

QEII - HALIFAX INFIRMARY EXPANSION PROJECT

CONSTRUCTION MANAGEMENT PLAN

REV 004 - January 18, 2024



QE11 HIEP CMP R004 - JANUARY 18, 2024

PCL Constructors Canada Inc. 49 Auriga Drive Nepean, Ontario K2E 8A1



TABLE OF CONTENTS

1. Intr	roduction	2
1.1.	Project Description and Objectives	2
1.2.	Project Contact Information	
2. Pro	oject Schedule & Logistics	Ę
2.1.	Schedule	Ę
2.2.	Work Within the Public Right-of-Way	Ę
2.3.	Tree Removals	
2.4.	Hours	
3. Rel	levant Regulations & Guidelines	7
3.1.	Occupational Health & Safety Regulations	
3.2.	Provincial & Municipal Regulations & Guidelines	8
4. Veh	hicle and Pedestrian Management	8
4.1.	Vehicle Traffic Control	8
4.2.	Haul Routes	
4.3.	Parking	
4.4.	Pedestrian Management	
4.5.	Public Transit Impacts	9
4.6.	Accessibility and Visually Impaired	10
5. Con	nstruction Site Protection and Hoarding	10
5.1.	Site Protection and Hoarding Materials	10
5.1.1.	Concrete F-Type Barriers	10
5.1.2.	Fencing & Translucent Mesh	10
5.1.3.	Hoarding Aesthetics	10
5.2.	Signage	1
6. Lift	ting, Hoisting and Crane Operations	1
6.1.	Navigation Canada & Transport Canada Regulatory Approvals	1
6.2.	Operations above the Public Realm	1
7. On-	-Site Conditions	1
7.1.	Site Safety and Security	1
7.2.	Hazard Assessment	13
7.2.1.	Construction Hazard Assessment	13
7.2.2.	. Hazard Identification and Control	13
7.3.	Dangerous Activities	14





7.3	.1. Blasting	14
7.3	.2. Rodent Control Plan	14
7.4	. Material Handling, Loading/Unloading and Vehicle Staging	15
7.5	. Environmental Controls	15
7.5	.1. Streets and Right of Way Cleaning	15
7.6	. Storm Water Management Plan	15
7.6	.1. Noise and Vibration Plan (NV)	16
7.6	.2. Dust and Emissions Control	16
7.6	.3. Erosion Control	17
7.6	.4. Dewatering	17
8. (Community Engagement	17
9. F	Pre-Construction Meeting	17
10. 8	Summary	18
11. L	_ist of Appendices	19
11.1	. Appendix A2.1.1-ROW Impact Summary Schedule	20
11.2	2. Appendix A2.2.1- ROW Impacts & Encroachments	2
11.3	3. Appendix A2.2.2- ROW Utilities Work	22
11.4	4. Appendix A4.1.1- Phase 1 Traffic Control & Pedestrian Wayfinding	23
11.5	5. Appendix A4.1.2 - Variable Message Board Locations	24
11.6	6. Appendix A4.2.1- QEII-Haul Routes	25
11.7	7. Appendix A5.1.3- Construction Hoarding Aesthetics	26
11.8	3. Appendix A5.2.1- PCL Project Site and Safety Signage	27
11 C	Appendix A 6.1 Rodent Control Plan	28



1. INTRODUCTION

1.1. Project Description and Objectives

The Halifax Infirmary Expansion Project will be redevelopment of the existing Halifax Infirmary, an existing hospital and healthcare facility centrally located in the Halifax Peninsula in the Halifax Regional Municipality (HRM). The site is generally bounded by four streets, Robie Street, Bell Road, Summer Street and Veterans Memorial Lane. The site works are expected to be completed in several construction phases and includes the demolition of a parking structure and other infrastructure as well as construction of new healthcare buildings.

PCL Constructors Canada Inc. and WSP Canada Inc. have prepared this Construction Management Plan (CMP) to review and mitigate potential negative impacts on the surrounding community associated with the enabling works. This CMP outlines the construction activities for the enabling works to mitigate the effects to the surrounding neighbourhood before they arise.

The QEII Halifax Infirmary Expansion Project is a complex, multi-phased development in which the timely delivery of health infrastructure is critical.

To meet the needs of Novia Scotia, PCL Constructors Canada Inc, the Province and HRM have agreed that the Construction Management Plan will be a living document, consisting of iterative submissions and approvals at key milestones throughout the course of the construction.

The QEII Halifax Infirmary Expansion Project consists of the following primary construction phases:

• Enabling Works-Preparation of the site for the New Facilities

- Hoarding & Fencing installations
- Site surface removals and various adjacent right of way impacts (sidewalks, curbs, roadways, landscaping)
- Temporary Access Roads from Municipal streets and modifications to the right of way for traffic management and construction setup.
- Site services, excavation and rock blasting
- o Demolition of Existing Structures (Robie St. Parkade and portions of the Existing Hospital

The project site is located in downtown Halifax at the corner of Bell Rd & Robie St. The QEII Hospital is the major hub for all health care services in the province of Nova Scotia and Atlantic Canada. The expansion program is one of the largest construction projects in eastern Canada upgrading the capacity and service for almost all hospital departments.





Conditions of the CMP:

- The CMP will be always kept onsite during construction.
- If the project changes ownership or contracting services throughout the project, HRM will be notified, and the new parties must agree to comply with the CMP in writing.
- The contractor or owner shall inspect the implementation of the CMP on a regular basis and keep a detailed inspection and maintenance log.
- If for any reason changes are required to the CMP during the construction, HRM shall be notified immediately.
- The Municipality may direct maintenance or adjustment of certain elements as required and may request to view the inspection and maintenance log at any time.
- Any damage to HRM infrastructure will be remediated to HRM standards at the expense of the property owner who caused such damage



1.2. Project Contact Information

OWNER / DEVELOPER

Nova Scotia Health

Build Nova Scotia

DESIGN BUILD PARTNERSHIP

CONSULTANTS

Architectural: B+H & Arcadis

Structural: ENTUITIVE

Civil & Transportation: CBCL

Civil & Transportation for Early Temporary Works: WSP

Mechanical and Electrical: S+A

PCL CONSTRUCTORS CANADA INC.:

Senior Project Manager, Jaclyn Tomlinson; PCL Constructors Canada Inc.

Project Manager, Chris Edge; PCL Constructors Canada Inc.

Field Operations Manager, Michael Halajian; PCL Constructors Canada Inc.

Site Superintendent, Luke Skelhorn; PCL Constructors Canada Inc.

Communications Manager, Marg Sheridan; PCL Constructors Canada Inc.

Email: masheridan@pcl.com



2. PROJECT SCHEDULE & LOGISTICS

2.1. Schedule

The Project schedule is developed based on the various primary phases of construction for the development.

Below is a summary of each phase of construction and key milestones, please refer to the following Appendices for full details:

Refer to Appendix A2.1.1-ROW Impact Summary Schedule

ROW Impact Phase	Construction Phase	Start	Finish
Phase 1	Phase 1 to Phase 7	February 2024	June 2024
Phase 2	Phase 8 to Phase 13	June 2024	Sept 2024
Phase 3	Phase 14 to Phase 17	Sept 2024	TBD

The construction schedule will change during construction and PCL will distribute project schedule updates to HRM where required as part of planning or upon request from HRM.

2.2. Work Within the Public Right-of-Way

Refer to Appendix A2.2.1 - ROW Impact & Encroachments

Refer to Appendix A2.2.2 - ROW Utilities Work

As part of the QEII Project various Right of Way works are scheduled and design development will include HRM review and input into the various ROW adjustments.

The construction works and associated plan onsite will change during construction and PCL will distribute updates to HRM as required for any major changes to work plans or upon request from HRM.

ROW Impact Phase 1-Construction-Phases 1 to 7

Robie Street

- Curb modifications for construction vehicle gates
- Periodic sidewalk closures during construction
- Tree removals

Bell Road

- Permanent southern sidewalk closures
- Tree removals
- Driveway access permit for new public/ambulance access off Bell Road
- Bus lane closure during construction
- Bike lane closure on south side of Bell Road





- Existing curb modifications for construction vehicle gates
- Site service crossings and connections to municipal infrastructure
- New pedestrian crossing mid-block between Quinpool intersection and Summer Street
- Temporary overhead hydro services to site (overhead across Bell Road)

Summer Steet

- Temp construction driveway access and curb modification
- Periodic sidewalk closures during hoarding construction
- Temporary overhead hydro services to site (from existing power poles on summer)

ROW Impact Phase 2-Phases 8 to 13

Robie Street

- Permanent driveway access closures to existing Robie Street public entrances
- Temp median adjustments between Cherry St & Jubilee
- Existing curb modifications for vehicle gates
- Site service crossings and connections to municipal infrastructure
- Temporary and permanent underground duct bank installations
- Communications underground duct bank installations
- Periodic sidewalk closures during rock blasting
- Eastward Energy natural gas service

Bell Road

- Commission new pedestrian crossing
- Re-open portion of sidewalk for public access to Emergency Department
- Open new public driveway access to emergency department
- Open new ambulance driveway access to emergency department
- Reinstate Bus Stop on Bell Road adjacent to new public access to emergency department.
- Site service crossings and connections to municipal infrastructure
- Communications underground duct bank installations
- Permanent underground dunk bank installations

Summer Steet

N/A

ROW Impact Phase 3-Phases 14-16

Robie Street

- Sidewalk closure
- Northbound lane closure due to increased extent of hoarding
- Decommission pedestrian crossings.
- Periodic sidewalk closures during rock blasting

Bell Road

NA

Summer Steet

NA



2.3. Tree Removals

To facilitate the early Enabling Works required to prepare the site for the building of the new facilities, tree removals will be necessary.

The HIEP site borders existing HRM mature growth trees on three sides: Robie Street, Bell Road, and Summer Street. A separate permit application will be coordinated with the Halifax Regional Municipality and Urban Forestry to address the required removals and compensation plan.

In general, for all work adjacent to existing ROW trees not scheduled for removal, Bylaw T-600 will be respected, and PCL will utilize best practices for Tree protection as detailed in Part A - Municipal Design Guidelines.

