

MORE PEOPLE BIKING MORE OFTEN

Wolseley to Downtown Walk/Bike Project

Bike Winnipeg Comments and Recommendations Regarding Preliminary Design – June 2019

General

The Pedestrian and Cycling strategies call for bikeways along Westminster/Young/Balmoral/Granite Way from Dominion to Osborne, and along Wolseley from Omands Creek to Furby. The Wolseley neighbourhood has embraced some of the highest levels of sustainable transportation seen in the city. Residents of the West Broadway neighbourhood have some of the lowest car ownership rates in the city. The residents of these neighbourhoods, and the thousands of Winnipeggers who travel through these neighbourhoods have displayed a strong demand to create a complete, connected, and dense bicycle network as directed in the Pedestrian and Cycling Strategies. This project needs to deliver on that demand.

The Wolseley to Downtown Walk Bike Project provides an opportunity to turn this vision into reality. If we truly want to embrace the city's strategic goal of providing "a transportation system that supports active, accessible and healthy lifestyle options", then we must use this opportunity to reshape the transportation system in Wolseley and West Broadway from one centered on travel by car to one that provides quality options to people on foot, bike, or riding on transit.

We need to ensure that the designs brought forward by this process meet the needs of the future we desire for our city in terms of livability, equity, sustainability, and transportation choice. Design choices must go beyond minimal improvements to walking and cycling conditions by embracing best practices in walking and cycling infrastructure and traffic calming to substantially improve safety for all users of the transportation system, and to substantially improve comfort levels and mobility for people on foot, bike, or public transit. Designs must be appropriate for all ages and abilities, they must be consistent through major sections of the corridor, and they need to meet demands for capacities that allow us to meet our climate, health, and mobility targets.

The recommendations in this document are conceptual only, and represent our best effort to meet the desire for improved walking and cycling called for through the first phase of public engagement under this project. Widths and treatments may need to be modified as information becomes available. We are open to dialogue and suggestions that improve the designs that this project will provide., but our goal is to provide safe transportation options..., we feel that the final designs chosen for the neighbourhoods need to meet legitimate, well expressed demands for improved safety, better bike network connections, and cycling comfort throughout the areas covered by this report.

East Section

We feel that Option 1 (with modifications as described below), which converts the Westminster/Young/Balmoral corridor to a one-way between Langside and Broadway and Granite Way into a one-way between Balmoral and Osborne provides the best solution to the top 3 priorities identified in the public engagement report:

- 1. Safety
- 2. Bike Network Connections
- 3. Cycling Comfort.

One of the strongest benefits of Option 1 is that it is the only option that provides enough space to provide protected bike lanes with enough width to meet the expected capacity requirements for a bike lane on such a highly used route. Options with narrow bike lanes will not permit passing or side-by-side riding, and will create safety hazards as faster cyclist try to pass slower cyclists along a roadway with little room for error.



at least 6.5 ft. recommended to enable passing movements

Same Direction	Bike Lane Width (ft.)		
Bicyclists/ Peak Hour	Rec.	Min.*	
<150	6.5	5.0	
150-750	8.0	6.5	
>750	10.0	8.0	

 $^{^{\}ast}$ A design exception is required for designs below the minimum width.

EXHIBIT 3H: Bike Lane Widths for One-way Operation

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to	enable	pass	ing mo	ovements

Bidirectional Bicyclists/	Bike Lane Width (ft.)		
Peak Hour	Rec.	Min.*	
<150	10.0	8.0	
150-400	11.0	10.0	
>400	14.0	11.0	

^{*} A design exception is required for designs below the minimum width.

EXHIBIT 3I: Bike Lane Widths for Two-way Operation

MassDOT Separated Bike Lane Planning & Design Guide

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Conversion of the Westminster/Young/Balmoral section to a northeast bound one-way will also make it possible to significantly improve safety for all road users at the intersections of Balmoral @ Young and Westminster @ Young, two locations singled out in the public engagement report as safety issues, cycling issues, and driving issues.

One-Way Conversion of Granite Way

We feel that conversion of Granite Way into a one-way makes a lot of sense. The one way conversion will remove two conflict zones at Osborne and Granite Way identified on page 26 of the public engagement report (people on foot or bike accessing the pork chop island west of Osborne having to merge or cross motorized traffic turning right off of Granite Way onto Osborne), and cyclists turning left off of eastbound Assiniboine onto southbound Osborne being cut-off by motorized traffic turning right off of Granite Way onto Osborne), which is a positive improvement to safety along this bike route.

To provide access to the Building Blocks on Balmoral YMCA-YWCA of Winnipeg Child Care Centre parking lot, two-way traffic could be allowed on Granite Way between Balmoral and the parking lot entrance. With the removal of parking on Granite Way between this parking lot entrance and Colony (roughly 6 spots), two-way traffic along Granite Way could be maintained from Balmoral to Colony, providing access to the westernmost Granite Curling Club parking lot from both Balmoral and Colony.

If on street parking for this section was desirable, there is adequate space on the south boulevard of Granite Way to route the northbound protected bike lane coming off of Balmoral onto eastbound Granite Way between a realigned south sidewalk and Granite Way. Westbound cycling traffic could be routed to the north side of Granite Way at a raised crossing attached to a closure of the westbound traffic lane. This would be similar to the treatment used on McDermot Avenue two-way protected bike lanes as they approach Arlington Street. As an added benefit, a raised crossing would slow traffic in front of the Child Care Centre.

