

be used for temporary point-to-point communications when authorized by the WSDOT Engineer.

All locations containing identical equipment shall be configured and wired in an identical manner, including internal wiring and harnesses, wiring color codes, labeling terminal block positions, termination strips, power service configuration, and panel and equipment mounting and locations.

2.18.4.13.1 Fiber Optic Cable

The Design-Builder shall furnish, install, test, and maintain the following SMFO cable for mainline distribution and signal interconnect:

1. New continuous 48-strand SMFO FTC distribution cable between an existing cable vault adjacent to 167-FT-00151 (DW-N167 Line STA 78+35) and the existing cable vault adjacent to 005-CH-13714 (I-5 Line STA 3630+00)
2. New continuous 48-strand SMFO FTC Toll/TRS cable between an existing cable vault adjacent to 167-FT-00151 (DW-N167 Line STA 78+35) and the existing cable vault adjacent to 005-CH-13714 (STA 3630+00)
3. New continuous 96-strand SMFO FTC mainline cable between an existing cable vault adjacent to 167-FT-00151 (DW-N167 Line STA 78+35) and the cable vault adjacent to 005-CH-13714 (STA 3630+00)
4. New continuous 12-strand SMFO I-5 southbound distribution cable between a new cable vault adjacent to 005-CH-13715 (STA 3630+00) and the cable vault adjacent to 099-VC-0089 connecting all ITS cabinets along the I-5 southbound alignment
5. New continuous 48-strand SMFO I-5 southbound mainline cable between an existing cable vault adjacent to 005-CH-13714 (I-5 Line STA 3630+00) and the existing cable vault at approximately I-5 Line STA 3766+83. Remove the existing I-5 southbound mainline fiber between the two cable vaults.
6. New continuous 48-strand SMFO I-5 northbound mainline cable between an existing cable vault at approximately I-5 Line STA 3652+00 and the existing cable vault at approximately I-5 Line STA 3681+95. Remove the existing I-5 northbound mainline fiber between the two cable vaults.
7. New continuous 12-strand SMFO I-5 northbound distribution cable between an existing cable vault at approximately I-5 Line STA 3652+00 and the cable vault adjacent to 005-RM-13854 (I-5 Line STA 3687+00) connecting all ITS cabinets along the I-5 northbound alignment
8. New continuous 12-strand SMFO distribution cable between an existing cable vault adjacent to 167-FT-00151 (DW-N167 Line STA 78+35) and the cable vault adjacent to 167-CH-00635 (SB167 Line STA 230+00) connecting all ITS cabinets along the SR 167 southbound alignment

9. New continuous 12-strand SMFO distribution cable between an existing cable vault adjacent to the 167-FT-00151 (DW-N167 Line STA 78+35) and the cable vault adjacent to 167-CH-00635 (SB167 Line STA 230+00) connecting all ITS cabinets along the SR 167 northbound alignment
10. New continuous 48-strand SMFO mainline cable vault adjacent to the 167-FT-00151 (DW-N167 Line STA 78+35) and the cable vault adjacent to 167-CH-00635 (SB167 Line STA 230+00) along the southbound SR 167 alignment
11. New continuous 48-strand SMFO mainline cable on the southbound side of SR 167, between an existing cable vault adjacent to the 167-FT-00151 (DW-N167 Line STA 78+35) and the cable vault adjacent to 167-CH-00635 (SB167 Line STA 230+00), along the northbound SR 167 alignment.
12. New continuous 48-strand SMFO mainline cable on the northbound side of SR 167, between the existing cable vault adjacent to 167-FT-00151 (DW-N167 Line STA 78+35) and the cable vault adjacent to 167-CH-00635 (SB167 Line STA 230+00), along the northbound SR 167 alignment. The mainline fiber shall run through the cable vault outside the weigh station. A pigtail from a patch panel in the communications room of the building shall be spliced to the mainline fiber for connection to the communication system.
13. New continuous 24-strand SMFO SR 167 toll/TRS cable between the cable vault adjacent to the 167-FT-00151 (DW-N167 Line STA 78+35) and the cable vault adjacent to the 167-CH-00635 (SB167 Line STA 230+00)
 - a) Six strands of the 24-strand SMFO distribution cable shall be terminated at each roadside toll cabinet (STAs 129+80 and 129+90) in a 12-port pre-terminated patch panel. The six fiber optic strands shall be dedicated to the tolling network.
 - b) Six strands of the 24-strand SMFO distribution cable shall be terminated at each TRS cabinet (STAs 105+00 and 133+00) in a 12-port pre-terminated patch panel. The six fiber optic strands shall be dedicated to the TRS network.
14. New continuous 12-strand SMFO WIM distribution cable between the WIM system site cabinet and the weigh station data room located in the inspection building, connecting the electronic screening site cabinet and the compliance site cabinet, as shown in the Conceptual Plans (Appendix M) and *Inspection Building Conceptual Drawings* (Appendix X) and in accordance with the WSDOT *Weigh-in-Motion (WIM) and Electronic Screening Systems* and the WSDOT *WIM Special Provisions*.

The Design-Builder shall splice the 12-strand and 24-strand SMFO distribution cables to the pre-terminated patch panel stub cable for all ITS, traffic signals, TRS, roadside toll cabinet, FTCs, and communications hubs in accordance with the WSDOT *Olympic Region ITS Special Provisions* and the WSDOT *Olympic Region ITS Design Requirements* and as shown in the Conceptual Plans (Appendix M).