

QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
STANDARD MH (HO. CO. STD.-5.01)	7			
8" SEWER MAIN (DIP)	1194 L.F.			
4" SEWER HOUSE CONNECTION	421 L.F.			
# SEWER HOUSE CONNECTIONS	4 EACH			
# DROP SEWER HOUSE CONNECTIONS	19 EACH			
# MANHOLE SEWER HOUSE CONNECTIONS	2 EACH			
8" WATER MAIN	1161 L.F.			
4" WATER MAIN	367 L.F.			
1" WATER HOUSE CONNECTION	454 L.F.			
# 1" WMC	25 EACH			
8" x 8" I.S. & V.	1 EACH			
4" CAP & BUTTRESS	2 EACH			
1/8 H.B. (8")	2 EACH			
1/16 H.B. (8")	2 EACH			
1/32 H.B. (8")	2 EACH			
45' WYE	1 EACH			
8"x4" R	2 EACH			
4" V	2 EACH			
F.H.	3 EACH			
8"x6" F.H.T. & V.	3 EACH			
1 1/2" DRAIN	2 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER SDP-02-138

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.

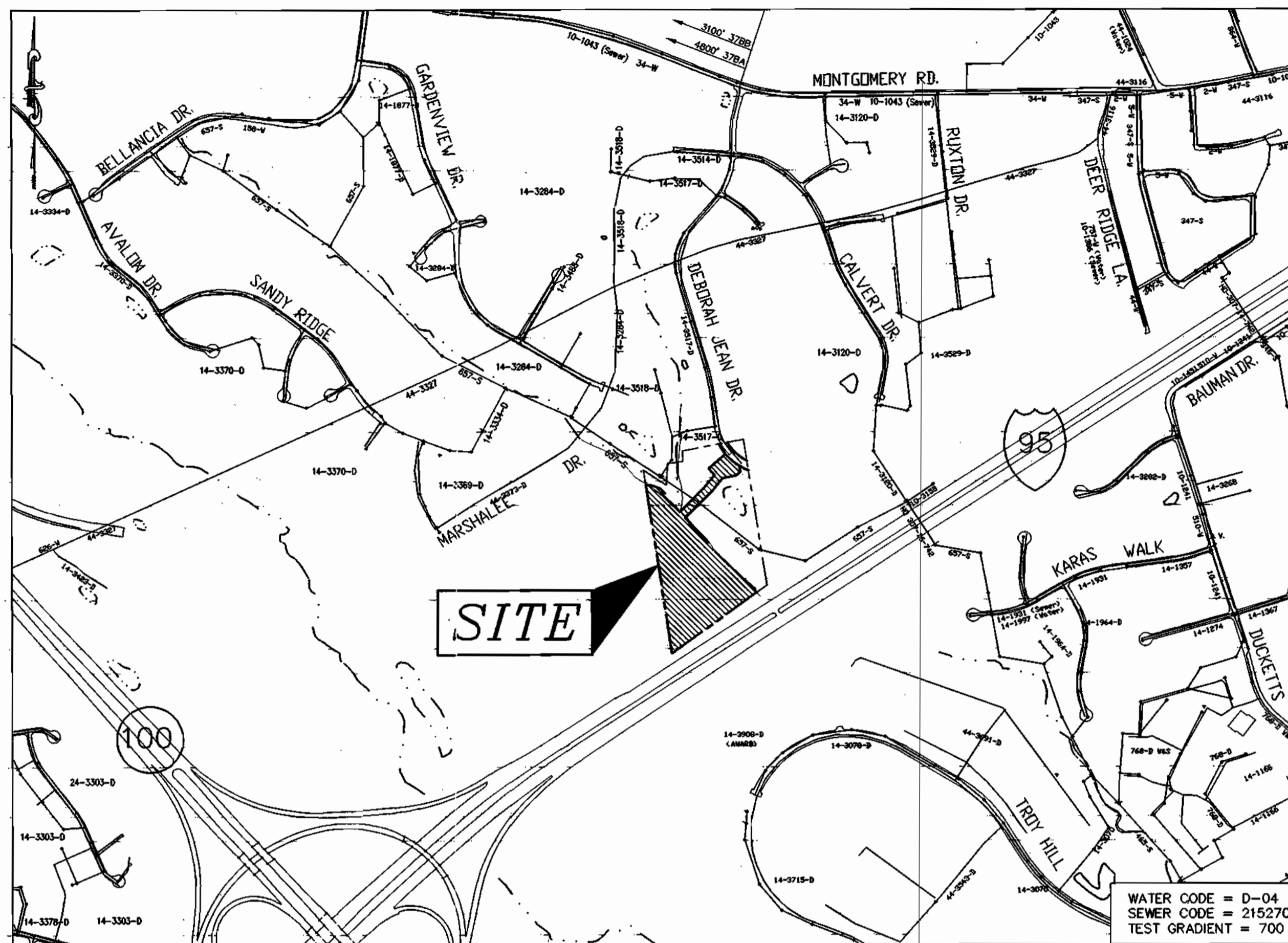
Neil L. Long 3/14/03
DEVELOPER'S SIGNATURE DATE

John B. Mildenberg 3/12/03
ENGINEER'S SIGNATURE DATE
JOHN B. MILDENBERG
ENGINEER'S NAME

Jim Muxey 3/27/03
USDA NATURAL RESOURCES CONSERVATION SERVICE DATE

John R. Robertson 3/27/03
HOWARD SOIL CONSERVATION DISTRICT DATE

PLAN REFERENCE NUMBERS:
SDP-02-138



VICINITY MAP

SCALE 1"=600'

TYPE OF BUILDING	SFA
No. OF UNITS	25
No. OF WATER HOUSE CONNECTION	25
No. OF SEWER HOUSE CONNECTIONS	25
DRAINAGE AREA	PATAPSCO
TREATMENT PLANT	PATAPSCO WWTP

WATER CODE = D-04
SEWER CODE = 2152700
TEST GRADIENT = 700

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 NAD83/91 AS PROJECTED BY HOWARD COUNTY HORIZONTAL AND VERTICAL GEODETIC CONTROL NOS. 37C3 & 37F3. THESE WATER AND SEWER DRAWINGS ARE BASED ON A FIELD RUN TOPOGRAPHIC STUDY PERFORMED BY MILDENBERG, BOENDER AND ASSOCIATES, INC. ON OR ABOUT JANUARY 2001.
- 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 12". 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 TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND 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 (410) 313-4900
BUREAU OF UTILITIES (800) 446-5266
BELL ATLANTIC (800) 446-5266
- 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.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 05.52. 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.H.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 SDP-02-138.
- 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.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER PROFILE
4	SEWER PROFILE

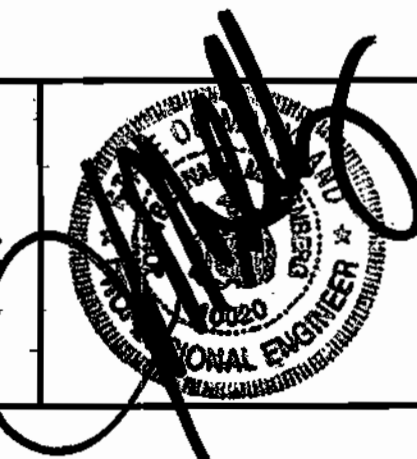
CONTRACT NO.: 14-4092-D
FAIRWAY OVERLOOK
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

OWNER
5072 PROPERTY, LLC
C/O MILDENBERG, BOENDER AND ASSOC., INC.
5072 DORSEY HALL DRIVE SUITE 202
ELLCOTT CITY, MARYLAND 21043
(410)997-0296

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 21043
(410) 997-0296 Bulk (301) 621-5521 Fax (410) 997-0298 E-Mail



engineering HSP
illustration HSP
approval JBM
project 00-085
date MAR 2003 BY NO. REVISION DATE 600' SCALE MAP NO. 37 BLOCK NO. 11

