# City of Olympia Low Impact Development Examples of Development Code Changes

The proposals described below provide further detail about the staff recommended options in Elements #6, 7, 8, 9, 10, 16, 18, 21 and 22.

## Group 3: Reducing impervious surfaces - streets

Element 6 - Cul-De-Sacs

Staff recommends increasing the size of the landscaped traffic island within the center of new cul-de-sacs, to reduce impervious surface. The current standard design for cul-de-sacs calls for a traffic island in the center with a diameter of 35 feet. Staff performed field tests and concluded that the size of the traffic island could be increased to a diameter of 44 feet, and still accommodate large City service vehicles.

#### Element 9 – Sidewalks

Staff recommends making a series of revisions to the Engineering Design and Development Standards (EDDS) to prioritize use of permeable concrete sidewalks, where possible. Permeable sidewalks would be built to current City standards. Staff recommends adding a new appendix to the EDDS that describes the permeable concrete sidewalk materials to be used on Public Works and private development projects. Staff is updating standard drawings to show that driveway entrances and pedestrian curb access ramps would continue to be constructed of standard, impermeable concrete. Where permeable sidewalks cannot be built, requests to build standard concrete sidewalks would be reviewed by the City Engineer.

Permeable materials could also be used for trails, which are often built through sensitive areas, but only with approval of the City Engineer. Construction of permeable concrete walkways can disturb natural areas, and permeable surfaces tend to become clogged in areas with heavy vegetation cover.

### Element 10 – Driveways

Staff recommends revising the EDDS, to reduce standard residential entrance driveway widths from 24 feet to 20 feet.

#### **Group 5: Procedures, processes, codes**

# Element 16 – Definitions

Where possible, staff is aligning LID-related definitions in the EDDS and Olympia Municipal Code (OMC) to match Drainage Design and Erosion Control Manual (DDECM) definitions. For the most part, this is possible. There are a few areas of the OMC that cannot be exactly matched to the DDECM.

# City of Olympia Low Impact Development Examples of Development Code Changes

#### Element 18 – LID Site Assessment

Assessments of sites to determine the feasibility and possible locations for LID techniques will be required prior to formal land use review submittal. An LID approach to development requires understanding soils, groundwater, vegetation and terrain early in the site design process. If these investigations are not done early on, then project redesign is often needed, potentially jeopardizing a land use decision.

# Element 21 – Variances, Deviations and Exceptions

Staff recommends designating permeable trails as a deviation from the City Engineering Design and Development Standards. Deviations are reviewed and approved by the City Engineer.

Otherwise, staff is proposing to designate LID development techniques as allowed approaches and methods in the DDECM, EDDS and OMC. The intent is that a variance, deviation or exception would not be needed for an LID technique to be used by a project.

### Element 22 – Green Roofs, Rainwater Reuse, LID Foundations

To reduce peak flows and improve on-site infiltration, Ecology's guidance encourages consideration of alternative building techniques such as "green roofs" (i.e., stormwater detention on building roofs); rainwater collection and reuse (e.g., cisterns and rainbarrels), low-impact foundations (e.g., pin piles instead of footings), and other innovative approaches. Although rarely used, all of these techniques are now allowed by the City's construction codes. Instead of mandating such techniques, which would generally require an exception to State uniform construction codes, the City staff proposes a focus on incentives to encourage increased use of such techniques. Among the measures being considered are:

- Reducing stormwater utility rates for projects that use these types of innovative techniques
- Enhanced public education regarding these options
- Allowing more on-site impervious surface when commercial buildings incorporate green roofs