WO 456-05 Culver Mini Storage Site Plan

MSA-5-1829-5368

715/05 7/15/05 Robert L. Ehrlich, Jr. Governor

Michael S. Steele



Martin G. Madden Chairman

Ren Serey
Executive Director

STATE OF MARYLAND CRITICAL AREA COMMISSION CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401 (410) 260-3460 Fax: (410) 974-5338 www.dnr.state.md.us/criticalarea/

July 29, 2005

Ms. Stacey Weisner
Development Review & Permitting
One West Market St., Room 1201
Snow Hill, MD 21863

RE: Culver Mini-Storage

Dear Ms. Weisner:

Thank you for providing information on the above referenced site plan. The applicant proposes to construct a mini-storage facility on a 1.57-acre IDA parcel in the Chesapeake Bay Critical Area outside the Town of Snow Hill. Commission staff reviewed the information provided and we have the following comments:

- 1. The 10% calculations are incorrect. It is not possible to provide treatment to 180% of the site (% of site served should generally add up to 100 for all of the BMPs provided). Additionally, the wet swale is actually a ditch, a means of getting the runoff to the stormwater pond and not a BMP in itself. If credit is sought for the ditch, it must be constructed in accordance with all specifications of the MDE stormwater manual.
- 2. If credit is sought for the ditch and the pond on site, in addition to the above, the calculations should be provided for a BMP in a series in accordance with the Commission's 10% guidance manual.
- 3. As currently proposed, there is a deficit in the stormwater management being provided. Offsets must be identified.
- 4. Due to the expanded Buffer for the non-tidal wetlands that are contiguous to the Pocomoke River, it appears this proposal requires a variance. Please forward the variance information when it is submitted. It appears that Buffer impacts could be avoided.

Ms. Stacey Weisner July 29, 2005 Page 2 of 2

5. The MDE permit will need to be amended if there are impacts to the buffer to the wetlands in the southern corner of the property.

Thank you for the opportunity to comment. If you have any questions or concerns, please contact me at (410) 260-3477.

Sincerely, Yell fave Chandles

LeeAnne Chandler Science Advisor

Cc: WO456-05

Robert L. Ehrlich, Jr. Governor

Michael S. Steele Lt. Governor



Martin G. Madden Chairman

Ren Serey
Executive Director

STATE OF MARYLAND CRITICAL AREA COMMISSION CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401 (410) 260-3460 Fax: (410) 974-5338 www.dnr.state.md.us/criticalarea/

July 5, 2005

VIA FACSIMILE

Ms. Stacey Weisner Worcester County Development Review & Permitting One West Market St., Room 1201 Snow Hill, MD 21863

RE: Major Site Plan – Culver Mini-Storage

me Chardles_

Dear Ms. Weisner:

Thank you for providing information on the above referenced site plan. The applicant proposes to construct a storage facility on a parcel outside of Snow Hill. Based on the County's Critical Area maps, the site is designated IDA. Additional information is needed to ensure compliance with the County's Chesapeake Bay Critical Area Program. As a development within the IDA, the 10% pollutant reduction calculations are needed along with a Critical Area report and site plan. An existing conditions plan that shows any environmental features in the vicinity of the site such as wetlands or sensitive species habitats is also needed.

Please forward the above information for further review when it is submitted. We will provide further comments upon receipt of the necessary information. Thank you.

Sincerely,

LeeAnne Chandler

Natural Resources Planner

cc: WO45**6**-05

Chandler, LeeAnne

From:

Chandler, LeeAnne

Sent:

Wednesday, November 23, 2005 10:41 AM

To:

'klackie@co.worcester.md.us'

Subject:

Culver Mini-storage

Hi Keith -

I just spoke with Weston Young about Culver Mini-storage. Now I have an understanding of how the calculations were done. They are including the adjacent parcel 132 in the calculations so when/if that piece were to come in for development, SWM would already be taken care of. They have allowed 0.23 acres of potential impervious cover on adjacent parcel 132.

So total site area for SWM purposes is listed as 1.63 acres (1.2 for mini storage, 0.43 for P. 132). Proposed impervious on both totals 1.06 acres. They have a removal requirement of 1.80 pounds while they are removing approx. 1.52 pounds. This leaves a deficit of 0.279 pounds.

