	SHEET INDEX
NO	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	GRADING AND SEDIMENT CONTROL PLAN
4	NOTES AND DETAILS

TO ANY EXCAVATION WORK BEING DONE.

PREPARED BY CAD-CON, INC.

WATER IS PUBLIC, CONTRACT NO. 420-W

WELL AS THE PREVIOUS ADDITION.

12. THERE IS NO 100- YEAR FLOODPLAIN ON SITE.

14. A TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT.

15. A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.

AVAILABLE INFORMATION.

GENERAL NOTES

ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

MONUMENT NOS. 31AA AND 31DA WERE USED FOR THIS PROJECT.

SEWER IS PUBLIC, CONTRACT NO. 420-S, DRAINAGE AREA: DORSEY

13. THERE ARE NO WETLANDS DISTURBANCE ANTICIPATED FOR THIS SITE.

FACILITY IS AN EXPANSION TO AN ALREADY ESTABLISHED S.W.M. AREA.

SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.

EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.

ALL PIPE ELEVATIONS SHOWN ARE INVERT OF ELEVATIONS.

MINIMUM OF 95% COMPACTION OF AASHTO TI80.

VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.

PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN

ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A

PROPOSED ADDITION -

SOUTHEAST ELEVATION

17. THE BOUNDARY FOR THIS PROJECT WAS DIGITIZED FROM SDP NO. 75-41.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.

CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR

THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR

THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/

SITE DEVELOPMENT PLAN WORTHINGTON NTARY SCHOOL ADDITION / RENOVATION

2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOC. DATED JAN. 1997, AND FROM SDP-88-250 THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE COORDINATE SYSTEM. HOWARD COUNTY THE STORMWATER MANAGEMENT FACILITY PROPOSED FOR THIS SITE IS AN EXPANSION OF THE EXISTING PRIVATELY OWNED AND MAINTAINED DRYWELL DESIGNED TO MANAGE RUNOFF FROM THIS ADDITION AS WELL AS APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST BALTIMORE G ZONE THE GEOTECHNICAL STUDY FOR STORMWATER MANAGEMENT IS NOT REQUIRED AS THE PROPOSED 18. SUBJECT PROPERTY ZONED R-20 PER 10-18-93 COMPREHENSIVE ZONING PLAN. ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929. SEE DEPARTMENT OF PLANNING AND ZONING FILE NO'S .: SDP-75-41, SDP-88-250, WP-88-147 THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, 26. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS. STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, i.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.

- EXISTING BUILDING -

SITE ANALYSIS

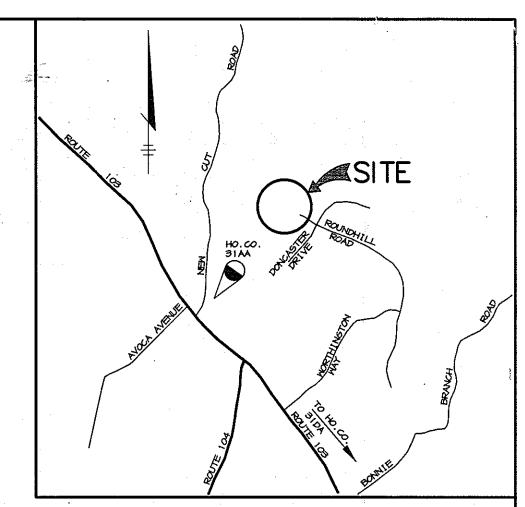
AREA OF PARCEL 19.6920 AC. (857,782 S.F.)

DISTURBED AREA 1.26 AC R - 20

ZONING ELEMENTARY SCHOOL PROPOSED USE ADDITION

FLOOR SPACE 6,182 S.F.

NOTE: NO MODIFICATIONS TO EXISTING PARKING ARE PROPOSED UNDER THIS PLAN.

