



Photos/pictures sourced from Urban Design Guidelines (WSP) & Downtown Development Master Plan (FORREC)



# Main Street and Beach Areas 1 & 2 Improvements PUBLIC INFORMATION CENTRE

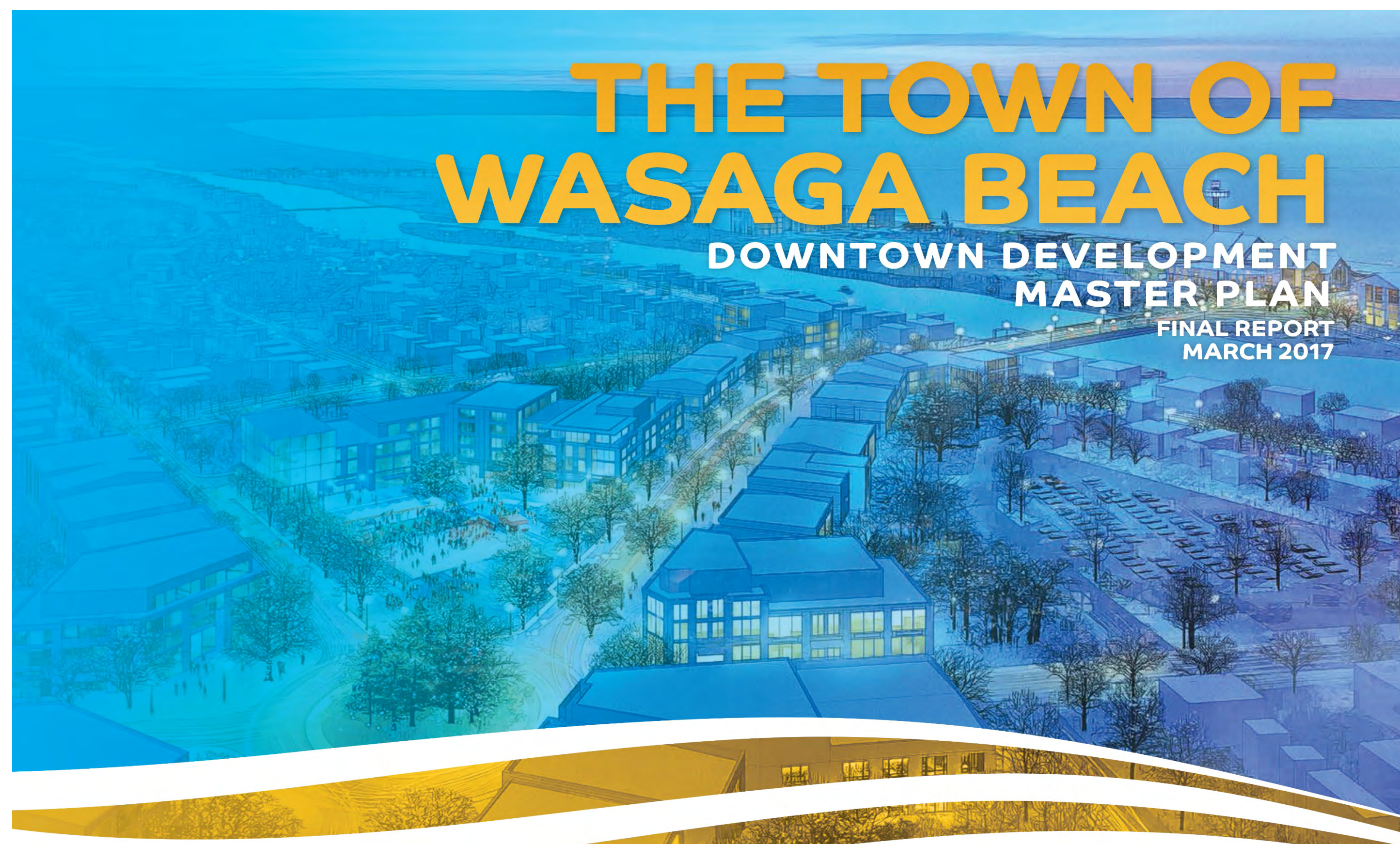


## BACKGROUND

Over the past several years, the Town has undertaken a number of initiatives relating to the redevelopment of Main Street and Beach Areas 1 & 2. The most significant to this project include:

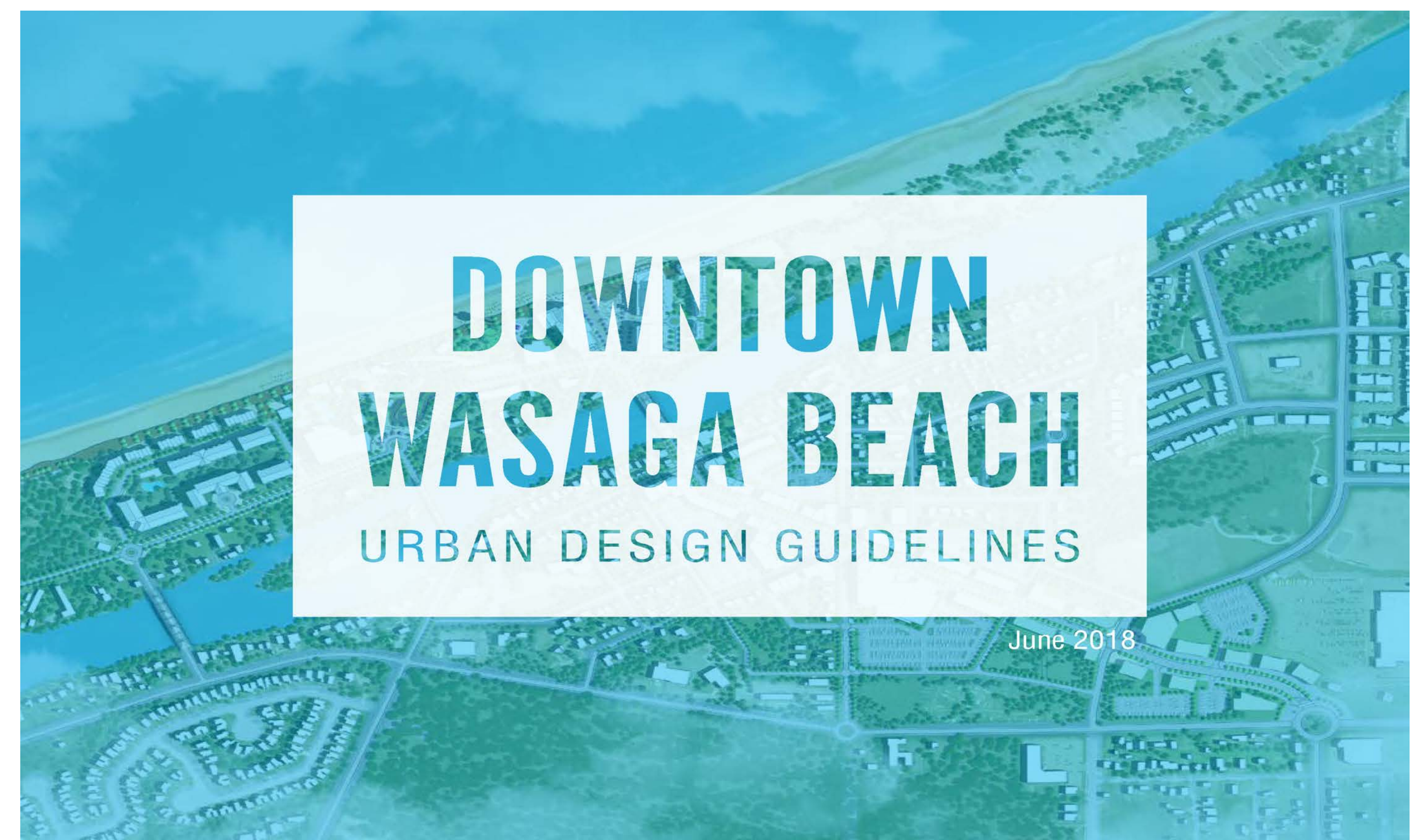
### ▪ Downtown Development Master Plan (DDMP)

- The DDMP was "designed to promote the evolution of a livable, compact, accessible, sustainable downtown for the entire community."



### ▪ Downtown Wasaga Beach Urban Design Guidelines (UDG)

- Intended to "encourage development that supports and implements the objectives that are outlined in the DDMP."



## OBJECTIVE OF THE STUDY

The objective of this study is to identify and facilitate the implementation of improvements to the study area transportation network in consideration of:

- the natural, socio-economic & heritage environments
- the needs of pedestrians
- the needs of cyclists
- the needs of motorists
- goals and objectives identified in the DDMP, UDG and supporting studies

## PURPOSE OF THE STUDY

The purpose of this study is:

- develop alternative solutions to improve the local road network and renew infrastructure to facilitate the overall objectives of the DDMP and UDG
- identify the location, extent and sensitivity of affected environments
- assess the alternatives given potential environmental impacts
- identify the preferred solutions
- establish measures to mitigate impacts
- satisfy the Class EA requirements

## PURPOSE OF THE PIC

The purpose of the Public Information Centre (PIC) is to:

- establish channels of communication with public and stakeholders
- detail the study area, study purpose and objective
- present the need and justification for the study and issues to be resolved
- identify alternative solutions and potential environmental impacts
- seek input and comments for consideration in the selection of the preferred solutions

## THE ROLE OF THE PUBLIC

To assist in the completion of this study, the public and stakeholders should:

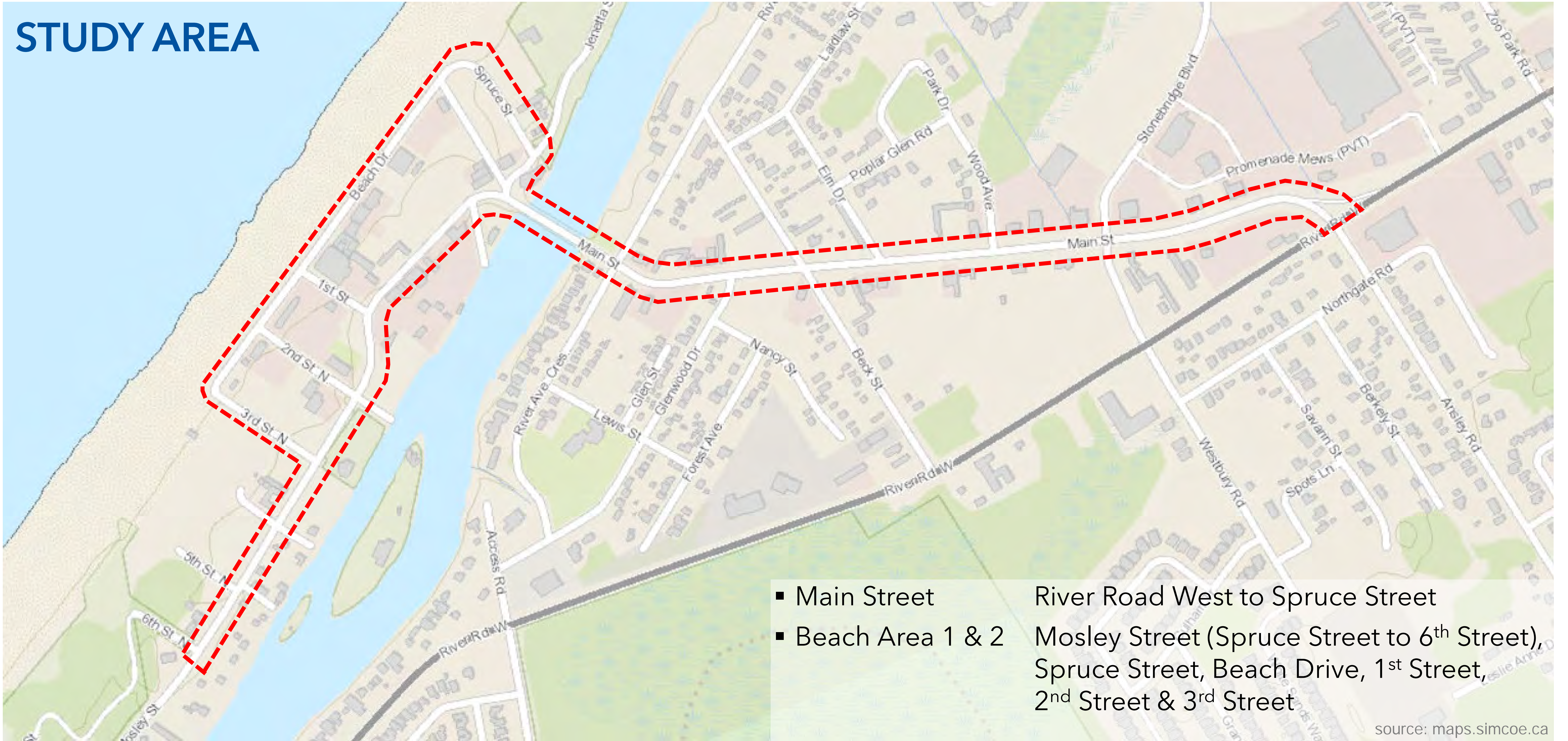
- sign the registry
- review the presentation material
- ask questions of the Town and/or Consultant
- make your opinions known
- submit a comment sheet
- indicate whether you want to be added to the mailing list to be kept informed of the process and future events



## Main Street and Beach Areas 1 & 2 Improvements PURPOSE & OBJECTIVES



# STUDY AREA



- Main Street River Road West to Spruce Street
- Beach Area 1 & 2 Mosley Street (Spruce Street to 6<sup>th</sup> Street), Spruce Street, Beach Drive, 1<sup>st</sup> Street, 2<sup>nd</sup> Street & 3<sup>rd</sup> Street

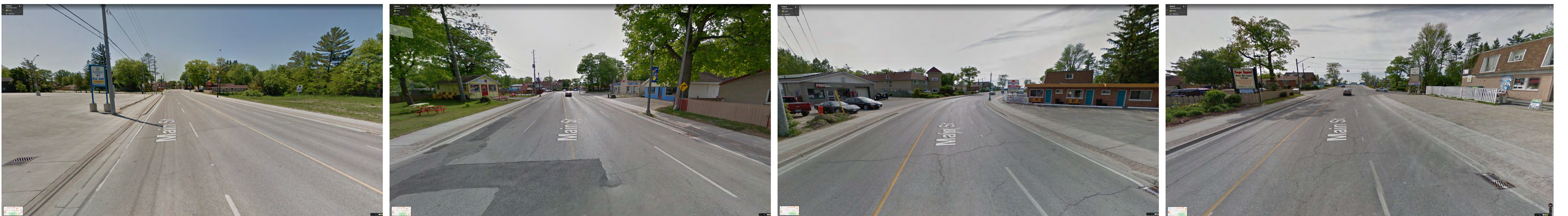
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MAIN STREET - River Road West to Stonebridge Boulevard



MAIN STREET - Stonebridge Boulevard to Beck Street



MAIN STREET - Beck Street to River Avenue Crescent / River Road East



MOSLEY STREET - Spruce Street to 1<sup>st</sup> Street

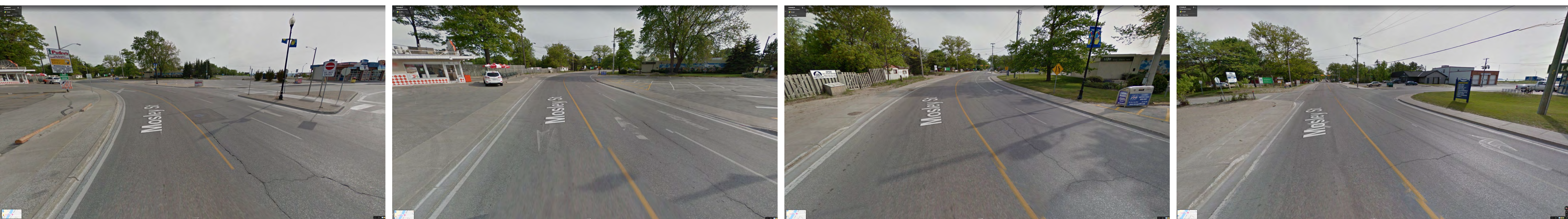
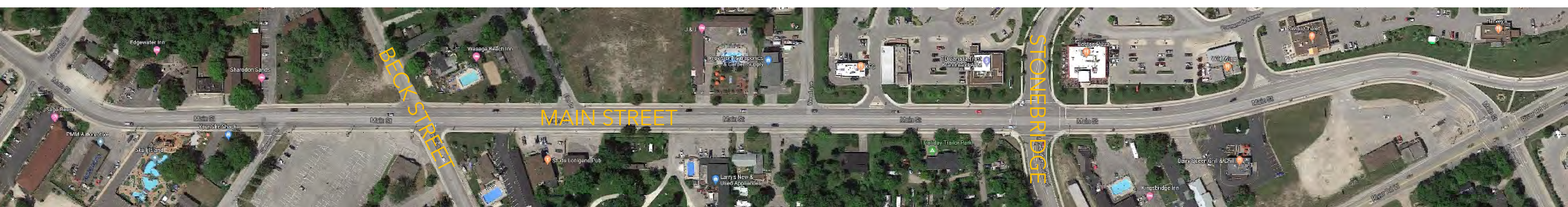
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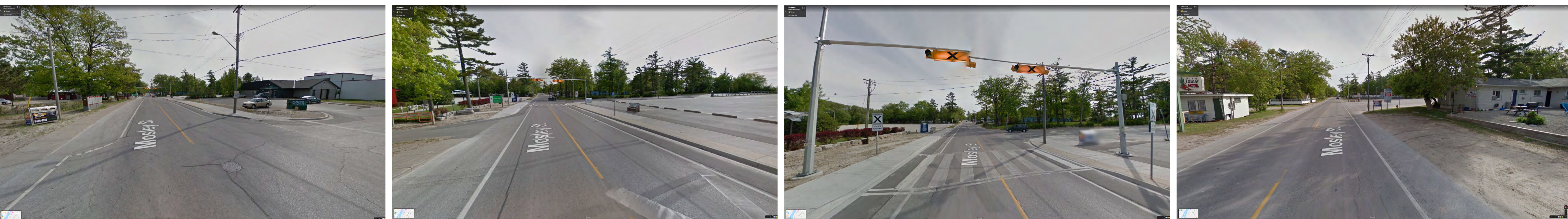
## Main Street and Beach Areas 1 & 2 Improvements EXISTING CONDITIONS



# AERIAL MAPPING



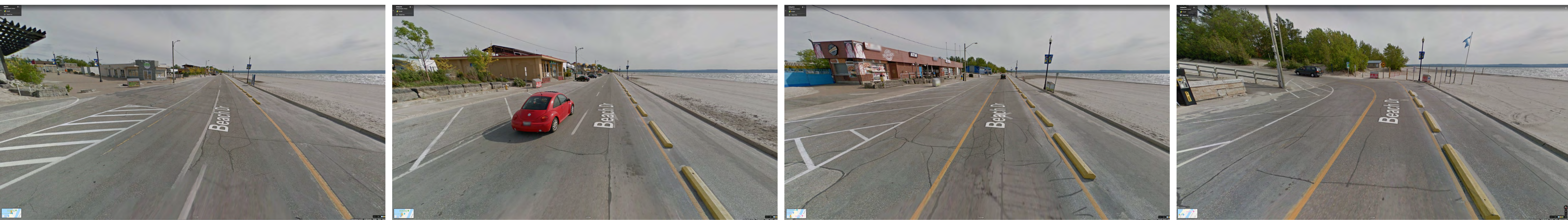
MOSLEY STREET - 1<sup>st</sup> Street to 2<sup>nd</sup> Street



MOSLEY STREET - 2<sup>nd</sup> Street to 3<sup>rd</sup> Street



MOSLEY STREET - 3<sup>rd</sup> Street to 6<sup>th</sup> Street



BEACH DRIVE - Spruce Street to 3<sup>rd</sup> Street

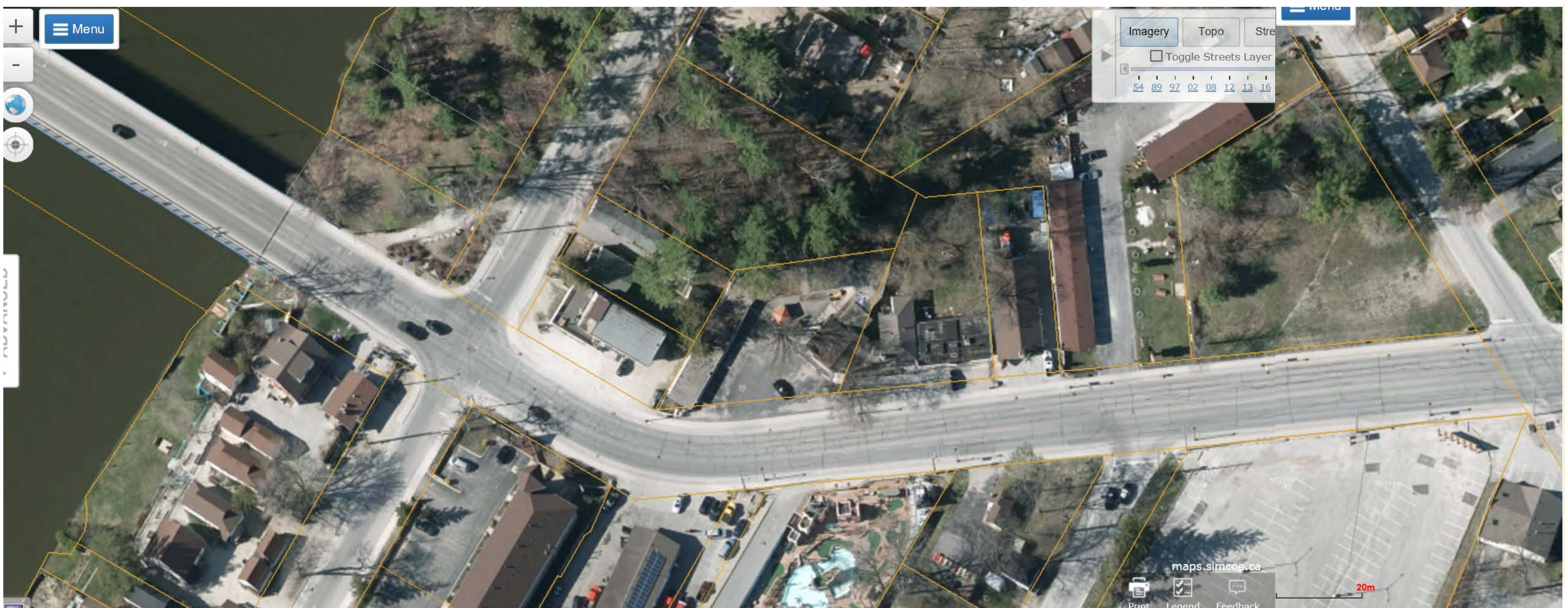
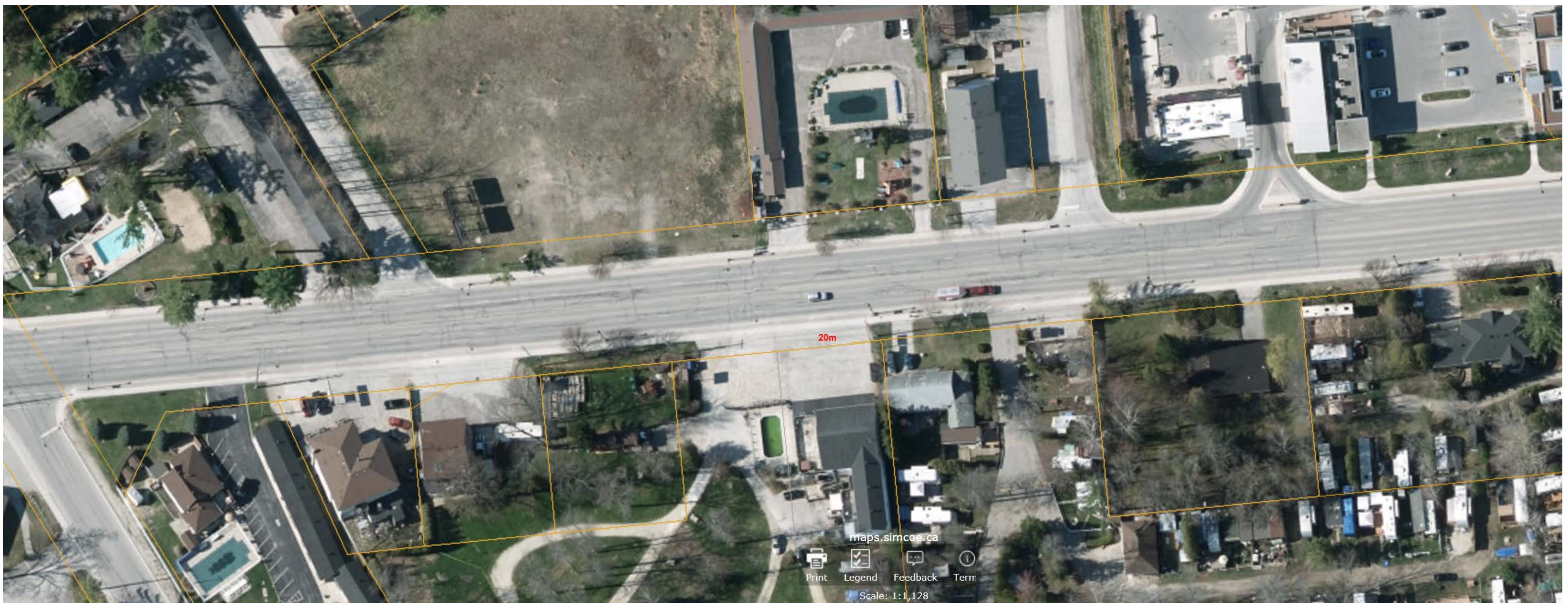
source: Google Streetview