Adding a two-way cycle track to the south side of Granite Way will also remove a potential safety hazard at the intersection of the Cornish Pathway with Granite Way, which is currently obscured behind parked cars. A diverter at this location would provide the same benefit.

Further removal of on-street parking along Granite Way between Colony and the entrance to the eastern Granite Curling Club parking lot (roughly 16 spots) would provide access to the east parking lot from Balmoral, Colony, and Osborne.

While it may be tempting to suggest detouring the bike route behind the Granite Curling Club, either along the existing Cornish Pathway or along a higher route skirting the south side of the curling club along a well-established desire line, this option presents several challenges:

- The Cornish Pathway is regularly closed due to seasonal flooding;
- The Riverside pathway presents CPTED/safety issues;
- A pathway along the higher desire line would require substantial benching of the slope and potential removal of mature trees and or parking.
 - o This would prove quite expensive.

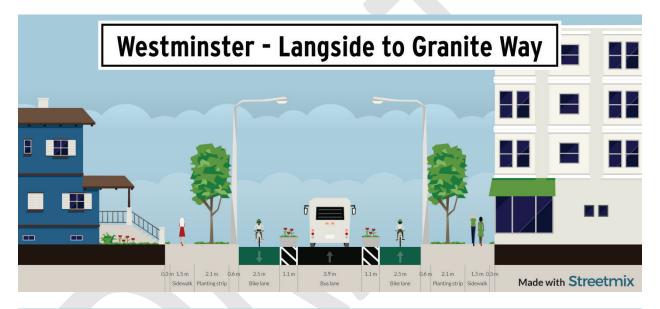
It should be noted that people already choose not to detour along the river pathway south of Assiniboine Avenue between Osborne and Edmonton. It's unlikely that a detour south of the curling club will be treated any differently.

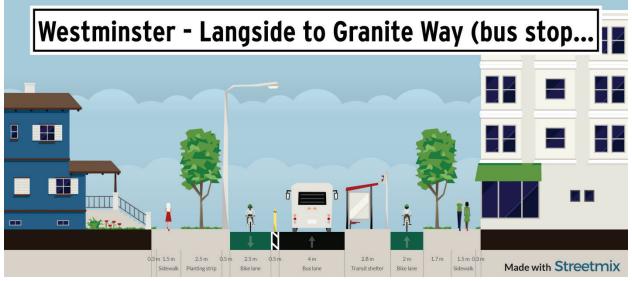
For these reasons, we recommend against any option to divert people on bikes south of the curling club. The on road options, including the addition of short two-way segments described above provide better options.

Langside to Granite Way - One Way Conversion

We like the decision to convert the Westminster/Young/Balmoral corridor to one-way northbound traffic as the only option provided that we feel adequately meets the demands to improve safety, connectivity, and cycling comfort.

This is the only option that approaches the widths recommended by best practice, but it also meets neighbourhood goals of reducing cut-through traffic, improving safety, improving bicycle network connectivity, and increasing the comfort level of folks on bikes.





In contrast to the comfort levels provided to road users in option 1 with its conversion of Westminster/Young/Balmoral to a one-way, options 2 and 3 provide bike lanes that will be narrow to permit passing, and in the case of option 3 with just painted bike lanes

Young Street will be an important destination and connection for people on bike (Broadway Neighbourhood Centre and Park – community gardens, skate park, bike park, sports field, playground, wading pool/spray pad -, ArtCity, Pals Supermarket, an existing traffic signal providing safe access across Broadway). We recommend that Young Street should replace Langside Street as the main north/south bike route through West Broadway and potentially up to the University of Winnipeg.



This change to the strategies would be in line with direction 1B - Action xi of the Pedestrian and Cycling Strategies – to pursue bicycle network improvements that establish connections to major destinations throughout the City, including regional, community, and neighbourhood mixed-used centres and corridors, schools, libraries, and parks.

Given that northeast/southwest flow along Westminster/Young/Balmoral is not currently forced stop at Young and Balmoral, access to northbound Young would be best served by a conversion of the Westminster/Young/Balmoral corridor to a one way, which will reduce the number of conflicting movements through this intersection. We would like to see the consultants investigate the possibility of

widening the planned one-way southbound protected bike lane on Young between Westminster and Balmoral into a two-way protected bike lane in addition to the planned northbound one-way protected bike lane. People riding their bikes eastbound on Westminster would then be able to cross eastbound Balmoral at the existing stop protecting the driveway into/out of Balmoral Hall and ride north along the west side of Young before crossing the southbound lane of Young with the right of way before turning left and continuing up Young St in mixed traffic in the northbound lane.



As a northbound one-way, option 1 would also provide a way to get rid of the southbound stop sign at Westminster and Young that is identified as an issue in the public engagement report, as any potential conflict is removed through the protected bike lanes.

Connecting Young Bikeway across Portage Avenue

This is the hardest part of the route to complete, but multiple options exist that would provide a connection from Young and Westminster across Portage Avenue to the University of Winnipeg Campus, the downtown protected bike lane network, and ideally the planned east/west connection to the St. Matthews Ave protected bike lanes (identified aa an east/west spine in the city's planned bike network).

Destinations and Connections North of Portage Avenue:

- The U of W's Furby-Langside Campus (McFeeters Hall, Richardson College Centre for the Environment & Science Complex, Day Care Centre)
- The Richardson Green Corridor providing connections between Langside and Young to Spence Street and them main U of W Campus.
- Signalized connections across Ellice Ave along Young St or Spence St.
- Pedestrian corridors across Ellice and Sargent along Langside.

