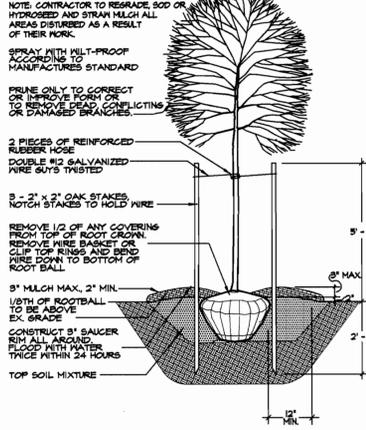


**STORM DRAIN PROFILE**

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

**SEQUENCE OF CONSTRUCTION**

- OBTAIN A GRADING PERMIT.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE (2 DAYS).
- UPON PERMISSION OF HO. CO. DILP SEDIMENT CONTROL INSPECTOR, BEGIN ROUGH GRADING AND BUILDING CONSTRUCTION. INSTALL STORM DRAINS AS SOON AS SUBGRADE ELEVATIONS ARE ESTABLISHED.
- COMPLETE STORM DRAIN INSTALLATION (1 WEEK).
- INSTALL CURB AND GUTTER THEN PAVE (1 WEEK).
- INSTALL LANDSCAPING. (1 DAY)
- COMPLETE ALL REMAINING CONSTRUCTION AND UPON APPROVAL OF THE HO. CO. DILP SEDIMENT CONTROL INSPECTOR, REMOVE REMAINING SEDIMENT CONTROLS AND STABILIZE IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES. (2 WEEKS)



**TREE PLANTING DETAIL**

**STRUCTURE SCHEDULE**

STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
1-1	COB-10	* N 542942.58 E 1375054.46	238.41 (15')	238.31 (15')	242.0	MSHA STD. DETAIL MD-374.51
1-2	K INLET	* N 542052.81 E 1375047.91	-	238.72 (15')	242.4	MSHA STD. DETAIL MD-378.03
M-1	4'DIA	* N 542452.65 E 1375058.74	238.10 (15')	238.00 (12')	240.5	MSHA STD. DETAIL MD-384.01

NOTES: \* FOR "COB" INLETS LOCATION IS GIVEN FOR CENTER OF THROAT OPENING AT FACE OF CURB. FOR GRATE INLETS AND MANHOLES LOCATION IS AT CENTER OF TOP COVER. TOP ELEVATION IS TOP OF CURB/GRATE/RIM.

**STANDARD SEDIMENT CONTROL NOTES**

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (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 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERE TO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 47 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1. BY 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 THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOIL TEMPORARY SEEDING, AND MULCHING (SEC. 6.). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHED 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: 0.6580 ACRES  
AREA DISTURBED: 0.0918 ACRES  
AREA TO BE ROOFED OR PAVED: 0.0023 ACRES  
AREA TO BE VEGETATIVELY STABILIZED: 0.0086 ACRES  
TOTAL CUT: 300 CU. YARDS  
TOTAL FILL: 300 CU. YARDS  
OFFSITE WASTE/DORROW AREA LOCATION
- 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 CONTROLS MUST BE PROVIDED IF DEEMED NECESSARY BY THE HOWARD COUNTY 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 THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
- SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- 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.

**PERMANENT SEEDING NOTES**

- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeded 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 one of the following schedules:
- Preferred - Apply 2 tons per acre dolomitic limestone (42 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 (4 lbs. per 1000 sq. ft.).
  - Acceptable - Apply 2 tons per acre dolomitic limestone (42 lbs. per 1000 sq. ft.) and 1000 lbs. per acre 10-10-10 Fertilizer (28 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 (14 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 options:
- 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.
  - Use sod.
  - Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well-anchored mulch 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 210 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.

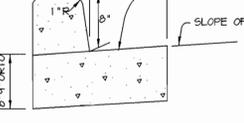
**TEMPORARY SEEDING NOTES**

- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seeded 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. 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 ryegrass (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 210 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.
- Refer to the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

**21.0 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**
- 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.
- 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 Experiment Station.
  - 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 an 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 cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
    - Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
    - Where 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 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:
    - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
  - For sites having disturbed areas over 5 acres:

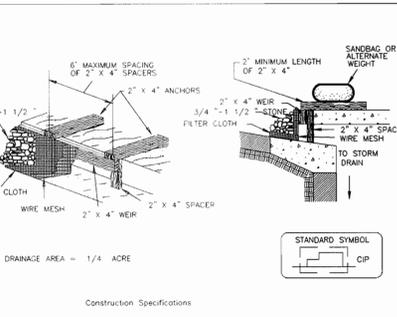
**M.S.H.A. TYPE 'A' CURB AND GUTTER**



**M.S.H.A. PAVING SECTION**

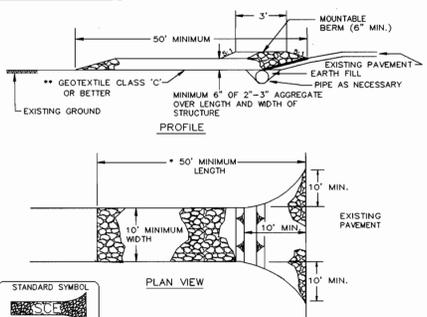


**DETAIL 23C - CURB INLET PROTECTION**



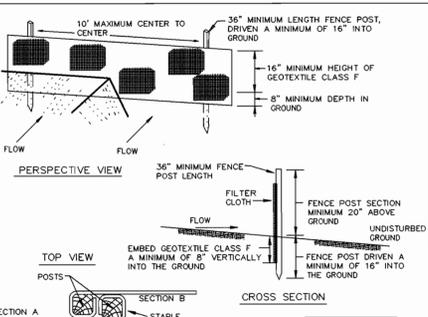
- Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4" to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
- Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.
- Securely nail the 2" x 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4" apart).
- Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
- The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
- Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.
- This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
- Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

**DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE**



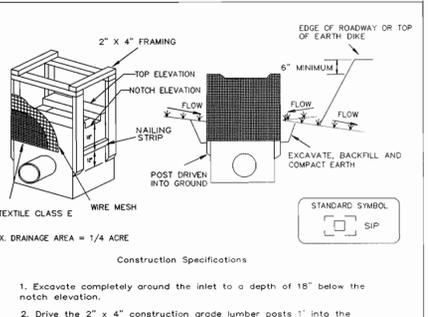
- Length - minimum of 50' (\*30' for single residence lot).
- Width - 10' minimum, should be flored at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. \*\*The plan approval authority may not require single family residences to use geotextile.
- 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 entrance.
- 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.
- 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.

