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Governor

Anthony G. Brown  
Lt. Governor



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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/](http://www.dnr.state.md.us/criticalarea/)

April 1, 2008

Mr. Blaine Smith  
Zoning Administrator  
Town of Ocean City  
PO Box 158  
Ocean City, MD 21843

Re: Sorenson Building Permit  
14528

Dear Mr. Smith:

Thank you for providing information on the above referenced building permit application. The applicant is proposing to construct a duplex dwelling. Critical Area issues include stormwater management, pollutant removal, and afforestation.

The lot is 4,696 square feet in size, is zoned R-1, and has a setback of 15 feet. The lot is currently developed with a two-story building, paved driveway, covered porch, second floor deck, and wood walk. The applicant proposes to remove the existing structures and construct a duplex, pervious paver drive, first floor pervious deck, and two second floor pervious decks. Total existing impervious surface onsite is 3,346 square feet (71.25%). The applicant proposes to reduce impervious surface onsite to 2,864 square feet (60.9%). To meet mitigation requirements in the 100-foot Buffer, the applicant is required to provide 3,772 square feet of mitigation; the applicant proposes to plan 2 large trees (Japanese black pine), 6 small trees (crape myrtle), 20 large shrubs (blue point juniper), 15 small shrubs (Japanese barberry), and 20 herbaceous plants (bugleweed). In addition, the applicant will pay \$578.40 as a fee-in-lieu for landscaping. The applicant is meeting 10% phosphorus removal requirements by reducing impervious surface onsite.

Based on the information provided, we have the following comment on this project:

1. Within the 100-foot Buffer area, the applicant proposes to construct a duplex, pervious paver drive, pervious deck, and two second floor pervious decks; the total area allocated for all three decks is 454 square feet. The Town of Ocean City Atlantic

TTY for the Deaf

Annapolis: (410) 974-2609 D.C. Metro: (301) 586-0450

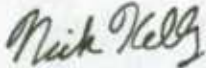


Coastal Bays Critical Area Program §30-554(d)(1) states that, "New development, including accessory structures, shall minimize the extent of intrusion into the Buffer..." While we understand that the Town of Ocean City Atlantic Coastal Bays Critical Area Program allows pervious decks in the setback, and we will continue to discuss this issue with staff, it appears that the size and location of the duplex and decks do not minimize Buffer intrusion. To minimize water quality and habitat impacts, we recommend reducing the size of the proposed first floor deck, removing the two second floor decks, and fully planting the remaining area of the setback with the native vegetation that is required for mitigation. We note that existing dwelling currently has a 180 square foot deck located within the setback.

2. The applicant proposes to plant Japanese barberry and bugleweed for mitigation purposes. Japanese barberry is listed as an invasive species to the Mid-Atlantic natural areas, and bugleweed, while not officially listed, is known to show invasive tendencies as well. Commission staff recommends that the applicant plant highbush blueberry and sneezeweed in lieu of the aforementioned species.

Thank you for the opportunity to provide comments on this building permit request. Please have the applicant provide the information requested above. If you have any questions, please feel free to call me at (410) 260-3483.

Sincerely,



Nick Kelly, Ph.D  
Natural Resource Planner  
cc: OC 185-08



# TOWN OF OCEAN CITY

*The White Marlin Capital of the World*

Reply to: Planning and Community Development  
P.O. Box 158  
Ocean City, MD 21843  
410-289-8855

MAYOR & CITY COUNCIL  
P.O. BOX 158  
OCEAN CITY,  
MARYLAND 21843-0158

[www.town.ocean-city.md.us](http://www.town.ocean-city.md.us)

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*City Clerk*

April 9, 2008

Mr. Nick Kelly  
State of Maryland Critical Area Commission  
1804 West Street, Suite 100  
Annapolis, MD 21401

Dear Nick:

Re: Sorenson Site Plan  
Application #08-14528  
Your File # OC 185-08

We have received your comments regarding the above referenced building permit and will take them under advisement. As you know, the Town of Ocean City is an Intensely Developed Area with buffer management regulations approved by the Critical Area Commission and the Mayor and City Council. Our Critical Area Program and City Code set forth specific development regulations for the critical area buffer (Section 30-554 (d)(2)). Our review indicates that the site plan as submitted is consistent with those regulations.

Please be assured that we appreciate the assistance that you provide in reviewing projects in the Critical Area, and that we take your comments seriously and apply them in accordance with adopted regulations.

Sincerely,

R. Blaine Smith  
Zoning Administrator

/m  
cc: Permit File #08-14528  
File 1501.13.2  
Correspondence '08

Ocean City, MD



100 - 100



185-08

CRITICAL AREA COMMISSION  
FOR THE CHESAPEAKE AND ATLANTIC COASTAL BAYS  
1804 WEST STREET, SUITE 100  
ANNAPOLIS, MD 21401

PROJECT NOTIFICATION APPLICATION

GENERAL PROJECT INFORMATION

Jurisdiction: Town of Ocean City, MD

Date: 03/27/08

Tax Map #	Parcel #	Block #	Lot #	Section
118	0042B	34	4	

FOR RESUBMITTAL ONLY

- Corrections
- Redesign
- No Change
- Non-Critical Area

\*Complete Only Page 1  
General Project Information

Project Name (site name, subdivision name, or other) Sorensen

Project location/Address 14122 Laurel Ave

City Ocean City, MD Zip 21842

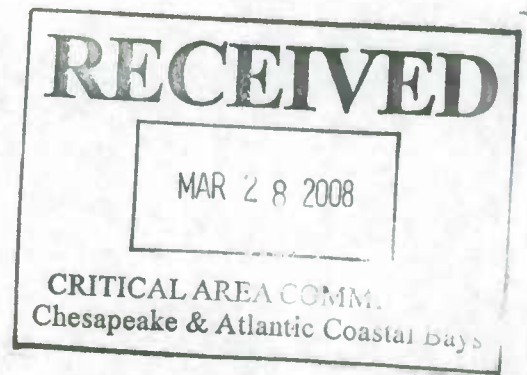
Local case number 14528

Applicant: Last name Sorensen First name Casper

Company \_\_\_\_\_

Application Type (check all that apply):

- |   |  |
|---|--|
| Building Permit <input checked="" type="checkbox"/> | Other <input type="checkbox"/>             |
| Buffer Management Plan <input type="checkbox"/>     | Rezoning <input type="checkbox"/>          |
| Conditional Use <input type="checkbox"/>            | Site Plan <input type="checkbox"/>         |
| Consistency Report <input type="checkbox"/>         | Special Exception <input type="checkbox"/> |
| Disturbance > 5,000 sq ft <input type="checkbox"/>  | Subdivision <input type="checkbox"/>       |
| Grading Permit <input type="checkbox"/>             | Variance <input type="checkbox"/>          |



Local Jurisdiction Contact Information:

Last name Smith First name Blaine

Phone # 410-289-8855 Response from Commission Required By ASAP

Fax # 410-289-8705 Hearing date \_\_\_\_\_

RECEIVED  
[ ]  
CRITICAL AREA  
Classification de l'air

**SPECIFIC PROJECT INFORMATION**

Describe Proposed use of project site:

Duplex

- |                       |                          |                       |                          |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Intra-Family Transfer | <input type="checkbox"/> | Growth Allocation     | <input type="checkbox"/> |
| Grandfathered Lot     | <input type="checkbox"/> | Buffer Exemption Area | <input type="checkbox"/> |

**Project Type (check all that apply)**

- |                    |                          |                          |                                     |
|--------------------|--------------------------|--------------------------|-------------------------------------|
| Commercial         | <input type="checkbox"/> | Recreational             | <input type="checkbox"/>            |
| Consistency Report | <input type="checkbox"/> | Redevelopment            | <input type="checkbox"/>            |
| Industrial         | <input type="checkbox"/> | Residential              | <input checked="" type="checkbox"/> |
| Institutional      | <input type="checkbox"/> | Shore Erosion Control    | <input type="checkbox"/>            |
| Mixed Use          | <input type="checkbox"/> | Water-Dependent Facility | <input type="checkbox"/>            |
| Other              | <input type="checkbox"/> |                          |                                     |

**SITE INVENTORY (Enter acres or square feet)**

	Acres	Sq Ft
IDA Area		4696
LDA Area		
RCA Area		
Total Disturbed Area		4696

Total Disturbed Area

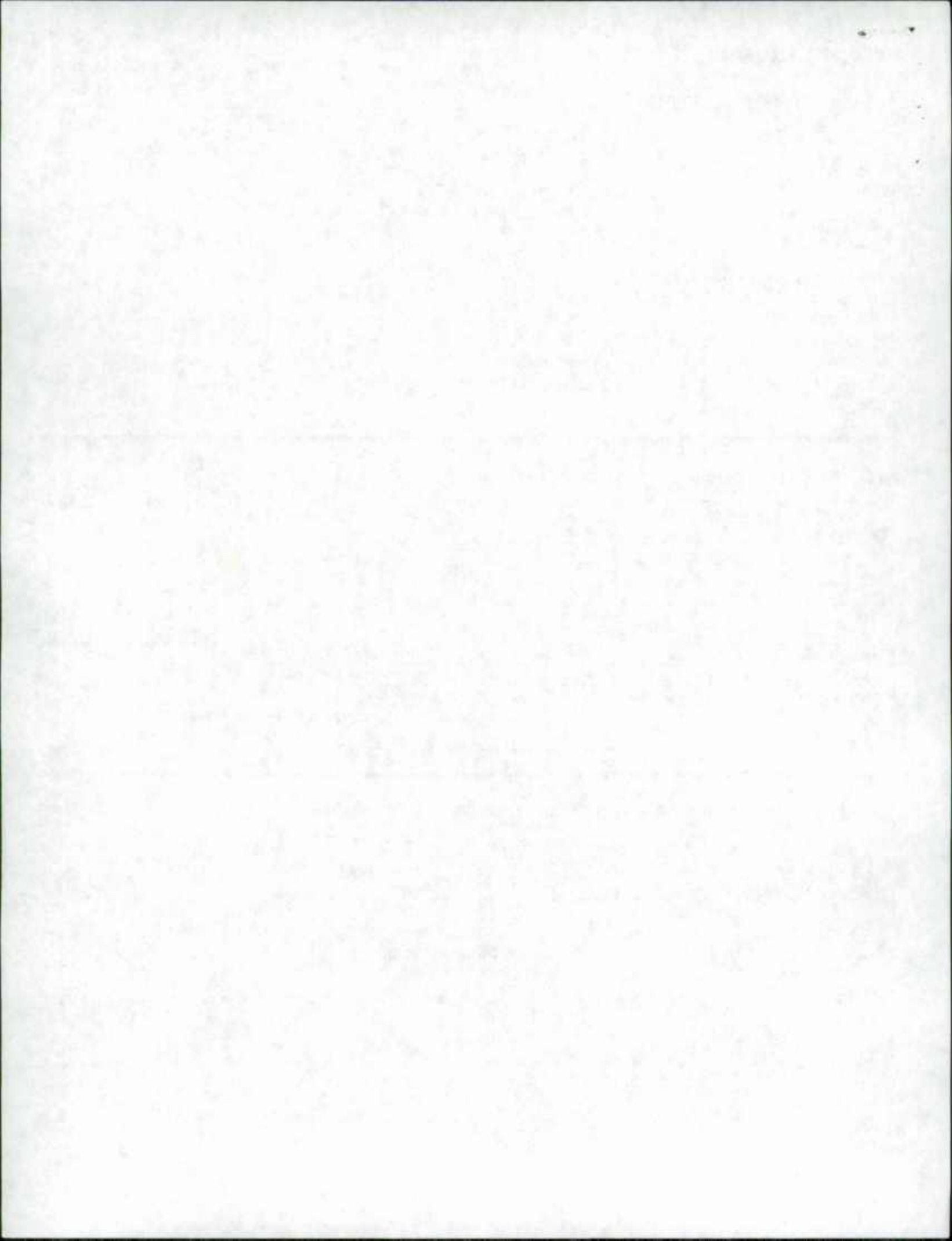
# of Lots Created

	Acres	Sq Ft		Acres	Sq Ft
Existing Forest/Woodland/Trees			Existing Impervious Surface		3346
Created Forest/Woodland/Trees			New Impervious Surface		
Removed Forest/Woodland/Trees			Removed Impervious Surface		482
			Total Impervious Surface		2864

**VARIANCE INFORMATION (Check all that apply)**

	Acres	Sq Ft		Acres	Sq Ft
Buffer Disturbance			Buffer Forest Clearing		
Non-Buffer Disturbance			Mitigation		

- |                      |                          |                         |                          |
|----------------------|--------------------------|-------------------------|--------------------------|
| <u>Variance Type</u> |                          | <u>Structure</u>        |                          |
| Buffer               | <input type="checkbox"/> | Acc. Structure Addition | <input type="checkbox"/> |
| Forest Clearing      | <input type="checkbox"/> | Barn                    | <input type="checkbox"/> |
| HPA Impact           | <input type="checkbox"/> | Deck                    | <input type="checkbox"/> |
| Impervious Surface   | <input type="checkbox"/> | Dwelling                | <input type="checkbox"/> |
| Expanded Buffer      | <input type="checkbox"/> | Dwelling Addition       | <input type="checkbox"/> |
| Nontidal Wetlands    | <input type="checkbox"/> | Garage                  | <input type="checkbox"/> |
| Other                | <input type="checkbox"/> | Gazebo                  | <input type="checkbox"/> |
| Setback              | <input type="checkbox"/> | Other                   | <input type="checkbox"/> |
| Steep Slopes         | <input type="checkbox"/> | Patio                   | <input type="checkbox"/> |
|                      |                          | Pool                    | <input type="checkbox"/> |
|                      |                          | Shed                    | <input type="checkbox"/> |





**Critical Area Project Application  
Town of Ocean City**

Date: 2.20.08 File# 10460-07 14528

Project Name: Sorenson

Project Address 14122 LAUREL AVE., OCEAN CITY

Tax Map: 118 Parcel: 42B Block: 34 Lot# 4 Zoning R-1

Property Owner ROBERTS, FREDA N. & DAVID A. CHASE Phone \_\_\_\_\_

Property Owner Address 7647 GREENDELL LANE, HIGHLAND, MD 20777

Parcel size (SF): 4,696 or Site Area (SF) \_\_\_\_\_ (If < 50% of parcel)  
Site size (SF) = area of disturbance  
plus 5 feet perimeter of actual construction

**I. PROJECT DESCRIPTION**

Parcels 40,000 SF or more: Critical Area setback is 25 feet. No impervious surface or cantilevering permitted within 25 feet of the shoreline/wetlands. ("Pervious" decks are permitted 10' into setback, per construction standards.)