TITLE SHEET

FAIRWAY OVERLOOK

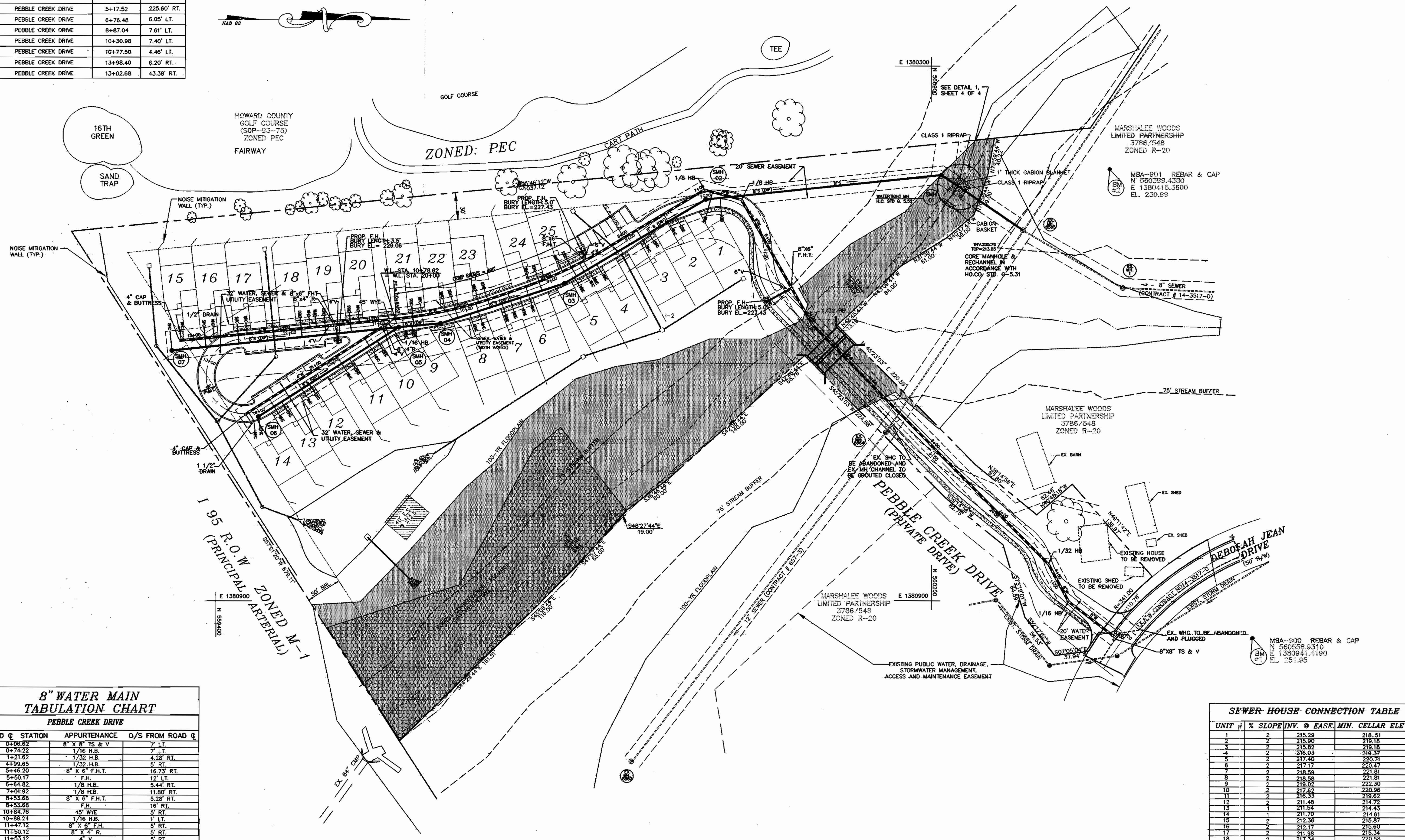
CONTRACT NO.: 14-4092-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale AS SHOWN

1 OF 4

MANHOLE LOCATION CHART

SMH#	ROAD NAME	CL STATION	OFFSET
01	PEBBLE CREEK DRIVE	5+17.52	225.60' RT.
02	PEBBLE CREEK DRIVE	6+76.48	6.05' LT.
03	PEBBLE CREEK DRIVE	8+87.04	7.61' LT.
04	PEBBLE CREEK DRIVE	10+30.98	7.40' LT.
05	PEBBLE CREEK DRIVE	10+77.50	4.46' LT.
06	PEBBLE CREEK DRIVE	13+98.40	6.20' RT.
07	PEBBLE CREEK DRIVE	13+02.68	43.38' RT.



8" WATER MAIN TABULATION CHART
PEBBLE CREEK DRIVE

ROAD C STATION	APPURTENANCE	O/S FROM ROAD C
0+06.82	8" X 8" TS & V	7' LT.
0+74.22	1/16 H.B.	7' LT.
1+21.62	1/32 H.B.	4.28' RT.
4+99.65	1/32 H.B.	5' RT.
5+46.20	8" X 6" F.H.T.	16.73' RT.
5+50.17	F.H.	12' LT.
6+54.82	1/8 H.B.	5.44' RT.
7+01.92	1/8 H.B.	11.90' RT.
8+53.68	8" X 6" F.H.T.	5.28' RT.
8+53.68	F.H.	10' RT.
10+84.76	45° WYE	5' RT.
10+88.24	1/16 H.B.	1' LT.
11+47.12	8" X 6" F.H.	5' RT.
11+50.12	8" X 4" R.	5' RT.
11+53.12	4" V.	5' RT.
12+95.35	1 1/2" DRAIN	38.58' RT.
13+97.35	4" CAP & BUTTRISS	43.94' RT.
13+84.05	4" CAP & BUTTRISS	1.42' LT.
13+88.97	1 1/2" DRAIN	12.10' LT.
14+94.76	4" V.	5' LT.
14+97.76	8" X 4" R.	5' LT.

SEWER HOUSE CONNECTION TABLE

UNIT #	% SLOPE	INV. @ EASE.	MIN. CELLAR ELEV.
1	2	215.29	218.51
2	2	215.95	219.18
3	2	215.82	219.18
4	2	216.03	219.37
5	2	217.40	220.71
6	2	217.17	220.47
7	2	218.59	221.81
8	2	218.58	221.81
9	2	219.02	222.30
10	2	217.42	220.96
11	2	216.33	219.62
12	2	211.48	214.72
13	1	211.54	214.43
14	1	211.70	214.61
15	2	212.36	215.87
16	2	212.17	215.60
17	2	211.95	215.34
18	2	217.34	220.58
19	2	218.61	221.92
20	2	223.57	223.98
21	2	220.58	223.98
22	2	220.25	223.47
23	2	219.58	222.82
24	2	219.08	222.26
25	2	218.46	221.59

OWNER/DEVELOPER
5072 PROPERTY, LLC
C/O MILDENBERG, BOENDER AND ASSOC., INC.
5072 DORSEY HALL DRIVE SUITE 202
ELLCOTT CITY, MARYLAND 21042
(410) 990-0296

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R.H. B... 3-18-03
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
... 4/15/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 991-0296 Dalt. (301) 821-8521 Wash. (410) 397-0296 Fax



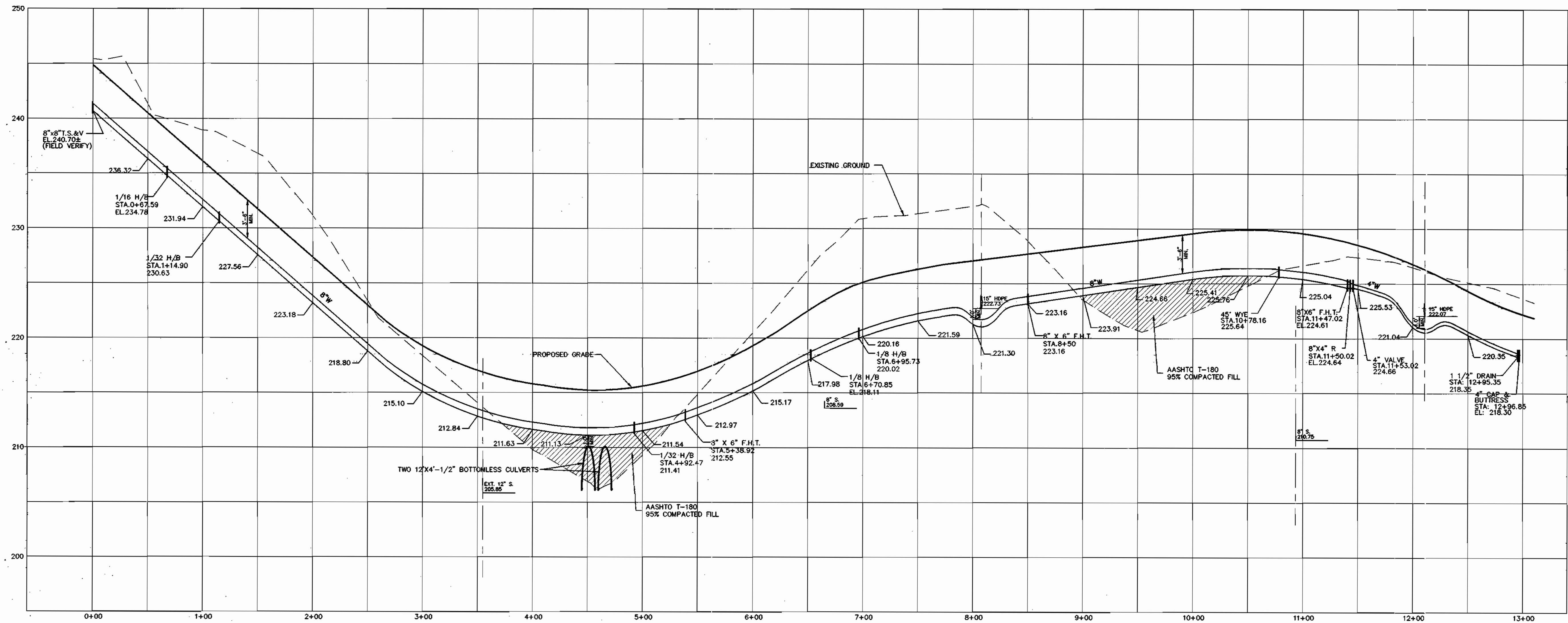
engineering	illustration	approval	project	date	BY	NO.	REVISION	DATE
HSP	HSP	JBM	00-085	MAR 2003				

