

## IB 2022-18 FIBER OPTICS BACKBONE CABLING AT LA TRINIDAD CAMPUS

*Project Description: Supply, Delivery, Installation, Testing and Commissioning of Fiber Optics Backbone Cabling at La Trinidad Campus*

### FIBER-OPTICS NETWORK CABLE LAYOUT

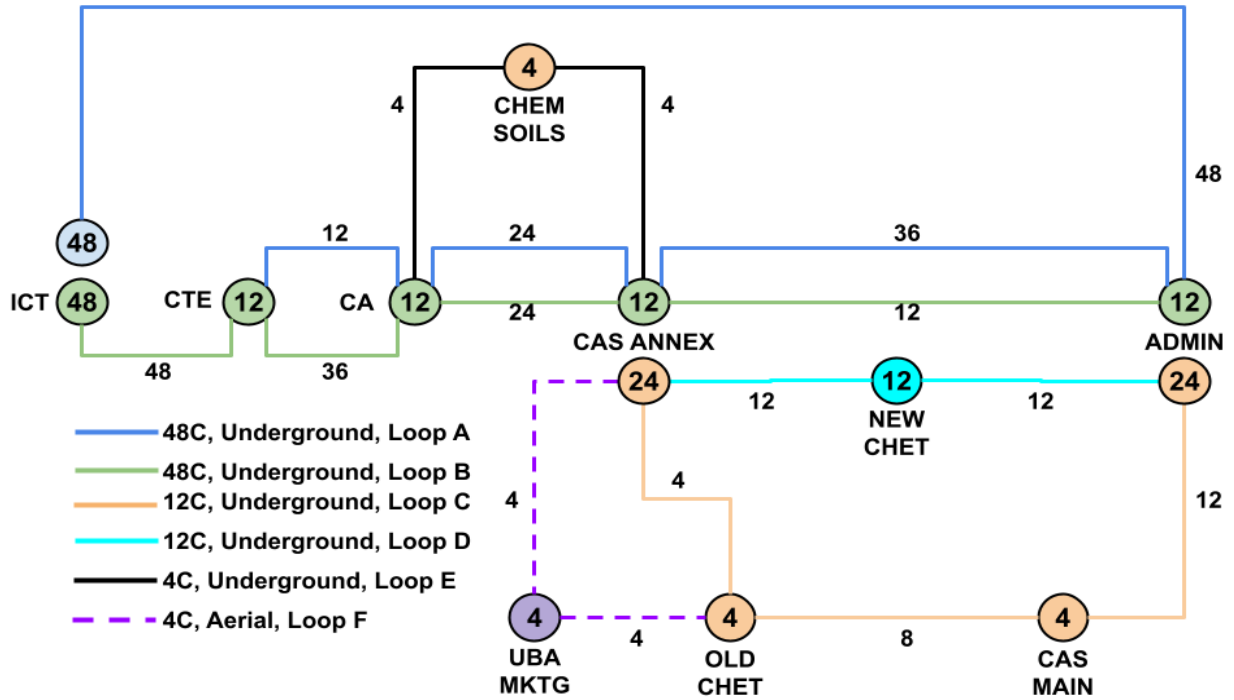


Figure 1. Fiber-Optic Network Phase 1.

