



End-to-End FTTH Outside Plant Design for a Leading North American Telco Provider



AT A GLANCE

CLIENT CHALLENGES

- Design packages to support 250,000+ living units across multiple States
- Single sourcing all elements of the outside plant design
- Import field data directly into the pre-field layout maps

CLIENT BENEFITS

- Return trips to the field, to verify ambiguous data, are virtually eliminated with this process
- Ability to create safe and repeatable designs that equate to notable cost savings
- Project management personnel and processes guide the project via proactive involvement in the design/build process

Business Need

Design packages to support the build of over 250,000 living units across multiple states for one of the major telco service providers in the United States.

RAMTeCH Solution

By utilizing high-level routing information from our client, RAMTeCH creates GIS-based pre-field layout maps for use during the walk-out of the areas under design. Least cost pathing is a high priority during this initial layout phase. Identifying paths that efficiently provide the required network and save significant capital as compared to just following “historical” routes.

By utilizing GIS-based, digital data capture methods, RAMTeCH gathers details from the field and imports data directly into the pre-field layout maps. This includes all required measurements, existing aerial, underground, and buried infrastructure details, and safety issues as well as captures this data via digital imagery and measurement techniques. Highly trained outside plant engineers use this data to design the GPON network, aligning with client specifications, at multiple RAMTeCH locations involving the following:

- GPON design
- Structural calculation, report creation, and required applications
- Safety issues identified and report for correction
- BOM and BOQ creation
- All required legacy data input to client systems
- Complete QA/QC process is employed through the process including review, in-process, with our client
- Pre-posting in the client’s proprietary records system
- Continued support during construction capturing field changes as they happen
- Compare and capture as-built changes and perform final posting in the client’s proprietary records system

Results

A critical component of success for this build focuses on single sourcing all elements of the outside plant design within the FTTH GPONs. Our solution offers efficiency and high utilization of fiber capacity and materials. RAMTeCH’s extensive and growing experience in this space allows us to recognize issues and resolve them before they become problems.