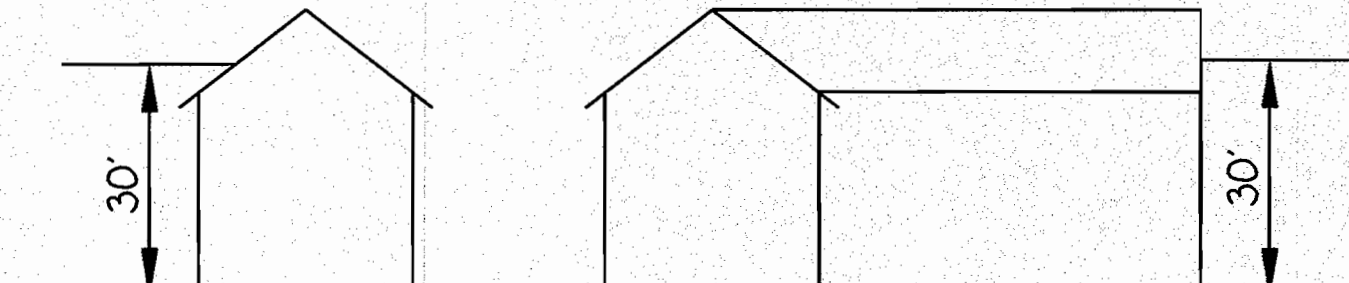


Lake Water Surface Elevation = 232.00



SCHEMATIC BUILDING ELEVATION

ENTRANCE LOCATION (DEEP WATER LANE)		
POINT No.	C.I. STATION	OFFSET
1	7+55.14	10' Left
2	7+64.78	14.85' Left
3	7+70.50	24' Left
4	8+01.31	33.71' Left
5	8+00.17	18.13' Left
6	8+13.51	10' Left

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer _____ Date _____

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

Director _____ Date 2/15/03

Chief, Division of Land Development _____ Date 2/14/03

Chief, Development Engineering Division _____ Date 2/11/03

EXISTING STORMWATER MANAGEMENT FACILITY No. 2
This Facility is a Detention Retention Facility (Wet Pond) that is Privately Owned + Maintained
Permanent Pool Elevation: 232.00
2Yr. W.S.El.=232.44
10Yr. W.S.El.=232.84
100Yr. W.S.El.=233.31
1/2 PMP W.S.El.=235.83

NOTE:
FOR UTILITY DETAIL +
HANDICAP ACCESSIBILITY IN
THE BATH HOUSE AREA
SEE 10 SCALE ENLARGEMENT
ON SHEET 3 OF 9.



Lake Water Surface Elevation = 232.00

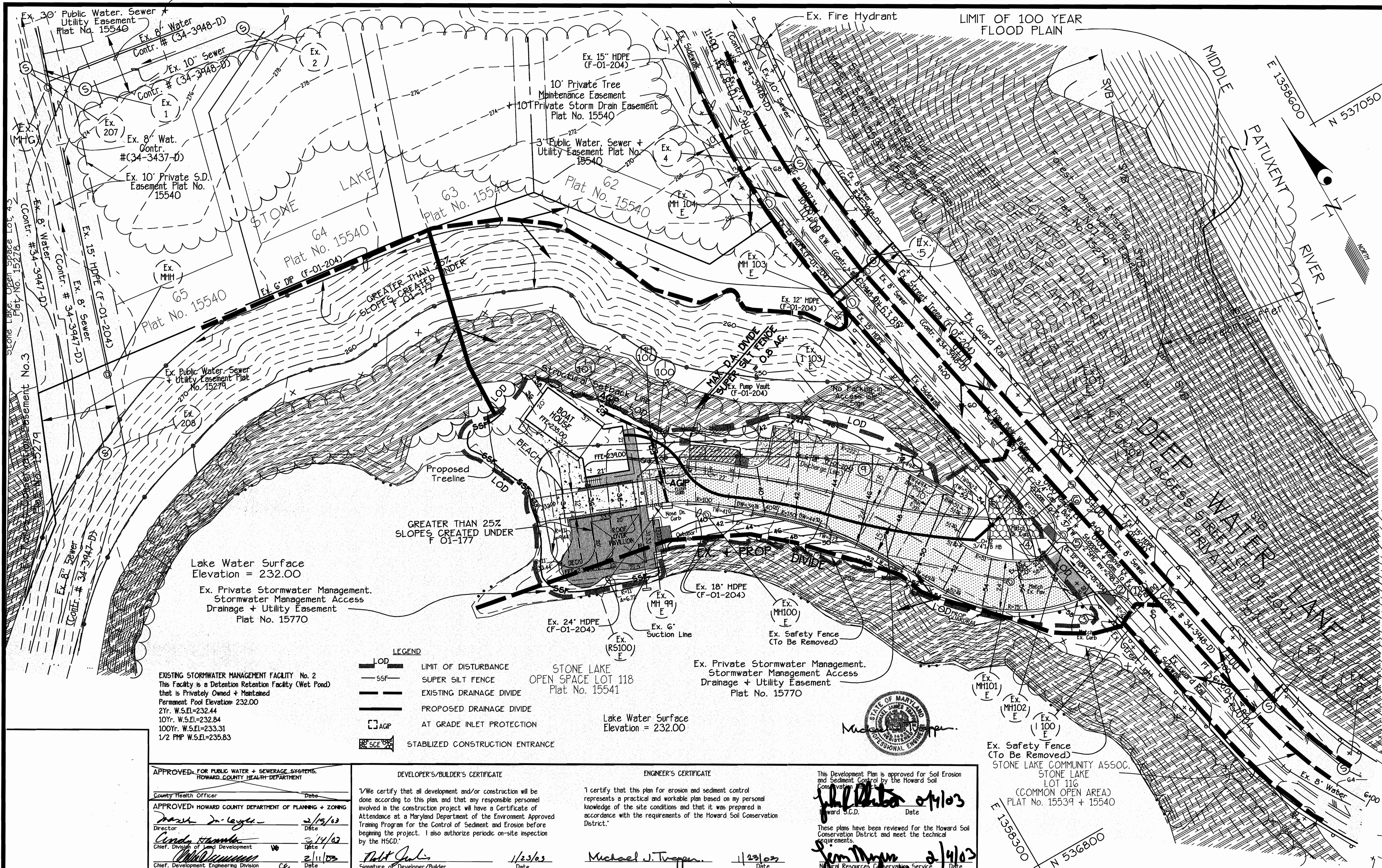
GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3404 NATIONAL DRIVE - SUITE 220 - BARTONSVILLE OFFICE PARK
BARTONSVILLE, MARYLAND 20836
TEL: 301-421-4024 BALT: 410-860-1820 DC/VA: 301-291-2524 FAX: 301-421-4186

DES.	DRN. WJ	CHK.	DATE	REVISION	BY	APPR.

OWNER:
STONE LAKE COMMUNITY ASSOC.
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044
PH: 410-992-6089
ATTN: MR. BOB JENKINS

SITE DEVELOPMENT PLAN
STONE LAKE
Open Space Lot 118
PLAT No. 15541

SCALE	ZONING	G. L. W. FILE No.
1" = 20'	R-ED	99140
DATE	TAX MAP - GRD	SHEET
JAN. 2003	47-9/10	2 OF 9



Lake Water Surface Elevation = 232.00

Ex. Private Stormwater Management. Stormwater Management Access Drainage + Utility Easement Plat No. 15770

EXISTING STORMWATER MANAGEMENT FACILITY No. 2
This Facility is a Detention Retention Facility (Wet Pond) that is Privately Owned + Maintained
Permanent Pool Elevation: 232.00
2Yr. W.S.El.=232.44
10Yr. W.S.El.=232.84
100Yr. W.S.El.=233.31
1/2 PMP W.S.El.=235.83

- LEGEND**
- LOD — LIMIT OF DISTURBANCE
 - SSF — SUPER SILT FENCE
 - — EXISTING DRAINAGE DIVIDE
 - — PROPOSED DRAINAGE DIVIDE
 - AGP AT GRADE INLET PROTECTION
 - SCE STABILIZED CONSTRUCTION ENTRANCE

STONE LAKE OPEN SPACE LOT 118 Plat No. 15541

Lake Water Surface Elevation = 232.00

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer _____ Date _____

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

Director _____ Date 2/19/03

Chief, Division of Land Development _____ Date 2/14/03

Chief, Development Engineering Division _____ Date 2/11/03

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that all development and/or 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 Maryland 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 HSCD.

Signature of Developer/Builder _____ Date 1/23/03

ENGINEER'S CERTIFICATE

I 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 of Engineer _____ Date 1/23/03

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

Signature of District Director _____ Date 2/19/03

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Signature of Reviewer _____ Date 2/19/03

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3924 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALTIMORE 410-880-1820 DC/VA 301-694-2584 FAX: 301-421-4186

DES.	DRN.	CHK.	DATE	REVISION	BY	APPR.