Parcels less than 40,000 SF: Critical Area set back is equal to the zoning setback (15' feet). No impervious surface or cantilevering permitted within the setback. ("Pervious" decks at ground level are permitted in the setback, per construction standards.)

**Existing Conditions**

Impervious surface (SF) 3,346 % of site impervious: 71.3

Impervious surface within the 100-foot buffer (SF): 3,346

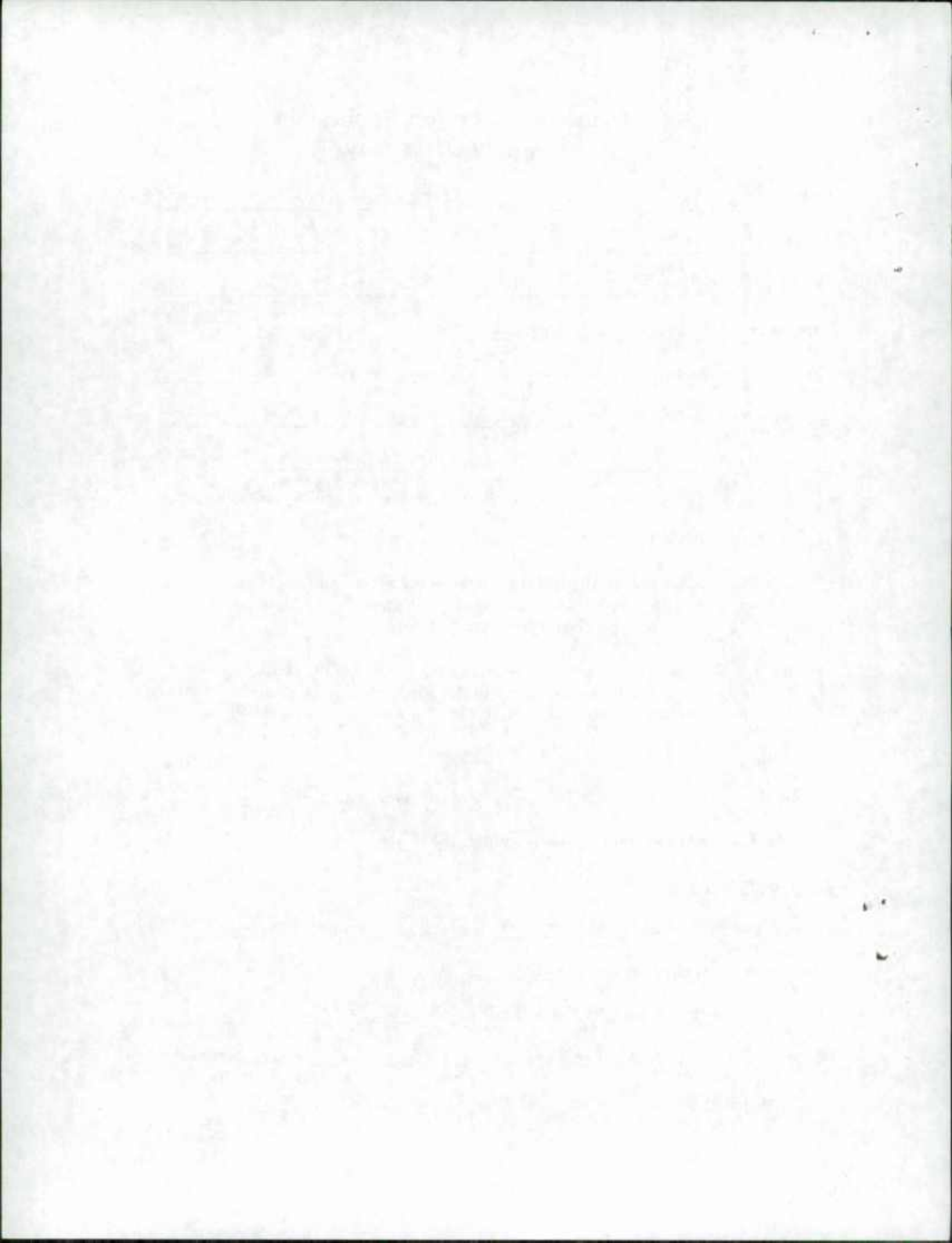
**Proposed Conditions**

Impervious surface (SF): 2,864 % of site impervious: 61.0

Total SF of disturbed area: 4,696

Impervious surface within the 100-foot buffer (SF): 2,864

Is project in the 100 foot buffer? Yes  No \_\_\_\_\_ (If yes, continue with Sec. II)  
(If no, skip to Sec. III)



**II. MITIGATION WORKSHEET IN THE 100-FOOT BUFFER**

**1. Detached Single Family Dwellings** (Need Landscaping Plan with schedule/legend per conversion chart below)

Value of Construction: \$ ~~200,000~~

- a. Landscape required in the amount of 2% of the cost of construction (Value of construction x .02 = \$ \_\_\_\_\_)
- b. Total landscape provided. Attach landscape plan with schedule of native plant material and cost values. \$ \_\_\_\_\_
- c. Mitigation requirement (if a - b > 0) = Fee in Lieu of landscape. \$ \_\_\_\_\_ (To be paid prior to issuance of Certificate of Occupancy.)
- d. Setback from water/wetlands \_\_\_\_\_ SF x .25 = \_\_\_\_\_ SF  
(Landscape SF to be provided in setback area to be shown on Landscaping Plan)

**2. Multi-Family and Commercial** ✓

All SF values determined from "Landscape Conversion Chart" below.

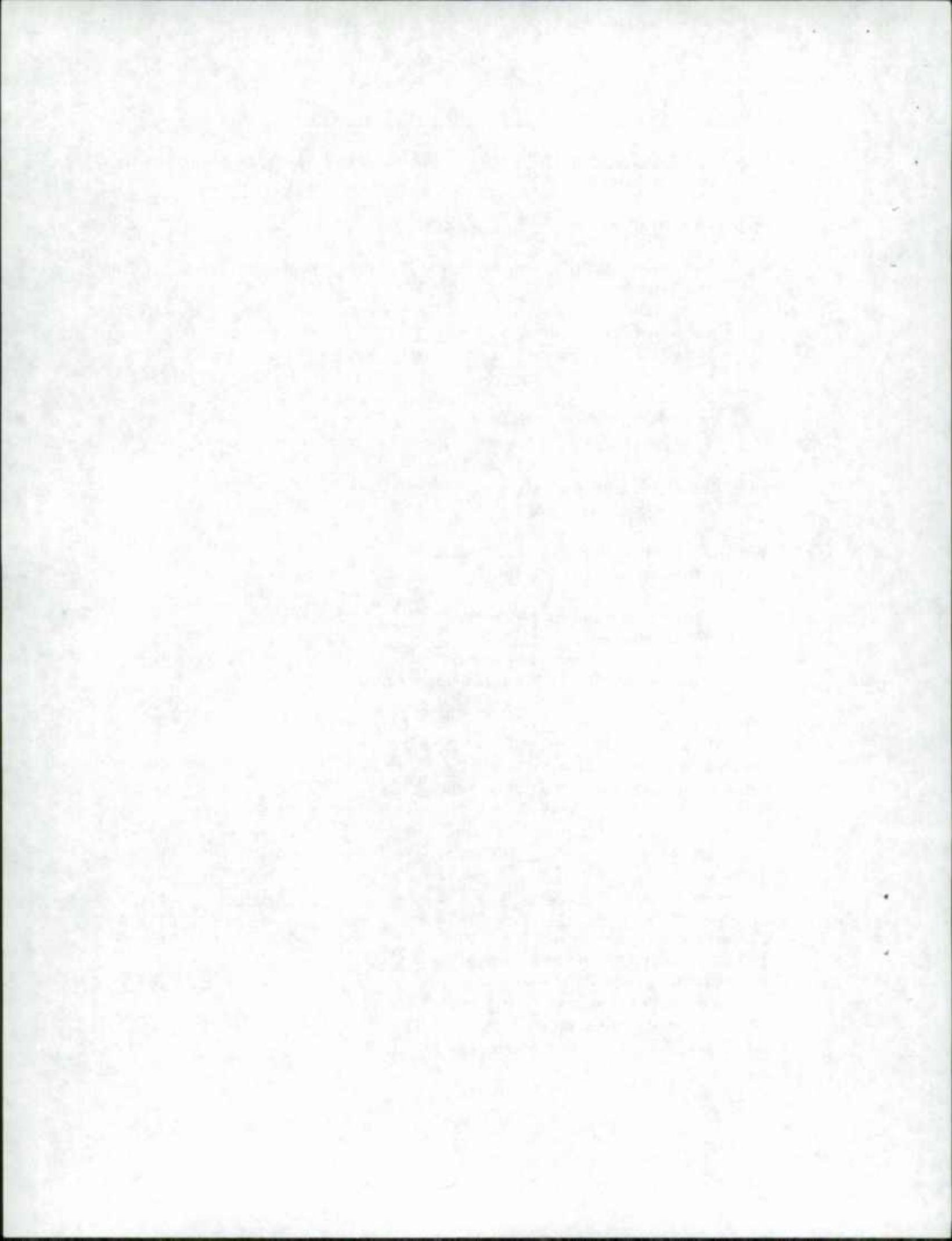
Activity Description (Complete all that apply):

- a. Trees or shrubs removed from outside of setback: \_\_\_\_\_ # x \_\_\_\_\_ SF x 1 = N/A SF
- b. Trees or shrubs removed from setback # \_\_\_\_\_ x \_\_\_\_\_ SF x 2 = N/A SF
- c. Pervious to impervious 0 SF x 2 = 0 SF
- d. Improved pervious to improved pervious N/A SF x 1 = N/A SF
- e. Undisturbed surface disturbed but remaining pervious N/A SF x 1 = N/A SF
- f. Impervious to impervious 2864 SF x 1 = 2864 SF
- g. Impervious to pervious N/A SF x 0 = 0 SF
- h. Construction of decks in setback 454 SF x 2 = 908 SF
- i. TOTAL MITIGATION REQUIRED (sum of a through h) = 3772 SF
- j. TOTAL LANDSCAPE PROVIDED (Refer to "Landscape Conversion Chart" below)

	Number	Value	Total	
Large trees	# <u>2</u>	x 200 SF	=	<u>400</u> SF
Small trees	# <u>6</u>	x 100 SF	=	<u>600</u> SF
Large shrubs	# <u>20</u>	x 75 SF	=	<u>1500</u> SF
Small shrubs	# <u>15</u>	x 50 SF	=	<u>750</u> SF
Herbaceous Plants	# <u>20</u>	x 2 SF	=	<u>40</u> SF

TOTAL VALUE OF LANDSCAPE PROVIDED 3290 SF

- k. FEE-IN-LIEU OF LANDSCAPE = i - j x \$1.20 \$ 578.40 (482 x 1.20)  
(To be paid prior to issuance of Certificate of Occupancy)
- l. Setback from water/wetlands 750 SF x .25 = 187.50 SF  
(Landscape SF to be provided in setback area)





**LANDSCAPE CONVERSION CHART  
MITIGATION**

Large tree = 200 square feet = 2" to 2 1/2" caliber - \$200.00 credit  
 Small tree = 100 square feet = 1" to 1 1/2" caliber - \$100.00 credit  
 Large shrub = 75 square feet = 36" height or spread or 3+ gallon container - \$75 credit  
 Small shrub = 50 square feet = 24" height or spread or 1-2 gallon container - \$50 credit  
 Herbaceous plants = 2 square feet per plant = 1 quart container - \$2 credit

**III. AFFORESTATION (LANDSCAPE) REQUIREMENT OUTSIDE THE 100-FOOT BUFFER**

All development or redevelopment within the 1000-foot Critical Area boundary (but outside the 100-foot buffer) must be vegetated with native plant material in an amount of 15% of the site area.

