

FiberLink System Description

(Proprietary, US Patent Pending)



**PRE-ENGINEERING / NETWORK DESIGN / PERMITTING SYSTEM /
PERFORMANCE & COST TRACKING / ASSET MANAGEMENT /
CONSTRUCTION & RED-LINING / DAMAGE PREVENTION**

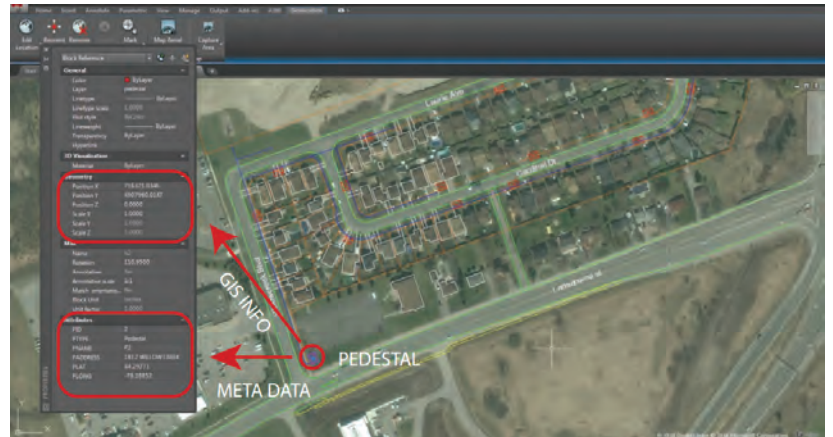
About FiberLink

A full scale business GIS-based management ERP and Asset Management system, Work Order Management and real time field reporting tool with multiple built-in modules, specifically designed and tailored for Fiber Networks.

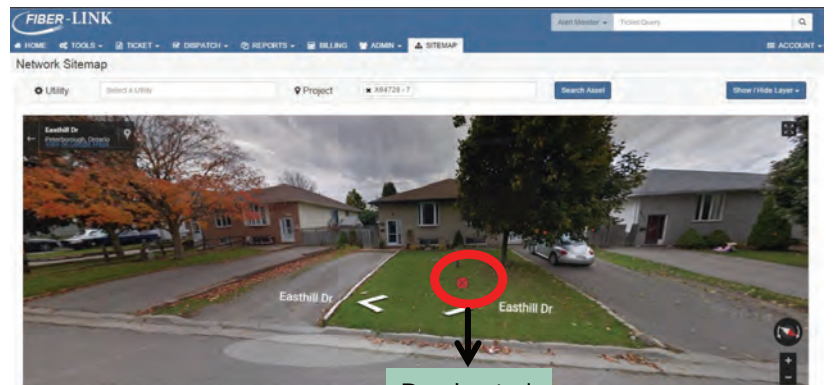
FiberLink is a cloud based Work Order Management solution that satisfies a multitude of needs that a telecommunications utility and/or telecom construction company requires. FiberLink provides fiber-network inventory and resource management, flexibility for design automation, operational control efficiencies and a complete Network Asset Management and Network Operations system. It encapsulates the full cycle of Fiber Network Design, Construction, Maintenance, and Damage Prevention in a streamlined fashion, capturing essential information from a multitude of sources during the full cycle of implementation and operations.

Fiberlink is a GIS based system and consists of modules such as: Pre-Engineering and Permitting, all aspects of Network Installations, Network Construction Management, Network Mapping and Integration of all types of Meta-Data from the field, allowing the red-lining of As-Built information, Asset Management & Network Operations Management. The system utilizes extensively Android Apps and Electronic Drawing capabilities on tablets for full scale field data collection during all aspects of construction (fiber-splicing, house-drop drilling information and maps, fiber-nid etc.),

“Fiberlink” has been designed and implemented in FTTH and FTTB operations in the Provinces of Alberta and British Columbia, Canada, supporting major contractors.



Maintain Spatial and Meta data for system updating



Street View on web GIS

Pedestal

FiberLink Features



Pre-Engineering

- Validation of preliminary network design subject to underground utilities and Municipal By-Laws;
- GIS integration of underground utilities locates along with property lines definition and Municipal By-Laws;
- Proposed underground utility path definition in respect to existing utilities and property lines;
- 3D models for underground utilities and 3D utilities visualization.



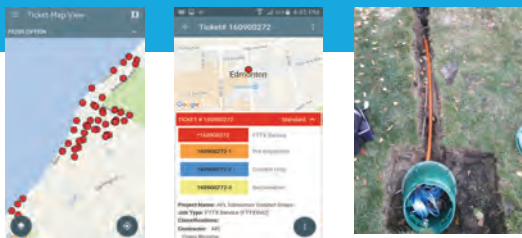
Permitting Module

- Finalized Network Designs existing already in Fiberlink can be accessed by Regulatory and Municipal Authorities on Web-GIS UI;
- Full scale cycle of alterations of proposed design capabilities along with recommendations and comments from pertinent Administrations.
- Subsequent amendments and replies to the Network Designs by Engineers;
- Electronic finalization and Permit Issuance;
- Complete elimination for additional IT and Administration resources by Municipalities;
- Dramatic increase of efficiencies and reduction of time delays.



Asset Management / On-Going Maintenance Module

- All Asset elements defined in the previous modules are available in the Asset Management Module;
- Detailed Asset information for individual elements/units such as geographical position, address asset type;
- Detailed Asset information for individual elements/units, such as Address, Asset Type (Ped, GLB, CSP), Closure Type Classification of pedestal, number of Splices, and color-codes, types and codes of Fiber in Attachments (photos, plans);
- On-Going Asset Maintenance and Repairs operations are streamlined by additional work-order management and scheduling while being facilitated by network illumination.



Network Design Module

- Ability to import existing network designs (csv or kml) into Fiberlink;
- Capability to extend Pre-Engineering results into full scale Network Design;
- Allow multiple layers management with Points, Lines or Polygon Objects.



Construction & Cost Tracking

- Full scale work-order generation (including underlying tasks such as prepping, splicing, QC, FTDR testing, remediation, house service mapping etc.) of all Network elements in Fiberlink;
- Full scale Dispatching to Contractors and Sub-Contractors, Teams and/or single employees;
- Full scale monitoring and 360 reporting of all aspects of work-order completion (time stamp, geo-positioning, supply costs etc.);
- Complete Payroll and Billing functionalities including Auditing;
- Full scale repository and storage functionalities of all pertinent information during Network installation (manholes, IDs and pictures, lengths of all assets, remediation pictures, electronic maps of house services installed etc.);
- Complete As Builts documentation (Red-Lining) accessible via android applications that enable users to flag (Red Line) any discrepancies with Engineering drawings as well as upload comments, photos and any other add on information while they are on site;
- Full scale usage of Android Apps and tablets by field crews.



Network Integrity and Damage Prevention Module

- The full scale Fiber Network information can be used by in-house locators and/or external utility locators to prevent damaging the Network by third party construction. Network Maps can be utilized in-house or externally by One-Call and Clearing Centres;
- Full scale Billing for residential and commercial users is implemented.



Hit Records