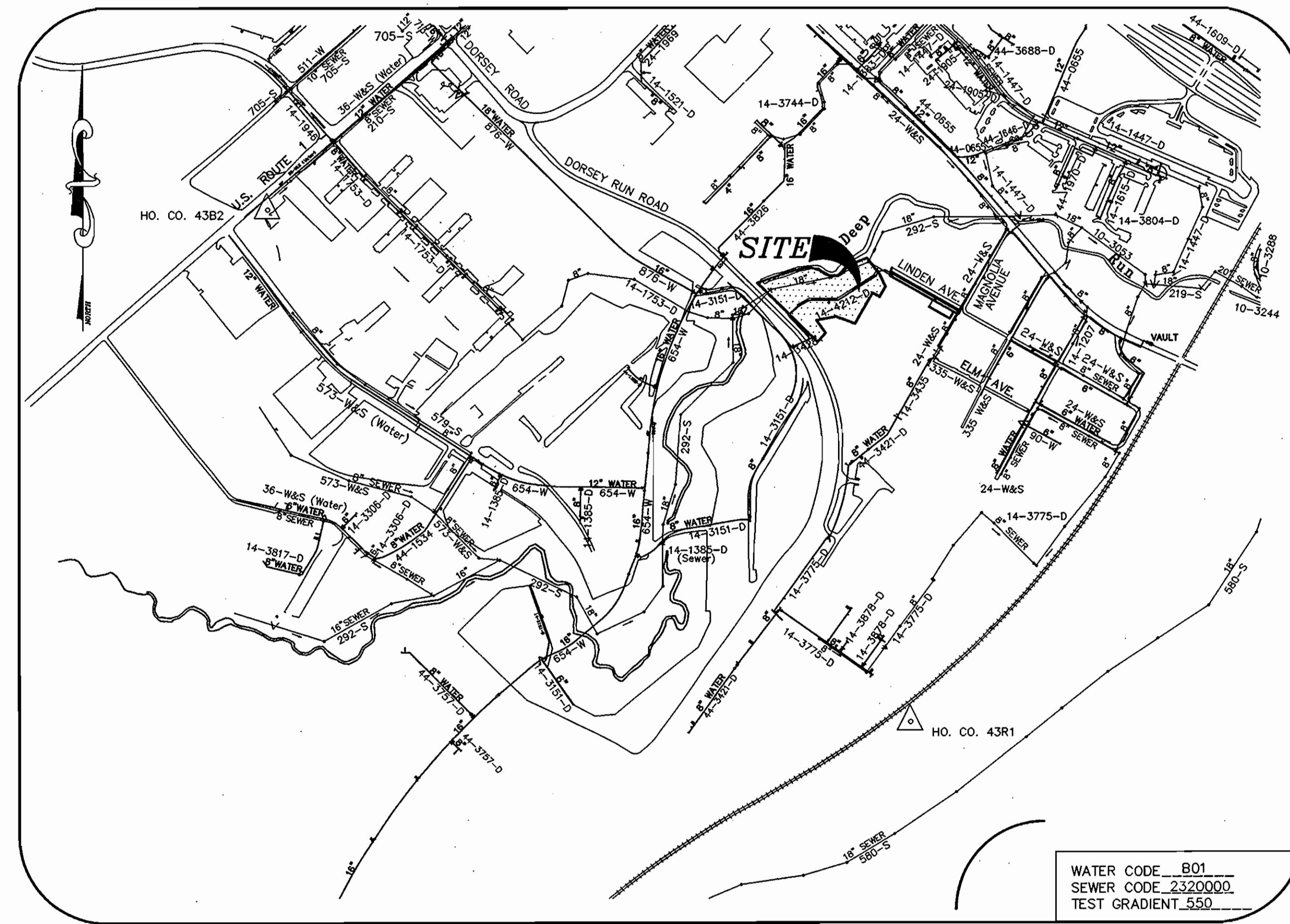


QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
STANDARD MH	4			
8" SEWER MAIN (DIP)	588 L.F.	582.0	SDIP	U.S. PIPE
4" SEWER HOUSE CONNECTION	306 L.F.			J.H. MFS
# SEWER HOUSE CONNECTIONS	15	15		
# MH CONNECTIONS	3	3		
8" WATER	831 L.F.	830		U.S. PIPE
1" WHC	305 L.F.	300		READING TUBE
# WHC	18	18		
8" V	2	2		MUELLER CO.
8"x8" FHT&V	1	1		MUELLER CO.
FIRE HYDRANTS	1	1		MUELLER CO.
8"x8" TEE	1	1		U.S. PIPE
1/16 HB	4	4		
1/32 HB	3	3		
8"x8" TEE W/ CAP & BUTTRESS	2	2		
1/32 VB	1	1		
NAME OF UTILITY CONTRACTOR: ROB HARRIS, INC.				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				



