

Ochterloney & Edward Apartments

40 Ochterloney Street
Excavation & Construction

Prepared by Geoff MacLean, P.Eng.

Job No. 38408

CONSTRUCTION MANAGEMENT PLAN

0	APR 2024	ISSUED FOR PERMIT
REVISION #	DATE	DESCRIPTION



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In consultation with the landowner, contractor, traffic control company and HRM

Section 1: Introduction

1.1: Project Description and Objectives

The owner/developer is planning to construct an apartment building on their land located on the corner of Ochterloney Street and Edward Street in Dartmouth, Nova Scotia. In preparation for this development the existing building at civic 28 Ochterloney Street was demolished and the existing lots were consolidated. The planned development will include 128 residential units and main floor commercial space within a 11-storey building with underground parking accessed from Edward Street. This CMP has been prepared to address excavation, services and building construction.

Where the development is planned to have 2 level of underground parking, with deep excavations fronting the HRM Right of Way (ROW) that vary in depth (Ochterloney Street +/- 7.3m-8.4m and Edward Street +/- 7.3m-8.3m) we anticipate excavation limits will fall within adjacent Ochterloney sidewalk and the Edwards Street travel lane. The building foundation is set at the ROW on both streets. To safely distance the public from excavation limits and construction activities, sidewalk access adjacent to the project will be closed to the public along Ochterloney Street and across Edward Street, while incorporating a portion of the Ochterloney street lane for a truck layby and closing a section of the existing one-way Edward Street between Ochterloney and Queen Street to provided additional room for workers and deliveries. This encroachment will redirect pedestrians to the opposite side of Ochterloney Street, relocate the parking pay station directly in front of the project site, temporarily close the existing Ochterloney and Edward crosswalk, close metered on-street parking adjacent to the truck layby, alter the street centerline reducing the street width of Ochterloney while maintaining two-way traffic with two 3.05m wide travel lanes, close a section of the existing one-way street on Edward while maintaining access to the neighbour's parking lot via temporary marked two-way travel lane and maintain two-way vehicle traffic along Ochterloney Street throughout construction.

Only during service work and driveway installation do we anticipate short term temporary lane drops. It is anticipated that the crane assembly will reside within the private property, while disassembly will reside within the Edward Street encroachment.

The project borders residential commercial properties that house Doraku Authentic Japanese and District 5 Bar & Grill along its eastern property line, a commercial parking lot along its southern property line, and across Edward and Ochterloney Street are commercial properties; that house the Queens Square to the west and the Quaker Landing building north of the project site. Neighbouring properties will remain undisturbed throughout the demolition phase of this project and all neighbours will be notified and updated on construction ahead of time.

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
Owner/Developer	Ariana Development Ltd.	Ramin Faraneh	72 Gary Martin Drive, Unit 101, Halifax, NS, B4B 0P7	(902) 449-5374
Project Manager	TMG Project Management Inc.	Samir Metlej	123 Chain Lake Drive, Unit 210, Halifax, NS, B3S 1B3	(902) 209-5788 Hour Emergency Contact
Site Contractor	Atlantic Road Construction and Paving	Greg MacDonald	6 Belmont Avenue, P.O. Box 89 Eastern Passage, NS B3G 1M7	(902) 830-6411
Traffic Control Company	Frontline Traffic Services	Tyler Hayman	6 Belmont Avenue, P.O. Box 89 Eastern Passage, NS B3G 1M7	(902) 818-5548
Rodent Control Company	Rentokil Pest Control		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
Rodent Control Program	Apr 1, 2024	-	Aug 31, 2024	5 months
Demolition	-		-	completed
Site Excavation	Apr 15, 2024	-	Aug 15, 2024	4 months
Substructure/Foundations	Aug 15, 2024	-	Feb 15, 2025	6 Months
Superstructure	Feb 15, 2025	-	Aug 15, 2026	18 Months
Service Abandonments	Jul 1, 2024	-	Jul 31, 2024	2 weekends
Service installs	Jul 1, 2024	-	Jul 31, 2024	2 weekends
HRM Right of Way Flat Works	Sep 1, 2025	-	Sep 30, 2025	1 month
Site Flat Works	Oct 1, 2025	-	Oct 31, 2025	1 month

2.2: Key Dates

- Install encroachment April 15, 2024
 - Sidewalk closure (Ochterloney & Edward Street)
 - Street lane encroachment (Ochterloney Street)
 - Partial Street closure (Edwards Street)
 - Existing crosswalk closure (Edward Street intersection)
- Finish encroachment August 15, 2026
- Duration of encroachment 28 months
- Temporary travel lane closures
 - Ochterloney Street service abandonments July 2024
 - Edward Street service abandonments July 2024
 - Ochterloney Street water service install July 2024
 - Ochterloney Street sewer service install July 2024

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. Note that construction noise exemptions may be granted where construction noise is planned to take place during prohibited hours of the N-200 By-law. The landowner to apply for this separately under the Construction Noise Exemption process.

Section 3 – Relevant Regulations & Guidelines

3.1: Occupational Health & Safety Regulations

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

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

3.2: Municipal Regulations & Guidelines

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

- a) HRM Design Guidelines;
- b) HRM Standard Details;
- c) S-300 Streets;
- d) E-200 Encroachments;
- e) B-201 Building;
- f) N-200 Noise;
- g) T-600 Trees;
- h) S-900 Controlled Access Streets;
- i) T-400 Truck Routes;
- j) W-101 Discharge into Public Sewers;
- k) B-600 Blasting;
- 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

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 series of Traffic Control Plans (TCP) has been prepared by the traffic control company and is provided in the Appendix.

We are proposing an encroachment that will close a section of the existing one-way Edward Street between Ochterloney and Queen streets, while maintaining access to the neighboring parking lot and an altered street centerline along Ochterloney Street in front of the Project site, to accommodate a layby encroachment, while maintaining two-way vehicle traffic on Ochterloney Street with two 3.05m travel lanes and two 2.69m travel lanes on Edward Street to accommodate local traffic. Throughout all phases of construction two-way vehicular traffic will be maintained along both streets. Only during building service work and driveway installation 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. All concrete and material deliveries shall be contained within private property and the encroachment. We anticipate these deliveries entering the northwest gate and exiting the northeast gate with traffic flow and/or backing into the northeast layby gate on Ochterloney and entering the northwest gate and exiting the southwest gate on Edward with traffic flow.

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

Metered on street public parking adjacent to the project layby encroachment will be closed to allow room for gate access during construction. On street parking will be affected by this project.

It is noted that passenger vehicles are not permitted to park within any encroachment areas. To minimize parking requirements in adjacent neighbourhoods, on-site workers will utilize private property and workers will be encouraged to carpool or rely on public transit.

4.6: Bus Stops

Bus service travelling along Ochterloney Street 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

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

Throughout all phases of construction, the project will temporarily close the existing crosswalk at the Edward Street intersection and relocate pedestrian traffic to the opposite sidewalk side of Ochterloney Street and close the sidewalk across Edward Street. This is to ensure construction and deliveries are kept a safe distance from pedestrians. Pedestrian traffic will be maintained with use of existing marked crosswalks, one (1) on the northwest corner of King Street and one (1) on the southeast corner of Alderney Drive to providing access to the opposite side of the street.

5.1: Pedestrian Protection

Pedestrians will be protected by physically distancing them from the project a combination of chain link fencing and F-type concrete barriers with chain link fencing mounted above will delineate the encroachment. All fencing will be covered with opaque covering and will extend a minimum 3m from the public right-of-way, 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 are not anticipated.

5.8: Pedestrian Detour Wayfinding Signage

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

Section 6: Encroachments & Disruptions

During building construction, the project will close the existing crosswalk at the intersection of Edward Street, close a section of Edward Street between Ochterloney and Queen Street, incorporate the public sidewalk in front of the project on Ochterloney and across Edward Street and a portion of the street lane on Ochterloney. This will move pedestrians to the opposite side of the street with use of the existing crosswalks, and temporarily close on street parking on Ochterloney Street adjacent to the layby encroachment towards King Street. These encroachments are to keep the public away from the excavation zone of influence as well as provide dedicated space for site workers and deliveries within the encroachment area. To keep the public away from potential hazards a row of interlocking F-type concrete barriers complete with chain link fencing with opaque coverings will delineate the project site.

Throughout the project, fencing will be positioned to not obstruct vehicle sight lines. In areas adjacent to the site gates open mesh chain link or rigid fence on top of the site barriers to not obstruct sight lines.

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 existing building on this site was previously demolished.

6.2: Site Excavation

This includes deep excavation, shoring installation and removal of common site material. The development is planned to have 2 levels below street grade fronting both streets. If bedrock is found, the contractor will need to 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 31st 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

7.1: Damage to HRM Infrastructure

Existing HRM infrastructure damaged during construction adjacent to the project will be reinstated and be completely replaced. This includes reinstatement of the HRM sidewalk, and curb and gutter post construction. It is anticipated that HRM infrastructure 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 additional portions of existing curbs, gutters and HRM lawn 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 landowner acknowledges that items may require to be fully replaced rather than repaired. The landowner 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, asphalt curb, and concrete curb reinstatement must be completed within 72 hours of disturbance and will be considered temporary if reinstated after October 31st 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 no HRM street trees within the Right-of-Way fronting the project site. 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. Adjacent street trees are to be protected during construction in accordance with the HRM Tree Bylaw (T-600). Refer to HRM tree protection detail in the appendix.

7.3: Line Painting and Temporary Crosswalks

An altered centerline proposed on Ochterloney and a section of temporary marked two-way street lanes on the existing one-way Edward Street for this project. Refer to the line painting schematic.

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.

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 silt bags and/or 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) unless approved under HRM exemption process. No work will take place on the project site outside those hours identified in section 2 of this report, unless HRM grants an exception.

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 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 site excavation 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

8.1: Barriers & Fences

Throughout construction the project site will be delineated using a combination of chain link fencing and interlocking F-type concrete jersey barriers complete with chain link with a total height (concrete barrier and fencing structure) being 1.8m or 6ft as per the noted administrative order. This fencing 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.

Along the private sidelines where vehicular traffic and non-vehicular traffic is present, the hoarding will be delineated by a combination of concrete waste blocks with rigid fencing mounted behind being 1.8m or 6ft as per the noted administrative order and weighted modular 1.8m (6ft) high fencing or existing fencing where it is at least 1.8m 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 and fencing that define 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, concrete waste blocks, 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 landowner, 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 landowner 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 to keep the edge of the vehicle travel lane clear of snow and ice build up on both streets, gates and fencing, barriers along both streets.

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 access gates are planned to be stationed at each end of the Ochterloney truck layby, one at the south end the close street section, and one at the proposed driveway along Edward 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 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

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 site's tower crane is shown in the appendix.

It is anticipated that the crane assembly will be stationed from private property, while disassembly will reside within in the Edward street encroachment.

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

Depending on the stage of construction, delivery & concrete pump trucks will be stationed within the encroachment area, on 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 gates for entry and exit. Timing of deliveries will be coordinated to have the least possible negative impact on regular traffic. The staging and delivery area will be coordinated by the delivery companies and site personnel, concrete and material delivery trucks will be housed within the encroachment or private property accessed from both streets.

10.3: Emergency Access & Egress

The site will be accessible through gates 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. Gates will be locked and secured afterhours to provide security against public access during off work hour. Emergency contact information will be posted on project information boards surrounding the site, refer to the CMP plan for details.

Gates are 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

There are two (2) existing fire hydrants within the vicinity of the project, behind the street curb on the opposite side of the street from the project along Ochterloney Street. One (1) on the northwest corner at the intersection of Edward Street and one (1) on the northwest corner at the intersection of King Street. Any adjacent existing fire hydrants will remain outside the project area and will be protected from construction activities. These 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.

Section 11: Pre-Construction Consultation & Meeting

11.1: Pre-CMP Community Consultation

Due to the current pandemic, the landowner 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 landowner, 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

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 landowner, contractor, or traffic control service provider.

Regards,

Servant, Dunbrack, McKenzie & MacDonald Ltd.

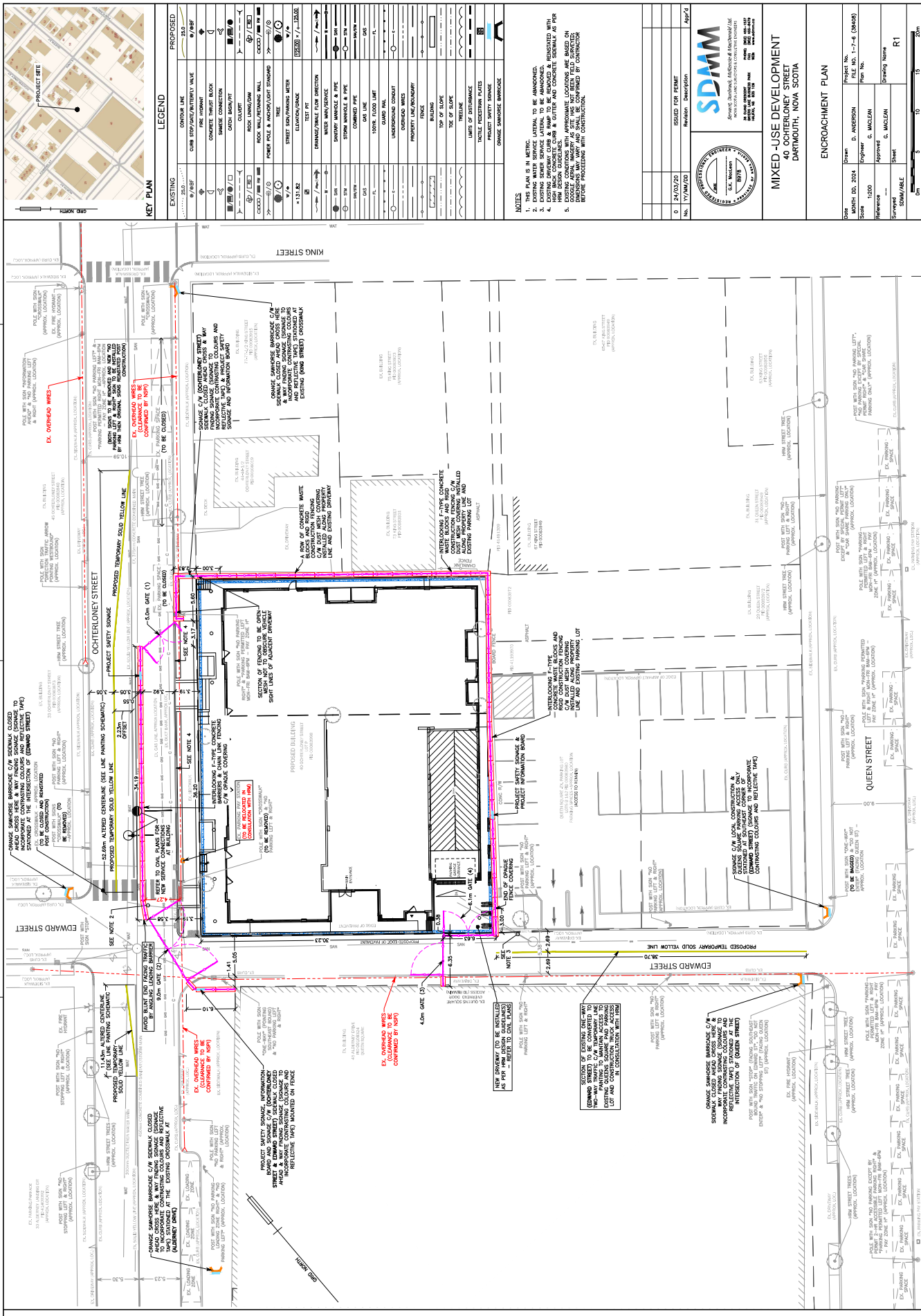
Geoff MacLean, P.Eng.

