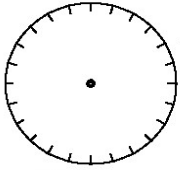


IOWA UNDERGROUND WIRELINE CROSSING

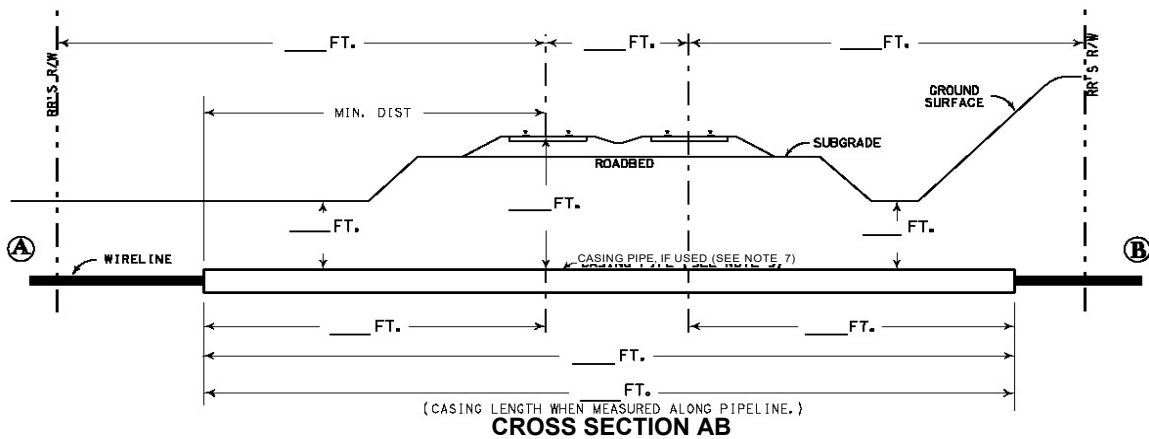
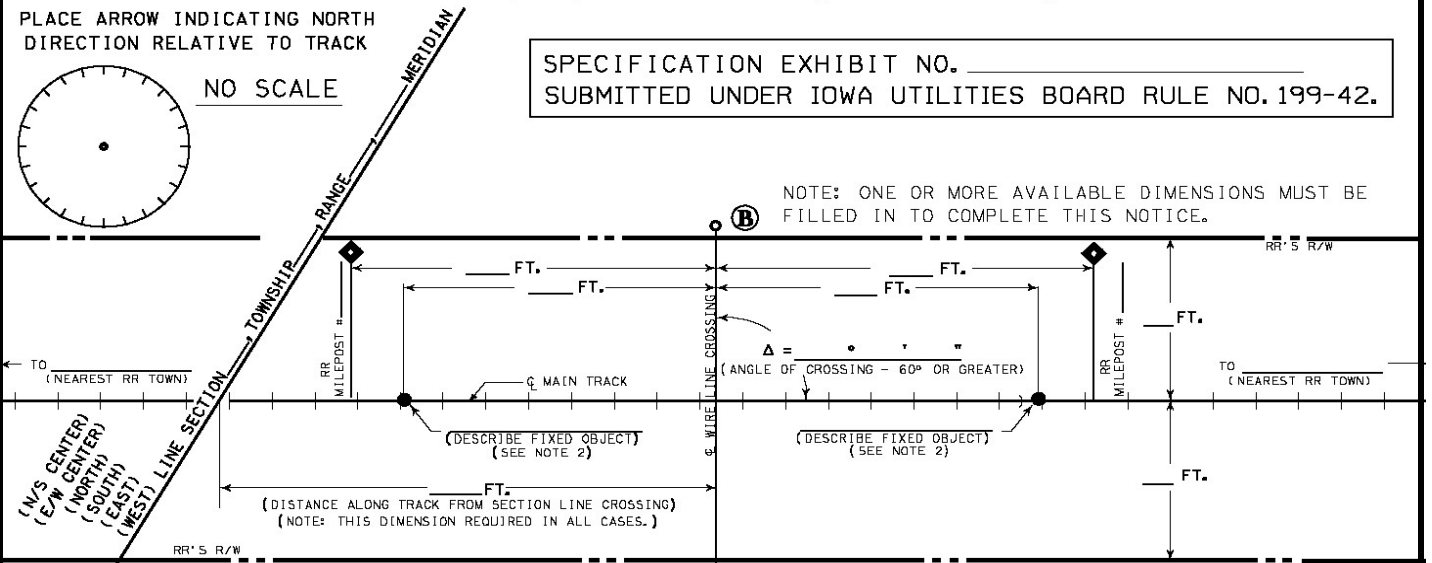
PLACE ARROW INDICATING NORTH DIRECTION RELATIVE TO TRACK



NO SCALE

SPECIFICATION EXHIBIT NO. _____
SUBMITTED UNDER IOWA UTILITIES BOARD RULE NO. 199-42.