**DETAIL 22 - SILT FENCE**



- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" 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 pound per linear foot.
- 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  
Tensile Modulus: 20 lbs/in (min.) Test: MSMT 509  
Flow Rate: 0.3 gal ft<sup>2</sup> / min (max.) Test: MSMT 322  
Filtering Efficiency: 75% (min.) Test: MSMT 322
- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

**DETAIL 23A - STANDARD INLET PROTECTION**



- Excavate completely around the inlet to a depth of 18" below the notch elevation.
- Drive the 2" x 4" construction grade lumber posts 1" into the ground at each corner of the inlet. Place nail strips between the posts on the ends of the inlet. Assemble the top portion of the 2" x 4" frame using the overlap joint shown on Detail 23A. The top of the frame (weir) must be 6" below adjacent roadways where flooding and safety issues may arise.
- Stretch the 1/2" x 1/2" wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a post.
- Stretch the Geotextile Class E tightly over the wire mesh with the geotextile extending from the top of the frame to 18" below the inlet notch elevation. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded, then fastened down.
- Backfill around the inlet in compacted 6" layers until the layer of inlet is level with the notch elevation on the ends and top elevation on the sides.
- If the inlet is not in a berm, construct a compacted earth dike across the ditch level directly below it. The top of the earth dike should be at least 6" higher than the top of the frame.
- The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged.

**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.

*Keith B. Bissler* 4.5.01  
DEVELOPER DATE

**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.

*Arthur E. Muegge* 4.5.01  
ENGINEER DATE

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

*Jim M. Myers* 4/16/01  
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*John M. Blanton* 4/16/01  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*Joseph R. Smith* 4/26/01  
DIRECTOR DATE

*Chris Hanover* 4/16/01  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Chris Hanover* 4/26/01  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

OWNER / DEVELOPER  
KEITH B. BISSER & RUSSELL W. ZORBAUGH  
7761 MD. RTE. 175  
JESSUP, MARYLAND 20794  
410-799-8338

PROJECT  
**AMERICAN BUILDING PRODUCTS WATERLOO ROAD, MD ROUTE 175 PARKING ADDITIONS**

AREA Tax Map 43 Block 21 Parcel 434  
L. 1691, F. 0484 Zoned M-2  
1st Election District, Howard County, Maryland

**PROFILES, DETAILS & NOTES**

**RIEMER MUEGGE & ASSOCIATES INC**  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, MD 21046  
tel 410.997.8800 fax 410.997.9282

DATE	DESIGNED BY:
	CJR
DATE	DRAWN BY:
	K.E.V.
DATE	PROJECT NO.:
	99239/ SDP3.DWG
DATE	SCALE:
	AS SHOWN
DATE	DRAWING NO.:
	3 OF 3



**SHEET INDEX**

1	SITE DEVELOPMENT PLAN
2	GRADING, SEDIMENT CONTROL PLAN, DRAINAGE AREA MAP
3	PROFILES AND DETAIL SHEET

**GENERAL NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1800 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-1111 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 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.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOCIATES, INC. DATED OCTOBER, 1999.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 43EA AND 43HB WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 792 M
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: DORSEY CONTRACT NO. 612 5
- NO STORMWATER MANAGEMENT FACILITIES ARE PROPOSED FOR THIS SITE.
- 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 OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- NO 100-YEAR FLOODPLAIN STUDY WAS REQUIRED FOR THIS PROJECT.
- NO WETLANDS ARE VISIBLE ON THE SITE.
- NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
- NO NOISE STUDY FOR THIS PROJECT IS REQUIRED.
- NO GEOTECHNICAL STUDY WAS REQUIRED FOR THIS PROJECT.
- THE BOUNDARY FOR THIS PROJECT IS BASED ON CLARK FINEROCK & SACKETT PLANS, DATED OCTOBER 1999.
- SUBJECT PROPERTY ZONED M-2 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: BA-98-28V, ZV-97-54, BA CASE 43-38N, SDP-93-67
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDINGS SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, VOLUME I OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- 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.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T100.
- BA-98-28V FOR A VARIANCE FROM REQUIREMENTS OF SECTION 130.8.2 TO REDUCE THE 50 FOOT SETBACK TO 45 FEET FOR A ONE STORY FRAME ADDITION AND TO 18 FEET FOR A SHED. ALSO SOUGHT WAS A REDUCTION FROM 30 FEET TO 5 FEET FOR PARKING AND LOADING. THE DECISION AND ORDER DATED NOVEMBER 10, 1998 GRANTED BOTH VARIANCE REQUESTS.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE BUILDERS GRADING PERMIT IN THE AMOUNT OF \$1,450,000.
- THIS PROJECT IS EXEMPT FROM THE HOWARD COUNTY FOREST CONSERVATION REQUIREMENTS BECAUSE THE PROJECT SIZE IS LESS THAN 40,000 SF BASED ON SECTION 16.120E(1)(X) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- PROPOSED OUTDOOR LIGHTING IS TO BE IN ACCORDANCE WITH ZONING SECTION 124. FULL OUT-CUT FIXTURES WILL BE USED.

**GENERAL NOTES CONTINUED**

- ZV-97-54: ZONING VIOLATIONS - MADE IMPROVEMENTS ON PROPERTY WITHOUT A SITE DEVELOPMENT PLAN
- BA-93-38N: CONFIRMATION OF A NONCONFORMING USE (SECTION 124) FOR THE PARKING AND THE LOADING, UNLOADING AND STORAGE OF INDUSTRIAL WAREHOUSE BUILDING MATERIALS WITHIN THE REQUIRED 50' SETBACK FROM A PUBLIC STREET RIGHT-OF-WAY [SECTION 124(D)(2)(a)(1)]. CASE WAS DENIED ON NOVEMBER 17, 1995. PETITION WAS WITHDRAWN ON NOVEMBER 21, 1996.
- SDP-93-67: FOR AS-BUILT CONDITION NO RECORD OF SDP BEING SIGNED/APPROVED.

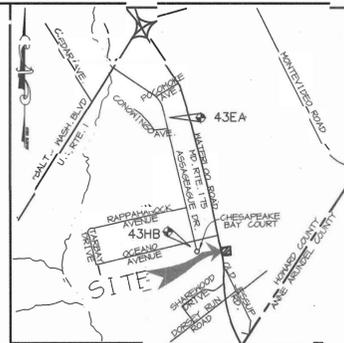
**DEVELOPER'S/BUILDER'S CERTIFICATE:**

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, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

*[Signature]*  
DEVELOPER

**SITE DEVELOPMENT PLAN**

**WATERLOO ROAD, MD. RT. 175  
PARCEL 434  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND**



**VICINITY MAP**  
SCALE: 1" = 2000'

**BENCH MARKS**

HOWARD COUNTY SURVEY CONTROL  
STANDARD DISC ON CONCRETE MONUMENT  
STATION: 43EA  
N 546,593.9961 E 1,373,621.7498  
ELEV. 242.94

HOWARD COUNTY SURVEY CONTROL  
STANDARD DISC ON CONCRETE MONUMENT  
STATION: 43HB  
N 547,166.7654 E 1,374,425.0369  
ELEV. 252.56

**PURPOSE STATEMENT:**  
THE PURPOSE OF THIS PLAN IS TO DEFINE THE ACCESS TO THE STATE HIGHWAY AND TO DEFINE THE CURRENT ON-SITE PARKING.

