SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (313- 1850).
2. 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 SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL", REVISIONS THERETO.
3. 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.
4. 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.
5. 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 (SEC. 51) 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.
6. 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
7. SITE ANALYSIS:

TOTAL AREA OF SITE	1.57	ACRES
AREA DISTURBED	84	ACRES
AREA TO BE ROOFED OR PAVED	N/A	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.80	ACRES
TOTAL CUT	320	CY
TOTAL FILL	320	CY
OFFSITE WASTE/BORROW AREA LOCATION	N/A	CY

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR
10. 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.
11. 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.

PERMANENT SEEDBED PREPARATION

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

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

1. PREFERRED – APPLY 2 TONS PER ACRE 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 DISC 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).
2. 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 DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ FT) OF 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 THROUGH 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 PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF 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 SEEDBED PREPARATION

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, IF NOT PREVIOUSLY LOOSENED.

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

SEEDING: FOR PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (.12 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THROUGH 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.

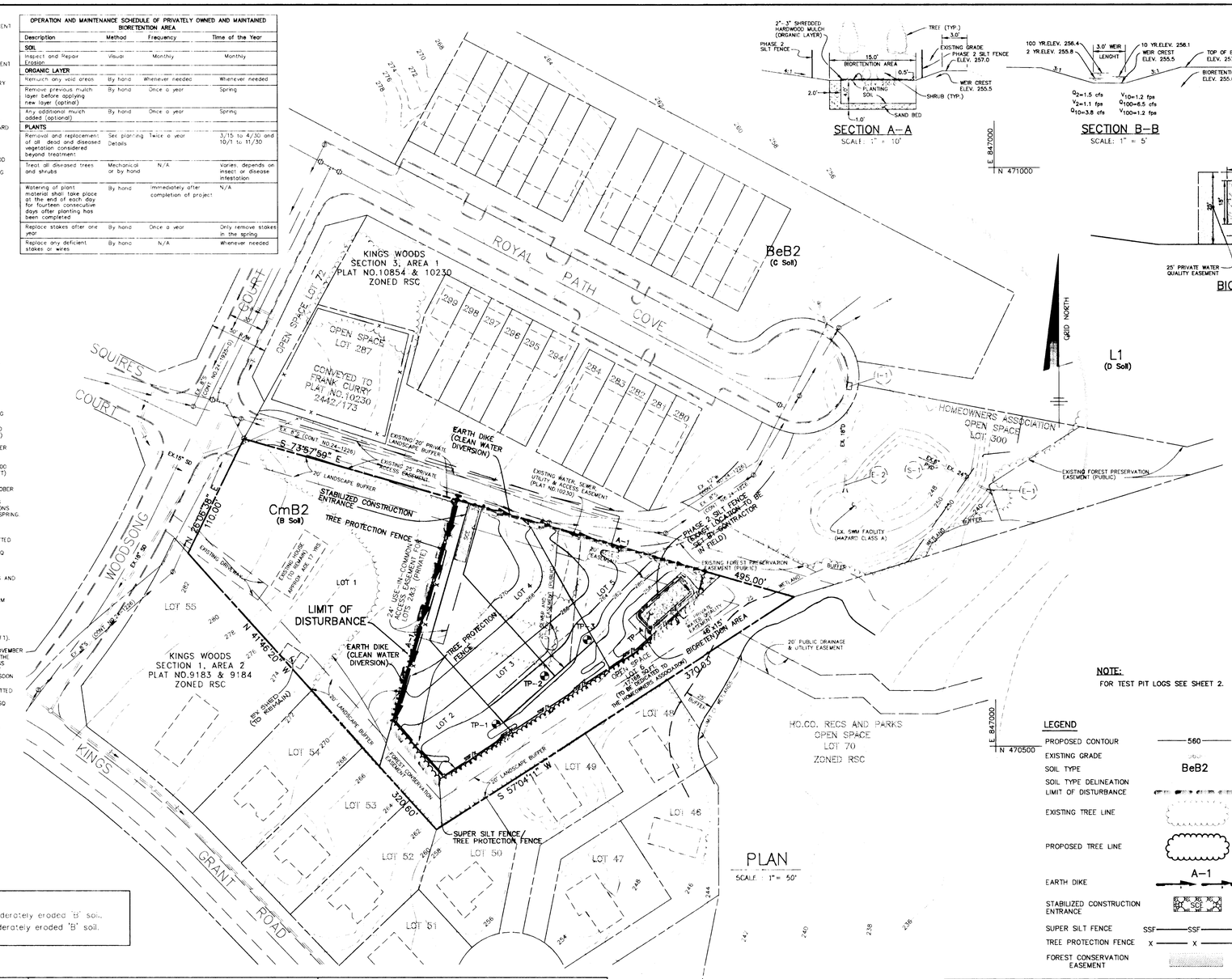
MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER,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

