Attachment D

DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan
County Executive

May 13, 2004

Robert C. Hubbard
Director

RECEIVED
MAY 19 2004
DEVELOPMENT REVIEW DIVISION

Mr. Philip R. Hughes
Rodgers & Associates, Inc.
9260 Gaither Road
Gaithersburg, Maryland 20877

Re: **Revised Preliminary** Water Quality Plan and Stormwater Management Concept for Cabin Branch
SM File #: 207133
Tract Size/Zone: 535.4 Ac/MXPD, RMX-1/TDR
Tax Plate: EV 32
Parcels: P505, P888, P333, P150 and P900
Montg. Co. Grid: 9B6,7and 8
Watershed: Little Seneca Creek/Cabin Branch

SPECIAL PROTECTION AREA

Dear Mr. Hughes:

Based on a review by the Department of Permitting Services, the revised Preliminary Water Quality Plan (PWQP) and the stormwater management concept for the above mentioned site is conditionally approved. This approval is for the elements of the Preliminary Water Quality Plan of which DPS has lead agency responsibility. It does not include limits on imperviousness or stream buffer encroachments. This approval is based on geotechnical assumptions that will require additional study and testing prior to the Final Water Quality Plan submittal.

Site Description: The site is bounded by West Old Baltimore Road, Clarksburg Road and I-270 and is comprised of five properties totaling approximately 535.4acres. This area, also known as the Clarksburg Triangle, includes about 243 acres within the Clarksburg Special Protection Area in the Little Seneca Creek Watershed. The proposal is for a mixed use (proposed zoning MXPD, RMX-1/TDR) residential and commercial development.

Stormwater Management: Channel protection measures for this site will be provided via thirteen extended detention dry ponds. These structures will provide channel protection volume for the one-year storm with a maximum detention time of 12 hours per state standards. Quality control will be provided via a treatment train that consists of recharge structures, surface sand filters (in series), biofiltration structures, dry swales, structural water quality inlets (both filtering and flow through) and vegetated buffer filtering. Since open section roads will not be feasible for the majority of the site, additional water quality volume will be provided in the proposed end of outfall large surface sand filters. This will be done by sizing these structures to treat the entire drainage area regardless of the facilities in the upland area that are already providing the required amount of treatment. Runoff from areas intended for vehicular use is to be pretreated prior to entering any water quality structures. Recharge is to be provided below the outlet pipe of all of the proposed (non-structural) water quality structures.

Sediment Control: Redundant sediment control structures are to be used throughout the site. These are to include upland sediment traps that drain to secondary traps down grade. When this is not feasible sediment traps with forebays will be acceptable. The total storage volume is to be 125% to150% of the normally required volume.

All sediment trapping structures are to be equipped with dewatering devices. Also, due to the sensitive nature of the watershed coupled with the large amount of proposed development, the use of flocculants, compost material or other measures to increase the effectiveness of sediment removal may be required in the detailed sediment control plan. The following features are to be incorporated into the detailed sediment control plan:

1. The earth dikes that direct runoff to the sediment traps are to be constructed using trapezoidal channels to reduce flow rates.

2. The site grading shall be phased whenever possible to limit disturbance and immediate stabilization is to be emphasized. The details of the phasing sequence will be addressed in the Final Water Quality Plan and finalized during the detailed plan review.

3. Silt fence alone will not be allowed as a perimeter control. The use of super silt fence will be acceptable for small areas of disturbance.

