GODERICH

DOWNTOWN STREETSCAPE

Committee of the Whole April 8, 2024

Rebuilding Downtown Infrastructure

June 1, 2023 – Goderich Strategic Action Plan - 4 year priority setting. Goal #1 = Safe and Reliable Infrastructure

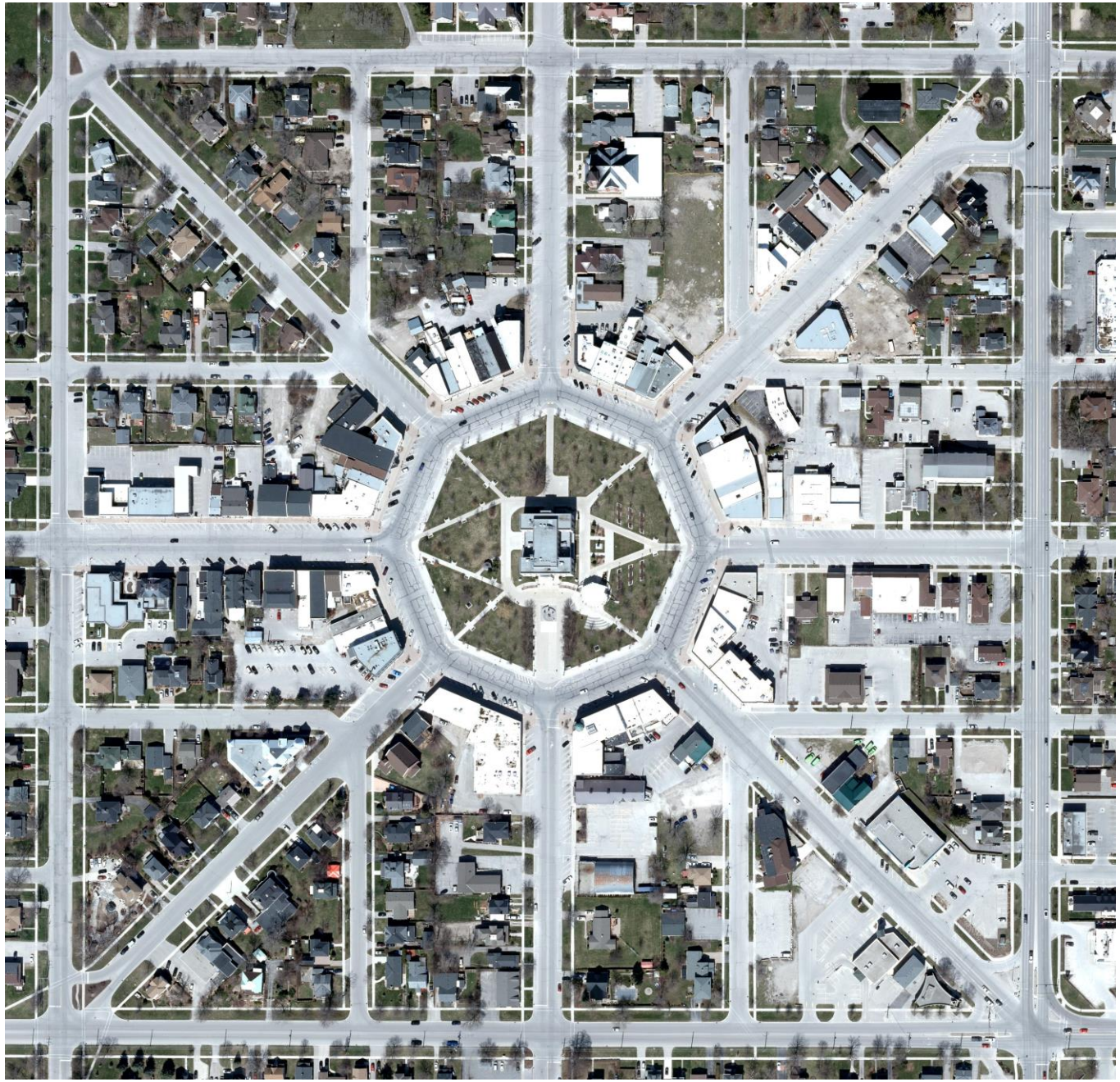
Subsection 1.1 – Taking a long-term perspective and an evidence-based approach to managing municipal infrastructure. Key elements:

a) **Engage a design/engineering firm** to work with Town staff to produce a **comprehensive** "Rebuilding Downtown Infrastructure" **plan** that includes **future state design concepts** and options, **associated costs** with high level **phases/milestones**. **The outcome of this process will be a costed out Preferred Option.**

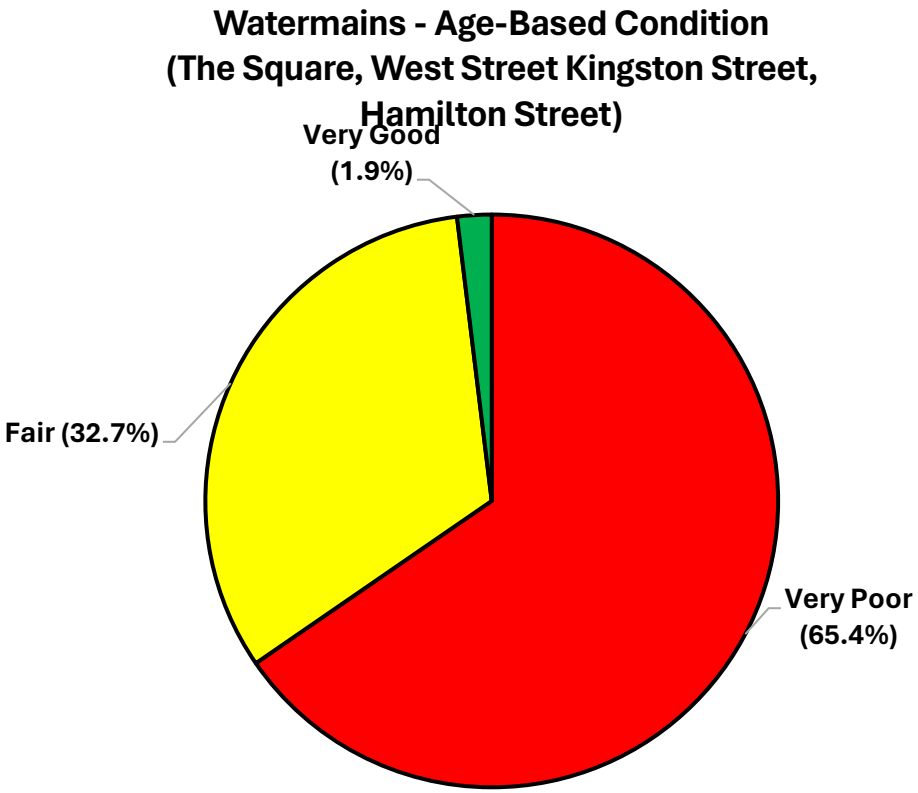
b) Establish a Rebuilding Downtown Infrastructure **Task Force** with citizen participation with a mandate to facilitate public discussion and inform the Project Team (design/engineering firm & Town staff) throughout the process.