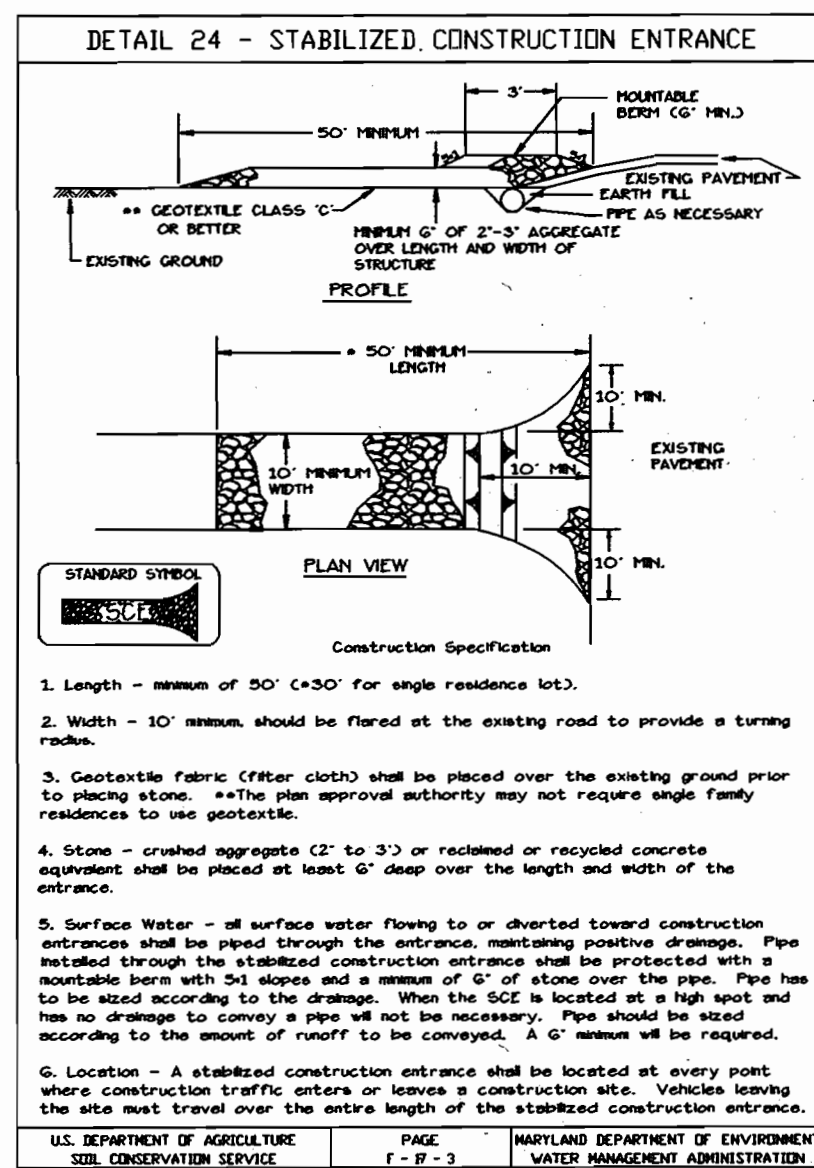
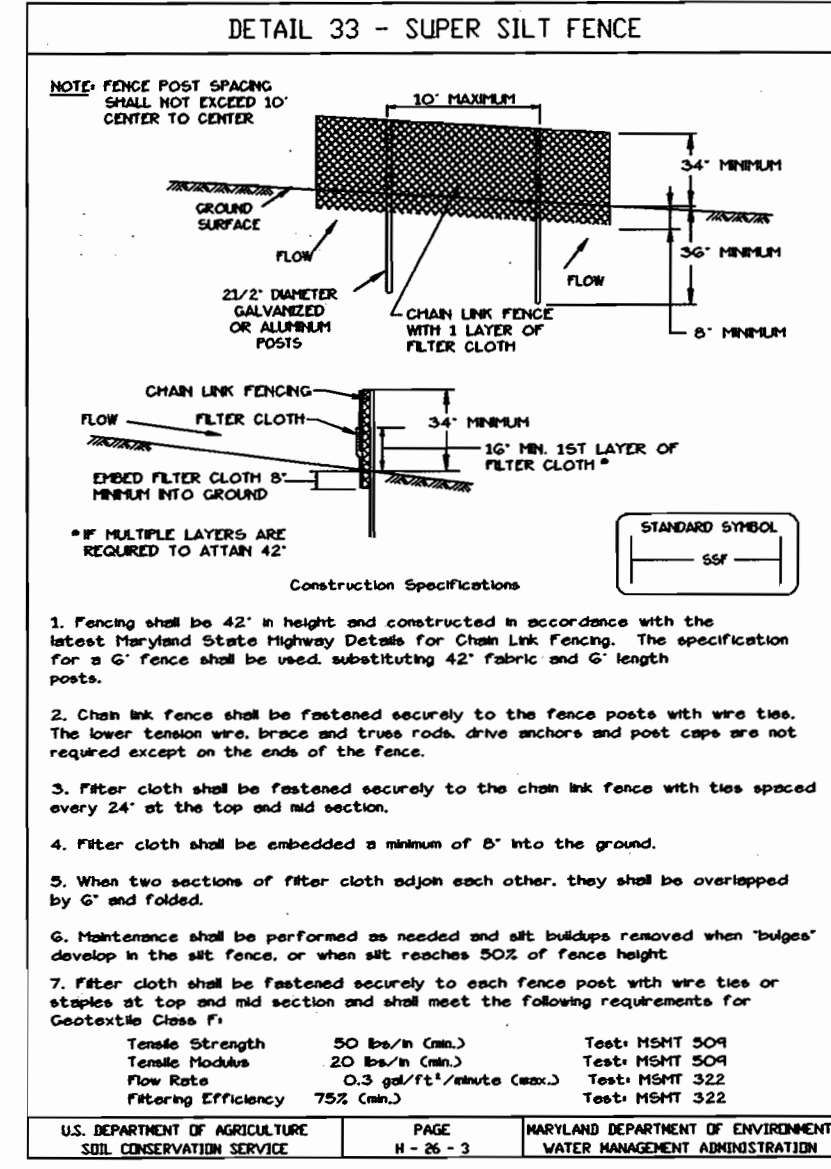
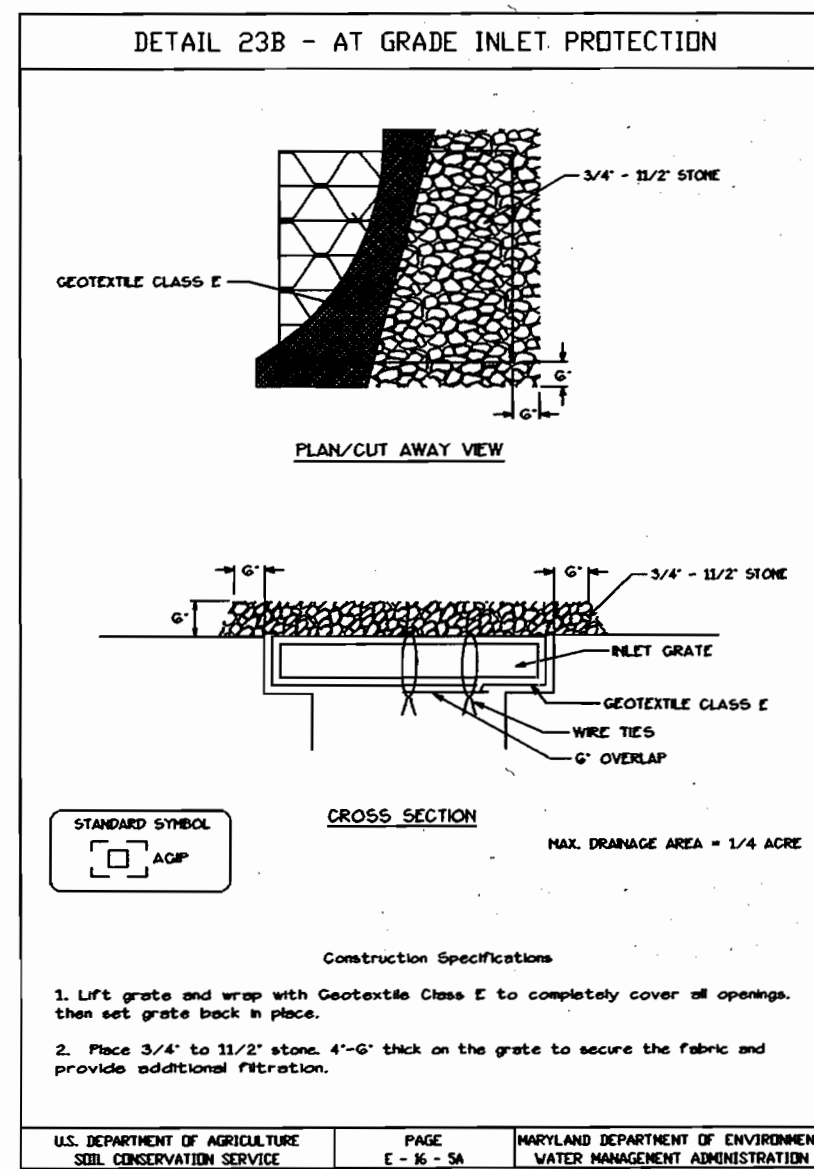
OWNER:
STONE LAKE COMMUNITY ASSOC.
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044
PH: 410-992-6089
ATTN: MR. BOB JENNINS

SEDIMENT CONTROL PLAN
STONE LAKE
Open Space Lot 118
PLAT No. 15541

ELECTION DISTRICT No. 6

HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 20'	R-ED	99140
DATE	TAX MAP - GRID	SHEET
JAN., 2002	47-9/10	4 OF 9



ENGINEER'S CERTIFICATE

I 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

Michael J. Trappan 1/23/03
 Signature Date

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that all development and/or 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 Maryland 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 HSCD.

Scott Jenkins 1/23/03
 Signature Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Jim Meyer 2/4/03
 Natural Resources Conservation Service Date

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

J.P. Ralston 2/4/03
 Howard S.C.D. Date

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer _____ Date _____

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

Director *March 21, 2003* 2/19/03 Date

Chief, Division of Land Development *Cindy Starns* 2/14/03 Date

Chief, Development Engineering Division *William...* 2/11/03 Date

STANDARD AND SPECIFICATIONS FOR TOPSOIL DEFINITION

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

PURPOSE

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

CONDITIONS WHERE PRACTICE APPLIES

I. This practice is limited to areas having 2:1 or flatter slopes where:

- The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
- The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
- The original soil to be vegetated contains material toxic to plant growth.
- The soil is so acidic that treatment with limestone is not feasible.

II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. Topsoil salvaged from the existing site may be used provided that it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the respective soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.

II. Topsoil Specifications - Soil to be used as topsoil must meet the following:

- Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by a agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of clods, stones, slag, coarse fragments, gravel, sticks, roots, trash or other materials larger than 1 1/2" in diameter.
- Topsoil must be free of plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
- Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

III. For sites having disturbed areas under 5 acres:

- Place topsoil (if required) and apply soil amendments as specified in 2.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

IV. For sites having disturbed areas over 5 acres:

- On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of photo-toxic materials.

Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

V. Topsoil Application

- When topsoiling, maintain needed erosion and sediment control practices such as diversion, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
- Grades on the areas to be topsoiled, which have been previously established, shall be maintained about 4' - 8' higher in elevation.
- Topsoil shall be uniformly distributed in a 4' - 8' layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water.
- Topsoil shall not be placed while the topsoil or subsoil is frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below.

PERMANENT SEEDING NOTES

Apply to graded or cleared area 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, discing or other acceptable means before seeding (unless previously loosened).

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

- Preferred - Apply 2 tons per acre dolomitic limestone (100 lbs/1000 square feet) and 175 lbs per acre 10-20-20 fertilizer (4 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 150 lbs per acre 46-0-0 ureaform fertilizer (3-1/2 lbs/1000 sq ft).
- Acceptable - Apply 2 tons per acre dolomitic limestone (100 lbs/1000 sq ft) and 325 lbs per acre 10-20-20 fertilizer (7-1/2 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 thru May 15, and August 15 thru October 15, seed with 150 lbs per acre (3.4 lbs/1000 sq ft) of Mx 3. For the period May 16 thru August 14, seed with 133 lbs. Mx 7 per acre. During the period of October 16 thru February 28, protect site by Option (1) 2 tons per acre of well anchored anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 150 lbs/acre Mx 3 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 seeded areas and make needed repairs, replacements and reseedings.

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, discing or other acceptable means before seeding (unless previously loosened).