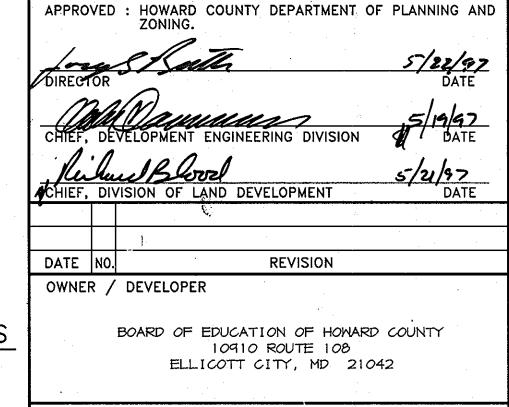


VICINITY MAP

COPYRIGHT ADC THE MAP
PEOPLE PERMITTED USE
NO. 20894285

<u>BENCHMARKS</u> HO. CO. SURVEY CONTROL STATION 31AA ELEV. 152.448 N 573,998.5714 E 1,369,934.23

HO. CO. SURVEY CONTROL STATION 31DA ELEV. 147.021 N 571,982.6706 E 1,372,145.076



WORTHINGTON ELEMENTARY SCHOOL

ADDITION/RENOVATION

TAX MAP 31 BLOCK 2 PARCEL 121 ZONE R-20 L.675 F.136 2nd ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

TITLE SHEET

RIEMER MUEGGE & ASSOCIATES, INC

ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282

5.12.97 JAYKANT D. PAREKH #19148

DESIGNED BY : C.J.R. DRAWN BY: M.A.D. PROJECT NO :96126 SDP1.DWG DATE: MAY 12, 1997 SCALE : AS SHOWN DRAWING NO. 1 OF

50P-97-08

	Z 27 1360000	PROPERTY OF BOARD OF HO. CO. COMMISSIONERS 180/339 ZONED R-20	GRID NORTH	
AS THE OPERITY OF GAS & ELECTRIC 340/105 NED R-20	EX. SOFTBALL 605.58'	EXI	S 22.34.00. W 200.00 WORTHINGTON SECTION 12 17/61 17/61 ZONED R-20 PARCEL 283 S 22.34.00. W 175.00. S88 S 22.34.00. W 175.00. M S 22.34.00. W 175.00. M	PROPERTY OF BOARD OF HO. CO. COMMISSIONERS 180/339 ZONED R-20 PROPERTY OF WORTHINGTON SECTION 11 15/33 ZONED R-20 LOT 175
	PROPERTY OF WORTHINGTON SECTION 10 10/82 ZONED R-20 LOTS 162-170	PLAN SCALE: " = 100'	₹26° ₩	OPERATION AND MAINTE (E) 1. THE MONITORING WELLS AND STRUCTULE AFTER EVERY LARGE STORM EVENT. 2. WATER LEVELS AND SEDIMENT BUILD LE A PERIOD OF SEVERAL DAYS TO INSULT 3. A LOG BOOK SHALL BE MAINTAINED TO 4. WHEN THE FACILITY BECOMES CLOGGED TIME PERIOD, CORRECTIVE ACTION SHA 5. THE MAINTENANCE LOG BOOK SHALL BE INSURE COMPLIANCE WITH OPERATION 6. ONCE THE PERFORMANCE CHARACTERI THE MONITORING SCHEDULE CAN BE REDATA INDICATES THAT A MORE FREQUENCE.

