

NATIONAL FUEL

NEW YORK CONTRACTOR EXCAVATION GUIDELINES

National Fuel provides this information as a quick reference to some of the contractors' responsibilities when worksites are near National Fuel (NFG) facilities. For more complete information regarding the responsibilities of contractors performing excavation and demolition obtain copies of state regulations from **Dig Safely New York by dialing 811.**

Contacting National Fuel:

In the event of an emergency involving an **accidental release of natural gas call our 24/7 emergency number at 1-800-444-3130** and; when police, fire, emergency medical or traffic control are necessary, also call **911**.

Responsibilities of an Excavator:

1. Give notification to Dig Safely New York by calling **811** or **1-800-962-7962** not less than two not more than ten working days, not including the date of the call, before the commencement date of the excavation or demolition work. Designating the dig site in white will aid in the timely marking of underground facilities. Pre-marking in white is required in some cases.
2. The excavator shall be responsible for protecting and preserving the staking, marking or other facility designation until no longer required for proper and safe excavation or demolition work at or near the underground facility.

NOTE: Whenever an excavator postpones the start of an excavation or demolition more than ten working days, the same requirements for notice shall pertain to the revised commencement date as listed above.

3. Where an underground facility has been staked, marked or otherwise designated by the operator and the tolerance zone overlaps with any part of the work area, or the projected line of a bore/directional drill interests the tolerance zone, the excavator shall verify the precise location, type, size, direction of run and depth of such underground facility or its encasement.

NOTE: Hand dug test holes and/or vacuum excavation is recommended to verify facility markings prior to commencement of construction projects.

4. Excavators shall take all reasonable precautions to prevent contact or damage to underground facilities and their protective coatings, including but not limited to, compliance with any reasonable directions given by affected underground facility operators as well as accepted engineering practices.
5. In the event of contact with or damage to an underground facility, the excavator shall immediately notify the operator of the facility.
6. In the event of an emergency involving danger to life, health or property as a result of damage to an underground facility containing gas or liquid petroleum products or as a result of an electrical short or escape of gas or hazardous fluids, the excavator shall:
 - (a) proceed to evacuate his or her employees and all other endangered persons from the immediate vicinity to the best of his or her ability;
 - (b) immediately notify the local police and fire departments and the operator affected facility of the exact location, nature of the emergency and of the underground facility which is affected.

(See Reverse Side)

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NFG General Requirements:

Scratches, dents, gouges, damage to protective coating, and pulled or bowed pipelines can result in a future pipeline rupture or leak, or a leak remote from the excavation site, and must be immediately reported to NFG.

A #12 locating wire is buried alongside most plastic pipe installations and is considered part of the marked facility. If the wire is damaged it must be reported to NFG.

Cables of various sizes are used as part of the cathodic protection systems of some steel gas lines. If a cable is damaged it must be reported to NFG.

NFG Support Requirements:

The contractor shall provide such support and mechanical protection in accordance with generally accepted engineering practices, including but not limited to shoring and bracing. The support shall be:

1. Equivalent to the previously existing support and shall protect the underground facility from freezing, traffic and other loads.
2. Maintained during excavation, backfilling and after backfilling is completed, if necessary.

NFG Backfill Requirement:

The backfill material around plastic and coated steel lines for a depth of at least 3" below the pipe and at least 6" on the sides and top, shall consist of either:

1. Clean dirt free of shale or sharp stones. Rounded stones shall be no larger than 1" in diameter.
2. Sand is the preferred material where washout is not likely.
3. Select granular fill that does not contain any sharp or crushed stone.