N 470500
E 846000

OPERATION AND MAINTENANCE SCHEDULE OF PRIVATELY OWNED AND MAINTAINED BIORETENTION AREA

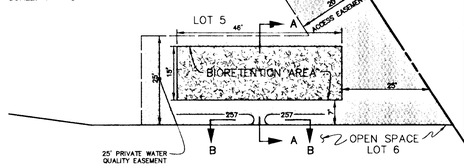
Description	Method	Frequency	Time of the Year
SOIL			
Inspect and Repair Erosion	Visual	Monthly	Monthly
ORGANIC LAYER			
Remulch any void areas	By hand	Whenever needed	Whenever needed
Remove previous mulch layer before applying new layer (optinal)	By hand	Once a year	Spring
Any additional mulch added (optional)	By hand	Once a year	Spring
PLANTS			
Removal and replacement of all dead and diseased vegetation considered beyond treatment	See planting Details	Twice a year	3/15 to 4/30 and 10/1 to 11/30
Treat all diseased trees and shrubs	Mechanical or by hand	N/A	Varies, depends on insect or disease infestation
Watering of plant material shall take place at the end of each day for fourteen consecutive days after planting has been completed	By hand	immediately after completion of project	N/A
Replace stakes after one year	By hand	Once a year	Only remove stakes in the spring
Replace any deficient stakes or wires	By hand	N/A	Whenever needed



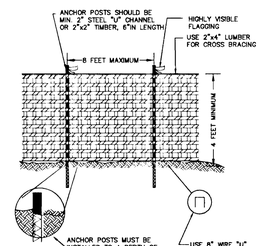
PLAN
SCALE: 1" = 50'

SECTION A–A
SCALE: 1" = 10'

SECTION B–B
SCALE: 1" = 5'



BIORETENTION AREA PLAN
SCALE: 1" = 20'



NOTES: BLAZE ORANGE PLASTIC MESH

1. FOREST PROTECTION DEVICE ONLY.
2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED FLAGGED PRIOR TO INSTALLING DEVICES.
4. AVOID ROOT DAMAGE WHEN PLACING ANCHOR POSTS.
5. DEVICE SHOULD BE PROPERLY MAINTAINED DURING CONSTRUCTION
6. PROTECTIVE SIGNAGE IS ALSO REQUIRED.

TEMPORARY TREE PROTECTION FENCE
NOT TO SCALE

BENCH MARKS (NAD27)

HO. CO. #1841004 ELEV. 295.392

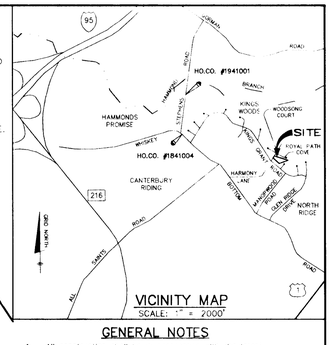
REBAR 6'± SOUTH OF EDGE OF WHISKEY BOTTOM ROAD NEAR THE INTERSECTION OF STEPHENS ROAD

N 471079.018 E 843657.878

HO. CO. #1941001 ELEV. 277.873

REBAR 4'± WEST OF EDGE OF STEPHENS ROAD IN FRONT OF HOUSE NO.8820 0.3' BELOW SURFACE.