## Main Street and Beach Areas 1 & 2 Improvements EXISTING CONDITIONS



# RIGHT-OF-WAY & PROPERTY LINES



source: Simcoe Maps



## Main Street and Beach Areas 1 & 2 Improvements EXISTING CONDITIONS



# RIGHT-OF-WAY & PROPERTY LINES



source: Simcoe Maps

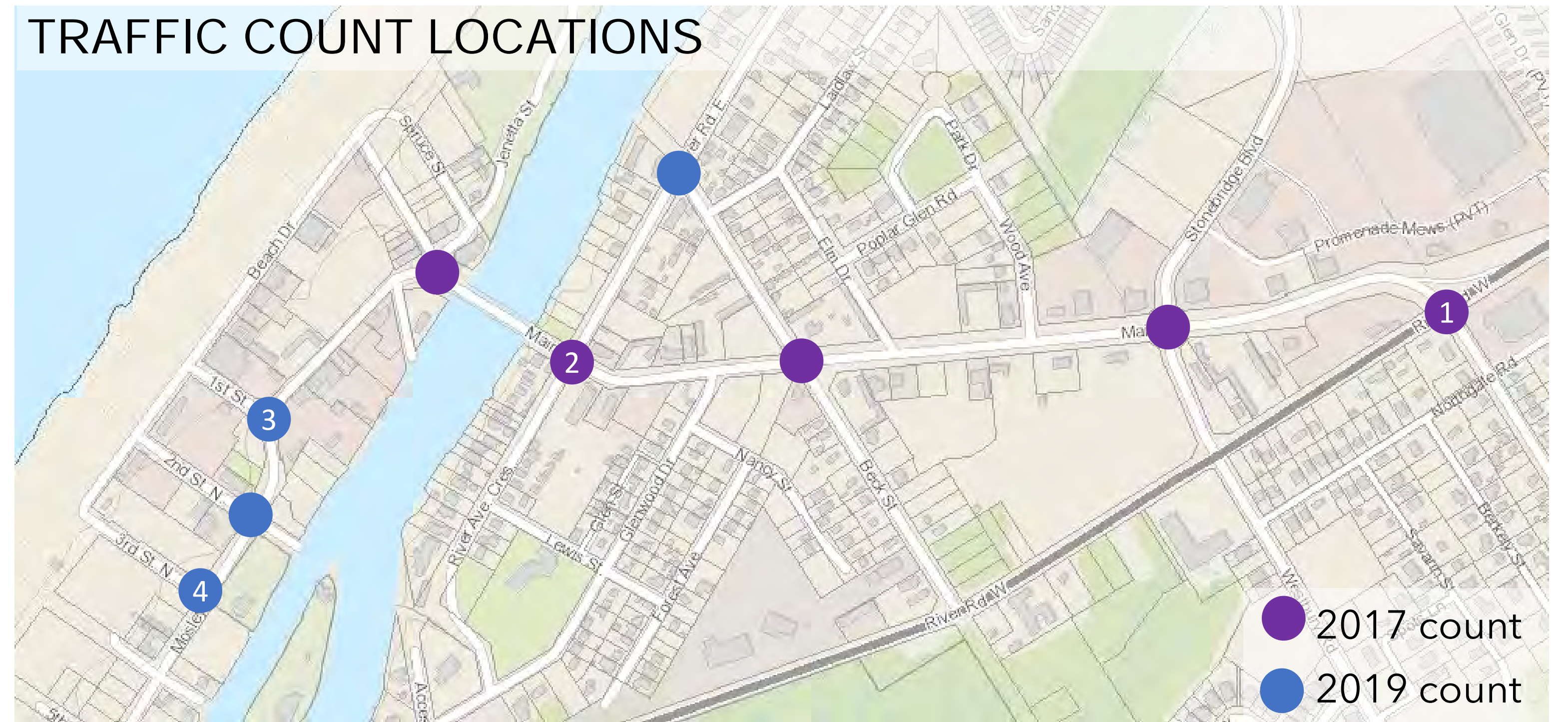


## Main Street and Beach Areas 1 & 2 Improvements EXISTING CONDITIONS



# TRAFFIC COUNTS

- Traffic counts were completed at key intersections along Main Street and Mosley Street on a weekday in June 2017 and June 2019.
- June is considered representative of **average conditions**.
- Traffic counts were also completed on Main Street and Mosley Street over the Canada Day weekend (June 30 to July 3, 2017).
- The Canada Day long weekend is considered a **peak summer weekend**.



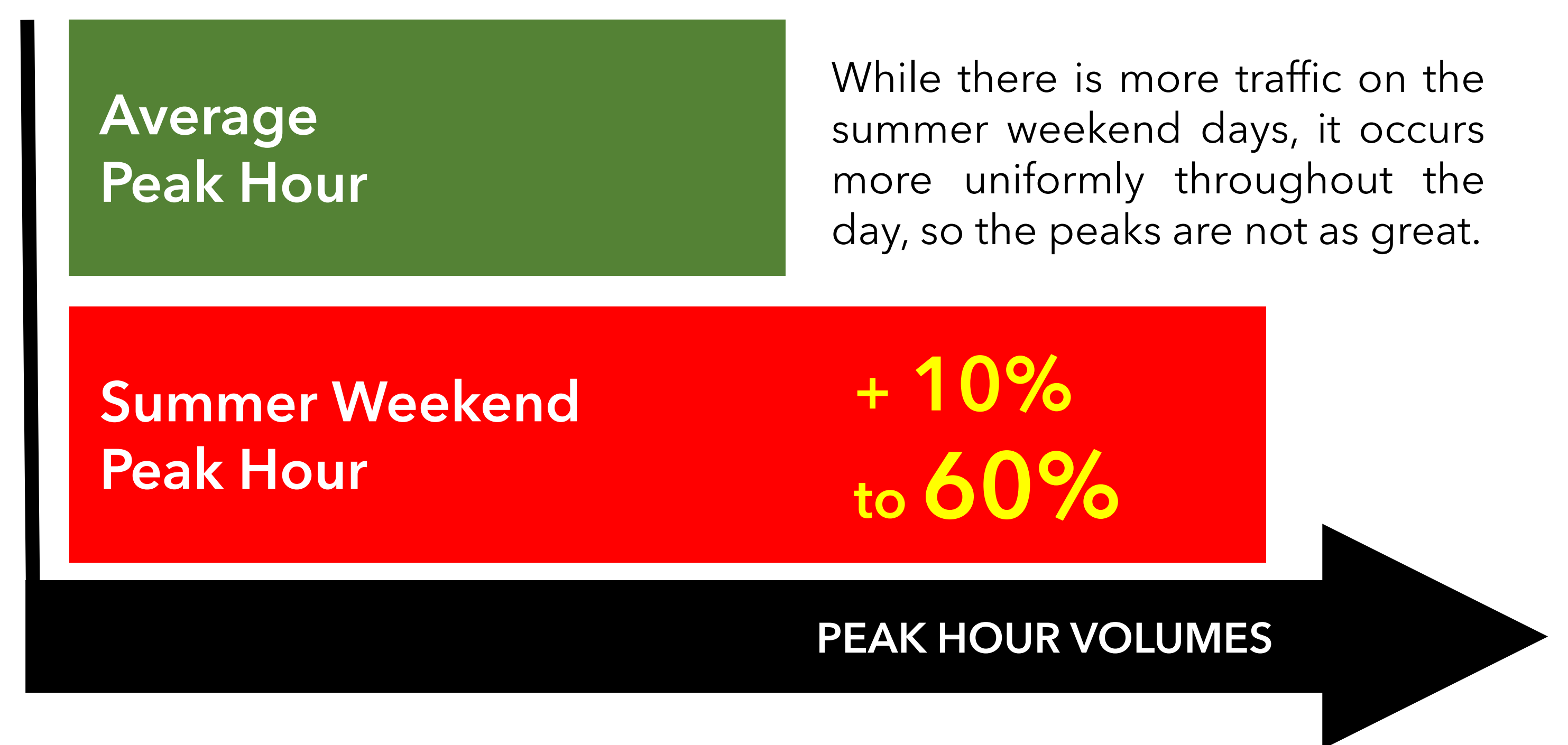
## AVERAGE VS SUMMER DAILY

- The summer weekend daily volumes are in the order of 60 to 100% greater than the average daily volumes.



## AVERAGE VS SUMMER PEAK HOUR

- The summer weekend peak hour volumes are 10 to 60% greater than the average peak hour volumes.



- As per the *Town of Wasaga Beach 2017 Transportation Study Update*, **summer weekend conditions are not considered an appropriate design parameter**. Designs based on summer weekend conditions will be “over designed” for the non-summer weekend periods.
- Rather, **average conditions should be used**.
- As per the traffic counts, the volumes during the PM peak hour are greater than the AM peak hour on the average day.
- The basis for transportation review is therefore **AVERAGE DAY PM PEAK HOUR**.



## AVERAGE DAY PM PEAK HOUR VOLUMES AT KEY INTERSECTIONS

Afternoon Peak Diagram	Specified Period	One Hour Peak	Afternoon Peak Diagram	Specified Period	One Hour Peak	Afternoon Peak Diagram	Specified Period	One Hour Peak	Afternoon Peak Diagram	Specified Period	One Hour Peak
Municipality: Wasaga Beach Site #: 1712500005 Intersection: River Rd W & Main St-Ansley Rd TFR File #: 1 Count date: 28-Jun-17	From: 15:00:00 To: 18:00:00	From: 16:00:00 To: 17:00:00	Municipality: Wasaga Beach Site #: 1712500015 Intersection: Main St & River Rd E-River Ave Cr TFR File #: 1 Count date: 29-Jun-17	From: 15:00:00 To: 18:00:00	From: 15:30:00 To: 16:30:00	Municipality: Wasaga Beach Site #: 1909900002 Intersection: Mosley St & 1st St N TFR File #: 1 Count date: 19-Jun-19	From: 15:00:00 To: 18:00:00	From: 16:00:00 To: 17:00:00	Municipality: Wasaga Beach Site #: 1909900004 Intersection: Mosley St & 3rd St N TFR File #: 1 Count date: 19-Jun-19	From: 15:00:00 To: 18:00:00	From: 15:15:00 To: 16:15:00
Person(s) who counted: 1	Weather conditions:	Weather conditions:	Person(s) who counted: 2	Weather conditions:	Weather conditions:	Person counted: Person prepared: Person checked:	Weather conditions:	Weather conditions:	Person counted: Person prepared: Person checked:	Weather conditions:	Weather conditions:
** Signalized Intersection ** Major Road: River Rd W runs W/E			** Non-Signalized Intersection ** Major Road: Main St runs W/E			** Non-Signalized Intersection ** Major Road: Mosley St runs N/S			** Non-Signalized Intersection ** Major Road: Mosley St runs N/S		
North Leg Total: 413 North Entering: 208 North Peds: 2 Peds Cross: 4	Heavys 0 Trucks 3 Cars 15 Totals 19	0 0 21 21	0 3 156 159	East Leg Total: 1059 East Entering: 540 East Peds: 1 Peds Cross: 1	Heavys 0 Trucks 5 Cars 200 Totals 205	0 0 199 199	0 1 156 157	East Leg Total: 626 East Entering: 380 East Peds: 16 Peds Cross: 1	Heavys 0 Trucks 1 Cars 80 Totals 81	0 1 22 23	0 1 105 106
Heavys Trucks Cars Totals 0 20 367 387	Heavys Trucks Cars Totals 0 176 4 180	0 11 11 22	Heavys Trucks Cars Totals 0 4 387 391	Heavys Trucks Cars Totals 0 17 1 18	0 307 4 311	0 51 12 63	Heavys Trucks Cars Totals 0 0 0 0	Heavys Trucks Cars Totals 0 0 0 0	Heavys Trucks Cars Totals 0 0 0 0	Heavys Trucks Cars Totals 0 0 0 0	Heavys Trucks Cars Totals 0 0 0 0
West Peds: 2 West Entering: 416 West Leg Total: 803	West Peds: 0 West Entering: 0 West Leg Total: 0	West Peds: 0 West Entering: 0 West Leg Total: 0	West Peds: 4 West Entering: 404 West Leg Total: 795	West Peds: 0 West Entering: 0 West Leg Total: 0	West Peds: 0 West Entering: 0 West Leg Total: 0	West Peds: 0 West Entering: 0 West Leg Total: 0	West Peds: 1 West Entering: 45 West Leg Total: 45	West Peds: 0 West Entering: 0 West Leg Total: 0	West Peds: 2 West Entering: 108 West Leg Total: 110	West Peds: 0 West Entering: 0 West Leg Total: 0	West Peds: 0 West Entering: 0 West Leg Total: 0
South Leg Total: 115 South Entering: 51 South Peds: 0 South Leg Total: 51	South Leg Total: 115 South Entering: 51 South Peds: 0 South Leg Total: 51	South Leg Total: 115 South Entering: 51 South Peds: 0 South Leg Total: 51	South Leg Total: 145 South Entering: 75 South Peds: 0 South Leg Total: 145	South Leg Total: 145 South Entering: 75 South Peds: 0 South Leg Total: 145	South Leg Total: 145 South Entering: 75 South Peds: 0 South Leg Total: 145	South Leg Total: 145 South Entering: 75 South Peds: 0 South Leg Total: 145	South Leg Total: 683 South Entering: 397 South Peds: 2 South Leg Total: 683	South Leg Total: 683 South Entering: 397 South Peds: 2 South Leg Total: 683	South Leg Total: 637 South Entering: 312 South Peds: 0 South Leg Total: 637	South Leg Total: 637 South Entering: 312 South Peds: 0 South Leg Total: 637	South Leg Total: 637 South Entering: 312 South Peds: 0 South Leg Total: 637



## Main Street and Beach Areas 1 & 2 Improvements EXISTING TRAFFIC VOLUMES



# TRAFFIC CAPACITY

The capacity of a road can vary by road section, as dictated by such things as:

- lane width
- lateral clearance
- commercial vehicles
- road alignment and geometry
- travel speed
- number of lanes
- drivers and vehicular characteristics
- presence of intersections
- presence of driveways
- presence of parking
- presence of pedestrians
- presence of cyclists

For this transportation assessment, the assumed road capacities range from 400 to 900 vehicles per hour per lane (vphpl).

**Main Street**  
800 to 900 vphpl

**Mosley Street**  
600 to 700 vphpl

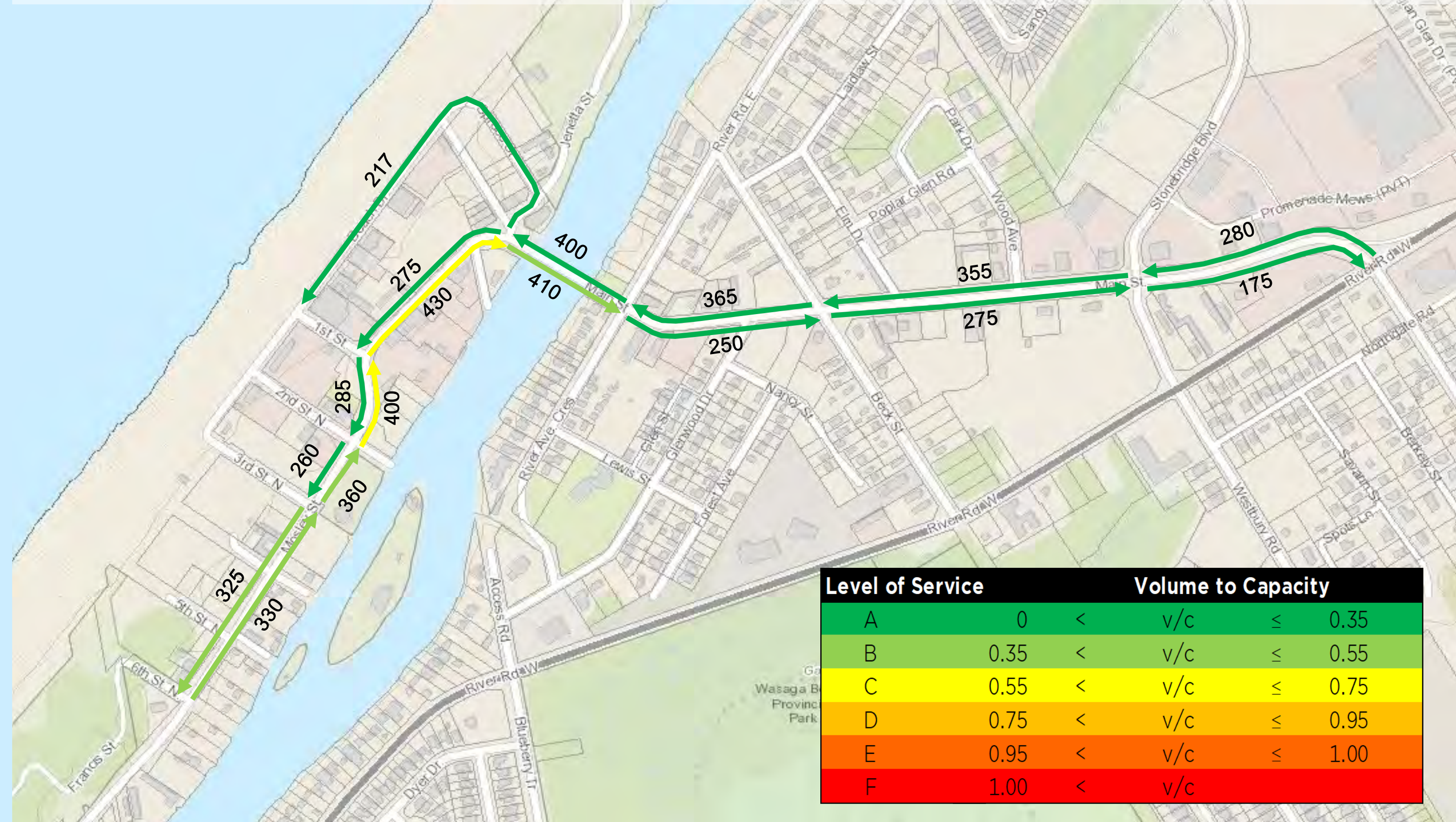
**Beach Drive**  
400 to 500 vphpl

## TRAFFIC OPERATIONS - ROAD SECTIONS

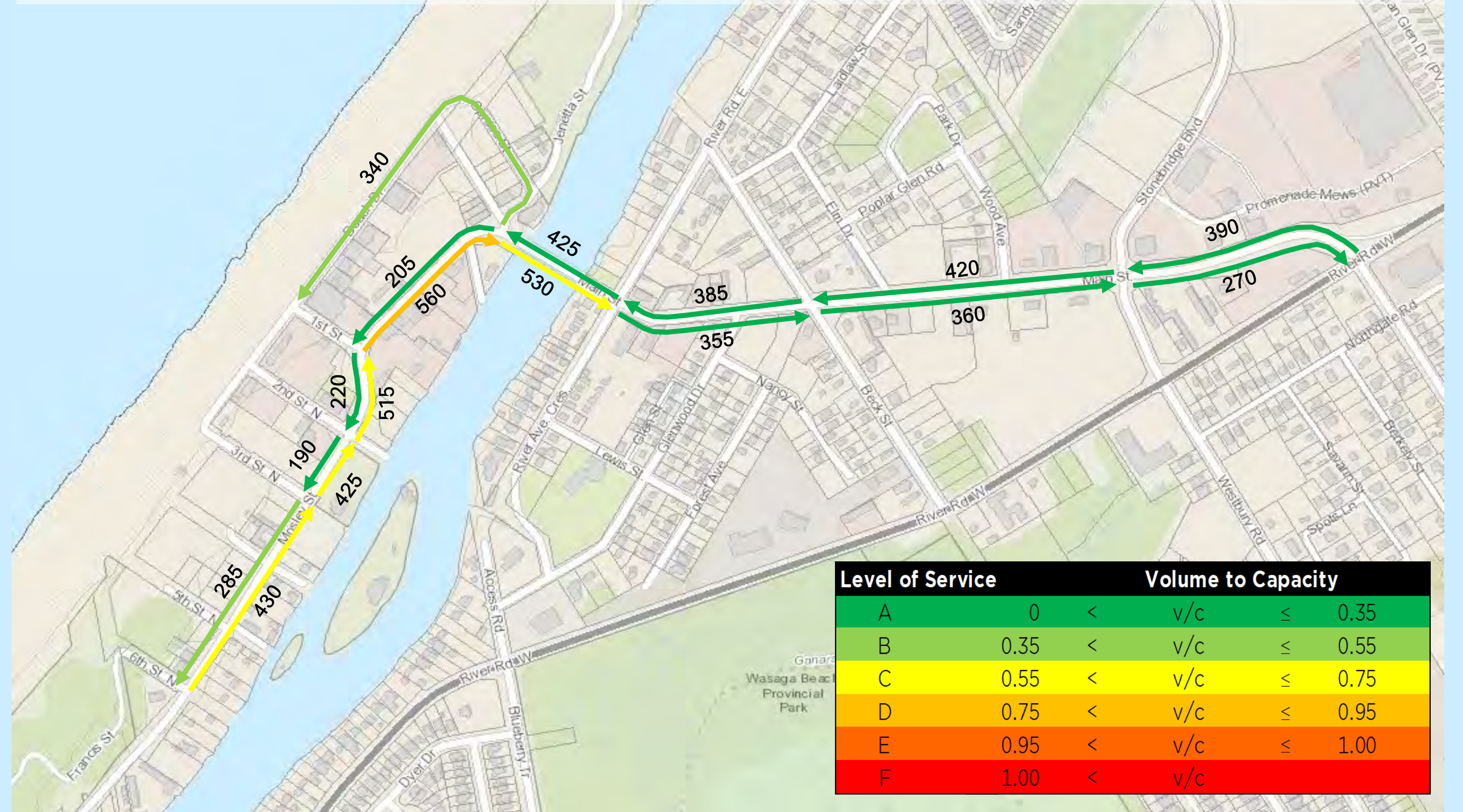
Existing traffic operations have been reviewed in context of the existing traffic volumes and the noted road capacities.

