

SHARED SEPTIC SYSTEM PLANS OWINGS PROPERTY, LOT 3

THIS SHEET SUPERCEDES PREVIOUS PLAN SIGNED APRIL 6, 2004 BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY, BY MY SEAL, THAT THE CONDITIONS SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS AND ALSO THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND.

Michael D. Adcock
MICHAEL D. ADCOCK, PROFESSIONAL LAND SURVEYOR
MD REG. NO. 21237, EXPIRATION DATE: 06-16-13 1/20/12 DATE



5th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

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CONNECTION OF THE BUILDING SEWER FROM AN INDIVIDUAL RESIDENCE TO THE SEWER HOUSE CONNECTION AT THE PROPERTY LINE MAY BE PERFORMED, PRIOR TO THE RELEASE OF THE USE AND OCCUPANCY PERMIT, ONLY UNDER THE FOLLOWING CIRCUMSTANCES:

- THE CONNECTION AT THE PROPERTY LINE SHALL BE PERFORMED USING A "DROP" CONNECTION THROUGH THE CLEANOUT. THE DROP CONNECTION SHALL BE A MINIMUM OF 2 FEET.
- AN INFLATABLE SEWER PLUG, WITH ITS AIR HOSE EXTENDED OUT THE TOP OF THE CLEANOUT, SHALL BE INSERTED IN THE STANDPIPE BELOW THE INVERT OF THE BUILDING SEWER TO PREVENT DISCHARGE TO THE PUBLIC COLLECTION SYSTEM. THE AIR LINES SHALL BE SECURED TO A BOARD, LOCATED NEXT TO THE CLEANOUT, AND CLEARLY MARKED WITH GREEN PAINT SO AS TO MAKE THE AIR LINES VISIBLE FROM THE ROADWAY.
- THE DEVELOPER IS RESPONSIBLE FOR MAINTENANCE OF THE AIR PLUGS, AND MUST INSURE THAT THEY ARE PROPERLY INFLATED AT ALL TIMES. SHOULD THE PLUG BECOME DEFLATED, THE DEVELOPER SHALL TAKE CORRECTIVE MEASURES IMMEDIATELY TO REINFLATE OR REPLACE THE PLUG, AND SHALL NOTIFY HOWARD COUNTY DPW SO THAT AN INSPECTION MAY BE PERFORMED.
- WHEN THE BUILDING IS SUBSTANTIALLY COMPLETE, INCLUDING COMPLETION OF INTERNAL PAINTING, FLOOR INSTALLATION, AND ANY ACTIVITY WHICH MIGHT CAUSE HARMFUL CHEMICALS OR PRODUCTS TO BE INTRODUCED TO THE SEWER SYSTEM, THE DEVELOPER MAY CONTACT HOWARD COUNTY DPW AND REQUEST REMOVAL OF THE PLUG. A REPRESENTATIVE OF HOWARD COUNTY DPW WILL INSPECT THE CLEANOUT, AND MAY REQUIRE THE DEVELOPER TO PUMP OUT ANY RESIDUAL MATERIAL PRIOR TO REMOVAL OF THE PLUG.
- HOWARD COUNTY DPW RESERVES THE RIGHT TO INSPECT THE AIR PLUGS AND/OR THE DOWNSTREAM SEPTIC TANKS AT ANY TIME DURING THE BUILDING PHASE, AND SHOULD CONTAMINATION BE DISCOVERED, REQUIRE IMMEDIATE PUMPING OF THE SEPTIC TANKS AND DISTRIBUTION BOX BY THE DEVELOPER.

NOTE:

- A SEPTIC FEE IN THE AMOUNT OF \$376 PER LOT SERVICED BY THE COMMON SEPTIC SYSTEM SHALL BE PAID TO THE TIME OF THE SEPTIC CONSTRUCTION PERMIT ISSUANCE.
- A SIGNED "DECLARATION OF COVENANTS" WILL BE REQUIRED ON SHARED SEPTIC LOTS.
- THE BUILDER SHALL INSTALL BACK FLOW PREVENTER AND RELIEF VENT ON THE SEWER SERVICE AT THE HOUSE. AT THE TIME OF THE HOUSE CONSTRUCTION OR AS REQUIRED BY THE PLUMBING INSPECTOR.
- SEPTIC TANKS SHALL BE CONCRETE WITH TOP SEAMS, HYDROSTATICALLY TESTED AFTER INSTALLATION, WITH THE INLET/OUTLET SANITARY TEES ACCESSIBLE FROM ABOVE AND LOCATED OUTSIDE OF PAVED AREAS.
- THE CONTRACTOR SHALL NOTIFY HOWARD COUNTY HEALTH DEPARTMENT AT (410) 313-1771 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY VACUUM TEST OF PRESSURE SEWERS, AND ANY SEPTIC TANKS VACUUM OR WATER TESTING IS PERFORMED.
- OBSERVATION WELL TO BE INSTALLED AFTER TRENCH INSTALLATION IS COMPLETED.
- THE HOWARD COUNTY HEALTH DEPARTMENT SHALL AS-BUILT THE SEPTIC TRENCH PORTION OF THE COMMON SEPTIC SYSTEM. THE COLLECTION PORTION OF THIS SYSTEM SHALL BE AS-BUILT BY OTHERS AS SPECIFIED BY THE DEVELOPER AGREEMENT.
- TRENCHES ARE TO BE INSTALLED IN ALTERNATING FASHION WITH THE SIDEWALL AND LENGTH TO BE INSPECTED PRIOR TO BACKFILLING WITH STONE.
- THE SHARED SEPTIC SYSTEM DESIGN IS BASED ON FOUR (4) BEDROOM BUILDING LOTS ONLY. RESTRICTION (4) BEDROOMS PER LOT. THE DEVELOPER SHALL BEAR ALL RESPONSIBILITY TO LIMIT THE DWELLING SIZE.

GENERAL NOTE:

- 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 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 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 THE DETAILS NOT SHOWN ON THE DRAWINGS AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES. THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTE OF THE NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS EXISTENT 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 (5) WORKING DAYS BEFORE STARTING WORK ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION 410-531-5533
 - BGE CONTRACTOR SERVICES 410-580-4620
 - BGE UNDER GROUND DAMAGE CONTROL 410-291-4607
 - MISS UTILITY 1-800-257-7777
 - COLONIAL PIPELINE CO. 410-549-4120
 - HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 410-313-4900
 - BUREAU OF UTILITIES 1-800-446-5266
 - BELL ATLANTIC
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACT SHALL REMOVE TREES AND 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 WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROADS OF LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL FOR THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.
- THE SHARED SEPTIC SYSTEM CAPACITY ON PRESERVATION PARCEL E IS NOT TO EXCEED THE SYSTEM DESIGN CAPACITY OF 4,200 GPD.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.

SEWER NOTES:

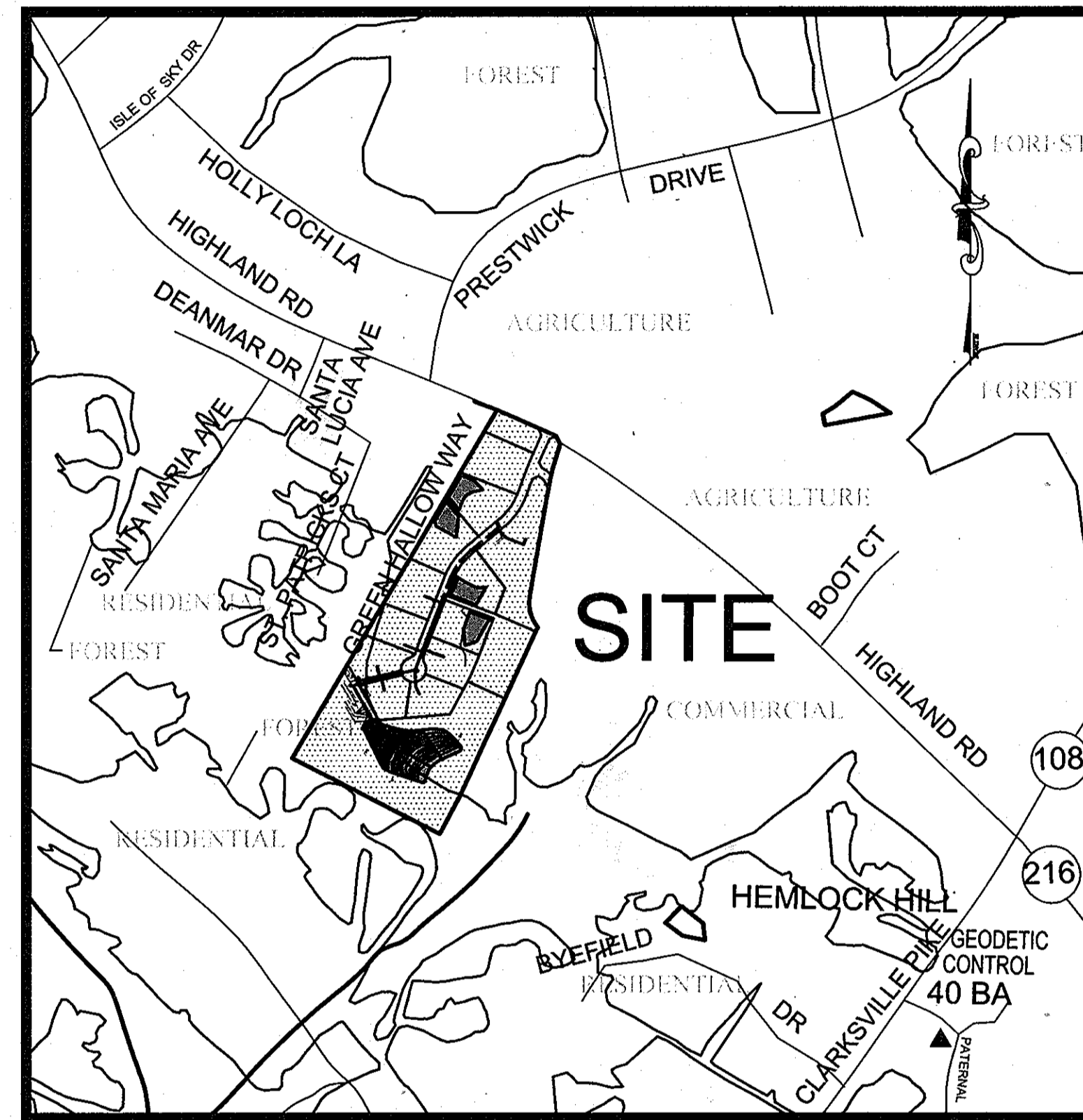
- ALL SEWER MAINS SHALL BE DIP OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
- THE 1 1/2" INCH PRESSURE SEWER SHALL BE PVC, SDR-21 PUSH ON GASKET JOINTS WITH A TRACER WIRE AND TEST STATIONS EVERY 200 FT. FOR LOCATING.

SEWER MANHOLE LOCATION DATA	
WATER AND SEWER COUNTY CODE	TYPE OF BUILDINGS - SINGLE FAMILY DETACHED
WATER CODE	NUMBER OF BUIDABLE LOTS 11
SEWER CODE	NUMBER OF NON-BUIDABLE LOTS 3
TEST GRADIENT	NUMBER OF WHC'S N/A
	NUMBER OF SHC'S 7
	DRAINAGE AREA X
	7 LOTS ARE SERVED BY THE SHARED SEPTIC SYSTEM