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (15 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 ryegrass (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 4 lbs per acre of weeping lovegrass (0.9 lbs/1000 sq ft). For the period November 16 thru February 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 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (410) 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes and 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seeding and mulching (Sec. G). 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	37.63 Acres
Area Disturbed	0.44 Acres
Area to be roofed or paved	0.21 Acres
Area to be vegetatively stabilized	0.23 Acres
Total Cut	5,000 Yds.
Total Fill	5,000 Yds.
Off-site waste/borrow area location	N/A
- 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 DFW 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 3 pipe lengths or that which shall be backfilled and stabilized within one working day, whichever is shorter.

SEQUENCE OF CONSTRUCTION

- Obtain permits and arrange for pre-construction meeting with the Sediment Control Inspector (1 day);
- Install stabilized construction entrance and perimeter super silt fence. (1 week);
- Fine grade site (1 weeks);
- Construct building (4 months);
- Install utilities (1 month);
- Install curb and gutter, sidewalks and base pave. Stabilize areas with grass seed and mulch (2 weeks);
- When permission has been granted by the sediment Control Inspector and all areas draining to the sediment controls have been stabilized, remove sediment controls and stabilize with grass seed and mulch (2 days);
- Install landscaping. (2 days);
- Install surface course paving and parking lot striping (3 days).

SCALE	ZONING	G. L. W. FILE NO.
DATE	TAX MAP - GRID	SHEET
Jan. 2003	47-9/10	5 OF 9

OWNER: STONE LAKE COMMUNITY ASSOC. THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MD 21044 PH: 410-992-6089 ATTN: MR. BOB JENKINS

SELECTION DISTRICT No. 6

HOWARD COUNTY, MARYLAND

SDP-03-21

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONVILLE OFFICE PARK
 BURTONVILLE, MARYLAND 20866
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DES.	DRN.	WSJ	CHK.	DATE	REVISION	BY	APPR.

SYMBOL	QTY.	NAMES (BOTANICAL / SCIENTIFIC)	SIZE	ROOT	COMMENTS
WP	6	PNUS STROBUS 'WHITE PINE'	8'-10' HT.	B + B	
A	5	ACER RUBRUM 'OCTOBER SUNSET' OCTOBER SUNSET MAPLE	2 1/2" - 3" CAL.	B + B	
Q	3	QUERCUS PALustris PIN OAK	2 1/2" - 3" CAL.	B + B	

Category	Perimeter			
	Adj. to Roadways	Adj. to Internal Prop.		
		D	A	B
Landscape Type	B*	N/A	N/A	N/A
Linear Feet of Roadway Frontage/Perimeter	265'	N/A	N/A	N/A
Credit for Ex. Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NO	NO	NO	NO
Credit for Wall Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NO	NO	NO	NO
Number of Plants Required				
Shade Trees	5	N/A	N/A	N/A
Evergreen Trees	6			
Shrubs				
Number of Plants Provided				
Shade Trees	5	N/A	N/A	N/A
Evergreen Trees	6			
Other Trees (211 subst.)				
Shrubs (101 subst.)				
(Describe plant substitution credits below if needed)				

A TYPE 'B' BUFFER IS BEING USED INSTEAD OF A TYPE 'T' BUFFER (PARING LOT ADJACENT TO A ROAD) BECAUSE EVERGREENS WILL PROVIDE BETTER SCREENING THAN SHRUBS

**SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING**

Number of Parking Spaces = 10, Number of Trees Required = 1
 Number of Trees Provided = 3
 Shade Trees 3
 Other Trees (211 substitution)

NOTE:
 Alternative Compliance per HMD's Standards
 Alternative Compliance exceeds County requirements

Schedule 'B' Number of Equivalent Shade Trees (EST) for bonding SURETY CALCULATION FOR THE REQUIRED HOWARD COUNTY LANDSCAPING

Schedule 'A' Number of Shade Trees for bonding	5 x \$300 = \$1,500.00
Schedule 'B' Number of Shade Trees for bonding	1 x \$300 = \$300.00
Schedule 'A' Number of Evergreen trees for bonding	6 x \$150 = \$900.00
TOTAL LANDSCAPE SURETY REQUIRED WITH GRADING PERMIT	\$2,700.00

FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DFW GRADING PERMIT IN THE AMOUNT OF \$2,700.00

DEVELOPER'S / BUILDER'S CERTIFICATE

I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape manual. I/We further certify that upon completion Certification of Landscape Installation accompanies an executed one-year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

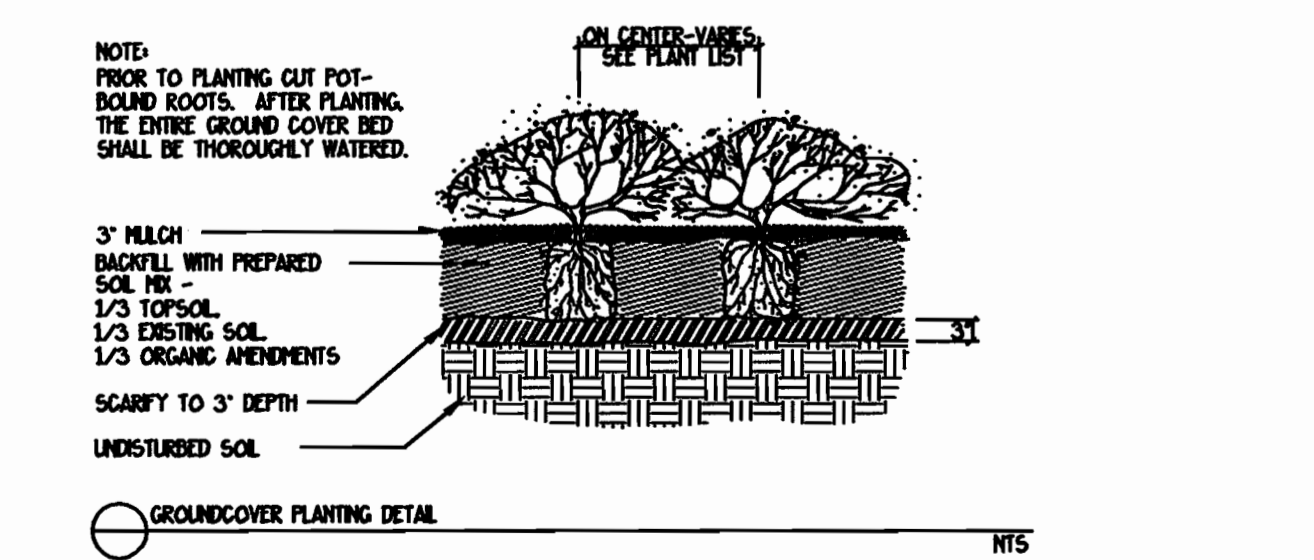
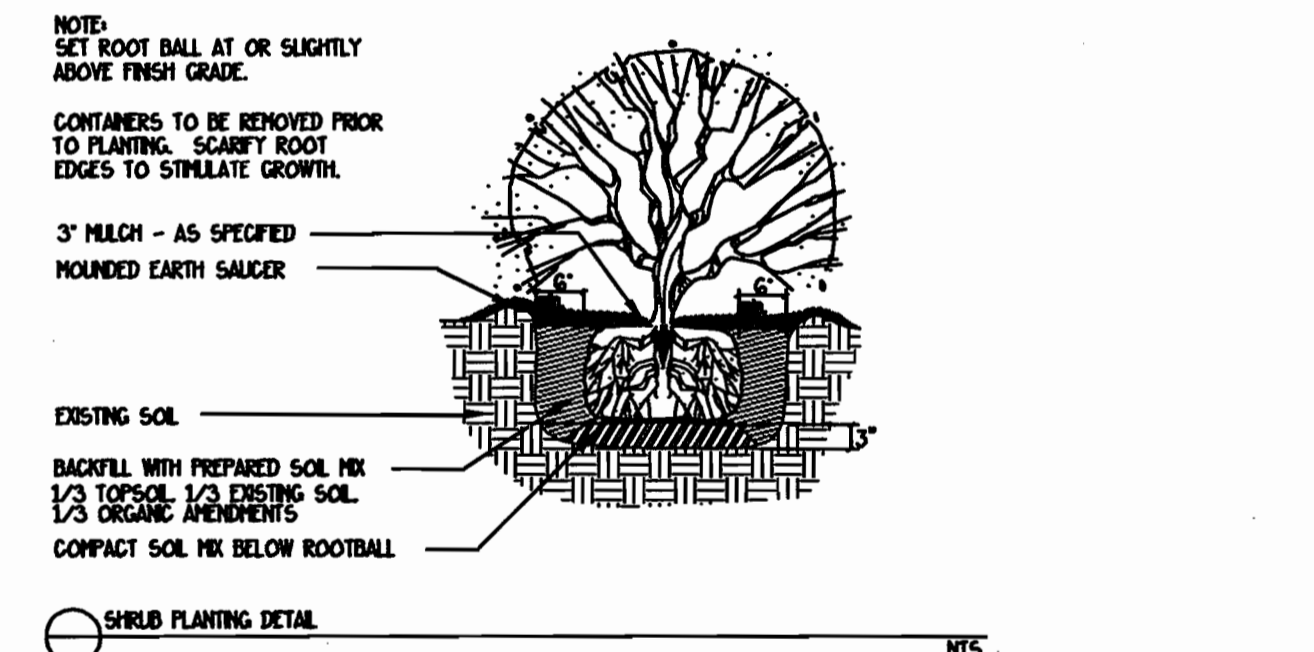
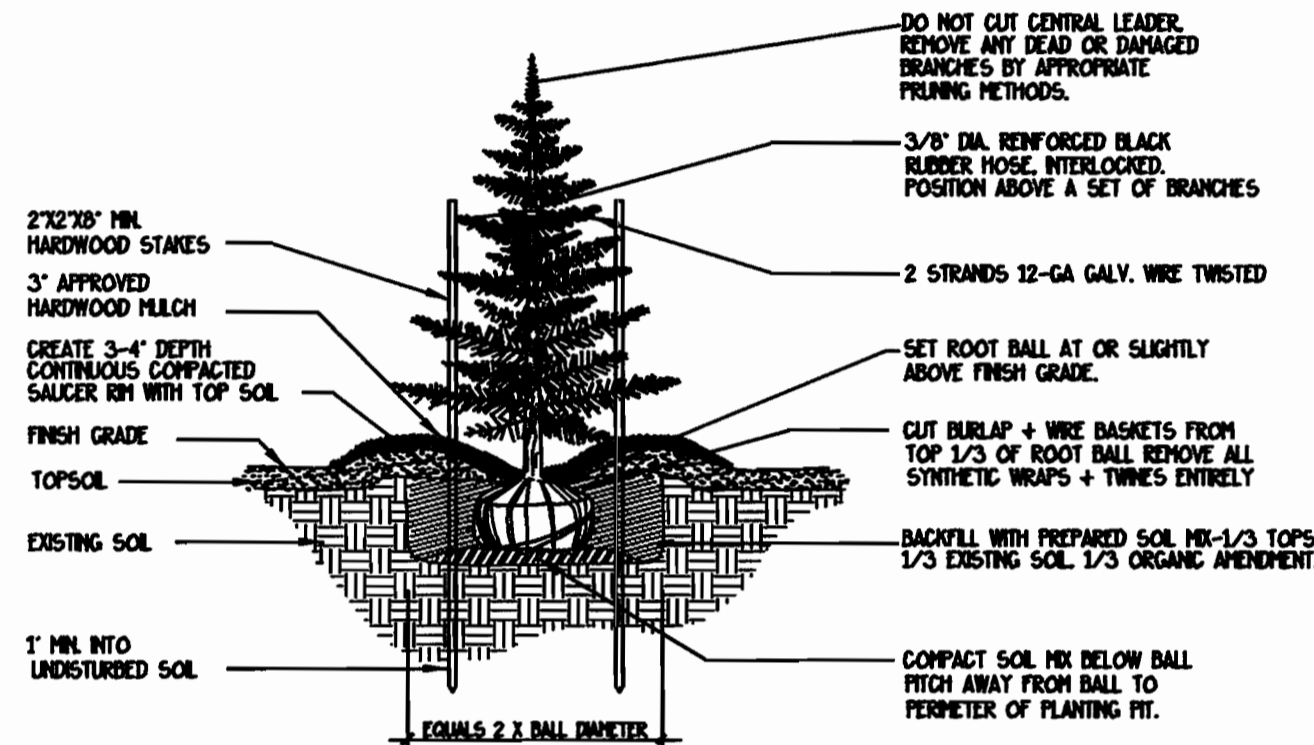
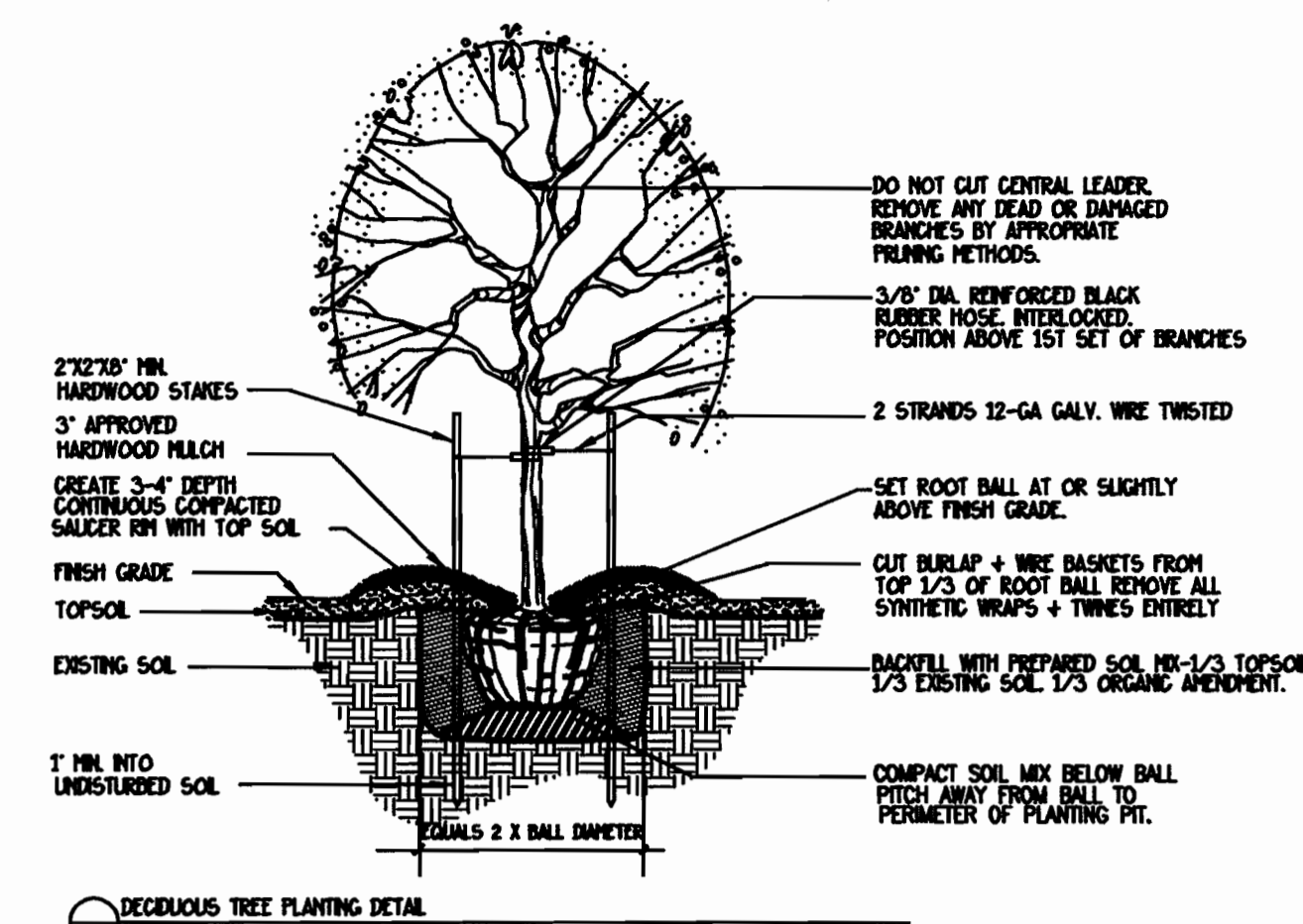
Mark J. ... 1/8/03
 Name (Developer's / Builder's) Date

