Regulatory Agency Contact Information

Virginia Marine Resources Commission (VMRC)
Habitat Management Division
380 Fenwick Road, Building 96
Fort Monroe, VA 23651
Phone: (757) 247-2200, Fax: (757) 247-8062
Website: http://www.mrc.virginia.gov/hmac/hmoverview.shtm

United States Army Corps of Engineers (USACE)
Norfolk District
803 Front Street, ATTN: CENAO-WR-R
Norfolk, Virginia 23510-1011
Phone: (757) 201-7652, Fax: (757) 201-7678
Website: http://www.nao.usace.army.mil/Missions/Regulatory.aspx

Virginia Department of Environmental Quality (DEQ)
Virginia Water Protection Permit Program
Post Office Box 1105
Richmond, Virginia 23218
Phone: (804) 698-4000
Website: http://www.deq.virginia.gov/

LOCAL WETLANDS BOARD (LWB) CONTACT INFORMATION:
Links to LWB information on the Web can be found at
http://ccrm.vims.edu/permits_web/guidance/local_wetlands_boards.html
In addition, the phone numbers listed below can be used to contact the LWB. Please be advised that these phone numbers are subject to change at any time.

Accomack County (757) 787-5721, Cape Charles (757) 331-3259, Charles City County (804) 829-9296, Chesapeake (757) 382-6248, Colonial Heights (804) 520-9275, Essex County (804) 443-4951, Fairfax County (703) 324-1364, Fredericksburg (540) 372-1179, Gloucester County (804) 693-2744, Hampton (757) 727-6140, Hopewell (804) 541-2267, Isle of Wight County (757) 365-6211, James City County (757) 253-6673, King and Queen County (804) 769-4978, King George County (540) 775-7111, King William County (804) 769-4927, Lancaster County (804) 462-5220, Mathews County (804) 725-5025, Middlesex County (804) 758-0500, New Kent County (804) 966-9690, Newport News (757) 247-8437, Norfolk (757) 664-4368, Northampton County (757) 678-0442, Northumberland County (804) 580-8910, Poquoson (757) 868-3040, Portsmouth (757) 393-8836, Prince William County (703) 792-6984, Richmond County (804) 333-3415, Stafford County (540) 658-8668, Suffolk (757) 923-3650, Virginia Beach (757) 427-8246, Westmoreland County (804) 493-0120, West Point (804) 843-3330, Williamsburg (757) 220-6130, York County (757) 890-3538

Tidewater Joint Permit Application (JPA)
For Projects Involving Tidal Waters, Tidal Wetlands and/or Dunes and Beaches in Virginia

This application may be used for most commercial and noncommercial projects involving **tidal waters, tidal wetlands and/or dunes and beaches in Virginia** which require review and/or authorization by Local Wetlands Boards (LWB), the Virginia Marine Resources Commission (VMRC), the Department of Environmental Quality (DEQ), and/or the U. S. Army Corps of Engineers (USACE). This application can be used for:

- **Access-related activities**, including piers, boathouses, boat ramps (without associated dredging or excavation*), moorings, marinas.
- **Shoreline stabilization projects** including living shorelines, riprap revetments, marsh toe stabilization, bulkheads, breakwaters, beach nourishment, groins, and jetties. It is the policy of the Commonwealth that living shorelines are the preferred alternative for stabilizing tidal shorelines (Va. Code § 28.2-104.1).
- **Crossings** over or under tidal waters and wetlands including bridges and utility lines (water, sewer, electric).
- **Aquaculture structures**, including cages and floats except "oyster gardening"**

***Note:** for all dredging, excavation, or surface water withdrawal projects you **MUST** use the Standard JPA form; for noncommercial, riparian shellfish aquaculture projects (i.e., "oyster gardening") you must use the abbreviated JPA found at https://mrc.virginia.gov/forms/2019/VGP3_Aquaculture_form_2019.pdf or call VMRC for a form.

The DEQ and the USACE use this form to determine whether projects qualify for certain General, Regional, and/or Nationwide permits. If your project does not qualify for these permits and you need a DEQ Virginia Water Protection permit or an individual USACE permit, you must submit the Standard Joint Permit application form. You can find this application at http://www.nao.usace.army.mil/Missions/Regulatory/JPA.aspx. Please note that some health departments and local agencies, such as local building officials and erosion and sediment control authorities, do not use the Joint Permit Application process or forms and may have different informational requirements. The applicant is responsible for contacting these agencies for information regarding those permitting requirements.

HOW TO APPLY

Submit one (1) completed copy of the Tidewater JPA to VMRC:

1. If by mail or courier, use the VMRC address provided on page 1.
2. If by electronic mail, address the package to: **JPA.permits@mrc.virginia.gov.** The application must be provided in the .pdf format and should not exceed 10 MB. If larger than 10 MB you may provide a file transfer protocol (ftp) site for download purposes.

The Tidewater JPA should include the following:

1. **Part 1** – General Information
2. **Part 2** – Signatures
3. **Part 3** - Appendices (A, B, C, and/or D as applicable to your project)
4. **Part 4** – Project Drawings.
   The drawings shall include the following for **ALL** projects:
   - Vicinity Map (USGS topographic map, road map or similar showing project location)
   - Plan View Drawing (overhead, to scale or with dimensions clearly marked)
   - Section View Drawing (side-view, to scale or with dimensions clearly marked)

Sample drawings are included at the end of Part 4 of this application to show examples of the information needed to consider your application complete and allow for the timely processing.

When completing this form, use the legal name of the applicant, agent, and/or property owner. For DEQ application purposes, *legal name* means the full legal name of an individual, business, or other organization. For an individual, the legal name is the first name, middle initial, last name, and suffix. For an entity authorized to do business in Virginia, the legal name is the exact name set forth in the entity's articles of incorporation, organization or trust, or formation agreement, as applicable. Also provide the name registered with the State Corporation Commission, if required to register. DEQ issues a permit or grants coverage to the so-named individual or business, who becomes the 'permittee'. Correspondence from some agencies, including permits, authorizations, and/or coverage, may be provided via electronic mail. If the applicant and/or agent wishes to receive their permit via electronic mail, please remember to include an e-mail address at the requested place in the application.

In order for projects requiring LWB authorization to be considered complete (Virginia Code § 28.2-1302); "The permit application shall include the following: the name and address of the applicant; a detailed description of the proposed activities; a map, drawn to an appropriate and uniform scale, showing the area of wetlands directly affected, the location of the proposed work thereon, the area of existing and proposed fill and excavation, the location, width, depth and length of any proposed channel and disposal area, and the location of all existing and proposed structures, sewage collection and treatment facilities, utility installations, roadways, and other related appurtenances of facilities, including those on the adjacent uplands; a description of the type of equipment to be used and the means of access to the activity site; the names and addresses of record of adjacent land and known claimants of water rights in or adjacent to the wetland of whom the applicant has notice; an estimate of cost; the primary purpose of the project; and secondary purpose of the proposed project; a complete description of measures to be taken during and after alteration to reduce detrimental offsite effects; the completion date of the proposed work, project, or structure; and such additional materials and documentation as the wetlands board may require."

You may include signed Adjacent Property Owner (APO) Acknowledgement Forms found at the end of this Short Form. You must provide these addresses in Part 1 whether or not you use the APO forms. VMRC will request comments from APOs for projects that require permits for encroachment over state-owned submerged lands. VMRC or your local wetlands board must notify all APO's of public hearings required for all proposals involving tidal wetlands and dunes/beaches that are not authorized by statute. This information will not be used by DEQ to meet the requirements of notifying riparian land owners.

Regional Permit 17 (RP-17), authorizes the installation and/or construction of open-pile piers, mooring structures/devices, fender piles, covered boathouses/boatslips, boatlifts, osprey pilings/platforms, accessory pier structures, and certain devices associated with shellfish gardening, for private use, subject to strict compliance with all conditions and limitations further set out in the RP-17 enclosure located at http://www.nao.usace.army.mil/Missions/Regulatory/RBregional/. In addition to the information required in this JPA, prospective permittees seeking authorization under RP-17 must complete and submit the 'Regional Permit 17 Checklist' with their JPA. A copy of the 'Regional Permit 17 Checklist' is found on pages 13 and 14 of this application package. If the prospective permittee answers "yes" (or "N/A", where applicable) to all of the questions on the 'Regional Permit 17 Checklist', the permittee is in compliance with RP-17 and will not receive any other written authorization from the Corps but may not proceed with construction until they have obtained all necessary state and local permits. ***Note: If the prospective permittee answers "no" to any of the questions on the 'Regional Permit 17 Checklist' then their proposed structure(s) does not meet the terms and conditions of RP-17 and written authorization from the Corps is required before commencement of any work.***

Note: Land disturbance (grading, filling, etc.) or removal of vegetation associated with projects located in Chesapeake Bay Preservation Areas will require approval from local governments. Certain localities utilize this application during their Bay Act review. Part 5 of this application is included to provide assistance for the applicant to comply with Bay Act /or Erosion and Sediment Control requirements concurrent with this application.

WHAT HAPPENS NEXT

Upon receipt of an application, VMRC will assign a permit application number to the JPA and will then distribute a copy of the application and any original plan copies submitted to the other regulatory agencies that are involved in the JPA process. All agencies will conduct separate but concurrent reviews of your project. Please be aware that each agency must issue a separate permit (or a notification that no permit is required). Note that in some cases, DEQ may be taking an action on behalf of the USACE, such as when the State Program General Permit (SPGP) applies. Make sure that you have received all necessary authorizations, or documentation that no permit is required, from each agency prior to beginning the proposed work.

During the JPA review process, site inspections may be necessary to evaluate a proposed project. Failure to allow an authorized representative of a regulatory agency to enter the property, or to take photographs of conditions at the project site, may result in either the withdrawal or denial of your permit application.

For certain federal and state permit applications, a public notice is published in a newspaper having circulation in the project area, is mailed to adjacent and/or riparian property owners, and/or is posted on the agency's web page. The public may comment on the project during a designated comment period, if applicable, which varies depending upon the type of permit being applied for and the issuing agency. In certain circumstances, the project may be heard by a governing board, such as a Local Wetlands Board, the State Water Control Board, or VMRC in cases where a locality does not have a wetlands board and with certain subaqueous cases. You may be responsible for bearing the costs for advertisement of public notices.

Public hearings that are held by VMRC occur at their regularly scheduled monthly commission meetings under the following situations: Protested applications for VMRC permits which cannot be resolved; projects costing over $500,000 involving encroachment over state-owned subaqueous land; and all projects affecting tidal wetlands and dunes/beaches in localities without a LWB. All interested parties will be officially notified regarding the date and time of the hearing and Commission meeting procedures. The Commission will usually make a decision on the project at the meeting unless a decision for continuance is made. If a proposed project is approved, a permit or similar agency correspondence is sent to the applicant. In some cases, notarized signatures, as well as processing fees and royalties, are required before the permit is validated. If the project is denied, the applicant will be notified in writing.

PERMIT APPLICATION OR OTHER FEES

Do not send any fees with the JPA. VMRC is not responsible for accounting for fees required by other agencies. Please consult agency websites or contact agencies directly for current fee information and submittal instructions.

- USACE: Permit application fees are required for USACE Individual (Standard) permits. A USACE project manager will contact you regarding the proper fee and submittal requirements.

- DEQ: Permit application fees required for Virginia Water Protection permits – while detailed in 9VAC25-20 – are conveyed to the applicant by the applicable DEQ office (http://www.deq.virginia.gov/Locations.aspx). Complete the Permit Application Fee Form and submit it per the instructions to the address listed on the form. Instructions for submitting any other fees will be provided to the applicant by DEQ staff.
- VMRC: An application fee of $300 may be required for projects impacting tidal wetlands, beaches and/or dunes when VMRC acts as the LWB. VMRC will notify the applicant in writing if the fee is required. Permit fees involving subaqueous lands are $25.00 for projects costing $10,000 or less and $100 for projects costing more than $10,000. Royalties may also be required for some projects. The proper permit fee and any required royalty is paid at the time of permit issuance by VMRC. VMRC staff will send the permittee a letter notifying him/her of the proper permit fees and submittal requirements.
- LWB: Permit fees vary by locality. Contact the LWB for your project area or their website for fee information and submittal requirements. Contact information for LWBs may be found at http://ccrm.vims.edu/permits_web/guidance/local_wetlands_boards.html.

FOR AGENCY USE ONLY	
	Notes:
	JPA #

APPLICANTS
Part 1 – General Information

PLEASE PRINT OR TYPE ALL ANSWERS: If a question does not apply to your project, please print N/A (not applicable) in the space provided. If additional space is needed, attach 8-1/2 x 11 inch sheets of paper.