- For each section, a volume to capacity ratio (v/c) ratio has been determined, which is a measure of how much road capacity is being consumed (ie. a v/c ratio of 0.85 indicates that 85% of the available capacity is used).
- The lower the volume to capacity, the better the level of service that the road provides (LOS A is best, LOS F is worst).
- Based on the 2019 traffic volumes, all roads provide acceptable operations under Average PM Peak Hour conditions (LOS C or better). For comparative purposes, the Summer Weekend PM Peak Hour conditions have also been provided.
- In all cases, the existing road system is adequate - no road widenings are required to provide additional lane capacity.

2019 AVERAGE PM PEAK HOUR – volumes & v/c ratio



2019 SUMMER WEEKEND PM PEAK HOUR – volumes & v/c ratio

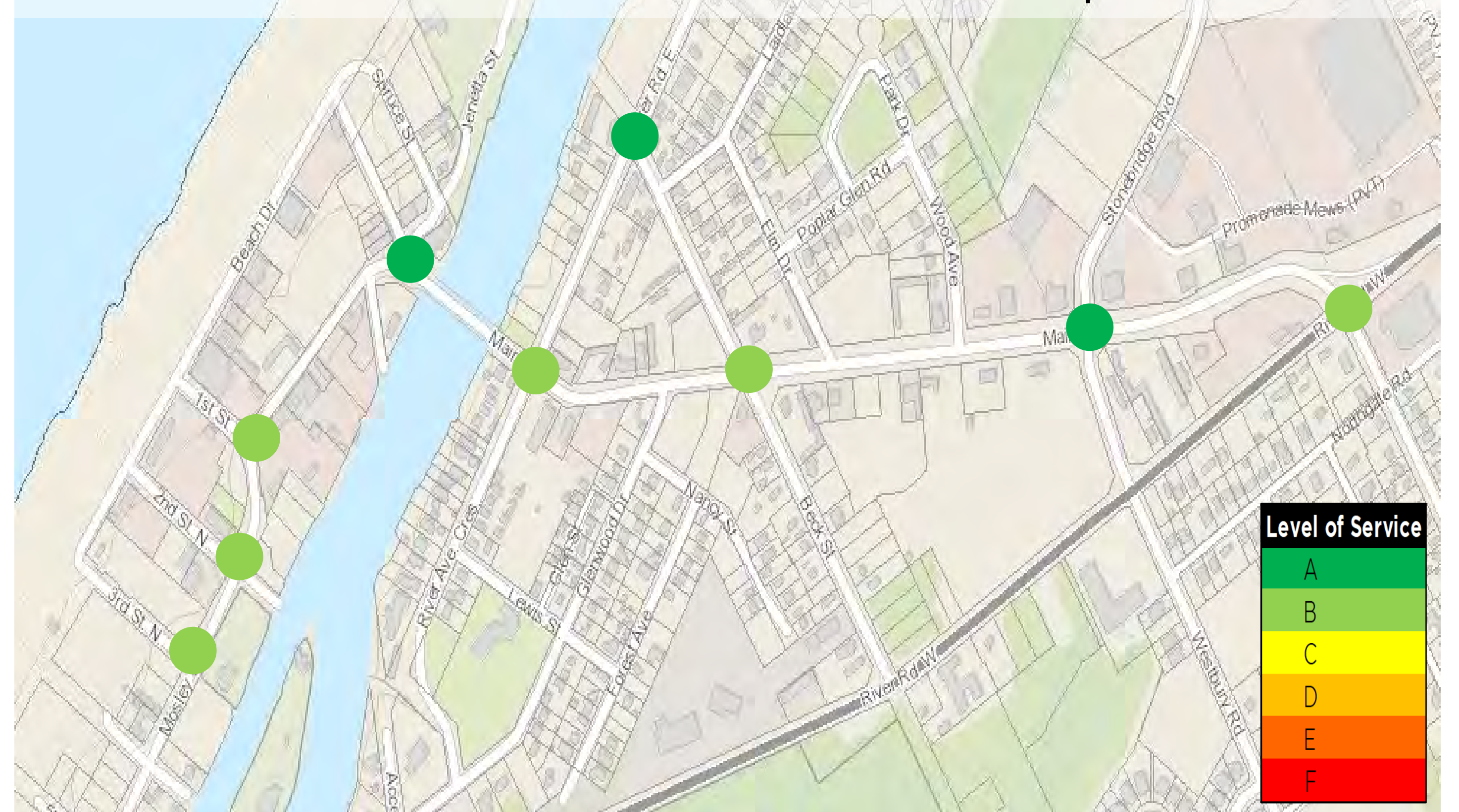


## TRAFFIC OPERATIONS - INTERSECTIONS

Existing traffic operations have also been considered in context of intersection operations.

- Intersection capacity is based on the same criteria as noted above, in addition to the volumes of the individual movements (ie. left turn, through or right turn).
- Under 2019 Average PM Peak Hour conditions, all intersections provide acceptable operations (Level of Service B or better).
- No intersection improvements are therefore necessary.

2019 AVERAGE PM PEAK HOUR – intersection operations



## Main Street and Beach Areas 1 & 2 Improvements EXISTING TRAFFIC OPERATIONS





## FUTURE DEVELOPMENT

To establish future traffic volumes, consideration has been given to the development program provided in the DDMP, with additional input from Town planning staff with respect to residential density.

The following development assumptions have been considered:

BEACH DISTRICT	DOWNTOWN CORE	DOWNTOWN GATEWAY
1000 medium density residential units	700 medium density residential units	270 medium density residential units
13,275m <sup>2</sup> commercial gross floor area	14,000m <sup>2</sup> commercial gross floor area	5,100m <sup>2</sup> commercial gross floor area



## DEVELOPMENT PHASING

**25%**  
by 2026

**50%**  
by 2031

**100%**  
by 2041

## DEVELOPMENT TRAFFIC

Trip estimates for the future development were established using industry standard trip generation data (*ITE Trip Generation Manual, 10<sup>th</sup> Edition*) and assigned to the study area road network

## FUTURE TRAFFIC PROJECTIONS

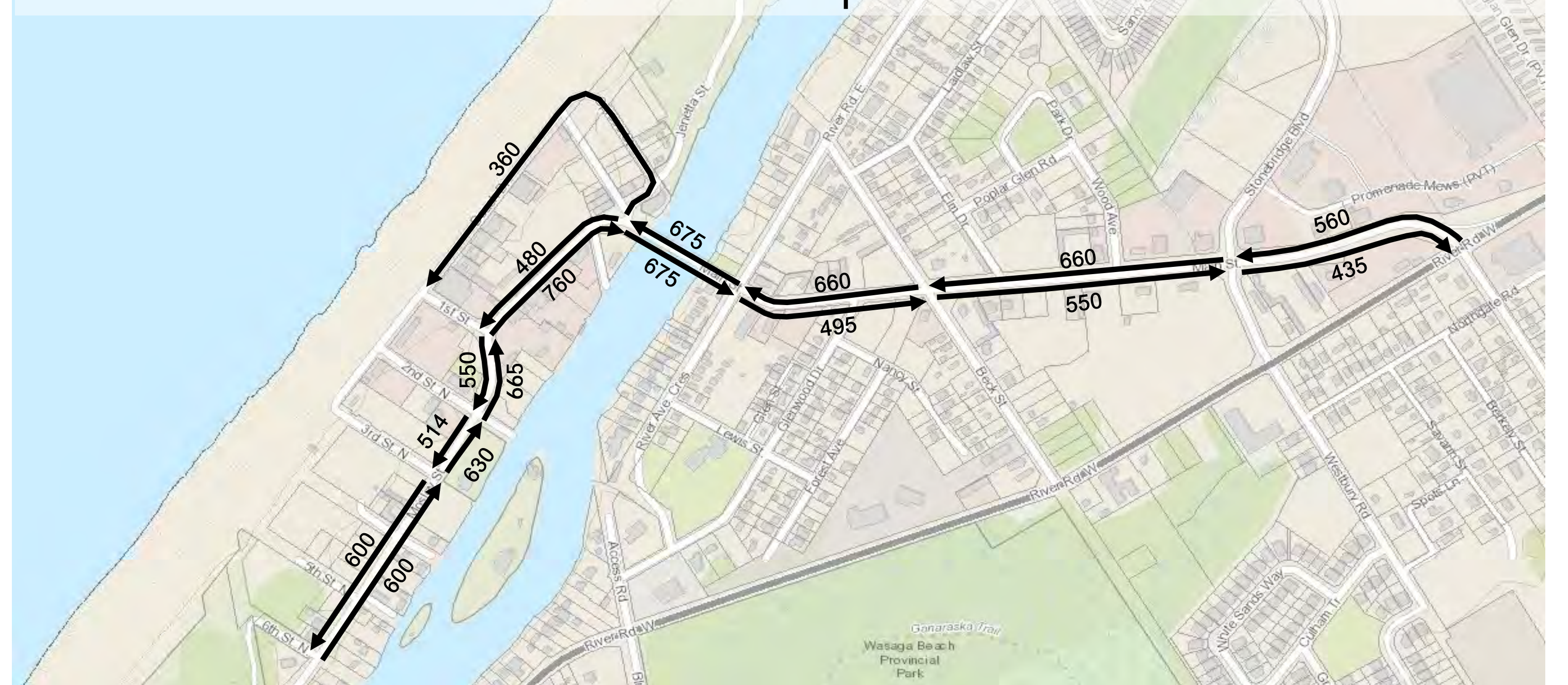
Future traffic projections have been prepared for the Average Day PM Peak Hour for 2026, 2031 and 2041 based on:



2026 PM PEAK HOUR - 25% Development



2031 PM PEAK HOUR - 50% Development



2041 PM PEAK HOUR - 100% Development



## FUTURE LANE REQUIREMENTS

### 2026 & 2031 Horizon Years

- Based on the projected volumes and assumed lane capacities for each road, a single lane per direction will provide sufficient capacity through the 2031 horizon.

### 2041 Horizon Year

- The 2041 traffic projections suggest additional capacity may be required to accommodate the noted volumes.



## Main Street and Beach Areas 1 & 2 Improvements FUTURE VOLUMES & OPERATIONS



# DOWNTOWN VISION

The Town of Wasaga Beach has identified the beachfront and surrounding area, consisting of the Main Street, Mosley Street and Beach Drive corridors, as an integral component of the Town's vision to develop a livable, accessible and sustainable all-season town-centre for the entire community, including existing and future residents and visitors.

In consideration of the existing road and infrastructure conditions, and in context of the requirements to support the Town's vision for a Downtown as identified in the *Downtown Development Master Plan* with respect to traffic volumes (vehicular, cycling and pedestrian) and municipal services, a Problem/Opportunity Statement has been defined.



## PROBLEM / OPPORTUNITY STATEMENT

*That existing traffic and infrastructure needs and deficiencies along the subject lengths of Main Street (from River Road West to Mosley Street), Mosley Street (from Main Street to 6<sup>th</sup> Street) and Beach Drive be addressed in an environmentally sound manner, in consideration of future traffic needs, current Town standards, active transportation opportunities and municipal infrastructure requirements, with the objective of facilitating future growth while providing safe and efficient travel for all road users."*

## PROCESS TO ADDRESS THE PROBLEM / OPPORTUNITY STATEMENT

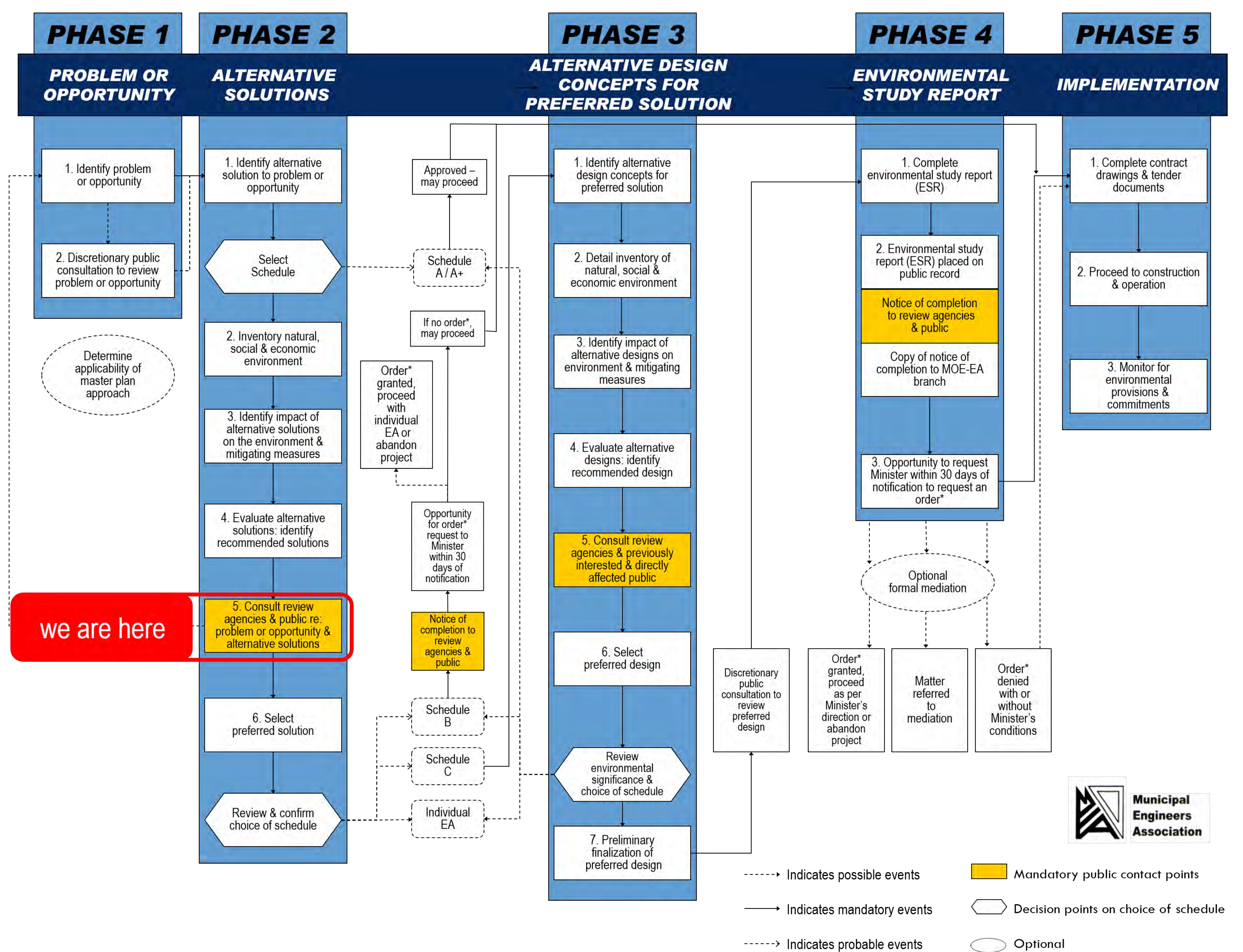
To address the problem/opportunity statement and explore opportunities for improvements to Main St and Beach Areas 1 & 2, a Class Environmental Assessment will be undertaken.

The Class EA schedule is based on the type of project, potential impacts and construction value.

The project will be undertaken as a Schedule C Class EA, with the completion of Phases 1 to 5 (see aside).

Opportunities for public review & input include:

- response to notices (Notice of Commencement, Notice of PICs x2 and Notice of Completion)
- public information centres (PICs x2)
- 30-day review of final report

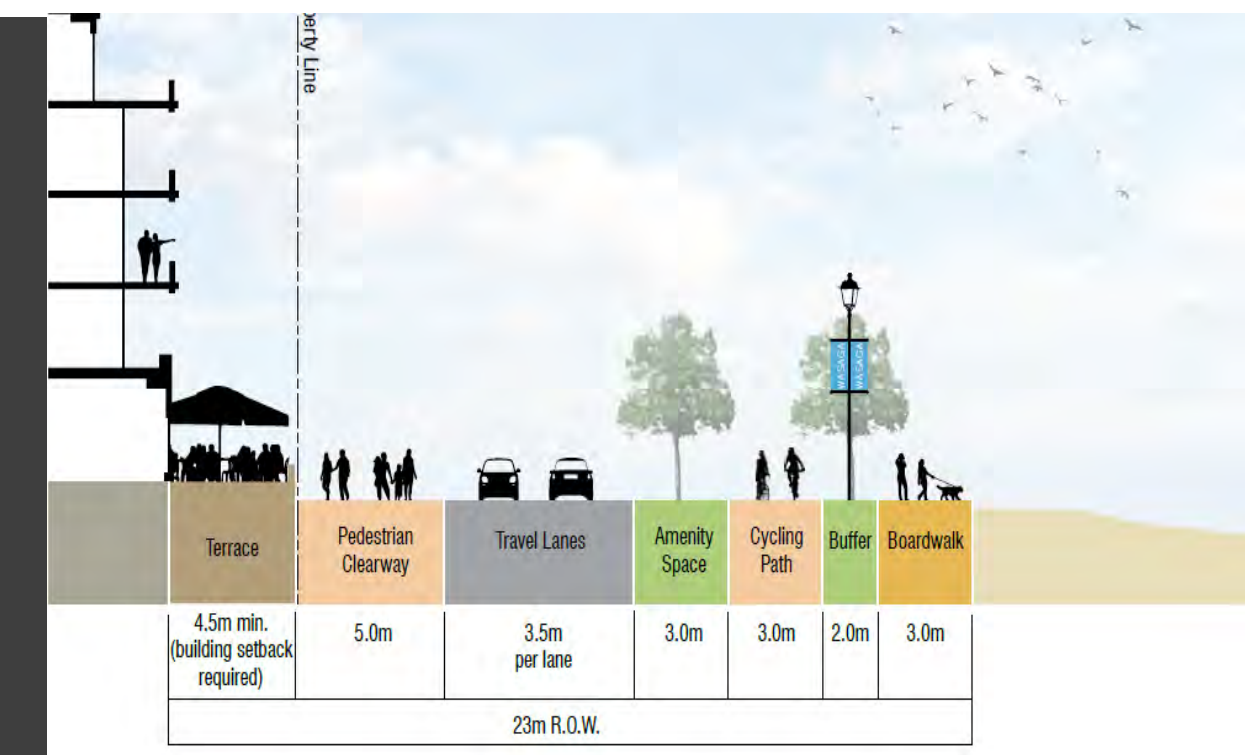


## Main Street and Beach Areas 1 & 2 Improvements PROBLEM IDENTIFICATION



## RIGHT-OF-WAY

What is the available road right-of-way within which the improvements must be assembled?



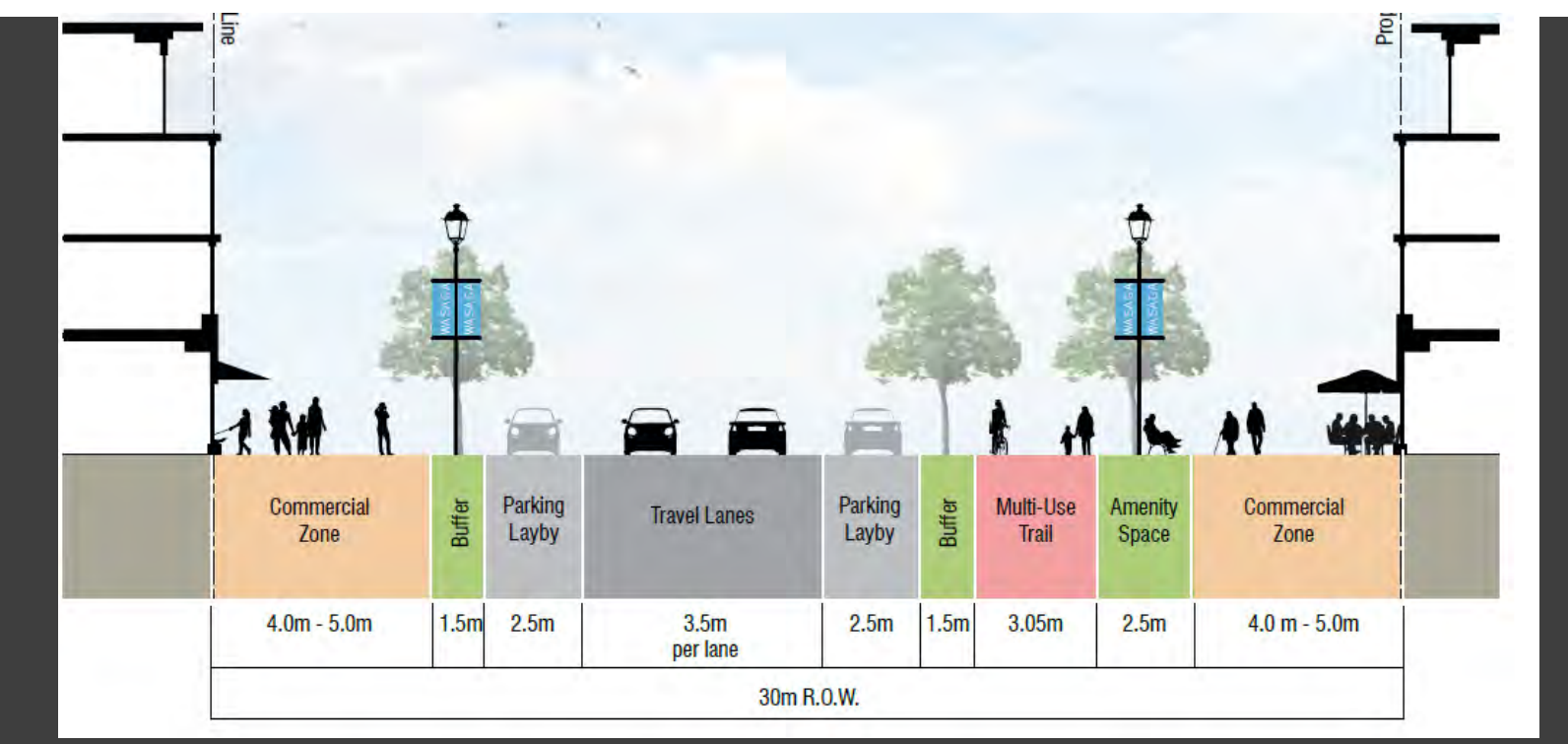
### Beach Drive

- 20 to 26m existing ROW
- 23m proposed as per UDG



### Mosley Street

- 13 to 20m existing ROW
- 23m proposed as per UDG

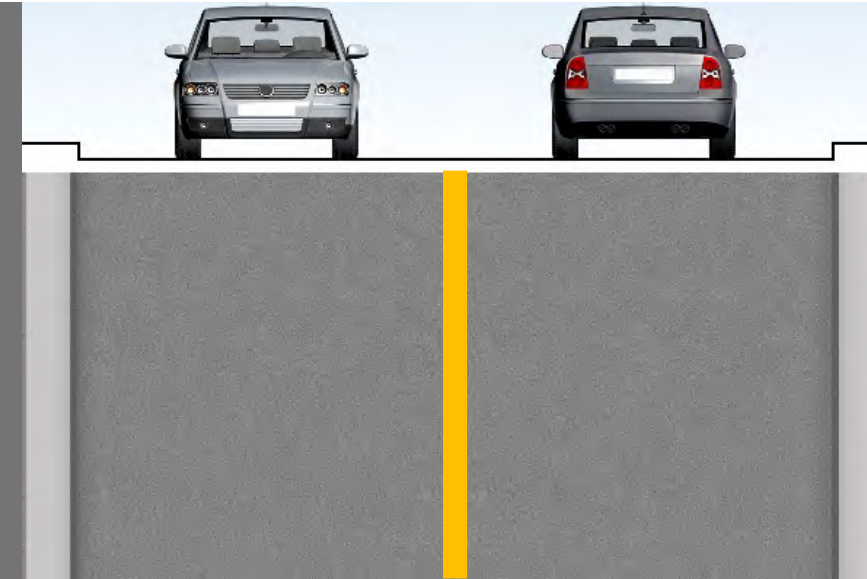


### Main Street

- 20 to 30m existing ROW
- 30m proposed as per UDG

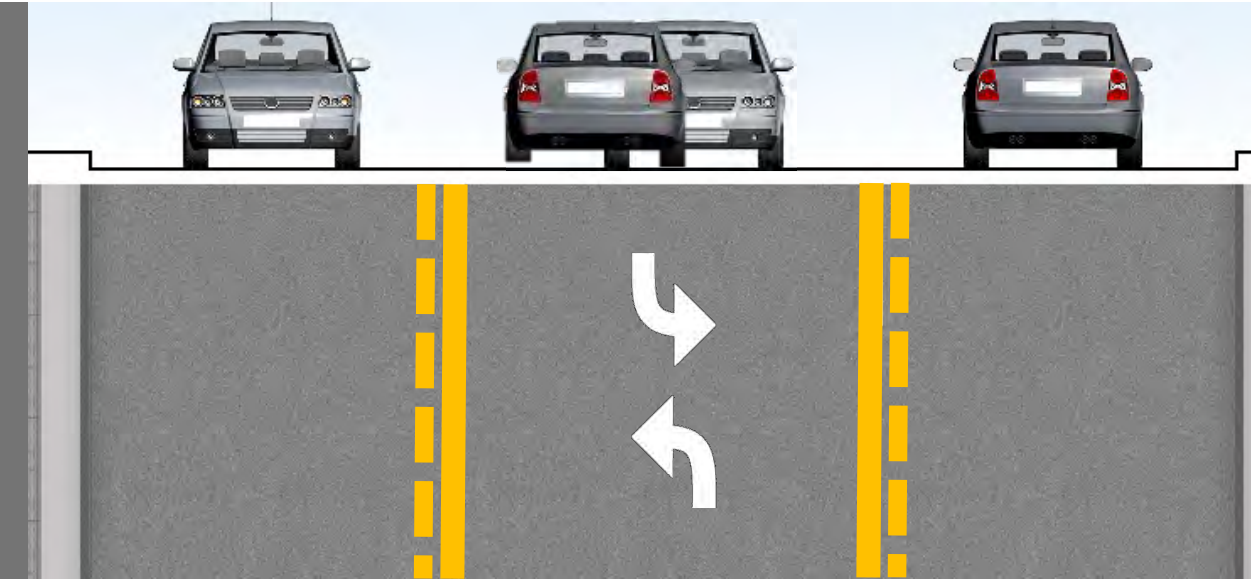
## VEHICLES

What is the most appropriate manner to address more vehicle travel demands?



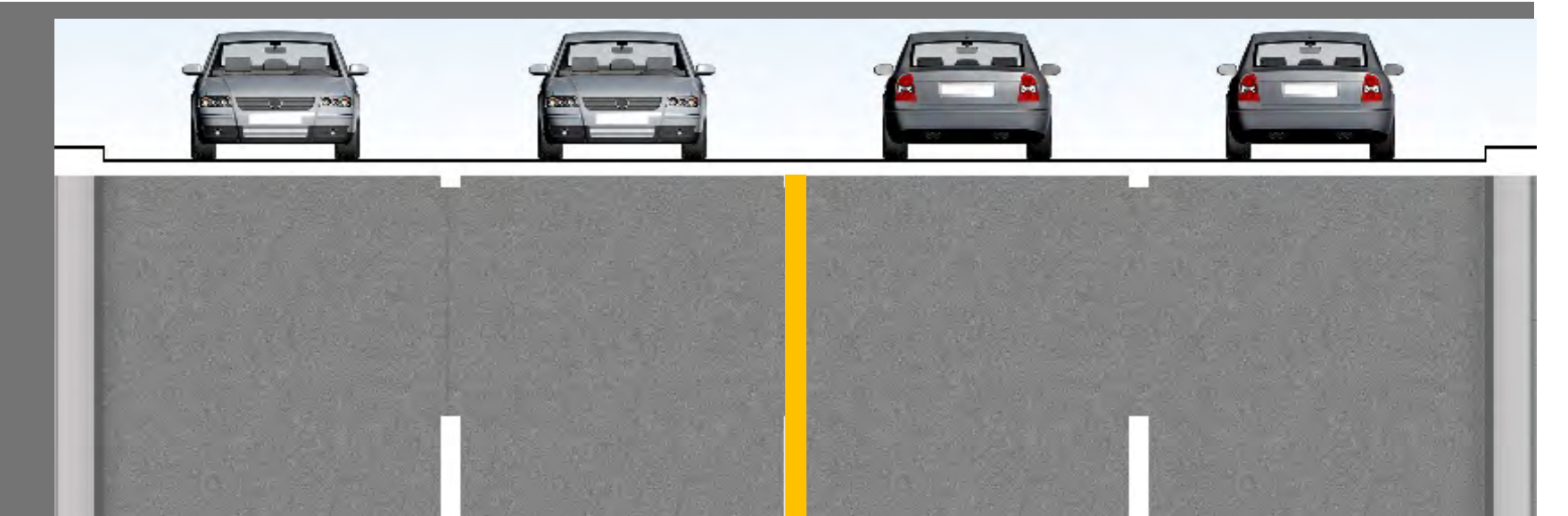
### 2 Lanes

- 3.25 to 3.5m widths
- lowest capacity
- least footprint



### 3 Lanes (2+ TWLTL)

- 3.25 to 3.5m thru widths
- 3.5 to 5.0m centre turn lane
- centre lane aids with left turns and increases capacity



### 4 Lanes

- 3.25 to 3.5m thru widths
- maximum capacity through provision of additional lanes
- maximum footprint

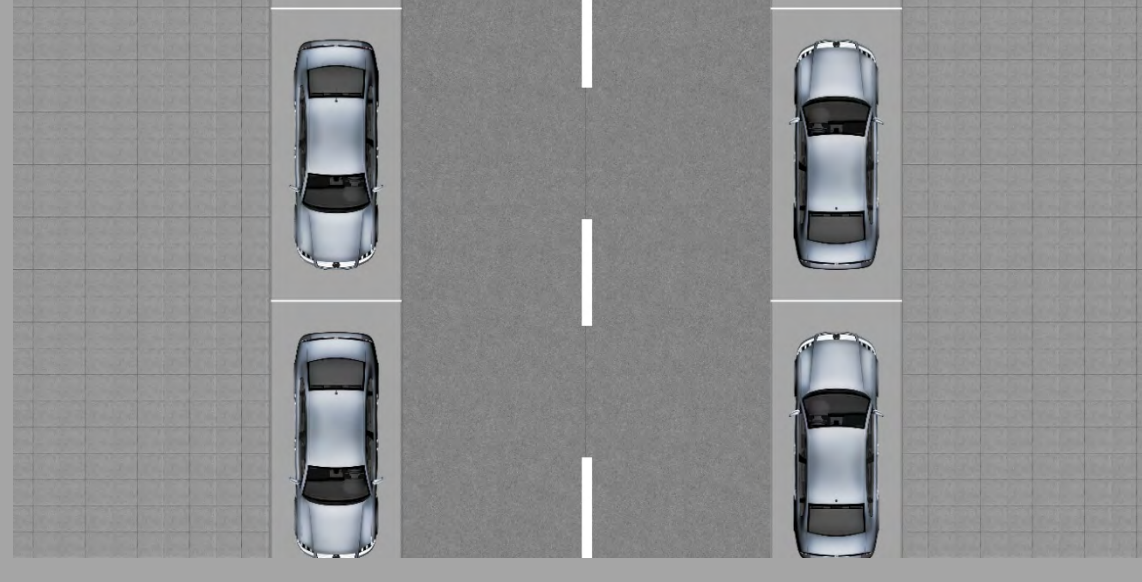
## PARKING

What is the most appropriate manner to accommodate demands for parking?



### No Parking

- must provide parking elsewhere
- impacts to commercial / retail operations



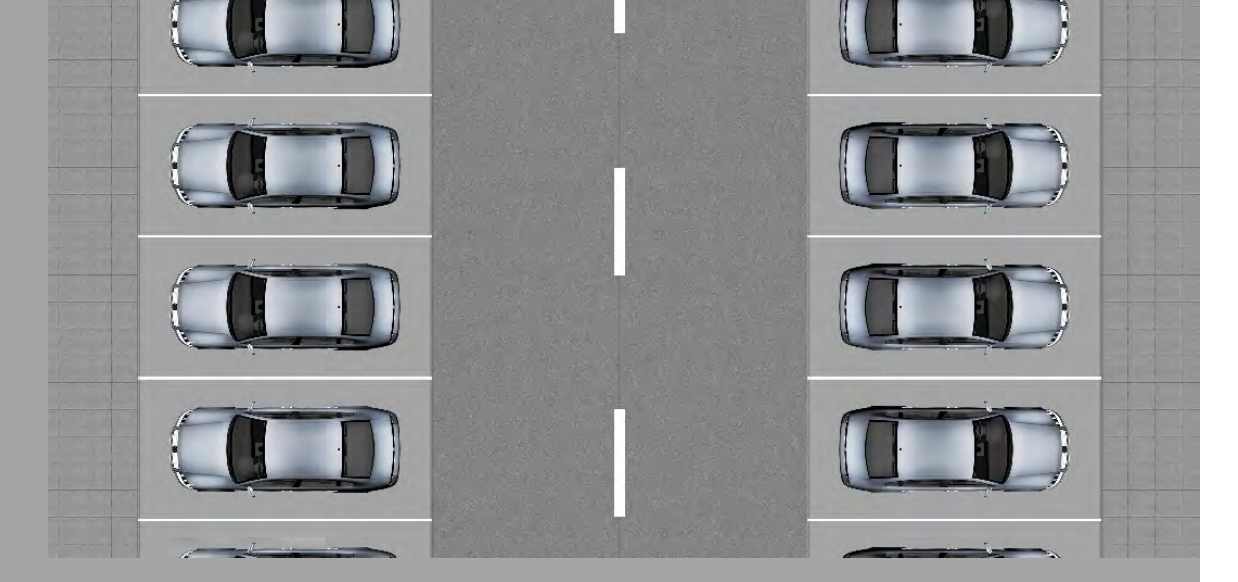
### Parallel Parking

- 2.2 to 2.5m width
- least footprint
- common arrangement
- ease of egress



### 45° Angle Parking

- 5.8m width
- greater footprint
- reverse movement can be difficult



### 90° Angle Parking

- 6.0m width
- greatest footprint
- maximizes parking count
- difficult reverse

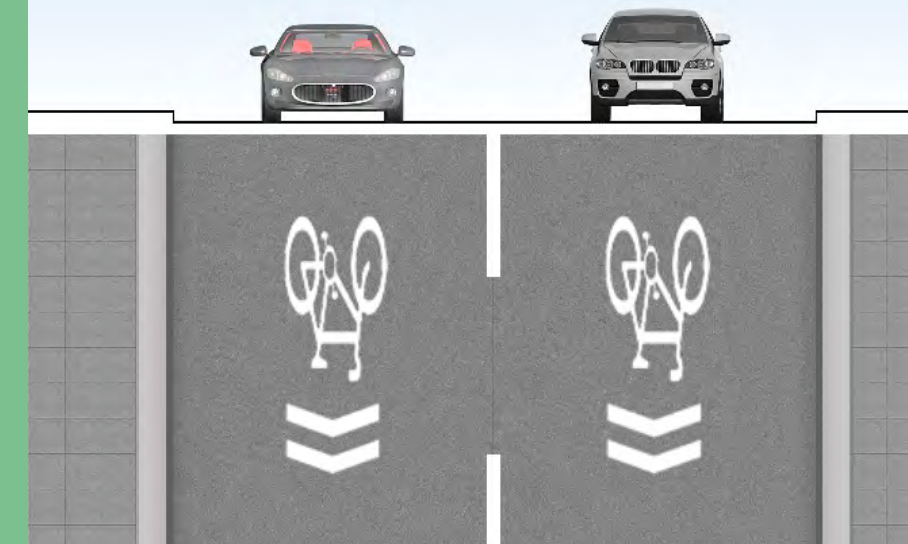
## BICYCLES

What is the most appropriate manner to address bicycle travel demands?



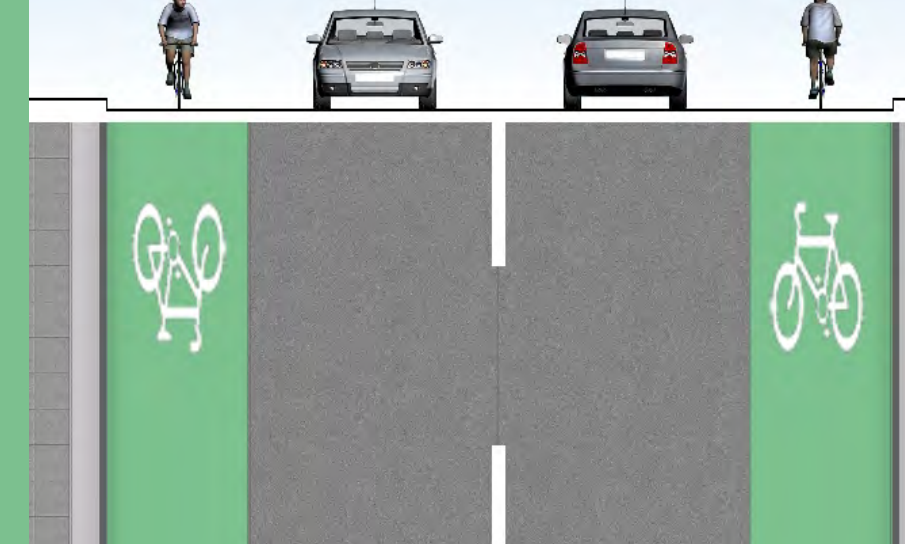
### No Bicycles

- no specific bicycle facilities provided
- cyclists to travel on lanes or sidewalk



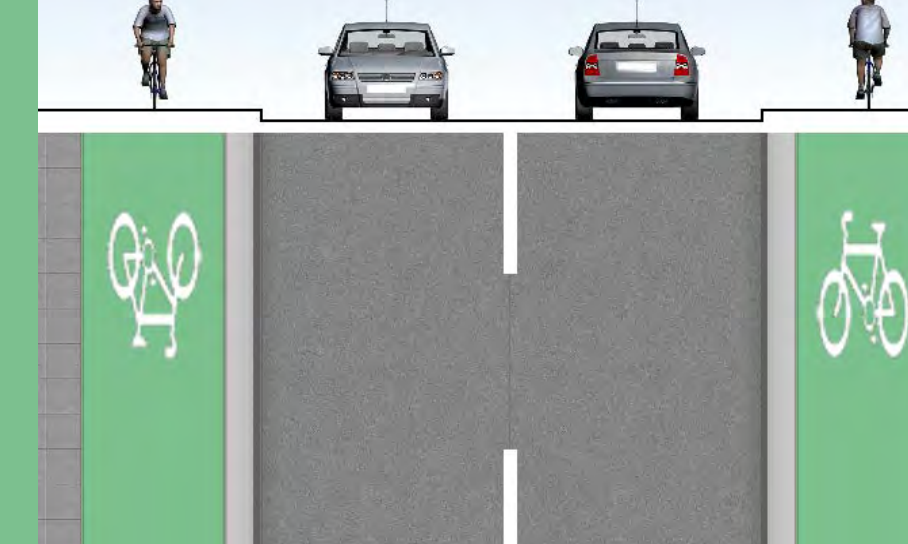
### Shared Lanes

- 4.0 to 4.50m lanes
- no designated area specific to cyclists



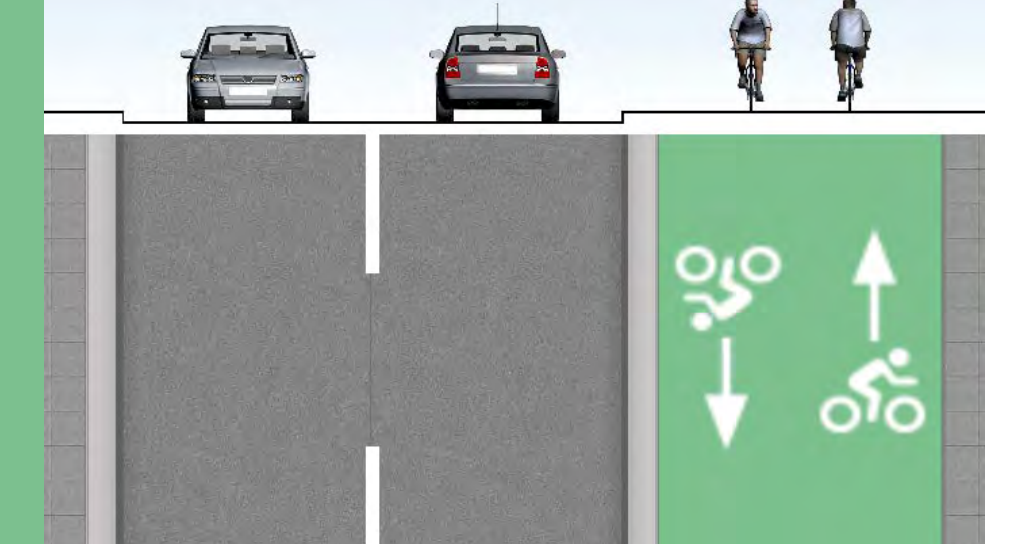
### Bike Lanes

- 1.5 to 2.0m
- 0.5 to 1.0m buffer if adjacent to parking



### Cycle Tracks

- 1.5 to 2.0m
- 1.0m buffer if adjacent to parking

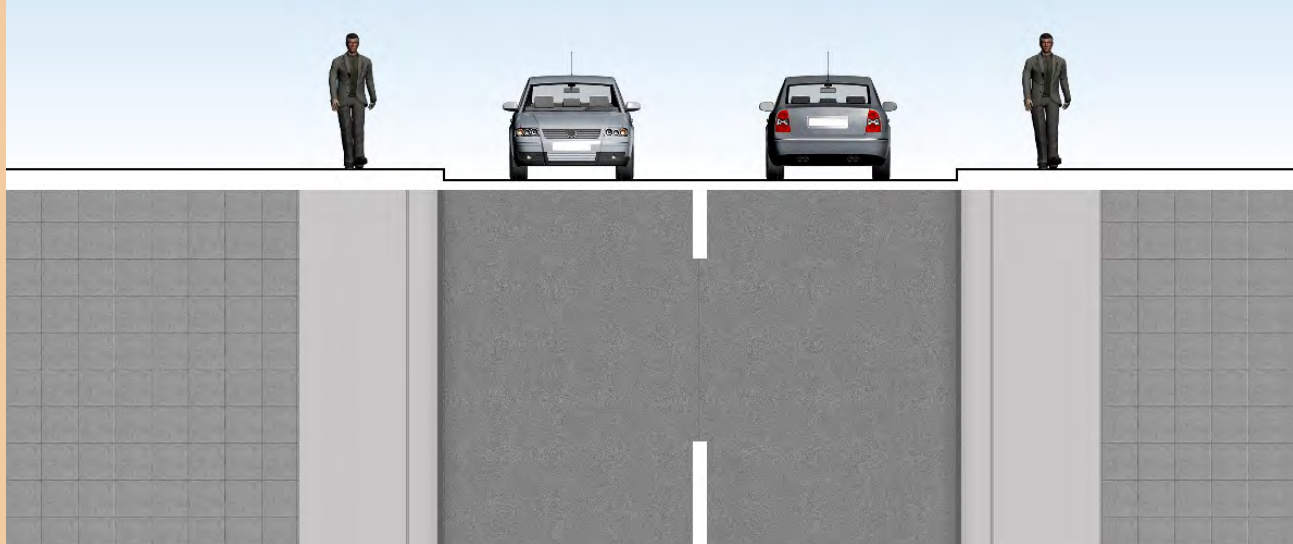


### Cycle Tracks

- 2.0 to 4.0m
- 1.0m buffer if adjacent to parking

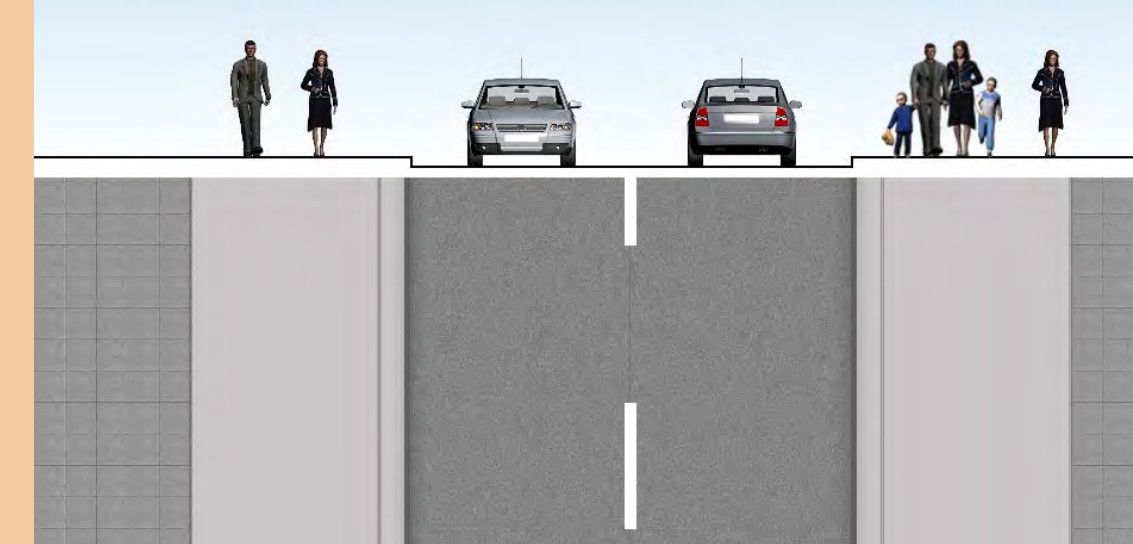
## PEDESTRIANS

What is the most appropriate manner to address pedestrian travel demands?