Project Engineer

Z:\SDMM\38000-38999\38400\38408\CMP\IFP\40 Ochterloney St - CMP (IFP) - 38408.docx

APPENDIX

Appendix A – Encroachment Plan



EXISTINGS		LEGEND		PROPOSED	
	CONCRETE LINE		CONCRETE WALL		PROPOSED CONCRETE LINE
	FIRE HYDRANT		FIRE HYDRANT		PROPOSED FIRE HYDRANT
	CONCRETE THRUST BLOCK		CONCRETE THRUST BLOCK		PROPOSED CONCRETE THRUST BLOCK
	MANHOLE CONNECTION		MANHOLE CONNECTION		PROPOSED MANHOLE CONNECTION
	SANITARY SEWER PIPE		SANITARY SEWER PIPE		PROPOSED SANITARY SEWER PIPE
	ROCK WALL/RETAINING WALL		ROCK WALL/RETAINING WALL		PROPOSED ROCK WALL/RETAINING WALL
	POWER POLE & MESSENGER/LIGHT STANDARD		POWER POLE & MESSENGER/LIGHT STANDARD		PROPOSED POWER POLE & MESSENGER/LIGHT STANDARD
	STREET SIGN/MONITOR METER		STREET SIGN/MONITOR METER		PROPOSED STREET SIGN/MONITOR METER
	ELEVATION MARKER		ELEVATION MARKER		PROPOSED ELEVATION MARKER
	DRAINAGE SWALE FOR DEPRESSION		DRAINAGE SWALE FOR DEPRESSION		PROPOSED DRAINAGE SWALE FOR DEPRESSION
	STORM MANHOLE & PIPE		STORM MANHOLE & PIPE		PROPOSED STORM MANHOLE & PIPE
	SANITARY MANHOLE & PIPE		SANITARY MANHOLE & PIPE		PROPOSED SANITARY MANHOLE & PIPE
	COMBINED PIPE		COMBINED PIPE		PROPOSED COMBINED PIPE
	GAS LINE		GAS LINE		PROPOSED GAS LINE
	100FT/1,000 LIMIT		100FT/1,000 LIMIT		PROPOSED 100FT/1,000 LIMIT
	GROUND LINE		GROUND LINE		PROPOSED GROUND LINE
	OVERHEAD UTILITY		OVERHEAD UTILITY		PROPOSED OVERHEAD UTILITY
	OVERHEAD INCHES		OVERHEAD INCHES		PROPOSED OVERHEAD INCHES
	PROPERTY LINE BOUNDARY		PROPERTY LINE BOUNDARY		PROPOSED PROPERTY LINE BOUNDARY
	FENCE		FENCE		PROPOSED FENCE
	BUILDING		BUILDING		PROPOSED BUILDING
	TOP OF SLOPE		TOP OF SLOPE		PROPOSED TOP OF SLOPE
	TOE OF SLOPE		TOE OF SLOPE		PROPOSED TOE OF SLOPE
	PIPELINE		PIPELINE		PROPOSED PIPELINE
	UTILITY EASEMENT PLATES		UTILITY EASEMENT PLATES		PROPOSED UTILITY EASEMENT PLATES
	PROJECT SAFETY SIGNAGE		PROJECT SAFETY SIGNAGE		PROPOSED PROJECT SAFETY SIGNAGE
	ORANGE DIAMOND UPGRADE		ORANGE DIAMOND UPGRADE		PROPOSED ORANGE DIAMOND UPGRADE

NOTES

1. THIS PLAN IS IN METRIC.
2. EXISTING WATER SERVICE LATERAL TO BE ABANDONED.
3. EXISTING WATER SERVICE LATERAL TO BE ABANDONED.
4. EXISTING DRAINWAY CURB & RAMP TO BE REMOVED & REINSTATED WITH HIGH BACK CONCRETE CURB & GUTTER AND CONCRETE SIDEWALK AS PER CITY SPECIFICATIONS.
5. EXISTING CONDITIONS WITH APPROXIMATE LOCATIONS ARE BASED ON GOOGLE AERIAL IMAGERY AS THIS HAS NOT BEEN FIELD SURVEYED; DIMENSIONS MAY VARY AND SHALL BE CONFIRMED BY CONTRACTOR.

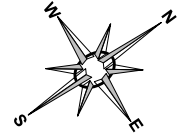
[illegible]

MIXED -USE DEVELOPMENT
40 OCHTERLONEY STREET
DARTMOUTH, NOVA SCOTIA

ENCROACHMENT PLAN		Scale MONTH 03, 2024		Drawn D. ANDERSON	Project No. FILE NO. 1-7-6 (20403)
		Size 1:200	Engineer C. MACLENN	Plan No.	
Reference		Approved	C. MACLENN	Drawing Name	
Surveyed SOM/ABLE		Sheet		R1	

Appendix B – Traffic Control Plans TCP

Centerline Alteration and Restoration Plan



Date: 2024-03-28 Author: Jenn MacLean TWS, NCSO, HSA (902) 209-7951 Project: SDMM CMP ENCROACHMENT PLAN
Contact: Geoff MacLean Phone: (902) 789-6374

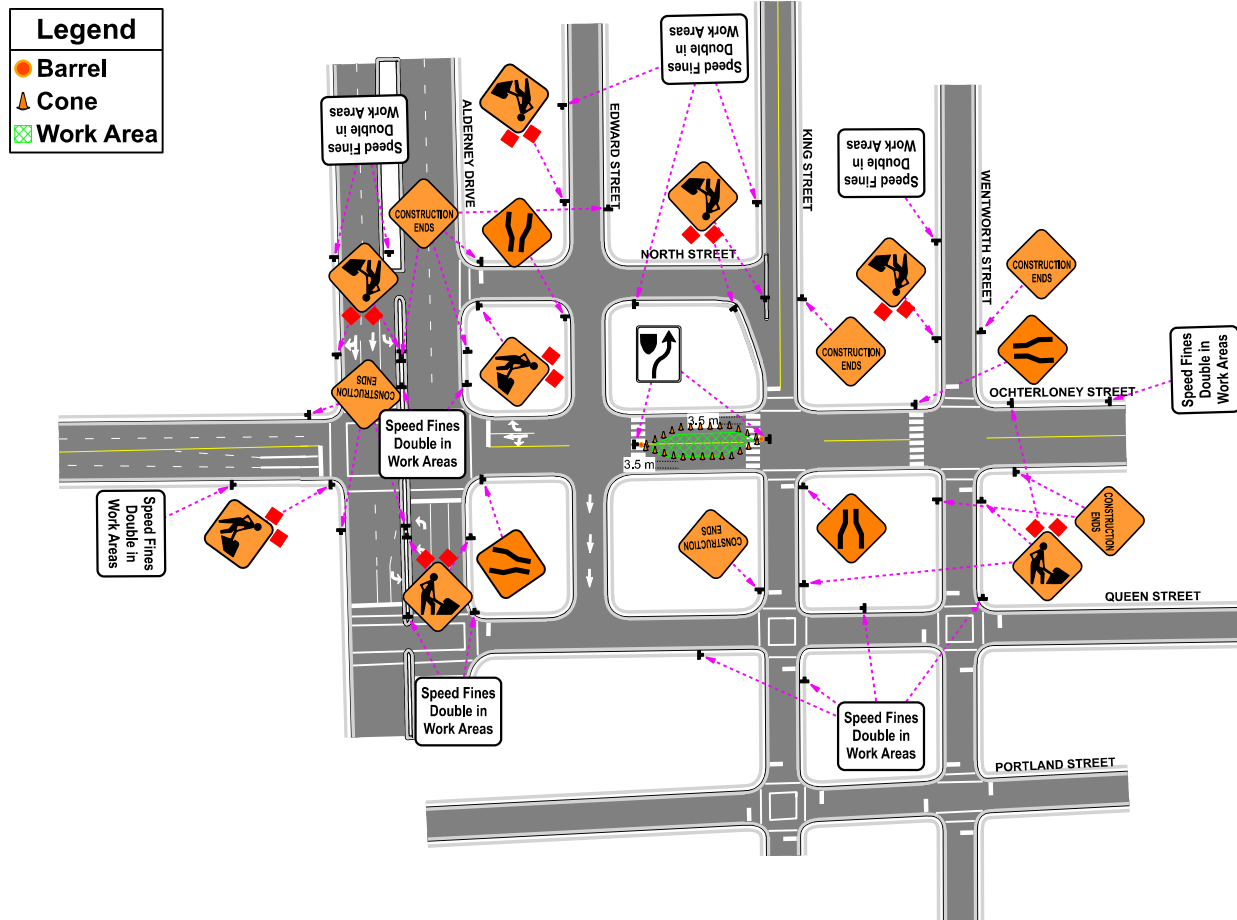
Comments:

Not to Scale

Application Guide C23

Centerline Alteration and Restoration Plan

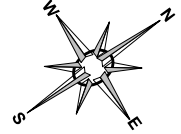
No sidewalk encroachment required



Manifest

26 x Cone
16 x TC-171 TC-171(NS) Speed Fines Double in Work Areas
13 x TC-2 TC-2
12 x TC-4 TC-4
4 x TC-34 TC-34
2 x Barrel

Barrier Installation and Removal Plan



Date: 2024-03-28 Author: Jenn MacLean TWS, NCSO, HSA (902) 209-7951 Project: SDMM CMP ENCROACHMENT PLAN
 Contact: Geoff MacLean Phone: (902) 789-6374

Comments:

Not to Scale

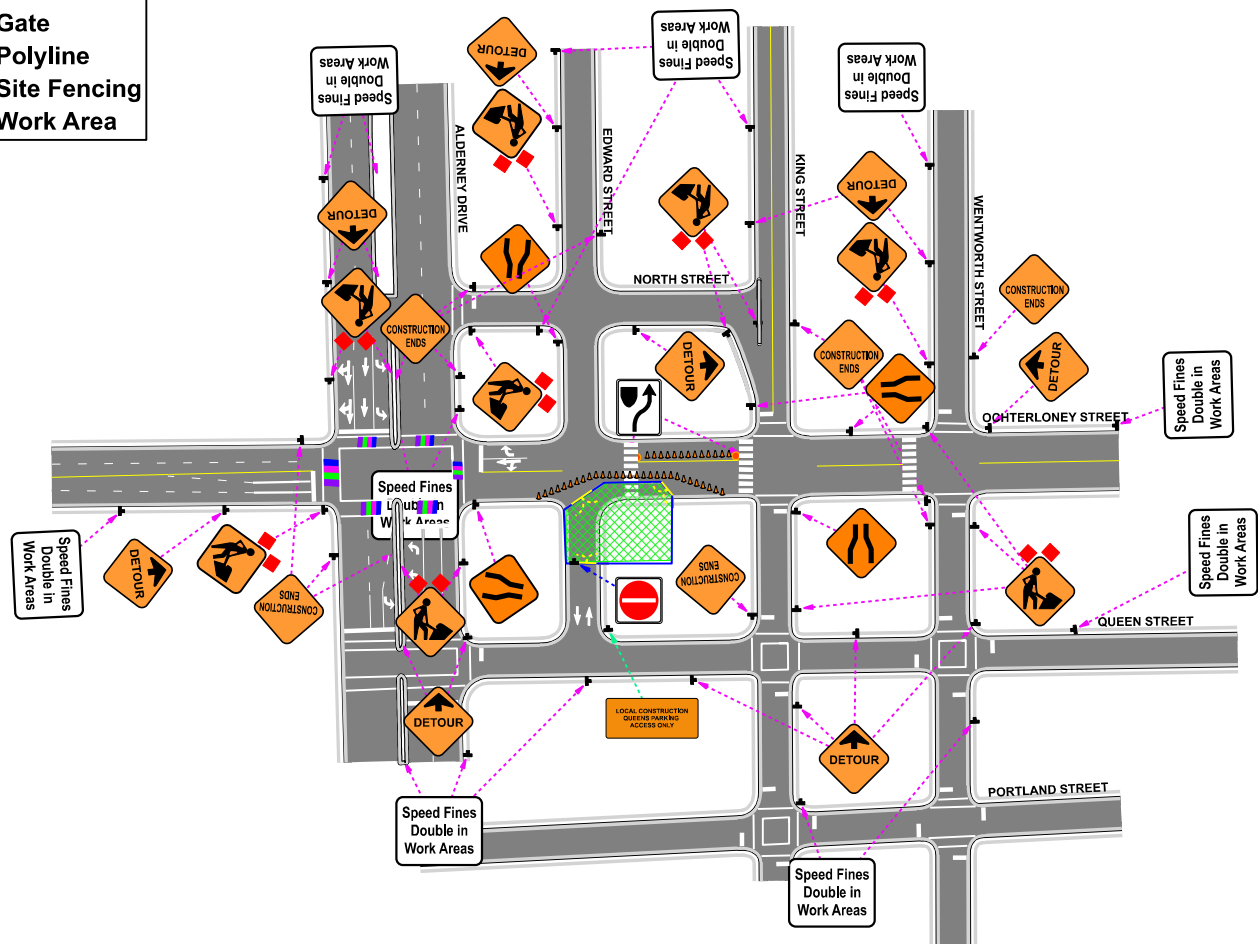
Application Guides C23 and C114

Barrier Installation and Removal Plan

See PMP for sidewalk closure details

Legend

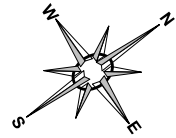
- Barrel
- Barrier
- ▲ Cone
- Gate
- Polyline
- Site Fencing
- Work Area