N 472223.19 E 843797.549



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES

1. All construction shall be in accordance with the latest standards and specifications of Howard County, plus MSHA standards and specifications, if applicable.
2. The contractor shall notify the Department of Public Works Construction Inspection Division at (410) 313-1880 at least (five) 5 working days prior to the start of work.
3. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
4. Project Background
   Location: Tax Map 7 – Parcel 903
   Zoning: RSC
   Total Tract Area: 1.53 Acres
   Number of Proposed Lots: 6
   Date Preliminary Plan Approved: September 1995
   DPZ Reference #: SP- 94-26, S-94 41, P-95 31, WP- 94-53 WP-94-103, WP- 95-103, WP- 95-73, S-95-19
5. Topography taken from field run survey performed by TSA Group, Inc., dated May, 1991, with verification supplemented by survey dated Nov., 1995. Contour interval is 2 feet.
6. Howard County monuments 1841004 & 1941001 used for horizontal and vertical datum.
7. Water and sewer for this subdivision is public. Drainage area is Little Patuxent. Contract No.24-3460-D
8. Stormwater management for this subdivision is provided under F-87-207 with water quality by Bioretention on site.
9. No floodplain or wetlands exist on site.
10. Forest Conservation Plan compiled by Eco-Science Professionals, Inc., June , 1995.
11. Geotechnical Report compiled by Hillis Carnes, Inc., November, 1995.
12. Existing utilities were located by record drawings and field run survey by TSA Group, Inc., dated November 15, 1995
13. Unless noted as "private" all easements are public.
14. The Forest Conservation Easement has been established to fulfill the requirements of Section 16.1200 of the Howard County Code; Forest Conservation Act. No clearing, grading or construction is permitted within the Forest Conservation easement; forest management practices as defined in the deed of Forest Conservation easement are allowed.
15. The water quality facility shown on these plans will be privately owned and maintained.
16. No clearing, grading or construction is permitted within wetland buffers or forest conservation areas.

NOTE:
FOR TEST PIT LOGS SEE SHEET 2.

LEGEND

PROPOSED CONTOUR	560
EXISTING GRADE	560
SOIL TYPE	BeB2
SOIL TYPE DELINEATION	
LIMIT OF DISTURBANCE	
EXISTING TREE LINE	
PROPOSED TREE LINE	
EARTH DIKE	A-1
STABILIZED CONSTRUCTION ENTRANCE	SCE
SUPER SILT FENCE	SSF SSF SSF
TREE PROTECTION FENCE	X X X
FOREST CONSERVATION EASEMENT	

BY THE DEVELOPER:
"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: _____ DATE: 4/29/96

BY THE ENGINEER:
"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."

ENGINEER: _____ DATE: 4/29/96

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

SOIL CONSERVATION DISTRICT NATURAL RESOURCE CONSERVATION SERVICE DATE: 5/13/96

APPROVED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

HOWARD SOIL CONSERVATION DISTRICT DATE: 5/13/96

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 5/21/96

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE: 5/23/96

DIRECTOR N/A DATE

NO	DATE	REVISION

TSA GROUP, INC.
planning • architecture • engineering • surveying
8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (410)465-6105

STATE OF MARYLAND — DONALD ALLEN MASON — No. 21678 — REGISTERED PROFESSIONAL ENGINEER

OWNER:
ALFRED HALL
9390 WOODSONG COURT
LAUREL, MARYLAND 20723

DEVELOPER:
SDC GROUP, INC.
P.O. BOX 417
ELLICOTT CITY, MARYLAND 21043

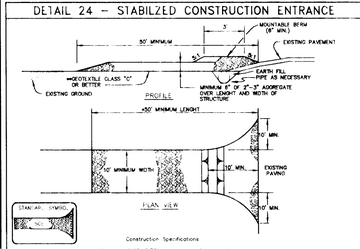
PROJECT:
ALFRED HALL PROPERTY
LOTS 1 THRU 6

LOCATION:
TAX MAP47 BLOCK 22 PARCEL 903
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: GRADING, EROSION & SEDIMENT CONTROL, WATER QUALITY MANAGEMENT PLAN & DETAILS
S-95-19
WP-94-53 WP-94-103 WP-95-10 WP-95-73 S-94-41 S-94-26

