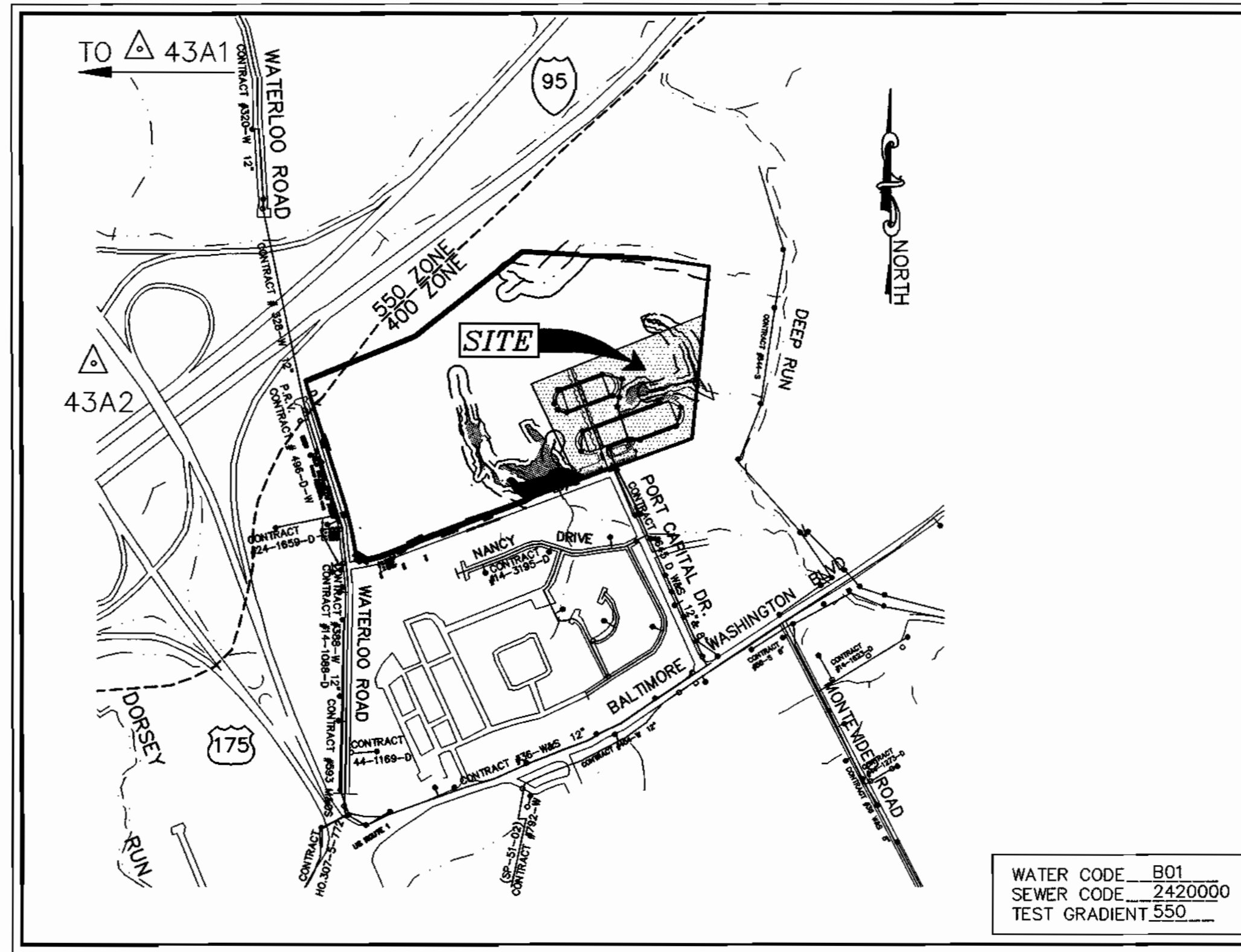


QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES		TYPE	MANUFACTURER/SUPPLIER
		QUANTITIES	TYPE		
STANDARD MH	14	14			Atlantic Concrete
DROP MH, TYPE "B"	5	5			Atlantic Concrete
INTERMEDIATE LANDING	7	7			Atlantic Concrete
8" SEWER MAIN	1,696 L.F.	1654 L.F.			J.M. Manufacturing/BRS
8" DIP SEWER MAIN	843 L.F.	815 L.F.			Griffin Pipe Products/BRS
4" SEWER HOUSE CONNECTION	542 L.F.	798 L.F.			J.M. Manufacturing/BRS
6" SEWER HOUSE CONNECTION	275 L.F.	295 L.F.			J.M. Manufacturing/BRS
# SEWER HOUSE CONNECTIONS	13	13			
# DROP HOUSE CONNECTIONS	4	4			
# MH CONNECTIONS	4	4			
# TWIN SHC	20	20			
# TWIN DHC	1	1			
# TWIN MHC	4	4			
8" WATER	1890 L.F.	1874 L.F.			Griffin Pipe Products/BRS
6" WATER	972 L.F.	977 L.F.			Griffin Pipe Products/BRS
4" WHC	44 L.F.	43 L.F.			Griffin Pipe Products/BRS
4" V	2	2			Mueller Co./BRS
3/4" WHC	505 L.F.	750 L.F.			Howell Metals/BRS
1" WHC	547 L.F.	405 L.F.			Howell Metals/BRS
F.H.	4	4			Mueller Co./BRS
12"x8" REDUCER	1	1			Griffin Pipe Products/BRS
8"x6" T&V	4	4			Griffin Pipe Products/BRS
8" 1/4 H.B.	2	2			Griffin Pipe Products/BRS
6" 1/4 H.B.	6	6			Griffin Pipe Products/BRS
8"-1/8 H.B.	2	2			Griffin Pipe Products/BRS
8"x8" T	4	4			Griffin Pipe Products/BRS
8"x6" C	2	2			Griffin Pipe Products/BRS
8"x6" R	2	2			Griffin Pipe Products/BRS
8" V	9	8			Mueller Co./BRS
6" V	6	6			Mueller Co./BRS
8" CAP & BUTTRESS	3	3			Griffin Pipe Products/BRS
# WHC	24	24			
# TWIN WHC	21	21			
8"x8" C	1	1			Griffin Pipe Products/BRS
NAME OF UTILITY CONTRACTOR: Chesapeake Contracting Group					
SURVEY AND DRAFTING DIVISION AS-BUILT DATE 02-12-98					



VICINITY MAP

SCALE: 1" = 600'

TYPE OF BUILDING	SFD, 2 COMMERCIAL
No. OF UNITS	65
No. OF WATER HOUSE CONNECTIONS	66
No. OF SEWER HOUSE CONNECTIONS	66
DRAINAGE AREA	DEEP RUN 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 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 531-5533
 BG & E CO. CONTRACTOR SERVICES 850-4620
 BG & E CO. UNDERGROUND DAMAGE CONTROL 787-9068
 MISS UTILITY 1-800-257-7777
 COLONIAL PIPELINE CO. 795-1390
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 313-4900
 BUREAU OF UTILITIES 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- 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.
- 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.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITH 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1" - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
- ALL WATER METERS TO BE LOCATED INSIDE PROPOSED UNITS.
- ALL STATIONING SHOWN IS WATER MAIN STATIONING.
- ALL CLEANOUTS AND BALL VALVES ARE TO BE LOCATED AT THE WATER, SEWER AND UTILITY EASEMENT LINE.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENSING CONSTRUCTION.
- EXISTING WATER AND SEWER EASEMENT ADJACENT TO PORT CAPITOL DRIVE IS RECORDED UNDER LIBER 727/FOLIO 098.

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.

[Signature] 11/22/96
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.

[Signature] 11-21-96
ENGINEER'S SIGNATURE DATE

ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEET TECHNICAL REQUIREMENTS.

[Signature] 12/3/96
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

[Signature] 12/5/96
HOWARD SCD DATE

PLAN REFERENCE NUMBERS

SDP-97-03
SDP-96-20

CONTRACT NO.: 14-3564-D NEW COLONY VILLAGE PHASE I 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
7	SEDIMENT CONTROL NOTES AND DETAILS

CONTRACT NO.: 14-3564-D
NEW COLONY VILLAGE, PHASE I
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
[Signature] 12-2-96
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
[Signature] 12/6/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 987-0288 Bull. (301) 621-5521 Wash. (410) 987-0288 Fax.



engineering	M.P./SD				
illustration	M.P./SD				
approval	J.H.				
project	94040				
date	NOV. 1996				

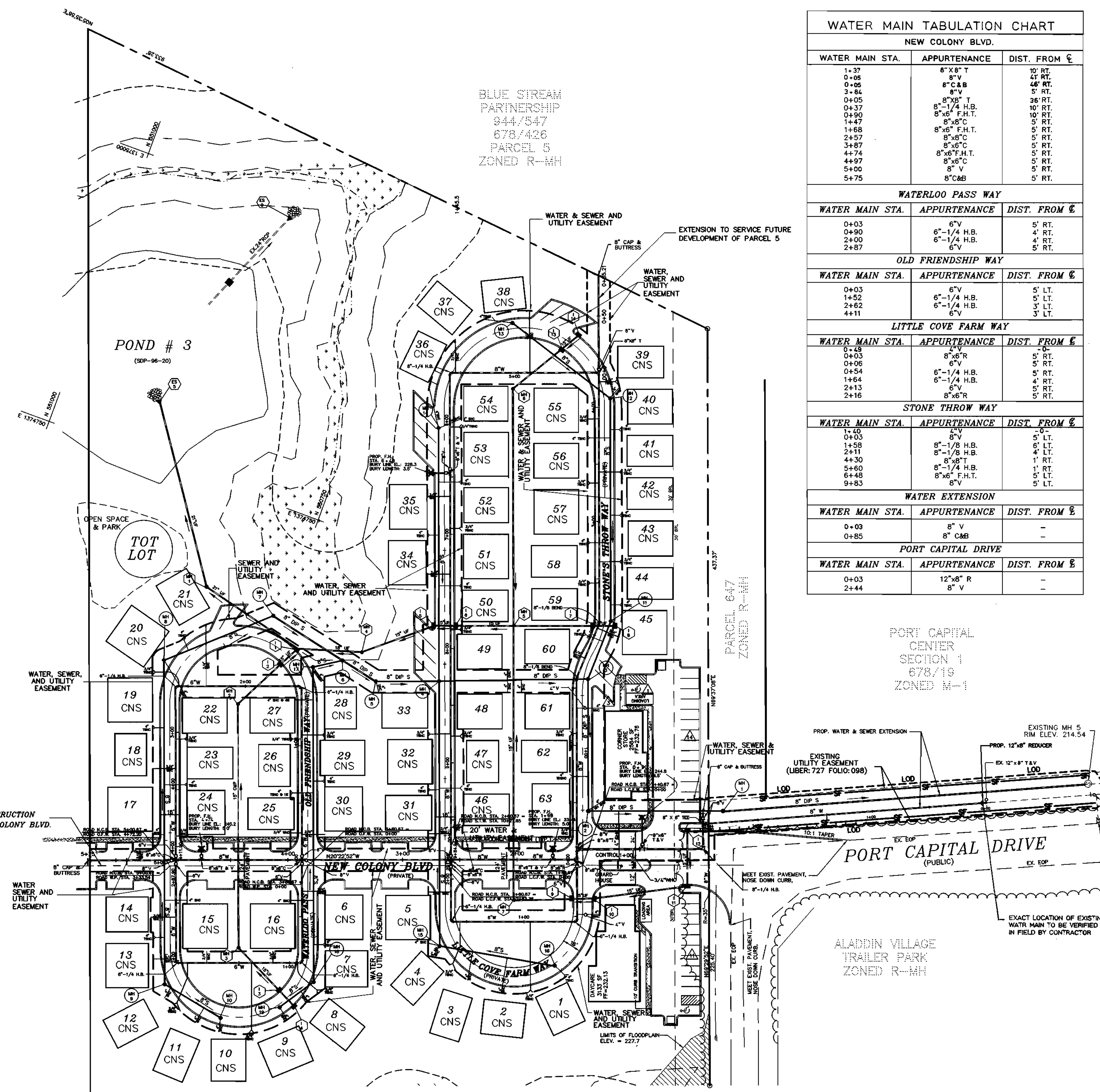
RCJ	1	REVISE QUANTITIES	4-4-97
BY	NO.	REVISION	DATE

TITLE SHEET

600' SCALE MAP NO. 43 BLOCK NO. 3

NEW COLONY VILLAGE
PHASE I
CONTRACT NO. 14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale AS SHOWN
1 OF 7



BLUE STREAM PARTNERSHIP
844/547
678/426
PARCEL 5
ZONED R-MH

WATER MAIN TABULATION CHART		
NEW COLONY BLVD.		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
1+37	8" x 8" T	10' RT.
0+05	8" V	41' RT.
0+05	8" C&B	46' RT.
3+84	8" V	5' RT.
0+05	8" x 8" T	36' RT.
0+37	8"-1/4 H.B.	10' RT.
0+90	8"x6" F.H.T.	10' RT.
1+47	8"x8" C	5' RT.
1+68	8"x6" F.H.T.	5' RT.
2+57	8"x8" C	5' RT.
3+87	8"x8" C	5' RT.
4+74	8"x6" F.H.T.	5' RT.
4+97	8"x8" C	5' RT.
5+00	8" V	5' RT.
5+75	8" C&B	5' RT.

WATERLOO PASS WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	6" V	5' RT.
0+90	6"-1/4 H.B.	4' RT.
2+00	6"-1/4 H.B.	4' RT.
2+87	6" V	5' RT.

OLD FRIENDSHIP WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	6" V	5' LT.
1+52	6"-1/4 H.B.	5' LT.
2+62	6"-1/4 H.B.	3' LT.
4+11	6" V	3' LT.

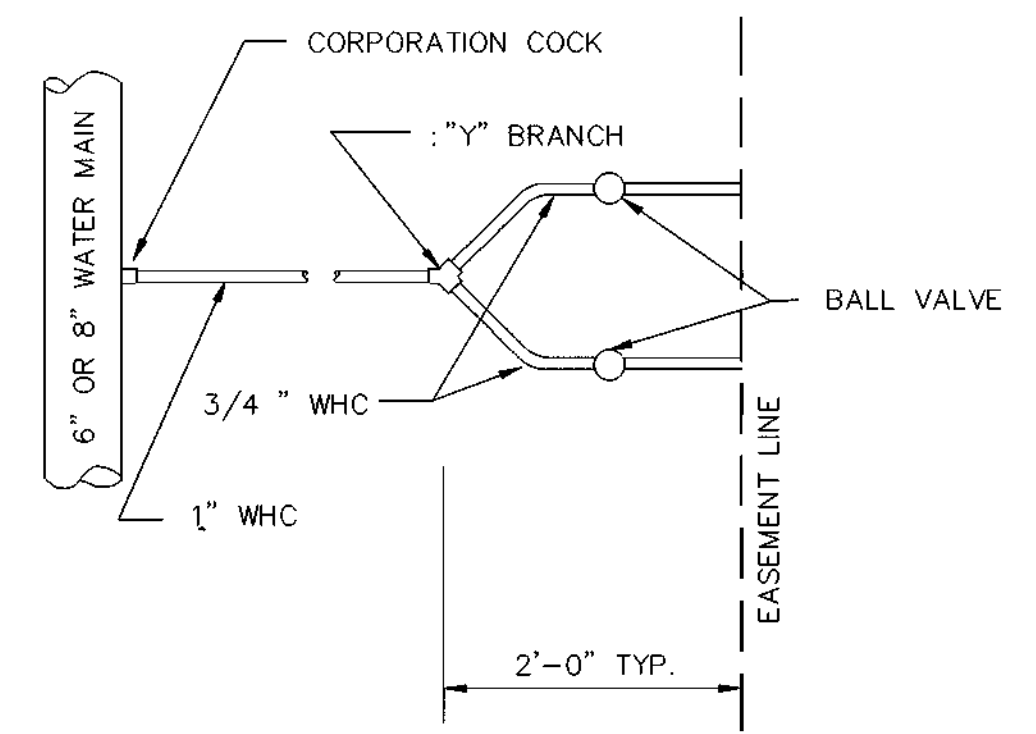
LITTLE COVE FARM WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+48	6" V	0'
0+03	8"x8" R	5' RT.
0+06	6" V	5' RT.
0+54	6"-1/4 H.B.	5' RT.
1+64	6"-1/4 H.B.	4' RT.
2+13	6" V	5' RT.
2+16	8"x8" R	5' RT.

STONE THROW WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
1+10	6" V	5' LT.
0+03	6" V	5' LT.
1+58	8"-1/8 H.B.	6' LT.
2+11	8"-1/8 H.B.	4' LT.
4+30	8"x8" T	1' RT.
5+60	8"-1/4 H.B.	1' RT.
6+48	8"x6" F.H.T.	5' LT.
9+83	6" V	5' LT.

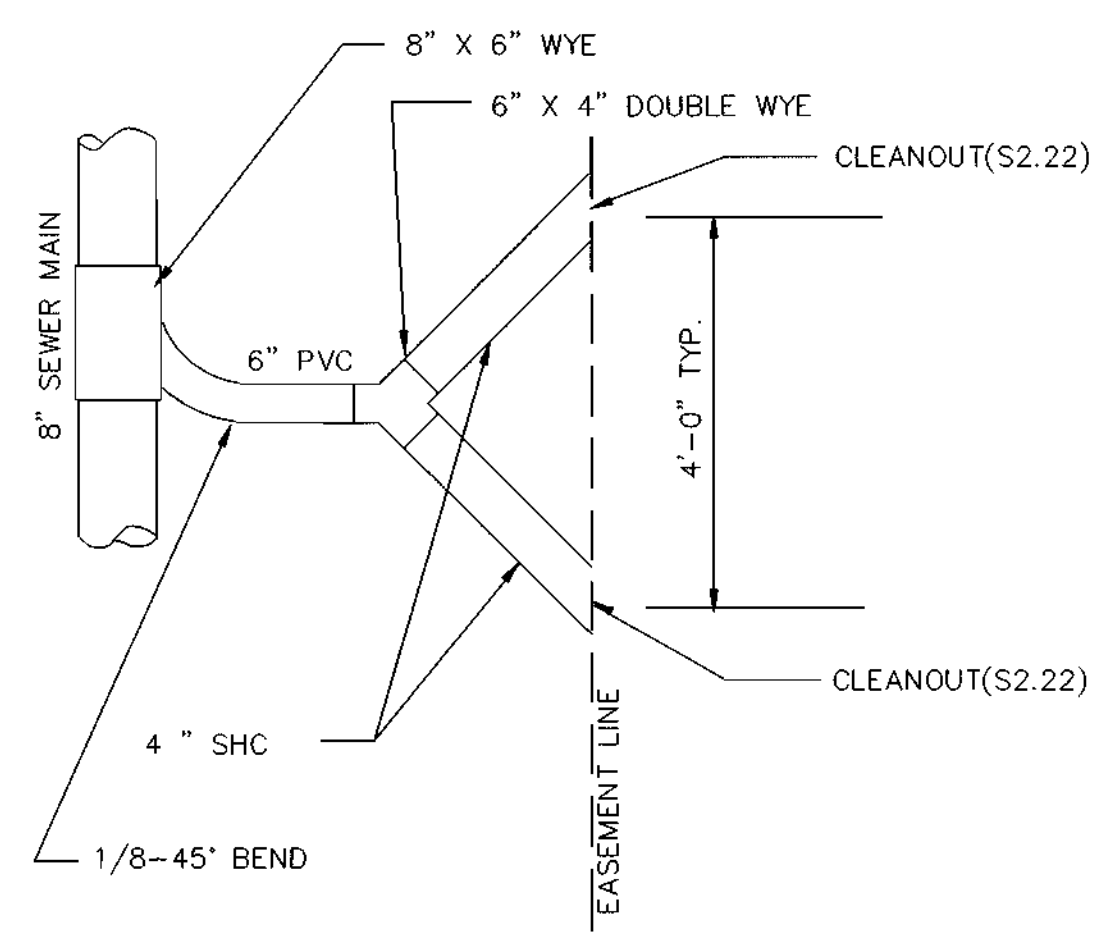
WATER EXTENSION		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	8" V	-
0+85	8" C&B	-

PORT CAPITAL DRIVE		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	12"x8" R	-
2+44	8" V	-

MANHOLE LOCATION CHART			
MH #	ROAD	CL STATION	OFFSET
1	NEW COLONY BLVD.	0+18.0	47.7' RT.
2	STONE THROW WAY	0+47.7	5.0' RT.
3	STONE THROW WAY	1+63.7	3.8' RT.
4	STONE THROW WAY	8+63.8	5.0' RT.
5	STONE THROW WAY	8+63.9	60.2' RT.
6	OLD FRIENDSHIP WAY	1+65.5	38.2' RT.
7	OLD FRIENDSHIP WAY	2+13.5	23.0' RT.
8	OLD FRIENDSHIP WAY	2+98.3	15.5' RT.
9	WATERLOO PASS	2+34.3	12.0' LT.
10	WATERLOO PASS	1+82.5	1+82.5' RT.
11	STONE THROW WAY	2+18.3	5.6' RT.
12	STONE THROW WAY	4+11.9	5.4' RT.
13	STONE THROW WAY	5+23.9	4.9' RT.
14	STONE THROW WAY	6+41.9	5.0' RT.
15	LITTLE COVE FARM WAY	1+97.6	13.0' LT.
16	LITTLE COVE FARM WAY	0+94.9	1.6' LT.
17	OLD FRIENDSHIP WAY	1+69.2	12.4' RT.
18	WATERLOO PASS WAY	0+97.9	11.3' LT.
19	WATERLOO PASS WAY	1+30.7	2.4' LT.