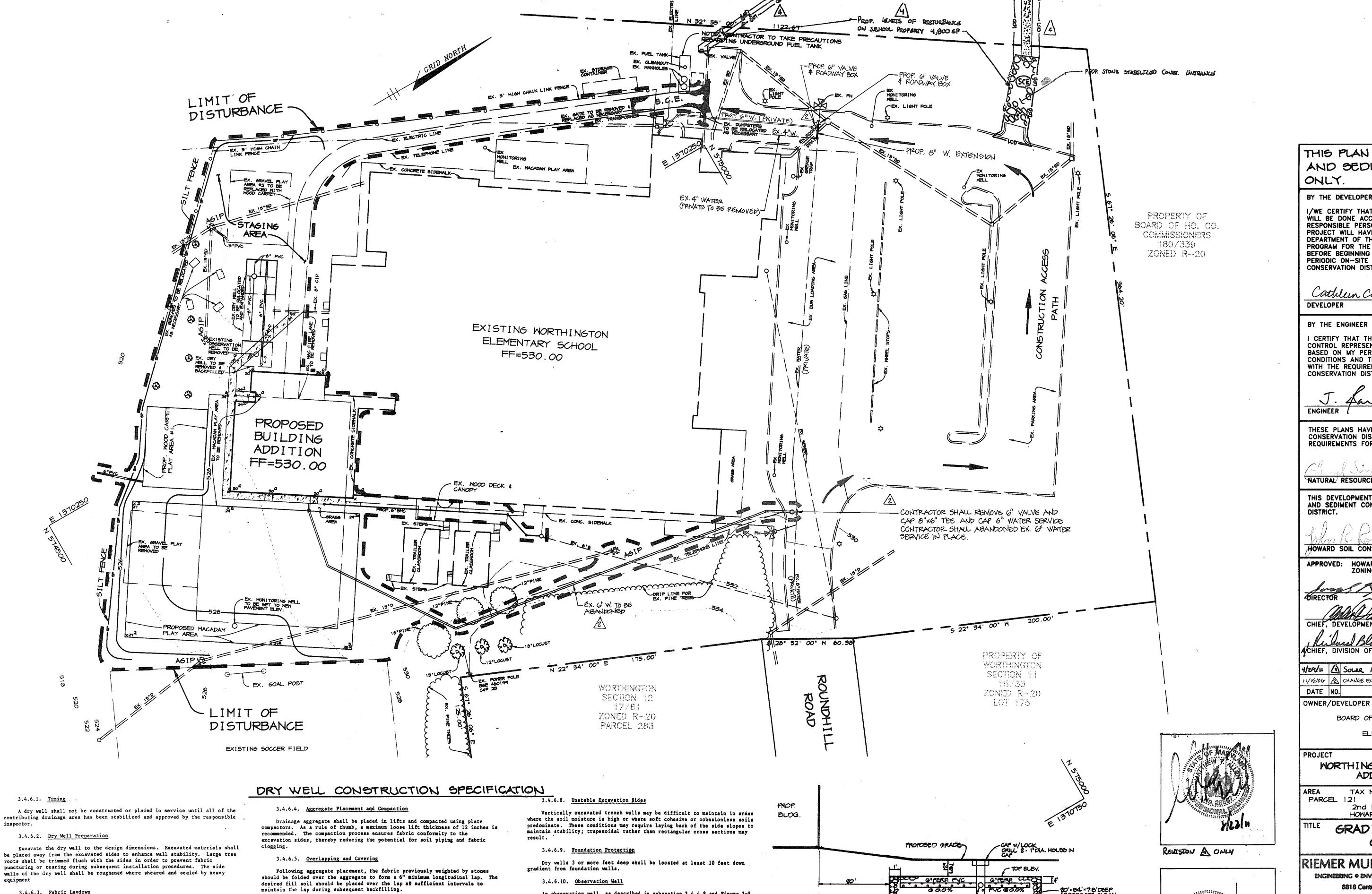
MAINTENANCE SCHEDULE FOR DRY WELLS (BY OWNER)

- AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS AND ORM EVENT.
- MENT BUILD UP IN THE MONITORING WELLS SHALL BE RECORDED OVER AYS TO INSURE TRENCH DRAINAGE.
- MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DEWATERS.
- MES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE 72 HOUR ACTION SHALL BE TAKEN.
- OOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO OPERATION AND MAINTENANCE CRITERIA.
- CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, LE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE MORE FREQUENT SCHEDULE IS REQUIRED.

	ADDRESS CHART			
• • • • • • • • • • • • • • • • • • •	PARCEL	STREET ADD	RESS	
	121	4570 ROUNDHILL ROAD		
Comment of the second	•		•	
SUBDIVISION NAME -	TON ELEM. 9		PARCEL - 1.2.1	

6027 W101

SDP - 97 - 98



3.4.6.3. Fabric Laydown

The filter fabric roll shall be cut to the proper width prior to installation. The cut width must include sufficient material to conform to well perimeter irregularities and for a 6-inch minimum top overlap. Place the fabric roll over the well and unroll a sufficient length to allow placement of the fabric down into the well. Stones or other anchoring objects should be placed on the fabric at the edge of the well to keep the lined well open during windy periods. When overlaps are required between rolls, the upstream roll shall lap a minimum of 2 feet over the downstream roll in order to provide a shingled effect. The overlap ensures fabric continuity or the fabric conforms to the excavation surface during aggregate placement and compaction.

3.4.6.6. Contamination

Care shall be exercised to prevent natural or fill soils from intermixing with the drainage aggregate. All contaminated aggregate shall be removed and replaced with uncontaminated aggregate.

3.4.6.7. Voids Behind Fabric

subsidence will be avoided by this remedial process.

