



Capital Planning and Engineering Services

EXCAVATION GUIDELINES

& PERMIT APPLICATION REQUIREMENTS

Introduction

An Excavation Permit (Permit) is required prior to the removal of any materials (e.g. asphalt, concrete, grass, gravel, etc.) within any part of a City of Lethbridge (City) owned Right of Way, Utility Right of Way (URW/Easement), or Public Utility Lot (PUL), herein collectively and/or individually referred to as the 'ROW', to a depth of 0.3m or greater below the established elevation.

The intent of these guidelines is to ensure that all excavations undertaken within the ROW prioritizes efficient use of the ROW, public safety, and that any areas disturbed from the excavation activities, including the area surrounding the excavation, are restored by the contractor to the pre-excavation condition or better. For the purposes of this document, the Contractor is considered:

- A contractor performing an excavation on behalf of:
 - a business or resident,
 - a utility or facility owner (including the City), or
- A utility owner's own forces performing an excavation.

If an excavation is part of a **new installation, road crossing or re-alignment** within the ROW, a Utility Location Assignment (ULA) Permit is required as described under the *Utility Location Assignment Guidelines*.

For street-use requirements, refer to the *Street-Use Guidelines*.

Purpose

These guidelines will outline the Permit process and identify standard safety and operational requirements, as well as provide general conditions, clarity, and direction to individuals who would like to understand this process from the perspective of the Permit applicant (Applicant), a business, or a citizen.

These Permits support the City in monitoring and coordinating activities within the ROW to:

- Allow excavation work to take place in a safe and timely manner.
- Prevent conflicts between utilities.
- Protect and maintain (ensuring longevity of) public infrastructure.
- Minimize disruption to businesses, residents, and road users (i.e. motorists, cyclists, and pedestrians).
- Maintain safety for all users.

It is the responsibility of those employing the use of this document, to ensure they have the most current and up-to-date version.

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**Questions? Please contact 311 (403.320.3111)
and ask to speak with Capital Planning and Engineering Services - ROW or email ROW at
rowapplications@lethbridge.ca**

Application Process

Permit applications shall be made to Capital Planning and Engineering Services – ROW:

- Phone 311 (403.320.3111) and ask to speak to a ROW Coordinator or
- Email: rowapplications@lethbridge.ca with all pertinent information

Applications must be made:

1. At least **three (3) business days in advance** for projects where completion of project is within 2 weeks and;
2. At least **five (5) business days in advance** for projects where completion of a project will be greater than 2 weeks
 - a. For street driving lane closures or pathway/sidewalk closures, a *Street-Use permit* will be required with notice given of at least **ten (10) business days in advance**

The Applicant shall submit the following:

1. Contractor name, email address and site supervisor phone number.
2. Utility owner; owner's site supervisors name, email address and phone number
3. Purchase order number/ charge number for invoicing.
4. ULA permit number or if not applicable a detailed work plan, including:
 - a. Description of the work.
 - b. Start date and end date.
 - c. Sketch of all excavation locations, with the municipal address of the adjacent parcel(s)
 - i. If the excavation is related to an approved ULA permit, the permit number shall be provided in lieu of sketch.
5. ROW facility type (e.g. street, sidewalk, pathway, boulevard, roadway, median, alley)
6. Existing surface material (e.g. concrete, asphalt, gravel, grass, dirt, etc.).
7. Traffic accommodation plan (only required if motor vehicles and/or pedestrians are affected) compliant with the City of Lethbridge Temporary Traffic Control (TTC) Manual.
 - a. To arrange for City of Lethbridge traffic control services, contact the Traffic and Signs Coordinator at 403.315.1508.
8. A valid copy of the Contractor's general commercial liability insurance with the City of Lethbridge listed as an "Additional Insured", with a minimum of \$5,000,000 coverage.
9. A valid copy of the Contractor's City of Lethbridge Business License.

Once approved, a copy of the Permit will be emailed to the Applicant and Utility Owner.

Field Change Process

Conflicts may become apparent between the approved ULA permit and existing utilities once excavation has taken place in the field.

