ATCO

Guide to Natural Gas Servicing for Urban Development

Edmonton Region

ATCO.COM

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1. Purpose

ATCO Gas and Pipelines (the Company) requires developers and their engineering consultants to provide specific information and meet certain conditions to ensure safe, efficient and cost-effective delivery of high-quality natural gas service to urban developments.

This document is intended to help all parties understand their responsibilities in the servicing process. Developers, engineering consultants and field superintendents should familiarize themselves with this information to avoid delays in obtaining service.

Standard design details such as joint trench and sleeve specifications can be found in the appendix.

2. Reference

Engineering: Questions about the engineering aspects of a project should be directed to the **Edmonton Region Engineering Group** at EDMGrowthEngineering@atco.com.

Service Contracts: Questions about residential or commercial service applications should be directed to the **Service Contracts Group** at gasapplicationsedmonton@atco.com.

Additional resources are available on the website at gas.atco.com.

3. Requirements

The information and requirements in this section are common to all types of developments. For specific information on various types of developments, please refer to:

- Section 6 Subdivisions
- Section 8 Condominium Sites
- Section 9 Homes on Non-Permanent Foundation
- Section 10 Commercial Sites

4. Engineering

4.1. Materials and Information

ATCO requires the following materials and information from the developer to initiate the engineering design of the project:

- tentative legal plan
- tentative construction schedule
- developer information including legal company name, contact information (name, phone number, and email)
- digital copy of the computer base plan in Microstation (.DGN) format or AutoCAD (.DWG) format, Ver. 2010 or earlier, set in model space, not paper space
- first submission date

If all required materials are not submitted, a delay in design and/or construction is likely to result.

4.2. Submitting Plans

To initiate your request, please email the materials and information above to EDMGrowthEngineering@atco.com.

The ATCO designer will contact the developer and/or the developer's consultant when they have been assigned to the project. All future correspondence relating to the project should be directed to the designer.

Please submit initial plans with sufficient lead time. The minimum design period is six (6) months but may vary on a project-by-project basis. ATCO makes every effort to meet scheduling requests, but cannot guarantee all timelines will be met as schedules can vary depending on factors such as weather, site conditions and existing project workloads.

If input from other departments within ATCO, other ATCO companies, or other external parties is required, this minimum design period may need to be increased. ATCO will advise the developer or consultant if the scheduling must be adjusted.

Temporary gas main installations, relocations, or abandonments may be completed at the expense of the developer. Contact ATCO Engineering to initiate a request. A minimum of six (6) months is requested to design and execute these requests.

4.3. Consultant Responsibilities

Upon submission of plans by the developer, ATCO will indicate the proposed natural gas distribution layout and the preliminary design will be returned to the developer's engineering consultant via email.

It is the consultant's responsibility to review the preliminary design for:

- possible conflicts with deep utilities and other shallow utilities
- easement requirements
- sleeve locations
- driveway conflicts

For easement requirements please contact the ATCO designer to whom the project was assigned.

Subdivision changes affecting the gas main design must be brought to the attention of the ATCO project designer immediately to ensure that the installation of the mains and ultimately the gas services, is not unnecessarily delayed. The developer or developer's consultant must notify ATCO of any changes made to the design after the initial set of drawings is provided, or if any change occurs in the civic addressing as applicable.

Before final plans can be issued to ATCO Construction Department, ATCO requires the following items from the developer:

- Final approved set of power and streetlighting drawings.
- Tentative legal plan (final changes awaiting approval).
- Tentative utility ROW plan (final changes awaiting approval).
- Confirmation of the installed sleeve locations on site.

All final plans must be submitted to EDMGrowthEngineering@atco.com at least 1 month prior to the required construction start date. Failure to submit all required materials in a timely fashion may result in delays in gas main and service construction.

In urban areas where the municipality does not obtain the ROWs on behalf of ATCO, copies of the relevant signed easement agreements must be executed in the name of ATCO Gas & Pipelines Ltd.

4.4. Design Requirements

The following specifications must be followed with relation to the gas design. Any changes to the following specifications must have approval from ATCO's Engineering Department.

- A minimum separation of 1.5 m between above grade facilities such as fences, trees, power poles, transformers, etc. and the gas main alignment.
- A minimum horizontal separation of 2.0 m between deep utilities and the gas main alignment.
- A minimum horizontal separation of 1.0 m between shallow utilities and the gas main alignment, except in joint trench installations.
- A minimum vertical separation of 300mm is required between all utilities and the gas main alignment. This separation can be reduced by utilizing split sleeving between power services and the gas main.
- In joint trench installation, the minimum horizontal separation between shallow utilities and the gas main is reduced to 300mm and the vertical separation can be reduced by utilizing a split sleeve.

5. Construction

5.1. Site Ready Conditions

The following site ready conditions apply to all developments. These conditions must be satisfied before ATCO crews will move onto a site:

- Installation of all deep utilities and other shallow utilities must be completed. For 4-party joint trenching projects, only deep utilities must be completed as all shallow utilities (cable, electrical, telecommunications and natural gas) are installed at once. The developer is responsible for ensuring that all deep utilities and all shallow utilities under the developer's control are installed on the proper line assignment and at the proper depths and will be responsible for any repairs or alterations if this condition is not met.
- The gas alignment is to be within 150 mm of final grade and free of obstructions such as dirt piles or building materials.
- All water valves and manholes must be clearly marked with marker posts.
- Paving and pouring of sidewalks, curbs, and other surface improvements may precede gas main installation; however, sleeves must be provided at all road crossing locations, refer to Section 5.2.
- Benchmark elevations must be provided if gas main installation is to precede curb and gutter installation.
- Driveways should not be installed prior to gas main installation. If a driveway must be preinstalled, a sleeve must be installed under the driveway to allow installation of the gas main, following the same guidelines as for road crossing sleeves.
- The developer may be asked to mark all private underground utilities, such as irrigation or secondary lines, or unenergized assets at least one (1) day before ATCO moves onto the site. The developer is responsible for the costs of these private locates as required.

If the developer or representative confirms that the site is ready for gas main installation, ATCO crews will mobilize and move on site and commence construction. If construction cannot move forward, the developer will be contacted. If the problem cannot be resolved immediately, ATCO crews will move off site. ATCO will reschedule the work which may result in a delay.

5.2. Sleeve Installation

If paving and/or concrete work is to be done before gas main installation, the developer must install sleeves under the pavement/concrete for future insertion of gas mains, subject to the following conditions:

- The developer obtains, installs, marks, and pays for the sleeves and their installation.
- Sleeves should be PVC Conduit suitable for direct burial.
- The size, location, length, and depth of the sleeves shall be determined in conjunction with the ATCO Engineering department.
- Sleeves are to be installed at a depth of 1.1 m to the top of gas pipe from the final grade.
- Sleeves should extend 1.0m past the edge of the sidewalk/road structure to ensure the infrastructure is not undermined during the sleeve exposure.