**SITE TABULATION**

SITE AREA	0.6580 ACRES (28,663 SF)
LIMIT OF DISTURBANCE AREA	0.0919 ACRES
PRESENT ZONING	M-2
EXISTING & PROPOSED USE	OFFICE/BUILDING MATERIALS WHOLESALE AND DISPLAY
FLOOR SPACE:	
TOTAL SF OF 2 STORY BUILDING (EX. 1171)	4014 SF
SF OFFICE	4404 SF
SF RETAIL	500 SF
BUILDING COVERAGE	70.21% OF SITE
NO. OF PARKING REQUIRED FOR OFFICE @ 3.3 SPACES/1000'	5 SPACES
NO. OF PARKING REQUIRED FOR RETAIL @ 5 SPACES/1000'	2 SPACES
TOTAL OF SPACES REQUIRED	7 SPACES
NO. OF PARKING SPACES PROVIDED	17 INCL. 4 HC
*PER HOWARD COUNTY ZONING REGULATIONS, SECTION 133	
PREVIOUS FILE NUMBERS: BA-98-28V, ZV-97-54, BA CASE 43-38N, SDP-93-67	

**PLANT LIST**

KEY	QTY	BOTANICAL + COMMON NAME	SIZE	ROOT	SPACING
<b>MAJOR DECIDUOUS TREES</b>					
*AR	3	Acer rubrum 'Red Sunset' Red Sunset Maple	2 1/2" Cal. (12'-14' Ht.)	B & B	Space as shown
<b>SHRUBS</b>					
EA	0	Juniperus alata 'Compacta' Dwarf Burning Bush	(30"-36" Ht.)	B & B	Plant 4' o.c.
TB	16	Toxicaria heptandens English Weeping Yew	(24"-30" Ht.)	B & B	Plant 3' o.c.

\* EXISTING TREE IS IN POOR CONDITION AND IS TO BE REPLACED BY (I) RED MAPLE.

**SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING**

PARKING LOT	
NUMBER OF PARKING SPACES	20
NUMBER OF SHADE TREES REQUIRED (1/20 SPACES)	1
NUMBER OF TREES PROVIDED	-
SHADE TREES	-
OTHER TREES (2:1 SUBSTITUTION)	-
NUMBER OF ISLANDS PROVIDED	1

**SCHEDULE A - PERIMETER LANDSCAPE EDGE:**

PERIMETER	ADJACENT TO ROADWAYS	
	1	2
LANDSCAPE TYPE	E	B
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	±120'	±25'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	(2) 8" SPRUCE (1) 8" RED MAPLE
CREDIT FOR DRIVE AISLE	YES 50'	NO
LINEAR FEET REMAINING	±70'	±25'
NUMBER OF PLANTS REQUIRED		
SHADE TREES	2	-
EVERGREEN TREES	-	-
SHRUBS	10	-
NUMBER OF PLANTS PROVIDED		
SHADE TREES	2	-
EVERGREEN TREES	-	-
FLOWERING TREES	-	N/A
SHRUBS	24	-

**SCHEDULE 'A' NOTES:**

CREDIT TAKEN FOR EXISTING TREES AS PER PAGE 16 OF THE HOWARD COUNTY LANDSCAPE MANUAL.

**SCHEDULE 'A' SUBSTITUTION NOTES:**

PERIMETER 1 - (6) SHRUBS WERE SUBSTITUTED FOR (0.5) SHADE TREES.

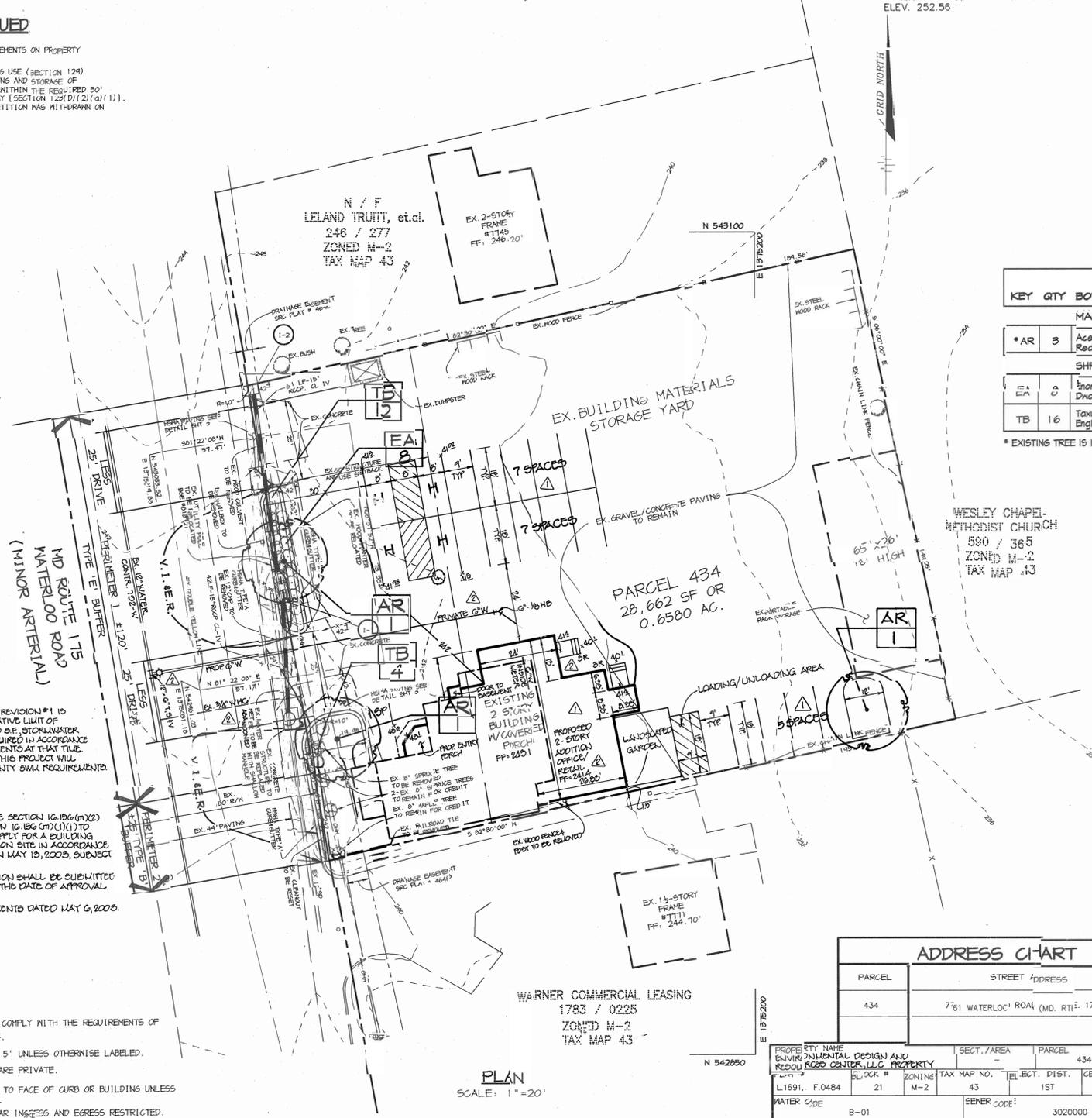
NOTE: LIMIT OF DISTURBANCE FOR REVISION #1 IS 4,400 SF. CUMULATIVE LIMIT OF DISTURBANCE EXCEED 5,000 SF. STORMWATER MANAGEMENT SHALL BE REQUIRED IN ACCORDANCE WITH THE DESIGN REQUIREMENTS AT THAT TIME. SUBSEQUENT PHASES FOR THIS PROJECT WILL ADDRESS THE CURRENT COUNTY SWM REQUIREMENTS.

