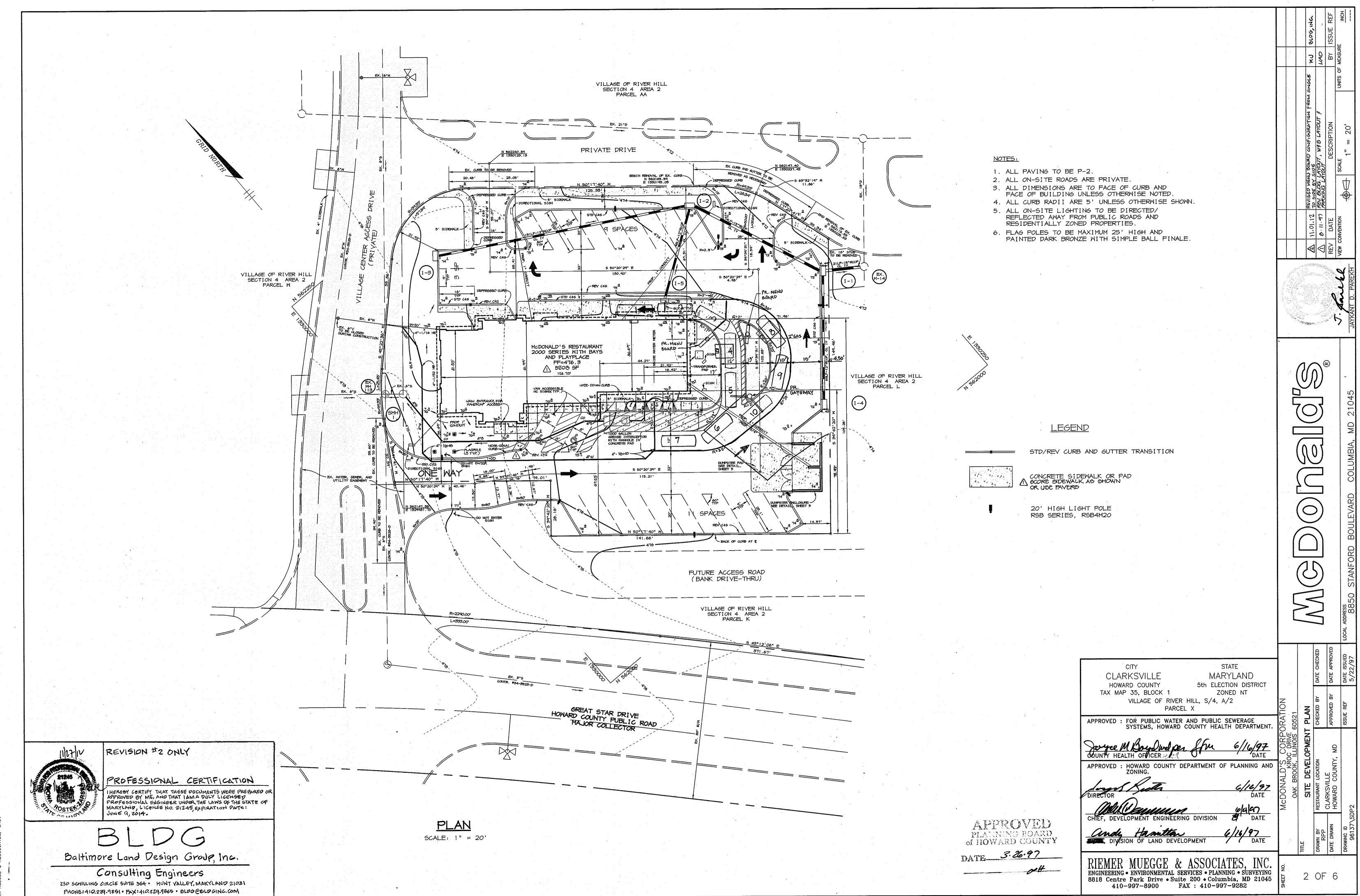
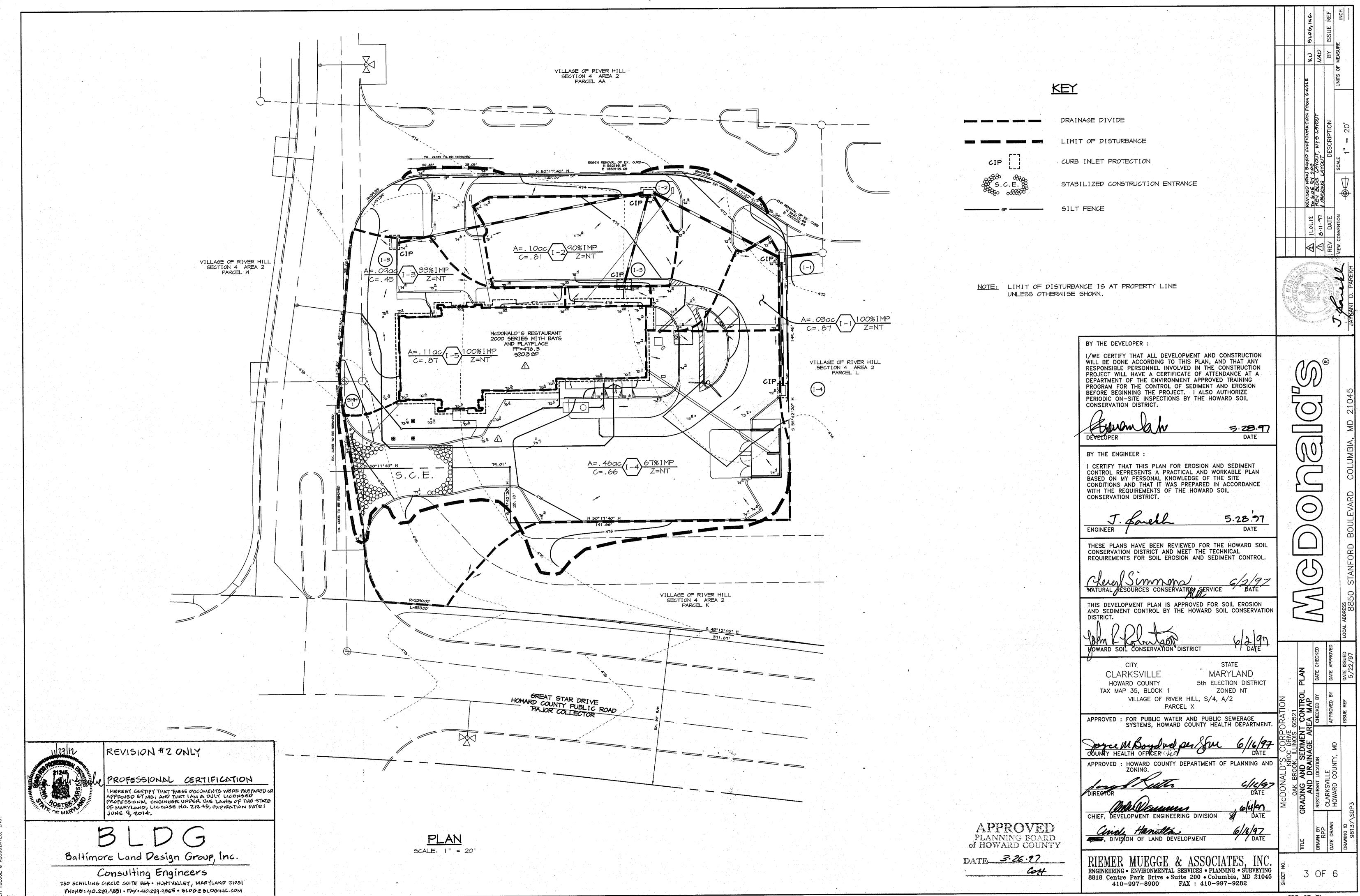


