

County Executive Steven R. Schuh

## Office of Planning and Zoning Development Division

#### INTER-OFFICE CORRESPONDENCE

**DATE:** July 9, 2015

TO: MBIA and Review Agencies

FROM: Larry R. Tom, Planning & Zoning Officer

**SUBJECT:** Rapid Stream Assessment Policy

As outlined in the Transition Team Report for the Office of Planning & Zoning, the department has been working with the MBIA SWM Work Group to develop revisions to the County's Stormwater Management Practices and Procedures Manual (SWM Manual). The revisions are designed to eliminate the requirement for Rapid Stream Assessments as part of the determination of adequate outfall, while still requiring both the capacity and stability of the downstream conveyance system to be addressed.

Effective immediately, all new projects, any current projects that have not yet had APF Storm Drain approved, and any projects that have not completed a Rapid Stream Assessment as outlined in Section 7.2.2.D of the SWM Manual are able to operate under the revised Section 7.2.2.D attached.

The Office of Planning and Zoning would like to express their thanks to the MBIA Members that participated in these meetings. The SWM Work Group will continue to meet monthly to address other issues with the SWM Manual, and ultimately to address any issues raised by the MDE Triennial Review of the County's SWM program, which is in the process of being completed.

#### attachment

J:\Shared\subdiv\David Braun\SWM Workgroup\RSA Memo.docx

#### **REVISED SECTION 7.2.2.D.**

# OF THE COUNTY STORMWATER PRACTICES AND PROCEDURES MANUAL TO ELIMINATE REQUIREMENT FOR RAPID STREAM ASSESSMENT Effective July 9, 2015

The existing Section 7.2.2.D. is hereby deleted, and the following is to be inserted in its place.

- D. Downstream analysis and determination of adequate outfall
  - I. If the site discharges directly to an existing closed storm drain system, the following information is required:
    - a. Provide copies of as built maps of the system. If as-built maps are unavailable, then an as-built survey must be completed by the design consultant.
    - **b.** Determine, from the as-built information, the location of the most restricted segment of the system, e.g. the run of pipe with the lowest capacity or structure with the greatest hydraulic gradient.
    - c. Determine the runoff rate (cfs) that would make the system adequate (q adequate)
    - **d.** Compute the total runoff rate to that point, based on the total drainage area (q ultimate).
    - e. Adequacy of the system is established if q ultimate is less than or equal to q adequate.
  - II. If the site discharges to a clearly defined open channel or by sheet flow, both the Capacity and the Stability of the downstream system must be established to provide an adequate outfall. The following is required.
    - a. Capacity
      - i) Provide topographic maps of the channel to at least 100 feet beyond the top of bank.
      - ii) Determine the location of the most restrictive segment of the system, e.g. the channel section with the lowest capacity.
      - iii) Determine the runoff rate (cfs) that would make the system adequate (q adequate)
      - iv) Compute the total runoff rate to that point, based on the total drainage area (q ultimate).
      - v) Adequacy of the capacity of the system is established if q ultimate is less than or equal to q adequate.

### **b.** Stability

- i) Provide a photo walking tour in accordance with the requirements of Chapter III of "Stream Assessment Protocol" and the "Sketch Plan-Preliminary Plan Checklist". The photo walking tour must include a narrative description of the conditions from the site outfall to the POI. This document must include a plan of the system being evaluated with the location and direction of the photographs indicated on the plan.
- ii) Based on analysis of the photo walking tour, determine any areas that indicate existing instability. Any areas that, in the County's opinion, indicate instability must be evaluated by a qualified professional (as outlined in Chapter III of the Stream Assessment Protocol) to determine if mitigation is necessary.
- iii) Determine if the Department of Public Works, through a Capital Improvement Project, the Watershed Management Tool, or any other method, has identified any retrofit projects along the system being analyzed.
- iv) Adequacy of the stability of the system is established if there is no existing downstream instability, or a mitigation agreement has been developed between the applicant and the County.

- v) A mitigation agreement can include one or any combination of the following items, but should be addressed in the order of priorities indicated:
  - Restoration work funded and performed by the applicant to address the instability within publicly owned land or in a public easement obtained by the applicant or the County.
  - 2. Provide private funding to a specific Capital Improvement Project (CIP) that has been identified by the Department of Public Works (DPW).
  - 3. Over-management of the site runoff, based on the percentage of flow from the site when compared to the total runoff to the area of instability.
  - 4. Provision of a hydrologic/hydraulic study that demonstrates that full compliance with the State SWM regulations and ESD to the MEP, shows the development will not have a negative impact on the existing conditions of the downstream facilities when considering flow rate and velocity, and that flows are being safely conveyed through the downstream system.