

MEMORANDUM

TO:

Wynn Witthans, Development Review

FROM:

Mark Pfefferle, Planning Coordinator, Countywide Planning M

DATE:

July 23, 2003

SUBJECT:

Final Water Quality Plan for Clarksburg Village – Site Plan # 8-03002

RECOMMENDATION

Staff recommends approval of the final water quality plan for Site Plan # 8-03002 subject to the following conditions:

- Reforestation is to begin as soon as possible after the issuance by the Montgomery County Department of Permitting Services (DPS) issuance of grading permits, with appropriate phasing to allow for the construction of sediment and erosion control structures.
- Conformance to the conditions as stated in the DPA letter dated July 18, 2003 approving the elements of the SPA water quality plan under its purview (Attachment A).

DISCUSSION

The 333-acre property is located in the southwest quadrant of Piedmont and Stringtown Roads in Clarksburg. The site is currently a mix of hay, corn, and soybean fields and forests. The property is zoned R-200/TDR 4, R-200/TDR-3, R-200, and PD-4. The proposed development of the site includes single-family detached units, townhouses, multi-family units, and associated infrastructure. The entire site is within the Clarksburg Special Protection Area.

The site is located within the Little Seneca Creek watershed. Water flows to the Town Center tributary, a first order tributary, and directly to the Little Seneca Creek. Both watercourses flow through the subject property and are designated as Use IV-P. The natural resource inventories for the site delineate the onsite environmental buffers.

Water quality plans are required as part of the Special Protection Area regulations. Under the SPA law, Montgomery County Department of Permitting Services (MCDPS) and the Planning Board have different responsibilities in the review of the water quality plan. MCDPS has reviewed and conditionally approved the elements of the final water quality plan under their

purview. The Planning Board responsibility is to determine if the site imperviousness, environmental guidelines for special protection areas, and forest conservation requirements have been satisfied.

SITE PERFORMANCE GOALS

As part of the final water quality plan, several site performance goals were established for the project:

- Protect the streams and aquatic habitat.
- Maintain the nature on-site stream channels.
- Maintain stream base flows.
- Identify and protect stream banks prone to erosion and slumping.
- Minimize storm flow runoff increases.
- Minimize increases in ambient water temperatures.
- Minimize sediment loading.
- Minimize pollutant loadings (nutrient and toxic substances).
- Protect springs, seeps, and wetlands.

STORMWATER MANAGEMENT

To help meet these performance goals, the stormwater management plan requires water quality control and quantity control to be provided through an extensive system of linked best management practices (BMPs). Water quality control will be provided via several dry ponds. Quality control will be provided via a treatment train that consists of vegetated conveyance swales, dry swales (vegetated swales underlain with infiltration structures), bioretention structures, surface sand filters, structural sand filters, and infiltration/recharge structures. In areas where open section roadways are not feasible, additional water quality structures are incorporated into the water quality plan to compensate for the lost benefits that open section roadways provide.

SITE IMPERVIOUSNESS

There are no impervious limitations within the Clarksburg SPA. The impervious amount proposed for the 333-acre site is approximately 23 percent. Environmental Planning does not have impervious data from similarly zoned sites in the County to compare the data, however the impervious level is similar to other sites developed using R-200 standard method. Environmental Planning looks for opportunities to reduce impervious surfaces on all plans reviewed and ways to reduce the imperviousness where incorporated into the plan. These include shared driveways, reduced width roadways, narrower hard surface trail, and sidewalks on one side of the roadways when appropriate.

ENVIRONMENTAL GUIDELINES

The environmental guidelines for SPAs require examination of many tools to maximize achievement of site performance goals. For instance, the goal of protecting seeps, springs, and wetlands is better achieved with naturalized buffers surrounding these areas. The natural resource inventory for the Clarksburg Village site identified the environmental buffers. Environmental buffers include wetlands and wetland buffers, floodplains, and streams and

stream valley buffers. As part of the Environmental Guidelines, the stream valley buffer must be reforested. Where trees do not currently exist, the applicant will plant new forests or supplement existing forests. The applicant will place forest conservation easements on the environmental buffers.

As part of the approval of the preliminary plan, the applicant requested and received permission from the Planning Board to encroach into the environmental buffers for stormwater management facilities. The preliminary plan conditions identified the ponds that could be partially located in the environmental buffers provided the facilities were reconfigured to maintain at least of the environmental buffer widths as undisturbed areas. Other stormwater management facilities could not encroach into the stream valley buffer any further than was approved in the preliminary water quality plan. The applicant has complied with the preliminary plan conditions.

Other impacts to environmental buffers are created and by stream crossings for A-305 (Midcounty Highway), A-302 (Newcut Road), and Foreman Boulevard. All proposed stream crossings are to be constructed using bottomless arch culverts. During the construction of the stream crossings, there will be impacts to wetlands. The U.S. Army Corps of Engineers and the Maryland Department of the Environment have jurisdiction over wetlands and are responsible to issuing wetland permits. The alignments of the Greenway trail and stream crossings for A-305 and A-302 were previously field located with various permitting agencies. The purpose of the field walks was to identify routes that avoid impacts to wetlands by utilizing boardwalk or by shifting roadway alignments.

FOREST CONSERVATION

The applicant is proposing an optional method of development for this site. The preliminary forest conservation plan was approved prior to the effective date of the forest conservation law as amended by Bill 35-00. Therefore, the development is not required to meet the requirements of Section 22A-12(f) of the Montgomery County code, which requires developments utilizing an optional method to meet the appropriate forest conservation threshold on-site.

The undeveloped site 333-acre Clarksburg Village Phase I site plan includes 208-acres of forest. The applicant is proposing to remove 123 acres of forest and retain 85 acres. The total planting requirement for this forest conservation plan is 10 acres. The forest conservation requirements will be met through onsite forest planting of the unforested portions of the stream valley buffer and other upland planting areas. A five-year maintenance period is required for all forest plantings per the environmental guidelines.

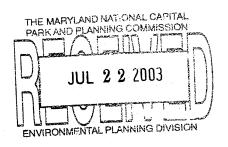
Attachment A



DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan County Executive

July 18, 2003



Robert C. Hubbard Director

Mr. Alan Barney Charles P. Johnson Associates, Inc. 1751 Elton Road Silver Spring, Maryland 20903

Re:

Final Water Quality Plan for Clarksburg Village-

Phase I

SM File #: 200006

Preliminary Plan No.: 1-01030

Tract Size, Zone: 333 Ac., R-200/TDR-4.

R-200/TDR-3, R-200 and PD-4

Tax Plate: EW, EV, FV 123 and FV 122

Watershed: Little Seneca Creek

SPECIAL PROTECTION AREA

Dear Mr. Barney:

Based on a review by the Department of Permitting Services Review Staff, the Final Water Quality Plan (FWQP) for the above mentioned site is conditionally approved. This approval is for the elements of the Final Water Quality Plan of which DPS has lead agency responsibility, and does not include limits on imperviousness or stream buffer encroachments.