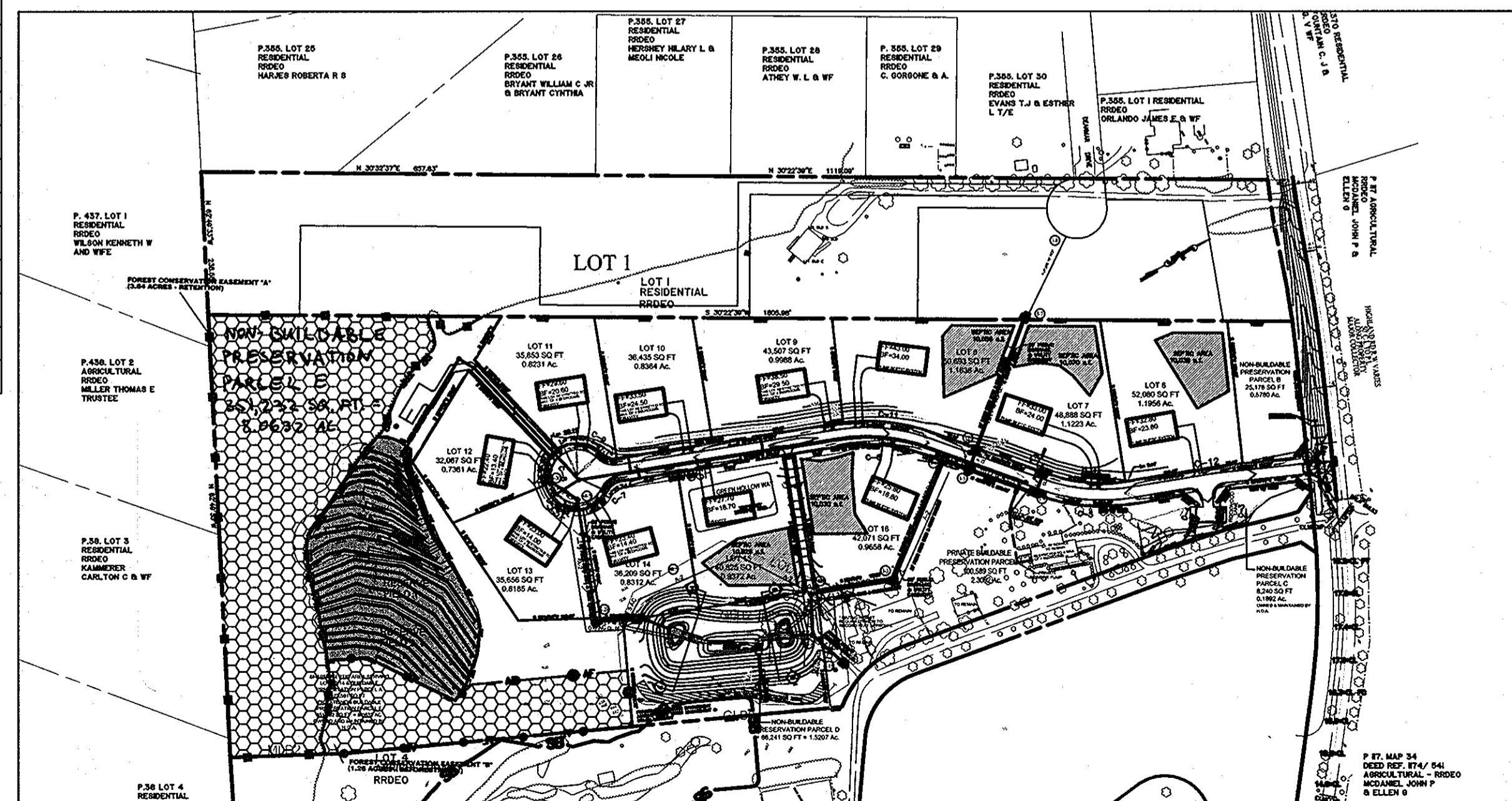
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUF./SUPPLIER
MANHOLES	6 EA.	6		
1 1/2" PRESSURE SEWER MAIN	450 L.F.	437.3 L.F.		
4" SEWER	31 L.F.			
8" SEWER	704 L.F.			
4" SEWER HOUSE CONN.	141 L.F.			
GRINDER PUMP	1 EA.	1		
TERMINAL FLUSH CONN.	1 EA.	1		
3000 GALLON SEPTIC TANK	4 EA.	4		
DISTRIBUTION BOX	1 EA.	1		
LEACHING FIELD	70,000 S.F.			
ZABEL A-100 H.P. FILTER	1 EA.			
4" HIGH POST & 3" RAIL FENCE	685 L.F.			
6" ASPHALT DRIVEWAY	502 S.Y.			

NAME OF UTILITY CONTRACTOR: GARLAND E. BRIAN SR., LLC.
SURVEY AND DRAFTING DIVISION AS-BUILT DATE: SILL, ADCOCK & ASSOCIATES, LLC. DECEMBER 8, 2011

LEGEND:	
EXISTING CONTOURS	PROPOSED CONTOURS
PROPERTY LINE	EXISTING PAVING
EXISTING TREE LINE	EXIST. HOUSE
PROPOSED SEPTIC AREA	PROP. STORM DRAIN EASEMENT
PAVED ACCESS DRIVE	PROP. SANITARY SEWER OR STORM DRAIN
SILT FENCE	PROP. SANITARY SEWER OR STORM DRAIN MANHOLE
POSSIBLE HOUSE LOCATION	PROP. SANITARY SEWER TERMINAL MANHOLE
PROPOSED WELL	PROP. SANITARY SEWER HOUSE CONNECTION



VICINITY MAP
SCALE: 1"=600'



SCALE: 1"=200'

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, LOTS 6-8, 15, AND 16; AND FOR PRIVATE WATER AND A SHARED SEWERAGE SYSTEM FOR LOTS 9-14 AND FOR BUIDABLE PRESERVATION PARCEL A.

HOWARD COUNTY HEALTH DEPARTMENT
Robert J. Wale
HOWARD COUNTY HEALTH OFFICER 10/20 3/31/06 DATE

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

Jim Morgan
U.S. A-NATURAL RESOURCES CONSERVATION SERVICE 4/25/06 DATE

THIS PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Platter
HOWARD SOIL CONSERVATION DISTRICT 4/25/06 DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS, F-03-133.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Michael D. Adcock
CHIEF, BUREAU OF UTILITIES 4/26/06 DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Michael D. Adcock
CHIEF, DEVELOPMENT ENGINEERING DIVISION 4/26/06 DATE

Dewberry & Davis LLC
203 PERRY PARKWAY
GATHERSBURG, MD 20877
TEL: (301) 948-6500
FAX: (301) 258-7607
Michael D. Adcock
PROFESSIONAL LAND SURVEYOR 2/24/06

DES.	DRN.	CHK.	BY	NO.	REVISIONS	DATE
SGB	SGB	RMM		1.3	REVISE PRESSURE SEWER FROM 1 1/4" TO 1 1/2"	5/18/06
				1.0	SHARED SEPTIC TRENCH DESIGN & LAYOUT	12/13/05
				1.1	REVISED FROM 1400 LF PER CELL TO 1650 LF PER CELL.	12/13/05
				1.2	DISTRIBUTION LATERAL TERMINATION REVISED	2/21/06
					NOTES ADDED	2/21/06

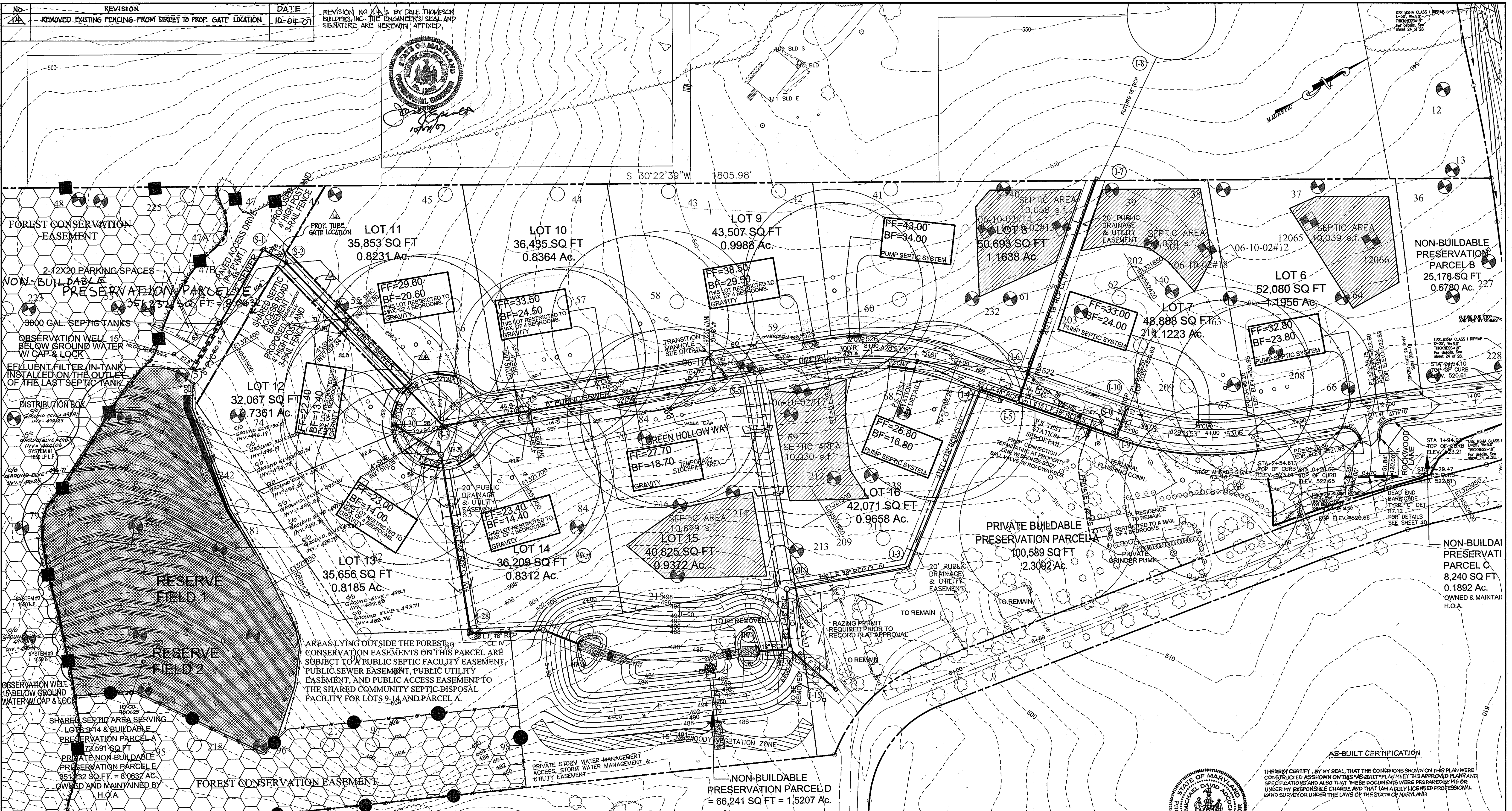
DATE: 7-29-03

COVERSHEET
TAX MAP NO. 40
PARCEL 44

AS-BUILT
OWINGS PROPERTY
LOTS 6 THRU 16 AND PRESERVATION PARCELS A THRU E
5th ELECTION DISTRICT
CONTRACT NO. 50-4157-D
SCALE: N/A
SHEET 1 OF 5

No.	REVISION	DATE
1A	REMOVED EXISTING FENCING FROM STREET TO PROF. GATE LOCATION	10-04-07

REVISION NO. 1A IS BY DALE THOMPSON BUILDERS, INC. THE ENGINEER'S SEAL AND SIGNATURE ARE HEREWITH AFFIXED.



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

Jim Meyers 4/12/06
U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE DATE

John K. Roberts 4/12/06
THIS PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

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Robert D. Walz 3/31/06
HOWARD COUNTY HEALTH DEPARTMENT
HOWARD COUNTY HEALTH OFFICER

John J. Kelly 4/10/06
CHIEF BUREAU OF UTILITIES DATE

Robert D. Walz 4/10/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

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HOWARD COUNTY HEALTH DEPARTMENT
Robert D. Walz 3/31/06
HOWARD COUNTY HEALTH OFFICER

Dewberry & Davis LLC
203 PERRY PARKWAY
GAITHERSBURG, MD 20877
TEL: (301) 948-8300
FAX: (301) 258-7607

Robert D. Walz 2/24/06
PROFESSIONAL ENGINEER
STATE OF MARYLAND
NO. 21257
EXPIRES 05-16-13

PLAN
SCALE: 1" = 50'

NOTES:

- PROVIDE A 8" PVC STUB-OUT ON THE DISTRIBUTION BOX WITH ISOLATION VALVE TO A POINT OUTSIDE OF THE ACTIVE DRAIN FIELD AREA FOR CONSTRUCTION AND FUTURE REPAIR AREA.
- THE 1 1/2-INCH PRESSURE SEWER SHALL BE PVC, SDR-21 PUSH ON GASKET JOINTS WITH TRACER WIRE AND TEST STATIONS EVERY 200 FT FOR LOCATING.
- PROVIDE A CONNECTION AT THE PROPERTY LINE OF PRIVATE BUILDABLE PRESERVATION PARCELA, TERMINATION AT A BRONZE-BODY BALL VALVE WITH A ROADWAY BOX.
- PROVIDE PRESSURE SEWER TESTING STATION AS FOLLOWS:
A. STATION 5+50.00-3.5' LT
B. STATION 7+25.00-3.5' LT
- PRIVATE NON-BUILDABLE PRESERVATION PARCELA WITH THE SHARED SEPTIC SYSTEM IS OWNED AND MAINTAINED BY THE HOA.

REVISED	BY	DATE
1.0	SGB	12/13/05
1.1	SGB	12/13/05
1.2	RMM	2/21/06

DATE: 7-29-03 BY: NO. REVISIONS DATE

PLAN AND DETAILS OF SHARED SEPTIC SYSTEM

REVISED	BY	DATE
1.0	SGB	12/13/05
1.1	SGB	12/13/05
1.2	RMM	2/21/06

TAX MAP NO. 40 PARCEL 44

AS-BUILT CERTIFICATION

I HEREBY CERTIFY, BY MY SEAL, THAT THE CONDITIONS SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS AND ALSO THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE AND THAT I AM A FULLY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND.

