

Windsor & Willow  
Apartments  
2570 Windsor Street

Demolition, Excavation and  
Building Construction

Prepared by Geoff MacLean, P.Eng.

CONSTRUCTION MANAGEMENT PLAN

REVISION #	DATE	DESCRIPTION
0	FEB 2022	ISSUED FOR REVIEW



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G.K. MacLean, P. Eng.

In consultation with the developer, contractor, traffic control company and HRM.

## Section 1: Introduction

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### 1.1: Project Description and Objectives

The developer is planning to construct an apartment building located on the corner of Windsor and Willow Street in Halifax. In preparation for this development, they previously demolished the former church at civic 2570 Windsor Street. The developer owns the adjacent building located at civic 6233 (PID 00133140) and plans to demolish this prior to concrete operations, utilizing private lands to minimize street encroachments. The proposed development will include 84 residential units within an 8-storey building tower set on two levels of underground parking accessed from Willow Street. This CMP has been prepared to address demolition, excavation, services and building construction.

The building is planned to have two levels of underground parking, deep excavations (+20ft) are required, the building foundation is planned to be setback only 2ft (0.6m) on Willow and 7ft (2.2m) on Windsor Street. For public safety from excavation limits and construction activities we are proposing an encroachment that closes the sidewalk on Willow Street, this will temporarily relocate pedestrian traffic to the opposite side of the street. The Windsor Street sidewalk will remain open however prior to excavation, a row of concrete jersey barriers with plywood fencing will be installed along the back edge of this sidewalk to shield pedestrians from noise. On Willow Street, rigid construction fencing will be installed at the front edge of sidewalk/HRM tree lawn, effectively closing the sidewalk from public use.

This project encroachment will be phased; with phase 1 for site excavation and phase 2 for building construction. The difference being phase 1 will only include the Willow sidewalk in front of the project; while phase 2 will increase to include the neighbouring lot, closing the sidewalk fronting civic 6233 Willow Street. Both phases will relocate pedestrian traffic on Willow Street and maintain two-way vehicular traffic on both streets. Throughout all construction stages, all work will remain on private property.

Only during service work and tower crane assembly and disassembly do we anticipate short term temporary lane closures on Willow Street.

The project borders residential properties, along its western and southern property lines, and opposite Willow Street. Across Windsor are commercial buildings that house Quackenbush Thomson law, Archadeck of Nova Scotia and Case Design/Remodeling Halifax. All neighbouring properties will remain undisturbed throughout the project.

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. SDMM, together with the developer, contractor, and traffic control company, have prepared this Construction Management Plan (CMP) 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 team for the proposed development consists of:

Role	Name	Contact	Address	Phone
<b>Developer</b>	Whimsical Lake Developments limited	Fred Ghosn	36 Brookshire Court, Suite 15, Bedford, NS, B4A 4E9	(902) 877-0054 <b>24 Hour Emergency Contact</b>
<b>Site Contractor</b>	Atlantic Road Construction and Paving	Greg MacDonald	6 Belmont Avenue, P.O. Box 89 Eastern Passage, NS B3G 1M7	(902) 830-6411
<b>Traffic Control Company</b>	Frontline Traffic Services	Phil Pruneau	6 Belmont Avenue, P.O. Box 89 Eastern Passage, NS B3G 1M7	(902) 818-5548
<b>Rodent Control Company</b>	Rentokil Pest Control	Main Office	51 Duke Street, Bedford, NS B4A2Z2	(902) 835-2304

## Section 2: Project Schedule and Logistics

The following is a brief summary of anticipated major project milestones broken down by phase:

### 2.1: Schedule

Project Phase	Start Date		End Date	Time Period
<b>Rodent Control Program</b>	April 15, 2022	-	Sep 15, 2022	5 months
<b>Site Excavation</b>	May 1, 2022	-	Sep 1, 2022	4 Months
<b>Demolition (civic 6233)</b>	Sep 1, 2022	-	Sep 16, 2022	2 weeks
<b>Substructure</b>	Sep 16, 2022	-	Jul 14, 2023	10 Months
<b>Superstructure</b>	Jul 17, 2023	-	Jul 16, 2024	12 Months
<b>Service Abandonments</b>	Jun 1, 2023	-	Jul 1, 2023	2 weekends
<b>Service installs</b>	Jun 1, 2023	-	Jul 1, 2023	2 weekends
<b>HRM Right of Way Flat Works</b>	Jul 17, 2024	-	Jul 31, 2024	2 weeks
<b>Site Flat Works</b>	Aug 1, 2024	-	Aug 15, 2024	2 weeks

### 2.2: Key Dates

- Take-over encroachment May 1, 2022
  - Sidewalk closure (Willow Street)
- Finish encroachment July 16, 2024
- Duration of encroachment 26.5 months
- Temporary lane closures:
  - Willow Street Service abandonments (civic 6233) June 3, 4, 2023 (weekends only)
  - Willow Street Service abandonments (vacant land) June 10, 11, 2023 (weekends only)
  - Willow Street Sewer service install June 17, 18, 2023 (weekends only)
  - Willow Street Water service install June 24, 25, 2023 (weekends only)
  - Willow Street Fire hydrant service install June 24, 25, 2023 (weekends only)

The encroachment areas are shown in the appendix for reference.

### 2.3: Hours of Work

Work will generally take place during normal working hours as outlined in HRM's Noise By-Law and Traffic Control Manual Supplement; these are noted below.

- Monday to Friday: 7:00 a.m. – 9:30 p.m.
- Saturdays: 8:00 a.m. – 7:00 p.m.
- Sundays & Statutory Holidays: 9:00 a.m. – 7:00 p.m.
- Servicing Work: Noted Above

Although work is not expected to be required outside of the times listed above, if, for any reason, work is anticipated to be required outside of these hours, the contractor will apply to HRM for approval 5 business days (minimum) in advance of such work and obtain approval prior to proceeding. It is noted that HRM's Noise By-Law cannot be altered without HRM council approval; work must adhere to the Noise By-Law.

## Section 3 – Relevant Regulations & Guidelines

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### 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;
- l) HRM TCM Supplement;
- m) G-200 Grade Alteration and Stormwater management;
- n) Admin Order 2018-005-ADM regarding encroachments; and

- o) Admin Order 2020-010-OP regarding stormwater management standards for development activities.

## Section 4: Vehicle Management

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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.

### 4.1: Vehicular Traffic Control

A Traffic Control Plan (TCP) has been prepared by the traffic control company and is provided in the Appendix.

Throughout all phases of construction two-way vehicular traffic will be maintained on both streets. Only during service work and tower crane assembly and disassembly do we anticipate short term temporary lane closures being required. Please refer to the appendices for required encroachment plan and traffic control plans.

### 4.2: Haul Route and Staging Areas

The truck Haul Route Plan has been prepared by the traffic control company and is provided in the appendix.

The selected route is intended to minimize traffic congestion and maximize pedestrian safety. During all construction phases vehicles will enter and exit the site at the gate location(s) which will be clearly marked for function.

Throughout all phases of construction, concrete and material deliveries shall be contained within the owner's private property accessed off Willow Street. We anticipate deliveries backing into the gate off Willow during construction activities. Refer to appendix for concrete delivery schematic.

### 4.3: Vehicular Traffic Notifications

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

### 4.4: Emergency Vehicles

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

### 4.5: Parking

On street parking is not permitted along Windsor Street, while on Willow Street in the vicinity of the project site on street parking is not permitted between 8am to 6pm Monday to Friday and 12am to 8am on Fridays during street cleaning. On street parking is not anticipated to be affected by this project. To minimize parking requirements in adjacent neighbourhoods, site workers will utilize private property and workers will be encouraged to carpool or rely on public transit.

### 4.6: Bus Stops

There are no bus stops directly in front of the project on either street. However, bus service travels along Windsor Street and should not be affected by this project.

### 4.7: Hazard Assessment

A vehicular and pedestrian hazard assessment is provided in the appendix. Any additional site hazards identified or encountered after work has commenced will be added to this list. All personnel on-site will be required to review this list and encouraged to identify additional potential hazards and hazard mitigation methods.

## Section 5: Pedestrian Management

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A Pedestrian Management Plan (PMP) has been prepared by the traffic control company and is provided in the appendix.

Throughout all construction phases, the project will relocate pedestrian traffic to the opposite sidewalk of the street for access along Willow Street. This is to ensure the limits of excavation and construction activities are kept a safe distance from pedestrians.

### 5.1: Pedestrian Protection

Pedestrians will be protected by physically distancing them from the project. F-type concrete jersey barriers with Plywood fencing mounted above and rigid construction fence will delineate the project. Rigid fencing will be covered with opaque covering to block view of the site. Refer to the appendix for examples of the barriers and fencing.

### 5.2: Pedestrian Safety

Pedestrian safety will be maintained by implementing appropriate signage as shown on the PMP. All navigation and safety signage indicating alternative sidewalks and potential hazards will be inspected and maintained regularly.

### 5.3: Pedestrian Traffic Notifications

Notifications will be distributed to properties in the impacted area a minimum of five (5) days in advance of pedestrian traffic impacts. A sample traffic notification letter can be found in the appendix. HRM must be notified prior to issuing the notification to neighbours.

### 5.4: Visually Impaired Persons

In keeping with 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. Sawhorse barriers will incorporate lower cross members, painted and marked consistent with the rest of the sawhorse, these added cross members will be placed near the ground to aid visually impaired persons using a cane. 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.

### 5.5: Accessibility

High visibility signage will be used to assist pedestrians to easily navigate around all project related blocked sidewalks.

### 5.6: Hazard Assessment

A vehicular and pedestrian hazard assessment is provided in the appendix. Any additional site hazards identified or encountered after work has commenced will be added to this list. All personnel on-site will be required to review this list and encouraged to identify additional potential hazards and hazard mitigation methods.

### 5.7: Pedestrian Management Plans Rendering (PMPR) Signage

The need for a rendered map displayed for pedestrians showing the detoured pedestrian routes is not anticipated for this project.

### 5.8: Pedestrian Detour Wayfinding Signage

The need for pedestrian wayfinding signage directing pedestrians to adjacent businesses is not anticipated for this project.

## Section 6: Encroachments & Disruptions

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During construction activities, we are proposing the project encroachment area will incorporate the public sidewalk on Willow Street. This will move pedestrians to the opposite side of the street. This encroachment is to keep the public away from potential hazards during demolition of the buildings' street walls, the excavation zone of influence as well as provide additional room for site workers.

The encroachment is planned to be delineated by a mix of interlocking F-type concrete jersey barriers complete with plywood fencing or rigid fencing with opaque coverings.

Throughout the project, fencing will be positioned to not obstruct vehicle sight lines. In areas adjacent to the Phase 2 site gate open mesh chain link fence will be utilized to not obstruct vehicle sight lines at the existing driveway of civic 6237 Willow Street

Should any utility or traffic disruptions be required, the contractor will first apply to HRM for approval, a minimum of five (5) business days in advance of such work and will then notify neighbours of these disruptions in a timely fashion.

### 6.1: Demolition

The demolition phase includes demolishing the existing buildings at civic 6233 Willow Street including the building foundations and abandonment of existing services at the street line.

### 6.2: Site Excavation

This includes deep excavation and removal of common site material. The development is planned to have two levels of underground parking. If bedrock is found, the contractor will apply for a blasting permit and adhere to the HRM blasting by-law and conditions of the blasting permit. Alternatively, if a blasting permit can not be obtained the site's bedrock will be broken by a series of rock breakers to reach footing elevation.

### 6.3: Site Services Connection

This includes installation of new water and sewer laterals to their respective mains as well as decommissioning existing laterals which will be abandoned. The service installs will require modifications to the encroachment with temporary workplace signage incorporated (refer to the Service Installation Traffic Control Plans (TCP) in the appendix). HRM requires that this service work be limited to weekends only to minimize traffic disruptions. The target dates for this work are provided in the "Key Dates" section above with time of installations adhering to the Noise By-Laws noted above. The intent will be to complete this servicing work and reinstate the street as quickly as possible in order to minimize disruptions to the public.

Before scheduling site services connections, the contractor will notify all neighbouring properties, of the intended timeline for this work. A sample notification letter is included in the appendix.

The contractor intends to reinstate the street cut during the season of work. It is noted that street cuts cannot be left gravel or open. HRM reinstatement specifications must be met, and the travel way must be hard surfaced prior to reopening to the public. Asphalt, concrete curb and sidewalk reinstatement must be completed within 72 hours of

disturbance and will be considered temporary if reinstated after October 31<sup>st</sup> or prior to May 1 in which case permanent reinstatement will be completed by June 15.

#### **6.4: Construction Management Plan Element Inspection and Maintenance**

Construction management plan elements will be inspected daily to ensure continued adherence to this CMP. Any deficiencies identified will be reinstated immediately. A CMP's TCP & PMP inspection report summary will be completed for the project, including information on what maintenance activities were conducted. This report must be kept on site at all times and be available to HRM upon request.

#### **6.5: Changes to the Construction Management Plan**

All departures from the CMP regardless of the significance must be submitted to the Municipality 10 days in advance for review and approval. Any required changes or modifications to the approved CMP will be submitted to HRM for review and approval prior to implementation.

## **Section 7: Environmental Factors**

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### **7.1: Damage to HRM Infrastructure**

Existing HRM infrastructure will be reinstated within the encroachment area and be completely replaced. It is anticipated that the sidewalks across the street will not be impacted by excavation or other construction activities. However, while efforts will be made to avoid damage, it is anticipated that some portions of existing curbs, gutters, and sidewalks may become damaged during the construction process which would require repairs or replacement. Pending HRM's review prior to and after construction and subject to damage due to construction activities, the developer acknowledges that items may require to be fully replaced rather than repaired. The developer also acknowledges that any costs incurred to repair or replace this public infrastructure are the responsibility of the owner.

For reinstatement timeline requirements, it is noted that asphalt, concrete curb and sidewalk reinstatement must be completed within 72 hours of disturbance and will be considered temporary if reinstated after October 31<sup>st</sup> or prior to May 1 in which case permanent reinstatement will be completed by June 15 of the following construction season.

### **7.2: Protection of Trees**

There are five (5) HRM street trees within the public right-of-way directly adjacent to the project site along Willow Street. We are proposing to remove two (2) HRM street trees in front of the project on Willow Street. The trees along Windsor Street are privately owned and will be removed as part of the project. Adjacent HRM street trees are to be protected during construction in accordance with the HRM Tree Bylaw (T-600); see HRM tree protection detail in the appendix. It is noted that HRM street trees shall not be touched prior to approval and/or compensation agreements between the developer and HRM Urban Forestry are in place.

### **7.3: Line Painting and Temporary Crosswalks**

Temporary line painting such as altered centreline or temporary crosswalk are not anticipated for this project.

### **7.4: Street and Right-of-Way Cleaning**

The portion of public street adjacent to the project will be cleaned daily of any debris from trucks and silt, dirt, or rock that migrates beyond the encroachments. A sweeper truck will be utilized as required. Rock pads will be installed and maintained at all site entrances behind the curb line to knock dirt free from truck tires with aim to reduce off tracking of site soils.

Where the developer plans to utilize the public sidewalk for their encroachment the developer is responsible to clear snow from the street side of these jersey barriers and rigid fencing.

### **7.5: Protection from Inclement Weather**

To protect the public from construction debris during inclement weather, the project site will be enclosed by fencing complete with dust control covering, the site will be regularly reviewed and cleaned, with loose items secured when not in use.

### **7.6: Storm Water Management**

During construction, nearby catch basins may be fitted with filter fabric to prevent debris from entering the storm system. Stormwater collected inside the project site will be directed to temporary stormwater settling ponds situated within the building footprint to allow clean water to be pumped into the existing public sewer systems in accordance with HW regulations and HRM By-law W-101 complete with appropriate fees to Halifax Water (HW). Sediment ponds may be shifted and positioned as desired by the site contractor during mass excavation however will generally be placed in localized low points within the building excavation.

### **7.7: Noise, Dust and Emission Control**

The contractor will at all times adhere to the HRM Noise Bylaw (N-200). No work will take place on the project site outside those hours identified in section 2 of this report.

Dust mitigation for this project will be achieved using rock pads for trucks exiting the site. A water truck and sweeper truck will also be utilized to help prevent dust from becoming airborne and, when required, calcium may need to be used to mitigate dust migration. Additionally, mesh on the inside of the fencing will help to contain any airborne dust inside the site.

Breaking of rock may occur and rock faces cleared to form a wall. Mesh will be used on the inside of all construction fencing to mitigate dust control.

All construction vehicles will be required to use the loading area for parking and idling to keep exhaust emissions within the construction zone. Vehicles will be staged so that idling will not occur for more than 3 minutes at a time.

As indicated above, all work shall be completed in accordance with the HRM Noise By-Law.

### **7.8: Rodent Control**

Rodent movement increases during construction activities. The owner has engaged a rodent control company, to utilize the established Rodent Control Plan (RCP) to help mitigate rodent movement prior to and during building demolition, site excavation and building construction. The RCP applies to all project phases with the goal of preventing movement of rodents off-site. The RCP will consist of a baiting and monitoring program. Bait stations (traps) will be placed as outlined in the NPMA Pest Management Standards for Food Processing & Handling Facilities.

The RCP was engaged two weeks prior to the commencement of building demolition to help to lower the number of active rodents in the project area. Bait stations positioned along existing buildings and fence lines prior to excavation. Bait stations positioned along the edges of the project and secured in place using wooden stakes (for open sodded and dirt locations), weighted patio stones (behind walls and on paved areas), and zip-ties (fixed to fences) as per typical industry standards.

Refer to the appendix for a copy of the Rodent Control Plan.

## Section 8: Site Protection & Hoarding

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### 8.1: Barriers & Fences

The encroachment will be delineated with a mix depending on the street and proximity to street trees. Along Windsor Street Interlocking F-type concrete jersey barriers complete with Plywood fencing secured to the jersey barrier will be positioned along the back of sidewalk. Fencing will have a total height (concrete barrier and fencing structure) of 1.8m or 6ft as per the noted administrative order. Along Willow Street rigid fencing will be positioned and secured along the front edge of sidewalk/HRM tree lawn. The rigid fence will be covered with an opaque dust control mesh of high quality which will extend a minimum 3m from the public right-of-way. This screening is described in the appendix and will block passersby or tourists view of the construction site. Throughout the project, fencing will be situated to not obstruct vehicle sight lines. In addition, the remaining street trees along Willow Street will be protected as per HRM's tree protection details with orange snow fencing delineating the existing tree lawns between existing concrete sidewalk and street curb.

Along the private sidelines where traffic is present, the hoarding will be delineated by weighted modular 1.5m (5ft) high fencing or existing fencing where it is at least 1.5m tall. All fencing will have opaque dust control mesh and must be anchored down to prevent unintentional movement or overturning due to snow or wind loads.

The F-type barriers, fencing and tree projection defining the encroachment will adhere to the Encroachment Plan which is to scale includes dimensions and can be found in the appendix. These areas can be measured for the administering of applicable fees. Encroachment areas and fees will be based on the areas within the public right-of-way enclosed by the barriers and fencing.

Installation of F-Type concrete barriers, fencing and covering will take place during regular working hours as noted above. This work will be scheduled by the contractor after the HRM's pre-construction meeting has been held. HRM will coordinate this pre-construction meeting; the developer, contractor and traffic control company will attend this site meeting. During the process of erecting and tearing down the traffic barriers, fencing and opaque covering defining the encroachment, traffic control elements will be implemented as per the Traffic Control Plan(s) in the appendix. All work and any traffic interruptions will be coordinated by the contractor who will notify HRM a minimum of 5 business days before work is scheduled to begin.

It is noted that surplus fencing must be stored and installed from private property when relocated for deliveries and be routinely re-established to keep the site secure. Surplus fencing cannot be stored within HRM's right-of-way.

### 8.2: Snow removal

The developer will be responsible to remove snow and ice as required to ensure that emergency access is maintain to the project site, this includes fire hydrants. The contractor will not dump snow or ice onto adjacent property and will truck snow off site as required to prevent the unsafe build-up of snow piles.

The contractor will clear snow from outside the jersey barriers and rigid fencing to keep the edge of the encroachment and vehicle travel lane clear of snow and ice build up.

### 8.3: Gate Access and 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.

Construction traffic will utilize the proposed access gate that is planned to be stationed off Willow Street to facilitate deliveries. Gates are to swing into site, remain closed when not in use and locked after hours.

Any existing fire hydrants located adjacent to the site will remain protected from construction activities. These fire hydrants, along with the existing 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.

#### **8.4: Hoarding Aesthetics**

The site hoarding will resemble that shown in the appendix; encroachment fee reductions are not anticipated.

#### **8.5: Sight Lines**

Rigid fencing and signage will be installed as per the CMP drawings such that vehicle sight lines are maintained around corners, particularly at driveway access points and existing intersections.

#### **8.6: 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 Board and the Encroachment Plan for the planned locations. Refer to the signage specification within the appendix describing the required size, materials, mounting hardware, etc. of these signs.

## **Section 9: Lifting, Hoisting, and Crane Operations**

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### **9.1: Crane Use Overview**

This project will incorporate a tower crane, the crane will be stationed within the project site and will be operated under the direct supervision of a licensed crane operator employed by the formwork contractor. The approximate location of the tower cranes is shown in the appendix.

It is anticipated that this tower crane will be assembly and disassembly by a mobile crane truck stationed on private property with deliveries received from Willow Street.

The crane swing will extend over neighbouring properties as shown in the Crane Swing Diagrams included in the appendix. The developer will notify these property owners prior to extending the crane over their properties. Refer to the appendix for crane information.

Concrete trucks will be stationed within owners' private property during concrete operations. (See concrete delivery schematic within the appendix).

If lifting operations are required over the public realm, this area will be closed to access. In all cases of lifting, extreme care will be used to ensure public and worker safety.

### **9.2: Transport Canada and Nav Canada Regulations**

There are two registered aerodromes in the Halifax region; Halifax International Airport and Canadian Forces Base Shearwater Airfield. According to Transport Canada regulations, the project site is outside of the lands to which regulations for these two aerodromes apply.

### 9.3: Aerodromes

There are several heliport approaches in the Halifax region; both Emergency Hospitals (QEII and IWK) as well as Point Pleasant Park. Given the location of the project site relative to these various approaches we understand Transport Canada notice does not apply.

## Section 10: On-Site Safety and Security

---

### 10.1: Site Safety and Security Overview

The contractor will adhere to all Occupational Health & Safety requirements throughout the completion of this project. At a minimum, the following safety protocols will be utilized to further enhance site safety and security:

- a) All workers will be required to have proof of up-to-date safety training;
- a) Personal protective equipment (PPE) will be required for all personnel on site;
- b) Adequate signage will be placed outside the hoarding, which will warn of hazards that may exist;
- c) Gates will be locked and the perimeter fencing secured to provide security against public access during off work hours and will be monitored during operation;
- d) Hoarding will clearly state “No Trespassing – Construction Personnel Only” & PPE requirements will be clearly identified (e.g., “Hard Hats and Safety Footwear Must Be Worn Beyond This Point”);
- e) Regular safety inspections will be conducted to ensure suitability of hoarding and other safety devices;
- f) Emergency contact information to be prominently posted as per the Project Information Board.

### 10.2: Material Handling: Loading, Unloading, Delivery and Storage

The contractor will adhere to the procedures stipulated in the Haul Route Plan for delivery of materials. Delivery vehicles will use the designated gate 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 coordinated by the delivery companies and site personnel, trucks will be housed on private property within the hoarding limits.

### 10.3: Emergency Access & Egress

The site will be accessible through a gate to facilitate construction vehicle access. In cases of emergencies, on-site workers will exit the project site through these gates. These gates will remain closed but unlocked at all times when workers are on site in case of emergency allowing unrestricted emergency response units access to the site. The gate 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, refer to the CMP plan for details.

The gate is to remain closed at all times unless being used for deliveries to maintain a controlled access site preventing access by the general public to the construction site.

### 10.4: Security Site Lighting

Security site lighting is not anticipated for this project.

### 10.5: Smoking Areas

On site smoking areas will not be provided as this will be a smoke-free site.

### 10.6: Fire Suppression Systems

The existing building will have their water supply turned off and as such any existing fire suppression systems will no longer be available during demolition of this building. Any adjacent existing fire hydrants, along with any existing 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 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 encroachment fencing has been removed.

## Section 11: Pre-Construction Consultation & Meeting

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### 11.1: Pre-CMP Community Consultation

Due to the current pandemic, the developer will forego the community consultation meeting. 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 contact 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. A map indicating these properties has been included in the appendix.

### 11.2: 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 Board and the CMP Plan for the planned locations. Information on signage size and materials is outlined in the appendix.

### 11.3: 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.

### 11.4: 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 12: Summary

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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.

Should you have any questions or comments related to this document, please contact SDMM. For all construction-related inquiries, please contact the developer, contractor, or traffic control service provider.