Manifest

42 x Cone
 16 x TC-171 TC-171(NS) Speed Fines Double in Work Areas
 14 x TC-10 TC-10
 13 x TC-2 TC-2
 12 x TC-4 TC-4
 9 x Barrier
 5 x TC-34 TC-34
 2 x Barrel
 1 x CUSTOM SDMM

40 OCHTERLONEY STREET ENCROACHMENT SIGNAGE PLAN



Date: 2024-03-28 Author: Jenn MacLean TWS, NCSO, HSA (902) 209-7951 Project: SDMM CMP ENCROACHMENT PLAN
Contact: Geoff MacLean Phone: (902) 789-6374

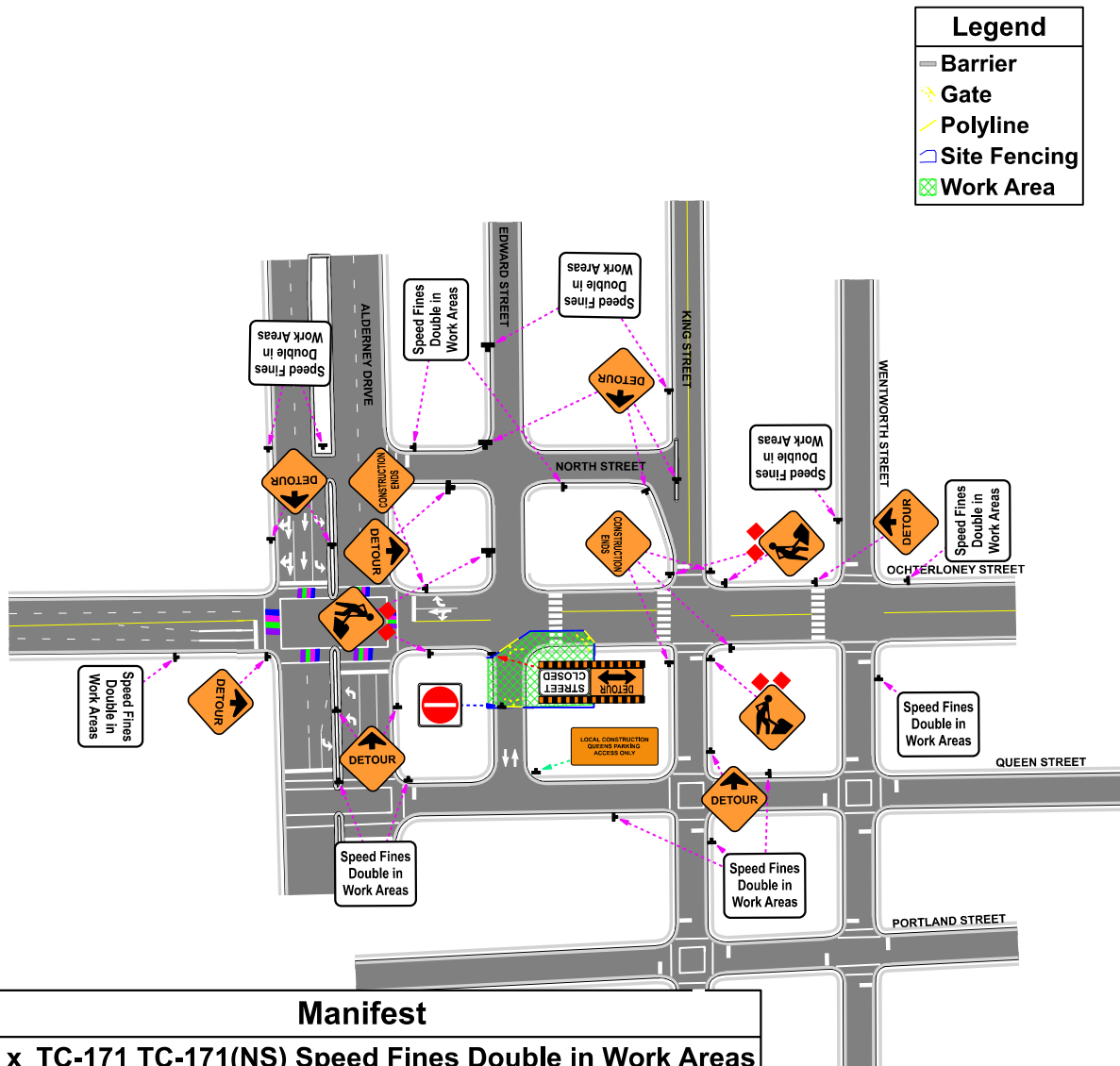
Comments:

Not to Scale

Encroachment Signage Plan

Application Guides C22 and C114

See PMP for sidewalk closure details



Manifest

15 x TC-171 TC-171(NS) Speed Fines Double in Work Areas

11 x TC-10 TC-10

9 x Barrier

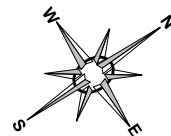
5 x TC-2 TC-2

4 x TC-4 TC-4

1 x CUSTOM SDMM

1 x TC64D

40 OCHTERLONEY STREET WAYFINDING ROUTE



Date: 2024-03-28 Author: Jenn MacLean TWS, NCSO, HSA (902) 209-7951 Project: SDMM CMP ENCROACHMENT PLAN
Contact: Geoff MacLean Phone: (902) 789-6374

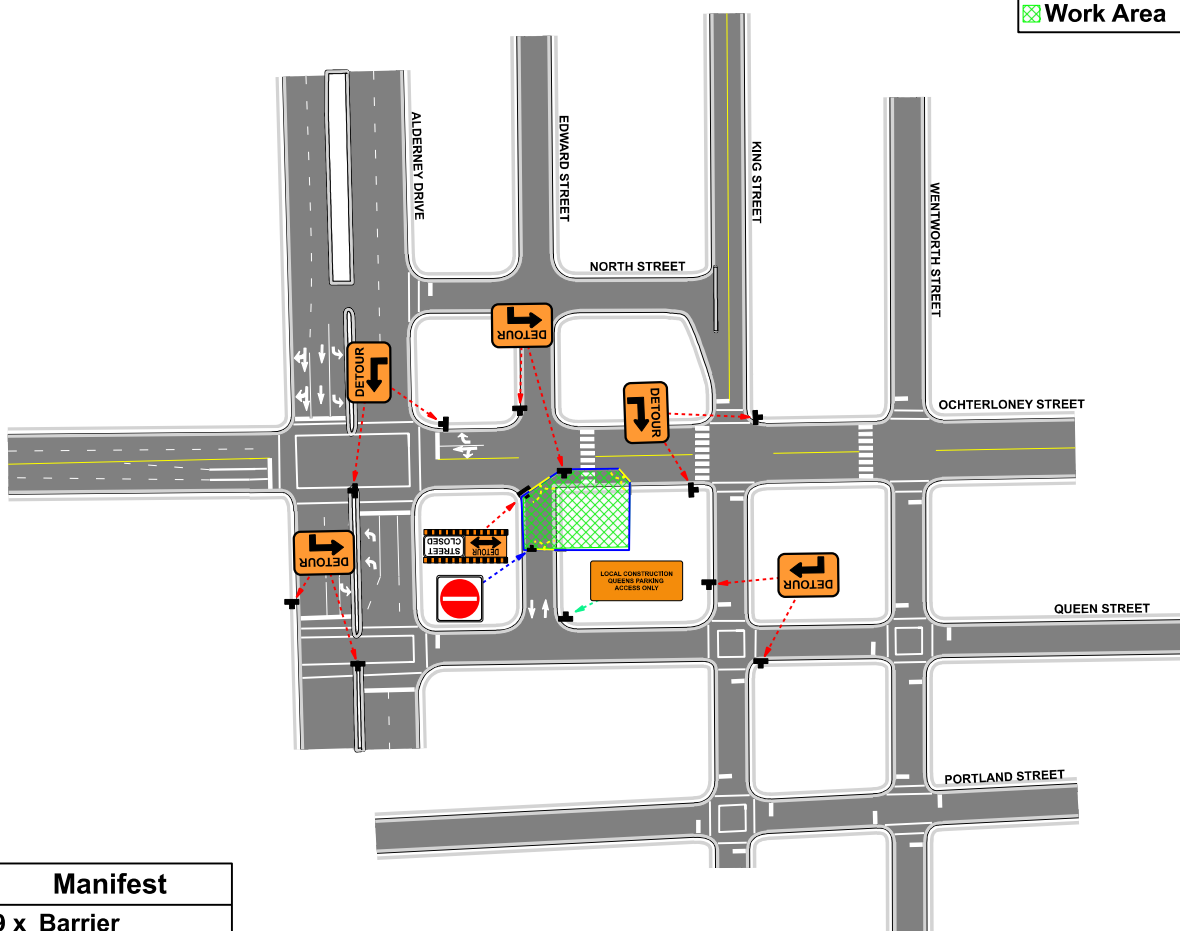
Comments:

Not to Scale

Application Guide C77

Wayfinding Plan

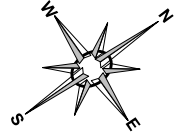
Legend	
	Barrier
	Gate
	Polyline
	Site Fencing
	Work Area



Manifest

9 x Barrier
6 x TC-11L TC-11L
4 x TC-11R TC-11R
1 x CUSTOM SDMM
1 x TC64D

OCHTERLONEY STREET CONCRETE DELIVERY PLAN



Date: 2024-03-28 Author: Jenn MacLean TWS, NCSO, HSA (902) 209-7951 Project: SDMM CMP ENCROACHMENT PLAN
Contact: Geoff MacLean Phone: (902) 789-6374

Comments:

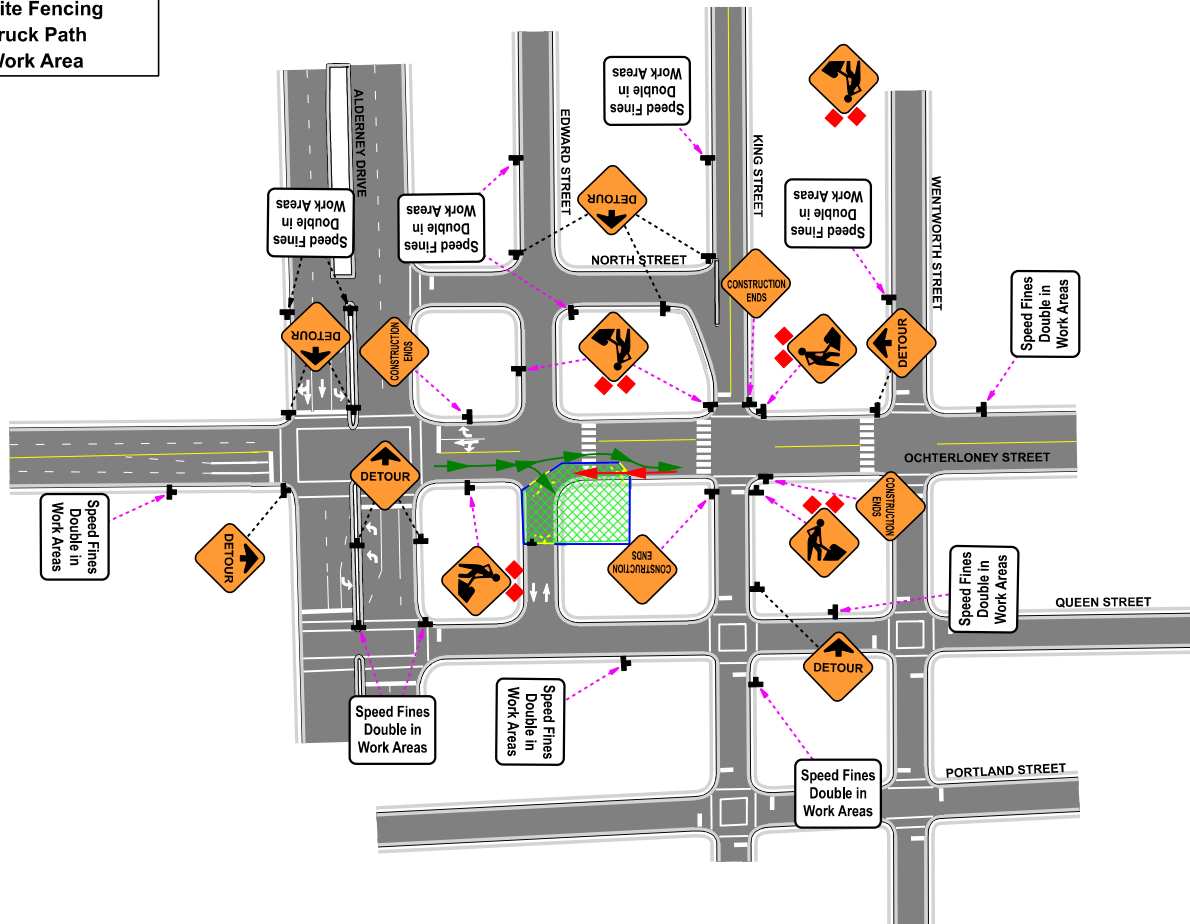
Not to Scale

Long Duration Encroachment Signage as shown.