2.4. Hours

Work will generally proceed with the normal construction hours during the week, and depending on weather and coordination of trades, work may occur in the early evenings or weekends. Hours of working are regulated through the times noted below:

Monday - Friday: 7:00 am - 9:30 pm
 Saturdays: 8:00 am - 7:00 pm
 Sunday - Statutory holidays: 9:00 am - 7:00 pm

As noted above the project is exempt from HRM Noise By- Law N-200 and it is worth noting some work will occur out of regular work hours, which is anticipated but no limited to:

- Off hours site deliveries and associated crane operations
- On site work
- Traffic control adjustments/set ups.

3. RELEVANT REGULATIONS & GUIDELINES

3.1. Occupational Health & Safety Regulations

The PCL Health & Safety Plan is available upon request.

Overview

PCL has long acknowledged the importance of maintaining a safe and healthy work environment for all personnel and the stewardship required in maintaining an effective and successful program.

This Project HSE Plan applies to all on-site personnel (unless otherwise specified) and describes the safety and environmental standards that govern the work performed on this project.

Full compliance with this Project HSE Plan, applicable safety and environmental laws, and regulations are the minimum requirement for working on this project. Where there is conflict between this Project HSE Plan and any regulatory requirement, the more stringent will apply and shall be enforced.





This Project HSE Plan is a document that integrates local HSE regulations, owner/client HSE requirements, and PCL HSE standards into a single package that can be easily referenced by PCL project management/supervision, subcontractor supervision and workers.

This Project HSE Plan can be amended as project conditions warrant. Substantial changes will be documented on the Project HSE Plan Revision Log.

3.2. Provincial & Municipal Regulations & Guidelines

The QEII Halifax Infirmary Expansion Project (Project) is located at the existing Halifax Infirmary site which is within the jurisdiction of the province. As such the Province, the Halifax Regional Municipality (HRM) and the Governmental Authorities have determined that a formal Development Permit and Building Permit Application will not be required for the Facility.

Pursuant to Section 14 of the Interpretation Act (Nova Scotia), no Building Permit or Development Approval is required for the Facility and additionally various other typical development permits not impacting the right of way are also exempt, which includes permits such as but not limited to: grade alteration, blasting, Noise Bylaws etc....

Permits for work impacting the Right of Way and HRM Infrastructure are still applicable, along with the associated fee(s) as set out in bylaw F-200 and Administrative Order 15.

This CMP has been prepared to comply with Administrative Order Number 2018-005-ADM. and to address the impacts to the Right of Way and HRM infrastructure.

4. VEHICLE AND PEDESTRIAN MANAGEMENT

4.1. Vehicle Traffic Control

Refer to Appendix A4.1.1 - Phase 1 Traffic Control & Pedestrian Wayfinding

During the various phases of work there are expected to be impacts to the vehicular traffic circulating the site. Phase 1 Right of Way Impacts generally includes traffic control plans for right of way impacts during hoarding installation and during the static phase conditions of the site, these are provided in the above referenced appendix.

Traffic control plans will include signage to notify and direct drivers as required in coordination with the impacts from construction.

As part of the development the Build Novia Scotia and Novia Scotia Health have requested variable message boards be installed along the primary access roads leading to the hospital in order to direct traffic to the appropriate lanes as a result of the impacts to public access during construction. These variable message boards will be solar powered type and appropriate permits and private property approvals will be obtained prior to installation. Variable messages will be reviewed with both the Province and HRM prior to installation and upon any updates as a result of construction phasing. **Refer to Appendix 4.1.2 Variable MB Locations**

For additional works such as service connections or larger deliveries, additional plans will be prepared and submitted to HRM at least ten (10) business days in advance of a requested closure.



4.2. Haul Routes

The Truck Haul Route Plan (HRP) has been prepared and can be found in **Appendix A4.2.1- Haul Routes**

This HRP includes the proposed route which construction and delivery trucks will use throughout construction and adheres to the HRM Traffic Control Manual Supplement. As shown in the HRP, haul routes will extend to their origins and destinations by streets approved in the HRM Truck Route Bylaw (T-400)

The Robie St and Bell Rd routes chosen are intended to minimize traffic congestion and ensure that truck routes are used. The Summer St to Spring Garden Rd route is to be used only as a secondary route.

4.3. Parking

There is intended to be no impact to on street/ ROW public parking in the Right of Way Impacts Phase 1.

As part of the development, the existing Robie St. parkade is scheduled for demolition later in 2024. To offset some of this loss of parking, limited onsite parking will be provided for the emergency department to ensure public have parking spaces available in close proximity to the entrance of the emergency department.

4.4. Pedestrian Management

Refer to Appendix A4.1.1 - Phase 1 Traffic Control & Pedestrian Wayfinding

During the various phases of work there are expected to be impacts to the pedestrian management for the site. Plans for right of way impacts during hoarding installation and during the static phase conditions of the site are provided in the above referenced appendix.

Phase 1 Right of Way Impacts generally include sidewalk closures along Bell Road and periodic closures on Robie Street for hoarding installations.

Pedestrian Management plans will include signage to notify and direct pedestrians as required in coordination with the impacts from construction.

A new signalized pedestrian crosswalk crossing at Bell Road is proposed at the approximate location of the existing ambulance entrance to facilitate pedestrian access to the new emergency department access road.

4.5. Public Transit Impacts

During Phase 1 of the Right of Way Impacts the closure of Halifax Transit stop #6291 on the south side of Bell Road is required. This stop serves routes #9A, #9B, #123, and #127. Each of these routes is also served at stop #8363 on the east side of Summer Street. Transit stop #8368 is to remain and is recommended to be used for the duration of the #6291 closure.

Once the construction is complete for the north emergency department access driveway, reinstatement of Transit stop #6291 is proposed adjacent to the new pedestrian crossing.

Additionally, on Robie Street, the existing bus stop across from Pepperrell street is proposed to be relocated 3 m south as the existing location conflicts with construction gate locations.



4.6. Accessibility and Visually Impaired

This construction area is within HRM's core area with existing sidewalks along both sides of the streets and pedestrian ramps at marked crosswalks. To identify termination points of sidewalks, sawhorse barricades will be installed with reflective tape and a bright orange colour for the materials. Reflective tape will be placed on the ends of hoarding, concrete F-Type barriers and scaffolding indicating the construction site and any disruptions.

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

5. CONSTRUCTION SITE PROTECTION AND HOARDING

5.1. Site Protection and Hoarding Materials

Hoarding throughout all construction phases will surround the development. The perimeter hoarding will be a combination of standard chain link fencing, chain link fencing installed to Concrete F-Type barriers and modular fencing where temporary short-term hoardings are planned. The hoarding types are indicated as such on **Appendix A2.2.1-ROW Impact & Encroachments.** The hoarding structures will be sufficiently strong such that they cannot be moved, removed, or overturned. PCL Constructors Canada Inc. shall regularly inspect the rigid hoarding to ensure their continued structural integrity. Any deficiencies in the system shall be addressed immediately to prevent pedestrians from entering the project site.

5.1.1. Concrete F-Type Barriers

Where planned, Concrete F-Type barriers will be installed as per **Appendix A2.2.1 - ROW Impact & Encroachments**. PCL Constructors Canada Inc. shall regularly inspect the condition and layout of these barriers.

5.1.2. Fencing & Translucent Mesh

Standalone chain link fencing and jersey barrier mounted chain-link fencing will be used as per **Appendix A2.2.1 - ROW Impact & Encroachments.**

Translucent scrim will be affixed to the perimeter fencing and will be installed to provide a screening system to the hoardings.

5.1.3. Hoarding Aesthetics

Refer to Appendix A5.1.3 Construction Hoarding Aesthetics

PCL Constructors Canada Inc. and Nova Scotia Health will both beautify the site hoarding system with either rigidly attached banners or graphics printed on the fencing scrim showing project renderings and sales and marketing information. These banners will be of high-quality and durable material. PCL Constructors Canada Inc. is looking to apply for a 50% reduction in encroachments fees for site beautification, as suggested in the current CMP administrative order.





Pedestrian Management Plan Renderings, wayfinding signage and graphics applied to the hoarding scrim will improve project site aesthetics and provide the public with information related to the project and nearby amenities. PCL shall regularly inspect the project site, its signage, and adjacent areas and keep these well maintained.

5.2. Signage

To help mitigate public concern, The PCL Constructors Canada Inc. & Nova Scotia Health will have signage erected on the property. The signage will include the following information:

- · Project Description
- Project Timelines
- Developer Contact Information
- Project Manager Contact Information

The sign will be placed on site after a permit has been issued or a minimum of 10 days before construction begins. This will allow the public has adequate time to adjust their travel patterns and usage of the streets.

Project Information Board and Safety Signage locations will be shown on the Site Plans. Final locations to be determined.

PCL Project and Safety Signage will be provided throughout the site and as required in the municipal right of way **Refer to Appendix A5.2.1 PCL Project Site & Safety Signage**

6. LIFTING, HOISTING AND CRANE OPERATIONS

6.1. Navigation Canada & Transport Canada Regulatory Approvals

The project will require multiple tower cranes and mobile cranes at times. Final locations and heights are to be confirmed. The locations and heights of the cranes will be reviewed and confirmed if they are in flight paths and if Transport Canada approval is required.

6.2. Operations above the Public Realm

Subject to the final location of the tower cranes it is not currently expected that during crane lifting operations loads would be suspended over public realm. The project will notify HRM and provide plans showing any crane sway over adjacent public streets pathways.

7. ON-SITE CONDITIONS

7.1. Site Safety and Security

PCL Health and Safety Plan is available for review on site.

PCL has long acknowledged the importance of maintaining a safe and healthy work environment for all personnel and the stewardship required in maintaining an effective and successful program.





This Project HSE Plan applies to all on-site personnel (unless otherwise specified) and describes the safety and environmental standards that govern the work performed on this project.

Full compliance with this Project HSE Plan, applicable safety and environmental laws, and regulations are the minimum requirement for working on this project. Where there is conflict between this Project HSE Plan and any regulatory requirement, the more stringent will apply and shall be enforced.

This Project HSE Plan is a document that integrates local HSE regulations, owner/client HSE requirements, and PCL HSE standards into a single package that can be easily referenced by PCL project management/supervision, subcontractor supervision and workers.

This Project HSE Plan can be amended as project conditions warrant. Substantial changes will be documented on the Project HSE Plan Revision Log.

The purpose of the Project HSE Plan is to:

Assist all workers in the planning, organizing, control, monitoring and implementation of corrective measures which are necessary to mitigate risk and prevent exposures which could cause injury, illness, property/equipment damage or negative environmental consequence.