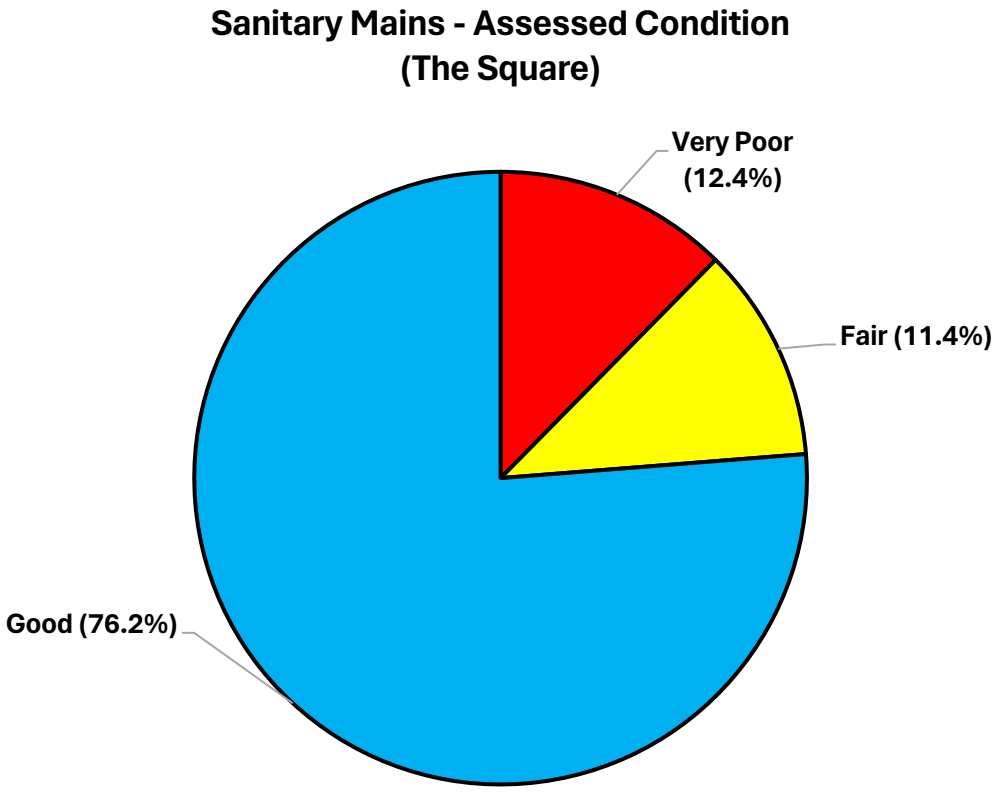
c) **Council makes decision** on the Rebuilding Downtown Infrastructure **Preferred Option**. Initiate c**ommunications strategy** with residents and downtown businesses.

d) Complete a go forward plan with priorities and costing to extend water/wastewater services.



Infrastructure Management – Time to Replace





High-Level Phasing

Initiation

Initiate Planning, Public Involvement, Visioning Processes

Design

Complete Planning in Early 2024 followed by design. Tendering in fall.

Construct

Phase 1 of Construction to be completed – work to be staged to maximize public access

Construct

Phase 2 of Construction to be completed – work to be staged to maximize public access

Final Paving

Complete top lift paving, line painting, and any outstanding streetscaping

Project Team

- Council and Staff
- Task Force – Representation from BIA, Chamber, and Citizen Member
- BMROSS – Engineering and Planning
- GSP - Urban Planning and Landscape Architecture

Rebuilding Downtown Infrastructure Task Force

Director of Community Services, Infrastructure and Operations

Mayor Trevor Bazinet

Randy Carroll

Councillor

Councillor

Christopher Spaleta

Citizen Appointment

Vicky Culbert
BIA Appointment

Janice Hallahan
CAO

Chamber of Commerce

New Appointment Pending

Director of Legislative Services/Clerk

Engineering Team

BMROSS

Dale Erb
P Eng
Principal and Senior Engineer

Role: Project Manager

Dennis Elliott

Senior Project Manager

Role: Design Manager

GODERICH PROJECT LEADER

Ryan Reihl
C.E.T.
Senior Engineering Technologist

Role: Designer

Matt Pearson
RPP
Senior Planner

Role: Facilitator

Engage Urban Planner / Landscape Architect

GSP

Mark Zuzinjak
OALA, CSLA
VP, Landscape Architecture

Role: Project Manager

Raj Mohabeer
OALA, CSLA, MCIP, RPP, LEED®AP
Urban Design Leader

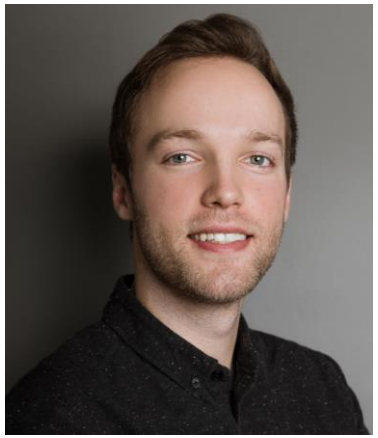
Role: Charette Lead

Jennifer Hachler
OALA, CSLA
Landscape Architecture Manager

Role: Streetscape Lead

Brendan te Brinke
OALA, CSLA
Sr. Landscape Architect

Role: Streetscape Designer



Owen Wheeler
Landscape Designer

Role: Streetscape Designer

Task Force Visioning Exercise

- Managed by GSP
- Significant Notification Process
- 4 Day Intensive Idea Exchange
- Involvement from Council Members, Staff, Task Force
- Significant Consultation Opportunities with excellent Public Participation
- “Live” Concept Development

The Charrette – A Community Driven Design

DESIGN CHARRETTE - EDUCATION AND IDEAS EXCHANGE

Time	Day 1 - Education and Vision Tuesday, November 28, 2023	Day 2 - Typical Street Section Wednesday, November 29, 2023	Day 3 - The Concept Plan Thursday, November 30, 2023	Day 4 - Production Friday, December 1, 2023
9:00-10:00		CONSULTATION Downtown Core Property Owners	CONSULTATION Downtown Core Property Owners	DRAFT Concept Plan / Public consultation
10:00-11:00		CONSULTATION Downtown Core Business – Restaurants	CONSULTATION Downtown Core Business – Restaurants	DRAFT Concept Plan / Public consultation
11:00-12:00	Tour with staff invited parties Walking audit and photographs	CONSULTATION Downtown Core Business – Offices	CONSULTATION Downtown Core Business – Offices	DRAFT Concept Plan / Public consultation
12:00-1:00		Public consultation	Public consultation	Public consultation
1:00-2:00	Working lunch with tour group Values and issues exercise	CONSULTATION Downtown Core Business - Retailers	CONSULTATION Downtown Core Business - Retailers	Councillor Session
2:00-3:00		Public consultation	Public consultation	Prep Streetscape Concept Plan presentation
3:00-4:00	Meet with Public Works and Parks	Develop Typical Cross Section(s)	DRAFT Concept Plan / Public consultation	
4:00-5:00			DRAFT Concept Plan Development	
5:00-6:00				
6:00-7:00	Opening night public presentation "Streetscape 101"	PIN UP SESSION / Public consultation	PIN UP SESSION / Public consultation	Closing presentation Streetscape Concept Plan
7:00-8:00	Public consultation	Public consultation	Public consultation	

CONCEPT

Existing Condition

2.6 m	11.5 m ±	5.5 m	3.9 m
Parallel Parking	Cart Path	Angle Parking	Typical Sidewalk