1. City approval is not required prior to proceeding, pending all Minimum Allowable Separation Requirements are respected and the following:
 - a. The alignment depth is maintained between 1.2m-1.5m.
 - b. A road crossing location changes to minimize daylight holes in the road (at 90 degrees from curb-both sides) within the same block of the approved location (*pending it does not result in the addition of a new alignment on the other side of the road*).

2. Changes to horizontal alignments greater than 0.15m require City approval prior to proceeding.

Separation Requirements and Conditions

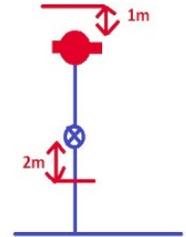
Unless approved otherwise by the owner of the existing utility (for the separation outlined below to be lowered), the below are minimum separation requirements to be maintained from existing infrastructure (please note that separation requirements listed are measured from *edge to edge* of the existing utility to the new utility, for a full 'unobstructed clearance').

1. **For all utilities**

- a. Min 0.3m vertical separation when crossing, **exception: high pressured (HP) pipelines.**
- b. If installing infrastructure where the horizontal separation will be 1.5m or less from an existing utility and the installation method is drilling, exposing that existing line at regular intervals (interval spacing dependent on which existing utility is in proximity) is required.
- c. Approval from the owning utility is required prior to any deviation from their separation requirements listed below.

2. **City of Lethbridge Storm, Sanitary or Water**

- a. 2.0m horizontal separation while paralleling any Storm, Sanitary or Water facility (including hydrants, valves, etc.), except:
 - i. 1.0m separation from the *backside* of any hydrant or catch basin only (as per diagram).
 - ii. 1.0m separation from a curb stand.



2. **ATCO Gas:**

- a. 1.0m horizontal separation while paralleling any ATCO Gas facility (that is not HP).
 - i. 0.5m horizontal separation for the placement of vaults, pedestals, cabinets, etc.

3. **Lethbridge Electric Utility (LEU):**

Contacting LEU operations (by calling 311) is required prior to construction when planning to expose and work around LEU's energized cables.

- a. Primary cables
 - i. 1.0m horizontal separation when drilling parallel to any primary cable.
 - ii. 0.5m horizontal separation when any primary cable is fully exposed.
 - iii. If installing infrastructure with a horizontal separation of 1.5m or less, exposing the existing primary cable **every 6m** is required.
 - iv. **When a primary line is exposed in any capacity, a LEU inspector is to be on site prior to conduit/cable placement and/or backfilling.**
- b. Secondary cables
 - i. 0.5m horizontal separation when drilling parallel to any secondary cable.
 - When horizontal separation is 1.5m or less, exposing the secondary cable **every 6m** is required.
 - ii. When hydrovacving, no horizontal separation from secondary cable is required.
- c. Transformers and Switching Cubicles
 - i. 1.0m horizontal separation from underground infrastructure.
 - ii. 3.0m separation from the **opening/access side** for above ground infrastructure.
 - 0.75m separation from the other sides (for 1ph).
 - 1.25m separation from the other sides (for 3ph).

