



GODERICH

DOWNTOWN STREETScape

February 2024

1 Introduction

GSP Group Inc. (GSP) was retained by BM Ross and Associates Limited (BM Ross), on behalf of the Town of Goderich (Town) in September 2023 to provide conceptual streetscape design services for the streets framing Courthouse Square. The conceptual streetscape design is part of the Rebuilding Downtown Infrastructure project intended to replace subsurface infrastructure that has served the surrounding land uses since the 1890s.

The project prioritizes pedestrian comfort and safety while balancing universal design principals and walkability with roadway geometry that promotes slow motor vehicle speeds. It contributes to the identity of a vibrant and successful main street.



Corridor tour group on first day of streetscape charrette.
Image source: GSP Group

1.1 Report Organization

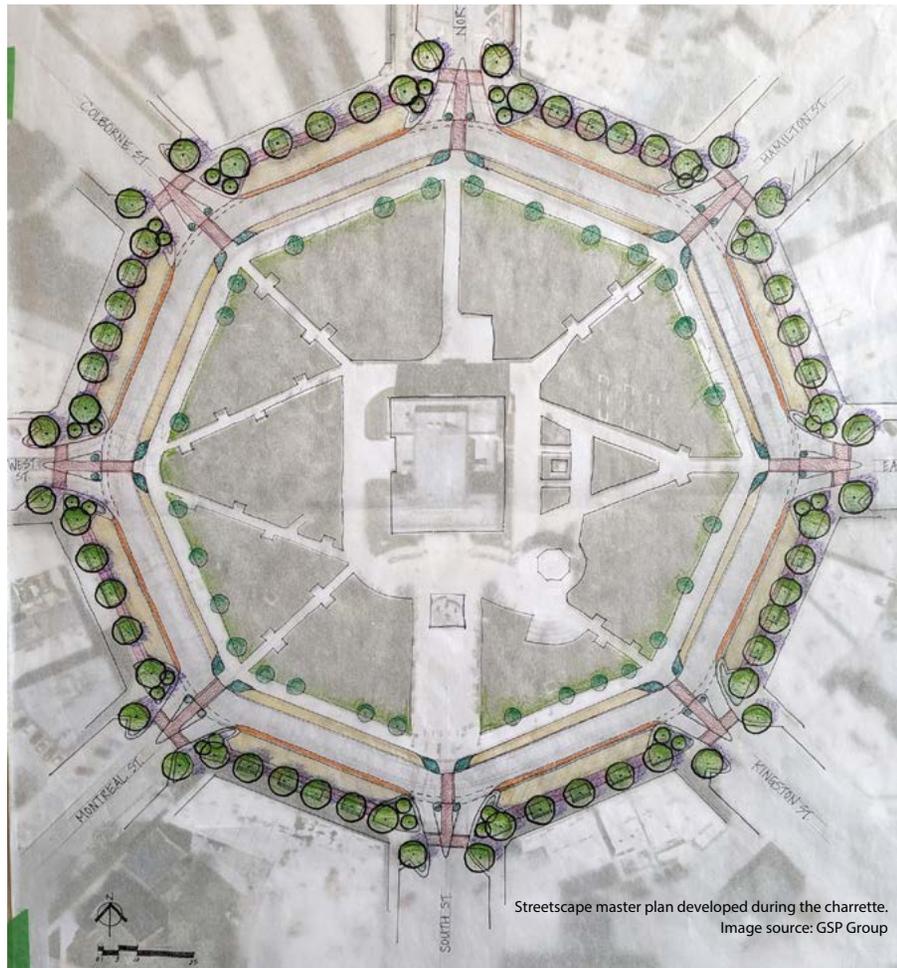
This report is design focused. It begins with a description of the four-day charrette used to generate the streetscape concept. Next, the contexts of the street — its regional and local significance, existing cross section and layout, accessibility issues, and streetscape elements — are described. Finally, the proposed streetscape design is set out through a description of the proposed layout and philosophy behind design elements.



Charrette closing night audience.
Image source: GSP Group

2 The Streetscape Charrette

GSP employed a charrette process — to develop a community endorsed conceptual streetscape design — that enables BM Ross to begin subsurface and roadway infrastructure design in the first quarter of 2024. This approach was employed to facilitate project construction completion by 2027 — in time to celebrate the Town’s 200th anniversary.



2.1 Charette Defined



A charrette is a collaborative planning and design workshop that brings together stakeholders, including community members, and local officials, to generate ideas and concepts for streetscapes and other planning and design projects. The term "charrette" is derived from the French word for "cart" or "chariot." It refers to an intense period of work to complete a planning and design project.

A charrette approach is/promotes:

- Collaborative design through community engagement. Participants work together to share ideas, expertise, and local knowledge to shape the design of the streetscape.
- Time-Limited and intensive often spanning several days or a week, the time constraint encourages participants to focus on generating creative and viable design solutions quickly.
- Multi-Disciplinary expertise - urban designers, architects, landscape architects, transportation planners, local business owners, residents, and other stakeholders – to generate well-rounded and practical design ideas.
- Publicly accessible for community members to provide input and feedback to ensure that the final design reflects the needs and aspirations of the local community.
- Analytically grounded in an understanding of factors such as traffic patterns, pedestrian flow, land use, and the overall character of the area.
- A participatory process where interested parties develop design concepts and ideas for the streetscape through sketching, drawing, and creating visual representations of the proposed changes.
- Focused on regular feedback sessions to allow participants to refine and adjust designs based on input from others, including community members and experts.
- Presentation and documentation focused where design concepts are provided to the community and other stakeholders. The ideas are documented, and the outcomes inform future planning and design efforts.
- Geared toward creating actionable recommendations to guide improvements.
- A sense of community ownership and involvement in the decision-making process to create a shared vision for the future.

The intent of a charrette is to be inclusive and collaborative when shaping the physical environment of a community.

2.2 The Courthouse Square Charette Process

GSP conducted a four-day Courthouse Square streetscape charrette, with BM Ross, during the final week of November 2023. The event was held in the Royal Canadian Legion Branch 109 hall located at 56 Kingston Street just off the Courthouse Square.

The structure of the Courthouse Square streetscape charrette included:



Streetscape stakeholders on tour.
Image source: GSP Group

Charrette Day 1: Discovery Education

The day kicked off with a tour of Courthouse Square, where GSP and BM Ross engaged staff and local leaders about various aspects of the street. Conversations spanned accessibility and travel lanes to sidewalks, plantings, parking, wayfinding, drainage, lighting, furnishings, and maintenance.

After the tour, participants broke into smaller groups, delving into collective values for the streetscape and addressing individual concerns. This collaborative effort set the stage for a productive evening session where GSP presented a comprehensive “Streetscape 101” educational session to the public audience.

The presentation covered critical elements of streetscapes and the principles guiding the creation of a unified and successful design. Topics ranged from the overall rationale behind replacing aging subsurface infrastructure to the intent of the charrette, emphasizing learning from one another, developing common values, and understanding individual issues.

GSP elaborated on the role of design vehicles, universal and inclusive design, accessibility compliance, the impact of speed, stormwater considerations, wayfinding, street trees, paved surfaces, lighting, parking, cycling facilities, and maintenance. The audience gained insight into the intricacies of creating a well-thought-out and sustainable streetscape.

Post-presentation, the public engaged in further discussions, forming common values and addressing individual issues. The outcome was a set of shared values against which the streetscape design would be evaluated, along with identified individual concerns that should be considered in the design process.

The collective values encompassed safety for all modes, the significance of parking for main street success, affordability, aesthetic appeal, universal accessibility, and creating a comfortable environment with shade and greenery. Individual issues included concerns about the existing environment, safety, design quality, potential project impacts including costs and business disruption during construction, parking issues, and wayfinding challenges.

These discussions culminated in a comprehensive list of values and issues, providing a foundation for the streetscape design process. This collaborative effort was aimed at addressing both collective aspirations and individual concerns. It guides a design that will be visually appealing, functional, inclusive, and considerate of the community’s diverse needs and preferences. (See appendix A for a summary of Values and Issues.)

Charrette Day 2: Cross Section

The second day of the charrette focused on the development of a streetscape cross section.

A streetscape cross section is a detailed and scaled representation of a vertical slice through a street or roadway, illustrating the various components and elements that make up its design. It provides a visual depiction of the arrangement and dimensions of different features within a street, from the ground level up.

The streetscape cross section shows:

- Roadway Surface: travel lanes for vehicles, bike lanes (if present), and any other designated paths.
- Sidewalks: pedestrian walkways, often indicating the materials used for paving and the width of the sidewalk.
- Drainage: curbs and gutters, swales, or ditches that help manage stormwater drainage.
- Street Furnishing Area: space dedicated to benches, trash cans, and other amenities that contribute to the streetscape.
- Street Trees and Landscaping: the location and type of vegetation that plays a crucial role in enhancing the aesthetics and environmental quality of the street.
- Lighting: placement and type of street lighting fixtures.
- Utility Infrastructure: Indications of underground utilities such as water pipes, sewer lines, and electrical conduits.
- Adjacent context: the distance between the street and the front of adjacent buildings or other land uses.

Streetscape cross sections help stakeholders, including designers, planners, and the public, understand how a street will look and function in three dimensions. This visualization aids in decision-making, community engagement, and ensuring that the design meets the desired aesthetic and functional goals.

Specific stakeholders — including property owners, restaurateurs, retailers, and office owners — sat down with the charrette design team to discuss how their businesses use the street and the impact that would have on the distribution of space within cross section.

Throughout the day, members of the public casually dropped in to observe and comment upon the evolving cross section design.

Stakeholders discussing downtown streetscape values, issues, and opportunities.
Image source: GSP Group



Charrette Day 3: Streetscape Layout

Using the cross section developed the previous day, the charrette team listened to property owners, restaurateurs, retailers, office owners, and members of the public to shape an overall streetscape layout. A streetscape layout is a detailed plan drawing that illustrates the arrangement and organization of various elements within a street or public space. This overall plan shows how the layout of physical components are integrated to achieve specific design goals.

The charrette team focused on the layout of intersections, specifically on safe crossings where large wheelbase vehicles needed to enter and exit the Courthouse Square

Charrette Day 4: Presentation of Starter Ideas

On the final day, the charrette team refined the cross section and layouts. The team continued to receive comments from the public and individual members of Town leadership before presenting the “starter-ideas” during a public presentation that evening.

The public presentation included a review of the elements and principles of streetscape design, a detail description of the existing cross section, the proposed cross section and the proposed layout. Two options were shown for the proposed cross section. One cross section included a two-way multi-use path located between the angle parking spots and the sidewalk. The other cross section showed an eight-meter cart path that included a 1.5-meter area for cycling. Both options showed back-in angle parking.

Following the presentation, a short question and answer period was conducted. Members of the public wanted to know about costs, construction impacts on their businesses, questioned back-in angle parking, and were concerned about smart cities and active surveillance. The plan was generally well received otherwise.



