

# Construction Management Plan

Quatre Apartments  
Nuvo Architecture and Interiors



341 Sackville Drive  
Lower Sackville, NS

Prepared by:  
Celine Jabbour, M.Arch, Intern Architect  
November 15, 2023

Prepared for:  
PWP Holdings Ltd.



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**Section 1 – Introduction**

**1.1 – Project description**

The proposed development on Sackville Drive consists of:

- The construction of four new 5-story multi residential building complexes – 65 units each
- Two levels of underground parking in each building

This CMP document is intended to be an evolving document to help guide the project team to mitigate impacts to the adjacent community before they arise and to address unforeseen issues. This Construction Management Plan (CMP) has been prepared following HRM’s CMP (2020) guidelines and administrative order (2018-005-ADM) in an effort to reduce potential negative impacts on the surrounding community, due to construction activities for this project.

The most up-to-date version of this document will be kept on-site at all times during construction. Should ownership or contracting services change throughout the course of this project, HRM will be notified immediately and new parties will be required to comply with the approved CMP in writing.

**1.2 – Project Contact Information**

The project contacts for the proposed development consists of:

Developer:

PWP Holdings Ltd.  
15 Eliza Ritchie, C109  
Halifax, NS, B3M 0K6

Project Manager:

Patrick Jabbour  
15 Eliza Ritchie, C109  
Halifax, NS, B3M 0K6  
(902) 209-1348  
quatreapts@gmail.com

24 Hour Emergency Contact:

Patrick Jabbour  
(902) 209-1348

Civil Contractor:

Design Point Engineering  
90 Western Parkway, Suite 500  
Bedford, NS, B4B 2J3  
(902) 832-5597

**Section 2 – Construction Schedule & Logistics**

For a detailed construction schedule, please refer to the appendix. The following is a brief summary of anticipated major project milestones:

- Construction Start:** January 2024
- Substructure Substantially Completed and Backfilled:**
  - Building 1: July 2024
- Superstructure Substantially Complete:**
  - Building 1: November 2024
- Building Façade, parking lots Complete:** May 2025
- Building Complete:**
  - Building 1: September 2025
  - Building 2: February 2026
  - Building 3: November 2026
  - Building 4: September 2027

We do not anticipate any utility disruption (water, power, etc.) to adjacent properties. Should a situation do arise where a disruption is necessary every effort will be made to ensure this work can be completed with a minimal public interference; however, the contractor must abide by the necessary Noise by-law requirements. Furthermore, all affected local community will be notified a minimum 10 days prior to any scheduled disruptions.

**Section 3 – Relevant Regulations & Guidelines**

**3.1 – Occupational Health & Safety Regulations**

This CMP shall be utilized in agreement with all applicable Provincial and Federal Occupational Health and Safety Regulations. At a minimum, construction activities must at all times meet the standards of:

- a) National Building Code of Canada, as adopted and modified under the Building Code Act and the Nova Scotia Building Code Regulations made under that Act;
- b) Nova Scotia Occupational Health and Safety Act, and the Nova Scotia Occupational Safety General Regulations made under that Act;
- c) The Transportation Association of Canada (TAC)’s Manual of Uniform Traffic Control Devices for Canada (MUTCDC); and
- d) Nova Scotia Temporary Workplace Traffic Control Manual (NSTCM).

**3.2 – Municipal Regulations & Guidelines**

In addition to the Provincial and Federal standards referenced in Section 3.1, this CMP shall be utilized in agreement with and meet, at a minimum, the standards of all relevant municipal by-laws including, but not limited to, the following:

- a) HRM Design Guidelines
- b) HRM Standard Details
- c) S-300 Streets;
- d) E-200 Encroachments;
- e) B-201 Building;

- f) N-200 Noise;
- g) T-600 Trees;
- h) S-900 Controlled Access Streets;
- i) T-400 Truck Routes;
- j) W-101 Discharge into Public Sewers;
- k) B-600 Blasting; and
- l) HRM TCM Supplement.
- m) G-200 Grade Alteration and Stormwater Management
- n) Admin Order 2018-005-ADM regarding encroachments
- o) Admin Order 2020-010-OP regarding stormwater management standards for development activities

#### Section 4 – Vehicle Management

Prior to any construction activity, all temporary workplace traffic control devices and signage will be in place as per the Nova Scotia Temporary Workplace Traffic Control Manual (latest edition). The traffic control company will install the signage and ensure that they are maintained throughout the project. This project's Traffic Control Plans (TCPs) are listed in the Appendix.

Throughout all phases of construction two-way vehicular traffic will be maintained along Sackville Drive. While services are installed, and service abandonments are addressed, temporary lane closures will be required, 3.5m wide travel lane width is required to accommodate local bus traffic.

The truck Haul Route Plan has been prepared and is provided in the appendix. The selected route is intended to minimize traffic congestion and maximize pedestrian safety. During all construction phases construction vehicles will enter and exit the site at the gate location which will be clearly marked for function.

Should any traffic disruptions be required, notifications will be distributed to HRM and properties in the impacted area a minimum of five (5) days in advance of vehicular traffic closures.

In the event of unforeseen emergency situations, the site will remain accessible to emergency vehicles at all times.

On street parking is not permitted along Sackville Drive in the vicinity of the project site. To minimize parking requirements in adjacent neighborhoods, on-site workers will be required to park on the construction site and /or carpool whenever possible to minimize site vehicles accessing the project site.

#### Section 5 – Pedestrian Management

A Pedestrian Management Plan (PMP) has been prepared by the traffic control company and is provided in the appendix. Throughout construction the sidewalks will remain open with the exception during service installations; where the sidewalk will be temporarily closed to facilitate trenching.

Pedestrians will be protected by physically distancing them from the construction site. A fence will separate the project from pedestrians.

