8.1 A Family of Elements

Installation of a family of streetscape and park elements will enhance continuity and amplify the intrinsic heritage character of downtown Kingston. The materials and character of these elements should reflect the use of natural stone, plus cast and wrought iron, which are the dominant building materials in the downtown area. A series of common elements is proposed, which will serve to articulate special places such as gateways and nodes. These elements will also provide for tree and annual planting, control pedestrian and vehicular movements, signage, pedestrian lighting and streetlights.

The line between Elements and Signage is intentionally blurred in order to integrate place making and function. For example, the Gateway Marker Columns are intended to be large and distinctive as landmark objects, with minimal sign identification, yet support banners for special events. Street and Park signs are also intended to be mounted on intersection columns and the columns of the park gateways, again to integrate these types of signs into the family of elements.

8.2 Appropriate Materials

The clues for appropriate materials are taken from a review of contextual building materials and from an analysis of durability. Given the harsh climate and realities of winter maintenance, the materials must not only provide visual continuity, but stand-up to the inevitable scraping and glancing of snow plows, knocks from errant vehicles and inevitable posters and graffiti. Additionally, the location and construction detailing should anticipate winter maintenance for roads and walkways, as well as facilitate good drainage and cleaning. Where possible, all streetscape elements should be located in the boulevard, well clear of sidewalk and roadway plowing.

The use of granite for the bases of lamps and columns is recommended, with a textured (flame etched) surface. This material is harder than concrete, and when chipping does occur, it is not readily apparent. It is also recommended for road curbs for the same reason of durability, making it a good life-cycle purchase. Granite curbs typically last four to five times longer than concrete curbs, although they must be reset with road reconstruction.

Granite pavers should be set on a concrete slab to eliminate settlement and cracking. These pavers are recommended for use only at key intersections for reasons of economy. The other pavements are a heavy duty grade of asphalt for roadways, concrete for sidewalks and crosswalks, and precast concrete pavers for boulevards and the parks. Once again, the construction detailing is critical to minimize differential settlement where two materials meet. It is at these awkward joints that differential settlement occurs, creating locations where snow plows damage pavement edges, puddles develop forming ice patches and debris becomes trapped.

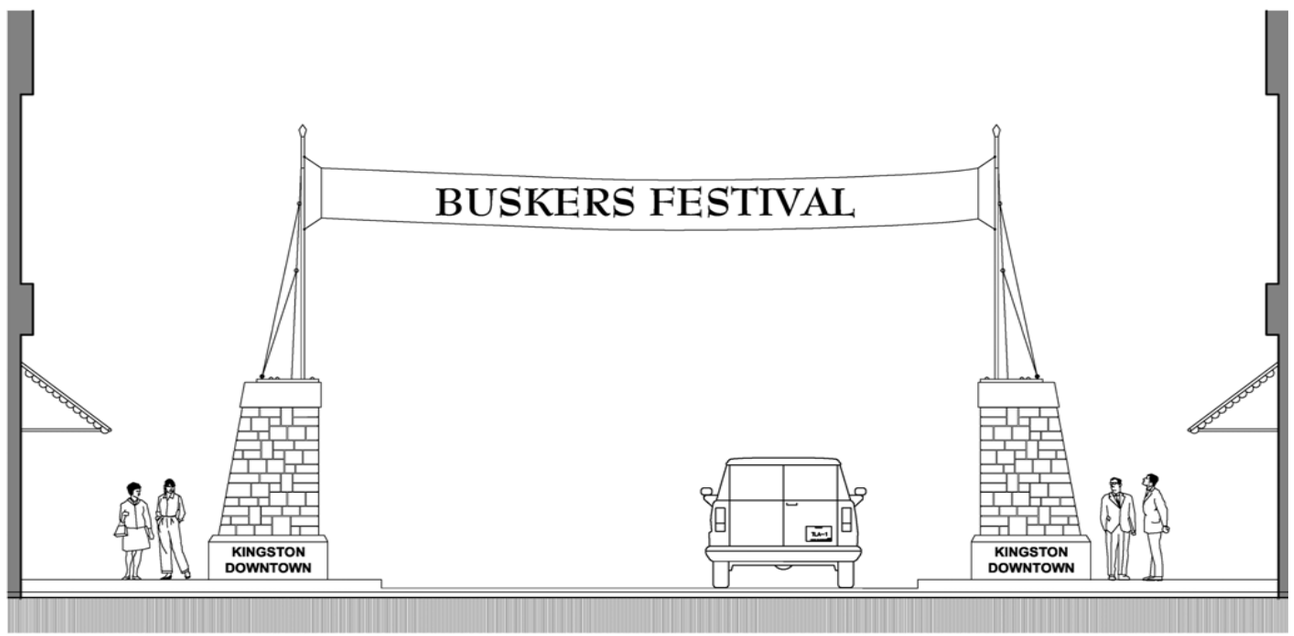
Concrete sidewalks should be specified at a high density 30 -35 Mpa with ample air entrainment and a high quality trowel finish. The jointing pattern should be well resolved and detailed on construction plans, using a rhythm of caulked construction joints and saw cut control joints. The waterfront esplanade might include inset stone or pavers by way of a signature motif. While all sidewalks are candidate locations, public art elements in the pavement would be particularly appropriate along the waterfront. Precast concrete pavers for the boulevards and parks should be large modules (i.e. 300 x 300 x 100 mm) and have a range of buff to tan toned colours to create visual interest, as well as, disguise staining and paver replacements.