NOTE: ONE OR MORE AVAILABLE DIMENSIONS MUST BE FILLED IN TO COMPLETE THIS NOTICE.



FOR RAILROAD REPRESENTATIVE USE

RAILROAD _____ MP _____
 SUBDIVISION _____ E.S. _____
 _____, IOWA
 (NEAREST STATION) (COUNTY) (STATE)
 PHONE: _____ RR FILE NO. _____
 E-MAIL _____

FOR UTILITY REPRESENTATIVE USE

UTILITY _____ DATE: _____
 ADDRESS _____
 BY _____ PHONE _____
 E-MAIL _____

- A) IS WIRELINE CROSSING WITHIN PUBLIC ROAD? _____ YES; _____ NO;
- B) IF YES, NAME OF STREET _____
- C) TYPE OF WIRELINE CROSSING: _____ TELEPHONE; _____ TELEVISION; _____ FIBER OPTIC; _____ ELECTRIC; OTHER: _____
- D) VOLTAGE TO BE CARRIED UNDER TRACK _____, NO. OF WIRES _____
- E) IF CASING TO BE USED, TYPE OF CASING TO BE INSTALLED _____
- F) METHOD OF INSTALLATION:
 _____ HORIZONTAL DIRECTIONAL DRILLING;
 _____ DRY BORE AND JACK (WET BORE NOT PERMITTED);
 _____ TUNNEL; OTHER _____
- G) DISTANCE FROM CENTER LINE OF TRACK TO NEAR FACE OF BORING AND JACKING PITS WHEN MEASURED AT RIGHT ANGLES TO THE TRACK _____ (30' MIN.)
- H) DISTANCE TO NEAREST ROAD CROSSING WITH SIGNAL LIGHTS OR GATES (IF LESS THAN ONE MILE) _____

TO BE COMPLETED BY **SMALL UTILITY** AS DEFINED IN THE IUB RULES
 I CERTIFY THAT THIS UTILITY QUALIFIES AS A SMALL UTILITY UNDER
 IOWA UTILITIES BOARD RULE 199 IAC 42.1.
 SIGNED _____ DATE _____

GUIDELINES TO IOWA UNDERGROUND WIRELINE CROSSING

1. Horizontal distances, in cross section AB on the Specification Exhibit, to be measured at right angles from centerline of track, except as noted.
2. Allowable fixed objects include: back walls of bridges, centerline of road crossings and overhead viaducts (give road name), or centerline of culverts.
3. Installation shall be in accordance with Iowa Utilities Board Rule 199 IAC 42.6.
4. The minimum depth below the base of the rail shall be 4.5 feet, except for fiber optic cables, which shall be 5.0 feet.
5. The minimum depth at other locations on the right of way shall be: 1) 5.0 feet for fiber optic cables, 2) 4.0 feet for conductors operating at more than 750 volts, 3) 3.0 feet for all other lines.
6. Crossing shall not be installed within 50 feet of the end of a railroad bridge, the centerline of a culvert, or a switch area.
7. Casings, if used, must extend a minimum of 30 feet from the centerline of nearest track, measured at right angles, except that casings for electrical conductors, if used, operating at more than 750 volts shall extend the full width of the right of way. At burial depths of less than 15 feet below the base of rails, the casing material shall be steel or rigid metal conduit. At depths of 15 feet or more, polyvinyl chloride (PVC) casing pipe may be used.
8. Except for the track and ballast area, warning tape shall be installed one foot below ground level over conductors operating at more than 750 volts, except that tape is not required for lines installed using directional drilling.
9. Bored crossing shall not be installed using water jetting or other methods that might leave cavities beneath the railroad right of way. Pits for boring or drilling crossings shall be beyond the limits of the railroad embankment and railroad live loads.
10. Unless otherwise authorized by the railroad, a railroad representative must be present during installation of buried crossings if there are underground railroad signal lines in the vicinity of crossing.
11. The form specifies that one or more available dimensions are requested, but providing additional dimensions will help the Railroad process the application more quickly.
12. It is recommended that the Railroad be contacted in advance for fiber optic cable and railroad signal locations.
13. Nearest Railroad Town means nearest town on the railroad in each direction. If not known, reference the Iowa DOT Rail map at <https://iowadot.gov/iowarail/iowa-freight-rail/railroad-maps>.