# SLSD Division 27 Specifications – Existing construction Lincoln Middle School

### Part 1 – General

# 1.1 PERMITS, FEES AND SERVICE CHARGES:

1.1.2 The CONTRACTOR shall obtain all permits required to complete the work and pay all associated fees.

#### 1.2 COORDINATION OF WORK

- 1.2.1 The CONTRACTOR shall plan his work in coordination with the other trades and with the power and telephone utility authorities
- 1.2.2 The CONTRACTOR shall field verify all dimensions of equipment to be installed or provided by others so that the correct clearances and connections may be made between the work installed by the CONTRACTOR and equipment installed or provided by others.
- 1.2.3 The CONTRACTOR shall arrange all conduit runs so that they do not interfere with piping, structural members, etc.

### **1.3 CODES**

1.3.1 Work shall conform to National Electrical Code (NEC), and State Codes and other applicable codes, even though not specifically mentioned for each item. These shall be regarded as the minimum standard of quality for materials and workmanship

### Part 2 – Execution

# 2.1 WORKMANSHIP & COORDINATION

- 2.1.1 All work shall be performed by personnel skilled in the particular trade in a workmanlike manner. Workmanship shall conform to the standards of the NEC and the National Electrical Installation Standards (NEIS)
- 2.1.2 The OWNER shall be the sole judge as to whether or not the finished work is satisfactory; and if in their judgment any material or equipment has not been properly installed or finished, the CONTRACTOR shall replace the material or equipment whenever required, and reinstall it in a manner entirely satisfactory to the OWNER without any increase in cost.
- 2.1.3 Work shall include the furnishing of all labor, materials, and equipment required to complete installation.

# 2.2 Cleaning and touch-up

- 2.2.1 Upon completion of work, all electrical equipment shall be cleaned
- 2.2.2 Vacuum all dirt, metal shavings, and foreign materials from all enclosures. The use of compressed air shall not be acceptable
- 2.2.3 All stains, dirt, and fingerprints shall be removed from enclosures, and all other electrical and communications equipment covers.
- 2.2.4 Provide touch-up paint on equipment that has been scraped, scratched, or chipped during installation. Paint color shall match color of equipment.

# PART 3 - Products - Lincoln Middle School

- 3.1 MATERIALS
- 3.1 Telecommunications Bonding Conductors
- 3.1.1 Shall be stranded or solid copper with green insulation, sized as necessary to accommodate load. 3.1.2 Listed for use as a bonding conductor.
- 3.2 Wire Basket Cable Tray
- 3.2.1 Size shall be 12" wide, 4" deep in the main tunnel and may be stepped down to 6" or 4" on secondary access tunnels.
- 3.2.2 Shall be provided with bends, T's, connector assemblies, clamp assemblies, connector plates, splice plates, splice bars, and spillways required for a complete system. The CONTRACTOR shall be responsible for providing all accessories
- 3.2.3 UL Classified as an equipment grounding conductor
- 3.2.4 Cable tray segments shall be bonded together with listed splice plates or listed bonding jumpers
- 3.3 Single Mode Fiber
- 3.3.1 Shall be 9/125 microns OS1 or greater
- 3.3.2 Shall be terminated utilizing type LC connectors
- 3.3.3 Shall be spliced using only fusion splicing method
- 3.4 CAT6 Cabling
- 3.4.1 Shall be unshielded twisted pair (UTP) copper conductors, Category 6, four-pair the cable shall be plenum rated
- 3.4.2 Shall be solid bare copper
- 3.4.3 Shall be blue in color
- 3.4.4 Classroom Jacks shall be blue in color
- 3.4.5 Termination shall be to CAT6 RJ45 Jacks
- 3.5 Cable Jackets and velcro cable wraps
- 3.4.1 All cables and velcro cable wraps shall be plenum rated.