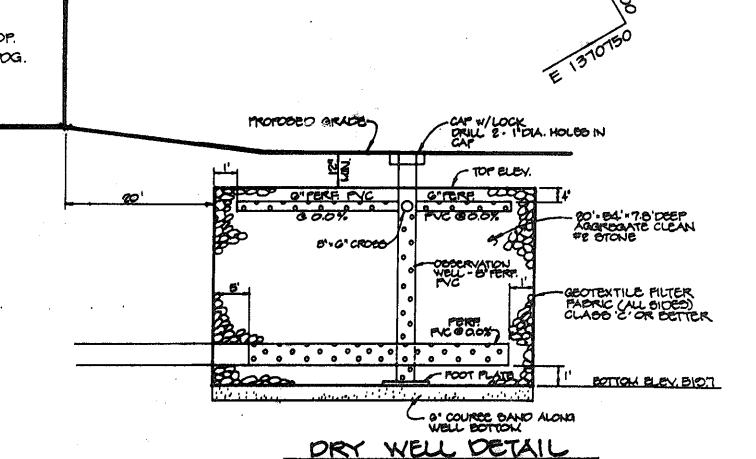
Voids can be created between the fabric and excavation sides and should be avoided. Removing boulders or other obstacles from the trench walls is one source of such voids. Natural soils should be placed in these voids at the most convenient time during construction to ensure fabric conformity to the excavation sides. Soil piping, fabric clogging, and possible surface

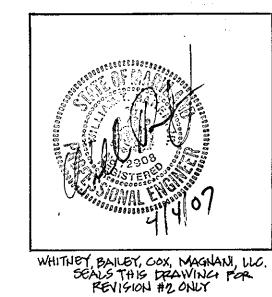
An observation well, as described in subsection 3.4.4.8 and Figure 3-5, will be provided. The depth of the well, at the time of installation, will be clearly marked on the well cap.

3.4.7. Maintenance

Dry wells shall be designed to minimize maintenance. However, it is recognized that all infiltration facilities are subject to clogging by sediment, oil, grease, grit and other debris. In addition, the performance and longevity of these structures is not well documented. Consequently, a monitoring observation well is required for all infiltration structures.

The observation well should be monitored periodically. For the first year after completion of construction, the well should be monitored on a quarterly basis and after every large storm. It is recommended that a log book be maintained indicating the rate at which the facility dewaters after large storms and the depth of the well for each observation. Once the performance characteristics of the structure have been verified, the monitoring schedule can be reduced to an annual basis, unless the performance data indicate that a more frequent schedule is required.





THIS PLAN IS FOR GRADING AND SEDIMENT CONTROL

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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Cathlein Conly young DEVELOPER

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.

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL

NATURAL RESOURCES CONSERVATION SERVICE

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

HOWARD SOIL CONSERVATION DISTRICT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND

DEVELOPMENT ENGINEERING DIVISION CHIEF, DIVISION OF LAND DEVELOPMENT

4/29/11 (1) SOLAR ARRAY FEELD CONNECTION TO SCHOOL 11/15/06 & CHANGE EX.4" WATER TO PROP. 6" WATER & ABANDONDED EX. 6"W. SERVI REVISION

BOARD OF EDUCATION OF HOWARD COUNTY 10910 ROUTE 108

ELLICOTT CITY, MD 21042

WORTHINGTON ELEMENTARY SCHOOL ADDITION/RENOVATION

TAX MAP 31 BLOCK 2 PARCEL 121 ZONE R-20 L.675 F.136
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

GRADING AND SEDIMENT CONTROL PLAN

RIEMER MUEGGE & ASSOCIATES, INC.

ENGINEERING @ ENVIRONMENTAL SERVICES @ PLANNING @ SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282

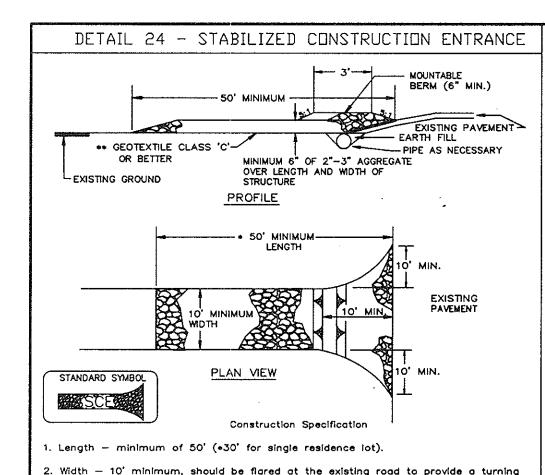
5.12.97 DATE

JAYKANT D. PAREKH #19148

DESIGNED BY: C.J.R. DRAWN BY: M.A.D. PROJECT NO: 96126 SDP4.DWG

DATE: MAY 12, 1997 SCALE: 1" = 30'