Enhance and maintain the health, safety and environmental awareness of all workers; and

Minimize hazards to public health and welfare.

Compliance and Enforcement of HSE Rules

Compliance with company and legislated HSE standards is necessary to maintain a safe and healthy work environment. Violations will be the cause for corrective action, which will result in disciplinary action up to and including termination of employment or service contract. Compliance with this Project HSE Plan is mandatory. To this end, PCL has developed a system of discipline to deal with infractions to the policies outlined within this plan.

Compliance with company and legislated HSE standards is necessary to maintain a safe and healthy work environment. Violations will be the cause for corrective action, which will result in disciplinary action up to and including termination of employment or service contract. Compliance with this Project HSE Plan is mandatory. To this end, PCL has developed a system of discipline to deal with infractions to the policies outlined within this plan.

The purpose of PPE is to provide an effective barrier between a worker and potentially dangerous objects, substances and processes. Each subcontractor is responsible for equipping their workers/employees with any required PPE.

At a minimum, all workers on this project must wear:

- Head protection
- Eye protection
- Hand protection
- Foot protection
- Suitable clothing including long pants and a shirt with minimum four-inch sleeves.
- Task-Specific PPE



7.2. Hazard Assessment

7.2.1. Construction Hazard Assessment

The Construction Hazard Assessment (CHA) is completed at the outset of the project to identify and control major project risks. Information is used to develop the Project HSE Plan. The CHA is essential to identify hazards, risks and controls prior to the start of a project. After completion, the CHA will be provided to all subcontractors and contained within this Project HSE Plan. During the life of the project, the CHA will be updated as necessary.

7.2.2. Hazard Identification and Control

Hazard identification and control are key components in maintaining a safe and healthy workplace. Accordingly, potential hazards on PCL projects must be assessed using the procedures set out in this section.

Hazard Reporting Responsibilities

PCL project management/supervision is responsible to:

- Verify that the Construction Hazard Assessment (CHA) has been completed prior to the start of the project to identify and control major project risks.
- Participate in the hazards assessment process through the Pre-Job Safety Instruction (PSI) program.
- Review subcontractor hazard assessments (JHAs/SWPs/PSIs) for accuracy and provide feedback as required; and
- Verify that corrective actions based on hazard assessments are implemented in their areas of responsibility.











LIFESAVING ABSOLUTES



















7.3. Dangerous Activities

7.3.1. Blasting

PCL Constructors Canada Inc. with its subcontractor will develop and implement an Engineered Blasting plan in conjunction with excavation works and HRM Bylaw-B-600. As this project is on Provincial lands HRM and the Province have agreed that a formal blasting application and permit will not be required for the project.

However, per the PSOS Sched 15 all work of this scope is to adhere to the technical aspects of the HRM Bylaw B-600:

- Engineered vibration/blasting Plan and Blast Engineer consulting services.
- Pre-Blast Survey
- Dust Control
- All monitoring equipment and services required per excavation and blasting plan for the duration of this scope of work package.
- Insurance requirements per HRM Bylaws
- Coordination with third party noise and vibration consultant (hired by PCL) and implementation of mitigation measures as required during course of work.
- Coordination with HRM in association with potential periodic sidewalk closures during blasting operations as may be required in accordance with Nova Scotia occupational health and safety regulations.

7.3.2. Rodent Control Plan

Rodent movement increases during construction activities: PCL Construction Canada Inc. has engaged Rentokil Terminix Pest Control, to help mitigate this. Rentokil has reviewed the rodent control plan with the goal of preventing rodents off-site to find safe refuge in adjacent areas.

Rodent Control Management

The RCP will consist of baiting and monitoring program. 90 Outdoor Bait Stations (more if required) would be set around the perimeter of the work site as required. The would be serviced every 2 weeks, and as the development moved forward.

Bait stations will be secured in their locations using wooden stakes (for open sodded and dirt locations), weighted patio stones (behind walls and paved areas), and zip-ties (fixed to fences). Bait within the project site will be fixed to rigid fences using zip-ties and will be placed on the property. Bait stations will be handled using "Contrac Blox" in accordance with the Environment Canada Pest Control Products Act. Information and specifications for bait stations and bait are provided in **Appendix 6.1 Rodent Control Plan**

Rodent Control Safety Considerations

Public safety will be of critical importance for rodent control activities. Physical (snap traps) will be prohibited unless approved by HRM.



7.4. Material Handling, Loading/Unloading and Vehicle Staging

For materials delivered to site, loaded, and unloaded, or handled and stored on site, the contractor will have a storage/laydown area that will be located with-in the encroachment. The Site Plan shows the staging area for deliveries. Delivery times will avoid peak traffic hours. This will help mitigate congestion in the area. Queuing of vehicles on the street is not acceptable.

Flaggers will be utilized at all active gates for public safety.

Delivery vehicles will use designated entry and exit gates. Timing of deliveries will be coordinated in such a way, that it would have the least impact to regular traffic. The main encroachment on Robie will be used for delivery trucks, offloading, and concrete operations, other temporary street encroachments may be required as well on Bell Road and Summer Street. On-site materials will be protected as required from environmental conditions such as snow, rain, and wind to prevent materials from causing harm to on-site workers or the public. All materials will be adequately secured to prevent wind from picking it up or will otherwise be stored so that it is kept away from the elements. Efforts will be made to avoid dust and other materials from becoming airborne during high wind events.

7.5. Environmental Controls

7.5.1. Streets and Right of Way Cleaning

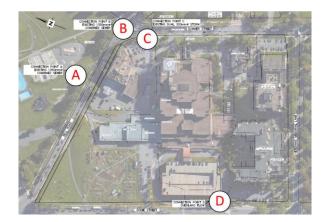
A sweeper truck will be sweeping adjacent streets periodically throughout the project life to mitigate dust and debris, when applicable.

7.6. Storm Water Management Plan

The stormwater management design is based on the minimum requirements as dictated by current local and municipal codes, including but not limited to the Halifax Regional Municipality's Municipal Design Guidelines (Red Book) and By-Law G-200 Respecting Grade Alteration and Stormwater Management Associated with Land Development, Halifax Water's Design Specifications and Supplementary Standard Specifications for Water, Wastewater & Stormwater Systems, the Province of Nova Scotia's former Department of Transportation and Infrastructure Renewal (TIR) (now DPW) and Document DC350 Design Requirements Manual (DC350). The Stormwater for the site is directed to three road systems adjacent to the property at four outlet locations:

- North Crossing Bell Road to the Halifax Commons (Outlet A)
- Northeast Crossing Bell Road near the intersection of Summer Street (Outlet B)
- East Discharging to Summer Street (Outlet C)
- Southwest Discharging to Robie Street and flowing south (Outlet D)





Further details will be included in the submission to Halifax water for the developments Water Permit Application.

7.6.1. Noise and Vibration Plan (NV)

For the Project a Construction Noise and Vibration Report and Plan will be produced to identify the primary vibration and noise impacts onsite- the plan will specifically include measures around the Halifax infirmary and sensitive equipment areas.

Prior to major construction works baseline noise and vibration measurements will be taken to gather ambient levels.

As part of the Construction N&V plan and based on baseline monitoring reports, a monitoring and reporting plan will be implemented during the course of construction.

A summary of Monitoring locations will include but not limited to:

- Onsite building foundations
- Onsite sensitive equipment area
- Onsite critical infrastructure
- Offsite critical infrastructure
 - Hyprescon Watermains
 - o Buried Hydro Utilities

7.6.2. Dust and Emissions Control

Throughout the project life, when necessary, street cleaning will take place around the site, minimizing street debris/dust. This will include Robie St, Bell Rd and Summer St and all other adjacent streets as required. Vehicle staging shall be queued such that vehicles are not permitted to idle outside of designated loading and unloading zones or the active work area for more than 25 minutes.





All materials will be adequately secured to prevent wind from picking it up or will otherwise be stored so that it is kept away from the elements. Efforts will be made to avoid dust and other materials from becoming airborne during high wind events.

A sweeper truck will be sweeping adjacent streets periodically throughout the project life to mitigate dust and debris, when applicable.

7.6.3. Erosion Control

Erosion and sediment control measures will be implemented throughout the site during construction to protect the adjacent lands and the piped stormwater and combined sewer systems. This is a LEED mandatory requirement and has been accommodated in the design. These measures are needed to keep the silts and solids from the exposed earth areas during construction from leaving the site. The control measures that form part of the design include siltation "Hay Wattles", catch basin barriers, and directional swales.

Control measures will be installed at all construction equipment entrances so that the mud from the truck tires will be shaken off prior to leaving the site.

7.6.4. Dewatering

During construction, dewatering will be implemented, and a dewatering permit applied and paid for as per Halifax Water guidelines and requirements.

Dewatering systems will be localized sump, storage, sediment/filtration and treatment system as required to meet discharge limits to the municipal systems based on Halifax Water/HRM guidelines.

8. COMMUNITY ENGAGEMENT

PCL Constructors Canada Inc. is currently developing a comprehensive Community Engagement Plan with Nova Scotia Health and other sponsors of the project.

This plan will be built using PCL Constructors Canada Inc.'s extensive experience on current and historical large scale Health Care projects. It will incorporate new and existing components of Nova Scotia Health's and the Halifax Infirmary's community engagement and communication plans and media.

The plan will consider and respect the requirements, understanding the scale of the project and the need to inform the surrounding community and businesses. It will provide the public regular updates regarding the status of the project and upcoming activities that may impact the public.

9. PRE-CONSTRUCTION MEETING

PCL Constructors Canada Inc. and the projects sponsors are committed to a positive engagement during the construction process with HRM and the public. As a result, HRM will be invited to any community consultation meetings and be given access to all means of project community communications available.





In addition, PCL Constructors Canada Inc. will hold a pre-construction meeting with HRM prior to the issuance of any permits, as required.

10. SUMMARY

The Construction Management Plan is a combination of diagrams, drawings, documents, and specifications that define the steps that will be taken to demonstrate how the impacts to the community will be minimized and how the impacts associated with any construction project will be managed. This plan will be used as a minimum standard throughout the project and any further safety protection necessary to mitigate negative effects will be used through the construction period.