Performance Goals: The performance goals that were established at the pre-application meeting are to be met as specified in the Preliminary Water Quality Plan. They are as follows:

1. Protect the streams and aquatic habitat.

2. Maintain the natural on-site stream channels.

3. Minimize storm flow run off increases.

4. Identify and protect stream banks prone to erosion and slumping.

5. Minimize increases to ambient water temperatures.

6. Minimize sediment loading.

7. Maintain stream base flows.

8. Protect springs, seeps, and wetlands.

9. Minimize nutrient loading.

10. Control insecticides, pesticides and toxic substances.

Monitoring: The monitoring must be in accordance with the BMP monitoring protocols which have been established by the Department of Permitting Services (DPS) and Department of Environmental Protection (DEP). The pre-construction monitoring requirements that were established at the pre-application meeting and further described in the Preliminary Water Quality Plan are still applicable but may be revised during the review of the Final Water Quality Plan. The construction and post construction monitoring requirements will be determined upon the finalization of the actual stormwater management structure locations. **The requirements from DEP's Monitoring Memorandum dated June 3, 2003 still apply and are to be included with the submission of the Final Water Quality Plan.**

Prior to the start of any monitoring activity, a meeting is to be held on site with DEP, DPS, and those responsible for conducting the monitoring to establish the monitoring parameters. **One year of pre-construction monitoring must be completed prior to the issuance of a sediment control permit.**

Conditions of Approval: The following conditions must be addressed in the submission of the Final Water Quality Plan (FWQP). This list may not be all inclusive and may change based on available information at the time of the subsequent plan reviews:

1. Provide clear access to all stormwater management structures from a public right-of-way.

2. Provide a geotechnical study/evaluation of the potential effect that the proposed deep cut and fill areas will have on groundwater recharge and stream base flow.

3. Due to the large cut/fill areas, provide loggers on each of the four required groundwater wells to provide a continuous record of groundwater elevations.

4. Water quality structures are not permitted on fill slopes (e.g. Drainage Area #11, structures 46, 47 and 57).

5. The placement of water quality structures in the road right-of-ways will require approval from the Department of Public Works and Transportation (DPW&T) prior to approval of the Final Water Quality Plan. If DPW&T does not grant approval, water quality must be provided elsewhere for the roadways. Please keep in mind that this could affect lot yield.

6. The proposed dry swales are to have under drains that tie into the proposed storm drain structures.

7. A geotechnical report is required to verify infiltration rates at any proposed infiltration structure locations.

8. The untreated drainage areas to the proposed end of line surface sand filters must not exceed ten acres. Additionally, the storage depth over surface sand filters is not to exceed two feet without hazard signage or four feet with hazard signage.

9. Water quality structures that are to be used for sediment control must have a minimum undisturbed buffer of two feet from the bottom of the sediment trap to the bottom of the stormwater structure.

10. The Final Water Quality plan must show that additional recharge volume has been provided similar to that shown in the Preliminary Water Quality Plan (150% of MDE requirement) to offset other site impacts (e.g. loss of open section roads and large cut/fill areas). Note that in Special Protection Areas the recharge volumes are not subtracted from the required water quality volumes.

11. Provide level spreaders and/or plunge pools at all of the quantity pond outfalls. Also, pond outfalls are to be located at non-erosive (down slope) areas. This may require additional stream valley buffer encroachment.

12. Minimize the use of insecticides and fertilizers via a residential Integrated Pest Management Plan as part of the Homeowners Association (HOA) documents. A draft of this plan/document must be submitted for review as part of the Final Water Quality. The final document is to be submitted prior to the detailed sediment control/stormwater management plan approval.

13. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.

14. The stream channels on-site are to be walked to determine if channel restoration is necessary.

15. Ball fields and other open areas that are to be maintained as grass must provide water quality control per MDE requirements.

16. Stormwater structures are not to be located on residential lots.

17. MCDPS reserves the right to require the developer to provide full-time, third-party, on-site, sediment control inspection if the department decides the goals of the Water Quality Plan are not being met.

Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended Water Quality Plan requirements.

If you have any questions regarding these actions, please feel free to contact Leo Galanko at (240) 777-6242.

Sincerely,

Richard R. Brush, Manager
Water Resources Section
Division of Land Development Services

RRB:dm:CN207133

cc: R. Weaver (MNCPPC-DR)
M. Pfefferle (MNCPPC-ED)
D. Marshall (MCDEP)
L. Galanko
SM File # 207133

Qn: on-site 535.4 ac
Ql: on-site 535.4 ac.