**WP-02-1091 - A REQUEST TO WAIVE SECTION 16.120E(1)(2) TO REACTIVATE SDP-01-36 AND SECTION 16.150C(1)(1) TO GRANT A ONE YEAR EXTENSION TO APPLY FOR A BUILDING PERMIT TO INITIATE CONSTRUCTION ON SITE IN ACCORDANCE WITH SDP-01-36 WAS APPROVED ON MAY 19, 2005, SUBJECT TO THE FOLLOWING CONDITIONS:**

- THE BUILDING PERMIT APPLICATION SHALL BE SUBMITTED TO DPLP WITHIN ONE YEAR OF THE DATE OF APPROVAL OF WAIVER.
- COMPLIANCE WITH OHA COMMENTS DATED MAY 9, 2005.

**NOTES:**

- ALL LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.
- ALL CURB RADIUS ARE 5' UNLESS OTHERWISE LABELED.
- ALL ON SITE ROADS ARE PRIVATE.
- ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE LABELED.
- V.I.E.R. - VEHICULAR INGRESS AND EGRESS RESTRICTED.



WESLEY CHAPEL  
METHODIST CHURCH  
580 / 365  
ZONED M-2  
TAX MAP .43

WARNER COMMERCIAL LEASING  
1783 / 0225  
ZONED M-2  
TAX MAP 43

**PLAN**  
SCALE: 1" = 20'

**ADDRESS CHART**

PARCEL	STREET ADDRESS
434	761 WATERLOO ROAD (MD. RT. 175)

PROPERTY NAME	ENVIRONMENTAL DESIGN AND RESOURCES CENTER, LLC PROPERTY
BLK	21
LOT	43
SEWER CODE	3020000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*[Signature]*  
DIRECTOR DATE 4/26/05

*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 4/21/05

*[Signature]*  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE 4/21/05

DATE NO. REVISION

OWNER / DEVELOPER:  
ENVIRONMENTAL DESIGN AND RESOURCES CENTER, LLC  
182 N. BLADES LANE  
GLEN BURKIE, MARYLAND 21060

PROJECT: ENVIRONMENTAL DESIGN AND RESOURCES CENTER (FORMERLY AMERICAN BUILDING PRODUCTS)  
WATERLOO ROAD, MD ROUTE 175  
BUILDING AND PARKING AREAS

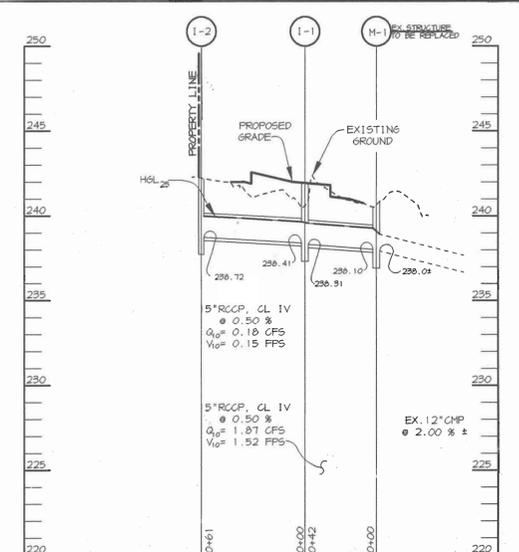
AREA: Tax Map 43 Block 21 Parcel 434  
L. 1691, F. 0484 Zoned M-2  
1st Election District, Howard County, Maryland

**SITE DEVELOPMENT PLAN**

**RIEMER MUEGGE & ASSOCIATES INC.**  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, MD 21045  
tel 410.997.8900 fax 410.997.9282

DATE	DESIGNED BY: CJR
	DRAWN BY: K.E.V.
	PROJECT NO: 99239/ SDP1.DWG
	DATE: APRIL 5, 2001
	SCALE: AS SHOWN
	DRAWING NO. 1 OF 3

SDP-01-38

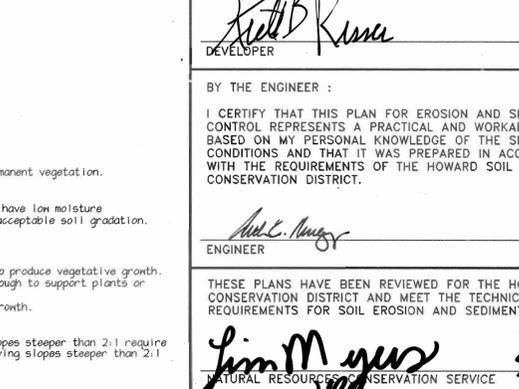
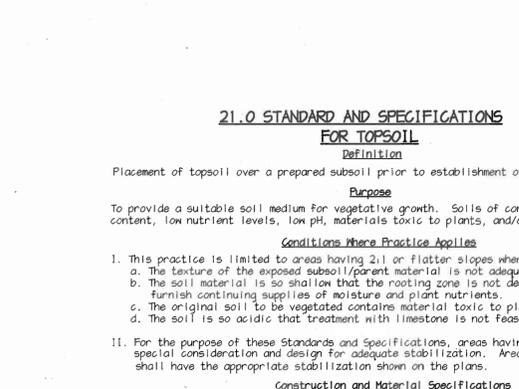
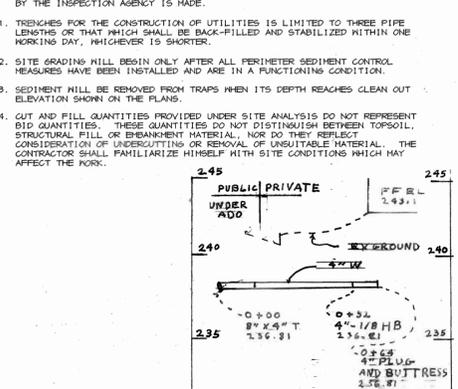
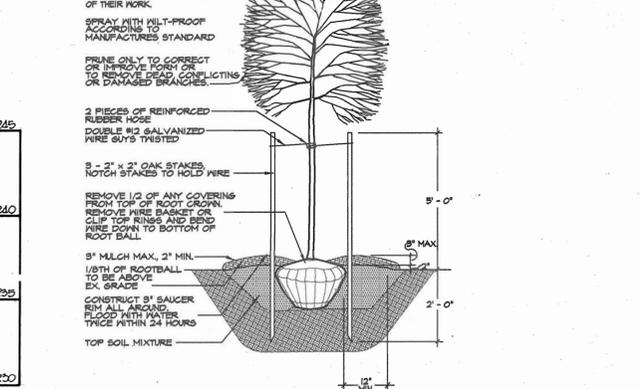
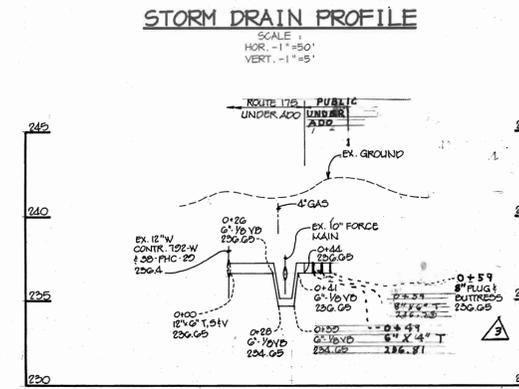


