

BUILDING MARKHAM'S
FUTURE TOGETHER
2015-2019 Strategic Plan

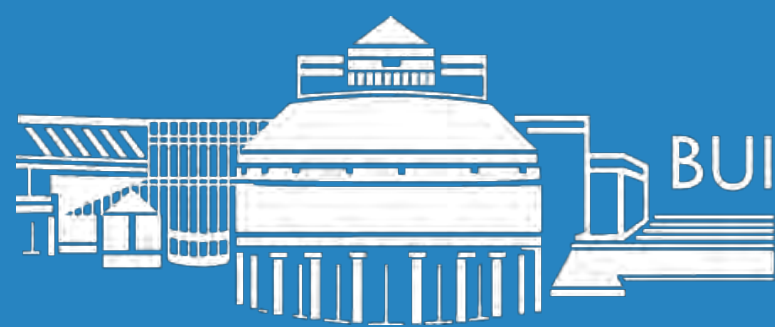


Welcome

to Public Open House 2

Victoria Square Boulevard Class Environmental Assessment June 14, 2017





Purpose and Study Corridor

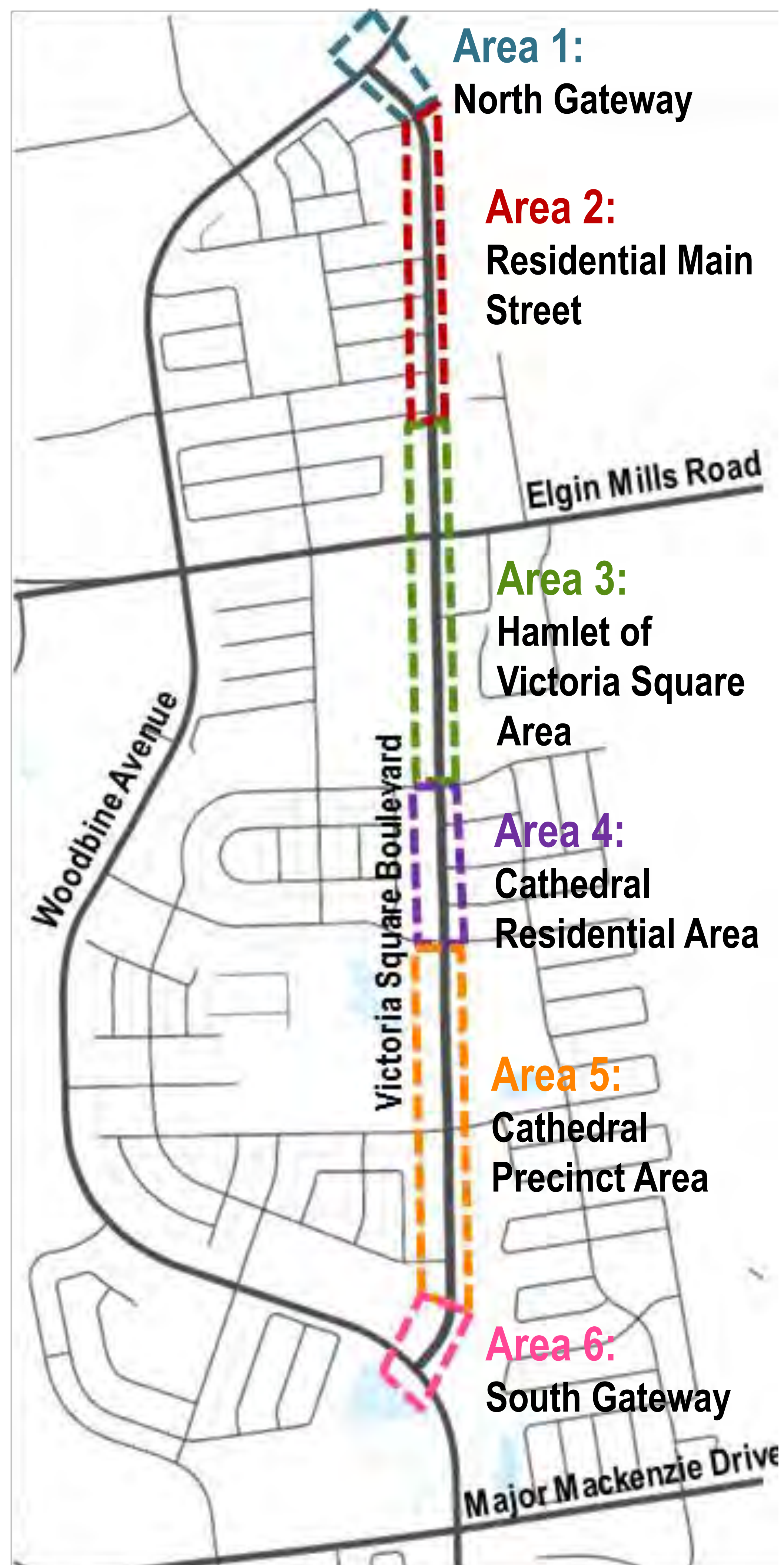
**Study Progress since
Open House 1**

**Share the evaluation
of alternative designs**

**Obtain your ideas on
the preferred design
concept**

**Obtain your input and
answer any questions you
may have**

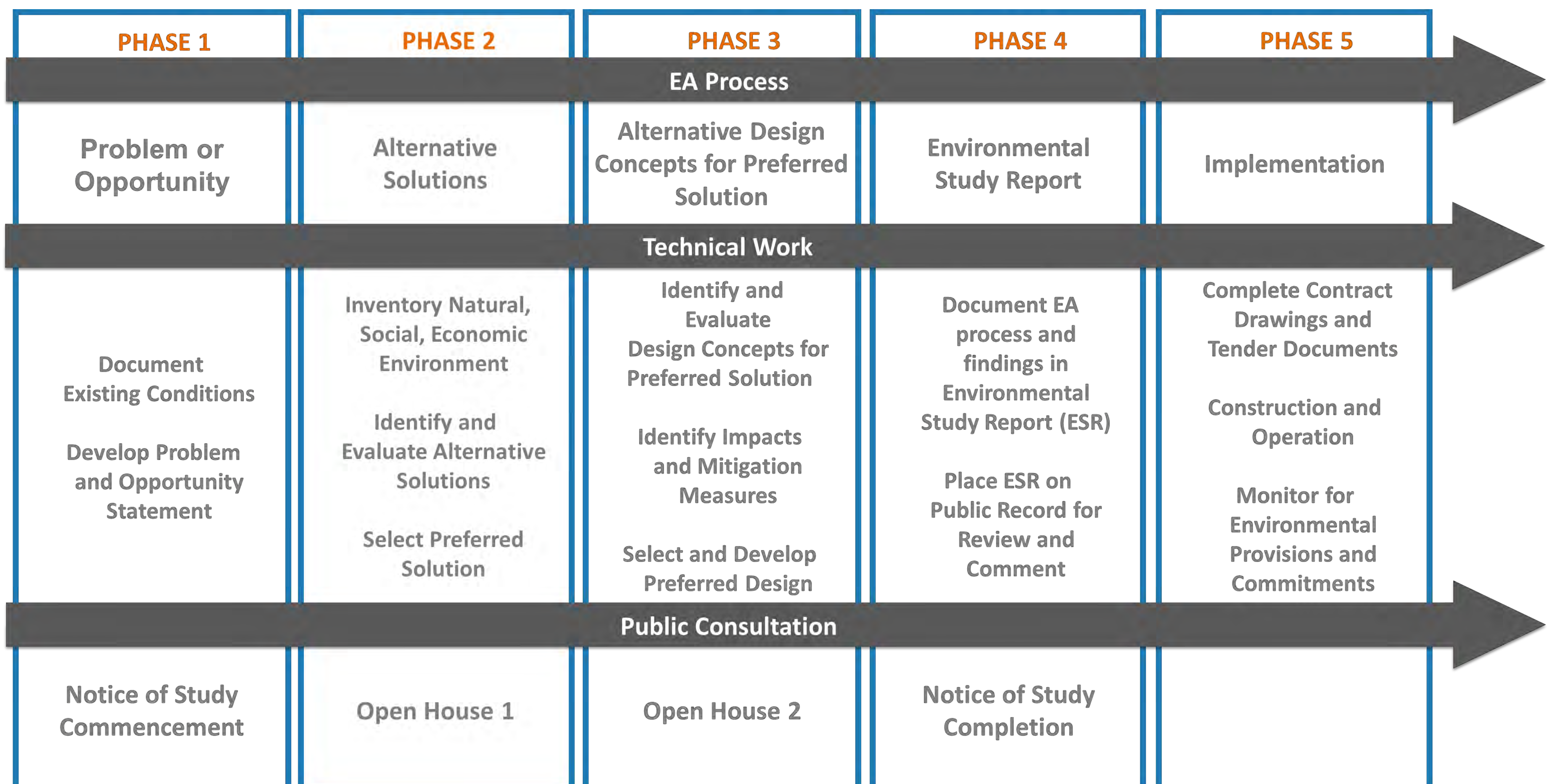
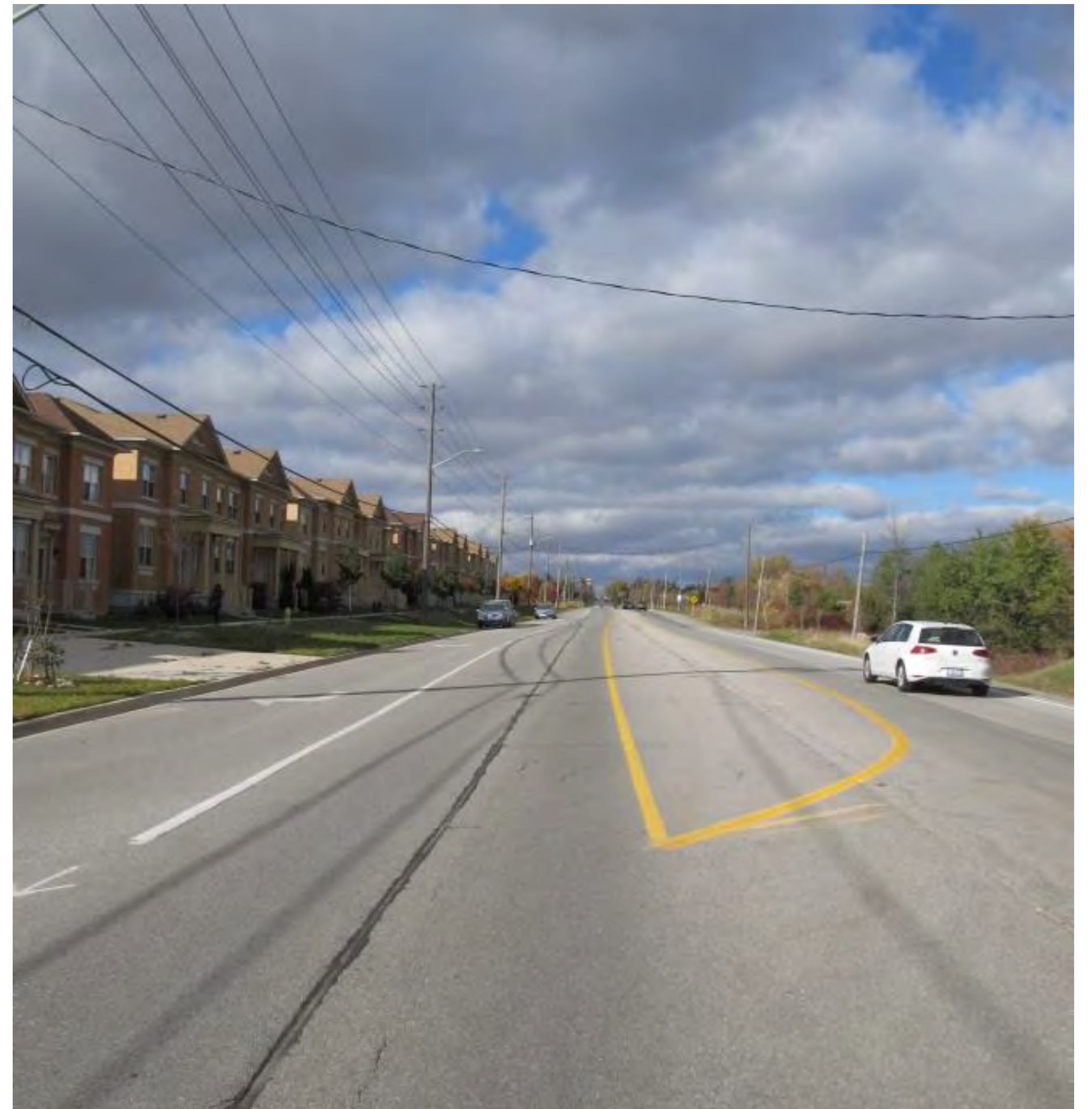
Discuss next steps



Study Process

What is an EA?

An **Environmental Assessment (EA)** is a planning and approval process for municipal infrastructure projects, following Ontario's *Environmental Assessment Act*.



WE ARE HERE

What we Heard at Open House 1



- Strong support for sidewalks along the corridor
- Strong support for dedicated cycling facilities



- Concerns about widening and traffic infiltration
- Support for intersection improvements
- Request for on-street parking in front of townhouses



- **Support for landscaping improvements**



- **Support for an urbanized roadway section**
- **Request for more street lighting along the corridor**

Open House 1 by the numbers



Held on June 13, 2016



116 Attendees



39 Comments Forms Received

Input on the Preferred Solution (Alternative 2: Multi-Modal Approach)

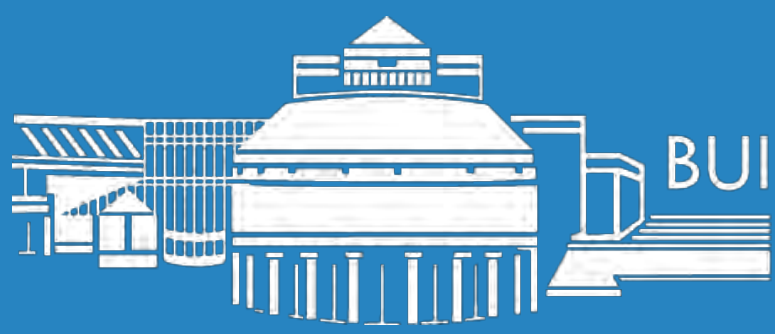
* Parking (including location on one side of the street or both sides of the street) will be reviewed during the next phase of the EA

Roadway Element	Like	Dislike
One travel lane per direction		
Separate cycling facilities		
Pedestrian facilities		
On-street parking		
Landscaping		
