SENATE COMMITTEE ON ENERGY, UTILITIES AND COMMUNICATIONS
Senator Ben Hueso, Chair
2021 - 2022 Regular

Bill No:	SB 378	**Hearing Date:**	4/26/2021
Author:	Gonzalez		
Version:	4/12/2021 Amended		
Urgency:	No	**Fiscal:**	Yes
Consultant:	Sarah Smith		

SUBJECT: Local government: broadband infrastructure development project permit processing: microtrenching permit processing ordinance

DIGEST: This bill establishes a definition for microtrenching and requires local governments to allow fiber installers to use microtrenching as a method for installing fiber unless the local government makes a specified finding that permitting microtrenching would adversely impact public health and safety.

ANALYSIS:

Existing law:

1) Establishes the authority of California Public Utilities Commission (CPUC) to regulate the practices, equipment, appliances, facilities, and services of public utilities and requires the CPUC to prescribe rules for utilities' practices, equipment, appliances, facilities, service or the methods that must be observed, furnished, constructed, enforced or employed in the provision of utility services. (Public Utilities Code §761)

2) Authorizes the CPUC to require every cable television corporation to construct, maintain and operate its facilities in a manner to protect the health and safety of its employees, customers and public. The CPUC may establish requirements for the installation, use, maintenance and operation of cable television corporation devices and facilities and require specific construction and equipment standards to ensure the safety of employees, customers, or the public. Existing law states that this authority cannot be construed to grant or deny a cable antenna television corporation the right to use a public utility's easement. (Public Utilities Code §768.5)

3) Establishes liability requirements for any individual who damages or destroys telegraph, telephone, electrical, or gas corporation equipment. (Public Utilities Code §7951 et. seq.)

4) Establishes the "Dig Safe Board" to oversee safety requirements for excavations around buried utility infrastructure. Existing law establishes requirements for excavations, creates notification requirements prior to the start of excavations, and establishes penalties for violating excavation statutes and rules. Existing law also specifies that no permit issued by a state or local agency for excavations is valid unless the permit applicant has obtained a ticket from a regional notification center. (Government Code §4216 et. seq.)

This bill:

1) Defines "fiber" as fiber optic cables, and related ancillary equipment such as conduit, ancillary cables, hand holes, vaults and terminals.

2) Defines a "microtrench" as a narrow open excavation trench that is four inches or less in width and between 12 and 26 inches in depth created for installing a subsurface pipe or conduit.

3) Requires a local agency to allow microtrenching as a method for installing undergrounded fiber unless the local agency makes a specified finding that permitting microtrenching for fiber would have a specific, adverse impact on public health and safety.

4) Allows, upon mutual agreement between a local government and an applicant, for a microtrench to be excavated shallower than 12 inches in depth in areas that are not beneath a paved roadway.

5) Requires a local agency to adopt or amend ordinances, codes, or construction rules to permit microtrenching under this bill.

6) Allows local governments to charge reasonable fees for reviewing and processing applications for a microtrenching permit.

Background

Microtrenching is a method for installing fiber optic cables, which support broadband access. Generally, higher speed broadband relies on telecommunications networks with a higher density of fiber. Multiple methods exist for deploying fiber, including attaching cables to utility poles and undergrounding fiber with other utility infrastructure. Certain utility infrastructure is undergrounded deeper below the street for safety reasons. This bill defines microtrenching as a more shallow excavation for the purpose of laying conduits for fiber installation. Under this bill, microtrenching is solely for the purpose of

installing fiber and microtrenches may not be more shallow than one foot deep unless the local government and the installing applicant mutually agree to a shallower depth for installations that are not under paved streets.

Benefits from microtrenching depend heavily on the standard adopted. While undergrounding utility infrastructure can limit certain safety risks, excavating utility trenches solely for the purpose of laying conduits for fiber can be costly and disruptive by requiring extensive digging, traffic mitigation, and repaving. Microtrenching can reduce construction costs and disruptions associated with installing fiber. These cost reductions can lower barriers to competition between different infrastructure providers and increase broadband service competition at the local level. New York City was the first large municipality to permit microtrenching on a widespread basis after successfully implementing a microtrenching pilot project to deploy fiber during reconstruction efforts after Hurricane Sandy. Since its adoption of microtrenching as a fiber installation method, the competition between fiber providers in the city has significantly increased in many commercial areas of the city, and fiber has been added in areas that previously lacked broadband infrastructure. While few cities in California have adopted uniform ordinances broadly permitting microtrenching, San Diego and Manhattan Beach have permitted microtrenching fiber projects. The City of Los Angeles adopted an ordinance in 2020 to broadly permit microtrenching for fiber.

While some local governments have experienced significant benefits from microtrenching, certain fiber deployment projects have failed due to the use of a trenching standard too shallow to prevent damage to the fiber network. Google has used microtrenching as a mechanism to bring Google Fiber service to certain cities. However, in Louisville, Kentucky, Google used a form of shallow trenching known as "nanotrenching", which installed fiber as shallow as two inches from a road's surface. This nanotrenching technique ultimately impacted the reliability of the network's infrastructure, forcing Google to cease operations in Louisville in 2019. Google has successfully used microtrenching techniques that install fiber at least six inches from a street surface in a number of other cities, including San Antonio and Austin. The microtrenching standard contained in this bill differs significantly from nanotrenching by requiring trenches that are at least 12 inches from the surface of a paved street and only allowing a shallower trench in other areas when mutually agreed upon by the locality and the installer.