TYPICAL DETAIL -
TWIN WATER HOUSE CONNECTION (TWHC)



TYPICAL DETAIL -
TWIN SEWER HOUSE CONNECTION (TSHC)

CONTRACT NO. 14-3564-D
NEW COLONY VILLAGE, PHASE I
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

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.

[Signature] 11/21/96
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.

[Signature] 11-21-96
ENGINEER'S SIGNATURE DATE
R. JAGB HIKMAT

ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEET TECHNICAL REQUIREMENTS.

[Signature] 12/6/96
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

[Signature] 12/7/96
HOWARD SCD DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 12-2-96
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature] 12/6/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5872 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 897-0296 Dalt. (301) 821-5521 Wash. (410) 997-0296 Fax

[Signature] 11-21-96

engineering	s.d.		
illustration	s.d.		
approval	J.H.		
project	94044	RCJ	1
date	NOV 1996	BY	NO.

RELOCATE 8" W, REMOVE EASEMENT, ADD S & W CONNECTIONS 4-6-97

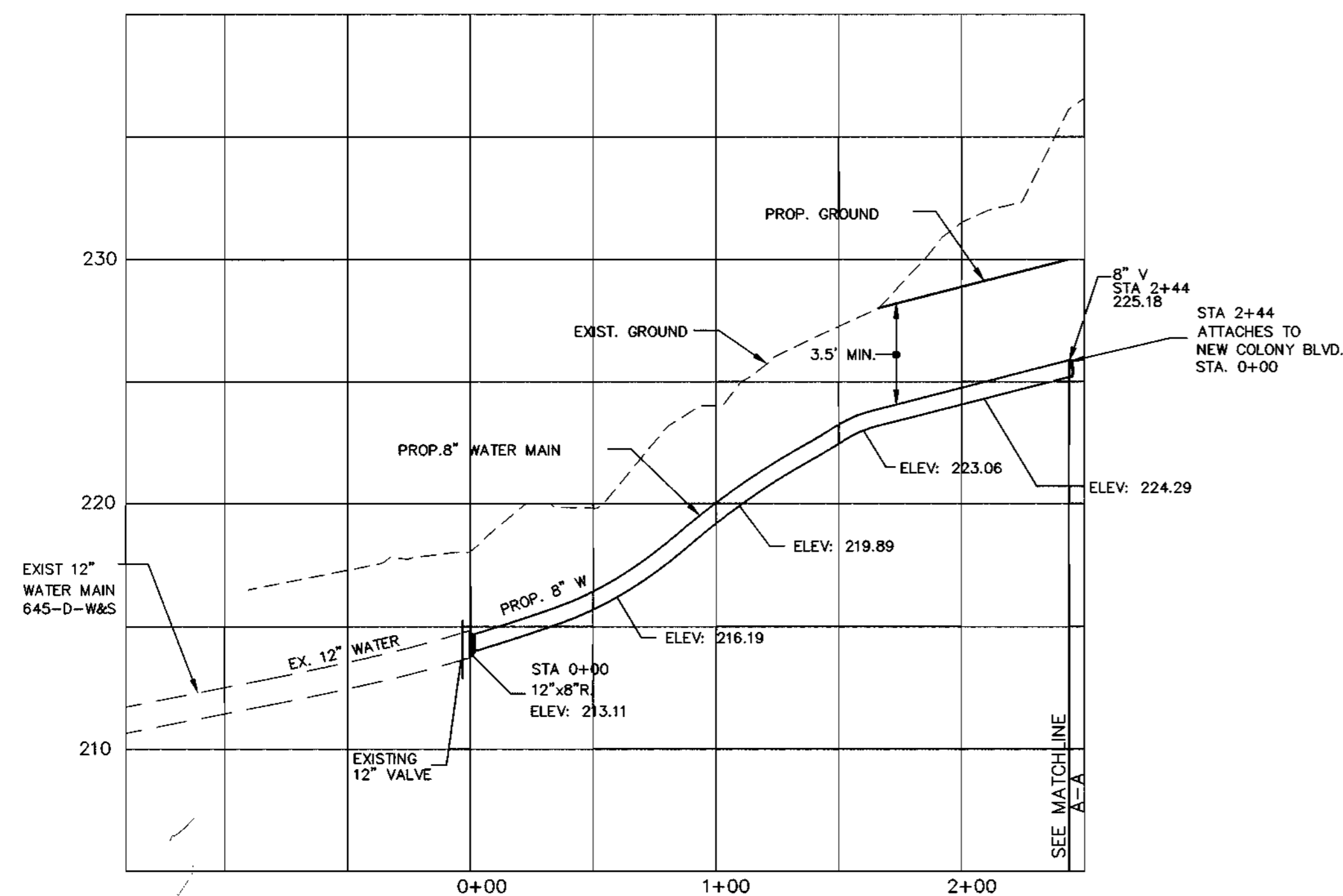
WATER & SEWER PLAN

600' SCALE MAP NO. 43 BLOCK NO. 3

NEW COLONY VILLAGE PHASE I
CONTRACT #14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY

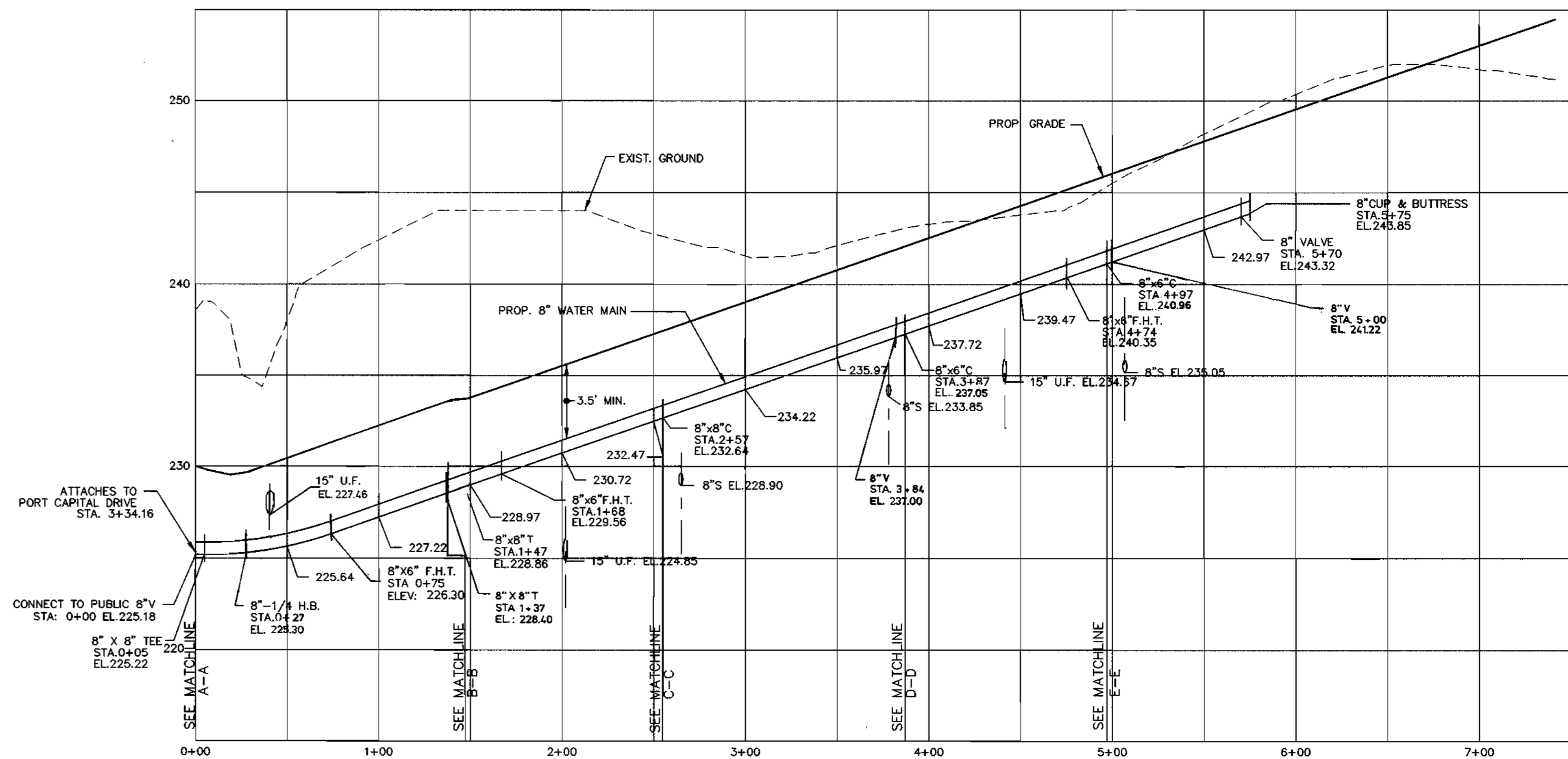
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2 OF 7

94044 (DWG) (PHASE I) (M&S) (PLAN).DWG



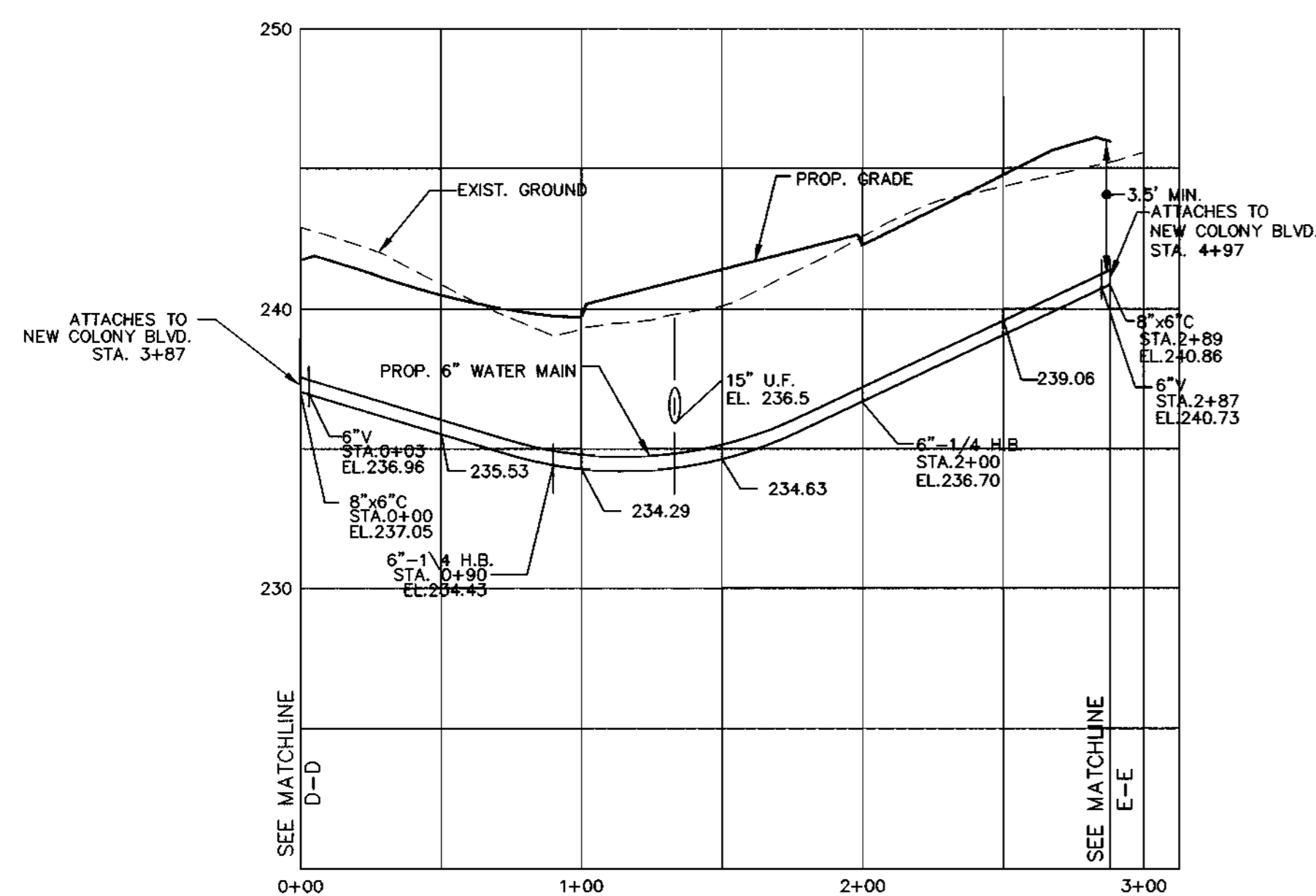
8" WATER MAIN PROFILE (PORT CAPITAL DRIVE)

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



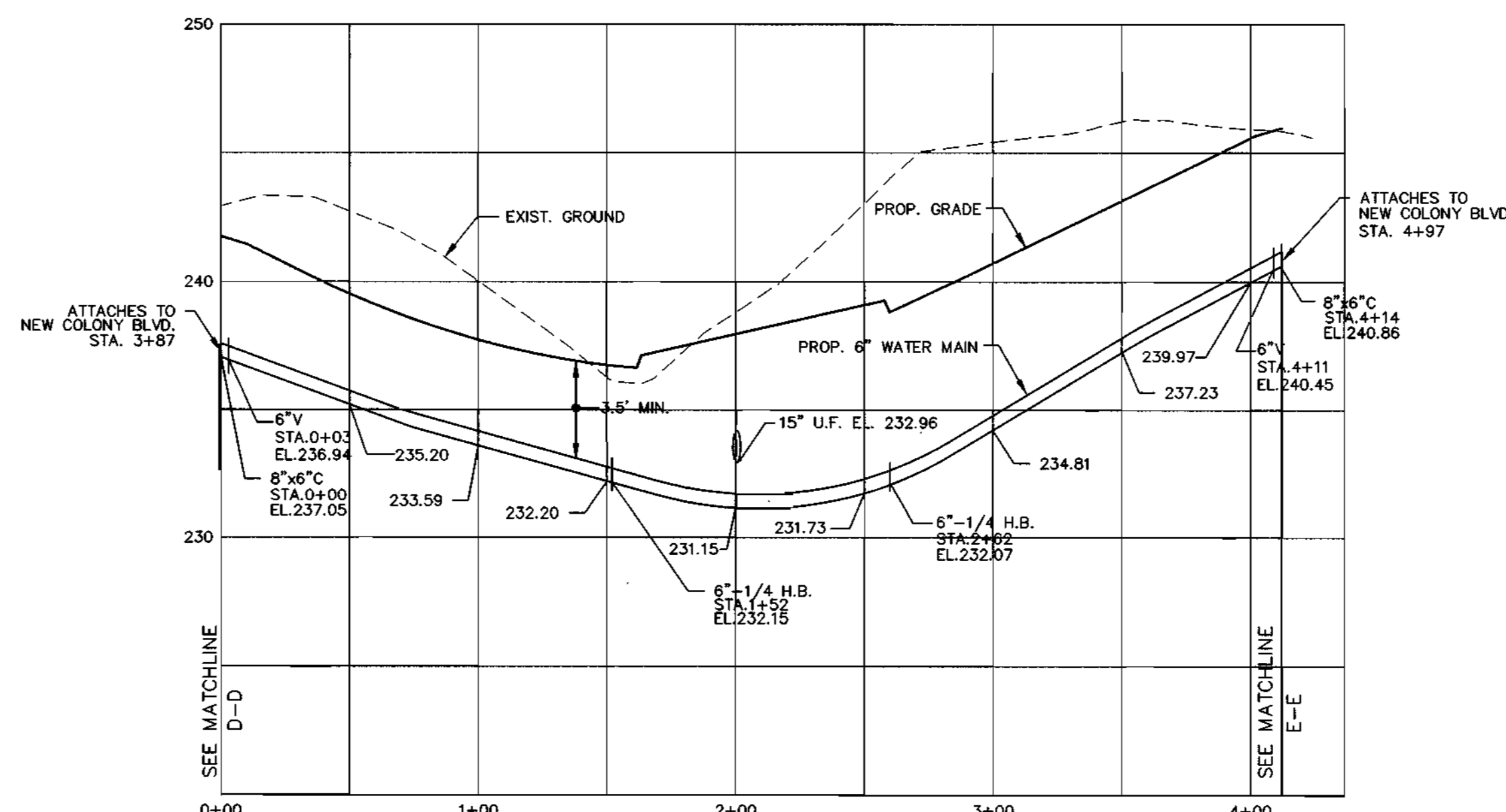
8" WATER MAIN PROFILE (NEW COLONY BLVD.)

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



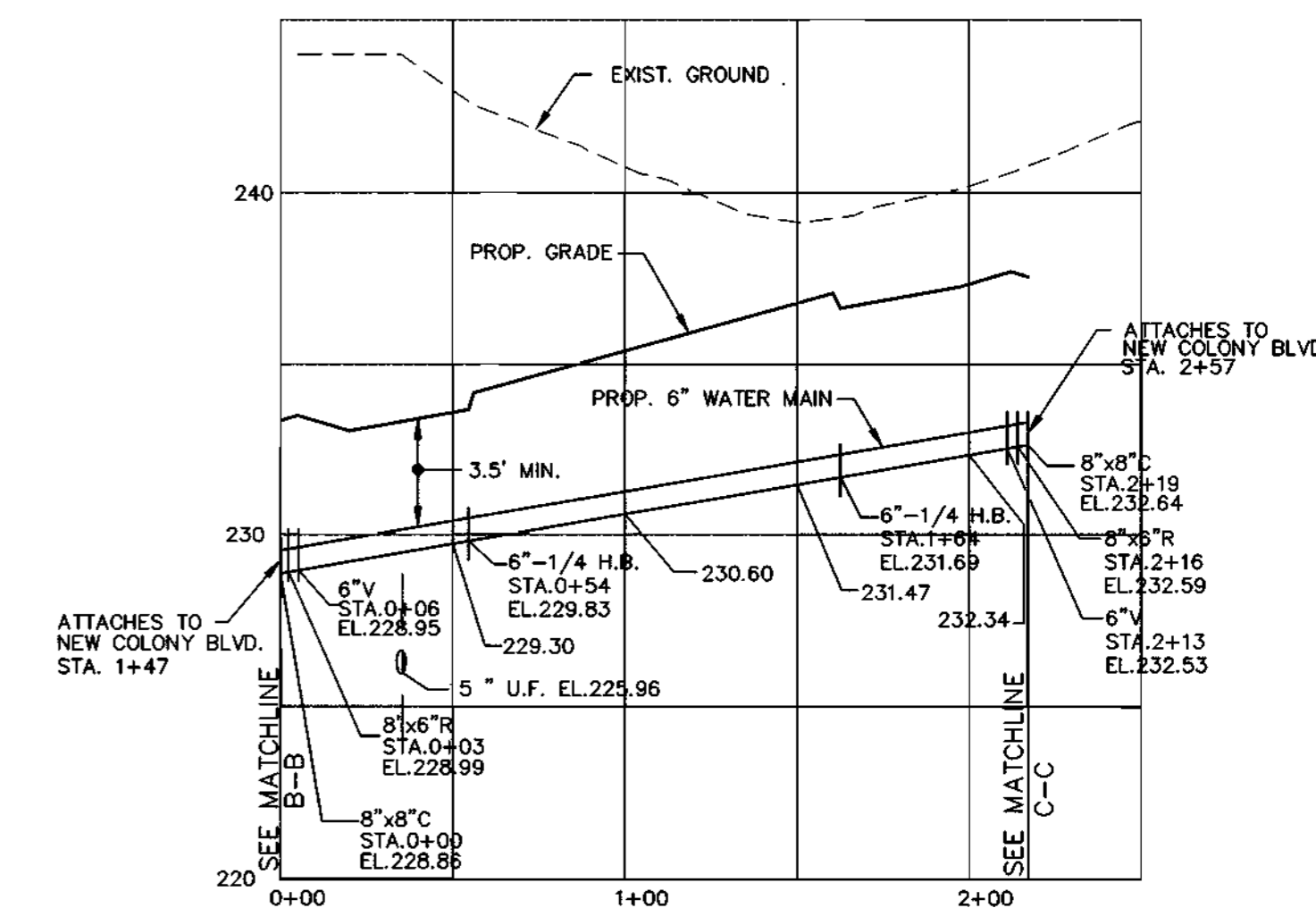
6" WATER MAIN PROFILE (WATERLOO PASS)

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



6" WATER MAIN PROFILE (OLD FRIENDSHIP WAY)

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



6" WATER MAIN PROFILE (LITTLE COVE FARM WAY)

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

CONTRACT NO. 14-3564-D
NEW COLONY VILLAGE, PHASE I
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

F:\954044\DWG\PHASE1\W&S\144-WS-1

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

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

5972 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0286 Fax (301) 621-6521 Wash. (410) 997-0286 Fax