a. Total landscape required: Parcel size 4700 SF x .15 = 705 SF  
 (This SF area must be plantable and vegetated with the required number of plants)

b. Landscape provided (Refer to Landscape Conversion Chart)

				Existing		Proposed	
Large trees	#	<u>2</u>	x 200 SF =		SF	<u>400</u>	SF
Small trees	#	<u>6</u>	x 100 SF =		SF	<u>600</u>	SF
Large shrubs	#	<u>20</u>	x 75 SF =		SF	<u>1500</u>	SF
Small shrubs	#	<u>15</u>	x 50 SF =		SF	<u>750</u>	SF
Herbaceous Plants	#	<u>20</u>	x 2 SF =		SF	<u>40</u>	SF

TOTAL VALUE OF LANDSCAPE PROVIDED: 3290 SF

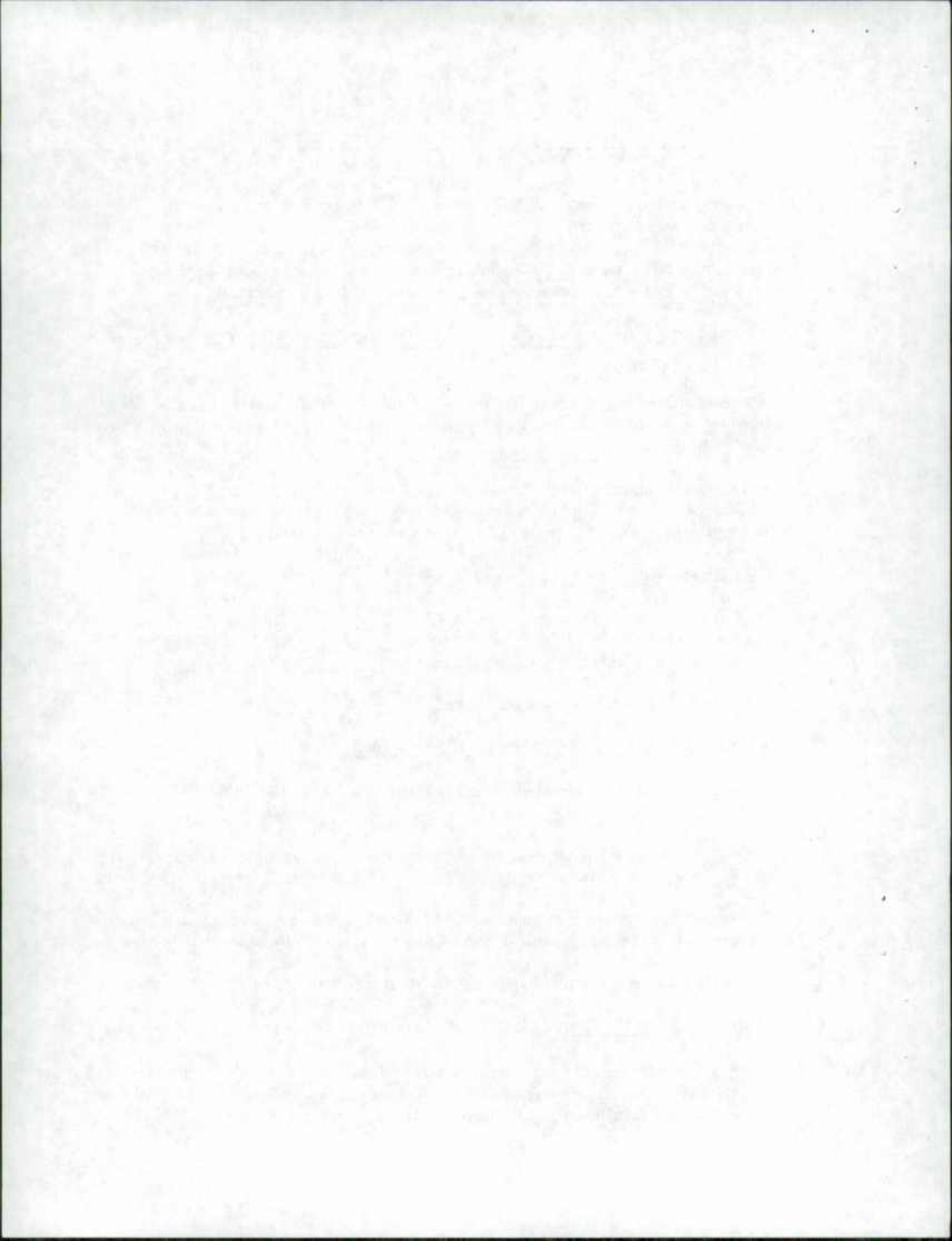
**IV. STORMWATER MANAGEMENT AND THE 10% RULE**

Pollutant reduction requirement for all disturbances over 250 SF in the 1000-foot Critical Area.

1. Single family development subject to stormwater management requirements that use the "Standard Stormwater Management Plan" automatically meet the 10% Rule.
2. Single family development not subject to stormwater management regulations can meet the intent of the 10% Rule by submitting a Water Quality Management Plan.
3. Multi-family and commercial development must submit the 10% Rule Worksheet.

**V. HABITAT PROTECTION (skip if it is less than 40,000 SF)**

For lots of 40,000 square feet or greater, the applicant must consult with the Maryland Department of Natural Resources to determine the existence of any Habitat Protection Areas that may be affected by the proposed development.



VI. LANDSCAPE PLAN

Proposed landscape/mitigation plan (including location, botanical name, common name and installation site and should show all required vegetation according to the Mitigation or Afforestation requirements as well as all vegetation required in accordance with CHAPTER 98, ARTICLE II, LANDSCAPING, OF THE CODE.

VII. SITE PLAN REQUIREMENTS

Critical Area site plan must be drawn to scale and shall include the following information:

1. A title block, including the name of the project or development and the names of the property owner, project data including street name, tax map -parcel and lot,
2. Property lines and approximate location of adjoining property structures
3. North arrow, scale, and legend,
4. All improvements and impervious surfaces (including all structures, sidewalks, sheds, decks, driveways, pools, etc.) labeled as existing or proposed show dimensions and tabulate
5. Existing and proposed grades and elevation (Topography)
6. Limit of all proposed clearing, grading and disturbance.
7. Existing Vegetation, size and type with legend, and
8. Proposed landscape/mitigation plan (including location, botanical name, common name and installation site
9. Mean high water line or Delineation of private and State tidal wetlands and Delineation of non-tidal wetlands (If applicable)
10. 100-foot Buffer and setback delineated (If applicable)
11. Habitat protection areas (if applicable)

Reviewed by:

J. Shih-Wei  
David P. Blayn

Zoning Administrator

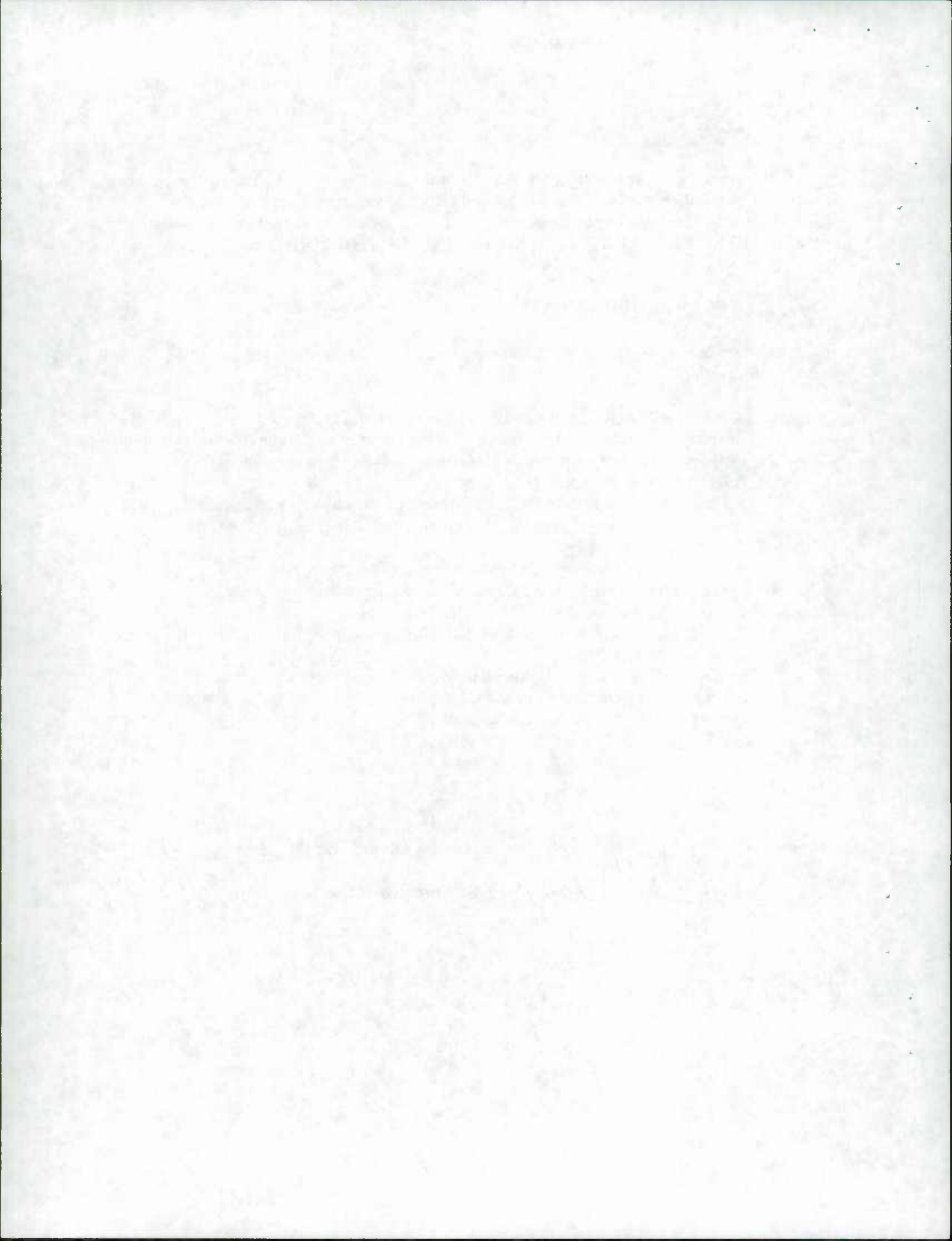
Date

3/17/08

Environmental Engineer

Date

3/18/08





# Worksheet A: Standard Application Process

## Calculating Pollutant Removal Requirements<sup>1</sup>

**Step 1: Calculate Existing and Proposed Site Imperviousness**

**A. Calculate Percent Imperviousness**

- 1) Site Area within the Critical Area IDA, A = 0.107 acres
- 2) Site Impervious Surface Area, Existing and Proposed, (See Table 4.1 for details)

	(a) Existing (acres)	(b) Proposed (acres)
Roads		
Parking lots	0.0374	0.0097
Driveways	0.0036	0.0051
Sidewalks/paths	0.0280	0.0538
Rooftops	0.0078	0.0107
Decks		
Swimming pools/ponds		
Other		
<b>Impervious Surface Area</b>	<b>0.0768</b>	<b>0.0793</b>

3) Non-Structural BMPs Applied to the Site

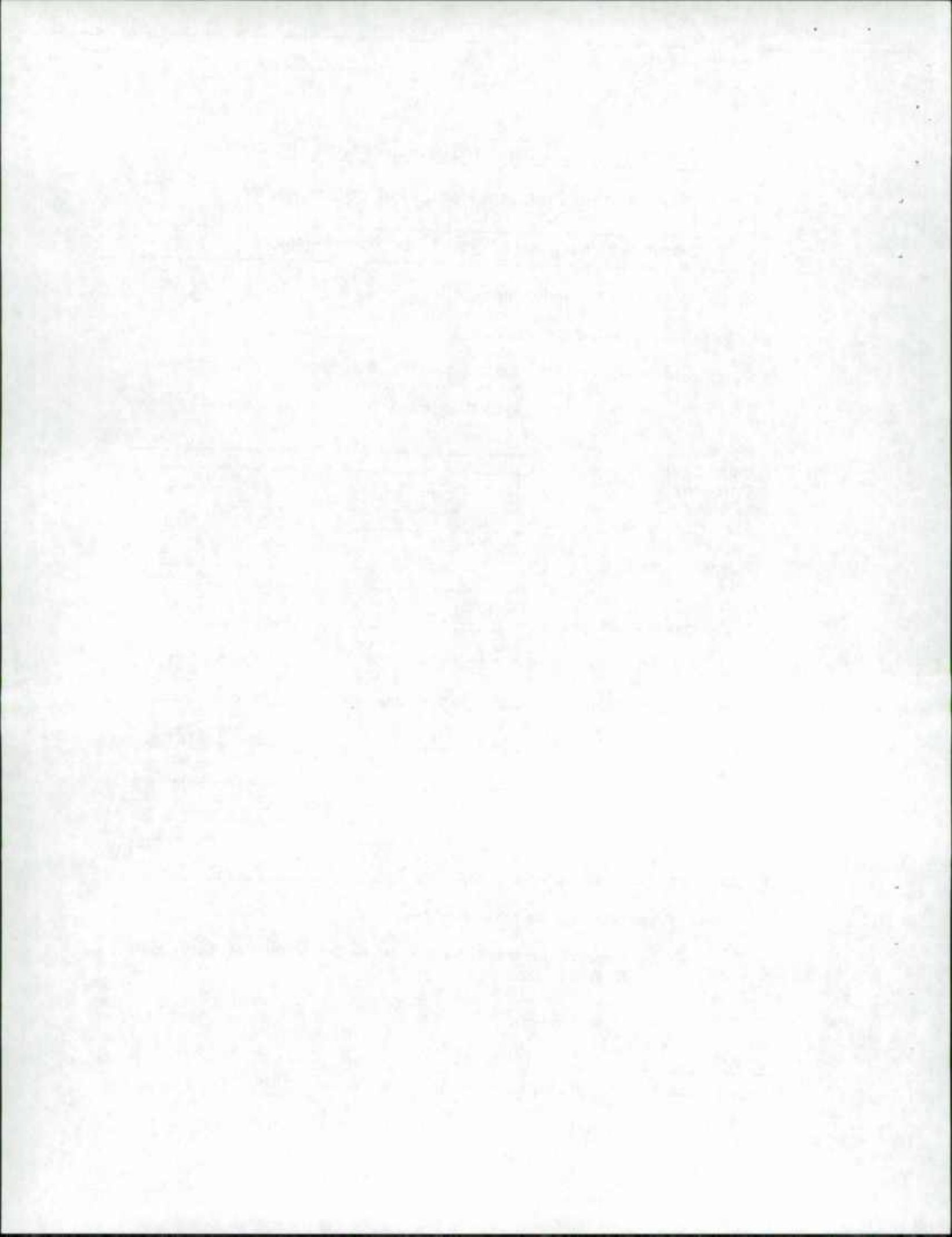
Non-Structural BMP	Disconnected Impervious Area, Proposed (acres)
<u>PERVIOUS DECKS</u>	<u>0.0107</u>
<u>PERVIOUS PAVED DRIVE</u>	<u>30% x 0.0097 = 0.0029</u>
_____	
_____	
_____	