Site Description: Phase I of the site consists of 333 acres located on the east side of Stringtown Road across from the intersection with Clarks Crossing Drive. The proposed zoning of the site is R-200/TDR-3 & 4, R-200 and PD-4. The development will consist of mixed residential (single-family detached, townhouses, and multi-family units) along with the associated infrastructure. This site is located in the Clarksburg Special Protection Area (SPA) of the Little Seneca Creek Watershed.

Stormwater Management: Water quantity control for this site will be provided via several 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 vegetated conveyance swales, dry swales (vegetated swales underlain with infiltration structures), bioretention structures, surface sand filters, structural sand filters and infiltration/recharge structures. Non-structural measures for the backs of some lots that are draining to the stream valley buffer have also been used. In areas where open section roads are not feasible, additional water quality measures are required to offset the lost benefits that open section roadways provide. These offsetting measures include maximizing the sand surface area in the surface sand filters (sand on the entire footprint), providing structural pretreatment prior to all filtering structures and providing additional recharge volume. Areas that are intended for vehicular use are to be pretreated prior to entering filtration and infiltration structures. The water quality structures must be sized to treat a minimum of one-inch over the proposed impervious area without subtracting the recharge volume.



<u>Sediment Control</u>: Redundant sediment control structures are to be used throughout the site. These are to include upland sediment traps which drain to secondary traps down grade, or when this is not feasible sediment traps with forebays will be acceptable.

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 or other measures to increase the effectiveness of sediment control removal will 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 feed 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.
- 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.

<u>Performance Goals</u>: The performance goals that were established at the pre-application meeting are to be met as specified in the Preliminary Water Quality Plan and further refined in the Final 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 pollutant loading (nutrient 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). 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. The pre-construction monitoring must be completed prior to the issuance of a sediment control permit. See the attachment to this approval letter for Phase I titled "Description of Monitoring Requirements" for during construction and post construction detailed monitoring requirements.

The "during construction" monitoring requirements are to last through the construction phase of the development, and the "post construction" monitoring will last for five years after construction is complete.

<u>Conditions of Approval:</u> The following conditions must be addressed in the initial submission of the detailed sediment control/stormwater management plan. This list may not be all inclusive and may change based on available information at the time of the review:

- 1. The stream channels on-site are to be walked to determine if channel restoration is necessary.
- 2. The proposed roadway dry swales are to have under drains that tie into the proposed storm drain structures. This will require approval from the Department of Public Works and Transportation.
- 3. Percolation tests must be performed to determine the feasibility of providing infiltration structures for water quality and ground water recharge.
- 4. Provide clear access to all stormwater management structures from a public right-of-way.
- 5. 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.
- 6. The channel protection volume compensation for surface sand filter "S" must be provided in Pond "C".
- Move the dry wells on lots 105-114, block T off of the lots and down slope of the PUE. Also, move the dry well for lots 47-50, block R off of lot 47 and down slope of the sanitary sewer line.
- 8. Structural pretreatment devices are to be sized for their entire contributing drainage area.
- 9. Additional pretreatment (other than road side swales), such as water quality inlets, will be required for surface sand filters that are treating large drainage areas (greater that 5 acres).
- 10. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.
- 11. Provide level spreaders and/or plunge pools at all of the quantity pond outfalls and at the storm drain outfall at surface sand filter "S".
- 12. Channel protection volume is to be provided separately from water quality volume.
- 13. Provide four inches of pea gravel on top of all of the proposed surface sand filters.
- 14. All of the proposed stream crossings are to be constructed using environmentally sensitive design criteria. Bottomless arch culverts as proposed in the preliminary Water Quality Plan will be acceptable.

- 15. At a minimum one foot of stone (dead storage) is to be provided below the outlet pipe of the surface sand filters to allow for groundwater recharge.
- 16. 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 is to be submitted at the detailed sediment control plan stage, and the final document is to be submitted prior to bond release.
- 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.

Richard R. Brush, Manager Water Resources Section

Division of Land Development Services

RRB:CN200006

CC:

W. Witthans

S. Federline

M. Pfefferle

L. Galanko

D. Marshall

SM File # 200006

Qn on-site 333 ac. Ql on-site 333 ac.



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Douglas M. Duncan County Executive

James A. Caldwell Director

Attachment to the Final Water Quality Plan for Clarksburg Village Phase I Description of BMP Monitoring Requirements

SM # 200006 (Phase I) Date: July 16, 2003

The purpose of this attachment is to add specificity to the standard monitoring requirements and procedures contained in the BMP monitoring protocols. Some supplemental QA/QC, data analysis, reporting and record keeping tasks will be explained in this attachment.

This BMP monitoring is being done to address whether the site performance goals are met. The purpose of the data analysis and reporting is to describe quantitatively how performance goals are met. Monitoring efforts and reports must employ scientific methods in an attempt to determine effectiveness of BMPs. Monitoring is to be done according to BMP Monitoring Protocols. However, these monitoring protocols are intended to provide a framework only. Some supplemental requirements are provided in this attachment. Prior to initiation of monitoring, consultants must contact DEP to review procedures and requirements. Thorough and careful analysis of data is required. Method(s) of data analysis and required statistical procedures may vary depending on the results obtained. Methods and assumptions should be detailed. BMP Monitoring Protocols are available at http://www.co.mo.md.us/services/dep/Publications/pdf%20files/bmpprotocols.pdf

Monitoring Requirements

- 1. BMP monitoring reports must include a table with dates of all major construction activities which take place on the site. (Groundbreaking, clearing, grading, BMP construction, BMP conversion, pond maintenance, etc.) Information should refer to specific structures and portions of the site.
- 2. Provide a record of continuous stream flow at two locations (Little Seneca Creek mainstem and downstream of the confluence of tributaries 109 and 110). The purpose of this monitoring is to document how development changes stream hydrology. Installation, maintenance, rating curve and data analysis must meet USGS standards. Predevelopment conditions are to be compared with post-development conditions examining



any relevant parameters including average flows, peak flows, hydrograph shape, lag time, etc. Conclusions regarding hydrologic impacts must be provided with graphs of supporting data.

