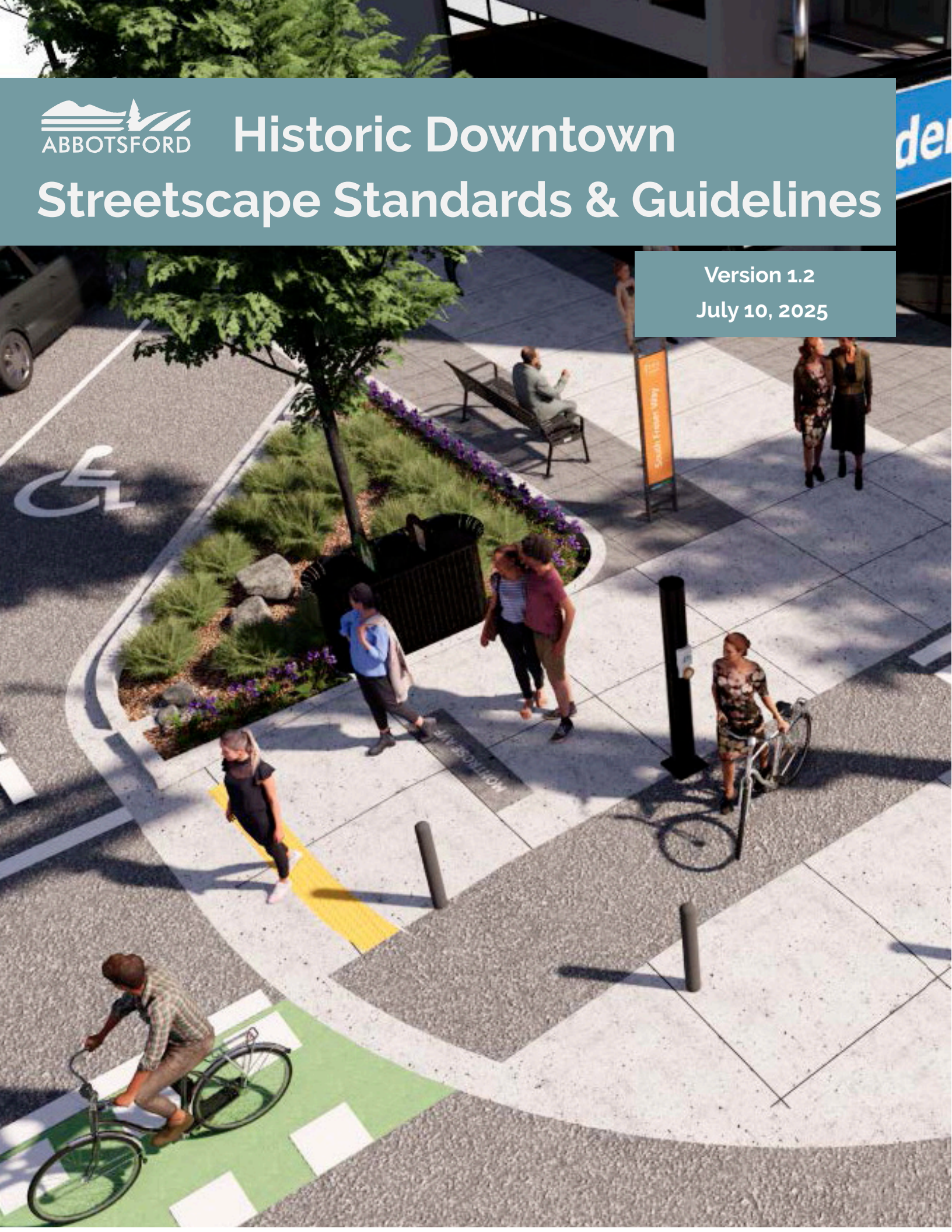


Historic Downtown Streetscape Standards & Guidelines

Version 1.2

July 10, 2025

Introduction + Purpose

The Historic Downtown Streetscape Standards and Guidelines are a continuation of the conceptual design work and proposals brought forward through Historic Downtown Neighbourhood Planning process and subsequent Historic Downtown Neighbourhood Plan (HDNP) in 2019. The Streetscape Guidelines are an additional level of design for components of "People-Centered Streets". The purpose of this document is to guide residents, businesses, developers, City Council and City staff in the renewal of these important streets within Historic Downtown.

How to Use

This document proposes a series of standards and design guidelines that can be applied to streetscape development within Historic Downtown. It is organized around important streetscape components that will be developed and refined through future capital works, and redevelopment. Section one of the document provides a description of the design rationale for each streetscape element that make up a strong public realm, and "People-Centered Streets". The document outlines the various component specifications, potential design equivalents, and any specialty installation notes. Section two provides overall deign guidelines through proposed street plans. A master matrix is included that provides a quick reference for streets within Historic Downtown that will receive the proposed components.

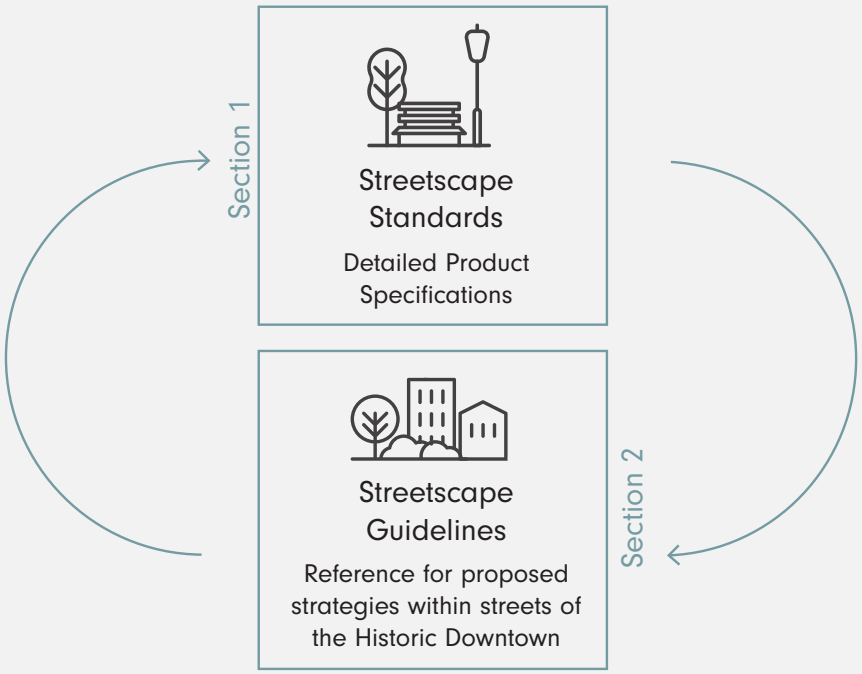


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Streetscape Standards

Streetscape Standards

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Streetscape Standards

1a. Street Furnishings

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Street Furnishings

All furnishings in Historic Downtown have a clean, elegant and classic form. The components are largely powder-coated black steel or aluminum with limited decorative elements.

The design language for each selected component relates to the history of Abbotsford as an industrious, working community with aspirations to create a community that supports places for people, and interaction of its residents. The furnishing components selected in this guideline have a sense of simple, clean 'optimism' that support a sense of shared history and future aspirations.



Victor Stanley PRSCA - 8; 4' and 6' Bench

Seating

Seating is to be provided within Historic Downtown through a combination of 1.2m (4') and 1.8m (6') traditional benches, leaning benches, individual chairs, and concrete seating cubes. This variety of seating options support opportunities for pedestrians to comfortably rest, and interact on the street.

The proposed 4' and 6' benches and chairs will be supplied by Victor Stanley. These products utilize some recycled solid steel components which provides a high level of durability, easy maintenance, and sustainable design. The design language for each of these components consist of simple steel straps in a welded frame - painted a uniform, high gloss black.



Victor Stanley RB28 Chair

Model: PRSCA - 8 and RB28 for chairs
Manufacturer: Victor Stanley
Size: 4' and 6' benches, 23" for chairs
Mounting: Surface mount with concrete base
Detailed Cut Sheet: Page 74-76

Seating Continued

Another unique seating/resting option for Historic Downtown are leaning benches be supplied by Wishbone Site Furnishings. These benches utilize recycled aluminum, and are manufactured within the Fraser Valley. They have a timeless design, that mimics the black powder-coated strap design of the benches and chairs.

These leaning benches are very 'space sensitive' and will help to de-clutter the Historic Downtown by providing viable resting points, without taking up a large footprint.

Model: PLAL-5
Manufacturer: Wishbone
Detailed Cut Sheet: Page 78



Wishbone Leaning Bench PLAL-5

A fourth level of seating opportunity is provided through the concrete seat cube by Sanderson Concrete. This element is unique in that it can be interpreted by pedestrians as a seat, a place to rest a bag, or a meeting place. The ambiguity of this seating object gives pedestrians options for its use. The cube is a simple and clean element cast from concrete. This element is also manufactured in the Fraser Valley out of recycled content - making it a sustainable, and easily replaceable seating amenity.



Sanderson Concrete Cube Bench

Model: Dark Grey Cube Bench
Manufacturer: Sanderson Concrete
Size: 24"
Mounting: Surface mount with concrete base
Detailed Cut Sheet: Page 79

The seating options presented offer varied opportunities for rest and interaction. The seating elements are provided through trusted and dependable suppliers with a strong record of warranty support and customer service.

When used in concert with one another - the various seating options will help to address streetscape de-cluttering, and will offer significant options for pedestrian respite.

Bike Racks

Bike racks and lockers are proposed throughout Historic Downtown and will help encourage and accommodate cycling. The bike racks are constructed of a simple steel tube, with black powder coat finish to compliment other furnishings. The profile for each bike rack is small - helping to reduce streetscape clutter, and allowing adequate space for pedestrian movement. Racks will be oriented to ensure that bikes do not obstruct pedestrian flow.

The proposed bike rack is provided by Reliance Foundry and is manufactured in the Fraser Valley. This rack is a solid-state element with strong warranty and support. Replacement and additional purchases of this item are readily accommodated.

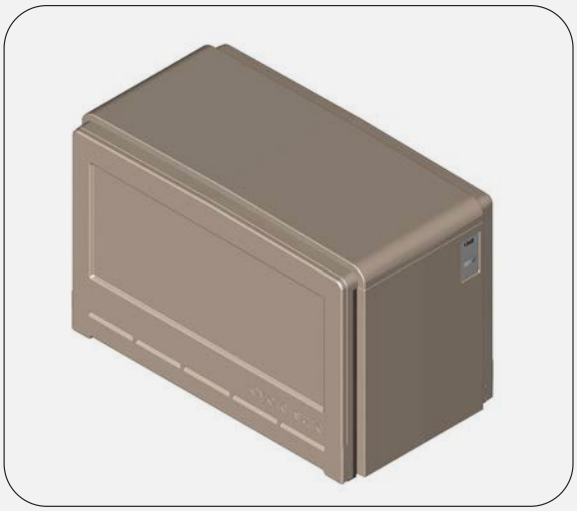


Reliance Foundry R-8238

Model: R-8238
Manufacturer: Reliance Foundry
Mounting: Surface
Detailed Cut Sheet: Page 81

The proposed bike locker is characterized by fiberglass reinforced polyester composite frames construction and a sandstone finish. The structure itself has a limited footprint, but still allows for comfortable accommodation of multiple bikes.

These elements will supplement bike parking opportunities at transit nodes and offer commuters more options for safely securing their bicycle.



Cyclesafe Propark

Model: Propark Standard Model
Manufacturer: Cyclesafe
Size: H-50", L-77 5/8", W-42"; Door Opening: H-45", W-30 ¾ "
Mounting: Surface Mount
Detailed Cut Sheet: Page 83

Waste Receptacles

The proposed waste receptacles will be supplied by Equiparc. These receptacles include 3 seperate streams to be accomodated in one unit.

The construction of this unit closely mimcs the chosen aesthetic for seating. A strap metal design with welded construction and powder coat black - will assure a consistent design language.

Model: EP 3700-RU-T-AT
Manufacturer: Equiparc
Mounting: Surface mount
Detailed Cut Sheet: Page 87



Equiparc EP 3700-RU-T-AT

Supplementary Waste Receptacle

In addition to the "3-stream" waste receptacles and recycling stations - a supplementary waste receptacle is offered. This unit matches the overall construction and aesthetic witha strap metal appearance and black surface finish.

This unit has a cover for weather protection and easy side opening for removal of waste containers by operations staff.

This element is also available locally and manufactured in the Fraser Valley. This local option assures shorter transport time, easy replacement options, and overall product sustainability.

Model: BTRR-40RT With Rain Top Cover
Manufacturer: Wishbone
Size: 26 1/2 inches
Mounting: Surface mount
Detailed Cut Sheet: Page 88



Wishbone BTRR-40RT

Streetscape Standards

Planters

Planters are proposed throughout Historic Downtown to maintain a continuation of the current desire for impromptu streetscape enhancement - a planter unit is provided for the addition of seasonal plant colour.

The planter unit is a precast concrete unit by Sanderson concrete. The units are manufactured in the Fraser Valley (Surrey) and are a durable, charcoal-tinted, and sandblasted finish. These planter styles compliment the "block seating " option - also by Sanderson concrete products.

Planter options may be considered in new development where setbacks of buildings are improved to accommodate a larger sidewalk cross section. Planters are also a welcome addition to key nodes or intersections, as long as they are planed in a position that does not obstruct pedestrian flow.

Provision for watering should be considered for any planter installation.



Model:
Manufacturer: Sanderson Concrete
Size: 24" x 48"
Detailed Cut Sheet: Page 86

Bollards

Bollards proposed throughout Historic Downtown provide vertical cues for pedestrians at higher traffic locations, or in areas where an additional 'seperator' is required to help support pedestrian safety and comfort.

The bollards chosen are a classic style in cast steel construction. A ribbed design with globe finial element are complimentary to the other furnishing families. These particular bollards are of a slim 200mm (10") construction, with black powder coat finish.



Model: R-7530 Bollard
Manufacturer: Reliance Foundry
Size: 10"
Mounting: Surface Mount
Detailed Cut Sheet: Page 85

1b. Street Trees & Planting

Street Trees

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B Hardscape 17

C Median 19

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Recommended Species 23

Rain Garden Planting 23

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Boulevard Planting 27

Street Trees

A Softscape

General Notes

Open planter pits will be linear planting channels parallel to the street with boulevard shrub planting and street tree plantings. These plantings will provide both aesthetic and environmental benefits for the Historic Downtown. The volume of available growing medium can be enhanced by installing soil cells beneath the adjacent sidewalk. The width of the open tree pit will vary for each Historic Downtown street., as well as specific onsite conditions. The minimum width will be 1500, however, the width of the tree pit may be wider than shown below.

Typical Section: A

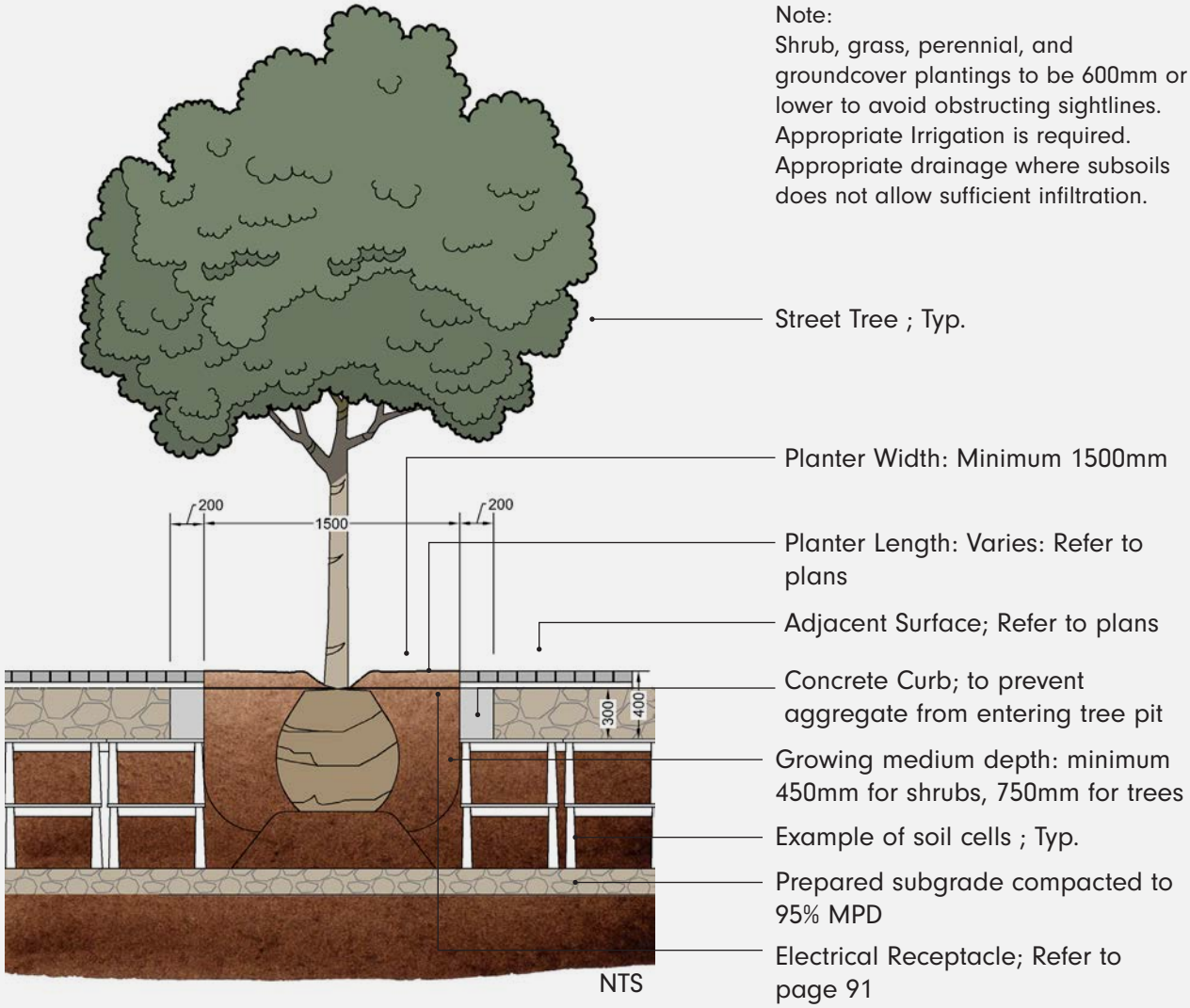


Figure 1. Typical Section of Softscape Planting (Strategy A)
** Typical section to provide illustrative intent and should be used in conjunction with City of Abbotsford development bylaw. Development bylaw will supersede where specifications differ.*

A Softscape

Plan View

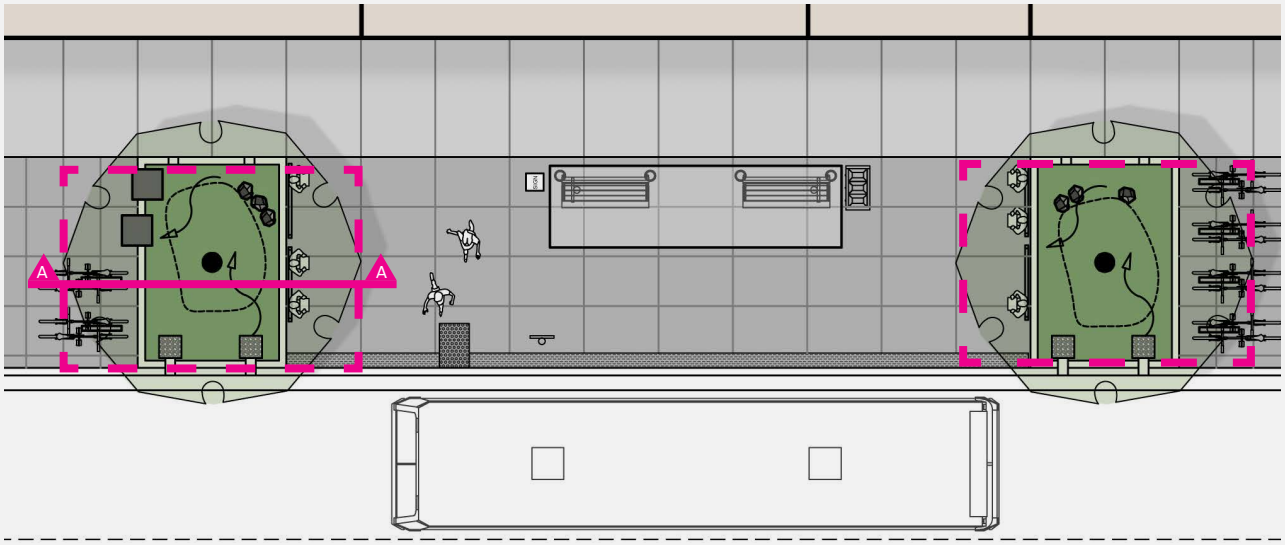


Figure 2. Example of Street trees in planter pit on Montrose (Transit)

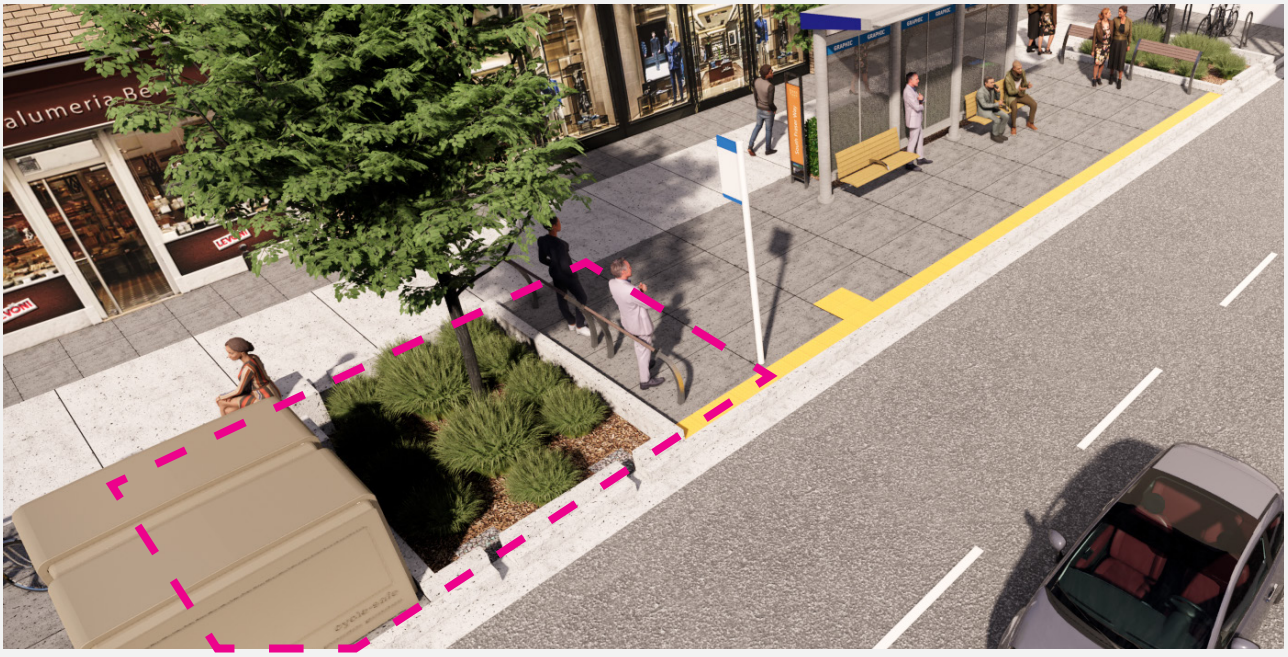


Figure 3. Rendering of Street trees in planter pit on Montrose (Transit)

B Hardscape

General Notes

Tree grates are recommended to protect tree roots, ensure that street trees receive adeqate air and water access, and provide a walkable surface in areas of high pedestrian actvity. Specific tree grates and guards are recommended for the Historic Downtown area, refer to the Streetscape Standards below. The volume of available growing medium can be enhanced by installing soil cells beneath the adjacent sidewalk.

Typical Section: B

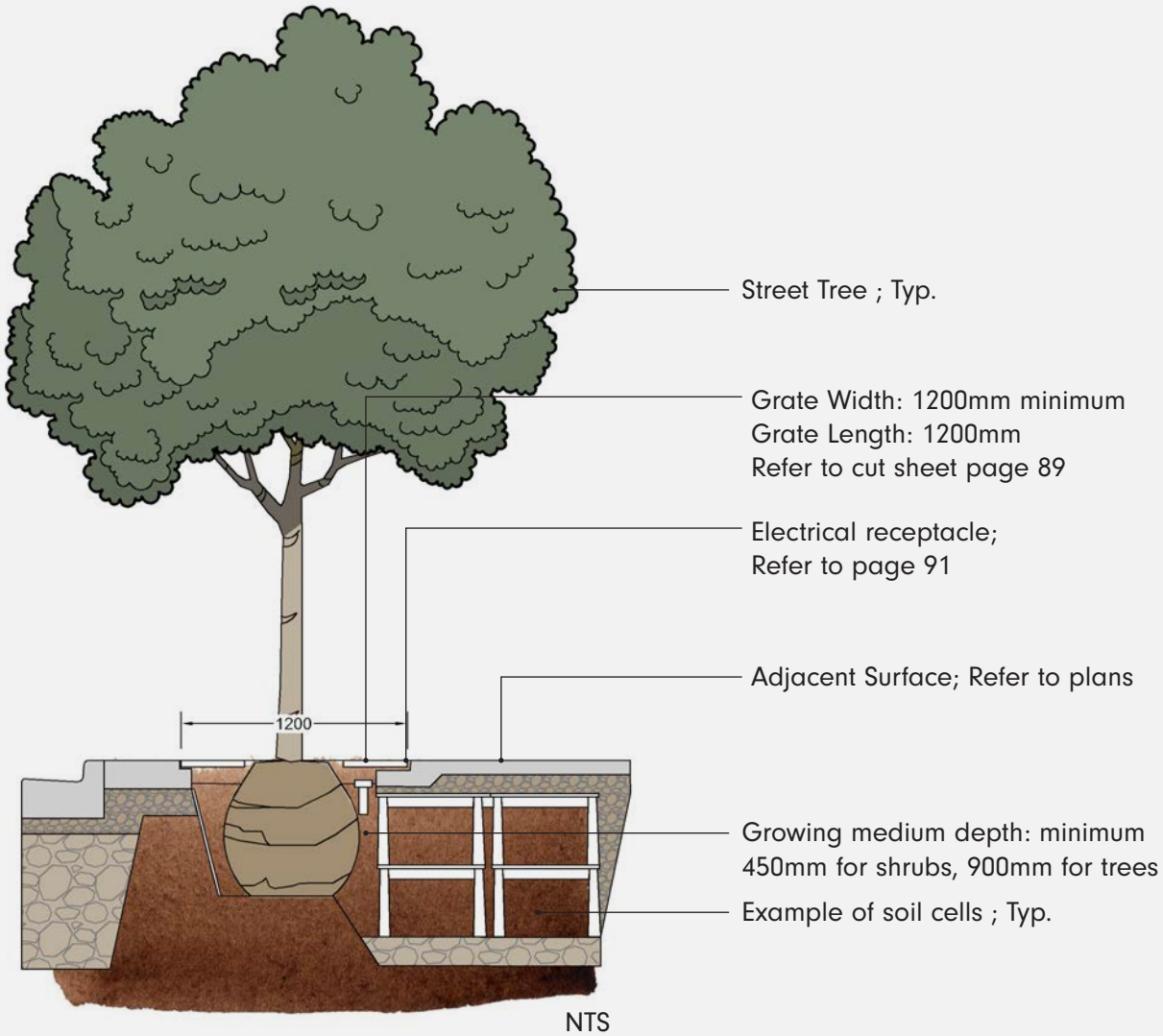


Figure 4. Typical Section of Hardscape Planting (Strategy B)
** Typical section to provide illustrative intent and should be used in conjunction with City of Abbotsford development bylaw. Development bylaw will supersede where specifications differ.*

B Hardscape

Plan View

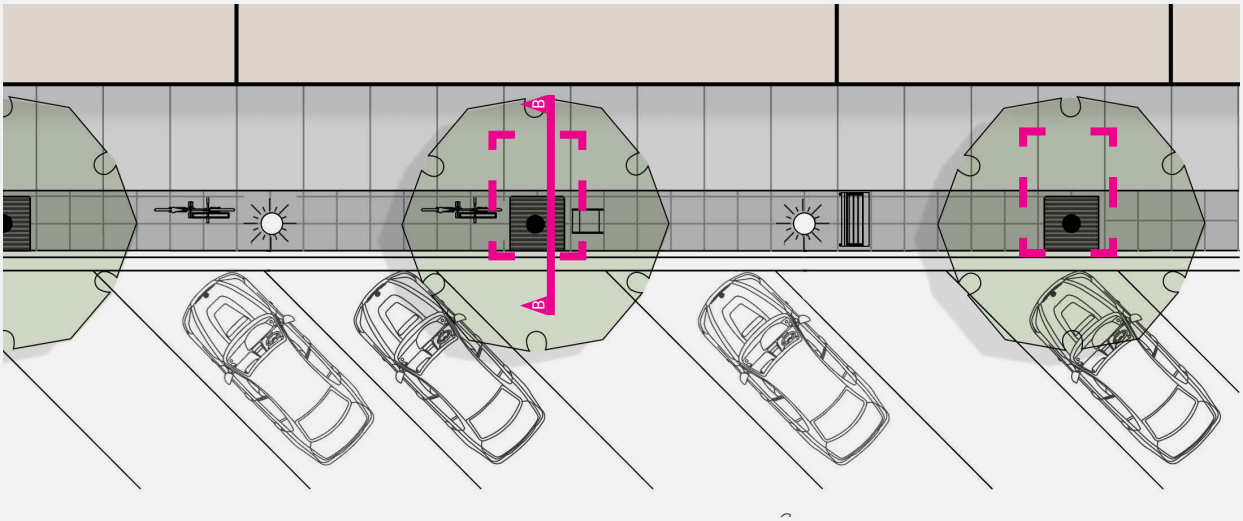


Figure 5.Example of Street trees in tree grates on Montrose (Retail site)



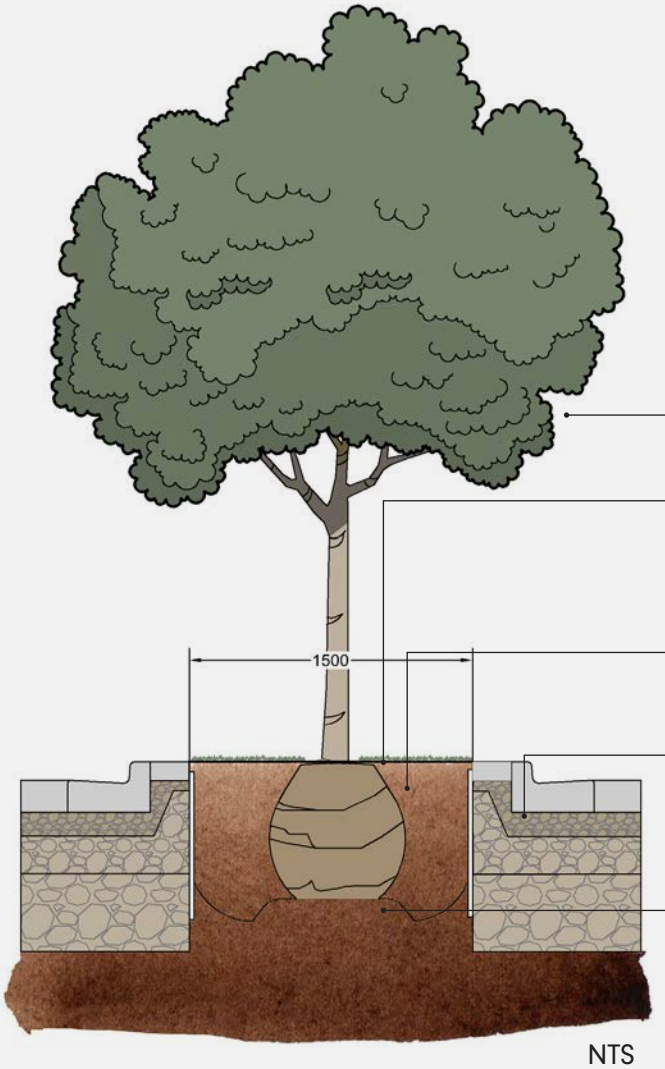
Figure 6.Typical Treatment rendering for Montrose (Retail Site)

C Median

General Notes

Raised medians are proposed within Historic Downtown as an opportunity to enhance and beautify the streetscape environment. Boulevard planting is encouraged as an alternative to sod. Median plantings are to have continuous. uninterrupted trenches with adequate soil volume to support the longterm health of the street trees and shrubs. Median width to be minimum 1.5m. Note: Soil cells are not recommended in this application, since the median is surrounded by active travel lanes. However, concrete medians with sufficient clear width may be acceptable for soil cell treatments.

Typical Section: C



Note:
Shrub, grass, perennial, and groundcover plantings to be 600mm or lower to avoid obstructing sightlines. Appropriate Irrigation is required. Appropriate drainage where subsoils does not allow sufficient infiltration.

Street Tree, set plumb ; Typ.

Planter Width: Minimum 1500mm (Splash pads may be implemented if width is available)

Planter Length: Varies: Refer to plans

Adjacent Surface; Refer to plans

Growing medium depth: minimum 450mm for shrubs, 750mm for trees

NTS

Figure 7. Typical Section of Median Planting (Strategy C)
** Typical section to provide illustrative intent and should be used in conjunction with City of Abbotsford development bylaw. Development bylaw will supersede where specifications differ.*

C Median

Plan View

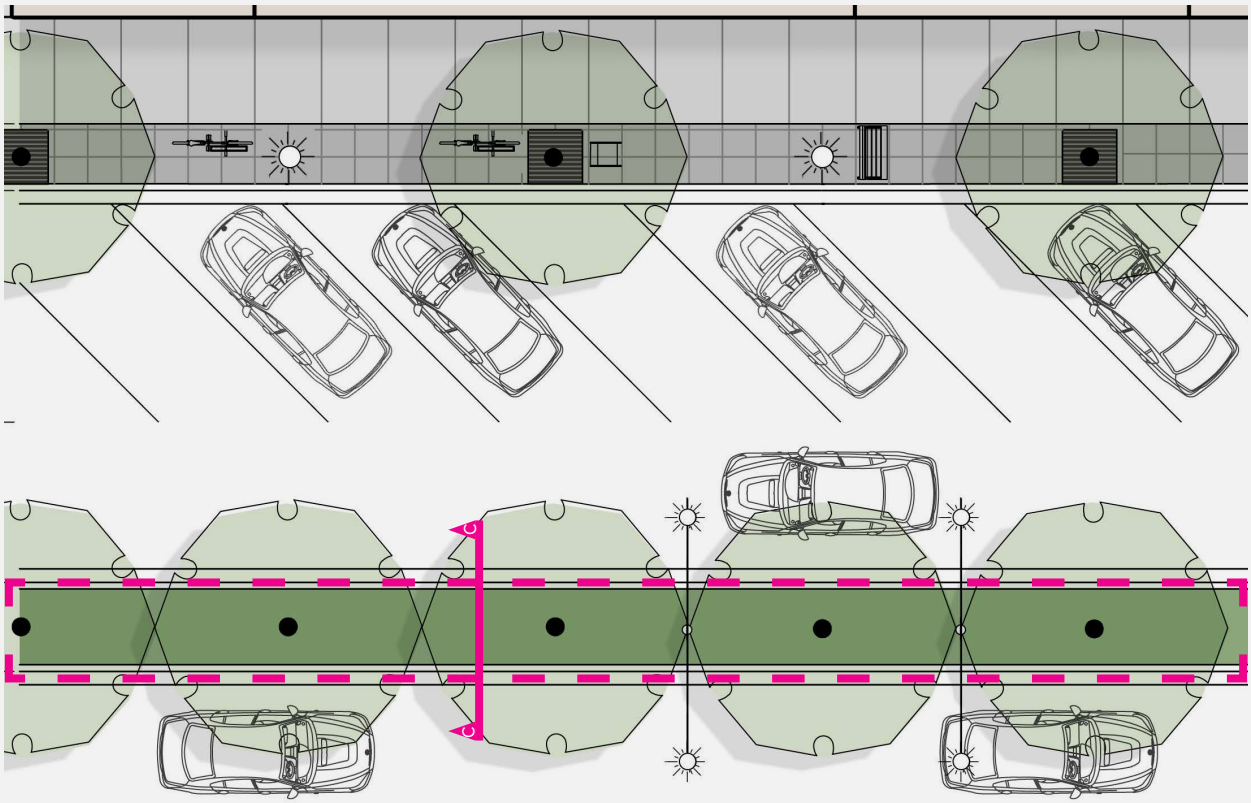


Figure 8.Example of Street trees in median on Montrose (Retail site)



Figure 9.Rendering of Street trees in median on Montrose (Retail site)

Rain Garden

Rain gardens to be planted where possible to intercept and infiltrate stormwater. These features are critical aids for improving the microclimate, and urban habitat. The area of rain garden depression that uses soil and plants will help to manage runoff from the road and sidewalk. This additional 'green infrastructure' will help to integrate storm water management.

Total area of a Rain Garden for each catchment zone should be close to 5%. Applicable locations for rain gardens include street corners, mid-block locations, and intersecting streets where runoff can be diverted from entering conventional catch basins. Refer to Page 89 for additional notes and cut sheets.

