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# **HRM Accessibility Design Considerations Within the Right-of-Way**

**Active Transportation Advisory Committee Meeting  
March 17, 2022**

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# Overview

- Accessibility Standards
- Protected Bikeway Intersections
- Tactile Direction Indicators (Guidance TWSIs)
- Transit Stops
- Accessible Parking Guidelines

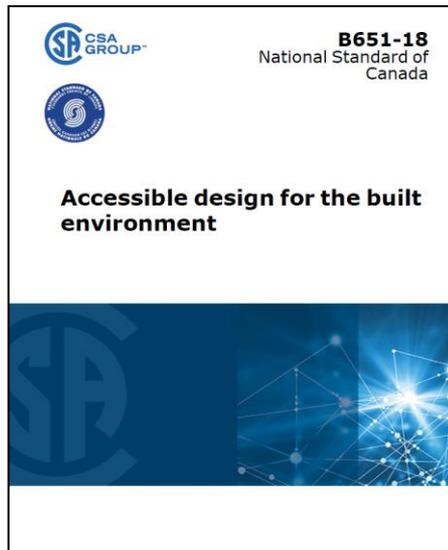
# Background and Guidance

- HRM planning & design shaped by the IMP, AT Priorities Plan, and 2021 Municipal Design Guidelines
- Focus on Complete Streets approach with emphasis on pedestrian, transit, cycling and road safety infrastructure
- Creates many opportunities and new challenges
- Ongoing process to make public spaces more accessible
- Collaboration with accessibility groups

# HRM Accessibility Standards

- Provincial Legislation Accessibility Act (2017)
  - Improve accessibility by preventing and removing barriers faced by people with disabilities
  - Advancing disability issues within government.
  - Work collaboratively to achieve the goal of an accessible NS by 2030
- HRM Accessibility Strategy Action Items:
  - Adopt CSA Standards
  - Use Rick Hansen Certification for scoring accessibility across HRM
  - Accessible signage (playgrounds, walkways, rec. facilities, etc.)
  - Increase accessible taxis
  - Following accessible standards for bus stops
  - Audit building, parks/playgrounds, and trails to upgrade to meet accessible standards

# Accessibility Standards and Guidance



Accessibility Group  
Consultation



Active Transportation Advisory  
Committee

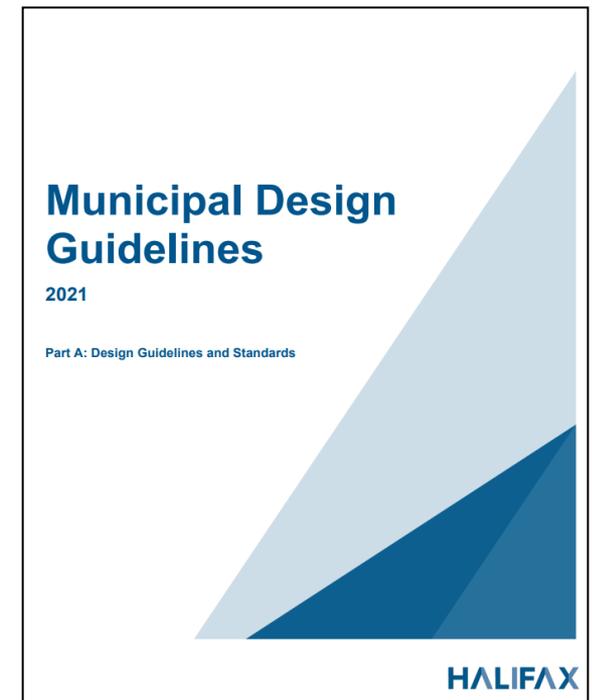
## Reference Standards



Accessibility ratings for existing  
facilities and proposed plans

# HRM Accessibility Standards

- 2021 Municipal Guidelines (Red Book) - “Providing a level of accessibility to all users, with specific consideration of persons with disabilities, is an important consideration in municipal design.”
  - Pedestrian through zones allowing people to travel barrier-free on sidewalks
  - Tactile Walking Surface Indicators (TWSIs) to provide attention cues for people with visual impairments
  - Curb ramp designs to provide barrier-free street crossings
  - Accessible Pedestrian Signals with audible cues
  - Develop accessible parking guidelines
  - Limit slopes on streets, ramps, walkways and pathways
  - Accessible bus stops and safer accessible routes to/from stops
  - Improving network connections



# HRM Accessibility Standards

- Common accessibility features in HRM:
  - Attention TWSIs (Tactile Attention Indicator)
  - Accessible Pedestrian Signals (APS)
- Ongoing accessibility developments:
  - Barrier-free sidewalks, reduced slopes, curb ramps for improved access, etc.
  - Tactile Direction Indicators (TDIs) / Guidance TWSIs
  - Transit stop accessibility
  - Accessible Parking Guidelines

**APS Push Button**



[Source: Polara.com]

**Attention TWSIs**

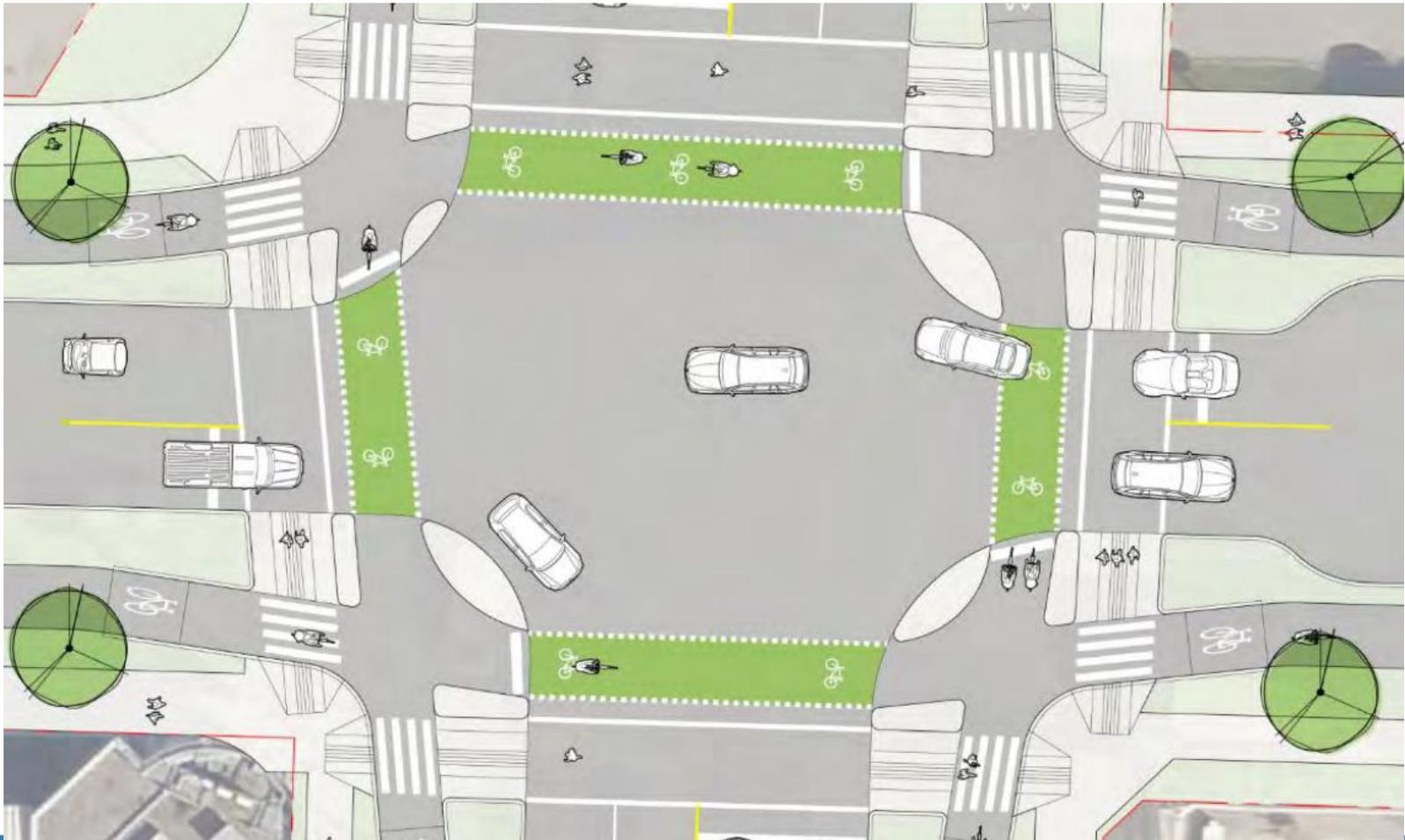


[Source: Google Maps]

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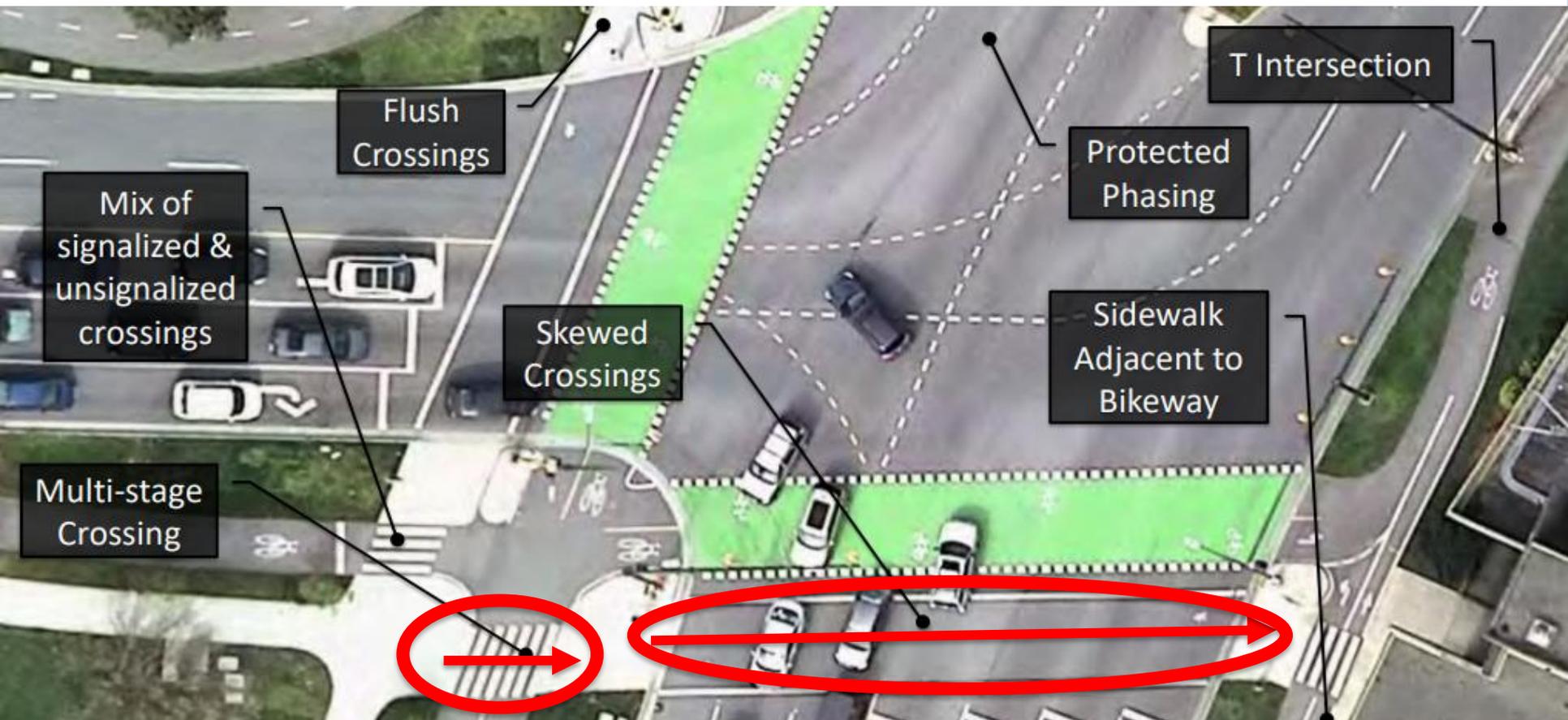
# Protected Bikeway Intersections

- Safer and more comfortable for cyclists of AAA
- Shorter crossings for pedestrians
- Presents challenges for people with low vision



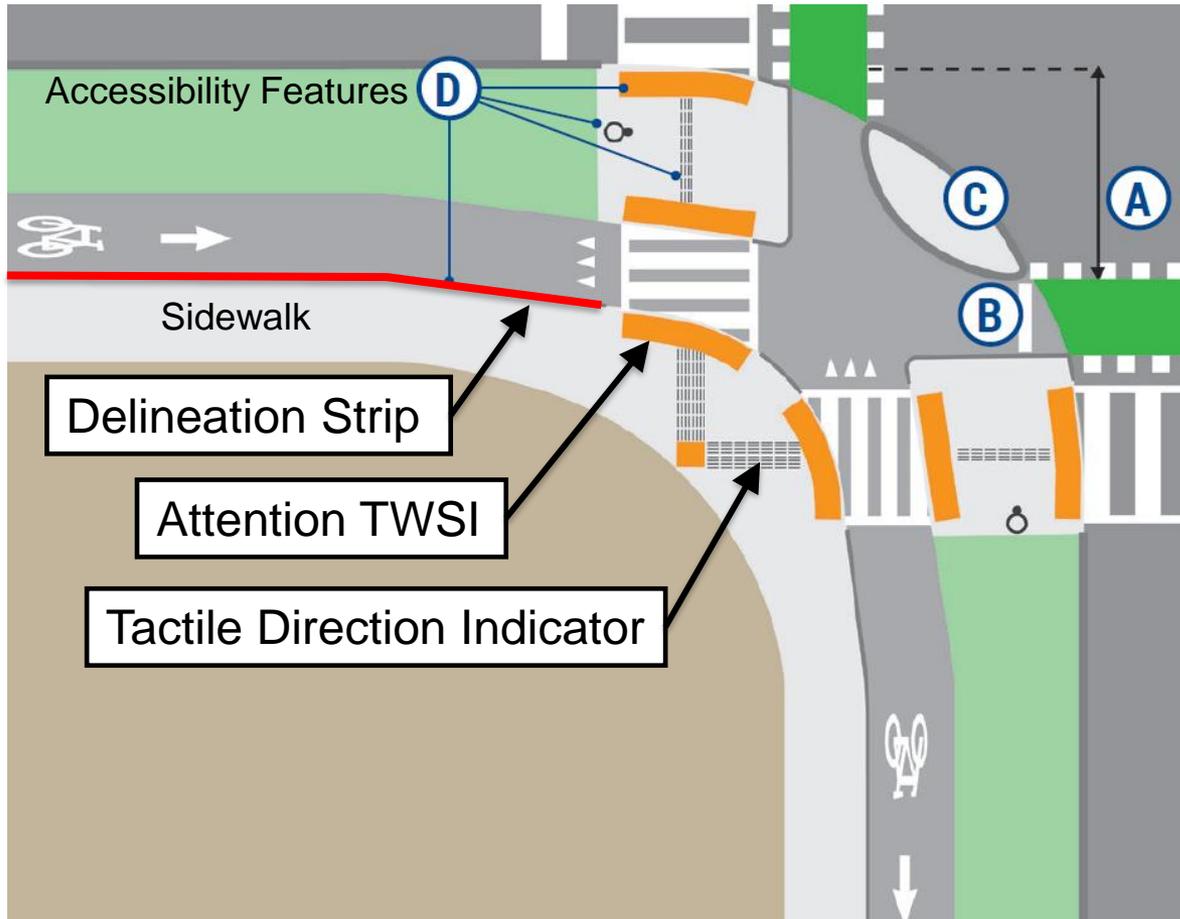
# Protected Bikeway Intersections

- Challenges for people with low vision

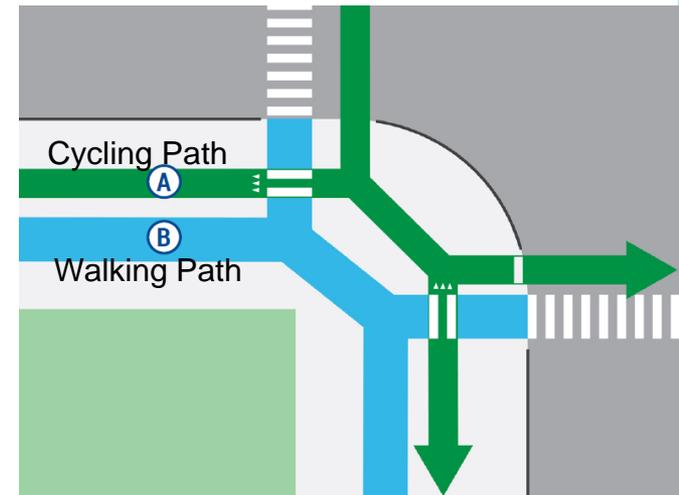


[Source: City of Vancouver – Don't give up at the Intersection]

# Protected Bikeway Intersections



[Source: Ottawa Protected Intersection Guide]



[Source: Ottawa Protected Intersection Guide]

## Design for Universal Accessibility

- Consider all users and their different needs
- Provide a straight, clear path of travel for pedestrians
- Provide tactile and colour contrasted detectable facilities for people who are blind or have low vision
- Design for navigability for all users

# Protected Bikeway Intersection - Hazard Warning

- Attention TWSIs at designated bikeway crossings – Both sides
- Warning for entering travelway (vehicle or bike)
- Not a wayfinding cue or indication of right-of-way
  - Bikes yield to pedestrians
- Not to use as delineation between facilities



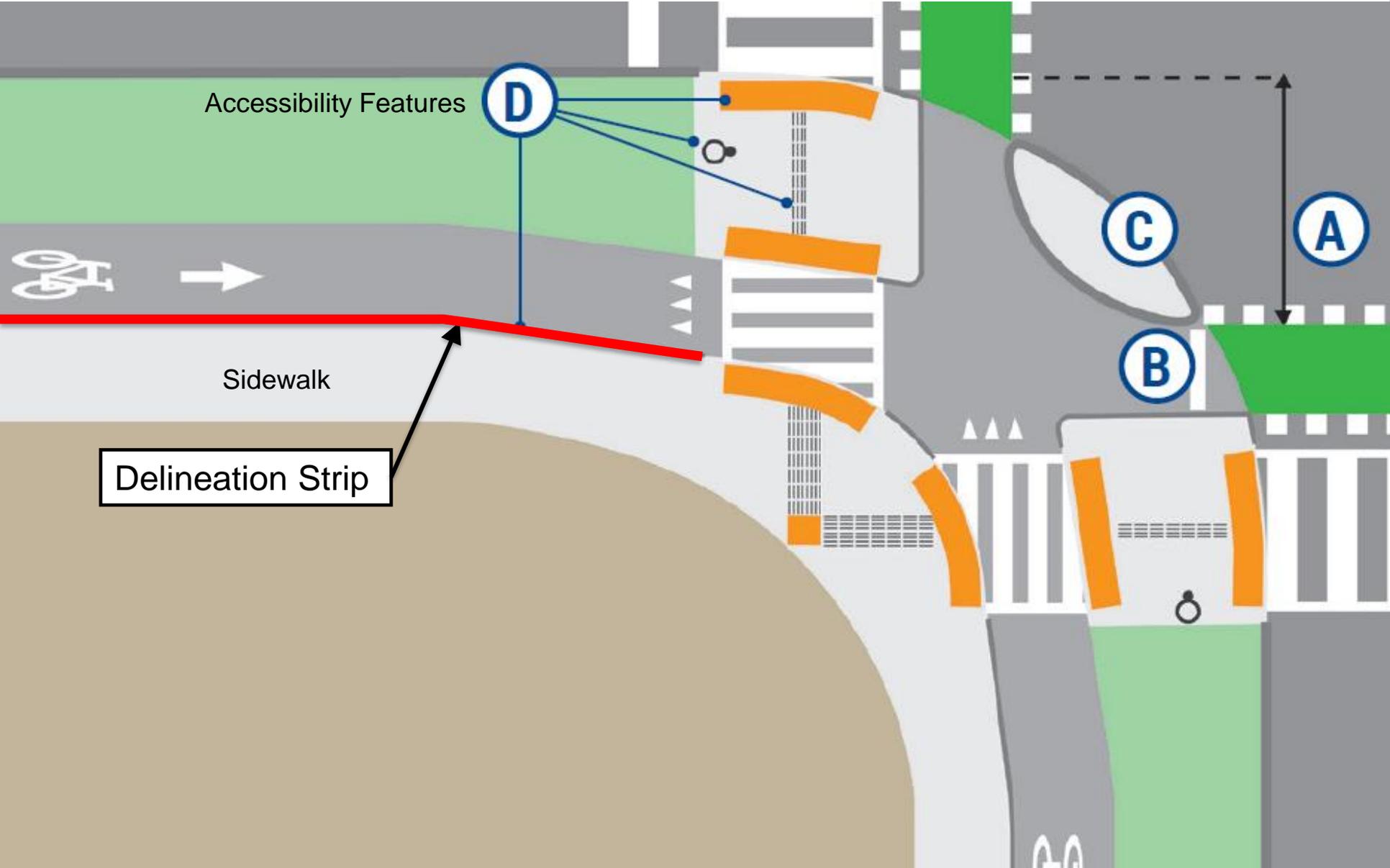
[Source: Nacto.org]



[South Park St. at Sackville St.]

Attention TWSIs

# Protected Bikeway Intersection - Delineation



# Protected Bikeway Intersection - Delineation

- Delineation between pedestrian and cycling facilities
- Prevent pedestrian inadvertently entering bikeway
- Detectable by a range of users (low vision, mobility devices).
  - Sod – extra space
  - Textured hard surface – limited space
  - Difference in height (Beveled / half-height curb)

**Sod Delineation**



[Source: NACTO]

**Beveled Curb**



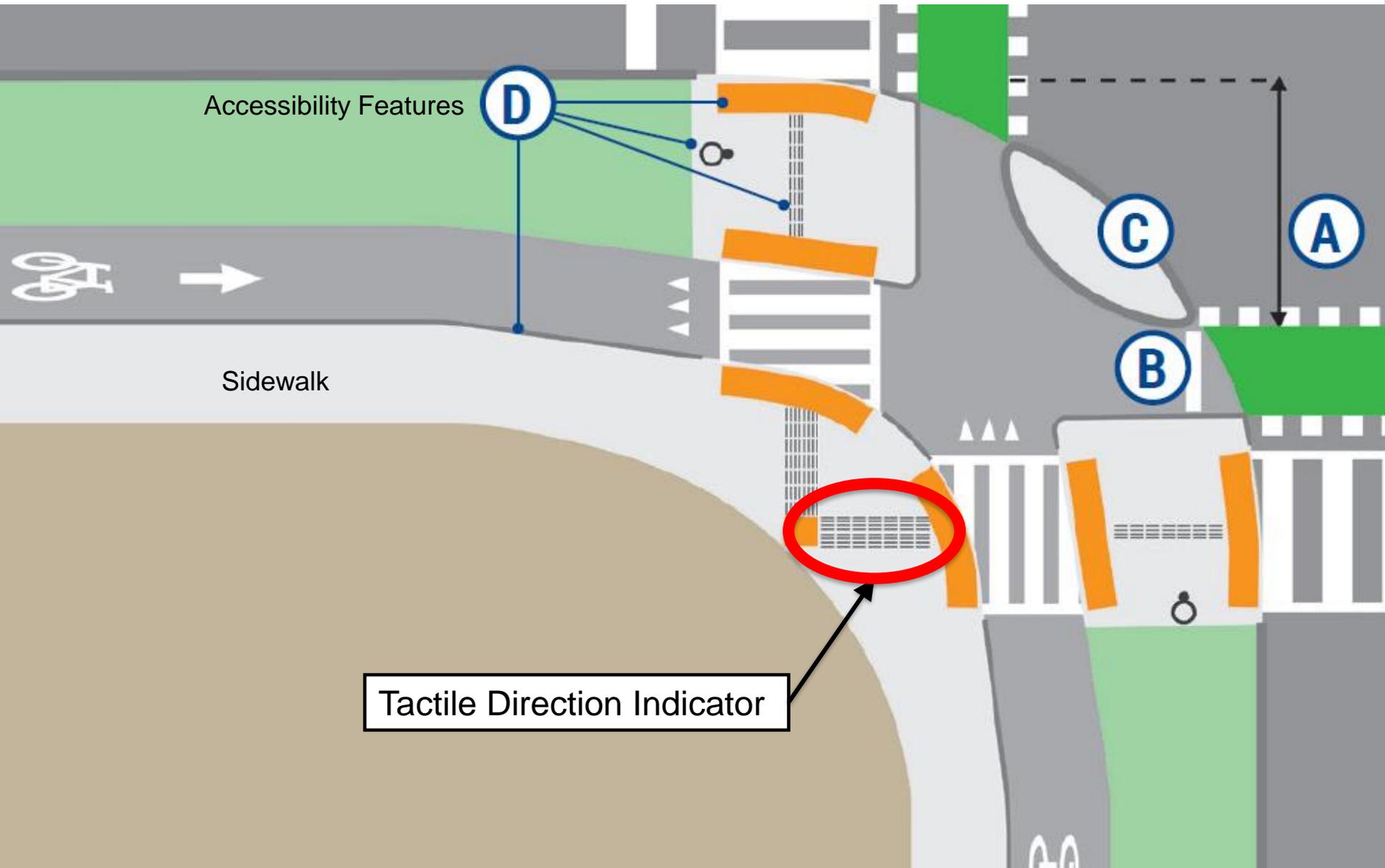
[Source: Vancouver 2019 Protected Bike Lanes Catalogue]

**Hard Surface Delineation**



[South Park St. at Sackville St.]

# Tactile Direction Indicator (Guidance TWSIs)



# Tactile Direction Indicator

- Supplemental tool for navigation in challenging environments such as:
  - Complex road crossings (RABs, mid-block crossings, skewed/offset crossings)
  - Protected bikeway intersections
  - Transit terminals
  - Large hard surface open areas (plazas)
- Not for use at every intersection or in place of linear, well-delineated, travel paths.



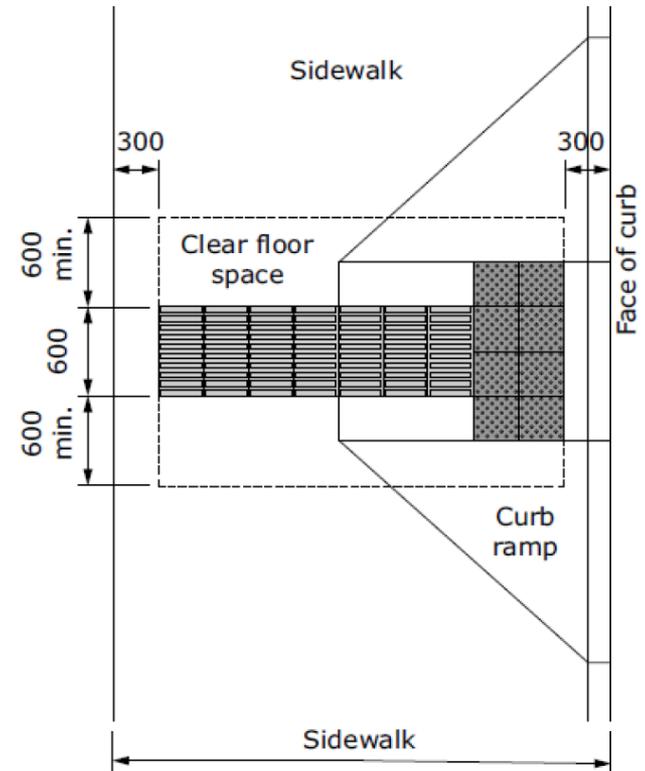
[Source: Vanguard Group.co.nz]

# Tactile Direction Indicator

Dartmouth Bridge Terminal

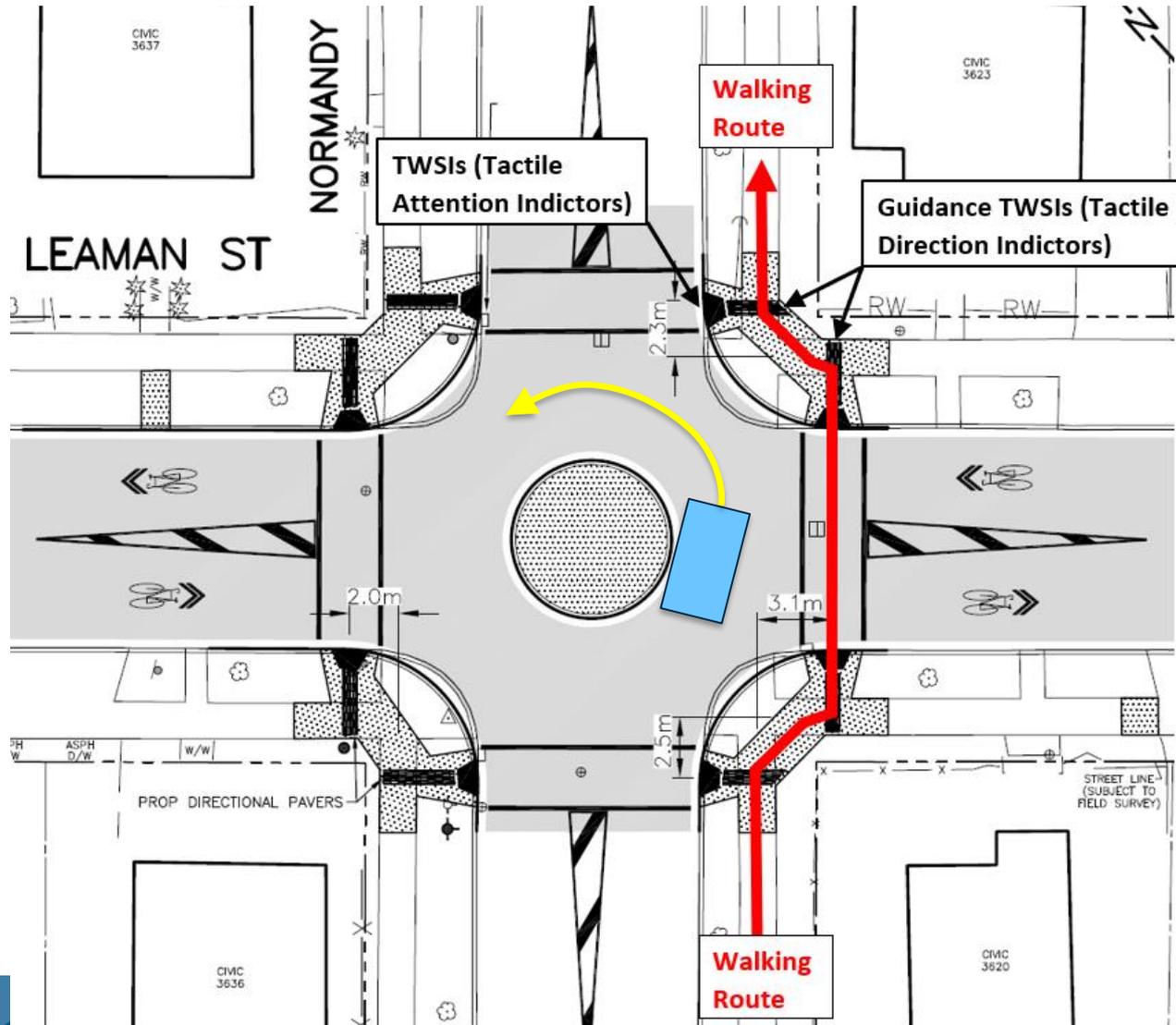


CSA Standard Detail



# Tactile Direction Indicator

## Mini Traffic Circle – Leaman St. at Normandy Dr., Halifax



# Tactile Direction Indicator

Mini Traffic Circle – Leaman St. at Normandy Drive, Halifax



# Transit Stops

- Transit stop can present challenges for people with low vision, particularly at bike facility crossings.
- Design considerations for accessible transit stops
  - Waiting area space (wheelchair ramp)
  - Barrier-free connections to sidewalk (hard surface, obstacles, width)
  - Accessible grades
  - Visual and tactile cues
  - Seating / shelter

# Transit Stops at Bike Lanes

- Conflict between transit stops and cyclists



[Source: bikeportland.org]

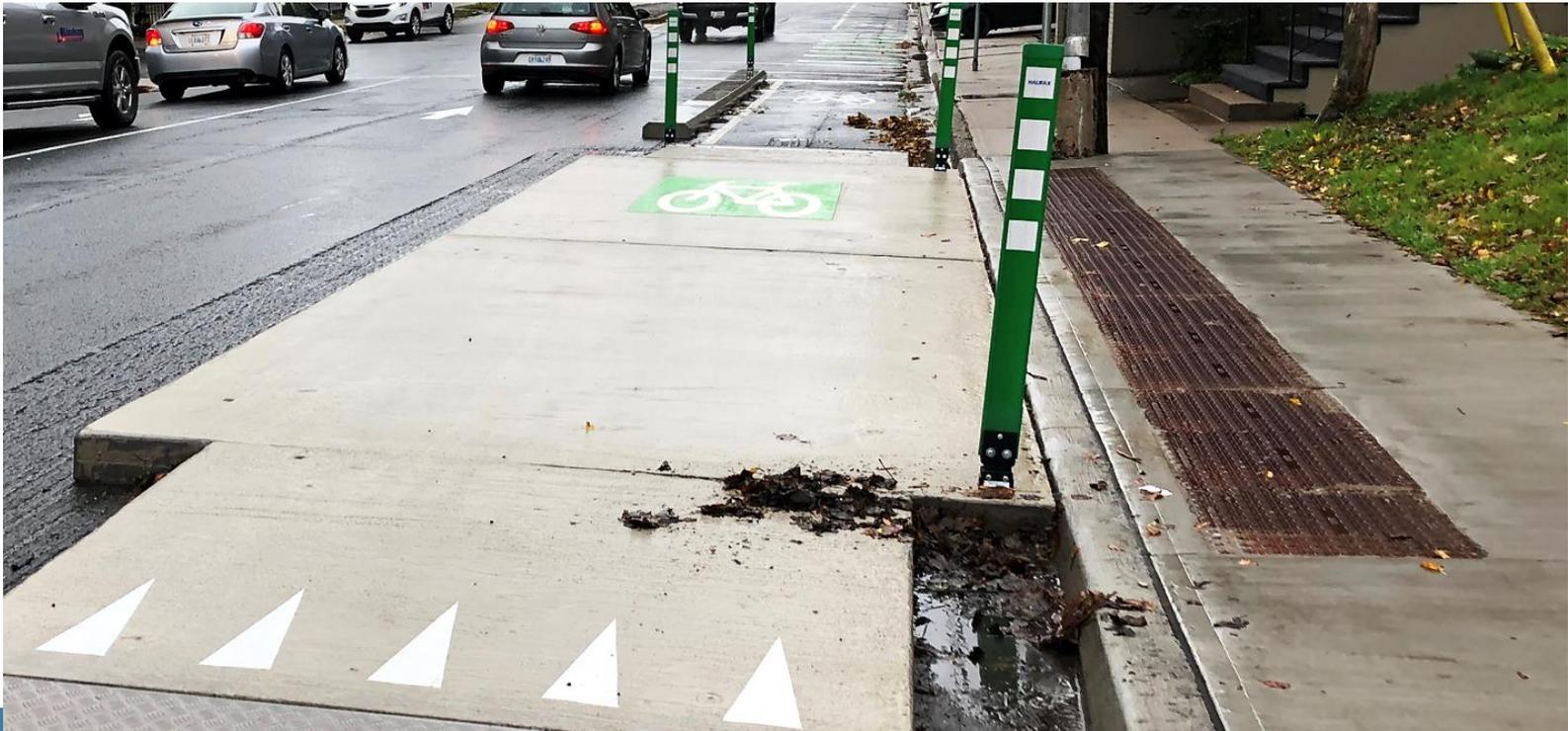


[Source: Pedbikesafe.org]

# Shared Transit – Bike Platform

- Maintains barrier-free transit access
- Attention TWSIs at bike lane transition
- Temporary bike facilities crossings with limited space

**Hollis Street Protected Bike Lane**



# Transit Stops at Bike Lanes

- 2019 installation of protected bike lanes over 7 blocks
- 10 raised bus stops with Attention TWSIs
- Separate waiting space with seating

## South Park Street Protected Bike Lane



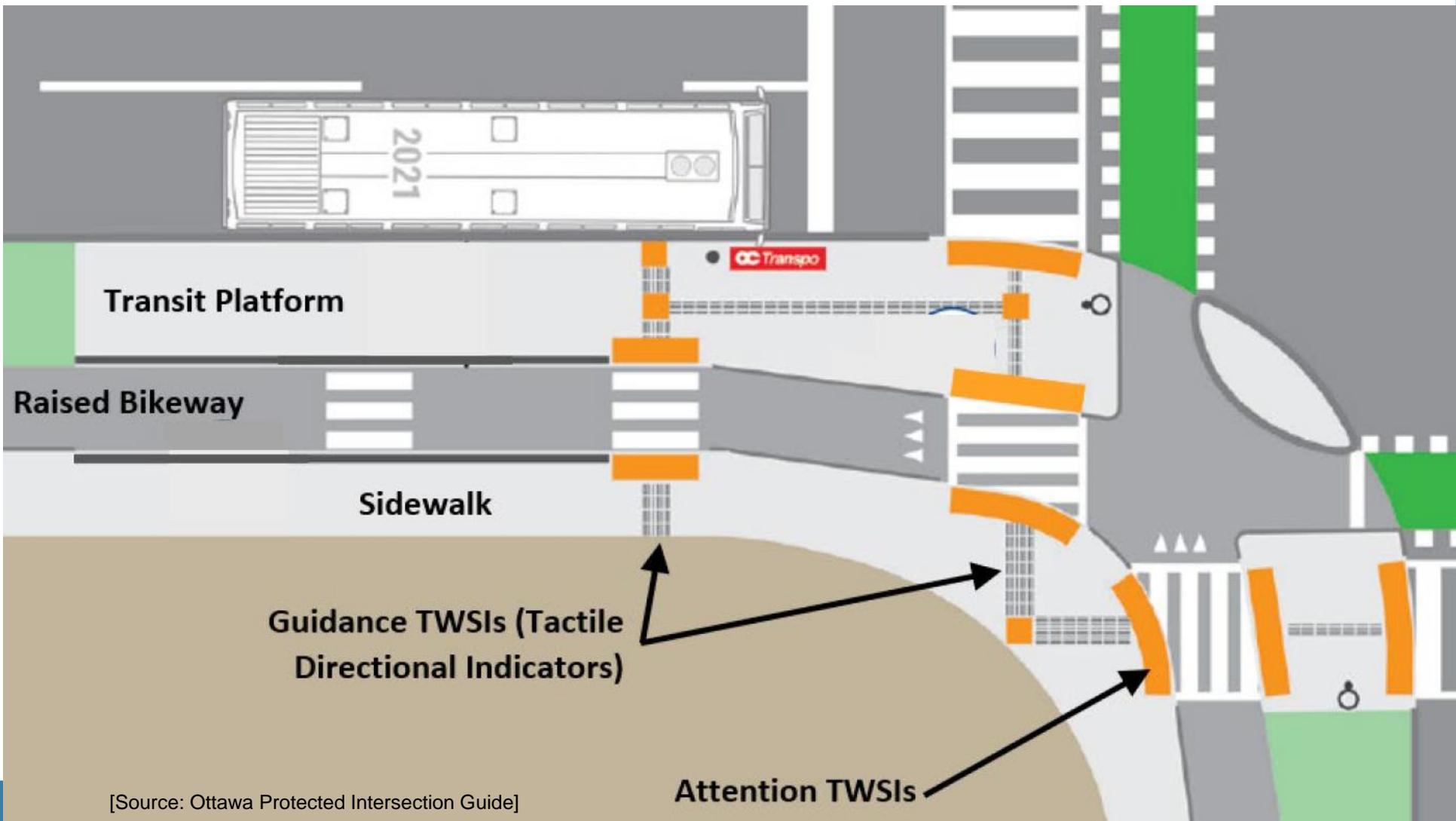
# Pedestrian Transit Island Platform

- Reduced conflicts with safe waiting area



# Pedestrian Transit Island Platform

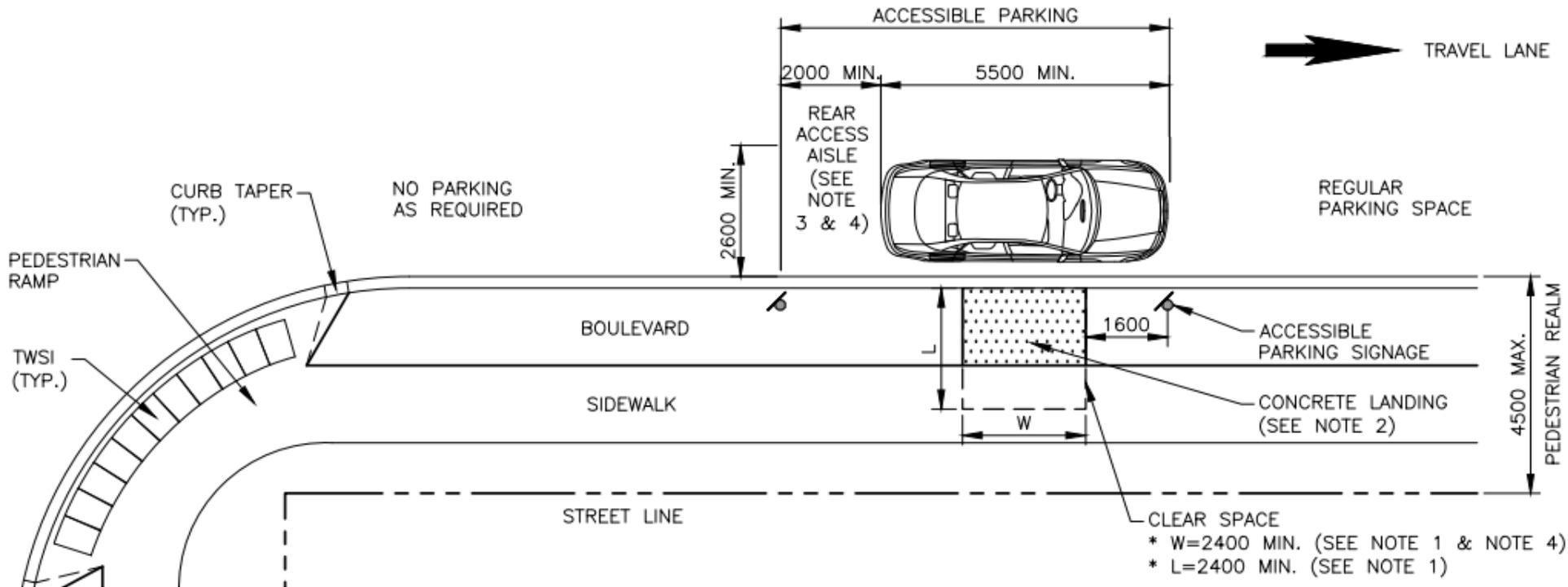
- TDIs may be considered at difficult to navigate stops



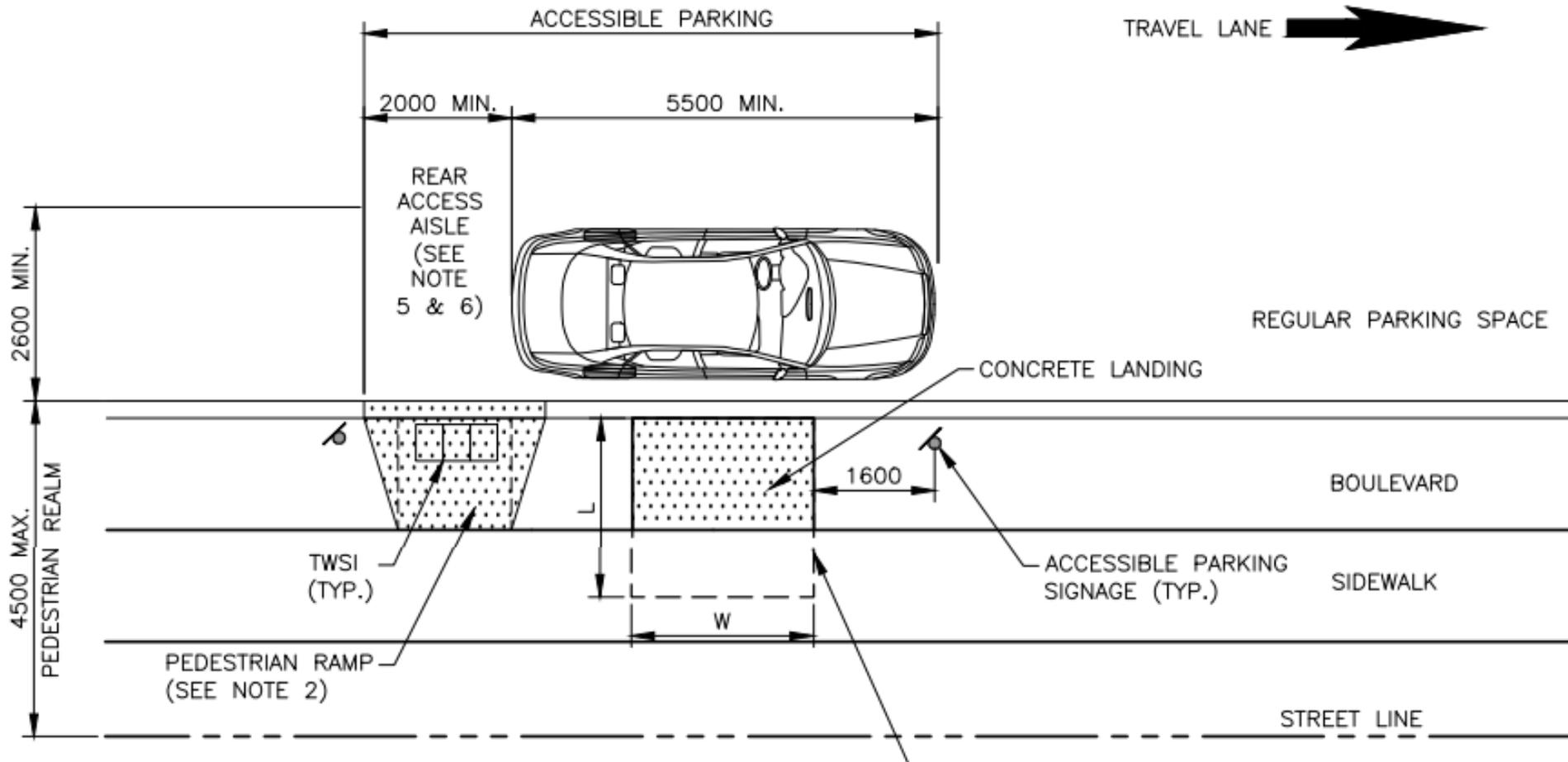
# Accessible Parking

- HRM Accessible Parking Guidelines
  - 2019 public engagement
  - Draft submitted to Accessibility Advisory Committee June 2021
  - Ongoing revisions
- Key points:
  - Create consistent, safe and comfortable parking access
  - Increase number of accessible spaces
  - Improve signage and markings
  - Improve sidewalk access
  - 2.6m wide (2.4m min. for non-accessible space)
  - Min. rear and passenger side barrier-free space – lift or ramp

# Accessible Parking – Near Intersection

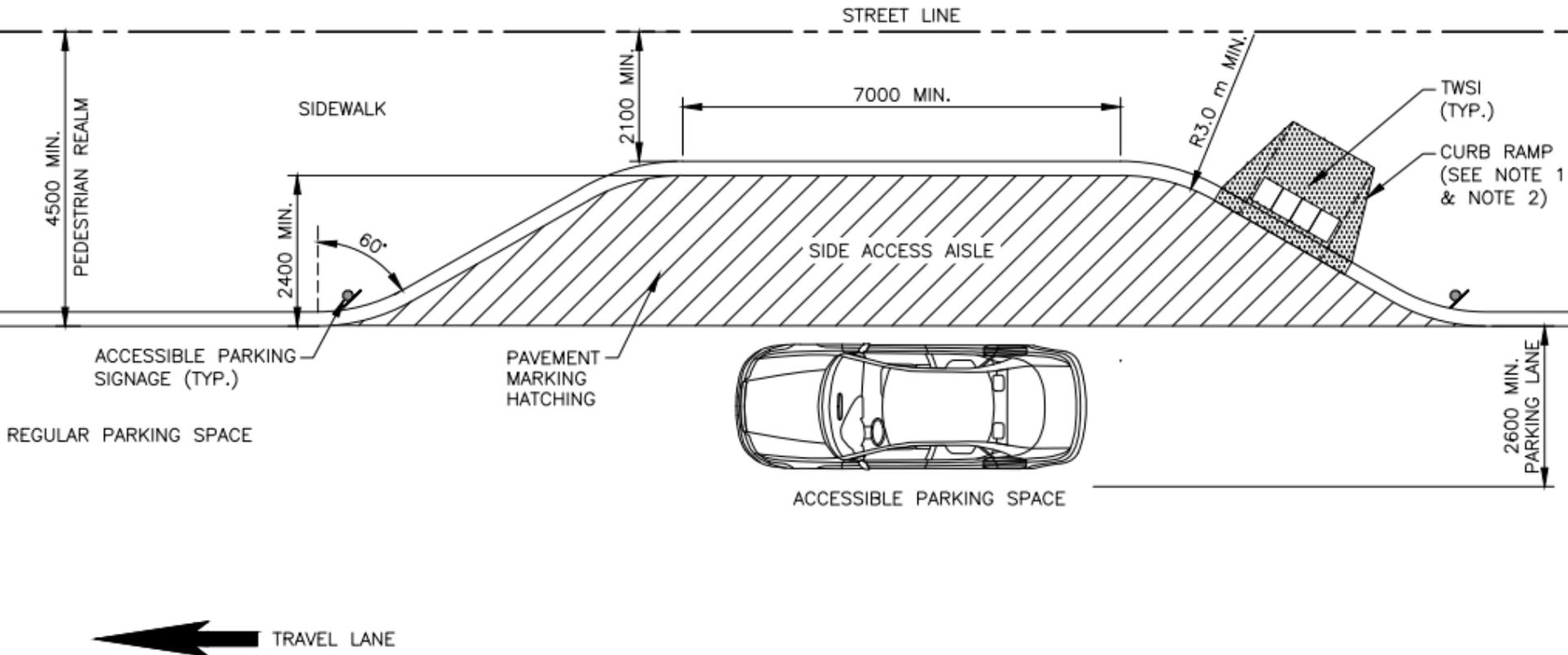


# Accessible Parking – Mid Block



# Accessible Parking

- Pedestrian Realm more than 4.5m wide
- Improved accessibility
- Detail under review – distance from curb needs to be compliant with MVA



# Next Steps

- Trial new accessibility features to implement based on established guidelines
- Collaboration and feedback from stakeholders and accessibility groups
- Continue to develop and improve HRM accessibility standards

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**Thank You**