

No. \_\_\_\_\_

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**UNITED STATES OF AMERICA  
BEFORE THE DEPARTMENT OF COMMERCE**

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**G. Walter Swain,  
Appellant,**

**vs.**

**Delaware Department of Natural  
Resources and Environmental Control,  
Respondent.**

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**APPENDIX TO THE  
INITIAL BRIEF ON APPEAL OF G. WALTER SWAIN  
UNDER THE COASTAL ZONE MANAGEMENT ACT**

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John W. Paradee, Esquire (DE Bar #2767)  
Kevin M. Baird, Esquire (DE Bar #4219)  
PRICKETT, JONES & ELLIOTT, P.A.  
11 North State Street  
Dover, Delaware 19901  
(302) 674-3841  
*Counsel for the Applicant/Appellant*

Dated: March 3, 2008

# EXHIBIT A

# Wetlands and Subaqueous Lands Section Basic Application Form

## Section 1: Applicant Identification

1. Applicant's Name: G. Walter Swain Telephone#: 302-422-3468  
 Mailing Address: 8241 Front Street Fax #: \_\_\_\_\_  
Lincoln, DE 19960 E-mail: \_\_\_\_\_
2. Consultant's Name: David L. Hardin Telephone#: 410-548-5320  
 Mailing Address: Environmental Resources, Inc. Fax #: 410-548-3767  
One Plaza East, Suite 500 E-mail: dhardin@ericonsultants.com  
Salisbury, MD 21801
3. Contractor's Name: Peter Russp Telephone #: 302-249-3600  
 Mailing Address: Venture Crane, Inc. Fax #: \_\_\_\_\_  
201 Hubbard Avenue E-mail: \_\_\_\_\_  
Frederica, DE 19946

## Section 2: Project Description

4. Check those that apply: New project / addition to existing project?   
 Repair/Replacement of existing structure?
5. Project Purpose (Attach additional sheets as necessary): \_\_\_\_\_  
To reconstruct and expand an existing marina destroyed by a storm  
 \_\_\_\_\_  
 \_\_\_\_\_
6. Check each Appendix that is enclosed with this application:  
 A. Boat Docking Facilities     G. Bulkheads     N. Preliminary Marina Checklist  
 B. Boat Ramps     H. Fill     O. Marinas  
 C. Road Crossings     I. Rip-Rap     P. Stormwater Management  
 D. Channel Modifications/Dams     J. Vegetative Stabilization     Q. Ponds and Impoundments  
 E. Utility Crossings     K. Jetties, Groins, Breakwaters     R. Maintenance Dredging  
 F. Intake or Outfall Structures     M. Projects in Wetlands     S. New Dredging

## Section 3: Project Location

7. Project Site Address: \_\_\_\_\_ Name of site owner: \_\_\_\_\_  
 \_\_\_\_\_ (if other than applicant)  
 \_\_\_\_\_ County: N.C.  Kent  Sussex
8. Driving directions: SR 1 & SR 36: east on SR 36 to Road 203 (Lighthouse Road), turn left to nearly end of road on right. Second house on right past marsh  
 (Attach a location road map with the site indicated on the map).
9. Tax Parcel Number: 3-30-5-10 Subdivision Name: \_\_\_\_\_

<b>WSLS Use Only:</b>	
Type of Auth: SP <input type="checkbox"/> SL <input type="checkbox"/> WE <input type="checkbox"/> WQ <input type="checkbox"/> SA <input type="checkbox"/> SU <input type="checkbox"/> LA <input type="checkbox"/> MP <input type="checkbox"/> WA <input type="checkbox"/> EX <input type="checkbox"/>	
Permit #s: _____	
SPGP: 18 <input type="checkbox"/> 20 <input type="checkbox"/> Individual Permit: <input type="checkbox"/> Nationwide Permit #: _____	
Received Date: _____ Project Scientist: _____	
Fee Received? Yes <input type="checkbox"/> No <input type="checkbox"/> Amt: \$\$ _____ Receipt #: _____	
Public Notice #: _____ Public Notice Dates: ON _____ OFF _____	

**Section 3: Project Location (Continued)**

10. Name of Waterbody at Project Location: Cedar Creek Waterbody is a Tributary to: Mispiillion River

11. Is the waterbody: Tidal  Non-tidal

12. Is the project:

On public subaqueous lands?  On private subaqueous lands?  In wetlands?

If the project is on private subaqueous lands, indicate the name of the subaqueous lands owner:

G. Walter Swain (applicant)

(Written permission of the private subaqueous lands owner must be included with this application).

13. Present Zoning: Agricultural  Residential  Commercial  Industrial  Other

**Section 4: Miscellaneous**

14. A. List the name and complete mailing address of the immediately adjoining property owners on all sides of the project. (Attach additional sheets as necessary):

See attached sheet

B. For wetlands and marina projects, list the name and complete mailing address of each property owner within a 1000 foot radius of the project. (Attach additional sheets as necessary)

See attached sheet

15. Indicate the names of all representatives from DNREC and the Army Corps of Engineers who you have discussed the project with:

Laura Herr- DNREC Kevin Faust -USACE

A. Have you had a State Jurisdictional Determination performed on the property? Yes  No

B. Has the project been reviewed in a monthly Joint Permit Processing Meeting? Yes  No

If yes, what was the date of the meeting? \_\_\_\_\_

16. Have you applied for or obtained any previous authorizations from the WSLs for projects at this site, or is there a current subaqueous lands lease for any fill or structures on public underwater land? Yes  No

If yes, what permit or lease number(s) were assigned? SL-3807/97 SL-1203/90

17. Have you applied for or obtained a federal permit for the project from the Army Corps of Engineers?

None  Pending  Issued  Denied Date: April, 2005

Type of permit: Individual Federal Permit or ID #: \_\_\_\_\_

18. Have you applied for permits from other Sections within DNREC?

None  Pending  Issued  Denied Date: \_\_\_\_\_ Permit or ID #: \_\_\_\_\_

Type of permit (circle all that apply): Septic Well NPDES Storm Water

**Section 5: Signature Page**

**18. Agent Authorization:**

If you elect to complete this agent authorization section, all future correspondence to the Department may be signed by the duly authorized agent. In addition, the agent will become the primary point of contact for all correspondence from the Department.

I do not wish to authorize an agent to act on my behalf.

I wish to authorize an agent as indicated below.

I, G. Walter Swain, hereby designate and authorize  
Name of Applicant  
David L. Hardin to act on my behalf in the processing  
Name of Agent

of this application and to furnish any information that is requested by the Department.

Authorized Agent's Name: David L. Hardin  
Mailing Address: Environmental Resources, Inc. Telephone #: 410-548-5320  
One Plaza East, Suite 500 Fax #: 410-548-3767  
Salisbury, MD 21801 E-mail: dhardin@ericonsultants.com

**19. Agent Signature**

I hereby certify that the information on this form and on the attached plans is true and accurate to the best of my knowledge. I understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application.

David L. Hardin 4/13/05  
Agent's Signature Date

**20. Applicant's Signature:**

I hereby certify that the information on this form and on the attached plans is true and accurate to the best of my knowledge. I understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application. I grant permission to the authorized Department representative(s) to enter upon the premises for inspection purposes during working hours.

G. Walter Swain 4/13/05  
Applicant's Signature Date

Peter C Russo 4/13/05  
Co-Applicant Date

**20. Contractor's Signature:**

I hereby certify that the information on this form and on the attached plans is true and accurate to the best of my knowledge. I understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application.

Peter C Russo 4/13/05  
Contractor Name Date

IMPORTANT NOTE TO APPLICANTS

***BEFORE SIGNING AND MAILING YOUR SUBAQUEOUS LANDS, WETLANDS OR MARINA PERMIT APPLICATION, PLEASE READ THE FOLLOWING:***

THE DEPARTMENT REQUESTS THAT THE CONTRACTOR OR PARTY WHO WILL PERFORM THE CONSTRUCTION OF YOUR PROPOSED PROJECT, IF OTHER THAN THE APPLICANT, SIGN THE APPLICATION SIGNATURE PAGE ALONG WITH THE APPLICANT, IN THE SPACES PROVIDED.

WHEN THE APPLICATION IS SIGNED BY THE CONTRACTOR AS WELL AS THE APPLICANT, THE DEPARTMENT WILL ISSUE THE PERMIT TO BOTH PARTIES. FOR LEASES, THE CONTRACTOR WILL RECEIVE A SEPARATE "CONSTRUCTION AUTHORIZATION" THAT WILL MAKE THEM SUBJECT TO ALL OF THE TERMS AND CONDITIONS OF THE LEASE RELATING TO CONSTRUCTION. THIS WILL ALLOW MORE FAIR AND CONSISTENT ENFORCEMENT OF THE CONDITIONS OF THE PERMIT OR LEASE BY INSURING THE PROPER LIABILITY OF THE CONTRACTOR.

IF YOU HAVE NOT YET CHOSEN A CONTACTOR BY THE TIME OF APPLICATION, YOU MAY WISH TO DO SO PRIOR TO SUBMITTING APPLICATION FOR PROCESSING.

IF YOU CHOOSE TO SUBMIT YOUR APPLICATION WITHOUT THE SIGNATURE OF YOUR CONTRACTOR, YOU WILL BE HELD SOLEY RESPONSIBLE FOR ALL OF THE TERMS AND CONDITIONS OF THE PERMIT OR LEASE, INCLUDING THOSE TERMS AND CONDITIONS RELATING TO CONSTRUCTION AND WHICH REQUIRE THAT THE PERMITTED STRUCTURE OR ACTIVITY BE INSTALLED OR CONDUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND PERMIT CONDITIONS.

Please contact the Wetlands and Subaqueous Lands Section at (302) 739-4691 if you should have any questions.

