



MONTGOMERY COUNTY DEPARTMENT OF PARKS

THE MARYLAND - NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB Item # 9

December 16, 2010

MEMORANDUM

December 9, 2010

TO: Montgomery County Planning Board

VIA: Mary Bradford, Director of Parks *M Bradford*
Mike Riley, Deputy Director of Parks
John E. Hensch, Ph.D., Chief, Park Planning and Stewardship Division *J Hensch*
Dan Hardy, Chief, Transportation Planning Division, Montgomery County Planning Department

FROM: Jai Cole, Principal Natural Resources Specialist, Park Planning and Stewardship Division

PROJECT: ICC Environmental Stewardship-Compensatory Mitigation Project PB-130 *J Cole*

REVIEW TYPE: Mandatory Referral No. 1006-SHA-1 ICC Environmental Stewardship

APPLICANT: Maryland State Highway Administration (SHA)

APPLYING FOR: Plan Approval

RECOMMENDATION: 1. Approve the construction of an Upper Paint Branch Special Protection Area (SPA) Best Management Practices (BMP) project (PB-130) as part of the ICC Environmental Stewardship and Compensatory Mitigation Program.

Background

As a part of the ICC Environmental Stewardship and Compensatory Mitigation Program, the State Highway Administration (SHA) is completing a number of stream restoration, wetland creation, and stormwater management projects throughout Montgomery County. Many of these projects focus on the Upper Paint Branch SPA due to the impact of the ICC on this watershed's high water quality and unique self-sustaining brown trout population. This project, named PB-130, is an Upper Paint Branch Special Protection Area (SPA) Best Management Practice (BMP) site located within the Good Hope Estates community in the Left Fork of Paint Branch (Figure 1). It was identified during the planning studies and included in the ICC Record of Decision (ROD) in order to address a range of watershed issues within the Upper Paint Branch Special Protection Area. The PB-130 site is proposed to be built in the DOT ROW along Cradock Street, Durant Street, Montford Road, Kings House Road and Edgeware Street within the Good Hope Estates community (figure 2), a neighborhood constructed prior to stormwater management laws and current standards.