State agencies are already examining options for making fiber deployment more cost-effective. The Covid-19 pandemic highlighted the degree to which a number of California communities lack sufficient broadband infrastructure. In August 2020, Governor Newsom issued Executive Order N-73-20, which directed multiple

state agencies to take actions to improve broadband access. The Executive Order specifically directed the CPUC to "…leverage utility infrastructure to increase access to existing fiber and cost-effectively deploy new fiber." The CPUC subsequently initiated a rulemaking (R. 20-09-001) to identify options to expedite deployment of reliable, fast, and affordable broadband infrastructure and services. The CPUC has identified the following as issues that will be discussed in the proceeding: infrastructure deployment strategies, economic development and recovery strategies, and strategies that support specific communities, public safety, and other critical broadband infrastructure uses. Microtrenching as defined by this bill may be an infrastructure deployment strategy the CPUC could consider as part of this ongoing proceeding.

As currently drafted, this bill may create confusion regarding the application of CPUC utility safety requirements. While existing law gives local governments' the authority to establish permitting requirements for construction conducted in public rights of way, existing law also gives the CPUC broad authority to regulate utilities, including establishing safety rules for construction and maintenance of utility infrastructure. The CPUC has adopted utility infrastructure safety requirements in a number of decisions; however, the CPUC's General Order 128 specifically enumerates the requirements for undergrounded utility infrastructure, including subsurface fiber conduits.

Excavations occurring in the vicinity of undergrounded electric and gas infrastructure can pose risks if the installer does not effectively work with utilities to locate exiting infrastructure and comply with safety requirements for installing conduits above electric and gas facilities. In 2019, a third-party contractor for fiber installation punctured a natural gas pipeline in San Francisco, causing an explosion and a fire that spread to nearby buildings. This bill does not explicitly preempt the application of CPUC General Order 128; however, it is unclear if a fiber installer would be required to comply with underground utility safety requirements pursuant to this bill because General Order 128 establishes specific requirements for fiber cables that are installed at deeper depths, closer to electrical and gas facilities.

Need for Amendments. As currently drafted, this bill requires local governments to allow fiber installers to use microtrenching as a method for deploying fiber conduits unless the local government makes certain findings. However, this bill does not explicitly require subsurface fiber installations conducted pursuant to this bill to comply with CPUC utility safety requirements or Dig Safe Board requirements. *To clarify that tise bill does not preempt these safety requirements, the author and committee may wish to amend this bill to specify that this bill does not limit the application of Dig Safe rules and the CPUC's General Order 128 or a successor order.*

Prior/Related Legislation

AB 41 (Wood, 2021) would require each fixed ISP to provide certain public notifications about where it has deployed broadband. The bill also requires the California Department of Transportation (CalTrans) to develop guidelines and specifications for the deployment of broadband infrastructure using a microtrench. The bill is currently pending in the Assembly.

SB 1206 (Gonzalez, 2020) contained provisions substantially similar to some in this bill. The bill would have required CalTrans to develop a model ordinance for local governments to follow when permitting fiber installations using microtrenching. The bill died in the Senate.

AB 980 (Wood, 2017) would have required CalTrans to install broadband conduits capable of supporting fiber optic communication cables in certain priority areas identified by the CPUC throughout the state. The bill died in the Assembly.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: Yes

SUPPORT:

Crown Castle, Sponsor
Bay Area Council
BizFed
California Apartment Association
California Builders Alliance
California Building Industry Association
California Business Properties Association
California Retailers Association
California School Boards Association
California Wireless Association
Chula Vista Chamber of Commerce
Garden Grove Chamber of Commerce
Greater Sacramento Economic Council
Harbor Association of Industry & Commerce
Sacramento Regional Builders Exchange
San Francisco Chamber of Commerce
Silicon Valley Leadership Group
South Bay Association of Chambers of Commerce
Wireless Infrastructure Association

OPPOSITION:

City of Beverly Hills
City of San Jose
Keep Baldy Wild
Safe Technology for Santa Rosa
Santa Barbara Green Sisters
Southern California Public Power Authority
www.gmoscience.org
12 Individuals

ARGUMENTS IN SUPPORT: According to the author:

> SB 378 is a measure that is designed to help close the digital divide now and in the future. The COVID-19 pandemic has made it clear that Californians need broadband connection as quickly as possible. Laying fiber is a critical component to support broadband connection and to bring advanced, fast and reliable internet services, whether to the home, community or somewhere in between. Further, the cost of laying fiber is still the most expensive part of bringing broadband to new places. By lowering installation costs and speeding up deployment of fiber hundreds of thousands of Californians will be able to access the internet to complete their school work, access telehealth services, work remotely, and much more. This is a critical measure that can help our communities close the digital divide in a quick and cost effective way.

ARGUMENTS IN OPPOSITION: Opponents argue that this bill limits a local government's ability to require fiber deployment in the manner deemed best by the locality, including the establishment of public-private partnerships that leverage permit authority to deploy broadband to unserved and underserved communities. Opponents also argue that the bill does not clearly require fiber installers to expressly comply with safeguards that prevent excavations from interfering with undergrounded utility infrastructure. In opposition, the Southern California Public Power Authority (SCPPA) states the following:

> Although SCPPA appreciates the need to provide high-speed internet to Californians in a quick and cost-effective manner, that need can be accomplished in a way that does not jeopardize the safety and integrity of POU infrastructure. Accordingly, SCPPA's concerns with SB 378 can be addressed by preserving the ability of a POU to apply standards that address safety, reliability, and engineering and operational concerns.

-- END --