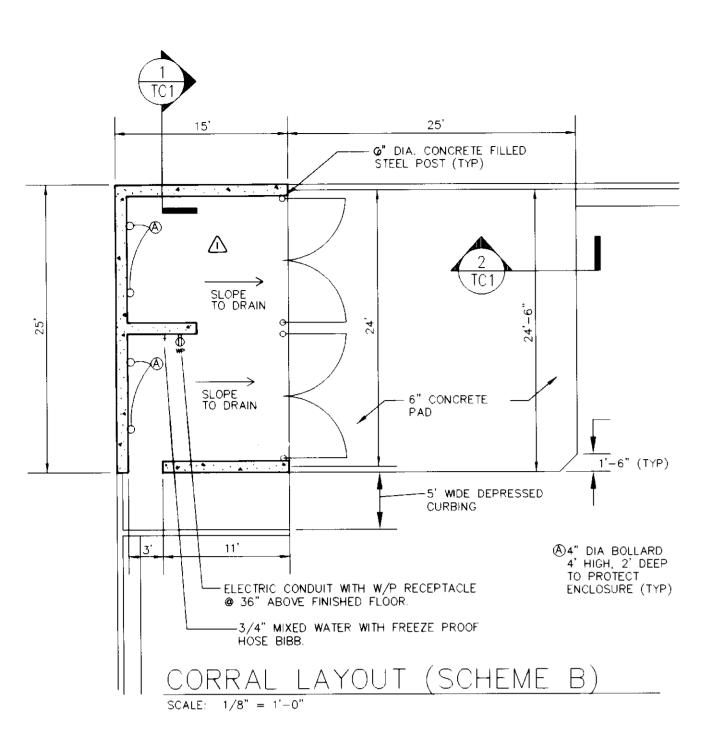
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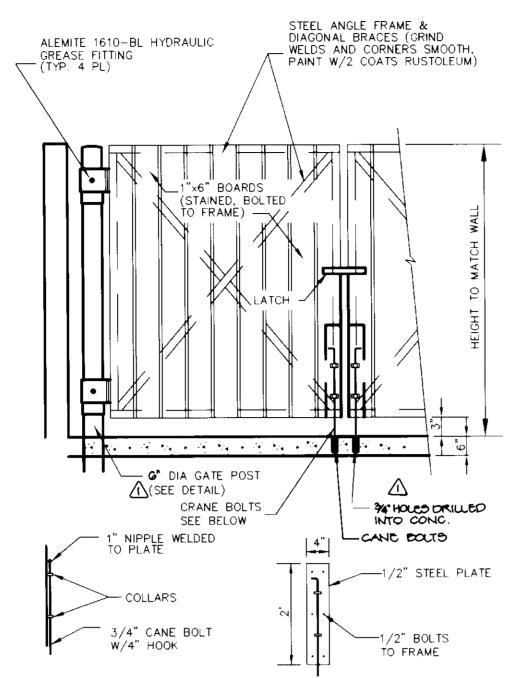
SDP-97.71