- 3. A rain gage will be installed and maintained. Data will be collected on 15 minute intervals. Data collected will be used in the analysis of flow and groundwater data. Instruments are to be calibrated according to manufacturer's recommendations.
- 4. Stream water temperature will be monitored at seven (7) locations. This monitoring will occur from June 1 through September 30 each year. Accuracy of the temperature logger is to be checked prior to use in spring. An accuracy check after retrieval in fall may be necessary depending on results obtained. Consult with equipment manufacturer or DEP for appropriate procedures. All accuracy checks are to be submitted with data analysis and reports. Temperature loggers should be set to take readings at 24 minute intervals. Consult with DEP if readings will be taken at different intervals. Water temperature data is to be compared to air temperatures and precipitation during the period of June 1 through September 30 to evaluate development impacts. An on-site temperature logger will be required to obtain temperature data. Pre-construction results should be compared with data from subsequent periods. Results should also be compared among stations to evaluate temperature patterns over stream distance.
- Ten (10) cross sections specified in the Greenway Village Trail PWQP will be monitored annually to evaluate the impact of the Clarksburg Village on stream geomorphology.

 Results should be plotted and compared to pre-construction conditions. DEP will be consulted before locating the cross sections. Cross sections surveys may need to be extended to the nearest reliable benchmark to allow accurate mapping of locations.
- 6. Stream channel embeddedness is to be monitored at the six (6) discrete flow stations. Photos of the stream bottom are to be taken concurrently with embeddedness readings. Frequency of embeddedness readings is one (1) per quarter year. Pre-construction results are to be compared with during and post-construction results to determine effectiveness of sediment control on the site. Graphs should be presented along with conclusions.
- 7. Photographs of the stream bed and channels are to be taken annually at temperature, discrete flow and continuous flow stations. The photographs are to be compared over time to evaluate development impacts.
- 8. Eighteen (18) groundwater monitoring wells are to be maintained. Well installation logs should be provided. Each groundwater well is to be surveyed to determine exact elevation. Groundwater levels are to be reported as actual elevations (surface elevation depth to water). Frequency of readings is to be one per month at each well. Data should be analyzed to determine the effectiveness of site design and stormwater management in maintaining groundwater levels. Data from the pre-construction period should be compared to results obtained in subsequent periods. Graphs should be provided to

support conclusions. Groundwater level data will be compared to stream flow data and rainfall data.

- 9. Water chemistry sampling is required at nine of the groundwater wells. The wells to be monitored will be numbers 2, 4, 5, 6, 7, 9, 14, 15 and 16. Parameters include: nitrate, nitrite, TKN, total nitrogen, ortho-phosphorus, total phosphorus, lead, zinc, copper, cadmium. See Table 1 for relevant methods and detection limits. Sampling is to be done quarterly along with groundwater elevation readings. This monitoring is intended to evaluate the effect of construction impacts, BMPs that promote infiltration and residential land use impacts. Results will be compared among wells and also over time to evaluate how groundwater nutrient levels are impacted by development. Results will also be compared to stream nutrient data to evaluate the impact of groundwater nutrients on streams.
- 10. Discrete stream flow readings will be taken at six locations. The purpose of this monitoring is to compare baseflow stream discharge with groundwater elevation. Therefore, flow readings are to be done concurrently with the monthly groundwater well readings. Instruments are to be calibrated annually for low flow conditions.
- 11. Stream nutrients are to be monitored in the vicinity of temperature monitoring site number 1. One base flow grab and one automated flow-weighted composite storm flow sample is to be collected each quarter and analyzed for the parameters in Table 1. Storm sampling is to be done during rain events of at least 0.6 inches over a 24 hour period. Required laboratory methods and detection limits are also listed in table 1.

Table 1. Pollutant parameters, lab methods and detection limits

Parameter	Method	Detection Limit
Nitrate	EPA 353.2	0.05 mg/L as N
Nitrite	EPA 354.1	0.02 mg/L as N
TKN	EPA 351.3	0.2 mg/L as N
Orthophosphorus	EPA 365.3	0.01 mg/L
Total Phosphorus	EPA 365.3	$0.05~\mathrm{mg/L}$
Total Suspended Solids	EPA 160.2	1.0 mg/L
Total Cadmium	EPA 213.2	0.6 μg/L
Total Copper	EPA 220.2	$1.2~\mu g/L$
Total Lead	EPA 239.2	$0.4~\mu g/L$
Total Zinc	EPA 289.2	3.4 μg/L

Concentrations and storm event loadings will be calculated. The storms during which the samples are collected should be characterized for duration and total rainfall.

Reports are to include analysis comparing pre-construction with post-construction results and draw conclusions on whether or not pollutant concentrations or loadings have changed in any significant way.

- 12. TSS grab sample locations will be established at the two (2) largest sediment ponds on the site during construction. Exact sampling locations will be determined by DEP in the field to allow evaluation of the effectiveness of redundant sediment traps. Sampling is to be done quarterly during storm events throughout the construction phase. Storms should have at least one half inch of rainfall in a 24 hour period to be counted towards this requirement. Samples should be collected within 24 hours after the storm. The storms during which the data was collected should also be characterized for duration and total rainfall. Storm frequency (return interval) should be reported as described in Technical Paper #40 of USDOC Weather Bureau. Results should be examined to determine the efficiency of the structure and percent removal of pollutants. Data should be compared to past periods and published results for similar structures. Graphs should be provided to support conclusions.
- 13. Pollutant removal efficiency will be determined for three (3) individual BMP structures. The water quality structures above ponds F, S and T will be monitored to evaluate BMP effectiveness under different site designs. Pollutants to be analyzed are listed in table 1. This monitoring will require the collection of automated flow-weighted storm composite samples at the inflow and outflow points of each structure. Qualifying storm events will be between one half (0.5) inch and one and one half (1.5) inches of rain in a twenty-four hour period. All three structures are to be monitored quarterly. Analysis will evaluate effects of differing site designs, whether pollutant removal efficiency changes over time, and compare removal efficiencies with published results. Drainage area, percent imperviousness, percent and total area of road surface, amount of open section or closed section roadways, and water quality pre-treatment approaches are to be reported and considered in the analysis.

One year of baseline data on items 2 (continuous flow), 4 (water temperatures), 6 (embeddedness), 7 (photos), 8 (groundwater levels) and 10 (discrete discharge measurements) must be collected as specified above before construction begins. Collection of data on items 3 (rainfall), 5 (cross sections), 9 (groundwater chemistry) and 11 (stream nutrients) should commence as soon as possible and continue for up to one year prior to construction. These items (3, 5, 9 and 11) do not need to be included in the pre-construction monitoring report. All items above with the exception of numbers 12 (sediment pond TSS) and 13 (water quality structure efficiency) should continue throughout the construction period and for five years post-construction. Item 12 (sediment pond TSS) is required only during construction. Item 13 (water quality structure efficiency) is only required during the post-construction period. A report on pre-construction conditions must be deemed acceptable by DEP prior to the issuance of a sediment control permit. For subsequent periods a draft annual report on BMP monitoring is due

to DEP by **October 31** each year. A final report is due annually by December 1. County code requires that reports be submitted quarterly. These quarterly reports may be incorporated in the annual report. This should be reflected in the title of the document. BMP monitoring reports are to be delivered with data in an electronic format to Mark Sommerfield at Montgomery County DEP and also to Leo Galanko at Montgomery County DPS. All information submitted to DEP will be public information that DEP may freely copy and distribute. Questions on the monitoring requirements and procedures may be directed to the following personnel.