VICINITY MAP

SCALE : 1" = 600'

TYPE OF BUILDING	SFD
No. OF UNITS	18
No. OF WATER HOUSE CONNECTION	18
No. OF SEWER HOUSE CONNECTIONS	18
DRAINAGE AREA	PATAPOCO
TREATMENT PLANT	PATAPOCO

GENERAL NOTES

- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON FEBRUARY 2003 BY WINGS AERIAL MAPPING SUPPLEMENTED BY TOPOGRAPHIC SURVEY PERFORMED BY MILDENBERG BOENDER & ASSOCIATES IN AUGUST 2004.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '83/'91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 43R1 AND NO. 43B2. ALL VERTICAL CONTROLS ARE BASED ON NAVD '29. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE HO.CO. GEODETIC CONTROL STA. 43R1 & 43B2.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWNED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES. FOR DETAILS NOT SHOWN ON THE DRAWING, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATIONS OF THE TEST PITS. 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.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 AT&T1-800-252-1133
 BGE(CONSTRUCTION SERVICES).....410-850-4620
 BGE(EMERGENCY).....410-685-1400
 BUREAU OF UTILITIES.....410-313-4900
 COLONIAL PIPELINE CO.....410-795-1390
 STATE HIGHWAY ADMINISTRATION.....410-531-5533
 VERIZON.....1-800-743-0033/410-224-9210
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATED. 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)313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER & SEWER PLAN
2	WATER & SEWER PLAN & PROFILES

NOTE :
SEDIMENT CONTROL
PROVIDED UNDER GP-05-52

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.

Handwritten signature 2/14/05
DEVELOPER'S SIGNATURE DATE

Handwritten signature 2/14/05
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.

Handwritten signature 2/14/05
ENGINEER'S SIGNATURE DATE

JEN B. MILDENBERG
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

Handwritten signature 3/3/05
DATE

U.S. NATURAL RESOURCES
CONSERVATION SERVICE

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

Handwritten signature 3/3/05
DATE

HOWARD SCD

**CONTRACT NO.: 14-4212-D
LENNOX PARK,
LOTS 1207 THRU 1214 AND 1218 THRU 1227
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS**

OWNER
LENNOX PARK LIMITED PARTNERSHIP
7111 DORSEY RUN ROAD
ELK RIDGE, MARYLAND 21075

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Handwritten signature 3-17-05
DATE

CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Handwritten signature 4/21/05
DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION

**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Elkridge City, Maryland 2142
(410) 987-0286 Balt. (301) 621-5521 Wash. (410) 987-0288 Md.

engineering	HSP				
illustration	HSP				
approval	JBM				
project	KCI	2	ASBUILT DATA SHOWN	2/26/04	
1996-076	MBA	1	REVISE SHC QUANTITIES	9/05	
date	FEB 2005	BY	NO.	REVISION	DATE

TITLE SHEET

600' SCALE MAP NO. 43 BLOCK NO. 6

**LENNOX PARK,
LOTS 1207 THRU 1214 AND 1218 THRU 1227**

CONTRACT NO. 14-4212-D
TAX MAP 43 PARCEL 698
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
AS SHOWN
1 of 3