- LANDSCAPING NOTES**
- The plan has been prepared in accordance with Section 16.124 of the Howard County Code and Chapter VI (Alternative Compliance) of the Howard County Landscape Manual.
 - Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet 1 shall apply.
 - Field verify underground utility locations and existing conditions before starting planting work. Contact engineer / landscape architect if any relocations are required.
 - Plant quantities shown on Plant List are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
 - All plant material shall be full, heavy, well formed, and symmetrical, and conform to the A.A.H. Specifications, and be installed in accordance with project specifications.
 - No substitution shall be made without written consent of the owner or his representative.
 - All areas disturbed by construction activities but not otherwise planted, paved, or sealed shall be seeded or sodded in accordance with the project specifications.
 - The contractor shall notify the owner in writing if he/she encounters soil drainage conditions which may be detrimental to the growth of the plants.
 - All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Detail.
 - Schedule A - Perimeter Landscape Edge and Schedule B - Parking Lot Internal Landscaping are provided for landscape surety calculation purposes only. Financial surety for the required landscaping shall be posted with the grading permit in the amount of \$2,700.00.
 - Tabulation for landscape shown

Planting provided:
 Shade Trees (Proposed) 5
 Evergreen Trees (Proposed) 6

Michael ...
 Professional Engineer

- PLANT MATERIALS AND PLANTING METHODS**
- A. Plant Materials
- The landscape contractor shall furnish and install and/or dig, back, burlap and transport all of the plant materials called for on drawings and/or listed in the Plant Schedule.
- Plant Names
Plant names used in the Plant Schedule shall conform with "Standardized Plant Names," latest edition.
 - Plant Standards
All plant material shall be equal to or better than the requirements of the USA Standard for Nursery Stock, latest edition, as published by the American Association of Nurserymen (hereafter referred to as AAN Standards). All plants shall be typical of their species and variety, shall have a normal habit of growth and shall be first quality, sound, vigorous, well-branched and with healthy, well-furnished root systems. They shall be free of disease, insect pests and mechanical injuries.
All plants shall be nursery grown and shall have been grown under the same climate conditions as the location of this project for at least two years before planting. Neither herbaceous plants nor plants from cold storage will be accepted.
 - Plant Measurements
All plants shall conform to the measurements specified in the Plant Schedule as approved by the ARC.
a. Caliper measurements shall be taken six inches (6") above grade for trees under four-inch (4") caliper and twelve (12") above grade for trees four inches (4") in caliper and over.
b. Minimum branching height for all trees shall be six feet (6'), minimum eight feet (8').
c. Minimum size for planting shade trees shall be 3"-3" caliper, 14'-16" in height.
d. Minimum size for planting minor or intermediate focus trees (Gees, crabapples, etc.) shall be 3"-3" caliper, 10'-12" in height.
e. Minimum size for planting shrubs shall be 18" - 24" spread unless noted otherwise.
f. Caliper, height, spread and size of ball shall be generally as follows:
- | CALIPER | HEIGHT | SPREAD | SIZE OF BALL |
|-----------|---------|---------|--------------|
| 3" - 3.5" | 14'-16' | 6'-8' | 32" diameter |
| 3.5" - 4" | 14'-16' | 8'-10' | 36" diameter |
| 4" - 4.5" | 16'-18' | 8'-10' | 40" diameter |
| 4.5" - 5" | 16'-17' | 10'-12' | 44" diameter |
| 5" - 5.5" | 16'-20' | 10'-12' | 48" diameter |
| 5.5" - 6" | 18'-20' | 12'-14' | 52" diameter |
- All plant material shall generally average the median for the size ranges indicated above as indicated in the "AAN Standards".
- Plant Identification
Legible labels shall be attached to all shade trees, minor trees, specimen shrubs and bushes or boxes of other plant material giving the botanical and common names, size and quantity of each. Each shipment of plants shall bear certificates of inspection as required by Federal, State and County authorities.
 - Plant Inspection
The ARC may, upon request by the builder or developer, at least ten (10) days prior to the installation of any proposed plant material, inspect all proposed plant material at the source of origin.
 - Planting Methods
All proposed plant materials that meet the specifications in Section A are to be planted in accordance with the following methods during the proper planting seasons as described in the following:
1. Planting Seasons
The planting of deciduous trees, shrubs and vines shall be from March 1st to June 15th and from September 15th to December 15th. Planting of deciduous material may be continued during the winter months providing there is no frost in the ground and frost-free topsoil planting conditions are used.
The planting of evergreen material shall be from March 15th to June 15th and from August 15th to December 1st. No planting shall be done when ground is frozen or excessively moist. No frozen or wet topsoil shall be used at any time.
2. Digging
All plant material shall be dug, baled and burlapped (B+B) in accordance with the "AAN Standards".
3. Excavation of Plant Pits
The landscaping contractor shall excavate all plant pits, tree pits, hedge trenches and shrub beds in accordance with the following schedule:
a. Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed by the landscaping contractor.
b. All pits shall be generally circular in outline, vertical sides, depth shall not be less than 6" deeper than the root ball diameter and shall not be less than two times the diameter of the root ball as set forth in the following schedule.
- B. Planting Methods
- All sodding shall be in accordance to the Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area, latest edition, approved by the Landscape Contractors Association of Metropolitan Washington and the American Society of Landscape Architects.
- All sodding shall be strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Provide only sod capable of growth development when planted and a strip not more than 18" wide x 4" long. Provide sod composed primarily of improved strain Kentucky bluegrass, such as Columbia, Victoria or Excelsior.



APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer _____ Date _____

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

Mark J. ... 2/19/03
 Director Date

Andy ... 2/19/03
 Chief, Division of Land Development Date

Michael ... 2/11/03
 Chief, Development Engineering Division Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE PARK
 BURTONSVILLE, MARYLAND 20886
 TEL: 301-421-4024 FAX: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4188

99140.DESIGN/BOATHOUSE/99140SP7.DWG DES. DRN. W.J. CHK. DATE REVISION BY APPR.

OWNER:
 STONE LAKE COMMUNITY ASSOC.
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044
 PH: 410-992-6081
 ATTN: MR. BOB JENNINS

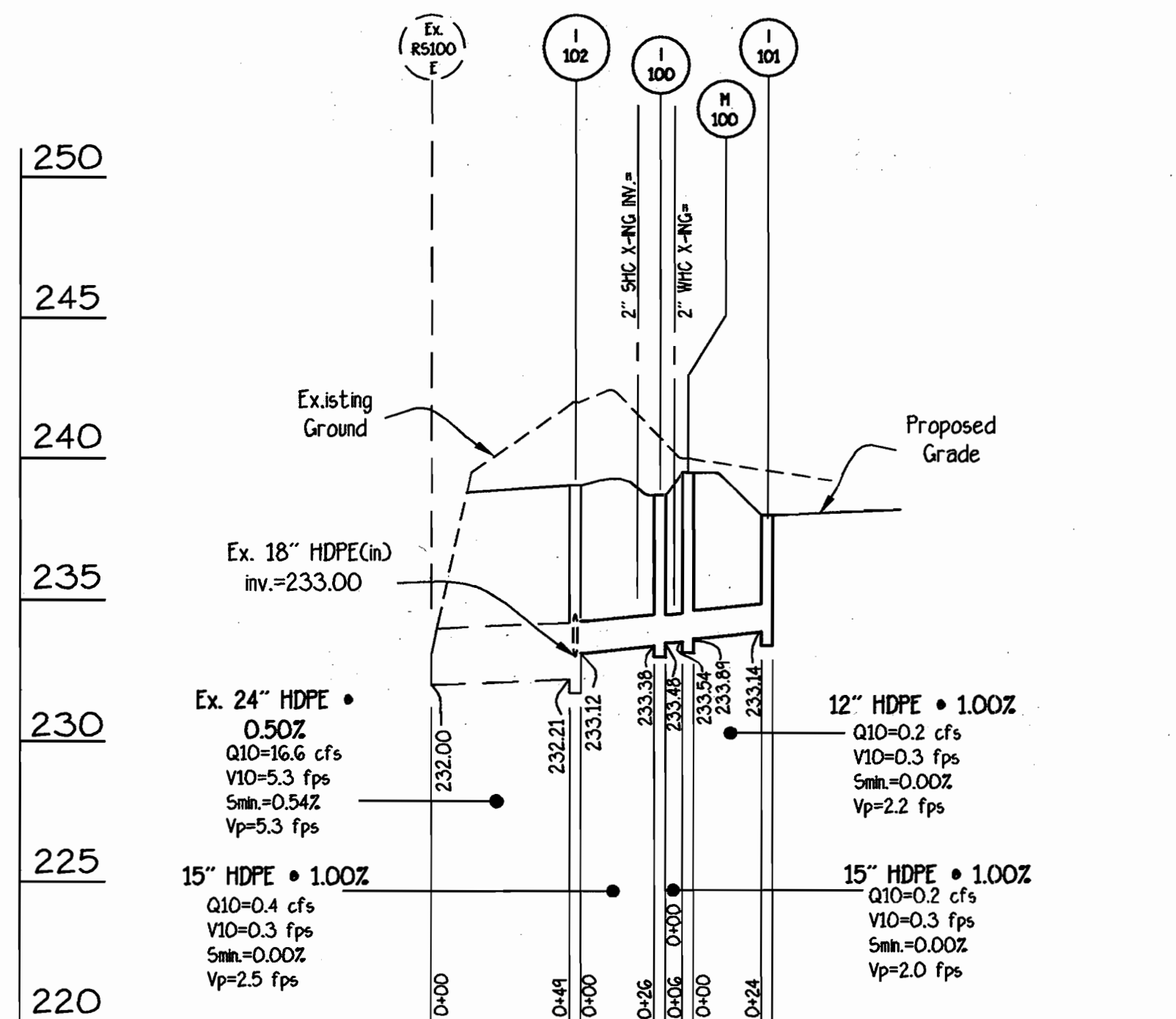
LANDSCAPE NOTES + DETAILS

STONE LAKE
 Open Space Lot 118
 PLAT No. 15541

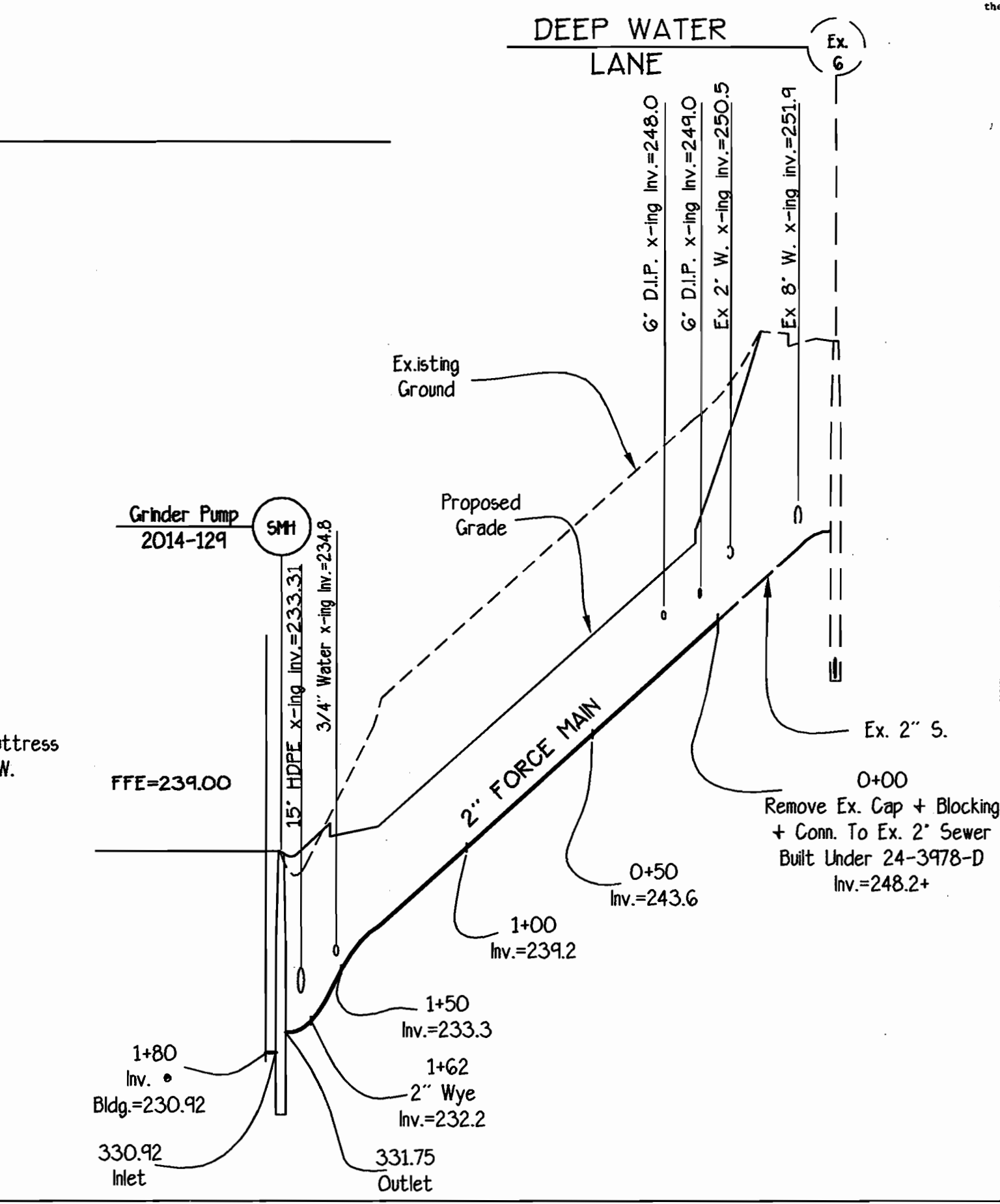
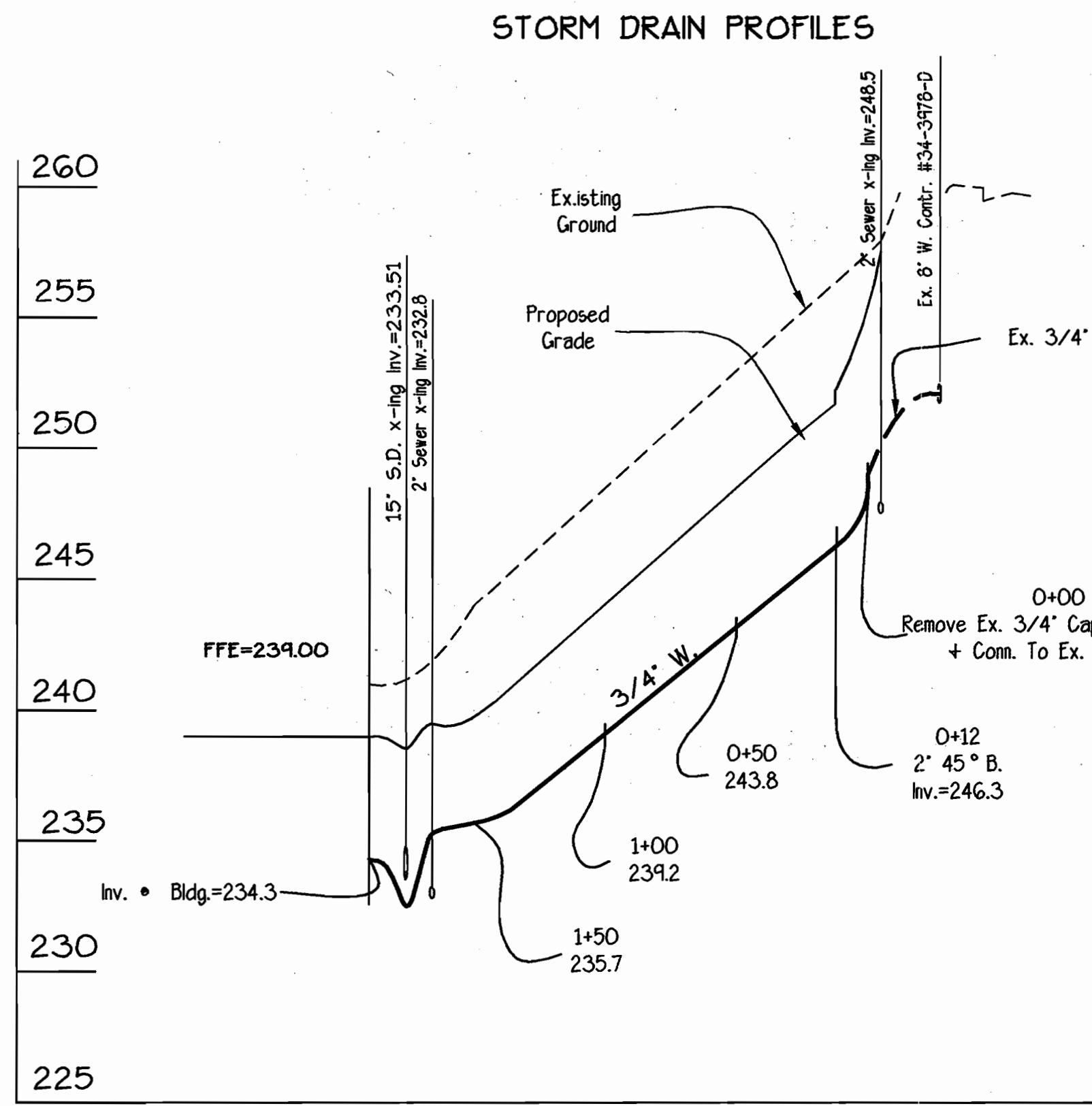
ELECTION DISTRICT No. 6