Mark Sommerfield (240) 777-7737 mark.sommerfield@co.mo.md.us

Doug Marshall (240) 777-7740

Leo Galanko (240) 777-6242

douglas.marshall@co.mo.md.us leo.galanko@co.mo.md.us



MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue Silver Spring, Maryland 20910-3760

December 27, 2001

Ms. Gladys Wood 12521 Piedmont Road Clarksburg, MD 20871

RE: Piedmont Road

Dear Ms. Wood:

We are writing in reply to your letter/petition received on September 18, 2001 suggesting that the section of Piedmont Road, a rustic road, approaching Stringtown Road and proposed A-305 end in a cul-de-sac, and not connect to either road.

Planning staff involved in Community-Based Planning, Subdivision Development Review, Site Plan Review, as well as Transportation Planning have reviewed your request. It is staff's consensus that the connection of Piedmont Road to A-305 as approved in the preliminary plan for Clarksburg Village is essential to provide connectivity of local neighborhoods and to provide opportunities for local circulation of vehicular and pedestrian traffic within the community. Therefore, staff does not support your idea to terminate Piedmont Road in a cul-de-sac approaching Stringtown Road or A-305.

You are welcome to make your views known during the Planning Board's review of the site plans for Clarksburg Village prior to their approval. Please contact Ms. Wynn Witthans at (301)495-4584 regarding the schedule for submission, review and approval of the site plans.

We regret that staff is unable to support your request.

Sincerely,

Ronald C. Welke, Supervisor Transportation Planning

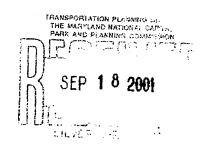
RCW:cmd

CC:

Wynn Witthans Malcolm Shaneman Karen Kumm-Morris

Piedmont Road - Letter to Glkadys Wood.doc

Mr. Welke Dept of Transportation Coordinator 8787 Georgia Ave Silver Spring, MD 20910-3760



Dear Mr. Welke,

We the undersigned Piedmont Road property homeowners, would like to see the section of Piedmont Road referenced in the attached drawing end in a court and not connect to A-305. As Piedmont Road has been designated a rural, rustic road, we feel having the road end in a court rather than attached to a major arterial road would better preserve its existing character, thereby allowing it to remain in keeping with the intent of the rural designation.

We have attached a copy of Mr. Flanagan's preliminary site plan for our section of Piedmont Road with the end of Piedmont changed to a court. This concept represents our vision for Piedmont Road.

Please keep us informed of future meetings regarding plans for this area, and/or other actions we should take to secure this vision of Piedmont Road.

Sincerely,

Glady Wood 10521 Diedmat Ll Clarbobing mis 208-71 301-540-7758

Kent P. Cheung 12517 Predmont Road Clarksburg, MD 20871 301 972-0188

oc Mr. Flanagan
Mr. Steve Howie

Jean and Dale Hayra

12600 Piedmont Rd

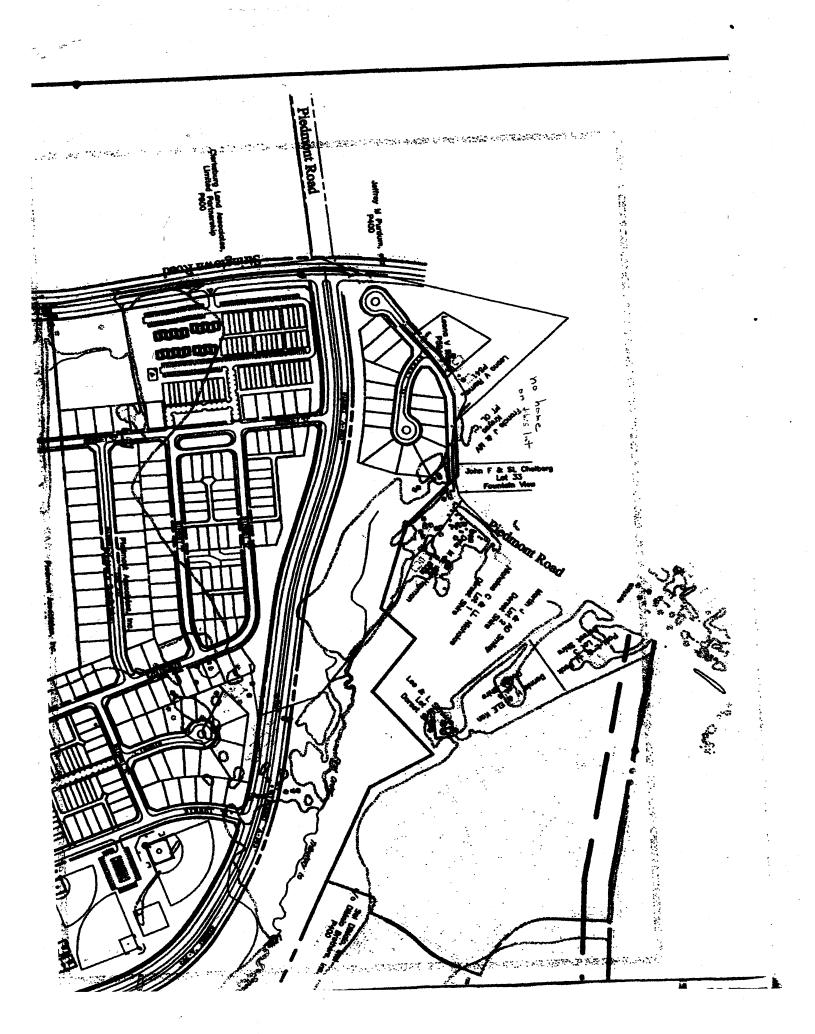
1211 - MN 20871

201 972 - 3571

John & Shari Chelberg 12601 Piedmont Rd. Clarksburg, MD 20871 301-540-9719 Muchales C. & Linda I. Micheles 12512 Piedmint Rd Charkshung MD 20871 301-540-1785 J. Martin Smily

9 Martin Smiles 12508 Predment Rd. Varksburg, MD 20871 301-972-1619

Beorge Classett 12509 Predmont 2d



Jean & Dale Hayman 12600 Piedmont Road Clarksburg, MD 20871 Home: 301-972-3571

FAX: 301-972-6488 October 6, 2002 WORK (30) 3538080

DECEVELOPMENT REVIEW DIVISION

M-NCPPC Development Review Division Montgomery Planning Board 8787 Georgia Avenue Silver Spring, MD 20910-3760

Dear Planning Review Board Members,

We would like to submit written comments on the Clarksburg Village-Phase 1 Plan. Our property is adjacent to the new homes planned for Piedmont Road. The second set of lots numbered 6 & 7 touch our property line.

