

Explorer Pipeline Company Foreign Crossing and Encroachment Specifications

EPL-331

Version No. 15.2

Before you start any excavation project **Call 811 (State One Call Center)**. There is also a project survey/design ticket available through the One Call Center which allows for pre-planning and underground utility first contacts. Federal and State laws require 48-72 hours' notice given to the utility companies prior to beginning excavation. This may be accomplished by contacting a State One Call Center (see bottom of back page for listings). If you are unable to contact the appropriate One Call Center, please call the nearest Explorer Pipeline area office a minimum of 48 hours prior to commencing work.

The following are minimum requirements for most proposed encroachments to avoid conflict with Explorer Pipeline's easement rights. It is not Explorer Pipeline's intent to convey that these are the only types of activities permitted; additional specifications may be required depending upon the proposed encroachments.

GENERAL REQUIREMENTS FOR SURFACE ALTERATIONS

These general requirements apply as appropriate to **surface alterations** discussed in this document.

- A) Explorer Pipeline's easement restricts the placement of a permanent structure, building, parking lot, pond, etc., within the right-of-way without a project review and the expressed written consent of Explorer Pipeline.
- B) An authorized Explorer Pipeline representative must be on site during any type of excavation or surface modification within the right-of-way. This includes activities such as driving fence posts.
- C) Any change in the amount of existing material (soil) on and over the right-of-way, that makes the total amount of cover less than four feet (4') or adds more than one foot (1') of cover, must be approved in advance by Explorer Pipeline's Public Awareness Program Administrator.
- D) Encroaching party will be responsible for any future erosion repairs due to its activities, or lack of proper erosion control measures, which result in Explorer Pipeline having to relocate its pipeline or take corrective measures to prevent its pipeline from becoming exposed.

GENERAL REQUIREMENTS FOR BURIED LINE CROSSINGS

These general requirements apply as appropriate to **buried line crossings** discussed in this document.

- A) All buried lines crossing Explorer Pipeline right-of-way shall be installed in adherence with all applicable codes and requirements governing such installations.
- B) All buried lines crossing Explorer Pipeline's right-of-way must cross on an angle that when measured between the proposed buried line and Explorer Pipeline right-of-way is between 90 and 45 degrees. This angle must be maintained across the entire width of the right-ofway. Points of Intersection (PIs) are not allowed within the right-ofway boundaries.
- C) All buried lines crossing Explorer Pipeline's line shall maintain a minimum separation of 24 inches between the two lines, with the same grade of depth carried across the entire right-of-way.
- D) All buried lines should cross under the pipeline. However, should the encroaching party be unable to comply with the 24" clearance requirements due to obstructions or unfavorable soil conditions, Explorer Pipeline's representative may approve special design and construction.
- E) Explorer Pipeline's line shall be exposed at encroaching party's expense during all bored crossings where clearance between Explorer Pipeline's line and proposed bore path is ten feet (10') or less. In addition, for bored crossings, the minimum separation between Explorer Pipeline and crossing utility shall be 48 inches. In cases where the soil condition (e.g. swampy) does not safely allow for Explorer Pipeline to be exposed, sheet piling (min. 5 feet (5') from pipeline to a depth 48" below the bottom of the pipe) shall be used to protect the pipeline. Upon completing crossing, compact all disturbed backfill to a density equal to or greater than surrounding soil.
- F) No foreign appurtenances (meters, poles, drop boxes, collection basins, etc.) shall be located within Explorer Pipeline's right-of-way.

- G) Encroaching party shall furnish and install a six-inch (6") wide burial warning tape, 12 to 18 inches above all lines and extend across the entire width of Explorer Pipeline's right-of-way.
- H) Where physically possible, signs shall be installed at each edge of right-of-way by encroaching party to locate and identify owner, type of service, and emergency phone numbers.
- Encroaching party will be responsible for any future erosion repairs due to its activities, or lack of proper erosion control measures, which result in Explorer Pipeline having to relocate its pipeline or take corrective measures to prevent its pipeline from becoming exposed.