Michael D. Arcock 4/10/12
MICHAEL D. ARCOCK, PROFESSIONAL LAND SURVEYOR
MD REG. NO. 21287, EXPIRATION DATE: 05-16-13 DATE

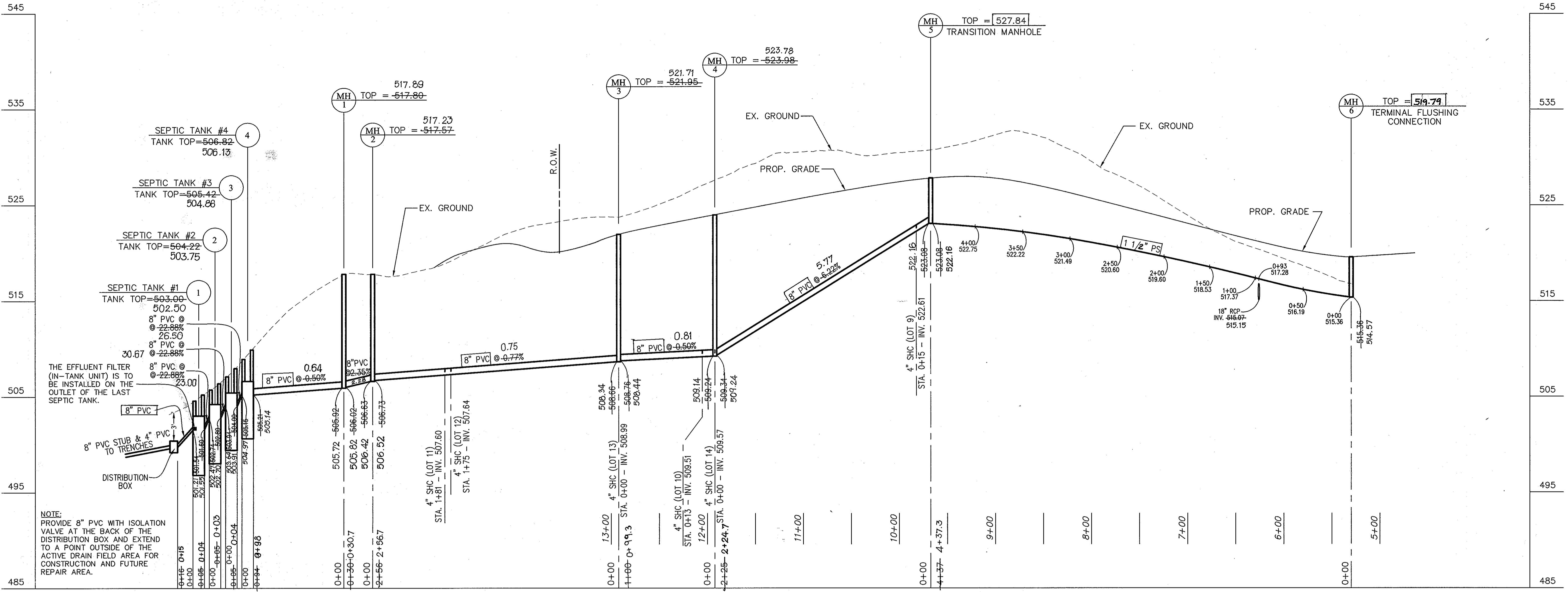
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AS-BUILT

OWINGS PROPERTY
LOTS 6 THRU 16 AND PRESERVATION PARCELA THRU E 5th ELECTION DISTRICT

CONTRACT NO. 50-4157-D

SCALE: 1" = 50'
SHEET 2 OF 5



THE EFFLUENT FILTER (IN-TANK UNIT) IS TO BE INSTALLED ON THE OUTLET OF THE LAST SEPTIC TANK.

NOTE: PROVIDE 8" PVC WITH ISOLATION VALVE AT THE BACK OF THE DISTRIBUTION BOX AND EXTEND TO A POINT OUTSIDE OF THE ACTIVE DRAIN FIELD AREA FOR CONSTRUCTION AND FUTURE REPAIR AREA.

SANITARY SEWER PROFILE

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

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
BALTIMORE GAS & ELECTRIC CO.	410-850-4620
CONTRACTOR SERVICES	410-291-4607
BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL	1-800-257-7777
MSS UTILITY	410-548-4120
COLONIAL PIPELINE CO.	410-313-4900
HOWARD COUNTY DEPT. OF PUBLIC WORKS	410-313-4900
BUREAU OF UTILITIES	1-800-448-5266
BELL ATLANTIC	

NOTE: SEPTIC TANKS SHALL HAVE HOWARD COUNTY STANDARD WATERTIGHT FRAME AND COVERS.

3,000 GALLON SEPTIC TANK DATA				
SHARED SEPTIC AREA	TANK ELEV.	INVERT ELEV.	TANK COORDINATES	MANHOLE RIM ELEVATION
	503.00 TOP	501.60	N 551453.22	-504.67 - 506.12
	502.50	501.55	E 1321391.11	-506.22 - 506.15
	504.22 TOP	502.80	N 551468.13	-506.74 - 507.26
	503.75	502.70	E 1321382.93	-506.30 - 507.36
	505.42 TOP	504.00	N 551483.03	-507.12 - 508.46
	504.86	503.91	E 1321374.76	-507.88 - 508.60
	506.82 TOP	506.21	N 551497.93	-508.93 - 509.66
	506.13	505.74	E 1321366.58	-509.92 - 510.83

TRENCH REQUIREMENTS
USE 4-BEDROOM/HOUSE.
600 GPD PER HOUSE
600 GPD/HOUSE X 7 HOUSE = 4,200 GPD
4,200 GPD/1 GPM/SQ.FT. = 4,200 SQ.FT. EFFECTIVE AREA
4,200 SQ. FT./3 FT. WIDE TRENCH = 1,400 L.F. (REQUIRED)
PROVIDED: 4,200 L.F.
SEPTIC TANK SIZED FOR 1500 GALLON/HSE

SEWER MANHOLE LOCATION DATA	
MH	LOCATION
1	N 551586.90 E 1321317.77
2	N 551601.09 E 1321343.64
3	N 551658.87 E 1321593.11
4	N 551752.50 E 1321628.94
5	N 551962.39 E 1321709.26

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

~~U.S.D.A.-NATURAL RESOURCES CONSERVATION SERVICE~~ _____ DATE

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

HOWARD SOIL CONSERVATION DISTRICT _____ DATE

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APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, LOTS 6-8, 15, AND 16; AND FOR PRIVATE WATER AND A SHARED SEWERAGE SYSTEM FOR LOTS 9-14, AND FOR BUILDABLE PRESERVATION PARCEL A.

HOWARD COUNTY HEALTH DEPARTMENT
Robert J. Weber
HOWARD COUNTY HEALTH OFFICER *RJD* 3/3/06

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AS-BUILT CERTIFICATION

I HEREBY CERTIFY, BY MY SEAL, THAT THE CONDITIONS SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS AS-BUILT PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS AND ALSO THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND.

Michael D. Adcock
MICHAEL D. ADCOCK, PROFESSIONAL LAND SURVEYOR
MG REG. NO. 21257, EXPIRATION DATE: 06-16-13
DATE: 4/20/12



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
John Kelly 4/18/06
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
John Kelly 4/21/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Dewberry & Davis LLC
203 PERRY PARKWAY
GAITHERSBURG, MD 20877
TEL: (301) 948-8300
FAX: (301) 258-7007

