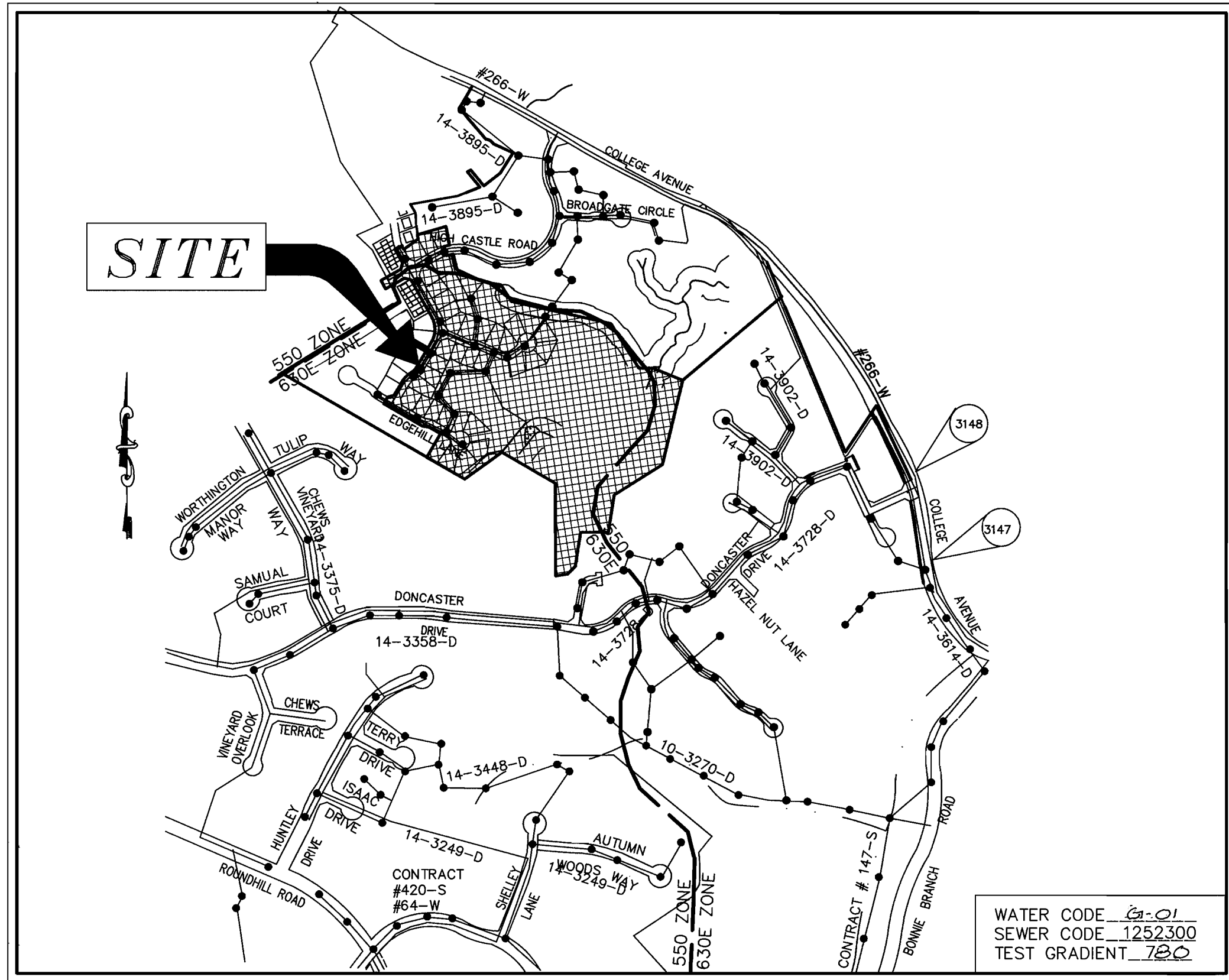


QUANTITY TABLE				
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
DROP MH, TYPE "B" (HO. CO. STD. S-1.32)	3			
DROP MH, TYPE "A" (HO. CO. STD. S-1.32)	1			
8" SEWER MAIN	2,268 L.F.			
8" D.I.P.	419 L.F.			
4" SEWER HOUSE CONNECTION	1,480 L.F.			
# SEWER HOUSE CONNECTIONS	51 EACH			
8" WATER	2,043 L.F.			
12" WATER	330 L.F.			
1" WATER HOUSE CONNECTION	1,540 L.F.			
# 1" WHC	53 EACH			
# TWIN 1.5" WHC	5 EACH			
1.5" WATER HOUSE CONNECTION	100 L.F.			
F.H.	4 EACH			
12"x8" C	1 EACH			
8"x 8" T	2 EACH			
8"x6" T	4 EACH			
8"x4" T	1 EACH			
12" V	2 EACH			
6" V	4 EACH			
8" V	6 EACH			
8" CAP & BUTTRESS	4 EACH			
12" CAP & BUTTRESS	1 EACH			
1/8 H.B. (8")	1 EACH			
1/16 H.B. (8")	5 EACH			
1/32 H.B. (8")	5 EACH			
8" PRESSURE VALVE	1 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



VICINITY MAP
SCALE: 1"=600'

TYPE OF BUILDING	SFD
No. OF UNITS	38
No. OF FUTURE UNITS	23
No. OF WATER HOUSE CONNECTION	38 (FUTURE 23)
No. OF SEWER HOUSE CONNECTIONS	38 (FUTURE 23)
DRAINAGE AREA	BONNIE BRANCH, PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

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 ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- 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 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 DETAIL 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 [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 (410) 531-5533
BG & E CO. CONTRACTOR SERVICES (410) 850-4620
BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068
MISS UTILITY 1-800-257-7777
COLONIAL PIPELINE CO. (410) 795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES (410) 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE 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 (5) 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 HOWARD COUNTY CODE.
- 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE 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.
- FOR SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. 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.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- SEDIMENT CONTROL TO BE PROVIDED BY F-01-38.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL HOUSES WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- THE EXISTING WELL AND SEPTIC SERVICING EXISTING HOUSE(S) ARE TO BE ABANDONED.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY. SEE ROAD PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-01-38

CONTRACT NO.: 14-3896-D

AUTUMN VIEW, SECTION 5, PHASE II
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER PROFILES
4	WATER PROFILES
5	SEWER PROFILES
6	SEWER PROFILES

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Bruce Taylor, Pres 12/18/09 DATE
DEVELOPER'S SIGNATURE
DEVELOPER'S NAME

Joy B. Mildenberg 12/29/01 DATE
ENGINEER'S SIGNATURE
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.
Jim Meyer 2/7/02 DATE
USDA NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.
John R. Robertson 2/7/02 DATE
HOWARD SCD

PLAN REFERENCE NUMBERS

F-01-38
P-00-09
S-99-01

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert B. ... 2-4-02 DATE
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
... 2/11/02 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 2104
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax



engineering M.P.	
illustration M.P.	
approval J.M.	
project 99072	
date DEC. 2001	

TITLE SHEET
600' SCALE MAP NO. ... 31... BLOCK NO. ... 3 & 4...

AUTUMN VIEW, SECTION 5
PHASE 2 LOTS: 260-300
CONTRACT NO.: 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

99072.DWG, SECT 5, FINAL, W&S/COVER

**WATER MAIN
TABULATION CHART**

WINDING ROSS WAY		
STATION	APPURTENANCE	O/S FROM CL
0+50.00	F.H.	LT. 16.1'
0+50.00	8"x6" T	RT. 8.0'
3+10.00	1/16 H.B.	RT. 3.0'
3+35.00	F.H.	RT. 16.1'
3+35.00	8"x6" T	RT. 2.5'
3+41.73	1/16 H.B.	RT. 1.0'
3+62.16	8"x6" T	RT. 4.0'
4+06.78	1/16 H.B.	RT. 0.75'
5+87.40	1/16 H.B.	RT. 3.0'
6+92.87	1/16 H.B.	RT. 8.0'

EDGEHILL LANE		
STATION	APPURTENANCE	O/S FROM CL
0+03.00	8" V.	RT. 8.0'
0+42.00	F.H.	LT. 22.1'
0+42.00	8"x6" T	RT. 8.0'
3+19.39	1/32 H.B.	RT. 9.0'
L.P. 1+83.00	8"C. & B.	RT. 11.0'

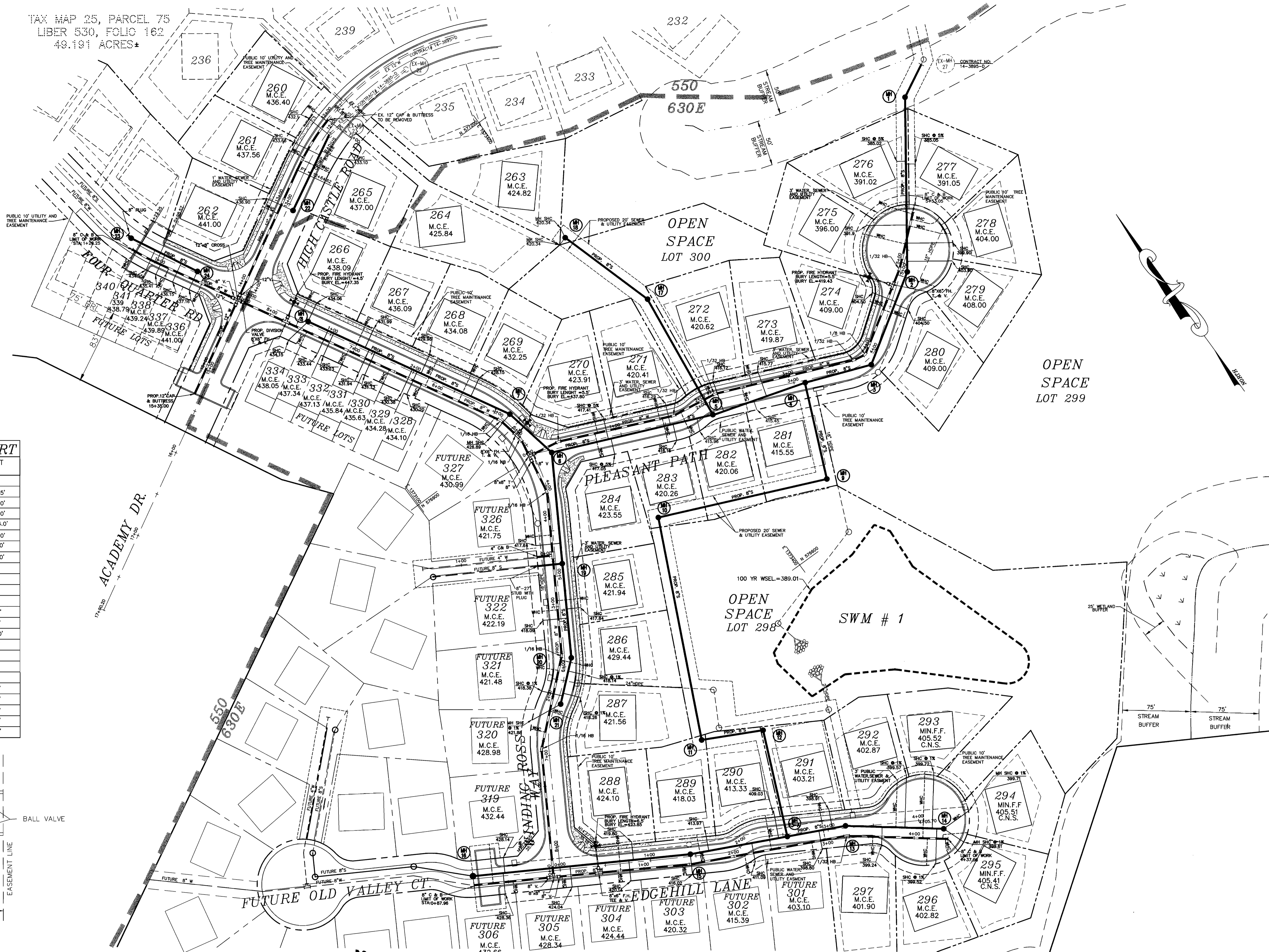
PLEASANT PATH		
STATION	APPURTENANCE	O/S FROM CL
0+03.00	8" V.	0.0'
0+30.98	1/32 H.B.	LT. 7.0'
1+60.60	1/32 H.B.	LT. 7.0'
2+12.71	1/32 H.B.	LT. 7.0'
3+72.44	1/32 H.B.	LT. 8.0'
3+87.96	1/8 H.B.	LT. 6.0'
4+72.80	8"x6" T	LT. 4.0'
4+72.80	F.H.	LT. 26.0'
4+92.24	1/32 H.B.	LT. 2.5'
L.P. 1+42.00	8"C. & B.	RT. 3.0'

HIGH CASTLE ROAD		
STATION	APPURTENANCE	O/S FROM CL
14+16.49	8" V.	RT. 8.0'
14+19.49	8"x8" CROSS	RT. 8.0'
14+22.49	8" V.	RT. 8.0'
15+33.16	8" C. & B.	RT. 8.0'

FOUR QUARTER ROAD		
STATION	APPURTENANCE	O/S FROM CL
0+02.19	PRESSURE V.	LT. 8.0'
0+11.58	8" V.	LT. 8.0'
1+35.73	8" C. & B.	LT. 8.0'

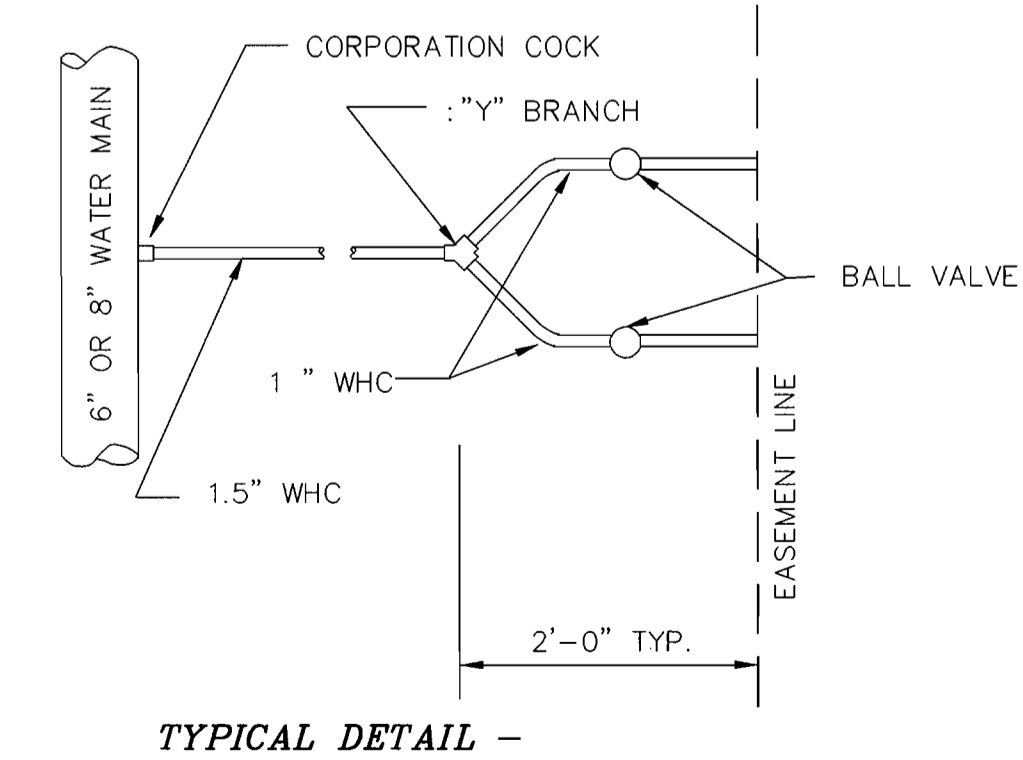
FUTURE ROAD "J"		
STATION	APPURTENANCE	O/S FROM CL
0+05.07	8" V.	LT. 7.0'
0+08.07	8"x6" T	LT. 7.0'
0+11.07	8" V.	LT. 7.0'
0+96.01	8" C. & B.	LT. 7.0'

TAX MAP 25, PARCEL 75
LIBER 530, FOLIO 162
49.191 ACRES±



MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET
1	N 576,946.794 E 1,373,795.271		
2	PLEASANT PATH	4+91.79	RT. 6.5'
3	PLEASANT PATH	3+85.07	RT. 7.0'
4	PLEASANT PATH	3+12.15	RT. 3.0'
5	PLEASANT PATH	2+02.40	RT. 14.0'
6	PLEASANT PATH	0+21.08	RT. 3.0'
7	WINDING ROSS WAY	3+13.67	LT. 9.0'
8	WINDING ROSS WAY	0+71.66	LT. 3.0'
9	N 576,658.775 E 1,373,479.650		
10	N 576,733.569 E 1,373,304.964		
11	N 576,508.032 E 1,373,199.711		
12	N 576,476.963 E 1,373,260.622		
13A	EDGEHILL LANE	2+54.58	RT. 3.0'
13	EDGEHILL LANE	3+19.39	LT. 3.0'
14	EDGEHILL LANE	1+71.98 L.P.	LT. 21.0'
15	EDGEHILL LANE	1+44.19	LT. 2.0'
16	N 576,535.202 E 1,372,908.384		
17	N 576,934.106 E 1,373,436.321		
18	N 577,042.036 E 1,373,402.708		
19	WINDING ROSS WAY	4+86.86	LT. 7.0'
20	WINDING ROSS WAY	5+90.52	LT. 7.0'
21	WINDING ROSS WAY	6+40.25	LT. 5.0'
22	HIGH CASTLE ROAD	13+04.99	LT. 6.0'
23	FOUR QUARTER ROAD	0+61.87	RT. 2.0'

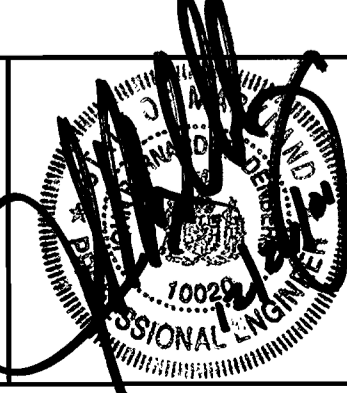


DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors

5072 Dersy Hill Drive, Suite 202, Ellicott City, Maryland 2104
(410) 997-0298 Fax (301) 821-5521 Wash. (410) 997-0298 Fax



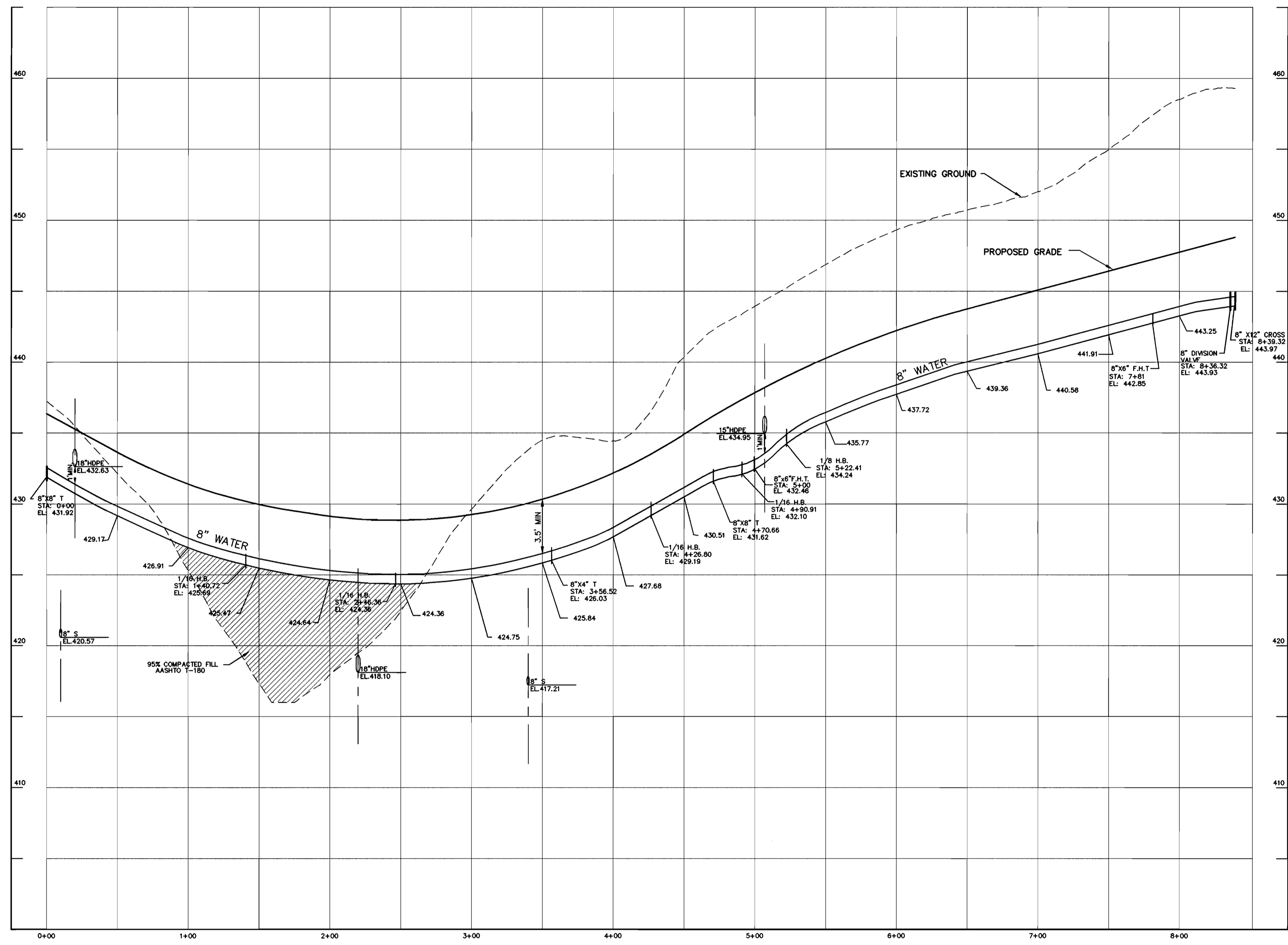
engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

**WATER
AND SEWER
PLAN**

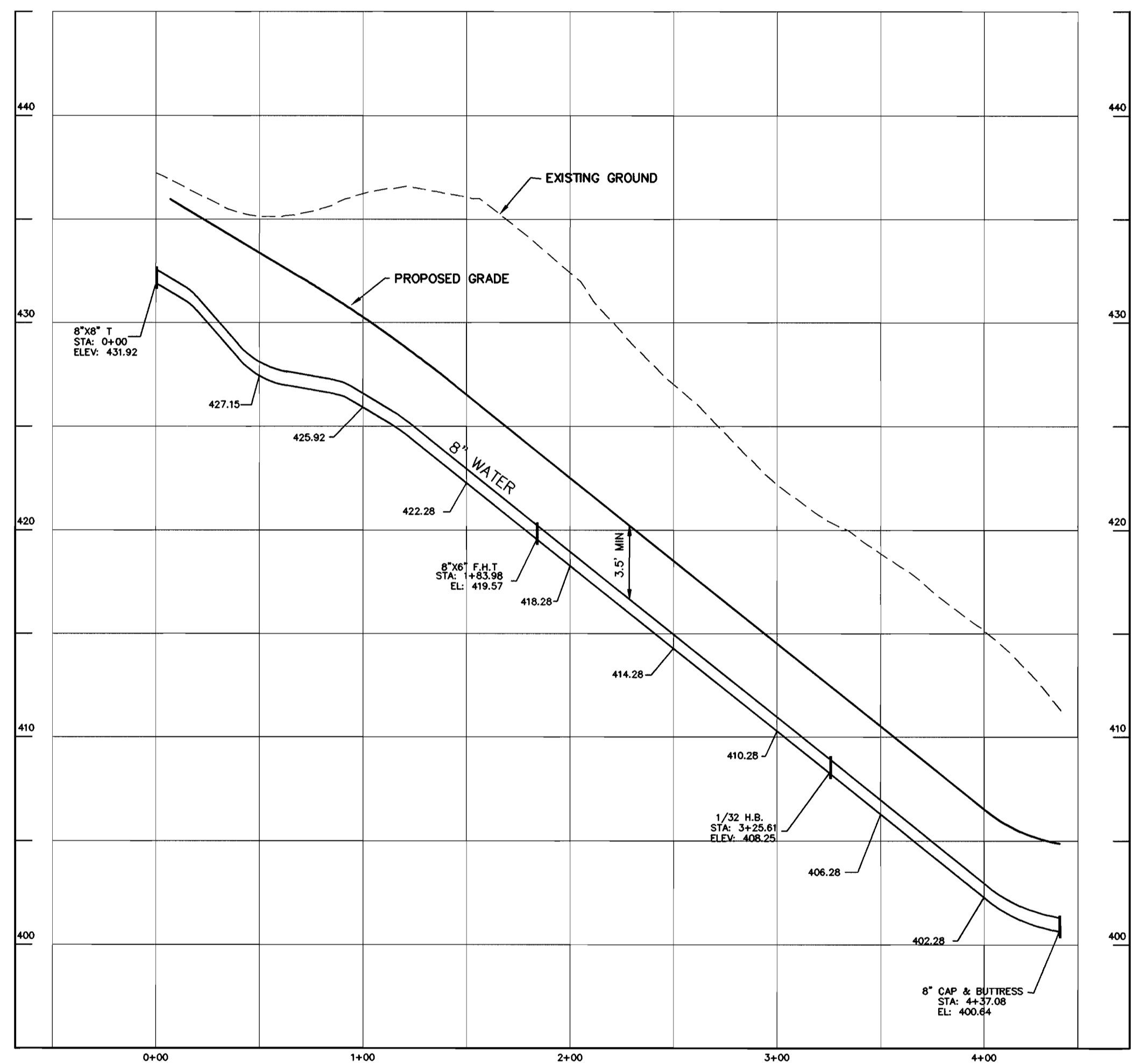
AUTUMN VIEW, SECTION 5
PHASE 2, LOTS 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
2 OF 6

99072\PHASE-2\DWG\WS-PLAN-1



8" WATER PROFILE (WINDING ROSS WAY)
 SCALE: HOR. 1"=50'
 VER. 1"=5'



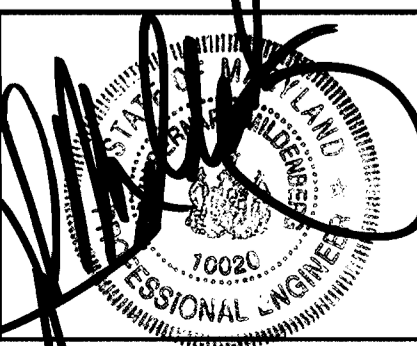
8" WATER PROFILE (EDGEHILL LANE)
 SCALE: HOR. 1"=50'
 VER. 1"=5'

99072\PHASE-2\DWG\MS\W-PROF.DWG

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
Robert Bainger
 CHIEF, BUREAU OF UTILITIES
 DATE 2-4-02

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

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dersey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Balt. (301) 821-5521 Wash. (410) 997-0298 Fax

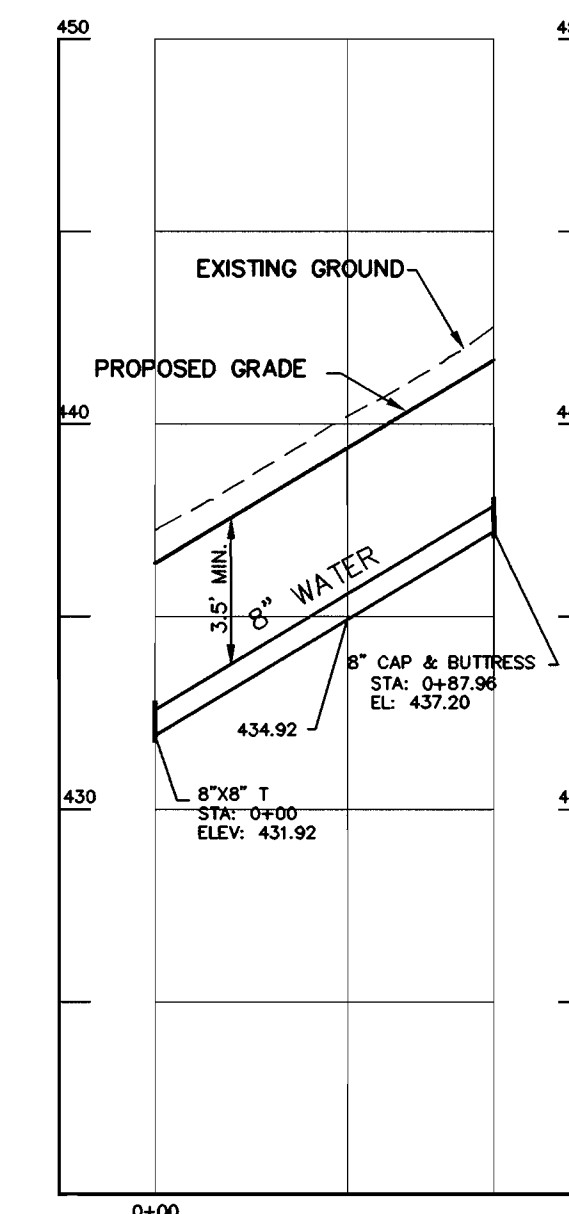
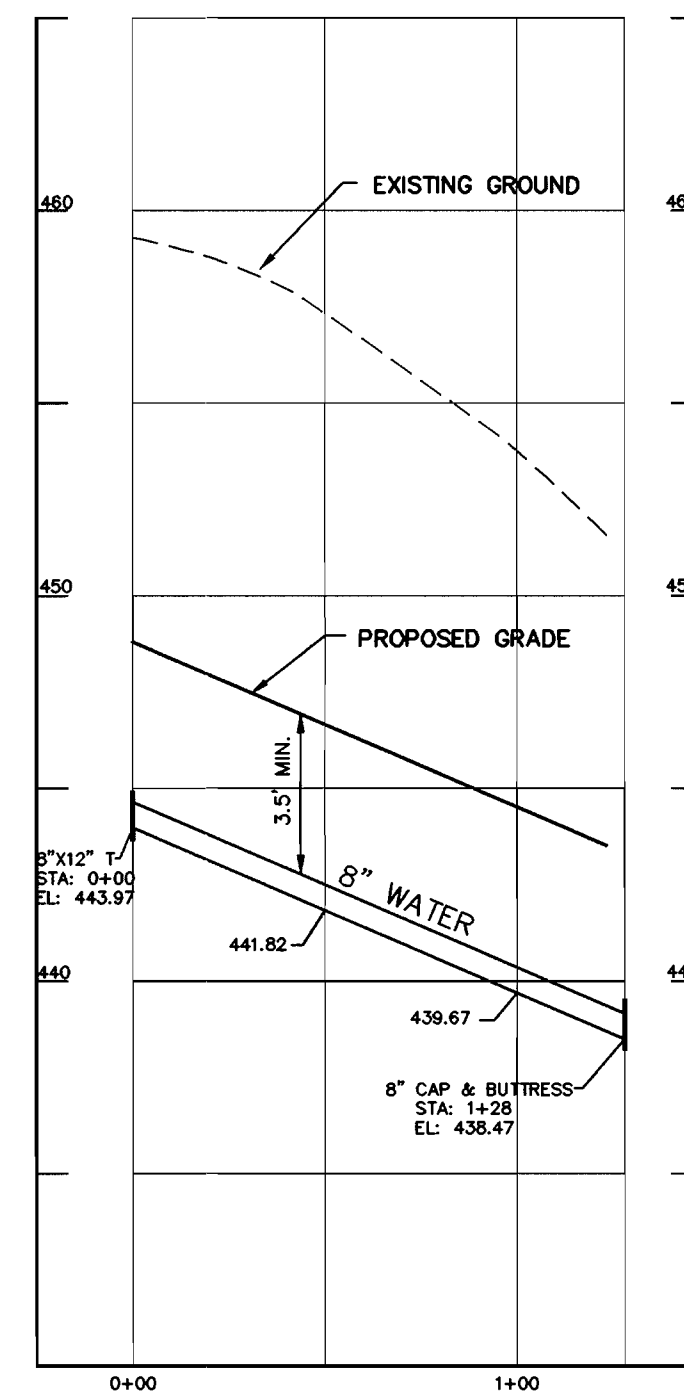
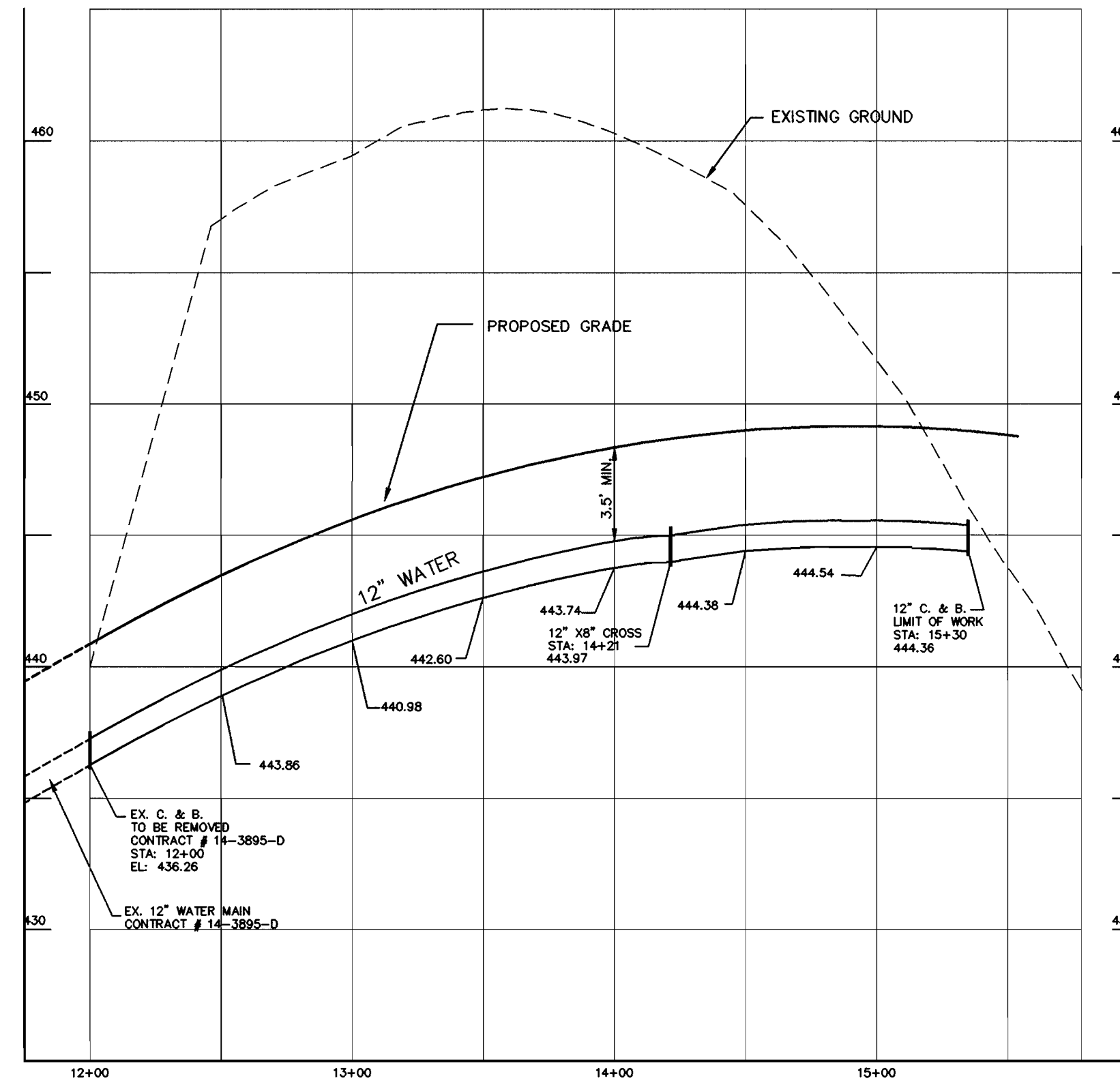
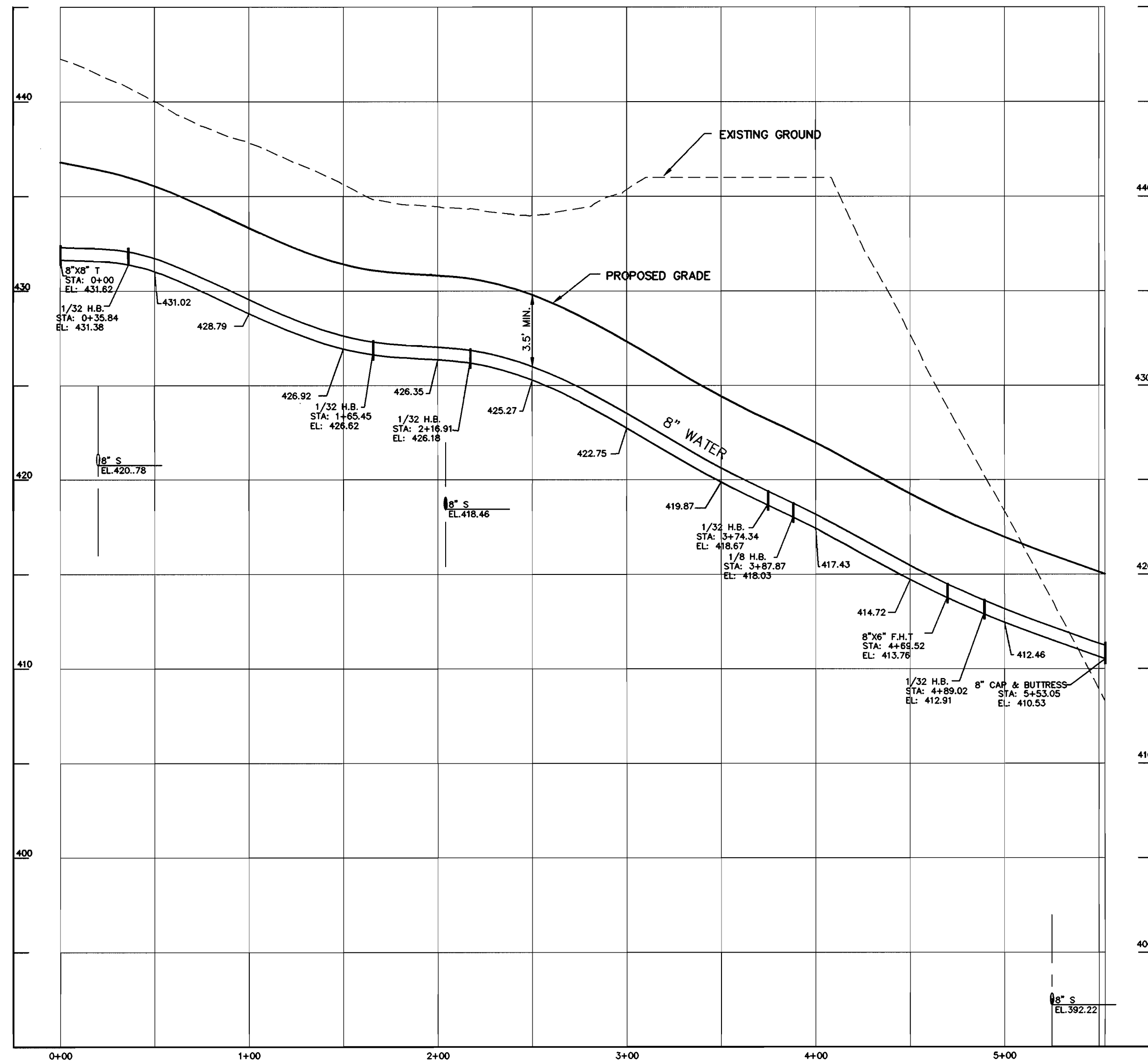


engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

WATER PROFILES
 600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

AUTUMN VIEW, SECTION 5
 PHASE 2, LOTS: 260-300
 CONTRACT # 14-3896-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY

scale 1"=50'
3 OF 6



8" WATER PROFILE (FOUR QUARTER ROAD)

8" WATER PROFILE (FUTURE ROAD J)

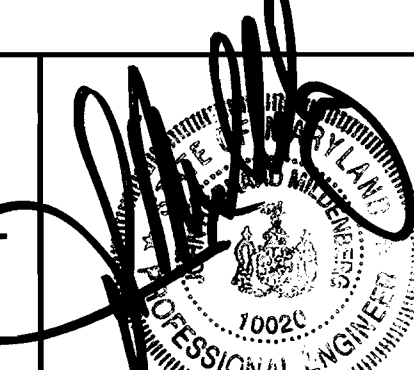
99072 PHASE-2.DWG\MS\W-PROF.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Beltsville City, Maryland 20812
(410) 997-0286 Balt. (301) 621-5521 Wash. (410) 997-0286



engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

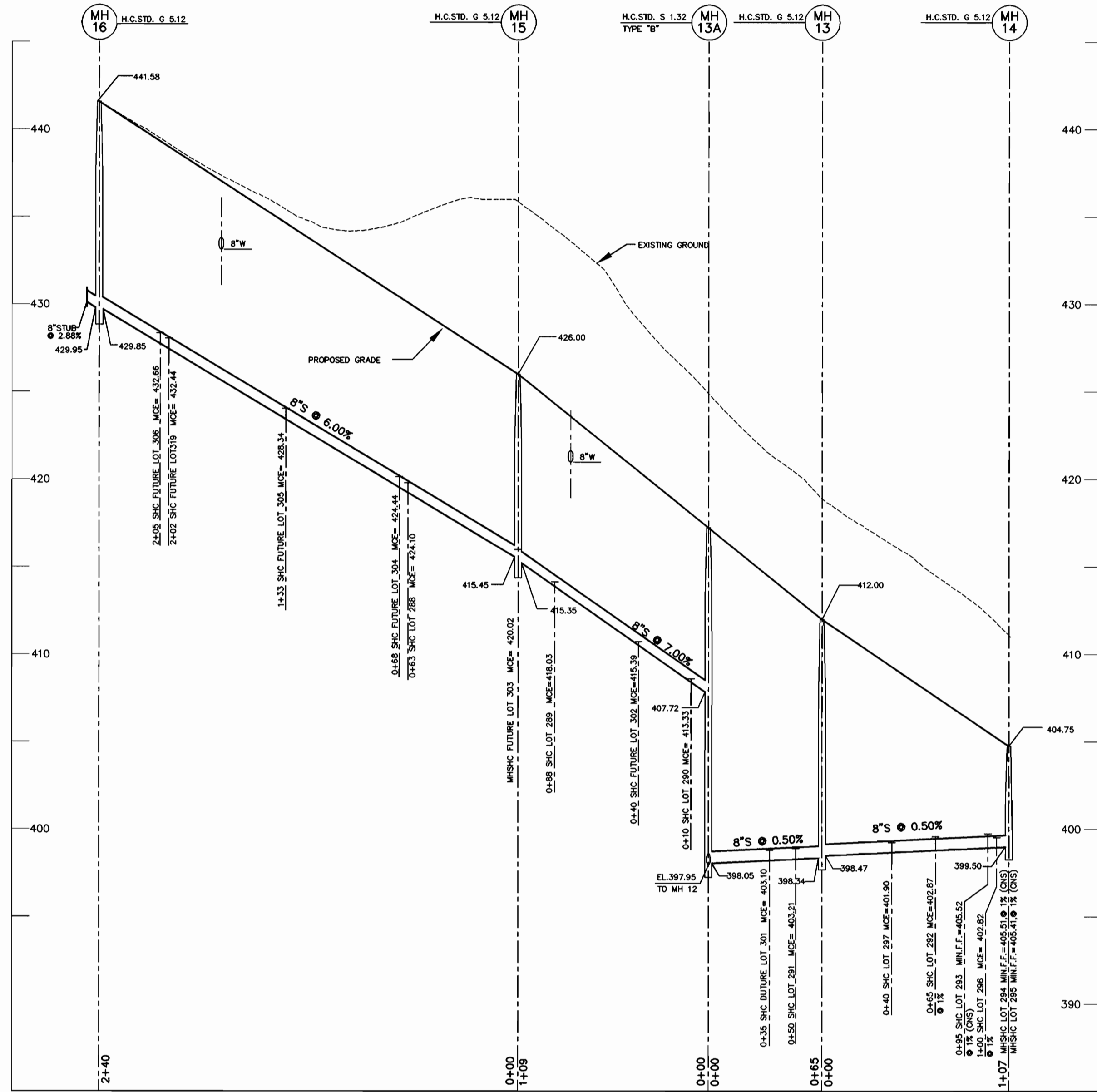
**WATER
PROFILES**

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 200-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'

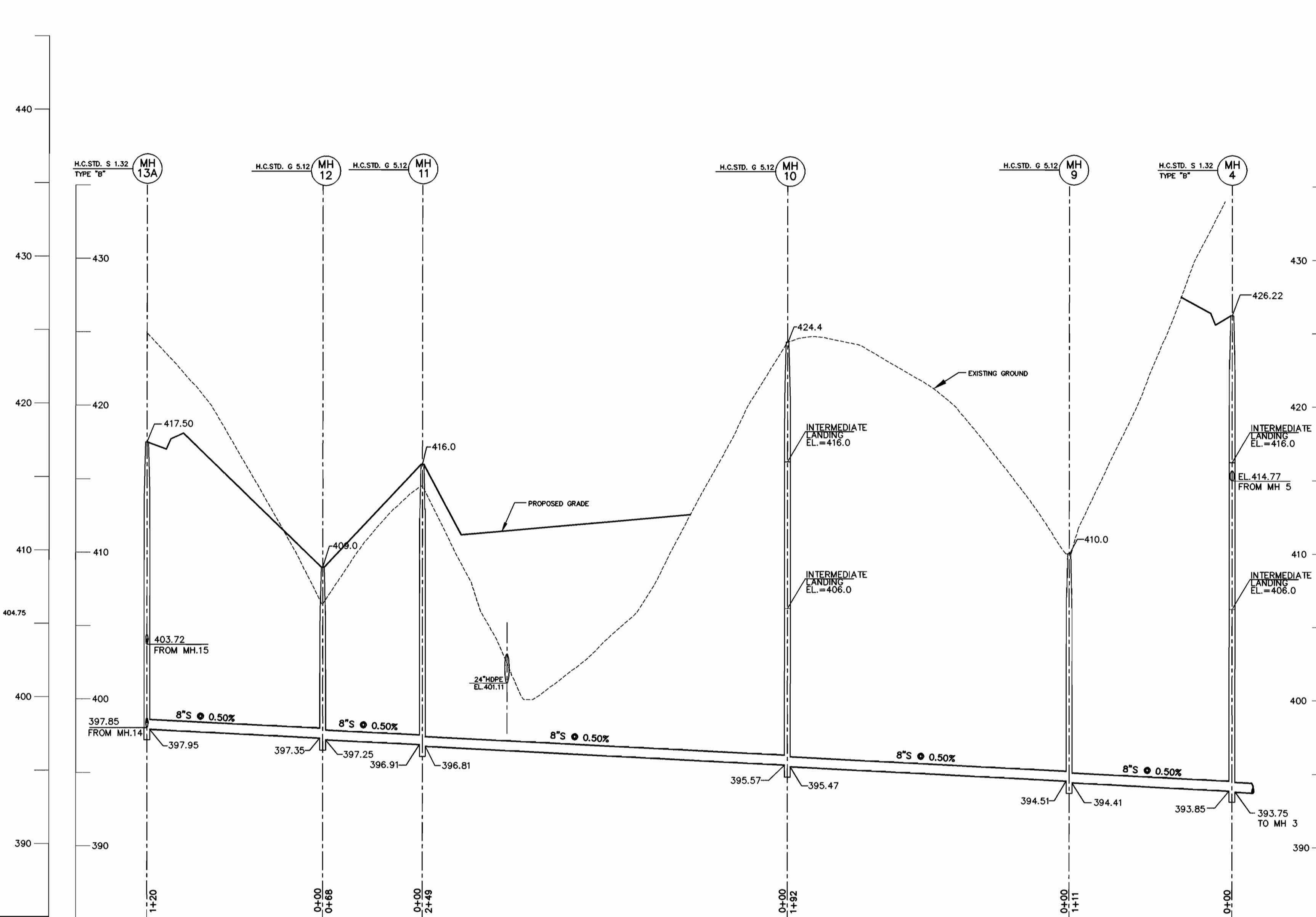
Robert M. Boender
CHIEF, BUREAU OF UTILITIES
DATE 2-4-02

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE



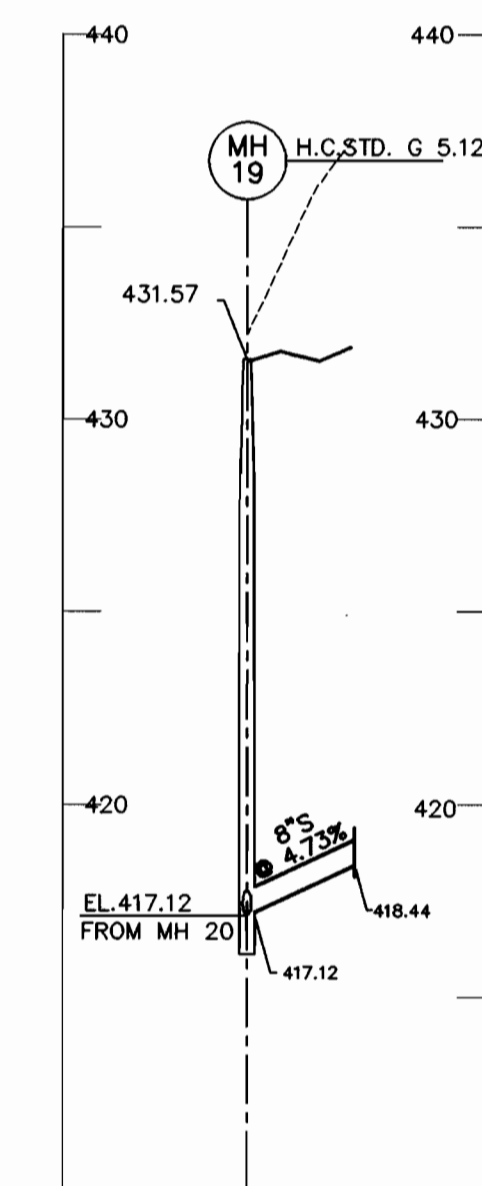
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