Disconnected Impervious Area 0.0136

4) Adjusted Proposed Impervious Surface Area

= Proposed Impervious Surface Area – Disconnected Impervious Area  
 = (Step 2b) – (Step 3)  
 = (0.0793) – (0.0136)  
 = 0.0657 acres

<sup>1</sup> NOTE: All acreage used in this worksheet refers to areas within the IDA of the Critical Area only.



5) Imperviousness (I)

$$\begin{aligned} \text{Existing Imperviousness, } I_{pre} &= \text{Impervious Surface Area / Site Area} \\ &= \text{(Step 2a) / (Step 1)} \\ &= \frac{(0.0768)}{(0.107)} \\ &= \underline{71.7} \% \end{aligned}$$

$$\begin{aligned} \text{Proposed Imperviousness, } I_{post} &= \text{Impervious Surface Area / Site Area} \\ &= \text{(Step 4) / (Step 1)} \\ &= \frac{(0.0657)}{(0.107)} \\ &= \underline{61.4} \% \end{aligned}$$

C. Define Development Category (circle)

- 1) Redevelopment: Existing imperviousness greater than 15% I (Go to Step 2A)
- 2) New Development: Existing imperviousness less than 15% I (Go to Step 2B)
- 3) Single Lot Residential: Single lot being developed or improved; single family residential; and more than 250 square feet being disturbed (Go to Section 5, Residential Approach, for detailed criteria and requirements.)

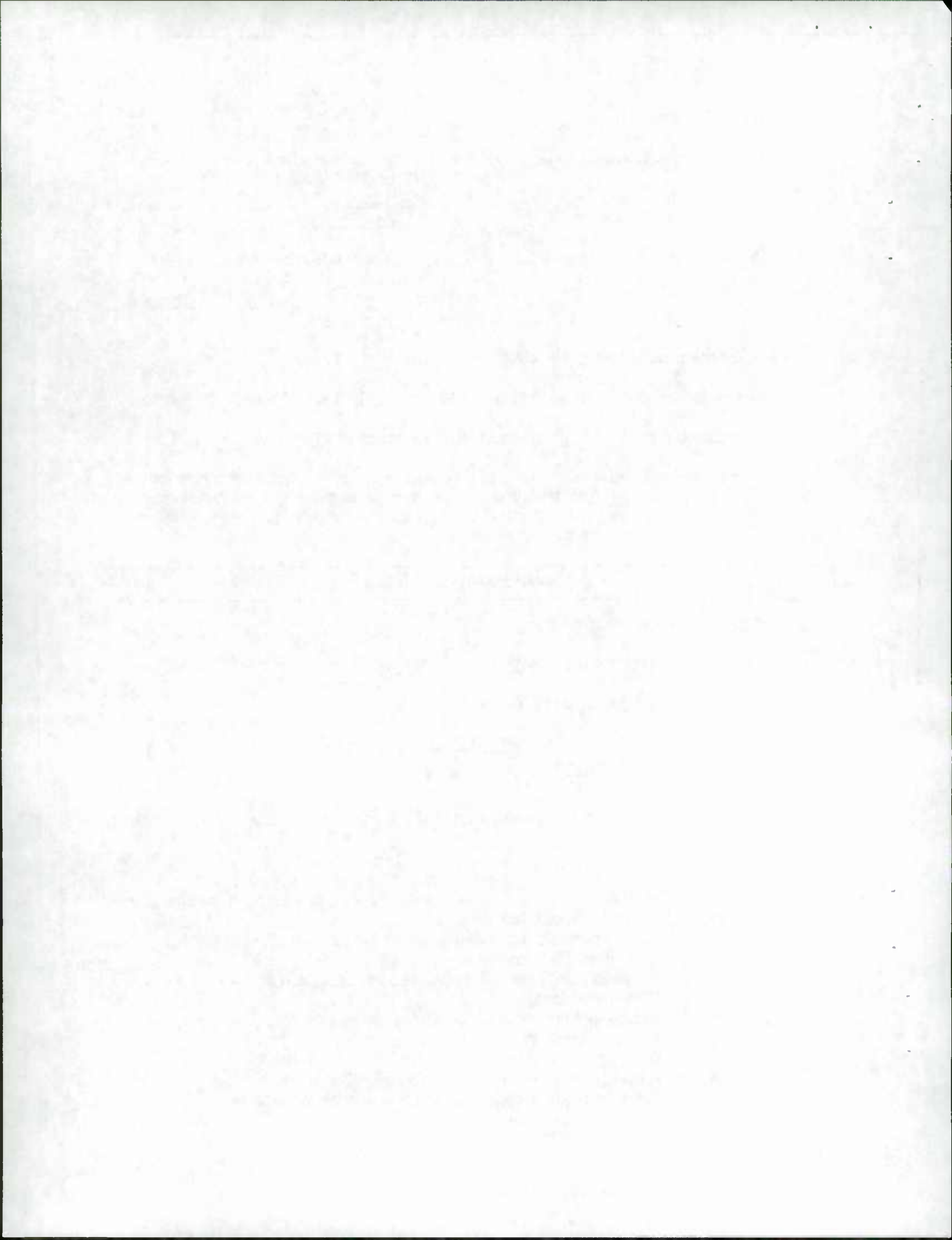
Step 2: Calculate the Predevelopment Load ( $L_{pre}$ )

A. Redevelopment

$$\begin{aligned} L_{pre} &= (R_v) (C) (A) (8.16) \\ R_v &= 0.05 + 0.009 (I_{pre}) \\ &= 0.05 + 0.009 (\underline{71.7}) = \underline{0.6953} \\ L_{pre} &= \frac{(\underline{0.6953}) (\underline{0.30}) (\underline{0.107}) (8.16)}{1} \\ &= \underline{0.182} \text{ lbs/year of total phosphorus} \end{aligned}$$

Where:

- $L_{pre}$  = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- $R_v$  = Runoff coefficient, which expresses the fraction of rainfall which is converted into runoff
- $I_{pre}$  = Predevelopment (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
- $A$  = Area of the site within the Critical Area IDA (acres)
- 8.16 = Includes regional constants and unit conversion factors





**B. New Development**

$$L_{pre} = (0.5) (A)$$

$$= (0.5) (\underline{\hspace{2cm}})$$

$$= \underline{\hspace{2cm}} \text{ lbs /year of total phosphorus}$$

Where:

- $L_{pre}$  = Average annual load of total phosphorus exported from the site prior to development (lbs/year)
- 0.5 = Annual total phosphorus load from undeveloped lands (lbs/acre/year)
- A = Area of the site within the Critical Area IDA (acres)

**Step 3: Calculate the Post-Development Load ( $L_{post}$ )**

**A. New Development and Redevelopment:**

$$L_{post} = (R_v) (C) (A) (8.16)$$

$$R_v = 0.05 + 0.009 (I_{post})$$

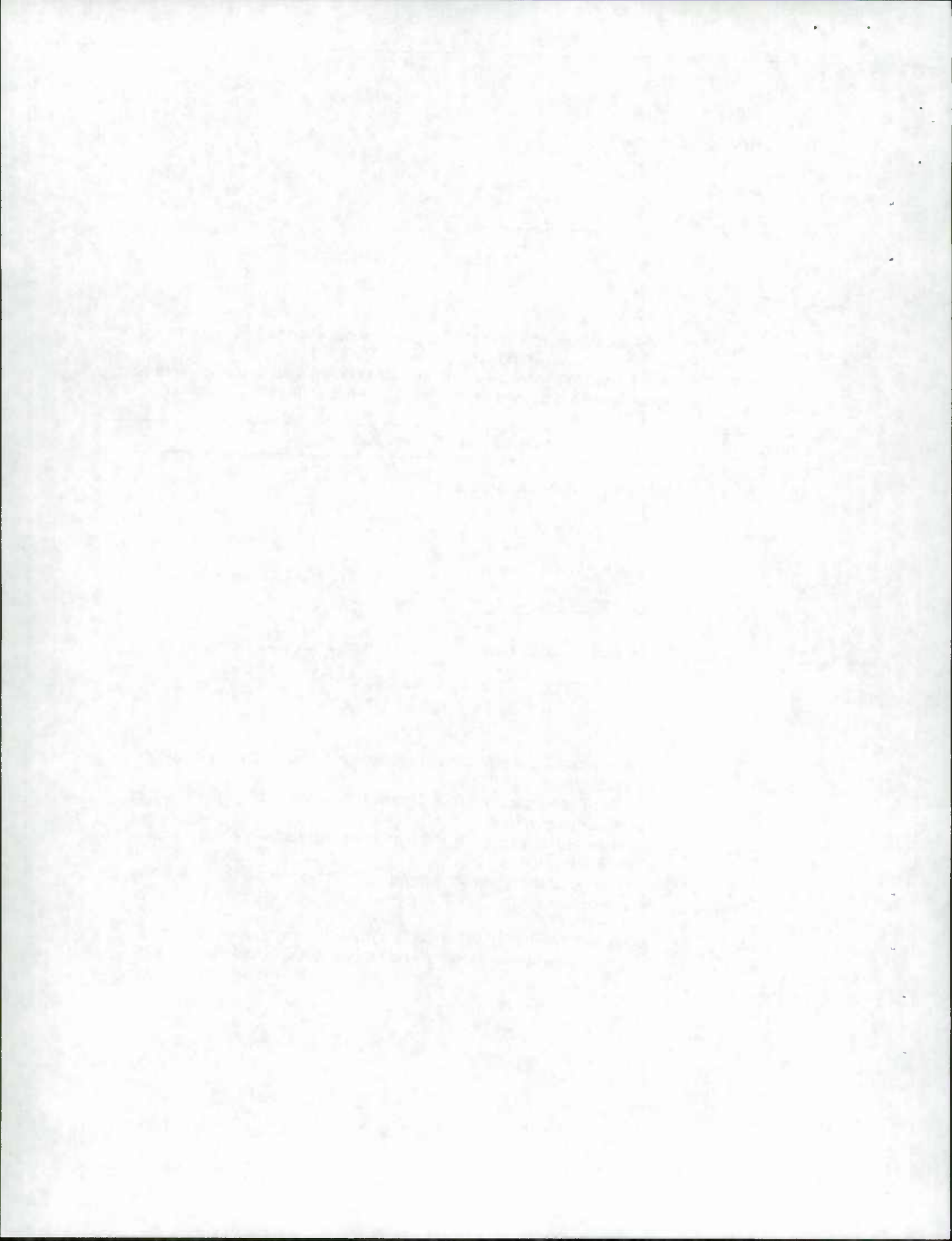
$$= 0.05 + 0.009 (\underline{61.4}) = \underline{0.6026}$$

$$L_{post} = (\underline{0.6026}) (\underline{.30}) (\underline{0.107}) (8.16)$$

$$= \underline{0.158} \text{ lbs/year of total phosphorus}$$

Where:

- $L_{post}$  = Average annual load of total phosphorus exported from the post-development site (lbs/year)
- $R_v$  = Runoff coefficient, which expresses the fraction of rainfall which is converted into runoff
- $I_{post}$  = 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
- A = 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)**

$$\begin{aligned}
 RR &= L_{\text{post}} - (0.9) (L_{\text{pre}}) \\
 &= (0.158) - (0.9) (0.182) \\
 &= -0.0058 \text{ lbs/year of total phosphorus}
 \end{aligned}$$