DRAWING NO. 3 OF 4



3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior

to placing stone. **The plan approval authority may not require single family residences to use geotextile. 4. Stone — crushed aggregate (2" to 3") or reclaimed or recycled concrete

equivalent shall be placed at least 6" deep over the length and width of the

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

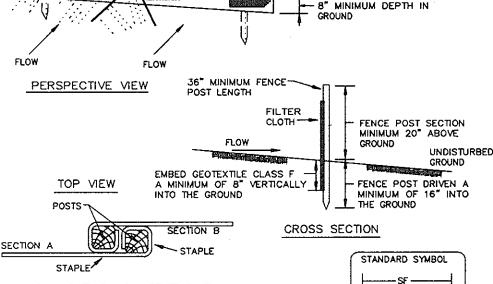
has no drainage to convey a pipe will not be necessary. Pipe should be sized

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 length of the stabilized construction entrance.

according to the amount of runoff to be conveyed. A 6" minimum will be required.

MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT DE AGRICULTURE F - 17 - 3 WATER MANAGEMENT ADMINISTRATION SDIL CONSERVATION SERVICE

DETAIL 22 - SILT FENCE - 36" MINIMUM LENGTH FENCE POST 10' MAXIMUM CENTER TO CENTER ____ GROUND 16" MINIMUM HEIGHT OF GEOTEXTILE CLASS F 8" MINIMUM DEPTH IN



Construction Specifications 1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foo

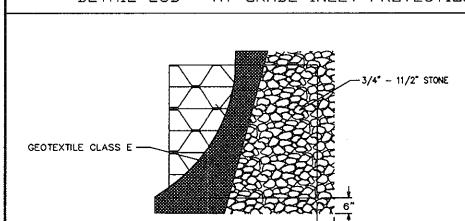
JOINING TWO ADJACENT SILT FENCE SECTIONS

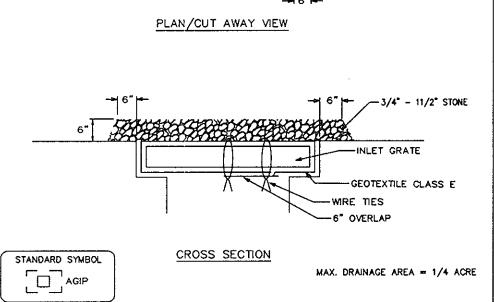
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength 50 lbs/in (min.) Test: MSMT 509 20 lbs/ln (min.) Test: MSMT 509 Tensile Modulus 0.3 gal ft 1/ minute (max.) Test: MSMT 322 Flow Rate Test: MSMT 322 Filtering Efficiency 75% (min.)

3. Where ends of geotextile fabric come together, they shall be overlapped,

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height. MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION DETAIL 23B - AT GRADE INLET PROTECTION





Construction Specifications 1. Lift grate and wrap with Geotextile Class E to completely cover all openings,

2. Place 3/4" to 11/2" stone, 4"-6" thick on the grate to secure the fabric and

U.S. DEPARTMENT OF AGRICULTURE

provide additional filtration

MARYLAND DEPARTMENT OF ENVIRONMENT E - 16 - 5A WATER MANAGEMENT ADMINISTRATION

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

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

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

Conditions Where Practice Applies

1. This practice is limited to areas having 2:1 or flatter slopes where: a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.

b. 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. c. The original soil to be vegetated contains material toxic to plant growth.

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

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

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

nutsedge, poison ivy, thistle, or others as specified.

d. The soil is so acidic that treatment with limestone is not feasible

i. Topsol shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoli shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse ragments, gravel, sticks, roots, trash, or other materials larger than 19" in diameter. II. Topsoli must be free of plants or plant parts such as bermuda grass, gaackgrass, Johnsongrass

iii. Where subsoii 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 1,000 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.

For sites having disturbed areas under 5 acres:

i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

I. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:

a. 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.

b. Organic content of topsoil shall be not less than 1.5 percent by weight.

c. Topsoil having soluble salt content greater than 500 parts per million shall not be used. d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

Note: Topsoil substitutes to 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.

II. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.

ii. Grades on the areas to be topsolled, which have been previously established, shall be iii. 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 tiliage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water packets.

iv. Topsoil shall not be placed while the topsoil or subsoil is in a 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.

