

*Issued: 10-12-2023*

***Involvement status relates solely to facilities owned and/or operated by TC Energy.***

Work within the TC Energy's right-of-way will be performed in accordance with TC Energy procedures to protect the safety of TC Energy's facilities. The following guidelines, although not inclusive, are provided to accommodate your request and protect our pipelines and facilities.

**Section 1: General Requirements for Construction within TC Energy Right-of-Way (ROW).**

1. Follow all applicable federal and state safety requirements at all times.
2. Before any preliminary field work or construction begins in the vicinity of TC Energy pipeline facilities the approximate location and elevation of the pipeline shall be investigated. Begin with a call to 811 or appropriate state "One Call" notification number. Request both the approximate location and depth of the pipeline to be determined in any area of proposed construction. The area of proposed construction shall be marked with white paint, flags, or otherwise as required by state law.
3. When conducting construction activities in or around TC Energy pipeline facilities or rights-of-way, a TC Energy on-site Company Representative shall be present unless otherwise permitted by TC Energy. A TC Energy Representative will review the location of pipeline facilities prior to starting work.
4. Notice of at least seventy-two (72) hours in advance of construction must be provided.
5. Permittee shall notify the responsible State "One Call" center to request that TC Energy re-mark a pipeline if the existing markers are inadequate or no longer visible for any reason, including disturbance due to construction activities.
6. Permittee shall not burn or bury trash, brush, or other items or substances within TC Energy pipeline rights-of-way.
7. Permittee shall not park equipment or store materials on the TC Energy right-of-way.
8. Use of vibratory equipment larger than walk-behind units shall not be permitted within twenty-five (25) feet of the pipeline or related facility.
9. The Permittee shall mark any excavation area with white paint, flags, or as required by applicable state law within TC Energy right-of-way.
10. The following items, but not limited to, are not permitted within the ROW; valves, curb boxes, manholes, sprinkler heads, splice boxes, service risers, energized equipment,

poles, towers, guy wires, mechanical supports, ground rods, anchors, signs, bollards, and similar structures.

11. Before excavation can begin near a TC Energy right-of-way, the excavation area must be located and marked in according to the appropriate state one call regulation. Safe digging is no accident. Know what's below. Call 811 before you dig. TC Energy or its representative shall locate the pipeline and determine the approximate depth of cover before the Permittee can begin excavation.
12. TC Energy shall have a Company representative present during all excavation activities. The Company representative shall have full authority to stop the work if it is determined that the work is being performed in an unsafe manner relative to TC Energy facilities or personnel.
13. Should it be necessary for a TC Energy employee/representative to enter the excavation to inspect its pipeline(s), the excavation at the crossing shall be sloped, permitted safe with trench boxes, or shored in accordance with the requirements of the Occupational Safety and Health Administration.
14. No equipment shall work directly over the pipeline, unless TC Energy grants specific written permission.
15. When excavating within a TC Energy right-of-way, in the presence of a loaded pipeline, the Permittee's excavation equipment shall have a plate welded or attached over the teeth of the excavator bucket.
16. No side cutters shall be used during any excavation within a TC Energy ROW.
17. No part of powered equipment shall come within two (2) feet of TC Energy's pipelines, or according to applicable State or Federal requirements.
18. No bucket, any attachment or load may be swung over TC Energy's pipeline(s) where there is less than two (2) feet of cover.
19. TC Energy requires the pipeline to be potholed located prior to excavation within fifteen (15) feet. Afterwards potholing techniques are to be used when digging within two (2) feet of the outer edge of the pipe, unless requirements that are more stringent are set forth by the applicable state's One Call system. Within this "tolerance zone" only hand excavation, air cutting, vacuum excavation or other TC Energy approved techniques are permitted.
20. No excavation shall be made on land adjacent to the pipeline that shall in any way impair, withdraw lateral support, cause subsidence, create the accumulation of water, or cause damage to the pipeline or right-of-way.