99072 \PHASE-2 \DWG \MS \S-PROF

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert V. Bannan
 CHIEF, BUREAU OF UTILITIES 2-4-02 DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Howard
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 987-0296 Balt. (301) 621-5521 Wash. (410) 387-0296 Fax

[Signature]
 PROFESSIONAL ENGINEER

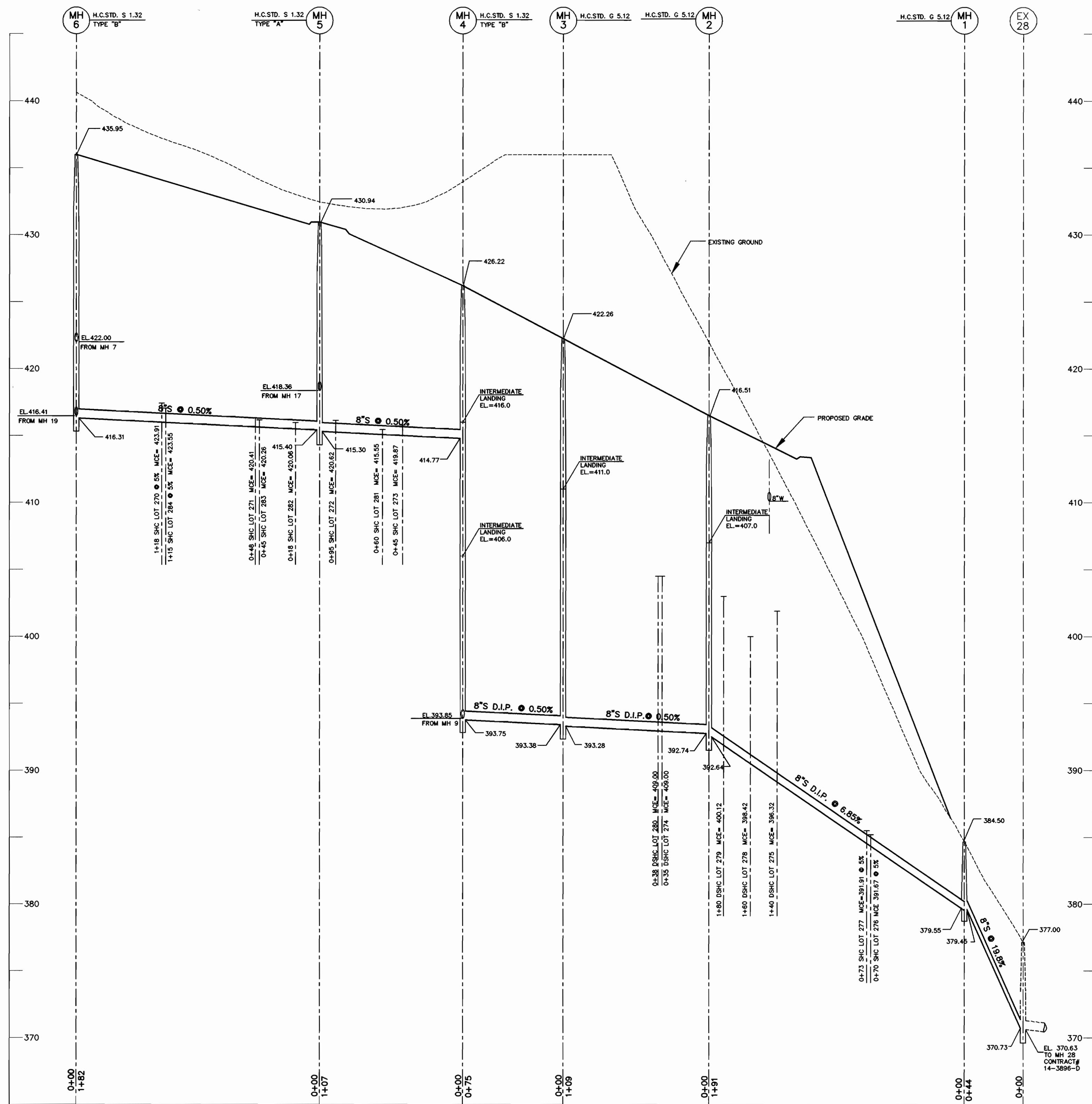
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illustration	M.P.				
approval					
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

SEWER PROFILE

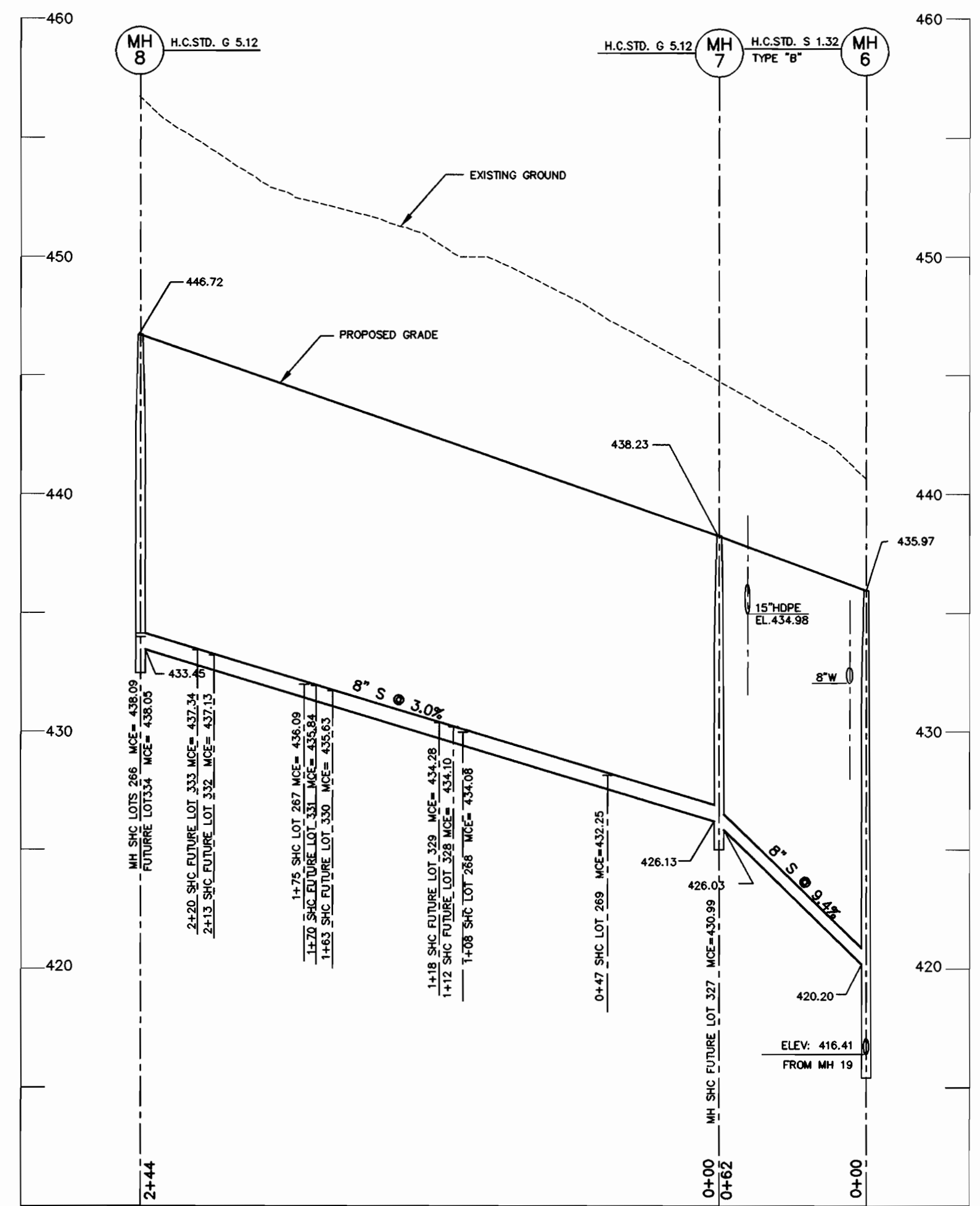
600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

AUTUMN VIEW, SECTION 5
 PHASE 2, LOTS: 260-300
 CONTRACT # 14-3896-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY

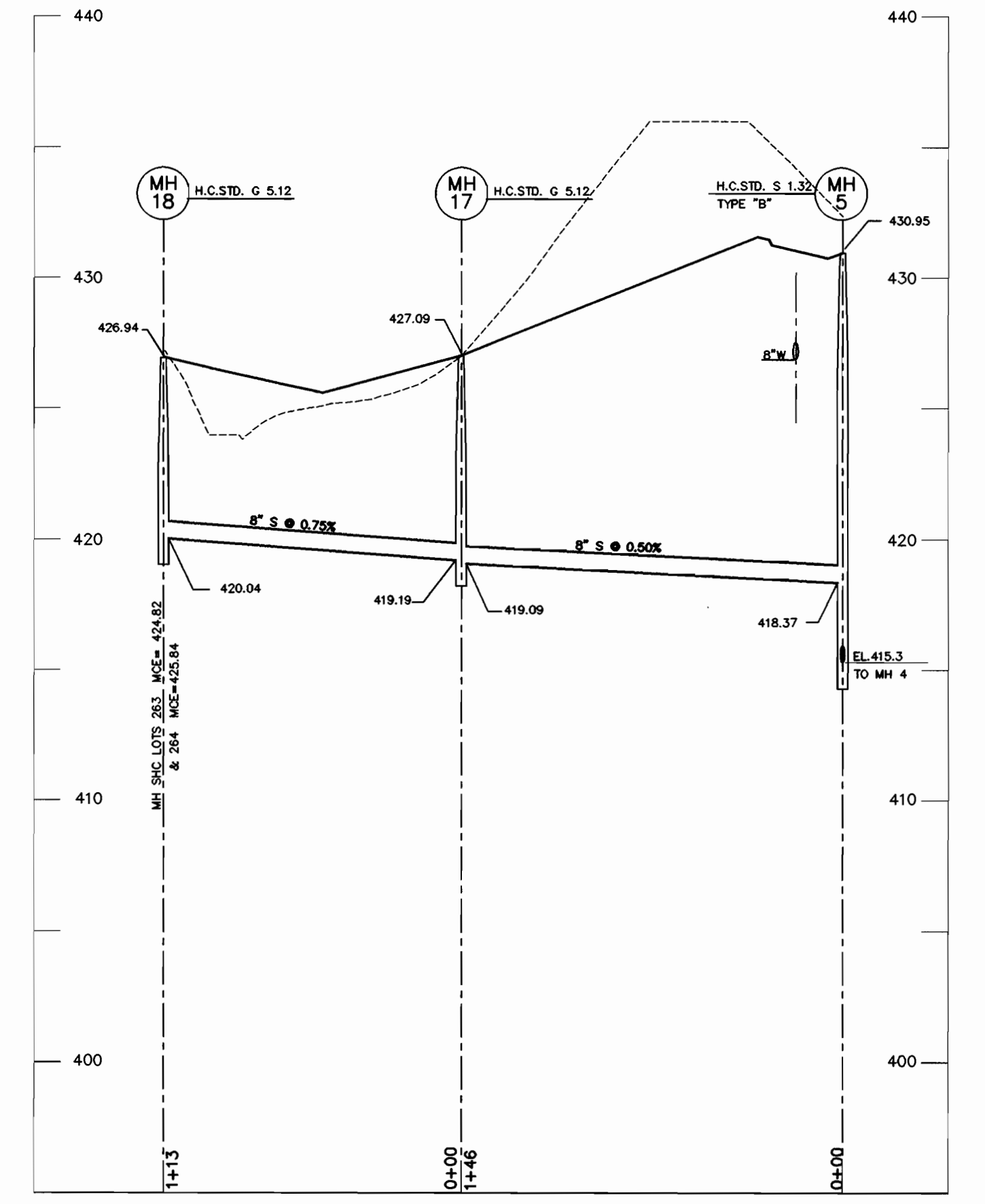
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5 OF 6



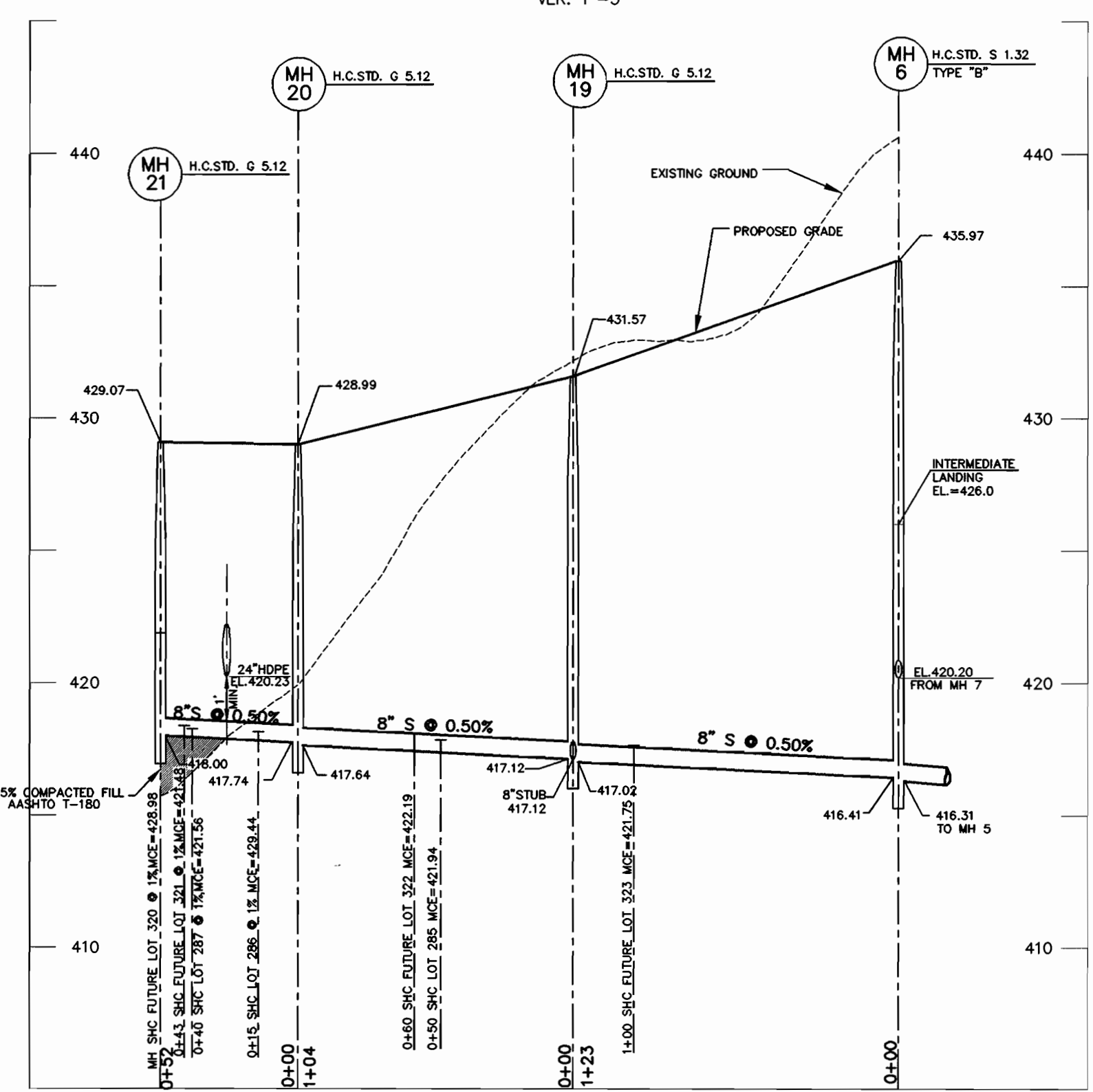
8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



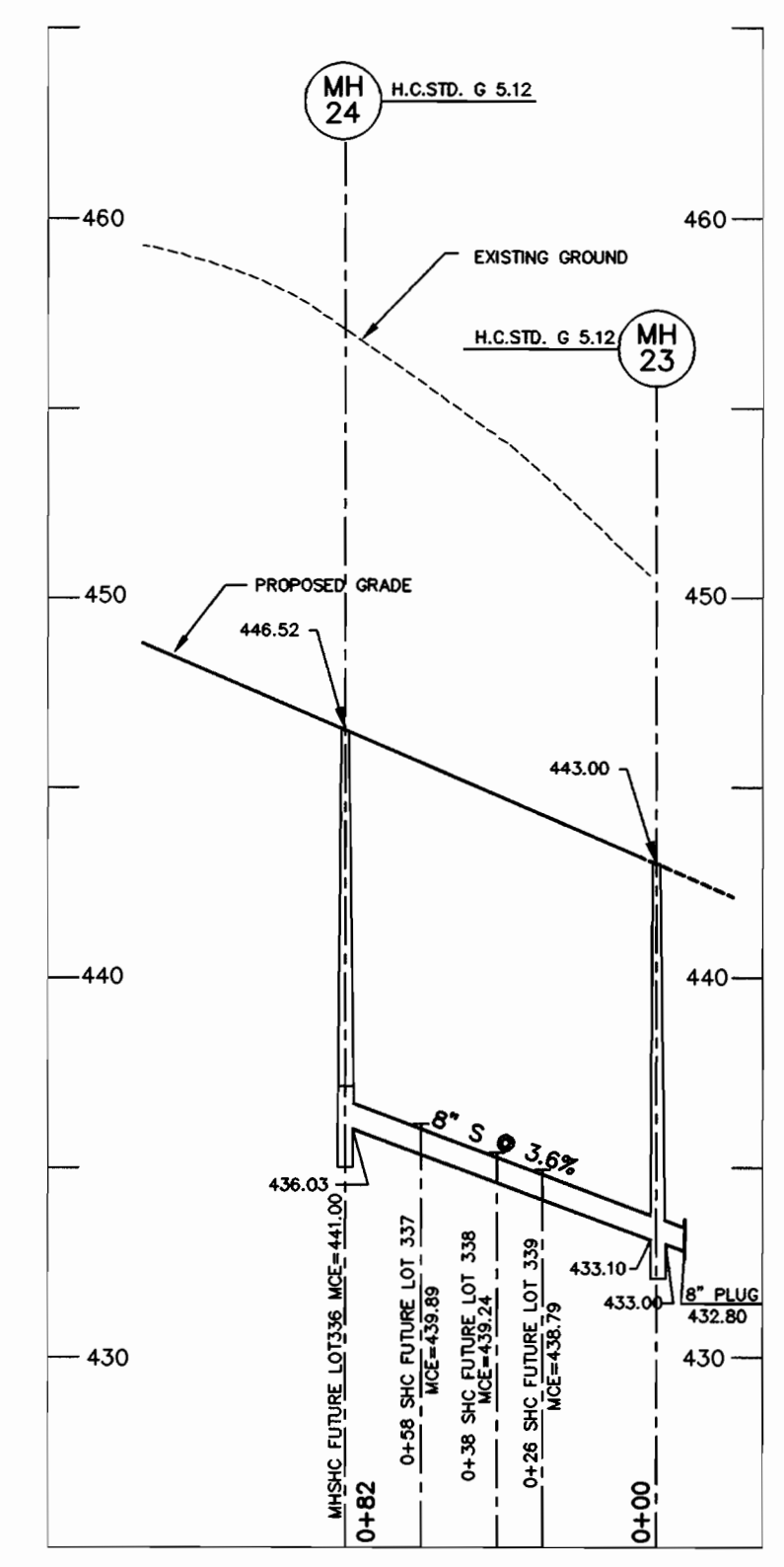
8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



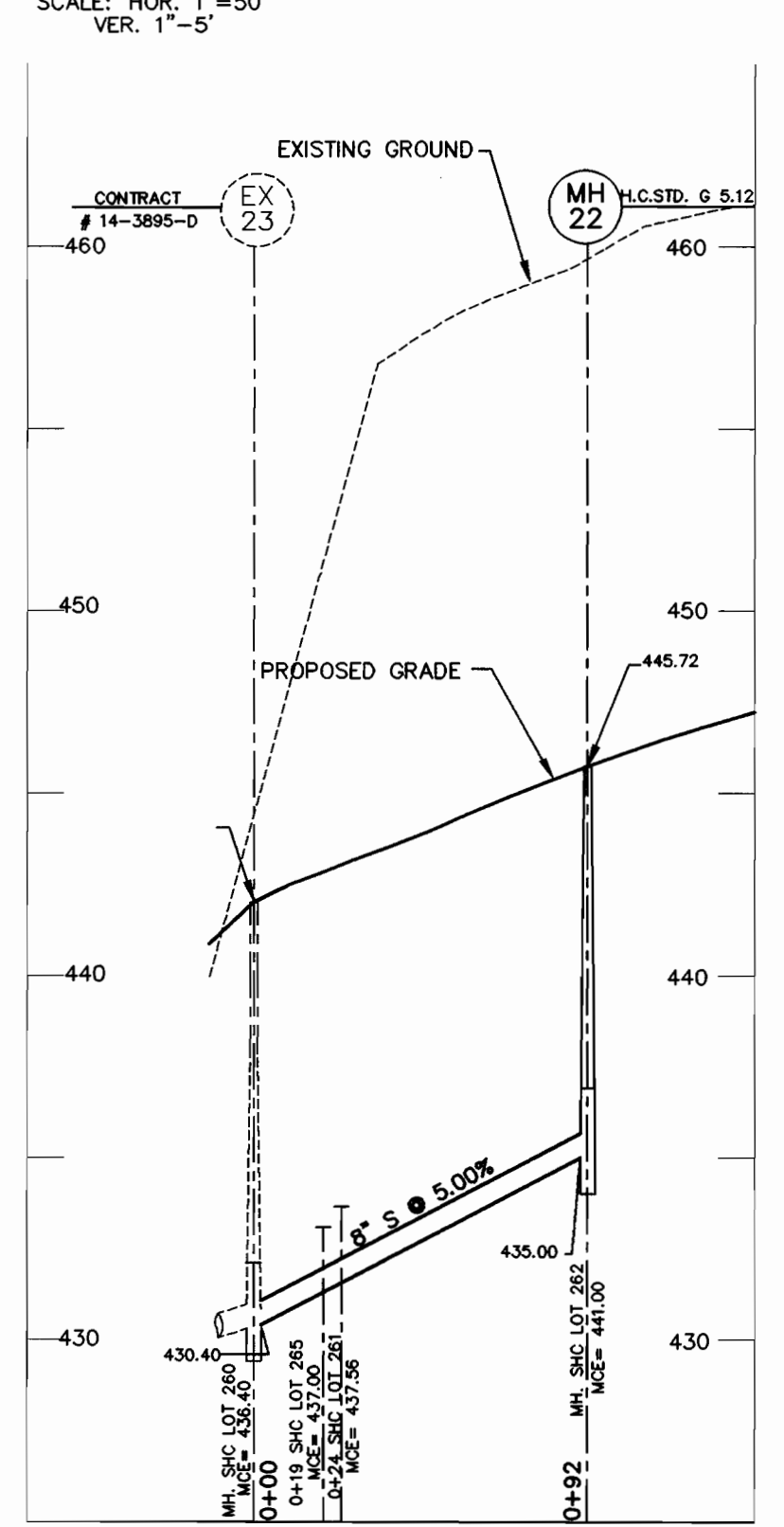
8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'

99072 (PHASE-2) DWG (WS) S-PROF

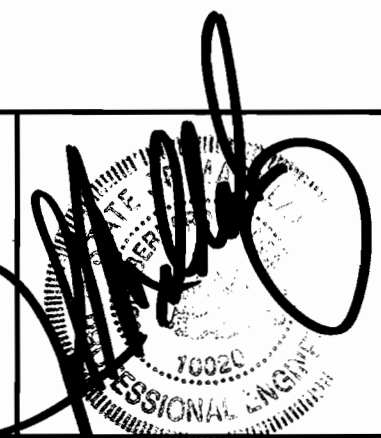
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert Damjan 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Ball. (301) 621-5521 Wash. (410) 997-0288 Fax



engineering	M.P.						
illustration	M.P.						
approval	J.M.						
project	99072						
date	DEC. 2001	BY	NO.	REVISION	DATE	600' SCALE MAP NO.	31
						BLOCK NO.	3 & 4

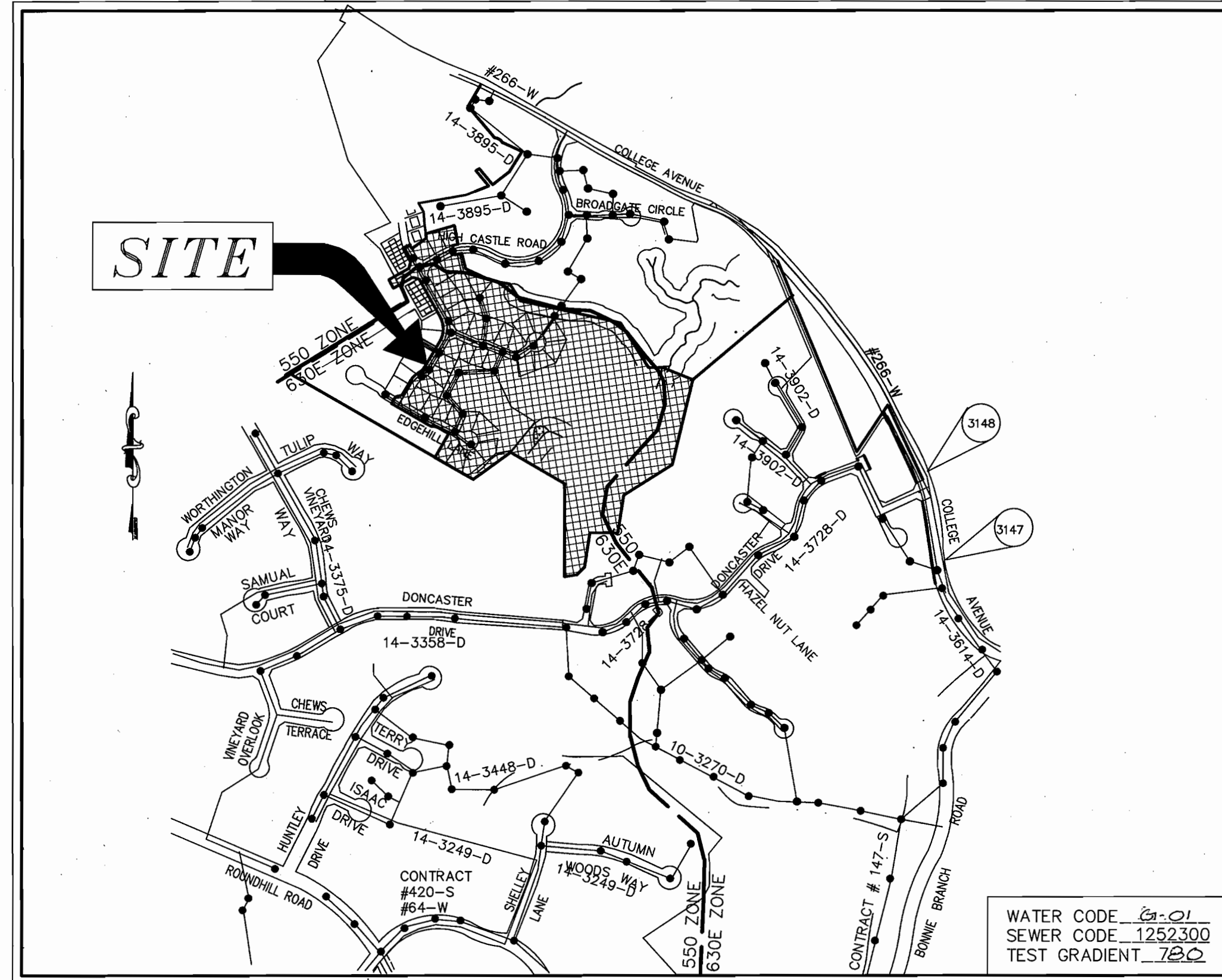
SEWER PROFILE

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
6 OF 6

QUANTITY TABLE

ITEMS	QUANTITIES		TYPE	MANUFACTURER/SUPPLIER
	ESTIMATED	QUANTITIES		
STANDARD MH (HO. CO. STD.G-5.01)	21			
DROP MH, TYPE "B" (HO. CO. STD. S-1.32)	3			
DROP MH, TYPE "A" (HO. CO. STD. S-1.32)	1			
8" SEWER MAIN	1,262 L.F.			
8" D.I.P.	795 L.F.			
4" SEWER HOUSE CONNECTION	1,480 L.F.			
# SEWER HOUSE CONNECTIONS	51 EACH			
8" WATER	2,043 L.F.			
12" WATER	330 L.F.			
1" WATER HOUSE CONNECTION	1,540 L.F.			
# 1" WHC	53 EACH			
# TWIN 1.5" WHC	5 EACH			
1.5" WATER HOUSE CONNECTION	100 L.F.			
F.H.	4 EACH			
12"x8" C	1 EACH			
8"x 8" T	2 EACH			
8"x6" T	4 EACH			
8"x4" T	1 EACH			
12" V	2 EACH			
6" V	4 EACH			
8" V	6 EACH			
8" CAP & BUTTRESS	4 EACH			
12" CAP & BUTTRESS	1 EACH			
1/8 H.B. (8")	1 EACH			
1/16 H.B. (8")	5 EACH			
1/32 H.B. (8")	5 EACH			
8" PRESSURE VALVE	1 EACH			
4" DROP SEWER HOUSE CONNECTION	10 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



VICINITY MAP
SCALE: 1"=600'

TYPE OF BUILDING	SFD
No. OF UNITS	38
No. OF FUTURE UNITS	23
No. OF WATER HOUSE CONNECTION	38 (FUTURE 23)
No. OF SEWER HOUSE CONNECTIONS	38 (FUTURE 23)
DRAINAGE AREA	BONNIE BRANCH, PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-01-38

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 ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- 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 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 DETAIL 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 (410) 531-5533
BG & E CO. CONTRACTOR SERVICES (410) 850-4620
BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068
MISS UTILITY 1-800-257-7777
COLONIAL PIPELINE CO. (410) 795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES (410) 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE 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 (5) 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 HOWARD COUNTY CODE.
- 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE 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.
- FOR SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. 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.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- SEDIMENT CONTROL TO BE PROVIDED BY F-01-38.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL HOUSES WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- THE EXISTING WELL AND SEPTIC SERVICING EXISTING HOUSE(S) ARE TO BE ABANDONED.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY. SEE ROAD PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Bruce Taylor Pres 12/18/02
DEVELOPER'S SIGNATURE DATE

John B. Mildenberg 12/24/01
ENGINEER'S SIGNATURE DATE
JOHN B. MILDENBERG
ENGINEER'S NAME

Jim Muzes 2/7/02
REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS. DATE

John R. Robertson 2/7/02
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT. DATE

Robert M. Bauman 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

PLAN REFERENCE NUMBERS

F-01-38
P-00-09
S-99-01

CONTRACT NO.: 14-3896-D
AUTUMN VIEW, SECTION 5, PHASE II
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER PROFILES
4	WATER PROFILES
5	SEWER PROFILES
6	SEWER PROFILES

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21041
(410) 997-0296 Balt. (301) 821-5521 Wash. (410) 997-0296 Fax

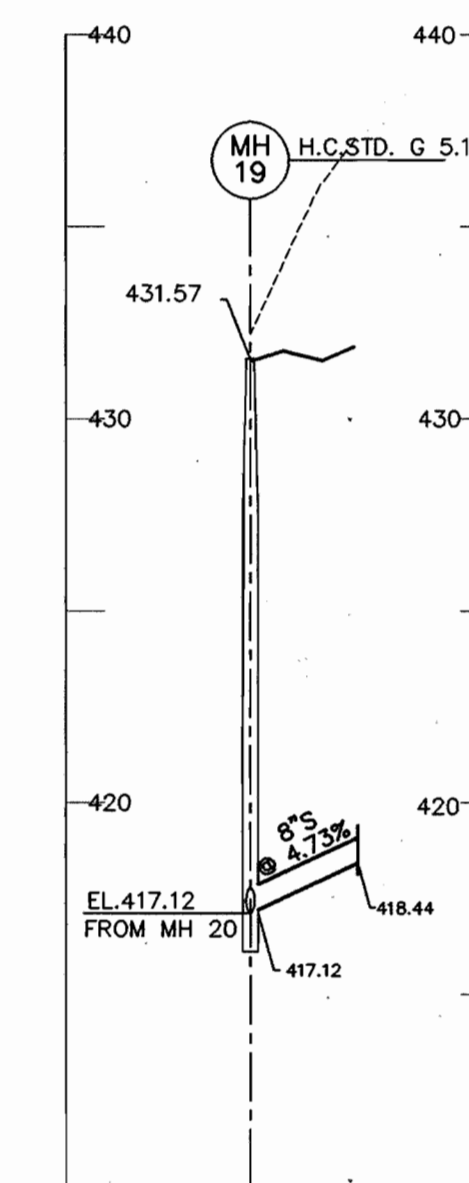
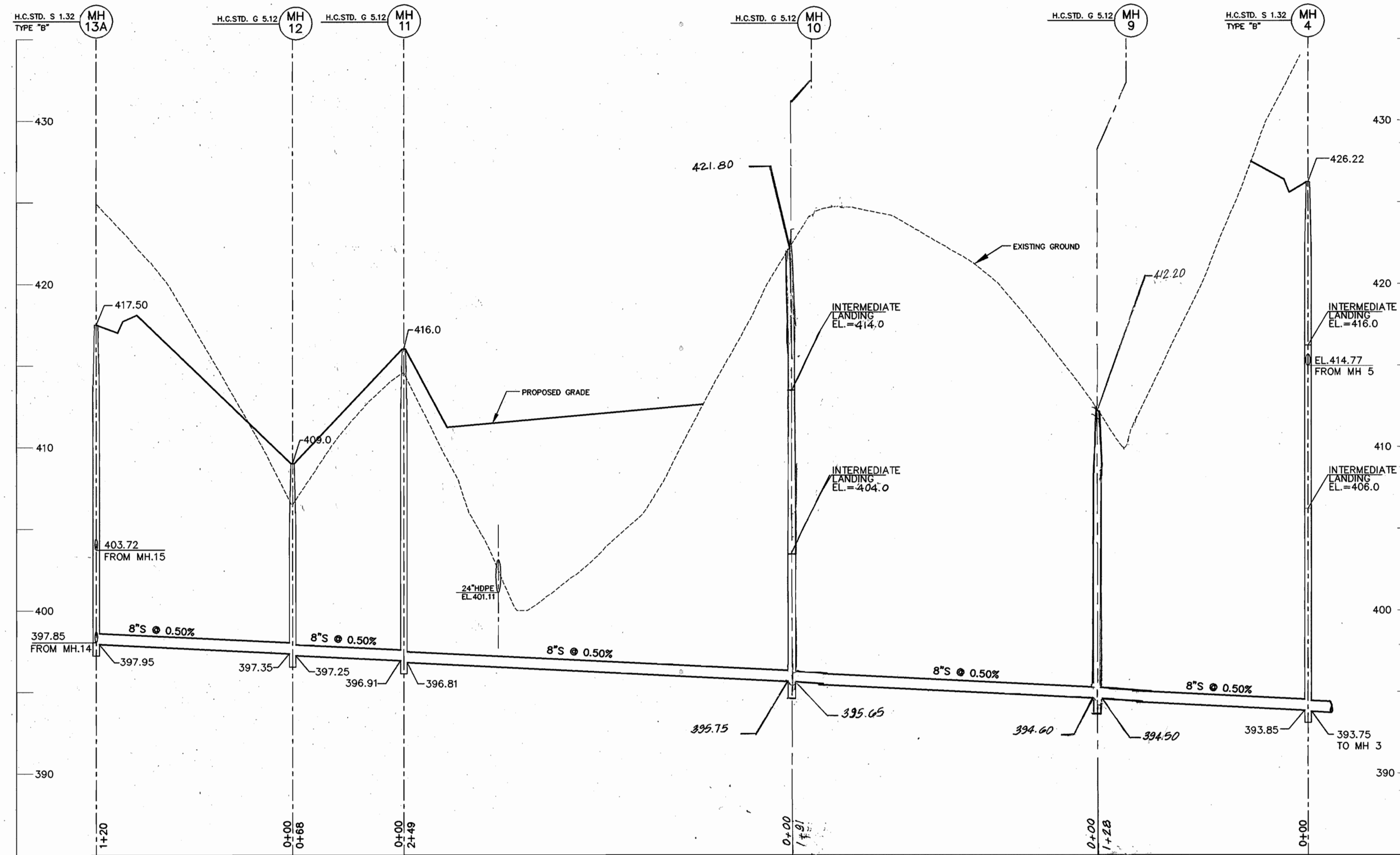
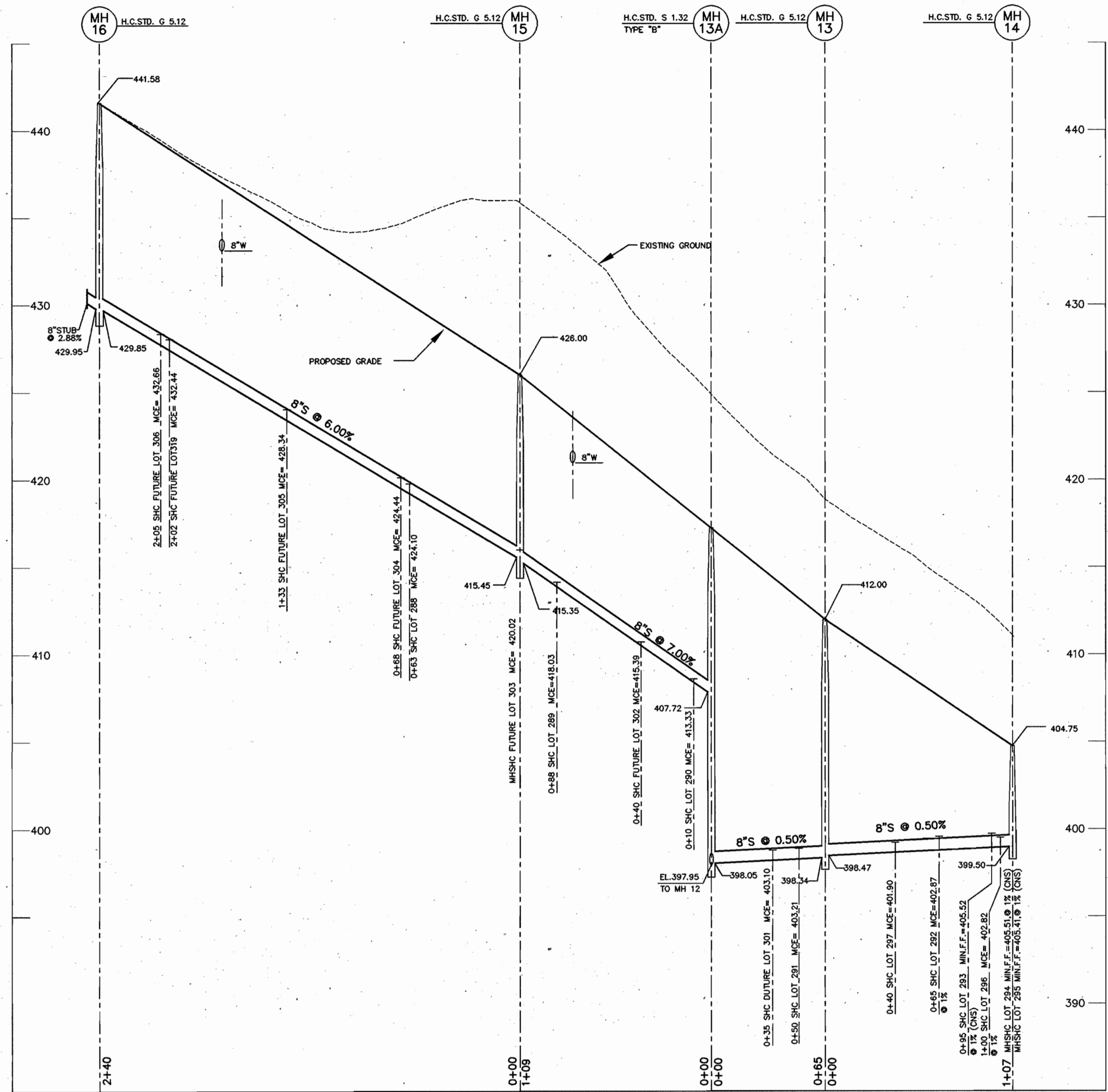
engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072	MBA	2	MODIFY THE QUANTITY TABLE	5/15/03
date	DEC. 2001	BY	NO.	REVISION	DATE

TITLE SHEET

AUTUMN VIEW, SECTION 5
PHASE 2 LOTS: 260-300
CONTRACT NO.: 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale AS SHOWN
1 OF 6

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4



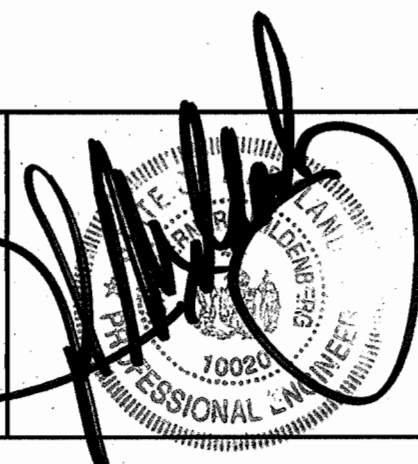
99072 PHASE-2.DWG\WS-S-PROF

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

**MILDENBERG,
 BOENDER & ASSOC., Inc.**
 Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Ball. (301) 621-5221 Wash. (410) 997-0233 Fax.



engineering	M.P.				
illustration	M.P.				
approval					
project	99072	MBA	1	REVISE SEWER PROFILE	4/9/02
date	DEC. 2001	BY	NO.	REVISION	DATE

**SEWER
 PROFILE**

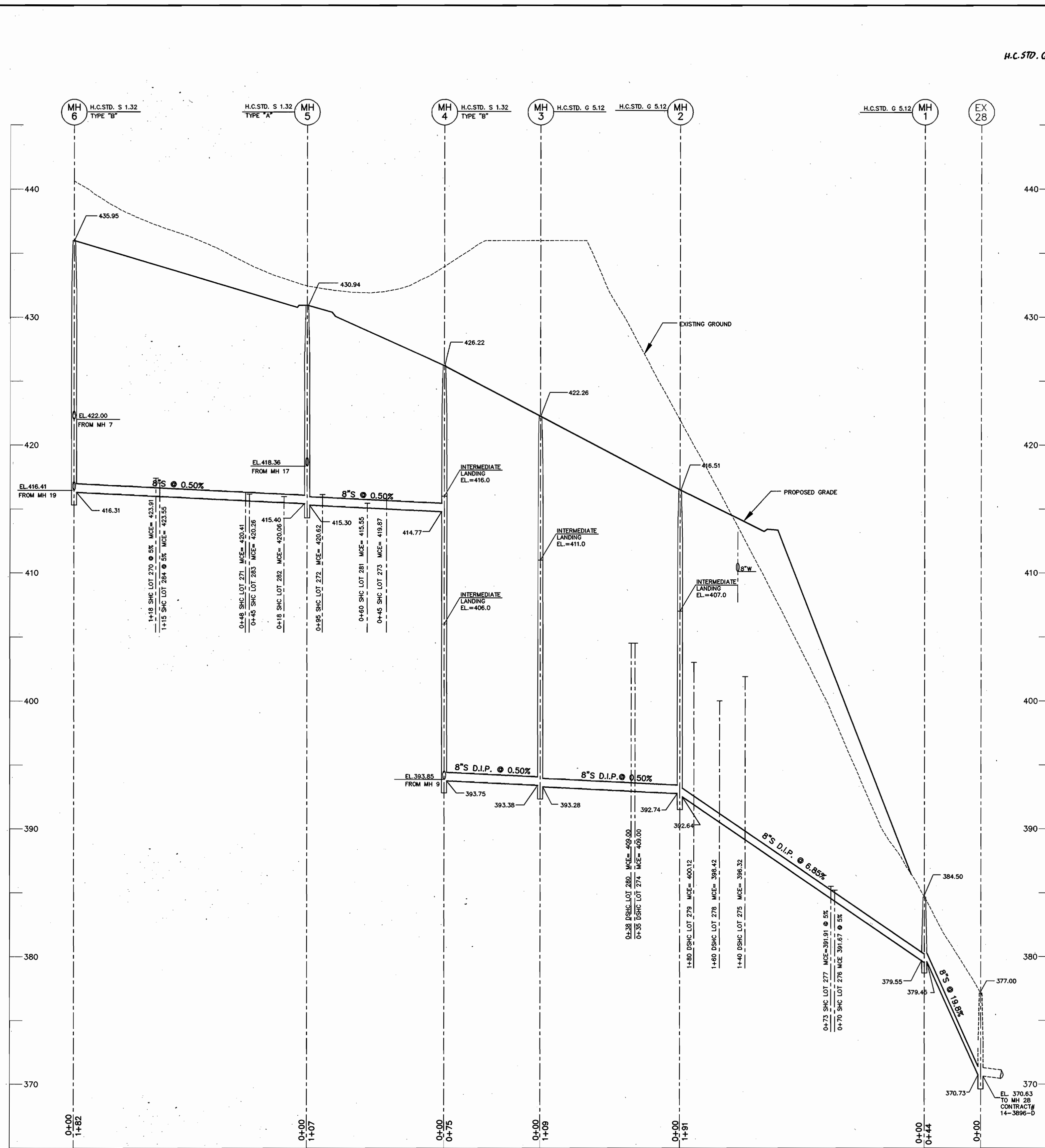
AUTUMN VIEW, SECTION 5
 PHASE 2, LOTS: 260-300
 CONTRACT # 14-3896-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY

scale
 1"=50'
 5 OF 6

Robert W. Boender 2-4-02
 CHIEF, BUREAU OF UTILITIES DATE

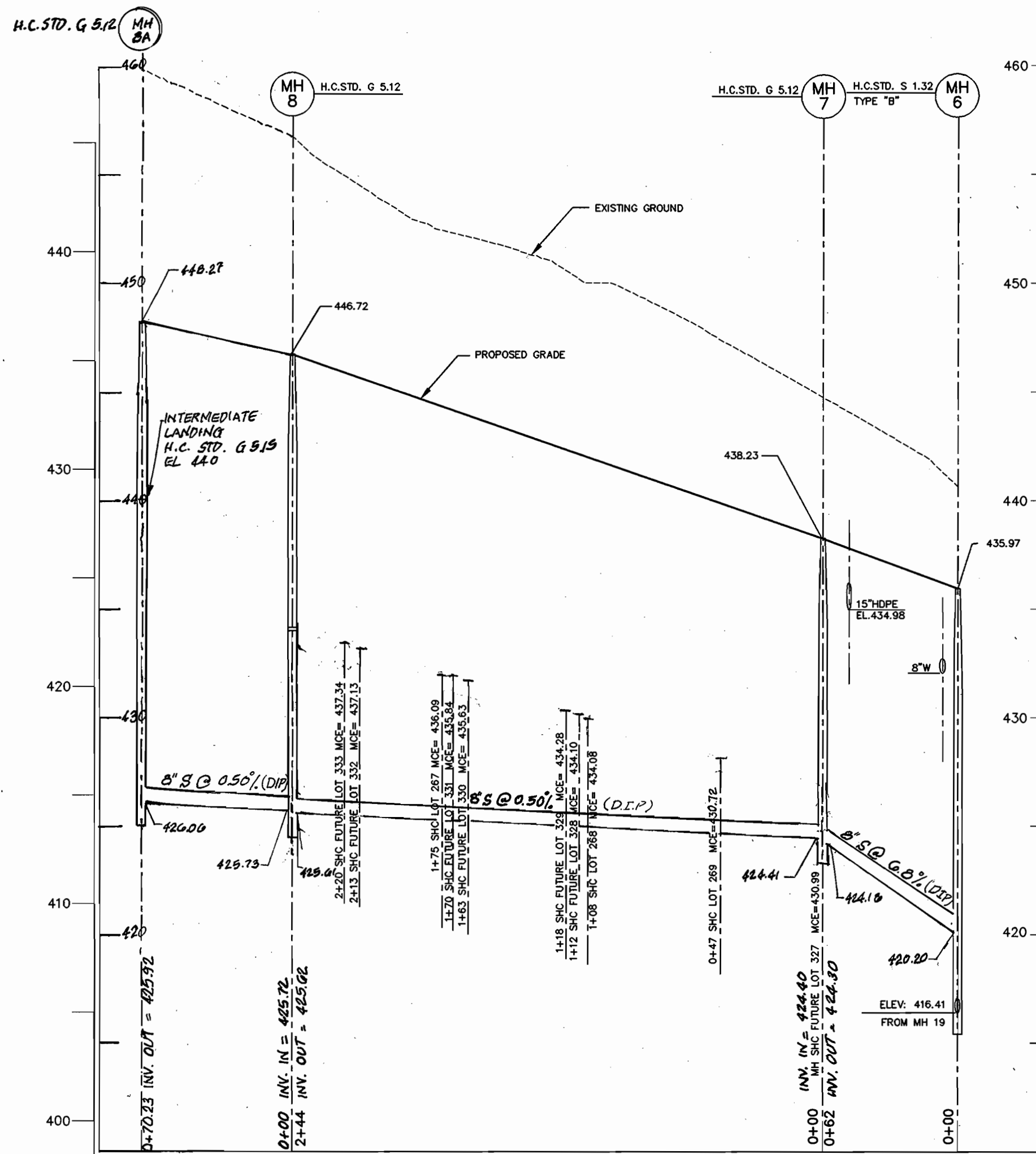
[Signature] 2/1/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4