SCALE	ZONING	G. L. W. FILE No.
NOT TO SCALE	R-ED	99140
DATE	TAX MAP - GRID	SHEET
Jan. 2003	47-9/10	7 OF 9

HOWARD COUNTY, MARYLAND

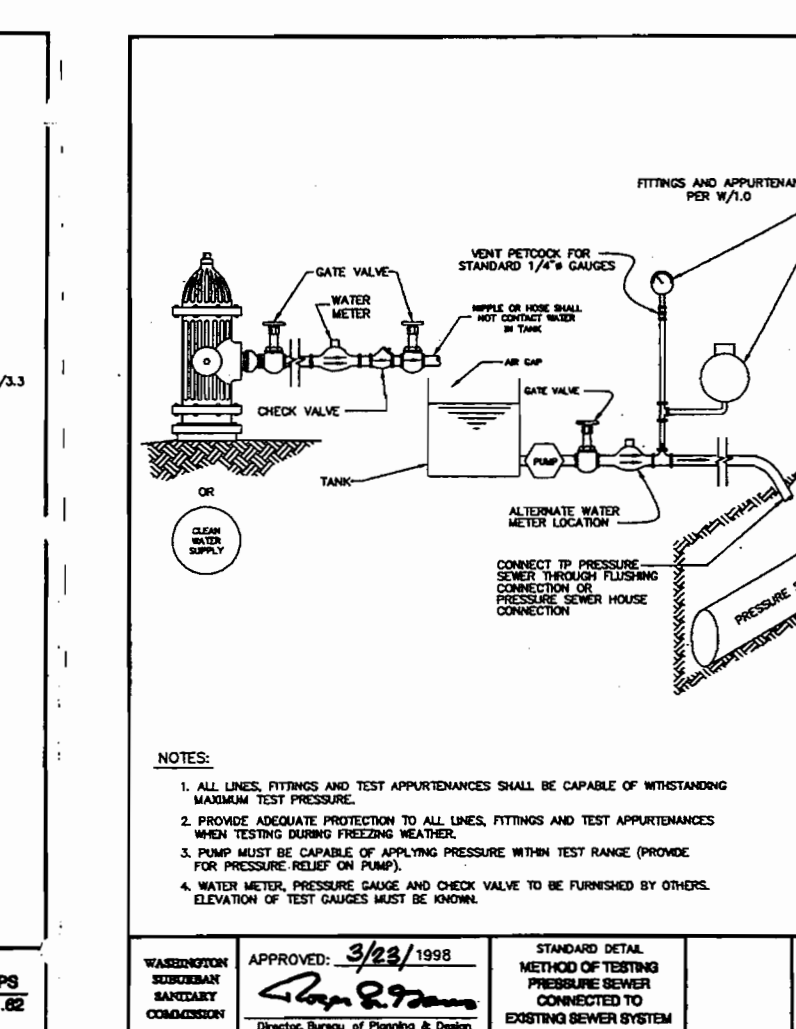
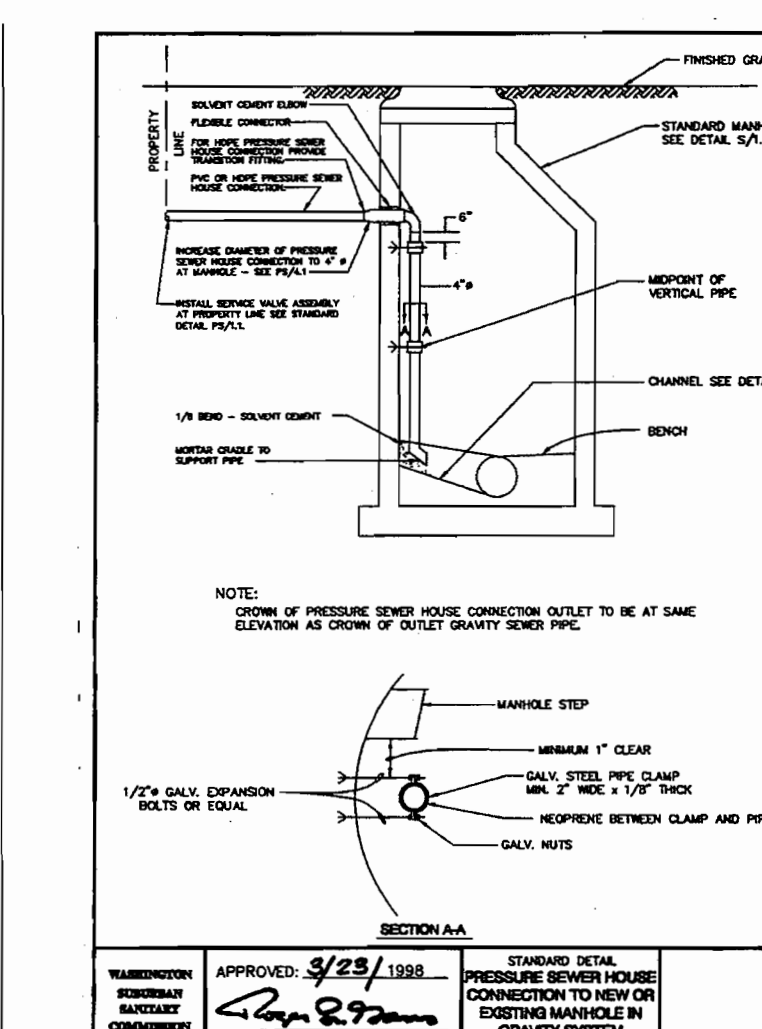
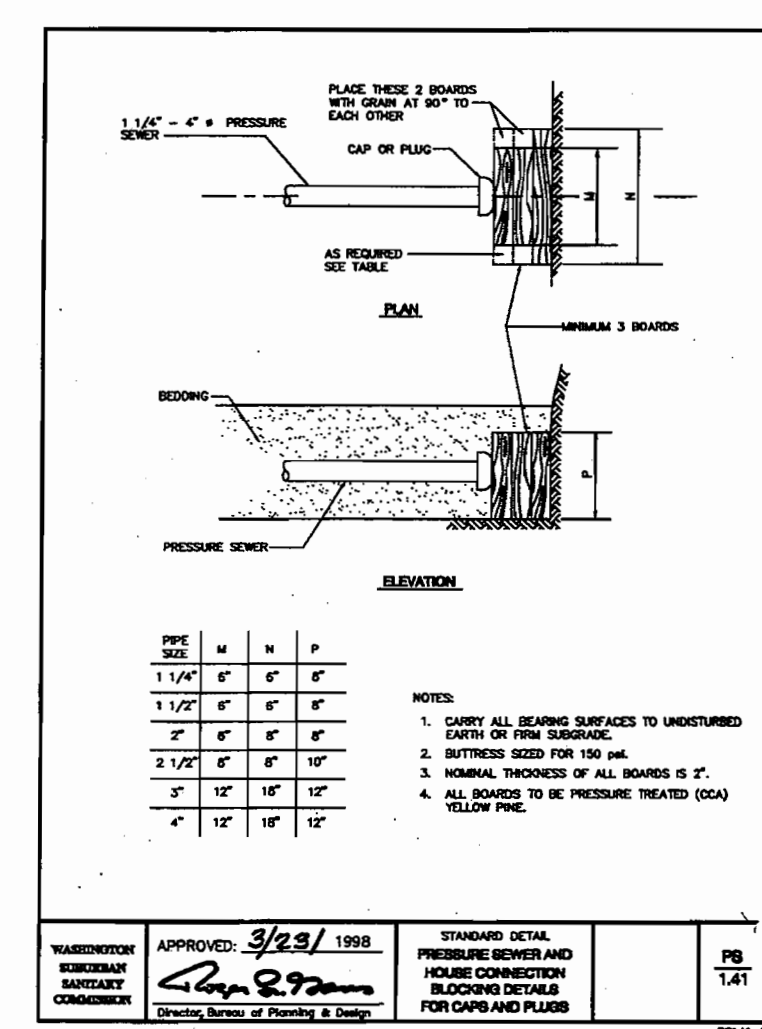
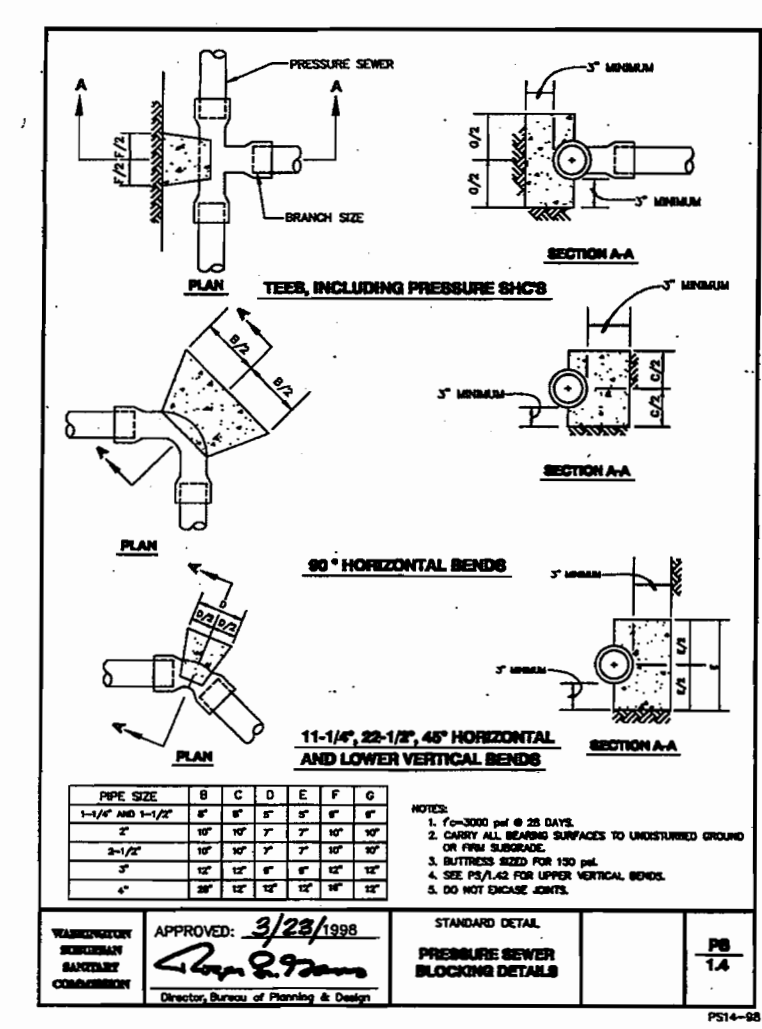