Along this side of our property is a stand of mature, native trees composed of white oak, cedar, locust, sassafras, etc. We are interested in preserving these trees along the border between our property and Clarksburg Village.

We are also <u>interested in maintaining</u> a buffer between our property and the <u>newer development</u> which is not compatible with our home and neighboring properties.

We would like to see properties #6 and #7 removed or moved so that the mature trees and our buffer can remain intact.

Please allow us to have input on the planning of this area. Please notify us of meetings regarding this area and please keep us informed when plans are submitted.

Thank you,

Jean and Dale Hayman

October 8, 2002

Development Review Montgomery County Planning Board 8787 Georgia Avenue Silver Spring, Maryland 20907



Re: Notice of Site Plan Application to Adjacent Property Owners

Clarksburg Village - Phase 1

Current zoning: R-200, R-200 TDR-3, R-200/TDR-4

Plan #: 8-03002

Dear Sirs:

As a new resident to the area, I'm shocked at the shear number of homes that are planned for this entire site. Traffic already is awful for the morning and evening commutes on both 355 and Route 27. I cannot imagine how bad it will be when this development is complete.

The solution is not building more roads. It's building fewer homes!

Given our current state of affairs, did anyone stop and think for a moment where all the water is going to come from for these homes? Frederick, Maryland has had to stop all development for lack of water. When will our community see the light and stem development?

Near our lot specifically, you plan to construct a new, major road through our perfectly peaceful neighborhood. Split an existing neighborhood in two, just to add a new road? I can see why; to pack in more houses in the land to be developed. But how can you consider putting all that extra noise and traffic into a neighborhood that is quiet and well established? Please reconsider placing this major outlet through the new development rather than intersecting our neighborhood.

I also see nothing that will guarantee the survival of our beautiful line of trees that exists at the back of my property. Please tell me you wouldn't cut them down for the sake of "development."

I appreciate the opportunity to comment. I only hope you will take them seriously.

Yours truly,

Keith F. Mordoff

11705 Morning Star Dr.

IF. Mult

Germantown, MD 20876

Witthans, Wynn

From:

Dolan, Mary

Sent:

Wednesday, May 14, 2003 8:23 AM

To:

'Krisna_Becker@hgsi.com'; Maskal, Nellie; Edwards, Sue; Pfefferle, Mark; Kumm, Karen; Witthans,

Wynn

Subject: RE: Natural Landscaping

Krisna-

Steve Cary has transferred to another part of our agency and is not available to follow up on this. Robert, unfortunately, is currently doing the work of three inspectors and is very difficult to reach. We will be following up with him to see what we can do under the current approvals. It just may take some time.

Thanks for your persistence in this matter. We will follow up as soon as possible.

Mary

-----Original Message-----

From: Krisna_Becker@hgsi.com [mailto:Krisna_Becker@hgsi.com]

Sent: Tuesday, April 22, 2003 3:50 PM

To: Maskal, Nellie; Edwards, Sue; Dolan, Mary; Pfefferle, Mark; Kumm, Karen; Witthans, Wynn

Subject: Natural Landscaping

Dear Clarksburg Planners:

Thank you again for meeting with me in February. I thought I would just send a note in time for Spring landscaping. You have probably seen the minutes from the December 12 Clarksburg Planning Meeting by now, but here they are again. I would really like to know if the Clarksburg Streetscape Plan has been amended to include our input on landscaping issues. I've also included a few other resources that you could use. (More resources can be found at www.mdflora.org.)

I would just like to emphasize again that Clarksburg needs a more natural type of landscaping, in keeping with it's Special Protection Area status. This will save the taxpayers <u>a lot</u> of money in maintenance (mowing alone costs \$2240 a year, per acre, according to management at a local condominium), preserve our air quality (reduces lawnmower emissions), protect our streams by filtering runoff, and ensure that we have sufficient drinking water during peak months by using native plants that don't need as much water. Please use these resources to preserve as much of the existing, functioning habitats of Clarksburg as possible.

By the way, I have also tried to contact Steve Cary and Robert Kronenberg about Ecological Covenant site plan enforcement, but have received no response. Is there anyone else who might be responsible for ensuring that the developers in Clarksburg comply with these covenants?

Thank you, Krisna Becker

Roadside Use Of Native Plants; Bonnie L. Harper-Lore and Maggie Wilson; 2000; Island Press: Washington, DC; 665 pgs. ISBN: 1-55963-837-0

This book was first created by the Federal Highway Administration and is aimed at the highway administrator but it contains material useful to all native plant landscapers. It covers both basic topics like "Defining a Native Plant", and more complex issues such as "Using Plant Communities as Models", "Working with Succession", and "Choosing Non-Invasive Plant Materials".



Natural Landscaping for Public Officials - a Source Book

Minutes from the December 12, 2002 Clarksburg Civic Association Planning Meeting

Draft Clarksburg Streetscape Plan Landscaping and Lighting issues

Attendees: Chuck Faller
Paul Majewski
Dave Post
Krisna Davis
John Davis
John Carman
Gary Gunterberg

The meeting began promptly at 7:30. The focus of the discussion was to determine what types of tree were appropriate for the streetscapes of Clarksburg. Comment was made that Red Maples, identified as a Streetscape tree on the Draft Streetscape plan ("the Plan"), were not a good streetscape tree because of their root system being along the top of the ground. This would cause damage to any sidewalks or paving nearby. It was also noted that the Red Maples on the Plan were on the perimeter roads of the plan like West Old Baltimore Road, Rt. 121 on the West side of I270 and Rt. 27. Another tree identified on the Plan, the Pagoda Tree, is also not a desirable tree because the seed pods that fall from the trees tend to clog up drainage systems. The Tilia Cordata 'Greenspire' tree identified on the Plan has a hard problem with Japanese Beetles, and would find it hard to survive in this area.

With regards to the guidelines on the Plan, the planting of a single tree species along each street may go well in the Town center or retail areas of the Master plan but a variety of trees may look better in the residential areas of the Master Plan. A question was asked, "Have you ever seen a residential street with all of the same trees on it?" The committee felt that by using 2 or 3 species along the residential streets it would look more natural than all one species. The second point in the Guidelines of the Plan should allow mixing of species within a block in the residential areas. Third, providing (2) 4" vertical perforated, PVC pipes on either side of the root ball for tree watering within mixed use center, please add "or acceptable alternative". As written, this limits the way plants are watered. There may be another way that would be better in some circumstances. There was a split in the committee on seasonal lighting. We understand the problems that may occur with the lights but some thought it would be nice in the commercial areas.