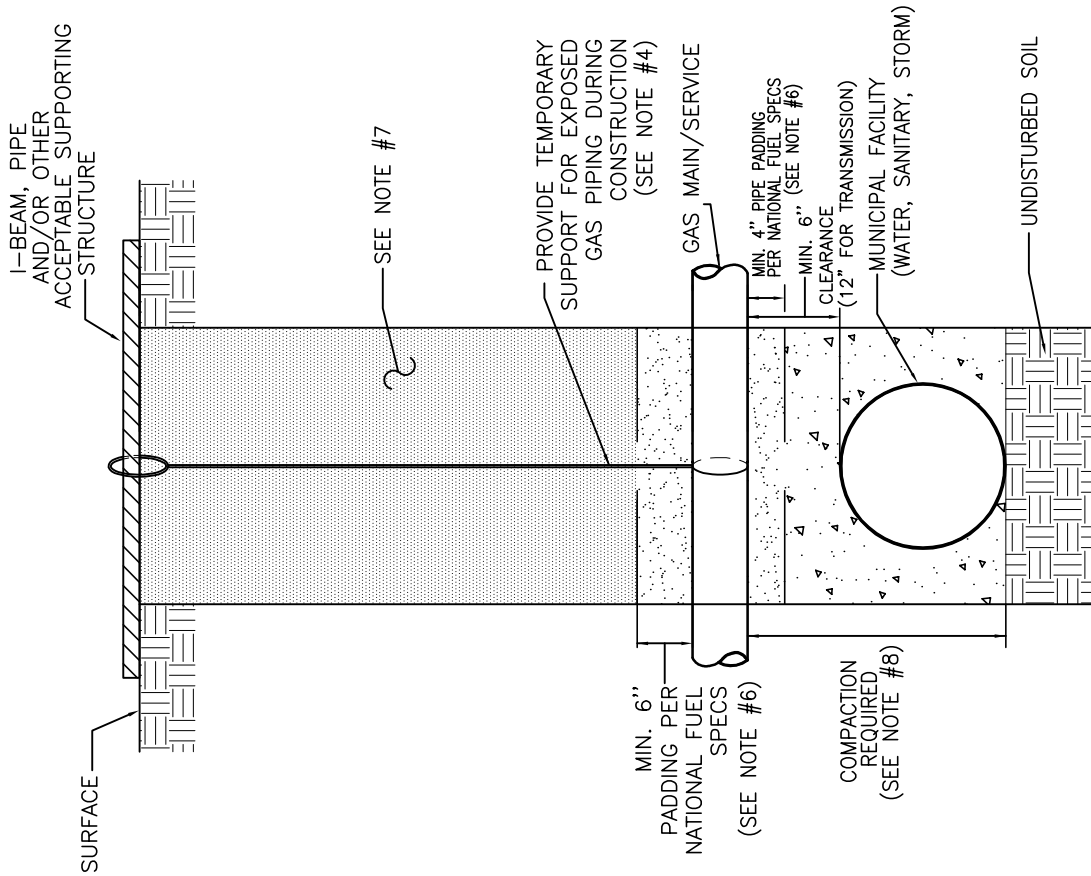
Backfill material beyond 6" of the pipe shall be free of logs, cinders, stumps, skids, brush or rocks larger than 12".

Backfill beneath and around any underground facility shall be properly compacted in accordance with generally accepted engineering practices.

Heavy loads and excessive forces shall not be imposed on any exposed underground facility at any time during backfilling operations.