3 Existing Context Analysis

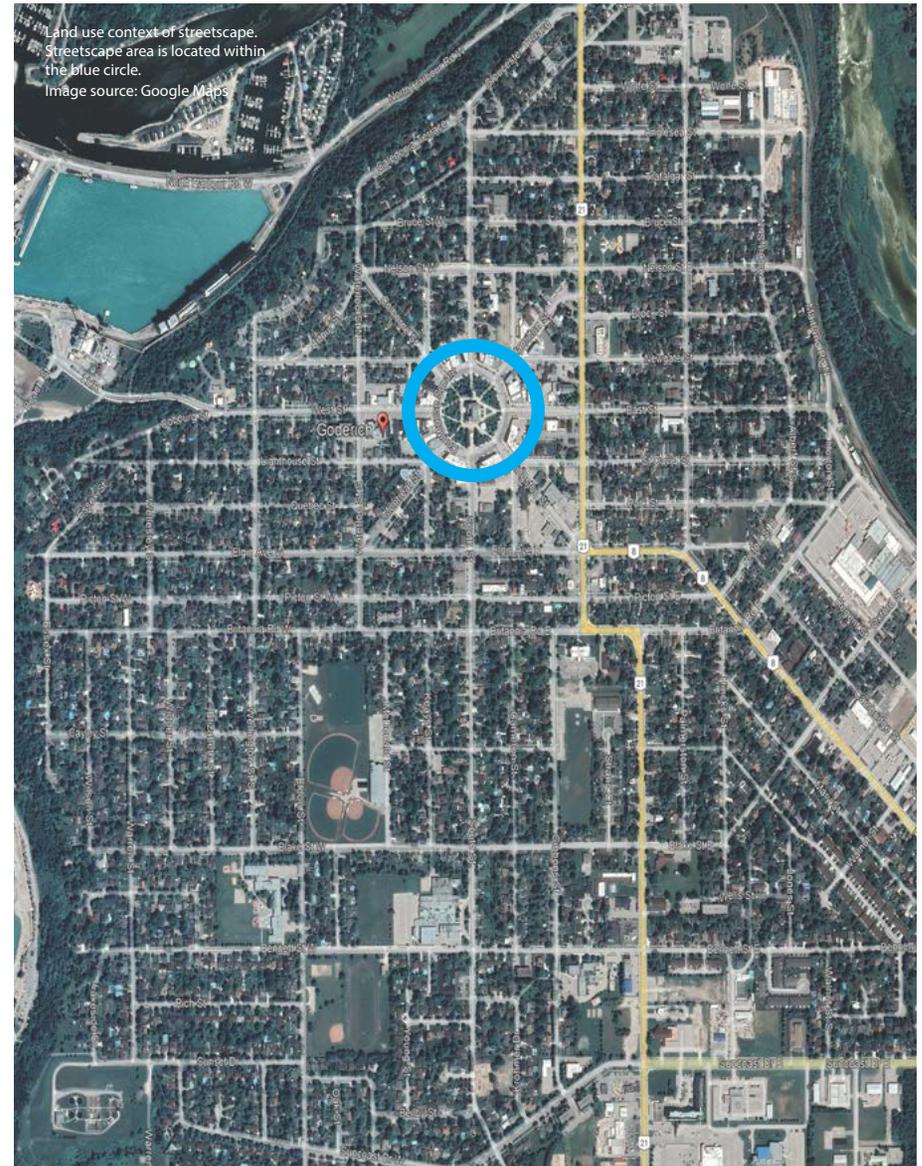
The Courthouse Square streetscape is situated in Goderich, Ontario, on the eastern shore of Lake Huron in Huron County, Ontario. The square is regionally and locally significant as a central point for community engagement, events, and social activities.

3.1 Regional Significance

The town's layout was carefully planned, featuring a central square that would serve as a focal point for civic and community activities. Often referred to as Market Square or Courthouse Square, it was intended to be a gathering place for residents and a hub for commerce. Shops, restaurants, and cafes surrounding the square play a crucial role in bolstering the regional economy. It serves as the cultural centre of Huron County, hosts events like art fairs, music festivals, and other cultural activities that draw visitors from the broader region. The square significantly contributes to the region's cultural vibrancy. It is surrounded by historic buildings and landmarks and holds architectural and historical significance. It serves as a starting point for tourists exploring other local attractions and landmarks — acting as a central location for information and orientation.

3.2 Local Significance

Locally, the square is a focal point for events such as farmers' markets, parades, and holiday celebrations, providing a platform for local businesses, artisans, and community groups to showcase their offerings. It is the commercial center for local retail and dining establishments, benefitting from increased foot traffic during events. The square is a vital cultural, social, and economic hub. It enriches the community, fosters a sense of belonging, and provides a platform for diverse activities and events that enhance the quality of life for residents while attracting visitors from the broader area.

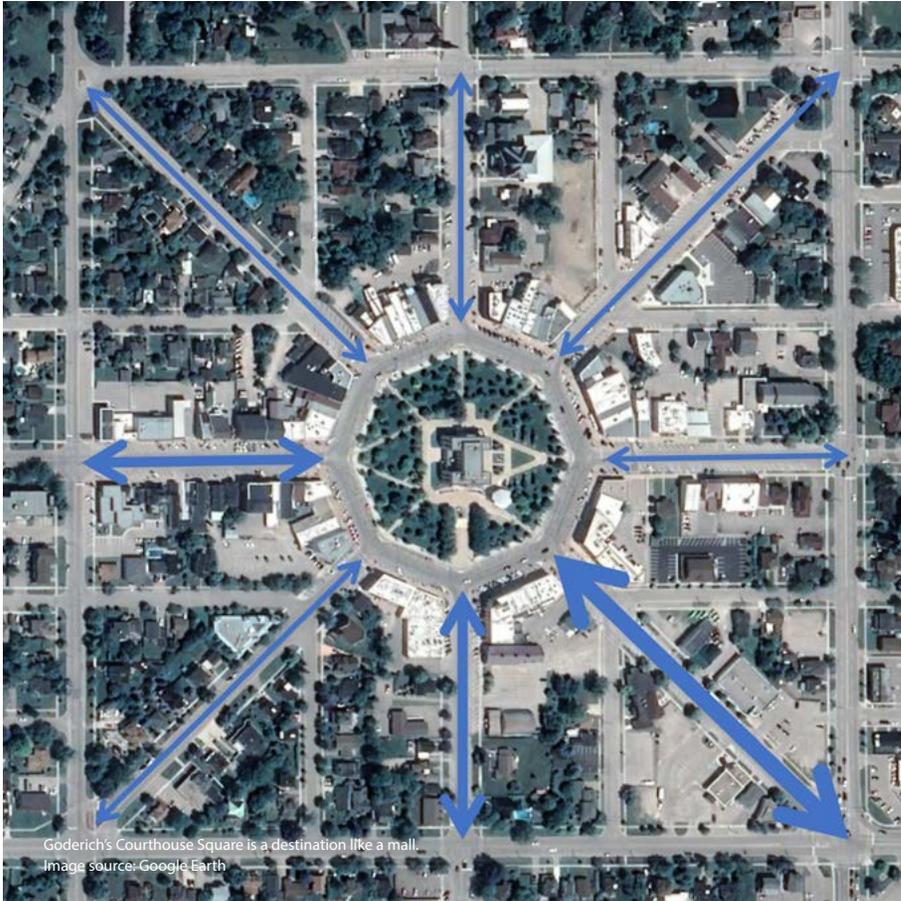
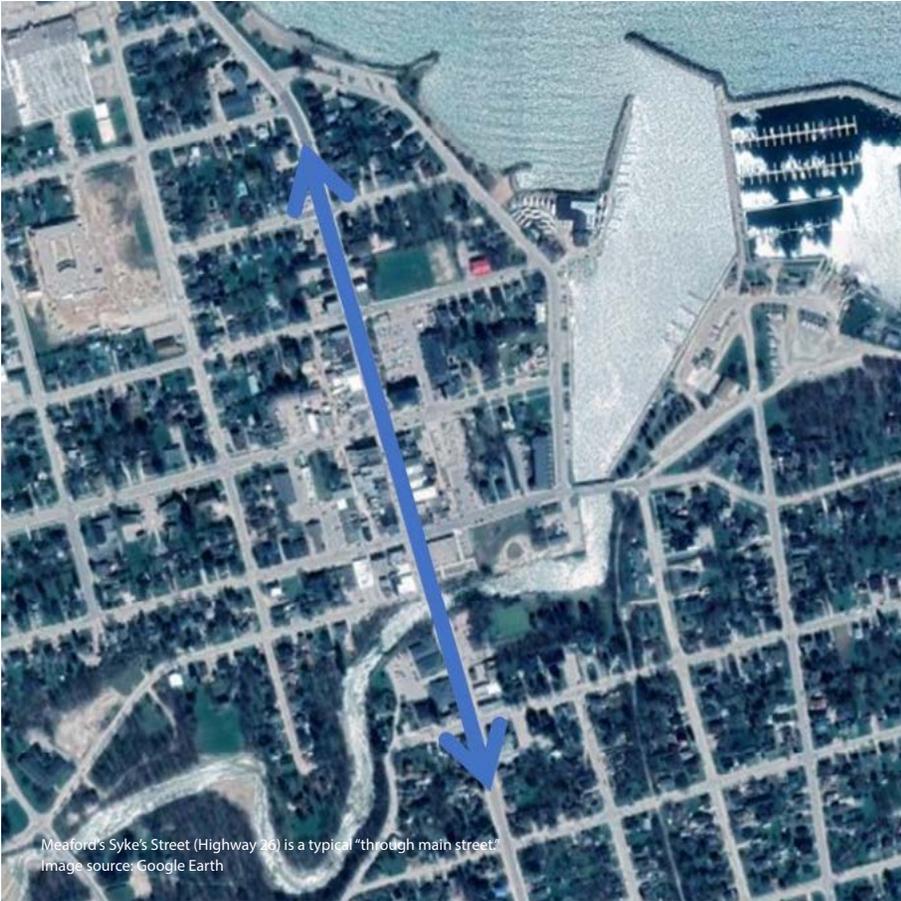


3.3 Destination Main Street

Goderich's Courthouse Square is a unique main street. Typical main streets occur along regional "through streets" at a conglomeration of business within a dense area of walkable streets. The businesses depend on drive-by traffic for customers.

Goderich's main street operates as a destination rather than a through street. This is similar to how an outdoor shopping mall functions and presents unique challenges and opportunity. As the centre of civic life, courthouse is the historical regional draw to the area.

As a destination, off of regional thoroughfares, collective marketing and parking play big roles in the success of Courthouse Square businesses. The generous rights-of-way of the streets surrounding the square present opportunity to increase parking supply. The Town should develop a parking strategy to effectively provide more parking to serve the businesses on the square.



3.4 Existing Cross Section

The existing cross section drains continuously from the surrounding buildings to the courthouse square at about two percent gradient. Wide sidewalks are composed of ordinary concrete and concrete unit pavers. The sidewalks include street furnishings, lighting, and occasional potted plants. An asphalt concrete road surface accommodates narrow stall, head-in, angle parking stalls adjacent to 11.5 meters of cartway, and parallel parking stalls adjacent to the square.



3.5 Existing Sidewalk Layout

The existing concrete sidewalk area appears to be in good condition. The adjacent concrete unit-paver furnishing zones and landing crossing landing areas are irregular — from frost heave and material failure. Lack of street trees an opportunities to sit may limit users during summer months and events.



Occasional street tree in planter box to avoid salt spray, provides limited shade.

Newer construction have at grade entrances while older buildings may have entrances above the sidewalk grade.

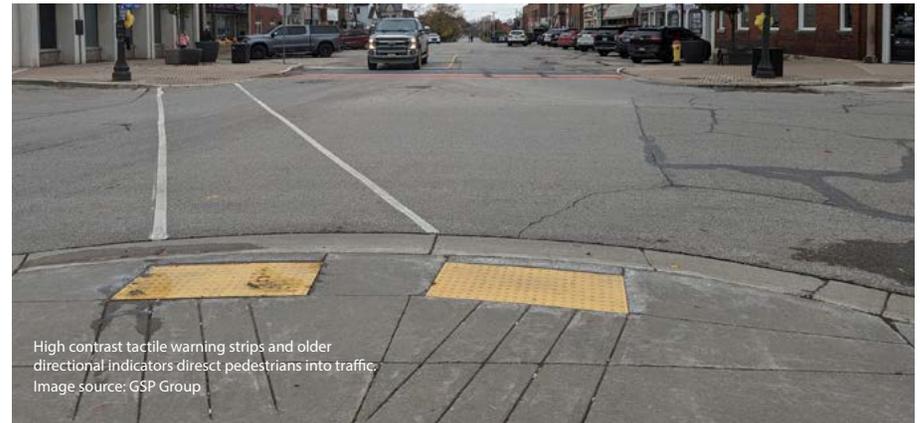
Furnishing zone contains an assortment of site furnishings and light standards that do not appear to be dark skies compliant.

Base under concrete paver furnishing zone is failing causing differential settling and a trip hazard that does not meet AODA requirements for the built environment.

3.6 Accessibility Issues

The streetscape project will improve existing accessibility issues to better conform with Accessibility for Ontarians with Disabilities Act built environment requirements. Current accessible parking stalls and ramp requirements will be improved with the help of the Town's Accessibility Committee. Issues with sidewalk ramps — many do not include tactile warning strips, some do not direct visually impaired pedestrians directly to the opposite side of the street, and some have drainage concerns — will be addressed through design. Uneven, poorly drained surfaces will be addressed through design and construction.

Access to adjacent buildings, where finish-floor-elevations are above the sidewalk grade, will be examined individually to determine if reconstructed sidewalks would be able to meet entries at the same grade. Where this is not possible, it remains the responsibility of individual building owners to meet AODA requirements within their buildings.



High contrast tactile warning strips and older directional indicators direct pedestrians into traffic.
Image source: GSP Group



Many curb ramps do not meet current AODA requirements including missing tactile warning strips and poor drainage conditions.
Image source: GSP Group



Improvised ramps throughout the corridor extend into the public sidewalk to meet accessibility requirements for private property.
Image source: GSR Group



Substandard accessible parking still missing ramp.
Image source: GSP Group

3.7 Maintenance Considerations

Material choices and the organization of elements within the right of way contributes to ease of maintenance that supports the identity of a charming downtown main street.

