

## Excavations in Public Right of Way

### Purpose:

This policy is to define the responsibility of the parties involved when excavations are carried out in public right of ways, to define regulations related to the work, to specify that the work will conform to City standards and safety requirements, to ensure that the City is provided with the proper information and scheduling enabling the issuance of the excavation permit and to establish rates approved by the City Manager.

### Guidelines:

Under the authority of The City of Red Deer's Traffic Bylaw 3186, Section 90:

1. All persons excavating within a City of Red Deer public right of way shall obtain a permit from The City of Red Deer Engineering Department.
2. No persons, other than those working for or authorized in writing by the utility company or authorized by The City of Red Deer will be issued an excavation permit.
3. Alignment approval for new utility installations, borehole or monitoring wells must be obtained from The City of Red Deer Engineering Department.
4. Unless noted otherwise within this policy, the permit holder will perform subsurface work including backfill as required. The City of Red Deer reserves the right to perform all surface restoration works at the permit holder's expense unless the City of Red Deer releases the surface repairs in writing to the permit holder. As condition of release, the permit holder is responsible to maintain surface repairs for a period of 2 years.

### Occupational Health & Safety Requirements

It is The City's expectation that all contractors carrying out excavations in a public right of way shall have a valid certificate of recognition relevant to their industry and shall comply with Alberta Occupational Health & Safety Act, Regulations and Code.

### Maintenance of Utility Cuts, Barricades, and Lights

The permit holder shall be responsible for the maintenance of the excavated area during construction and for a maximum period of 30 days after The City of Red Deer Public Works office has been advised that all work on the excavation has been completed, inspected, and a standard proctor density of 100% has been recorded for the backfill material.

In addition, the permit holder shall obtain permission from The City of Red Deer Engineering Department concerning erecting and maintaining adequate barricades, signs and flashing caution lights during the entire period of his operation.

In the event that the barricades and/or flashing caution lights are removed, damaged, or destroyed while under the permit holder's responsibility, and if it is found necessary for the City to re-establish such barricades and/or lights, this work will be done at the expense of the permit holder.

If final repairs have not been completed, i.e. pavement replacement, within 30 days **following notification to the City**, the City will assume responsibility for maintenance of the excavated area, including barricades, signs, and lights at the expense of the permit holder. If the excavation is taking place in the winter months (Oct 1 – May 1), the Permit Holder is

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responsible for maintenance and expense of temporary asphalt repairs until final paving can be completed in the spring.

### Other Utilities

The permit holder shall be responsible for checking the location of other utilities and facilities in the working area, either below or above ground, as related to the following agencies:

- ATCO Gas
- Telus Communications
- Shaw Cablesystems Ltd.
- City's Electric, Light, and Power Department
- City's Water Distribution, Sanitary and Storm Collection Systems (Environmental Services Department)
- City's Parks Department
- A. T. & T.
- All other utilities in the vicinity of work

### Liability

The permit holder undertakes and agrees to indemnify and save harmless The City of Red Deer from, of, and against any and all liabilities and claims for damages of any nature and kind, or any judgements related thereto, caused to persons or property by reasons of his activities upon City property, roads, rights of way, easements, or utility lots.

### Requirements for Excavations associated with Boreholes or Monitoring Wells

- Remove all material excavated from the borehole.
- Where possible, place concrete slurry (3 to 5 mpa) from the bottom of the borehole to within 750mm of the surface and let this material set for a minimum of 72 hours before continuing with backfilling operations.
- Protect the concrete slurry from freezing during cold weather.
- Existing pavement structure to be replaced to match thickness with granular base material to within 150 mm of finished roadway surface. The upper 150 mm of excavation depth to be replaced with matching surface treatment (hot-mix asphalt or concrete).
- Existing landscape surface to be replaced with 300 mm topsoil and matching surface treatment.
- Protect the borehole area with delineators, ribbon, fencing, flashers, etc. as appropriate for the use of the surrounding right of way and keep the protection in place from the time of excavating until backfilling is complete.
- All work shall be carried out by the permit holder at no expense to The City of Red Deer.

### Backfill and Compaction Requirements for all other Excavations

All work shall be carried out by the permit holder at no expense to The City of Red Deer.

### Backfill Requirements

The applicant shall backfill and compact excavations, as outlined under the items

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hereinafter listed. Upon removal of excess material from the area, the applicant shall request, through the City's Public Works Department, an inspection of his completed work.