Trucks to back up only under the guidance of a competent spotter

See PMP for sidewalk closure details

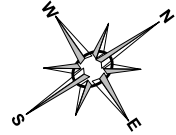
Legend	
	Barrier
	Gate
	Polyline
	Reversing Vehicle
	Site Fencing
	Truck Path
	Work Area



Manifest

13 x TC-171 TC-171(NS) Speed Fines Double in Work Areas
10 x TC-10 TC-10
9 x Barrier
6 x TC-2 TC-2
4 x TC-4 TC-4

Service Laterals Installation Plan



Date: 2024-03-28 Author: Jenn MacLean TWS, NCSO, HSA (902) 209-7951 Project: SDMM CMP ENCROACHMENT PLAN
Contact: Geoff MacLean Phone: (902) 789-6374

Comments:

Not to Scale

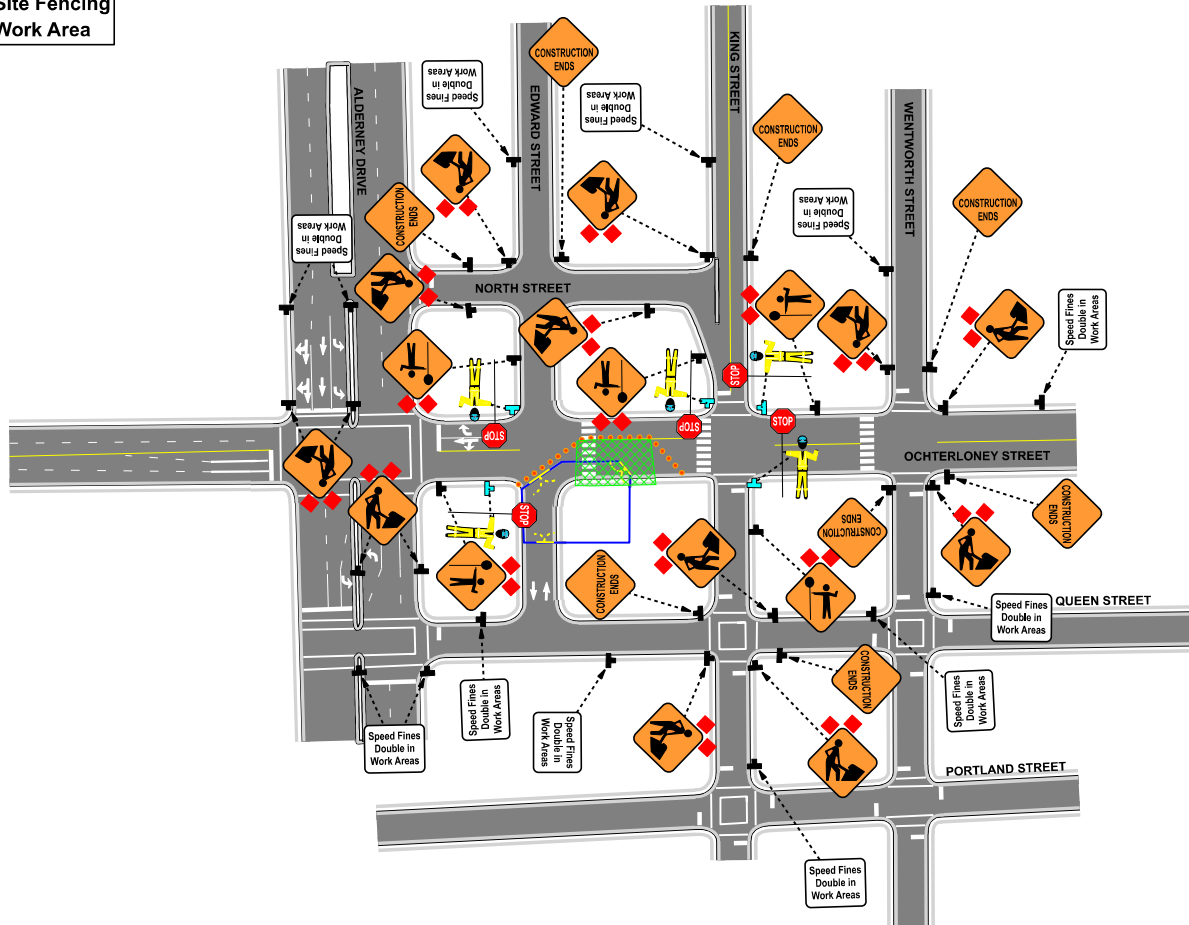
Application Guide C112

Priority must be given to TCP closest to Alderney.

See PMP for sidewalk closure details

Legend

- Barrel
- Barrier
- ⚡ Gate
- Polyline
- Site Fencing
- ▨ Work Area



Manifest



- 21 x Barrel
- 14 x TC-2 TC-2
- 13 x TC-171 TC-171(NS) Speed Fines Double in Work Areas
- 9 x Barrier
- 8 x TC-4 TC-4
- 5 x TC-21 TC-21
- 5 x TCP

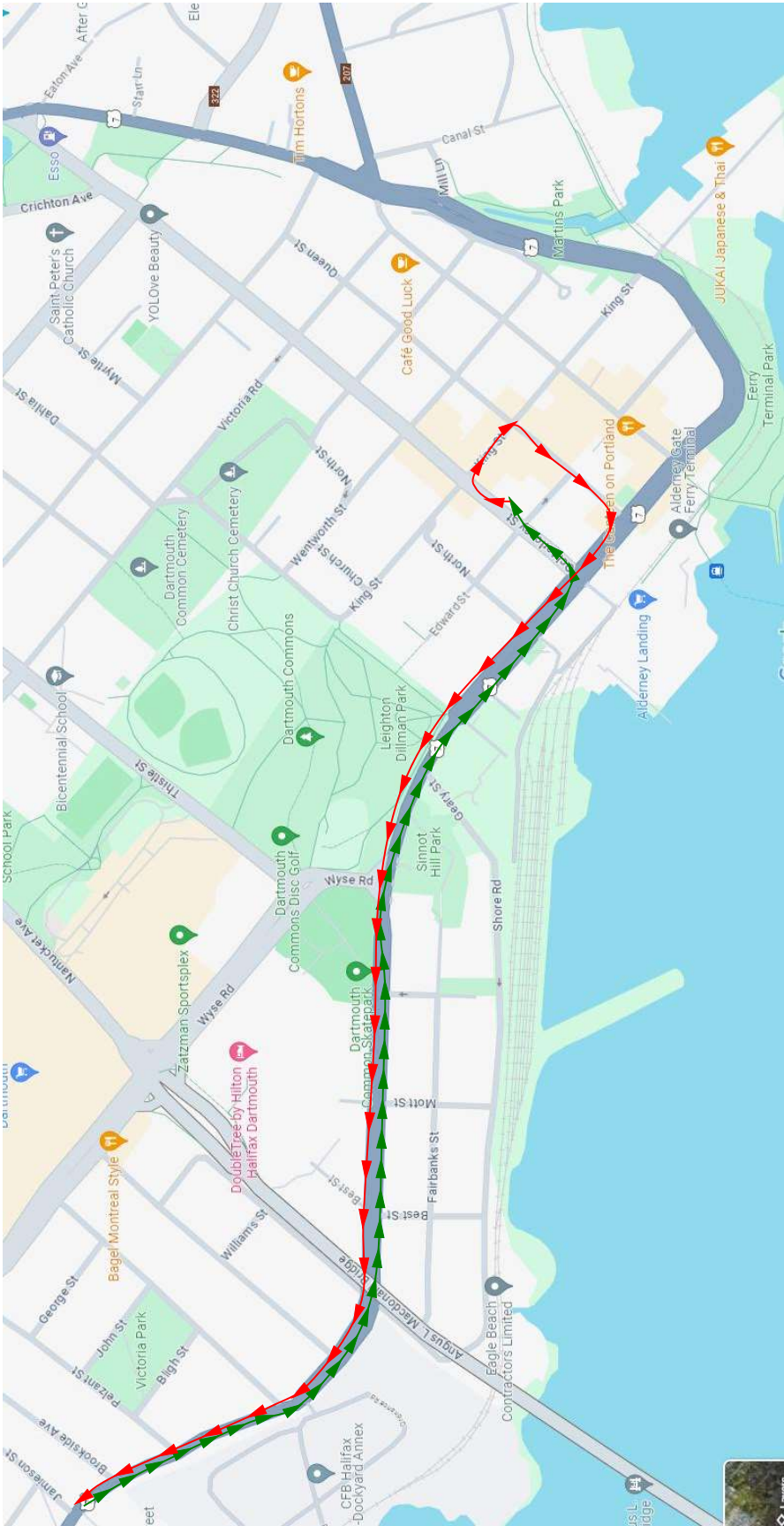
Appendix C – Haul Route Plan

40 OCHTERLONEY STREET TRUCK HAUL ROUTE



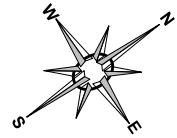
Date: 2024-03-28 Author: Jenn MacLean TWS, NCSO, HSA (902) 209-7951 Project: SDMM CMP ENCROACHMENT PLAN
Contact: Geoff MacLean Phone: (902) 789-6374
Comments:
Haul Route Plan
Haul Route Inbound via Hwy 7 (Windmill Rd) to Ochterloney St
Outbound via Ochterloney St to King St to Alderney

Legend	
	Haul Route Inbound
	Haul Route Outbound



Appendix D – Pedestrian Management Plan (PMP)

40 OCHTERLONEY STREET PEDESTRIAN MANAGEMENT PLAN



Date: 2024-03-28 Author: Jenn MacLean TWS, NCSO, HSA (902) 209-7951 Project: SDMM CMP ENCROACHMENT PLAN
Contact: Geoff MacLean Phone: (902) 789-6374

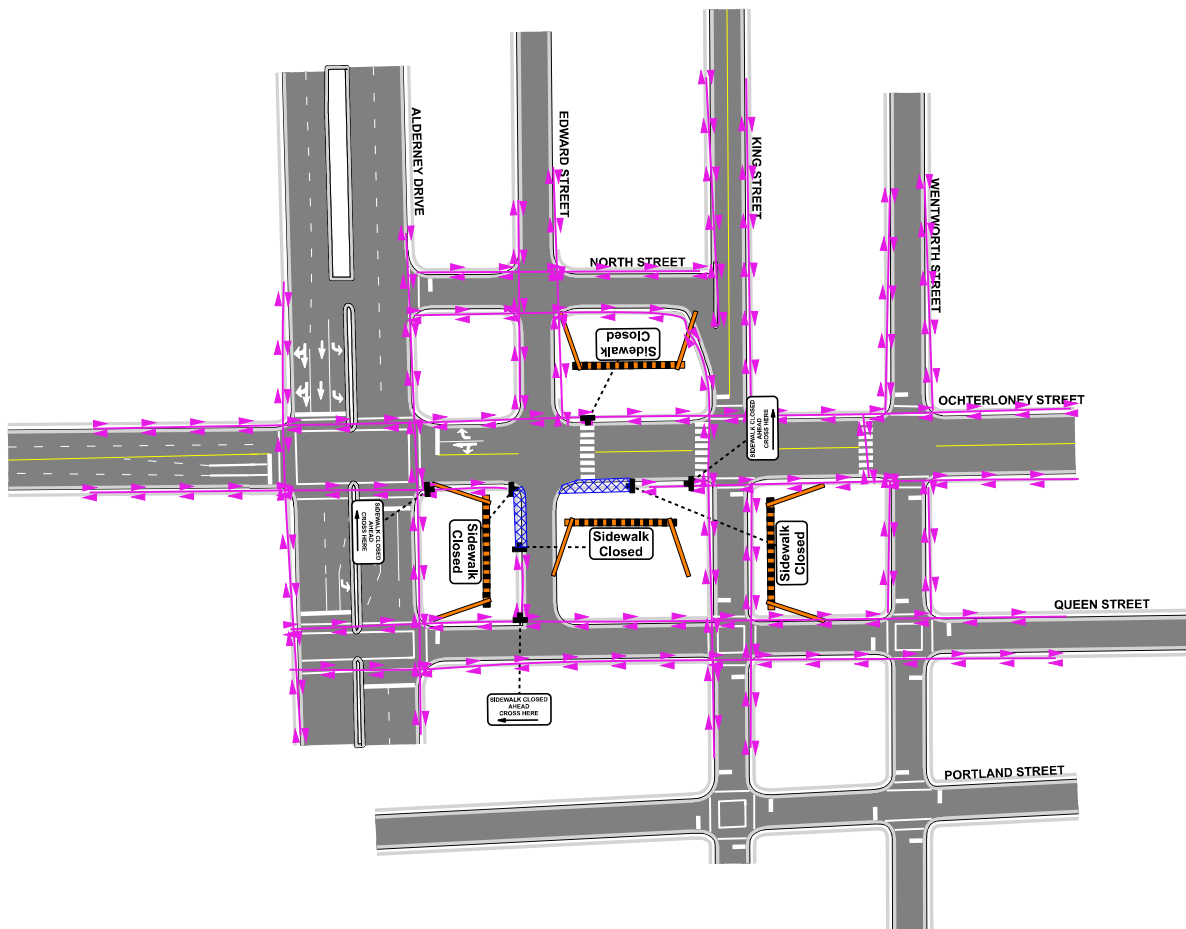
Comments:

Not to Scale

Pedestrian Management Plan

For long duration closure of sidewalk on Ochterloney and Edward Sts.