Sleeve sizes shall be determined according to Table 1:

Table 1 – Sleeve Sizes

External Diameter of Gas Main (mm)	Internal Diameter of Sleeve (mm)
15.9	35
26.7	50
42.2	75
60.3	100
88.9	150
114.3	200
168.3	250
219.1	300
323.9	400

- Where sleeves are not possible or not desired, ATCO requests that developers omit portions of the pavement/concrete to allow for open-cut installation.
- Joints in sleeves will not protrude into the sleeve such that they will interfere with the insertion of the pipe.
- The ends of the installed sleeves will be sealed to prevent the entry of water or other foreign materials into the pipe.
- The ends of each sleeve will be clearly marked with 100 mm square wooden posts. The above ground portion of the posts must be painted yellow to indicate that the sleeve is for a gas main.

If sleeves are not installed to the proper depth or alignment, are too small, too large, crushed or otherwise unsuitable for use, they will not be used. If the developer paves the road without installing sleeves or the sleeves are deemed unusable, ATCO will notify the developer who will be given the following three (3) options:

1. ATCO or the developer can cut and remove the pavement/concrete. ATCO will open cut a trench to install the gas main. If ATCO performs the work, the developer will be invoiced at the current rates.
2. ATCO can directionally drill the gas main. The developer will be invoiced at the current rate for the length of drill and any cuts that may be required.
3. The developer can install a new sleeve at their own cost.

In addition to the three options above, the following conditions will apply:

- ATCO will compact to municipal standards across the road.
- ATCO will place a cold-mix patch on the ditch and the developer will be invoiced at the current rates. If the developer wishes to make a permanent asphalt repair immediately, the developer must contact the appropriate ATCO Construction Supervisor to arrange for the omission of the temporary patch.
- ATCO will backfill and compact cut sidewalks to the bottom grade of the sidewalk. The developer is responsible for the permanent repair and any associated costs.

- The developer will provide direct access across a road/sidewalk where a gas main is to be installed.
- The developer is responsible for the permanent repair and any associated costs.

5.3. Survey Requirements

Prior to construction ATCO requires the following information to be available.

- Enough legal evidence (e.g., survey control point, pins, etc.) in place and accessible.
- A point plan, showing the individual legal pin markings.
- Tentative legal and utility ROW plans (final changes awaiting approval) if they have not already been provided.

For traditional installation projects completed by ATCO, ATCO's survey team will survey the gas alignment based upon survey documents provided by the developer/consultant and the gas alignment created by Engineering.

For 4-party projects completed by the developer's contractor, it is the developer's responsibility to survey the site and the gas alignment. ATCO survey/inspections will only confirm that the gas alignment is installed correctly based upon the information provided. ATCO survey/inspections will not confirm if the developer's staking or survey are correct.

5.4. Gas Main Installation Before Paving

5.4.1. Road Crossings

The developer shall maintain a minimum of 0.6 m cover from the top of the sleeve to the bottom of the road structure when the final road structure is being prepared. The final depth of the gas main shall be 1.1 m from the top of the gas pipe to the final grade.

Contact ATCO Engineering department for options to install gas prior to road installation. Please note both the developer and ATCO must agree upon the costs and conditions before construction begins.

5.4.2. Lanes

- The developer shall maintain a minimum of 0.6 m cover over the gas mains while lanes are being constructed. The final depth of the gas main shall be 1.1 m from the top of the pipe to the final grade.
- If undercutting is required after installation of the gas mains, proper gas line exposing practices are required. The road contractor must arrange for an ATCO Inspector to inspect the pipe prior to and after undercutting, and before backfilling.

5.5. Backfill and Compaction

In private property, ATCO will backfill existing fill and any compaction requirements to ATCO from the developer may be charged back to the developer.

In public property, ATCO backfills and compacts to municipal standards.

In the City of Edmonton, compaction follows the City of Edmonton requirements as per Complete Streets.

5.6. Service Line Timing and Costs

In conventional natural gas installations, service lines to each parcel or lot are installed after the foundation for each individual dwelling/building is complete. Refer to Section 7 for joint trench construction installations.

After a gas service line has been applied for, a site inspection will be completed prior to installation. Only after a satisfactory site inspection will ATCO schedule the installation of a service line. Please note additional time may be

required if a main extension is necessary to service a parcel or lot.

The applicant pays for service line installations within the applicant's property. Billing for the service line installation is based on the rates in effect at the time of installation.

In the Edmonton Region, application can be made to the Service Contracts Group online by accessing the ATCO Gas website New Natural Gas Service Line or Changes.

5.6.1. Commercial

Specific requirements, such as a concrete pad and enclosure for the gas meter, must be in place and will be inspected and approved by an ATCO representative before a service line and gas meter will be installed. Energy provider enrollment must also be in place. Please contact the Service Contracts Group for requirement details.

5.7. Meter Installation

The following information pertains to all types of developments (residential, commercial, joint-trench, etc). Each type of development may have specific requirements which can be found in the appropriate section. Meter sets are installed from Left (Riser) to Right (Meter). For further information including allowed meter location and clearances, please see What You Should Know About Obtaining a New Residential Natural Gas Service.

6. Subdivisions

ATCO installs natural gas mains in various subdivision developments. Each type of development is explained in further detail in subsequent sections of the guide.

- Single family (detached and semi-detached) residential dwellings in the City of Edmonton.
- Multi-family (attached) residential dwellings in the City of Edmonton.
- Single family (detached and semi-detached) residential dwellings outside the City of Edmonton.
- Multi-family (attached) residential dwellings outside the City of Edmonton.
- Commercial subdivisions both in and outside the City of Edmonton.

Feeder main extensions both in and outside the City of Edmonton may be required to provide gas service to new subdivisions when no existing gas mains are present.

ATCO installs natural gas mains in subdivision developments, provided the developer:

- legally registers individual lots and public thoroughfares.
- services the development with municipal sewer and water.
- provides suitable rights of way (ROWs) for ATCO use, whether they are registered as public thoroughfares or utility ROWs.

In addition, the requirements outlined in Section 4 & 5 must also be met.

7. Joint Trench Construction

Joint trench construction is where all shallow utilities (power, telephone, cable, and natural gas) are installed in one (1) common trench at the same time. These utilities are typically installed within an easement in property under the front lawn.

7.1. Joint Trench Design

All shallow utilities will be designed as per the appropriate municipality's joint trench detail. The joint trench design will be divided between the power/communications half and the gas half of the trench. ATCO will be responsible for the design and approvals of the gas portion of the trench.