- ### SEQUENCE OF CONSTRUCTION
- OBTAIN A GRADING PERMIT.
  - INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE (2 DAYS).
  - UPON PERMISSION OF HO. CO. DILP SEDIMENT CONTROL INSPECTOR, BEGIN ROUGH GRADING AND BUILDING CONSTRUCTION. INSTALL STORM DRAINS AS SOON AS SUBGRADE ELEVATIONS ARE ESTABLISHED.
  - COMPLETE STORM DRAIN INSTALLATION (1 WEEK).
  - INSTALL CURB AND GUTTER THEN PAVE (1 WEEK).
  - INSTALL LANDSCAPING. (1 DAY)
  - COMPLETE ALL REMAINING CONSTRUCTION AND UPON APPROVAL OF THE HO. CO. DILP SEDIMENT CONTROL INSPECTOR, REMOVE REMAINING SEDIMENT CONTROLS AND STABILIZE IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES. (2 WEEKS)

- ### STANDARD SEDIMENT CONTROL NOTES
- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (319-1855).
  - ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1984 HARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
  - FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, PILES, PERIMETER SLOPES, AND ALL SLOPES STEEPER 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 THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
  - ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1984 HARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOIL TEMPORARY SEEDING, AND MULCHING (SEC. 6.). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN THE 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: 0.6580 ACRES
    - AREA DISTURBED: 0.0418 ACRES
    - AREA TO BE ROOFED OR PAVED: 0.0928 ACRES
    - AREA TO BE VEGETATIVELY STABILIZED: 0.0296 ACRES
    - TOTAL CUT: 300 CU. YARDS
    - TOTAL FILL: 300 CU. YARDS
    - OPPOSITE WASTE/DORRON AREA LOCATION
  - 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 CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY 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 THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
  - SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
  - SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
  - 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, REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.

- ### PERMANENT SEEDING NOTES
- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeded 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 one of the following schedules:
- Preferred - Apply 2 tons per acre dolomitic limestone (42 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 before seeding. Apply 400 lbs. per acre 30-0-0 ureaform fertilizer (4 lbs. per 1000 sq. ft.).
  - Acceptable - Apply 2 tons per acre dolomitic limestone (42 lbs. per 1000 sq. ft.) and 1000 lbs. per acre 10-10-10 fertilizer (28 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 31, seed with 60 lbs. per acre (1.4 lbs. per 1000 sq. ft.) of Kentucky 91 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 91 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 options:
- 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.
  - Use sod.
  - Seed with 60 lbs. per acre Kentucky 91 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 210 gal. per acre (5 gal. per 1000 sq. ft.) of emulsified asphalt on flat areas. On slopes, 5 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq. ft.) for anchoring.
- Refer to the 1984 HARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rates and methods not covered.

- ### TEMPORARY SEEDING NOTES
- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seeded 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. per 1000 sq. ft.).
- Seeding** - For the period March 1 thru April 30 and from August 1 thru November 15, seed with 2-1/2 bushels per acre of annual ryegrass (3 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 210 gal. per acre (5 gal. per 1000 sq. ft.) of emulsified asphalt on flat areas. On slopes, 5 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq. ft.) for anchoring.
- Refer to the 1984 HARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rates and methods not covered.



### STRUCTURE SCHEDULE

STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
I-1	COS-10	* N 542992.58 E 1375054.46	238.41 (15")	238.31 (15")	242.0	MSHA STD. DETAIL MD-374.51
I-2	K INLET	* N 543052.87 E 1375047.91	-	238.72 (15")	242.4	MSHA STD. DETAIL MD-378.03
M-1	4" DIA.	* N 542452.65 E 1375058.74	238.10 (15")	238.00 (12")	240.5	MSHA STD. DETAIL MD-384.01