Legend	
	Pedestrian Pathway
	Sidewalk Closed



Appendix E – Barriers, Waste Blocks, Fence & Gates Information

Sample Barrier & Fence Details

F-shape Barrier

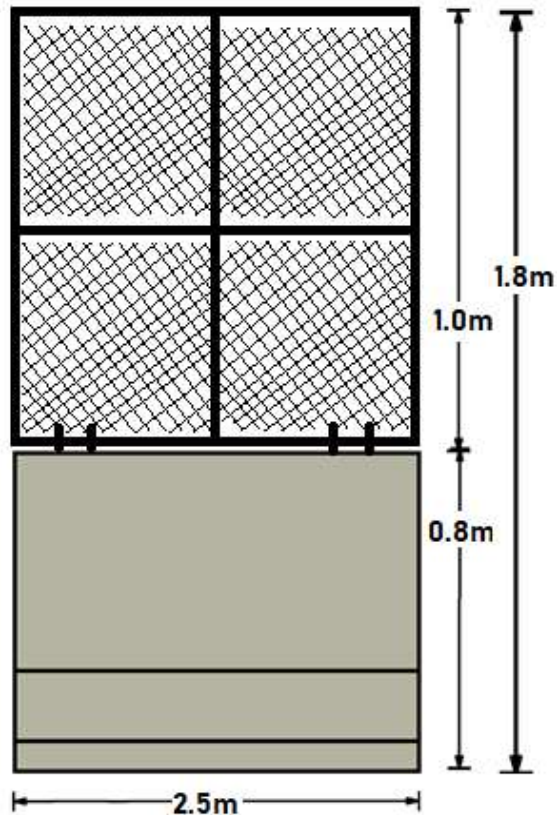
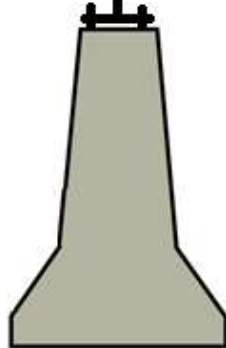
Approved Barrier Designs

The only pre-approved portable anti-intrusion barrier in Nova Scotia is the Portland Cement Concrete F-shape Barrier. F-shape Barriers with designs approved before 2011.01.01 must be constructed and installed copying a design certified as meeting Test Level 3 of the NCHRP Report 350 (NCHRP 350), or if the design was approved after 2011.01.01, Test Level 3 standards of the American Association of State Highway and Transportation Officials (AASHTO) Manual for Assessing Safety Hardware (MASH).

Dimensions are in mm

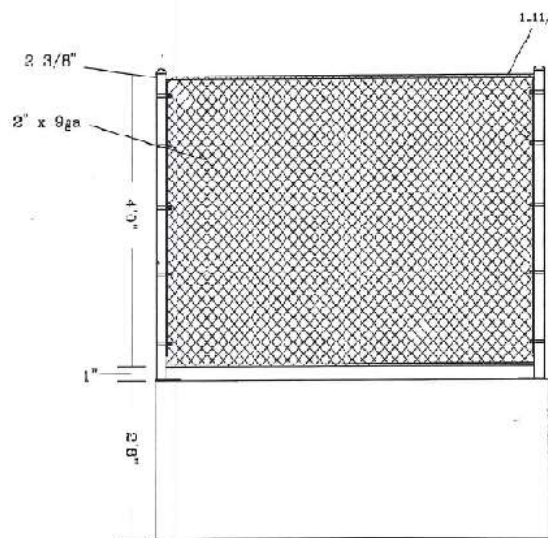
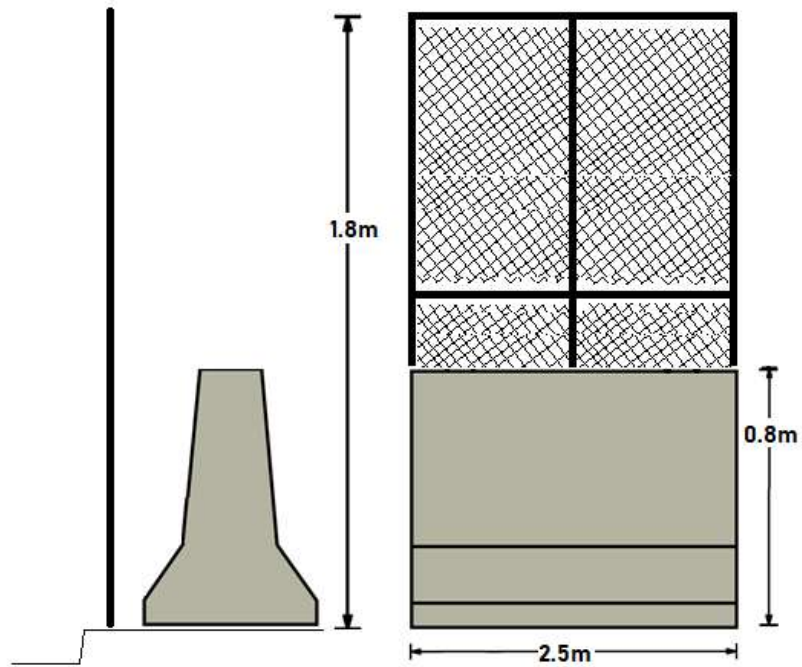


Chain link fence mounted
on top of F-type
interlocking concrete
jersey barrier

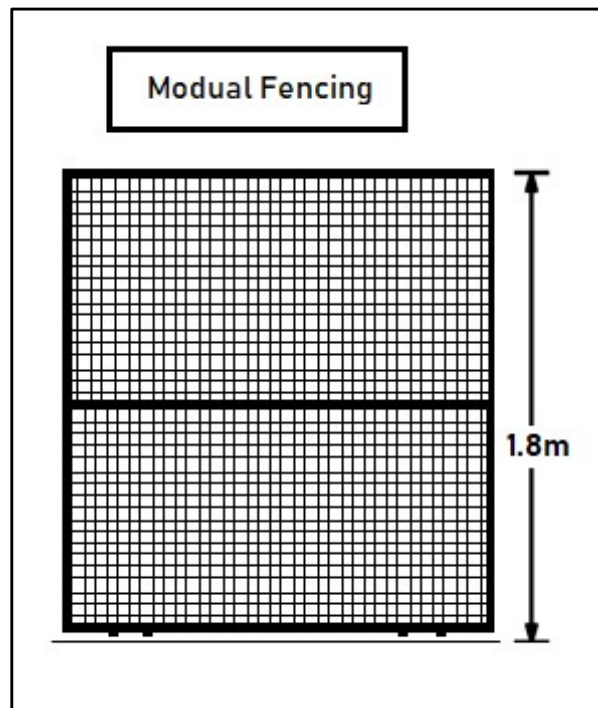
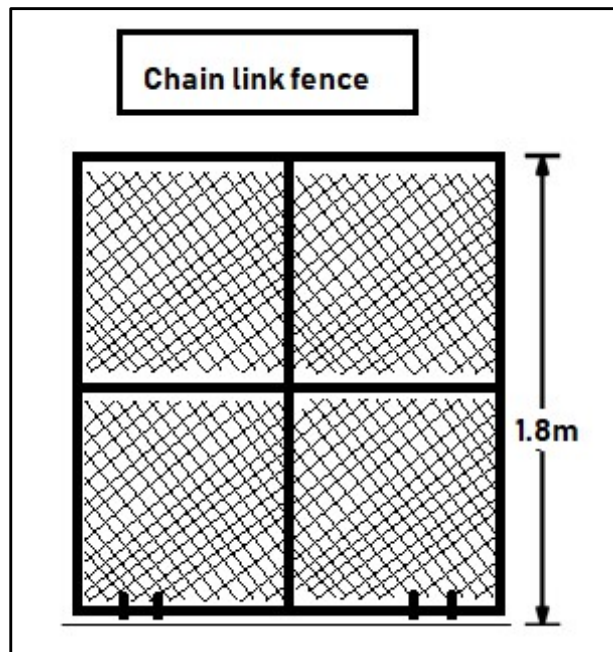


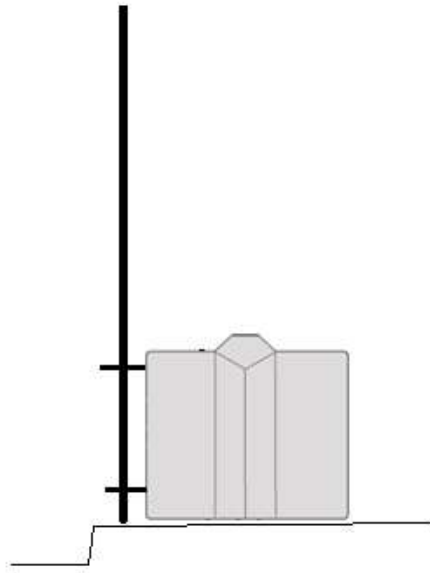
Note: All F-type concrete barriers within the street shall have reflective tape on them.

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



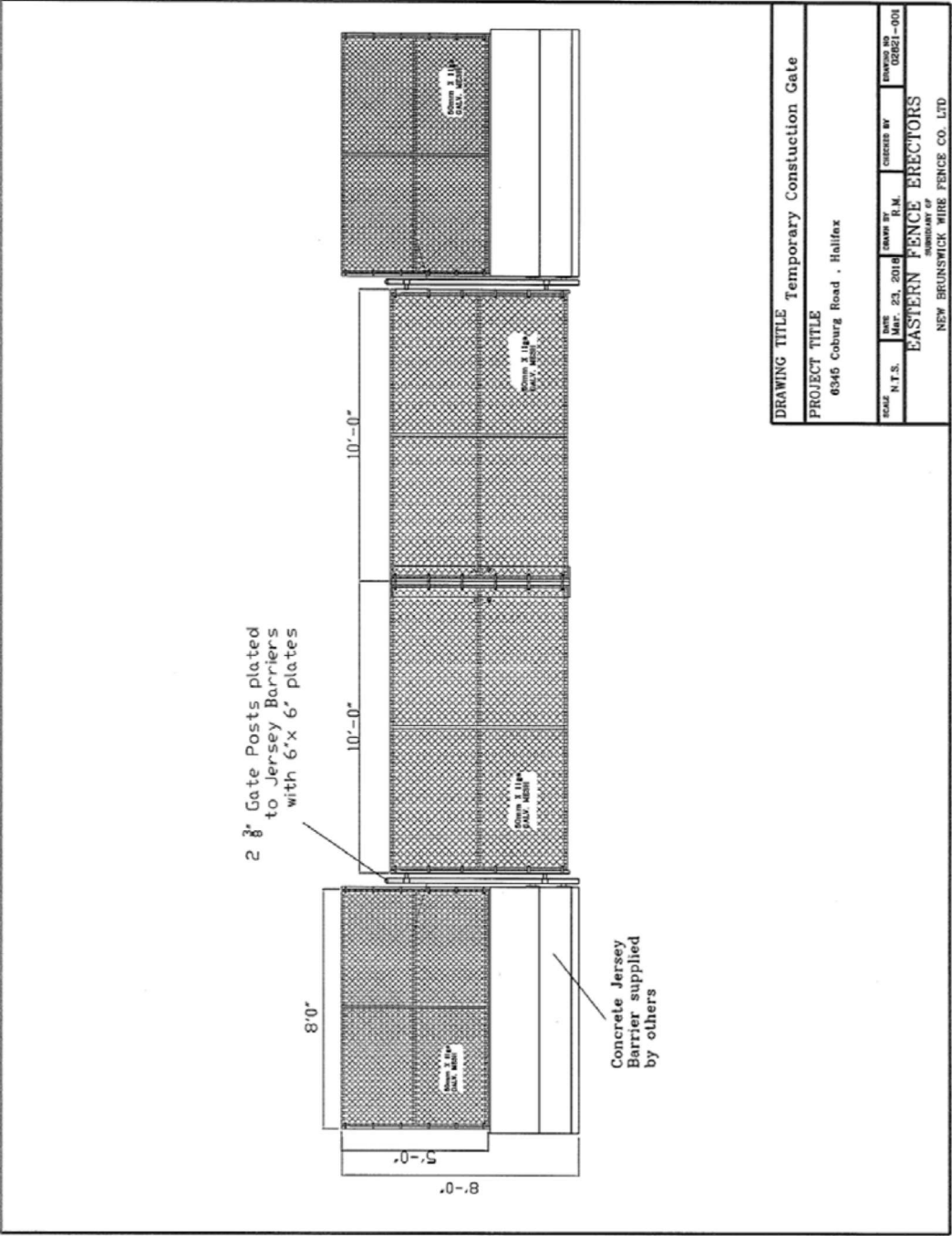
DRAWING				
SHOP DRAWING				
DRAWING TITLE				
PROJECT TITLE				
DATE	DATE	DATE	DATE	DATE
REV	REV	REV	REV	REV
EASTERN FENCE				
NEW BRUNSWICK FENCE CO. LTD.				





Modular Fencing positioned at curb with concrete block or sand bags placed beside and secured to fencing, anchoring modular fencing to the ground.

Sample Gate Detail



Appendix F – Hoarding Information

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.

Tarp Option



Print Banner Option



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/m²	7.96 oz/yd²
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.)

ULTRAFLEX

Ultraflex Systems Inc.
Headquarters
203 Kasey Lane, Suite E
Tampa, FL 33619
P: (973)627-8008
Email: sales@ultraflex.com

www.ultraflex.com
updated: 12/2010

Ultraflex Systems Inc.
1570 Sussex Turnpike, Bldg. 4
Randolph, NJ 07069
P: (973)627-8008
F: (973)627-8006
Email: sales@ultraflex.com

Ultraflex Europe
Unit 1 Hardwick Road Industrial Park
Great Grimsden Bedfordshire
England SG19 3BJ
Phone: (44)1767-677-100
Email: sales@ultraflexeurope.com

Ultraflex Mexico
Azufra No. 112, Col. Granjas México
Del. Iztacalco, C.P. 09400, México D.F.
Tel: (55)51823632, 3162 3608
01 800 822 52 31
Email: sales.mx@ultraflex.com

Ultraflex Guadalajara
Av. Patria No. 2804
Loma Bonita Sur,
Zapopan, Jalisco CP45086
México
Tel: (55)3312-049-857

Appendix G – Project Information Board



April 2024 – August 2026

OCHTERLONEY & EDWARD APARTMENTS
40 Ochterloney Street

11 Storey – Residential Building

128 Residential Units on 10 Levels

Level 1 Commercial Space

1, 1+ Den and 2 Bedroom Units

2 Levels Underground Parking

Indoor & Outdoor Amenity Space with
Landscaped Roof Greenhouse

Indoor Bicycle parking & Storage

Owner/Developer:

Ariana Development Ltd.