Robert J. Weber
PROFESSIONAL ENGINEER
2/21/06

DES.	DRN.	CHK.	BY	NO.	DATE
1.0	1.1	1.2			
REVISIONS					
1.3	1.0	1.1			
REVISIONS					

AS-BUILT

PROFILE OF SHARED SEPTIC SYSTEM

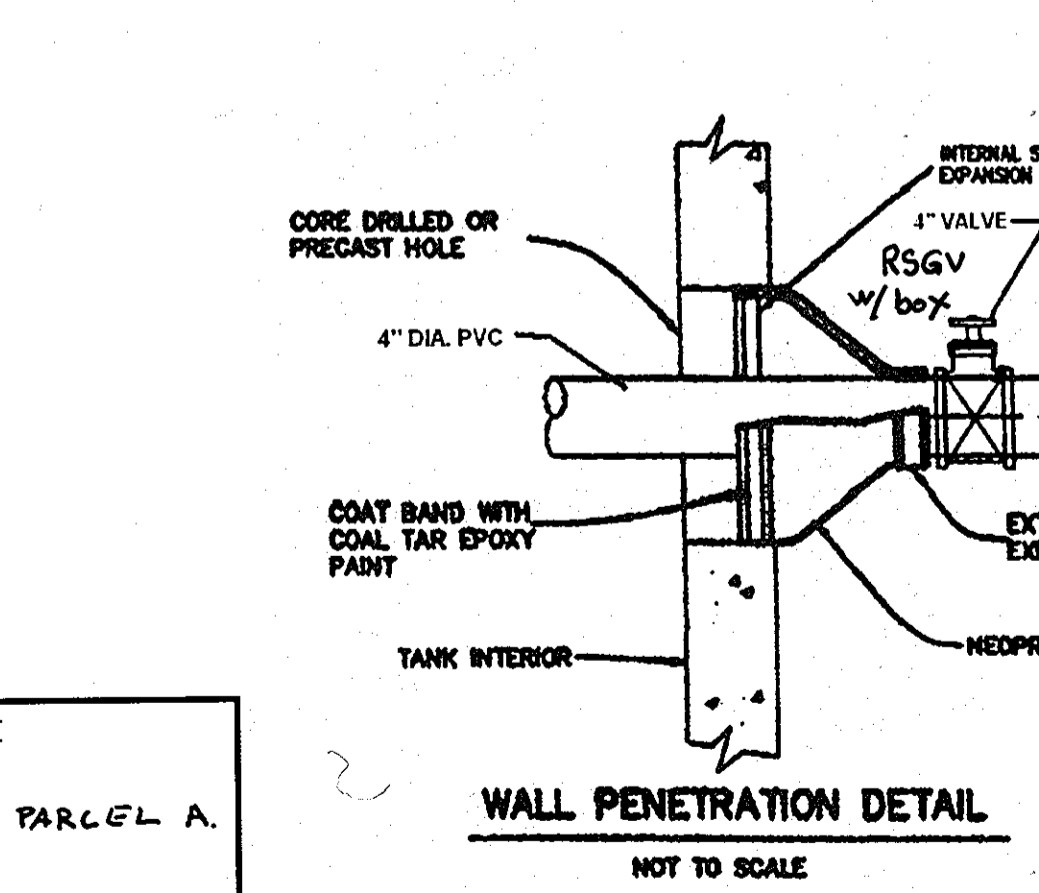
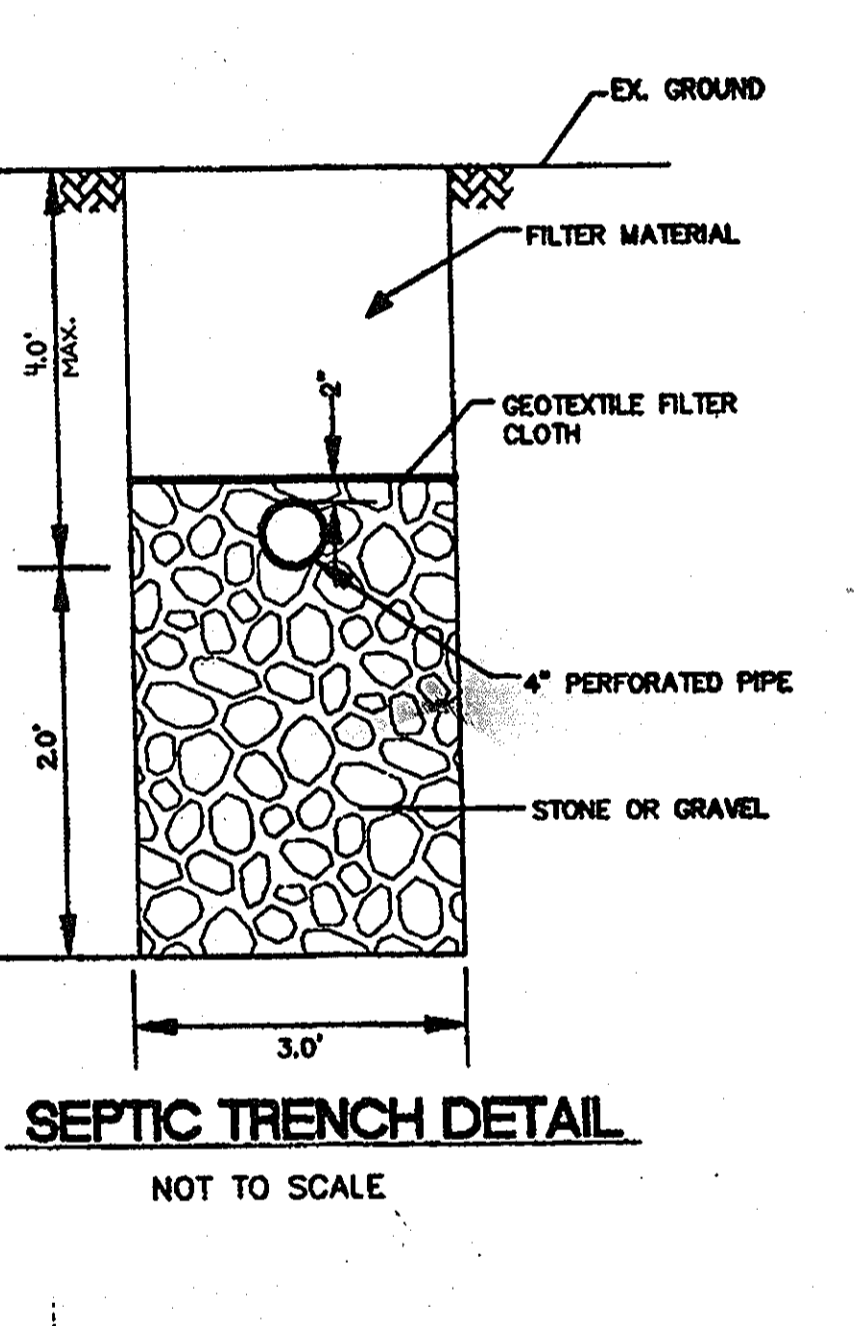
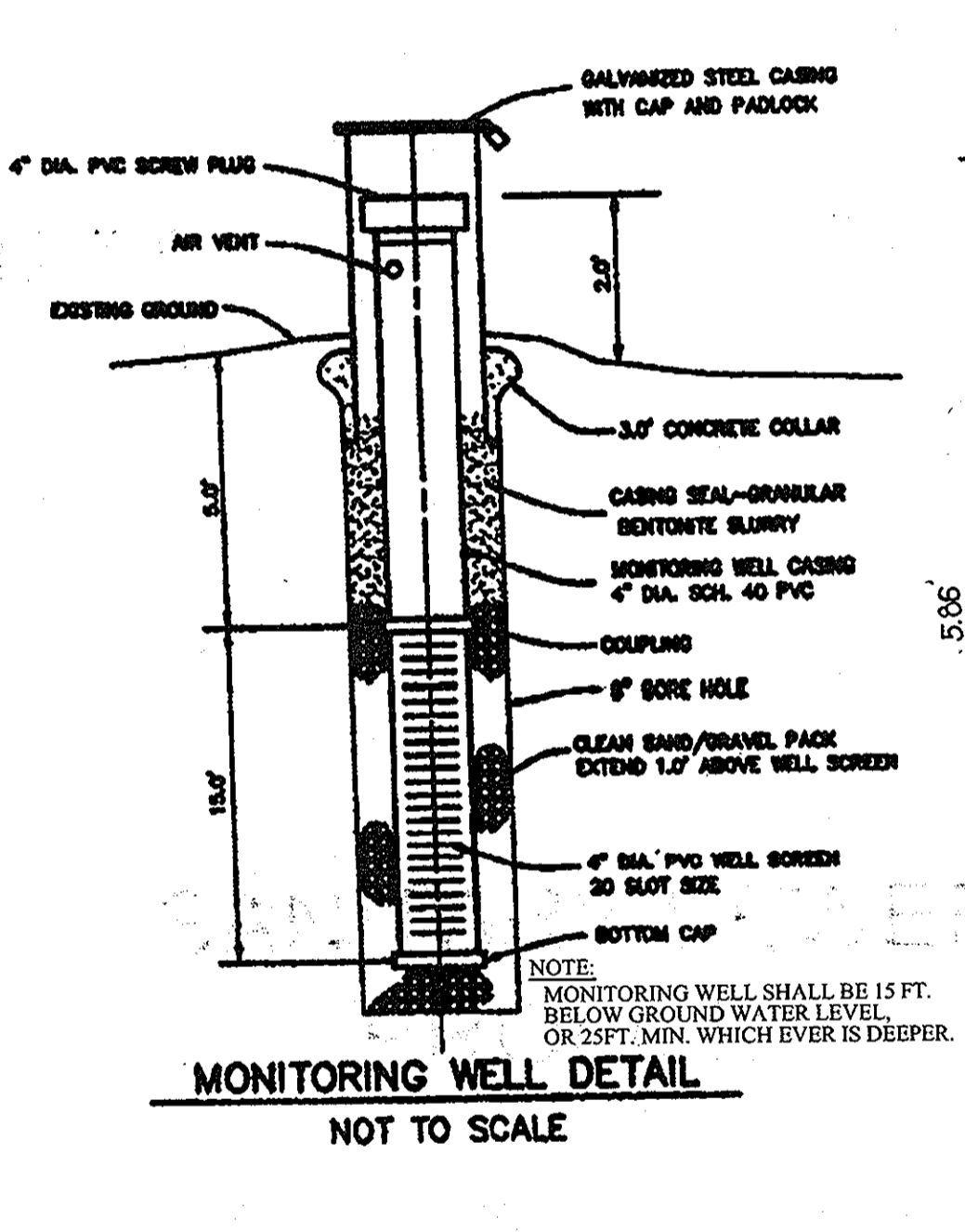
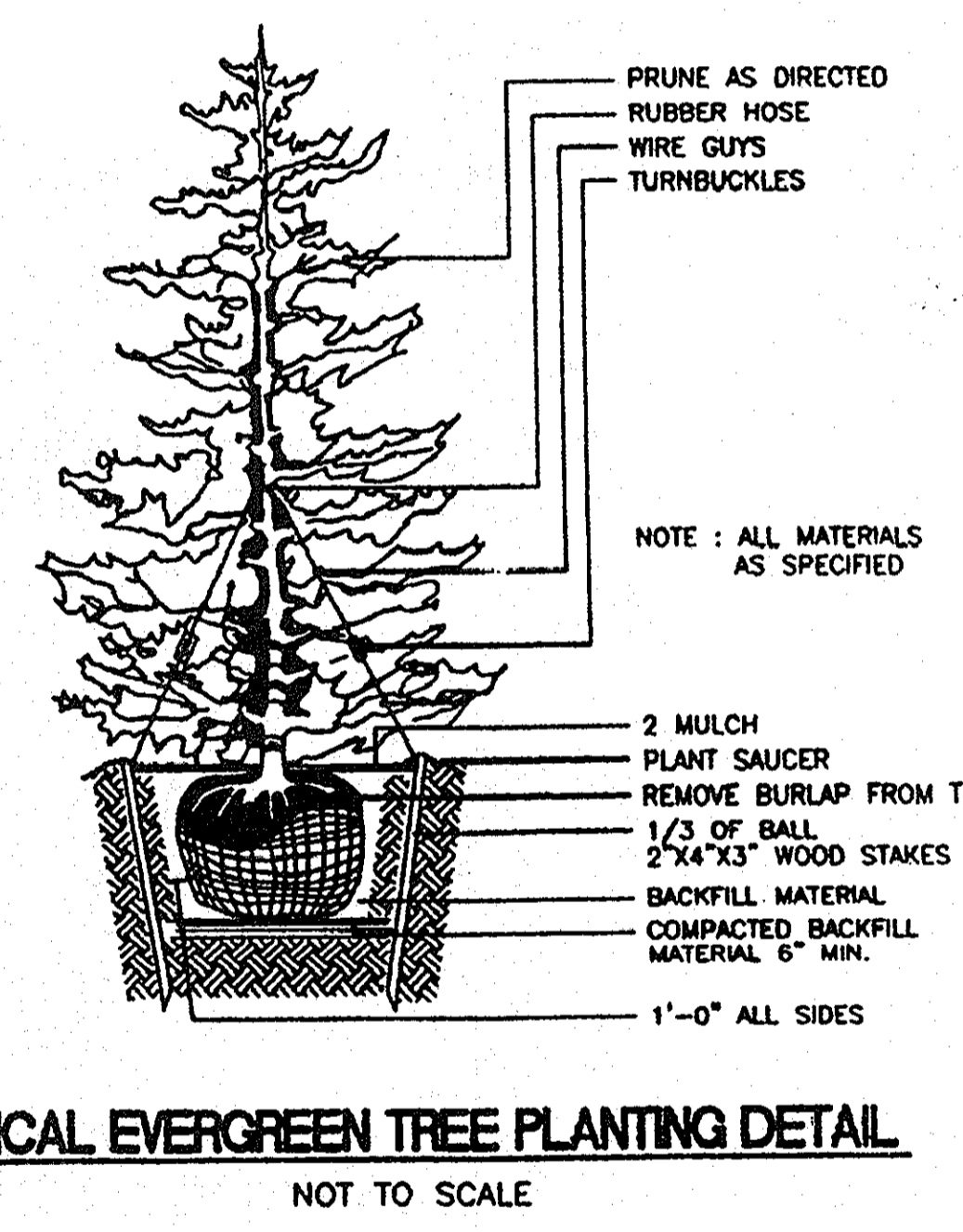
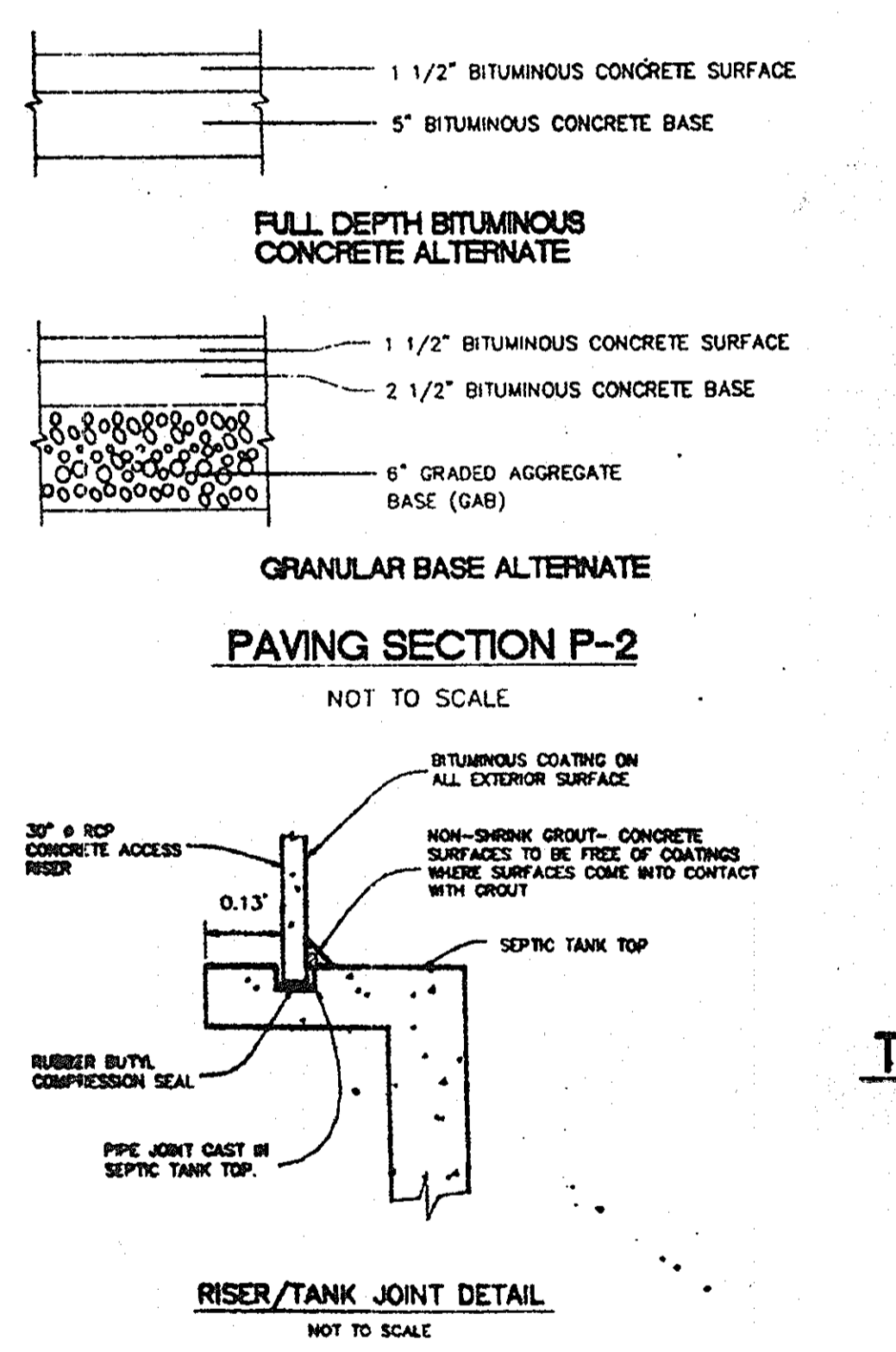
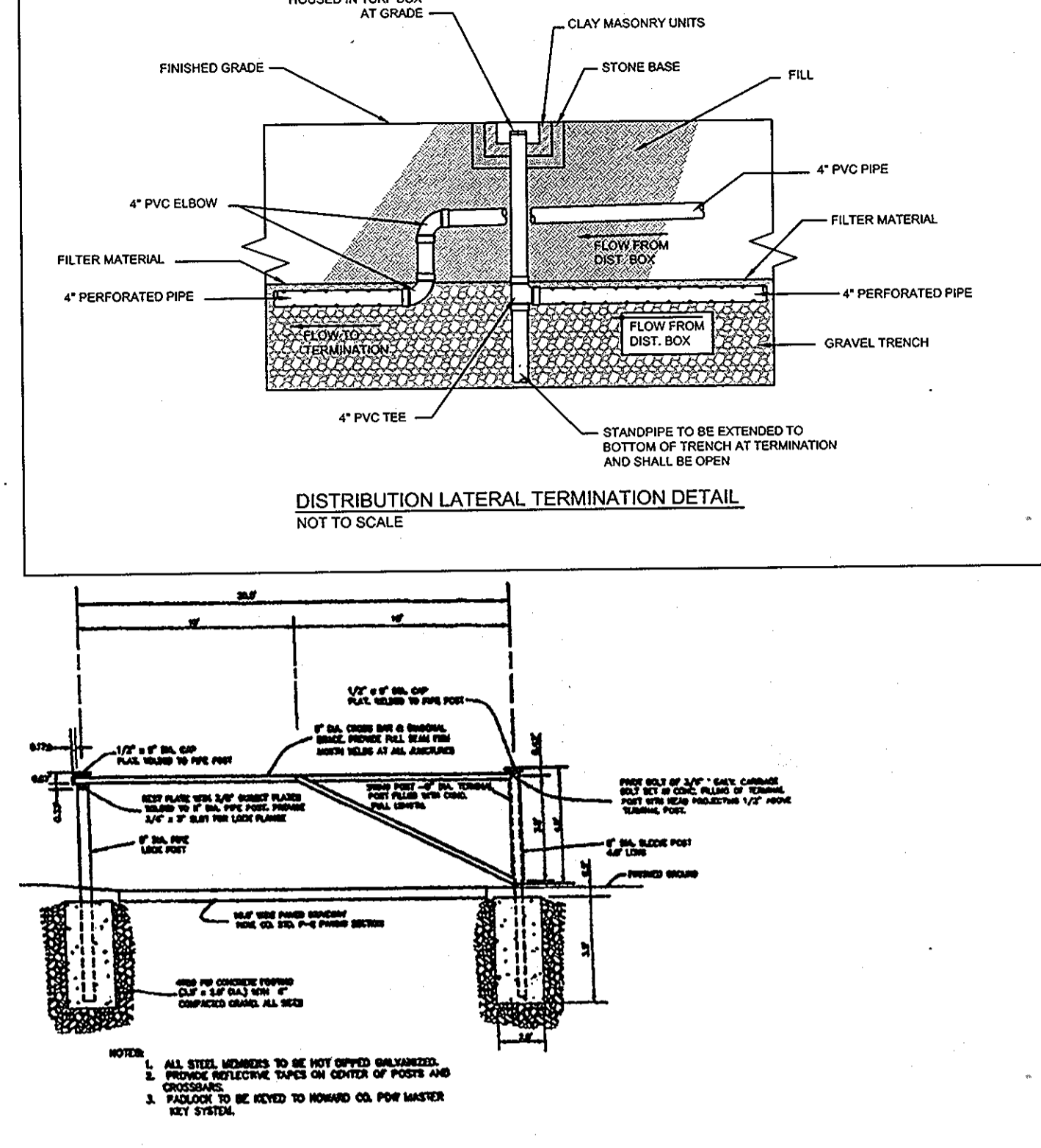
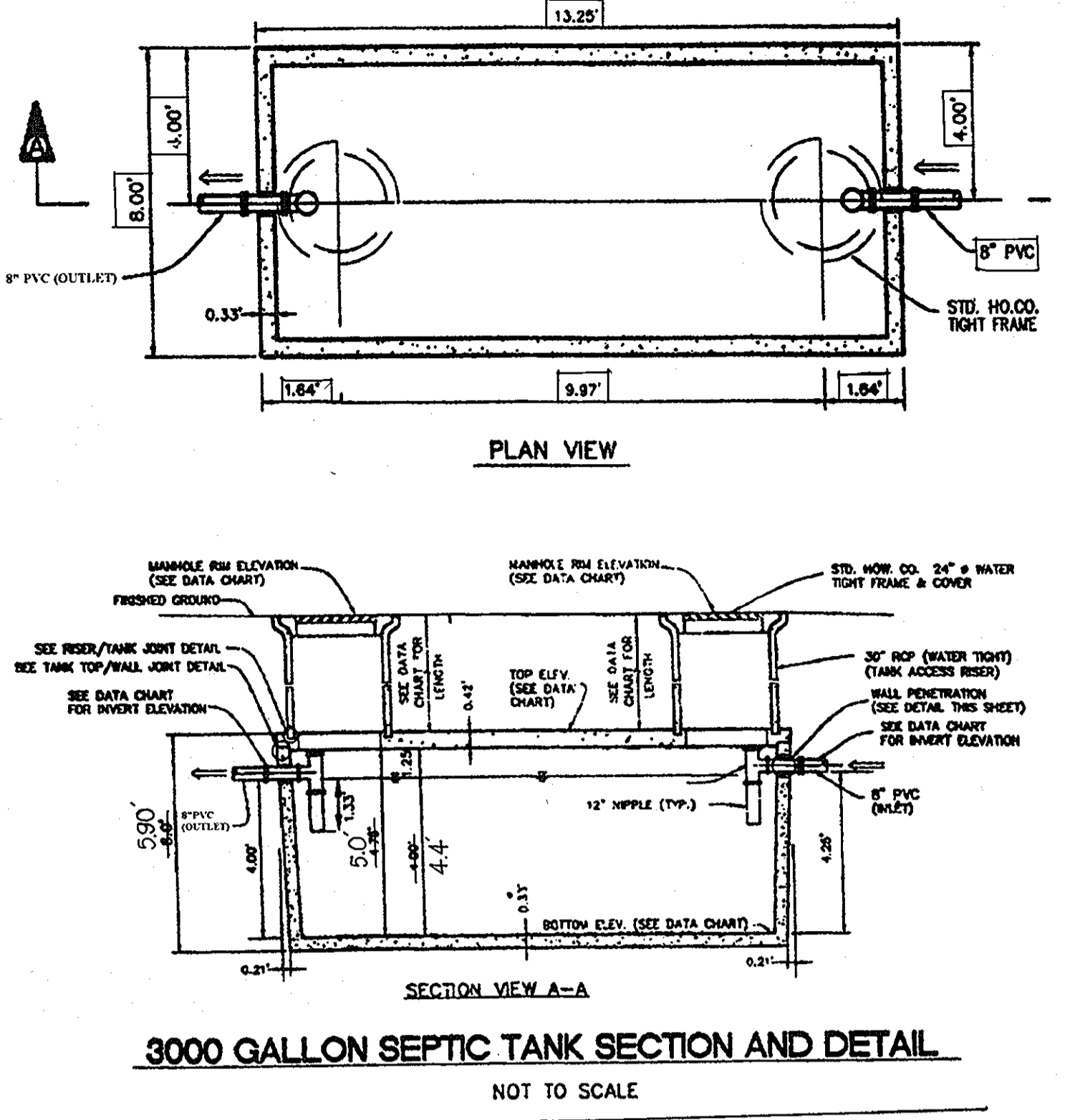
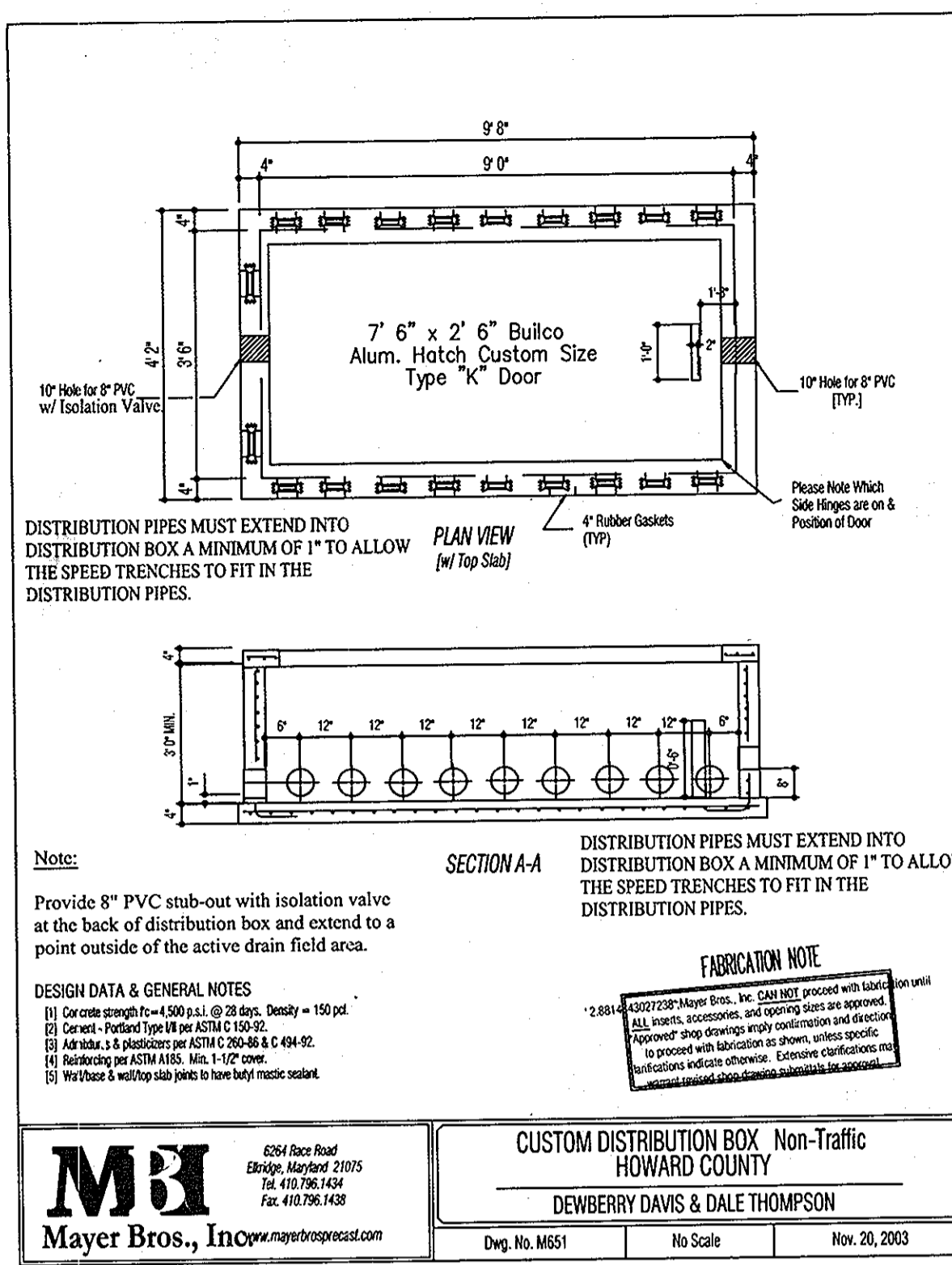
TAX MAP NO. 40 PARCEL 44