The 2019 Pedestrian and Cycling Program Action Plan includes funding for a study to improve cycling connectivity to the U of W Campus from the south. We urge the consulting team to work with consultants for this study and coordinate access from Young Street to the U of W Campus.

Move Traffic Signal from Langside @ Portage to Young @ Portage

This would create a signalized connection across Portage, but could prove hard to implement as U of W parking is currently accesses via a left turn lane on Portage at Young.

Add Pathway Connection between Young and Langside South of Portage

This would have to wind its way through parking. It would require removal of some parking on Young, but this could be mitigated by flipping the parking from the west side of Young to the east side of Young.

Add a 2-way Pathway between Langside and Young on South Portage Right of Way

There is not a lot of space for this, and it would require the removal of any snow storage on the south side of Portage between Young and Langside.

Add One-way Cycle Tracks on Portage between Langside and Young

To reach Langside from Young, it might be possible to install a one-way cycle track between an off-peak parking lane and sidewalk on the south side of Portage. This would provide a cycle track that was parking protected in off-peak hours, but next to a diamond lane during peak hours. There are no bus stops on this section of eastbound Portage.

To facilitate westbound people on bike, it may be possible to remove the left turn lane on Portage between Langside and Young to provide a one-way cycle track in the Portage median between Young and Langside. This option may be a hard sell as the left turn off Portage onto NB Young is the access route to parking.

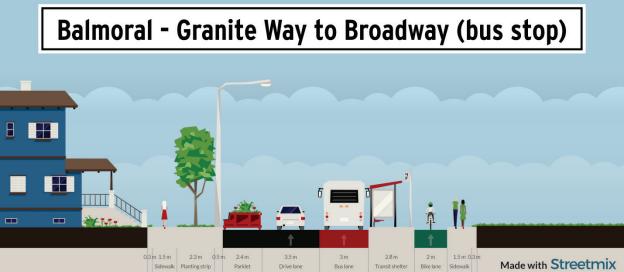
This would require closing Young at Portage and adding a signal to stop eastbound traffic on Portage – westbound traffic coming off St. Mary and heading east on Portage could be maintained.

There could be potential to continue the bikeway north along Langside to Cumberland, and then revert to Young/Kate via at two way cycle track on Cumberland (planned?) that would continue north to Elgin. Elgin would provide easy access to the Red River College Princes Ave Campus, and could ideally be connected through the Princess Ave bike lanes to the Market Lands development and Old Market Square.

Balmoral One-Way

Bamloral has a width of 11m between Granite Way and Broadway, widening to 13.5 m between the back lane and Broadway. If turned into a one way, you could implement angled parking between Granite Way and Broadway instead of parallel parking, which would add parking spaces. Space would also be available for a northbound protected bike lane, at least along the one-way section.





Two-way traffic could be maintained between Broadway and the Canada Life Parking Lot Entrance/Broadway back lane to maintain access to the Canada Life Parking Lot and the Balmoral/Spence back lane.

Langside One Way Conversion

Conversion of Langside St from a two-way street into a southbound one-way street would be a requirement of any option that converted Balmoral into a northbound one-way, as transit traffic for the #10 bus route would need to be diverted off of southbound Balmoral. Conversion to the one-way would provide room and predictability for the bus. Conversion of Langside to one-way traffic would obviously affect access for motorized traffic on Langside, but would also make Langside a lot less desirable as a bike route, which makes Young an even more desirable choice as a north/south route across Broadway.

West of Langside, Westminster would revert to a two way street with transit in both directions.

Moving Route from Balmoral to Langside/Balmoral

Making New Connections

One benefit of moving transit access to Wolseley on the westbound route from Balmoral to Langside would be the addition of stops serving MacDonald Youth Services, Pals Supermarket, and the Broadway Neighbourhood Centre & Park.

A new stop located on southbound Langside at Sara would provide a second access to the Broadway Neighbourhood Centre & Park as well as access to commercial and institutional properties on Sherbrook (about 100m distant) and Maryland (about 200m distant) via Sara, served by pedestrian corridors for crossings of both Sherbrook and Maryland.

This would be offset by a loss to the southbound Balmoral stop (stop # 10216 – Southbound Balmoral @ Granite) which serves the Child Care Centre at Balmoral and Granite Way. Users of this stop would have to shift to stop 10214 (Westbound Broadway @ Balmoral), 300m to the north, or to the new stop at Langside and Westminster, 375 m to the southwest.

The loss of stop 10215 (Southbound Balmoral @ Broadway) would be offset by the addition of stop 10214 (Eastbound Broadway @ Balmoral).

Stop 10212 (Southbound Balmoral @ Spence) would be replaced by a stop at Southbound Langside @ Westminster, which would be served by a crosswalk on Westminster. This new stop would be 215 away from the existing stop.

No address would be placed more than 400m from both a west/southbound and east/northbound bus stop on the proposed new routing of route #10.

Active Transit Signal Priority @ Broadway and Langside

To facilitate the left turn off of Broadway onto Langside, it may be possible/feasible to utilize an Active Transit Signal Priority treatment at Langside and Broadway. Only eastbound traffic on Broadway would need to be stopped, although to ensure that the bus could transition from the curb lane to the median lane for the left turn, Upstream Green Truncation could be combined with a transit priority signal at the intersection of Broadway and Young to provide westbound buses with a needed jump in traffic to transition into the median lane or to generate the needed gap in eastbound traffic.

Essentially, as the #10 bus approached Broadway @ Langside, the signal would be triggered to stop east bound traffic on Broadway and allow the transit bus to turn left onto Langside.

