	6" V		8' LT.	

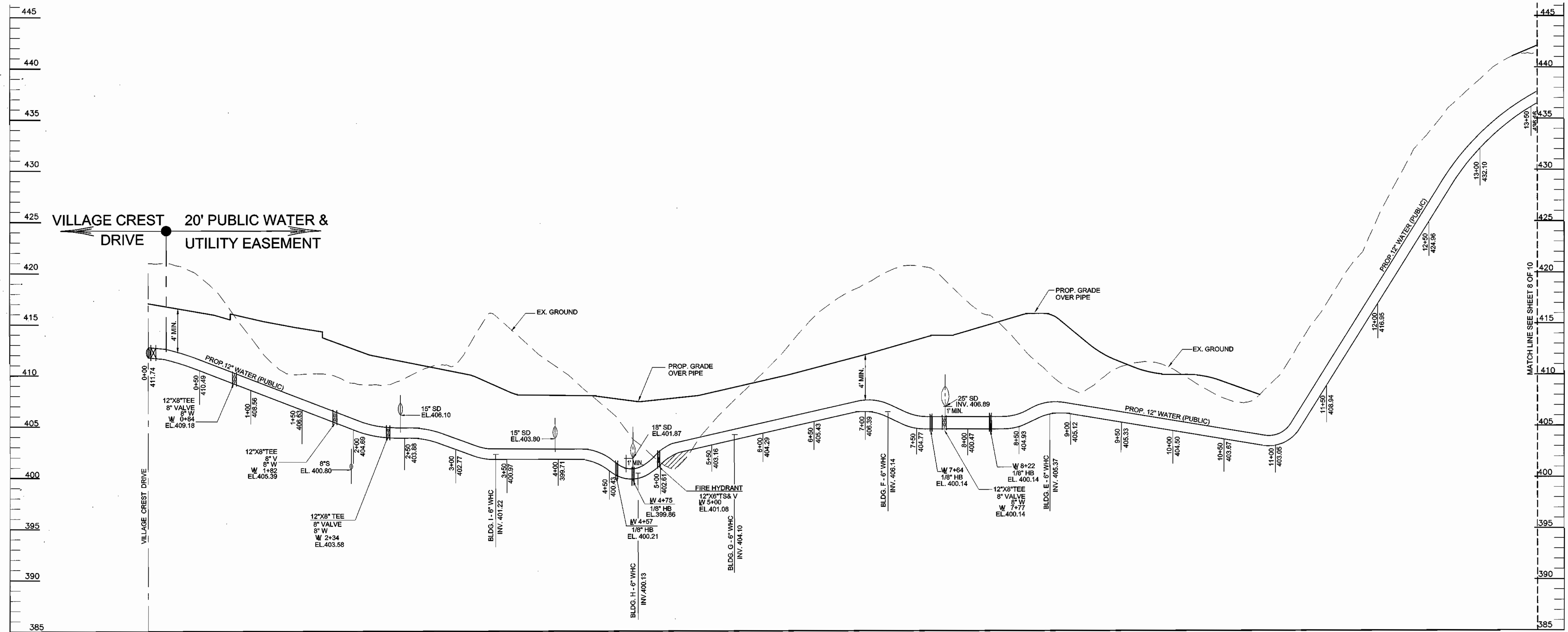
MANHOLE LOCATION CHART						
MANHOLE NO.	TYPE	LOCATION	CL. ROAD STATION	OFFSET	TOP ELEVATION	
SMH 860	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL VILLAGE CREST	19+77	3.3' LT.	385.89	
SMH 859	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL VILLAGE CREST	18+76	6.4' LT.	386.41	
SMH 858	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL VILLAGE CREST	17+58	7.3' LT.	391.55	
SMH 857	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578583.30 E 1372244.71			390.53	
SMH 856	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578352.36 E 1372296.60			394.53	
SMH 855	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578336.53 E 1372330.28			853.00	
SMH 854	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578349.23 E 1372450.26			390.10	
SMH 853	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578337.70 E 1372588.78			365.00	
SMH 852	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578303.90 E 1372591.49			366.14	
SMH 851	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578272.66 E 1372701.15			363.00	
SMH 850	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578345.18 E 1372812.91			367.00	
SMH 849	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578380.26 E 1373140.87			355.50	
SMH 848	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578274.43 E 1373501.37			356.00	
SMH 8A	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 577192.70 E 1373089.60			448.27	
SMH 846	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL VILLAGE CREST	1+47	6' LT.	428.66	
SMH 847	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL VILLAGE CREST	4+17	13' RT.	424.00	
SMH 845	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 576856.02 E 1,372,049.29			461.71	
SMH 844	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 577,043.98 E 1,372,317.24			443.33	
SMH 843	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 576,980.62 E 1,372,344.03			446.30	
SMH 842	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL ACADEMY ROAD	0+44	3' RT.	468.13	
SMH 841	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL ACADEMY ROAD	3+93	9' RT.	451.75	
SMH 840	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL ACADEMY ROAD	7+65	7' RT.	442.53	
SMH 839	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL ACADEMY ROAD	10+28	6' RT.	449.53	

SEWER CONNECTION TABULATION					
LOT NO.	TYPE	ELEVATION @ MANHOLE	ELEVATION @ R/W	M.C.E.	BASEMENT
ACADEMY ROAD					
51	SHC @ 5%	445.90	457.00	461.10	463.01
50	SHC @ 5%	455.85	456.75	461.45	461.54
49	SHC @ 5%	453.80	454.65	459.05	459.54
48	SHC @ 5%	452.85	453.36	457.68	458.14
47	SHC @ 5%	450.84	451.49	456.09	456.14
46	SHC @ 5%	448.10	448.85	453.25	454.44
45	SHC @ 5%	444.68	445.43	449.58	450.01
44	SHC @ 5%	442.91	443.61	447.71	448.54
43	SHC @ 2%	442.68	442.98	446.46	446.64
42	DHC @ 5%	435.54	436.29	440.54	445.21
41	SHC @ 5%	432.74	433.09	437.24	442.01
40	SHC @ 5%	432.09	433.04	437.09	440.84
39	DHC @ 5%	434.00	435.00	439.25	439.54
38	DHC @ 5%	432.74	433.14	436.44	438.44
37	SHC @ 5%	431.94	432.94	437.19	437.54
36	SHC @ 5%	431.87	432.87	437.12	437.41
35	SHC @ 5%	431.50	432.50	436.75	437.04
34	SHC @ 5%	433.67	434.07	437.27	437.04
33	DHC @ 5%	433.40	433.80	438.96	437.54
32	DHC @ 5%	432.36	433.36	437.51	438.24
31	DHC @ 5%	432.87	433.87	437.97	438.41
30	DHC @ 5%	433.36	434.36	438.86	439.14
29	DHC @ 5%	435.00	436.00	440.75	440.84
28	DHC @ 5%	435.66	436.66	440.91	441.50
27	DHC @ 5%	435.66	437.16	441.16	441.34
26	DHC @ 5%	435.00	436.50	440.50	440.64
25	DHC @ 5%	433.36	434.86	439.11	439.54
24	DHC @ 5%	432.87	434.35	438.44	438.44
23	DHC @ 5%	432.30	433.80	437.90	437.84
22	SHC @ 5%	433.40	434.00	437.26	437.64
21	DHC @ 5%	432.17	432.77	435.97	437.51
20	SHC @ 5%	431.50	432.10	435.50	437.24
19	SHC @ 5%	431.87	432.47	435.87	437.64
18	SHC @ 5%	431.94	432.54	435.84	437.84
17	DHC @ 5%	432.74	433.34	437.04	438.14
16	DHC @ 5%	434.00	434.60	438.30	439.21

SEWER CONNECTION TABULATION					
LOT NO.	TYPE	ELEVATION @ MANHOLE	ELEVATION @ R/W	M.C.E.	BASEMENT
ACADEMY ROAD					
15	DHC @ 5%	438.01	438.51	439.51	443.51
14	DHC @ 5%	436.59	437.09	438.34	442.34
13	DHC @ 5%	435.14	435.64	437.14	441.14
12	SHC @ 5%	434.47	434.97	436.22	439.54
11	SHC @ 5%	433.71	434.21	435.71	438.21
10	SHC @ 5%	434.34	434.84	434.14	436.64
9	SHC @ 5%	438.81	439.31	440.31	443.81
8	SHC @ 2%	441.15	441.65	441.85	445.01
7	SHC @ 5%	441.89	442.19	443.69	446.54
6	SHC @ 5%	444.03	444.53	445.28	447.74
5	SHC @ 5%	444.57	445.07	446.57	449.74
4	SHC @ 5%	446.01	446.51	448.01	451.84
3	SHC @ 5%	448.35	448.85	450.10	453.11
2	SHC @ 5%	448.89	449.39	450.89	454.64
1	SHC @ 5%	460.64	461.14	452.24	456.81



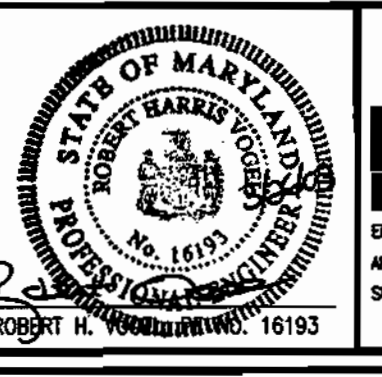
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND				DES: RJ DRN: RJ CHK: JCO DATE: DEC. 2002		12" WATER 8" WATER 8" SEWER		VILLAGE CREST PARCELS C-1, D-1, AND E-1 CONTRACT NO. 14-4034-D		SCALE AS SHOWN SHEET 6 OF 10	
CHIEF, BUREAU OF UTILITIES DATE: 4-1-03		CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE:		ROBERT H. VOSE, P.E. 16193		FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2394 Phone: 410-290-9550 Fax: 410-720-6228 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia		600' SCALE MAP NO. 25 BLOCK NO. 20		TAX MAP 25 BLOCK 20 2ND ELECTION DISTRICT		PARCEL P/O '98 HOWARD COUNTY, MARYLAND	



**PROFILE-B
WATER PROFILE**
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. H. B... 4-1-03
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
... 4/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Worrenton, Virginia

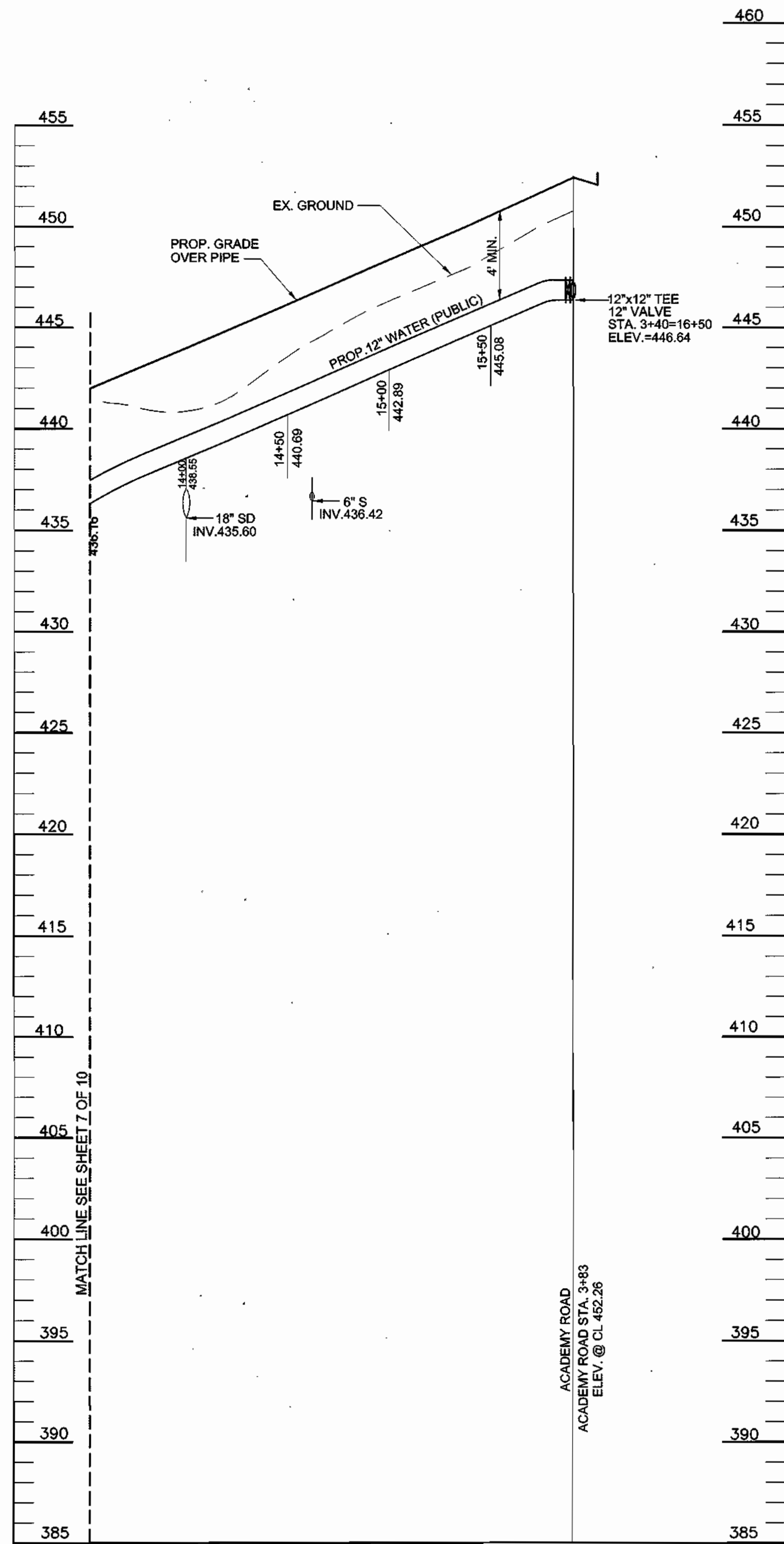
DES: RJ				
DRN: RJ				
CHK: JCO				
DATE: DEC. 2002	BY	NO.	REVISION	DATE

12" WATER
8" WATER
8" SEWER
60' SCALE MAP NO. 25
BLOCK NO. 20

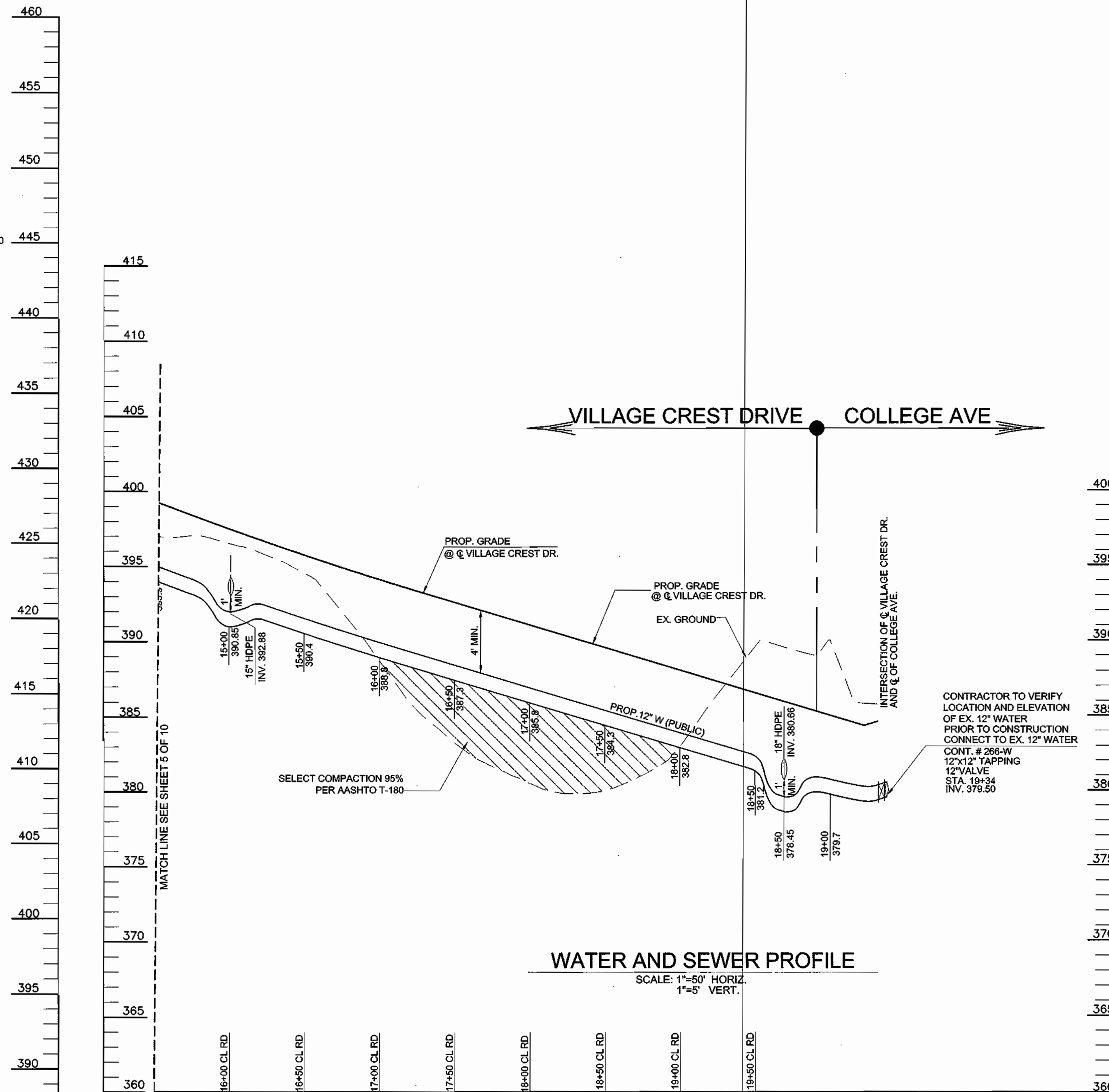
VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D
TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT
PARCEL P/O '98'
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 7 OF 10

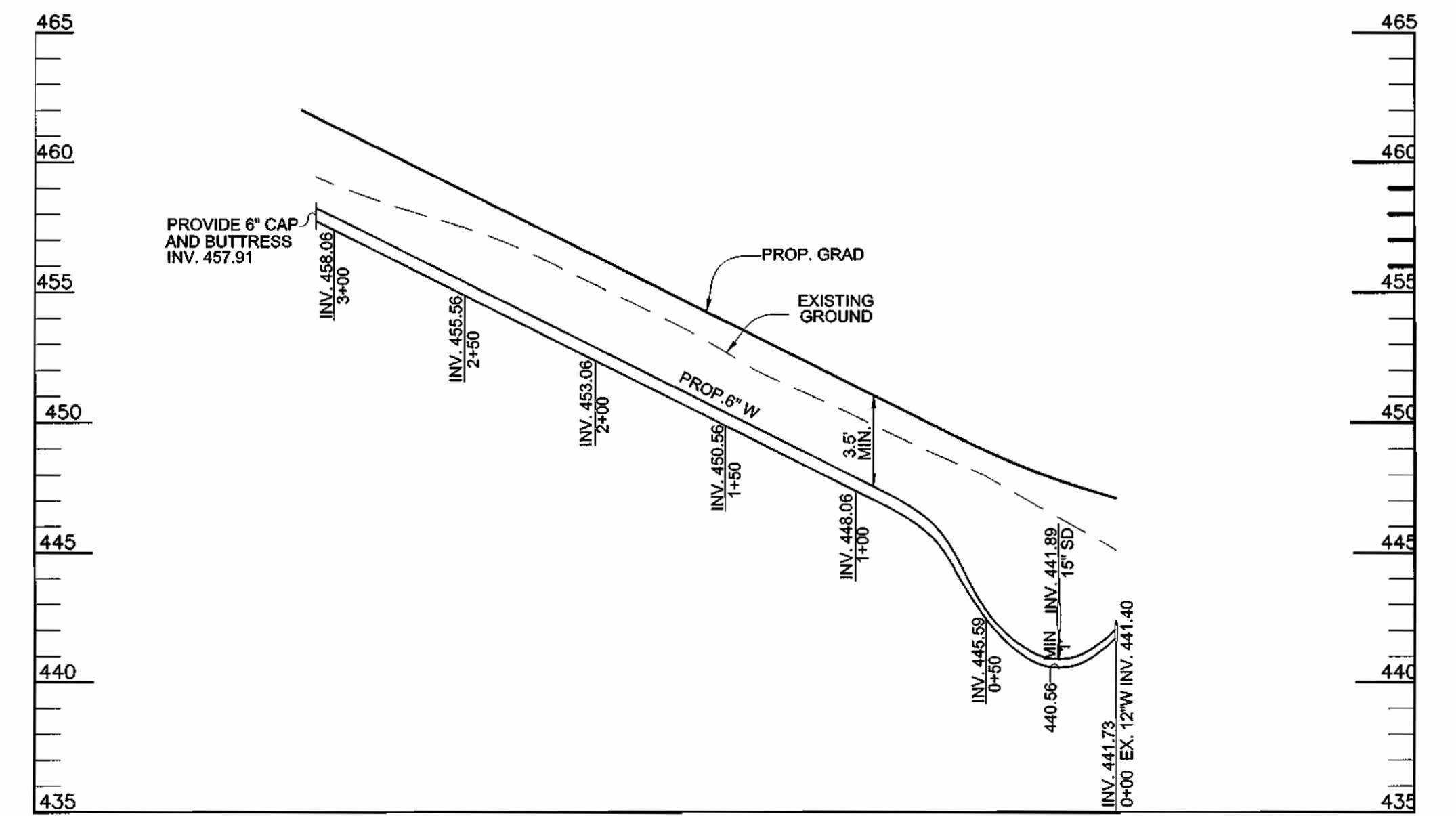
K:\PROJECTS\20181211\Eng\dwg\CD\HLS\0765PROF.dwg Mod Mar. 26. 09. 16. 23. 2003 e14



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



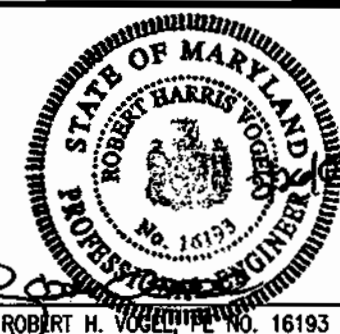
WATER AND SEWER PROFILE
SCALE: 1"=50' HORIZ.
1"=5' VERT.