OWINGS PROPERTY
LOTS 6 THRU 16 AND PRESERVATION PARCELS A THRU E
5th ELECTION DISTRICT

SCALE: 1" = 50'
SHEET 3 OF 5

CONTRACT NO. 50-4157-D

P:\Projects\Projects\Archives\June 2004\2002\Figs\02745-Dwg\Drawings\Final_Lot_3.rvt - 2/22/2006 12:43:58 PM, 3/1/12



NEW DESIGN EFFLUENT FILTERS A100-12 Series Filteration 1/16"

• Versa-Case accepts 4" or 6" SCH 40 pipe and is available with Supplemental By-Pass Protection
 • Reduce in built-in Versa-Case
 • Control support system with new easy grip handle
 • New handle flows up to 8000 gpd
 • Redesigned filter disc decrease turbulence and promote settling of solids

1-800-221-5742

PART NO.	DESCRIPTION	LIST ONE'	TWO'	THREE'	FOUR'
A100-12-20-VC	12" Dia. Versa-Case	181.50	145.00	110.00	110.00
A100-12-20-VC-1	12" Dia. Versa-Case with 1" Filter Disc	235.00	187.00	142.00	142.00
A100-12-20-VC-2	12" Dia. Versa-Case with 2" Filter Disc	245.00	200.00	155.00	155.00
A100-12-20-VC-3	12" Dia. Versa-Case with 3" Filter Disc	255.00	210.00	165.00	165.00
A100-12-20-VC-4	12" Dia. Versa-Case with 4" Filter Disc	265.00	220.00	175.00	175.00
A100-12-20-VC-5	12" Dia. Versa-Case with 5" Filter Disc	275.00	230.00	185.00	185.00
A100-12-20-VC-6	12" Dia. Versa-Case with 6" Filter Disc	285.00	240.00	195.00	195.00
A100-12-20-VC-7	12" Dia. Versa-Case with 7" Filter Disc	295.00	250.00	205.00	205.00
A100-12-20-VC-8	12" Dia. Versa-Case with 8" Filter Disc	305.00	260.00	215.00	215.00
A100-12-20-VC-9	12" Dia. Versa-Case with 9" Filter Disc	315.00	270.00	225.00	225.00
A100-12-20-VC-10	12" Dia. Versa-Case with 10" Filter Disc	325.00	280.00	235.00	235.00
A100-12-20-VC-11	12" Dia. Versa-Case with 11" Filter Disc	335.00	290.00	245.00	245.00
A100-12-20-VC-12	12" Dia. Versa-Case with 12" Filter Disc	345.00	300.00	255.00	255.00

Zabel A100-12 Series Effluent Filter Product Specification

Performance:
 • Commercial and residential applications up to 8000 gpd
 • 50-80% reduction in TSS within 6 months of installation
 • 20-45% reduction in BODs within 6 months of installation
 • Disinfection reduces turbidity and promotes slopping

Construction:
 • Case, central support and handle constructed of PVC
 • Lid and filter disc constructed of polypropylene
 • Lid has built-in handle
 • Filter disc may be achieved by extending 4" support pipe from the bottom of the tank.