Company Name Swains Wharf Marina, LLC

### COMMERCIAL APPLICANT BACKGROUND INFORMATION

*Pursuant to 7 Del. C., Chapter 79, the following information must be submitted along with any commercial subaqueous lands permit application. "Commercial" is defined as any activity undertaken for profit for which a fee will be charged, directly or indirectly, or which results in the generation of revenue. Please use the N/A abbreviation for any items that are not applicable to your application.*

PROVIDING ALL THE INFORMATION REQUESTED IN THIS FORM SATISFIES THE REQUIREMENTS OF 7 DEL. C., CH. 79 UNLESS THE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL OR THE DEPARTMENT OF JUSTICE DETERMINES THAT ADDITIONAL SUBMISSIONS ARE NECESSARY. FAILURE TO PROVIDE THE INFORMATION REQUESTED OR PROVIDING ERRONEOUS INFORMATION IS GROUNDS FOR DENYING OR REVOKING AN ENVIRONMENTAL PERMIT, AND FOR CIVIL OR CRIMINAL PENALTIES.

1. \* Attach a complete list of all current members of the Board of Directors, all current corporate officers, all persons owning more than 20 percent of the applicant's stock or other resources, all subsidiary companies, all parent companies, all companies with which the applicant's company shares two or more members of the Board of Directors.
2. \* Attach a description of any felony or other criminal conviction of any person or company identified in response to Question 1 where the conviction resulted in a fine greater than \$1,000 or a sentence longer than seven days, regardless of whether any portion of such fine or sentence was suspended.
3. Have any of the following been issued to any person or entity specified in response to Question Number 1 or any violation of any environmental statute, regulation, permit, license, approval, or order, regardless of the state in which it occurred, during the five years prior to the date of the application:

Notice of Violation	(yes or no)	<u>  N  </u>
Administrative Penalties	(yes or no)	<u>  N  </u>
Criminal Citation	(yes or no)	<u>  N  </u>
Arrests	(yes or no)	<u>  N  </u>
Convictions	(yes or no)	<u>  N  </u>
Criminal Penalties	(yes or no)	<u>  N  </u>

4. If you answered "Yes" to any of the items in Question 3, attach a description of the incidents or events leading to the issuance of each enforcement action, the disposition of each action, and any actions that have been taken to correct the violations that led to such enforcement action.
5. \* Attach copies of any and all settlements of the environmental claims associated with actions identified in response to Question 3 above, whether or not such settlements were based on agreements where the applicant did not admit liability for the action.

*I do hereby swear that I have read the above questions and have provided all of the information requested and that all of the information provided is true and accurate.*

G. Walter Swain  
Signature - Applicant or Corporate Agent

Name: G. WALTER SWAIN

Company Name: SWAINS WHARF MARINA LLC

Address: 8241 ~~FRONT~~ STREET

LINCOLN, DE 19960

Phone: 302-422-3468

\* NOTE: The applicant may claim that some or all of the information presented in response to Questions 1, 2, and 5 is confidential if such information is not already available to the public. An applicant wishing to make such a claim should write, preferably in red ink "claimed confidential information" at each point in the response where such confidentiality is claimed, and provide an explanation of why the release of such information would constitute an invasion of personal privacy or would seriously affect the applicant's business or competitive situation.

ADJACENT PROPERTY OWNERS WITHIN 1000 FOOT RADIUS  
(Current as of 2-9-2005)

PARCELS 3-30-5-

7 &9&11&12& 41 STATE OF DELAWARE  
DNREC DIV FISH & WILDLIFE  
PO BOX 1401  
DOVER , DE 19901

7.01 JOSEPH W JR. & PAMELA GIERSCHICK  
129 W. HOWARD STREET  
STOWE, PA 19464

7.02 BARRY L. & BARBARA A. HOCH  
229 MANATAWNY RD  
BOYERTOWN, PA 19512

7.03 FRANK L EVANS  
333 BRIDGE ST  
SPRING CITY, PA 19475

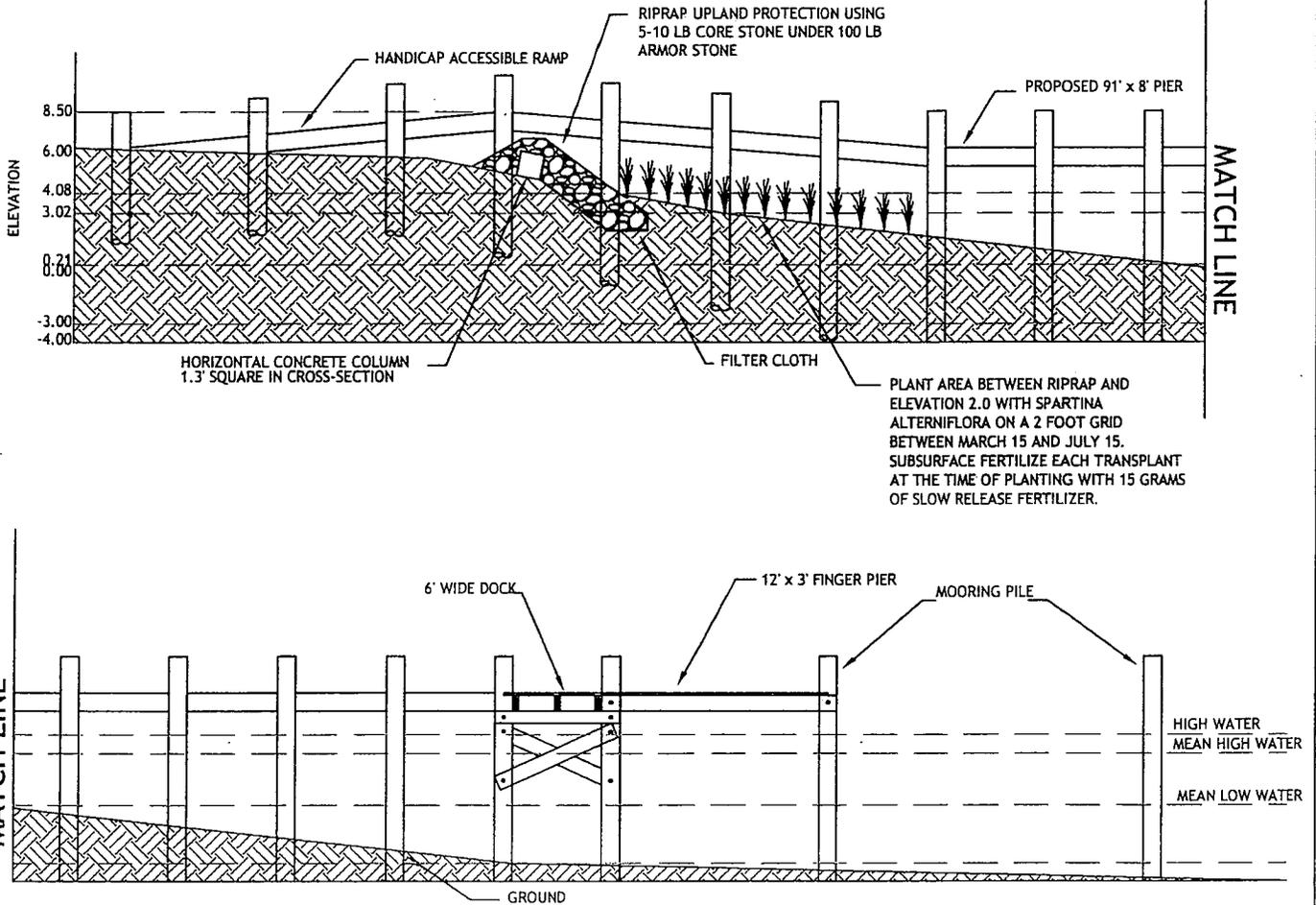
7.04 CHARLES R JR AUMAN  
RR 1 BOX 415  
MILFORD, DE 19963

6 IRENE M FITZGERALD  
18516 JOHNSON RD  
LINCOLN, DE 19960

8 ATLANTIC MANAGEMENT GROUP LLC  
16 GREYHAMPTON RD  
WEST YARMOUTH, MA 2673

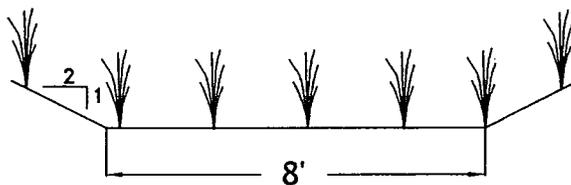
13 GENE W & JEANETTE K FITZGERALD  
337 BAY AVE  
MILFORD, DE 19963





## MARINA SECTIONAL AND PLANTING DETAIL

SCALE: 1" = 10'



SWALE ELEVATIONS SHALL BE CHECKED PRIOR TO PLANTING AND REGRADED AS NEEDED TO MEET DESIGN GRADES. PLANT SWALE BOTTOM AND SIDES WITH *SPARTINA ALTERNIFLORA* 2 FEET ON-CENTER, AND SUBSURFACE FERTILIZE WITH 15 GRAMS SLOW RELEASE FERTILIZER AT TIME OF PLANTING. ALL PLANTS SHALL BE NURSERY GROWN STOCK AND WELL-ROOTED THROUGH OUT THE CONTAINER. PLANTING IS BEST CONDUCTED BETWEEN MARCH 15 AND MAY 15, BUT MAY BE EXTENDED THROUGH JULY 15. SWALES SHALL BE PLANTED AFTER SITE GRADING AND SEEDING IS COMPLETED.

