

WETLANDS BOARD

BUILDING F - 7:00 P.M.

NOVEMBER 10, 2010

A. Roll Call

B. Minutes

From September 8, 2010 – Board Meeting

C. Public Hearings

1. W-03-11/VMRC 10-1493. Sydnor – 3024 N. Riverside

The following two cases are continued from 6/9/10 and 9/8/10 and will be heard concurrently with the related cases on the Chesapeake Bay Board Agenda.

2. W-06-10/VMRC 09-170. Fisher – 7604 Uncle's Neck

3. W-12-10/VMRC 10-0389. Stephens & Phillips – 7596 & 7600 Uncle's Neck

D. Board Considerations - None

1. Calendar Year 2011 Meeting Schedule

E. Election of Officers for 2011

F. Matters of Special Privilege

G. Adjournment

MEMORANDUM

DATE: November 10, 2010
TO: The Wetlands Board
FROM: Michael Majdeski; Senior Environmental Inspector *MM*
SUBJECT: Case NO. W-03-11/VMRC 10-1493; 3024 and 3026 North Riverside Drive; Bulkhead replacement, erosion repair, and stabilization

Ms. Karla Havens on behalf of Mr. Matthew Sydnor and the Chickahominy Haven Citizen’s Association has applied for a Wetlands Permit to undertake a bulkhead replacement project with associated erosion repair and subsequent re-stabilization. The properties are located at 3024 and 3026 North Riverside Drive within the Chickahominy Haven subdivision directly adjacent to the Chickahominy River and are further identified as JCC Parcel Numbers 1820200053 and 1820200052 respectively. Karla Havens of Mid Atlantic Resource Consulting is the authorized agent for this project.

A site visit was conducted on September 15, 2010 by staff to evaluate both the potential scope of the project and the existing conditions on-site.

The location of the existing bulkhead and proposed work borders the Chickahominy River in a northwesterly facing direction and has experienced large wave action from previous storm events, strong winds, and boat wakes. This wave action has caused several areas behind the existing bulkhead to erode causing unstable conditions. The area bordering the bulkhead consists of a sandy beach during low tide that is inundated during high tide. Additionally, several areas along the bulkhead are inundated by the river at all times. No wetlands vegetation was observed along the shoreline.

The project design proposes to prevent further upland and shoreline erosion by removing the existing timber bulkhead and replacing it with 8”x18” Diamond Pro anchor block over a stone leveling pad no further than approximately 1’ landward and no further than 1’ channelward of the existing bulkhead. The proposed block wall is approximately 4’ high will not affect any wetland vegetation during installation. The block wall will be backfilled with a sand/gravel mixture and reinforced with MiraGrid geotechnical material to provide soil stability behind the proposed wall. The backfill will then be stabilized with an appropriate seed mix and mulch to establish vegetative cover. The backfill will encroach no further than a 5’ landward from the back side of the proposed wall.

At the request of the Environmental Division, an engineered construction drawing has been provided illustrating how the wall will be constructed in the field.

If the board chooses to approve this application the following conditions should be included in the permit:

1. Prior to any land disturbing activities, a preconstruction meeting will be held on-site.
2. All other Federal, State, and local permits required for this project shall be obtained prior to commencing work. Evidence of the securing of these permits must be provided prior to the pre-construction meeting.
3. No woody vegetation, other than the three (3) proposed Leyland Cypress trees, shall be removed as part of this project unless approved by the Environmental Division, as per the approved plan.

4. The Environmental Division Director reserves the right to require erosion and sediment control measures, including a turbidity curtain, for this project if field conditions warrant their use.
5. The limits of work shall be flagged in the field prior to the pre-construction meeting.
6. The proposed seed mix for stabilization must be approved by the Environmental Division prior to the pre-construction meeting.
7. The re-planting locations of the proposed Leyland Cypress trees shall be provided at or prior to the pre-construction meeting.
8. The wetlands permit for this project shall expire on November 10, 2011. If an extension of the permit is needed, a written request shall be submitted to the Environmental Division no later than two weeks prior to the expiration date.

