1. **CONTRACTOR RESPONSIBILITIES**

Contractor shall:

* 1. Be licensed and fully competent in all aspects to build a complete fiber optic infrastructure at the Hickory Point Recreation Park in a safe manner.
     1. Employ only skilled, qualified workers.
  2. Provide all-inclusive quotes to provide 100% turnkey projects that include common installation, repairs, preventative maintenance, and replacement of equipment.
     1. Include all required labor, material, equipment, permitting and local inspections.
     2. Include costs for general housekeeping and work area clean up.
     3. Include travel time.
     4. Change orders shall not be issued for incidental items or tasks that should have been reasonably construed to be part of the project by the Contractor.
  3. Obtain licenses, permits, and fees (including inspection fees) as required to comply with all laws, ordinances, regulations, and code requirements applicable to complete projects.
  4. Be responsible inspections, penalties, fees, or fines for projects.
  5. Be responsible for damages caused as the result of completing projects.
  6. Furnish all tools and equipment (possibly cranes, lift trucks, boom trucks, cherry pickers, etc.) to complete projects timely.

1. **SCOPE OF WORK**
   1. Contractor shall:
      1. Direct all lines to the Admin building.
      2. Install vaults along the way and build a redundant path in the core throughout the property.
      3. Run Single Mode Fiber Optic cable across campus to service nine (9) buildings with fiber.
      4. Install LC Connectors on all ends.
      5. Run a 4” conduit run between buildings and new vaults installed outside of each building.
      6. Innerduct shall be at least four (4) channels inside the conduit.
      7. Install a wall mount fiber box to terminate the fiber using LC Connectors in all remote locations.
      8. Install tracer wire alongside of all fiber cabling underground.
      9. Install Fiber Marker Post to be at least 42” above the ground and at no more than 100’ intervals, if less than 100’ between vaults, place the marker in the middle of the run, marker post are needed at the vaults.
2. **TECHNICAL SPECIFICATIONS**

**Phase I - North Section**

3.1.There is no conduit in place at this time.

3.2. 48 Count single mode fiber will terminate in the Admin building in the IT closet for the North leg and will require to be rack mounted fiber panels, leaving room for an additional 48.

3.3. 48 Count single mode fiber will leave the Admin building (Admin vault) and head North to the first vault called North 1.

3.4. 12 Count single mode fiber will be spliced and terminated into the Water Lab (building not built yet).

3.5. From North 1, go to North 2 with 36 Count single mode.

3.6. From North 2, run 12 Count to the North 3 at the Lodge with a vault installed on the outside of the building for future growth to the North.

3.7. From North 2, run 12 Count to the BCC-Office directly into the backboard of the IT space, just inside the exterior wall.

**Phase II - South Section**

3.8. There is no conduit in place at this time.

3.9 From North 2 to South 2, run a 4” conduit with innerduct and nothing else. This conduit will remain empty.

3.10. From the Admin Building vault, head South to vault South 1 with 48 Count single mode.

3.11. From South 1, run conduit to vault South 2. This will have a 48 Count single mode, leaving a future splice loop in South 1.

3.12. From South 2, run a 12 Count single mode to the SO-Office directly into the building. No additional vault required.

3.13. From South 2, run a 36 Count single mode to South 3 vault outside the Volleyball complex.

3.14. From South 3, run a 12 Count single mode directly into the Volleyball building to the IT space. No additional vault required.

3.15. From South 3, run a 12 Count single mode to the Pickleball building Vault: South 4 and then on into the Pickleball building

3.16. From South 3, continue South to South 5 vault with a 12 Count single mode.

3.17. From South 5 vault, run a 12 Count single mode into the Information Technology (IT) closet in the pavilion.

3.18. The Admin 48 Count to the South will require to be rack mounted fiber panels.

1. **COUNTY RESPONSIBILITIES**
   1. As stated in Exhibit C and Exhibit D.
2. **DELIVERY REQUIREMENTS AND ACCEPTANCE.**
   1. All fiber cabling must be tested and certified, and Contractor must provide County results of test prior to final payment.
   2. As stated in Exhibit C and Exhibit D.
3. **WARRANTY REQUIREMENTS**
   1. As stated in Exhibit C and Exhibit D.

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