WATER AND SEWER PLAN
600' SCALE MAP NO. 37 BLOCK NO. 11

FAIRWAY OVERLOOK

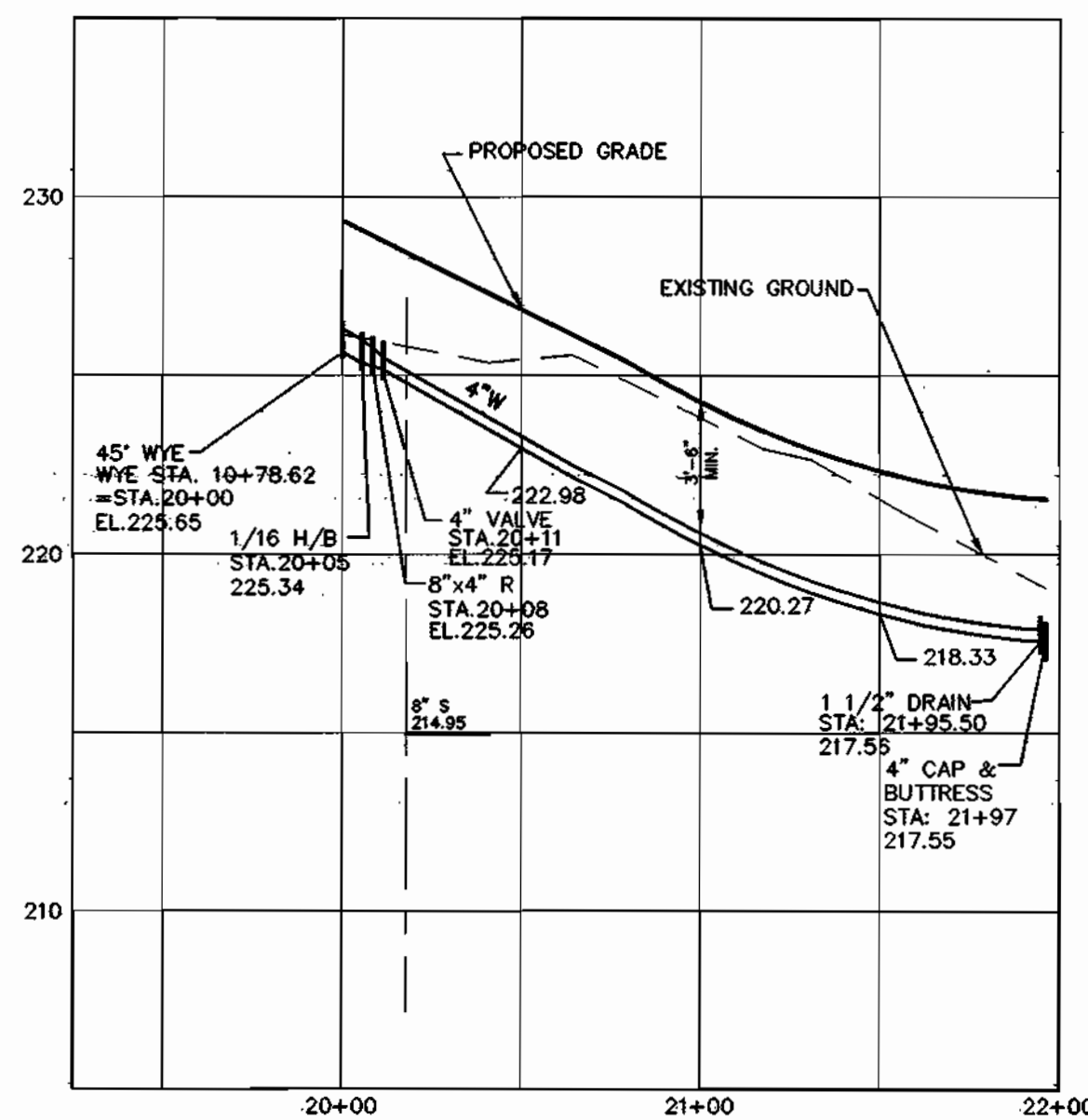
CONTRACT NO.: 14-4092-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
1"=50'
2 of 4



WATER MAIN PROFILE

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

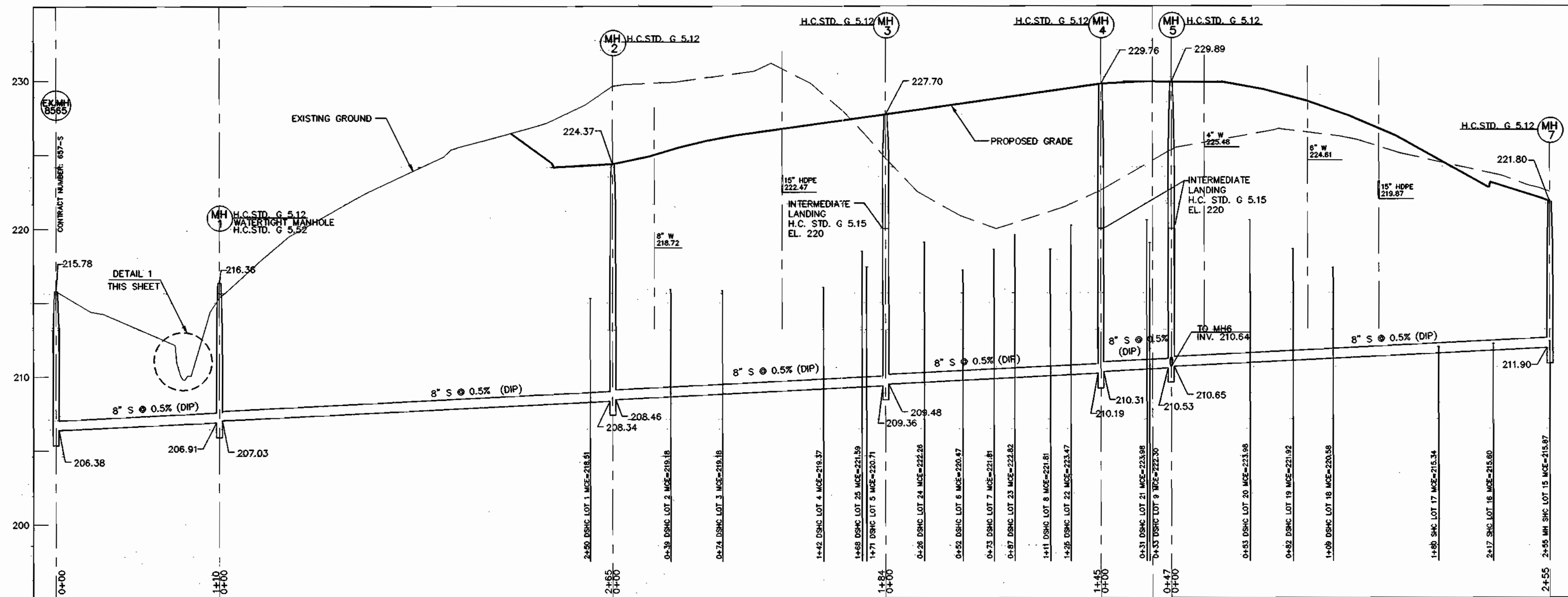


WATER MAIN PROFILE

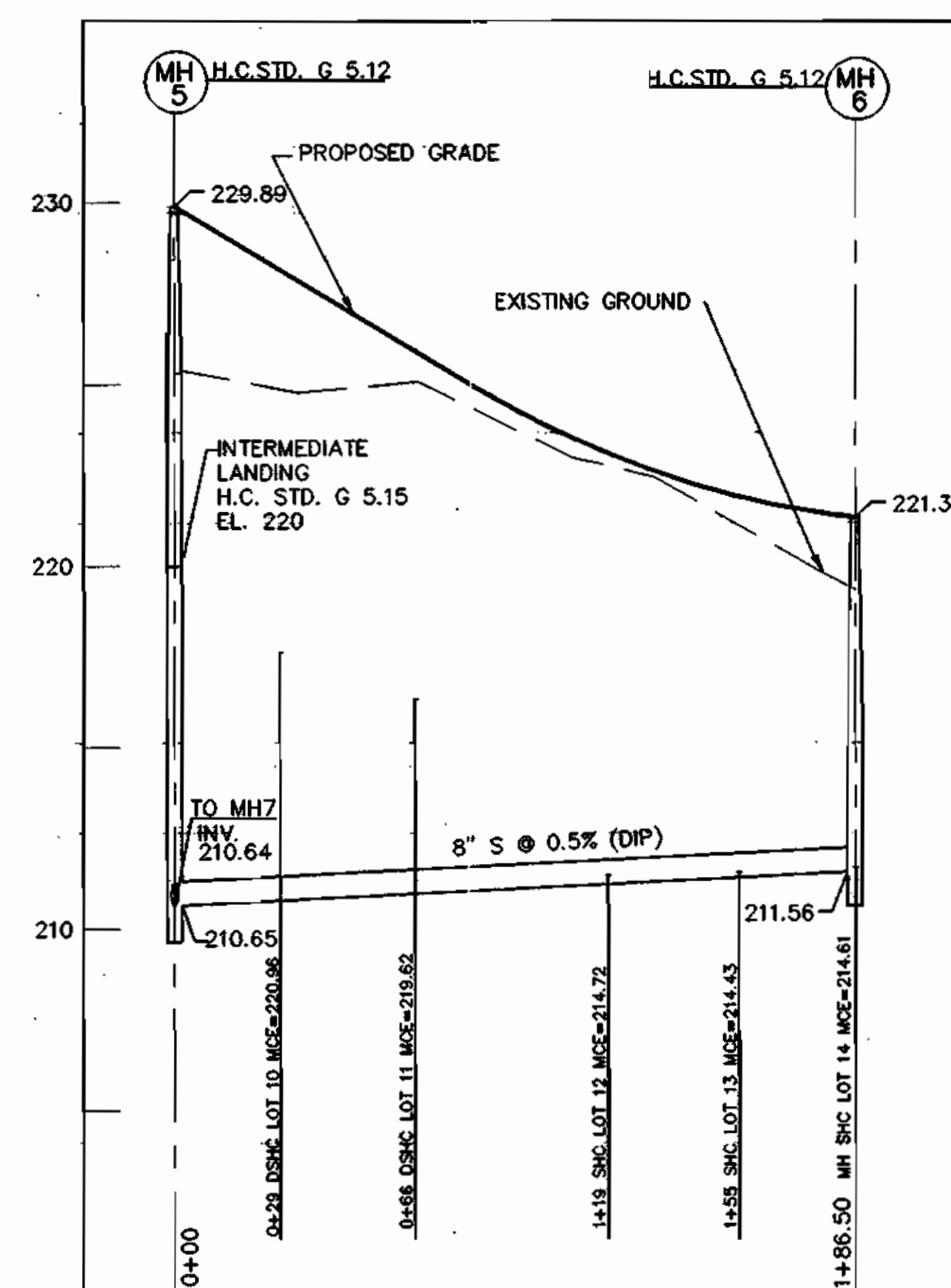
SCALE: HOR. 1"=50'
VER. 1"=5'