Typical Section: D

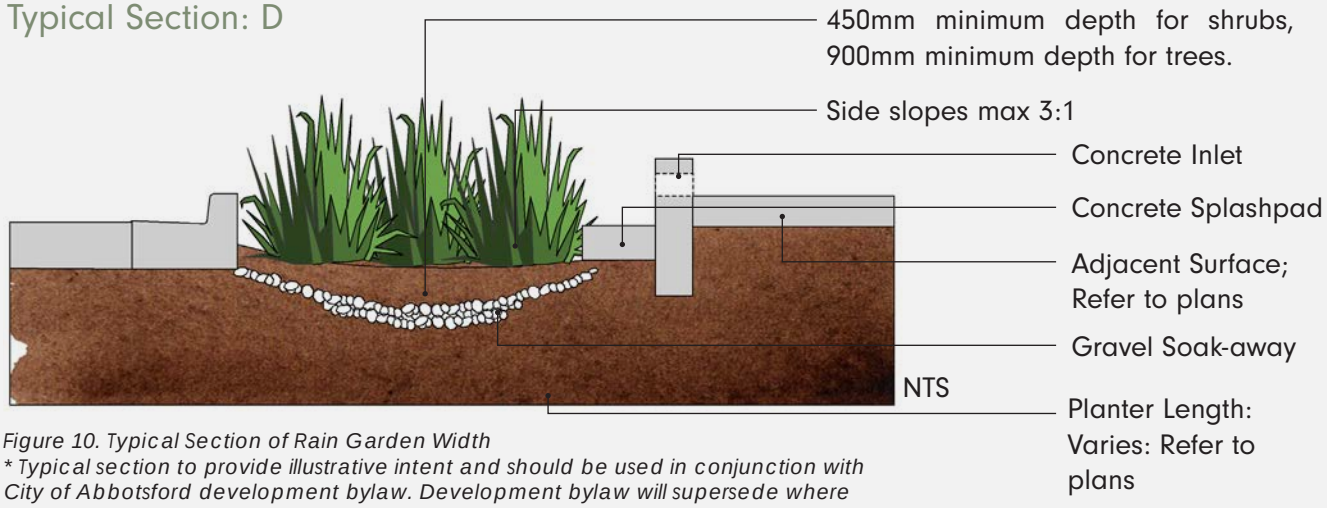


Figure 10. Typical Section of Rain Garden Width
** Typical section to provide illustrative intent and should be used in conjunction with City of Abbotsford development bylaw. Development bylaw will supersede where specifications differ.*

Typical Section: E

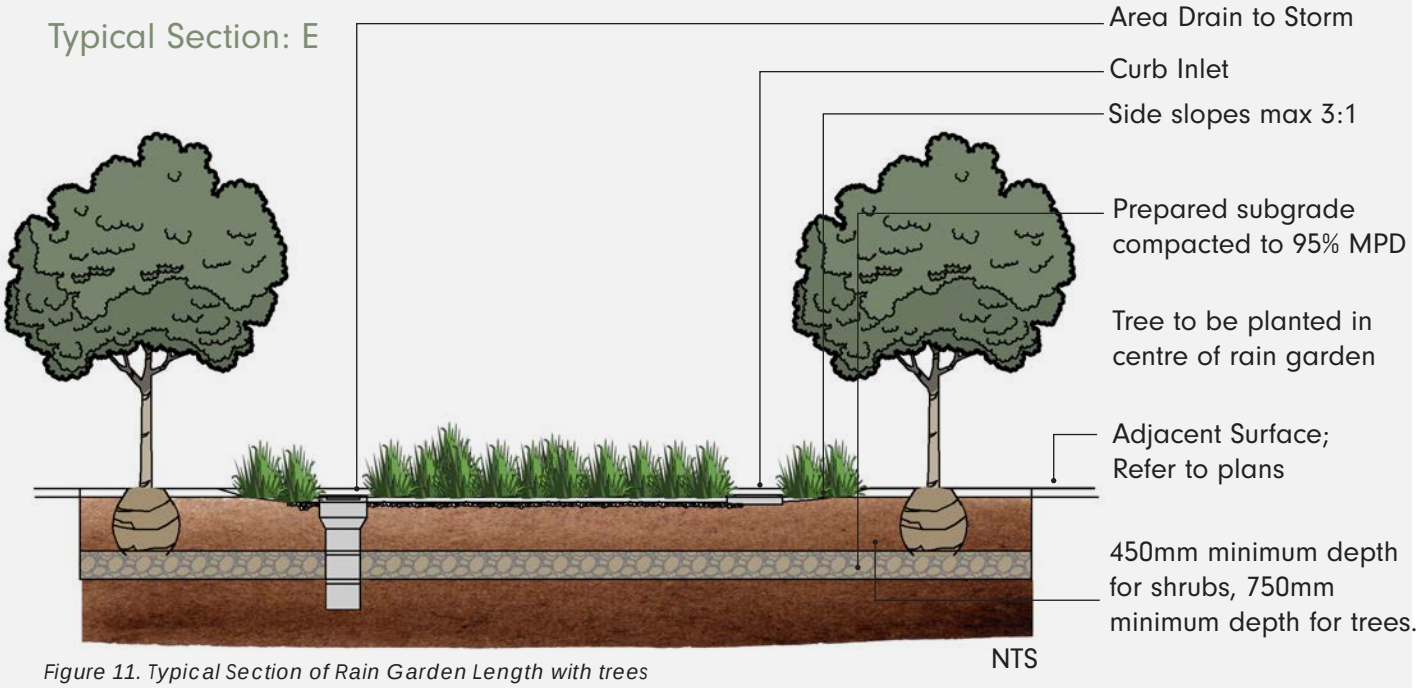


Figure 11. Typical Section of Rain Garden Length with trees
** Typical section to provide illustrative intent and should be used in conjunction with City of Abbotsford development bylaw. Development bylaw will supersede where specifications differ.*

Rain Garden

Plan View

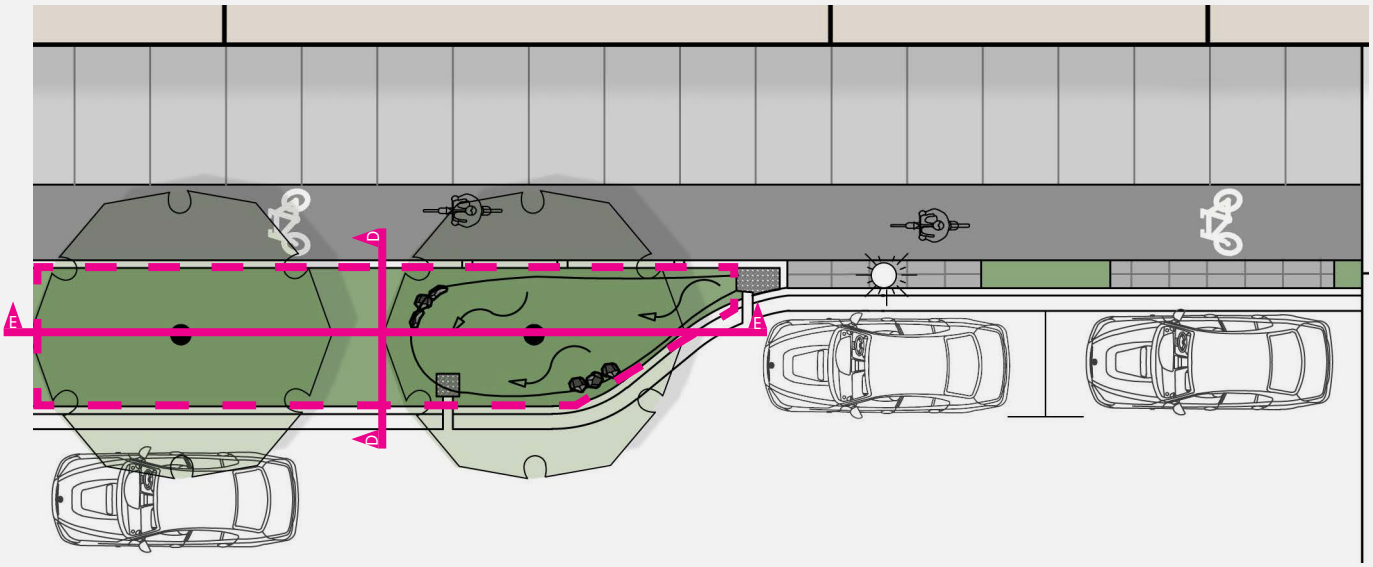


Figure 12. Example of Rain Gardens on Essendene

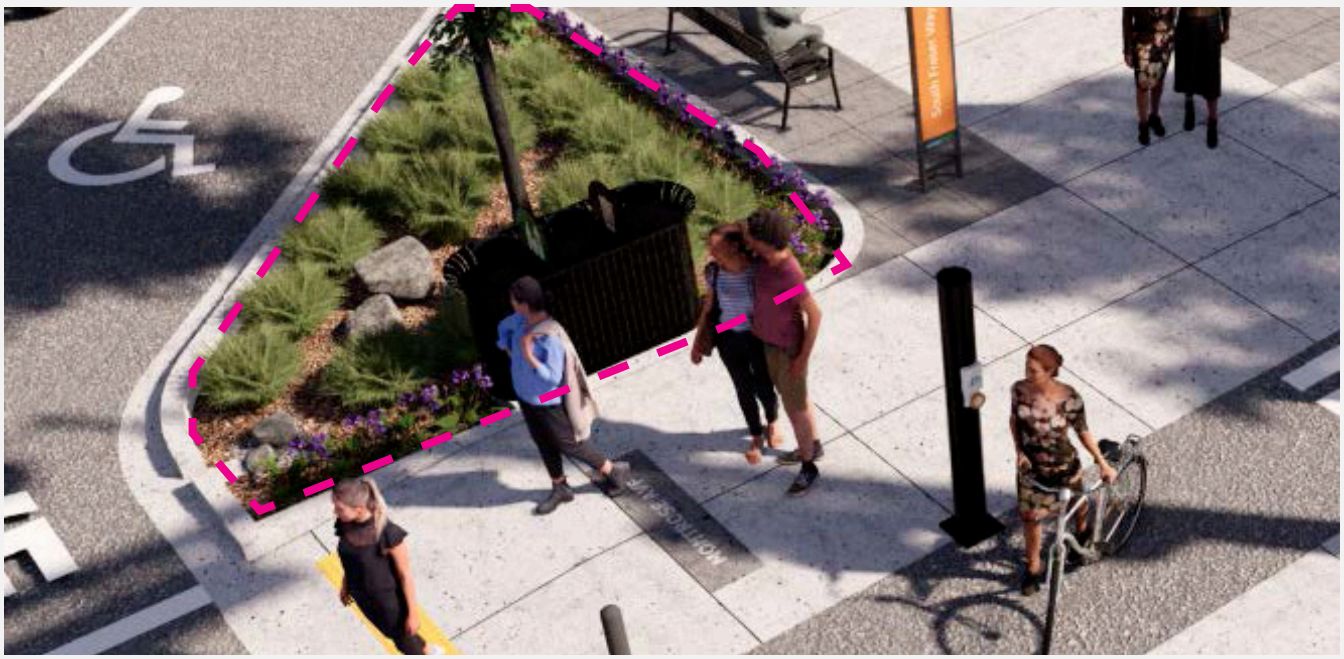


Figure 13. Render of Rain Gardens on Essendene

Recommended Species

A Rain Garden Planting

Rain gardens to be planted where possible to intercept and infiltrate stormwater runoff to improve the microclimate, and urban habitat. Plant material should be generally lower than 600mm (24") to allow for unobstructed sightlines. A two year maintenance period is recommended prior to the boulevard or rain garden maintenance being transferred to the City of Abbotsford. It is the responsibility of the adjacent landowner to maintain rain gardens by watering the plant material.

Recommended Rain Garden Plant List

Dry soil: >1.0m above high water
Dry to moist soil: 0.5m to 1.0m above high water
Moist to wet soil: 0.5m above high water to 0.3m deep

Scientific Name	Common Name	Soil condition	Size	Spacing
Shrubs				
Cornus sericea 'Kelseyi'	Kelsey dogwood	Dry to moist soil	#2 Pot	60cm (24")
Spiraea japonica 'Little Princess'	Little Princess spirea	Dry to wet soil	#2 Pot	60cm (24")
Perennials / Grasses				
Carex obnupta	Slough sedge	Sun/Part Shade	#1 Pot	30cm (12")
Carex pachystachya	Chamisso sedge	Sun/Part Shade	#1 Pot	30cm (12")
Carex stipata	Sawbeak sedge	Wet soil	#1 Pot	30cm (12")
Juncus effusus	Common rush	Wet soil	#1 Pot	30cm (12")
Juncus patens	California grey rush	Wet soil	#1 Pot	30cm (12")
Iris missouriensis	Rocky mountain iris	Wet soil	#1 Pot	38cm (15")
Groundcovers				
Asarum caudatum	Wild ginger	Moist to wet soil	#1 Pot	30cm (12")

General Planting Notes

1. Plants in this plant list are specified according to the Canadian Nursery Landscape Association Canadian Standards for nursery stock and Section 12, container grown plants of the BC Landscape Standard, current edition.
2. All plant material shall meet or exceed standards required by BCLNA or BCSLA guidelines.
3. Bioretention growing medium is to be organic, sandy soil with minimal clay and silts shall be supplied shall be from a reputable source. A full analysis of the topsoil will be required at the Contractor's expense, submit to Landscape Architect for approval.
4. Amend topsoil per soil analysis recommendations prior to spreading on site rejected topsoil shall be removed off site immediately at the landscape contractors expense.
5. Topsoil depths for planting to be minimum 450mm (18").
6. 2" minus compost mulch to be installed in all shrub planting areas. Use medium textured mulch that is not too large or that it floats, or too small that it reduces infiltration.
7. Planting areas to present clear groupings of the same species in legible patterns.


Spirea japonica


Cornus sericea 'Kelseyi'


Asarum caudatum


Carex stipata


Carex pachystachya


Iris missouriensis



Left: Planting areas to present clear groupings of the same species in legible patterns.

Photo credit:
Landperspectives.com
Portland, Oregon

Streetscape Standards

Recommend Species

B Street Trees

The total tree canopy coverage of Historic Downtown should be increased to improve the microclimate. Trees should be spaced appropriately along all streets to provide visual and environmental benefits (refer also to Street Tree Planting Notes below). Healthy existing trees should be retained where possible, although the street trees should transition over time to align with the Signature Corridor and Commercial Street Tree plans of the Historic Downtown Neighbourhood Plan (see opposite page).

Street trees should be planted with sufficient growing medium volume for long-term tree health, and to prevent sidewalk heaving from tree roots. The best possible growing conditions should be provided for all new tree planting, and existing tree planting conditions should be improved where possible. To improve the volume of growing medium per tree, the use of soil cells is preferred by the City of Abbotsford. The City of Abbotsford will evaluate whether soil cells should be installed taking into account existing and planned utilities. The City of Abbotsford to direct alternatives where soil cells are not possible.

Trees should be pruned at branch heights above 3m to allow unobstructed sight lines to landmarks, storefronts, sign bands, and building facades.

Recommended Street Tree Species

Scientific Name	Common Name	Size
Acer cappadocium 'Aureum'	Cappadocian maple	7 cm cal. (2 ½" cal.)
Fraxinus americana 'Autumn Applause'	Autumn Applause ash	7 cm cal. (2 ½" cal.)
Gymnocladus dioicus	Kentucky coffee tree	7 cm cal. (2 ½" cal.)
Parrotia persica 'Vanessa'	Vanessa Persian ironwood	7 cm cal. (2 ½" cal.)
Styrax japonicus	Japanese snowbell	7 cm cal. (2 ½" cal.)
Tilia tomentosa 'Sterling Silver'	Sterling Silver linden	7 cm cal. (2 ½" cal.)

General Street Tree Planting Notes

1. Street trees to be minimum 7cm caliper.
2. Provide straight, well-branched, nursery grown street trees with a central leader. Street trees are to be uniform shape and highest quality.
3. Plants are specified according to the Canadian Nursery Landscape Association Canadian Standards for nursery stock and the BC Landscape Standard, current edition.
4. Final selection and approval of street trees to be done by City of Abbotsford.
5. Trees to be spaced at regular intervals. Maximum tree spacing to be 10m, minimum tree spacing to be 8m.
6. Adequate growing medium to be provided for each tree. Soil depth to be minimum 900mm. Structural soil cells to be utilized as required to ensure sufficient soil volume for longterm health of the street trees.
7. Each tree to be provided with high-efficiency automatic irrigation and adequate drainage.

Signature Corridor Species

As per the HDNP, "alternate the use of all trees along the Signature Corridor to create a pattern and sense of rhythm along the street. This could be in ones, twos, or threes as fits the context (60)."



Tree One
Gymnocladus dioicus
Crown diameter: 6-10m
Spacing: 9-10m



Tree Two
Tilia tomentosa 'Sterling Silver'
Crown diameter: 8-12m
Spacing: 9-10m



Tree Three
Fraxinus americana 'Autumn Applause'
Crown diameter: 8-12m
Spacing: 9-10m

Commercial Street Species

As per the HDNP, "use the primary tree as the most frequent and predominant tree along Commercial Streets, and use the feature trees in prominent and feature locations."



Primary Tree
Acer cappadocium 'Aureum'
Crown diameter: 5-12m
Spacing: 9-10m



Feature Tree One
Styrax japonicus
Crown diameter: 5-8m
Spacing: 8-10m



Feature Tree Two
Parrotia persica 'Vanessa'
Crown diameter: 8-10m
Spacing: 8-10m



Boulevard Planting

Boulevard planting will improve HIstoric Downtown by cooling the urban environment, and providing visual and environmental benefits. Plant material should be generally lower than 600mm (24") to allow for unobstructed sightlines. A two year maintenance period is recommended prior to the boulevard or rain garden maintenance being transferred to the City of Abbotsford. It is the responsibility of the adjacent landowner to maintain boulevards by watering the boulevard plant material.

Recommended Boulevard Plant List

Scientific Name	Common Name	Exposure	Size	Spacing
Shrubs				
Buxus x Winter Gem	Winter Gem boxwood	Sun/Shade	#2 Pot	38cm (15")
Cistus x canescens	Rock rose	Sun/Part Shade	#2 Pot	75cm (30")
Cornus sericea 'Kelseyi'	Kelsey dogwood	Sun/Part Shade	#2 Pot	60cm (24")
Pinus mugho 'Pumilio'	Dwarf Mugo pine	Sun/Part Shade	#2 Pot	45cm (18")
Rosa 'Flower Carpet'	Flower Carpet rose	Sun/Part Shade	#2 Pot	75cm (30")
Sarcococca hookeriana var. humilis	Himalayan sarcoccoca	Part Shade/Shade	#2 Pot	45cm (18")
Spiraea japonica 'Little Princess'	Little Princess spirea	Sun/Part Shade	#2 Pot	60cm (24")
Symphoricarpos chenaultii 'Hancock'	Trailing snowberry	Sun/Part Shade	#2 Pot	45cm (18")
Vaccinium ovatum 'Thunderbird'	Evergreen huckleberry	Sun/Shade	#3 Pot	75cm (30")
Perennials / Grasses				
Astrantia major	Greater masterwort	Sun/Part Shade	#1 Pot	45cm (18")
Aster frikartii 'Monch'	Monch aster	Sun/Part Shade	#1 Pot	45cm (18")
Bergenia cordifolia	Heartleaf bergenia	Sun/Part Shade	#1 Pot	45cm (18")
Echinacea purpurea	Purple coneflower	Sun/Part Shade	#1 Pot	45cm (18")
Gaura lindheimeri 'Siskiyou Pink'	Pink gaura	Sun/Part Shade	#1 Pot	45cm (18")
Miscanthus 'Little Kitten'	Dwarf maiden grass	Sun/Part Shade	#1 Pot	45cm (18")
Pennisetum 'Hameln'	Dwarf fountain grass	Sun/Part Shade	#1 Pot	45cm (18")
Perovskia atriplicifolia 'Little Spire'	Dwarf Russian sage	Sun/Part Shade	#1 Pot	60cm (24")
Polystichum munitum	Western sword fern	Part Shade/Shade	#2 Pot	60cm (24")
Sedum 'Autumn Joy'	Autumn Joy sedum	Sun/Part Shade	#1 Pot	45cm (18")
Groundcovers				
Arctostaphylos uva-ursi	Bearberry	Sun/Part Shade	#1 Pot	38cm (15")
Erica carnea 'Springwood Pink'	Pink winter heath	Sun/Part Shade	#1 Pot	38cm (15")
Epimedium rubrum	White winter heath	Sun/Part Shade	#1 Pot	45cm (18")
Lonicera pileata	Privet honeysuckle	Part Shade/Shade	#1 Pot	45cm (18")
Mahonia nervosa	Dwarf Oregon Grape	Part Shade/Shade	#1 Pot	45cm (18")

General Planting Notes

1. Plants in this plant list are specified according to the Canadian Nursery Landscape Association Canadian Standards for nursery stock and Section 12, container grown plants of the BC Landscape Standard, current edition.
2. All plant material shall meet or exceed standards required by BCLNA or BCSLA guidelines.
3. Topsoil supplied shall be from a reputable source. A full analysis of the topsoil will be required at the Contractor's expense, submit to Landscape Architect for approval.
4. Amend topsoil per soil analysis recommendations prior to spreading on site. Rejected topsoil shall be removed off site immediately at the landscape contractors expense.
5. Topsoil depths for planting to be minimum 450mm (18").
6. 2" minus compost mulch to be installed in all shrub planting areas.
7. Planting areas to present clear groupings of the same species in legible patterns.


Buxus x Winter Gem


Polystichum munitum


Symphoricarpos chenaultii 'Hancock'


Echinacea purpurea


Miscanthus 'Little Kitten'


Arctostaphylos uva-ursi



Left: Planting areas to present clear groupings of the same species in legible patterns.

Image source:
Murdoch de Green Inc.,
1515 Douglas Street

1c. Hardscape

Public Realm 31

Intersections 32

Hardscape

Hardscape recommendations for Historic Downtown are provided for the following: Public Realm, Intersections, and Supplemental Areas .

Public realm: Composed of the furnishing and pedestrian zone. The dominant paving type in the furnishing zone is sawcut, and tinted concrete. This zone is divided through score line cuts to create a greater textural change for pedestrians and to signal this zone's primary purpose as a place for pedestrian gathering, furnishings, or transition to parked vehicles. The boulevard furnishing zone will have thoughtful and deliberate score line patterning made with mechanical cuts (not forming joints).

The pedestrian zone: is largely composed of broom finished concrete with 1.5m control jointing. This area of the public realm is the 'movement zone' and is meant to be unencumbered by furnishings, planting, or other obstructions.

Intersections: Areas created at adjoining streets are characterized by tinted concrete, streetbond painted lines, tactile warning strips, and scorelined natural concrete.

Hardscape

Public Realm

DETAIL CODE **P1**

TECHNICAL SPECIFICATION

Sidewalk / General Concrete

1. Sawcut dimensions: 1.5m lengths on sidewalks. Expansion joints where concrete meets vertical structure and every 6m on centre.
2. Colour: No pigment.
3. Finishing: Broom Finish

Boulevard Concrete

1. Sawcut dimensions: Equally spaced as shown below. To be continuous from sidewalk saw cuts.
2. Colour: Integral Coloured Concrete: Davis Colours "Dark Gray (Carbon) #8084.
3. Finishing: Sandblast

STANDARD DETAIL (NTS)

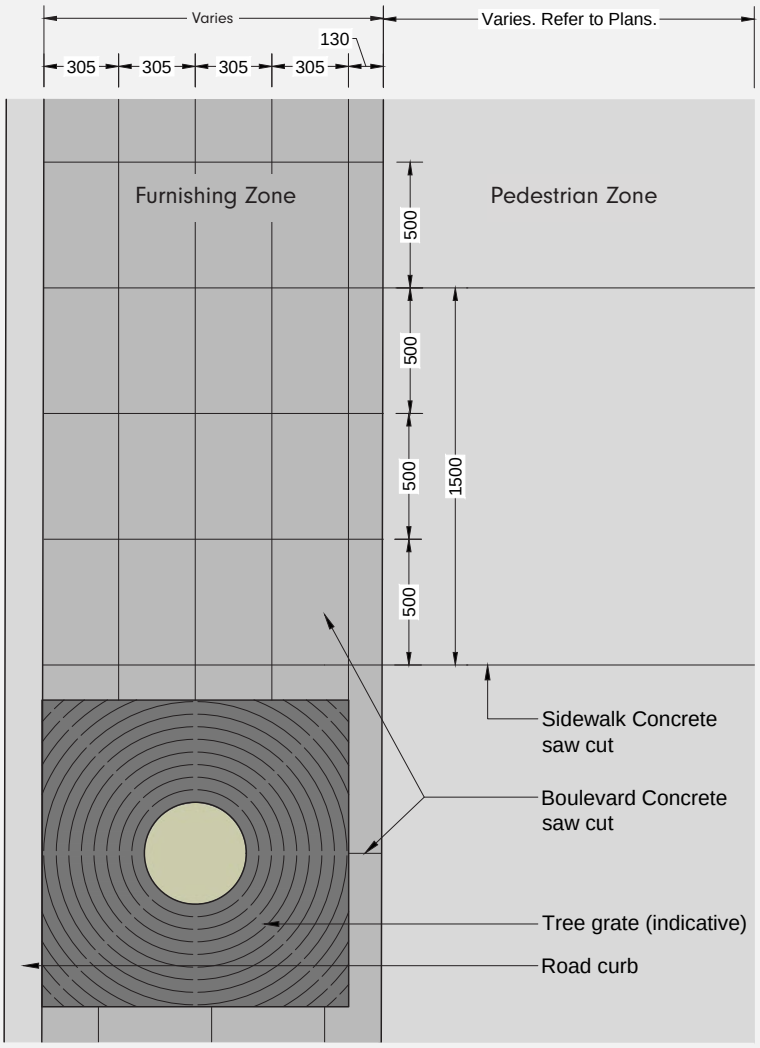


Figure 14. Public Realm Hardscape Standard detail



Indicative saw cut design in boulevards (Refer to plans for actual saw cut design and dimensions)

Installation

1. Expansion Joints: Required along building tie-ins of new concrete sidewalks. Extend through full depth of concrete. Fill with 13mm approved joint material or as specified by Engineer
2. Control Joints: Place along sidewalk and building strips, and corners of at-grade features (i.e. utility boxes, tree pits)
3. Isolation Joints placed around all structures and fixed objects within concrete. Fill with 13mm approved joint material or as specified by Engineer.
4. Sawcuts; Extend to a minimum depth of 19mm or as specified by Engineer

Hardscape

Intersections

DETAIL CODE **P2**

TECHNICAL SPECIFICATION

Sidewalk / General Concrete

1. Sawcut dimensions: 1.5m lengths on sidewalks. Expansion joints where concrete meets vertical structure and every 6m on centre.
2. Colour: No pigment.
3. Finishing: Broom Finish

Boulevard Concrete

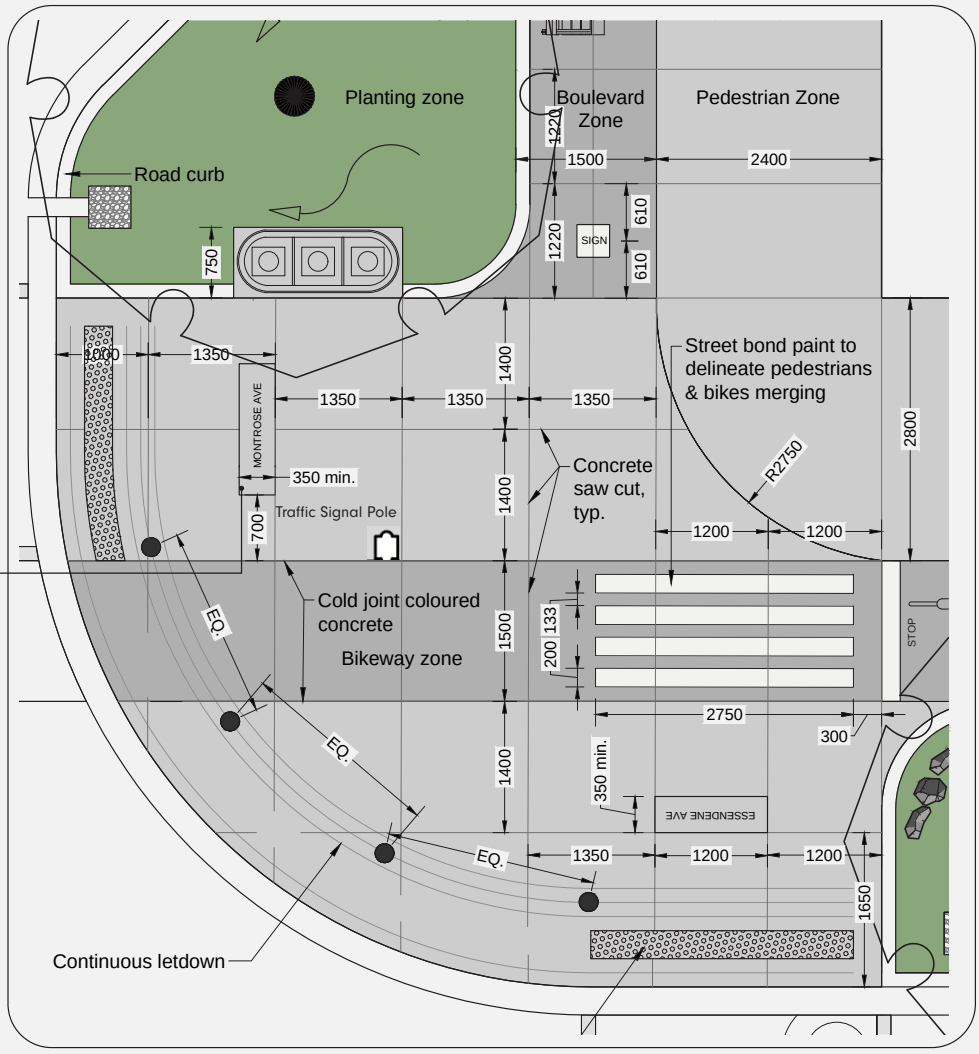
1. Sawcut dimensions: Equally spaced as shown below. To be continuous from sidewalk saw cuts.
2. Colour: Integral Coloured Concrete: Davis Colours "Dark Gray (Carbon) #8084.
3. Finishing: Sandblast



PRECEDENT PHOTO DETAIL

Refer to Wayfinding; Page 43

Refer to Supplemental Intersection Corner Treatments Guidelines Page 33



STANDARD DETAIL (NTS)

Curb returns to follow TAC and CoA development bylaws

Figure 15. Intersections Hardscape Standard detail

Streetscape Standards



1d. Lighting

Roadway & Pedestrian Lighting 35

Streetlighting

Decorative Pedestrian Lights:

Decorative Pedestrian Lights:

TECHNICAL SPECIFICATION

Pole, base and luminaire (aluminum) finish shall be as follows:

- Chemically pre-treated
- Electrostatically-applied, powder primer coat
- Electrostatically-applied, powder topcoat

Plant hanger finish shall be as follows:

- Chemically pre-treated
- Electrostatically-applied, polyester powder basecoat
- Electrostatically-applied, polyester powder topcoat RAL 9005 (black)

Berry Festival Circuit Provisions:

- Shall be installed at the discretion of the COA engineering department.
- Shall generally conform to the COA street lighting drawing no. I-444 & I-445.

Irrigation Provisions:

- Irrigation system shall be installed as shown
- Irrigation zone requirements shall be determined at the discretion of the COA engineering and parks department.

Streetlighting

Decorative Pedestrian Lights Continued :

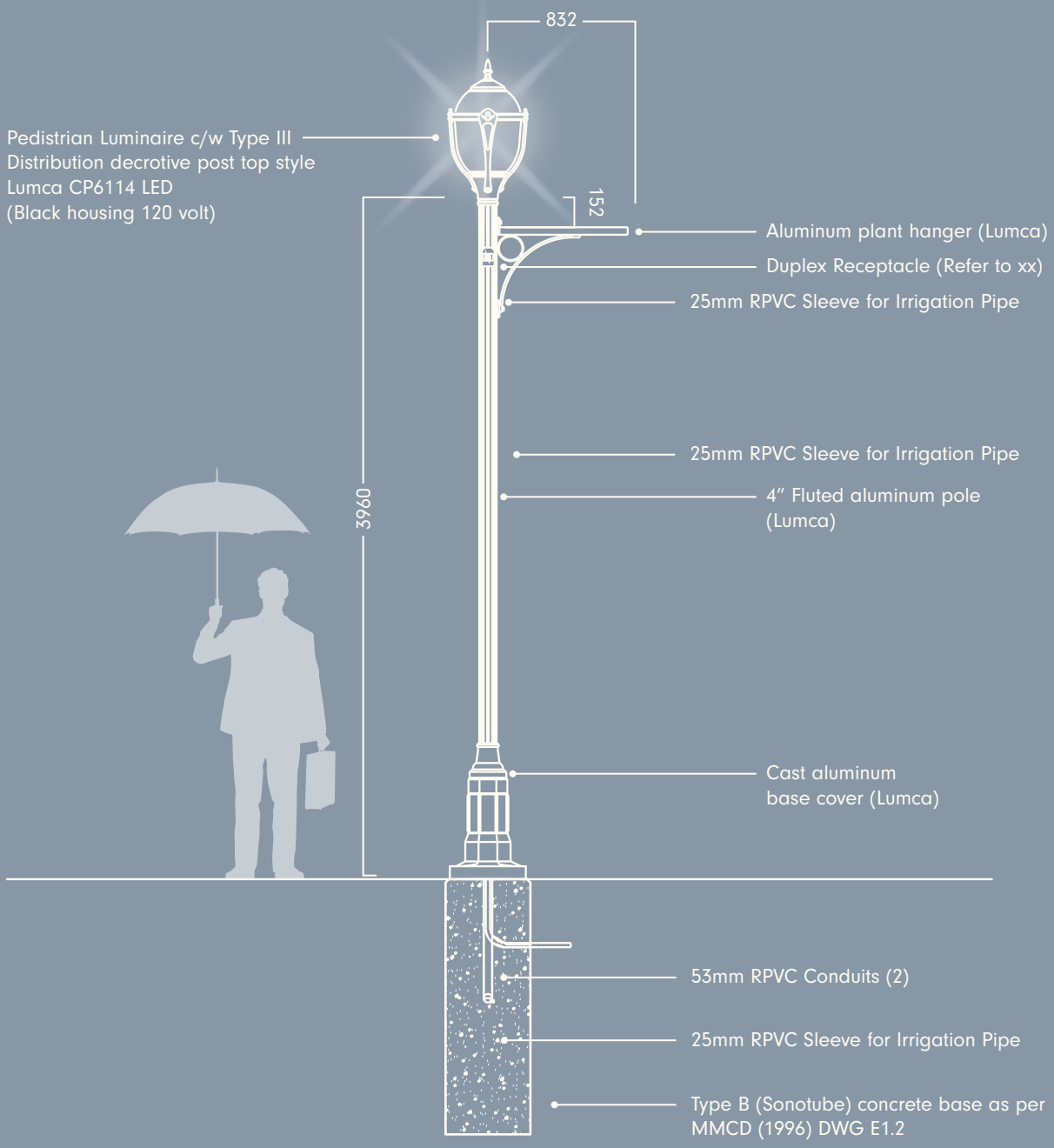


Figure 16. Decorative Pedestrian Light Standard

Streetlighting

Decorative Combination Lights:

Decorative Combination Roadway & Pedestrian Lights:

TECHNICAL SPECIFICATION

Pole finish (shaft and arm) shall be as follows:

- Galvanized steel per MMCD specifications
- Brush blasted
- Electrostatically-applied, polyester powder basecoat
- Electrostatically-applied, polyester powder topcoat RAL 9005

Banner arm & plant hangers shall be as follows:

- Electrostatically-applied, polyester powder basecoat
- Electrostatically-applied, powder topcoat (black colour RAL 9005)

Pedestrian luminaire and mounting arm (cast-aluminum) finish shall be as follows:

- Chemically pre-treated
- Electrostatically-applied, polyester powder basecoat
- Electrostatically-applied, polyester powder topcoat RAL 9005

Cobra-head luminaire shall have standard factory-applied, gray,

Berry Festival Circuit Provisions:

- Shall be installed at the discretion of the COA engineering department.
- Shall generally conform to the COA street lighting drawing no. I-444 & I-445.

Irrigation Provisions:

- Irrigation system shall be installed as shown
- Irrigation zone requirements shall be determined at the discretion of the COA engineering and parks department.

Streetlighting

Decorative Combination Lights Continued :

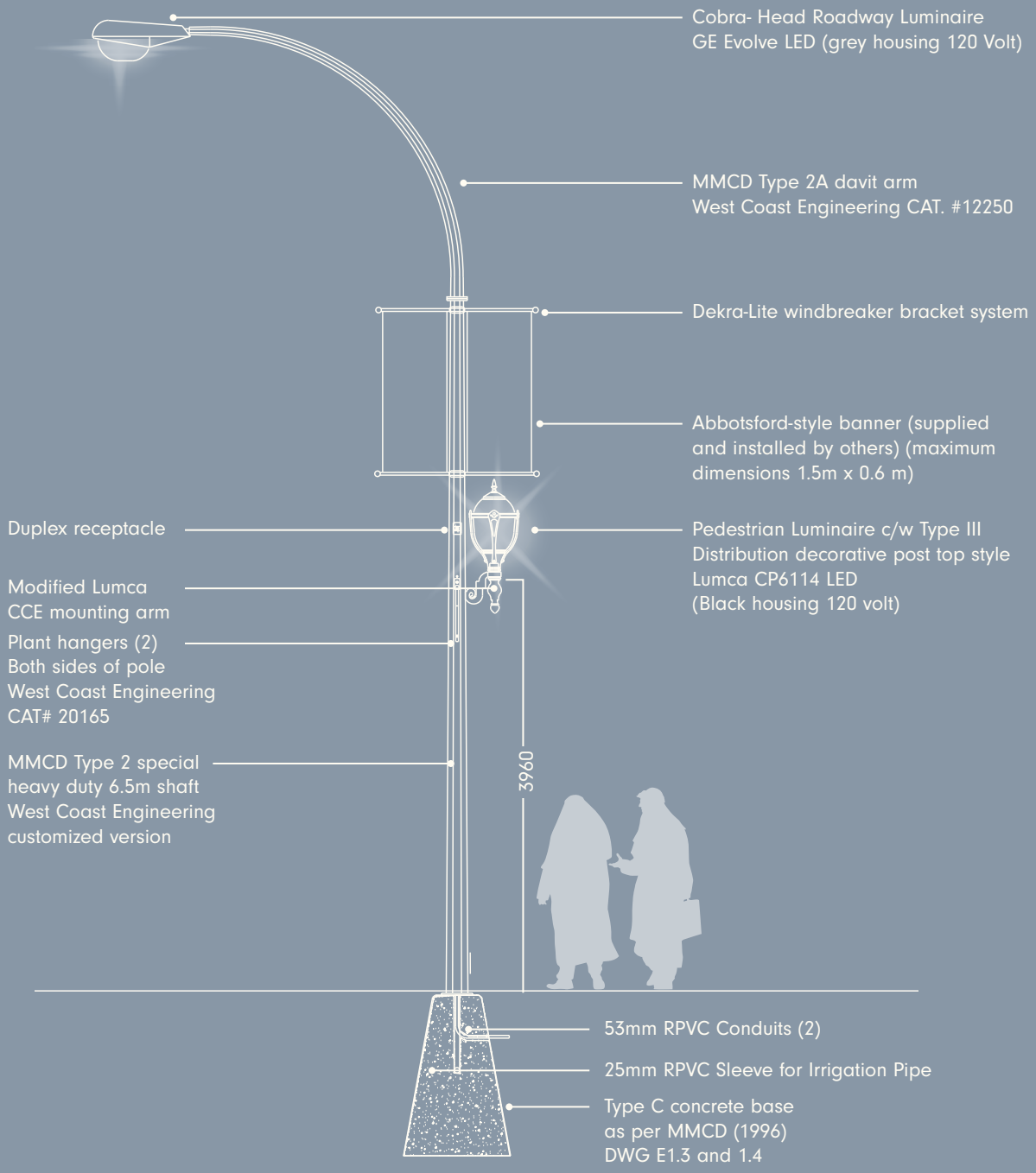


Figure 17. Decorative Combination Light Standard

1e. Wayfinding & Signage

Overall Recommendations 40

Signage and Markers 41

Wayfinding & Signage

Overall Recommendations

The purpose of this wayfinding strategy is: for municipal brand integration into all Historic Downtown wayfinding elements. This will strengthen and improve the municipal brand recognition and sense of place. It should be noted that branding is subject to change in collaboration with stakeholders and affiliates of the Historic Downtown as revitalization moves forward.