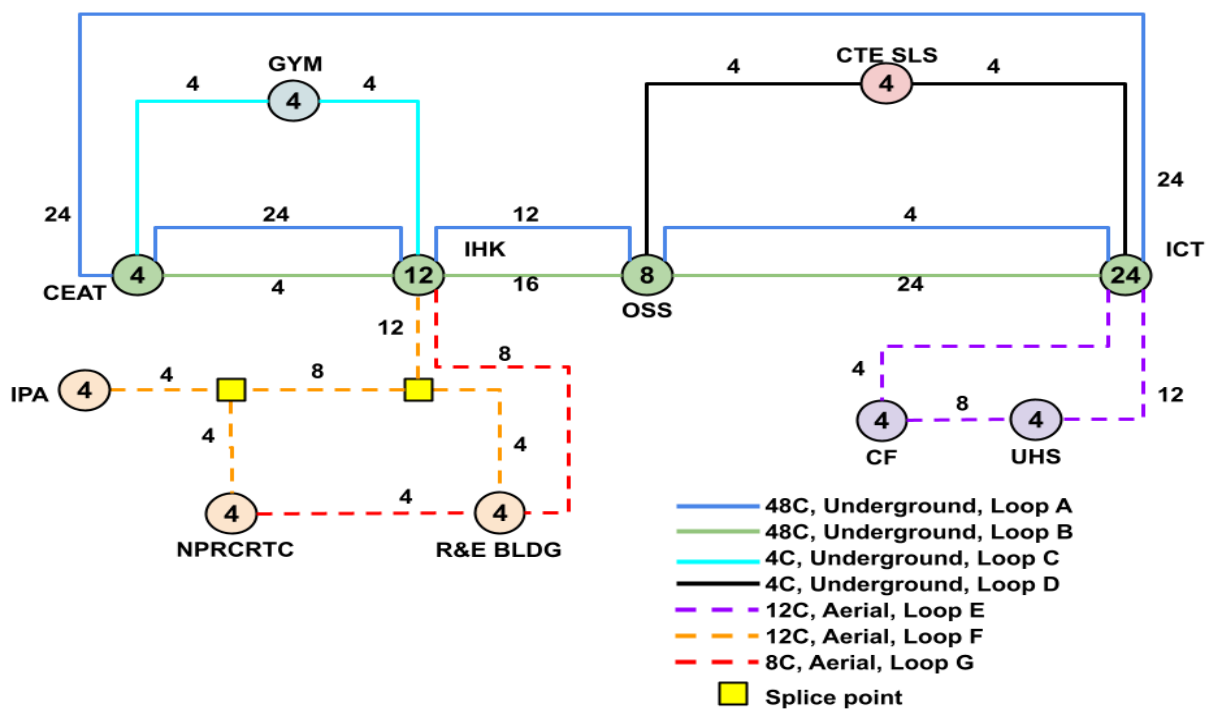


Figure 2. Fiber-Optic Network Phase 2.

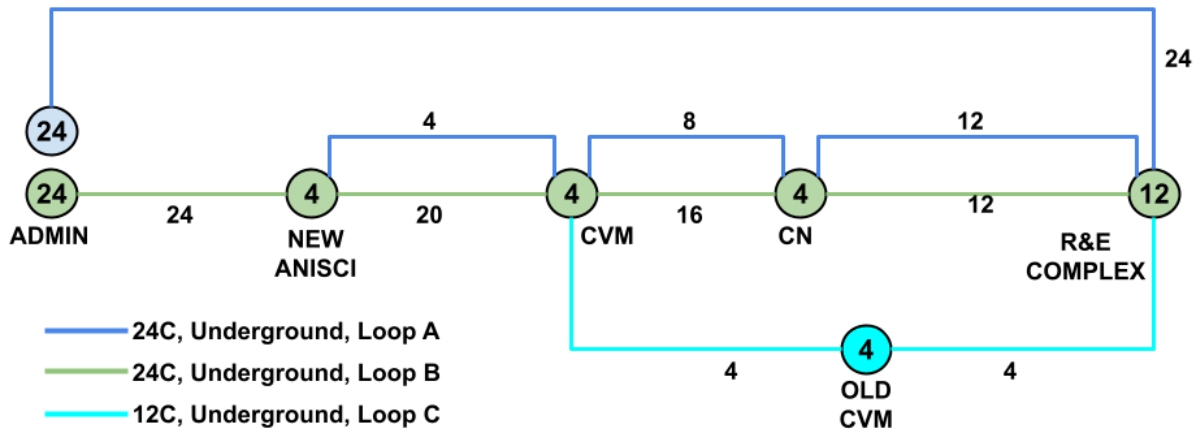


Figure 3. Fiber-Optic Network Phase 3.

**FIBER-OPTICS NETWORK MAPS**



Figure 4. Proposed Fiber-optic Network Physical Layout North Main Campus.

