

WC 574-05  
SUB

Seapointe Phase I

MSA-S-1829-5364

AC 12-6-05

Robert L. Ehrlich, Jr.  
*Governor*

Michael S. Steele  
*Lt. Governor*



Martin G. Madden  
*Chairman*

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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/)

December 6, 2005

**VIA FACSIMILE**

Mr. Keith Lackie, Natural Resources Administrator  
Development Review & Permitting  
One West Market St., Room 1201  
Snow Hill, MD 21863

RE: Seapoint, TM 27, Parcel 637, Outlot A

Dear Mr. Lackie:

Thank you for providing information on the above referenced site plan. The applicant proposes to construct seven (7) duplexes and associated parking on a 2.35 acre parcel within the IDA. The site is currently undeveloped. Based on the information provided, we have the following comments:

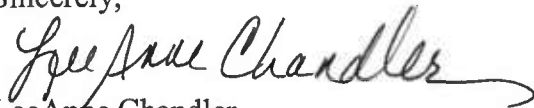
1. Please forward a copy of the response from the Natural Heritage Division when it is received. The project should not receive final approval until a response is in hand and any necessary protective measures established.
2. The proposal appears to meet the 15% afforestation requirement through retention of existing landscaping and additional plantings.
3. In regard to the 10% calculations, there are several issues and concerns. First, the impervious area proposed on the plan (45,519 square feet or 1.04 acres) is different than that used in the 10% calculations (1.283 acres). This must be resolved. Second, Step 5 of the calculations shows two proposed best management practices (BMPs), a wet pond and a grass swale treating 137.4% of the site. This is incorrect as total treatment cannot exceed 100% of the site. The grass channels and the SWM basin appear on the plan but adequate detail is not provided to determine if the channels drain to the basin. If so, and if the channels are constructed in accordance with the specifications for a wet or dry swale in the MDE Stormwater Manual, the calculations should be revised to reflect the best management practices in a series. Information on calculating the removal from such a scenario can be found on pages 7-9 to 7-10 of the Commission's 10% Rule Guidance Manual. If the grass channels are simply a means

Mr. Keith Lackie  
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of conveying rooftop runoff to the basins, they provide pretreatment but cannot count as a BMP. The wet pond alone would fall short of meeting the 10% requirement by approximately 0.5 pounds. Offsets would be required to make up this deficit.

Thank you for the opportunity to review and comment on this site plan. If you have any questions or concerns regarding these comments, please contact me at (410) 260-3477.

Sincerely,



LeeAnne Chandler  
Science Advisor

cc: WC48705  
0574-05

ATLANTIC COASTAL BAYS CRITICAL AREA REPORT

TAX MAP 27, PARCEL 657, OUTLOT A  
TENTH ELECTION DISTRICT  
WORCESTER COUNTY, MARYLAND

PREPARED FOR  
JASTICON, INC.  
P.O. Box 179  
Medford, NJ 08055

PREPARED BY  
R.D.HAND AND ASSOCIATES, INC.  
12302 Collins Rd.  
Bishopville, MD 21813  
410-352-5623

Nov. 16, 2005

## INTRODUCTION

The proposed development of Parcel 637, Outlot A consists of the construction of 14 duplex housing units with associated parking, amenities and infrastructure. The total site area is 2.35 acres. The entire site is within the intensely developed area (IDA) designation of the Atlantic Coastal Bays Critical Area.

The site is relatively flat and was previously utilized as a dredge spoil disposal area when the Marsh Harbor Marina was constructed. The onsite soils are designated as urban land (UT). Existing landscaping consists of a landscaped berm on the north and west property lines. Currently there is no stormwater management for the site with runoff discharging directly to tidal water without treatment.

After development all runoff will be directed to best management practices (BMP's) for treatment prior to discharge. These include grass channels as well as a wet basin. The attached "calculating pollutant removal requirement" show that the developed site exceeds the pollutant removal requirements for critical areas. The site is required to provide 15% forest cover and through plantings and retention the site will have 18% forest cover. Total site disturbance and grading will be 2.03 acres and after development impervious area will be 1.04 acres (44%). The site will be served with both central water and central sewer.

There should be an improvement in water quality after development of this project due to pollutant removal from use of BMP's as well as increased forest cover.

Attached please find correspondence to DNR, Natural heritage Division from Spencer Rowe concerning this project.