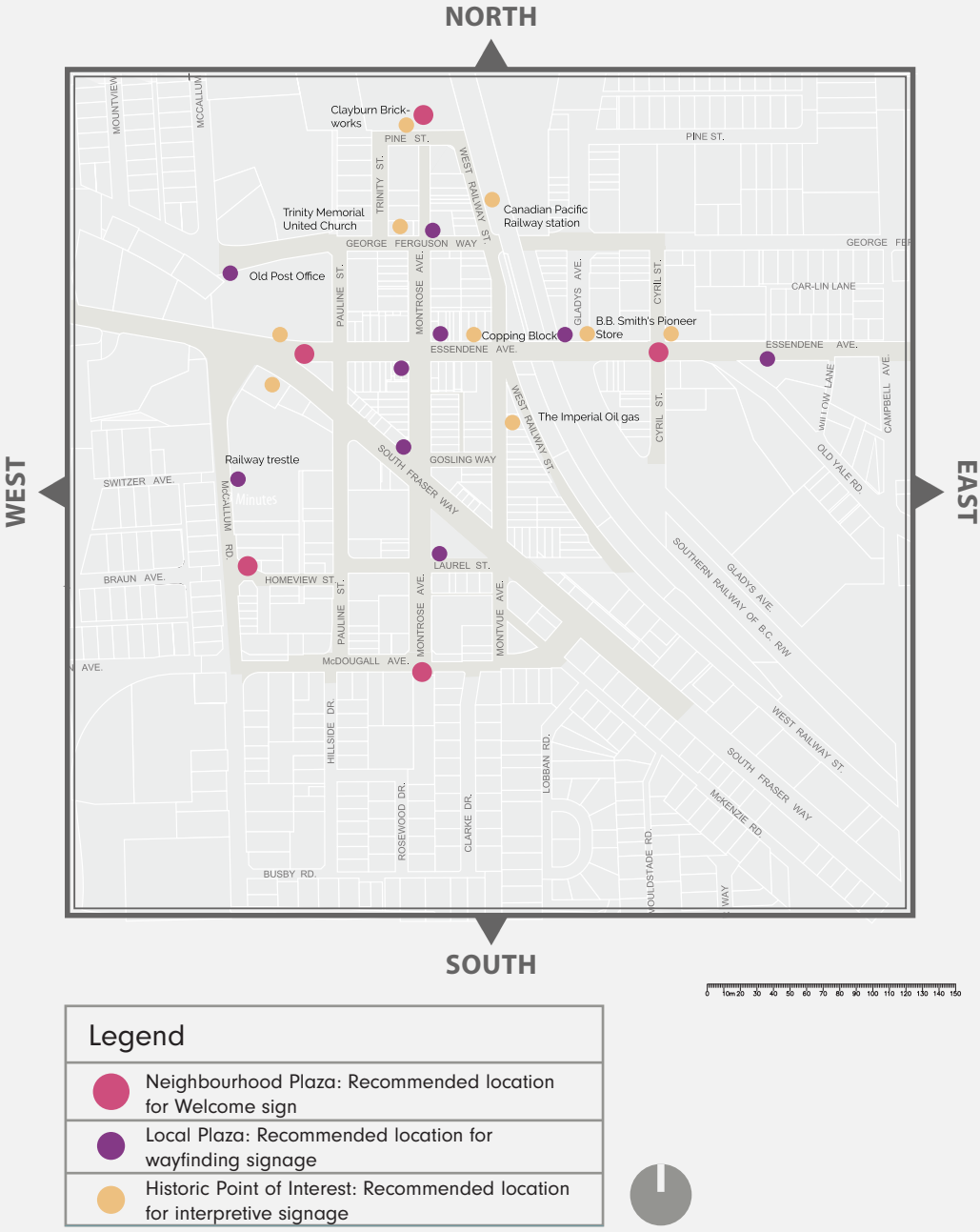


Figure 18. Overall 'High level' Wayfinding recommendations for wayfinding and interpretive signs

Signage and Markers

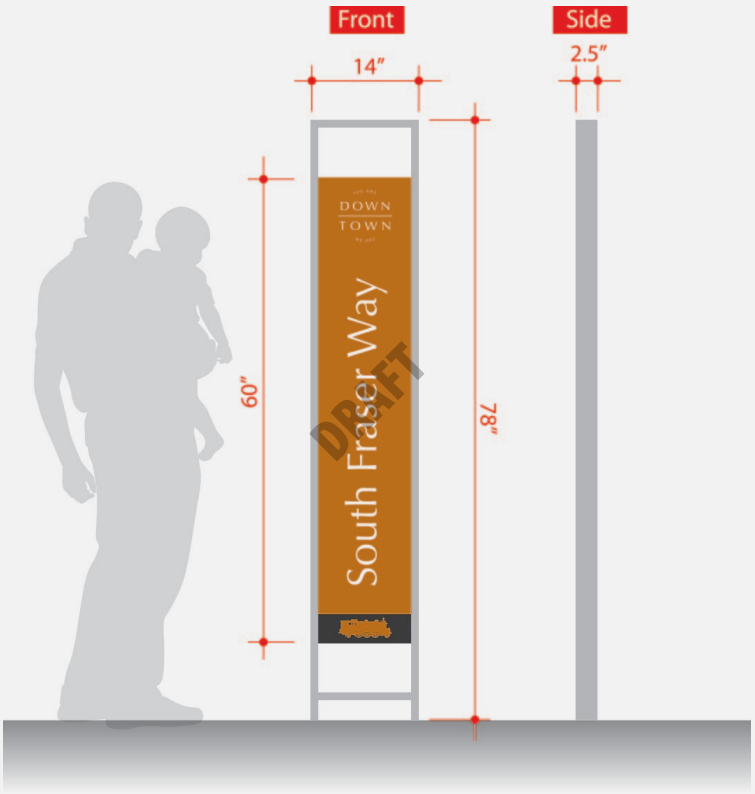


Figure 19. Main Street Identification Sign

Purpose: Identification of primary downtown streets.

Materials: Electrostatic printing on aluminum bolted to bracketed aluminum extruded square tube. Structure poured into concrete base.

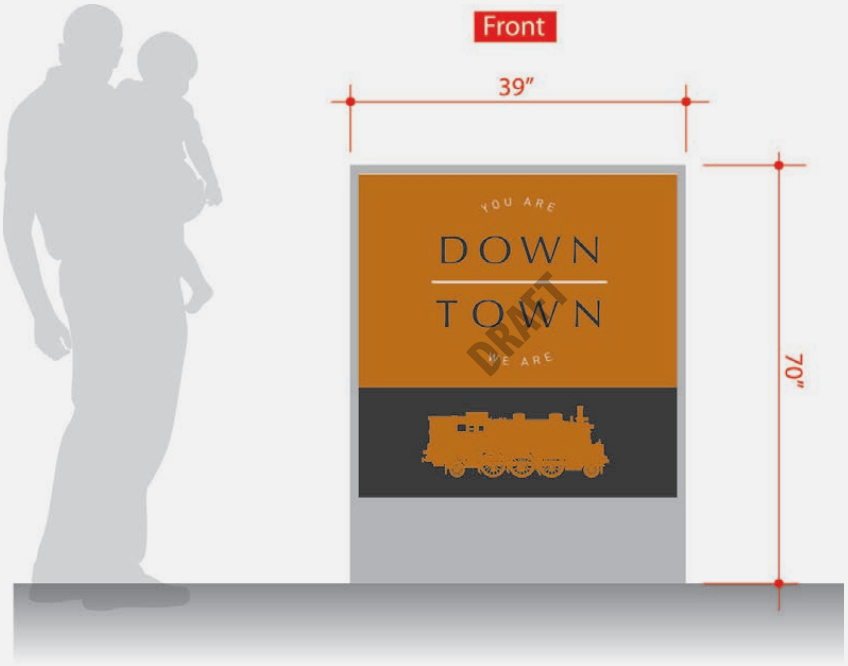


Figure 20. Welcome Sign

Purpose: Primary downtown welcome sign to identify entrance and exit to and from downtown core.

Materials: Electrostatic printing on aluminum bolted to bracketed aluminum extruded square tube. Structure poured into concrete base.

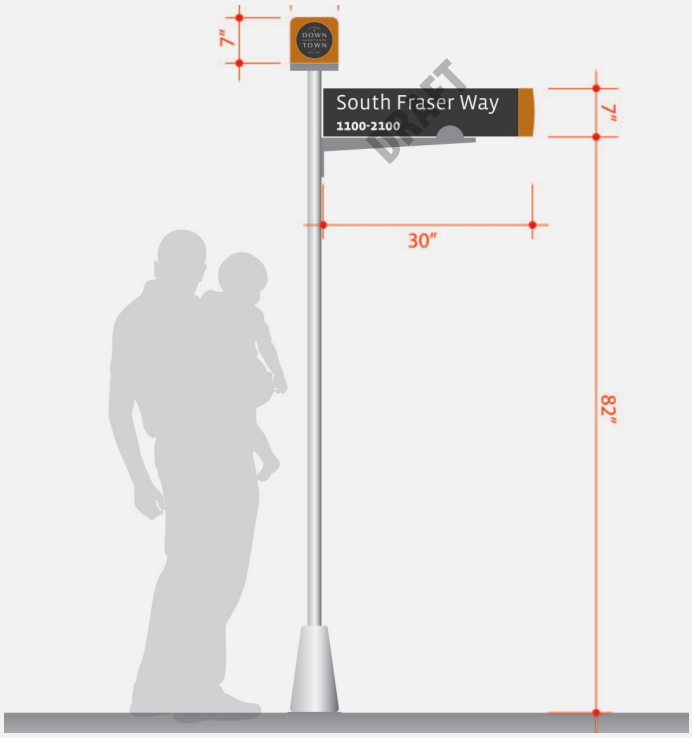


Figure 21. Street Sign

Purpose: Primary identification of downtown streets and integrating of municipal branding strategy.

Materials: Street sign (electrostatic printing on aluminum OR reflective 3M decal on aluminum) on typical street sign post.

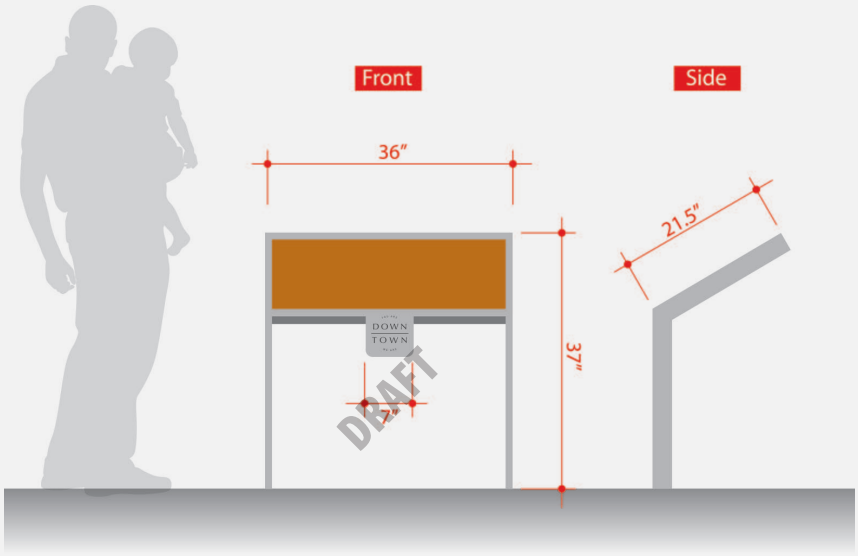
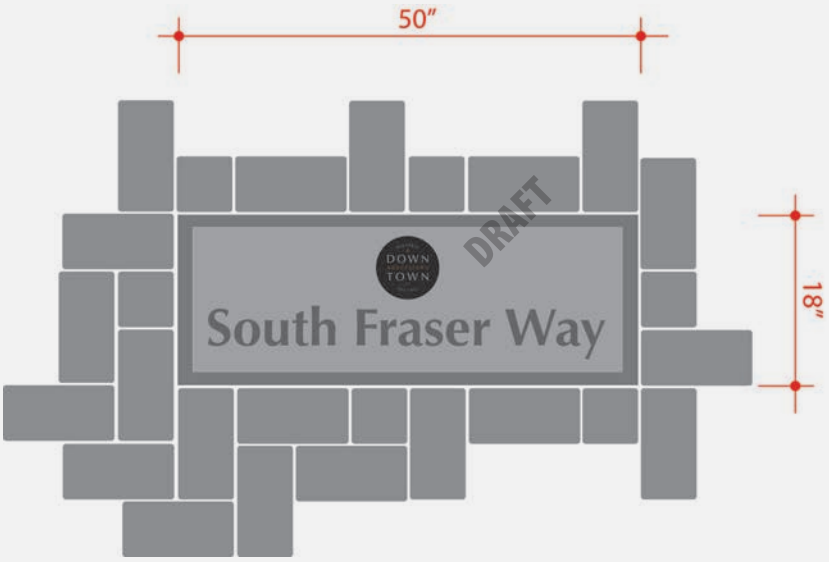


Figure 22. Interpretive Sign

Purpose: Secondary level interpretive signs to strengthen the sense of place in the downtown area.

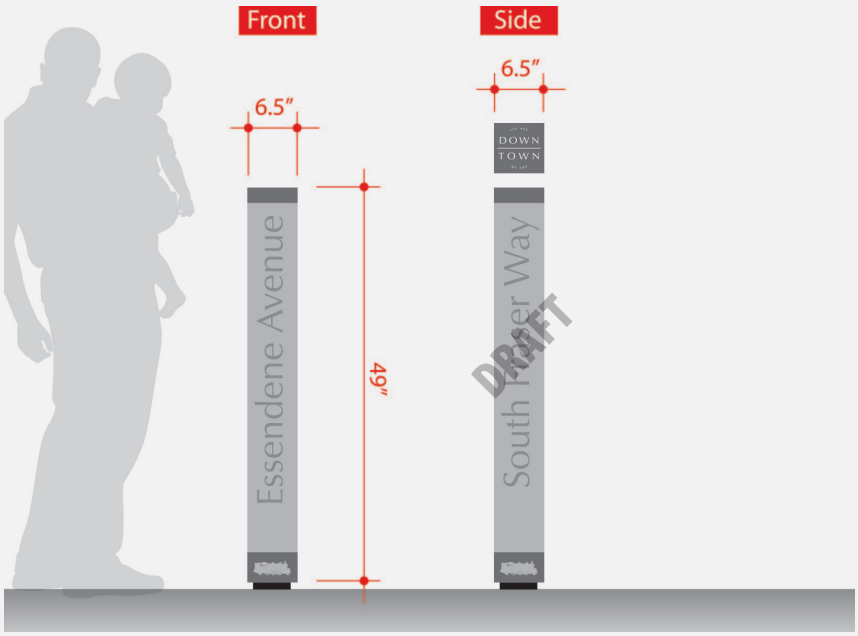
Materials: Electrostatic printing on aluminum bolted to bracketed aluminum extruded square tube. Structure poured into concrete base.



Purpose: Mark intersections at paving level in downtown core.

Materials: Concrete and anodized aluminum insert. Bricks (grey or brown).

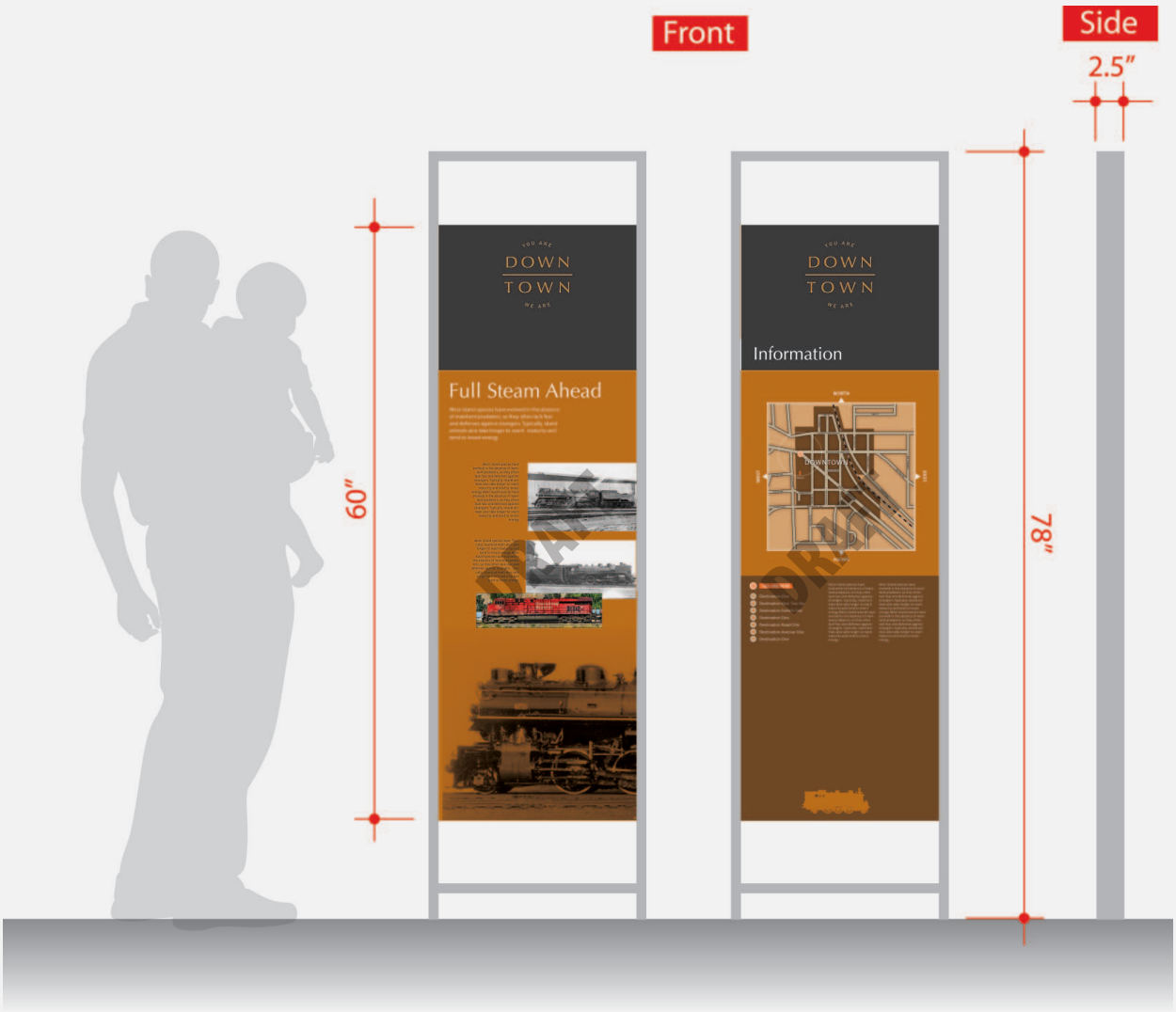
Figure 23. Street Marker



Purpose: Intersection marker and wayfinding element for primary streets of the downtown core.

Materials: Anodized aluminum column with structural aluminum core bolted to concrete base.

Figure 24. Street Intersection Identification



Purpose: LEFT: Interpretive sign element.
RIGHT: Wayfinding sign element. Signs can be positioned back to back or as single installation depending on strategic positioning in downtown core area.

Materials: Electrostatic printing on aluminum bolted to bracketed aluminum extruded square tube. Structure poured into concrete base.

Figure 25. Wayfinding Sign

Streetscape Guidelines

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Essendene Avenue 59

West Railway Street 61

Supporting Streets

McCallum Road 63

McDougall Street 65

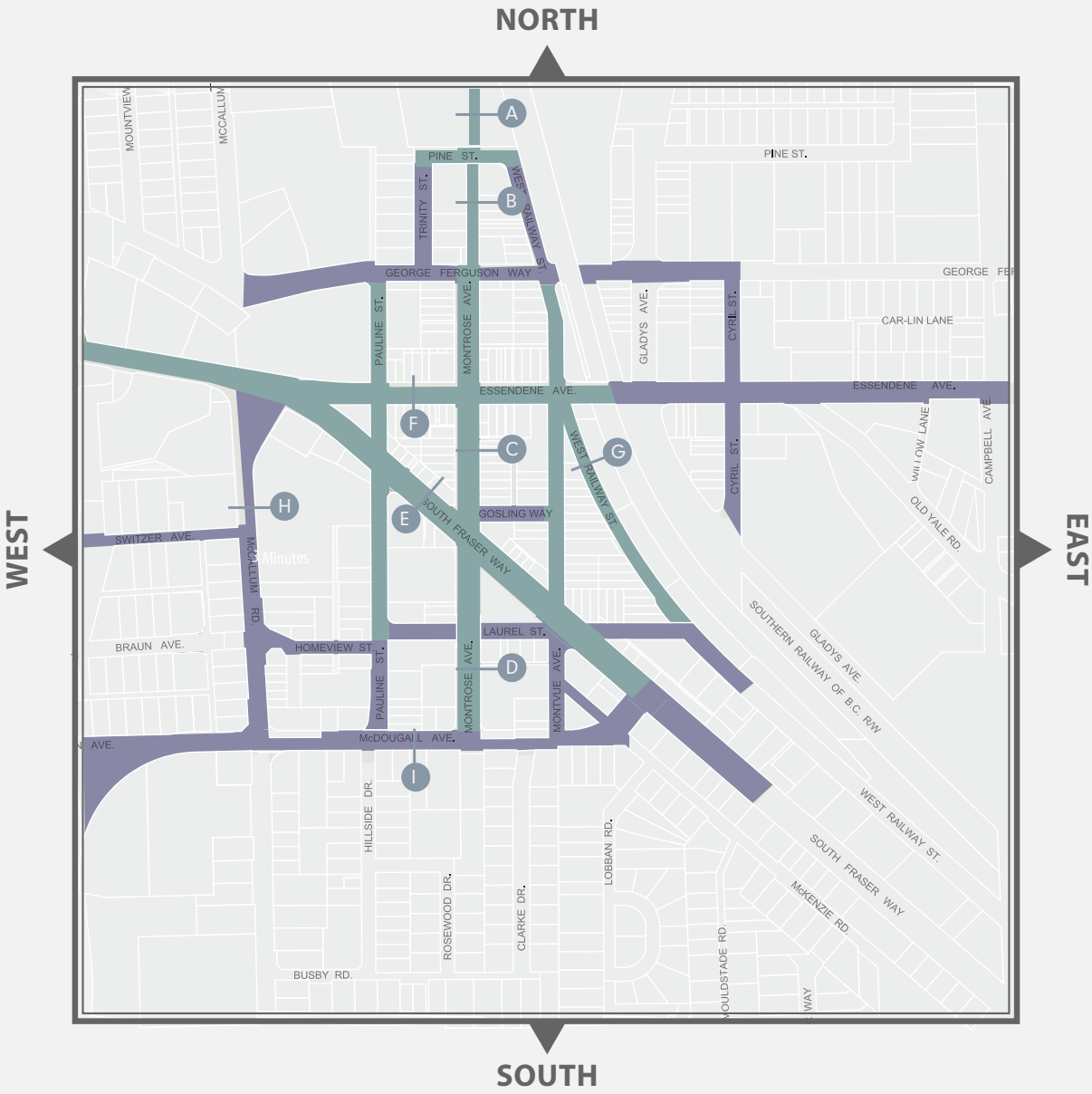
Supplemental Treatments

Commercial Street Corner 67

Supporting Street Corner 71

Enhanced Streets Map

This Historic Downtown Streetscape map shows the distinct streets reviewed in this report. These street types are based on the HDNP and are broken out into commercial streets and supporting streets.



Legend	
	Commercial Street
	Supporting Street
X	Location of Section

Figure 26. Enhanced Streets Map

Streets Matrix

Below is a comprehensive checklist showing a list of furnishings for each street.

		Commercial Streets				Supporting Streets	
		Montrose Avenue	South Fraser Way	Essendene Avenue	West Railway Street	McCallum Road	McDougall Avenue
Sidewalks	Concrete sidewalk	✓	✓	✓	✓	✓	✓
	Asphalt bike-way / Muti-use Path		✓	✓	✓	✓	✓
	Boulevard concrete	✓	✓	✓	✓	✓	✓
Street Trees & Planting	Boulevard planting	✓	✓	✓	✓	✓	✓
	Planted median	✓	✓			✓	
	Tree bumpout			✓			
Site Furnishings	6' Length Bench	✓				✓	✓
	4' Length Bench	✓	✓		✓		
	Leaning Bench	✓					
	Metal Chair	✓	✓				
	Concrete Cube				✓		
	Bike Rack	✓	✓		✓	✓	✓
	Waste Receptacle	✓	✓		✓	✓	✓

Cross-sections not specifically indicated within this section should take elements from other known commercial and/or supporting streets guidelines.

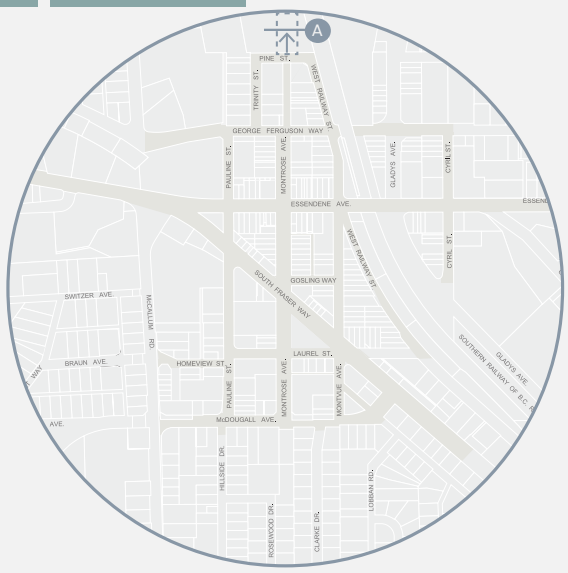
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Commercial Streets

Montrose Avenue: - Clayburn Site (18m) Section A

Legend

1. Concrete sidewalk. Refer to page 31
2. Tree grate. Refer to page 89
3. Boulevard Concrete. Refer to page 31
4. Bike Racks. Refer to page 80
5. Seating - 4' Length Bench. Refer to page 75
6. Planting Strategy B. Refer to page 15



Historic Downtown Neighbourhood Plan ("Elements" on p.92):

- From McCallum Road to Pine Street
- Sidewalk and tree strip on both sides
- Parallel parking on both sides
- One travel lane in either direction

General Intent:

- Establish a clear 1.8m width pedestrian movement zone that facilitates access to the retail frontages in the Clayburn commercial area on both sides of the street.
- Establish a clear 1.5m width boulevard zone for seating and outdoor displays.
- Provide bicycle and pedestrian facilities.
- Provide street trees in tree grates or shrub/rain garden planting on both sides of the street.
- Incorporate historic elements into the hardscape, such as Clayburn brick pavers, to promote wayfinding and to enhance the pedestrian experience.

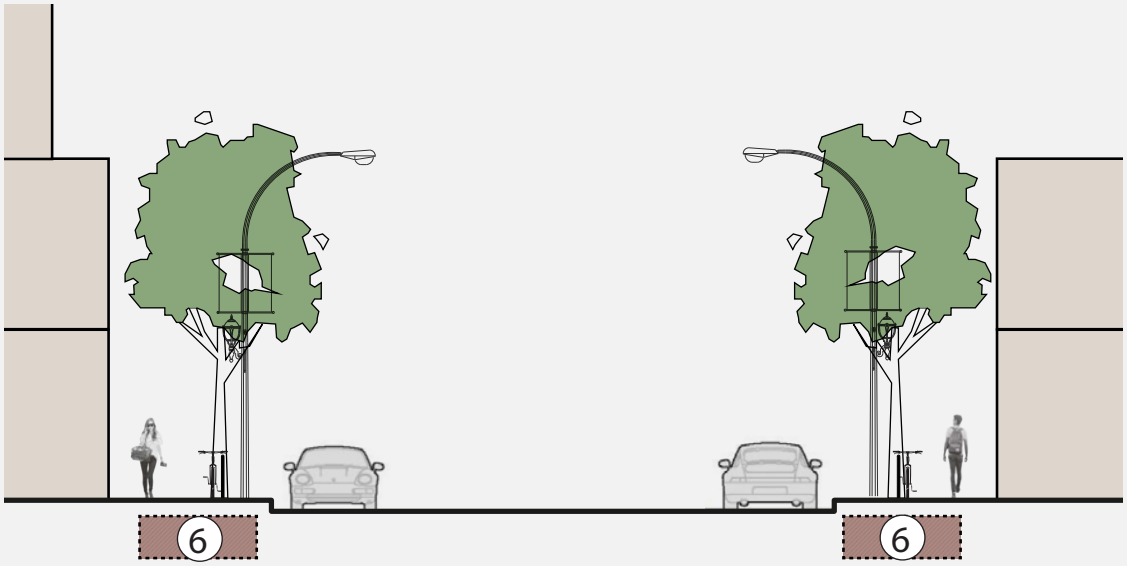


Figure 27.Typical Section for Montrose- Clayburn Site

Roadway and pedestrian lighting poles types will alternate as determined in street lighting detail design.

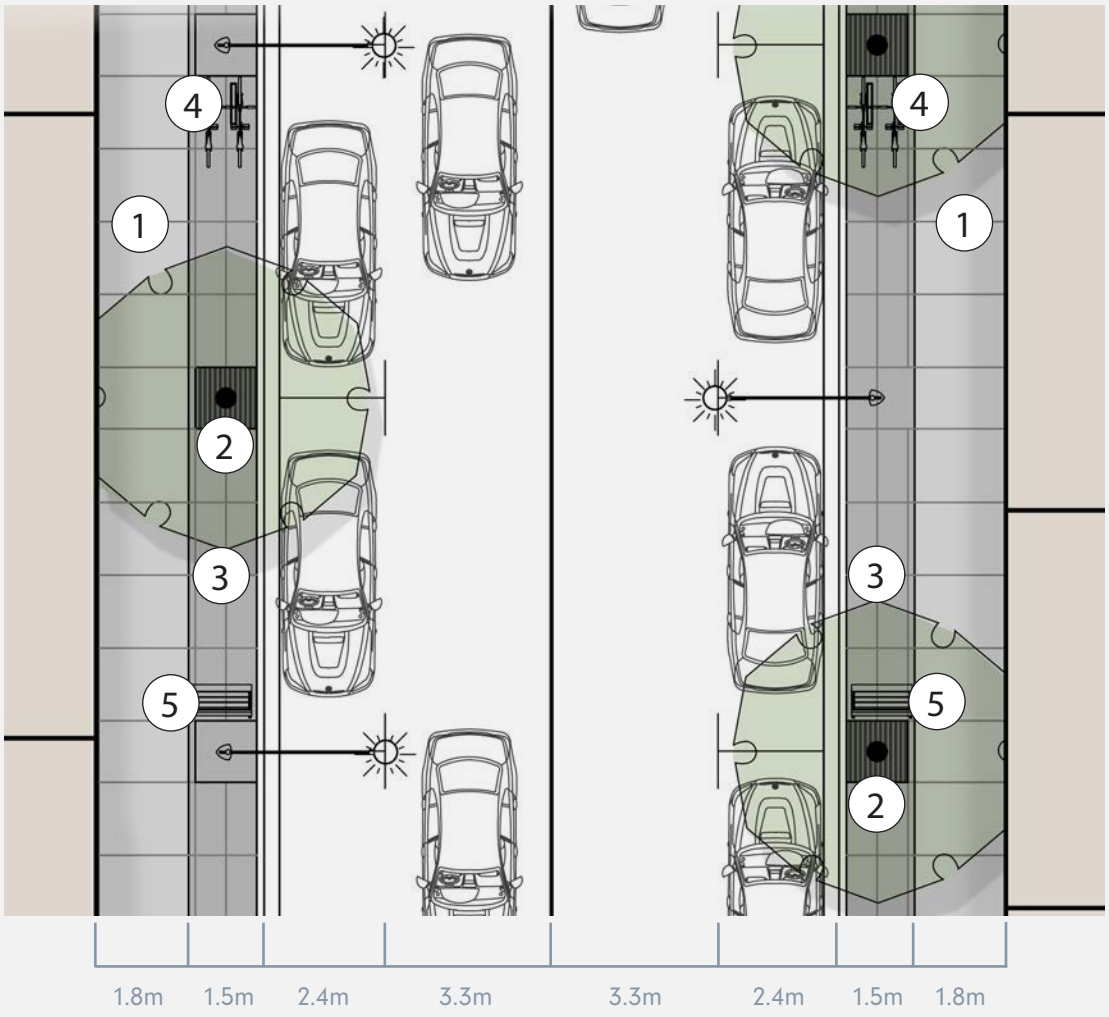


Figure 28.Typical Treatment Plan for Montrose- Clayburn Site

Streetscape Guidelines

Commercial Streets

Montrose Avenue: - Transition Site (16m) | Section B

Legend

1. Concrete sidewalk. Refer to page 31
2. Boulevard planting with opportunity for rain gardens. Refer to page 20
3. Boulevard Concrete. Refer to page 31
4. Bike Racks. Refer to page 80
5. Seating - 4' or 6' Length Bench. Refer to page 75
6. Seating - Concrete Block or Metal Chair. Refer to page 77
7. Planting Strategy A. Refer to page 15
8. Waste Receptacle. Refer to page 86



Historic Downtown Neighbourhood Plan ("Elements" on p.93):

- One block from Pine Street to George Ferguson Way
- Sidewalk and tree strip on both sides
- Parallel parking on the east side
- One travel lane in each direction

General Intent:

- Establish a clear 2.0m pedestrian movement zone.
- Establish a clear 1.5m boulevard zone for seating, lighting, landscaping, and outdoor retail displays.
- Provide bicycle and pedestrian facilities.
- Provide minimum 3 bike racks on each side of each block.
- Provide minimum 2 seating options on each side of each block.
- Provide street trees in shrub/rain garden planting on both sides of the street.

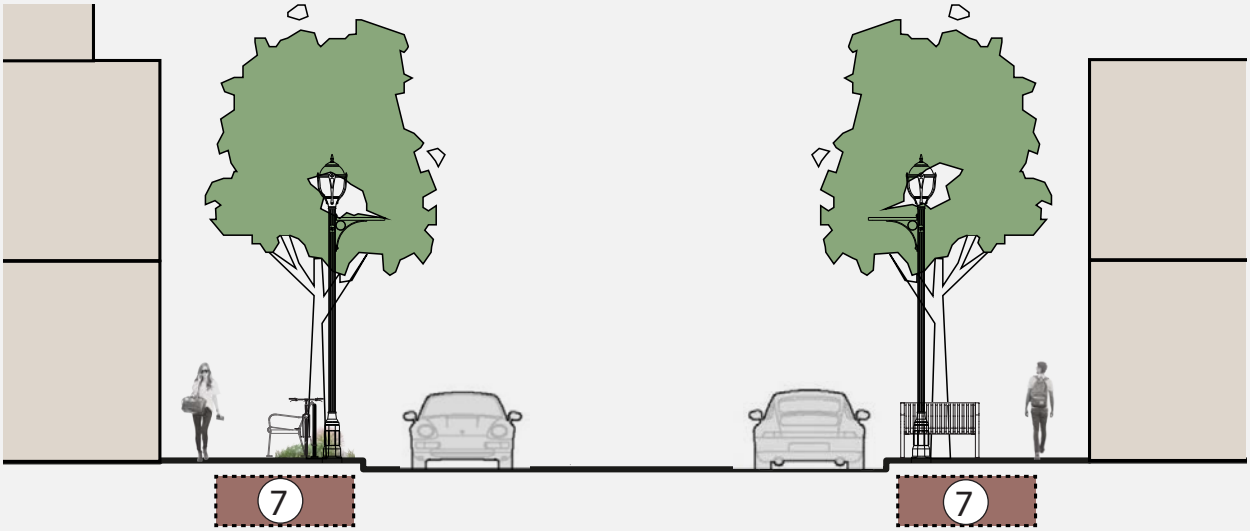


Figure 29.Typical Section for Montrose- Transition Site

Roadway and pedestrian lighting poles types will alternate as determined in street lighting detail design.

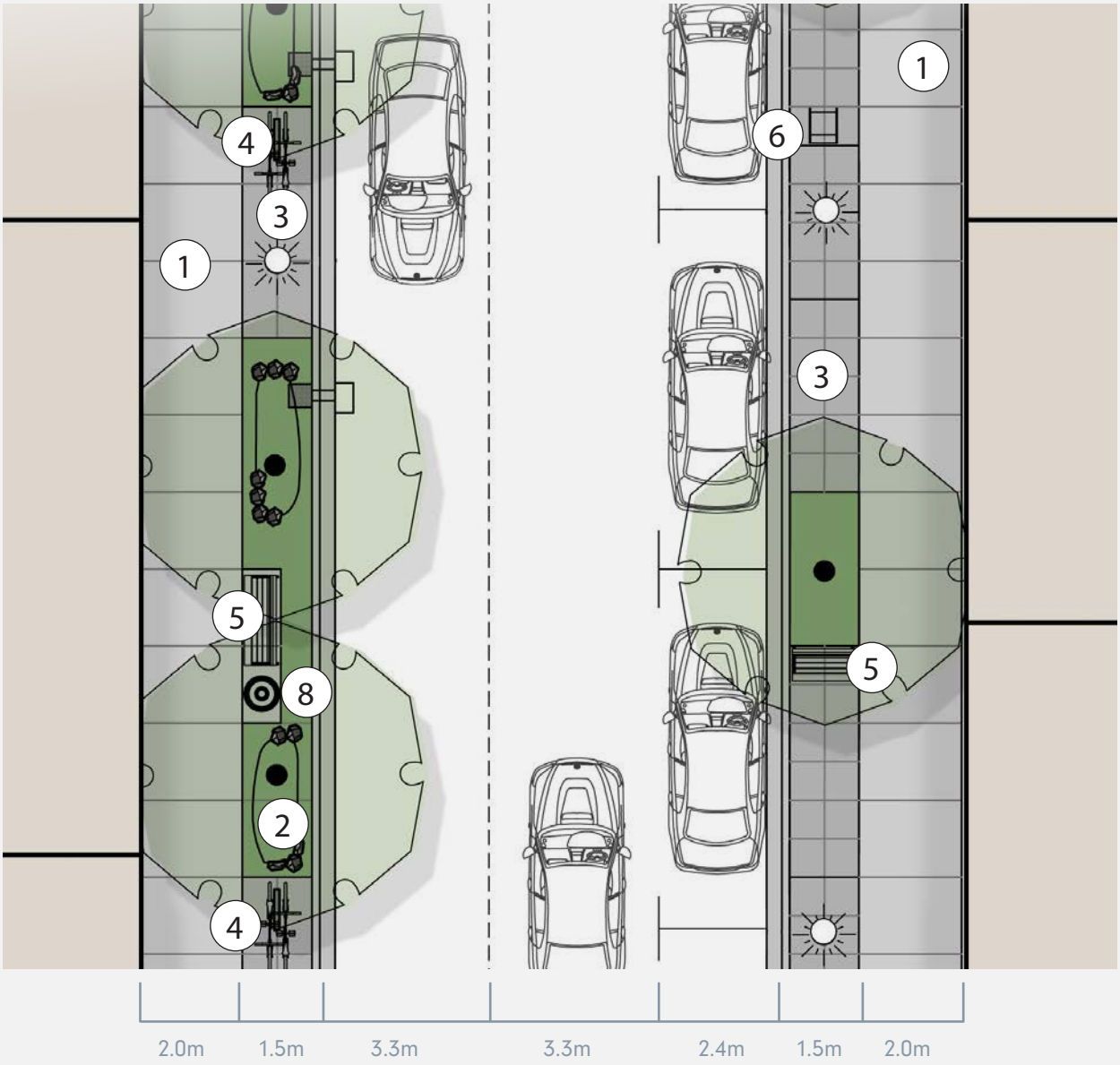


Figure 30. Typical Treatment plan for Montrose- Transition Site

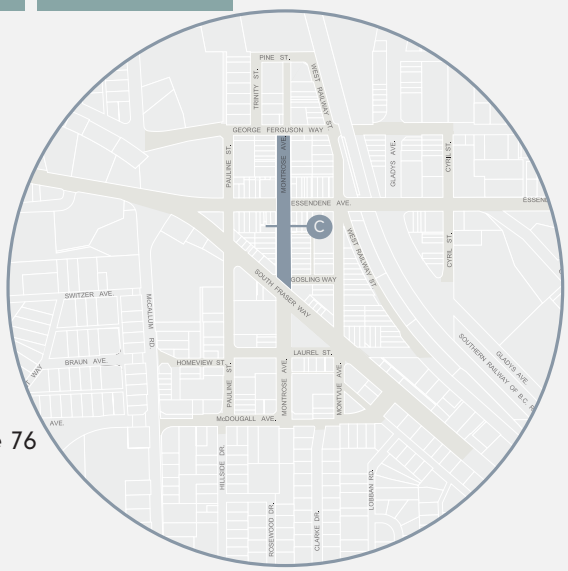
Development bylaw will supersede where dimensions differ on typical section.

