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Monday, April 13, 2020

**Re: California Geotechnical Engineers' Association (CalGeo)
State of California Executive Order N-33-20
Critical Infrastructure Workers Classification for Geotechnical Engineers**

CALGEO'S POSITION ON CRITICAL FUNCTION OF GEOTECHNICAL PROFESSIONALS DURING THE COVID-19 PANDEMIC

The California Geotechnical Engineers' Association (CalGeo) hereby confirms that geotechnical professionals* and geotechnical engineering firms provide essential services in maintaining critical infrastructure; provide professional services required to support legally mandated construction activities; and are mandated by licensure and ethics to safeguard life, health, property and public welfare. During this unprecedented time in the history of the State of California and in the world, it is imperative that geotechnical engineering firms continue their critical support activities in construction and hazardous-waste mitigation sectors.

EXECUTIVE ORDER N-33-20

Governor Newsom issued Executive Order N-33-20 on March 19, 2020 directing residents of the State of California to stay at home, except as necessary to maintain critical infrastructure.

On March 22, 2020, the California State Public Health Officer and Director of the California Department of Public Health issued the following:

"...order all individuals living in the State of California to stay home or at their place of residence except as needed to maintain continuity of operations of the federal critical infrastructure sectors, as outlined at <https://www.cisa.gov/identifying-critical-infrastructure-during-covid-19>. In addition, and in consultation with the Director of the Governor's Office of Emergency Services, I may designate additional sectors as critical in order to protect the health and well-being of all Californians.

The federal government has identified 16 critical infrastructure sectors whose assets, systems, and networks, whether physical or virtual, are considered so vital to the United States that their incapacitation or destruction would have a debilitating effect on security, economic security, public health or safety, or any combination thereof. I order that Californians working in these 16 critical infrastructure sectors may continue their work because of the importance of these sectors to Californians' health and well-being."

There was no specified end date to this order. This order imposes statewide restrictions similar to earlier local orders to "Shelter in Place" issued by Bay-Area counties and Los Angeles's "Safer at Home" public order.



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The March 22nd [State Public Health Officer's document included a list of "essential critical infrastructure workers"](#) to clarify who, if their critical work necessitates it, may perform those critical functions at locations other than their residence. As it pertains to construction industry and, particularly, geotechnical operations that support that industry, the State Public Health Officer's list includes the following:

- Construction workers who support construction, operation, inspection and maintenance of construction sites and construction projects (including housing construction).
- Workers such as plumbers, electricians, exterminators, and other service providers who provide services that are necessary to maintaining the safety, sanitation, construction material sources, and essential operation of construction sites and construction projects...

On March 19, the [Department of Homeland Security issued guidance on "Identifying Critical Infrastructure During COVID-19."](#) This document provides detail with respect to a March 16 guideline by the President, stating that:

"If you work in a critical infrastructure industry, as defined by the Department of Homeland Security, such as healthcare services and pharmaceutical and food supply, you have a special responsibility to maintain your normal work schedule."

Department of Homeland Security (DHS) guidance identifies [16 "critical infrastructure sectors,"](#) and critical functions within each. Construction of facilities in these sectors, including necessary engineering design and other engineering functions, is generally included. "Critical infrastructure workers" include:

- Workers to ensure continuity of building functions, including but not limited to security and environmental controls (e.g., HVAC)... and the permits and inspections for construction supporting essential infrastructure.
- Workers supporting essential maintenance, manufacturing, design, operation, inspection, security, and construction for essential products, services, and supply chain and COVID-19 relief efforts.
- Workers supporting the construction of housing, including those supporting government functions related to the building and development process, such as inspections, permitting and plan review services...

This DHS statement clarifies that the *"list is advisory in nature"* and *"is not, nor should it be considered, a federal directive or standard."*



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ADDITIONAL COUNTY-SPECIFIC RESTRICTIONS ON CONSTRUCTION

On Tuesday March 31st, six Bay Area Counties (Alameda, Contra Costa, Marin, Santa Clara, San Francisco and San Mateo), as well as the City of Berkeley, extended their previous Shelter-In-Place Orders through May 3, 2020, with stricter limitations on construction. The new Orders went into effect at 11:59 p.m. PDT on Tuesday, March 31, 2020, requires people to stay at home except for doing essential activities, and prohibits most residential and commercial construction. Their Orders provided an exception for “*Essential Businesses*,” which includes Construction, but only for the types listed below:

1. Projects immediately necessary to the maintenance, operation, or repair of Essential Infrastructure;
2. Projects associated with Healthcare Operations, including creating or expanding Healthcare Operations, provided that such construction is directly related to the COVID-19 response;
3. Affordable housing that is or will be income-restricted, including multi-unit or mixed-use developments containing at least 10% income-restricted units;
4. Public works projects if specifically designated as an Essential Governmental Function by the lead governmental agency;
5. Shelters and temporary housing, but not including hotels or motels;
6. Projects immediately necessary to provide critical non-commercial services to individuals experiencing homelessness, elderly persons, persons who are economically disadvantaged, and persons with special needs;
7. Construction necessary to ensure that existing construction sites that must be shut down under this Order are left in a safe and secure manner, but only to the extent necessary to do so; and
8. Construction or repair necessary to ensure that residences and buildings containing Essential Businesses are safe, sanitary, or habitable to the extent such construction or repair cannot reasonably be delayed.

