



Third Party Utility Construction Guidebook

For Electrical, Natural Gas Pipelines, Telecommunication, Regional Water & Sewer Transmission, Railways and Port Facilities

Engineering Division
City of Port Moody

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How to Use This Guidebook

This document serves as a guidebook for third party utility companies and their contractors working in the City of Port Moody. Whether your project involves an overhead or underground electrical distribution system, a natural gas pipeline, or a telecommunications duct, this guidebook provides important information on how to stay in compliance with the City of Port Moody requirements and municipal bylaws.

A third party utility company is considered to be any utility company operating facilities within Port Moody, including those in road right-of-ways, statutory right-of-ways, easements or marine environments. Construction is considered to be any operation or maintenance activity that involves ground disturbance or requires a temporary road closure or traffic disruption, as well as new construction and replacement work.

Third-party utility companies electing to install new infrastructure within the City of Port Moody require an active Municipal Access Agreement or permissions via the appropriate Provincial or Federal Acts and Regulations.

This guidebook is divided into two sections:

- **Section 1:** Engineers, Designers & Consultants
- **Section 2:** Field Staff & Contractors

Section 1 provides information specific to parties designing and engineering Third Party Utility construction activities, such as the process for submitting drawings and plans for review by City staff and determining erosion and sediment control requirements.

Section 2 provides information relevant to field staff and contractors, including how to obtain the required City of Port Moody permits and who to call in the event of an emergency.

Section 1: Engineers, Designers & Consultants

This section provides information for engineers, designers and consultants planning Third Party Utility maintenance or construction. Prior to starting work on a project in Port Moody, the utility should collect all relevant information from the City and submit and obtain City design acceptance in accordance with Figure 1 below:

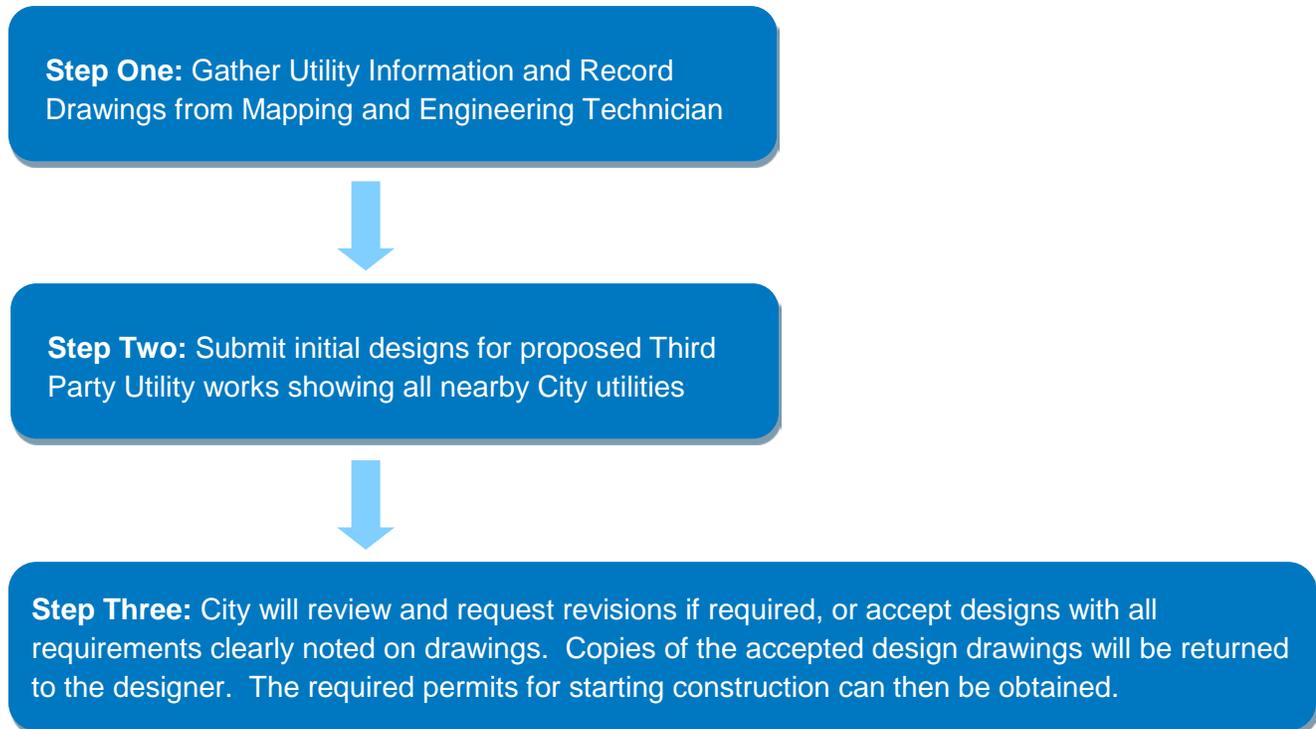


Figure 1: Utility Design Acceptance Procedure

In accordance with the above procedure, no construction on City property shall commence until the designer has received copies of the accepted design drawings and all relevant permits for construction have been obtained.

Step 1: City Utility Information & Record Drawings

Contact the Engineering Division to coordinate transmittal of utility information and record drawings. Be sure to provide as much location information as possible. Costs for searching record drawing databases and compiling information is billed by the City on a per drawing or per hour basis, as deemed appropriate, in accordance with the Port Moody Fees Bylaw. The requestor will receive an invoice for costs relating to the data request. Once payment has been received, the information will be sent to the requestor in their choice of electronic or hardcopy format.

For utility information and record drawing searches, contact the Engineering Division. Record drawing search and information compilation costs are outlined in Table 1 below.

Table 1: Information Services	
Fee Name	Fee*
11X17 – Colour map (printed or PDF)	\$12.00
24X36 – Colour map (printed or PDF)	\$25.00
36X48 – Colour map (printed or PDF)	\$47.00
Legal Plans & Utility Record Drawings: TIFF/PDF format	\$2.00
Legal Plans & Utility Record Drawings: Full set: Images & Index	\$46.00
Legal Plans & Utility Record Drawings: Custom Utility Drawing Search	\$46.00/hour (15-minute increments)
Digital/GIS Data	\$46.00/hour (15-minute increments)
Custom Mapping Product	\$46.00/hour (15-minute increments)

*Fees are from the Port Moody Fees Bylaw (No. 3057)

Step 2: Design Review

The City requires an initial drawing submission that includes drawings and designs indicating the location and scope of the proposed works. Port Moody will provide standard notes and signature blocks that must be placed on all drawings. The notification blocks clearly define the City requirements for working around Port Moody utilities and monitoring ESC measures. Contact the Engineering Division to obtain the latest version of these items in AutoCAD or PDF format. The City Engineering Standards webpage has examples of these permits and forms.

Port Moody Engineering Division staff will review submitted drawings to check for potential conflicts with City utilities and will evaluate the impact of third party utility works on future infrastructure or development plans in the City. If conflicts are identified or staff cannot support the proposed alignment/designs of the Third Party Utility's proposed works, marked up drawings and comments will be returned to the designer or submitter.

If the project involves any ground disturbance or excavation, the initial submission must show all required erosion and sediment control (ESC) measures. The City will review and provide comment on ESC items if Third Party Utility Construction Guidebook

City of Port Moody

necessary. ESC plans must be compliant with the City Stream and Drainage System Protection Bylaw (No.2470). During the design review process, the Engineering Division will also gather feedback from the City Environmental Services Division on the potential environmental impact and ESC requirements of the proposed works.

Port Moody Utility Clearance

The following horizontal and vertical clearances from City of Port Moody utilities must be maintained at all times:

- 1.5m from water mains less than 200mm in diameter, irrigation, sanitary gravity sewers and storm gravity sewers unless otherwise approved
- 3.0m from water mains greater than 200mm in diameter and all sanitary force mains
- 1.0m from streetlighting and communications conduits unless otherwise approved

Exceptions may be made to the clearance requirements if no other alternative is feasible. The City may require additional protection, such as concrete encasement, of either City or Third Party utilities if sufficient clearance cannot be maintained.

Modifications to Port Moody Utilities

The City requires that engineers, designers and consultants avoid modifications to Port Moody utilities and infrastructure wherever possible. If modifications are unavoidable, designs must be approved by the City before construction on any part of the project can begin. All designs must conform to the standards in the MMCD Platinum Edition. The City standard notes and notification blocks on the City Engineering Standards webpage outline the requirements for notification and inspection prior to work on City utilities and infrastructure.