DATE: DECEMBER 11, 1995 / MARCH 20, 1996
PROJECT NO. 0644
DES: GWF DRN: JR
SCALE: AS SHOWN
DRAWING 1 OF 2

DETAIL 24 – STABILZED CONSTRUCTION ENTRANCE

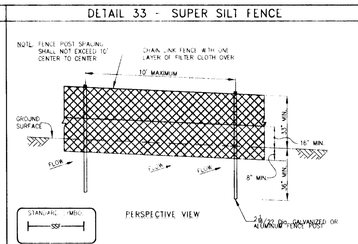


Construction Specifications

1. Length – minimum of 50' (*30' for single residence lot).
2. Width – 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile (filter cloth) shall be placed over the existing ground prior to placing stone. *The plan approval authority may not require single family residence to use geotextile.
4. Stone – crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed atleast 6" deep over the lenght and width of the entrance.
5. Surface Water – all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage when the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location – A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire lenght of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE F - 17 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE H - 26 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SUPER SILT FENCE

CONSTRUCTION SPECIFICATIONS

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
4. Filter cloth shall be embedded a minimum of 8" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: WSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: WSMT 509
Flow Rate	0.3 gal/ft /minute (max.)	Test: WSMT 322
Filtering Efficiency	75% (min.)	Test: WSMT 322

SUPER SILT FENCE DESIGN CRITERIA

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 feet	1,500 feet
20 - 33%	5:1 - 3:1	100 feet	1,000 feet
33 - 50%	3:1 - 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE E - 26 - 3A | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

GENERAL NOTES CONTINUED:

17. Waiver petition WP- 95- 10 was approved on September 9,1994 to waive Section 16.121(f)(1) to permit Open Space Lot 6 with less than 40' road frontage.
18. Waiver petition WP- 94-103 was approved on July 5, 1994 to waive section 16.1200(c)(2) to permit the creation of SFD Lots without public road frontage.
19. Waiver petition WP- 95- 73 was approved on April 20, 1995 to waive section 16.104(c) to reactivate waiver petitions WP- 94-103 and WP- 95- 10.

SEQUENCE OF CONSTRUCTION

DAY 1 OBTAIN GRADING PERMIT.

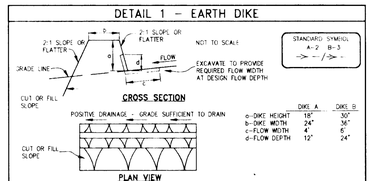
DAY 2- 6 INSTALL STABILIZED CONSTRUCTION ENTRANCE, CLEAR AND GRUB AS NEEDED TO INSTALL PERIMETER CONTROLS. INSTALL TREE PROTECTION FENCE, EARTH DIKE & SUPER SILT FENCE AROUND PERIMETER.

DAY 7- 16 CLEAR AND GRUB REMAINDER OF SITE, GRADE SITE, AND STABILIZE SITE EXCEPT FOR THE BIORETENTION AREA IN ACCORDANCE WITH PERMANENT SEEDBED NOTES.

DAY 17-20 INSTALL PHASE 2 SILT FENCE AROUND BIORETENTION AREA. EXCAVATE FOR AND CONSTRUCT BIORETENTION AREA. STABILIZE SITE WITH PERMANENT STABILIZATION.

DAY 21-24 UPON APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE ANY REMAINING DISTURBED AREAS WITH PERMANENT STABILIZATION.

DETAIL 1 – EARTH DIKE



FLOW CHANNEL STABILIZATION
GRADE 0.5% MIN. 10% MAX.

1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum.

CONSTRUCTION SPECIFICATIONS

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
6. Fill shall be compacted by earth moving equipment.
7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
8. Inspection and maintenance must be provided periodically and after each rain event.

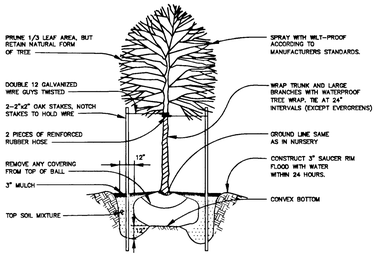
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE A - 1 - 6 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SOILS CLASSIFICATION

BeB2 - Beltsville silt loam, 1 to 5 percent slopes, moderately eroded 'B' soil.
CmB2 - Chillum silt loam, 1 to 5 percent slopes, moderately eroded 'B' soil.
Ll - Leonardtown silt loam,'D' soil.