PROFILE-C WATER PROFILE
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Worrenton, Virginia

DES: RJ					
DRN: RJ					
CHK: JCO					
DATE: DEC. 2002	BY	NO.	REVISION	DATE	

12" WATER
8" WATER
8" SEWER

VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

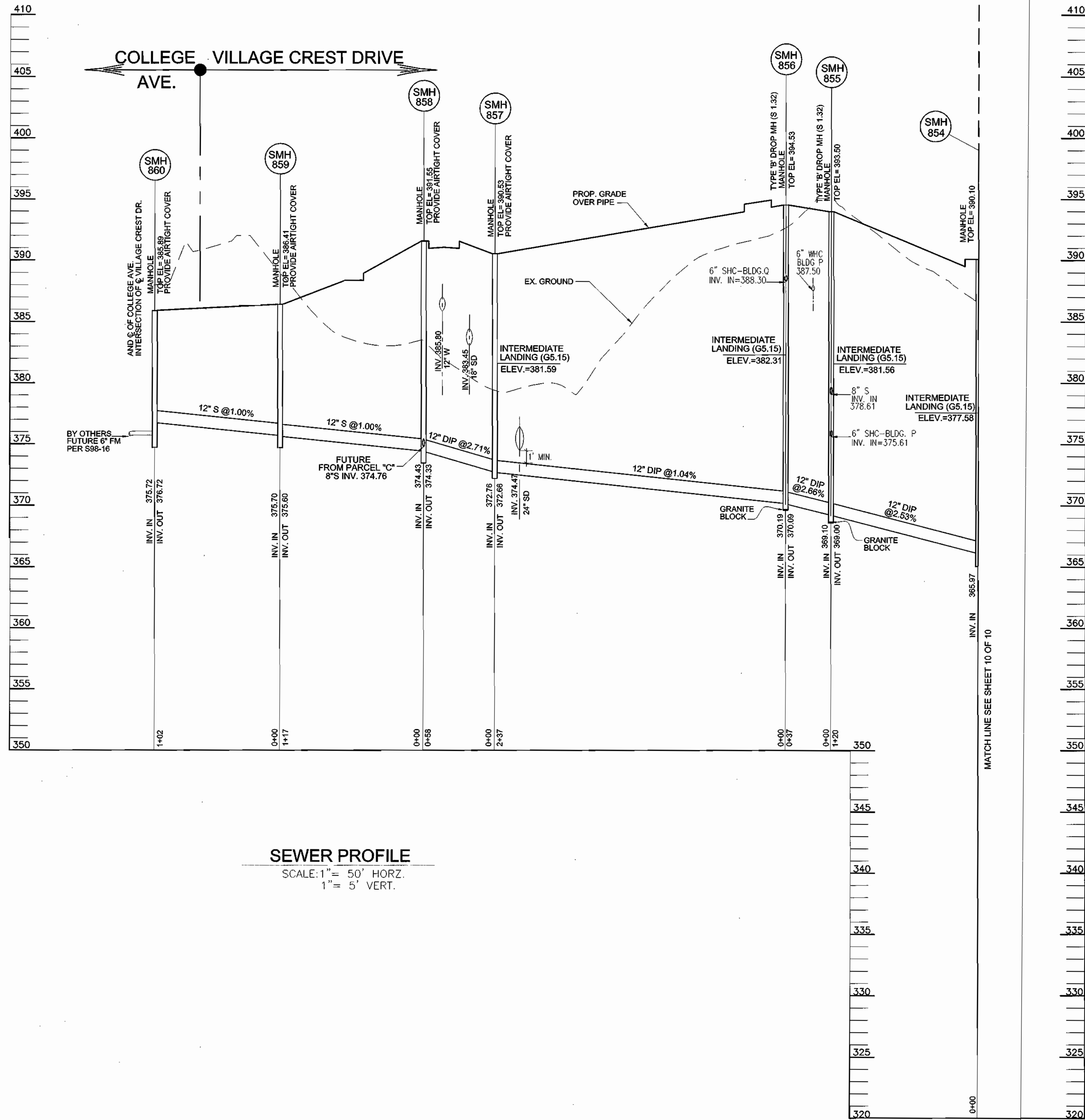
SCALE
AS
SHOWN

SHEET
8 OF 10


600' SCALE MAP NO. 25 BLOCK NO. 20

TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT

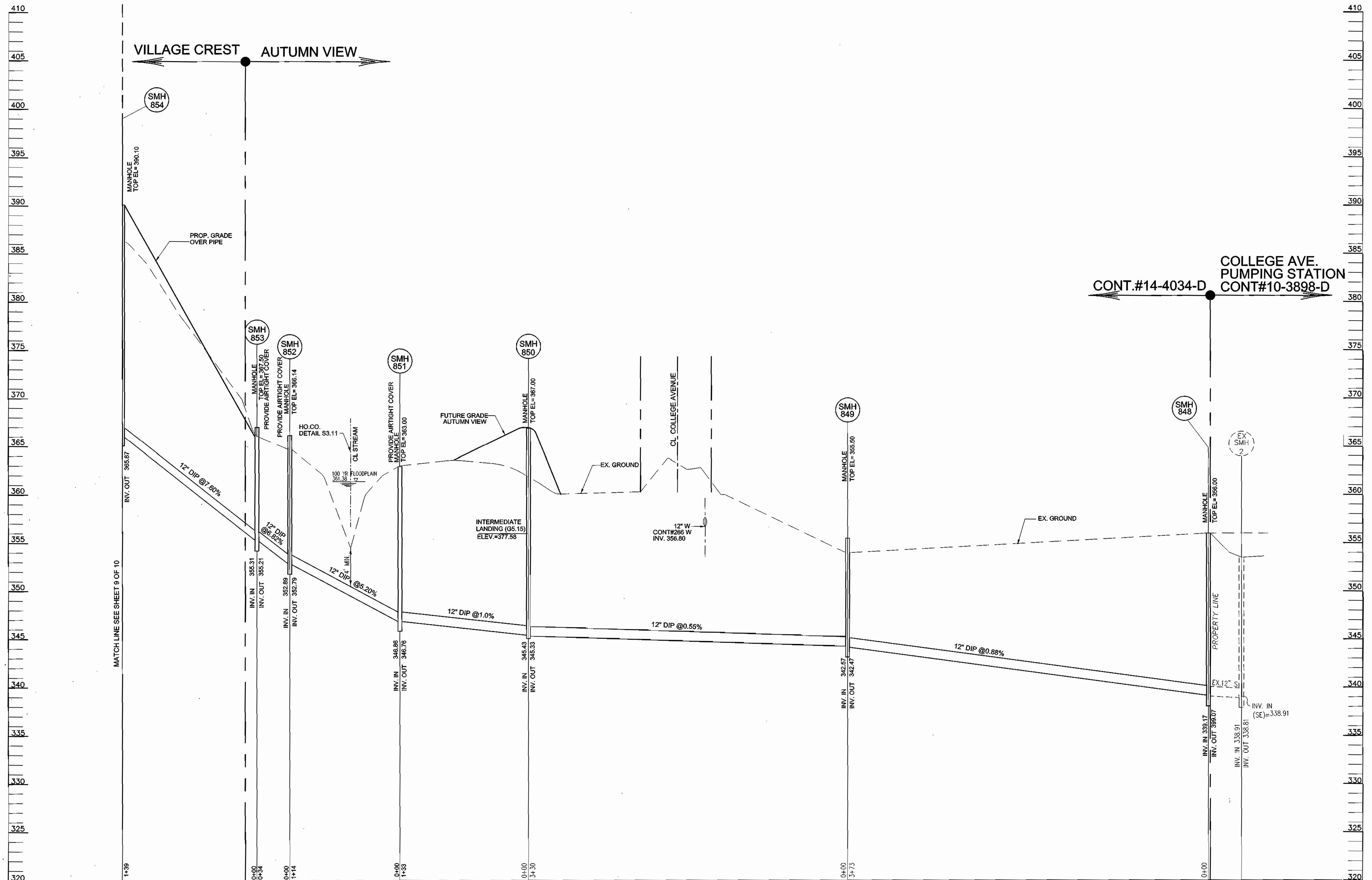
PARCEL P/O '98'
HOWARD COUNTY, MARYLAND



SEWER PROFILE
 SCALE: 1" = 50' HORZ.
 1" = 5' VERT.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert H. Voller</i> 4/1/02 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>Robert H. Voller</i> 4/1/02 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	 FREDERICK WARD ASSOCIATES, INC. ENGINEERS AND SURVEYORS 7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-6226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia	DES: RJ DRN: RJ CHK: JCO DATE: DEC. 2002	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>BY</th> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	BY	NO.	REVISION	DATE					12" WATER 8" WATER 8" SEWER	VILLAGE CREST PARCELS C-1, D-1, AND E-1 CONTRACT NO. 14-4034-D TAX MAP 25 BLOCK 20 2ND ELECTION DISTRICT PARCEL P/O '98 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 9 OF 10
BY	NO.	REVISION	DATE												

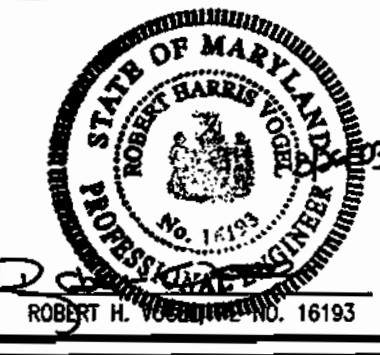
K:\PROJECTS\20181211\Eng\dwg\UTIL\MS\9905PROF.dwg Mod Mar 26 08:18:25 2003 e1w



SEWER PROFILE
 SCALE: 1" = 50' HORZ.
 1" = 5' VERT.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 R. H. B... 4-1-02
 CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



FREDERICK WARD ASSOCIATES, INC.
 7125 Riverwood Drive Columbia, Maryland 21046-2354
 Phone: 410-290-9550 Fax: 410-720-6226
 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

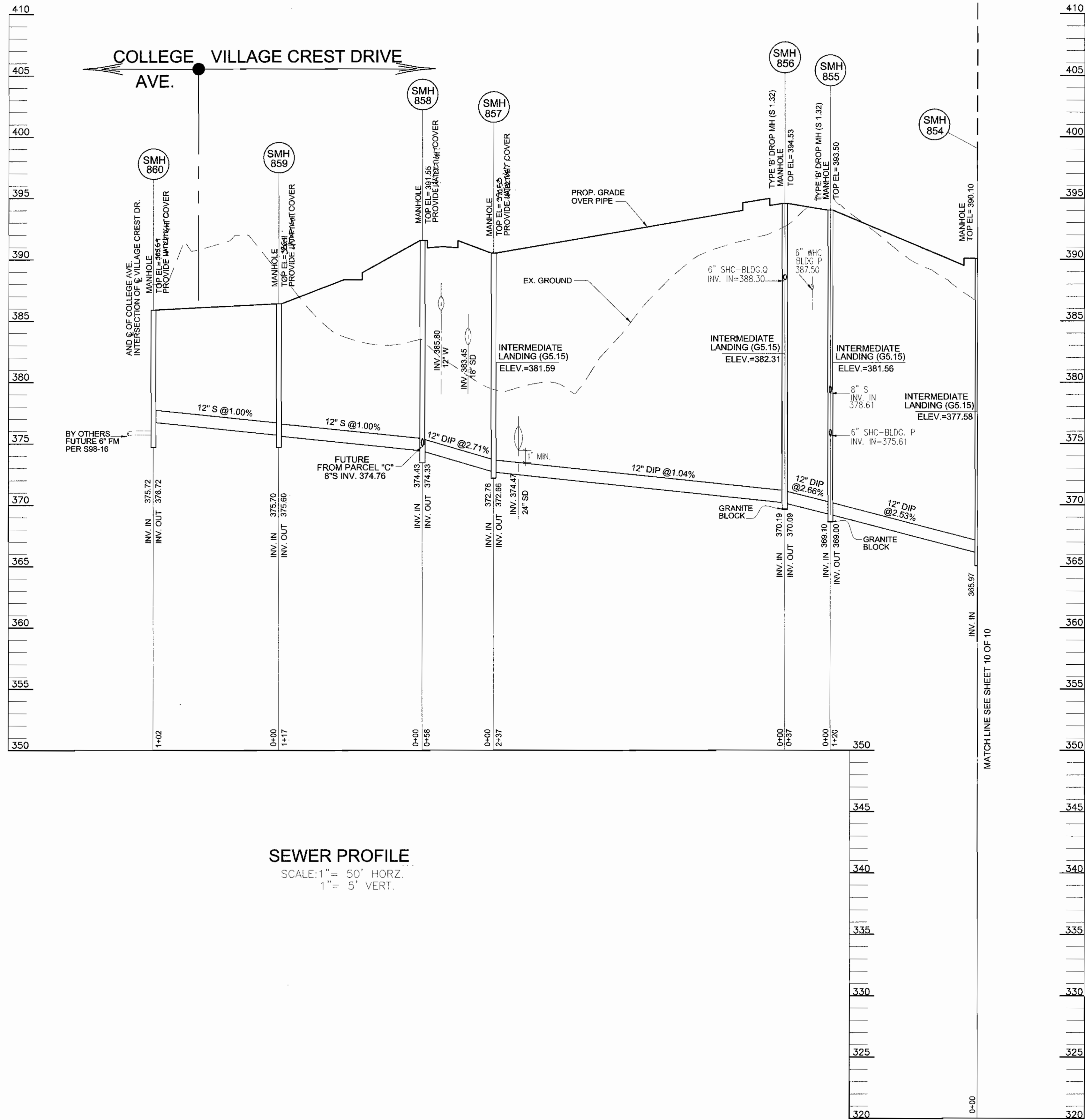
DES: RJ					
DRN: RJ					
CHK: JCO					
DATE: DEC. 2002	BY	NO.	REVISION	DATE	

12" WATER
 8" WATER
 8" SEWER
 600' SCALE MAP NO. 25 BLOCK NO. 20

VILLAGE CREST
 PARCELS C-1, D-1, AND E-1
 CONTRACT NO. 14-4034-D
 TAX MAP 25 BLOCK 20
 2ND ELECTION DISTRICT

SCALE AS SHOWN
 SHEET 10 OF 10
 PARCEL P/O '98
 HOWARD COUNTY, MARYLAND

K:\PROJECTS\2018121\Engr\Map\FINAL\NS\LONGPRUF.dwg Wed Mar 26 05:19:14 2003 e.l.w

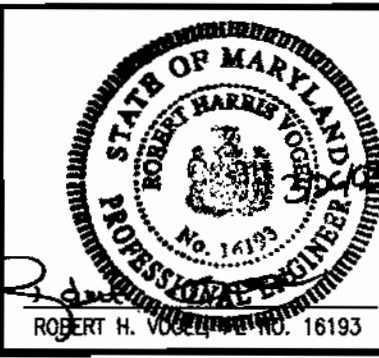


DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

R. L. ... 4-1-02
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

... 4/1/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



FREDERICK WARD ASSOCIATES, INC.
 ENGINEERS ARCHITECTS SURVEYORS
 7125 Riverwood Drive Columbia, Maryland 21046-2354
 Phone: 410-290-9550 Fax: 410-720-8226
 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: JCO			
DATE: DEC. 2002	BY NO.	REVISION	DATE
		1 REVISE MANHOLE COVER TYPE	4/21/02

12" WATER
 8" WATER
 8" SEWER

600' SCALE MAP NO. 25 BLOCK NO. 20

VILLAGE CREST
 PARCELS C-1, D-1, AND E-1
 CONTRACT NO. 14-4034-D

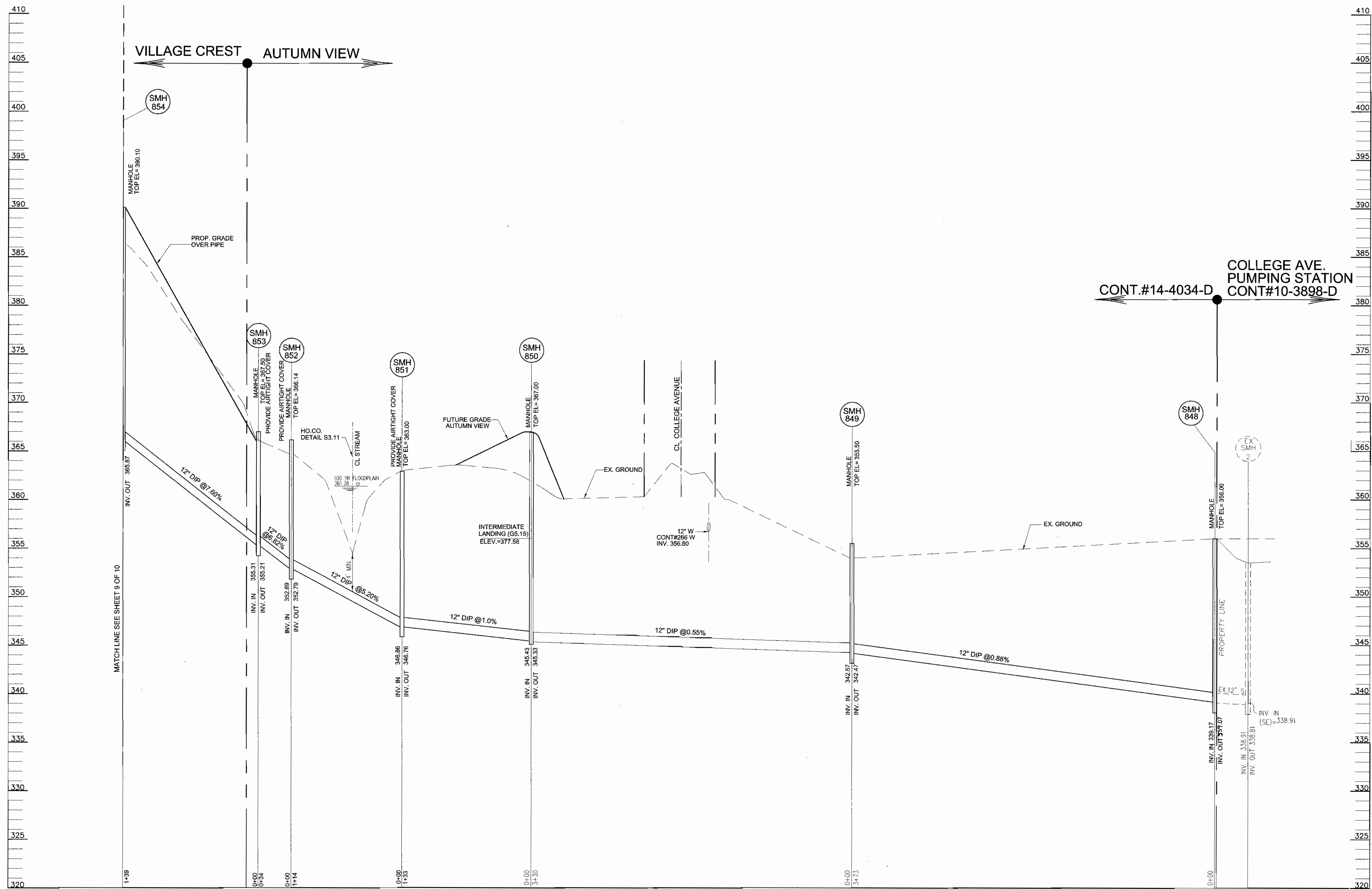
TAX MAP 25 BLOCK 20
 2ND ELECTION DISTRICT

PARCEL P/O '98
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN


SHEET 9 OF 10

M:\PROJECTS\2018121\Drawings\PLANS\09BSPROF.dwg Wed Mar 26 09:18:25 2003 614



SEWER PROFILE

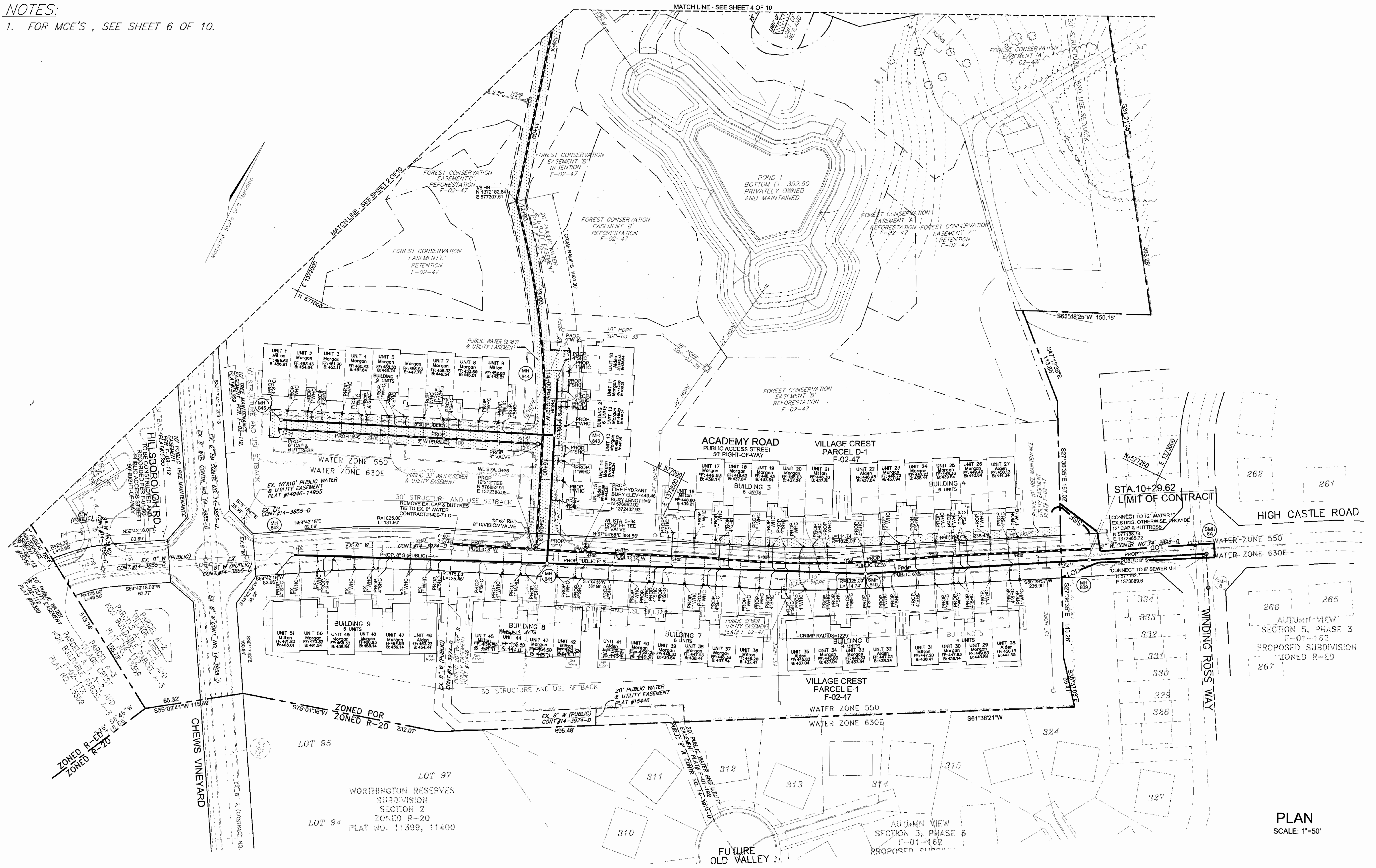
SCALE: 1" = 50' HORZ.
1" = 5' VERT.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R. H. B...</i> 4-1-09 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	 ROBERT H. WENTWORTH, JR. 16193	FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2394 Phone: 410-290-9550 Fax: 410-720-6226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia	DES: RJ DRN: RJ CHK: JCO DATE: DEC. 2002	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> <tr> <td>1</td> <td>REVISE MANHOLE ELEVATION</td> <td>4/21/09</td> </tr> </table>	NO.	REVISION	DATE	1	REVISE MANHOLE ELEVATION	4/21/09	12" WATER 8" WATER 8" SEWER	VILLAGE CREST PARCELS C-1, D-1, AND E-1 CONTRACT NO. 14-4034-D TAX MAP 25 BLOCK 20 2ND ELECTION DISTRICT	SCALE AS SHOWN SHEET 10 OF 10 PARCEL P/O '98 HOWARD COUNTY, MARYLAND
NO.	REVISION	DATE												
1	REVISE MANHOLE ELEVATION	4/21/09												