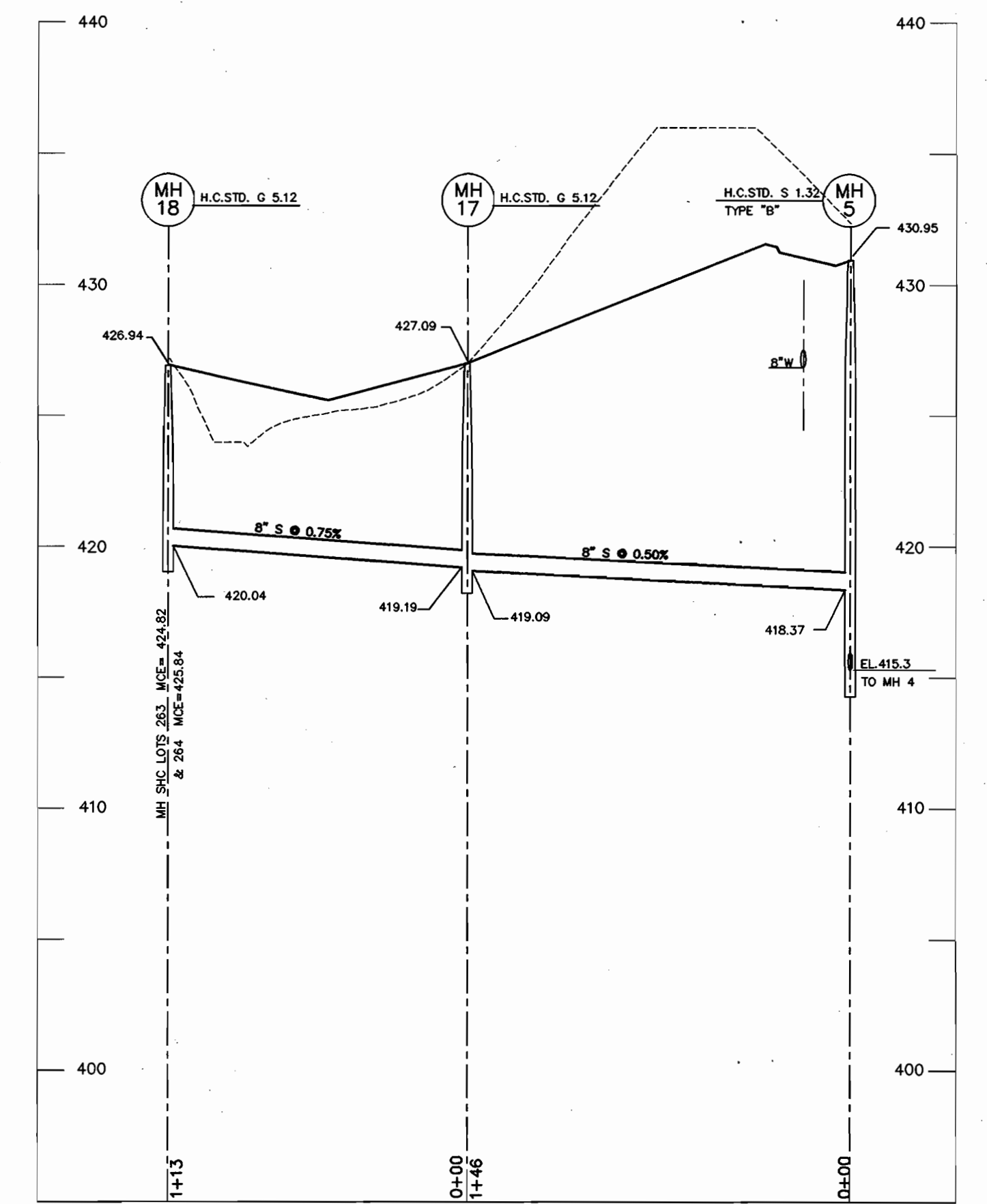
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



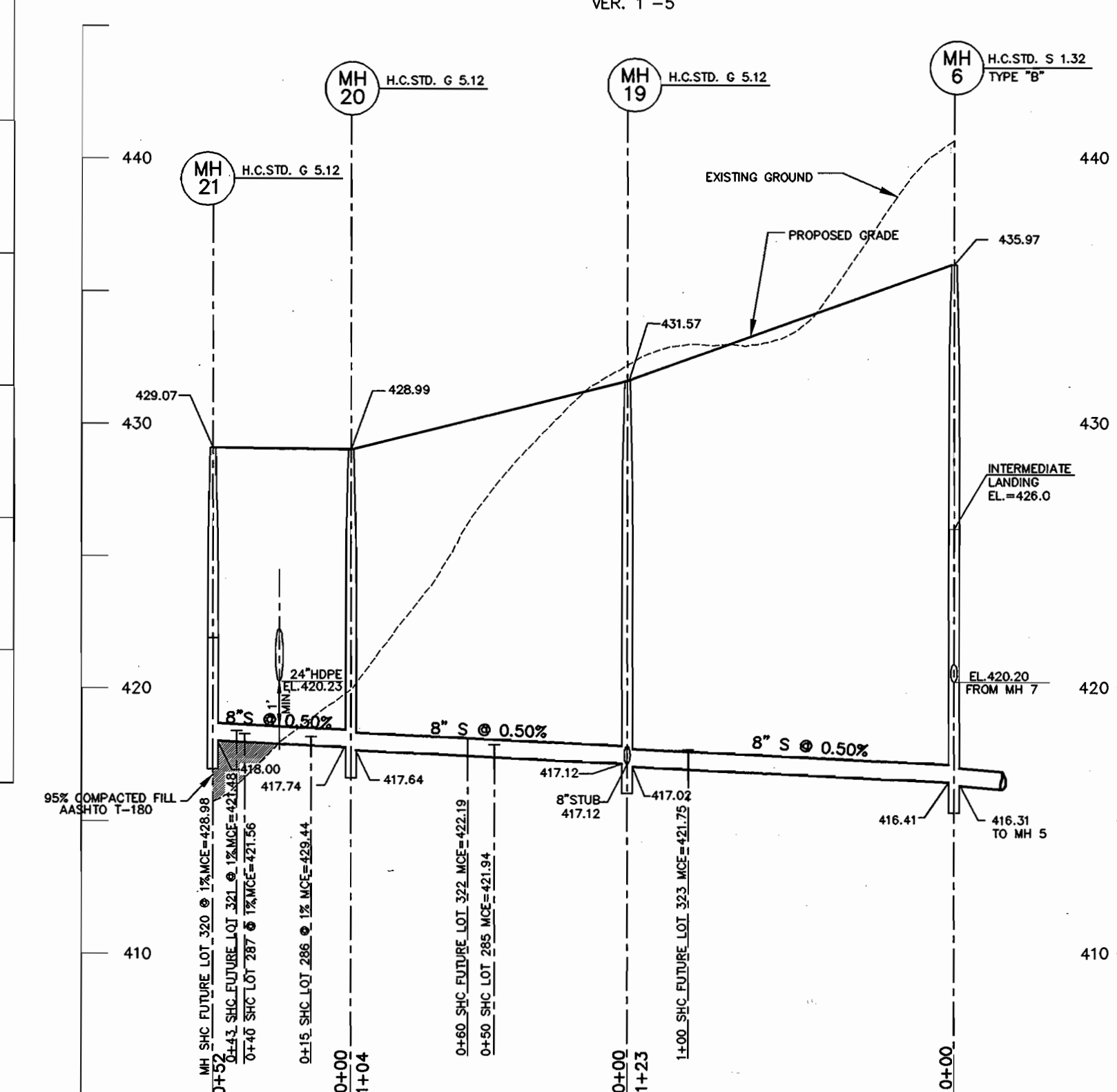
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



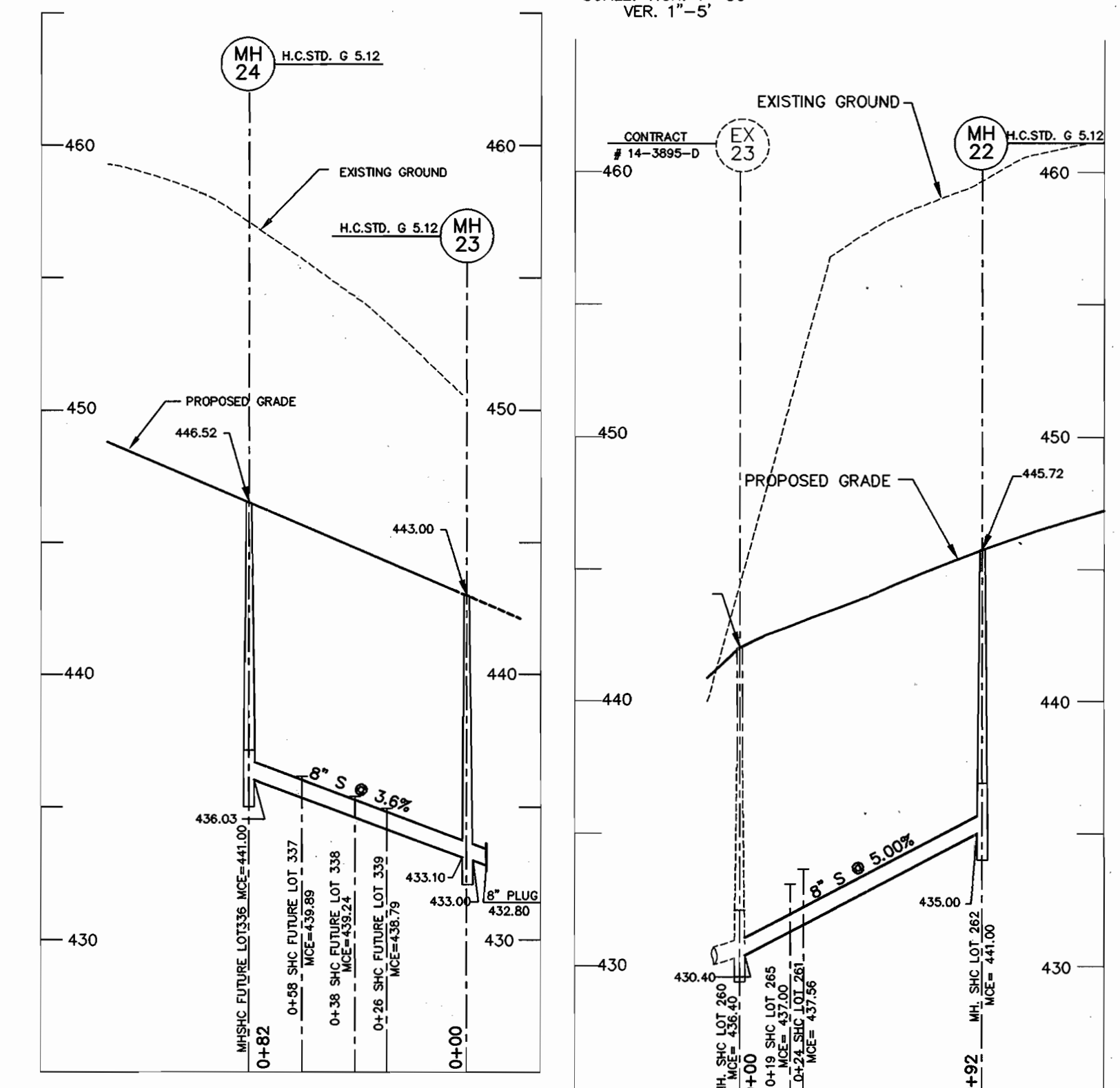
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

8" SEWER PROFILE

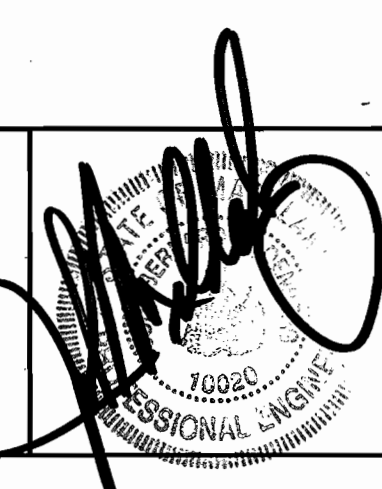
SCALE: HOR. 1"=50'
VER. 1"=5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
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engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072	MBA	2	ADD MHA AND REVISE PROFILE BETWEEN MHG AND MH8A	03/25/03
date	DEC. 2001	BY	NO.	REVISION	DATE

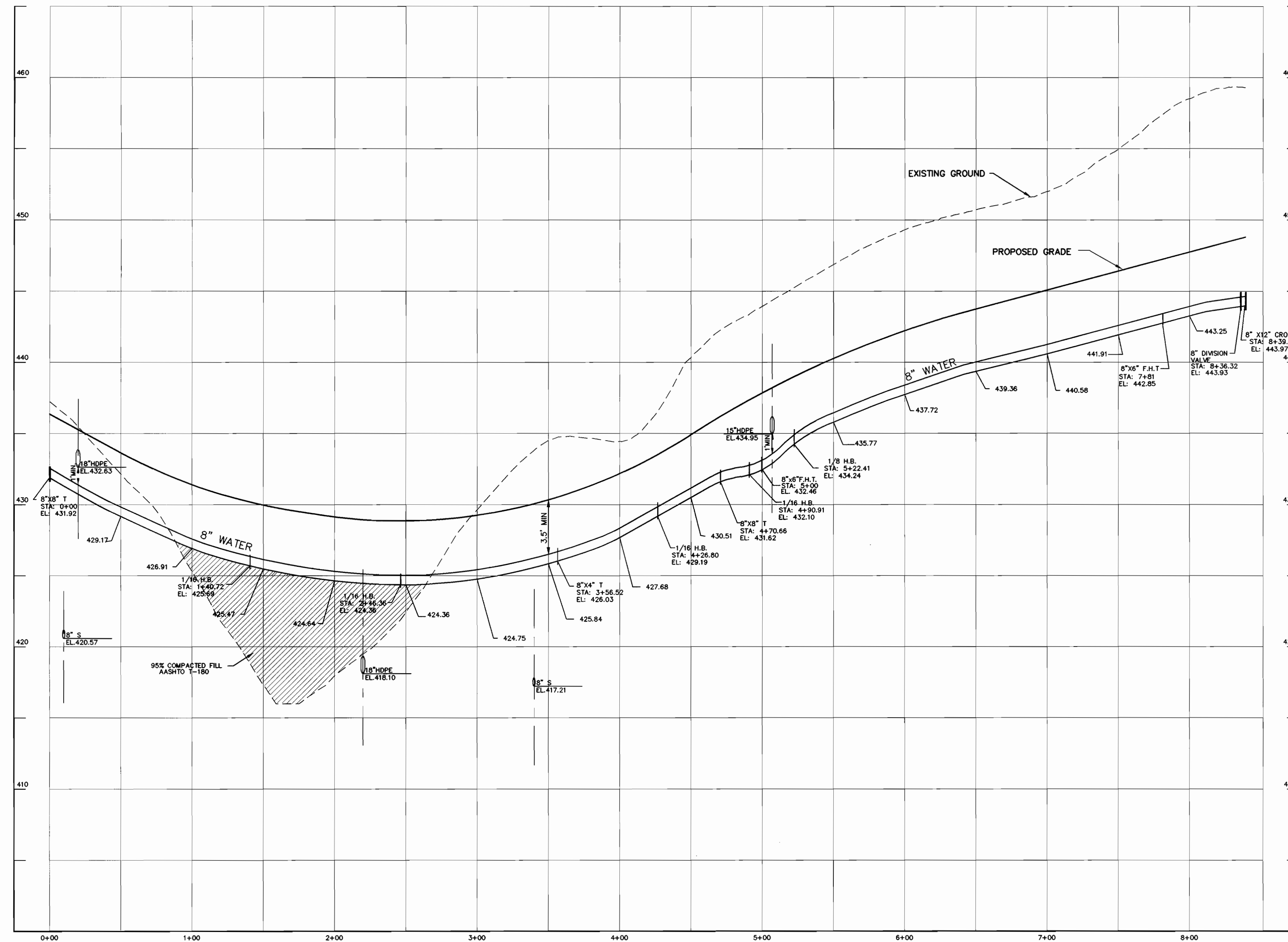
**SEWER
PROFILE**

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

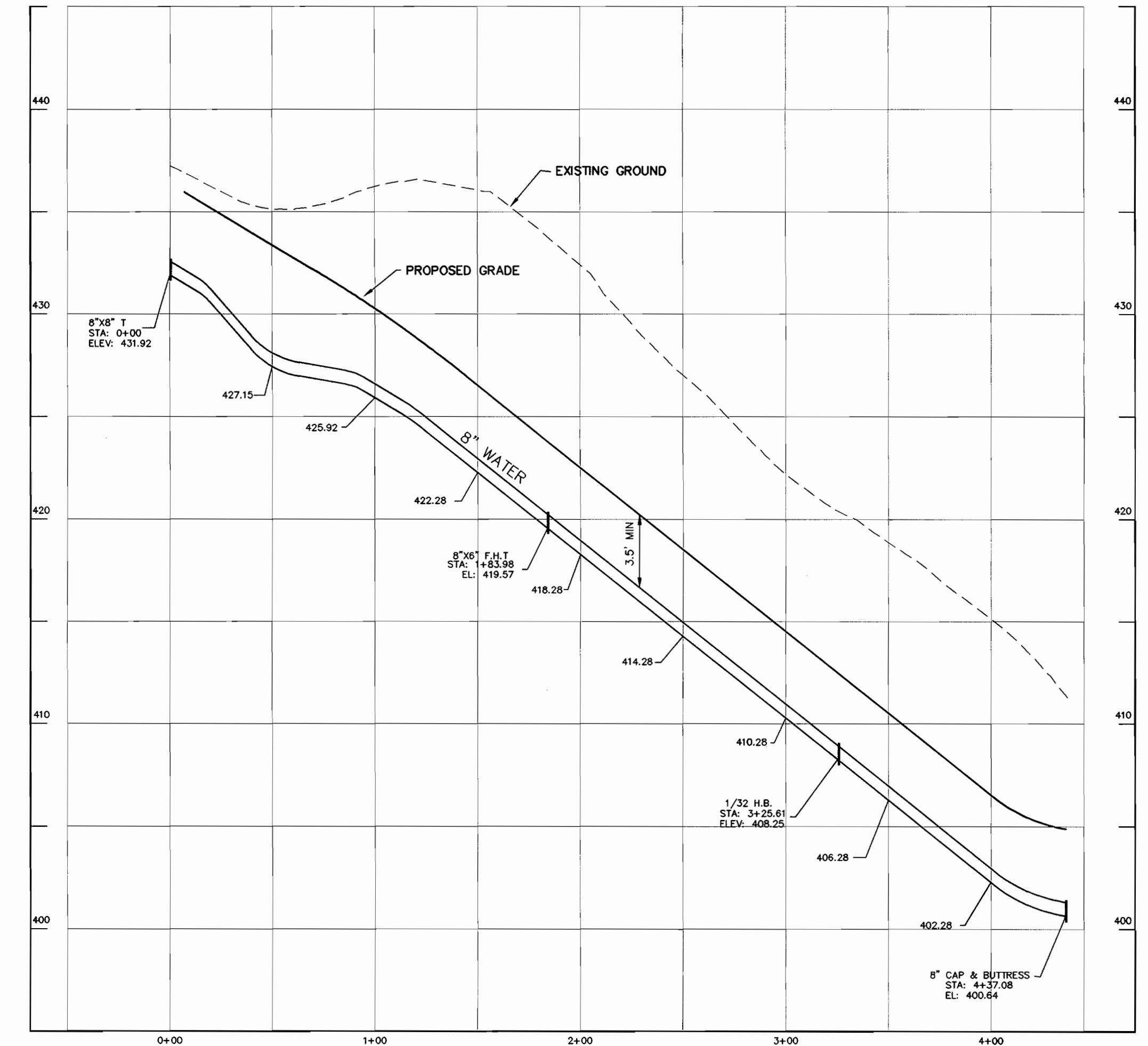
Robert M. Boender 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

Chief, Development Engineering Division DATE



8" WATER PROFILE (WINDING ROSS WAY)

SCALE: HOR. 1"=50'
VER. 1"=5'



8" WATER PROFILE (EDGEHILL LANE)

SCALE: HOR. 1"=50'
VER. 1"=5'

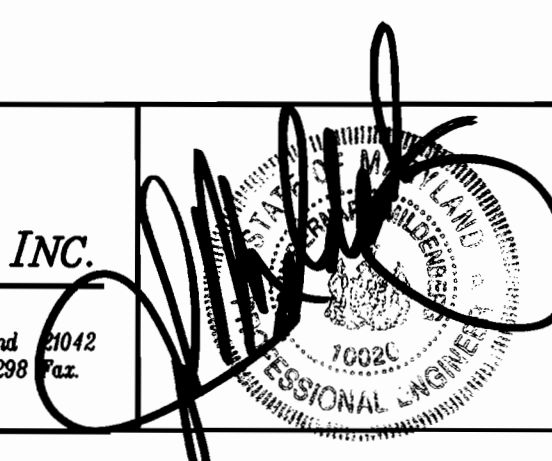
99072\PHASE-2\DWG\MS\W-PROF.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
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(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax



engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

**WATER
PROFILES**

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

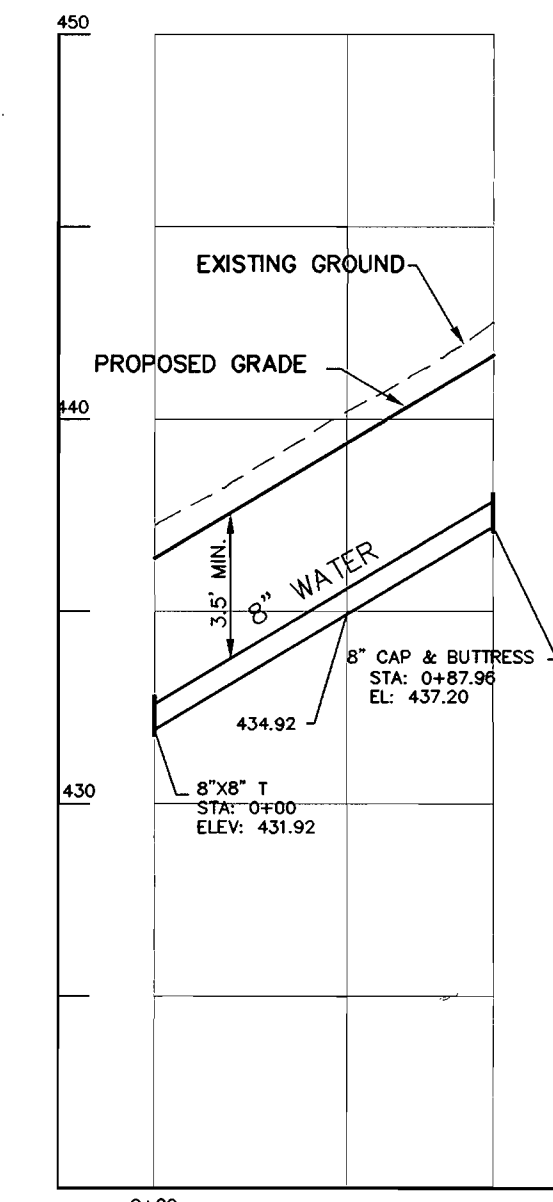
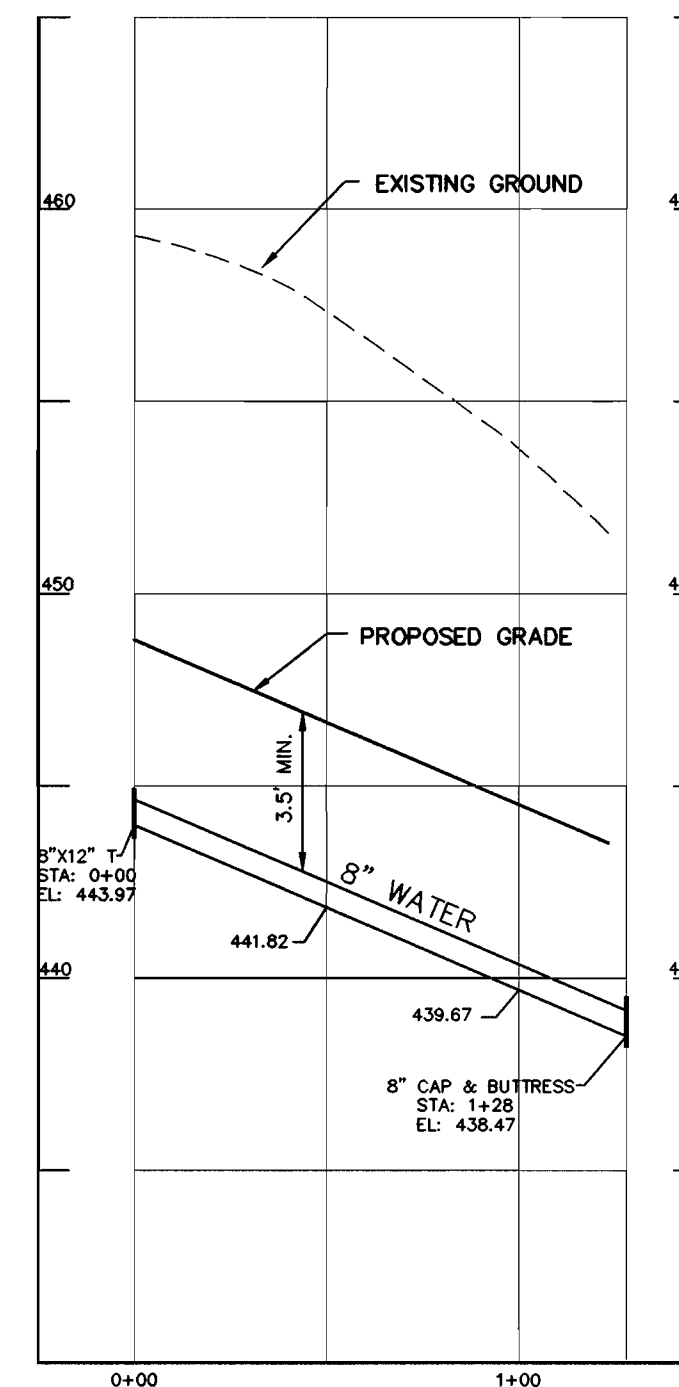
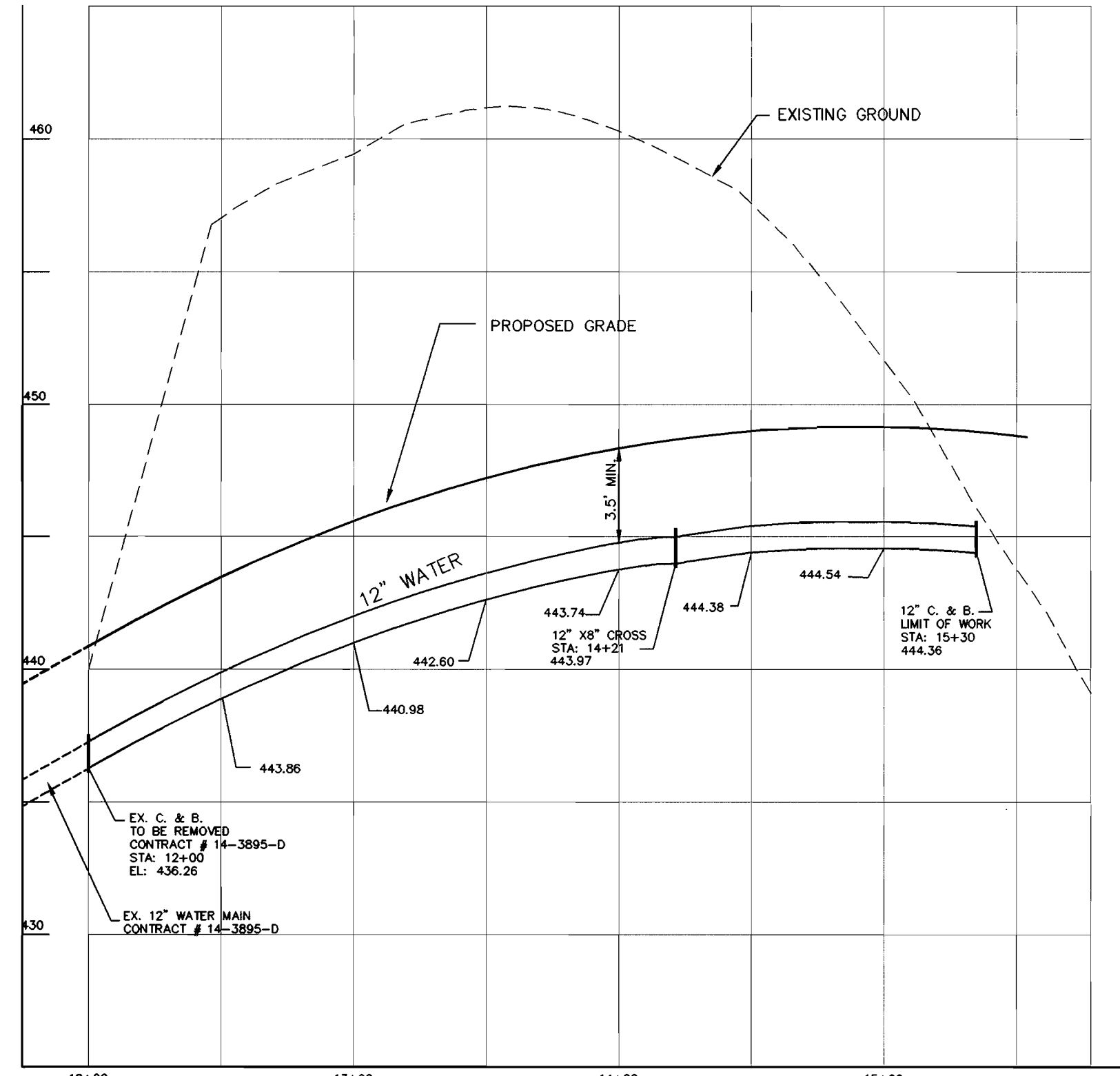
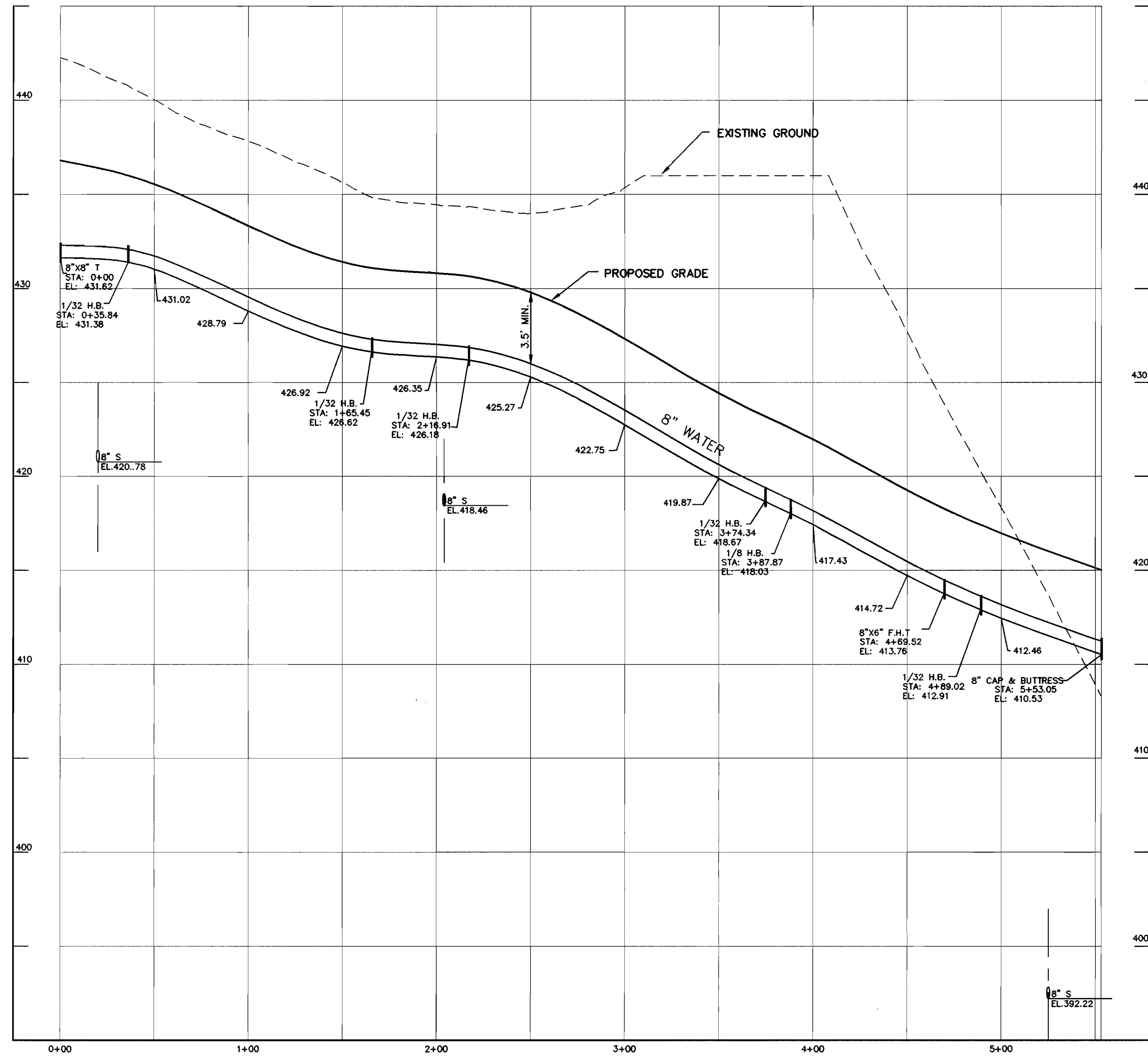
scale
1"=50'

3 OF 6

Robert B. Bunker 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4



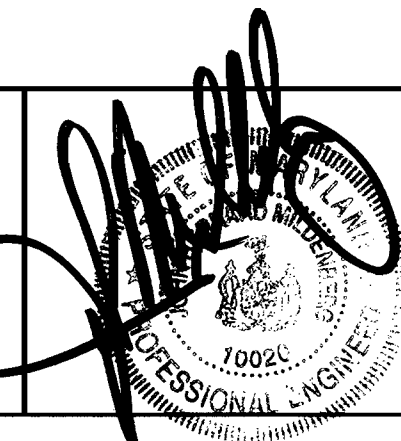
SEWER AS-BUILT DATA				WATER AS-BUILT DATA			
LOT	FROM	TO	DIST.	LOT	FROM	TO	DIST.
260	SAC	EX. MH 23	24'	260	WHC	EX. MH 25	25'
261	"	"	40'	261	"	"	47'
262	"	MH 22	31'	262	"	MH 22	34'
263	"	MH 16	10'	263	"	EX. MH 23	45'
264	"	"	10'	264	"	"	35'
265	"	EX. MH 23	20'	265	"	"	40'
266	"	MH 2	22'	266	"	MH 2	25'
267	"	"	71'	267	"	"	62'
268	"	MH 7	100'	268	"	MH 7	100'
269	"	"	53'	269	"	"	62'
270	"	MH 6	74'	270	"	MH 6	54'
271	"	MH 5	55'	271	"	MH 5	65'
272	"	"	37'	272	"	"	30'
273	"	"	70'	273	"	"	61'
274	"	MH 4	55'	274	"	MH 4	65'
275	"	SD INLET	26'	275	"	SD INLET	42'
276	"	MH 2	17'	276	"	MH 2	65'
277	"	SD INLET	85'	277	"	SD INLET	66'
278	"	MH 1	22'	278	"	MH 1	75'
279	"	SD INLET	77'	279	"	SD INLET	13'
280	"	MH 1	52'	280	"	MH 2	30'
281	"	MH 2	29'	281	"	MH 2	63'
282	"	SD INLET	71'	282	"	SD INLET	10'
283	"	MH 2	51'	283	"	MH 2	35'
284	"	SD INLET	40'	284	"	SD INLET	61'
285	"	MH 2	42'	285	"	MH 5	64'
286	"	MH 3	74'	286	"	MH 2	51'
287	"	MH 5	49'	287	"	MH 5	40'
288	"	MH 4	61'	288	"	MH 4	71'
289	"	MH 5	25'	289	"	MH 5	34'
290	"	"	50'	290	"	"	58'
291	"	MH 4	70'	291	"	MH 6	54'
292	"	MH 19	52'	292	"	MH 19	46'
293	"	MH 20	26'	293	"	MH 20	25'
294	"	MH 21	24'	294	"	MH 21	21'
295	"	MH 15	67'	295	"	MH 15	82'
296	"	"	27'	296	"	"	23'
297	"	MH 13A	34'	297	"	MH 13A	35'
298	"	MH 13	27'	298	"	MH 13	36'
299	"	"	72'	299	"	MH 14	75'
300	"	"	62'	300	"	"	66'
301	"	"	23'	301	"	"	27'
302	"	"	25'	302	"	"	30'
303	"	"	40'	303	"	"	45'
304	"	MH 13	45'	304	"	MH 13	36'
305	"	MH 13A	42'	305	"	MH 13A	38'
306	"	"	46'	306	"	"	63'
307	"	MH 15	25'	307	"	MH 15	23'
308	"	"	61'	308	"	"	72'
309	"	MH 16	40'	309	"	MH 16	50'
310	"	"	40'	310	"	"	40'
311	"	MH 21	36'	311	"	MH 21	44'
312	"	MH 20	44'	312	"	MH 20	30'
313	"	MH 19	36'	313	"	MH 19	34'
314	"	"	36'	314	"	"	42'
315	"	MH 7	32'	315	"	MH 7	32'
316	"	"	102'	316	"	"	102'

99072 PHASE 2 LDMG VMS W-PROF.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
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Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Beltsville City, Maryland 20842
(410) 997-0296 Balt. (301) 621-5527 Wash. (410) 997-0298



engineering	M.P.			
illustration	M.P.			
approval	J.M.			
project	99072	1	AS-BUILT DATA ADDED	6/24/05
date	DEC. 2001	BY	NO.	REVISION

**WATER
PROFILES**

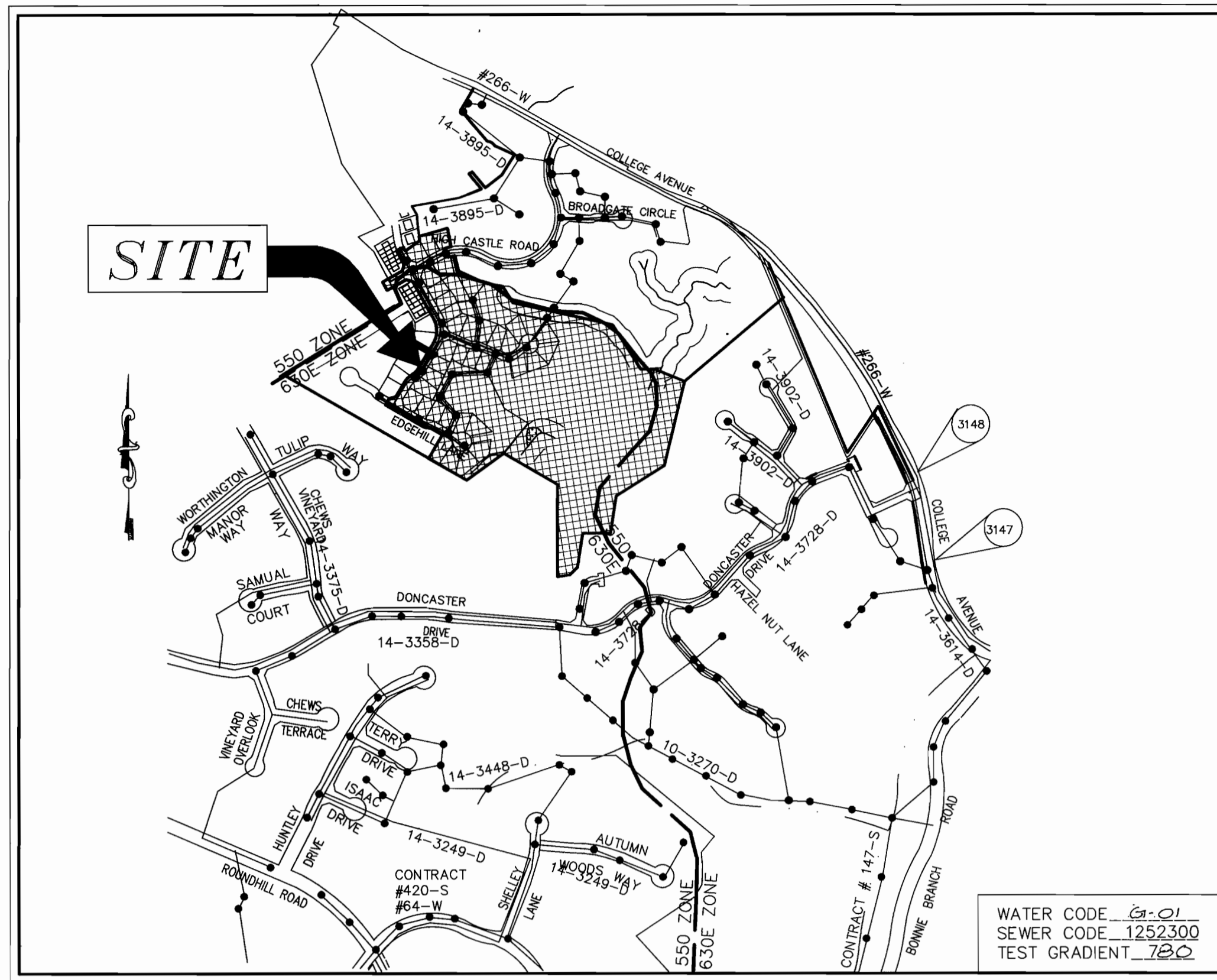
AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
4 OF 6

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
STANDARD MH (HO. CO. STD.G-5.01)	21	20		ATLANTIC CONCRETE
DROP MH, TYPE "B" (HO. CO. STD. S-1.32)	3	3		" "
DROP MH, TYPE "A" (HO. CO. STD. S-1.32)	1	1		" "
8" SEWER MAIN	1,962 L.F.	2270		JM MANUFACTURING
8" D.I.P.	795 L.F.	420		GRIFFIN
4" SEWER HOUSE CONNECTION	1,480 L.F.	1520		JM MANUFACTURING
# SEWER HOUSE CONNECTIONS	51 EACH	51		
8" WATER	2,043 L.F.	2250		GRIFFIN
12" WATER	330 L.F.	330		" "
1" WATER HOUSE CONNECTION	1,540 L.F.	1600		CAMBRIDGE LEE
# 1" WHC	53 EACH	53		
# TWIN 1.5" WHC	5 EACH	5		CAMBRIDGE LEE
1.5" WATER HOUSE CONNECTION	100 L.F.	100		" "
F.H.	4 EACH	4		MUELLER
12"x8" C	1 EACH	1		DISPIPE & FOUNDRY
8"x 8" T	2 EACH	2		" "
8"x6" T	4 EACH	4		" "
8"x4" T	1 EACH	1		" "
12" V	2 EACH	2		MUELLER
6" V	4 EACH	4		" "
8" V	6 EACH	6		" "
8" CAP & BUTTRESS	4 EACH	3		DISPIPE & FOUNDRY
12" CAP & BUTTRESS	1 EACH	0		
1/8 H.B. (8")	1 EACH	0		
1/16 H.B. (8")	5 EACH	0		
1/32 H.B. (8")	5 EACH	0		
8" PRESSURE VALVE	1 EACH	1		MUELLER
4" DROP SEWER HOUSE CONNECTION	10 EACH			
NAME OF UTILITY CONTRACTOR: <u>CCS</u>				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



VICINITY MAP
SCALE: 1"=600'

TYPE OF BUILDING	SFD
No. OF UNITS	38
No. OF FUTURE UNITS	23
No. OF WATER HOUSE CONNECTION	38 (FUTURE 23)
No. OF SEWER HOUSE CONNECTIONS	38 (FUTURE 23)
DRAINAGE AREA	BONNIE BRANCH PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-01-38

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 ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- 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 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 DETAIL 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 (410) 531-5533
BG & E CO. CONTRACTOR SERVICES (410) 850-4620
BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068
MISS UTILITY 1-800-257-7777
COLONIAL PIPELINE CO. (410) 795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES (410) 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE 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 (5) 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 HOWARD COUNTY CODE.
- 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE 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.
- FOR SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P., CLASS 52 UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. 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.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- SEDIMENT CONTROL TO BE PROVIDED BY F-01-39.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL HOUSES WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- THE EXISTING WELL AND SEPTIC SERVICING EXISTING HOUSE(S) ARE TO BE ABANDONED.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY, SEE ROAD PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

CONTRACT NO.: 14-3896-D

**AUTUMN VIEW, SECTION 5, PHASE II
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS**

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER PROFILES
4	WATER PROFILES
5	SEWER PROFILES
6	SEWER PROFILES

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Bruce Taylor Pres 12/18/01
DEVELOPER'S SIGNATURE DATE

Bruce Taylor Pres
DEVELOPER'S NAME

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

J. B. Mildenberg 12/24/01
ENGINEER'S SIGNATURE DATE

J. B. MILDENBERG
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

Jim Marcus 2/7/02
USDA NATURAL RESOURCES CONSERVATION SERVICE

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

John R. Roberts 2/7/02
HOWARD SCD

PLAN REFERENCE NUMBERS

F-01-38
P-00-09
S-99-01

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21041
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax

Robert M. Bauman 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

John R. Roberts 2/16/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

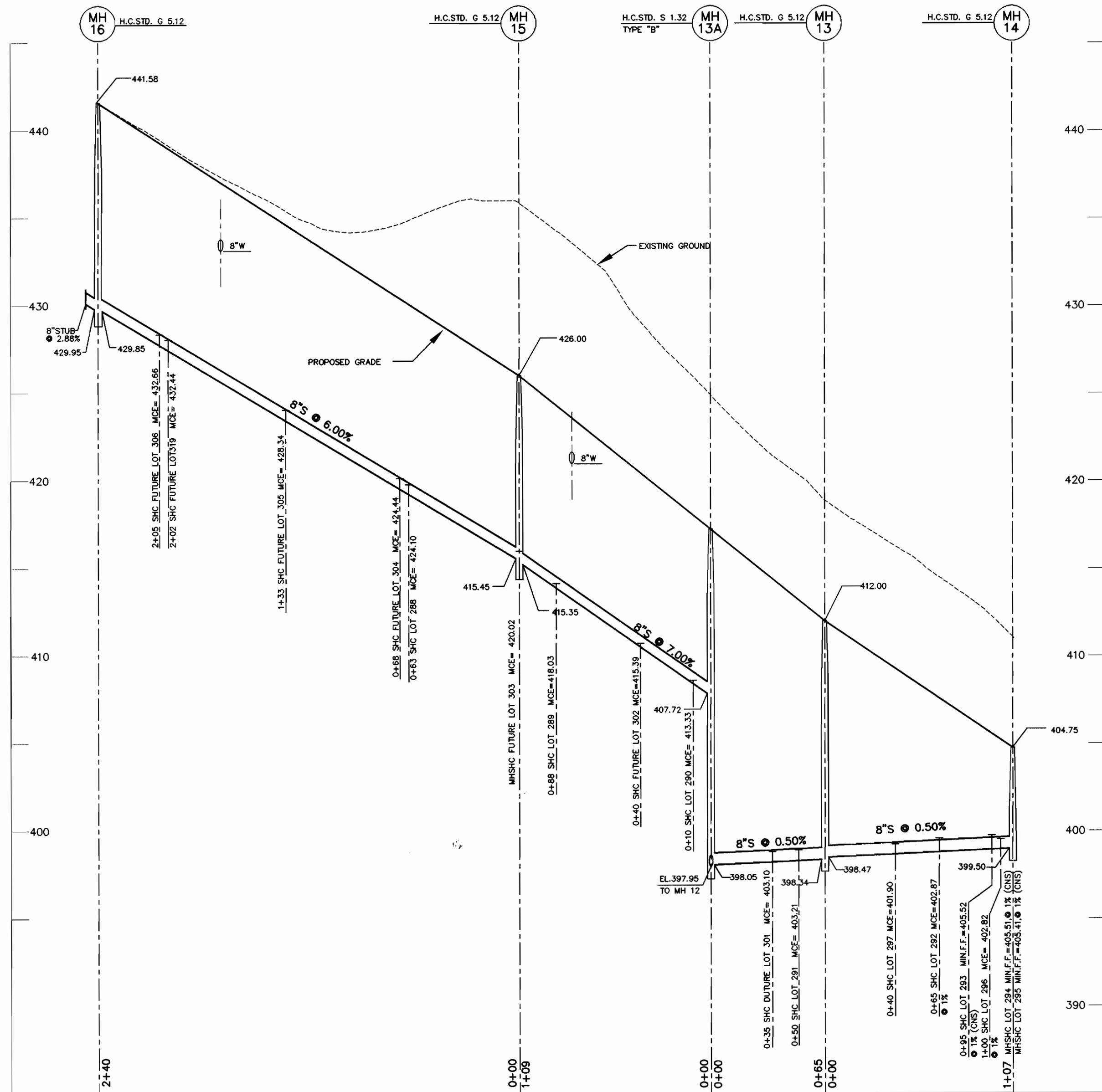
engineering	M.P.			
illustration	M.P.			
approval	J.M.			
project	MBA	3	ADDED AS BUILT DATA	5/18/05
99072	MBA	2	MODIFY THE QUANTITY TABLE	5/25/03
date	BY	NO.	REVISION	DATE
DEC. 2001				