21. The Permittee shall ensure all excavation work complies with OSHA's excavation standards outlined in 29 CFR 1926 and correct any noncompliant excavation site before work within TC Energy right-of-way continues.
22. At any location where the pipeline is exposed, the Permittee shall provide TC Energy the opportunity to inspect the pipeline condition, install cathodic protection equipment, repair any pipe coating imperfections, and/or install underground warning materials.
23. No TC Energy buried pipeline shall be left exposed for any duration of time, unless otherwise permitted by TC Energy.
24. Backfill and compaction shall be performed to the satisfaction and in the presence of a Company representative. At least 6 inches of fine, loose earth or other permitted backfill material with no sharp gravel, rock, hard clods, vegetation, or other debris shall be added on all sides of any pipeline, and remaining backfill shall be placed so as not to disturb this padding material or damage the pipeline and its coating. Backfill over the pipe shall be compacted by hand until eighteen (18) inches of cover is achieved.
25. If a flowable fill is required by TC Energy to achieve necessary compaction and support under and around the pipe, specifications will be provided after drawing review and approval.
26. Disturbed ground shall be compacted to at least the same degree of compaction as surrounding areas.
27. The Permittee shall restore the site to its original condition unless otherwise permitted by TC Energy.
28. Continuously poured, steel reinforced concrete is not permitted within TC Energy right-of-way.
29. There shall be no work or spoil storage on the TC Energy right-of-way, nor shall there be any unauthorized equipment crossing(s) on the TC Energy right-of-way.
30. The permittee may be crossing one or more of TC Energy's transmission pipeline(s). These pipeline(s) may be coated with a material to protect them from corrosion. The coating may contain asbestos. If the excavation results in exposing TC Energy's pipeline(s) and there is any damage to the coating, you will be responsible for all costs, including any disposal costs, associated with the coating repair. If necessary, you will also be required, to halt all work activity while the coating material is being analyzed. The coating repair, including the removal of the original material, will be performed by TC Energy personnel or a qualified third-party contractor selected by TC Energy. All work will be done in accordance with TC Energy's current engineering and environmental standards. During the course of the excavation work, Permittee agrees to cooperate with TC Energy to ensure all federal, state and local environmental and safety regulations are followed.

31. The permittee shall submit a Heavy Equipment Crossing Information Form for **all additional** equipment that will operate within the TC Energy right-of-way. No additional equipment will be permitted within the right-of-way without prior approval from TC Energy. The permittee will work with the on-site representative to complete the Heavy Equipment Crossing Information Form.
32. While using the permitted crossing area(s) with heavy equipment, if rutting, any form of ground decay, or ground pumping occurs, additional measures will be required. The additional measures will include but are not limited to: load calculation reassessment, matting/air bridge installment, additional cover, concrete relief slabs, etc.
33. TC Energy shall limit the number of temporary construction roads constructed by the Permittee. Crossings shall be limited to pre-selected sites and shall be clearly defined and marked. Random crossings are not permitted. The Permittee shall install temporary fencing along the TC Energy right-of-way boundaries so equipment shall not inadvertently pass over the pipeline at locations other than those established for the crossing.
34. During the use of a permitted temporary construction road, the Permittee shall take all reasonable and necessary steps to maintain the integrity of the permitted crossing protection. TC Energy personnel should inspect crossings periodically and may require the Permittee to provide additional protective measures deemed necessary to prevent damage to the pipeline or right-of-way.

## **Section 2: Requirements for Construction of Roads, Sidewalks, Parking, and Grading**

35. All proposed road crossings of buried facilities must be evaluated by TC Energy. Protective measures may be required before construction activity can begin or during the course of such construction activity.
36. Roads, driveways, and concrete sidewalks are not permitted to be installed longitudinally within the ROW.
37. Use of vibratory equipment larger than walk-behind units shall not be permitted within twenty-five (25) feet of the pipeline or related facility.
38. Variance of the existing depth of cover is not permitted without TC Energy's written permission. Protective measures may be required before construction activity can begin or during the course of such construction activity.
39. Where additional cover is permitted, the final grading shall meet a minimum cover of three (3) feet over the pipeline but shall not exceed five (5) feet from the top of the pipeline without TC Energy written permission.
40. Detention or retention ponds, lakes, structures or any type of impoundment of water, temporary or permanent, shall not be permitted within the right-of-way.