72 Gary Martin Drive, Unit 101, Halifax, NS, B4B 0P7

Project Manager:

TMG Project Management Inc.

123 Chain Lake Drive, Unit 210, Halifax, NS, B3S 1B3

24 Hour Contact:

Samir Metlej – (902) 209-5788

Contractor:

Atlantic Road Construction and Paving

6 Belmont Avenue, P.O. Box 89, Eastern Passage, NS, B3G 1M7

Contact:

Greg MacDonald – (902) 830-6411

Traffic Control:

Frontline Traffic Services

6 Belmont Avenue, P.O. Box 89, Eastern Passage, NS, B3G 1M7

Contact:

Tyler Hayman - (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

**NO
TRESPASSING**

! WARNING

CONSTRUCTION SITE

To reduce risk of injury,

- Hard Hat
- Safety Shoes

MUST be worn on this site.



Appendix I – Project Signage Specifications

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 10days 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



Proposed Multi-Unit Residential Building

DRAFT NOTIFICATION LETTER

TO WHOM IT MAY CONCERN

Date

NOTIFICATION OF TRAFFIC DISRUPTION: STREET NAME, DARTMOUTH, NOVA SCOTIA

This is to inform you that the to facilitate operations in association with the 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

Site 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

Project

Date:

Location:

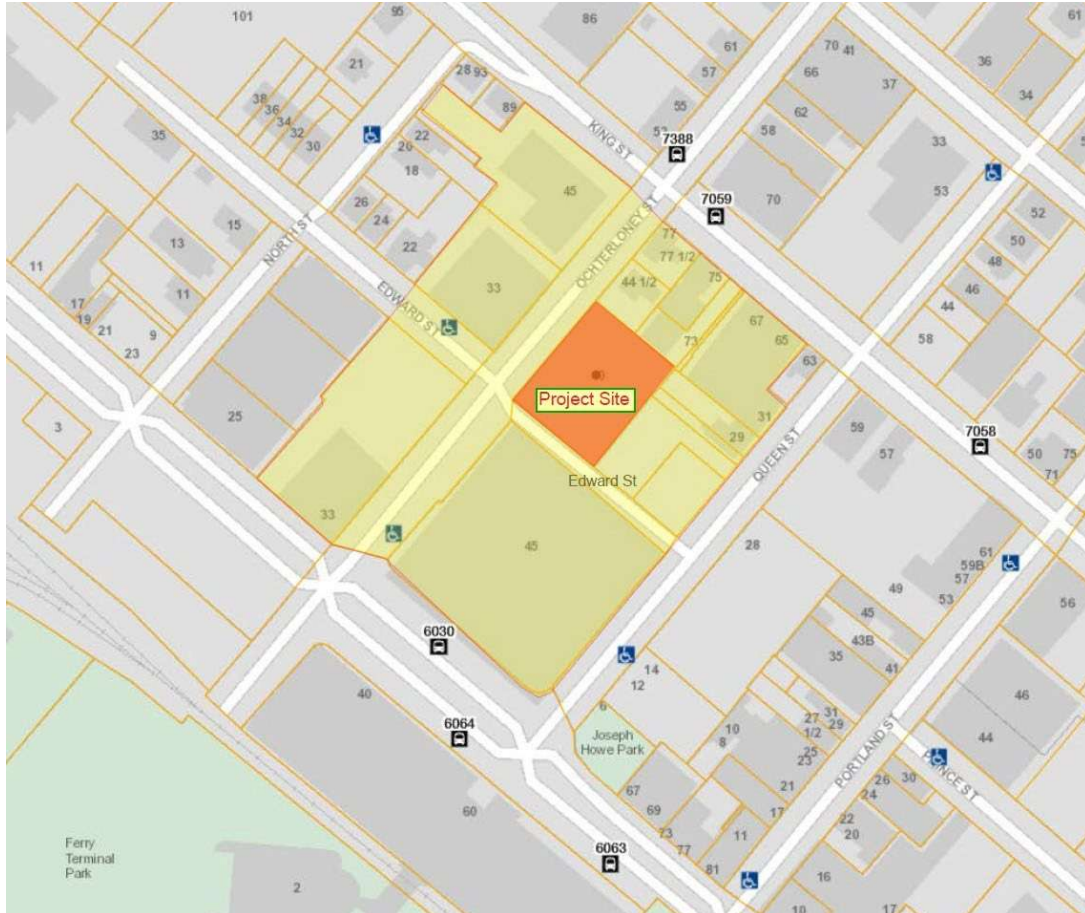
VEHICULAR & PEDESTRIAN HAZARD ASSESSMENT

No.	Hazard:	Project Phase:	Vehicular Impacts:	Mitigation Methods:	Pedestrian Impacts:	Mitigation Methods:
1	Excavation	Excavation	Vehicles may enter project site and fall down excavation.	Place concrete barriers along travel ways. Concrete barriers and existing curbs to prevent vehicle entry.	Pedestrians may enter project site and fall down excavation.	Place concrete barriers/rigid fencing around entire project site.
2	Rock Blasting	Excavation	Vehicle weight may surcharge excavation, causing excavation wall failure.	Close sidewalks & driveways adjacent to project site, moving vehicles farther away from excavation.	Blasted rock projectiles may strike pedestrians.	Install solid plywood hoarding along rigid fence adjacent to blasting zone.
3	Construction Waste	All Phases	Blasted rock projectiles may strike vehicles.	Close sidewalks & driveways adjacent to site, moving vehicles farther away from blasted rock.	Pedestrians may be struck by construction waste.	The contractor shall keep the project site and surrounding areas clean and free of construction debris.
4	Vehicular & Pedestrian Activities	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.	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.
5	Heavy Machinery Operation	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.	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.
6	Construction Signage	All Phases	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	Dangerous Materials	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.
8	Hoisting Operations	Superstructure	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.	Construction signage may strike pedestrians.	Construction signage will be securely fixed to existing poles, temporary concrete sign bases, or rigid fences.
9	Reinstatement of Public Infrastructure & Service Installation	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.	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.
10	Fallen debris	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.	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.
			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.	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.
					Dobris 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

COMMUNITY CONSULTATION MAP OVERVIEW

Project – Ochterloney & Edward Apartments



Notification Letter

Date: *****

Ariana Development Ltd.– Building Construction Information Meeting

Dear Neighbour,

As you may be aware, we are planning an apartment building construction project located at 40 Ochterloney Street, on the corner of Ochterloney and Edward Street in Dartmouth.

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.

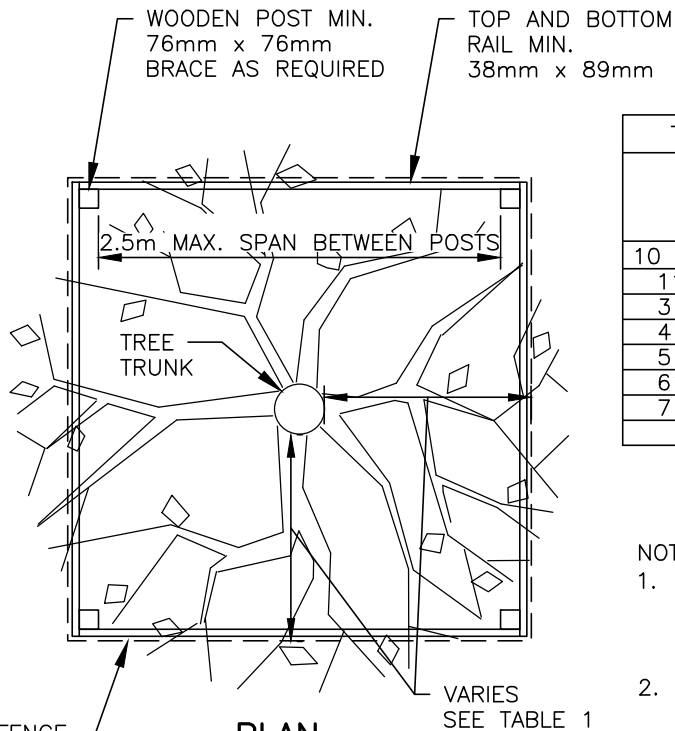
Thank you.

Samir Metlej (TMG Project Management Inc.)

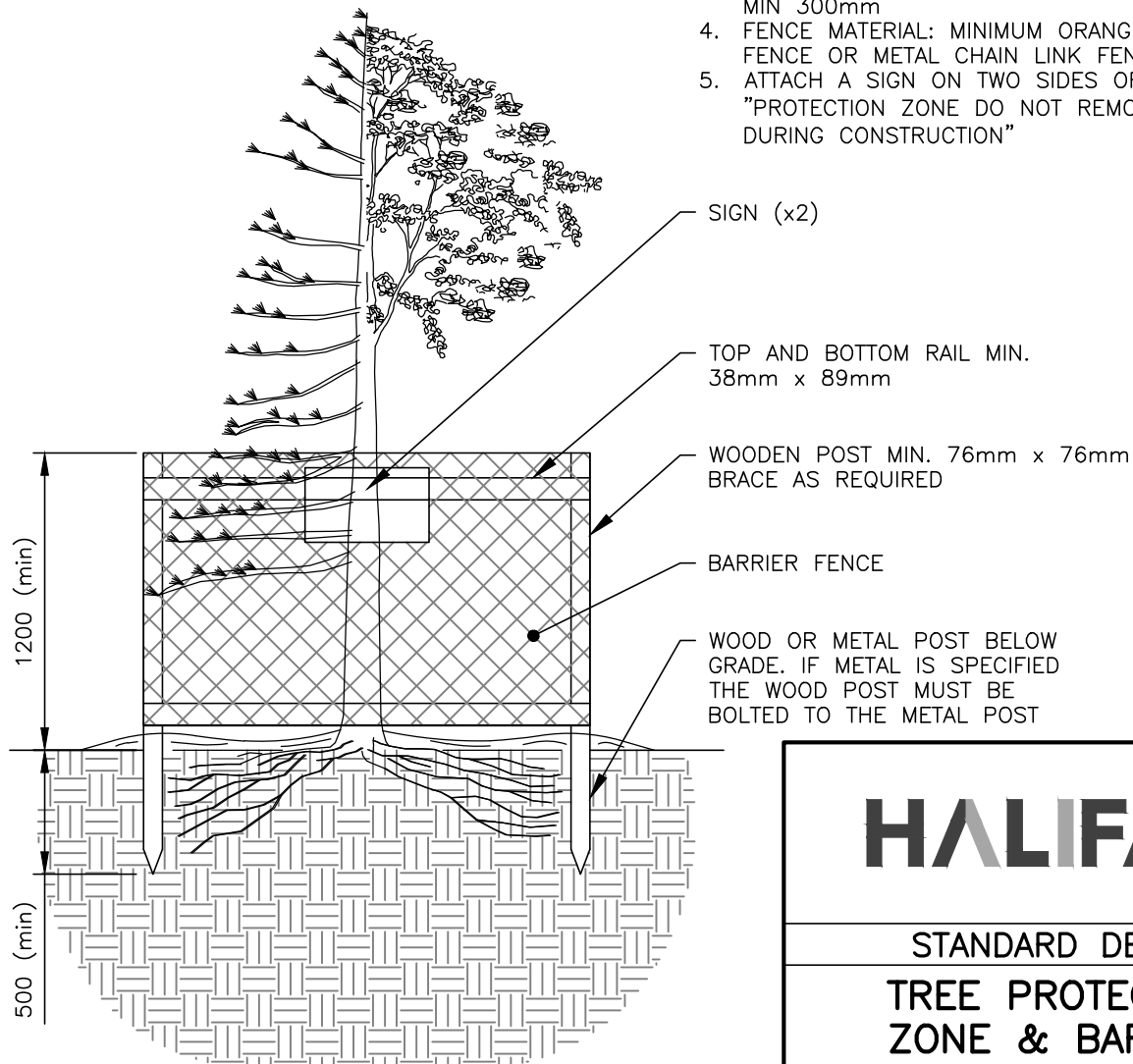
Cell: 902-209-5788

Email: samir@tmgprojects.com

Appendix M – HRM Tree Detail



PLAN



PROFILE

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"

HALIFAX

STANDARD DETAIL

**TREE PROTECTION
ZONE & BARRIER**

DATE:	2021	REFERENCE	APPROVED
SCALE:	NTS		FIG No.: HRM 140

Appendix N – Rodent Control Plan

NOTES:

1. LOT IDENTIFIERS 1 AND P-1 ORIGINATE ON THIS PLAN.
2. SEE PLAN SHOWING LANDS OWNED BY DREPMOUTH FUNERAL HOME LIMITED (DREPMOUTH FUNERAL HOME LIMITED, 288 DATED NOVEMBER 18, 1974; STAFF PLAN NO. 8-322 (NOT RECORDED)).

OCHTERLOWEY STREET
(16.154m WIDE)



Bait Station Legend
Pre & Post Excavation
Rodent Control Plan
Prepared for
Rentokil Atlantic
902-835-2304
51 Duke Street, Bedford, NS

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
Protecta Evo Ambush

CODE
EA2000

DIMENSIONS (in)
8 1/2 x 10 1/4 x 4 1/4

CASE QTY
6 Stations



More Than Meets The Eye

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

www.bellabs.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 (8.2kg)**



DETEX[®] 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[®] 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
Inert and Non-Hazardous Ingredients (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

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

Components	NTP	IARC	OSHA
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

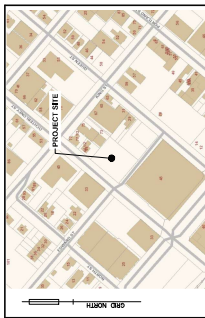
For additional information, please contact the manufacturer noted in Section 1.

NFPA	Health: 0 (Not Toxic)	Flammability: 1 (slight)	Reactivity: 0 (stable)	Specific Hazard: None
HMIS	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.