Pedestrian safety will be maintained by implementing appropriate signage. All navigation and safety signage indicating alternative sidewalks, and potential hazards will be inspected and maintained regularly.

Notifications will be distributed to HRM and properties in the impacted area a minimum of five (5) days in advance of pedestrian traffic impacts.

In keeping with Canadian National Institute for the Blind (CNIB) requirements and as outlined on their 'Clearing Our Path' website; various items will be incorporated into the pedestrian management signage and barriers. Such as, high visibility contrasting colours with appropriate font types (mix of upper and lower-case lettering), font sizes (between 16mm to 51mm) and sign colours (orange background with black lettering or white background with black lettering). The contractor will use bright orange sawhorse barricades complete with bold-font signage to identify sidewalk termination points. Reflective tape will also be placed on the ends of fencing, hoarding, sawhorse barricades, and concrete barriers to help delineate pedestrian routes and disruptions. Signage and tape colours will vary but will comply with the colour/brightness contrast as outlined by the CNIB website; examples are black/white, orange/black or dark red/white combinations.

High visibility signage will be used to assist pedestrians to easily navigate around the pedestrian route.

## Section 6 – Construction Site Protection & Hoarding

### 6.1 – Hoarding

In an effort to minimize debris from leaving the site, and to keep unauthorized personnel from entering the site, the entire perimeter of the work area will be delineated with chain-link mesh fencing along the property line, total height shall be 1.8m or 6ft as per the noted administrative order. The chain-link fencing may be covered with a combination of project advertising banners. For details please refer to the appendix.

### 6.2 – Street Cleaning, Dust & Noise Control

Dust and silica control is an important part of the civil contractor safety program. With no exceptions, water is to be used in all cutting and coring applications of concrete and asphalt. Water applied to obtain compaction in gravel works also acts as a dust suppressant. Roadway debris will be swept as required either by crews or with the use of a street sweeper.

Noise pollution is difficult to avoid on projects containing excavation and roadwork. The use of modern, reduced-emission equipment, and wet-cutting, will mitigate noise pollution to some extent. Work is to comply with HRM noise by-law N-200 at all times. Noise by-law exemptions will be requested if required.

### 6.3 – Emergency Access & Egress

The site will be accessible through gates. These gates are the only locations that will receive equipment/materials during construction, gates will remain closed and will be locked at all times after work hours. In cases of emergencies, on-site workers will exit the project site through these gates. These gates will remain unlocked at all times when workers are on site in case of emergency allowing unrestricted emergency response units access to the site.

Any existing fire hydrants located adjacent to the site will remain protected from construction activities. These fire hydrants, along with the existing and proposed fire department connections (Siamese connections) will be accessible to firefighters throughout all phases of the project. Adjacent existing hydrants and fire department connections are not anticipated to be affected by construction.

**6.4 – Environmental Control**

Please refer to the appendix which defines a detailed erosion and sediment control plan. Silt fence is installed and does not infringe on neighboring properties.

**6.5 – Stormwater Management and Runoff Pollution**

Construction will adhere to the proposed storm drainage plan and the Nova Scotia Department of Transportation and Infrastructure Renewal (NSTIR) Erosion and Sedimentation Control Manual. The main objective of the storm water management plan will be to identify Best Management Practices, which will minimize erosion and sediment transport. See the appendix for:

- a) Surface drainage patterns;
- b) Catchbasin locations;
- c) Site entrance/exit locations

**6.6 – Encroachment**

Please refer to Design Point’s site servicing drawing in the appendix, which delineates the anticipated area of disturbance. Please note that encroachment of the city property will take place during the installation of the services along Sackville Drive. Developer to comply with all by-laws and obtain all necessary permits during this phase of the work.

**Section 7 – Lifting, Hoisting, and Crane Operations**

All Lifting and Hoisting are within the construction site perimeter with the anticipation of some interference with the public. All lifting and hoisting are supposed to be carried out with stationary cranes, mobile cranes and lifts. Developer will obtain a crane encroachment permit prior to erecting of crane.

**7.1 – Operations above the Public Realm**

Lifting operations, such as tower cranes, mobile cranes, telehandlers, forklifts, and small lifts, are a crucial and important piece of equipment on this construction site. Their presence brings about a level of risk that must be considered.

Lifting heavy loads over public space should generally be avoided, there are times when such a lift is necessary. The submitted CMP includes the following provisions for proposed crane operations or lifting of heavy loads over the public realm:

- a) Notwithstanding level-luffing cranes, tower cranes will be sited so that there is at least 3m clearance between the end of the boom and the nearest obstacle or building and as much as possible, tower cranes will be sited to avoid loads being handled over occupied areas;
- b) Measures for ensuring that people are not placed at risk from the operation of the crane;
- c) No loads should be moved or suspended over people;
- d) At no time should a load be left suspended over the public realm;
- e) Routines for requiring continuous and thorough checks for area specific hazards;

- f) If loads must be transferred over a public space or ROW, the area would be closed to access (in accordance with short duration traffic control protocols as specified by NSTCM) during the move; and
- g) When loads have to be handled in the vicinity of persons, extreme care will be exercised, and adequate clearances allowed.

## **Section 8 – On-Site Safety and Security**

The owner and developer will engage the services of an independent Safety Officer throughout this project. The Safety Officer will have full power to set safety protocols for the site as well to make sure all Contractors are registered members in good standing with the Nova Scotia Construction Safety Association and are committed to upholding the safety of their workers and the public paramount. In addition to ensuring strict compliance with all applicable safety codes and regulations, the following safety protocols will be implemented to further enhance the site safety and security:

- a) Contractor and Sub-trade workers will all be required to attend a mandatory site safety orientation training session;
- b) Personal protective equipment (PPE) will be required for all personnel on site;
- c) Adequate signage will be placed outside the hoarding, which warns of all hazards that may exist;
- d) Gates will be locked and the perimeter fencing secured to provide security against public access during off work hours and monitored in high traffic areas during operation;
- e) Hoarding will be marked clearly “No Trespassing – Construction Personnel Only”, and personal protective equipment requirements clearly marked (e.g., “Hard Hats and Safety Footwear Must Be Worn Beyond This Point”);
- f) Regular safety inspections will be conducted to ensure suitability of hoarding and other safety devices;
- g) Emergency contact information will be prominently posted.