M:\PROJECTS\2010\21\Eng\Drawings\TUMS\10NSP\PROF.dwg Mod: 08:19:14 2003 e14

NOTES:

1. FOR MCE'S, SEE SHEET 6 OF 10.



PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: JCO	2	SIC LABEL	4/31/04
DATE: DEC. 2002	BY NO.	1	REVISE BASEMENT ELEVATION
			REVISION

12" WATER
8" WATER
8" SEWER

600' SCALE MAP NO. 25 BLOCK NO. 20

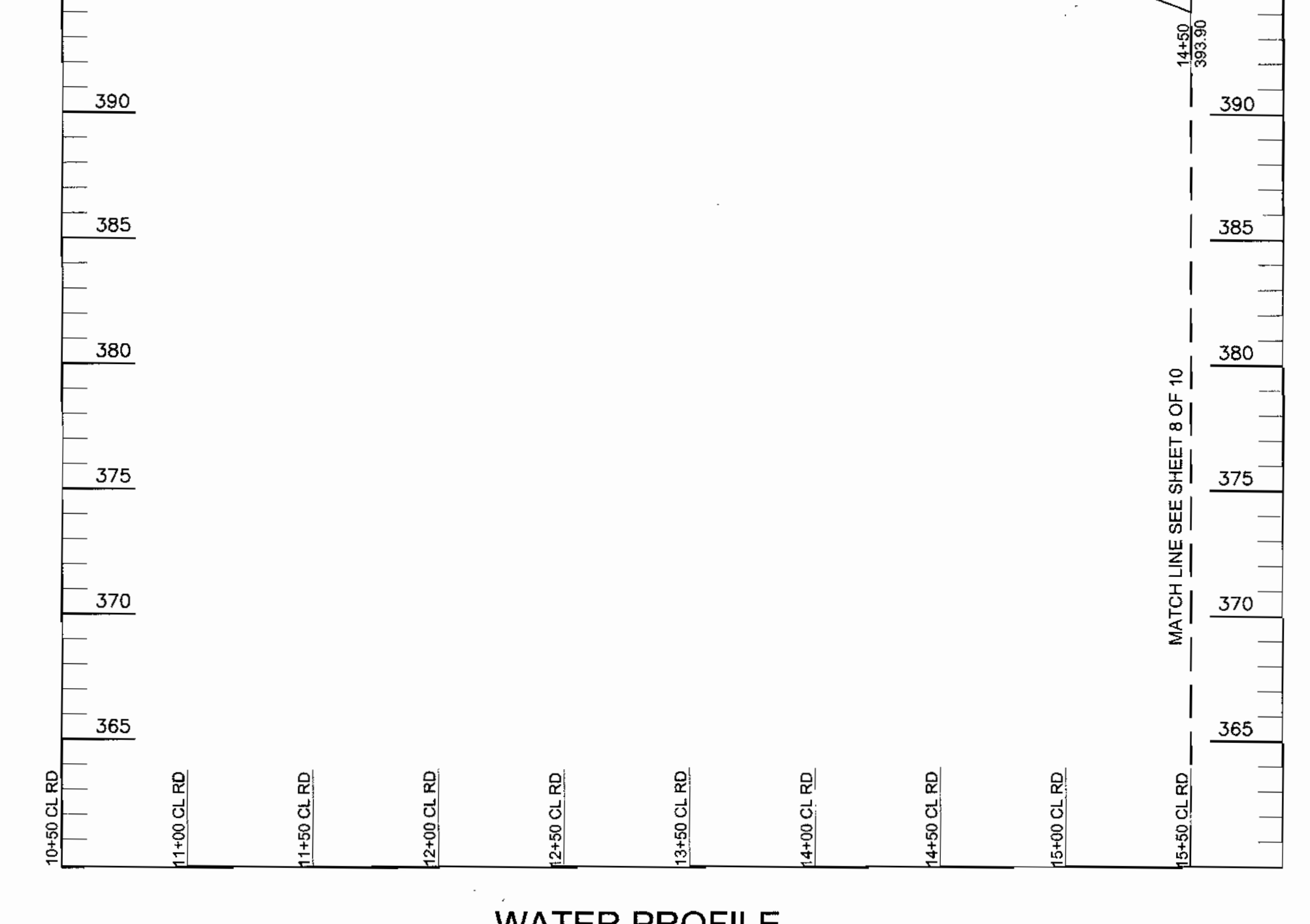
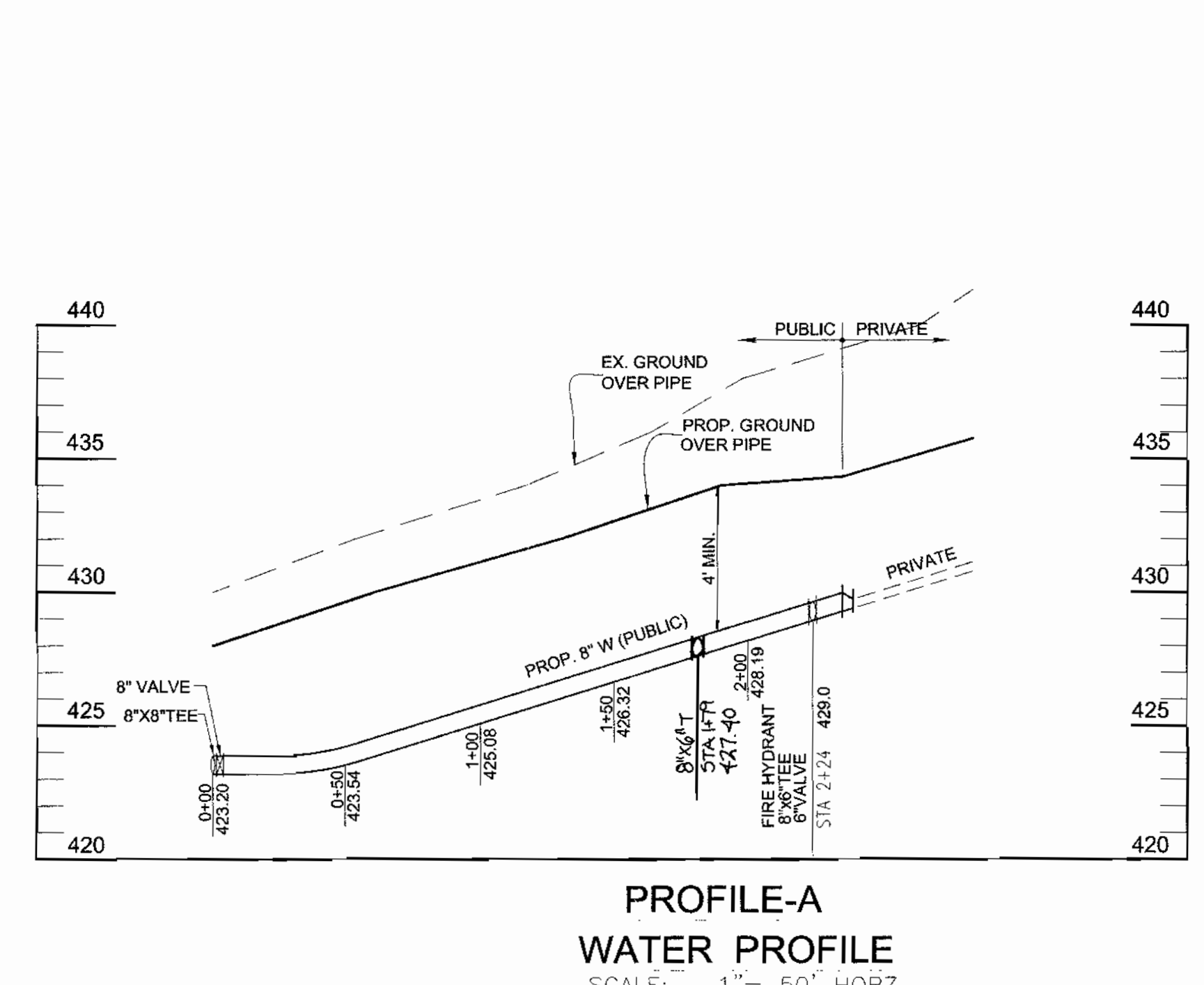
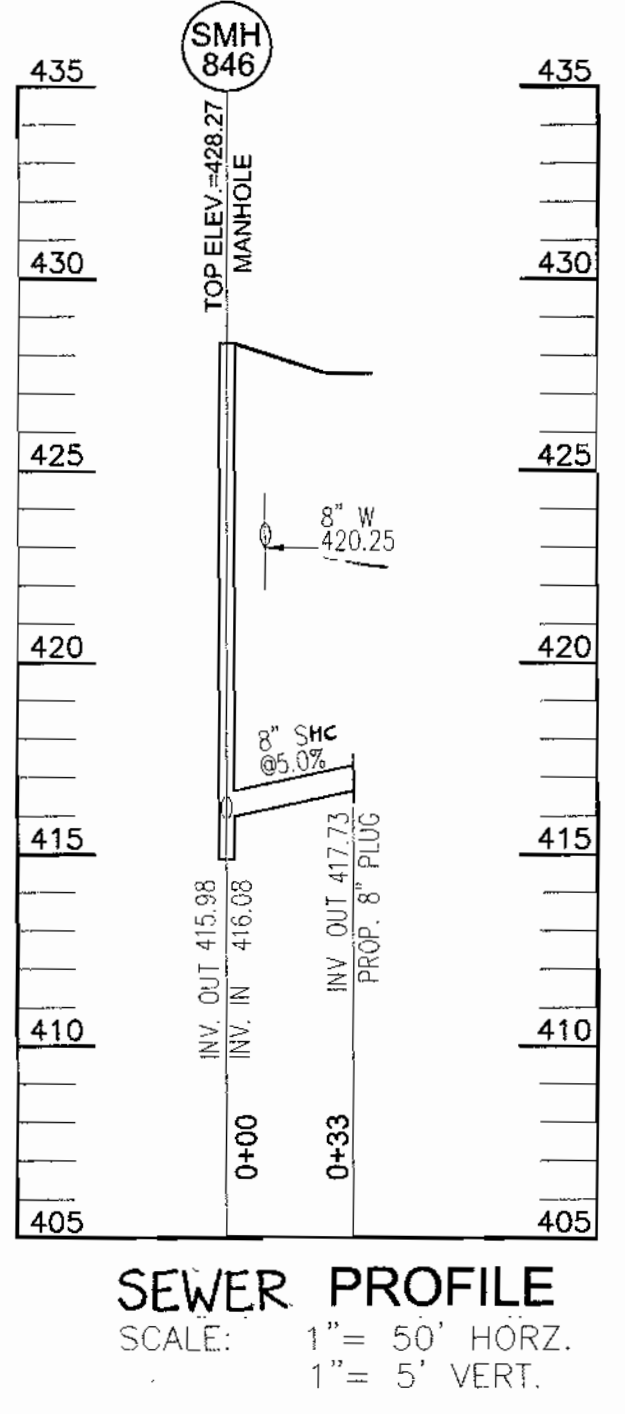
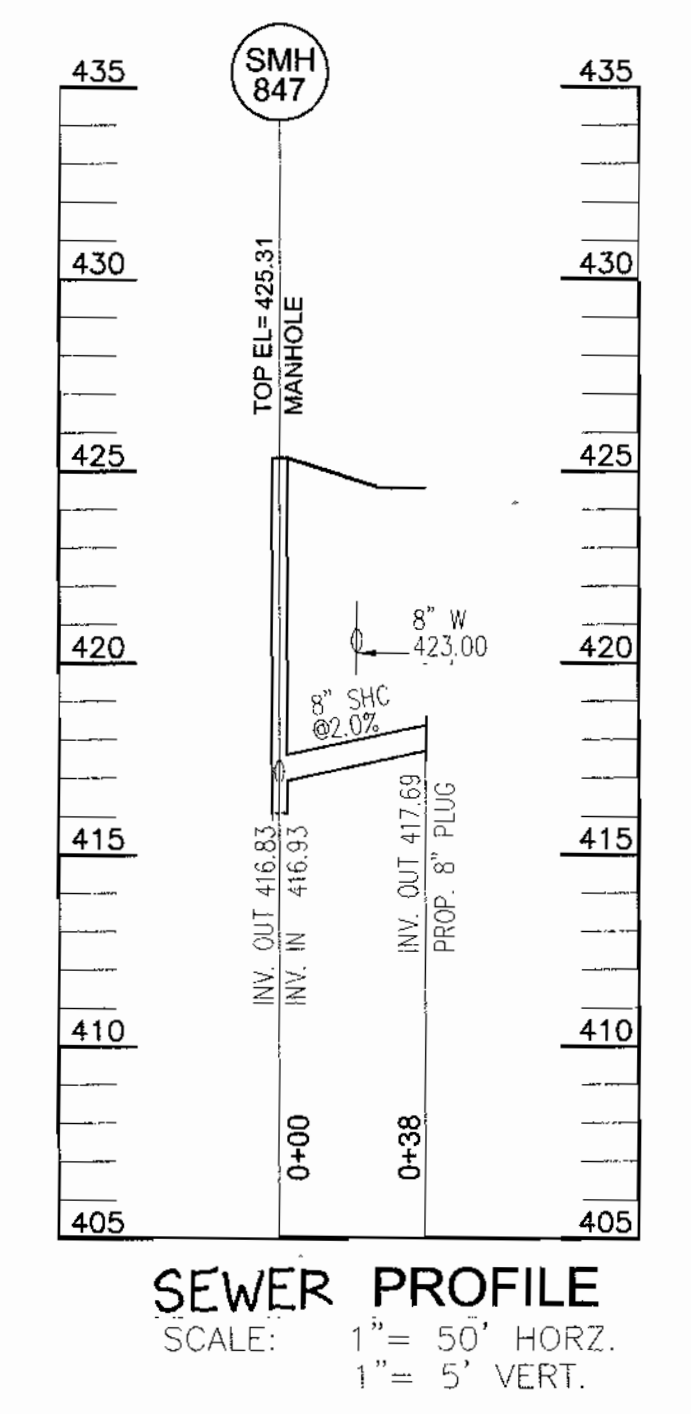
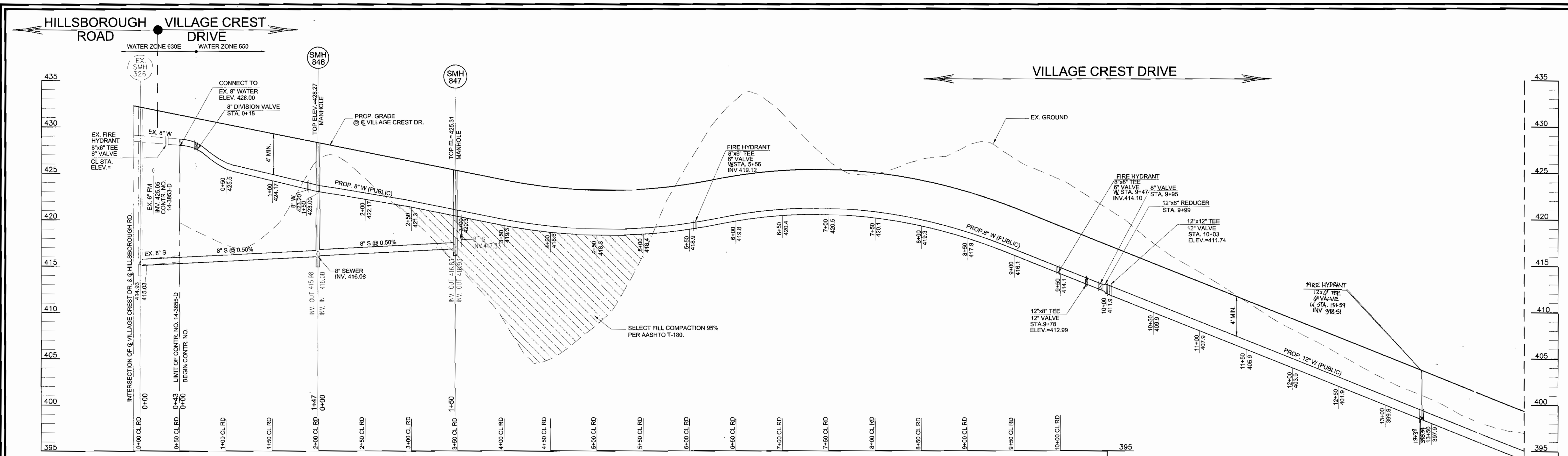
VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT

PARCEL P/O '98
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 10

V:\PROJECTS\2010\121\ENGR\DWG\FT\MD\NS\03NSPLAN.dwg Tue Apr 06 13:21:29 2003 E4

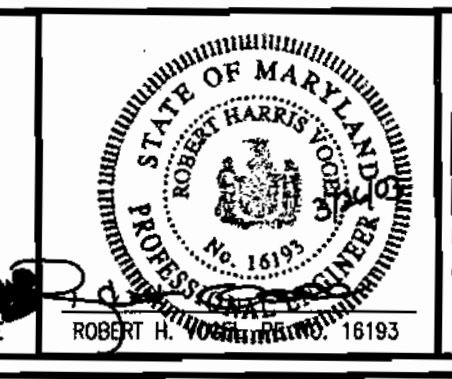


DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert Benjamin 4-1-03
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Robert H. ... 4/10/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES:	RJ
DRN:	RJ
CHK:	JCO
DATE:	DEC. 2002
BY:	NO.
REVISION:	2 RELOCATION OF FIRE HYDRANT 4/21/04 1 ADD 8" x 6" T LUL PROFILE A
DATE:	

12" WATER
8" WATER
8" SEWER

600' SCALE MAP NO. 25 BLOCK NO. 20

VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT

PARCEL P/O '98
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 5 OF 10

K:\PROJECTS\20181211\Eng\1040\FINAL\WS\GEN\PROF.dwg Mod Mar. 26 08:43:43 2003 e.l.k

NOTES:

1. FOR MCE'S, SEE SHEET 6 OF 10.

MATCH LINE - SEE SHEET 4 OF 10



PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: JCO			
DATE: DEC. 2002			
BY NO.	3	ADD AIR RELEASE MH #1	12.6.04
REVISION	2	SIC LABEL	1/31/04
		REVISE BASEMENT ELEVATION	

12" WATER
8" WATER
8" SEWER

VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

SCALE AS SHOWN
SHEET 3 OF 10

TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT
PARCEL P/O 98'
HOWARD COUNTY, MARYLAND

4-2-03
DATE

DATE

DATE

DATE

DATE


600' SCALE MAP NO. 25
BLOCK NO. 20

DATE

DATE

PROJECTS\2010\21\ENERGY\1\TITLES\03\SP\AN.dwg Tue Apr 08 13:21:29 2003 14

GENERAL NOTES

- PART I**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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 83/91.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD 88 UNLESS OTHERWISE NOTED ON THE PLANS.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON DRAWINGS IN THE EVENT 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 MONIES 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 NOTES 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 OPERATION AT HIS OWN EXPENSE.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
 AT & T 1-800-252-1133
 BGE (CONTRACTOR SERVICE) 410-950-4620
 BGE (UNDERGROUND DAMAGE CONTROL) 410-787-9088
 BUREAU OF UTILITIES 410-313-4900
 COLONIAL PIPELINE CO. 410-795-1390
 MISSISSIPPI UTILITY 1-800-257-7777
 STATE HIGHWAY ADMINISTRATION 410-531-5533
 VERIZON 1-800-743-0033/410-224-9210
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUTTING OR BORING JACKING OF ANY COUNTY ROAD FOR LAYING BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAIN OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(c) OF THE HOWARD COUNTY CODE.
 - PROVIDE CAST IRON ROADWAY BOXES FOR W/C BALL VALVE WITHIN PAVED AREAS.