Appendix O – CMP's TCP & PMP Inspection Records

Appendix P – Concrete Delivery Schematic

[illegible]

NOTES

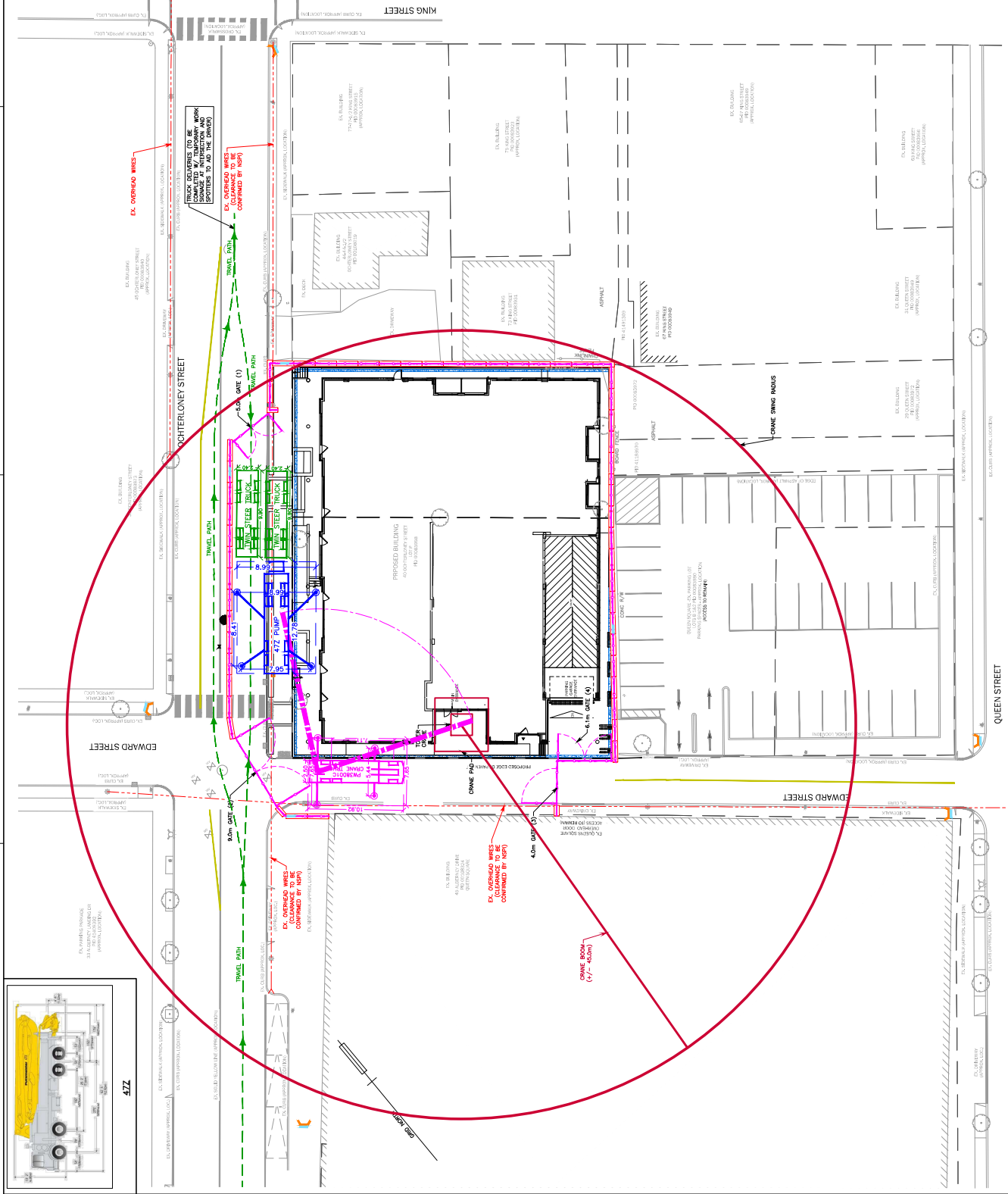
1. THIS PLAN IS IN METRIC.
2. EXISTING CONDITIONS WITH APPROXIMATE LOCATIONS ARE BASED ON GOOGLE AERIAL IMAGERY AS SITE HAS NOT BEEN FIELD SURVEYED; DIMENSIONS MAY VARY AND SHALL BE CONFIRMED BY CONTRACTOR BEFORE PROCEEDING WITH CONSTRUCTION.

0	24/03/20	ISSUED FOR PERMIT	2404/2	 <p>SDMM Strategic Development, Architecture & Mechanical Ltd 1000 SOUTH LANE, SUITE 100, COVINGTON, LOUISIANA 70038 PHONE: 504.833.8888 FAX: 504.833.8889 WWW: WWW.SDMM-LLC.COM</p>
	17/04/20	PERMIT		
		REVISION		

MIXED-USE DEVELOPMENT
40 OCHTERLONEY STREET
DARTMOUTH, NOVA SCOTIA

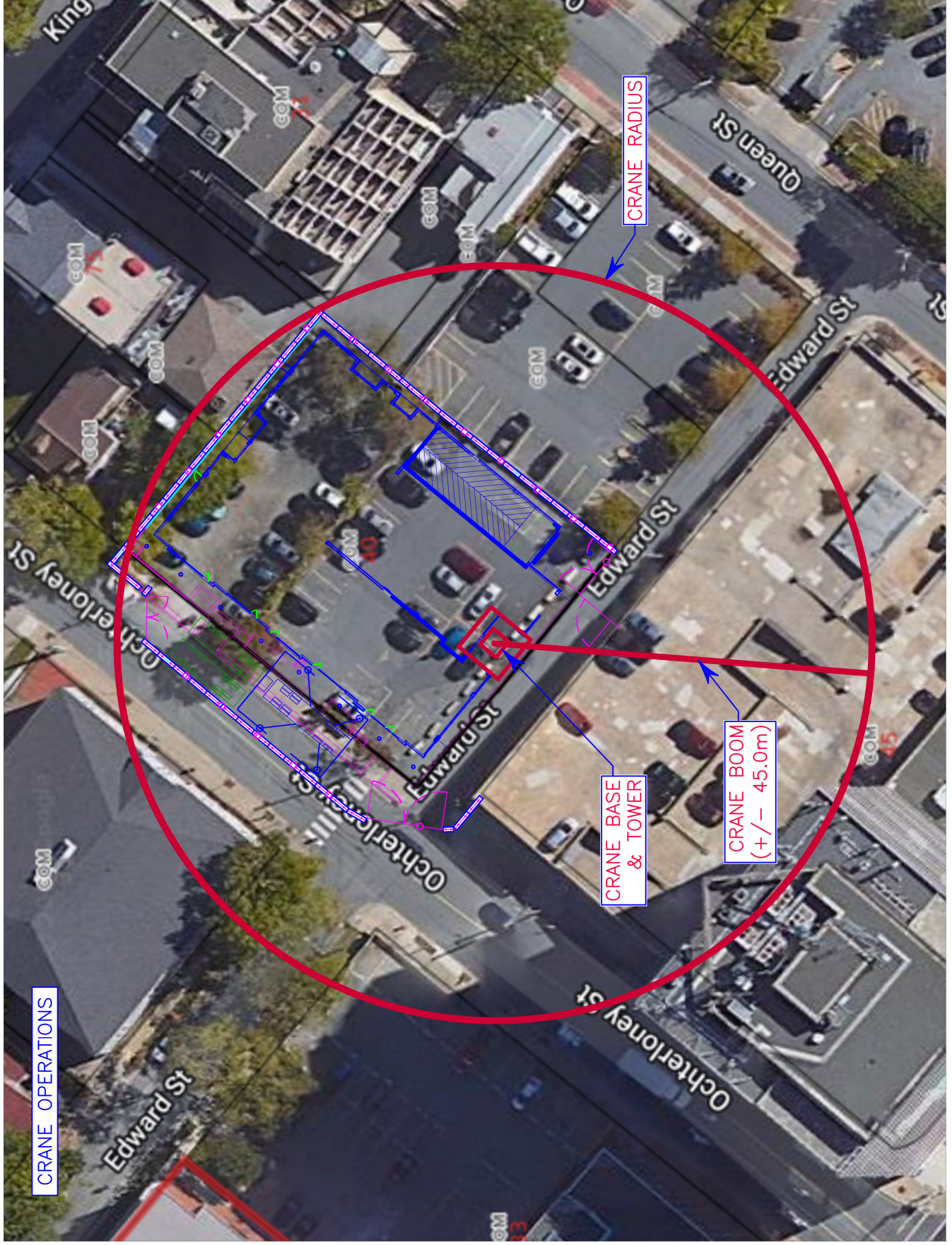
CONCRETE DELIVERY SCHEMATIC

Date	March 10, 2024	Drawn	D. ANDERSON	Project No.	
Scale	1"=200'	Engineer	G. MACLEIN	FILE NO.	1-7-6 (38403)
Reference	---	Approved		Plan No.	
Surveyed	SDMM	Sheet		Drawing Name	
				R2	



Appendix Q – Crane Information

CRANE OPERATIONS



The drawing shows a building facade with a grid of columns labeled A through H. Key features and levels are indicated:

- HOOK ELEVATION** (+/- 49.837m) is marked at the top left, with a dimension line indicating a height of 147' - 8" / 45.0m.
- TOP OF GREENHOUSE ROOF** (+/- 39.837m) is marked with a blue arrow pointing to the top of the greenhouse structure.
- TOP OF ROOF** (+/- 36.787m) is marked with a blue arrow pointing to the top of the main roofline.
- LEVEL 1** (+/- 8.760m) is marked with a blue arrow pointing to the first floor level.
- LEVEL P1** (+/- 4.952m) is marked with a blue arrow pointing to the parking level P1.
- LEVEL P2** (+/- 1.904m) is marked with a blue arrow pointing to the parking level P2.

Other labels include "FEATURE ALUMINUM COMPOSITE PANEL", "ARCHITECTURAL FEATURE", "MAX 5.00 HEIGHT", and "A.V. GRADE". The drawing also shows a cross-section of the building with a truss structure and a roofline.

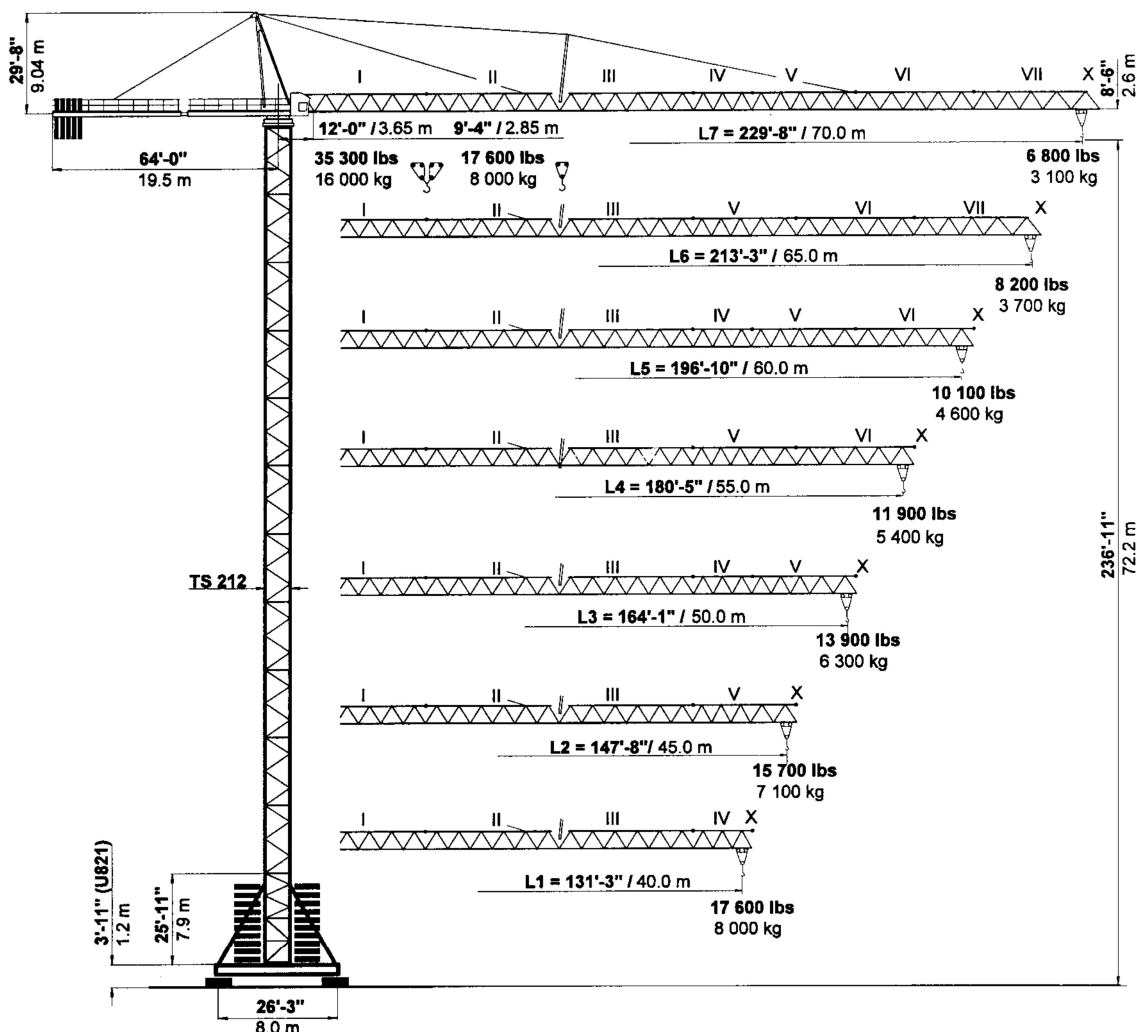
LEVEL P2
(+/- 1.904m)



