LEGEND

- FIBER OPTIC CABLE MARKER WITH INFORMATION LABEL
- PULL BOX
- MANHOLE (TMS)
- FIBER CONDUIT - (NUMBER AND SIZE AS SHOWN IN PLANS)
- E — CDOT ELECTRICAL UTILITY LOCATION MARKER
- T — CDOT TELEPHONE UTILITY LOCATION MARKER

LOCATION MARKER SPACING

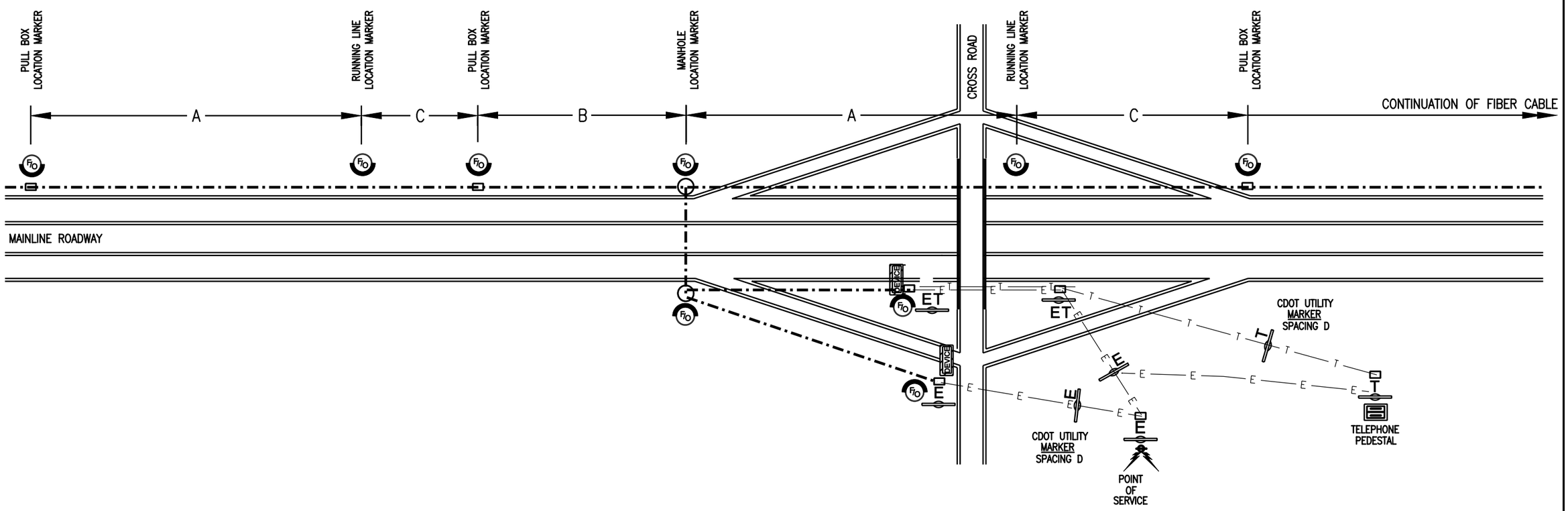
MEASUREMENT	DESCRIPTION	DISTANCE (FEET)
A	FIBER OPTIC RUNNING LINE MARKER SPACING	1000
B	HANDHOLE MARKER SPACING	< 1000
C	ADDITIONAL FIBER OPTIC RUNNING LINE MARKER SPACING	C=A-B (WHERE REQUIRED) < 1000
D	UTILITY MARKER SPACING	* ■

* UTILITY LOCATION MARKERS FOR DEVICE POWER SOURCE ELECTRIC RUNS TO BE INSTALLED AT BEGINNING AND END OF UTILITY CONDUIT. IF RUNNING LINE IS LONGER THAN 500 FEET ONE ADDITIONAL MARKER SHALL BE INSTALLED AT THE MIDPOINT OF CONDUIT RUN.

■ UTILITY LOCATION MARKERS FOR RUNNING LINE ELECTRICAL CONDUIT TO BE INSTALLED AT BEGINNING AND END OF UTILITY CONDUIT, AT ALL MANHOLES AND AT A MAXIMUM SPACING OF 1000' ALONG LINE BETWEEN MANHOLES.

FIBER OPTIC AND CDOT UTILITY LOCATION MARKER INSTALLATION NOTES:

1. AREA AROUND LOCATION MARKER INSTALLATION SHALL BE RETURNED TO EXISTING GRADE AND CONDITION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT BE INCLUDED IN THE COST OF LOCATION MARKER ITEM.
2. LOCATION MARKERS SHALL BE INSTALLED AT EACH PULL BOX AND MANHOLE ALONG BOTH THE BACKBONE AND LATERAL FIBER OPTIC CABLE RUNS THROUGHOUT THE PROJECT. ADDITIONAL MARKERS SHALL BE INSTALLED ALONG THE RUNNING LINE.
3. UTILITY LOCATION MARKERS SHALL BE INSTALLED AT BOTH THE UTILITY POINT OF SERVICE PULL BOX AND THE EQUIPMENT PULL BOX OR MANHOLE AT PROJECT DEVICE. ADDITIONAL MARKERS, IF REQUIRED, SHALL BE INSTALLED AT MID LOCATIONS ALONG THE UTILITY LINE AS SHOWN ON THE PLANS.
4. CONCRETE FOOTING SUPPORT FOR FIBER OPTIC CABLE LOCATION MARKERS AT PULL BOX LOCATIONS SHALL BE INCLUDED IN THE COST OF EACH PULL BOX SHOWN IN THE PROJECT.
5. CONCRETE FOOTING SUPPORTS FOR FIBER OPTIC CABLE RUNNING LINE MARKERS ARE TO BE INCLUDED IN LOCATION MARKER ITEM.
6. UTILITY LOCATION MAKERS SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. CONCRETE SUPPORT FOUNDATIONS SHALL NOT BE REQUIRED FOR UTILITY LOCATION MARKERS.
7. LANDSCAPE LOCATION MARKERS SHALL BE INSTALLED IN LANDSCAPE AREAS AND AREAS SUCH AS PARKING LOTS WHICH COULD HAVE VEHICULAR TRAFFIC.
8. THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER AN AS-BUILT DRAWING SHOWING THE INSTALLED LOCATIONS OF ALL MARKER TYPES.
9. LOCATION MARKERS SHALL HAVE INFORMATION LABELS ATTACHED WITH ADHESIVE TO WITHSTAND HEAT AND COLD. INFORMATION ON LABELS SHALL INCLUDE CDOT CONTACT INFORMATION. NUMBERS INDICATING THE HIGHWAY MILE POINT OF THE PULL BOX OR MANHOLE, TO THE HUNDREDTH OF A MILE, SHALL BE INSTALLED BENEATH THE INFORMATION LABELS AS SHOWN ON SHEET TWO OF THIS PROJECT DETAIL.
10. WHERE REQUIRED ON NATIONAL FOREST SERVICE LAND, MARKERS SHALL BE BROWN (Fed #20059) IN COLOR. INFORMATION LABELS SHALL HAVE BLACK LETTERING ON THE BROWN BACKGROUND.



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Fiber Optic and Utility Markers Project Standard

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Project No./Code
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