96076-CDV.DWG

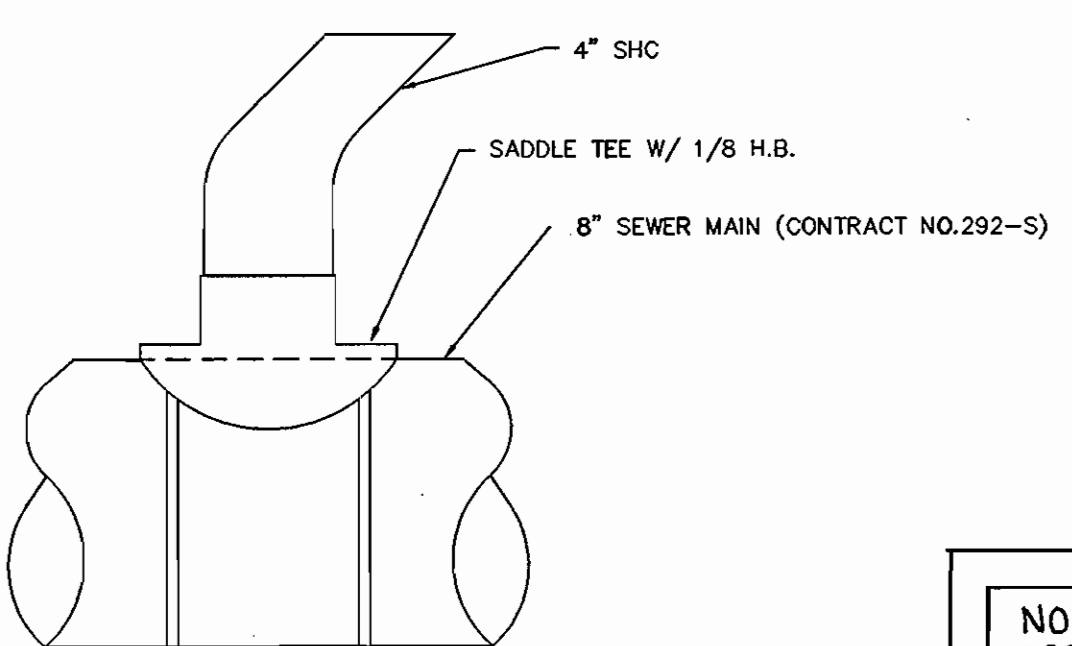
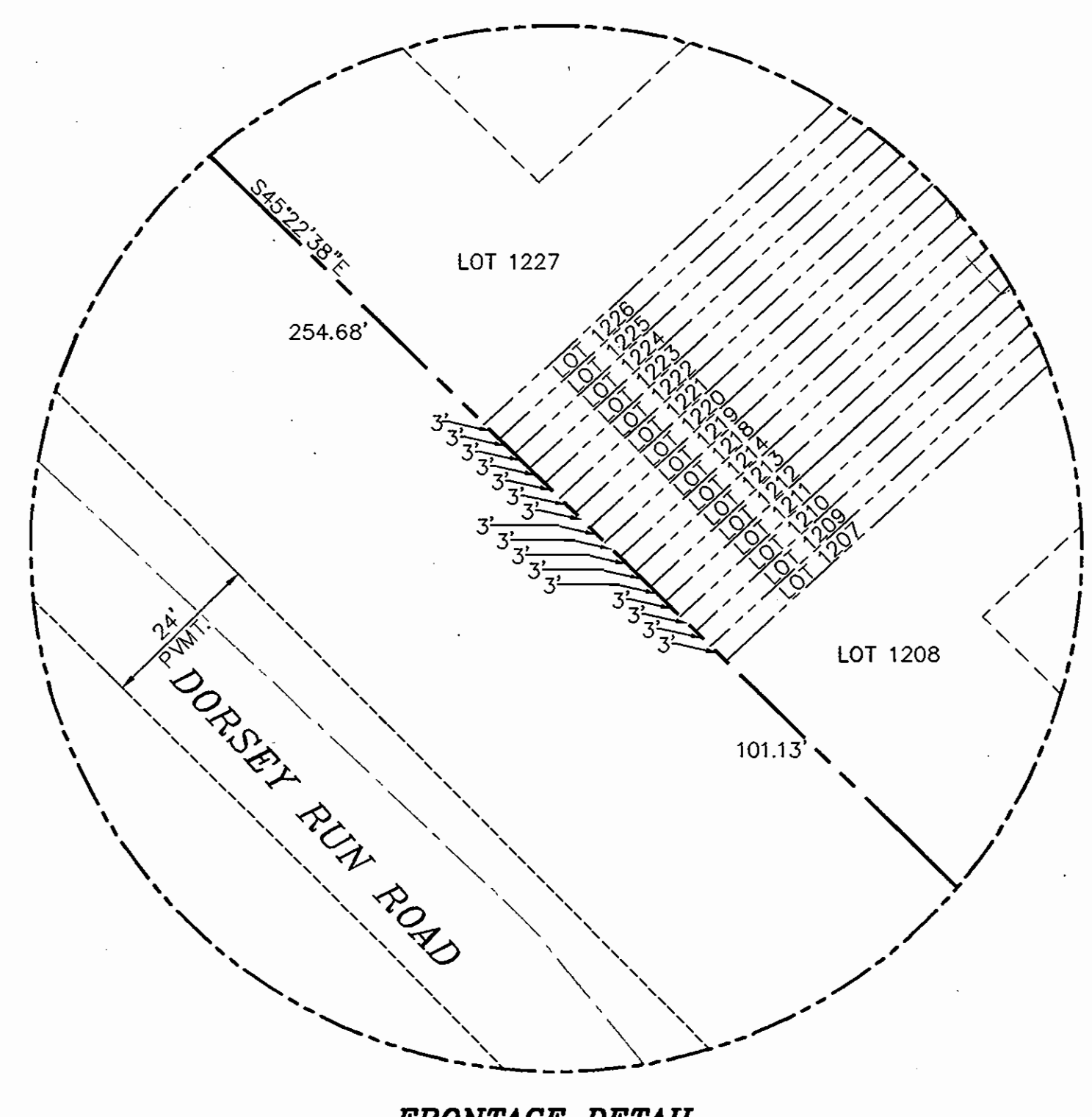