Specifications:

Model	Filteration	GPD	Securing Area	Total Filter Surface	Linear Feet of Wall
A100-12-20-VC	1/16"	2000	1.2125 sq ft	2.723 sq ft	21.17'
A100-12-20-VC-1	1/16"	4500	1.78125 sq ft	4.1727 sq ft	24.42'
A100-12-20-VC-2	1/16"	5000	2.025 sq ft	4.6875 sq ft	26.91'

Call Direct to ORDER 1-800-221-5742 • Or Order Online: www.zabelfilters.com

TUF-TITE Speed Levelers™ SL-4

There is No Faster, Easier, Better, Or More Economical Way To Control Distribution Box Flow

• For 4" or 6" PVC pipes
 • Easy to install and use
 • No need for special tools
 • No need for special training
 • No need for special equipment
 • No need for special materials
 • No need for special labor
 • No need for special time
 • No need for special money

HOW TO SET SPEED LEVELERS:
 1. Insert Speed Leveler into each pipe main to distribute flow.
 2. Turn the Speed Leveler to the "Open" position.
 3. Turn the Speed Leveler to the "Close" position.
 4. Turn the Speed Leveler to the "Adjust" position.

TUF-TITE Floor Door

LEAF ALUMINUM PATTERN PLATE

Perfomed to 50 lbs per square foot for 72" sq. ft. or more when the floor is finished.

Design: Corrosion Resistant

1. Be installed in a hole or hole frame when setting up. Back up and give the floor a minimum of 1" to be sure it is level and the floor is finished.

Factory Finish: Aluminum - All with aluminum plate on surface to be used with concrete. Hydrophobic - no rust stain - corrosion resistant.

QUANTITY TYPE FRAME OPENING WIDTH X LENGTH

<input type="checkbox"/>	K-1	2'0" x 2'0"
<input type="checkbox"/>	K-2	2'0" x 2'6"
<input type="checkbox"/>	K-3	2'6" x 2'6"
<input type="checkbox"/>	K-4	2'6" x 3'0"
<input type="checkbox"/>	K-5	3'0" x 3'0"

REVISIONS:
 REVISION NO. DATE
 1. 4/18/04
 2. 4/22/04

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

U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE

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

HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS, F-03-153.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Dewberry & Davis LLC
203 PERRY PARKWAY
GAITHERSBURG, MD 20877
TEL: (301) 948-6300
FAX: (301) 958-7607

DATE: 4/18/04
DATE: 4/22/04

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, LOTS 6-8, 15, AND 16; AND FOR PRIVATE WATER AND A SHARED SEWERAGE SYSTEM FOR LOTS 9-14, AND FOR BUILDABLE PRESERVATION PARCEL A.

HOWARD COUNTY HEALTH DEPARTMENT

Robert W. Weller
HOWARD COUNTY HEALTH OFFICER

DATE: 3/31/04

AS-BUILT CERTIFICATION

I HEREBY CERTIFY, BY MY SEAL, THAT THE CONDITIONS SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS AND ALSO THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND.

Michael B. Apocook
MICHAEL B. APOCOOK PROFESSIONAL LAND SURVEYOR
NO. REG. NO. 21257, EXPIRATION DATE 06-16-13

DATE: 11/20/12

STATE OF MARYLAND
MICHAEL DAVID APOCOOK
PROFESSIONAL LAND SURVEYOR
NO. 21257

AS-BUILT

DES.	NO.	REVISIONS	DATE
RMM	1.0	REVISE PRESSURE SEWER FROM 1 1/4" TO 1 1/2"	5/18/04
SGB	1.0	SHARED SEPTIC TRENCH DESIGN & LAYOUT	2/13/05
SGB	1.1	REVISED FROM 1400 LF PER CELL TO 1650 LF PER CELL.	2/13/05
RMM	1.1	DISTRIBUTION LATERAL TERMINATION REVISED	2/13/05
RMM	1.2	NOTES ADDED	2/21/08