Attachments: Permit Application

MEMORANDUM

DATE: November 10, 2010
TO: The Wetlands Board
FROM: Michael P. Majdeski, Senior Environmental Inspector
SUBJECT: Case No. W-06-10 / VMRC 09-1701; 7604 Uncles Neck Road

Wilbur Jordan and Karla S. Havens on behalf of Mr. Jeff Fisher (applicant) have applied for a Wetlands permit to install approximately 200 linear feet of riprap revetment to prevent future erosion along the shoreline located at 7604 Uncles Neck Road. The applicant has also applied for a wetlands permit to construct a pier on the same property. The pier portion of this application is outside of this Board's jurisdiction and is mentioned for information only. The property is further identified by James City County Real Estate as PIN # 2030200026. The project site in question is located on the Chickahominy River, a tributary to the Chesapeake Bay. The applicant has been advised that their attendance at the Wetlands Board meeting is highly recommended.

This project will involve the construction of 200 linear feet of rip-rap revetment. The revetment is proposed to be constructed using Class III rip-rap armor stone, installed ovetop of #3 surge stone and filter fabric. To be consistent with other rip-rap revetment projects recently installed in the County, staff would propose that Class II rip-rap armor stone be installed ovetop of Class I core stone. The project will involve impacts to jurisdictional wetlands and it will also include impacts to upland areas not within the Wetlands Board's jurisdiction. The project as proposed will require the excavation of the upland area to create an acceptable 2H:1V slope. Grading impacts to the RPA buffer extend landward approximately 60 linear feet from existing MHW (existing toe of slope).

Staff estimates the impacts for the proposed revetment to be 100 square feet to vegetated wetlands (brackish water mixed community, type XII) and 10,000 square feet (0.23 ac) to the upland Resource Protection Area. Total fill impacts for the revetment are estimated to be 300 square feet to non-vegetated wetlands (sand-mud mixed flat community, type XII). The applicant proposes to taper the riprap revetment into the bank adjacent to Lot 27.

There is a bald eagle nest near the proposed limits of work. State and federal agencies are aware of this nest and this project. No comments have been received to date regarding this issue. It will be the sole responsibility of the applicant and property owner to secure any necessary permits and authorizations from these other agencies prior to work commencing. Written authorization from these agencies is required prior to work commencing.

The proposed solution (revetment) is no longer supported through the use of the VIMS-CCRM Decision Tree for Undefended Shorelines. When the bank erosion is high, a forested shoreline, and a bank height greater than 30 feet, the decision tree action is to grade the bank and use upland management. When there is no marsh present, no beach present, fetch is low to moderate, and the near-shore depth is shallow, the decision tree recommends that an offshore sill be utilized.

At the request of the board, nearshore depth measurements were done by both the applicant and Staff to determine the water depths along the shoreline adjacent to the property (see table). This new bathymetry data suggests water depths are not as deep as originally indicated in the reach assessment although the depths do vary in several areas along the northwest side of the shoreline which may affect the scope of work to construct an offshore sill.

The VIMS report states that if any action is justified and the near-shore depth is as indicated, then the revetment is the appropriate solution. A subsequent meeting with representatives from VIMS was held on October 7, 2010 to further discuss the utilization of an offshore sill or revetment on Lot 26. During this meeting VIMS representatives indicated that although a sill may be the most viable environmental option for this specific lot that a revetment would provide the most realistic approach for this lot and the best long term protection without causing undue harm to both the environment and the applicant.

Staff offers the following information and guidance for the Board's consideration:

1. The applicant proposes to construct an armor stone revetment and grade approximately 10,000 square feet of RPA buffer in order to achieve a 2H:1V slope. The proposed grading will occur within an RPA buffer that is well vegetated with a heavy canopy and understory shrub layer. The proposed revetment will tie into a proposed armor stone revetment located on an adjacent property (Lot 25). The revetment for the three combined properties is not self-contained, meaning there are opportunities for the adjacent properties to continue the same shoreline protection treatment.
2. The shoreline along this stretch of the Chickahominy River suffers from wave attack during major storm events and boat wakes resulting in shoreline erosion.
3. There is no imminent danger to existing dwellings that may be caused by the shoreline erosion.
4. The VIMS report states that it is preferable from a marine environmental viewpoint to leave the shoreline in its natural state.
5. As the proposed graded bank is at a 2H:1V or steeper slope, the use of canopy trees should be limited to prevent future problems with slope stability.
6. Work on the proposed pier for this property has been completed at the direction of the landowner.
7. There is a federally protected bald eagle nest on this property within or adjacent to the proposed work zone.