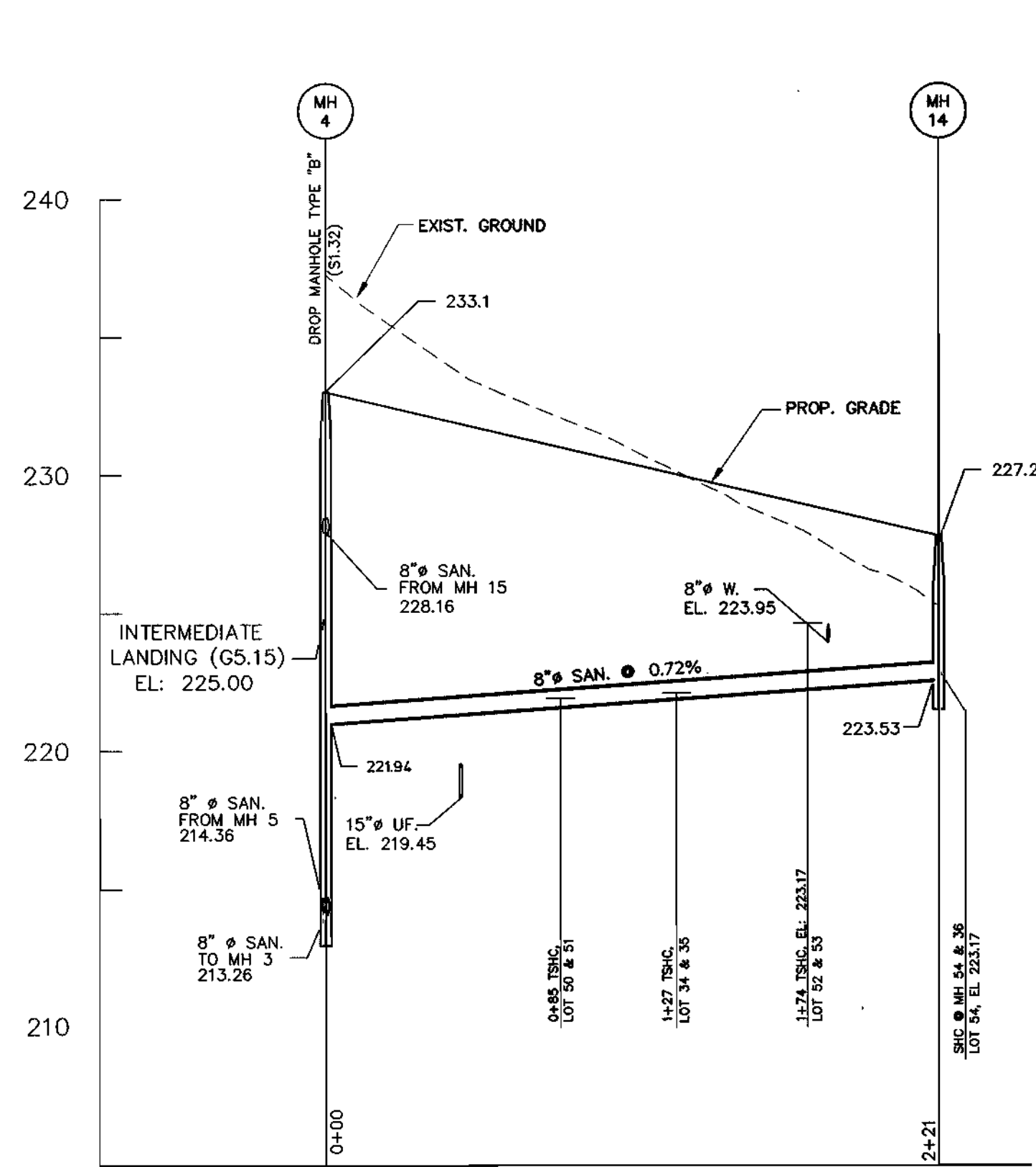
Handwritten signature and date: 11-21-96

engineering	s.d.				
illustration	s.d.				
approval	J.H.				
project	94044	RCJ	1	CHANGE 8" W PROFILE ON NEW COLONY BLVD.	4-4-97
date	NOV 1996	BY	NO.	REVISION	DATE

**WATER
PROFILES**

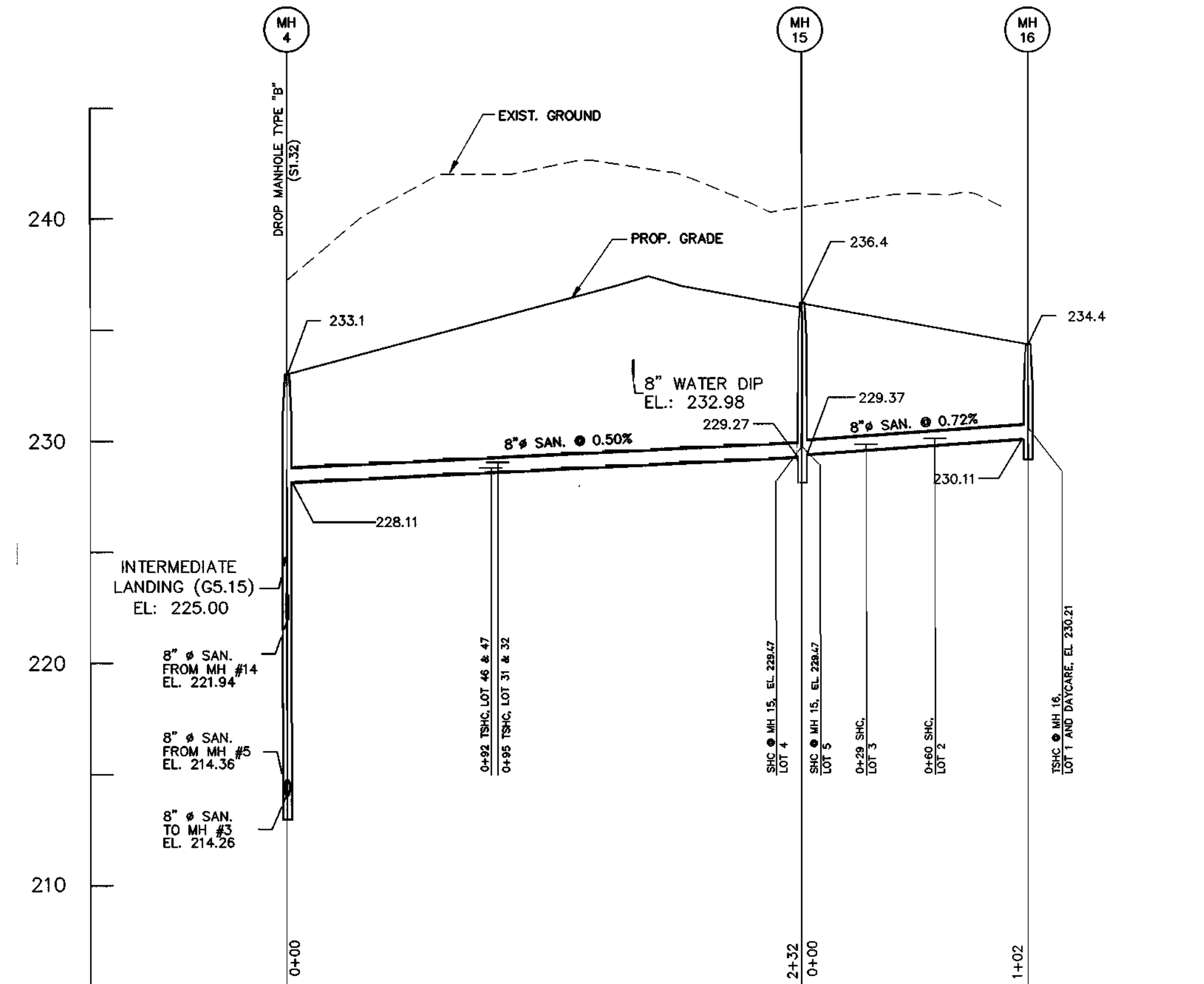
**NEW COLONY VILLAGE
PHASE I**
CONTRACT #14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
HOR. 1"=50'
VER. 1"=5'



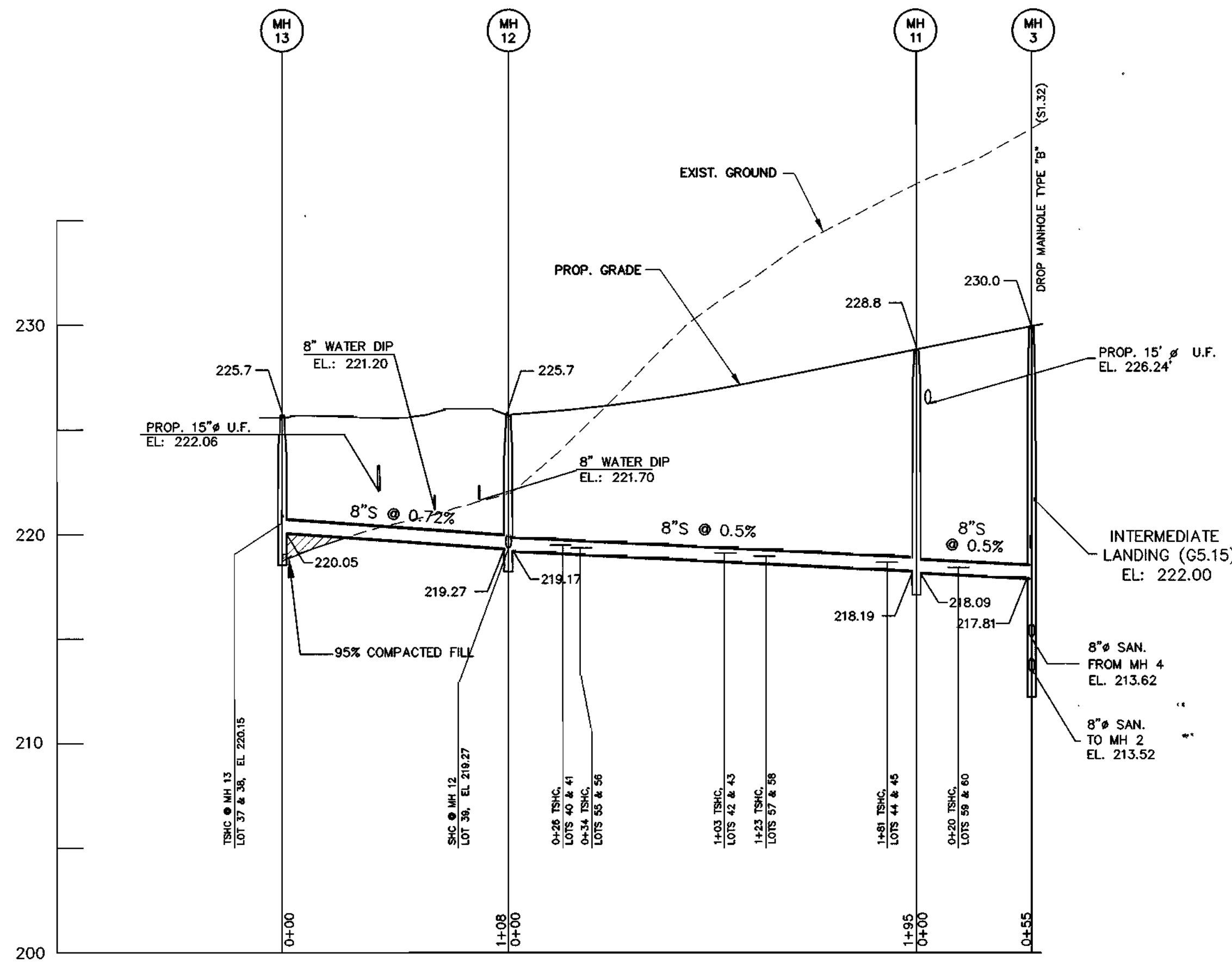
8" SEWER MAIN PROFILE

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



8" SEWER MAIN PROFILE

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



8" SEWER MAIN PROFILE

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

SEWER HOUSE CONNECTION TABLE					
UNIT #	% SLOPE	INV. @ EASE	SERVICABLE ELEV.	TYPE OF CONNECTION	
DAYCARE	2	230.49	233.59	TSHC	
1	2	230.49	233.29	TSHC	
2	2	230.40	233.20	SHC	
3	2	230.09	232.89	SHC	
4	2	229.67	232.47	MHC	
5	2	229.67	232.47	MHC	
6 & 7	2	234.47	237.27	TSHC	
8	2	234.85	237.65	SHC	
9	2	235.16	237.96	SHC	
10	2	236.44	239.24	SHC	
11	2	236.28	239.08	SHC	
12	2	235.96	238.76	SHC	
13 & 14	2	235.59	238.39	TSHC	
15	2	235.72	238.82	SHC	
16	2	234.46	237.26	SHC	
17	2	235.14	237.94	SHC	
18 & 19	2	234.64	237.44	TSHC	
20 & 21	2	233.48	236.83	TSHC	
22	2	234.55	237.32	MHC	
23 & 24	2	235.14	237.94	TSHC	
25 & 26	1	233.73	236.48	TSHC	
27	4	233.87	236.77	SHC	
28	2	233.35	236.15	SHC	
29 & 30	2	233.67	236.47	TSHC	
31 & 32	2	228.79	231.59	TSHC	
33	2	222.07	224.87	MHC	
34 & 35	2	222.10	225.00	TSHC	
36	2	224.73	227.53	MTHSC	
37 & 38	2	220.75	223.55	MTHSC	
39	2	219.58	222.35	SHC	
40 & 41	2	219.24	222.04	TSHC	
42 & 43	2	218.86	221.66	TSHC	
44 & 45	2	218.47	221.27	TSHC	
46 & 47	2	228.97	231.77	TSHC	
48	2	221.18	223.88	DHC	
49	2	221.18	223.88	DHC	
50 & 51	2	221.92	224.89	TSHC	
52 & 53	2	224.64	227.54	TSHC	
54	2	223.61	226.47	MTHSC	
55 & 56	2	218.39	221.19	TSHC	
57 & 58	2	218.96	221.76	TSHC	
59 & 60	2	218.39	221.19	TSHC	
61	2	220.28	223.08	DHC	
62 & 63	2	221.14	223.94	TSHC	
CORNER	2	218.68	222.48	MTHSC	
GUARD	2	-	225.07	DHC	

FROM:	TO:	DIST:	FROM:	TO:	DIST:
MH 15	LOT 46	105'	SDI-14	LOT 40	56'
MH 4	LOT 33	48'	MH 12	LOT 40	12'
MH 4	LOT 32	53'	MH 12	LOT 38	17'
MH 4	LOT 47	54'	MH 12	LOT 55	23'
MH 4	LOT 41	59'	MH 12	LOT 41	64'
MH 4	LOT 46	133'	MH 12	LOT 42	70'
MH 4	LOT 31	136'	MH 12	LOT 56	76'
SDI-5	LOT 32	100'	MH 12	LOT 57	82'
SDI-5	LOT 33	93'	MH 12	LOT 43	143'
SDI-5	LOT 48	100'	MH 12	LOT 44	148'
SDI-5	LOT 47	106'	MH 12	LOT 58	162'
SDI-5	LOT 50	23'	MH 12	LOT 59	168'
MH 4	LOT 49	26'	MH 11	LOT 59	26'
MH 4	LOT 49	45'	MH 11	LOT 58	40'
MH 4	LOT 50	51'	MH 11	LOT 44	48'
SDI-5	LOT 34	48'	MH 11	LOT 43	54'
SDI-5	LOT 51	86'	MH 11	LOT 57	118'
SDI-5	LOT 51	91'	MH 11	LOT 56	124'
SDI-5	LOT 35	113'	MH 11	LOT 42	121'
FH	LOT 35	18'	MH 11	LOT 41	133'
FH	LOT 52	51'	MH 11	LOT 55	178'
FH	LOT 51	56'	MH 11	LOT 45	18'
FH	LOT 34	26'	MH 11	LOT 60	44'
FH	LOT 53	48'	MH 3	LOT 60	27'
FH	LOT 54	52'	MH 3	LOT 45	40'
MH 14	LOT 51	18'	MH 3	CORNER STONE	30'
MH 14	LOT 53	19'	MH 3	LOT 61	48'
MH 14	LOT 36	77'	MH 3	LOT 62	53'
MH 14	LOT 37	81'	MH 3	LOT 63	132'
MH 13	LOT 37	48'	MH 2	LOT 63	21'
MH 13	LOT 36	59'	MH 2	LOT 62	68'
MH 13	LOT 38	19'	MH 2	LOT 61	73'
SDI-14	LOT 38	48'	MH 2	CORNER STONE	82'
SDI-14	LOT 39	53'			

MIN. CELLAR ELEV.	
UNIT #	MCE
17	273.94
33	224.87
44 & 45	221.27
48	223.88
49	223.88
58	221.76
59 & 60	221.19
61	223.08
62 & 63	223.94
GUARD	225.07

CONTRACT NO. 14-3564-D
NEW COLONY VILLAGE, PHASE I
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

94044.DWG (PHASE I) W&S 044-SAN-I.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert B. ... 12-2-96
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
... 12/6/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION

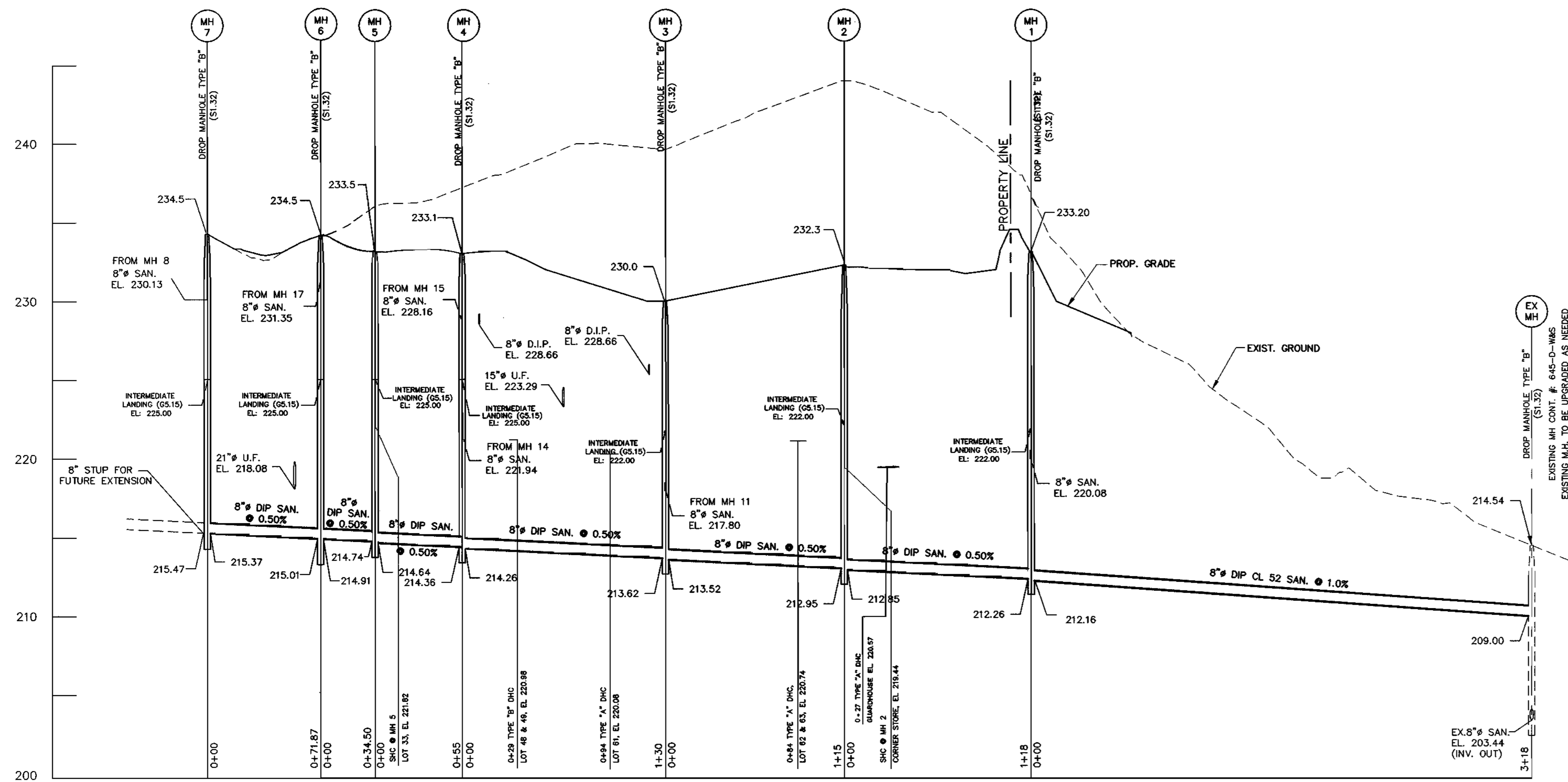
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Elkton City, Maryland 21042
(410) 397-0298 Fax. (301) 621-5521 Telex. (410) 397-0298 Fax.



engineering	SD				
illustration	SD				
approval	J.H.				
project	94044				
date	NOV 96				
BY	NO.	REVISION	DATE		