00-065.DWG\MS\065-WATER PROFILE.DWG

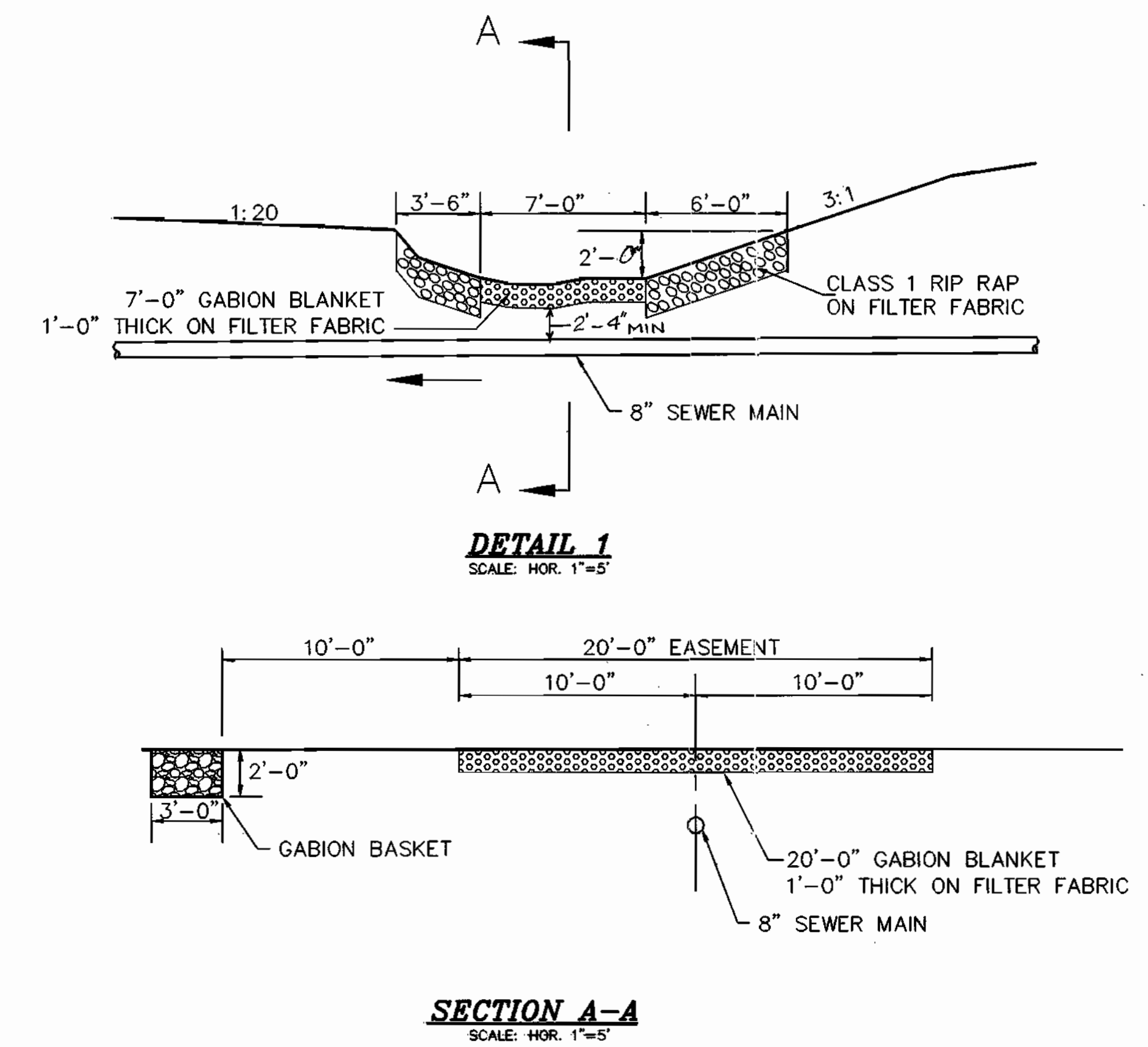
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND R. L. ... 3-18-03 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND ... 4/1/03 CHIEF, DEVELOPMENT ENGINEERING DIVISION	MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042 (410) 997-0286, Fax (301) 621-5521, Wash. (410) 997-0288	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>engineering</td><td>HSP</td></tr> <tr><td>illustration</td><td>HSP</td></tr> <tr><td>approval</td><td>JBM</td></tr> <tr><td>project</td><td>00-065</td></tr> <tr><td>date</td><td>MAR 2003</td></tr> <tr><td>BY</td><td>NO.</td></tr> <tr><td>REVISION</td><td></td></tr> <tr><td>DATE</td><td></td></tr> </table>	engineering	HSP	illustration	HSP	approval	JBM	project	00-065	date	MAR 2003	BY	NO.	REVISION		DATE		<h2 style="margin: 0;">WATER PROFILE</h2>	<h2 style="margin: 0;">FAIRWAY OVERLOOK</h2> <p style="font-size: small; margin: 0;">CONTRACT NO.: 14-4092-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>	scale AS SHOWN 3 OF 4
engineering	HSP																					
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				600' SCALE MAP NO. 37 BLOCK NO. 11																		



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



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



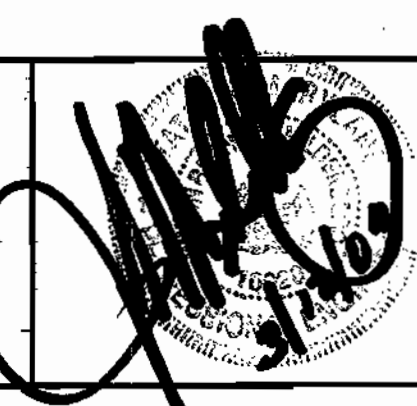
DETAIL 1
SCALE: HOR. 1"=5'

SECTION A-A
SCALE: HOR. 1"=5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
3-18-03
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
4/10/03
DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21032
(410) 997-0286 Balt. (301) 521-5521 Wash. (410) 997-0288 Pa.



engineering	HSP				
illustration	ESB				
approval	JBM				
project	00-065				
date	MAR 2003	BY	NO.	REVISION	DATE