The City requires that design review and inspection costs be recovered for projects requiring extensive modifications to City utilities or infrastructure.

Location of Appurtenances

In order to minimize conflicts with traffic, pedestrians and utilities, the City requires that all third party utility appurtenances be located according to City guidelines. Examples of these appurtenances include:

- Junction boxes
- Kiosks
- Vaults
- Test points
- Valve boxes
- Manholes and chambers

The City prefers that appurtenances be placed according to the following criteria:

- Impact to pedestrian and vehicle traffic is minimized
- Operation and maintenance of the Third Party Utility appurtenance does not conflict with the City utilities by maintaining a minimum 3.0m vertical and horizontal separation
- Impacts to the environment and sensitive habitat are minimized during construction

Appurtenances should be located according to these criteria unless no other reasonable alternative exists for the Third Party Utility. In addition, in residential and business areas, the designer should take care to

locate above ground appurtenances alongside or rear property lines whenever possible to minimize aesthetic impacts of the utility and minimize inconvenience to property access.

Drawing Standards

For projects requiring Erosion and Sediment Control works, or any crossings or modifications to City of Port Moody utilities, the standard notification blocks must be shown on the first page of the drawing submission.

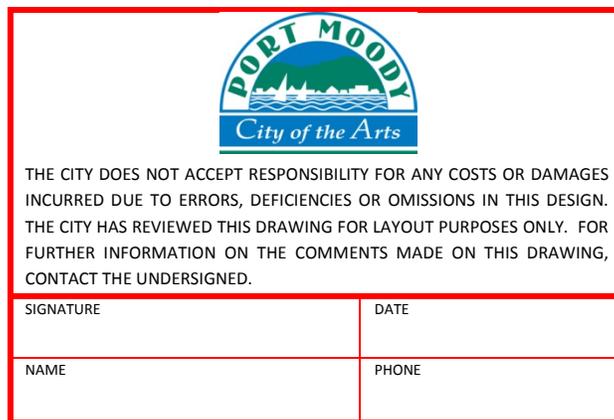
All projects involving underground works must have a drawing submission that shows all nearby City of Port Moody utilities.

All necessary permits required to complete the work must be noted on the front page of the drawing submission. This drawing must also be made available to Field Staff and Contractors.

All City utility locations and information, and ESC measures, must be shown on the initial design submission for City review.

Step 3: Design Acceptance

Once all conflicts have been resolved, the drawing will be approved using the stamp shown in Figure 2.



The stamp features the City of Port Moody logo at the top, which includes a stylized city skyline and the text "PORT MOODY" in an arch and "City of the Arts" in a blue banner below. Below the logo is a disclaimer: "THE CITY DOES NOT ACCEPT RESPONSIBILITY FOR ANY COSTS OR DAMAGES INCURRED DUE TO ERRORS, DEFICIENCIES OR OMISSIONS IN THIS DESIGN. THE CITY HAS REVIEWED THIS DRAWING FOR LAYOUT PURPOSES ONLY. FOR FURTHER INFORMATION ON THE COMMENTS MADE ON THIS DRAWING, CONTACT THE UNDERSIGNED." At the bottom of the stamp is a table with four fields for signature, date, name, and phone.

THE CITY DOES NOT ACCEPT RESPONSIBILITY FOR ANY COSTS OR DAMAGES INCURRED DUE TO ERRORS, DEFICIENCIES OR OMISSIONS IN THIS DESIGN. THE CITY HAS REVIEWED THIS DRAWING FOR LAYOUT PURPOSES ONLY. FOR FURTHER INFORMATION ON THE COMMENTS MADE ON THIS DRAWING, CONTACT THE UNDERSIGNED.	
SIGNATURE	DATE
NAME	PHONE

Figure 2: City of Port Moody Acceptance Stamp

Once this stamp has been placed on the drawing and signed, the City will have considered the design review complete. However the proposed works can only proceed when the Third Party Utility's forces or contractors have completed the requirements outlined in Section 2 of this guidebook.

Section 2: Field Staff & Contractors

This section provides important information for field staff and contractors. Before work can commence on any Third Party Utility project all required permits must be completed, with payment received by the City.

