

Fiber to the Home (FTTH)

Our Design Team designs and submits fiber network designs, including surveying, permitting for all local, state and federal authorities, right-of-way activities and production of construction prints. Our turnkey solutions include construction and fiber splicing to complete installation of the network design.



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EXECUTIVE SUMMARY

The COVID-19 Pandemic drove an unexpected digital surge spotlighting the need for fiber optics in communication. In addition, today's media is much higher in quality, and we expect to download and stream at a much higher rate without any interruption. Our current infrastructure of coaxial cables does not provide the capacity to support this. With the existing infrastructure bill approved last year, the demand for fiber to the home broadband connections, especially in rural areas, is at an all-time high.

Fiber optic networks are an effective method for transporting large amounts of digital information over long distances, and companies are scrambling to design and install such infrastructure. Many homes and businesses still rely on copper wiring for the last mile of internet connectivity, which is about to change in the next decade.

Fiber to the Home (FTTH) refers to the fiber optic cable to deliver broadband internet connections from a central location directly to the home. It will meet the demand for future needs. The demand for faster internet connection will continue to grow, and so will the need for FTTH. As with any fiber optic project, the quality of the installation depends on the quality of the installer.



Sample Drawings



RECENT PROJECT COMPLETED

BPG has the knowledge, experience, and understanding of how to design and deploy FTTH networks to provide future-proof technology with unlimited capacity.

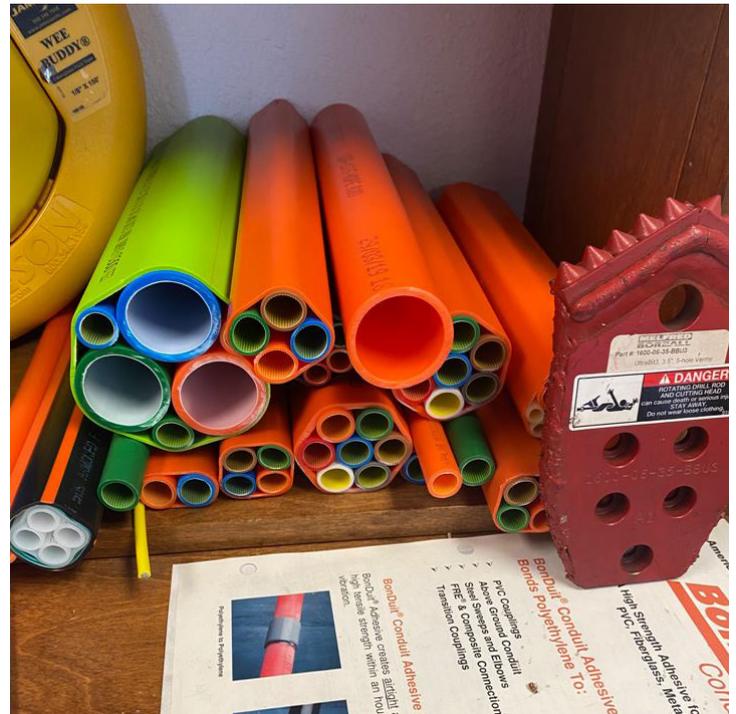
Among projects in other cities and states, our design team recently worked with a customer on an FTTH project here in Arizona. The team designed the network and submitted 1.2 million feet of fiber design (including approximately 170 permits) to get fiber to the home for over 18,000 homes.

This design utilized microduct installation of fiber to a hand hole placed outside of a home. A splitter was then used to split the fiber up to feed up to 6 additional surrounding dwellings. When a homeowner signs up for the customer's service, the fiber is pulled up to the home and installed. We used Google Earth, field survey, and [LiDAR](#) to survey the homes and locate where other cables entered to identify the most efficient path.

LiDAR Truck



Microduct



OUR PROCESS

The BPG team will take your fiber project from analysis, surveying, and design all the way to permitting and installation for your proposed area. Our [design services](#) include all work required for a robust fiber-to-the-home plan, and our design team performs permitting for all state, local and federal authorities.

We include all fieldwork to lay our fiber routes and specify fiber optic cables, determine locations for any passive optical network (PON) splitter locations, cable entrance, all permitting and right-of-way activities, and production of construction prints. A detailed needs assessment will be conducted at the start of the project to determine appropriate fiber placement options, considering geography and field environment.

Our team will communicate with you every step to keep you informed on progress and any issues that might arise.