ATCO's gas infrastructure will be installed closest to the proposed building. If the developer wishes to flip the trench, i.e., have the power infrastructure closer to the building, the ATCO designer must be notified and approve this change.

A coverage of 1.0m is required for all new installs in a joint trench. A minimum of 200mm of fine sand is required over the gas main before it is filled completely to grade with high quality earth material.

The joint trench design varies between municipalities. The ATCO designer, in coordination with the developer's power consultant, will approve the appropriate joint trench design.

Prior to construction, the developer or the developer's consultant must provide the final valve top elevation to the ATCO Gas designer by email. ATCO's Construction team will coordinate with the Contractor to ensure the top of the valve is installed to the desired elevation. If the valve top must be adjusted after construction, the developer may be responsible for the adjustment costs.

7.2. Service Stub Locations

In a joint trench construction situation, ATCO will extend service stubs onto each property to be served within a subdivision. Service lines will be installed in a straight line from the service box location to the meter at the house. The developer must agree in writing to the following before ATCO will install service stubs in a subdivision:

- Meter locations and the side of the lot on which ATCO Gas' service stub is located will be predetermined. Refer to Section 5.7 for more information on meter locations.
- If the house lines are installed such that ATCO must install the service line on the opposite side of the house, the developer/builder will pay for the abandonment of the existing service stub and reinstallation of a new stub.
- The developer must inform ATCO of any change in lot configuration prior to installation of service stubs.
- If a change in lot configuration results in service stubs having to be abandoned and new stubs installed, the developer will be responsible for all associated costs of abandonment and reinstallation of the stubs.
- The properties will be unobstructed in the areas where service stubs are to be installed.

All the shallow utility services are installed on the same side of the house except for multi-family housing. It is the developer's responsibility to make the homebuilders in the subdivision aware of this.

- The house must be designed so that there is room on the wall to hang all the meters and still maintain the required clearances from openings.
- The service line is installed at the sub-floor stage, along with the other shallow utilities. The homebuilder

must ensure that applications for gas service and the gas meter location are made early enough that ATCO can schedule these installations.

- The homebuilder is responsible for exposing ATCO service stubs/main and excavating the house foundation. An ATCO crew will install service lines in the same trench as the other shallow utilities once they have been installed. The homebuilder is responsible for the backfill of the service trench with suitable material (i.e., free of large rocks, garbage, etc. that could damage the gas line) within 5 days once all utilities have been installed. This includes the removal of refuse from the trench before backfilling. Once the services are placed 200mm of fine sand will fill the trench before it is filled completely to grade with high quality earth material. Typical service trench dimensions are 0.45m wide by 1.0m deep to the top of the service pipe.

7.3. Joint Trench Installation

The gas line will be installed by the developer's chosen contractor from a list of ATCO's approved fusers and contractors. Gas installation will proceed after or concurrently with power and communications installation. Gas installation must be completed under the supervision of an ATCO approved Inspector. ATCO will provide an Inspector and materials when requested by the developer/their consultant with at least 48 hours prior notice. The ATCO Inspector will complete the following on site.

- Verify appropriate gas infrastructure installation as per ATCO's policies and procedures.
- Verify the newly installed mains for as-built purposes.
- Complete all paperwork as required.
- Coordinate with Engineering regarding alignment changes.

For any off-site work completed by the developer's chosen contractor, the contractor must follow ATCO's policies regarding ground disturbance. Off-site work may include bringing gas infrastructure to the developer's site, tie-in outside the development boundary, etc. These policies include, but are not limited to, written consent from the utility owner for clearances when crossing third-party assets or written consent that the developer will take legal liability in the event of damages to third-party assets if ATCO's ground disturbance policies are not followed.

8. Condominium Sites

In condominium sites, the entire gas distribution system within the property is installed, owned, and operated by ATCO; the service lines are paid for by the developer/owner.

Standard condominiums are single parcels of land in which no individual lots are sold with the condominium unit and no internal roads are registered as public thoroughfares.

Bareland condominiums are developments in which lots are sold with the condominium units, but no internal roads are registered as public thoroughfares. If roads are registered as public thoroughfares, the guidelines outlined in Section 6 apply. Bareland commercial developments are handled in the same fashion as residential Bareland condominium projects.

The following information applies to both standard and Bareland condominiums:

- Natural gas pipelines within the condominium property are classified as "mains" and "service lines".
- The portions of the piping system that cross through more than one (1) property within the development are known as "main" and are installed at no charge to the developer.
- Registered URWs for the mains must be provided by the developer.
- The lateral lines extending from the gas main to the meter sets are known as "service lines". The "customer end-of-service" extends from the edge of the ROW to the meter. The owner is billed for this portion of the service line at the current rates.
- A separate service application must be made for each meter or riser.
- Joint trench installation is strongly recommended as these sites are often very congested.
- Maintaining marker posts is the responsibility of the developer. If marker posts have been removed, it is the responsibility of the developer to expose the stub at their cost.

8.1. Consultant Responsibilities

In addition to the requirements given in Section 4, the developer must provide the following information:

- mechanical site plan
- electrical plan
- building footprints and lot lines on legal plan
- site plans indicating the location of fences, roads, sidewalks and any other aboveground permanent features
- natural gas consumption and house-line pressure requirements
- building floor and/or elevation plans indicating the desired meter location, refer to Section 5.7
- correct civic addressing for each unit

Please note that the service lines are not necessarily installed at the same time as the mains. It is the developer's responsibility to ensure that services to the individual units are applied for separately. This can be done by contacting Service Contracts Group. They will require a load breakdown for each unit and up-to-date civic addressing.

Since condominiums tend to have smaller distances between underground facilities, ATCO strongly recommends the

developer's consultant arrange a design meeting in the early stages of design with representatives from all shallow utilities present. It is recommended to apply for gas service early in the design to coordinate the gas main and service installation.

8.2. Meter Locations for Condominium Sites

The developer's options for metering facilities are as follows:

- individual meters grouped at a central location on each building
- Individual meter located on the outside wall of each unit.

For additional information see Section 5.7.

8.3. Construction

In addition to the requirements given in Section 5, the developer must meet each of the following conditions:

- Prior to construction, the developer must sign a form indicating the entire site is within 150 mm of final grade and will be responsible for any damage to the gas lines or extra costs associated with service installation due to a change of grade after main installation.
- The developer must mark the final grade line on the buildings.
- The developer will install the house lines after the proposed meter locations have been approved on-site by an ATCO Service Representative. The house line on the outside wall must have a permanent metal tag attached indicating the unit number it serves or ATCO will not install a meter.

9. Homes on Non-Permanent Foundation

ATCO defines homes on non-permanent foundation as single parcels of land where no internal roads are registered as public thoroughfares. If the road system is registered as public thoroughfares and the lots are individually registered under separate title, then the guidelines in Section 6 apply.