Figure 1 - PB-130 Locational Map

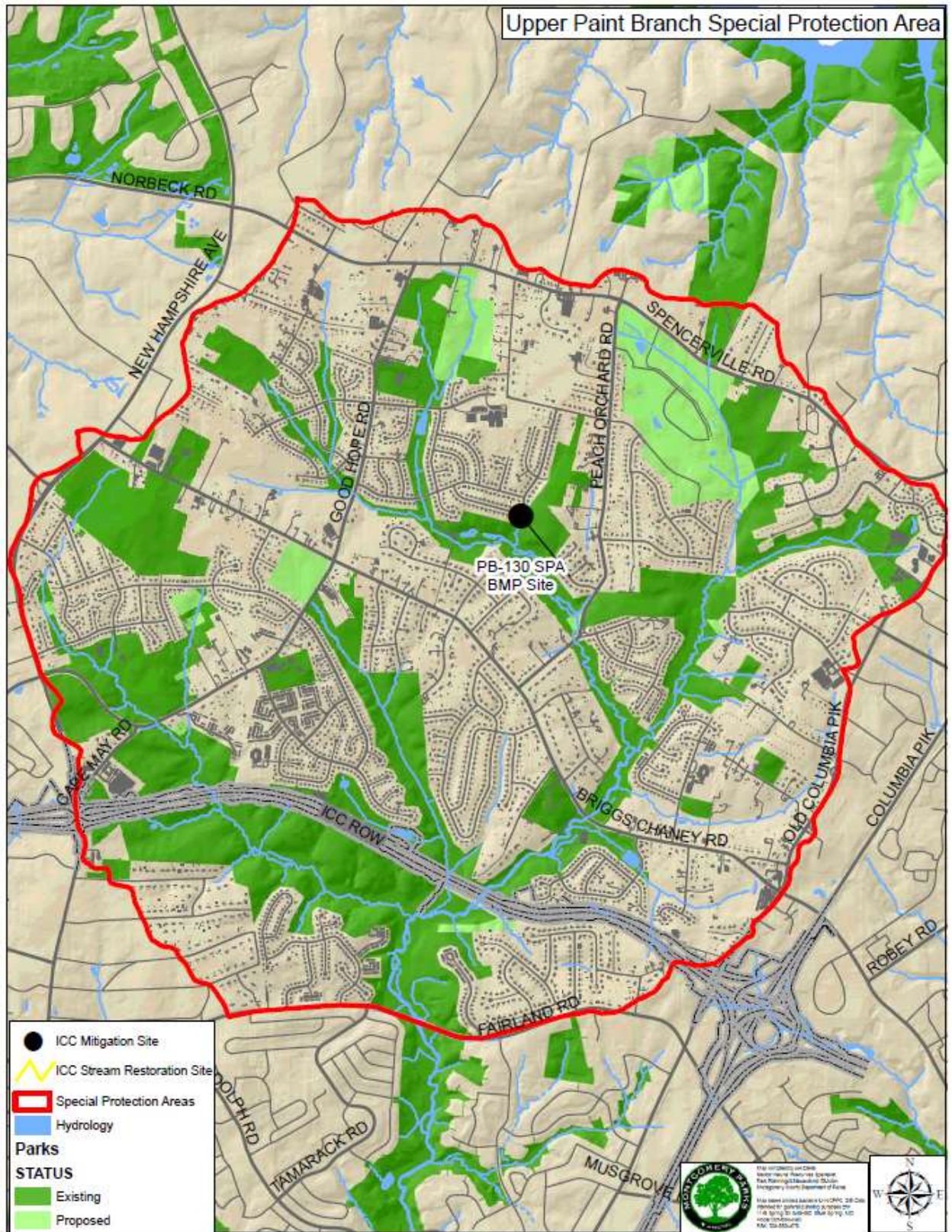


Figure 2 – PB130 Neighborhood Curb Extension Site Map



Design

Like biotrenches, curb extensions function as in-line bioretention facilities but are designed for closed roadway sections. Curb extensions consist of an in-line break in the curb and an extension of new curbing which expands into the road right of way. An opening in the curbing allows roadway runoff to flow into the bioretention filtration area located behind the new curb line (Figure 3).

The biotrench BMPs that have been previously brought before the Board are an appropriate method of infiltrating stormwater runoff in communities built with an "open roadway section". An open roadway section is one bordered by existing grass swales as opposed to a "closed roadway section" where runoff is directed along curbs and into gutters. Biotrenches are



Figure 3 -Rabbit Rd. Curb Extension – Gaithersburg, MD

considered infeasible in communities with a closed roadway section like Good Hope Estates for many reasons. First, because there is not existing grass swales present, a substantial amount of excavation would be necessary. Second, such extreme excavation would interfere with existing utilities that run along the curb. Finally, the substantial amount of disturbance that would be necessary creates an uncertainty of the soil infiltration properties which would render a biotrench ineffective.

These practices would be located within Montgomery County DOT right of way and be structurally maintained by the County after the project has been completed. As is the case with biotrenches, grass swales, and the mow strip adjacent to County provided sidewalks, the resident adjacent to the curb extension will be responsible for mowing.

NPDES Permit

The National Pollution Discharge Elimination Permit (NPDES) for the County's Municipal Separate Storm Sewer System (MS-4) places specific requirements on the County for reduction of stormwater runoff and associated pollutants in urban areas. These requirements include providing stormwater management for 20% of the uncontrolled impervious areas in the County as well as to meet the pollution reduction requirements for County streams. Because roads account for approximately one-third of all impervious surfaces in urban areas, to meet the MS-4 requirements, the County will need to retrofit existing roadways with BMP's to reduce runoff and pollution. To make this possible, DEP and DOT are working together so that all roads will be retrofit with stormwater BMPs when road rehabilitation projects are conducted. Because of this agreement between DEP and DOT, if this project is not done by SHA, these bump outs would be built and paid for by the County when the roads in Good Hope Estates are repaved. These practices have been installed in curb and gutter systems in Gaithersburg (Figure 2) with great success.