Commercial Streets

Montrose Avenue: Retail Site (27.4m) — Section C

Legend

1. Concrete sidewalk. Refer to page 31
2. Tree grate. Refer to page 89
3. Boulevard Concrete. Refer to page 31
4. Bike Racks. Refer to page 80
5. Seating - 4' Length Bench. Refer to page 75
6. Seating - Concrete Block or Metal Chair. Refer to page 76
7. Planted median with opportunity for rain gardens. Refer to page 19 (Planting Strategy C)
8. Planting Strategy B. Refer to page 17



Historic Downtown Neighbourhood Plan ("Elements" on p.94):

- Two blocks from George Ferguson Way to South Fraser Way
- Sidewalk and tree strip on both sides
- Angled parking on the east side
  One travel lane in each direction

General Intent:

- Establish a wider (2.4m width) pedestrian movement zone that facilitates access to the existing retail frontages on Montrose Avenue on both sides of the street.
- Establish a clear 1.5m width boulevard zone for seating, lighting, landscaping, and outdoor retail displays.
- Provide bicycle and pedestrian facilities.
- Provide minimum 3 bike racks on each side of each block.
- Provide minimum 2 seating options on each side of each block.



Figure 31.Typical Treatment rendering for Montrose- Retail Site

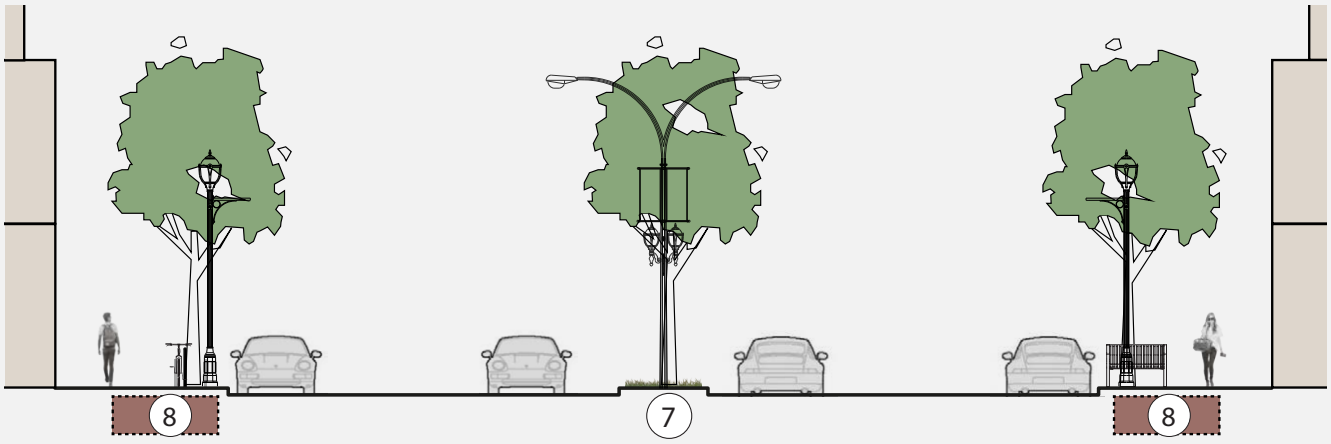


Figure 32.Typical Section for Montrose- Retail Site

Roadway and pedestrian lighting poles types will alternate as determined in street lighting detail design.

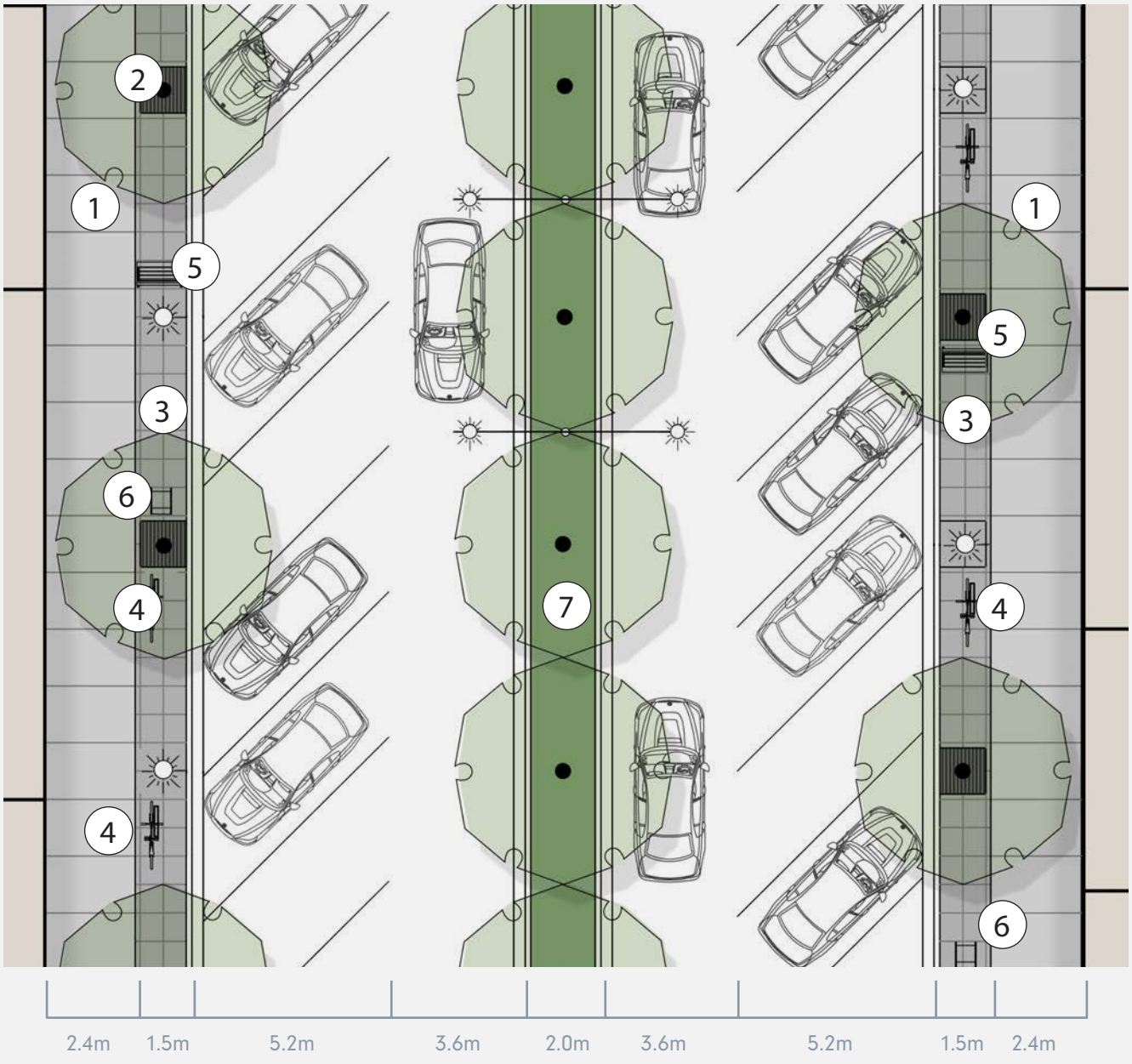


Figure 33.Typical Treatment plan for Montrose- Retail Site

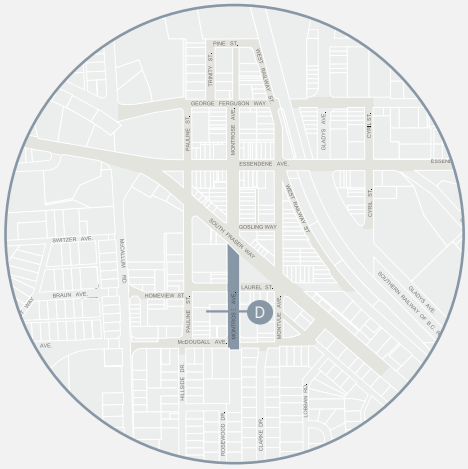
Development bylaw will supersede where dimensions differ on typical section.

Commercial Streets

Montrose Avenue: Transit Site (27.4m) — Section D

Legend

1. Concrete sidewalk. Refer to page 31
2. Boulevard planting with opportunity for rain gardens. Refer to page 21
3. Boulevard Concrete. Refer to page 31
4. Bike Locker. Refer to page 82
5. Seating - 6' Length Bench. Refer to page 75
6. Seating - Concrete Block. Refer to page 77
7. Seating - Leaning Bench. Refer to page 78
8. Bus Shelter - indicative
9. Waste Receptacle. Refer to page 86
10. Tactical Ground Surface Indicators.



Historic Downtown Neighbourhood Plan ("Elements" on p.95):

- Two blocks from South Fraser Way to McDougall Avenue
- Sidewalk, tree strip, and transit shelters on both sides
- One bus lane in each direction (sawtooth or straight curb)
- One travel lane in each direction



Figure 34.Typical Render section for Montrose- Tranist Site

General Intent:

- Establish a clear 2.4m width pedestrian zone.
- Provide street trees in tree grates or shrub/rain garden planting on both sides of the street.
- Provide a B.C. transit specified bus shelter on both sides of the street with a "standing zone" to provide adequate access for users. Bus shelters to provide adequate weather protection.
- Provide bicycle and pedestrian facilities.
- Provide minimum 3 bike racks on each side of block.
- Provide minimum 2 seating options on each side of each block.
  Receptacles to be located at transit stops
- Provide seating, public art, or other programmatic elements to create a unique outdoor space for pedestrians.
- Incorporate historic elements into the hardscape, such as Clayburn brick pavers, to promote wayfinding and to enhance the pedestrian experience.



Figure 35. Typical Overhead Render for Montrose- Tranist Site

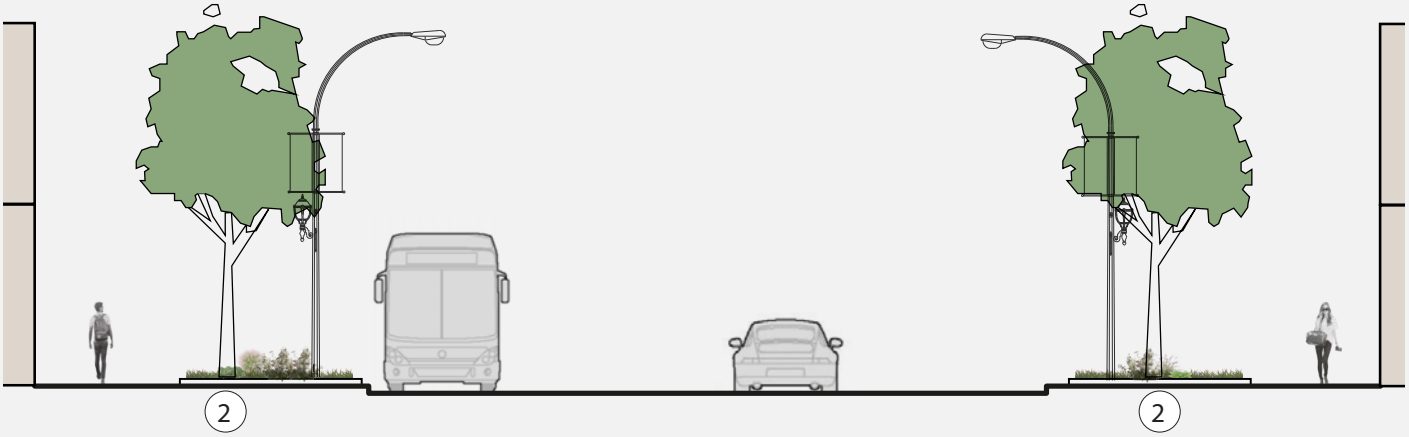


Figure 36.Typical Section for Montrose- Transit Site

Roadway and pedestrian lighting poles types will alternate as determined in street lighting detail design.

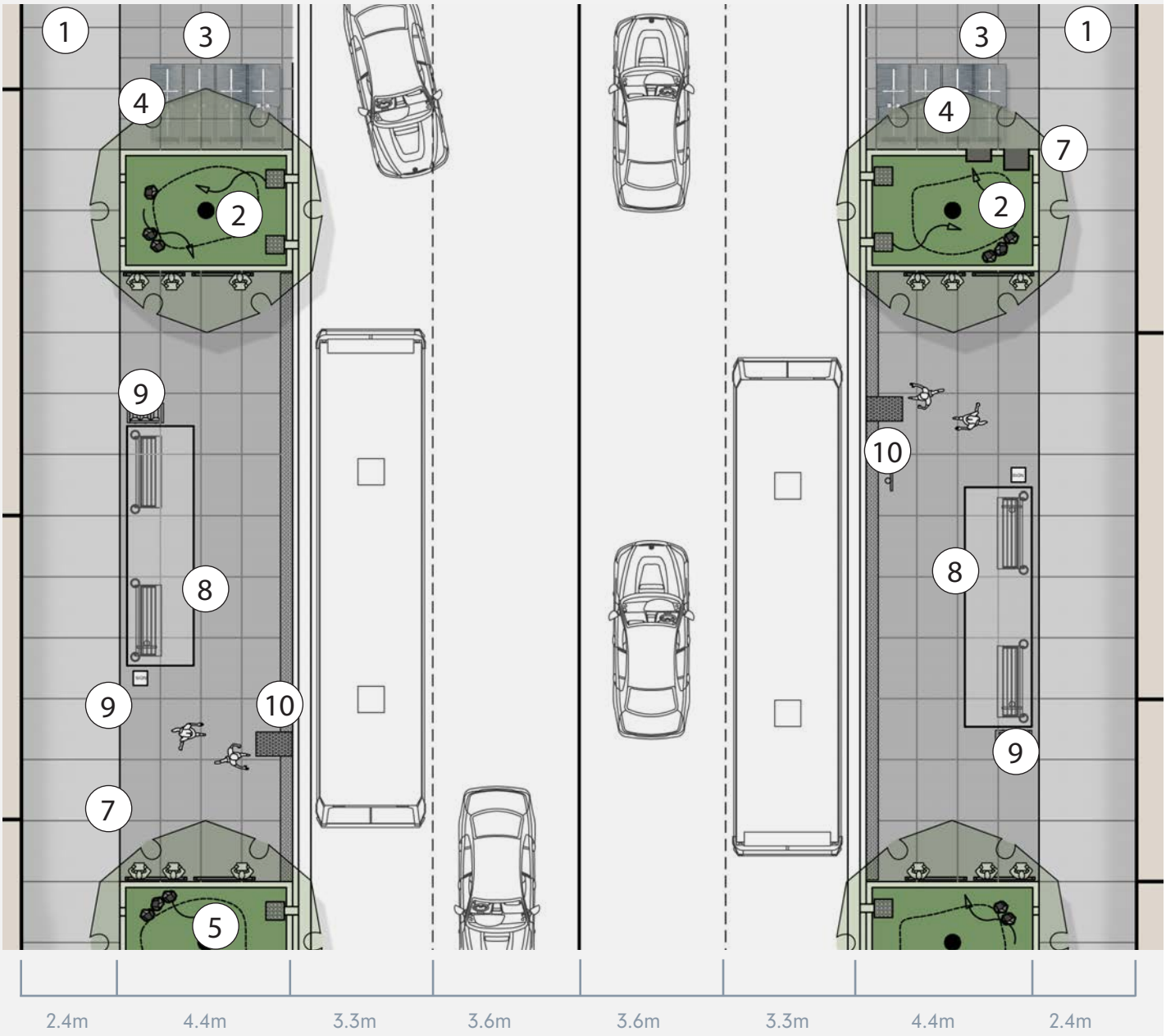


Figure 37.Typical Treatment plan for Montrose- Transit Site

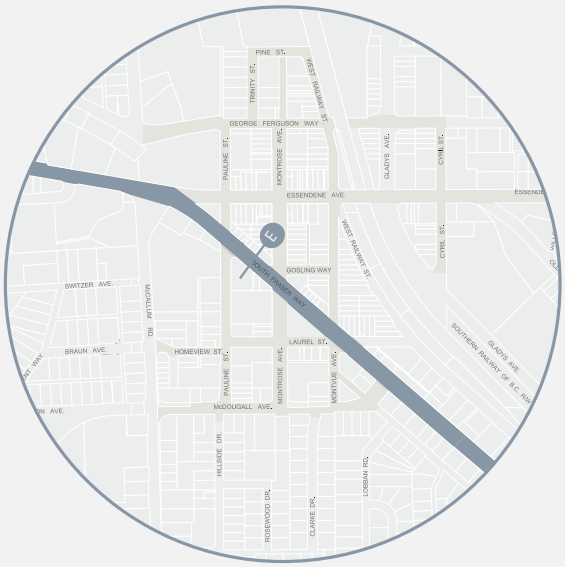
Development bylaw will supersede where dimensions differ on typical section.

Commercial Streets

South Fraser Way (27.3m - 30.3m) | Section E

Legend

1. Concrete sidewalk. Refer to page 31
2. Asphalt bikeway.
3. Boulevard planting with opportunity for rain gardens. Refer to page 21
4. Planted median with opportunity for rain gardens. Refer to page 18 (Planting Strategy C.)
5. Boulevard Concrete. Refer to page 31
6. Bike Racks. Refer to page 80
7. Seating - 4' Length Bench. Refer to page 75
8. Waste Receptacle. Refer to page 86



Historic Downtown Neighbourhood Plan ("Elements" on p.97):

- From McCallum Road to McDougall Avenue
- North side angle parking, south side parallel parking
- One travel lane in each direction
- Left turn lanes at intersections (with central boulevard and trees between intersections)
- West of Montrose Avenue has sidewalk/bike lane/boulevard elements reduced in width to accommodate cross section within a 27.3m ROW

General Intent:

- Establish a clear 2.7m width pedestrian movement zone.
- Provide street trees in tree grates or shrub/rain garden planting on both sides of the street. Rain gardens to facilitate drainage due to the wider cross-section with hardscape elements.
- Establish a clear 1.5m width boulevard zone for seating, lighting, landscaping, and outdoor retail displays.
- Establish a median planted with trees between intersections.
- Provide bicycle and pedestrian facilities.
- Provide minimum 3 bike racks on each side of each block.
- Provide minimum 2 seating options on each side of each block
- Provide bicycle lanes on both sides of the street. Bicycle lanes at intersection transitions to follow B.C. Active Transportation Guidelines and best practices.

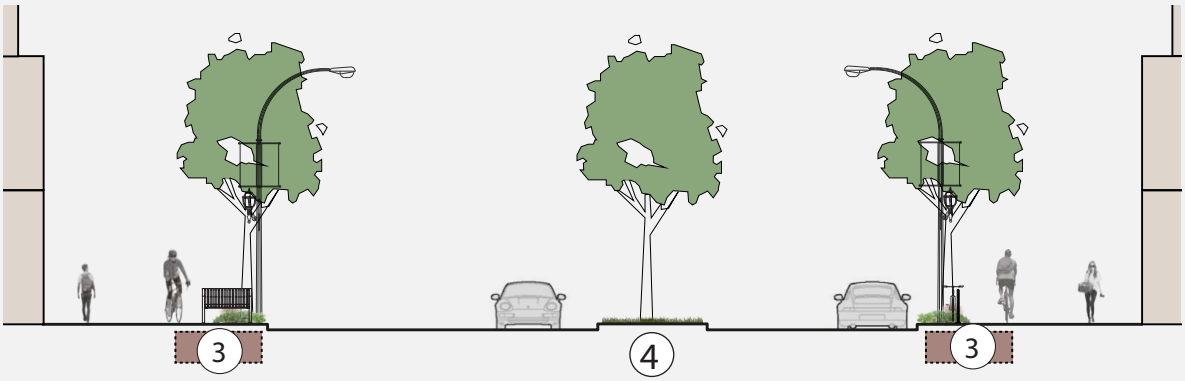


Figure 38.Typical Section for South Fraser Way

Roadway and pedestrian lighting poles types will alternate as determined in street lighting detail design.

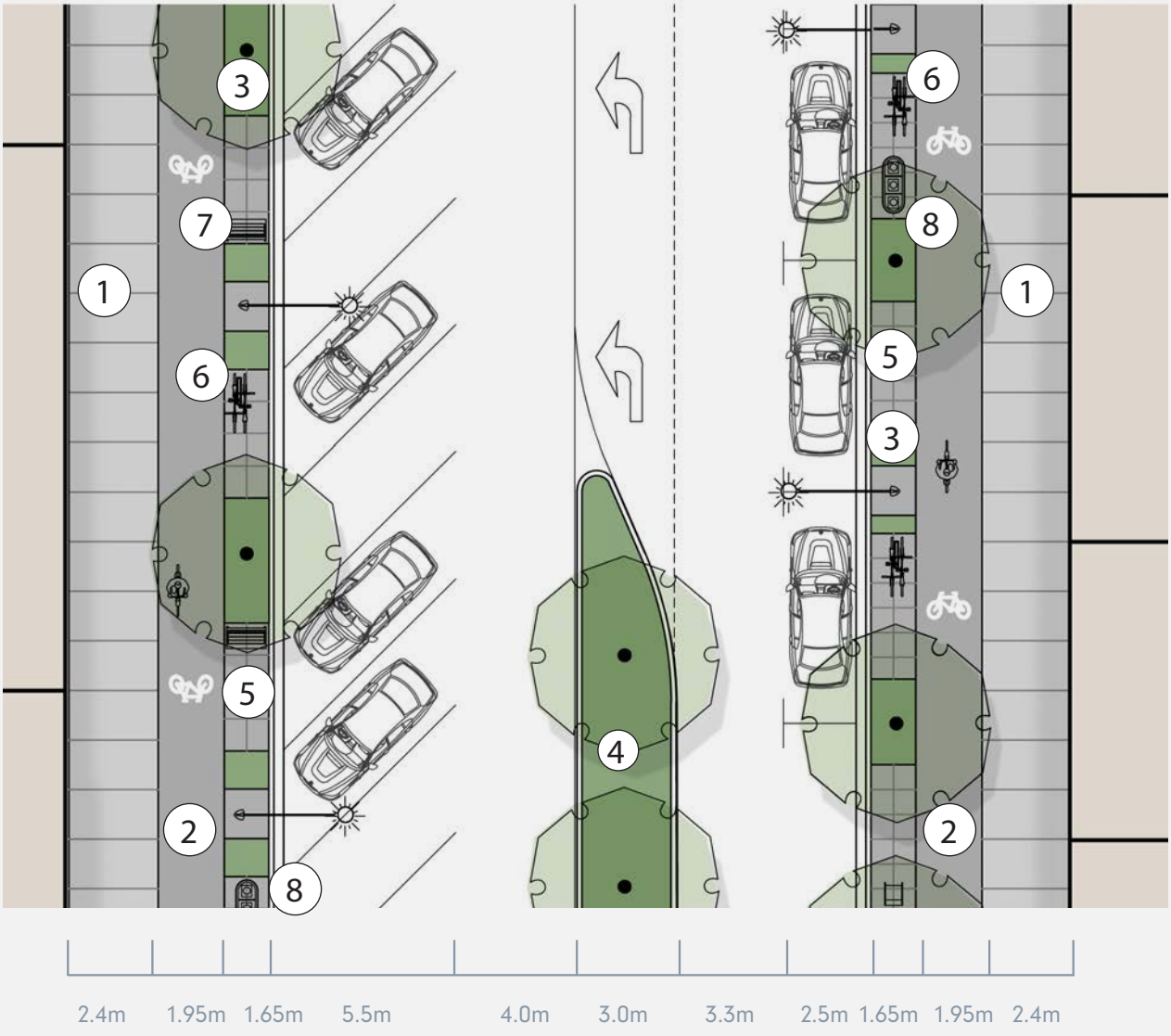


Figure 39.Typical Treatment plan for South Fraser Way

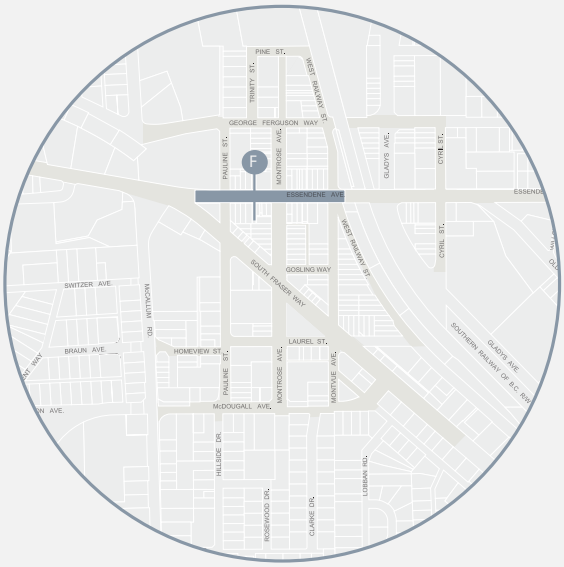
Development bylaw will supersede where dimensions differ on typical section.

Commercial Streets

Essendene Avenue (24.4m) | Section F

Legend

1. Concrete sidewalk. Refer to page 31
2. Asphalt bikeway.
3. Boulevard Concrete. Refer to page 31
4. Boulevard planting with opportunity for rain gardens. Refer to page 21
5. Boulevard Planting



Historic Downtown Neighbourhood Plan ("Elements" on p.96):

- From South Fraser Way to Cyril Street
- Sidewalk and AAA bike lane on both sides
- Parallel parking on both sides (with possible tree pockets)
- One travel lane in each direction
- Left turn lanes at intersections

General Intent:

- Reduce vehicle space and retain on-street parallel parking.
- Establish a wider (2.8m width) pedestrian movement zone.
- Establish an AAA bike lane on both sides of the street.
- Provide bicycle and pedestrian facilities.
- Incorporate historic elements into the hardscape, such as Clayburn brick pavers, to promote wayfinding and to enhance the pedestrian experience.
- Establish street tree pockets within the parallel parking lanes to regular intervals.
- Provide bicycle lanes on both sides of the street. Bicycle lanes at intersection transitions to follow B.C. Active Transportation Guidelines and best practices.

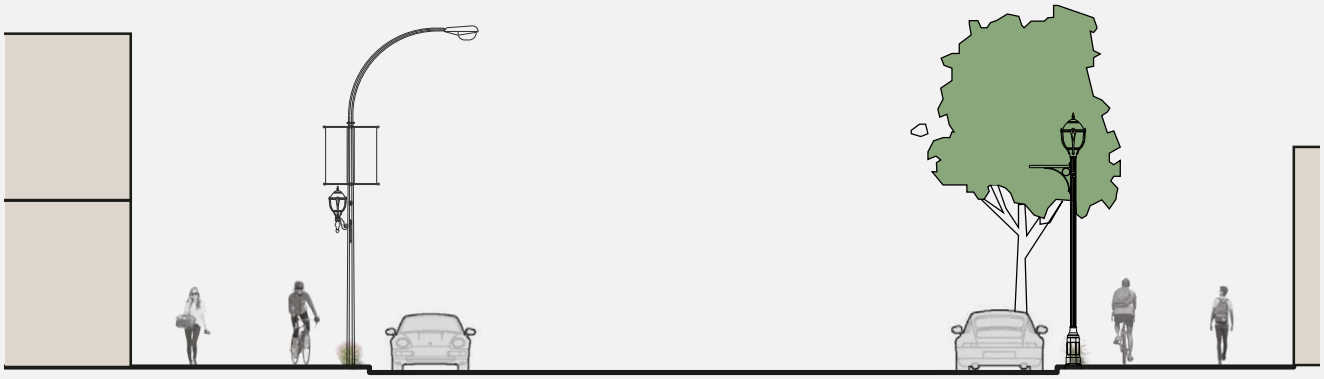


Figure 40.Typical Section for Essendene Avenue
Roadway and pedestrian lighting poles types will alternate as determined in street lighting detail design.

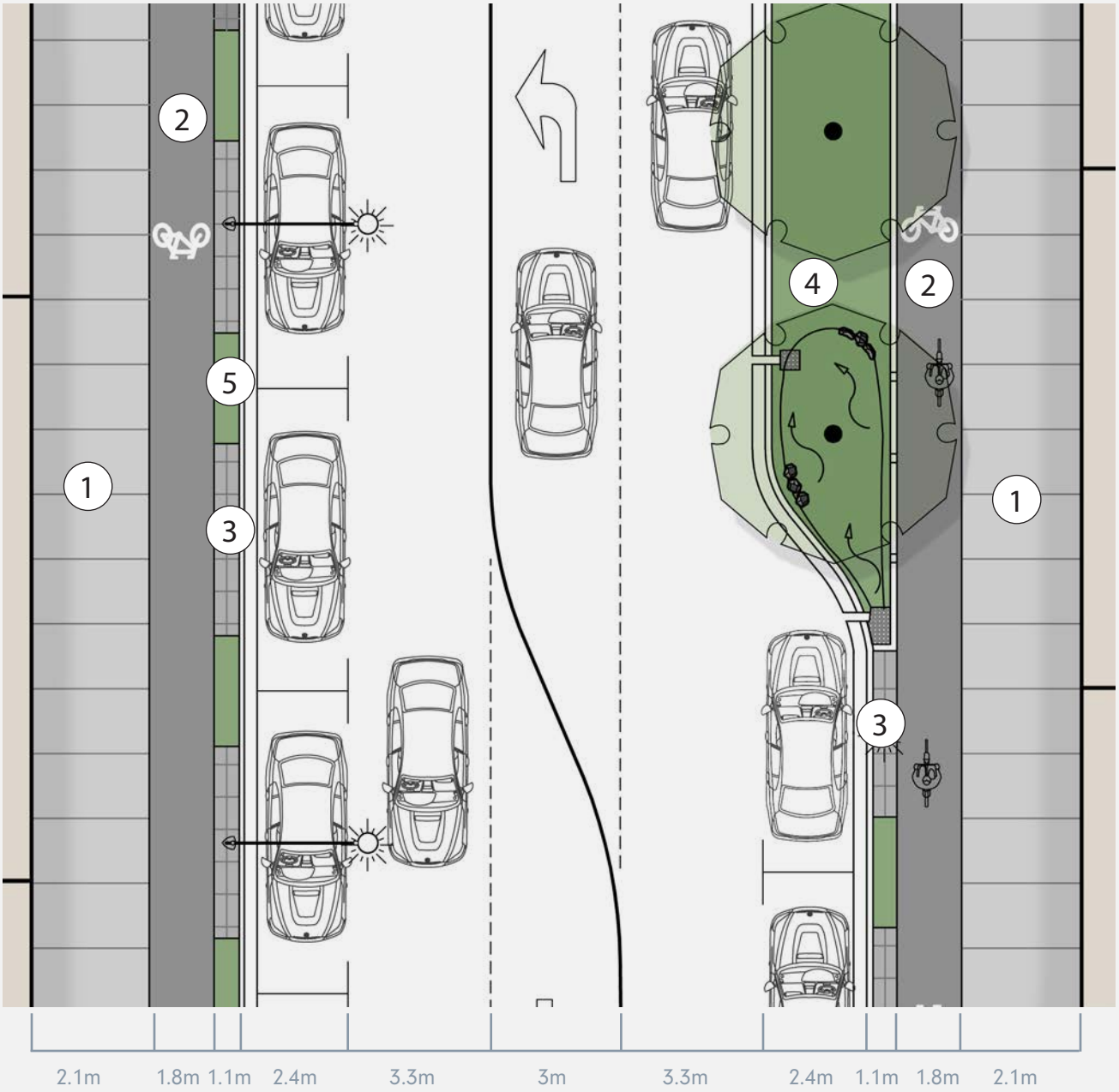


Figure 41.Typical Treatment plan for Essendene Avenue
Development bylaw will supersede where dimensions differ on typical section.

Streetscape Guidelines

Commercial Streets

West Railway Street (17.5m - 20m) | Section G

Legend

1. Concrete sidewalk. Refer to page 31
2. Multiuse Path.
3. Boulevard Concrete. Refer to page 31
4. Boulevard planting with opportunity for rain gardens. Refer to page 15 (Planting Strategy A)
5. Seating - Concrete Block. Refer to page 77
6. Seating - 4' Length Bench. Refer to page 75
7. Waste Receptacle. Refer to page 86



Historic Downtown Neighbourhood Plan ("Elements" on p.98):

- From Laurel Street to Pine Street
- Multiuse path on east side, sidewalk on west side, tree strip on both sides
- Parallel parking on both sides
- One travel lane each direction
- North of George Ferguson Way has sidewalk/multiuse path elements reduced in width and one side parallel parking removed to accommodate cross section within a 17.5m ROW

General Intent:

- Establish a clear 2.0m width pedestrian movement zone.
- Establish a clear 1.5m width boulevard zone for seating, lighting, landscaping, and outdoor retail displays.
- Establish a multi-use path on the east side of the street.
- Provide street trees within shrub/rain garden planting on both sides of the street.
- Provide parallel parking on both sides of the street.
- Provide bicycle and pedestrian facilities.
- Provide minimum 3 bike racks on each side of each block.
- Provide minimum 2 seating options on each side of each block.

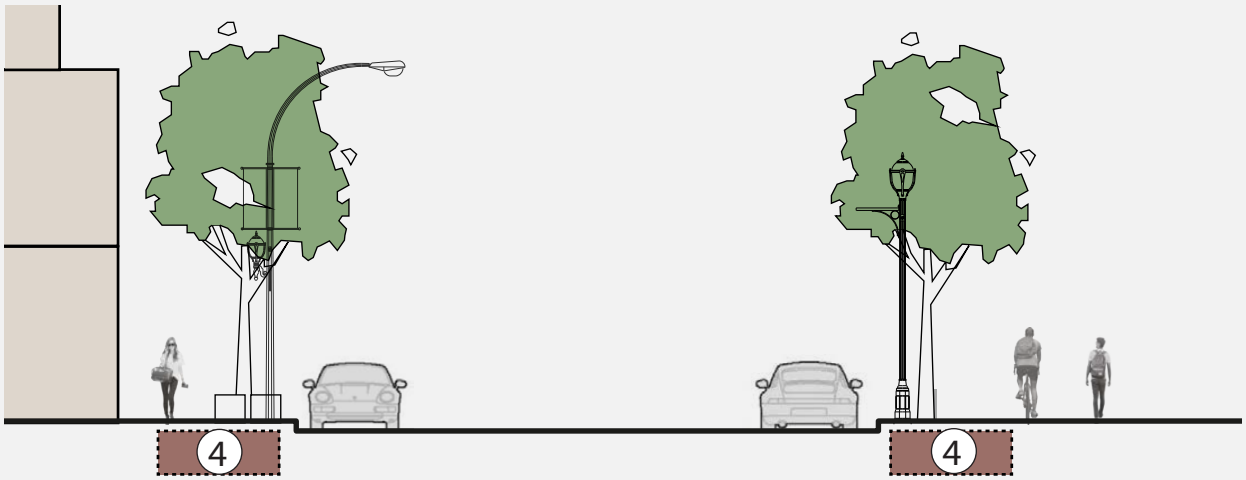


Figure 42.Typical Section for West Railway Street
Roadway and pedestrian lighting poles types will alternate as determined in street lighting detail design.

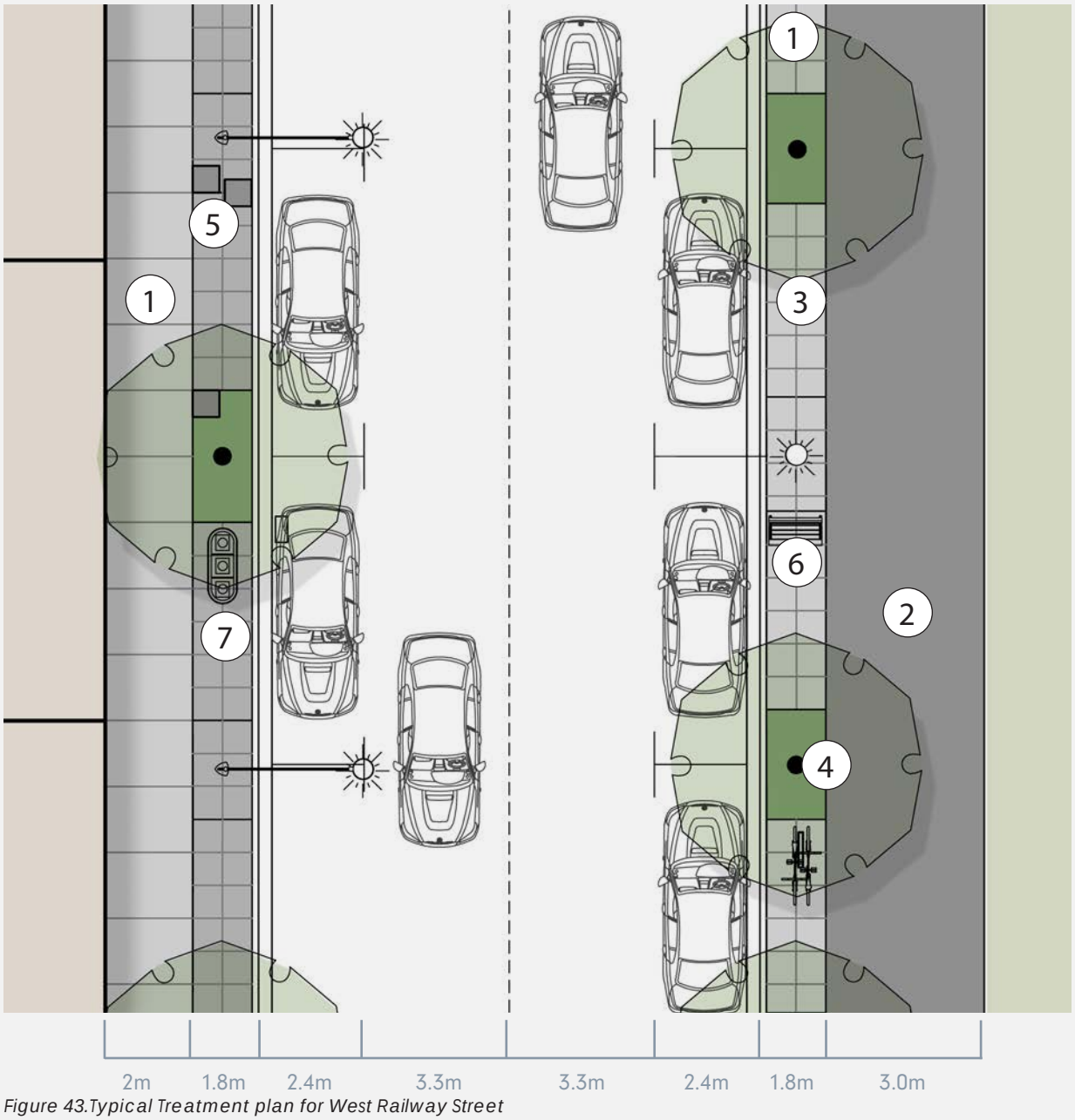


Figure 43.Typical Treatment plan for West Railway Street
Development bylaw will supersede where dimensions differ on typical section.

