TO: DSG Staff
FROM: Tim Stewart, Development Services Director
DATE: February 15, 2012
RE: Interpretation of the City of Mercer Island’s Standards for Development/Redevelopment Regarding Stormwater Detention
CC: City Attorney

MICC SECTION(S) INTERPRETED
15.09.050 Stormwater Management Program Standards for Development and Redevelopment

ISSUE
Mercer Island has utilized the Washington State Dept. of Ecology’s 1992 Stormwater Management Manual for the Puget Sound Basin (1992 Manual) since Mercer Island’s Storm and Surface Water Utility was formed in 1995. The 1992 Manual requires stormwater detention when at least 5,000 square feet (sf) of impervious surface is created or added by a project and the downstream drainage system includes a stream. On Mercer Island, this threshold has been 500 sf since the 1990s in light of Mercer Island’s many watercourses in ravines and the need to protect these erosion susceptible ravines and water quality in Lake Washington.

MICC 15.09 (Stormwater Management Program) was amended by Ordinance 09C-09 to comply with the City’s National Pollutant Discharge Elimination System (NPDES) Phase II Western Washington Municipal Stormwater Permit, which requires local governments to adopt specific stormwater regulations. NPDES is a federal program that regulates the discharge of stormwater to waters of the State. The Permit requires municipalities who regulate to thresholds lower than that required by NPDES to continue regulating at that level and not “backslide”. Mercer Island is such a municipality. This threshold relates to when stormwater regulations are required, specifically for stormwater detention on development projects, both smaller scale (additions/remodels) and new homes. The legislative intent of Ordinance 09C-09 was to comply with NPDES including the no “backsliding” requirement. However, MICC 15.09.050 (Standards for Development and Redevelopment) as amended does not clearly
maintain the former threshold for stormwater detention for new homes and “teardowns”. The previous regulations required stormwater detention when a new development or redevelopment created 500 square feet of impervious area or greater. The new regulations describe the threshold as “500 square feet of net new impervious surface”. This “net new” impervious surface threshold is confusing to understand for new homes and teardowns. It was intended to mean “new” but some interpret it to mean “net increase”. To clearly maintain the original threshold, it should have said, “create 500 square feet or greater,” not “net new”. This is consistent with the 1992 DOE Manual where it refers to “creation or addition of …” in section I-2.4 (New Development and Redevelopment – Application of Minimum Requirements).

FINDINGS
1. The City Manager or his designee, pursuant to Mercer Island City Code (MICC) 15.09.050(A)(1) is authorized to modify the requirements of the 1992 Department of Ecology Stormwater Manual. The Development Services Group Director is the duly authorized designee along with the City Engineer.

2. MICC 15.09.050(A)(1) states, “All new development and redevelopment projects disturbing less than one acre must comply with the requirements of the 1992 manual as modified by the city manager or his/her designee. Projects which result in a net increase in impervious surface of 500 square feet or more up to one acre of land disturbance must meet the requirements of the 1992 manual. The threshold for flow control in the 1992 manual shall be reduced from 5,000 square feet to 500 square feet of net new impervious surface. The flow control requirement can be waived if the project discharges directly to Lake Washington or if findings from a downstream analysis indicate that the entire downstream system is comprised of pipes/roadside ditches and the proposed project discharges will not exceed the conveyance capacity of the downstream system.”

3. MICC 15.11.010(A) states, “Develop” shall mean the erection or construction of any building, structure, parking lot or other impervious surface that results in an increase in storm water runoff. “Develop” shall also mean the erection or construction of any addition to existing buildings where the addition increases impervious area by 500 square feet or more and on sites where an existing building is replaced with a new building.”

4. MICC 15.11.010(B) states, “Development” shall mean, where a proposed new development or redevelopment creates 500 square feet of impervious area or greater, the developer shall provide storm water detention on-site to mitigate the impact of the development or when approved by the city engineer, pay a fee in lieu of detention.”

5. The Stormwater Flow Control/Detention Design Requirements handout prepared January 2010 provides guidance and clarification regarding when stormwater detention is required for development projects. This information has been made available to the public at the permit counter and on the City’s website. It states the following:

**General Requirements**

This guidance document applies only to projects or common developments disturbing less than one (1) acre of land when flow control is required. The applicable design manual is the 1992 Stormwater Management Manual for the Puget Sound Basin as prepared by the Washington State Department of Ecology (1992 Manual). Applicants have the option of using the 2005 version of the manual.
Is stormwater detention (flow control) required for my project?

Yes, if:
- The **new construction/redevelopment** project creates more than 500 square feet of impervious surface or
- The **addition/alteration** creates more than a 500 square foot **net increase** in impervious surface.

No, if:
- **Construction results in less than 500 square feet of impervious surface area.**
  The stormwater runoff from the site must be managed properly either through use of low impact development (LID) techniques appropriate for the site, infiltration, collection and conveyance to an existing drainage system, or other acceptable manner.
- **The project discharges runoff directly to Lake Washington.**
- **The applicant’s downstream analysis performed by a civil engineer confirms that the entire downstream system is comprised of pipes/roadside ditches and the proposed project discharges will not exceed the conveyance capacity of the downstream system.**

6. The City Council was presented information regarding NPDES Permit compliance and considered changes to MICC 15.09 through agenda bills 4444, 4445, 4447, and 4477, ultimately adopting Ordinance 09C-09 on November 2, 2009.
7. The 1992 Manual requires stormwater detention when at least 5,000 square feet of impervious surface is created or added by a project. Mercer Island reduced this to 500 square feet.
8. Mercer Island has used the 1992 Manual since 1995 when the Stormwater Utility was established by the City Council.
9. The stormwater detention threshold of creating 500 square feet of impervious surface for new houses was established informally in 1995 and formalized in 2000 when the Fee in Lieu of Stormwater Detention was adopted into MICC 15.11.

CONCLUSIONS
2. The legislative intent of agenda bills 4444, 4445, 4447, and 4477 was to update MICC 15.09 to comply with the NPDES Permit requirements including “no backsliding” on Mercer Island’s previous regulatory stormwater thresholds.
3. The Development Services Group Director and the City Engineer may modify the requirements of the 1992 Department of Ecology Stormwater Manual to clarify when stormwater detention is required.
4. The definitions of “develop” and “development” in MICC 15.11 support an interpretation that the 500 square foot threshold is related to “creation of” rather than “net new” impervious surface.
5. The City has a longstanding practice of requiring stormwater detention based on the creation of or addition of 500 square feet of impervious surface.
6. The stormwater detention handout prepared in January 2010 available on the City’s website and at the permit counter expressed the requirements in a manner consistent with the previous regulations and the legislative intent of the updated regulations in MICC 15.09.050.
INTERPRETATION
Stormwater detention is required in MICC 15.09.050(A)(1) if:

- The new construction/redevelopment project creates more than 500 square feet of impervious surface or
- The addition/alteration creates more than a 500 square foot net increase in impervious surface.