The column and wall elements should have granite 'socks' as a durable base below the limestone coursing and the stone should have a rough surface to discourage posters. Copings and capitals should be solid and have a sufficient overhang and a drip edge to reduce staining from acid rain. The fence elements should be pre-manufactured and pre-finished to minimize rusting and painting. Lamps should be pre-finished steel or aluminum. Princess Street lamp posts and banner poles on intersection columns should be a taupe colour with red or blue accent colours. Lamps in the heritage district should be painted black to look like cast iron.

8.3 The Elements

8.3.1 Gateway Elements

The gateway columns should have a granite base meeting grade and be constructed of regular cut limestone. The upper banner masts should be stainless steel.



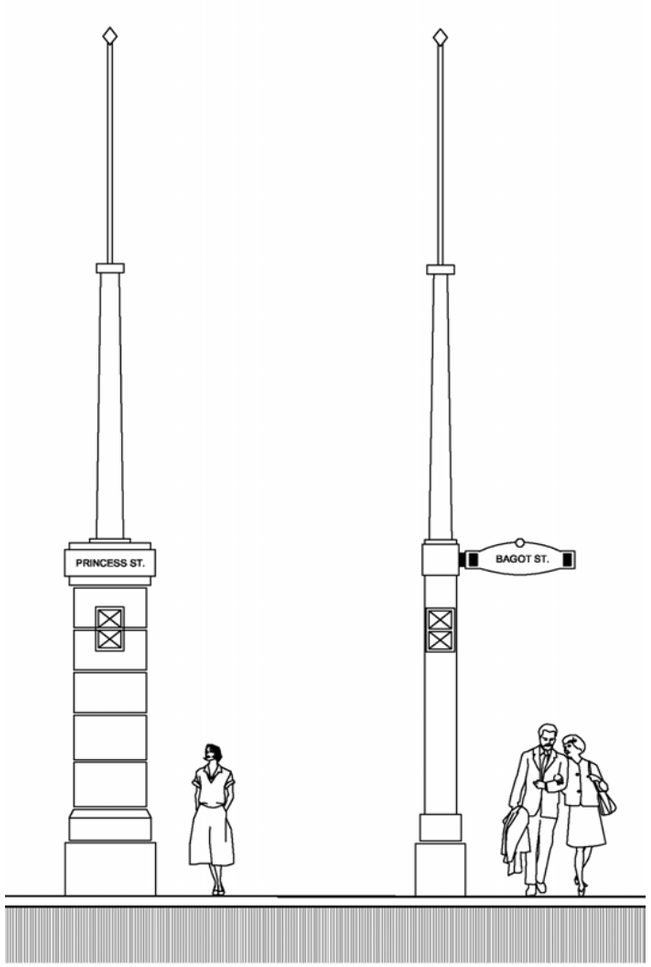
Princess Street Gateway

8.3.2 Marker and Intersection Columns

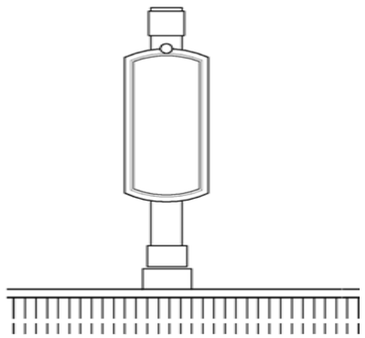
Marker and intersection columns should both have granite bases with cored limestone blocks above the marker columns. Where appropriate, crosswalk signals, traffic signals and street names should be incorporated onto the columns or upper banner masts. Banner masts and intersection columns should be painted a taupe colour to match the Princess Street pedestrian light poles.

8.3.3 Communications Columns

The communication column is intended to display commercial, civic and notice board information. A four-sided display box should be mounted on a pole to match the intersection columns. Two sides of the display box could have hinged glass windows and lighting, while the remaining sides could be plywood panels acting as notice boards. The colours should match the intersection columns and pedestrian lights.