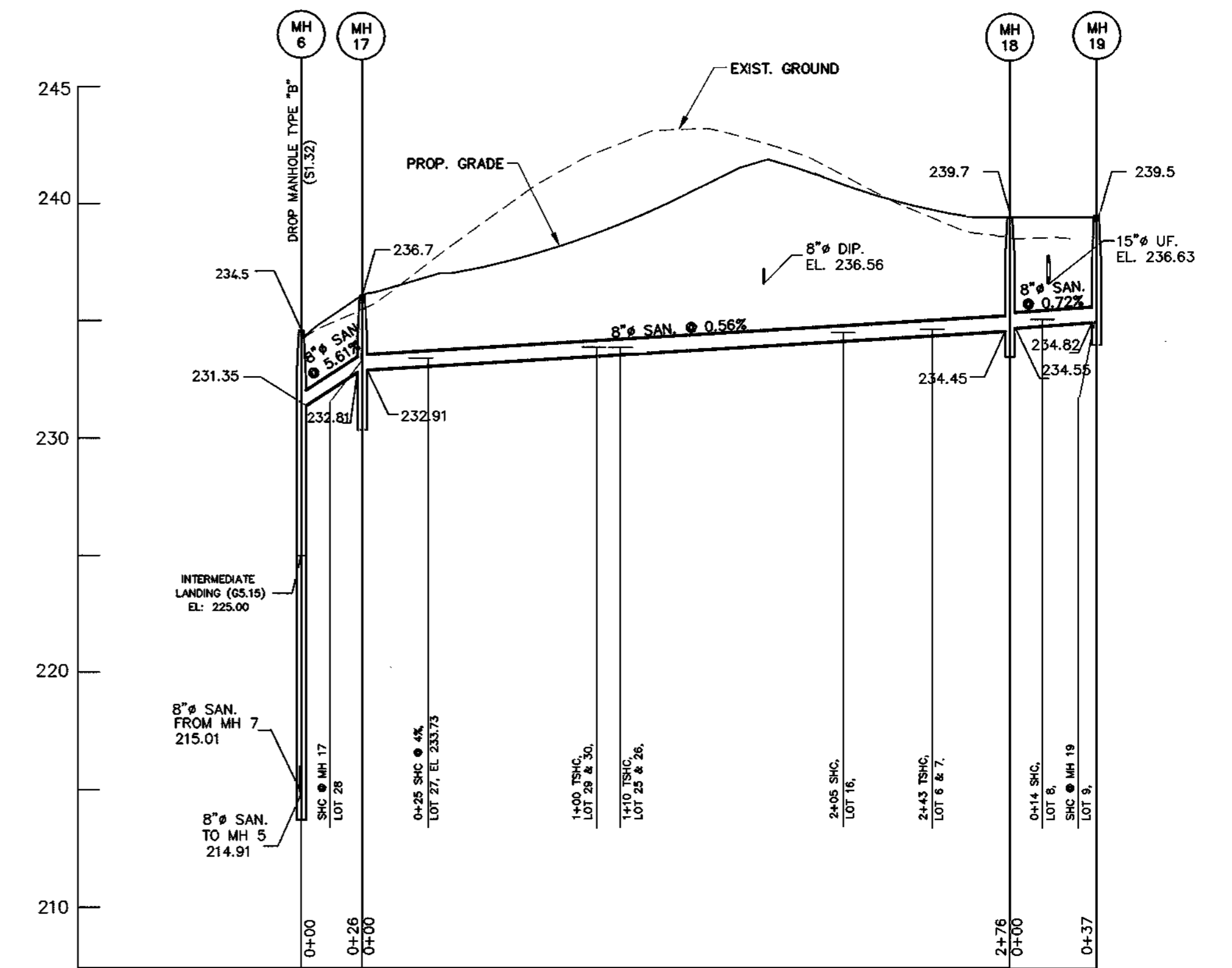
SEWER PROFILES
600' SCALE MAP NO. 43 BLOCK NO. 3

NEW COLONY VILLAGE PHASE I
CONTRACT # 14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
scale AS SHOWN
5 OF 7



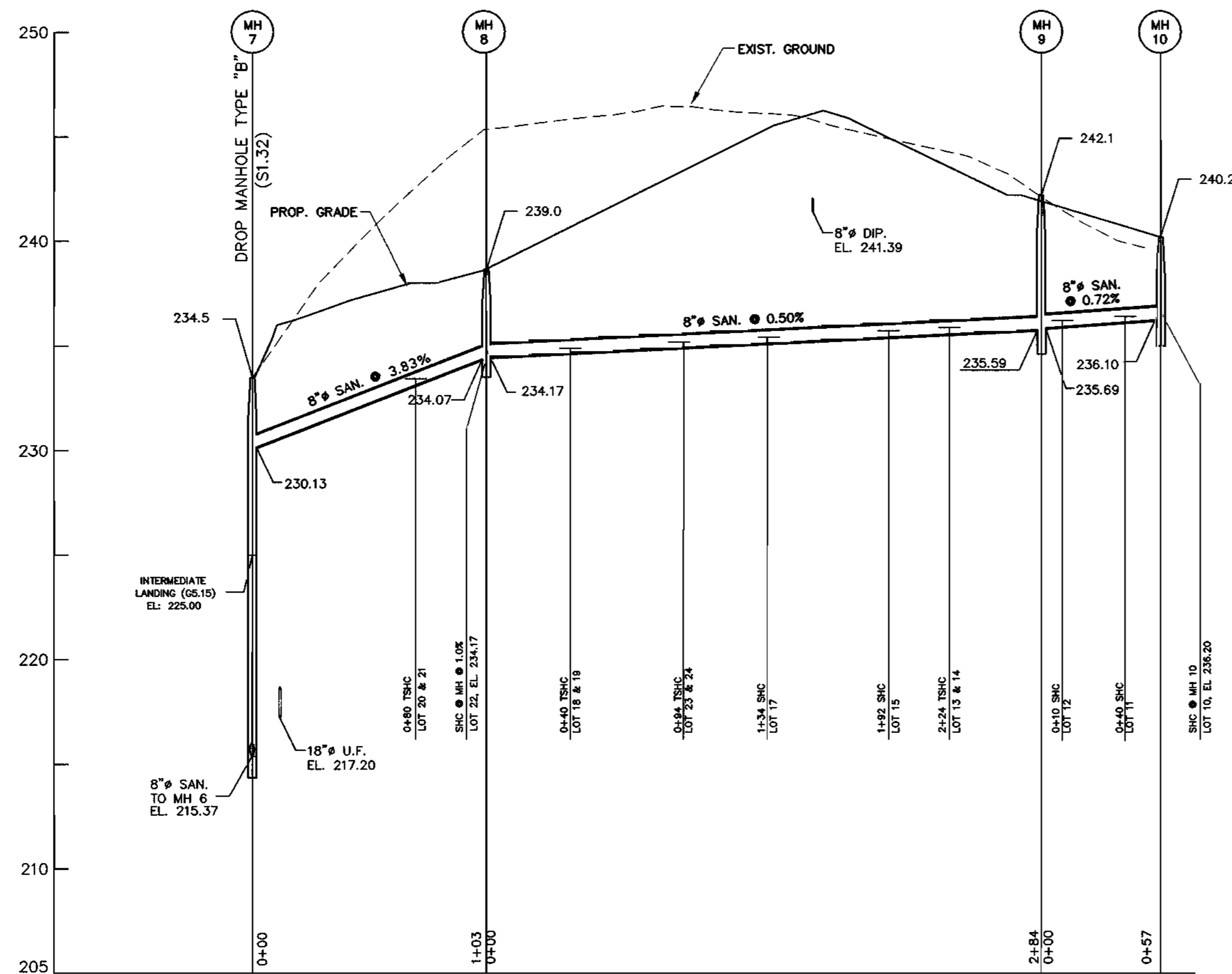
8" SEWER MAIN PROFILE

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



8" SEWER MAIN PROFILE

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



8" SEWER MAIN PROFILE

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

CONTRACT NO. 14-3564-D
NEW COLONY VILLAGE, PHASE I
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

94044.DWG\PHASE1\WKS\044-SAN-1.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Ruth Benin
CHIEF, BUREAU OF UTILITIES
12-2-96
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
Michael Damman
CHIEF, DEVELOPMENT ENGINEERING DIVISION
12/6/96
DATE

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors
5972 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax (301) 821-6321 Wash (410) 997-0296 Fax

[Signature]
12-2-96

engineering	SD				
illustration	SD				
approval	J.H.				
project	94044	RCJ	1	ADD SHC TO PROFILE	4-7-97
date	NOV 96	BY	NO.	REVISION	DATE

**SEWER
PROFILES**

600' SCALE MAP NO. 43 BLOCK NO. 3

**NEW COLONY VILLAGE
PHASE I**
CONTRACT #14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ.FT.).
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE 1-4 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (05 LBS./1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) - 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE SOD. OPTION (3) - SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.)

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU NOVEMBER 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

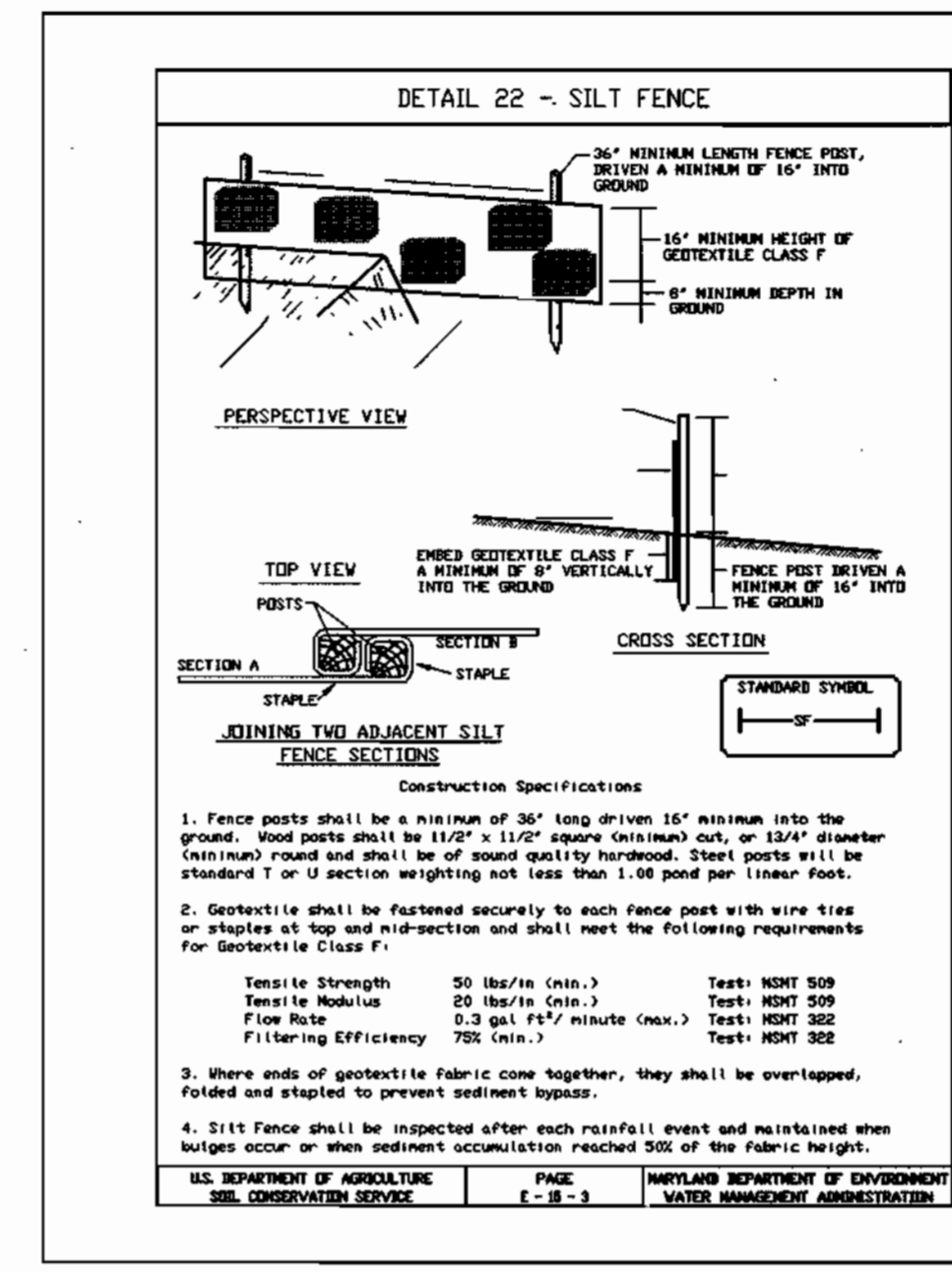
SEQUENCE OF CONSTRUCTION

- OBTAIN THE REQUIRED GRADING PERMIT.
- INSTALL THE REQUIRED SEDIMENT AND EROSION CONTROL DEVICES.
- CLEAR AND GRUB AS NECESSARY; ONLY AS REQUIRED FOR EXCAVATION AND INSTALLATION OF THE WATER AND SEWER MAINS. ONLY WITHIN THE DESIGNATED WATER, SEWER, AND UTILITY EASEMENTS.
- INSTALL WATER AND SEWER MAINS AS PER THIS CONTRACT.
- STABILIZE, SEED AND MULCH ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.
- FOLLOWING SUCCESSFUL STABILIZATION OF ALL DISTURBED AREAS, AND AFTER PERMISSION FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL EROSION AND SEDIMENT CONTROL DEVICES.
- NOTE: LIMITS OF DISTURBANCE (L.O.D.) SHOWN ON THESE PLANS DELINEATE DISTURBED AREAS OUTSIDE THOSE SHOWN ON THE NEW COLONY VILLAGE SITE DEVELOPMENT PLAN (SDP 97-03).

HOWARD SOIL CONSERVATION DISTRICT

STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC-5), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC-52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
TOTAL AREA OF SITE: 52.6 ACRES
AREA DISTURBED: 0.23 ACRES
AREA TO BE ROOFED OR PAVED: - ACRES
AREA TO BE VEGETATIVELY STABILIZED: - ACRES
TOTAL CUT: 3,500 CU. YDS.
TOTAL FILL: 3,500 CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION: -
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.



SILT FENCE		
Silt Fence Design Criteria		
Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Factor less than 50:1	Unlimited	Unlimited
50:1 to 10:1	125 Feet	1,000 Feet
10:1 to 5:1	100 Feet	750 Feet
5:1 to 3:1	60 Feet	500 Feet
3:1 to 2:1	40 Feet	250 Feet
2:1 and steeper	20 Feet	125 Feet

Note: In areas of less than 50 slope and steady soils USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT
SOIL CONSERVATION SERVICE 6-8-3 WATER MANAGEMENT ADMINISTRATION

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.

[Signature] 11/22/96
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.

[Signature] 11-21-96
ENGINEER'S SIGNATURE DATE

R. TAGE HIKMAT
ENGINEER'S NAME

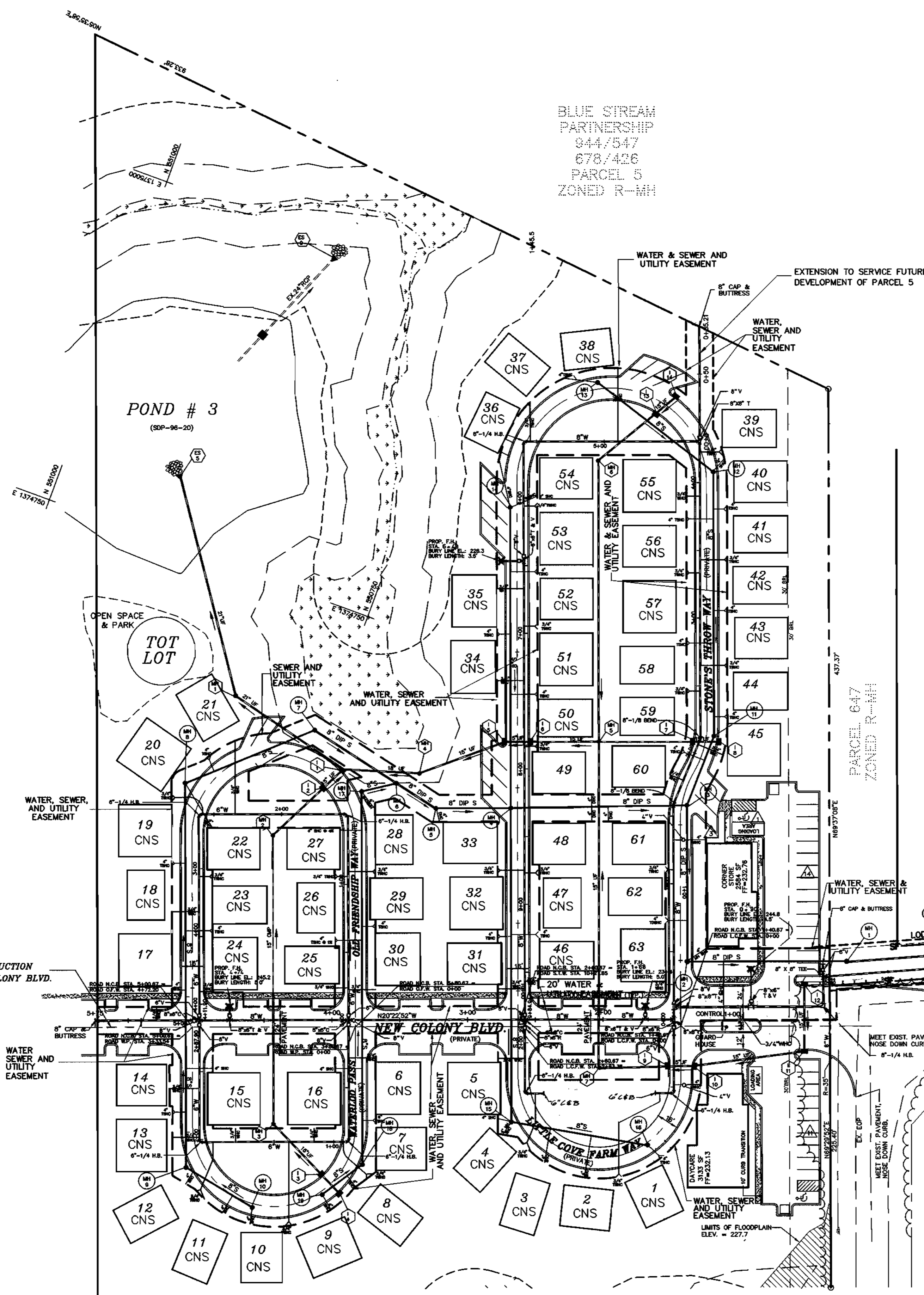
REVIEWED FOR HOWARD SCD AND MEET TECHNICAL REQUIREMENTS.

USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

HOWARD SCD DATE

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) 997-0286 Balt. (301) 621-5521 Wash. (410) 997-0286 Fax	engineering M.P. _____ illustration M.P. _____ approval J.H. _____ project 94044 date JULY 96	SEDIMENT CONTROL NOTES AND DETAILS DATE 600' SCALE MAP NO. 43 BLOCK NO. 3	NEW COLONY VILLAGE PHASE 1 CONTRACT #14-3564-D FIRST ELECTION DISTRICT HOWARD COUNTY	scale NTS 7 OF 7
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BLUE STREAM PARTNERSHIP
944/547
678/426
PARCEL 5
ZONED R-MH

WATER MAIN TABULATION CHART		
NEW COLONY BLVD.		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
1+37	8" x 8" T	10' RT.
0+05	8" V	41' RT.
0+05	8" C&B	46' RT.
3+84	8" V	5' RT.
0+05	8" V	38' RT.
0+37	8"-1/4 H.B.	10' RT.
0+90	8"x6" F.H.T.	10' RT.
1+47	8"x6" C	5' RT.
1+68	8"x6" F.H.T.	5' RT.
2+57	8"x6" C	5' RT.
3+87	8"x6" C	5' RT.
4+74	8"x6" F.H.T.	5' RT.
4+97	8"x6" C	5' RT.
5+00	8" V	5' RT.
5+75	8" C&B	5' RT.

WATERLOO PASS WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	6" V	5' RT.
0+90	6"-1/4 H.B.	4' RT.
2+00	6"-1/4 H.B.	4' RT.
2+87	6" V	5' RT.

OLD FRIENDSHIP WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	6" V	5' LT.
1+52	6"-1/4 H.B.	5' LT.
2+62	6"-1/4 H.B.	3' LT.
4+11	6" V	3' LT.