11. LIST OF APPENDICES

A2.1.1	ROW IMPACT SUMMARY SCHEDULE
A2.2.1	ROW IMPACTS & ENCROACHMENTS
A2.2.2	ROW UTILITIES WORK
A4.1.1	PHASE 1 TRAFFIC CONTROL PLANS & PESDESTRIAN WAYFINDING
A4.1.2	VARIABLE MB LOCATIONS
A4.2.1	QEII-HAUL ROUTES
A5.1.3	CONSTRUCTION HOARDING AESTHETICS
	PCL PROJECT SITE & SAFETY SIGNAGE
A6.1.1	RODENT CONTROL PLAN

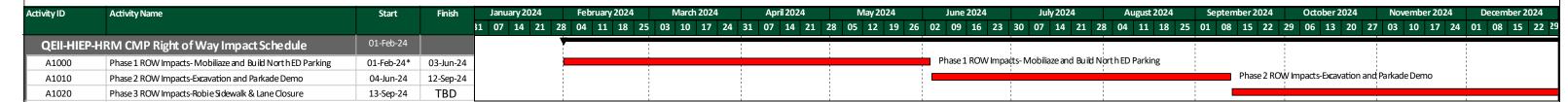




11.1. Appendix A2.1.1-ROW Impact Summary Schedule

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PCL Constructors Canada Inc. QEII Halifax Infirmary Expansion Project