Regards,

**Servant, Dunbrack, McKenzie & MacDonald Ltd.**

Geoff MacLean, P.Eng.

Project Engineer

Z:\SDMM\35000-35999\35500\35541\CMP\Windsor & Willow St. - CMP (IFR) - 35541.docx

# APPENDIX

## Appendix A – Encroachment Plan

---



KEY PLAN

LEGEND		
EXISTING		PROPOSED
25.0	CONTOUR LINE	25.0
⊗/⊗BF	CURB STOP/GATE/BUTTERFLY VALVE	⊗/⊗BF
⊕	FIRE HYDRANT	⊕
⊕	CONCRETE THRUST BLOCK	⊕
⊕	SIAMESE CONNECTION	⊕
⊕	CATCH BASIN/PIT	⊕
⊕	CULVERT	⊕
⊕	ROCK LINING/DAM	⊕
⊕	ROCK WALL/RETAINING WALL	⊕
⊕	POWER POLE & ANCHOR/LIGHT STANDARD	⊕
⊕	TREE	⊕
⊕	STREET SIGN/PARKING METER	⊕
× 131.82	ELEVATION/GRADE	[125.00] × / + 125.00
⊕	TEST PIT	⊕
→	DRAINAGE/SWALE FLOW DIRECTION	→
W	WATER MAIN/SERVICE	W
SAN	SANITARY MANHOLE & PIPE	SAN
STM	STORM MANHOLE & PIPE	STM
SAW/STM	COMBINED PIPE	SAW/STM
GAS	GAS LINE	GAS
FL	100YR. FLOOD LIMIT	FL
—	GUARD RAIL	—
—	UNDERGROUND CONDUIT	—
—	OVERHEAD WIRES	—
—	PROPERTY LINE/BOUNDARY	—
—	FENCE	—
—	BUILDING	—
—	TOP OF SLOPE	—
—	TOE OF SLOPE	—
—	TREELINE	—
—	LIMITS OF DISTURBANCE	—
—	TACTILE PEDESTRIAN PLATES	—
—	PROJECT SAFETY SIGNAGE	—
—	ORANGE SAWHORSE BARRICADE	—

NOTES

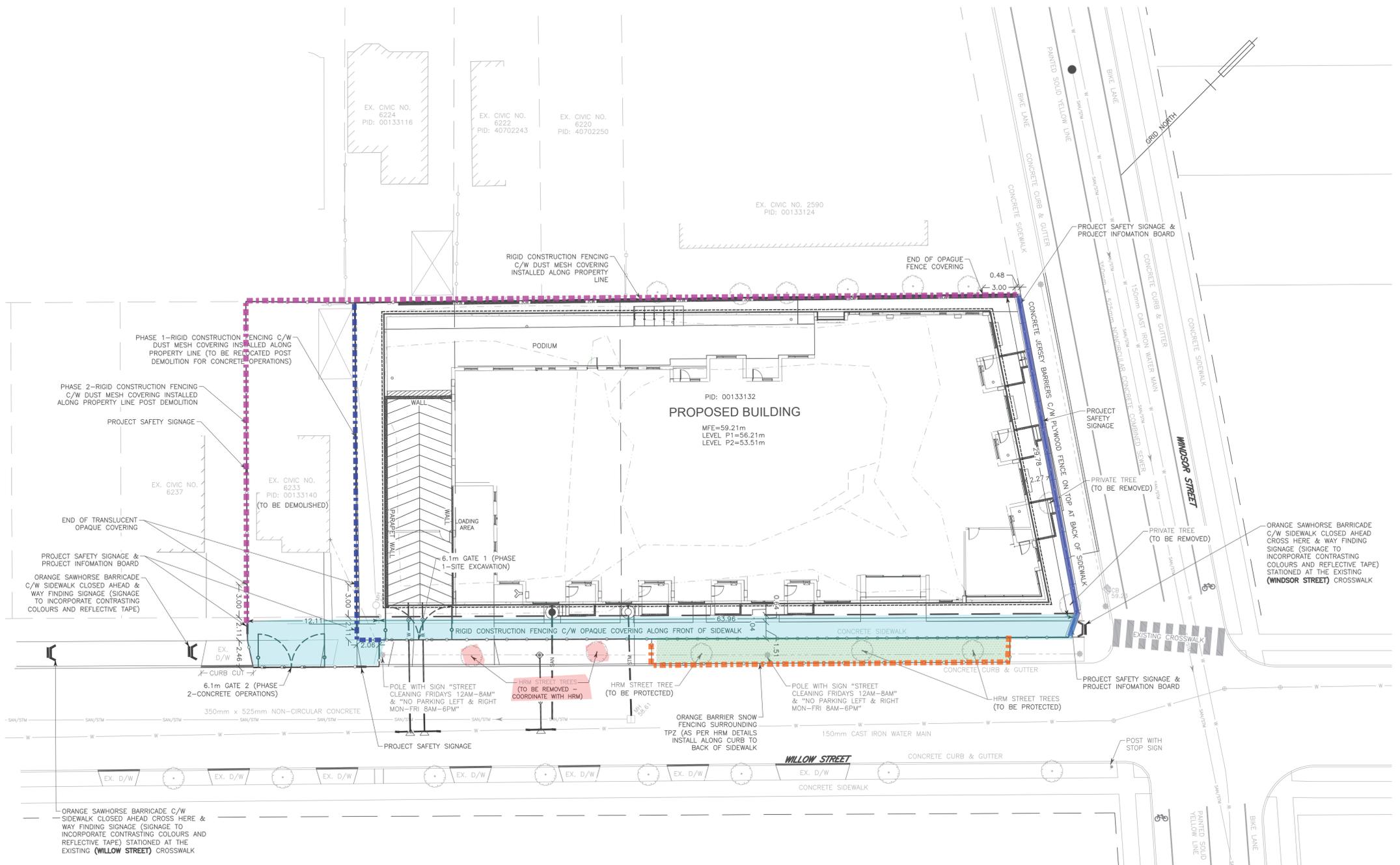
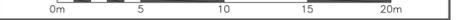
1. THIS PLAN IS IN METRIC.

No.	YY/MM/DD	Revision	Description	Appr'd
1	22/02/17	REVISED FOR BUILDING PERMIT AND CRANE LOCATION		
0	21/11/25	ISSUED FOR REVIEW		



PROPOSED APARTMENT BUILDING  
WILLOW STREET & WINDSOR STREET  
HALIFAX, NOVA SCOTIA

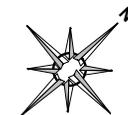
ENCROACHMENT PLAN					
Date	NOVEMBER 25, 2021	Drawn	D. ANDERSON	Project No.	FILE NO. 1-1-429 (35541)
Scale	1:200	Engineer	G. MACLEAN	Plan No.	-1
Reference	Approved	Approved	G. MACLEAN	Drawing Name	R1
Surveyed	SDMM	Sheet			



## **Appendix B – Traffic Control Plans TCP**

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# Encroachment Signage Plan



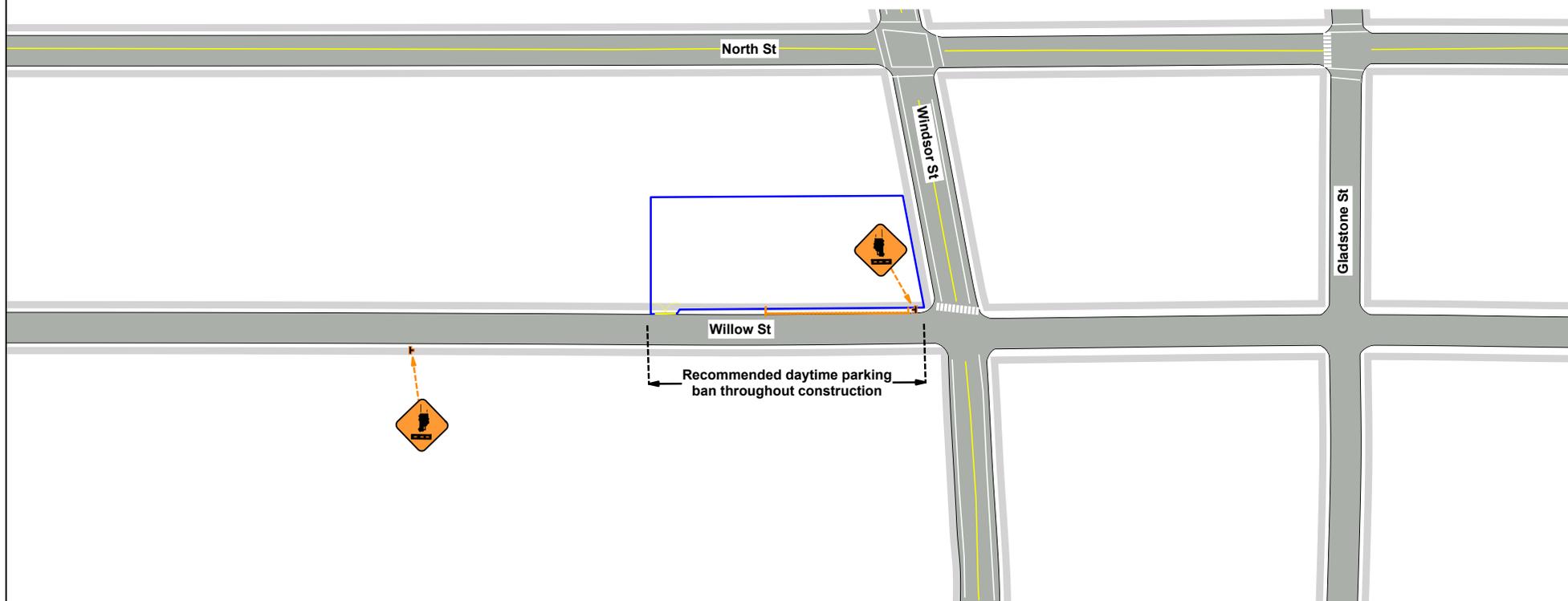
Date: 2022-02-18 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: Proposed Bldg at Willow and Windsor  
Contrator: SDMM Contact: Geoff MacLean, 902-789-6374

**Comments:**

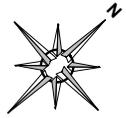
Not to Scale  
Off Shoulder Work Area  
Daytime parking ban recommended  
See Pedestrian Management Plan for sidewalk closure details

### Legend

-  Gate
-  Site Fencing
-  Snow Fencing for tree Protection



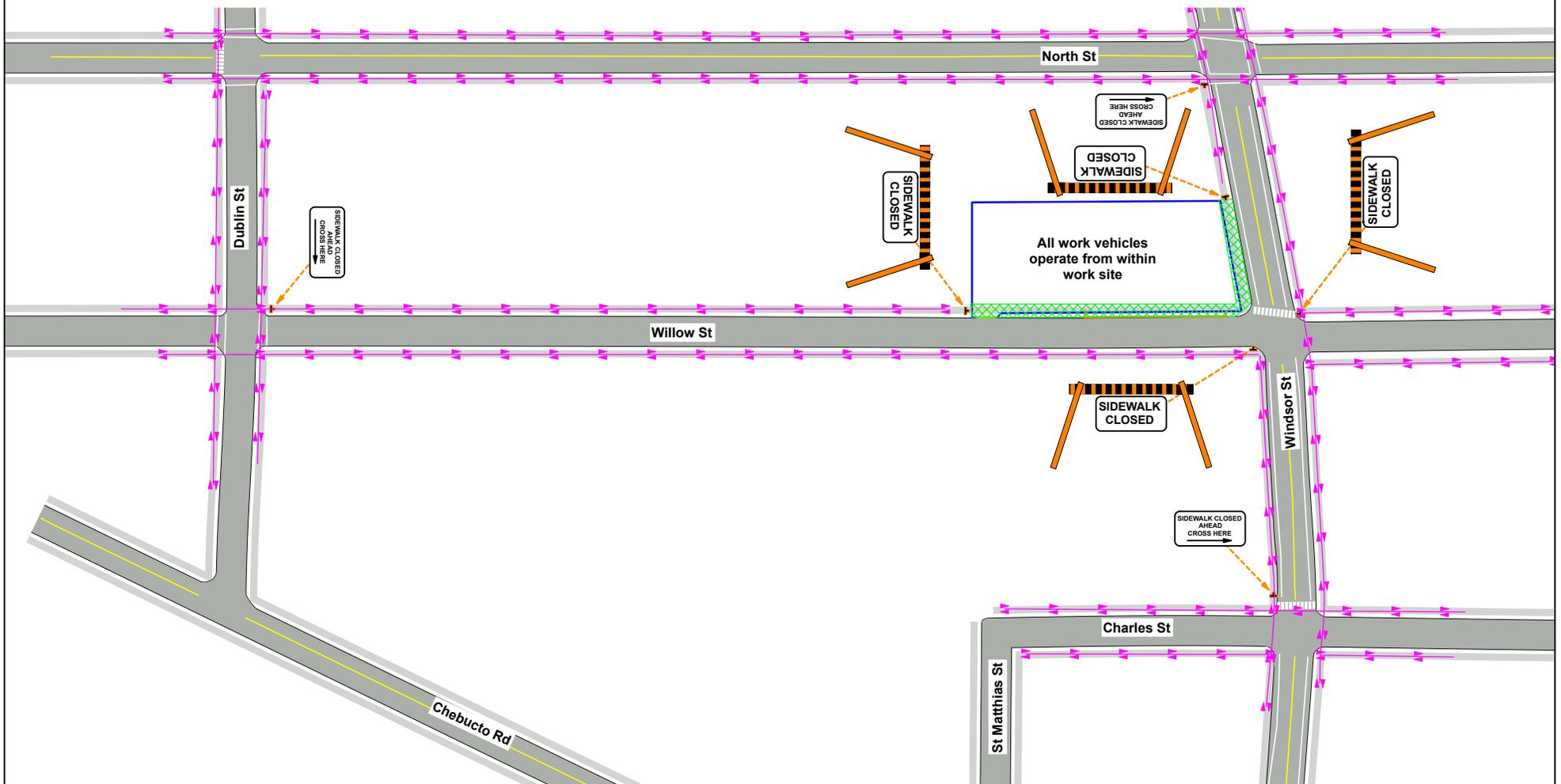
# Fencing Installation Plan



Date: 2022-02-18 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: Proposed Bldg at Willow and Windsor  
Contrator: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:  
Not to Scale  
Fencing Installation Plan  
All work vehicles to park on site property  
Pedestrian Management as Shown

Legend	
	Gate
	Pedestrian Route
	Site Fencing
	Snow Fencing for tree Protection
	Work Area



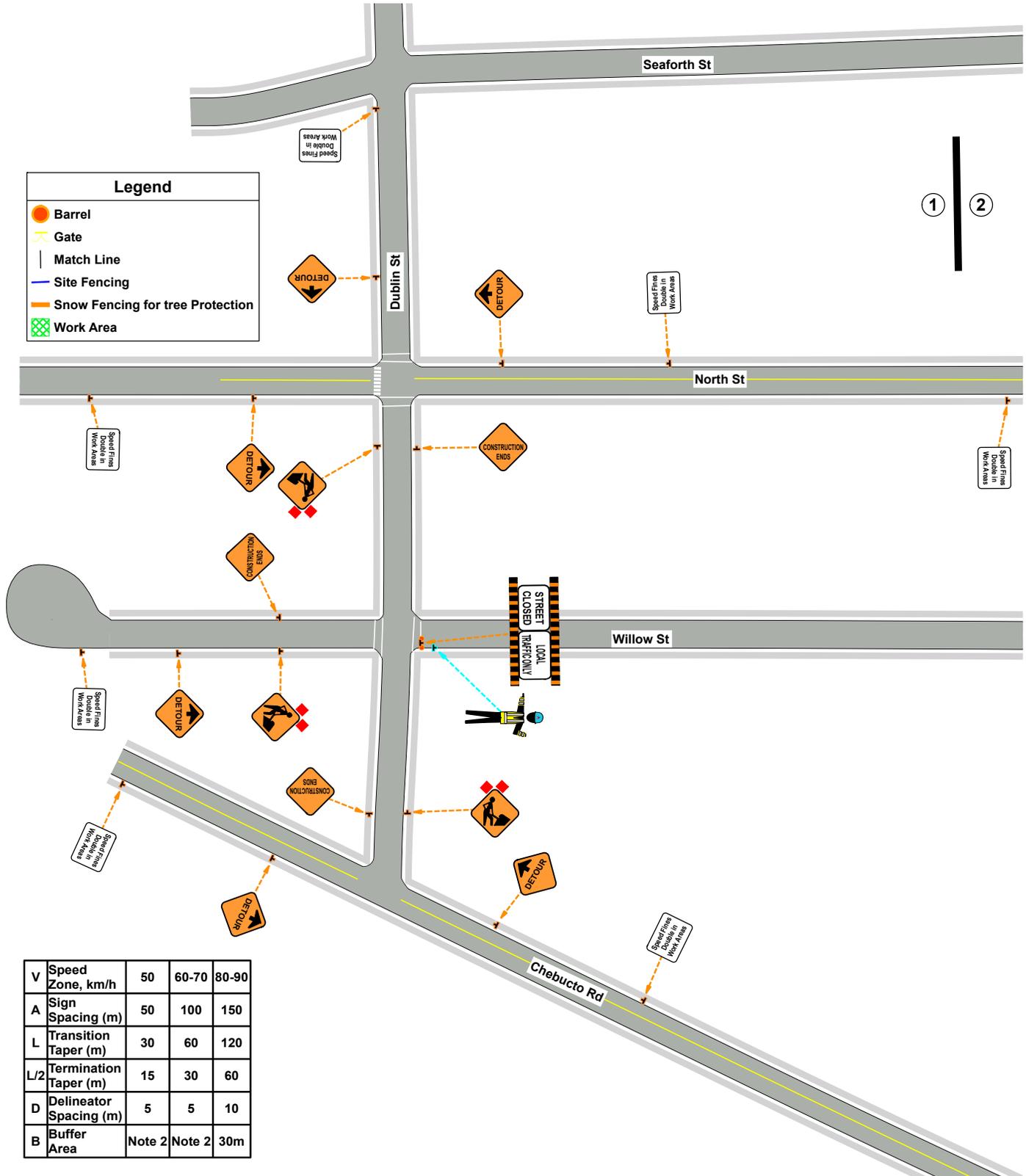


# 1

## Service Laterals Installation Plan

Date: 2022-02-18 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: Proposed Bldg at Willow and Windsor  
 Contrator: SDMM Contact: Geoff MacLean, 902-789-6374

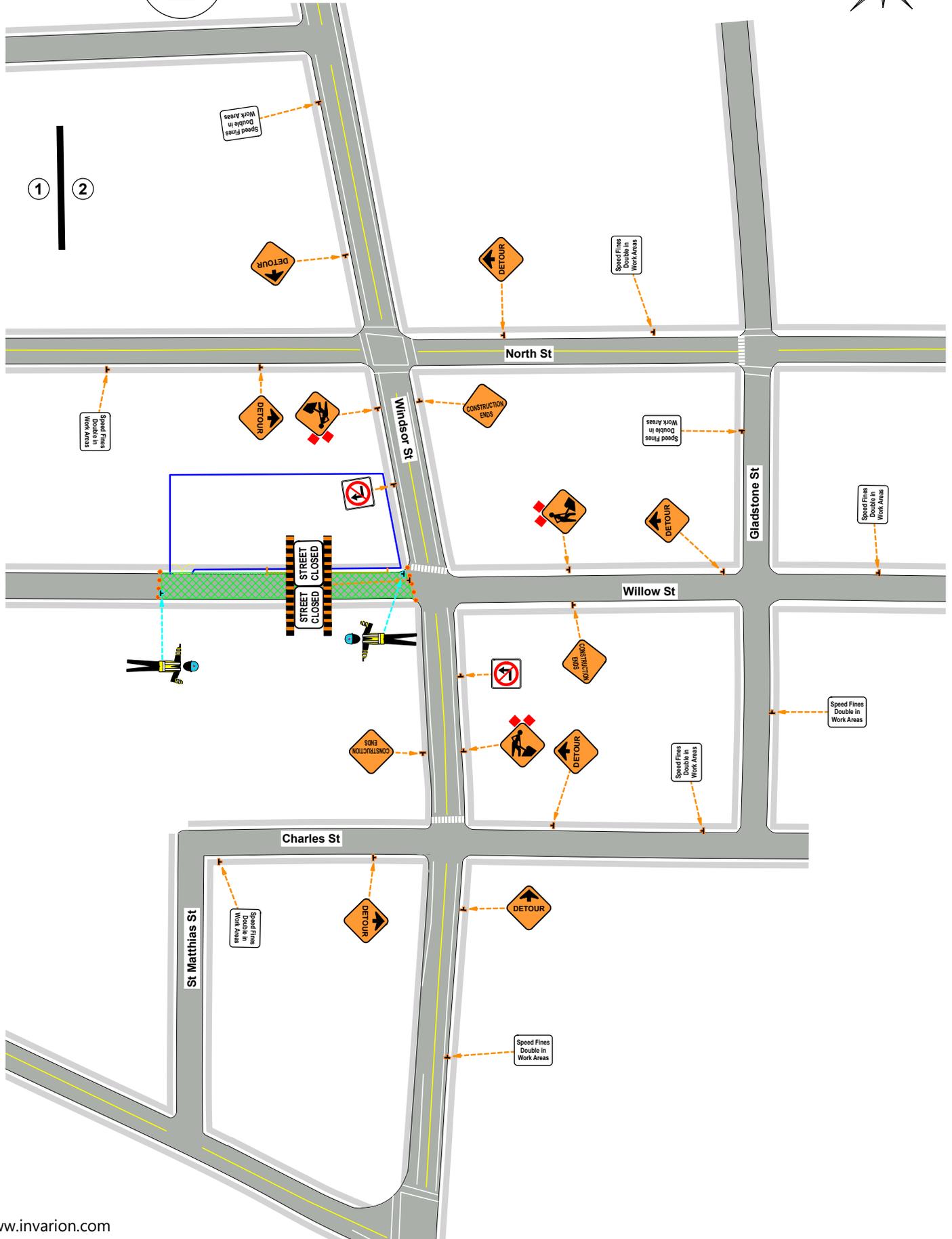
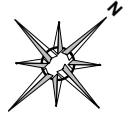
Comments:  
 Not to Scale  
 Application Guide C114  
 See Pedestrian Management Plan for sidewalk closure details



V	Speed Zone, km/h	50	60-70	80-90
A	Sign Spacing (m)	50	100	150
L	Transition Taper (m)	30	60	120
L/2	Termination Taper (m)	15	30	60
D	Delineator Spacing (m)	5	5	10
B	Buffer Area	Note 2	Note 2	30m

# 2

## Service Laterals Installation Plan



## Appendix C – Haul Route Plan

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# Haul Route Plan

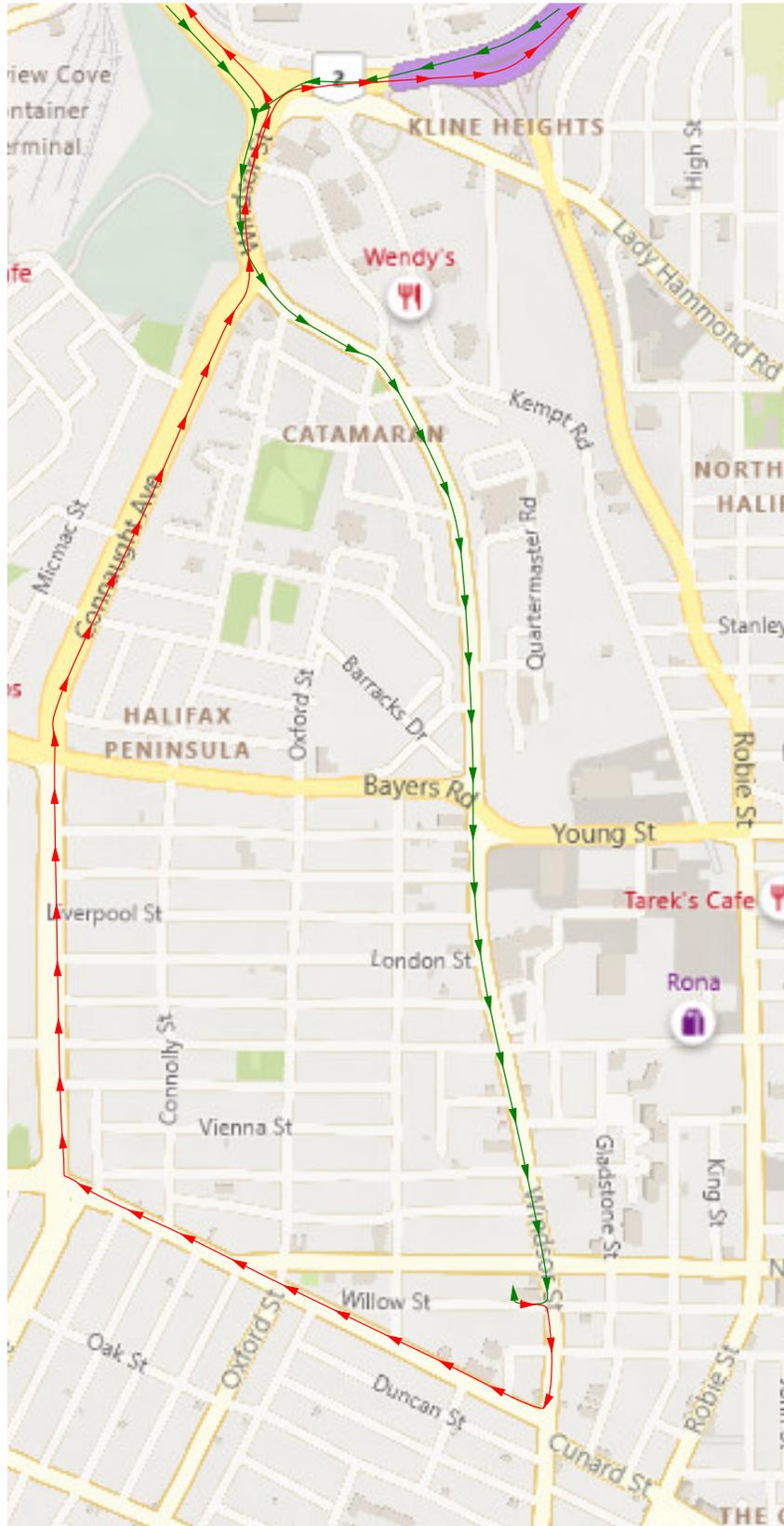
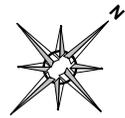
Date: 2022-02-18 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: Proposed Bldg at Willow and Windsor  
Contractor: SDMM Contact: Geoff MacLean, 902-789-6374