CONSTRUCTION AND FIBER SPLICING

BPG provides aerial, underground, and air-blown fiber solutions. Whether on campus environments, last mile, or long-haul fiber cable installations, we have the equipment to install on-time and on-budget. Our fleet consists of a number of [horizontal directional drills](#), [hydrovacs](#), and a [long-haul plow](#) for rural projects. Our teams take the project from idea to completion.

Our fiber optic construction crews and [low-voltage](#) technicians are trained in aerial and underground fiber installation and the safety of our employees is of utmost importance.

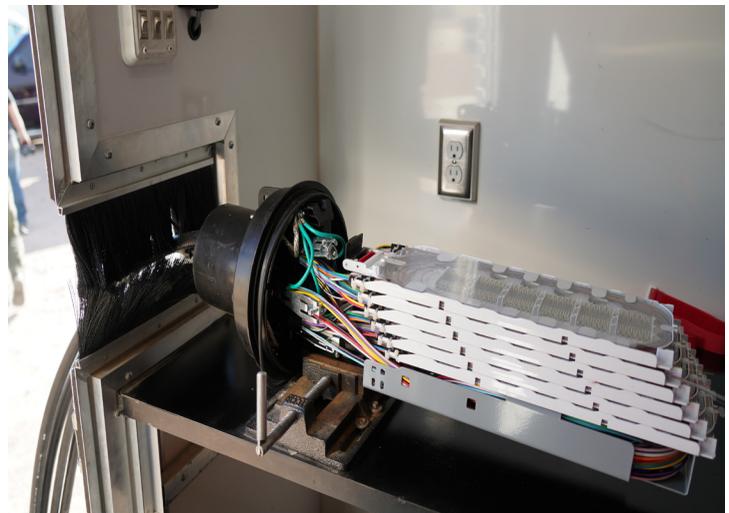
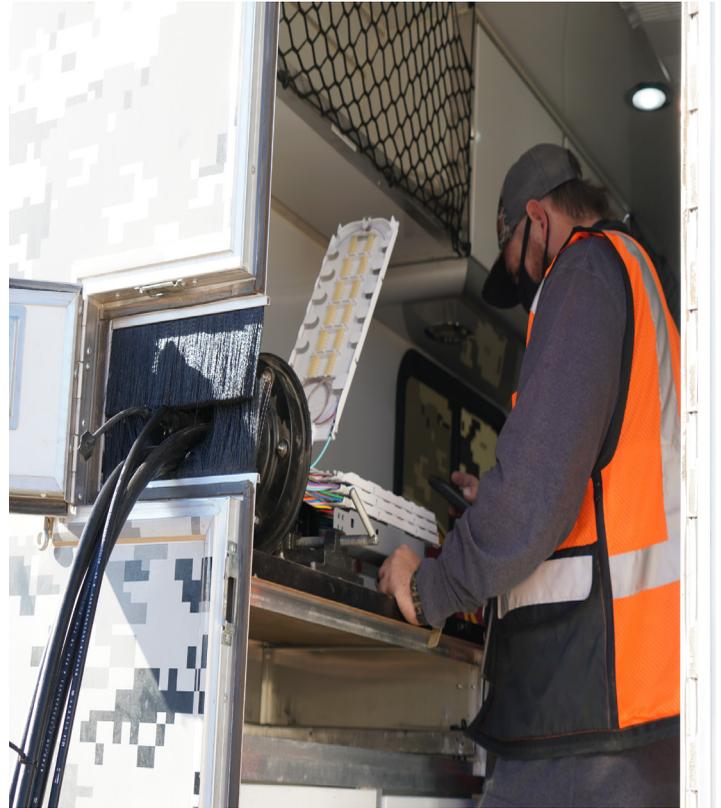
Whether you are looking for the Design, Construction, Fiber Splicing, or the entire turnkey FTTH project, we can assist you with your needs.

Pulling Fiber



MEET BPG AND THE TEAM

BPG is a Design-Build Telecommunication Infrastructure Company specializing in Turnkey Solutions from Concept to Connection for our customers. Founded in 2000 in Phoenix, Arizona, with a simple vision “That if we could provide our customers confidence knowing that they are working with the most innovative, creative, forward-thinking, technologically advanced company focused on producing results, we could reach our dreams and make a difference in the community we serve,” the company has expanded its markets with offices in Las Vegas, Nevada, San Diego, and Los Angeles, California.



When you choose BPG as a partner for your project, be assured the quality of work, attention-to-detail, and overall operational maintenance from start to finish will be exceptional. The design integration, installation, and everything that comes after is unparalleled in our industry.

Every service we provide is delivered with the intent to better the community we serve and make a difference in the lives of the people we work with on a daily basis.

For more information please [email us](#) or visit our [contact page](#).