### 21.0 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.

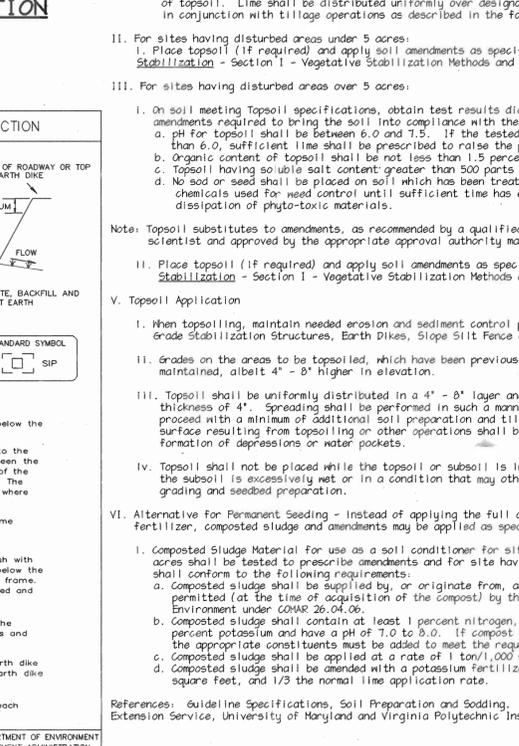
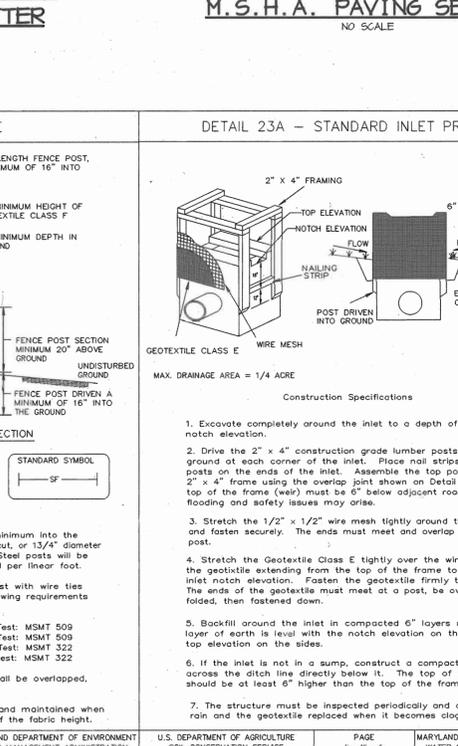
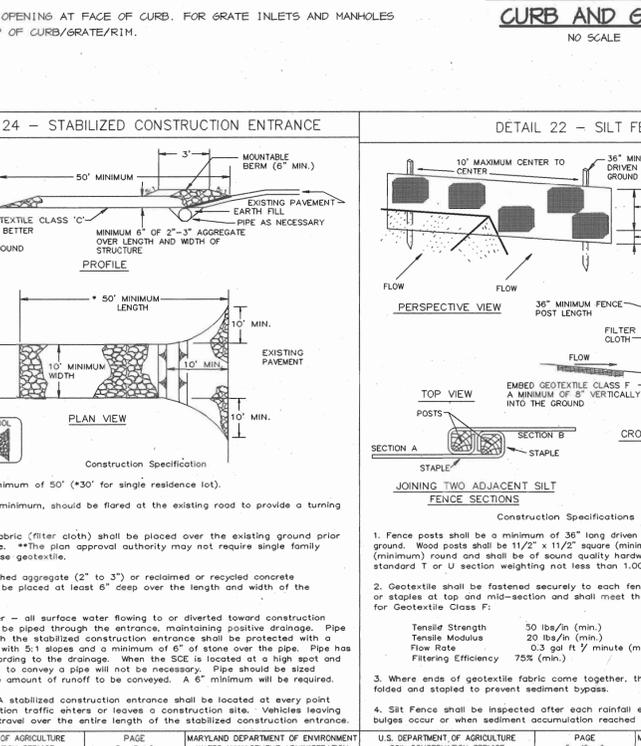
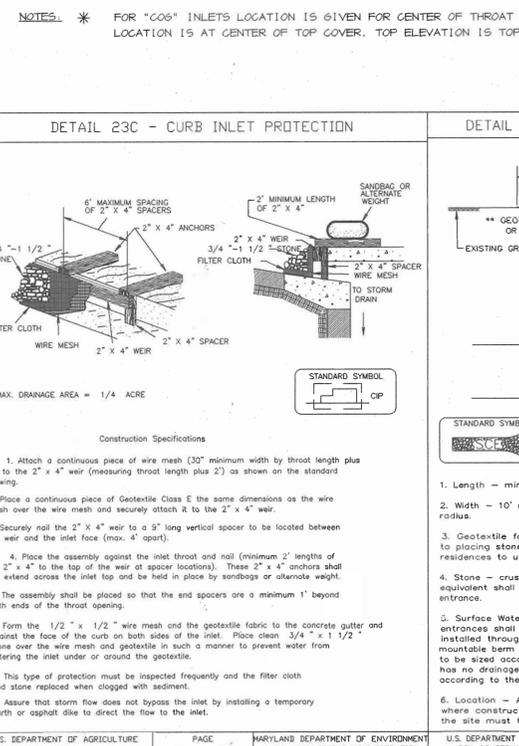
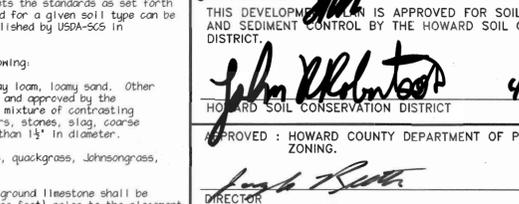
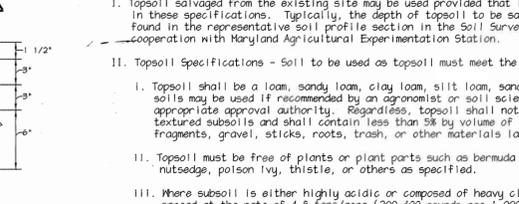
**Conditions Where Practice Applies**

- 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.
- 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.
- 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 an 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 cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
  - Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison Ivy, thistle, or others as specified.
  - Where 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 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:
  - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- 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 content greater than 500 parts per million shall not be used.
    - 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 phytotoxic 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.
  - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

### DETAIL 23C - CURB INLET PROTECTION



### PROFILES, DETAILS & NOTES

**OWNER / DEVELOPER**  
ENVIRONMENTAL DESIGN AND RESOURCES CENTER, LLC  
152 N. BLADES LANE  
GLEN BURNIE, MARYLAND 21060

**PROJECT ENVIRONMENTAL DESIGN AND RESOURCES CENTER (FORMERLY AMERICAN BUILDING PRODUCTS) WATERLOO ROAD, ROUTE 175 BUILDING AND PARKING ADDITIONS**

**AREA** Tax Map 43 Block 21 Parcel 434  
L 1691, F. 0484 Zoned M-2  
1st Election District, Howard County, Maryland

**TITLE**  
PROFILES, DETAILS & NOTES

**RIEMER MUEGG & ASSOCIATES INC.**  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, MD 21046  
tel 410.997.8800 fax 410.997.8282

**DATE**  
DESIGNED BY: CJR  
DRAWN BY: K.E.V.  
PROJECT NO.: 99239/SDF3.DWG  
DATE: APRIL 5, 2001  
SCALE: AS SHOWN  
DRAWING NO. 3 OF 3