**SPENCER ROWE, INC.**  
**12430 Fleetway Drive**  
**Ocean City, Maryland 21842**  
office: 410-213-0127 fax: 410-213-9884

*◦ wetland delineation and permitting ◦ forestry ◦ complete site evaluation*

October 13, 2005

Lori Byrne  
Maryland Department of Natural Resources  
Wildlife and Heritage Service  
580 Taylor Avenue, E-1  
Annapolis, MD 21401

Re: Outlot A, Parcel 637, Worcester County Tax Map 27, Seapointe subdivision

Dear Ms Byrne:

On behalf of our client, we are requesting a determination of any Service concerns regarding the above-referenced parcel.

This area is a former dredge spoil site now maintained as an open mowed field. It is in the middle of the Seapointe subdivision.

Thank you.

Sincerely,

Encl.  
Portion, Worcester County Tax Map 27  
USGS Quad map with approximate property location  
2004 ortho photo

U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATOR CERTIFICATION No. WDCP93MD0310002A

SEAPointE

Section 4.0 Standard Application Process

**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 = 2.355 acres
- 2) Site Impervious Surface Area, Existing and Proposed, (See Table 4.1 for details)

	(a) Existing (acres)	(b) Proposed (acres)
Roads	_____	_____
Parking lots	_____	<u>0.50 AC.</u>
Driveways	_____	_____
Sidewalks/paths	_____	<u>0.015 AC.</u>
Rooftops	_____	<u>0.59 AC.</u>
Decks	_____	<u>0.058</u>
Swimming pools/ponds	_____	<u>0.18 AC.</u>
Other	_____	_____
<b>Impervious Surface Area</b>	<u>0</u>	<u>1.283 AC.</u>

3) Imperviousness (I)

Existing Imperviousness,  $I_{pre}$  = Impervious Surface Area / Site Area  
 = (Step 2a) / (Step 1)  
 =  $(\frac{0}{2.355}) / (\frac{0}{2.355})$   
 = 0 %

Proposed Imperviousness,  $I_{post}$  = Impervious Surface Area / Site Area  
 = (Step 2b) / (Step 1)  
 =  $(\frac{1.283}{2.355}) / (\frac{1.283}{2.355})$   
 = 54.48 %

**B. Define Development Category (circle)**

- 1) New Development: Existing imperviousness less than 15% | (Go to Step 2A)
- 2) Redevelopment: Existing imperviousness of 15% | 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).

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

## Preparation Process

**Step 2: Calculate the Predevelopment Load ( $L_{pre}$ )****A. New Development**

$$\begin{aligned}
 L_{pre} &= (0.5) (A) \\
 &= (0.5) ( \underline{2.355} ) \\
 &= \underline{1.1775} \text{ lbs/year of total phosphorus}
 \end{aligned}$$

Where:

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

**B. Redevelopment**

$$\begin{aligned}
 L_{pre} &= (R_v) (C) (A) (8.16) \\
 R_v &= 0.05 + 0.009 (I_{pre}) \\
 &= 0.05 + 0.009 ( \underline{\hspace{2cm}} ) = \underline{\hspace{2cm}} \\
 L_{pre} &= ( \underline{\hspace{2cm}} ) ( \underline{\hspace{2cm}} ) ( \underline{\hspace{2cm}} ) (8.16) \\
 &= \underline{\hspace{2cm}} \text{ lbs/year of total phosphorus}
 \end{aligned}$$

Where:

$$\begin{aligned}
 L_{pre} &= \text{Average annual load of total phosphorus exported from the site prior to development (lbs/year)} \\
 R_v &= \text{Runoff coefficient, which expresses the fraction of rainfall which is converted into runoff} \\
 I_{pre} &= \text{Pre-development (existing) site imperviousness (i.e., } I = 75 \text{ if site is 75\% impervious)} \\
 C &= \text{Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l} \\
 A &= \text{Area of the site within the Critical Area IDA (acres)} \\
 8.16 &= \text{Includes regional constants and unit conversion factors}
 \end{aligned}$$



## Section 4.0 Standard Application Process

**Step 3: Calculate the Post-Development Load ( $L_{post}$ )****A. New Development and Redevelopment:**

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

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

$$= 0.05 + 0.009 (54.48) = 0.54032$$

$$L_{post} = (0.54032) (0.30) (2.355) (8.16)$$

$$= 3.115 \text{ lbs/year of total phosphorus}$$

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)**

$$RR = L_{post} - (0.9) (L_{pre})$$

$$= (3.115) - (0.9) (1.1775)$$

$$= 2.055 \text{ lbs/year of total phosphorus}$$

Where:

$RR$  = Pollutant removal requirement (lbs/year)

$L_{post}$  = Average annual load of total phosphorus exported from the post-development site (lbs/year)