Should the Board vote to approve this application for a permit, staff recommends the following permit conditions be applied to the permit:

1. Prior to any land disturbing activities, a preconstruction meeting will be held on-site.
2. All land disturbing activities shall be coordinated with the adjacent project (7596 and 7600 Uncles Neck Road), if a wetland permit is granted for that project. If a wetlands permit is not granted for the adjacent property, then a revised plan must be submitted showing how this project will terminate on the northern property line (Lot 25).
3. The limits of clearing and grading shall be flagged in the field prior to the preconstruction meeting. The flagging should provide a continuous barrier between the work zone and the undisturbed RPA buffer.
4. Written documentation from the US Fish and Wildlife Service and/or the Virginia Department of Game and Inland Fisheries is required prior to work commencing. Documentation shall state that the agencies are aware of this project and the proximity of the bald eagle's nest to the work area. A copy of such authorization shall be provided to the Environmental Division (Division) staff at or prior to the preconstruction meeting.
5. Armor stone for this revetment shall be Class II installed over a minimum size core stone of Class I. Filter cloth shall be installed underneath of all core stone. Inspections of the excavated core trench and filter cloth are required prior to the installation of core stone.

6. Wetlands compensation shall be required to be paid by the applicant for the proposed 100 sf of impacts to vegetated wetlands. The applicant shall pay into a Virginia based tidal wetlands bank or the Virginia Aquatic Resource Trust Fund. Proof of wetland compensation payment shall be submitted to the Division prior to the pre-construction meeting.
7. A turbidity curtain shall be in place at the start of construction and stay in place until all upland disturbances have been stabilized.
8. The Division reserves the right to require additional erosion and sediment control measures for this project if field conditions warrant their use.
9. The applicant must obtain authorization from all other regulatory agencies that have jurisdiction over the proposed project and written evidence submitted to the Environmental Division prior to the pre-construction meeting.
10. The permit shall expire November 10, 2011. If an extension of this permit is needed, a written request shall be submitted to the Environmental Division no later than two weeks prior to the expiration date.

Attachments: Bathymetry Data
Permit Application

MEMORANDUM

DATE: November 10, 2010
TO: The Wetlands Board
FROM: Michael P. Majdeski, Senior Environmental Inspector
SUBJECT: Case No. W-12-10 / VMRC 10-0389 - 7596 and 7600 Uncles Neck Road

Karla S. Havens on behalf of Mr. Henry Stevens, Mr. Christopher Phillips, and Uncles Neck LLC (applicants) has applied for a Wetlands permit to install approximately 258 linear feet of riprap revetment to prevent future erosion along the shoreline located at 7596 and 7600 Uncles Neck Road. The properties are further identified by James City County Real Estate as PIN # 2010200024 (7596 Uncles Neck Road) and 2010200025 (7600 Uncles Neck Road). The project sites in question are located on the Chickahominy River, a tributary to the Chesapeake Bay. The applicants have been advised that their attendance at the Wetlands Board meeting is highly recommended.

This project will involve the construction of 258 linear feet of rip-rap revetment. The revetment is proposed to be constructed using Class III rip-rap armor stone, installed overtop of #3 surge stone and filter fabric. To be consistent with other riprap revetment projects recently installed in the County, staff would propose that Class II rip-rap armor stone installed overtop of Class I core stone be used. The project will involve impacts to jurisdictional wetlands and it will also include impacts to upland areas not within the Wetlands Board's jurisdiction. The project as proposed will require the excavation of the upland area to create an acceptable 2H:1V slope. Grading impacts to the RPA buffer extend landward approximately 40 linear feet from existing MHW (existing toe of slope).

Staff estimates the impacts for the proposed revetment to be 50 square feet to vegetated wetlands (brackish water mixed community, type XII) and 6,000 square feet (0.14 ac) to the upland Resource Protection Area. Total fill impacts for the revetment are estimated to be 466 square feet to non-vegetated wetlands (sand-mud mixed flat community, type XV).