Where:

- RR = Pollutant removal requirement (lbs/year)
- $L_{\text{post}}$  = Average annual load of total phosphorus exported from the post-development site (lbs/year)
- $L_{\text{pre}}$  = Average annual load of total phosphorus exported from the site prior to development (lbs/year)

**Step 5: Identify Feasible BMP(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.

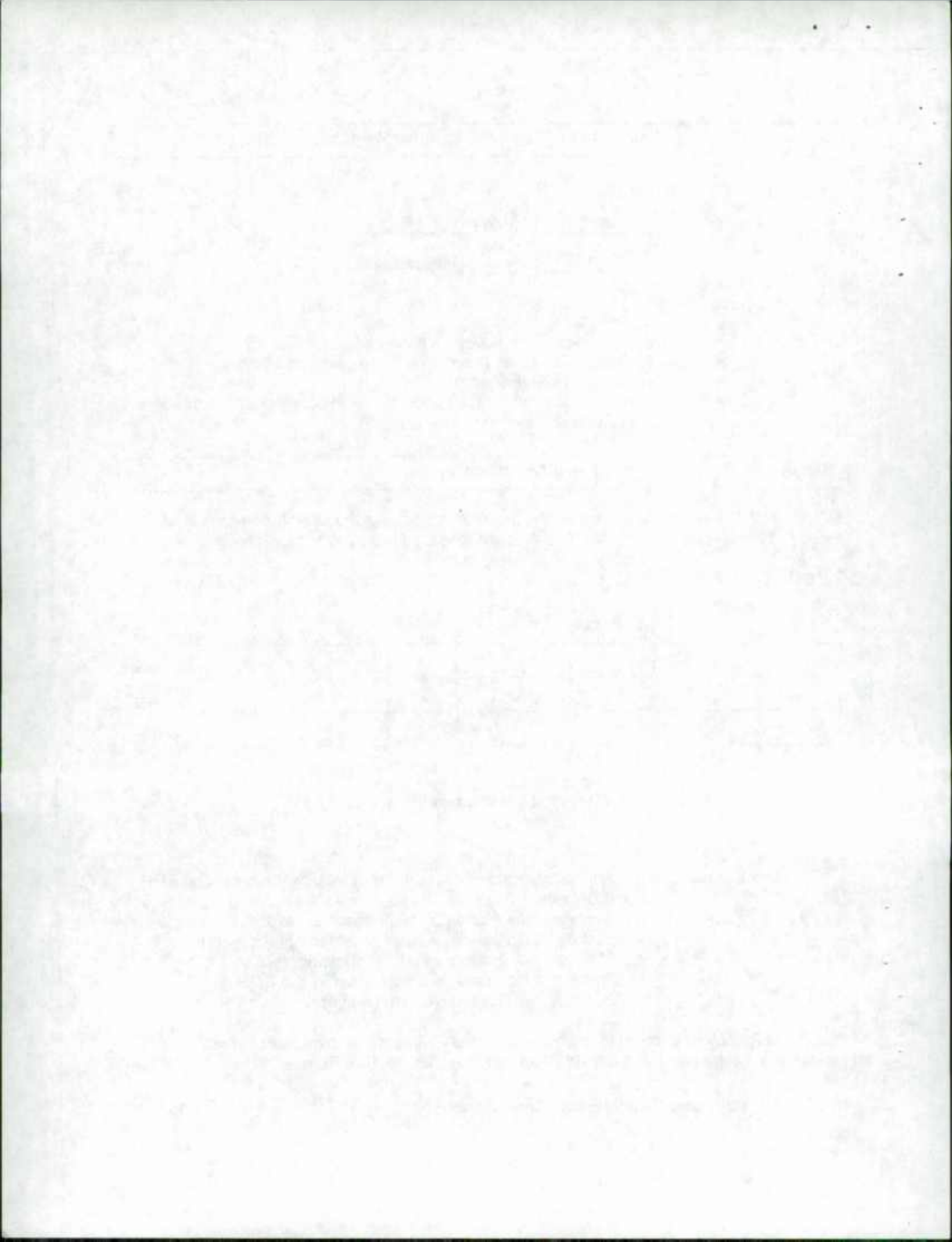
BMP Type	$(L_{\text{post}})$	x	$(BMP_{\text{RE}})$	x	$(\% \text{ DA Served})$	=	LR
<del>_____</del>	<del>_____</del>	<del>x</del>	<del>_____</del>	<del>x</del>	<del>_____</del>	<del>=</del>	<del>_____ lbs/year</del>
<del>_____</del>	<del>_____</del>	<del>x</del>	<del>_____</del>	<del>x</del>	<del>_____</del>	<del>=</del>	<del>_____ lbs/year</del>
<del>_____</del>	<del>_____</del>	<del>x</del>	<del>_____</del>	<del>x</del>	<del>_____</del>	<del>=</del>	<del>_____ lbs/year</del>
<del>_____</del>	<del>_____</del>	<del>x</del>	<del>_____</del>	<del>x</del>	<del>_____</del>	<del>=</del>	<del>_____ lbs/year</del>
Load Removed (total) =							_____ lbs/year
Pollutant Removal Requirement (from Step 4) =							_____ lbs/year

Where:

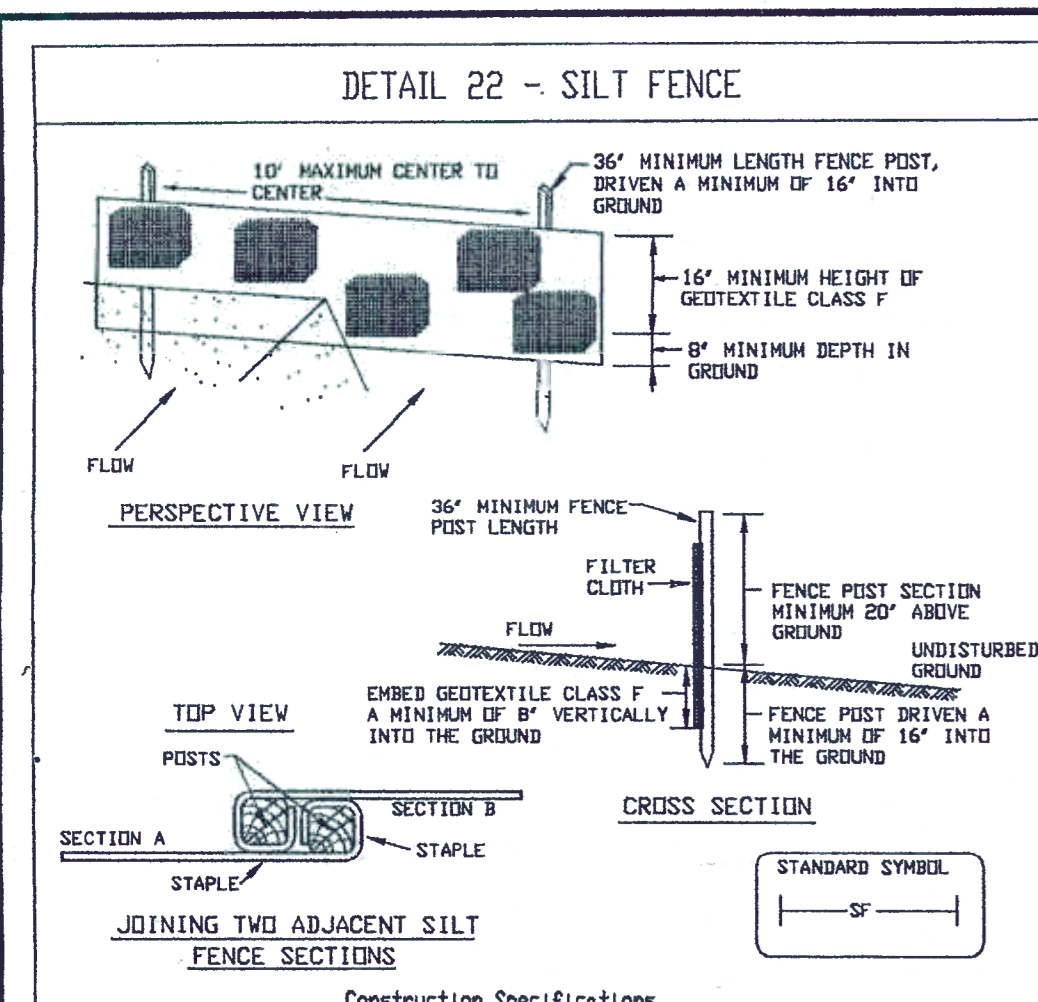
- Load Removed = Annual total phosphorus load removed by the proposed BMP (lbs/year)
- $L_{\text{post}}$  = Average annual load of total phosphorus exported from the post-development site prior to development (lbs/year)
- $BMP_{\text{RE}}$  = BMP removal efficiency for total phosphorus, Table 4.8 (%)
- % DA Served = Fraction of the drainage area served by the BMP (%)
- RR = Pollutant removal requirement (lbs/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 (pollutant removal requirement) been met?  Yes  No





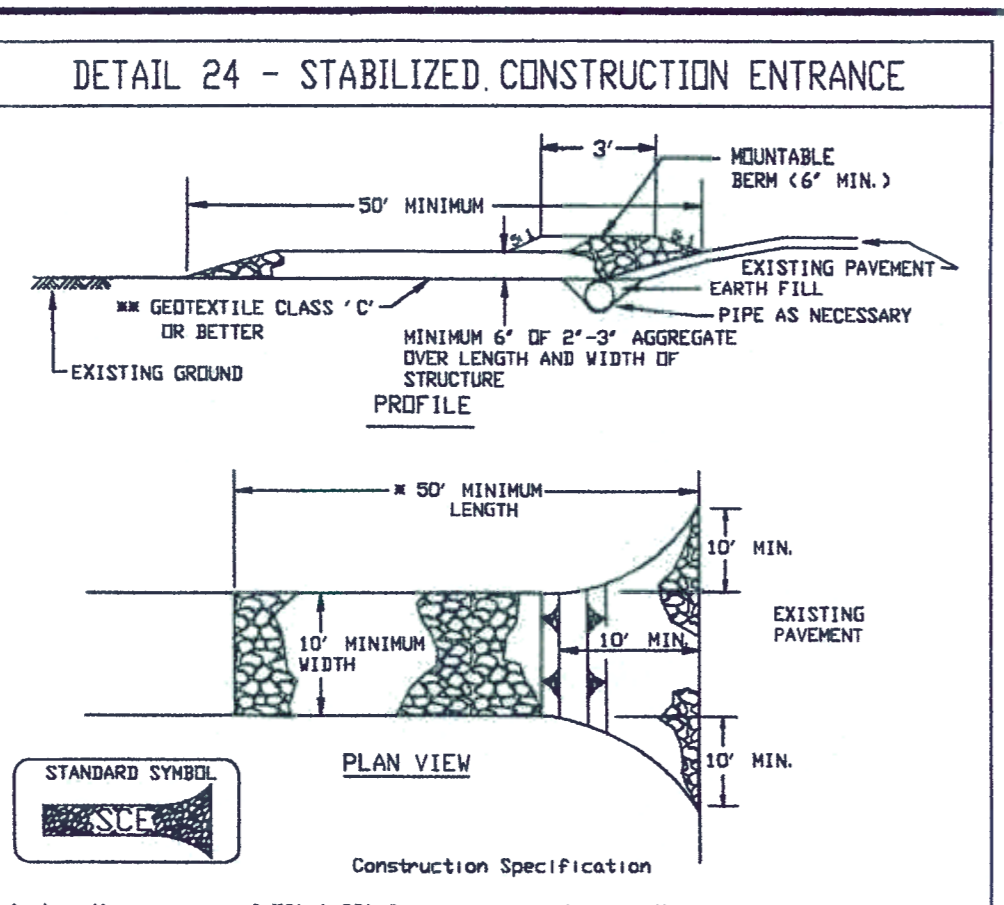


**Construction Specifications**

- 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 MSHT 509
Tensile Modulus	20 lbs/in (min.)	Test MSHT 509
Flow Rate	0.3 gal / 1/2" minute (max.)	Test MSHT 382
Filtering Efficiency	75% (min.)	Test MSHT 382
- Where ends of geotextile fabric cone 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.

