

The City of Chestermere Quick Trench Program

FOR SINGLE FAMILY AND SEMI-DETACHED CONSTRUCTION PERMITS ONLY (RESIDENTIAL) OR ROW HOUSING/ MULTI FAMILY BUILDINGS INDIVIDUAL PARCELS

Purpose:

The City of Chestermere Quick Trench program has been reviewed and updated to align with current construction practices. The Quick Trench program is intended to improve the installation process for deep services, specifically water, sanitary sewer, and storm water systems for new single-family, semi-detached homes and individual parcel multi-family developments. This program is delivered through excavation contractors who provide installation services to the City of Chestermere builders. Contractors not currently enrolled in the program will be automatically registered upon submitting their first Water and Sewer application.

Scope:

The Quick Trench Program is designed to enhance safety and ensure project continuity by minimizing the duration that excavations remain open. It also aims to improve the quality of deep service installations using approved piping, bedding, and backfill materials. The program also streamlines the trenching, connection, and inspection process by coordinating these activities between builders and excavation contractors.

The City of Chestermere establishes standards for the Quick Trench Program – Community Growth & Infrastructure and are aligned with the National Building Code – Alberta Edition (NBC-AE) and the National Plumbing Code (NPC).

Process:

Information on the water and sewer connection is submitted by the applicant as part of the building permit on a standard Water and Sewer Connection form. This also initiates the excavator/installer's participation in the Quick Trench Program on their first submitted application. Under the Quick Trench Program, either the excavation company or the builder must submit all required documentation and photographs to (inspections@chestermere.ca) for review by the City's Plumbing Safety Codes Officer.

If the submitted documents are in compliance, the review process will be considered closed. The excavation contractor is fully responsible for ensuring the safety of all personnel and members of the public during excavation, piping installation, and backfilling activities.



QUICK TRENCH PROGRAM PROCEDURES APPLICATION FOR ACCEPTANCE INTO THE PROGRAM BY LICENSED EXCAVATING CONTRACTOR

Participation in the Quick Trench Program is automatically initiated when an excavation contractor submits their first application for a water and sewer permit from the City of Chestermere.

Certification and acceptance into the program must be granted by the City's Plumbing Safety Codes Officer. To qualify, the excavation contractor must agree to follow all procedures and requirements outlined in the Quick Trench Program by signing the declaration section below.

The excavation contractor must also demonstrate their ability to meet these standards to the satisfaction of the City's Plumbing Safety Codes Officer. As part of the qualification process, the contractor must have **five trench installations** inspected. These installations will be tracked by City staff, and upon successful completion of five compliant inspections, the contractor will receive signed confirmation of acceptance into the program.

Once accepted, the contractor may proceed with future Quick Trench installations without requiring pre-backfill inspections.

If a **contractor** has not participated in the program within **a four-year period** and subsequently applies for a water and sewer permit, they must **re-qualify** under the same conditions outlined above.

- *** Excavation Contractors installing water and sewers services that are not, yet part of the program must call and request trench inspections, must not back fill until the inspection is completed and maintain site fencing. ****
- ***For Safety, the City of Chestermere will attempt to complete the inspection within 24 hours from the time the inspection was called in.***
- *** THE QUICK TRENCH PROGRAM ONLY APPLIES TO SINGLE FAMILY DWELLINGS, SEMI-DETACHED HOMES, AND MULTI PARCEL MULTI FAMILY DEVLOPMENTS. ALL OTHER DEVELOPMENT TYPES INCLUDING, BUT NOT LIMITED TO INDUSTRICAL, COMMERCIAL, INSTITUTIONAL AND SINGLE PARCEL MULTIFAMILY DEVLOPMENTS WOULD NEED INSPECTIONS FROM THE REGISTERED PROFESSIONAL RESPONSIBLE FOR THE DESIGN AND OVERALL INSTALLATION. Given this, the City will require that the Professional Engineer responsible for the



design and installation oversight of water, sewer, and sanitary systems provide a report verifying that the installation of the services meets the designed specifications and all other regulations.

ROLES AND RESPONSIBILITIES

- Builders/Plumbers are not required to apply for the program themselves but must ensure their excavating contractors secure the necessary Water & Sewer Permits. The building permit applicant can submit the application on behalf of the Excavation contractor, but the Water and Sewer permit applicant must be a registered contractor (with a valid business license) with the City of Chestermere.
- It is essential for Builders/Plumbers to understand the Quick Trench Program's requirements. Builders must verify that their contractor is qualified and participating in the quick trench program.
- When submitting a building permit application for qualifying developments, builders must specify the excavating company responsible for the work.
- Excavation Companies must provide a copy of the permit to the Safety Codes Officer onsite, who may request to see it before conducting an inspection. Those participating in the Quick Trench Program must,
 - o Submit photographs to the City before covering the trenches.
 - o Complete five satisfactory installations inspections before granting approval for additional projects.
 - o Participants in the program must retain the acceptance letter issued by the City's Safety Codes Officer and have readily available if requested by the Safety Codes Officer.

The Quick Trench program is a privilege granted to proven performers and may be revoked at any time by The City's safety codes officer.



RESIDENTIAL WATER AND SEWER TIE-IN REQUIREMENTS AND DOCUMENTATION FOR THE CITY OF CHESTERMERE.