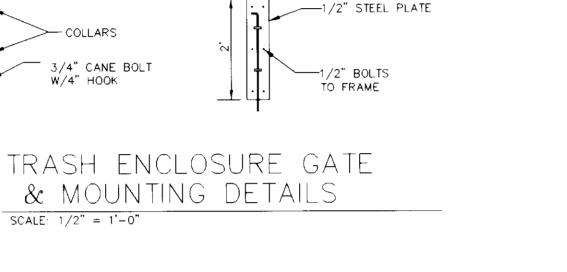
7/ SDP-97-71

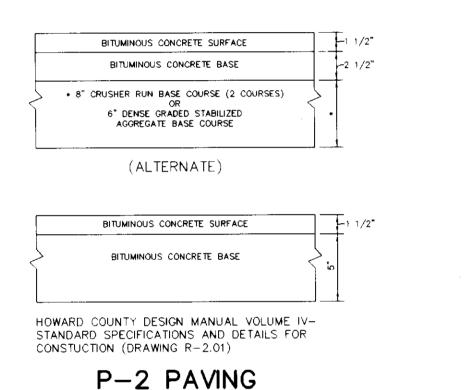










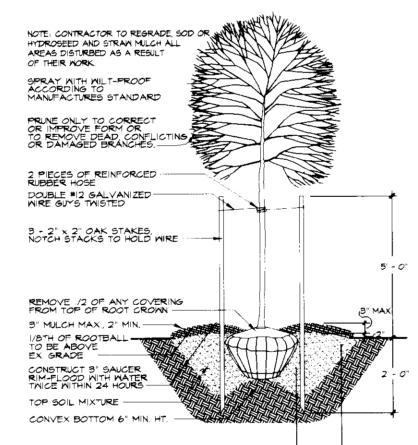




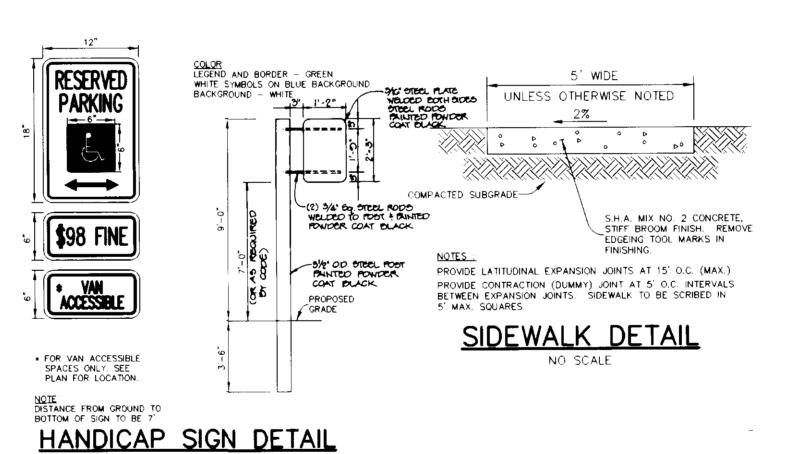
I. Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein.

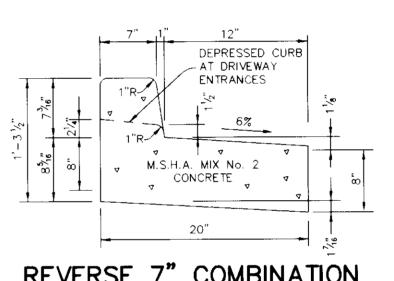
- 2. All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to American Association of Nurserymen (AAN) Standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, sunscald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak, or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug; no healed-in plants or plants from cold storage will be accepted.
- 3. Unless otherwise specified, all general conditions, planting operations, details and planting specification shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Areas", (hereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architect, latest edition, including all agenda.
- 4. Contractor shall be required to guarantee all plant material for a period of two years after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the two year specifications including watering and replacement of specified plant material.
- 5. Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.
- 6. Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence at the drip line.
- 7. Contractor is responsible for installing all material in the proper planting season for each plant type. Al planting is to be completed within growing season of completion of site construction.
- 8. Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.
- 9. Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plan take precedence.
- quantities shown on plan and those shown on the plant hat, the quantities on the plant take processing
- 10. All shrubs and groundcover areas shall be planted in continuous prepared planting beds mulched with composted hardwood mulch as detailed and specified except where noted on plans.
- 11. Positive drainage shall be maintained in planting beds (minimum 2 percent slope).
- 12. Planting mix shall be as follows: Deciduous Plants Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs of standard fertilizer per cubic yard of planting mix. Evergreen Plants - two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen (acidic) fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines.
- 13. Weed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its adaptability to the specific groundcover to be treated.
- 14. Mulch: Groundcover beds should be mulched with minimum 2 inches of shredded composted hardwood, or as specified on the details, whichever is greater.
- 15. All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded.
- 16. This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.