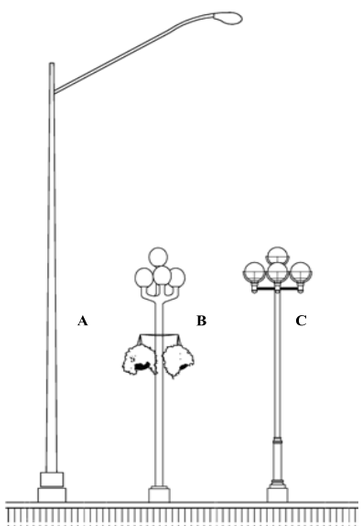
Marker Column/Street Sign Along Princess Street



Communications Column (notice board)

8.3.4 Princess Street - Street and Pedestrian Lights

The Princess Street light fixtures should be set on a granite 'washer' to protect the bases of the poles from snow plows. Pole types should be painted a taupe colour, with a highlight ring of colour on the pedestrian light. The feasibility of refurbishing the existing fixtures should be reviewed in detail, as this type of globe and soft diffused light works very well in conjunction with the taller streetlights. Should it make financial sense to purchase new pedestrian lights, a more contemporary five globe 'pearl in a basket' fixture is recommended. Lighting characteristics and performance are described in Appendix 'C'.



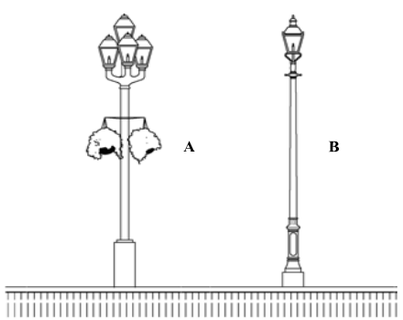
(A) Princess Street Light
(B) Refurbished Princess Street Light
(C) Pedestrian Princess Street Light (new)

8.3.5 Historic District Streetlight

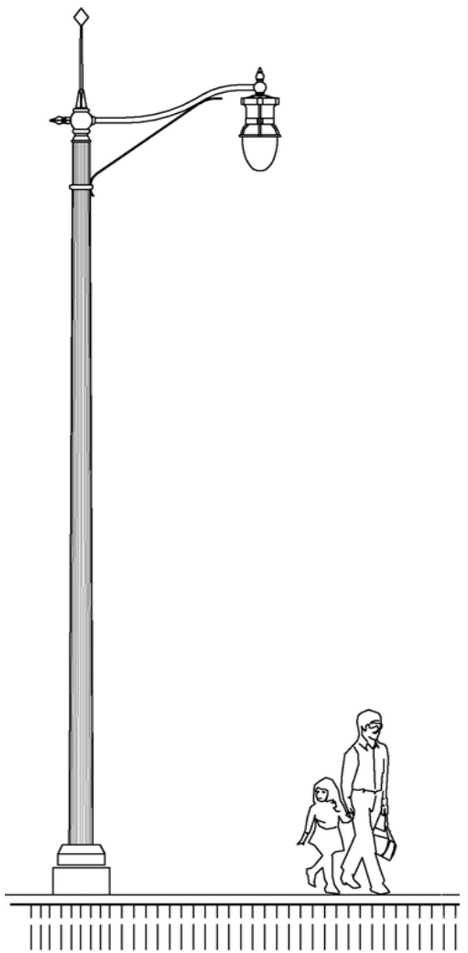
Streetlights in the Historic District are intended to be stainless steel 'acorn' type luminaries on steel poles. These poles should be painted black and set on a granite washer.

8.3.6 Historic District Gas Lamps

Working gas lamps are recommended for Confederation Park, Boucher Park, Ontario Street at Confederation Park, Clarence Street and the intersections within the Historic District. These lamp posts should be painted black and set on a granite base.



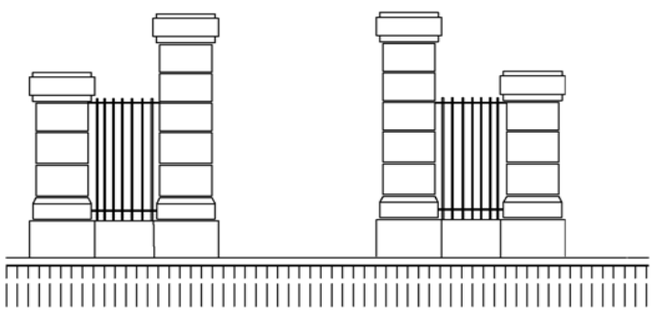
(A) Pedestrian Heritage Gas Light
(B) Pedestrian Heritage Gas Light - Single