The streetscape design will include a family of furnishings that are durable to withstand civic uses, be readily available in the open market if replacement is needed, and are easy to clean.

Materials must be able to withstand the heavy use of road salt.

Furnishings and other design elements will be selected and organized to withstand snow loading and road salting, and spaced out for ease of snow clearing while allowing for moveable outdoor seating and tables for dining during warmer months.



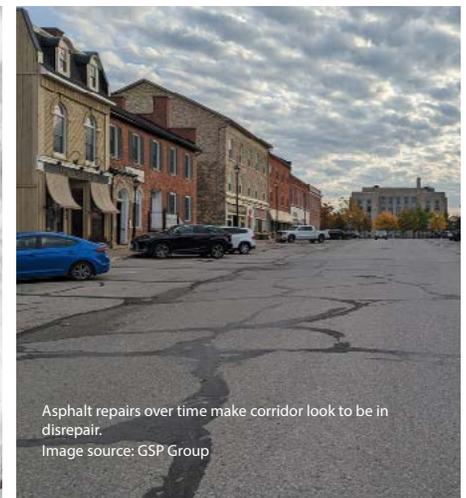
Light standards and site furnishings randomly placed in furnishing zone make sidewalk snow clearing difficult.
Image source: GSP Group



Random, varied, furnishings make replacement and repair complicated for asset managers.
Image source: GSP Group



Salt corrodes furnishings and finishes.
Image source: GSP Group



Asphalt repairs over time make corridor look to be in disrepair.
Image source: GSP Group

4 Proposed Streetscape Design

The streetscape plan is based on pedestrian comfort and safety. Intersections are designed to provide refuge, meet AODA requirements, and accommodate turning movements for the Town's largest fire truck and typical delivery vehicles. The geometry of the road, varying surface materials, and vertical objects at intersection bump-outs are employed to promote traffic calming and a desired operating speed of 25 km/hr or less.

4.1 Design Vehicle

The pedestrian is the "design vehicle" for the Downtown Goderich Streetscape. All other vehicles will be accommodated in a manner that supports the safety and comfort of pedestrians within the street environment.

Commonly used design vehicles include passenger cars, buses, trucks, and emergency vehicles. Engineers select the a design vehicle or combination of vehicles based on the characteristics of the road, function of adjacent land uses, and the expected traffic. This approach helps create roads that are safe, efficient, and functional for the intended users.

The largest TAC Design Vehicle traveling within the Courthouse Square is assumed to be a WB 21 for this streetscape design. This accommodates the turning movements of infrequent large wheelbase vehicles at three of eight intersections, recognizing that encroaching into oncoming traffic on side streets will be necessary on this low volume road.



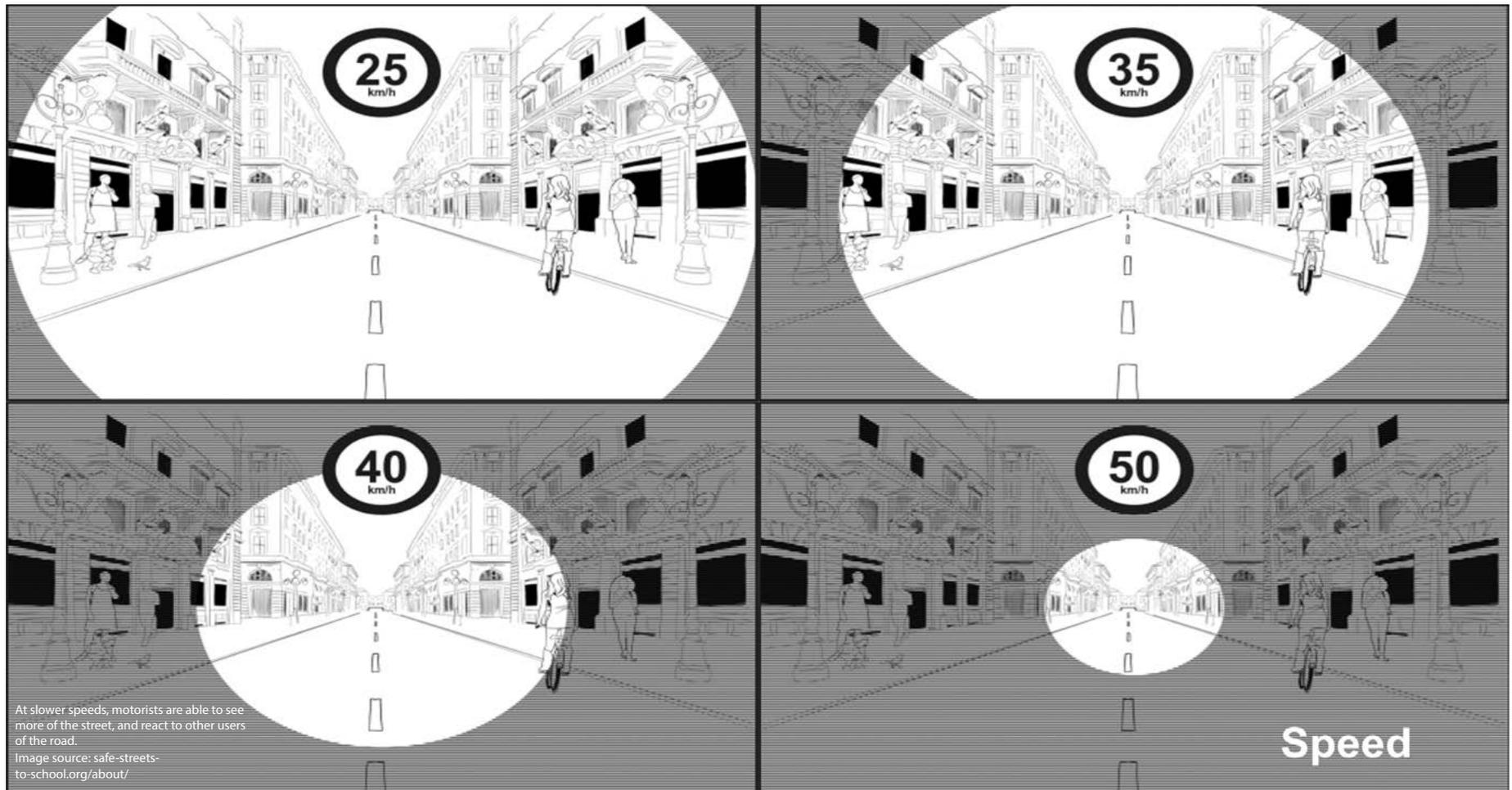
4.2 Calm Traffic

The reconstruction of the streetscape is an opportunity to create a cross-section that influences motorists to travel at speeds where other users of the street feel comfortable.

Surface textures, lane widths, on-street parking, vertical objects — trees, light poles, raised planters — and carefully designed intersections focus motorists'

attention on the mid- and near- ground so they are aware of pedestrians and cyclists traveling at slower speeds. This promotes a shared street ethos that is conducive to a welcoming main street environment.

Slow speed streets are safer for vulnerable users of the road. At slower speeds, motorists are able to see and react to pedestrian and cyclist activity easily.



4.3 Proposed Typical Cross-section

The cross-section organizes the space between the buildings framing the outer limit of the project and the fixed vertical curb that defines the edge of the Courthouse Square. It is subdivided into areas for walking, furnishings and lighting, parking and cartway.

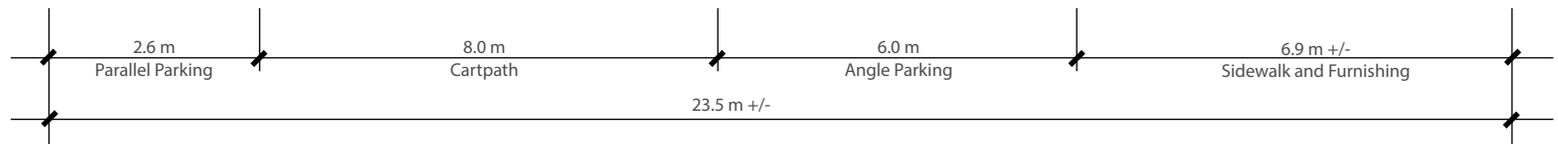
The walking area is generously wide to accommodate retail displays, plant pots, and other identity defining elements. The furnishing zone can be used for utility boxes as well as lighting, refuse receptacles, bicycle racks and other street furnishings. Adjacent restaurants and other uses can provide outdoor dining seating as well.

Angle-parking, back-in or head-in, is shown on the building side of the road allowance. The depth and width of stalls are based on industry standards for main street uses – wider than the current condition. Parallel parking defined by a change in surface materials to differentiate from driving surfaces.

The eight-meter wide cartway allows for two undefined travel lanes for motorists and for cyclists. This width combined with the turning movements required to traverse the octagonal roadway geometry necessitates encroachment for large wheelbase vehicles to turn in and out of the square at slow speeds.



Proposed typical cross-section.
Image source: GSP Group



4.4 Proposed Typical Layout



Crosswalk ramps align with landing areas across the street.

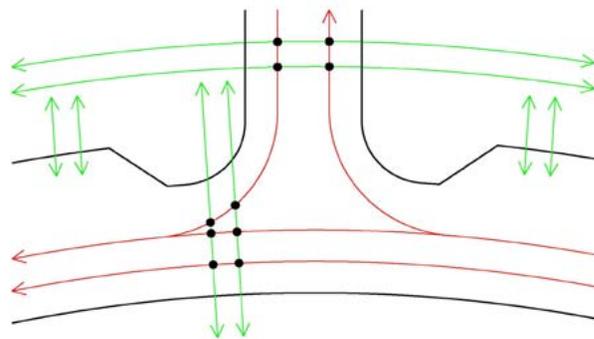
Raised planters protect trees and other plant materials from salt spray and provide informal seating.

Spaces between planters provide opportunities for flexible seating and plantings.

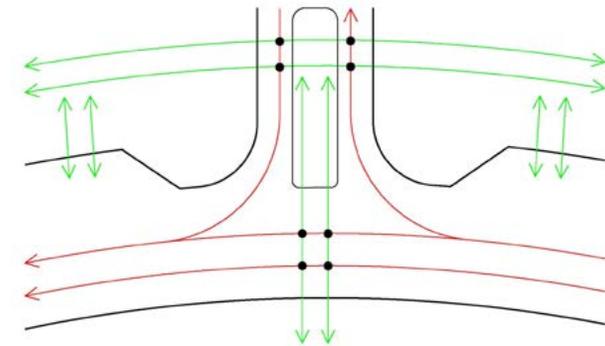
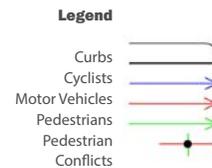
Defined angle parking stalls are protected by curb extensions.

Curb extensions provide informal opportunities for dining and flexible furnishings.

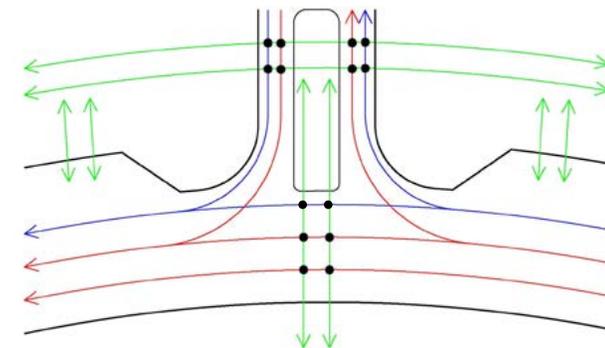
4.5 Intersection Designs Based on Minimizing Pedestrian Conflicts



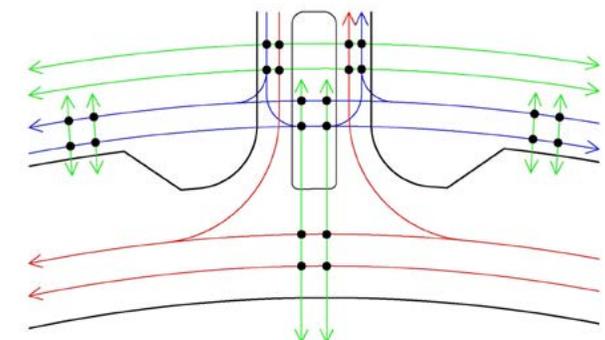
Existing pedestrian crossing conflicts.



Pedestrian crossing conflicts for proposed design without dedicated cycling facilities.



Pedestrian crossing conflicts for proposed design with one-way dedicated cycling facilities.



Pedestrian crossing conflicts for proposed design with two-way dedicated cycling facilities.