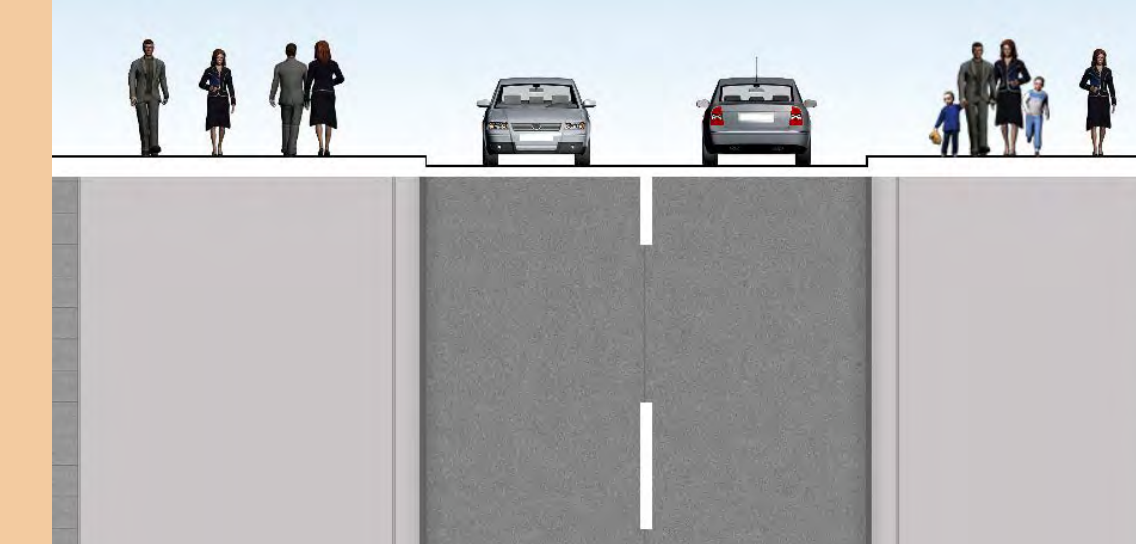
### Standard Sidewalks

- 1.5 to 2.0m sidewalks
- minimum configuration



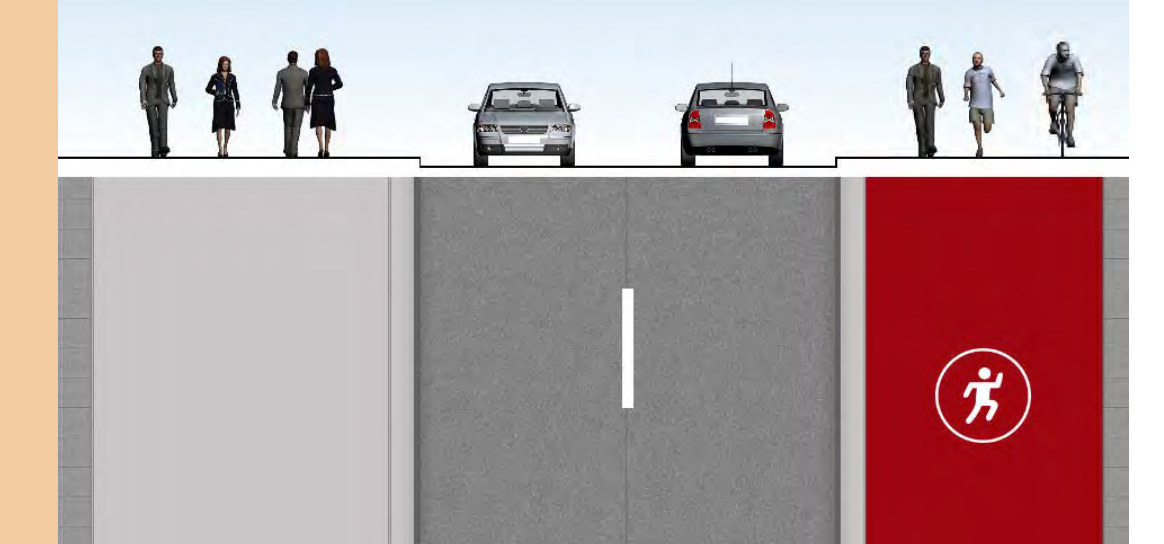
### Wide Sidewalks

- 3.0m sidewalks
- better accommodation of increased volumes and types of users



### Wider Sidewalks

- 4.0 to 5.0m sidewalks
- best accommodation of increased volumes and types of users



### Multi-Use Trails

- 3.0 to 4.0m trails
- for cyclists and peds
- increased potential for conflict

## RETAIL / COMMERCIAL

What opportunities can be provided to support retail / commercial development?

### Commercial Zones

- 3.0 to 5.0m desired to allow for commercial activities
- can include sandwich boards, outdoor sales, etc.

## CLASS EA PHASE 2 - Alternative Solutions

Under the Class EA process (see previous slide), the first step in establishing the ultimate road improvements is to determine the most appropriate solution to the problem.

The focus is therefore on what elements need to be included in the ultimate road cross-section (ie. how many lanes, type of parking, type of bike facility, etc.), with the understanding that the design details will be addressed in the next phase.



# Main Street and Beach Areas 1 & 2 Improvements BASIS OF DESIGN / IMPROVEMENTS



# ALTERNATIVE SOLUTIONS - MAIN STREET

**RIGHT-OF-WAY**

- 30m as proposed in the UDM
- 20 to 30m existing (additional ROW will be required)

**VEHICLES**

- consider 2 lanes
- consider centre turn lane to accommodate left turns and increase capacity

**PARKING**

- on-street parallel parking given need to service abutting retail/commercial

**BICYCLES**

- desire to provide dedicated bike facilities
- separate from vehicles & pedestrians

**PEDESTRIANS COMMERCIAL**

- combine pedestrian & commercial zone
- maximize available space

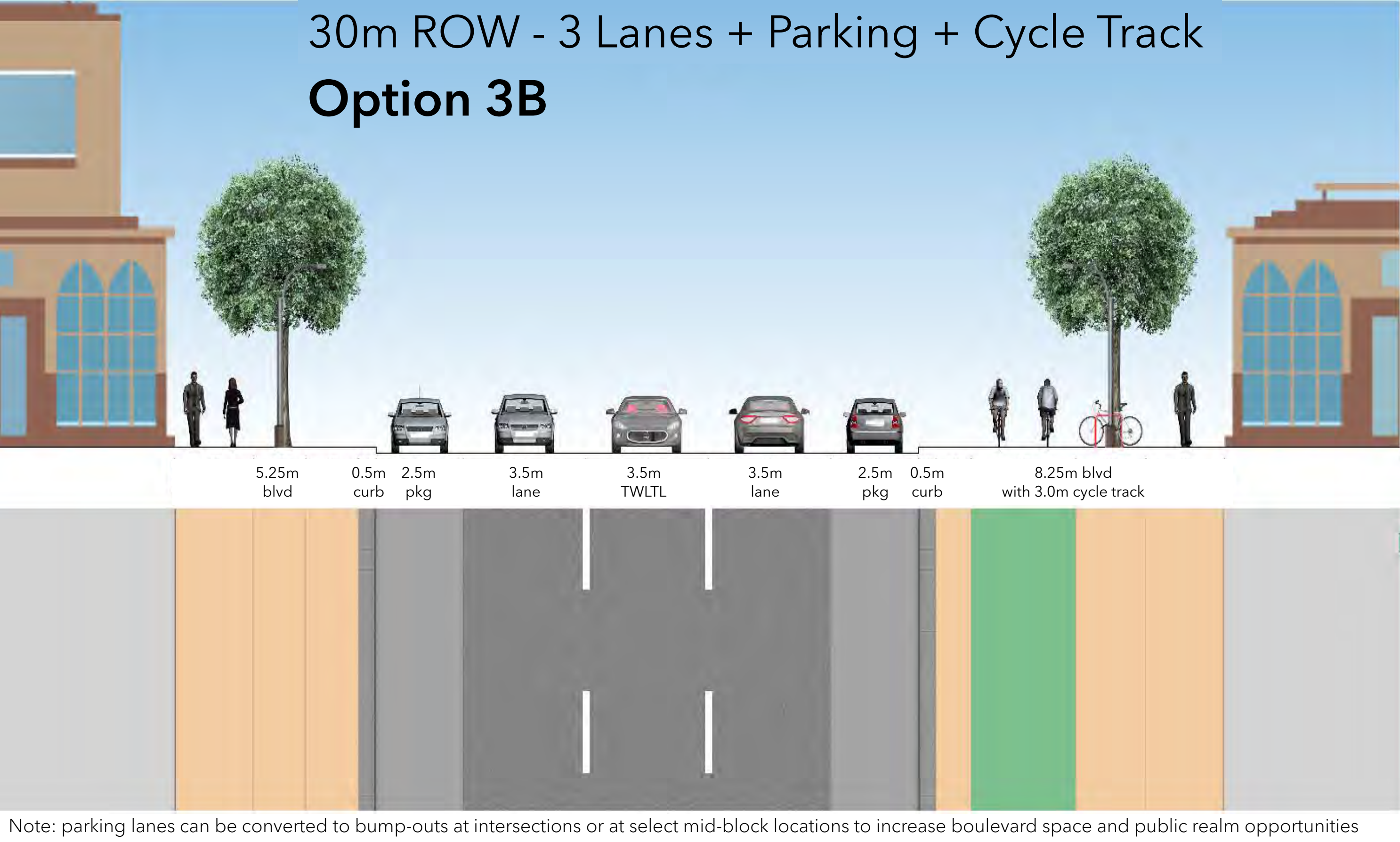
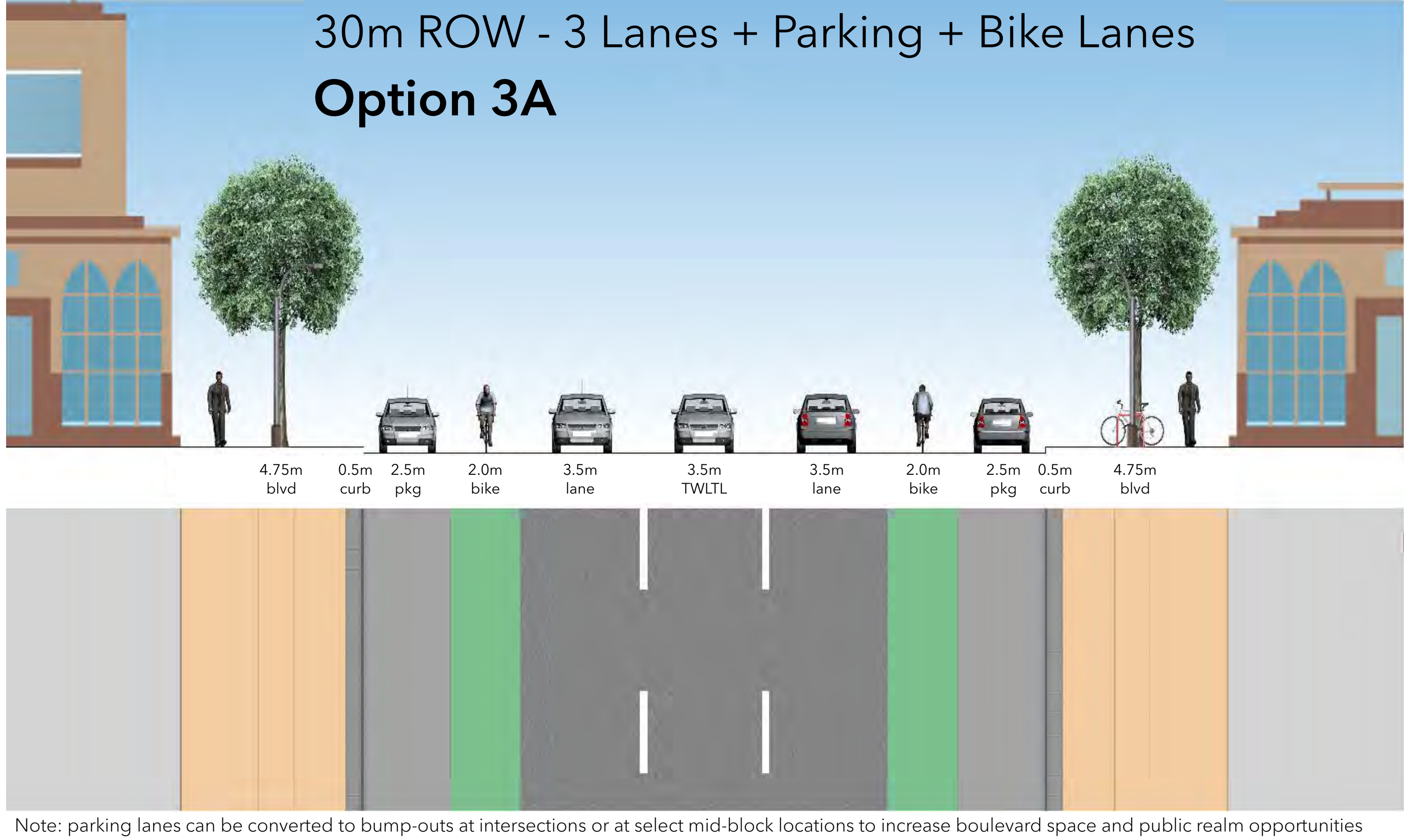
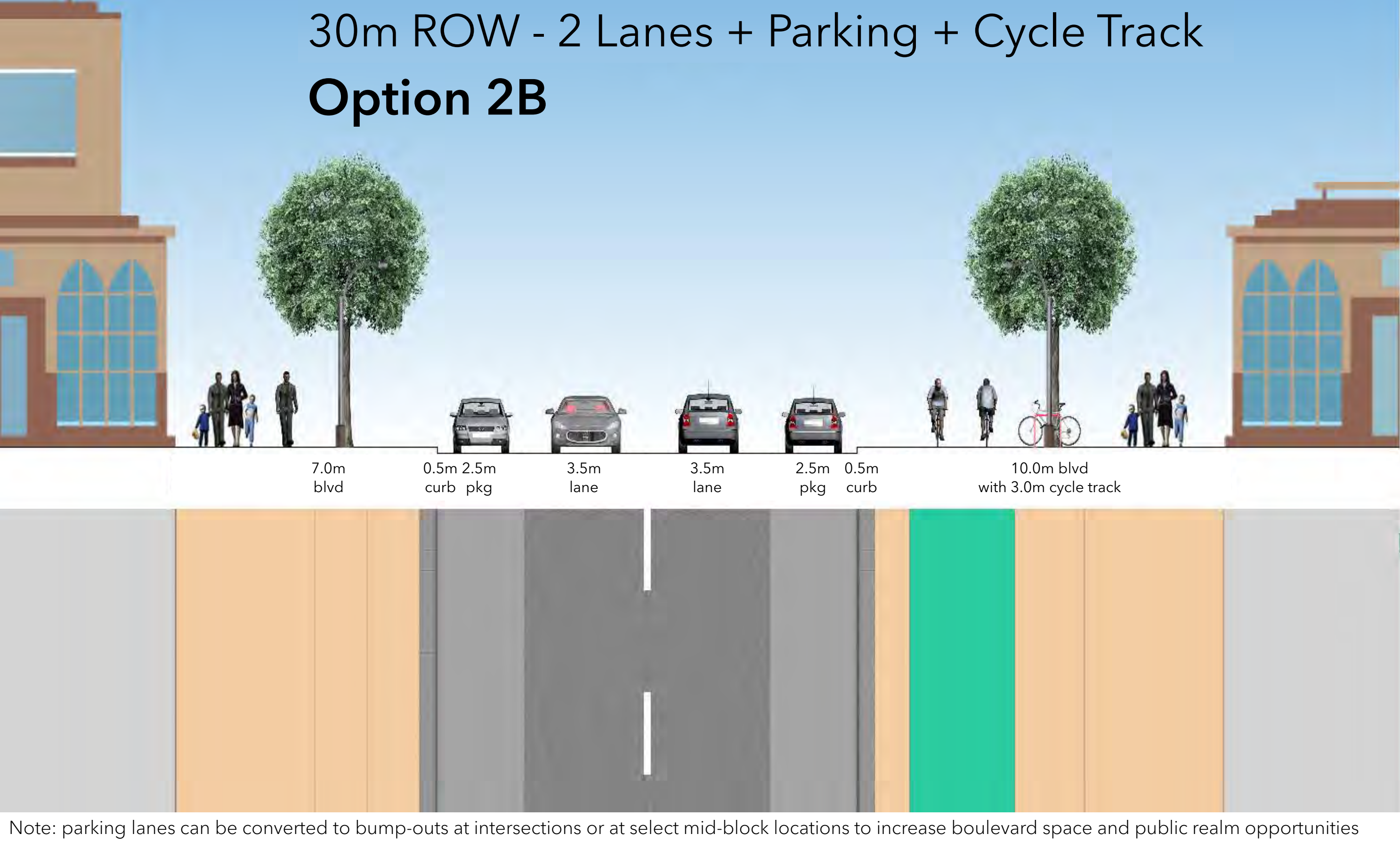
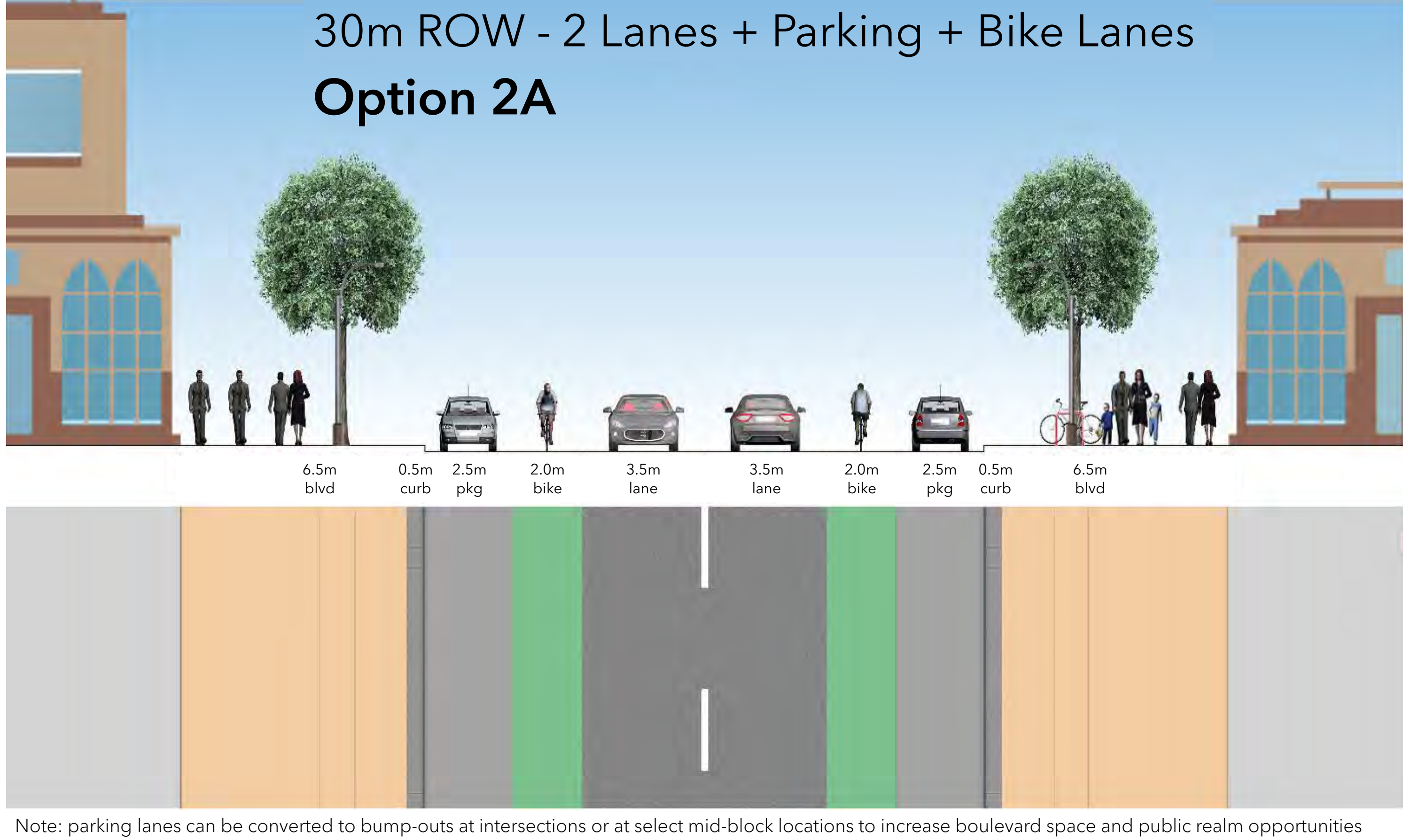
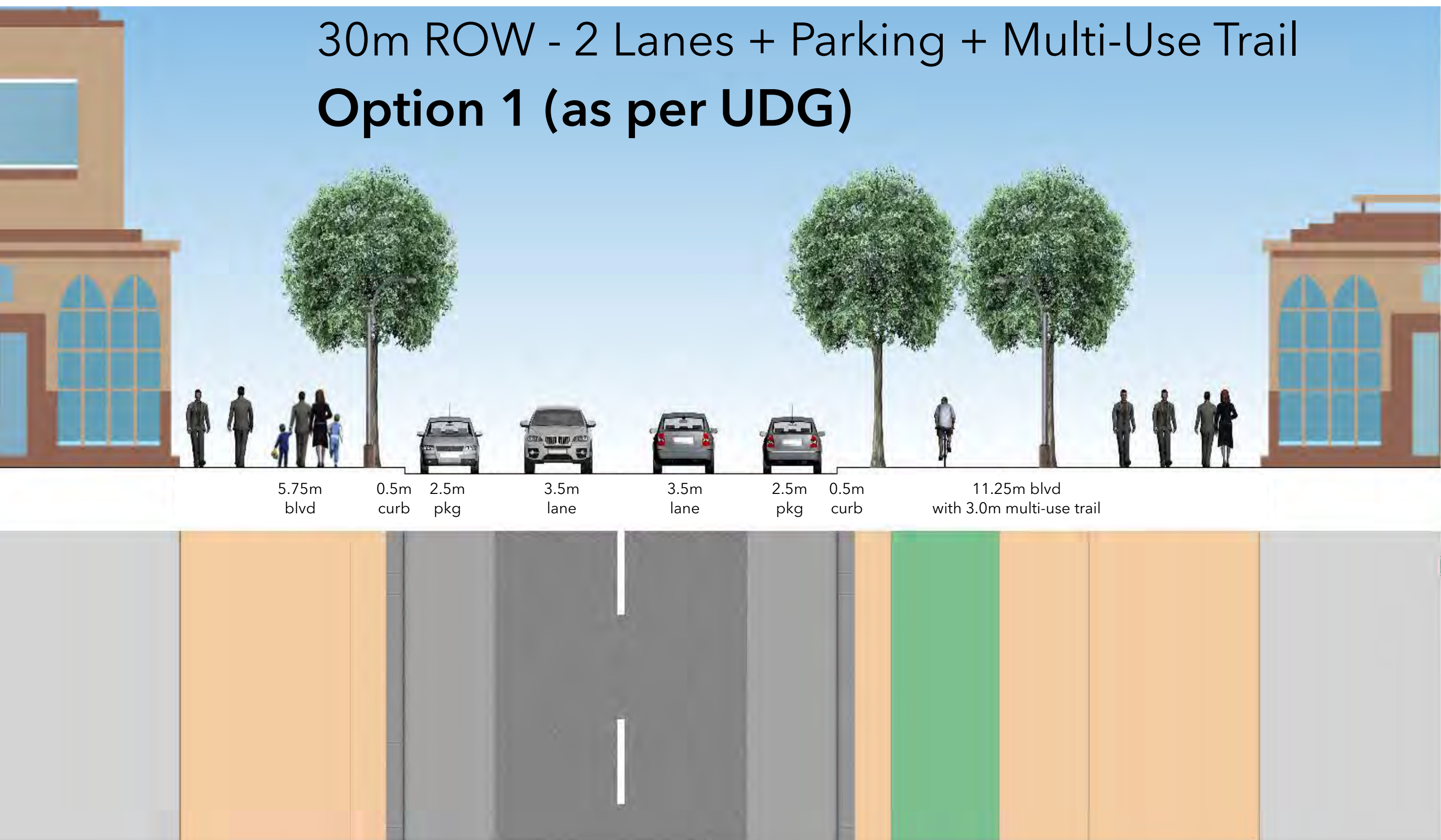
**Main Street - Alternative Solutions**