Other (please specify) WATER & SEWER Streed Light @ vine cliff rd please put a traffic light at Vine Cliffor Safety. Kids + home crossing before a Square Bl. Bike racks on West side only - Bus Shelter re. Windward (preferred method) Quiet Paving on Road	<ul style="list-style-type: none"> - speed limit, no car racing - STREET LIGHT with flower baskets - TRAFFIC LIGHT TO WOODBRIDGE - Street trees - need adequate - Bush Overhead wires - not rid of POLES - east side intersection south of LUGGILLIES / our Victoria Square Blvd - fit in divider. Use for cycling or pedestrian - water, drainage - some over a fence. - vegetation wall north 	

The above images are created using Streetmix and are subject to the Creative Commons BY-SA 3.0 license (<http://creativecommons.org/licenses/by-sa/3.0/>)

Victoria School has been needs left turning lane into school (morning sun or evening square west)

- measure to address + voice arrived by traffic.
- Stop Signs
- Speeding
- Overhead wires
- catches - yuck!
- Speed Display Board



BUILDING MARKHAM'S
FUTURE TOGETHER
2015-2019 Strategic Plan



Study Area

- ★ Key Destination
- ◆ Properties of Heritage / Archaeological / Cultural Value or Interest
- ◇ Environmental Constraint
- Y Existing Bus Stop
- Existing Stop Sign
- Existing Traffic Lights
- [-] Constrained Right-of-way
- Future Road (Approved)
- Future Streets (Under Study Review)

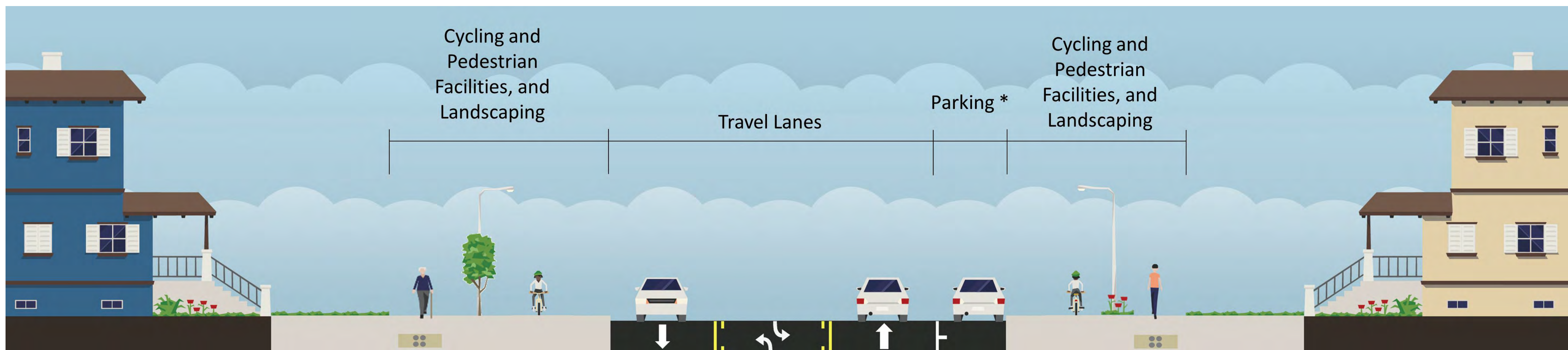


Preferred Alternative Solution from Phase 2

Multi-modal Approach

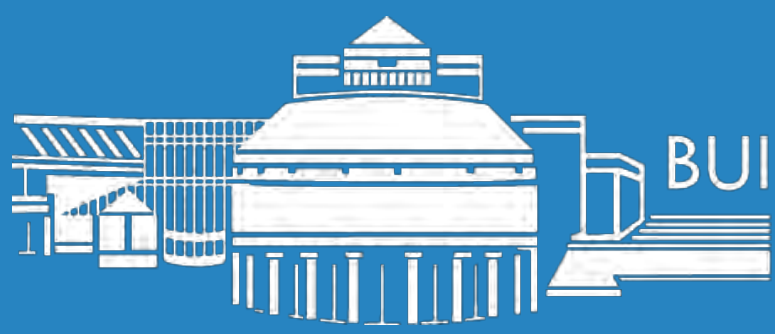
- Accommodate all road users
- Provision of continuous active transportation facilities
- Improved pedestrian environment
- On-street parking
- Intersection improvements
- Urbanization for improved drainage
- Additional landscaping opportunities
- Consideration for a continuous centre-left turn lane where feasible and warranted