41. Any modifications to an existing drainage pattern shall be designed so there is no erosion of the cover over TC Energy right-of-way. The Permittee shall provide engineering documentation for water velocity calculations verifying no erosion will occur.
42. For drainage channels and ditches where a minimum cover of three (3) feet cannot be maintained, the Permittee shall be responsible for the cost of installation of additional protection required by TC Energy.
43. Roads, driveways, or sidewalks shall cross the right-of-way at as near to ninety (90) degrees as possible, but no less than forty-five (45) degrees.
44. Venting systems shall not be used as a means to extend crossovers or vent parking lots.
45. Concrete sidewalks and/or curbs, shall have expansion joints installed five (5) feet on either side of the pipeline.
46. Asphalt roads must not be greater than twenty-five (25) feet in width, or the minimum width required by local and/or state regulations. Permittee must submit documentation when requesting road widths exceeding twenty-five (25) feet.
47. Asphalt pavement shall not be installed closer than five (5) feet from the pipeline except in the case of roadway, driveway, or parking lot crossovers. Where parking areas are permitted within the ROW, barriers must be installed on the edge of the parking area closest to the pipeline.
48. Parking area(s) shall not be installed within ten (10) feet of TC Energy pipeline facilities.
49. Barriers shall be installed on the edge of the parking area closest to the pipeline.
50. Parking lot “crossovers” may be permitted by TC Energy and shall be no greater than twenty-five (25) feet in width.
51. Parking lot “crossovers” shall be spaced at a minimum of fifty (50) foot intervals (measured from the edge of the crossover). Where fifty (50) feet cannot be maintained additional measures may be required.

### **Section 3: Requirements for Walking and Bicycle Paths**

52. Walking/bicycling paths shall be constructed at the outside edge of the TC Energy permanent right-of-way area.
53. Longitudinal path width within TC Energy rights-of-way shall not exceed six (6) feet.
54. Paths shall cross the TC Energy pipeline as close to ninety (90) degrees as possible, but no less than forty-five (45) degrees.

55. No motorized vehicles of any type, other than power driven wheelchairs, shall utilize paths, which run longitudinally inside the right-of-way.
56. Paving shall be restricted to asphalt only. No concrete paving shall be used for walking and paths.
57. Landowner shall be responsible for maintaining the path to prevent right-of-way damage (including erosion, illegal dumping, etc.) Any change in grade or modifications to existing grade required to control erosion shall be reviewed and approved by TC Energy

#### **Section 4: Requirements for Construction of Retaining Walls, Fences, Buildings, and Landscaping**

58. Buildings or other structures, including but not limited to overhanging balconies, patios, decks, swimming pools, wells, walls, utility poles, septic systems, propane tanks, transformer pads, or the storage of materials which creates an obstruction or prevents the inspection of the right-of-way by air or foot, shall not be permitted within the TC Energy right-of-way.
59. The Permittee shall not build retaining walls, drive piling or sheeting, or install an engineered structure that may negatively impact the TC Energy right-of-way.
60. The right-of-way area may be planted in lawn, flowerbeds, or vegetable gardens, or used for normal agricultural purposes.
61. Shrubs or ornamental plantings must not be permitted within 10 ft of the pipeline. Plantings within the ROW and greater than 10 ft from the pipeline must be maintained at 5 ft in height or less.
62. Shrubs maturing at more than five feet tall and all trees (including fruit/nut bearing and Christmas tree farms) shall not be permitted within the right-of-way.
63. TC Energy shall not be responsible for replacement of or reimbursement for any plantings within the right-of-way, unless otherwise stated in applicable land rights document.
64. Fence(s) shall cross as near to ninety (90) degrees as possible, but no less than forty-five (45) degrees.
65. Fence or hedge height may not exceed five (5) feet in height. Commercial chain link fences used for security protection or other business requirements may exceed five (5) feet.
66. Fence posts, or similar posts, shall not be placed within five (5) feet of the outermost edge of the pipeline.