**SHEET INDEX**

1	SITE DEVELOPMENT PLAN
2	GRADING, SEDIMENT CONTROL PLAN, DRAINAGE AREA MAP
3	PROFILES AND DETAIL SHEET

**GENERAL NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-251-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 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.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOCIATES, INC. DATED OCTOBER, 1994.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT NOS. 43EA AND 43HB WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 792 M
- SEWER IS PUBLIC. SEWER DRAINAGE AREA. DORSEY CONTRACT NO. 612 S
- NO STORMWATER MANAGEMENT FACILITIES ARE PROPOSED FOR THIS SITE.
- 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 AVAILABLE INFORMATION.
- NO 100-YEAR FLOODPLAIN STUDY HAS BEEN REQUIRED FOR THIS PROJECT.
- NO WETLANDS ARE VISIBLE ON THE SITE.
- NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
- NO NOISE STUDY FOR THIS PROJECT IS REQUIRED.
- NO GEOTECHNICAL STUDY HAS BEEN REQUIRED FOR THIS PROJECT.
- THE BOUNDARY FOR THIS PROJECT IS BASED ON CLARK FINEROCK & SACKETT PLANS, DATED OCTOBER 1999.
- SUBJECT PROPERTY ZONED M-2 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. BA-98-28V, ZV-87-54, BA CASE 93-38N, SDP-93-67
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6' OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDINGS SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE CONSTRUCTED TO A MINIMUM OF 95% COMPACTION OF ASPHALT T180.
- BA-98-28V FOR A VARIANCE FROM REQUIREMENTS OF SECTION 130.B.2 TO REDUCE THE 50 FOOT SETBACK TO 45 FEET FOR A ONE STORY FRAME ADDITION AND TO 15 FEET FOR A SHED. ALSO REQUEST WAS A REDUCTION FROM 30 FEET TO 5 FEET FOR PARKING AND LOADING. THE DECISION AND ORDER DATED NOVEMBER 10, 1998 GRANTED BOTH VARIANCE REQUESTS.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE BUILDERS GRADING PERMIT IN THE AMOUNT OF \$1,350.00.
- THIS PROJECT IS EXEMPT FROM THE HOWARD COUNTY FOREST CONSERVATION REQUIREMENTS BECAUSE THE PROJECT SITE IS LESS THAN 40,000 SQ. FT. BASED ON SECTION 16.180C(1)(X) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- PROPOSED OUTDOOR LIGHTING IS TO BE IN ACCORDANCE WITH ZONING SECTION 184. FULL CUT-OFF FIXTURES WILL BE USED.

**GENERAL NOTES CONTINUED**

- ZV-87-54: ZONING VIOLATIONS - MADE IMPROVEMENTS ON PROPERTY WITHOUT A SITE DEVELOPMENT PLAN.
- BA-93-38N: CONFIRMATION OF A NONCONFORMING USE (SECTION 129) FOR THE PARKING AND THE LOADING, UNLOADING AND STORAGE OF INDUSTRIAL WAREHOUSE BUILDING MATERIALS WITHIN THE REQUIRED 50' SETBACK FROM A PUBLIC STREET RIGHT-OF-WAY [SECTION 129(D)(2)(a)(1)]. CASE WAS DENIED ON NOVEMBER 17, 1995. PETITION WAS WITHDRAWN ON NOVEMBER 27, 1995.
- SDP-93-67: FOR AS-BUILT CONDITION NO RECORD OF SDP BEING SIGNED/APPROVED.

**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, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

*[Signature]*  
DEVELOPER

NOTE: 8" WATER MAIN, 4" AND 6" TAPS WITHIN PUBLIC WATER AND UTILITY EASEMENT TO BE CONSTRUCTED BY ON-SITE CONTRACTOR UNDER ADD AGREEMENT WITH COUNTY.

NOTE: 6" WATER WITHIN WD ROUTE 175 RIGHT OF WAY TO BE CONSTRUCTED UNDER ADD AGREEMENT BY HOWARD COUNTY.

NOTE: LIMIT OF DISTURBANCE FOR REVISION #1 IS 15' AND 0.5 AC. THE CUMULATIVE LIMIT OF DISTURBANCE EXCEED 5000 SQ. FT. STORMWATER MANAGEMENT SHALL BE REQUIRED IN ACCORDANCE WITH THE DESIGN REQUIREMENTS AT THAT TIME. SUBSEQUENT PHASES FOR THIS PROJECT WILL ADDRESS THE CURRENT COUNTY SWM REQUIREMENTS.

WP-02-109 - A REQUEST TO WAIVE SECTION 10.150 (M)(2) TO REACTIVATE SDP-01-20 AND SECTION 10.150 (M)(1)(1) TO GRANT A ONE YEAR EXTENSION TO APPLY FOR A BUILDING PERMIT TO INITIATE CONSTRUCTION ON SITE IN ACCORDANCE WITH SDP-01-20 WAS APPROVED ON MAY 18, 2000, SUBJECT TO THE FOLLOWING CONDITIONS:  
1. THE BUILDING PERMIT APPLICATION SHALL BE SUBMITTED TO DPLP WITHIN ONE YEAR OF THE DATE OF APPROVAL OF WAIVER.  
2. COMPLIANCE WITH OHA COMMENTS DATED MAY 9, 2000.

**NOTES:**

- ALL LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.
- ALL CURB RADI ARE 5' UNLESS OTHERWISE LABELED.
- ALL ON SITE ROADS ARE PRIVATE.
- ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE LABELED.
- V.I.E.R. - VEHICULAR INGRESS AND EGRESS RESTRICTED.

**SITE DEVELOPMENT PLAN**

**WATERLOO ROAD, MD. RT. 175  
PARCEL 434  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND**



**VICINITY MAP**  
SCALE: 1" = 2000'

**BENCH MARKS**

HOWARD COUNTY SURVEY CONTROL  
STANDARD DISC ON CONCRETE MONUMENT  
STATION: 43EA  
N 543,593.9961 E 1,373,621.7498  
ELEV. 242.94

HOWARD COUNTY SURVEY CONTROL  
STANDARD DISC ON CONCRETE MONUMENT  
STATION: 43HB  
N 543,166.7654 E 1,374,425.0369  
ELEV. 252.56

**PURPOSE STATEMENT:**  
THE PURPOSE OF THIS PLAN IS TO DEFINE THE ACCESS TO THE STATE HIGHWAY AND TO DEFINE THE CURRENT ON-SITE PARKING.

**SITE TABULATION**

SITE AREA	0.6580 ACRES (28,663 SF)
LIMIT OF DISTURBED AREA	0.2919 ACRES
PRESENT ZONING	M-2
EXISTING & PROPOSED USE	OFFICE/BUILDING, MATERIALS WHOLESALE AND DISPLAY
FLOOR SPACE:	
TOTAL SF OF 2 STORY BUILDING (EX. FROM)	4614 SF
SF OFFICE	4404 SF
SF RETAIL	210 SF
BUILDING COVERAGE	7.021% OF SITE
NO. OF PARKING REQUIRED FOR OFFICE @ 3.3 SPACES/1000'	6 SPACES
NO. OF PARKING REQUIRED FOR RETAIL @ 5 SPACES/1000'	2 SPACES
TOTAL OF SPACES REQUIRED	8 SPACES
NO. OF PARKING SPACES PROVIDED	30 INCL. 4 HC
*PER HOWARD COUNTY ZONING REGULATIONS, SECTION 133	
PREVIOUS FILE NUMBERS: BA-98-28V, ZV-87-54, BA CASE 93-38N, SDP-93-67	

**PLANT LIST**

KEY	QTY	BOTANICAL + COMMON NAME	SIZE	ROOT	SPACING
<b>MAJOR DECIDUOUS TREES</b>					
*AR	3	Acer rubrum Red Sunsh Red Sunsh Maple	2 1/2" Cal. (12"-14" Ht.)	B & B	Space as shown
<b>SHRUBS</b>					
EA	6	Enonymus alatus Comf. Camellia Dwarf burning bush	(30"-36" Ht.)	B & B or cont.	Plant 4' o.c.
TB	16	Yucca bacata 'repandens' English Mesquite Yucca	(24"-30" Ht.)	B & B or cont.	Plant 3' o.c.