$L_{pre}$  = Average annual load of total phosphorus exported from the site prior to development (lbs/year)

Section 4.0 Standard Application Process

**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	( $L_{post}$ )	x	( $BMP_{RE}$ )	x	(% DA Served)	=	LR
WET POND	3.115	x	50%	x	100	=	1.5575 lbs/year
GRASS SWALE	3.115	x	50%	x	37.4	=	0.5825 lbs/year
		x		x		=	lbs/year
		x		x		=	lbs/year
Load Removed, LR (total) =							2.14 lbs/year
Pollutant Removal Requirement, RR (from Step 4) =							2.055 lbs/year

Where:

- Load Removed, LR = Annual total phosphorus load removed by the proposed BMP (lbs/year)
- $L_{post}$  = Average annual load of total phosphorus exported 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 (CA) 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

**GENERAL NOTES**

PARKING AREAS AND ACCESS DRIVES SHALL BE CONSTRUCTED OF GRAVEL AT A MINIMUM.

THERE ARE NO TIDAL OR MONTIDAL WETLANDS ON SITE AS VERIFIED BY SPENCER ROWE, ENVIRONMENTAL CONSULTANT.

REFER TO WATER SEWER, STORMWATER MANAGEMENT AND S.E.S.C PLANS FOR LOCATIONS OF UTILITIES, GRADING AND BUILDING FLOOR ELEVATIONS.

EXISTING CONDITIONS, BOUNDARY AND TOPOGRAPHIC MAPPING BY FRANK G. LYNCH JR. AND ASSOCIATES, INC.

REFER TO ARCHITECTURAL PLANS FOR BUILDING HEIGHT, TYPE OF CONSTRUCTION ETC.

CONCRETE WHEEL STOPS OR PAINTED STRIPES WILL BE USED TO DEMARCATÉ PARKING SPACES.

INDIVIDUAL CURB SIDE PICK UP WILL BE USED FOR GARBAGE REMOVAL, THEREFORE NO DUMPSTERS ARE REQUIRED.

THERE WILL BE NO PAVING WITHIN 3' OF ANY TREE TRUNK.

ALL LIGHTING, INCLUDING EXTERIOR LIGHTS SIGNS, FLOOD LIGHTS, PARKING LOT LIGHTING, STREET LIGHTS AND LIGHTING NECESSARY FOR THE SAFETY AND PROTECTION OF PROPERTY, SHALL BE DIRECTED, CONTROLLED AND FOCUSED WITHIN THE SITE'S PROPERTY LINES TO MINIMIZE GLARE AND ILLUMINATION OF NEIGHBORING PROPERTIES AND SPECIFICALLY TO DIRECT THE LIGHT AWAY FROM ADJOINING LOTS OR ROADS.

ALL MINIMUM YARD SETBACKS ARE MEASURED FROM FINISHED WALL SURFACE, NOT THE FOUNDATION.

AT A MINIMUM HOSE BIBS WILL BE PROVIDED FOR WATERING OF PLANT MATERIAL.

**SITE DATA**

**PARCEL DESCRIPTION**  
REVISED OUTLOT "A"  
SEAPoint SUBDIVISION  
TAX MAP 27, PARCEL 637  
TAX DISTRICT 10  
WORCESTER COUNTY MD

**OWNER / APPLICANT**  
JASTICON INC.  
P.O. BOX 179  
MEDFORD, NJ 08055

**EXISTING ZONING**  
R-4, GENERAL RESIDENTIAL  
SETBACKS: FRONT = 25'  
SIDE = 6'  
REAR = 20'

**SITE AREA**  
102,570.00 S.F.

**OPEN SPACE**  
REQUIRED = 7,500 S.F.  
PROVIDED = 7,588 S.F.

**PROPOSED USE**  
14 DUPLEX UNITS

**PARKING**  
**REQUIRED**  
14 DUPLEXES @ 2.0 EACH = 28 SPACES  
**PROVIDED**  
28 = 14 (2) CAR GARAGES  
3 = OUTSIDE 10'x20' SPACES  
2 = HANDICAP  
33 TOTAL SPACES PROVIDED

**SEWER**  
SEWER WILL BE PROVIDED BY WEST OCEAN CITY WASTEWATER COLLECTION SYSTEM.

**WATER**  
WATER WILL BE PROVIDED VIA MYSTIC HARBOUR WATER TREATMENT FACILITY.

**IMPERVIOUS AREA**

**EXISTING**  
-0- S.F. IMPERVIOUS

**PROPOSED**  
PARKING, DRIVES, WALKS = 22,433 S.F.  
BUILDINGS = 23,086 S.F.  
TOTAL = 45,519 (44.3%)

OPEN SPACE = 57,051 S.F. (55.7%)