## WET SWALE DETAIL

NO SCALE

Date: FEBRUARY 2, 2005

Scale: AS SHOWN

Proj.No.: 408B001

Drawing No.:

FIGURE 2

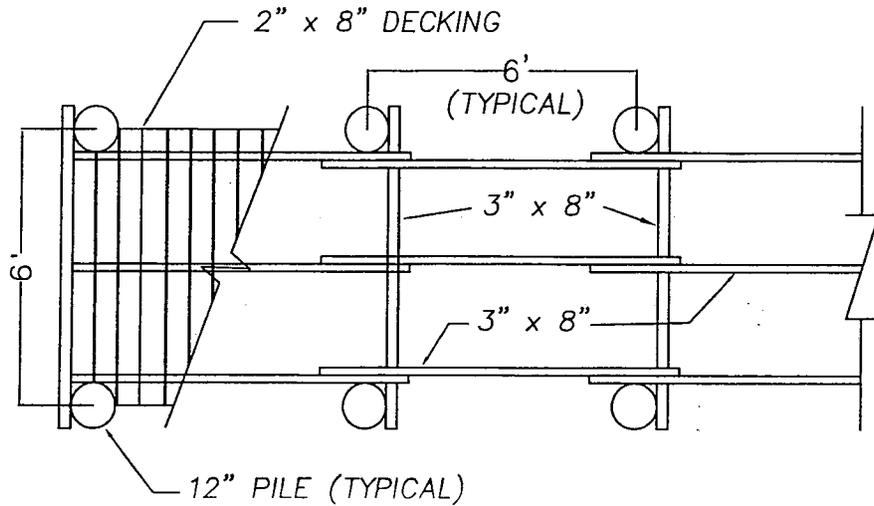
PROPOSED MARINA REVISION

SWAIN MARINA, TAX MAP 3-30-5-10

SLAUGHTERS BEACH, SUSSEX COUNTY, DELAWARE

**ERI** ENVIRONMENTAL  
RESOURCES, INC.

100 EAST MAIN STREET  
ONE PLAZA EAST, SUITE 500  
SALISBURY, MARYLAND 21801  
TEL: 410-548-5320



TYPICAL PIER TOP VIEW

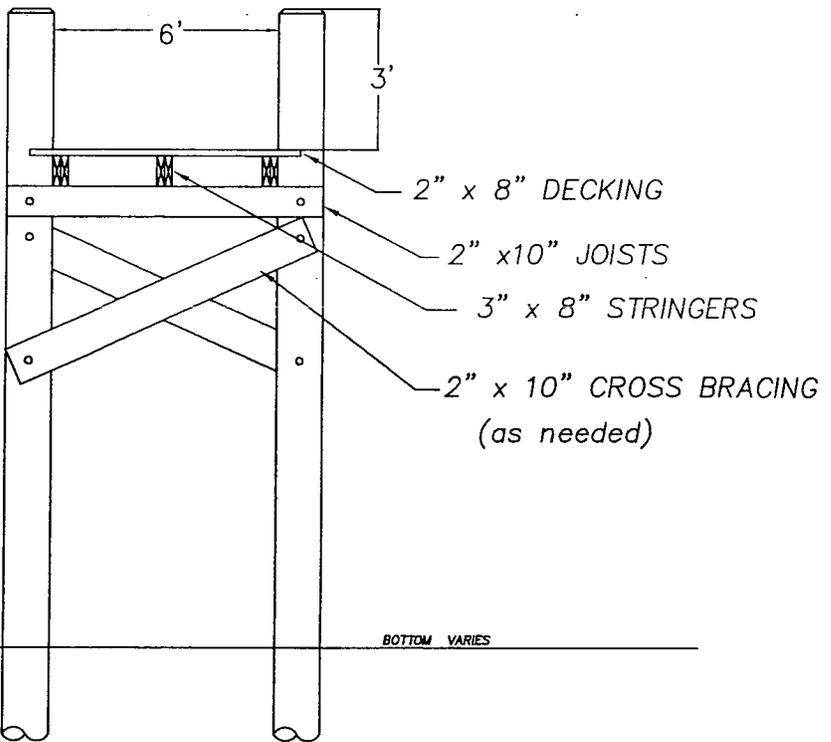
NTS

DECK ELEV.: 6.0' - 7.0'  
 DEPENDING ON INSTALLER'S  
 RECOMMENDATION FOR AREA

MEAN HIGH WATER: 3.02'

MEAN LOW WATER: 0.21'

ELEVATIONS ARE BASED ON  
 1929 NGVD



TYPICAL PIER CROSS SECTION

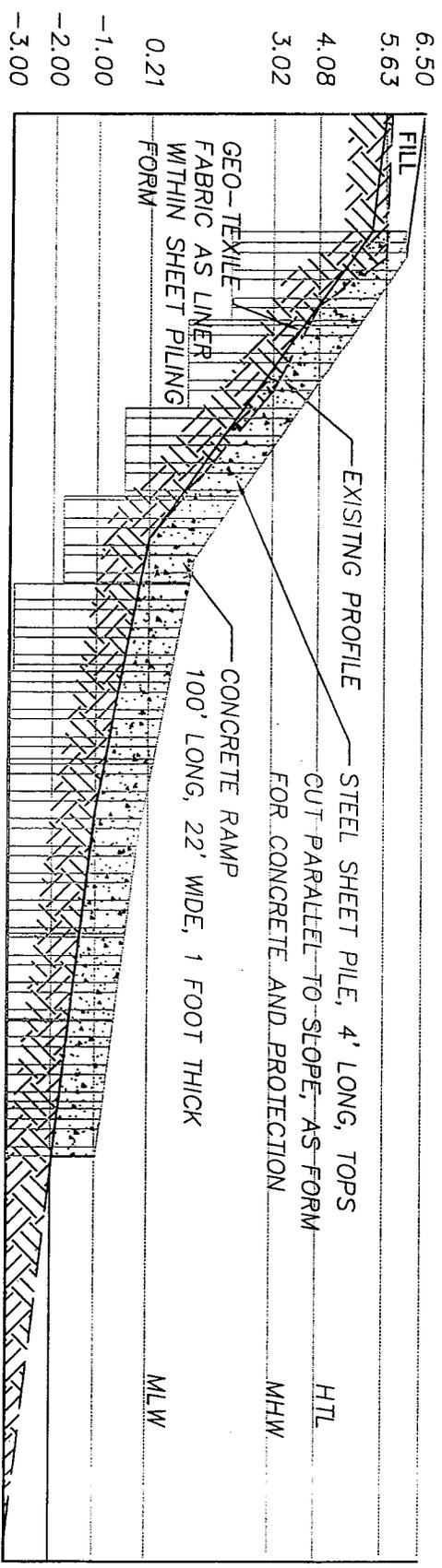
NTS

Date: FEBRUARY 2, 2005  
 Scale: 1" = 40'  
 Proj.No.: 408B001  
 Drawing No.: FIGURE 3

PROPOSED MARINA REVISION  
 SWAIN MARINA, TAX MAP 3-30-5-10  
 SLAUGHTERS BEACH, SUSSEX COUNTY, DELAWARE

**ERI** ENVIRONMENTAL  
 RESOURCES, INC.

100 EAST MAIN STREET  
 ONE PLAZA EAST, SUITE 500  
 SALISBURY, MARYLAND 21801  
 TEL: 410-548-5320



RAMP PROFILE  
 HORIZONTAL SCALE : 1"=20'  
 VERTICAL SCALE: 1"=10'

Date: FEBRUARY 9, 2005  
 AS SHOWN  
 Proj.No.: 408B001  
 Drawing No.: **FIGURE 4**

PROPOSED MARINA REVISION  
 SWAIN MARINA, TAX MAP 3-30-5-10  
 SLAUGHTERS BEACH, SUSSEX COUNTY, DELAWARE

**ERI** ENVIRONMENTAL RESOURCES, INC.  
 100 EAST MAIN STREET  
 ONE PLAZA EAST, SUITE 500  
 SALISBURY, MARYLAND 21801  
 TEL: 410-548-5320

**APPENDIX A  
BOAT DOCKING FACILITIES**

- \* Any boat docking facility for more than four (4) vessels is considered a marina facility (see definitions and explanations section) and requires the applicant to complete Appendices N and O, and make application to the U. S. Army Corps of Engineers for approval.
- \* Please make sure answers to all of the questions in this appendix correspond to information on the application drawings.

1. Briefly describe the project and the project purpose. (Attach additional sheets as necessary.) See definition section of Joint Application Form Reference Guide for clarification of "Dock" and "Pier".

2. Please provide numbers and dimensions as follows:

2 Dock(s): Dimensions (Channelward of mean high water line) \_\_\_ ft. by \_\_\_ ft.  
 Dimensions (Channelward of mean low water line) 460 ft. by 6 ft.  
185 ft. by 6 ft.

3 Pier(s): Dimensions (Channelward of mean high water line) 2-91 ft. by 8 ft.  
145 ft. by 8 ft.  
 Dimensions Channelward of mean low water line) \_\_\_ ft. by \_\_\_ ft.

27 Finger Piers(s):  
 Dimensions (Channelward of mean high water line) \_\_\_ ft. by \_\_\_ ft.  
 Dimensions (Channelward of mean low water line) 20-12 ft. by 3 ft.  
7-15 ft. by 3 ft.

\_\_\_ Support Pilings: Total No. 355 Stand-Alone Pilings: Total No. 77

\_\_\_ Mooring Buoy: What will be used for the anchor(s)? \_\_\_\_\_  
 Anchor/Mooring Block Weight \_\_\_\_\_  
 Anchor Line Scope (Length or Ratio) \_\_\_\_\_  
 Water Depth at Mooring Location \_\_\_\_\_

\_\_\_ Dolphin \_\_\_ # Piles per Dolphin

\_\_\_ Other: (Describe)  
 Total Dimensions (Channelward of mean high water line) \_\_\_ ft. by \_\_\_ ft.

3. Approximately how wide is the waterway at this project site? 280 ft.  
 (as measured from MLW to MLW)

4. What will be the mean low water depth at the most channelward end of the mooring facility? 2-5 ft.

5. What type of material(s) will be used for construction of the mooring facility (e.g. salt treated wood, aluminum, fiberglass floats, etc.) Use of creosote-treated wood is prohibited. CCA wood for pilings and structural members, ACQ wood for decking
6. Will any structure(s) be built on the boat docking facility? (i.e. handrails, electric or waterlines, dock box, fish cleaning station etc.)  Yes  No If your answer is "YES", note dimensions and location on application drawings.
7. What will be the distance from the most channelward end of the docking facility to the edge of any natural or man-made channel? 50 ft.
8. Describe the vessels that will be berthed at the docking facility. Please draw exact vessel locations on plans and drawings.
9. What size vessel(s) will be berthed at the facility? (Attach sheets as needed).
 