Following that review the committee decided to go down the list of trees and vote on which trees we would like to see along our streets. We created three lists. The first were trees that we

wanted to see on our streets. The second was a list of trees that we definitely did not want on our streets. The third were trees that we did not have a strong opinion either way. Some of the committee members had certain criteria that they use in determining their vote. These included but not in any specific order of importance:

- 1. Was the tree native to the area.
- 2. Tree shape
- 3. Aesthetics
- 4. Tree viability in the area
- 5. Seed pods or flowers that would drop on the ground
- 6. Root system
- 7. Overused in the area

The following lists were not written in order of preference. The trees were selected by reviewing the list of trees in the Plan then a list of approved major trees from the Montgomery County Department of Transportation and then other trees that were not included in either list.

TREES THAT WE WANT TO SEE ON OUR STREETS

- 1. Sugar Maple
- 2. Yellowwood
- 3. Marshall Seedless Ash
- 4. Thornless Honey Locust (seedless variety)
- 5. White Oak
- 6. Red Oak
- 7. Willow Oak
- 8. Silver Linden
- 9. American Linden
- 10. American Elm
- 11. October Glory Red Maple
- 12. Red Sunset Maple
- 13. Black Gum
- 14. Pin Oak
- 15. Shingle Oak

TREES THAT WE DO NOT WANT ON OUR STREETS

- 1. European Beech
- 2. Village Green Zelkora
- 3. Silver Maple
- 4. Autumn Flame Red Maple
- 5. Pagoda Tree
- 6. Sawtooth Oak
- 7. Norway Maple

TREES THAT WE MAY WANT ON OUR STREETS

- 1. European Hornbeam
- 2. Male Grafted Ginkgo

- 3. Little Leaf Linden
- 4. London Plane Tree
- 5. Shumard Oak
- 6. Lacebark Elm

By the time we reviewed the trees and came up with the above list it was 9:00. We decided to postpone the lighting until the next meeting in January. Meeting was adjourned.

Also, here are some comments from Louisa Thompson, a native plant specialist, and gardener. I asked for her opinion on the list of trees that the Planning Committee had settled on: louisathompson@erols.com

Regarding your list of trees below:

- Pinoak is a terrible street tree because its lower branches grow downwards and outwards. They must be limbed up every year until they reach maturity, and then they look butchered. Also, they drop leaves all through the winter, making leaf pickup an ongoing job.

- Maples in general have shallow roots that interfere with lawns and sidewalks. While silver and Norway maple are the worst, I would make sure that sugar maple and the red maple cultivars on the list truly do not have this characteristic, before approving their use as street trees. I've seen them in large tree boxes and mulched islands, and the fall foliage is gorgeous, but I don't know whether they damage the pavement as they get larger.

I'm not familiar with most of the non-natives.

There is a European linden that grows in Patapsco Valley State Park, where it spread from a historic planting. Every summer, the linden leaf miner (closely related to the locust leaf miner) so completely tunnels through the leaves that the foliage is almost white. It looks awful. So I hope someone will check whether the lindens on the list are resistant to this insect. American linden needs a colder climate than we have here - but yours may be just cold enough (of course, the climate is warming everywhere).

Depending on the kind of soil they are planted in and how much water they will get, scarlet oak may be a better choice than red oak, and chestnut oak might do better than white. Both tolerate thinner soil and drier conditions better. Scarlet oak naturally grows on ridgetops and does well in full sun. Chestnut oak grows on ridgetops and steeps slopes, and probably can tolerate either sun or shade.

The trees you've listed are all quite tall, which is good for street trees because they grow well above traffic. However, I hope there will be a list of smaller, flowering trees for use in the landscape. I'd recommend fringetree (the native Chionanthus virginicus, not the Chinese one), black haw (Viburnum prunifolium), and redbud as the 3 most beautiful. Fringetree tolerates minimal soil but probably needs it to be well-drained. Redbud tolerates high alkalinity and does well in lawns. Black haw tolerates a wide range of conditions. All have attractive fall foliage as well, and none produces particularly messy fruit. Redbud is planted around here as a street tree, and I see black haw flourishing in highway interchanges. Fringetree is more expensive.

There is a serviceberry cultivar bred for its fall foliage. Personally

I don't love serviceberry as much as the others, but it is the earliest to bloom, just after Bradford pear.

Some shrubs you might want to consider are spicebush and Carolina allspice. Spicebush is tall and vase-shaped, so it can be planted next to walkways. Carolina allspice, an old-fashioned favorite because of its fragrant leaves, is probably also pretty resistant to deer. It's a dense, round shrub good for foundation plantings. The native shrub viburnums are not deer-resistant, but they are lovely. Maple-leaf viburnum is said to be difficult to transplant, but downy arrowwood and smooth arrowwood, which have been lumped as Viburnum dentatum, are widely available in the nursery trade. You should try to get the one that used to be called Viburnum recognitum, smooth arrowwood, which is the piedmont species/variety and doesn't need as much soil moisture. Both flowers and foliage are ornamental.

a Gormany & specify

Charles P. Johnson & Associates, Inc.

Planners Engineers Landscape Architects Surveyors



Silver Spring, MD

Frederick, MD

Fairfax, VA

July 11, 2003

Ms. Wynn Witthams Development Review Division MNCPPC 8787 Georgia Avenue Silver Spring, MD 20901

Re: Clarksburg Village

Dear Wynn:

On behalf of our client, Elm Street Development, we are requesting waivers for the following sections of the Montgomery County Code, Chapter 50 from the Maryland National Capital Park and Planning Commission:

Section 50-26 (h) (3) which requires a sidewalk on both sides of a tertiary street. Because streets "Cool Valley Court" and "Tulip Tree Terrace" are so short in distance and serving so few units, and we are in a Special Protection Area, we are requesting that the sidewalk requirement for one side of the roadway be waived.

Section 50-26 (e) (3) requires a 25' truncation at intersections. In this subdivision due to its neotraditional traights we are utilizing a radius truncation which allows the homes to move closer to the right of way.

Section 50-28 (a) (1), which states that the maximum block length is 1600 feet. We have one block between "Rainbow Arch Drive" and "Robin Song Drive" which exceeds the 1600 foot requirement. This block has been designed with a "Green street" breaking up the houses. This will serve as pedestrian access, play and sitting areas. As mentioned earlier, since we are in a Special Protection Area, and are utilizing some neo-traditional neighborhood design, we feel this provides the residences with a better living environment.