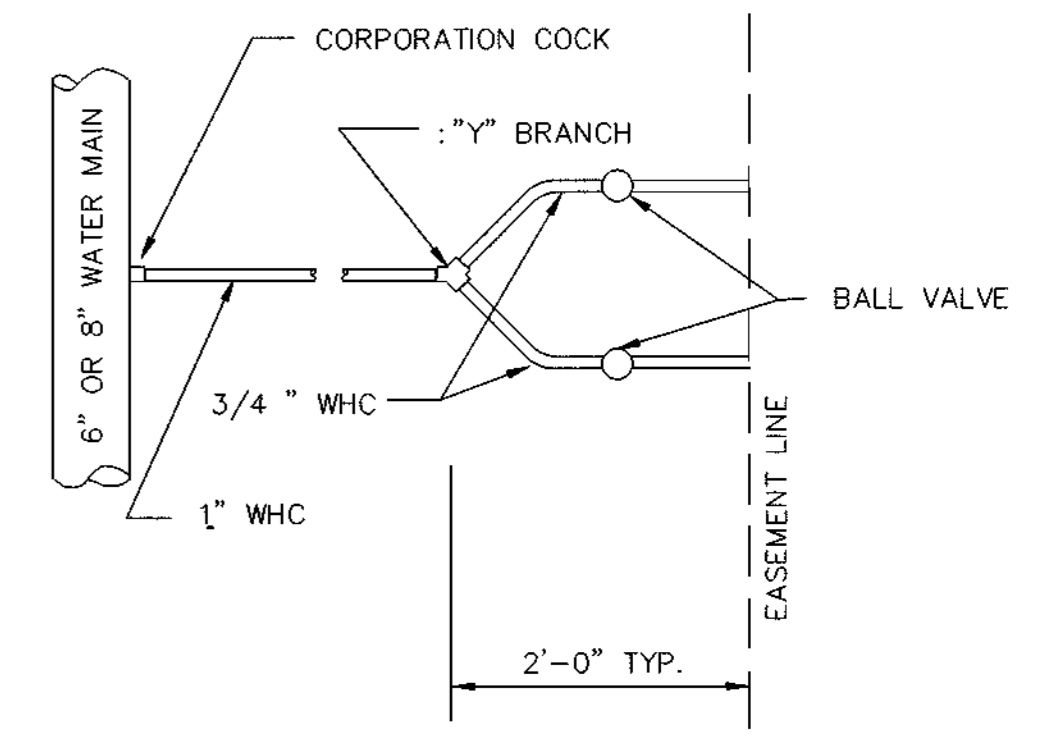
LITTLE COVE FARM WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+28	6" V	5' RT.
0+03	8"x6" T	5' RT.
0+06	6" V	5' RT.
0+54	6"-1/4 H.B.	5' RT.
1+64	6"-1/4 H.B.	4' RT.
2+13	6" V	5' RT.
2+16	8"x6" R	5' RT.

STONE THROW WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+00	6" V	5' LT.
0+03	8"-1/8 H.B.	6' LT.
1+58	8"-1/8 H.B.	4' LT.
2+11	8"-1/8 H.B.	1' RT.
4+30	8"x6" T	1' RT.
5+60	8"-1/4 H.B.	1' RT.
6+48	8"x6" F.H.T.	5' LT.
9+83	8" V	5' LT.

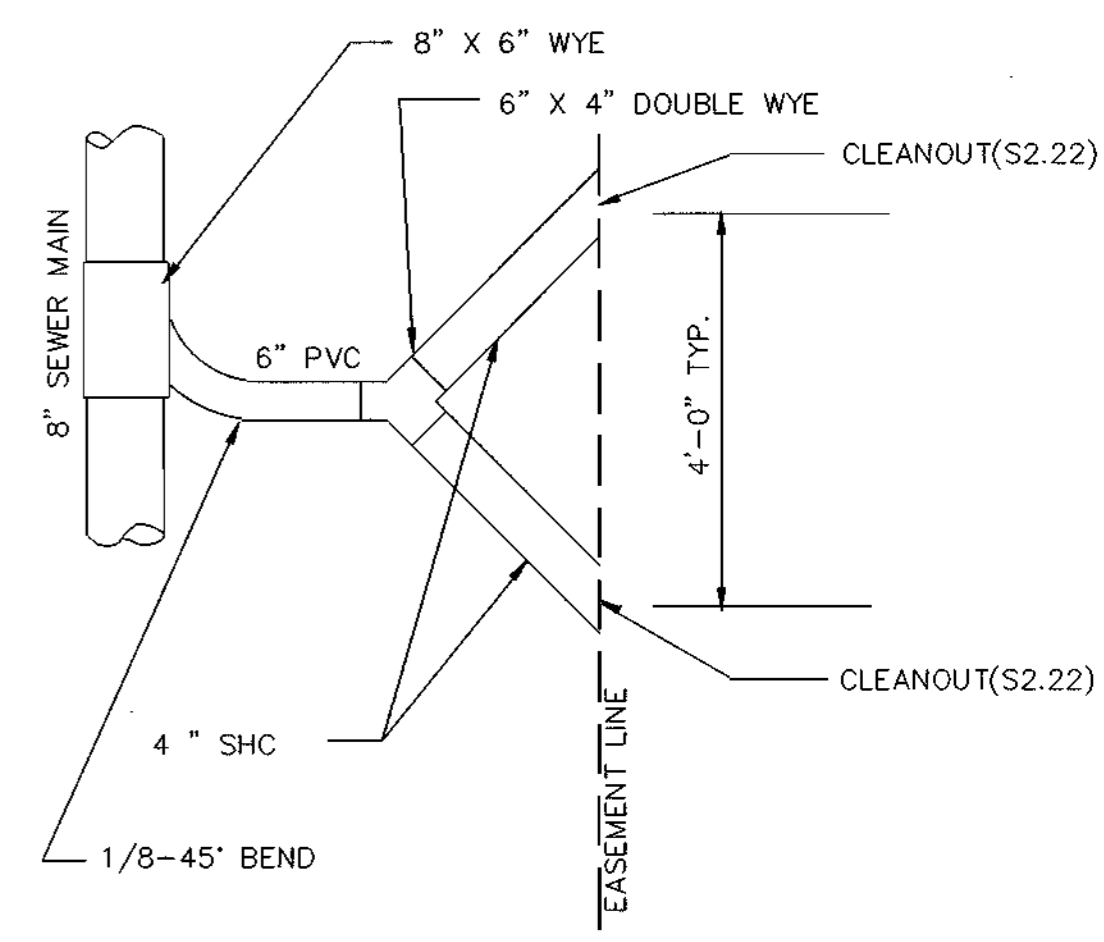
WATER EXTENSION		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	8" V	-
0+85	8" C&B	-

PORT CAPITAL DRIVE		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	12"x8" R	-
2+44	8" V	-

MANHOLE LOCATION CHART			
MH #	ROAD	CL STATION	OFFSET
1	NEW COLONY BLVD.	0+18.0	47.7' RT
2	STONE THROW WAY	0+47.7	5.0' RT.
3	STONE THROW WAY	1+63.7	3.8' RT.
4	STONE THROW WAY	8+63.8	5.0' RT.
5	STONE THROW WAY	8+63.9	60.2' RT.
6	OLD FRIENDSHIP WAY	1+65.5	38.2' RT.
7	OLD FRIENDSHIP WAY	2+13.5	23.0' RT.
8	OLD FRIENDSHIP WAY	2+98.3	15.5' RT.
9	WATERLOO PASS	2+34.3	12.0' LT.
10	WATERLOO PASS	1+82.5	2.8' LT.
11	STONE THROW WAY	2+18.3	5.6' RT.
12	STONE THROW WAY	4+11.9	5.4' RT.
13	STONE THROW WAY	5+23.9	4.9' RT.
14	STONE THROW WAY	6+41.9	5.0' RT.
15	LITTLE COVE FARM WAY	1+97.6	13.0' LT.
16	LITTLE COVE FARM WAY	0+94.9	1.6' LT.
17	OLD FRIENDSHIP WAY	1+69.2	12.4' RT.
18	WATERLOO PASS WAY	0+97.9	11.3' LT.
19	WATERLOO PASS WAY	1+30.7	2.4' LT.



TYPICAL DETAIL -
TWIN WATER HOUSE CONNECTION (TWHC)



TYPICAL DETAIL -
TWIN SEWER HOUSE CONNECTION (TSHC)

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.

DEVELOPER'S SIGNATURE: *[Signature]* DATE: 11/21/96

DEVELOPER'S NAME: _____

ENGINEER'S SIGNATURE: *[Signature]* DATE: 11-21-96

ENGINEER'S NAME: R. JACOB HIKMAT

REVIEWED FOR HOWARD SCD AND MEET TECHNICAL REQUIREMENTS. DATE: 12/1/96

USDA-NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT. DATE: 12/1/96

HOWARD SCD

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DATE: 12-2-96

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

DATE: 12/6/96

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



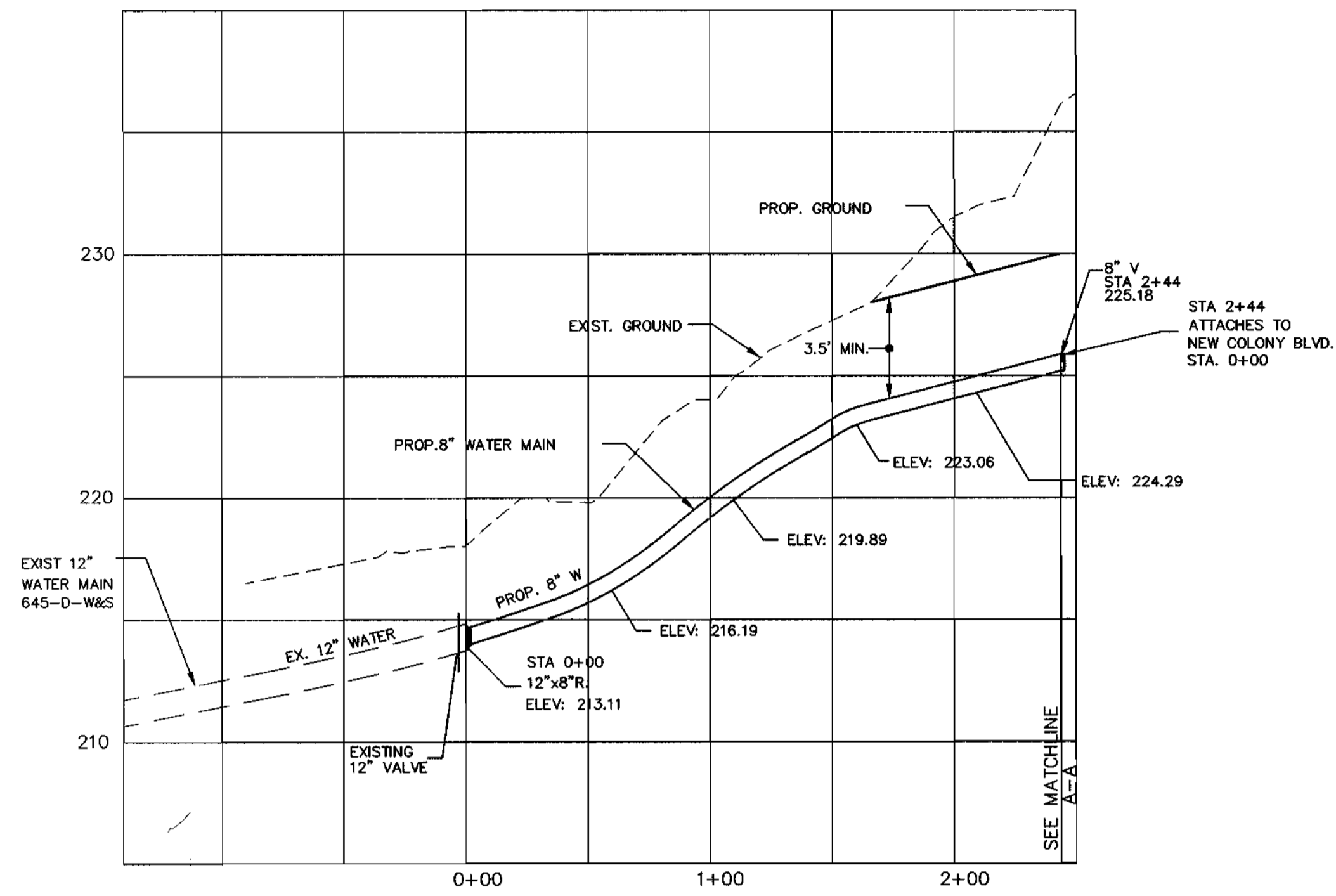
engineering	s.d.				
illustration	s.d.				
approval	J.H.				
project	M.P.	2.	REV. G" WATER MAIN ALONG LITTLE COVE FARM WAY	4-2-01	
date	94044	RCJ	1	RELOCATE 8" W. REMOVE EASEMENT, ADD S & W CONNECTIONS	4-4-97
NOV 1996	BY NO.			REVISION	DATE

WATER & SEWER PLAN

600' SCALE MAP NO. 43 BLOCK NO. 3

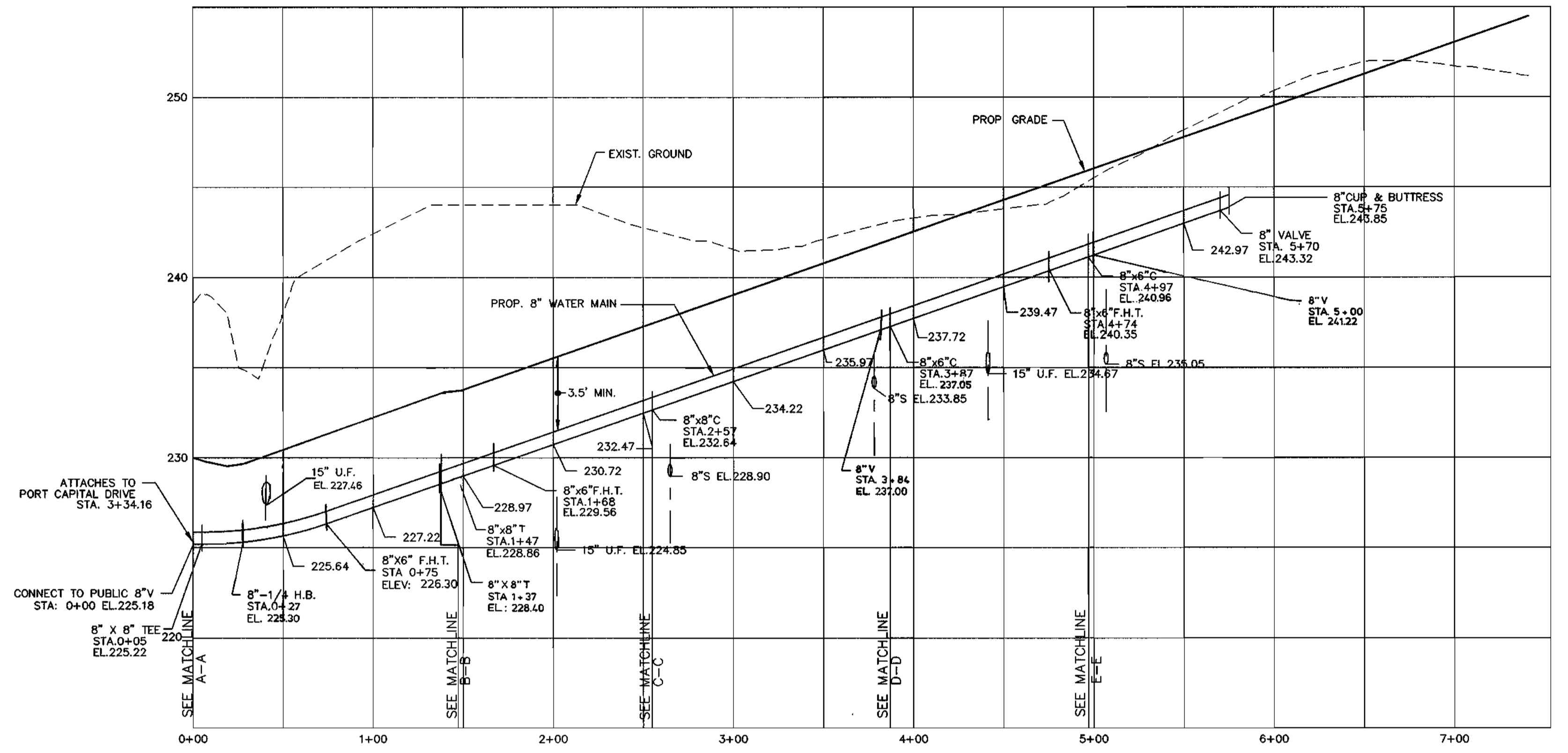
NEW COLONY VILLAGE PHASE I
CONTRACT #14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY

scale 1"=50'
2 of 7



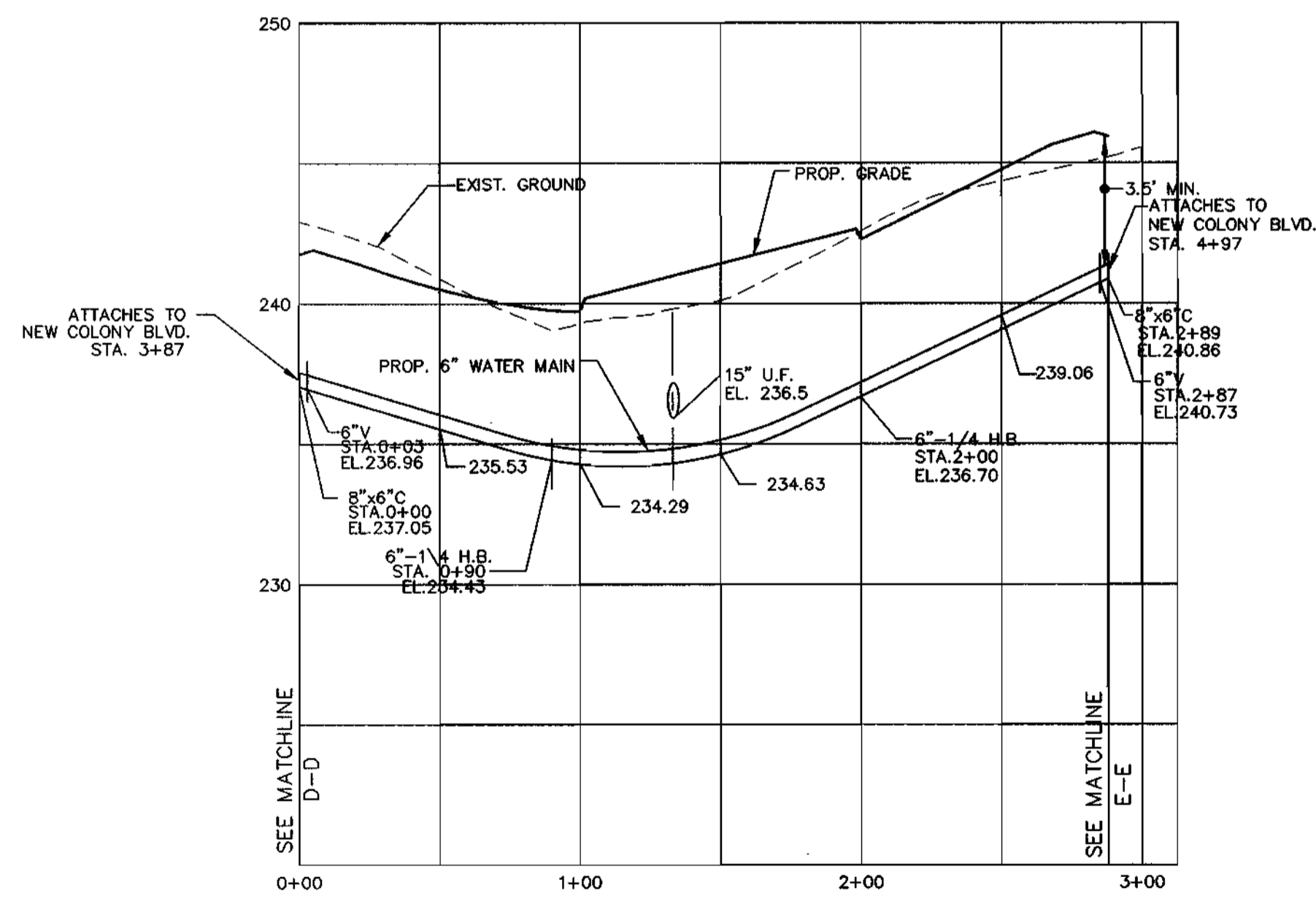
8" WATER MAIN PROFILE (PORT CAPITAL DRIVE)

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



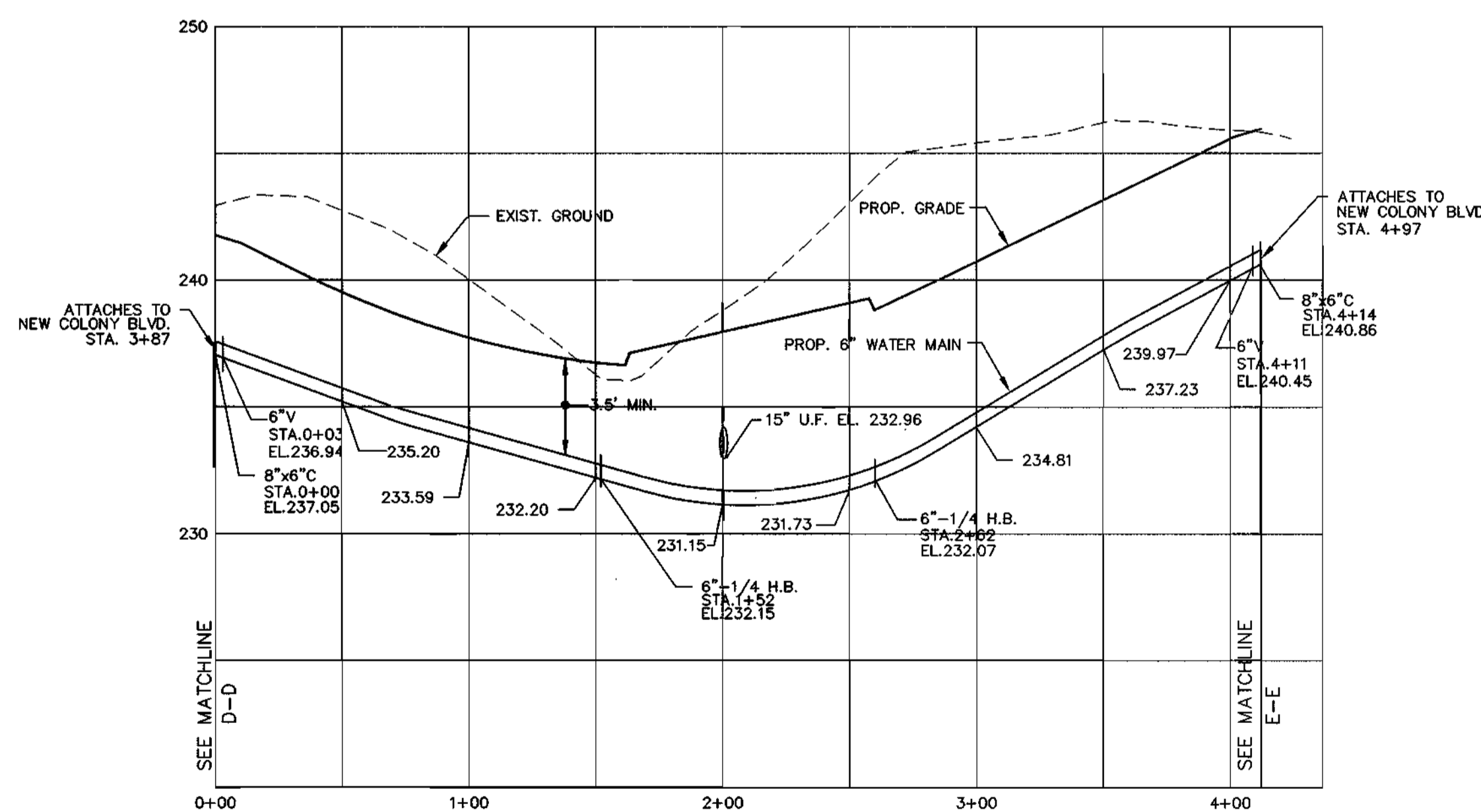
8" WATER MAIN PROFILE (NEW COLONY BLVD.)