PLANTING DETAILS



TREE PLANTING DETAIL





HYDRAULIC GREASE FITTING DRILL AND TAP HOLE (TYP. 4 PLACES)

WELD BOTTOM COLLAR TO POST, BOLT TOP COLLAR

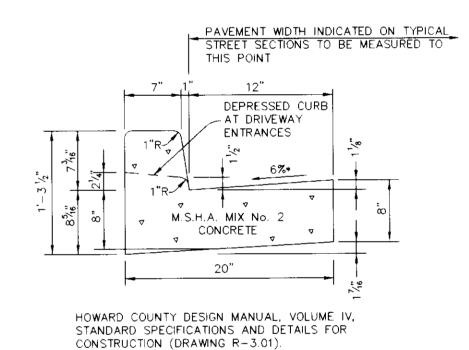
1'-6"

△TRASH ENCLOSURE

G" DIA. CONCRETE FILLED STEEL POST

POURED CONCRETE ---

REVERSE 7" COMBINATION
CURB AND GUTTER
NO SCALE



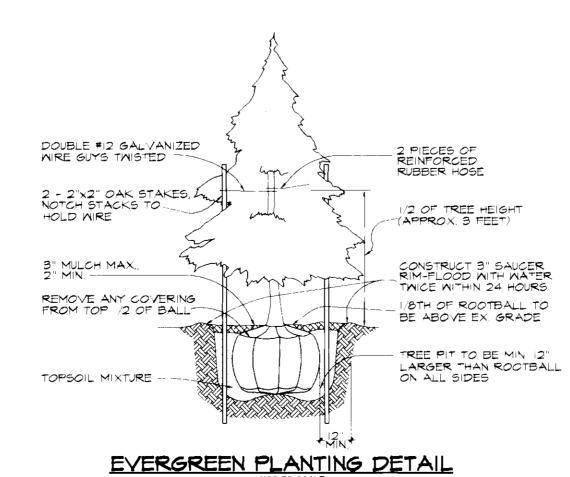
THICKENED SLAB AROUND PERIMETER OF APPROACH SLAB TO BE 3000 PSI

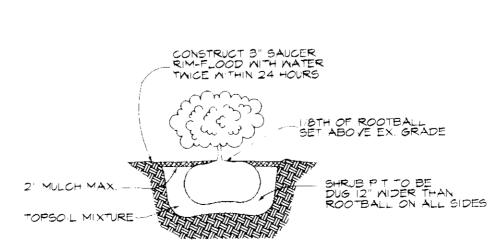
CONC. WITH FIBERMESH REINFORCING

OVER 6" COMPACTED GRAVEL BASE.

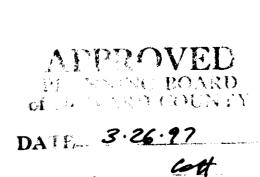
* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

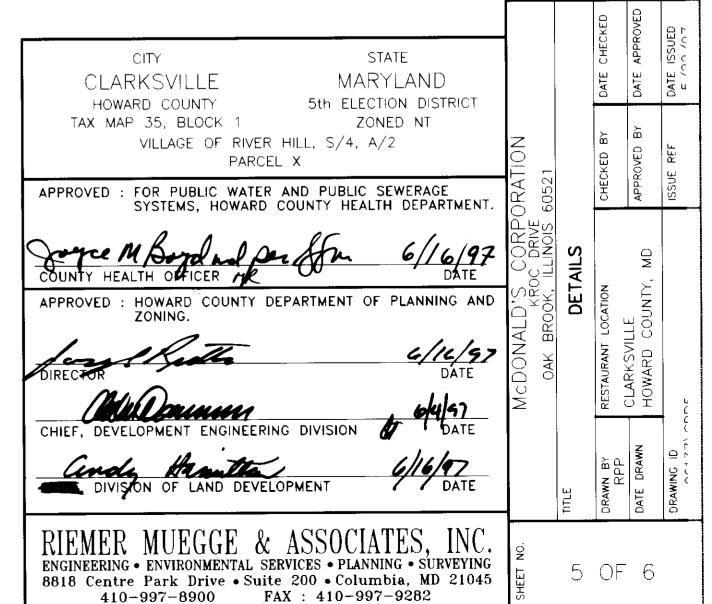
STANDARD 7" COMBINATION CURB AND GUTTER





SHRUB PLANTING DETAIL





SDP97.7/SDP-97-7

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

Soll Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 |bs. per |000 sq.ft.

Seeding : For periods March I 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 I 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 Fébruary 28, protect site by applying 2 tons per acre of well anchored stram mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per gare (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.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

PERMANENT SEEDING NOTES

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

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

<u> Soil Amendments : In lieu of soil test recommendations, use one of</u> 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 1bs. 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 1bs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the period March | 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 tans per acre of well-anchored mulch straw and seed as soon as possible in the spring.
- 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 reseedinas

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 FROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL, AND REVISIONS THERETO
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES 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 ALONG 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.