Check all that apply		
Pre-Construction Notification (PCN) ☐ NWP # _____ (*For Nationwide Permits ONLY - No DEQ-VWP permit writer will be assigned*)	Regional Permit 17 (RP-17) ☐	

County or City in which the project is located:_____
Waterway at project site:_____

PREVIOUS ACTIONS RELATED TO THE PROPOSED WORK (Include all federal, state, and local pre application coordination, site visits, previous permits, or applications whether issued, withdrawn, or denied)

Historical information for past permit submittals can be found online with VMRC - https://webapps.mrc.virginia.gov/public/habitat/ - or VIMS - http://ccrm.vims.edu/perms/newpermits.html

Agency	Action / Activity	Permit/Project number, including any non-reporting Nationwide permits previously used (e.g., NWP 13)	Date of Action	If denied, give reason for denial

Part 1 - General Information (continued)

1. Applicant's legal name* and complete mailing address: Contact Information:
   Home (____)_____
   Work (____)_____
   Fax (____)_____
   Cell (____)_____
   e-mail _____
   State Corporation Commission Name and ID Number (if applicable) _____

2. Property owner(s) legal name* and complete address, if different from applicant: Contact Information:
   Home (____)_____
   Work (____)_____
   Fax (____)_____
   Cell (____)_____
   e-mail _____
   State Corporation Commission Name and ID Number (if applicable) _____

3. Authorized agent name* and complete mailing address (if applicable): Contact Information:
   Home (____)_____
   Work (____)_____
   Fax (____)_____
   Cell (____)_____
   e-mail _____
   State Corporation Commission Name and ID Number (if applicable) _____

<u>* If multiple applicants, property owners, and/or agents, each must be listed and each must sign the applicant signature page.</u>

4. Provide a <u>detailed</u> description of the project in the space below, including the type of project, its dimensions, materials, and method of construction. Be sure to include how the construction site will be accessed and whether tree clearing and/or grading will be required, including the total acreage. If the project requires pilings, please be sure to include the total number, type (e.g. wood, steel, etc), diameter, and method of installation (e.g. hammer, vibratory, jetted, etc). If additional space is needed, provide a separate sheet of paper with the project description.

Part 1 - General Information (continued)

5. Have you obtained a contractor for the project? ___ Yes* ___ No. *If your answer is "Yes" complete the remainder of this question and submit the Applicant's and Contractor's Acknowledgment Form (enclosed)
   Contractor's name* and complete mailing address:

   Contact Information:
   Home (____)_____
   Work (____)_____
   Fax (____)_____
   Cell (____)_____
   email _____

   State Corporation Commission Name and ID Number (if applicable) _____

<u>* If multiple contractors, each must be listed and each must sign the applicant signature page.</u>

6. List the name, address and telephone number of the newspaper having general circulation in the area of the project. Failure to complete this question may delay local and State processing.

   Name and complete mailing address:

   Telephone number
   (____) _____

7. Give the following project location information:
   Street Address (911 address if available)_____
   Lot/Block/Parcel#_____
   Subdivision_____
   City / County_____ ZIP Code_____
   Latitude and Longitude at Center Point of Project Site (Decimal Degrees):
   _____ / -_____ (Example: 36.41600/-76.30733)

   If the project is located in a rural area, please provide driving directions giving distances from the best and nearest visible landmarks or major intersections. *Note: if the project is in an undeveloped subdivision or property, clearly stake and identify property lines and location of the proposed project. A supplemental map showing how the property is to be subdivided should also be provided.*

8. What are the *primary and secondary purposes of and the need for* the project? For example, the primary purpose <u>may</u> be "to protect property from erosion due to boat wakes" and the secondary purpose <u>may</u> be "to provide safer access to a pier."

Part 1 - General Information (continued)

9. Proposed use (check one):
   ___ Single user (private, non-commercial, residential)
   ___ Multi-user (community, commercial, industrial, government)

10. Describe alternatives considered and the measures that will be taken to avoid and minimize impacts, to the maximum extent practicable, to wetlands, surface waters, submerged lands, and buffer areas associated with any disturbance (clearing, grading, excavating) during and after project construction. *Please be advised that unavoidable losses of tidal wetlands and/or aquatic resources may require compensatory mitigation.*

11. Is this application being submitted for after-the-fact authorization for work which has already begun or been completed? ___Yes ___No. If yes, be sure to clearly depict the portions of the project which are already complete in the project drawings.

12. Approximate cost of the entire project (materials, labor, etc.): $_____
    Approximate cost of that portion of the project that is channelward of mean low water:
    $_____

13. Completion date of the proposed work:_____-_____

14. Adjacent Property Owner Information: List the name and complete **mailing address**, including zip code, of each adjacent property owner to the project. (NOTE: If you own the adjacent lot, provide the requested information for the first adjacent parcel beyond your property line.) Failure to provide this information may result in a delay in the processing of your application by VMRC.

Part 2 - Signatures

1. Applicants and property owners (if different from applicant).
NOTE: REQUIRED FOR ALL PROJECTS

<u>PRIVACY ACT STATEMENT</u>: The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972. These laws require that individuals obtain permits that authorize structures and work 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 prior to undertaking the activity. Information provided in the Joint Permit Application will be used in the permit review process and is a matter of public record once the application is filed. Disclosure of the requested information is voluntary, but it may not be possible to evaluate the permit application or to issue a permit if the information requested is not provided.
CERTIFICATION: I am hereby applying for all permits typically issued by the DEQ, VMRC, USACE, and/or Local Wetlands Boards for the activities I have described herein. I agree to allow the duly authorized representatives of any regulatory or advisory agency to enter upon the premises of the project site at reasonable times to inspect and photograph site conditions, both in reviewing a proposal to issue a permit and after permit issuance to determine compliance with the permit. **In addition, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.**

_____ _____
Applicant's Legal Name (printed/typed) (Use if more than one applicant)

_____ _____
Applicant's Signature (Use if more than one applicant)

_____
Date

_____ _____
Property Owner's Legal Name (printed/typed) (Use if more than one owner)
(If different from Applicant)

_____ _____
Property Owner's Signature (Use if more than one owner)

_____
Date

Part 2 – Signatures (continued)

2. Applicants having agents (if applicable)

CERTIFICATION OF AUTHORIZATION

I (we),_____, hereby certify that I (we) have authorized _____
(Applicant's legal name(s)) (Agent's name(s))
to act on my behalf and take all actions necessary to the processing, issuance and acceptance of this permit and any and all standard and special conditions attached.

We hereby certify that the information submitted in this application is true and accurate to the best of our knowledge.

_____ _____
(Agent's Signature) (Use if more than one agent)

_____
(Date)

_____ _____
(Applicant's Signature) (Use if more than one applicant)

_____
(Date)

3. Applicant's having contractors (if applicable)

CONTRACTOR ACKNOWLEDGEMENT

I (we), _____, have contracted_____
(Applicant's legal name(s)) (Contractor's name(s))
to perform the work described in this Joint Permit Application, signed and dated_____.

We will read and abide by all conditions set forth in all Federal, State and Local permits as required for this project. We understand that failure to follow the conditions of the permits may constitute a violation of applicable Federal, state and local statutes and that we will be liable for any civil and/or criminal penalties imposed by these statutes. In addition, we agree to make available a copy of any permit to any regulatory representative visiting the project to ensure permit compliance. If we fail to provide the applicable permit upon request, we understand that the representative will have the option of stopping our operation until it has been determined that we have a properly signed and executed permit and are in full compliance with all terms and conditions.

_____
Contractor's name or name of firm

_____
Contractor's or firms address

_____ _____
Contractor's signature and title Contractor's License Number

_____ _____
Applicant's signature (use if more than one applicant)

_____
Date

Part 2 – Signatures (continued)

ADJACENT PROPERTY OWNER'S ACKNOWLEDGEMENT FORM

I (we), _____, own land next to (across the water
(Print adjacent/nearby property owner's name)

from/on the same cove as) the land of_____.
(Print applicant's name(s))

I have reviewed the applicant's project drawings dated _____
(Date)

to be submitted for all necessary federal, state and local permits.

I HAVE NO COMMENT_____ ABOUT THE PROJECT.

I DO NOT OBJECT _____ TO THE PROJECT.

I OBJECT _____ TO THE PROJECT.

The applicant has agreed to contact me for additional comments if the proposal changes prior to construction of the project.

(Before signing this form be sure you have checked the appropriate option above).

_____
Adjacent/nearby property owner's signature(s)

_____
Date

Note: If you object to the proposal, the reason(s) you oppose the project must be submitted in writing to VMRC. An objection will not necessarily result in denial of the project; however, valid complaints will be given full consideration during the permit review process.

Part 2 – Signatures (continued)

ADJACENT PROPERTY OWNER'S ACKNOWLEDGEMENT FORM

I (we), _____, own land next to (across the water
(Print adjacent/nearby property owner's name)

from/on the same cove as) the land of_____.
(Print applicant's name(s))

I have reviewed the applicant's project drawings dated _____
(Date)

to be submitted for all necessary federal, state and local permits.

I HAVE NO COMMENT_____ ABOUT THE PROJECT.

I DO NOT OBJECT _____ TO THE PROJECT.

I OBJECT _____ TO THE PROJECT.

The applicant has agreed to contact me for additional comments if the proposal changes prior to construction of the project.

(Before signing this form, be sure you have checked the appropriate option above).

_____
Adjacent/nearby property owner's signature(s)

_____
Date

Note: If you object to the proposal, the reason(s) you oppose the project must be submitted in writing to VMRC. An objection will not necessarily result in denial of the project; however, valid complaints will be given full consideration during the permit review process.

U.S. Army Corps Of Engineers
Norfolk District

REGIONAL PERMIT 17 CHECKLIST
Expires: September 5, 2023

Please review the 18-RP-17 enclosure before completing this form and note 18-RP-17 can only be used for proposed PRIVATE USE structure(s) that comply with the terms and conditions of 18-RP-17. Copies can be obtained online at http://www.nao.usace.army.mil/Missions/Regulatory/RBregional/.

YES☐ NO☐ **(1)** Has the permittee reviewed the 18-RP-17 enclosure and verified that the proposed structure(s) is in compliance with all the terms, conditions, and limitations of 18-RP-17?

YES☐ NO☐ **(2)** Does the proposed structure(s) extend no more than one-fourth of the distance across the waterway measured from either mean high water (MHW) to MHW (including all channelward wetlands) or ordinary high water (OHW) to OHW (including all channelward wetlands)?

YES☐ NO☐ **(3)** Does the proposed structure(s) extend no more than 300 feet from MHW or OHW (including all channelward wetlands)?

YES☐ NO☐ N/A☐ **(4)** Does the proposed structure(s) attach to the upland at a point landward of MHW or OHW (including all channelward wetlands)?

YES☐ NO☐ N/A☐ **(5)** If the proposed structure(s) crosses wetland vegetation, is it an open-pile design that has a maximum width of five (5) feet and a minimum height of four (4) feet between the decking and the wetland substrate?

YES☐ NO☐ N/A☐ **(6)** Does the proposed structure(s) include no more than two (2) boatlifts and no more than two (2) boat slips?

YES☐ NO☐ N/A☐ **(7)** Is the open-sided roof structure designed to shelter a boat ≤ 700 square feet and/or is the open sided roof structure or gazebo structure designed to shelter a pier ≤ 400 square feet?

YES☐ NO☐ N/A☐ **(8)** Are all piles associated with the proposed structure(s) non-steel, less than or equal to 12" in diameter, and will less than or equal to 25 piles be installed channelward of MHW?

YES☐ NO☐ N/A☐ **(9)** Is all work occurring behind cofferdams, turbidity curtains, or other methods to control turbidity being utilized when operationally feasible and federally listed threatened or endangered species may be present?

YES☐ NO☐ N/A☐ **(10)** If the proposed structure(s) is to be located within an anadromous fish use area, the prospective permittee will adhere to the anadromous fish use area time of year restriction (TOYR) prohibiting in-water work from occurring between February 15 through June 30 of any given year if (1) piles are to be installed with a cushioned impact hammer and there is less than 492 feet between the most channelward pile and mean low water (MLW) on the opposite shoreline or (2) piles are to be installed with a vibratory hammer and there is less than 384 feet between the most channelward pile and MLW on the opposite shoreline.

YES☐ NO☐ **(11)** Is all work occurring outside of submerged aquatic vegetation (SAV) mapped by the Virginia Institute of Marine Sciences' (VIMS) most recent survey year and 5 year composite?

YES☐ NO☐ **(12)** Has the permittee ensured the construction and/or installation of the proposed structure(s) will not affect federally listed threatened or endangered species or designated critical habitat?

YES☐ NO☐ **(13)** Will the proposed structure be located outside of Broad Creek in Middlesex County, Fisherman's Cove in Norfolk, or the Salt Ponds in Hampton?

YES☐ NO☐ **(14)** Will the proposed structure(s) be located outside of the waterways containing a Federal Navigation Project listed in Permit Specific Condition 12 of 18-RP-17 and/or will all portions of the proposed structure(s) be located more than 85 feet from the Federal Navigation Project?

YES☐ NO☐ **(15)** Will the proposed structure(s) be located outside a USACE Navigation and Flood Risk Management project area?

YES☐ NO☐ **(16)** Will the proposed structure(s) be located outside of any Designated Trout Waters?