Sample Cross-Section



* Parking is considered only where justified, and location (including on one side of the street or both sides of the street) will vary by segment

The above images are created using Streetmix and are subject to the Creative Commons BY-SA 3.0 license (<http://creativecommons.org/licenses/by-sa/3.0/>).



Evaluation Criteria for Alternative Design Concepts



Socio-Economic

- Compatible with adjacent land use
- Improve access to adjacent areas
- Minimize impacts on existing properties
- Improve visual aesthetics and community character and accommodate green space for tree planting and landscaping
- Improve access to businesses and opportunities for commerce
- Preserve and enhance archaeological and cultural heritage features

Transportation



- Level of separation/protection for cyclists/pedestrians from other modes
- Minimize potential conflicts between modes
- Support planned transit improvements and operations
- Provide direct, continuous, and convenient connections to local and arterial roads
- Accommodate all ages, abilities, and types of users
- Ability to integrate proposed active transportation facilities into surrounding local network
- Improve traffic flow



Natural Environment

- Minimize impacts to vegetation, wildlife, aquatic habitat, surface/groundwater, and air quality



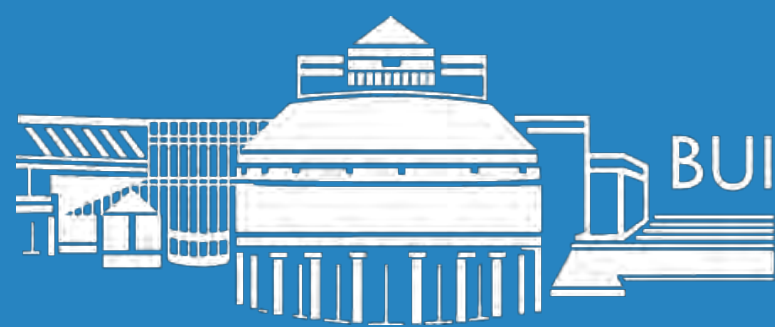
Infrastructure Design

- Minimize above ground utility relocation
- Minimize impacts to driveways
- Ability to implement within proposed right-of-way at constrained locations and intersections
- Stormwater management impacts due to amount of hard surface



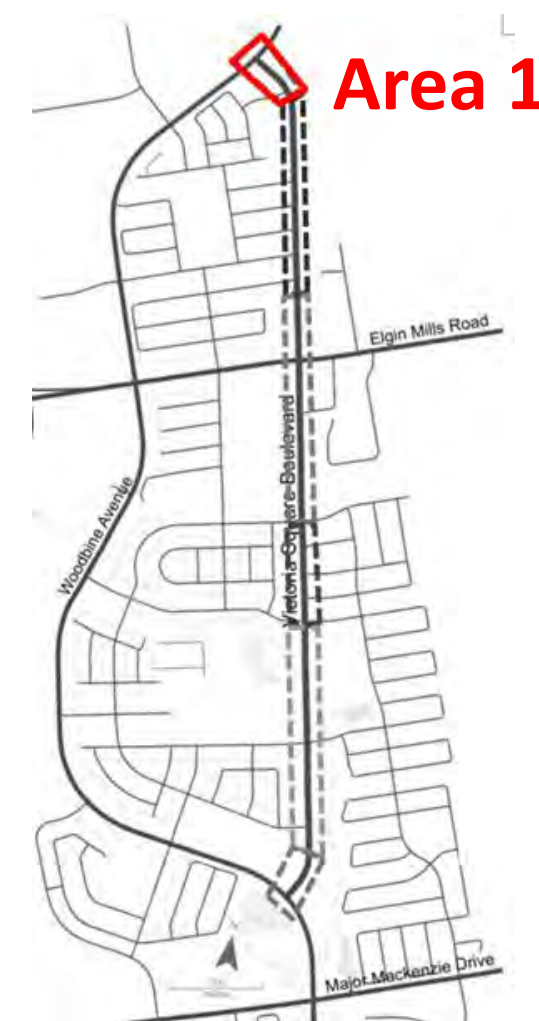
Cost

- Minimize capital costs
- Minimize operating and maintenance costs
- Minimize rehabilitation and replacement costs



Area 1: North Gateway (N)

Alternative Design Concepts



Alternative N1* – PREFERRED ALTERNATIVE

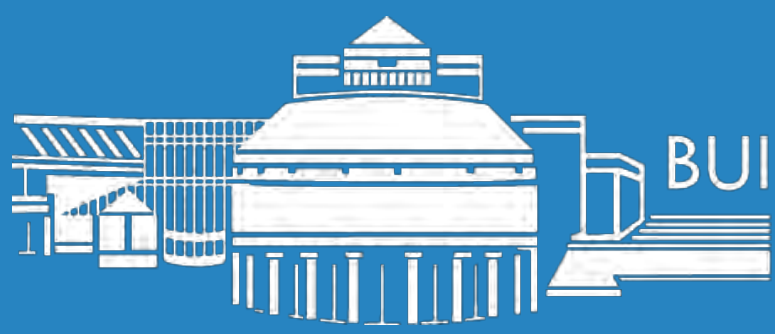


What do you like about this design? Is there anything you would change?

Note: Where constraints exist, the separate sidewalk and cycle track facilities may be combined into a single multi-use path facility. Details would vary by segment.










* Due to right-of-way constraints, northbound traffic demand, and the relatively short length of this segment, only one alternative that adequately accommodates pedestrians, cyclists, transit users and motorized vehicles was carried forward for the detailed evaluation for Area 1: North Gateway. Alternatives considering various cycling and pedestrian facilities, such as on-road bike lanes, were considered but screened out and are therefore not presented.

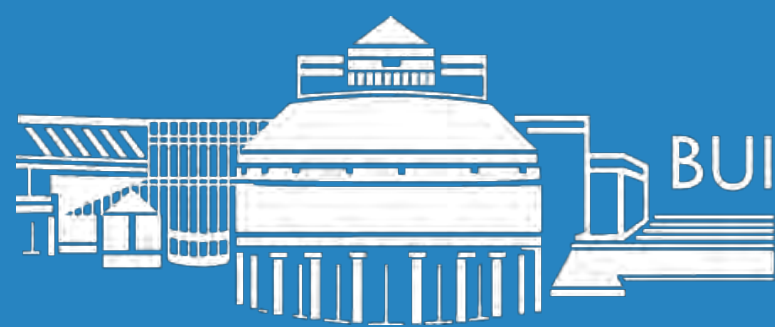
The above images are created using Streetmix and are subject to the Creative Commons BY-SA 3.0 license (<http://creativecommons.org/licenses/by-sa/3.0/>).