Vi. 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:

shall conform to the following requirements: a. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the

acres shall be tested to prescribe amendments and for site having disturbed areas under 5 acres

I. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5

Environment under COMAR 26.04.06. b. Composted sludge shall contain at least 1 percent nitragen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements,

the appropriate constituents must be added to meet the requirements prior to use. c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.

d. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guideline Specifications, Soll Preparation and Sodding. MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.

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, if not previously

Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.).

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual rye (3.2 lbs. per 1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 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. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

Sequence of construction (A)

1. CONTRACTOR TO NOTEPY THE HOWERD CONTY DILP, SED. CONTROL DOLUSION A PRICE HOME OF (48) HEURE PRICE TO THE STREET OF CONSTRUCTION AT (410) SIS-1965 2. CONTRACTOR TO HEREN INSTALL PROSMETER SES CONTROLS, INCLUDING SELT POWER

AS IDENTERED ON THE GROSTON MO SECTIONS CONTROL PLAN. 3. CORRESTOR TO INTEREST CONTRACTOR OF BRIC MAD "67 3/4" CLUM STURE WRAPPOD IN 16 GUICE GOOD WELL MESH AS SHOWN ON THE STANDARD SOLAR PANEL MODULE STATES THE CONTRACTOR SHALL USE RUSSER WHEELS ON ANY EXCAUSIONS SO AS TO REQUES

THE METURBANCE CAUSED BY EXCAUATION ACTIVETES 4. CONTRACTOR TO INSTALL INVERTER PAG. CONTRACTOR TO TRENCH FOR CONDUCT THAT CONTRACTOR THE PAUL ROUS AND THE PARE ROUS TO THE BURETUR PRO. DEPTH OF TREMOBRE AT ANNTHUE IN NOT TO EXCEND EN". GITTACTUR TO SUSTAIL COLOURT RUNS AND BACKERS PREMICANDA SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections and Permits prior to the start of any construction (313-1855).

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in FOR SOIL AND EROSION CONTROL, and revisions thereto.

conformance with the MARYLAND STANDARDS AND SPECIFICATIONS 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 other disturbed or graded areas on the project site.

4. All sediment traps/basins shown must be fenced and warning signs posted around the 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 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION 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 19.6920 acres Area Disturbed Area to be roofed or paved Area to be vegetatively stabilized Total Cut Total FIII BORROW TO BE OBTAINED FROM SITE WITH ACTIVE GRADING PERMIT

1.26 acres

0.58 acres

0.68 acres

0 cu.yds

893 cu.yds

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same

9. Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.

10. Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition

11. Sediment will be removed from traps when its depth reaches clean out elevation shown on the plans. 12. Cut and fill quantities provided under site analysis do not

represent bid quantities. These quantities do not distinguish between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unsuitable material. The contractor shall familiarize himself with site conditions which may affect the work.

13. On all sites with disturbed greas 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.

14. Trenches for the construction of utilities is limited to three pipe lenaths or that which can be backfilled and stabilized within one working day, whichever is shorter.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking. discing or other acceptable means before seeding, if not previously

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

1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 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. per 1000 sq.ft.).

2) Acceptable — Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the period March 1 thru April 30 and from August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs. per 1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of weeping lovegrass. During the period October 16 thru February 28, protect site by one of the following

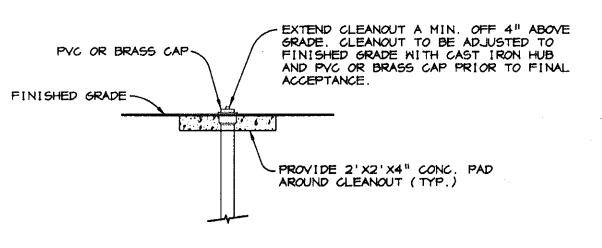
1) 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.

Use sod.

3) Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

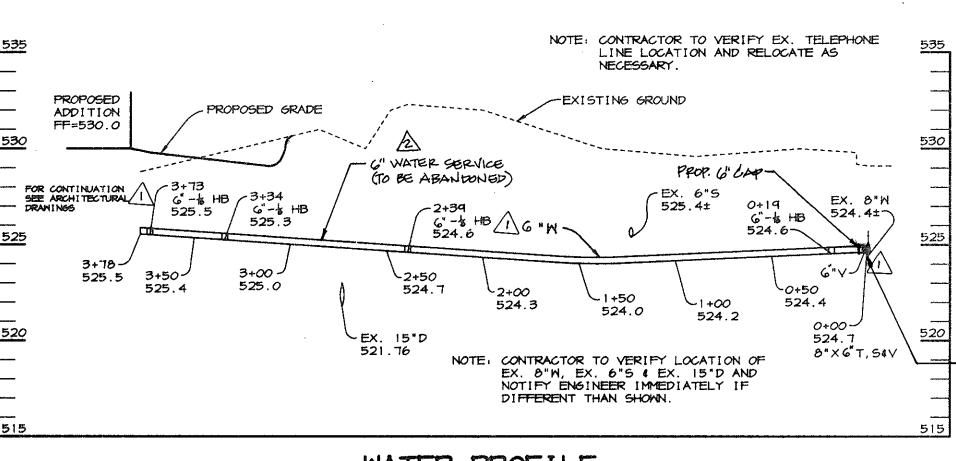
Maintenance: Inspect all seeded areas and make needed repairs. replacements and reseedings.



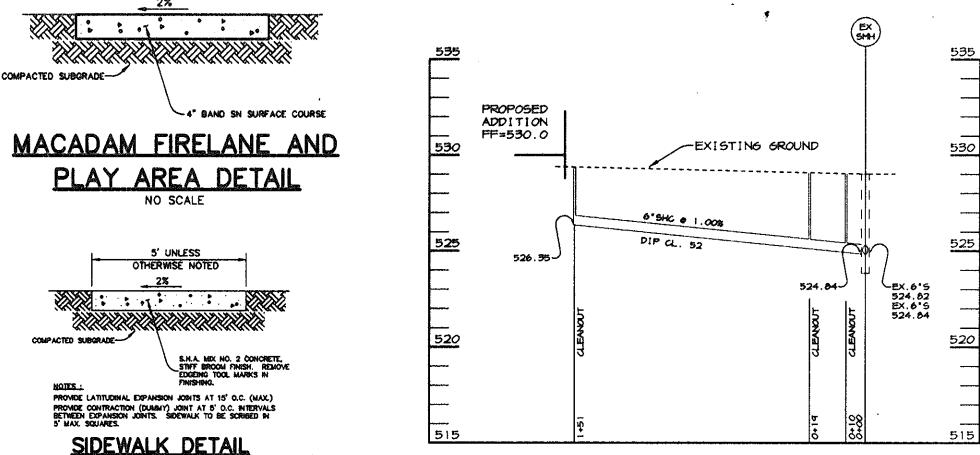
LEANOUT DETAIL

5. COMPRACTOR TO TROUBLE AND JAMPELL CONNET RUN FROM JUNEAUTER RO TO ELEMENTIFY SCHOOL CONTRACTOR TO INSTALL BANGUITS AND BERRILL WATH STONE AT LOCATIONS SHOWN ON THIS PLAN. AT ML OTHER LOCATION, CONTRACTOR TO BACKERUL WITH COMPAGIND SOIL, CONTRACTOR TO MAKE BURN THAT ANY EXCENTED SALE ARE PLACED ON UPHELL STON OF TRANSPER AND

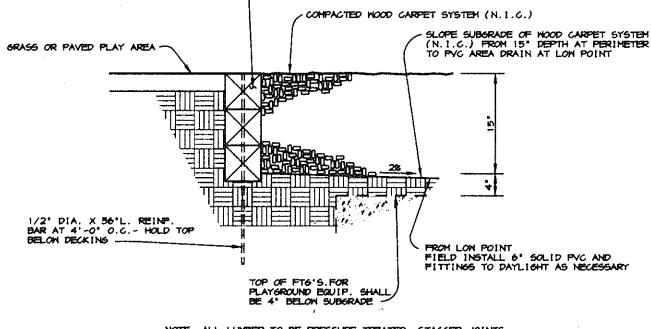
7. CONTRACTOR TO PLACE SURAR ARRAY MODULUS THE PORTION. ARE PERMANENTH STABILITY ALL DESCRIBED LAND.