- d. Pedestals
 - i. 0.6 m clearance if placing any above ground utility adjacent to an above ground pedestal on access side of the pedestal.
 - e. Junction Enclosures/Loop Boxes
 - i. Minimum 0.15m horizontal separation when conduit is hydrovacc'd in.
 - ii. Minimum 0.3m horizontal separation when conduit is drilled in.
 - f. Overhead power poles and street light poles.
 - i. 0.6m horizontal separation from underground infrastructure (from poles/bases).
 - ii. Crossing between poles and guy wires may be permitted, evaluated case by case.
 - iii. Any excavation within 1m of any overhead LEU power pole must be backfilled the same day.
 - iv. Workers must be familiar with limits of approach when working around overhead cables. Orientation can be supplied by LEU if required.
4. **Telecommunications:**
- a. 0.6m clearance if placing any above ground utility adjacent to an above ground telecommunications pedestal on opening/access side of the pedestal.
5. **City of Lethbridge Transportation:**
- a. 0.15m of unobstructed clearance from any public sidewalk/pathway to any vertically installed utility/infrastructure (e.g. ground water monitoring well, Little Lethbridge Library, pedestals, etc.).
 - b. Shallow utility installations across paved roads must be completed by way of directional drill.
 - c. The Contractor must meet all standards as required,
 - i. City of Lethbridge Transportation Construction Drawings (Appendix B) www.lethbridge.ca
 - ii. Backfilling Regulations of Public Right-of-Ways (06000) www.lethbridge.ca
 - d. Shallow utility installations must comply with the depth noted on the approved drawing.
 - e. Should geotechnical fabric be encountered, it must be repaired and replaced with overlapping edges.
6. **City of Lethbridge Parks:**
- a. A Parks Access Permit is required to perform work within City parks, which includes an irrigation locate service.
 - a. Form can be found at <https://forms.lethbridge.ca/311-Forms/Parks/Park-Access-Permit-Application>
 - b. Open excavations and bore holes are not permitted to be located within the drip line (under the branch canopy) or within 3m of a tree base (whichever of the two is the lesser distance) without prior approval from Parks.
 - i. Directional drilling when working in proximity to public trees is required to minimize tree damage.
 - ii. Any non-compliance resulting in damage to a tree may be subject to a fee (issued by Parks) equivalent to the 3:1 replacement cost of a tree, invoiced to the Contractor.
 - iii. For questions on a City owned tree, contact 311 to speak with Urban Forestry Arborist.

7. Train Rails:

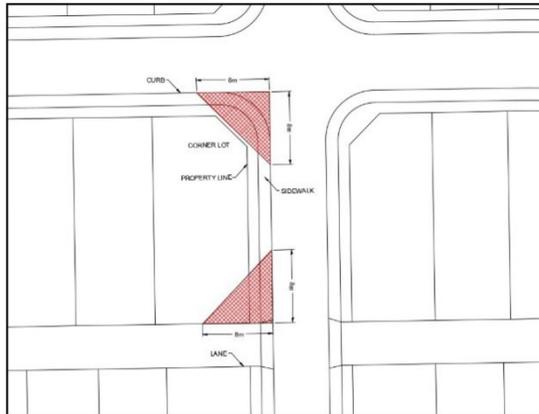
Any work planned, including but not limited to excavating, placement of equipment and/or machinery operation in proximity of a rail line requires approval from the Canadian Pacific Railway (CPR) as well as the City prior to construction, and may require a crossing and/or proximity agreement (for a map distinguishing ownership between the two, please contact ROW).

- a. Within 15m of a CPR rail; email utilities_requestscanada@cpr.ca.
- b. Within 5m of a City owned rail; City Signals Department by calling 311 and asking to speak with the Signals & Streetlights Operations Manager.

Safety

1. Under the Occupational Health and Safety Act, Regulation and Code; the Alberta Electrical Utility Code; and the Alberta Pipeline Act, field location of all existing utilities is mandatory, and failure to obtain same will INVALIDATE the Permit. Prior to excavating, existing utilities are to be located through the services of:
 - a. Utility Safety Partners: 1-800-242-3447 (utilityafety.ca).
 - b. City Parks Irrigation (refer to Separation Requirements and Conditions: Parks).
 - c. City Signals (by calling 311).
2. When working in proximity to live electric cables and/or exposing energized cables, contact 311 prior to construction to speak with the Electric Control Room.
 - a. Ensure locates slips are available.
3. The work must comply with the current City TTC Manual, including but not limited to:
 - a. Peak hour traffic typically occurs from 7 a.m. to 9 a.m. and from 3 p.m. to 6 p.m. Monday to Friday. During these times, construction work and/or traffic disruption is not permitted on arterial and major collector roads except in cases of emergencies or with prior approval from the City Transportation Department.
 - b. For partial road closures, a minimum unobstructed clearance of 3m is always required for each direction of traffic flow.
4. A minimum clearance of 1.8m of sidewalk for pedestrian movement must be always maintained.
 - a. In situations where this cannot be achieved, a full sidewalk closure is required. Parking stalls adjacent to a sidewalk closure must also be closed to the public.
5. The Contractor is to contain and maintain their own safe work area within the temporary traffic-controlled area.
6. The safe work zone shall be properly defined with a physical barrier (e.g. barricades, fencing).
7. If the work requires the closure of a Regional Pathway, an approved mobility-friendly pedestrian detour must be provided.
8. When two or more contractors are working within the same temporary traffic-controlled area, all must communicate with the first one approved to be on site, prior to starting construction.
9. No building emergency exits, or fire lanes may be blocked.
10. No item, with a height greater than 1m above the established elevation, measured from the top of the curb where there is a sidewalk or from the level of the crown of the roadway where there is no sidewalk, shall be placed within a triangle formed on a corner site by the way of two curb