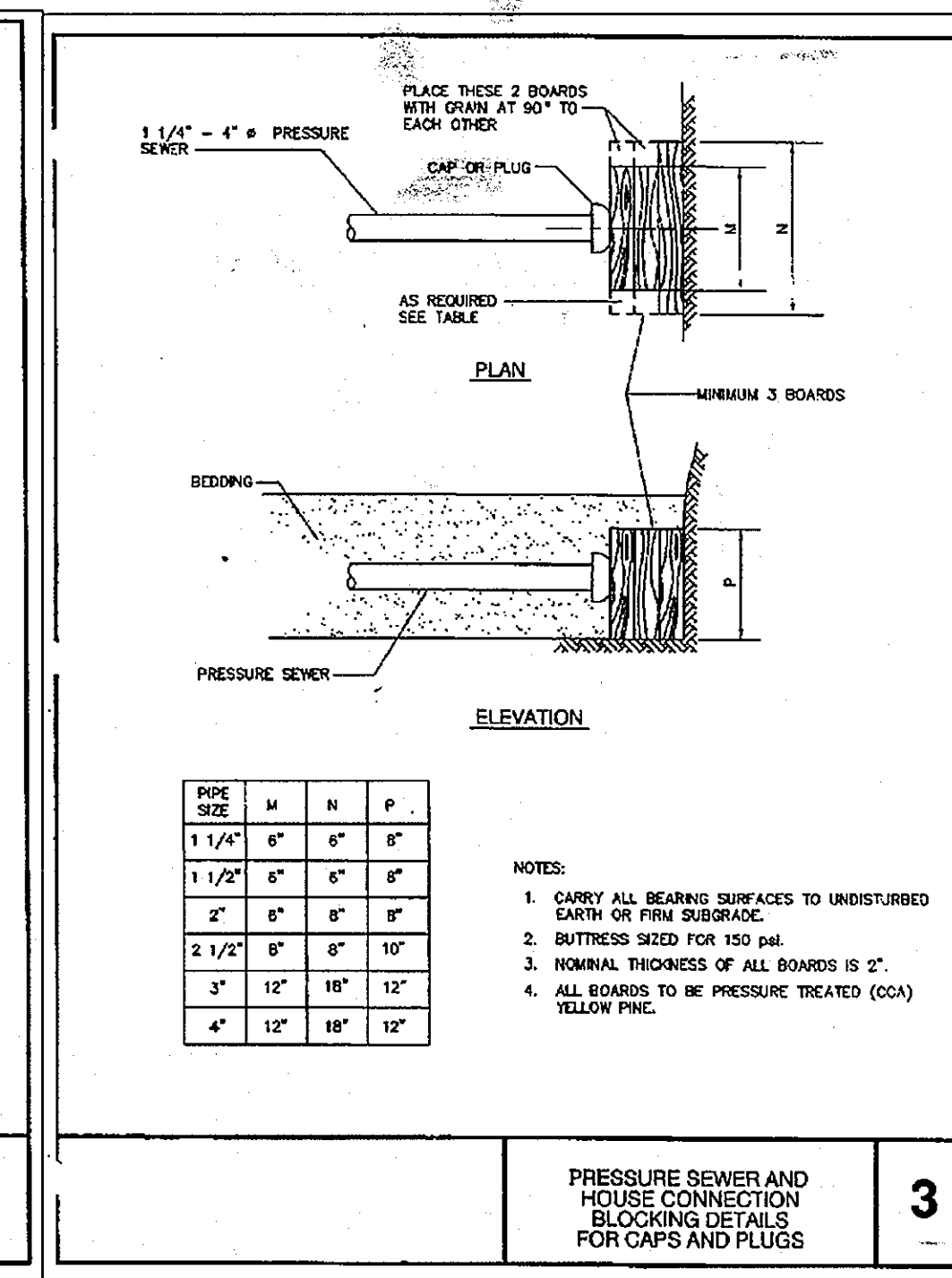
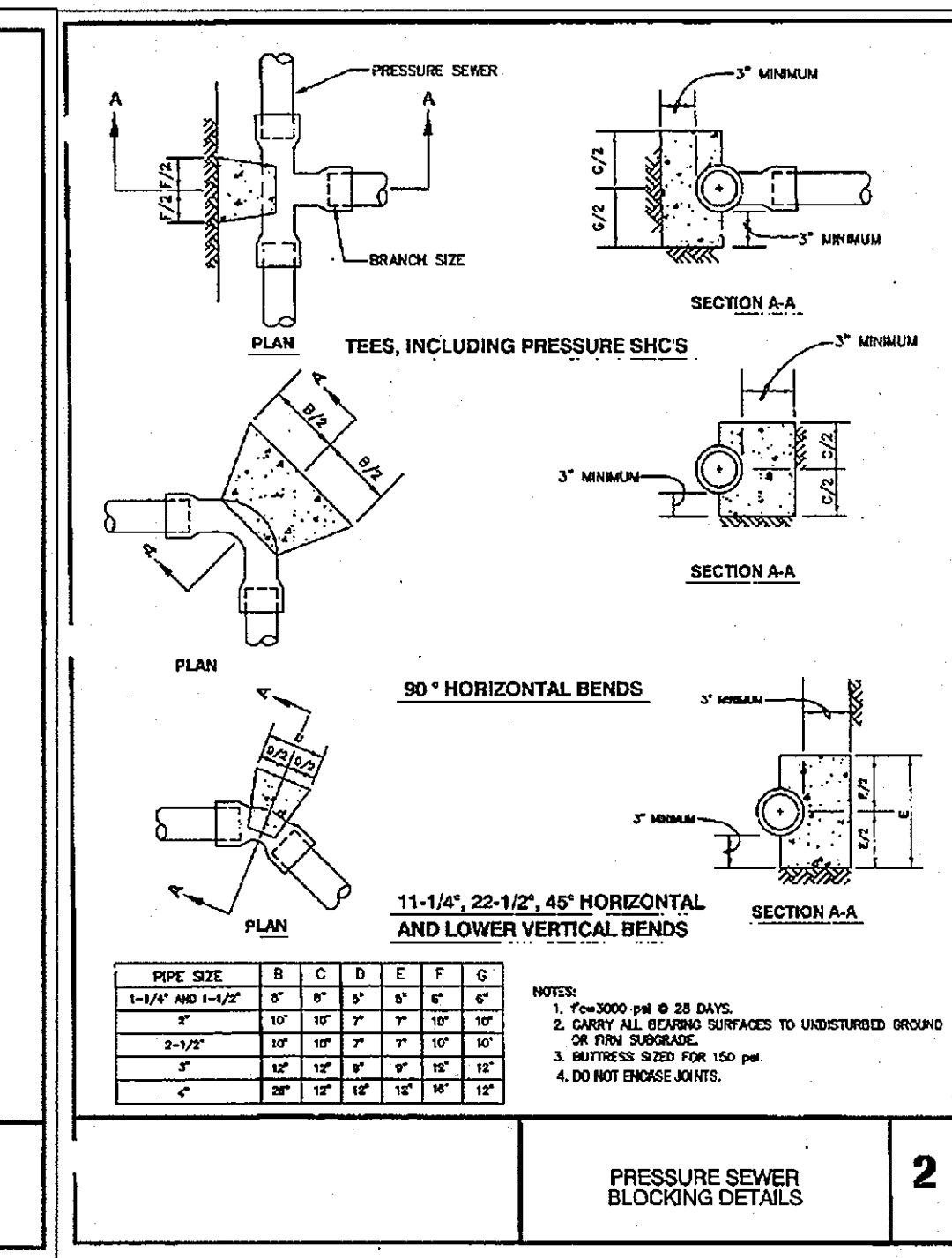
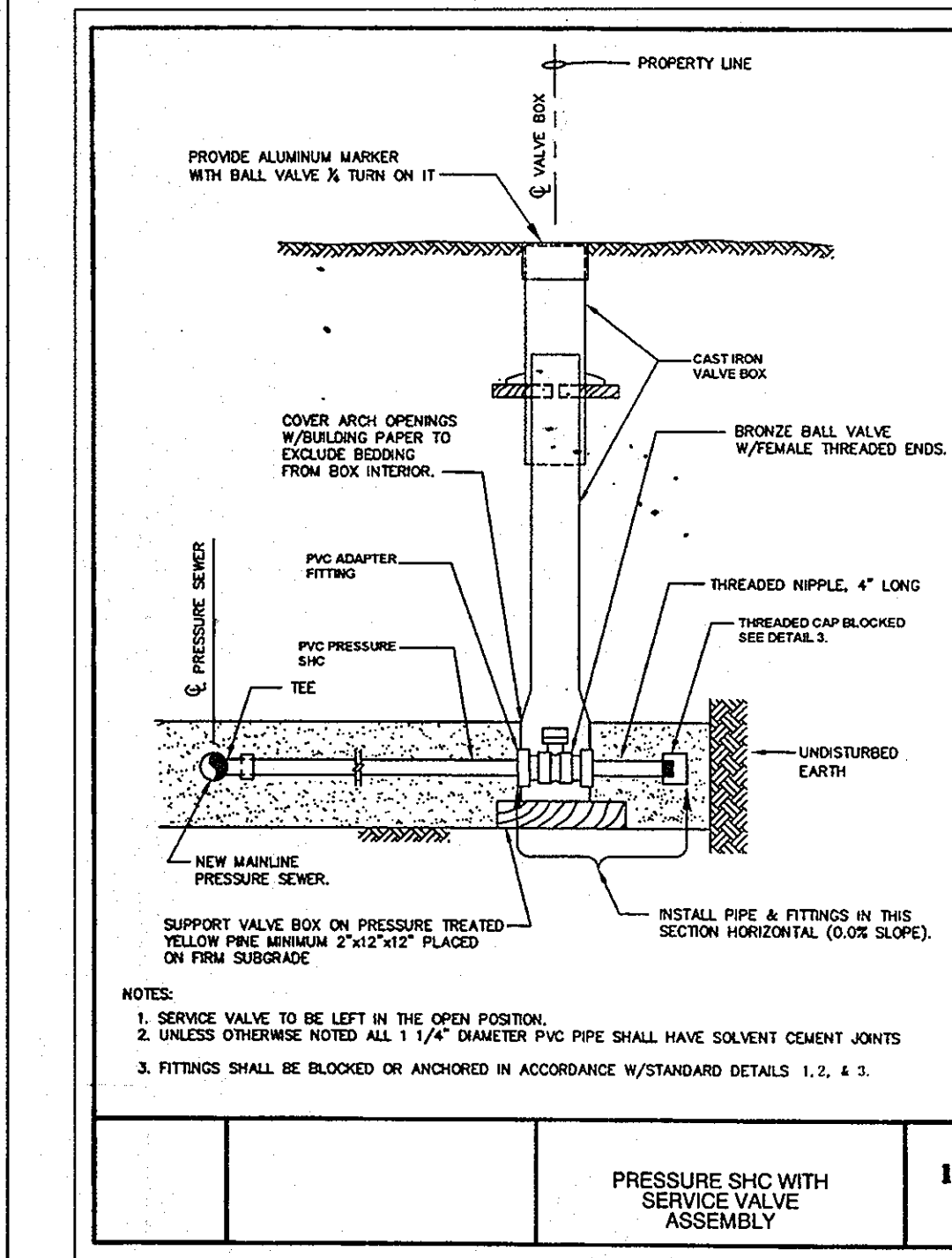
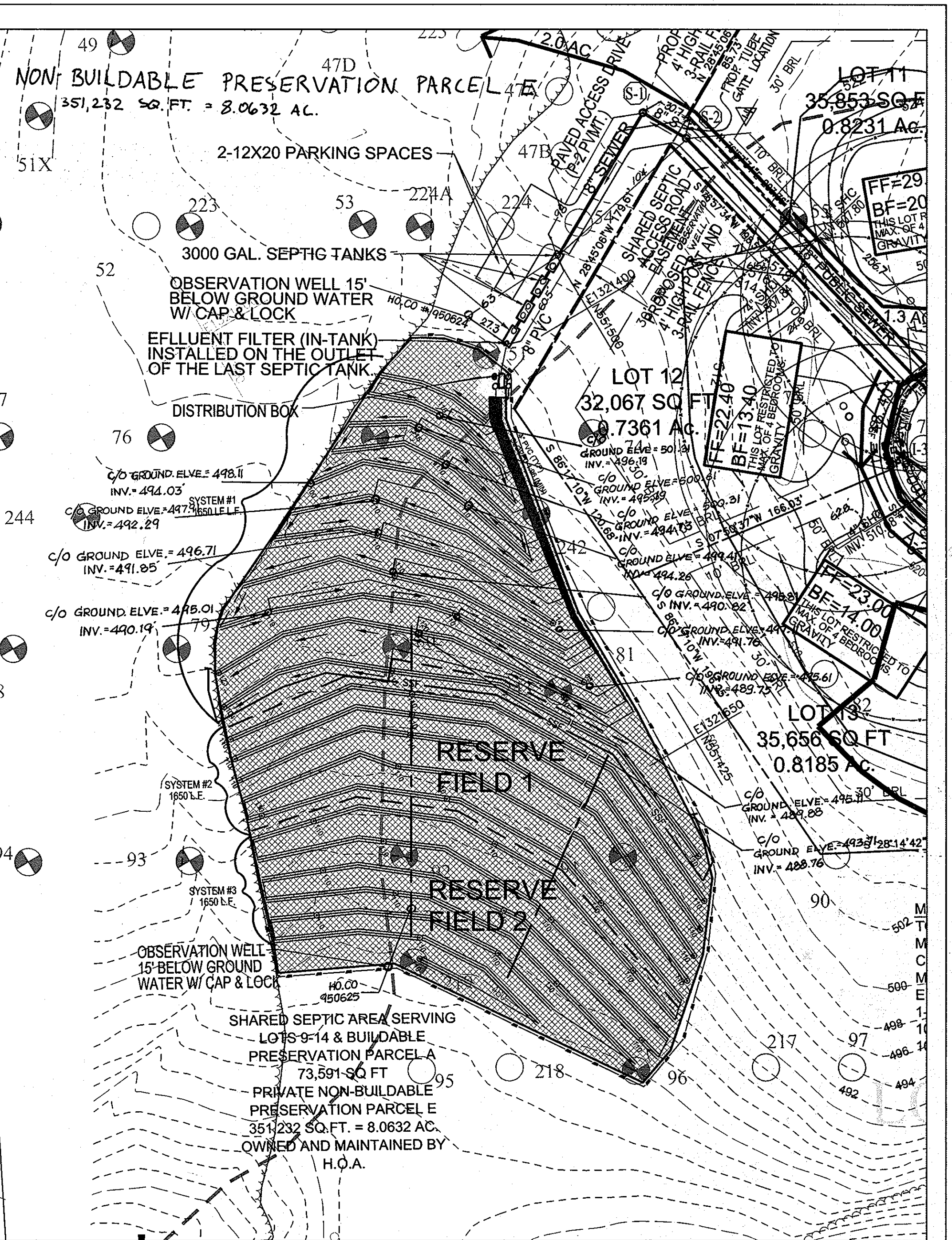
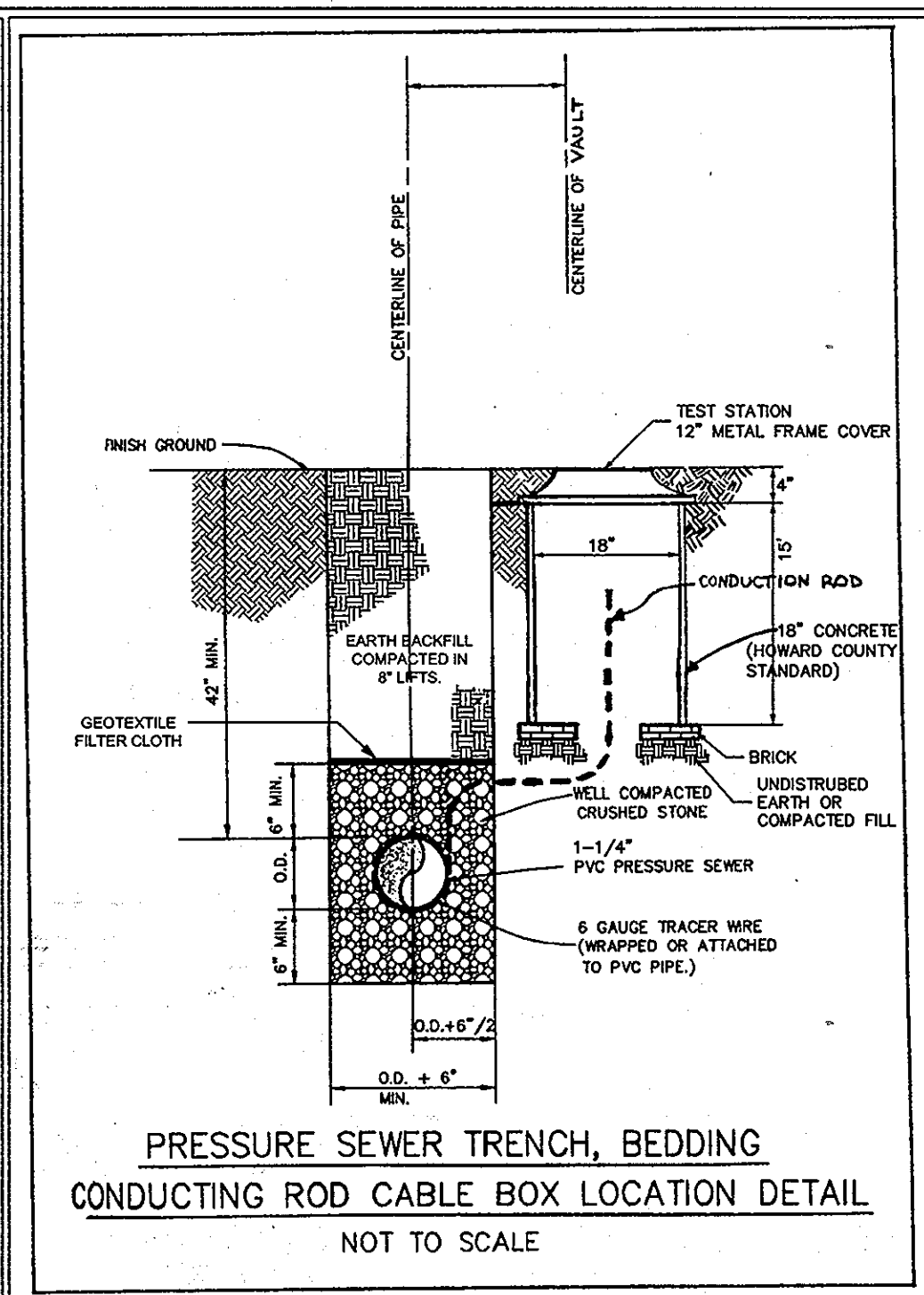
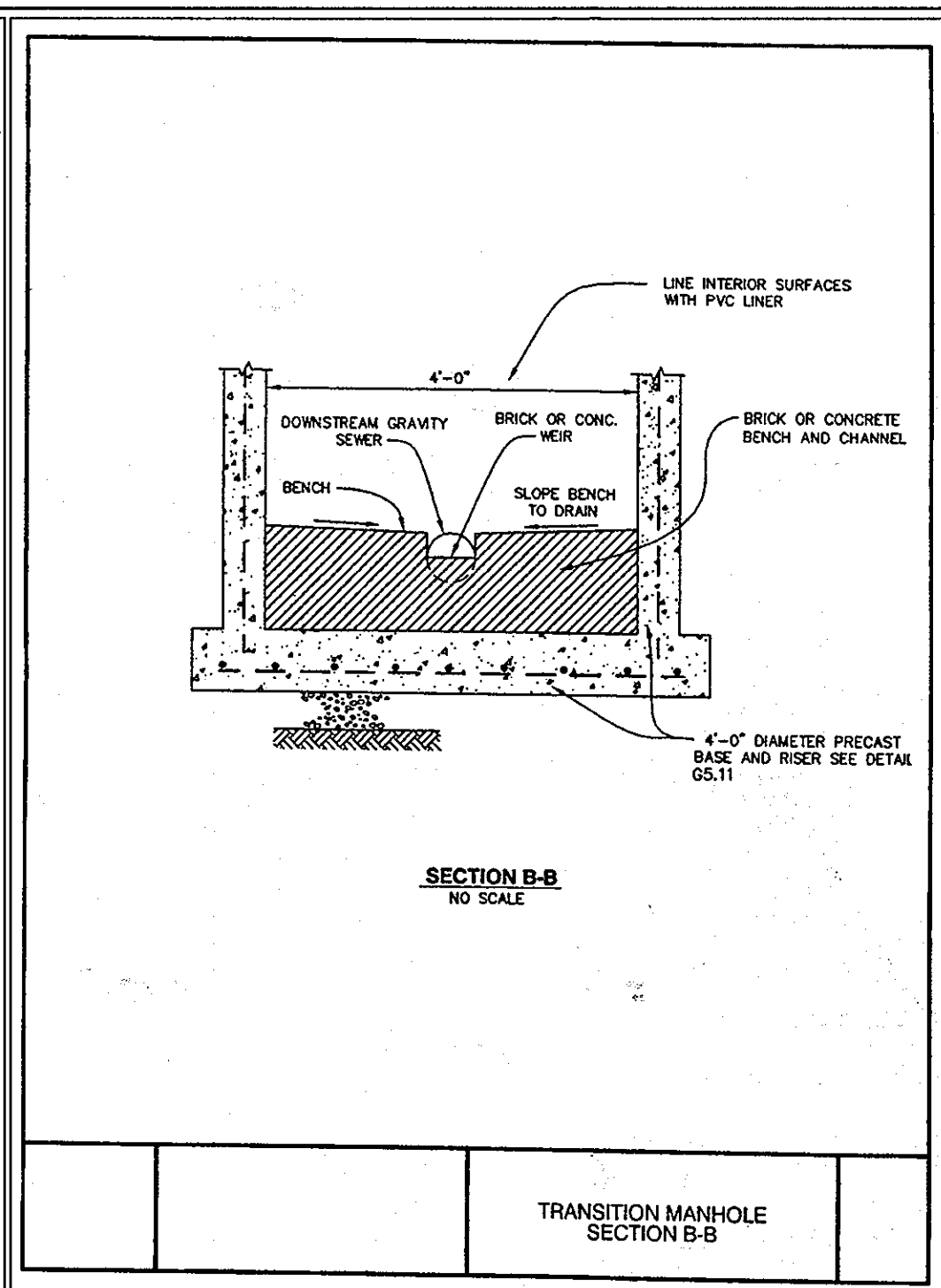
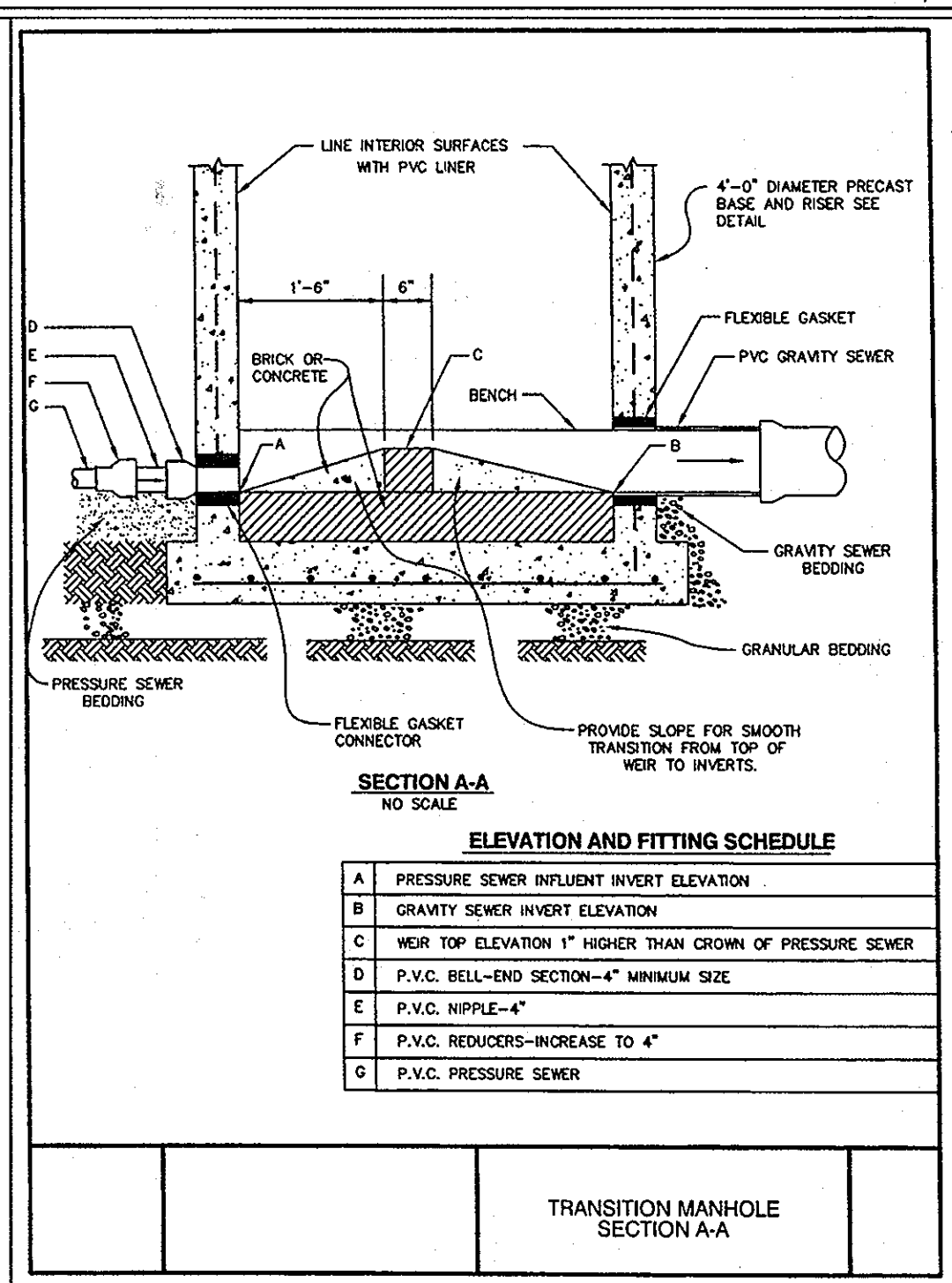
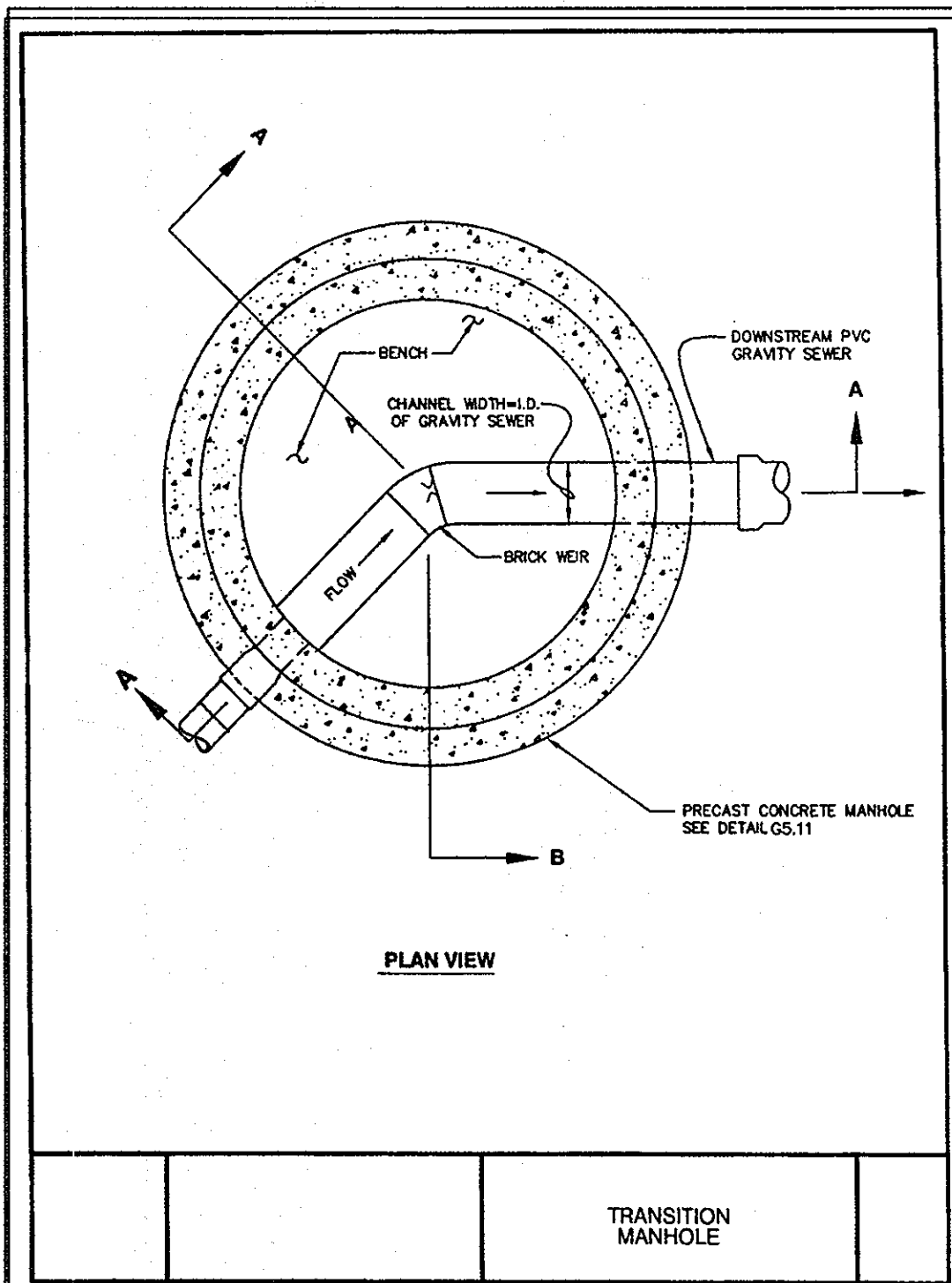
TAX MAP NO. 40
PARCEL 44