TITLE SHEET

AUTUMN VIEW, SECTION 5
PHASE 2 LOTS: 260-300
CONTRACT NO.: 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

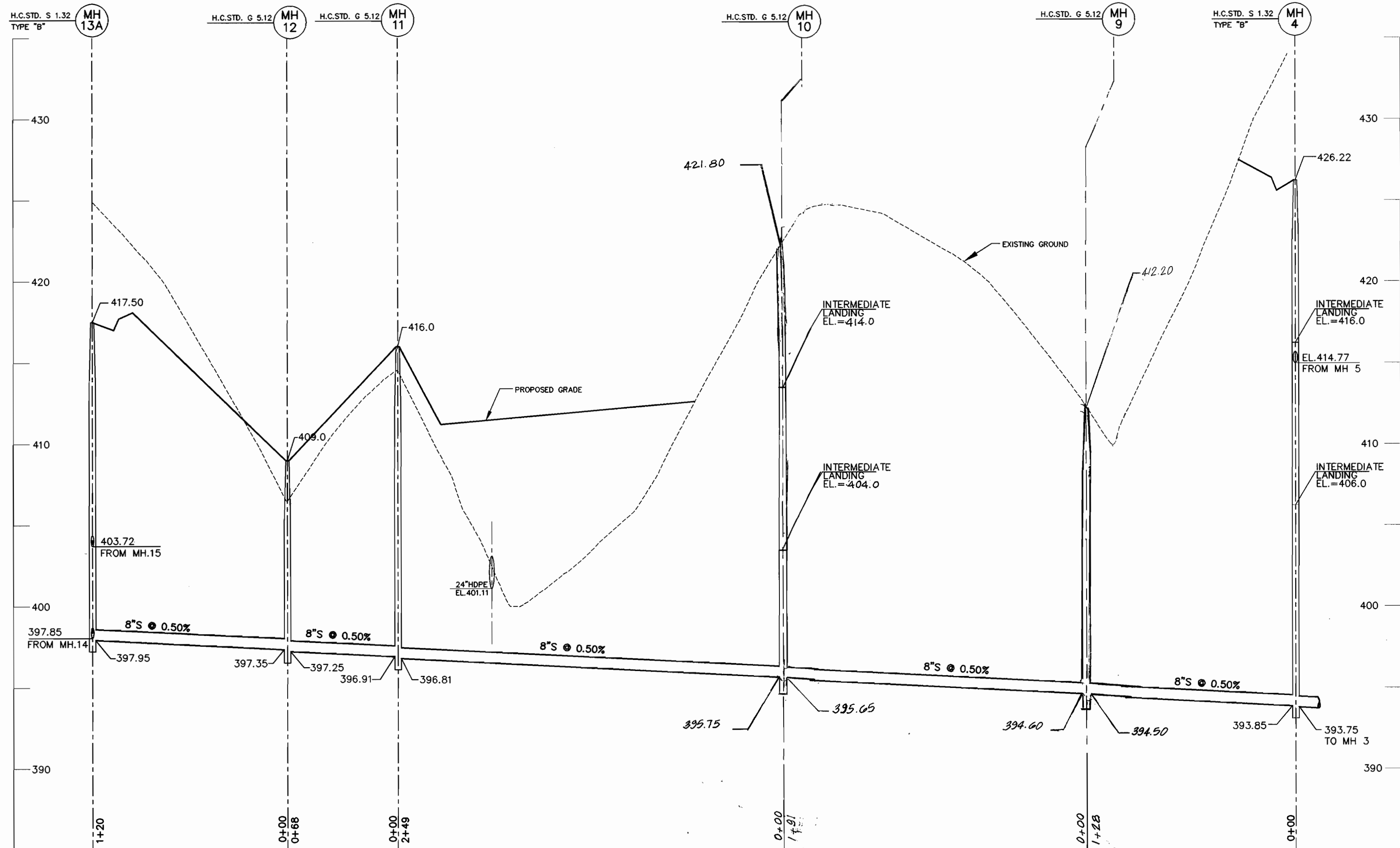
scale AS SHOWN

1 OF 6



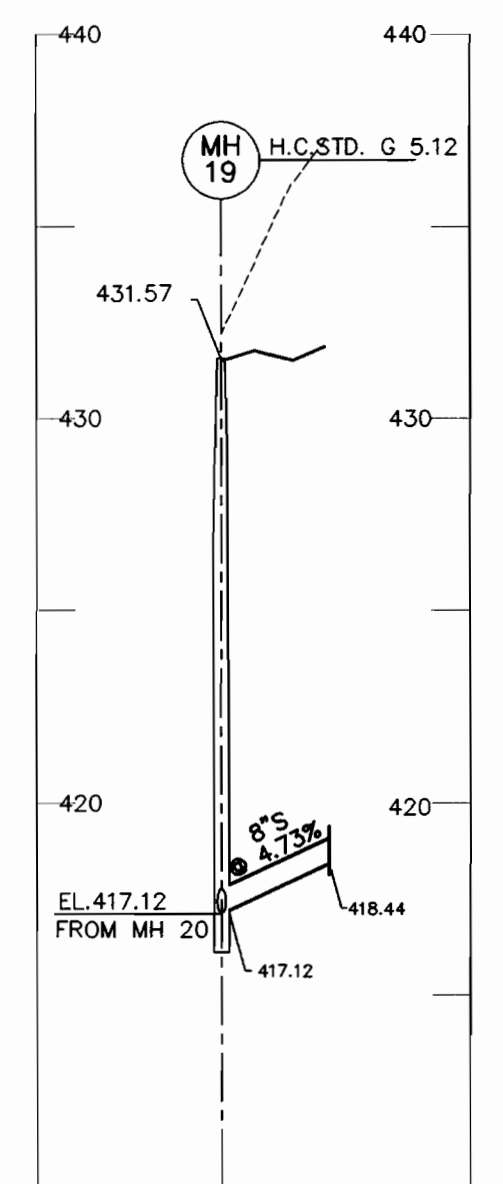
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

99072 PHASE-2.DWG\WS-S-PROF

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert B. Bannister
 CHIEF, BUREAU OF UTILITIES
 2-4-02
 DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Michael J. ...
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE

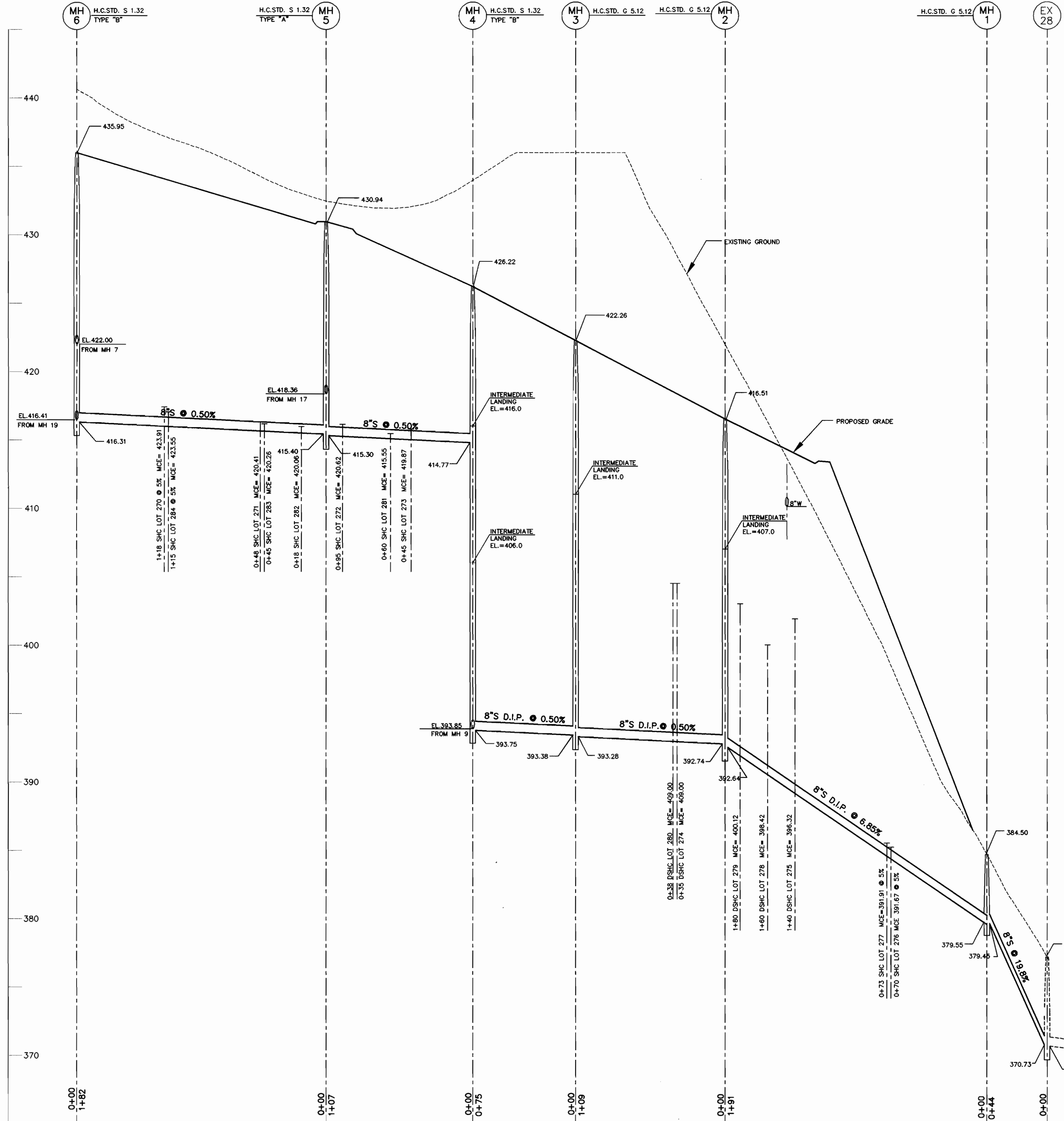
MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Balt. (301) 621-5521 Wash. (410) 997-0296 Fax

engineering	M.P.				
illustration	M.P.				
approval					
project	99072	MBA	1	REVISE SEWER PROFILE	1/9/02
date	DEC. 2001	BY	NO.	REVISION	DATE

SEWER PROFILE
 600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

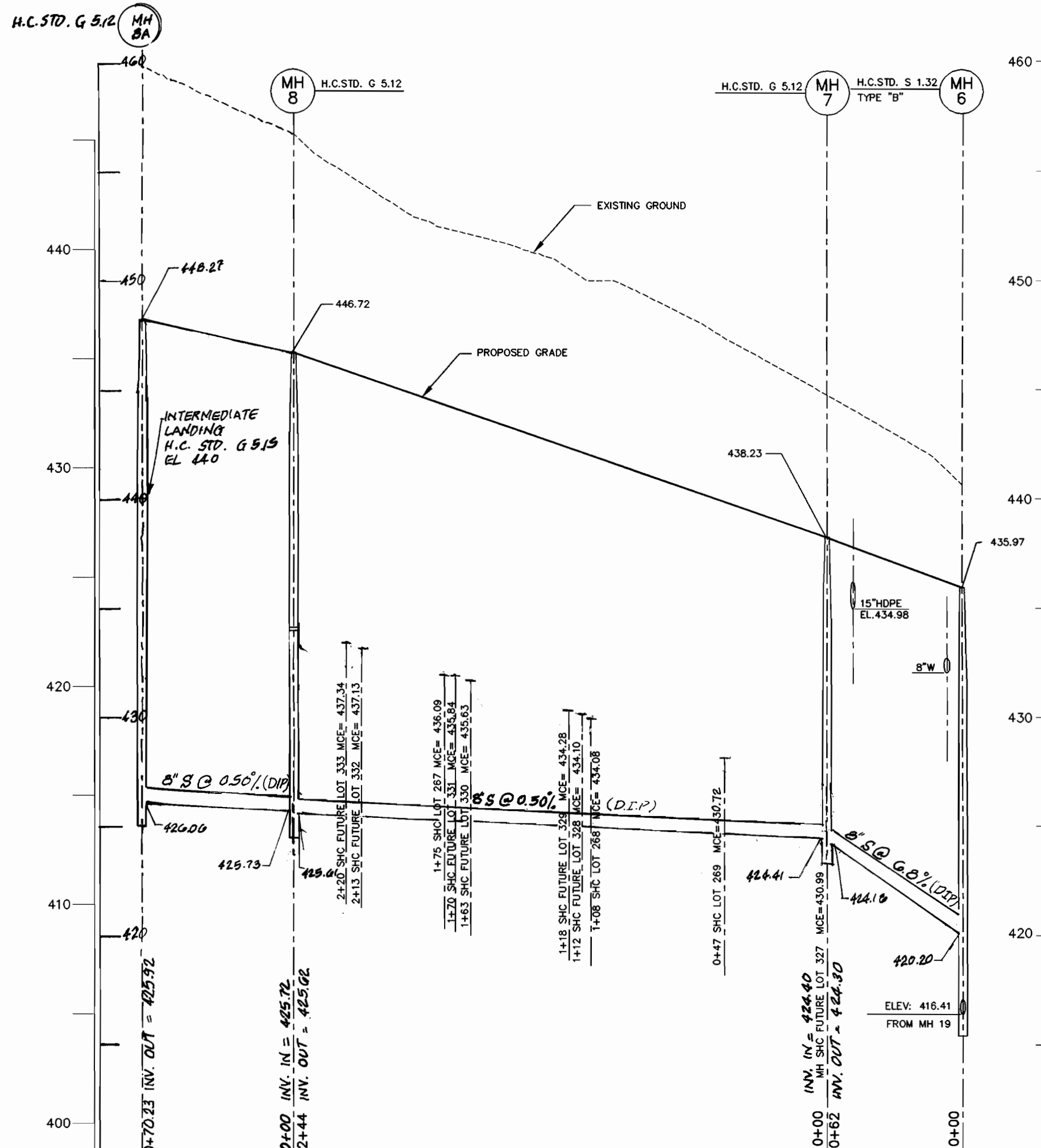
AUTUMN VIEW, SECTION 5
 PHASE 2, LOTS: 260-300
 CONTRACT # 14-3896-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY

scale
1"=50'
5 OF 6



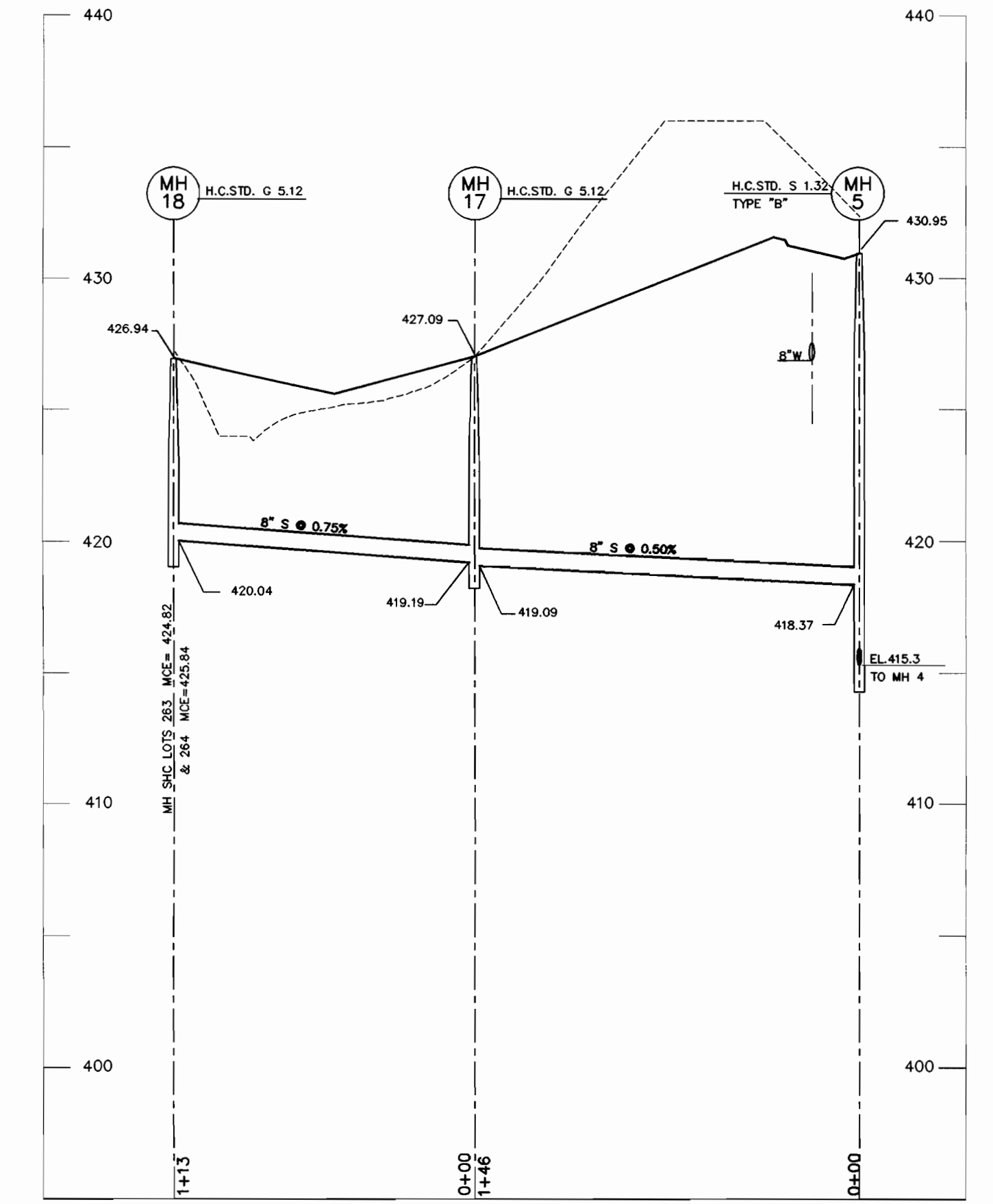
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



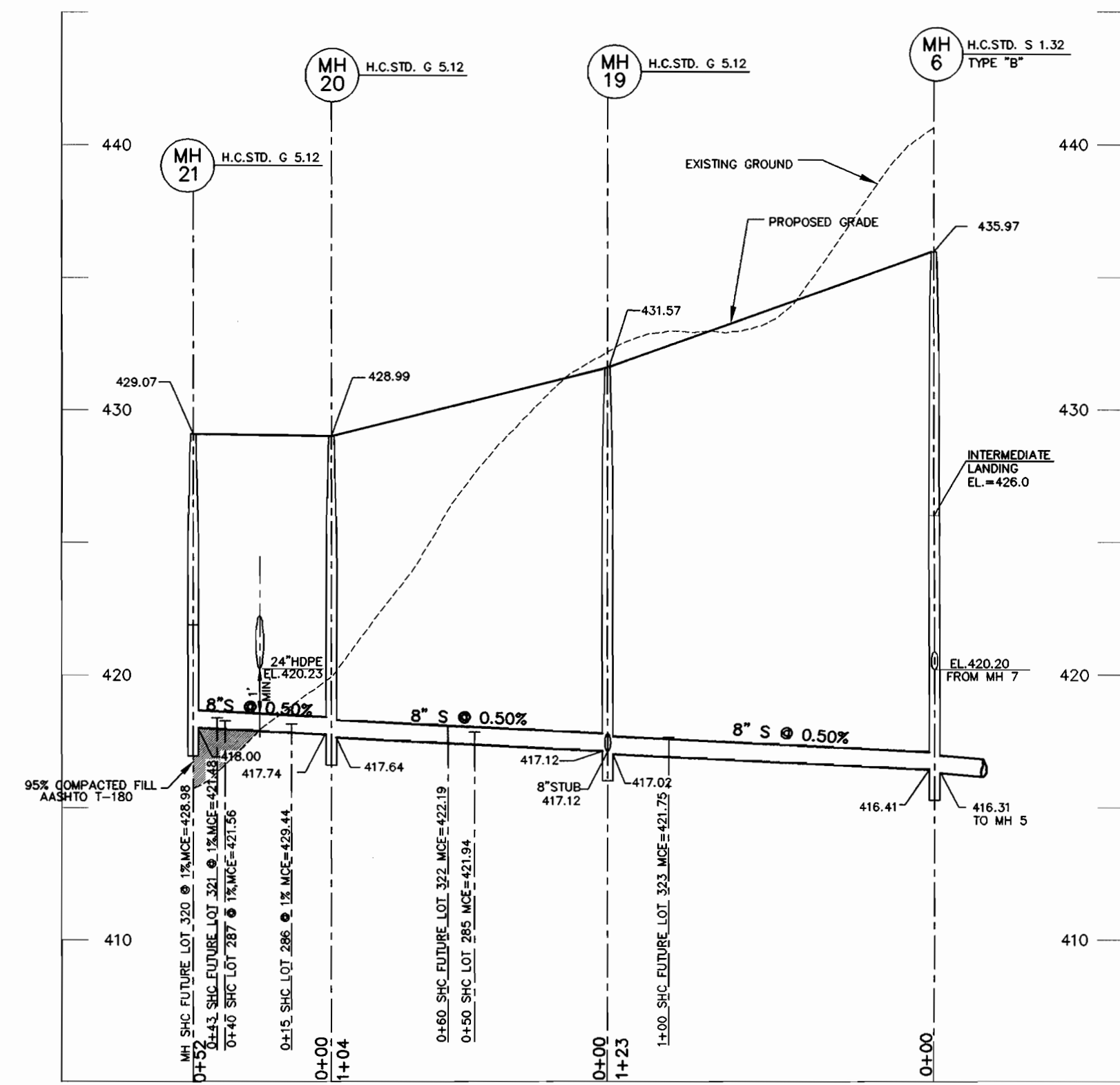
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



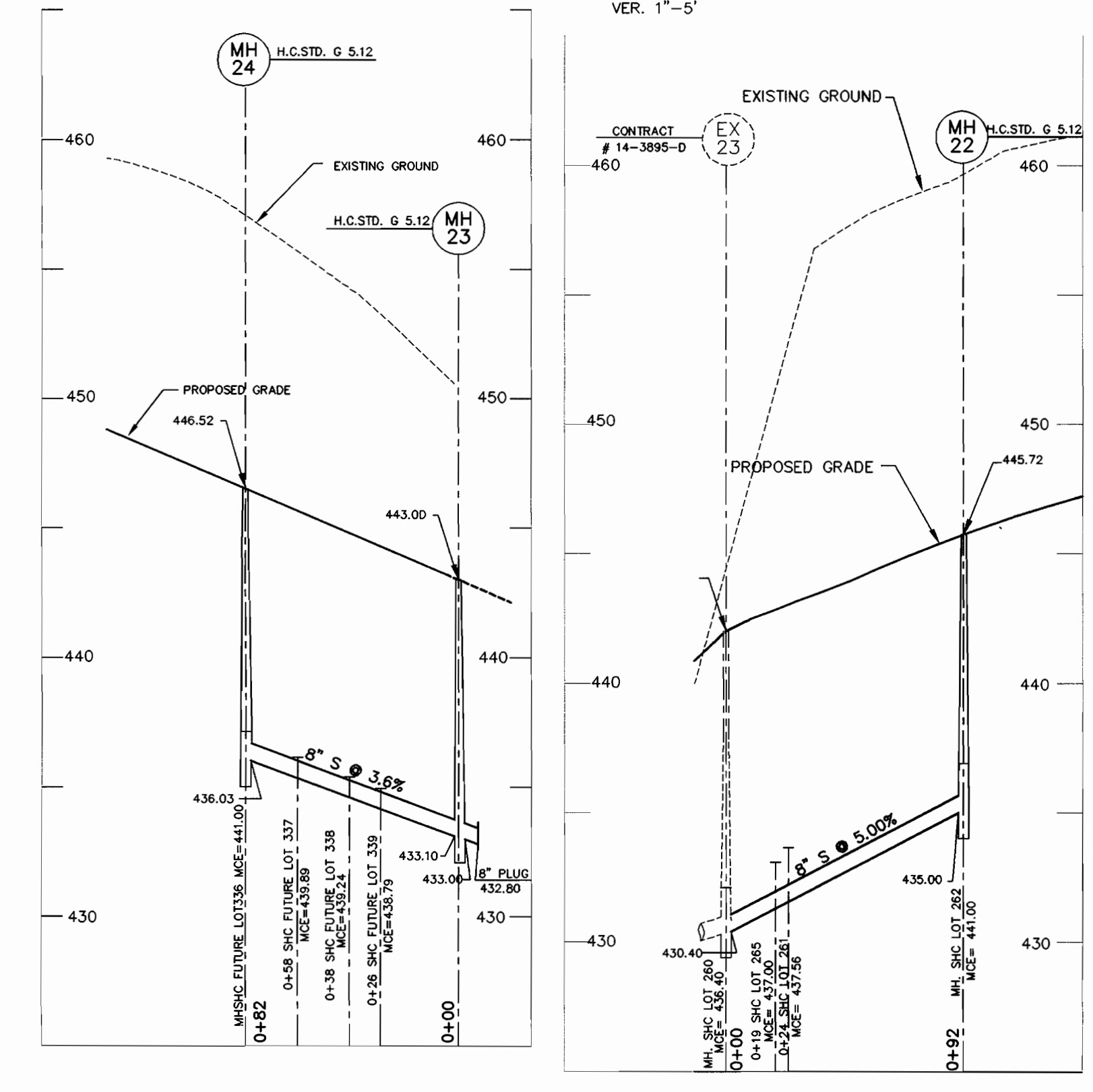
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

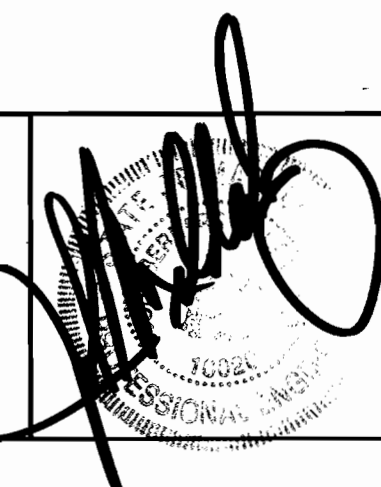
99072 (PHASE-2) (DWG) (V) (WS - S - PROF)

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 987-0296 Bull. (301) 621-5521 Wash. (410) 987-0298 Fax



engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072	MBA	2	ADD MBA AND REVISE PROFILE BETWEEN MHG AND MHA	03/25/03
date	DEC. 2001	BY	NO.	REVISION	DATE

SEWER PROFILE

60' SCALE MAP NO. 31 BLOCK NO. 3 & 4

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
6 OF 6

Robert M. Boender 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

Chief, Development Engineering Division DATE

**WATER MAIN
TABULATION CHART**

WINDING ROSS WAY		
STATION	APPURTENANCE	O/S FROM C
0+50.00	F.H.	LT. 16.1'
0+50.00	8"X6" T	RT. 8.0'
3+10.00	1/16 H.B.	RT. 3.0'
3+35.00	F.H.	RT. 16.1'
3+35.00	8"X6" T	RT. 2.5'
3+41.73	1/16 H.B.	RT. 1.0'
3+62.16	8"X8" T	RT. 4.0'
4+08.78	1/16 H.B.	RT. 0.75'
5+87.40	1/16 H.B.	RT. 3.0'
6+92.87	1/16 H.B.	RT. 8.0'

EDGEHILL LANE		
STATION	APPURTENANCE	O/S FROM C
0+03.00	8" V.	RT. 8.0'
0+42.00	F.H.	LT. 22.1'
0+42.00	8"X6" T	RT. 8.0'
3+19.39	1/32 H.B.	RT. 9.0'
L.P. 1+83.00	8" C. & B.	RT. 11.0'

PLEASANT PATH		
STATION	APPURTENANCE	O/S FROM C
0+03.00	8" V.	0.0'
0+30.98	1/32 H.B.	LT. 7.0'
1+60.80	1/32 H.B.	LT. 7.0'
2+12.71	1/32 H.B.	LT. 7.0'
3+72.44	1/32 H.B.	LT. 8.0'
3+87.96	1/8 H.B.	LT. 6.0'
4+72.80	8"X6" T	LT. 4.0'
4+72.80	F.H.	LT. 26.0'
4+92.74	1/32 H.B.	LT. 2.5'
L.P. 1+42.00	8" C. & B.	RT. 8.0'

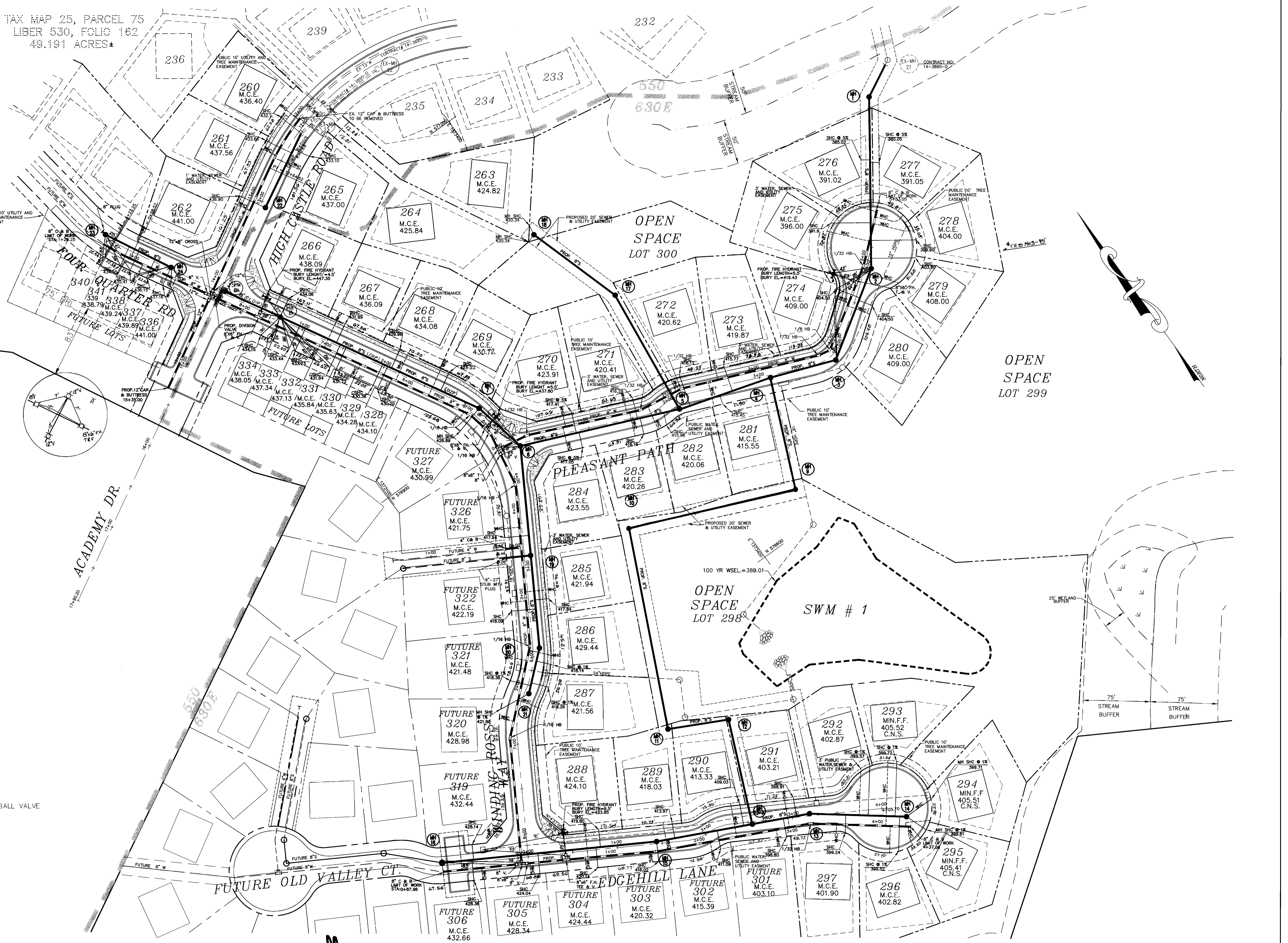
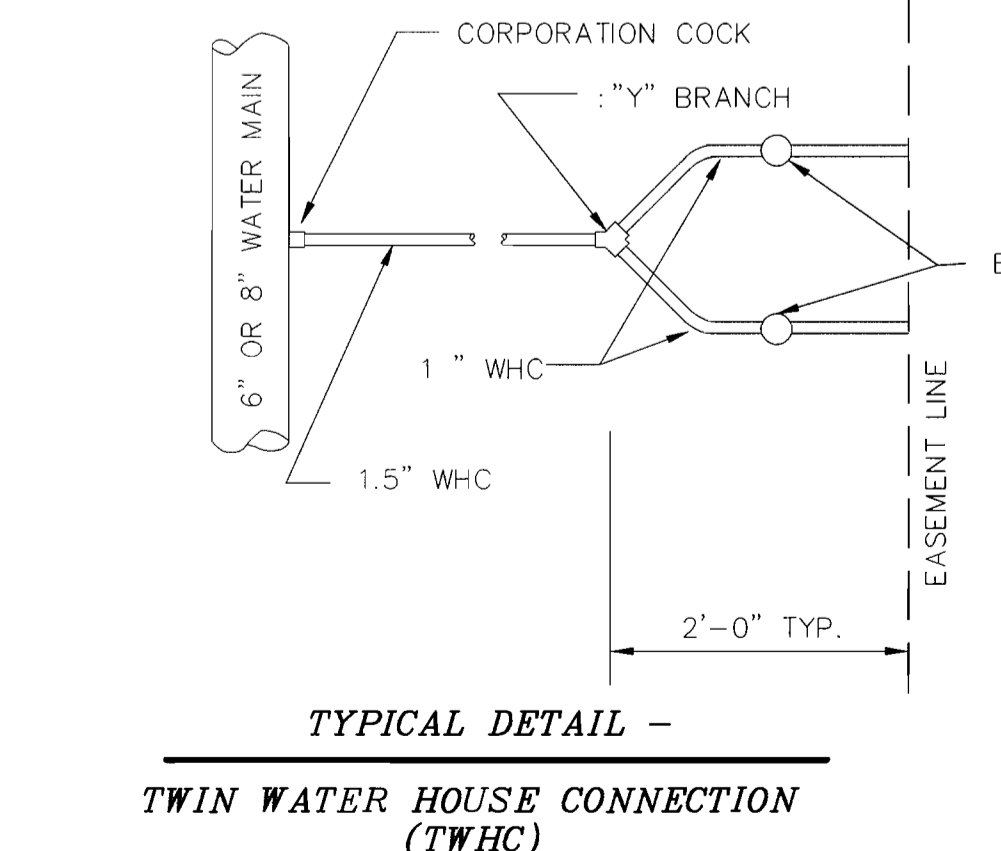
HIGH CASTLE ROAD		
STATION	APPURTENANCE	O/S FROM C
14+16.49	8" V.	RT. 8.0'
14+19.49	8"X8" CROSS	RT. 8.0'
14+22.49	8" V.	RT. 8.0'
15+33.16	8" C. & B.	RT. 8.0'

FOUR QUARTER ROAD		
STATION	APPURTENANCE	O/S FROM C
0+02.19	PRESSURE V.	LT. 8.0'
0+11.58	8" V.	LT. 8.0'
1+35.73	8" C. & B.	LT. 8.0'

FUTURE ROAD "J"		
STATION	APPURTENANCE	O/S FROM C
0+05.07	8" V.	LT. 7.0'
0+08.07	8"X6" T	LT. 7.0'
0+11.07	8" V.	LT. 7.0'
0+96.01	8" C. & B.	LT. 7.0'

MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET
1	N 576,946.794 E 1,373,795.271		
2	PLEASANT PATH	4+91.79	RT. 6.5'
3	PLEASANT PATH	3+85.07	RT. 7.0'
4	PLEASANT PATH	3+12.15	RT. 3.0'
5	PLEASANT PATH	2+02.40	RT. 14.0'
6	PLEASANT PATH	0+21.08	RT. 3.0'
7	WINDING ROSS WAY	3+13.67	LT. 9.0'
8	WINDING ROSS WAY	0+71.66	LT. 3.0'
9	N 576,658.775 E 1,373,479.650		
10	N 576,733.569 E 1,373,304.964		
11	N 576,508.032 E 1,373,199.711		
12	N 576,476.963 E 1,373,260.622		
13A	EDGEHILL LANE	2+54.58	RT. 3.0'
13	EDGEHILL LANE	3+19.39	LT. 3.0'
14	EDGEHILL LANE	1+71.98 L.P.	LT. 21.0'
15	EDGEHILL LANE	1+44.19	LT. 2.0'
16	N 576,535.202 E 1,372,908.384		
17	N 576,934.106 E 1,373,436.321		
18	N 577,042.036 E 1,373,402.708		
19	WINDING ROSS WAY	4+86.86	LT. 7.0'
20	WINDING ROSS WAY	5+90.52	LT. 7.0'
21	WINDING ROSS WAY	6+40.25	LT. 5.0'
22	HIGH CASTLE ROAD	13+04.99	LT. 6.0'
23	FOUR QUARTER ROAD	0+61.87	RT. 2.0'
24	WINDING ROSS WAY	0+01.42	LT. 2.59'



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert J. ... 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

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

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21041
(410) 997-0286 Ballt. (301) 621-5521 Wash. (410) 997-0286 Fax

engineering	M.P.	illustration	M.P.	approval	J.M.	project	99072	date	DEC. 2001

**WATER
AND SEWER
PLAN**

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

**AUTUMN VIEW, SECTION 5
PHASE 2, LOTS 260-300**

CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
2 OF 6

**WATER MAIN
TABULATION CHART**

WINDING ROSS WAY		
STATION	APPURTENANCE	O/S FROM C
0+50.00	F.H.	LT. 16.1'
0+50.00	8" X 8" T	RT. 8.0'
3+10.00	1/16 H.B.	RT. 3.0'
3+35.00	F.H.	RT. 16.1'
3+35.00	8" X 8" T	RT. 2.5'
3+41.73	1/16 H.B.	RT. 1.0'
3+62.16	8" X 8" T	RT. 4.0'
4+06.78	1/16 H.B.	RT. 0.75'
5+87.40	1/16 H.B.	RT. 3.0'
6+92.87	1/16 H.B.	RT. 8.0'

EDGEHILL LANE		
STATION	APPURTENANCE	O/S FROM C
0+03.00	8" V.	RT. 8.0'
0+42.00	F.H.	LT. 22.1'
0+42.00	8" X 6" T	RT. 8.0'
3+19.39	1/32 H.B.	RT. 9.0'
L.P. 1+83.00	8" C. & B.	RT. 11.0'

PLEASANT PATH		
STATION	APPURTENANCE	O/S FROM C
0+03.00	8" V.	O.0'
0+30.98	1/32 H.B.	LT. 7.0'
1+60.80	1/32 H.B.	LT. 7.0'
2+12.71	1/32 H.B.	LT. 7.0'
3+72.44	1/32 H.B.	LT. 8.0'
3+87.96	1/8 H.B.	LT. 6.0'
4+72.80	8" X 6" T	LT. 4.0'
4+72.80	F.H.	LT. 26.0'
4+92.24	1/32 H.B.	LT. 2.5'
L.P. 1+42.00	8" C. & B.	RT. 3.0'

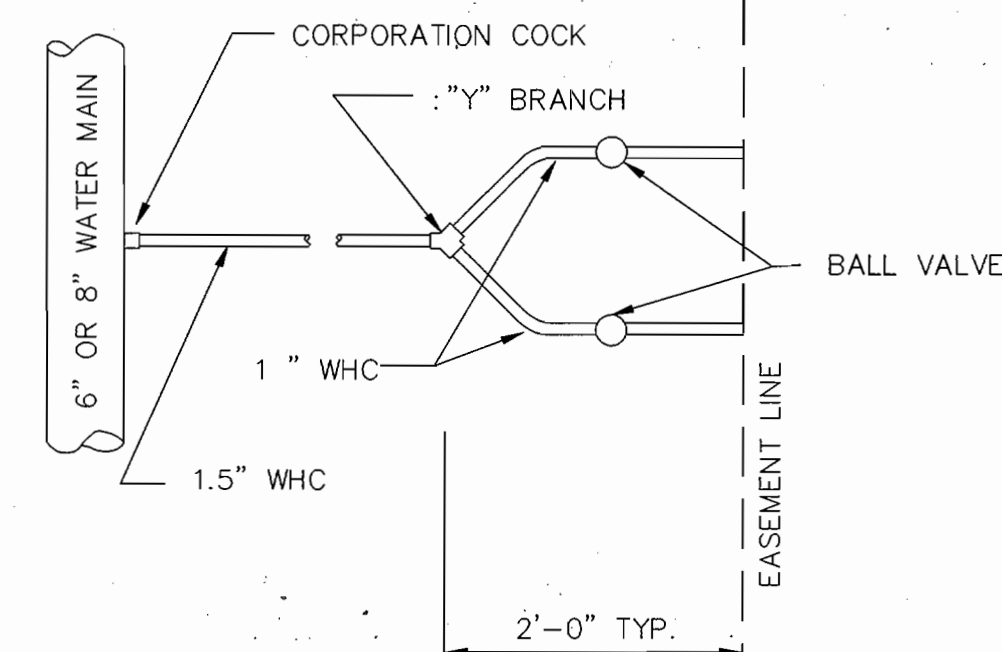
HIGH CASTLE ROAD		
STATION	APPURTENANCE	O/S FROM C
14+16.49	8" V.	RT. 8.0'
14+19.49	8" X 8" CROSS	RT. 8.0'
14+22.49	8" V.	RT. 8.0'
15+33.16	8" C. & B.	RT. 8.0'

FOUR QUARTER ROAD		
STATION	APPURTENANCE	O/S FROM C
0+02.19	PRESSURE V.	LT. 8.0'
0+11.58	8" V.	LT. 8.0'
1+35.73	8" C. & B.	LT. 8.0'

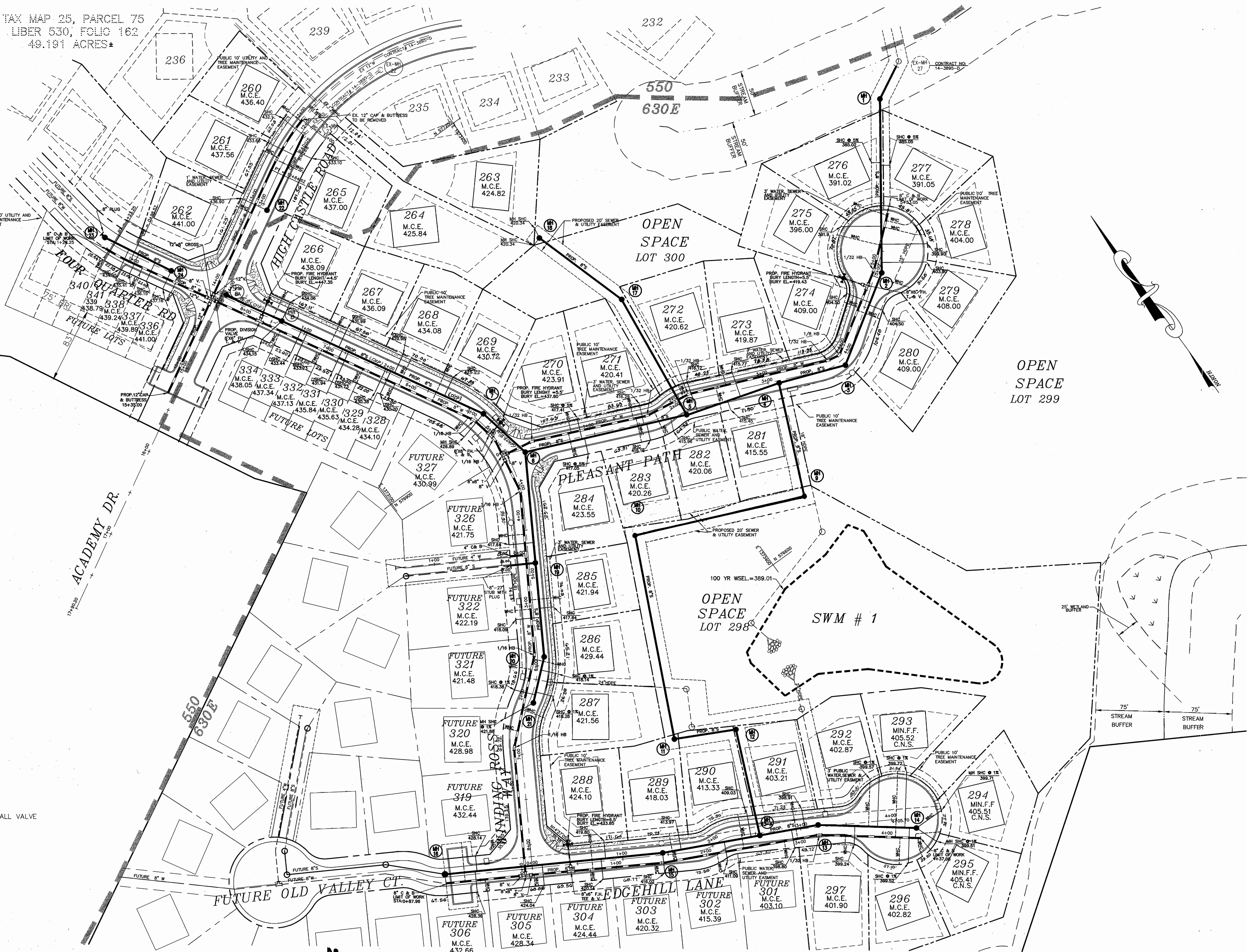
FUTURE ROAD "J"		
STATION	APPURTENANCE	O/S FROM C
0+05.07	8" V.	LT. 7.0'
0+08.07	8" X 8" T	LT. 7.0'
0+11.07	8" V.	LT. 7.0'
0+96.01	8" C. & B.	LT. 7.0'

MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL. STATION	OFFSET
1	N 576,946.794 E 1,373,795.271		
2	PLEASANT PATH	4+91.79	RT. 6.5'
3	PLEASANT PATH	3+85.07	RT. 7.0'
4	PLEASANT PATH	3+12.15	RT. 3.0'
5	PLEASANT PATH	2+02.40	RT. 14.0'
6	PLEASANT PATH	0+21.08	RT. 3.0'
7	WINDING ROSS WAY	3+13.67	LT. 9.0'
8	WINDING ROSS WAY	0+71.66	LT. 3.0'
9	N 576,658.775 E 1,373,479.650		
10	N 576,733.569 E 1,373,304.964		
11	N 576,508.032 E 1,373,199.711		
12	N 576,476.963 E 1,373,260.622		
13A	EDGEHILL LANE	2+54.58	RT. 3.0'
13	EDGEHILL LANE	3+19.39	LT. 3.0'
14	EDGEHILL LANE	1+71.98 L.P.	LT. 21.0'
15	EDGEHILL LANE	1+44.19	LT. 2.0'
16	N 576,535.202 E 1,372,908.384		
17	N 576,934.106 E 1,373,436.321		
18	N 577,042.036 E 1,373,402.708		
19	WINDING ROSS WAY	4+86.86	LT. 7.0'
20	WINDING ROSS WAY	5+90.52	LT. 7.0'
21	WINDING ROSS WAY	6+40.25	LT. 5.0'
22	HIGH CASTLE ROAD	13+04.99	LT. 6.0'
23	FOUR QUARTER ROAD	0+61.87	RT. 2.0'
24	WINDING ROSS WAY	0+01.42	LT. 2.53'



TYPICAL DETAIL -
TWIN WATER HOUSE CONNECTION (TWHC)



OPEN SPACE
LOT 299

OPEN SPACE
LOT 298

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors
5072 Derney Hall Drive, Suite 202, Ellicott City, Maryland 21041
(410) 997-0286 Ball. (301) 621-5521 Wash. (410) 997-0288 Fax

engineering	M.P.	
illustration	M.P.	
approval	J.M.	
project	MBA	2
date	99072	1
DEC. 2001	BY NO.	REVISION

**WATER
AND SEWER
PLAN**

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
2 OF 6

99072 (PHASE-2) (DWG) (WS) (PLAN)-1

**WATER MAIN
TABULATION CHART**

WINDING ROSS WAY		
STATION	APPURTENANCE	O/S FROM C
0+50.00	F.H.	LT. 16.1'
0+50.00	8" X 8" T	RT. 8.0'
3+10.00	1/16 H.B.	RT. 3.0'
3+35.00	F.H.	RT. 16.1'
3+35.00	8" X 8" T	RT. 2.5'
3+41.73	1/16 H.B.	RT. 1.0'
3+62.16	8" X 8" T	RT. 4.0'
4+06.78	1/16 H.B.	RT. 0.75'
5+87.40	1/16 H.B.	RT. 3.0'
6+92.87	1/16 H.B.	RT. 8.0'

EDGEHILL LANE		
STATION	APPURTENANCE	O/S FROM C
0+03.00	8" V.	RT. 8.0'
0+42.00	F.H.	LT. 22.1'
0+42.00	8" X 6" T	RT. 8.0'
3+19.39	1/32 H.B.	RT. 9.0'
L.P. 1+83.00	8" C. & B.	RT. 11.0'

PLEASANT PATH		
STATION	APPURTENANCE	O/S FROM C
0+03.00	8" V.	O.0'
0+30.98	1/32 H.B.	LT. 7.0'
1+60.80	1/32 H.B.	LT. 7.0'
2+12.71	1/32 H.B.	LT. 7.0'
3+72.44	1/32 H.B.	LT. 8.0'
3+87.96	1/8 H.B.	LT. 6.0'
4+72.80	8" X 6" T	LT. 4.0'
4+72.80	F.H.	LT. 26.0'
4+92.24	1/32 H.B.	LT. 2.5'
L.P. 1+42.00	8" C. & B.	RT. 3.0'