There are a number of options for dealing with the deficit. First, they could pay a fee-in-lieu. At \$20k per pound (which is what OC charges, not that they are the model jurisdiction or anything), they would owe about \$5580. Alternatively, they can provide other offsets such as riparian planting (0.14 acres of planting would equate to 0.279 pounds), retrofitting any existing developed sites with SWM, reducing the imperviousness of an existing developed site, treating off-site runoff with their on-site BMP (for example, if one of the adjacent properties doesn't have SWM and there is a way to get the runoff to the new BMP, they can get credit for that). That's about all I can think of. It's tough to meet the 10% rule on undeveloped IDA properties where proposed impervious is over 62%--some offsets or creative engineering is going to be necessary.

Hope this helps. Happy Thanksgiving!

LeeAnne Chandler
Science Advisor
Critical Area Commission for the Chesapeake
and Atlantic Coastal Bays
1804 West St., Suite 100
Annapolis, MD 21401
(410) 260-3477
(410) 974-5338 (fax)



DEPARTMENT OF
DEVELOPMENT REVIEW AND PERMITTING

Morcester County

BOARD OF APPEALS
PLANNING COMMISSION
AGRICULTURAL PRESERVATION

GOVERNMENT CENTER
ONE WEST MARKET STREET, ROOM 1201
SNOW HILL, MARYLAND 21863
TEL: 410-632-1200 / FAX: 410-632-3008

ELECTRICAL BOARD SHORELINE COMMISSION LICENSE COMMISSIONERS

MEMORANDUM

TO:

Kelly Henry, Zoning Administrator

FROM:

Stacey Weisner, Planner II &W

SUBJECT:

TRC Meeting of July 6, 2005 - Culver Mini-Storage

DATE:

July 1, 2005

The following comments are provided for the property referenced above which is located on Tax Map 63, Parcel 2.

1. The subject property lies within the Worcester County Chesapeake Bay Critical Area (Critical Area) and is designated as an "Intensely Developed Area" (IDA). Therefore, this Site Plan must comply with δNR 3-204(c)(4)(c) of the Worcester County Code of Public Local Laws (County Code), in which pollutant loads must be reduced by 10% of the pre-development levels (10% Rule).

Please include the site area and the limits of disturbance on the plans. Under δNR 3-210 (d)(1)(L) please provide calculations of the amount of proposed impervious surfaces. Please provide a breakdown of the different surfaces; for example, rooftop, parking lots, or sidewalks. Dimensions of impervious surfaces must also be shown on the site plan.

When this project is submitted to the Planning Commission, there is a deadline each month for an approved Stormwater Management (SWM) / Sediment and Erosion Control Plan. Please note that this date now also reflects the deadline required to have approved "10% calculations" from the Chesapeake and Atlantic Coastal Bays Critical Area Commission (Critical Area Commission) as well as County Staff. It is possible to receive Stormwater Management Approval and not satisfy the "10% Rule," however both approvals are required prior to scheduling for Planning Commission review /approval. Projects will not proceed to the Planning Commission VED until all of these requirements are satisfied. Please include two copies of the 10% Rule calculations as well as profiles and inverts on all proposed storm-water.

CRITICAL AREA COMMISSION

2. Please ensure that all requirements of the Critical Area Site Plan and Critical Area Report (Report) are provided for, as listed in δNR 3-201(d)(1) and (2). The Critical Area Report should include documentation from the Wildlife & Heritage Division of the Maryland Department of Natural Resources (DNR) in regard to the absence or presence of any Habitat Protection Areas that may be on or in the vicinity of the site. There is a Sensitive Species Review Area near the project. Please provide *two* copies of the Report and any attachments.

Heritage Division DNR Lori Byrne 580 Taylor Avenue, E-1 Annapolis, MD 21401

3. Please provide a note on the plat that states the name of the person that did the wetland delineation(s) and the date it was done. Staff is providing a copy of an aerial map (Attachment 1) showing the property, and wishes to bring to the Applicant's attention a concern that appears to affect the property. The Resources Inventory Maps indicate that the Non-Tidal Wetlands are adjacent to Tidal Wetlands.

Should Non-Tidal Wetlands be located on the property (and be adjacent to Tidal Wetlands) then the 100 Foot Buffer "[s]hall be expanded beyond 100 feet to include sensitive areas such as steep slopes, hydric soils or highly erodible soils whose development or disturbance may impact streams, wetlands or other aquatic environments" as stated in δNR 3-219(c)(2).