Excavation Requirements for Water Service Connections – City of Chestermere

To ensure compliance with municipal and national standards, all excavation contractors performing water service installations within the City of Chestermere must adhere to the following requirements:

1. Business Licensing:

 Contractors must hold a valid Business License issued by the City of Chestermere prior to commencing any work. Information in obtaining a business license can be found online www.thecityofchestermere.ca – Business Permits and Licenses

2. Qualified Personnel:

• All piping professionally trained and qualified personnel must execute connections to ensure safety and code compliance.

3. Approved Materials:

• Only piping approved under the National Plumbing Code or (equivalent) shall be used. All joints must be sealed using appropriate compounds to maintain system integrity.

4. Fitting Limitations:

- A maximum of either:
 - a. Two (2) 22½° fittings, with a minimum of two (2) feet of straight piping between them to facilitate future cleaning and inspection, or
 - b. One (1) 45° fitting is permitted within the service line configuration.

5. Service Line Continuity and Pipe size for Water Service:

• The minimum allowable pipe diameter for water service is 1 inch.



- The water service pipe must match the diameter of the pre-installed service piping from the property line to the main shut-off valve inside the residence.
- Where pre-serviced properties exist, the quick trench installer is responsible for assuring water service is 1" diameter pipe at the property line.

6. Pictures Requirements:

- Pictures show pipe size and manufacture of pipe being installed.
- Site **Address** of where the quick trench is **being performed** on **every picture**.
- Date stamp on every picture.
- Connection made at existing services provided to Excavator.
- Piping laid on bedding.
- Piping covered by backfill material.

Excavation and Backfill

To ensure regulatory compliance and uphold safety and quality standards, all excavation and installation of sewer and water services in the City of Chestermere must be performed by **qualified personnel** and follow the specifications outlined in the **Building Grade Form**.

Installation Requirements

1. Minimum burial depths:

• Water lines: **8 feet**

• Sewer lines: **4 feet**

• Variations must be reviewed with the **Plumbing Safety Codes Officer** at **403-207-7075**.

2. Bedding:

- Use **pea gravel** (max ½" size)
- Minimum 4" below, 6" above, and 1' clearance on each side of the pipe.

3. Safety:

• All work must comply with Occupational Health and Safety standards and NBC-AE Division B, Sentence 8.1.2.2.(1).



QUICK TRENCH PROGRAM PARTICIPATION

1. Initial Inspection:

• Contractors must contact **Building Services** at **403-207-7075**, or (<u>inspections@chestermere.ca</u>) arrange an inspection before joining the program.

2. Inspection Approval:

• Backfilling is permitted **only after** the Plumbing Safety Codes Officer confirms compliance in a written report.

3. Failed Inspections:

- If an inspection fails, contractors must rebook after correcting deficiencies.
- Backfilling a failed trench will result in mandatory excavation and re-inspection at the permit holder's expense.

Ongoing Compliance

After joining the Quick Trench Program, contractors must:

- Submit **labelled photos** via email to <u>inspections@chestermere.ca</u> per picture requirements.
- The Plumbing Safety Codes Officer will complete an inspection report based on the submitted photos.
- If an inspection fails after the first 5 installations, the contractor must expose the three previous installations for re-inspection at the officer's discretion.
 Random spot checks will be conducted on open trenches to ensure continued compliance.



DECLARATION: I/We declare that we have read, understood, and agree to adhere to the procedures and requirements of the Quick Trench Program. Excavation Contractor Company Name: Business License #: Signature (above printed name): ______ For office use only. To be completed by staff and the SCO upon acceptance to the program ACCEPTANCE TO THE CITY OF CHESTERMERE QUICK TRENCH PROGRAM Excavation Company Name: _____ Date Accepted to the Program: Addresses of 5 passed inspections: 1. _____ SCO Name: _____ SCO Signature:

The personal information you provide on this form is being collected under the authority of Section 640(2) of the Municipal Government Act and Section 34 of the Access to Information Act (ATIA) and Protection of Privacy Act (POPA) is protected by the privacy provision of these acts. This information will be used to determine eligibility for a development/building permit and for enforcement of applicable laws and may be circulated to persons or authorities as necessary for the review process. If you have questions about the collection of this information, please contact the ATIA/POPA Coordinator at atia@chestermere.ca or in person at 105 Marina Road, Chestermere, Alberta T1X 1V7 (403) 207-7050.

SCO Designation Number:



Key points for all trench types

- Piping and connecting materials must be listed in the National Plumbing Code as acceptable for use in the application for a service trench.
- Water service piping shall be minimum 1 in (25 mm) in size and certified for potable water.
- All installations must abide by the grade slip issued by the developer for new builds.
- If the grade slip indicates a size larger than the minimum 1 in (25 mm), the size indicated by the grade slip must be installed.
- For changes in direction for a sewer or storm service, a maximum of two 22.5-degree fittings or one 45-degree fitting may be used on a pipe from the foundation to the street without the installation of an approved cleanout.
- Grades must be a minimum one in 50 for 3 in and one in 100 for 4 in and deflections of not more than five degrees every 3 m.
- Trench depth and earth cover must comply with the City requirement for frost protection of 8.5 ft for water services and 4.5 ft for sanitary sewer services.
- Piping must be bedded in hard durable particles free from clay lumps, cementation, organic material, frozen material, and other materials that may cause harm or damage no larger than 0.75 in (20 mm). Bedding in sand is not acceptable. The material must be a minimum of 4 in (100 mm) under the piping with 12 in (300 mm) of cover over the piping and extend to 12 in (300 mm) on each side.
- Completing the backfill with native soil, rocks or frozen lumps are not permitted.
- Sanitary and storm inspections are automatically generated at the pre-backfill stage.