- The portions of the piping system that cross through more than one (1) property within the development are known as "main" and are installed at no cost to the developer.
- Registered URWs for the mains must be provided by the developer.
- Each lot is pre-serviced with a service line and meter post. The lateral lines extending from the gas main to the meter posts are known as "service lines". The "customer end-of-service" extends from the edge of the ROW to the meter post. The developer is billed for this portion of the service line at the current rates. The developer must provide final grade elevations at the meter post locations.
- A flexible hose from the meter set to the modular home is supplied and owned by ATCO and is considered part of the meter set.
- A separate service application must be made for each unit.
- Locates must be completed prior to installation of the meter to confirm the main and service are not located under the modular home. If an infraction is found, the meter will not be installed until the situation is corrected at the cost of the developer.

9.1. Consultant Responsibilities

In addition to the requirements given in Section 4, the developer must also provide the following information:

- a site plan indicating the exact location of roads, lots, meters, sidewalks, and other surface features
- electrical plan
- civic addresses for each mobile home site.

It is the consultant's responsibility to:

- note any section of the proposed pipeline route which requires special compaction, primarily in paved areas
- examine the proposed pipeline layout for conflicts with all other utilities.

9.2. Meter Locations for Modular Homes

Meters are located on a support post adjacent to each modular home. Meter locations must be outside and must be approved by ATCO in the planning stages. For additional information see Section 5.7.

10. Commercial Sites

ATCO defines a commercial site as any non-residential subdivision that is not otherwise classified in:

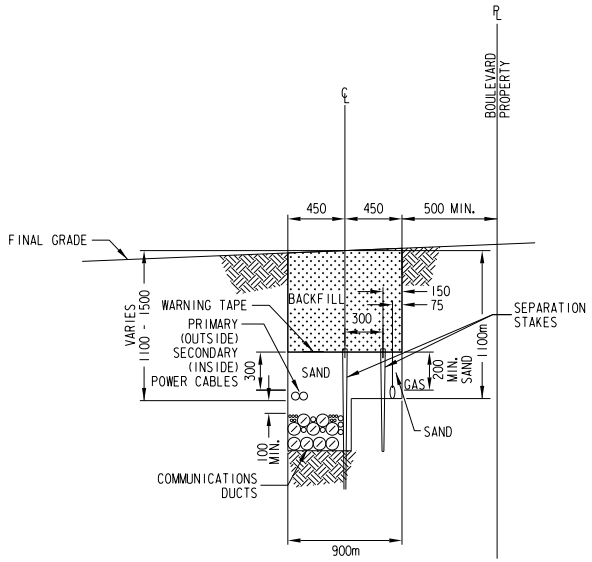
- Section 6 Subdivisions
- Section 8 Condominium Sites
- Section 9 Homes on Non-Permanent Foundation

10.1. Single Property

The natural gas facilities installed on a single property are classified as "customer end-of-service" and are paid for by the owner/developer. Service line installation rates are available on the ATCO Gas website at Charges for Service Line Installations - North.

NOTES:

1. Refer to the City of Edmonton Design and Construction Standards Volume 7 – 2024 Power for power standards.
2. Compact and Backfill as per City of Edmonton Volume 2: Complete Streets Design and Construction (Roadways).
3. For use with gas mains from 60 to 114mm in diameter.
4. If a wide trench is required for larger sized main (greater than 114mm), contact Engineering for approval.
5. Minimum 200mm of sand is required over top of the gas facilities.
6. Contact Engineering for variance approval or changes from standard design.



LEGEND

EXISTING MAIN: (HP) (IP) (MP) (LP) (AB)
PROPOSED MAIN:
PROPOSED ABANDONMENT:
CP CABLING:
DEVELOPER INSTALLED SLEEVE:
PROPOSED SERVICE / STUBS:
PROPOSED METER / METER BANK: X / XXXX

ATCO Gas Main Descriptor
323 IPS ST JT
Joint Trench
Pipe Material
Maximum Operating Pressure
Size of Pipe in Millimetres

PRESSURE CONVERSIONS

LP	7
AB	210
MP	420
IP	700
HP	1050
XH	1400
XXH	2100

All dimensions are in millimeters unless otherwise specified. Scale – NTS

Drawn By: HILARY CHEN
Mail/Mail-ups: EDMONTON
Plot No:

PRESSURE TESTS

TEST REQUIREMENTS				TEST RECORD		
M=SERVICE DATE	SEGMENT NO.	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST MEDIUM

PIPE RECORD

	MANUFACTURER	RESIN	DESIGNATION	CODE	NOMINAL PIPE SIZE	SDR	COIL NO.	PLANT LOCATION	PROD. DATE	PROD. INFO
EX. MAIN AT TIE-IN:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										

REV	DATE	ISSUE	REVISION NOTES	PREPARED BY	APPROVED BY
0	SEE PERMIT STAMP	IFC	ISSUED FOR CONSTRUCTION	RYAN FONG	SEE PROFESSIONAL STAMP

CONSTRUCTION RECORD

	NAME / ID#	INITIAL	START DATE	END DATE
FUSER(S) / WELDER(S):				
CREW CHIEF / INSPECTOR:				
☐ TENTATIVE PLAN STAKED BY:				
EMPLOYER-IN-CHARGE:				
CONSTRUCTED BY (NAME / COMPANY):				
EXCAVATION PERMIT / OSCAM #:				

PERMIT STAMP

PERMIT TO PRACTICE
ATCO GAS AND PIPELINES LTD.
RM SIGNATURE:
RM APEGA ID #: 83498
DATE: 07-Nov-2025
PERMIT NUMBER: P014343
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

PROFESSIONAL STAMP

PROFESSIONAL ENGINEER ALBERTA
MITCHELL THOMAS REESE
ID 261599
03-Nov-2025

PREPARED BY

RYAN FONG

CHECKED BY

NOT APPLICABLE

ATCO

PROJECT NAME:
STANDARD DESIGN
EDMONTON GROWTH JOINT TRENCH DETAILS
PROJECT LOCATION:
REFER TO WORK ORDER DRAWING

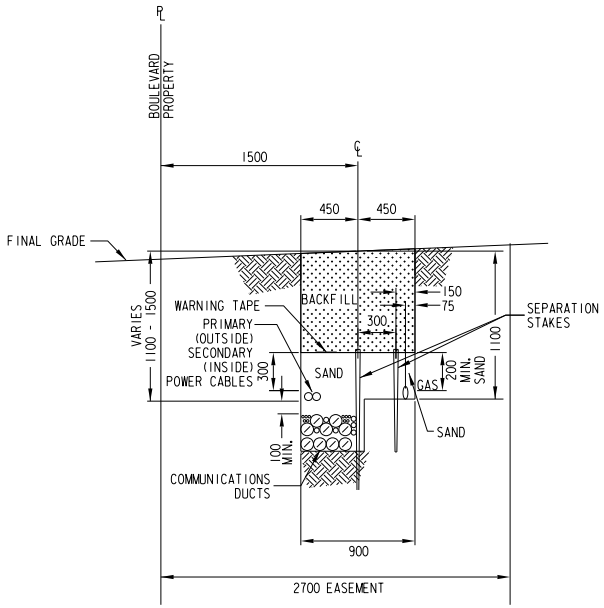
PROJECT NUMBER:
REFER TO WORK ORDER DRAWING
DRAWING NAME:
EDMONTON TYPICAL 4 PARTY SHARED TRENCH IN ROAD ALLOWANCE