For an excavation within a roadway or concrete area, backfill shall be placed as follows:

- Backfill one metre below the finished grade shall be placed in lifts not exceeding 300 mm and compacted as required to match the existing cross section unless the native backfill is deemed to be unsuitable, then it shall be replaced with similar insitu subgrade material. If it is necessary to confirm required cross section requirements, contact the Engineering Department.
- 20 mm crushed gravel to be placed in lifts not exceeding 150 mm and compacted as required
  - in the case of a roadway, the backfill shall be placed to an elevation flush to the existing roadway
  - in the case of concrete the backfill shall be placed to an elevation flush to the original elevation of the concrete work prior to the excavation
- 20 mm crush gravel meeting the City of Red Deer Aggregate Designation 4b may be used.

### Compaction Testing Requirements

The permit holder shall arrange to obtain the services of an approved geotechnical soils testing firm to conduct moisture/density tests at no expense to The City of Red Deer. The results of the testing shall be forwarded to the City's Engineering Department.

Testing frequency and compaction methodology as per City of Red Deer Contract Specifications.

- Frequency of testing shall be a minimum of 1 moisture/density test of every 150 lin m of construction per 150 mm lift. No less than 1 moisture/density test will be required, unless otherwise approved by the Engineering Department, for each construction section less than 150 lin m.
- Compaction shall be carried out by an approved mechanical method. In the case of a roadway excavation, compaction to a depth of 1 metre below finished road grade to obtain a minimum density of 100% Standard Proctor Density at optimum moisture content. Material below the top 1 metre shall be compacted to 95% Standard Proctor Density at optimum moisture content. In the case of a concrete area excavation, compaction to a depth of 1 metre below top of the concrete to obtain a minimum density of 97% Standard Proctor Density at optimum moisture content.

Should density test results reveal that compaction does not meet required densities; the City shall re-compact the deficient portions and charge the permit holder the actual cost plus administration to do this.

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**NOTE:** Fill Crete should only be used with permission of the Public Works Department, because of the frost penetration associated with it.

### Asphaltic Pavement Excavations

A Record of Pavement Cut Form is to be completed for every excavation and returned to The City of Red Deer, Engineering Department.

Pavement shall be saw cut to form a straight vertical edge. The trench shall be left at a minimum of 1 metre wide. Pavement fragments and unsuitable excavated material shall be removed from the site area and disposed of at an approved disposal site.

The City of Red Deer reserves the right to perform all surface restoration works at the permit holder's expense unless the City of Red Deer releases the surface repairs in writing to the permit holder. City crews will arrange to have the pavement replaced at a charge to the permit holder as follows:

50 mm compacted lift	\$40.00/m <sup>2</sup>
75 mm compacted lift	\$45.00/m <sup>2</sup>
100 mm compacted lift	\$55.00 /m <sup>2</sup>
125 mm compacted lift	\$60.00/m <sup>2</sup>
150 mm compacted lift	\$85.00/m <sup>2</sup>
175 mm compacted lift	\$90.00/m <sup>2</sup>
200 mm compacted lift	\$95.00/m <sup>2</sup>
<b>Minimum job charge</b>	<b>\$500.00</b>

### Gravel or Oiled Surface Excavations

Unsuitable excavated material shall be removed from the site area and disposed of at an approved disposal site. The City of Red Deer crews will arrange to have the surface re-oiled, and the permit holder will be charged the actual cost of the work.

### Unimproved or Underdeveloped Areas

Excavations shall be backfilled with select non-organic material and adequately compacted so no trench settlement occurs. The trenches shall be left in a state at least equivalent to the original condition. The permit holder will be responsible to correct any and all deficiencies causing trench settlement. Failure to correct the deficiencies will result in The City of Red Deer taking the necessary corrective measures and charging the costs back to the permit holder.

### Concrete Area Excavations

Concrete shall be saw cut to form a straight vertical edge at trowel or tool joints where possible. Concrete waste, debris, and unsuitable excavated trench material shall be removed from the site area and disposed of at an approved disposal site. The City of Red

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Deer crews will arrange to have the concrete replaced at a charge to the permit holder of:

- sidewalk \$175.00/m<sup>2</sup>
- 250 mm curb and gutter \$275.00/linear m
- 500 mm curb and gutter \$355.00/linear m
- in boulevard or separate walk \$160.00/m<sup>2</sup>
- sidewalk crossing \$265.00/linear m
- curb crossing \$375.00/linear m

The City of Red Deer reserves the right to perform all surface restoration works at the permit holder's expense unless the City of Red Deer releases the surface repairs in writing to the permit holder.