<u>24'</u>	length	<u>8'</u>	width	<u>1.5'</u>	draft typical
<u>40'</u>	length	<u>13'</u>	width	<u>2.5'</u>	draft typical
<u>          </u>	length	<u>          </u>	width	<u>          </u>	draft
<u>          </u>	length	<u>          </u>	width	<u>          </u>	draft
10. Please provide a copy of the current state registration or Coast Guard Certificate of Documentation for each motorized vessel listed above. Not available
11. Do you plan to reach the boat docking facility from your own upland property?  Yes  No If "No", explain your proposed means of access.
12. Is there currently a residence on the property?  Yes  No
13. Give the number and type of each Marine Sanitation Device (e.g. MSD III, Portable toilet) that will be used on vessels to be docked at the facility. Not available
14. For ponds or artificial lagoons where the underwater land is privately owned by someone other than the applicant, written permission of the underwater land owner must be provided with this application. Not applicable
15. Will any portion of the structure or any vessel be placed within 10 feet of your property line?  Yes  No If yes, a letter of no objection from the adjacent property owner must be included with this application.

Revised: July, 1999

**APPENDIX B  
BOAT RAMPS**

- \* Please make sure answers to all of the questions in this appendix correspond to information on the application drawings.
- \* See Joint Application Form Reference Guide - How to calculate square feet, cubic feet, and cubic yards.
- 1. How many boat ramps will be constructed?   1
- 2. What type of material(s) will be used for construction of the boat ramp(s) (e.g. concrete, timber, gravel, etc.)? Concrete
- 3. How many feet will the boat ramp(s) extend channelward of:
  - A. Tidal Waters: mean high water line?  83 ave  ft.
  - B. Non-tidal Waters: ordinary high water line?  59 ave  ft.
- 4. How many square feet of the boat ramp(s) will be located:
  - A. Below mean high water?  1826  sq. ft.
  - B. On vegetated wetlands?   0   sq. ft.
- 5. Will any docking facilities be constructed alongside of the boat ramp(s)?   X   Yes        No If your answer is "Yes" indicate on the application drawings and complete Appendix A.
- 6. Will any dredging or excavation be required?   X   Yes        No Amount of material to be removed?   41   cubic yards
- 7. Will boat ramp(s) do you now use in the area? Old ramps to be removed
- 8. What will be the dimensions of the proposed boat ramp(s)?  

<u>  100'  </u> Length	<u>  22'  </u> Width
<u>  1:15  </u> Slope	<u>  12"  </u> Thickness
- 9. Will this ramp be:        public,   X   commercial,        private? If public or commercial, complete Appendix N (Marinas).

## APPENDIX I RIP-RAP

- \* Please make sure answers to all of the questions in this appendix correspond to information on the application drawings.
  - \* See Joint Application Form Reference Guide - How to Calculate Square Feet, Cubic Feet, and Cubic Yards.
  - \* To calculate average number of cubic yards of rip-rap per running foot of shoreline: Divide the average length of shoreline structure into the total cubic yards.
1. Will the project be considered new construction or repair and replacement of an existing rip-rap structure?  X  New Construction       Repair and Replacement  
If repair/replacement, photographs must be submitted of entire project length.
  2. What will be the overall length of the rip-rap structure?  388  ft.
  3. What will be the average number of cubic yards of rip-rap used?  
Per running foot of shoreline?  0.74  cubic yards  
Total?  233  cubic yards
  4. How many feet will the rip-rap structure be placed channelward of the:
    - A. Tidal waters: mean high water line?  0  ft.  
mean low water line?  0  ft.
    - B. Non-tidal waters: ordinary high water line?       ft.
  5. How much of the rip-rap structure will be located:
    - A. channelward of mean high water?  0  sq. ft.
    - B. on vegetated wetlands?  0  sq. ft.
  6. What type of material(s) will be used for construction of the rip-rap structure (e.g. quarry stone, broken concrete, cinder blocks, etc.)? Quarry stone and concrete pilings
  7. Will the rip-rap structure be backfilled?       Yes  0  No If your answer is "Yes", complete Appendix H.
  8. Will filter cloth be used behind the rip-rap structure?  0  Yes       No

(APPENDIX I, CONTINUED)

9. What will the average weight of the:
- A. armor (Larger size rip-rap) material? 100 pounds
- B. core (smaller size rip-rap) material 5-10 pounds  
(See sample drawing in Joint Application Form Reference Guide for illustration of armor and core material.)
10. What is the average slope of the existing bank? Varies: maximum is 6:1
11. What will the average slope of the rip-rap structure?
- Slope = 2 ft. (Run Horizontal distance):  
1 ft. (Rise-Vertical distance):

## HOW TO CALCULATE SLOPE

FORMULA:  $\text{SLOPE} = \frac{\text{RUN (Horizontal distance or Base Width)}}{\text{RISE (Vertical distance or Height)}}$

PROBLEM: Stabilize an eroding bank by filling an area 4 feet high and 8 feet wide with quarry stone rip-rap.

CALCULATION:  $\text{SLOPE} = \frac{\text{RUN}}{\text{RISE}}$  therefore,

$$\text{SLOPE} = \frac{8}{4} \text{ or,}$$

$$\text{SLOPE} = \frac{2}{1} \text{ OR,}$$

$$\text{SLOPE} = 2\text{H}:1\text{V}$$

**APPENDIX J**

**VEGETATION STABILIZATION**

\* Please make sure that all answers in this appendix correspond to information on the application drawing.

\* See Joint Application Form Reference Guide - How to Calculate Square Feet, Cubic Feet, and Cubic Yards.

1. Submit brief description of the proposed activity:

A combined shoreline protection of riprap at the top of the slope with tide marsh vegetation in front is proposed. Average width of riprap would be 10' and vegetation 13'.

2. What is width of the waterbody in the vicinity of project? 280'

3. Is grading of bank and placement of fill part of this project (explain)?  
       Yes   X   No If "Yes", complete Appendix H.

4. Describe the sequence of construction and planting.

Riprap would be installed first, piers for the marina would be constructed over the riprap and then, when the season is appropriate, *Spartina alterniflora* would be planted on a maximum 2' grid. See plans.

6. Indicate area of proposed planting:

Channelward of mean high water line   7735   sq. ft.

Channelward of mean low water line     0     sq. ft.

7. What is channelward distance of project:

Channelward of mean high water   13'   sq. ft.

Channelward of mean low water     0'    sq. ft.

**APPENDIX N  
PRELIMINARY MARINA SCREENING CHECKLIST**

**(To be submitted at least one week prior to the pre-application meeting)**

**\* Provide the following information and/or answer the following with regard to the proposed marina project:**

1. **Applicant's (Property Owners) Name and complete address:** \_\_\_\_\_ **Telephone Number**  
G. Walter Swain **Home ( 302 ): 422-3468**  
8241 Front Street **Work ( ): \_\_\_\_\_**  
Lincoln, DE 19960

**Project Name:** Swain's Wharf Marina

2. **Provide an aerial photograph of the site, if available.**
3. **What are the existing land uses on the site?**  
Existing uses include a house and remnants of former marina with pilings and walkways
4. **What are the existing land uses on adjacent properties within 1000 feet of the proposed marina or marina alteration, including the opposite shore?**  
Residential, docking and launching, opposite shore is owned by Division of Fish and Wildlife and undeveloped.
5. **Name and distance of nearest municipality.**  
Slaughter Beach, approximately 0.5 mile
6. **Is the proposed project an open water or enclosed basin marina?**  
 X  **Open water**      \_\_\_\_\_ **Enclosed basin**
7. **Is the marina on a creek, river, or open bay? Name of the water body?**  
Marina is on Cedar Creek at confluence with Mispillion River
8. **Indicate the number of wet slips. Proposed**  50  **Existing**  26

(APPENDIX N, CONTINUED)

9. **Indicate the number of dry stack spaces. Proposed 0 Existing 0**  
 Site is too small for commercially viable dry stack facility
10. **Will the proposed marina or marina alteration require dredging?**  
     Yes   X   No
11. **If so, approximate the amount in cubic yards.**  
 Material to be dredged.
12. **If the project requires dredging, do you own or have access to an upland site for dredged material disposal?      Yes      No** If yes, where is it located?
13. **If not, how do you propose to dispose of your dredged material?**
14. **How many years of maintenance dredge spoil capacity does the spoil site possess?**  
             Years
15. **Will the proposed project require the use of any State wetlands?      Yes   X   No**  
 If yes, approximate the amount of wetlands required in acres and the intended use.
16. **What is the tide range at the marina site? Normal tide 4.6' Neap tide 2.3' est.**  
 What is the source of this information? NOAA web site
17. **What is the approximate MLW depth at the marina site? 0.21 Ft.**  
 What is the source of this information? Survey
18. **If the site includes residential development, indicate:**  
 Number of units platted               
 Length of shoreline owned               
 Acreage of upland property
- Indicate the number of on-site parking spaces for:**
- |          | cars      | trailers    | cars with trailers | oversize vehicles |
|----------|-----------|-------------|--------------------|-------------------|
| Proposed | <u>38</u> | <u>    </u> | <u>14</u>          | <u>    </u>       |
| Existing | <u>0</u>  | <u>0</u>    | <u>0</u>           | <u>0</u>          |
19. **What utilities will be provided on or in the marina or dock area proper? Be specific, e.g. fuel, electricity, sewage pump-out, water, etc.** portable pump-out, water, smaller slips will share water and electric, larger slips will have individual water and electric
20. **What additional shore-based facilities are included in the proposed marina or marina alteration? Be specific, e.g., boat or engine repairs, fuel, foods, etc.** None

(APPENDIX N, CONTINUED)

21. Will the marina project be available to the general public? If so, on what basis?  
Slips will be rented
22. Are existing public facilities, services, and transportation adequate to accommodate the project and associated development impacts?  Yes  No If no, please describe the upgrades required:
23. Has a market study been completed for the project?  Yes  No  
If so, please attach the study report.
24. If no market study has been completed, please describe briefly the intended market, particularly the types and sizes of boats anticipated to use the facility.  
Based on past use of the facilities and comments and questions from the public, the applicants anticipate most of the slips will be rented by fisherman wanting access to Delaware Bay. Other uses will be boaters traversing the coast that will need to berth for the night. These uses indicate powerboats in the range of 20-40 feet will be the most common.

