

January 14, 2021

Dominic Gagnon Vice President of Facilities Maine Medical Center 22 Bramhall Street, Portland, Maine 04102

Subject: Maine Congress St. Building Easement for Temporary Support of Excavation (SOE) System - Gilman St

As part of the construction of the new Congress St Building for MMC a temporary SOE system is required to perform excavation work from street level (varies from El 43 to El 58) to the bottom of excavation at elevation 32. Due to the location of the foundation elements along Gilman Street approximately 200 lf of this temporary SOE system is required to be installed within the Right of Way (ROW) along Gilman Street. Following is a description of the temporary SOE system, installation, and removal.

The temporary SOE system has been engineered and stamped by a professional engineer employed by the installing contractor Keller North America. The system is comprised of driven soldier piles, wood lagging and tiebacks where required by engineered calculations. The system requires the installation of approximately 200 lf of soldier piles and lagging and 13 tiebacks along Gilman St. in order to reach the required depths of excavation at the northern end of the foundation (Building column lines C through E). Soldier piles and lagging will be installed approximately 3' into the Gilman St ROW with 13 tiebacks extending 42'-52' below grade under Gilman St. Soldier piles from building line F to E will be set in drilled shafts backfilled with flow fill. The remaining soldier piles will be driven every 7'-8' along the length of the system. All utility companies will be notified prior to the installation of tiebacks. In addition, we will provide a video file of the length of sewer line from SMH 8 to SMH 6. Temporary SOE will be monitored for movement in accordance with the project specifications.

We are scheduled to excavate to elevation 32 (Bottom of Excavation) in July/August 2021 and perform foundation backfilling operations from November 2021 through January 2022. Upon completion of the Congress St Building foundation installation and during backfill operations, the temporary tiebacks will be de-tensioned and the soldier piles and lagging will be cut off and removed to a depth of 4' below grade.

The Temporary SOE consists of three phases; <u>Phase 1 - SW Corner</u> which extends form the new secant wall to building column line E on Gilman St.; <u>Phase 2 - Gilman/Congress</u> continues form column line E on Gilman St to column line 11.5 on Congress St.; <u>Phase 3 - East End</u> continues along column line 11.5 returning south to the new secant wall.

The portions of Phase 1 and Phase 2 along Gilman St require the easement from the city for the ROW at Gilman St. Phase 2 along Congress Street is still in the design /engineering phase. I have included the draft documents for review.

Attached please find the following documents related to the installation of the Temporary SOE system along Gilman St and Congress St:

- 1. Keller North America Response to City of Portland email dated 1/15/21.
- 2. Simpson Gumpertz and Heger Specification Section 315001 Temporary Support of Excavation Performance Based.
- 3. Simpson Gumpertz and Heger Drawing SE00-1 General Notes Rev 7 dated 5/11/20.
- 4. SW Cole Geotechnical Report 16-1136 S Addendum NO.1 dated 12/20/19.
- 5. Earthwork Engineering Inc. Temporary SOE Design Submittal (No CS315001-SOE-0002-1) dated 12/31/20. (Phase 1)
- 6. Earthwork Engineering, Inc. Paul A Deterling, PE Resume.
- 7. Temporary SOE Gilman St / Congress St Draft w/mark ups (Phase 2)

Please feel free to call me with any questions or if you require any additional information.

Sincerely,

Patrick Carroll
Senior Project Manager
Turner Construction Company