DRAWING NUMBER: SD00204–1

FILE NAME: P:\PIPEline\6335\SD00204.dgn PLOT DATE: 10-NOV-2025 12:26 UNTY

NOTES:

1. Refer to the City of Edmonton Design and Construction Standards Volume 7 – 2024 Power for power standards.
2. Compact and Backfill as per City of Edmonton Volume 2: Complete Streets Design and Construction (Roadways).
3. For use with gas mains from 60 to 114mm in diameter.
4. If a wide trench is required for larger sized main (greater than 114mm), contact Engineering for approval.
5. Minimum 200mm of sand is required over top of the gas facilities.
6. Contact Engineering for variance approval or changes from standard design.



LEGEND

EXISTING MAIN: (HP) (IP) (MP) (LP) (AB)

PROPOSED MAIN:

PROPOSED ABANDONMENT:

CP CABLING:

DEVELOPER INSTALLED SLEEVE:

PROPOSED SERVICE / STUBS:

PROPOSED METER / METER BANK: X / XXXX

ATCO Gas Main Descriptor
323 IPS ST JT
Light Trench
Pipe Material
Maximum Operating Pressure
Size of Pipe in Millimetres

PRESSURE CONVERSIONS

HP	5516	800
	4137	600
IP	1723	250
	690	100
MP	415	60
	210	30
LP	21	3
	14	2
AB	105	15

All dimensions are in millimeters unless otherwise specified. Scale – NTS

Drawn By: HILARY CHEN

Mod/Modify: EDMONTON

Rm No:

PRESSURE TESTS

TEST REQUIREMENTS				TEST RECORD			
P=SERVICE DATE	SEGMENT NO.	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST MEDIUM

PIPE RECORD

	MANUFACTURER	RESIN	DESIGNATION	CODE	NOMINAL PIPE SIZE	SDR	COIL NO.	PLANT LOCATION	PROD. DATE	PROD. INFO
EX. MAIN AT TIE-IN:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										

REV	DATE	ISSUE	REVISION NOTES	PREPARED BY	APPROVED BY
0	SEE PERMIT STAMP	IFC	ISSUED FOR CONSTRUCTION	RYAN FONG	SEE PROFESSIONAL STAMP

CONSTRUCTION RECORD

	NAME / ID#	INITIAL	START DATE	END DATE
FUSER(S) / WELDER(S):				
CREW CHIEF / INSPECTOR:				
☐ TENTATIVE PLAN STAKED BY:				
EMPLOYER-IN-CHARGE:				
CONSTRUCTED BY (NAME / COMPANY):				
EXCAVATION PERMIT / OSCAM #:				

PERMIT STAMP

PERMIT TO PRACTICE
ATCO GAS AND PIPELINES LTD.
RM SIGNATURE:
RM APEGA ID #: 83498
DATE: 07-Nov-2025
PERMIT NUMBER: P014343
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

PROFESSIONAL STAMP

PROFESSIONAL ENGINEER ALBERTA
MITCHELL THOMAS KRESTE
ID 261599
03-Nov-2025

PREPARED BY

RYAN FONG

CHECKED BY

NOT APPLICABLE

ATCO

PROJECT NAME:
STANDARD DESIGN
EDMONTON GROWTH JOINT TRENCH DETAILS
PROJECT LOCATION:
REFER TO WORK ORDER DRAWING

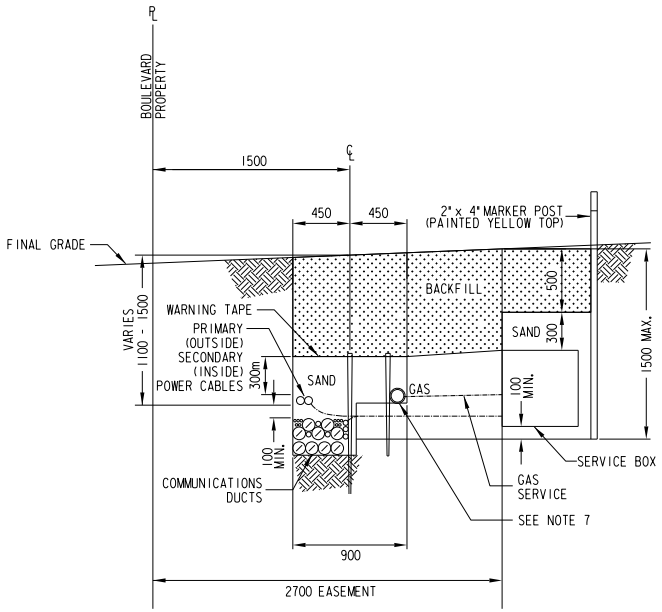
PROJECT NUMBER:
REFER TO WORK ORDER DRAWING
DRAWING NAME:
EDMONTON TYPICAL 4 PARTY SHARED TRENCH IN EASEMENT

DRAWING NUMBER: **SD00204-2**

FILE NAME: P:\RPS\mkr6939\SD00204.dgn PLOT DATE: 10-NOV-2025 12:26 units

NOTES:

1. Refer to the City of Edmonton Design and Construction Standards Volume 7 – 2024 Power for power standards.
2. Compact and Backfill as per City of Edmonton Volume 2: Complete Streets Design and Construction (Roadways).
3. For use with gas mains from 60 to 114mm in diameter.
4. If a wide trench is required for larger sized main (greater than 114mm), contact Engineering for approval.
5. Minimum 200mm of sand is required over top of the gas facilities.
6. Refer to WP 00434 Four Party Main and Service Stub Installation for service stub details.
7. Install PE split sleeve according to sleeve size and length requirements in WP 00434 Four Party Main and Service Stub Installation.
8. Contact Engineering for variance approval or changes from standard design.