**Comments:**

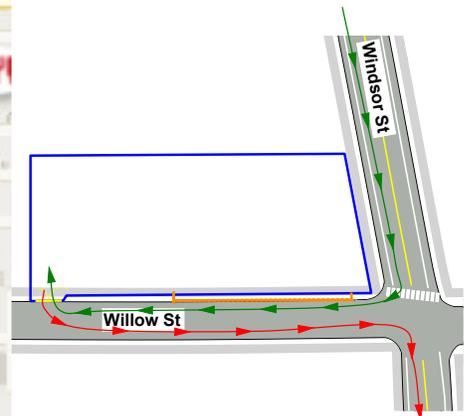
Not to Scale

Inbound via Windsor St to Willow St

Outbound via Willow St to Windsor St to Chebucto Rd to Connaught Ave



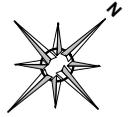
Legend	
	Gate
	Haul Route Inbound
	Haul Route Outbound
	Site Fencing
	Snow Fencing for tree Protection



## Appendix D – Pedestrian Management Plan (PMP)

---

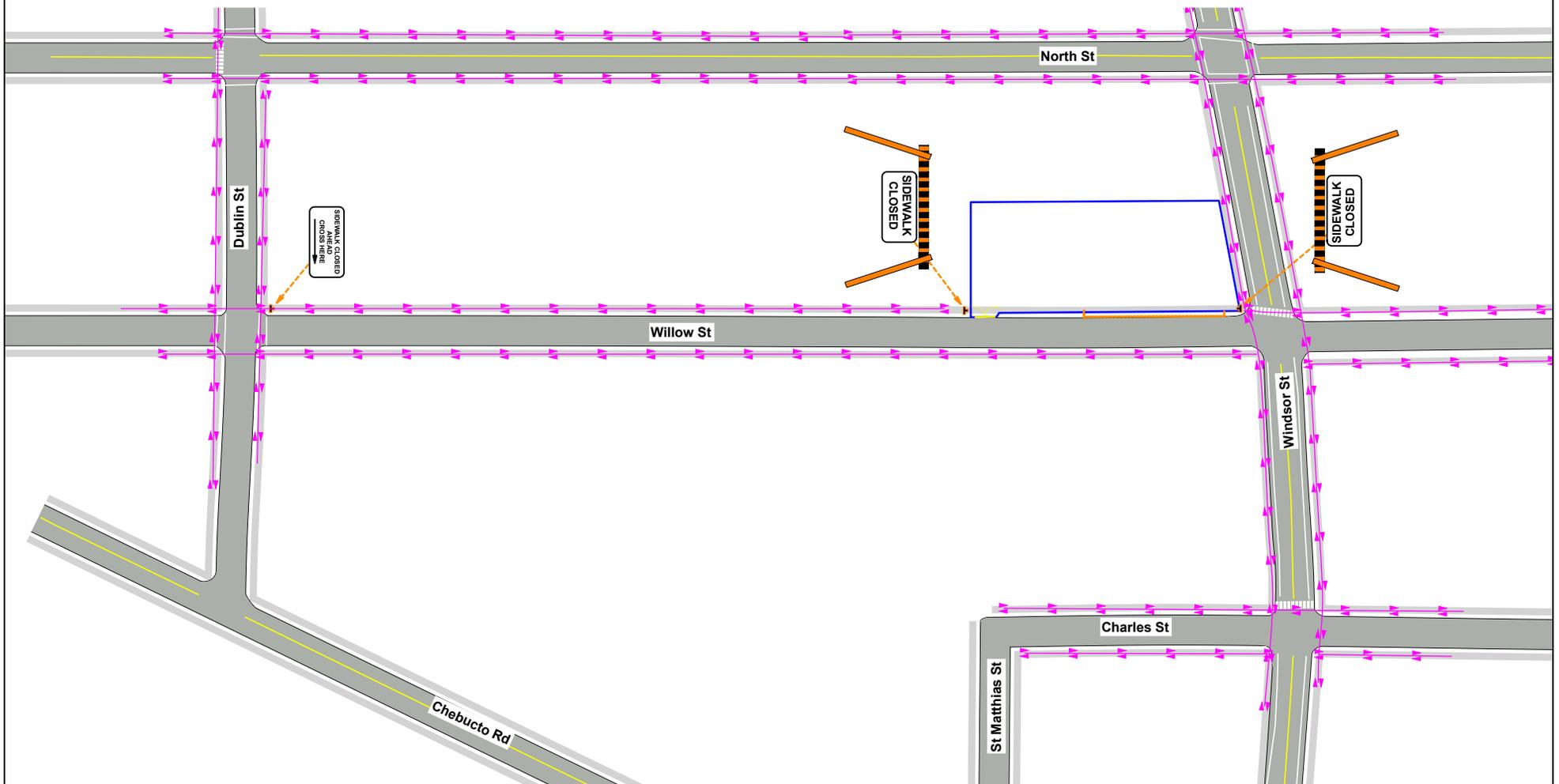
# Pedestrian Management Plan



Date: 2022-02-18 Author: Norman Bussmann, TWS, Frontline Traffic Services, 902-817-3364 Project: Proposed Bldg at Willow and Windsor  
Contrator: SDMM Contact: Geoff MacLean, 902-789-6374

Comments:  
Not to Scale  
Pedestrian Management Plan for long duration closure of sidewalk on Willow St

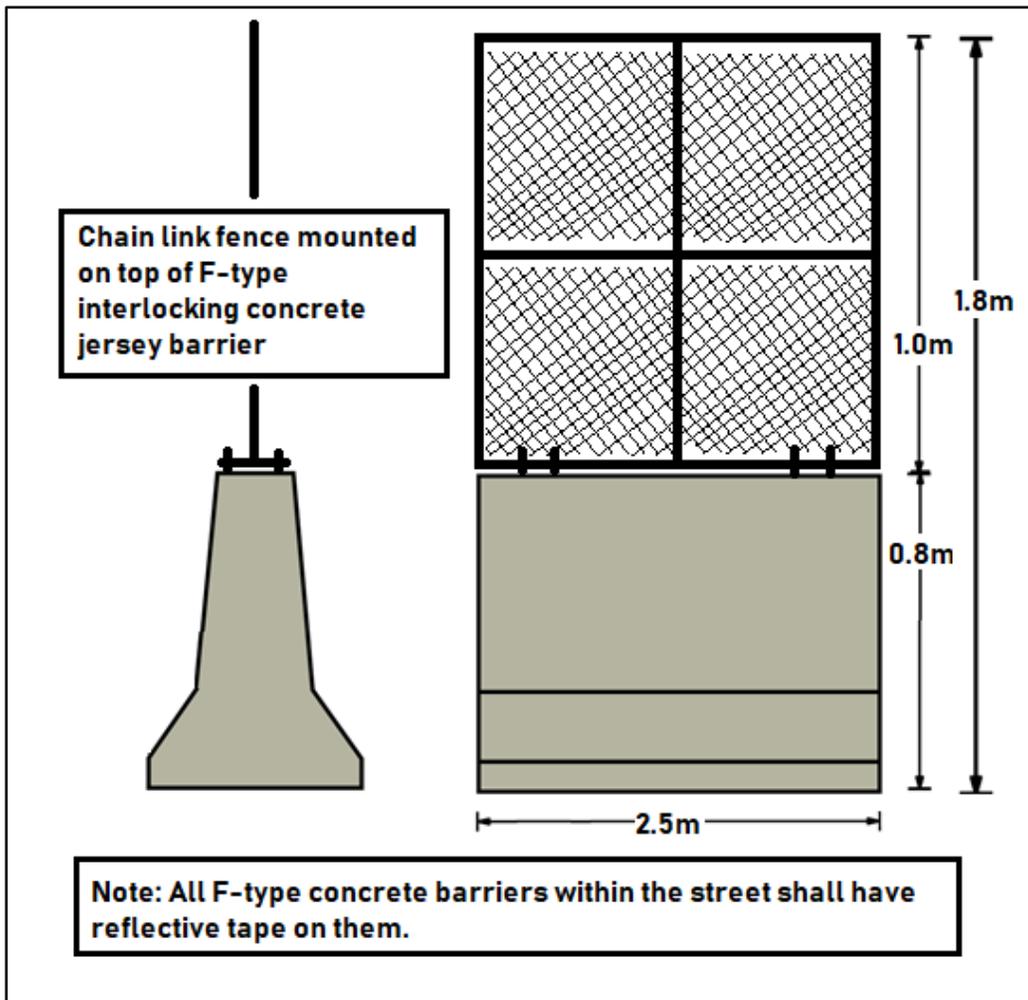
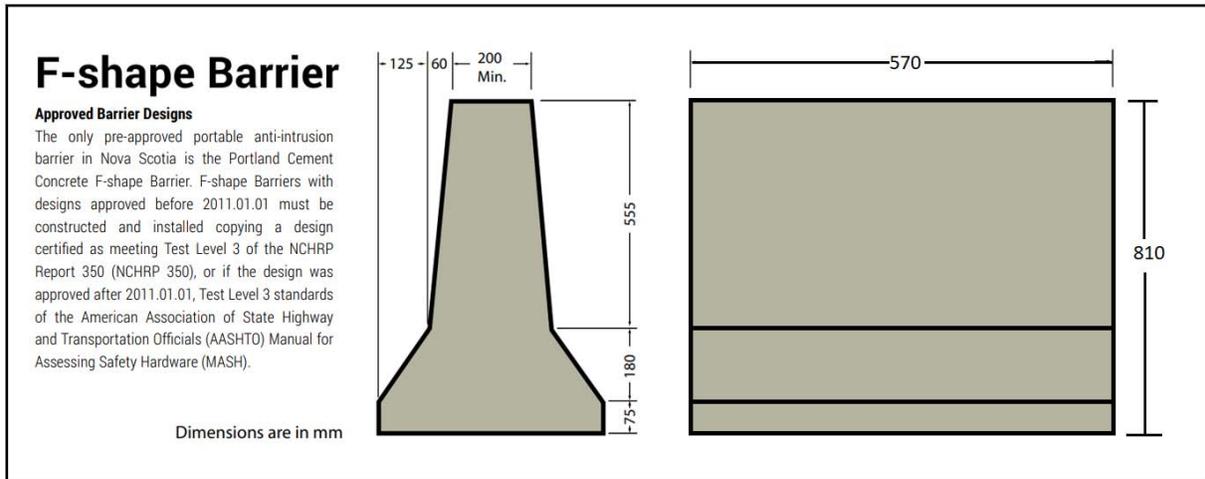
Legend	
	Gate
	Pedestrian Route
	Site Fencing
	Snow Fencing for tree Protection



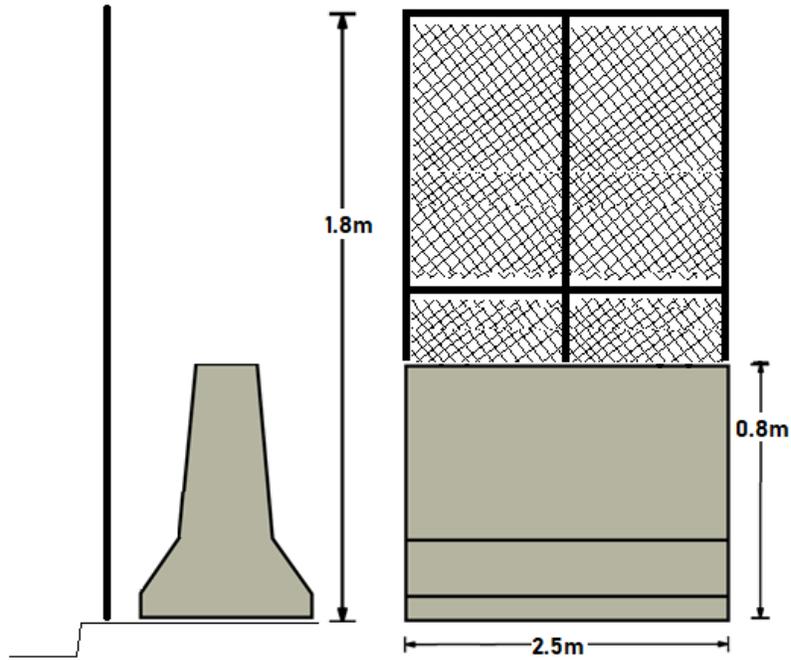
## Appendix E – Barrier, Fence & Gates Information

---

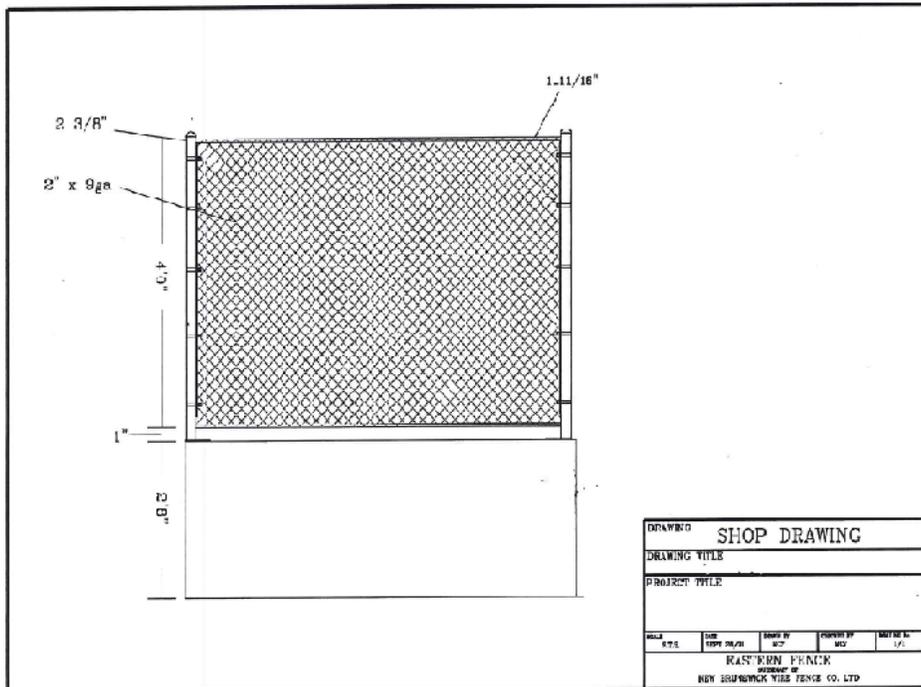
## Sample Barrier & Fence Details

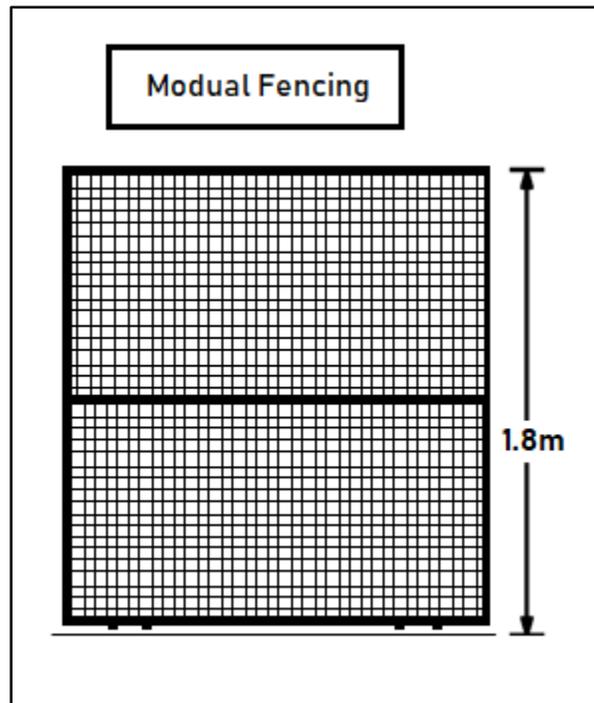
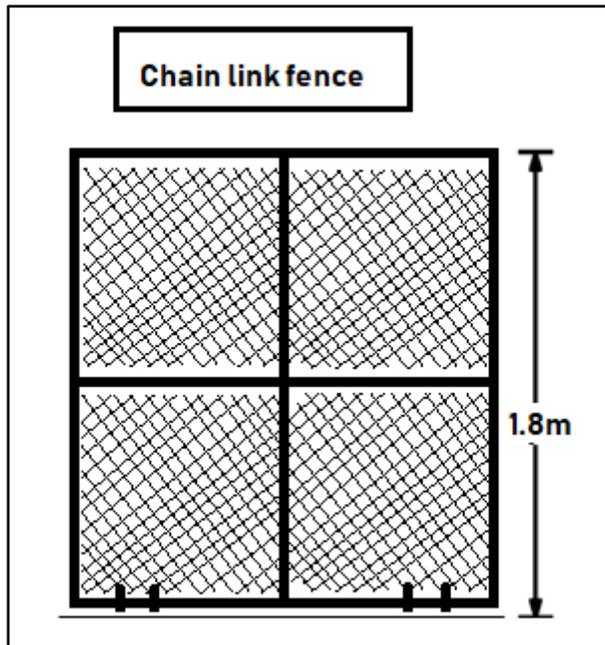


Fence mounted to curb with interlocking F-type concrete jersey barriers set beside

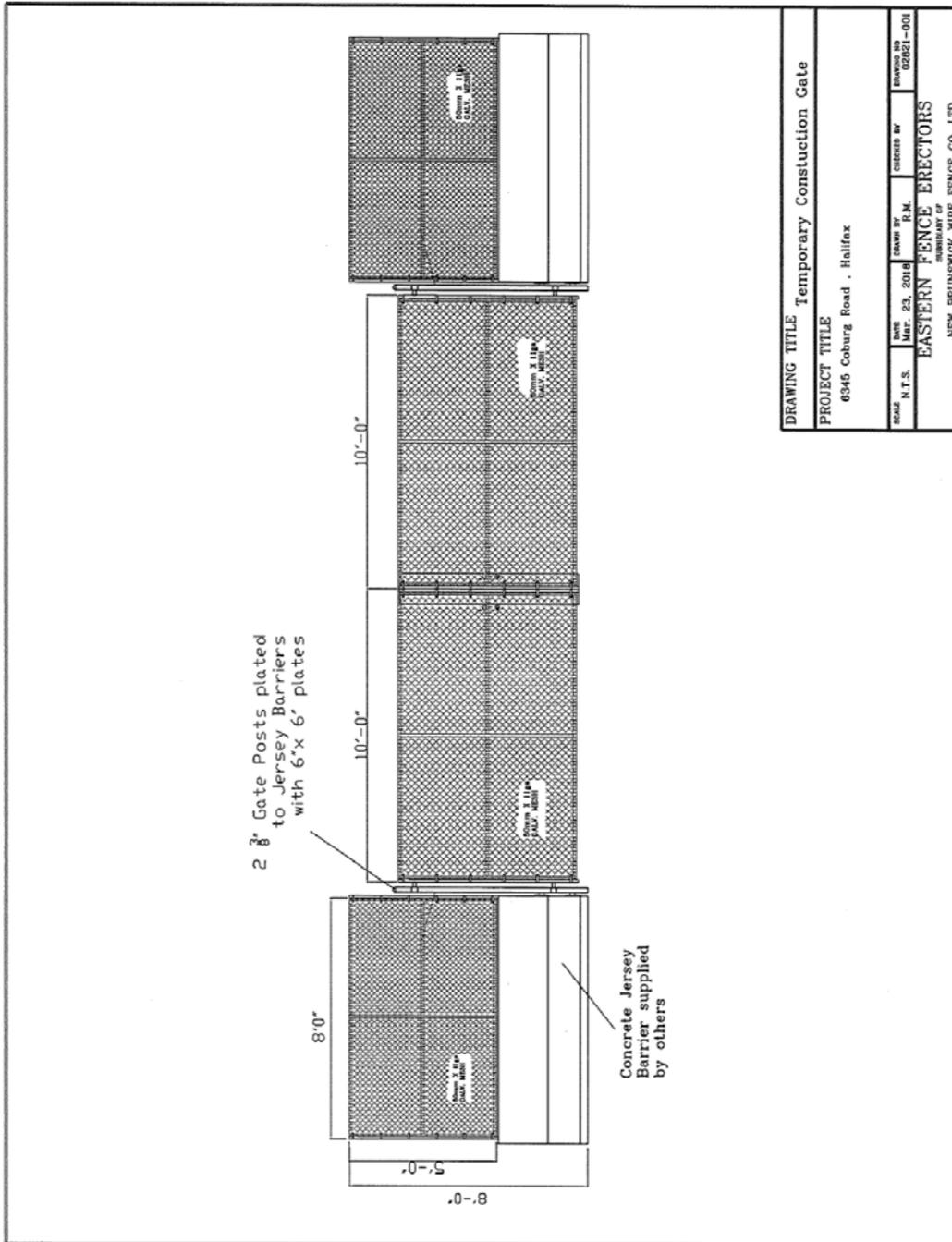


Note: All F-type concrete barriers within the street shall have reflective tape on them.





