

## **E-Rate Cat-2 2019 Equipment Requirements**

**Site:** Tonopah Elementary School

Tonopah Middle School

1220 Idaho Cir, Tonopah, NV 89049

## **CABLING DROPS & IDF Termination**

### **Project Description:**

**Section 1.** The existing IDF for the upper building is inside a very small janitor closet on the second floor. The goal is to create a new IDF in a room down the hall on the other side of the upper building. See location on map (figure 1). The existing janitor closet has a six strand fiber cable running to the MDF in the main office area. If the other 4 strands between this fiber junction in the janitor closet and the main Office MDF are not terminated, they will need to be terminated into the junction boxes at both ends. This should create three distinct fiber home runs from the janitor closet and the main office MDF.

#### Section goals:

- 1) identify new IDF
- 2) Identify state of existing strands between office MDF and janitor closet.
- 3) Terminate any unfinished strands so that 3 pairs are now viable between office MDF and janitor closet.

**Section 2.** There is a fiber connection between the fiber box in the janitor closet and the fiber box in the wall mount rack in room 10. the primary terminated cable to room 10 needs to be jumpered in the janitor closet fiber box so that a straight run now exists between room 10 and the main office MDF. The connection types in the fiber box, if terminated, are of type "ST". If any of the remaining strands for the fiber cable running between the janitor closet and the fiber box in room 10 are not finished with ends, then the remaining strands will need to be terminated. One of these 2nd fiber pairs will then be jumpered to create a second pair of fiber that is a home run from the fiber box in room 10 and the office MDF. If a third pair between the office MDF and the janitor junction box was successfully tested or terminated, then jumper this third run to the fiber connection feeding room 1. Now a home run will exist between the office MDF and room 1.

#### Section goals:

- 1) By patching between existing fiber runs from the (MDF to the janitor closet), and the (janitor closet to room 10), a single home run of fiber will exist between the main office MDF and room 10.
- 2) Terminate any unfinished strands between janitor closet and room 10.
- 3) Connect another pass through jumper so now two distinct fiber home runs now exist between room 10 and the main office MDF.
- 4) Connect another pass through jumper so a home run will exist between MDF and room 1.

**Section 3.** The second home run that now exists between room 10 and the main office MDF will be used to extend a fiber connection from the room 10 wall mount rack to the new IDF location just across the hall. The actual length is no more than 30 feet. There is false ceiling tile, but there could be concrete between the rooms and the hallway. It is possible existing paths through the brick exist. The fiber will terminate into a fiber junction box in the new IDF. The junction box will be mounted into a standing rack or wall rack that we will provide.

#### Section 3 goals:

- 1) Run a fiber connection from the free pair in room 10 to the new IDF and test.
- 2) Mount the new fiber drop into a junction box in a rack that we will provide In the new IDF.

**Section 4:** Run cat6 cable drops from the new IDF to classrooms. Terminate to patch panel in IDF. Vendor will supply patch panel, we will supply rack. There will most likely be concrete between the new IDF and the classrooms, but existing drops can be cut in the classrooms and used to pull new cable. The allocation is listed.

- Room 9 = 4 drops total to wall plates| split 2 x 2 – front/rear, 1 to ceiling for future need.
- Room 8 = 4 drops total to wall plates| split 2 x 2 – front/rear, 1 to ceiling for future need.
- Room 7 = 4 drops total to wall plates| split 2 x 2 – front/rear, 1 to ceiling for future need.
- Room 6 = 6 drops total to wall plates| split 3 x 2 – front/rear/middle, 1 to ceiling for future need.
- Room 5 = Skip
- Room 4 = 4 drops total to wall plates| split 2 x 2 – front/rear, 1 to ceiling for future need.
- Room 3 = 4 drops total to wall plates| split 2 x 2 – front/rear, 1 to ceiling for future need.
- Room 2 = 4 drops total to wall plates| split 2 x 2 – front/rear, 1 to ceiling for future need.
- Room 12 = 4 drops total to wall plates| split 2 x 2 – front/rear, 1 to ceiling for future need.

Section goals:

- 1) Run drops from patch panel in new IDF to classrooms.
- Total Drops = 42

**figure 1. main map**

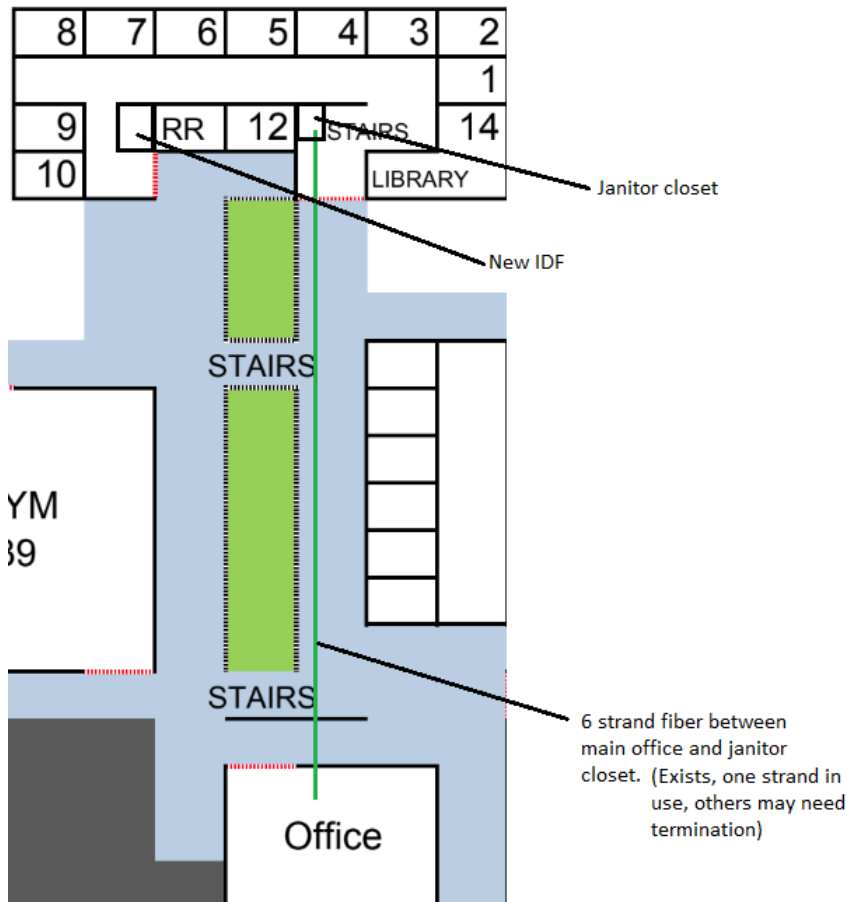


figure 2 Upper Building

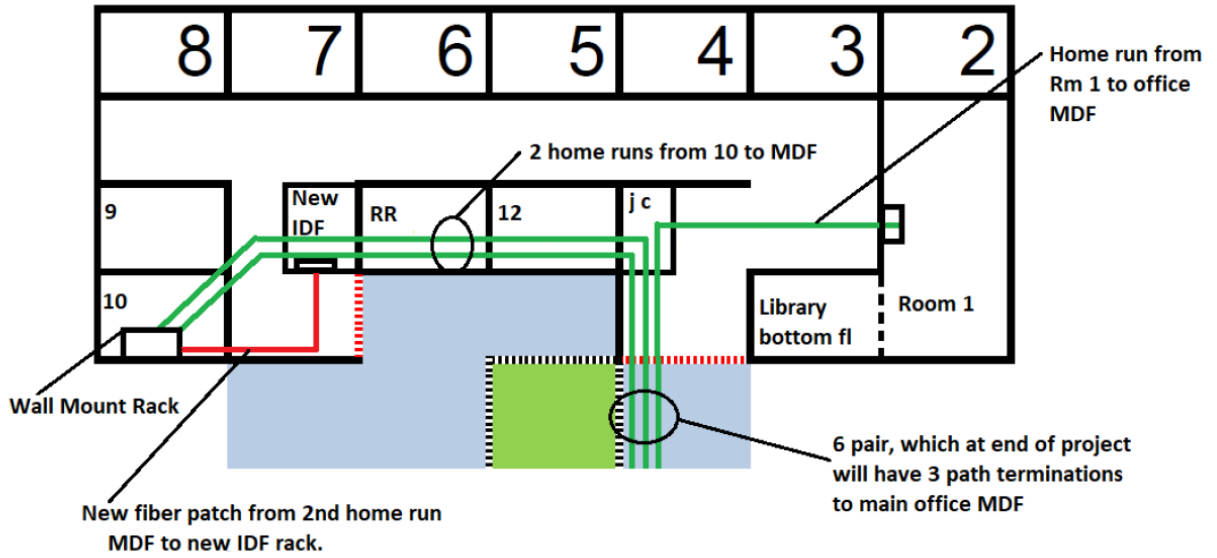


figure 3. new IDF



**Vendor Selection**

Supplies	Qty	Make/Model/Desc	Unit Price \$
Add'l Supplies	Qty	Make/Model/Desc	Unit Price \$
Add'l Supplies	Qty	Make/Model/Desc	Unit Price \$
Add'l Supplies	Qty	Make/Model/Desc	Unit Price \$
Add'l Supplies	Qty	Make/Model/Desc	Unit Price \$
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Add'l Supplies	Qty	Make/Model/Desc	Unit Price \$
Add'l Supplies	Qty	Make/Model/Desc	Unit Price \$
Add'l Supplies	Qty	Make/Model/Desc	Unit Price \$

Project Labor Total Cost \$ Or Qty X Unit Price \$

**Notes:**

**Section Total \$**

Check here if additional information is attached.