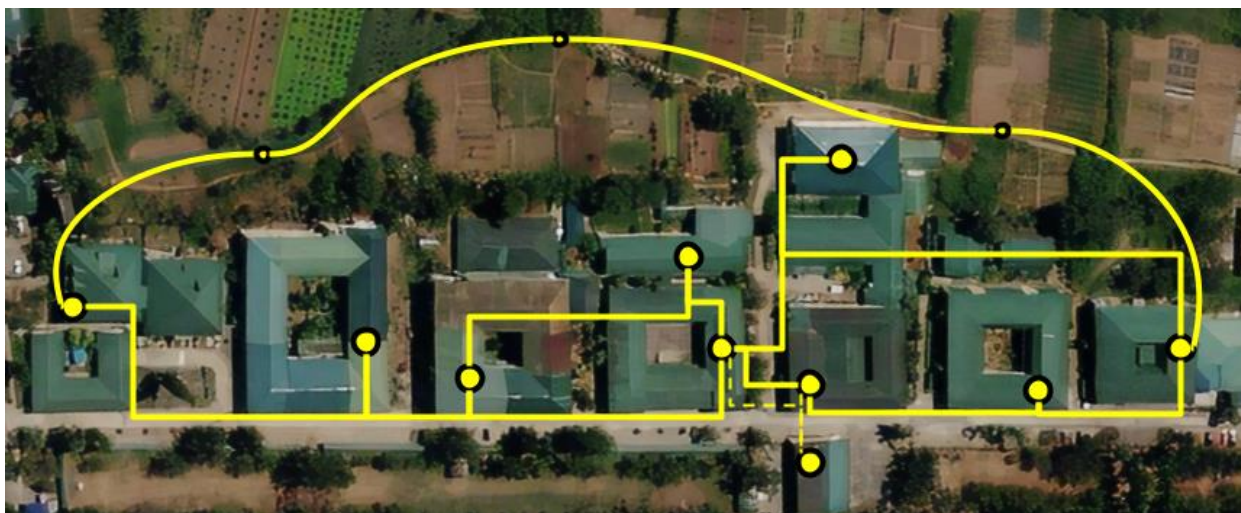


Figure 5. Proposed Fiber-optic Network Physical Layout Central Main Campus.



Figure 6. Proposed Fiber-optic Network Physical Layout South Main Campus.

**NOTE:** The supplier will adhere to the following:

- LC fiber-optic patch panels will be used.
- 2-3 meter long LC-LC fiber-optic patch cords will be provided for every available fiber-optic pair.
- Two (2) 48U 4-post open frame data racks will be installed at the New Administration NOC.
- 42U-48U data cabinets will each be installed at the following locations:
  - Corner Lobby, First Floor, College of Agriculture
  - Data Room, Second Floor, Former College of Arts & Sciences Annex
  - Backstage, Audio Visual Room, First Floor, College of Human Kinetics
  - Data Room, College of Public Administration & Governance (*Former R&E Complex*)
  - Data Room, Second Floor, College of Teacher Education
  - Lobby, Main Floor, University Library & Information Services
- 16U-20U wall mounted data cabinets will each be installed at the following locations:
  - Hallway, Ground Floor, Former College of Arts & Sciences Main
  - Lobby, Second Floor, College of Engineering
  - Reception Area, Second Floor, College of Forestry
  - Hallway, Second Floor, New College of Home Economics & Technology
  - Hallway, Second Floor, Old College of Home Economics & Technology
  - Hallway, Second Floor, College of Nursing
  - Faculty Room, College of Teacher Education Secondary Level School
  - Hallway, Second Floor, College of Veterinary Medicine
  - Hallway, Old Administration College of Veterinary Medicine
  - Corner Lobby, Second Floor, New Animal Science Building
  - Lobby, University Board of Regents Building
  - Hallway, Second Floor, Chemistry & Soils Department
  - Stage Right, Closed Gymnasium
  - Hallway, Second Floor, New Research & Extension Building
  - Reception Area, First Floor, New University Health Services Building
  - Second Floor, University Business Affairs/ Marketing Center
- IP20/IP30/IP40/IP50 rated data cabinets will be used for fully indoor installations.

- IP55/IP65 rated data cabinets will be used for flood prone, partially indoor and outdoor installations.
- All available pairs will be properly labeled and printed trace maps stickers will be pasted behind the cabinet's front door.
- Connect ALL data cabinets to each respective location's electrical circuit complete with an appropriately rated circuit breaker.
- All Data cabinet locks can be opened by a single master key. Multiple copies of this master key will be provided to the university.
- The data cabinet lock type shown or similar to that below are REJECTED.



Figure 7. Rejected data cabinet lock and key type

### FIBER-OPTICS NETWORK EQUIPMENT DEPLOYMENT

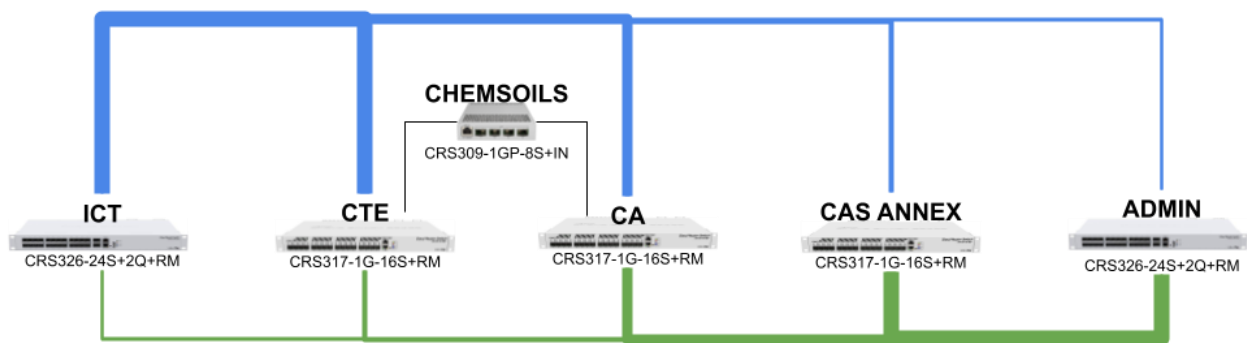


Figure 8. Fiber-Optic Network Phase 1A Equipment Deployment.

