

Wetlands Board

June 9, 2010

A. Roll Call

B. Minutes

1. From May 12, 2010 – Board Meeting

C. Staff Presentation

1. VIMS-CCRM Decision Tree for undefended shorelines – Mike Wooslon

D. Public Hearings

1. W-06-10/VMRC 09-1701. Fisher – 7604 Uncles Neck
2. W-12-10/VMRC 10-0389. Stephens & Phillips – 7596 & 7600 Uncles Neck

D. Board Considerations - None

E. Matters of Special Privilege

1. Presentation on completed projects – Mike Wooslon

F. Adjournment

MEMORANDUM

DATE: June 9, 2010
TO: The Wetlands Board
FROM: Michael D. Woolson, Senior Watershed Planner
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) has 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 overtop of #3 surge stone and filter fabric. To be consistent with other rip-rap revetment projects recently installed in the County, staff would propose the 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 2:1 slope. Grading impacts to the RPA buffer extend landward a maximum of 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 12,000 square feet (0.28 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. The bank height in this area approaches 25 to 30 feet high. It is unclear how this taper will work without either working on the adjacent property or causing further erosion issues. Therefore, staff proposes that this revetment work stop at the swale that is indicated on the revised drawing (May 4, 2010), near the location of the proposed pier, see figure 4.

There is a bald eagle nest within 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 is supported through the use of the VIMS-CCRM Decision Tree for Undeveloped Shorelines. Where 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. Where there is no marsh present, no beach present, fetch is low to moderate, and the near-shore depth is deep, the decision tree action is a revetment. The applicant has provided a reach assessment for this section of the Chickahominy River which outlines the above environmental conditions for this site.

The VIMS report states that if any action is justified and the near-shore depth is as indicated, then the onshore 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 12,000 square feet of RPA buffer in order to achieve a 2:1 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 are self-contained, meaning there are no opportunities for other adjacent properties to tie in to the revetment, if the work stops approximately 50 feet east of the common property line between lots 26 and 27 (near the proposed pier location).
2. The shoreline along this stretch of the Chickahominy River has suffered from wave attack during major storm events 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 2:1 or steeper slope, the use of canopy trees should be limited to prevent future problems with slope stability.
6. A pier is also proposed for this property.
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 permission from the US Fish and Wildlife Service and/or the Virginia Department of Game and Inland Fisheries is required prior to work commencing. A copy of such authorization shall be provided to the Environmental Division (Division) staff at or prior to the pre-construction meeting.
5. The proposed project grading will impact approximately 12,000 square feet of RPA buffer. An RPA buffer modification plan shall be submitted to the Division to show the proposed species and locations for (30) native canopy trees, (60) native understory trees, and (90) shrubs required for mitigation to offset the RPA impacts. Shrubs may be substituted for canopy trees at a ratio of 3:1 and understory trees at a ratio of 2:1. There shall be no turf grass established within the RPA. The entire disturbed RPA area shall be hardwood mulched, overtop of the erosion control type-2 matting, to a depth of at least 3-inches to stabilize the graded slopes. The implementation of the RPA buffer modification plan and stabilization shall be guaranteed by surety in a form acceptable to the Division and to the County Attorney and be submitted and approved prior to the preconstruction meeting.
6. The armor stone proposed for this revetment is Class II, the core stone shall be a minimum size 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.
7. 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 a wetlands compensation fee of approximately \$10.00 - \$12.00 per sf directly into a tidal wetlands fund or wetlands bank, approved by the Division. Proof of wetland compensation payment shall be submitted to the Division prior to the pre-construction meeting.
8. A turbidity curtain shall be in place at the start of construction and stay in place until all upland disturbances have been stabilized.
9. The Division reserves the right to require erosion and sediment control measures for this project if field conditions warrant their use.
10. 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.
11. The permit shall expire June 9, 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.

MEMORANDUM

DATE: June 9, 2010

TO: The Wetlands Board

FROM: Michael D. Woolson, Senior Watershed Planner

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 2:1 slope. Grading impacts to the RPA buffer extend landward a maximum of 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).

The proposed solution is supported through the use of the VIMS-CCRM Decision Tree for Undefended Shorelines. Where 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. Where there is no marsh present, no beach present, fetch is low to moderate, and the near-shore depth is deep, the decision tree action is a revetment. The applicant has provided a reach assessment for this section of the Chickahominy River which outlines the above environmental conditions for this site.

The VIMS report states that if any action is justified and the near-shore depth is as indicated, then the onshore 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 2:1 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 are self-contained, meaning there are no opportunities for other adjacent properties to tie in.
2. The shoreline along this stretch of the Chickahominy River has suffered from wave attack during major storm events 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 2:1 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 adjacent project (7604 Uncles Neck Road), if wetlands 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 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. The proposed project grading will impact approximately 6,000 square feet of RPA buffer. An RPA buffer modification plan shall be submitted to the Division to show the proposed species and locations for (15) native canopy trees, (30) native understory trees, and (45) shrubs required for mitigation to offset the RPA impacts. Shrubs may be substituted for canopy trees at a ratio of 3:1 and understory trees at a ratio of 2:1. There shall be no turf

grass established within the RPA. The entire disturbed RPA area shall be hardwood mulched, overtop of erosion control type-2 matting, to a depth of at least 3-inches to stabilize the graded slopes. The implementation of the RPA buffer modification plan and stabilization shall be guaranteed by surety in a form acceptable to the Division and to the County Attorney and be submitted and approved prior to the preconstruction meeting.

5. The armor stone proposed for this revetment is Class II, the core stone shall be a minimum size of Class I. Filter cloth shall be installed underneath of all core stone. Inspection 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 50 sf of impacts to vegetated wetlands. The applicant shall pay a wetlands compensation fee of approximately \$10.00 – \$12.00 per sf directly into a tidal wetlands fund or wetlands bank, approved by the Division. 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 erosion and sediment control measures for this project if field conditions warrant their use.
9. Any time-of-year construction restrictions should be coordinated with the US Fish and Wildlife service and/or the Virginia Department of Game and Inland Fisheries.
10. 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.
11. The permit shall expire June 9, 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.