### **8.1 – Material Handling: Loading, Unloading, Delivery & Storage**

The contractor will adhere to the procedures stipulated in the Haul Route Plan for delivery of materials. Delivery vehicles will use the designated gates for entry and exit. Timing of deliveries will be coordinated to have the least possible negative impact on regular traffic. The staging and delivery area will be housed to the project site on private property and will serve as the site’s main laydown area for loading, unloading, concrete pumping and construction materials.

### **8.2 – Emergency Access & Egress**

The site will be accessible through a gate stationed at the planned driveway to facilitate construction vehicle access. This gate is the only locations that will receive equipment/materials during construction. This gate will be clearly marked for function. In cases of emergencies, on-site workers will exit the project site through this gate. This gate will remain unlocked at all times when workers are on site in case of emergency allowing unrestricted emergency response units access to the site. Gates will be locked and secured afterhours to provide security against public access during off work hour. Emergency contact information will be posted on project information boards surrounding the site.



### 8.3 – Fire Suppression Systems

The adjacent existing fire hydrants will remain outside the project area and will be protected from construction activities. These fire hydrants, along with any existing adjacent fire department connections (Siamese connections) will be accessible to firefighters throughout all phases of the project.

There are no proposed fire department connections at this stage of the project. These are not available for fire department use until after the building's water supply lines have been installed, tested and commissioned by the water commission, similar with the fire suppression system. This system will not be active until after the building is near complete and the construction site fencing has been removed.

### 8.4 – Power Poles

Power poles with street lights on them will be temporarily removed with the help of NSP until the site has been excavated down to grade. Once complete, poles with lights will be restored. Anticipated down time to be 30 days.

## Section 9 – Pre-Construction Consultation & Meeting

### 9.1 – Pre-CMP Community Consultation

When developing a new building, there is potential for disruption to the surrounding community. As such, discussions with surrounding community will be held. A construction notification letter will be delivered to the properties neighbouring the construction site as well as HRM staff, notifying them of the expected work with contract information for questions and feedback. As part of this notification the surrounding community and businesses will be offered to sign up for a monthly construction project notification from the development. It is understood, HRM requires a confirmation letter from the applicant confirming delivery of notification letters to affected residents.

### 9.2 – Project Information and Contacts

To encourage communication between the project team and the public, contact information will be provided on Project Information Boards; these will be posted prominently around the project site on the fencing; refer to the appendix for a copy of the Project Information Boards.

### 9.3 – Preconstruction Meeting

Prior to construction the developer, contractor and traffic control company will attend a pre-construction meeting with HRM staff to review the CMP document on site. HRM's engineering technician will confirm the date and time of this meeting; and may wish to waive the requirement.

### 9.4 – Construction Notification

Approximately five (5) business days prior to the encroachment, an additional notification will be circulated to the neighbouring properties, notifying them that work is starting on site.

## Section 10 – Pre-Engineered Retaining Walls

Part of this CMP report are pre-engineered retaining walls which will be supplied and installed by civil contractor. The retaining wall is manufactured by Shaw Group. Please refer to the appendix for details.

### 10.1 – Existing Retaining Wall

There is an existing HRM owned retaining wall in front of the property. Once encroachment permit is issued this retaining wall will be removed. The existing grade will be excavated down to Sackville Dr. elevation before the retaining wall is removed in order to maintain safe passage for pedestrians. Refer to the appendix for sketch.

### Section 11 – Summary

This construction management plan was prepared with the goal to minimize negative impacts to the community, pedestrians, and traffic throughout the scope of this project. This plan will be used as a minimum standard and any further safety protection required or methods to provide a more positive environment will be used throughout construction work as necessary.