Sample Gate Detail

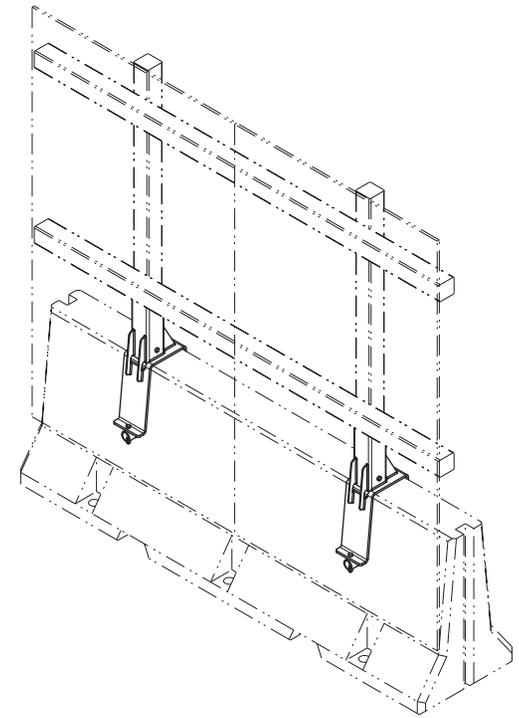
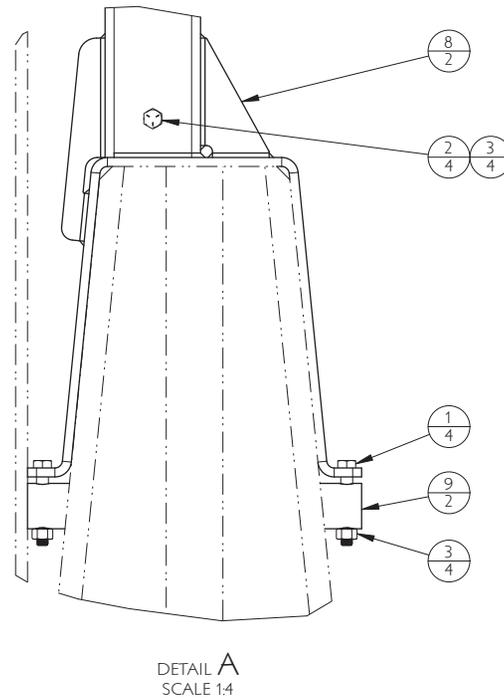
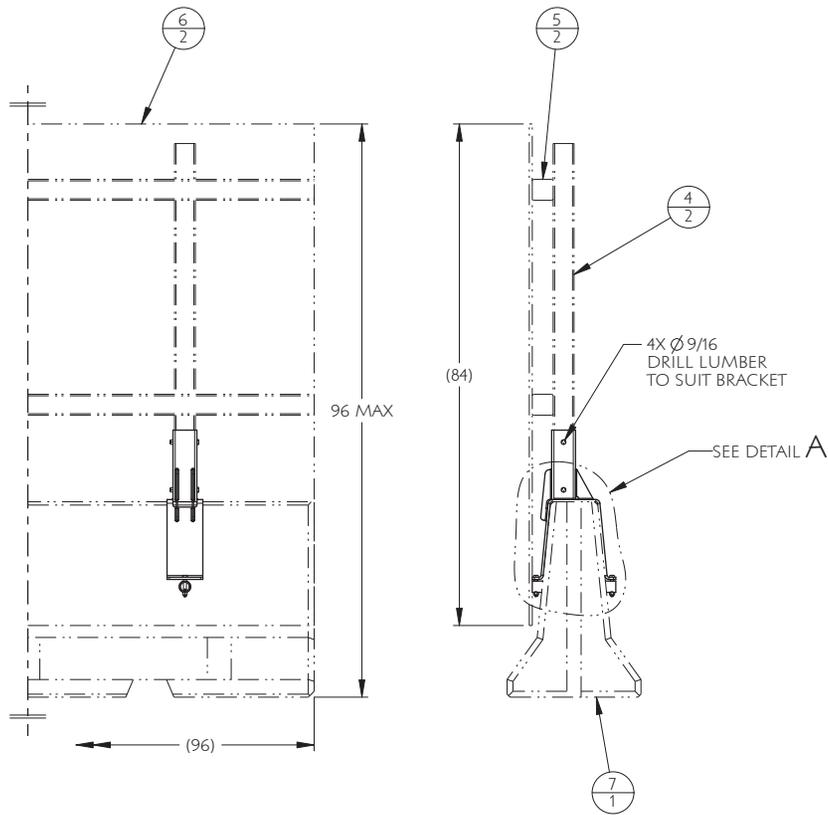


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PROJECT TITLE 6345 Coburg Road . Halifax			
SCALE N.T.S.	DATE Mar. 23, 2018	DRAWN BY R.M.	CHECKED BY DDB21-001
EASTERN FENCE ERECTORS NEW BRUNSWICK WIRE FENCE CO. LTD			





REV	ZONE	DESCRIPTION	DATE
A	-	FIRST ISSUE	-



ITEM N°	QTY	PART NUMBER	PART NAME	SUPPLY
1	4	-	1/2-13 UNC-2A X 3-1/4 LONG HEX HEAD SCREW, GRADE 5 MINIMUM	BY OTHERS
2	4	-	1/2-13 UNC-2A X 4-1/2 LONG HEX HEAD SCREW, GRADE 5 MINIMUM	BY OTHERS
3	8	-	1/2-13 UNC-2B NUT, GRADE 5 MINIMUM	BY OTHERS
4	2	-	4X4 LUMBER, 8 ft LONG	BY OTHERS
5	2	-	4X4 LUMBER, -5 ft LONG	BY OTHERS
6	2	-	PLYWOOD SHEET	BY OTHERS
7	1	-	SHAW PRECAST SOLUTIONS STANDARD JJ BARRIER, F-TYPE	BY OTHERS
8	2	PO25-0002-00	BARRIER BRACKET	VELOCITY MACHINING & WELDING INC.
9	2	PO25-0003-00	FASTENING PIPE	VELOCITY MACHINING & WELDING INC.

NOTES:

- FOR USE IN 100 km/hr WINDS MAXIMUM. WIND SPEEDS GREATER THAN 100 km/hr MAY CAUSE BARRIER TO TIP OVER.



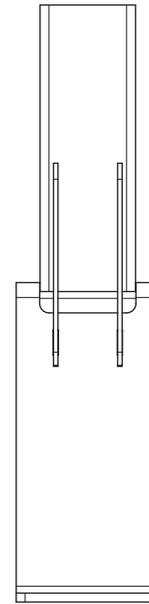
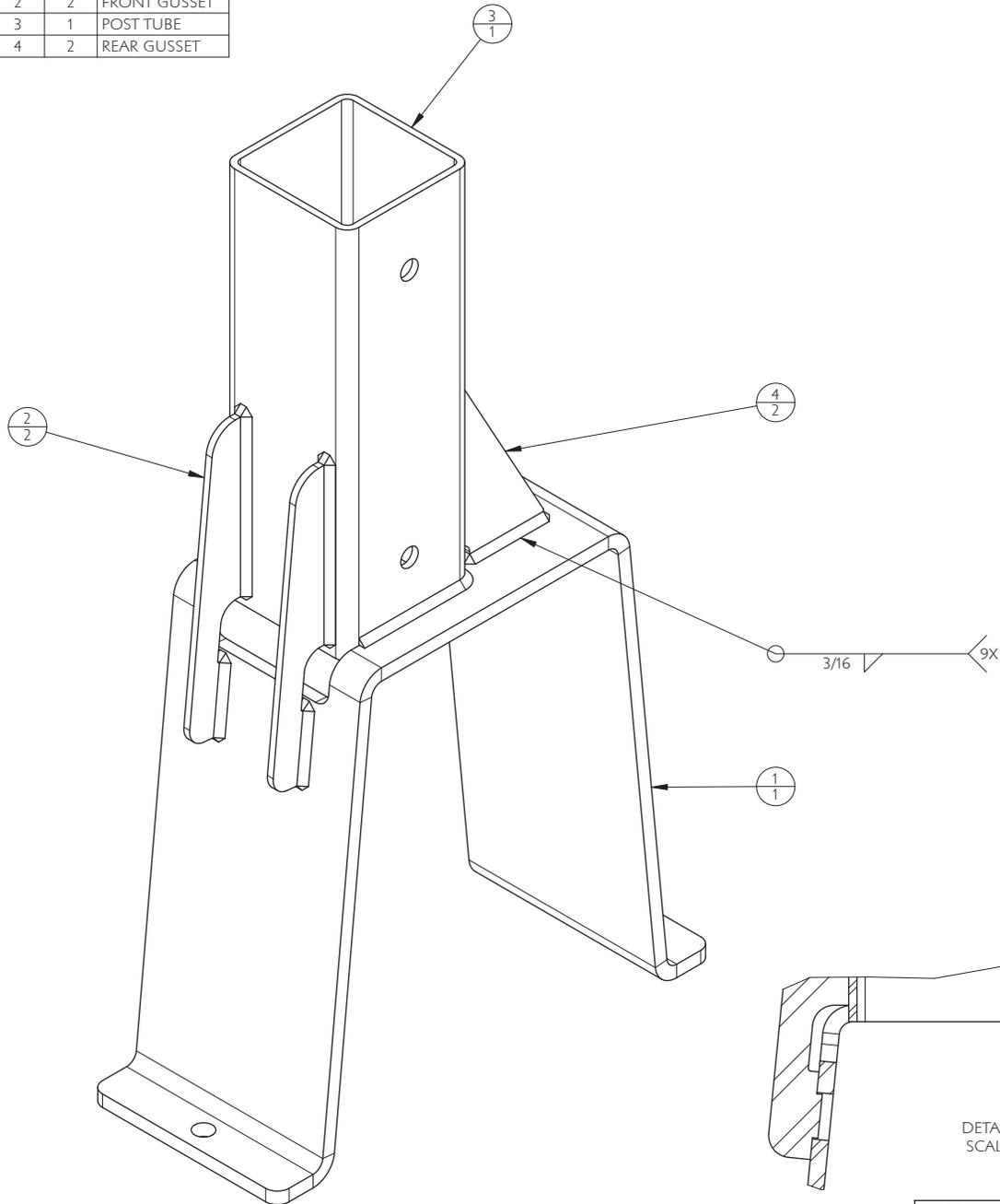
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Original Sign				
S. ROBERTSON	CHECKED <i>BBH</i>		TITLE <b>BARRIER BRACKET GA</b>	REV <b>A</b>
APPROVED <i>[Signature]</i>	SIZE <b>C</b>	THIRD ANGLE PROJECTION	DRAWING N° <b>PO25-0001-00</b>	
DATE 2019-10-28	SCALE <b>1:16</b>	SHEET 1 OF 1		

THIS DRAWING BELONGS TO WELL ENGINEERED. CONTACT US IF YOU WISH TO REPRODUCE IT OR COMMUNICATE ANY OF ITS CONTENTS. PERMISSION WILL LIKELY BE GRANTED AND GIVEN IN WRITING.

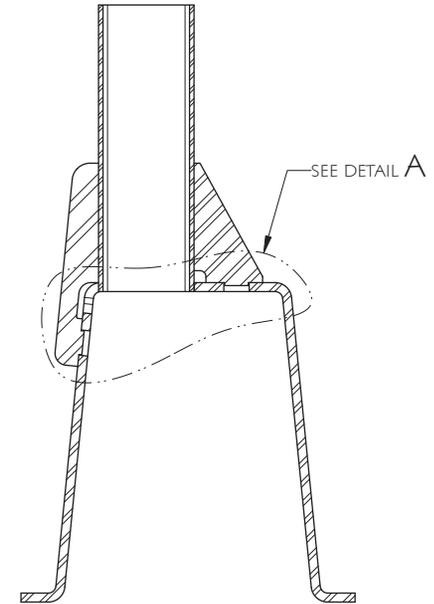
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TOLERANCES AND FINISH UNLESS NOTED OTHERWISE					
≤	X & X/X	XX	XXX	XXXX	FILLETS   CORNERS   125/
±5°	±1/32	±.01	±.005	±.0010	Ø2 MAX   Ø2 MAX   √MAX

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2	2	FRONT GUSSET
3	1	POST TUBE
4	2	REAR GUSSET

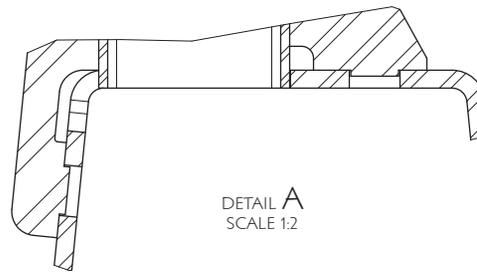
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A	-	FIRST ISSUE	-



SCALE 1:4



SECTION A-A



DETAIL A  
SCALE 1:2

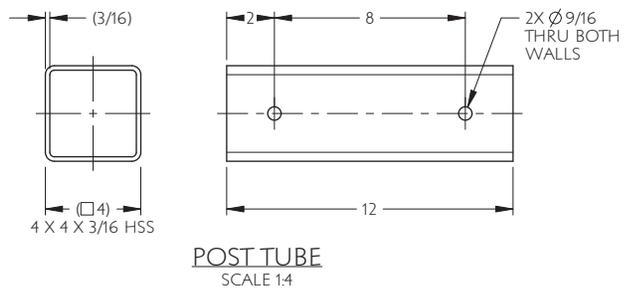
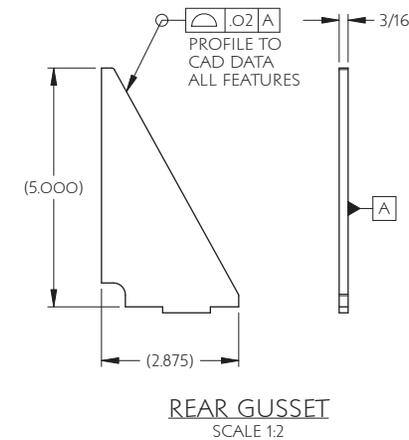
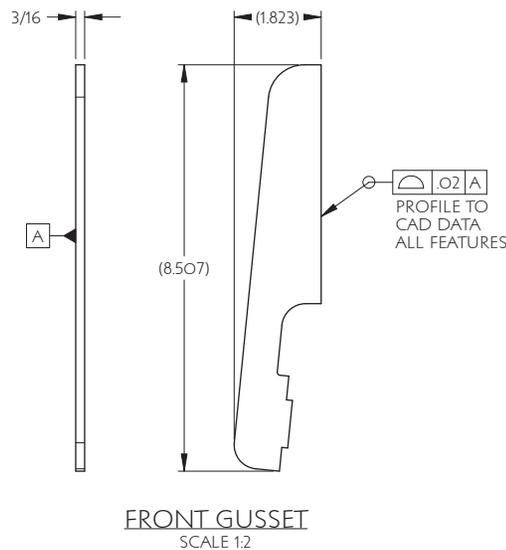
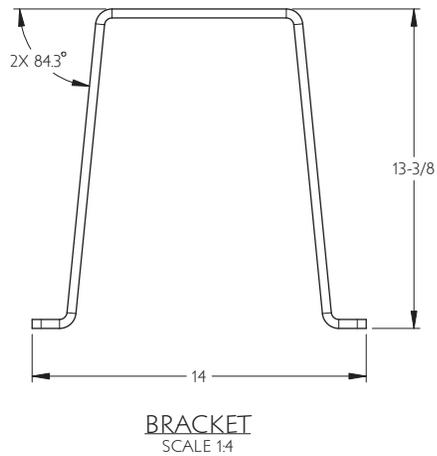
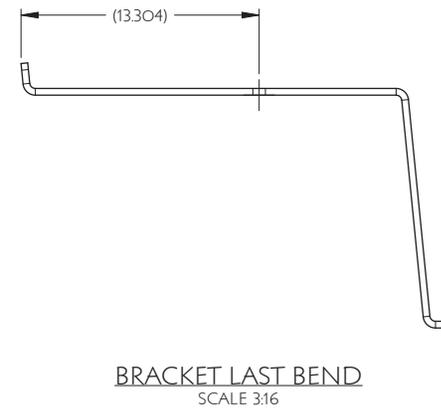
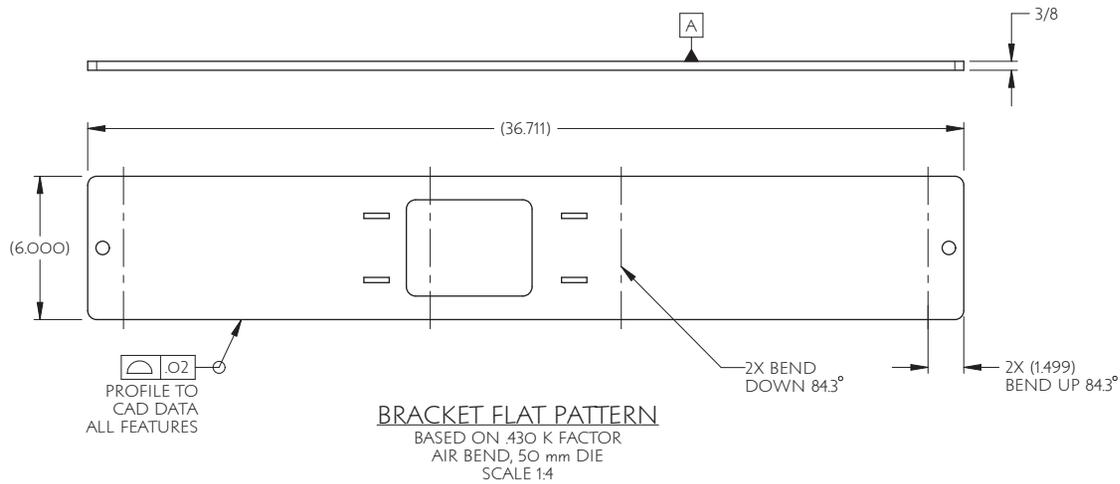


NOTES:

1. WELDING SHALL CONFORM TO REQUIREMENTS OF C.S.A W59.

MASS	32,535 lbm		
MATERIAL	A36 STEEL		
DRAWN	S. ROBERTSON	121 ILSLEY AVE, UNIT 114, DARTMOUTH NOVA SCOTIA, CANADA, B3B 1S4 <a href="http://wellengineered.ca/">http://wellengineered.ca/</a>	
CHECKED	BBH	TITLE	BARRIER BRACKET
APPROVED	[Signature]	SIZE	C
DATE	2019-10-28	THIRD ANGLE PROJECTION	
DIMENSIONS IN INCHES, INTERPRET PER ASME Y14.5M-1994 TOLERANCES AND FINISH UNLESS NOTED OTHERWISE <math>\leq X & X/X   XX   XXX   XXXX   FILLETS   CORNERS   125 / <math>\pm 5^{\circ}   \pm 1/32   \pm 0.1   \pm 0.005   \pm 0.010   0.2 \text{ MAX}   0.2 \text{ MAX}   \sqrt{\text{MAX}}       </math>		DRAWING N°	PO25-0002-00
		REV	A
		SCALE	1:2
		SHEET 1 OF 2	

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MASS	32.535 lbm
MATERIAL	A36 STEEL
DRAWN	S. ROBERTSON
CHECKED	BBH
APPROVED	[Signature]
DATE	2019-10-28

**WellENGINEERED**  
 121 ILSLEY AVE, UNIT 114, DARTMOUTH  
 NOVA SCOTIA, CANADA, B3B 1S4  
<http://wellengineered.ca/>

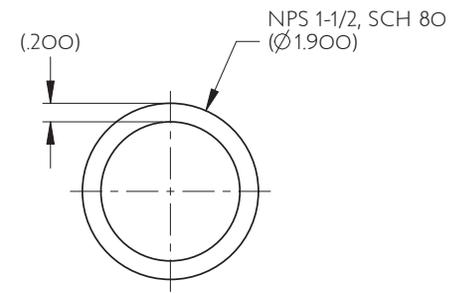
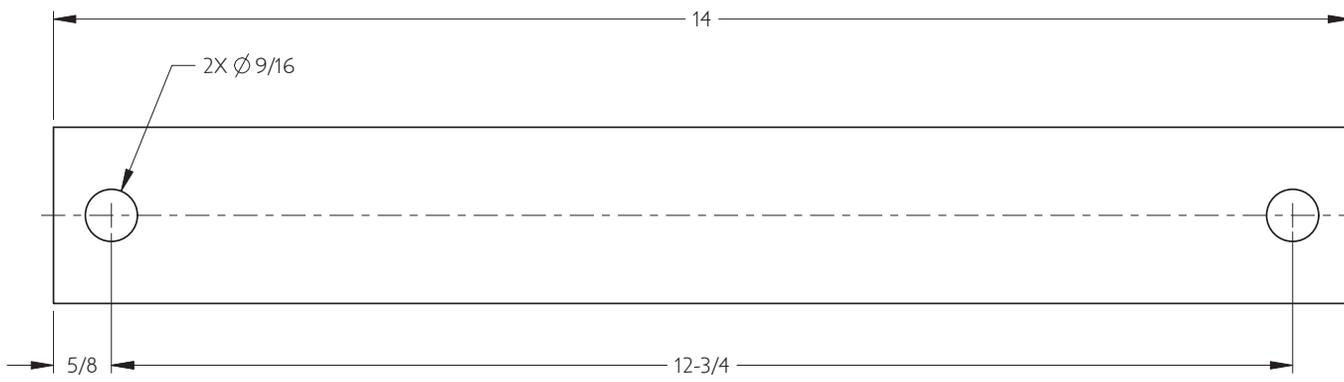
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DIMENSIONS IN INCHES, INTERPRET PER ASME Y14.5M-1994  
 TOLERANCES AND FINISH UNLESS NOTED OTHERWISE

∠	X & X/X	XX	XXX	XXXX	FILLETS	CORNERS	125/
±5°	±1/32	±.01	±.005	±.0010	.02 MAX	.02 MAX	√MAX

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SCALE	1:2	SHEET 2 OF 2

REV	ZONE	DESCRIPTION	DATE
A	-	FIRST ISSUE	-



MASS	4.160 lbm
MATERIAL	ASTM A 53
DRAWN	S. ROBERTSON



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 NOVA SCOTIA, CANADA, B3B 1S4  
<http://wellengineered.ca/>

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DIMENSIONS IN INCHES, INTERPRET PER ASME Y14.5M-1994							
TOLERANCES AND FINISH UNLESS NOTED OTHERWISE							
∠	X & X/X	XX	XXX	XXXX	FILLETS	CORNERS	125/√MAX
±5°	±1/32	±.01	±.005	±.0010	.02 MAX	.02 MAX	√MAX

CHECKED	BBH	TITLE	FASTENING PIPE	
APPROVED	mbh	SIZE	B	REV
DATE	2019-10-29	THIRD ANGLE PROJECTION		DRAWING N°
		SCALE	3:4	PO25-0003-00
				SHEET 1 OF 1

## Appendix F – Hoarding Information

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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.

UltraMesh® Eclipse® if a 7.96 oz. which is a polyester, black-backed mesh that is used where complete opacity is required.

UltraMesh Eclipse is UV printable for project renderings and is typically used for building and fence graphic wraps. The product is available in widths of 126" and 196".

Product example is shown below with the technical data sheet on the following page.

Sample Dust Control Mesh



Plywood Option



Printed Banner over Plywood



UltraMesh Eclipse is a 7.96 oz. polyester, black-backed mesh. The material is ideal for applications where complete opacity is required. UltraMesh Eclipse is UV printable and may be used for building wraps and fence graphics. Available in widths of 126 and 196 .

### Material Details

CHARACTERISTICS	TEST METHOD	METRIC	ENGLISH
Base Fabric	100% PES	1000D×1000D	
Construction			12×12
Total Weight	DIN53352 BS3424 Method5A	270 +/- 20 gsm/m <sup>2</sup>	7.96 oz/yd <sup>2</sup>
Width		Up to 500cm	
Tensile Strength	DIN53352 BS3424	Warp 1250 n/5cm Weft 1100 n/5cm	142.75 x 130.19 lb/in
Tear Strength	DIN53356 BS3424	Warp 235 N Weft 225 N	52.8 x 50.5 lbf
Air Permeability	GB/T 2410-2008		2649 mm/s
Light Transmission	GB/T 5453-1997		37%
Temperature Resistance	DIN53357 BS3425 Method 10		-20°C /70°C

### Applications

	Back-lit	Banner	Billboard	Block-out	Building Wrap	Fence Graphics	Truckside
Applications		■		■	■	■	

### Ink Printability

Solvent	Eco Solvent	UV	Latex	Screen Printing	Dye Transfer	Dye Direct
		■				

### Available Sizes

Metric (m)	English (inches)
3.20, 5.00	126 , 196

The information on physical and chemical characteristics is based upon tests believed to be reliable. The values are intended only as a source of information. A legally binding guarantee of specific properties is not to be inferred from our specifications. They are given without guaranty and do not constitute a warranty. A weight variance of +1/-2 is acceptable. The purchaser should independently determine, prior to use, the suitability of this material for his/her specific purpose. (Data represents averages and is not intended for use as a specification.)

## Appendix G – Project Information Board

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**May 2022 – July 2024**

**PROPOSED BUILDING**  
**Windsor & Willow Apartments**

8 – Storey Residential Building

7 levels - 84 Residential Units

Mixture of Bach, 1, 2 & 3-Bedroom units

Level 8 - Rooftop Landscaping with  
Indoor Amenity Space

Ground Level Common Courtyard

2 Levels of Underground Parking

Surface and Underground Bicycle parking

**Owner:**

Whimsical Lake Developments Limited  
36 Brookshire Court, Suite 15, Bedford, NS

**24 Hour Contact:**

**Fred Ghosn – (902) 877-0054**

**Contractor:**

Atlantic Road Construction and Paving  
6 Belmont Avenue, P.O. Box 89, Eastern Passage, NS

**Contact:**

Greg MacDonald - (902) 830-6411

**Traffic Control:**

Frontline Traffic Services  
6 Belmont Avenue, P.O. Box 89, Eastern Passage, NS

**Contact:**

Phil Pruneau – (902) 818-5548

**Rodent Control Company:**

Rentokil Pest Control  
51 Duke Street, Bedford, Bedford, NS

**Contact:**

Main office – (902) 835-2304

## Appendix H – Project Safety Signage

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**RESTRICTED**  
**— AREA —**

**CONSTRUCTION**  
**WORK IN**  
**PROGRESS**

## Appendix I – Project Signage Specifications

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Signage Specifications: Project Signage shall;

- Be constructed of weatherproof material (corrugated plastic)
- Have high visibility contrasting colours (dark letters on white background)
- Incorporate appropriate font types (mix of upper and lower-case lettering)
- Incorporate appropriate font sizes (16mm – 51mm) such that the signage is readable from a distance (16-20m)
- Size of signage will be poster size (600mm x 900mm) or larger; to allow community members to see and read the information from a distance
- Signage may incorporate plastic grommets positioned every 300mm around the perimeter of the signage to ensure a secure signage installation
- Signage will be installed/anchored to project fencing using plastic zip-ties
- Signage will be positioned along the project site as per the encroachment plan
- Signage shall not impede traffic of pedestrian sight lines
- **Signage shall be placed on site 10 days prior to the start of the noted construction activity to ensure the passing public has had adequate time to review, adjust their travel patterns, usage of streets and or can be considered 'informed'.**

Samples



## Appendix J – Sample Traffic Notification Letter

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## Proposed Multi-Unit Residential Building 2570 Windsor Street

### DRAFT NOTIFICATION LETTER

### TO WHOM IT MAY CONCERN

### Date

### NOTIFICATION OF TRAFFIC DISRUPTION: STREET NAME, HALIFAX, NOVA SCOTIA

This is to inform you that the to facilitate operations in association with the Multi-Unit Residential building construction work, traffic disruptions will occur on or about **DATE** with an anticipated duration of approximately **TIME**. The street will be **reduced(?)** to one lane of vehicular traffic during this time.