Public Meetings and Community Issues

A meeting was held April 14, 2010 to provide the community an opportunity to review and comment on plans for the project. Representatives from Good Hope Estates were in attendance. The curb extensions (PB-130) were an issue of concern to the community and so the ICC team held additional community meetings on May 5, 2010, June 23, 2010 and September 30, 2010. These meetings were well attended.

Some of the changes to the design that have taken place in direct result of community concerns are listed below:

- The original curbing that was to be used to delineate the back edge of the facilities from the yard areas have been removed and replaced with slopes into the facilities for an all turf transition. This change will make it easier for homeowners to mow the facility at the same time as their front yards.
- Curb extension areas into the road have been removed for some installations in response to community concerns about a narrowing effect.
- Additional areas with minimal stormwater management benefit that had been included for traffic calming purposes have been removed from the plan.
- Concrete spreader pads have been redesigned to be smaller to place less hard surface within the curb extension facilities.

- The design of check dams within the facilities have been changed to promote better turf establishment.
- The curb extensions will be planted with sod instead of a perennial seed mix.
- One curb extension has been added to DOT ROW in front of Upper Paint Branch Stream Valley Park.

Community Opposition

An email dated October 28, 2010 titled "Good Hope Estates Community Petition Against PB-130 and PB-108" can be found in Appendix 1, 2 and 3.

An email to County Executive Isiah Leggett dated October 30, 2010 from a homeowner in the Good Hope Estates Community and the County Executive's response dated December 7, 2010 in support of the project can be found in Appendix 4.

Wetland and Stream Impacts

No jurisdictional wetlands or waters are present in the proposed project area therefore, no impacts are anticipated.

Maryland Historical Trust

Cultural or Historic Architectural Resources: The completed ICC Cultural Resource Studies have not identified any historic properties within the general vicinity of the project. Coordination with MHT is ongoing.

Natural Resource Inventory and Forest Stand Delineation (NRI/FSD)

Except for individual trees, no forest stands exist within the project area, therefore no impacts are anticipated as a result of this contract. An exemption of the Forest Conservation Act will be coordinated with the Maryland Department of Natural Resources as required in accordance with the Forest Conservation Act. . Strategies for protecting trees will be included in the design plans including root pruning, avoidance of critical root zones, and tree protection fencing.

Air and Noise

As proposed, the project is not expected to have any significant affect on traffic within the adjacent communities. Therefore, an environmental traffic noise analysis and assessment was not conducted.

Traffic Control

SHA will coordinate with the appropriate staff of the Montgomery County Department of Transportation for construction access. The project plans and specifications address maintenance of traffic and safety considerations for access from residential streets and county roads. In areas where communities are adjacent to work areas, blaze orange fencing and signage would be installed for safety purposes

Funding

The proposed environmental stewardship projects are being funded by the Maryland State Highway Administration.

Implementation

Construction is expected to begin June 2011 following the award of the contract under the normal SHA advertisement process.

Maintenance

Following construction, the maintenance and monitoring of the curb extensions are expected to be minimal. Under the agreement with the County, these duties will be assumed by the County DOT.

PC:

Doug Redmond, Natural Resources Manager, Park Planning and Stewardship Division

Gene Giddens, Deputy Director, Department of Parks

Mike Horrigan, Chief, Northern Region, Department of Parks

Jeff Humerick, Operations Manager, Northern Region, Department of Parks

Mike Little, Park Manager, Olney Manor, Department of Parks

Mitra Pedoeem, Chief, Park Development, Department of Parks

Mark Pfefferle, Chief, Environmental Planning, Department of Planning

Glenn Kreger, Acting Chief, Community Based Planning

Andy Frank, Environmental Engineering Section Leader, Park Development, Department of Parks

Dan Harper, Stream Restoration Manager, Montgomery County Department of Environmental Planning

Steven Shofar, Watershed Management Division Chief, Montgomery County Department of
Environmental Planning