67. Electric fence(s) shall be equipped with insulated handled gate or some type of disconnect, that is available to TC Energy.
68. Conductors for electric fences shall not be placed within fifteen (15) feet of any TC Energy above grade piping with mechanical fittings.
69. Fence(s), must be designed and installed to allow at least a sixteen (16) foot gate or opening centered on the pipeline. Gates should be centered on the pipeline unless property lines or similar limitations are present.
70. Permittee shall provide TC Energy access through all gates permitted within the TC Energy right-of-way. If Permittee installs locks on said gates, TC Energy shall also be allowed to install its own locks in a manner that allows TC Energy unimpeded access without limiting Permittee's access.
71. Masonry, brick, or stone walls shall not be permitted on the right-of-way.
72. Permittee will allow TC Energy to place pipeline markers at or near, fences, walls or shrubs in order to identify the pipeline route.

#### **Section 5: Requirements for Utility Crossings**

73. Concrete pipe is not permitted to cross above the TC Energy pipeline.
74. Water valves, curb boxes, manholes, sprinkler heads, splice boxes, service risers, energized equipment, poles, towers, guy wires, mechanical supports, ground rods, anchors and similar structures are not permitted inside the TC Energy ROW.
75. Warning tape shall be placed over the utility whenever a utility is being installed or replaced. A minimum six (6) inch wide tape that follows A.P.W.A. Uniform Color Code shall be placed directly above the buried utility, where possible. The tape will be buried at least one (1) foot below the surface of the ground. A second warning tape shall be placed at least one (1) foot directly above the utility.
76. The utility shall cross the TC Energy right-of-way as near to ninety (90) degrees as possible, but no less than forty-five (45) degrees.
77. Utilities shall not be installed longitudinally within the right-of-way.
78. The utility shall maintain the same depth of cover across the entire width of the TC Energy ROW if crossing above the TC Energy pipeline.
79. The utility shall maintain elevation across the entire width of the TC Energy ROW if crossing below the TC Energy pipeline.

80. Gravity drainage systems are permitted to have reasonable slope within the ROW if the drain maintains two (2) feet of clearance projected across the ROW.
81. The utility shall not change direction within the TC Energy ROW.
82. Underground utility crossings shall be marked with proper signage at the edge of the TC Energy right-of-way boundaries. Signage shall be according to the A.P.W.A. Uniform Color Code and comply with the authorities having jurisdiction at the edge of each ROW boundary. Exceptions may include agricultural land or open waters.
83. Utilities crossings below the TC Energy pipeline with greater than three (3) feet of clearance may not require additional encasement. TC Energy will review the proposed installation and make the final determination.

**Section 5a: Requirements for non-metallic utilities including water, drains, sewer, and industrial gases installed by open cut excavation.**

84. Utilities shall cross the pipeline with a minimum vertical clearance of two (2) feet for open cut.
85. Non-metallic utilities shall be installed with tracer wire for the full width of the TC Energy right-of-way.
86. At locations where tracer wire is installed, tracer wire shall be raised to the ground surface and connected to a test station for monitoring.
87. Natural gas (or other industrial gases) line crossing below the pipeline shall either be encased in a six (6)-inch envelope of yellow 2,000 psi concrete or encased in four (4)-inch minimum diameter, standard wall thickness, coated steel pipe or four (4) inch minimum diameter Schedule 40 PVC (or equivalent) pipe across the full width of the TC Energy right-of-way.
88. Natural gas (or other industrial gases) line permitted by TC Energy to cross above the pipeline shall be encased in four (4) inch minimum diameter, standard wall thickness, coated steel pipe or four (4) inch minimum diameter Schedule 40 PVC (or equivalent) pipe across the full width of the TC Energy right-of-way. Do not use concrete for crossings above the pipeline.

**Section 5b: Requirements for metallic utilities including water, drains, sewer, and industrial gases installed by open cut excavation.**

89. Metallic utilities shall be coated with a non-conductive coating for the entire width of the TC Energy right-of-way.
90. Metallic utilities shall cross the pipeline with a minimum vertical clearance of two (2) feet for open cut.