Area 1: North Gateway (N)

Evaluation of Alternative Design Concepts

Legend		Alternative N1	
 Meets Minimum Criteria		 Does Not Meet Minimum Criteria	
Socio-Economic			
Transportation			
Natural Environment			
Infrastructure Design			
Cost			
Summary			
Comments		<ul style="list-style-type: none">• Improves access for all modes• Accommodates cyclists and pedestrians on the east and west sides in facilities separate from vehicular traffic• No impacts to driveways anticipated	
Recommendation			



Area 2: Residential Main Street (RM)

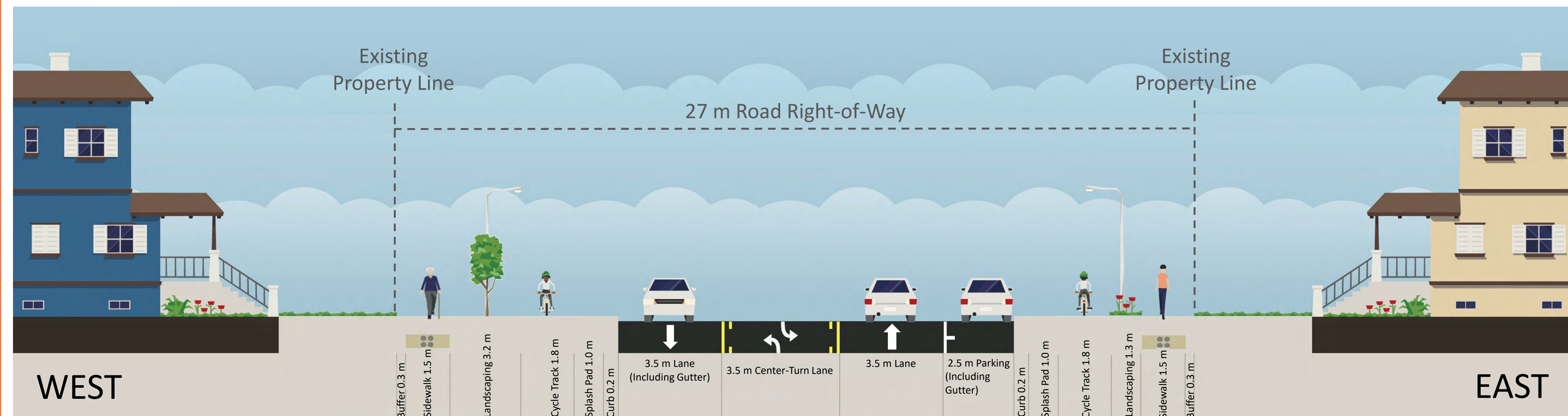
Alternative Design Concepts



Alternative RM1



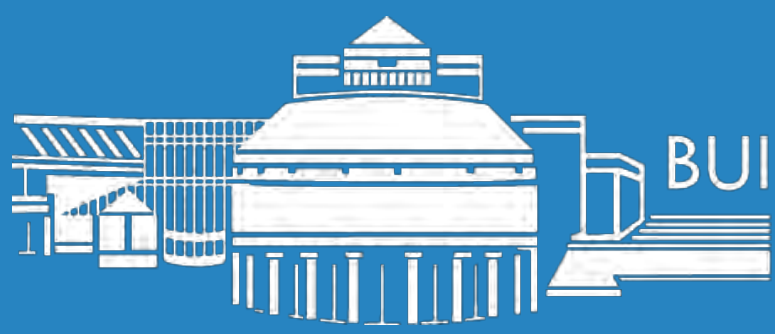
Alternative RM2 – PREFERRED ALTERNATIVE



What do you like about this design? Is there anything you would change?

Note: Where constraints exist, the separate sidewalk and cycle track facilities may be combined into a single multi-use path facility. Details would vary by segment.

The above images are created using Streetmix and are subject to the Creative Commons BY-SA 3.0 license (<http://creativecommons.org/licenses/by-sa/3.0/>).



Area 2: Residential Main Street (RM)

Evaluation of Alternative Design Concepts

Legend		Alternative RM1	Alternative RM2
<p>Preferred</p> <p>Less Preferred</p> <p>Not Preferred</p>			
Socio-Economic			
Transportation			
Natural Environment			
Infrastructure Design			
Cost			
Summary			
Comments		<ul style="list-style-type: none">Does not accommodate on-street parkingAccommodates a slightly wider landscape buffer on both sides of the roadLower capital cost	<ul style="list-style-type: none">Accommodates on-street parking on the east side of the roadParking provides better access to residences and businessesHigher capital cost
Recommendation			

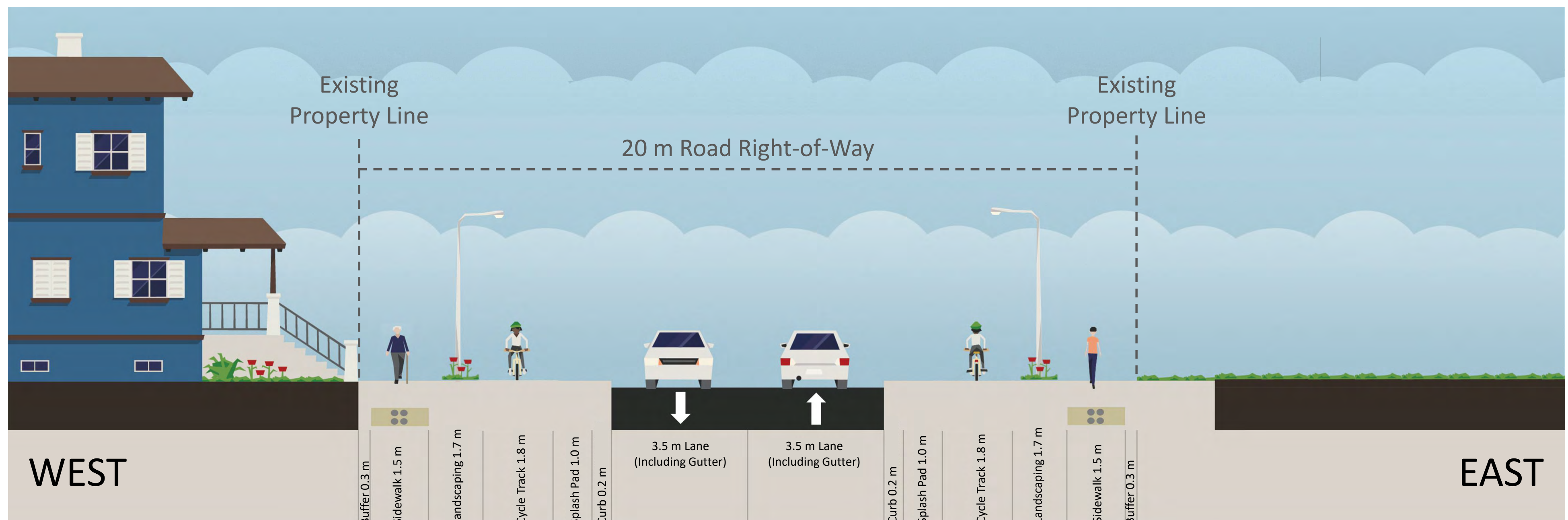


Area 3: Hamlet of Victoria Square Area (H)

Alternative Design Concepts

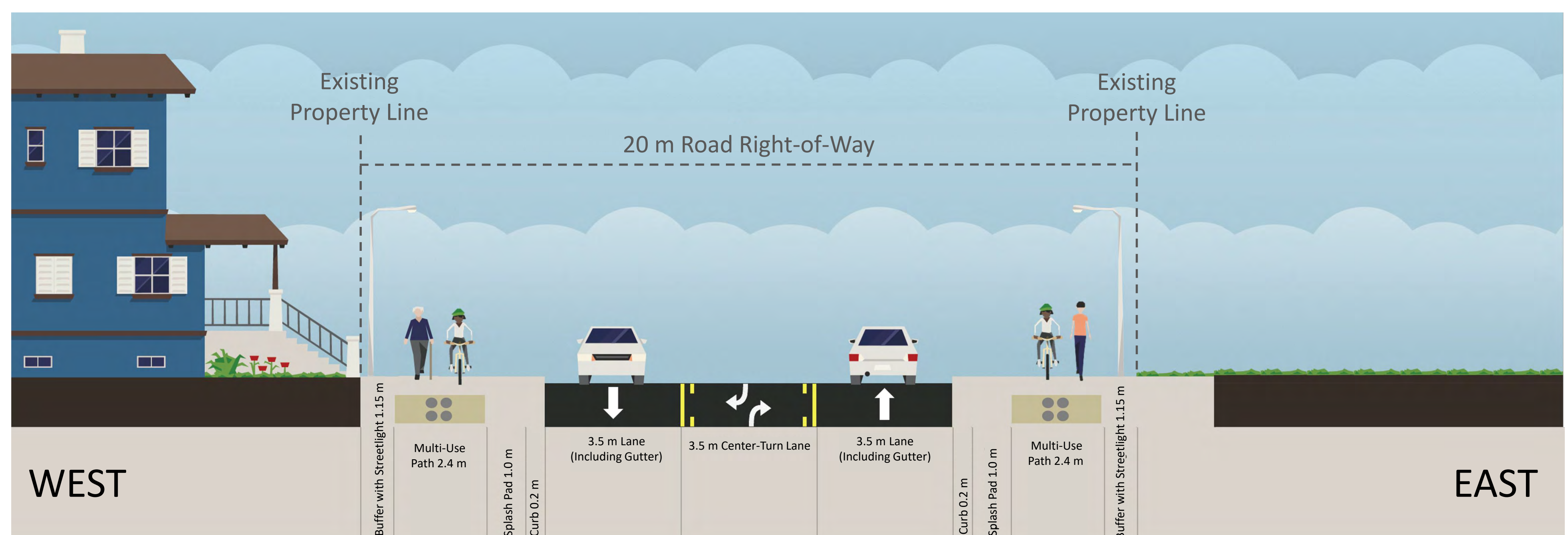


Alternative H1 – PREFERRED ALTERNATIVE



What do you like about this design? Is there anything you would change?