Table 2 below shows the common permits and agreements required by Third Party Utilities while working in Port Moody.

Table 2: Permit & Agreement Requirements	
Permit	Required For:
Highway Use Permit	Work on or within the City road or road right-of-way Work requiring vehicles or equipment to remain stationary on the road or right-of-way
Hydrant Use Permit	Use of City of Port Moody fire hydrants for construction water
Building Permit	Construction of structures greater than 100 ft ²
Agreements	May Be Required For:
Encroachment Agreement	Construction of temporary structures or storage of equipment on City road right-of-ways
Licence of Occupation	Temporary access over or temporary storage on City property

Other permits or agreements may be required depending on project scope. These requirements are identified in the design stage and will be clearly outlined to the Engineers, Designers and Consultants. Contact the Engineering Division to complete permit applications.

Once the utility's engineer, designer or consultant has received approval for the proposed works from the City of Port Moody, the permits and approvals required prior to the start of work can be obtained. A typical permit and approval process is outlined in Figure 3 below:



Figure 3: Acceptance & Permitting Procedure for Third Party Utility Construction

Highway Use Permits

The City requires a Highway Use Permit (HUP) for all temporary road or travelled lane closures, regardless of how long the disruption is required. A HUP must also be obtained for any asphalt or concrete utility cuts. As part of the HUP, the applicant may be required to provide a traffic management plan, traffic safety plan, and truck haul route/truck management plan. HUP applications must be obtained and submitted in person at City Hall. Permit fees are outlined in Table 3 below.

Table 3: Highway Use Permit Fees for 2012	
Type of Permit	Cost
Major Road Network-Weekly <i>*every week after</i>	\$305.00 \$130.00
Local Road Network-Weekly <i>*every week after</i>	\$175.00 \$65.00
No Parking Sign Rental (x2) <i>*additional signs</i>	\$45.00 \$15.00

**Fees are from the 2017 Port Moody Fees Bylaw (No. 2857).*

In addition to these fees, a deposit may be required for utility cuts or in case of accidental damage to nearby infrastructure or utilities. These refundable bonds are taken at the discretion of Engineering Division staff, and have a minimum value of \$1000.00. City staff will conduct an inspection of utility cuts within 30 business days of being notified that the Third Party Utility's project is complete. If the utility cut restoration meets the City standards below, the bonds will be released within 10 business days of the inspection.

Utility Cut Procedures & Restoration Standards

Utility cuts in asphalt pavement are only permitted for construction and maintenance activities when no other practical alternative to the utility cuts exist. The City’s asphalt restoration requirements differ based on the age of the pavement. Table 4 below outlines the requirements.

Table 4: Asphalt Utility Cut Restoration Requirements	
Asphalt Age/Condition	Utility Cut & Restoration Requirement
Base Lift Pavement	<ul style="list-style-type: none"> • All utility cuts must be permanently restored to MMCD standard G5. • No temporary restorations are permitted. • All irregularly or angle-shaped utility cuts must be enlarged to a continuous rectangular shape with regular edges.
Final Lift Pavement Less Than Five Years Old	<ul style="list-style-type: none"> • No utility cuts are permitted on newly completed roads unless required by exceptional circumstances. • Sole discretion for allowing utility cuts on new completed roads rests with the City Engineering Division.
Final Lift Pavement More Than Five Years Old	<ul style="list-style-type: none"> • All utility cuts must be permanently restored to MMCD standard G5. • No temporary restorations are permitted. • All irregularly or angle-shaped utility cuts must be enlarged to a continuous rectangular shape with regular edges parallel or perpendicular to the flow of traffic. • No partial lane-width restorations are permitted on Major, Arterial and Collector routes. • Milling and restoration of the full width of the travelled lanes is required on Major, Arterial and Collector routes.

All restoration work is to be completed by the Third Party Utility or their contractor. After utility cut restoration is complete, the Engineering and Operations Division shall be contacted to arrange for an inspection.

The contractor shall take all practical measures to protect the City infrastructure and utilities. This may include protecting concrete sidewalk and letdowns with steel road plates. Contractors must ensure that no tracked equipment travels directly on paved surfaces.