PART II - WATER

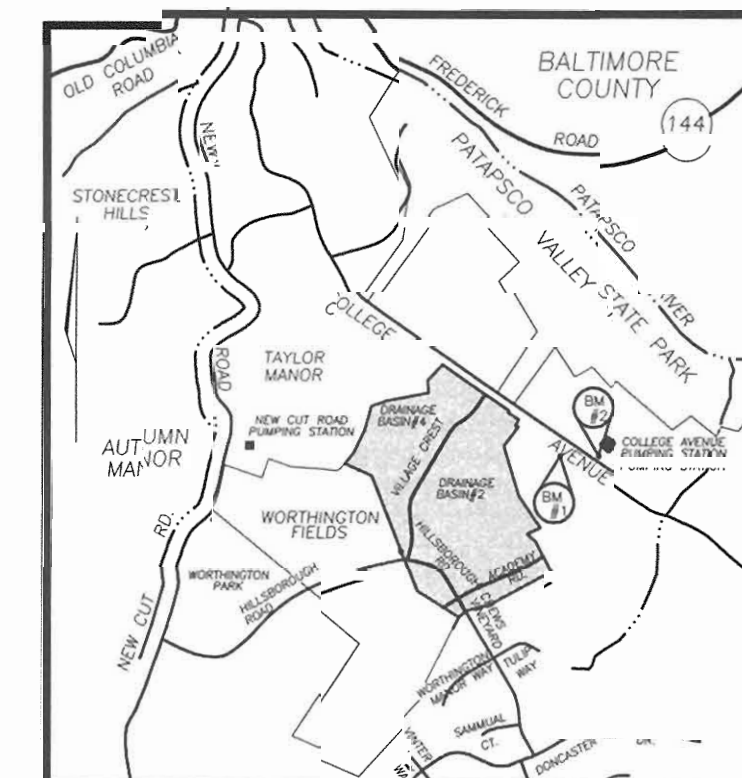
- ALL WATER MAINS SHALL BE D.I.P. CLASS 32 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-4" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS 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 INSTALLED IN ACCORDANCE WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND 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 WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.

PART III - SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAIN SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED "WT. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL 05.52 WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED. SET TOP OF FRAME 1'-15" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

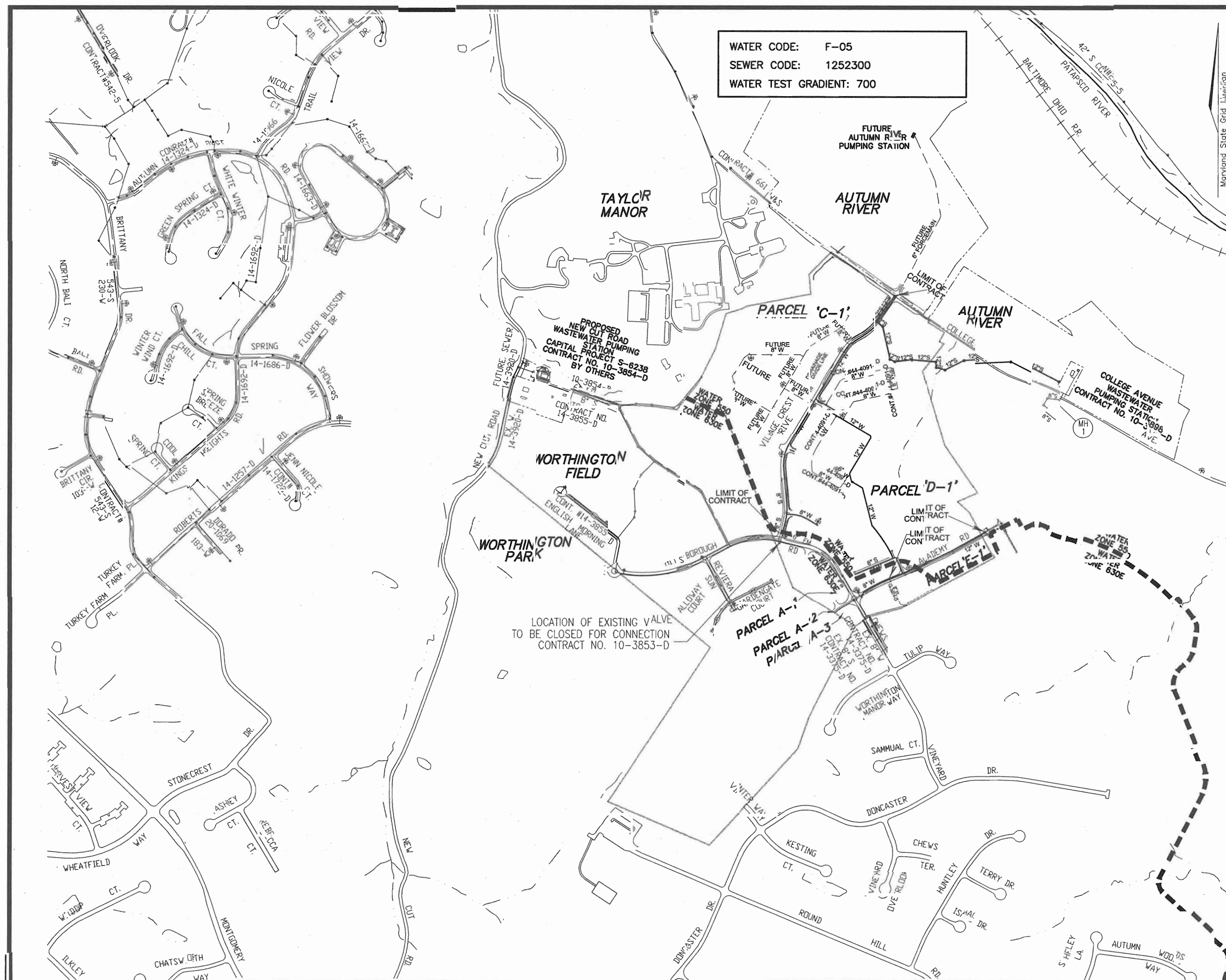
TYPE OF BUILDING	RESIDENTIAL
NO. OF UNITS/PARCELS:	6 AP. BUILDINGS +51 TOWNHOUSES
NO. OF WATER HOUSE CONNECTIONS:	4(6" WHC) + 45(1" WHC)+6 (EX.1"WHC) CONT#14-3974-D
NO. OF SEWER HOUSE CONNECTIONS:	51(4"SHC)+2(6"SHC)+1(2"WHC)+3(8" SHC)
DRAINAGE AREA:	PATAPS/SLU
TREATMENT PLANT:	PATAPS CO WRF VIA
NEW CUT R/C MD PUMPING STATION / WIND COLLEGE AVENUE PUMPING STATION	

VILLAGE CREST PARCELS C-1, D-1, AND E-1 HOWARD COUNTY, MARYLAND CONTRACT NO. 14-4034-D



VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS
 BENCHMARK NO. 12 COUNTY CONTROL #3044005R
 3/4" REBAR 0.8" BELOW SURFACE
 N. 578233.92, E. 1373142.33
 ELEV. = 374.389
 BENCHMARK NO. 2 COUNTY CONTROL #3044004R
 3/4" REBAR 0.8" BELOW SURFACE
 N. 578128.03, E. 1373460.71
 ELEV. = 362.575



LOCATION PLAN
SCALE: 1"=600'

QUANTITIES

NAME OF UTILITY CONTRACTOR :				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE :				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
12" W	4,229 LF			
8" W	1,341 LF			
6" W	300 LF			
FIRE HYDRANT	6 EACH			
8" DIVISION VALVE	2 EACH			
8"x6" FIRE HYDRANT TEE AND VALVE	3 EACH			
12"x6" FIRE HYDRANT TEE AND VALVE	3 EACH			
12"x8" RED	2 EACH			
12"x12" TEE	1 EACH			
12" VALVE	2 EACH			
12"x8" TEE	4 EACH			
8" VALVE	6 EACH			
8"x8" TEE	1 EACH			
12"x6" TEE	1 EACH			
6" VALVE	1 EACH			
12" CAP & BUTTRESS	2 EACH			
8" CAP & BUTTRESS	5 EACH			
6" CAP & BUTTRESS	1 EACH			
12" S	1,797 LF			
8" S	1,755 LF			
MANHOLES	23 EACH			
1" WHC	1,096 LF			
2" WHC	10 LF			
6" SHC	48 LF			
4" SHC	885 LF			
8" SHC	70 LF			
12" x 12" T.S. & V	1 EACH			
8"x6" TEE	1 EACH			
AIR RELEASE M H (12")	1 EACH			

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH F-02-47 AND WITH THESE PLANS FOR LIMIT OF DISTURBANCE.

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

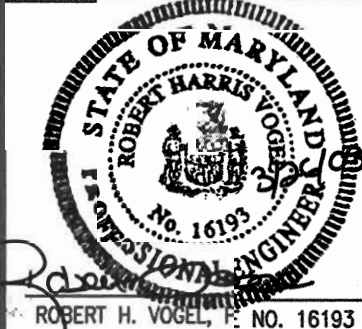
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Jim Meyer
SOIL CONSERVATION DISTRICT
DATE: 4/3/03

John L. Roberts
U.S. SOIL CONSERVATION DISTRICT
DATE: 4/3/03

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Rita Beaman 4-1-03
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
Chad Danner 4/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION



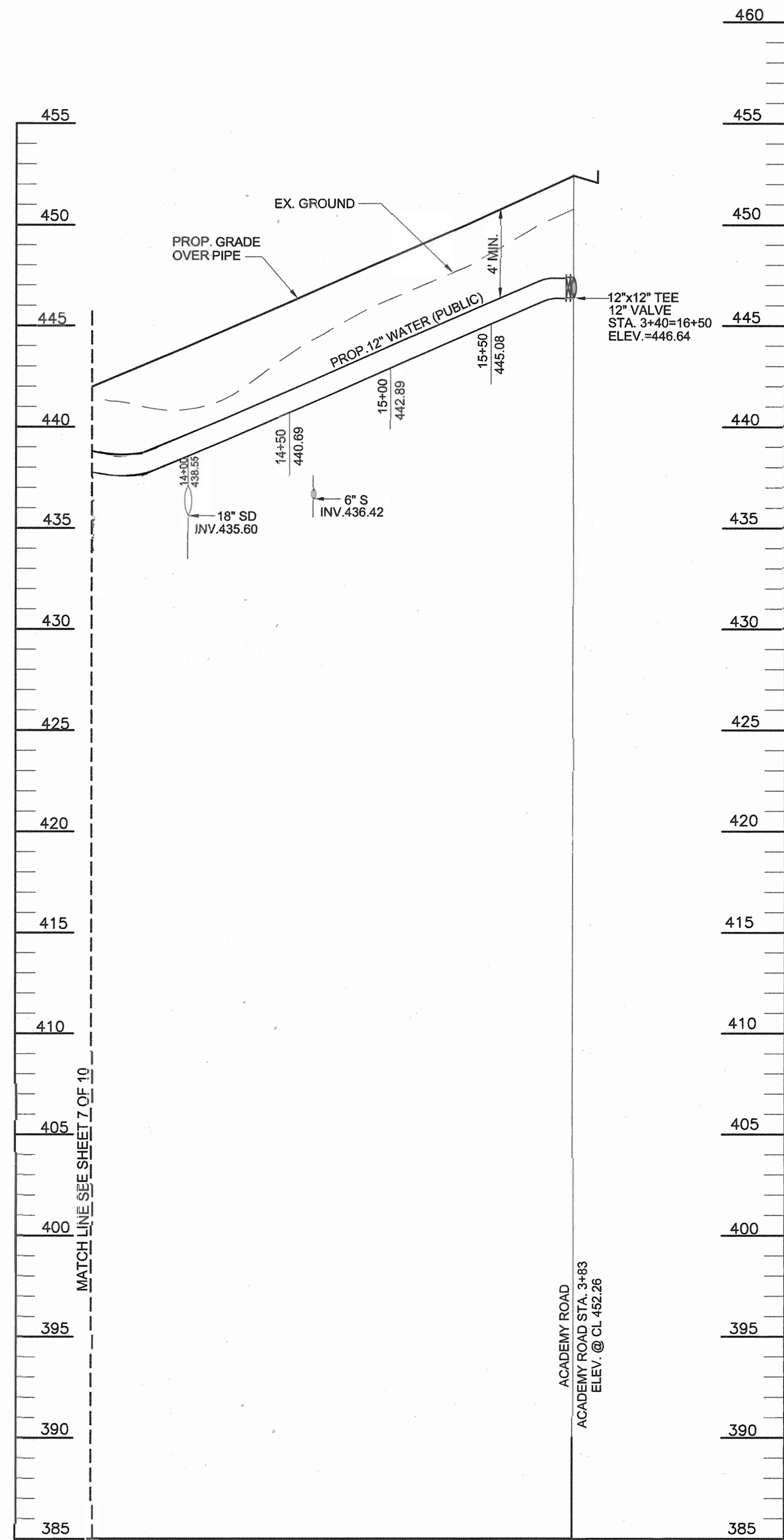
FREDERICK WARD ASSOCIATES, INC.
725 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bt Air, Maryland Columbia, Maryland Warrenton, Vi rginia

DES: RJ			
JRN: RJ			
CHK: JCO	3	ADD AIR RELEASE MH #13 REVISE WATER MAIN 9+50+0 13+50 ADD 8"x6" T TO QUANTITIES	12.6.04
DATE: MARCH 2003	BY: NO.	REVISION	DATE

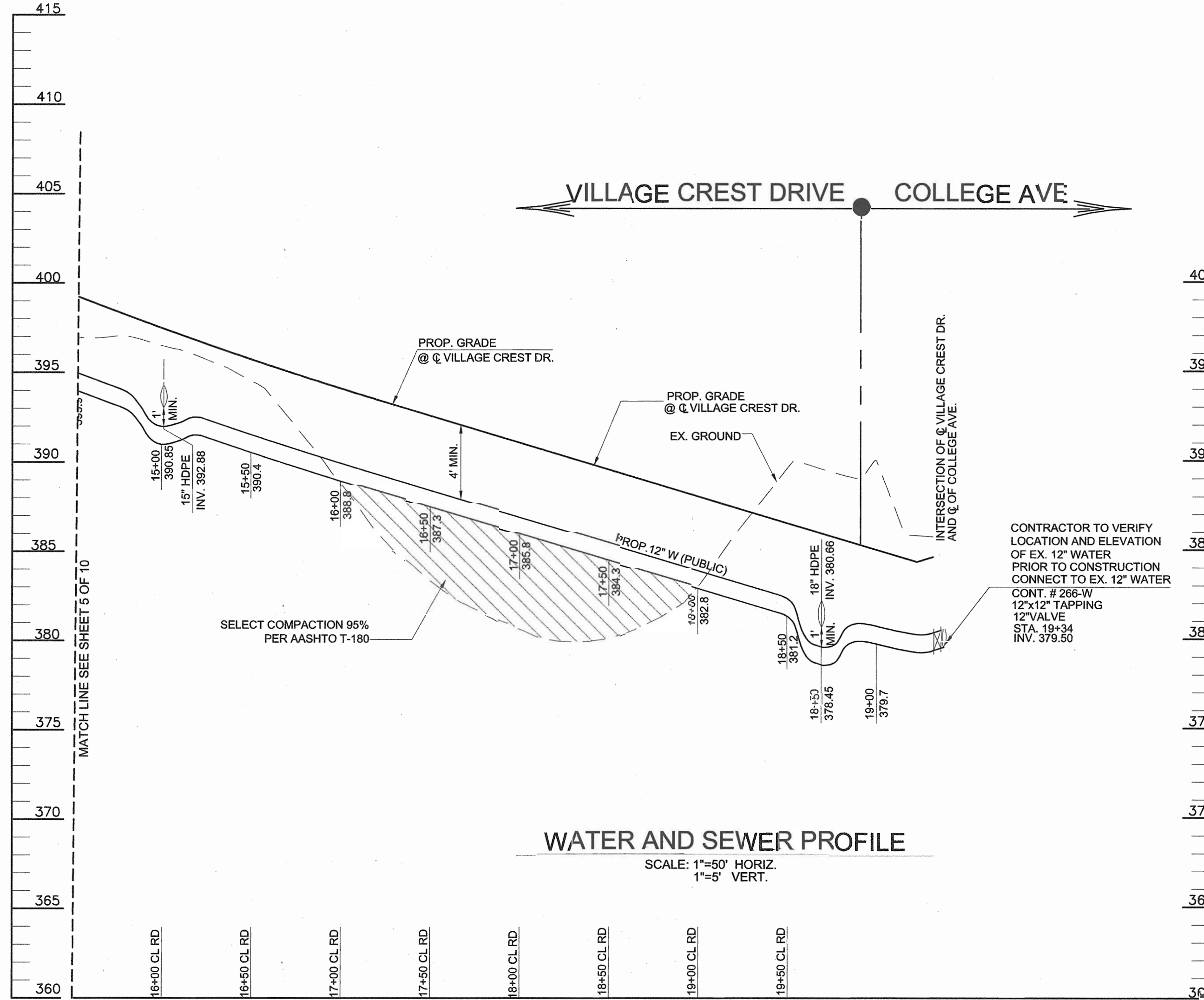
TITLE SHEET
600' SCALE MAP NO. 2b BLOCK NO. 4U

VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D
TAX MAP: 25 BLOCK 20 2ND ELECTION DISTRICT
PARCEL P/O #15 HOWARD COUNTY, MARYLAND

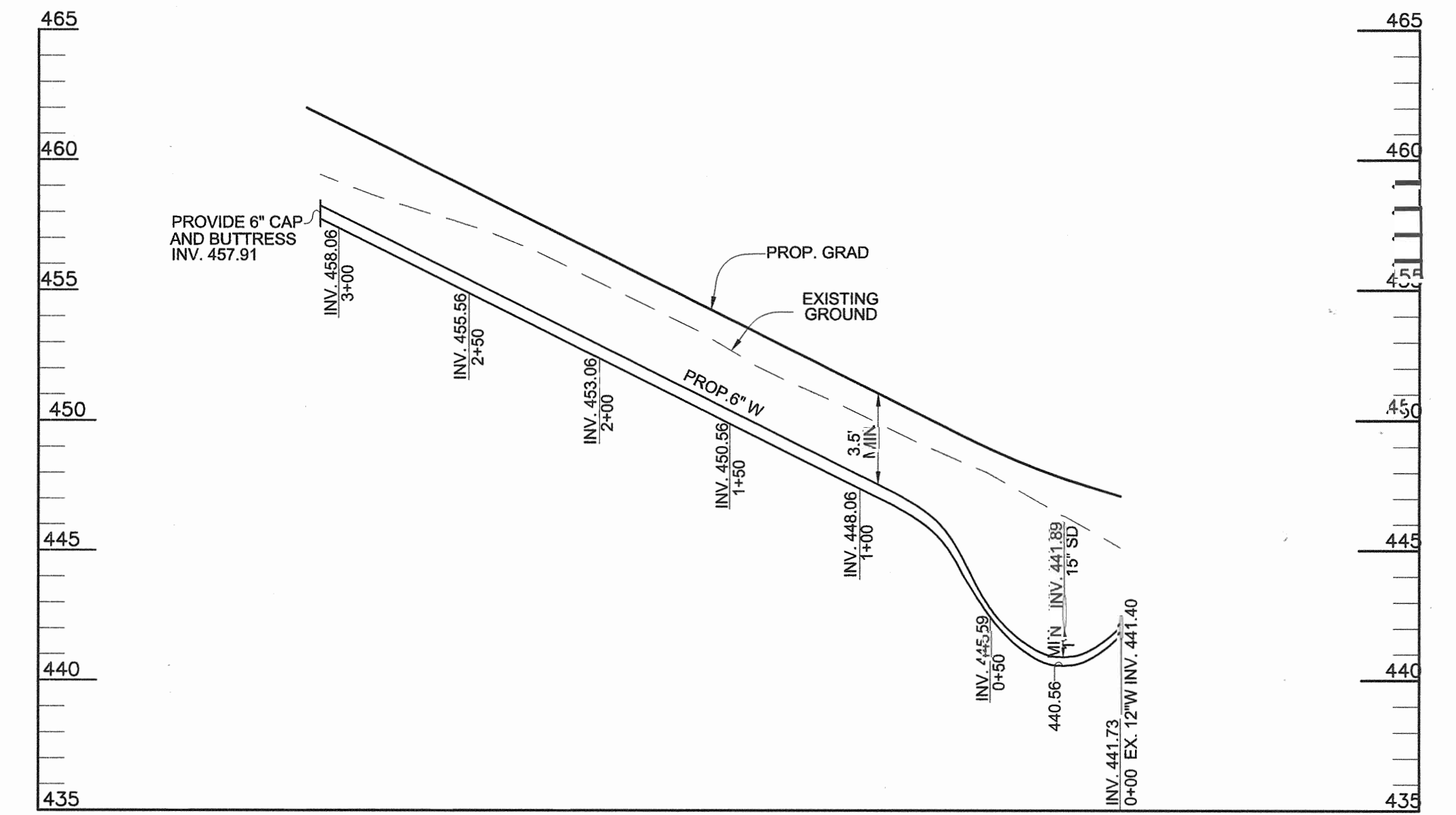
SCALE AS SHOWN
SHEET 1 OF 10



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



WATER AND SEWER PROFILE
SCALE: 1"=50' HORIZ.
1"=5' VERT.



