Storm Water Management-Low Impact Development

The term *low impact development* (LID) refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of storm water in order to protect water quality and associated aquatic habitat. LID is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product.

Examples of LID methods: bio-retention facilities, rain gardens, vegetated rooftops, rain barrels and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed.

More information about why LID is important to our community, the benefits associated, and ideas please see: https://www.epa.gov/nps/urban-runoff-low-impact-development

The city's preferred list of Low Impact Development BMP methods can be found at: http://www.nslcity.org/DocumentCenter/View/853

Storm Water Management (to be completed by design engineer)	YES	NO
Project Name:		
1. Is this project located within a drinking water source protection area?	☐	☐
2. Development of a new commercial retail or office project ☐ Retail: sq. ft._____ ☐ Restaurant: sq. ft._____ ☐ Office: sq. ft._____ ☐ Other (specify)_____sq. ft. _____	☐	☐
3. Development of a new industrial project Description: _____sq. ft._____	☐	☐
4. Development of a new residential project Type: _____No. Units_____	☐	☐
5. Redevelopment of an existing site? ☐ Removal of existing uses/structures (specify):_____ ☐ Remodel ☐ Addition	☐	☐
6. Site Modification ☐ Repaving sq. ft._____ ☐ Additional paving/impervious surfaces sq. ft._____ ☐ Additional landscaping/pervious surfaces sq. ft._____	☐	☐
7. Existing Site Conditions ☐ Impervious Area (buildings/sidewalks/concrete/asphalt) sq. ft._____ ☐ Pervious Area (landscaping) sq. ft._____		

Drainage Patterns/Connections Include a detailed description of existing and proposed drainage patterns. Describe the areas and sub-areas (to include square footage), treatment locations, direction of flow through each area, discharge point(s), ultimate termination point, etc.	Existing: Proposed:

Storm Water Management (to be completed by design engineer)-Continued	
NARRATIVE PROJECT DESCRIPTION: Include a detailed description of project areas, type of facilities, activities conducted onsite, materials and products received and stored on site, SIC Code (if applicable), land uses, land cover, design elements, drainage management areas (DMAs), etc.	
Offsite Runon: Describe any offsite runon anticipated and how the runon will be either accounted for in LID BMP sizing or directed around the site.	
UTILITY AND INFRASTRUCTURE INFORMATION: Include a description of the existing and proposed onsite utility and infrastructure. Evaluate the potential impacts of storm water infiltration on subsurface utilities, establish necessary setbacks, and if the utilities need to be relocated. Retention-based storm water quality control measures should not be located near utility lines where an increased volume of water could damage utilities.	

DOES THE PROPOSED PROJECT FALL INTO ONE OF THE FOLLOWING CATEGORIES? CHECK YES/NO.	YES	NO
1. *Project is a redevelopment that decreases the effective impervious area compared to the pre-project conditions.*	☐	☐
Describe:		
2. *Project is a redevelopment that increases the infiltration capacity of pervious areas compared to the pre-project conditions.*	☐	☐
Describe:		

Storm Water Management (to be completed by design engineer)-Continued	
SITE DESIGN Describe site design and drainage plan including; site design practices utilized and how BMPs are incorporated using the appropriate hierarchy. Site must be designed to retain on site a 90th Percentile 24-hour storm (0.60 inch)	
Please select the Low Impact Development BMP methods utilized on site from the preferred list.	Preferred List: ☐ Bio-Retention Basins ☐ Bio-Swales ☐ Infiltration Planters/Tree Boxes ☐ Curb Cuts & Infiltration ☐ Permeable Pavement ☐ Rainwater Harvest (cistern/basin/underground detention) ☐ Other: _____
Attachments	
☐ Description on selection and sizing of Control Measures. ☐ Calculations to demonstrate how the volume, flowrate, and duration conditions can be met with Control Measures BMPs. ☐ Pertinent geotechnical report, soils report, percolation report, soils letters, etc. Documents must detail the results of soil investigation, infiltration rate, groundwater depths, soil characterization, etc. Soil borings should be conducted in area of proposed BMPs. ☐ Storm Water Management Agreement, Signed and Notarized	
Design Engineer Certification	
Professional Engineering Stamp	Name:_____ Mailing address:_____ Phone:_____ Email:_____
	The undersigned acknowledges by signature that these documents meet or exceed the design standards of the City of North Salt Lake and that they were prepared under my supervision. _____ Signature