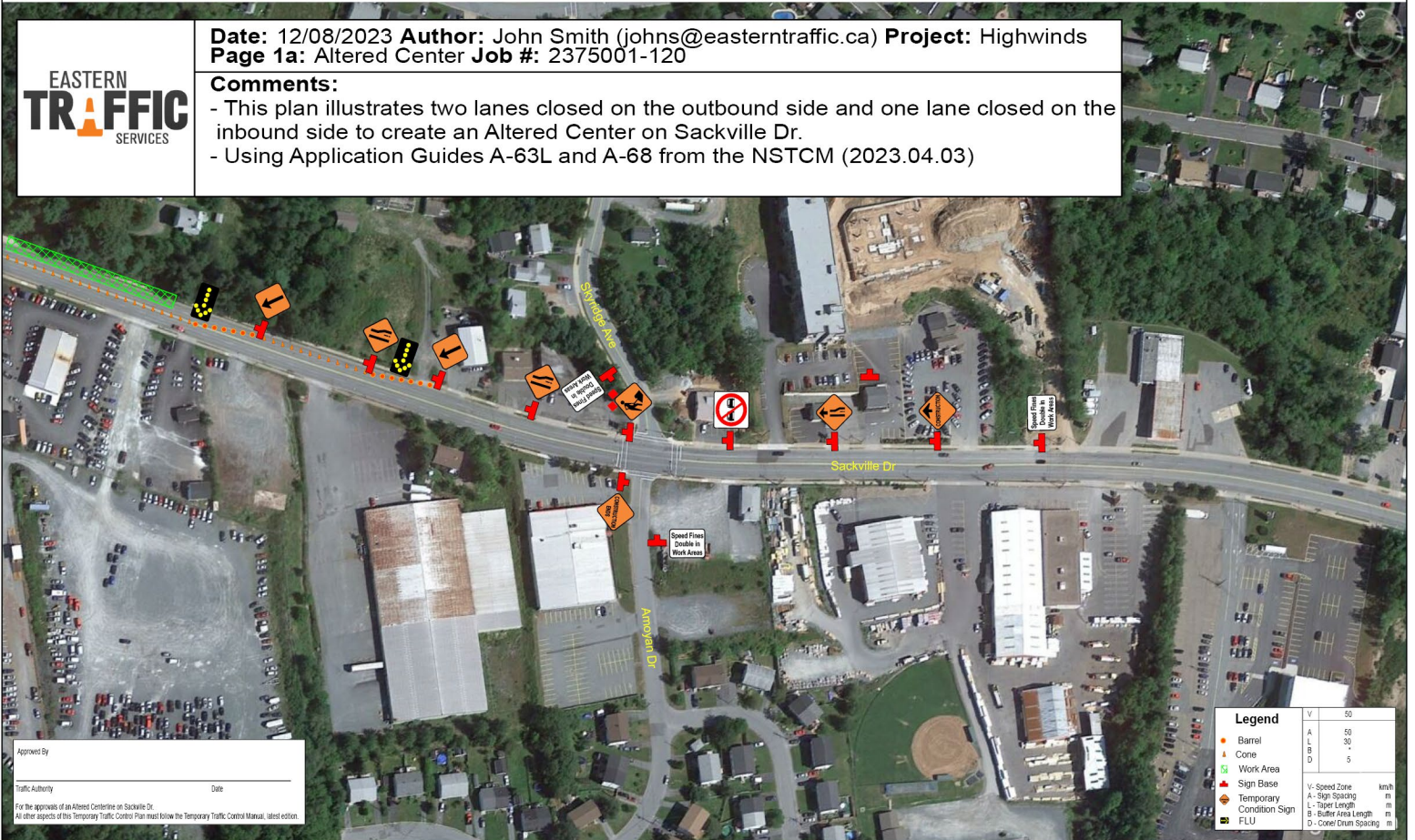
# Appendix B (1/2) – Traffic Control Plan



**Date:** 12/08/2023 **Author:** John Smith (johns@easternttraffic.ca) **Project:** Highwinds  
**Page 1a:** Altered Center **Job #:** 2375001-120

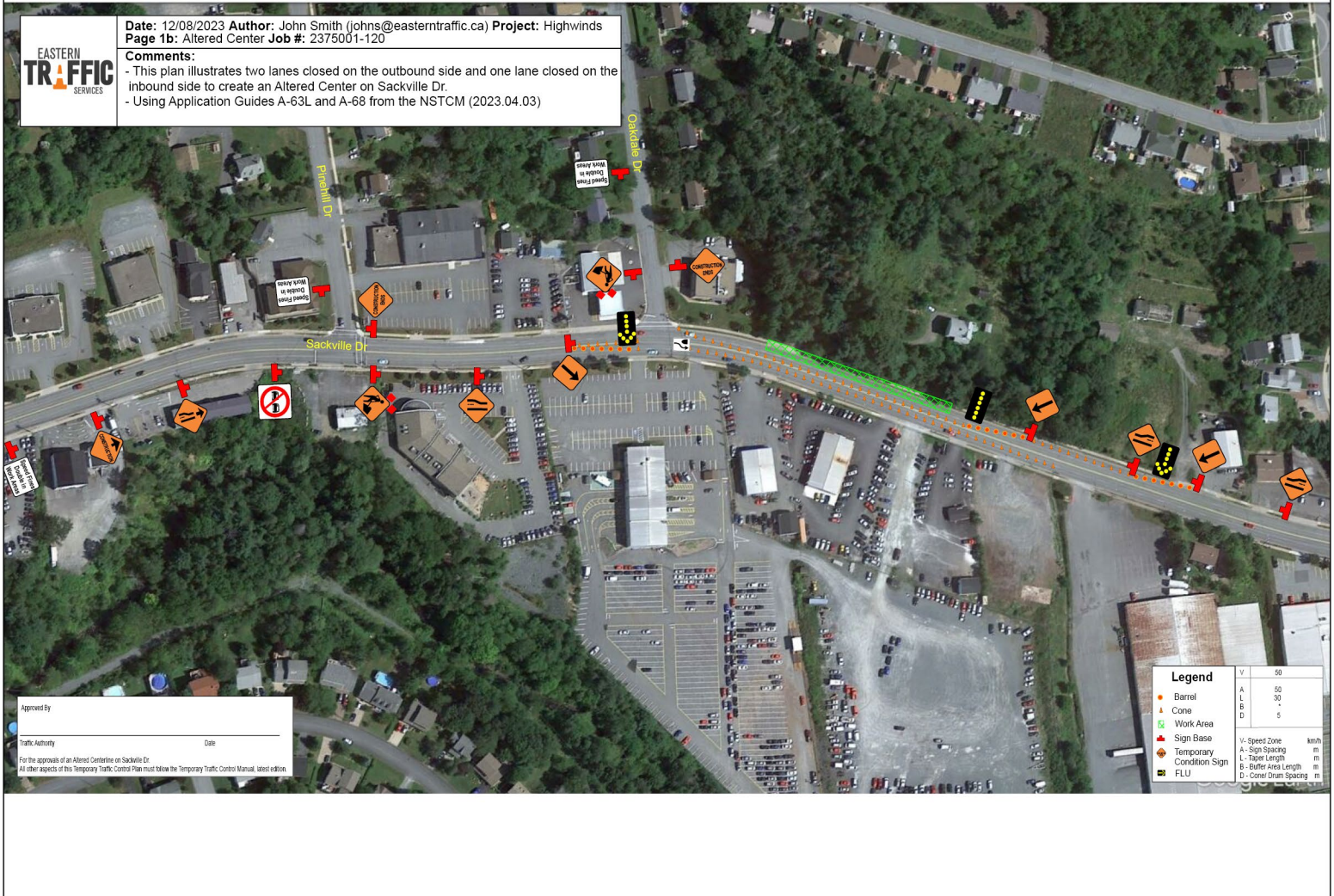
**Comments:**

- This plan illustrates two lanes closed on the outbound side and one lane closed on the inbound side to create an Altered Center on Sackville Dr.
- Using Application Guides A-63L and A-68 from the NSTCM (2023.04.03)