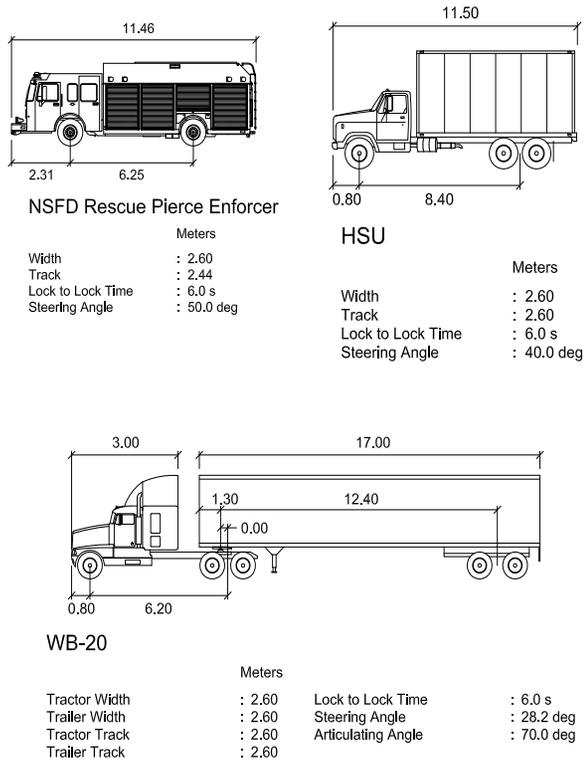
The intersection designs are focused on minimizing conflicts between pedestrians and circulating vehicles — note that bicycles are considered vehicles under Ontario's Highway Traffic Act. For the purpose of this analysis, only pedestrian conflicts are examined. Many vehicle to vehicle conflicts exist but are not shown.

In the existing condition where cycling paths are not differentiated from motor vehicle paths, ten pedestrian crossing conflicts exist. In the proposed design, without dedicated cycling facilities and with median island crossings refuge, eight crossing conflicts exist. If a one-way circulating cycling lane is introduced to the proposed design, the number of pedestrian crossing conflicts increases to fourteen. If two-way cycling facilities are introduced behind the curb (because contra-flow cycling facilities within the roadway creates many other vehicle to vehicle issues with parking), more than 24 conflict points exist as people exiting their cars will have to cross the path of cyclists.

The intent of the proposed design is to create a street that operates at a low operating speed so cyclist feel safe in a shared environment that does not require dedicated cycling facilities. This reduces the number of conflicts for pedestrians and makes it safer for all users of the street.

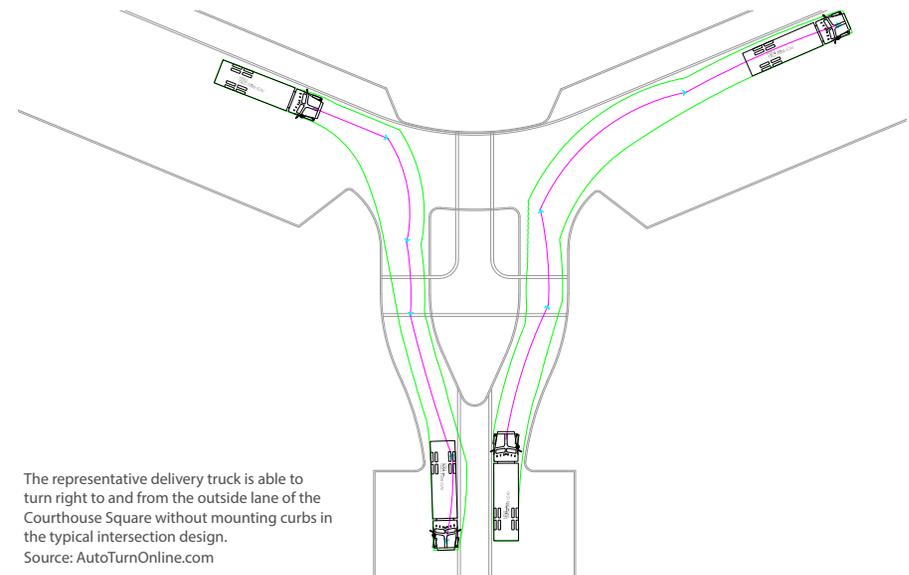
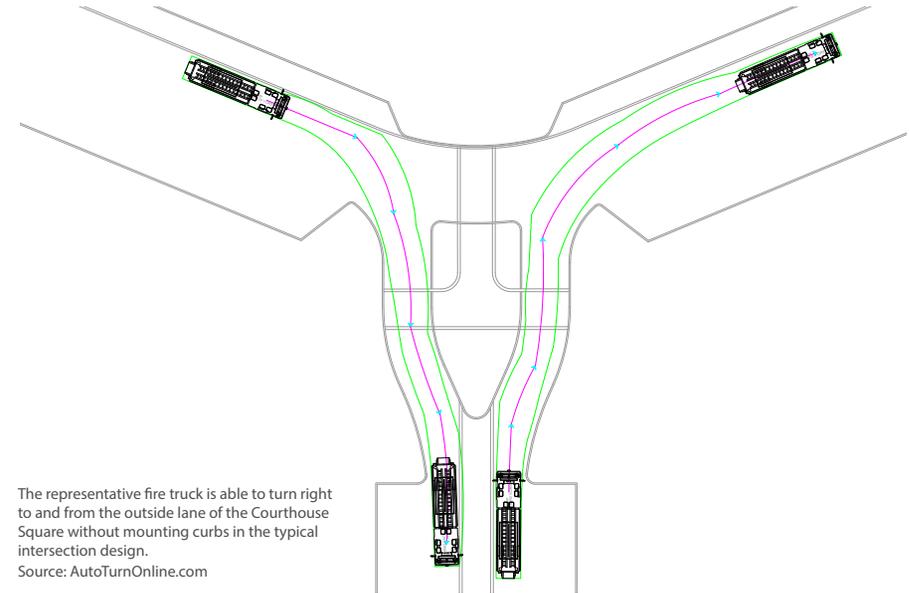
4.6 Turning Movements

Two intersections have been designed within the streetscape. Both accommodate the swept path of delivery vehicles and the fire truck specified by the Town's Fire Department. One accommodates large wheelbase vehicles up to a WB20 tractor with trailer.



Representative vehicles from Autoturn Online used to test turning movements.
Source: AutoTurnOnline.com

Typical Intersection Turning Movements

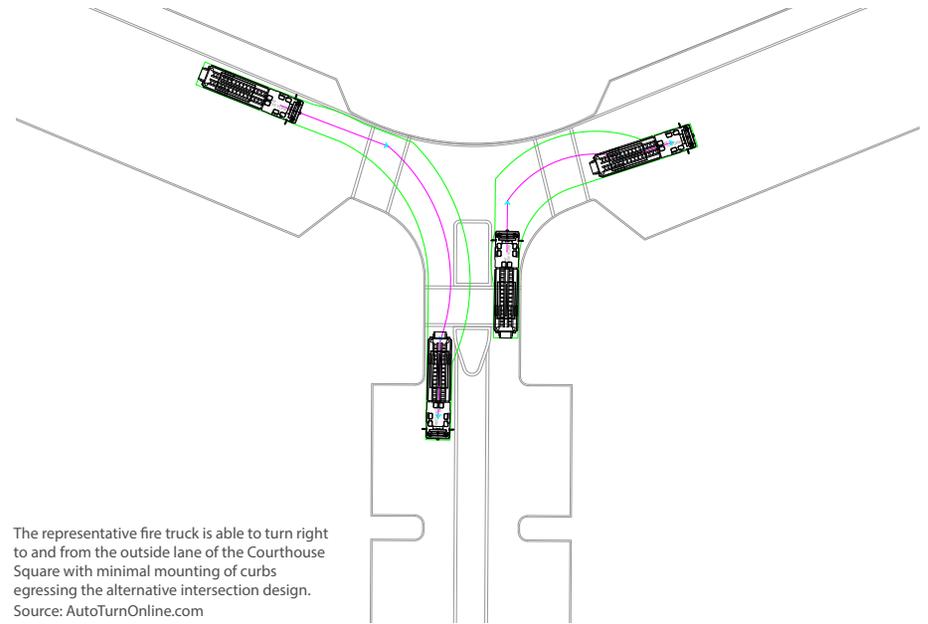


Large WB Vehicle Intersection

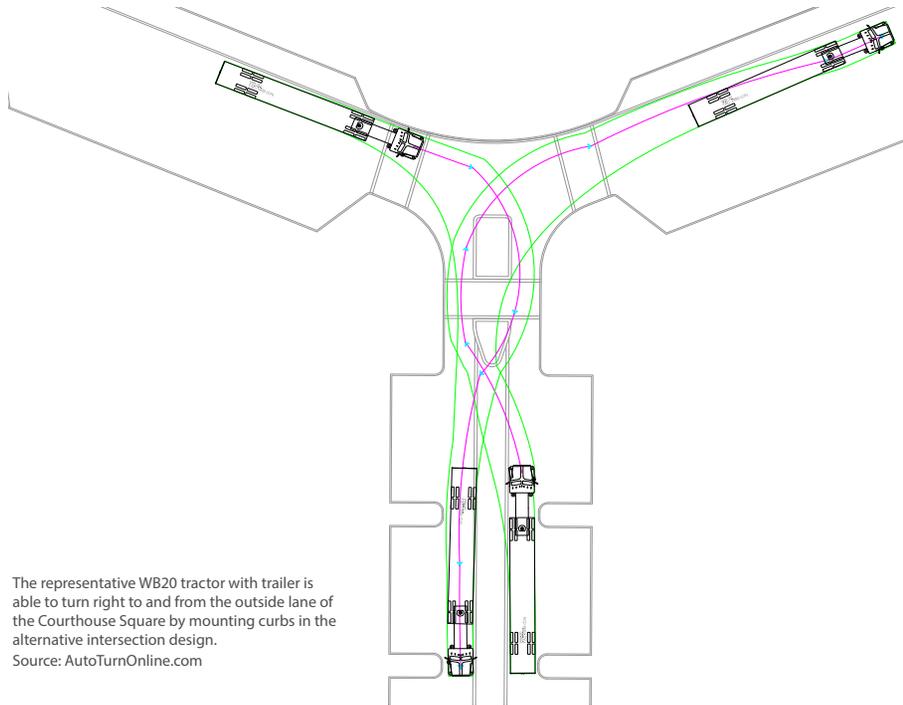
The alternative intersection design accommodates right turn movements of articulated tractors with trailers through encroachment of the outside or on-coming lanes. Coordination in detail design will determine which intersections use this design for infrequent use of vehicles up to wheelbase 20. Though the movement can be made by mounting curbs..



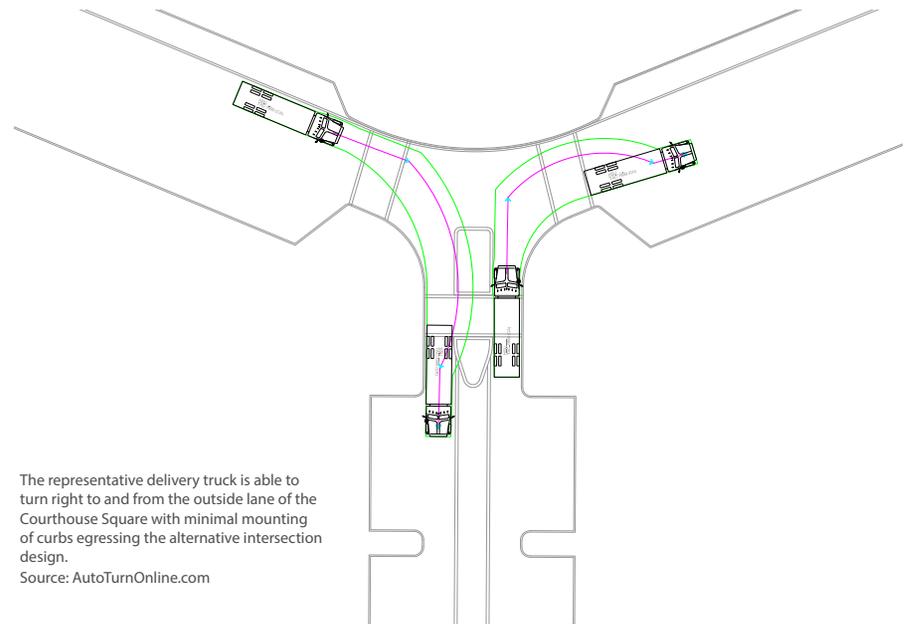
Image source: thesignmaker.co.nz/



The representative fire truck is able to turn right to and from the outside lane of the Courthouse Square with minimal mounting of curbs egressing the alternative intersection design. Source: AutoTurnOnline.com



The representative WB20 tractor with trailer is able to turn right to and from the outside lane of the Courthouse Square by mounting curbs in the alternative intersection design. Source: AutoTurnOnline.com



The representative delivery truck is able to turn right to and from the outside lane of the Courthouse Square with minimal mounting of curbs egressing the alternative intersection design. Source: AutoTurnOnline.com

4.7 Proposed Typical Intersection

Typical intersections have been designed to minimize conflicts between pedestrians and vehicles while meeting AODA requirements. A refuge island has been provided to serve as a starting and landing point for people crossing to

and from the courthouse. Entry and exit vehicle lanes are composed of compound curves that accommodate the Town's largest WB fire truck and typical delivery vehicles. These typical intersections do not accommodate vehicles beyond WB11.