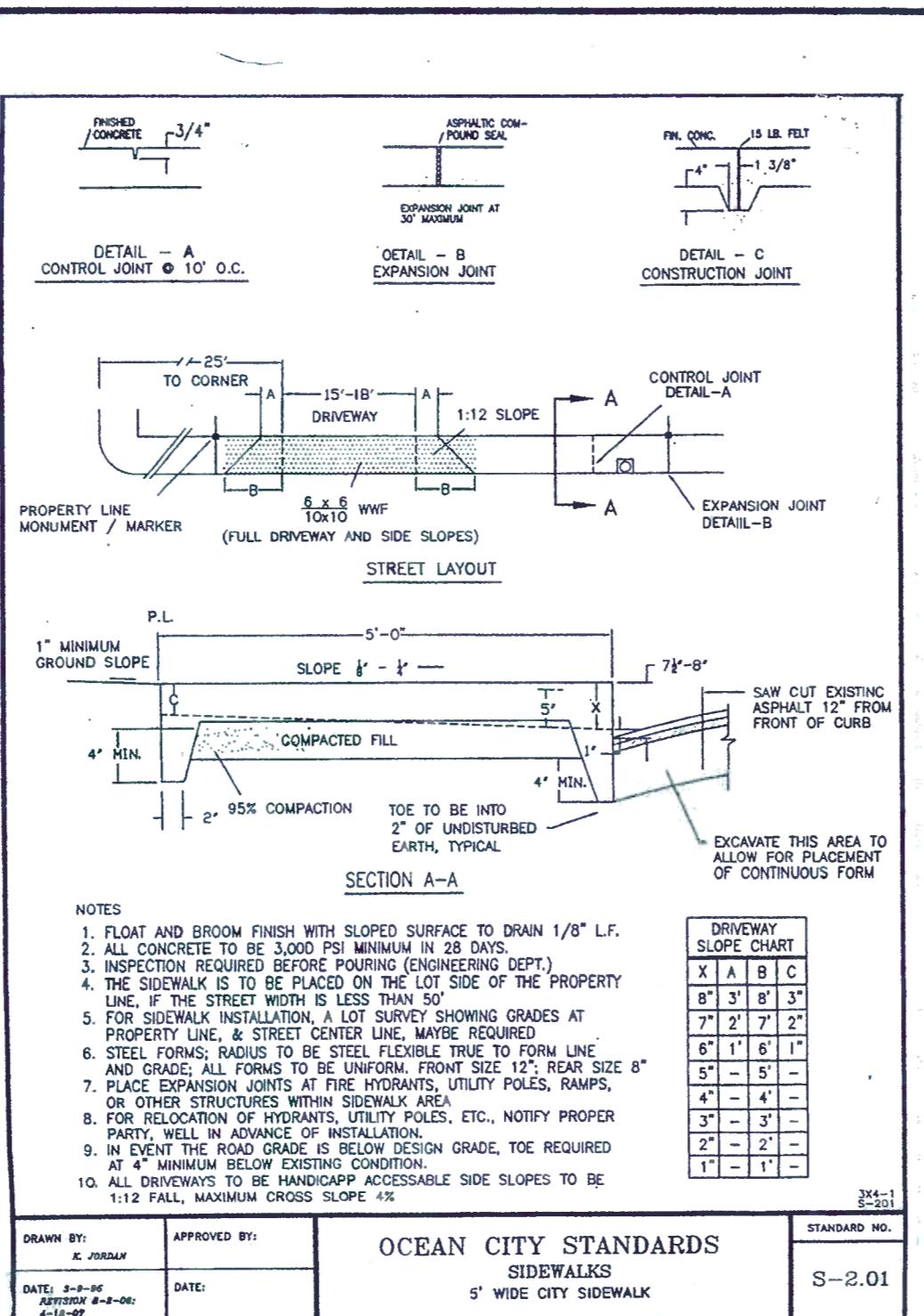
U.S. DEPARTMENT OF AGRICULTURE PAGE 1 MARYLAND DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES  
SOIL CONSERVATION SERVICE E-15-3 WATER MANAGEMENT ADMINISTRATION



**Construction Specification**

- Length - minimum of 50' (#30' for single residence lots).
- Width - 10' minimum, shall be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. Written approval authority may not require single family residences to use geotextile.
- Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete aggregate 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 portable berm with 5' slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the pipe is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe shall 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.

U.S. DEPARTMENT OF AGRICULTURE PAGE 2 MARYLAND DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES  
SOIL CONSERVATION SERVICE E-15-3 WATER MANAGEMENT ADMINISTRATION



**OCEAN CITY STANDARDS SIDEWALKS**  
5' WIDE CITY SIDEWALK

STANDARD NO. S-2.01

DATE: 8-2-00  
DRAWN BY: J. LYNCH  
APPROVED BY: J. LYNCH

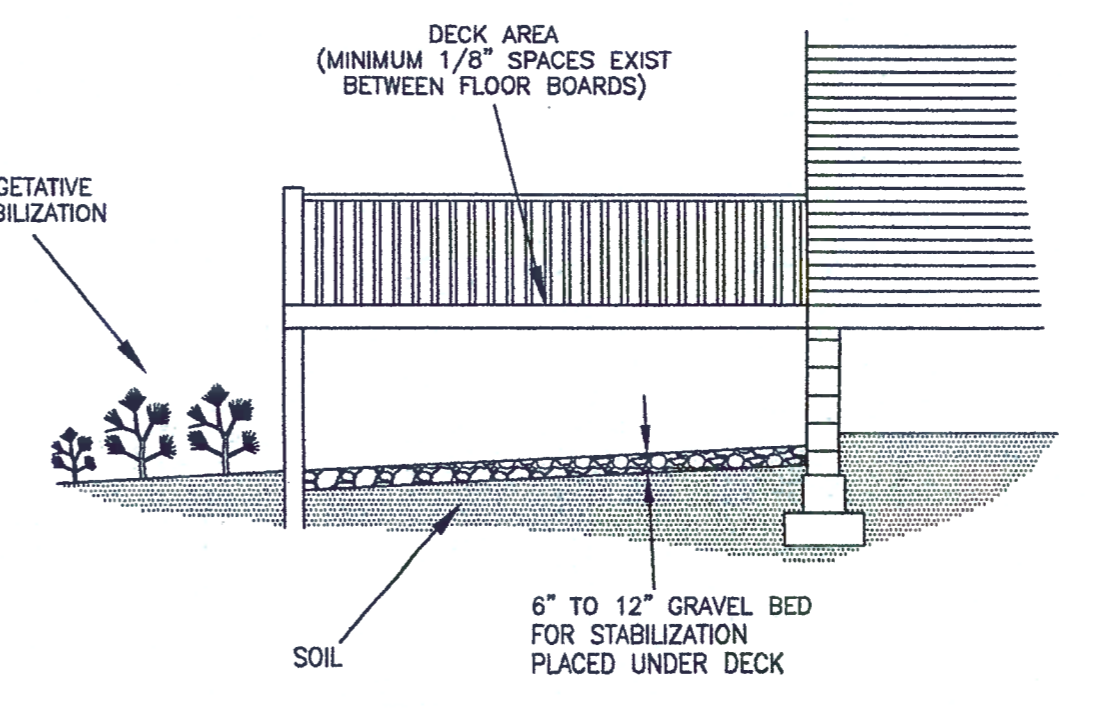
**CONSTRUCTION NOTES:**

- CONTRACTOR SHALL BE REQUIRED TO PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE PROJECT CONSTRUCTION AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
- THE CONTRACTOR SHALL CONTACT MISS UTILTY FOR LOCATION OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. (1-800-257-7777)
- THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE SITE ANY DAMAGE TO EXISTING UTILITIES, ETC. CAUSED BY THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR OBTAINING ALL NECESSARY PERMITS AND FEES.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH WORCESTER COUNTY. (410) 632-1200
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ONGOING INSPECTION AND ACCEPTANCE BY WORCESTER COUNTY ROADS, WORCESTER COUNTY HEALTH DEPARTMENT AND WORCESTER COUNTY SANITARY DISTRICT.
- PARKING LOT AREAS SHALL, AT A MINIMUM, BE SURFACED WITH GRAVEL.



**TABLE 24 MAINTENANCE FERTILIZATIO FOR PERMANENT SEEDINGS**  
USE SOIL TEST RESULTS OR RATES SHOWN BELOW

SEEDING MIXTURE	TYPE	LB/AC	LB/1000 SF	TIME	MOWING
TALL FESCUE MAKES UP 70% OR MORE OF COVER	10-10-10 OR 30-10-10	500	11.5	YEARLY OR AS NEEDED	NOT CLOSER THAN 1/4" IF OCCASIONAL MOWING IS DESIRED.
CROWNWETCH BERBERIS LESPEDEZA BIRDFOOT TREFOIL	0-20-0	400	9.2	SPRING, THE YEAR FOLLOWING ESTABLISHMENT AND EVERY 4-5 YEARS THERE AFTER	DO NOT MOW CROWNWETCH
FAMILY UNIFORM STAND OF TALL FESCUE AND BERBERIS LESPEDEZA, OR BIRDFOOT TREFOIL.	6-10-10	800	11.5	FALL THE YEAR FOLLOWING ESTABLISHMENT AND EVERY 4-5 YEARS THERE AFTER	NOT REQUIRED, NO CLOSER THAN 1/4" IN THE FALL AFTER SEED HAS MATURED.
WEEPING LOVE GRASS & BERBERIS LESPEDEZA FAMILY UNIFORM PLANT DISTRIBUTION	6-10-10	800	11.5	SPRING, THE YEAR FOLLOWING ESTABLISHMENT AND EVERY 4-5 YEARS THERE AFTER	NOT REQUIRED, NO CLOSER THAN 1/4" IN THE FALL AFTER SEED HAS MATURED.
RED & CROWNWETCH FESCUE, KENTUCKY BLUEGRASS, HARD FESCUE MIXTURE	20-10-10	250	5.8	SEPTEMBER, 30 DAYS LATER, DECEMBER, MAY 30, IF NEEDED.	MOW NO CLOSER THAN 1/4" FOR RED FESCUE AND K. BLUEGRASS, 1/2" FOR FESCUE.



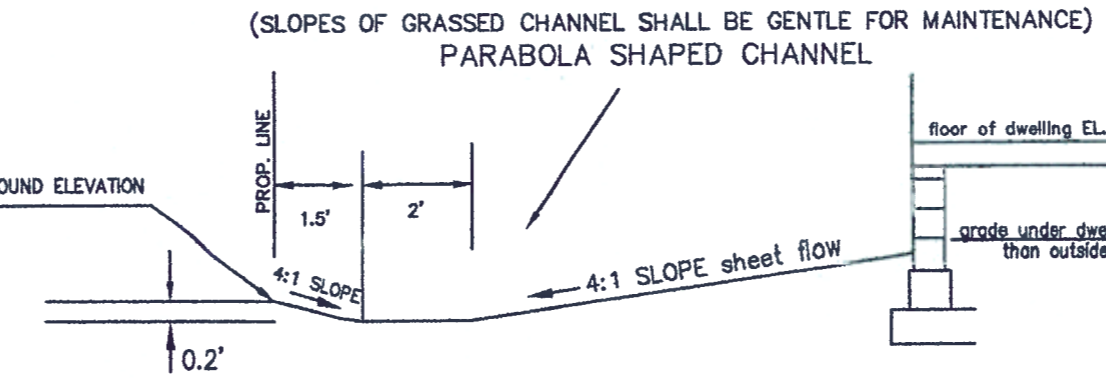
**FIGURE 10.0: DECK BPM'S**

**CONSTRUCTION SCHEDULE FOR SEDIMENT CONTROL MEASURES**

- NOTIFY TOWN OF OCEAN CITY ENGINEERING DEPARTMENT AND MADE AT 410-289-8625 TO SCHEDULE A PRE-CONSTRUCTION MEETING AT LEAST 48 HOURS PRIOR TO COMMENCING ANY SITE WORK. FAILURE TO CONTACT AGENCIES MAY RESULT IN AN IMMEDIATE STOP WORK ORDER.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SILT FENCE, 3 DAYS
- FILL AND GRADE SITE, 2 DAYS
- CONSTRUCT PROPOSED IMPROVEMENTS, 10 DAYS
- PERMANENTLY SEED AND/OR SOO PROPOSED GRASS AREAS AND INSTALL LANDSCAPING, 1 WEEK
- AFTER GRASS HAS BEEN MOWED TWICE, INSTALL GRASS CHANNELS IF SOODED, MOWING NOT REQUIRED PRIOR TO INSTALLATION OF GRASS CHANNELS, GRASS CHANNELS TO BE SOODED AND SEEDING AND STABILIZED WITH MATTING.
- REMOVE SEDIMENT CONTROL MEASURES WHEN ALL DISTURBED AREAS HAVE BECOME STABILIZED WITH GRASS OR OTHER APPROPRIATE MEASURE.