YES☐ NO☐ N/A☐ **(17)** If the proposed structure(s) includes flotation units, will the units be made of materials that will not become waterlogged or sink if punctured?

YES☐ NO☐ N/A☐ **(18)** If the proposed structure(s) includes flotation units, will the floating sections be braced so they will not rest on the bottom during periods of low water?

YES☐ NO☐ **(19)** Is the proposed structure(s) made of suitable materials and practical design so as to reasonably ensure a safe and sound structure?

YES☐ NO☐ **(20)** Will the proposed structure(s) be located on the property in accordance with the local zoning requirements?

YES☐ NO☐ N/A☐ **(21)** If the proposed structure(s) includes a device used for shellfish gardening, will the device be attached directly to a pier and limited to a total of 160 square feet?

YES☐ NO☐ N/A☐ **(22)** If the proposed structure(s) includes a device used for shellfish gardening, does the permittee recognize this RP does not negate their responsibility to obtain an oyster gardening permit (General Permit #3) from Virginia Marina Resources Commission's Habitat Management Division?

YES ☐ NO ☐ **(23)** Does the permittee recognize this RP does not authorize any dredging or filling of waters of the United States (including wetlands) and does not imply that future dredging proposals will be approved by the Corps?

YES☐ NO☐ **(24)** Does the permittee understand that by accepting 18-RP-17, the permittee accepts all of the terms and conditions of the permit, including the limits of Federal liability contained in the 18-RP-17 enclosure? Does the permittee acknowledge that the structures permitted under 18-RP-17 may be exposed to waves caused by passing vessels and that the permittee is solely responsible for the integrity of the structures permitted under 18-RP-17 and the exposure of such structures and vessels moored to such structures to damage from waves? Does the permittee accept that the United States is not liable in any way for such damage and that it shall not seek to involve the United States in any actions or claims regarding such damage?

IF YOU HAVE ANSWERED "NO" TO ANY OF THE QUESTIONS ABOVE, REGIONAL PERMIT 17 (18-RP-17) DOES NOT APPLY AND YOU ARE REQUIRED TO OBTAIN WRITTEN AUTHORIZATION FROM THE CORPS PRIOR TO PERFORMING THE WORK.

IF YOU HAVE ANSWERED "YES" (OR "N/A", WHERE APPLICABLE) TO ALL OF THE QUESTIONS ABOVE, YOU ARE IN COMPLIANCE WITH REGIONAL PERMIT 17 (18-RP-17). PLEASE SIGN BELOW, ATTACH, AND SUBMIT THIS CHECKLIST WITH YOUR COMPLETED JOINT PERMIT APPLICATION (JPA). THIS SIGNED CERTIFICATE SERVES AS YOUR LETTER OF AUTHORIZATION FROM THE CORPS. YOU WILL NOT RECEIVE ANY OTHER WRITTEN AUTHORIZATION FROM THE CORPS; HOWEVER, YOU MAY NOT PROCEED WITH CONSTRUCTION UNTIL YOU HAVE OBTAINED ALL OTHER NECESSARY STATE AND LOCAL PERMITS.

I CERTIFY THAT I HAVE READ AND UNDERSTAND ALL CONDITIONS OF THE REGIONAL PERMIT 17 (18-RP-17), DATED SEPTEMBER 2018, ISSUED BY THE US ARMY CORPS OF ENGINEERS, NORFOLK DISTRICT REGULATORY BRANCH (CENAO-WRR), NORFOLK, VIRGINIA.

Proposed work to be located at:

_____

_____

Signature of Property Owner(s) or Agent

_____

Date_____

VMRC Number: _____

Part 3 – Appendices

Please complete and submit the appendix questions applicable to your project, and attach the required vicinity map(s) and drawings to your application. If an item does not apply to your project, please write "N/A" in the space provided.

Appendix A: **(TWO PAGES) Projects for Access** to the water such as private and community piers, boathouses, marinas, moorings, and boat ramps. Answer all questions that apply.

1. **Briefly describe your proposed project**.

2. **For private, noncommercial piers:**
   Do you have an existing pier on your property? ____Yes____ No
   If yes, will it be removed? ____Yes ____No
   Is your lot platted to the mean low water shoreline? ____Yes ____No
   What is the overall length of the proposed structure? _____feet.
   Channelward of Mean High Water? _____feet.
   Channelward of Mean Low Water? _____feet.
   What is the area of the piers and platforms that will be constructed over
   Tidal non-vegetated wetlands _____ square feet.
   Tidal vegetated wetlands _____ square feet.
   Submerged lands _____square feet.
   What is the total size of any and all L- or T-head platforms?_____sq. ft.
   For boathouses, what is the overall size of the roof structure? _____sq. ft.
   Will your boathouse have sides?_____Yes____ No.

   NOTE: All proposals for piers, boathouses and shelter roofs must be reviewed by the Virginia Marine Resources Commission (Commission or VMRC), however, pursuant to § 28.2-1203 A 5 of the Code of Virginia a VMRC permit may not be required for such structures (except as required by subsection D of § 28.2-1205 for piers greater than 100 feet in length involving commercially productive leased oyster or clam grounds), provided that (i) the piers do not extend beyond the navigation line or private pier lines established by the Commission or the United States Army Corps of Engineers (USACE), (ii) the piers do not exceed six feet in width and finger piers do not exceed five feet in width, (iii) any L or T head platforms and appurtenant floating docking platforms do not exceed, in the aggregate, 400 square feet, (iv) if prohibited by local ordinance open-sided shelter roofs or gazebo-type structures shall not be placed on platforms as described in clause (iii), but may be placed on such platforms if not prohibited by local ordinance, and (v) the piers are determined not to be a navigational hazard by the Commission. Subject to any applicable local ordinances, such piers may include an attached boat lift and an open-sided roof designed to shelter a single boat slip or boat lift. In cases in which open-sided roofs designed to shelter a single boat, boat slip or boat lift will exceed 700 square feet in coverage or the open-sided shelter roofs or gazebo structures exceed 400 square feet, and in cases in which an adjoining property owner objects to a proposed roof structure, permits shall be required as provided in § 28.2-1204.

Part 3 – Appendices (continued)

3. **For USACE permits**, in cases where the proposed pier will encroach beyond one fourth the waterway width (as determined by measuring mean high water to mean high water or ordinary high water mark to ordinary high water mark), the following information must be included before the application will be considered complete. For an application to be considered complete:

   a. The USACE MAY require depth soundings across the waterway at increments designated by the USACE project manager. Typically 10-foot increments for waterways less than 200 feet wide and 20-foot increments for waterways greater than 200 feet wide with the date and time the measurements were taken and how they were taken (e.g., tape, range finder, etc.).
   b. The applicant MUST provide a justification as to purpose if the proposed work would extend a pier greater than one-fourth of the distance across the open water measured from mean high water or the channelward edge of the wetlands.
   c. The applicant MUST provide justification if the proposed work would involve the construction of a pier greater than five feet wide or less than four feet above any wetland substrate.

4. Provide the type, size, and registration number of the vessel(s) to be moored at the pier or mooring buoy.

   Type Length Width Draft Registration #
   _____
   _____
   _____

5. For **Marinas, Commercial Piers, Governmental Piers, Community Piers and other non-private piers**, provide the following information:
   A) Have you obtained approval for sanitary facilities from the Virginia Department of Health?_____ (required pursuant to Section 28.2-1205 C of the Code of Virginia).
   B) Will petroleum products or other hazardous materials be stored or handled at your facility?_____.
   C) Will the facility be equipped to off-load sewage from boats?_____.
   D) How many wet slips are proposed?_____. How many are existing?_____.
   E) What is the area of the piers and platforms that will be constructed over
      Tidal non-vegetated wetlands _____ square feet
      Tidal vegetated wetlands _____ square feet
      Submerged lands _____square feet

6. For **boat ramps**, what is the overall length of the structure?_____feet.
   From Mean High Water?_____feet.
   From Mean Low Water?_____feet.

   Note: drawings must include the construction materials, method of installation, and all dimensions. If tending piers are proposed, complete the pier portion.
   Note: If dredging or excavation is required, you must complete the Standard Joint Point Permit application.

Part 3 – Appendices (continued)

Appendix B: Projects for Shoreline Stabilization in tidal wetlands, tidal waters and dunes/beaches including riprap revetments and associated backfill, marsh toe stabilization, bulkheads and associated backfill, breakwaters, beach nourishment, groins, jetties, and living shoreline projects. Answer all questions that apply. Please provide any reports provided from the Shoreline Erosion Advisory Service or VIMS**.**

NOTE: It is the policy of the Commonwealth that living shorelines are the preferred alternative for stabilizing tidal shorelines (Va. Code § 28.2-104.1). **Information on non-structural, vegetative alternatives (i.e., Living Shoreline) for shoreline stabilization is available at http://ccrm.vims.edu/coastal_zone/living_shorelines/index.html.**

1. Describe each **revetment, bulkhead, marsh toe, breakwater, groin, jetty, other structure, or living shoreline project** separately in the space below. Include the overall length in linear feet, the amount of impacts in acres, and volume of associated backfill below mean high water and/or ordinary high water in cubic yards, as applicable:

2. What is the maximum encroachment channelward of mean high water?_____feet.
   Channelward of mean low water?_____feet.
   Channelward of the back edge of the dune or beach?_____feet.

3. Please calculate the square footage of encroachment over:
   - Vegetated wetlands _____square feet
   - Non-vegetated wetlands _____square feet
   - Subaqueous bottom _____square feet
   - Dune and/or beach _____square feet

4. For bulkheads, is any part of the project maintenance or replacement of a previously authorized, currently serviceable, existing structure? ____ Yes____ No.

   If yes, will the construction of the new bulkhead be no further than two (2) feet channelward of the existing bulkhead? _____Yes ____No.

   If no, please provide an explanation for the purpose and need for the additional encroachment.

Part 3 – Appendices (continued)

5. Describe the type of construction and **all** materials to be used, including source of backfill material, if applicable (e.g., vinyl sheet-pile bulkhead, timber stringers and butt piles, 100% sand backfill from upland source; broken concrete core material with Class II quarry stone armor over filter cloth).
   NOTE: **Drawings must include construction details, including dimensions, design and all materials, including fittings if used**.

6. If using stone, broken concrete, etc. for your structure(s), what is the average weight of the:
   Core (inner layer) material_____ pounds per stone Class size _____
   Armor (outer layer) material _____ pounds per stone Class size _____

7. For **beach nourishment**, including that associated with breakwaters, groins or other structures, provide the following:

   - Volume of material _____ cubic yards channelward of mean low water
     _____ cubic yards landward of mean low water
     _____ cubic yards channelward of mean high water
     _____ cubic yards landward of mean high water

   - Area to be covered _____ square feet channelward of mean low water
     _____ square feet landward of mean low water
     _____ cubic yards channelward of mean high water
     _____ cubic yards landward of mean high water

   - Source of material, composition (e.g. 90% sand, 10% clay):_____
   - Method of transportation and placement:
     _____
   - Describe any proposed vegetative stabilization measures to be used, including planting schedule, spacing, monitoring, etc. Additional guidance is available at http://www.vims.edu/about/search/index.php?q=planting+guidelines:

Part 3 – Appendices (continued)

Appendix C: Crossings in, on, over, or under, waters, submerged lands, tidal wetlands and/or dunes and beaches, including but not limited to, bridges, walkways, pipelines and utility lines.

1. What is the purpose and method of installation of the crossing?

2. What is the width of the waterway and/or wetlands to be crossed
   from mean high water to mean high water (tidal waters)? _____ feet.
   from mean low water to mean low water (tidal waters)? _____ feet.
   from ordinary high water to ordinary high water (non-tidal waters)? _____ feet.

3. For bridges (footbridges, golf cart bridges, roadway bridges, etc.), what is the width of the structure over the tidal wetlands, dunes/beaches and/or submerged lands? _____square feet.

4. For overhead crossings:
   a. What will be the height above mean high water? _____feet.
   b. If there are other overhead crossings in the area, what is the minimum height? _____feet.
   c. If the proposed crossing is an electrical line, please confirm the total number of electrical circuits: _____

5. For buried crossings, what will be the depth below the substrate? _____feet. Will the proposed utility provide empty conduits for any additional utilities that may propose to co-locate at a later date? _____Yes _____No.

6. Will there be any excavation or fill required for placement of abutments, piers, towers, or other permanent structures on State-owned submerged lands, tidal wetlands, and dunes/beaches? ____Yes ____ No.

   If yes, please provide the following:

   a. Amount of excavation in wetlands _____ cubic yards
      _____ square feet

   b. Amount of excavation in submerged land _____ cubic yards
      _____ square feet

   c. Amount of excavation in dune/beach _____ cubic yards
      _____ square feet

   d. Amount of fill in wetlands _____ cubic yards
      _____ square feet

   e. Amount of fill in submerged lands _____ cubic yards
      _____ square feet

   f. Amount of fill in dune/beach _____ cubic yards
      _____ square feet

Appendix D: **Aquaculture Related Structures** such as cages and floats. Before completing this appendix, please review the aquaculture requirements summary at: http://mrc.virginia.gov/Shellfish_Aquaculture.shtm.