Should you have any questions or concerns please feel free to contact the below:

### CONTACT INFORMATION

General Contractor:

### Atlantic Road Construction and Paving

6 Belmont Avenue, P.O. Box 89

Eastern Passage, NS

B3G 1M7

Phone: (902) 830-6411

Should any questions arise, please feel free to contact the undersigned.

Yours Truly,

Greg MacDonald

Atlantic Road Construction and Paving

## Appendix K – Vehicular and Pedestrian Hazard Assessment

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Project

Date:

Location:

## VEHICULAR &amp; PEDESTRIAN HAZARD ASSESSMENT

No.	Hazard:	Project Phase:	Vehicular Impacts:	Mitigation Methods:	Pedestrian Impacts:	Mitigation Methods:
1	Building Demolition	Demolition	Debris may fall off building, damaging vehicles.	Spotters to be present to ensure vehicles temporarily do not park adjacent to site during front wall tear down.	Debris may fall off building, injuring pedestrians.	Temporarily close sidewalks adjacent to site, moving pedestrians to opposite side of street.
2	Excavation	Excavation	Vehicles may enter project site and fall down excavation. Vehicle weight may surcharge excavation, causing excavation wall failure.	Place concrete barriers along travel ways. Concrete barriers and existing curbs to prevent vehicle entry. Close sidewalks & driveways adjacent to project site, moving vehicles farther away from excavation.	Pedestrians may enter project site and fall down excavation.	Place concrete barriers/rigid fencing around entire project site.
3	Rock Blasting	Excavation	Blasted rock projectiles may strike vehicles.	Close sidewalks & driveways adjacent to site, moving vehicles farther away from blasted rock.	Blasted rock projectiles may strike pedestrians.	Install solid plywood hoarding along rigid fence adjacent to blasting zone.
4	Construction Waste	All Phases	Vehicles may be struck by construction waste.	The contractor shall keep the project site and surrounding areas clean and free of construction debris.	Pedestrians may be struck by construction waste.	The contractor shall keep the project site and surrounding areas clean and free of construction debris.
5	Vehicular & Pedestrian Activities	All Phases	Drivers and pedestrians may become confused or impatient with construction activities. Pedestrians may walk in unmarked crosswalks or in vehicular travel areas. Drivers may fail to obey traffic signage.	Vehicular and pedestrian signage will be posted prominently around the project site to facilitate pedestrian movement. Notification will be sent prior to all traffic interruptions.	Drivers and pedestrians may become confused or impatient with construction activities. Pedestrians may walk in unmarked crosswalks or in vehicular travel areas. Drivers may fail to obey traffic signage.	Vehicular and pedestrian signage will be posted prominently around the project site to facilitate pedestrian movement. Notification will be sent prior to all traffic interruptions.
6	Heavy Machinery Operation	All Phases	Heavy machinery or vehicles may break down or overturn, damaging other vehicles.	The contractor shall maintain safe distances between vehicles and heavy machinery on-site. Concrete barriers will be installed to separate construction vehicles from public traffic.	Heavy machinery or vehicles may break down or overturn, injuring pedestrians.	The contractor shall maintain safe distances between pedestrians, vehicles, and heavy machinery. Rigid fences will be installed to separate construction vehicles from pedestrians.
			Heavy machinery or vehicles may overturn due to uneven terrain, damaging other vehicles.	The contractor shall maintain safe distances between vehicles and heavy machinery on-site and ensure travel routes are kept flat.	Heavy machinery or vehicles may overturn due to uneven terrain, injuring pedestrians. Pedestrians may walk on uneven terrain causing them to twist their ankles or fall.	The contractor shall maintain safe distances between pedestrians, vehicles, and heavy machinery and ensure travel routes are kept flat.
7	Construction Signage	All Phases	Construction signage may strike vehicular traffic.	Construction signage will be securely fixed to existing poles, temporary concrete sign bases, or rigid fences.	Pedestrians may walk into construction signage, including traffic signage, wayfinding signs, etc. may.	Signage will be angled in line with pedestrian routes and/or be placed at heights such that they do not pose a risk to pedestrians.
					Construction signage may strike pedestrians.	Construction signage will be securely fixed to existing poles, temporary concrete sign bases, or rigid fences.
8	Dangerous Materials	All Phases	Flammable, explosive, & hot materials may damage vehicles if not properly maintained & stored.	The contractor will use and store dangerous materials properly as per manufacturers' specifications.	Flammable, explosive, & hot materials may injure pedestrians if not properly maintained & stored.	The contractor will use and store dangerous materials properly as per manufacturers' specifications.
9	Hoisting Operations	Superstructure	Precast concrete panels and other items hoisted may fall from heights and damage vehicles.	Proper hoisting and lifting techniques will be used to ensure that materials do not fall from heights. F-Type concrete barriers will be installed such that loads are never suspended above the public realm.	Precast concrete panels and other items hoisted may fall from heights and injure pedestrians.	Proper hoisting and lifting techniques will be used to ensure that materials do not fall from heights. Pedestrians will be moved to opposite sides of street from the project site or onto temporary sidewalks such that loads are never suspended above the public realm.
10	Reinstatement of Public Infrastructure & Service Installation	Superstructure	Heavy equipment and hot concrete used during public infrastructure reinstatement and service installation may cause damage to vehicles.	The contractor shall maintain safe distances between vehicles and heavy machinery on-site. Concrete barriers will be installed to separate construction vehicles from public traffic during public infrastructure reinstatement and service installation.	Heavy equipment and hot concrete used during public infrastructure reinstatement may injure pedestrians.	The contractor shall maintain safe distances between pedestrians, vehicles, and heavy machinery.
11	Fallen debris	Superstructure	Debris may fall from upper stories of the new building causing damage to vehicles.	F-Type concrete barriers will be installed such that a safe distance is maintained between the building envelope and vehicular traffic.	Debris may fall from upper stories of the new building injuring pedestrians.	Construction of upper building levels will be set back from the property line/rigid fencing, this separating pedestrians from potential fallen debris.

## Appendix L – Community Consultation Records

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# COMMUNITY CONSULTATION MAP OVERVIEW

## Project – Windsor & Willow Apartments



# Notification Letter

Date: \*\*\*\*\*

Whimsical Lake Developments Ltd – Building Construction Information Meeting

Dear Neighbour,

As you may be aware, we are planning an apartment building construction project on the corner of Windsor and Willow Street. In preparation for this we are going to demolish our current building located at 6233 Willow Street and excavate our vacant land located at civic 2570 Willow Street, Halifax.

If you are interested in receiving more information about our construction plans, practices, schedule and to go over any questions you may have regarding construction of our new project please contact us to discuss. We would be happy to meet with you to discuss.

Thank you.

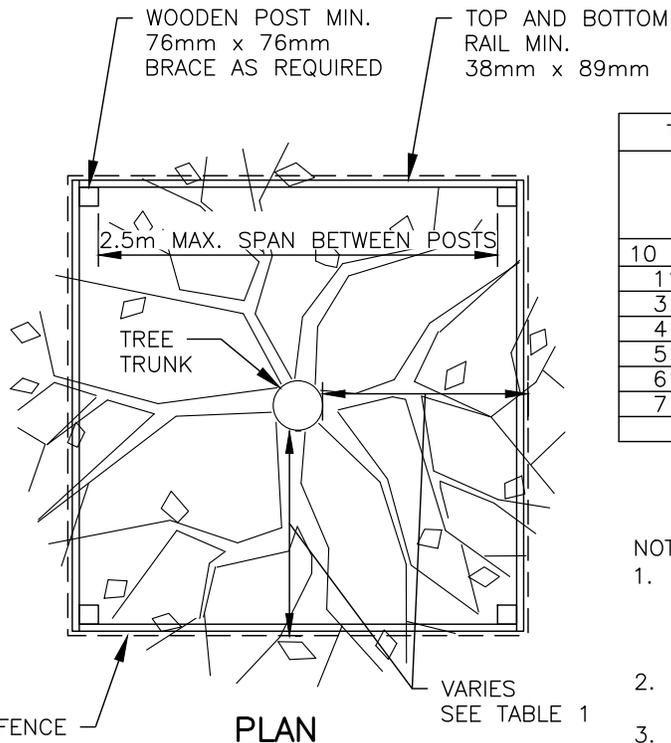
Fred Ghosn

Cell: (902) 877-0054

Email: fredghosn@gmail.com

## Appendix M – HRM Tree Detail

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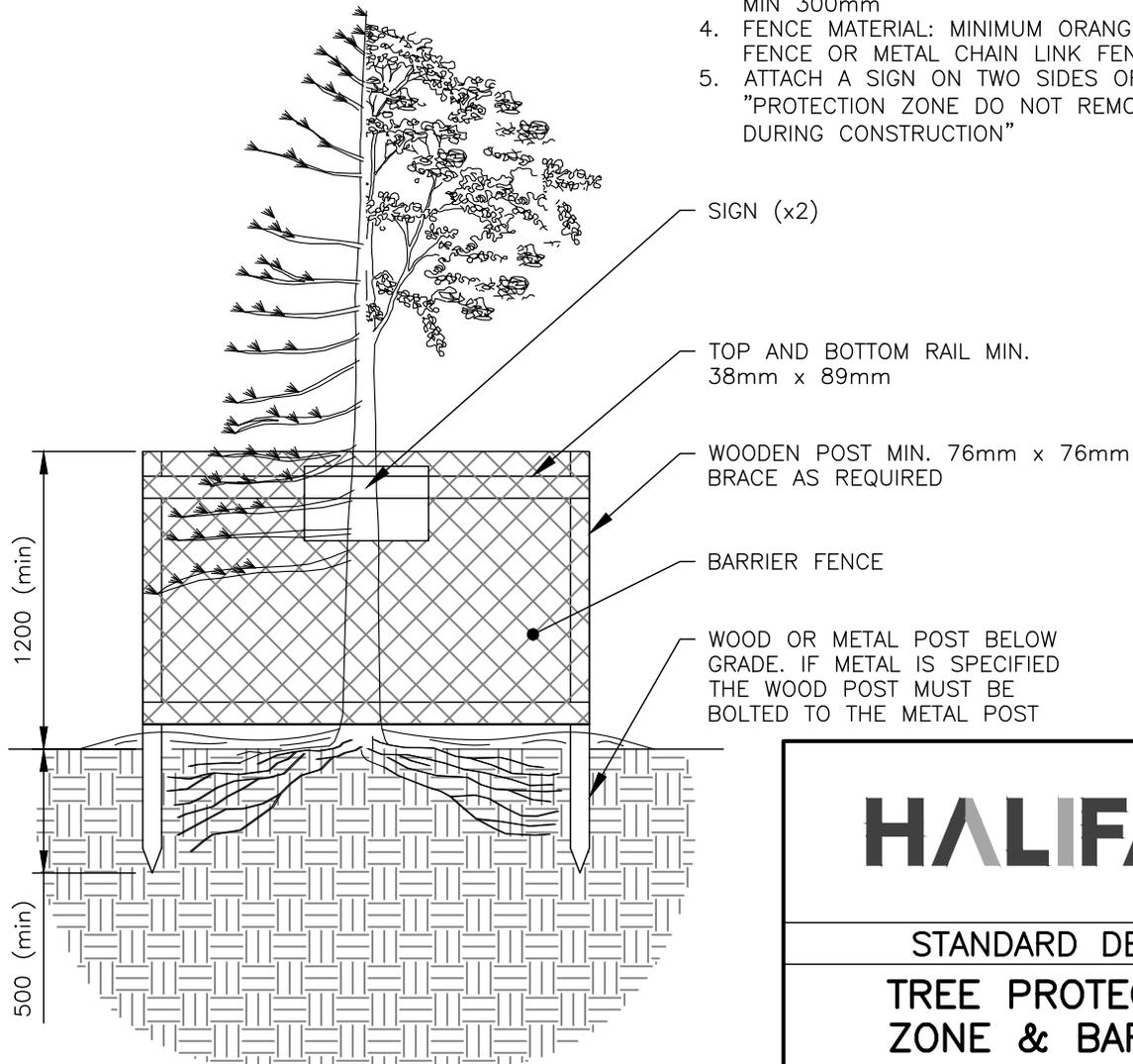
**PLAN**

**TABLE 1**

TREE PROTECTION ZONE CALCULATION TABLE	
TRUNK DIAMETER (DBH)	MINIMUM PROTECTION DISTANCE REQUIRED (MEASURE FROM THE OUTSIDE EDGE OF TREE TRUNK)
10 CM & UNDER	1.2 METERS
11 – 30 CM	2.0 METERS
31 – 40 CM	3.4 METERS
41 – 50 CM	4.6 METERS
51 – 60 CM	6.0 METERS
61 – 70 CM	7.0 METERS
71 – 80 CM	8.0 METERS
>80 CM	9.0 METERS

**NOTES:**

1. WOOD POST: (MIN. 76mm WIDTH) INSTALLED TO A DEPTH OF 500mm. TOP AND BOTTOM RAIL: (MIN. 38 x 89mm CONSTRUCTION, MAX. SPAN 2.5m), CROSS BRACING AS REQUIRED.
2. NO GROUND DISTURBANCE WITHIN 1.2 METER OF THE TREE TRUNK (I.E. POST INSTALLATION)
3. POSTS SET BACK FROM SIDEWALK AND CURB: MIN 300mm
4. FENCE MATERIAL: MINIMUM ORANGE BARRIER FENCE OR METAL CHAIN LINK FENCE
5. ATTACH A SIGN ON TWO SIDES OF THE TREE "PROTECTION ZONE DO NOT REMOVE FENCE DURING CONSTRUCTION"



**PROFILE**

**HALIFAX**

STANDARD DETAIL

**TREE PROTECTION ZONE & BARRIER**

DATE:	2021	REFERENCE	APPROVED
SCALE:	NTS		FIG No.: <b>HRM 140</b>

## Appendix N – Rodent Control Plan

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GRID NORTH

NSHPN 204879  
 N 4,946,338.205m  
 E 25,571,280.783m  
 (2016-09-26)

NORTH STREET

WINDSOR STREET  
 (16.764m WIDE)

PID 00133124  
 LOT A  
 (SEE NOTE 1)  
 PETER JOHN METLEJ

PID 40702250  
 LOT B-2  
 (SEE NOTE 1)  
 JOANNE MARIE MACDONALD,  
 LIAM CAMERON MACDONALD &  
 CAMERON LAUREL MACDONALD

PID 40702243  
 LOT B-1  
 (SEE NOTE 1)  
 JOYTIROY CHOWDHURY  
 & SUCHITA CHOWDHURY

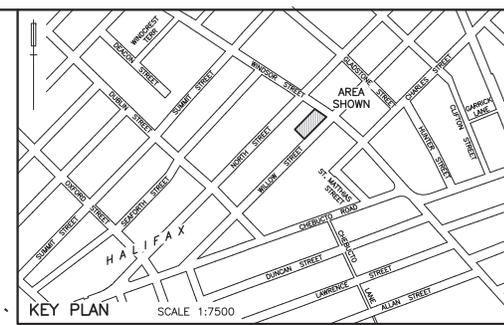
PID 00133116  
 LOT 1  
 HCLRO PLAN NO. 152  
 JACOB ARTHUR  
 JEBBAILEY

BLOCK W  
 1,846.8 SQ.M

WHIMSICAL LAKE DEVELOPMENTS LIMITED

HCLRO DOC NO. 108889985  
 HCLRO PLAN NO. 98912471

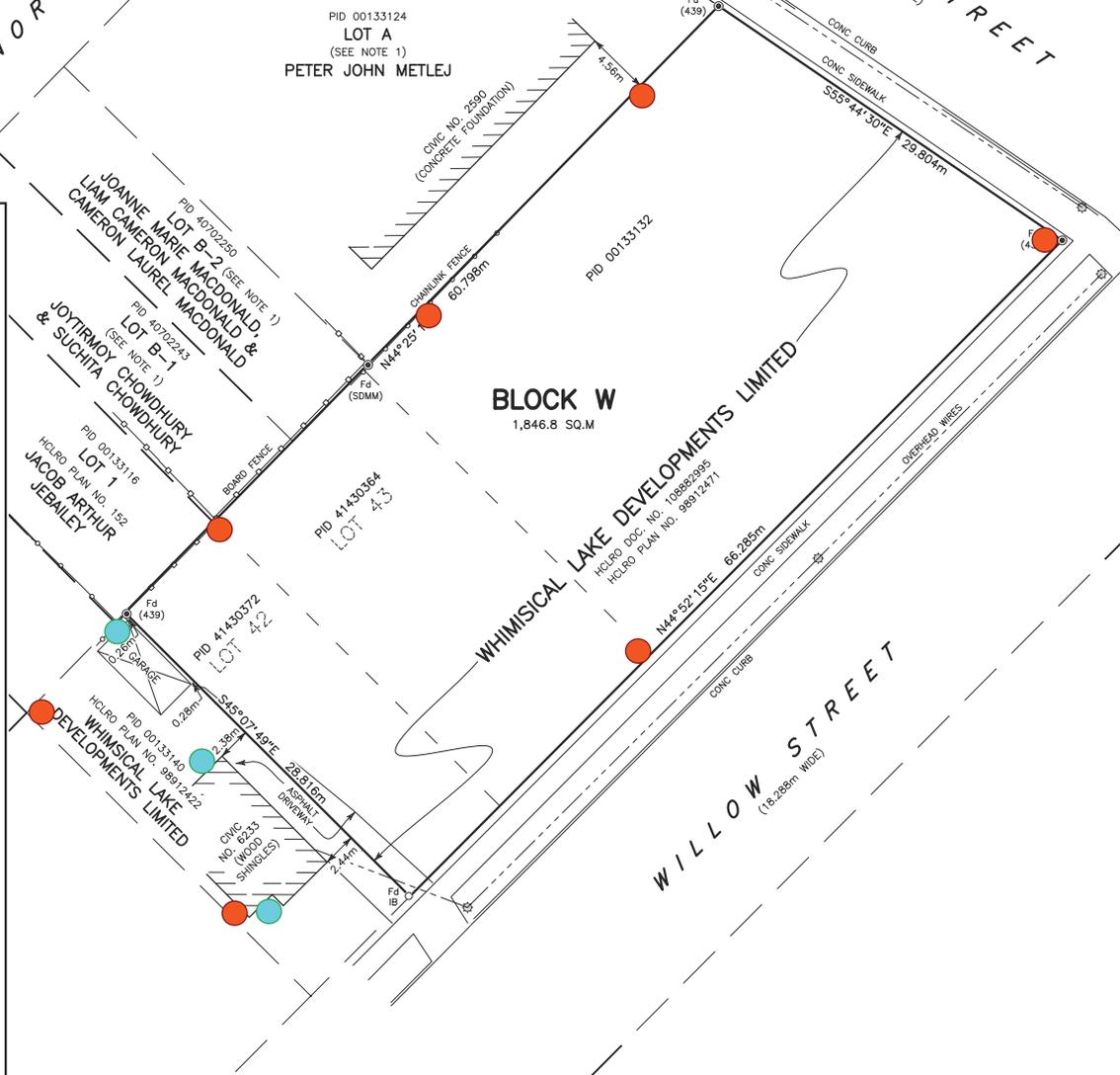
WILLOW STREET  
 (18.289m WIDE)



- LEGEND
- PERIMETER OF LANDS SURVEYED
  - NSHPN . . . . . NOVA SCOTIA HIGH PRECISION NETWORK MONUMENT
  - IB . . . . . SURVEY MARKER SET
  - . . . . . IRON BAR
  - ⊕ . . . . . UTILITY POLE & ANCHOR
  - HCLRO . . . . . HALIFAX COUNTY LAND REGISTRATION OFFICE
  - PID . . . . . PARCEL IDENTIFICATION NUMBER
  - Fd . . . . . FOUND
  - SQ.M . . . . . SQUARE METERS
  - (439) . . . . . RODERICK K. MACINNIS, N.S.L.S.

Bait Station Legend	
Pre Demolition	<span style="color: cyan;">●</span>
Post Demolition	<span style="color: red;">●</span>

-  
 Rodent Control Plan  
 -  
 Prepared for  
 Rentokil Atlantic  
 -  
 51 Duke Street, Bedford, NS  
 -  
 (902) 835-2304



**Protecta®**  
**EVO®** **AMBUSH™**  
 PATENT PENDING



**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
  - or -
  - T-Rex™ rat trap or Mini-Rex™ mouse trap
- ▶ Compatible with Sidekick® Load-N-Lock™ system



PRODUCT	CODE	DIMENSIONS (in)	CASE QTY
Protecta Evo Ambush	EA2000	8 1/2 x 10 1/4 x 4 1/4	6 Stations



**More Than Meets The Eye**

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

[www.belllabs.com](http://www.belllabs.com)

ALL-WEATHER  
**BLOX™**



**CONTRAC®**  
**ALL-WEATHER BLOX™**

**KILLS RATS, MICE & MEADOW VOLES\***

***Kills Warfarin Resistant Norway Rats***

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See back panels for First Aid and additional precautionary statements.

ACTIVE INGREDIENT:

Bromadiolone (CAS #28772-56-7): . . . . . 0.005%

OTHER INGREDIENTS†: . . . . . 99.995%

†Contains Denatonium Benzoate      TOTAL 100.000%

\*Not permitted for use against the following species in California: Cotton rat, Eastern harvest mouse, Golden mouse, Polynesian rat, Meadow vole, White-throated woodrat, Southern plains woodrat, and Mexican woodrat.

NET WT:  
**18 lbs (8.2 kg)**

#### FIRST AID

##### HAVE LABEL WITH YOU WHEN OBTAINING TREATMENT ADVICE

###### IF SWALLOWED:

- Call a poison control center, doctor, or 1-877-854-2494, or 1-800-858-7378\*\* 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 the poison control center or doctor.

###### IF ON SKIN OR CLOTHING:

- Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes.
- Call a poison control center or doctor for treatment advice.

###### 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 center, doctor, or 1-877-854-2494 immediately for treatment advice.

\*\* Also call this number for information on health concerns and pesticide incidents.

#### NOTE TO PHYSICIAN

If swallowed or absorbed through the skin, this material may reduce the clotting ability of the blood and cause bleeding. If ingested, administer Vitamin K<sub>1</sub> intramuscularly or orally. Repeat as necessary based on monitoring of prothrombin times.

#### TREATMENT FOR PET POISONING

If animal eats bait, call veterinarian at once.

#### NOTE TO VETERINARIAN

**Anticoagulant Bromadiolone:** For animals ingesting bait and/or showing poisoning signs (bleeding or elevated prothrombin times), give Vitamin K<sub>1</sub>. If needed, check prothrombin times every 3 days until values return to normal (up to 30 days). In severe cases, blood transfusions may be needed.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**READ THIS LABEL:** Read this entire label and follow all use directions and use precautions. Use only for sites, pests, and application methods described on this label.

**IMPORTANT:** Do not expose children, pets, or nontarget animals to rodenticides. To help to prevent exposure:

1. Store unused product out of reach of children and pets.
2. Apply bait in locations out of reach of children, pets, domestic animals and nontarget wildlife, or in tamper-resistant bait stations. These stations must be resistant to destruction by dogs and by children under six years of age, and must be used in a manner that prevents such children from reaching into bait compartments and obtaining bait. If bait can be shaken from bait stations when they are lifted, units must be secured or otherwise immobilized. Stronger bait stations are needed in areas open to hoofed livestock, raccoons, bears, or other potentially destructive animals, or in areas prone to vandalism.
3. Dispose of product container and unused, spoiled, or unconsumed bait as specified on this label.