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



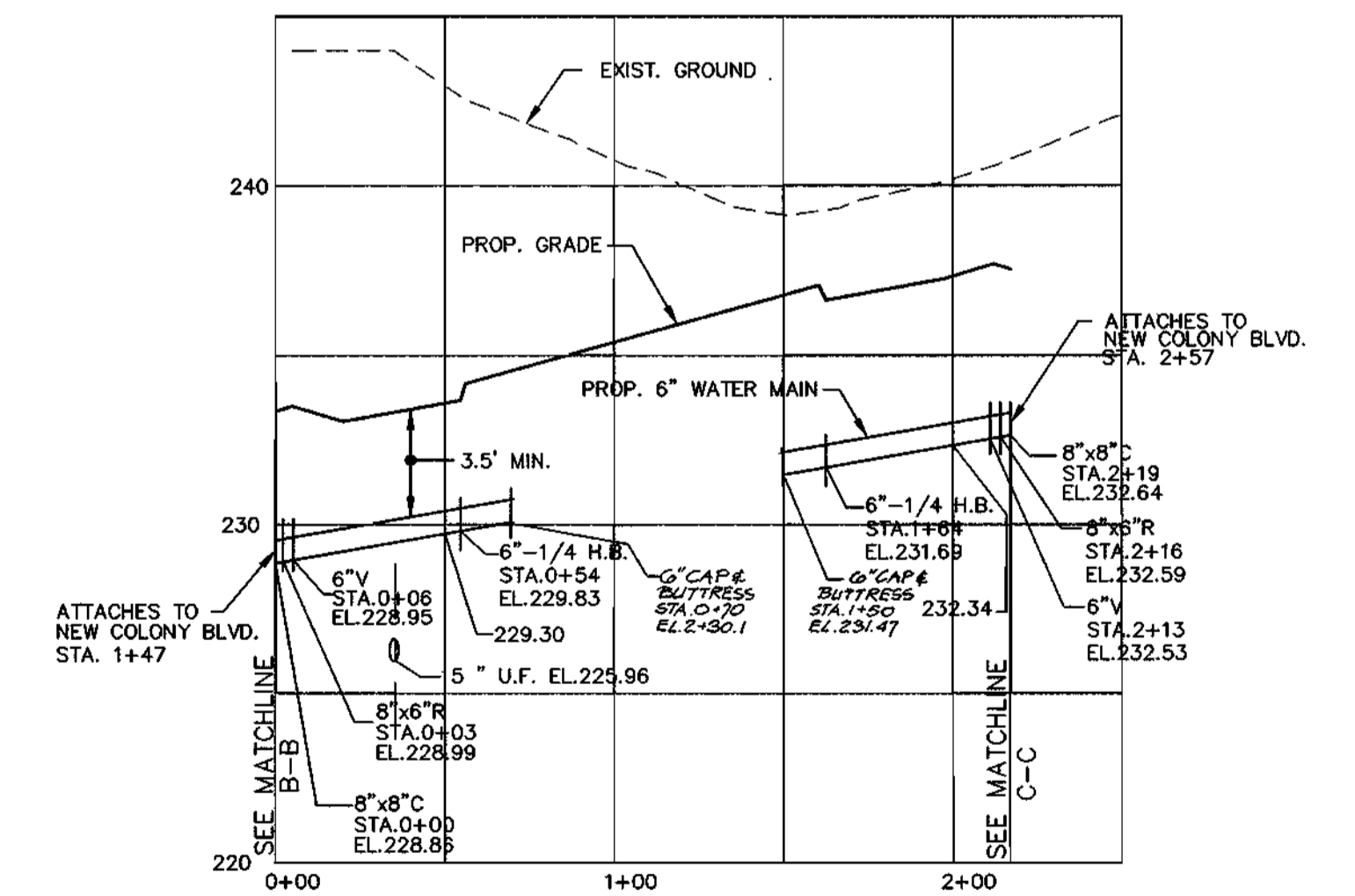
6" WATER MAIN PROFILE (WATERLOO PASS)

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



6" WATER MAIN PROFILE (OLD FRIENDSHIP WAY)

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



6" WATER MAIN PROFILE (LITTLE COVE FARM WAY)

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

CONTRACT NO.: 14-3564-D
NEW COLONY VILLAGE, PHASE I
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

F: 954044.DWG (PHASE I) WMS 144-WS-1

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. J. Berman
12-2-96
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
M. J. Danman
12/6/96
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 Bal. (301) 621-6321 Wash. (410) 987-0298 Fax

M. J. Danman
11-21-96

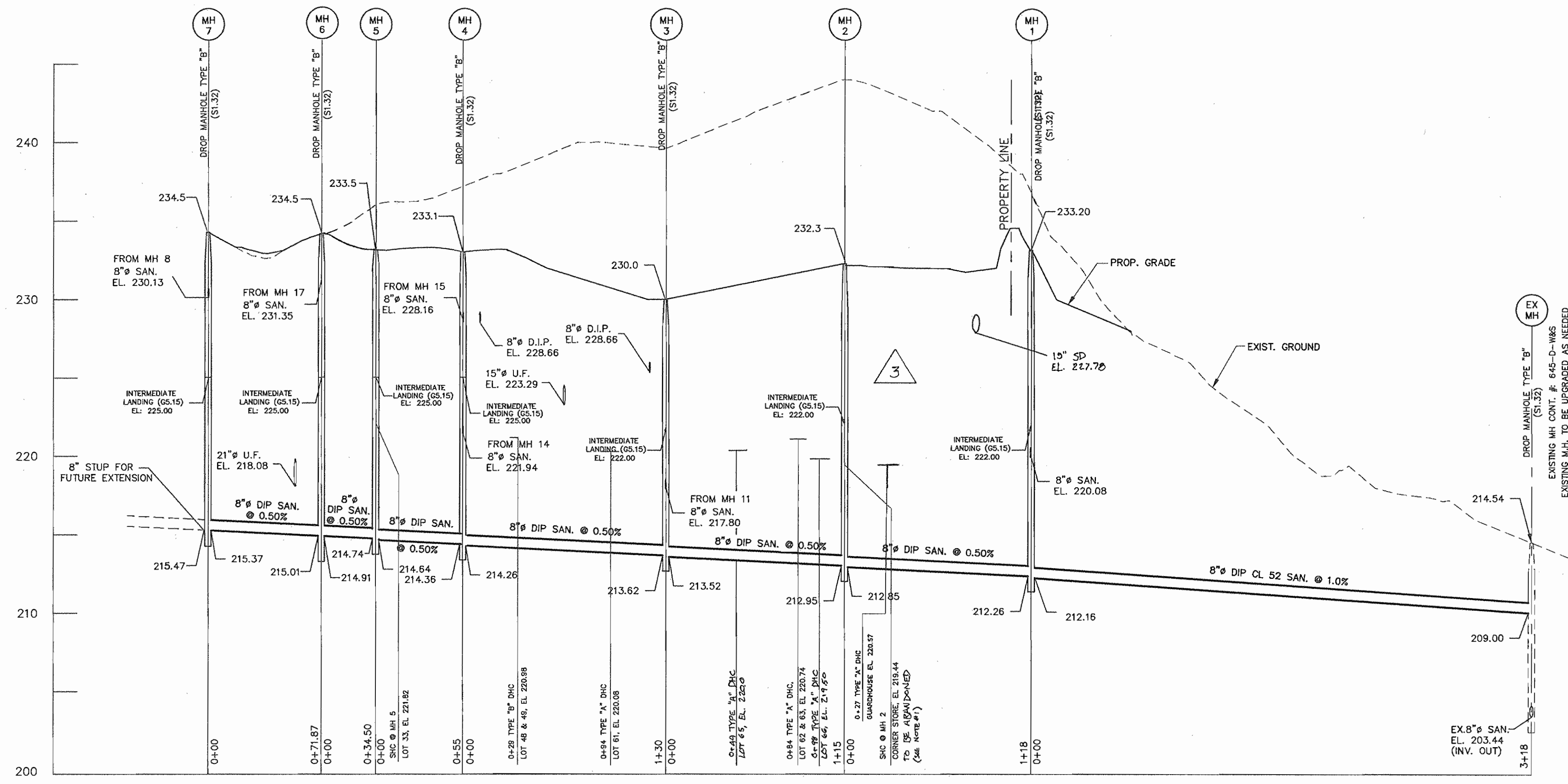
engineering	s.d.				
illustration	s.d.				
approval	J.H.				
project	M.P. 2	REV. 6" WATER MAIN PROFILE ALONG LITTLE COVE FARM WAY	4-2-01		
	RCJ 1	CHANGE 8" W PROFILE ON NEW COLONY BLVD.	4-4-97		
date	NOV 1996	BY NO.	REVISION	DATE	

WATER PROFILES

600' SCALE MAP NO. 43 BLOCK NO. 3

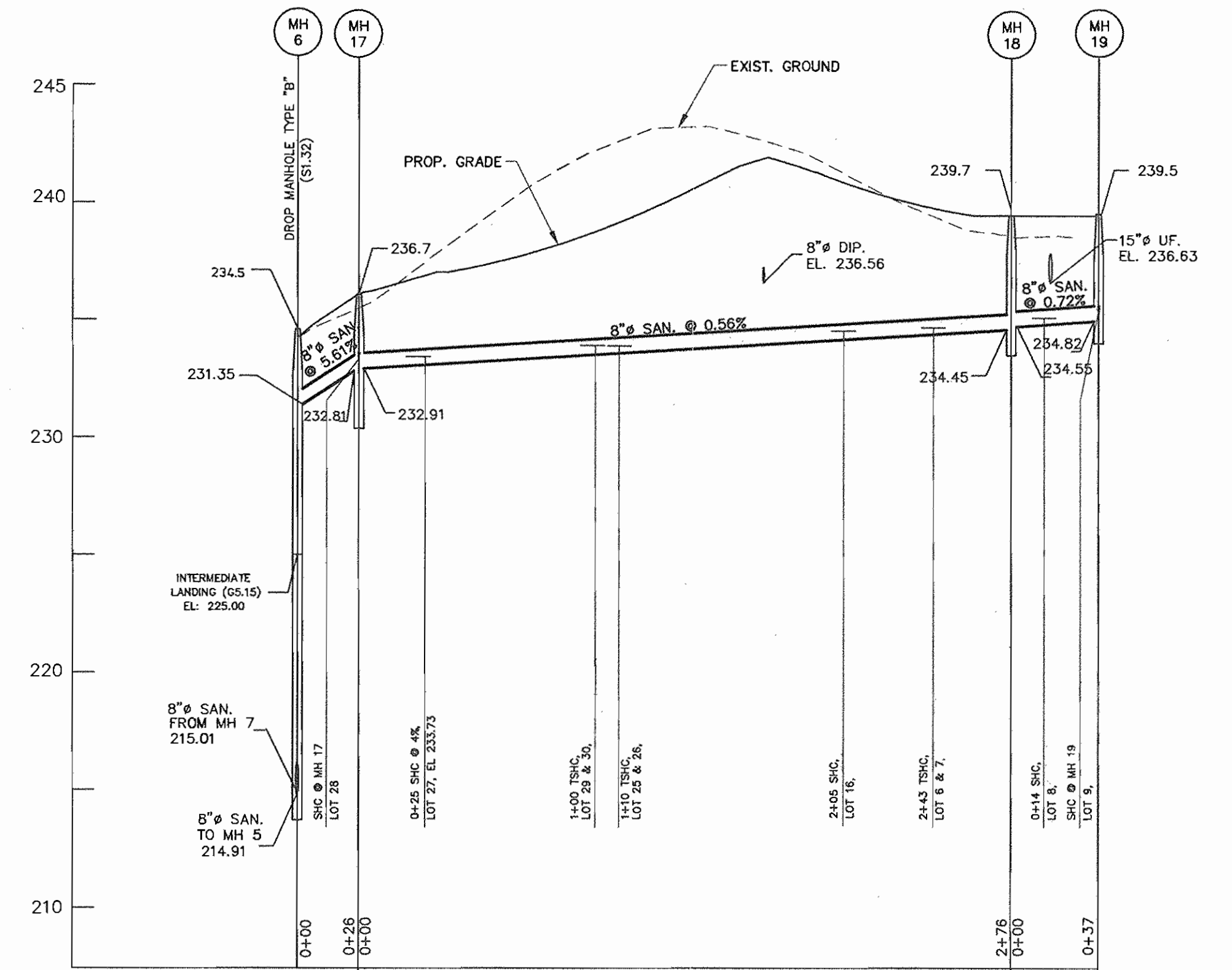
NEW COLONY VILLAGE
PHASE I
CONTRACT #14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
HOR. 1"=50'
VET. 1"=5'
3 of 7



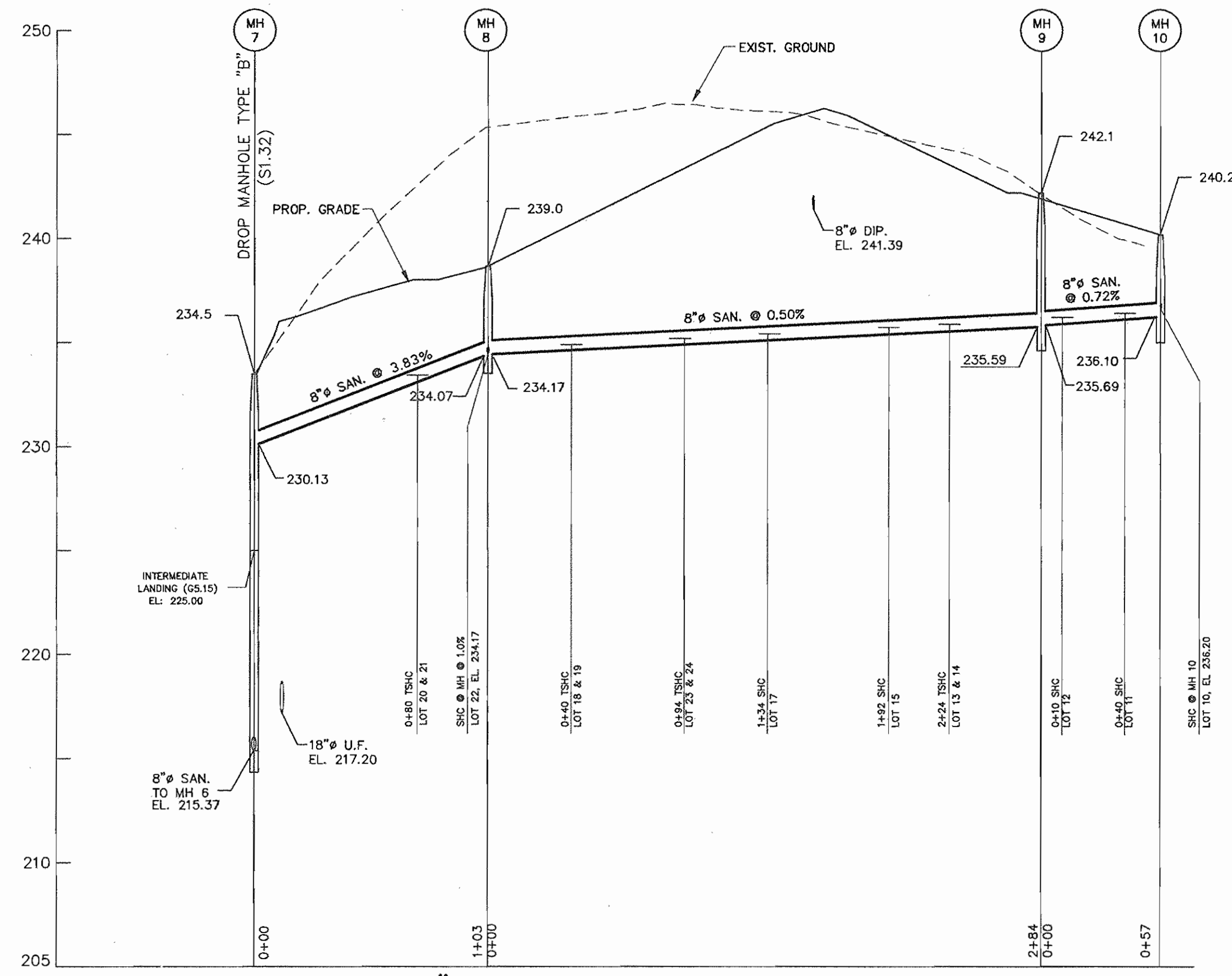
8" SEWER MAIN PROFILE

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



8" SEWER MAIN PROFILE

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



8" SEWER MAIN PROFILE

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



- NOTES:
- WHC AND/OR SHC T.B.A. = TO BE ABANDONED AT THE MAIN PER HOWARD COUNTY STANDARD DETAILS.
 - DOUBLE WHC AND/OR SHC TO BE CONVERTED TO SINGLE HOUSE CONNECTIONS.



01/02/08 - SEALED FOR REVISION
ONLY UNITS 64-68 ADDED TO PLAN.