This would limit access to Langside and preserve the signal at Broadway and Young, needed for the north/south bikeway along Young and as a connection to the Broadway Neighbourhood Centre and Park.

Developing Cornish Pathway as Alternative to Cycling Facilities on Balmoral

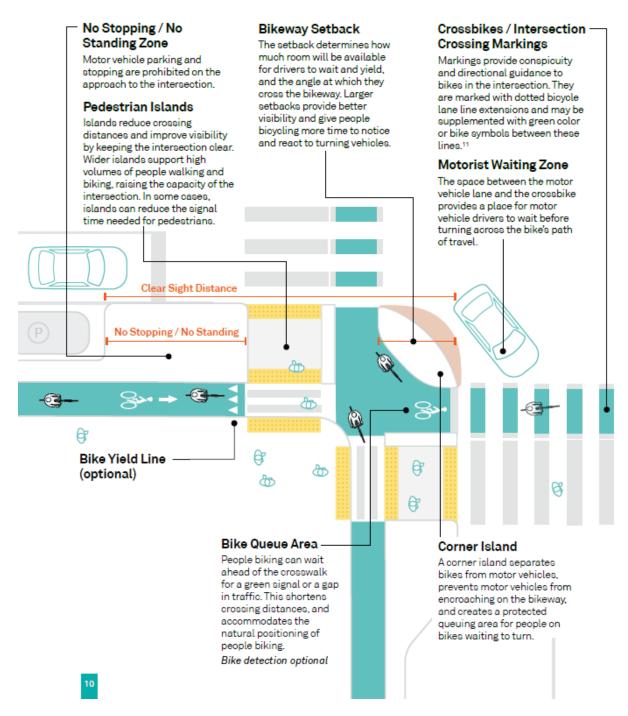
The Cornish pathway is simply not a viable alternative to protected bike lanes along the Westminster/Young/Balmoral/Granite Way corridor:

- It would be an isolated pathway with very serious CPTED issues (would you want your 13 year old daughter riding this pathway at 10pm?)
 - o It would require installation of lighting, which is quite expensive.
- Seasonal flooding is an issue.
- An arterial pathway (and that is what we are planning) would require considerable property acquisition (~5m per property along the route to build the path on high ground).
- Construction of an arterial pathway would cause substantial damage to the riparian zone
 - Height differences make access from side streets impractical. They would wither be prohibitively expensive and destructive to the riparian zone (you would have to raise the pathway and riverbank to make it accessible from side streets and maintain it above flood level.
 - Accessibility is an important factor for choice of cycling /walking facilities
 - Accessible pathways are limited to a 5% (3-4% preferred) grade and a 2% cross-grade.
- A 3.5m pathway (plus 1m buffer) would require significant tree removal.
- It would be poorly connected to destination along the route
 - The pathway would only be accessible from Cornish, Spence, and one or two locations off Granite Way.

Mid Sections - Walnut through to Langside

The sections between Walnut and Langside are the most important sections along the route as they see the highest levels of traffic and generate the most conflict points between motorized traffic and people on foot or bike. We need to see improvements along these sections of road. An important improvement will also see protected intersections developed where Westminster and Wolseley cross Sherbrook and Maryland. Protected intersections at Sherbrook and Maryland will accommodate left hand turns off of Sherbrook/Maryland onto Wolseley & Westminster. Space constraints on Maryland may limit treatments to accommodate left turns off of Wolseley and Westminster to bike boxes, but the Sherbrook intersections should provide enough room for more substantial protection, including the ability to provide protection for the crosswalks.

Protected Intersections



Stress the need to connect to the Sherbrook/Maryland Commercial Corridor using terms from the Our Winnipeg Strategy.

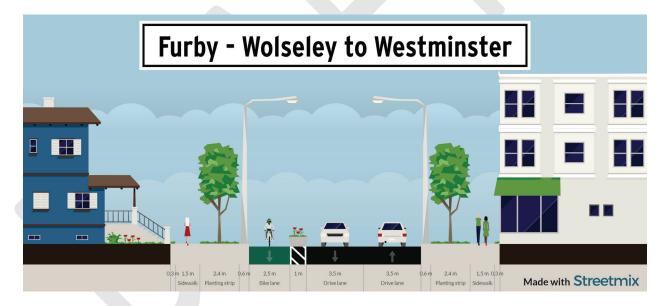
Furby

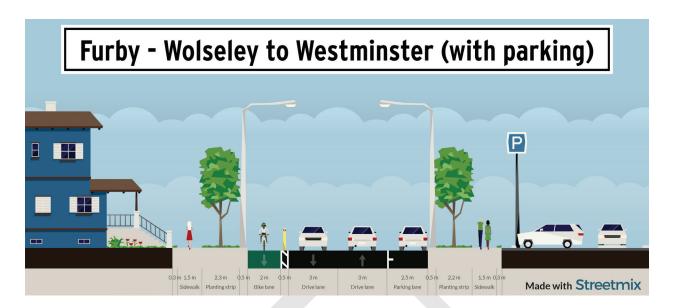
Furby is about 10m/32ft wide between Broadway and Conrish. This is quite wide, and would provide a connection to the east side of the Maryland Bridge should it ever be desirable to allow bikes onto the bridge sidewalks.

As Wolseley and Westminster Ave have limited width and will likely require two-way traffic between Maryland and Langside, we suggest that in order to provide the highest degree of comfort, consideration be given to adding a southbound protected bike lane along Furby between Cornish and Broadway. This would cut back on the amount of counter flow bike traffic in the Sherbrook protected bike lanes, and would also allow for a more consistent bike lane width and level of comfort for people biking along the

Wolseley/Sherbook/Furby/Westminster/Young/Balmoral/Graniteway corridor.