**Bait stations are mandatory for outdoor, above-ground use. Tamper-resistant bait stations must be used wherever children, pets, non-target mammals, or birds may have access to the bait placement location.**

**USE RESTRICTIONS:** This product may only be used to control the following rodent pests in and around man-made structures: House mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), Roof rat (*Rattus rattus*), Cotton mouse (*Peromyscus gossypinus*), Cotton rat\* (*Sigmodon hispidus*), Deer mouse (*Peromyscus maniculatus*), Eastern harvest mouse\* (*Reithrodontomys humuli*), Golden mouse\* (*Ochrotomys nuttalli*), Polynesian rat\* (*Rattus exulans*), Meadow vole\* (*Microtus pennsylvanicus*), White-footed mouse (*Peromyscus leucopus*), White-throated woodrat\* (*Neotoma albigula*), Southern plains woodrat\* (*Neotoma micropus*), and Mexican woodrat\* (*Neotoma mexicana*). This product must be used in and within 100 feet of man-made structures constructed in a manner so as to be vulnerable to commensal rodent invasions and/or to harboring or attracting rodent infestations. Examples of such structures include homes and other permanent or temporary residences, food processing facilities, industrial and commercial buildings, trash receptacles, agricultural and public buildings, transport vehicles (ships, trains, aircraft), docks and port or terminal buildings and related structures around and associated with these sites. Fence and perimeter baiting, beyond 100 feet from a structure as defined above, is prohibited. This product must not be applied directly to food or feed crops.

587CB-9

# CONTRAC®

## ALL-WEATHER BLOX™

### KILLS RATS, MICE, AND MEADOW VOLES\*

#### Kills Warfarin Resistant Norway Rats

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

#### ACTIVE INGREDIENT:

Bromadiolone (CAS #28772-56-7): . . . . . 0.005%

OTHER INGREDIENTS: . . . . . 99.995%

†Contains Denatonium Benzoate TOTAL 100.000%

## KEEP OUT OF REACH OF CHILDREN CAUTION

See side panels for First Aid and additional precautionary statements.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store only in original container in a cool, dry place inaccessible to children and pets. Keep containers closed and away from other chemicals.

**Pesticide Disposal:** Wastes resulting from the use of this product may be placed in trash or delivered to an approved waste disposal facility.

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. [Plastic:] Offer for recycling or reconditioning; or puncture and dispose of in a sanitary landfill; or by incineration. In most states, burning is not allowed.

**WARRANTY:** To the extent consistent with applicable law, seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.

### NET WEIGHT: 18 lbs (8.2 kg)

EPA REG. NO. 12455-79

EPA EST. NO. 12455-WI-1

Manufactured by:

**Bell**  
LABORATORIES, INC.  
3699 Kinsman Blvd.  
Madison, WI 53704 U.S.A.  
www.bellabs.com  
**MADE IN USA**

#### DIRECTIONS FOR USE (Continued from other panel)

Burrow baiting with Contrac All-Weather Blox is prohibited.

Do not place near or inside ventilation duct openings. Do not contaminate water, food, feedstuffs, food or feed handling equipment, or milk or meat handling equipment or surfaces that come into direct contact with food. When used in USDA inspected facilities, this product must be applied in tamper-resistant bait stations. Do not broadcast bait. Do not use this product in sewers.

Do not sell this product in individual containers holding less than 16 pounds of bait.

**SELECTION OF TREATMENT AREAS:** Determine areas where rats, mice, or meadow voles\* will most likely find and consume the bait. Generally, these areas are along walls, by gnawed openings, in corners and concealed places, between floors and walls, or in locations where rats, mice, or meadow voles\*, or their signs have been seen. Protect bait from rain and snow. Remove as much alternative food as possible.

#### APPLICATION DIRECTIONS:

**RATS:** Place 3 to 16 bait blocks (at intervals of 15 to 30 feet) per placement in infested areas. Maintain an uninterrupted supply of fresh bait for at least 10 days or until signs of rat activity cease.

**MICE AND MEADOW VOLES\*:** Place 1 block per placement. Space placements at 8- to 12-foot intervals in infested areas. Two blocks may be needed at points of very high activity. Maintain an uninterrupted supply of fresh bait for at least 15 days or until signs of mouse or meadow vole\* activity cease.

**FOLLOW-UP:** Replace contaminated or spoiled bait immediately. Wearing gloves, collect and dispose of all dead, exposed animals and leftover bait. To prevent reinfestation, limit sources of rodent 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 as needed.

#### PRECAUTIONARY STATEMENTS

##### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed or absorbed through the skin. Keep away from children, domestic animals and pets. Do not get in eyes, on skin or on clothing.

All handlers (including applicators) must wear: shoes plus socks, and waterproof gloves. Any person who retrieves carcasses or unused bait following application of this product must wear gloves.

#### User Safety Requirements

Follow manufacturer's instruction for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash hands thoroughly after applying bait and before eating, drinking, chewing gum, using tobacco or using the toilet and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish, birds and other wildlife. Dogs and predatory and scavenging mammals and birds might be poisoned if they feed upon animals that have eaten this bait. Do not apply this product directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff also may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash water or rinsate.

\*Not permitted for use against the following species in California: Cotton rat, Eastern harvest mouse, Golden mouse, Polynesian rat, Meadow vole, White-throated woodrat, Southern plains woodrat, and Mexican woodrat.

Product Code: CB4051

090415/09-15





# DETEX<sup>®</sup> BLOX with LUMITRACK

## SAFETY DATA SHEET

ACCORDING TO REGULATION: OSHA  
Hazard Communication Standard 29 CFR 1910.1200

DATE OF ISSUE:  
January 2016

PREPARED BY:  
CAR

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** DETEX<sup>®</sup> BLOX with LUMITRACK  
**EPA Registration Number:** NA  
**Relevant identified uses of the substance or mixture and uses advised against**  
**Relevant identified uses:** Activity Monitoring - Ready to use  
**Uses advised against:** Use only for the purpose described above

**MANUFACTURER/SUPPLIER:**

Bell Laboratories, Inc.  
3699 Kinsman Blvd.  
Madison, WI 53704, USA  
Email: sds@belllabs.com  
Phone: 608-241-0202  
Medical or Vet Emergency: 877-854-2494 or 952-852-4636  
Spill or Transportation Emergency: 800-424-9300 (CHEMTREC)

### SECTION 2. HAZARDS IDENTIFICATION

**Classification according to Regulation OSHA 1910.1200(d):** Not classified  
**Signal Word:** None  
See Section 15 for information on FIFRA applicable safety, health, and environmental classifications.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	% By weight
<b>Inert and Non-Hazardous Ingredients</b> (Unlisted components are non-hazardous)	Proprietary	100.00%

### SECTION 4. FIRST AID MEASURES

**Description of first aid measures**  
**Ingestion:** Non-Toxic  
**Inhalation:** Not applicable.  
**Eye contact:** Non-Toxic  
**Skin contact:** Non-Toxic  
**Most important symptoms and effects, both acute and delayed**  
Non-Toxic  
**Advice to physician:** Non-Toxic  
**Advice to Veterinarian:** Non-Toxic

### SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing media**  
Suitable Extinguishing Media: water, foam or inert gas.  
Unsuitable Extinguishing Media: None known.  
**Special hazards arising from the mixture:** High temperature decomposition or burning in air can result in the formation of toxic gases, which may include carbon monoxide.  
**Advice for firefighters:** Wear protective clothing and self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** None. Non-Toxic  
**Environmental precautions:** None. Non-Toxic  
**Methods and materials for containment and cleaning up**  
**For Containment:** None. Non-Toxic  
**For Cleaning Up:** None. Non-Toxic  
**Reference to other sections:** Refer to Sections 7, 8 & 13 for further details of personal precautions, personal protective equipment and disposal considerations.

## SECTION 7. HANDLING AND STORAGE

**Precautions for safe handling:** Do not use near heat sources, open flame, or hot surfaces. Non-Toxic.

**Conditions for safe storage, including any incompatibilities:** None. Non-Toxic

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Established Limits

Component	OSHA	ACGIH	Other Limits
None	Not Established	Not Established	Not Established

**Appropriate Engineering Controls:** None. Non-Toxic

**Occupational exposure limits:** None. Non-Toxic

**Personal Protective Equipment:**

**Respiratory protection:** Not required

**Eye protection:** Not required

**Skin protection:** None. Non-Toxic

**Hygiene recommendations:** None. Non-Toxic

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance/Color:</b>	Tan wax block
<b>Odor:</b>	Sweet grain-like
<b>Odor Threshold:</b>	Not applicable, odor not associated with a hazardous material.
<b>pH:</b>	Not applicable, is not dispersible with water.
<b>Melting point:</b>	Not applicable
<b>Boiling point:</b>	Not applicable
<b>Flash point:</b>	Not applicable, does not contain components classified as flammable.
<b>Evaporation rate:</b>	Not applicable, is a solid.
<b>Flammability:</b>	Not applicable, is a solid.
<b>Upper/lower flammability or explosive limits:</b>	Not applicable, does not contain components classified as flammable or explosive.
<b>Vapor Pressure:</b>	Not applicable
<b>Vapor Density:</b>	Not applicable, is a solid
<b>Relative Density:</b>	1.13 g/mL @ 20°C
<b>Solubility (water):</b>	Not water soluble
<b>Solubility (solvents):</b>	Not applicable
<b>Partition coefficient: n-octanol/water:</b>	Not applicable
<b>Auto-ignition temperature:</b>	Not applicable, does not contain components classified as flammable.
<b>Decomposition temperature:</b>	Not applicable
<b>Viscosity:</b>	Not applicable, is not a liquid.

## SECTION 10. STABILITY AND REACTIVITY

**Reactivity:** Not Applicable

**Chemical stability:** Not Applicable

**Possibility of hazardous reactions:** Refer to Hazardous decomposition products

**Conditions to avoid:** Avoid extreme temperatures (below 0°C or above 40°C).

**Incompatible materials:** Not Applicable

**Hazardous decomposition products:** Not Applicable

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Acute Toxicity

**LD50, oral (ingestion):** Not Toxic

**LD50, dermal (skin contact):** Not Toxic

**LC50, inhalation:** Not Toxic

**Skin corrosion/irritation:** Not Toxic

**Serious eye damage/Irritation:** Not Toxic.

**Respiratory or skin sensitization:** Not Toxic

**Germ cell mutagenicity:** Not Toxic

**Carcinogenicity:** Not Toxic

<b>Components</b>	<b>NTP</b>	<b>IARC</b>	<b>OSHA</b>
None	NA	NA	NA

**Reproductive Toxicity:** Not Toxic  
**Aspiration Hazard:** Not Toxic  
**Target Organ Effects:** Not Toxic

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity Effects:** Not Toxic  
**Persistence and degradability:** Not Toxic  
**Bioaccumulative potential:** Not Toxic  
**Mobility in Soil:** Not Toxic.  
**Other adverse effects:** None.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal:** Wastes resulting from the use of this product may be placed in trash, on-site, or at an approved waste disposal facility. Dispose of all wastes in accordance with all Federal, state and local regulations.

## SECTION 14. TRANSPORT INFORMATION

**UN number:** Not regulated  
**UN proper shipping name:** Not regulated  
**Transport hazard class(es):** Not regulated  
**Packing group :** Not regulated  
**Environmental Hazards**  
**DOT Road/Rail:** Not considered hazardous for transportation via road/rail.  
**DOT Maritime:** Not considered hazardous for transportation by vessel.  
**DOT Air:** Not considered hazardous for transportation by air.  
**Freight Classification:** LTL Class 60  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:** Not applicable  
**Special precautions for user:** None

## SECTION 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture:** Not applicable  
**Signal Word:** None  
**Precautionary Statements:** None  
**Potential Health Effects:**  
**Eye Contact:** May cause irritation  
**Skin Contact:** Non-irritating to the skin  
**Ingestion:** Not harmful if swallowed  
  
**TSCA:** All components are listed on the TSCA Inventory or are not subject to TSCA requirements  
**CERCLA/SARA 313:** Not Toxic  
**CERCLA/SARA 302:** Not Toxic

## SECTION 16. OTHER INFORMATION

For additional information, please contact the manufacturer noted in Section 1.

<b>NFPA</b>	Health: 0 (Not Toxic)	Flammability: 1 (slight)	Reactivity: 0 (stable)	Specific Hazard: None
<b>HMIS</b>	Health: 0 (Not Toxic)	Flammability: 1 (slight)	Reactivity: 0 (minimal)	Protective Equipment: None

**Disclaimer:** The information provided in this Safety Data Sheet has been obtained from sources believed to be reliable. Bell Laboratories, Inc. provides no warranties; either expressed or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your consideration and investigation. The user is responsible to ensure that they have all current data, including the approved product label, relevant to their particular use.

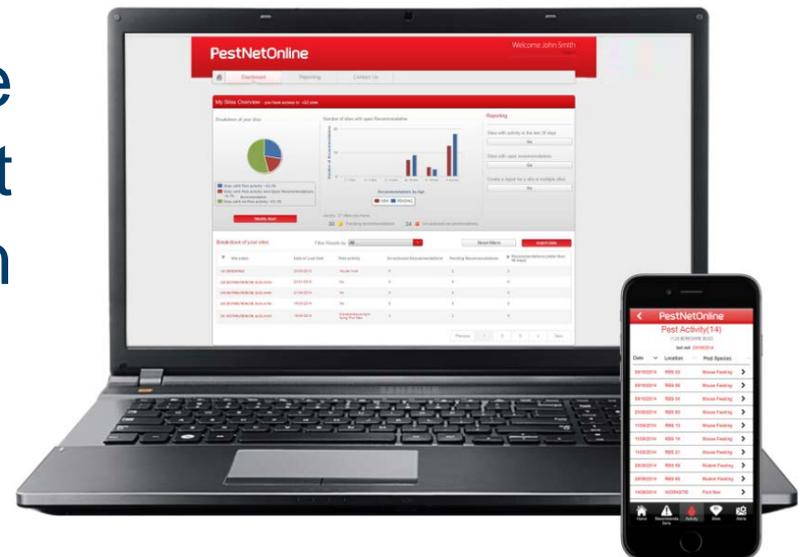
# Rentokil

Ehrlich | Western | Presto-X  
Your Local Pest Control Experts

# PestNetOnline

The complete online  
pest management  
and reporting solution

***Randy Hobbs***  
***Account Executive***



# What is PestNetOnline?

## Online reporting and analysis of all pest activity

- Intuitive and easy to use
- Complete visibility to minimize risks
- Increased efficiency with information at your fingertips
- Minimize exposure with all your pest control records and data in one place
- Stay in control with a smartphone app



# Who is PestNetOnline for?

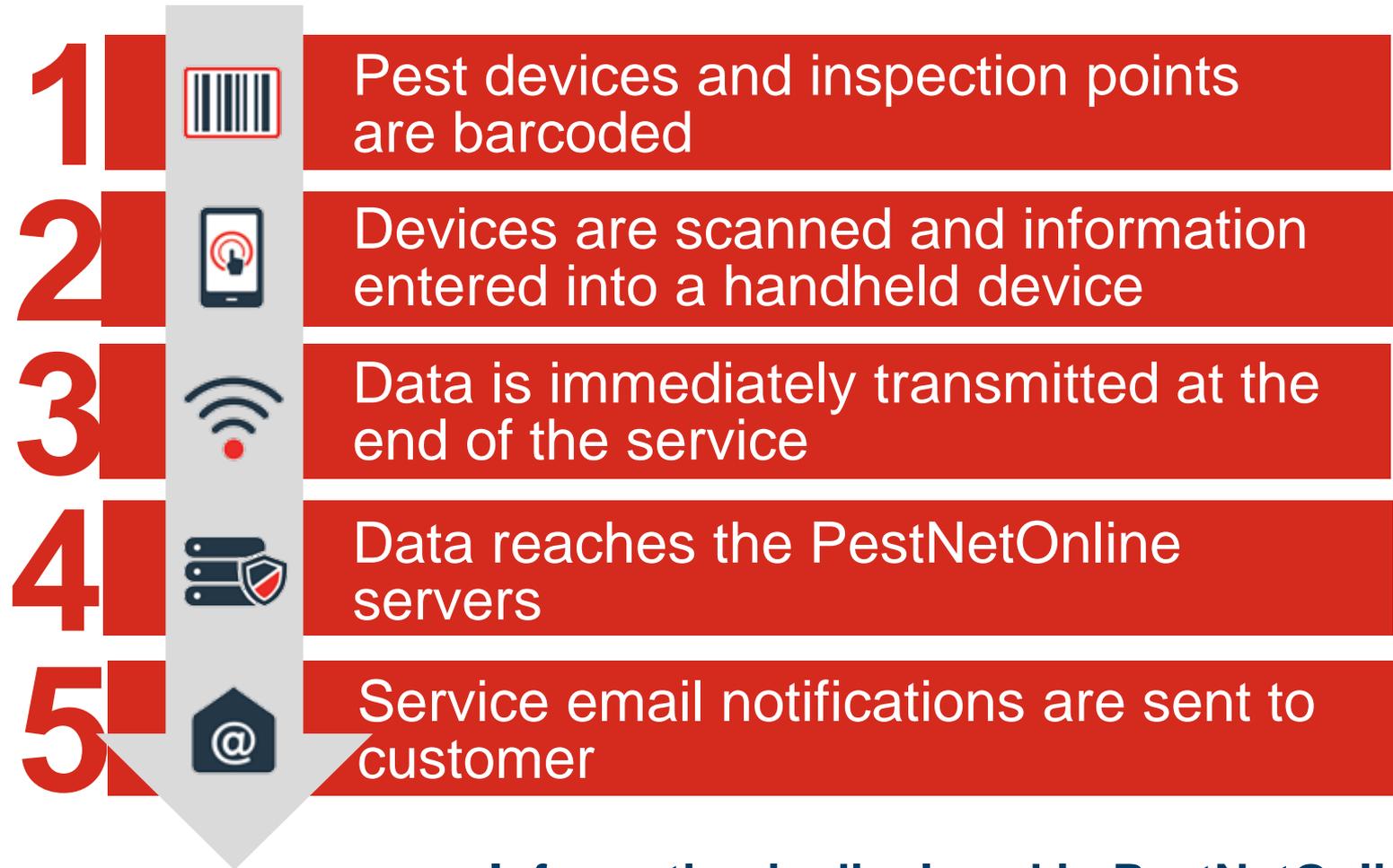
**For Food and Beverage, Pharmaceutical, Logistics, Healthcare, Commercial/Residential Property, and Retail... any business that needs online pest management and reporting**

## **Offering:**

- Personalized Dashboard
- Multiple and Single Site Locations
- Trend Analysis
- Detailed Service Reports
- Recommendation System
- Interactive Site Maps
- Documentation Availability
- Material Usage Reports
- Proof of Service



# How PestNetOnline works...



**PestNetOnline**

**Information is displayed in PestNetOnline and mobile applications**

# PestNetOnline

## Single site locations

- Provides a comprehensive review of all visit details
- Pest Activity and Recommendation charts summarizing at a high level all issues
- Visit Filters allowing you to quickly locate series of visit and types of visits
- Review and reprint any Proof of Service
- Navigation tabs take you directly to Tasks, Recommendations, Pest Activity and Material Usage detail screen – quickly and easily

The screenshot displays the PestNetOnline interface for a single site. The top navigation bar includes the logo, a welcome message for the client, and a search icon. Below this is a secondary navigation bar with tabs for Dashboard, Reporting, Service History, Audit Compliance, Documents, and Contact Us. The main content area is divided into several sections:

- Site Overview:** Features a bar chart titled "Recommendations chart by age" showing the number of recommendations over time. A table titled "Recommendations outstanding" lists five items with columns for ID, Visit date, Type, Status, and Detail icon. A "Modify Alert" button and pagination controls are also present.
- Rentokil Visits:** A pie chart titled "Rentokil visits breakdown" shows the distribution of visits between Routine (71.4%) and Callout (28.6%) over the last 12 months.
- My Contract:** Displays contract details such as Contract Number, Start Date, and Number of routine visits per year.
- Site summary:** Provides a quick overview of the site, including the address (5701 Park Ave) and the last visit date (11/04/2014). It includes a filter for "Zones With Activity" and a table showing activity details for different zones.

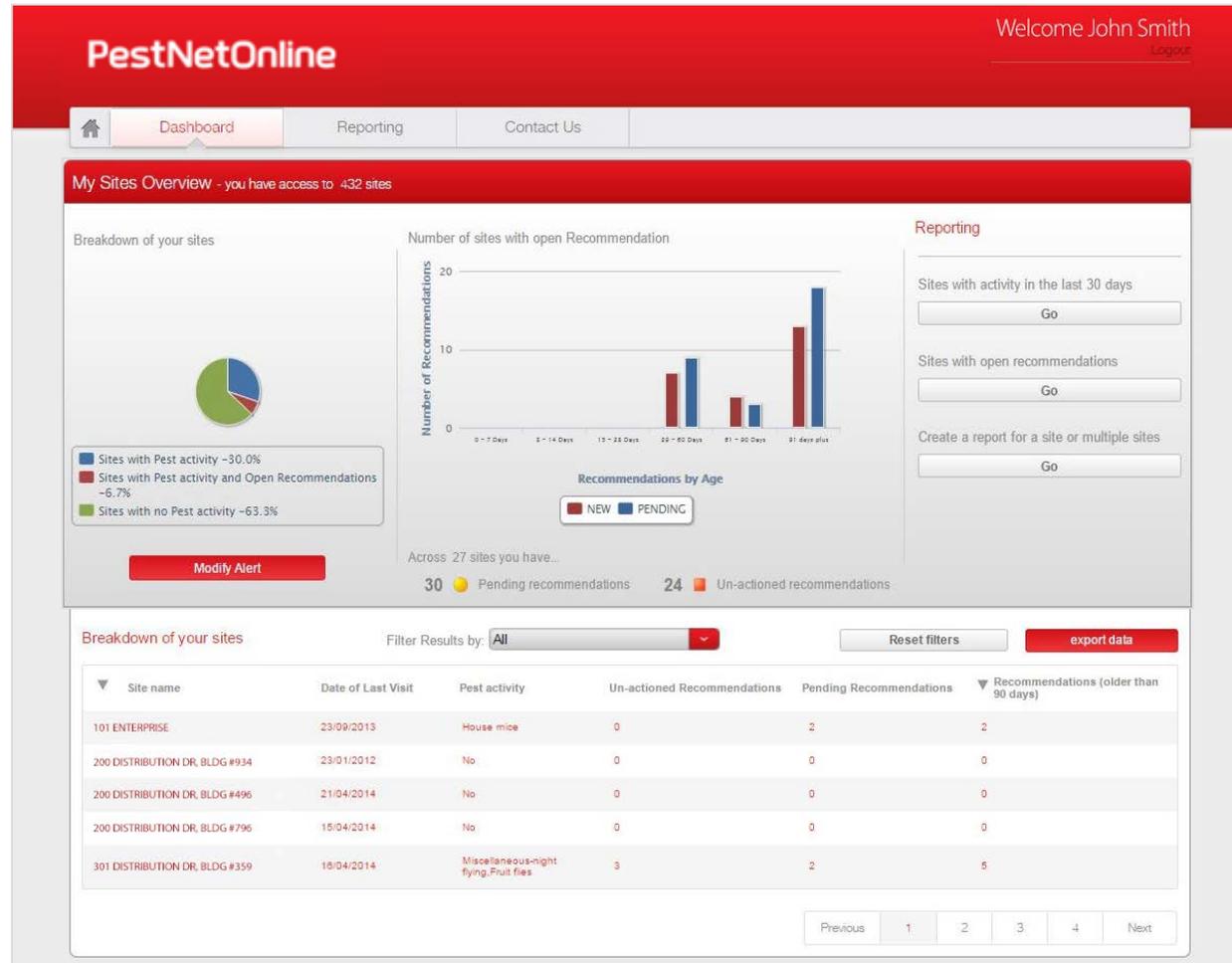
ID	Visit date	Type	Status	Detail icon
45	11/04/2014	Structural	Yellow	Info
44	11/04/2014	Structural	Yellow	Info
43	11/04/2014	Structural	Yellow	Info
42	11/04/2014	Structural	Yellow	Info
41	11/04/2014	Structural	Yellow	Info

Building	Floor	Zone	Activity	Recommendations
BUILDING	FLOOR	Exterior	Yes	0
BUILDING	FLOOR	Interior	Yes	1

# PestNetOnline

## For multi site locations

- A dashboard that summarizes all activity
- My Sites allows you to see an overview of your locations
- Navigation shortcuts allowing you to quickly and effortlessly research visit activity
- Link to all related information
- Export data for custom analysis