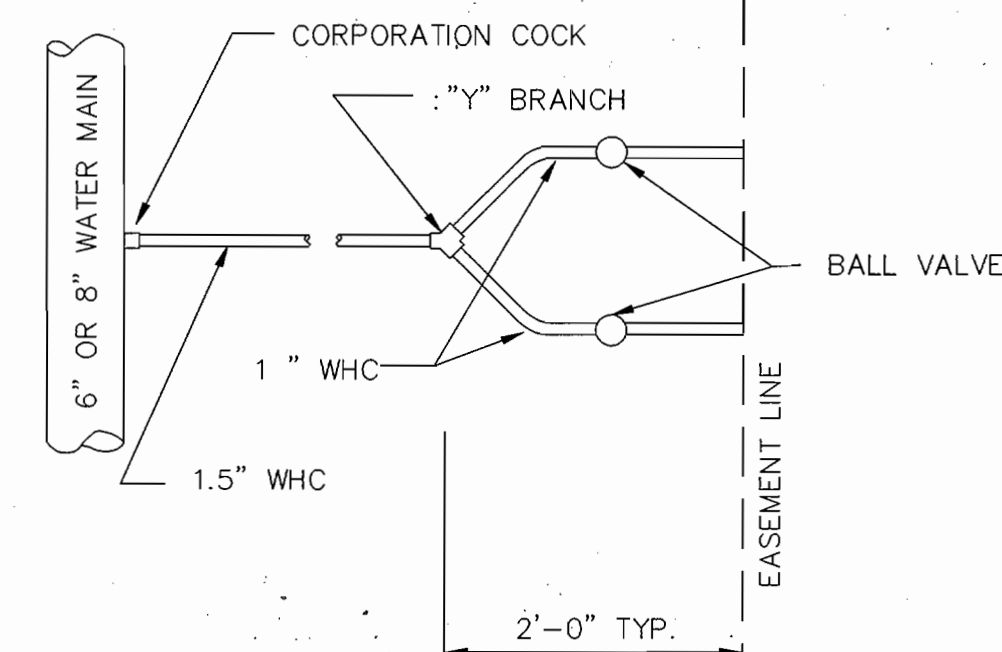
HIGH CASTLE ROAD		
STATION	APPURTENANCE	O/S FROM C
14+16.49	8" V.	RT. 8.0'
14+19.49	8" X 8" CROSS	RT. 8.0'
14+22.49	8" V.	RT. 8.0'
15+33.16	8" C. & B.	RT. 8.0'

FOUR QUARTER ROAD		
STATION	APPURTENANCE	O/S FROM C
0+02.19	PRESSURE V.	LT. 8.0'
0+11.58	8" V.	LT. 8.0'
1+35.73	8" C. & B.	LT. 8.0'

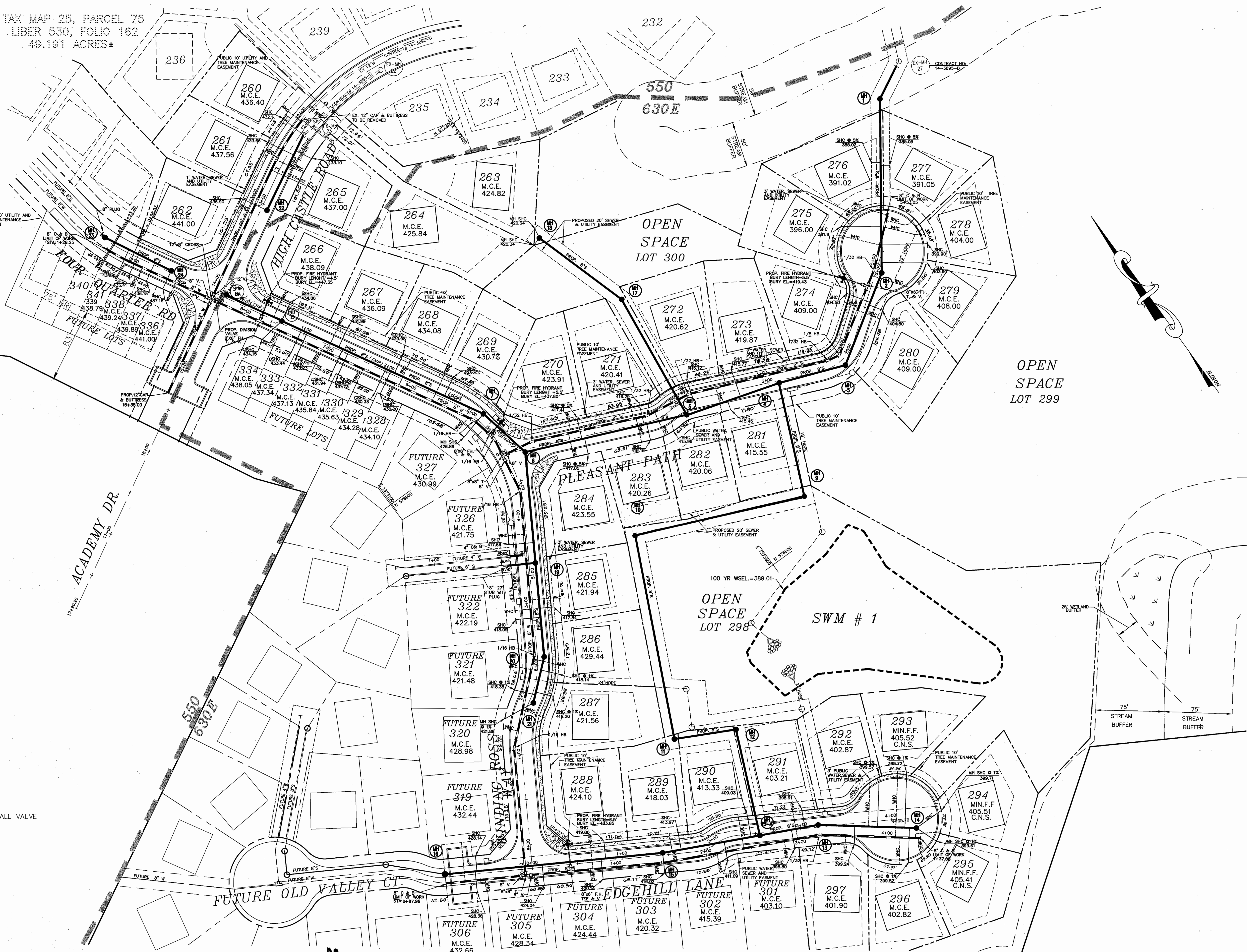
FUTURE ROAD "J"		
STATION	APPURTENANCE	O/S FROM C
0+05.07	8" V.	LT. 7.0'
0+08.07	8" X 8" T	LT. 7.0'
0+11.07	8" V.	LT. 7.0'
0+96.01	8" C. & B.	LT. 7.0'

MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL. STATION	OFFSET
1	N 576,946.794 E 1,373,795.271		
2	PLEASANT PATH	4+91.79	RT. 6.5'
3	PLEASANT PATH	3+85.07	RT. 7.0'
4	PLEASANT PATH	3+12.15	RT. 3.0'
5	PLEASANT PATH	2+02.40	RT. 14.0'
6	PLEASANT PATH	0+21.08	RT. 3.0'
7	WINDING ROSS WAY	3+13.67	LT. 9.0'
8	WINDING ROSS WAY	0+71.66	LT. 3.0'
9	N 576,658.775 E 1,373,479.650		
10	N 576,733.569 E 1,373,304.964		
11	N 576,508.032 E 1,373,199.711		
12	N 576,476.963 E 1,373,260.622		
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13	EDGEHILL LANE	3+19.39	LT. 3.0'
14	EDGEHILL LANE	1+71.98 L.P.	LT. 21.0'
15	EDGEHILL LANE	1+44.19	LT. 2.0'
16	N 576,535.202 E 1,372,908.384		
17	N 576,934.106 E 1,373,436.321		
18	N 577,042.036 E 1,373,402.708		
19	WINDING ROSS WAY	4+86.86	LT. 7.0'
20	WINDING ROSS WAY	5+90.52	LT. 7.0'
21	WINDING ROSS WAY	6+40.25	LT. 5.0'
22	HIGH CASTLE ROAD	13+04.99	LT. 6.0'
23	FOUR QUARTER ROAD	0+61.87	RT. 2.0'
24	WINDING ROSS WAY	0+01.42	LT. 2.53'



TYPICAL DETAIL -
TWIN WATER HOUSE CONNECTION (TWHC)



OPEN SPACE
LOT 299

OPEN SPACE
LOT 298

SWM # 1

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors
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(410) 997-0286 Fax (301) 621-5521 Wash. (410) 997-0288 Fax

engineering	M.P.	
illustration	M.P.	
approval	J.M.	
project	MBA	2
date	99072	1
date	DEC. 2001	BY NO.

**WATER
AND SEWER
PLAN**

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
2 OF 6

99072 (PHASE-2) (DWG) (WS) (PLAN)-1

**WATER MAIN
TABULATION CHART**

WINDING ROSS WAY		
STATION	APPURTENANCE	O/S FROM C
0+50.00	F.H.	LT. 16.1'
0+50.00	8"X6" T	RT. 8.0'
3+10.00	1/16 H.B.	RT. 3.0'
3+35.00	F.H.	RT. 16.1'
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3+62.16	8"X8" T	RT. 4.0'
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5+87.40	1/16 H.B.	RT. 3.0'
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L.P. 1+83.00	8" C. & B.	RT. 11.0'

PLEASANT PATH		
STATION	APPURTENANCE	O/S FROM C
0+03.00	8" V.	0.0'
0+30.98	1/32 H.B.	LT. 7.0'
1+60.80	1/32 H.B.	LT. 7.0'
2+12.71	1/32 H.B.	LT. 7.0'
3+72.44	1/32 H.B.	LT. 8.0'
3+87.96	1/8 H.B.	LT. 6.0'
4+72.80	8"X6" T	LT. 4.0'
4+72.80	F.H.	LT. 26.0'
4+92.74	1/32 H.B.	LT. 2.5'
L.P. 1+42.00	8" C. & B.	RT. 8.0'

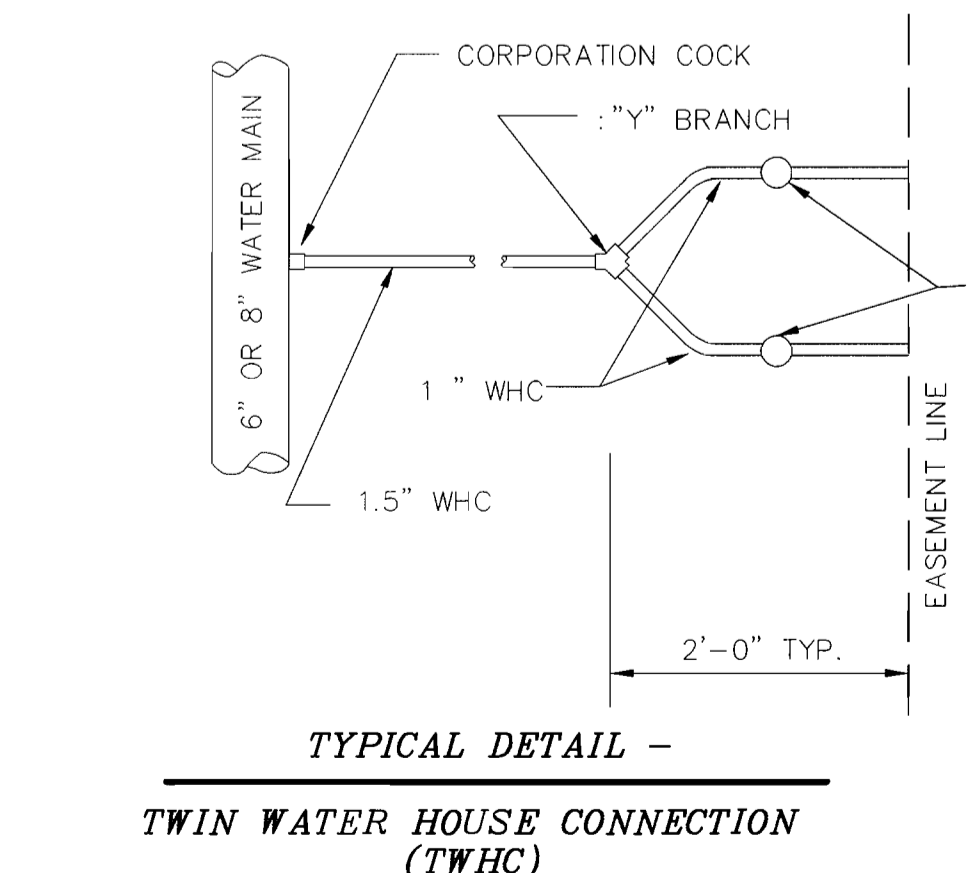
HIGH CASTLE ROAD		
STATION	APPURTENANCE	O/S FROM C
14+16.49	8" V.	RT. 8.0'
14+19.49	8"X8" CROSS	RT. 8.0'
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FOUR QUARTER ROAD		
STATION	APPURTENANCE	O/S FROM C
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0+11.58	8" V.	LT. 8.0'
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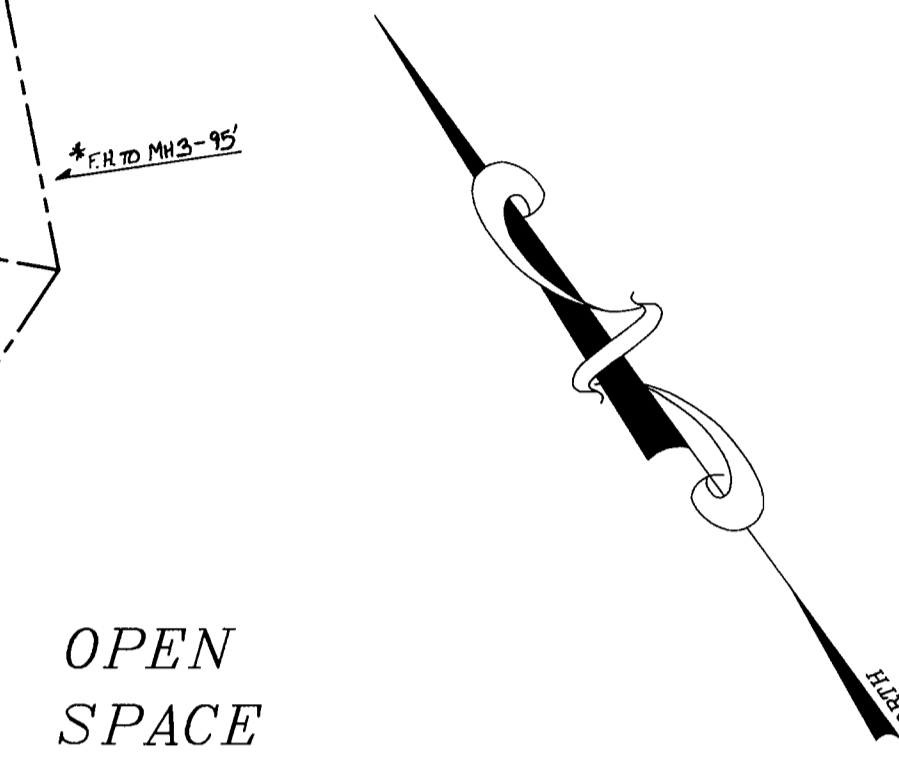
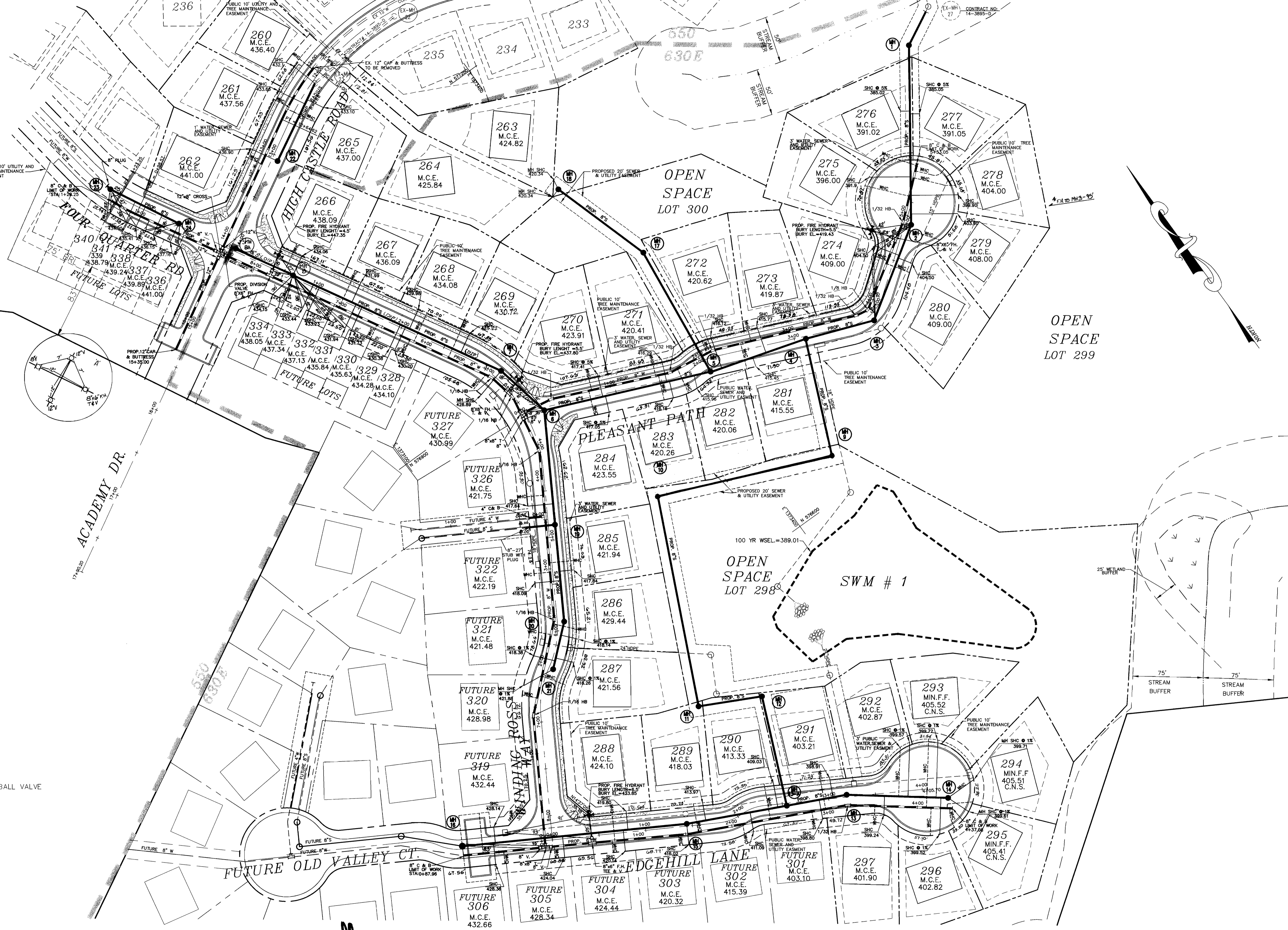
FUTURE ROAD "J"		
STATION	APPURTENANCE	O/S FROM C
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0+08.07	8"X6" T	LT. 7.0'
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7	WINDING ROSS WAY	3+13.67	LT. 9.0'
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9	N 576,658.775 E 1,373,479.650		
10	N 576,733.569 E 1,373,304.964		
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13A	EDGEHILL LANE	2+54.58	RT. 3.0'
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18	N 577,042.036 E 1,373,402.708		
19	WINDING ROSS WAY	4+86.86	LT. 7.0'
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21	WINDING ROSS WAY	6+40.25	LT. 5.0'
22	HIGH CASTLE ROAD	13+04.99	LT. 6.0'
23	FOUR QUARTER ROAD	0+61.87	RT. 2.0'
24	WINDING ROSS WAY	0+01.42	LT. 2.59'



TAX MAP 25, PARCEL 75
LIBER 530, FOLIO 162
49.191 ACRES±



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert J. ... 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
... 4/1/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

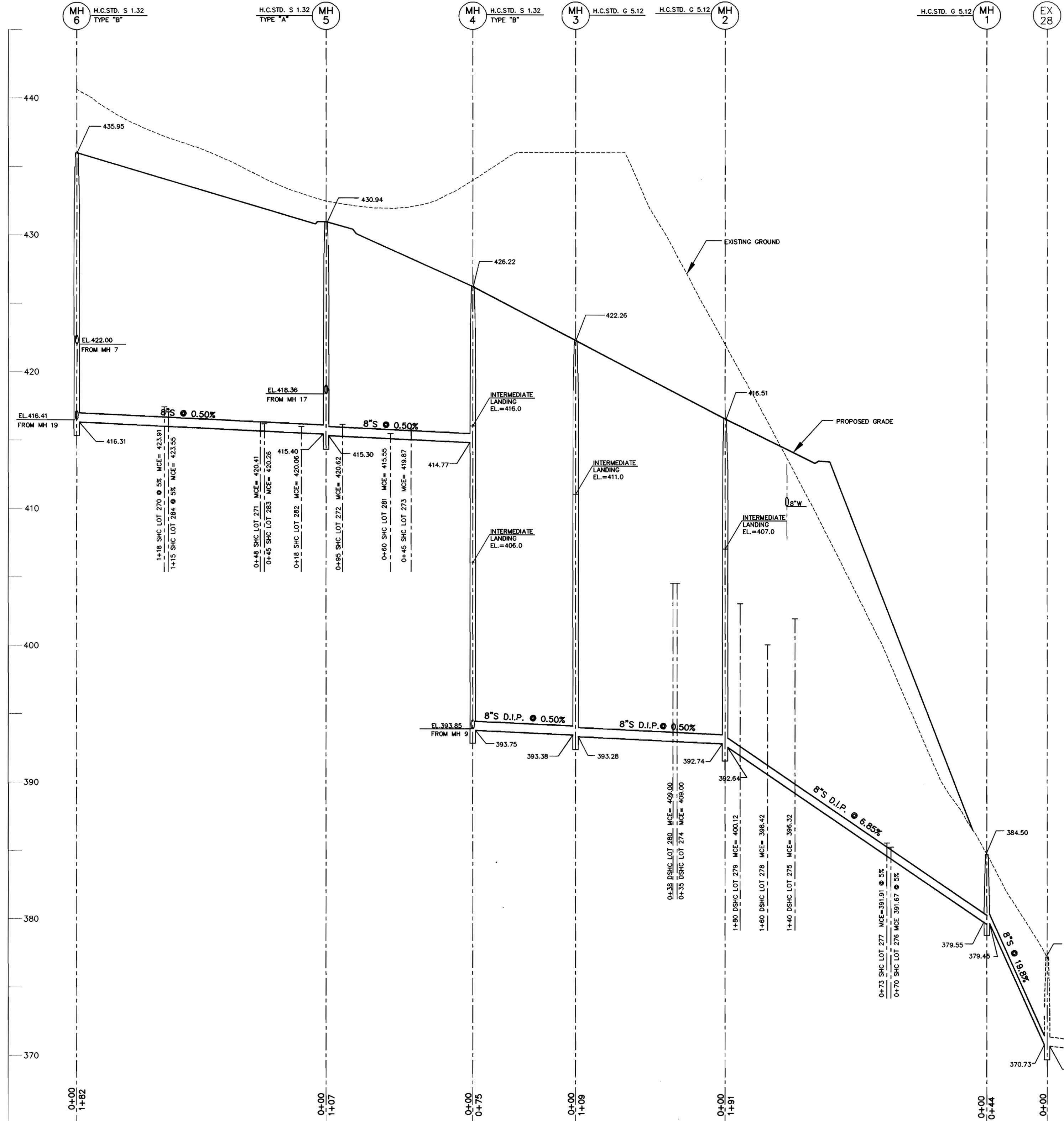
**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21041
(410) 997-0286 Ballt. (301) 621-5521 Wash. (410) 997-0286 Fax

engineering	M.P.				
illustration	M.P.				
approval	J.M.	KCI	3	ADDED AS BUILT DATA	5/16/05
project	MBA	MBA	2	MODIFY THE LENGTH OF THE SEWER LINE W/ ADD. OF MH-8A	3/18/05
	MBA	MBA	1	ADDED LOT FRONTAGE; REVISE SEWER MAIN	4/19/02
date	DEC. 2001	BY	NO.	REVISION	DATE

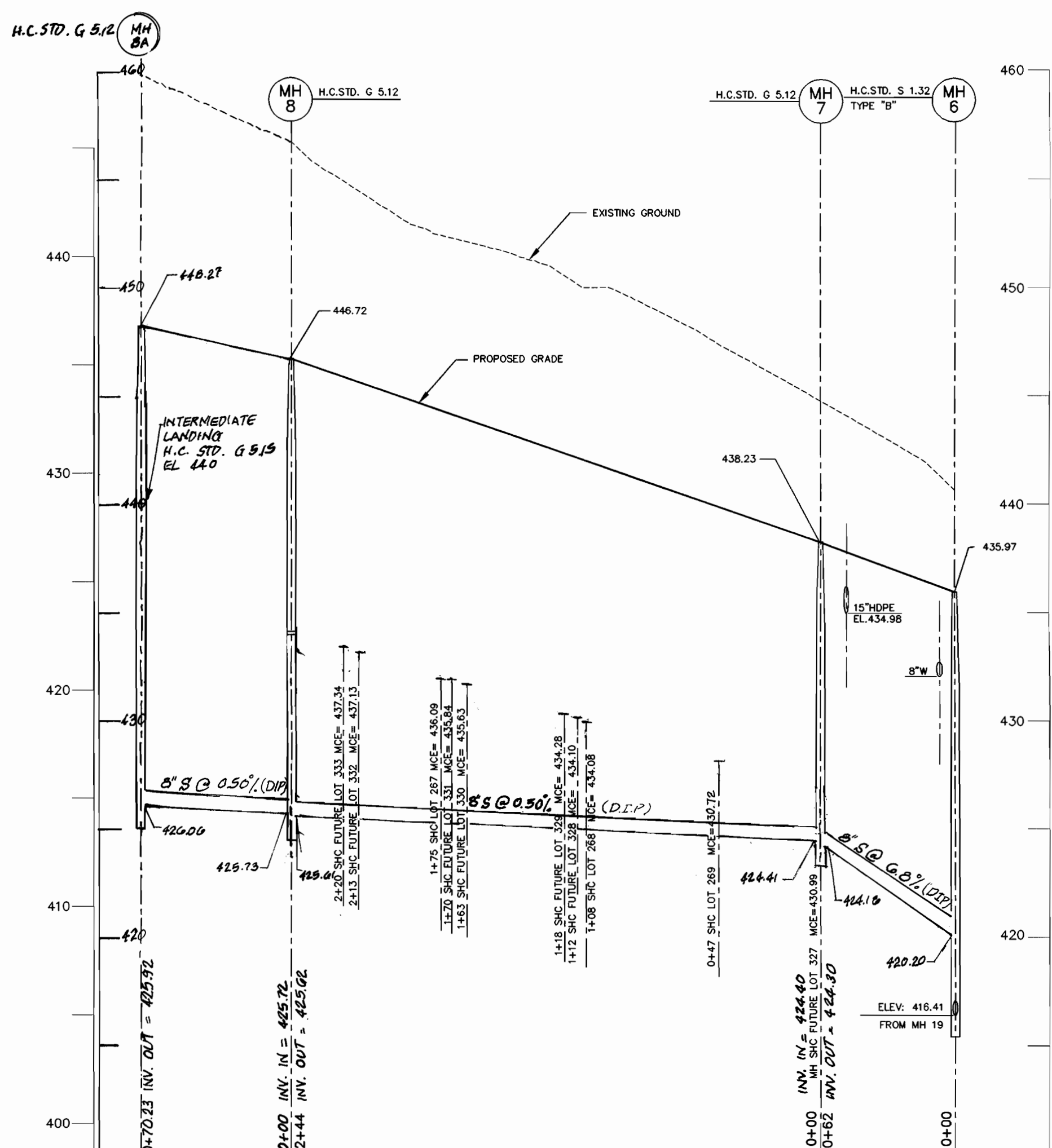
**WATER
AND SEWER
PLAN**

**AUTUMN VIEW, SECTION 5
PHASE 2, LOTS 260-300**
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

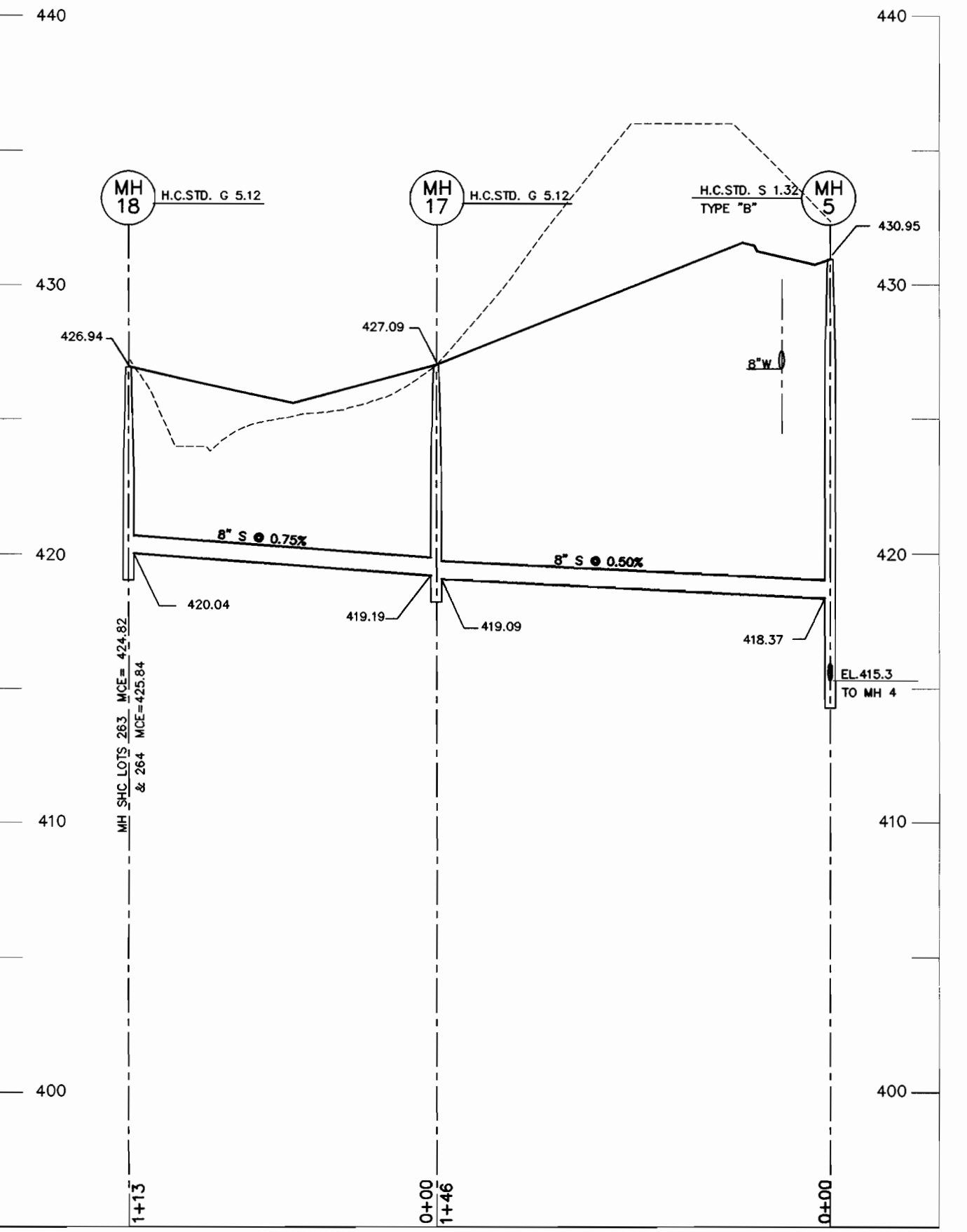
scale
1"=50'
2 OF 6



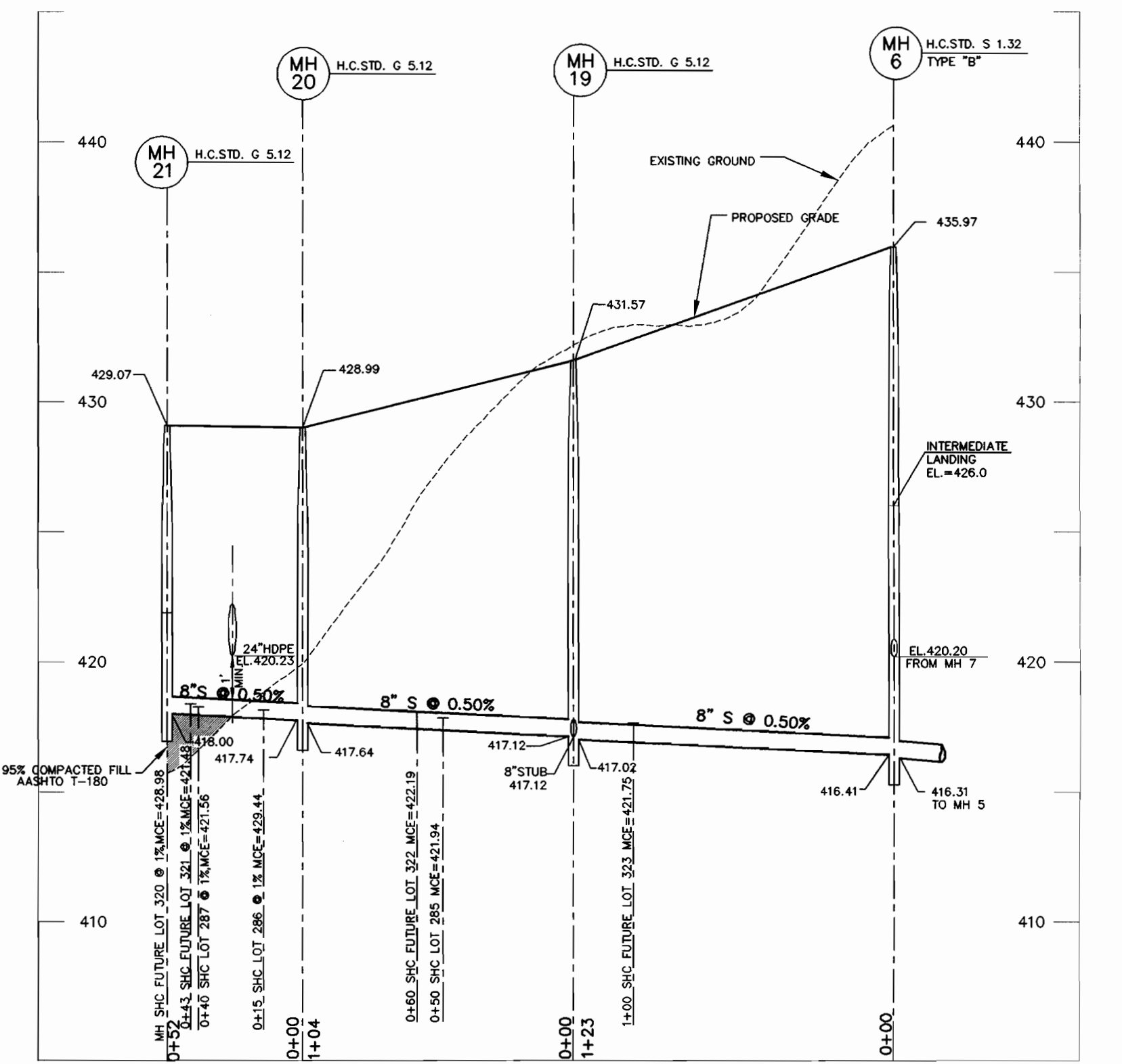
8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



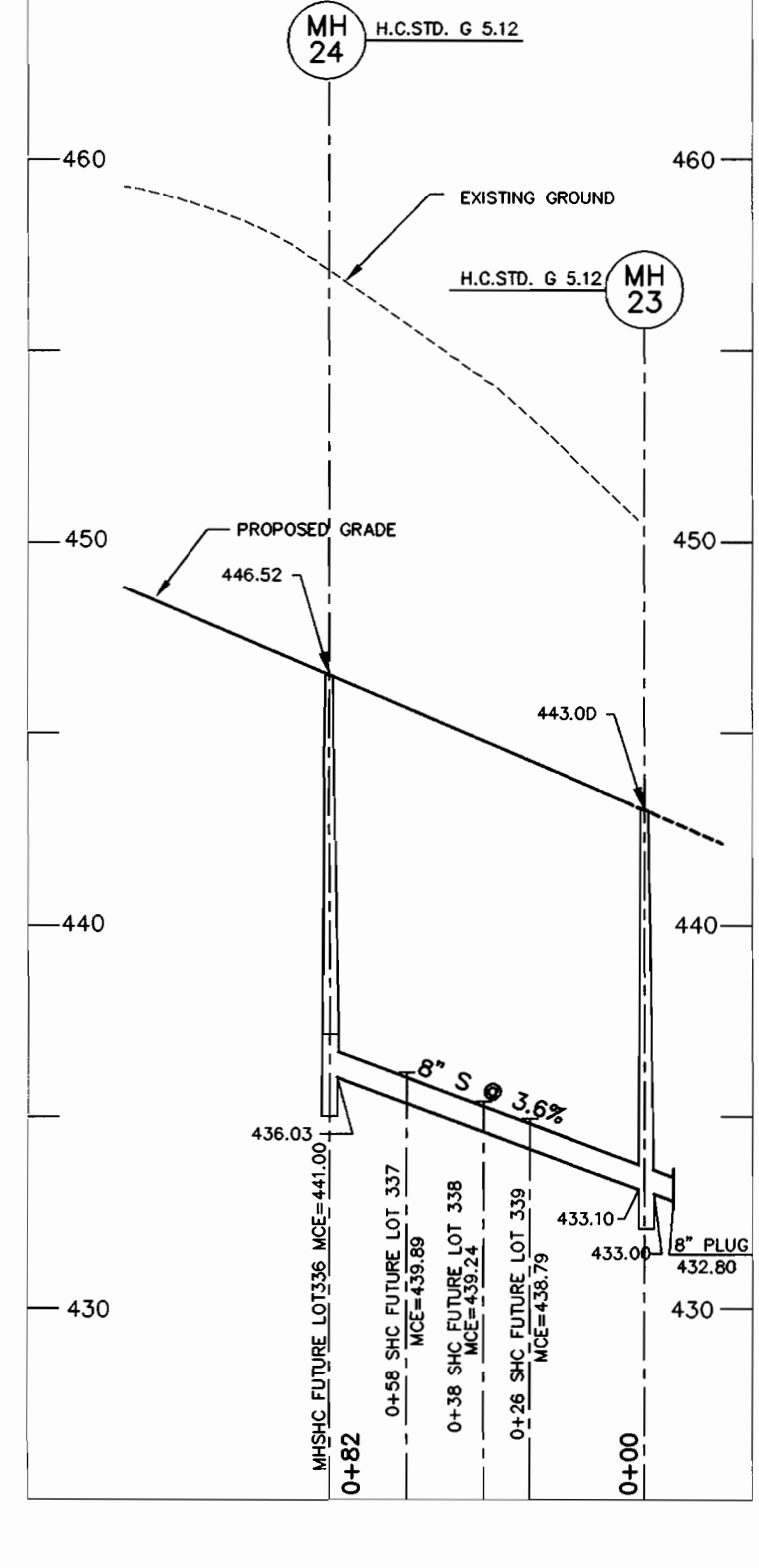
8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



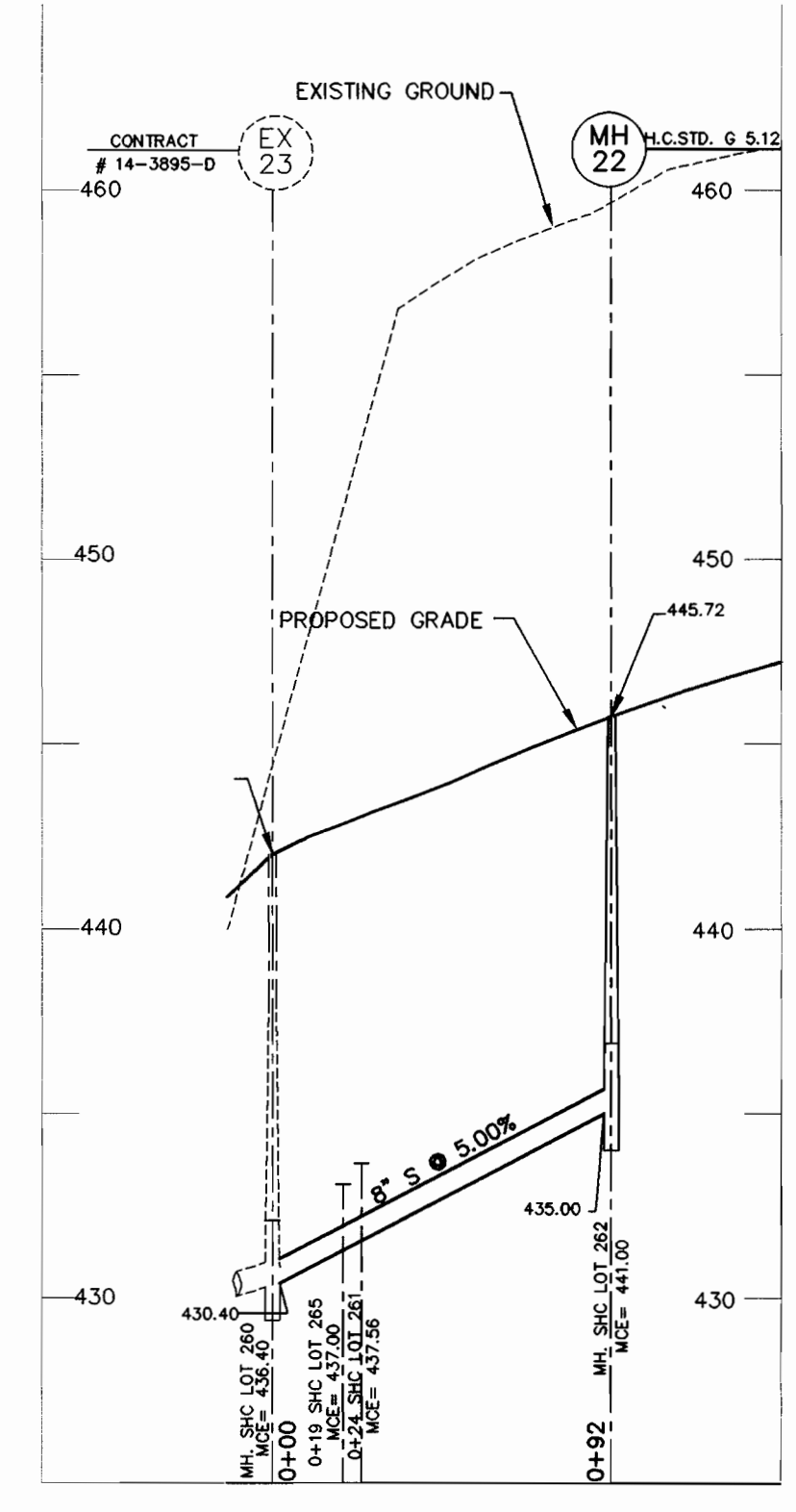
8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 987-0296 Fax (301) 621-5521 Wash. (410) 987-0298 Fax

Robert D. ... 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

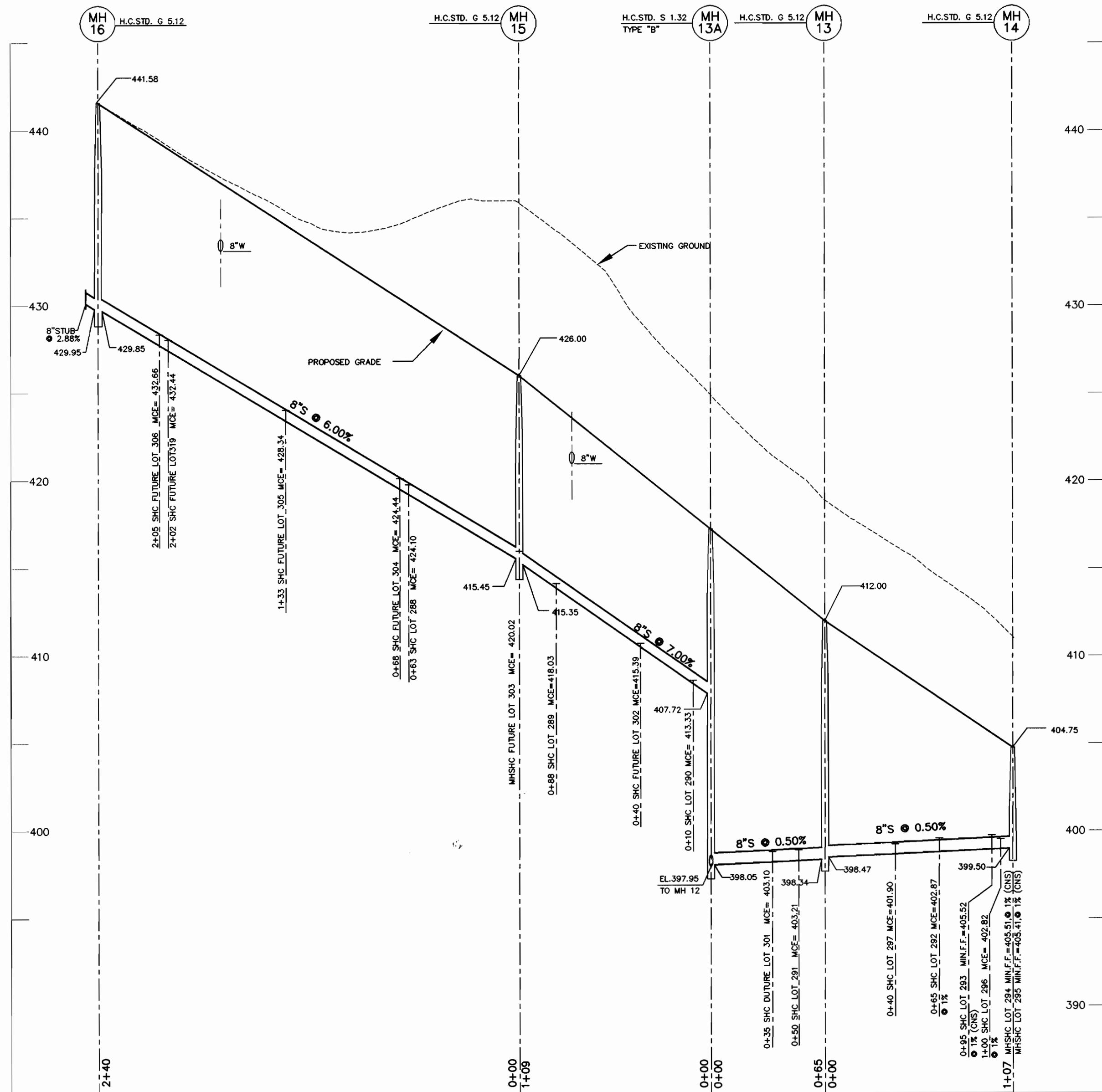
engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

SEWER PROFILE

60' SCALE MAP NO. 31 BLOCK NO. 3 & 4

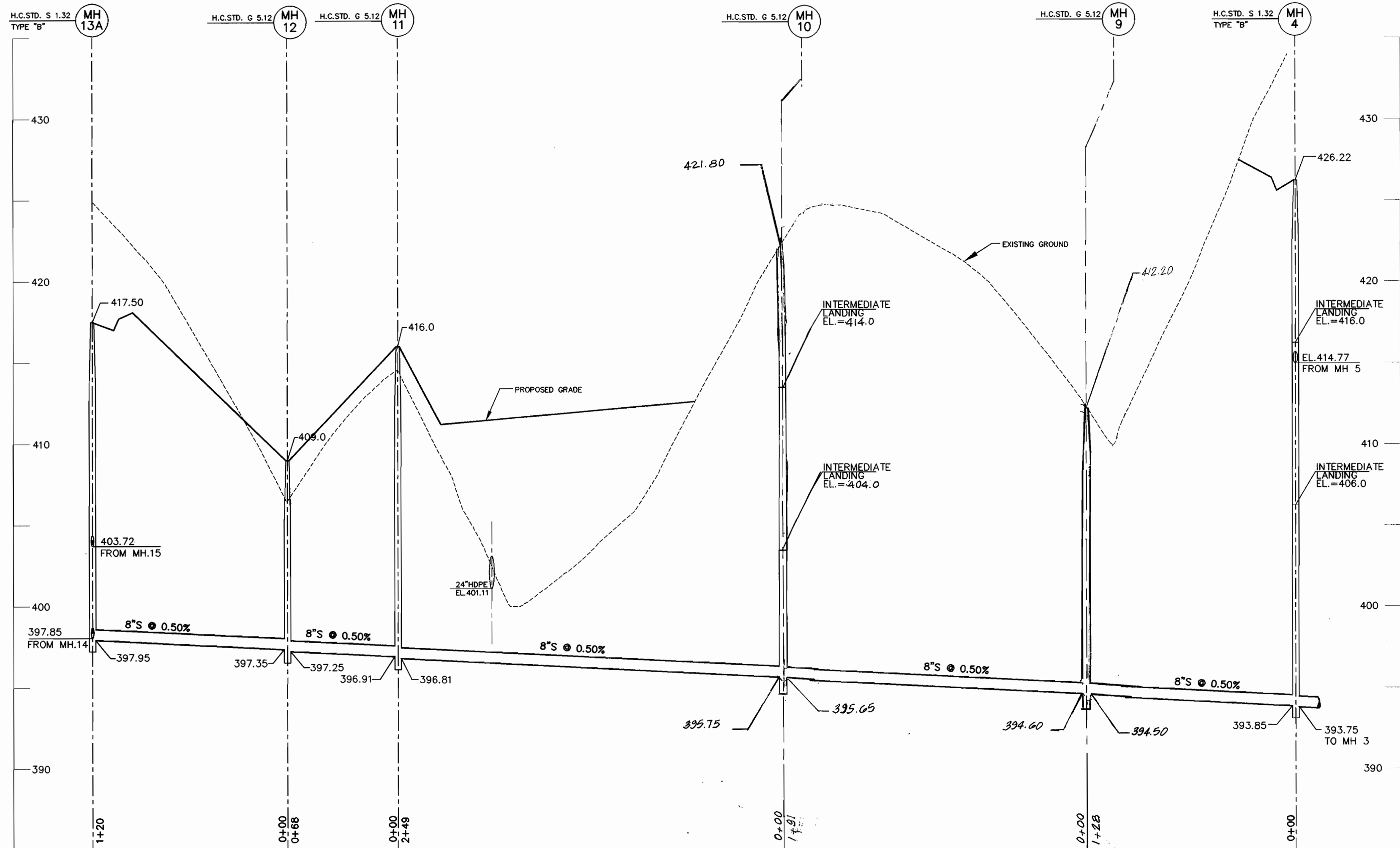
AUTUMN VIEW, SECTION 5
PHASE 2, LOTS 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
6 OF 6