SEWER PROFILE
600' SCALE MAP NO. 37 BLOCK NO. 11

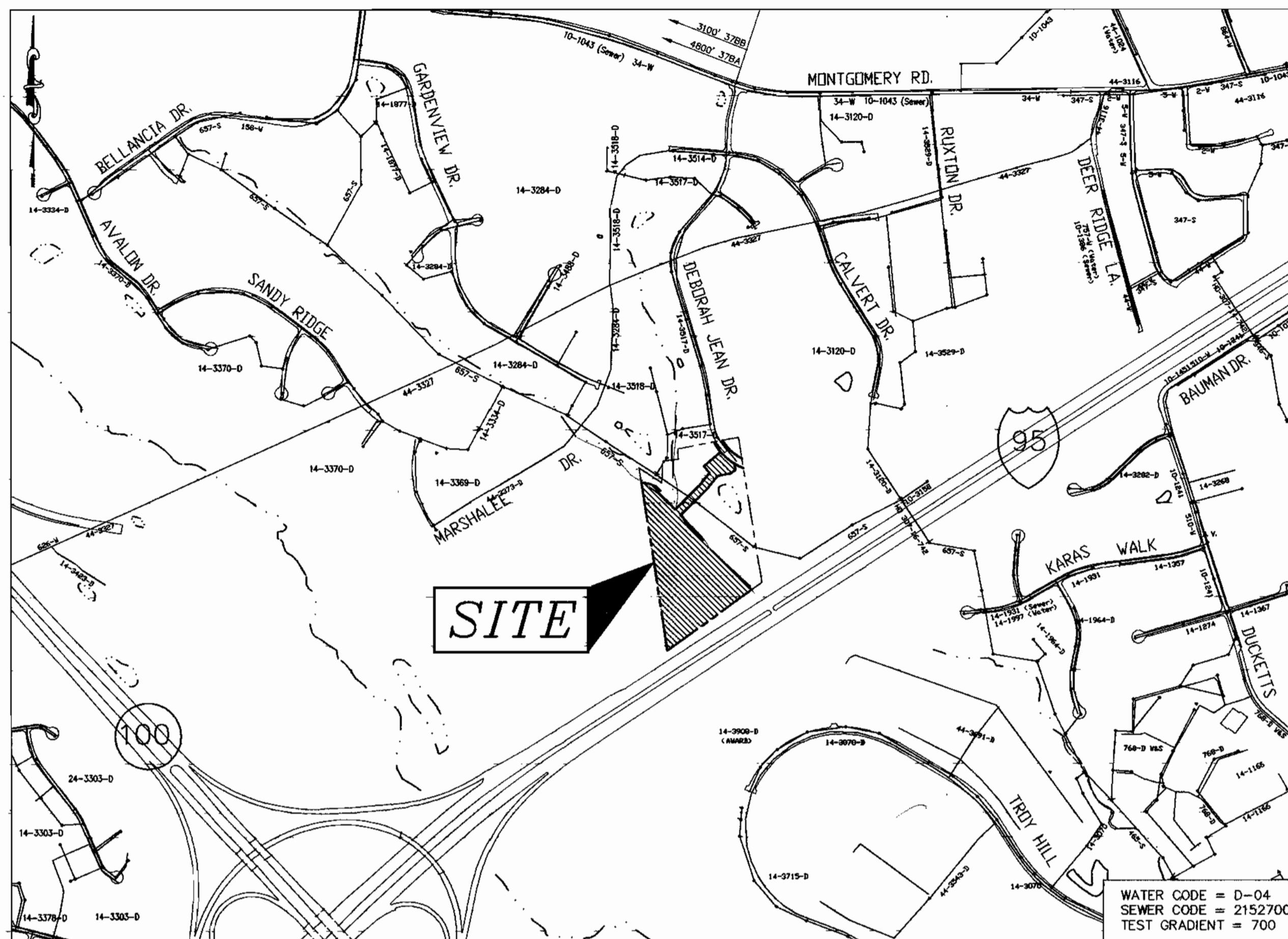
FAIRWAY OVERLOOK
CONTRACT NO.: 14-4092-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
AS SHOWN
4 OF 4

QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
STANDARD MH (HO. CO. STD.G-5.01)	7	7EA.	PRECAST	HANSON/HANSON PIPE
8" SEWER MAIN (DIP)	1194 L.F.	1170 EA.	CL-52	ATLANTIC STATES/NATIONAL
4" SEWER HOUSE CONNECTION	421 L.F.	380 EA.	CL-52	GRIFFIN PIPE/BELAIR RD. SUPPLY
# SEWER HOUSE CONNECTIONS	4 EACH	4 EA.	"	"
# DROP SEWER HOUSE CONNECTIONS	19 EACH	19 EA.	"	"
# MANHOLE SEWER HOUSE CONNECTIONS	2 EACH	2 EA.	"	"
8" WATER MAIN	1161 L.F.	1153 L.F.	CL-52	ATLANTIC STATES/NATIONAL WATER WORKS
4" WATER MAIN	367 L.F.	336 L.F.	CL-52	"
1" WATER HOUSE CONNECTION	454 L.F.	434 L.F.	KOPPER	CAMBRIDGE LEE/BELAIR RD SUPPLY
# 1" WHC	25 EACH	25EA.	"	"
8" x 8" T.S. & V.	1 EACH	1EA.	HG15M3	MOELLER/NATIONAL WATER WORK
4" CAP & BUTTRESS	2 EACH	2EA.	M.J.	U.S. PIPE/BELAIR RD. SUPPLY
1/8 H.B. (8")	2 EACH	2EA.	M.J.	"
1/16 H.B. (8")	2 EACH	2EA.	M.J.	"
1/32 H.B. (8")	2 EACH	2EA.	M.J.	"
45° WYE	1 EACH	1EA.	M.J.	"
8"x4" R	2 EACH	2EA.	M.J.	"
4" V	2 EACH	2EA.	GATE VAL.	MUELLER/BELAIR RD. SUPPLY
F.H.	3 EACH	3EA.	"	"
8"x6" F.H.T. & V.	3 EACH	3EA.	GATE VAL.	U.S. PIPE & MOELLER/BELAIR RD. SUPPLY
1 1/2" DRAIN	2 EACH	2EA.	BRASS	MERIT/BELAIR RD. SUPPLY
NAME OF UTILITY CONTRACTOR: ROB HARRIS INC.				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE JULY 2004				

WATER WORKS



VICINITY MAP

SCALE 1"=600'

TYPE OF BUILDING	SFA
No. OF UNITS	25
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DRAINAGE AREA	PATAPSCO
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MISS UTILITY (410) 257-7777
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BUREAU OF UTILITIES (800) 446-5266
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- 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.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 05.52. 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 SDP-02-138.
- 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.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER SDP-02-138

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.

Neil L. Long 3/14/03
DEVELOPER'S SIGNATURE DATE
DEVELOPER'S NAME: *Neil Long Inc.*

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 HOWARD SOIL CONSERVATION DISTRICT.

J. B. Mildenberg 3/12/03
ENGINEER'S SIGNATURE DATE
ENGINEER'S NAME: JOHN B. MILDENBERG

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

Jim Moxey 3/27/03
USDA-NRCS RESOURCES CONSERVATION SERVICE DATE

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

John R. Robinson 3/27/03
HOWARD SCD DATE

PLAN REFERENCE NUMBERS:
SDP-02-138

**CONTRACT NO.: 14-4092-D
FAIRWAY OVERLOOK
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 PROFILE
4	SEWER PROFILE

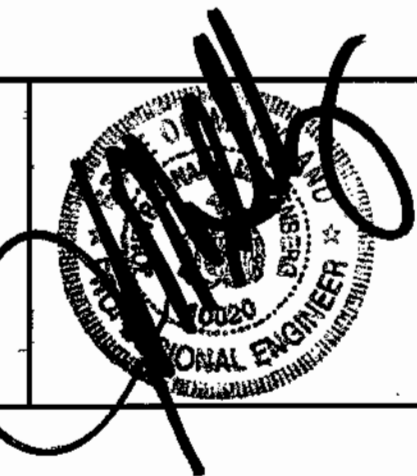
OWNER
5072 PROPERTY, LLC
C/O MILDENBERG, BOENDER AND ASSOC., INC.
5072 DORSEY HALL DRIVE SUITE 202
ELICOTT CITY, MARYLAND 21043
(410)997-0296

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, Elicott City, Maryland 21042
(410) 997-0296 Baltimore (301) 621-5521 Wash. (410) 997-0298 Fax



engineering HSP				
illustration HSP				
approval JBM				
project 00-065	KCI	1	WATER/SEWER AS-BUILT DATA	8/1/04
date MAR 2003	BY	NO.	REVISION	DATE

TITLE SHEET

FAIRWAY OVERLOOK

CONTRACT NO.: 14-4092-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

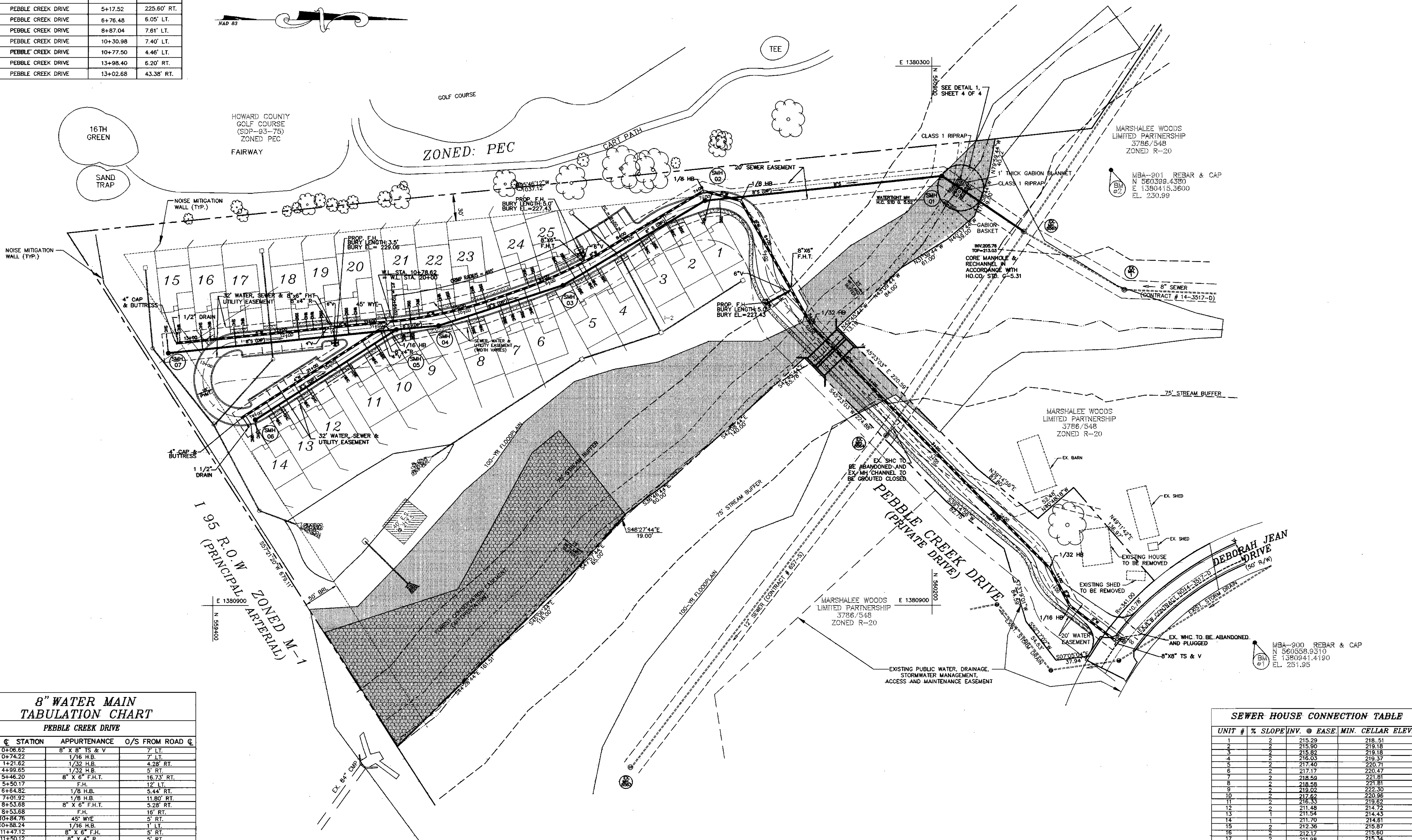
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1 OF 4