If the Applicant is unable to provide access the adjoining property for the person performing the wetland delineation, then Staff has no alternative except to go with the best possible information available, which is the aerial provided by Staff. The Expanded Buffer shall include the Tidal Wetlands, the Non-Tidal Wetlands, as well as the 25 foot Non-Tidal Wetland Buffer. Please note the Expanded Buffer may not be disturbed without a Variance from the Board of Zoning Appeals, to which the Critical Area Commission also provides comments. Attachment 2 is an example of the 100 foot Expanded Buffer. Please ask if you have any questions on this.

Should the Expanded Buffer occur on the site, please clearly label the Expanded Buffer on the site plan. Please place a note under the general notes that reads as follows: Any disturbance to the Expanded Buffer (including grading) is not permitted without a variance from the Board of Zoning Appeals.

Any impact to the Non-Tidal Wetlands or the 25 Buffer must provide Staff with a copy of the authorization from the Maryland Department of the Environment (MDE). Should MDE determine there are Wetlands of special state concern (WSSC) on the property, then a 100 foot Buffer will be required to be placed around any WSSC, both inside and outside of the Critical Area. If those conditions exist, special permitting will be required from MDE. It appears there may be non-tidal wetlands to the south of the property. Please have those wetlands delineated if they are within 25 feet of the property.

4. Please provide the following note on the Site Plan:

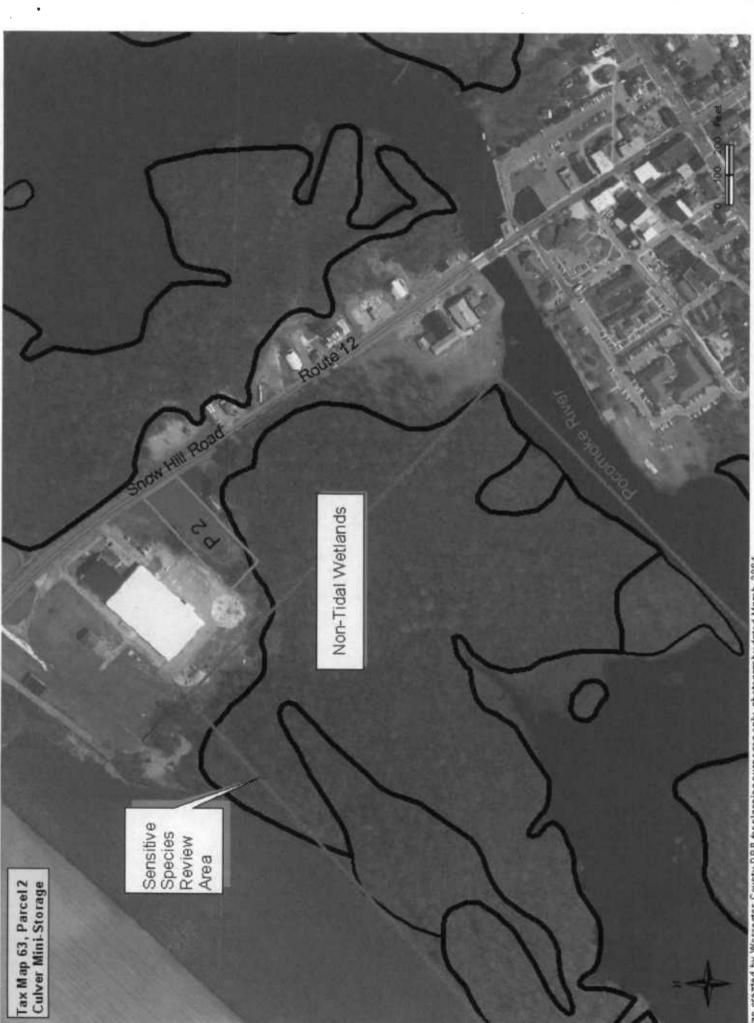
Worcester County Chesapeake Bay Critical Area Law Note:

This property lies within the Worcester County Chesapeake Bay Critical Area, any and all proposed development activity must meet the requirements of Title 3 (Land and Water Resources), Subtitle II (Chesapeake Bay Critical Area) of the Worcester County Code of Public Local Laws in effect at the time of the proposed development activity.