Section 50-29 (a) (2) which requires for single family detached lots to have frontage on a public street. There are several areas throughout the development in which we have single family detached homes fronting on to Homeowner Association open spaces. The homes have pedestrian access from the HOA and have vehicular access via the alleys at the rear of the homes. Again, we are trying to employ some of the neo-traditional neighborhood design principals.

Section 50-29 (a) (3) which states lot lines will be perpendicular to the road right of way. There are several areas throughout the development where the lot lines are not perpendicular or radial to the street in an effort to create open space or enhance some of the views with house sitings.

We are also requesting that any previous variance request for waivers that may have been granted at the time of preliminary plan be maintained. These include, but are not limited to, section 50-32 (a-c) which is special controls for environmentally sensitive areas. I am also enclosing a copy of the waivers that we are requesting from Montgomery County Department of Permitting Services and Department of Public Works and Transportation.

If you have any questions or comments, please feel free to contact me.

Sincerely

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Charles P. Johnson & Associates, Inc.

Planners

Engineers

Landscape Architects

Surveyors

sociates

Silver Spring, MD

Frederick, MD

Fairfax, VA

July 15, 2003

Montgomery County Department Permitting Services 255 Rockville Pike Rockville, MD 20850

Attn: Mr. Joseph Y. Cheung

Re: Clarksburg Village Preliminary Plan #1-01030

Dear Mr. Cheung:

On behalf of our client, Clarksburg Village L.C., we hereby submit for a waiver of the open section road standard, as typically required in a Special Protection area. As part of the proposed neo-traditional layout, there will be a combination of open and closed section roads.

As part of processing the Preliminary Plan of subdivision (Approved 7/30/01) and Preliminary Water Quality Plan (approved 7/27/01), a variety of street cross sections were agreed to by MCDPS, MCDPW&T and the MNCPPC. The approved sections appear on sheet C-10 of the Preliminary Plan (by Rodgers Consulting).

The subdivision is currently going through the Site Plan and Final Water Quality Plan process, and is scheduled for planning board on July 31, 2003. As required by MCDPS-Water Resources Division, in areas where open section roads are not feasible, additional water quality measures are to be provided to offset the lost benefits that open section roadways provide.

Please find attached the previous correspondence and approvals related to the street sections and if in agreement, please sign below. Thanks again for all your assistance throughout the whole process.

Sincerely,

Jeff Seidleck

Approved:

Joseph Y. Cheung

Manager - Right of Way Permitting And
Plan Review Section

cc: MNCPPC - Steve Federline MCDPWT - Greg Leck

 $W: \label{eq:WPFILES} Letters \ \ Vil-Cheung 07, 15.03. wpd$

Charles P. Johnson & Associates, Inc.

Planners

Engineers

Landscape Architects

Surveyors



Silver Spring, MD

Frederick, MD

Fairfax, VA

July 15, 2003

Montgomery County
Department Permitting Services
255 Rockville Pike
Rockville, Md 20850

Attn: Mr. Joseph Y. Cheung

Re: Clarksburg Village Preliminary Plan #1-01030

Dear Mr. Cheung:

On behalf of our client, Clarksburg Village L.C. we hereby submit for a waiver of the standard 30' fillet radius for street intersections within the subdivision. The above-referenced site is going through the site plan approval process and is scheduled for Planning Board on July 31, 2003. As was implemented on other neo-traditional style subdivisions within the Clarksburg area, we are proposing the following standard for intersection fillets:

- 30' Radius for an intersection with a Primary Road
- 25' R Secondary
- 20' R Tertiary
- 15' R Alley

The Proposed Site Development Plan reflects these guidelines and if you are in agreement, please sign below. Thanks again for your assistance.

Sincerely,

Jeff Seidleck

Approved:

Joseph Y. Cheung

Manager - Right of way Permitting and

Plan Review Section

cc: MCDPS - Sarah Navid

MNCPPC - Wynn Witthans

W:\WPFILES\Letters\Montg County Mr Cheung ClarksVill Pre Pln101030.wpd



MONTGOMERY COUNTY DEPARTMENT OF PARK & PLANNING

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue Silver Spring, Maryland 20910-3760

MEMORANDUM

July 23, 2003

TO:

Wynn Witthans, Site Plan Review, Development Review Division

Michael Ma, Site Plan Supervisor, Development Review Division

FROM:

Doug Powell, Plan Review Coordinator, Park Planning and Resource

Analysis Unit, Countywide Planning Division

RE:

Clarksburg Village Subdivision, Site Plan #8-03002

Park Planning and Resource Analysis staff has reviewed the above-referenced Plan and requests the following **CONDITIONS OF APPROVAL**:

8-03002 Clarksburg Village

- 1. Applicant to construct an 8-foot wide asphalt/boardwalk hiker/biker trail in the Clarksburg Greenway on the property applicant currently owns. The alignment will follow the route established by the Clarksburg Greenway Facility Plan and be constructed to park standards and specifications. The Applicant will provide necessary bridges and boardwalk per the Facility Plan.
- 2. Applicant will construct the portions of the hiker/biker trail from Stringtown Road east to Newcut Road and north to the Greenway Village Property that are not on applicant's property, provided that M-NCPPC acquires the ownership or easement rights across the needed property along the trail alignment and funds the proportionate cost to Applicant for construction of these additional sections of trail.
- 3. Applicant will construct Foreman Boulevard to allow for grade separated crossing for the hiker/biker Greenway Trail. The trail crossing should be constructed to accommodate the trail under the road without changing the natural location, configuration or composition of the stream channel, and should be located to minimize flooding of the trail and minimize surface water runoff from the paved trail directly into the stream. Trail crossing to meet the

"staff guidelines" as set out in the attached Meeting Summary of March 18, 2002 unless otherwise agreed to by M-NCPPC staff and Applicant. Due to the substantial length of the trail under Foreman Boulevard, Applicant to install adequate lighting along the trail under the road. Final trail/road crossing details to be submitted to M-NCPPC staff for approval.

- 4. The property within the delineated Clarksburg Greenway along Little Seneca Creek and Little Seneca Tributary will be dedicated to M-NCPPC and the hiker/biker trail constructed or clearly delineated and marked prior to construction of the residences that abut the Greenway. Dedication to be made at time of record plat and boundaries to be clearly staked to delineate between parkland and private property. Dedicated property to be transferred free of trash and unnatural debris.
- 5. The school/park site off of Midcounty Highway will be graded, surfaced with topsoil, fine graded to a maximum of +/- 6" over 100', and seeded as appropriate for ball field cover. The entire site, including the ball field area at the north end, will be maintained by the Board of Education for use as an elementary school if such school is constructed. If the school is not constructed by the Board of Education, the entire school/park site will be owned and managed by M-NCPPC for use as parkland.