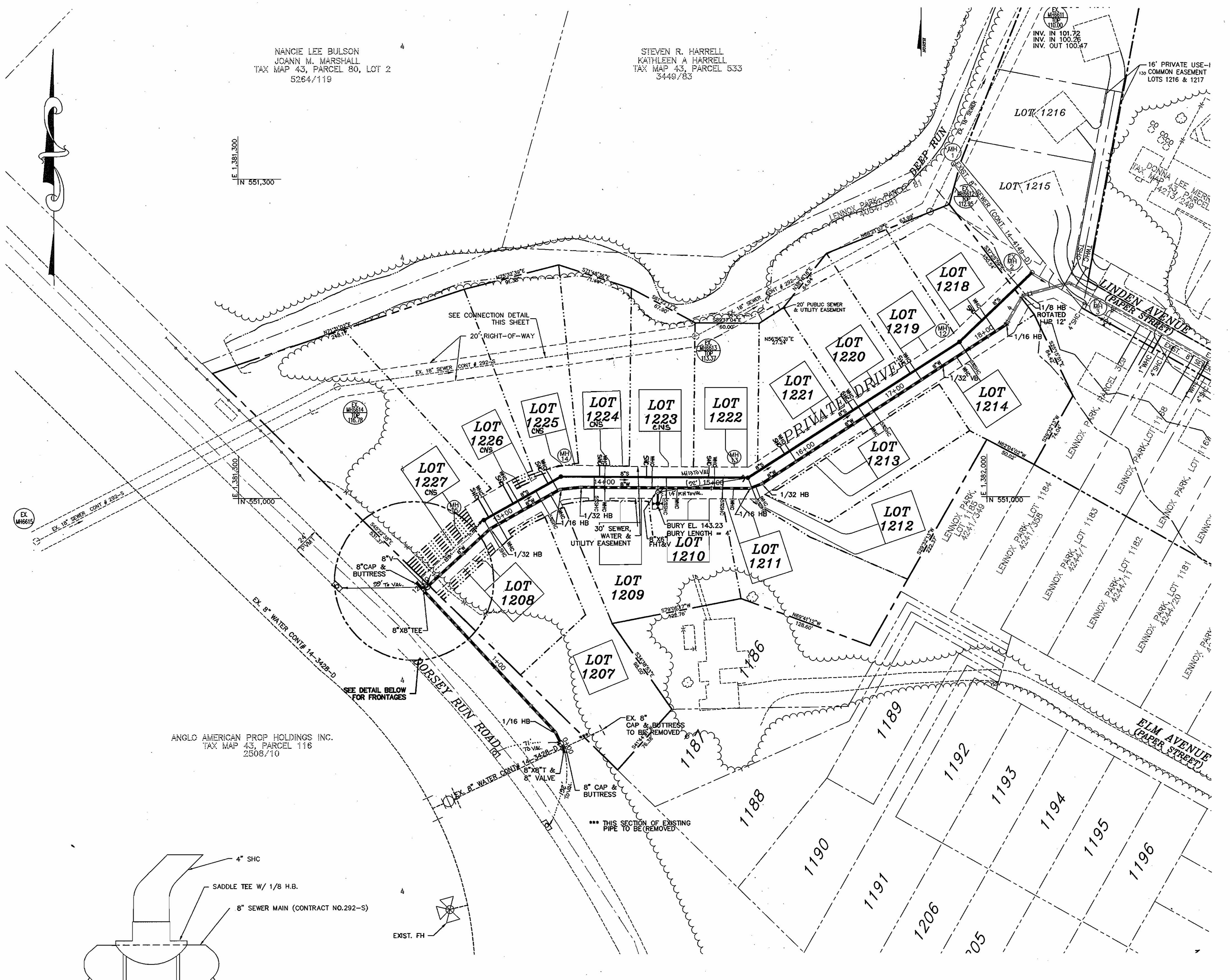
NANCIE LEE BULSON
JOANN M. MARSHALL
TAX MAP 43, PARCEL 80, LOT 2
5264/119