CONTRACT NO. 14-3564-D
NEW COLONY VILLAGE, PHASE I
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

94044.DWG\PHASE1\WKS\044-SAN-1.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

**MILDENBERG,
BOENDER & ASSOC., INC.**
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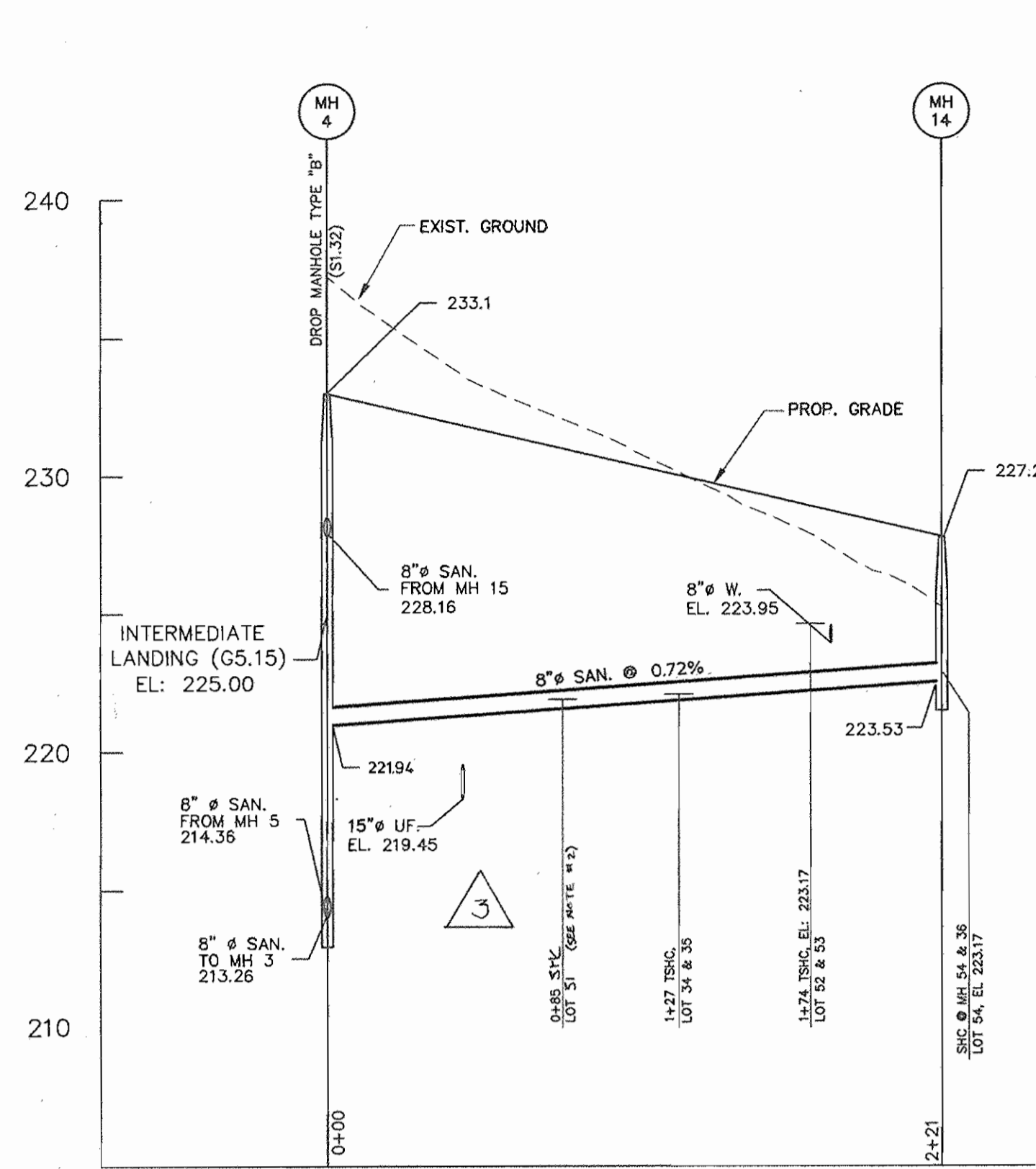
[Handwritten signature]
11-21-96

engineering	SD				
illustration	SD				
approval	J.H.	MRA	3	REMOVED DAY CARE & CORNER STORE. ADDED UNITS 64-68 REVISED HOUSE CONNECTIONS FOR UNITS 49, 51, 58 & 60.	01/08
project	94044	RCJ	1	ADD SHC TO PROFILE	4-7-97
date	NOV 96	BY	NO.	REVISION	DATE

**SEWER
PROFILES**

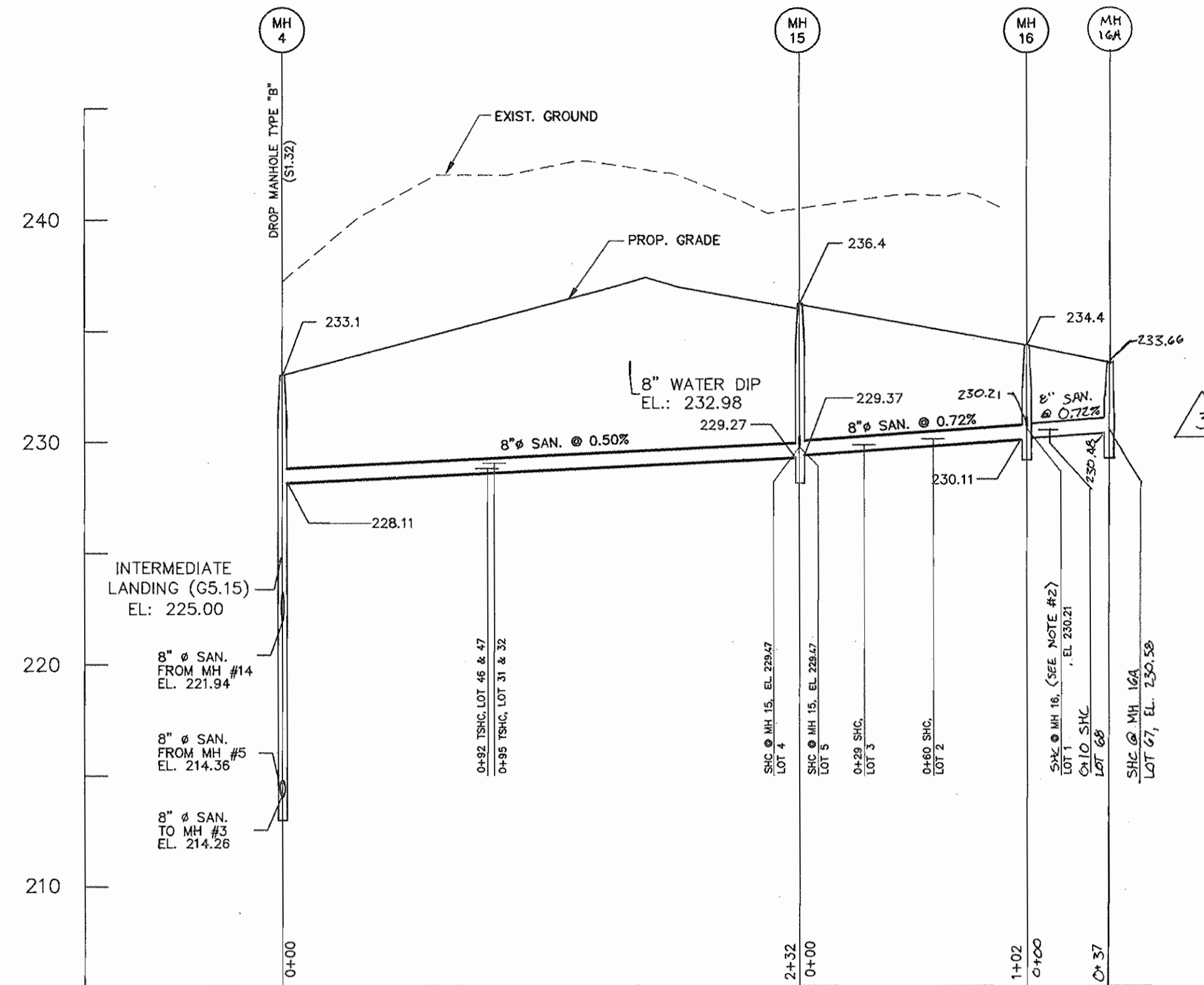
**NEW COLONY VILLAGE
PHASE I**
CONTRACT #14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale



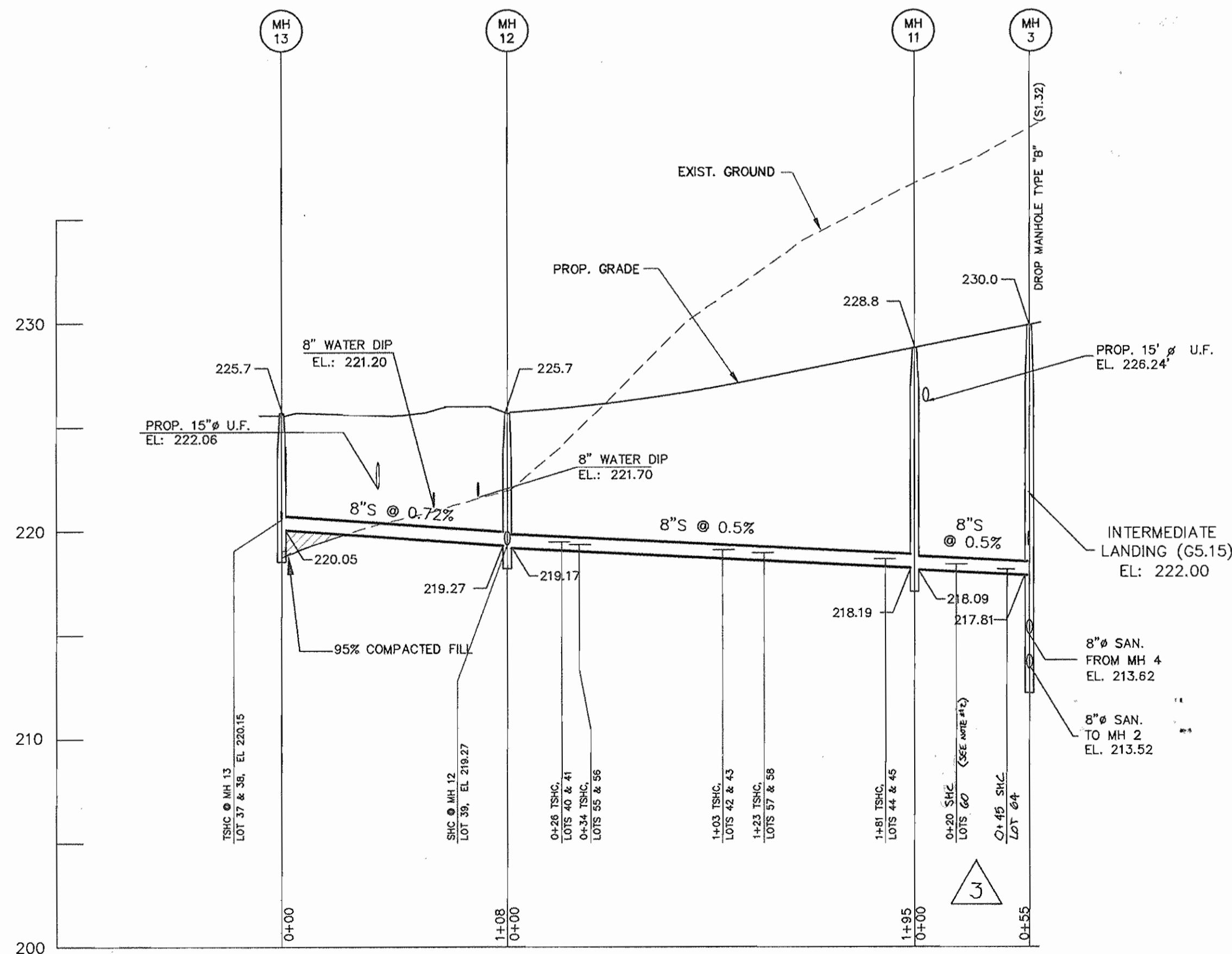
8" SEWER MAIN PROFILE

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



8" SEWER MAIN PROFILE

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



8" SEWER MAIN PROFILE

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

SANITARY SEWER STRUCTURE SCHEDULE						
STR. NO.	TOP ELEV.	INV. IN	INV. OUT	TYPE		
MH 16A	233.66	230.58	230.48	SHALLOW MANHOLE, HO. CO STANDARD	G5.12	

SEWER HOUSE CONNECTION TABLE						
UNIT #	% SLOPE	INV. @ EASE	SERVICEABLE ELEV.	TYPE OF CONNECTION		
DAYCARE	2	230.49	233.59	TSHC		
1	2	230.49	233.29	TSHC		
2	2	230.40	233.20	SHC		
3	2	230.09	232.89	SHC		
4	2	229.67	232.47	MHC		
5	2	229.67	232.47	MHC		
6 & 7	2	234.47	237.27	TSHC		
8	2	234.85	237.65	SHC		
9	2	235.16	237.96	SHC		
10	2	236.44	239.24	SHC		
11	2	236.26	239.06	SHC		
12	2	235.96	238.76	SHC		
13 & 14	2	235.59	238.39	TSHC		
15	2	235.72	238.92	SHC		
16	2	234.46	237.26	SHC		
17	2	235.14	237.94	SHC		
18 & 19	2	234.64	237.44	TSHC		
20 & 21	2	233.48	236.83	TSHC		
22	2	234.55	237.32	MHC		
23 & 24	2	235.14	237.94	TSHC		
25 & 26	1	233.73	236.48	TSHC		
27	4	233.87	236.77	SHC		
28	2	233.35	236.15	SHC		
29 & 30	2	233.67	236.47	TSHC		
31 & 32	2	228.79	231.59	TSHC		
33	2	222.07	224.87	MHC		
34 & 35	2	222.10	225.00	TSHC		
36	2	224.73	227.53	MTHC		
37 & 38	2	220.78	223.55	MTHC		
39	2	218.55	222.35	SHC		
40 & 41	2	219.24	222.04	TSHC		
42 & 43	2	218.86	221.66	TSHC		
44 & 45	2	218.47	221.27	TSHC		
46 & 47	2	228.87	231.77	TSHC		
48	2	221.18	223.88	DHC		
49	2	221.18	223.88	DHC		
50 & 51	2	221.92	224.89	SHC		
52 & 53	2	224.64	227.54	TSHC		
54	2	223.61	226.47	MTHC		
55 & 56	2	219.39	222.19	TSHC		
57 & 58	2	218.96	221.76	TSHC		
59 & 60	2	218.39	221.19	SHC		
61	2	220.28	223.08	DHC		
62 & 63	2	219.68	223.94	TSHC		
CORNER	2	219.68	222.48	MTHC		
GUARD	2	218.23	221.73	DHC		
64	2	218.23	221.73	SHC		
65	2	216.28	223.04	DHC		
66	2	219.78	222.62	DHC		
67	1	230.66	232.58	SHC		
68	1	230.66	232.22	SHC		

MIN. CELLAR ELEV.

UNIT #	MCE
17	273.94
33	224.87
44 & 45	221.27
48	223.88
49	223.88
58	221.76
59 & 60	221.19
61	223.08
62 & 63	223.94
GUARD	225.07
64	221.73
65	223.04
66	222.62
67	232.58
68	232.22

FROM:	TO:	DIST:	FROM:	TO:	DIST:
MH 15	LOT 46	105'	SDI-14	LOT 40	56'
MH 4	LOT 33	48'	MH 12	LOT 40	12'
MH 4	LOT 32	53'	MH 12	LOT 38	17'
MH 4	LOT 48	54'	MH 12	LOT 55	23'
MH 4	LOT 41	53'	MH 12	LOT 41	64'
MH 4	LOT 46	133'	MH 12	LOT 42	70'
MH 4	LOT 31	136'	MH 12	LOT 56	76'
SDI-5	LOT 32	100'	MH 12	LOT 57	82'
SDI-5	LOT 33	95'	MH 12	LOT 43	143'
SDI-5	LOT 48	100'	MH 12	LOT 44	148'
SDI-5	LOT 47	106'	MH 12	LOT 58	162'
SDI-5	LOT 50	25'	MH 12	LOT 59	168'
SDI-5	LOT 49	26'	MH 11	LOT 59	36'
MH 4	LOT 49	45'	MH 11	LOT 58	40'
MH 4	LOT 50	51'	MH 11	LOT 44	48'
SDI-5	LOT 34	45'	MH 11	LOT 43	54'
SDI-5	LOT 51	86'	MH 11	LOT 57	115'
SDI-5	LOT 51	91'	MH 11	LOT 56	124'
SDI-5	LOT 35	113'	MH 11	LOT 42	127'
FH	LOT 35	18'	MH 11	LOT 41	135'
FH	LOT 32	51'	MH 11	LOT 55	178'
FH	LOT 31	56'	MH 11	LOT 45	19'
FH	LOT 34	86'	MH 11	LOT 60	44'
FH	LOT 53	48'	MH 3	LOT 60	27'
FH	LOT 54	52'	MH 3	LOT 45	40'
MH 14	LOT 54	13'	MH 3	CORNER STORE	20'
MH 14	LOT 53	15'	MH 3	LOT 61	48'
MH 14	LOT 36	77'	MH 3	LOT 62	53'
MH 14	LOT 37	81'	MH 3	LOT 63	132'
MH 13	LOT 37	48'	MH 2	LOT 63	21'
MH 13	LOT 36	59'	MH 2	LOT 62	68'
MH 13	LOT 38	13'	MH 2	LOT 61	73'
SDI-14	LOT 38	48'	MH 2	CORNER STORE	32'
SDI-14	LOT 39	53'			

NOTES:
1. WHC AND/OR SHC T.S.A. = TO BE ABANDONED AT THE MAIN PER HOWARD COUNTY STANDARD DETAILS
2. DOUBLE WHC AND/OR SHC TO BE CONVERTED TO SINGLE HOUSE CONNECTIONS



01/02/08 - SEALED FOR REVISION ONLY. UNITS 64-68 ADDED TO PLAN.

CONTRACT NO. 14-3564-D
NEW COLONY VILLAGE, PHASE I
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE: 12-2-96

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
DATE: 12/6/96

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

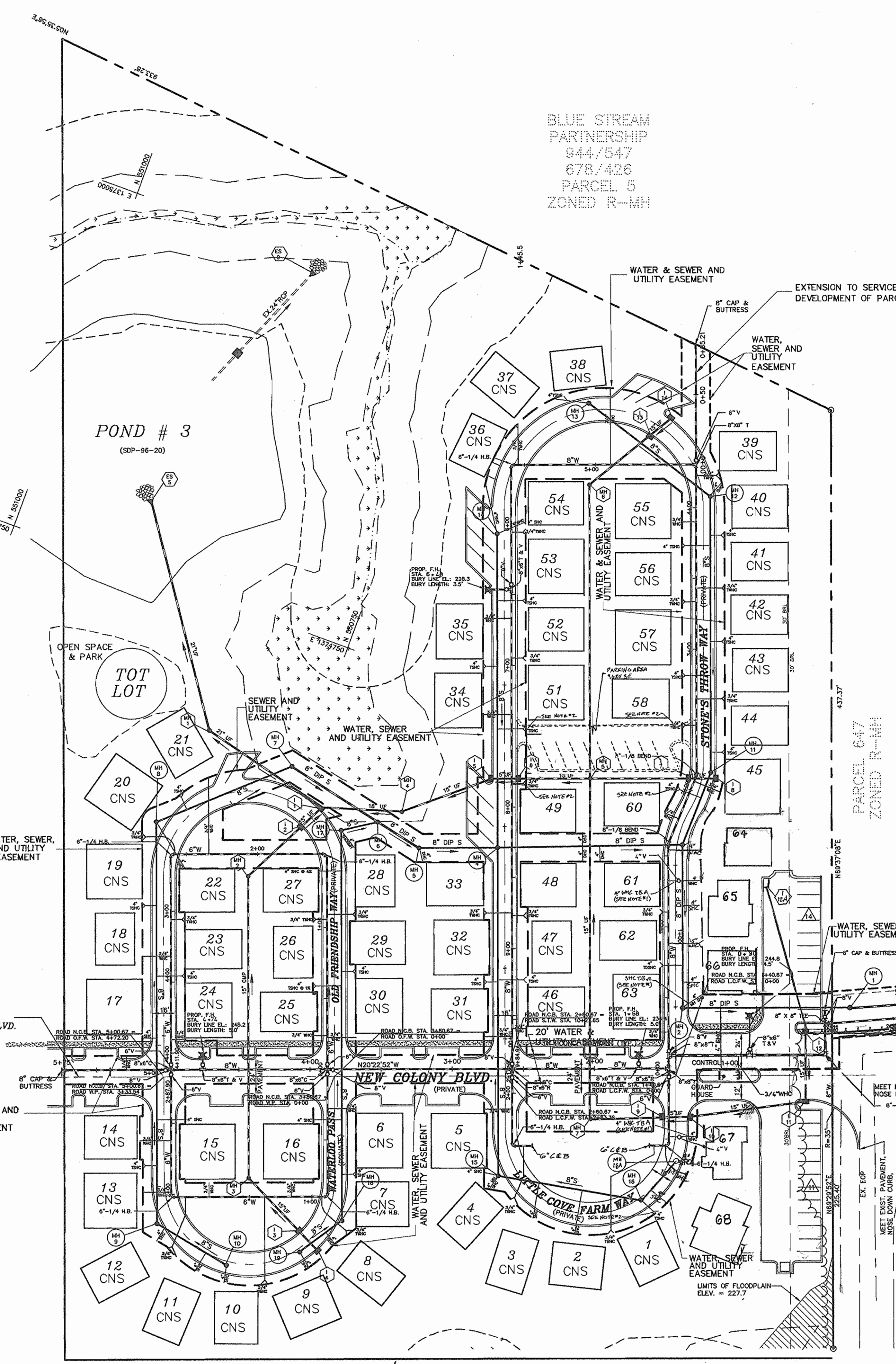


engineering	SD				
illustration	SD				
approval	J.H.	MRA 3	REVISED DAY CARE & CORNER STORE. ADDED UNITS 64-68	12/08	
project	94044	REVISED HOUSE CONNECTIONS TO UNITS 49, 51, 58 & 60.			
date	NOV 96	ADD SHC TO CHART		4-7-97	
	BY NO.	REVISION		DATE	

SEWER PROFILES
600' SCALE MAP NO. 43 BLOCK NO. 3

NEW COLONY VILLAGE PHASE I
CONTRACT # 14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale AS SHOWN
5 of 7



BLUE STREAM PARTNERSHIP
844/547
678/426
PARCEL 5
ZONED R-MH

PORT CAPITAL CENTER SECTION 1
678/19
ZONED M-1

WATER MAIN TABULATION CHART		
NEW COLONY BLVD.		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
1+37	8" x 8" T	10' RT.
0+05	8" V	41' RT.
3+84	8" C&B	46' RT.
0+05	8" V	5' RT.
0+37	8" x 8" T	36' RT.
0+90	8"-1/4" H.B.	10' RT.
1+47	8" x 6" C	5' RT.
1+68	8" x 6" F.H.T.	5' RT.
2+57	8" x 6" C	5' RT.
3+87	8" x 6" C	5' RT.
4+74	8" x 6" F.H.T.	5' RT.
4+87	8" x 6" C	5' RT.
5+00	8" V	5' RT.
5+75	8" C&B	5' RT.

WATERLOO PASS WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	6" V	5' RT.
0+90	6"-1/4" H.B.	4' RT.
2+00	6"-1/4" H.B.	4' RT.
2+87	6" V	5' RT.

OLD FRIENDSHIP WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	6" V	5' RT.
1+52	6"-1/4" H.B.	5' LT.
2+62	6"-1/4" H.B.	3' LT.
4+11	6" V	3' LT.