Alternative H2

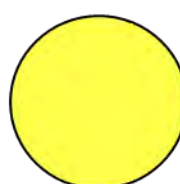






Note: Where constraints exist, the separate sidewalk and cycle track facilities may be combined into a single multi-use path facility. Details would vary by segment.

The above images are created using Streetmix and are subject to the Creative Commons BY-SA 3.0 license (<http://creativecommons.org/licenses/by-sa/3.0/>).

Area 3: Hamlet of Victoria Square Area (H)

Evaluation of Alternative Design Concepts

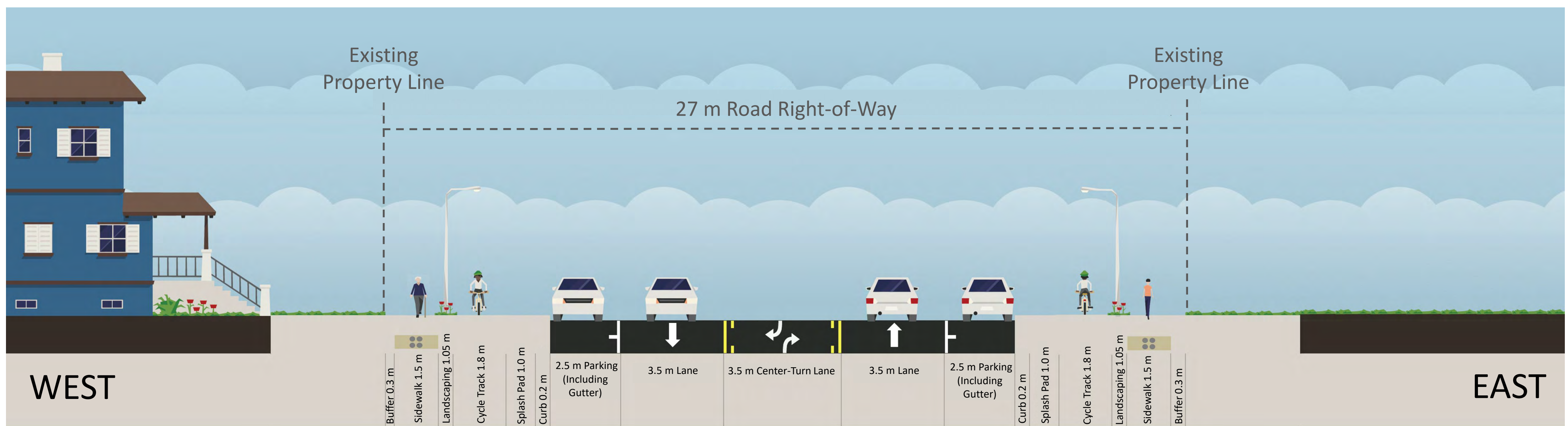
Legend		Alternative H1	Alternative H2
<div>Preferred</div> <div>Less Preferred</div> <div>Not Preferred</div>			
Socio-Economic			
Transportation			
Natural Environment			
Infrastructure Design			
Cost			
Summary			
Comments		<ul style="list-style-type: none">Accommodates a landscape buffer on both sides of the roadAccommodates cyclists and pedestrians in dedicated facilities, minimizing conflicts between transportation modesLower capital cost	<ul style="list-style-type: none">Does not accommodate a landscape buffer on either side of the roadAccommodates cyclists and pedestrians in a combined facility, resulting in potential conflicts between transportation modesHigher capital cost
Recommendation			



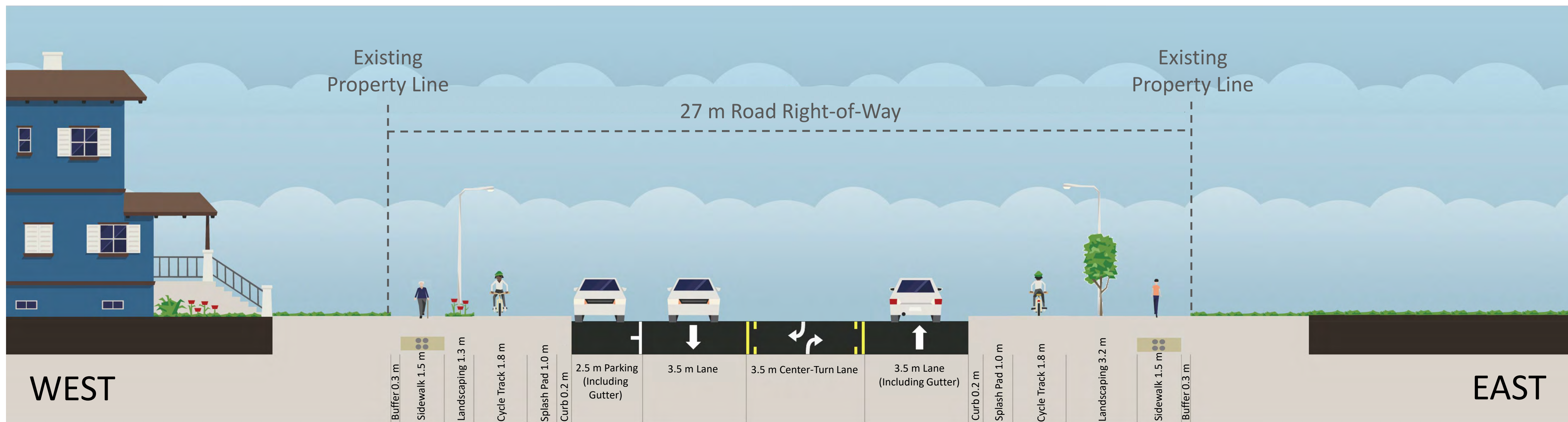
Area 4: Cathedral Residential Area (CR) Alternative Design Concepts



Alternative CR1



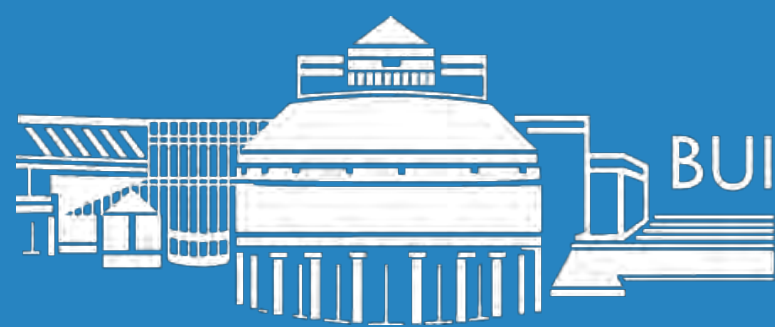
Alternative CR2 – PREFERRED ALTERNATIVE



What do you like about this design? Is there anything you would change?

Note: Where constraints exist, the separate sidewalk and cycle track facilities may be combined into a single multi-use path facility. Details would vary by segment.

The above images are created using Streetmix and are subject to the Creative Commons BY-SA 3.0 license (<http://creativecommons.org/licenses/by-sa/3.0/>).



Area 4: Cathedral Residential Area (CR)

Evaluation of Alternative Design Concepts

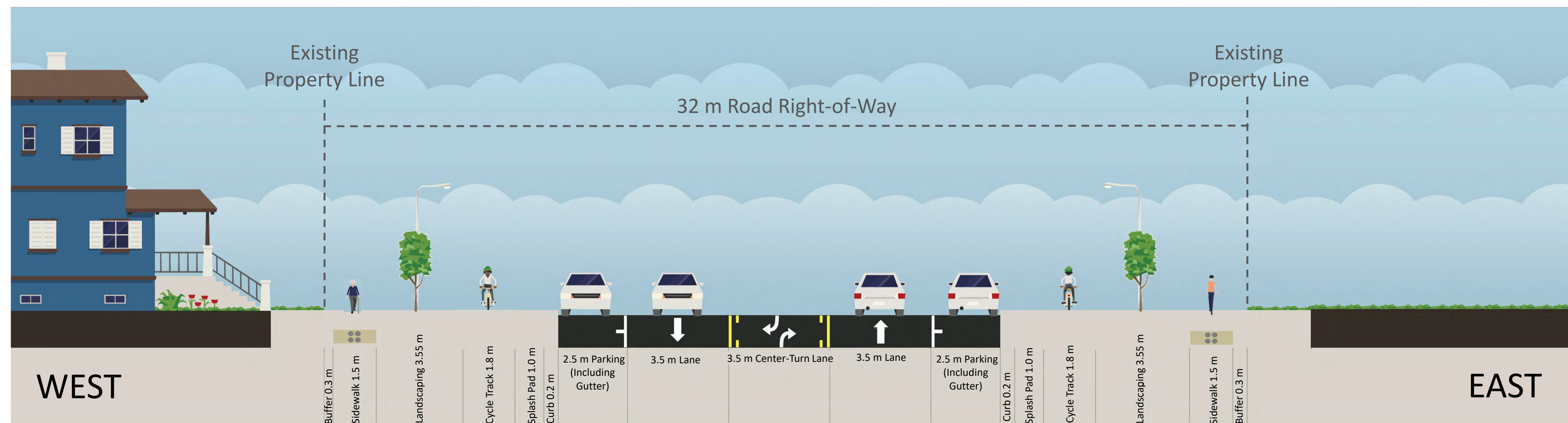
Legend		Alternative CR1	Alternative CR2
<p>Preferred</p> <p>Less Preferred</p> <p>Not Preferred</p>			
Socio-Economic			
Transportation			
Natural Environment			
Infrastructure Design			
Cost			
Summary			
Comments		<ul style="list-style-type: none">Accommodates a limited landscape buffer on both sides of the roadProvides on-street parking on both sides of the street, although parking on the east side is not required to accommodate townhomesHigher capital cost	<ul style="list-style-type: none">Accommodates an adequate landscape buffer on both sides of the roadProvides on-street parking on the west side of the street to accommodate the townhomes that front onto Victoria Square BoulevardLower capital cost
Recommendation			