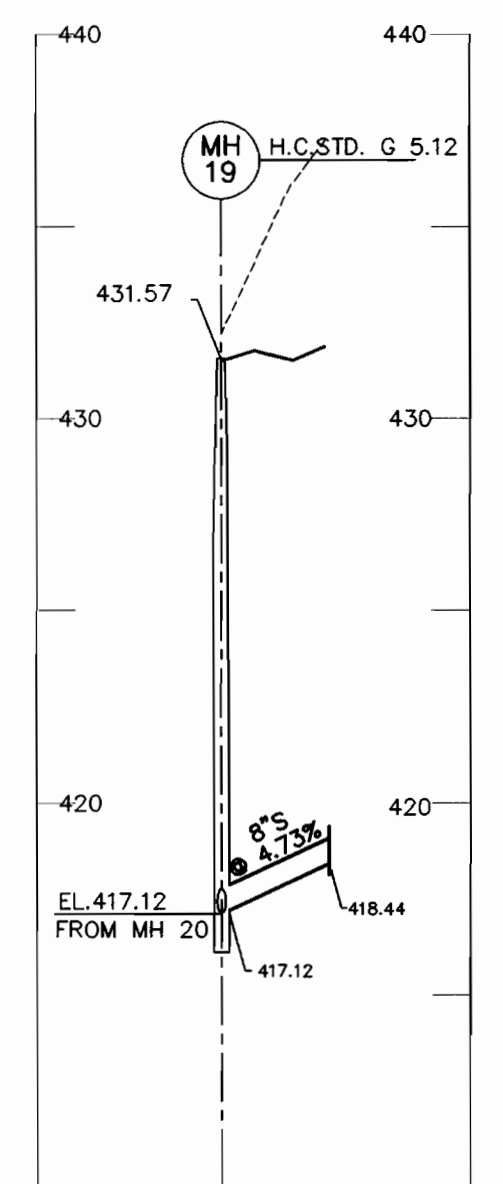
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

99072 \\PHASE-2\DWG\WS\WS-S-PROF

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert B. ...
 CHIEF, BUREAU OF UTILITIES
 2-4-02
 DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

...
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE

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 Engineers Planners Surveyors
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engineering	M.P.				
illustration	M.P.				
approval					
project	99072	MBA	1	REVISE SEWER PROFILE	1/9/02
date	DEC. 2001	BY	NO.	REVISION	DATE

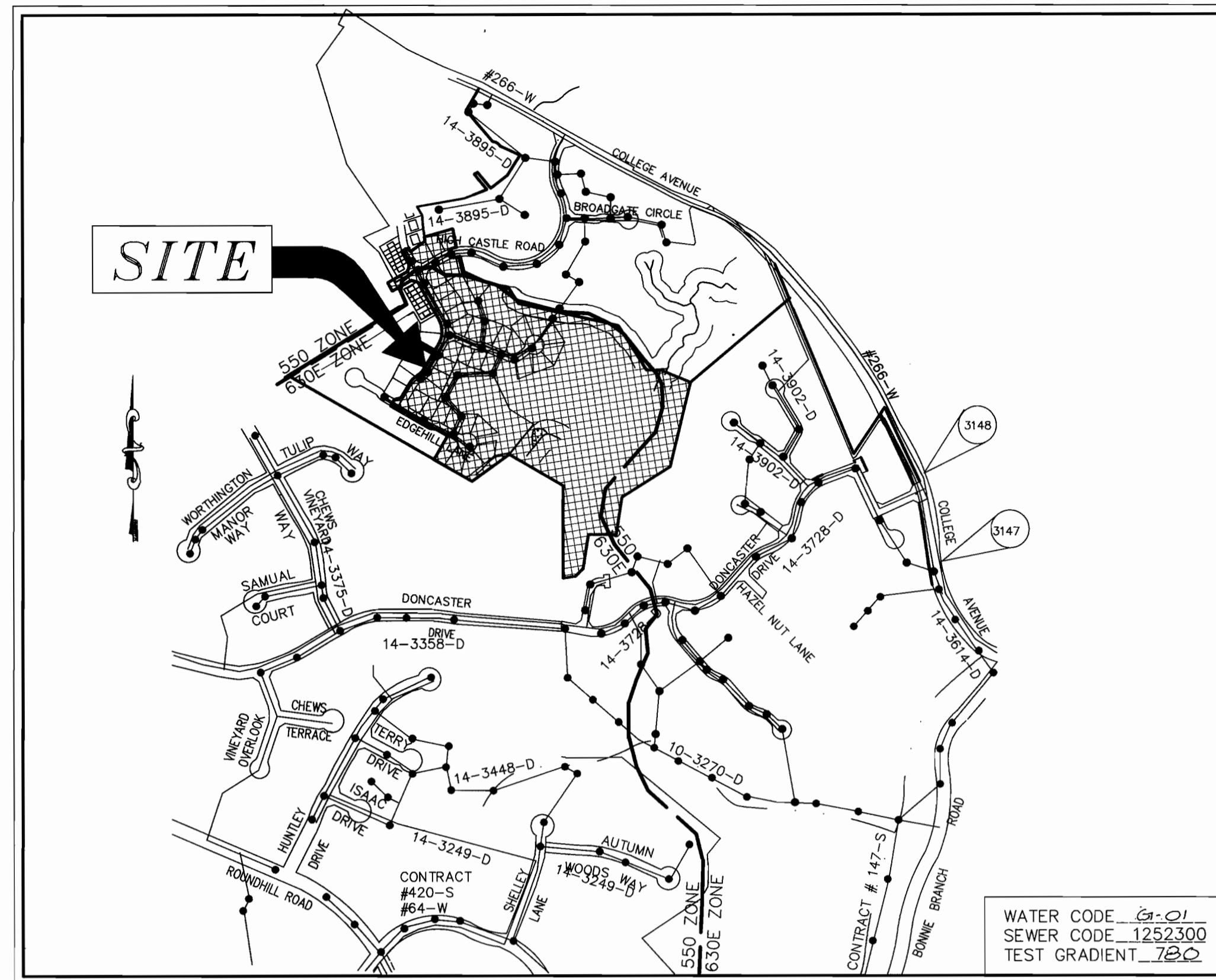
SEWER PROFILE
 600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

AUTUMN VIEW, SECTION 5
 PHASE 2, LOTS: 260-300
 CONTRACT # 14-3896-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY

scale
1"=50'
5 OF 6

QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
STANDARD MH (HO. CO. STD.G-5.01)	21	20		ATLANTIC CONCRETE
DROP MH, TYPE "B" (HO. CO. STD. S-1.32)	3	3		" "
DROP MH, TYPE "A" (HO. CO. STD. S-1.32)	1	1		" "
8" SEWER MAIN	1,962 L.F.	2270		JM MANUFACTURING
8" D.I.P.	795 L.F.	420		GRIFFIN
4" SEWER HOUSE CONNECTION	1,480 L.F.	1520		JM MANUFACTURING
# SEWER HOUSE CONNECTIONS	51 EACH	51		
8" WATER	2,043 L.F.	2250		GRIFFIN
12" WATER	330 L.F.	330		" "
1" WATER HOUSE CONNECTION	1,540 L.F.	1600		CAMBRIDGE LEE
# 1" WHC	53 EACH	53		
# TWIN 1.5" WHC	5 EACH	5		CAMBRIDGE LEE
1.5" WATER HOUSE CONNECTION	100 L.F.	100		" "
F.H.	4 EACH	4		MUELLER
12"x8" C	1 EACH	1		DISPIPE & FOUNDRY
8"x 8" T	2 EACH	2		" "
8"x6" T	4 EACH	4		" "
8"x4" T	1 EACH	1		" "
12" V	2 EACH	2		MUELLER
6" V	4 EACH	4		" "
8" V	6 EACH	6		" "
8" CAP & BUTTRESS	4 EACH	3		DISPIPE & FOUNDRY
12" CAP & BUTTRESS	1 EACH	0		" "
1/8 H.B. (8")	1 EACH	0		" "
1/16 H.B. (8")	5 EACH	0		" "
1/32 H.B. (8")	5 EACH	0		" "
8" PRESSURE VALVE	1 EACH	1		MUELLER
4" DROP SEWER HOUSE CONNECTION	10 EACH			
NAME OF UTILITY CONTRACTOR: <u>CCS</u>				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



VICINITY MAP
SCALE: 1"=600'

TYPE OF BUILDING	SFD
No. OF UNITS	38
No. OF FUTURE UNITS	23
No. OF WATER HOUSE CONNECTION	38 (FUTURE 23)
No. OF SEWER HOUSE CONNECTIONS	38 (FUTURE 23)
DRAINAGE AREA	BONNIE BRANCH PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-01-38

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 ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- 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 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 DETAIL 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 (410) 531-5533
BG & E CO. CONTRACTOR SERVICES (410) 850-4620
BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068
MISS UTILITY 1-800-257-7777
COLONIAL PIPELINE CO. (410) 795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES (410) 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE 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 (5) 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 HOWARD COUNTY CODE.
- 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE 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.
- FOR SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P., CLASS 52 UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. 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.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- SEDIMENT CONTROL TO BE PROVIDED BY F-01-39.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL HOUSES WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- THE EXISTING WELL AND SEPTIC SERVICING EXISTING HOUSE(S) ARE TO BE ABANDONED.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY, SEE ROAD PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Bruce Taylor, Pres 12/18/01
DEVELOPER'S SIGNATURE DATE
DEVELOPER'S NAME

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

John B. Mildenberg 12/24/01
ENGINEER'S SIGNATURE DATE
JOHN B. MILDENBERG
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

Jim Marcus 2/7/02
USDA NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Roberts 2/7/02
HOWARD SCD DATE

PLAN REFERENCE NUMBERS

F-01-38
P-00-09
S-99-01

CONTRACT NO.: 14-3896-D
AUTUMN VIEW, SECTION 5, PHASE II
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER PROFILES
4	WATER PROFILES
5	SEWER PROFILES
6	SEWER PROFILES

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Bauman 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

John B. Mildenberg 2/16/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21041
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax



engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	MBA	3	ADDED AS BUILT DATA	5/18/05	
99072	MBA	2	MODIFY THE QUANTITY TABLE	5/25/03	
date	DEC. 2001	BY	NO.	REVISION	DATE

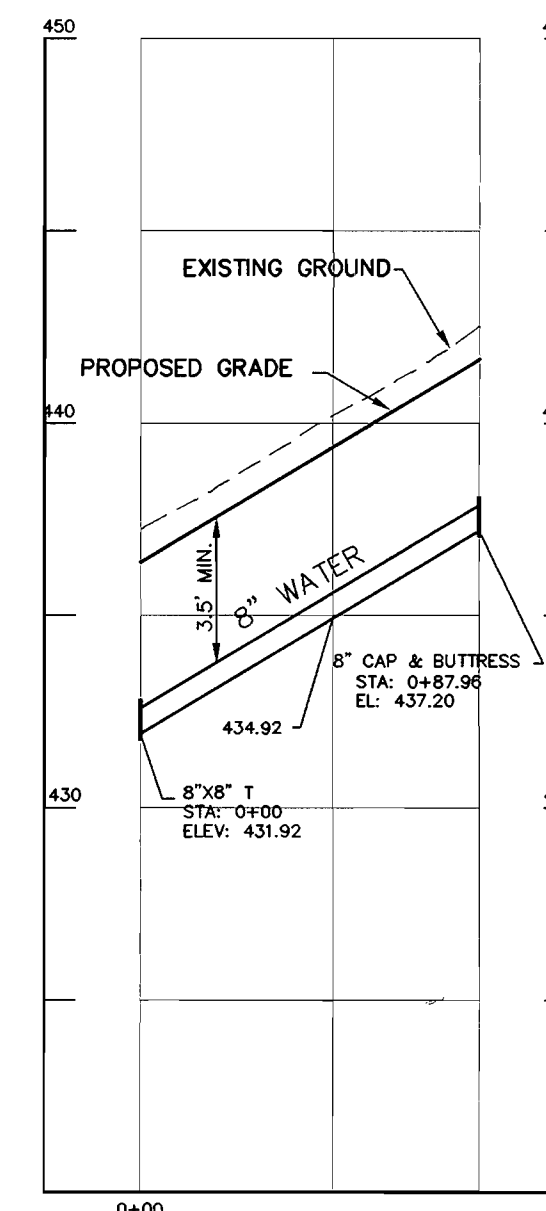
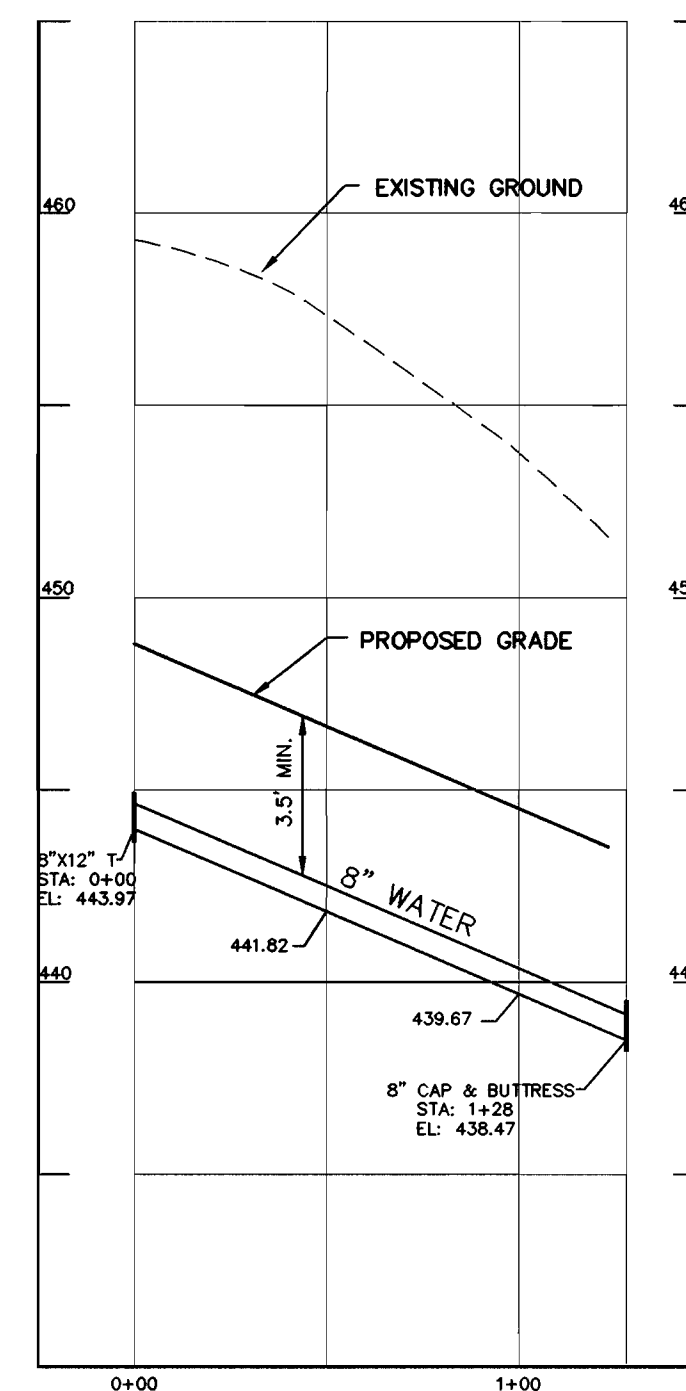
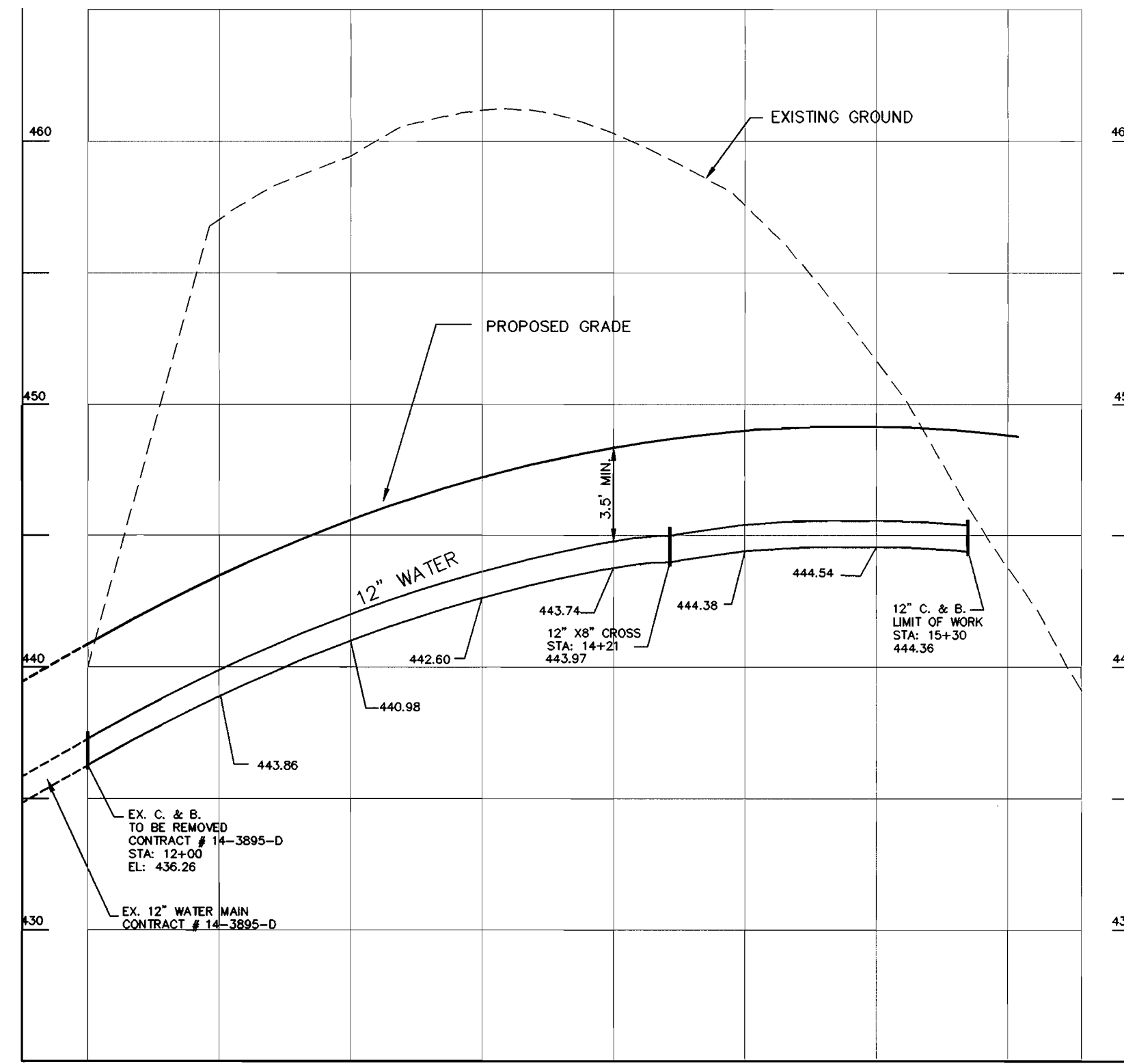
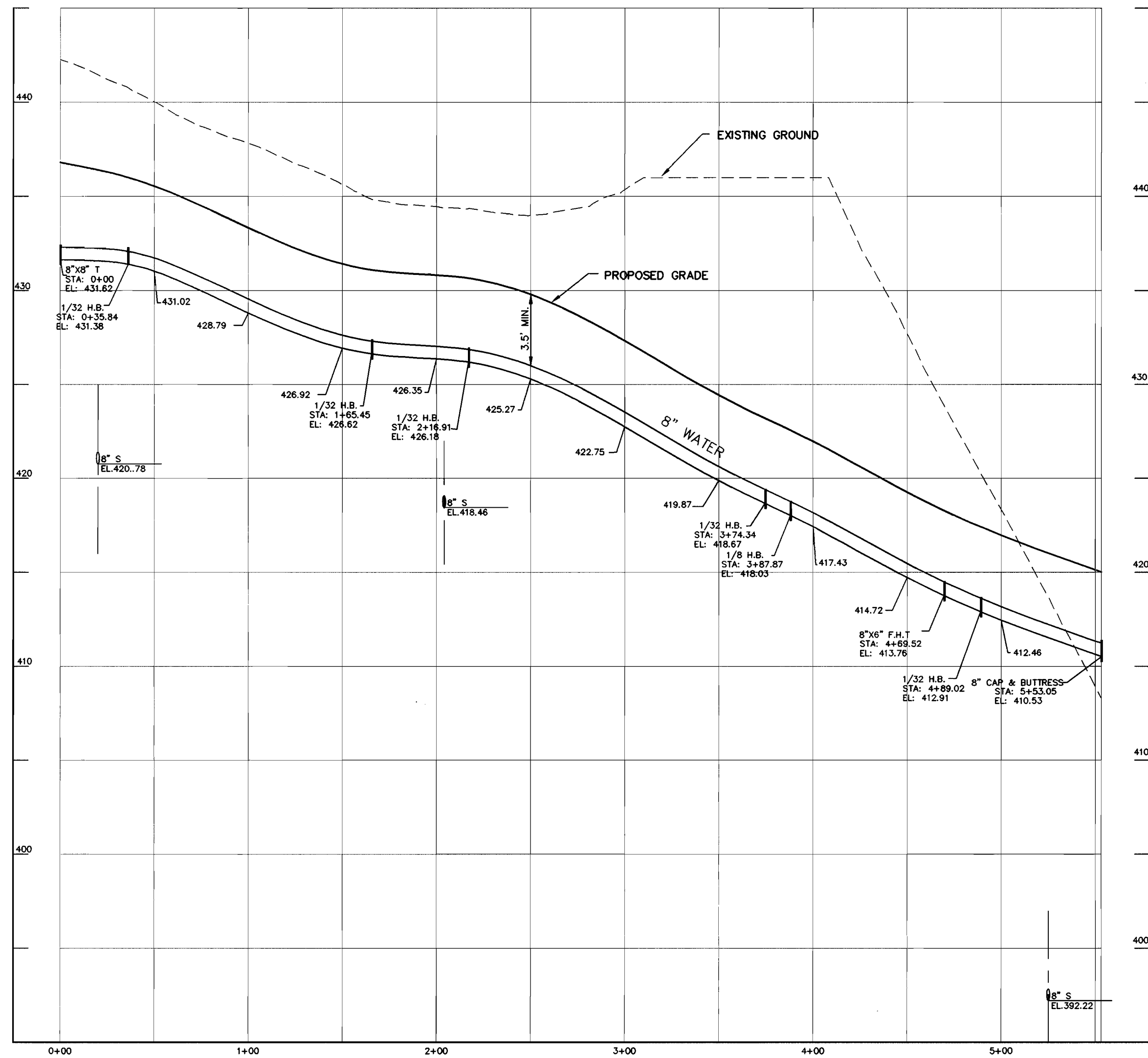
TITLE SHEET

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

AUTUMN VIEW, SECTION 5
PHASE 2 LOTS: 260-300
CONTRACT NO.: 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale AS SHOWN
1 OF 6

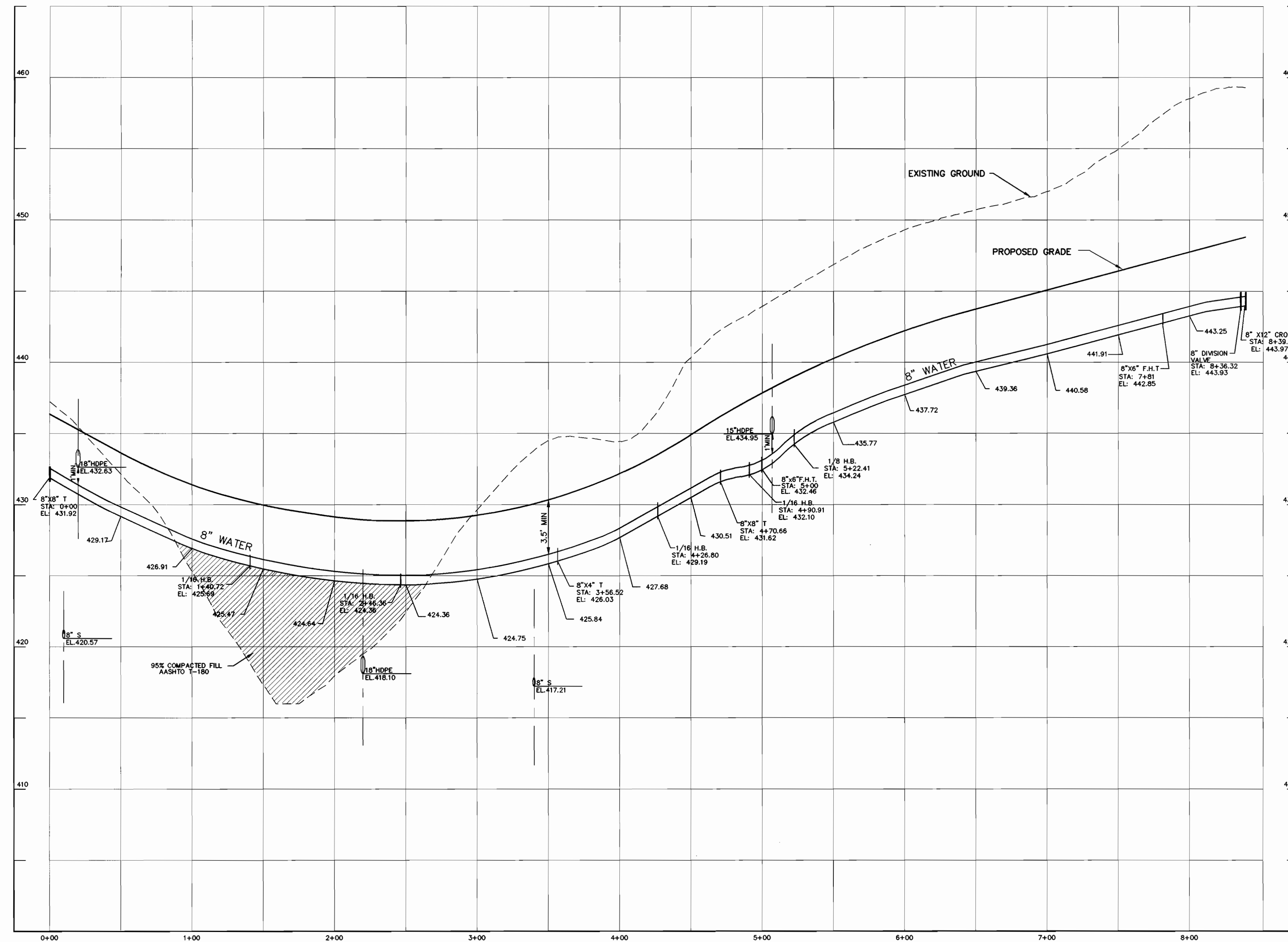
99072.DWG/SEC2.FINAL VWS/C/COVER



SEWER AS-BUILT DATA				WATER AS-BUILT DATA			
LOT	FROM	TO	DIST.	LOT	FROM	TO	DIST.
260	SAC	EX. MH 23	24'	260	WHC	EX. MH 25	25'
261	"	"	40	261	"	"	47
262	"	MH 22	31	262	"	MH 22	34
263	"	MH 16	10	263	"	EL. MH 23	45
264	"	"	10	264	"	"	35
265	"	EX. MH 23	20	265	"	"	40
266	"	MH 2	22	266	"	MH 2	25
267	"	"	71	267	"	"	62
268	"	MH 7	100	268	"	MH 7	100
269	"	"	53	269	"	"	62
270	"	MH 6	74	270	"	MH 6	59
271	"	MH 5	55	271	"	MH 5	55
272	"	"	37	272	"	"	30
273	"	"	70	273	"	"	61
274	"	MH 4	55	274	"	MH 4	65
275	"	SD INLET	26	275	"	SD INLET	42
276	"	MH 2	17	276	"	MH 2	65
277	"	SD INLET	85	277	"	SD INLET	66
278	"	MH 1	22	278	"	MH 1	75
279	"	SD INLET	77	279	"	SD INLET	13
280	"	MH 1	52	280	"	MH 1	30
281	"	MH 2	29	281	"	MH 2	63
282	"	SD INLET	71	282	"	SD INLET	10
283	"	MH 2	51	283	"	MH 2	35
284	"	SD INLET	40	284	"	SD INLET	67
285	"	MH 2	42	285	"	MH 2	64
286	"	MH 3	74	286	"	MH 3	51
287	"	MH 5	49	287	"	MH 5	40
288	"	MH 4	61	288	"	MH 4	71
289	"	MH 5	25	289	"	MH 5	34
290	"	"	50	290	"	"	58
291	"	MH 4	70	291	"	MH 4	54
292	"	MH 19	52	292	"	MH 19	46
293	"	MH 20	26	293	"	MH 20	25
294	"	MH 21	24	294	"	MH 21	21
295	"	MH 15	67	295	"	MH 15	82
296	"	"	27	296	"	"	23
297	"	MH 13A	34	297	"	MH 13A	35
298	"	MH 13	27	298	"	MH 13	36
299	"	MH 14	72	299	"	MH 14	75
300	"	"	62	300	"	"	66
301	"	"	23	301	"	"	27
302	"	"	25	302	"	"	30
303	"	"	40	303	"	"	45
304	"	MH 13	45	304	"	MH 13	36
305	"	MH 13A	42	305	"	MH 13A	32
306	"	"	46	306	"	"	53
307	"	MH 15	25	307	"	MH 15	23
308	"	"	61	308	"	"	72
309	"	MH 16	40	309	"	MH 16	50
310	"	"	40	310	"	"	40
311	"	MH 21	36	311	"	MH 21	44
312	"	MH 20	44	312	"	MH 20	30
313	"	MH 19	36	313	"	MH 19	32
314	"	"	36	314	"	"	42
315	"	MH 7	32	315	"	MH 7	32
316	"	"	102	316	"	"	102

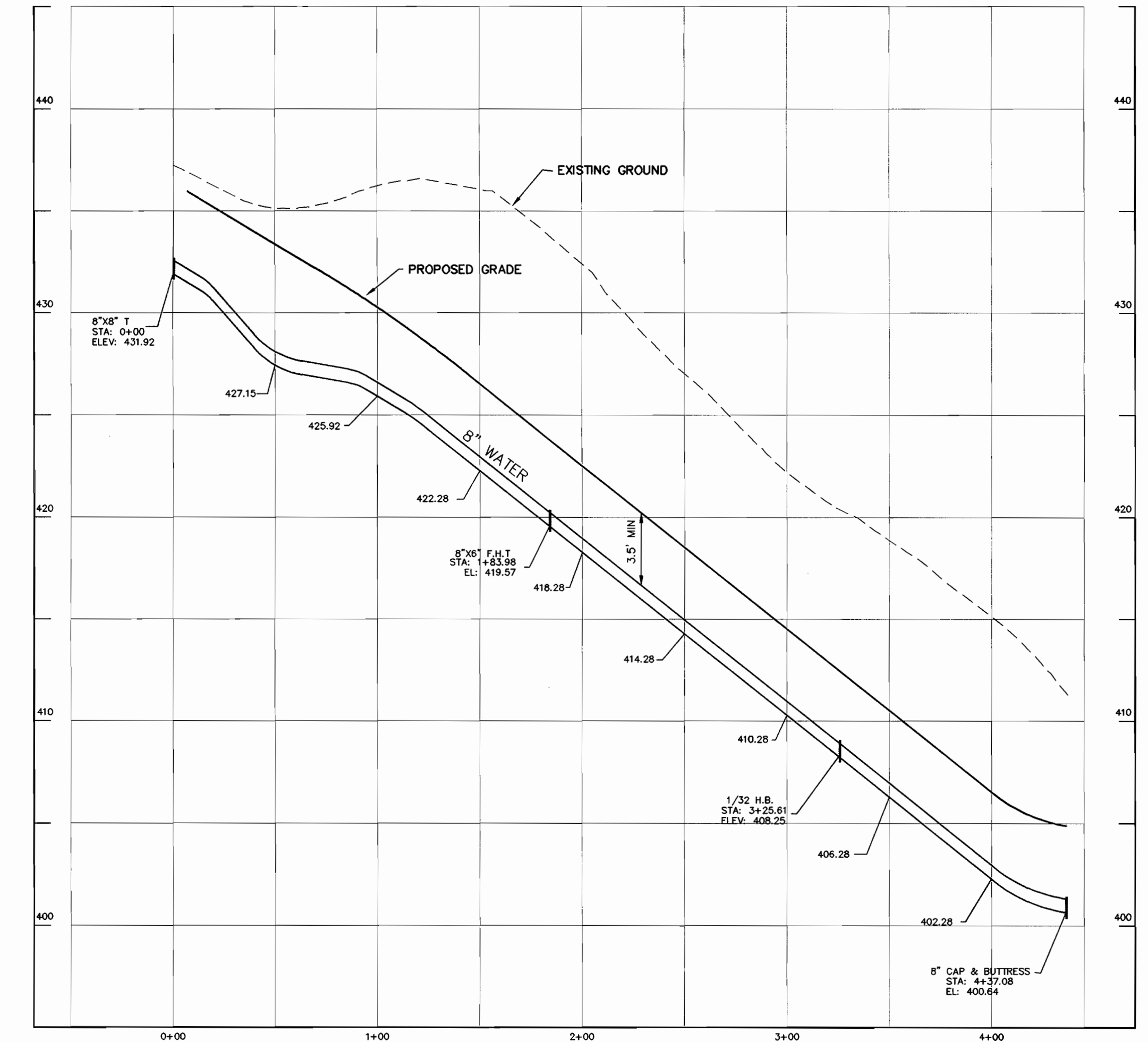
99072 PHASE-2.DWG (MS) (W) - PROF.DWG

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Robert M. Berman CHIEF, BUREAU OF UTILITIES 2-4-02 DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND [Signature] CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors 5072 Dorsey Hall Drive, Suite 202, Beltsville City, Maryland 20842 (410) 997-0296 Balt. (301) 621-5527 Wash. (410) 997-0298	engineering M.P. illustration M.P. approval J.M. project 99072 date DEC. 2001	M.P. M.P. J.M. 1 AS-BUILT DATA ADDED NO. 1 REVISION DATE	WATER PROFILES 600' SCALE MAP NO. 31 BLOCK NO. 3 & 4	AUTUMN VIEW, SECTION 5 PHASE 2, LOTS: 260-300 CONTRACT # 14-3896-D SECOND ELECTION DISTRICT HOWARD COUNTY	scale 1"=50' 4 OF 6
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8" WATER PROFILE (WINDING ROSS WAY)

SCALE: HOR. 1"=50'
VER. 1"=5'



8" WATER PROFILE (EDGEHILL LANE)

SCALE: HOR. 1"=50'
VER. 1"=5'

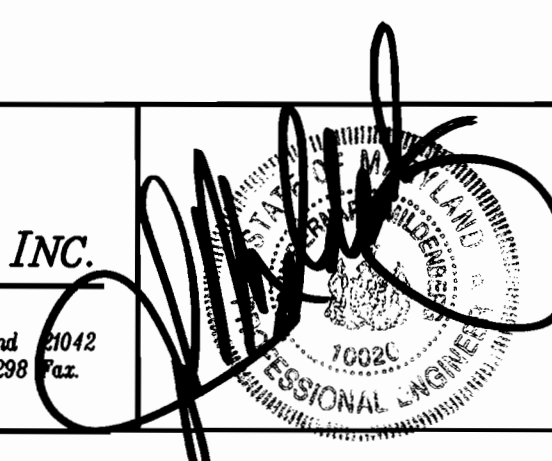
99072\PHASE-2\DWG\MS\W-PROF.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax



engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

**WATER
PROFILES**

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

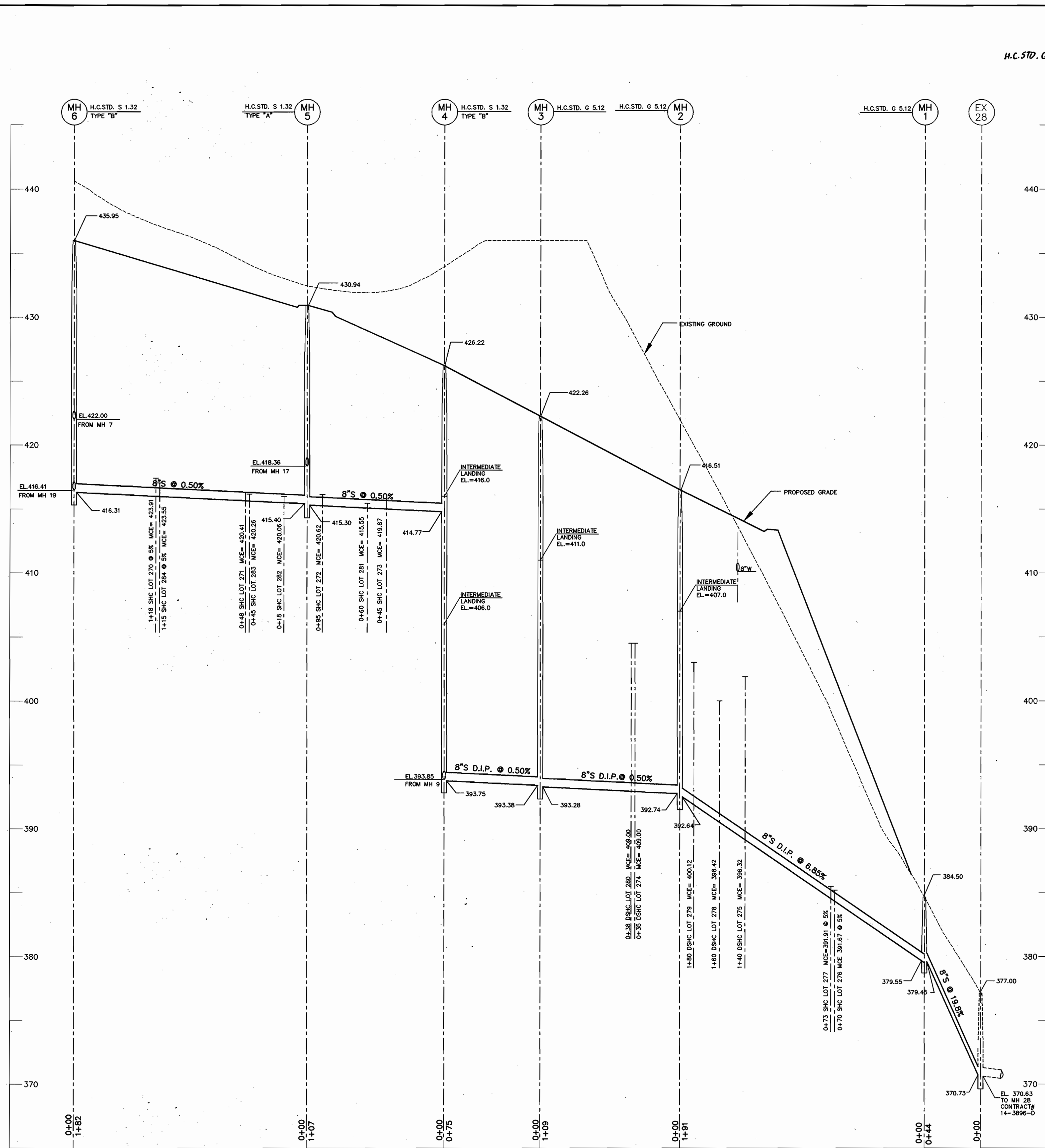
scale
1"=50'

3 OF 6

Robert B. Bunker 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

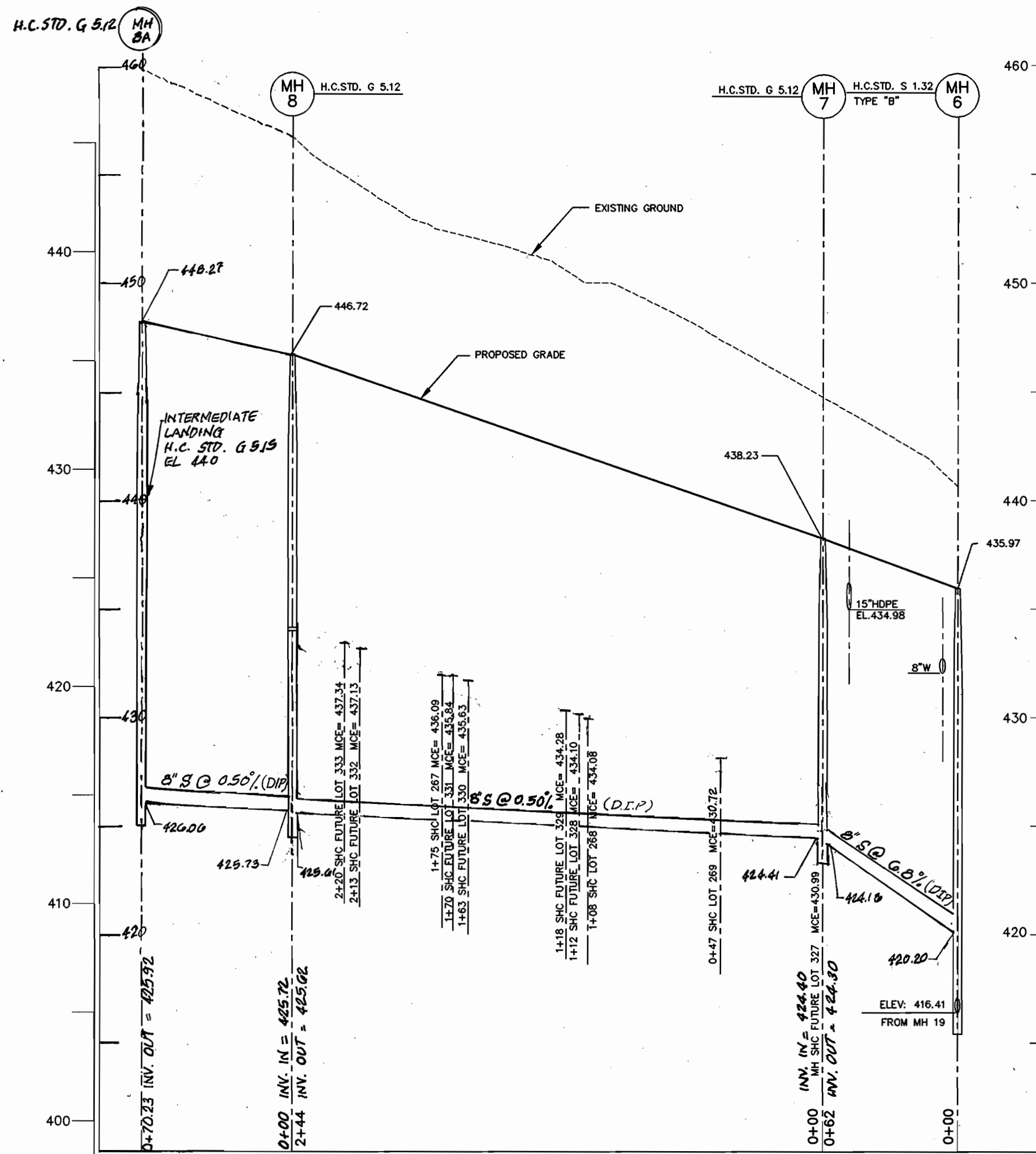
[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4



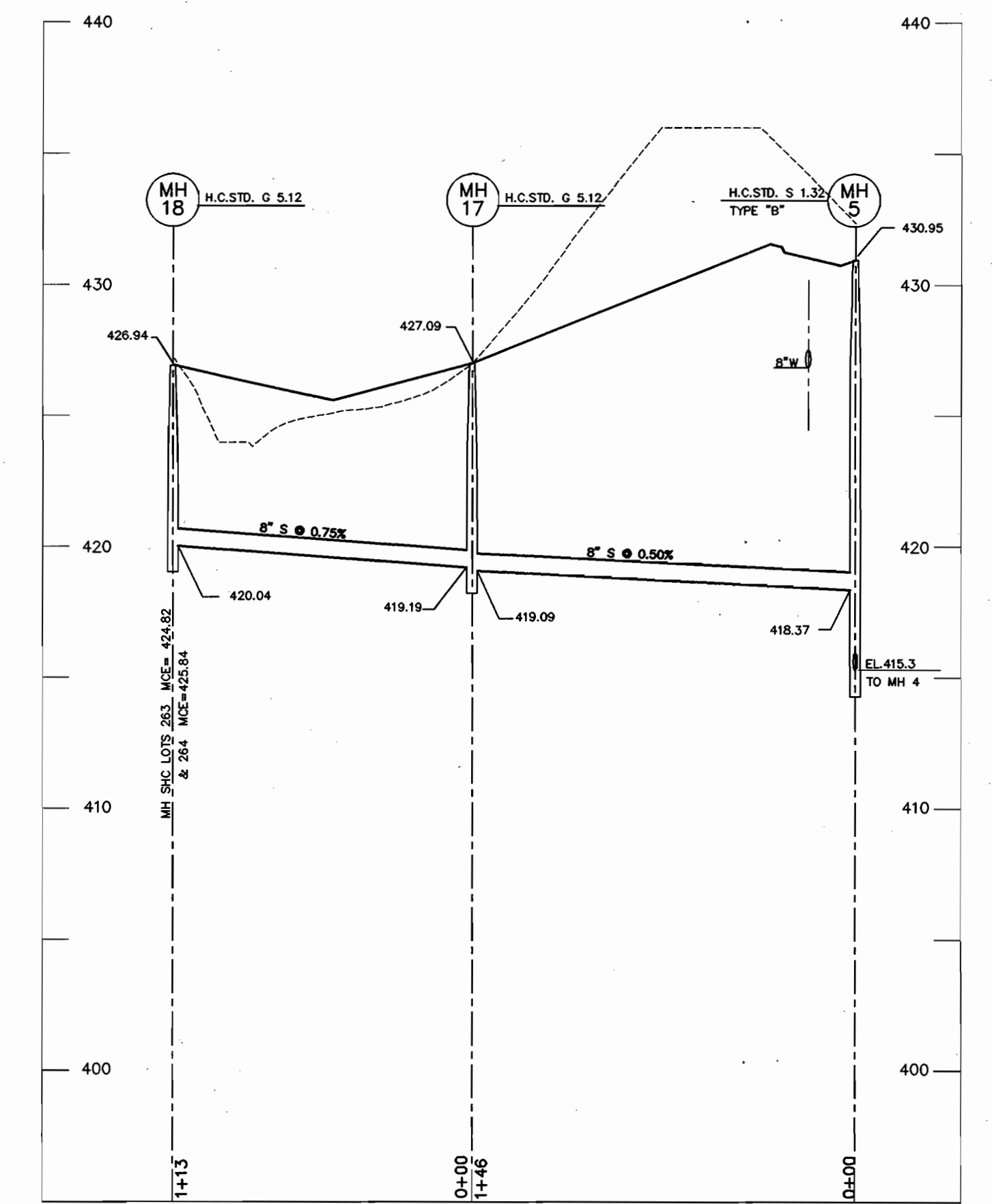
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



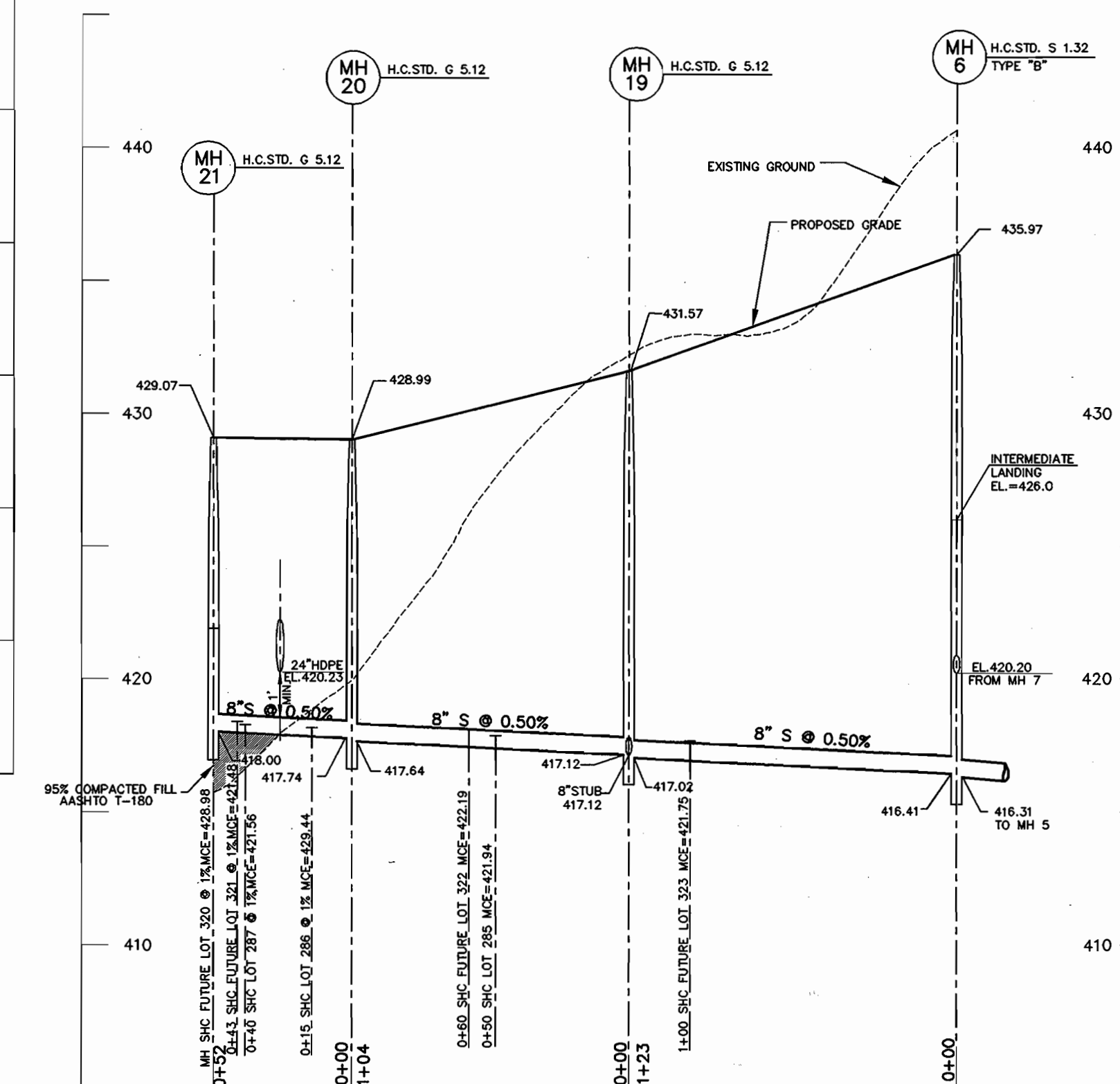
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