**SEDIMENT AND EROSION CONTROL NOTES:**

- FOLLOWING INITIAL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS ON ALL DISTURBED AREAS ON THE SITE.
- CERTIFICATION BY OWNER OR DEVELOPER THAT 1. ANY CLEARING, GRADING, CONSTRUCTION OR DEVELOPMENT, OR ALL OF THESE, WILL BE DONE ACCORDANT TO THE PROVISIONS OF THE DEPARTMENT APPROVED TRAINING PROGRAM (GROSS, SLOPE, CUTTER, SLOPE, PERIMETER SLOPES, AND SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL, (3:1) AND WITHIN FOURTEEN (14) DAYS ON ALL OTHER DISTURBED OR SOO AREAS ON THE PROJECT SITE.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 3 ACRES, APPROVAL OF THE INSPECTOR AGENCY SHALL BE OBTAINED PRIOR TO THE BEGINNING OF ANY CLEARING, GRADING, CONSTRUCTION OR DEVELOPMENT. APPROVALS MAY NOT BE APPROVED THROUGH THIS INITIAL APPROVAL BY THE INSPECTOR AGENCY IS MADE.
- APPROVAL SHALL BE REQUESTED UPON FINAL STABILIZATION OF ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES BEFORE REMOVAL OF SEDIMENT CHANNELS.
- MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE THAT STABILIZED AREAS CONTINUOUSLY MEET THE PERMITS AND REQUIREMENTS OF 19A MARYLAND STATUTES AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- APPROVED PLANS REMAIN VALID FOR 2 YEARS FROM THE DATE OF APPROVAL, EXCEPT SURFACE MINES AND LANDFILL PLANS WHICH REMAIN VALID FOR 5 YEARS FROM THE DATE OF APPROVAL, UNLESS SPECIFICALLY EXTENDED OR RENEWED BY THE APPROVAL AGENCY.
- SEEDMENT AND EROSION CONTROL MEASURES MUST BE INSPECTED AND MAINTAINED REGULARLY TO INSURE THAT THE INTENDED PROTECTION IS MAINTAINED.
- ALL DISTURBED AREAS WHICH ARE NOT PAVED OR GRADED WILL BE SEEDS OR SOOED.
- WHERE SEEDING IS REQUIRED, USE K-31 OR BETTER, ALL SLOPES OF 3:1 AND ALL AREAS IF SEEDING ON THE PLAN SHALL BE SEEDS.
- ALL DISTURBED AREAS ARE TO BE PROTECTED DURING ALL PHASES OF DEVELOPMENT.
- ALL SPILL WILL BE REMOVED TO AN APPROVED SITE. SPILL FROM EDUCATION WILL BE REMOVED DAILY, CLEAN RUNOFF WATER WILL BE DIVERTED AROUND ANY TEMPORARY STOPPING AREAS.
- THE APPROVAL OF THIS PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER AND CONTRACTOR OF ANY FEDERAL, STATE, COUNTY/TOWN REQUIREMENTS PERTAINING TO ENVIRONMENTAL ISSUES.
- ANYTIME A SOIL EROSION OR SEDIMENT CONTROL PROBLEM OCCURS, PROMPT AND NECESSARY MEASURES WILL BE TAKEN BY THE OWNER AND/OR CONTRACTOR TO CORRECT THE PROBLEM.



**GRASS CHANNEL SECTION (NO FALSE BERM REQUIRED) - NTS**

NOTE: MINOR GRADING TO BE DONE TO MINIMIZE RUNOFF ONTO ADJACENT PROPERTIES AND DOWN SPOUTS TO BE DIRECTED TO GRASS CHANNELS.

EXISTING	PROPOSED
CRITICAL AREA NOTES: 1. DESIGNATION: IDA 2. IMPERVIOUS AREA: DWELLING = 1,218 S.F.± COV. PORCH/DECK/STEPS = 129 S.F.± DECK/STEPS = 28 S.F.± REAR DECK = 182 S.F.± WOOD WALK = 158 S.F.± PAVED DRIVE = 1,631 S.F.± TOTAL IMPERVIOUS = 3,346 S.F.±	CRITICAL AREA NOTES: 1. DESIGNATION: IDA 2. IMPERVIOUS AREA: DWELLING = 2,188 S.F.± COV. ENTRIES = 157 S.F.± CONC. WALKS = 222 S.F.± PERVIOUS PAVED DRIVE = 297 S.F.± (424 S.F. - 30% VOID RATIO = 297 S.F.) REAR DECK (PERVIOUS) = 0 S.F.± TOTAL IMPERVIOUS = 2,864 S.F.± 3. IMPERVIOUS % 71.3 % ± 4. IMPERVIOUS AREA WITHIN 100' BUFFER: 3,346 S.F.± 5. SITE IS IMPROVED.

**STORMWATER MANAGEMENT CALCULATIONS**

EXISTING IMPERVIOUS: 3,346 S.F.±  
PROPOSED IMPERVIOUS: 2,864 S.F.±  
PER TOWN OF OCEAN CITY, IF THERE IS A 20% REDUCTION OF IMPERVIOUS SURFACE NO STORMWATER MANAGEMENT IS REQUIRED. IF THE REDUCTION OF IMPERVIOUS SURFACE IS LESS THAN 20% THEN THE REMAINING IMPERVIOUS SURFACE MUST BE TREATED, UP TO 20%. FOR EXAMPLE, IF THE REDUCTION OF IMPERVIOUS SURFACE IS 15% THEN 5% OF EXISTING IMPERVIOUS SURFACE MUST BE TREATED.

(EXISTING IMP.) 3,346 S.F. - (PROPOSED IMP.) 2,864 S.F. = 482 S.F.  
482 S.F. / 3,346 S.F. = 14.4%  
20% - 14.4% = 5.6%  
5.6% X (EXISTING IMP.) 3,346 S.F. = 187 S.F. REQUIRED STORMWATER MANAGEMENT

**STORMWATER MANAGEMENT TREATMENT PROVIDED**

2 X 73 L.F. GRASSED CHANNELS X 2' WIDE = 292 S.F.

**OPEN SPACE CALCULATIONS**

1,239 S.F. (OPEN) / 4,696 S.F. (TOTAL) = 26% OPEN SPACE  
MINIMUM OF 15% REQUIRED  
CRITICAL AREA OPEN SPACE CALCULATIONS  
296 S.F. (OPEN) / 750 S.F. (TOTAL) = 39% OPEN SPACE IN CRITICAL AREA  
MINIMUM OF 15% REQUIRED

NOTE: THE LIVING AREA FLOOR AND/OR GARAGE FLOOR ELEVATIONS AS SHOWN HEREON ARE RECOMMENDED MINIMUMS. THE ACTUAL ELEVATIONS OF THESE FLOORS ARE TO BE ESTABLISHED BY THE OWNER AND/OR GENERAL CONTRACTOR AS IT IS THEIR RESPONSIBILITY TO VERIFY THE BUILDING CODES, FEMA REGULATIONS, AND ANY OTHER APPLICABLE REGULATIONS AND/OR RESTRICTIONS ARE COMPLIED WITH. IT IS IMPORTANT TO NOTE THAT UTILITIES SERVICING THE STRUCTURE MAY OR MAY NOT REQUIRE A CHANGE IN THE RECOMMENDED FLOOR ELEVATIONS AS SHOWN HEREON.

NOTE: THIS PLAN REFLECTS THE DESCRIPTION OF THE LOT/PARCEL AS NOTED IN THE TITLE OF THIS PLAN, AS SHOWN ON THE RECORD PLAN AND DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHT OF WAYS OR EASEMENTS PERTAINING TO THIS PROPERTY OTHER THAN THOSE AS SHOWN ON SAID RECORD PLAN. NO TITLE SEARCH OR COVENANTS PROVIDED OR STIPULATED.

**TABLE 25 PERMANENT SEEDING FOR LOW MAINTENANCE AREAS**

MIX	SEED MIX (USE CERTIFIED MATERIAL IF AVAILABLE)	PLANTING RATE (SEEDS/1000 SQ. FT.)	SITE CONDITIONS	SOIL HANDLING (NOES)	RECOMMENDED PLANTING DATES	NOTES
1	TALL FESCUE (70%) CANADA BLUEGRASS (10%) KENTUCKY BLUEGRASS (10%) REDTOP (10%)	150 34	MOST TO DRY	6b	X X X X	A
2	KENTUCKY BLUEGRASS (50%) CROWNWETCH RED FESCUE OR A HARD FESCUE (10%) REDTOP (10%)	150 34	MOST TO MODERATELY DRY TO DRY	6a	X X X X	B
3	TALL FESCUE (60%) PERENNIAL RYEGRASS (10%) KENTUCKY BLUEGRASS (10%)	125 25 10	MOST TO DRY	6b	X X X X	C
4	RED FESCUE OR CROWNWETCH RED FESCUE (80%) PERENNIAL RYEGRASS (20%)	60 60 15 34	MOST TO DRY	6a	X X X X	D
5	TALL FESCUE (60%) OR PERENNIAL RYEGRASS (20%) PLUS CROWNWETCH OR PLATYRA	110 25 20 46	MOST TO DRY	6b	X X X X	E
6	TALL FESCUE (60%) OR PERENNIAL RYEGRASS (20%) PLUS CROWNWETCH OR PLATYRA	4 20 46	MOST TO VERY DRY	7a	X X X X	F

**TABLE 25 PERMANENT SEEDING FOR LOW MAINTENANCE AREAS (CONT'D)**

MIX	SEED MIX (USE CERTIFIED MATERIAL IF AVAILABLE)	PLANTING RATE (SEEDS/1000 SQ. FT.)	SITE CONDITIONS	SOIL HANDLING (NOES)	RECOMMENDED PLANTING DATES	NOTES
7	TALL FESCUE (60%) PERENNIAL RYEGRASS (20%) PLUS SERICIA LESPEDEZA (10%)	110 25 20 46	DRY TO VERY DRY	6b	X X X X	G
8	RED QUAMOCIL GRASS (70%) RED FESCUE (10%) PLUS BIRDFOOT TREFOIL (10%)	60 60 15 34	WET TO MODERATELY DRY	6a	X X X X	H
9	TALL FESCUE (60%) JOA THROMALIS (7%) BIRDFOOT TREFOIL (7%)	125 25 20 23	WET TO MODERATELY DRY	6b	X X X X	I
10	TALL FESCUE (60%) HARD FESCUE (20%)	120 34 60	WET TO DRY	6b	X X X X	J
11	HARD FESCUE (100%)	75 17	MOST TO DRY	6a	X X X X	K

**TABLE 26 TEMPORARY SEEDING RATES, DEPTHS AND DATES**

SPECIES	MINIMUM SEEDING RATES PER ACRE	PLANTING DEPTHS INCHES	HARDNESS ZONES * AND SEEDING DATES											
			7a and 7b	8b	9a and 9b	10a and 10b	11a and 11b	12a and 12b	13a and 13b	14a and 14b	15a and 15b	16a and 16b		
CHOOSE ONE: RYE GATS	2.5 BU (120 LBS) 1 BU (60 LBS) 2.5 BU (120 LBS)	2.0 1.2 3.2	X X X	X X X	X X X	X X X	X X X	X X X	X X X	X X X	X X X	X X X	X X X	X X X
BANILEY OR RYE PLUS FERTILIZER	150 LBS	3.45	X X X	X X X	X X X	X X X	X X X	X X X	X X X	X X X	X X X	X X X	X X X	X X X
WEEPING LOVEGRASS	4 LBS	.09	X	X	X	X	X	X	X	X	X	X	X	X
ANNUAL RYEGRASS	50 LBS	1.15	X	X	X	X	X	X	X	X	X	X	X	X
MILLET	50 LBS	1.15	X	X	X	X	X	X	X	X	X	X	X	X

Sediment Control Plan Approval  
Worcester Soil Conservation District  
Snow Hill, MD 21853  
Approved by: *[Signature]*  
Date: 03/27/08

Anytime an erosion or sediment problem occurs the prompt and necessary measures will be taken to correct it by the owner and/or contractor. An approved copy of the Sediment Control Plan will be on site at all times.

#	REVISION	DATE	CHKD	PROJECT

LOT 4, BLOCK 34, SEC. 2-A, CAINE WOODS  
TOWN OF OCEAN CITY  
TENTH TAX DISTRICT, WORCESTER COUNTY, MARYLAND  
TAX MAP 118, PARCEL 42B

**PROPOSED SITE PLAN, STORMWATER MANAGEMENT, SOIL EROSION AND SEDIMENT CONTROL PLAN**

PROFESSIONAL SEAL  
FRANK G. LYNCH, JR. & ASSOCIATES, INC.  
10535 RACETRACK ROAD  
BERLIN, MD 21111  
(410) 641-5363

**Frank G. Lynch, Jr. & Associates, Inc.**  
SURVEYING · LAND PLANNING  
10535 RACETRACK ROAD · BERLIN, MARYLAND 21111  
(410) 641-5363 · 641-6773