Approved By \_\_\_\_\_  
 Traffic Authority \_\_\_\_\_ Date \_\_\_\_\_  
 For the approval of an Altered Centreline on Sackville Dr.  
 All other aspects of this Temporary Traffic Control Plan must follow the Temporary Traffic Control Manual, latest edition.

# Appendix B (2/2) – Traffic Control Plan



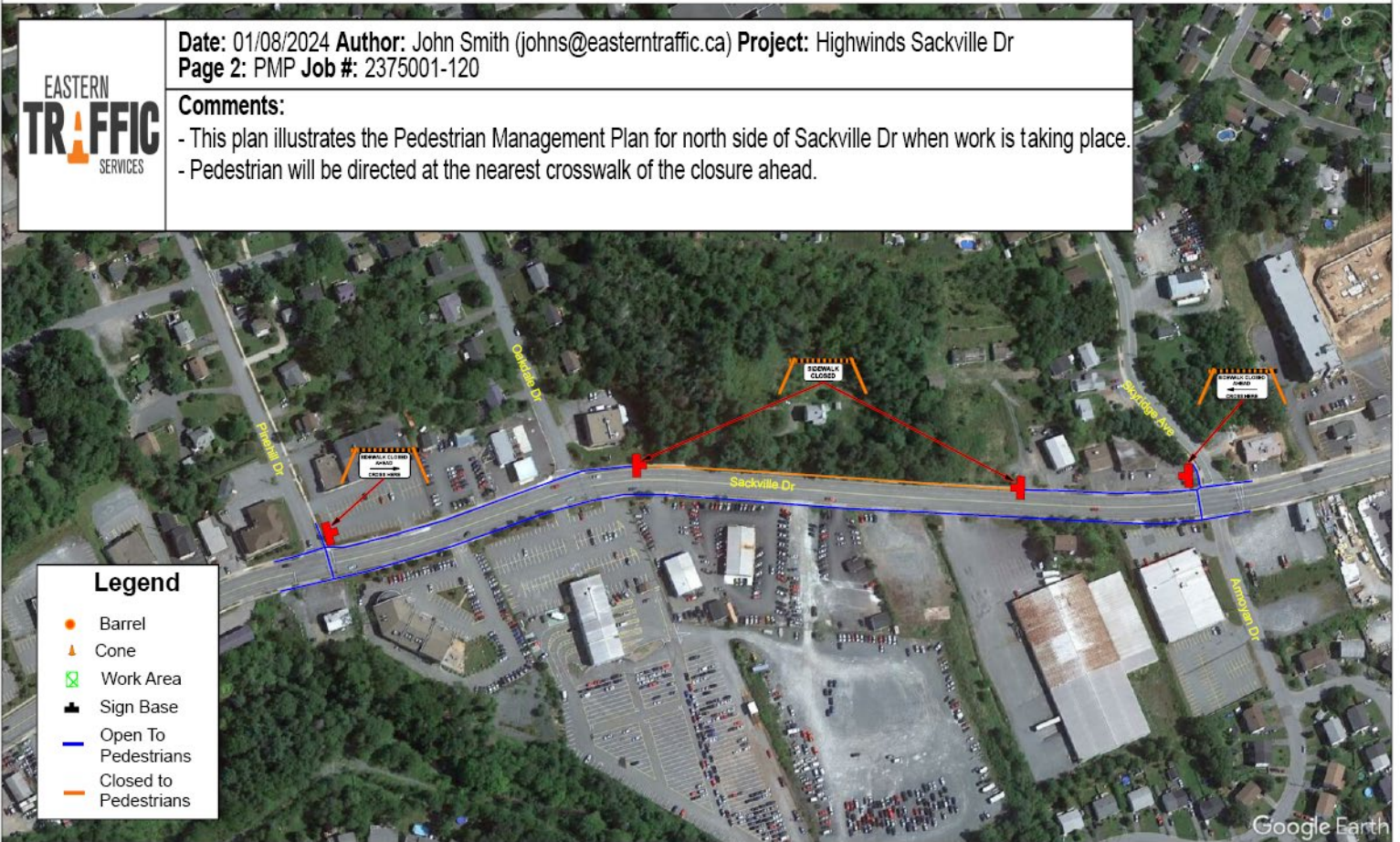
# Appendix C – Pedestrian Management Plan



**Date:** 01/08/2024 **Author:** John Smith (johns@easterntraffic.ca) **Project:** Highwinds Sackville Dr  
**Page 2:** PMP Job #: 2375001-120

**Comments:**

- This plan illustrates the Pedestrian Management Plan for north side of Sackville Dr when work is taking place.
- Pedestrian will be directed at the nearest crosswalk of the closure ahead.