## APPENDIX O MARINAS

\* Marina applicants must complete this appendix and any other appendices that may apply to the proposed project (see "List of Appendices", Page 2).

\* Please be sure that answers to all of the questions in this appendix correspond to information on the application drawings.

\* Guidance for completing this appendix can be found in the Marina Guidebook and the Joint Application Form Reference Guide.

1. Name of marina: Swain's Wharf Marina

2. Complete mailing address for marina: Swain's Wharf LLC  
201 Hubbard Avenue  
Frederica, DE 10046

Telephone Number: 302-335-0744

3. Name and complete address for Harbormaster, if applicable: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

4. Check appropriate box:     New Marina     Alteration to Existing Marina  
 (See definition to Joint Application Form Reference Guide)

5. Number of Slips: Complete Appendix A for details of docking facilities.

	Wet Slips	Dry Storage Spaces
Existing	<u>26</u>	<u>0</u>
Proposed or Additional	<u>50 total</u>	<u>0</u>

\* If this is an alteration to an existing marinas, please be advised that the questions that follow pertain only to the altered portion(s) of the facility.

6. Wetlands: Complete appendices L and/or M.  
 No wetlands to be impacted

(APPENDIX O, CONTINUED)

7. **Shellfish Resources:** Is any part of the marina located within or adjacent to a classified shellfish growing area? This information can be obtained from the Division of Water Resources, Watershed Assessment Section (302-739-4590)

Yes  No

If yes, how is the area currently classified?

Approved Area  Conditionally Restricted Area  
 Conditionally Approved Area  Prohibited Area  
 Restricted Area

8. **Submerged Aquatic Vegetation (SAV):** Are any SAV beds located within the marina basin or adjacent areas?  Yes  No

9. **Critical Habitats:** Is the marina located within or adjacent to an area classified as a critical habitat by the Department's Division of Parks and Recreation? Critical habitat areas are those that are included in the Natural Areas Inventory, or that provide habitat for species included in the State Endangered Species Act (7 Del. C., Chapter 6). To obtain the locations of these areas, contact the Division of Parks and Recreation at (302) 739-5285.  Yes  No

10. **Dredging and Dredged material Disposal:** Complete Appendices R and/or S.  
not applicable

11. **Shoreline Protection Structures:** Complete appropriate Appendices (i.e. G, H, I, J, K). See Appendices I and J

12. **Water Supply:** Describe the existing or proposed water supply facilities for the project.

Public water system. Identify: \_\_\_\_\_  
 Private well. If existing, include the DNREC Well Permit Number: old well  
If there are plans to construct a new well, a permit must be obtained from the Department's Water Supply Section prior to well construction.

13. **Wastewater Facilities:**

A. How many restroom facilities are planned for the marina? 0

B. If none, please explain: Portable toilets available during season

C. How will the wastewater from the facility be handled?

Public sewer, identify: \_\_\_\_\_  
 On-site septic system  
 Other, describe: pumped per portable toilet rental contract

(APPENDIX O, CONTINUED)

- D. Identify the permit numbers for any treatment, storage or disposal permits that have been obtained for the proposed wastewater facilities, including name and permit number for any waste transporters who will be transporting wastewater or septage. N/A
- E. If permits for the wastewater facilities have not yet been obtained, have permit applications been submitted? \_\_\_\_ Yes X No  
If Yes, show the date and to whom the application was mailed. If no, describe all proposed plans for wastewater handling. Attach additional sheets as necessary. Waste will be handled by portable facilities pumped per rental contract
14. Parking:
- A. How many parking spaces will be provided? 42
- B. Does the proposed parking plan conform to:  
\_\_\_\_ Local planning codes or requirements; (Contact the County Planning Department and/or local municipal government offices for this information).  
X The 0.5 spaces/slip rebuttable presumption from the Marina Regulations  
\_\_\_\_ Other. Please explain:
15. Stormwater Management: Describe in detail the plans to detain the first one-half inch of stormwater run-off from the disturbed portion of the site and release it over a 24 hour period. Attach additional sheets and drawings as necessary.  
See attached sheets
16. Solid Waste Management:
- A. How many trash receptacles will be provided at the marina? 5
- B. If trash receptacles will not be provided, what measures will be taken to ensure that solid wastes are properly disposed of?
17. Boat Maintenance Areas and Activities: No maintenance areas provided
- A. Describe in detail how boat maintenance by-products, debris, residues, spills and run-off from maintenance areas will be controlled in accordance with the Marina Regulations. Attach separate sheets if necessary.
- B. Will special containers for waste oils and other maintenance wastes be provided? \_\_\_\_ Yes X No Explain: boat owners are encouraged to conduct maintenance off-site and remove their own waste materials.  
See maintenance restrictions in Operations Manual, page 3-Vessel Maintenance

(APPENDIX O, CONTINUED)

- C. Describe in detail how materials used in maintenance and repair operations will be handled and stored. Materials of concern include, but are not limited to, paints, solvents, oils, greases, preservatives, pesticides, epoxies and corrosive cleaners. Indicate whether local fire codes or national Fire Protection Association (NFPA) standards have been used in developing the proposed handling and storage. Attach separate sheets if necessary.

N/A See Operations Manual pages 3 – Vessel Maintenance and page 5 – Waste Oil

18. **Fuel Storage and Delivery Facilities/Spill Contingency Plan:** No fueling facilities.

- A. Describe in detail all procedures for storage, handling and dispensing of fuel. Indicate whether local fire codes or National Fire Protection Association (NFPA) standards have been used in developing proposed procedures. A permit from the Department's Underground Storage Tank Branch may also be required. Attach separate sheets as necessary.

No on-site fuel storage or dispensing provided. See Operation Manual page 5- Boat Fuel(s) and Lubricants. Spill containment materials will be stored at the Marina office.

- B. Describe in detail procedures that will be used to contain and clean any fuel spills that occur as a result of marina operations. Notification procedures should also be described. Attach separate sheets if necessary.

See operations manual page 7 – Fuel Spills

19. **Fire Protection Systems:** Describe the fire protection systems that are proposed for the facility. Indicate whether local fire codes or National Fire Protection Association NFPA) standards have been used in choosing and designing the systems. Attach additional sheets as necessary. Each boat is required to have appropriate fire extinguishers on board, plus 2A 20-BC extinguishers will be located per NFPA 303 standards. Fixed extinguisher systems are not required for piers less than 36" above MHW

20. **Life Safety Equipment:**

- A. For alterations to existing marinas: Does the alteration involve the addition of new water-based structures?  Yes  No If yes, complete 20 B. If no, skip to question 21.
- B. For new marinas: How many floatation devices will be provided around the marina and how far apart will they be located? 9 – approximately 90' apart

21. **Fish Waste:**

- A. Will fish cleaning stations be provided?  Yes  No If yes, how many? 3 (Be sure to show their location on the engineering plans).
- B. Will the marina provide a live bait concession?  Yes  No

(APPENDIX O, CONTINUED)

22. Piers and Docks:

- A. # 5 Main Piers and Walkways. Complete Appendix A.
- B. # 27 Finger Piers. Complete Appendix A.
- C. # 77 Pilings.
- D.  Fixed  Floating
- E. Describe methods of construction and the types of materials and equipment to be used. Attach additional sheets as necessary. See attached sheets.

23. Drawing Requirements: At a minimum, all marina applicants must submit at least the following drawings:

- A. Elevation or Section View
- B. Vicinity Map
- C. Plan View

\* General Information for All Drawings: For all major structures, the structural dimensions and distance from the nearest property line, survey marker or permanent landmark should be shown.

\* Wherever possible, identify the materials used in construction. If dredging or filling is involved, show the volume and type of materials to be moved, and the grade to be used.

- A. Elevation or Section View

The vicinity map and elevation or section view should be prepared and submitted in accordance with the drawing checklist general information in the Joint Application Form Reference Guide.

The elevation or section view includes the following, as applicable: (check those which apply) Pre-checked items must be included.

- Mean high and low water lines;
- Construction details for all water-based structures (e.g. piers docks, pilings);
- Construction details for all bulkheads, rip-rap and other shoreline protection structures;
- Intake and outfall structures
- Boat Ramps
- Channel or basin modifications (proposed dredging areas)
- Other

(APPENDIX O, CONTINUED)

**B. Vicinity Map**

Directions for preparation of the vicinity map can also be found in the Joint Application Form Reference Guide.