0.83 ACRES

0.92 ACRES

0.82 ACRES

0.10 ACRES

306 CU. YARDS

7. SITE ANALYSIS:

TOTAL AREA OF SITE AREA DISTURBED

AREA TO BE ROOFED OR PAVED AREA TO BE VEGETATIVELY STABILIZED TOTAL CUT

TOTAL FILL 846 CU. YARDS 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF

DISTURBANCE.

9. ADDITIONAL SEDIMENT 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 AREAS IN EXCESS OF 2 AC., 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 LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

BORROW SITE TO BE PRE-APPROVED BY THE SEDIMENT CONTROL INSPECTOR. OR IN CASE OF EXCESS MATERIAL, AN APPROVED SEDIMENT CONTROL PLAN WILL BE VEEDED TO DEPOSIT EXCESS OFF-SITE.

21.0 STANDARD AND SPECIFICATIONS

TOPSOIL

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

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

Conditions Where Practice Applies I. 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 soll 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 soll to be vegetated contains material toxic to plant growth.
- d. The soil is so acidic that treatment with limestone is not feasible.
- II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

i. Topsoll 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 solvaged 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.

[1. Topsoll Specifications - Soil to be used as topsoil must meet the following.

Topeol shall be a loam, sandy loam, clay loam, eilt loam, sandy clay loam, loamy sand. Other solls may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardiese, topsoil 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 1½° in diameter

ii. Topsoil must be free of plante or plant parts such as bermuda grass, quackgrass, Johnsongrass nutsedge, polson ivy, thistle, or others as specified.

Fil. 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 n conjunction with tillage operations as described in the following procedures.

For sites having disturbed areas under 5 acres:

1. Place topsoli (if required) and apply soll amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

III. For sites having disturbed areas over 5 acres:

- 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 topsoll 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 Topsoll 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 meed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

Note: Topsoll 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

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

. When topsoffing, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Slit Fence and Sediment Traps and Basins. 6 frades on the areas to be topsolled, which have been previously established, shall be

111. Topsoil shall be uniformly distributed in a 4° - 8° layer and lightly compacted to a minimum thickness of 4°. Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the

surface resulting from topsoiling or other operations shall be corrected in order to prevent the

- Iv. Topeoff shall not be placed while the topeoff or subsoil is in a frozen or muddy condition, when the subsoil is excessively met or in a condition that may othermise be detrimental to proper
- 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-

. Composted Sludge Material for use as a soli conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for site having disturbed areas under 5 acres 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
- b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 3.0. 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 1b/1,000

SEQUENCE OF CONSTRUCTION

2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SILT FENCE. (| DAY)

4. AS SUBGRADE ELEVATIONS ARE ESTABLISHED, INSTALL STORM DRAINS, WATER

AND SEWER UTILITIES. PROVIDE INLET PROTECTION AS SHOWN. (10 DAYS)

7. STABILIZE DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING

9. UPON APPROVAL OF THE HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR,

REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE ALL REMAINING AREAS

3. ROUGH GRADE SITE AND BEGIN BUILDING CONSTRUCTION. (5 DAYS)

8. INSTALL LIGHTS, LANDSCAPING AND SIGNS AS REQUIRED. (5 DAYS)

IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES. (2 DAYS)

5. INSTALL CURB AND GUTTER AND PAVE ROADWAYS. (20 DAYS)

References: Guideline Specifications, Soil Preparation and Sodding. MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1975.

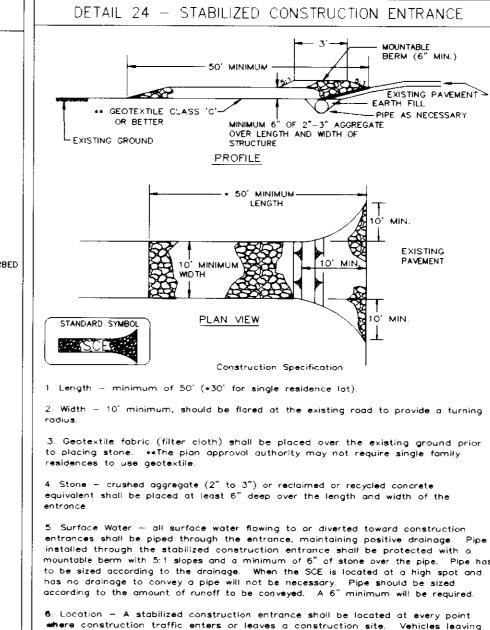
square feet, and 1/3 the normal lime application rate.

1. OBTAIN GRADING PERMIT

6. FINE GRADE SITE. (5 DAYS)

NOTES, (1 DAY)

DETAIL 22 - SILT FENCE 6" MINIMUM LENGTH FENCE POST 10' MAXIMUM CENTER TO DRIVEN A MINIMUM OF 16" INTO -16" MINIMUM HEIGHT OF - 8" MINIMUM DEPTH IN PERSPECTIVE VIEW - FENCE POST SECTION GROUND A MINIMUM OF 8" VERTICALLY_ INTO THE GROUND - FENCE POST DRIVEN A ____T THE GROUND CROSS SECTION STANDARD SYMBOL SF ----JOINING TWO ADJACENT SILT FENCE SECTIONS 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 foot. 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 Tensile Strength 50 lbs/in (min.) Test. MSMT 509 Tensile Modulus 20 lbs/in (min.) Test: MSMT 509 Flow Rate 0.3 gal ft ½ minute (max.) Test: MSMT 322 Filtering Efficiency 75% (min.) Test: MSMT 322 3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass. 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. U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