lines adjoining an intersection, including an alley intersection, and two points **located 8m** from the said corner where the curb lines meet (see below figure).



Project Completion Package

A project completion package to confirm compliance with all relevant City guidelines, standards and regulations is required once the final surface repair has been completed. The package shall be emailed to rowapplications@lethbridge.ca and must include:

1. Field pictures showing compliance with alignment of conduit (a picture is required for each alignment change); pictures need to be easily identifiable with regards to location.
2. Field pictures showing compliance with depth of conduit.
3. Field pictures showing compliance with alignment of each at-grade vertical piece of infrastructure (e.g. pedestals).
4. A marked up drawing showing location of all daylight holes.
 - a. Identify where fillcrete and/or compactible material was used.
5. Documentation of notes if a field change was approved.
6. Backfilling compaction test results and/or fillcrete tickets.
 - a. Compaction test results must clearly identify where the test was taken within the excavation zone without utilizing specialized tools.
7. Picture of the final surface repairs (*if related to winter work and excavation is beneath a hard surface material, a picture showing the cold mix patch is required*).
 - a. Asphalt and/or concrete
 - i. Once completed by the City of Lethbridge, or
 - ii. Within the Paving Report according to the contractor's approved QC Plan.
 - b. Gravel/grass
 - i. Once completed by the contractor.

Surface Repairs

1. All hard surface (concrete/asphalt) repairs within the road Right-of-Way must be completed by the City of Lethbridge Transportation department unless an approved Quality Control (QC) Plan has been accepted by the City.

- a. If hot-mix asphalt or concrete are not available due to cold weather, it is the Contractor's responsibility to complete the surface repair using cold mix.
 - i. A picture of the cold mix patch must be sent to rowapplications@lethbridge.ca with the permit number identified in the subject.
 - ii. Cold mix patches are to be monitored by the Contractor and/or Utility Owner on a regular basis to ensure public safety.
2. Full concrete replacement is required between control joints if any concrete is removed due to an excavation.
3. Seeding/sod/gravel can be completed by the Contractor.
 - a. Any remedial work within the river valley requires a site-specific grass seed to protect the native ecological diversity. Please contact 311 to speak with Parks Coordinator.

Warranty

All excavations (up to and including the surface repair) carry a two (2) full calendar year warranty period with the Utility Owner and will remain in effect until a warranty inspection is completed.

1. A pre-warranty inspection by the utility owner or contractor is required for installations greater than 100m (one block) and is to be done one year from the excavation end date.
2. Remedial work will be required if the following conditions apply.
 - a. Any settlement that could cause moisture to be held/trapped.
 - b. A settlement greater than 0mm for concrete as the surface material.
 - c. Daylight holes not patched.
 - d. Cold mix remains instead of hot mix asphalt/concrete.
 - e. Any cracking (including alligator/fatigue) for asphalt as the surface material.
 - f. Any settlement greater than 5mm over 3m for asphalt surface.
 - i. Seam cracks are a good indication warranty remedial work will be required.
 - ii. Follow the City of Lethbridge Asphalt Concrete Specification Section 05140 (5.6: Smoothness).
3. Should a contractor or utility owner want to do the warranty inspection on permits for single excavations/hydrovac holes, the following shall be submitted:
 - a. A date stamped picture clearly showing no settlement of the repair.
 - b. Permit number related to the original excavation(s).
 - c. Indication if remedial work is required.