**C. Plan View**

The plan view should be prepared on 8 1/2" x 11" paper, and in a standard blue print size and format, and contain the locations of the following features, as applicable (Check all those which apply to the project and include these items on the plan view drawing):

- Property boundaries
- Shoreline
- Mean high and low water lines
- Direction of river flow/ebb and flow of tide
- Proposed channel
- Navigation Aids
- Piers, docks, pilings, bulkheads, moorings, anchorages, jetties, groins, breakwaters and other water-based structures
- Slips (Wet)
- Slips (Dry)
- Boat ramp(s)
- Buildings, other structures (identify each)
- Boat storage areas/facilities
- Boat maintenance area(s)
- Extent of roof coverage (e.g. over maintenance areas, boat storage areas, etc.)
- Roadways (identify surface, e.g. asphalt, gravel dirt, etc.)
- Parking areas (identify surface, e.g. asphalt, gravel, dirt, grass, etc.)
- Maintenance materials storage areas(s)
- Public telephone(s)
- Public restroom(s)
- Fish cleaning station(s)
- Life safety equipment station(s)
- Fuel dispensing pump(s) underground storage tank
- Septic tank
- Sewer connection/wastewater collection system
- Water supply well
- Portable fire extinguisher(s), fire hydrant(s)
- Spill containment equipment storage areas(s)
- Trash receptacle(s) waste oil - other waste receptacles
- Stormwater management facilities
- Compensation area for wetlands
- Other:

## APPENDIX O. MARINAS

### 15. Stormwater Management

The site is located within the 100-year floodplain of Cedar Creek and Mispillion River, therefore a waiver for quantity control has been requested. All of the uplands that are being disturbed will be either seeded with grass or covered with crushed stone. The only completely impervious surfaces will be the existing building and the marina office. Stormwater management consists of regrading the site so any runoff moves away from the creek and river and towards the road. Grading between the road and the driveway will direct runoff towards the west ends of the two wet swales located along the north and south edge of the uplands.

The north swale will be 157 feet long with a slope of 0.6% and a bottom width of 8 feet. The bottom elevations will range from 5.5 feet at the west end to 5.0 feet at the east end. The east end will have a stone check dam with an invert of 5.70. The south swale will be 265 feet long with a 0.3% slope and a bottom width of 8 feet. The bottom elevations range from 5.00 at the west end to 4.0 at the east end. The east end will have a stone check dam with an invert of 4.50. Since the bottom elevations are close to that of existing *Spartina alterniflora* on and adjacent to the site, the bottom of both swales will be planted with *Spartina alterniflora* on a 2 foot grid. Additional details on the swales, check dams and planting are provided on Sheet 3 of 3.

## APPENDIX O. MARINAS

### 22. Piers and Docks:

#### E. Methods of construction and materials

The proposed action will reconstruct and expand a former 26 slip commercial marina destroyed by a storm. Activities will include construction of two docks, 460' x 6' and 185' x 6'; connected to land by three piers, 145' x 8' and 91' x 8' (2); and a boat ramp 100' x 22'. The expanded marina will have 50 wet slips; 38 - 25' x 12' and 12 - 40' x 15' with tapered finger piers having a maximum width of 3 feet. The docks and piers will consist of 431- 12" diameter (approximate) driven pilings of pressure treated wood supporting 5442 SF of 2" x 8" ACQ treated decking. Joists and cross braces will be 2" x 10" pressured treated wood and stringers will be 3" x 8" pressure treated wood. Only the decking will use ACQ treated lumber as the ACQ treatment is not suited for constant exposure to salt water. Pilings, joists, cross braces and stringers will be CCA treated. Remnant structures of the old marina will be removed during construction.

The boat ramp replaces two former ramps. The ramp will be constructed by driving steel sheets to create a coffer dam and pumping the area within the ramp dry. A second series of steel sheets will be driven to create the form for the concrete pad and to provide erosion protection. The interior of the form will be lined with geotextile fabric and the concrete poured to a 12" thickness. After the concrete sets, the steel form will be cut even with the top of the concrete and the coffer dam removed.

Shoreline protection will be provided by a combination of riprap and tide marsh planting. The riprap will be located more toward the top of the shoreline slope to keep storm tides from washing over the parking lot and eroding the top of the slope. The riprap will cover 388 linear feet of the shore. The site will be prepared by digging a trench at the waterward extent of the stone to key the stone into the sand. The ground will then be covered with filter fabric and the riprap installed. The riprap will consist of a core of 16" concrete column laid horizontally, and covered with 5-10 lb core stone. The top will then be covered with 100 lb armor stone. The shore below the riprap down to elevation 2.0 will be protected by establishing *Spartina alterniflora*. Elevations were chosen based on the elevation range of the existing *Spartina*. Plants will be installed on a 2 foot grid between March 15 and July 15.

The uplands will be prepared by trucking in sandy fill and increasing site elevations near the shore. The site will be graded so any runoff flows towards the road then to the north and south into wet swales established along the edge of the property. The swale bottoms will be 8 feet wide and planted with *Spartina alterniflora* on a 2 foot grid. The south swale will be 265 feet long and the north swale will be 157 feet long. Each swale will have a low stone check dam at the outlet end.

Most of the uplands will be covered with crushed stone for the circular driveway and parking area. Parking will consist of 32- 10' x 20' stalls for cars, 6- 15' x 20' stall for handicap parking and 14 - 20' x 40' stalls for trailers.

SCHEDULE A

DOROTHY M. BENNETT LANDS

ALL THAT certain tract, piece and parcel of land, together with all buildings and improvements erected thereon, and all riparian rights appurtenant thereto, as well as all wharves, ramps, catwalks, and mooring posts heretofore erected and now maintained adjacent thereto, as appurtenances thereof, situate at the Northwesterly corner of the confluence of the waters of Mispillion River and Cedar Creek, in Cedar Creek Hundred, Sussex County, Delaware, and more particularly described by courses and distances, according to a certain field survey and Plat thereof made and prepared by Charles C. Brown, Engineer and Surveyor, (June 12, 1970), for Dorothy M. Bennett, as follows: BEGINNING at an ancient corner marker set along the water's edge of the Northerly bank of Cedar Creek, and marking the first corner for these lands and lands now or late of Thomas Robinson; THENCE, by and with the common boundary line between these lands and said lands now or late of Thomas Robinson, North  $33^{\circ}$  West, 342.2 feet, passing through two ancient line-marker pipes and one ancient line-marker concrete slab, to another ancient corner marker set in and along the center line of Sussex County Highway Route 203, (at fifty (50) feet wide) and marking the second, common corner for these lands and said lands now or late of Thomas Robinson; THENCE, by and with the center line of said Route 203, North  $56^{\circ} 41'$  East, 19.35 feet, to another ancient corner marker set in and along the center line of said Route 203, and marking the first, common corner for these lands and lands now or late of Webb & Turner; THENCE, by and with the common boundary line between these lands and said lands now or late of Webb & Turner, the following three (3) courses and distances, viz: (1) South  $33^{\circ} 19'$  East, 175 feet, passing through one ancient line marker pipe, to another ancient corner marker pipe.

SCHEDULE A (CONTINUED)

DOROTHY M. BENNETT LANDS

of Missillion River, following the several meanderings thereof, in a general Southerly direction, for a distance of three hundred ten (310) feet, more or less, to the point of confluence thereof with the water's edge of the Northerly bank of Cedar Creek; AND THENCE, by and with the water's edge of the Northerly bank of Cedar Creek, following the several meanderings thereof, in a general Westerly direction, for a distance of six hundred twenty (620) feet, more or less, to the ancient corner marker set along such water's edge of such Northerly bank of Cedar Creek first above mentioned, being home to the point or place of BEGINNING, and

CONTAINING four and seven-tenths (4.7) acres of land, be the same more or less.

# **EXHIBIT B**

**APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT  
(33 CFR 325)**

**OMB APPROVAL NO. 0710-003**

Reporting burden for this collection of information is estimated to average 5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-003), Washington, DC 20503. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

**PRIVACY ACT STATEMENT**

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in, or affecting, navigable waters of the United States; the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Routine uses: Information provided on this form will be used in evaluating the application for a permit. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the proposed activity. An application that is not completed in full will be returned.

**(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)**

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED
--------------------	----------------------	------------------	-------------------------------

**(ITEMS BELOW TO BE FILLED BY APPLICANT)**

5. APPLICANT'S NAME 3. Walter Swain	8. AUTHORIZED AGENT'S NAME & TITLE (an agent is not required) David L. Hardin
6. APPLICANT'S ADDRESS 8241 Front Street Lincoln, DE 19960	9. AGENT'S ADDRESS Environmental Resources, Inc. One Plaza East, Suite 500 Salisbury, MD 21801
7. APPLICANT'S PHONE NUMBERS WITH AREA CODE a. Residence 302-422-3468 b. Business	10. AGENT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business 410-548-5320

**STATEMENT OF AUTHORIZATION**

I hereby authorize Environmental Resources, Inc. to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

*Walter Swain*  
APPLICANT'S SIGNATURE

4/13/05  
DATE

**NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY**

12. PROJECT NAME OR TITLE (see instructions) Swain's Wharf Marina	
13. NAME OF WATERBODY, IF KNOWN (if applicable) Cedar Creek and Mispillion River	14. PROJECT STREET ADDRESS (if applicable)
15. LOCATION OF PROJECT Sussex COUNTY DE STATE	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) project is located near the end of Road 203 (Mispillion Lighthouse Road) on the east side	
17. DIRECTIONS TO THE SITE SR 1 & SR 36: east on SR 36 to Road 203, left to nearly end on right.	

18. NATURE OF ACTIVITY (Description of project, include all features)

Rebuild and expand marina by construction of two docks, 460' x 6' and 185' x 6'; three piers; 145' x 8', 91' x 8' (2), a boat ramp (22' x 100'), 52 parking slips, 264' x 10' and 157'x10' stormwater quality wetland swales, remove existing piers and ramps. Marina will have 50 wet slips with no fueling or maintenance facilities.

19. PROJECT PURPOSE (Describe the reason or purpose of the project, see instructions)

Project purpose is to rebuild and expand previously permitted and existing/former marina destroyed by storm.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. REASON(S) FOR DISCHARGE

No fill or dredging proposed

21. TYPE(S) OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS

22. SURFACE AREA IN ACRES OF WETLANDS OR OTHER WATERS FILLED (see instructions)

23. IS ANY PORTION OF THE WORK ALREADY COMPLETE? YES  NO  IF YES, DESCRIBE THE WORK

24. ADDRESSES OF ADJOINING PROPERTY OWNERS, LESSEES, ETC. WHOSE PROPERTY ADJOINS THE WATERBODY (if more than can be entered here, please attach a supplemental list)

See attached sheet

25. LIST OF OTHER CERTIFICATIONS OR APPROVALS/DENIALS RECEIVED FROM OTHER FEDERAL, STATE, OR LOCAL AGENCIES FOR WORK DESCRIBED IN THIS APPLICATION

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
Delaware DNREC	Subaqueous Lands permit				
Sussex Conservation District	Sediment and erosion control				

\* Would include but is not restricted to zoning, building and flood plain permits.