Streetscape Guidelines

Supporting Streets

McCallum Road (30m) | Section H

Legend

1. Concrete sidewalk. Refer to page 31
2. Asphalt bikeway.
3. Boulevard Concrete. Refer to page 31
4. Boulevard planting with opportunity for rain gardens. Refer to page 15 (Planting Strategy A)
5. Planted median. Refer to page 19 (Planting Strategy C)
6. Seating - 6' Length Bench. Refer to page 75
7. Waste Receptacle. Refer to page 86
8. Bike Racks. Refer to page 80



Historic Downtown Neighbourhood Plan ("Elements" on p.100):

- From Marshall Road to South Fraser Way
- Sidewalk, tree strip and AAA bike lane on both sides
- Two travel lanes in each direction
- Left turn lanes at intersections (with central boulevard and trees between intersections)

General Intent:

- Establish a clear 2.2m width pedestrian movement zone.
- Establish a clear 2.3m width boulevard zone for seating, lighting, landscaping, and outdoor retail displays.
- Establish a bike lane on both sides of the street.
- Provide bicycle and pedestrian facilities.
- Provide minimum 3 bike racks on each side of each block.
- Provide minimum 2 seating options on each side of each block.
- Provide street trees in tree grates or shrub/rain garden planting on both sides of the street.

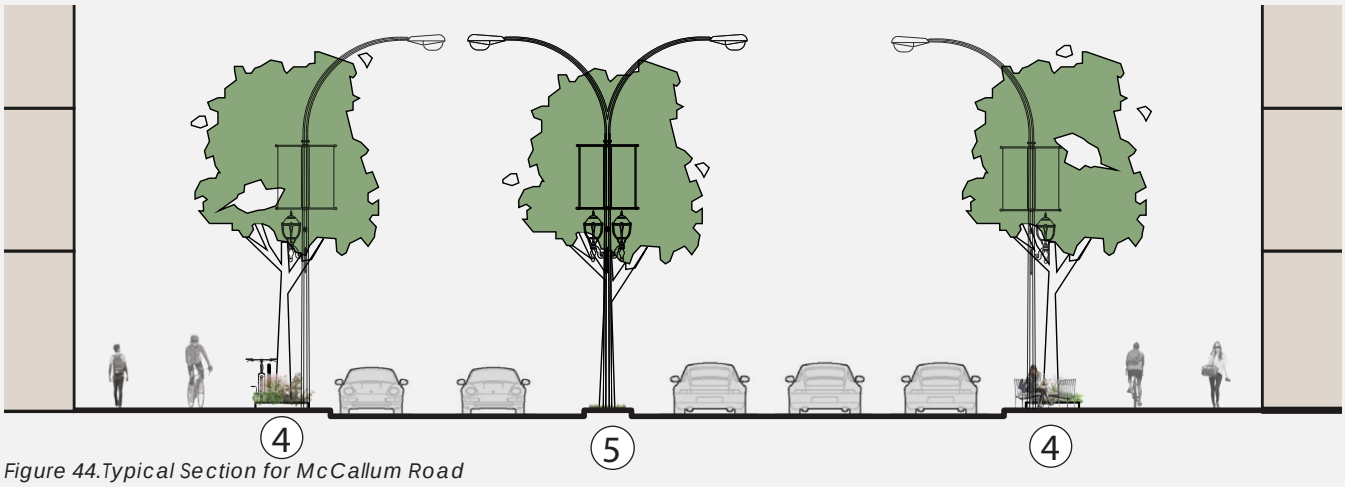


Figure 44.Typical Section for McCallum Road

Roadway and pedestrian lighting poles types will alternate as determined in street lighting detail design.

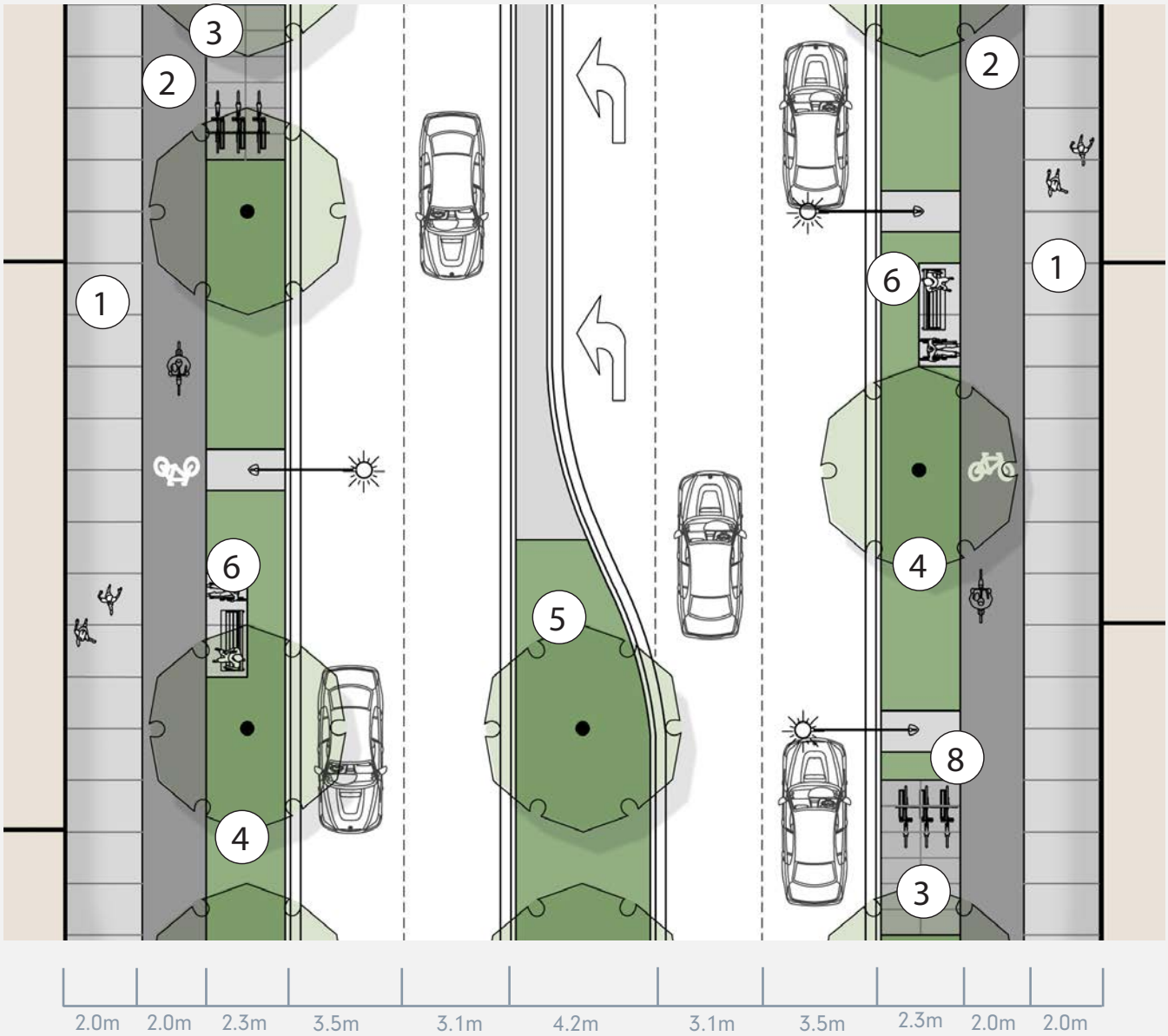


Figure 45.Typical Treatment plan for McCallum Road

Development bylaw will supersede where dimensions differ on typical section.

Supporting Streets

McDougall Avenue (22.5m) | Section I

Legend

1. Concrete sidewalk. Refer to page page 31
2. Asphalt bikeway.
3. Boulevard Concrete. Refer to page page 31
4. Boulevard planting with opportunity for rain gardens. Refer to page 15 (Planting Strategy A)
5. 6' Length Bench. Refer to page 75
6. Bike Rack. Refer to page 80
7. Waste Receptacle. Refer to page 86



Historic Downtown Neighbourhood Plan ("Elements" on p.100):

- From Marshall Road to South Fraser Way
- Sidewalk, tree strip and AAA bike lane on both sides
- Two travel lanes in each direction
- Left turn lanes at intersections (with central boulevard and trees between intersections)

General Intent:

- Establish a clear 2.0m width pedestrian movement zone.
- Establish a clear 1.85m width boulevard zone for seating, lighting, landscaping, and outdoor retail displays.
- Establish an AAA bike lane on both sides of the street.
- Provide street trees in tree grates or shrub/rain garden planting on both sides of the street.
- Provide bicycle and pedestrian facilities.
- Provide minimum 3 bike racks on each side of each block.
- Provide minimum 2 seating options on each side of each block.

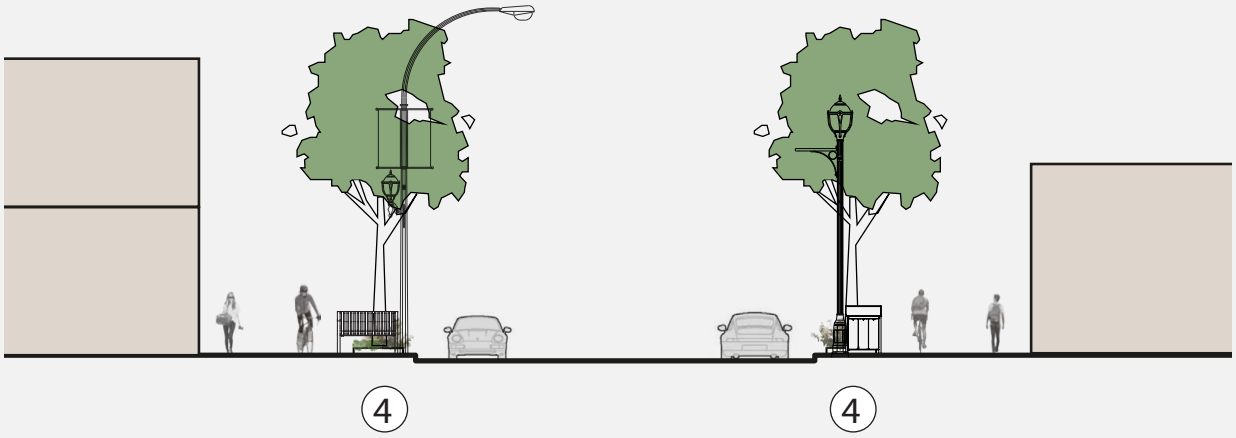


Figure 46.Typical Section for McDougall Avenue

Roadway and pedestrian lighting poles types will alternate as determined in street lighting detail design.

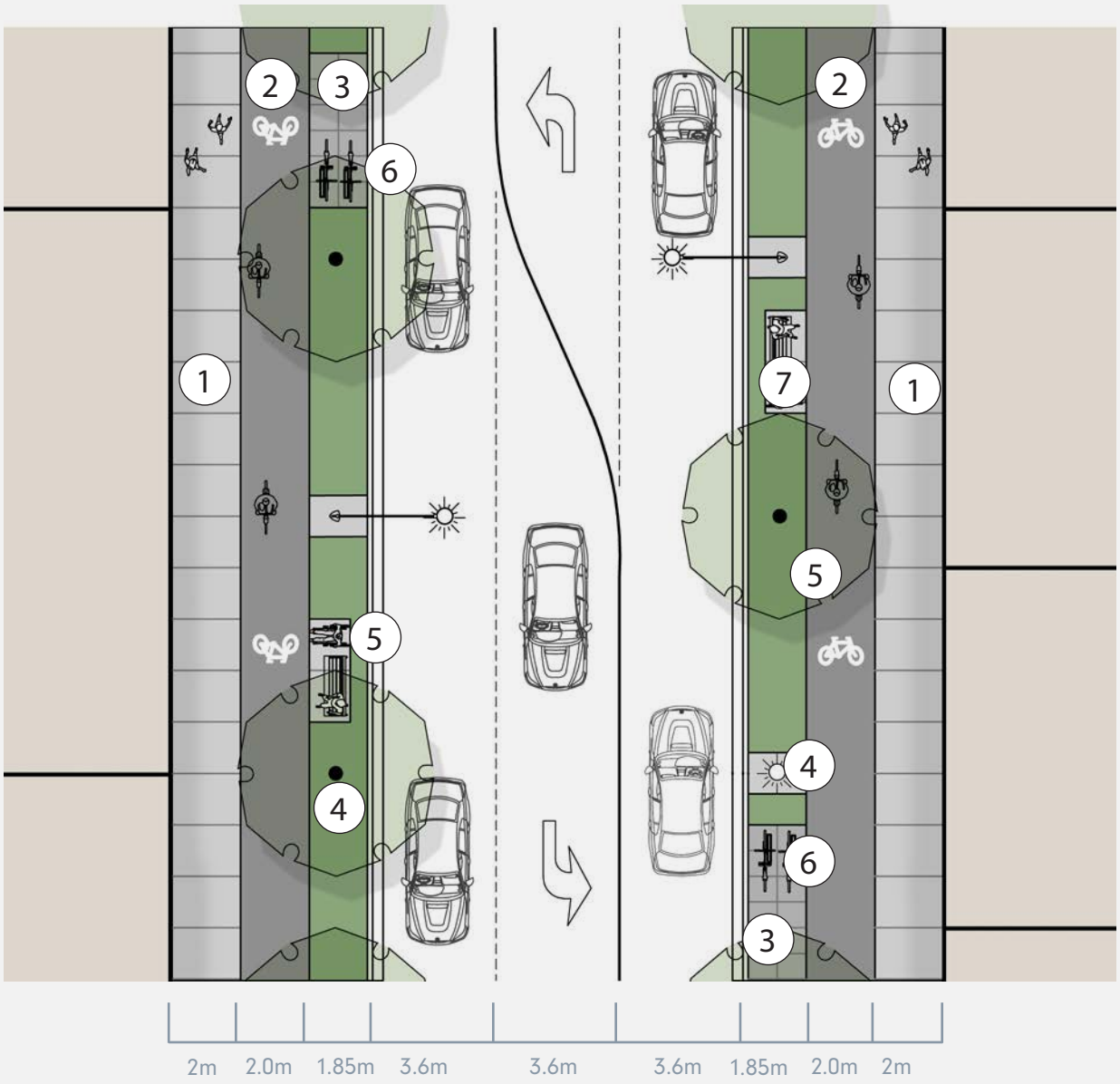


Figure 47.Typical Treatment plan for McDougall Avenue

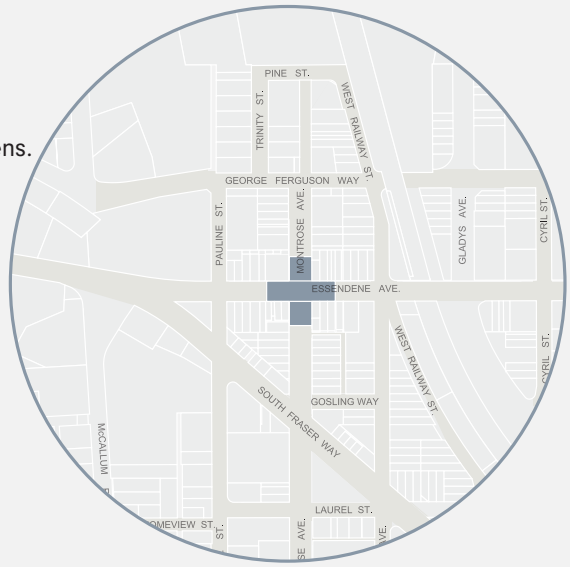
Development bylaw will supersede where dimensions differ on typical section.

Commercial Streets

Typical Corner Treatment

Legend

1. Concrete sidewalk. Refer to page 31
2. Boulevard planting with opportunity for rain gardens. Refer to page 21
3. Boulevard Concrete. Refer to page 31
4. Asphalt bikeway.
5. Bike Racks. Refer to page 80
6. Seating - 6' Length Bench. Refer to page 75
7. Intersection Concrete. Refer to page 32
8. Bollards. Refer to page 84
9. Tactical Ground Surface Indicators. Refer to page 32
10. Continuous curb let down
11. Thermoplastic paint patterns at crosswalk locations.
12. Waste Receptacle. Refer to page 86



13. Signage. Refer to page 41-44
14. In-pavement street names
15. Bike lane at intersection with MMA paint and elephant feet border.

General Intent:

- Provide a comfortable and safe pedestrian experience and street corners. No benches to be placed within intersection concrete open spce (number 7 in legend). Receptacles to be located at corners and set into at grade planters that bulge at the intersection, to maximize pedestrian movement.
- Incorporate historic elements into the hardscape, such as Clayburn brick pavers, to promote wayfinding and to enhance the pedestrian experience.
- Decrease the length of crosswalks across Essendene Avenue and provide physical separation from vehicular traffic with planting.
- Provide tactile perimeter paving at curbs to improve pedestrian comfort and accessibility.
- Bike and pedestrian transitions to be governed by BC Active Transportation Guidelines, or best practices.
- Curb geometry to follow TAC and Development Bylaw
- Separate cyclist/pedestrian push button and traffic signal/pedestrian push button poles to be provided. Positioning of pole bases to follow installation for traffic control devices best practices.



Figure 48.Typical Corner Treatment for Commercial Streets

Development bylaw will supersede where dimensions differ on typical section.



Notes:

- Corner treatment to include bulges of planting that lead to a crosswalk to minimize crosswalk distance. Corner treatments at intersections will have a continuous formed drop to accommodate wheelchair access between at-grade plantings. Tactile ground surface indicators to be installed at transit sites and at all intersections as shown. Crosswalks to have Thermoplastic paint design. Renderings and plan show an indicative graphic, but the final design to be determined by City of Abbotsford.



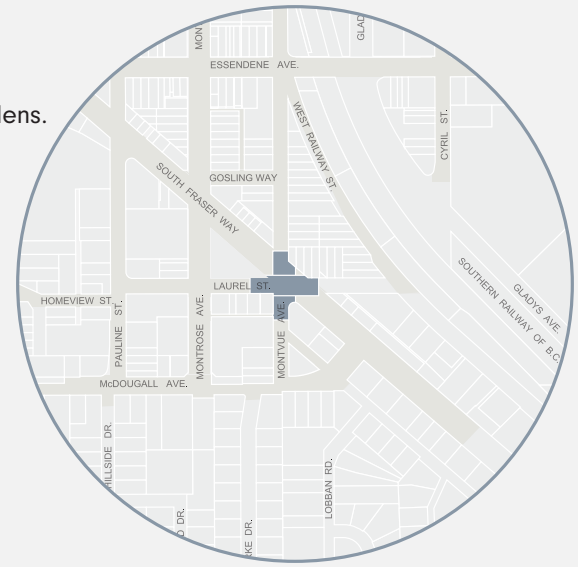
Figure 49.Typical Corner Rendering for Commercial Streets

Supporting Streets

Typical Corner Treatment

Legend

1. Concrete sidewalk. Refer to page 31
2. Boulevard planting with opportunity for rain gardens. Refer to page 21
3. Boulevard Concrete. Refer to page 31
4. Seating - 6' Length Bench. Refer to page 75
5. Intersection Concrete. Refer to page 32
6. Bollards. Refer to page 84
7. Tactical Ground Surface Indicators.
8. Continuous curb let down
9. Parallel line crosswalk in thermoplastic paint.
10. Waste Receptacle. Refer to page 86
11. Wayfinding Signage. Refer to page 41-44
12. In-pavement street names



General Intent:

- Provide a comfortable and safe pedestrian experience and street corners. No benches to be placed within intersection concrete open spce (number 7 in legend).
- Incorporate historic elements into the hardscape, such as Clayburn brick pavers, to promote wayfinding and to enhance the pedestrian experience.
- Decrease the length of crosswalks across Montrose and provide physical separation from vehicular traffic with planting.
- Provide tactile perimeter paving at curbs to improve pedestrian comfort and accessibility.
- Curb geometry to follow TAC and Development Bylaw
- Separate cyclist/pedestrian push button and traffic signal/pedestrian push button poles to be provided. Positioning of pole bases to follow installation for traffic control devices best practices.

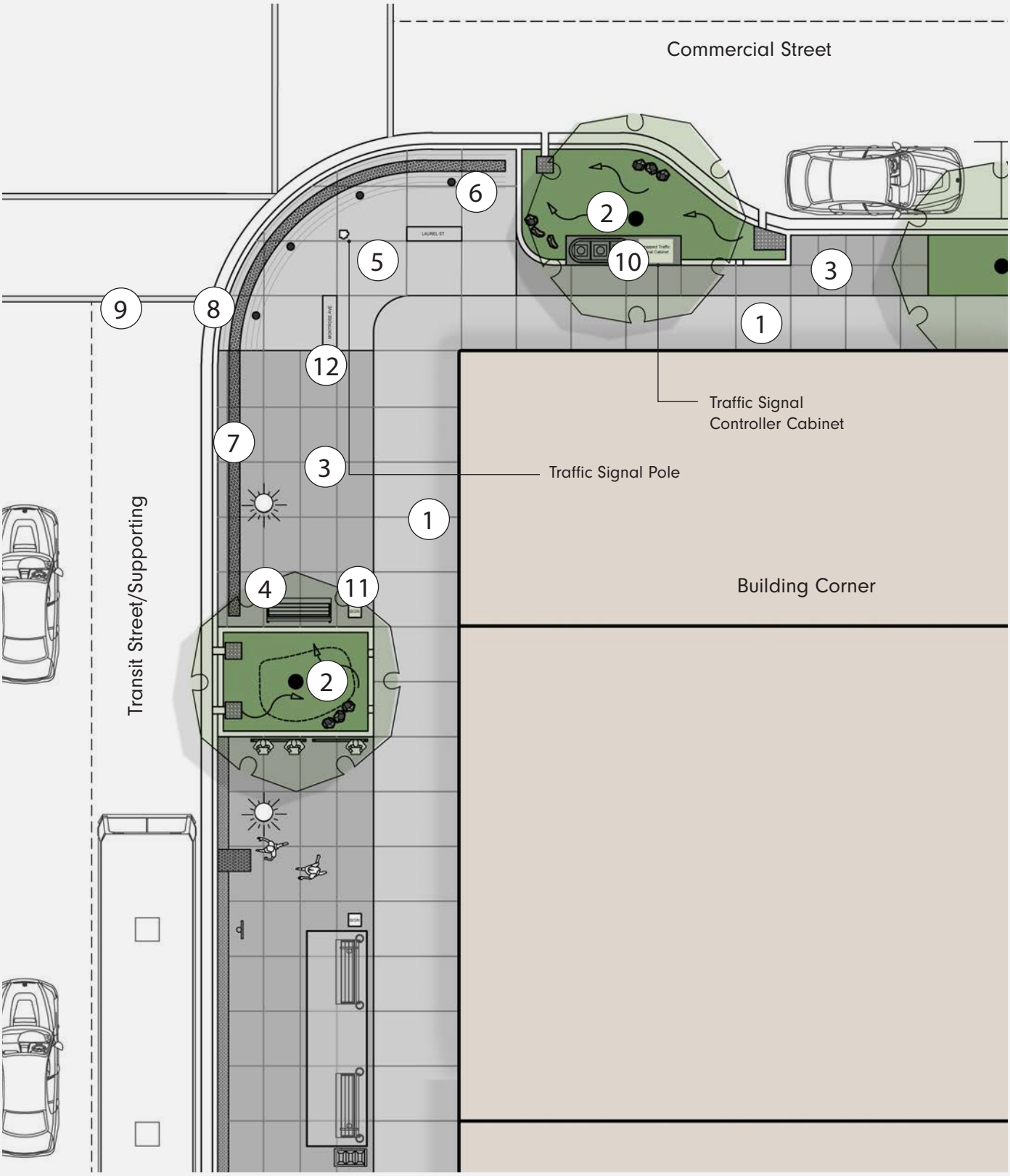


Figure 50.Typical Corner Treatment for Transit/Supporting Streets

Appendix

Seating	75
Bike Racks	80
Bollards	84
Planters	85
Waste Receptacles	86
Tree Grate	89
Tree Pit Receptacle	91
Lighting	93
Wayfinding	107

Seating

General Notes

Seating:

Provide minimum 2 seating opportunities on each side of each block The final location and quantity to be to the satisfaction of the City of Abbotsford.

- Seating to not be placed at intersection corner treatments so that intersections encourage movement.
- Seating positioned facing buildings on streets where there are tree grates (unless otherwise shown on plans). Seating to face perpendicular to road backed up against at grade planters.
- Single seats to be installed on streets where benches do not fit. They should face the buildings or be positioned at an angle as shown in the plans – preferably with their back against planters.
- Concrete single seat block to be positioned partially in planters, refer to plans for locations.
- Seating to not be placed on top of any water valves, manholes, PRV stations AVR, etc to avoid impeding operations during emergency access.
- Seating to not be placed within 1.5m of Fire Hydrants. Operations staff to determine offset distances from other manholes, meter-boxes, and surface features as required.

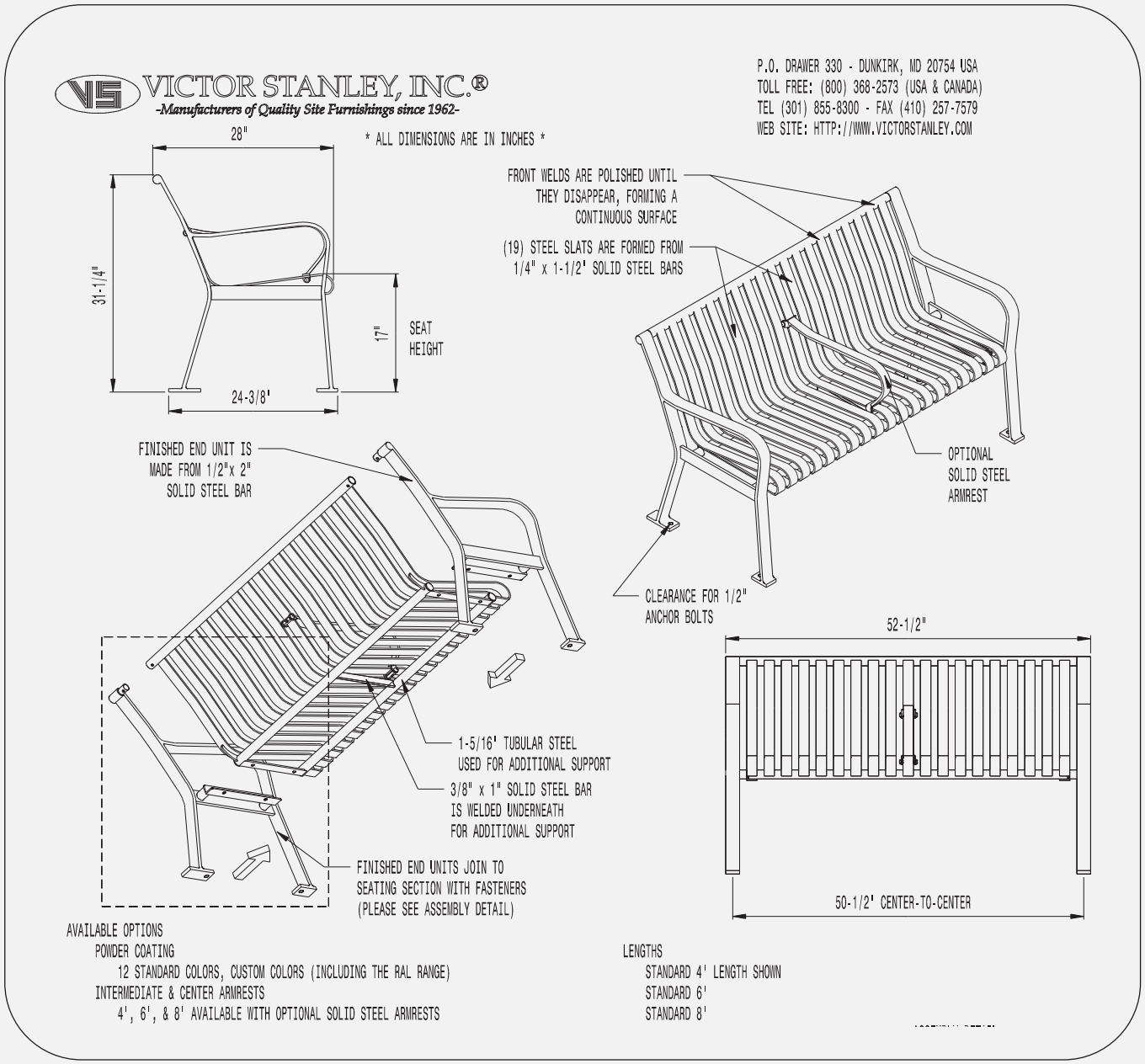
DETAIL CODE **B1**

TECHNICAL SPECIFICATION

1.	Manufacturer	Victor Stanley
2.	Supplier:	Habitat
3.	Product Name:	RB-28
4.	Style:	Backed
5.	Size:	4ft and 6ft Lengths
6.	Mounting:	Surface Mount
7.	Option:	Centre arm
8.	Finish:	Powder coat black
9.	Material:	Recycled Solid Steel

INSTALLATION GUIDELINES

1. Corrosion resistant anchor bolts recommended, not provided by the manufacturer.
2. Install in accordance with manufacturer's assembly sheet and instructions at locations indicated in this document as 'B1'. Install on concrete only.
3. Install benches level.



Typical Assembly Detail

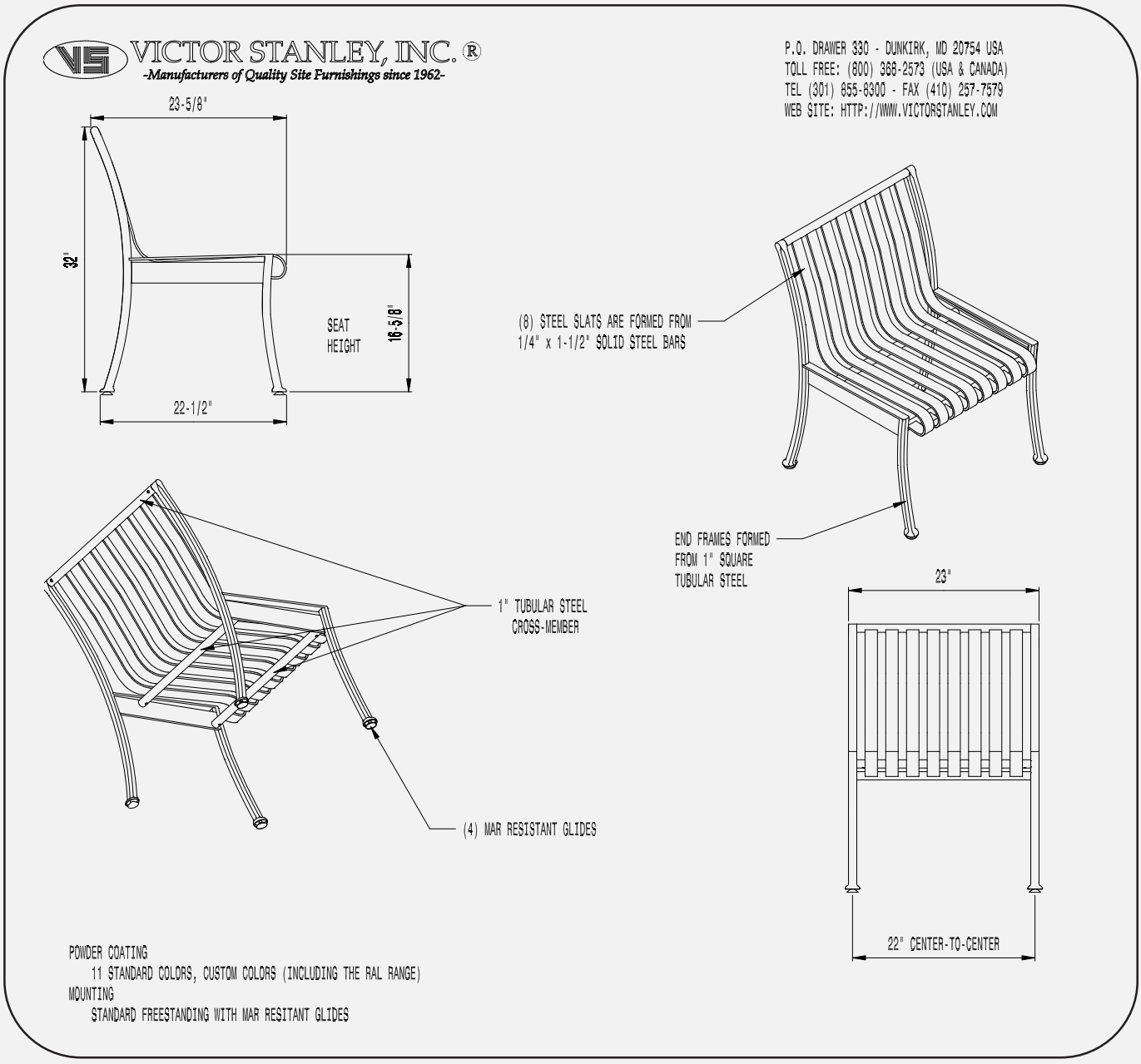
DETAIL CODE **C1**

TECHNICAL SPECIFICATION

1. Manufacturer / Supplier: Victor Stanley
2. Product Name: PRSCA - 8
3. Style: Backed
4. Size: Width 23" (584mm)
5. Mounting: Surface Mount
6. Option:
7. Seat & Back Panels:
8. Finish on Frame: Powder coat black
9. Material: Recycled Solid Steel Bar

INSTALLATION GUIDELINES

1. Corrosion resistant anchor bolts recommended, not provided by the manufacturer.
2. Install benches in accordance with manufacturer's instructions at locations indicated in this document as 'C2'.
3. Product ships unassembled , refer to Victor Stanley written specs for information how to assemble.
4. Install Chairs level.



Typical Installation Detail (N.T.S.)

DETAIL CODE **C2**

TECHNICAL SPECIFICATION

1.	Manufacturer / Supplier:	Sanderson Concrete
2.	Product Name:	Cube Bench
3.	Size:	24"x 24" /18" seat
4.	Colour:	Dark Grey 5 lbs. #860
5.	Finish on Frame:	Solid Concrete

CONCRETE SPECIFICATION

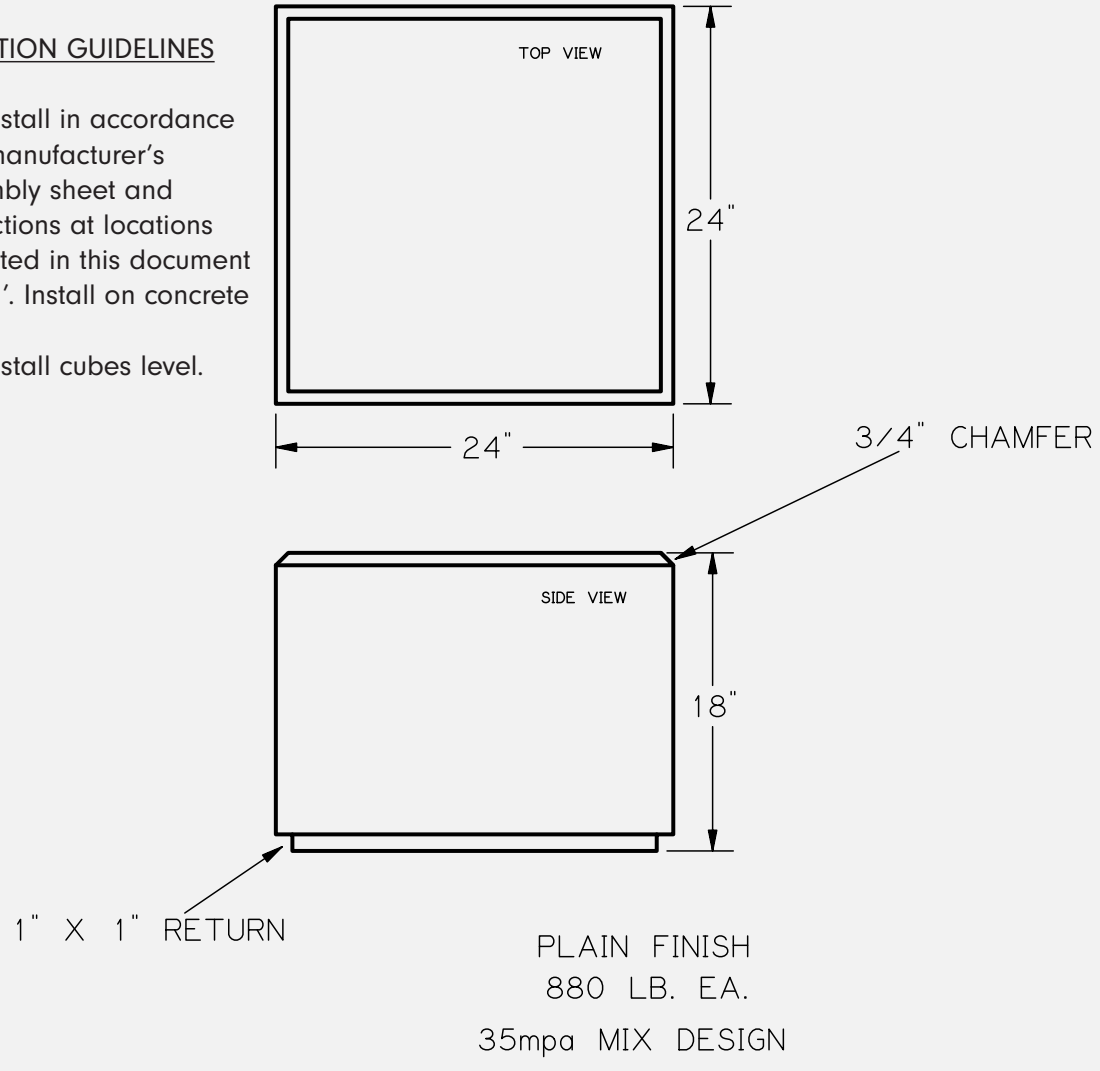
1.	Cement:	828 lbs
2.	3/8" Schelt Rock:	2393 lbs
3.	Sand:	2085 lbs
4.	Water:	265 lbs
5.	Flyash:	15%
6.	Glenium 7500	1100 ml
7.	Air AE 220	5%

Weight per 1 m^3

CUBE BENCH

INSTALLATION GUIDELINES

1. Install in accordance with manufacturer's assembly sheet and instructions at locations indicated in this document as 'C1'. Install on concrete only.
2. Install cubes level.