23.5 m ±


Scotiabank
Scotiab
MacNAB & FEAGAN
Legibility


Crossings

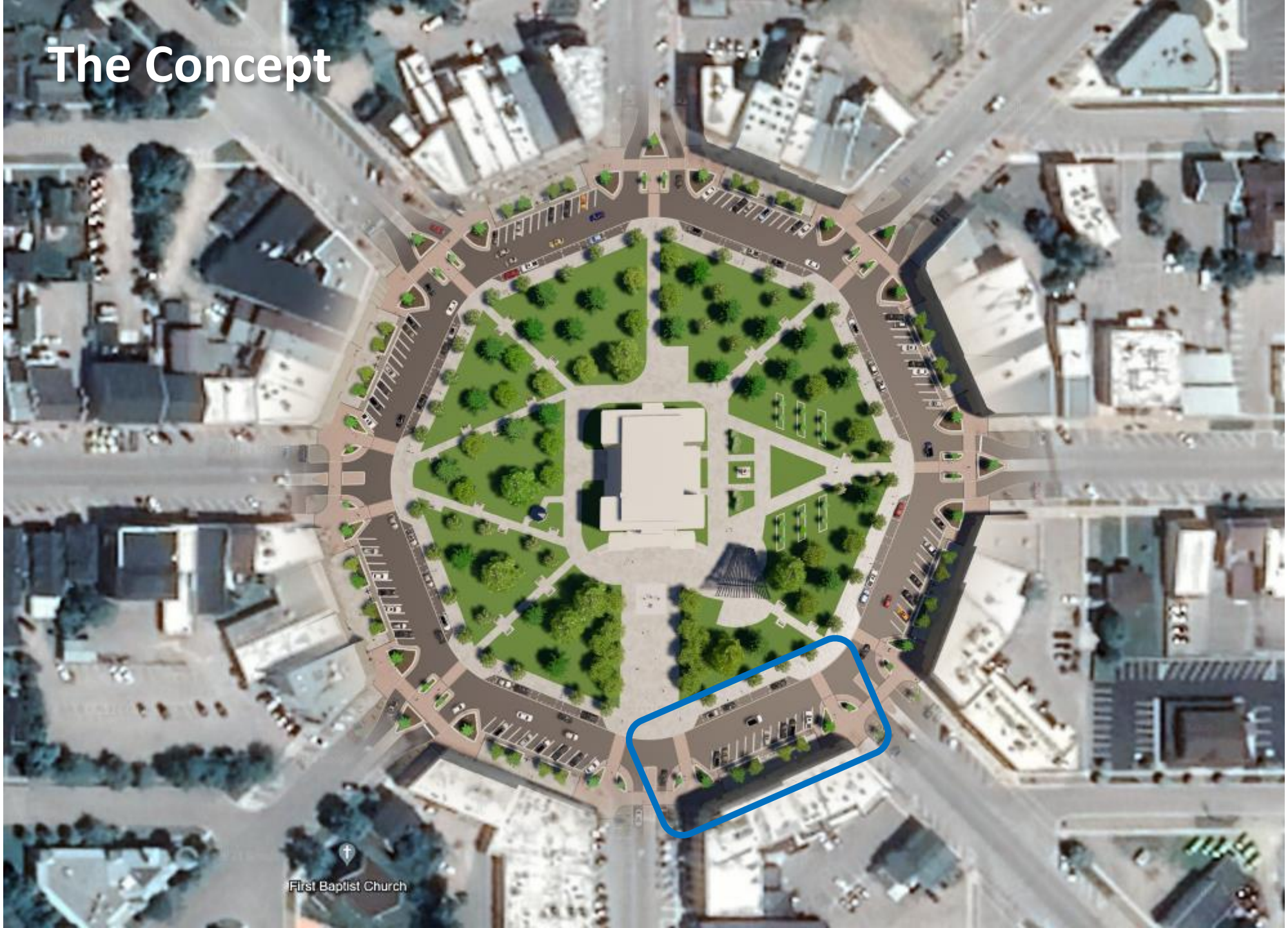

Entrances


the
Comfort


Parking

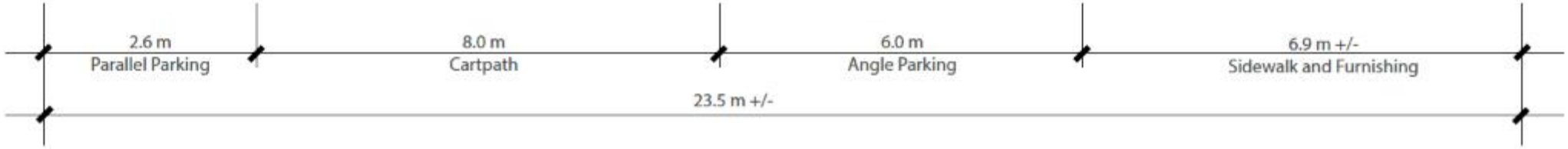

Salt

The Concept



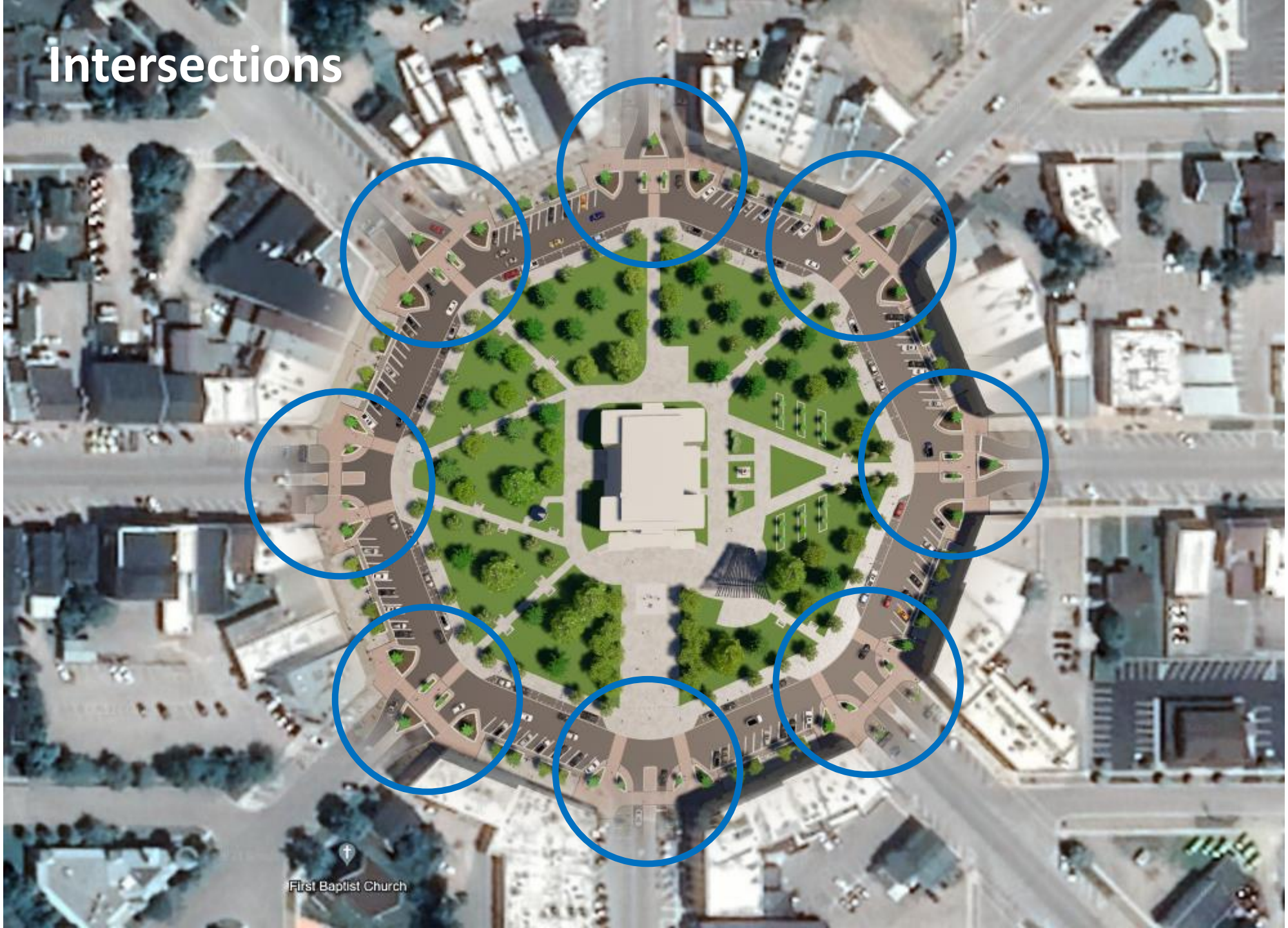
The Typical Cross Section

Proposed typical cross-section.
Image source: GSP Group



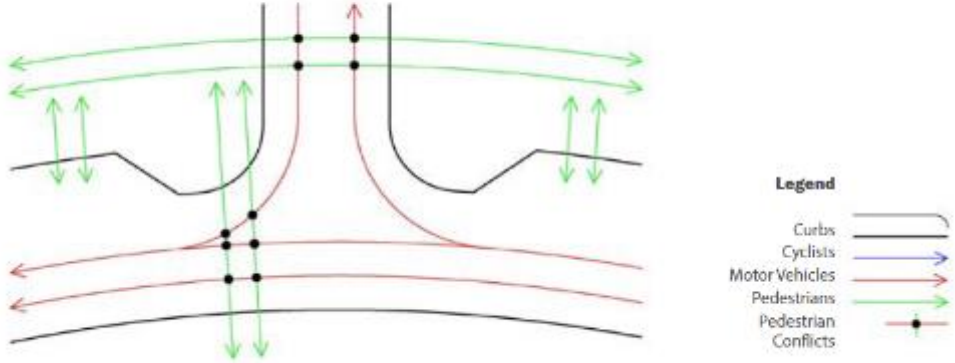
The Typical Plan

Intersections



Cycling

4.5 Intersection Designs Based on Minimizing Pedestrian Conflicts

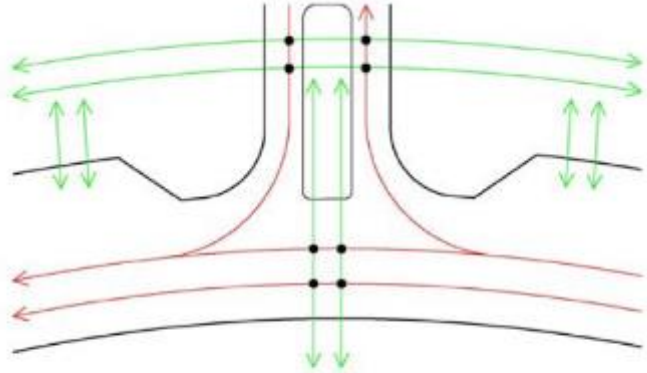


Existing pedestrian crossing conflicts.

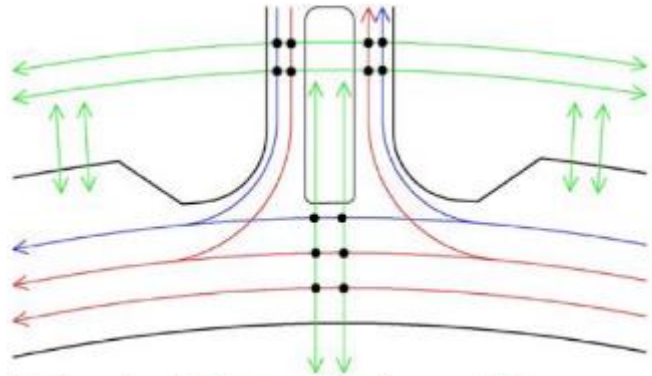
The intersection designs are focused on minimizing conflicts between pedestrians and circulating vehicles — note that bicycles are considered vehicles under Ontario's Highway Traffic Act. For the purpose of this analysis, only pedestrian conflicts are examined. Many vehicle to vehicle conflicts exist 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.