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

G. Walter Swann  
SIGNATURE OF APPLICANT

4/13/05  
DATE

\_\_\_\_\_  
SIGNATURE OF AGENT

\_\_\_\_\_  
DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, factitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**ATTACHMENT A**

**SWAINS WHARF MARINA**

**COASTAL ZONE MANAGEMENT CONSISTENCY STATEMENT**

The owners of the proposed Swains Wharf Marin have determined the proposed marina reconstruction/expansion complies with Delaware's approved Coastal Zone Management Program and will be conducted in a manner consistent with such program.

J. Walter Swain  
Signature of Applicant

4/13/05  
Date

Nearest Post Office - Milford  
110 Causey Avenue,  
Milford, DE 19963  
(302) 422-5618

Local Newspaper  
Delaware State News  
P.O. Box 737  
Dover, Delaware 19903  
(302) 741-8297

State Newspaper  
News Journal  
P.O. Box 15505  
Wilmington, DE 19850  
(302)-324-2500

ADJACENT PROPERTY OWNERS WITHIN 1000 FOOT RADIUS  
(Current as of 2-9-2005)

PARCELS 3-30-5-

7 & 9 & 11 & 12 & 41 STATE OF DELAWARE  
DNREC DIV FISH & WILDLIFE  
PO BOX 1401  
DOVER, DE 19901

7.01 JOSEPH W JR. & PAMELA GIERSCHICK  
129 W. HOWARD STREET  
STOWE, PA 19464

7.02 BARRY L. & BARBARA A. HOCH  
229 MANATAWNY RD  
BOYERTOWN, PA 19512

7.03 FRANK L EVANS  
333 BRIDGE ST  
SPRING CITY, PA 19475

7.04 CHARLES R JR AUMAN  
RR 1 BOX 415  
MILFORD, DE 19963

6 IRENE M FITZGERALD  
18516 JOHNSON RD  
LINCOLN, DE 19960

8 ATLANTIC MANAGEMENT GROUP LLC  
16 GREYHAMPTON RD  
WEST YARMOUTH, MA 2673

13 GENE W & JEANETTE K FITZGERALD  
337 BAY AVE  
MILFORD, DE 19963

## PART I

### I. PROJECT DESCRIPTION.

- A. General site location: Accurately locate the project site with respect to state, county of other subdivision and in relation to streams and rivers.

The project is located near the end of Road 203 (Mispillion Lighthouse Road) at the confluence of the Mispillion River and Cedar Creek, Slaughter Beach, Sussex County, Delaware.

- B. Specific site location: Completely locate the project site with respect to cove, creek, property owner, plot number, etc.

The site is the property formerly known as Dot's Docks, now owned by G. Walter Swain and mapped as parcel 3-30-5-10 by Sussex County.

- C. Description of proposed action: Carefully describe the action proposed, including the method of construction and equipment and materials to be used. Detail in your description is important. (Use the back of this page to complete your description).

See attached sheet

- D. Purpose of proposed action: Define the purpose of the proposed structure or work. For example the purpose of bulkheading may be to stabilize an eroding bank, whereas the purpose for a pier may be for the mooring of a private boat, for access to a public or private facility, for a marine or for other purpose.

Proposed action is to reopen and expand a former marina that was largely destroyed by a storm.

- E. Submit color photographs of the site, with explanations of the views shown (prints only). Photographs help us to better understand your project. The more you provide the easier it is to understand an process your application.

See attached photos

**PART II - ENVIRONMENTAL IMPACT CHECKLIST**

<b>Environmental Impact</b>	<b>Yes</b>	<b>No</b>	<b>Qualifying Remarks</b>
<b>A. Physical</b>			
1. Topography	X		upland fill and grading for positive drainage
2. Geological Elements & Leaching		X	
3. Air		X	
4. Transportation		X	
5. Handling of Hazardous Materials		X	
6. Spoil Disposal		X	Only excavation of 34 CY for construction of the boat ramp
7. Sewage & Solid Wastes		X	sewage only from season portable toilets, trucked off-site
<b>8. Water Resources</b>			
a. Water Quality		X	
b. Hydrography, Circulation, Littoral Drift		X	
c. Ground Water		X	
<b>B. Biological</b>			
<b>1. Vegetation</b>			
a. Terrestrial	X		much of the vegetation (grasses, forbs) replaced with gravel parking
b. Aquatic		X	Docks will shade some bottom, but also increase habitat structure
<b>2. Fish &amp; Wildlife</b>			
a. Mammals		X	
b. Birds		X	
c. Amphibians		X	
d. Reptiles		X	
e. Fish		X	Increased habitat structure
f. Shellfish		X	
g. Invertebrates		X	Some increased habitat for attachment
<b>3. Rare or Endangered Species</b>		X	

**PART II - ENVIRONMENTAL IMPACT CHECKLIST (cont'd.)**

Environmental Impact	Yes	No	Qualifying Remarks
<b>C. Cultural</b>			
1. Land Use		X	location is site of previous marina operation
2. Population Density & Trends		X	
3. Regional Development		X	
4. Historic Places		X	
5. Archaeological Sites		X	
6. Aesthetics	X		project would clean up site of existing debris and old pilings
7. Utilities		X	
8. Transportation Systems		X	
9. Recreation	X		would provide 50 wet slips for fisherman and recreational boaters
10. Public Health		X	
<b>D. Other Factors</b>			
1. Secondary Effects		X	
2. Controversiality		X	
3. Is significant dredging involved?		X	No dredging required
4. Is significant filling involved?		X	No filling of aquatic sites other than the ramp

## PART III

### CONSIDERATIONS OF A DREDGING PROPOSAL

- A. Describe characteristics and locations of the proposed dredged material disposal site. Provide Photographs.  
Not applicable, no dredging proposed.
- B. Is there a comprehensive plan for disposal sites which takes into account the accumulative effect over time and the decreasing amount of suitable sites for disposal?
- C. Describe the present land use of the disposal site.
- D. Describe characteristics of the material to be disposed including:
1. Physical nature of material (i.e. sand, silt, clay, etc.). Give percentages of the various fractions if available.
  2. Chemical composition of material - Many areas, especially marinas, highly industrialized areas, etc. have sediments with high concentrations of pollutants (chemicals, organic material etc.). These materials may be resuspended or reintroduced into the water and result in serious environmental damage. If your proposed dredging is in an area such as described above, a chemical analysis of the material to be dredged should be provided.
  3. Dewatering properties of material to be disposed.
  4. Compatibility of material and settling rates of material to be disposed.
  5. Dredging and disposal schedule to insure that operations do not degrade water quality during times of anadromous fish migration.
- E. When the project involves land disposal discuss the following:
1. Method of disposal to be utilized, i.e., pipeline discharge, barge, hopper (underway or stationary).
  2. Describe method of dredged material containment (i.e. embankment, behind bulkhead etc.).

3. What type of leachates will be produced from the spoil material and what is planned for protection of the groundwater?
4. Methods to insure that spoil water does not adversely affect water quality both during construction and after completion of the project.
5. Provisions for monitoring during discharge - water quality, sediment transport, precautions to prevent "short" circuiting dumping.

F. Consider and discuss the following for water disposal:

1. Describe methods to be used for water disposal, including volumes and site selection.
2. Describe the existing water characteristics at the site, including chemical analysis for water quality.

G. Discuss the frequency and amount of maintenance dredging which will be required; discuss the resulting impacts.

H. Alternatives

1. Discuss all alternatives to the project including the no action alternative.
2. Discuss alternative types and methods of dredging and disposal, such as pipeline discharge, barging, or hopper method.
3. Discuss alternatives to dredging.
4. Discuss alternative areas of sites for spoil disposal.
5. Discuss impact of port docking patterns upon the demand for dredging. Can alternative patterns reduce the amount of dredging required to support port operations?
6. Suggest alternative means of construction which would prevent or minimize water quality degradation using EPA standards for guidance.
7. State in detail impacts resulting in alternative locations for the proposed project.

## PART IV

### CONSIDERATIONS OF A FILLING PROPOSAL:

- A. Describe in detail the existing characteristics of the area proposed for filling (i.e., aquatic area, marsh, mudflat, swamp etc. ). In your description be sure to include the types of vegetation present and the types of animals, that use the area. (Provide photographs).  
Filling will consist of placement of wooden piles to support the docks and piers and installation of a 22'x100' concrete boat ramp.
- B. Give the following information in regard to the project size:
1. Total area to be filled.  
1826SF for ramp
  2. Size of underwater area to be filled.  
Approximately 1826 SF(22'x83' average) filled below MHW
  3. Area of intertidal zone to be filled.  
396SF (22'x18') between MHW and MLW
  4. Area of wetlands to be filled.  
None
  5. Proposed height of fill.  
Ramp will be one foot thick and keyed into the bottom 6 inches thus extending 6 inches above the bottom
  6. Volume of material that will be used in filling.  
1826 CF of concrete
- C. Describe in detail the material to be used as fill including as follows:
1. Type of fill to be used (sand, stone, rubble, etc.). If the material is a composite (i.e. rubble) list the types of materials it will contain.  
Concrete
  2. Give the specific location of the source of this material.  
Atlantic Concrete, Inc., Milford, DE
  3. What types of leachates will be produced from the fill material and what is planned for protection of surface and ground water?  
There should be no leachates produced
- D. Carefully describe the method of fill including the following:
1. Method of fill placement including equipment used in deposition and grading.  
The area around the ramp will be enclosed with a cofferdam, the area pumped dry, necessary excavation completed, sheet piling for the form/protection driven, filter fabric laid and the concrete poured. The cofferdam will be left in place until the concrete has cured.
  2. Method of stabilization of banks from erosion, sloughing, wave action, boat wakes etc.  
Stabilization should not be needed
  3. Method of stabilization of the surface of the fill.  
Fill (concrete) will be stable

4. Length of time needed for completion of the project. State if filling will be continuous, intermittent etc.

Project will be constructed over a period of two months.