Remedial Work

If Capital Planning and Engineering Services - ROW has identified that emergency remedial work is required due to an excavation, the owner has 7 days in which to rectify the situation, or the City of Lethbridge will rectify it and all costs incurred as well as non-compliance fees will be billed to the utility owner.

Notification to rowapplications@lethbridge.ca of intent to start remediation and upon completion, submittal of documentation, is required showing compliance with Backfilling Regulations. If remedial work will be 0.3m or greater from the surface, a valid excavation permit will also be required.

General Conditions

It is the Contractor's responsibility to ensure that their Permit is valid prior to commencing any excavation work and a copy of the Permit is always on site. Please note that excavation permits will only be issued to contractors with utility owner approval. Capital Planning and Engineering Services - ROW can be reached by calling 403.320.3111 or by emailing rowapplications@lethbridge.ca.

1. **If any condition of the Permit is not followed or parameters change without prior approval from the City, the Contractor may be subject to a non-compliance fee (refer to *Additional Fees* below) and/or the Permit revoked.**
2. It is the applicant's responsibility to ensure any area excavated is returned to its pre-excavation condition or better.
3. Upon completion of the installation, the contractor shall update the drawing with the dimension off either the property line (PL), back of walk (BOW), or back of curb (BOC) and submit to the utility owner so that they provide accurate as-builts to the City.
4. It is the Applicant's responsibility to determine whether public services will be affected and to notify the service provider prior to the commencement of the work. For schedules and routes, visit www.lethbridge.ca. These services include but are not limited to:
 - a. Waste & Recycling (commercial or residential)
 - i. Waste & Recycling Foreman: 403.320.4149 or 403.320.3139
 - b. Lethbridge Transit
 - c. Emergency Medical Services (EMS)
 - i. EMS only need to be contacted when the road is impassable.
 - d. Canada Post
 - i. Please email rowapplications@lethbridge.ca for a contact number should a Canada Post super box (or any Canada Post infrastructure) be affected.
5. Permits issued under these Guidelines require a site inspection, by Capital Planning and Engineering Services – ROW, prior to backfilling to ensure compliance ^{with} the field drawing (the approved alignment), existing utilities in proximity being respected (in terms of minimum allowable separation requirements), the backfill material being used (as outlined within the Backfilling Regulations and Transportation's standards), as well as conduit depth.
 - a. **Please send group text to ROW at 403.360.0230 & 403.635.1590 with a minimum two (2) hour notice for an inspection.** *Note: Pre-construction meetings with the City on site is a great way to ensure all parties are on the same page. Any arterial or collector road closure requires a Public Service Announcement.*
6. Any subcontractors working on behalf of the Contractor within the work zone must be listed on the Permit. Contractors that are not listed on the Permit are required to apply for their own Permit. Failure to do so will be in contravention of the Streets Bylaw.
7. Utility excavations shall not be permitted on streets resurfaced or top lifted within the past two **(2) calendar years** with exceptions granted only where it can be shown that the utility excavation was beyond the control of the utility involved. This shall include, but not limited to, emergency work or redevelopment/development requiring service connections. All utility

excavation permits applied for prior to the two (2) years shall be reviewed case by case, and subject to the following rehabilitation standard of the street surface, in addition to the rest of the guidelines outlined in this document.