- 5. Please add the following note to the General Notes: This property is in the Chesapeake Bay Critical Area and the Land Use Designation is Intensely Developed Area (IDA).
- 6. Please submit the Critical Area Review Fee (\$200 base fee, plus \$25 per acre (or portion over one acre).
- 7. Please address the attached comments from LeeAnne Chandler of the Chesapeake and Atlantic Coastal Bays Critical Area Commission. *Please note that all comments being addressed must be reviewed again by the Critical Area Commission.*

Staff Recommendation

Staff recommends that this project be returned to the Technical Review Committee if the Expanded Buffer occurs on the property. Otherwise, the comments above can be satisfied with Staff review, but must be addressed prior to Site Plan approval. Should you have any questions or comments please feel free to contact me at 410-632-1200, extension 1144.



Map created by Worcester County DRP for planning purposes only, photography dated March, 2004.

Western young 4109572149 X206

Section 4.0 Standard Application Process

Worksheet A: Standard Application Process

Calculating Pollutant Removal Requirements							
Step 1: Calculate Existing and Proposed Site Imperviousness							
A.	Calculate Percent Imperviousness						
1)	Site Area within the Critical Area	ite Area within the Critical Area IDA, A = 1.63 acres					
2)	Site Impervious Surface Area, Existing and Proposed, (See Table 4.1 for details)						
	' (a) Existing (acres)	(b) Proposed (acres)				
	Roads Parking lots		0.764				
	Driveways						
	Rooftops		0.296				
	Swimming pools/ponds Other						
	Impervious Surface Area	Ø	1.060				
3)	Imperviousness (I)						
	Existing Imperviousness, Ipre	= Impervious = (Step 2a) / = (O	Surface Area / Site Area (Step 1) / (1 . 63) %				
	Proposed Imperviousness, Ipost	= Impervious = (Step 2b) /	Surface Area / Site Area				
	·	$= \frac{(3.06)^{7}}{65.03}$	(Glep 1) %				
B. De	efine Development Category (circ	cle)					
1	New Development: Existing imperviousness less than 15% I (Go to Step 2A)						
2)	Redevelopment: Existing in	Redevelopment: Existing imperviousness of 15% I or more (Go to Step 2B)					
3)	Single Lot Residential Development: Single lot being developed or improved; single family residential development; and more than 250 square feet of impervious area and associated disturbance (Go to Section 5, Residential Approach, for detailed criteria and requirements).						
NOT	E: All acreage used in this worksheet re	efers to areas within the ID	A of the Critical Area only.				

Section 4.0 Standard Application Process

Calculate the Predevelopment Load (Lpre) Step 2: **New Development** (0.5)(A)(0.5) (1.63) 0.815 lbs /year of total phosphorus Where: Average annual load of total phosphorus exported from the site prior to development (lbs/year) Annual total phosphorus load from undeveloped lands (lbs/acre/year) 0.5 Area of the site within the Critical Area IDA (acres) Redevelopment (R_v) (C) (A) (8.16) R, $0.05 + 0.009 (I_{pre})$ 0:05 + 0.009 () (8.16) bs/year of total phosphorus Where: Average apriual load of total phosphorus exported from the site prior to development (lbs/year) Runoff coefficient, which expresses the fraction of rainfall which is R, converted into runoff Pre-development (existing) site imperviousness (i.e., I = 75 if site is 75% impervious) C Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l Area of the site within the Critical Area IDA (acres) 8.16 Includes regional constants and unit conversion factors

Section 4.0 Standard Application Process

Step 3: Calculate the Post-Development Load (Lpost) A. New Development and Redevelopment: (R_v) (C) (A) (8.16) R, $0.05 + 0.009 (I_{post})$ 0.05 + 0.009 (65.03) = 0.6353(0.6353)(0.30)(1.63 __)(8.16) 2.535 lbs/year of total phosphorus Where: Average annual load of total phosphorus exported from the postdevelopment site (lbs/year) R. Runoff coefficient, which expresses the fraction of rainfall which is converted into runoff Post-development (proposed) site imperviousness (i.e., I = 75 if site is 75% impervious) C Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l Area of the site within the Critical Area IDA (acres) 8.16 Includes regional constants and unit conversion factors Step 4: Calculate the Pollutant Removal Requirement (RR) RR L_{post} - (0.9) (L_{pre}) (2.535)-(0.9) (0.815) 1.802 lbs/year of total phosphorus Where: RR Pollutant removal requirement (lbs/year) Average annual load of total phosphorus exported from the post-Loost development site (lbs/year) Average annual load of total phosphorus exported from the site prior to development (lbs/year)