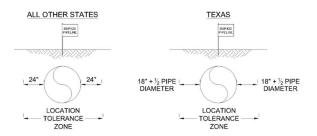
PARALLEL ENCROACHMENTS AND OVERLAPPING EASEMENTS WITHIN EXPLORER PIPELINE'S RIGHT-OF-WAY

A) A third party intending to encroach upon Explorer Pipeline's easement must first obtain Explorer Pipeline's permission and/or provide documentation stating there is no exclusivity to said easement. Explorer Pipeline prefers not to have parallel pipeline construction within its easement. A Joint User Agreement will be put in place to reserve any "first in time" rights available to Explorer Pipeline should there be a need for overlapping easements. The requirements for parallel encroachments and overlapping easements within Explorer Pipeline's right-of-way will be negotiated with Explorer Pipeline's Public Awareness Program Administrator.

1. EXCAVATION

A) In compliance with state regulatory requirements and operational best practices, Explorer Pipeline requires a tolerance zone of 18inches plus ½ the pipe diameter in Texas, and a tolerance zone of 24-inches in all other states.

STATE	TOLERANCE ZONE
Texas	18 Inches + ½ Pipe Diameter
Oklahoma	24 Inches
Missouri	24 Inches
Illinois	24 Inches
Indiana	24 Inches



- B) Plans for any excavation on the right-of-way must be approved before work commences. Excavating closer than 24 inches (32 inches in Texas) to the pipeline or cathodic protection (C.P.) wires shall be done **by hand** until the pipeline and C.P. wires are exposed. This shall be done only with the approval and in the presence of an authorized Explorer Pipeline representative. After Explorer Pipeline's line and C.P. wires have been exposed, the excavation equipment should be positioned so the operation of the equipment will not reach within 24 inches (32 inches in Texas) of the pipeline or C.P. wires.
- C) If a backhoe is used, the bucket should be curled under each time it is returned to the ditch and should have a plate covering all teeth to reduce the chance of gouges or punctures to the pipe.
- D) A One Call to 811 (State One Call Center) is required if any action may negatively impact the safe operations of the pipeline such as deep plowing, ripping of the soil, or tilling at any depth within the right-of-way, including agricultural land. If you should strike the pipeline at any time you must call Explorer Pipeline's emergency number at 888-876-0036. It is the law.

2. COMMUNICATION LINES (FIBER OPTIC, TELEPHONE, TV, OTHER DATA LINES)

A) For clearances less than 48" below Explorer Pipeline and for all crossings over Explorer Pipeline, fiber optics shall be encased in rigid steel conduit the full width of right-of-way. Directionally bored installations will be evaluated on a case by case basis.

Explorer Pipeline Page 1 of 2



Explorer Pipeline Company Foreign Crossing and Encroachment Specifications

EPL-331

Version No. 15.2

3. POWER LINES (BURIED)

- A) Shall have a minimum clearance of 24 inches (32 inches in Texas) when crossing over or under Explorer Pipeline's line.
- B) Shall be encased in steel conduit. The steel conduit shall be the full width of the right-of-way and centered in a six-inch (6") minimum layer of red concrete.
- C) Concrete may be omitted when crossing under Explorer Pipeline's pipeline when 48 inches or more of clearance is obtained between the bottom of Explorer Pipeline's line and the top of the steel conduit; Or if 72 inches of clearance is obtained for bored installations utilizing non-steel conduit.
- D) Signs shall be placed at each edge of the right-of-way to mark the underground cable angle and path of crossing. The signs are to be furnished by the Power Company of the encroaching party.

4. POWER LINES (ABOVEGROUND)

- A) Shall maintain a minimum of 25 feet of clearance above grade and completely across the right-of-way.
- B) Shall have no poles or appurtenances located on the right-of-way.

5. SEWER AND WATER LINES

- A) Septic tanks / drain fields are not permitted within the right-of-way.
- B) The supply line feeding drain piping may be allowed provided it meets buried line crossing requirements.

6. METALLIC PIPE CROSSINGS

A) Explorer Pipeline personnel will install leads on Explorer Pipeline's line when deemed necessary. Explorer Pipeline may request test leads to be installed at third party pipeline crossings.