Meeting Summary Prepared by Lyn Coleman

TOPIC: Reaching Staff Consensus on How Clarksburg Greenway Will Cross Roads

DATE: March 18, 2002

ATTENDING: Lyn Coleman, Karen Kumm, Wynn Witthans, Mark Pfefferle, Larry

Cole, Marian Elsasser, Art Nelligan

SUMMARY PREPARED BY: Lyn Coleman

The focus of the meeting was to develop planning and design guidelines for two road-trail intersections that are part of the Clarksburg Village subdivision application: Foreman Blvd and Midcounty Arterial.

First, we developed some general guidelines for trail crossings under roads:

1. Minimum clearance of 12' to accommodate rescue and maintenance vehicles.

2. Tread or path width of 10' in constricted area under road; 12" to 24" cleared area on either side of path.

3. Trail must be located above floodplain. Construction practices that help convey

water from the trail are encouraged.

- 4. Construction approaches that minimize length of tunnel are encouraged including use of wing walls, 45 degrees off centerline of trail to maximize light in tunnel.
- 5. At least a 2-1/2 foot head wall should be provided over the entrance to the tunnel.
- 6. When trail length under road is less than 50 feet, no artificial light will be required (NOTE: staff is continuing to research whether this is the correct standard)
- 7. Minimize the extent of riprap needed to stabilize stream banks outside of the tunnel itself.
- 8. A corrugated tunnel interior helps reduce graffiti. Any surface used in the bridge should allow easy maintenance and cleaning by park staff.

FOREMAN BLVD. GUIDELINES

THE TRAIL MUST GO UNDER THE ROAD. The length of the trail under Foreman Blvd. will be approximately 35 to 40 feet. The basic issue at Foreman Blvd. is whether there should be single bottomless culvert where the trail and the creek are both located or whether a double arch should be provided to separate the trail from the creek. The second arch does not have to be connected to the first. It can be separated from the first and outside the floodplain. Each approach has advantages and disadvantages. The developer may pursue either approach assuming the following standards are achieved:

Single bottomless culvert: The trail must be located above the 100-year floodplain. The trail should not routinely require maintenance to remove mud and debris after storm events. The road may have to be elevated to provide trail clearance.

Double arches: For aesthetic reasons, do not mix arch and box culverts—use one type or the other. Do not place arch supports in the stream. Prefer continuous head wall over both arches or culvers for aesthetic reasons.

MIDCOUNTY ARTERIAL GUIDELINES

The length of trail tunnel beneath Midcounty Highway would be 120 to 130 feet.

Three options are possible where the trail traverses Midcounty Arterial: 1. Cross at grade, relying on bikepath along Newcut Road Extended. 2. Cross beneath Midcounty Aterial using culvert. 3. If a bridge is built for Midcounty Arterial to traverse the stream, place the trail below the bridge at a location that minimizes impact to the stream.

In terms of option 3, the Planning Board has supported a bridge as part of a Taxing District for Clarksburg. Whether it will happen is not known yet. The bridge would be outside the floodplain.

In terms of option 2, separate bottomless arches are suggested. There should be openings in the median of Midcounty Arterial to provide natural light for the trail users and a guardrail should be provided on the road. Staff will ask parks as to whether more height clearance and width for the trail should be requested than for Foreman because of the length of the tunnel.

Option 1 would require trail users to cross at a roundabout at the intersection of Newcut Road and Midcounty where no traffic light is planned.

Staff will continue to keep informed on the status of Option 3.

Lyn agreed to prepare a map showing all trail proposals for Clarksburg so we can make decisions on these bridge crossings based on what is being proposed on adjoining properties. We all agreed this meeting was very useful and should continue meeting to address other road/trail crossing issues, including Skylark Road at Ovid Hazen Wells Park and trail location on Martens and Clarksburg Triangle.



DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan *County Executive*

Robert C. Hubbard *Director*

MEMORANDUM

June 24, 2003

TO:

Wynn Witthans

Development Review Division - MNCPPC

FROM:

Sarah R. Navid

Right-of-Way Permitting and Plan Review Section

SUBJECT:

Site Plan Review #8-003002 Phase I – Clarksburg Village

Sarah Morid

We have reviewed the subject site plan and recommend approval. The following comments will apply when the plan is submitted for roadway permitting review:

- The geometrics for <u>Snowdens Farm Parkway (A-305)</u> including the intersection with Stringtown Road will be reviewed in greater detail at permitting review. For most intersections, the left turn lanes will be 175' long with 150' reverse curve tapers. These dimensions will be shortened or lengthened according to the specific intersection characteristics and intersection spacing. A 7' wide bikeway is acceptable on the east side of the road from Blue Sky Drive to Grand Elm Street to supplement bikeway access to the school.
- The following fillet radii are acceptable: 30' for primary/arterial roads, 25' for secondary roads, 20' for tertiary roads and 15' for alleys. These are appropriate for the entire Clarksburg Village development.
- Rainbow Arch Drive should be widened to 36-40' as feasible, for the short section between Stringtown Road and Derby Post Place to accommodate left turns in both directions. Derby Post Place is acceptable as shown.
- Two curb ramps will be provided on each corner of four-leg intersections and on one corner of T-intersections (not including alleys or driveways) wherever feasible. DPS will work with the applicant at permitting review, for the specific designs and locations of the ramps.
- We concur with the traffic circle at Granite Rock Road and Grand Elm Street with landscaping to be maintained by the HOA. Per our most recent criteria, a 4' wide traffic bearing brick collar should be provided. The driveway to the house on the southwest corner should be relocated from Granite Rock Road to Grand Elm Street to provide clearance of 25' from the handicapped range.

Page 2 – Clarksburg Village Phase I

- One mid-block handicapped ramp at a consistent location will be provided for pedestrian
 crossings for the mews between Rainbow Arch Drive and Bent Arrow Drive. A one side,
 mid-block choker on the east side of Bent Arrow Drive will be provided for the crossing
 between the park areas.
- The west leg of Foreman Boulevard should be 36' wide between Snowdens Farm Parkway and Turtle Rock Terrace. The 26' wide alternative primary design is appropriate south of Turtle Rock Terrace through the stream valley. The bike path should be concrete rather than asphalt adjacent to the front of lots 1-3.
- The right turn channelization at Horseshoe Bend Circle and Snowdens Manor Parkway is not required or recommended.
- Tree spacing of 40 feet is acceptable on the internal neighborhood streets. Standard county spacing (50') should be used on arterials, including the median on Stringtown Road.
- DPS will work with the applicant during permitting review to resolve any less than standard driveway setbacks from intersections and the design of the temporary turnaround on Cool Valley Court.

Thank you for the opportunity to review this plan. Please let me know if you have any questions.

srn\clarksburgvillage.doc

cc:

Joe Cheung
David Flanagan
Les Powell
Jeff Seidleck
Jeff Riese