DC-065 (1/01) V.S. 065-COVERING

MANHOLE LOCATION CHART

SMH#	ROAD NAME	CL STATION	OFFSET
01	PEBBLE CREEK DRIVE	5+17.52	225.60' RT.
02	PEBBLE CREEK DRIVE	6+76.48	6.05' LT.
03	PEBBLE CREEK DRIVE	8+87.04	7.61' LT.
04	PEBBLE CREEK DRIVE	10+30.98	7.40' LT.
05	PEBBLE CREEK DRIVE	10+77.50	4.46' LT.
06	PEBBLE CREEK DRIVE	13+98.40	6.20' RT.
07	PEBBLE CREEK DRIVE	13+02.68	43.38' RT.



8" WATER MAIN TABULATION CHART

PEBBLE CREEK DRIVE

ROAD C	STATION	APPURTENANCE	O/S FROM ROAD C
0+06.62		8" X 8" TS & V	7' LT.
0+74.22		1/16 H.B.	7' LT.
1+21.62		1/32 H.B.	4.28' RT.
4+99.65		1/32 H.B.	5' RT.
5+46.20		8" X 6" F.H.T.	16.73' RT.
5+50.17		F.H.	12' LT.
6+64.82		1/8 H.B.	5.44' RT.
7+91.92		1/8 H.B.	11.80' RT.
8+53.68		8" X 6" F.H.T.	5.28' RT.
8+53.68		F.H.	16' RT.
10+84.76		45' WYE	5' RT.
10+88.24		1/16 H.B.	1' LT.
11+47.12		8" X 6" F.H.	5' RT.
11+50.12		8" X 4" R.	5' RT.
11+53.12		4" V.	5' RT.
12+95.35		1 1/2" DRAIN	38.58' RT.
12+97.20		4" CAP & BUTTRESS	43.94' RT.
13+84.06		4" CAP & BUTTRESS	1.42' LT.
13+88.97		1 1/2" DRAIN	12.10' LT.
14+94.76		4" V.	5' LT.
14+97.76		8" X 4" R.	5' LT.

SEWER HOUSE CONNECTION TABLE

UNIT #	% SLOPE	INV. @ EASE MIN.	CELLAR ELEV.
1	2	215.29	218.51
2	2	215.90	219.18
3	2	215.82	219.18
4	2	216.03	219.37
5	2	217.40	220.71
6	2	217.17	220.47
7	2	218.59	221.81
8	2	218.58	221.81
9	2	218.62	222.30
10	2	217.62	220.96
11	2	216.33	219.62
12	2	211.48	214.72
13	1	211.54	214.43
14	1	211.70	214.61
15	2	212.36	215.87
16	2	212.17	215.60
17	2	211.98	215.34
18	2	217.34	220.58
19	2	218.61	221.92
20	2	220.57	223.98
21	2	220.58	223.98
22	2	220.22	223.47
23	2	218.58	222.82
24	2	219.08	223.28
25	2	218.46	221.59

OWNER/DEVELOPER
 5072 PROPERTY, LLC
 C/O MILDENBERG, BOENDER AND ASSOC., INC.
 5072 DORSEY HALL DRIVE SUITE 202
 ELLICOTT CITY, MARYLAND 21042
 (410) 990-0296

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

R. L. B... 3-18-03
CHIEF, BUREAU OF UTILITIES DATE

M. D... 4/3/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0286 Fax: (301) 621-5621 Wash. (410) 997-0288 Fax

engineering	HSP	illustration	HSP	approval	JBM	project	00-065	date	MAR 2003	BY	NO.	REVISION	DATE