Section 4.0 Standard Application Process

Step 5:	Identify Fe	easible BMP(s	s)				
Select BMP Options using the screening matrices provided in the Chapter 4 of the 2000 Maryland Stormwater Design Manual. Calculate the load removed for each option.							
BMP Type	(L _{post})	x (BMP _{RE})	x (% DA Sei	rved) =	LR		
Wet ED Pand	7.535	× 60	aal x_	= 1.5	Z Ibs/year		
				=			
		x	_ x	=	lbs/year		
		x	_ X	=	lbs/year		
	•			total) = 1,52			
Poll	utant Remov			ep 4) = 1.80			
Where:							
Load Removed, LR		ual total phosi /year)	phorus load ren	noved by the pro	oposed BMP		
. L _{post}	= Ave	rage annual lo		sphorus exporte	d from the		
post-development site (lbs/year) BMP _{RE} = BMP removal efficiency for total phosphorus, Table 4.8 (%) % DA Served = Fraction of the site area within the critical area IDA served by the BMP (%)							
RR			requirement (Ib	s/year)			
If the Load Removed is equal to or greater than the Pollutant Removal Requirement computed in Step 4, then the on-site BMP complies with the 10% Rule.							
Has the RR (pollutar	nt removal r	equirement) i	peen met?	☐ Yes	ĽXNo		
					!		

1 ac = 2 1bs

Environmental Assessment For Culver Mini-Storage Tax Map 63, lot 76

July 12, 2005

Ronald D. Gatton
Environmental Consultants Inc.
P.O. Box 438
Trappe, Maryland 21673

Introduction

The proposed project will develop a 1.57-acre upland property. The land is presently maintained in a yard like condition. The site is located adjacent to Snow Hill Road (Route 12) in Snow Hill Maryland, Maryland. (See figure 1). The proposed development is located within the Chesapeake Bay Critical Area (CBCA) and designated as a an Intensely Developed Area (IDA). For purposes of this report, tax map 63, lot 132's area was used to iclude future development.

Table 1 Summary of Existing Conditions

	Existing Conditions	
Total Area	-	1.57 acres
Woodlands		-0- acres
Wetlands		0.04 acres
Uplands		1.53 acres
Impervious Areas		0.0 acres
	Proposed Conditions	
Proposed impervious area	(including future development)	1.24 acres
Forest to be cleared		-0-
Wetlands to be impacted	04 acres	
Nontidal Wetland Buffer		.2 acres
Wetland buffers (100' CBCA	-0- acres	

Proposed project

The proposed project consists of three mini storage buildings, access roads, seven parking spaces and a storm water management facility. Landscaping will be done with native species and will occupy 1,483 sq. ft. of the site.

Existing Conditions

Topography and Hydrology

Generally, the site has flat slopes, with the highest elevation being approximately 4' above NGVD. Drainage from the site sheet flows into the adjacent drainage ditches or the adjacent woodland.

Existing Land Use

As stated above the site is presently lawn

Soils

The Worcester County Soil Conservation Service Survey maps indicate soil, which occurs on the site, is "Made Land". (See figure 2)

Wetlands

The routine method described in the current (January 1987) Corps of Engineers Wetland Delineation Manual was used to determine if any wetlands are on the property. This manual uses three parameters to determine if an area is wetlands; the presence of wetland vegetation, hydric soils, and the presence of ground water within 12 inches of the surface for a period of 11 to 21 days during the growing season. In order to be classified as a wetland, all three parameters must be present.

A small amount of nontidal wetlands was found to occur along the back of the site. The largest area is primarily vegetated with common reed (*Phragmites australis*), the second area is within the yard and is vegetated primarily with butter cup. While not delineated it appears the woodland to the east of the site would be considered nontidal wetland. Thus, the 25-foot nontidal wetland buffer would extend into the property.

100- foot CBCA Buffer

The Chesapeake Bay Critical Area Law requires that the 100-foot tidal wetland buffer be expanded to the extent of contiguous wetlands. While a wetland survey of the adjacent woodland to the east of the site has not then done, it likely that this wetland is contiguous to the tidal waters of the Pocomoke River. However, these wetlands do not extend into the site. Thus, no expanded buffer occurs on the subject property.