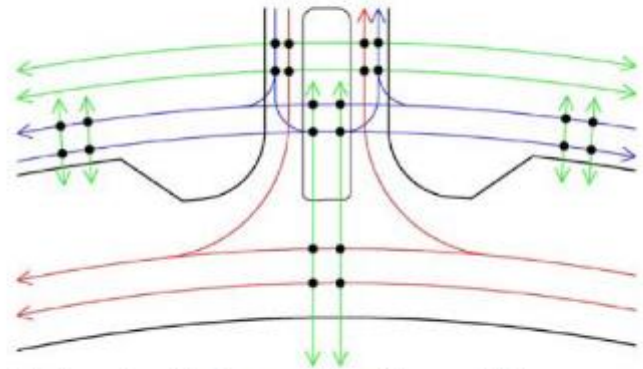
The intent of the proposed design is to create a street that operates at a low operating speed so cyclist feel safe in a shared environment that does not require dedicated cycling facilities. This reduces the number of conflicts for pedestrians and makes it safer for all users of the street.



Pedestrian crossing conflicts for proposed design without dedicated cycing facilities.



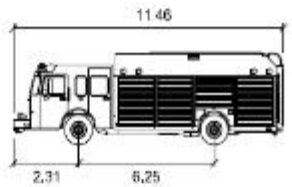
Pedestrian crossing conflicts for proposed design with one-way dedicated cycing facilities.



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

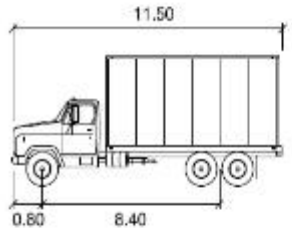
4.6 Turning Movements

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.



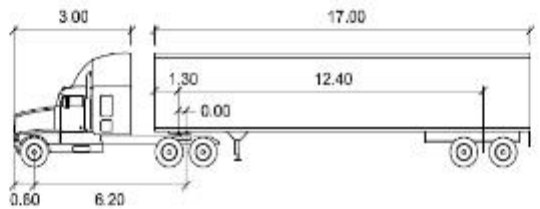
NSFD Rescue Pierce Enforcer

	Meters
Width	: 2.60
Track	: 2.44
Lock to Lock Time	: 6.0 s
Steering Angle	: 50.0 deg



HSU

	Meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0 s
Steering Angle	: 40.0 deg