Typical Assembly Detail (N.T.S.)

DETAIL CODE **C3**

TECHNICAL SPECIFICATION

1.	Manufacturer / Supplier:	Wishbone
2.	Product Name:	Parker Leaning Bench
3.	Style:	Backed
4.	Mounting:	Surface Mount
5.	Seat & Back Panels:	Aluminium slats
6.	Finish on Frame:	Powder coat black
7.	Finish on panels:	Powder coat black

INSTALLATION GUIDELINES

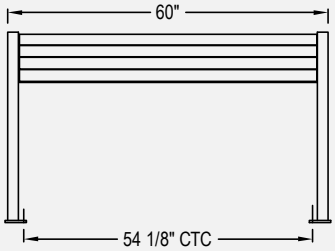
1. Corrosion resistant anchor bolts recommended, not provided by the manufacturer.
2. Install benches in accordance with manufacturer's instructions at locations indicated in this document as 'B2'.
3. Install benches level.

☑ SELECT DESIRED TEXTURED POWDER COATED COLOR:

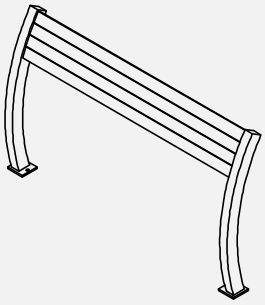
- ☐ BOSTWICK BROWN
- ☐ CARDINAL BLACK
- ☐ CARDINAL GREY
- ☐ COLD BROWN
- ☐ LAKESIDE SAND
- ☐ OIL RUB BRONZE
- ☐ NON-TEXTURED PEWTER
- ☐ BENGAL SILVER
- ☐ BLACK SUPER TEXTURE

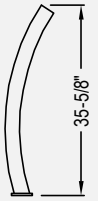
☑ SELECT DESIRED CUSTOMIZED SOLUTIONS:

- ☐ CUSTOM POWDER COATING (SETUP CHARGES MAY APPLY)
- ☐ GIFTING PROGRAM (CUSTOM INSET BRONZE PLAQUES)
- ☐ 2' UP TO 10' LENGTHS
- ☐ INST-1 STAINLESS STEEL BOLT DOWN KIT



FRONT ELEVATION


ISOMETRIC VIEW



SIDE ELEVATION

SPECIFICATIONS:
-DURABLE POWDER COATED ALUMINUM SLATS
-DURABLE POWDER COATED ALUMINUM FRAME
-LONG LASTING STAINLESS STEEL HARDWARE
TOTAL HEIGHT: 36" / 914 MM
DEPTH: 10" / 254 MM
TOTAL LENGTH: 60" / 1524 MM
WEIGHT: 19 LBS / 8.6 KG
RECYCLED CONTENT: 0% RECYCLED CONTENT BY WEIGHT

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 4289-074.

Typical Installation Detail (N.T.S.)

Bike Racks

General Notes

- Bike Racks: Provide minimum 3 bike racks on each side of each block
  The final location and quantity to be to the satisfaction of the City of Abbotsford.
  Model to be black powdercoat colour. Refer to plans and BR1 for bike rack placements.

- Installation guidelines (on page BR1):
- Install in accordance with manufacturer's assembly sheet and instructions at locations indicated in this document as 'BR1'. Install on concrete only.
- Install bike racks level.
- Bike racks to be spaced minimum 900mm apart, minimum 600mm from curb edge, and minimum 450mm from sidewalks or bikeways.
- Access from on-street parking stalls to sidewalk to be maintained; provide minimum 1000m clear unobstructed pathway without bike racks, benches, and other obstructions between street trees.
- Bike racks to be clustered at main transit sites as shown out of way of pedestrian movement where the boulevard thickens.
- Bike racks should be installed adjacent to at grade planters where possible.
- Bike racks to not be placed on top of any water valves, manholes, PRV stations AVR, etc to avoid impeding operations during emergency access.
- Bike Racks to not be placed within 1.5m of Fire Hydrants. Operations staff to determine offset distances from other manholes, meter-boxes, and surface features as required.

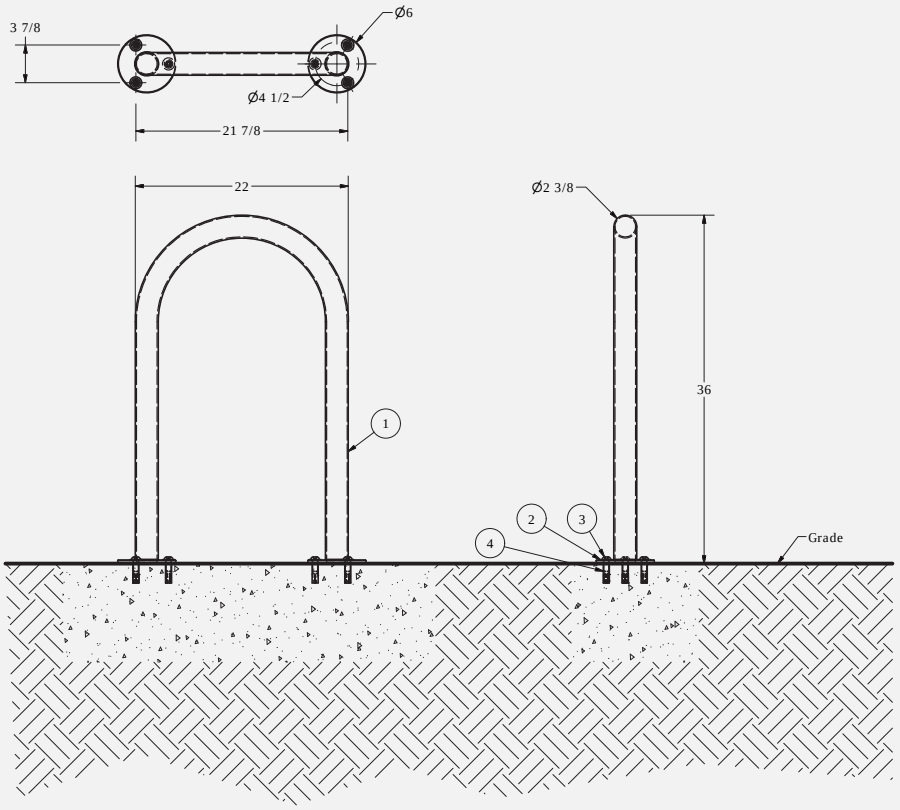
DETAIL CODE **BR1**

TECHNICAL SPECIFICATION

1.	Manufacturer / Supplier:	Reliance Foundary
2.	Product Name:	R-8238-FL
3.	Colour:	Black
4.	Colour Application:	Powdercoat
5.	Height:	36 "
6.	Width:	22"
7.	Weight:	28 lbs
8.	Material:	Carbon Steel
9.	Mounting:	Surface Mount

INSTALLATION GUIDELINES

1. Install in accordance with manufacturer's assembly sheet and instructions at locations indicated in this document as 'BR1'. Install on concrete only.
2. Install bike racks level.
3. Install on concrete only.
4. Bike racks to be spaced minimum 900mm apart, minimum 600mm from curb edge, and minimum 450mm from sidewalks or bikeways.
5. Access from on-street parking stalls to sidewalk to be maintained; provide minimum 1000m clear unobstructed pathway without bike racks, benches, and other obstructions between street trees.



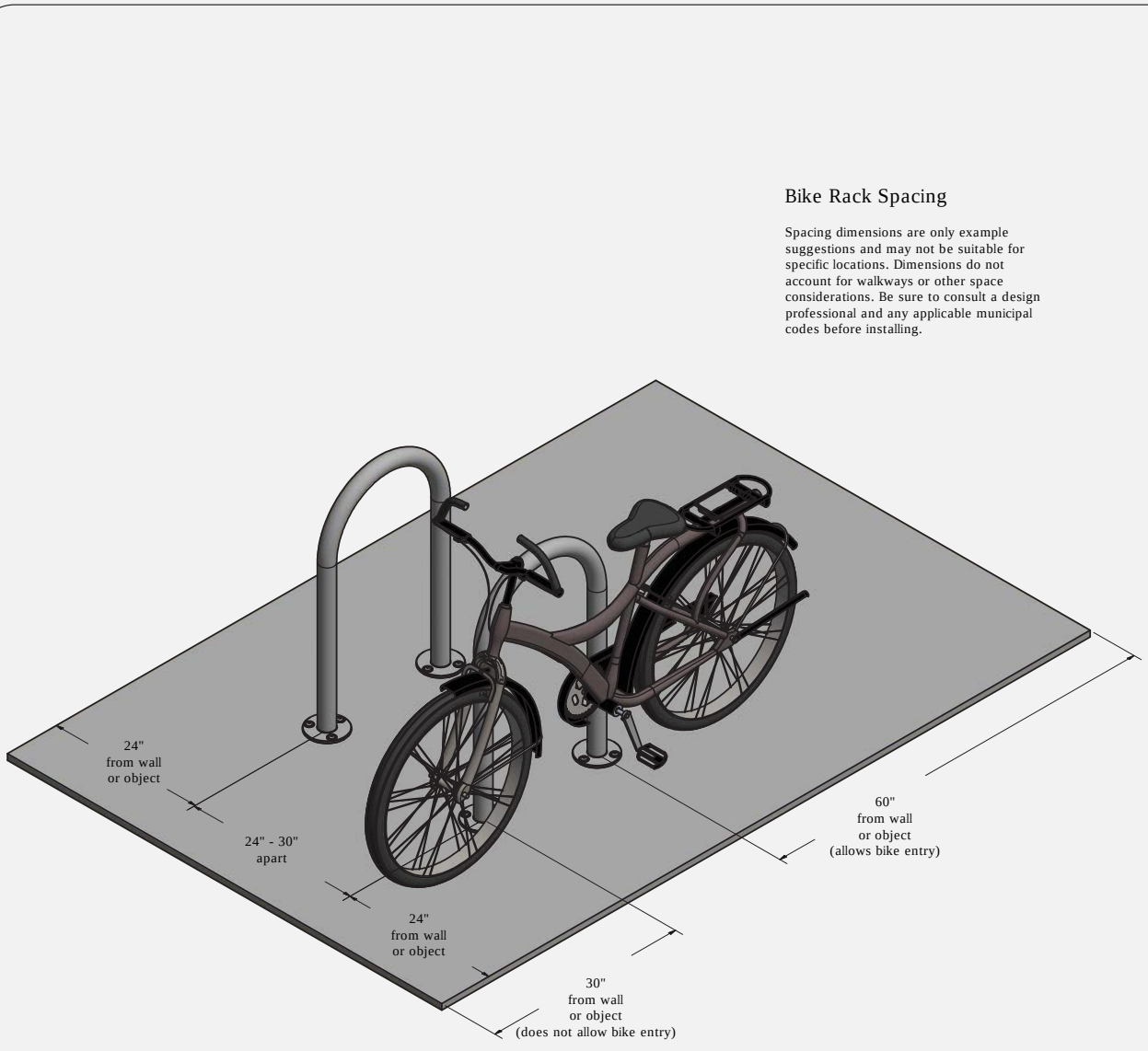
Notes:

- Embedment details are for reference illustration only. Minimum foundation sizes depend on local soil conditions, weather conditions and engineering requirements.
- Bike rack is provided as shown with parts listed below. Concrete foundation and/or installation not provided by Reliance Foundry.
- This drawing is not drawn to scale. Dimensions provided herein are for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
- Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

Typical Assembly Detail (N.T.S.)

DETAIL CODE BR1

INSTALLATION GUIDE CONTINUED

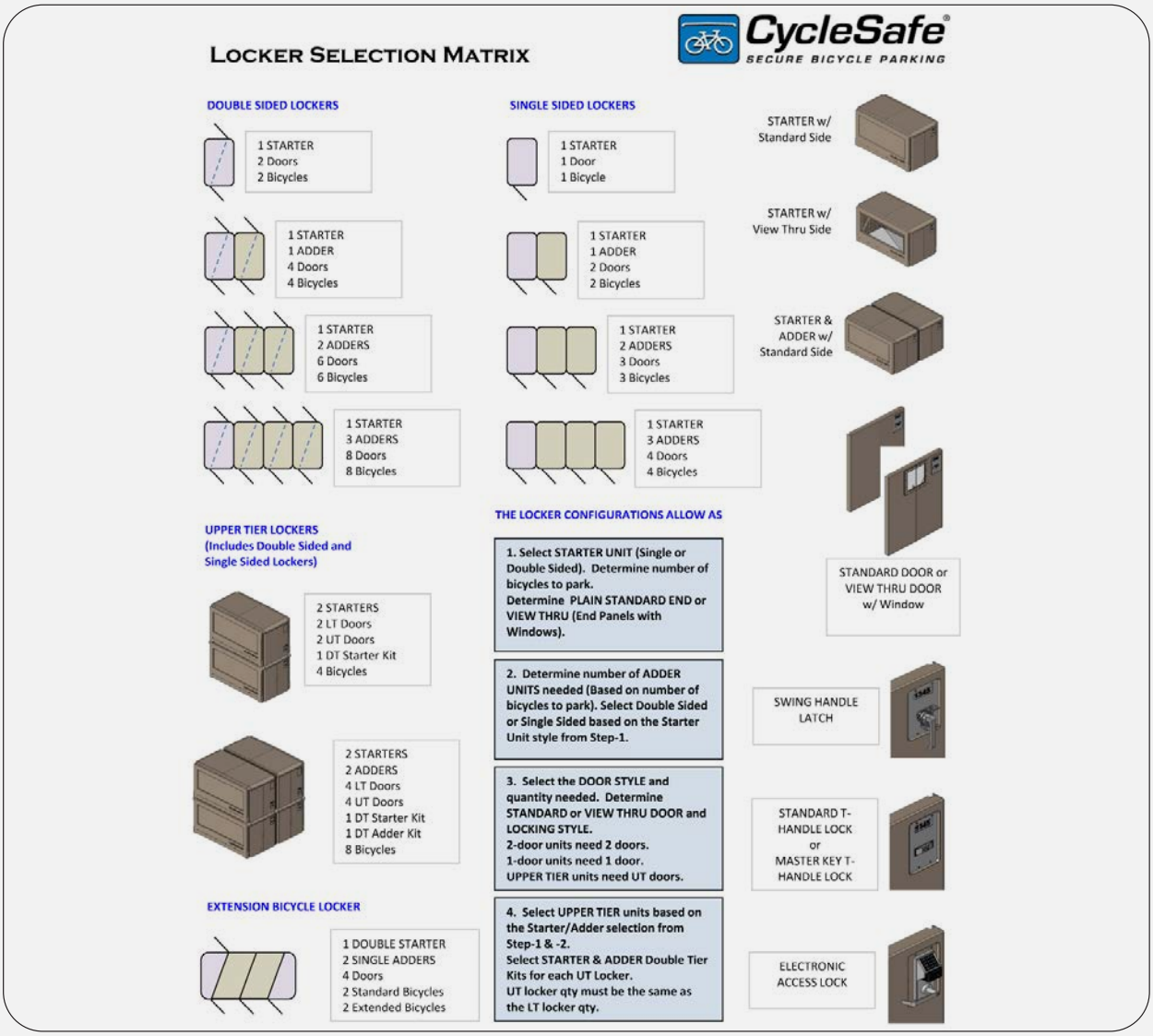


Typical Installation Detail (N.T.S.)

DETAIL CODE **BL1**

TECHNICAL SPECIFICATION

Manufacturer / Supplier:	Cyclesafe
Product Name:	Propark
Colour:	Sandstone
Dimensions:	H-50", L-77 5/8", W-42"
Material:	Fiberglass reinforced polyester composite frames
Mounting:	Surface Mount

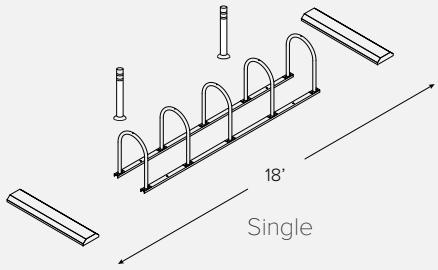


Typical Assembly Detail (N.T.S.)

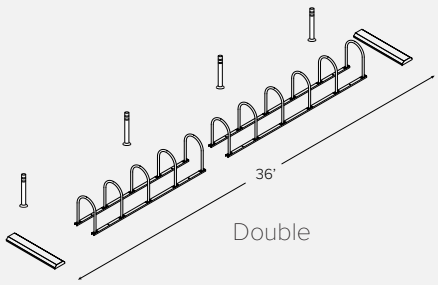
DETAIL CODE **BS1**

TECHNICAL SPECIFICATION

Manufacturer / Supplier:	Dero
Product Name:	Cycle Stall Basic
Colour:	Black
Colour Application:	Powdercoat
Height:	Approx. 3′
Width:	18′
Material:	Hoop Racks: 1.5″ Schedule 40 pipe (1.9″ OD)
Wheel Stops:	Recycled plastic
Mounting:	Surface Mount



Single



Double

CAPACITY

Single: 10 Bikes
Double: 22 Bikes

MATERIALS

Hoop Racks: 1.5” schedule 40 pipe (1.9” OD)
Wheel Stops: Recycled plastic

FINISHES

☐ **Galvanized**
An after fabrication hot dipped galvanized finish is our standard option.

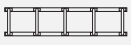
☐ **Powder Coat**
Our powder coat finish assures a high level of adhesion and durability by following these steps:
1. Sandblast
2. Epoxy primer electrostatically applied
3. Final thick TGIC polyester powder coat

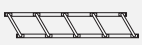
☐ **Stainless**
Stainless Steel: 304 grade stainless steel material finished in either a high polished shine or a satin finish.

MOUNT OPTIONS

☐ **Rail**
Rail Mounted Racks are bolted to two parallel rails which can be left freestanding or anchored to the ground. Rails are heavy duty 3”x1.4”x3/16” thick galvanized mounting rails. Specify rail mount for this option.

Rack Angle:

☐ Standard 

☐ Angled 

Traffic delineators are included in either yellow (standard) or white color options.

Typical Assembly Detail (N.T.S.)

DETAIL CODE **BO1**

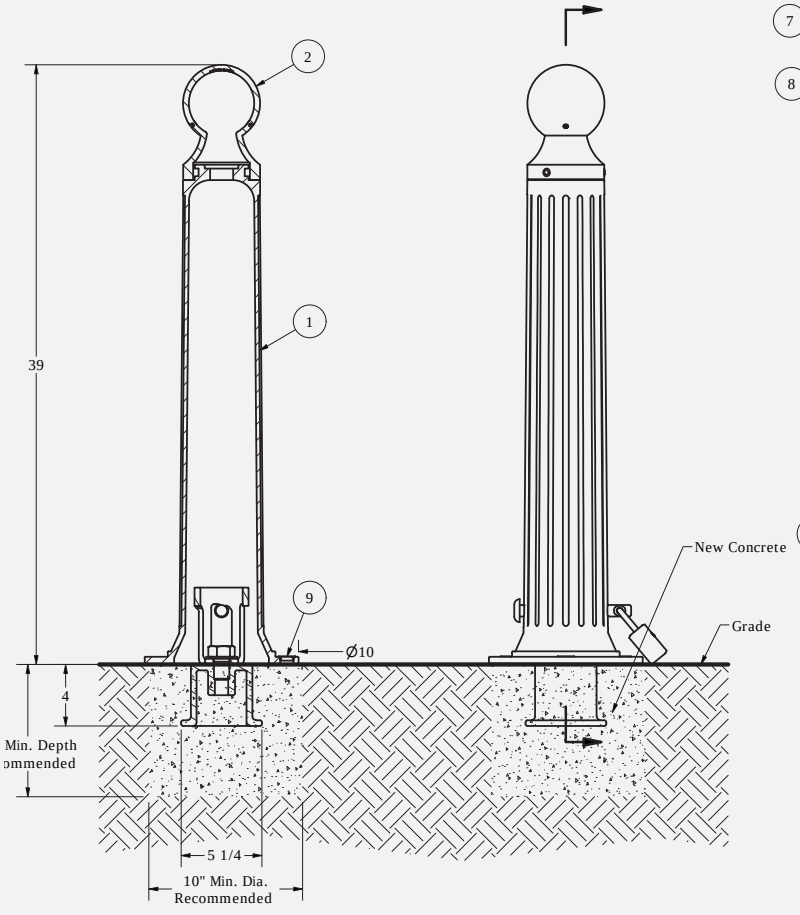
TECHNICAL SPECIFICATION

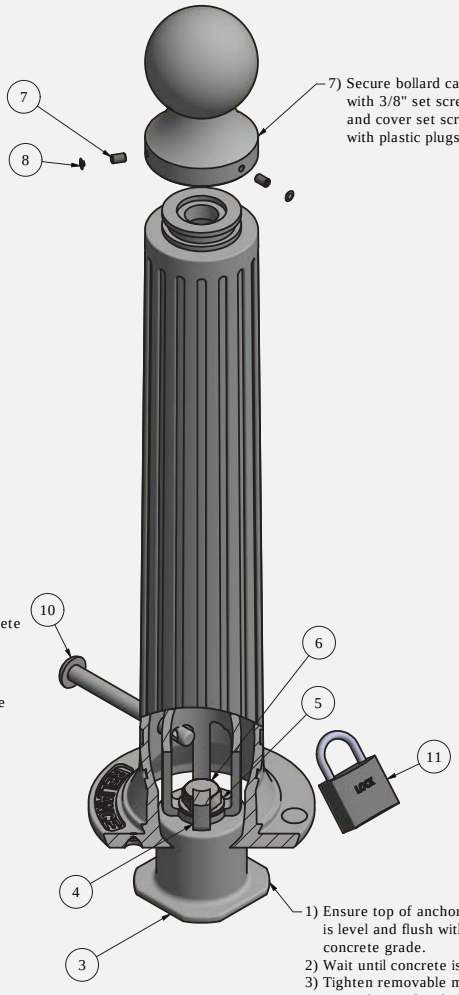
1.	Manufacturer / Supplier:	Reliance Foundry
2.	Product Name:	R-7530 Bollard
3.	Height:	39″
4.	Base Diameter:	10″
5.	Weight:	62 lbs (Bollard Only)
6.	Material:	Ductile Iron
7.	Mounting:	Surface Mount
8.	Colour:	Powdercoat Black
9.	Option:	Removable Mounting with Anchor Casting in New Concrete

INSTALLATION GUIDELINES

1. Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
2. Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
3. Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.

Bollard R-7530





Notes:
1) Bollard post is provided as shown. Concrete, foundation and/or installation ordered separately or provided by others.
2) Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
3) Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
4) Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

Tools needed:
1) Measuring tape
2) 1 1/2" wrench
3) 3/16" hex key

1) Ensure top of anchor casting is level and flush with finished concrete grade.
2) Wait until concrete is cured.
3) Tighten removable mount with 1" washer and 1" bolt.
4) Align and insert lock pin through bollard base.
5) Turn bollard base clockwise to tighten it into position.
6) Fasten the padlock.

Typical Assembly Detail (N.T.S.)

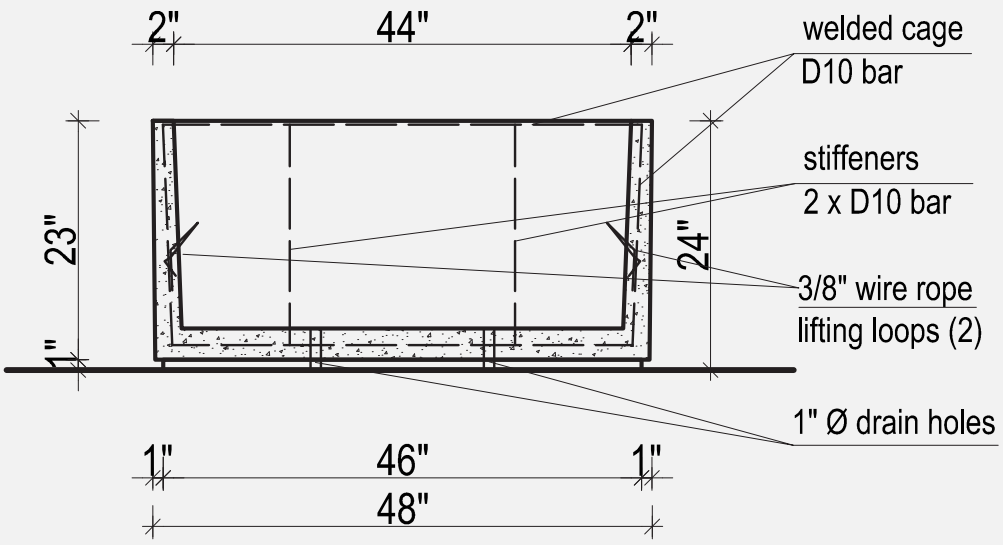
DETAIL CODE **P1**

TECHNICAL SPECIFICATION

1.	Manufacturer / Supplier:	Sanderson Concrete
2.	Product Name:	Made to order
3.	Size:	Made to order
4.	Finish:	Solid Concrete

CONCRETE SPECIFICATION

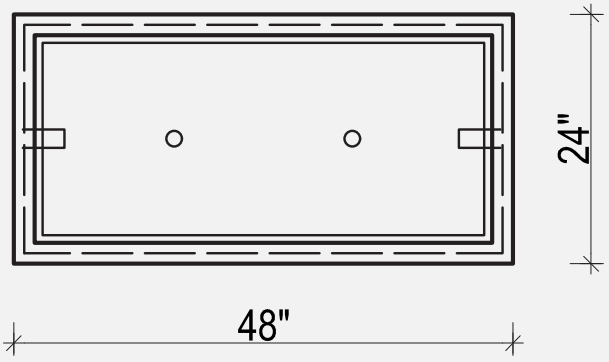
1.	Cement:	828 lbs
2.	3/8" Schelt Rock:	2393 lbs
3.	Sand:	2085 lbs
4.	Water:	265 lbs
5.	Flyash:	15%
6.	Glenium 7500	1100 ml
7.	Air AE 220	5%



SECTION

INSTALLATION GUIDELINES

1. Install in accordance with manufacturer's assembly sheet and instructions at locations indicated in this document as 'P1'. Install on concrete only.
2. Install Planters level.



TOP VIEW

Example of Typical Dimension Detail Dimensions to vary

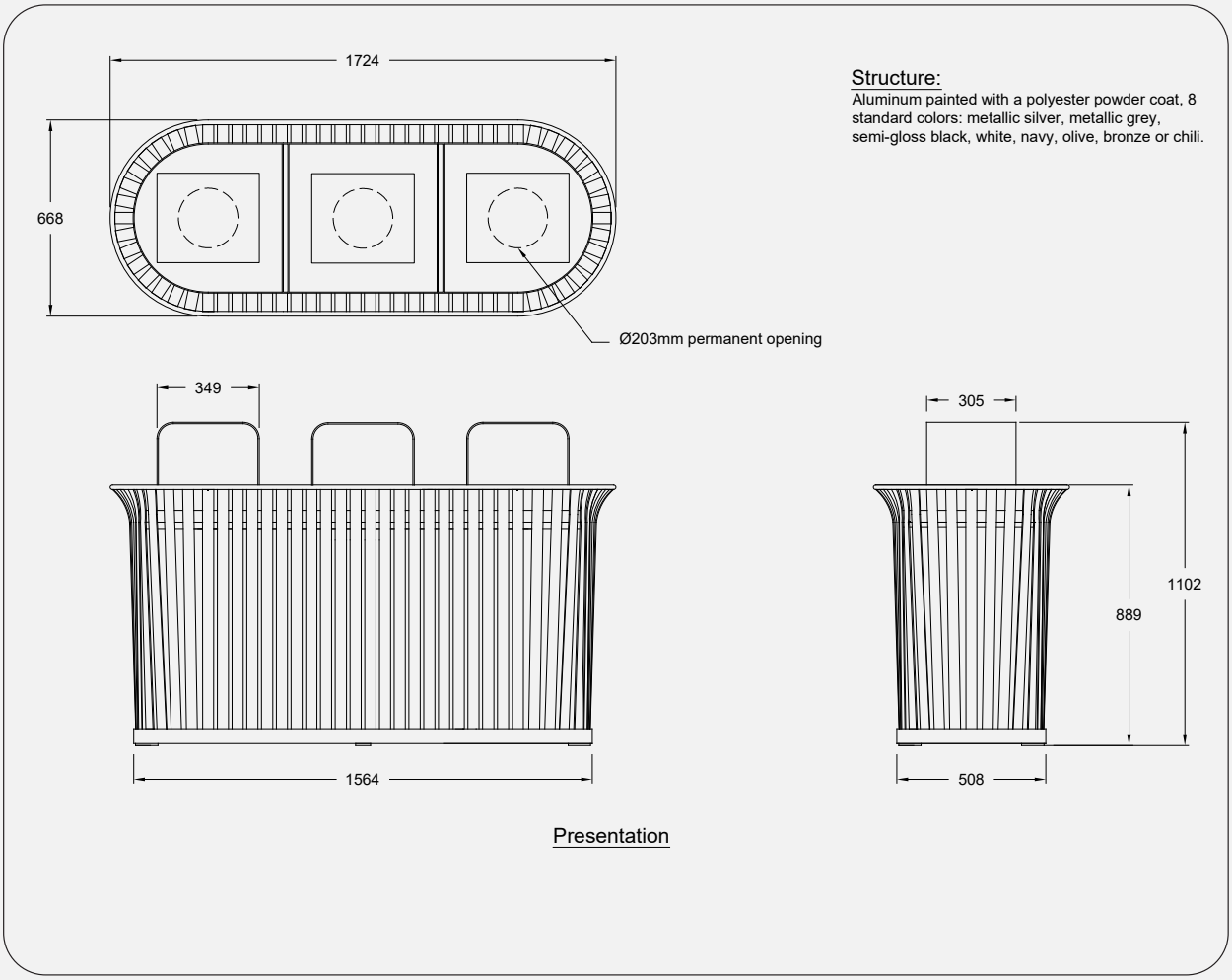
DETAIL CODE **T1**

TECHNICAL SPECIFICATION

1.	Manufacturer / Supplier:	Eqiuparc
2.	Product Name:	Recycling Unit
3.	Product Number:	EP 3700-RU-T
4.	Frame:	Welded aluminum
5.	Slats:	Aluminum slats 6mm X 38mm (1/4" X 1 1/2")
6.	Linear:	Galvanized and paint 127 litres / 34 US gal
7.	Mounting:	Surface mount
8.	Finish:	Powder coat black
9.	Options:	Rain Cover

INSTALLATION GUIDELINES

1. 7000 1 slab 610mm X 1829mm X 152mm (24'' X 72" X 6")
2. QS 4 stainless steel kwik bolts
3. QAV 4 drop-in anchors with stainless steel theftproof bolts
4. Install in accordance with manufacturer's instructions at locations indicated in this document as 'T1'.
5. Possibility of adapting the descriptive label on the cover according to needs.
   This waste receptacle must be anchored.
   The warranty applies when our product is properly assembled and anchored.



Typical Assembly Detail (N.T.S.)

DETAIL CODE **T2**

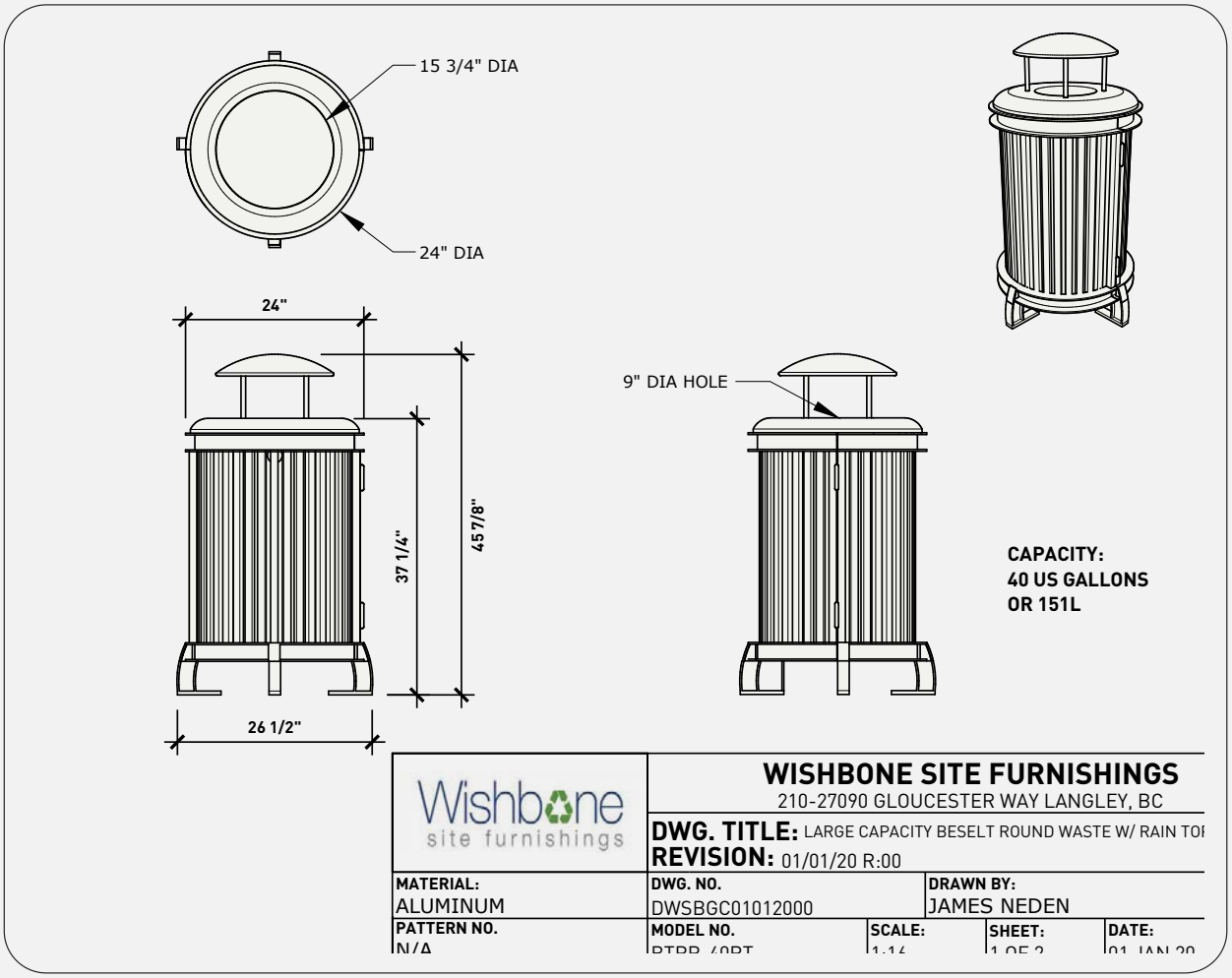
TECHNICAL SPECIFICATION

1.	Manufacturer / Supplier:	Wishbone
2.	Product Name:	Beselt Large Capacity
3.	Product Number:	BTRR-40RT
4.	Frame:	Aluminum
5.	Slats:	Aluminum
6.	Diameter:	26 1/2 inches
7.	Mounting:	Surface mount
8.	Finish:	Powder coat black

Note:
Wishbone colour code for black= Victor Ridge II

INSTALLATION GUIDELINES

1. 7000 1 slab 610mm X 1829mm X 152mm (24'' X 72" X 6")
2. QS 4 stainless steel kwik bolts
3. QAV 4 drop-in anchors with stainless steel theftproof bolts
4. Install in accordance with manufacturer's instructions at locations indicated in this document as 'T2'.
5. Possibility of adapting the descriptive label on the cover according to needs.
   This waste receptacle must be anchored.
   The warranty applies when our product is properly assembled and anchored.



Typical Assembly Detail (N.T.S.)

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DETAIL CODE TG1

TECHNICAL SPECIFICATION

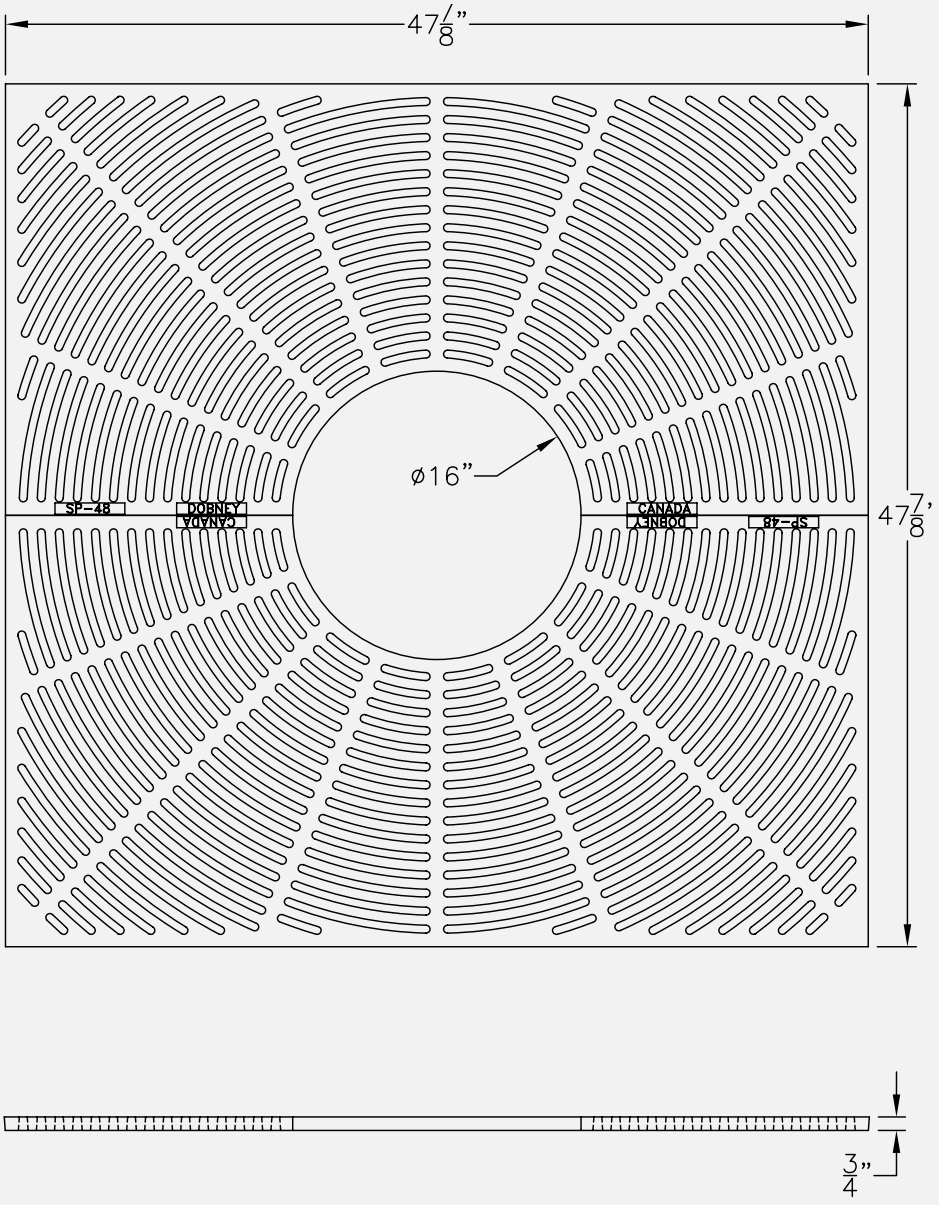
Tree Grates:

1.	Manufacturer / Supplier:	Dobney Foundry
2.	Product Name:	SP-48cat
3.	Material	Ductile Iron
4.	Weight	420 lbs

INSTALLATION GUIDELINES

1. Prepare the tree pit
2. Plan the outside dimensions
3. Install the frame (Refer to Tree Grate Frames on next page).
4. Pour the concrete
5. Inspect the installation
6. Ensure the tree grate is plumb to the surface, and the edges are flush with the surface grade. If the edges are not flush, it may be necessary to redo the installation

Reliance Foundry manufactures its products to the highest design standards to ensure their durability. Reliance Foundry's tree grates are finished with long-lasting black paint. We recommend basic care and maintenance for painted finishes to ensure a full service life.