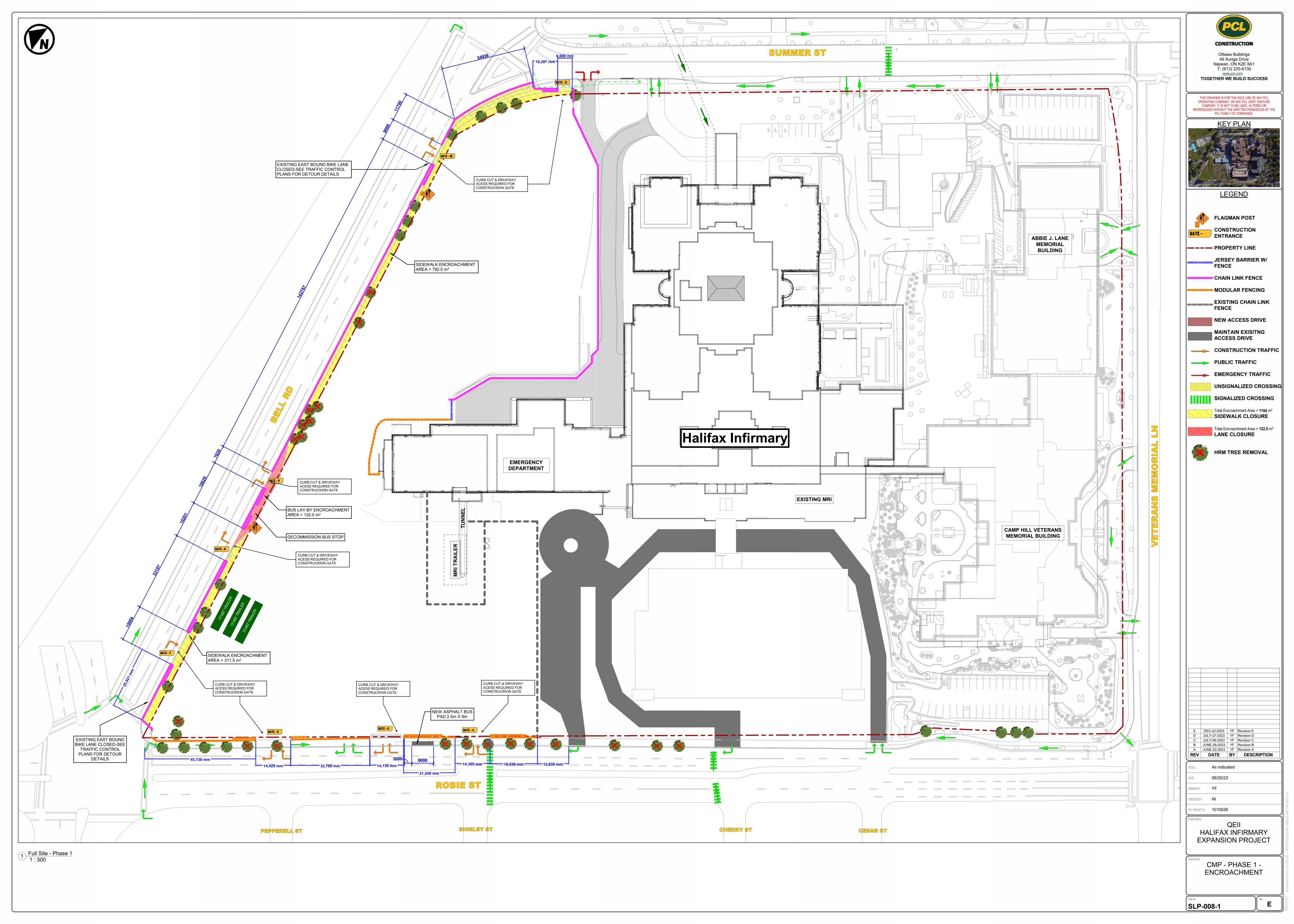


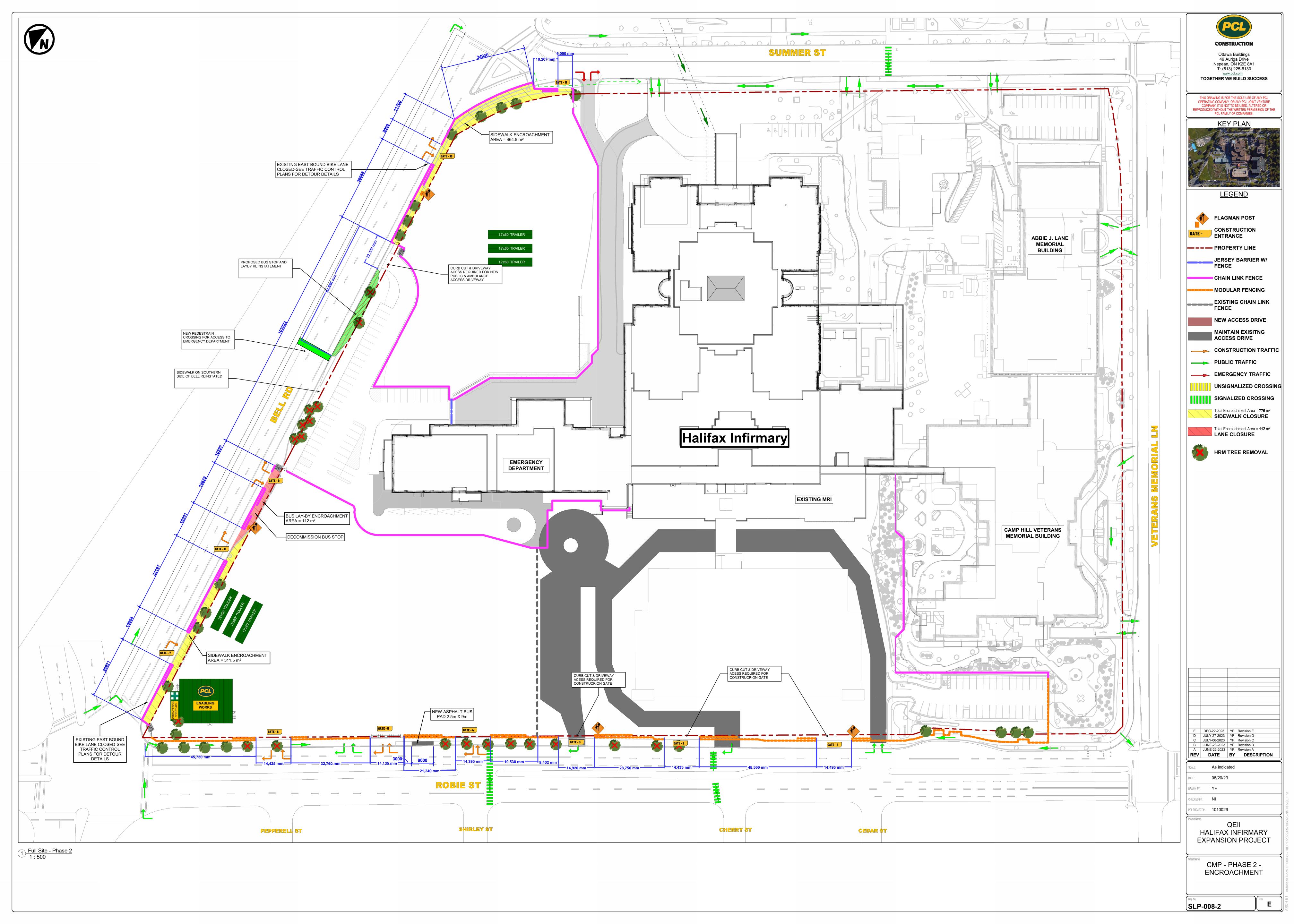






11.2. Appendix A2.2.1- ROW Impacts & Encroachments

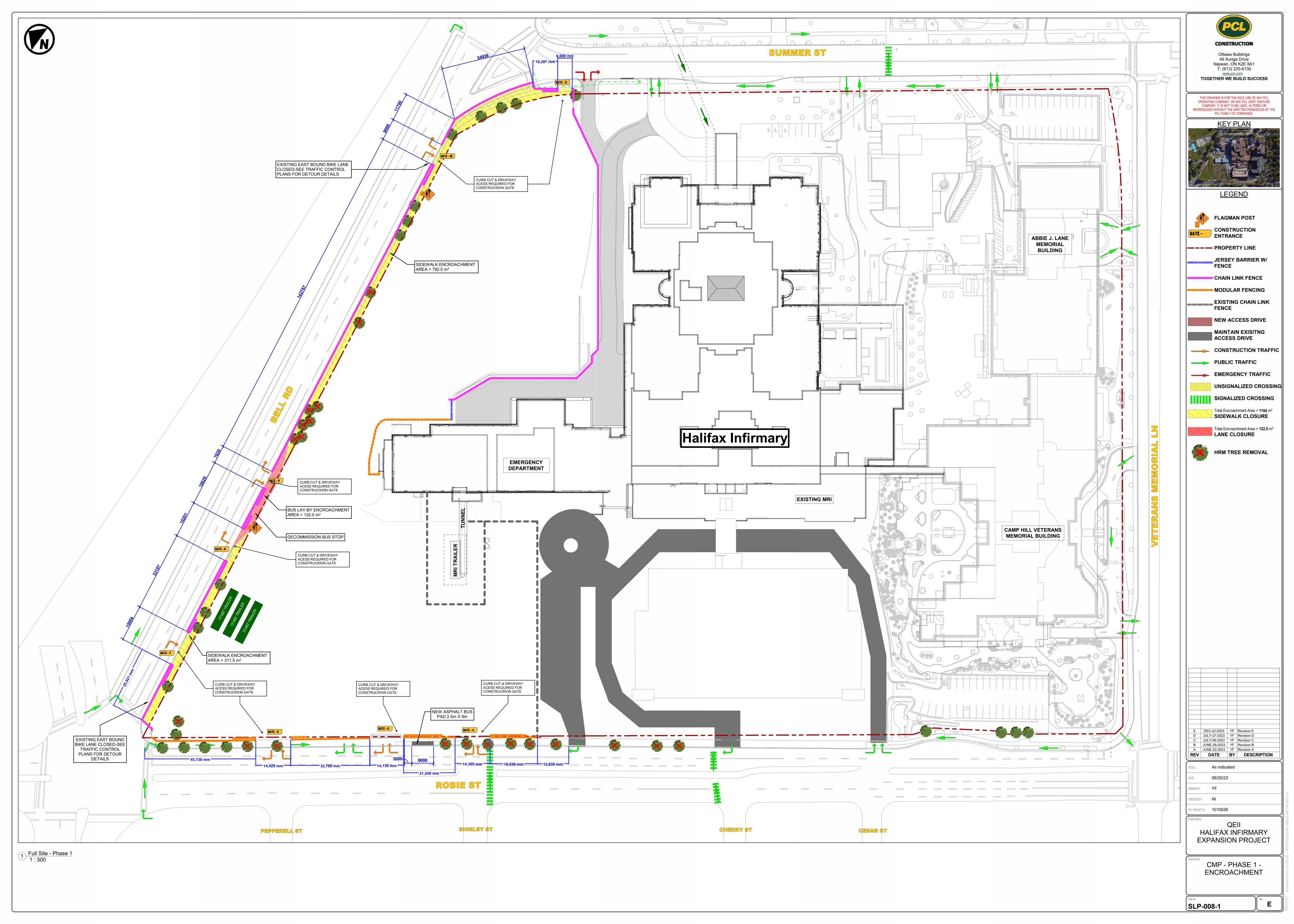


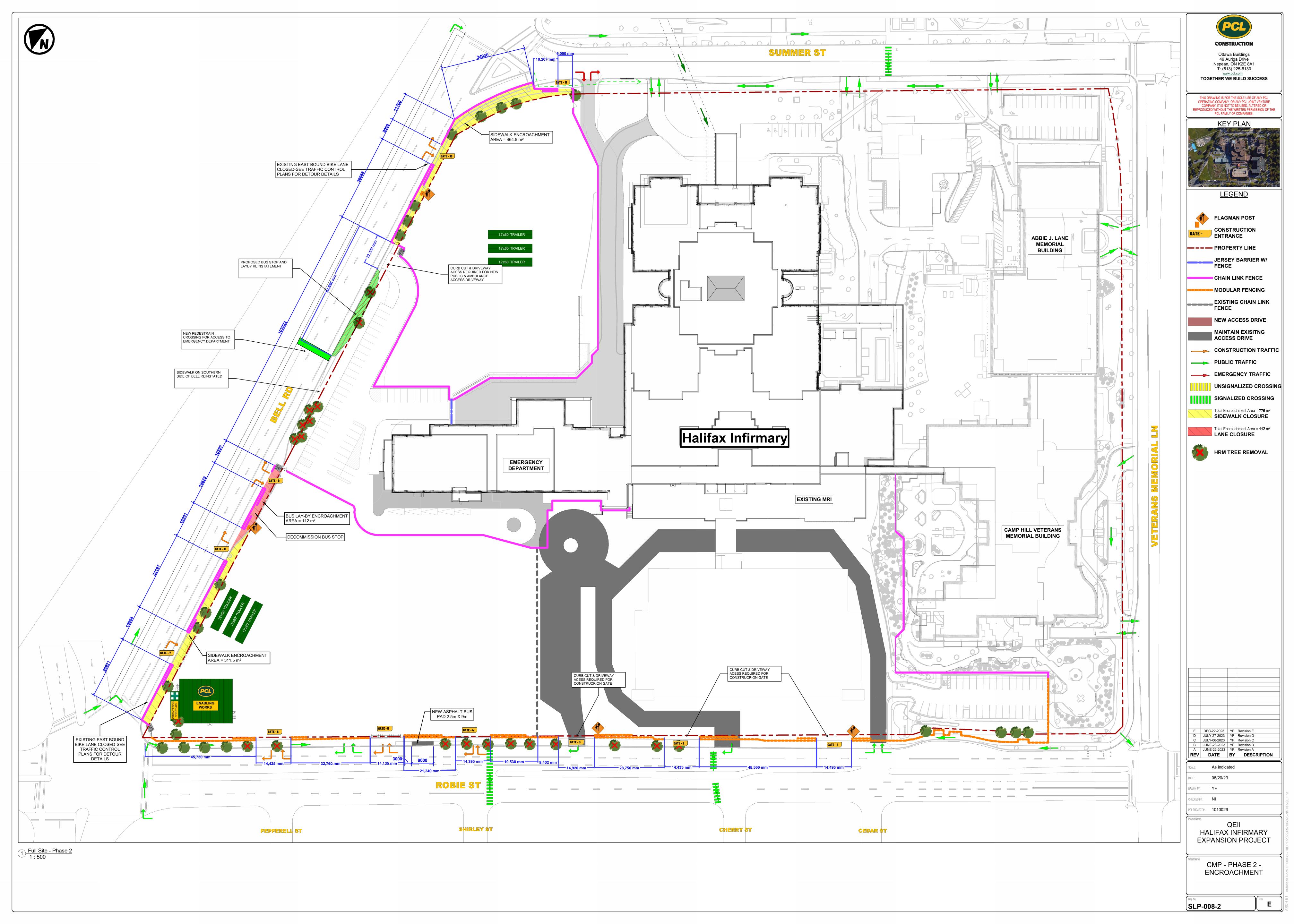






11.3. Appendix A2.2.2- ROW Utilities Work

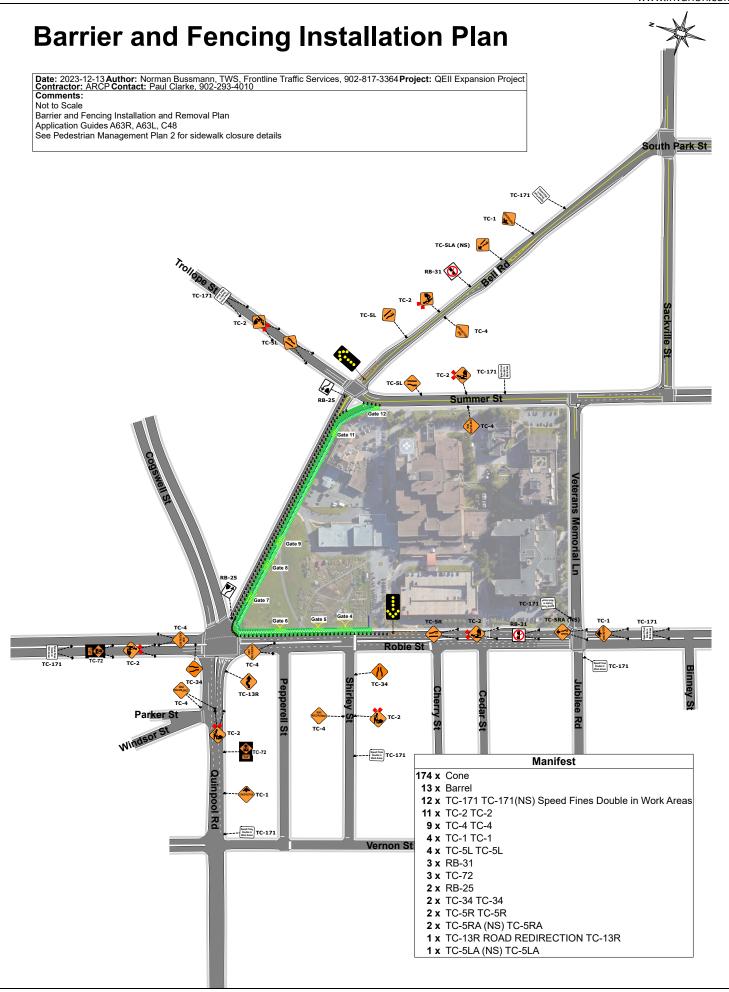


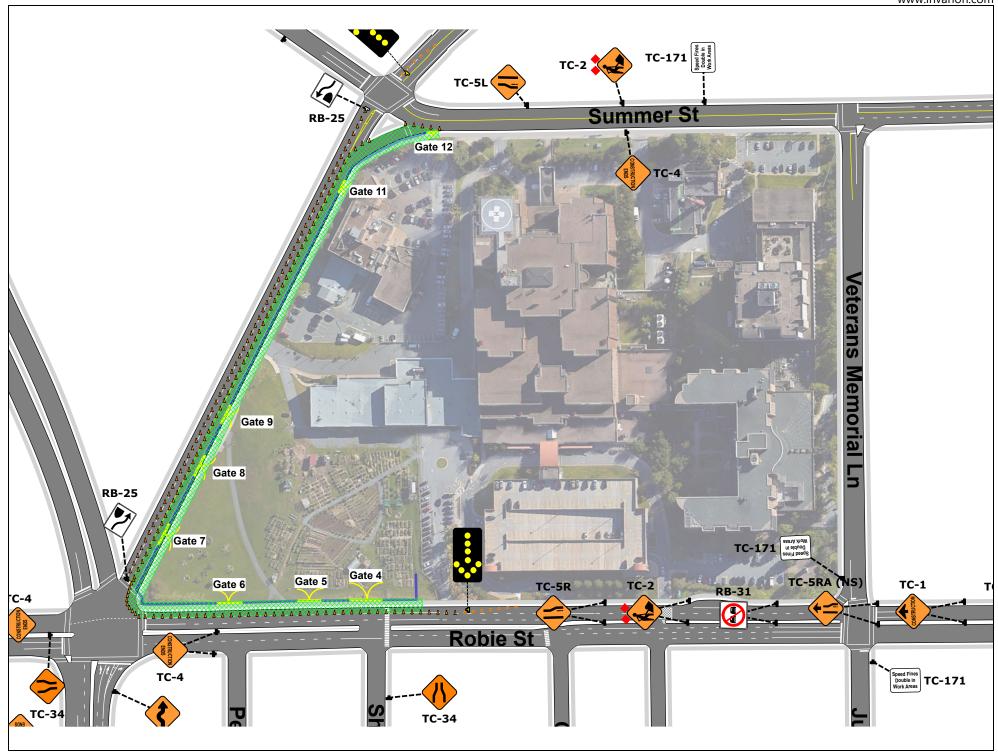


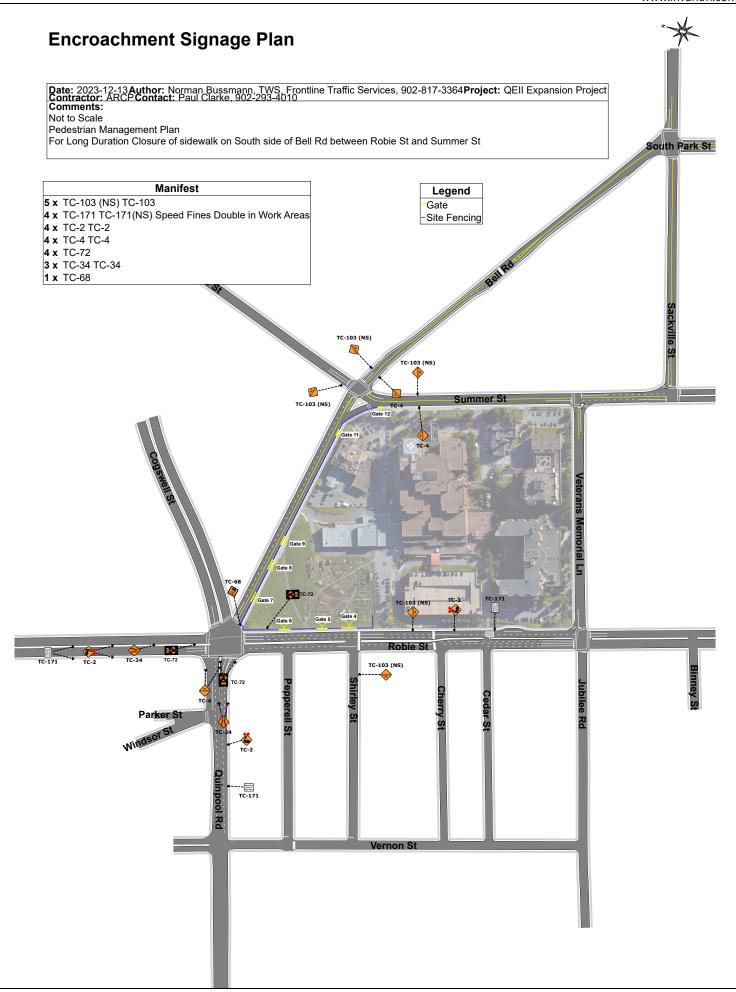


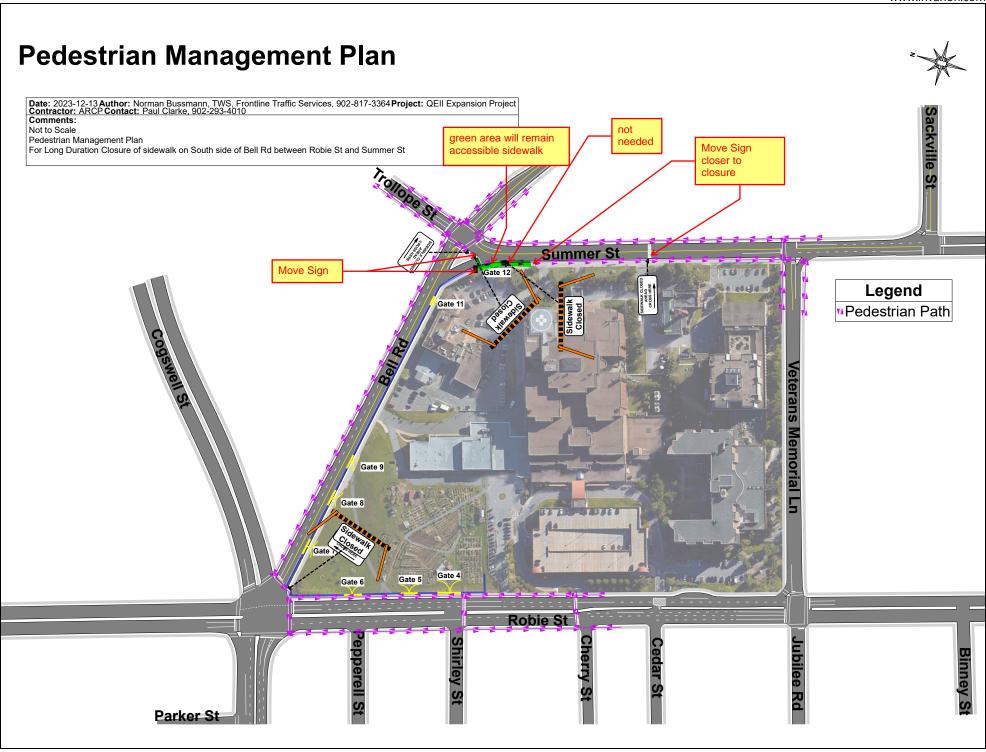


11.4. Appendix A4.1.1- Phase 1 Traffic Control & Pedestrian Wayfinding





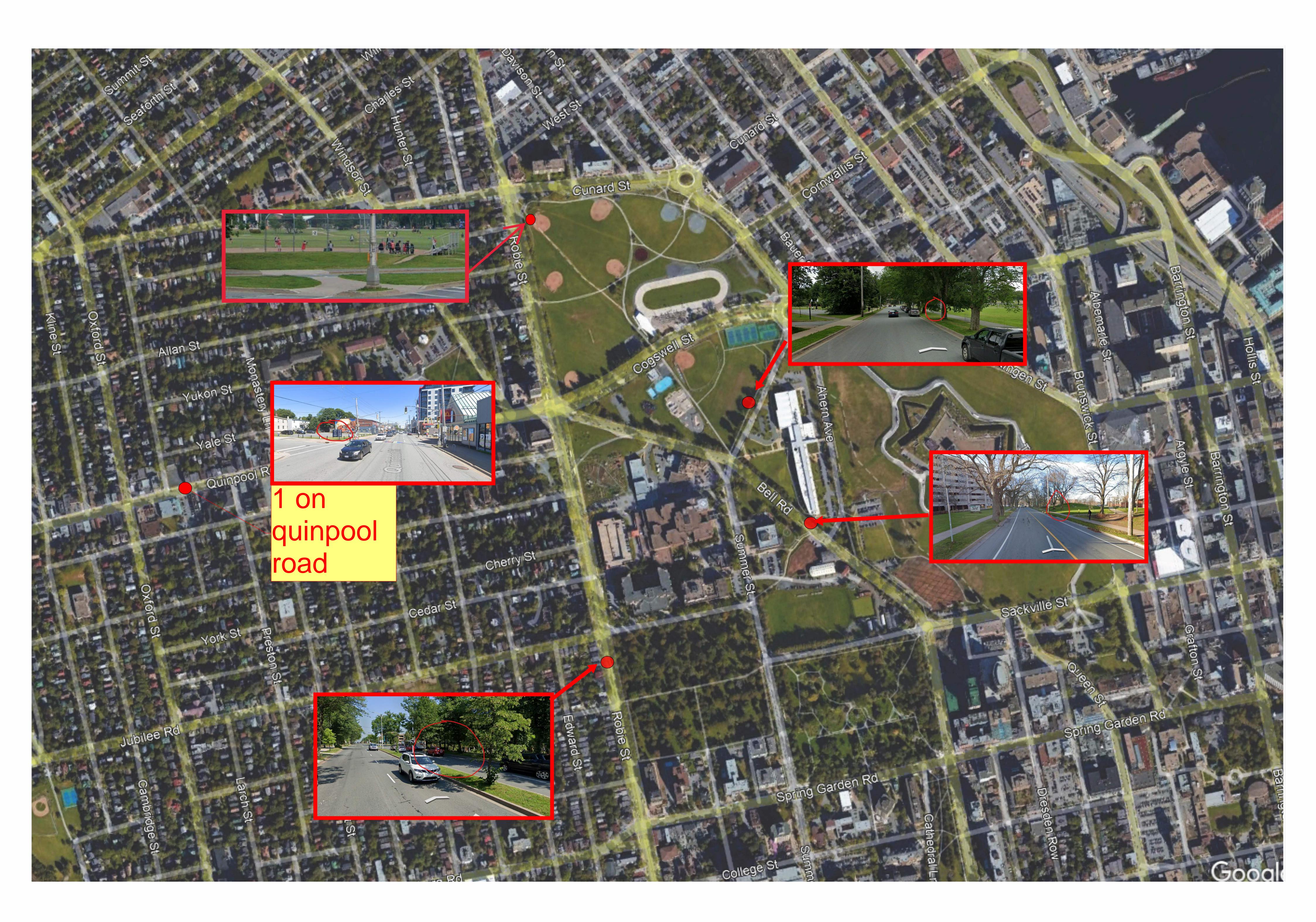








11.5. Appendix A4.1.2 - Variable Message Board Locations

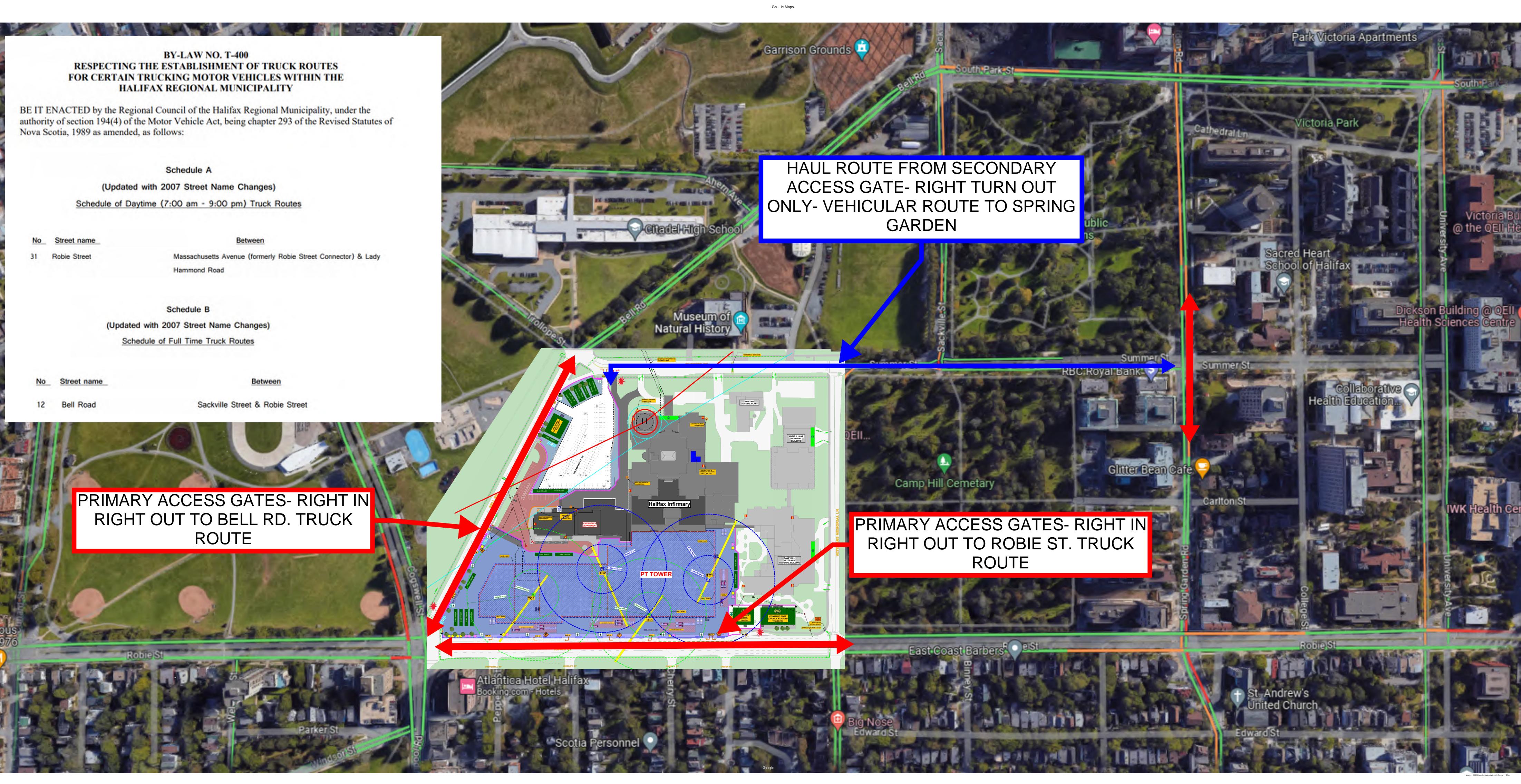






11.6. Appendix A4.2.1- QEII-Haul Routes

QEII-HAUL ROUTES



17 EXEMPTIONS AND EXCEPTIONS

Exceptions to these restrictions will be considered on a case by case basis only when specifically requested by the permit applicant and/or contractor. The two main criteria for evaluating the exception request will be (1) what the actual impact of the work area will be on the public and (2) whether the scope of work and excavation size prevents the work area from being re-opened to traffic in accordance to the applicable restricted times noted above. Any exception to the hours of work restrictions will be reflected on the permit.