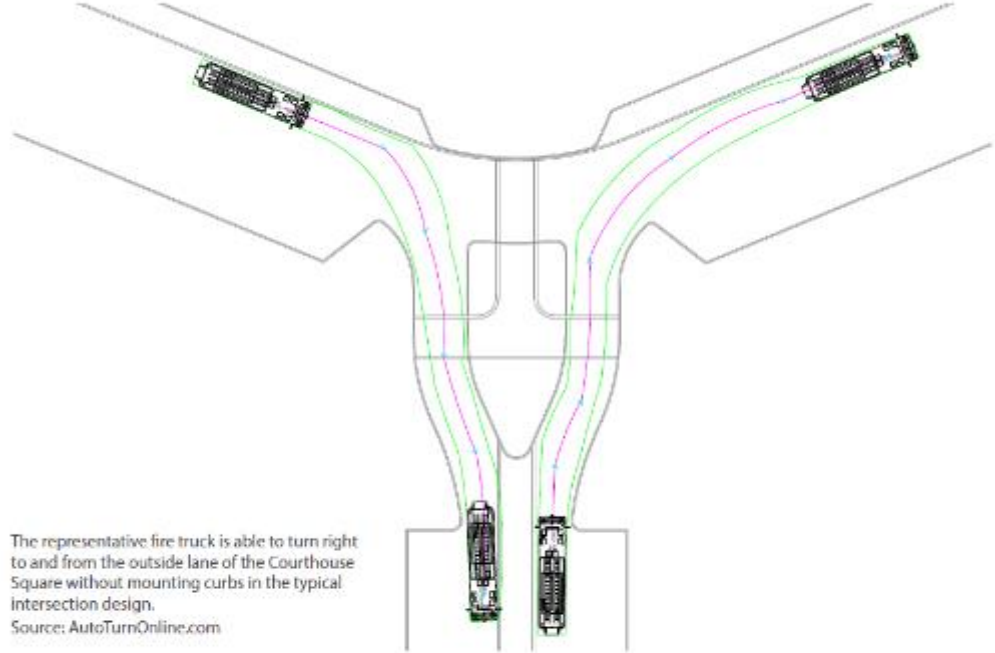


WB-20

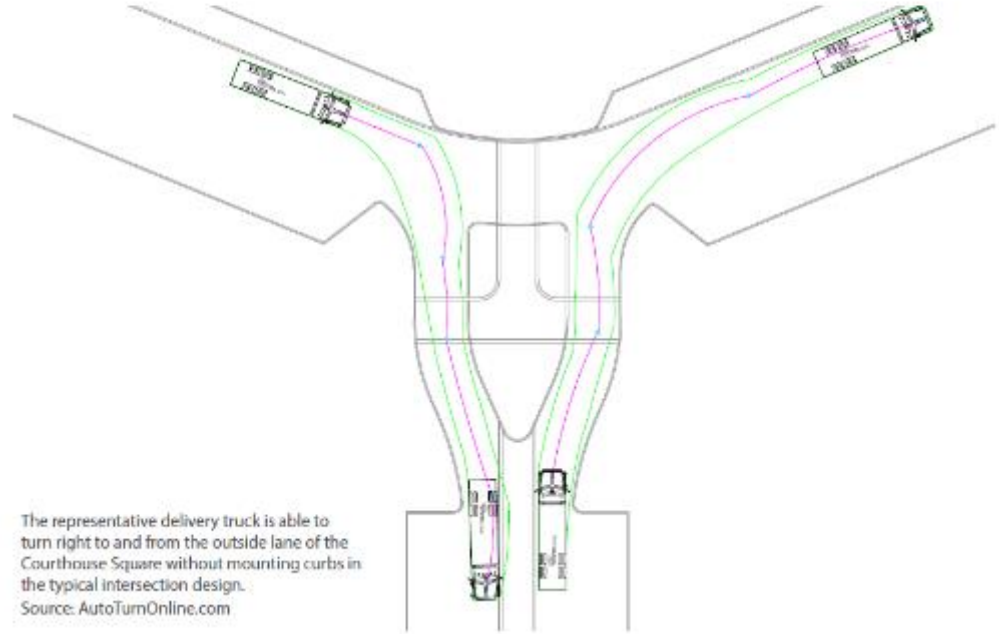
	Meters		
Tractor Width	: 2.60	Lock to Lock Time	: 6.0 s
Trailer Width	: 2.60	Steering Angle	: 28.2 deg
Tractor Track	: 2.60	Articulating Angle	: 70.0 deg
Trailer Track	: 2.60		

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

Typical Intersection Turing Movements

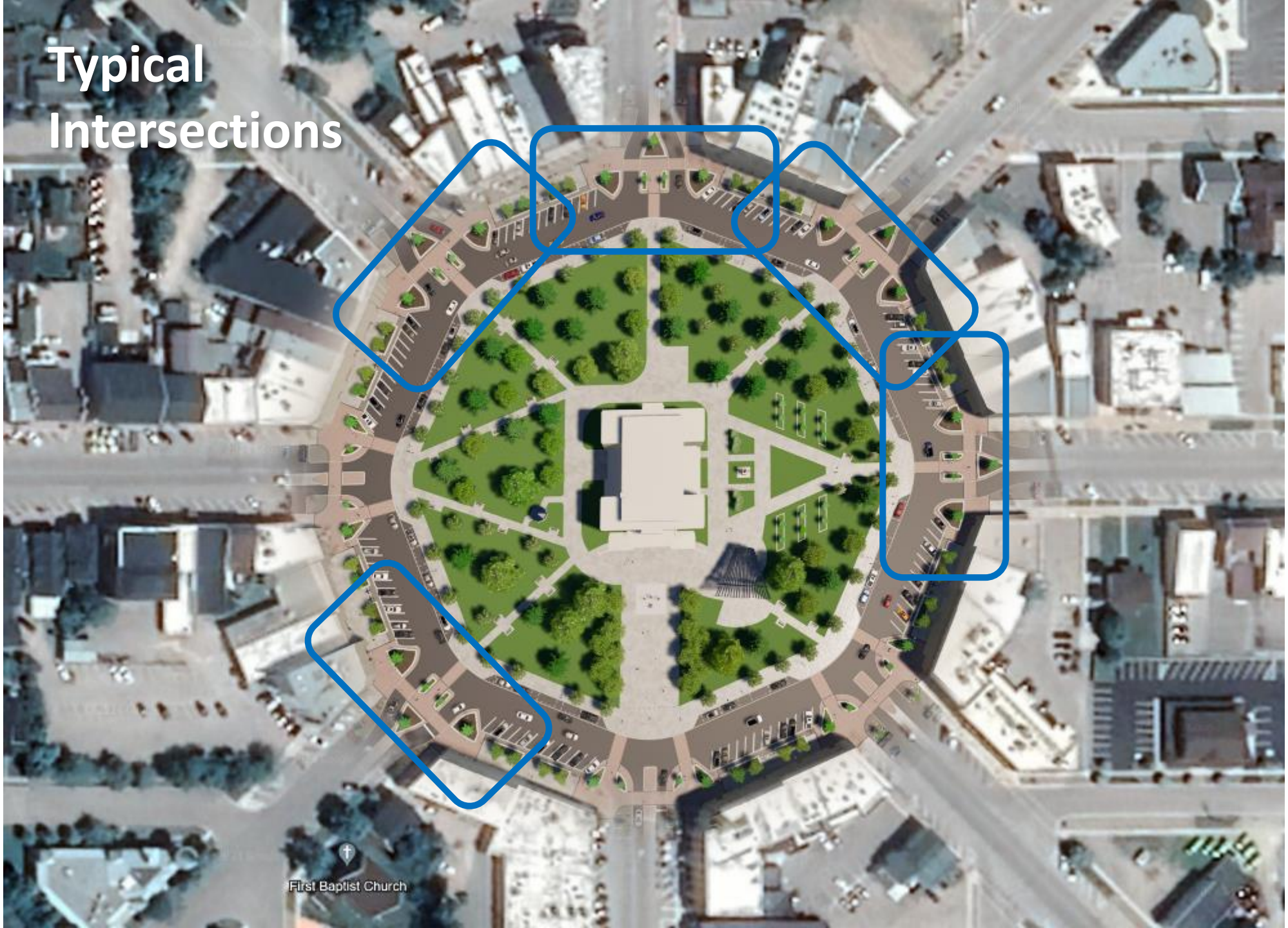


The representative fire truck is able to turn right to and from the outside lane of the Courthouse Square without mounting curbs in the typical intersection design.
Source: AutoTurnOnline.com



The representative delivery truck is able to turn right to and from the outside lane of the Courthouse Square without mounting curbs in the typical intersection design.
Source: AutoTurnOnline.com