DETAIL CODE **TG1**

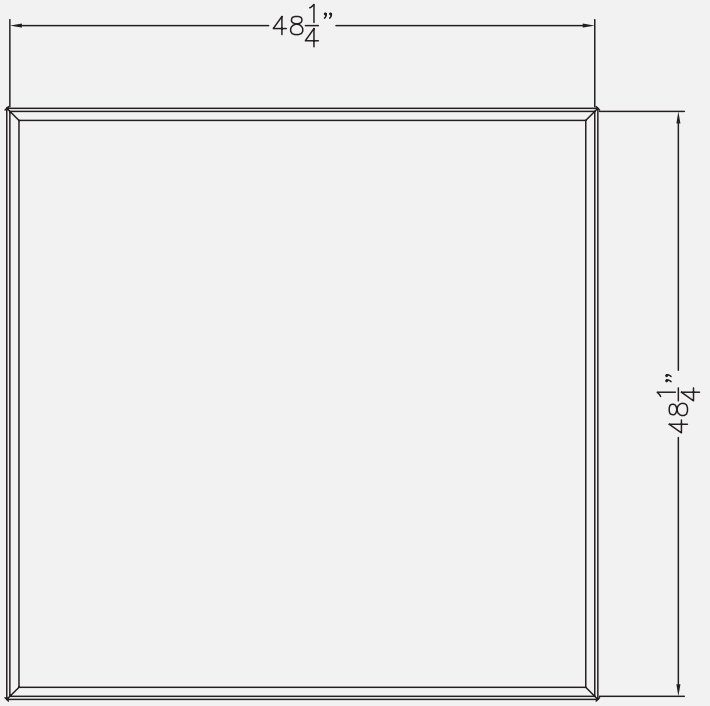
TECHNICAL SPECIFICATION

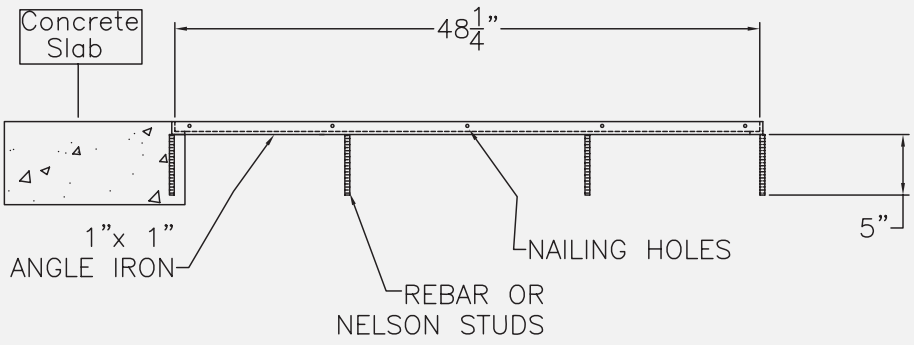
Tree Grates:

1. Manufacturer / Supplier: Dobney Foundry
2. Product Name: 48frame
3. Material Iron

INSTALLATION GUIDELINES

1. Using the hardware provided, assemble the grate frame.
2. Be sure to tighten the countersunk flathead screws so they are flush or below the bearing surface of the grate frame.
3. Place the grate frame on the wood form.
4. Place both grate halves within the frame.
5. Wire grates, frames, and form together.
6. Check the frame alignment and adjust or elevate as necessary.
7. Install the steel rebar through the lugs on the frame and support as required. There should be a 3/16 space between the vertical faces of the frame and grate.
8. Pour Concrete





TECHNICAL SPECIFICATION

Structural Cells:

1. Manufacturer / Supplier: w
2. Product Name: Weatherproof Cover kits
3. Compliance: NEC® 2017 Section 406.9 for weatherproof enclosures

4996-KIT

- One GFWT1-GY, 15 A, 125 V Receptacle, SmartlockPro Weather- & Tamper-Resistant GFCI in gray
- One 4996-GY, Single-Gang, Decora/GFCI Receptacle Weather-Resistant Cover with self-closing lid in gray
- One 1GM53-GY, Single-Gang Die-Cast Weatherproof Box with Three ½" Diameter threaded holes



IUM1V-KRG

- One IUM1V-GY, Single-Gang, Extra-Duty Vertical Outlet Box Hood with Pre-Installed Weatherproof Gasket
- One GFWT1-GY, 15 A, 125 V Receptacle, SmartlockPro Weather & Tamper-Resistant GFCI



IUM1V-KBG

- Consists of same items as IUM1V-KRG shown at left, with the addition of: One 1GM53-GY, Single-Gang Die-Cast Weatherproof Box with Three ½" Diameter Outlets and Mounting Hardware



IUM1H-KRG

- One IUM1H-GY, Single-Gang, Extra-Duty Horizontal Outlet Box Hood with Pre-Installed Weatherproof Gasket
- One GFWT1-GY, 15 A, 125 V Receptacle, SmartlockPro Weather- & Tamper-Resistant GFCI



IUM1H-KBG

- Consists of same items as IUM1H-KRG shown at left, with the addition of: One 1GM53-GY, Single-Gang Die-Cast Weatherproof Box with Three ½" Diameter Outlets and Mounting Hardware



WM1SC-2GY

- One WM1S-GY Metallic Weatherproof Switch Cover in gray with Weatherproof Gasket and Mounting Screws
- One CS120-2GY 20 A, 120/277 VAC Switch in gray



Explore the whole line...

In addition to the convenient kits shown on this page, Leviton also carries a full line of plastic and metallic weatherproof device covers designed for optimal device protection.



Visit our Website at:
www.leviton.com/weatherproofcovers
email: commercial@leviton.com

Q-1180 092519

Leviton Manufacturing Co., Inc.
201 N Service Rd, Melville, NY 11747
Telephone: 1-800-323-8920 • FAX: 1-800-832-9538
Tech Line (8:30AM-7:30PM E.S.T. Monday-Friday): 1-800-824-3005

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While-In-Use Metal Cover
One Gang - Horizontal and Vertical Mount - Extra Duty

LEVITON

Cat. Nos. IUM1H, IUM1V

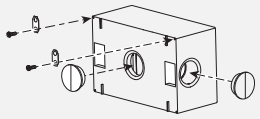
WARNINGS:
- **TO AVOID FIRE SHOCK OR DEATH TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING.**
- TO BE INSTALLED AND/OR USED IN ACCORDANCE WITH APPROPRIATE ELECTRICAL CODES AND REGULATIONS.

PK-A3303-10-02-2A

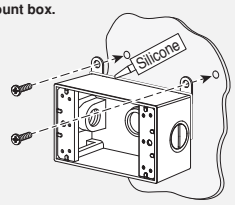
HORIZONTAL MOUNT INSTALLATION

ENGLISH

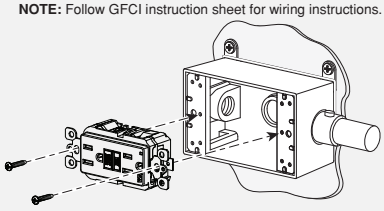
1. **Insert plugs and attach mounting tabs.**
Cat. No. IUM1H-KBG is shown.
NOTE: No back box is inlcuded with Cat. No. IUM1H-KRG proceed to step 3.



2. **Mount box.**

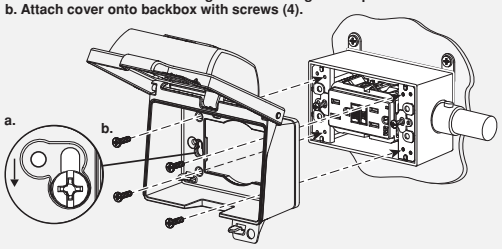


3. **Install GFCI.**
NOTE: Follow GFCI instruction sheet for wiring instructions.

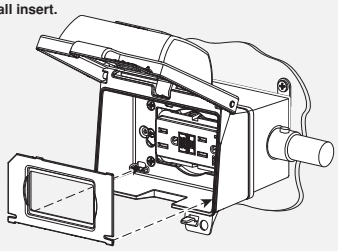


Leave GFCI mounting screws 3/8" out for cover installation.

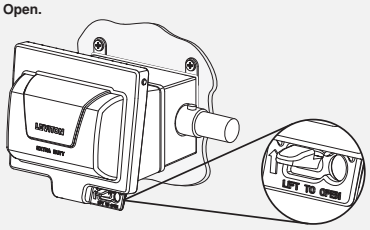
4. **a. Mount cover onto 2 mounting screws and tighten in place.**
b. Attach cover onto backbox with screws (4).



5. **Install insert.**

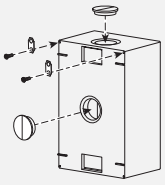


6. **Lift to Open.**

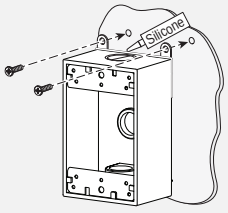


VERTICAL MOUNT INSTALLATION

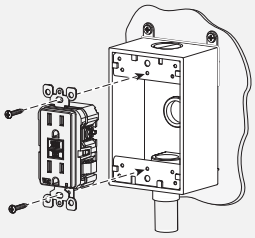
1. **Insert plugs and attach mounting tabs.**
Cat. No. IUM1H-KBV is shown.
NOTE: No back box is inlcuded with Cat. No. IUM1H-KRV proceed to step 3.



2. **Mount box.**

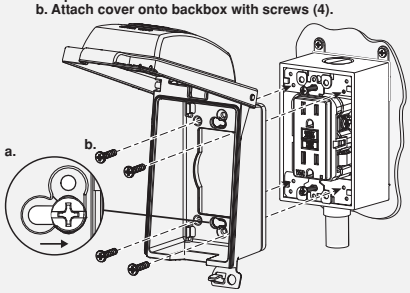


3. **Install GFCI.**
NOTE: Follow GFCI instruction sheet for wiring instructions.

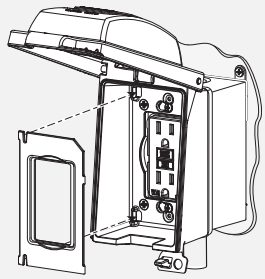


Leave GFCI mounting screws 3/8" out for cover installation.

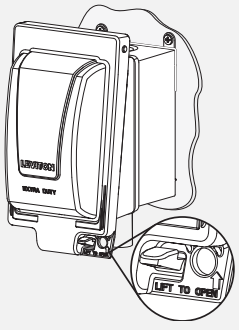
4. **a. Mount cover onto 2 mounting screws and tighten in place.**
b. Attach cover onto backbox with screws (4).



5. **Install insert.**



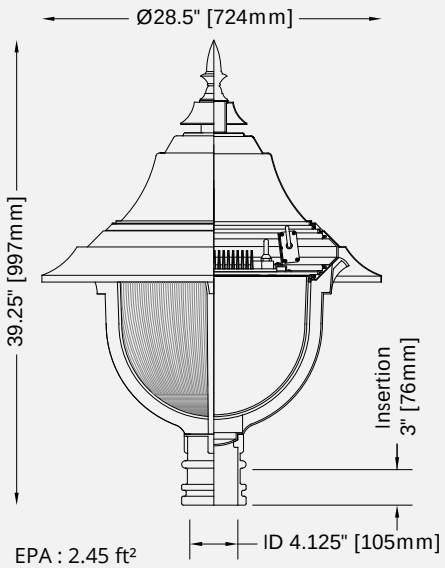
6. **Lift to open.**



WEB VERSION

Install instructions

CP6114



EPA : 2.45 ft²
Weight: 37 lb - 16.8 kg

SPECIFICATIONS

CONSTRUCTION
Cast aluminium: Alloy 356.1, minimum wall thickness of 0.188" [5mm].
Extruded aluminium: Alloy 6063-T4.
All hardware is in stainless steel.

POST TOP ADAPTOR
Complete with decorative cast aluminium cage supporting the luminaire housing. Slip-fits on 4" [102mm] O.D. poles and tenons. Mechanically secured by (3) 5/16-18UNC Allen set screws.

HOUSING
One-piece extruded aluminium core topped with a heavy gauge spun aluminium hinged cover and an extruded aluminium frame. It contains the optical system. A tool-less access to the inner components is provided by the means of a push button. A silicon gasket protects the luminaire housing from rain, insects and dust in accordance with international standard IP65.

OPTICAL SYSTEM (IP66)
Consists of a high impact resistant acrylic lens, an aluminium heat sink dissipator and high intensity white light emitting diodes (LED) divided in 1 to 4 light bars. A hermetic sealing meeting the international standard IP66 protects against lumen depreciation due to dust or insects infiltration, maintaining a higher lumen output over the years and eliminating periodic cleaning of the lens.

Light distributions available in type II (L2B), III (L3 & L3FL), IV (L4) & V (L5 & L5S) (see chart) according to the Illuminating Engineering Society's standards.

DRIVER
High power factor constant current electronic LED driver featuring a -40°C [-40°F] to 80°C [176°F] operating capacity and a power factor exceeding 97%. Rated by UL class 2 operation for maintenance. Line voltage available is 120 to 277 (Other voltages available, consult factory). **0-10V dimmable**.

FINISH
All metallic parts are pretreated using an environmentally friendly organic phosphating technology (PLAFORIZATION) before a polyester powder coating is electrostatically applied. The finish is of 100 microns minimal thickness and meets the ASTM B117 regulation related to salt spray and the ASTM D2247 regulation related to the resistance of the finishes exposed to a 100% relative humidity.

NS1 : NEMA STICKER.

Configuration	Modules QTY	Current (mA)	System consumption	CCT (°K)	Distribution type	CRI
18	1	700 (07)	40W	4000 (40K)	L3	73
36	2		80W			
54	3		120W			

Lumca reserves the right to modify the elements on this technical data sheet without prior notice

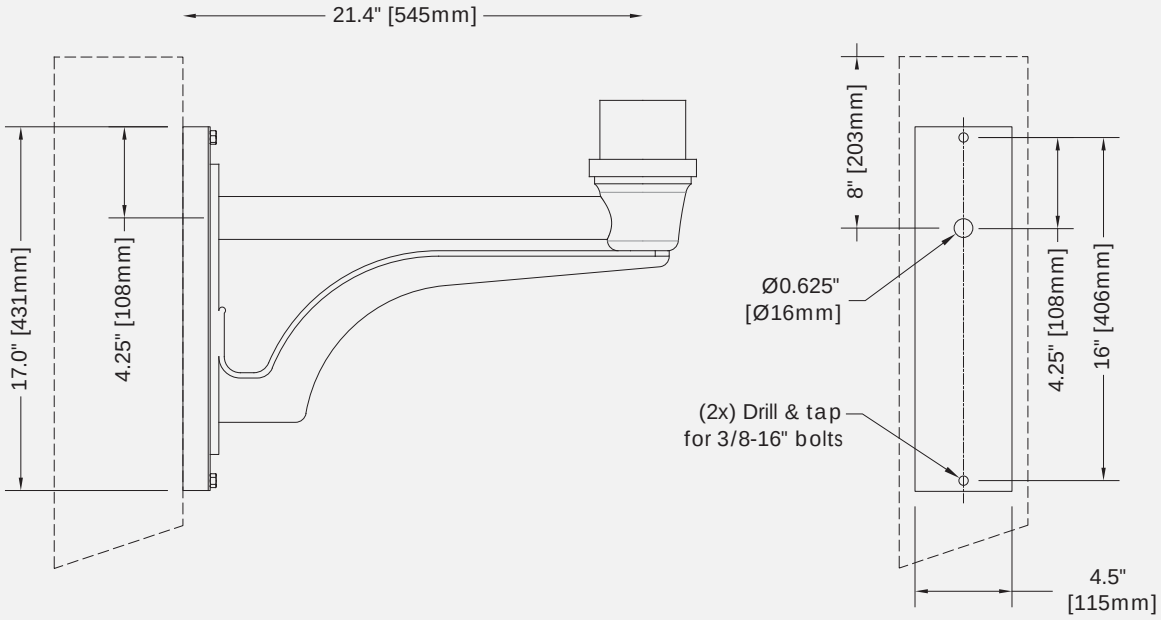
PROJECT #:	NAME :	STATUS	
LS0102506	CITY OF ABBOTSFORD	☐FOR APPROVAL	■FOR INFORMATION

LUMCA INC
2645-A WATT QUÉBEC
TEL : 418-650-1693 FAX : 418-650-1896
www.lumca.com -- info@lumca.com

CAT. #					
CP6114 36LED07 80W 120V L3 40K NS1 BK					
DRAWN BY : M.A.Vien		QTY : 1	TYPE : B2		
DATE : 20-09-09	REV # : 0	SCALE : N/A	COLOUR : BLACK		

Lumca LIGHTING LIFE

PM-CCE MD102506



ANCHORING DETAILS

Specifications

CONSTRUCTION

Cast aluminum: Alloy 356.1, minimum wall thickness of 0.188" [5mm].
Extruded aluminum: Alloy 6063-T5.
All hardware is in stainless steel.

Cast aluminium arm, welded to the anchor plate mechanically secured to the pole. Complete with decorative elements.

FINISH: All metallic parts are pre-treated using an environmentally friendly organic phosphating technology (PLAFORIZATION) before a polyester powder coating is electrostatically applied. The finish is of 100 microns minimal thickness and meets the ASTM B117 regulation related to 5000 hours salt spray and the ASTM D2247 regulation related to the resistance of the finishes exposed to a 100% relative humidity.

NOTES:
MD102506: Mounting arm will be monted on a DAVIER conical fluted pole. Must accommodate 3/8' stainless steel fastening bolts .
TBD:Dimension of pole (by others)

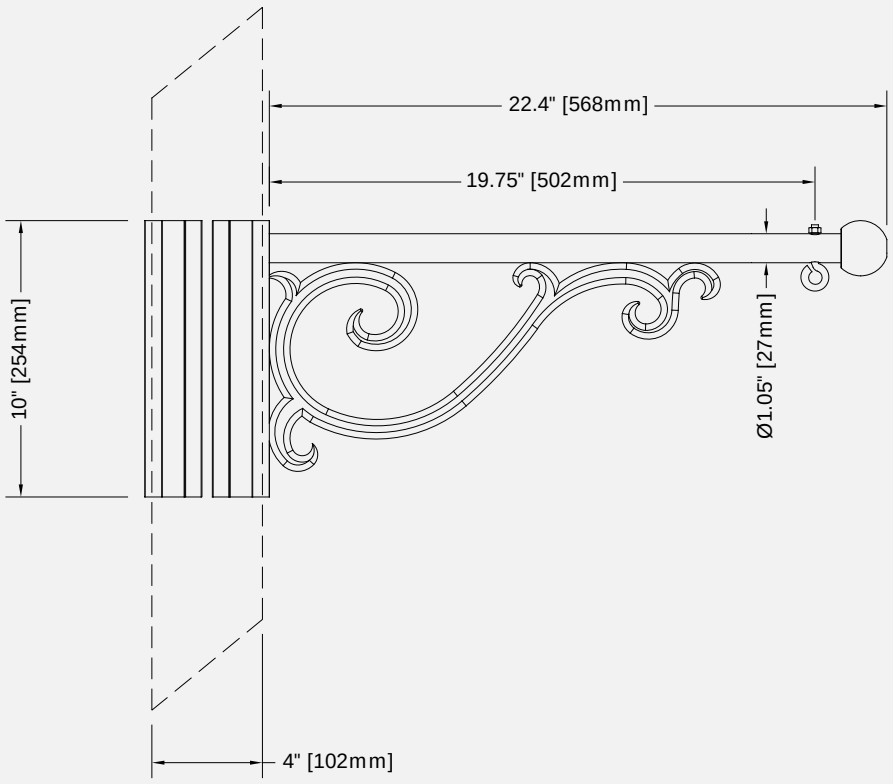
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PROJECT #:	NAME :	STATUS	
LS0102506	CITY OF ABBOTSFORD	☐FOR APPROVAL	■FOR INFORMATION

LUMCA INC
2645-A WATT QUÉBEC
TEL : 418-650-1693 FAX : 418-650-1896
www.lumca.com -- info@lumca.com

CAT. #					
PM-CCE MD102506 BK					
DRAWN BY :	M.A.Vlen		QTY : 1	TYPE :	B5
DATE :	20-09-09	REV # : 1	SCALE : N/A	COLOUR :	Black

BH-60-23-S4



CONSTRUCTION

- Extruded aluminum: Alloy 6061-T6.
- Cast aluminum: Alloy 356.1, minimum wall thickness of 0.188" [4.7mm].
- All hardware is in stainless steel.

Single basket-hanger, welded to the extruded clamps mechanically secured around the pole. C/W decorative elements.

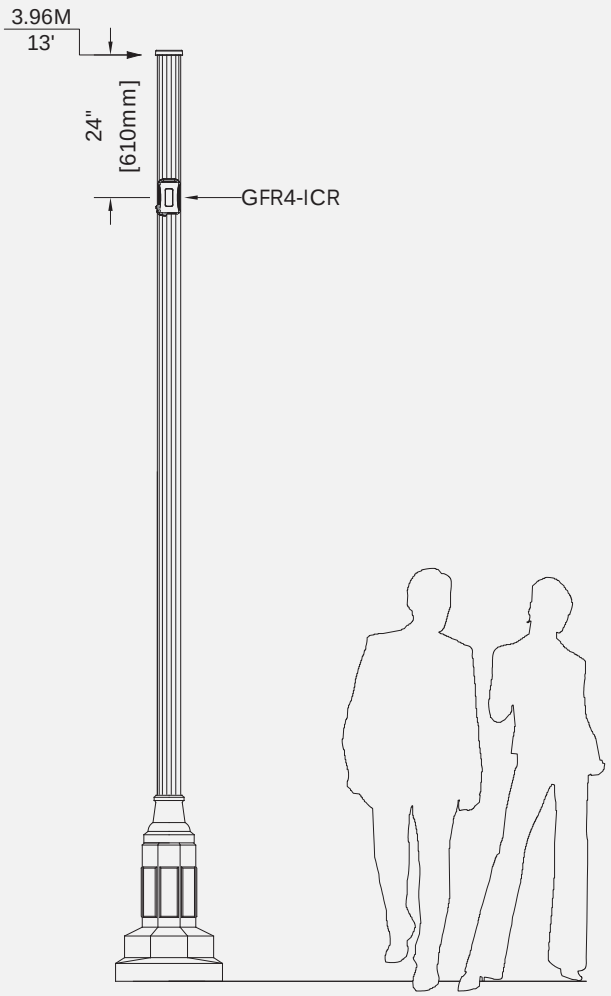
FINISH: All metallic parts are pre-treated using an environmentally friendly organic phosphating technology (PLAFORIZATION) before a polyester powder coating is electrostatically applied. The finish is of 100 microns minimal thickness and meets the ASTM B117 regulation related to 5000 hours salt spray and the ASTM D2247 regulation related to the resistance of the finishes exposed to a 100% relative humidity.

Lumca reserves the right to modify the elements on this technical data sheet without prior notice

PROJECT #:	NAME :	STATUS	
LS0102506	CITY OF ABBOTSFORD	☐FOR APPROVAL	■FOR INFORMATION

LUMCA INC
2645-A WATT QUÉBEC
TEL : 418-650-1693 FAX : 418-650-1896
www.lumca.com -- info@lumca.com

CAT. #					
BH60-23-S4 BK					
DRAWN BY :	M.A.Vlen		QTY : 1	TYPE :	B7
DATE :	20-09-09	REV # : 1	SCALE : N/A	COLOUR :	Black



NOTE:

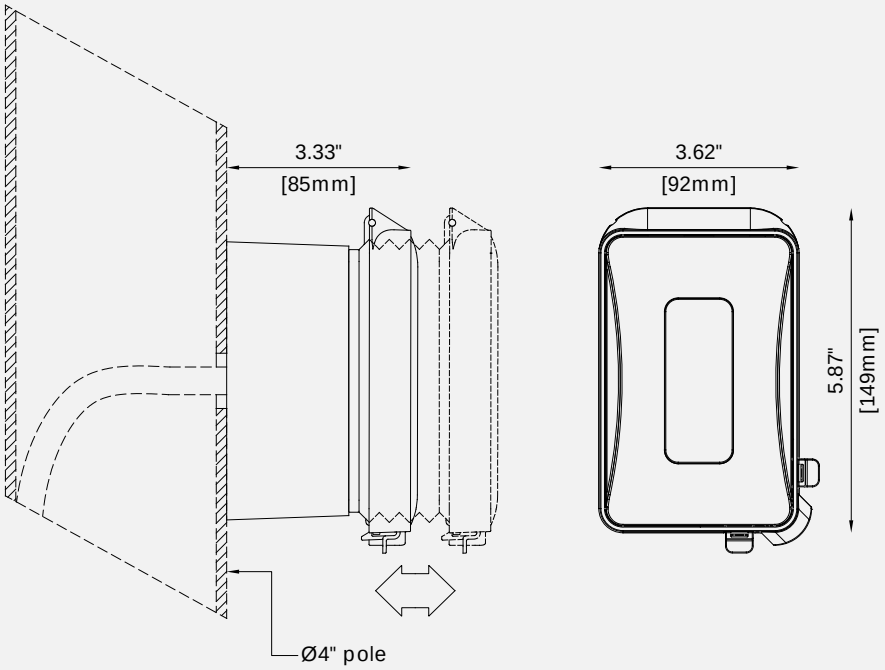
REF :

Lumca reserves the right to modify the elements on this technical data sheet without prior notice

PROJECT #:	NAME :	STATUS	
LS0102506	CITY OF ABBOTSFORD	☐**FOR APPROVAL**	■**FOR INFORMATION**

	CAT. #	
LUMCA INC 2645-A WATT QUÉBEC	PL41-D13 GFR4-ICR BK	Lumca

GFR4-ICR



CONSTRUCTION : Duplex receptacle with ground fault switch c/w retractable "in-use" cover made of UV resistant plastic. **(voltage 120, transformer needed for other voltages, consult factory).** Mounted on a cast aluminum pole adaptor and mechanically secured on pole with two screws.

All hardware is in stainless steel.

fINISH : All metallic parts are pre-treated using an environmentally friendly organic phosphating technology (PLAFORIZATION) before a polyester powder coating is electrostatically applied. The finish is of 100 microns minimal thickness and meets the ASTM B117 regulation related to salt spray and the ASTM D2247 regulation related to the resistance of the finishes exposed to a 100% relative humidity.

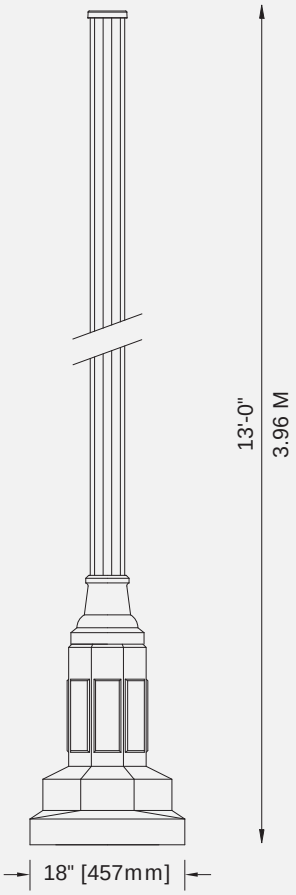
Lumca reserves the right to modify the elements on this technical data sheet without prior notice

PROJECT #:	NAME :	STATUS	
LS0102506	CITY OF ABBOTSFORD	☐FOR APPROVAL	■FOR INFORMATION

LUMCA INC
2645-A WATT QUÉBEC
TEL : 418-650-1693 FAX : 418-650-1896
www.lumca.com -- info@lumca.com

CAT. #					
GFR4-ICR BK					
DRAWN BY :	M.A.Vlen		QTY : 1	TYPE :	C1
DATE :	20-09-09	REV # : 1	SCALE : N/A	COLOUR :	Black

Lumca LIGHTING LIFE



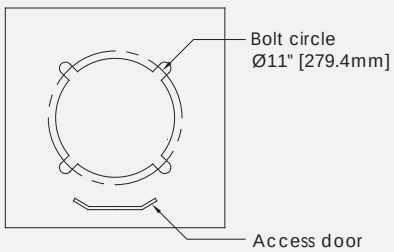
CONSTRUCTION

- Extruded aluminum: Alloy 6061-T6.
- Cast aluminum: Alloy 356.1, minimum wall thickness of 0.188" [4.7mm].
- All hardware is in stainless steel.

- Ø4" [102mm] extruded aluminium fluted tube (8 flutes).
- Wall thickness: 0.125" [3.2mm].
- Access door: 9" [229mm] × 9" [229mm] cast aluminum door.
- One piece cast aluminium decorative base and anchor base.
- Copper ground lug behind the access door.

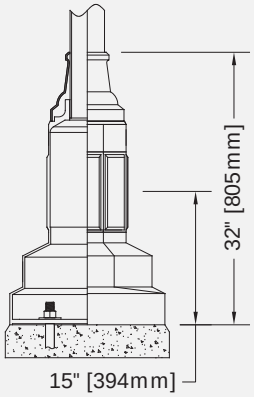
FINISH: All metallic parts are pre-treated using an environmentally friendly organic phosphating technology (PLAFORIZATION) before a polyester powder coating is electrostatically applied. The finish is of 100 microns minimal thickness and meets the ASTM B117 regulation related to 5000 hours salt spray and the ASTM D2247 regulation related to the resistance of the finishes exposed to a 100% relative humidity. RAL and Custom colour matches available.

ANCHOR BASE PLATE:



Anchor bolts : **3/4-10×15"**
Supplied by : **Lumca**
Recommended bolts projection : **3" [76mm]**

DETAILS:



NOTE:

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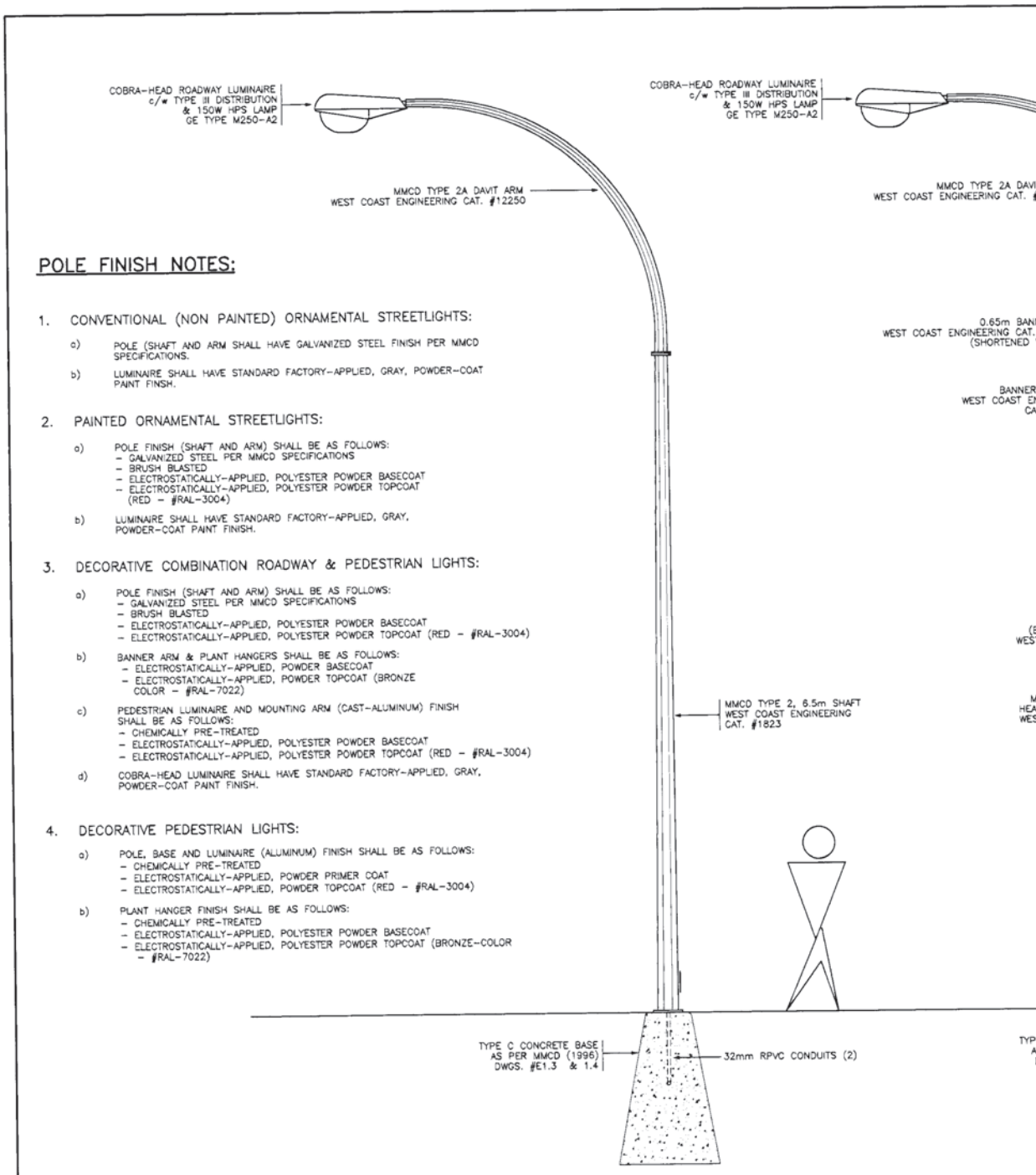
PROJECT #:	NAME :	STATUS	
LS0102506	CITY OF ABBOTSFORD	☐FOR APPROVAL	■FOR INFORMATION

LUMCA INC
2645-A WATT QUÉBEC
TEL : 418-650-1693 FAX : 418-650-1896
www.lumca.com -- info@lumca.com

CAT. #					
PL41-D13 BK					
DRAWN BY : M.A.Vlen		QTY : 1	TYPE : C1		
DATE : 20-09-09	REV # : 1	SCALE : N/A	COLOUR : Black		

Lumca LIGHTING LIFE

Appendix



POLE FINISH NOTES:

1. CONVENTIONAL (NON PAINTED) ORNAMENTAL STREETLIGHTS:
   - a) POLE (SHAFT AND ARM SHALL HAVE GALVANIZED STEEL FINISH PER MMCD SPECIFICATIONS.
   - b) LUMINAIRE SHALL HAVE STANDARD FACTORY-APPLIED, GRAY, POWDER-COAT PAINT FINSH.
2. PAINTED ORNAMENTAL STREETLIGHTS:
   - a) POLE FINISH (SHAFT AND ARM) SHALL BE AS FOLLOWS:
     - GALVANIZED STEEL PER MMCD SPECIFICATIONS
     - BRUSH BLASTED
     - ELECTROSTATICALLY-APPLIED, POLYESTER POWDER BASECOAT
     - ELECTROSTATICALLY-APPLIED, POLYESTER POWDER TOPCOAT (RED - #RAL-3004)
   - b) LUMINAIRE SHALL HAVE STANDARD FACTORY-APPLIED, GRAY, POWDER-COAT PAINT FINISH.
3. DECORATIVE COMBINATION ROADWAY & PEDESTRIAN LIGHTS:
   - a) POLE FINISH (SHAFT AND ARM) SHALL BE AS FOLLOWS:
     - GALVANIZED STEEL PER MMCD SPECIFICATIONS
     - BRUSH BLASTED
     - ELECTROSTATICALLY-APPLIED, POLYESTER POWDER BASECOAT
     - ELECTROSTATICALLY-APPLIED, POLYESTER POWDER TOPCOAT (RED - #RAL-3004)
   - b) BANNER ARM & PLANT HANGERS SHALL BE AS FOLLOWS:
     - ELECTROSTATICALLY-APPLIED, POWDER BASECOAT
     - ELECTROSTATICALLY-APPLIED, POWDER TOPCOAT (BRONZE COLOR - #RAL-7022)
   - c) PEDESTRIAN LUMINAIRE AND MOUNTING ARM (CAST-ALUMINUM) FINISH SHALL BE AS FOLLOWS:
     - CHEMICALLY PRE-TREATED
     - ELECTROSTATICALLY-APPLIED, POLYESTER POWDER BASECOAT
     - ELECTROSTATICALLY-APPLIED, POLYESTER POWDER TOPCOAT (RED - #RAL-3004)
   - d) COBRA-HEAD LUMINAIRE SHALL HAVE STANDARD FACTORY-APPLIED, GRAY, POWDER-COAT PAINT FINISH.
4. DECORATIVE PEDESTRIAN LIGHTS:
   - a) POLE, BASE AND LUMINAIRE (ALUMINUM) FINISH SHALL BE AS FOLLOWS:
     - CHEMICALLY PRE-TREATED
     - ELECTROSTATICALLY-APPLIED, POWDER PRIMER COAT
     - ELECTROSTATICALLY-APPLIED, POWDER TOPCOAT (RED - #RAL-3004)
   - b) PLANT HANGER FINISH SHALL BE AS FOLLOWS:
     - CHEMICALLY PRE-TREATED
     - ELECTROSTATICALLY-APPLIED, POLYESTER POWDER BASECOAT
     - ELECTROSTATICALLY-APPLIED, POLYESTER POWDER TOPCOAT (BRONZE-COLOR - #RAL-7022)

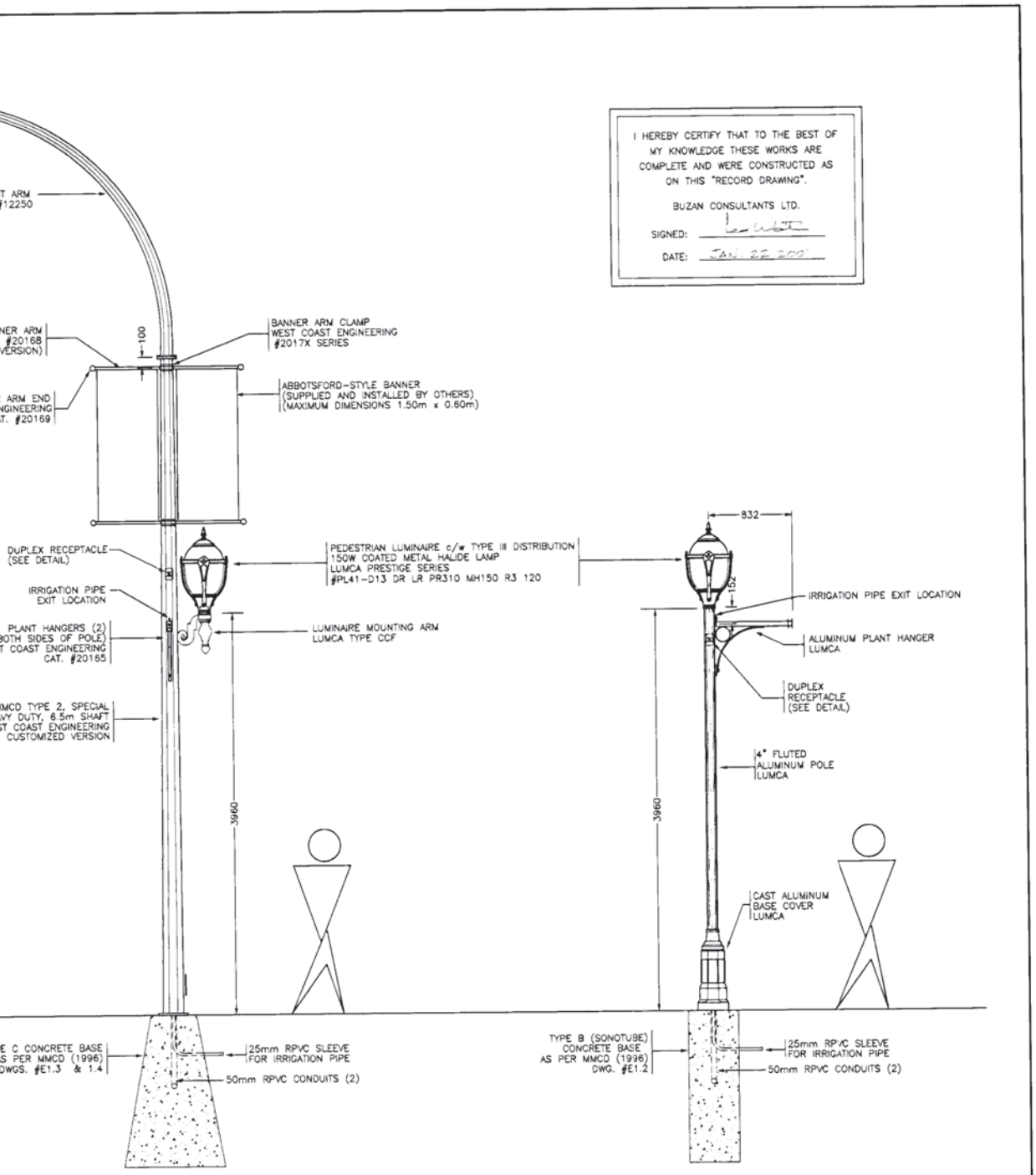
ORNAMENTAL STREETLIGHT
SCALE 1:25

DECORATIVE
SCALE 1:25

R.F. Binnie & Associates Ltd.
CIVIL ENGINEERS & SURVEYORS
Lower Mainland · Fraser Valley · Sea to Sky Country

buzan consultants ltd.