These solutions are intended to illustrate the desired elements within the ultimate Main Street cross-section and the overall relationship of each.

The configuration and composition of the boulevards (which are to include buffer space, amenity zones, pedestrian through zones and retail/commercial zones) are for illustration purposes only.

The next phase of the study will advance the Preferred Solution for Main Street and develop Alternative Design Concepts for it, with greater details as to dimensions, arrangements, landscape and streetscape, materials, etc.

What is presented here are only preliminary representations.



## Main Street and Beach Areas 1 & 2 Improvements MAIN STREET



# ASSESSMENT OF ALTERNATIVE SOLUTIONS - MAIN STREET

Evaluation Criteria	How Criteria is Being Assessed	Option 1	Option 2A	Option 2B	Option 3A	Option 3B	
Transportation	Vehicles	Ability to accommodate future traffic volumes	▪ Lower capacity as compared to 3-lane options	× Lowest capacity due to 2-lane profile & on-road bike lanes	▪ Lower options capacity as compared to 3-lane	▪ Greater capacity as compared to 2-lane options	✓ Greatest capacity due to 3-lane profile & separated cycle track
	Parking	Ability to service abutting retail/commercial	✓ On-street parallel parking provided	✓ On-street parallel parking provided	✓ On-street parallel parking provided	✓ On-street parallel parking provided	✓ On-street parallel parking provided
	Cyclists	Cycling operation and safety	▪ Better operations/ safety as compared to on-street bike lanes ▪ Potential conflict with other users (i.e. pedestrians) on multi-use trail	▪ Good operations/safety as compared to no facilities	✓ Best operations/safety given separated and dedicated cycle track	▪ Good operations/safety as compared to no facilities	✓ Best operations/safety given separated and dedicated cycle track
	Pedestrians	Pedestrian operation and safety along study corridor	✓ Wider sidewalks provide best accommodation for increased pedestrian volumes ▪ Increased potential for conflict with cyclists on multi-use trail	✓ Wider sidewalks provide best accommodation for increased pedestrian volumes	✓ Wider sidewalks provide best accommodation for increased pedestrian volumes	✓ Wider sidewalks provide best accommodation for increased pedestrian volumes	✓ Wider sidewalks provide best accommodation for increased pedestrian volumes
	Promote AT	Likelihood to promote and foster Active Transportation use	▪ Better potential to promote Active Transportation	▪ Good potential to promote Active Transportation	✓ Best potential to promote Active Transportation	▪ Good potential to promote Active Transportation	✓ Best potential to promote Active Transportation
Natural Environment	Fisheries / Aquatic Impacts	Impact to fish habitat and other aquatic features	▪ Impacts to natural environment to be similar for all alternatives				
	Wildlife / Terrestrial Impacts	Impact to wildlife species	▪ Impacts to natural environment to be similar for all alternatives				
	Vegetation Impacts	Impact to vegetation communities on adjacent properties	▪ Impacts to natural environment to be similar for all alternatives				
Social Environment	Property Impacts	Impacts to property based on widening of road platform and/or ROW	▪ No impact to adjacent properties ▪ 30m ROW consistent for all options				
	Construction Impacts	Future impacts to adjacent properties	▪ Impacts similar across all options ▪ Minor, short-term, impacts during construction				
Cultural Heritage	Archaeological & Heritage Impacts	Impacts to cultural and heritage features	▪ Impacts similar across all options ▪ No anticipated archaeological or cultural/heritage impacts as the work will be largely within the existing right-of-way or abutting lands which have likely been previously disturbed				
Economic Environment	Construction Costs	Costs to construct individual options	▪ Greater cost to construct as compared to other 2-lane options	✓ Lowest cost to construct	✓ Lowest cost to construct	× Greatest cost to construct	× Greatest cost to construct
	Maintenance Costs	Future maintenance requirements	▪ Lower cost to maintain	▪ Low cost to maintain	✓ Lowest cost to maintain	× Greatest cost to maintain	▪ Greater cost to maintain
	Land Acquisition Costs	Total land acquisition costs	▪ Land acquisition costs similar for all options (30m ROW)				
	Economic Opportunities	Retail & Commercial Enhancements	✓ Greatest opportunity for commercial engagement with public due to wider boulevards (comparable to Option 2B)	▪ Good opportunity for commercial engagement with public due to wide boulevards	✓ Greatest opportunity for commercial engagement with public due to wider boulevards (comparable to Option 1)	× Least opportunity for commercial engagement with public due	▪ Good opportunity for commercial engagement with public due to wider boulevards



## Main Street and Beach Areas 1 & 2 Improvements MAIN STREET



# ALTERNATIVE SOLUTIONS - MOSLEY STREET

**RIGHT-OF-WAY**

- 23m as proposed in the UDM
- 13 to 20m existing (additional ROW will be required)

**VEHICLES**

- consider 2 lanes
- consider centre turn lane to accommodate left turns and increase capacity

**PARKING**

- consider on-street parallel parking
- municipal off-street parking is expected
- recognize limited right-of-way

**BICYCLES**

- consider bicycle facilities
- recognize limited right-of-way
- use Shore Lane Trail system & Beach Drive also

**PEDESTRIANS COMMERCIAL**

- combine pedestrian & commercial zone
- maximize available space

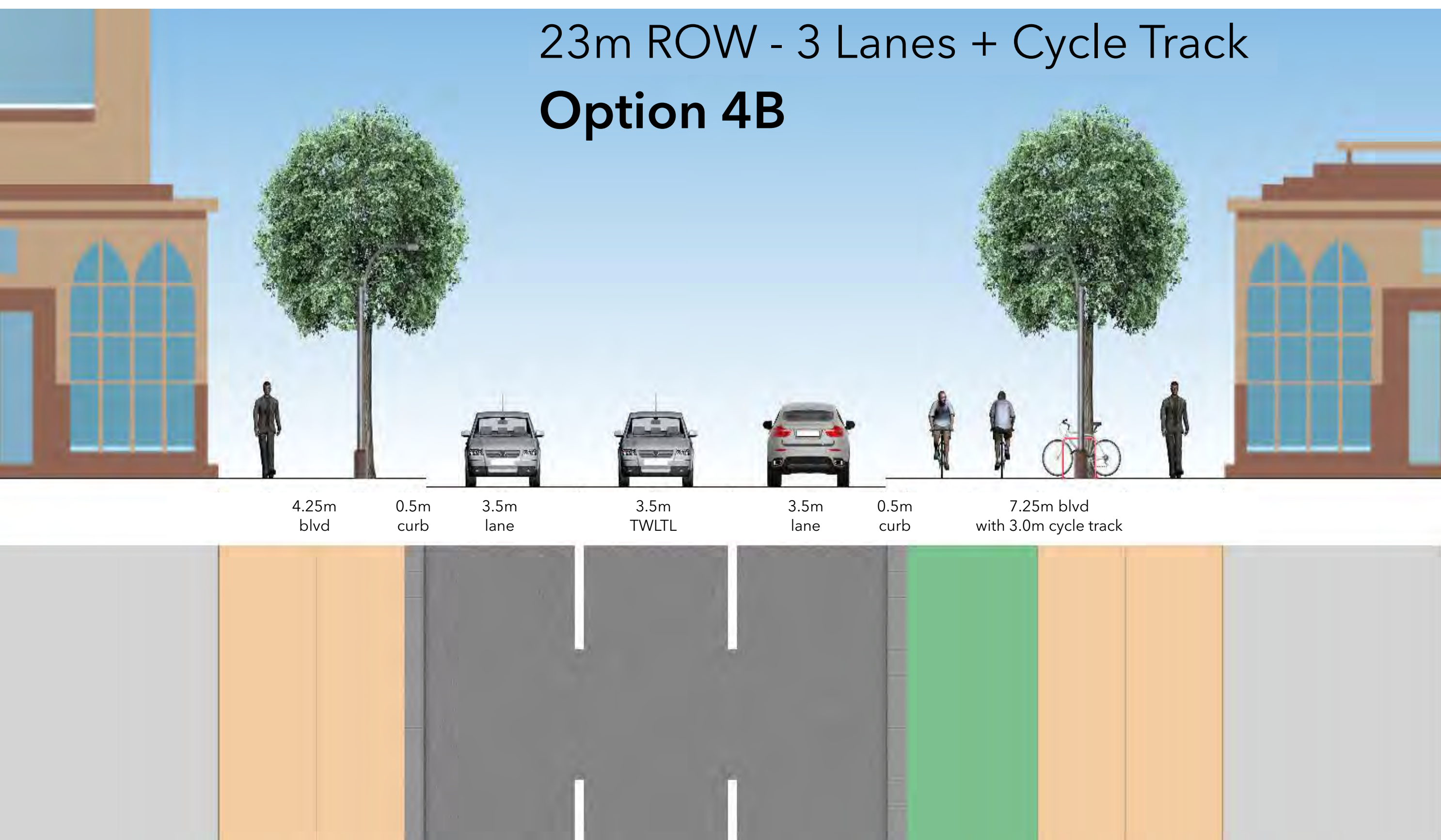
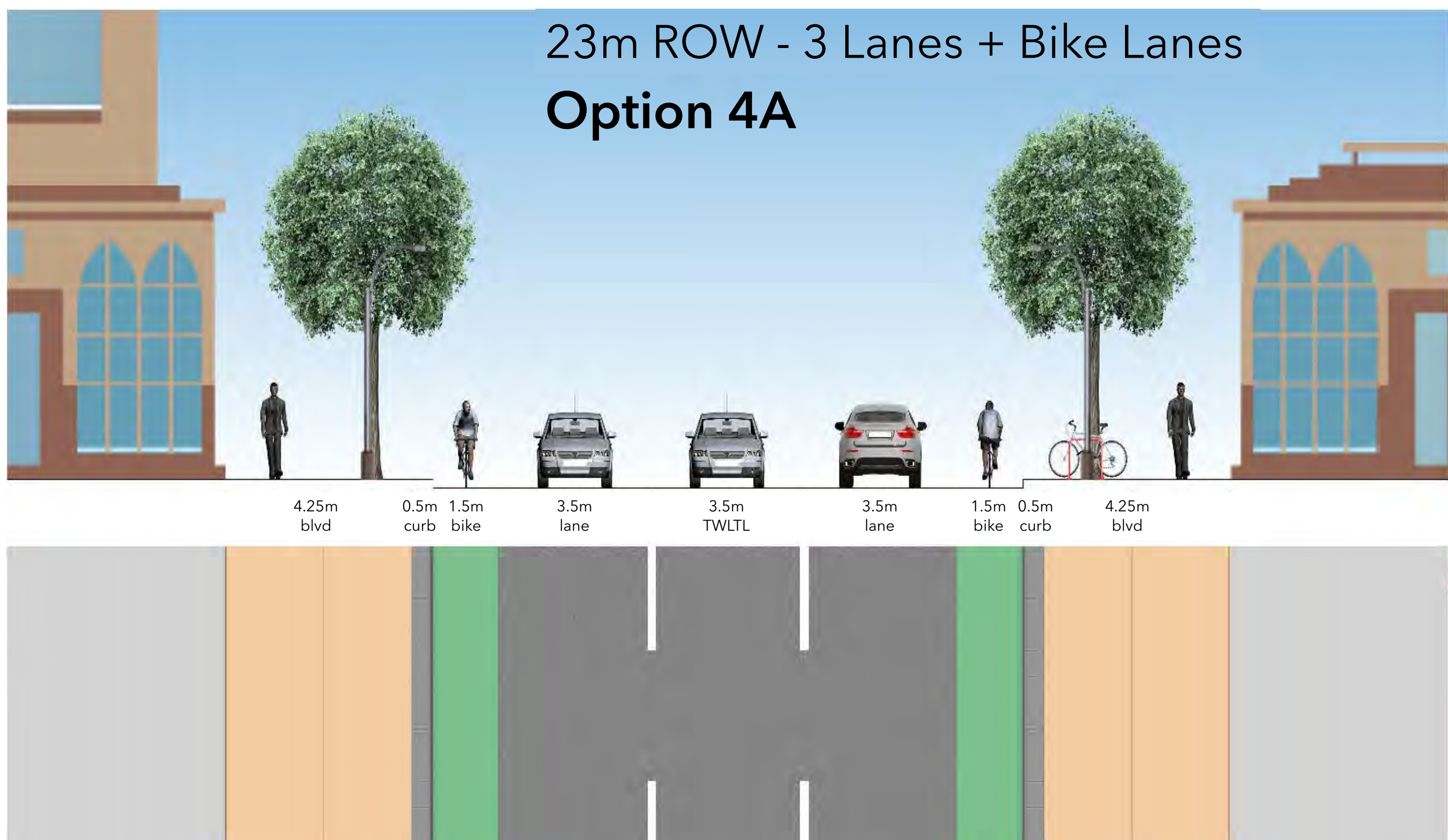
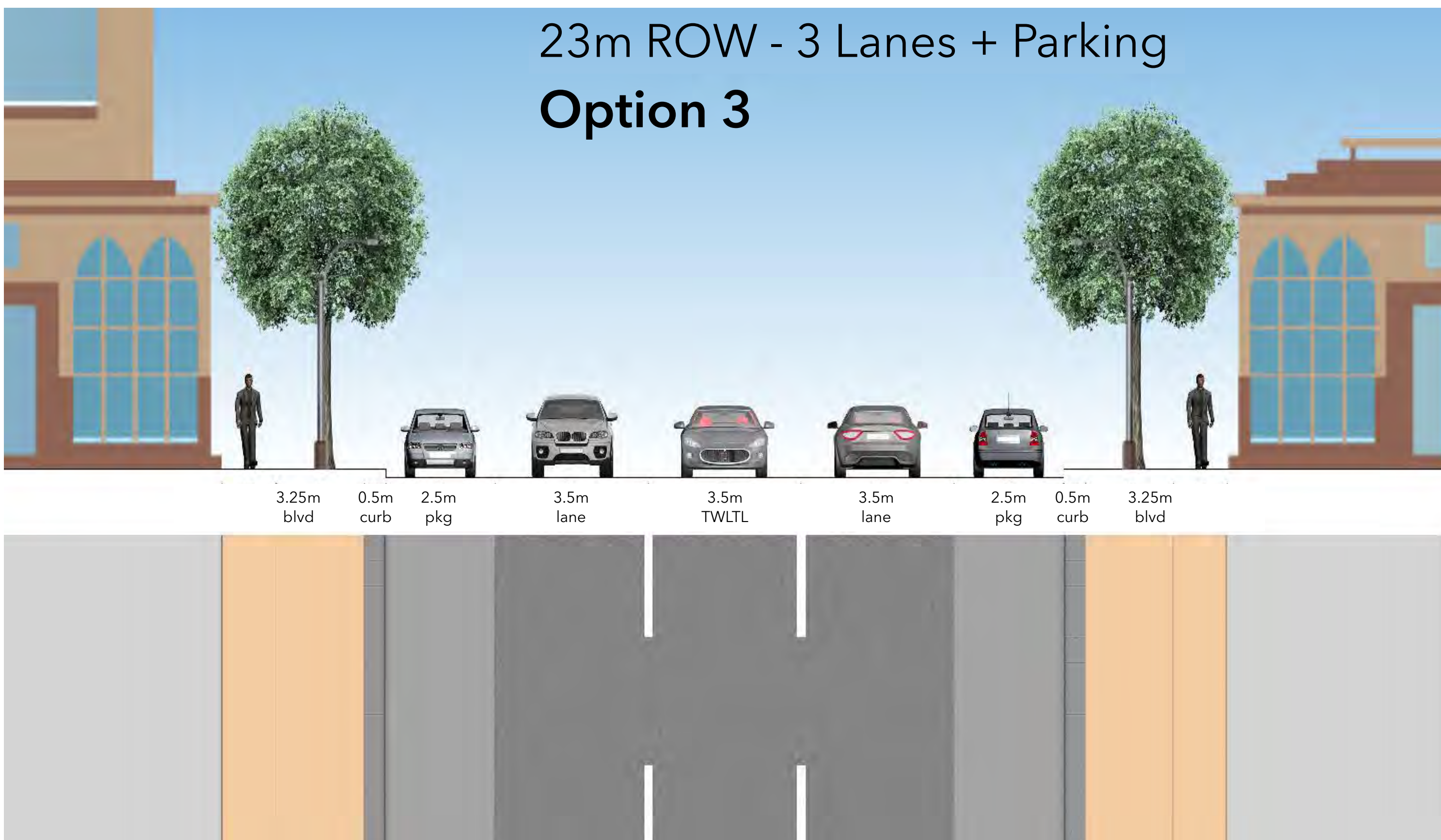
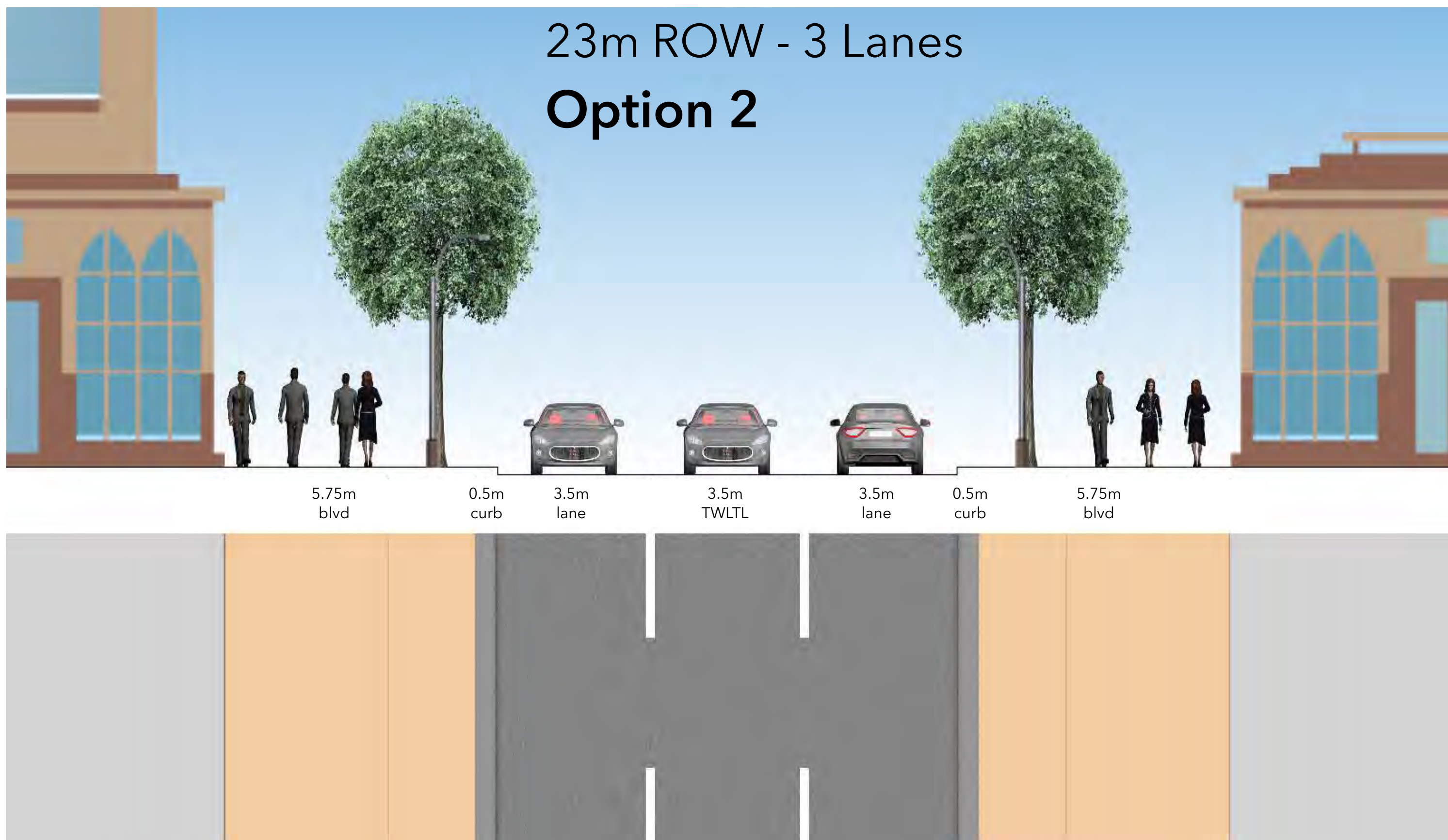
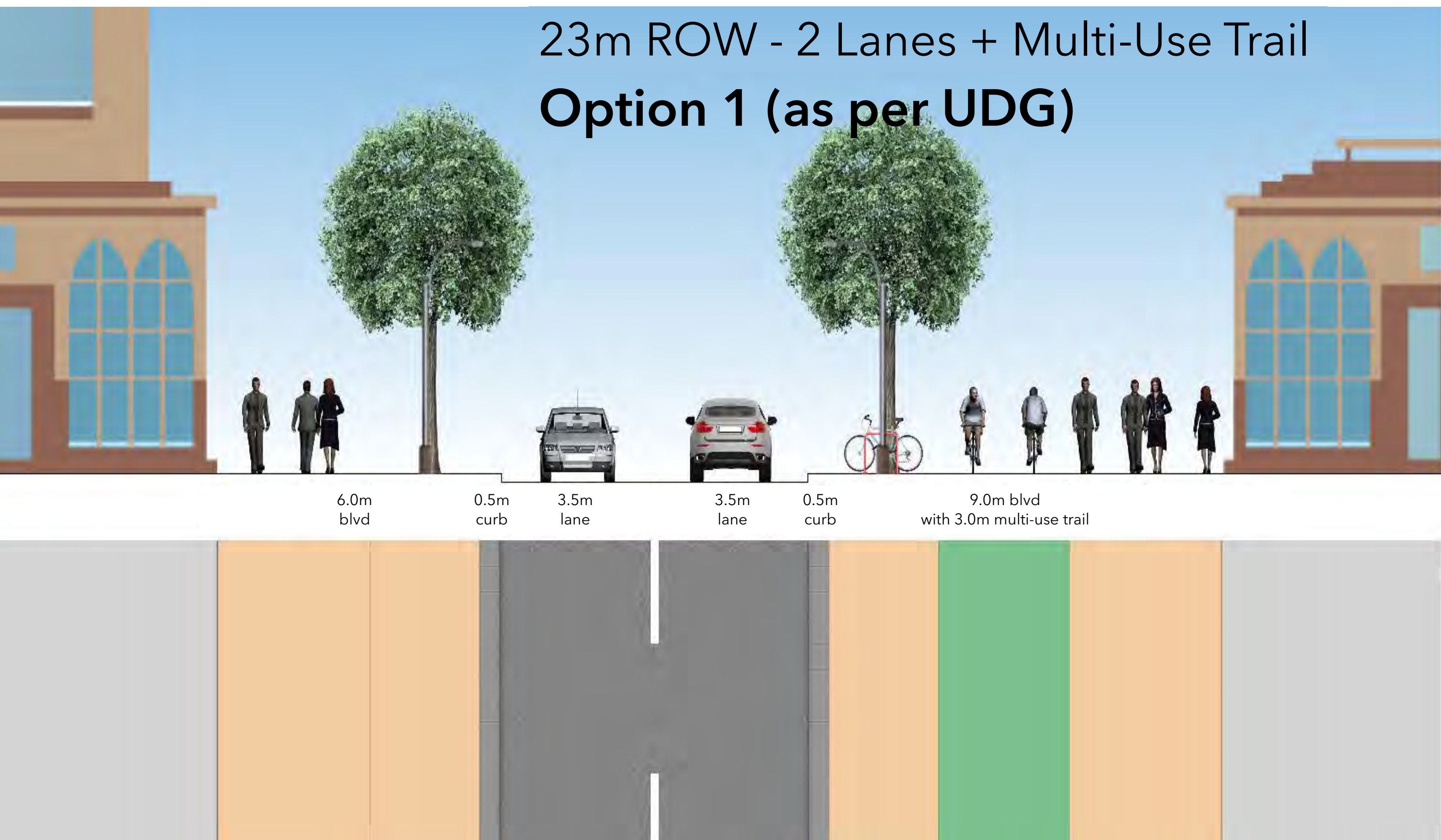
**Mosley Street - Alternative Solutions**