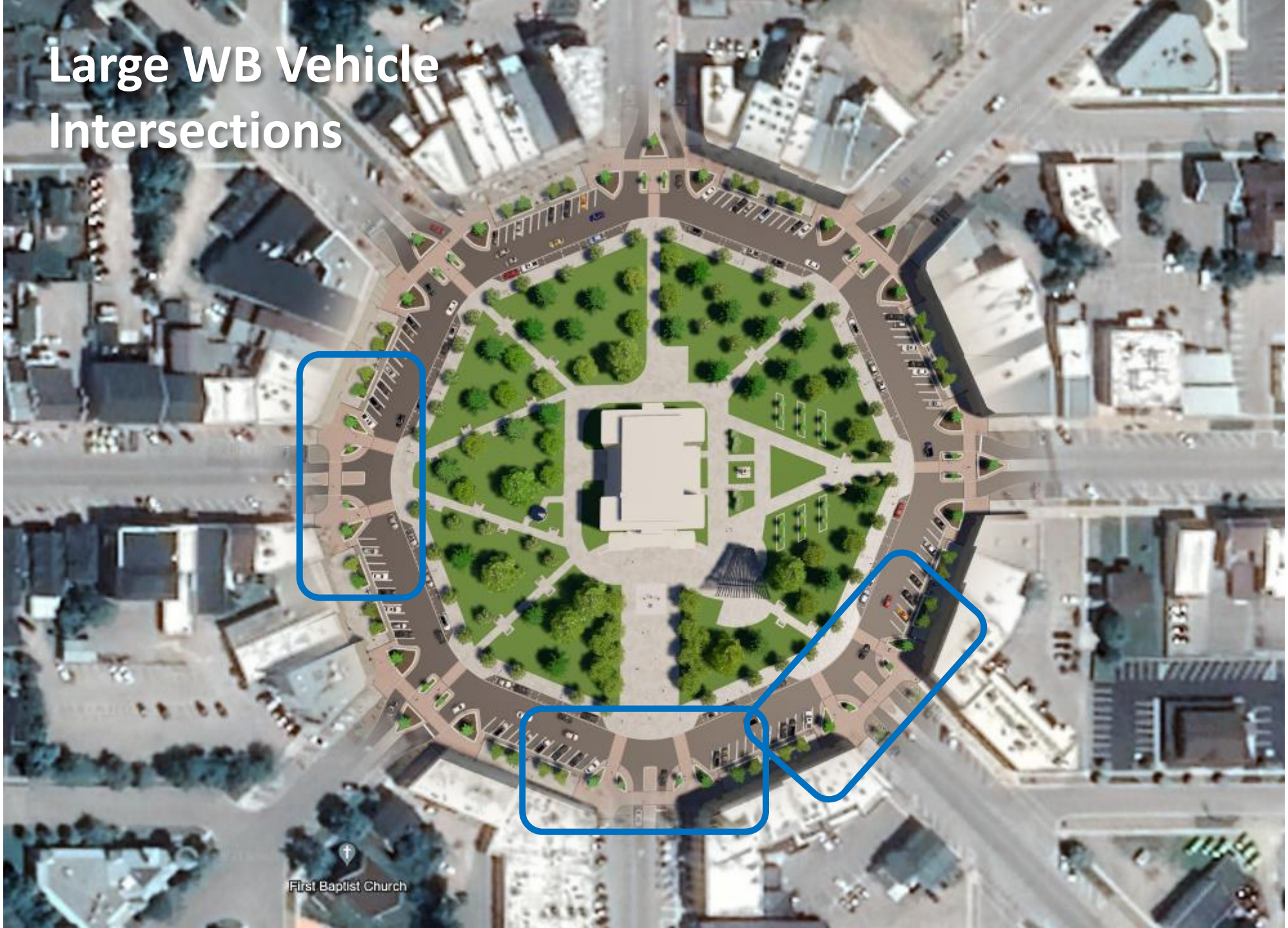
Typical Intersections



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


STOP

Large WB Vehicle Intersections



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

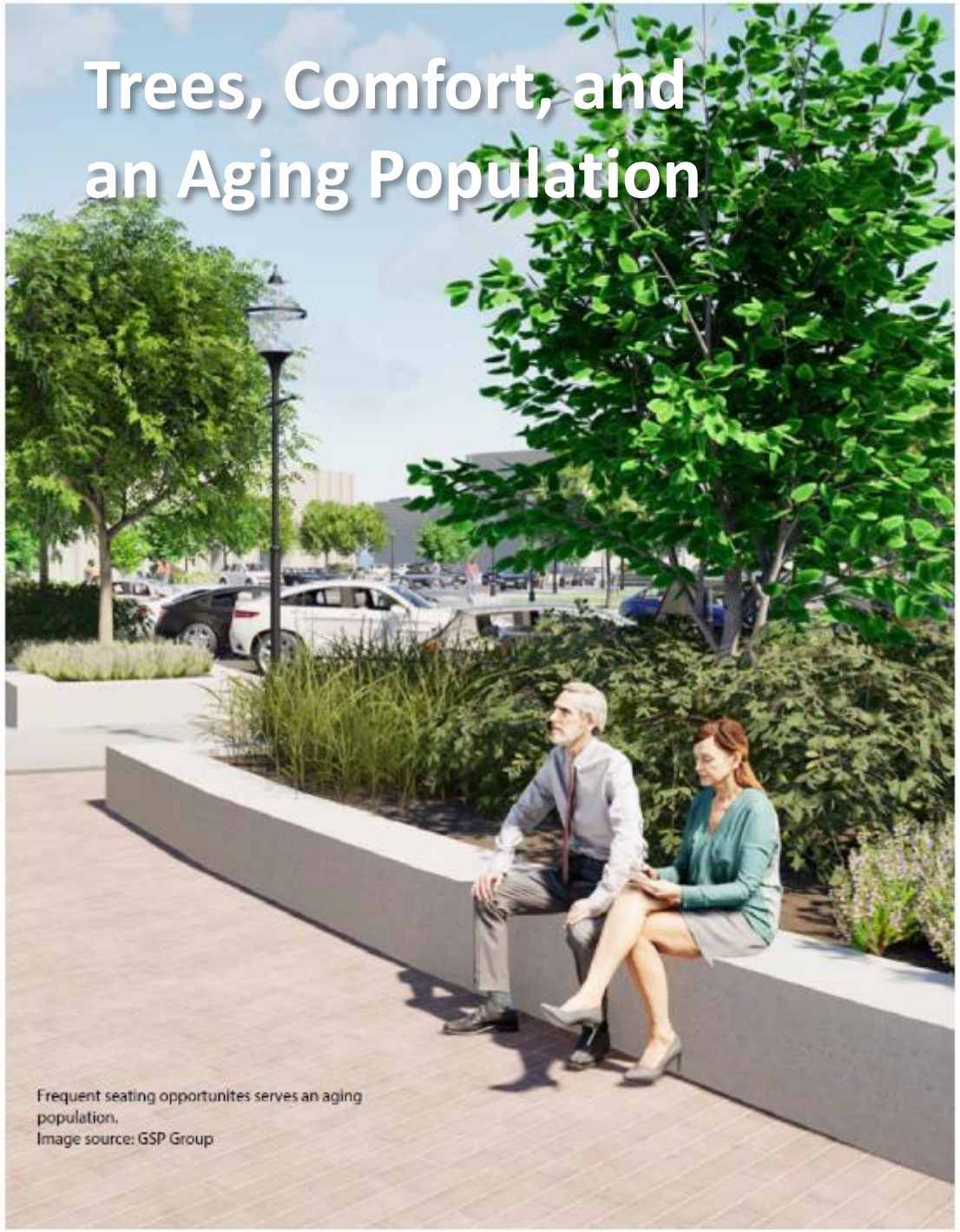
Finding More Parking

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.

Dining Opportunities

Surface Materials and Accessibility

Trees, Comfort, and an Aging Population



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

The use of soil cells provides trees with uncompacted soil volumes that encourages healthy root growth resulting in healthier, long lasting trees.

The Concept

Probable (Estimated) Costs and Comparison

Costing Elements

- **Below Ground**
  - Electrical Ducts
  - Sewers and Watermain
  - Road and Sidewalk Base
  - Soil Cells / Structural Soils
  - Irrigation
- **Above Ground**
  - Street Lighting
  - Roadway and Parking
  - Sidewalks and Boulevards
  - Intersections
  - Landscaping
    - Planters / Seatwalls
    - Plantings and Trees