If asphalt or concrete surfaces are damaged or not repaired to the satisfaction of the City Engineering Division, the Third Party Utility must make repairs as soon as possible after notification from the City. Failure to repair asphalt or concrete surfaces within 10 business days may result in the City drawing upon the Third Party Utility’s damage bond to conduct repairs.

Erosion & Sediment Control and Environmental

ESC measures are established in the initial design review, and must be noted on the drawings approved by the City. Port Moody Staff actively and continuously monitor all construction projects to ensure compliance with the requirements noted in the design review, and for compliance with the City Stream and Drainage System Protection Bylaw (No. 2470).

The City requires that all projects near creeks or other environmentally sensitive areas have on-site spill response kits, which are clearly visible to all personnel. The City may require additional levels of protection and monitoring for projects near creeks or other environmentally sensitive areas.

If an Environmental Monitor is engaged on the behalf of the Third Party Utility, daily environmental reports shall be forwarded to the City.

Report any failures of ESC measures or discharge of sediment laden water to any water course or storm system to the Parks & Environmental Services or Engineering Division immediately.

Hydrant Use Permits

City of Port Moody fire hydrants cannot be used as a source of water for construction purposes without a valid Hydrant Use Permit. To obtain a permit and coordinate scheduling, contact the Operations Division. Once the Hydrant Use Permit has been submitted and payment has been received, Port Moody crews will attend the site, install a backflow device and operate the hydrant. Unauthorized use of City hydrants is not permitted as it may cause damage to the water system or potentially impact water quality and fire protection. Permit fees are shown in Table 5 below:

Table 5: Hydrant Use Permit Fees for 2012	
Required Fees and Deposits	Cost
Refundable Deposit	\$600.00
Hydrant Inspection Fee	\$210.00
Water Use Fee	\$100.00 for 1st day, \$50.00 per additional day
Usage Fees Outside of 0700-1500 (Normal Permit Hours)	Overtime Rates for Port Moody Utility Operators

**Fees are from the 2017 Port Moody Fees Bylaw (No. 3067)*

Hydrant Use Permit holders are responsible for any damage to equipment and property that occurs during use of the hydrant. The City water supply is chlorinated, and special care must be taken so that the discharge of water does not cause harm to the natural environment. Hydrant flows must not be directed into catch basins or the storm system unless approved by the City and a dechlorination system using sodium thiosulphate is provided.

Working Near City of Port Moody Utilities

All modifications, tie-ins, or crossings of Port Moody utilities and infrastructure must conform to the approved designs referenced in Step 2 of Section 1 of this guidebook, and must be performed by a qualified contractor according to MMCD Platinum specifications.

Before proceeding with construction according to the approved designs for modifications, tie-ins or crossings, minimum 72 hour notice must be provided to the City in order to arrange for witnessing and inspection.

Specific requirements for inspections will be identified during the City's design review in Step 2 of Section 1 of this guidebook. City staff must witness or inspect construction of or on the following utilities and infrastructure:

- Water main tie-ins and re-routing, and fire hydrant relocation
- Sanitary and storm sewer tie-ins and re-routing, and manhole and catch basin adjustments
- Concrete curbs and sidewalks
- First inspection required after forming but before the concrete poured
- Second inspection after concrete poured

Third Party Utility works involving the relocation of any component of the Port Moody water system must adhere to AWWA requirements for chlorination, pressure testing and flushing, and must be witnessed by a City representative.

Appendix A: Contacts

Engineering Division

Engineering General Information
604.469.4618

Operations General Information
604.469.4574, operationsinfo@portmoody.ca

Staff Contacts

Division or Department	2012 Staff		Telephone	Email
Engineering Division				
Infrastructure Engineering Section	Manager of Engineering	James Chandler	604.469.4619	jchandler@portmoody.ca
	Infrastructure & Development Technician	Robinson Puche	604.469.4523	rpuche@portmoody.ca
Transportation Engineering Section	Transportation Technologist	Mark Halpin	604.469.4567	mhalpin@portmoody.ca

Emergency Contacts

Time	Telephone
Monday to Friday, 0700-1530 excluding statutory holidays	604.469.4574
All other times	604.461.3456

Mailing Addresses

City Hall

100 Newport Drive, PO Box 36
Port Moody, BC V3H 3E1

Works Yard

3250 Murray Street
Port Moody, BC V3H 1X8