**FLOOD PLAIN**

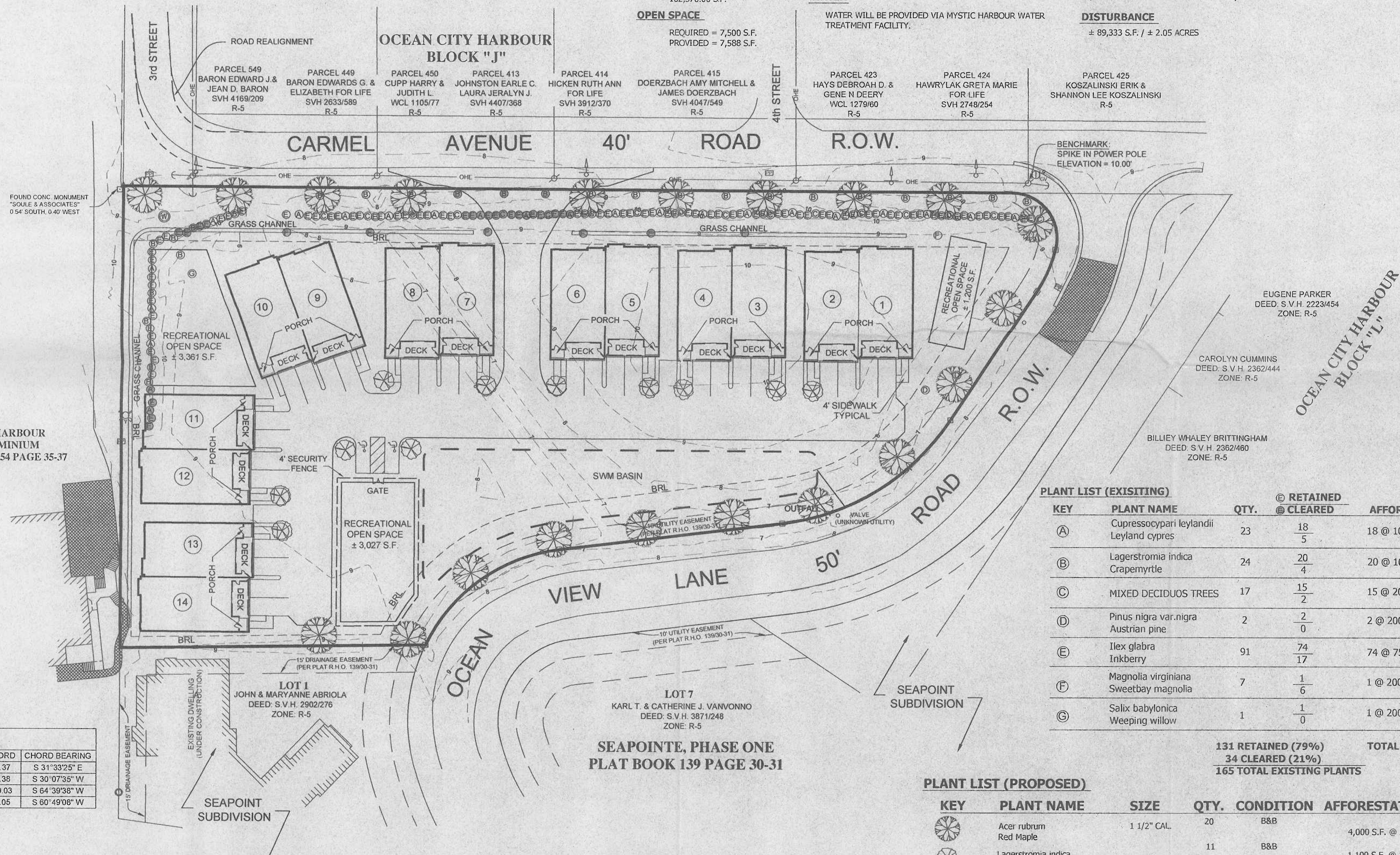
THIS SITE IS LOCATED ENTIRELY WITHIN FLOODZONE A=6 (ELEV 9) PER FEMA COMMUNITY PANEL 240083 0105C AND OUTSIDE THE 100' BUFFER.