Uplands

The uplands on the site are maintained in a yard like condition and is vegetated predominately with White clover (Trifolium repens) Bermuda grass (Cynodon dactylo), fescue grass (Fescue arundinocea), and crab grass (Digitaria sanguinalis).

Forest

No Forest occurs on the site.

Wildlife

As stated above, the site is maintained in a yard like condition. Thus, wildlife use of the area is very limited.

Endangered Species, Colonial Bird Nesting Areas and Critical habitat

No endangered species, colonial bird nesting areas and critical habitat are expected or known to occur on the site. However, the applicant as requested that the Maryland DNR, Wildlife and Heritage Service review their records to see if any endangered species, colonial bird nesting areas and critical habitat are known to occur on the site.

Existing Pollution Sources

Existing sources of pollution are limited to air born pollutants deposited on the site, and associated runoff.

Environmental Consequences

Land Use

Land use will change from a lawn to commercial use.

Wetland

The proposed project will impact .04 acres of low value wetland, and the applicant will need to obtain authorization from the Maryland Department of the Environment, and the U.S. Army Corps of Engineers.

Forest

No forest area will be impacted by the proposed work. However, native trees and plants will be planted as part of the landscape plan.

Wildlife

No wildlife habitat will be impacted by the proposed development. Wildlife will not be significantly impacted by this development.

Endangered Species, Colonial Bird Nesting Areas and Critical Habitat

No endangered species, colonial bird nesting areas and critical habitat are known to occur on the site. Thus, no endangered species, colonial bird nesting areas and critical habitat are expected to be adversely impacted by the proposed project.

Water Quality

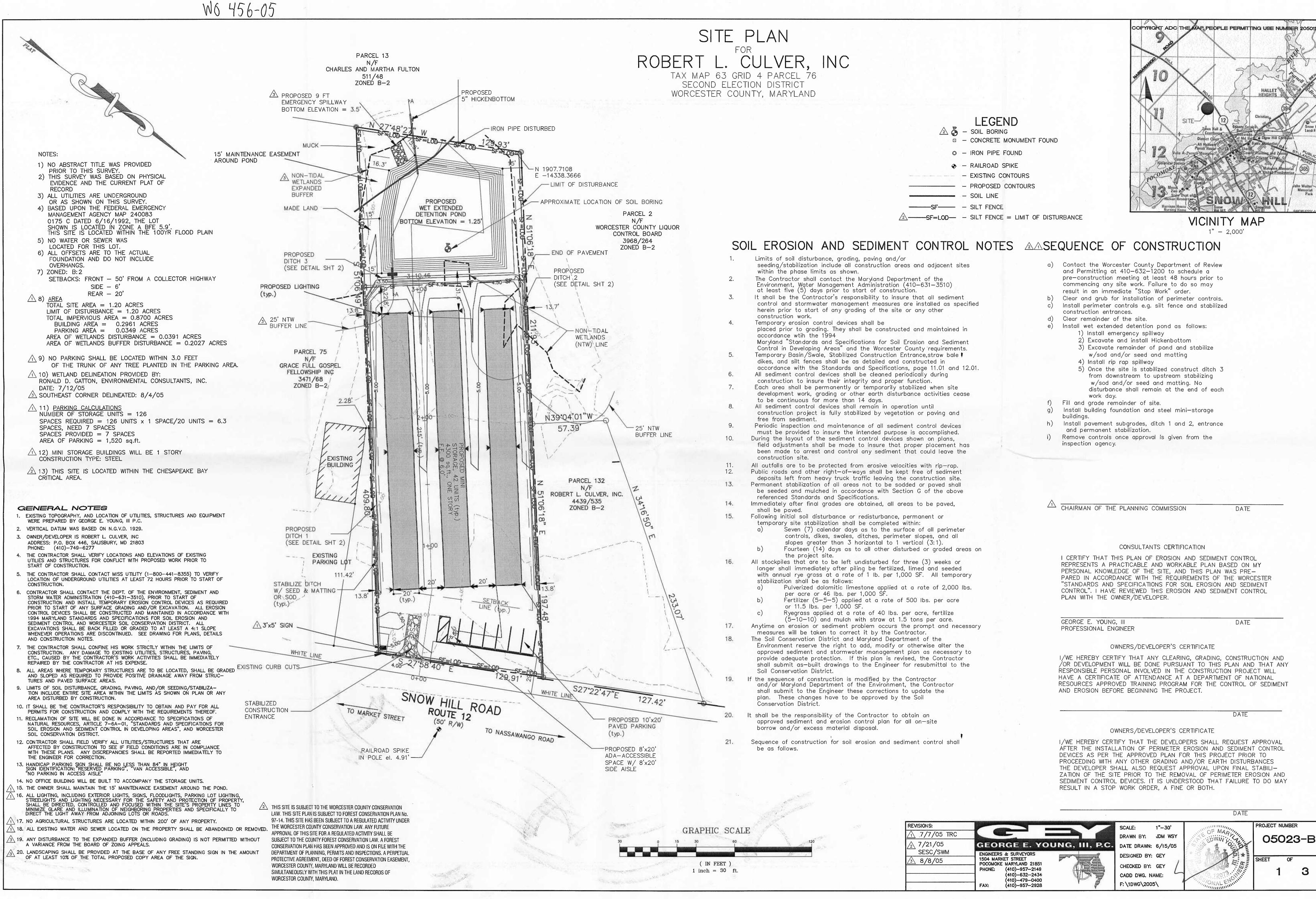
The project, will in all probability, slightly increase the amount of storm water runoff into the Bay, but the quality will improve. All development within the Intensely Developed Area of Town will be required to improve the quality of storm water runoff by 10 percent. Estimates of the pollutant reduction indicate the proposed storm water management faculties will exceed this requirement. Thus, there will be an improvement in the water quality of the storm water runoff.