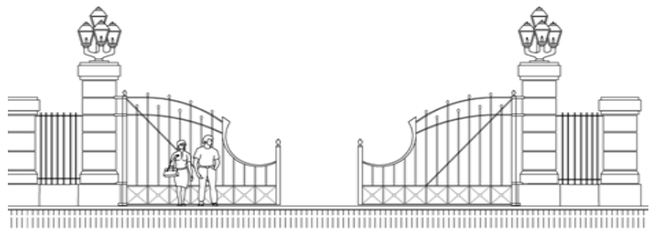
Heritage Streetlight - 'acorn' fixture

8.3.7 Park Gateways

The gateways to Confederation and Boucher Parks should be articulated with masonry columns, linked with a steel picket fence. Cast bronze park identity signs, with raised letters and painted background, can be mounted on these columns. Special columns with multiple head gas lamps and working steel gates are recommended for Ontario Street, at the corners of Clarence and Brock Street, to provide street closure for special events. These gates must be large enough to be seen from at least one block away, giving drivers enough warning and time to detour when the street is closed. The design of the Ontario Street gates should reflect the heritage character of the columns and gas lights of the parks and Historic District. They should be durable and have a high quality black paint finish. When closed, the gates should have a gap that allows pedestrian movement, but restricts vehicles. They should be lockable in the open position.



Park Entrance Gateway

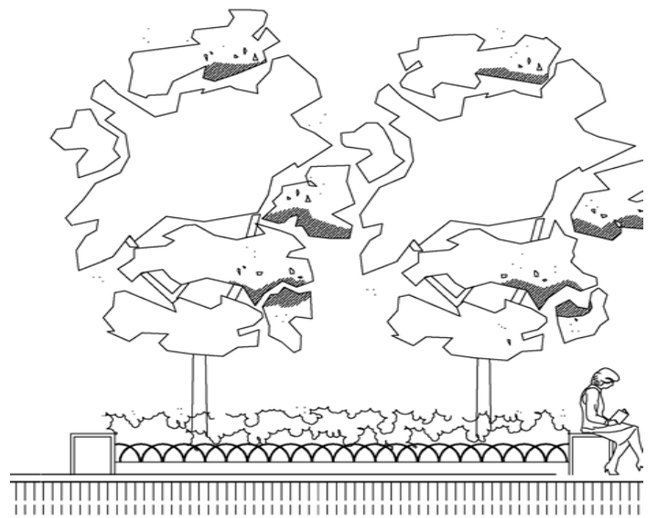


Ontario Street vehicular gates at Confederation Park.

8.3.8 Tree Planters

The street tree planters are recommended to be at grade with open soil, rather than tree grates or pavers over the roots. These planting beds are to be defined with solid granite blocks at each end to serve as a sitting surface. Curb height sides will keep salt laden melt water from running into the planting soil. An ornamental iron picket or hoop barrier should be located on top of the curbed sides. This will limit people from stepping into the planter to lock bikes onto trees. Electrical bollards inside the planters would facilitate seasonal lighting and special events.

The recommendation to provide open soil for the trees is based on the intent to provide a reasonable area of uncompacted soil/air surface, allowing the tree roots to grow and support healthy trees. The open soil areas also allow easy access for watering, fertilization and monitoring. Beds can be under-planted with flowers to provide a ‘green mulch’. These plants should be perennials rather than annuals to limit disruption to the tree’s feeder roots close to the soil surface. Box-like walls below grade may be required to retain the granular road base and maximize the volume of good planting soil.



Tree Planter

8.3.9 Site Furniture

In keeping with the principle of differentiation between Princess Street, the parks, the historic district, and the waterfront, it is recommended that the site furniture reflect the character of each zone.

Princess Street

Benches, waste receptacles, bollards and bicycle racks should be of a contemporary style, constructed of pre-finished metal. The site furniture should be painted a taupe colour to match the other Princess Street elements, accentuated where possible with a complimentary accent colour.

Parks and Historic District

Site furniture within the parks and historic district should be of a heritage style, constructed with cast-iron components when possible, and painted black to match the light standards. Wood bench slats with clear, natural finish are recommended.

Waterfront Promenade

In keeping with the nautical theme, the site furniture along the waterfront should be of contemporary industrial style. This furniture should be constructed of brushed stainless steel or painted high gloss, silver grey. Galvanized metal finishes could be used for fittings or on elements where a great deal of tactile contact is not expected, such as bicycle racks, bollards or waste receptacles.

Princess Street
Bench

Princess Street
Waste Receptacle

Princess Street
Bollards

Princess Street
Bike Racks

Parks & Historic District
Waste Receptacles

Parks & Historic District
Benches

Waterfront Promenade
Bike Racks

Waterfront Promenade
Benches