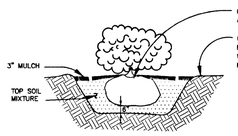
1812

F-96-85



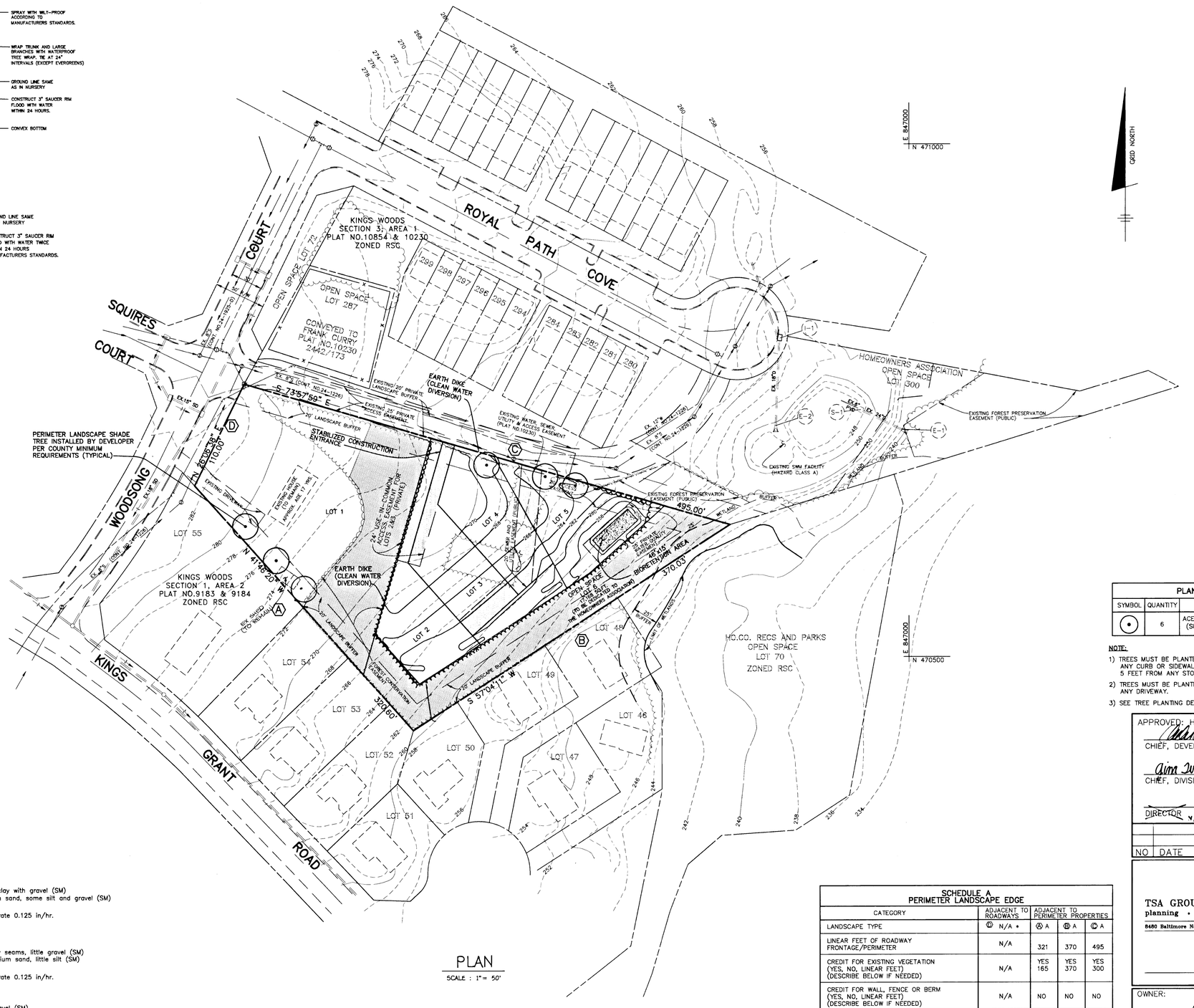
TREE PLANTING DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE



PLAN

SCALE : 1"= 50'

TEST PIT LOGS

TP-1 Elevation 264.1

0.0' – 0.75' Topsoil and rootmat.
0.75' – 3.0' Tan moist silty sand with gravel (SM)
3.0' – 5.0' Orange brown, tan, moist silty sand, little clay with gravel (SM)
5.0' – 10.0' Orange brown, moist to dry fine to medium sand, some silt and gravel (SM)
10.0' Bottom of pit

No water encountered, infiltration test at 6.0', infiltration rate 0.125 in/hr.