NO.	DATE	BY	REVISIO
2	22 JAN 01	NM	RECORD DRAWING
1	14 FEB 00	NM	ISSUED FOR TENDER
0	04 FEB 00	NM	ISSUED FOR REVIEW



COMBINATION ROADWAY & PEDESTRIAN LIGHT

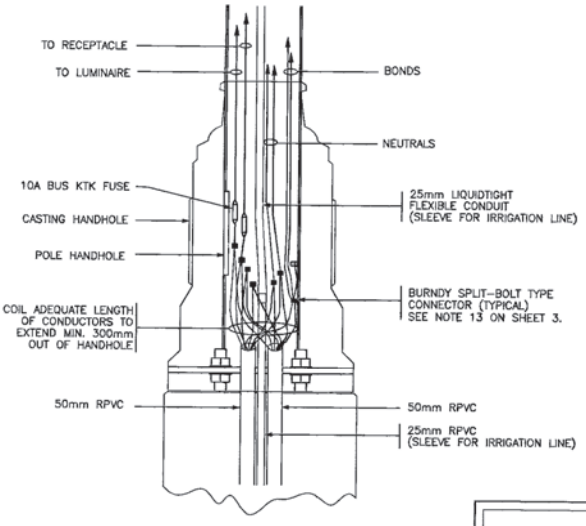
DECORATIVE PEDESTRIAN LIGHT
SCALE 1:25

ABBOTSFORD PROJECT No. L445 DWG. No. E11

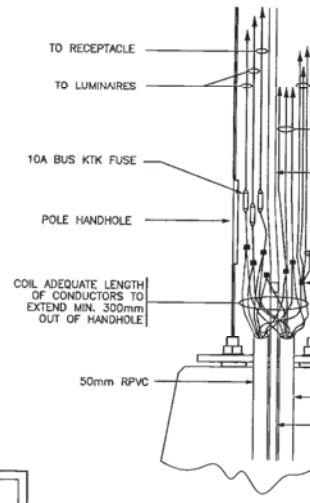
			DATE: JAN 2000	WORK ORDER NO.	CITY OF ABBOTSFORD
			DRAWN: NM	PERMIT NO.	ESSENDENE AVE. – STREETLIGHTING
	NM	TW	DESIGN: –	SCALE HOR. 1:25 VERT. –	ROADWAY & PEDESTRIAN POLE DETAILS
	NM	TW			
	NM	TW			
NS	TECH	ENG.			

T. T. WATANABE

JAN 2 2 2001



TYPICAL PEDESTRIAN LIGHT POLE HANDHOLE DETAIL
NTS



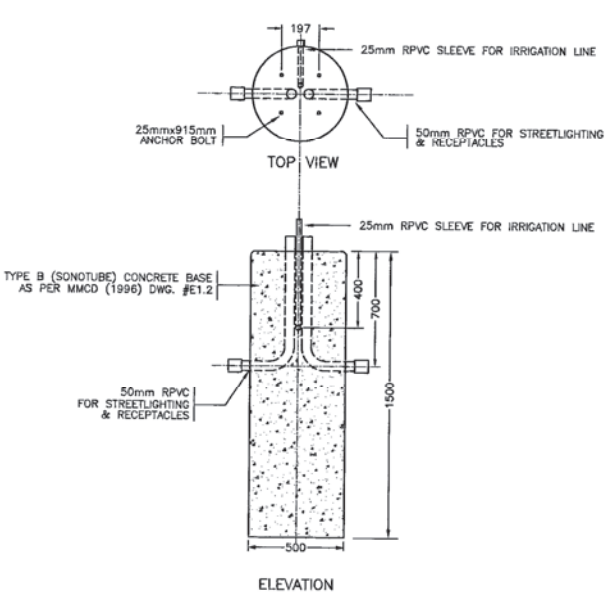
TYPICAL COMBINATION
& PEDESTRIAN LIGHT
HANDHOLE DETAIL
NTS

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE WORKS ARE COMPLETE AND WERE CONSTRUCTED AS ON THIS "RECORD DRAWING".

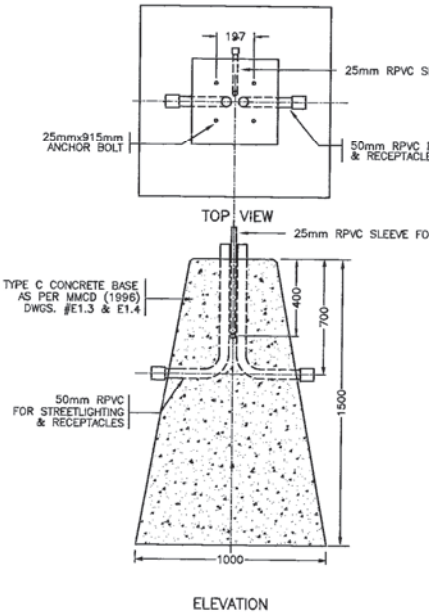
BUZAN CONSULTANTS LTD.

SIGNED:

DATE: JAN. 22, 2001



TYPICAL PEDESTRIAN LIGHT POLE
CONCRETE BASE DETAIL
NTS

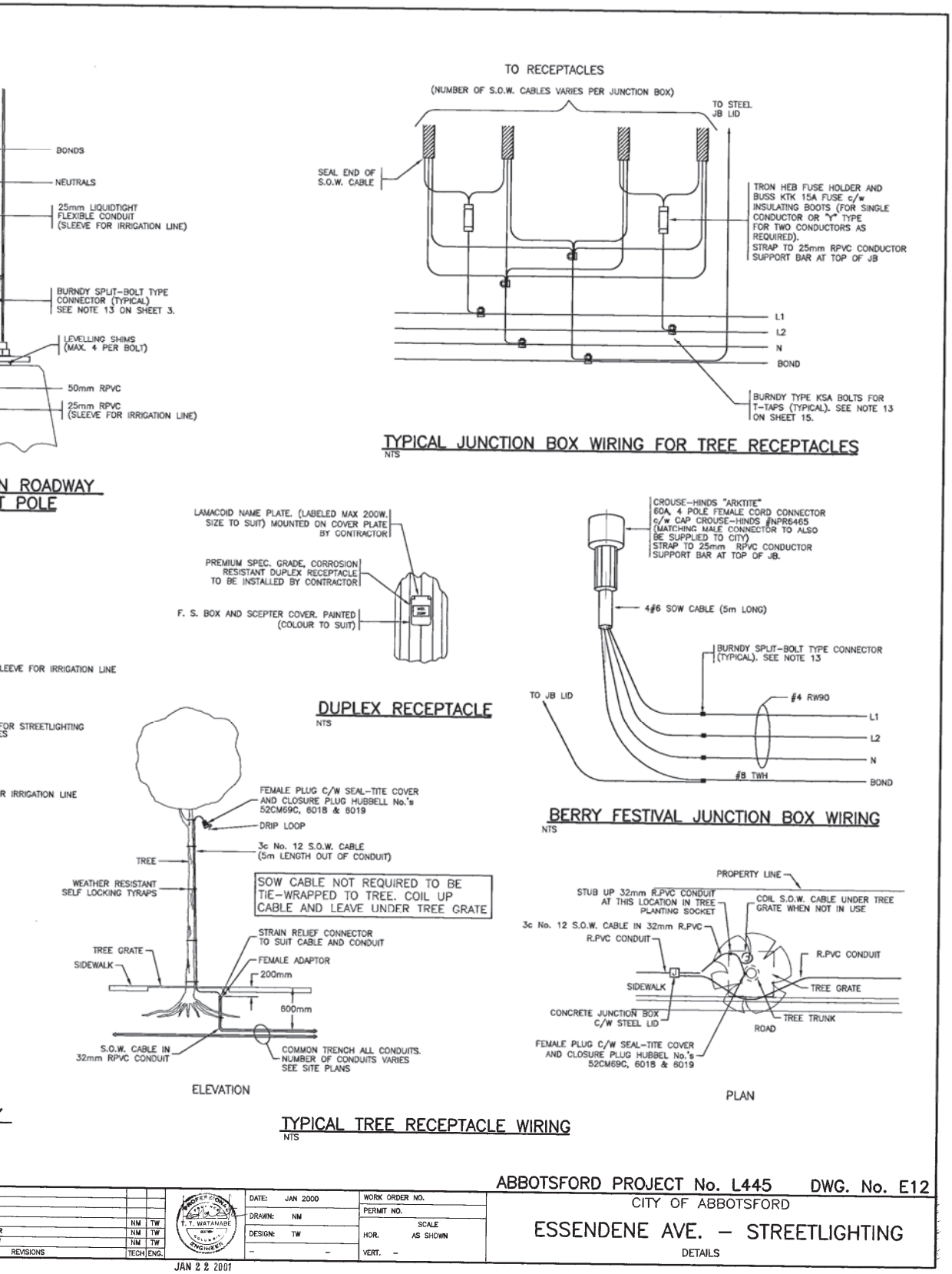


TYPICAL COMBINATION ROADWAY
& PEDESTRIAN LIGHT POLE
CONCRETE BASE DETAIL
NTS

R.F. Binnie & Associates Ltd.
CIVIL ENGINEERS & SURVEYORS
LOWER MAINLAND 420-1721 | FRASER VALLEY 574-3336 | SEA TO SKY COUNTRY 892-8222

buzan consultants ltd.
10211 ROSSDOWNE CRES. RICHMOND, B.C. V7A 2P6
TEL. (604) 241-5816

NO.	DATE	BY	
2	22 JAN 01	NM	RECORD DRAWING
1	14 FEB 00	NM	ISSUED FOR TENDER
0	04 FEB 00	NM	ISSUED FOR REVIEW


BONDS
NEUTRALS
25mm LIQUIDTIGHT FLEXIBLE CONDUIT (SLEEVE FOR IRRIGATION LINE)
BURNDY SPLIT-BOLT TYPE CONNECTOR (TYPICAL) SEE NOTE 13 ON SHEET 3.
LEVELLING SHIMS (MAX. 4 PER BOLT)
50mm RPVC
25mm RPVC (SLEEVE FOR IRRIGATION LINE)
TO RECEPTACLES
(NUMBER OF S.O.W. CABLES VARIES PER JUNCTION BOX)
TO STEEL JB LID
SEAL END OF S.O.W. CABLE
TRON HEB FUSE HOLDER AND BUSS KTK 15A FUSE c/w INSULATING BOOTS (FOR SINGLE CONDUCTOR OR 'Y' TYPE FOR TWO CONDUCTORS AS REQUIRED). STRAP TO 25mm RPVC CONDUCTOR SUPPORT BAR AT TOP OF JB
L1
L2
N
BOND
BURNDY TYPE KSA BOLTS FOR T-TAPS (TYPICAL). SEE NOTE 13 ON SHEET 15.
TYPICAL JUNCTION BOX WIRING FOR TREE RECEPTACLES
NTS
N ROADWAY
T POLE
LEEVE FOR IRRIGATION LINE
FOR STREETLIGHTING
R IRRIGATION LINE
LAMACOID NAME PLATE. (LABELED MAX 200W. SIZE TO SUIT) MOUNTED ON COVER PLATE BY CONTRACTOR
PREMIUM SPEC. GRADE, CORROSION RESISTANT DUPLEX RECEPTACLE TO BE INSTALLED BY CONTRACTOR
F. S. BOX AND SCEPTER COVER. PAINTED (COLOUR TO SUIT)
DUPLEX RECEPTACLE
NTS
CROUSE-HINDS "ARKTITE" 60A, 4 POLE FEMALE CORD CONNECTOR c/w CAP CROUSE-HINDS #NPR6465 (MATCHING MALE CONNECTOR TO ALSO BE SUPPLIED TO CITY) STRAP TO 25mm RPVC CONDUCTOR SUPPORT BAR AT TOP OF JB.
4#6 SOW CABLE (5m LONG)
BURNDY SPLIT-BOLT TYPE CONNECTOR (TYPICAL). SEE NOTE 13
TO JB LID
#4 RW90
L1
L2
N
#8 TWH
BOND
BERRY FESTIVAL JUNCTION BOX WIRING
NTS
FEMALE PLUG C/W SEAL-TITE COVER AND CLOSURE PLUG HUBBELL No.'s 52CM69C, 6018 & 6019
DRIP LOOP
3c No. 12 S.O.W. CABLE (5m LENGTH OUT OF CONDUIT)
TREE
WEATHER RESISTANT SELF LOCKING TYRAPS
SOW CABLE NOT REQUIRED TO BE TIE-WRAPPED TO TREE. COIL UP CABLE AND LEAVE UNDER TREE GRATE
STRAIN RELIEF CONNECTOR TO SUIT CABLE AND CONDUIT
TREE GRATE
SIDEWALK
FEMALE ADAPTOR
200mm
600mm
S.O.W. CABLE IN 32mm RPVC CONDUIT
COMMON TRENCH ALL CONDUITS. NUMBER OF CONDUITS VARIES SEE SITE PLANS
ELEVATION
PROPERTY LINE
STUB UP 32mm R.PVC CONDUIT AT THIS LOCATION IN TREE PLANTING SOCKET
COIL S.O.W. CABLE UNDER TREE GRATE WHEN NOT IN USE
3c No. 12 S.O.W. CABLE IN 32mm R.PVC
R.PVC CONDUIT
R.PVC CONDUIT
SIDEWALK
TREE GRATE
CONCRETE JUNCTION BOX C/W STEEL LID
TREE TRUNK
ROAD
FEMALE PLUG C/W SEAL-TITE COVER AND CLOSURE PLUG HUBBEL No.'s 52CM69C, 6018 & 6019
PLAN
TYPICAL TREE RECEPTACLE WIRING
NTS
ABBOTSFORD PROJECT No. L445
DWG. No. E12
CITY OF ABBOTSFORD
ESSENDENE AVE. – STREETLIGHTING
DETAILS
DATE: JAN 2000
DRAWN: NM
DESIGN: TW
WORK ORDER NO.
PERMIT NO.
SCALE
HOR. AS SHOWN
VERT. –
REVISIONS
NM TW
NM TW
NM TW
TECH ENG.
T. T. WATANABE
JAN 2 2 2001

Appendix

Abbotsford Brand Integration

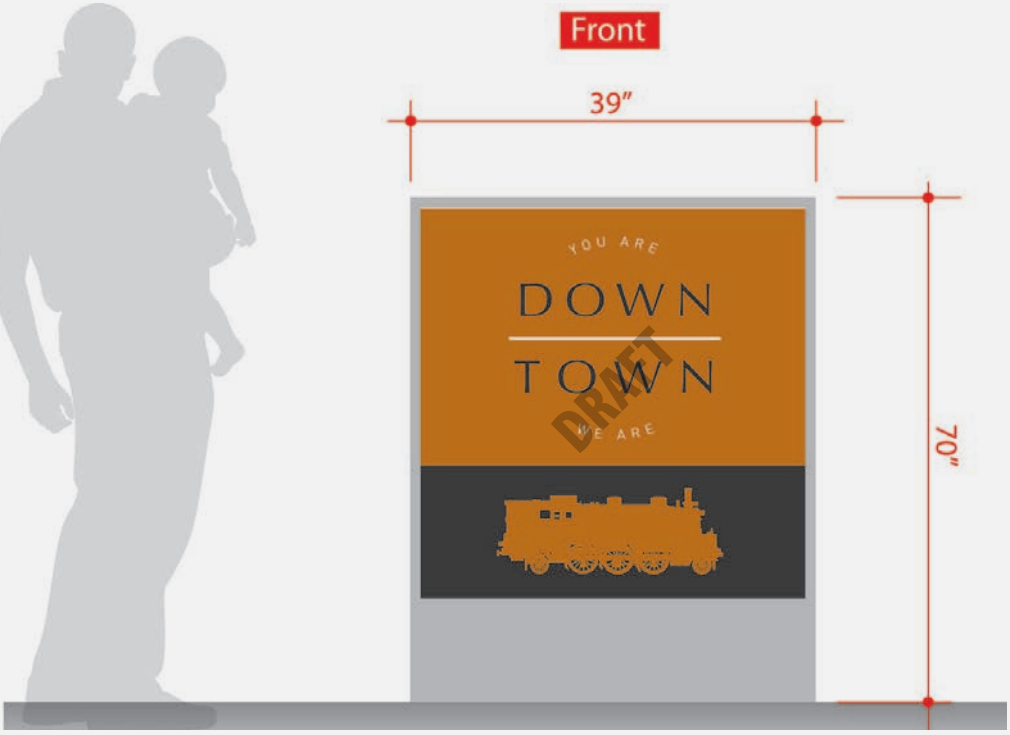
Primary Mark

Secondary Mark

Other Marks

Brand Colors

90% Black	White	Ochre
#373736	#ffffff	#B27317
C: 0	C: 0	C: 4
M: 0	M: 0	M: 54
Y: 0	Y: 0	Y: 99
K: 90	K: 0	K: 19



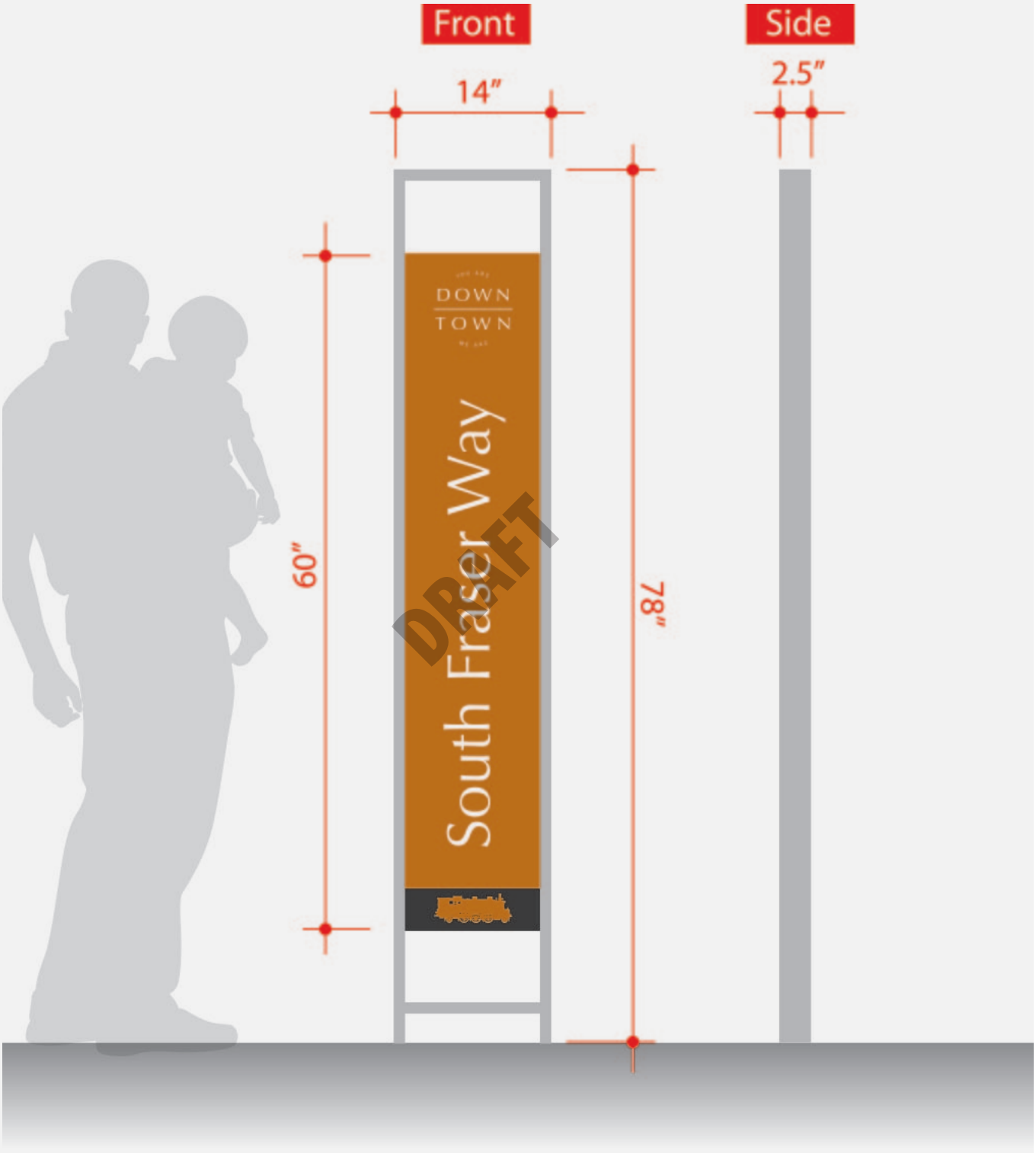


Figure 51. Street Sign

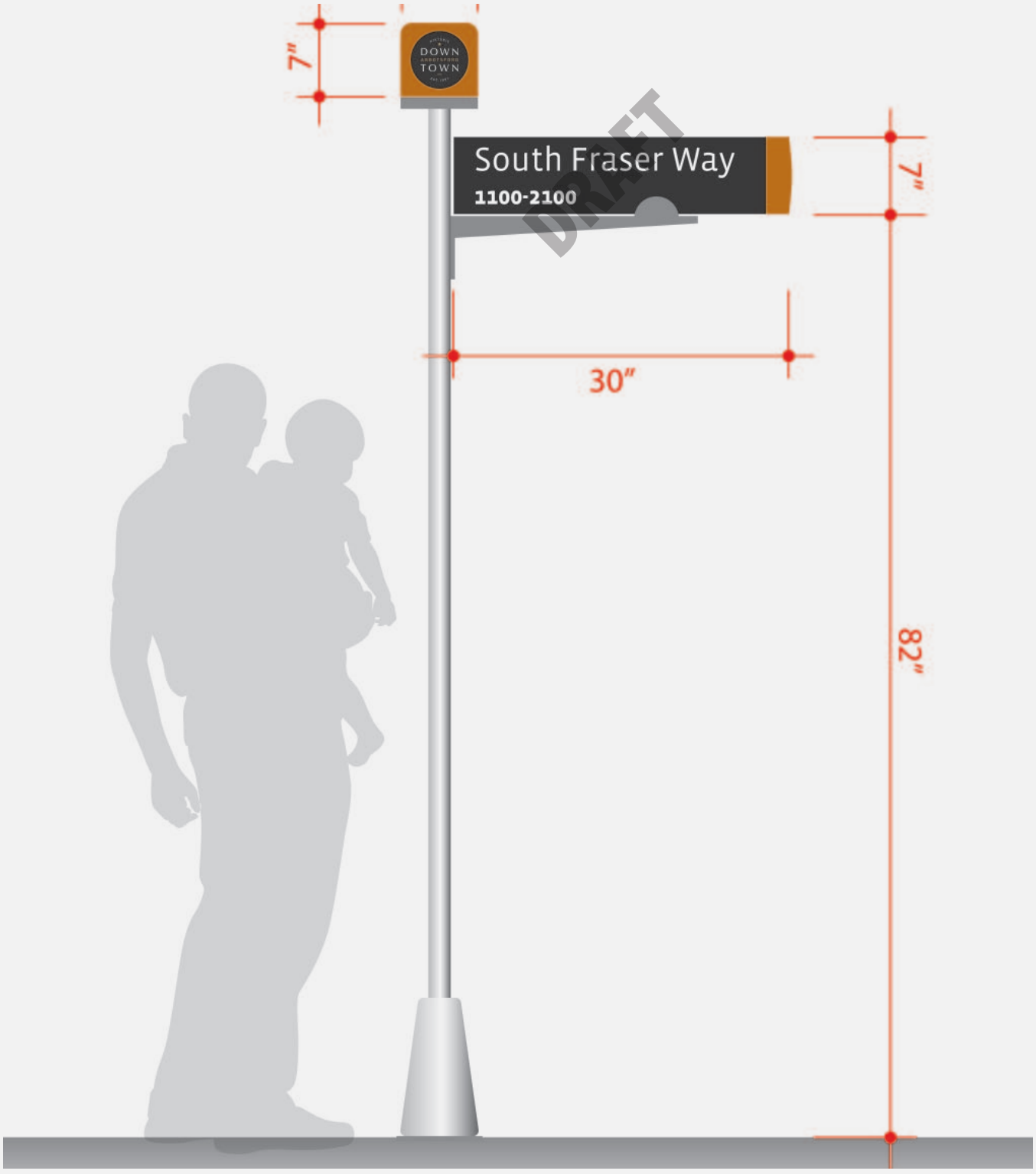


Figure 52. Street Marker

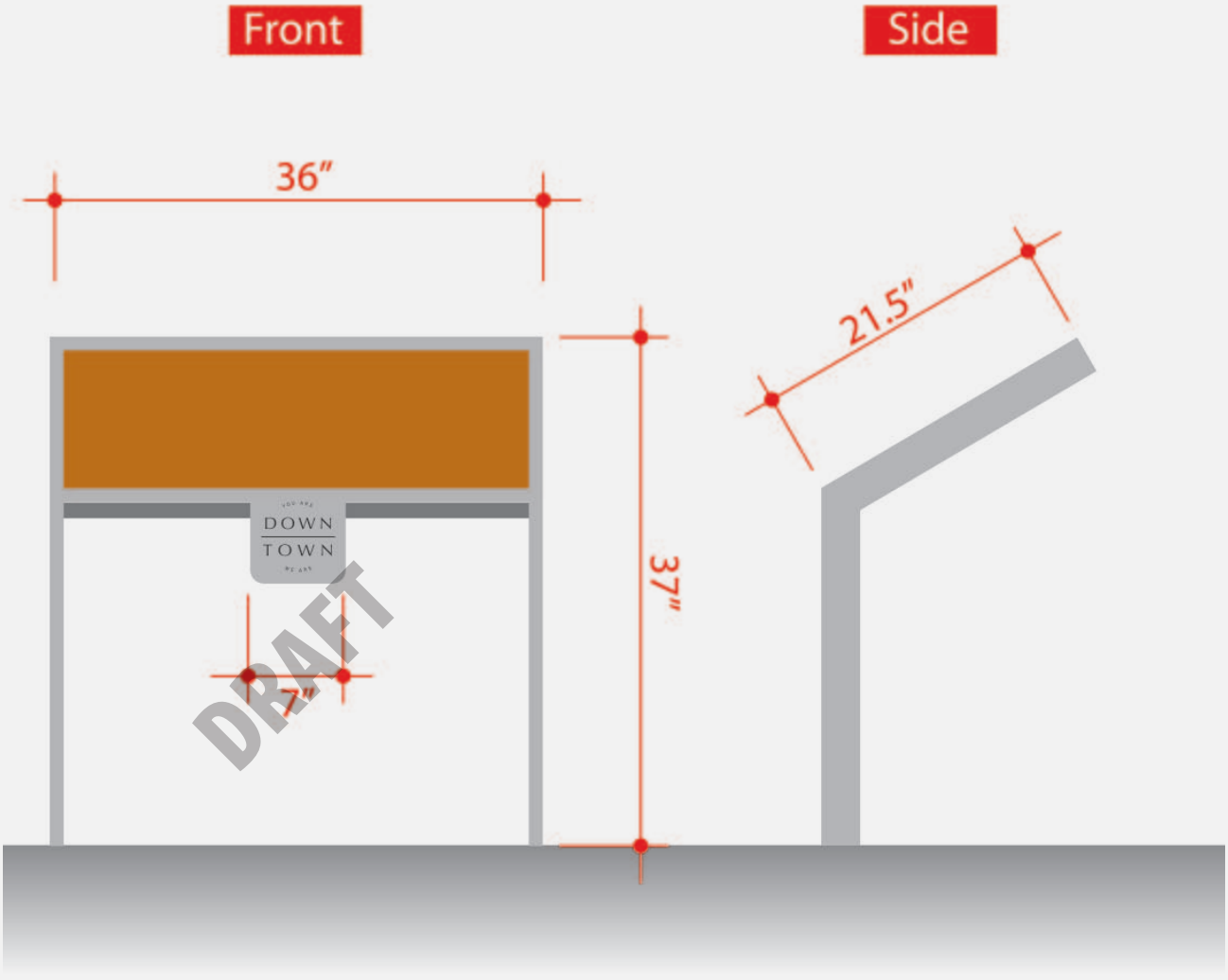


Figure 53. Interpretive Sign

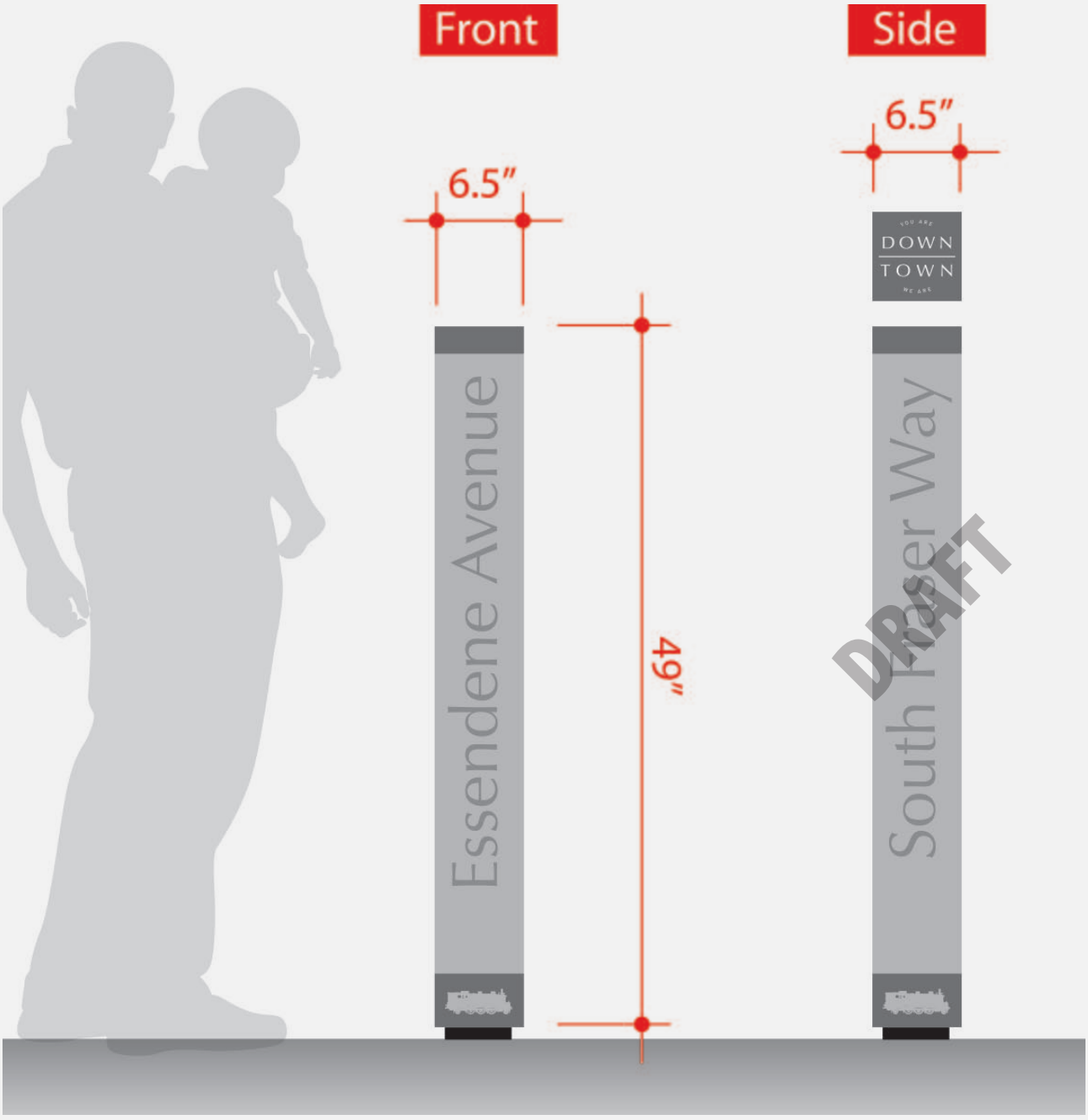


Figure 54. Street Intersection Identification

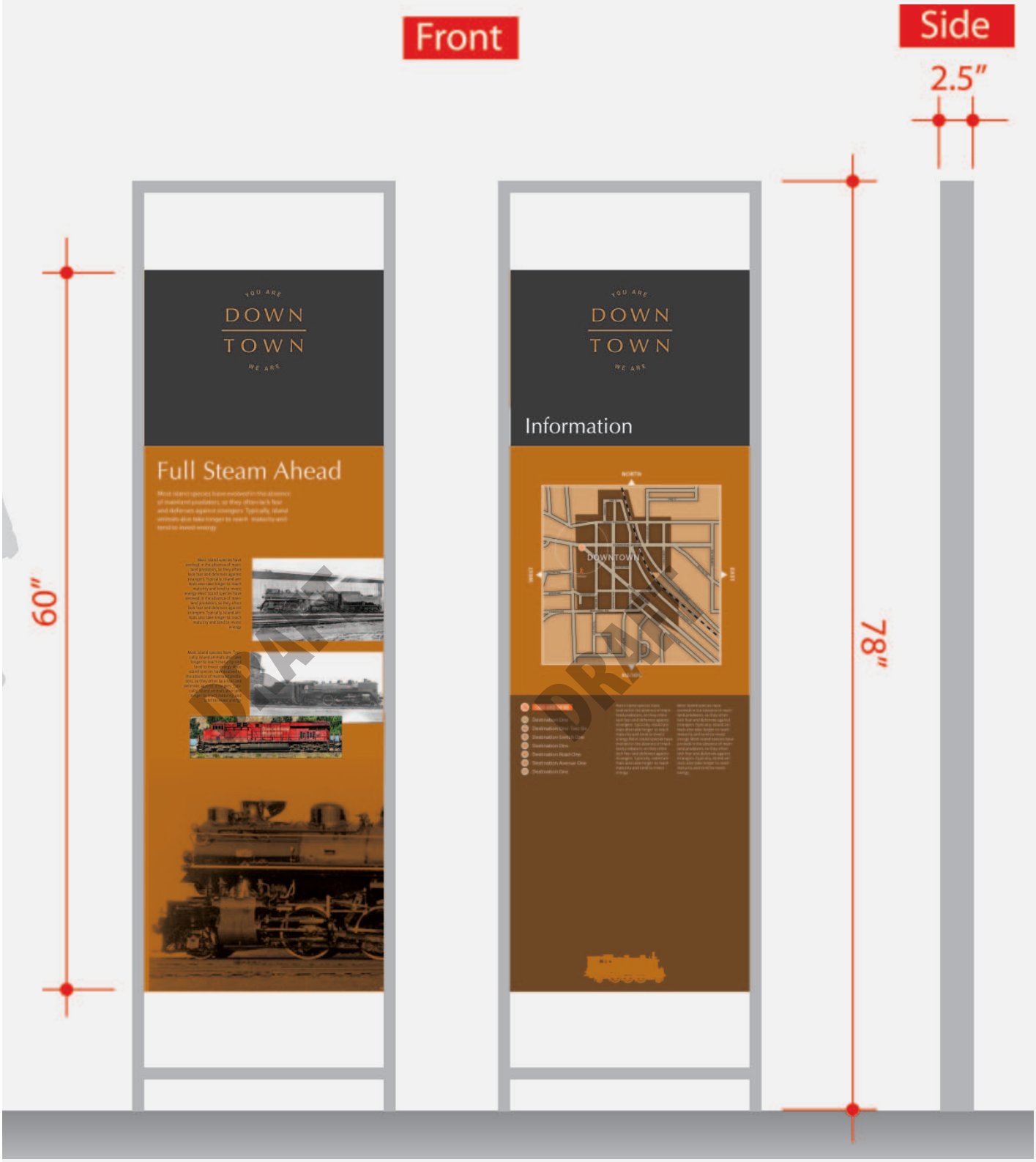


Figure 55. Wayfinding Sign

Acknowledgments

Many thanks to the team of dedicated people who contributed to the creation of this report. Thanks to The Abbotsford Infrastructure Planning Division and City of Abbotsford for their active involvement in Historic Downtown improvements. Thanks also extend to our consulting partner's O'm Engineering and Lime Design for their contribution to the text, graphics and photographs in this report. Special thanks go to the City of Abbotsford for recognizing the importance of streetscape design in its overall planning process.

DRAFT

Draft

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