Area 5: Cathedral Precinct Area (CP) Alternative Design Concepts



Alternative CP1



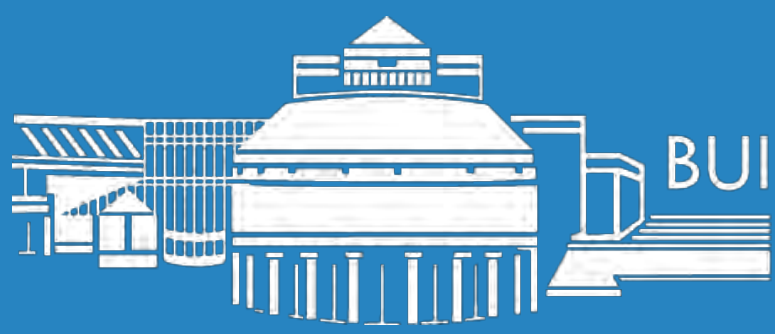
Alternative CP2 – PREFERRED ALTERNATIVE



What do you like about this design? Is there anything you would change?

Note: Where constraints exist, the separate sidewalk and cycle track facilities may be combined into a single multi-use path facility. Details would vary by segment.

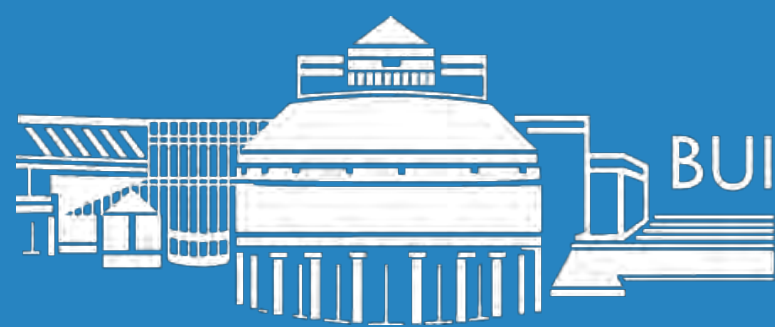
The above images are created using Streetmix and are subject to the Creative Commons BY-SA 3.0 license (<http://creativecommons.org/licenses/by-sa/3.0/>).



Area 5: Cathedral Precinct Area (CP)

Evaluation of Alternative Design Concepts

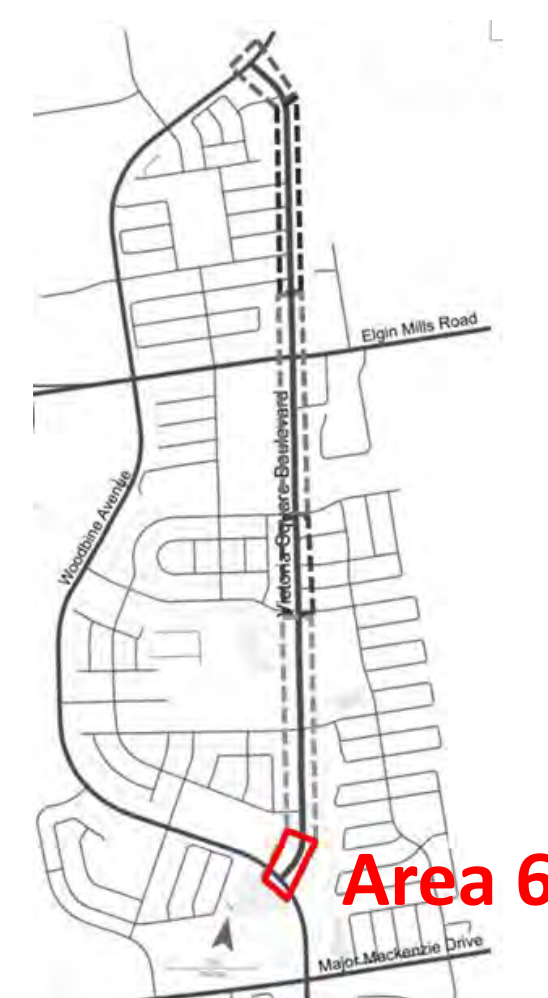
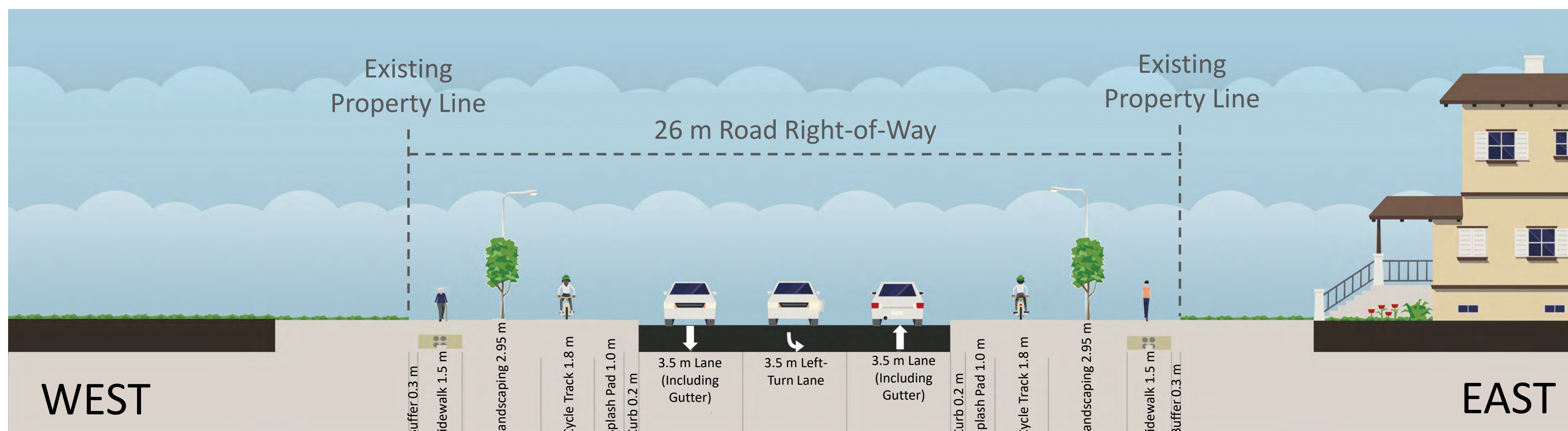
Legend		Alternative CP1	Alternative CP2
<p>Preferred</p> <p>Less Preferred</p> <p>Not Preferred</p>			
Socio-Economic			
Transportation			
Natural Environment			
Infrastructure Design			
Cost			
Summary			
Comments		<ul style="list-style-type: none">Accommodates an adequate landscape buffer on both sides of the roadProvides on-street parking on both sides of the street, although parking on the east side is not required to accommodate townhomesMore significant impacts to watercourse and floodplainLonger culvert will be required to accommodate a wider roadway platformHigher capital cost	<ul style="list-style-type: none">Accommodates an adequate landscape buffer on both sides of the roadProvides on-street parking on the west side of the street to accommodate the townhomes that front onto Victoria Square BoulevardLess significant impacts to watercourse and floodplainShorter culvert will be required to accommodate a narrower roadway platformLower capital cost
Recommendation			