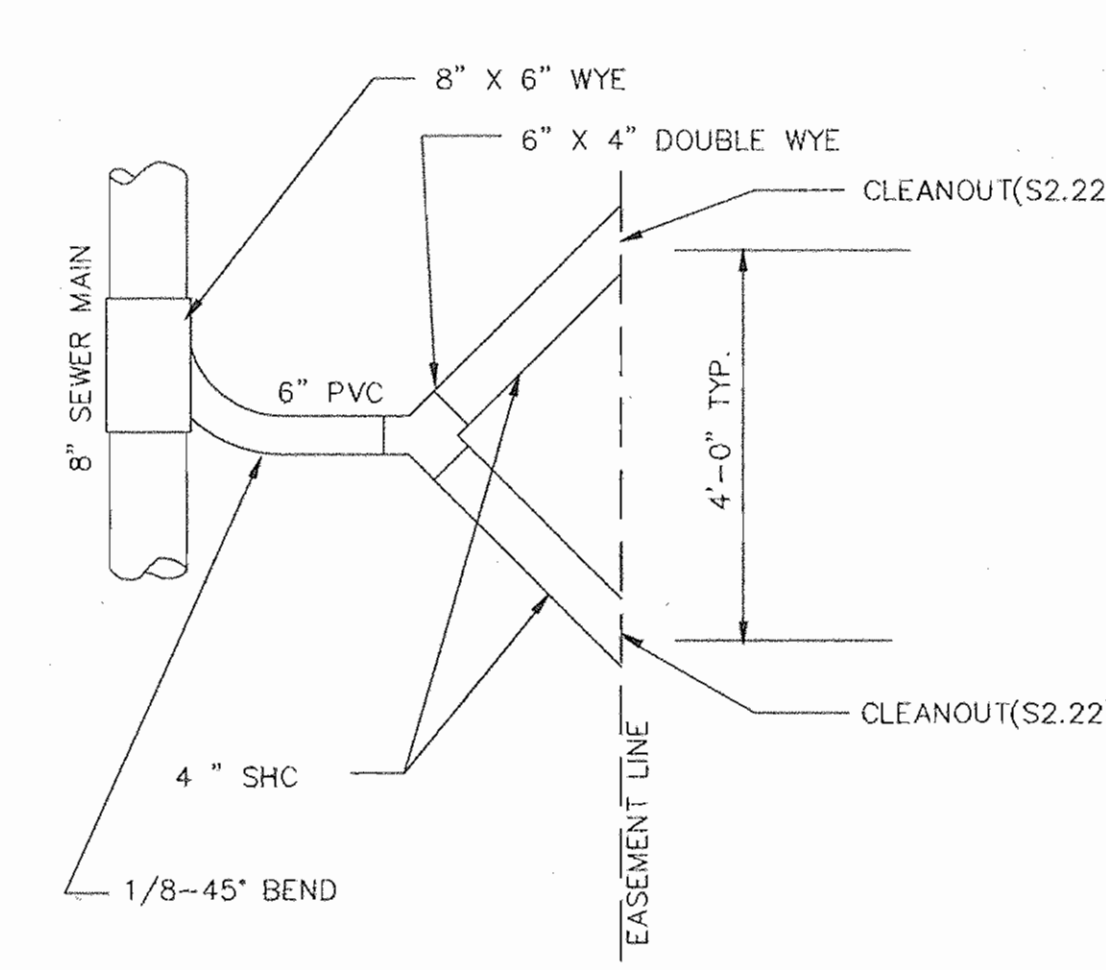
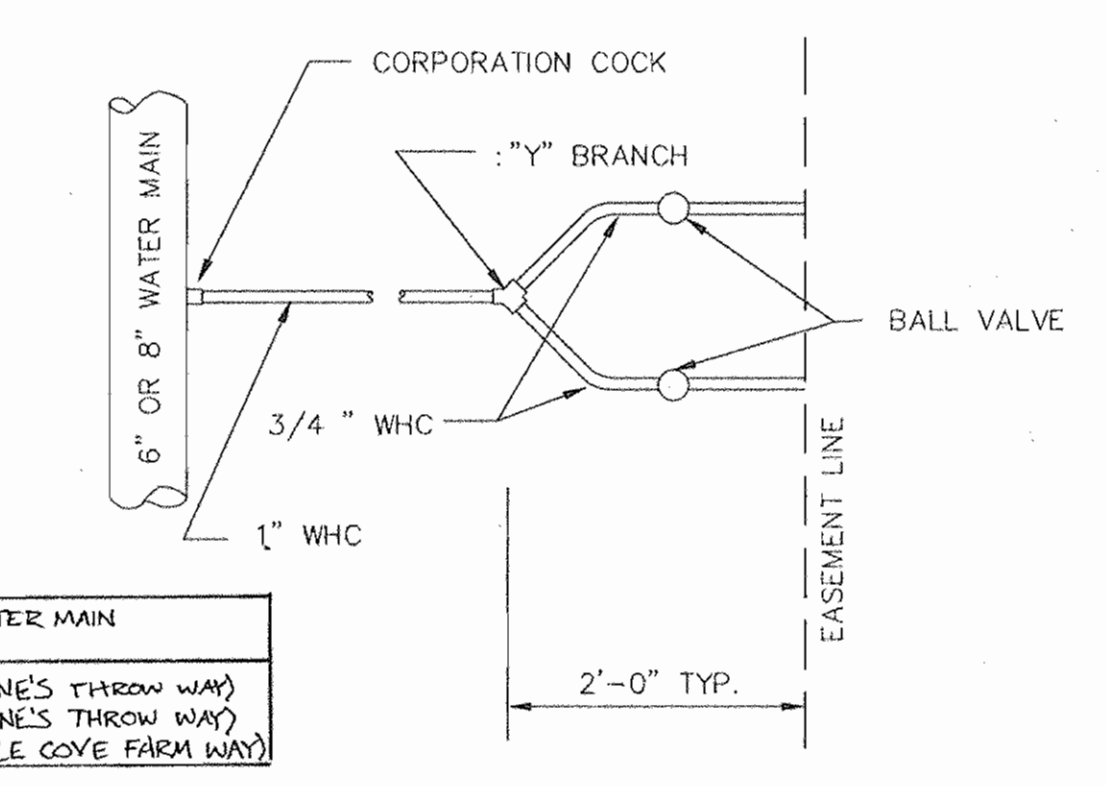
LITTLE COVE FARM WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+48	6" V	5' RT.
0+03	8" x 6" C	5' RT.
0+06	6" V	5' RT.
0+54	6"-1/4" H.B.	5' RT.
1+64	6"-1/4" H.B.	4' RT.
2+13	6" V	5' RT.
2+16	8" x 6" R	5' RT.

STONE THROW WAY		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
1+40	8" V	5' LT.
0+03	8" V	5' LT.
1+58	8"-1/8" H.B.	6' LT.
2+11	8"-1/8" H.B.	4' LT.
4+30	8"-1/8" H.B.	1' RT.
5+60	8"-1/4" H.B.	1' RT.
6+48	8" x 6" F.H.T.	5' LT.
9+83	8" V	5' LT.

WATER EXTENSION		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	8" V	-
0+85	8" C&B	-

PORT CAPITAL DRIVE		
WATER MAIN STA.	APPURTENANCE	DIST. FROM C
0+03	12" x 8" R	-
2+44	8" V	-

MANHOLE LOCATION CHART			
MH #	ROAD	CL STATION	OFFSET
1	NEW COLONY BLVD.	0+18.0	47.7' RT.
2	STONESTHROW WAY	0+47.7	5.0' RT.
3	STONESTHROW WAY	1+63.7	3.8' RT.
4	STONESTHROW WAY	8+63.8	5.0' RT.
5	STONESTHROW WAY	8+63.9	60.2' RT.
6	OLD FRIENDSHIP WAY	1+65.5	38.2' RT.
7	OLD FRIENDSHIP WAY	2+13.5	23.0' RT.
8	OLD FRIENDSHIP WAY	2+98.3	15.5' RT.
9	WATERLOO PASS	2+34.3	12.0' LT.
10	WATERLOO PASS	1+82.5	2.8' LT.
11	STONESTHROW WAY	2+18.3	5.6' RT.
12	STONESTHROW WAY	4+11.9	5.4' RT.
13	STONESTHROW WAY	5+23.9	4.9' RT.
14	STONESTHROW WAY	6+41.9	5.0' RT.
15	LITTLE COVE FARM WAY	1+97.6	13.0' LT.
16	LITTLE COVE FARM WAY	0+94.9	1.6' LT.
17	OLD FRIENDSHIP WAY	1+69.2	12.4' RT.
18	WATERLOO PASS WAY	0+97.9	11.3' LT.
19	WATERLOO PASS WAY	1+30.7	2.4' LT.
16A	LITTLE COVE FARM WAY	0+60.0	4.5' LT.



LOT#	SERVICE CONNECTION	WATER MAIN
64	SINGLE	EX. 8" (STONE'S THROW WAY)
65/66	TWIN	EX. 8" (STONE'S THROW WAY)
67/68	TWIN	EX. 8" (LITTLE COVE FARM WAY)

LOT#	SERVICE CONNECTION	SEWER MAIN
64	SINGLE	EX. 8" (STONE'S THROW WAY)
65	SINGLE	EX. 8" (STONE'S THROW WAY)
66	SINGLE	EX. 8" (STONE'S THROW WAY)
67	SINGLE	EX. 8" (LITTLE COVE FARM WAY)
68	SINGLE	EX. 8" (LITTLE COVE FARM WAY)

CONTRACT NO. 14-3564-D
NEW COLONY VILLAGE, PHASE I
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

- NOTES:
1. WHC AND/OR SHC IS A - TO BE ABANDONED AT THE MAIN PER HOWARD COUNTY STANDARD DETAILS.
- ABANDONMENT OF THE 1" WATER CONNECTIONS SHALL INCLUDE EXCAVATION OVER THE MAIN, REMOVAL OF THE CORPORATION STOP, INSERTING A BRASS PLUG OR REPAIR WITH AN APPROVED FULL CIRCLE REPAIR CLAMP. THE BALL VALVE BOX AT THE PROPERTY LINE SHALL BE REMOVED.
- ABANDONMENT OF THE 4" WATER CONNECTION SHALL INCLUDE EXCAVATION OVER THE MAIN, TURNING OFF THE 4" VALVE, CUTTING & REMOVAL OF A SECTION OF PIPE BEHIND THE VALVE, BLOCKING THE VALVE, AND REMOVAL OF THE ROADWAY BOX.
 2. DOUBLE WHC AND/OR SHC TO BE CONVERTED TO SINGLE HOUSE CONNECTIONS.
- CONVERSION OF THE TWIN SEWER CONNECTIONS TO A SINGLE CONNECTION REQUIRES EXCAVATION OF THE Y BRANCH, CUTTING & CAPPING OF THE SEWER HOUSE CONNECTION AT THE Y BRANCH AND REMOVAL OF THE CLEANOUT AT THE PROPERTY LINE.

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.

DEVELOPER'S SIGNATURE: *[Signature]* DATE: 11/22/96

ENGINEER'S SIGNATURE: *[Signature]* DATE: 11-21-96
R. JACOB HIKMAT

REVIEWED FOR HOWARD SCD AND MEET TECHNICAL REQUIREMENTS.
[Signature] DATE: 12/6/96

USDA-NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.
[Signature] DATE: 12/7/96

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES
DATE: 12-2-96

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 12/6/96

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Blitts City, Maryland 21042
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engineering	s.d.				
illustration	s.d.				
approval	J.H.				
project	M.P.	2.	REV. G WATER MAIN ALONG LITTLE COVE FARM WAY	4-8-01	
date	R.C.J.	1	RELOCATE 8" W, REMOVE EASEMENT ADD S & W CONNECTIONS	4-4-97	
NOV 1996	BY NO.		REVISION	DATE	

WATER & SEWER PLAN

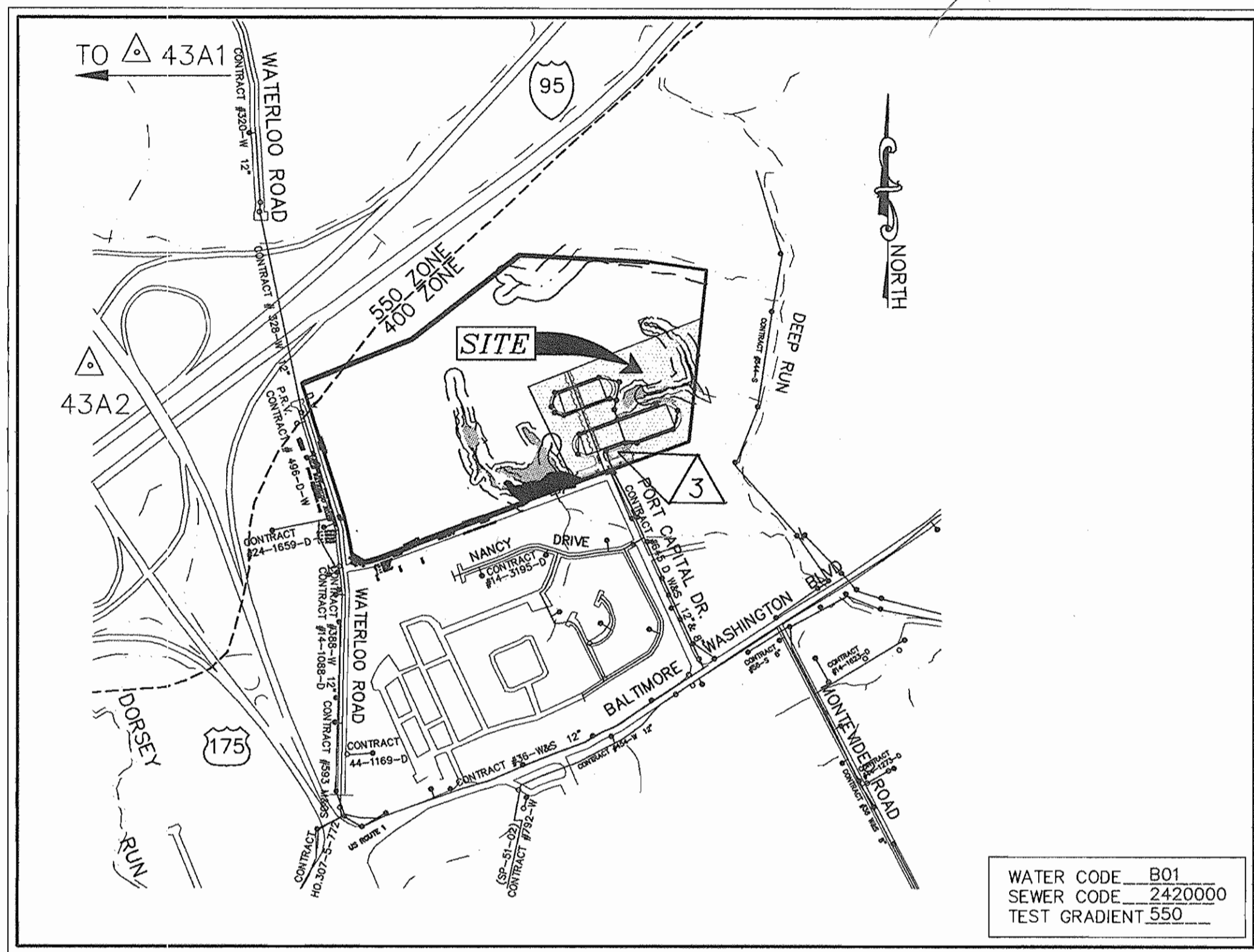
600' SCALE MAP NO. 43 BLOCK NO. 3

NEW COLONY VILLAGE
PHASE I
CONTRACT #14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY

scale
1"=50'
2 OF 7

QUANTITY TABLE

ITEMS	QUANTITIES		TYPE	MANUFACTURER/SUPPLIER
	ESTIMATED	QUANTITIES		
STANDARD MH	14	14		Atlantic Concrete
DROP MH, TYPE "B"	5	5		Atlantic Concrete
INTERMEDIATE LANDING	7	7		Atlantic Concrete
8" SEWER MAIN	1,696 L.F.	1654 L.F.		J.M. Manufacturing/BRS
8" DIP SEWER MAIN	843 L.F.	815 L.F.		Griffin Pipe Products/BRS
4" SEWER HOUSE CONNECTION	542 L.F.	758 L.F.		J.M. Manufacturing/BRS
6" SEWER HOUSE CONNECTION	275 L.F.	295 L.F.		J.M. Manufacturing/BRS
# SEWER HOUSE CONNECTIONS	13	13		
# DROP HOUSE CONNECTIONS	4	4		
# MH CONNECTIONS	4	4		
# TWIN SHC	20	20		
# TWIN DHC	1	1		
# TWIN MHC	4	4		
8" WATER	1890 L.F.	1874 L.F.		Griffin Pipe Products/BRS
6" WATER	972 L.F.	977 L.F.		Griffin Pipe Products/BRS
4" WHC	44 L.F.	43 L.F.		Mueller Co./BRS
4" V	2	2		Mueller Co./BRS
3/4" WHC	505 L.F.	750 L.F.		Howell Metals/BRS
1" WHC	547 L.F.	405 L.F.		Howell Metals/BRS
F.H.	4	4		Mueller Co./BRS
12"x8" REDUCER	1	1		Griffin Pipe Products/BRS
8"x6" T&V	4	4		Griffin Pipe Products/BRS
8" 1/4 H.B.	2	2		Griffin Pipe Products/BRS
6" 1/4 H.B.	6	6		Griffin Pipe Products/BRS
8"-1/8 H.B.	2	2		Griffin Pipe Products/BRS
8"x8" T	4	4		Griffin Pipe Products/BRS
8"x6" C	2	2		Griffin Pipe Products/BRS
8"x6" R	2	2		Griffin Pipe Products/BRS
8" V	9	8		Mueller Co./BRS
6" V	6	6		Mueller Co./BRS
8" CAP & BUTTRESS	3	3		Griffin Pipe Products/BRS
# WHC	24	24		
# TWIN WHC	21	21		
8"x8" C	1	1		Griffin Pipe Products/BRS
NAME OF UTILITY CONTRACTOR: Chesapeake Contracting Group				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE 02-12-98				



VICINITY MAP
SCALE: 1" = 600'

TYPE OF BUILDING: SFD
No. OF UNITS: 66
No. OF WATER HOUSE CONNECTION: 67
No. OF SEWER HOUSE CONNECTIONS: 67
DRAINAGE AREA: DEEP RUN, 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 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 531-5533
BG & E CO. CONTRACTOR SERVICES 850-4620
BG & E CO. UNDERGROUND DAMAGE CONTROL 787-9068
MISS UTILITY 1-800-257-7777
COLONIAL PIPELINE CO. 795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITH 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.
- 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.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITH 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1" - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
- ALL WATER METERS TO BE LOCATED INSIDE PROPOSED UNITS.
- ALL STATIONING SHOWN IS WATER MAIN STATIONING.
- ALL CLEANOUTS AND BALL VALVES ARE TO BE LOCATED AT THE WATER, SEWER AND UTILITY EASEMENT LINE.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENSING CONSTRUCTION.
- EXISTING WATER AND SEWER EASEMENT ADJACENT TO PORT CAPITOL DRIVE IS RECORDED UNDER LIBER 727/FOLIO 098.

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.

[Signature] 11/22/96
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.

[Signature] 11-21-96
ENGINEER'S SIGNATURE DATE
R. JACOB HIKMAT
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEET TECHNICAL REQUIREMENTS.

[Signature] 12/3/96
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

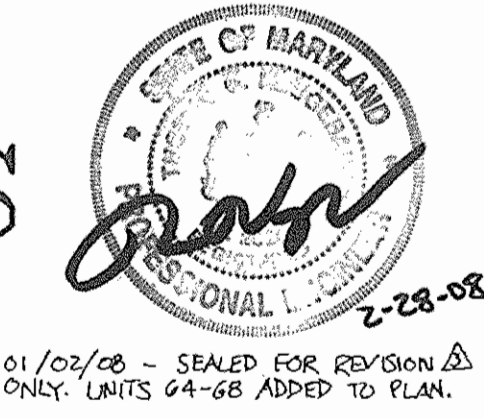
[Signature] 12/5/96
HOWARD SCD DATE

PLAN REFERENCE NUMBERS
SDP-97-03
SDP-96-20

CONTRACT NO.: 14-3564-D
NEW COLONY VILLAGE
PHASE I
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
7	SEDIMENT CONTROL NOTES AND DETAILS



01/02/98 - SEALED FOR REVISION Δ ONLY. UNITS 64-68 ADDED TO PLAN. WATER & SEWER AS BUILT'S CONTRACT NO.: 14-3564-D NEW COLONY VILLAGE, PHASE I WATER AND SEWER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
[Signature] 12-2-96
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
[Signature] 12/6/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hill Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Bal. (301) 621-5221 Wash. (410) 957-0286 Fax

engineering	M.P./SD				
illustration	M.P./SD				
approval	J.H.	MRA	3	REMOVED DRY CARE & CORNER STORE. ADDED UNITS 64-68 REVISED HOUSE CONNECTIONS FOR UNITS 49, 51, 58 & 60.	01/98
project	94040	RCJ	1	REVISE QUANTITIES	4-4-97
date	NOV. 1996	BY	NO.	REVISION	DATE

TITLE SHEET
600' SCALE MAP NO. 43
BLOCK NO. 3

NEW COLONY VILLAGE
PHASE I
CONTRACT NO. 14-3564-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND