

Equitable Provision & Maintenance of Traffic Control Devices for Blind and Partially Sighted Persons

Milena Khazanavicius & Bernard Bessette

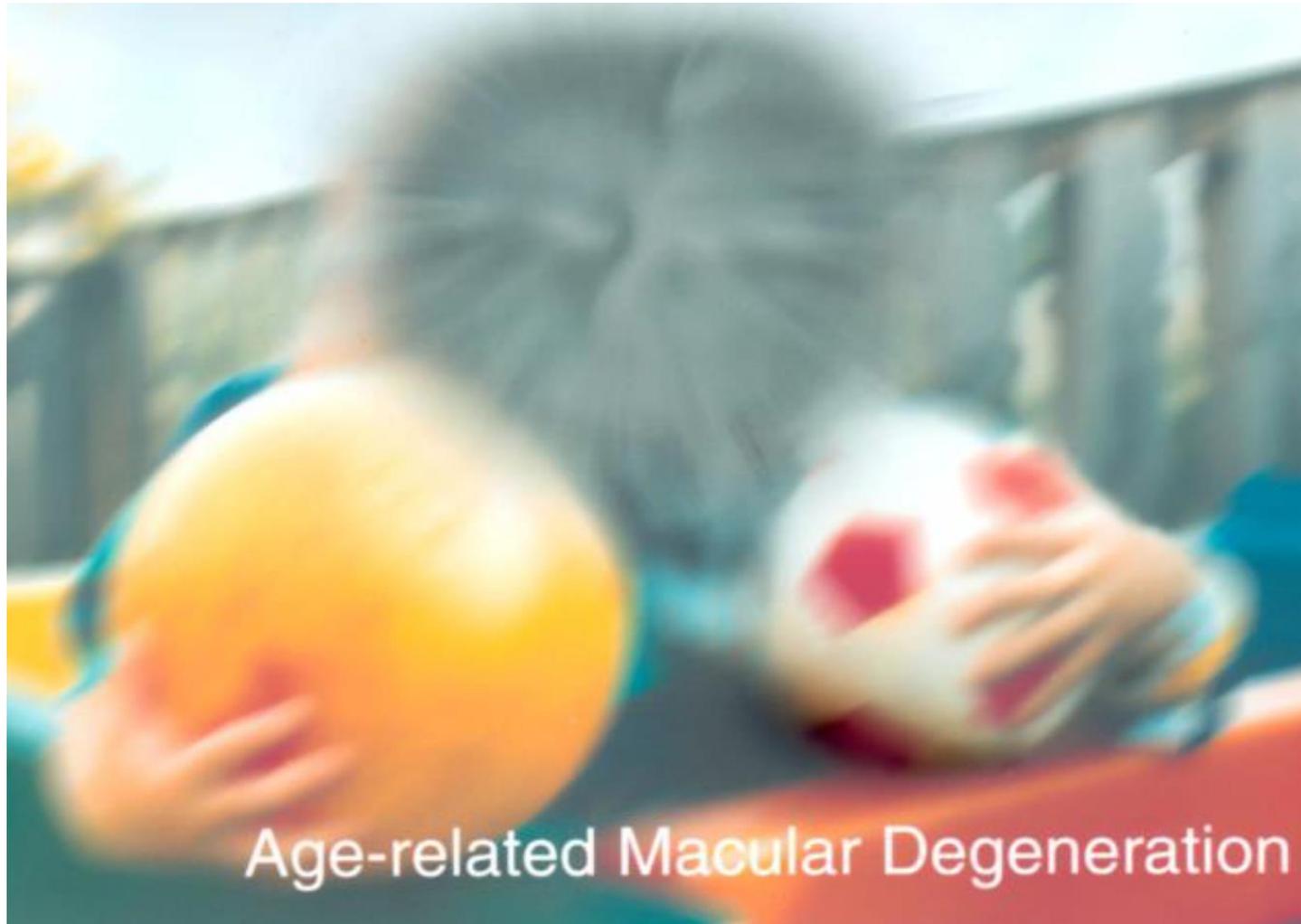
Transportation Standing Committee

March 25, 2021

Sir Frederick Fraser



Eye Conditions – Macular Degeneration

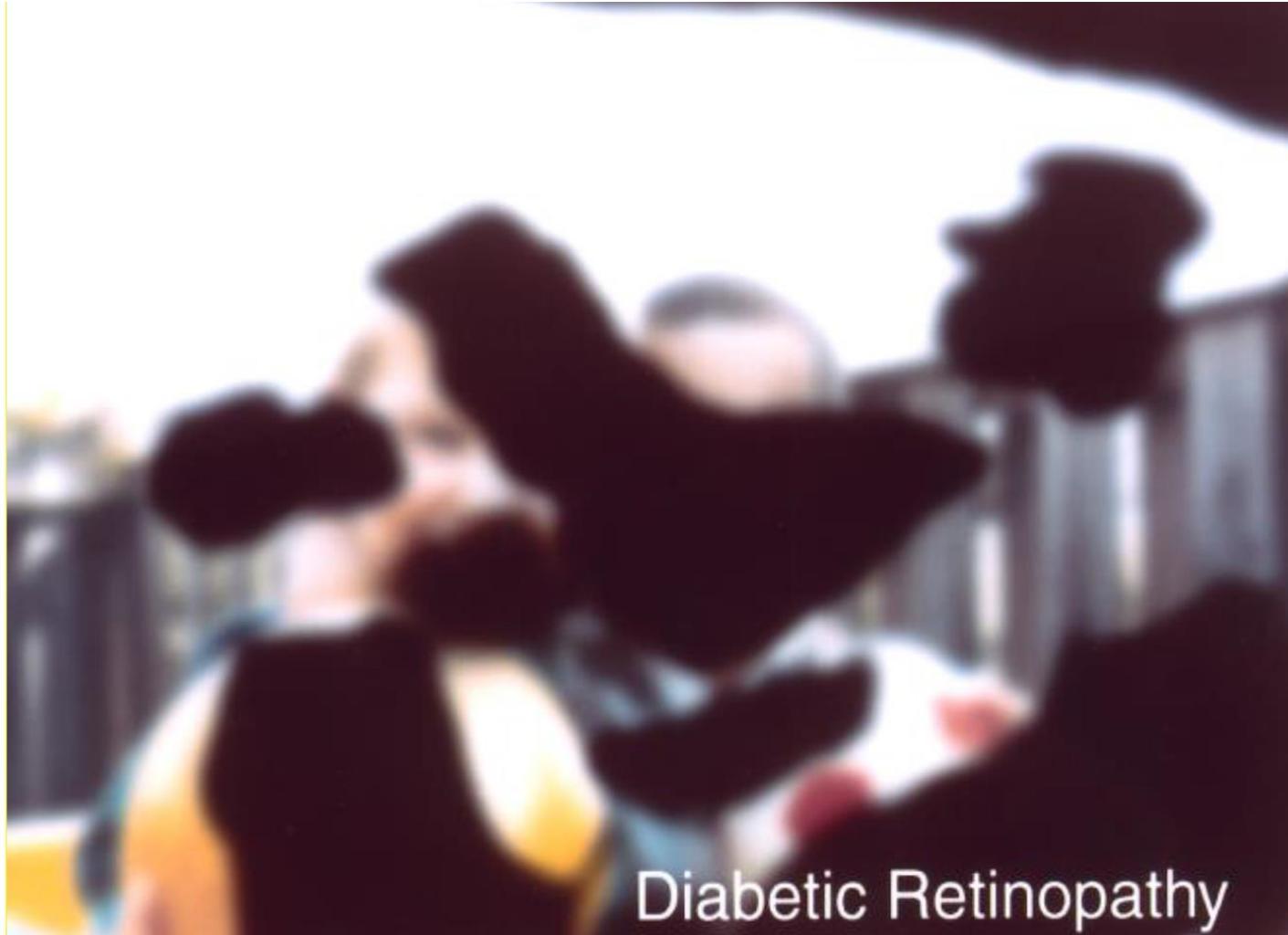


Age-related Macular Degeneration

Eye Conditions - Cataract



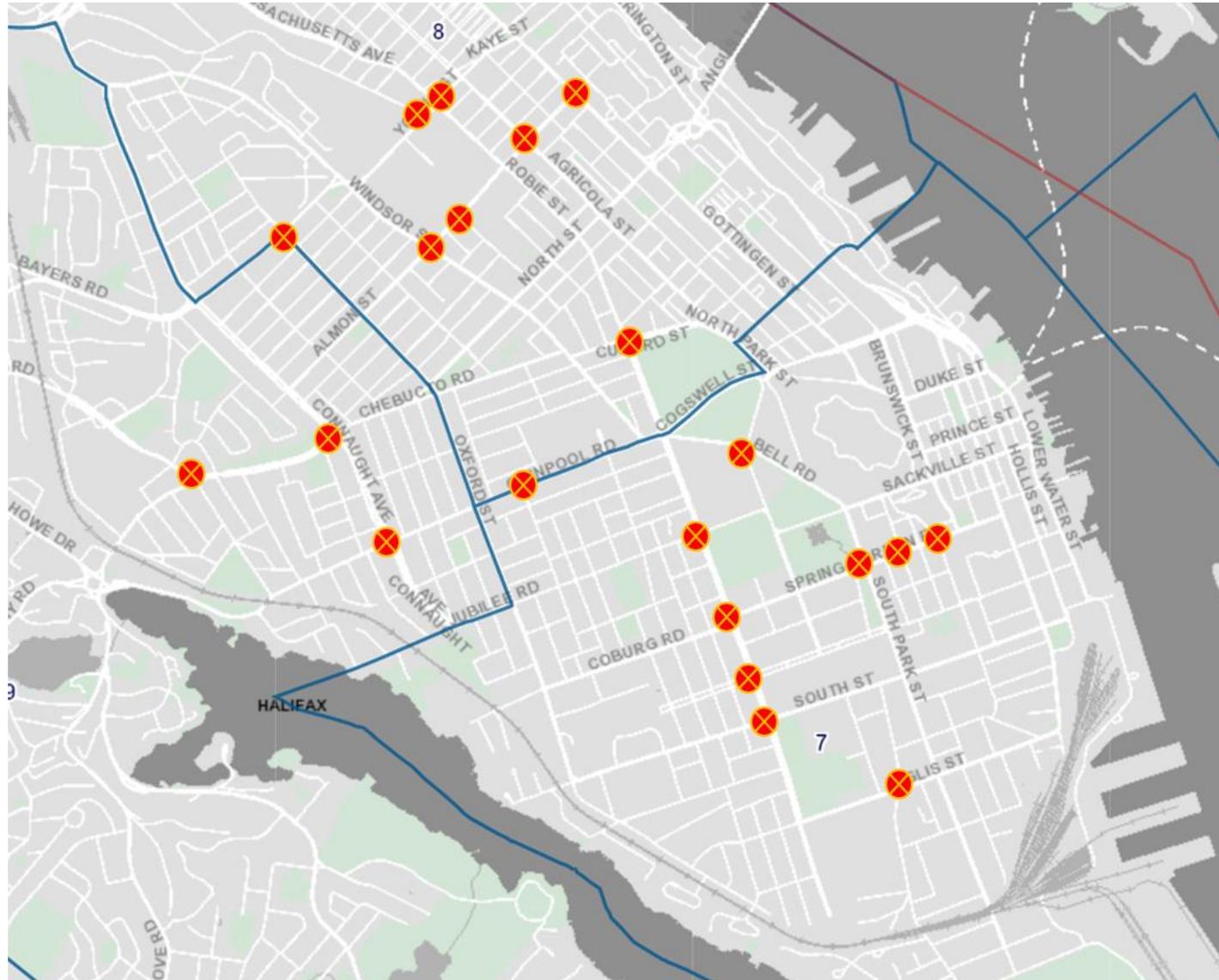
Eye Conditions – Diabetic Retinopathy



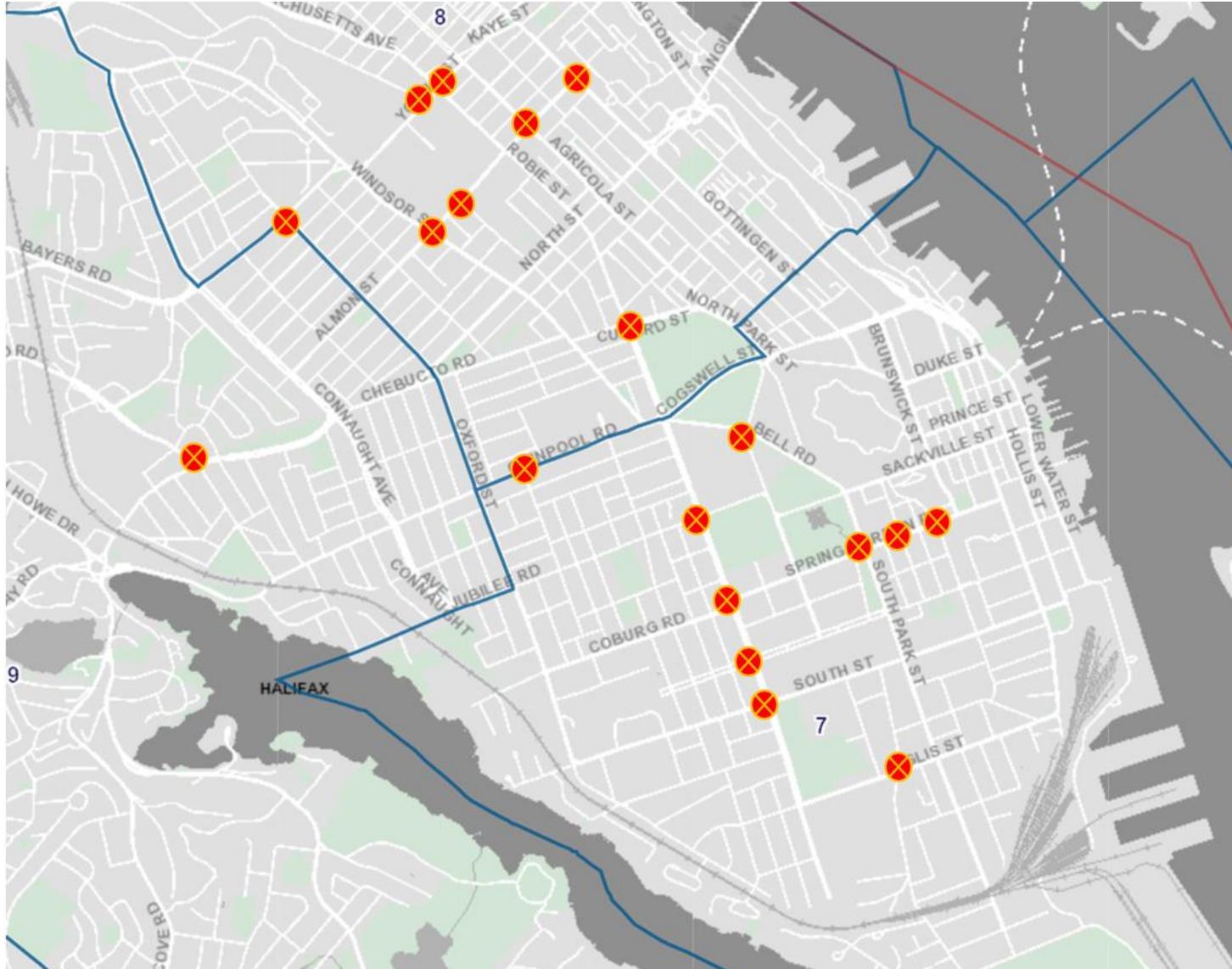
Eye Conditions - Glaucoma



Intersections with Defective APS – March 2020



Intersections with Defective APS – March 2021



Revealing Barriers – Hayley Inglis

Revealing Barriers:

Learning From the Experiences of People With Visual Impairments

Hayley Inglis

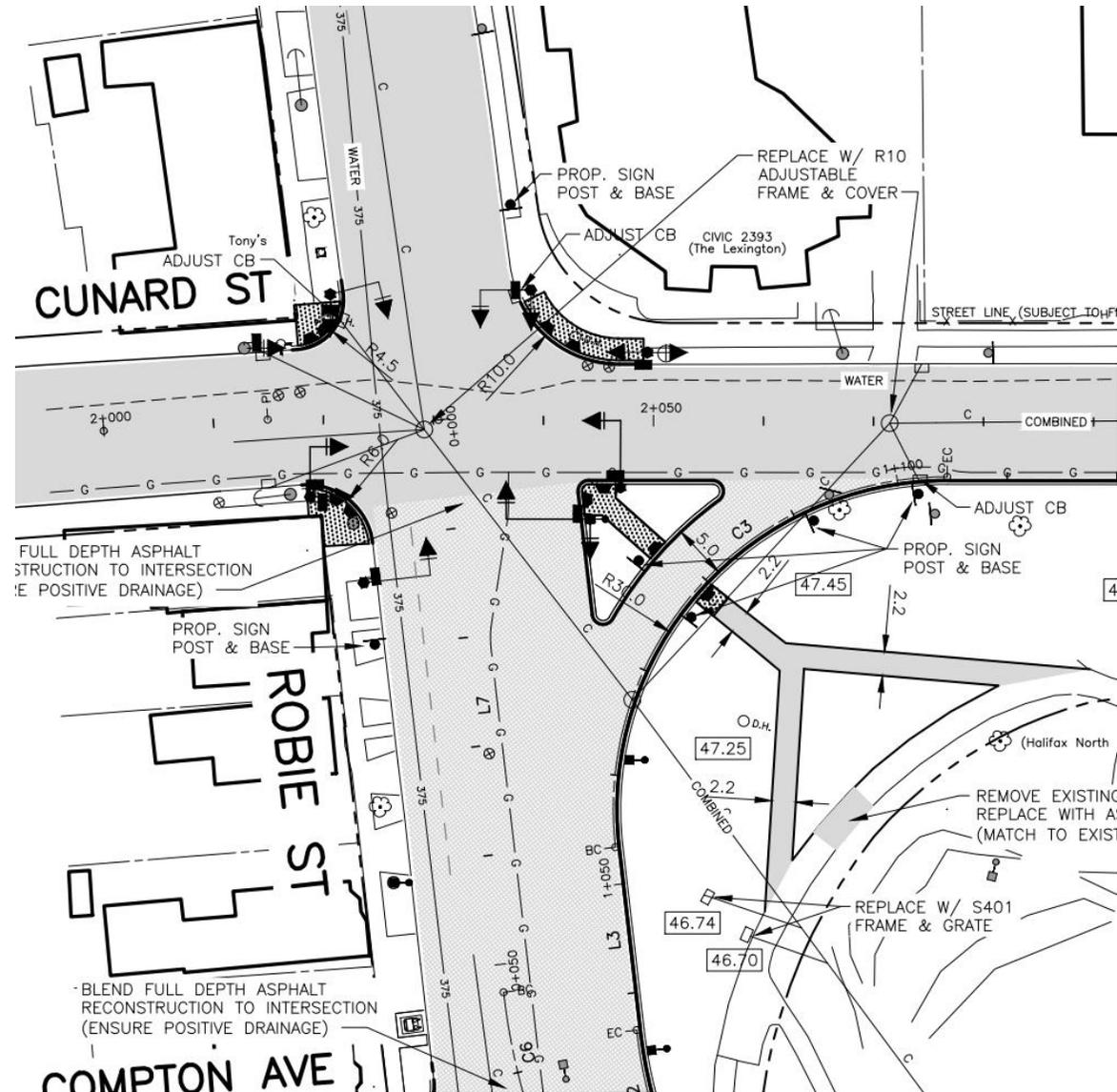
Robie and North – APS Location



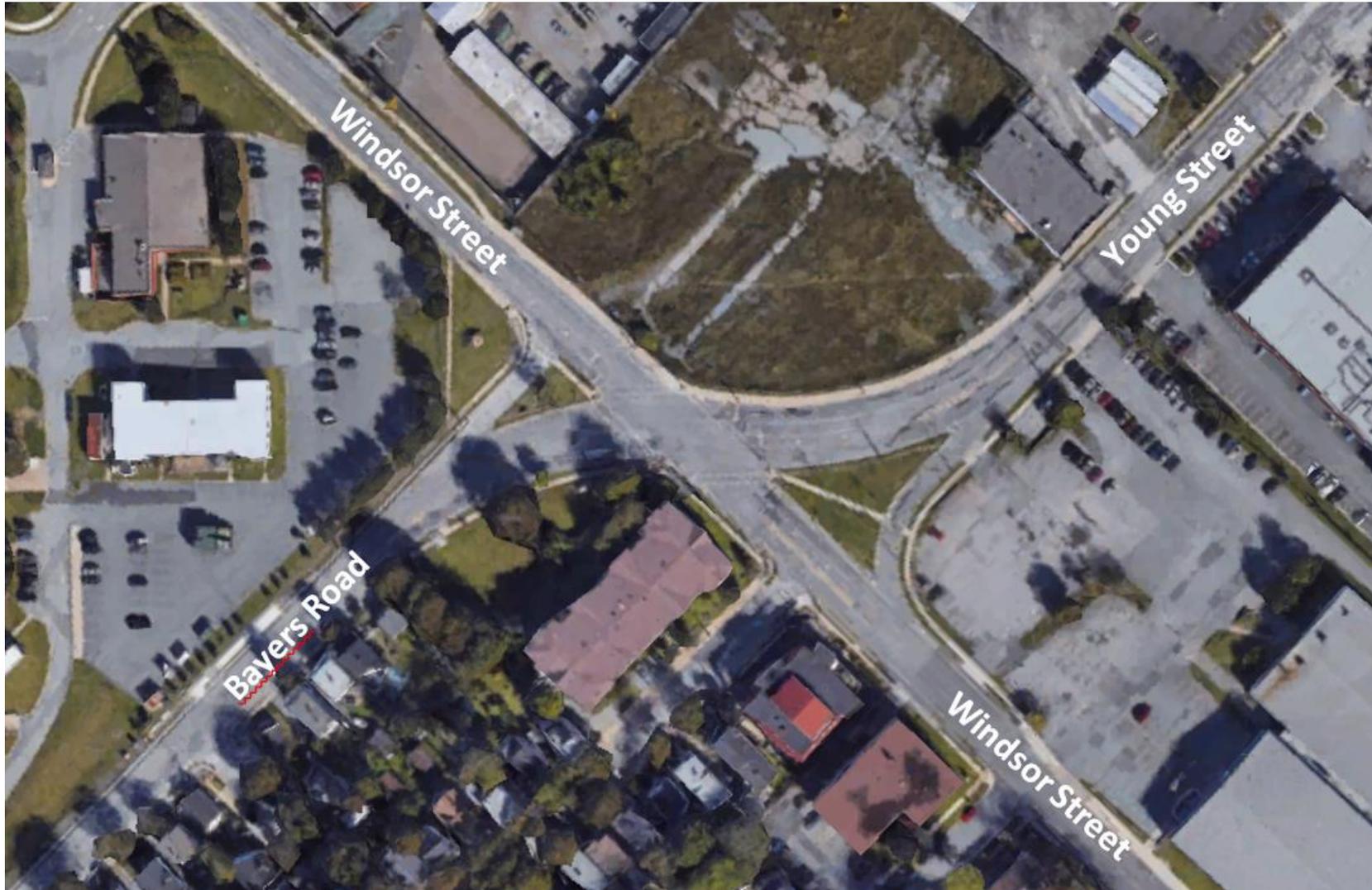
Sackville and Dresden Row – Colour Contrast



Robie and Cunard – Waiting for Activation



Bayers / Young / Windsor Intersection



Halifax.ca Listing of APS Device Locations

HALIFAX 311 Online Services

About Halifax ▾ Home & Property ▾ Transportation ▾ Fire & Police ▾

Locations with Accessible Pedestrian Signals

Updated February 26, 2021

List of Accessible Pedestrian Signals by Geographic Placename:

Please note that you are required to press and hold a button to activate the APS unless otherwise noted.

[Show all](#) [Hide all](#)

- ▾ Bedford
- ▾ Clayton Park/Fairview
- ▾ Cole Harbour
- ▾ Dartmouth
- ▾ Eastern Passage
- ▾ Halifax - Downtown

Lower Sackville

- Beaver Bank Road at Glendale Drive
- Beaver Bank Road at Millwood Drive
- Glendale Drive at Cobeqid Road
- Glendale Drive at McDougall Avenue
- Sackville Drive at Beaver Bank Road
- Sackville Drive at Florence Street
- Sackville Drive at Millwood Drive
- Sackville Drive at Riverside Drive
- Sackville Drive at Sackville Cross Road
- Sackville Drive at Superstore

Complete Street Guidelines(Draft)

Halifax Complete Streets Guidelines

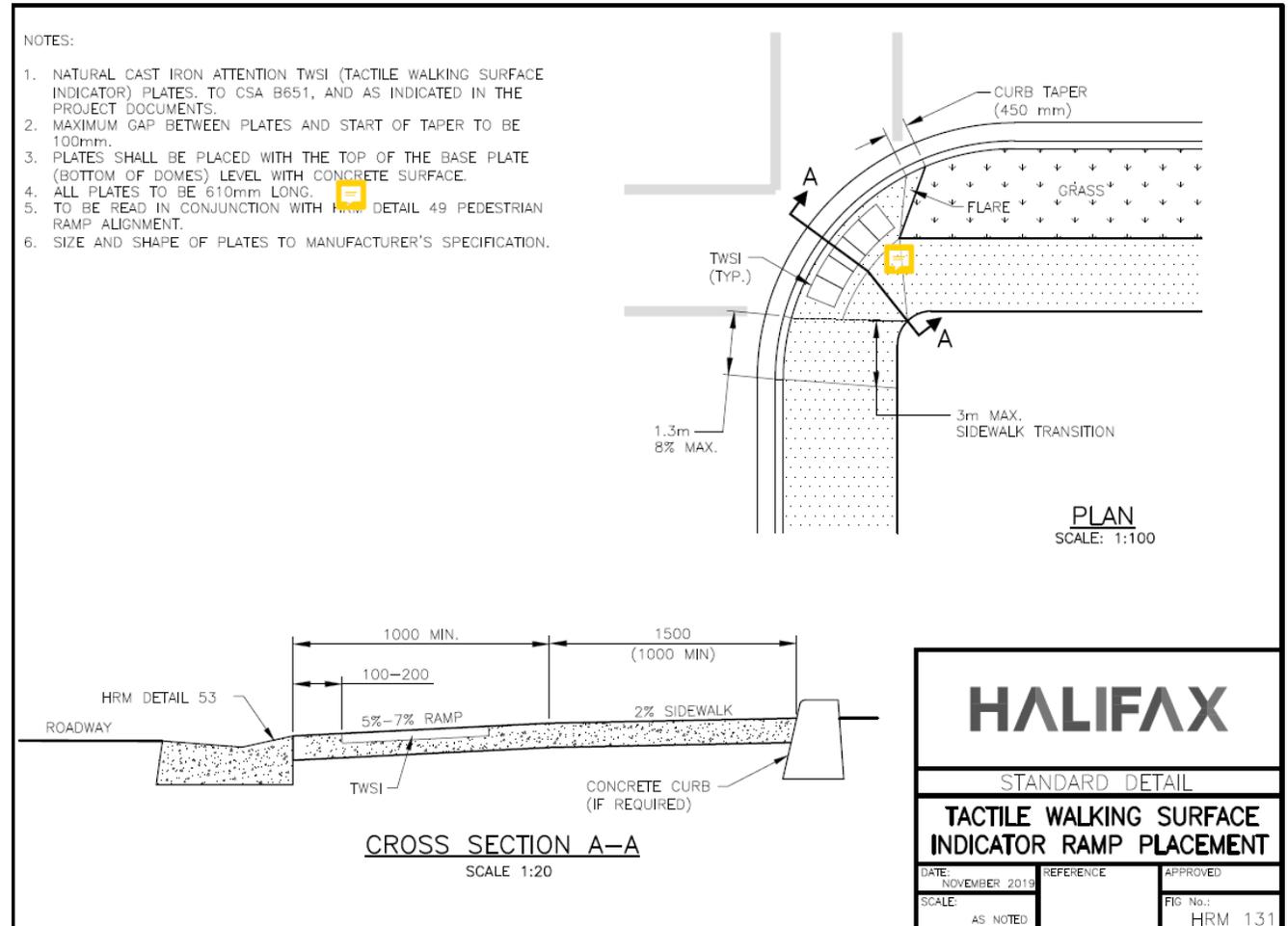
2021 DRAFT

Part A: Design Guidelines and Standards

Part B: Standard Details

Part C: Drawing Standards

HALIFAX



Crosswalk Markings – Proper Maintenance



Electric Vehicles



TPW APS Workplan

HRM Traffic Management – Traffic Signal & Streetlight Maintenance

Accessible Pedestrian Signals (APS)

As requested at the January 25th, 2021 meeting related to accessible pedestrian signals (APS), the following information is being provided to outline the activities intended to be undertaken by the Traffic Signal & Streetlight Maintenance section of HRM Traffic Management as staff progress with APS assessments, troubleshooting, maintenance, repair and upgrade work. The information is not exhaustive and other work / activities may also be undertaken that are not explicitly identified here.

Please note that the work related to the APS system / equipment is only one portion of the overall work and responsibilities of the Traffic Signal & Streetlight Maintenance group.

The timeframe for the activities identified is intended to be for approximately the next **4 to 6 months**.

- **Develop a documented standard**, in addition to current manufacturer manuals, for equipment installation and setup
- Develop a **standardized maintenance checklist** specific to APS equipment to be used to identify and record deficiencies during twice annual maintenance checks
- Develop **detailed list of intersections for APS upgrade** identifying those that can be undertaken easily with no infrastructure adjustments, those that would require minor adjustments and those that would require major reconstruction. This will be used to inform capital budget requirements to expand the APS system
- Set up a **“training session”** with staff to help provide perspective in order to better understand the types of issues to look for when troubleshooting or assessing locations
- Schedule **on-site meeting(s) with the group** to assist with determining of appropriate locator tone / APS signal volume. Intended to be scheduled in the spring.

- Based on items identified during APS meetings, **review all locations** to determine:
 - If appropriate wiring is installed and note locations requiring wire to be updated
 - If most up to date firmware is installed and update if needed
 - If settings for locator tone volume, APS volume and ambient/background volume adjust settings are appropriate and update if needed
- Install **new wiring at locations where required**. Activity can't start until ground thaws so that wire can be pulled through underground conduit.
- **Installation of APS at locations currently without equipment** (some identified through this group)
- Continue with **troubleshooting and maintenance / repair activities** as requests are submitted
- Work directly with the **APS equipment vendor** to troubleshoot existing issues and identify full capabilities of the equipment. Once session has already been held, currently working with Polara to schedule additional sessions
- If approved by Transportation Standing Committee, proceed with **adjustments to all APS locations** to allow for single press operation
- Continue to work with the group to develop a **survey for the blind and visually impaired** regarding the APS system

Submission to TPW Budget Meeting



We have been working with Transportation and Public Works (TPW) staff to bring attention to the needs of blind and partially sighted persons as they walk through HRM. Here are some comments as you consider the TPW 2021 / 2022 budget.



- Traffic Management's development of an implementation plan to install **Accessible Pedestrian Signals at all signalized intersections** by 2030
- Road Operations and Construction review of maintenance processes and capital projects to **ensure safe pedestrian accessibility through construction sites**
- Road Operations and Construction leading a project to **improve communication of construction projects** to residents



- No reference to a top Traffic Signal Maintenance priority to find out the root cause of **defective Accessible Pedestrian Signals** and to resolve it so that a blind or partially sighted person can reliably depend on the signals operating consistently, not in their current **consistently inconsistent** way
- No reference to enhancement of the Pavement Marking service, to make **high contrast crosswalk markings visible** throughout the year throughout HRM
- No reference to replacement of the current Tactical Walking Surface Indicators at crosswalk ramps with **high colour contrast ones**.

Our 'Ask' to the Committee

Request the CAO to:

1. Accelerate efforts to **understand the cause** of the consistently inconsistent operation of Accessible Pedestrian Signals (APS);
2. Use this understanding to **repair the APS devices** so that they are reliable 100% (ideally) of the time they are used;
3. Adopt an **inspection schedule** appropriate to the frequency of occurrence of APS defective operation;
4. Update the **Complete Street Guidelines** to include a Standard Detail drawing specifying the horizontal and vertical location of APS devices at intersections; &
5. Investigate methods to **improve crosswalk marking maintenance** to enhance their visibility to partially sighted persons throughout the year.