LEGEND

EXISTING MAIN: (HP), (IP), (MP), (LP), (AB)
PROPOSED MAIN:
PROPOSED ABANDONMENT:
CP CABLING:
DEVELOPER INSTALLED SLEEVE:
PROPOSED SERVICE / STUBS:
PROPOSED METER / METER BANK: X / XXXX

ATCO Gas Main Descriptor
323 IPS ST JT
Joint Trench
Pipe Material
Maximum Operating Pressure
Size of Pipe in Millimetres

PRESSURE CONVERSIONS

	kPa	psi
HP	4200	600
	2400	350
IP	1050	150
	700	100
MP	420	60
	210	30
LP	7.0	1
AB	345	50
	206	30

All dimensions are in millimeters unless otherwise specified. Scale – NTS

Drawn By: HILARY CHEN
Mod/Modify: EDMONTON
Plot No:

PRESSURE TESTS

TEST REQUIREMENTS				TEST RECORD			
P=SERVICE DATE	SEGMENT NO.	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST MEDIUM

PIPE RECORD

	MANUFACTURER	RESIN	DESIGNATION	CODE	NOMINAL PIPE SIZE	SDR	COIL NO.	PLANT LOCATION	PROD. DATE	PROD. INFO
EX. MAIN AT TIE-IN:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										

REV	DATE	ISSUE	REVISION NOTES	PREPARED BY	APPROVED BY
0	SEE PERMIT STAMP	IFC	ISSUED FOR CONSTRUCTION	RYAN FONG	SEE PROFESSIONAL STAMP

CONSTRUCTION RECORD

	NAME / ID#	INITIAL	START DATE	END DATE
FUSER(S) / WELDER(S):				
CREW CHIEF / INSPECTOR:				
☐ TENTATIVE PLAN STAKED BY:				
EMPLOYEE-IN-CHARGE:				
CONSTRUCTED BY (NAME / COMPANY):				
EXCAVATION PERMIT / OSCAM #:				

PERMIT STAMP

PERMIT TO PRACTICE
ATCO GAS AND PIPELINES LTD.
RM SIGNATURE:
RM APEGA ID #: 83498
DATE: 07-Nov-2025
PERMIT NUMBER: P014343
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

PROFESSIONAL STAMP

PROFESSIONAL ENGINEER ALBERTA
MITCHELL THOMAS KRESTE
ID 261599
03-Nov-2025

PREPARED BY

RYAN FONG

CHECKED BY

NOT APPLICABLE

ATCO

PROJECT NAME:
STANDARD DESIGN
EDMONTON GROWTH JOINT TRENCH DETAILS
PROJECT LOCATION:
REFER TO WORK ORDER DRAWING

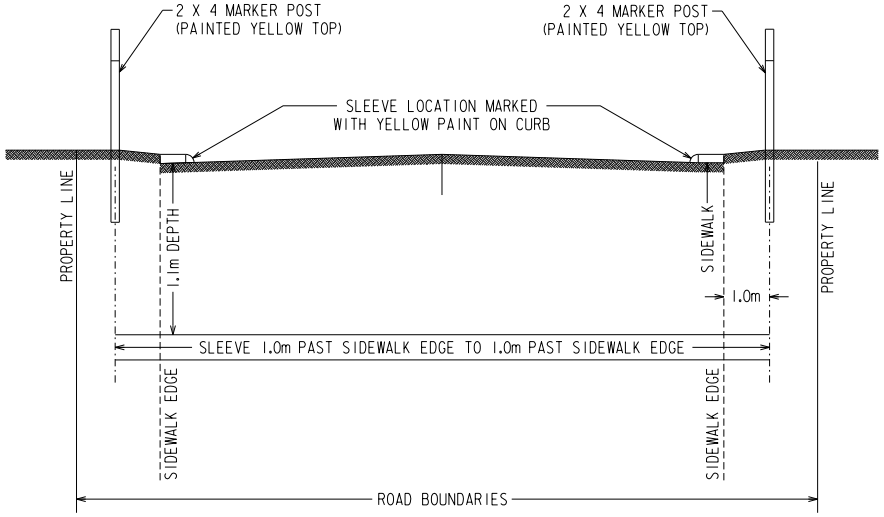
PROJECT NUMBER:
REFER TO WORK ORDER DRAWING
DRAWING NAME:
EDMONTON TYPICAL 4 PARTY SHARED TRENCH IN EASEMENT WITH SERVICE STUB DETAILS
DRAWING NUMBER: **SD00204-3**

FILE NAME: P:\PRP\Drw\6335\SD00204.dgn PLOT DATE: 10-NOV-2025 12:26

NOTES:

1. Sleeves shall be sized according to the table below.

External Diameter of Gas Main (mm)	Internal Diameter of Sleeve (mm)
15.9	35
26.7	50
42.2	75
60.3	100
88.9	150
114.3	200
168.3	250
219.1	300
323.9	400



LEGEND

EXISTING MAIN: (HP) (IP) (MP) (LP) (AB)
PROPOSED MAIN:
PROPOSED ABANDONMENT:
CP CABLING:
DEVELOPER INSTALLED SLEEVE:
PROPOSED SERVICE / STUBS:
PROPOSED METER / METER BANK: X / XXXX

ATCO Gas Main Descriptor
323 IP5 ST JT
Joint Trench
Pipe Material
Maximum Operating Pressure
Size of Pipe in Millimetres

PRESSURE CONVERSIONS

	kPa	psig
HP	4137	600
	2068	300
IP	689	100
	415	60
MP	345	50
	210	30
LP	70	10
	34	5
AB	14	2

All dimensions are in millimeters unless otherwise specified. Scale – NTS

Drawn By: HILARY CHEN
Mail/Mail By: EDMONTON
Plot No:

PRESSURE TESTS

TEST REQUIREMENTS				TEST RECORD			
M=SERVICE DATE	SEGMENT NO.	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST MEDIUM

PIPE RECORD

	MANUFACTURER	RESIN	DESIGNATION	CODE	NOMINAL PIPE SIZE	SDR	COIL NO.	PLANT LOCATION	PROD. DATE	PROD. INFO
EX. MAIN AT TIE-IN:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										

REV	DATE	ISSUE	REVISION NOTES	PREPARED BY	APPROVED BY
0	SEE PERMIT STAMP	IFC	ISSUED FOR CONSTRUCTION	RYAN FONG	SEE PROFESSIONAL STAMP

CONSTRUCTION RECORD

NAME / ID#	INITIAL	START DATE	END DATE
FUSER(S) / WELDER(S):			
CREW CHIEF / INSPECTOR:			
☐ TENTATIVE PLAN STAKED BY:			
EMPLOYER-IN-CHARGE:			
CONSTRUCTED BY (NAME / COMPANY):			
EXCAVATION PERMIT / OSCAM #:			

PERMIT STAMP

PERMIT TO PRACTICE
ATCO GAS AND PIPELINES LTD.
RM SIGNATURE:
RM APEGA ID #: 83498
DATE: 07-Nov-2025
PERMIT NUMBER: P014343
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