1. Will the activity be for commercial purposes? _____Yes _____ No.

   If Yes and structures will be placed upon an oyster ground lease, you may qualify for the VMRC General Permit #4 for Temporary Protective Enclosures for Shellfish. For more info see: http://www.mrc.virginia.gov/regulations/MRC_Scanned_Regs/Shellfish_Mix/fr1130_12-0107.pdf. If you qualify for the General Permit #4, or if such structures are proposed that are not on an oyster planting ground lease, or for floating structures of any kind, complete this Joint Permit Application and include the necessary information requested below in question 2 through 11.

   If No, you may qualify for the VMRC General Permit #3, for Noncommercial Riparian Shellfish Growing (i.e. "Gardening") For more information see: http://www.mrc.virginia.gov/forms/VGP3_Aquaculture.doc.pdf. If you qualify for this general permit use the Abbreviated Joint Permit Application For Noncommercial Riparian Shellfish Aquaculture Structures available at https://mrc.virginia.gov/forms/2019/VGP3_Aquaculture_form_2019.pdf ***do not use this Joint Permit Application***.

2. Will aquaculture structures be attached to an existing pier or other structure? ____ Yes ____ No.

3. The plat file # if proposed upon oyster planting ground lease(s)._____

4. The maximum area where enclosures are proposed. _____ square feet

5. The maximum number of enclosures being proposed to be deployed. _____

6. The species of shellfish to be cultured. _____

7. A detailed description of the enclosures to include width, length and height.

8. In addition to the requirements itemized in Part 4 Project Drawings, the following additional information must be included on your project drawings: A general description of the area within 500 feet of deployment area. Provide a drawing that depicts existing marine resources such as SAV, shellfish beds, fixed fishing devices, public grounds, piers, water depths at mean low water, tide range, and the minimum clearance at mean low tide over the enclosures.

9. Provide the date enclosures are proposed to be deployed _____. How will the structures be secured? _____.

Part 3 – Appendices (continued)

10. List of all riparian land owners within 500 feet of the area where enclosures are proposed along with a map (tax map or other suitable map) depicting the locations of such parcels or riparian property owner acknowledgement forms signed by the riparian land owner with any comments concerning the enclosures deployment request.

11. Proof that the applicant holds a current oyster or clam aquaculture product owners permit, and verification that the applicant is in compliance with Mandatory Harvest Reporting requirements, and verification that the current years oyster ground rent is paid, if structures are proposed on an oyster ground lease.

Part 4 - Project Drawings

Plan view and cross-sectional view drawings are required for all projects. Application drawings do not need to be prepared by a professional draftsman, but they must be clear, accurate, and should be to an appropriate scale. If a scale is not used, all dimensions must be clearly depicted in the drawings. If available, a plat of the property should be included, with the existing and proposed structures clearly indicated. Distances from the proposed structure(s) to fixed points of reference (benchmarks) and to the adjacent property lines must be shown. A vicinity map (County road map, USGS Topographic map, etc.) must also be provided to show the location of the property. **NOTE:** The sample drawings have been included at the end of this section to provide guidance on the information required for different types of projects. Clear and accurate drawings are essential for project review and compliance determination. Incomplete or unclear drawings may cause delays in the processing of your application.

The following items must be included on <u>ALL</u> project drawings: (plan and cross-sectional, as appropriate)

- **name of project**
- **north arrow**
- **scale**
- **waterway name**
- **existing and proposed structures, labeled as such**
- **dimensions of proposed structures**
- **mean high water and mean low water lines**
- **all delineated wetlands and all surface waters on the site, including the Cowardin classification (i.e., emergent, scrub-shrub, or forested) for those surface waters (if applicable)**
- **limits of proposed impacts to surface waters, such as fill areas, riprap scour protection placement, and dredged areas, and the amount of such impacts in square feet and acres**
- **ebb/flood direction**
- **adjacent property lines and owner's name**
- **distances from proposed structures to fixed points of reference (benchmarks) and adjacent property lines**

Part 5 - Chesapeake Bay Preservation Act Information

All proposed development, redevelopment, land disturbance, clearing or grading related to this Tidewater JPA must comply with the Chesapeake Bay Preservation Area Designation and Management Regulations, which are enforced through locally adopted Chesapeake Bay Preservation Area (CBPA) ordinances. Compliance with state and local CBPA requirements mandates the submission of a ***Water Quality Impact Assessment (WQIA)*** for the review and approval of the local government. Contact the appropriate local government office to determine if a WQIA is required for the proposed activity(ies).

Because the 84 local governments within Tidewater Virginia are responsible for enforcing the CBPA Regulations, the completion of the JPA process does not constitute compliance with the Bay Act Regulations nor does it guarantee that the local government will approve encroachments into the RPA that may result from this project. Applicants should contact their local government as early in the design process as possible to ensure that the final design and construction of the proposed project meets all applicable CBPA requirements. Early cooperation with local government staff can help applicants avoid unnecessary and costly delays to construction. Applicants should provide local government staff with information regarding existing vegetation within the Resource Protection Area (RPA) as well as a description and site drawings of any proposed land disturbance, construction, or vegetation clearing. As part of their review and approval processes, local government staff will evaluate the proposed project and determine whether or not approval can be granted. Once the locality has made a decision on the project, they will advise the Local Wetlands Boards and other appropriate parties of applicable CBPA concerns or issues.

Resource Protection Areas (RPAs) are composed of the following features:

1. **Tidal wetlands;**
2. **Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow;**
3. **Tidal shores;**
4. **Other lands considered by the local government to meet the provisions of subsection A of 9VAC25-830-80 and to be necessary to protect the quality of state waters; and**
5. **A buffer area not less than 100 feet in width located adjacent to and landward of the components listed in subdivisions 1 through 4 above, and along both sides of any water body with perennial flow.**

<u>Notes for all projects in RPAs</u>

Development, redevelopment, construction, land disturbance, or placement of fill within the RPA features listed above requires the approval of the locality and may require an exception or variance from the local Bay Act ordinance. Please contact the appropriate local government to determine the types of development or land uses that are permitted within RPAs.

Pursuant to 9VAC25-830-110, on-site delineation of the RPA is required for all projects in CBPAs. Because USGS maps are not always indicative of actual “in-field” conditions, they may not be used to determine the site-specific boundaries of the RPA.

<u>Notes for shoreline erosion control projects in RPAs</u>

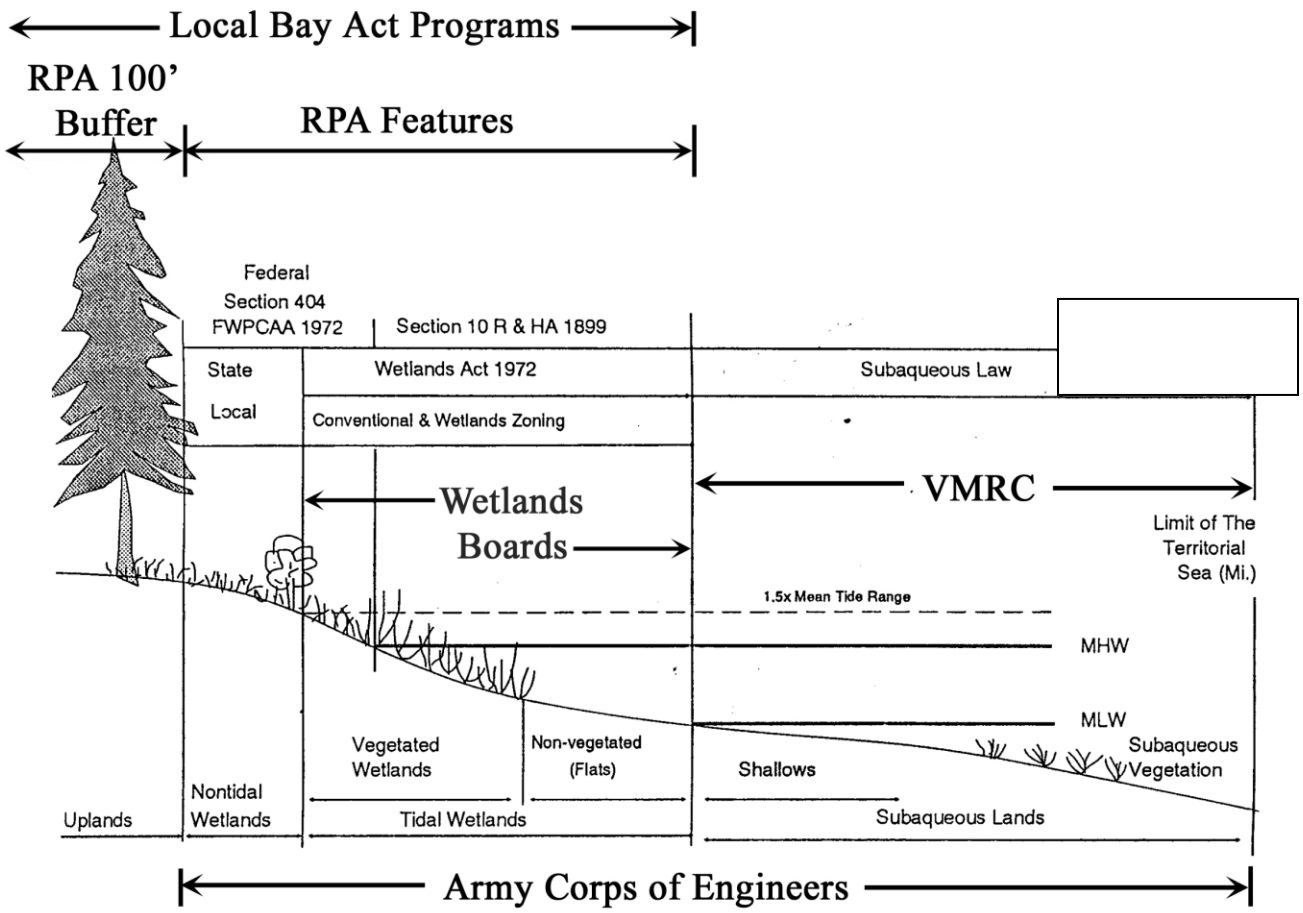
Re-establishment of woody vegetation in the buffer will be required by the locality to mitigate for the removal or disturbance of buffer vegetation associated with your proposed project. Please contact the local government to determine the mitigation requirements for impacts to the 100-foot RPA buffer.

Part 5 - Chesapeake Bay Preservation Act Information (continued)

Pursuant to 9VAC25-830-140 5 a (4) of the Virginia Administrative Code, shoreline erosion projects are a permitted modification to RPAs provided that the project is based on the "best technical advice" and complies with applicable permit conditions. In accordance with 9VAC25-830-140 1 of the Virginia Administrative Code, the locality will use the information provided in this Part V, in the project drawings, in this permit application, and as required by the locality, to make a determination that:

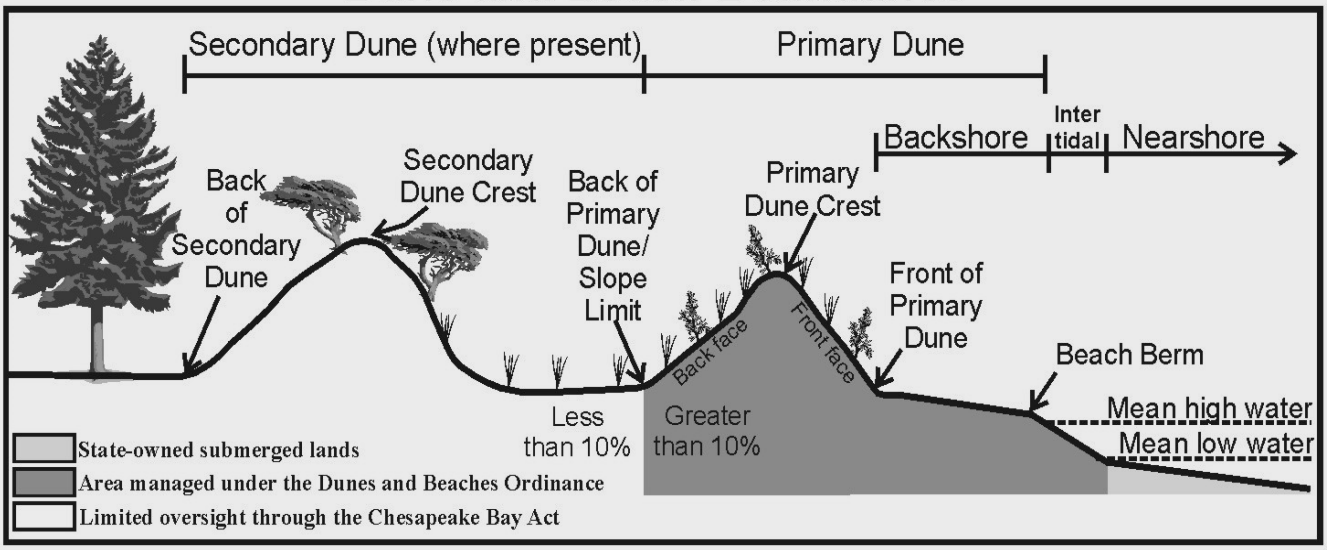
1. Any proposed shoreline erosion control measure is necessary and consistent with the nature of the erosion occurring on the site, and the measures have employed the "best available technical advice"
2. Indigenous vegetation will be preserved to the maximum extent practicable
3. Proposed land disturbance has been minimized
4. Appropriate mitigation plantings will provide the required water quality functions of the buffer (9VAC25-830-140 3)
5. The project is consistent with the locality's comprehensive plan
6. Access to the project will be provided with the minimum disturbance necessary.