These solutions are intended to illustrate the desired elements within the ultimate Mosley Street cross-section and the overall relationship of each.

The configuration and composition of the boulevards (which are to include buffer space, amenity zones, pedestrian through zones and retail/commercial zones) are for illustration purposes only.

The next phase of the study will advance the Preferred Solution for Mosley Street and develop Alternative Design Concepts for it, with greater details as to dimensions, arrangements, landscape and streetscape, materials, etc.

What is presented here are only preliminary representations.



## Main Street and Beach Areas 1 & 2 Improvements MOSLEY STREET



# ASSESSMENT OF ALTERNATIVE SOLUTIONS - MOSLEY STREET

Evaluation Criteria	How Criteria is Being Assessed	Option 1	Option 2	Option 3	Option 4A	Option 4B	
<b>Transportation</b>	Vehicles	Ability to accommodate future traffic volumes	× Lowest capacity as compared to 3-lane options	✓ Greatest capacity given omission of on-street parking and bike lanes	× Lower options capacity as compared to 3-lane	▪ Greater capacity as compared to 2-lane options	✓ Greatest capacity given omission of on-street parking and separated cycle track
	Parking	Ability to service abutting retail/commercial	× No on-street parallel parking provided	▪ Parking bays may be possible in select areas within the boulevard	✓ On-street parallel parking provided	× On-street parallel parking provided	× On-street parallel parking provided
	Cyclists	Cycling operation and safety	✓ Best operations/safety given separated and dedicated cycle track	▪ No provision for cyclists on Mosley St, rather they would be diverted to the Shore Lane Trail north of Mosley St through the beach area	▪ No provision for cyclists on Mosley St, rather they would be diverted to the Shore Lane Trail north of Mosley St through the beach area	▪ Good operations/safety as compared to no facilities	✓ Better operations/safety given separated and dedicated cycle track ▪ Narrow buffer reduces safety
	Pedestrians	Pedestrian operation and safety along study corridor	▪ Wide sidewalks provide good accommodation for increased pedestrian volumes	✓ Wider sidewalks provide best accommodation for increased pedestrian volumes	× Narrow sidewalks limit accommodation for increased pedestrian volumes	▪ Wide sidewalks provide good accommodation for increased pedestrian volumes	▪ Wide sidewalks provide good accommodation for increased pedestrian volumes
	Promote AT	Likelihood to promote and foster Active Transportation use	✓ Best potential to promote Active Transportation	▪ Average potential to promote Active Transportation	× Least potential to promote Active Transportation	▪ Good potential to promote Active Transportation	▪ Good potential to promote Active Transportation
<b>Natural Environment</b>	Fisheries / Aquatic Impacts	Impact to fish habitat and other aquatic features	▪ Impacts to natural environment to be similar for all alternatives				
	Wildlife / Terrestrial Impacts	Impact to wildlife species	▪ Impacts to natural environment to be similar for all alternatives				
	Vegetation Impacts	Impact to vegetation communities on adjacent properties	▪ Impacts to natural environment to be similar for all alternatives				
<b>Social Environment</b>	Property Impacts	Impacts to property based on widening of road platform and/or ROW	▪ Impacts similar across all options ▪ 23m ROW consistent for all options				
	Construction Impacts	Future impacts to adjacent properties	▪ Impacts similar across all options ▪ Minor, short-term, impacts during construction				
<b>Cultural Heritage</b>	Archaeological & Heritage Impacts	Impacts to cultural and heritage features	▪ Impacts similar across all options ▪ Some potential impacts to adjacent built heritage, additional studies may be required to ensure appropriate mitigation				
<b>Economic Environment</b>	Construction Costs	Costs to construct individual options	▪ Lower cost to construct as compared to other 2-lane options	✓ Lowest cost to construct	✓ Low cost to construct	× Greatest cost to construct	× Greatest cost to construct
	Maintenance Costs	Future maintenance requirements	▪ Lower cost to maintain	✓ Lowest cost to maintain	✓ Low cost to maintain	× Greatest cost to maintain	× Greatest cost to maintain
	Land Acquisition Costs	Total land acquisition costs	▪ Land acquisition costs similar for all options (23m ROW)				
	Economic Opportunities	Retail & Commercial Enhancements	▪ Good opportunity for commercial engagement with public due to wide boulevards	✓ Greatest opportunity for commercial engagement with public due to wider boulevards	× Least opportunity for commercial engagement with public due to narrow boulevards	× Least opportunity for commercial engagement with public due to narrow boulevards	× Least opportunity for commercial engagement with public due to narrow boulevards



## Main Street and Beach Areas 1 & 2 Improvements MOSLEY STREET



# ALTERNATIVE SOLUTIONS - BEACH DRIVE

### RIGHT-OF-WAY

- 23m as proposed in the UDM
- consider 20m to reduce footprint and maximize development area

### VEHICLES

- consider 2 lanes
- Beach Drive is not a through road (only provides access to the Beach and abutting properties)

### PARKING

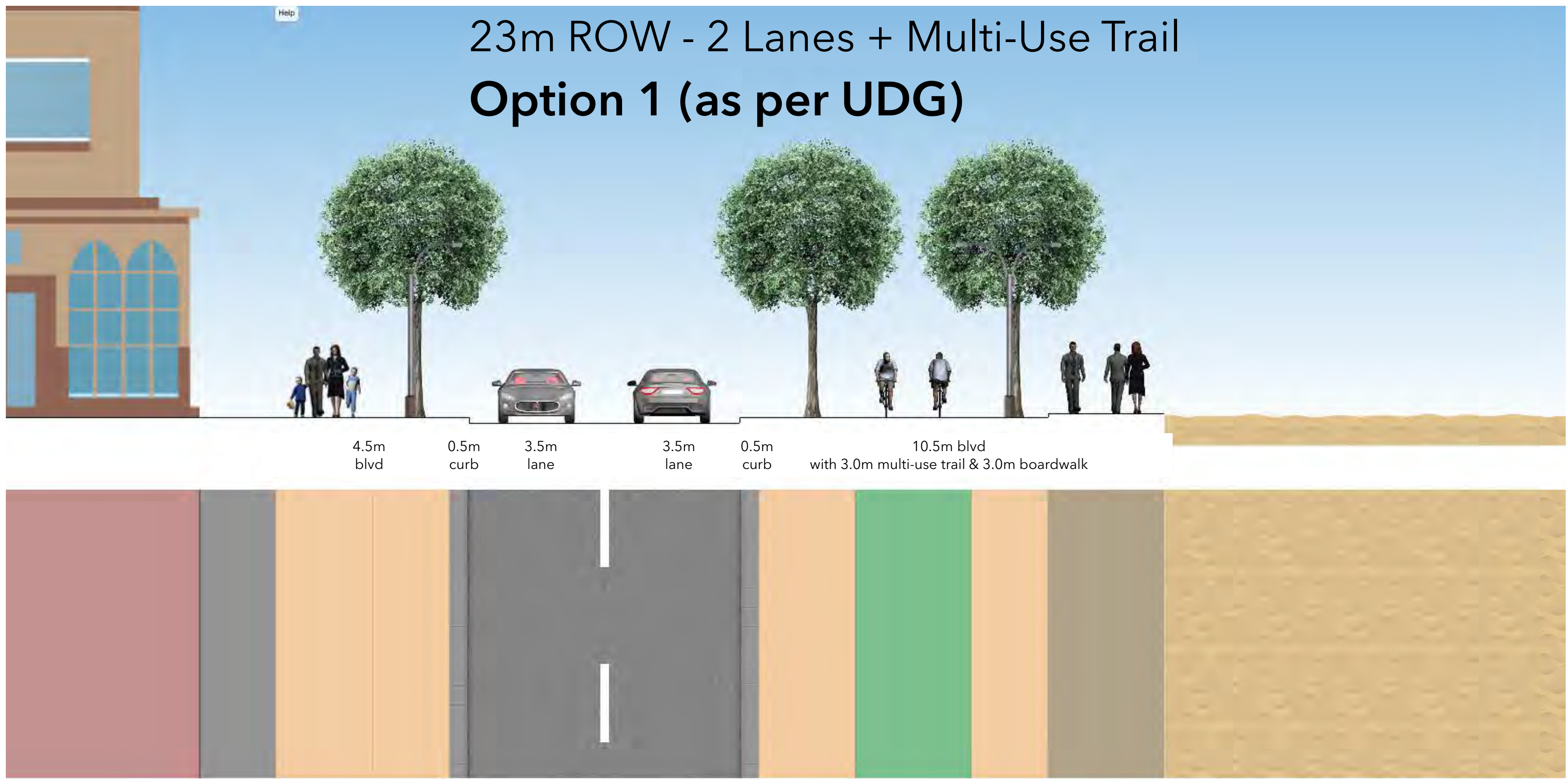
- eliminate parking to reduce conflicts
- municipal off-street parking is expected
- recognize limited right-of-way

### BICYCLES

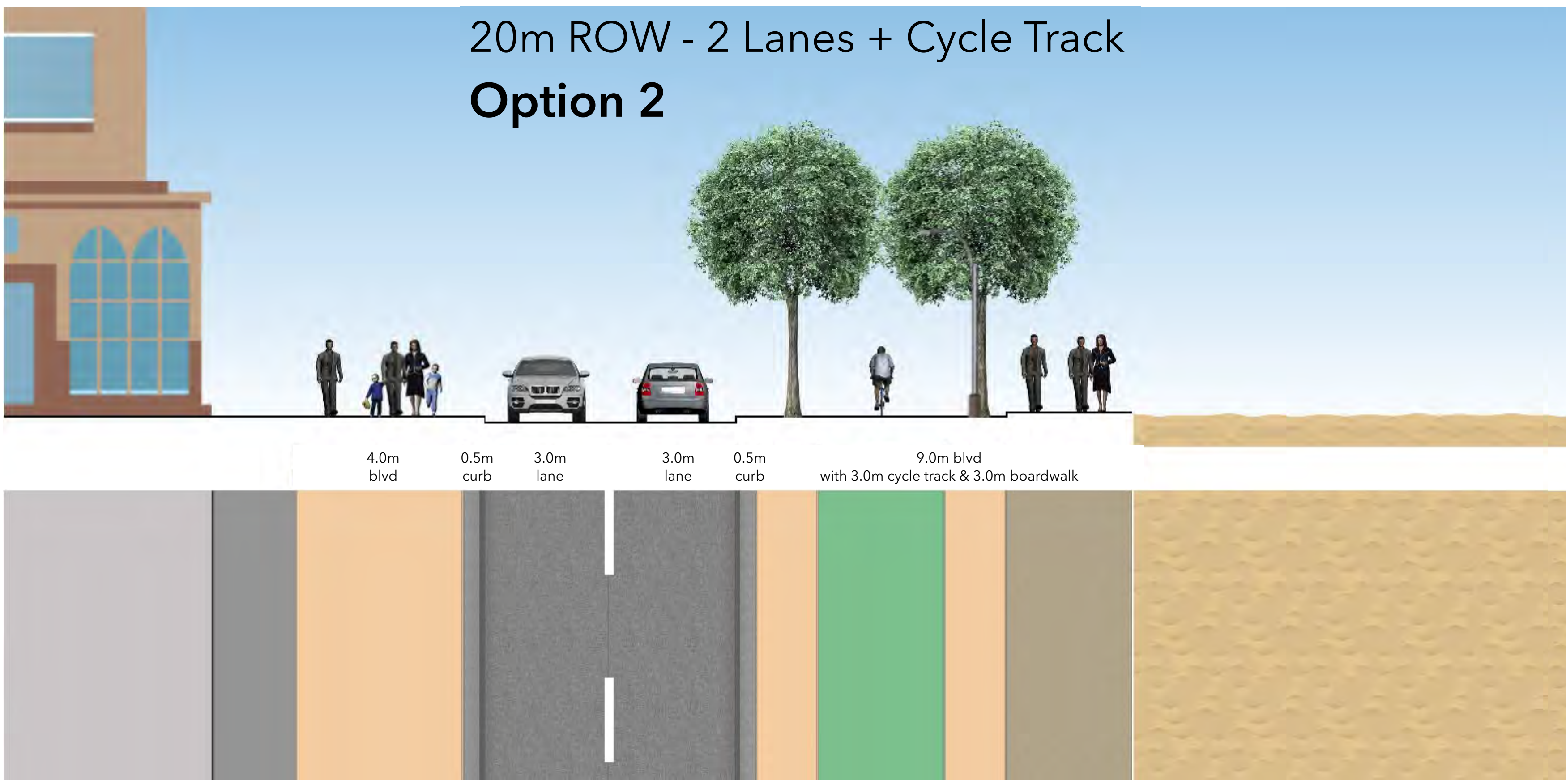
- consider bicycle facilities
- serves as an alternative route to Mosley Street

### PEDESTRIANS COMMERCIAL

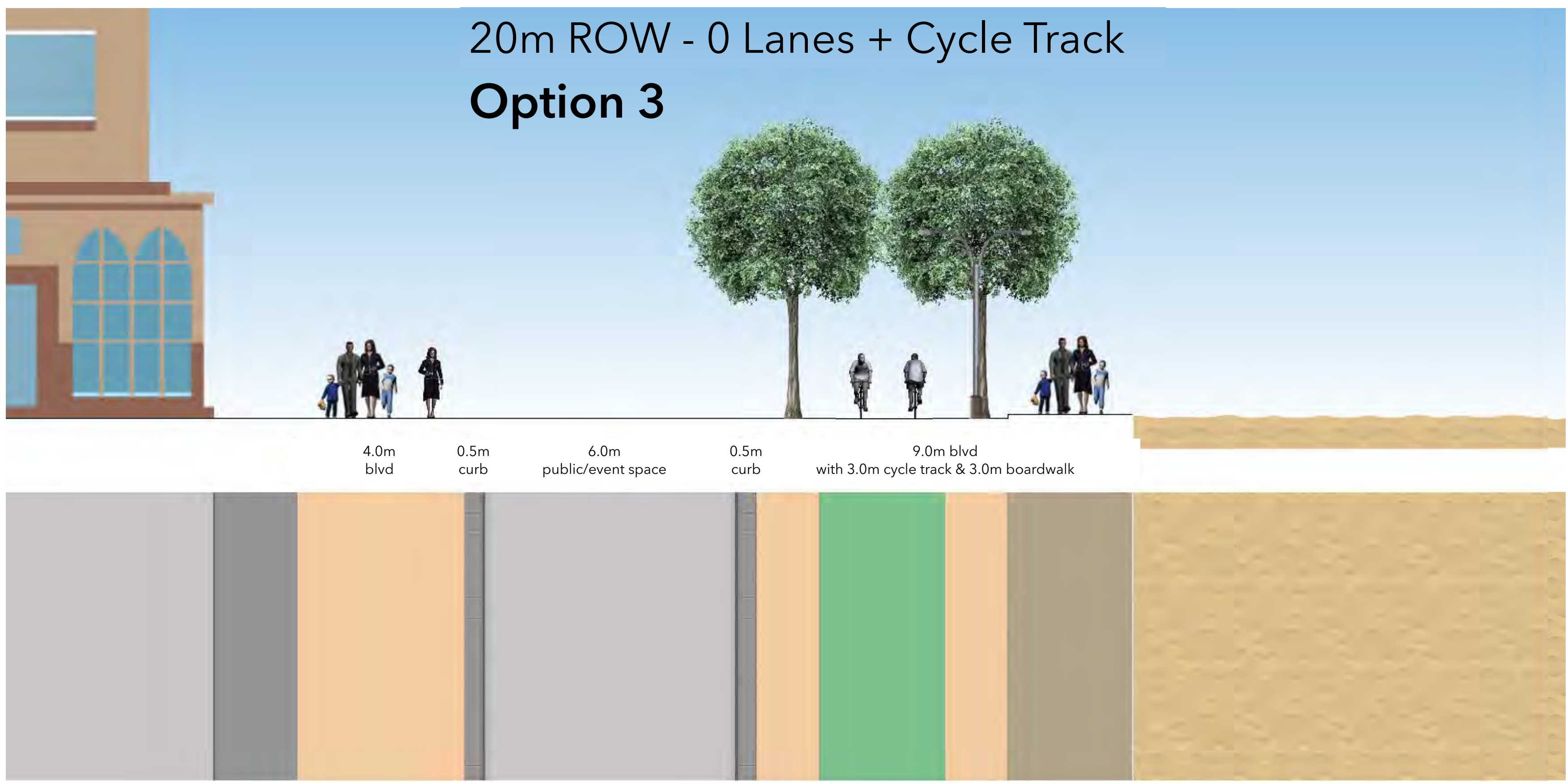
- combine pedestrian & commercial zone
- maximize space
- greatest pedestrian demands on beach



- 23m right-of-way and cross-section as recommended in the Urban Design Guidelines (UDG).
- With the provision of municipal off-street parking to be provided in the area, there is no need to provide on-street parking along Beach Drive, thereby reducing the overall cross-section width. This allows the space to be utilized for the public realm.
- A shoreline protection zone can be incorporated into the boardwalk.



- Under Option 2, the right-of-way is reduced to 20m to maximize the remaining land for either public beach use or development use.
- Travel lanes have been reduced from 3.5 to 3.0m in context of the "local" nature of the road. Boulevards have also been reduced.
- The multi-use trail as been reconfigured as a cycle track to eliminate conflict between cyclists and pedestrians (peds are to use the boardwalk).