BASIS FOR CALGEO’S POSITION

In forming this position, CalGeo has considered the following:

- The California Professional Engineers Act requires Civil and Geotechnical Engineers, by virtue of licensure and professional ethics, to “*safeguard life, health, property, and public welfare.*” Engineers do so through “*Supervision of the construction of engineering structures*” by providing “periodic observation of materials and completed work to



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determine general compliance with plans, specifications, and design and planning concepts” according to the Act.

- Local Orders identify “*professional services, ..., when necessary to assist in compliance with legally mandated activities*” as essential businesses. When completing on-site observations of construction, Civil and Geotechnical Engineers are providing services mandated by the California Building Code.
- Active construction projects, such as schools and universities, medical facilities, and commercial facilities, approved for construction require proper, code-mandated, observation and assistance in compliance with design intent and construction plans. Improper or inadequate coordination of construction now, can increase the risk of harm to the general public through less than best construction implementation, which may result in poor performance during other future disasters, such as earthquakes.

The geotechnical and geo-environmental professions in California have long been a cornerstone of safety of the environment, protecting the public from the worst consequences of earthquakes and other hazards. The professionals within the industry are critical to California’s future and ability to weather disasters affecting the built environment. Therefore, Civil and Geotechnical engineers, Professional Geologists, Certified Engineering Geologists and Hydrogeologists, along with the services their firms provide such as site investigation, design, materials testing, and hazardous materials characterization and remediation, are a necessary part of active construction and hazardous materials clean-up projects and should be considered an essential part of the workforce.

PERFORMANCE OF CRITICAL GEOTECHNICAL-ENGINEERING FUNCTIONS DURING THE COVID-19 PANDEMIC

CalGeo recognizes that the COVID-19 pandemic threatens the health and well-being of engineers, geologists and field technicians performing their functions and of the public in general; that inter-personal contact has been identified as the means of transmission for this pandemic; and that minimizing risks caused by personal contact is a civic responsibility.

CalGeo is committed to developing and disseminating best practices regarding fulfillment of critical engineering functions in a manner consistent with both our ethical obligations and our civic responsibility. This guidance will be expanded and amended as appropriate in light of emerging public orders, municipal practices, and other developments. At this time, CalGeo has the following recommendations:

- **Work-at-home:** CalGeo recommends that work be done remotely at home rather than in the office or on the job site, except for specific items that require in-person, on-site observation.



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- **Implement virtual site visits:** CalGeo recommends that engineers work with contractors to utilize video and other technology to facilitate remote site observation and reduce the need for in-person site visits. Periodic in-person observation may nevertheless be appropriate (if not essential), with frequency and duration reduced by using virtual visits whenever possible.
- **Reduce in-person site visits:** CalGeo recommends that in-person site visits be thoroughly planned in advance, including the need for personal protective equipment, the need to share space or come relatively close to other site workers such as safety meetings, handling samples and testing equipment. Any indoor in-person meetings should be avoided in favor of web meetings. CDC recommendations for maintaining interpersonal distance and minimizing transmission risk should be followed.
- **Implement municipal construction-site COVID-19 protocols:** When available, follow local municipal guidance for construction-site COVID-19 protocols, such as promulgated by the City of Los Angeles Department of Building and Safety (adding face coverings); see:
<https://ladbs.org/docs/default-source/publications/misc-publications/construction-site-guidance.pdf>
- **Implement electronic report and plan submittals:** CalGeo recommends that jurisdictions take immediate action to implement touchless, paperless submittals and reviews, including allowing reports and plans to be submitted electronically, via PDF or other electronic means, allow for on-line payment of review/plan check/permit fees, and virtual meetings. The California Geological Survey (CGS) system for uploading school and hospital geohazard reports provides a good example for local municipalities to follow.

CalGeo remains committed to the safety and well-being of our members, geotechnical professionals across California (and the world) and general public.

Sincerely,

Christopher M. Diaz, PE GE
President, CalGeo 2019-2020

Representing geotechnical professionals* throughout the State of California

*California-licensed Civil Engineers (geotechnical emphasis), Geotechnical Engineers, Professional Geologists, Certified Engineering Geologists and Hydrogeologists.