TP-2 Elevation 264.2

0.0' – 0.5' Topsoil and rootmat.
0.5' – 2.5' Tan moist silty sand with gravel (SM)
2.5' – 5.0' Orange brown, tan moist silty sand with clay seams, little gravel (SM)
5.0' – 10.0' Orange brown, tan moist to dry fine to medium sand, little silt (SM)
10.0' Bottom of pit

No water encountered, infiltration test at 6.0', infiltration rate 0.125 in/hr.

TP-3 Elevation 268.0

0.0' – 0.75' Topsoil and rootmat.
0.75' – 3.5' Tan moist silty sand with little clay and gravel (SM)
3.5' – 5.0' Tan moist silty sand and gravel (SM-GM)
5.0' – 10.0' White, gray dry silty clay with some fine sand (CL-ML)
10.0' Bottom of pit

No water encountered, infiltration test at 6.0', infiltration rate 0.000 in/hr.

TP-4 Elevation 258.5

0.0' – 0.83' Topsoil and rootmat.
0.83' – 4.0' Tan moist clayey sand with gravel (SC)
4.0' – 5.0' Brown moist sand and gravel with silt (SM-GM)
5.0' – 8.0' Brown, tan moist to dry silty sand with clay seams and iron cemented sand (SM)
8.0' – 10.0' White, gray dry fine to medium sand, some silt (SP-SM)
10.0' Bottom of pit

No water encountered, infiltration test at 6.0', infiltration rate 0.875 in/hr.

SCHEDULE A
PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES		
	Ⓓ	Ⓐ	Ⓑ	Ⓒ
LANDSCAPE TYPE	N/A *	A	A	A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	N/A	321	370	495
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	N/A	YES 165	YES 370	YES 300
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	N/A	NO	NO	NO
NUMBER OF PLANTS REQUIRED SHADE TREES	N/A	3	0	3
EVERGREEN TREES		–	–	–
OTHER TREES (2:1 SUBSTITUTE)		–	–	–
SHRUBS		–	–	–
NUMBER OF PLANTS PROVIDED SHADE TREES	N/A	–	–	–
EVERGREEN TREES		–	–	–
OTHER TREES (2:1 SUBSTITUTE)		–	–	–
SHRUBS (10:1 SUBSTITUTE)		–	–	–
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)				

* – STREET TREES INSTALLED IN ASSOCIATION WITH CONSTRUCTION OF WOODSONG COURT.

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPING MANUAL. FINANCIAL SURETY FOR THE REQUIRED 6 LANDSCAPE TREES IN THE AMOUNT OF $600.00 IS PART OF THE DEVELOPERS AGREEMENT.

MATERIAL SPECIFICATIONS FOR BIORETENTION AREA

PLANTING SOIL

The bioretention areas shall consist of a planting soil having a composition of at least 10 to 25 percent clay and shall be of a sandy loam or loamy sand texture. Loamy soils may be utilized for the planting soil but must consist of 25% sand. In addition, the furnished planting soil shall be of uniform composition, free of stones, stumps, roots or similar objects larger than one inch, brush, or any other material or substance which may be harmful to plant growth, or a hinderance to planting or maintenance operations.

The planting soil shall be free of plants or plant parts of Bermuda grass, Quack grass, Johnson grass, Mugwort, Nutsedge, Poison Ivy, Canadian Thistle or others as specified.

It shall not contain toxic substances harmful to plant growth.