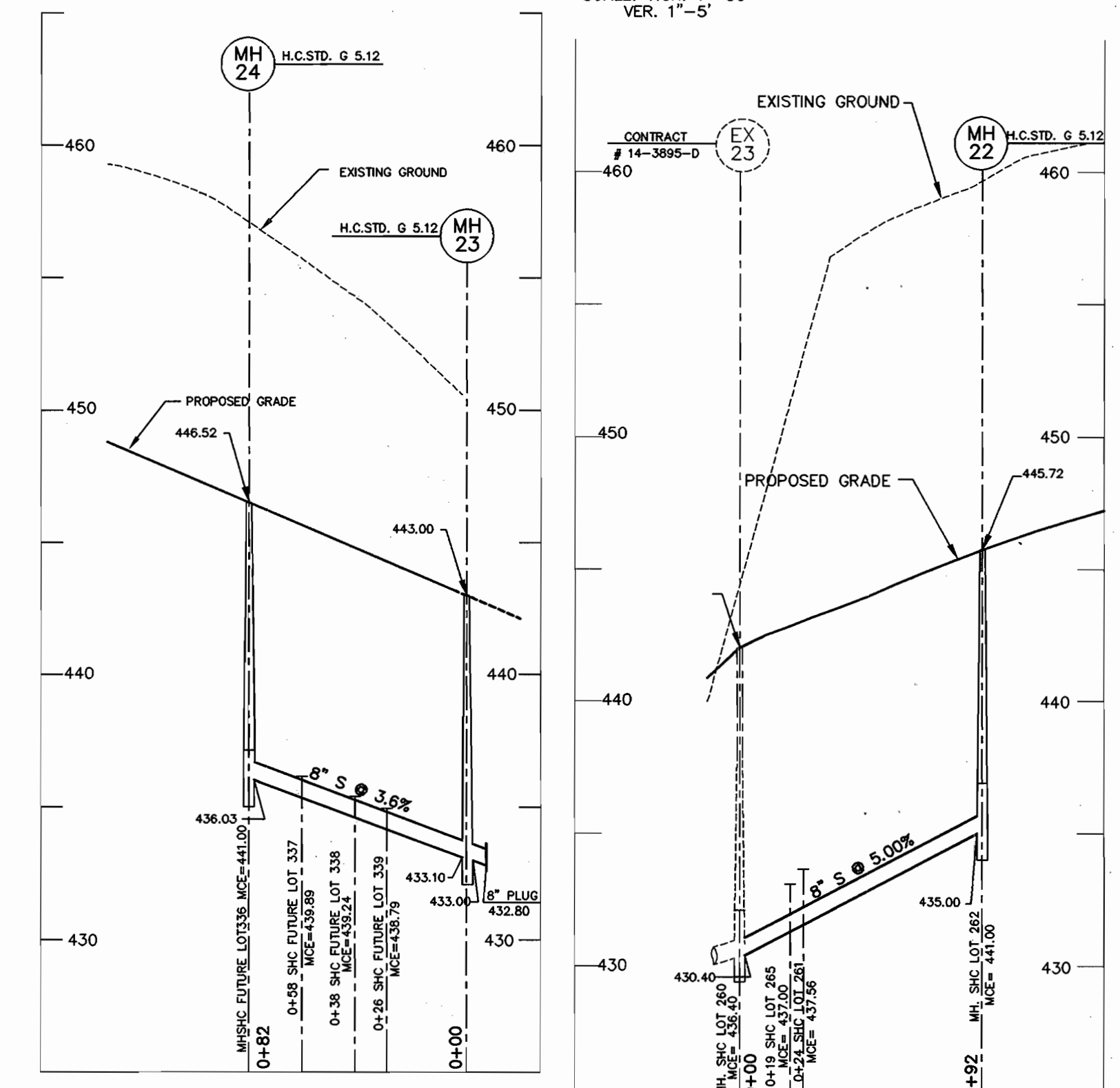
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

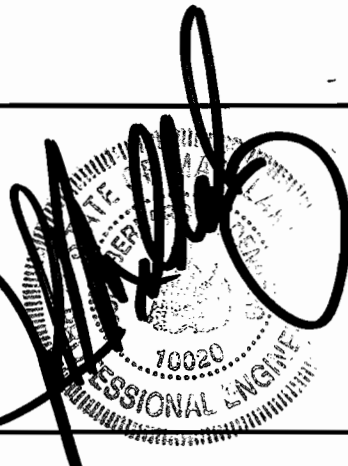
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Ball. (301) 621-5521 Wash. (410) 997-0298 Fax

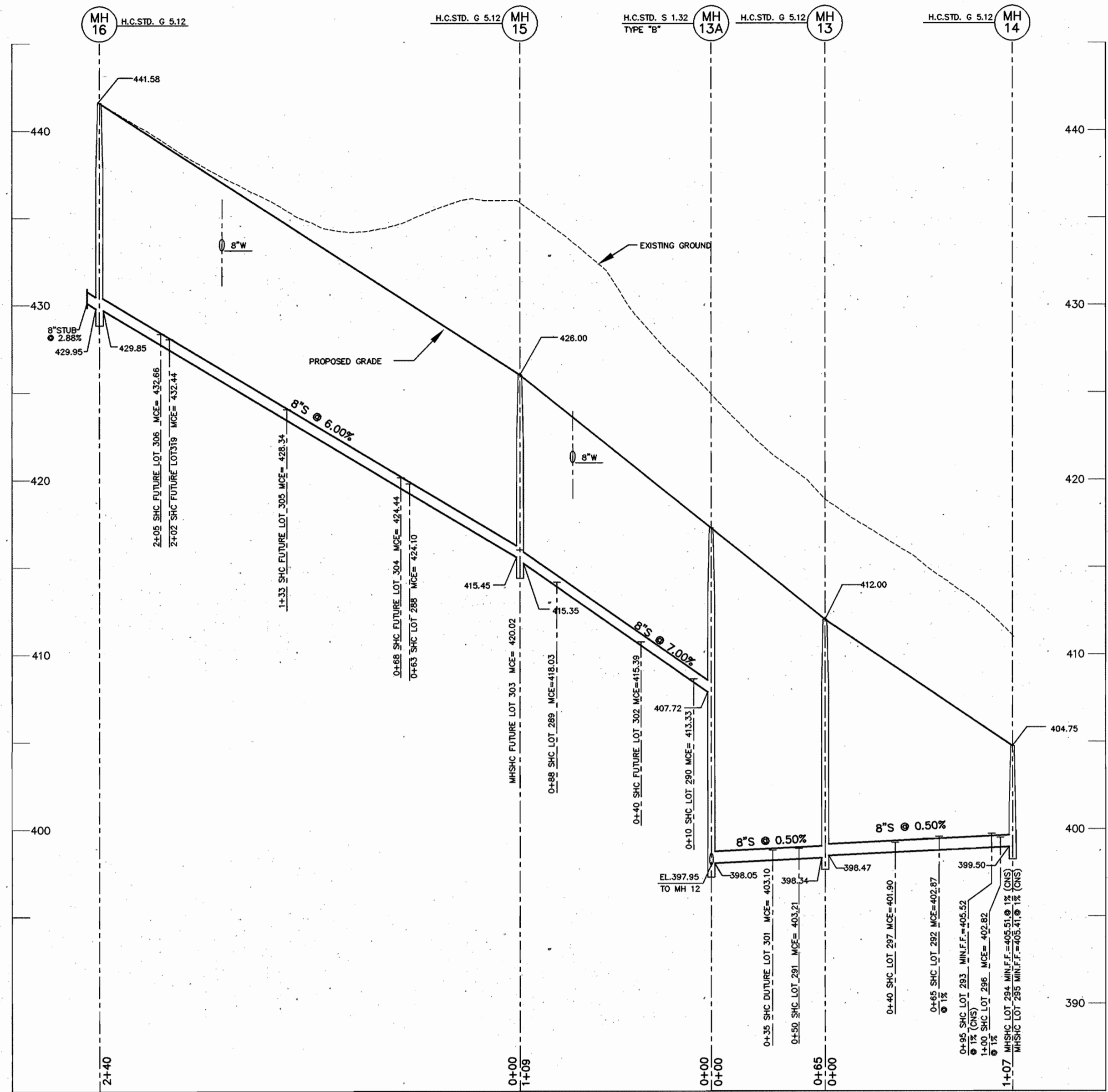


engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072	MBA	2	ADD MHA AND REVISE PROFILE BETWEEN MHG AND MH8A	03/25/03
date	DEC. 2001	BY	NO.	REVISION	DATE

**SEWER
PROFILE**

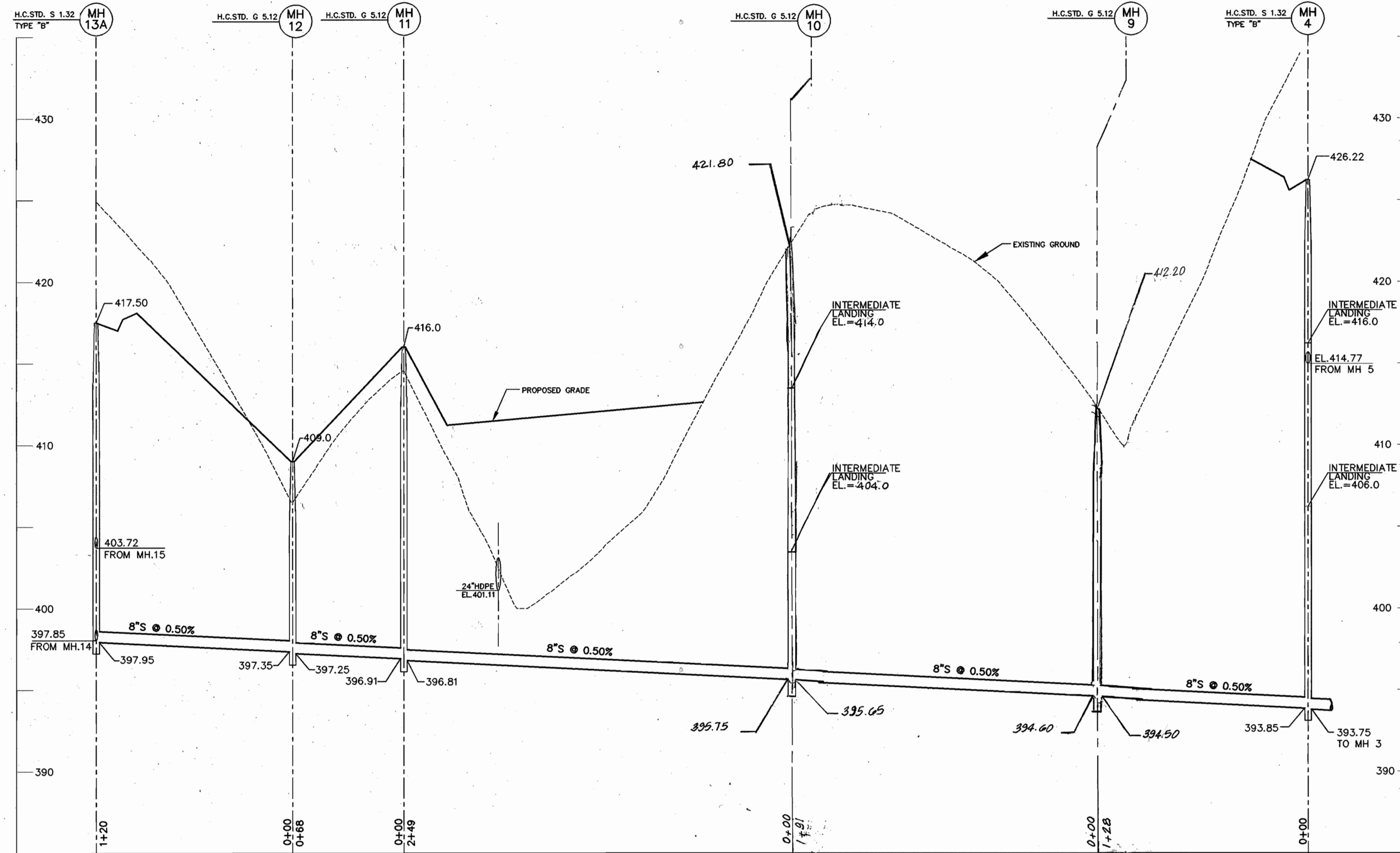
AUTUMN VIEW, SECTION 5
PHASE 2, LOTS 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

99072 PHASE-2 DMC WS WS-S-PROF



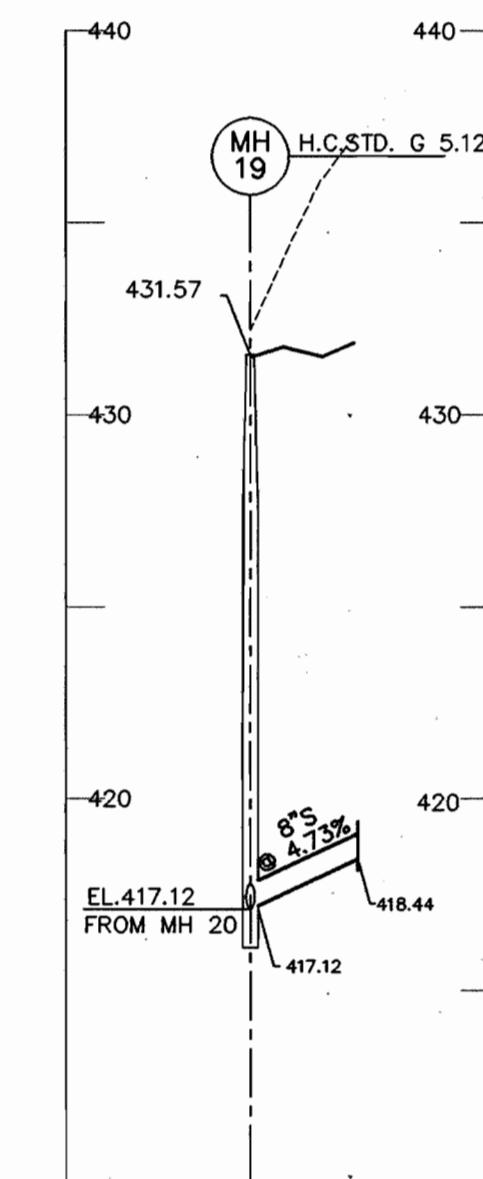
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'

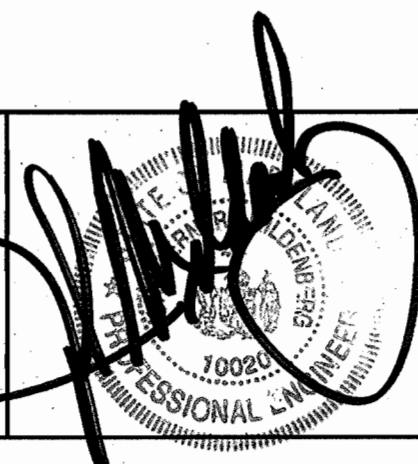
99072 PHASE-2.DWG\WS-S-PROF

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., Inc.**
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Ball. (301) 621-5221 Wash. (410) 997-0233 Fax.



engineering	M.P.				
illustration	M.P.				
approval					
project	99072	MBA	1	REVISE SEWER PROFILE	4/9/02
date	DEC. 2001	BY	NO.	REVISION	DATE

**SEWER
PROFILE**

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
5 OF 6

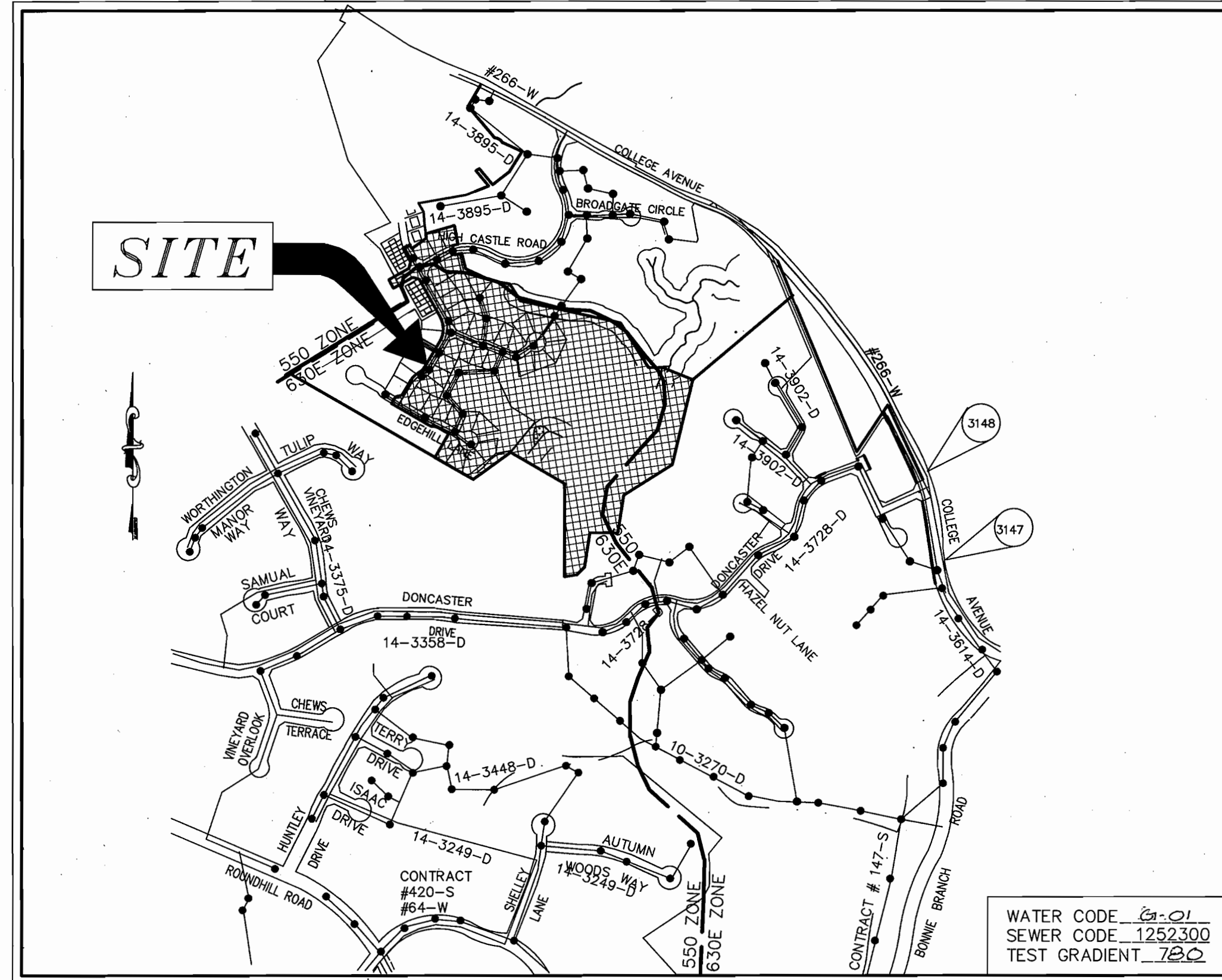
Robert W. Boender 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 2/10/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

QUANTITY TABLE

ITEMS	QUANTITIES		TYPE	MANUFACTURER/SUPPLIER
	ESTIMATED	QUANTITIES		
STANDARD MH (HO. CO. STD.G-5.01)	21			
DROP MH, TYPE "B" (HO. CO. STD. S-1.32)	3			
DROP MH, TYPE "A" (HO. CO. STD. S-1.32)	1			
8" SEWER MAIN	1,262 L.F.			
8" D.I.P.	795 L.F.			
4" SEWER HOUSE CONNECTION	1,480 L.F.			
# SEWER HOUSE CONNECTIONS	51 EACH			
8" WATER	2,043 L.F.			
12" WATER	330 L.F.			
1" WATER HOUSE CONNECTION	1,540 L.F.			
# 1" WHC	53 EACH			
# TWIN 1.5" WHC	5 EACH			
1.5" WATER HOUSE CONNECTION	100 L.F.			
F.H.	4 EACH			
12"x8" C	1 EACH			
8"x 8" T	2 EACH			
8"x6" T	4 EACH			
8"x4" T	1 EACH			
12" V	2 EACH			
6" V	4 EACH			
8" V	6 EACH			
8" CAP & BUTTRESS	4 EACH			
12" CAP & BUTTRESS	1 EACH			
1/8 H.B. (8")	1 EACH			
1/16 H.B. (8")	5 EACH			
1/32 H.B. (8")	5 EACH			
8" PRESSURE VALVE	1 EACH			
4" DROP SEWER HOUSE CONNECTION	10 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



VICINITY MAP
SCALE: 1"=600'

TYPE OF BUILDING	SFD
No. OF UNITS	38
No. OF FUTURE UNITS	23
No. OF WATER HOUSE CONNECTION	38 (FUTURE 23)
No. OF SEWER HOUSE CONNECTIONS	38 (FUTURE 23)
DRAINAGE AREA	BONNIE BRANCH, PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-01-38

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 ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- 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 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 DETAIL FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
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COLONIAL PIPELINE CO. (410) 795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES (410) 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE 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 (5) 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 HOWARD COUNTY CODE.
- 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE 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.
- FOR SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. 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.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- SEDIMENT CONTROL TO BE PROVIDED BY F-01-38.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL HOUSES WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- THE EXISTING WELL AND SEPTIC SERVICING EXISTING HOUSE(S) ARE TO BE ABANDONED.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY. SEE ROAD PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Bruce Taylor Pres 12/18/02
DEVELOPER'S SIGNATURE DATE
DEVELOPER'S NAME

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

John B. Mildenberg 12/24/01
ENGINEER'S SIGNATURE DATE
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

Jim Muzes 2/7/02
USD - NATURAL RESOURCES
CONSERVATION SERVICE DATE

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

John R. Robertson 2/7/02
HOWARD SCD DATE

PLAN REFERENCE NUMBERS

F-01-38
P-00-09
S-99-01

CONTRACT NO.: 14-3896-D
AUTUMN VIEW, SECTION 5, PHASE II
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER PROFILES
4	WATER PROFILES
5	SEWER PROFILES
6	SEWER PROFILES

99072.DWG/SEC2/FINAL/MS/COVER

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 2104
(410) 997-0296 Balt. (301) 821-5521 Wash. (410) 997-0296 Fax

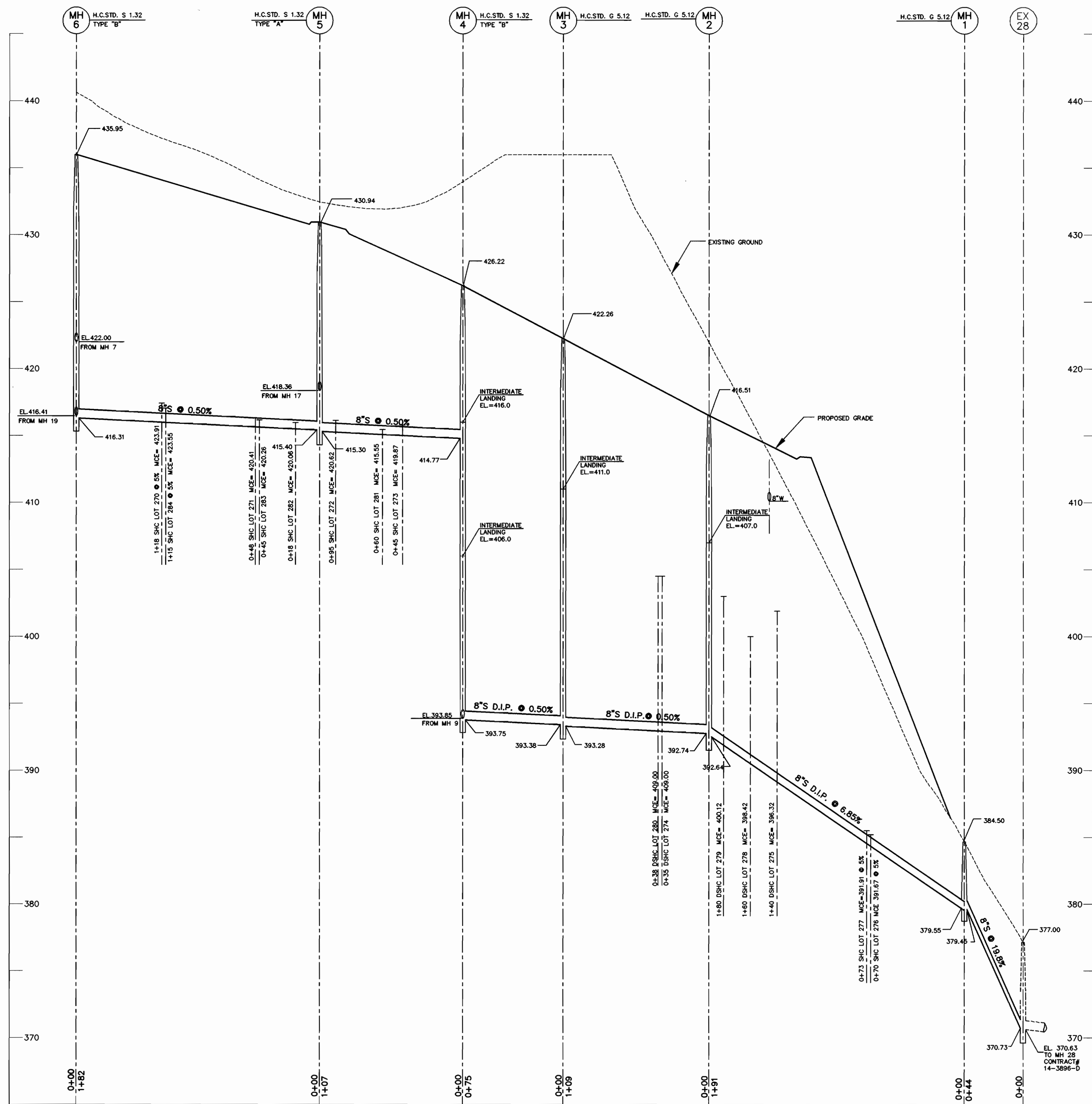
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illustration	M.P.				
approval	J.M.				
project	99072	MBA	2	MODIFY THE QUANTITY TABLE	5/5/03
date	DEC. 2001	BY	NO.	REVISION	DATE

TITLE SHEET

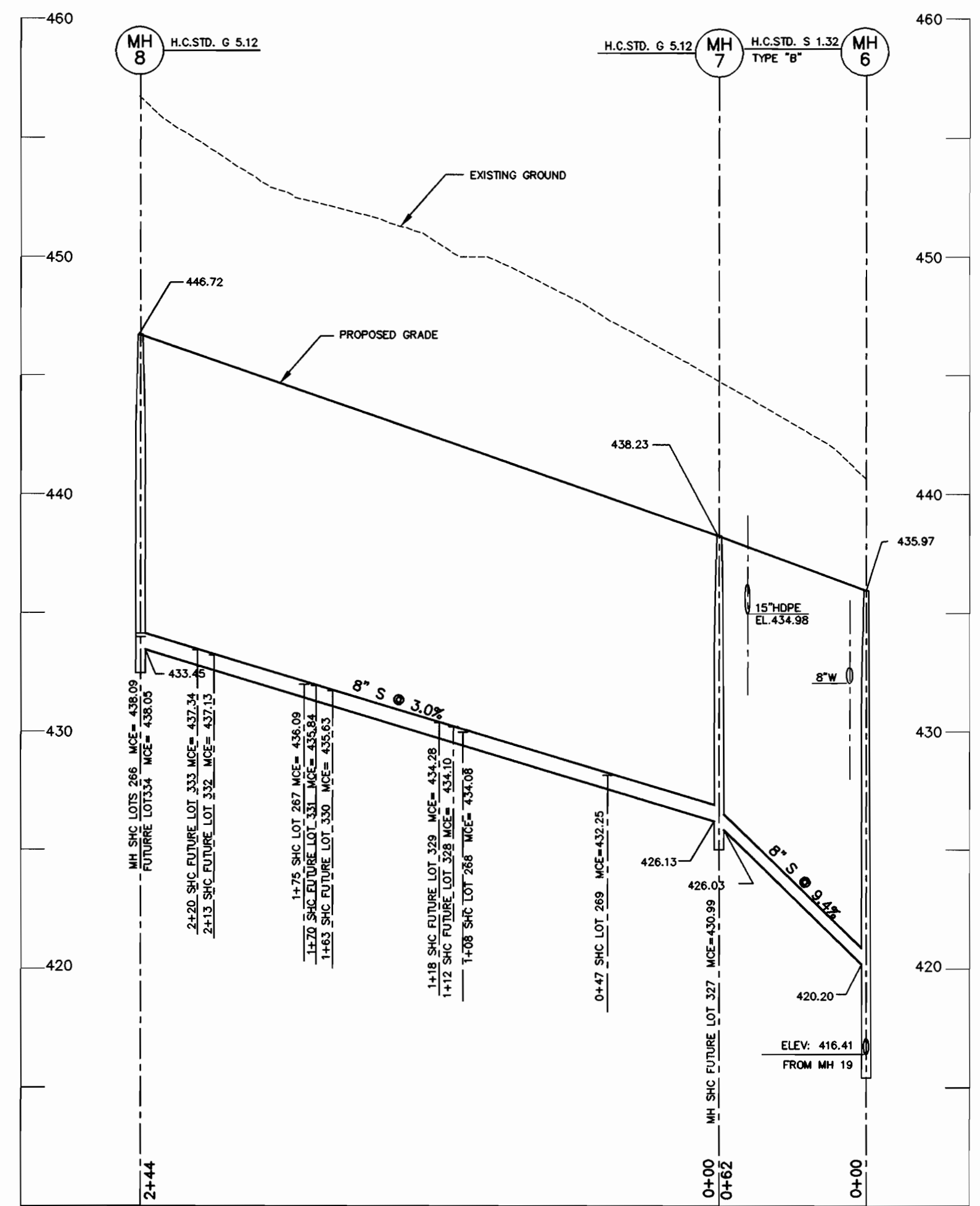
AUTUMN VIEW, SECTION 5
PHASE 2 LOTS: 260-300
CONTRACT NO.: 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale AS SHOWN
1 OF 6

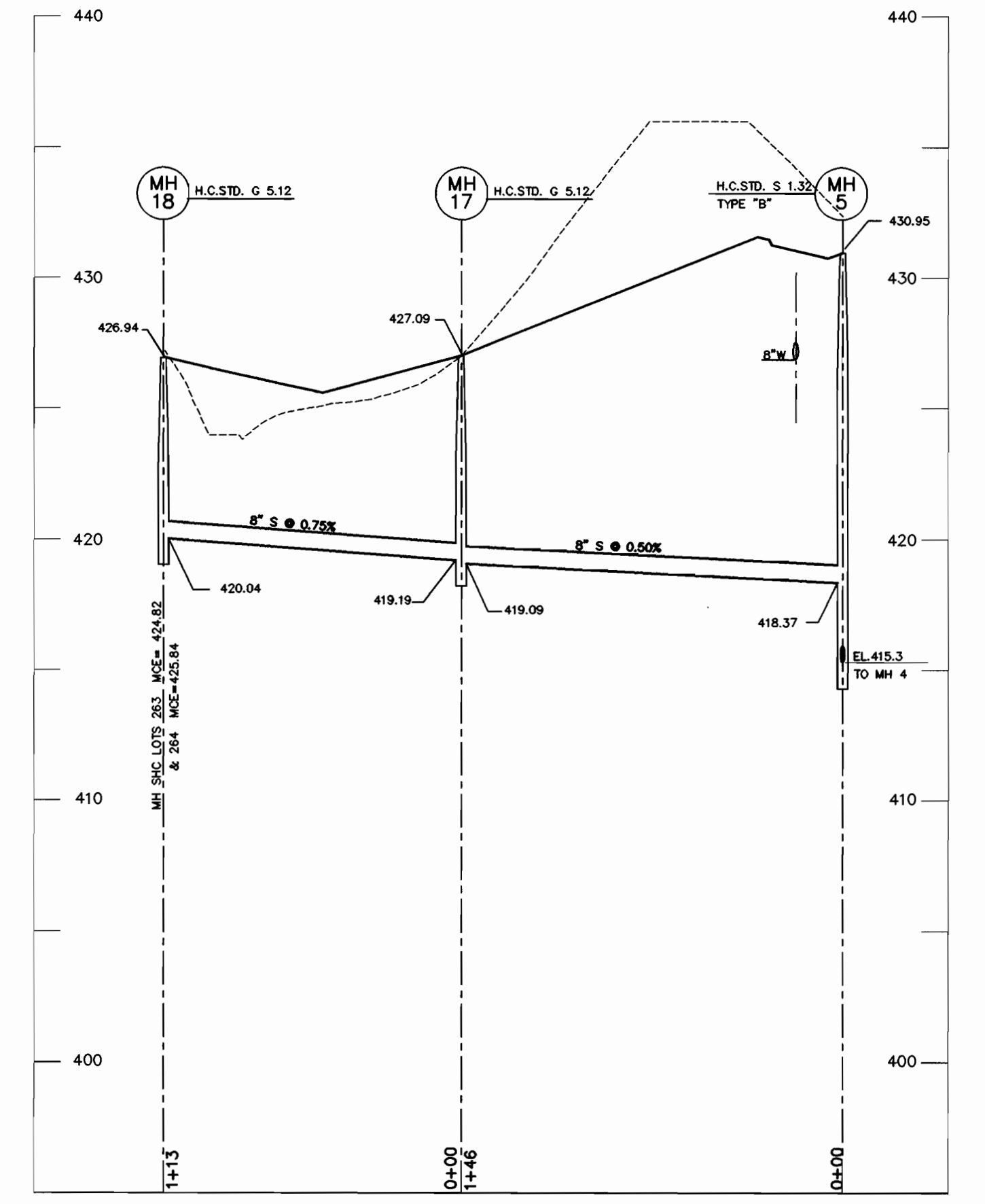
600' SCALE MAP NO. 31 BLOCK NO. 3 & 4



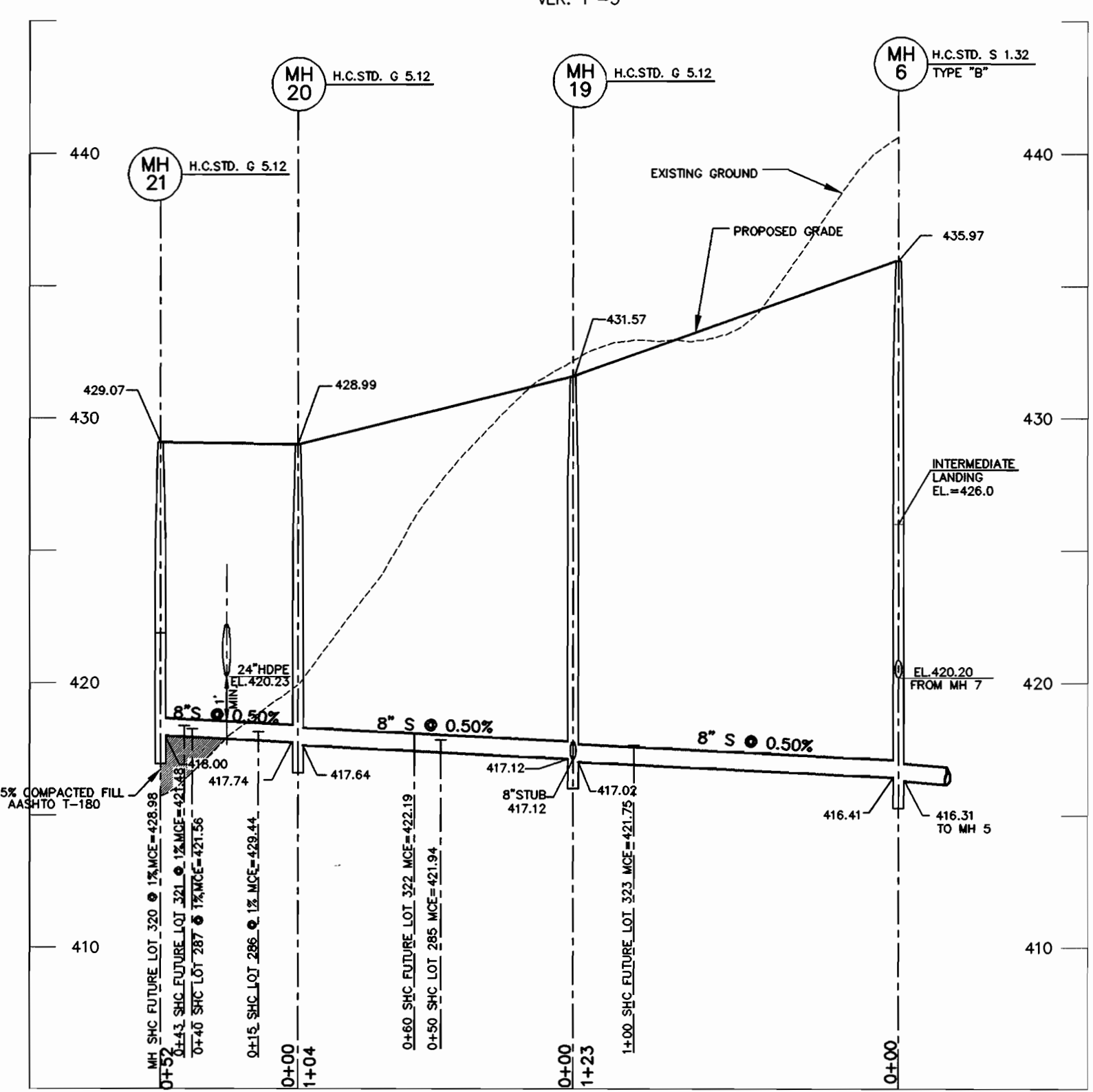
8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



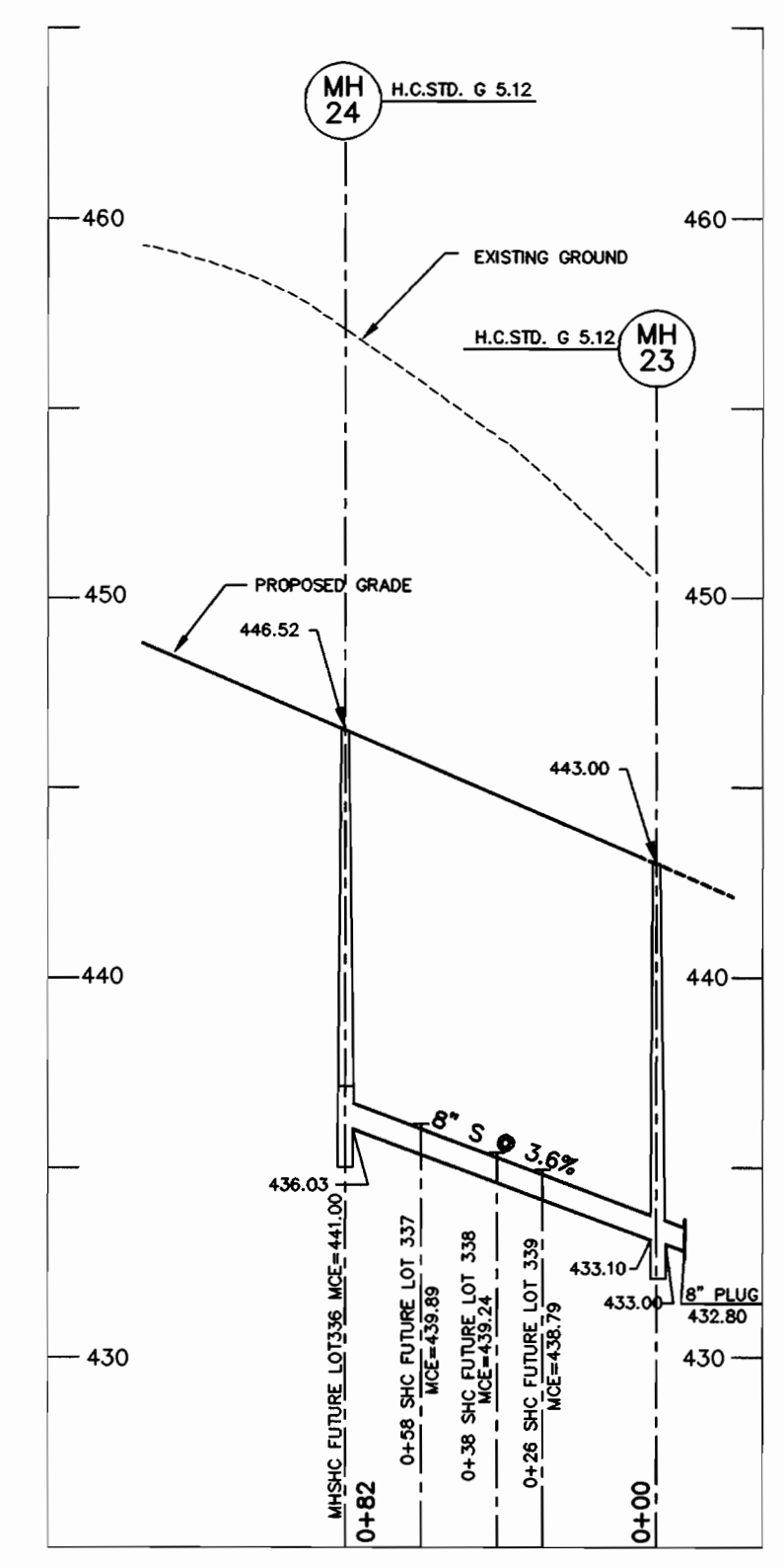
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VER. 1"=5'



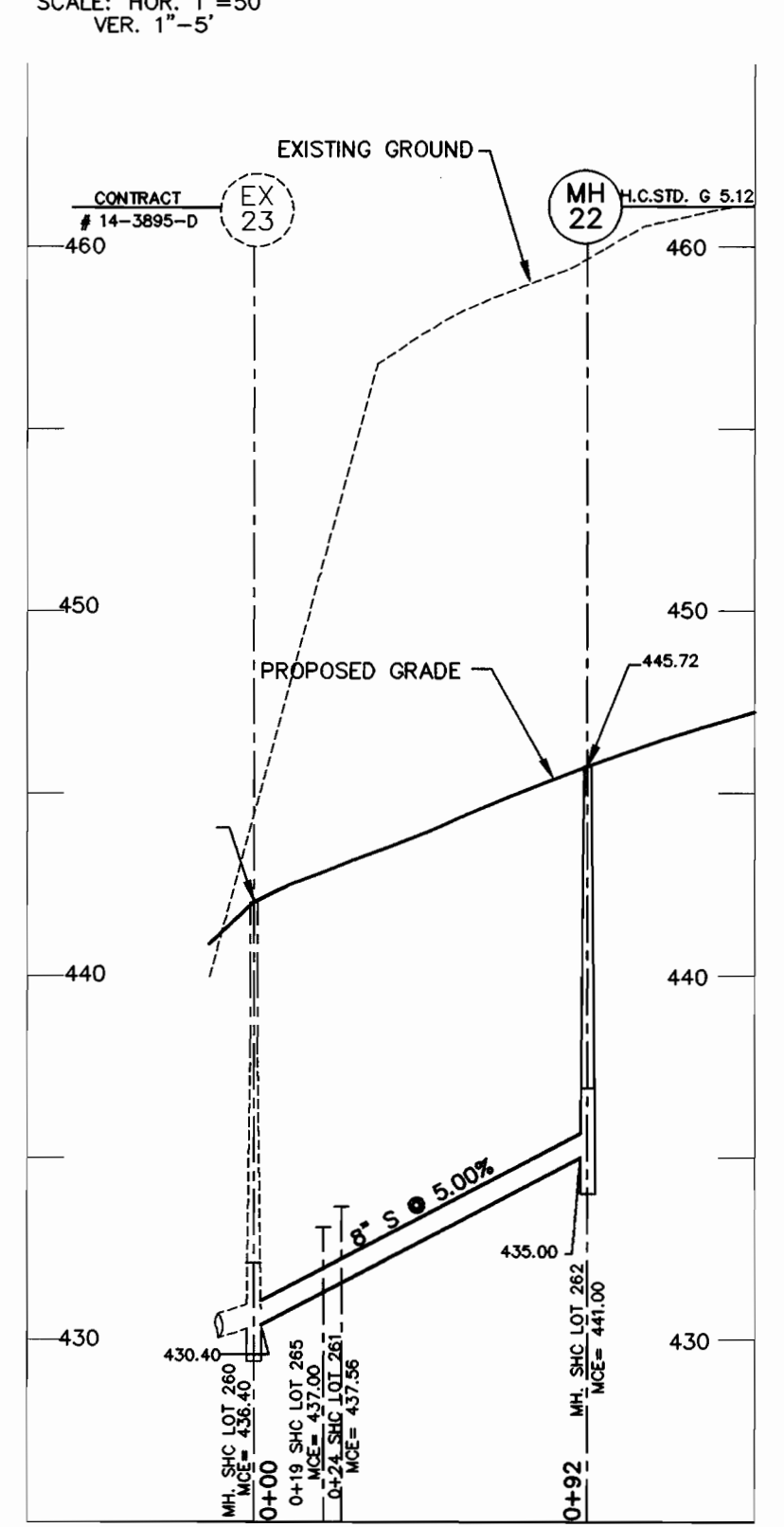
8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'

99072 (PHASE-2) DWG (MS) - S - PROF

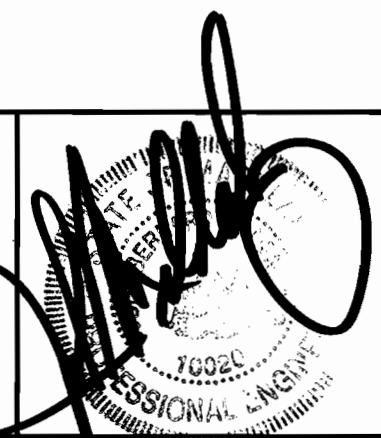
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert Damjan 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Ball. (301) 621-5521 Wash. (410) 997-0288 Fax

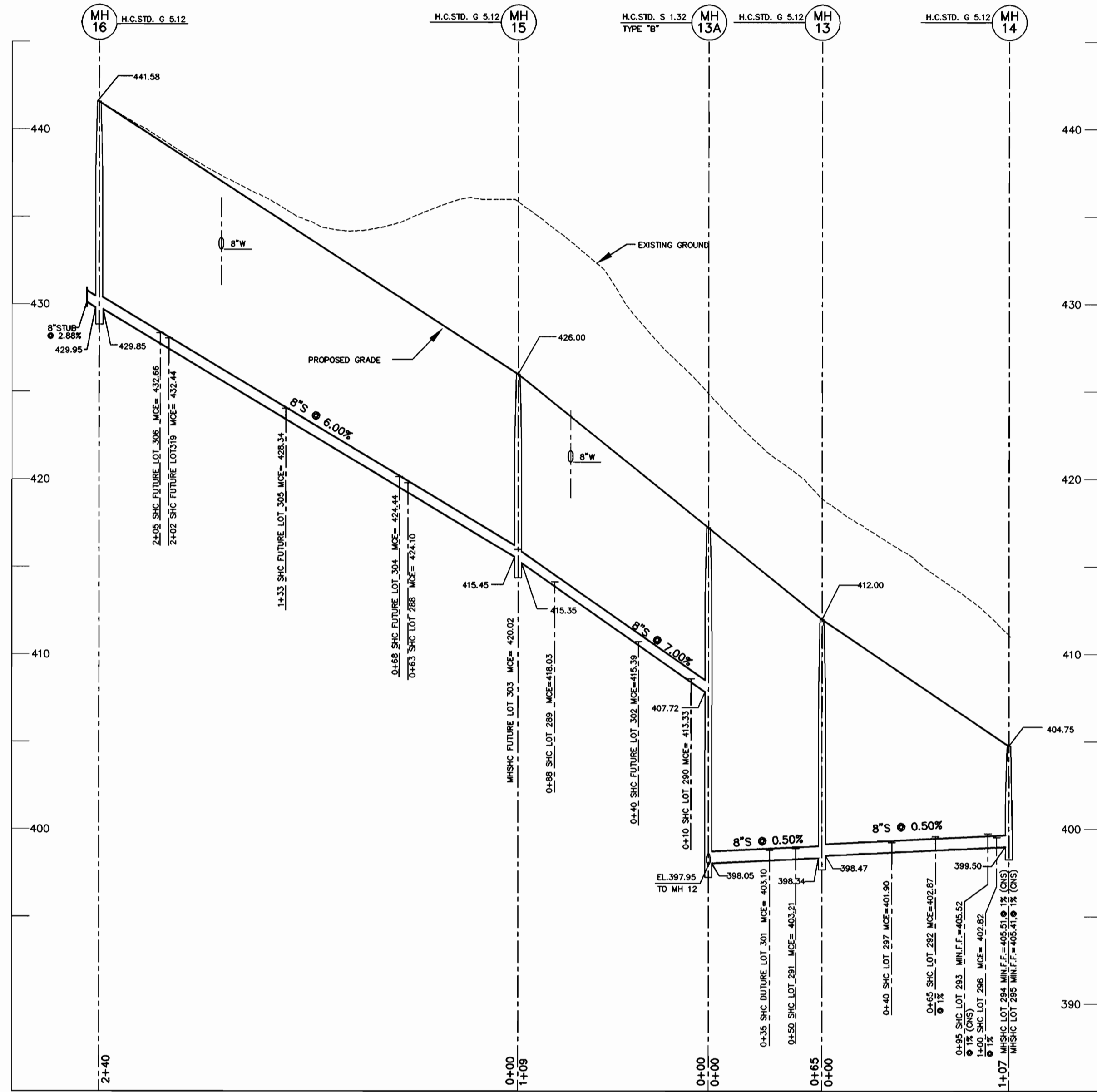


engineering	M.P.						
illustration	M.P.						
approval	J.M.						
project	99072						
date	DEC. 2001	BY	NO.	REVISION	DATE	600' SCALE MAP NO. 31	BLOCK NO. 3 & 4