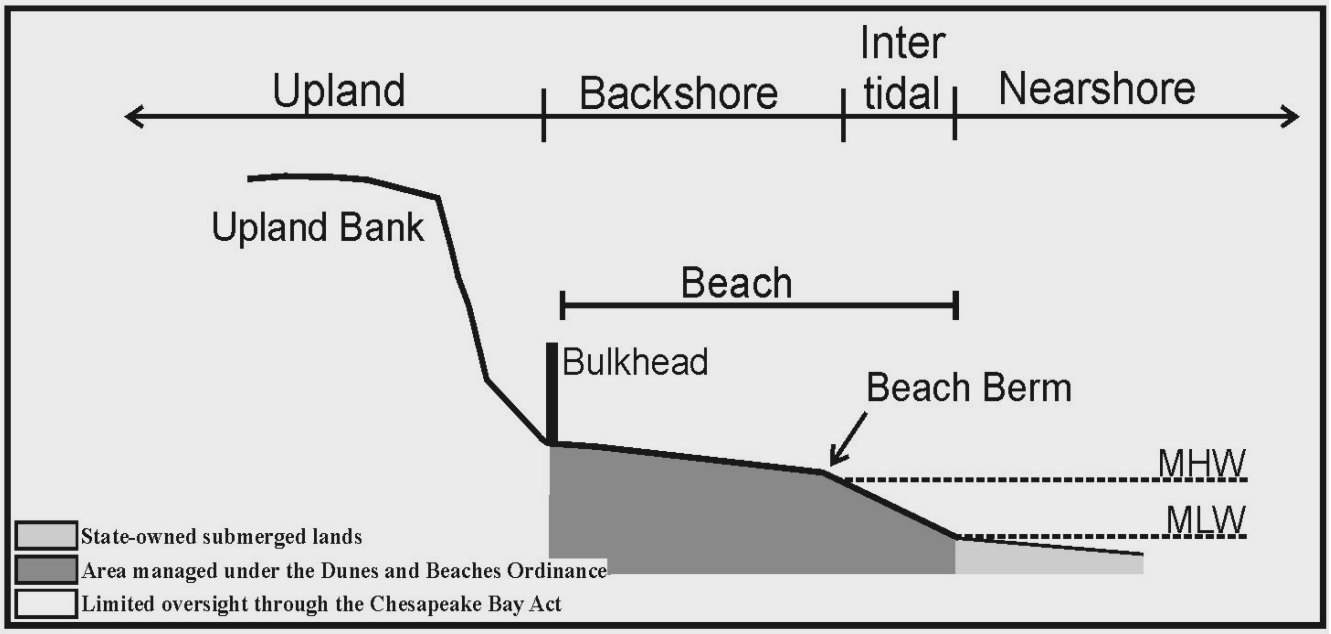
Jurisdictional Boundaries

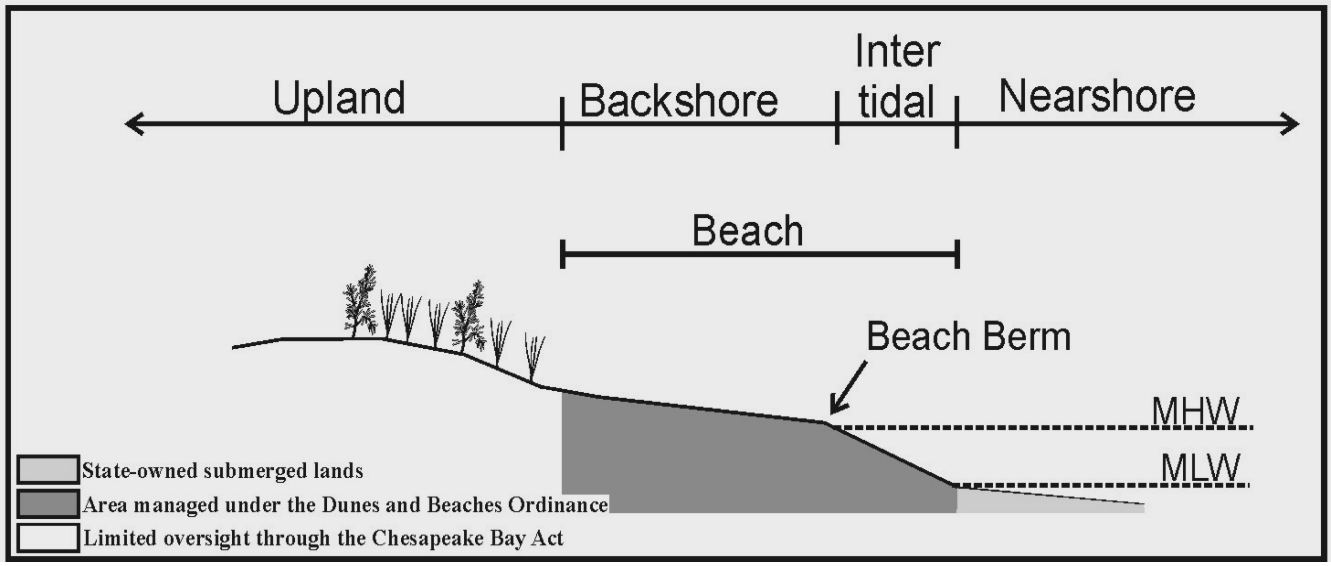


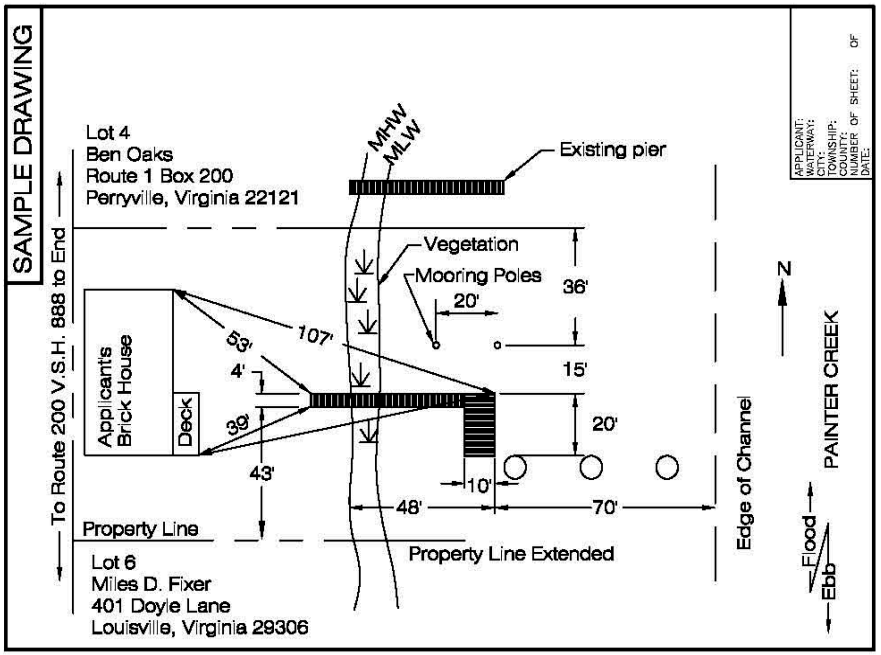
and DEQ (including isolated wetlands)