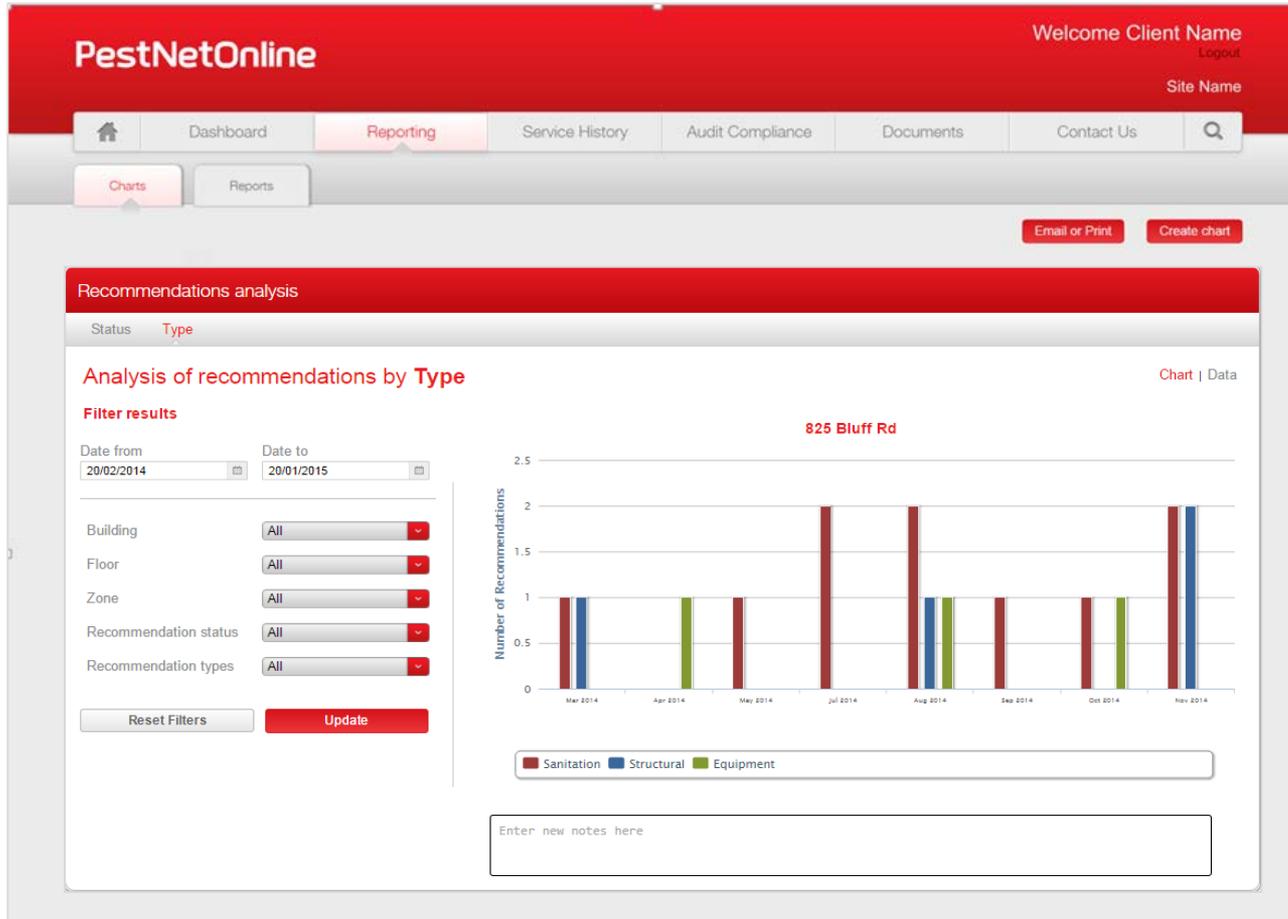
# PestNetOnline

The screenshot displays the PestNetOnline web application interface. At the top, there is a red header with the logo 'PestNetOnline' on the left and 'Welcome Client Name' with a 'Logout' link on the right. Below the header is a navigation bar with 'Dashboard', 'Reporting' (highlighted), and 'Contact Us' tabs, along with a search icon. The main content area is divided into two sections: 'Existing reports' and 'Create new'. The 'Create new' section contains a form titled 'Create a new report'. The form includes a text input field for the report title, currently containing 'Pest Activity'. Below this is a section titled '1) Select report type and location' with several options: 'Type of report' (All, Pest activity, Recommendations, Preparations), 'What format should the report be' (Excel, pdf), 'Where would you like this report emailed to?' (john.pfeffer@rentokil.com), 'When would you like the report to run?' (One Off, Scheduled), 'What site locations would you link to report on?' (All, Internal, External), and 'Which sites would you like to report on?' (All, with a list of sites including 'PestNetOnline Demo Account (E) (High Dependency)' and 'PestNetOnline Demo Account (A) (Commercial)'). A 'continue' button is at the bottom of the form.

## Analysis and reports

- Provides quick, ad-hoc snapshot analysis reporting on all pest and device type activity
- Reports can be created to document Pest Activity, Recommendations, Visit Performance, Task Performance and Material Usage
- Reports are distributed to you via email
- Can be created and ran once, or proactively scheduled on a Daily, Week, Monthly or Quarterly based upon your needs
- Many options available to customize a snapshot view of Pest Activity

# PestNetOnline

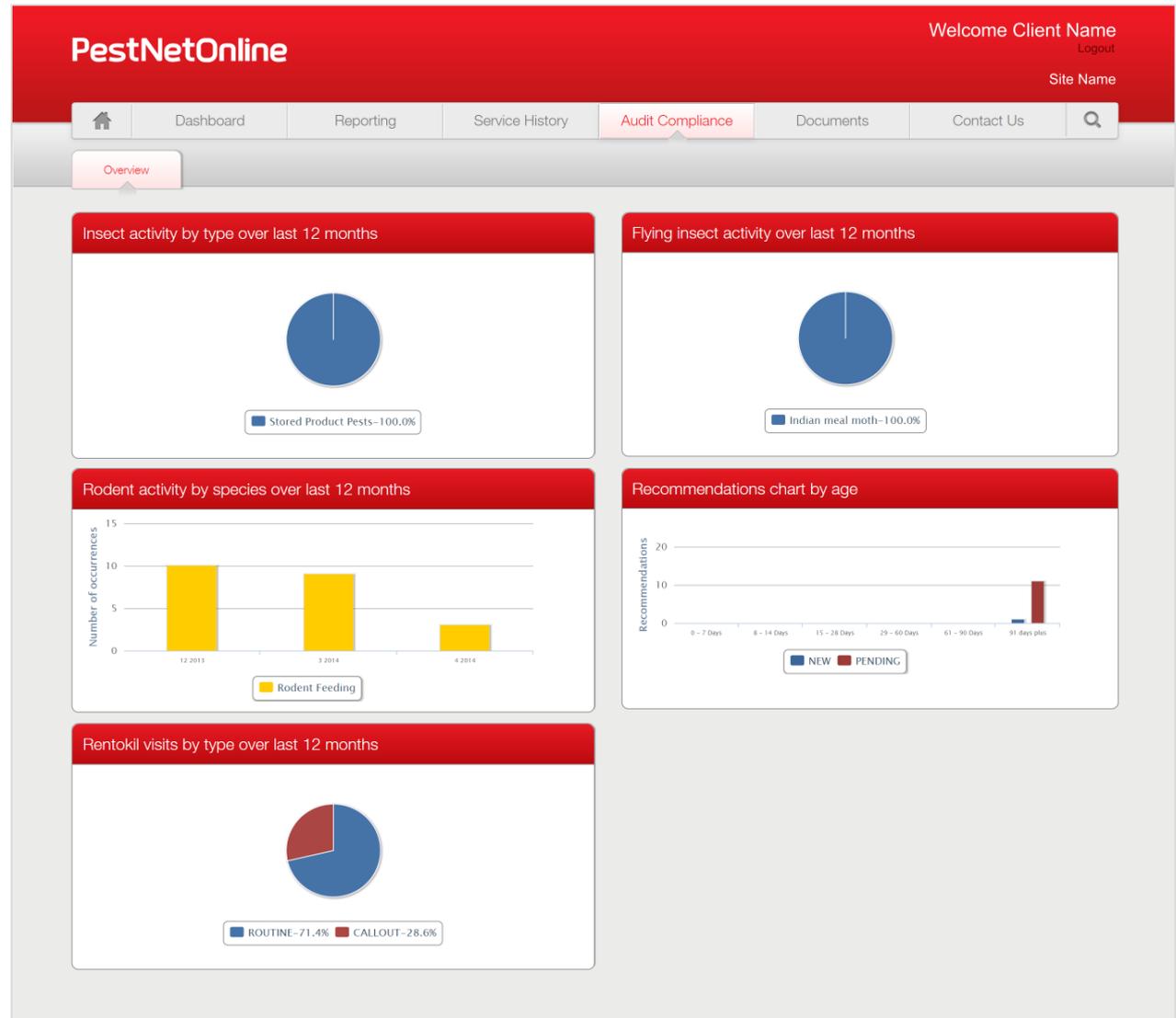


- Options to review an entire worksite, or specific Buildings / Floor / Zones within your worksite
- Feature rich with multiple date range options
- Provides quick, ad-hoc snapshot analysis on all pest activity
- Add commentary to charts

# PestNetOnline

## For high dependency customers

- A dedicated Audit Checklist page
- For AIB, BRC, and other 3<sup>rd</sup> Party Auditors, a single page that brings together all necessary visit details and links to related information



# PestNetOnline

## Site plans for high dependency and commercial customers

- Provide an interactive, graphic representation of device location
- Filters allow you to locate specific types (Mechanical Rodent Traps, Pheromone, etc.) quickly and easily
- Site Maps may also be printed if desired

The screenshot displays the PestNetOnline web application interface. At the top, there is a navigation bar with the logo and user information: "Welcome Client Name" and "Logout". Below this is a secondary navigation bar with tabs for "Dashboard", "Reporting", "Service History", "Audit Compliance", "Documents", and "Contact Us".

The main content area is divided into several sections:

- Site Overview:** Includes a "Recommendations chart by age" and "Recommendations outstanding" section, and a "Rentokil Visits (over the last 12 calendar months)" section with a "more" link.
- Site summary:** Shows the address "5701 Park Ave" and the "Last Visit Date".
- Building:** A list of buildings, with "BUILDING" selected.
- Pest activity map:** The central focus is a detailed floor plan titled "PestNetOnline Demonstration Floor Plan" for "1335 Main Street, Oakville, OH", revised on "Sept 05, 2014". The map shows various rooms such as "Commissary", "Candy Room", "Pan Wash Room", "Washroom", "Front Office", "Break Room", "Maintenance Area", "Chemical Cage", "Fresher", "Cooler", "PHE 001-007", "ISP001-004", "Boiler Room", and "Hi Lo Room". Numerous devices are plotted on the map, represented by numbered icons (1-46) and colored markers (red triangles for traps, green circles for pheromones).

Filters and controls for the map include "Actions" (Enlarge or print floor plan), "Detector types" (All), and "Floor plans" (All Areas: All Floors).

# PestNetOnline

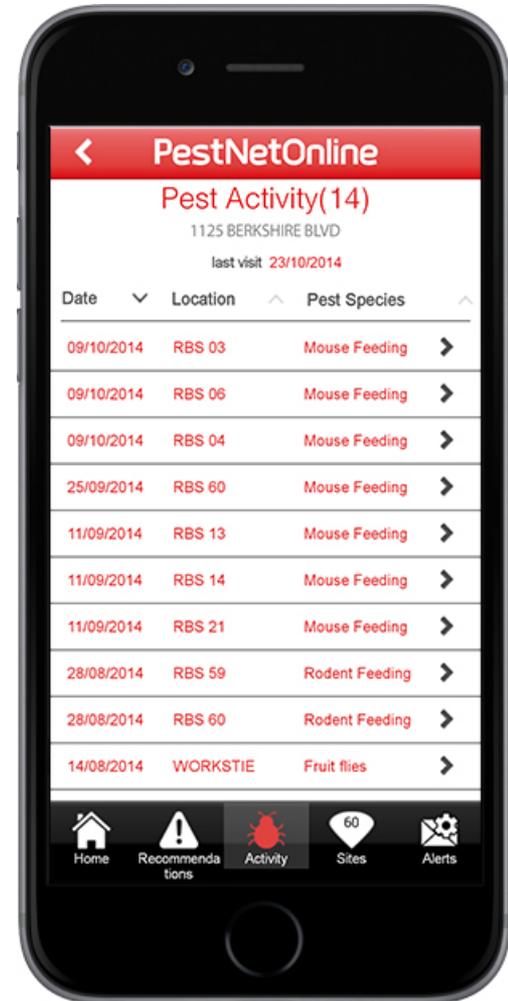
Site Documents,  
available to all users of  
PestNetOnline  
compliments all printed  
log book information  
electronically

The screenshot displays the PestNetOnline web application interface. At the top, there is a red header with the 'PestNetOnline' logo on the left and 'Welcome Client Name' with a 'Logout' link on the right. Below the header is a navigation menu with tabs for 'Dashboard', 'Reporting', 'Service History', 'Audit Compliance', 'Documents' (which is highlighted), and 'Contact Us'. A search icon is also present in the navigation bar. Below the navigation bar, there are two sub-tabs: 'Site Documents' (selected) and 'Site Plan'. The main content area is titled 'Documents list' and contains a list of documents. The list is organized into sections: 'TECH LICENSES, BUSINESS LICENSES, TRAINING CERTIFICATES', 'INSURANCE CERTIFICATES', and 'FACILITY ASSESSEMENTS'. Each document entry includes the document title, creation and expiration dates, and a download icon.

TECH LICENSES, BUSINESS LICENSES, TRAINING CERTIFICATES		
<b>Rentokil Background Check policy</b>	Created by : 04/04/2014   Version : 1   Expired by :	
<b>Technician License - John Doe</b>	Created by : 03/10/2014   Version : 1   Expired by : 06/30/2016	
<b>GMP Training Certificate - John Doe</b>	Created by : 01/01/2014   Version : 1   Expired by :	
INSURANCE CERTIFICATES		
<b>Insurance Certificate</b>	Created by : 01/01/2014   Version : 1   Expired by : 31/12/2014	
FACILITY ASSESSEMENTS		
<b>IPM Facility Assessment 2014</b>	Created by : 03/01/2014   Version : 1   Expired by :	
<b>IPM Facility Assessment 2013</b>	Created by : 14/01/2013   Version : 1   Expired by :	

# PestNetOnline Smartphone App

- **Home Screen**
  - Open recommendations
  - Instances of activity (last 90 days)
- **Recommendations**
  - Open recommendations total and by site
  - Open recommendations within a single site
  - Individual recommendation detail
    - Update the recommendation on the spot!
- **Activity**
  - Overall activity and activity instances by site
  - Last 90 days activity within a single site
  - Activity details and materials used
- **Site list and recommendation and activity indicators**
- **Email alerts creation**



# PestNetOnline Flexibility

## PestNetOnline offers three levels of functionality

- Whether you are a homeowner, local retailer, business with multiple branches or manufacturer, PestNetOnline will meet all of your business needs

Level	Residential	Commercial	High Dependency
Functionality	Privately owned residences, condos, and townhouses	Commercial organizations that do not require third party audit support	Businesses and organizations who utilize any third party audit group
Barcode Structure	One barcode is required	✓	✓
Materials Usage	Only through reporting	✓	✓
Pest Activity	✓	✓	✓
Updating Recommendations	✓	✓	✓
Visit Details	✓	✓	✓
Single Site Reporting	✓	✓	✓
Documents	✓	✓	✓
Reports	✓	✓	✓
Smartphone app (lite version)	✓	✓	✓
Alerts	X	✓	✓
Multi-Site Reporting	X	✓	✓
Detector History	X	✓	✓
Trends Analysis	X	✓	✓
Tasks	X	✓	✓
Site Plans	X	X	✓
Audit Compliance	X	X	✓

# PestNetOnline

For more information visit [pnol.rentokilna.com](http://pnol.rentokilna.com)

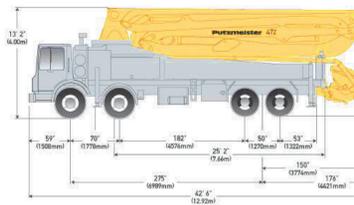
## Appendix O – CMP’s TCP & PMP Inspection Records

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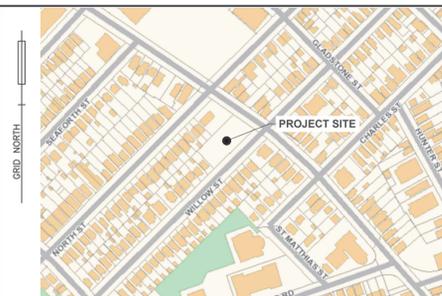


## Appendix P – Concrete Delivery Schematic

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47Z



KEY PLAN

LEGEND

EXISTING	PROPOSED
25.0	25.0
CONTOUR LINE	CONTOUR LINE
CURB STOP/GATE/BUTTERFLY VALVE	CONCRETE THURST BLOCK
FIRE HYDRANT	SIAMASE CONNECTION
CONCRETE THURST BLOCK	CATCH BASIN/PIT
SIAMASE CONNECTION	CULVERT
CATCH BASIN/PIT	ROCK LINING/DAM
CULVERT	ROCK WALL/RETAINING WALL
ROCK LINING/DAM	POWER POLE & ANCHOR/LIGHT STANDARD
ROCK WALL/RETAINING WALL	TREE
POWER POLE & ANCHOR/LIGHT STANDARD	STREET SIGN/PARKING METER
TREE	ELEVATION/GRADE
STREET SIGN/PARKING METER	TEST PIT
ELEVATION/GRADE	DRAINAGE/SWALE FLOW DIRECTION
TEST PIT	WATER MAIN/SERVICE
DRAINAGE/SWALE FLOW DIRECTION	SANITARY MANHOLE & PIPE
WATER MAIN/SERVICE	STORM MANHOLE & PIPE
SANITARY MANHOLE & PIPE	COMBINED PIPE
STORM MANHOLE & PIPE	GAS LINE
COMBINED PIPE	100YR. FLOOD LIMIT
GAS LINE	GUARD RAIL
100YR. FLOOD LIMIT	UNDERGROUND CONDUIT
GUARD RAIL	OVERHEAD WIRES
UNDERGROUND CONDUIT	PROPERTY LINE/BOUNDARY
OVERHEAD WIRES	FENCE
PROPERTY LINE/BOUNDARY	BUILDING
FENCE	TOP OF SLOPE
BUILDING	TDE OF SLOPE
TOP OF SLOPE	TREELINE
TDE OF SLOPE	LIMITS OF DISTURBANCE
TREELINE	TACTILE PEDESTRIAN PLATES
LIMITS OF DISTURBANCE	PROJECT SAFETY SIGNAGE
TACTILE PEDESTRIAN PLATES	ORANGE SAWHORSE BARRICADE
PROJECT SAFETY SIGNAGE	
ORANGE SAWHORSE BARRICADE	

NOTES

1. THIS PLAN IS IN METRIC.

1	22/02/17	REVISED FOR BUILDING PERMIT AND CRANE LOCATION
0	21/11/25	ISSUED FOR REVIEW
No.	YY/MM/DD	Revision Description Appr'd

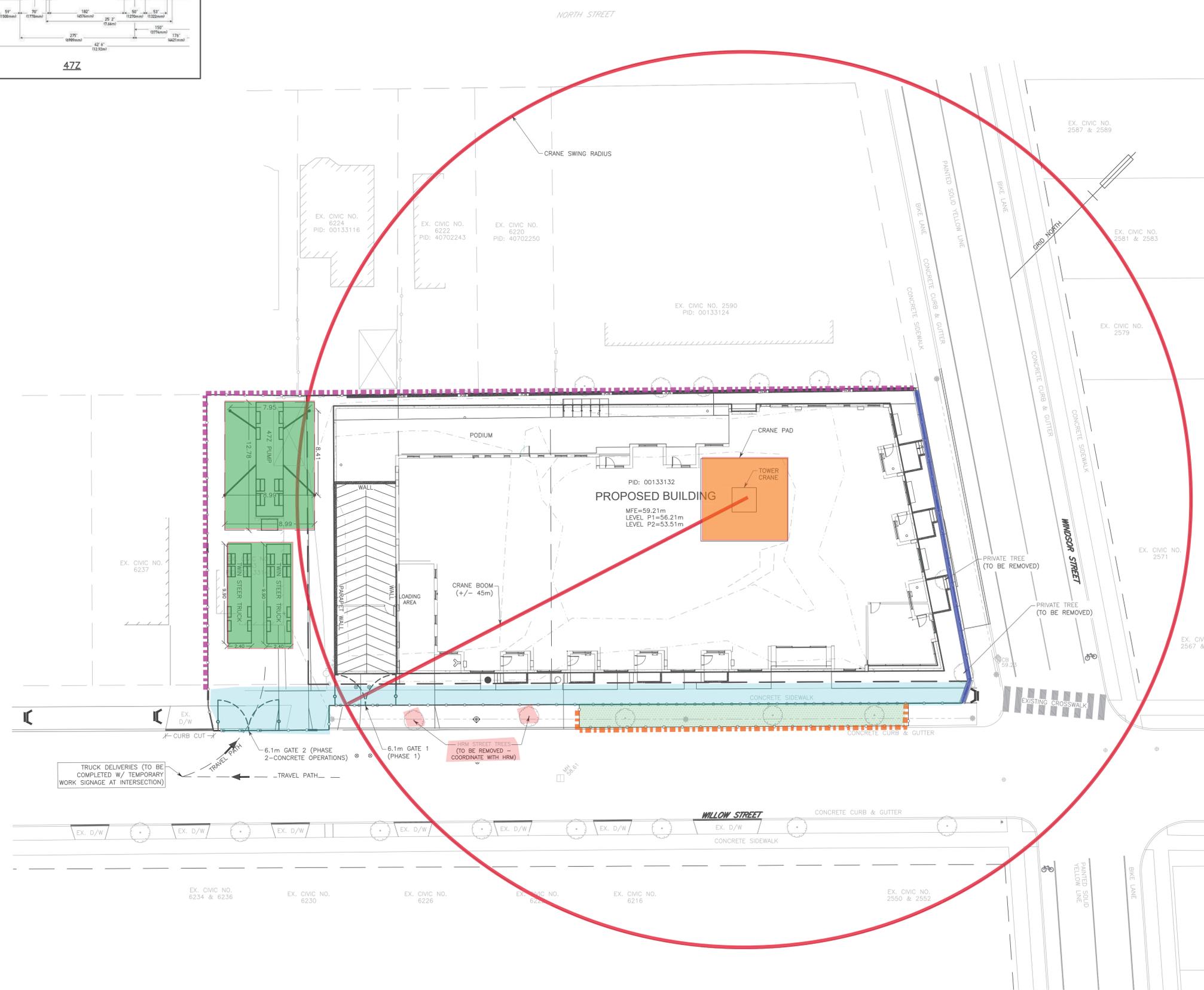
REGISTERED PROFESSIONAL ENGINEER  
GATE  
G.K. MacLean  
897B  
PROFESSIONAL ENGINEER  
NOVA SCOTIA

**SDMM**  
Servant, Dunbrack, McKenzie & MacDonald Ltd.  
NOVA SCOTIA LAND SURVEYORS & CONSULTING ENGINEERS  
36 OLAND CRESCENT  
BAYERS LANE BUSINESS PARK  
HALIFAX, NS B3S 1G8  
PHONE: (902) 455-1537  
FAX: (902) 455-9479  
WEB: www.sdmm.ca

PROPOSED APARTMENT BUILDING  
WILLOW STREET & WINDSOR STREET  
HALIFAX, NOVA SCOTIA

CONCRETE DELIVERY SCHEMATIC

Date	NOVEMBER 25, 2021	Drawn	D. ANDERSON	Project No.	FILE NO. 1-1-429 (35541)
Scale	1:200	Engineer	G. MACLEAN	Plan No.	
Reference	Approved	Approved	G. MACLEAN	Drawing Name	
Surveyed	SDMM	Sheet			R2