**SOILS**

THE ENTIRE SITE IS MAPPED AS UT (URBAN LAND - UDORTHEM COMPLEX)

**DISTURBANCE**

± 89,333 S.F. / ± 2.05 ACRES



**PLANT LIST (EXISTING)**

KEY	PLANT NAME	QTY.	RETAINED CLEARED	AFFORESTATION CREDIT
A	Cupressocypari leylandii Leyland cypress	23	18 5	18 @ 100 S.F. = 1,800 S.F.
B	Lagerstromia indica Crapemyrtle	24	20 4	20 @ 100 S.F. = 2,000 S.F.
C	MIXED DECIDUOUS TREES	17	15 2	15 @ 200 S.F. = 3,000 S.F.
D	Pinus nigra var. nigra Austrian pine	2	2 0	2 @ 200 S.F. = 400 S.F.
E	Ilex glabra Inkberry	91	74 17	74 @ 75 S.F. = 5,550 S.F.
F	Magnolia virginiana Sweetbay magnolia	7	1 6	1 @ 200 S.F. = 200 S.F.
G	Salix babylonica Weeping willow	1	1 0	1 @ 200 S.F. = 200 S.F.

131 RETAINED (79%)  
34 CLEARED (21%)  
165 TOTAL EXISTING PLANTS

TOTAL CREDIT = 13,150 S.F.

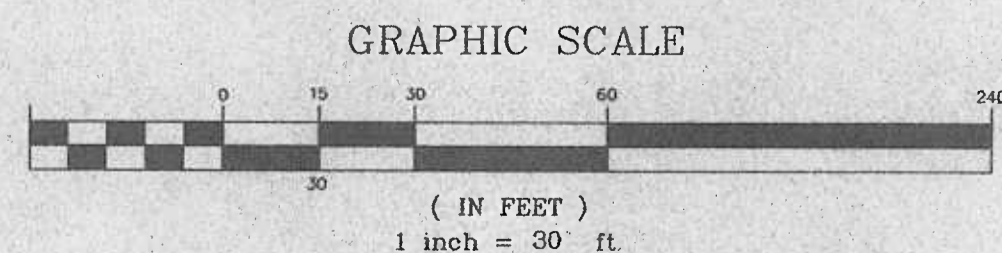
**PLANT LIST (PROPOSED)**

KEY	PLANT NAME	SIZE	QTY.	CONDITION	AFFORESTATION CREDIT
⊗	Acer rubrum Red Maple	1 1/2" CAL.	20	B&B	4,000 S.F. @ 200 S.F. EACH
⊗	Lagerstromia indica Crapemyrtle	1 1/2" CAL.	11	B&B	1,100 S.F. @ 100 S.F. EACH
□	LAWN				

5,100 S.F. PROPOSED  
13,150 S.F. RETAINED  
18,250 S.F. PROVIDED (±18)  
15,385 S.F. REQUIRED (15%)

**CURVE TABLE**

CURVE	DELTA	RADIUS	LENGTH	CHORD	CHORD BEARING
C-1	103°53'10"	25.00	45.33	39.37	S 31°33'25" E
C-2	19°28'50"	75.00	25.50	25.38	S 30°07'35" W
C-3	49°35'16"	130.00	112.51	109.03	S 64°39'38" W
C-4	57°16'16"	95.00	94.96	91.05	S 60°49'08" W



**WORCESTER COUNTY ATLANTIC COASTAL BAYS CRITICAL AREA LAW NOTE:**  
THIS PROPERTY LIES WITHIN THE WORCESTER COUNTY ATLANTIC COASTAL BAYS CRITICAL AREA. ANY AND ALL PROPOSED DEVELOPMENT ACTIVITY MUST MEET THE REQUIREMENTS OF TITLE 3 (LAND AND WATER RESOURCES), SUBTITLE 1 (ATLANTIC COASTAL BAYS CRITICAL AREA) OF THE WORCESTER COUNTY CODE OF PUBLIC LOCAL LAWS IN EFFECT AT THE TIME OF PROPOSED DEVELOPMENT ACTIVITY.

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**CRITICAL AREA PLAN**  
REVISED OUTLOT "A" SEAPointe SUBDIVISION  
TAX MAP 27, PARCEL 637  
WORCESTER COUNTY, MARYLAND

**R.D. HAND AND ASSOCIATES, INC.**  
LANDSCAPE ARCHITECTURE, SITE PLANNING AND FEASIBILITY  
12302 COLLINS ROAD BISHOPVILLE, MD. 21813 410-352-5623

DATE: 2/20/04  
REV. DATE: 11/16/05  
DRAWN BY: J. MAYHUE  
CHK'D BY: R.D. HAND  
DRAWING: C-1  
SCALE: 1"=30'

**SHEET**  
C-1