PROFILE-C WATER PROFILE
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-5226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: JCO			
DATE: DEC. 2002	BY NO.	REVISION	DATE
		3 ADD AIR RELEASE MH @ 13+50	12.6.04
		REVISE WATER MAIN B 9+50 TO 13+50	

12" WATER
8" WATER
8" SEWER

VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

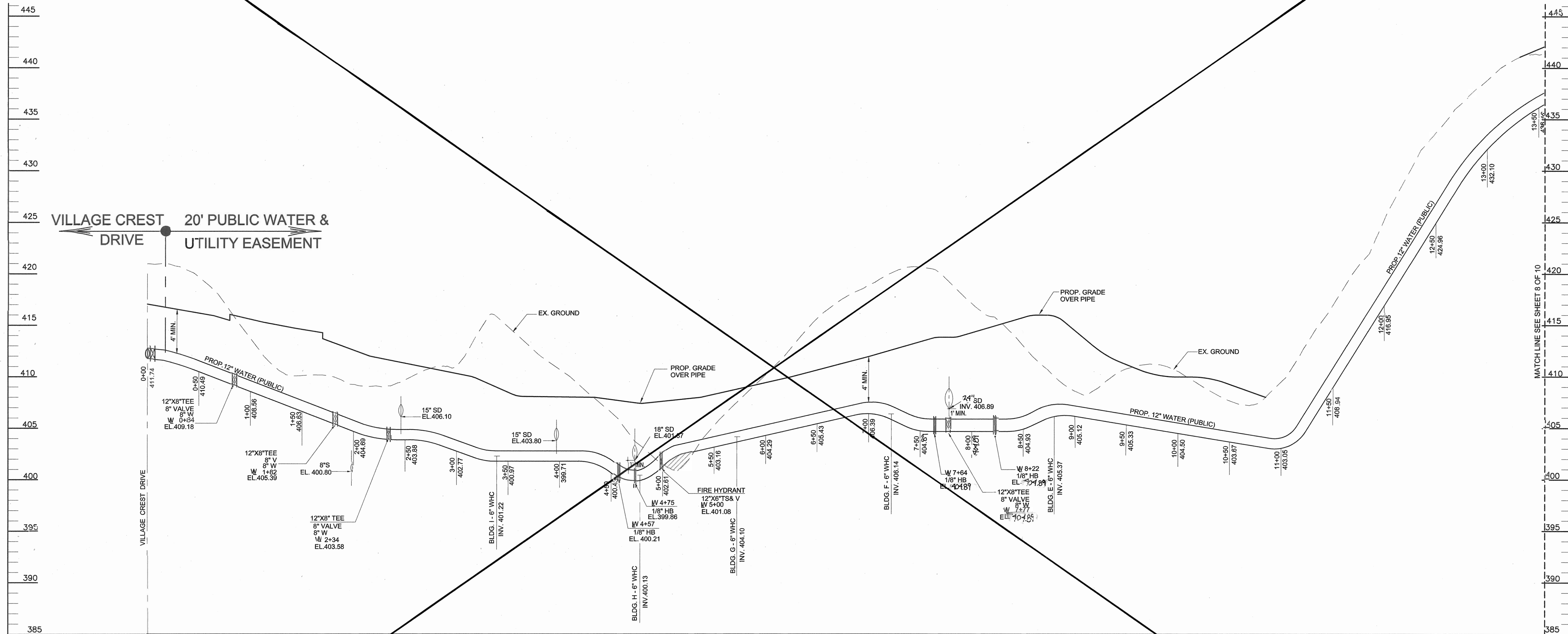
SCALE AS SHOWN

SHEET 8 OF 10


TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT

PARCEL P/O '98
HOWARD COUNTY, MARYLAND

K:\PROJECTS\2018121\Eng\dwg\171111.MS\08NSPROF.dwg Mod Wed 26 09:17:29 2003 614



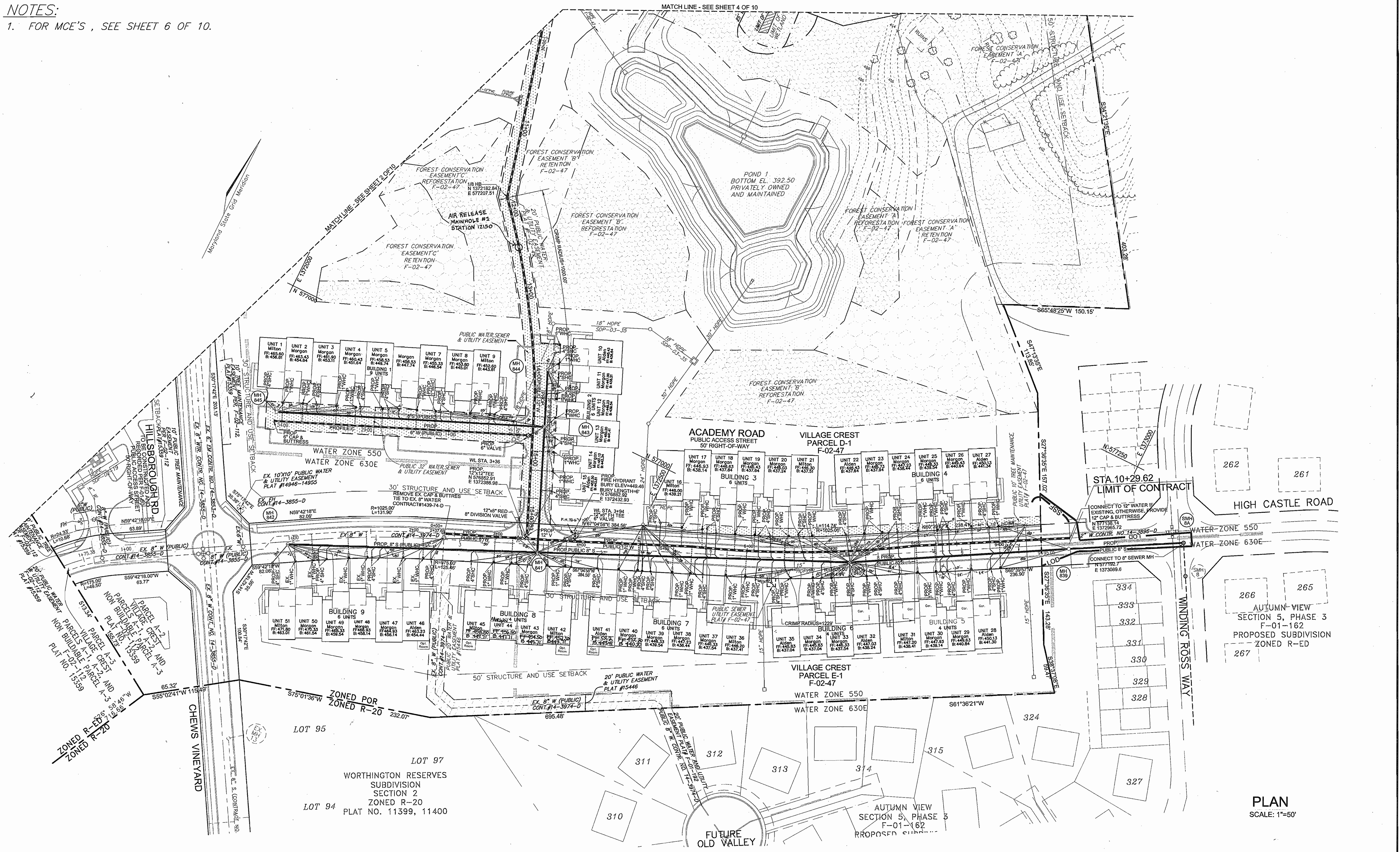
**PROFILE-B
WATER PROFILE**
SCALE: 1" = 50' HORZ.
1" = 5' VERT.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert H. ...</i> 4-1-02 <small>CHIEF, BUREAU OF UTILITIES</small>	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>Robert H. ...</i> 4/1/02 <small>CHIEF, DEVELOPMENT ENGINEERING DIVISION</small>	 FREDERICK WARD ASSOCIATES, INC. <small>7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-6226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia</small>	DES: RJ DRN: RJ CHK: JCO DATE: DEC. 2002 BY: NO. REVISION DATE REVISE ELEVATION @ 12" X 8" TEE	12" WATER 8" WATER 8" SEWER 600' SCALE MAP NO. 25 BLOCK NO. 20	VILLAGE CREST PARCELS C-1, D-1, AND E-1 CONTRACT NO. 14-4034-D <small>TAX MAP 2^{1/2} BLOCK 20 2ND ELECTION DISTRICT</small> <small>PARCEL P/O 198 HOWARD COUNTY, MARYLAND</small>	SCALE AS SHOWN SHEET 7 OF 10
---	---	---	---	--	---	--

M:\PROJECTS\2016121\Eng\dwg\VTM\KS\07\WBPROF.dwg Mod Mar 26 09:16:23 2003 e1w

NOTES:

1. FOR MCE'S, SEE SHEET 6 OF 10.



PLAN
SCALE: 1"=50'

<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> 4-2-03 CHIEF, BUREAU OF UTILITIES</p>	<p>DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> 4/1/03 CHIEF, DEVELOPMENT ENGINEERING DIVISION</p>	<p>STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER No. 16193</p> <p>FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-8226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>DES: RJ</td> <td></td> </tr> <tr> <td>DRN: RJ</td> <td>KEI 4</td> </tr> <tr> <td>CHK: JCO</td> <td>3</td> </tr> <tr> <td>DATE: DEC 2002</td> <td>BY NO.</td> </tr> </table> <p>ADD AIR RELEASE MH #1 SHC LABEL REVISE BASEMENT ELEVATION</p>	DES: RJ		DRN: RJ	KEI 4	CHK: JCO	3	DATE: DEC 2002	BY NO.	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>12" WATER</td> <td>11/1/00</td> </tr> <tr> <td>8" WATER</td> <td>12.6.04</td> </tr> <tr> <td>8" SEWER</td> <td>4/21/04</td> </tr> </table> <p>600' SCALE MAP NO. 25 BLOCK NO. 20</p>	12" WATER	11/1/00	8" WATER	12.6.04	8" SEWER	4/21/04	<p>VILLAGE CRIST PARCELS C-1, D-1, AND E-1 CONTRACT NO. 14-4034-D</p> <p>TAX MAP 25 BLOCK 20 2ND ELECTION DISTRICT</p> <p>PARCEL P/O '98 HOWARD COUNTY, MARYLAND</p>	<p>SCALE AS SHOWN</p> <p>SHEET 3 OF 10</p>
DES: RJ																				
DRN: RJ	KEI 4																			
CHK: JCO	3																			
DATE: DEC 2002	BY NO.																			
12" WATER	11/1/00																			
8" WATER	12.6.04																			
8" SEWER	4/21/04																			

GENERAL NOTES

- PART I**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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 83/91.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD 88 UNLESS OTHERWISE NOTED ON THE PLANS.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON DRAWINGS IN THE EVENT 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 MONIES 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 NOTES 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 OPERATION AT HIS OWN EXPENSE.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
 AT & T.....1-800-252-1133
 BGE (CONTRACTOR SERVICE).....410-850-4620
 BGE (UNDERGROUND DAMAGE CONTROL).....410-787-3068
 BUREAU OF UTILITIES.....410-313-4900
 COLONIAL PIPELINE CO.....410-795-1390
 MISS UTILITY.....1-800-257-7777
 STATE HIGHWAY ADMINISTRATION.....410-531-5533
 VERIZON.....1-800-743-0033/410-224-9210
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUTTING OR BORING JACKING OF ANY COUNTY ROAD FOR LAYING BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAIN OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(g) OF THE HOWARD COUNTY CODE.
 - PROVIDE CAST IRON ROADWAY BOXES FOR WHC BALL VALVE WITHIN PAVED AREAS.

PART II - WATER

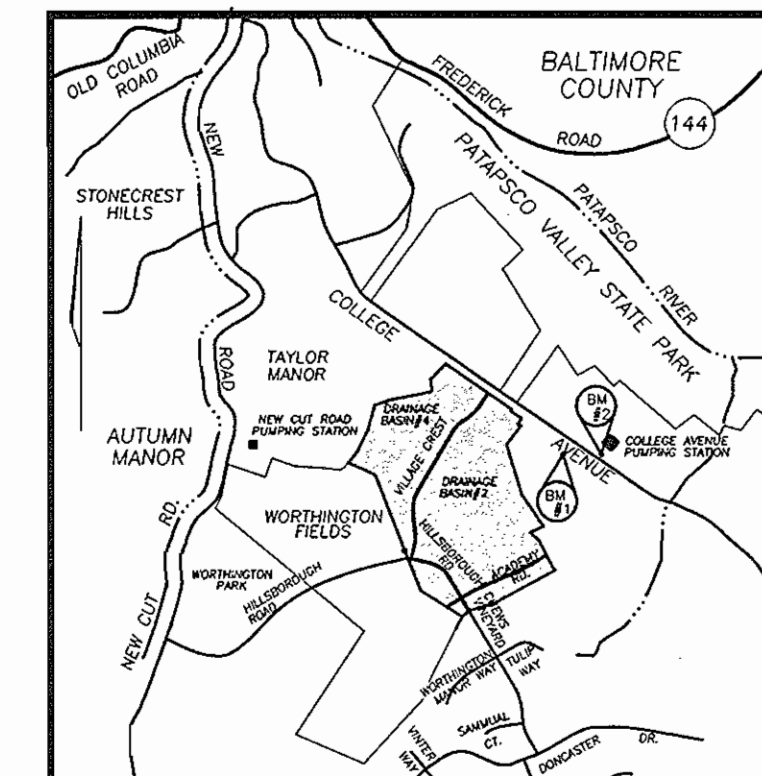
- ALL WATER MAINS TO BE D.I.P. CLASS S2 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS 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 INSTALLED IN ACCORDANCE WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND 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 WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.

PART III - SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAIN 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 COVER, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE 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.

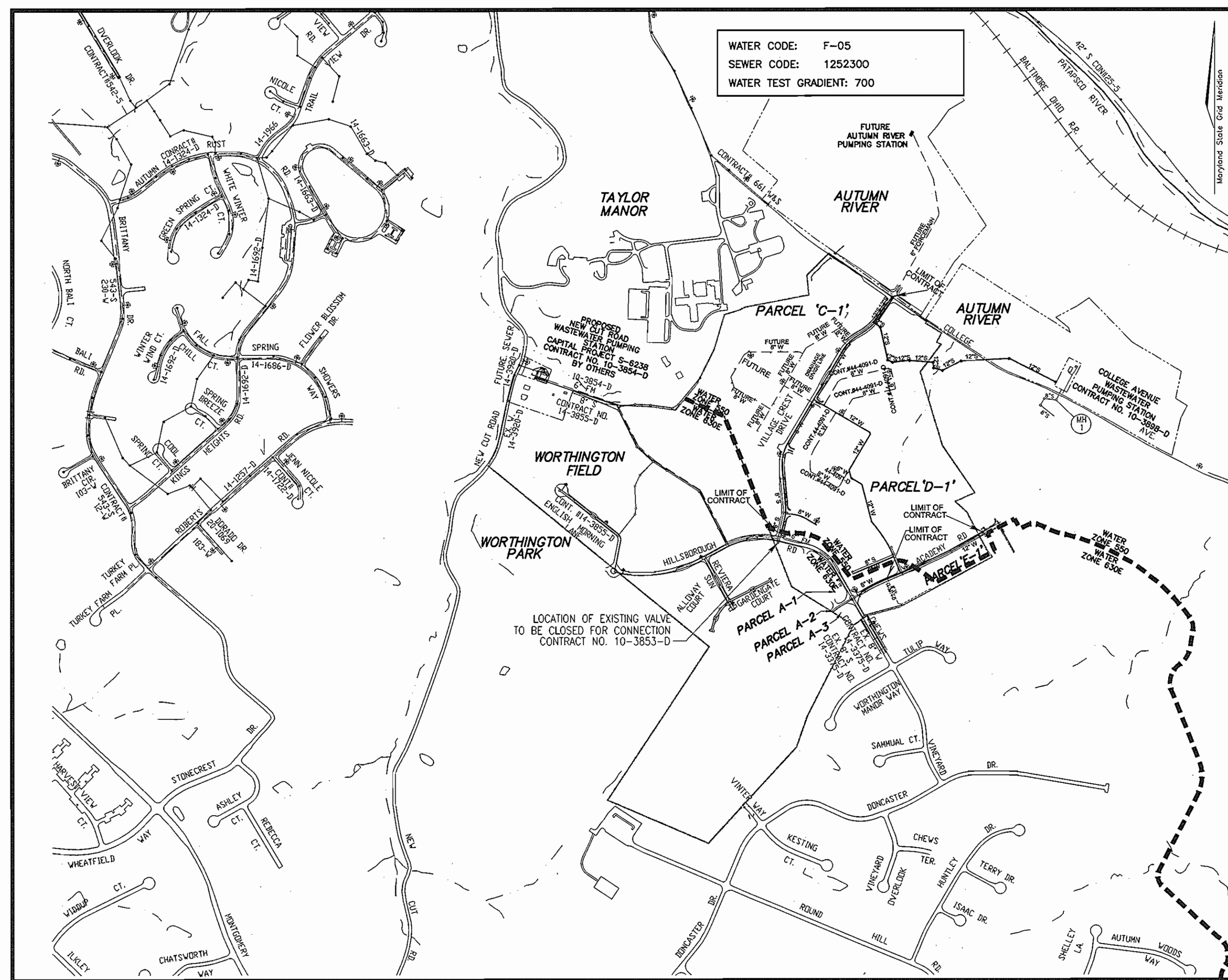
TYPE OF BUILDING:	RESIDENTIAL
NO. OF UNITS/PARCELS:	6 APT. BUILDINGS +51 TOWNHOUSES
NO. OF WATER HOUSE CONNECTIONS:	4(6" WHC) + 45(1" WHC)+6 (EX.1"WHC) CONT#14-3974-D
NO. OF SEWER HOUSE CONNECTIONS:	51(4"SHC)+2(6"SHC)+1(2"WHC)+3(8" SHC)
DRAINAGE AREA:	PATAPSCO
TREATMENT PLANT:	PATAPSCO WRP VIA
	NEW CUT ROAD PUMPING STATION AND COLLEGE AVENUE PUMPING STATION

VILLAGE CREST PARCELS C-1, D-1, AND E-1 HOWARD COUNTY, MARYLAND CONTRACT NO. 14-4034-D



VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS
 BENCHMARK NO. 1: COUNTY CONTROL #3044005R
 3/4" REBAR 0.8' BELOW SURFACE
 N. 578233.92, E. 1373142.33
 ELEV. = 374.369
 BENCHMARK NO. 2: COUNTY CONTROL #3044004R
 3/4" REBAR 0.6' BELOW SURFACE
 N. 578128.03, E. 1373460.71
 ELEV. = 362.575



LOCATION PLAN
SCALE: 1"=600'

QUANTITIES

NAME OF UTILITY CONTRACTOR :				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE :				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
12" W	4,229 LF	4385	DIP CL 82	GRIFFIN PIPE
8" W	1,341 LF	1352	"	GRIFFIN
6" W	300 LF	300	"	GRIFFIN
FIRE HYDRANT	6 EACH	6EA	MUELLER	MUELLER CO.
8" DIVISION VALVE	2 EACH	2EA	M.J.	U.S. PIPE
8"x6" FIRE HYDRANT TEE AND VALVE	3 EACH	3EA	"	"
12"x6" FIRE HYDRANT TEE AND VALVE	3 EACH	3EA	"	"
12"x8" RED	2 EACH	2EA	"	"
12"x12" TEE	1 EACH	1EA	"	"
12" VALVE	2 EACH	2EA	"	"
12"x8" TEE	4 EACH	4EA	"	"
8" VALVE	6 EACH	6EA	"	"
8"x8" TEE	1 EACH	1EA	"	"
12"x6" TEE	1 EACH	1EA	"	"
6" VALVE	1 EACH	1EA	"	"
12" CAP & BUTTRESS	2 EACH	2EA	M.J. CAP	"
8" CAP & BUTTRESS	5 EACH	5EA	"	"
6" CAP & BUTTRESS	1 EACH	1EA	"	"
12" S	1,797 LF	1,800	P.V.C. SDR35	J.M. MFG.
8" S	1,755 LF	1,765	"	"
MANHOLES	23 EACH	23EA	4" PRE CAST	ATLANTIC PRO
1" WHC	1,096 LF	1,110 LF	WOODPECKER	READING
2" WHC	10 LF	10 LF	"	"
6" SHC	48 LF	48 LF	PVC SDR 25	J.M. MFG.
4" SHC	885 LF	910 LF	"	"
8" SHC	70 LF	70 LF	"	"
12" x 12" T.S. & V	1 EACH	1EA	"	U.S. PIPE
8" x 6" TEE	1 EACH	1EA	PRECAST MJ	ATLANTIC
AIR RELEASE M.H. (12")	1 EACH	1EA	"	U.S. PIPE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH F-02-47 AND WITH THESE PLANS FOR LIMIT OF DISTURBANCE.