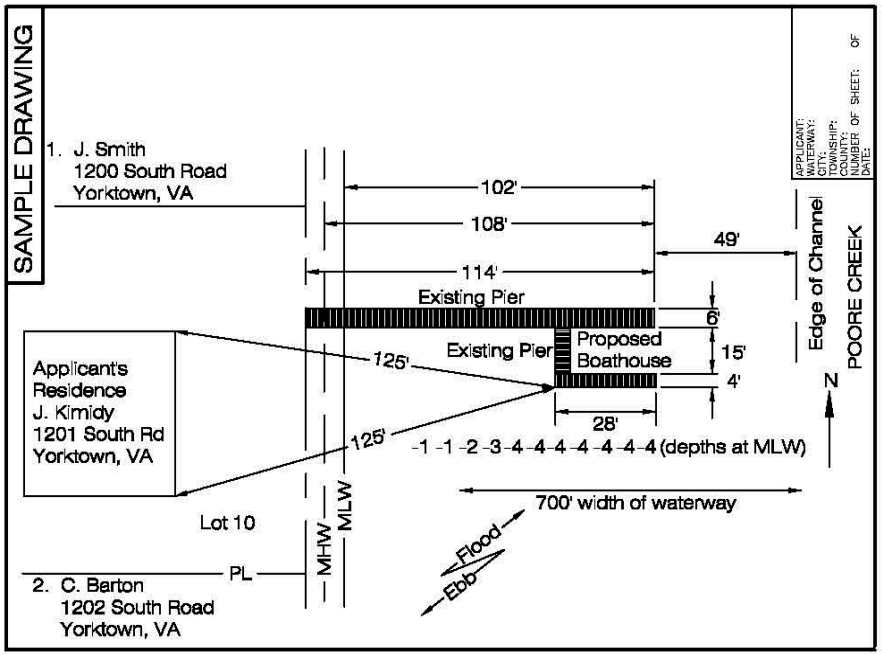
Dune and Beach Boundaries



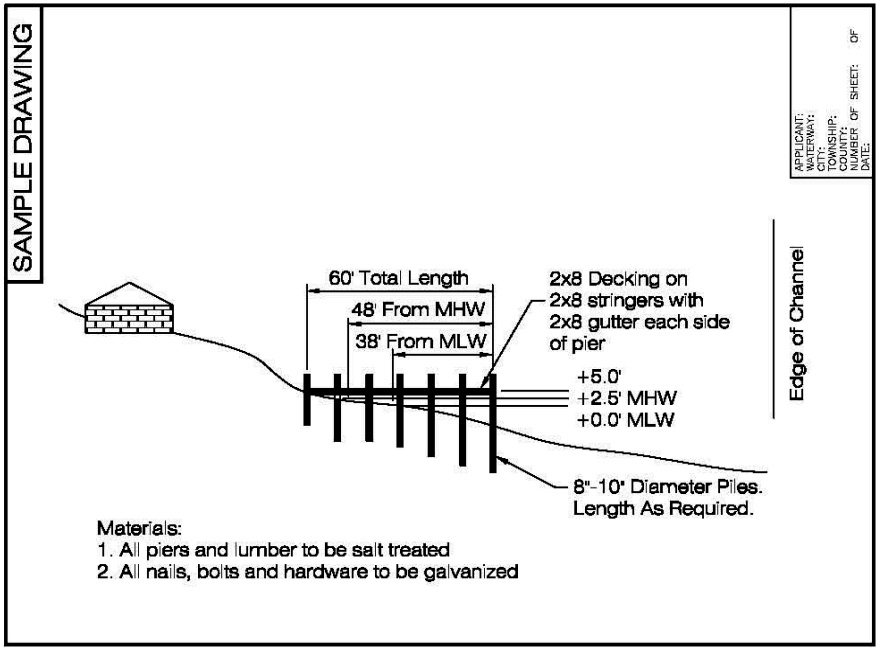


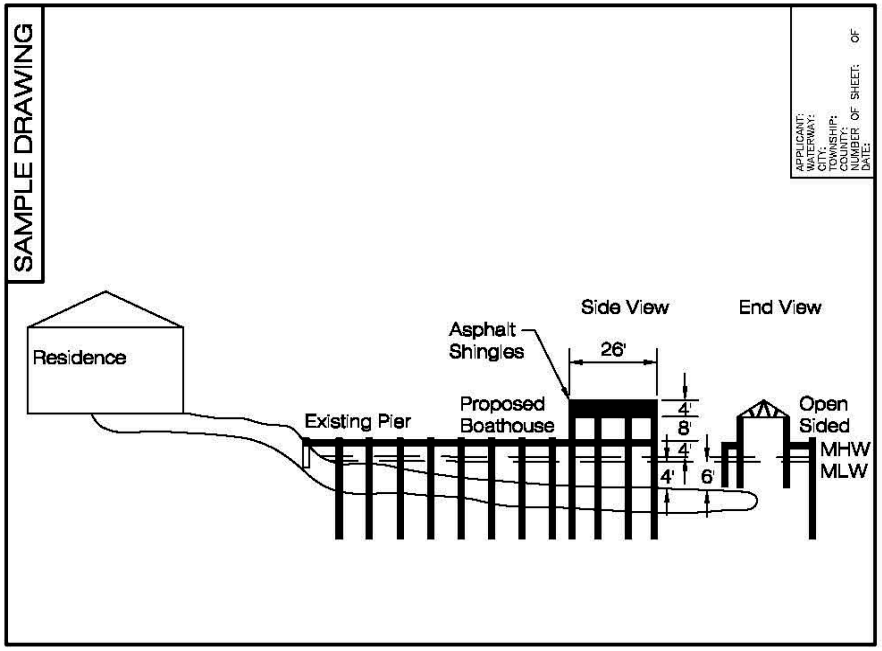






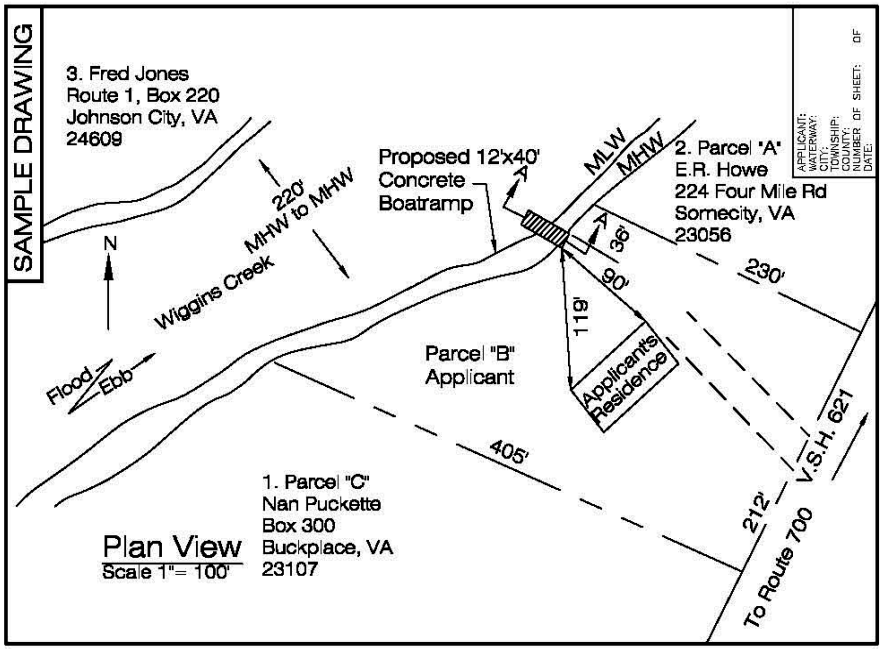
Private Piers & Marginal Wharves

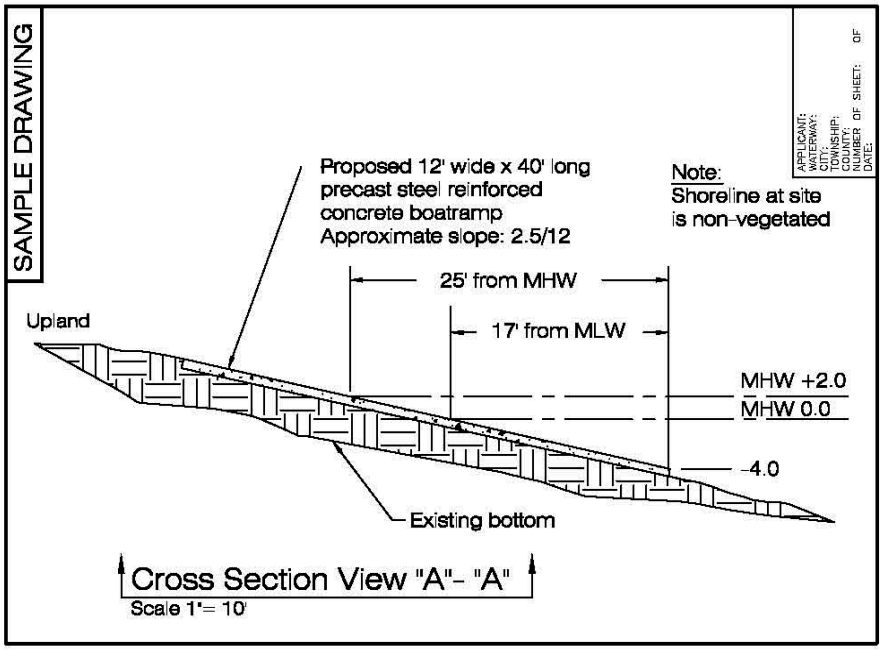




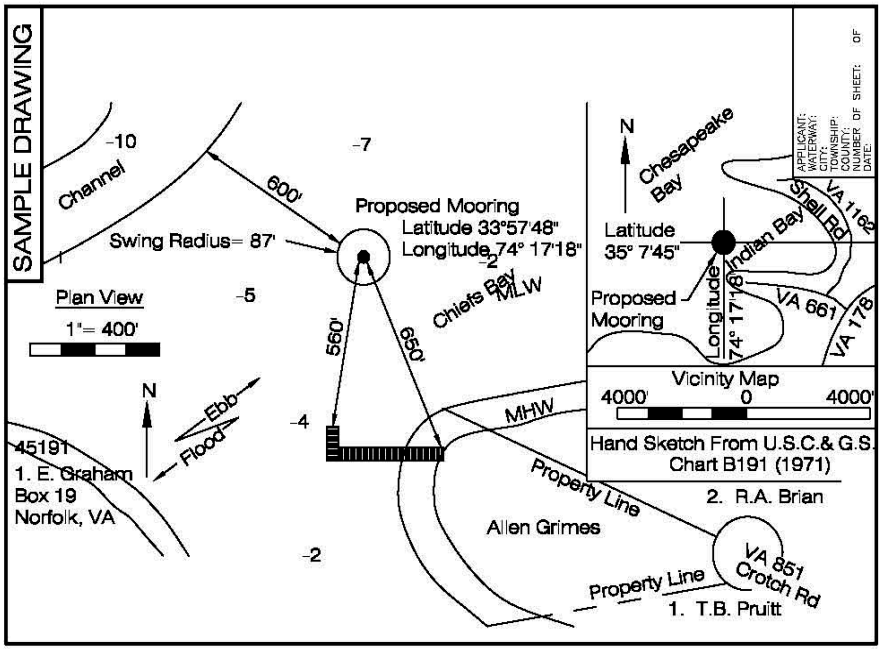
Boathouses

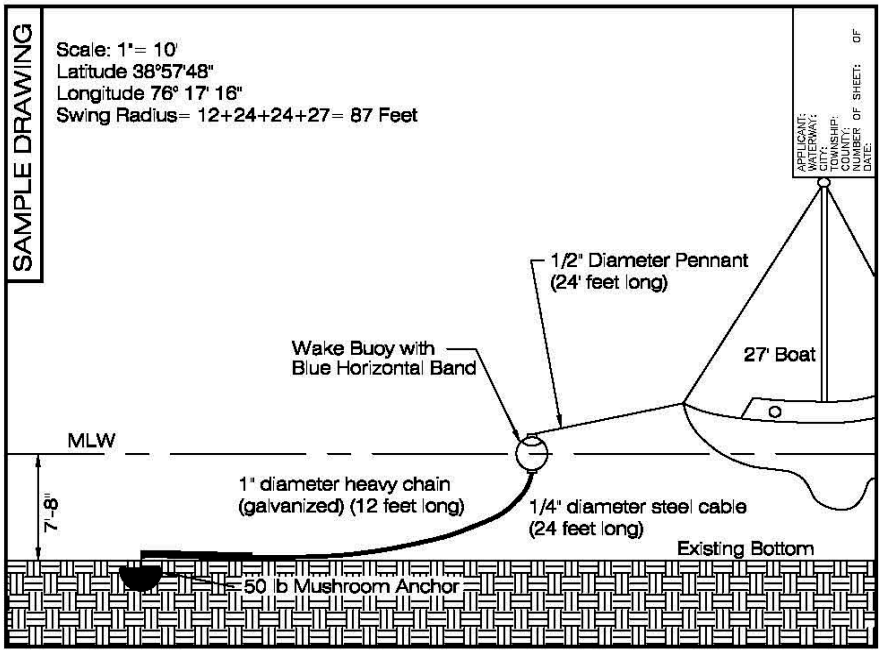
Boat Ramps

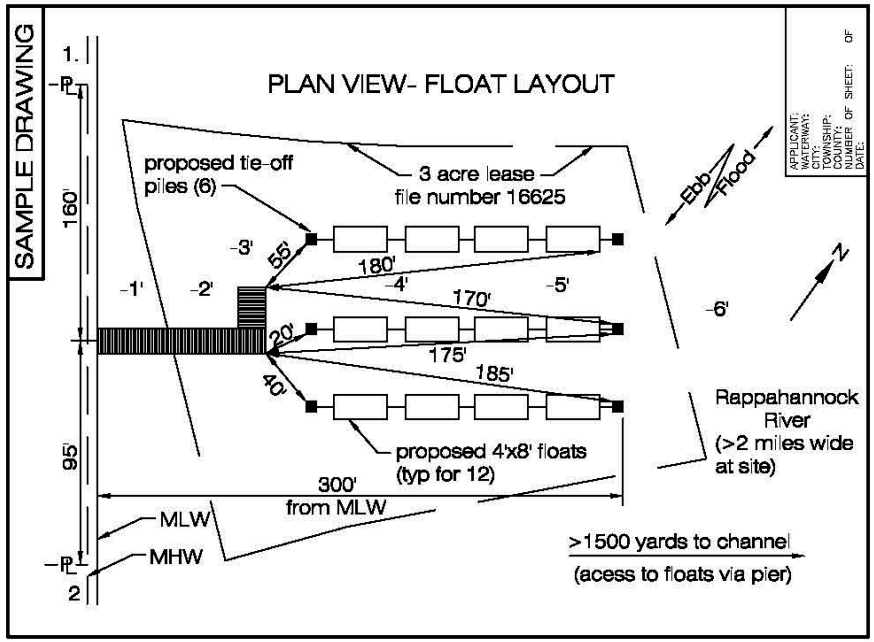


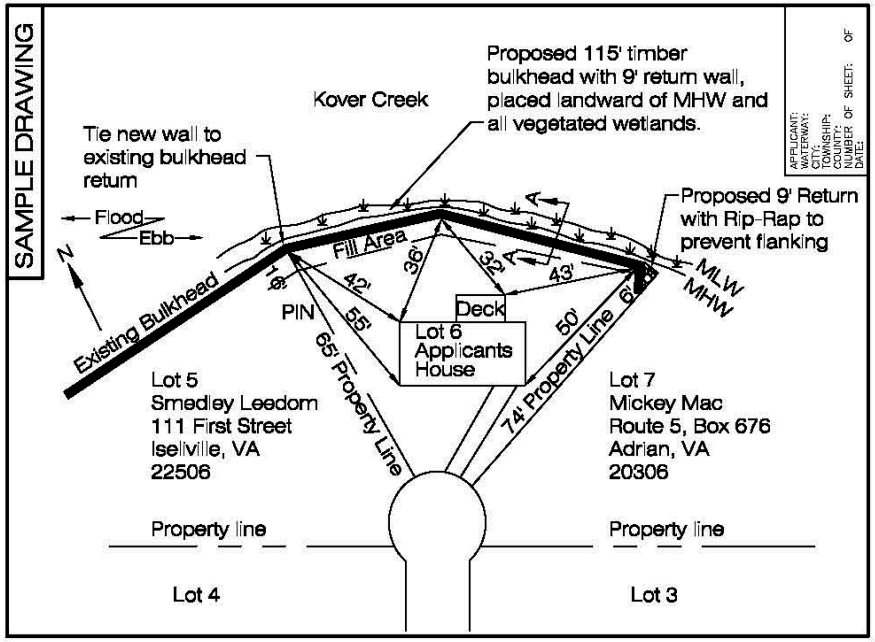


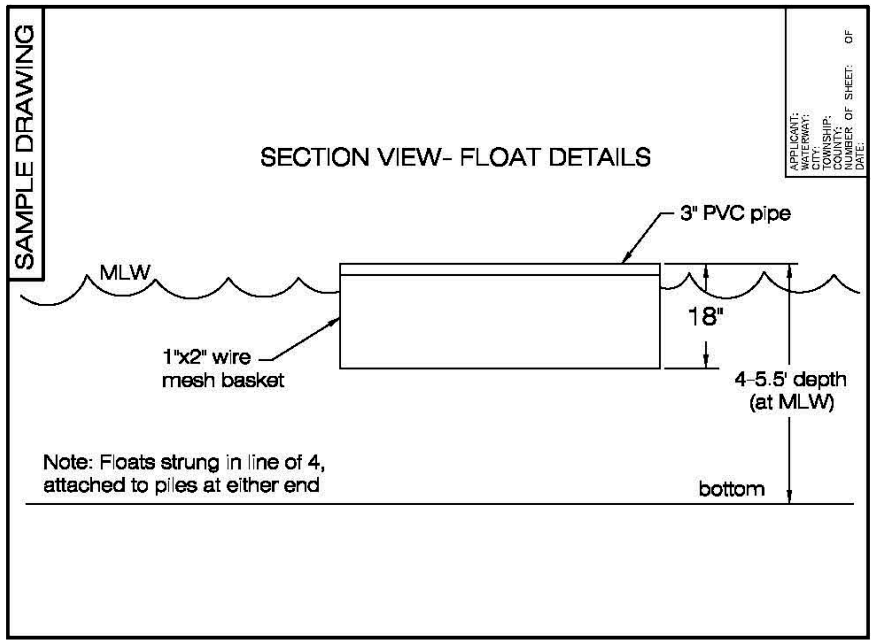
Dolphins or Moorings

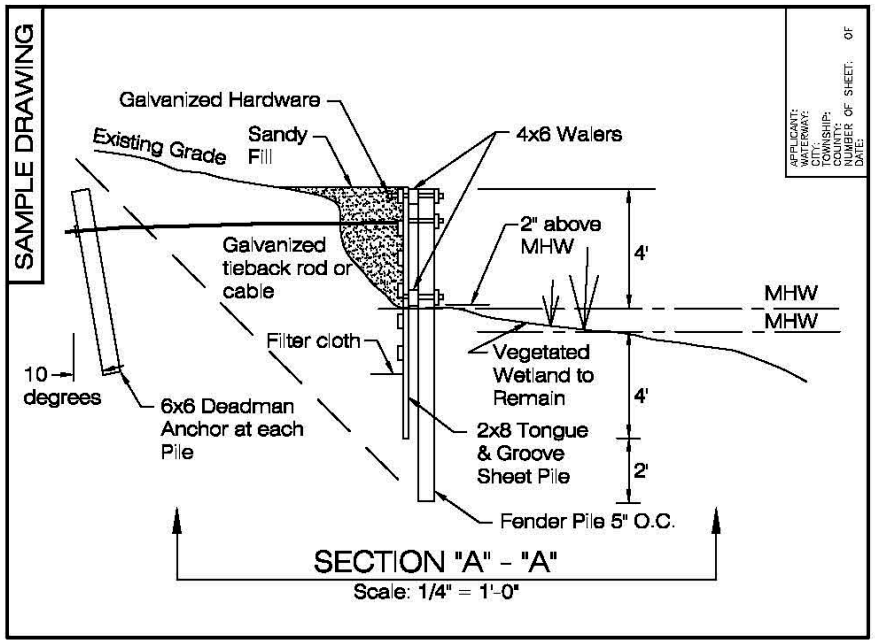


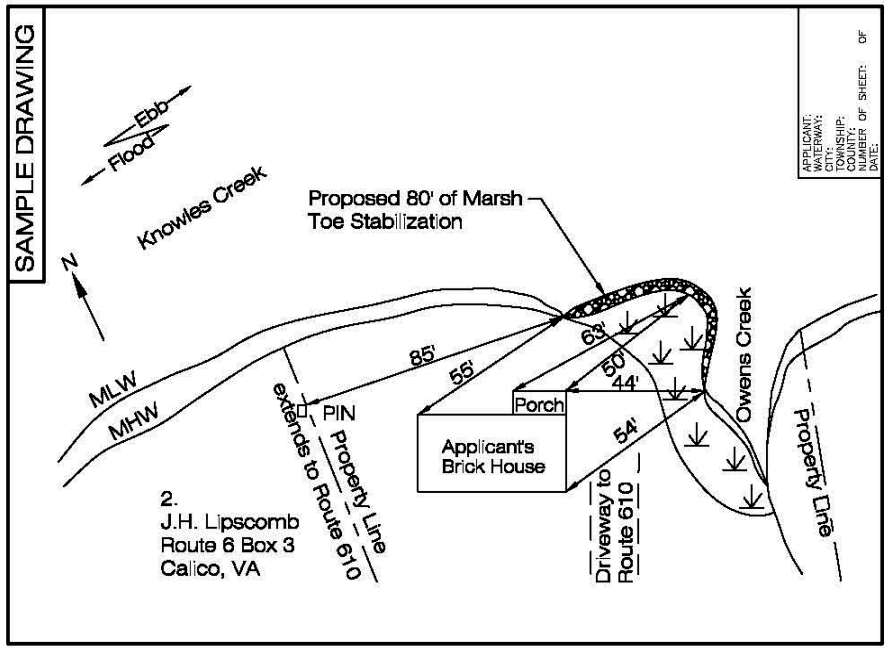


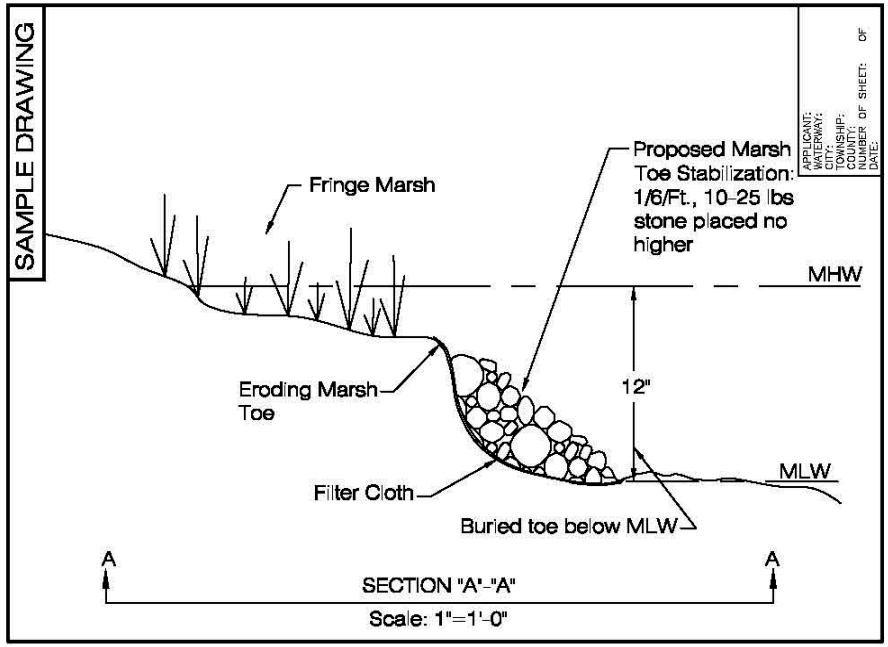

SAMPLE DRAWING
PLAN VIEW- FLOAT LAYOUT
proposed tie-off piles (6)
3 acre lease file number 16625
Ebb
Flood
N
160'
95'
-1'
-2'
-3'
-4'
-5'
-6'
55'
180'
170'
20'
175'
185'
40'
300' from MLW
proposed 4'x8' floats (typ for 12)
Rappahannock River (>2 miles wide at site)
MLW
MHW
>1500 yards to channel
(acess to floats via pier)
APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEET: OF
DATE:


SAMPLE DRAWING
Proposed 115' timber bulkhead with 9' return wall, placed landward of MHW and all vegetated wetlands.
Kover Creek