- a. If approval is granted, special conditions may be made in addition to following Transportation's standard details str_35 & str_36.
8. It is illegal to remove or tamper with an official boundary marker (a survey pin).
 - a. Should an excavation result in a boundary marker (survey pin) being removed or destroyed, it is the responsibility of the utility owner (or contractor on their behalf) to have an Alberta Land Surveyor re-measure and re-establish the destroyed/removed markers.
 - i. For more information regarding this, please contact Alberta Land Surveyor's Association (www.alsa.ab.ca).
9. Unrestricted access and egress to all businesses and/or residences, including private garages and parking pads, must be always maintained unless written approval has been obtained from the affected business or resident (with a copy submitted with the Permit application).
10. For Permit requests adjacent to any business (during business hours), residence and/or within 100m of any school, the Applicant must deliver a letter to those affected with a minimum of two (2) business days' notice. The letter shall include:
 - a. A description of the work taking place & anticipated duration.
 - b. Site contact information including phone number and email address.
11. For Permit requests within the Downtown core (Scenic Dr to Stafford Dr S or 9 St S, from 1 Ave to 6 Ave S), the Applicant must notify the Downtown BRZ a minimum of two (2) business days prior to the start of construction.
12. Closures that affect the use of a parking kiosk, a time-controlled parking area, or a parking location specific to individuals with mobility constraints require approval by contracting 311 to speak with the Parking Coordinator.
13. The Contractor shall comply with all relevant City Bylaws.
14. The disposal of hydrovac waste must be compliance with government regulations.
15. Any work that encroaches/crosses the Oldman River may require approval from Fisheries and Oceans Canada prior to construction.
16. For private property parcels owned by the City, contact 311 to speak with the Corporate Land Administrator. If approval is granted, a URW easement may be required.
17. For public parcels owned by the Parks Department, contact 311 to speak with the Parks Infrastructure Coordinator. If approval is granted, a URW easement may be required.
18. For privately owned parcels (owned by any entity other than the City of Lethbridge), approval must be obtained by the property owner.
19. Work within 50m Alberta Transportation's (AT's) ROW requires approval from AT prior to.
 - a. For drawings that show the ROW limits (AT vs. City of Lethbridge), email rowapplications@lethbridge.ca.
20. Irrigation lines may be present in any green space and if damaged due to utility work, must be repaired by the excavator and/or Utility Owner.

Excavation Fees

All fees (including non-compliant fees) related to the excavation work are billed to the Utility Owner.

1. \$200 per single excavation (up to a 20m trench) and/or a hydro-excavation hole, excluding Transportation signs.
 - a. Typically includes one (1) pre-backfill inspection and one (1) warranty inspection.
2. \$400 per 100m block for unlimited excavations and/or hydro-excavation holes or for trenches over 20m but under 100m ($20m < x \leq 100m$), excluding Transportation signs.
 - a. Typically includes one (1) pre-construction meeting, one (1) pre-backfill inspection and one (1) warranty inspection.

Additional Fees

1. Winter Work Fee of \$100 per permit dated December 21 through to March 20.
2. Permit Revision Fee \$100 per revision.
3. Applications that do not follow the application process regarding notice carry an additional fee equal to two times (2x) of the regular Permit cost to cover administrative processing costs, pending Engineering Services can accommodate the construction schedule.
4. After hours and weekend inspections \$200 per visit.
5. Failed site visit/inspections \$200 per visit.
6. Non-compliance fees are issued to the Utility Owner for the following circumstances:
 - a. **Minor non-compliance**; fee equal to two (2) times the regular Permit cost.
 - i. Failure to obtain a Permit prior to excavating.
 - ii. Failure to obtain prior approval of a 'no-cut' location.
 - b. **Major non-compliance**; fee equal to five (5) times the regular Permit cost.
 - i. Failure to comply with the City of Lethbridge Excavation Guidelines.
 - ii. Failure to comply with the approved IFC drawings.
7. Annual Contractor Meeting \$400
 - a. Must be completed before any excavation permit is issued
 - b. Includes a meeting room and up to 1.5hrs of time from Engineering Services. This fee is waived for contractors that were issued a minimum of 10 excavation permits the previous year with no non-compliance issues on record.

Invoicing

All fees are billed to the utility owner.

Questions? Please contact 311 (403.320.3111)
and ask to speak with Capital Planning and Engineering Services - ROW or email ROW at
rowapplications@lethbridge.ca