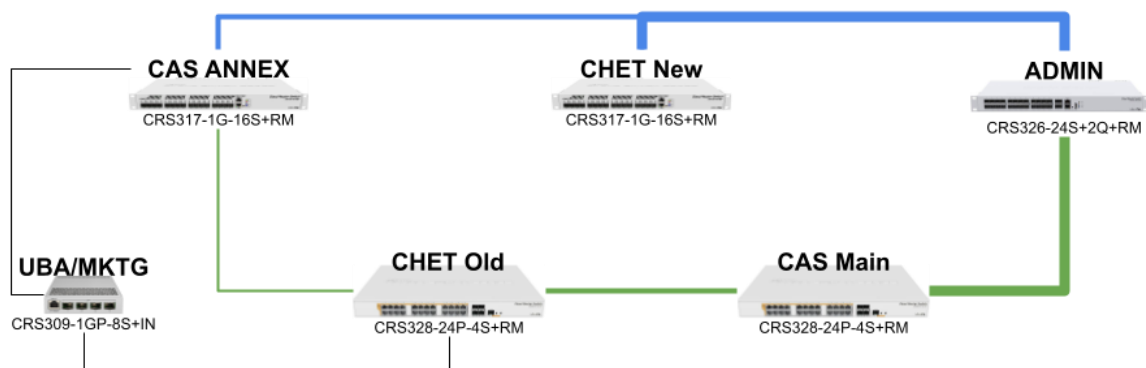


Figure 9. Fiber-Optic Network Phase 1B Equipment Deployment.



Figure 10. Fiber-Optic Network Phase 2A Equipment Deployment.

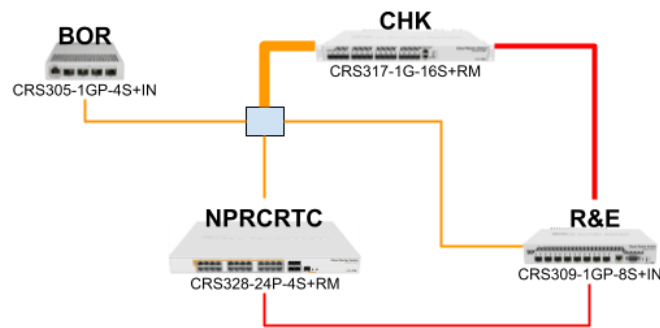


Figure 11. Fiber-Optic Network Phase 2B Equipment Deployment.

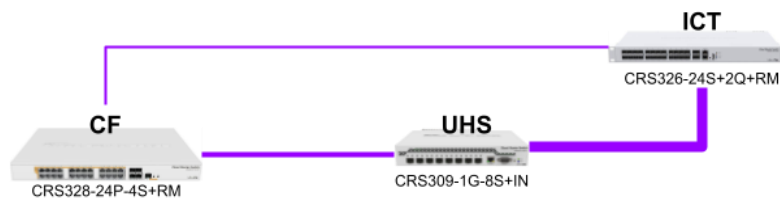


Figure 12. Fiber-Optic Network Phase 2C Equipment Deployment.

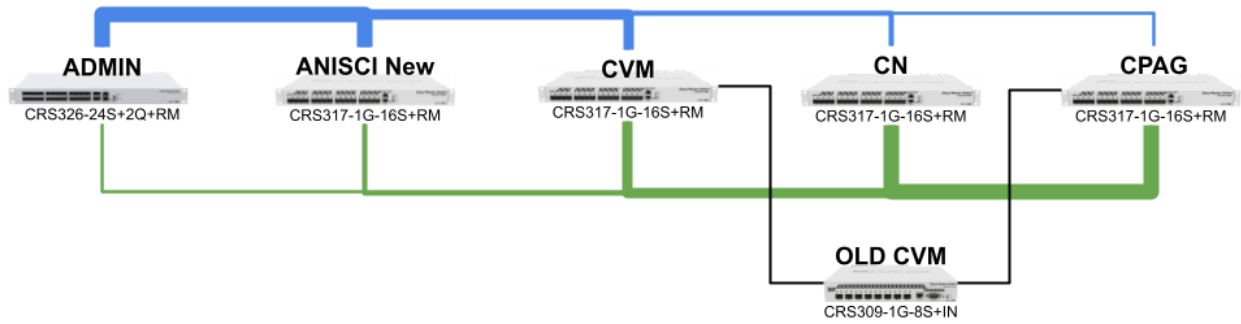


Figure 13. Fiber-Optic Network Phase 3 Equipment Deployment.