\*EXISTING TREE IS IN POOR CONDITION AND IS TO BE REPLACED BY (1) RED MAPLE.

**SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING**

PARKING LOT	1
NUMBER OF PARKING SPACES	20
NUMBER OF SHADE TREES REQUIRED (1/20 SPACES)	1
NUMBER OF TREES PROVIDED	-
SHADE TREES (2:1 SUBSTITUTION)	-
NUMBER OF ISLANDS PROVIDED	1

**SCHEDULE A - PERIMETER LANDSCAPE EDGE**

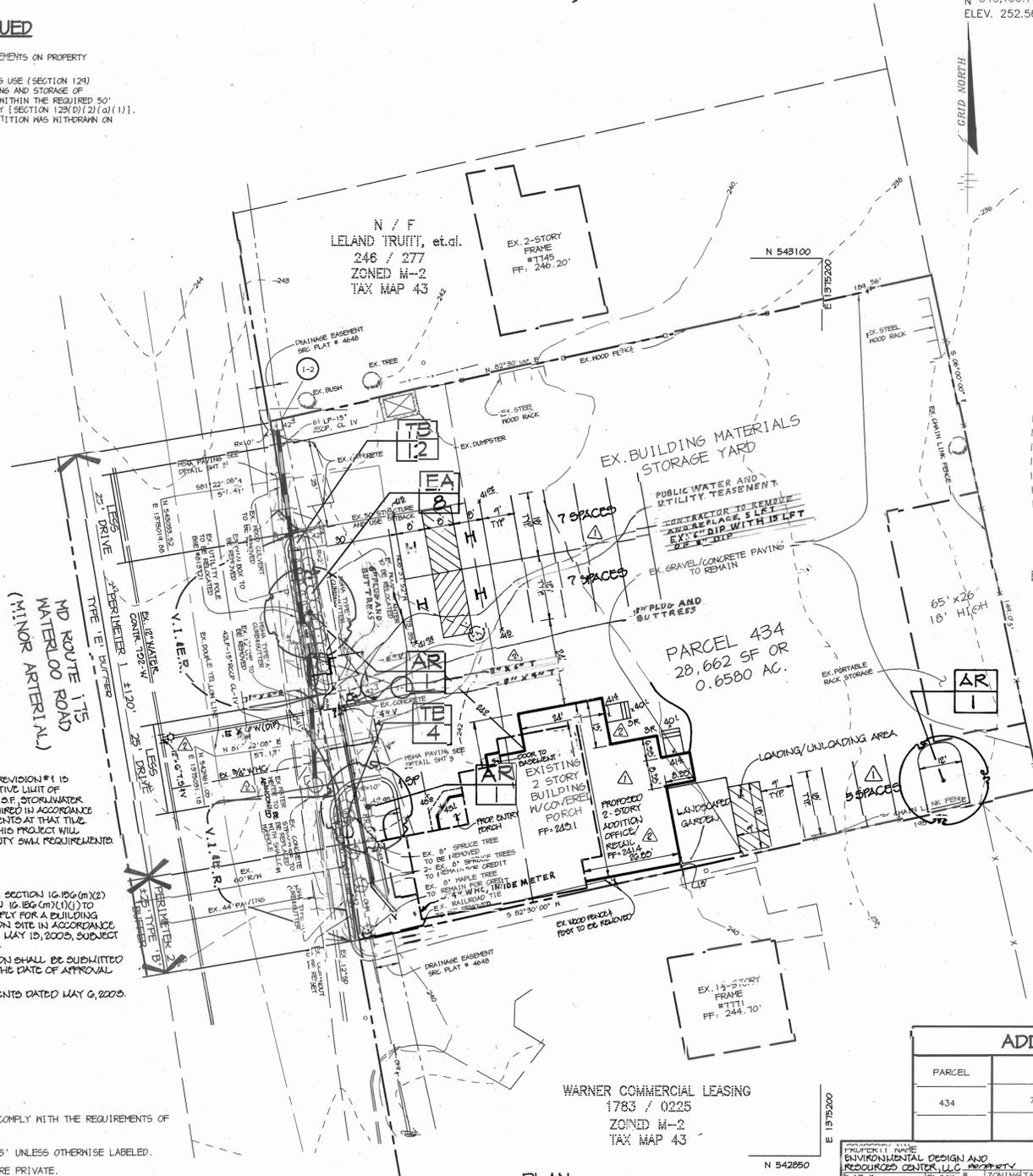
PERIMETER	ADJACENT TO ROADWAYS	
	1	2
LANDSCAPE TYPE	E	B
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	±120'	±25'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	(2) 8" SPRUCE (1) 8" RED MAPLE
CREDIT FOR DRIVE AISLE	YES 50'	NO
LINEAR FEET REMAINING	±70'	±25'
NUMBER OF PLANTS REQUIRED		
SHADE TREES	2	-
EVERGREEN TREES	10	-
SHRUBS	-	-
NUMBER OF PLANTS PROVIDED		
SHADE TREES	2	N/A
EVERGREEN TREES	-	-
SMALL FLOWERING TREES	24	-
SHRUBS	-	-

**SCHEDULE 'A' NOTES:**

\* CREDIT TAKEN FOR EXISTING TREES AS PER PAGE 16 OF THE HOWARD COUNTY LANDSCAPE MANUAL.

**SCHEDULE 'A' SUBSTITUTION NOTES:**

PERIMETER 1 - (6) SHRUBS WERE SUBSTITUTED FOR (0.5) SHADE TREES.



WESLEY CHAPEL  
METHODIST CHURCH  
580 / 365  
ZONED M-2  
TAX MAP 43

PARCEL 434  
28,662 SF OR  
0.6580 AC.

WARNER COMMERCIAL LEASING  
1783 / 0225  
ZONED M-2  
TAX MAP 43

**ADDRESS CHART**

PARCEL	STREET ADDRESS
434	7761 WATERLOO ROAD (MD. RTE. 175)

PROJECT NAME	ENVIRONMENTAL DESIGN AND RESOURCES CENTER, LLC	PARCEL	434
PLAT #	L1691, F.0484	ELECT. DIST.	1ST
BLOCK #	21	ZONING	M-2
TAX MAP NO.	43	CENSUS TRACT	6012
SEWER CODE	B-01	SEWER CODE	3020000

**RIEMER MUEGGE & ASSOCIATES INC.**  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, MD 21046  
tel 410.997.9900 fax 410.997.9282

DATE	DESIGNED BY: CJR
	DRAWN BY: K.E.V.
	PROJECT NO: 99259/SDP/DWG
	DATE: APRIL 5, 2001
	SCALE: AS SHOWN
	DRAWING NO. 1 OF 3