

LIGHT IMPRINT  
STORMWATER MATRIX  
SMARTCODE MODULE

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*All the water that will ever be is, right now.*

National Geographic, 1993

*These annotations are advisory only. The SmartCode itself appears only on the right side of each spread.*

### **LIGHT IMPRINT STORM DRAINAGE MATRIX**

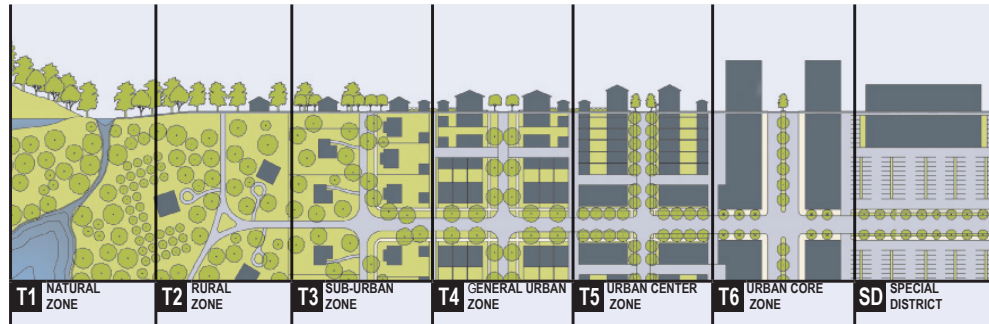
This table summarizes a comprehensive strategy that can supplement the basic Natural Drainage Standards in this volume. The Light Imprint initiative coordinates over sixty tools and resources for environmental, infrastructural, and cost efficiency concerns. Because it is transect-based, all or part of Light Imprint may be adopted with a SmartCode, or provided as an auxiliary set of guidelines for developers. Definitions will be necessary for some terms on this table. Full descriptions of all the tools, along with a comprehensive introduction and set of case studies, are located in the complete Light Imprint Handbook. Information is available at [www.lightimprint.org](http://www.lightimprint.org).

# SMARTCODE MODULE

# LIGHT IMPRINT STORM DRAINAGE MATRIX

Municipality

Note: All requirements in this Table are subject to calibration for local context.



	T1	T2	T3	T4	T5	T6	SD	Maint.	Cost
<b>a. PAVING</b>									
Compacted Earth	■	■	■	■	■	■	■	L	\$
Wood Planks	■	■	■	■	■	■	■	H	\$\$\$
Plastic Mesh/Geomat		■	■	■	■	■	■	L	\$
Crushed Stone/Shell		■	■	■	■	■	■	M	\$
Cast/Pressed Concrete Paver Block		■	■	■	■	■	■	L	\$\$
Grassed Cellular Plastic		■	■	■	■	■	■	M	\$\$\$
Grassed Cellular Concrete		■	■	■	■	■	■	M	\$\$\$
Pervious Asphalt		■	■	■	■	■	■	L	\$\$
Asphalt		■	■	■	■	■	■	L	\$
Concrete		■	■	■	■	■	■	L	\$\$
Pervious Concrete		■	■	■	■	■	■	L	\$\$
Stamped Asphalt		■	■	■	■	■	■	L	\$\$\$
Stamped Concrete		■	■	■	■	■	■	L	\$\$\$
Pea Gravel		■	■	■	■	■	■	M	\$
Stone/Masonry Paving Blocks		■	■	■	■	■	■	L	\$\$\$
Wood Paving Blocks on Concrete		■	■	■	■	■	■	L	\$\$\$
Asphalt Paving Blocks		■	■	■	■	■	■	M	\$\$
<b>b. CHANNELING</b>									
Natural Creek	■	■	■	■	■	■	■	L	\$
Terracing	■	■	■	■	■	■	■	M	\$\$
Vegetative Swale	■	■	■	■	■	■	■	L	\$
Drainage Ditch	■	■	■	■	■	■	■	L	\$
Stone/Rip Rap Channels		■	■	■	■	■	■	L	\$\$
Vegetative/Stone Swale		■	■	■	■	■	■	L	\$
Grassed Cellular Plastic		■	■	■	■	■	■	M	\$\$\$
Grassed Cellular Concrete		■	■	■	■	■	■	M	\$\$\$
Soakaway Trench		■	■	■	■	■	■	M	\$\$\$
Slope Avenue		■	■	■	■	■	■	M	\$\$\$
French Drain		■	■	■	■	■	■	M	\$
Shallow Channel Footpath/Rainwater Conveyor		■	■	■	■	■	■	L	\$
Concrete Pipe		■	■	■	■	■	■	L	\$\$
Gutter		■	■	■	■	■	■	L	\$\$
Planting Strip Trench		■	■	■	■	■	■	L	\$
Masonry Trough		■	■	■	■	■	■	L	\$\$
Canal		■	■	■	■	■	■	H	\$\$\$
Sculpted Watercourse, i.e. cascades		■	■	■	■	■	■	M	\$\$\$
Concrete Trough		■	■	■	■	■	■	L	\$\$
Archimedean Screw		■	■	■	■	■	■	L	\$\$\$
<b>c. STORAGE</b>									
Irrigation Pond		■	■	■	■	■	■	L	\$
Retention Basin with Sloping Bank		■	■	■	■	■	■	L	\$\$
Retention Basin with Fence		■	■	■	■	■	■	L	\$\$
Retention Hollow		■	■	■	■	■	■	M	\$
Detention Pond		■	■	■	■	■	■	L	\$
Vegetative Purification Bed		■	■	■	■	■	■	M	\$\$
Flowing Park		■	■	■	■	■	■	M	\$\$
Retention Pond		■	■	■	■	■	■	M	\$\$
Landscaped Tree Well		■	■	■	■	■	■	L	\$\$
Pool/Fountain		■	■	■	■	■	■	H	\$\$\$
Underground Vault/Pipe/Cistern-Corrugated Metal		■	■	■	■	■	■	L	\$\$
Underground Vault/Pipe/Cistern-Pre-cast Concrete		■	■	■	■	■	■	L	\$\$
Underground Vault/Pipe/Cistern-Cast in place Concrete		■	■	■	■	■	■	L	\$\$
Grated Tree Well		■	■	■	■	■	■	L	\$\$
Underground Vault/Pipe/Cistern-Plastic		■	■	■	■	■	■	L	\$\$\$
Paved Basin		■	■	■	■	■	■	M	\$\$\$
<b>d. FILTRATION</b>									
Wetland/Swamp	■	■	■	■	■	■	■	L	\$
Filtration Ponds	■	■	■	■	■	■	■	L	\$\$
Shallow Marsh	■	■	■	■	■	■	■	M	\$
Surface Landscape	■	■	■	■	■	■	■	L	\$
Natural Vegetation	■	■	■	■	■	■	■	L	\$
Constructed Wetland		■	■	■	■	■	■	M	\$
Bio-Retention Swale		■	■	■	■	■	■	M	\$\$
Purification Biotope		■	■	■	■	■	■	H	\$\$
Green Finger		■	■	■	■	■	■	L	\$\$\$
Roof Garden		■	■	■	■	■	■	M	\$\$\$
Rain Garden		■	■	■	■	■	■	M	\$\$
Detention Pond		■	■	■	■	■	■	L	\$
Grassed Cellular Plastic		■	■	■	■	■	■	M	\$\$\$
Grassed Cellular Concrete		■	■	■	■	■	■	M	\$\$\$
Waterscapes		■	■	■	■	■	■	H	\$\$\$

\*NOTE - Maintenance is denoted as L=Low, M=Medium and H=High.