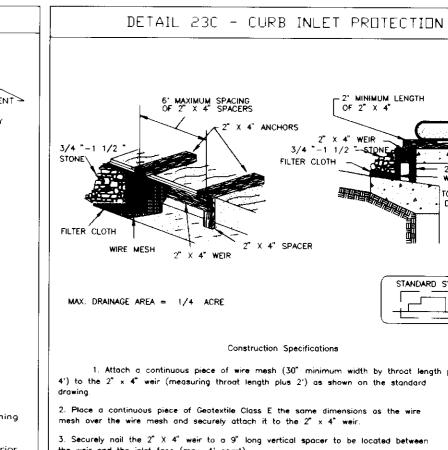


the site must travel over the entire length of the stabilized construction entrance.

WATER MANAGEMENT ADMINISTRATION

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE



1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4') to the 2" \times 4" weir (measuring throat length plus 2') as shown on the standard

3. Securely noil the $2'' \times 4''$ weir to σ 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 $2'' \times 4''$ to the top of the weir at spacer locations). These $2'' \times 4''$ anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

5. The assembly shall be placed so that the end spacers are a minimum 1' beyond 6. Form the 1/2 " \times 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 injet under or around the geotextile. 7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

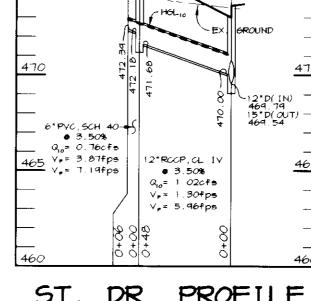
8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE E + 16 - 5B WATER MANAGEMENT ADMINISTRATION

-EXISTING GROUND 475 PROPOSED GRADE 12*D 468.62~ J. 470 12"RCCP, CL IV 15" RCCP, CL IV 0 1.00% Q₁₀= 0.43cfs e 1.58% Q10= 1.79cfg Vp= 0.55fps V_F= 1.46fp≤ V= 2.97fps V,= 5.07fps 15"RCCP.CL [V -1 00% Q = 4.29cfs V,= 3.50fps V_p= 5.27fps

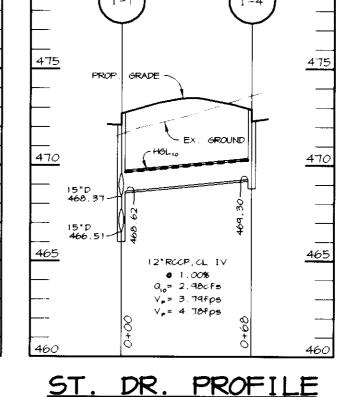
STORM DRAIN PROFILE SCALE : HOR . - 1 " =50"

VERT. -1" =5'



FF=476.

ST. DR. PROFILE HOR. -1"=50" VERT, -1"=5'



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

STRUCTURE SCHEDULE

TRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
I-1	A-5	N 562,091.22 E 1,330,215.81	468.62(12") 468.37(15")	466.51	473.2	HOCO. STD. DETAIL SD 4.01
I-2	A-5	N 562, 157.76 E 1,330, 185.70	470.00(12") 469.79(12")	469.54	473.6	HOCO. STD. DETAIL SD 4.01
1-3	A-5	N 562, 221.57 E 1,330,013.33	-	471.10	474.7	HOCO. STD. DETAIL SD 4.01
1-4	A-5	N 562,034.06 E 1,330,172.57	-	469.30	473.4	HOCO. STD. DETAIL SD 4.01
1-5	S COMB.	N 562,130.63 E 1,330,146.34	472.18	471.68	476.35	HOCO. STD. DETAIL SD 4.32
SMH-1	4' MH	N 562, 179.70 E 1,330,014.35	469.06	464.49	477.2	HOCO. STD. DETAIL 6 5.01

3.26.97 -EXISTING GROUND -EXISTING GROUND Building PP- 470.5 BUILDING FF=476.3 PROPOSED GRADE PROPOSED GRADE 475 475 4-16-16 1+01 4"-16HD GREASE ! 470.0 SEE ARCH DWGD 472.4 CONTRACTOR TO FIELD VERIEY LOCATION AND DEPTH OF EXISTING WATER MAIN. NOTIFY ENGINEER IMMEDIATELY IF DIFFERENT THAN SHOWN 34.3528.0 CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF EXISTING SEWER. NOTIFY ENGINEER IMMEDIATELY IF DIFFERENT THAN SHOWN.

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

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

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.

5.28.9

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.