7. STREETS, ROADS, DRIVEWAYS AND RAILROADS

- A) Unpaved residential driveways shall be allowed provided there will be a minimum cover of 48" between the lowest point of the road subgrade and top of Explorer Pipeline's line.
- B) An opportunity for Explorer Pipeline to make a pipe inspection must be given at least 48 hours prior to the start of any construction.
- C) Paved driveways, streets, highways and railroad construction may require a special encroachment agreement. Plans for such crossings should be submitted a minimum of 180 calendar days prior to work commencement to allow time for project impact review by Explorer Pipeline's Public Awareness Program Administrator.

8. FENCES - BARRIERS - WALLS

- A) Privacy fences are not permitted, unless otherwise authorized by the easement or as approved by Explorer Pipeline's Public Awareness Program Administrator.
- B) Fence posts shall not be installed within 3 feet of the center of the pipeline and the first post either side of the pipe shall be set in hand dug holes. To perform normal maintenance, access through or around fences crossing the right-of-way must be provided.
- C) Cable Barrier vertical supports along highway medians or rights-ofway must span the pipeline equidistance from the center of the pipeline and not be closer than 3 feet from the edge of the pipeline. The first footings either side of the pipe shall be set in hand dug holes.
- D) Sound Barrier or Beautification Walls shall be designed with a subgrade horizontal beam. Vertical supports will be mounted to the horizontal beam. There are no vertical shafts to be drilled on the rightof-way without Explorer Pipeline's approval in writing.

9. LANDSCAPING

- A) Flower beds, lawns and vegetable gardens are permitted within the right-of-way, but may be damaged by routine or annual maintenance / testing, if planted directly over the pipeline. Heavy maintenance may require total clearing of the right-of-way.
- B) The planting of trees or shrubbery on, or which hang over; Explorer Pipeline's right-of-way is prohibited unless specifically stated in the

right-of-way agreement. Ornamental trees or shrubs required by city ordinance with deep, sophisticated root systems will NOT be allowed over the pipeline at any time.

10. OPEN WATERWAYS

- A) Open waterways smaller than 3 feet wide at the bottom are defined as "ditches" and must have a minimum of 3 feet of cover from the top of the pipe to the bottom of the ditch, or the ditch must be lined using an approved Explorer Pipeline method and material. Larger open waterways are considered on a case by case basis.
- B) Anyone altering (clearing, re-grading, or changing alignment) a waterway on Explorer Pipeline's right-of-way must obtain approval from Explorer Pipeline.

11. BLASTING/SEISMIC ACTIVITY

All blasting and seismic activity encroachment shall be approved by Explorer Pipeline prior to work. The party responsible for the blasting shall complete and submit Explorer Pipeline's Blasting Data Form to Explorer Pipeline for calculation of the safe blasting distance.

12. SUBSURFACE DRAINAGE TILE (NON METALLIC)

- A minimum clearance of 12" is desired at the crossing with a constant grade the full width of Explorer Pipeline's right-of-way.
- B) Field tiles that cross over the pipeline shall require special nonmetallic support. Support is not required for plastic drain lines.

13. TEMPORARY HEAVY EQUIPMENT CROSSINGS

A) Equipment, such as construction, logging, etc., must cross the pipeline only at Explorer Pipeline approved crossing locations where the cover has been checked and determined adequate to meet loadbearing requirements.

14. CONTACT INFORMATION

A) Contact 811 or State One Call Center prior to commencing any work near the right-of-way. Please contact Explorer Pipeline, after contacting 811 or State One Call Center, with any additional questions or to obtain additional information.

EXPLORER PIPELINE COMPANY CONTACTS

24 Hr. Emergency 1-888-876-0036

Hammond, Indiana (877) 931-7473

Wood River, Illinois (877) 926-7473

Glenpool, Oklahoma

(877) 925-7473

ROW Department (918) 493-5153 or row@expl.com

Greenville, Texas (877) 918-7473

Houston, Texas (877) 915-7473

Port Arthur, Texas (877) 912-7473

Arlington, Texas (877) 921-7473

ONE CALL CENTERS National One Call

811 Illinois 1-800-892-0123 Oklahoma

1-800-522-6543

Indiana 1-800-382-5544 Missouri 1-800-344-7483 Texas

1-800-545-6005



Explorer Pipeline, at its sole discretion, may revise these specifications at any time. It is the encroaching party's or other third party's responsibility to confirm use of the current document version in effect at the time of its project and/or proposed encroachment. This document may be found at www.expl.com.

Explorer Pipeline Page 2 of 2