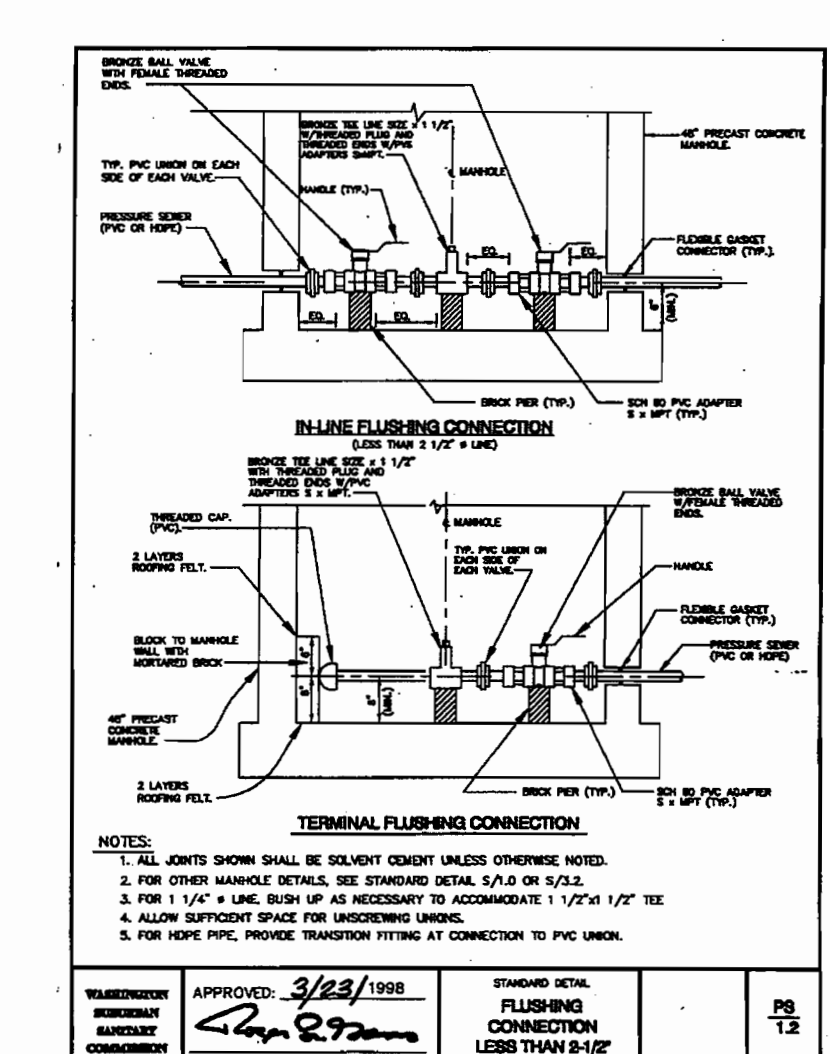
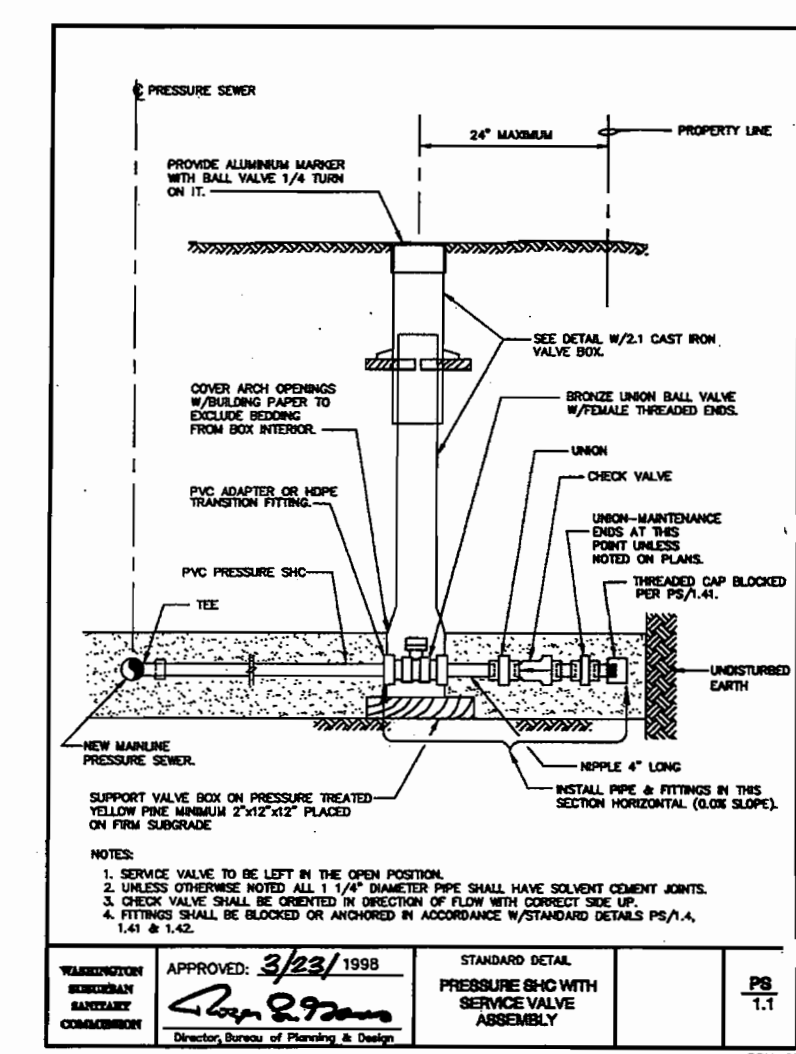
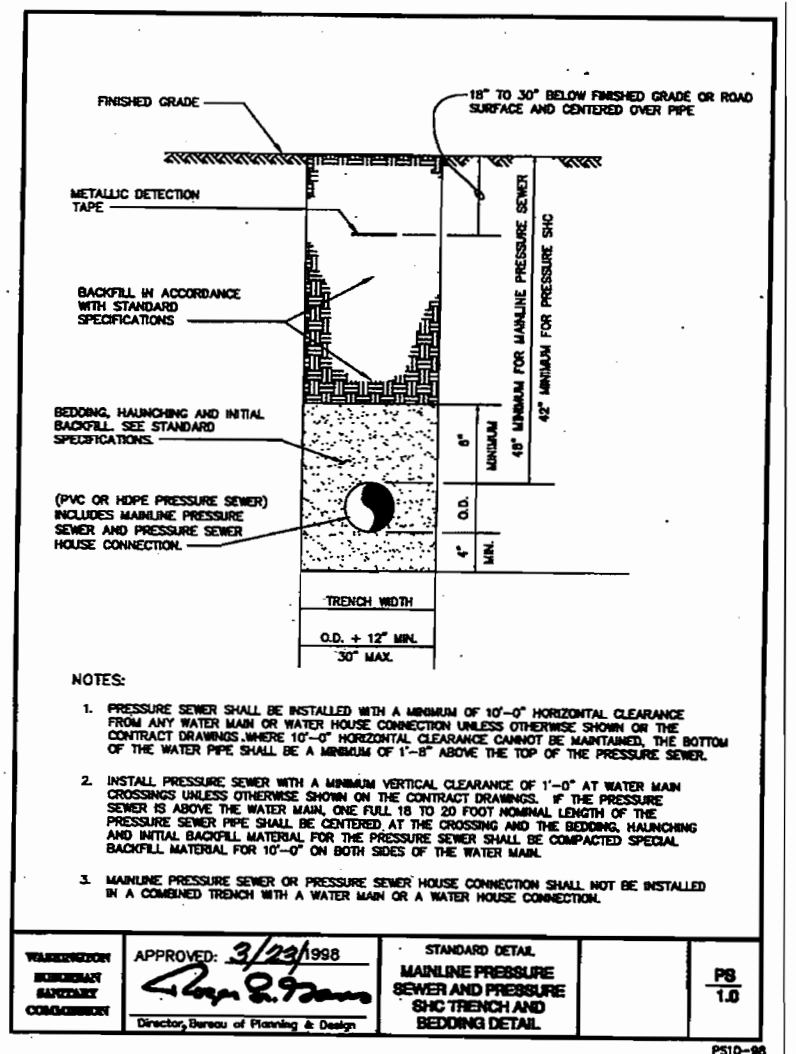


PROFILE SCALES:
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'



Field Testing
Field pressure tests shall be performed on PVC pressure sewer pipe and connections 4-inch or smaller diameter.

