

**At STAAR we don't limit ourselves to what we know. We are always learning new technologies & design techniques to stay ahead of the curve and provide our clients with the best engineering services possible.**

## **OUTSIDE PLANT (OSP) ENGINEERING.**

Outside plant (OSP) engineering and project management are the cornerstones of our business. We provide comprehensive, end-to-end project management for all aspects of outside plant (OSP) projects. Our highly-skilled OSP engineers and project managers have extensive experience in fiber optic and copper cable plant projects for telecom companies and campus networks across the country. We have implemented Fiber to the Prem (FTTP) networks nationwide.

Our outside plant engineers and project managers are dedicated, creative thinkers with an in-depth knowledge of the telecommunications industry. With years of combined experience and expertise, our engineers are reliable, highly-organized professionals ready to oversee every aspect of your project. We are capable of completing a complex range of assignments and delivering superior results.

# OUTSIDE PLANT (OSP) DESIGN & FIELD STAKING.

We provide outside plant (OSP) field staking and design services for telecommunications companies across the country. We work closely with our clients to ensure our designs meet their unique specifications to achieve their objectives.

Our engineers and technicians utilize state-of-the-art technology and the latest industry best practices to complete a broad range of OSP and field staking projects in the telecom industry. This enables us to offer outside plant telecom solutions that are cost-effective, flexible and meet our customers' precise requirements. From the initial design through implementation, our team works to ensure your telecommunication project is a success.

## OUR OUTSIDE PLANT DESIGN & FIELD STAKING SERVICES INCLUDE:

- Detailed buried, underground and aerial staking
- State, county and railroad ROW permitting
- FTTH, FTTN and FTTP designs
- Use of USDA Rural Utilities Services (RUS)
- Detailed construction and installation field

## SUPERIOR CAD AND DRAFTING SERVICES.

At STAAR, we work closely with outside plant (OSP) engineers in the telecom industry to provide technical CAD and drafting services for fiber, coax and wireless projects. We plan, construct and outline projects for telecommunications companies across the United States.

Our highly skilled team of professional designers and drafters can help you achieve your design objectives. We establish precise, executable plans according to your unique technical and design requirements. Our seamless drafting services make for a smooth and efficient design process. We also respond quickly to the changing needs of every project, saving you valuable time and resources.

At STAAR, we're proud to utilize the latest technology. This gives us the ability to find innovative solutions for a broad range of telecommunication infrastructures, all while meeting your goals and remaining cost-efficient. From concept through completion, our drafting services are unsurpassed in the industry.

# ENGINEERING CONSULTING & TECHNICAL PROJECT MANAGEMENT.

At STAAR, we provide expertise in engineering consulting and technical project management in the telecom industry. We have a passion for solving problems and finding strategic, innovative solutions for our clients' unique demands.

Our engineers work diligently to equip our clients with comprehensive, executable plans that are focused on results. Our team of highly skilled professionals is ready to connect with you and help start reaching your goals.

# OUR ENGINEERING AND TELECOMMUNICATIONS CONSULTING SERVICES INCLUDE:

- Planning
- Design
- Permitting
- Construction & Project Management
- Partner Integration and Support

# TELECOMMUNICATION S ENGINEERING.

**Providing Expertise in State-of-the-Art Network Design Solutions.**

We pride ourselves on being at the forefront of the telecom industry. Utilizing the latest technologies, we perform every aspect of network design and telecommunications engineering for companies nationwide. Our approach to engineering is to work collaboratively with the client to ensure that the finished product is of the highest quality and the client is happy with our deliverables.

# Our telecommunications engineers are experienced in the following:

## **TELECOMMUNICATIONS ENGINEERING FOR OUTSIDE PLANT FACILITIES.**

- Fiber Optics (long haul or metro) – Circuit design, network connectivity, splicing orders, demarcation plans, writing fiber acceptance testing test plans, Macro/small cell fiber backhaul, GPON networks, auditing existing outside plant facilities to identify trouble areas and optimize the plant, and providing planning and consulting services for path design.
- Radio Frequency (RF) – Modeling systems in EDX wireless to design new infrastructure or optimize existing infrastructure. This includes two-way coverage studies, and propagation studies.
- Microwave – Path Loss calculations.

## **TELECOMMUNICATIONS ENGINEERING FOR INSIDE PLANT FACILITIES.**

- Complete audit of inside plant facilities. This service includes site visits, field notes, and an AutoCAD package.
- Provisioning / design of channel bank T1 allocations.
- Transport design – SONET
- Complete Communications Rack design this includes equipment selection, provisioning, power calculations, Network One-lines, and an AutoCAD package. Eventually STAAR Corp will have its own lab so that we can also perform Rack and Stack, as well as Factory Acceptance Testing.

## **GENERAL TELECOMMUNICATIONS.**

- System integration
- Two-way radio system design
- Working closely with the client in a consulting manner to help them in the equipment selection / vendor selection process / system design process.