Typical intersection designed to satisfy AODA requirements and provide refuge for pedestrian priority.
Image source: GSP Group

4.8 Proposed Large WB Vehicle Intersection

Three large wheelbase vehicle intersections have been designed to minimize conflicts between pedestrians and vehicles while meeting AODA requirements. Dual crosswalks are provided to get to the Courthouse. A mountable pedestrian island is provided with the understanding that large vehicles will roll over the island and encroach into approaching travel lanes to make turning movements at speeds less than 10 km/hr.



Large wheelbase vehicle intersections designed to satisfy AODA requirements and provide refuge for pedestrian priority.
Image source: GSP Group

4.9 Cycling Facilities

The safety needs and comfort of cyclists play a significant role in the streetscape design. As noted in the design of intersections, it is preferred to create a slow operating speed street environment that is conducive to safe and comfortable cycling rather than providing dedicated lanes to reduce conflicts with pedestrian crossings. The provision of bicycle racks and other amenities like dedicated bicycle parking areas, pump and tool stations, and water fountains will create an inviting place for cyclists. Maintenance practices, particularly in the winter months, will be key to supporting a thriving cycling friendly place.



A cyclist encountered during the charrette, illustrates the need for good winter maintenance to encourage multi-modal use of the streetscape.
Image source: GSP Group

4.10 Stormwater

The treatment and conveyance of stormwater in Downtown Goderich is uniquely challenging. The Goderich salt mine, located 550m below Lake Huron, is the largest underground salt mine in the world and is located next to the downtown. As a result, salt is available and used by the Town for winter maintenance. Salt in snow melt and spray damages plants and the finishes of materials used in the streetscape. Unlike other projects — where it is desirable to capture the first few millimeters of stormwater insitu to improve quality and reduce volumes entering stormwater infrastructure — it is recommended to convey stormwater away from the streetscape and treated to reduce salt concentrations before being released into the surrounding ecosystem.



A large concrete "splash strip" surrounds the Courthouse Square for storage of snow. This prevents the adjacent grass from being damaged by salt in the snow melt.
Image source: GSP Group

4.11 Parking Supply

The number of parking stalls within the Courthouse Square will be reduced because new stalls will be designed to be slightly wider at 2.75 meters and accessible parking spaces will meet AODA standards.

To make up for this reduction within the square, it is recommended that the Town develop a parking management strategy.

Given the generous road allowance of intersecting streets, the Town may consider restriping the angle parking on the intersecting streets to be ninety degrees versus the current angle. This could potentially increase parking numbers significantly.

This approach can work given the wide travel lanes as demonstrated by other nearby Towns.



Ninety degree angle parking on intersecting streets can increase parking supply in the Courthouse Square area. This is only possible because of the generous travel lanes that allows motorists to turn into the spaces without encroaching into oncoming travel lanes. Image source: GSP Group.

4.12 Back-in Angle Parking

Back-in angle parking, also known as reverse-in angle parking, is safer for pedestrians, cyclists, and passengers than the current head-in angle parking in Goderich. Municipalities across North America implement back-in angle parking for this reason. The Goderich Streetscape Charrette participants expressed extreme trepidation toward this approach regardless of benefits explained:

- Improved visibility and safety resulting from better sight lines where backing into a parking space provides drivers with improved sight lines when exiting the space. This helps in spotting pedestrians, cyclists, and oncoming traffic, reducing the risk of accidents by minimizing blind spots.
- Easier maneuver to back into an angled parking space versus backing into circulating traffic, especially in busy areas. Drivers can have better control and precision when entering the parking space as well.
- Motorists behind the vehicle being parked must stop.

BACK-IN ANGLE PARKING

Did you know?

- Back-in angle parking allows you to safely load parcels in your trunk from the sidewalk.
- By backing in, your doors create a barrier to discourage any young passengers from running into the street.
- When departing, you have full field of vision up and down the street.
- Back-in angle parking is being introduced in one block of King Street. The rest of on-street parking will remain traditional parallel parking, so there's lots of choice!



- Back-in parking is often more convenient for loading and unloading items from the trunk of a vehicle at the sidewalk instead of in traffic, making it advantageous for businesses and individuals with cargo needs.
- Children are directed to the sidewalk rather than placed in traffic when existing vehicles.
- The egress maneuver reduces the time spent safely re-entering travel lanes.

The geometric layout of the parking stalls in the streetscape design will allow either head-in or back-in angle parking to be implemented at anytime by simply changing the pavement markings. It is recommended that back-in angle parking be used as the safer option.

4.13 Legibility, Identity, and Wayfinding

Wayfinding contributes to the identity and legibility of main street environments. Wayfinding techniques employ directional signage, informational signs, and landmarks. The proposed design will disentangle the current signs and reestablish a logical approach to provide information and orientation.

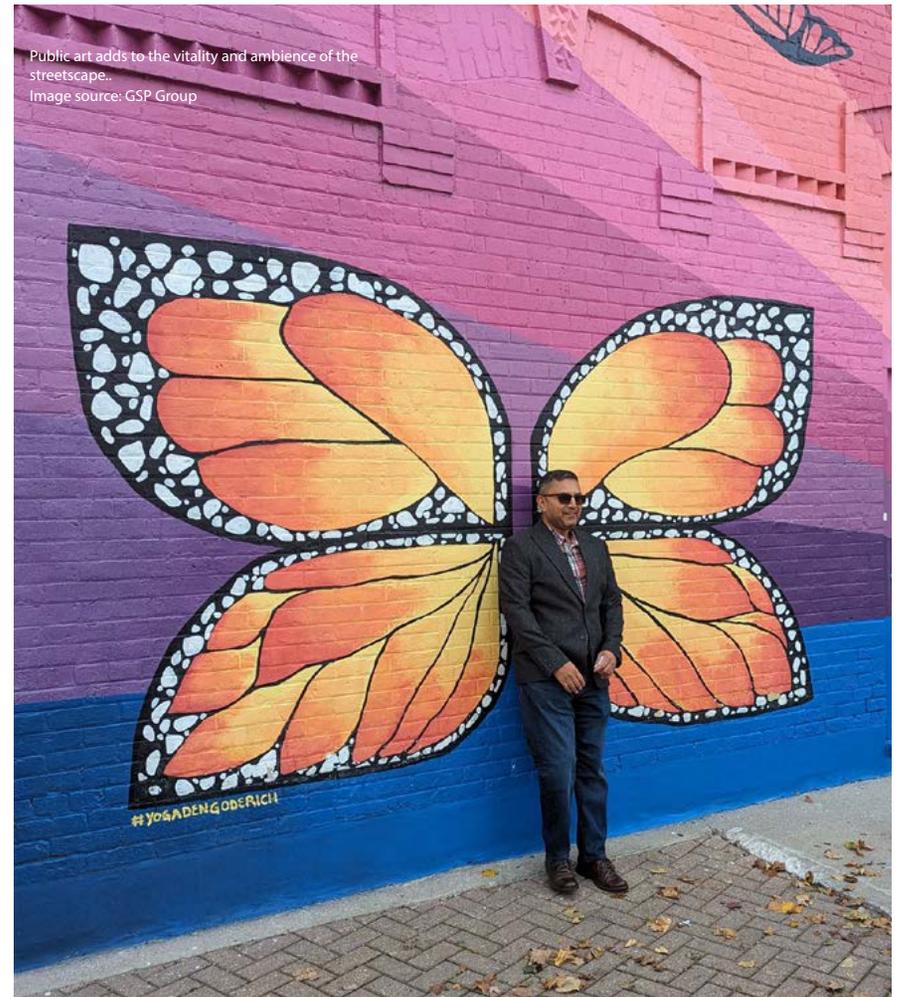
Signs that direct people to businesses are similar to traditional street name signs. This results in wayfinding confusion.
Image source: GSP Group



4.14 Public Art

Public art contributes to the creative capital of the community. Where possible, art installations and opportunities for incorporation into streetscape elements will be leveraged with the help of local artists.

Public art adds to the vitality and ambience of the streetscape.
Image source: GSP Group



4.15 Universal, Accessible, and Inclusive Design

The intent of the streetscape design is to be universally accessible where possible. Achieving this intent is complicated as a result of existing elevations, that is, meeting the grades of the existing catch basins on the interior of the square while also meeting the finish floor elevations of the buildings that frame the square. During detail design, the opportunities for manipulating grades to deliver a curbless plaza in certain areas will be explored.

“Universal design,” “accessible design,” and “inclusive design” are terms related to creating environments, products, and services that are usable by as many people as possible, regardless of their abilities or means. While these terms share common goals, there are subtle distinctions in their meanings and applications:

- *Universal Design aims to create products, environments, and systems that are usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. The principles of universal design focus on concepts such as equity, flexibility, simple and intuitive use, perceptible information, tolerance for error, and low physical effort. A curb cut on a sidewalk is an example of universal design. It benefits not only individuals using wheelchairs but also parents with strollers, cyclists, and others.*

- *Accessible Design refers to the specific design modifications or features that are added to products, environments, or services to make them usable by individuals with disabilities. It is often associated with compliance with accessibility standards and guidelines. The primary focus of accessible design is on ensuring that people with disabilities have equal access and opportunities by removing barriers. Installing ramps, elevators, or tactile paving in a building are examples of accessible design features that enhance usability for individuals with disabilities.*
- *Inclusive Design goes beyond accommodating disabilities and aims to create environments and products that are welcoming and usable by the widest range of people, including those with diverse abilities, ages, and backgrounds. Inclusive design involves considering the needs and preferences of a broad user base during the design process, rather than creating separate solutions for different groups. Designing a website with customizable text sizes, color contrast options, and easy navigation is an example of inclusive design. It caters to users with various needs and preferences.*

The Icon Graphic Elements



Wheel Cutouts

5 By including white angled knockouts the symbol presents the wheel as being in motion. These knockouts also work for creating stencils used in spray paint application of the icon. Having just one version of the logo keeps things more consistent and allows viewers to more clearly understand intended message.

Limb Rendition

4 The human depiction in this icon is consistent with other body representations found in the ISO 7101 - DOT Pictograms. Using a different portrayal of the human body would clash with these established and widely used icons and could lead to confusion.

Head Position

1 Head is forward to indicate the forward motion of the person through space. Were the person is the “driver” or decision maker about her mobility.

Arm Angle

2 Arm is pointing backward to suggest the dynamic mobility of a chair user, regardless of whether or not she uses her arms. Depicting the body in motion represents the symbolically active status of navigating the world.

Leg Position

5 The leg has been moved forward to allow for more space between it and the wheel which allows for better readability and cleaner application of icon as a stencil.

Left image:

Universal design focuses on ability versus disability. The use of images and icons reflects this approach. New York State is the first to officially adopt the icon change shown, many businesses outside of the New York are voluntarily making the switch. Accessibility signage in the streetscape will be inclusive of people who possess different abilities.

Image source:

<https://emedco.com/blog/safety->

Right image:

Sulphur Springs, TX, Courthouse Square is barrier free from the surrounding buildings through the plaza. People of all abilities are able to move freely without encountering raised curbs.

Image source:

www.expedia.com/Sulphur-Springs.



4.16 Paving Materials

Paved surface materials influence the success of streetscapes.

Ordinary poured concrete sidewalks support retailing by reducing trip hazards from heaving unit pavers so pedestrians' attention is on the wares in storefront windows not the ground. Poured concrete also maintains slopes and non-slip textures required by AODA built environment standards.

Concrete unit pavers in low traffic areas, like the sidewalk furnishing zone, are flexible to allow repair of infrastructure below, but requires a well designed aggregate base or concrete underneath to prevent heaving. A concrete paver specified to have fines vibrated to the wear surface — making it smoother — may reduce spalling resulting from the heavy use of salt in the Town's wintermaintenance.

Clay brick or cobble are appropriate accents in cross walks, corners of blocks, muntable areas, and on road and parking surfaces. Brick used on wlkng surfaces must have a smooth texture and maximum joints that meet AODA built environment requirements. Roadway brick should have an irregular surface to create wheel noise to encourage motorists to drive slowly. Smooth brick used in crosswalks and block corners should be placed on a concrete base to reduce frost heaving.