- Pressure gauges, valves, water and water meter for testing shall be furnished by the Contractor. Contractor shall set up the testing equipment by connecting to PVC pressure sewers at manholes, connections, cleaning assemblies, or other approved fittings. When testing a new pressure sewer system without direct connections to an existing sewer, the Contractor shall set up testing apparatus in accordance with Standard Detail W14.0. When testing an existing sewer system which is connected to an existing system, the Contractor shall set up testing apparatus in accordance with Standard Detail P27.0.
- Test pressure shall be 100 psi at the low point of the system or as indicated on the drawings but the Contractor shall not exceed this pressure.
- The Contractor shall conduct all pressure testing with the Engineer in attendance. Contractor shall provide 72 hours notice to Engineer prior to testing.
- Before beginning the pressure test, the Contractor shall:
 - Close solvent cement joints and concrete thrust blocks.
 - Completely backfill the pipe as specified in Section 02200.
 - Cap or plug ends of test sections and brace caps to withstand thrust developed under test pressure.
 - Slowly fill section of pipe to be tested with water until completely full and air has been expelled.
- Subject test section to the test pressure for a minimum of two hours. Commission personnel will operate valves during this portion of the test.
- No leakage allowance will be permitted for pipe with solvent cement joint or threaded joint. Maximum allowable leakage for pipe with mechanical joints will be calculated using the following formula:
 $L = \frac{W}{V} \times \frac{P}{T}$
where:
L = maximum allowable leakage, gallons/hour
W = number of joints in test section
D = nominal diameter of tested pipe, inches
P = average test pressure, pounds per square inch.
- Should test results show displacement, damage, or leakage in excess of the allowable amount, the Contractor shall repair the displacement and damage, and eliminate the leakage. He shall repeat until specified conditions are met, to the satisfaction of the Engineer, at no added normal cost.



STRUCTURE SCHEDULE									
NO	TYPE	WIDTH (INSIDE)	TOP ELEVATION		INVERT ELEVATION		STD. DETAIL	LOCATIONS	REMARKS
			UPPER	LOWER	UPPER	LOWER			
I-100	12" NYLOPLAST IN LINE DRAIN W/ PEDESTAL GRATE	12"	238.70		233.56		N/A	SEE PLAN	
I-101	12" NYLOPLAST IN LINE DRAIN W/ PEDESTAL GRATE	12"	238.00		233.88		N/A	SEE PLAN	
M-100	12" NYLOPLAST DRAIN BASH W/ SOLID COVER	12"	234.50	233.73	233.63		N/A	SEE PLAN	
I-102	A-5	2'-6"	239.15	233.25	232.21		N/A	SEE PLAN	*

PIPE SUMMARY		
SIZE	TYPE	LENGTH
12"	HDPE	24'
15"	HDPE	32'

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

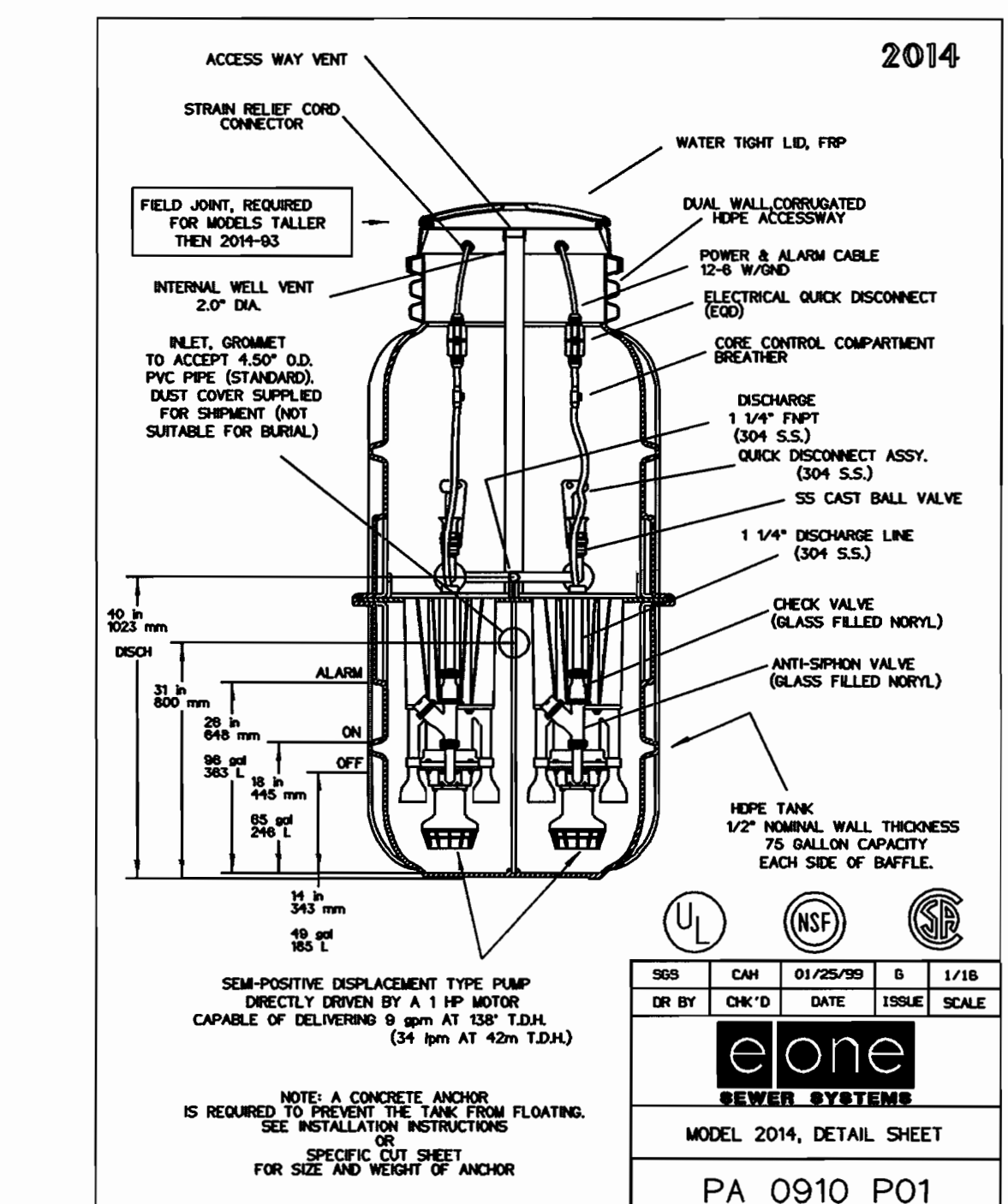
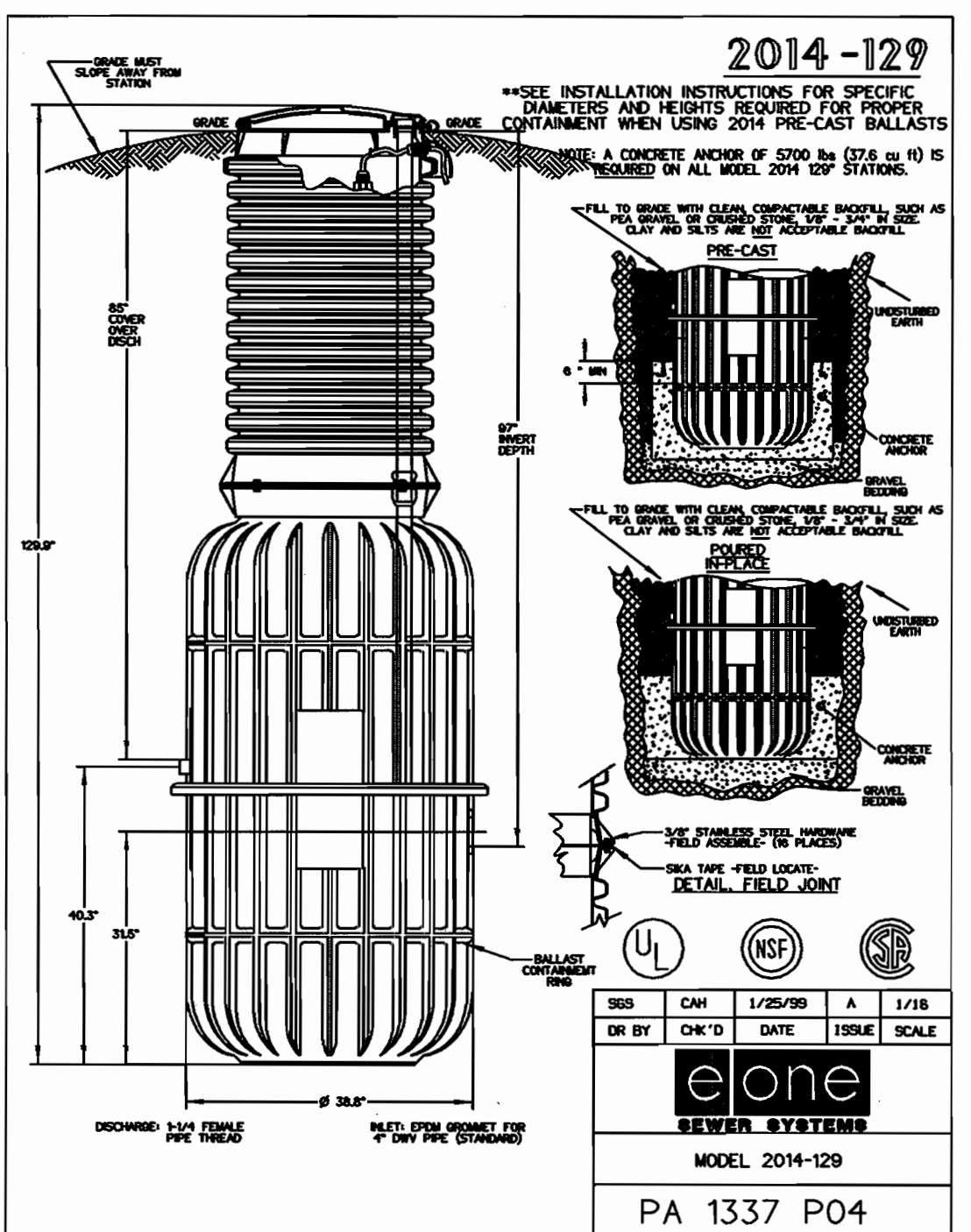
County Health Officer _____ Date _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

Director _____ Date 2/19/02

Chief, Division of Land Development _____ Date 2/14/03

Chief, Development Engineering Division _____ Date 2/11/03



GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3904 NATIONAL DRIVE - SUITE 220 - BETHESDA OFFICE PARK
BETHESDA, MARYLAND 20814
TEL: 301-421-4024 BAL: 410-880-1820 DC: 301-421-2524 FAX: 301-421-4186

DES.	DRN.	W.SJ.	CHK.	DATE	REVISION	BY	APPR.

OWNER:
STONE LAKE COMMUNITY ASSOC.
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATENT PARKWAY
COLUMBIA, MD 21044
PH: 410-992-6089
ATTN: MR. BOB JENKINS

UTILITY PROFILES, DETAILS + SCHEDULES
STONE LAKE
Open Space Lot 118
PLAT No. 15541
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE NO.
A5 SHOWN	R-ED	99140
DATE	TAX MAP - GRID	SHEET
NOV. 2002	47-4/10	8 OF 9

