

Placentia FiberCity® Project

- City of Placentia and SiFi Networks entered into a Development Agreement and a Smart City Agreement for the purpose of constructing a privately funded Citywide Fiber to the Premise network, delivered to all residences and businesses within the community.
- The Smart City Agreement provides for fiber optic interconnection of 31
 existing City facilities and properties, 10 Gigabit of internet connectivity, and
 provides enough bandwidth for an additional 300 service connections for
 various Smart City applications in the future.





Placentia FiberCity® Project



Helen Putnam Award for Excellence





Benefits to the City

- Privately funded.
- Citywide network promotes digital equity.
- Delivers superfast fiber internet to every home and business.
- Open access network enabling multiple service providers.
- Brings choice, competitive pricing, better customer support.
- Helps boost the city's economy.
- Retains and attracts new businesses.
- Makes the city digitally sustainable now and in the future.
- Supports Smart City applications.
- Can improve city services.





Becoming a Smart City

A Smart City fiber network provides the City with numerous opportunities to implement numerous Smart City Applications and Technologies

- Closed loop municipal fiber network is infinitely faster and more secure
- Public WiFi mesh networks
- Public safety drone programs
- Smart poles/streetlights
- Gun shot detection devices, license plate readers
- Air quality and ambient sound monitoring
- Digital media advertising and public information boards
- Smart traffic signals & collision detection devices
- Enhanced security and traffic monitoring video feeds



Placentia FiberCity® Construction Overview

- Microtrenching Equipment.
- Jetting of Service Drop Locations.
- Microduct Placement.
- Reinstatement Process Overview.
- Vault Placement.
- Cabinet and Hut Installation.
- Fiber Installation.





Microtrenching Equipment

- The microtrench machine is a rotary blade on a tractor body connected to a vacuum truck to collect asphalt grindings as it cuts the microtrench.
- The two machines work in conjunction with one another and create a relatively small footprint in the roadway.
- This process is very steady and completed quickly.



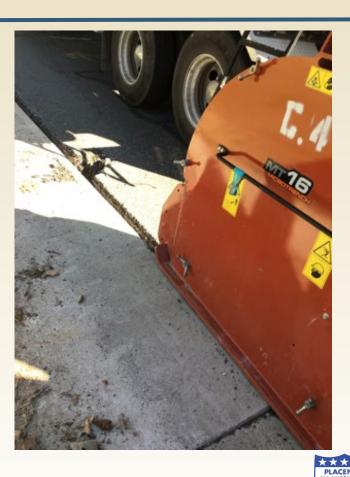




Microtrenching Equipment









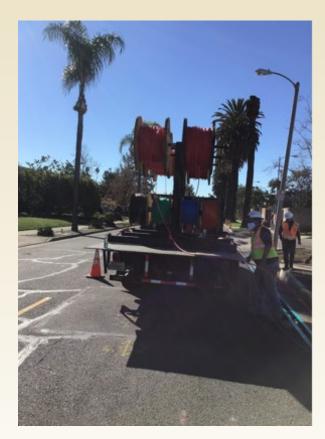
Jetting and Microduct Placement

- After the trenching operation is complete a separate crew begins to prepare the trench with a water jet attachment.
- The service drop locations are jetted to place any microduct behind the curb face.
- When the jetting work has been completed, the microduct team places various numbers of microducts in the trench.
- The number of microducts varies by location in the work zone. Some areas require more microducts to create a loop from other zones.

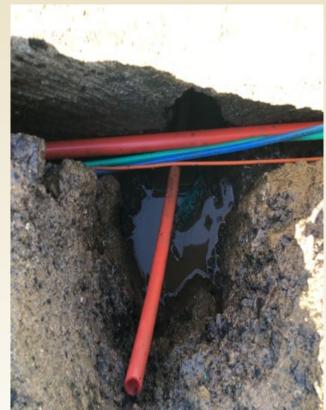




Jetting and Microduct Placement













Trench Backfill and Overband

- When the microducts have been placed, the trench is backfilled with sand to act as a bond breaker between microduct and flowable fill. The sand is tamped by manual compaction to insure coverage.
- This allows for future street projects to take place without future grinding operations accidentally pulling up the ducts that may become attached to concrete.
- The concrete backfill used is rapid set and takes very little time to set up and cure.
- Once the flowable fill application is complete, the overband is placed over concrete that creates a barrier between grade and microduct placement.









Trench Backfill Operation











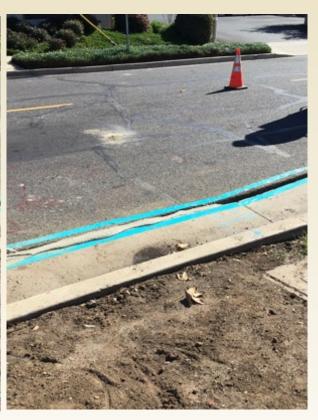


Trench Backfill Operation











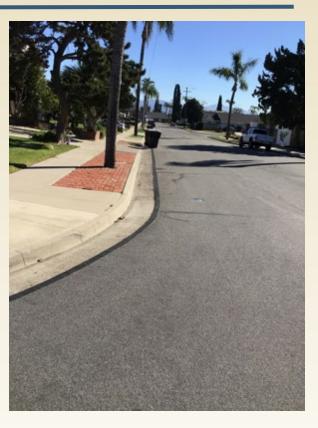


Pavement Restoration













Vault Installation





 The system is a continuous loop so in order to maintain concentricity, vaults are placed in the ROW sidewalk or parkways to continue the run of conduits in the neighborhood.





Cabinet Placement, Hut Construction, Fiber Placement

- As the microduct placement continues, cabinets are being constructed in locations in the City Of Placentia.
- The cabinets will connect to 2 central locations that will carry connectivity for the network city wide.
- As the huts are being constructed, the contractor will begin placing the fiber in the existing microducts which will connect to the main Hut sending the signal to each resident subscriber.





Cabinet Placement, Hut Construction, Fiber Placement









Community Communications

Door hangers



Leaflets



Business cards

IF YOU HAVE ANY QUESTIONS OR CONCERNS ABOUT THE **CONSTRUCTION OF THE** FIBERCITY® NETWORK PLEASE CONTACT US



CALL: 888 766 9475 **EMAIL: INFO@SIFINETWORKS.COM**





Dedicated community relations team



Community Engagement











Closing the Digital Divide

- Citywide network brings digital equity.
- Provides a connection to every home and business.
- No cherry picking.
- Access to high speed internet allows for better online learning resources, better job and training opportunities.