A southbound protected bike lane on Furby could provide a connection between Broadway and Wolseley, including Sara. Existing parking along Furby could be maintained (although flipped from the west side to the east side of Furby) with this option, either as a shared travel/parking lane, or as two travel lanes plus a dedicated parking lane.





Wolseley

Converting Wolseley into a westbound one way between Walnut and Maryland will dramatically cut down on traffic along this stretch as well as the stretch from Maryland to Sherbrook.

Sherbrook to Furby

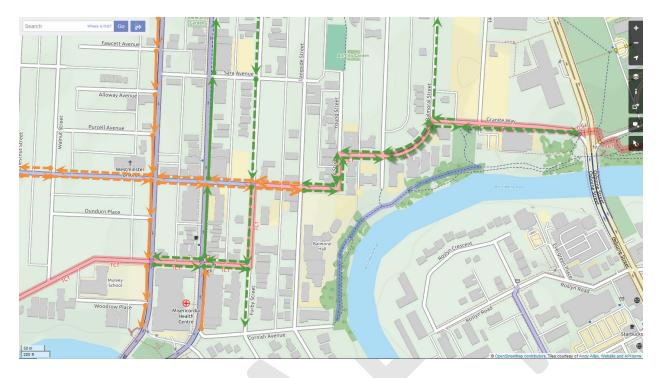
Wolseley to Furby has about 8 parking spots on the south side between Furby and Sherbrook.

Critical Measurements

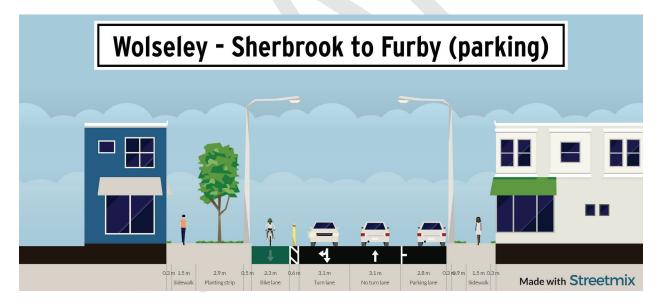
Sherbrook to Furby

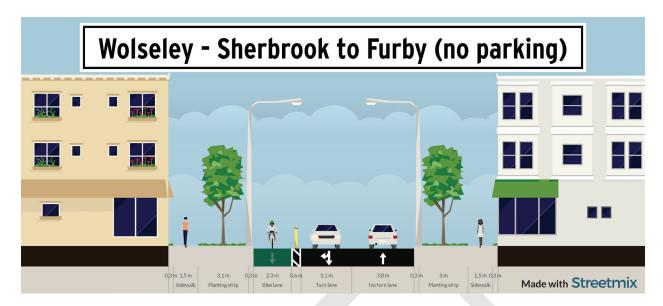
- Roadway width (curb to curb) ~ 11m (36') wide
- North boulevard is about 11'2"(3.4m) from curb to sidewalk (including curb)
- South boulevard is about 10'8" (3.3m) from curb to sidewalk (including curb)
 - Tapers to about 3'10" (1.2m) between Sherbrook back lane and Sherbrook
 - 4 parking spots between Sherbrook and back lane (there is a fire hydrant adjacent to the back lane that prevents any additional parking).
- Sidewalks are 5'

Given that there is already a protected bike lane along Sherbrook heading north between Wolseley and Westminster, to maximize space it might be better to split north/south bike traffic travelling along the Wolseley/Sherbrook/Furby/Westminster corridor between Sherbrook and Furby. Northbound bike traffic would follow Wolseley/Sherbrook/Westminster. Southbound traffic would follow Westminster/Furby/Wolseley.



Proposed bike lane network – Solid lines show existing infrastructure. Green lines show proper width protected bike lanes, orange lines show reduced with bike lanes – painted or raised.





Sherbrook to Maryland

Wolseley stretches about 88m from Sherbrook to Maryland.

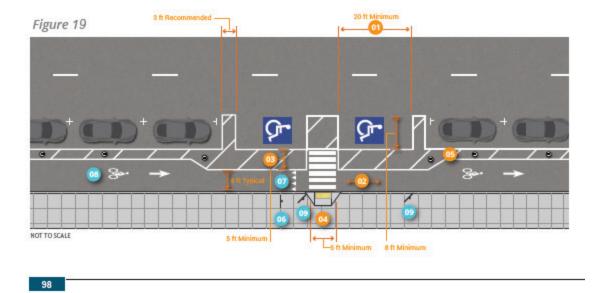
Critical Measurements

- ~ 24m right of way.
- ~ 14m curb to curb between Sherbrook and Maryland.
- South Boulevard
 - O Boulevard is about 4'3" (1.3m) sidewalk to curb (including curb)
 - Sidewalk is about 5' (1.5m)
 - South side includes about 14' (4.25m) space between building and sidewalk
- North side boulevard
 - o Boulevard is about 47" (1.2m) from curb to sidewalk (including curb)
 - Sidewalk is about 5' (1.5m)

There are needed bus stops on both sides of Wolseley between Sherbrook and Maryland – they are both far side bus stops.

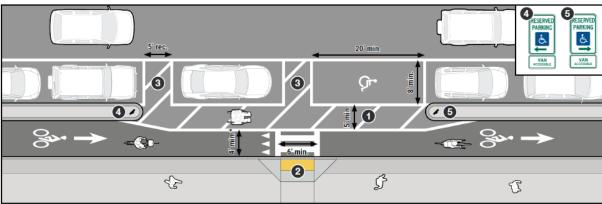
- Route 99 turns off Sherbrook onto Wolseley and then onto Maryland.
- Route 17 turns off Maryland onto Wolseley and then onto Sherbrook.

Any design will need to plan for accessible parking in front of Misericordia Hospital from the entranceway to Sherbrook.



Source: FHWA Separated Bike Lane Planning & Design Guide; 2015; FHWA

EXHIBIT 5B: ACCESSIBLE ON-STREET MOTOR VEHICLE PARKING (MID-BLOCK)



A bike lane width narrower than 5 ft. requires a design exception

MassDOT Separated Bike Lane Planning & Design Guide

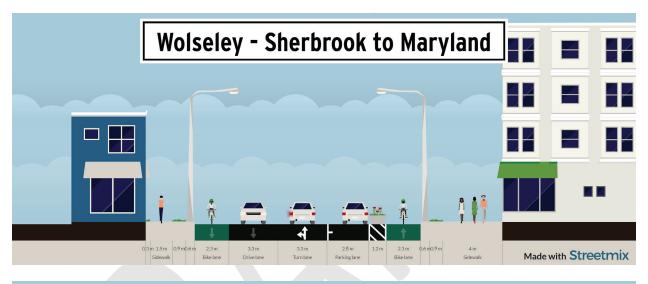
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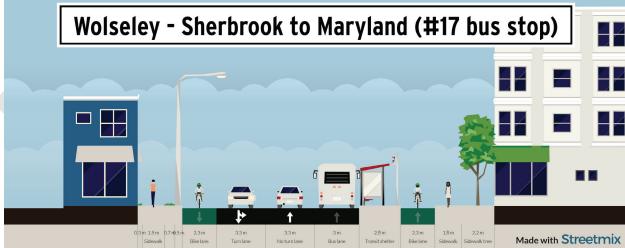
The only eastbound traffic on Wolseley would be traffic turning off of southbound Maryland or out of the back lane, so this will be a negligible flow, eliminating the need for a turning lane. There are only so many reasons why you would want to turn off of Maryland onto Wolseley:

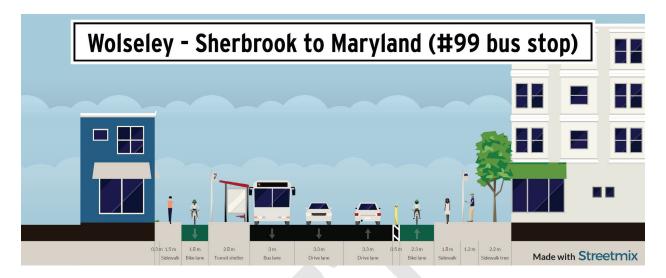
- Hospital drop offs/pick ups and parking
- Turning around to head north on Sherbrook
 - Cornish serves the same purpose
- Connecting to eastbound Wolseley beyond Sherbrook.
 - This is also fairly limited as Wolseley dead ends at Furby.

- Access to Armstrong Point
- Access to Furby
- Connecting to Westminster on way to Osborne
 - This would be negated by the one-way option on Westminster/Balmoral.

Removing one lane may provide space to install protected bike lanes, leave room for transit, and maintain some parking/drop off zones for the hospital.







A bike box at Wolseley and Maryland might be desirable to help facilitate left turns off of westbound Wolseley onto southbound Maryland by people on bike. It could be hard to find space on Wolseley for a two stage left turn (a person on bike would have to cross the sidewalk to wait for a green light on Maryland and then again to reach the southbound bike lane on Maryland). Combined with traffic volume reductions this might be acceptable.

The canopy/porch on northern entrance to Misericordia Hospital extends to the sidewalk. This means that there is likely no way to widen Wolseley to the south.

On the south side of Wolseley, you essentially have:

- 4.5m standing space between the building front and the sidewalk
- 1.5m sidewalk
- 1.25 (maybe up to1.5m) buffer between the sidewalk and street.

Recommendation:

- Two one way protected bike lanes between Sherbrook and Maryland
- Requires removal of one parking lane, but only one or two spots are available on the north side anyway.
- Push bus stop as far east as possible and bend roadway to allow for a left hand turn land and bike box at Maryland.

Westminster

Westminster is narrower than Wolseley between Maryland and Sherbrook, and mature trees in the boulevards mean that there is no possibility of widening the roadway without removing mature trees. Traffic volumes along this section of Westminster reach about 5,000 vehicles per day at Maryland and Westminster. That means that any type of bikeway along Westminster that will need to remove parking or drastically reduce the volume of traffic. The choice then becomes

whether to remove parking or to reduce traffic. We think that the option to remove parking makes more sense and better fits the desires identified in the public engagement report.

Westminster has no bus stops in the section between Sherbrook and Maryland.

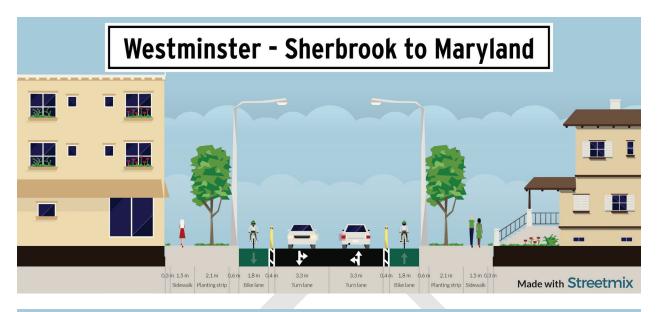
Critical Measurements

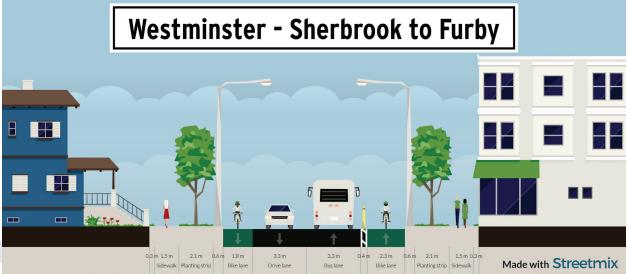
- 20.1 m right of way
- 11m roadway curb to curb
- North Side Boulevard
 - 2.7m boulevard curb to sidewalk (including curb)
 - Boulevard has mature trees
 - o 1.5m sidewalk
 - 0.3m setback
- South Side Boulevard
 - 2.7m boulevard curb to sidewalk (including curb)
 - Boulevard has mature trees
 - 1.5m sidewalk
 - o 0.3m setback

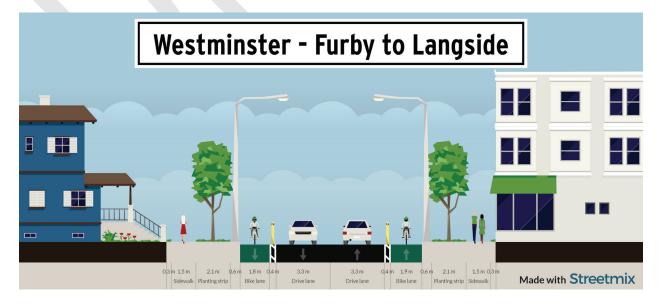
Parking would need to be prohibited to provide any bike lane (protected or not) on Westminster if two-way traffic is to be retained. Even then, only a narrower bike lane can be provided, likely 2.2m or less in width including any buffer/gutter. This constraint is true for the section of Westminster between Arlington and Maryland all the way through to Langside, where East Option 1 proposes turning Westminster into an eastbound one-way, which would free up space for protected bike lanes (see above for the benefits of this option and potential cross sections made possible by the conversion to a one-way).

Since the narrower conditions along Westminster exist all the way to Arlington, we think that its worth reducing the quality of the westbound bike lane from a protected bike lane to an at-grade bike lane between Sherbrook and Furby to provide a more consistent wider protected bike lane for bike traffic flowing east. As the Wolseley/Sherbrook/Furby/Westminster routing is identified as part of The Great Trail (formerly the Trans-Canada Trail), we think that this decision is warranted.

Where width exists, we would recommend raised bike lanes along Westminster as the best compromise between width and protection along the constrained sections of Westminster.







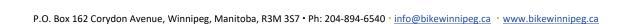
Furby @ Westminster

To accommodate left turns off of westbound Westminster onto southbound Furby, we would recommend installation of a two-stage turn queue at Westminster and Furby. Space for the two-stage turn queue would likely have to be created by bending the southbound protected bike lane on Furby into the curb, which would require moving a utility pole west.

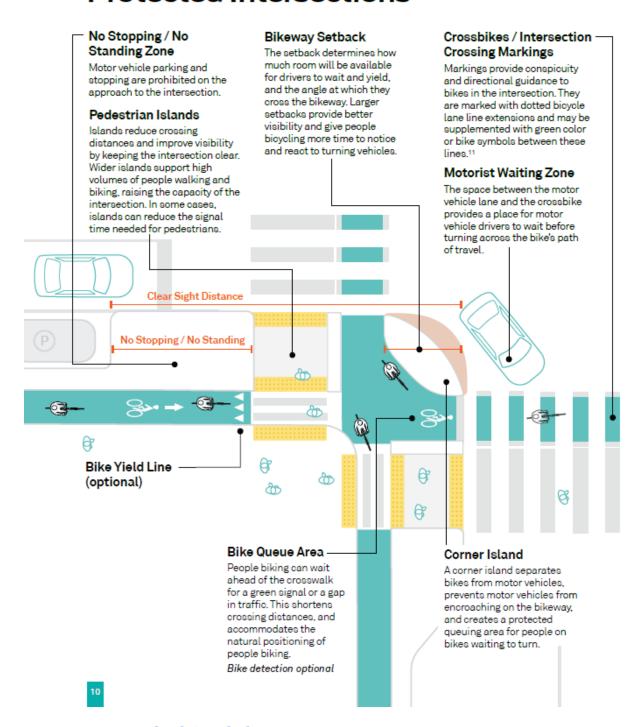
Maryland/Sherbrook Intersection Improvements

Sherbrook @ Wolseley

Convert Sherbrook @ Wolseley into a protected intersection.