At the request of the Board, nearshore depth measurements were done by both the applicant and Staff to determine the water depths along the shoreline adjacent to the property (See table). This new bathymetry data suggests that the nearshore water depths are not as deep as originally indicated in the Reach Assessment.

Conversations with representatives from VIMS has determined that though the water depths along the shoreline of Lots 24 and 25 have been revealed to be shallower than first thought, the installation of a revetment along this part of the shoreline would still be the ideal choice for shoreline protection in this area.

The proposed solution (revetment) is supported through the use of the VIMS-CCRM Decision Tree for Undeveloped Shorelines. When the bank erosion is high, a forested shoreline exists, and a bank height is greater than 30 feet, the decision tree action is to grade the bank and use upland management.

Where there is no marsh present, no beach present, fetch is low to moderate, and the near-shore depth is moderately deep, the decision tree recommends that a revetment be utilized.

The VIMS report states that if some action is considered justified and the near-shore depth is as indicated, then the revetment is the appropriate solution.

Staff offers the following information and guidance for the Board's consideration:

1. The applicant proposes to construct an armor stone revetment and grade approximately 6,000 square feet of RPA buffer in order to achieve a 2H:1V slope. The proposed grading will occur within an RPA buffer that is well vegetated with a heavy canopy and understory shrub layer. The proposed revetment will tie into a proposed armor stone revetment located on an adjacent property. The revetment for the three combined properties is not self-contained, meaning there are opportunities for other adjacent properties to continue the same shoreline protection.
2. The shoreline along this stretch of the Chickahominy River suffers from wave attack during major storm events and boat wakes resulting in shoreline erosion.
3. There is no imminent danger to existing dwellings that may be caused by the shoreline erosion.
4. The VIMS report states that it is preferable from a marine environmental viewpoint to leave the shoreline in its natural state.
5. As the proposed graded bank is at a 2H:1V or steeper slope, the use of canopy trees should be limited to prevent future problems with slope stability.
6. There is a federally protected bald eagle nest on the adjacent property (7604 Uncles Neck Road).

Should the Board vote to approve this application for a permit, staff recommends the following permit conditions be applied to the permit:

1. Prior to any land disturbing activities, a preconstruction meeting will be held on-site
2. All land disturbing activities shall be coordinated with the proposed work on the adjacent project (7604 Uncles Neck Road), if a wetland permit is granted for that project. If a wetland permit is not granted for the adjacent property then a revised plan must be submitted showing the proposed construction access, equipment lay-down area, and soil stockpile areas.
3. The limits of clearing and grading shall be flagged in the field prior to the preconstruction meeting. The flagging should provide a continuous barrier between the work zone and the undisturbed RPA buffer.
4. Armor stone for this revetment shall be Class II installed over a minimum size core stone of Class I. Filter cloth shall be installed underneath of all core stone. Inspections of the excavated core trench and filter cloth are required prior to the installation of core stone.
5. Wetlands compensation shall be required to be paid by the applicant for the proposed 50 sf of impacts to vegetated wetlands. The applicant shall pay into a Virginia based tidal wetlands bank or the Virginia Aquatic Resources Trust Fund. Proof of wetland compensation payment shall be submitted to the Division prior to the pre-construction meeting.
6. A turbidity curtain shall be in place at the start of construction and stay in place until all upland disturbances have been stabilized.

7. The Division reserves the right to require additional erosion and sediment control measures for this project if field conditions warrant their use.
8. Written documentation from the US Fish and Wildlife Service and/or the Virginia Department of Game and Inland Fisheries is required prior to work commencing. Documentation shall state that the agencies are aware of this project and the proximity of the bald eagle's nest to the work area. A copy of such authorization shall be provided to the Environmental Division staff at or prior to the pre-construction meeting.
9. The applicant must obtain authorization from all other regulatory agencies that have jurisdiction over the proposed project and written evidence submitted to the Environmental Division prior to the pre-construction meeting.
10. The permit shall expire November 10, 2011. If an extension of this permit is needed, a written request shall be submitted to the Environmental Division no later than two weeks prior to the expiration date.

Attachments: Bathymetry Data
Permit Application