**Minimum Job charge for any single job shall be a flat rate of \$500.00.**

**Boulevard Area Excavations****a. Grassed**

The Parks Department will undertake the cultivation and repair at a cost to the permit holder of \$26.80 per square metre for sod and \$18.90 per square metre for seed. The decision to sod will be at the sole discretion of The City of Red Deer.

**NOTE:**

1. The square metre charge will be based upon the total area which requires repair. It is, therefore, to the advantage of the permit holder to confine the work to as small an area as possible, and to carefully rake any clay or other material from turf, beyond the bounds of the excavations, before vacating the site.
2. When backfilling and levelling, the top 30 centimetres (12 inches) must be of good quality topsoil.

Should extra work be required by the Parks Department, all work will be charged to the permit holder at cost, plus administration charges.

**Inspection charge for any single job shall be \$ 200.00.**

**b. Trees and Shrubs**

It is the Contractor's responsibility to insure every effort is made to minimize damage to trees and shrubs. If plantings must be disturbed, the applicant is required to advise the Parks Landscape Supervisor. The plantings will be protected, transplanted or replaced by City Park's crews or by a landscaping contractor. Any costs associated with the protection, repair, transplanting, or replacing of trees and shrubs will be charged to the permit holder. Topsoil compaction on turf area and around trees will be considered as damage which must be repaired.

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**NOTE:** Any work undertaken by the permit holder found to be deficient or defective will result in The City of Red Deer taking the necessary measures to correct the deficiencies at the permit holder's expense.

### Issuance of Excavation Permits

Excavation permits will only be issued to companies or agencies owning the utility or other agencies as approved by The City of Red Deer. Permits will not be issued to subcontractors doing work for the utility company or agency unless the owner of the utility provides permission in writing for the sub-contractor to be issued the permit. Contractors and subcontractors must have a current City of Red Deer Business License. The owner of the utility agrees to be responsible for all obligations, including repair costs for damages of the permit holder or subcontractor, and to make payment of all funds for which the permit holder or subcontractor are responsible under the terms of these regulations. Where there is no utility involved, the permit holder is ultimately responsible for all costs.

#### a. Information Required

Job contact information  
Location (complete with job number)  
Schedule (dates - start and end)  
Work to be done

#### b. Lanes, Locals and Collector Roadways

General repair or construction plans and a schedule of work are required two days prior to the City approving the permit so that the Public Works Department can schedule road closures and detours, if necessary. The road closure and detour work will be at cost to the permit holder. Prior approval of the alignment does not constitute approval of an excavation permit. Excavation can not proceed until The City of Red Deer Engineering Department has approved the closure/detour.

#### c. Arterials/Bus Routes

If the work is a general repair or new construction (non-emergency) on an arterial roadway or bus route, we will require plans and a schedule of work one week (5 business days) prior to the City approving the permit so that the Public Works Department can schedule road closures and detours, if necessary. The road closure and detour work will be at cost to the permit holder. Prior approval of the alignment does not constitute approval of an excavation permit. Excavation can not proceed until The City of Red Deer Engineering or Public Works Department has approved the closure/detour.

Construction in these areas should be continuous until the job is complete, i.e. not left over weekends. Authorization must be given by the Public Works Department for an excavation area to be left open over a weekend.

If the work is of an emergency nature on an arterial or bus route (e.g. a gas leak), the utility company involved must contact The City of Red Deer Engineering Department as soon as possible (342-8161) to arrange for the appropriate traffic accommodation and apply for a permit the next working day.

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d. Signing

Permit holders must adequately sign any construction on City property indicating to the general public the name of the agency undertaking the work.

**Scope/Application:**

This policy applies to all contractors, subcontractors, utility companies or members of the public.

**Authority/Responsibility to Implement:**

**Construction and Rate Review**

1. Public Works Manager
2. Roads Superintendent

**Permitting & Inspection Process**

1. Engineering Services Manager
2. Customer Services Administrator

**References/Links:**

1. The City of Red Deer Traffic Bylaws.
2. Alberta Occupational Health & Safety Act
3. Alberta Occupational Health & Safety Regulations and Code

**Inquiries/Contact Person:**

Roads Superintendent

**Approval History:**

**Approved By:**

**Date:**

<b>Approval History:</b>	<b>Approved By:</b>	<b>Date:</b>
Public Works Manager	Greg Sikora	February 7, 2022
Public Works Manager	Greg Sikora	December 2, 2019
Public Works Manager	Greg Sikora	January 17, 2019
Public Works Manager	Greg Sikora	June 11, 2018