91. Corrosion protection (CP) materials including but not limited to bonds, test leads, test stations, magnesium anode current drains, and permanent reference electrodes shall be installed at the expense of the Permittee. Corrosion materials will be determined by TC Energy upon review of the installation or at the time of construction.  
CP material requirements may include:
  - i. Installation of test leads on both the TC Energy pipeline and the Permittee's crossing structure.
  - ii. Installation of a permanent Copper-Copper Sulfate (CuCuSO<sub>4</sub>) reference electrode between the TC Energy pipeline and the Permittee's crossing structure.
92. Permittee shall be responsible for the corrosion protection of its facilities against TC Energy's cathodic protection system. Permittee shall be responsible for installation of facilities on its structures. TC Energy shall provide personnel, at the expense of Permittee, for installation of facilities on TC Energy's pipelines.
93. The permittee will be responsible to work with TC Energy to perform cooperative interference testing of the existing and newly installed corrosion protection systems. Any interference found will be mitigated by the permittee.

**Section 5c: Requirements for electric, fiber optic/cable installed by open cut excavation.**

94. All underground electric under 600V and fiber optic utilities permitted by TC Energy shall cross the pipeline with a minimum vertical clearance of two (2) feet.
95. All underground electric above 600V permitted by TC Energy shall cross the pipeline with a minimum vertical clearance of three (3) feet.
96. The design of buried electrical cables energized to 600 volts or more installed within 900 feet of TC Energy's pipeline(s) must be reviewed and approved by TC Energy. This review may require installation of induced AC mitigation facilities.
97. All underground electric and fiber optic utilities permitted by TC Energy to cross below the pipeline shall be encased with a minimum of two (2) inch Schedule 40 PVC pipe, or equivalent, for the complete width of the right-of-way **and** also be surrounded with a minimum of six (6) inches of colored concrete in accordance with the A.P.W.A. Uniform Color Code or four (4) inch minimum diameter, standard inch wall thickness, coated steel or Schedule 40 PVC pipe across the full width of the TC Energy right-of-way.
  - i. Underground electric and fiber optic utilities permitted by TC Energy to cross in excess of three (3) feet below the pipeline do not require the use of concrete or an additional conduit.
98. All underground electric and fiber optic utilities permitted by TC Energy to cross above the pipeline shall be encased in two (2) inch minimum diameter Schedule 40 PVC pipe for the complete width of the right-of-way **and** a four (4) inch minimum diameter,

standard inch wall thickness, coated steel pipe or Schedule 40 PVC pipe across the full width of the TC Energy right-of-way.

99. Spare conduits that can be identified for future use may be installed. Spare conduits must be installed at the same depth as the main conduit.
100. Conduits must be installed and marked to meet all requirements of the specific type of approved Crossing (e.g., tracer wire, warning tape).

#### **Section 5c: Requirements for electric, fiber optic/cable installed aboveground.**

101. Aboveground cables shall be installed with a minimum of thirty-three (33) feet above grade clearance for the full width of the TC Energy right-of-way.
102. The design of overhead electrical cables energized to 600 volts or more installed within 900 feet of TC Energy's pipeline(s) must be reviewed and approved by TC Energy. This review may require installation of induced AC mitigation facilities, and additional aerial markers.
103. Unacceptable levels of AC or DC stray current caused by the installation of a foreign utility crossing will be mitigated at the expense of the Permittee.

#### **Section 5d: Requirements for utilities installed by trenchless excavation.**

104. All utilities installed via trenchless excavation require three (3) feet of clearance from the TC Energy pipeline.
105. Underground utilities permitted by TC Energy to cross in excess of three (3) feet below the pipeline do not require the use of concrete or an additional conduit.
106. Natural gas (or other industrial gases) line permitted by TC Energy to cross above the pipeline shall be encased in four (4) inch minimum diameter, standard wall thickness, coated steel pipe or four (4) inch minimum diameter Schedule 40 PVC (or equivalent) pipe across the full width of the TC Energy right-of-way. Do not use concrete for crossings above the pipeline.
107. All underground electric and fiber optic utilities permitted by TC Energy to cross above the pipeline shall be encased in two (2) inch minimum diameter Schedule 40 PVC pipe for the complete width of the right-of-way **and** a four (4) inch minimum diameter, standard inch wall thickness, coated steel pipe or Schedule 40 PVC pipe across the full width of the TC Energy right-of-way.
108. Spare conduits that can be identified for future use may be installed. Spare conduits must be installed at the same depth as the main conduit.