The planting soil shall be tested and meet the following criteria:

pH range	5.5 – 6.5
Organic matter	1.5 – 3.0%
Magnesium – Mg	35 lbs./acre
Phosphorus – P_2O_5	100lbs./acre
Potassium – K_2O	85 lbs./acre
Soluble salts	not to exceed 500ppm

The following testing frequencies shall apply to the above soil constituents:
PH, Organic Matter: 1 test per 90 cubic yards, but no more than 1 test per Bioretention area.
Magnesium, Phosphorus, Potassium, Soluble Salts:
1 test per 500 cubic yards, but not less than 1 test per borrow source

One grain size analysis shall per performed per 90 cubic yards of planting soil, but no less than 1 test per Bioretention Area.

MULCH LAYER SPECIFICATIONS

A mulch layer approximately 2"–3" in depth shall be provided on top of the planting soil. An acceptable mulch layer shall include shredded hardwood or shredded wood chips.

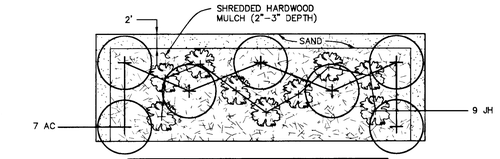
Of the approved mulch products all must be well aged, uniform in color, and free of foreign material including plant material. Well aged mulch is defined as mulch that has been stockpiled or stored for at least twelve (12) months.

SAND SPECIFICATIONS

The sand shall be free of deleterious material and rocks greater than 1 inch in diameter.

COMPACTION

Soil shall be placed in lifts less than 18 inches and lightly compacted (minimal compactive effort) by tamping with a bucket from a dozer or a backhoe.



PLANTING LIST FOR THE BIORETENTION AREA			
SYMBOL	QUANTITY	NAME	REMARKS
⊕	7	ACER RUBRUM (RED MAPLE)	2 1/2"MIN. CAL B&B FULL HEAD
⊛	9	JUNIPERUS HORTZONTALIS (CREEPING JUNIPER)	18" TO 24" SPREAD

• PLANTING TABULATION:
TREES : (450–650/AC.) USE 550/AC (AVER.)x0.0158 AC.=9 TREES
TREES PROVIDED: 7
SHRUBS : (200–450/AC.) USE 325/AC (AVER.)x0.0158 AC.=5 SHRUBS
SHRUBS PROVIDED: 5+4 (2:1 SUBSTITUTION FOR TREES)
• – TABULATIONS BASED ON INFORMATION PROVIDED BY BIOHABITATS, INC.

BIORETENTION AREA PLANTING LAYOUT

SCALE 1"=10'

PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
⊙	6	ACER SACCHARUM (SUGAR MAPLE)	2 1/2"MIN. CAL B&B FULL HEAD

NOTE:
1) TREES MUST BE PLANTED A MINIMUM OF 4 FEET FROM ANY CURB OR SIDEWALK AND MUST BE A MINIMUM OF 5 FEET FROM ANY STORM DRAIN.
2) TREES MUST BE PLANTED A MINIMUM OF 10 FEET FROM ANY DRIVEWAY.
3) SEE TREE PLANTING DETAIL – THIS SHEET.

LEGEND

PROPOSED CONTOUR 560
EXISTING GRADE 560
EXISTING TREE LINE
PROPOSED TREE LINE
FOREST CONSERVATION EASEMENT
BIORETENTION AREA

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/21/96

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 5/23/96

DIRECTOR N/A — DATE

NO	DATE	REVISION

TSA GROUP, INC.
planning • architecture • engineering • surveying
8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (410)465-6105

Donald Mabe

OWNER:
ALFRED HALL
9390 WOODSONG COURT
LAUREL, MARYLAND 20723

DEVELOPER:
SDC GROUP, INC.
P.O. BOX 417
ELLICOTT CITY, MARYLAND 21043

PROJECT:
ALFRED HALL PROPERTY
LOTS 1 THRU LOT 6

LOCATION:
TAX MAP 37 BLOCK 22 PARCEL 903
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:
LANDSCAPING PLAN AND DETAILS S-95-19

WP-94-53 WP-94-103 WP-95-10 WP-95-73 S-94-41 S-94-26

DATE: DECEMBER 11, 1995 / MARCH 20, 1996
PROJECT NO. 0644

SCALE: AS SHOWN
DRAWING 2 OF 2

DES: GWF DRN: JR

Project Work: 22-1-903
Acad Dwg: 705351

5-16-96