WATER PROFILE SCALE : HOR.-1"≈50' VERT. - 1 " =5 '

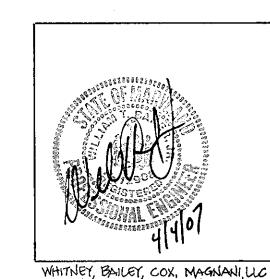


SEWER PROFILE HOR. -1"=50" VERT. -1"=5"



-3-6"x6"x6"-0" PRESGURE TREATED TIMBERS INSTALLED FLUSH NITH ADJACENT GRADE-ROUND ALL CORNERS AT TOP TIMBER

NOTE: ALL LUMBER TO BE PRESSURE TREATED. STAGGER JOINTS



SEALS THIS DRAIMING FOR REVISION #2 ONLY

PLAY AREA SURFACE/DRAINAGE DETAIL

BASKETBALL BACKSTOP ASSEMBLY - W/8'-0" H. COAL (2-REQ'D.) - SEE DETAIL G/C 1G 2'-0" DIA.CIRCLE WITH 12" H.MAMBER (TYP.) -BASKETBALL BACKSTOP ASSEMBLY W/10'-0" H. GOAL (2-REQ'D.) YELLOW LYELLOWY FOUR SQUARE MAMBERS -- TO BE 12" HIGH (TYP.) 4 3 | 3 | 6'-0-| 3 | 9'-0-| | 6'-0-| | 6'-0-| | 3'| 6'-0-| | 3'| 6'-0-| | 3'| 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6'-0-| | 6 REDUCCION A ONEM

> CENERAL NOTES: 1. ALL LINES SHALL BE 2" WIDE AND PAINTED WHITE UNLESS OTHERWISE HOTED. ALL MARKES SHALL BE AS MIAND PAINTED WHITE INSISS OTHERWISE NOTED.

PAYED PLAY AREA - STRIPING DETAIL

SEQUENCE OF CONSTRUCTION

I. OBTAIN A SRADING PERMIT.

2. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND INLET PROTECTION. (2 DAYS)

3. ROUGH GRADE FOR BUILDING CONSTRUCTION AND PLAY AREA. INSTALL WATER AND SEWER AND RELOCATE DRY WELL
AWAY FROM PROPOSED BUILDING. EXPAND DRY WELL PER DETAIL
AND PLAN AND INSTALL ROSE DRAIN. ENCLOSE DRY WELL WITH FENCE TO PROHIBIT CONSTRUCTION TRAFFIC. (10 DAYS)

4. INSTALL NEW PLAY SURFACE AND BEGIN BUILDING CONSTRUCTION. CONTRACTOR TO OPEN PLAY AREA FOR USE AS SOON AS POSSIBLE MAINTAINING ADEQUATE FENCED-IN WORK AREA 10' OFF OF BUILDING

5. COMPLETE BUILDING CONSTRUCTION AND STABILIZE DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (3 MONTHS) UPON APPROVAL OF HOWARD COUNTY D.I.L.P. SEDIMENT

CONTROL INSPECTOR, REMOVE ALL REMAINING SEDMENT

CONTROL DEVICES AND STABILIZE IN ACCORDANCE WITH

THE PERMANENT SEEDING NOTES. (1 DAY)

- CONTRACTOR SHALL REMOVE 6" VALVE AND CAP 8"x6" TEE, AND CAP 6" WATER SERVICE CONTRACTOR SHAW ABANDONED EX. 6" WATER SERVICE IN PLACE.

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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Cathleen Conly Young DEVELOPER

BY THE ENGINEER

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.

5.12.97 ENGINEER DATE THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL

REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL. NATURAL RESOURCES CONSERVATION SERVICE

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

0010 HOWARD SOIL CONSERVATION DISTRICT

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

MW Maumen

CHIEF, DIVISION OF LAND DEVELOPMENT SHAR ARRY FRED COMMENTED TO STEPLE

DEVELOPMENT ENGINEERING DIVISION

7-10-97 CHANGED 4" W. TO G W. ON WATER PROFILE DATE NO.

OWNER/DEVELOPER BOARD OF EDUCATION OF HOWARD COUNTY 10910 ROUTE 108

ELLICOTT CITY, MD 21042

A CHANGE EX. 4" WATER TO PROP. G" WATER & ABANDONED EX. 6"W. SERVICE

REVISION

PROJECT

WORTHINGTON ELEMENTARY SCHOOL ADDITION/RENOVATION

TAX MAP 31 BLOCK 2 PARCEL 121 ZONE R-20 L.675 F.136 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

NOTES AND DETAILS

RIEMER MUEGGE & ASSOCIATES, INC ENGINEERING @ ENVIRONMENTAL SERVICES @ PLANNING @ SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282

> 5-12:97 DESIGNED BY: C.J.R. DRAWN BY: DAM PROJECT NO: 96126 SDP3.DWG DATE: MAY 12, 1997

SCALE: AS SHOWN DRAWING NO. 4 OF 4

SDP-97-98