Estimated Cost Comparison

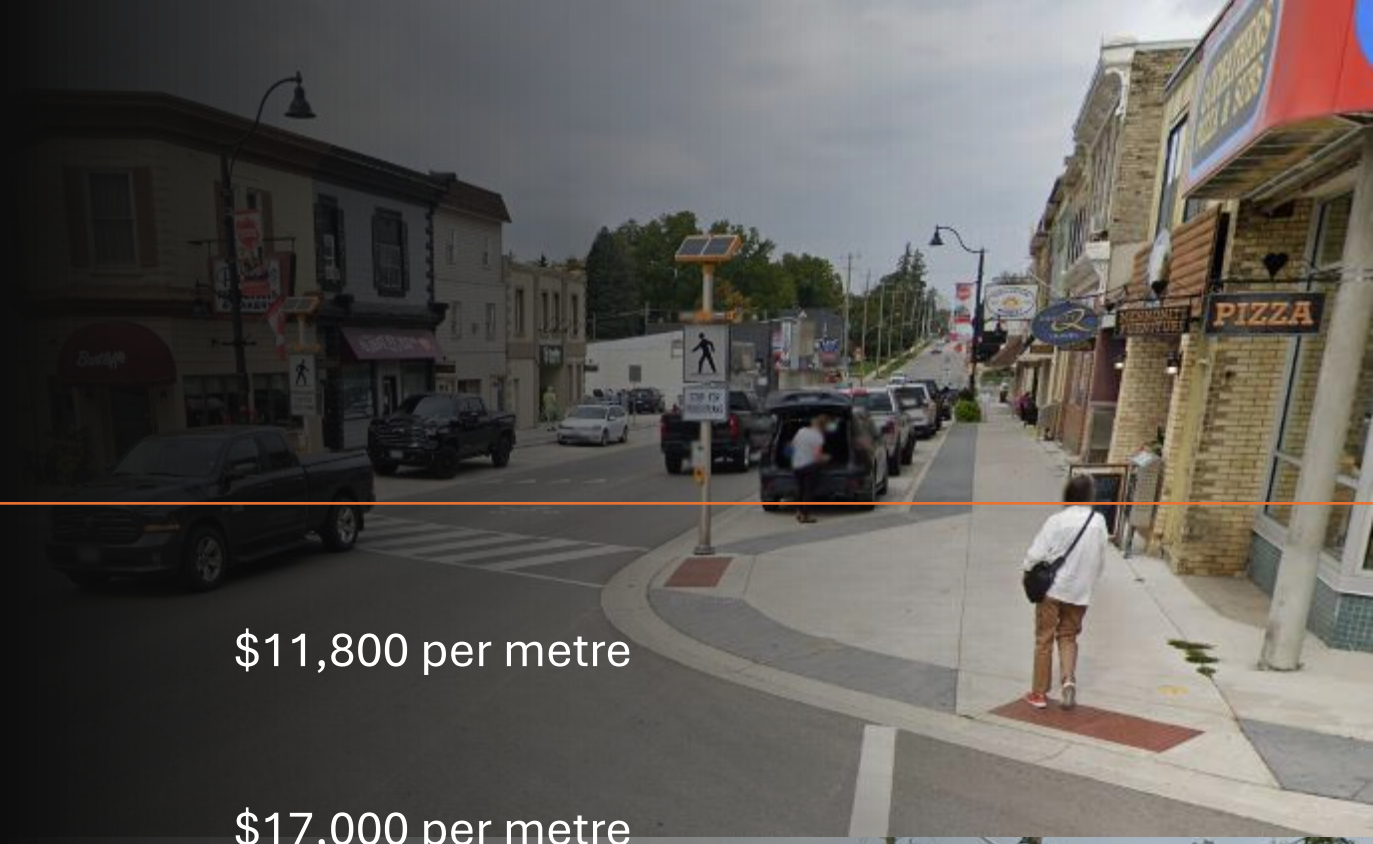
Infrastructure Component	OPTION	
	Replacement of What we Have	Preferred Concept / Upgrade
Roadworks - lanes, parking, curb, asphalt	$2,530,000	$2,420,000
Sidewalks and Boulevards	$1,380,000	$1,490,000
Buried Infrastructure - Storm/San/Water	$1,820,000	$1,820,000
Streetlighting and Related Electrical	$450,000	$450,000
Planters and Seatwalls	$120,000	$980,000
Planting Media: Soil Cells/Structural Soil	$80,000	$710,000
Plantings, Trees, Irrigation, streetscape	$90,000	$460,000
Provisional and Miscellaneous	$880,000	$880,000
Sub-total (Excl. HST)	**$7,340,000**	**$9,210,000**

Notes:

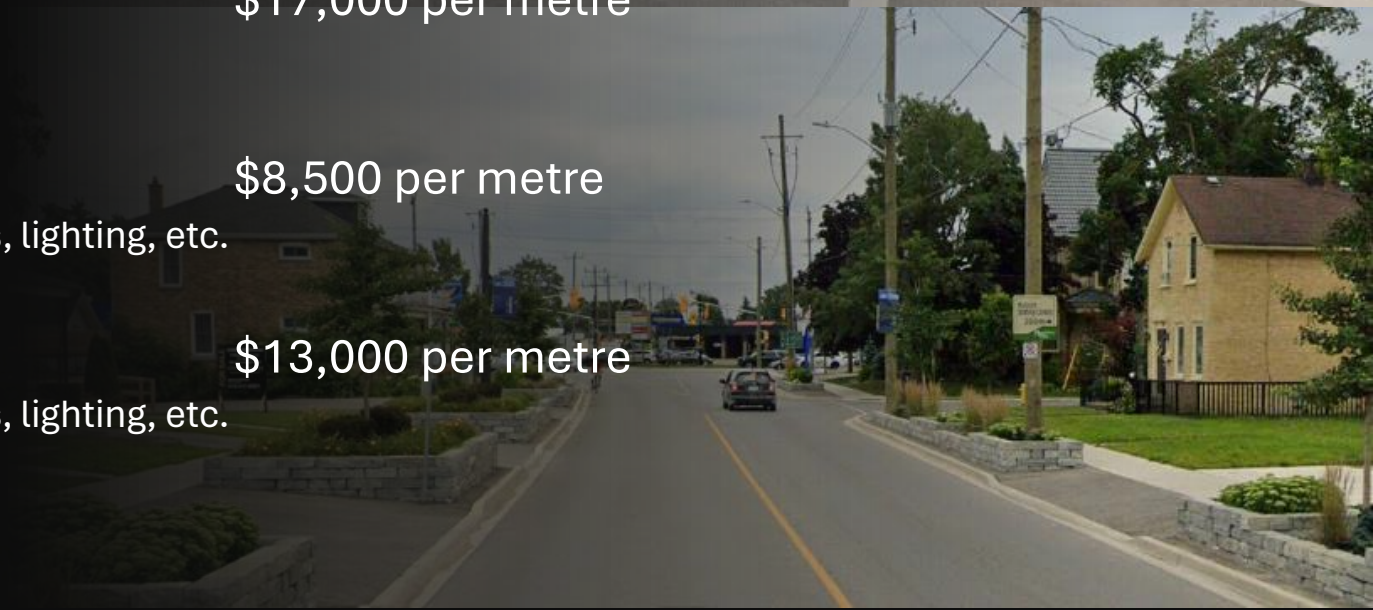
1. Subject to Final Design / Contractor Pricing/Phasing Plan, etc.
2. Estimate includes 30m of reconstruction work on each Street off the Square.
3. Planting Media Cost Options based on Soil Cell Alternative. Structural Soil may provide cost savings.
4. Engineering/Planning Allowance = $700,000 to $900,000 depending on construction period.

Other Projects

Construction Cost Comparison



- Goderich Square Concept $9.2M $11,800 per metre
  - Preferred Concept
- Strathroy – Caradoc St $6.5M $17,000 per metre
  - Large storm sewer, railway crossing, planters
- Clinton – Albert St. $3.5M $8,500 per metre
  - Revitalization, road, infrastructure, Sidewalks, lighting, etc.
- Kincardine – Queen St. $7.1M $13,000 per metre
  - Revitalization, road, infrastructure, Sidewalks, lighting, etc.