HOWARD COUNTY

5.28.97 DATE

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

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

CITY STATE CLARKSVILLE MARYLAND

TAX MAP 35, BLOCK 1 ZONED NT VILLAGE OF RIVER HILL, S/4, A/2 PARCEL X

5th ELECTION DISTRICT

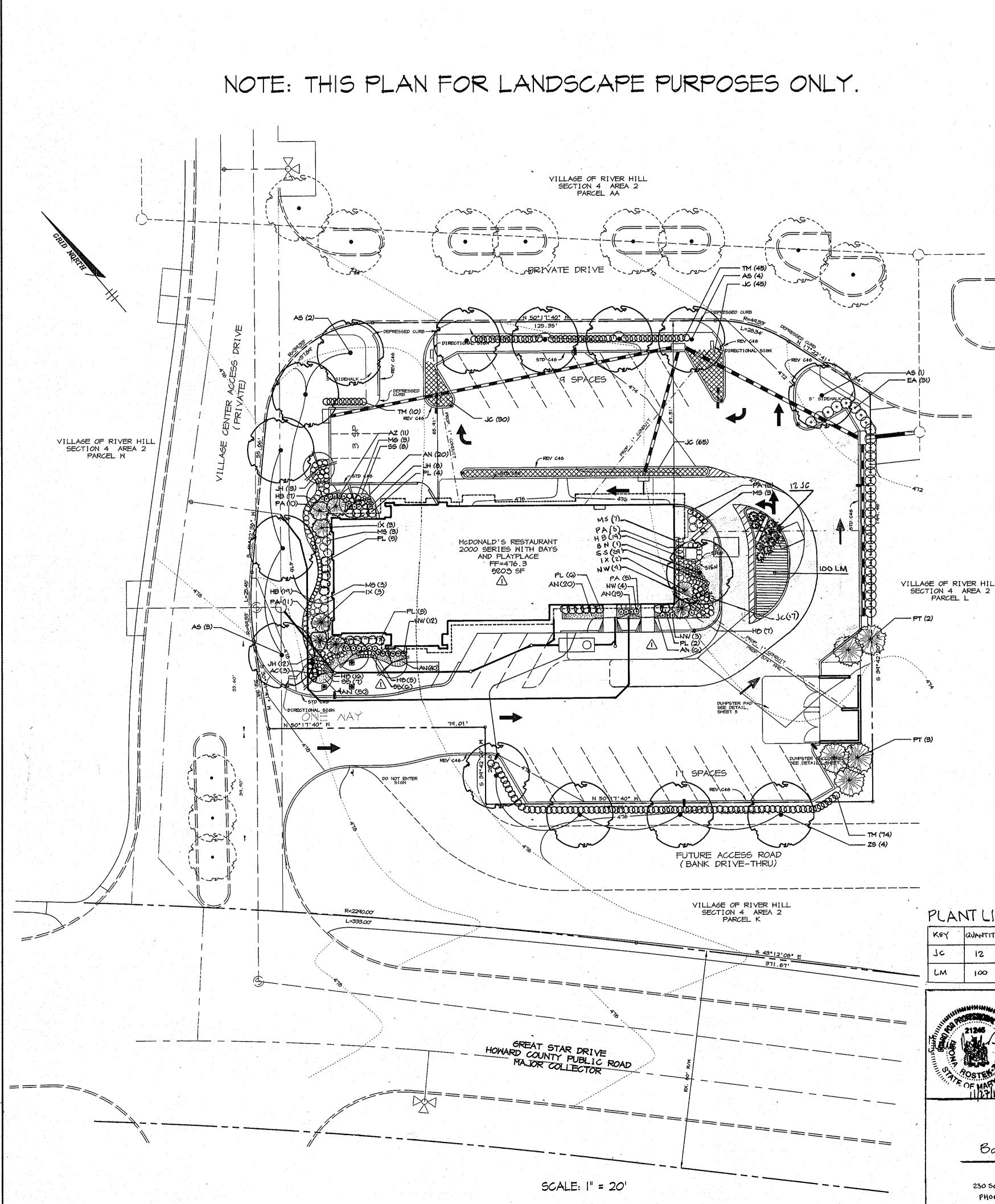
APPROVED : FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND

DEVELOPMENT ENGINEERING DIVISION DIVISION OF LAND DEVELOPMENT

ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-997-8900 FAX: 410-997-9282

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ALTERNATIVE COMPLIANCE REQUIRED

COMMERCIAL O - 3 ACRES 30 SHADE TREES PER GROSS ACRE - UNMOODED 0.83 ACRES X 30 SHADE S.T.E./ACRE = 24.9 S.T.E. (HRD REQUIRD SHADE TREE EQUIVALENTS, S.T.E.) = 25

PROVIDED: 5.1.E.	PLANIED	9.1.E.	
Each Shade Tree = 1 S.T.E. Each Evergreen Tree = 0.5 S.T.E.	(15) (13)	15 6.5	
Each Flowering Tree = 0.5 S.T.E.	(ד)	3.5	
SUBTOTAL	1b	<u>25.0</u>	
CREDIT FOR EXISTING STREET TRE (EACH CREDITED SHADE TREE =		0	
			_

SCHEDULE A - PERIMETER LANDSCAPE EDGE REQUIREMENTS FOR THE THE REGULATION DO NOT REQUIRE LANDSCAPE EDGES, BUFFERING, OR SCREENING BETWEEN INTERNAL LOTS OR PARCELS WITHIN THE SAME DEVELOPMENT. THEREFORE, SCHEDULE A IS NOT APPLICABLE FOR THIS PROJECT.

