**ITEM 632 INTERCONNECT, MISC.: FIBER OPTIC SPLICE ENCLOSURE, dome, 288 SPLICE**

**ITEM 632 INTERCONNECT, MISC.: FIBER OPTIC SPLICE ENCLOSURE, DOME, 800 SPLICE**

Fiber optic cable splices shall be performed in splice enclosures as shown on the Plans. The splice enclosures shall be corrosion resistant, rodent proof, re-enterable, and manufacturer certified for underground installation.

Splice enclosures are to be installed in 32” or 48” pull boxes or mounted aerially as directed in the Plans.

THE Contractor shall advise the Engineer in the event that cables cannot enter THE splice enclosure perpendicularly to THE cable port entry plate, or if cable bends exceed minimum installation bend radius rating at the enclosure entry due to existing field conditions such as inadequate space in pull box or other obstructions. Additionally, THE Contractor shall advise the Engineer prior to splicing if IT IS ANTICIPATED THAT THE number of FUSION splices, SPARE FIBERS, AND BUFFER TUBES AS SHOWN IN THE PLANS cannot be neatly and securely contained in the splice enclosure called out in the Plans.

For underground installation, splice enclosure and slack cable must fit within pull box to avoid damage to the enclosure or cable upon closing the pull box lid.

For aerial installation, an extended strength member bracket shall be installed with the splice enclosure to ensure cable entries remain perpendicular and securely fastened to the port entry plate. Aerial mounted slack storage racks are to be used for all installations where cables are looped or bent 180o. The cost of the strain relief hardware, extended strength member brackets, ties, or other installation hardware is considered incidental to this pay item.

The splice enclosure shall be weatherproof, waterproof, corrosion resistant, rodent proof, re-enterable, and crush resistant. Dome enclosures shall be single tube with cable entry plate. The splice enclosure shall easily fit into pull boxes along with loops of slack cable in box (approx. 150 ft) the splice enclosure shall be a complete kit including all components and hardware for installation. The splice enclosure shall be suitable for application in the temperature range of -40 C to +70 C. The splice enclosure shall provide space, allowing entry of fiber optic cable without exceeding the minimum bend radius of the cable. The enclosure shall have provisions for cable and pigtail strain-relief, and shall be equipped with strain-relief hardware. The splice enclosure shall be equipped with elastomeric splice blocks enclosed within manufacturer splice trays and shall permit selective fiber splicing (looping a backbone cable in and out while only cutting into the desired fibers – all buffer tubes not shown as being spliced in the Plans are to be securely coiled within the splice enclosure). The size of the enclosure shall allow all the fibers of the largest optical fiber trunk cable to be fusion spliced to a second cable of the same size, plus additional pigtails. The splice enclosure shall allow splicing of all fibers up to the maximum number specified on the contract drawings.

each cable entering the enclosure shall be sealed with the APPROPRIATELY sized grommet. grommets, Plug kits, and brackets shall be incidental to pay item. Any proposed equivalent must be approved by the Engineer prior to installation. Fiber optic cable splice enclosures must meet the requirements listed under Bellcore Testing Requirement GR-771-CORE and UL 1863.

The work as described will be measured as one unit for each of the installations specified, and shall include all materials, equipment and incidentals, complete in place. Terminations, connections, and other miscellaneous items and materials shall be incidental to this work and no separate payment will be made. 1/12/24