WATER AND SEWER PLAN

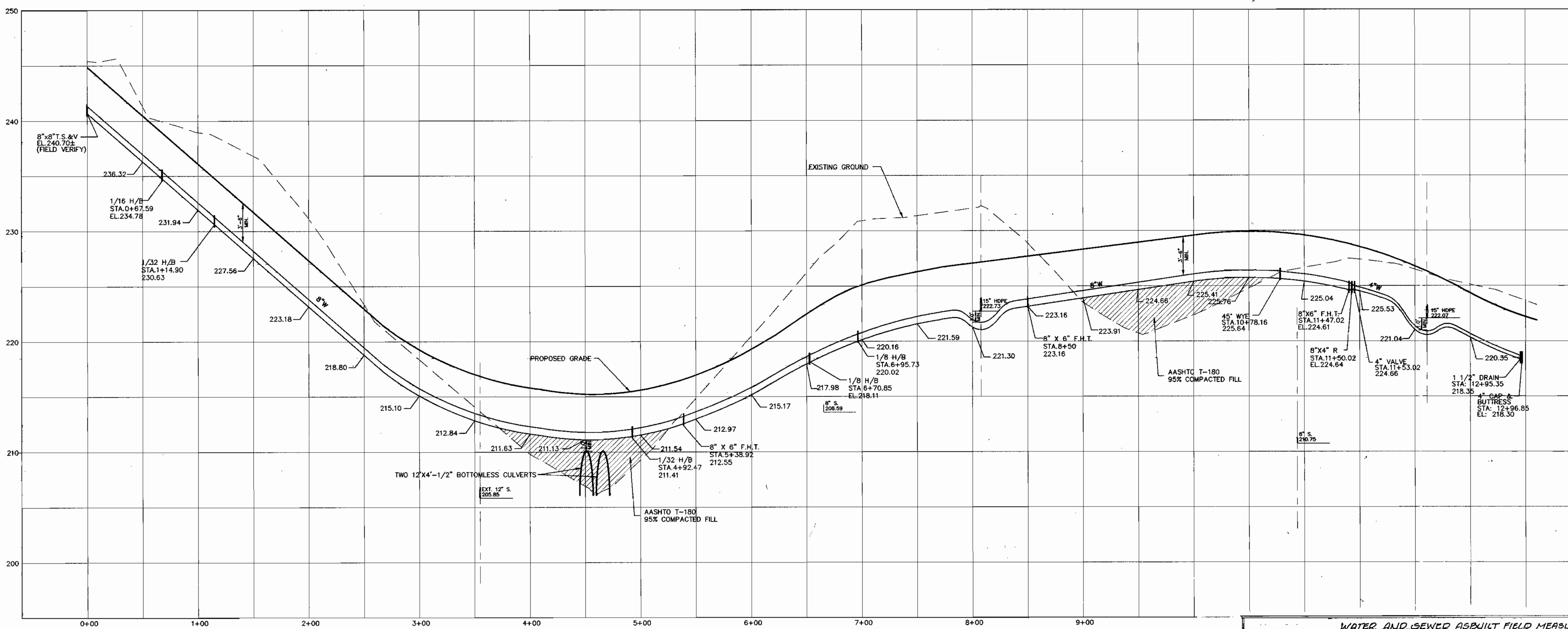
600' SCALE MAP NO. 37 BLOCK NO. 11

FAIRWAY OVERLOOK

CONTRACT NO.: 14-4092-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

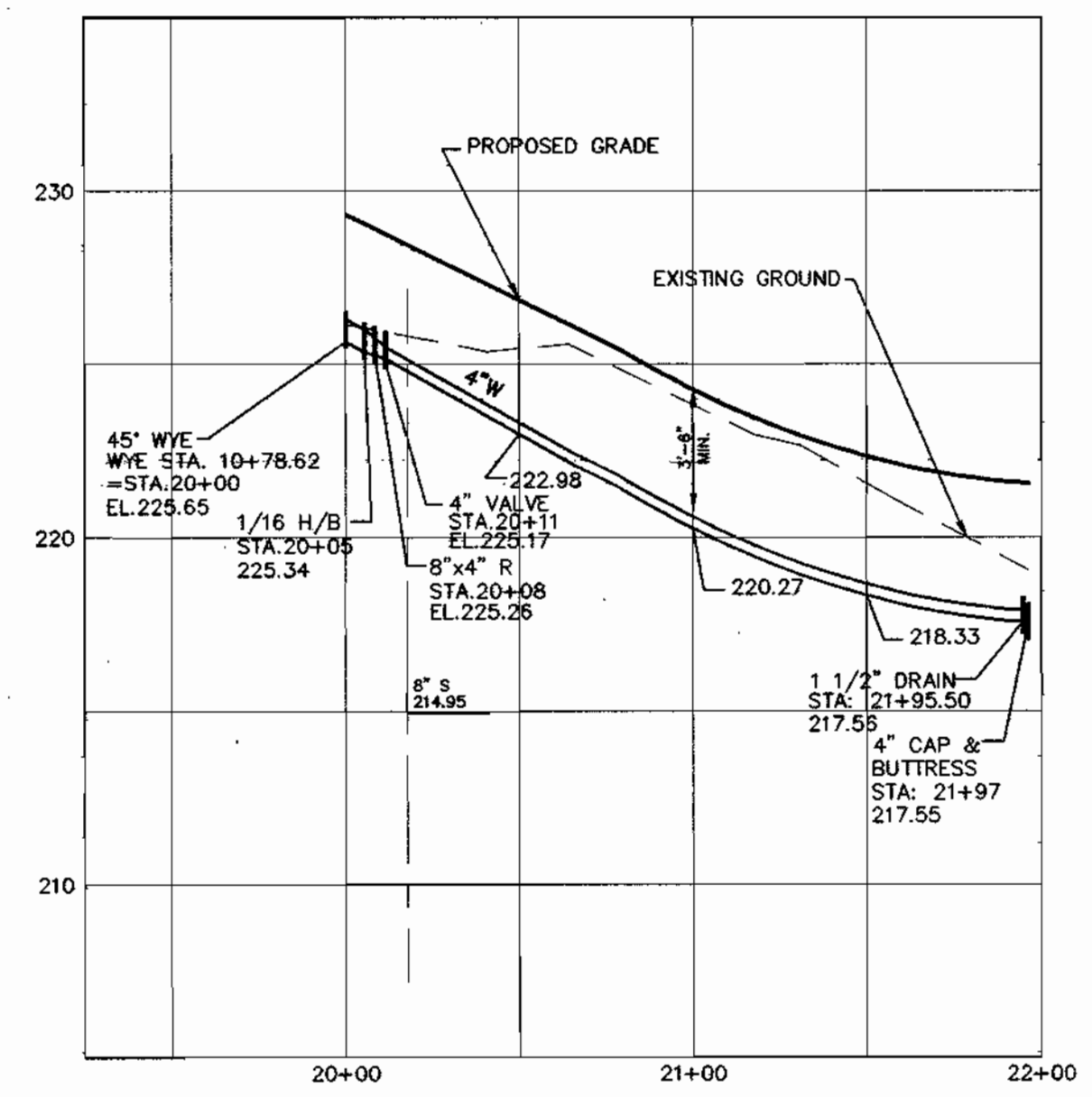
scale
1"=50'

2 OF 4



WATER MAIN PROFILE

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



WATER MAIN PROFILE

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

WATER AND SEWER ASBUILT FIELD MEASUREMENTS											
LOT #	FROM	TO	DIST (FT)	REMARKS	LOT #	FROM	TO	DIST (FT)	REMARKS		
	T.S. 8" V	VALVE	EX. S.D.	17.0	T.S. 8" V	1/2" DR.	1/2" DR.	WHC 14	23.5		
	F.H.V.	EX. S.D.	EX. F.H.	17.0				WHC 15	11.0		
		F.H. 6" S	6" VAL	28.0	LOT 15			SHC 15	MH 7	10.5	
LOT 1	SHC 1	WHC 1	10.0	N/E HEADWALL				WHC 15	MH 7	25.0	
	SHC 1	MH 2	27.5		1/2" DR.	1/2" DR.		SHC 15	MH 7	27.0	
	WHC 1	MH 2	10.0					SHC 15	MH 7	21.0	
LOT 2	SHC 2	WHC 2	7.0		LOT 16	SHC 16	WHC 16	9.0			
	SHC 2	MH 2	45.0					SHC 16	MH 7	48.0	
	WHC 2	MH 2	49.0					WHC 16	MH 7	55.0	
LOT 3	SHC 3	WHC 3	8.5		LOT 17	SHC 17	WHC 17	9.5			
	SHC 3	MH 2	72.0					SHC 17	MH 7	82.0	
	WHC 3	MH 2	80.0					WHC 17	MH 7	50.0	
LOT 4	SHC 4	WHC 4	9.5		LOT 18	SHC 18	FH 1150	51.0			
	SHC 4	MH 3	45.0					SHC 18	MH 5	111.0	
	WHC 4	MH 3	36.0					WHC 18	FH 1150	43.5	
LOT 5	SHC 5	WHC 5	17.0					WHC 18	MH 5	101.0	
	SHC 5	MH 3	13.0		LOT 19						
	WHC 5	MH 3	20.0								
F.H.V.	F.H.V. 6"	F.H. 8" S	37.0	STA 8+50							
LOT 6	SHC 6	WHC 6	11.0		LOT 20						
	SHC 6	MH 3	53.5								
	WHC 6	MH 3	42.0								
LOT 7	SHC 7	WHC 7	12.5		LOT 21						
	SHC 7	MH 3	75.5								
	WHC 7	MH 3	64.0								
LOT 8	SHC 8	WHC 8	10.5		LOT 22						
	SHC 8	MH 4	37.0								
	WHC 8	MH 4	48.0		LOT 23						
LOT 9	SHC 9	MH 4	36.5								
	SHC 9	MH 5	18.0								
	WHC 9	MH 4	43.0		LOT 24						
	WHC 9	MH 5	16.0								
LOT 10	SHC 10	WHC 10	8.5		LOT 25						
	SHC 10	MH 5	32.0								
	WHC 10	MH 5	38.0								
LOT 11	SHC 11	WHC 11	9.0								
	SHC 11	FH 1150	24.0								
	WHC 11	FH 1150	36.0								
LOT 12	SHC 12	FH 1150	62.0								
	SHC 12	MH 6	36.0								
	WHC 12	FH 1150	73.0								
	WHC 12	MH 6	24.5								
LOT 13	SHC 13	WHC 13	10.5								
	SHC 13	MH 6	70.0		6" VAL.	6" VAL.	F.H.	16.5	STA 11+50		
	WHC 13	MH 6	61.5		4" VAL.	4" VAL.	F.H.	17.0	STA 11+50		
LOT 14	SHC 14	WHC 14	9.0								
	SHC 14	MH 6	13.5		4" VAL.	4" VAL.	MH 5	12.0	STA 16+00		
	WHC 14	MH 6	10.5		4" VAL.	4" VAL.	F.H.	57.5	STA 11+50		

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. J. ... 3-18-03
CHIEF, BUREAU OF UTILITIES

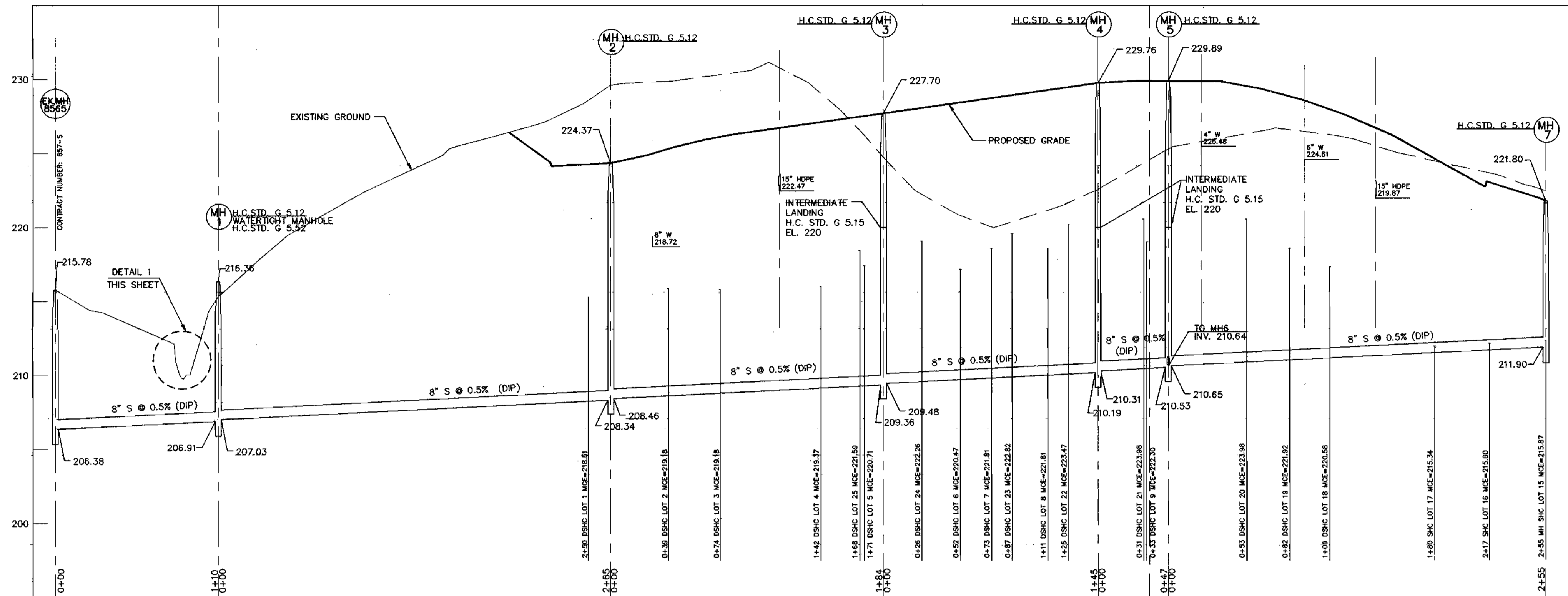
DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
... 4/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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engineering HSP
illustration HSP
approval JBM
project 00-065
date MAR 2003
BY NO. REVISION
DATE 8/12/04
WATER/SEWER ASBUILT DATA