4.17 Designing for Aging Population

Promoting inclusivity for an active aging population is an important public health driver of the streetscape. The pedestrian focused design achieves this by creating easily maintainable AODA built environment compliant surface treatments, refuge islands in crossings, calmed traffic, and planters that serve as seating areas and provide shade through canopy trees.

The primary benefit of the planters is to prevent salt spray from damaging plant material. They are also deliberately designed to be wide at seating height and located throughout the streetscape to permit people to stop and rest whenever necessary. This creates an environment where people with mobility issues that are still active can thrive.

For those with low vision, durable high contrast tactile directional pavers and tactile warning strips will be used to provide guidance to shops and safe crossing areas.



4.18 Pedestrianizing the Square

The charrette process revealed a priority for creating a pedestrian-oriented streetscape that provides comfortable and flexible spaces. A place where pedestrians and cyclists feel safe while engaging the various businesses around the Square and motorists travel through the area respecting other users of the street. While the existing condition of the Square includes some seating and planting elements that are focused towards the street intersections, the Concept recommends extending planting and pedestrian provisions into the blocks and along the street frontage through the implementation of a defined planting/

furnishing zone. This zone will act as an organizing element around the Square and offer increased opportunity for seating and social interaction along the full extent of the street. It includes the provision of fixed and flexible seating that can be moved during special events or for seasonal programming, defined spaces for bike parking, and dedicated space for tree plantings to extend tree canopy to both sides of the street, contributing to pedestrian comfort through the provision of shade during summer months.



Moveable furnishings, plant pots, and sandwich board signs add to the character and flexibility of the corridor.
Image source: GSP Group

4.19 Street Furnishings

The selection of a cohesive palette of street furnishings will enhance the pedestrian experience within the Square. The provision of complementary furnishings placed in a coordinated manner will provide convenient and flexible opportunities for seating and social interaction, while contributing to the overall character of the public realm surrounding the Square. Criteria for the specific

selection and placement of street furnishings including benches, planters, waste receptacles, bike racks, light standards, and bollards are outlined below. The criteria consider the operational requirements and processes described by Operations staff and stakeholders through the charrette process to ensure they are appropriate for their location and maintain their quality long-term.



Pedestrian priority intersections provide many opportunities for seasonal changes in plantings and furnishings in a dynamic streetscape.
Image source: GSP Group

General Provisions & Considerations

The following are general considerations for the selection and placement of street furnishings within the Pedestrian/Planting Zone of the proposed cross section for the Square:

- Provide furniture and seating types for people of all abilities and at frequent intervals (~30m) that provide opportunities to rest, wait for shoppers, or enjoy events in the Square. Current AODA standards outline that at a minimum, 25% of all seating should be barrier-free, however opportunities to exceed this amount are encouraged.
- The placement of furnishings should prioritize pedestrian comfort and accessibility, while maintaining clear sightlines for pedestrians, cyclists and motorists. The final placement of furnishings should consider impacts on daylighting at intersections, and follow best practices for Crime Prevention Through Environmental Design (CPTED) to ensure that views between parking areas, pedestrian walkways and storefronts are maintained.
- Furnishing placement will consider 4-season use while anticipating paths of travel for snow removal equipment, stockpiling of snow, and heavy salting of the sidewalks.
- All furnishings should be constructed of high-quality, durable materials suitable for exposure to both snow and salt through winter maintenance, or be provided with coatings which allow for easy removal of graffiti.
- The selection and preference of street furnishings through detailed design should consider suppliers who are either local to Goderich or include products with recycled content to minimize environmental footprints. Preference for those manufacturers who provide extended warranties for their products should also be considered. The palette of street furnishings selected through detailed design should incorporate a mix of fixed and moveable elements to allow for flexibility for special events, seasonal programming and ease of maintenance.
- The recommended location and placement of street furnishings demonstrated in the Concept have been proposed with cross-section to minimize conflicts with light standards and anticipated below grade utilities. The final placement of site furnishings through detailed design will need to evaluate and consider both the locations and access requirements of underground utilities to minimize disruption should repair of below grade utilities be required.
- The selected furnishing package proposed through detailed design and should read as a family of elements. This can be achieved by establishing consistent colours, finishes, materials, and a preferred theme early in the detail design process.



Fixed and flexible furnishings and plants promote a pedestrian streetscape.
Image source: GSP Group

Benches

Bench seating should be a minimum of 1.80m long and be placed in a manner where pedestrians are oriented with backs either towards the raised planters, or towards the pedestrian clearway. Where single benches are proposed, preference for backed standards with side arms should be considered. Where multiple benches are proposed, either between planters or affixed to the tops of raised planter walls, different seating configurations are encouraged for variety across each of the blocks surrounding the square. Benches configurations might include both armrests, centre armrests only, or an armrest at one end. These configurations will provide opportunities for people of various abilities to use the bench that suits their needs. All benches must be accompanied by a clear space at one end to allow for side transfers. For benches with an armrest at one end, the clear space should be at the opposite end. Additionally, bench standards selected should be provided with seat heights between 400mm to 460mm. All benches should be surface-mounted to concrete paving where proposed.

Seatwalls

Seatwalls should be provided around raised planters facing into the pedestrian zone at a height of 400-460mm above finished grade. Seatwalls should either be cast-in-place or pre-fabricated modular units, with chamfered or rounded perimeter edges for pedestrian comfort, and to minimize damage from maintenance vehicles. Smooth finishes are

Bistro Tables & Chairs (Flexible Furnishings)

Moveable group seating is also proposed within the cross-section's planting / furnishing zone and intended to be provided between raised planters. These seating opportunities are intended to provide flexibility, by allowing pedestrians to manipulate the furnishings to accommodate seating for individuals or small groups, or to relocate the furnishings as needed to accommodate seasonal patios or special events. Standards which are weighted appropriately to withstand wind conditions and prevent them from being carried away conveniently are encouraged. Alternatively, tables might be permanently fixed and include moveable chairs that are secured with tethers. Tables and chairs which include perforations to prevent water from accumulating on table-tops or seats are also recommended.



Frequent seating opportunities serves an aging population.
Image source: GSP Group

Bollards

Bollards will be selected for versatility so they can be used in various applications. Some applications may require separation between vehicles and pedestrian traffic. Where temporary security is required for seasonal festivals and events, removable bollards and sleeving within pavement should be considered to provide flexibility, whether through closure of full street blocks, or rows of on-street parking, in place of setting up temporary construction barriers. Another application includes integrated lighting where to increase ambient lighting levels. For all applications, the selected bollard should be modified to suit the intended use.

Bicycle Racks

Cycling accommodations through the provision of short-term bike racks in highly visible locations, and at frequent intervals along the street should be provided. Where proposed bike parking can be clustered, however regularly spaced racks should be encouraged to provide each business with parking nearby. Racks where provided should be accessible from all sides unless intended to be single-loaded, and properly set back from obstructions or from pedestrian walkways to ensure that parked bicycles do not impede pedestrian clearways. The selected standards should provide two points of connection for securing bicycles. Inverted 'U' racks, or those of similar form are recommended. Bike racks, whether single units or cluster units should be surface mounted to concrete paving where proposed.

Planters

Freestanding planters should compliment store fronts and be placed where in-ground planting is limited along the streetscape. These are recommended for use offset intersections where daylighting requirements should be considered. Freestanding planters are also encouraged to frame pedestrian crossing locations between blocks, or to the Square. The continued use of self-watering inserts is encouraged to reduce long-term maintenance. It is also recommended that any prefabricated planters are made from coloured concrete or reinforced fibreglass to stand up to salt exposure. Planter models with integral outer rings or pedestals / feet to allow for pickup with towmotor forks or pump-trucks are recommended for ease of movement and flexibility for rearrangement as may be required for programmed events or road closures.

Waste Receptacles

Waste receptacles are to be placed in highly visible locations, and at frequent intervals along each block to discourage littering. Barrier-free receptacles, with full shield to prevent the accumulation of water within the units should be considered. Receptacles should be placed in a manner where removal of receptacle bags does not impede with pedestrian travel, with side openings for ease of unloading for operations staff. Subject to input from Operations staff, multi-streamed receptacles with prominent graphics to provide clear distinction between streams may be considered in detail design. Odour when locating receptacles by offsetting them an appropriate distance from storefronts and seating. Include a permanent cover and prominent graphics to provide clear distinction between waste streams.



4.20 Light Standards

Light standards within the public realm should be placed in a manner which provides adequate and uniform illumination across the sidewalks and vehicle travel lanes. It is recommended that warm spectrum LED lighting, covering only the public realm, be provided to reduce light pollution and contribute to night time ambience.

Light standards which provide opportunity for the integration of smart technology to indicate when maintenance is required, and the integration of exterior GFI's for seasonal lighting or special event plug-ins is encouraged. Light standards which include provisions in their design for the addition of speakers, hanging planters, or signage should also be considered for selection through detailed design of the project.

Light standards shall be placed on reinforced concrete pedestals raised slightly above grade to protect the pole from direct salt exposure or damage from maintenance vehicles.

4.21 Event Power

Receptacles for providing metered power — to vendor stalls during street festivals and other events — will be incorporated at strategic locations during detail design. Along with outlets located near the top of light standards, the intent is to minimize extension cords and generators when hosting events.



Warm LED colour temperature between 2700–3000 degrees Kelvin (k) is recommended for street lighting.
Image source: lightingdesignstudio.co.uk/colour-temperature/



Shielded luminaires direct light where needed and reduces light pollution.
Image source: www.ledlightingsupply.com/blog/dark-sky-compliance



Light poles and luminaires are available in a variety of materials, sizes, and finishes that influence character. For the streetscape, lighting will be selected based on appropriate photometrics, timelessness, ease of maintenance, and durability.
Image source: www.linkedin.com/pulse/what-street-light-pole-definitive-guide-choose-poles-libby-huang/

4.22 Landscaping — Greening the Streets

Through the charette process, participants identified the need for street trees. The addition of tree plantings on the building side of the street will provide shade for pedestrians to increase comfort during summer months and extend the aesthetic of the Square for visual appeal throughout the year. Recommendations for the specific selection and placement of street tree planting and understory landscaping including placement, species selection and soil provisions are outlined below. Like street furnishings, the recommendations for the selection of landscape materials consider the operational requirements and processes described by Operations staff and stakeholders. It is recommended that Operations and Horticulture staff provide continued input and review of the detailed species lists, soil mixes, and design layouts through detailed design so landscaping is located where it can thrive and mature for the long-term.

General Provisions & Considerations

The following are general recommendations and considerations for the selection and placement of street trees and understory plantings within the proposed cross section for the streetscape:

- Tree plantings should be planted within the proposed planting / site furnishing zone, and away from conflict with underground utility lines.
- The selected tree species palette should avoid monoculture plantings, and instead ensure that no species makes up more than 20% of those proposed within the Square.
- Trees which are native, native cultivars, or those which have demonstrated success within the Square should be considered. Tree species that are appropriate for urban conditions, demonstrate tolerance to salt exposure, and are suitable for planting in Hardiness Zone 5b-6b shall be required.
- Adequate, uncompacted, soil volumes be provided to encourage healthy root growth and support tree development into desired mature forms.