STEVEN R. HARRELL
KATHLEEN A HARRELL
TAX MAP 43, PARCEL 533
3449/83

MANHOLE LOCATION CHART		
MANHOLE NUMBER	NORTHING	EASTING
MH 12	551145.3968	1381974.4433
MH 13	551018.3016	1381776.2273
MH 14	551019.8016	1381776.2273
MH 15	550979.0472	1381529.2773

WATER MAIN TABULATION CHART		
APPURTENANCE	NORTHING	EASTING
8"X8" T & 8" V	550764.6244	1381602.7979
1/16" H.B.	550779.3319	1381595.9484
8"X8" TEE	550913.2986	1381595.9484
8" CAP & BUTTRESS	550920.6558	1381465.8484
8" V	550916.0067	1381475.5650
1/32" H.B.	550970.9089	1381535.2017
1/16" H.B.	551007.6997	1381600.2970
1/32" H.B.	551009.6409	1381620.0729
8"X6" TEE	551009.0262	1381691.7282
FH	550994.1857	1381691.9819
1/16" H.B.	551008.2855	1381778.0547
1/32" H.B.	551012.6773	1381789.3941
1/16" H.B.	551161.4775	1382018.0179

SEWER HOUSE CONNECTION TABLE				
UNIT #	% SLOPE	INV. @ EASE.	MIN. CELLAR ELEV.	
1207	5	131.65	142.95	
1208	2	131.40	135.17	
1209	5	131.11	137.33	
1210	5	130.66	136.76	
1211	5	130.39	137.60	
1212	5	130.34	146.71	
1213	5	127.92	133.10	
1214	5	126.70	132.57	
1218	2	121.08	126.23	
1219	2	127.08	130.48	
1220	2	128.01	131.98 (C.N.S.)	
1221	2	124.18	133.55	
1222	2	132.47	134.11	
1223	2	130.37	134.34 (C.N.S.)	
1224	2	130.34	134.51 (C.N.S.)	
1225	2	131.50	135.00 (C.N.S.)	
1226	2	132.00	135.42 (C.N.S.)	
1227	2	132.09	135.56 (C.N.S.)	



NO BASEMENT GRAVITY SEWER SERVICE PROVIDED TO LOTS 1220, 1223, 1224, 1225, 1226 AND 1227. BASEMENT SEWER SERVICE TO LOTS 1220, 1223, 1224, 1225, 1226 AND 1227 TO BE PROVIDED BY PRIVATE ON SITE PUMP.

CONNECTION DETAIL
NTS

FRONTAGE DETAIL
SCALE: 1"=20'

OWNER AND DEVELOPER
LENOX PARK LIMITED PARTNERSHIP
7111 DORSEY RUN ROAD, STE 101
ELKRIDGE, MARYLAND 21075
410-579-2442

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert J. ...
3-17-05
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
...
4/2/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION

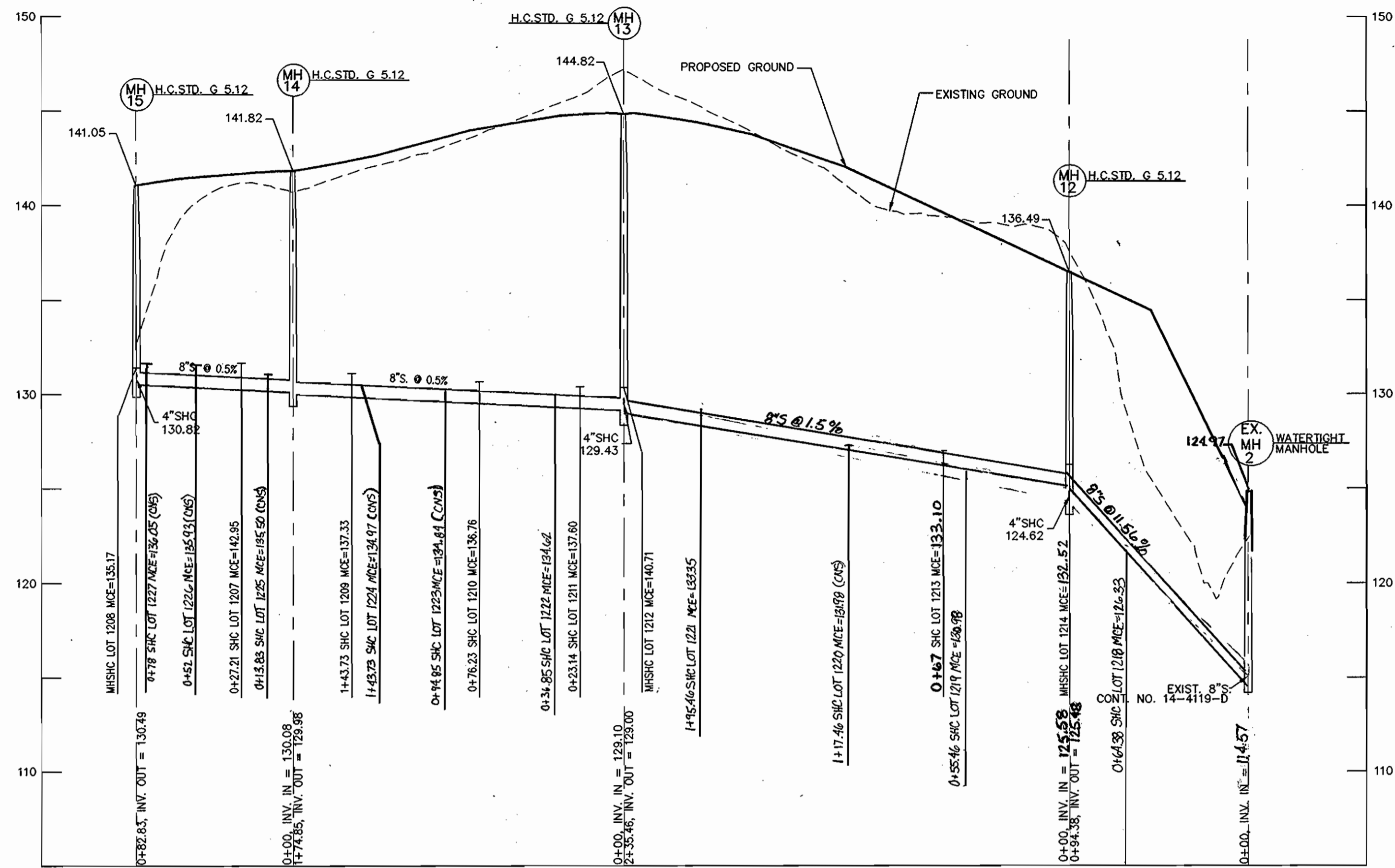
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Ball. (301) 621-5521 Wash. (410) 997-0288 Fax



engineering	HSP				
illustration	HSP				
approval	JBM				
project	K01	2	AS-BUILT DATA SHOWN ON PLAN	06/05/05	
	MBA	1	ADD SHC FOR LOTS 1218-1227	9/05	
date	FEB 2005	BY	NO.	REVISION	DATE

WATER & SEWER PLAN
600' SCALE MAP NO. 43 BLOCK NO. 6

LENOX PARK
LOTS 1207 THRU 1214 & 1218 THRU 1227
CONTRACT NO.: 14-4212-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