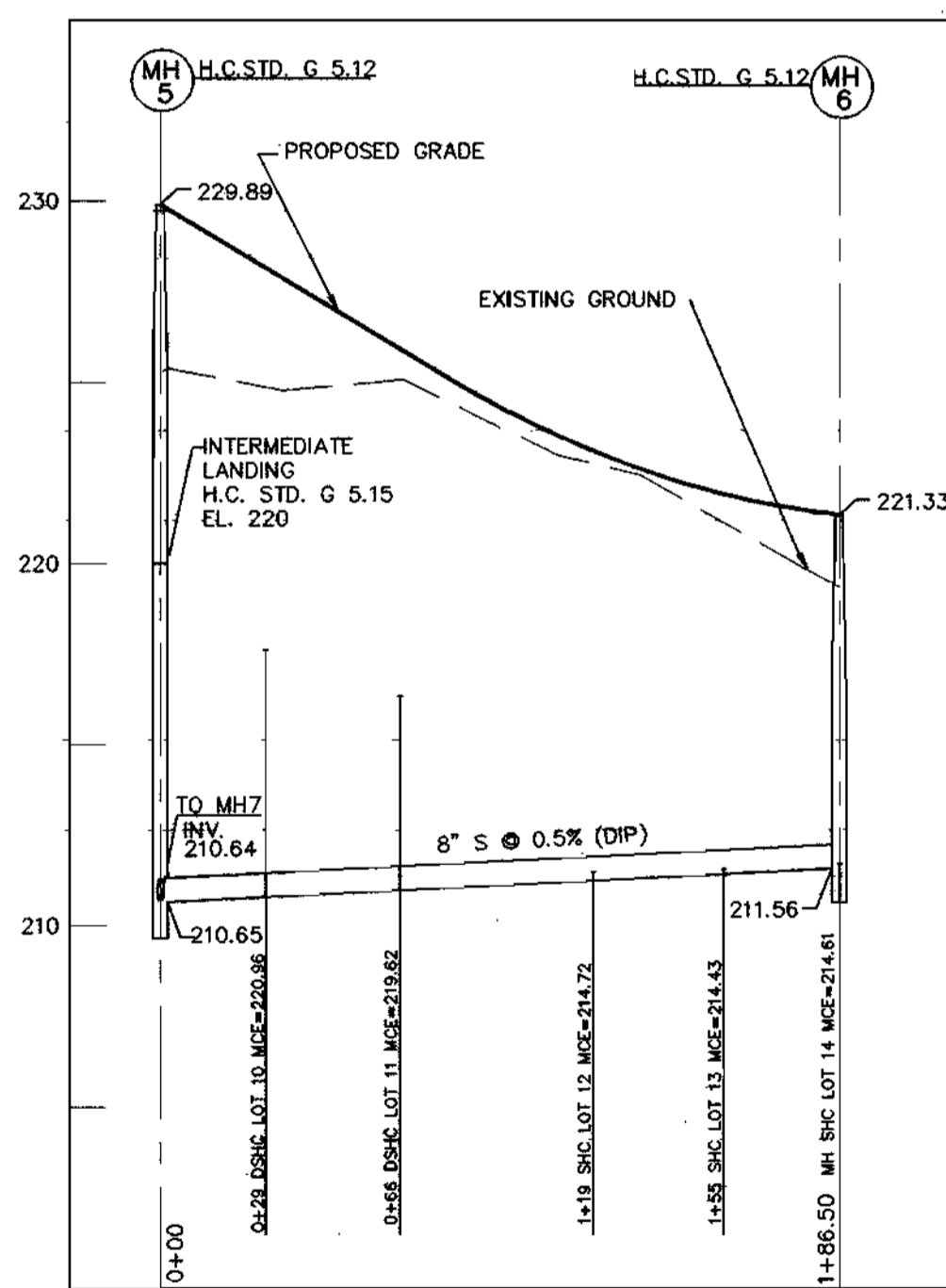
WATER PROFILE
600' SCALE MAP NO. 37 BOOK NO. 11

SCALE AS SHOWN
3 of 4



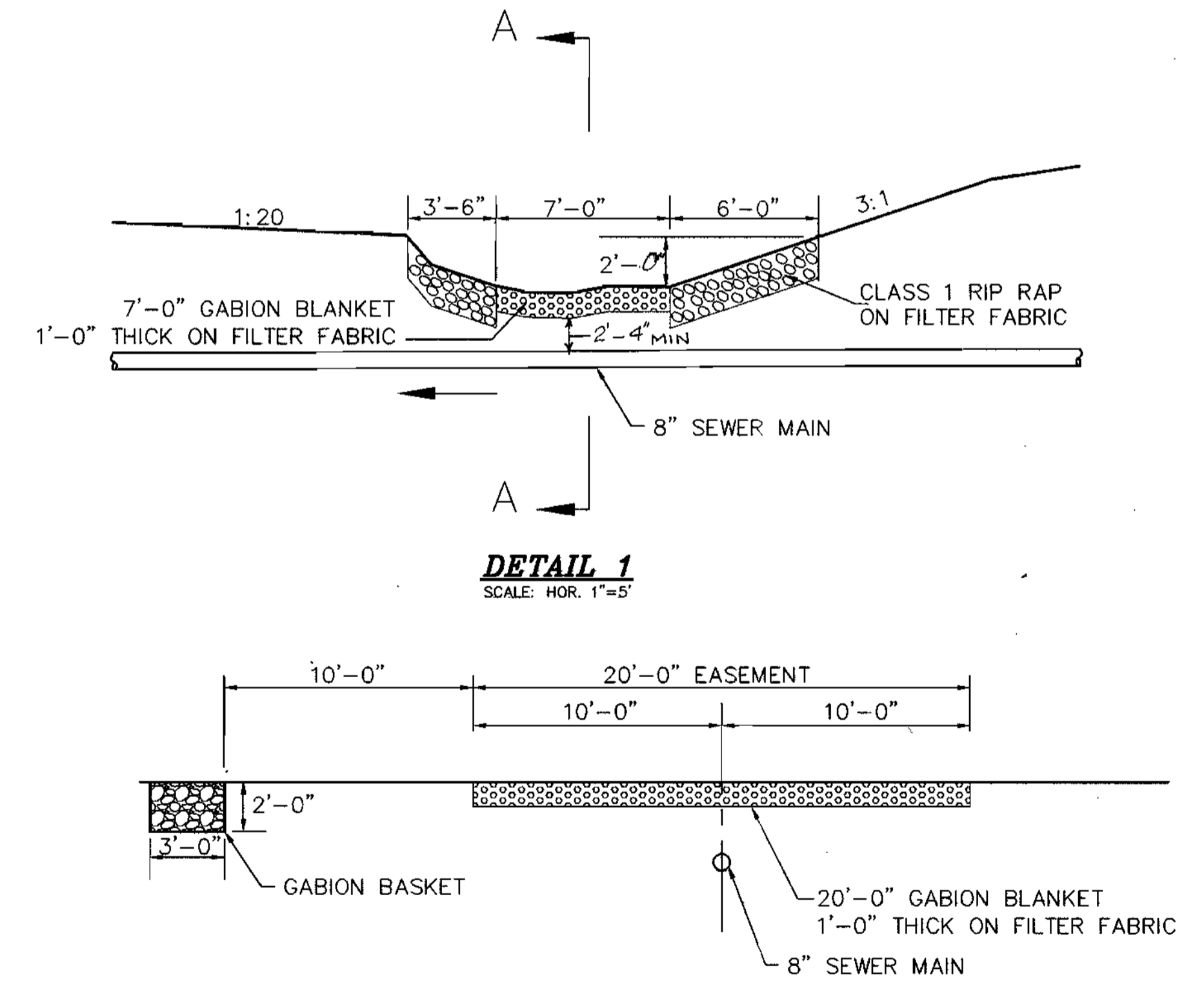
8" SEWER MAIN

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



8" SEWER MAIN

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



DETAIL 1

SCALE: HOR. 1"=5'

SECTION A-A

SCALE: HOR. 1"=5'

00-065\DWG\MS\WSP\PLAN.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. L. B...
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
M. D. ...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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[Handwritten Signature]

engineering	HSP				
illustration	HSP				
approval	JBM				
project	00-065				
date	MAR 2003	BY	NO.	REVISION	DATE

SEWER PROFILE
600' SCALE MAP NO. 37 BLOCK NO. 11

FAIRWAY OVERLOOK
CONTRACT NO.: 14-4092-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
AS SHOWN
4 OF 4