PROFESSIONAL STAMP

PROFESSIONAL ENGINEER ALBERTA
MITCHELL THOMAS REESE
ID 261599
03-Nov-2025

PREPARED BY

RYAN FONG

CHECKED BY

NOT APPLICABLE

ATCO

PROJECT NAME:
STANDARD DESIGN
EDMONTON GROWTH JOINT TRENCH DETAILS
PROJECT LOCATION:
REFER TO WORK ORDER DRAWING

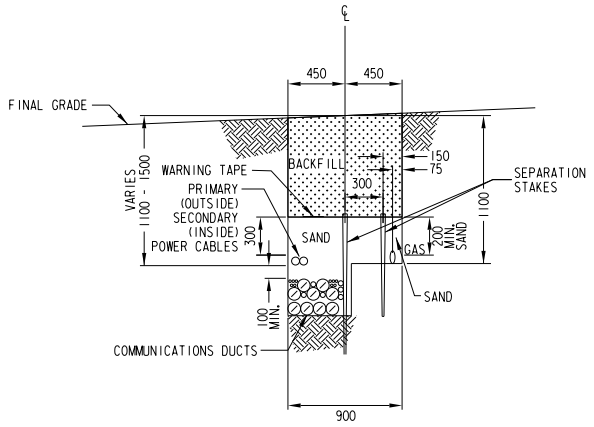
PROJECT NUMBER:
REFER TO WORK ORDER DRAWING
DRAWING NAME:
TYPICAL GAS SLEEVE CROSS SECTION

DRAWING NUMBER: SD00204–4

FILE NAME: P:\PIPS\Inter\SD\SD00204.dgn PLOT DATE: 10-NOV-2025 10:26

NOTES:

1. Refer to the EPCOR's Customer Connection Guide for power standards.
2. Backfill the trench according to WP 01207 – Ground Disturbance Around ATCO Distribution Pipelines.
3. For use with gas mains from 60 to 114mm in diameter.
4. If a wide trench is required for larger sized main (greater than 114mm), contact Engineering for approval.
5. Minimum 200mm of sand is required over top of the gas facilities.
6. Gas is typically installed closer to the building with a joint trench. Deviations may be approved by Engineering.
7. Contact Engineering for variance approval or changes from standard design.



All dimensions are in millimeters unless otherwise specified. Scale – NTS

LEGEND

EXISTING MAIN: (HP) (IP) (MP) (LP) (AB)
PROPOSED MAIN:
PROPOSED ABANDONMENT:
CP CABLING:
DEVELOPER INSTALLED SLEEVE:
PROPOSED SERVICE / STUBS:
PROPOSED METER / METER BANK: X / XXXX

ATCO Gas Main Descriptor
323 IP5 ST JT
323 = Pipe Material
IP = Maximum Operating Pressure
ST = Side of Pipe in Trench
JT = Joint Trench

PRESSURE CONVERSIONS

	kPa	psi
LP	7	1
AB	200	30
MP	420	60
IP5	500	70
IP	700	100
IP2	830	120
IP3	1050	150
MS	105	15
HP	1900	275

Drawn By: HILARY CHEN
Modified By: EDMONTON
File No:

PRESSURE TESTS

TEST REQUIREMENTS				TEST RECORD			
M=SERVICE DATE	SEGMENT NO.	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST MEDIUM

PIPE RECORD

EX. MAIN AT TIE-IN:	MANUFACTURER	RESIN	DESIGNATION	CODE	NOMINAL PIPE SIZE	SDR	COIL NO.	PLANT LOCATION	PROD. DATE	PROD. INFO
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										

REV	DATE	ISSUE	REVISION NOTES	PREPARED BY	APPROVED BY
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CONSTRUCTION RECORD

	NAME / ID#	INITIAL	START DATE	END DATE
FUSER(S) / WELDER(S):				
CREW CHIEF / INSPECTOR:				
☐ TENTATIVE PLAN STAKED BY:				
EMPLOYER-IN-CHARGE:				
CONSTRUCTED BY (NAME / COMPANY):				
EXCAVATION PERMIT / OSCAM #:				

PERMIT STAMP

PERMIT TO PRACTICE
ATCO GAS AND PIPELINES LTD.
RM SIGNATURE
RM APEGA ID #: 83498
DATE: 07-Nov-2025
PERMIT NUMBER: P014343
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

PROFESSIONAL STAMP

PROFESSIONAL ENGINEER ALBERTA
MITCHELL THOMAS KRETZ
ID 261599
03-Nov-2025

PREPARED BY

RYAN FONG

CHECKED BY

NOT APPLICABLE

ATCO

PROJECT NAME:
STANDARD DESIGN
EDMONTON GROWTH MULTI-FAMILY JOINT TRENCH DETAILS
PROJECT LOCATION:
REFER TO WORK ORDER DRAWING

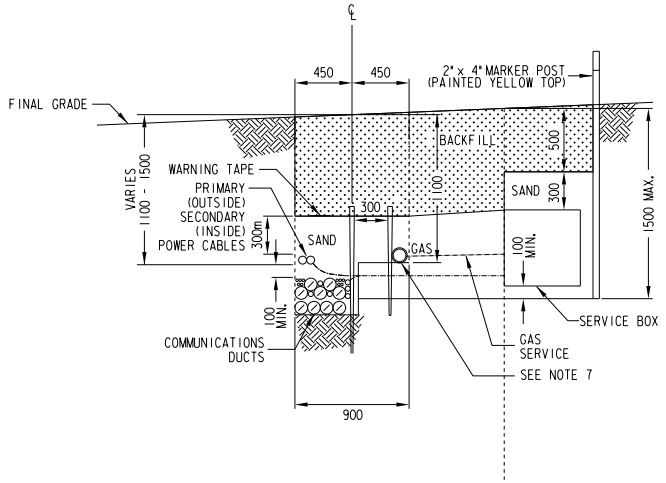
PROJECT NUMBER:
REFER TO WORK ORDER DRAWING
DRAWING NAME:
EDMONTON TYPICAL MULTI-FAMILY JOINT TRENCH DETAIL

DRAWING NUMBER: **SD00205-1**

FILE NAME: P:\WP\Jobs\50335\SD00205.dgn PLOT DATE: 10-NOV-2025 10:17

NOTES:

1. Refer to the EPCOR's Customer Connection Guide for power standards.
2. Backfill the trench according to WP 01207 – Ground Disturbance Around ATCO Distribution Pipelines.
3. For use with gas mains from 60 to 114mm in diameter.
4. If a wide trench is required for larger sized main (greater than 114mm), contact Engineering for approval.
5. Minimum 200mm of sand is required over top of the gas facilities.
6. Gas is typically installed closer to the building with a joint trench. Deviations may be approved by Engineering.
7. Install PE split sleeve according to sleeve size and length requirements in WP 00434 Four Party Main and Service Stub Installation.
8. Contact Engineering for variance approval or changes from standard design.