- Under Option 3, Beach Drive is closed to vehicular traffic thereby removing vehicles from the corridor and eliminating conflicts with other users.
- The "road corridor" space will remain, to be utilized by the public, for event staging and for service or emergency vehicles as required.
- The multi-use trail has been reconfigured as a cycle track to eliminate conflict between cyclists and pedestrians (peds are to use the boardwalk).

## Beach Drive - Alternative Solutions

These solutions are intended to illustrate the desired elements within the ultimate Beach Drive cross-section and the overall relationship of each.

The configuration and composition of the boulevards (which are to include buffer space, amenity zones, pedestrian through zones and retail/commercial zones) are for illustration purposes only.

The next phase of the study will advance the Preferred Solution for Beach Drive and develop Alternative Design Concepts for it, with greater details as to dimensions, arrangements, landscape and streetscape, materials, etc.

What is presented here are only preliminary representations.



## Main Street and Beach Areas 1 & 2 Improvements BEACH DRIVE





# ASSESSMENT OF ALTERNATIVE SOLUTIONS - BEACH DRIVE

Evaluation Criteria	How Criteria is Being Assessed	Option 1	Option 2	Option 3	
<b>Transportation</b>	Vehicles	Ability to accommodate future traffic volumes	✓ Will accommodate future volumes	✓ Will accommodate future volumes	▪ No vehicular access
	Parking	Ability to service abutting retail/ commercial	× No on-street parallel parking provided	× No on-street parallel parking provided	× No on-street parallel parking provided
	Cyclists	Cycling operation and safety	▪ Good operations/safety given separated and dedicated cycle track	▪ Good operations/safety given separated and dedicated cycle track	✓ Best operations/safety for cyclists given closure of Beach Drive to vehicular traffic
	Pedestrians	Pedestrian operation and safety along study corridor	▪ Wider sidewalks provide good accommodation for increased pedestrian volumes	• Wide sidewalks provide good accommodation for increased pedestrian volumes	✓ Best operations/safety for cyclists given closure of Beach Drive to vehicular traffic
	Promote AT	Likelihood to promote and foster Active Transportation use	▪ Good potential to promote Active Transportation	▪ Good potential to promote Active Transportation	✓ Greatest potential to promote Active Transportation
<b>Natural Environment</b>	Fisheries / Aquatic Impacts	Impact to fish habitat and other aquatic features	▪ Impacts to natural environment to be similar for all alternatives		
	Wildlife / Terrestrial Impacts	Impact to wildlife species	▪ Impacts to natural environment to be similar for all alternatives		
	Vegetation Impacts	Impact to vegetation communities on adjacent properties	▪ Impacts to natural environment to be similar for all alternatives		
<b>Social Environment</b>	Property Impacts	Impacts to property based on widening of road platform and/or ROW	× Greatest impact to store front properties due to 23m ROW	▪ Least impact impact to store front properties due to 20m ROW	▪ Least impact to store front properties due to 20m ROW
	Construction Impacts	Future impacts to adjacent properties	▪ Impacts similar across all options ▪ Minor, short-term, impacts during construction		
	Community Building	Opportunity for placemaking and enhanced access to public attraction	▪ Good opportunity to enhance Beach Area	▪ Good opportunity to enhance Beach Area	✓ Best opportunity to enhance Beach Area and increase access.
<b>Cultural Heritage</b>	Archaeological & Heritage Impacts	Impacts to cultural and heritage features	× Greatest potential impact to heritage features due to 23m ROW	▪ Least potential impact to heritage features due to 20m ROW (comparable to Option 3)	▪ Least potential impact to heritage features due to 20m ROW (comparable to Option 2)
<b>Economic Environment</b>	Construction Costs	Costs to construct individual options	× Greatest cost to construct as compared to other 2-lane options	▪ Lower cost to construct	✓ Lowest cost to construct
	Maintenance Costs	Future maintenance requirements	× Greatest cost to maintain	▪ Lower cost to maintain	✓ Lowest cost to maintain
	Land Acquisition Costs	Total land acquisition costs	× Greatest land acquisition costs due to 23m ROW	▪ Least land acquisition costs (comparable to Option 3)	▪ Least land acquisition costs (comparable to Option 2)
	Economic Opportunities	Retail & Commercial Enhancements	▪ Good opportunity for commercial engagement with public due to wide boulevards	▪ Good opportunity for commercial engagement with public due to wide boulevards	✓ Greatest opportunity for commercial engagement with public due to closure to vehicular traffic and increased pedestrian activity



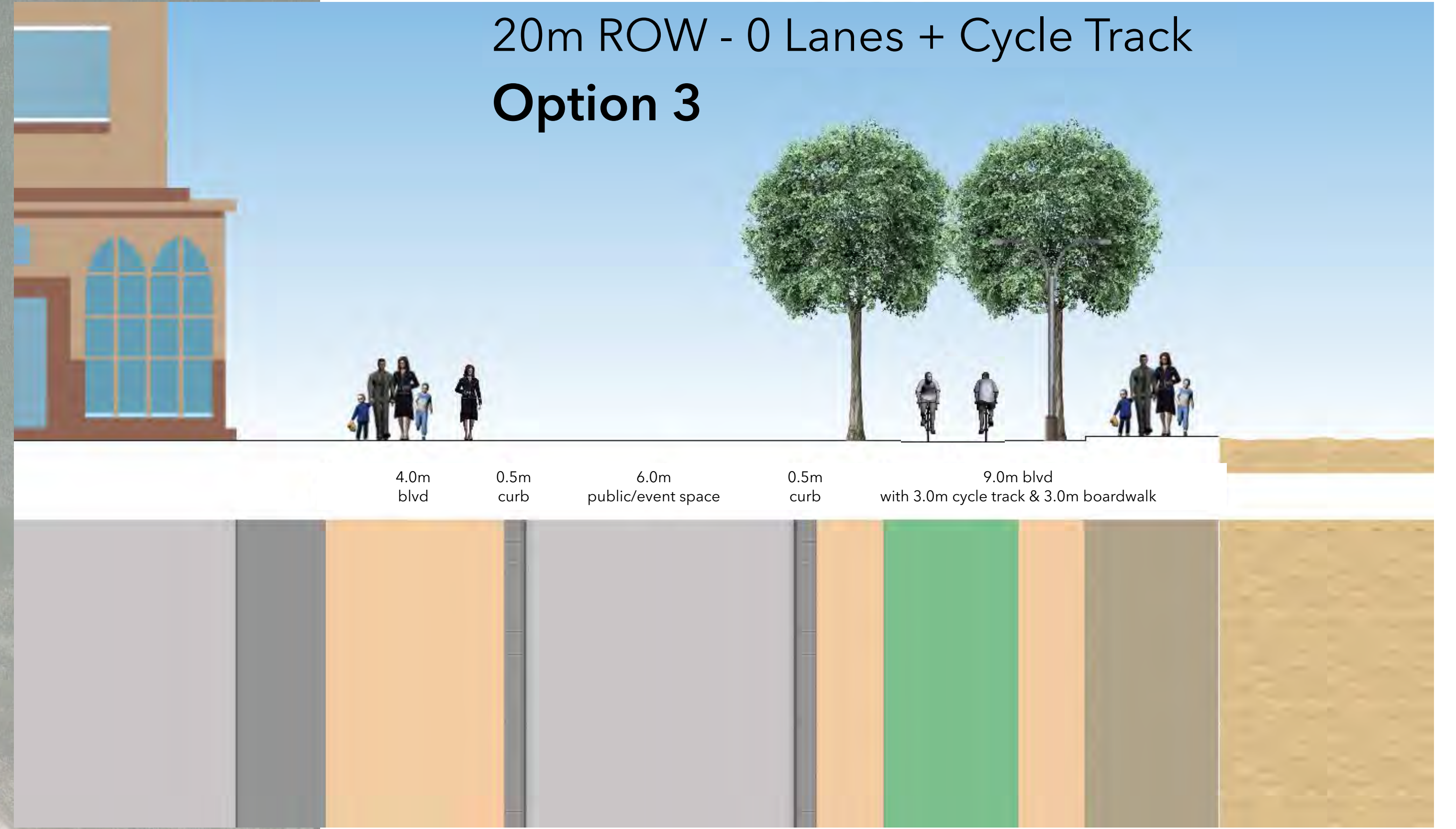
## Main Street and Beach Areas 1 & 2 Improvements BEACH DRIVE





## BEACH DRIVE

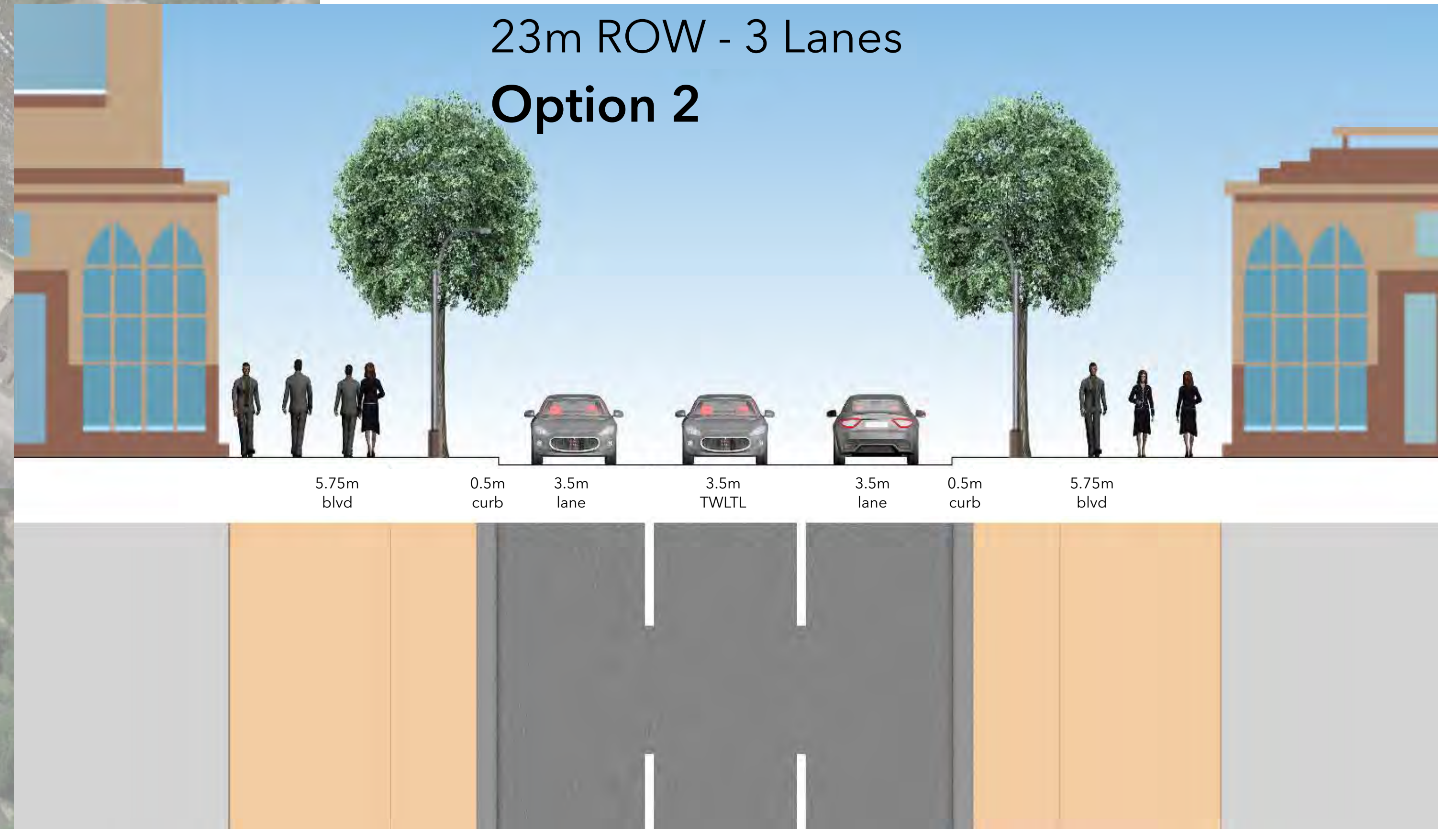
20m ROW - 0 Lanes + Cycle Track  
Option 3



Note: the need for and type of shoreline protection to be confirmed; minimum right-of-way to be confirmed

## MOSLEY STREET

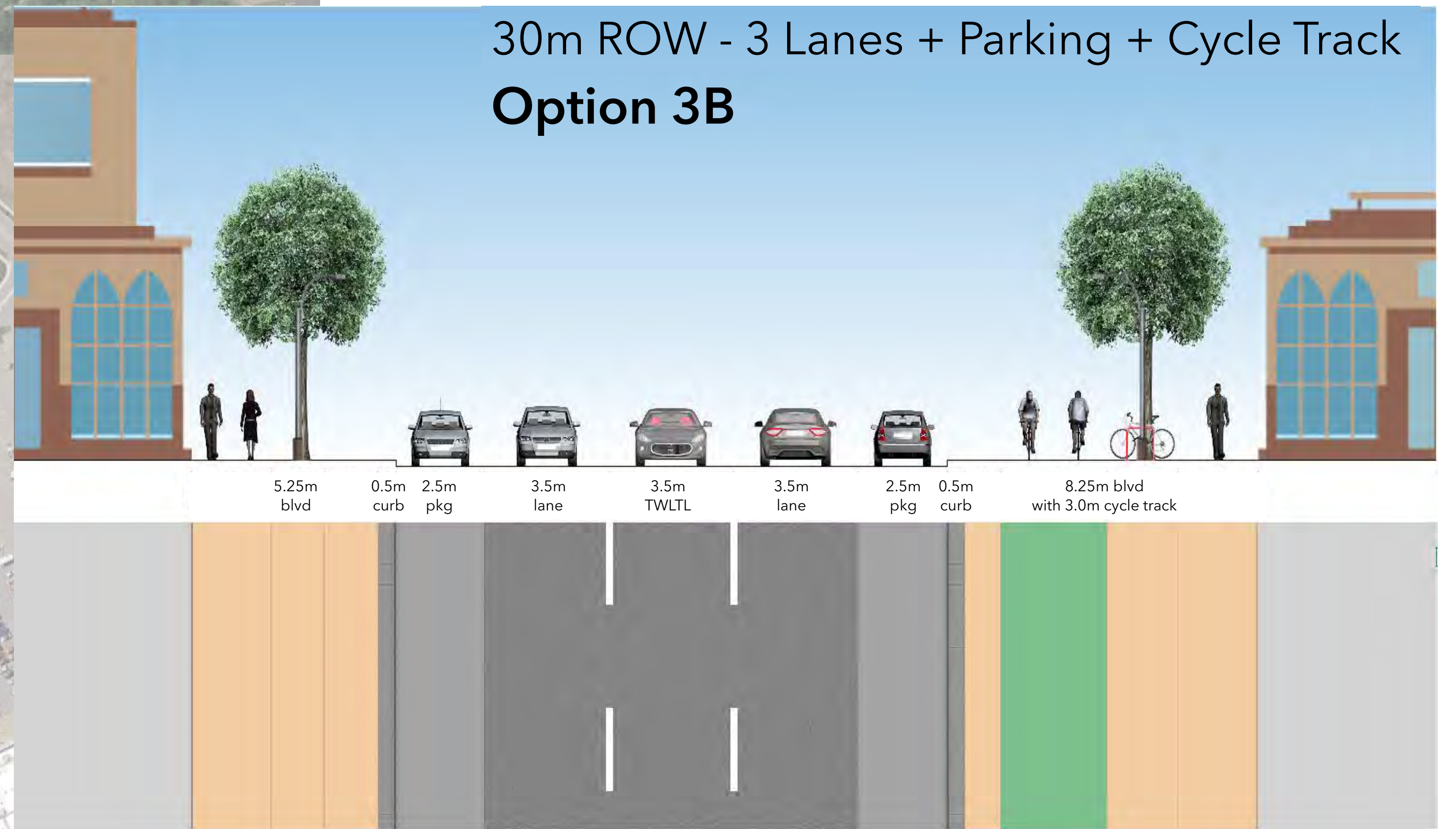
23m ROW - 3 Lanes  
Option 2



Note: parking bays can be provided within the boulevards on either side through select areas where development and space permit

## MAIN STREET

30m ROW - 3 Lanes + Parking + Cycle Track  
Option 3B



Note: parking lanes can be converted to bump-outs at intersections or at select mid-block locations to increase boulevard space and public realm opportunities

Imagery ©2020 Google, Map data ©20



# Main Street and Beach Areas 1 & 2 Improvements RECOMMENDED SOLUTIONS



## PREFERRED SOLUTIONS

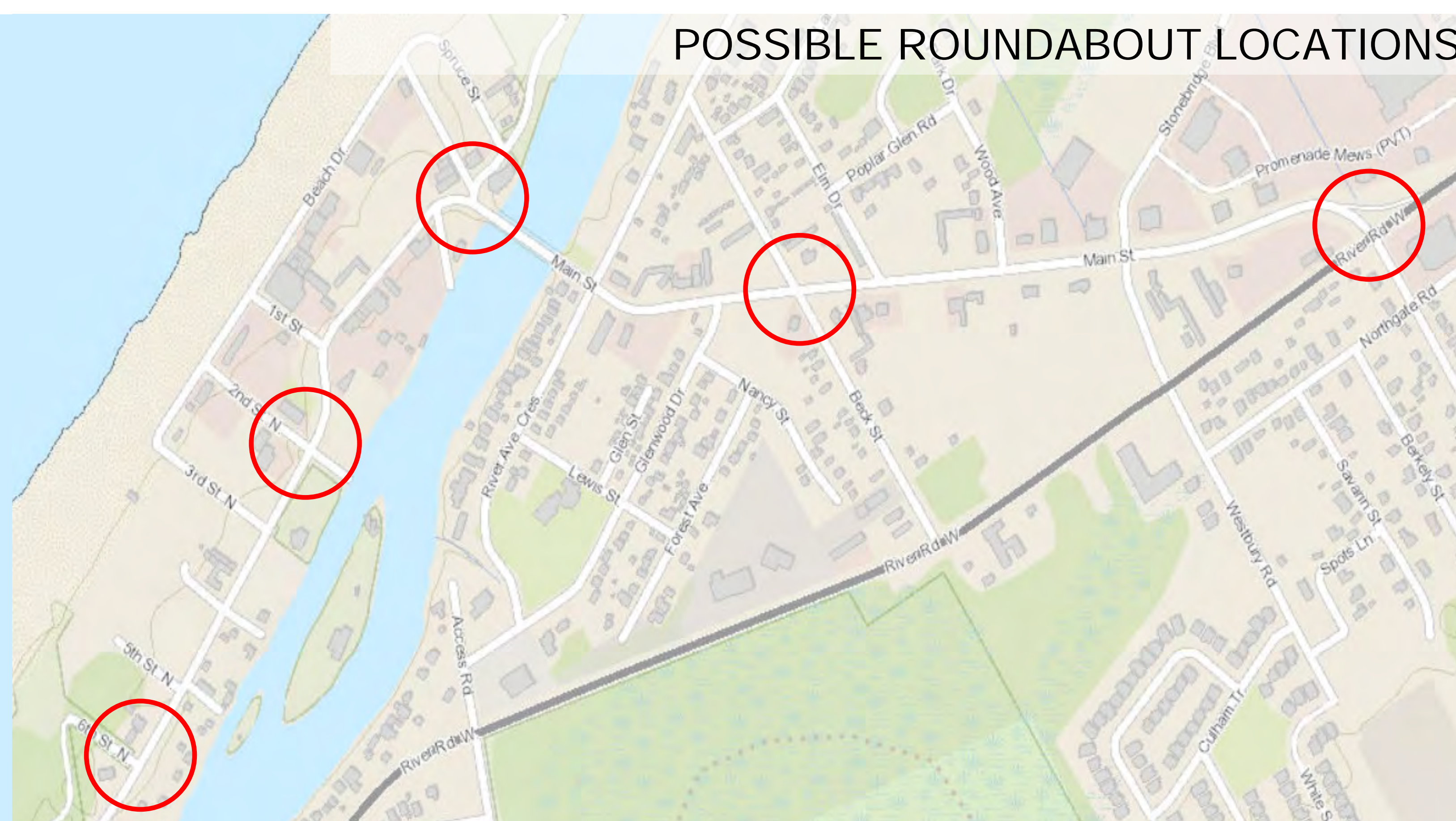
- All public comments will be reviewed and summarized.
- The development of the Alternative Solutions for each road will be revisited and additional options and/or modifications to existing options will be considered, as necessary.
- The assessment of the Alternative Solutions for each road will be revisited in context of the public comments and updated, as necessary.
- A Preferred Solution for each road will be identified and will serve as the basis for the next phase of the study.
- A Phases 1 & 2 Class EA Report will be prepared to document the process to date and complete Phase 2 of the Class EA process.

## ALTERNATIVE DESIGN CONCEPTS

- Proceed to Phase 3 of the Class EA process.
- For each Preferred Solution for each road, Alternative Design Concepts will be prepared to further refine and define the cross-section.
- The Design Concepts will further consider and explore such things as:
  - sizes and dimensions of the noted components (eg. drive lanes, parking lanes, cycle tracks, etc.)
  - configuration and placement of elements within the boulevard (eg. amenity/utility corridors, pedestrian travel lanes, retail/commercial zones, etc.)
  - streetscape and landscape features and materials

## ROUNDBABOUTS

- The feasibility of implementing roundabouts at select study area intersections will be reviewed.
- Roundabouts have several safety, environmental, aesthetic and operational benefits over traditional intersections, and are becoming more prevalent in revitalization projects.
- Roundabouts also provide the opportunity to develop gateway features upon entry to a particular area and can also serve to announce arrival at a destination.



## RIVER AVENUE CRESCENT & GLENWOOD DRIVE



- Currently, River Avenue Crescent is one-way southbound between Main Street and Glenwood Drive, whereas Glenwood Drive is one-way northbound between River Avenue Crescent and Main Street.
- The remaining space on River Avenue Crescent has been converted to bike lanes (one on each side); Glenwood Drive has a narrow paved shoulder on one side.
- The configuration of these streets will be reviewed in context of the overall area transportation needs, with due consideration for their intersections with Main Street. Alternative solutions to be considered include:
  - maintain the existing configuration
  - convert both to two-way operations (which would result in elimination of the dedicated bike lanes on River Avenue Crescent)

## PUBLIC INFORMATION CENTRE 2

- Public Information Centre 2 will be scheduled for Spring 2020.
- Notices will be posted in the newspaper and Town website, and emailed to those on the mailing list).
- The Alternative Design Solutions and corresponding recommendations will be presented for public review and comment.
- Findings and recommendations from the continued transportation analyses regarding roundabouts and River Avenue Crescent and Glenwood Drive will be presented.



## Main Street and Beach Areas 1 & 2 Improvements NEXT STEPS