SCHEDULE B PARKING LOT INTERNAL LANDSCA	PING
NUMBER OF PARKING SPACES	25 ⚠
NUMBER OF ISLANDS REQUIRED (I ISLAND/ 20 SPACES)	1.8
NUMBER OF ISLANDS PROVIDED	4
NUMBER OF SHADE TREES REQUIRED @ S.T./20 SPACES	1.8
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	2 5

NOTES: "THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE

"FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$ 200.00

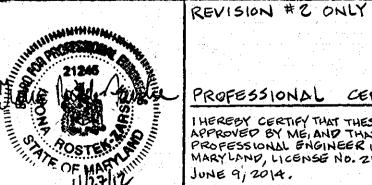
NOTE: SEE SHEET 5 OF 6 FOR PLANTING DETAILS AND SPECIFICATIONS.

PLANT MATERIAL LIST

KEY	QTY	BOTANICAL + COMMON NAME	SIZE	ROOT	REMARKS
		SHADE TREES			
AS	10	Acer Saccharum 'Legacy' Legacy Sugar Maple	3"-3 ^b "Cal. 14'-16' Ht.	B 4 B	Full Crown
BN	Ì	Betula niara 'Heritage' Heritage River Birch	3"-3 ⁵ "Cal. 14'-16' Ht.	B 4 B	Multi-stemmed Full Crown
zs	4	Zelkova serrata Village Green' Village Green Zelkova	3"-3½ "Cal. 14'-16' Ht.	B 4 B	Full Crown
		FLOWERING TRE	ES		
1 AC	6	Amelanchier laevis	2"-21/2"Cal.	BeB	Kulti-etemmed
	V 1.	Allegheny Serviceberry	8'-10'Ht.		Full Crown
		مرجعت المعتملات الاحتمال المعتملات			
	<u></u> .	EVERGREEN TRE			
PT	5	Pinus thunbergiana Japanese Black Pine	8'-10' Ht.	B # B	Full Form
IX,	8	ilex X 'San Jose' San Jose Holly	6'-7' Ht.	B 4 B	Full Form
		SHRUBS			
AZ	11	Azalea X 'Pleasant Valley White' Pleasant Valley White Azalea	18"-24" Sp.	B # B/ Cont.	36" O.C.
EA	31	Evonymus alatus 'compacta' Dwarf Burning Bush	2'-3' Ht.	B # B	36" O.C.
JC /	157	Juniperus chinensis 'Sargentii' Sargents Juniper	12" -18" Sp.	Cont.	18" O.C.
JH C	33	Juniperus hor. pium. Youngstown' Andorra Juniper	18" -20" Sp.	Cont.	24" O.C.
NM	23	Nandina domestica 'Harbor Dwarf' Harbor Dwarf Heavenly Bamboo	12" -18" Ht.	Cont.	spacing as shown
PL	22	Prunus larvocerasus 'Otto Luykens' Dwarf Cherry Laurel	2'-3' Ht.	B 4 B	30" O.C.
тм	129	Taxus X media 'Hicksii' Hatfield Upright Yew	3'-4' Ht.	B 4 B	18" O.C.
	λ	ANNUALS, PERENNIALS	# GRASS	<u>es</u>	
AN	151	Annuals Seasonal Annuals	6"	Cont.	12" <i>O.C</i> .
MS	16	Miscanthus sinensis 'Silver Feather' Silver Feather Miscanthus	2' -9' Ht.	Cont.	36" O.C.
PA	36	Pennisetum alopec. 'Orientalis' Oriental Fountain Grass	12" -18" Ht.	Cont.	30° 0.C.
HB	73	Hemerocallus X 'Bountiful Valley' Yellow Dayilly (long-blooming)	2' -3' Ht.	Cont.	24" O.C.
55	45	Sedum spectablis 'Autum Joy' Autum Joy Sedum	12" -18* Ht.	Cont.	18" O.C.

PLANT LIST

KEY	QUANTITY	BOTANICAL NAME COMMON NAME	SIZE	CONDITION	REMARKS
70	12	JUNIPERUS CHINENSIS SARGENTII SARGENTI JUNIPER	18-24"	#3 CONT-	SPACE 3' O.C.
LM	I∞	LIRIOPE MUSCARI 'VARIEGATA' VARIEGATEV LIRIOPE	#1	CONTAINER	SPACE 18" Q.C. STAGGER



PROFESSIONAL CERTIFICATION

THEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARY LAND, LICENSE NO. 21245, EXPIRATION DATE: JUNE 9, 2014.

Baltimore Land Design Group, Inc.

Consulting Engineers 230 SCHILLING CIRCLE SUITE 364 . HUNTVALLEY, MARYLAND 21031 PHONE 410.229.9851 . FAX: 410.229.9865 . BLDG@ BLDGING. COM

APPROVED PLANNING BOARD OF HOWARD COUNTY DATE 3.26.97

STATE CITY CLARKSVILLE MARYLAND HOWARD COUNTY 5th ELECTION DISTRICT ZONED NT TAX MAP 35, BLOCK 1 VILLAGE OF RIVER HILL, S/4, A/2 PARCEL X APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT. COUNTY HEALTH OFFICER MR APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Condy Hamultan

DIVISION OF LAND DEVELOPMENT

SDP 97.71

RIEMER MUEGGE & ASSOCIATES, INC.

ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING

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410-997-8900 FAX: 410-997-9282 6 OF 6

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