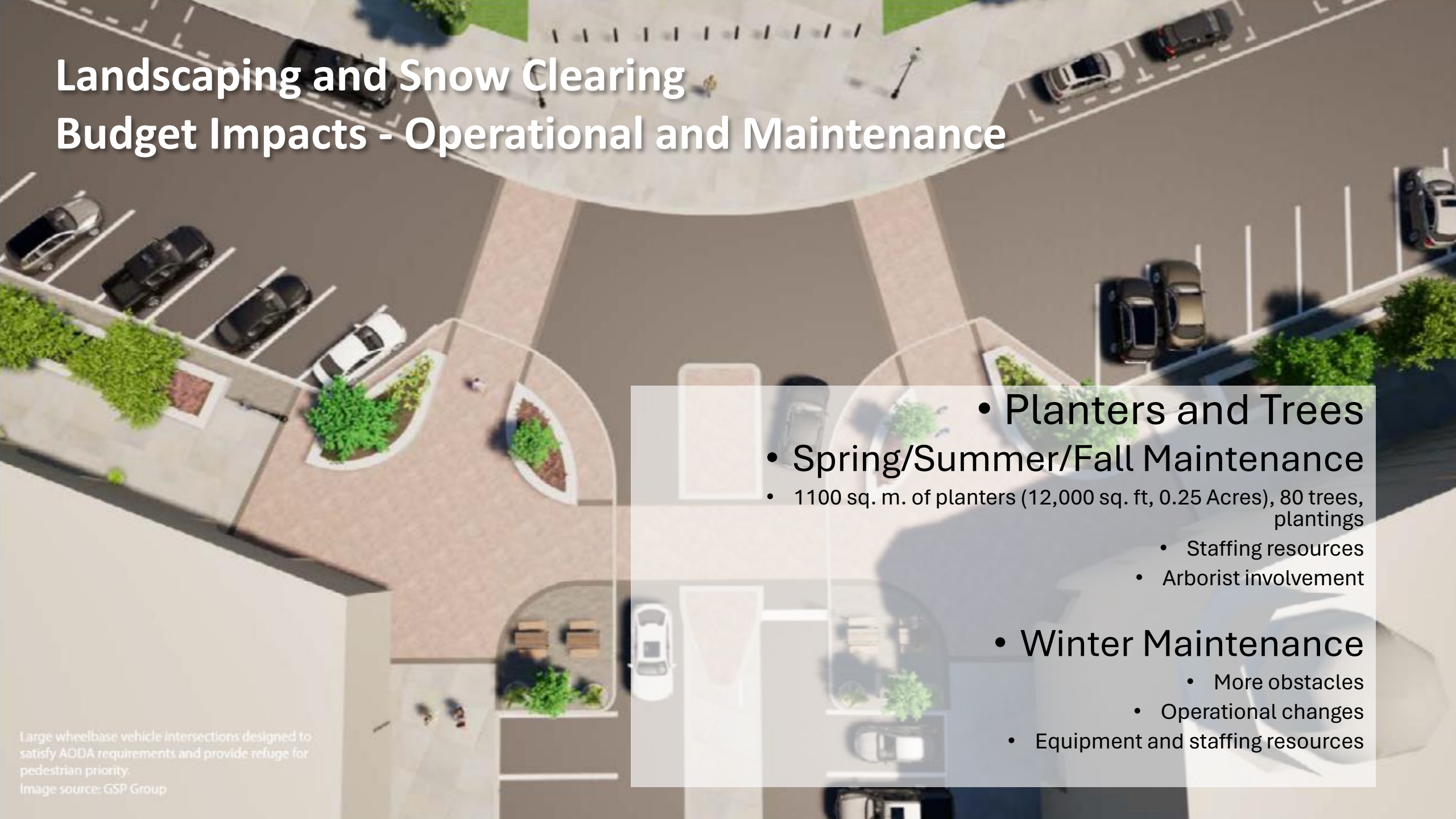


Long-term Maintenance Considerations

Seasonal Landscaping

Winter – Snow Removal

Landscaping and Snow Clearing
Budget Impacts - Operational and Maintenance



- Planters and Trees
- Spring/Summer/Fall Maintenance
  - 1100 sq. m. of planters (12,000 sq. ft, 0.25 Acres), 80 trees, plantings
  - Staffing resources
  - Arborist involvement
- Winter Maintenance
  - More obstacles
  - Operational changes
  - Equipment and staffing resources

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

Recommended Next Steps

- Project Team Advance to Detailed Design Stage
  - BMROSS / STAFF / GSP
- Coordinate Surface with Underground Works with all Utility Stakeholders and Businesses
- Develop Construction Phasing and Mitigation Plan
  - Consider Off-site Parking
- Continued Public Consultation
- Consider Parking Management Study
- Coordinate Accessibility Items with Huron County Accessibility Advisory Committee

Council Motion

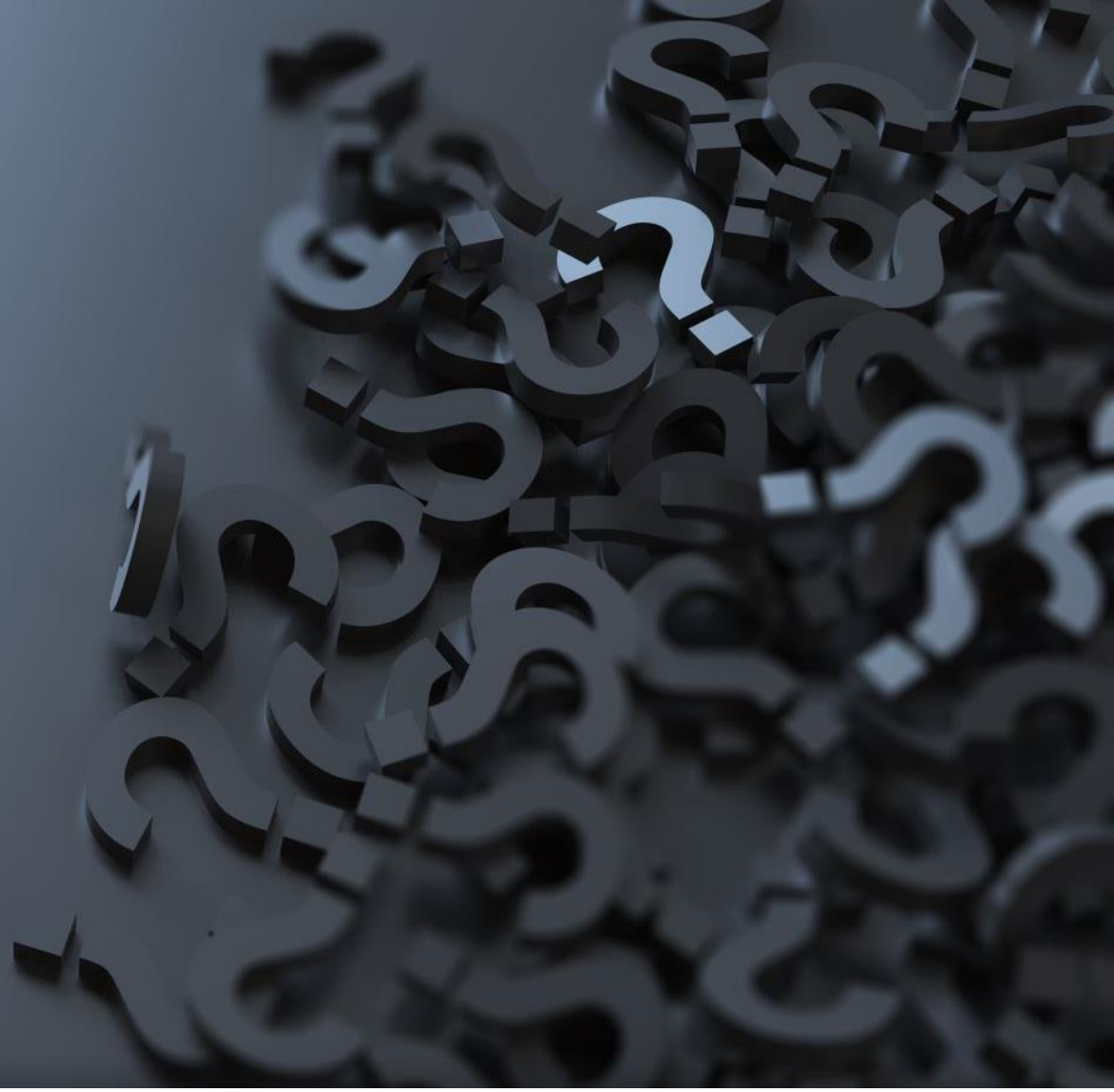
- Direct design team (BMROSS/GSP) to proceed with Detailed Design
  - Work with staff related to operational considerations
- Update Task Force through design process
- Present Design to Public when appropriate

Motion

That Goderich Town Council receive the Downtown Streetscape Plan presented by BMROSS and GSP for information.

Council further directs staff to bring back a financial strategy on how this Capital Infrastructure Project will be funded to unify the work to achieve Council's Strategic Goal.

QUESTIONS



GODERICH Canada's Prettiest Town

BMROSS engineering better communities

GSP group