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

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

Jim Meyer 4/3/03
SOIL CONSERVATION DISTRICT DATE

John R. Roberts 4/3/03
U.S. SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Ruth Zimm 4-1-03
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Chad Cameron 4/10/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



FREDERICK WARD ASSOCIATES, INC.
 7125 Riverwood Drive Columbia, Maryland 21046-2354
 Phone: 410-290-9550 Fax: 410-720-6226
 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ	KCI	5	AS-BUILT DATA SHOWN ON PLAN 11/01/00
CHK: JCO		4	ADD AIR RELEASE MH #13
		3	REVISE WATER MAIN 9+50+0 13+50
		1	ADD 8"x6" T TO QUANTITIES
DATE: MARCH 2003	BY	NO.	REVISION

TITLE SHEET

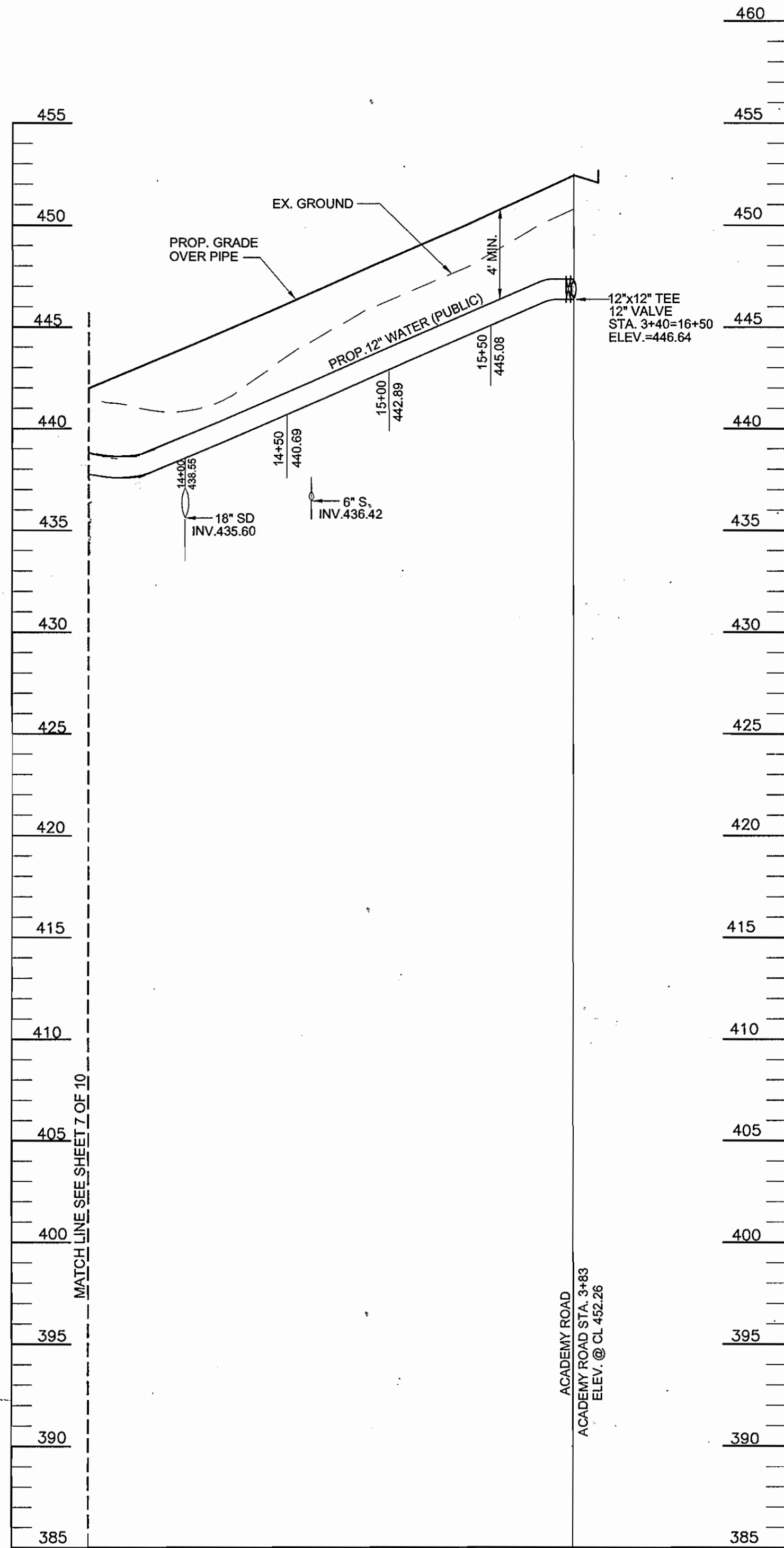
600' SCALE MAP NO. 25 BLOCK NO. 20

**VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D**

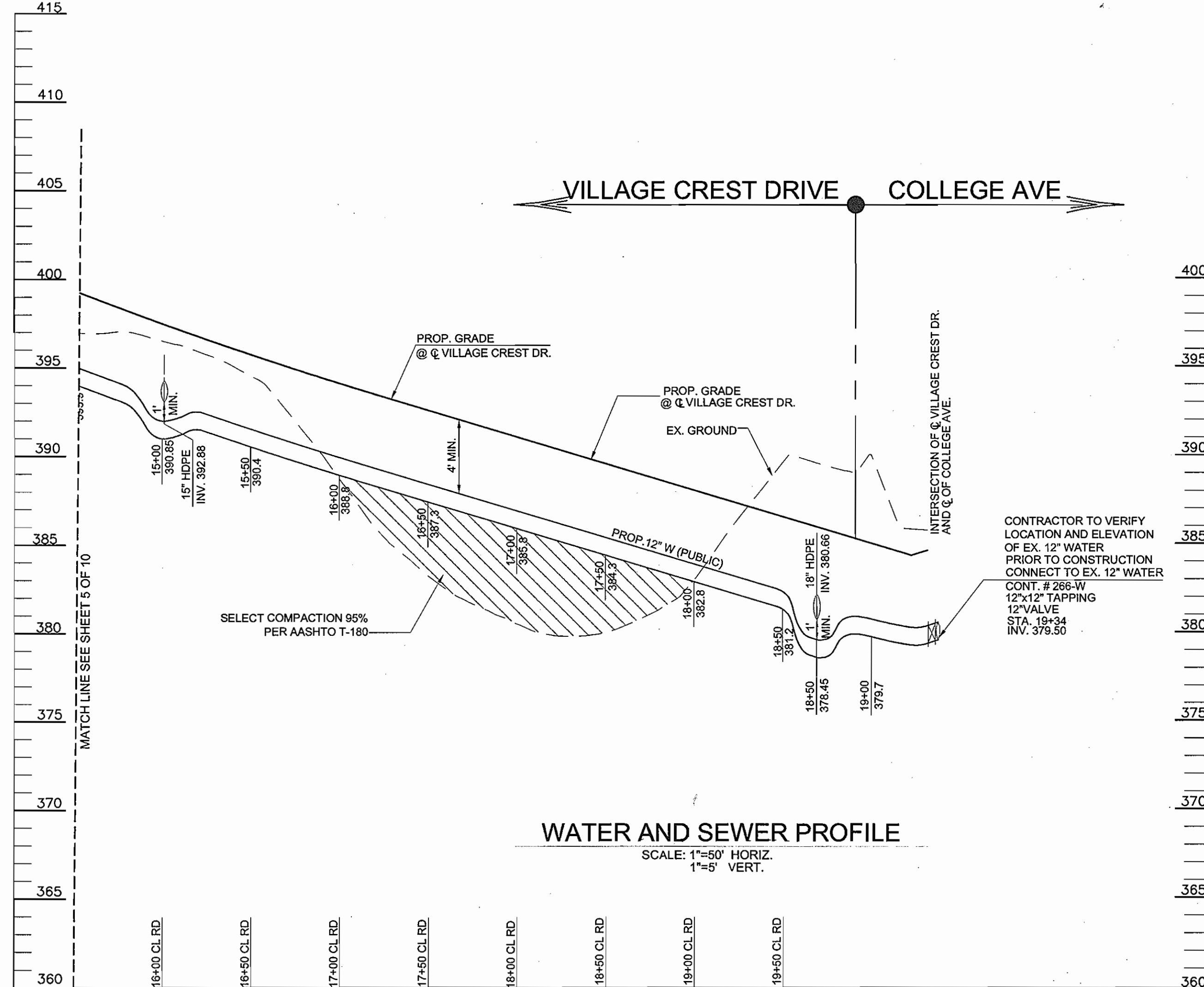
TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT

PARCEL P/O '98
HOWARD COUNTY, MARYLAND

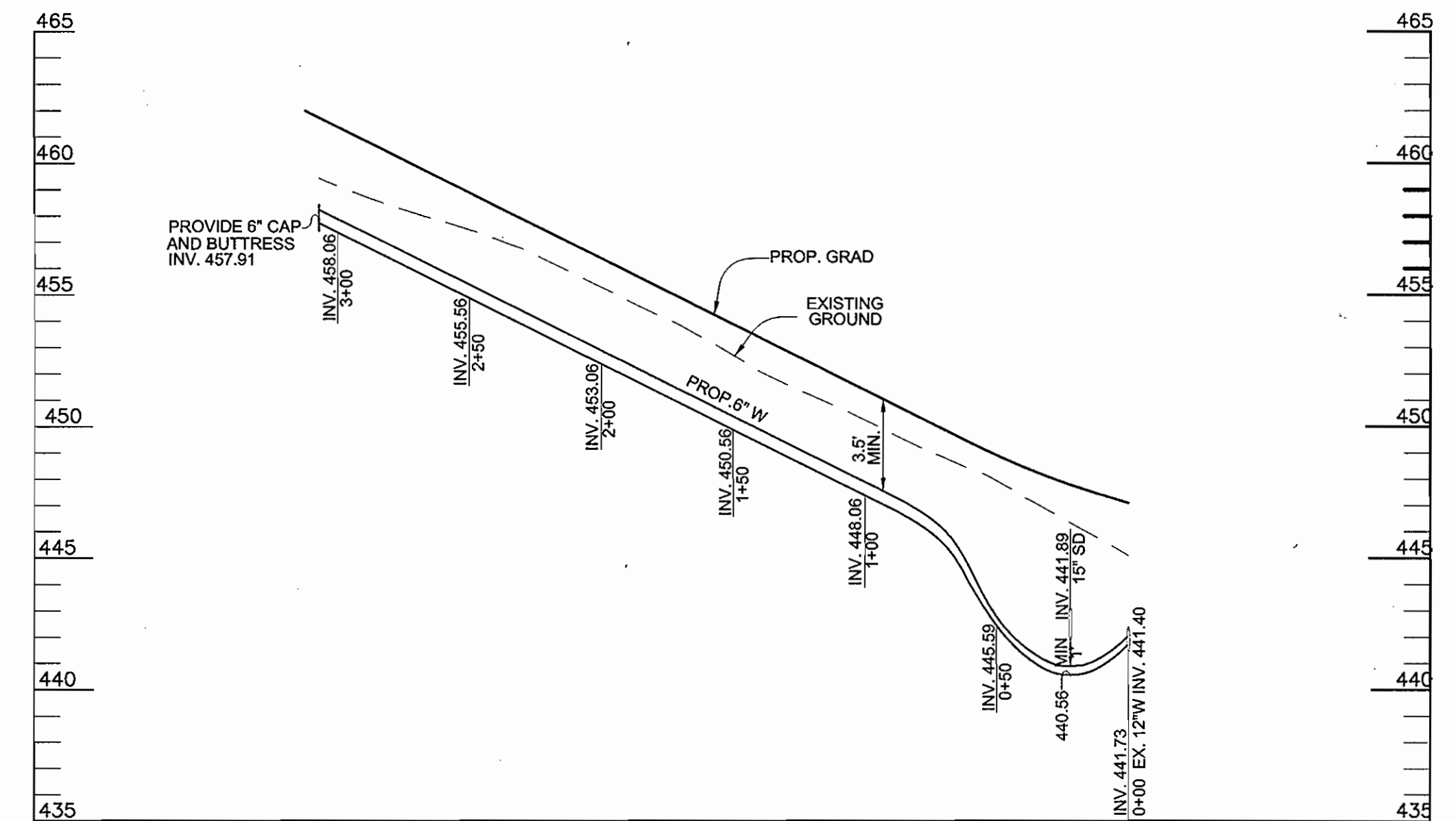
SCALE AS SHOWN
SHEET 1 OF 10



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



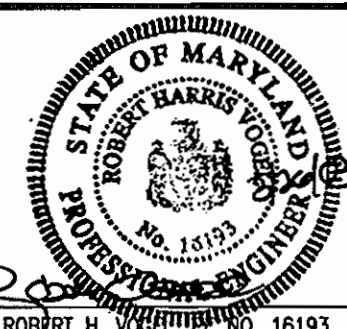
WATER AND SEWER PROFILE
SCALE: 1"=50' HORIZ.
1"=5' VERT.



PROFILE-C WATER PROFILE
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES:	RJ			
DRN:	RJ			
CHK:	JCO			
DATE:	DEC. 2002	BY:	NO.	REVISION
				ADD AIR RELEASE MH # 1
				3 REVISE WATER MAIN B 9+50 TO 12.6.04

12" WATER
8" WATER
8" SEWER

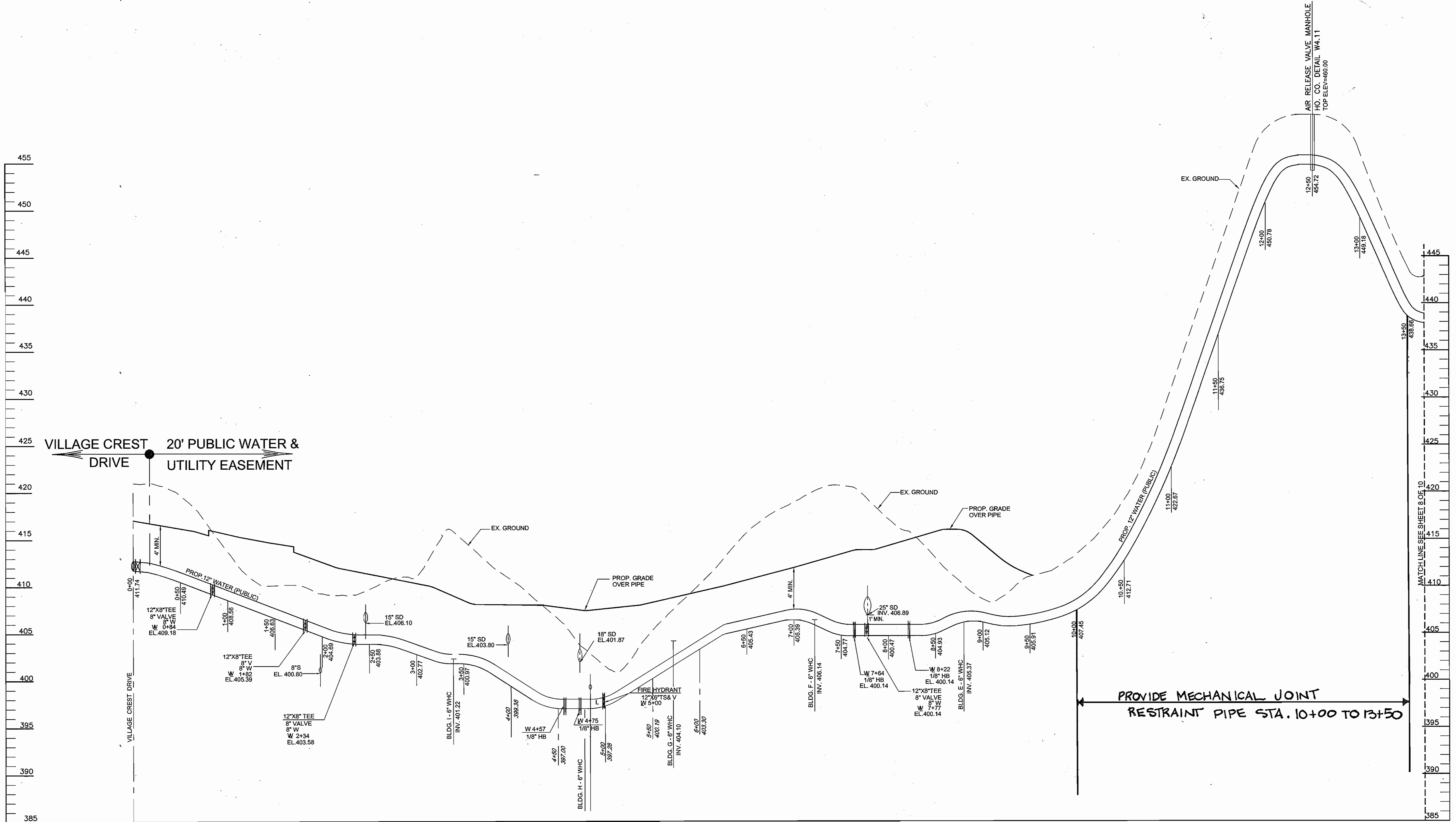
VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

SCALE
AS
SHOWN

SHEET
8 OF 10

TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT

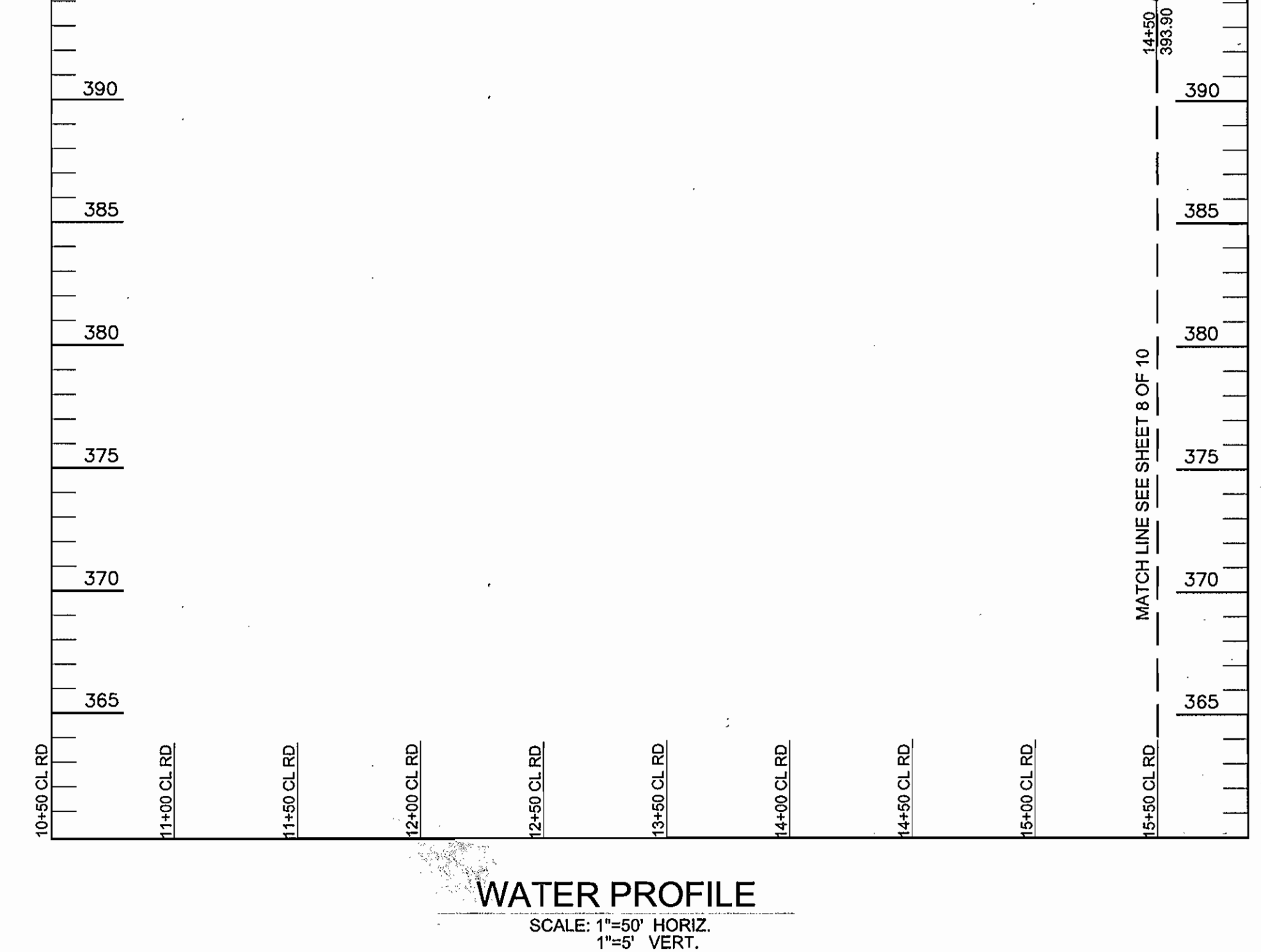
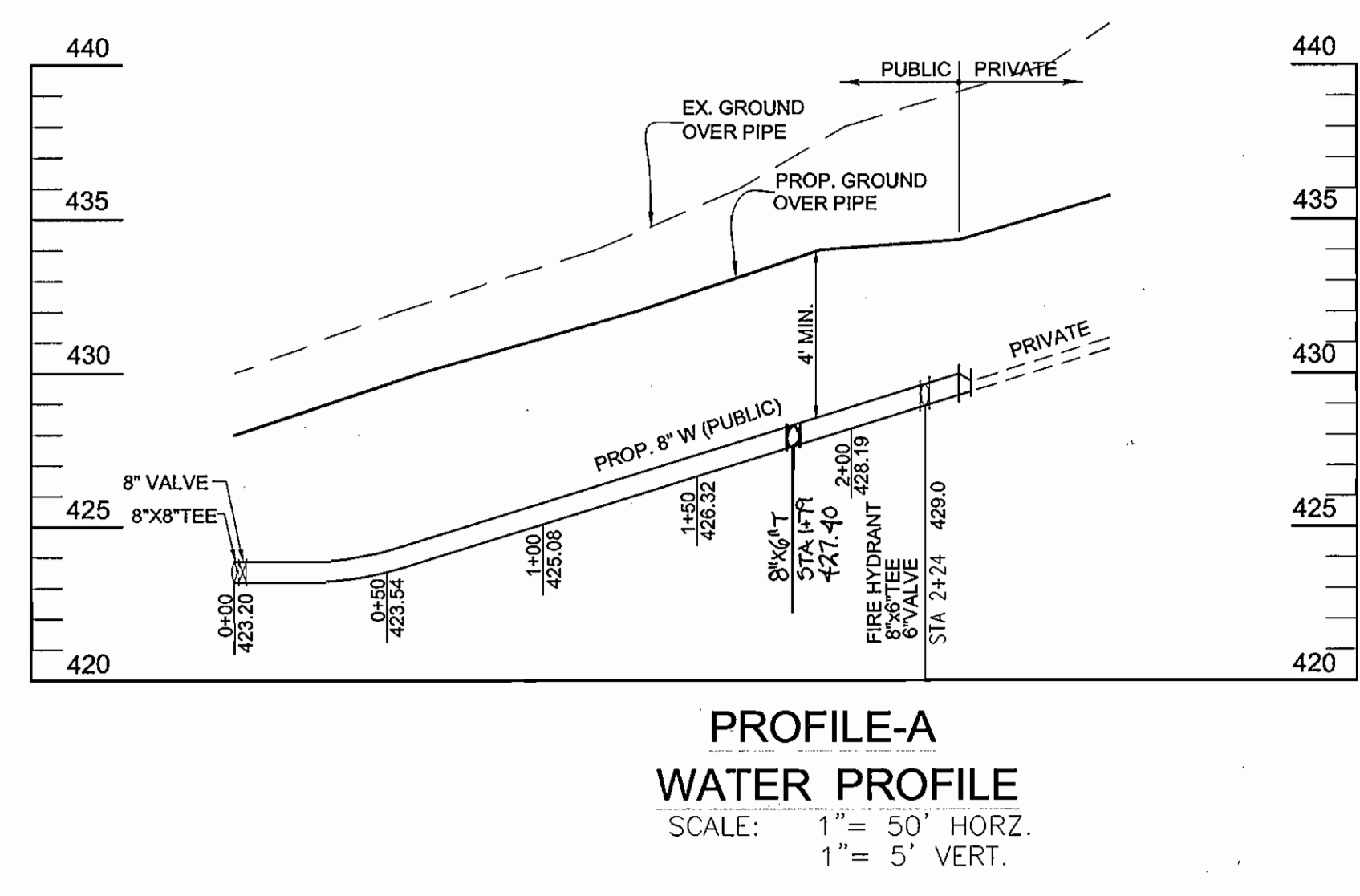
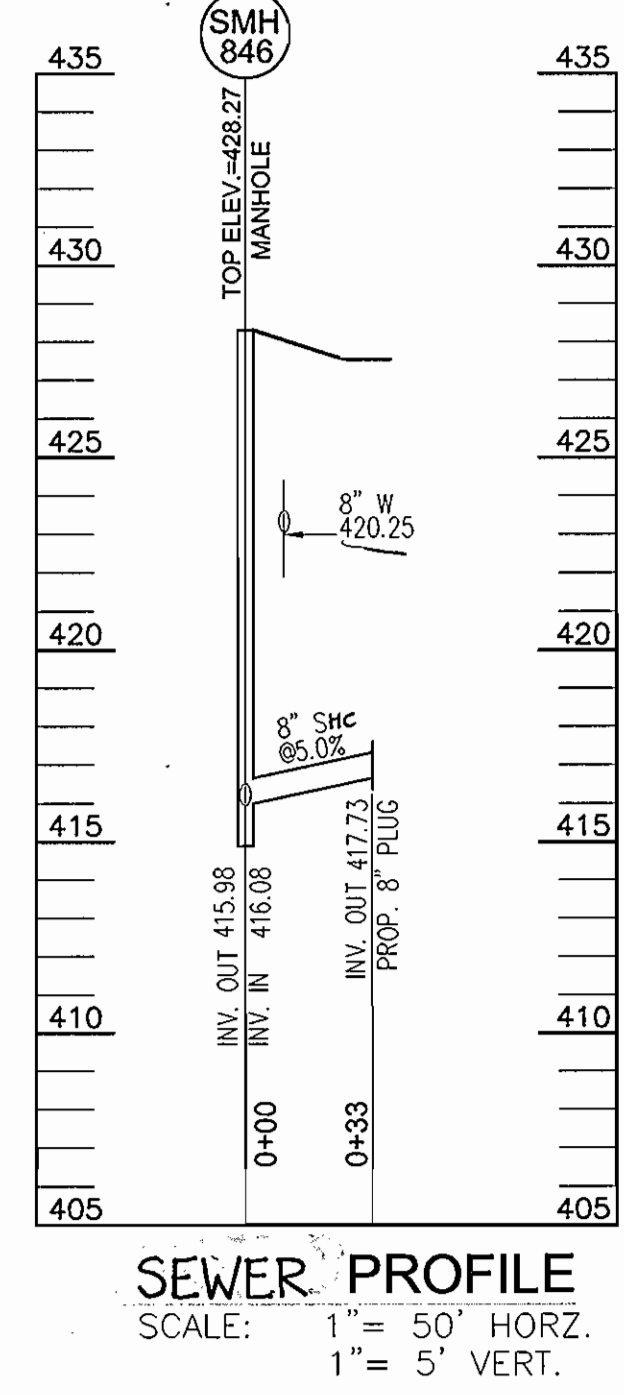
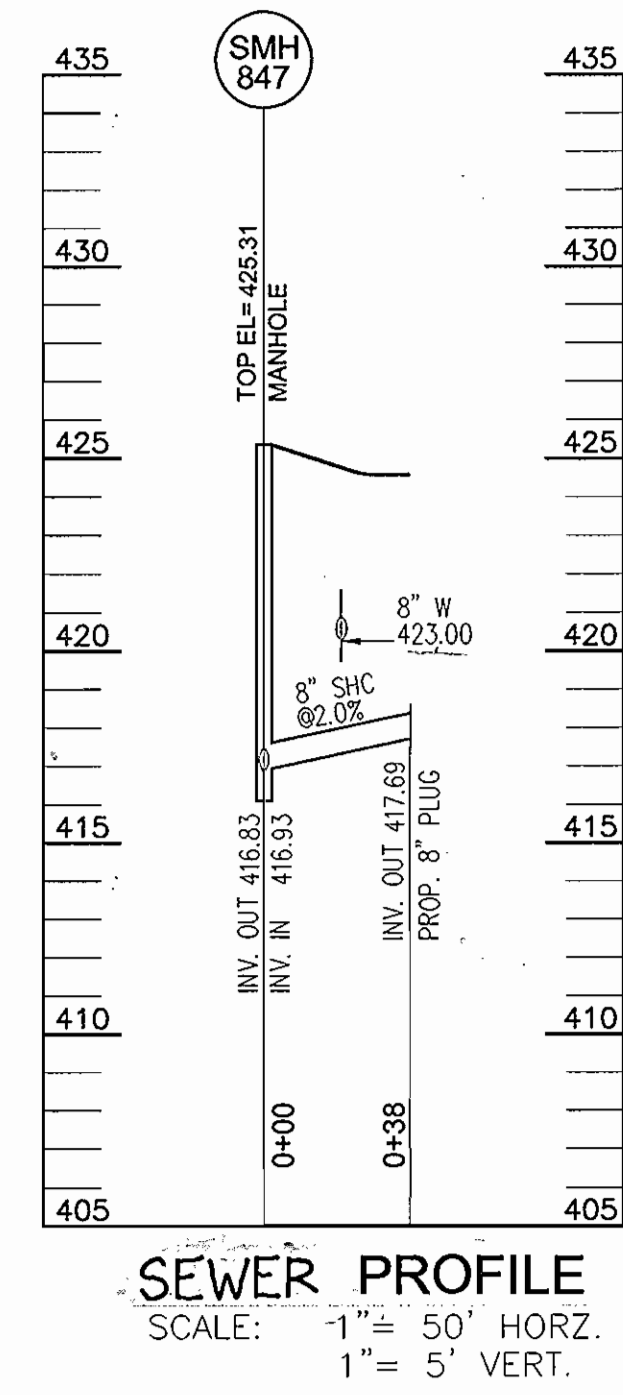
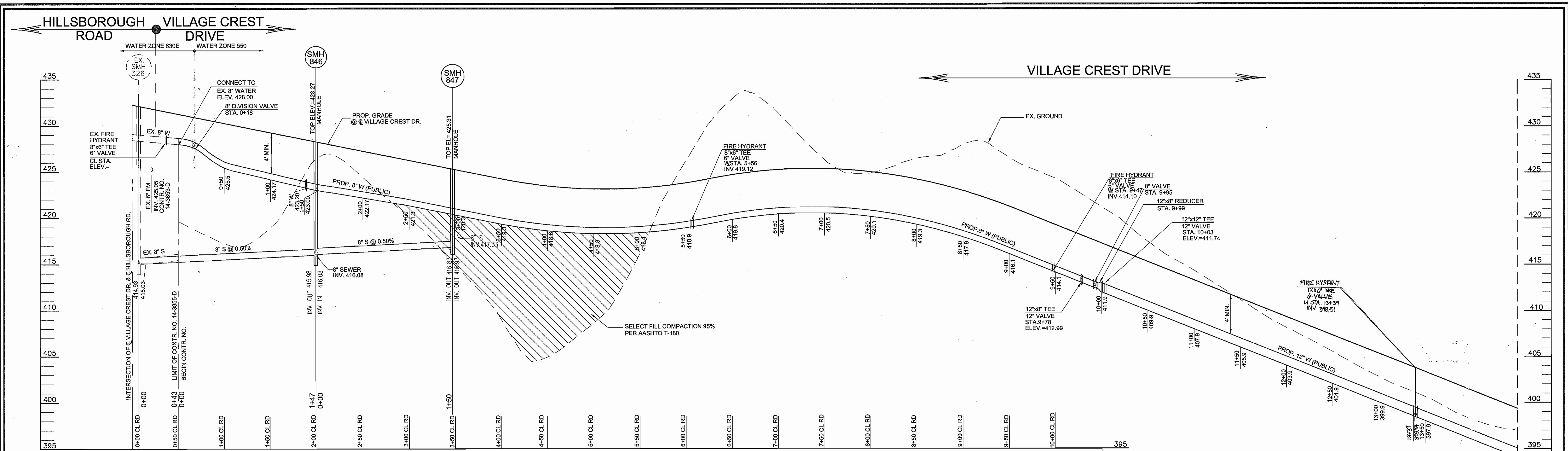
PARCEL P/O '98'
HOWARD COUNTY, MARYLAND