5. Method of controlling turbidity when filling an underwater area.

All filling (pouring concrete) will be done in the "dry" behind the cofferdam

E. Purpose of the project -

1. What is the intended use of the filled area?

Filled area will be a boat ramp to launch and retrieve boats

2. What structures, if any, will be constructed on the fill?

No structures will be constructed on top of the ramp

3. What benefits would you gain from the proposed fill?

The ramp will allow slip owners to launch and retrieve their boats at the marina, and also allow days to launch boats for a fee.

F. Alternatives

1. Discuss the "no action" alternative and how this would affect your present and future plans for the development of the area.

No action would result in no ramp. This would make removal of boats from the marina more difficult in cases where the boat is not capable of moving under its own power.

2. Discuss alternative locations for the proposed fill.

It was determined this was the best location within the marina for the ramp based on currents and water depths.

3. Discuss the use of elevated structures (i.e. causeways, elevated platforms etc.) in place of the proposed fill.

Elevated boat ramps are highly accepted by boat owners and disliked by marina owners due to liability of a boat falling over the edge

4. Discuss any other alternatives you have considered prior to formulating the presently submitted proposal.

The marina was originally considered for a total of 58 slips, this exceeded the minor alteration criteria under Delaware Marina regulations by 8 slips and placed the end of one dock close to a property boundary

## I. PROJECT DESCRIPTION

### C. Description of Proposed Action

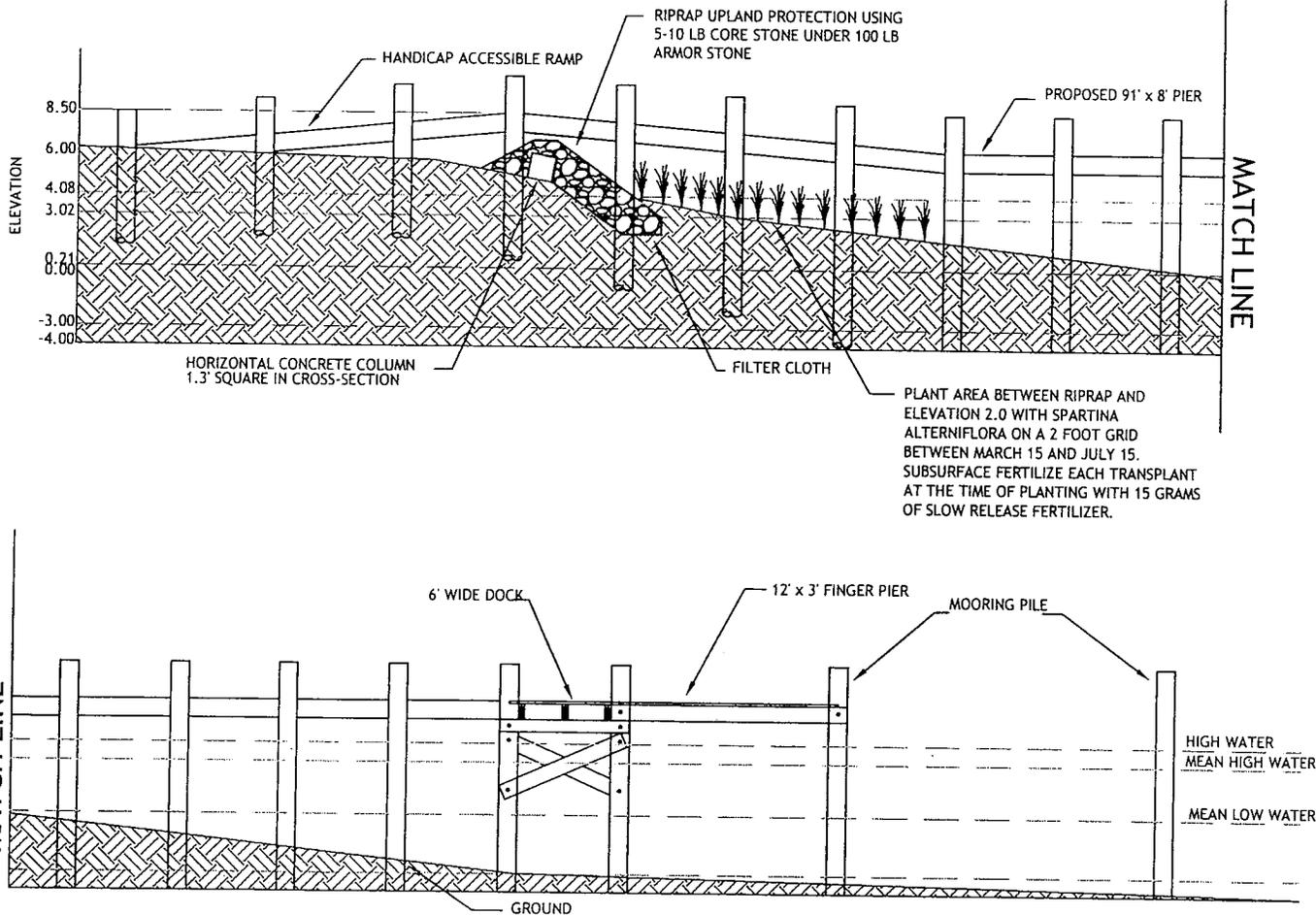
The proposed action will reconstruct and expand a former 26 slip commercial marina destroyed by a storm. Activities will include construction of two docks, 460' x 6' and 185' x 6'; connected to land by three piers, 145' x 8' and 91' x 8' (2); and a boat ramp 100' x 22'. The expanded marina will have 50 wet slips; 38 - 25' x 12' and 12 - 40' x 15' with tapered finger piers having a maximum width of 3 feet. The docks and piers will consist of 431- 12" diameter (approximate) driven pilings of pressure treated wood supporting 5442 SF of 2" x 8" ACQ treated decking. Joists and cross braces will be 2" x 10" pressured treated wood and stringers will be 3" x 8" pressure treated wood. Only the decking will use ACQ treated lumber as the ACQ treatment is not suited for constant exposure to salt water. Pilings, joists, cross braces and stringers will be CCA treated. Remnant structures of the old marina will be removed during construction.

The boat ramp replaces two former ramps. The ramp will be constructed by driving steel sheets to create a coffer dam and pumping the area within the ramp dry. A second series of steel sheets will be driven to create the form for the concrete pad and to provide erosion protection. The interior of the form will be lined with geotextile fabric and the concrete poured to a 12" thickness. After the concrete sets, the steel form will be cut even with the top of the concrete and the coffer dam removed.

Shoreline protection will be provided by a combination of riprap and tide marsh planting. The riprap will be located more toward the top of the shoreline slope to keep storm tides from washing over the parking lot and eroding the top of the slope. The riprap will cover 388 linear feet of the shore. The site will be prepared by digging a trench at the waterward extent of the stone to key the stone into the sand. The ground will then be covered with filter fabric and the riprap installed. The riprap will consist of a core of 16" concrete column laid horizontally, and covered with 5-10 lb core stone. The top will then be covered with 100 lb armor stone. The shore below the riprap down to elevation 2.0 will be protected by establishing *Spartina alterniflora*. Elevations were chosen based on the elevation range of the existing *Spartina*. Plants will be installed on a 2 foot grid between March 15 and July 15.

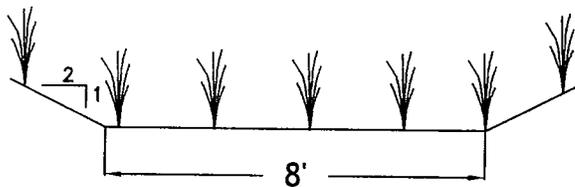
The uplands will be prepared by trucking in sandy fill and increasing site elevations near the shore. The site will be graded so any runoff flows towards the road then to the north and south into wet swales established along the edge of the property. The swale bottoms will be 8 feet wide and planted with *Spartina alterniflora* on a 2 foot grid. The south swale will be 265 feet long and the north swale will be 157 feet long. Each swale will have a low stone check dam at the outlet end.

Most of the uplands will be covered with crushed stone for the circular driveway and parking area. Parking will consist of 32- 10' x 20' stalls for cars, 6- 15' x 20' stall for handicap parking and 14 - 20' x 40' stalls for trailers.



## MARINA SECTIONAL AND PLANTING DETAIL

SCALE: 1" = 10'



SWALE ELEVATIONS SHALL BE CHECKED PRIOR TO PLANTING AND REGRADED AS NEEDED TO MEET DESIGN GRADES. PLANT SWALE BOTTOM AND SIDES WITH *SPARTINA ALTERNIFLORA* 2 FEET ON-CENTER, AND SUBSURFACE FERTILIZE WITH 15 GRAMS SLOW RELEASE FERTILIZER AT TIME OF PLANTING. ALL PLANTS SHALL BE NURSERY GROWN STOCK AND WELL-ROOTED THROUGH OUT THE CONTAINER. PLANTING IS BEST CONDUCTED BETWEEN MARCH 15 AND MAY 15, BUT MAY BE EXTENDED THROUGH JULY 15. SWALES SHALL BE PLANTED AFTER SITE GRADING AND SEEDING IS COMPLETED.

## WET SWALE DETAIL

NO SCALE

Date: FEBRUARY 2, 2005

Scale: AS SHOWN

Proj.No.: 408B001

Drawing No.:

FIGURE 1

PROPOSED MARINA REVISION

SWAIN MARINA, TAX MAP 3-30-5-10

SLAUGHTERS BEACH, SUSSEX COUNTY, DELAWARE

**ERI** ENVIRONMENTAL  
RESOURCES, INC.

100 EAST MAIN STREET  
ONE PLAZA EAST, SUITE 500  
SALISBURY, MARYLAND 21801  
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