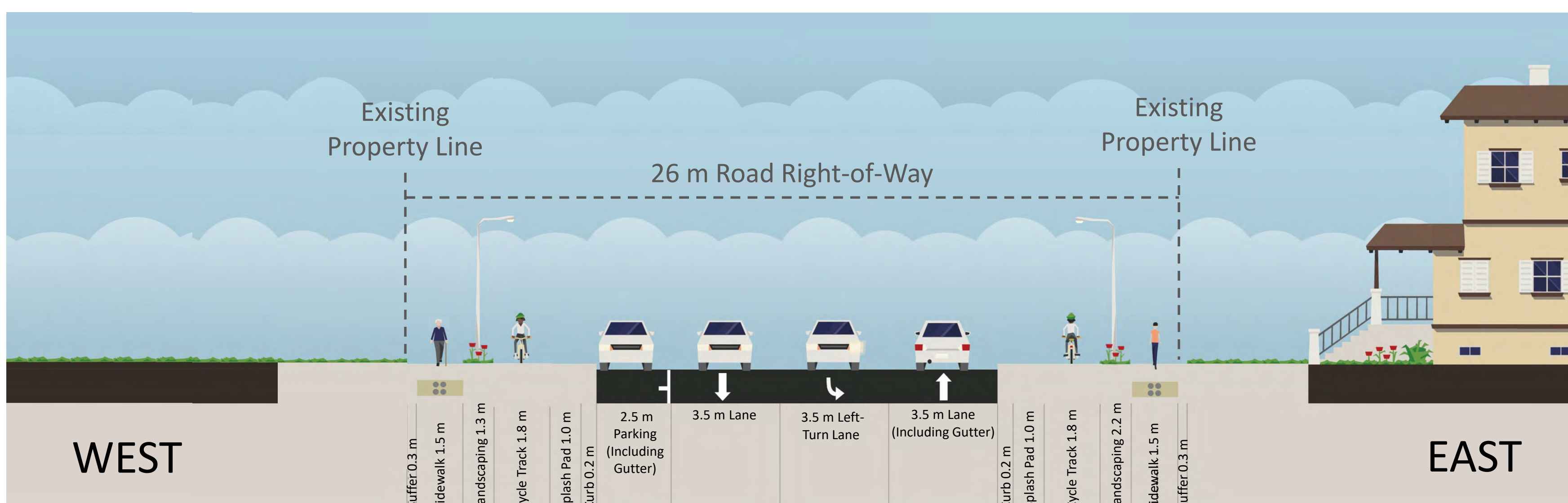
Area 6: South Gateway (S)

Alternative Design Concepts

Alternative S1

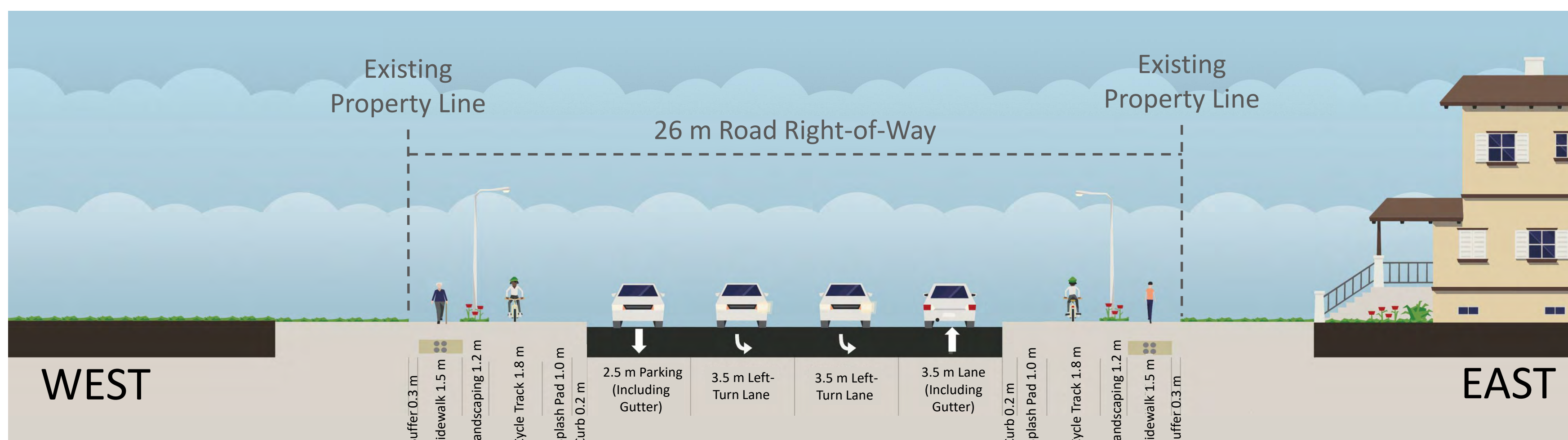


Alternative S2 – PREFERRED ALTERNATIVE



What do you like about this design? Is there anything you would change?

Alternative S3



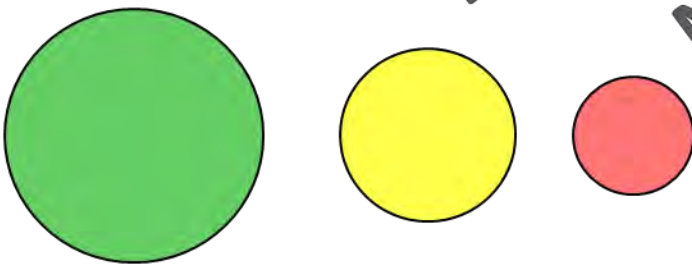

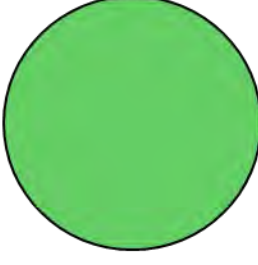
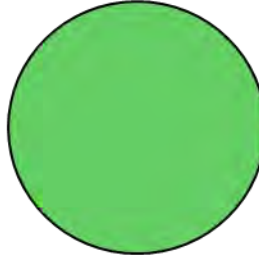
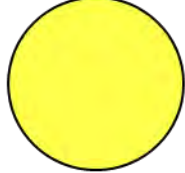






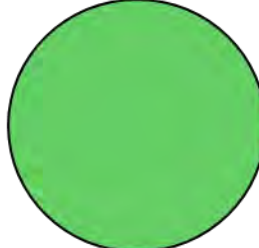
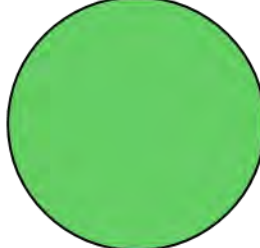

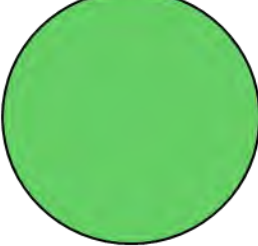
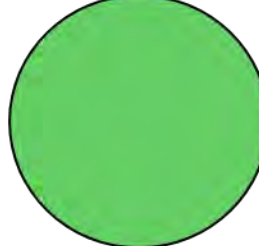
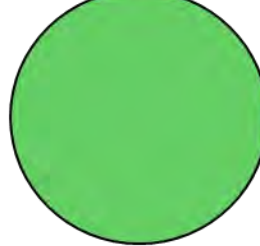


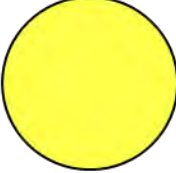


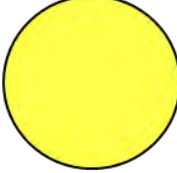

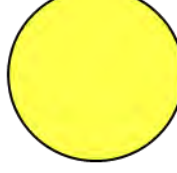





Note: Where constraints exist, the separate sidewalk and cycle track facilities may be combined into a single multi-use path facility. Details would vary by segment.

The above images are created using Streetmix and are subject to the Creative Commons BY-SA 3.0 license (<http://creativecommons.org/licenses/by-sa/3.0/>).



Area 6: South Gateway (S)

Evaluation of Alternative Design Concepts

Legend		Alternative S1	Alternative S2	Alternative S3
<p>Preferred Less Preferred Not Preferred</p> 				
Socio-Economic				
Transportation				
Natural Environment				
Infrastructure Design				
Cost				
Summary				
Comments		<ul style="list-style-type: none">Provides adequate landscape buffer that accommodates utilitiesDoes not provide on-street parkingLowest capital cost	<ul style="list-style-type: none">Provides adequate landscape buffer that accommodates utilitiesProvides on-street parkingHigher capital cost	<ul style="list-style-type: none">Does not accommodate utilities in narrow landscape bufferDoes not provide on-street parkingHigher capital cost
Recommendation				