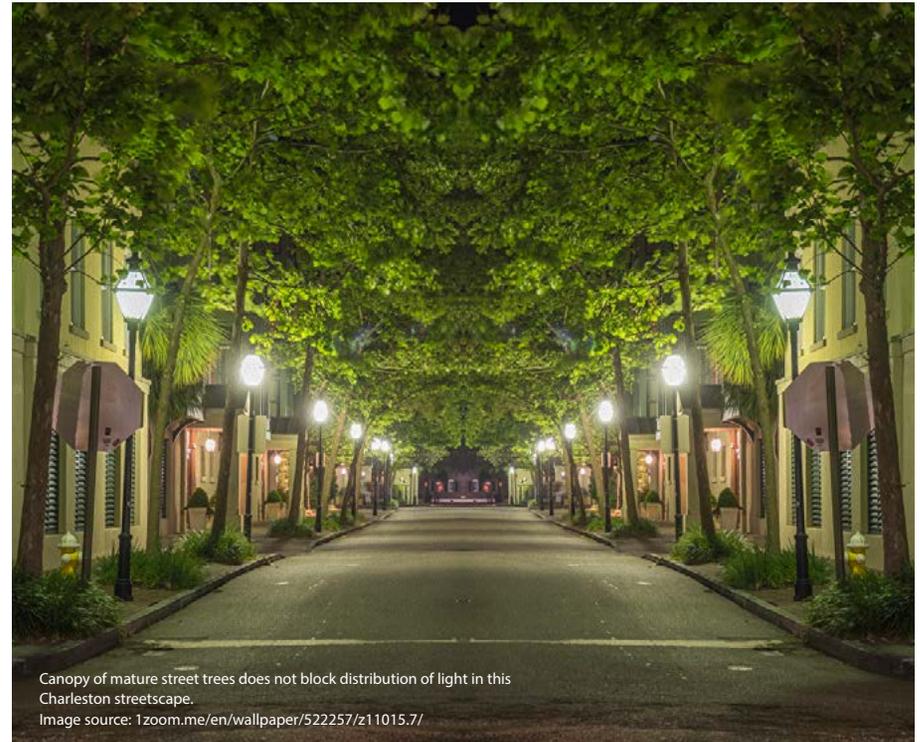
The use of soil cells provides trees with uncompacted soil volumes that encourages healthy root growth resulting in healthier, long-lasting trees.
Image source: greenblue.com/ce/product-category/soil-cells-ce/

Street Tree Placement and Form

While the addition of street tree plantings along the primary streets of the Square has been identified as a priority for the enhancement of the public realm, the detailed placement and selection of street trees will need to be considered to ensure they are located in a manner which allows for their full growth and maturity and does not present conflicts with pedestrians, store frontages or future maintenance of below-grade utilities. The following are specific recommendations for the placement of street trees as demonstrated in the Concept Plan, and considerations to move forward with in detailed design of the project:

- Street tree plantings have been shown within the furnishing / planting zone of the cross section within raised planters. This allows for increased soil volumes, allows for understory planting opportunities, and protects trees from salt exposure during winter maintenance. The integration of raised planters, instead of at-grade tree grates, is recommended to reduce salt loading, litter accumulation, or future heaving of tree grates and surrounding paving from roots. This also provides additional opportunities for seating along the street.
- Consideration for the layout of underground utility lines and services must be given to ensure that they do not run through or beneath tree planting areas to minimize conflicts or damage during future maintenance. Where underground utilities cross planting zones, trees should be placed offset to those conflict areas.
- Trees within the raised planters should be centred or placed toward the pedestrian side of the street. The anticipated mature height of trees in raised planters should be considered to minimize conflicts with surrounding buildings and lighting.
- Trees with high-branching canopy habits should be used to maintain open sight lines between the street and store fronts, or where located near intersections. The use of coniferous tree species, especially in front of existing store fronts or near pedestrian crossing areas is not recommended.

- Street trees should be spaced apart at distances appropriate for their expected size at maturity, with some overlap to promote a continuous canopy along the street edge.
- Large or medium stature trees should be considered where planted along storefronts. Medium to small stature trees should be considered in proximity to street corners or crossing areas.
- Location of street trees and their canopy forms should be considered relative to proposed light standards and signage. The Concept Plan proposes that street light standards are located outside of the proposed raised planter locations to provide at least 4.50m of separation from tree plantings, and to minimize conflict with future canopy growth.



Canopy of mature street trees does not block distribution of light in this Charleston streetscape.
Image source: 1zoom.me/en/wallpaper/522257/z11015.7/

Species Selection - Street Trees and Understory Plantings

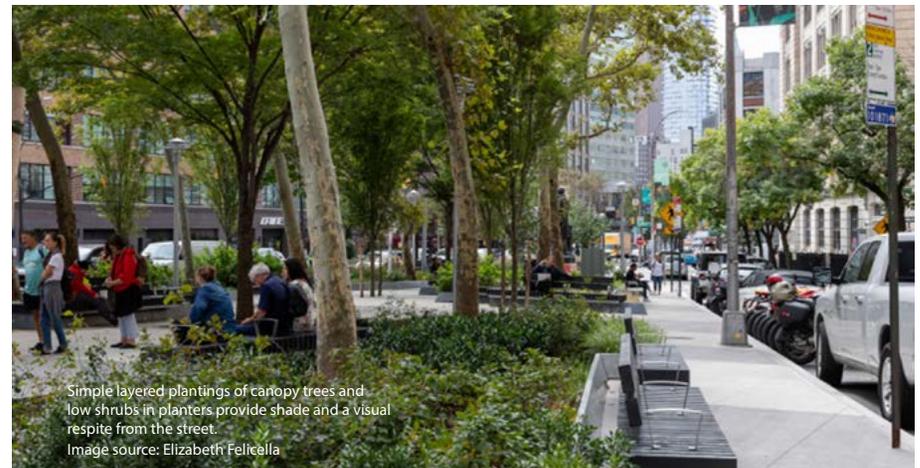
The selection of street tree species should focus on the integration of native or native cultivar species, with mature canopy forms suitable for the locations where proposed. Additionally, trees which have demonstrated success where planted within urban settings, tolerance towards salt exposure, and known disease resistance should be considered within the proposed public realm enhancements surrounding the Square. The selection of street tree species and understory plantings should also ensure that open sight lines are maintained, with recommendation for mass / group plantings for ease of maintenance.

The following are specific recommendations for the selection of street tree and understory plant species to consider through the detailed design phase of the project.

- Preference for native or native cultivars should be considered for street tree and understory plantings.
- Species which pose significant risks with known susceptibility to various forms of disease or pests should be avoided.
- Street tree selections should provide variety across the public realm and avoid monoculture plantings along street blocks. Overall, no more than 30% of street trees should be of the same species or genus to ensure future resistance to possible pests or disease.
- Street trees should be selected to provide seasonal interest. Species which demonstrate various bloom times, bark interest, fall colour, or those which are marcescent should be considered to provide interest and variety of colour or form year-round.
- Tree species which are fruit bearing or have significant seed pods may be avoided to limit maintenance requirements or 'messy conditions' for pedestrians and parked vehicles.
- Tree canopy size must be considered through species selection. Medium to large stature trees are recommended for use in raised planters between the public sidewalk and parking areas, with smaller stature trees suggested within proximity of intersections or pedestrian crossings.

- Understory plantings should include preference towards perennials, grass plantings, ground covers or low-growing shrubs. Broadleaf evergreen or spreading coniferous species and grasses should be considered to provide seasonal interest and greenery throughout the year.
- Understory plantings should avoid species which include thorns or noxious fruit.
- All species selections should consider future growth habits, to ensure they do not extend beyond their containers and present conflicts with pedestrian travel or sight lines.
- Pollinator species should also be implemented, with consideration to proximity of pedestrian seating opportunities proposed mid-block between planters.

The following are recommendations for species to be considered through the detail design phases of the project. Please note that the development and selection of all plant materials should be prepared in coordination with Goderich Operations and Horticulture staff.



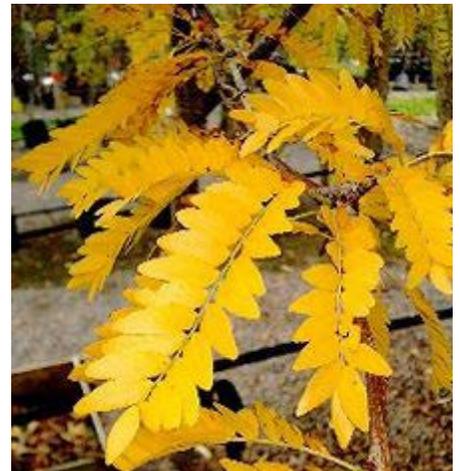
Street Trees



Acer x freemanii 'Jeffersred' - Autumn Blaze Maple



Gleditsia triacanthos var. *inermis* 'Skyline' - Skyline Honey Locust



Ginkgo biloba 'Princeton Sentry' - Princeton Sentry Maidenhair Tree



Ulmus x 'Homestead' - Homestead Elm



Shrubs



Cornus sericea 'Kelsey' - Kelsey Red Osier Dogwood



Ground Covers



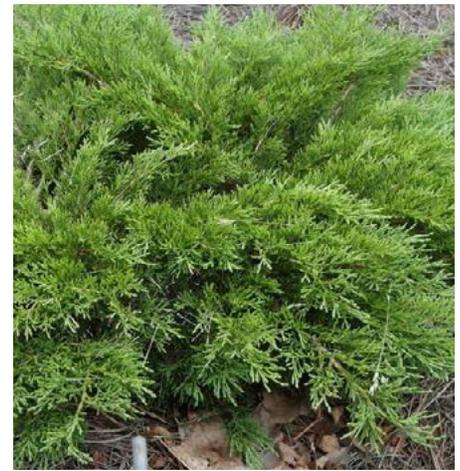
Juniperus chinensis sargentii 'Viridis' - Green Sargent Juniper



Hypericum prolificum - St Johns Wort



Juniperus sabina 'Arcadia' - Arcadia Juniper



Perennials



Gaillardia aristata - Blanket Flower



Perovskia atriplicifolia 'Denim n Lace'
- Russian Sage



Asclepias tuberosa - Butterfly
Weed



Rudbeckia fulgida 'Goldstrum'
- Black-Eyed Susan

Grasses



Bouteloua gracilis - Blue Gama



Schizachyrium scoparium - Little
Blue Stem



Panicum virgatum 'Cheyenne Sky'
- Cheyenne Sky Switch Grass

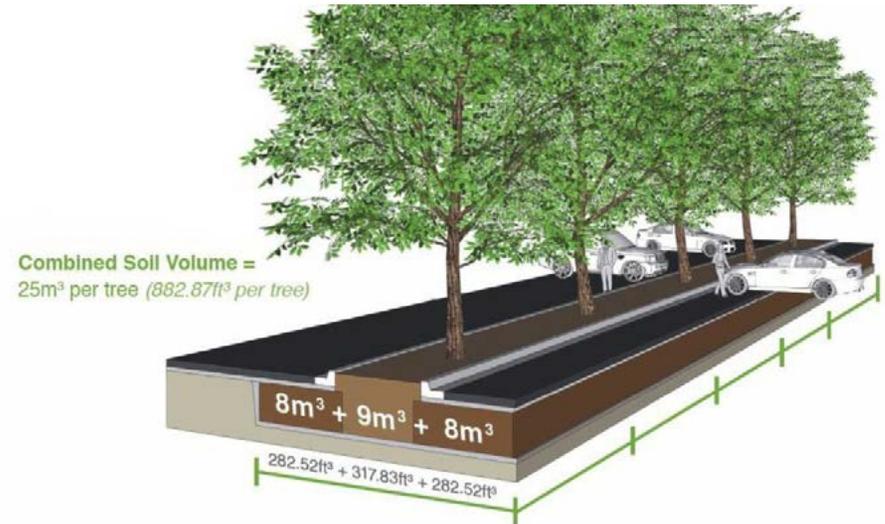


Calamagrostis acutiflora 'Lighting
Strikes' - Variegated Feather Reed
Grass

Soil Provisions – Providing Street Trees a Suitable Home to Grow In

Adequate soil provisions, including soil volumes and quality of soil types is paramount to ensuring that the plant materials proposed for the Square can thrive for the community to enjoy for years to come. It is recommended that all street tree plantings be planted within continuous soil trenches, to allow for all trees to have access to shared soil volumes to promote healthy root growth to meet their full potential. The following are recommendations for the soil infrastructure for street tree plantings as shown in the Concept Plan.

- The implementation of below grade soil infrastructure through the use of soil cell technologies to provide continuous soil trenches for root growth, while structurally supporting at-grade paving surfaces and structures without compacting root zones is recommended
- The continuous soil zone is expected to extend beneath raised planter areas, and into the pedestrian clear zone / walkway as required.
- Street tree plantings should be provided access to adequate soil volumes to support healthy growth to their expected mature forms. The provision of 30 cubic meters of shared soil volume is best practice, however recommendations for minimum soil targets are suggested where access to these volumes is limited. This includes a recommendation of 24-30 cubic meters of shared soil volume for large stature trees, 20-24 cubic meters of shared soil volume for medium stature trees, and 15-20 cubic meters of shared soil volume for small stature trees.
- All street tree plantings should be irrigated, with adequate drainage. Watering ports should be implemented at regular intervals to allow for air exchange, watering and/or system flushing as part of regular Spring or Fall maintenance processes.



Uncompacted soil volume required for trees to enable robust growth. Soil volume can be shared with multiple trees.
Image source: citygreen.com/category/products/stratacell/

4.23 Long-term Maintenance

Proper planning and maintenance of the streetscape will be key to ensuring long-term success. During Design Development, a maintenance plan which aligns with the needs of Town staff budgets, staffing, and workflow shall be developed. Town Staff will play an important role in the design process and shall be consulted regularly during detail design to incorporate their input. The maintenance plan should be reviewed with the Town's Asset Management team, and incorporated into their forecast's for predictable maintenance and replacement.