PROFILE-B
WATER PROFILE
 SCALE: 1" = 50' HORIZ.
 1" = 5' VERT.

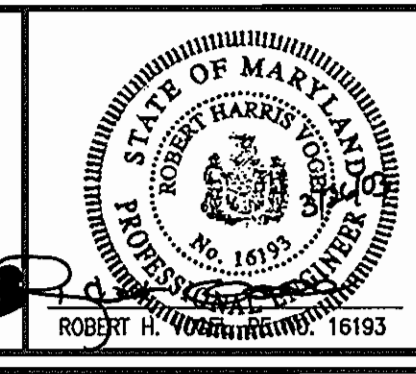
THIS SHEET SUPERCEDES PREVIOUS SHEET 7

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R. J. JACO</i> 5-25-05 CHIEF, BUREAU OF UTILITIES		DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>Chadman</i> 5/27/05 CHIEF, DEVELOPMENT ENGINEERING DIVISION						DES: RJ DRN: RJ CHK: JCO DATE: DEC 2002		<table border="1"> <tr> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> <tr> <td>4</td> <td>ADD MECHANICAL JOINT RESTRAINT NOTE</td> <td>7.1.05</td> </tr> <tr> <td>3</td> <td>ADD AIR RELEASE MH#1 AND REVISE</td> <td>12-06-04</td> </tr> <tr> <td></td> <td>WATER MAIN STA. 9+50 TO STA. 13+50</td> <td></td> </tr> </table>		NO.	REVISION	DATE	4	ADD MECHANICAL JOINT RESTRAINT NOTE	7.1.05	3	ADD AIR RELEASE MH#1 AND REVISE	12-06-04		WATER MAIN STA. 9+50 TO STA. 13+50		12" WATER 8" WATER 8" SEWER		VILLAGE CREST PARCELS C-1, D-1, AND E-1 CONTRACT NO. 14-4034-D		SCALE AS SHOWN SHEET 7A OF 10	
NO.	REVISION	DATE																											
4	ADD MECHANICAL JOINT RESTRAINT NOTE	7.1.05																											
3	ADD AIR RELEASE MH#1 AND REVISE	12-06-04																											
	WATER MAIN STA. 9+50 TO STA. 13+50																												
600' SCALE MAP NO. 25						BLOCK NO. 20		TAX MAP 25 BLOCK 20 2ND ELECTION DISTRICT		PARCEL P/O '98 HOWARD COUNTY, MARYLAND																			



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. J. Bennett 4-1-03
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
Robert H. ... 4/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION



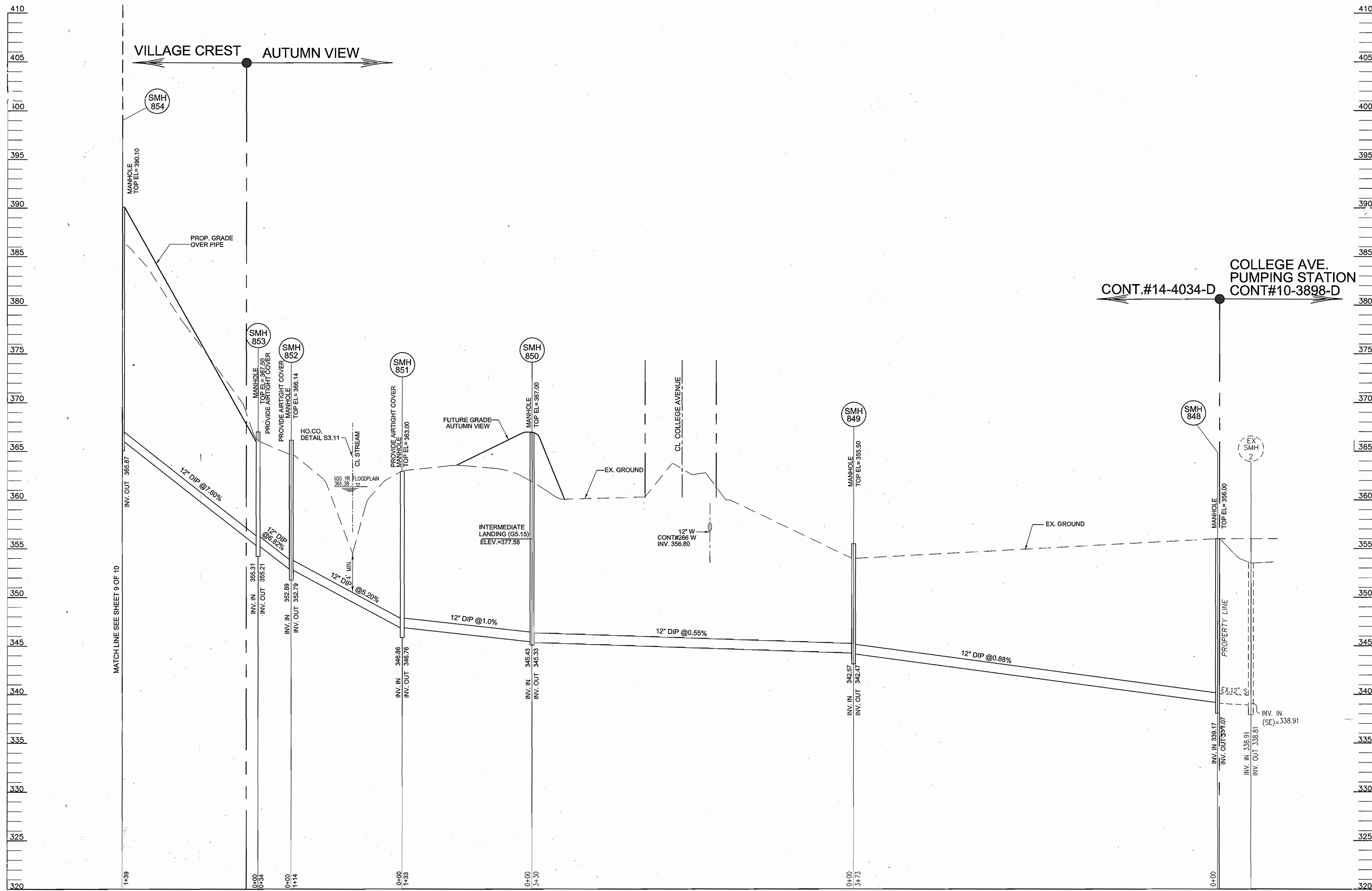
FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ				
DRN: RJ				
CHK: JCO	2	RELOCATION OF FIRE HYDRANT	4/21/04	
DATE: DEC. 2002	BY NO.	REVISION	DATE	
		1	ADD 8" X 6" T L L PROFILE A	

12" WATER.
8" WATER
8" SEWER
600' SCALE MAP NO. 25 BLOCK NO. 20


VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D
TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT
PARCEL P/O '98
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 5 OF 10

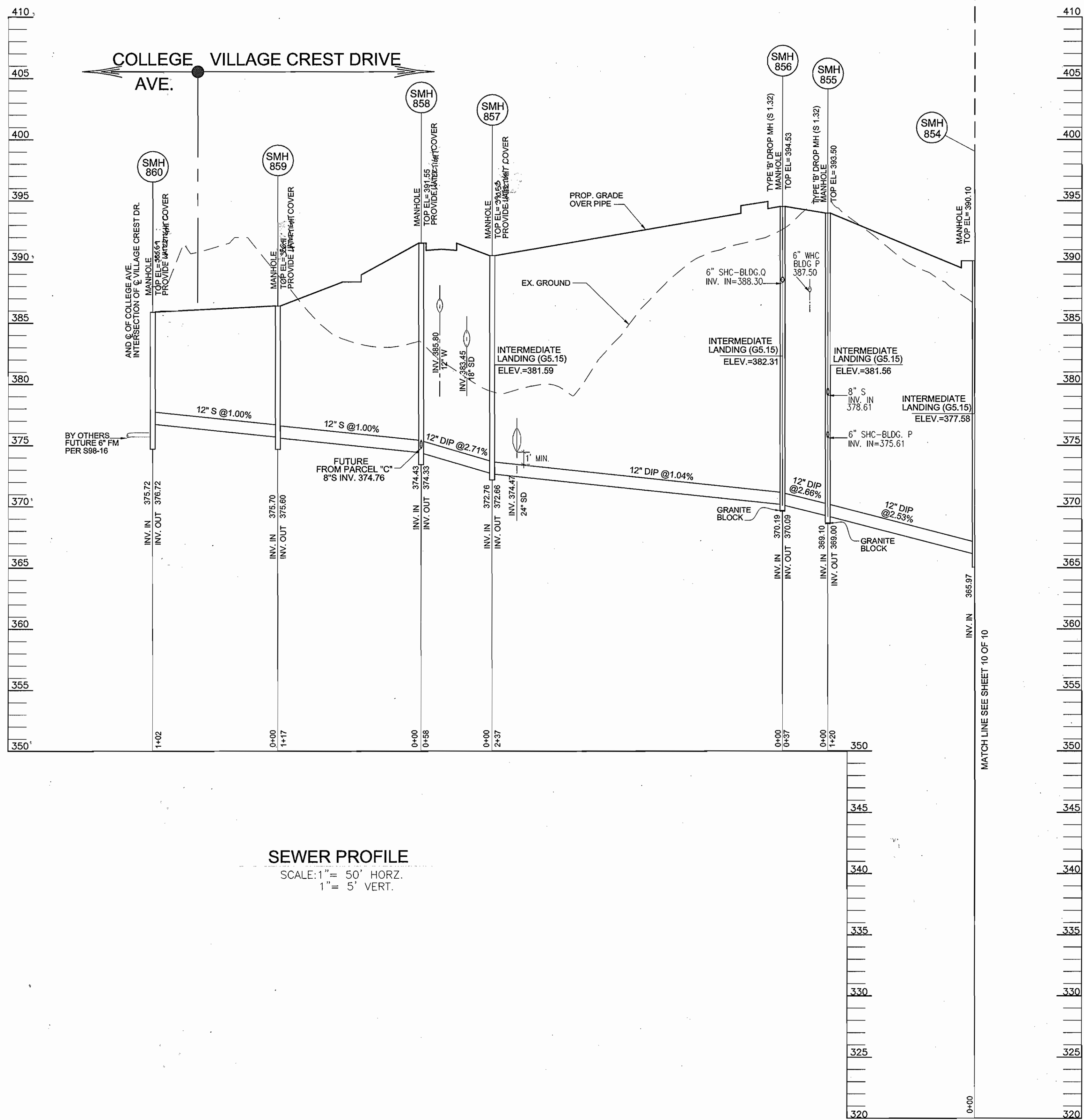


SEWER PROFILE

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

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R. J. ...</i> 4-1-02 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	 FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-6226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia	DES: RJ DRN: RJ CHK: JCO DATE: DEC. 2002 BY: NO.	12" WATER 8" WATER 8" SEWER 1 REVERSE MANHOLE ELEVATION 4/21/04 REVISION DATE	VILLAGE CREST PARCELS C-1, D-1, AND E-1 CONTRACT NO. 14-4034-D TAX MAP 25 BLOCK 20 2ND ELECTION DISTRICT PARCEL P/O '98 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 10 OF 10
--	---	--	--	---	--	----------------------------------

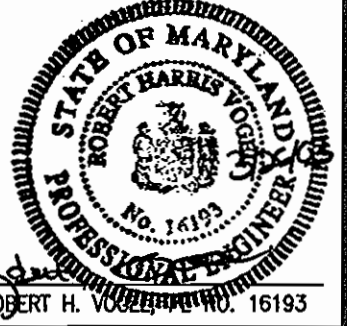
K:\PROJECTS\2018121\Engin\dwg\FINALS\WORKSHEET.dwg Mod Mar 26 09:19:14 2003 e1w



SEWER PROFILE
SCALE: 1" = 50' HORZ.
1" = 5' VERT.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Worrenton, Virginia

DES: RJ					
DRN: RJ					
CHK: JCO					
DATE: DEC. 2002	BY NO.	REVISION	DATE		
		1 REVISE MANHOLE COVER TYPE	1/31/04		

12" WATER
8" WATER
8" SEWER

600' SCALE MAP NO. 25 BLOCK NO. 20

VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT.

PARCEL P/O '98
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 9 OF 10

R. J. ...
4-1-02
DATE

...
4/1/02
DATE

...
DATE

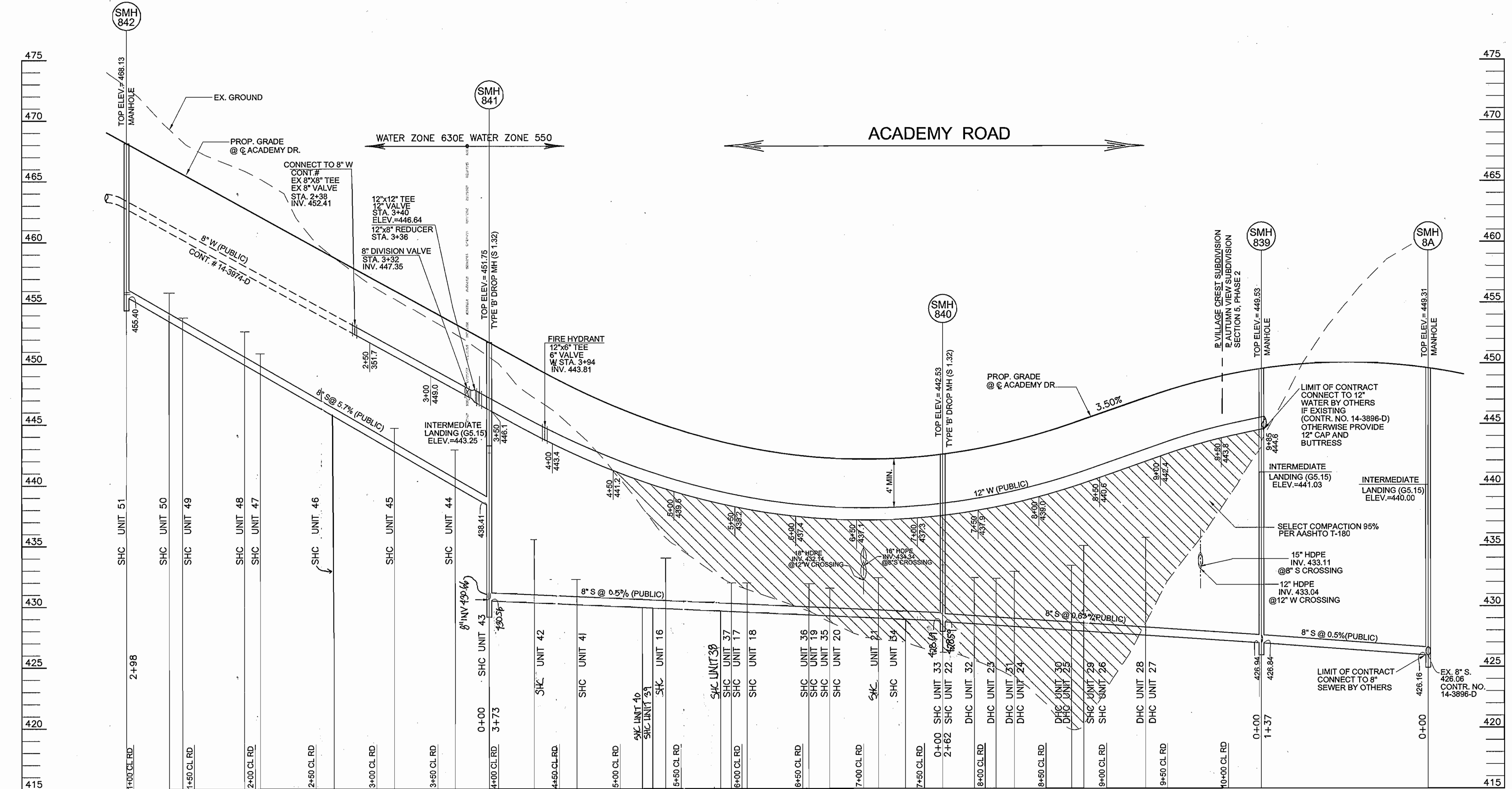
K:\PROJETS\2018121\Eng\dwg\T\MAILS\09SPRDF.dwg Mod Wed 26 09:18:25 2003 e1w

CL STATION	APPURTENANCE	OFFSET	WL STATION	APPURTENANCE
	VILLAGE CREST DRIVE		PROFILE-A	
1+39	8"x6" FH TEE	7.6' LT.	2+24	8"x6" FH TEE
1+39	6" VALVE		2+24	6" VALVE
5+56	8"x6" FH TEE	7' LT.	2+30	8" VALVE
5+56	6" VALVE			
9+47	8"x6" FH TEE	7' LT.	PROFILE-B	
9+47	6" FH VALVE		0+84	12"x8" TEE
10+50	12"x12" TEE	7' LT.	0+84	8" VALVE
10+46	12"x8" RED.		1+82	12"x8" TEE
10+13	12" V		1+82	8" VALVE
14+03	12"x6" FH TEE	7' LT.	2+34	12"x8" TEE
14+03	6" V		2+34	8" VALVE
19+34	12"x12" TEE	7' LT.	4+98	12"x6" FH TEE
19+34	12" V		4+98	6" VALVE
			7+22	6" VALVE
			7+76	12"x8" TEE
	ACADEMY ROAD		7+76	8" VALVE
3+94	12"x6" FH TEE	6' LT.	8+62	12" V
3+94	6" V		14+73	12"x6" TEE
3+83	12" V		14+73	6" VALVE
3+79	12"x8" RED.		6' LT.	
3+75	8" DIVISION VALVE		6' LT.	
3+83	12"x12" TEE	10' LT.		
3+37	12"x6" TEE	6' LT.		
3+37	6" V	8' LT.		