Protected Intersections



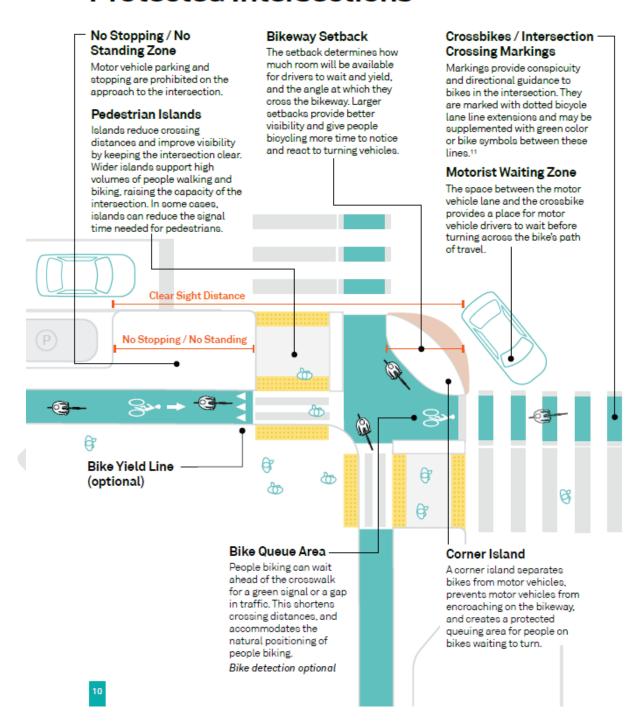
Maryland @ Wolseley

Depending on what is being considered for Maryland, a bike box might be used for left turns instead of a more formal protected intersection treatment.

Sherbrook @ Westminster

Convert into a protected intersection.

Protected Intersections



Maryland @ Westminster

Depending on what is being considered for Maryland, a bike box might be used for left turns instead of a more formal protected intersection treatment.

West Section - Raglan to Maryland

Wolseley

With traffic diverters and one way conversions as shown, we think that a mixed use, neighbourhood greenway treatment should be good.

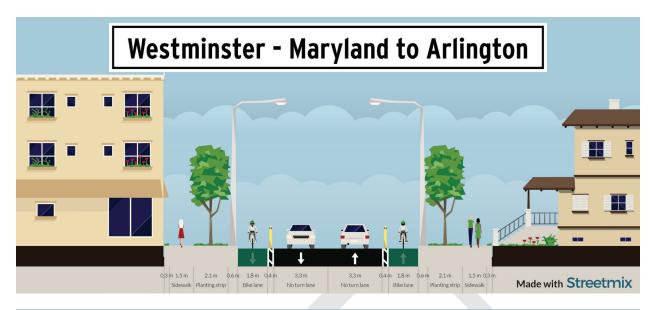
The one way section between Walnut and Maryland is critical. It has been noted that 4 collisions with students at Mulvey School have occurred in the last number of years.

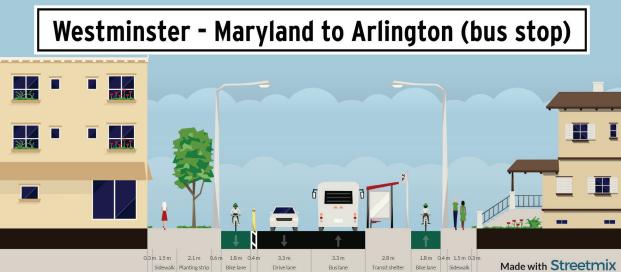
Clifton

- Geometric changes at Wolseley and Clifton are important.
- Rather than a pedestrian corridor at Portage and Clifton, we'd like to see a half signal, similar to what is planned for the Ruby/Banning intersection with Portage, to facilitate the proposed Clifton neighbourhood greenway.
- The addition of a safe crossing of Portage at Clifton via a half signal creates a connection to Riddle and hence to the Empress Cycle track which may act a s an alternative route when the Omand's Creek Bridge is flooded out.
- Clifton is the last direct crossing opportunity on Portage. Every other street west of Grenwood and Dominion
- Clifton provides access to Valour Community Centre Isaac Brock Centre.

Westminster

We prefer option 2 through the west section of the study, as the protected bike lanes included in this design match the desire for added connectivity and comfort for people cycling on Westminster. We would recommend that parking restrictions at the north/south ends of streets intersecting Westminster be used to free up parking space for local businesses.





Arlington Bus Route

Rather than diverting bus traffic onto Home Street, we believe that transit should connect between Wolseley and Westminster along Arlington northbound and southbound.

It should be fairly easy to convert Arlington into two-way bus traffic. When included with the width along Arlington and the back lane entrances on the west side of Arlington, bus stops and parking restrictions at either end of Arlington should allow for a straightforward transit protocol to prevent the passing of two buses.

• Southbound Buses – If a northbound bus has entered the roadway, any southbound bus would complete its turn onto Arlington, pull into the curb of the southbound lane (perhaps a good spot for a new bus stop?) and wait for the northbound bus to pass before continuing south.

• Northbound Buses – If a northbound bus turning onto Arlington spots a southbound bus already in the roadway, it will turn onto Arlington and wait for the southbound bus to pass it in the southbound lane (may require removal of some parking) before continuing north.

This option removes buses from Evanston, which would likely be seen as a plus.

This would create a direct north/south bus route along Arlington from Inkster all the way to Wolseley once the planned Arlington Bridge replacement project is completed (buses are not now allowed over the Arlington Bridge, but will be allowed once this project is completed). As this is a highly walkable/bikeable segment of roadway, this route would be beneficial.

Raglan Road

We would like to see signage added to indicate whether the Omand's Creek Bridge is open or closed. Signs should be located as follows:

- Before the first entrance to the Empress St Pathway near the east end of the St James Cemetary
- At the north end of the BNSF Rail/Walk/Bike Bridge
- At the corner of Wolseley and Raglan Rd.

Other

We would like to see improvements to the crossing at Ruby/Banning @ Portage.

- 1. A post to allow someone on bike to activate the signal.
- 2. Bike signals to show red, yellow, and green for people on bikes.