Tie new wall to existing bulkhead return
Flood
Ebb
N
Existing Bulkhead
Fill Area
Proposed 9' Return with Rip-Rap to prevent flanking
MLW
MHW
A
A
18'
42'
36'
32'
43'
6'
PIN
55'
Deck
Lot 6 Applicants House
65' Property Line
50'
74' Property Line
Lot 5
Smedley Leedom
111 First Street
Iselville, VA
22506
Lot 7
Mickey Mac
Route 5, Box 676
Adrian, VA
20306
Property line
Property line
Lot 4
Lot 3
APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEET: OF
DATE:

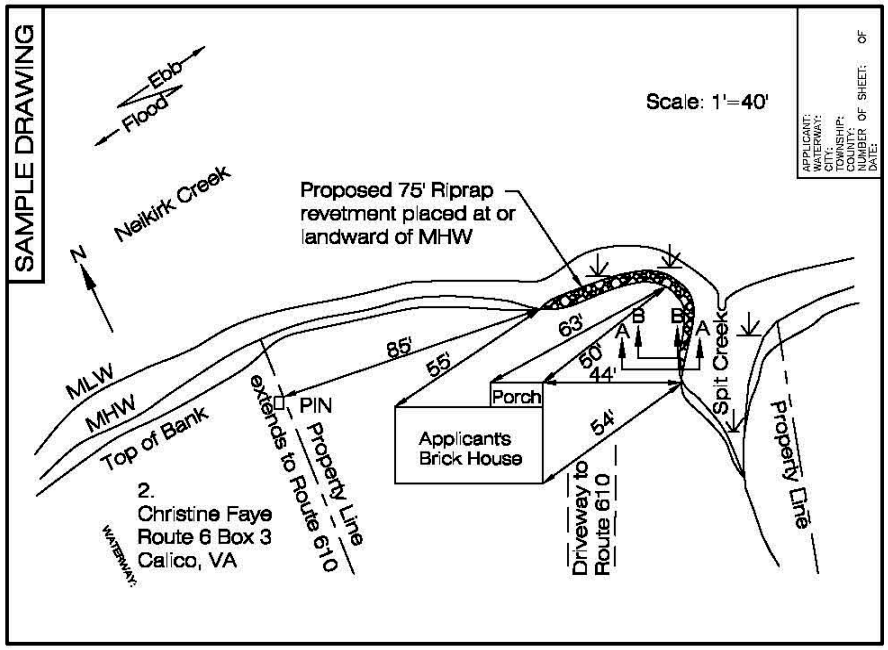

SAMPLE DRAWING
SECTION VIEW- FLOAT DETAILS
3" PVC pipe
MLW
18"
1"x2" wire mesh basket
4-5.5' depth (at MLW)
Note: Floats strung in line of 4, attached to piles at either end
bottom
APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEET: OF
DATE:

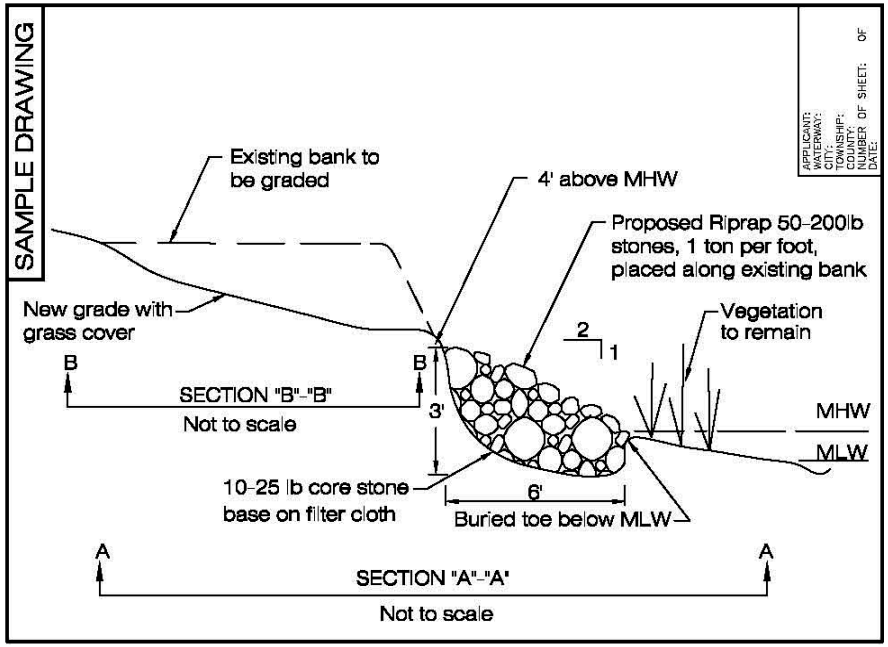

SAMPLE DRAWING
Galvanized Hardware
Existing Grade
Sandy Fill
4x6 Walers
2" above MHW
4'
Galvanized tieback rod or cable
MHW
MHW
Filter cloth
Vegetated Wetland to Remain
10 degrees
6x6 Deadman Anchor at each Pile
2x8 Tongue & Groove Sheet Pile
4'
2'
Fender Pile 5" O.C.
SECTION "A" - "A"
Scale: 1/4" = 1'-0"
APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEET: OF
DATE:



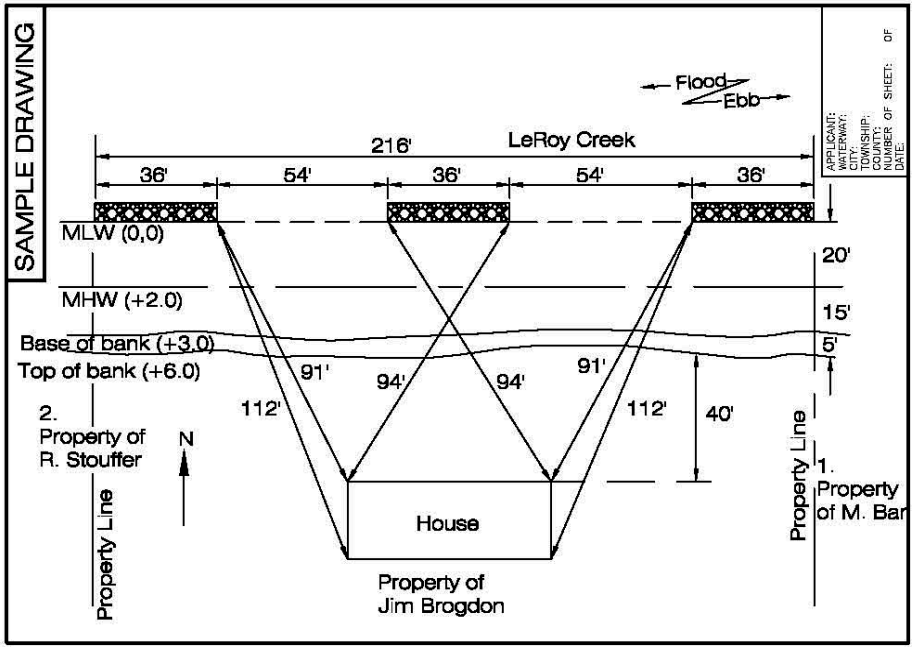


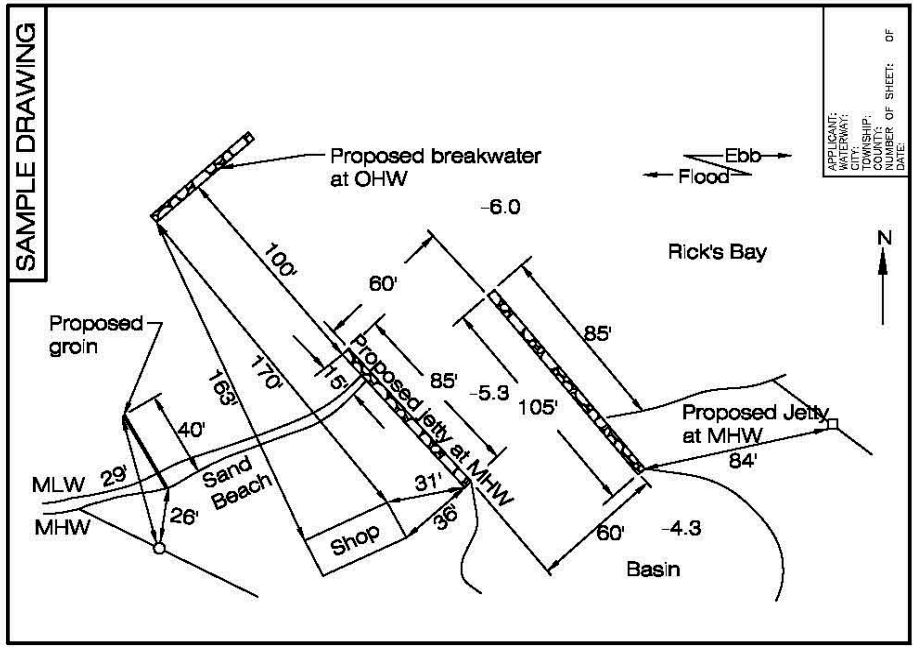
Marsh Toe Stabilization

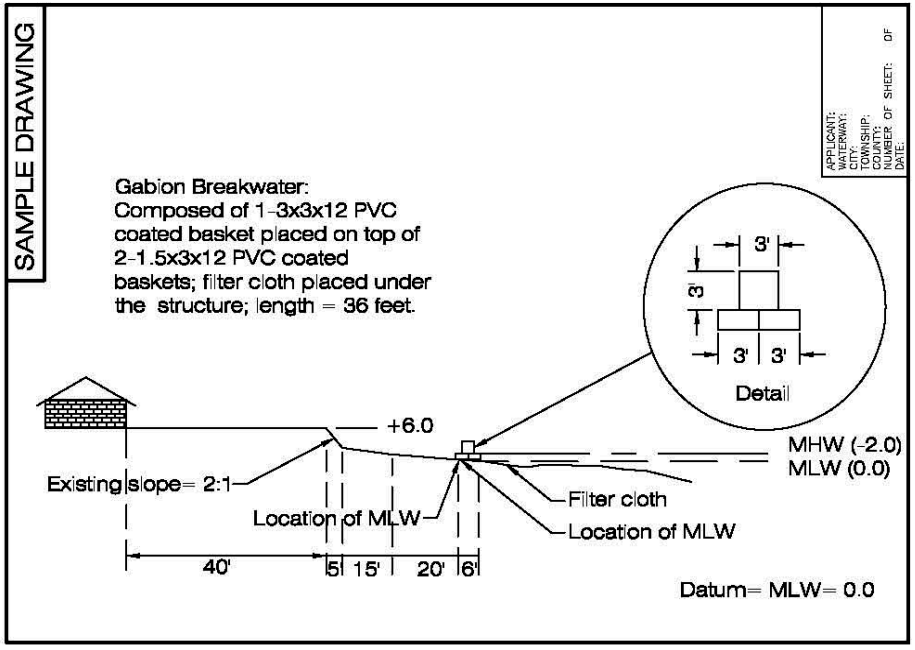


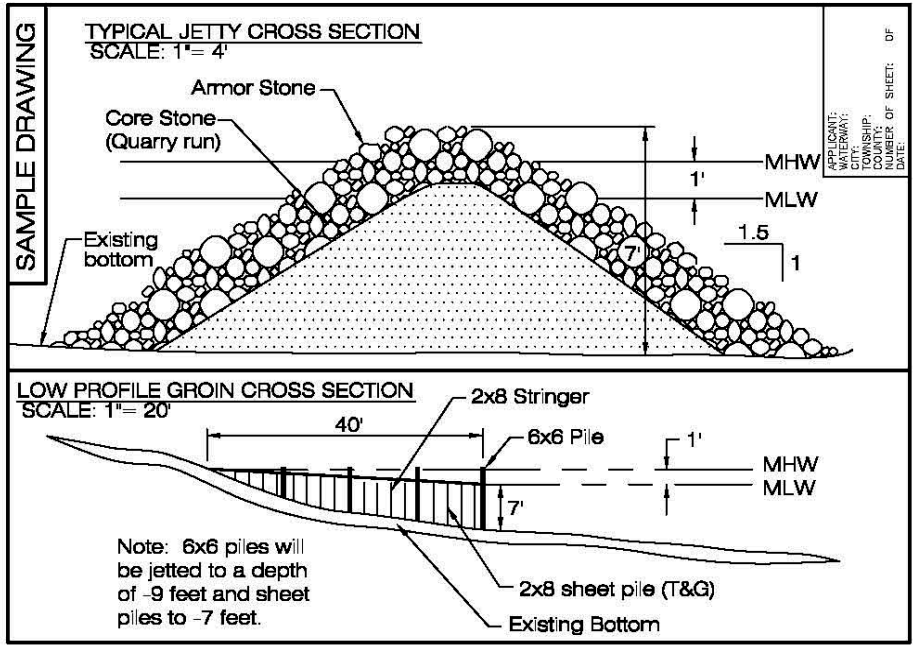


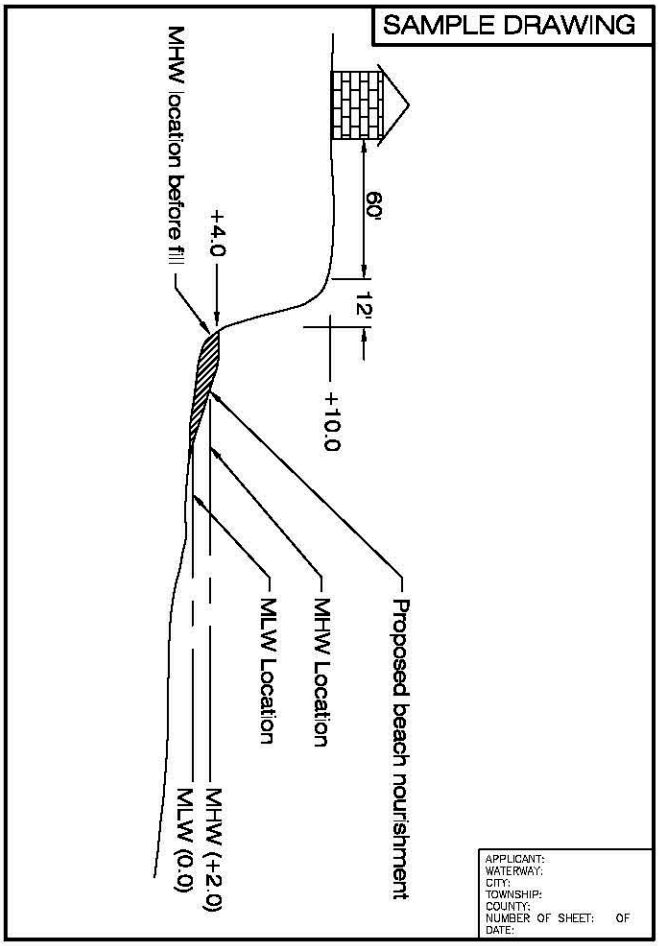
Riprap Revetment & Associated Backfill

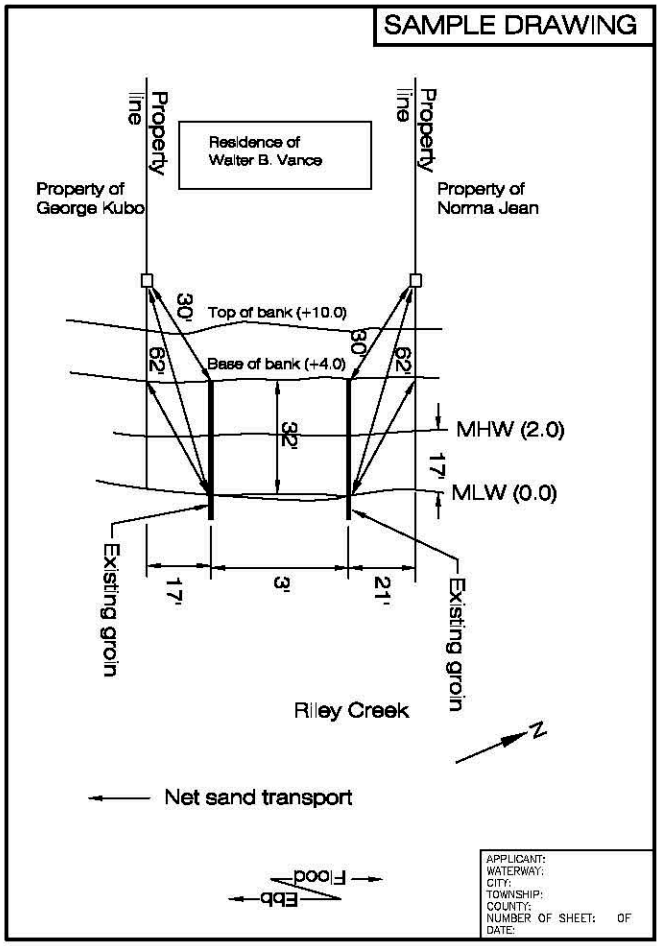

SAMPLE DRAWING
Flood
Ebb
216'
LeRoy Creek
36'
54'
36'
54'
36'
MLW (0,0)
MHW (+2.0)
Base of bank (+3.0)
Top of bank (+6.0)
20'
15'
5'
91'
94'
94'
91'
112'
112'
40'
2.
Property of
R. Stouffer
N
Property Line
House
Property of
Jim Brogdon
Property Line
1.
Property
of M. Bar
APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEET: OF
DATE:


SAMPLE DRAWING
Proposed breakwater
at OHW
-6.0
Ebb
Flood
Rick's Bay
N
100'
60'
Proposed
groin
163'
170'
15'
Proposed jetty at MHW
85'
-5.3
105'
85'
Proposed Jetty
at MHW
84'
40'
MLW
29'
MHW
26'
Sand
Beach
31'
36'
Shop
60'
-4.3
Basin
APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEET: OF
DATE:


SAMPLE DRAWING
Gabion Breakwater:
Composed of 1-3x3x12 PVC
coated basket placed on top of
2-1.5x3x12 PVC coated
baskets; filter cloth placed under
the structure; length = 36 feet.
3'
3'
3'
3'
Detail
+6.0
MHW (-2.0)
MLW (0.0)
Existing slope= 2:1
Location of MLW
Filter cloth
Location of MLW
40'
5'
15'
20'
6'
Datum= MLW= 0.0
APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEET: OF
DATE:


SAMPLE DRAWING
TYPICAL JETTY CROSS SECTION
SCALE: 1"= 4'
Armor Stone
Core Stone
(Quarry run)
MHW
1'
MLW
1.5
1
7'
Existing
bottom
LOW PROFILE GROIN CROSS SECTION
SCALE: 1"= 20'
2x8 Stringer
40'
6x6 Pile
1'
MHW
MLW
7'
Note: 6x6 piles will
be jetted to a depth
of -9 feet and sheet
piles to -7 feet.
2x8 sheet pile (T&G)
Existing Bottom
APPLICANT:
WATERWAY:
CITY:
TOWNSHIP:
COUNTY:
NUMBER OF SHEET: OF
DATE:





Beach Nourishment