## Appendix Q – Crane Information

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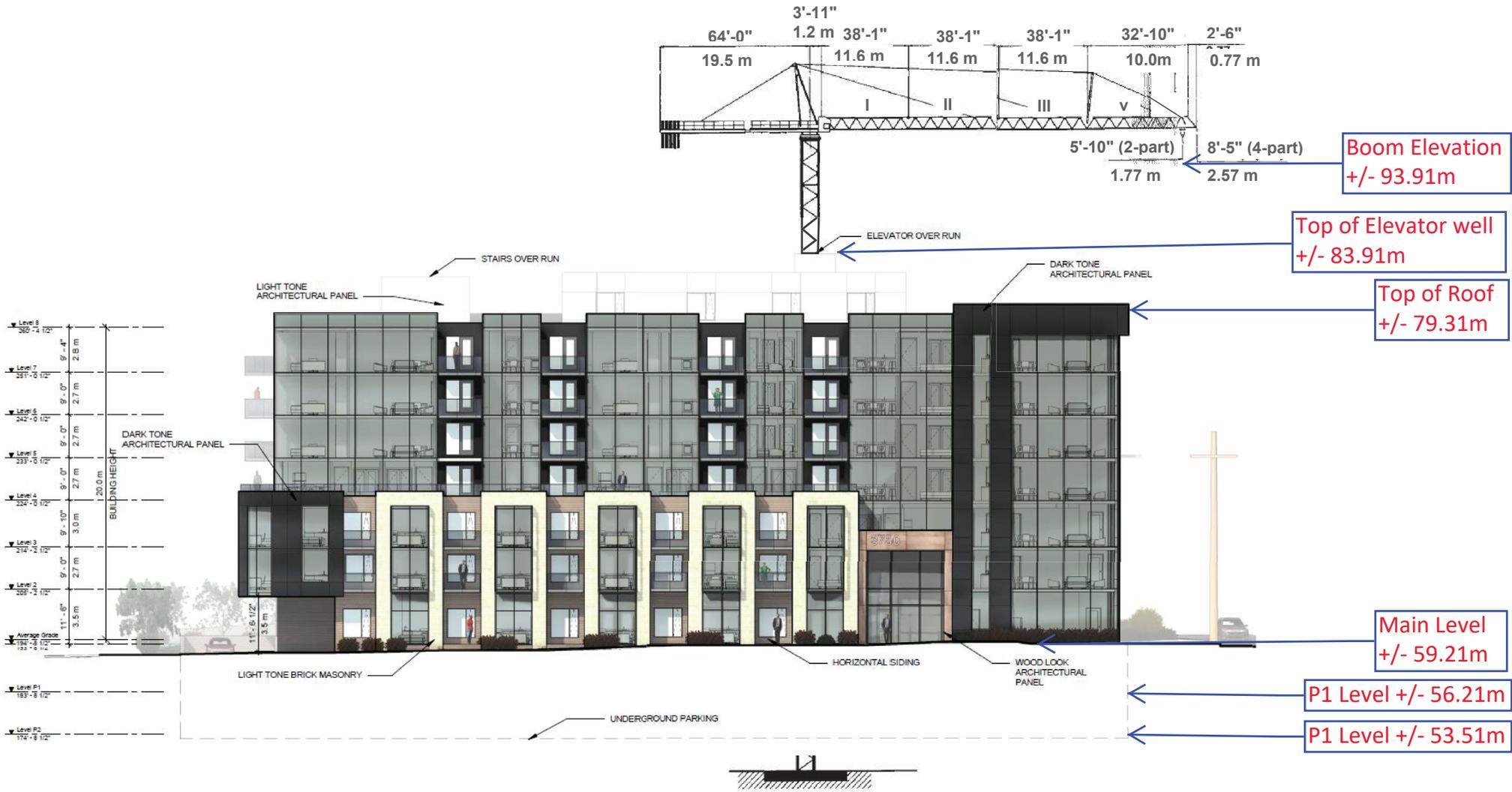
Crane Operations

Crane Base & Tower

Crane Boom (+/- 45m)

Crane Radius

# Crane Operations

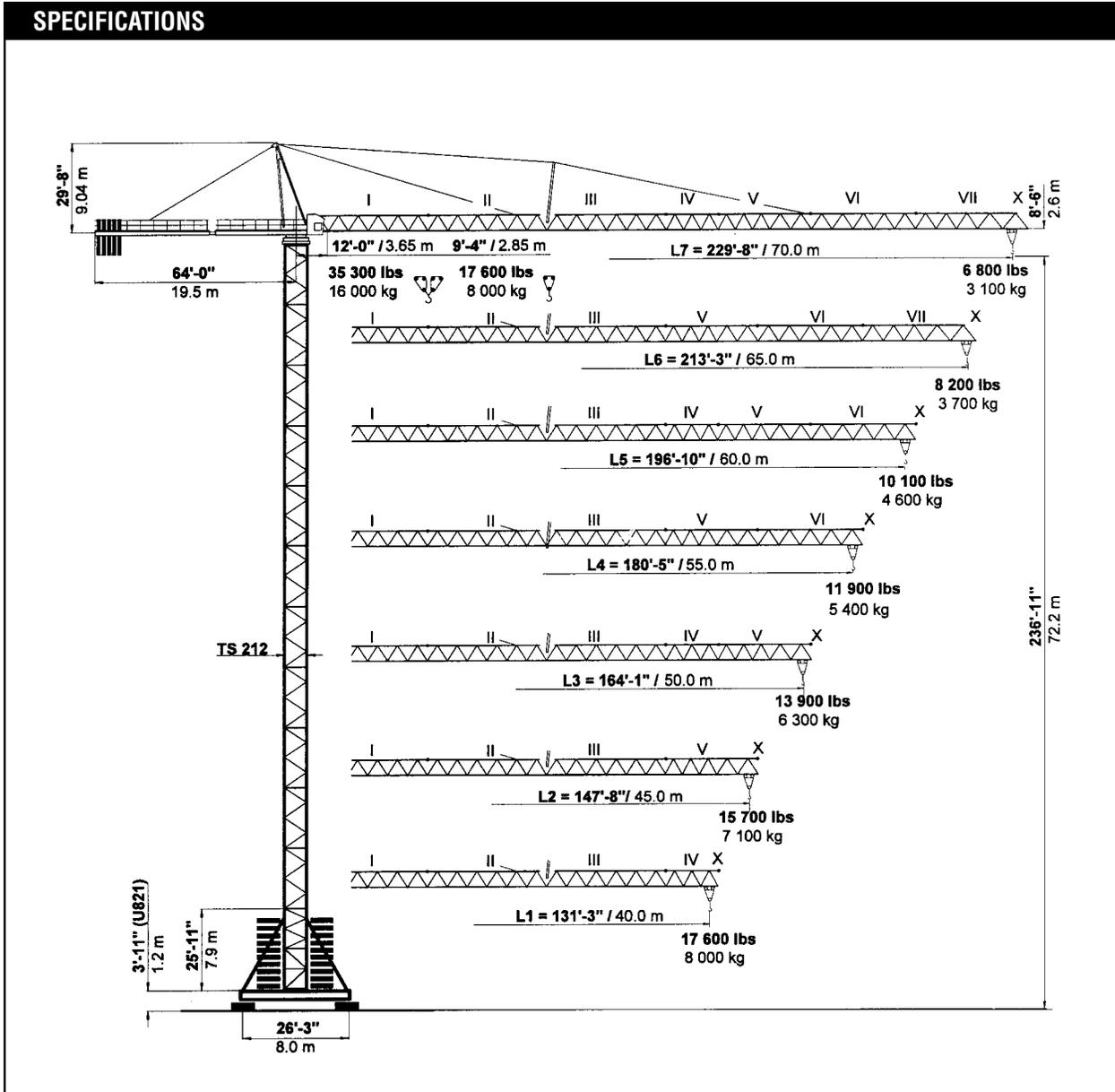




# PEINER SK 315

Hammerhead Tower Crane  
 17,600-35,300 lbs. (8-16 mt)  
 Lifting Capacity

## SPECIFICATIONS



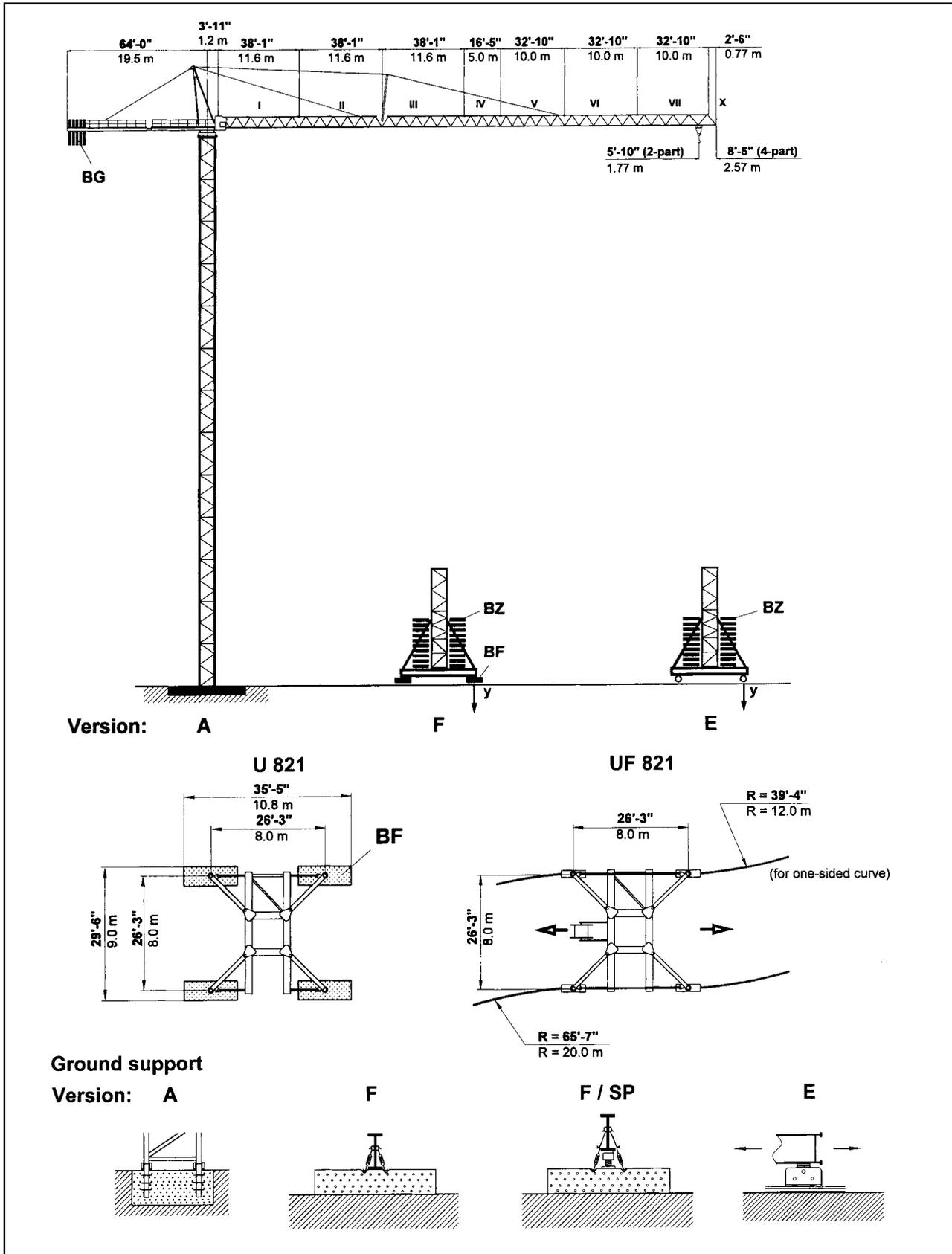
simple, available and  
 cost effective™

Machines shown may have optional equipment.

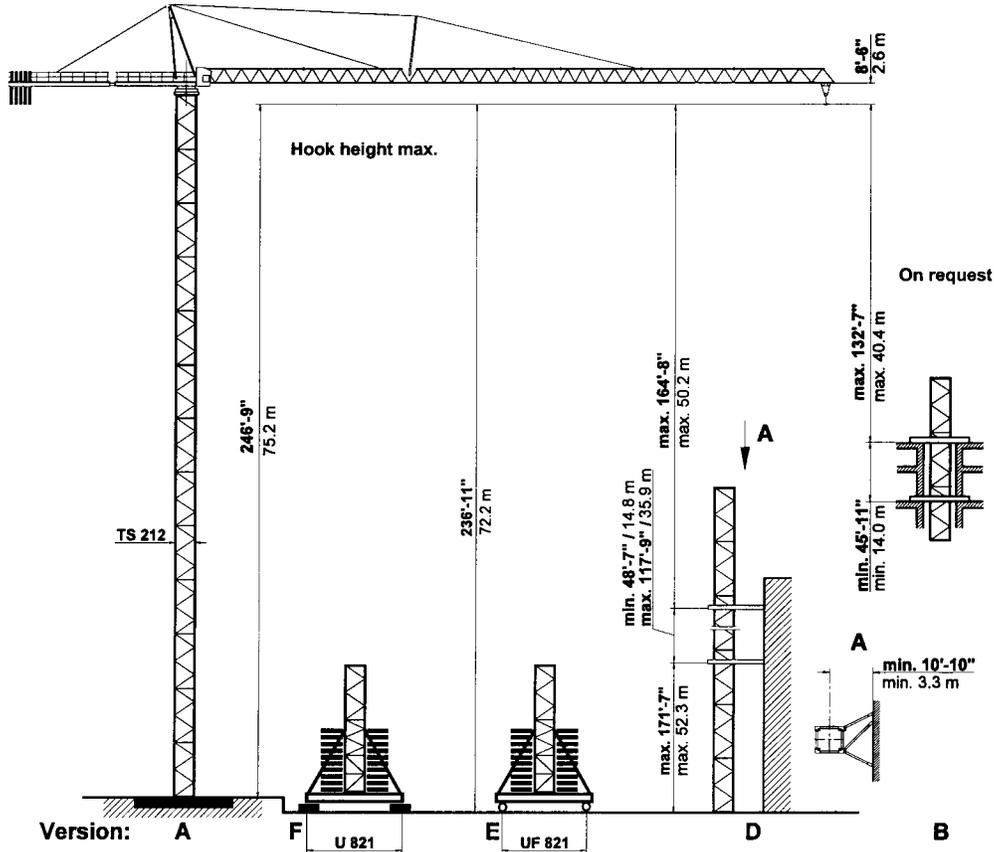


# PEINER SK 315

Combinations of tower section, hook heights, forces acting per corner, base ballast



**PEINER SK 315 Tower TS 211**



TS 212	Version A		Version F				Version E			
	Tower	HH	Tower	HH	BZ + BF	in service	out of service	BZ	in service	out of service
TS 212.1	ft	m	TSV 212	ft	kips / t	kips / kN	kips / kN	kips / t	kips / kN	kips / kN
13 x TS 212.1	246'-9"*	75.2*								
12 x TS 212.1	227'-4"*	69.3*	1 x TSV 212	236'-11"*	212.0	204	279	198.0	212	282
			11 x TS 212.1	72.2*	96	909	1243	90	942	1253
11 x TS 212.1	208'-0"*	63.4*	1 x TSV 212	217'-6"*	168.0	186	240	154.0	192	242
			10 x TS 212.1	66.3*	76	826	1066	70	856	1075
10 x TS 212.1	188'-8"*	57.5*	1 x TSV 212	198'-2"	146.0	173	203	132.0	179	204
			9 x TS 212.1	60.4	66	770	901	60	797	909
9 x TS 212.1	169'-4"	51.6	1 x TSV 212	178'-10"	124.0	161	169	88.0	161	169
			8 x TS 212.1	54.5	56	715	751	40	715	754
8 x TS 212.1	149'-11"	45.7	1 x TSV 212	159'-5"	101.0	149	145	88.0	154	170
			7 x TS 212.1	48.6	46	661	645	40	683	654
7 x TS 212.1	130'-7"	39.8	1 x TSV 212	140'-1"	101.0	142	128	66.0	141	124
			6 x TS 212.1	42.7	46	633	569	30	629	553
6 x TS 212.1	111'-3"	33.9	1 x TSV 212	120'-9"	101.0	136	112	66.0	135	108
			5 x TS 212.1	36.8	46	607	499	30	600	482
5 x TS 212.1	91'-10"	28.0	1 x TSV 212	101'-5"	101.0	131	98	66.0	129	94
			4 x TS 212.1	30.9	46	582	435	30	573	418
4 x TS 212.1	72'-6"	22.1	1 x TSV 212	82'-0"	101.0	126	85	66.0	123	81
			3 x TS 212.1	25.0	46	559	376	30	548	359
3 x TS 212.1	53'-2"	16.2	1 x TSV 212	62'-8"	101.0	120	80	66.0	118	75
			2 x TS 212.1	19.1	46	536	356	30	523	335
2 x TS 212.1	33'-9"	10.3	1 x TSV 212	43'-4"	101.0	116	80	66.0	112	75
			1 x TS 212.1	13.2	46	515	356	30	500	335
Foundation 25'-7" x 25'-7" x 5'-7" 7.8 x 7.8 x 1.7 m			Stationary base U 821				Travelling base UF 821			
Anchor stools 4 x FF 212					BF 4 x 8.82 kips 4 x 4.0 t		BZ block 11.02 kips Block 5.0 t		Bogle Curve F 500	

If TSK 212 section is used the hook height is increased by 6'-7" (2 m).

\* Lower climbing section after erection.

TS 212.1 = 19'-4 1/4" / 5.9 m

TSV 212 = 25'-11" / 7.9 m

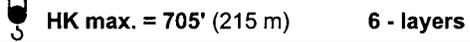
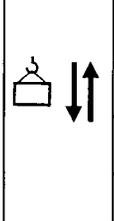
TSK 212 = 6'-7" / 2.0 m



**PEINER SK 315 Radius and Capacity**

Jib ft m	Max. capacity max. 17,600 lbs 8.0 t	Radius – ft./m Capacity – lbs./mt																	
		75'-6" 23	82'-0" 25	98'-5" 30	114'-10" 35	131'-3" 40	141'-1" 43	147'-8" 45	157'-6" 48	164'-1" 50	173'-11" 53	180'-5" 55	190'-3" 58	196'-10" 60	206'-8" 63	213'-3" 65	223'-1" 68	229'-8" 70	
2-Part Line  max. 17,600 lbs max. 8.0 t																			
L7	229'-8" 70.0	9'-4" - 96'-9" 2.85 - 29.5 m	17600	17600	17400	14800	12800	11900	11200	10600	10100	9500	9000	8600	8200	7700	7500	7100	6800
L6	213'-3" 65.0	9'-4" - 105'-0" 2.85 - 32.0 m	17600	17600	17600	16100	13900	13000	12300	11500	11000	10400	9900	9300	8800	8600	8200		
L5	196'-10" 60.0	9'-4" - 117'-9" 2.85 - 35.9 m	17600	17600	17600	17600	15700	14600	13900	13000	12300	11700	11200	10600	10100				
L4	180'-5" 55.0	9'-4" - 124'-8" 2.85 - 38.0 m	17600	17600	17600	17600	16800	15400	14800	13900	13200	12300	11900						
L3	164'-1" 50.0	9'-4" - 130'-11" 2.85 - 39.9 m	17600	17600	17600	17600	17600	16300	15400	14600	13900								
L2	147'-8" 45.0	9'-4" - 131'-11" 2.85 - 40.2 m	17600	17600	17600	17600	17600	16500	15700										
L1	131'-3" 40.0	9'-4" - 131'-3" 2.85 - 40.0 m	17600	17600	17600	17600	17600												
4-Part Line  max. 35,300 lbs max. 16.0 t																			
		Radius - 2'-7" (- 0.8 m)																	
L7	227'-0" 69.2	12'-0" - 48'-7" 3.65 - 14.8 m	21800	19600	16100	13200	11200	10400	9700	9000	8600	7900	7500	7100	6600	6200	6000	5500	5300
L6	210'-8" 64.2	12'-0" - 52'-2" 3.65 - 15.9 m	23800	21600	17400	14600	12600	11500	10800	9900	9500	8800	8400	7700	7500	6800	6600		
L5	194'-3" 59.2	12'-0" - 57'-9" 3.65 - 17.6 m	26900	24500	19800	16800	14300	13000	12300	11500	10800	10100	9700	9000	8600				
L4	177'-10" 54.2	12'-0" - 61'-0" 3.65 - 18.6 m	28700	26000	21200	17900	15200	14100	13200	12300	11700	10800	10400						
L3	161'-5" 49.2	12'-0" - 63'-8" 3.65 - 19.4 m	30200	27300	22300	18700	16100	14800	14100	12800	12300								
L2	145'-0" 44.2	12'-0" - 64'-0" 3.65 - 19.5 m	30400	27600	22500	19000	16300	15000	14100										
L1	128'-7" 39.2	12'-0" - 66'-3" 3.65 - 20.2 m	31700	28700	23600	19800	17000												

**Speeds**

FU 8-160/4		v = 0 → ~290 fpm (88 m / min.)	10.2 HP 7.5 kW					
SR 10-190/3		v = 0 → ~96 fpm (30 m / min.)	2 x 16.3 HP 2 x 12.0 kW					
K WB 120/4		v = 0 → 0.9 rpm (min <sup>-1</sup> )	2 x 11.4 HP 2 x 8.4 kW					
			480 V / 60 Hz / 3 ph					
Type SR WB 66-80/4F  [108 HP] [79 kW]		2-Part Line 	444 fpm 134 m/min	5 500 lbs 2 500 kg	4-Part Line 	222 fpm 67 m/min	11 000 lbs 5 000 kg	Total motor output ~140 HP without SR 10-190/3 ~105 kW  Connected power 170 kVA
			276 fpm 84 m/min	9 300 lbs 4 200 kg		138 fpm 42 m/min	18 600 lbs 8 400 kg	
			180 fpm 54 m/min	13 900 lbs 6 300 kg		90 fpm 27 m/min	27 800 lbs 12 600 kg	
			108 fpm 34 m/min	17 600 lbs 8 000 kg		54 fpm 17 m/min	35 300 lbs 16 000 kg	

**Counterweight**

Jib		L 1	L 2	L 3	L 4	L 5	L 6	L 7
Counterweight	BG	30 000 lbs 13 600 kg	32 200 lbs 14 600 kg	36 600 lbs 16 600 kg	39 150 lbs 17 750 kg	43 550 lbs 19 750 kg	41 350 lbs 18 750 kg	45 750 lbs 20 750 kg
	[lbs]	3 x 6 950 1 x 9 150	2 x 6 950 2 x 9 150	4 x 9 150	3 x 6 950 2 x 9 150	1 x 6 950 4 x 9 150	2 x 6 950 3 x 9 150	5 x 9 150
	[t]	3 x 3.15 1 x 4.15	2 x 3.15 2 x 4.15	4 x 4.15	3 x 3.15 2 x 4.15	1 x 3.15 4 x 4.15	2 x 3.15 3 x 4.15	5 x 4.15



**PEINER SK 315 Dimensions and transport weights**

See operating manual for mounting weights

	Designation		Dimensions (ft / m)			Weight	Volume
			l	b	h	lbs / t	ft <sup>3</sup> / m <sup>3</sup>
1	Jib Section III		39.01	4.99	7.09	4 200	1 386
			11.94	1.52	2.16	1.92	39.2
2	Jib Section I		39.01	4.99	5.84	3 790	1 137
	Section II		11.89	1.52	1.78	1.72	32.2
	Section III		38.65	4.99	6.17	4 320	1 190
	Section IV		11.78	1.52	1.88	1.96	33.7
	Section V		19.19	4.99	5.41	1 760	519
	Section VI		5.85	1.52	1.65	0.80	14.7
	Section VII		35.34	4.99	5.45	3 090	961
	Jib tip X		10.77	1.52	1.66	1.40	27.2
			36.03	4.99	5.48	2 470	985
			10.98	1.52	1.67	1.12	27.9
3	Turntable with slewing ring support and cabin		36.35	7.64	7.81	25 350	2 169
			11.08	2.33	2.38	11.50	61.4
	Turntable with slewing ring support		31.99	7.64	7.81	24 030	1 911
		9.75	2.33	2.38	10.90	54.1	
	Cabin with support and railing		10.17	4.92	7.25	1 320	364
			3.10	1.50	2.21	0.60	10.3
4	Counter jib with hoist winch		38.13	5.91	6.00	14 550	1 353
			11.62	1.80	1.83	6.60	38.3
	Hoist winch	66 WB	7.51	5.45	3.28	5 400	134
			2.29	1.66	1.00	2.45	8.4
5	Counterweight	BG	3.94	1.64	9.32	6 950	60
			1.20	0.50	2.84	3.15	1.4
			3.94	1.64	12.11	9 150	78
			1.20	0.50	3.69	4.15	1.7
6	Tower section	TS 212.1	19.52	7.78	8.01	9 130	1 216
			5.95	2.37	2.45	4.14	34.4
		TSV 212 with struts	31.17	9.84	10.00	20 330	3 067
		9.50	3.00	3.05	9.22	86.9	
	TSK 212	6.63	7.87	9.84	6 170	513	
		2.02	2.40	3.00	2.80	14.5	
7	Travelling base, folded	UF 821	41.01	9.74	7.05	35 050	2 816
			12.5	2.97	2.15	15.90	79.8
8	Stationary base, folded	U 821	34.55	9.06	2.79	17 130	873
			10.53	2.76	0.85	7.77	24.7
9	Central ballast block	BZ	11.48	4.92	2.20	11 020	124
			3.50	1.50	0.67	5.00	3.5
10	Foundation pad	BF	9.19	3.28	1.87	8 820	57
			2.80	1.00	0.57	4.00	1.6
11	Accessories					4 800	
						2.17	



For more information, product demonstration, or details on lease and rental plans, please contact your local Terex Towers Distributor.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty applicable to the particular product and sale. We make no other warranty, expressed or implied.

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