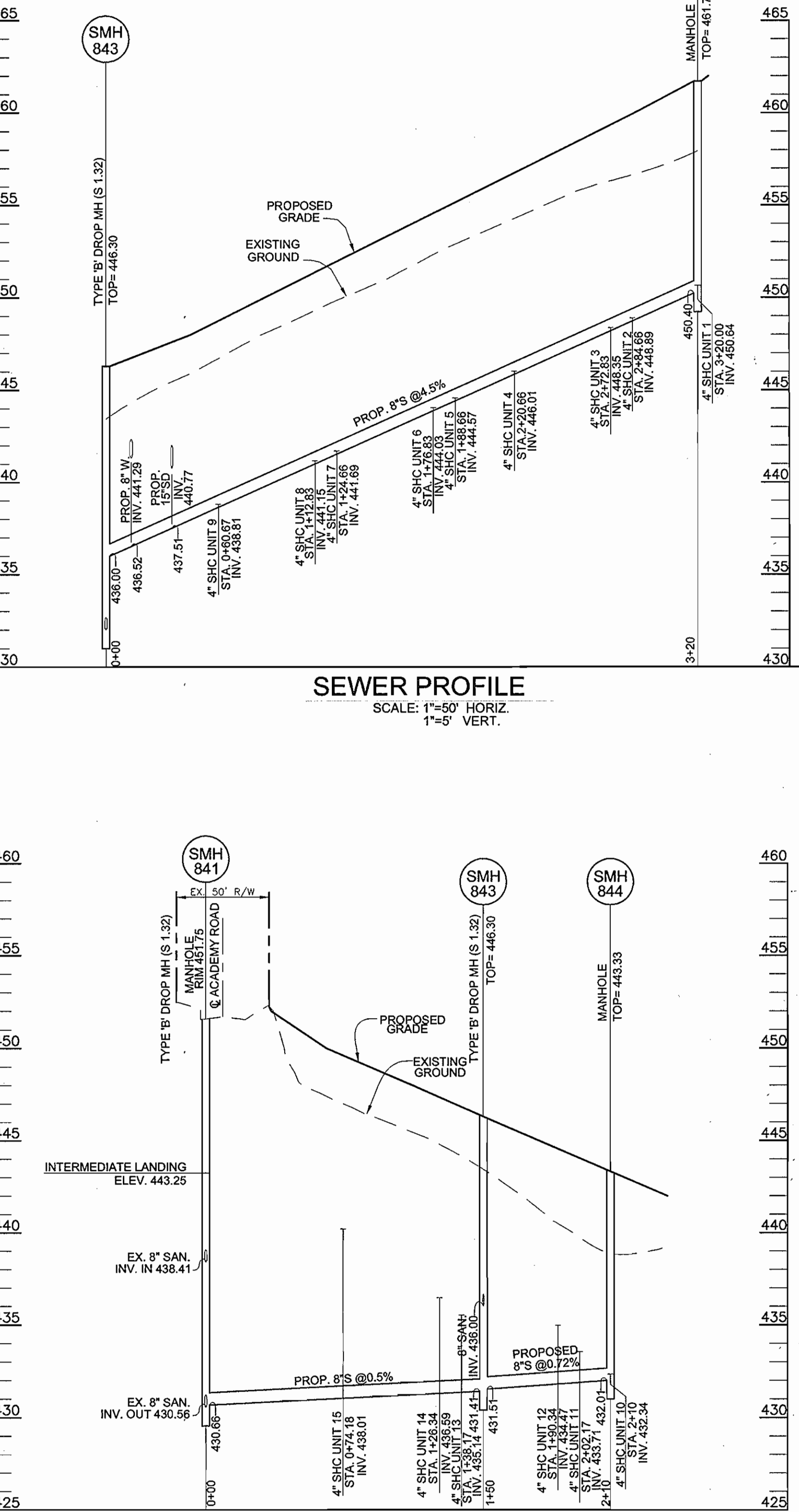
MANHOLE NO.	TYPE	LOCATION	CL ROAD STATION	OFFSET	TOP ELEVATION
SMH 860	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL VILLAGE CREST	19+77	3.3' LT.	385.89
SMH 859	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL VILLAGE CREST	18+76	6.4' LT.	386.41
SMH 858	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL VILLAGE CREST	17+58	7.3' LT.	391.55
SMH 857	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578583.30 E 1372244.71			390.53
SMH 856	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578352.36 E 1372296.60			394.53
SMH 855	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578336.53 E 1372330.28			853.00
SMH 854	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578349.23 E 1372450.26			390.10
SMH 853	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578337.70 E 1372588.78			365.00
SMH 852	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578303.90 E 1372591.49			366.14
SMH 851	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578272.66 E 1372701.15			432.20
SMH 850	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578345.18 E 1372812.91			367.00
SMH 849	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578380.26 E 1373140.87			355.50
SMH 848	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 578274.43 E 1373501.37			356.00
SMH 8A	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 577192.70 E 1373089.60			448.27
SMH 846	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL VILLAGE CREST	1+47	6' LT.	428.66
SMH 847	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL VILLAGE CREST	4+17	13' RT.	424.00
SMH 845	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 576856.02 E 1,372,049.29			461.71
SMH 844	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 577,043.98 E 1,372,317.24			443.33
SMH 843	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 576,980.82 E 1,372,344.03			446.30
SMH 842	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL ACADEMY ROAD	0+44	3' RT.	468.13
SMH 841	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL ACADEMY ROAD	3+93	9' RT.	451.75
SMH 840	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL ACADEMY ROAD	7+65	7' RT.	442.53
SMH 839	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL ACADEMY ROAD	10+28	6' RT.	449.53

LOT NO.	TYPE	ELEVATION @ MAIN	ELEVATION @ R/W	M.C.E.	BASEMENT
51	SHC @ 5X	455.66	461.10	463.01	
50	SHC @ 5X	455.85	456.75	461.45	461.54
49	SHC @ 5X	452.80	454.65	459.05	459.54
48	SHC @ 5X	452.66	453.36	457.68	458.14
47	SHC @ 5X	450.84	451.49	456.09	456.14
46	SHC @ 5X	448.10	448.85	453.25	454.44
45	SHC @ 5X	444.68	445.37	449.58	449.71
44	SHC @ 5X	441.16	441.78	447.71	447.71
43	SHC @ 5X	439.11	440.11	445.11	445.11
42	DHC @ 5X	437.04	437.04	440.54	437.41
41	SHC @ 5X	433.20	433.20	438.70	438.70
40	SHC @ 5X	431.87	432.97	437.97	437.97
39	DHC @ 5X	431.17	432.87	437.17	437.17
38	SHC @ 5X	429.61	429.61	437.86	437.86
37	SHC @ 5X	429.16	429.16	437.54	437.54
36	SHC @ 5X	429.16	429.16	437.41	437.41
35	SHC @ 5X	431.50	432.25	437.04	437.04
34	SHC @ 5X	431.04	432.04	437.04	437.04
33	DHC @ 5X	431.36	432.36	437.36	437.36
32	DHC @ 5X	432.36	433.36	437.51	437.51
31	DHC @ 5X	432.87	433.87	437.97	438.41
30	DHC @ 5X	433.36	434.36	438.86	439.14
29	DHC @ 5X	435.00	436.00	440.75	440.84
28	DHC @ 5X	435.66	436.66	440.91	441.30
27	DHC @ 5X	435.41	436.41	441.16	441.34
26	DHC @ 5X	434.75	435.75	440.50	440.64
25	DHC @ 5X	433.36	434.36	439.11	439.54
24	DHC @ 5X	431.19	432.19	438.44	438.44
23	DHC @ 5X	431.19	432.19	437.94	437.94
22	SHC @ 5X	431.19	432.19	437.26	437.64
21	DHC @ 5X	430.65	431.65	437.40	437.51
20	SHC @ 5X	429.78	430.78	437.51	437.24
19	SHC @ 5X	429.78	430.78	437.64	437.64
18	SHC @ 5X	430.67	431.67	437.64	437.64
17	SHC @ 5X	430.67	431.67	438.04	438.14
16	SHC @ 5X	431.45	432.45	438.14	439.21

LOT NO.	TYPE	ELEVATION @ MAIN	ELEVATION @ R/W	M.C.E.	BASEMENT
15	DHC @ 5X	431.25	431.96	443.00	443.51
14	DHC @ 5X	436.59	437.09	440.01	442.34
13	DHC @ 5X	435.14	435.64	441.64	441.14
12	SHC @ 5X	434.47	434.97	435.72	439.54
11	SHC @ 5X	433.71	434.21	436.71	438.21
10	SHC @ 7X	434.34	434.84	438.04	438.64
9	SHC @ 7X	438.70	439.20	441.00	443.81
8	SHC @ 2X	441.15	441.65	444.35	445.01
7	SHC @ 5X	441.69	442.19	446.19	446.54
6	SHC @ 5X	444.03	444.53	447.74	447.74
5	SHC @ 5X	444.57	445.07	449.07	449.74
4	SHC @ 5X	446.01	446.51	450.51	451.64
3	SHC @ 5X	448.35	448.85	452.10	453.11
2	SHC @ 5X	448.89	449.39	453.71	454.84
1	SHC @ 5X	450.61	451.11	455.61	456.81

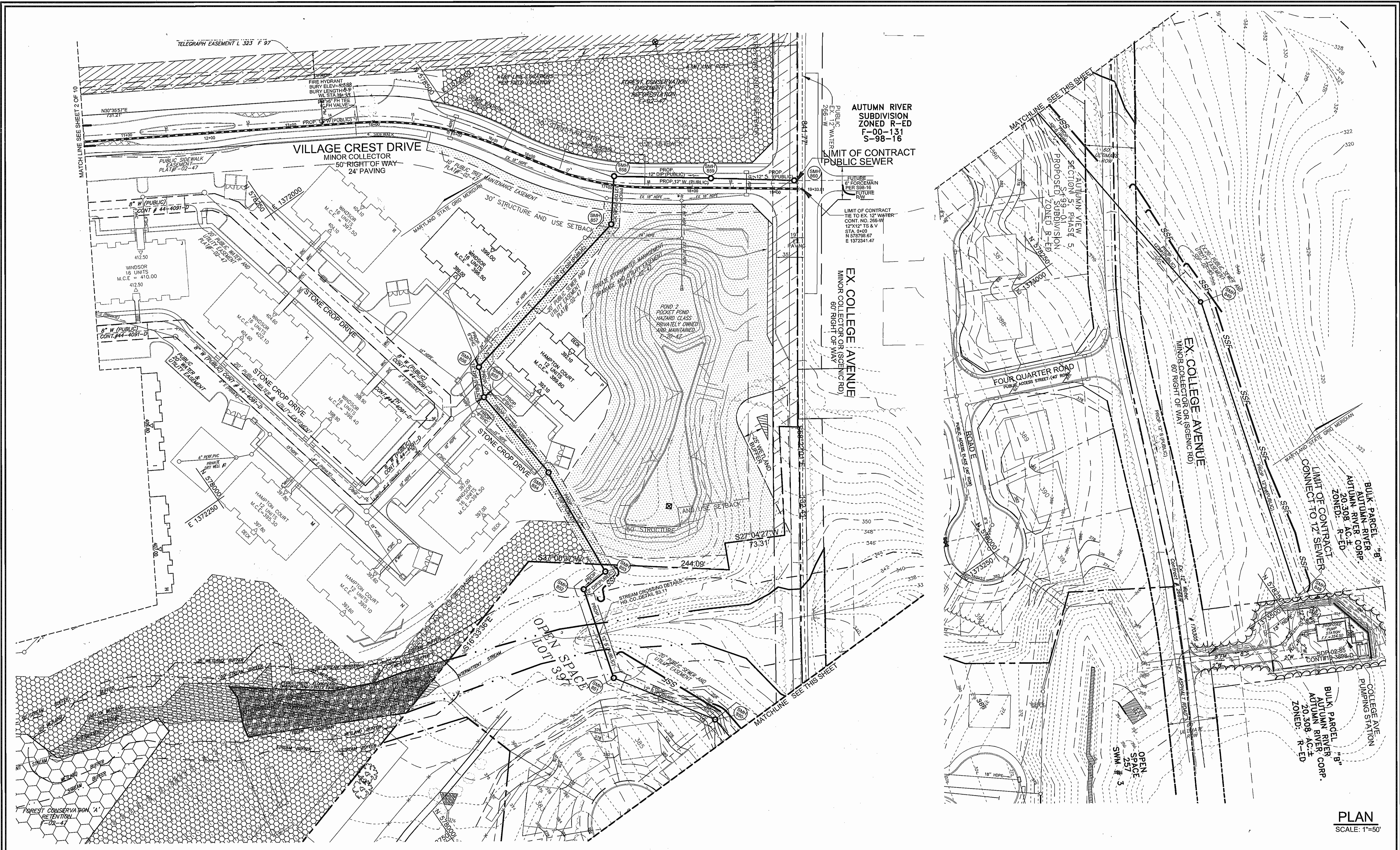


WATER AND SEWER PROFILE
SCALE: 1"=50' HORIZ.
1"=5' VERT.



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

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND
 FREDERICK WARD ASSOCIATES, INC.
 7125 Riverwood Drive, Columbia, Maryland 21046-2354
 Phone: 410-290-9550 Fax: 410-720-6226
 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia
 DES: RJ
 DRN: RJ
 CHK: JCO
 DATE: DEC. 2002
 12" WATER
 8" WATER
 8" SEWER
 VILLAGE CREST PARCELS C-1, D-1, AND E-1 CONTRACT NO. 14-4034-D
 SCALE AS SHOWN
 SHEET 6 OF 10
 TOWN MAP 25 BLOCK 20 2ND ELECTION DISTRICT
 PARCEL P/O '98' HOWARD COUNTY, MARYLAND



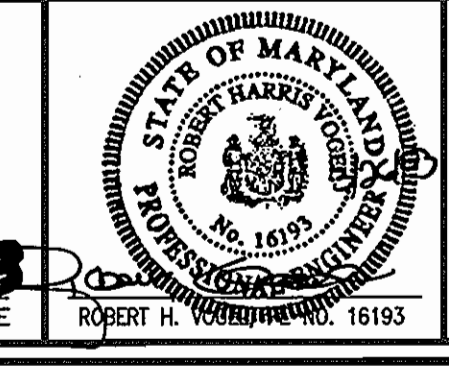
PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert J. ... 4-1-03
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Chad ... 4/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21048-2354
Phone: 410-290-9550 Fax: 410-720-6228
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ				
DRN: RJ				
CHK: JCO				
DATE: DEC. 2002	BY	NO.	REVISION	DATE
			1 RELOCATION OF FIRE HYDRANT	4/21/04

12" WATER
8" WATER
8" SEWER

600' SCALE MAP NO. 25 BLOCK NO. 20

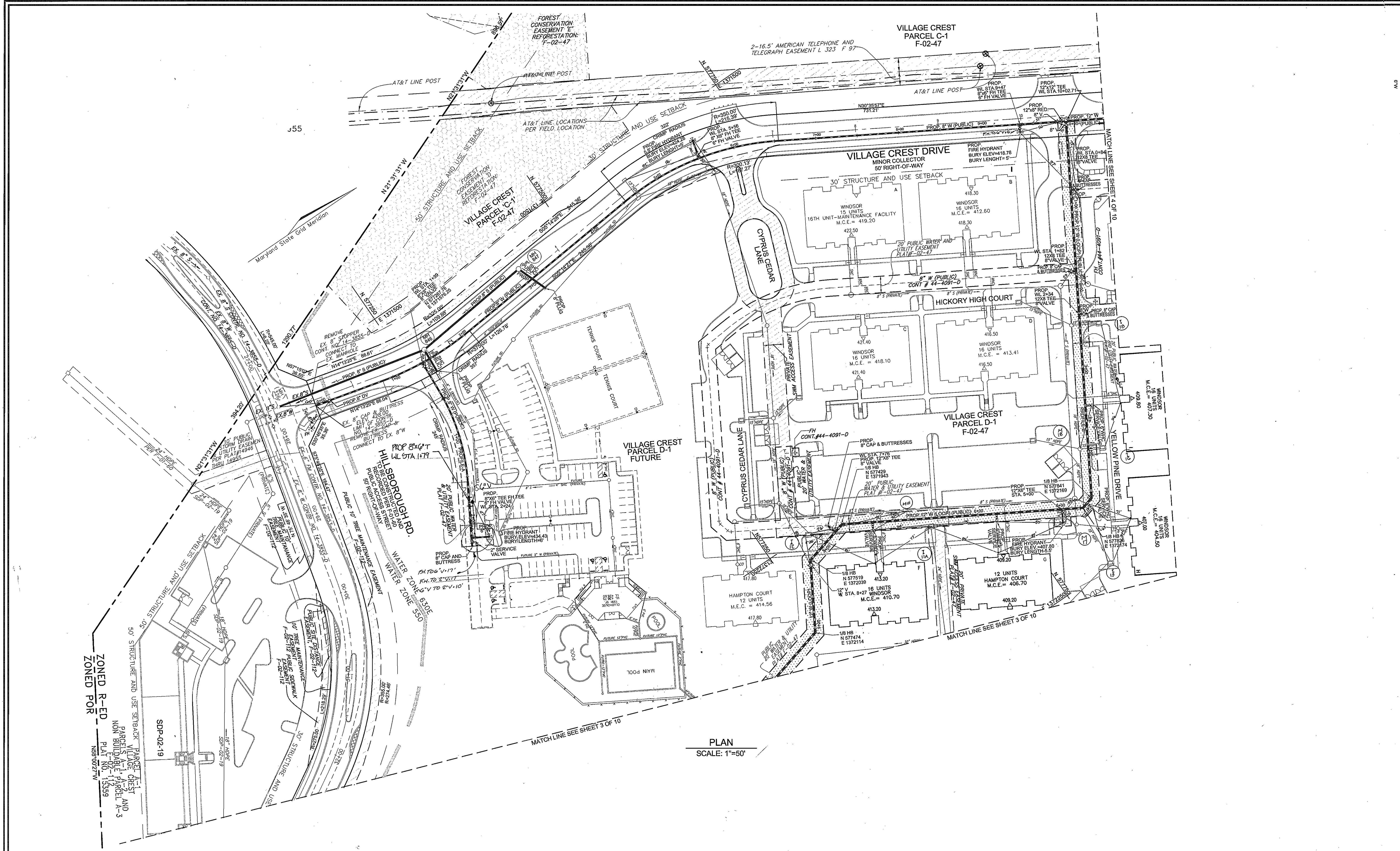
VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT

PARCEL P/O '98'
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

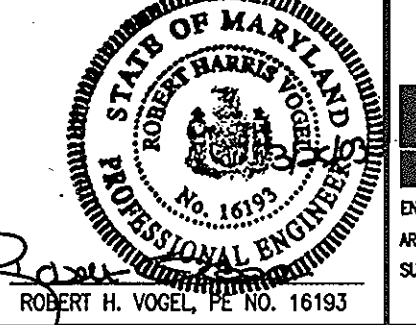
SHEET 4 OF 10



PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ					
DRN: RJ					
CHK: JCO	K.O.I	2	ADJUNCT DATA SHOWN		1/07/06
DATE: DEC. 2002	BY: NO.	REVISION	DATE	600' SCALE MAP NO. 25	BLOCK NO. 20

12" WATER
8" WATER
8" SEWER

VILLAGE CREST
PARCELS C-1, D-1, AND E-1
CONTRACT NO. 14-4034-D

TAX MAP 25 BLOCK 20
2ND ELECTION DISTRICT

PARCEL P/O '98
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 10

PROJECT: 20161211_Engr_01.dwg; P:\FINAL\MS\CD\SP\AK.dwg Mod: Mar 26 08:42:07 2003 e1v