# Appendix D – Haul Route Plan

Legend:

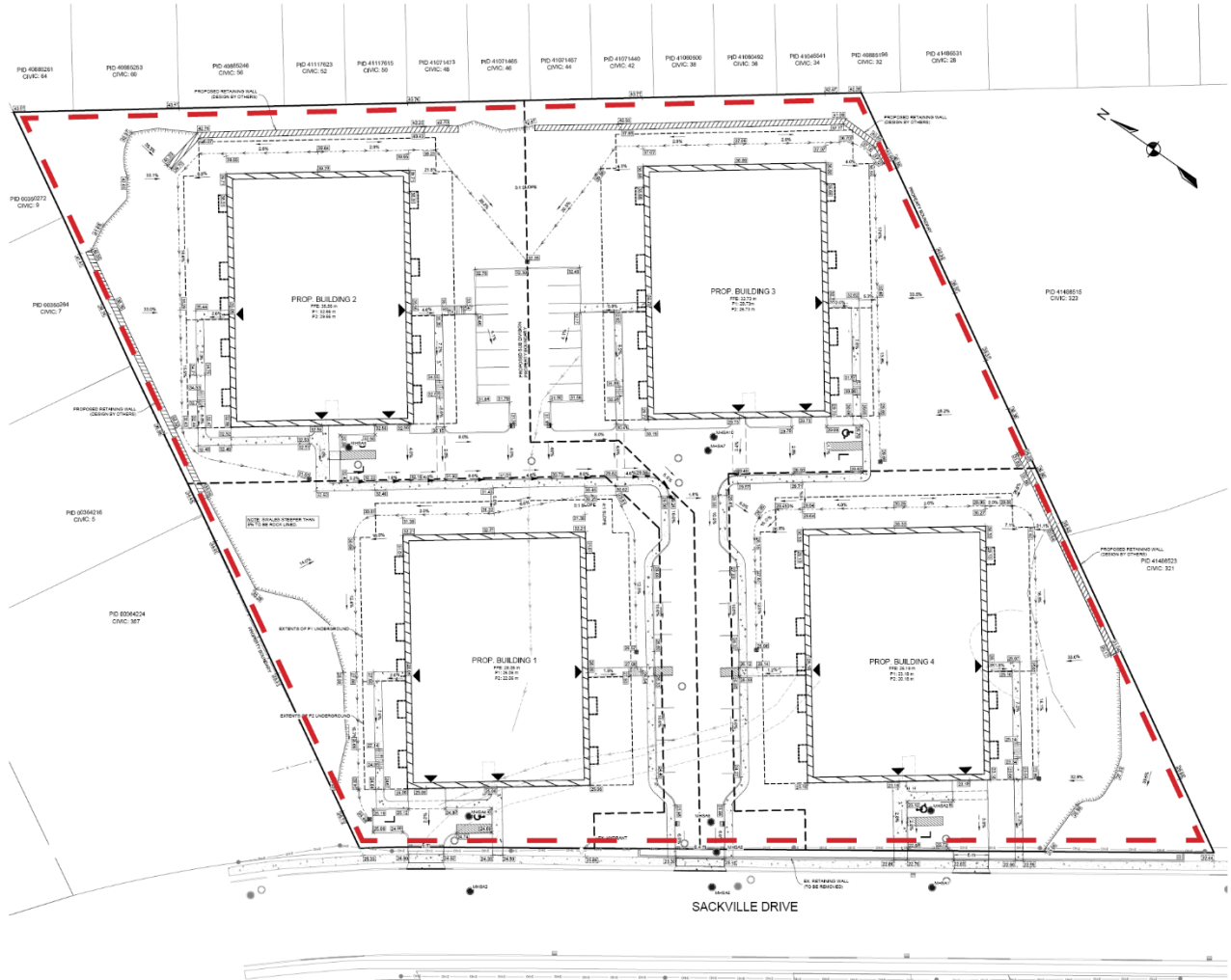
- Gate
- Haul Route Inbound
- Haul Route Outbound



Comments:

- Not to scale
- Inbound via Sackville Dr.
- Outbound via Sackville Dr.
- Left turns in and out of the site should be avoided whenever possible