109. Conduits must be installed and marked to meet all requirements of the specific type of approved Crossing (e.g., tracer wire, warning tape).
110. Trenchless excavation requires prior approval with drawings which detail the excavation plan.
111. During trenchless excavation:
  - i. A sight inspection hole must be excavated as follows to prevent the drill bit from coming in contact with the pipeline:
    - i. Minimum of 5 ft and a maximum of 10 ft from the side (nearest to the drill) of each buried pipeline
    - ii. Depth at least 36 in. below the bottom of the pipeline
    - iii. Sight inspection holes parallel to the pipeline, a minimum of 10 ft long, and sufficiently wide to provide visual confirmation of the borehead
    - iv. Where the sight inspection hole is not practical, additional requirements may apply, including but not limited to additional vertical clearance
  - ii. Centerline of the bore must be marked for trenchless excavation.
  - iii. Spoil piles must not be placed over the bore path as this increases the depth of cover.
  - iv. Any bore pits required to setup and stage equipment must be located outside of the ROW.
  - v. Tracking equipment is required to track the location of the drill head and must be:
    - i. Verified for operability within tolerances
    - ii. Field tested on site to confirm operation (the test should be documented by the permittee and approved on-site by the Operations representative)
  - vi. Continuously monitor the progress of the drill head and ensure it can be visually seen entering the sight inspection holes at the expected depth and location.
  - vii. If the drill head does not enter the sight inspection hole at the expected depth and location, stop the drill and reassess the bore. Confirm that there are no hazards prior to re-commencing the bore. This may require:
    - i. Adjusting the drill head
    - ii. Reconfirming the expected centerline of the drill head entry at sight inspection holes
    - iii. Enlarging or lengthening sight inspection holes
    - iv. Pulling back and restarting the bore where required

## **Section 6: Requirements for field tile installation.**

112. Permittee shall execute the Field Tile Agreement, prior to any field tile installations that occur from the edge of TC Energy right of way to the edge of TC Energy right of way. Permitted field tile or drainage pipe shall cross the pipeline right-of-way at or as near to ninety (90) degrees as possible, but no less than forty-five (45) degrees. A minimum clearance of twelve (12) inches above or below the pipeline shall be maintained. Field tile shall not drain onto a TC Energy right-of-way. Longitudinal runs of field tile shall not be within fifteen (15) feet of TC Energy pipelines.

**Section 7: Requirements for Dredging.**

113. Dredging activities within 500 feet of the TC Energy right-of-way shall comply with the following minimum requirements:
  - i. A TC Energy representative must meet with the Corps of Engineers representative to review the plan.
  - ii. TC Energy must be contacted at least 72 hours prior to coming within 500 feet of the pipeline.
  - iii. When practical an Operations Representative should be on board the barge when the dredging operation is within 500 ft of the nearest pipeline.

**Section 8: Requirements for Blasting.**

114. A blasting plan must be submitted to the Company 10 business days (excludes Saturday, Sunday, or federal holiday) in advance of any blasting proposed within 325 ft of a Company pipeline.
115. The Company must perform a blasting analysis to determine blasting requirements.
116. Blasting must not commence without prior review and approval from the Company.
117. Any modifications to the blasting plan must be submitted to the Company for prior review and approval.
118. The Third-Party must conduct and submit to the Company a three-axis seismic survey for each blast event within 325 ft of a Company pipeline, unless otherwise permitted by the Company.
119. Seismic monitoring equipment must be placed over the pipeline at the nearest point to the blast activities when the blast is within 325 ft of a Company pipeline. One axis must be aligned parallel to the pipeline and another axis perpendicular to the pipeline.
120. Storage of explosive and other equipment on the ROW is strictly prohibited. Explosives must not be stored within 1,000 ft of the ROW.