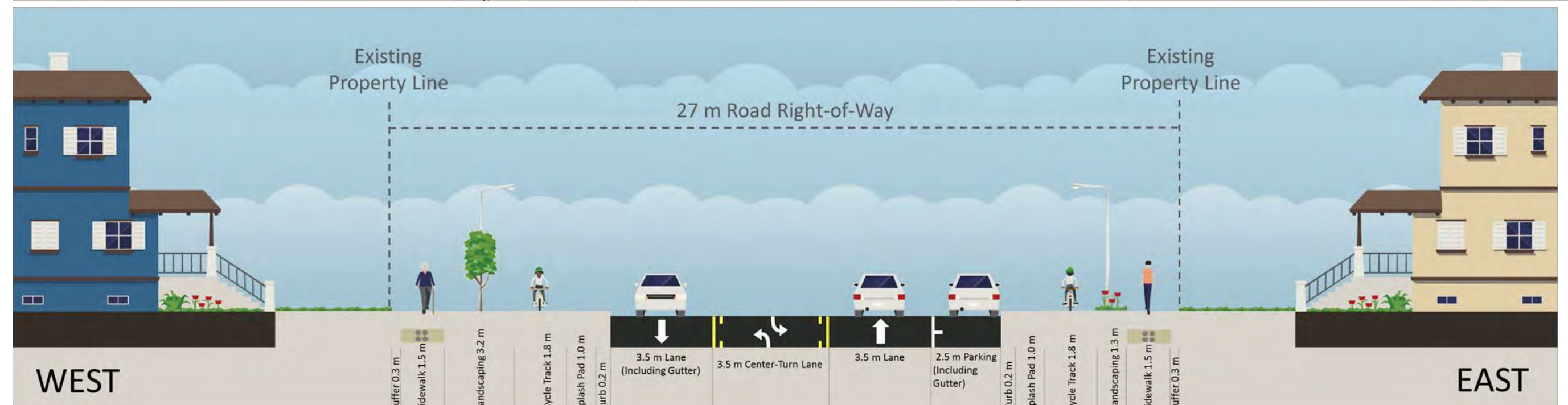
Preferred Design Concept: Typical Cross-Sections

(Refer to Preliminary Design Roll Plan for details at specific locations and transition between areas)

Area 1:



Area 2:



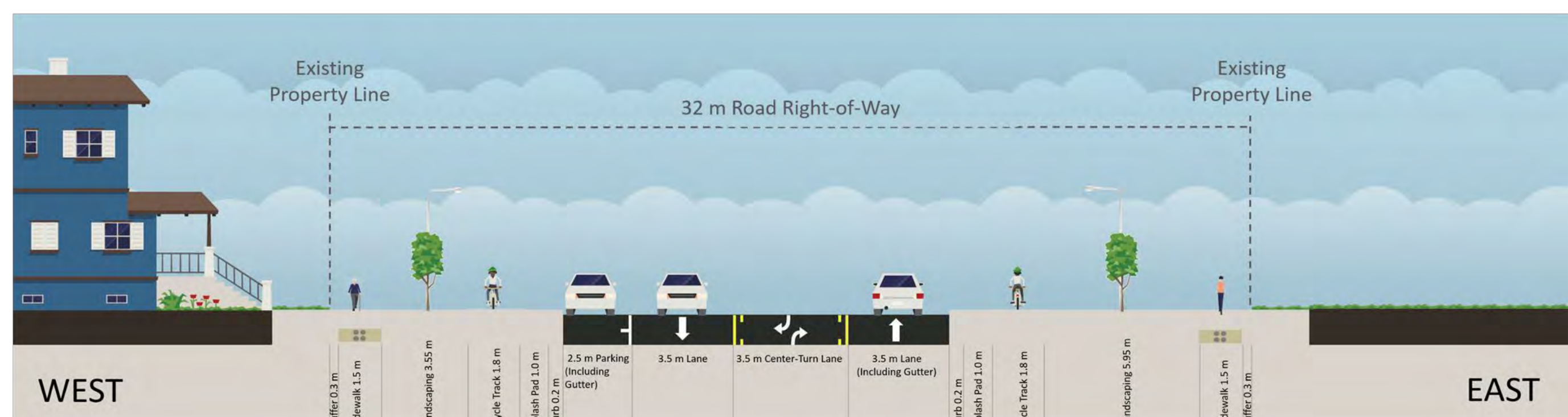
Area 3:



Area 4:



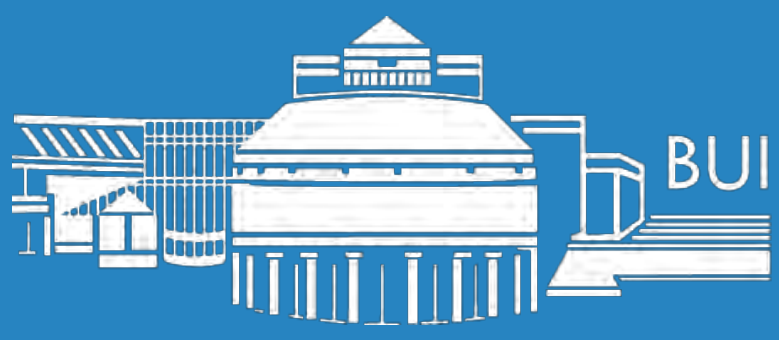
Area 5:



Area 6:



The above images are created using Streetmix and are subject to the Creative Commons BY-SA 3.0 license (<http://creativecommons.org/licenses/by-sa/3.0/>).



Gateway Features

Sample of a stone wall gateway feature with plantings:

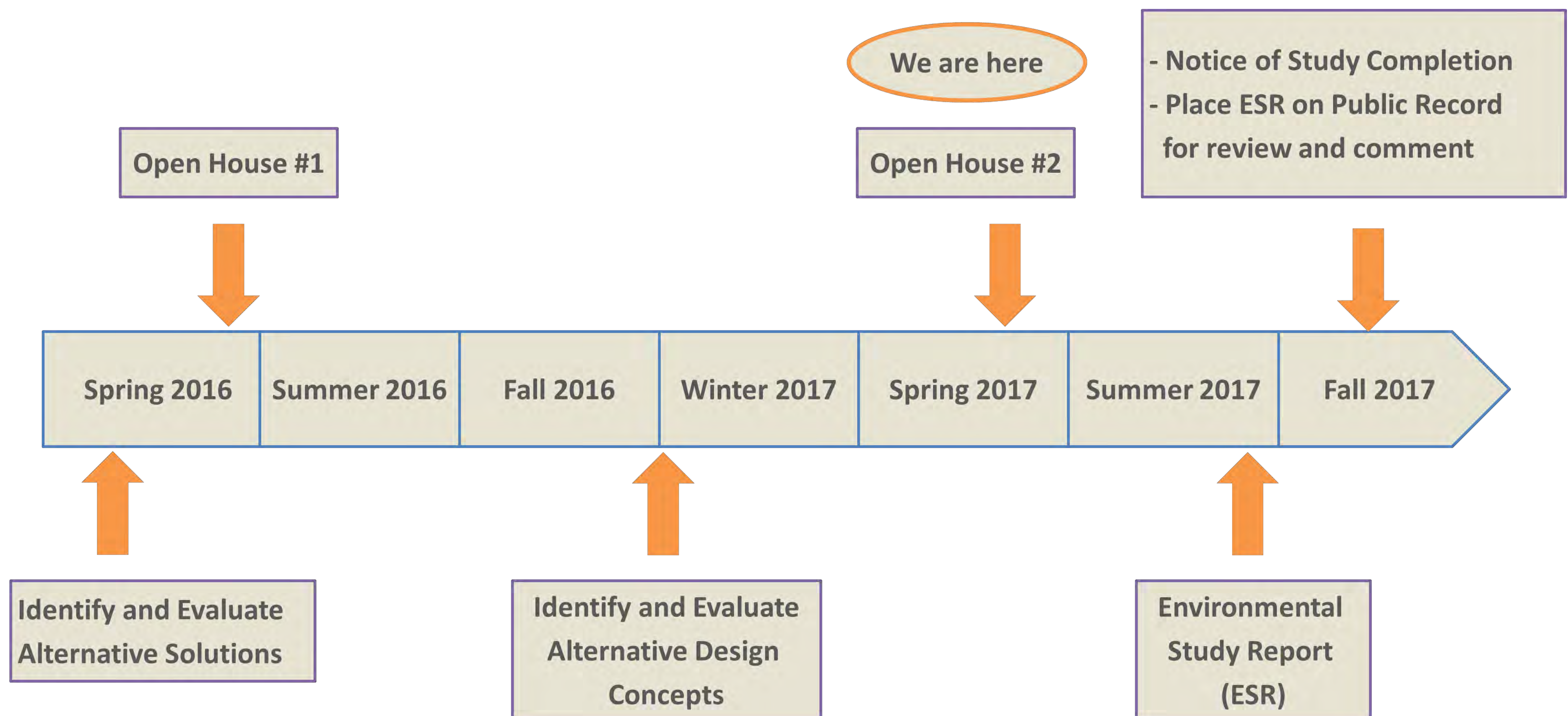


What do you like about this design?
Is there anything you would change?





Schedule and Next Steps





Thank you

Your input is very valuable to us!



Please fill out the feedback form
and return it to us today

OR

Send us your comments
within 2 weeks, by June 28, 2017

For More Information

Contact:

Alberto S. Lim, P.Eng.

**Senior Capital Works Engineer
Infrastructure and Capital Works
City of Markham**

Anthony Roman Centre
101 Town Centre Boulevard
Markham, ON L3R 9W3
Phone: 905 477 7000 x 2860
Email: ALim@markham.ca

Anthony Reitmeier, P.Eng.

**Consultant Project Manager
HDR Corporation**

100 York Boulevard, Suite 300
Richmond Hill, ON L4B 1J8
Phone: 647 777 4954
Email: Anthony.Reitmeier@hdrinc.com