# Appendix E – Vehicle Staging Plan





# Appendix F – Construction Site Protection & Hoarding

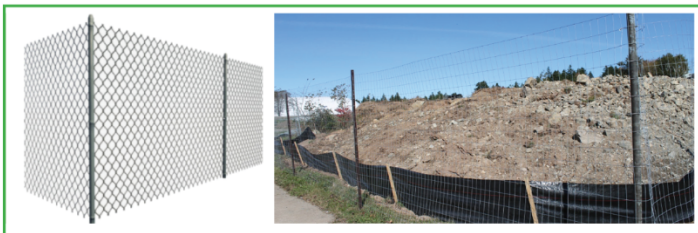
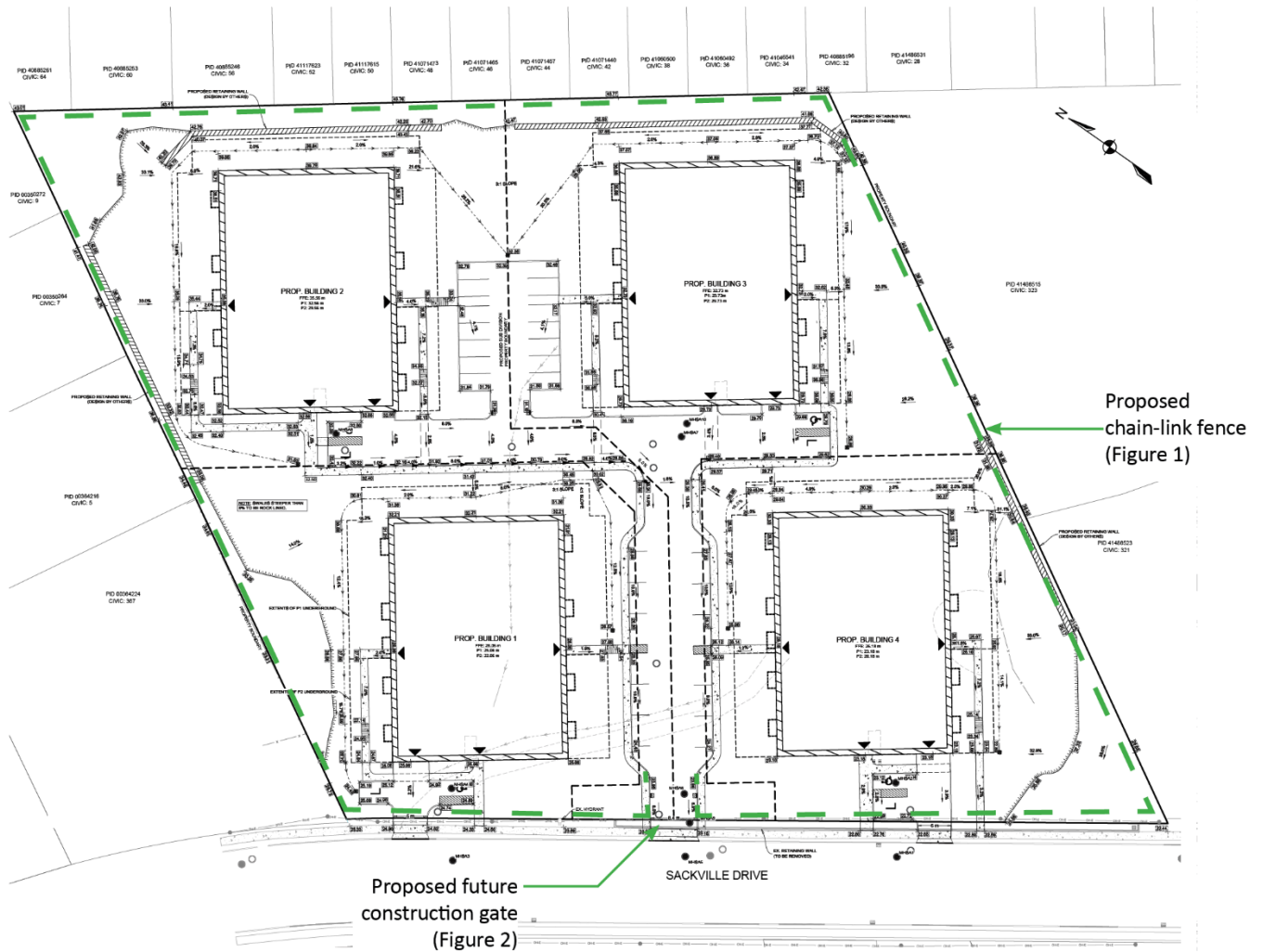


Figure 1. Construction Fence

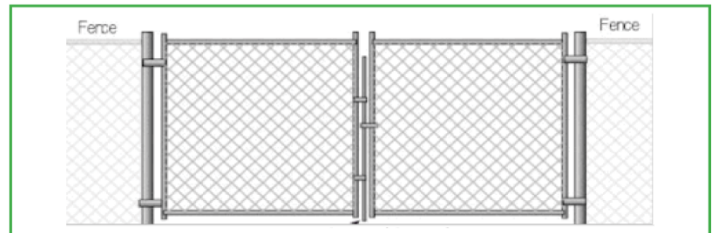


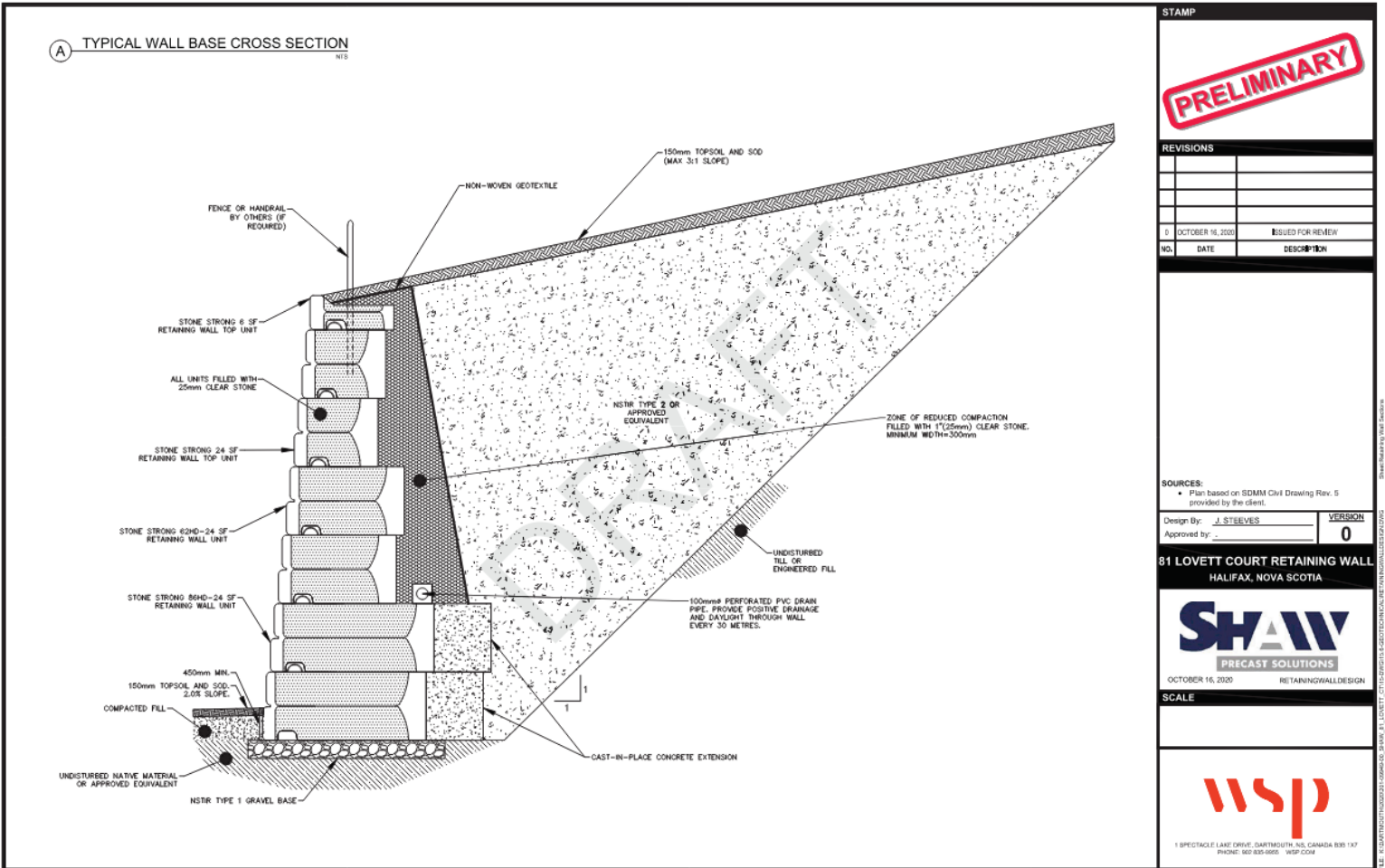
Figure 2. Construction Gate - Double Swing Gate