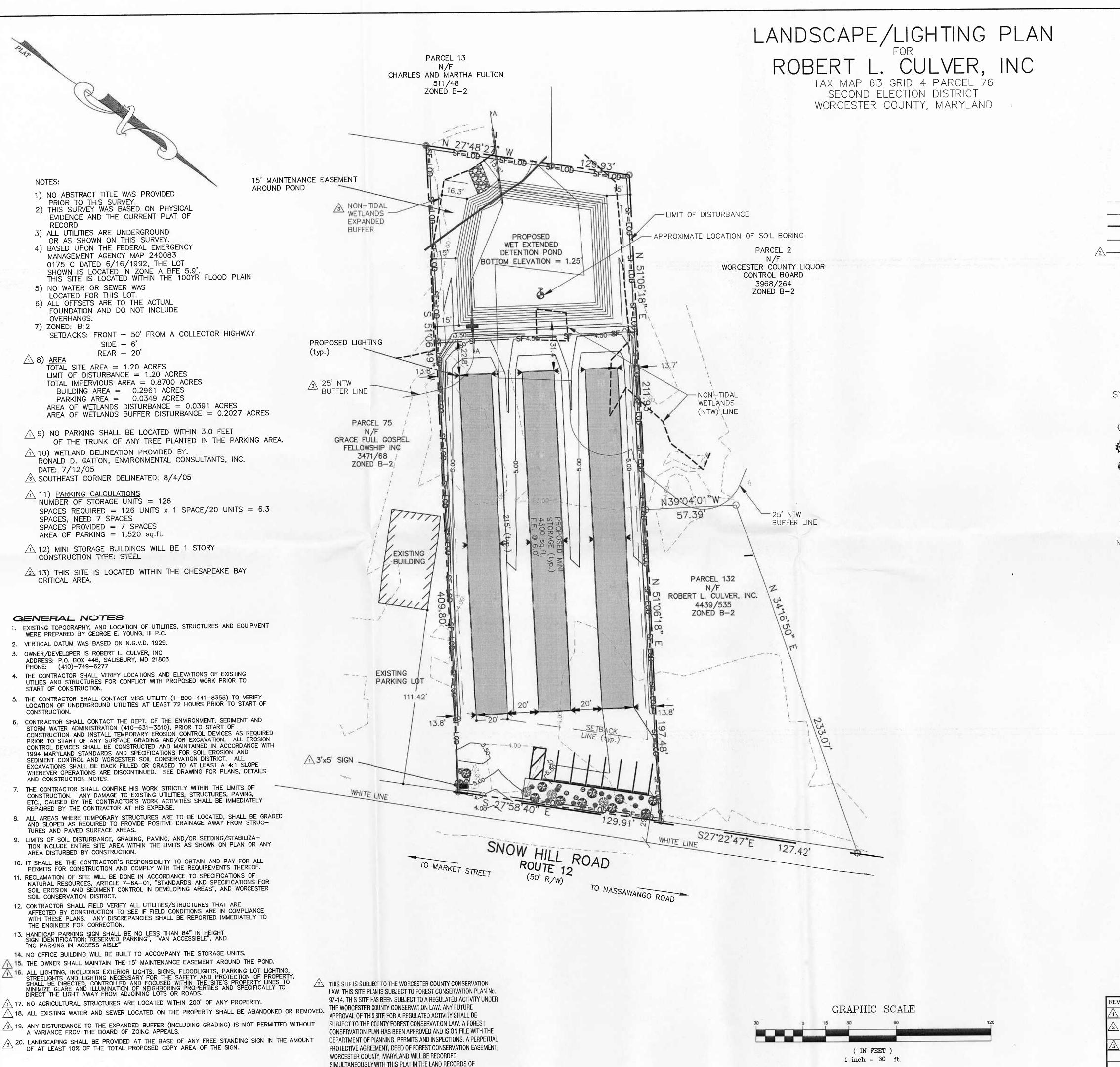
Habitat Protection

No adverse impacts to high value habitats will result from the proposed project.

Conclusion

The proposed development will provide a new commercial business, and will have no significant detrimental effect on the environment, the water quality, or living resources of the Chesapeake Bay.





WORCESTOR COUNTY, MARYLAND.



△ ♣ - SOIL BORING □ - CONCRETE MONUMENT FOUND

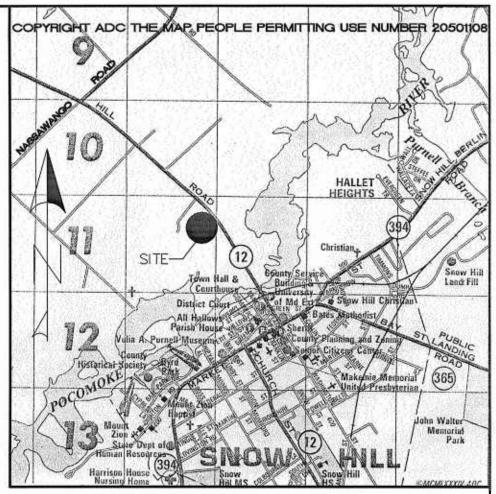
IRON PIPE FOUND

→ RAILROAD SPIKE

 EXISTING CONTOURS – PROPOSED CONTOURS

- SOIL LINE ——SF—— — SILT FENCE

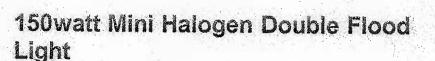
SF=LOD- - SILT FENCE = LIMIT OF DISTURBANCE



VICINITY MAP 1" - 2,000'

PLANTING SCHEDULE