THIS SHEET SUPERCEDES PREVIOUS PLAN SIGNED APRIL 6, 2004 BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION.

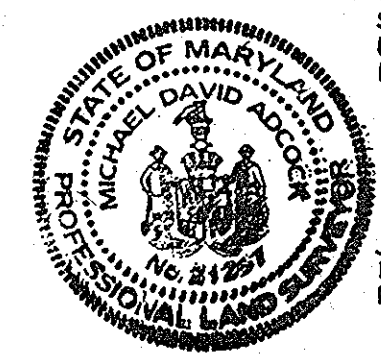
OWINGS PROPERTY
LOTS 6 THRU 16 AND PRESERVATION PARCELS A THRU E
5th ELECTION DISTRICT

CONTRACT NO. 50-4157-D

SCALE: N/A
SHEET 4 OF 5



THIS SHEET SUPERCEDES PREVIOUS PLAN SIGNED APRIL 6, 2004 BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION.



1/20/12 DATE
MICHAEL D. ADCOCK, PROFESSIONAL LAND SURVEYOR
MD REG. NO. 21297, EXPIRATION DATE: 05-16-13



REVISION No. 11 IS BY DALE THOMPSON BUILDERS, INC. THE ENGINEER'S SEAL AND SIGNATURE ARE AFFIXED.

NO	REVISION	DATE
1	REMOVED EXISTING FENCINGS FROM STREET TO PROP. GATE LOCATION	10-04-07

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Dewberry & Davis LLC
203 FERRY PARKWAY
GANTHERSBURG, MD 20877
TEL: (301) 948-6300
FAX: (301) 258-7907

4/13/14 DATE
4/23/14 DATE

NO.	REVISIONS	DATE
1.0	SHARED SEPTIC TRENCH DESIGN & LAYOUT	12/13/05
	REVISED FROM 1400 LF PER CELL TO 1650 LF PER CELL.	
1.1	DISTRIBUTION LATERAL TERMINATION REVISED	12/13/05
1.2	NOTES ADDED	2/21/06

NO.	REVISIONS	DATE
1.0	SHARED SEPTIC TRENCH DESIGN & LAYOUT	12/13/05
1.1	DISTRIBUTION LATERAL TERMINATION REVISED	12/13/05
1.2	NOTES ADDED	2/21/06

OWINGS PROPERTY
LOTS 6 THRU 16 AND PRESERVATION PARCELS A THRU E
5th ELECTION DISTRICT

CONTRACT NO. 50-4157-D

TAX MAP NO. 40 PARCEL 44

SCALE: NTS
SHEET 5 OF 5