Low Impact Development (LID)

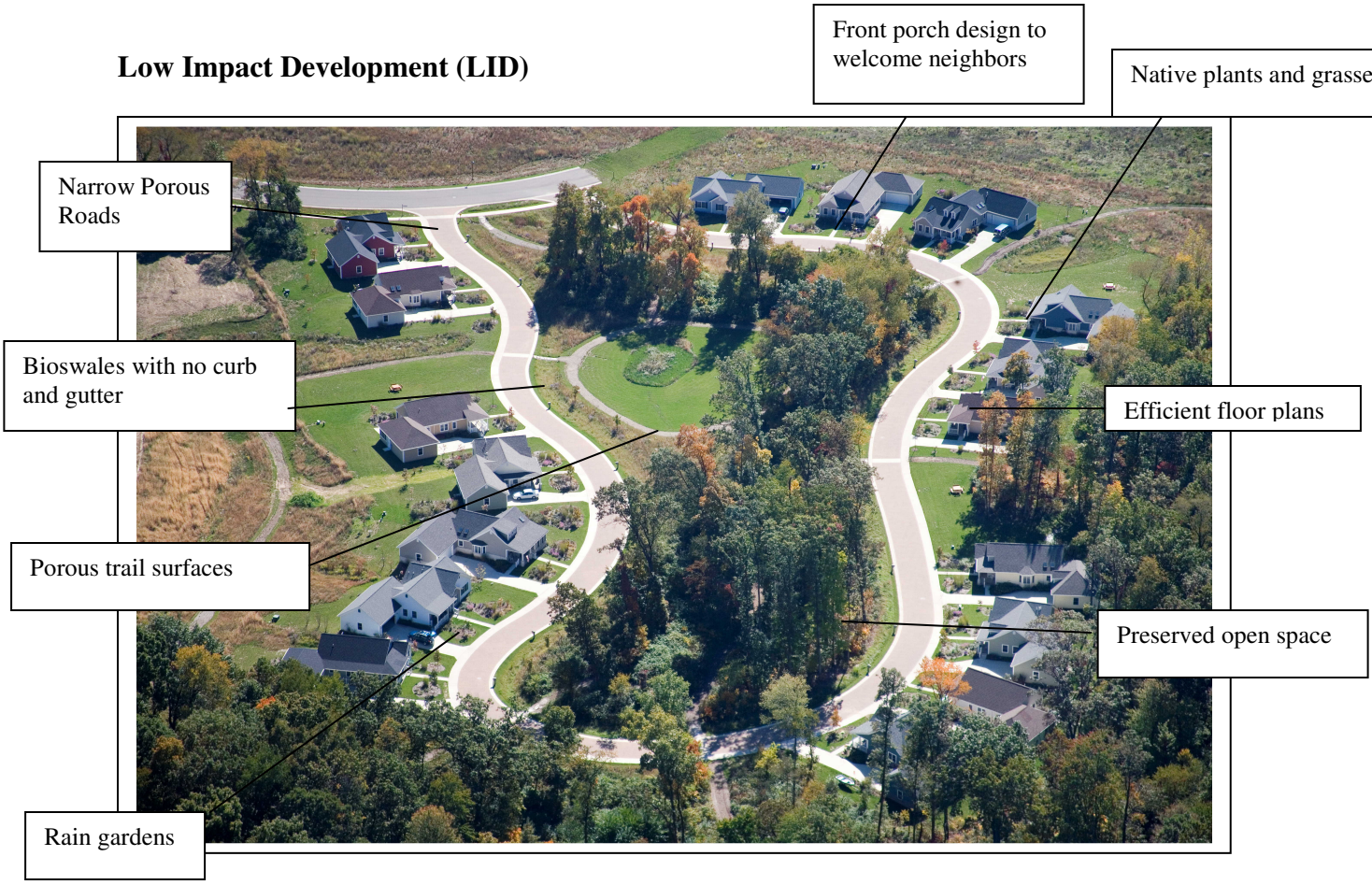

Photo courtesy of the Pokagon Band of Potawatomi Indians and Marge Beaver, Photography Plus

LID is an ecologically friendly approach to site development and stormwater management that aims to mitigate development impacts to land, water and air. The approach emphasizes the integration of site design and planning techniques that conserve natural systems and hydrologic functions on a site. The practice has been successfully integrated into many municipal development codes and stormwater management ordinances throughout the U.S.

Specifically LID aims to:

- Decentralize and micromanage stormwater at its source
- Preserve open space and minimize land disturbance
- Protect natural systems and processes (drainage ways, vegetation, soils, wetlands)
- Reexamine the use and sizing of traditional infrastructure (parking lots, streets, curbs, gutters, sidewalks) and customize site design
- Incorporate natural site elements (wetlands, stream corridors, mature forests) as design elements

Low Impact Development **VS.** **Conventional Development**

Conventional development techniques often clear all trees and valuable topsoil and re-grade it so that all water ends up in one large detention basin. Resulting problems include loss of groundwater recharge, increased water temperature in local streams, decreased water quality and higher runoff volumes. The LID approach protects the natural ability of the site to capture precipitation, keep it clean and allow it to recharge the local water table.

Where should LID be used?

LID can be applied to new development, urban retrofits, and redevelopment/revitalization projects at many scales. At a small scale, LID techniques can be used to better handle rainfall for a single family lot through rain barrels and rain gardens. At a larger scale, proper site design in combination with many landscaping and infiltration techniques distributed throughout a subdivision or development will cumulatively improve water quality and reduce runoff.

keep it BLUE

only rain in the drain

Internet Resources on LID:

Low Impact Development Center
www.lowimpactdevelopment.org

Nonpoint Education for Municipal Officials
http://nemonet.uconn.edu/

Planning with Power
www.planningwithpower.org

USEPA Low Impact Development Page
www.epa.gov/owow/nps/lid

www.urbanadvantage.com/images_HTM.htm

For more information visit:
Southwest Michigan Planning Commission
www.swmpc.org/water.asp

Sources:
http://www.uvm.edu/~ran/ran/toolbox/images/bioretention01.gif

http://www.springsgov.com/units/planning/CurrentProj/TND/TND streetscape.jpg

http://www.swmpc.org/lid.asp