Permission to work through restricted times may be granted by the Engineer or the HRM Inspector, only in the event of unforeseen circumstances which make re-opening the work area to traffic impractical. All requests to continue work through restricted hours must be requested in writing at least one hour before the restriction is to take effect. Permission is only considered granted upon receipt of a response in writing from the Engineer or the HRM Inspector indicating the request is approved. A Public Service Announcement will be issued by HRM advising motorists of the

17.1 VERY SHORT DURATION WORK

Very Short Duration Work – defined in the MANUAL as work at a location that does not take more than 30 minutes excluding the time required to set-up and take-down traffic control equipment – will generally be exempt from "Evening and Weekend Only" restrictions provided Peak Hour Restrictions are respected.

Note:

- for concrete pours and other specific work the site working hours will start at 6:00 am and trucks will be using the above haul routes at those times
- Work will be coordinated with the inspector as described in section 17 Exemptions and Exceptions

https://www.go le.com/maps/@ .645009,-63.5857381,1266a,35y,69.94h/data=!3m1!1e3!5m1!1e

continuing works.

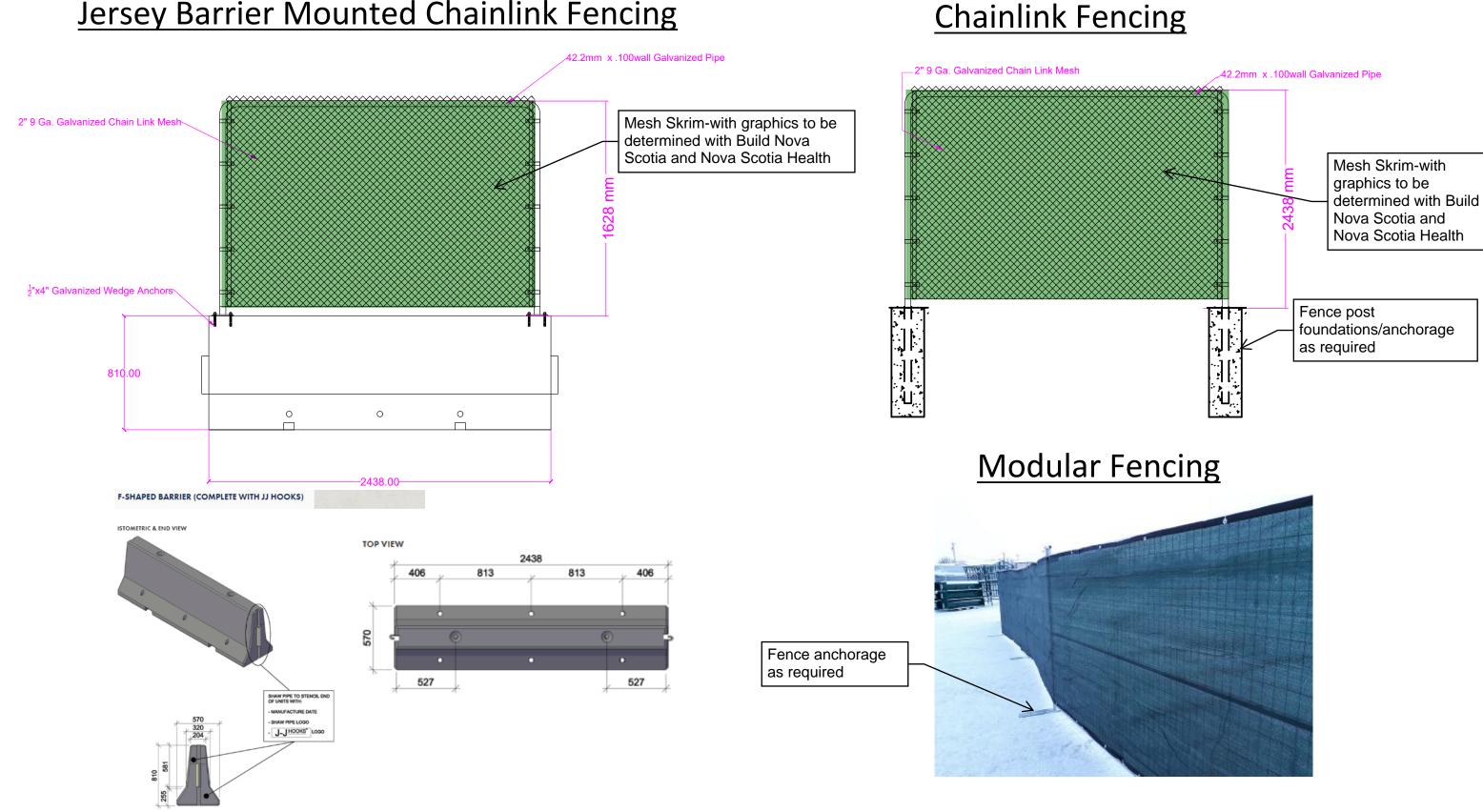




11.7. Appendix A5.1.3- Construction Hoarding Aesthetics

Opaque construction hoarding material shall covering and be adequately secured to the rigid fencing that outlines the encroachment area. This covering shall be continuous such that it prevents passersby or tourist from seeing through the fencing and gates to the active construction site.

Jersey Barrier Mounted Chainlink Fencing







11.8. Appendix A5.2.1- PCL Project Site and Safety Signage





PEDESTRIAN

WALKWAY

@

FIELD

@

OFFICE









SIGN B





ALL DELIVERY

DRIVERS MUST

REPORT TO

SITE OFFICE

@



@















NOTES

SIGN TYPE F

4mm Coroplast Panel

IM2201-GYMAT54 Matte Vinyl

OLUV-MAT54 Matte Overlam

120" x 72"

Substrate

QTY: 1

SIGN TYPE A

24" x 24" QTY: 83 Total Substrate 4mm Coroplast Panel

IM2201-GYMAT54 Matte Vinyl OLUV-MAT54 Matte Overlam

SIGN TYPE B 12" x 12"

OTY: 2

OTY: 2

Substrate 4mm Coroplast Panel Print IM2201-GYMAT54 Matte Vinyl OLUV-MAT54 Matte Overlam SIGN TYPE C

48" x 96"

Substrate 4mm Coroplast Panel Print IM2201-GYMAT54 Matte Vinvl OLUV-MAT54 Matte Overlam SIGN TYPE D