DESIGNED BY: B. OVERHOLT  
DRAWN BY: B. OVERHOLT  
CHECKED BY: FRANK G. LYNCH

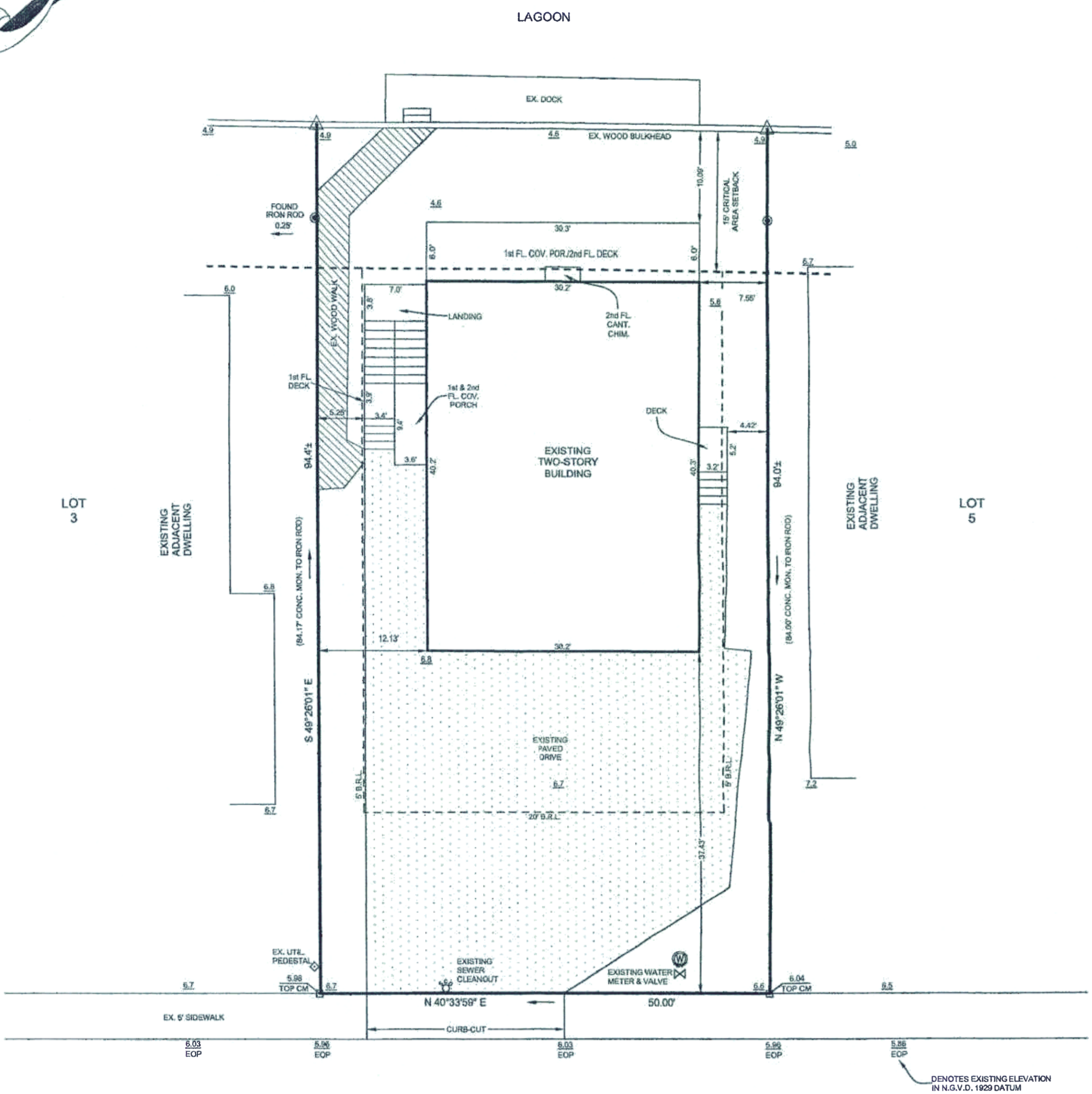
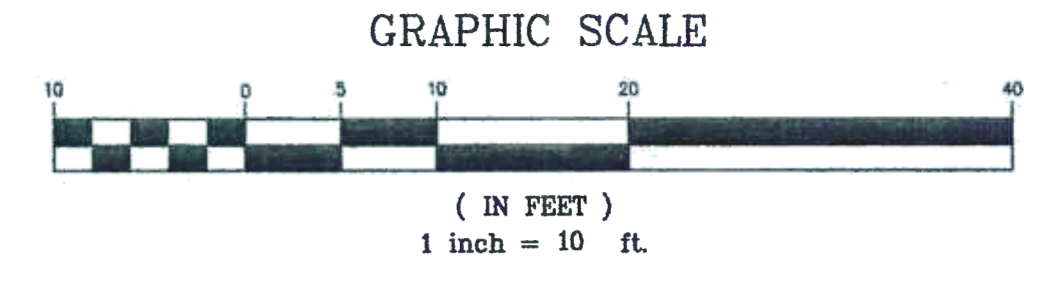
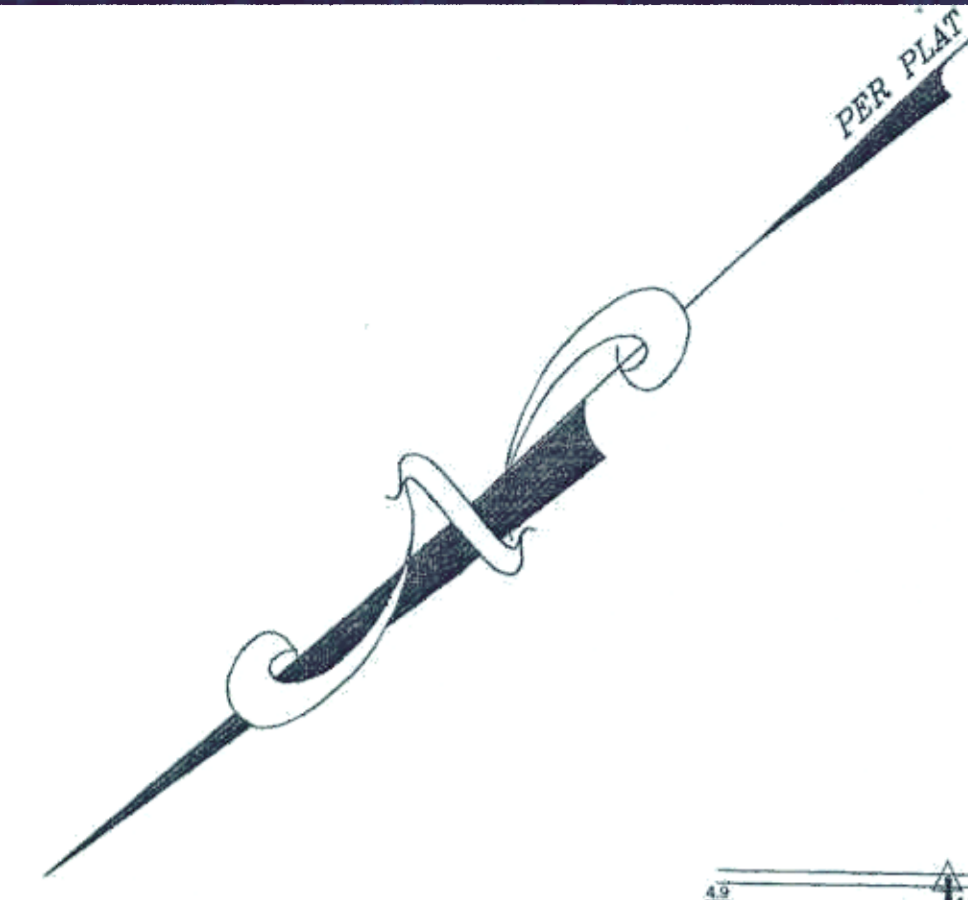
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DATE: 11-7-07  
SCALE: AS SHOWN

FILE NO.: 10480-07  
SHEET 1 OF 2

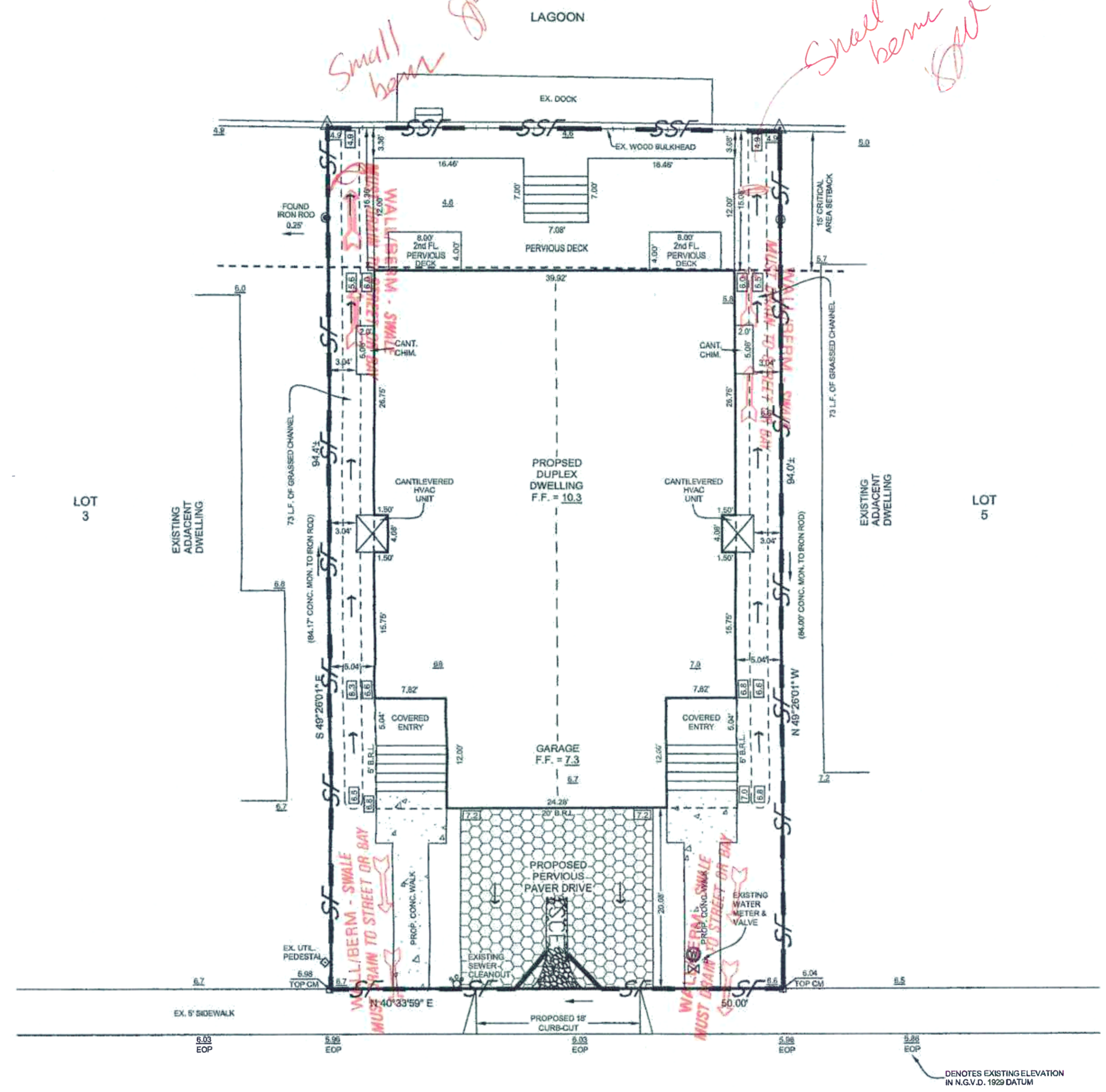
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**EXISTING**  
**CRITICAL AREA NOTES:**  
 1. DESIGNATION: IDA  
 2. IMPERVIOUS AREA:  
 DWELLING = 1,218 S.F.±  
 COV. PORCH/DECK/STEPS = 129 S.F.±  
 DECK/STEPS = 28 S.F.±  
 REAR DECK = 182 S.F.±  
 WOOD WALK = 158 S.F.±  
 PAVED DRIVE = 1,631 S.F.±  
 TOTAL IMPERVIOUS = 3,346 S.F.±  
 3. IMPERVIOUS % = 71.3 % ±  
 4. IMPERVIOUS AREA WITHIN 100' BUFFER: 3,346 S.F.±  
 5. SITE IS IMPROVED.



**PROPOSED**  
**CRITICAL AREA NOTES:**  
 1. DESIGNATION: IDA  
 2. IMPERVIOUS AREA:  
 DWELLING = 2,188 S.F.±  
 COV. ENTRIES = 157 S.F.±  
 CONC. WALKS = 222 S.F.±  
 PERVIOUS PAVER DRIVE = 297 S.F.±  
 REAR DECK (PERVIOUS) = 0 S.F.±  
 TOTAL IMPERVIOUS = 2,864 S.F.±  
 3. IMPERVIOUS % = 61.0 % ±  
 4. IMPERVIOUS AREA WITHIN 100' BUFFER: 2,864 S.F.±  
 5. SITE IS IMPROVED.

Town of Ocean City, Maryland  
 Solid Waste Division  
 Reviewed By: [Signature]  
 Date: 07-14-03

REVIEWED  
 STORMWATER MANAGEMENT ENGINEERING  
 Date: 3-18-08  
 Name: [Signature]  
 This Review is based upon information contained in this plan only, and does not cover unsatisfactory conditions resulting from errors, omissions or failure to clearly indicate conditions. Any alterations, additions or corrections of the plans must be submitted to this office for review. Conformance to drainage, grade, sidewalk, and city ordinance must be met. (See additional conditions attached!)

#	REVISION	DATE	CHKD

PROJECT  
 LOT 4, BLOCK 34, SEC. 2-A, CAINE WOODS  
 TOWN OF OCEAN CITY  
 TENTH TAX DISTRICT, WORCESTER COUNTY, MARYLAND  
 TAX MAP 118, PARCEL 42B

**PROPOSED SITE PLAN,  
 STORMWATER MANAGEMENT,  
 SOIL EROSION AND  
 SEDIMENT CONTROL PLAN**



**Frank G. Lynch, Jr.** DISK#  
 & Associates, Inc.  
 SURVEYING - LAND PLANNING  
 10535 RACETRACK ROAD - BERLIN, MARYLAND 21811  
 (410) 641-5353 • 641-5773

DESIGNED BY B. OVERHOLT	SURVEYED BY CM/MT	FILE NO.: 10460-07
DRAWN BY B. OVERHOLT	DATE 11-7-07	SHEET 2 OF 2
CHECKED BY FRANK G. LYNCH	SCALE 1"=10'	