LEGEND

EXISTING MAIN: (HP) (IP) (MP) (LP) (AB)
PROPOSED MAIN:
PROPOSED ABANDONMENT:
CP CABLING:
DEVELOPER INSTALLED SLEEVE:
PROPOSED SERVICE / STUBS:
PROPOSED METER / METER BANK: X / XXXX

ATCO Gas Main Descriptor
323 IPS ST JT
Joint Trench
Pipe Material
Maximum Operating Pressure
Size of Pipe in Millimetres

PRESSURE CONVERSIONS

	kPa	psi
HP	4140	600
	2760	400
IP	1725	250
	690	100
MP	415	60
	210	30
LP	103	15
	7	1
AB	300	15

All dimensions are in millimeters unless otherwise specified. Scale – NTS

Drawn By: HILARY CHEN
Manhattan/N: EDMONTON
File No:

PRESSURE TESTS

TEST REQUIREMENTS				TEST RECORD			
IN-SERVICE DATE	SEGMENT NO.	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST MEDIUM

PIPE RECORD

	MANUFACTURER	RESIN	DESIGNATION	CODE	NOMINAL PIPE SIZE	SDR	COIL NO.	PLANT LOCATION	PROD. DATE	PROD. INFO
EX. MAIN AT TIE-IN:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										

REV	DATE	ISSUE	REVISION NOTES	PREPARED BY	APPROVED BY
0	SEE PERMIT STAMP	IFC	ISSUED FOR CONSTRUCTION	RYAN FONG	SEE PROFESSIONAL STAMP

CONSTRUCTION RECORD

	NAME / ID#	INITIAL	START DATE	END DATE
FUSER(S) / WELDER(S):				
CREW CHIEF / INSPECTOR:				
☐ TENTATIVE PLAN STAKED BY:				
EMPLOYER-IN-CHARGE:				
CONSTRUCTED BY (NAME / COMPANY):				
EXCAVATION PERMIT / DSCAM #:				

PERMIT STAMP

PERMIT TO PRACTICE
ATCO GAS AND PIPELINES LTD.
RM SIGNATURE:
RM APEGA ID #: 83498
DATE: 07-Nov-2025
PERMIT NUMBER: P014343
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

PROFESSIONAL STAMP

PROFESSIONAL ENGINEER ALBERTA
MITCHELL THOMAS REESE
ID 261599
03-Nov-2025

PREPARED BY

RYAN FONG

CHECKED BY

NOT APPLICABLE

ATCO

PROJECT NAME:
STANDARD DESIGN
EDMONTON GROWTH MULTI-FAMILY JOINT TRENCH DETAILS
PROJECT LOCATION:
REFER TO WORK ORDER DRAWING

PROJECT NUMBER:
REFER TO WORK ORDER DRAWING
DRAWING NAME:
EDMONTON TYPICAL MULTI-FAMILY JOINT TRENCH DETAIL WITH SERVICE STUB DETAILS
DRAWING NUMBER: SD00205-2

FILE NAME: N:_PWP\Standards\SD\SD00205-2.dgn PLOT DATE: 10-NOV-2025 15:07 sony

NOTES:

1. Sleeves shall be sized according to the table below.

External Diameter of Gas Main (mm)	Internal Diameter of Sleeve (mm)
15,9	35
26,7	50
42,2	75
60,3	100
88,9	150
114,3	200
168,3	250
219,1	300
323,9	400

LEGEND

EXISTING MAIN: (HP) (IP) (MP) (LP) (AB)
PROPOSED MAIN:
PROPOSED ABANDONMENT:
CP CABLING:
DEVELOPER INSTALLED SLEEVE:
PROPOSED SERVICE / STUBS:
PROPOSED METER / METER BANK: X / XXXX

ATCO Gas Main Descriptor
323 IPS ST JT
323 = Size of Pipe in Millimetres
IPS = Maximum Operating Pressure
ST = Pipe Material
JT = Joint Trench

PRESSURE CONVERSIONS

kPa	psig
LP	1
MP	15
420	60
550	80
700	100
1050	150
1400	200
2100	300
2800	400
3500	500
4200	600
4900	700
5600	800
6300	900
7000	1000

All dimensions are in millimeters unless otherwise specified. Scale – NTS

Drawn By: HILARY CHEN
Municipality: EDMONTON
Rel No.:

PRESSURE TESTS

TEST REQUIREMENTS				TEST RECORD		
IN-SERVICE DATE	SEGMENT NO.	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST DURATION (HRS)	TEST PRESSURE (kPa)	TEST MEDIUM

PIPE RECORD

	MANUFACTURER	RESIN	DESIGNATION	CODE	NOMINAL PIPE SIZE	SDR	COIL NO.	PLANT LOCATION	PROD. DATE	PROD. INFO
EX. MAIN AT TIE-IN:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										
NEW PIPE:										

REV	DATE	ISSUE	REVISION NOTES	PREPARED BY	APPROVED BY
0	SEE PERMIT STAMP	IFC	ISSUED FOR CONSTRUCTION	RYAN FONG	SEE PROFESSIONAL STAMP

CONSTRUCTION RECORD

	NAME / ID#	INITIAL	START DATE	END DATE
FUSER(S) / WELDER(S):				
CREW CHIEF / INSPECTOR:				
☐ TENTATIVE PLAN STAKED BY:				
EMPLOYER-IN-CHARGE:				
CONSTRUCTED BY (NAME / COMPANY):				
EXCAVATION PERMIT / OSCAM #:				

PERMIT STAMP

PERMIT TO PRACTICE
ATCO GAS AND PIPELINES LTD.
RM SIGNATURE:
RM APEGA ID #: 83498
DATE: 07-Nov-2025
PERMIT NUMBER: P014343
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

PROFESSIONAL STAMP

PROFESSIONAL ENGINEER
ID 261599
PROVINCE OF ALBERTA
03-Nov-2025

PREPARED BY

RYAN FONG

CHECKED BY

NOT APPLICABLE

ATCO

PROJECT NAME:
STANDARD DESIGN
EDMONTON GROWTH MULTI-FAMILY JOINT TRENCH DETAILS
PROJECT LOCATION:
REFER TO WORK ORDER DRAWING

PROJECT NUMBER:
REFER TO WORK ORDER DRAWING
DRAWING NAME:
TYPICAL GAS SLEEVE CROSS SECTION

DRAWING NUMBER: SD00205–3

FILE NAME: P:\PW\primo\8000\SD00205.dgn PLOT DATE: 10-DEC-2025 16:07 ramy