240" x 72" QTY: 4 Substrate 4mm Coroplast Panel

IM2201-GYMAT54 Matte Vinyl OLUV-MAT54 Matte Overlam

SIGN TYPE E

24 x 36" QTY: 8 Substrate 4mm Coroplast Panel Print IM2201-GYMAT54 Matte Vinvl

OLUV-MAT54 Matte Overlam







GATE 4

EMERGENCY

EXIT



COMMAND

POST

0







PCL SITE

OFFICE

œ



SIGN A





EXTINGUISHER

3 BLASTS FOR EMERGENCY





MUSTER

POINT





TOGETHER WE BUILD SUCCESS

24-HOUR

PROJECT

#1000273

PHONE

EMERGENCY

613-248-5803



HEAD, EYE, FOOT & HAND PROTECTION AND REFLECTIVE VEST REQUIRED BEYOND THIS POINT



SITE **ACCESS**



SIGN F

SIGN C







SIGNE





TOGETHER WE BUILD SUCCESS



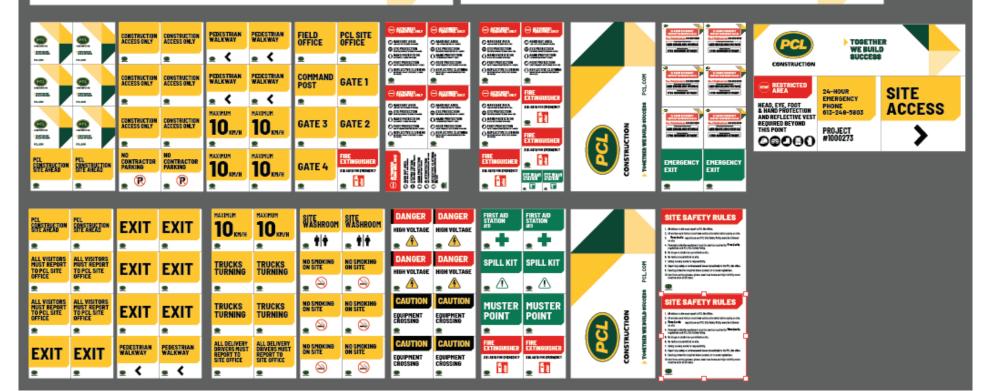
TOGETHER WE BUILD SUCCESS



TOGETHER WE BUILD SUCCESS



TOGETHER WE BUILD SUCCESS



Nested Print File



613 831 9622 sales@signfx.ca 106 Tansley Drive Ottawa, Ontario KOA 1L0





11.9. Appendix A 6.1 Rodent Control Plan

Products Act. Information and specifications for bait stations and bait are provided in **Appendix G.**

The Certified Rodent Control Professional will provide monthly monitoring of every bait station. During

each visit to an individual bait station, the technician will open the bait station, record the amount of

bait consumed, the amount of bait replenished, the site conditions (weather), and the condition of the

Construction Management Plan Page 13

bait and bait station. Visible rodent carcasses will be collected and removed from the project site and

neighboring areas on a monthly basis.

A rodent control package will always be kept on site and be housed in the project site office trailer. It

will include copies of certifications, letters of good standing, letters of conformance, technician names

and licenses, rodent control plans, and rodent control records. Certified Rodent Control technicians will

be required to sign in and out upon arrival to, and departure from, the project site.

Rodent Control Safety Considerations

Public safety will be of critical importance for rodent control activities. Physical (snap) traps will be

prohibited unless approved by HRM (the contractor must request proposed CMP changes to HRM a

minimum of 10 days prior to planned implementation for review). Trap size will be sufficiently small to

prevent children, dogs, or cats from entering and becoming poisoned and the bait/poison will be

sufficiently weak so as not to not kill children, dogs, or cats. In addition, bait stations will be tampering

proof and bait will be securely fixed inside so that it cannot be shaken out. Bait stations will be opaque

to protect the public from unsightly images.

Project Closure

Following completion of this project, Rentokil will promptly collect and appropriately dispose of all unused

bait, bait stations, and remaining carcasses and will provide a close out letter to HRM outlining the work

that was completed throughout construction and confirming that all necessary clean-up has been completed.



Sincerely,

Rob Colwell Account Executive Rentokil Canada Corporation



THE MOST ADVANCED LOW-PROFILE BAIT STATION







PRODUCT FEATURES:

- ▶ Single locking mechanism for quick servicing
- ▶ Removable tray for easy cleaning
- Locking bait rods won't fall out during cleaning
- Dog & child tamper-resistant
- Can hold:

4 - 1 oz. bait BLOX on 4 vertical rods

T-Rex[™] rat trap or Mini-Rex[™] mouse trap

▶ Compatible with Sidekick® Load-N-Lock™ system





... More Than Meets The Eye

Madison, Wisconsin 53704 USA | Ph: (608) 241-0202 | Fax: (608) 241-9631

www.belllabs.com

CONTRAC BLOX KILLS RATS & MICE

SOLID Kills Warfarin Resistant Norway Rats

Norway rats and house mice may consume a lethal dose in one feeding with first dead rodents appearing four or five days after treatment begins.

REGISTRATION NO.: 22239 PEST CONTROL PRODUCTS ACT

COMMERCIAL

WARNING



POISON

GUARANTEE

Bromadiolone......0.005%

Contains Denatonium Benzoate

Warning, contains the allergens wheat, soya lecithin. Contains calcium propionate at 0.3770.375% as a preservative.

READ THE LABEL BEFORE USING

(see back panel for additional precautionary statements)

KEEP OUT OF REACH OF CHILDREN

Only to be used by certified pest control operators, farmers and persons authorized in government-approved pest control programs.

NET CONTENTS: 1.8 – 8.2 kg

Manufactured by: Bell Laboratories, Inc., 3699 Kinsman Blvd., Madison, WI 53704 USA Tel: 608-241-0202

PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN, PETS AND LIVESTOCK. May be harmful or fatal if swallowed or absorbed through the skin. Chemical-resistant gloves must be worn when handling product and when disposing of dead rodents, unconsumed bait and empty containers. Avoid contact with eyes, skin or clothing. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Wash skin thoroughly with soap and water after handling. Wash contaminated clothing, separately

from other laundry, with soap and water before reuse. KEEP AWAY FROM FEED AND FOODSTUFFS.

All handlers must wear long-sleeved shirt and long pants, shoes plus socks, and chemical resistant gloves when handling this product.

FIRST AID:

If in eyes, hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If swallowed, call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

For all cases of human ingestion, immediately notify a physician or poison control centre. If a pet or livestock poisoning is suspected, immediately contact a veterinarian. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Vitamin K_1 in the form of intramuscular or subcutaneous injections, or by oral ingestion are suggested remedial treatments for anticoagulant poisoning. The severity of the case measured by establishing prolonged prothrombin times (P.T.) will determine appropriate therapy. Monitoring P.T. will indicate the necessity of repeated treatments.

ENVIRONMENTAL HAZARDS: This product is toxic to fish and wildlife. Keep out of lakes, streams or ponds.

DIRECTIONS FOR USE: Use bait to control the Norway rat (*Rattus norvegicus*), Roof rat (*Rattus rattus*), and House mouse (*Mus musculus*) indoors and outdoors within 15 metres of buildings (dwellings, farm buildings, food service establishments (non-food areas), granary bins (empty), processing plants (feed, food, in non-food areas) and storage areas (non-food)). Rodenticide bait can be placed in tamper-resistant bait stations along the fence line of properties, outside of the 15-metre limit but within 100 metres of buildings, if the station is securely fastened (e.g. nailed down) to the fence or the ground.

Food Processing, Food Manufacturing, Food Storage and Food Service Areas:

For areas not directly related to food processing: Use only in non-food or non-feed area where feed, food, packaging and handling equipment are never opened or exposed. For areas where feed or food is processed, served, or stored: In meat and food processing plants (processing areas), use only when plant is not in operation. Remove or cover all food, packaging material and utensils before placing bait in baiting stations. Remove all baits and dead rodents before reuse of the plant (processing areas include storage and

service). Users should remove clothing immediately if pesticide gets inside. Then wash skin thoroughly and put on clean clothing

USE LIMITATIONS: Bait MUST be placed either in tamper-resistant bait stations or in locations not accessible to children, pets, livestock or non-target wildlife. DO NOT place bait in areas where there is a possibility of contaminating food or surfaces that come in direct contact with food.

Bait stations (tier 3) used for the placement of rodenticide bait indoors, in locations not accessible to pets or livestock must have the following characteristics: (1) be constructed of high-strength material (e.g., metal or injection molded plastic) and resistant to destruction by children: (2) have an entrance designed so that children cannot reach the bait; (3) have internal structure which prevents bait from being shaken loose; (4) have an access panel that fastens securely and locks (e.g., metal screw or padlock); and (5) bear the product name, active ingredient, guarantee, registration number, "WARNING POISON", and the skull and crossbones symbol.

Bait stations (tier 2) used for the placement of rodenticide bait indoors, in locations accessible to pets or livestock must have the following characteristics, in addition to those outlined above for tier 3 bait stations: (1) resistant to destruction by non-target animals; and (2) have an entrance designed so that non-target animals cannot reach bait.

Bait applied outdoors and above-ground MUST be placed in bait stations.

Bait stations (**tier 1**) used outdoors, above-ground, in locations accessible to children, pets and non-target wildlife must have the following characteristics, in addition to those outlined above for tier 2 and 3 bait stations: (1) be resistant to destruction or weakening by elements of typical non-catastrophic weather (such as, snow, rain, extremes of temperature and humidity, direct sunshine, etc.).

SELECTION OF TREATMENT AREAS: Determine areas where rats and/or mice will most likely find and consume the bait. Generally, these areas are along walls, by gnawed openings, in or beside burrows, in corners and concealed places, between floors and walls, or in locations where rodents or their signs have been observed. Remove as much food as possible.

APPLICATION DIRECTIONS:

RATS: Place 3 to 16 pieces of CONTRAC BLOX at intervals of 4.5 to 9 metres per placement. Maintain an uninterrupted supply of fresh bait for 10 days or until signs of rat activity cease.

HOUSE MICE: Place one piece of CONTRAC BLOX at intervals of 2.5 to 3.5 metres per placement. Two pieces may be needed at points of high mouse activity. Maintain an uninterrupted supply of fresh bait for 15 days or until signs of mouse activity cease.

RATS AND MICE: Replace contaminated or spoiled bait immediately. To prevent reinfestation, eliminate food, water, and harborage as much as possible. If reinfestation

does occur, repeat treatment. Where a continuous source of infestation is present, establish permanent bait stations and replenish bait as needed.

DISPOSAL: Do not reuse empty container. Dispose of unused or spoiled bait in accordance with local requirements. Follow provincial instructions for any required cleaning of the container prior to its disposal. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For more information on the disposal of unused, unwanted product and cleanup of spills, contact the provincial regulatory agency or the Manufacturer.

Rodent Disposal: Dispose of dead rodents in garbage or by burying.

STORAGE: Store in cool, dry place away from other chemicals and food or feed. Store product not in use, in original container, in a secure location inaccessible to children and non-target animals.

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