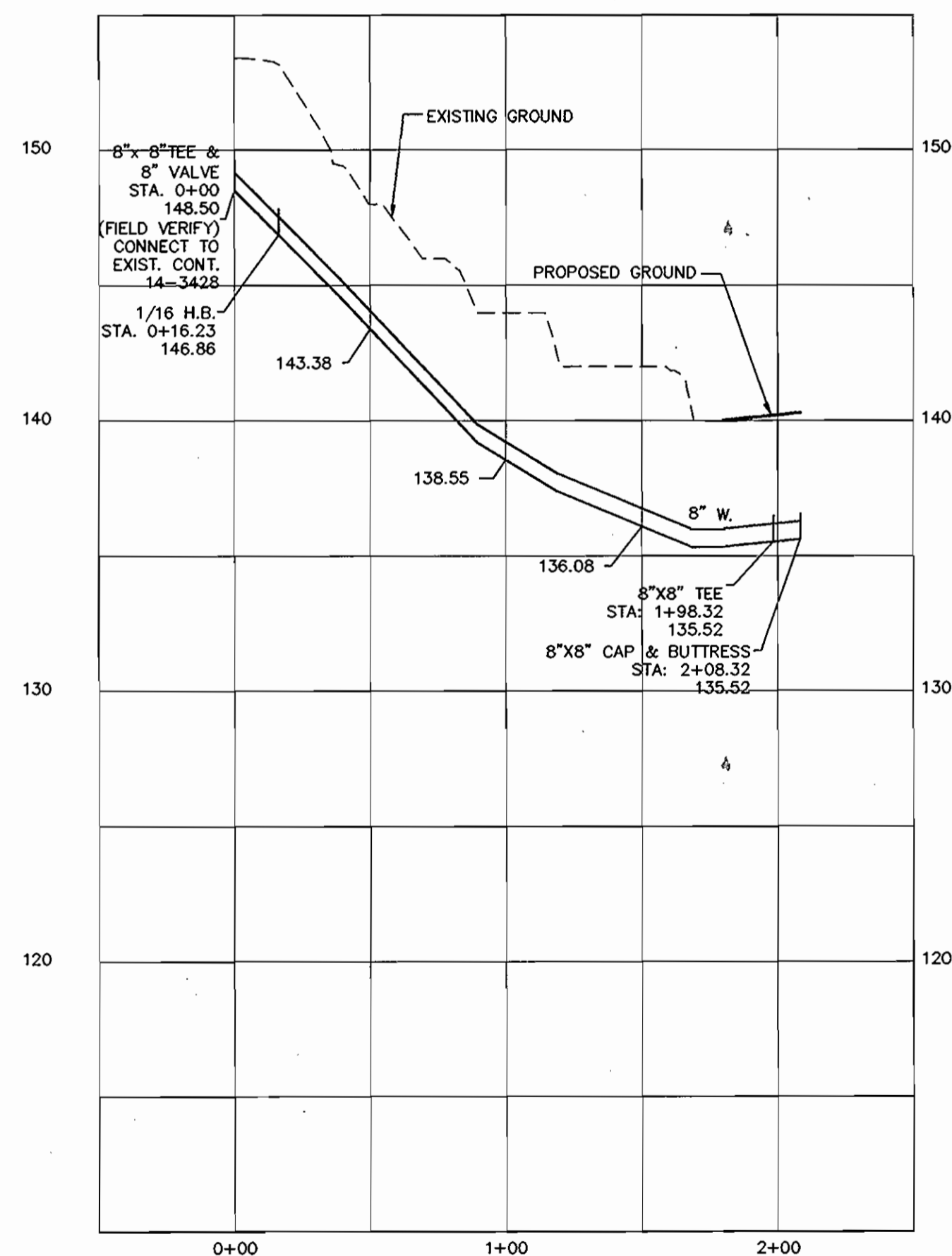
SEWER MAIN PROFILE

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

"ABSTRACT" WATER AND SEWER FIELD PULLS
LOTS 1207-1214 & 1218-1227

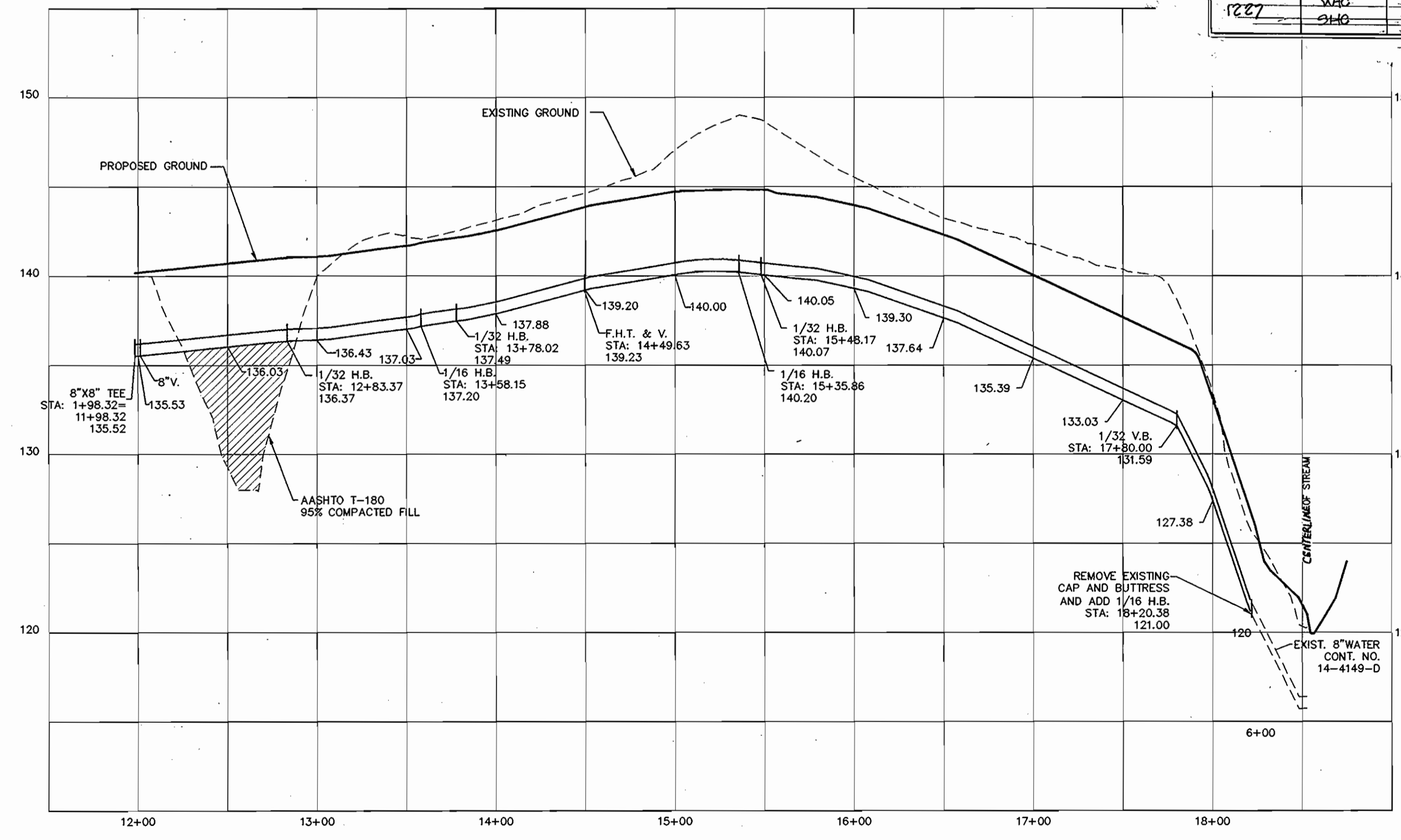
UNIT	FROM	TO	FEET	TO	FEET
1207	WHC	F.H.	87	5-14	27
	SHC		98		35
1208	WHC	S-14	78	5-12	28
	SHC		80		29
1209	WHC	F.H.	16	5-14	14
	SHC		21		31
1210	WHC	F.H.	28	5-12	28
	SHC		11		29
1211	WHC	F.H.	78	5-12	29
	SHC		67		28
1212	WHC	F.H.	108	5-12	20
	SHC		100		21
1213	WHC	S-12	114	5-12	125
	SHC		104		135
1214	WHC	S-12	23	5-12	228
	SHC		21		238
1218	WHC	S-12	32	5-12	270
	SHC		38		264
1219	WHC	S-12	40	5-12	188
	SHC		57		180
1220	WHC	S-12	113	5-12	124
	SHC		120		116
1221	WHC	S-12	120	5-12	47
	SHC		126		41
1222	WHC	S-12	34	F.H.	70
	SHC		38		67
1223	WHC	S-12	85	F.H.	38
	SHC		84		36
1224	WHC	S-14	32	F.H.	65
	SHC		21		85
1225	WHC	S-14	17	5-15	76
	SHC		21		71
1226	WHC	S-14	47	5-15	42
	SHC		55		37
1227	WHC	S-14	72	5-15	19
	SHC		81		12

See plan sheet for valves.



WATER MAIN PROFILE

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



WATER MAIN PROFILE

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

OWNER AND DEVELOPER
LENOX PARK LIMITED PARTNERSHIP
7111 DORSEY RUN ROAD, STE 101
ELK RIDGE, MARYLAND 21075
410-579-2442

96076.DWG\M&S\96076-PROFILES.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. L. B. B. B.
3-17-05
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
M. D. B. B. B.
4/2/05
DATE

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Engineers Planners Surveyors
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engineering HSP			
illustration HSP			
approval JBM			
project 96076	MBA	ADD SHC FOR LOTS 1218-1227	9/05
date FEB 2005	BY NO.	REVISION	DATE

SEWER & WATER PROFILES

60' SCALE MAP NO. 43 BLOCK NO. 6

LENOX PARK
LOTS 1207 THRU 1214 & 1218 THRU 1227
CONTRACT NO.: 14-4212-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
1"=50'
3 OF 3