HEIGHT SYM TYPE CORNUS FLORIDA - FLOWERING DOGWOOD 15'-30' ARONIA MELANOCARPA - BLACK CHOKEBERRY 6'-10' 2'-4' CARYOPTERIS - BLUEBEARD 3'-4' AZALEA — THUJA X DWARF VIBURNUM - VIBURNUM NUDUM 1'-3' 1'-3' (4' DIA.) BAYBERRY - MYRICA PENNSYLVANICA ALL TREES & SHRUBS WILL BE TRIMMED BY OWNER SO AS NO LIMBS AND/OR BRANCHES ENCROACH ROUTE 12 RIGHT OF WAY.





- Decorative pebbled
- glass lens
- All metal construction with mounting base for wall or ceiling
- Complete with two -150w halogen bulbs
- Limited Warranty

UL & CUL Listed

FLOOD LIGHTS ARE TO BE LOCATED ON FRONT CORNERS OF EACH BUILDING. OPERATION SHALL BE BY TIMER CONNECTED TO ELECTRICAL SYSTEM OF EACH UNIT.



(410)-479-0400

(410)-957-2928

DRAWN BY: JDM WSY DATE DRAWN: 6/15/05 DESIGNED BY: GEY CHECKED BY: GEY

F: \1DWG\2005\

PROJECT NUMBER 05023-B SHEET