At the time of construction, it is recommended that additional quantities of each furnishing be purchased to allow for quick replacements. It is often easier to purchase replacement parts for standard products, whereas custom products might be difficult to source afterwards. It is therefore recommended that sufficient quantities of replacement parts be stocked by the Town.



Asset management implications play a significant role in streetscape design particularly when considering the durability of furnishings, heartiness of plant materials, skills of staff, available equipment, budgets, and winter conditions. Maintenance associated with AODA compliance is critical.
Image source: country94.

4.24 Next Steps

The detailed design and successful implementation of the Courthouse Square streetscape will require continued communication and collaboration with Town staff, stakeholders, and the public. The following are recommendations for next steps for the Downtown Infrastructure Task Force and Council:

- Select a Landscape Architect for Detailed Design – The concept presented in this document outlines recommendations for the placement of elements and considerations for the selection of materials to deliver an enhanced streetscape. Translating the conceptual ideas into details for construction must be undertaken by those with expertise in the design of public realm enhancements.
- Coordinate with Underground Works – The detailed design of the surface works will need to be coordinated with the underground utilities which service the Square to ensure that they are implemented in a manner which allows for future access and maintenance without significant disruption to the streetscape. In addition, opportunity for the integration of low impact design measures to assist with stormwater capture, conveyance and treatment should be considered.
- Develop Construction Phasing & Mitigation Plan – In addition to the design coordination between the underground and surface works of the project, a phasing plan which outlines the schedule for implementation and mitigates the impacts of construction on parking, access, business function, and special events will need to be developed together with stakeholders.
- Continue Public Consultation and Communications – A communications plan should be developed by the Task Force and Town communications staff to keep the public involved and informed on project progress and updates, with key consultation milestones identified through the remainder of the project. Regular updates and opportunity for public involvement will educate and inform the community and maintain an open and transparent project process.
- Conduct a Parking Study – A study to assess the existing parking conditions, provisions and demands, as well as signage and options for management to best serve the community and businesses within the Square should be developed. Pilot projects that test parking recommendations, including reverse angled parking, should be considered to educate the community on potential changes and evaluate their success.
- Coordinate Accessibility Items – Those responsible for the detailed design and implementation of the project must ensure that designs meet AODA requirements for the surface treatments, site furnishings, accessible parking, and placement of elements along the street edge and road crossings. Regular coordination with the Huron County Accessibility Advisory Committee (HCAAC) should be part of the project communication moving forward.
- Develop Maintenance & Operations Plan – The recommendations of this Plan will introduce a change to the way the streets throughout the Square are maintained and operated. Regular coordination with staff at design progress milestones is recommended for education, buy-in, and planning of maintenance requirements to protect the capital investment in the project, and to ensure the longevity of project elements. An Operations manual should be developed with staff which outlines the maintenance requirements, processes and anticipated budgets for annual upkeep. Included in this would be consideration for preferred plant species, waste pick-up and removal, plant maintenance, snow-clearing, and set ups for special events.
- Establish Public Art Outreach – The local arts community should be included through the detailed design process to determine opportunities for the implementation of public art across the spaces and surfaces of the proposed streetscape design.

4.25 Closing

The Downtown Goderich streetscape design is a product of collaboration among Town residents and business owners, municipal staff, and consultants. It is the result of a collective, open, and transparent effort that considers the needs and desires of all involved in its creation.

It is truly the Town's plan.

The consulting team looks forward to celebrating the ribbon cutting with the people of Goderich in 2027 as the culmination of this amazing community effort.



Appendices

Summary of Values and Issues

The day began with a tour of Courthouse Square. GSP and BM Ross shared observations about the existing condition of the street with staff and local leaders. This included discussions about accessibility, travel lanes, sidewalks, plantings, parking, wayfinding, drainage, lighting, furnishings, and maintenance.

Following the tour, attendees separated into small groups and discussed their collective values for the streetscape and their individual issues.

During the evening, GSP delivered a “Streetscape 101” educational session in a session open to the public. The presentation described the elements considered during a streetscape design and the principles used to organize the elements into a cohesive and successful design including an explanation of:

- ▶ Overall project rationale of replacing subsurface infrastructure that has reached the end of its life cycle.
- ▶ Charrette intent:
 - ▶ To learn about streetscape considerations
 - ▶ To learn from each other
 - ▶ To develop common values
 - ▶ To understand individual issues
- ▶ Design vehicles
- ▶ Universal, accessible, and Inclusive design
- ▶ Accessibility for Ontarians with Disability Act requirements
- ▶ The influence of speed
- ▶ Storm water considerations
- ▶ Wayfinding

- ▶ Street trees
- ▶ Paved Surfaces
- ▶ Lighting
- ▶ Parking
- ▶ Cycling facilities
- ▶ Maintenance
- ▶ Observations of the Courthouse Square

Following the presentation, public attendees separated into small groups and discussed their common values for the streetscape and their individual issues like earlier in the day. The outcome of the small group discussions was a series of common values that the streetscape design will be evaluated against and individual issues the streetscape design should consider.

Values: collective judgement of what is important for the streetscape design to be successful.

The streetscape values shared:

1. Safety for all modes – pedestrians, cyclists, and motorists – with pedestrian priority.
2. Importance of parking for main street success.
3. Affordability of the streetscape project.
4. Being an aesthetically pleasing, welcoming, and maintainable place that is attractive to all including tourists.
5. Universal, accessible, and inclusive design.
6. Being a comfortable environment that provides shade and greenery.

Appendix A

Issues: an individual's topic or problem that the group should understand for debate or discussion

Multiple issues were identified:

1. Quality of existing environment

- ▶ Lack of shade in summer
- ▶ Outdoor dining
- ▶ Lacks cycling infrastructure like bike racks

2. Safety

- ▶ Pedestrian crossing
- ▶ Sightlines
- ▶ Motorist speed

3. Quality of design

- ▶ Universal design for all ages, means, and abilities,
- ▶ Placemaking,
- ▶ Public Art,
- ▶ A focus on people,
- ▶ Support pollinators and native species,
- ▶ Layered plantings,
- ▶ Timelessness – respecting the past without forsaking the future,

- ▶ Materials - concrete pavers heaving, salt destroying concrete elements,
- ▶ Opportunities for the project to remedy accessibility issues where sidewalks are currently below entrances and steps are required to access buildings.
- ▶ Snow removal and use of salt

4. Concern about project impacts:

- ▶ Cost and scope creep,
- ▶ Construction schedule and impacts on businesses,
- ▶ access to businesses during construction,
- ▶ communication during design construction,
- ▶ effective project management,
- ▶ impacts of basement connections and who is responsible for connections.

5. Parking:

- ▶ Aging population dislikes the idea of back-in angle parking,
- ▶ Employees taking up customer parking spaces,
- ▶ Businesses depend on parking for survival.

6. Wayfinding

- ▶ Concern about active surveillance and smart cities technology,
- ▶ Confusion between street name signage and directions to businesses,

AODA Influences on the Streetscape Design

O. Reg. 191/11: INTEGRATED ACCESSIBILITY STANDARDS under [Accessibility for Ontarians with Disabilities Act, 2005, S.O. 2005, c. 11](#)

EXTERIOR PATHS OF TRAVEL

Exterior paths of travel, application

80.21 (1) This Part applies to newly constructed and redeveloped exterior paths of travel that are outdoor sidewalks or walkways designed and constructed for pedestrian travel and are intended to serve a functional purpose and not to provide a recreational experience. O. Reg. 413/12, s. 6.
(2) This Part does not apply to paths of travel regulated under Ontario Regulation 350/06 (Building Code) made under the *Building Code Act, 1992*. O. Reg. 413/12, s. 6.

Exterior paths of travel, general obligation

80.22 Obligated organizations, other than small organizations, shall ensure that any exterior paths of travel that they construct or redevelop and intend to maintain meet the requirements set out in this Part. O. Reg. 413/12, s. 6.

Exterior paths of travel, technical requirements

80.23 When constructing new or redeveloping existing exterior paths of travel that they intend to maintain, obligated organizations, other than small organizations, shall ensure that new and redeveloped exterior paths of travel meet the following requirements:

1. The exterior path must have a minimum clear width of 1,500 mm, but this clear width can be reduced to 1,200 mm to serve as a turning space where the exterior path connects with a curb ramp.
2. Where the head room clearance is less than 2,100 mm over a portion of the exterior path, a rail or other barrier with a leading edge that is cane detectable must be provided around the object that is obstructing the head room clearance.
3. The surface must be firm and stable.
4. The surface must be slip resistant.

5. Where an exterior path has openings in its surface,
 - i. the openings must not allow passage of an object that has a diameter of more than 20 mm, and
 - ii. any elongated openings must be oriented approximately perpendicular to the direction of travel.
6. The maximum running slope of the exterior path must be no more than 1:20, but where the exterior path is a sidewalk, it can have a slope of greater than 1:20, but it cannot be steeper than the slope of the adjacent roadway.
7. The maximum cross slope of the exterior path must be no more than 1:20, where the surface is asphalt, concrete or some other hard surface, or no more than 1:10 in all other cases.
8. The exterior path must meet the following requirements:
 - i. It must have a 1:2 bevel at changes in level between 6 mm and 13 mm.
 - ii. It must have a maximum running slope of 1:8 or a curb ramp that meets the requirement of section 80.26 at changes in level of greater than 13 mm and less than 75 mm.
 - iii. It must have a maximum running slope of 1:10 or a curb ramp that meets the requirement of section 80.26 at changes in level of 75 mm or greater and 200 mm or less.
 - iv. It must have a ramp that meets the requirements of section 80.24 at changes in level of greater than 200 mm.
9. The entrance to the exterior path of travel must provide a minimum clear opening of 850 mm, whether the entrance includes a gate, bollard or other entrance design. O. Reg. 413/12, s. 6; O. Reg. 165/16, s. 14.

Exterior paths of travel, curb ramps

80.26 (1) Where a curb ramp is provided on an exterior path of travel, the curb ramp must align with the direction of travel and meet the following requirements:

1. The curb ramp must have a minimum clear width of 1,200 mm, exclusive of any flared sides.
2. The running slope of the curb ramp must,
 - i. be a maximum of 1:8, where elevation is less than 75 mm, and

Appendix B

- ii. be a maximum of 1:10, where elevation is 75 mm or greater and 200 mm or less.
 - 3. The maximum cross slope of the curb ramp must be no more than 1:50.
 - 4. The maximum slope on the flared side of the curb ramp must be no more than 1:10.
 - 5. Where the curb ramp is provided at a pedestrian crossing, it must have tactile walking surface indicators that,
 - i. have raised tactile profiles,
 - ii. have a high tonal contrast with the adjacent surface,
 - iii. are located at the bottom of the curb ramp,
 - iv. are set back between 150 mm and 200 mm from the curb edge,
 - v. extend the full width of the curb ramp, and
 - vi. are a minimum of 610 mm in depth. O. Reg. 413/12, s. 6.
- (2) In this section,
“curb ramp” means a ramp that is cut through a curb or that is built up to a curb. O. Reg. 413/12, s. 6.

Exterior paths of travel, depressed curbs

80.27 (1) Where a depressed curb is provided on an exterior path of travel, the depressed curb must meet the following requirements:

- 1. The depressed curb must have a maximum running slope of 1:20.
 - 2. The depressed curb must be aligned with the direction of travel.
 - 3. Where the depressed curb is provided at a pedestrian crossing, it must have tactile walking surface indicators that,
 - i. have raised tactile profiles,
 - ii. have high tonal contrast with the adjacent surface,
 - iii. are located at the bottom portion of the depressed curb that is flush with the roadway,
 - iv. are set back between 150 mm and 200 mm from the curb edge, and
 - v. are a minimum of 610 mm in depth. O. Reg. 413/12, s. 6.
- (2) In this section,
“depressed curb” means a seamless gradual slope at transitions between sidewalks and walkways and highways, and is usually found at intersections. O. Reg. 413/12, s. 6.

ACCESSIBLE PARKING

On-street parking spaces

80.39 (1) When constructing or redeveloping existing on-street parking spaces, designated public sector organizations shall consult on the need, location and design of accessible on-street parking spaces and shall do so in the following manner:

- 1. Designated public sector organizations must consult with the public and persons with disabilities.
 - 2. Municipalities must also consult with their municipal accessibility advisory committees, where one has been established in accordance with subsection 29 (1) or (2) of the Act. O. Reg. 413/12, s. 6.
- (2) In this section and despite section 2,
“designated public sector organization” means every municipality and every person or organization described in Schedule 1 to this Regulation, but not persons or organizations listed in Column 1 of Table 1 to Ontario Regulation 146/10 (Public Bodies and Commission Public Bodies — Definitions) made under the *Public Service of Ontario Act, 2006*. O. Reg. 413/12, s. 6.