# Appendix J – Pre-Engineered Retaining Walls



STAMP  
**PRELIMINARY**

REVISIONS		
NO.	DATE	DESCRIPTION
5	OCTOBER 16, 2020	ISSUED FOR REVIEW

SOURCES:  
 • Plan based on SDMM Civil Drawing Rev. 5 provided by the client.

Design By: J. STEEVES  
 Approved by: \_\_\_\_\_  
 VERSION: 0

81 LOVETT COURT RETAINING WALL  
 HALIFAX, NOVA SCOTIA

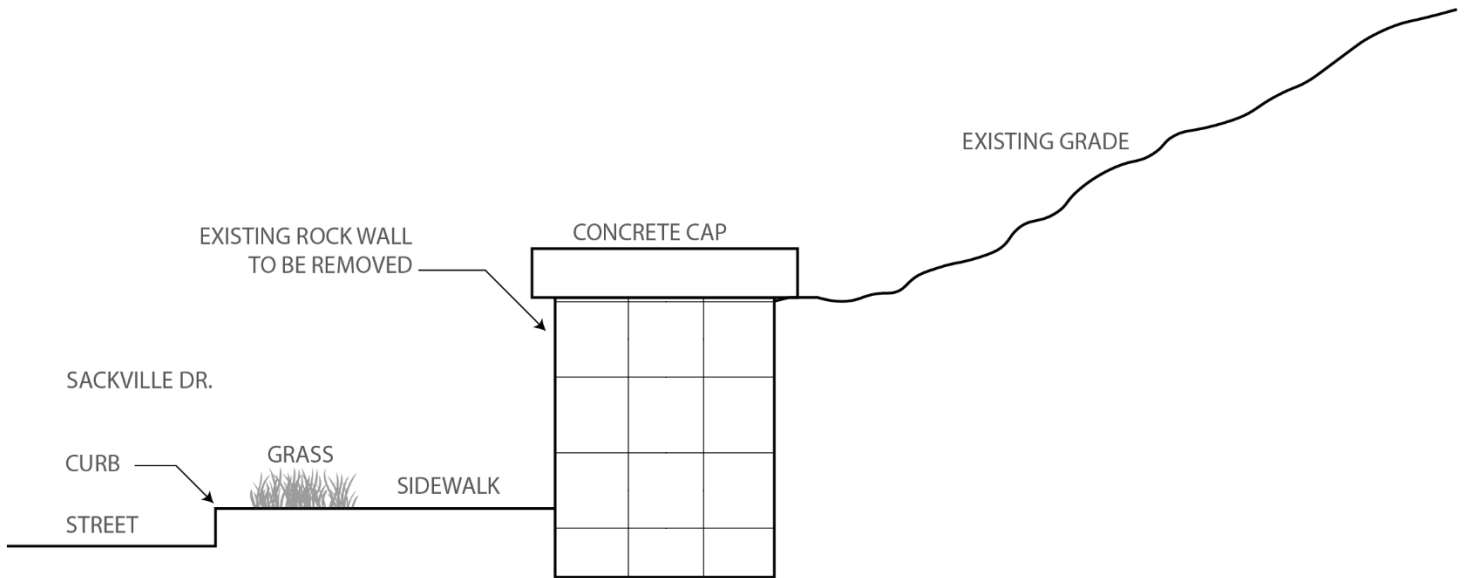


OCTOBER 16, 2020 RETAININGWALLDESIGN

SCALE



## Appendix K – Existing Retaining Wall



NOTE:

- NOT TO SCALE
- EXISTING GRADE WILL BE EXCAVATED DOWN TO SACKVILLE DR. ELEVATION BEFORE ROCK WALL IS REMOVED IN ORDER TO MAINTAIN SAFE PASSAGE FOR PEDESTRIANS.

Appendix L – Site Information & Wayfinding Signage  
Development Information Boards

**PWP Holdings Ltd.**



**341 Sackville Drive  
Lower Sackville, NS**

**Developer**

PWP Holdings Ltd.  
15 Eliza Ritchie, C109  
Halifax, NS, B3M 0K6

**Project Manager**

Patrick Jabbour  
15 Eliza Ritchie, C109  
Halifax, NS, B3M 0K6  
(902) 209-1348  
quatreapts@gmail.com

**24 Hour Emergency Contact**

Patrick Jabbour  
(902) 830-0577

**Project Consultant**

Nuvo Architecture & Interiors  
5335 Duffus St.  
Halifax, NS, B3K 2L9



**Construction Timeline**

Start: January 2024  
End: September 2027