SEWER PROFILE

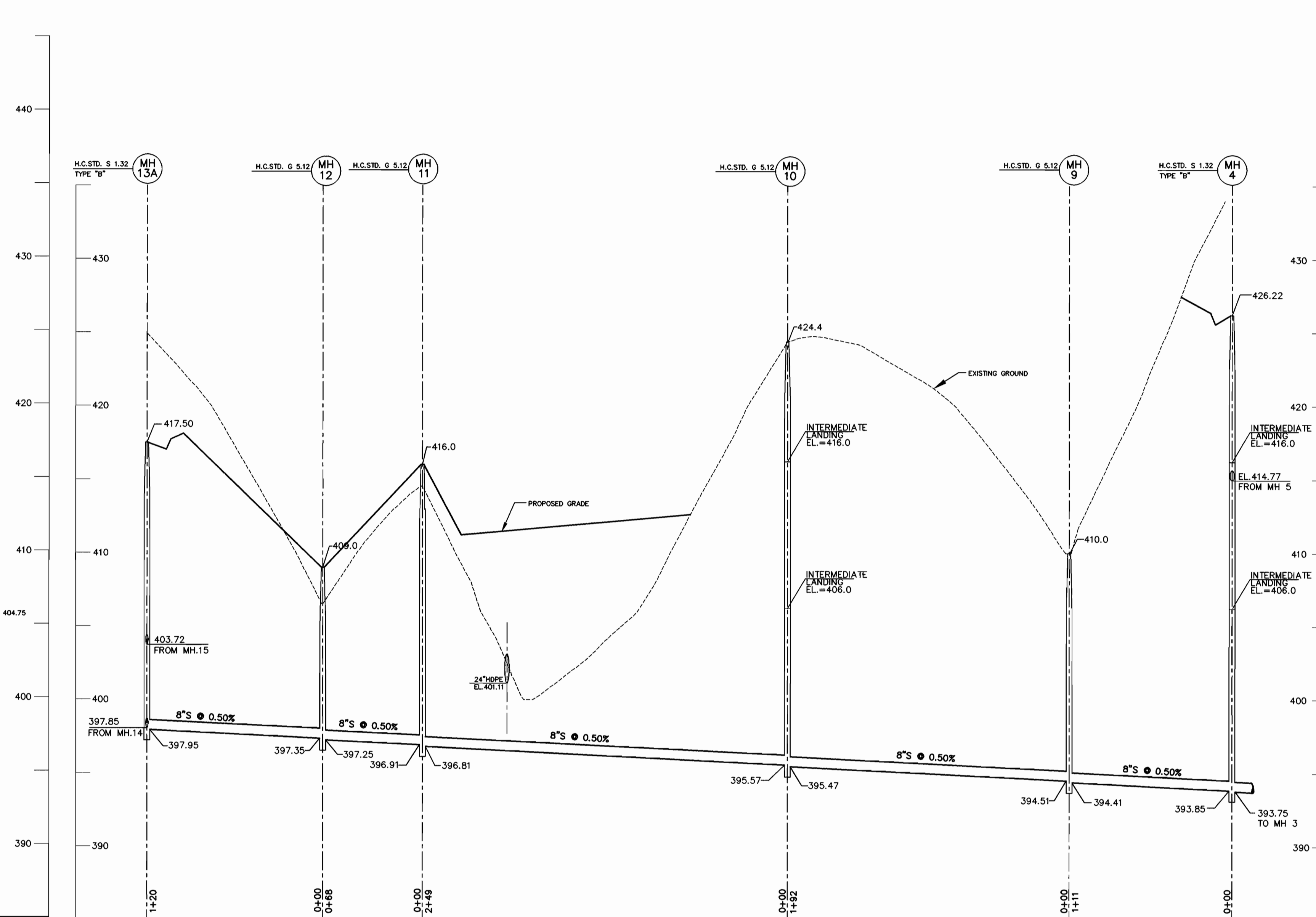
AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
6 OF 6



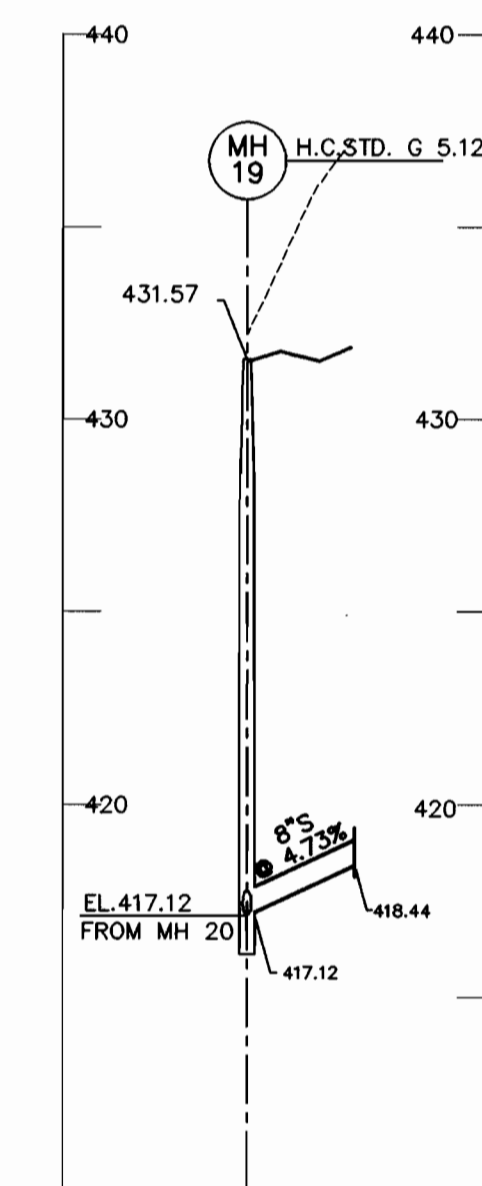
8" SEWER PROFILE

SCALE: HOR. 1"=50'
VER. 1"=5'



8" SEWER PROFILE

SCALE: HOR. 1"=50'
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SCALE: HOR. 1"=50'
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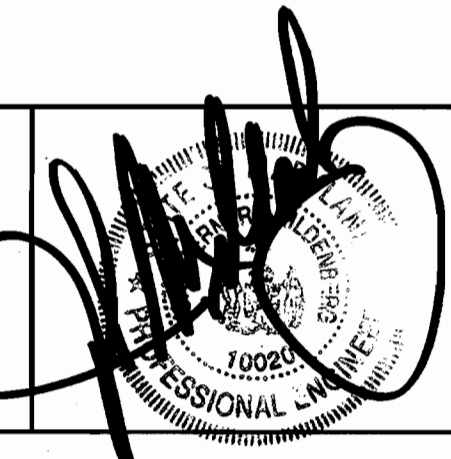
99072 \PHASE-2 \DWG \MS \S-PROF

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
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5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
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engineering	M.P.				
illustration	M.P.				
approval					
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

**SEWER
PROFILE**

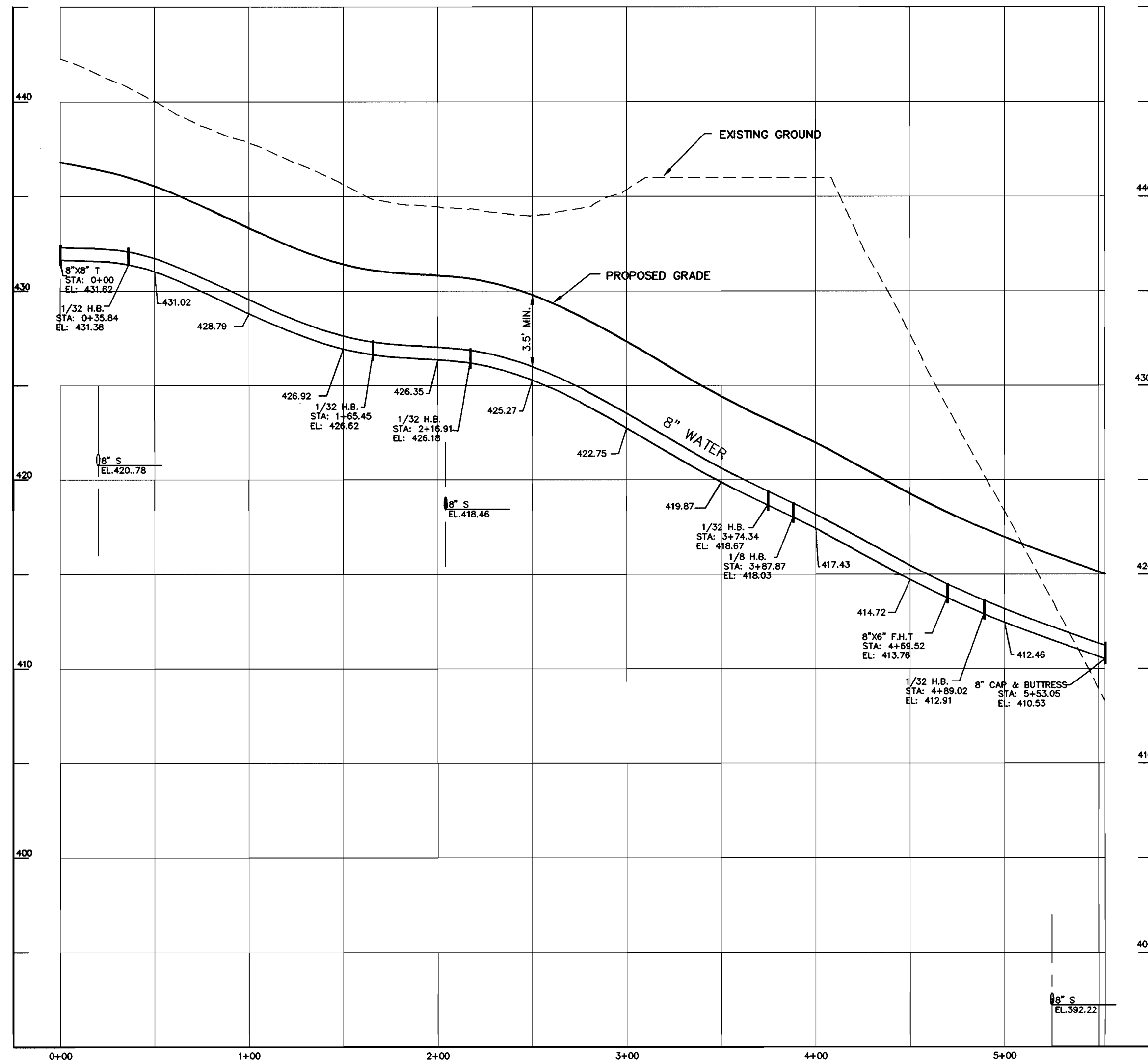
600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

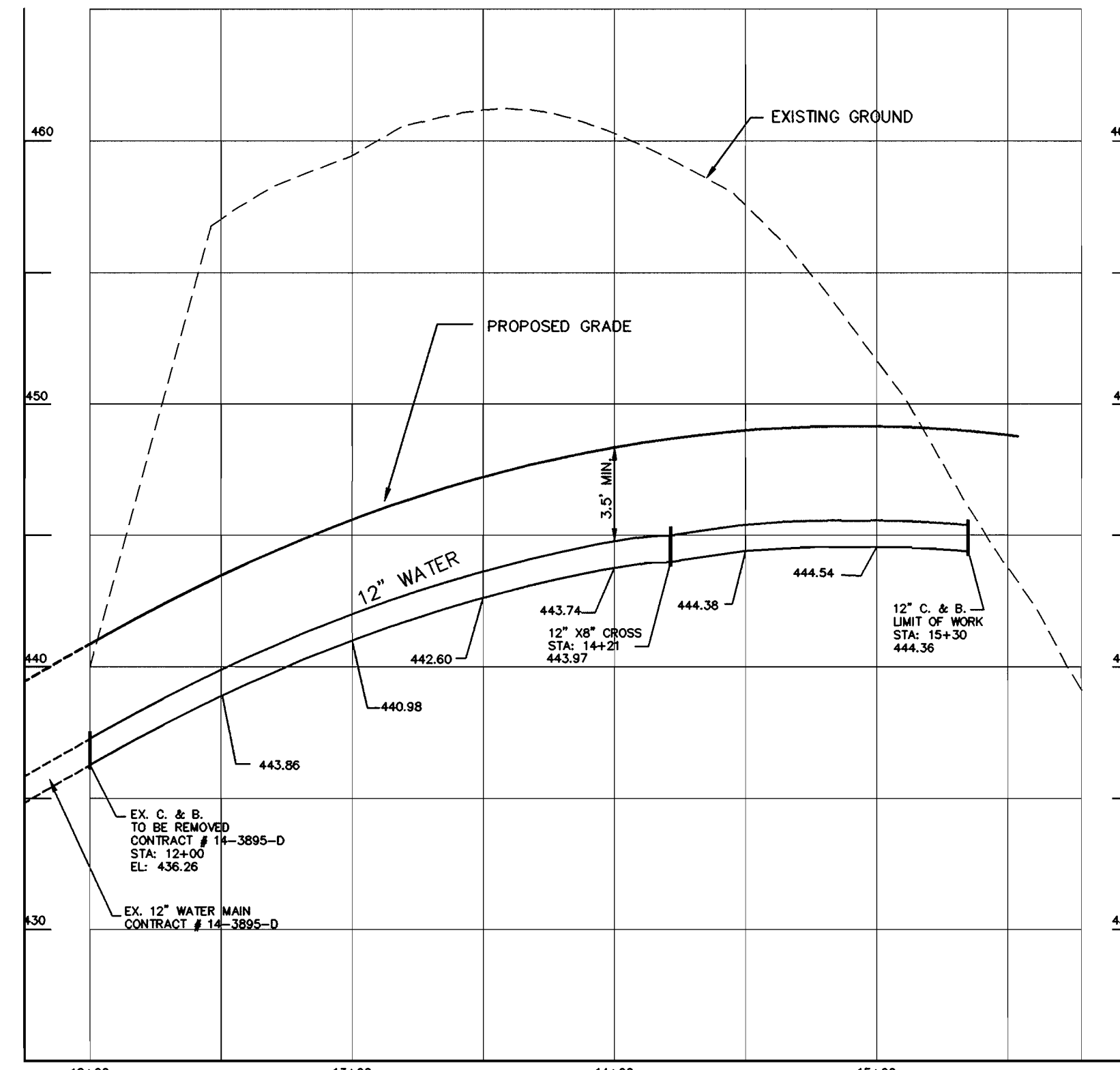
scale
1"=50'
5 OF 6

Robert V. Boender
CHIEF, BUREAU OF UTILITIES DATE 2-4-02

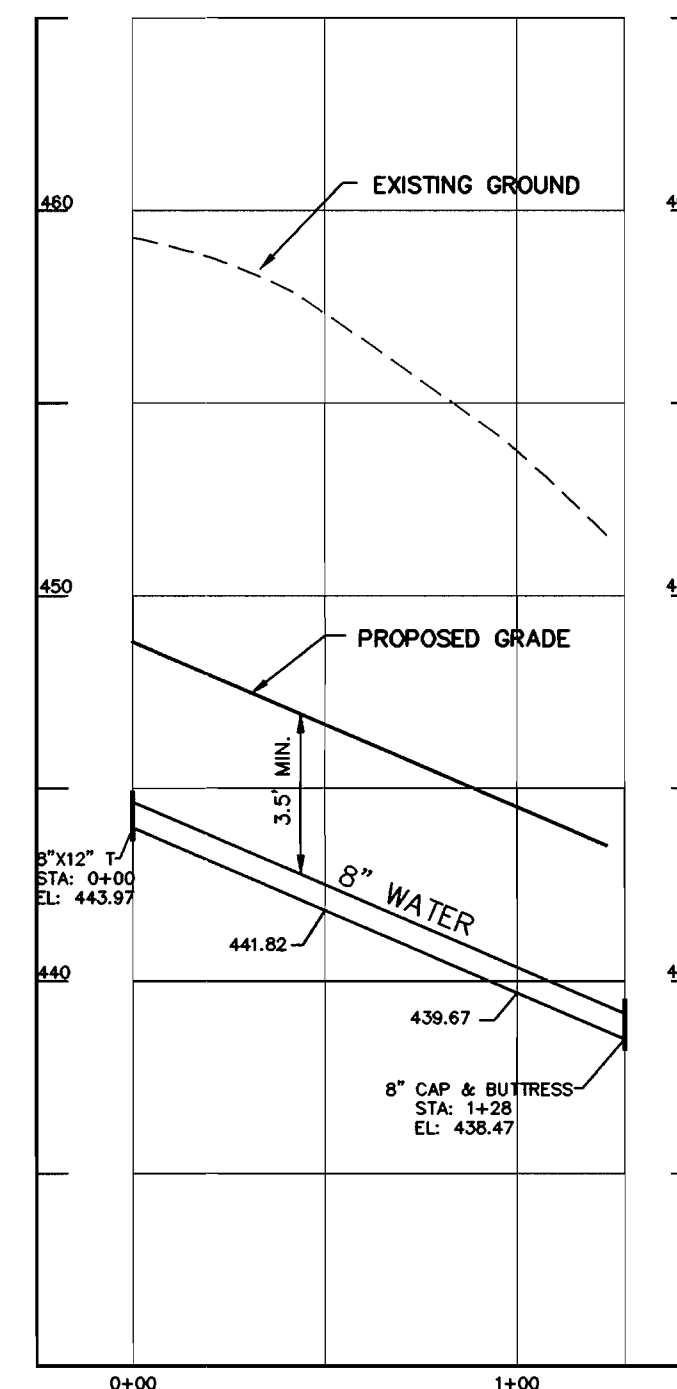
Howard
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



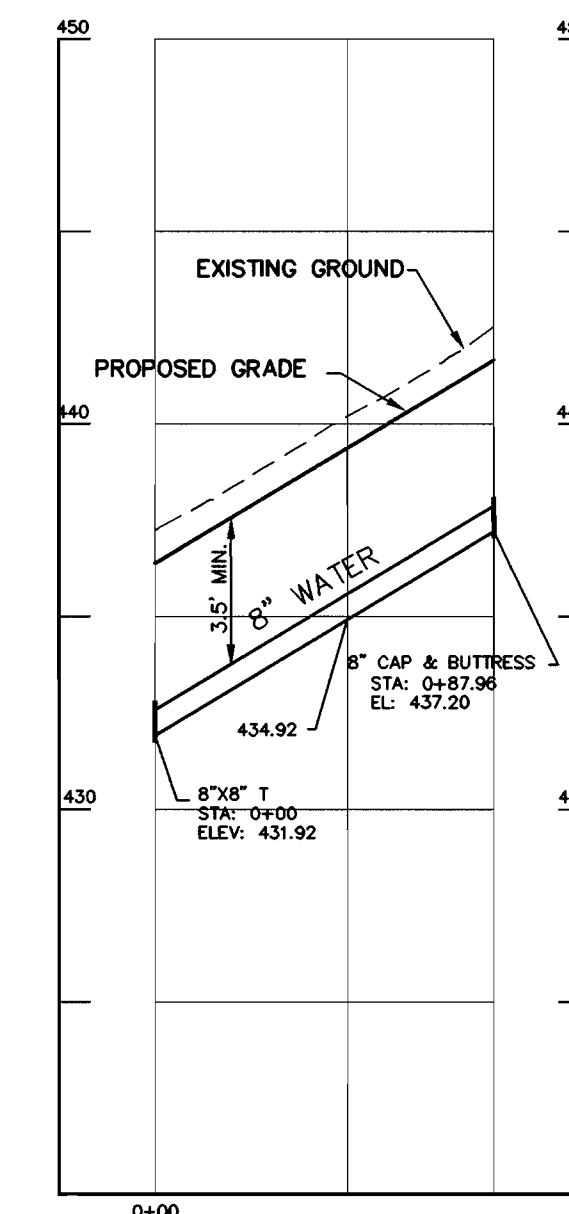
8" WATER PROFILE (PLEASANT PATH)



8" WATER PROFILE (HIGH CASTLE ROAD)



8" WATER PROFILE (FOUR QUARTER ROAD)



8" WATER PROFILE (FUTURE ROAD J)

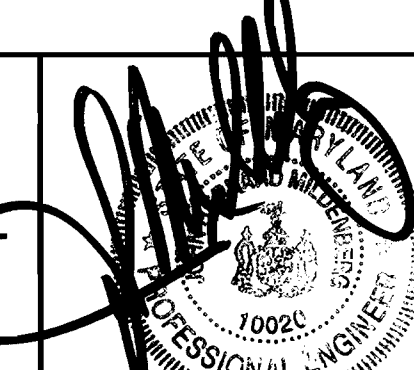
99072 PHASE-2.DWG MSJ\W-PROF.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Beltsville, Maryland 20812
(410) 997-0286 Fax (301) 621-5521 Wash. (410) 997-0286

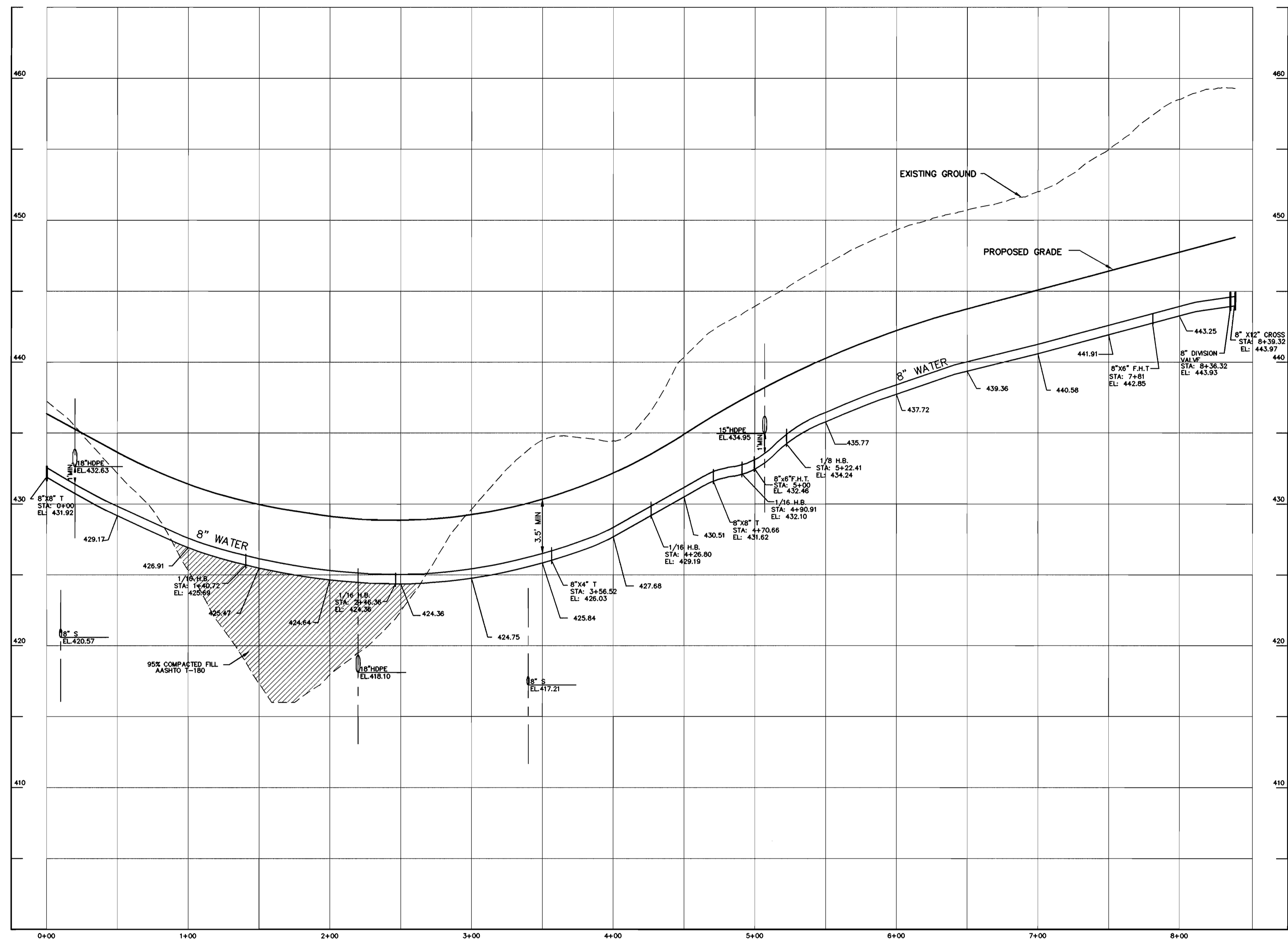


engineering	M.P.				
illustration	M.P.				
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project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

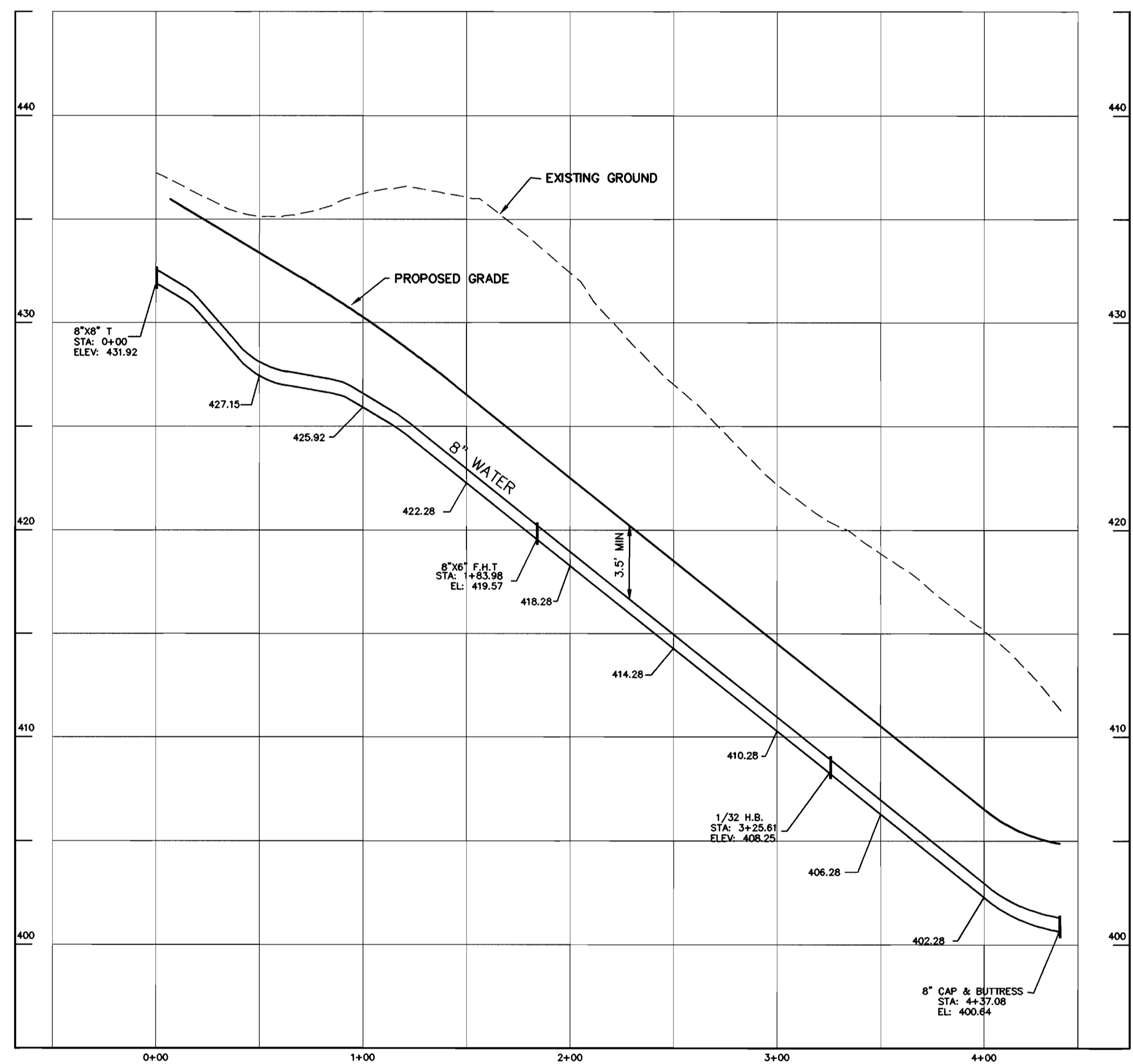
**WATER
PROFILES**

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS: 200-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'



8" WATER PROFILE (WINDING ROSS WAY)
 SCALE: HOR. 1"=50'
 VER. 1"=5'



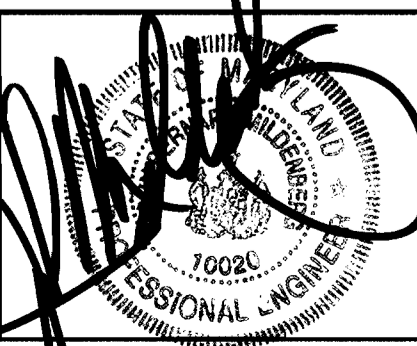
8" WATER PROFILE (EDGEHILL LANE)
 SCALE: HOR. 1"=50'
 VER. 1"=5'

99072\PHASE-2\DWG\MS\W-PROF.DWG

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 R. B. Bainger
 CHIEF, BUREAU OF UTILITIES
 2-4-02
 DATE

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

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dersey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Balt. (301) 821-5521 Wash. (410) 997-0298 Fax



engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

WATER PROFILES
 600' SCALE MAP NO. 31 BLOCK NO. 3 & 4

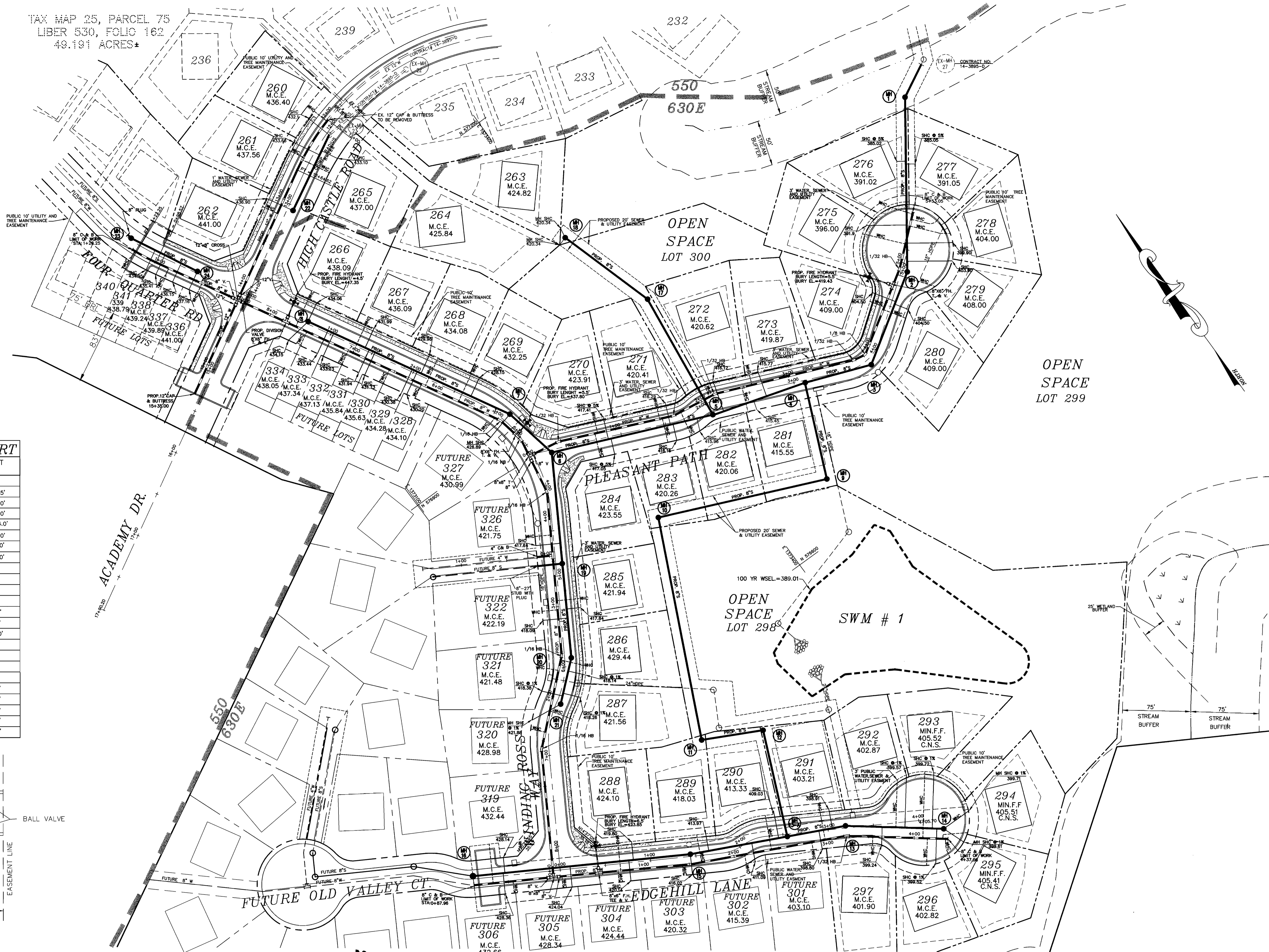
AUTUMN VIEW, SECTION 5
 PHASE 2, LOTS: 260-300
 CONTRACT # 14-3896-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY

scale
 1"=50'
3 OF 6

**WATER MAIN
TABULATION CHART**

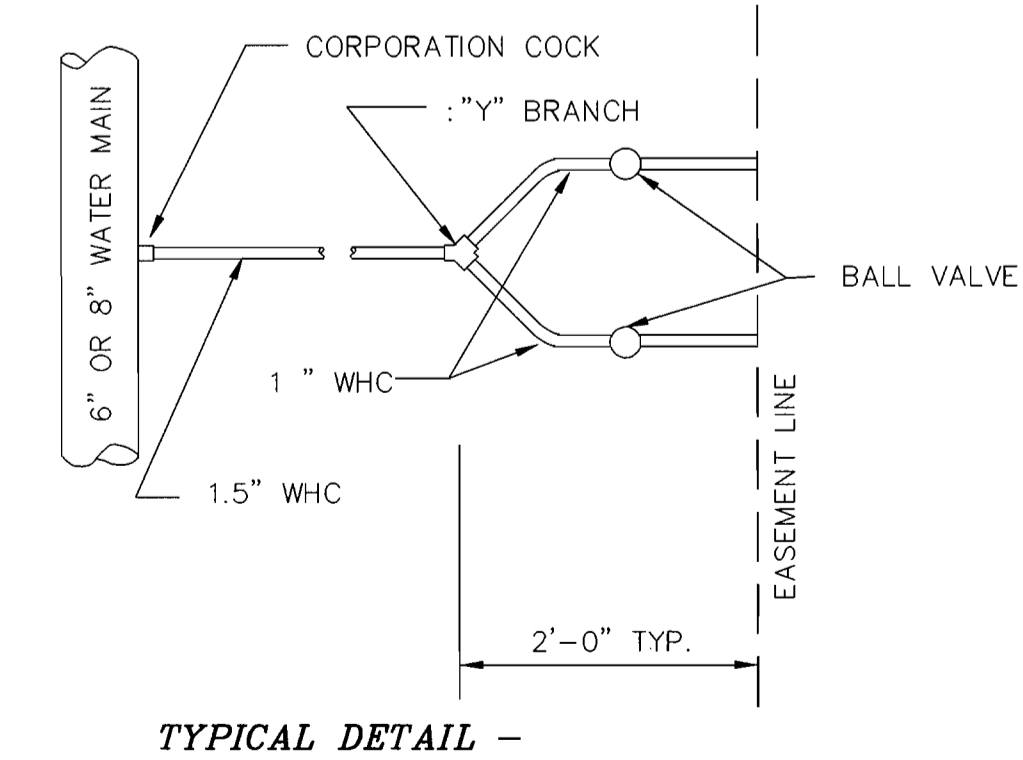
WINDING ROSS WAY		
STATION	APPURTENANCE	O/S FROM C
0+50.00	F.H.	LT. 16.1'
0+50.00	8"x6" T	RT. 8.0'
3+10.00	1/16 H.B.	RT. 3.0'
3+35.00	F.H.	RT. 16.1'
3+35.00	8"x6" T	RT. 2.5'
3+41.73	1/16 H.B.	RT. 1.0'
3+62.16	8"x6" T	RT. 4.0'
4+06.78	1/16 H.B.	RT. 0.75'
5+87.40	1/16 H.B.	RT. 3.0'
6+92.87	1/16 H.B.	RT. 8.0'
EDGEHILL LANE		
STATION	APPURTENANCE	O/S FROM C
0+03.00	8" V.	RT. 8.0'
0+42.00	F.H.	LT. 22.1'
0+42.00	8"x6" T	RT. 8.0'
3+19.39	1/32 H.B.	RT. 9.0'
L.P. 1+83.00	8"C. & B.	RT. 11.0'
PLEASANT PATH		
STATION	APPURTENANCE	O/S FROM C
0+03.00	8" V.	0.0'
0+30.98	1/32 H.B.	LT. 7.0'
1+60.60	1/32 H.B.	LT. 7.0'
2+12.71	1/32 H.B.	LT. 7.0'
3+72.44	1/32 H.B.	LT. 8.0'
3+87.96	1/8 H.B.	LT. 6.0'
4+72.80	8"x6" T	LT. 4.0'
4+72.80	F.H.	LT. 26.0'
4+92.24	1/32 H.B.	LT. 2.5'
L.P. 1+42.00	8"C. & B.	RT. 3.0'
HIGH CASTLE ROAD		
STATION	APPURTENANCE	O/S FROM C
14+16.49	8" V.	RT. 8.0'
14+19.49	8"x8" CROSS	RT. 8.0'
14+22.49	8" V.	RT. 8.0'
15+33.16	8" C. & B.	RT. 8.0'
FOUR QUARTER ROAD		
STATION	APPURTENANCE	O/S FROM C
0+02.19	PRESSURE V.	LT. 8.0'
0+11.58	8" V.	LT. 8.0'
1+35.73	8" C. & B.	LT. 8.0'
FUTURE ROAD "J"		
STATION	APPURTENANCE	O/S FROM C
0+05.07	8" V.	LT. 7.0'
0+08.07	8"x6" T	LT. 7.0'
0+11.07	8" V.	LT. 7.0'
0+96.01	8" C. & B.	LT. 7.0'

TAX MAP 25, PARCEL 75
LIBER 530, FOLIO 162
49.191 ACRES±



MANHOLE LOCATION CHART

MH #	ROAD NAME OR NORTHING & EASTING	CL STATION	OFFSET
1	N 576,946.794 E 1,373,795.271		
2	PLEASANT PATH	4+91.79	RT. 6.5'
3	PLEASANT PATH	3+85.07	RT. 7.0'
4	PLEASANT PATH	3+12.15	RT. 3.0'
5	PLEASANT PATH	2+02.40	RT. 14.0'
6	PLEASANT PATH	0+21.08	RT. 3.0'
7	WINDING ROSS WAY	3+13.67	LT. 9.0'
8	WINDING ROSS WAY	0+71.66	LT. 3.0'
9	N 576,658.775 E 1,373,479.650		
10	N 576,733.569 E 1,373,304.964		
11	N 576,508.032 E 1,373,199.711		
12	N 576,476.963 E 1,373,260.622		
13A	EDGEHILL LANE	2+54.58	RT. 3.0'
13	EDGEHILL LANE	3+19.39	LT. 3.0'
14	EDGEHILL LANE	1+71.98 L.P.	LT. 21.0'
15	EDGEHILL LANE	1+44.19	LT. 2.0'
16	N 576,535.202 E 1,372,908.384		
17	N 576,934.106 E 1,373,436.321		
18	N 577,042.036 E 1,373,402.708		
19	WINDING ROSS WAY	4+86.86	LT. 7.0'
20	WINDING ROSS WAY	5+90.52	LT. 7.0'
21	WINDING ROSS WAY	6+40.25	LT. 5.0'
22	HIGH CASTLE ROAD	13+04.99	LT. 6.0'
23	FOUR QUARTER ROAD	0+61.87	RT. 2.0'

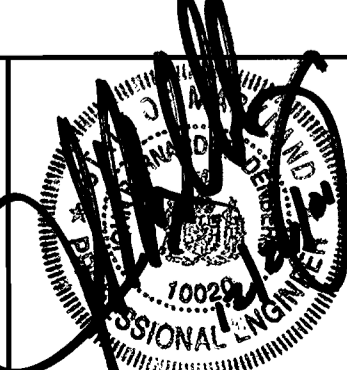


DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors

5072 Dersy Hill Drive, Suite 202, Ellicott City, Maryland 2104
(410) 997-0298 Fax (301) 821-5521 Wash. (410) 997-0298 Fax



engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

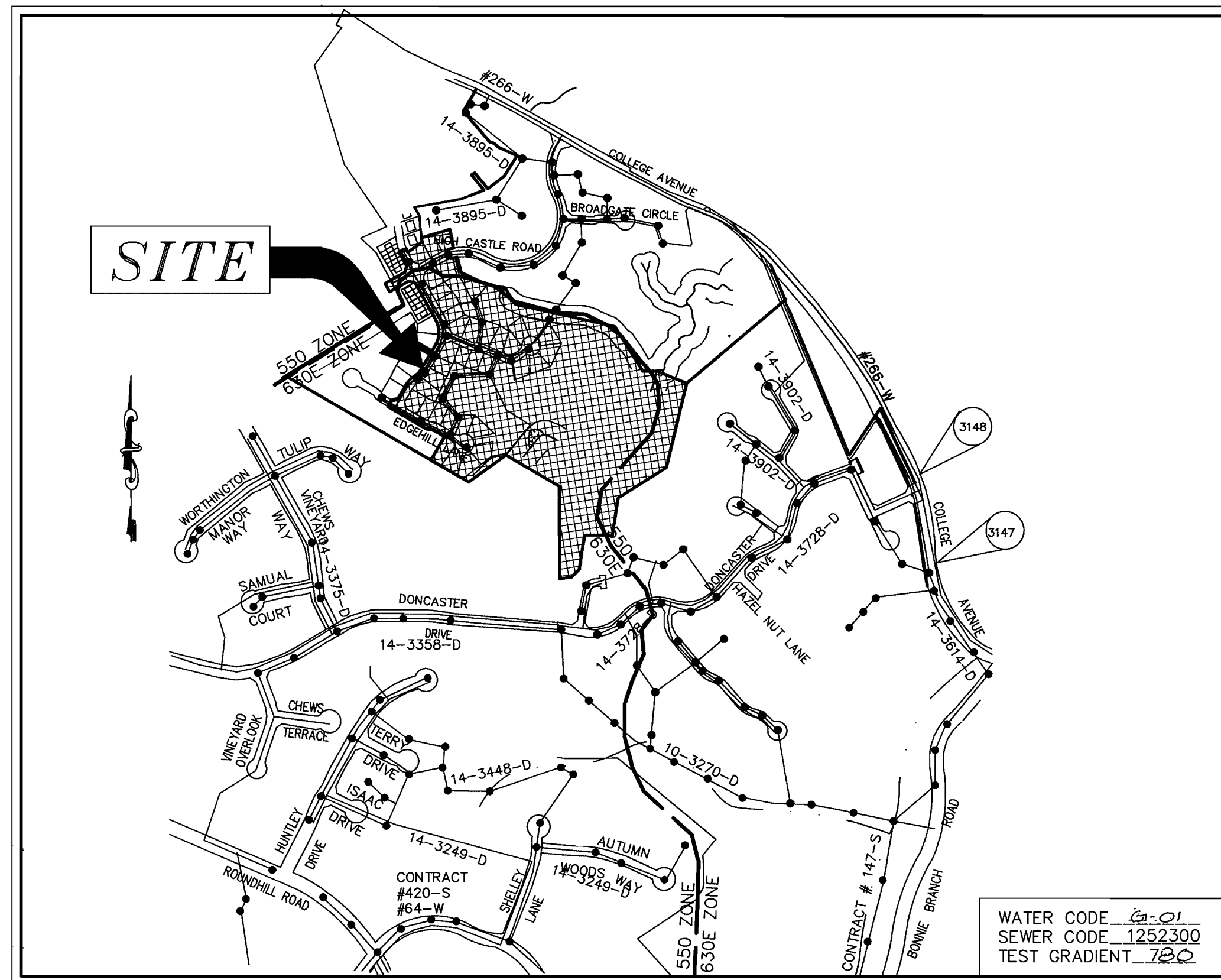
**WATER
AND SEWER
PLAN**

AUTUMN VIEW, SECTION 5
PHASE 2, LOTS 260-300
CONTRACT # 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
2 OF 6

99072\PHASE-2\DWG\WS-PLAN-1

QUANTITY TABLE				
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
DROP MH, TYPE "B" (HO. CO. STD. S-1.32)	3			
DROP MH, TYPE "A" (HO. CO. STD. S-1.32)	1			
8" SEWER MAIN	2,268 L.F.			
8" D.I.P.	419 L.F.			
4" SEWER HOUSE CONNECTION	1,480 L.F.			
# SEWER HOUSE CONNECTIONS	51 EACH			
8" WATER	2,043 L.F.			
12" WATER	330 L.F.			
1" WATER HOUSE CONNECTION	1,540 L.F.			
# 1" WHC	53 EACH			
# TWIN 1.5" WHC	5 EACH			
1.5" WATER HOUSE CONNECTION	100 L.F.			
F.H.	4 EACH			
12"x8" C	1 EACH			
8"x 8" T	2 EACH			
8"x6" T	4 EACH			
8"x4" T	1 EACH			
12" V	2 EACH			
6" V	4 EACH			
8" V	6 EACH			
8" CAP & BUTTRESS	4 EACH			
12" CAP & BUTTRESS	1 EACH			
1/8 H.B. (8")	1 EACH			
1/16 H.B. (8")	5 EACH			
1/32 H.B. (8")	5 EACH			
8" PRESSURE VALVE	1 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



VICINITY MAP
SCALE: 1"=600'

TYPE OF BUILDING	SFD
No. OF UNITS	38
No. OF FUTURE UNITS	23
No. OF WATER HOUSE CONNECTION	38 (FUTURE 23)
No. OF SEWER HOUSE CONNECTIONS	38 (FUTURE 23)
DRAINAGE AREA	BONNIE BRANCH, PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-01-38

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 ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- 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 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 DETAIL 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 (410) 531-5533
BG & E CO. CONTRACTOR SERVICES (410) 850-4620
BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068
MISS UTILITY 1-800-257-7777
COLONIAL PIPELINE CO. (410) 795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES (410) 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE 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 (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROASS 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 HOWARD COUNTY CODE.
- 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE 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.
- FOR SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. 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.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- SEDIMENT CONTROL TO BE PROVIDED BY F-01-38.
- ALL SEWER HOUSE CONNECTIONS TO BE 4" IN SIZE.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL HOUSES WILL HAVE SERVICE TO LOWEST FLOOR UNLESS OTHERWISE NOTED.
- THE EXISTING WELL AND SEPTIC SERVICING EXISTING HOUSE(S) ARE TO BE ABANDONED.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY. SEE ROAD PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

CONTRACT NO.: 14-3896-D

**AUTUMN VIEW, SECTION 5, PHASE II
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS**

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER PROFILES
4	WATER PROFILES
5	SEWER PROFILES
6	SEWER PROFILES

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Bruce Taylor, Pres 12/18/09
DEVELOPER'S SIGNATURE DATE
DEVELOPER'S NAME

Joy B. Mildenberg 12/24/01
ENGINEER'S SIGNATURE DATE
ENGINEER'S NAME

Jim Meyer 2/7/02
REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.
USDA NATURAL RESOURCES CONSERVATION SERVICE

John R. Redwood 2/7/02
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.
HOWARD SCD

PLAN REFERENCE NUMBERS

F-01-38
P-00-09
S-99-01

99072 (DWG) SECT 5 FINAL W&S COVER

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert B. ... 2-4-02
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
... 2/1/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 2104
(410) 997-0296 Fax (301) 621-5521 Wash. (410) 997-0298 Fax



engineering	M.P.				
illustration	M.P.				
approval	J.M.				
project	99072				
date	DEC. 2001	BY	NO.	REVISION	DATE

TITLE SHEET

600' SCALE MAP NO. ... 31 ... BLOCK NO. ... 3 & 4 ...

**AUTUMN VIEW, SECTION 5
PHASE 2 LOTS: 260-300**

CONTRACT NO.: 14-3896-D
SECOND ELECTION DISTRICT
HOWARD COUNTY

scale AS SHOWN
1 OF 6