PEINER SK 315

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

SPECIFICATIONS

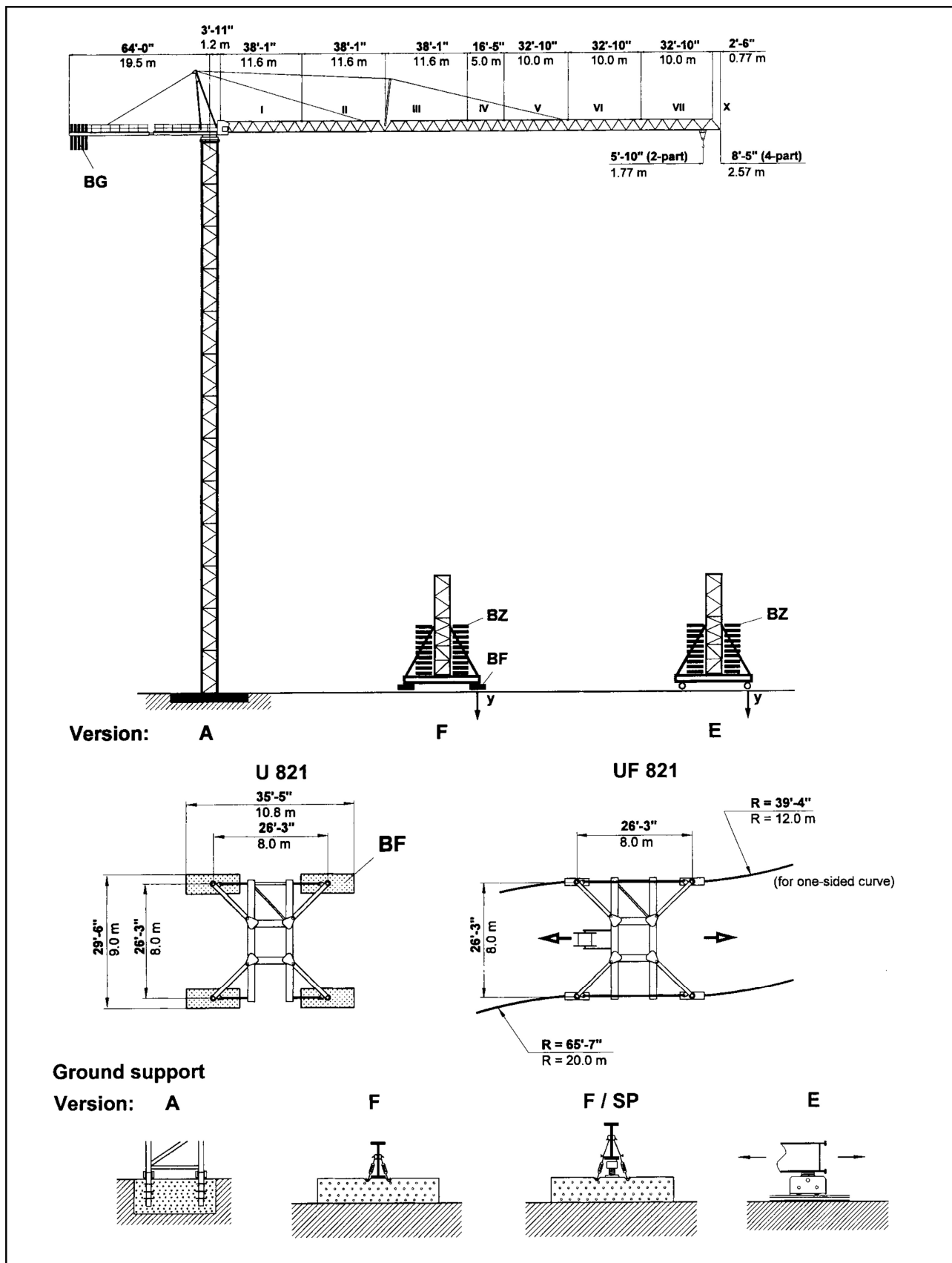


simple, available and
 cost effective™

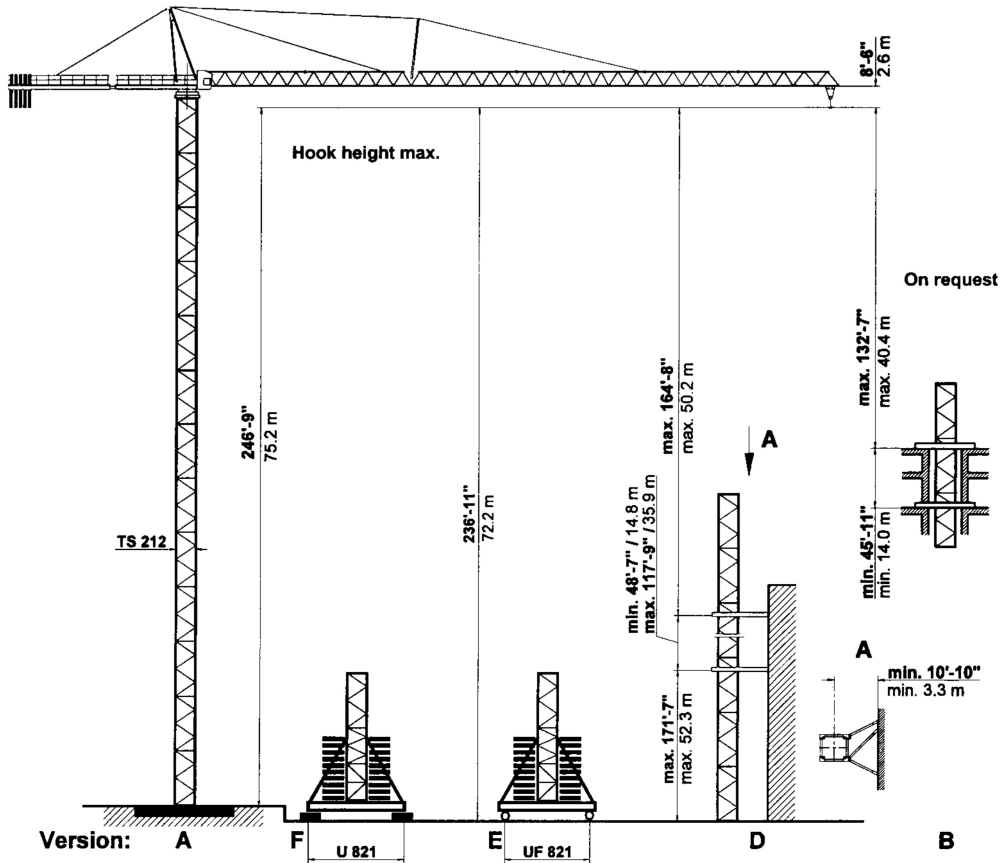
Machines shown may have optional equipment.

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 TS 212.1	ft m	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 11 x TS 212.1	236'-11\"** 72.2*	212.0 96	204 909	279 1243	198.0 90	212 942	282 1253
11 x TS 212.1	208'-0\"** 63.4*	1 x TSV 212 10 x TS 212.1	217'-6\"** 66.3*	168.0 76	186 826	240 1066	154.0 70	192 856	242 1075
10 x TS 212.1	188'-8\"** 57.5*	1 x TSV 212 9 x TS 212.1	198'-2\"** 60.4	146.0 66	173 770	203 901	132.0 60	179 797	204 909
9 x TS 212.1	169'-4\"** 51.6	1 x TSV 212 8 x TS 212.1	178'-10\"** 54.5	124.0 56	161 715	169 751	88.0 40	161 715	169 754
8 x TS 212.1	149'-11\"** 45.7	1 x TSV 212 7 x TS 212.1	159'-5\"** 48.6	101.0 46	149 661	145 645	88.0 40	154 683	170 654
7 x TS 212.1	130'-7\"** 39.8	1 x TSV 212 6 x TS 212.1	140'-1\"** 42.7	101.0 46	142 633	128 569	66.0 30	141 629	124 553
6 x TS 212.1	111'-3\"** 33.9	1 x TSV 212 5 x TS 212.1	120'-9\"** 36.8	101.0 46	136 607	112 499	66.0 30	135 600	108 482
5 x TS 212.1	91'-10\"** 28.0	1 x TSV 212 4 x TS 212.1	101'-5\"** 30.9	101.0 46	131 582	98 435	66.0 30	129 573	94 418
4 x TS 212.1	72'-6\"** 22.1	1 x TSV 212 3 x TS 212.1	82'-0\"** 25.0	101.0 46	126 559	85 376	66.0 30	123 548	81 359
3 x TS 212.1	53'-2\"** 16.2	1 x TSV 212 2 x TS 212.1	62'-8\"** 19.1	101.0 46	120 536	80 356	66.0 30	118 523	75 335
2 x TS 212.1	33'-9\"** 10.3	1 x TSV 212 1 x TS 212.1	43'-4\"** 13.2	101.0 46	116 515	80 356	66.0 30	112 500	75 335
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		Bogie 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																			
			2-Part Line  max. 17,600 lbs max. 8.0 t																			
			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			
L7	229'-8" 70.0	9'-4" - 96'-9" 2.85 - 29.5 m	17600 8.0	17600 8.0	17400 7.9	14800 6.7	12800 5.8	11900 5.4	11200 5.1	10600 4.8	10100 4.6	9500 4.3	9000 4.1	8600 3.9	8200 3.7	7700 3.5	7500 3.4	7100 3.2	6800 3.1			
L6	213'-3" 65.0	9'-4" - 105'-0" 2.85 - 32.0 m	17600 8.0	17600 8.0	17600 8.0	16100 7.3	13900 6.3	13000 5.9	12300 5.6	11500 5.2	11000 5.0	10400 4.7	9900 4.5	9300 4.2	8800 4.0	8600 3.9	8200 3.7					
L5	196'-10" 60.0	9'-4" - 117'-9" 2.85 - 35.9 m	17600 8.0	17600 8.0	17600 8.0	17600 8.0	15700 7.1	14600 6.6	13900 6.3	13000 5.9	12300 5.6	11700 5.3	11200 5.1	10600 4.8	10100 4.6							
L4	180'-5" 55.0	9'-4" - 124'-8" 2.85 - 38.0 m	17600 8.0	17600 8.0	17600 8.0	17600 8.0	16800 7.6	15400 7.0	14800 6.7	13900 6.3	13200 6.0	12300 5.6	11900 5.4									
L3	164'-1" 50.0	9'-4" - 130'-11" 2.85 - 39.9 m	17600 8.0	17600 8.0	17600 8.0	17600 8.0	17600 8.0	16300 7.4	15400 7.0	14600 6.6	13900 6.3											
L2	147'-8" 45.0	9'-4" - 131'-11" 2.85 - 40.2 m	17600 8.0	17600 8.0	17600 8.0	17600 8.0	17600 8.0	16500 7.5	15700 7.1													
L1	131'-3" 40.0	9'-4" - 131'-3" 2.85 - 40.0 m	17600 8.0	17600 8.0	17600 8.0	17600 8.0	17600 8.0															
	ft m	35,300 lbs 16.0 t	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 9.9	19600 8.9	16100 7.3	13200 6.0	11200 5.1	10400 4.7	9700 4.4	9000 4.1	8600 3.9	7900 3.6	7500 3.4	7100 3.2	6600 3.0	6200 2.8	6000 2.7	5500 2.5	5300 2.4			
L6	210'-8" 64.2	12'-0" - 52'-2" 3.65 - 15.9 m	23800 10.8	21600 9.8	17400 7.9	14600 6.6	12600 5.7	11500 5.2	10800 4.9	9900 4.5	9500 4.3	8800 4.0	8400 3.8	7700 3.5	7500 3.4	6800 3.1	6600 3.0					
L5	194'-3" 59.2	12'-0" - 57'-9" 3.65 - 17.6 m	26900 12.2	24500 11.1	19800 9.0	16800 7.6	14300 6.5	13000 5.9	12300 5.6	11500 5.2	10800 4.9	10100 4.6	9700 4.4	9000 4.1	8600 3.9							
L4	177'-10" 54.2	12'-0" - 61'-0" 3.65 - 18.6 m	28700 13.0	26000 11.8	21200 9.6	17900 8.1	15200 6.9	14100 6.4	13200 6.0	12300 5.6	11700 5.3	10800 4.9	10400 4.7									
L3	161'-5" 49.2	12'-0" - 63'-8" 3.65 - 19.4 m	30200 13.7	27300 12.4	22300 10.1	18700 8.5	16100 7.3	14800 6.7	14100 6.4	12800 5.8	12300 5.6											
L2	145'-0" 44.2	12'-0" - 64'-0" 3.65 - 19.5 m	30400 13.8	27600 12.5	22500 10.2	19000 8.6	16300 7.4	15000 6.8	14100 6.4													
L1	128'-7" 39.2	12'-0" - 66'-3" 3.65 - 20.2 m	31700 14.4	28700 13.0	23600 10.7	19800 9.0	17000 7.7															

Speeds

FU 8-160/4		$v = 0 \rightarrow \sim 290 \text{ fpm (88 m / min.)}$					10.2 HP 7.5 kW					
SR 10-190/3		$v = 0 \rightarrow \sim 96 \text{ fpm (30 m / min.)}$					2 x 16.3 HP 2 x 12.0 kW					
K WB 120/4		$v = 0 \rightarrow 0.9 \text{ rpm (min}^{-1}\text{)}$					2 x 11.4 HP 2 x 8.4 kW					
 HK max. = 705' (215 m) 6 - layers							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 without HP SR 10-190/3 ~105 kW
			▶ 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					
											Connected power	170 kVA

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	ft³ / m³
1	Jib			39.01	4.99	7.09	4 200	1 386
	Section III			11.94	1.52	2.16	1.92	39.2
2	Jib			39.01	4.99	5.84	3 790	1 137
	Section I			11.89	1.52	1.78	1.72	32.2
	Section II			38.65	4.99	6.17	4 320	1 190
				11.78	1.52	1.88	1.96	33.7
	Section IV			19.19	4.99	5.41	1 760	519
				5.85	1.52	1.65	0.80	14.7
	Section V			35.34	4.99	5.45	3 090	961
				10.77	1.52	1.66	1.40	27.2
	Section VI			36.03	4.99	5.48	2 470	985
				10.98	1.52	1.67	1.12	27.9
	Section VII			33.33	4.99	5.32	1 570	853
				10.16	1.52	1.62	0.71	25.0
	Jib tip X			3.12	5.02	1.64	310	25
				0.95	1.53	0.50	0.14	0.7
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.

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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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Appendix R – Line Painting Schematic