NOTES

1. PRIOR TO ANY EXCAVATION WORK, DAMAGE PREVENTION LAWS REQUIRE PERSONS TO MAKE CONTACT WITH THE APPROPRIATE ONE-CALL SYSTEM BY CALLING 811 OR IN NEW YORK 1-800-962-7962/ IN PENNSYLVANIA 1-800-242-1776.
2. IF A NATURAL GAS FACILITY IS DAMAGED, RESULTING IN A RELEASE OF NATURAL GAS, IMMEDIATELY CALL 911 AND THE NATIONAL FUEL EMERGENCY NUMBER 1-800-444-3130.
3. IF A NATURAL GAS LINE IS SCRATCHED, GOUGED, DENTED, PULLED, OR BOWED DURING EXCAVATION WORK OR THE PROTECTIVE COATING IS DAMAGED, IMMEDIATELY CALL THE NATIONAL FUEL EMERGENCY NUMBER 1-800-444-3130 SO THAT WE CAN INVESTIGATE AND REPAIR ANY DAMAGE THAT COULD AFFECT PUBLIC SAFETY. SEEMINGLY INCONSEQUENTIAL DAMAGE CAN HAVE A MAJOR IMPACT AND CAN POTENTIALLY RESULT IN A FUTURE PIPELINE FAILURE.
4. NATIONAL FUEL REQUIRES THAT EXCAVATORS SUPPORT OUR FACILITIES IF EXPOSED DURING CONSTRUCTION. THE EXCAVATOR SHALL PROVIDE SUCH SUPPORT IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES. SUPPORT MUST BE MAINTAINED THROUGHOUT CONSTRUCTION AND BACKFILL OPERATIONS. THE SUPPORT SYSTEM SHALL PROTECT THE GAS FACILITIES FROM SETTLEMENT, TRAFFIC AND HEAVY LOADS OR FORCES. CONTACT NATIONAL FUEL FOR SUPPORT RECOMMENDATIONS AND INSPECTION WHERE GAS PIPING WILL BE EXPOSED FOR A LENGTH OF 15 OR GREATER, OR WHENEVER A COUPLING OR FITTING IS EXPOSED.
5. UNDERGROUND UTILITIES AND OTHER STRUCTURES PLACED NEAR NATIONAL FUEL FACILITIES MUST MAINTAIN A MINIMUM CLEARANCE OF 12" FOR TRANSMISSION PIPELINES AND 6" FOR DISTRIBUTION MAINS AND SERVICES. ANY METALLIC STRUCTURE PLACED NEAR STEEL PIPELINES REQUIRES THE INSTALLATION OF AN ELECTRIC TEST STATION.
6. BACKFILL MATERIAL AROUND NATIONAL FUEL GAS FACILITIES SHALL BE CLEAN DIRT, FREE OF SHALE OR SHARP STONES. ROUND STONES SHALL BE NO LARGER THAN 1" IN DIAMETER. ACCEPTABLE BACKFILL MATERIALS ARE:
 - A. SAND (SAND IS THE PREFERRED MATERIAL WHERE WASHOUT IS NOT LIKELY).
 - B. STONE "SCREENINGS" (LIMESTONE) ALL PASSING:
 - 100% PASSING THE NO.40 SIEVE
 - 70% PASSING THE NO.200 SIEVE
 - C. GRAVEL (A MODIFIED SIDEWALK MIX) OF A 50/50 BLEND OF NO.1A ROUND GRAVEL AND SAND.
 - D. NO.1A ROUND GRAVEL.
7. FILL MATERIAL BEYOND THE SELECT BACKFILL SHALL BE FREE OF LOGS, CINDERS, STUMPS, SKIDS, BRUSH OR ROCKS LARGER THAN 12 INCHES.
8. BACKFILL MATERIAL BENEATH AND AROUND ANY UNDERGROUND GAS FACILITY SHALL BE PROPERLY COMPACTED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES.
9. HEAVY LOADS AND EXCESSIVE FORCES SHALL NOT BE IMPOSED ON GAS FACILITIES AT ANY TIME DURING CONSTRUCTION OR BACKFILLING OPERATIONS.
10. #10 OR #12 LOCATING WIRE IS BURIED ALONG SIDE MOST PLASTIC GAS MAINS AND SERVICES. HEAVIER CABLES (PART OF CATHODIC PROTECTION SYSTEMS) MAY ALSO BE FOUND NEAR SOME STEEL PIPE FACILITIES. IF ANY WIRE OR CABLE IS DAMAGED IT MUST BE IMMEDIATELY REPORTED TO NATIONAL FUEL.



TYPICAL GAS LINE CROSSING OPEN TRENCH DETAIL

NOT TO SCALE

		TYPICAL GAS LINE CROSSING OPEN TRENCH DETAIL	
		DRAWN BY: T. NUGENT	CHECKED BY: M. PARKER
ENGINEERING 6363 MAIN STREET WILLIAMSVILLE, NY 14221		APPROVED BY: K. HOUSE	SHEET NO.: 1 OF 1
		DATE: 1/5/12	FILENAME: GASLINECROSSINGDETAIL.DWG