



22 June 2022

Mr. Raul Velez
General Manager
Sutro Tower Inc.
1 La Avanzada Street
San Francisco, CA 94131

Project 067199.11 – Condition Assessment of Sutro Tower

Dear Mr. Velez:

At your request, Simpson Gumpertz & Heger Inc. (SGH) provided oversight and engineering support for tower condition assessment and repair work performed in 2020. Under the agreement with the City of San Francisco (the “Standard Conditions”), Sutro Tower performs annual inspections of 1/3 of the tower, consisting of one of the three legs and the horizontal framing on one face, each year. In accordance with the inspection protocol, these inspections are typically rotated such that the entire tower is inspected over a three-year period.

On a five-year schedule, the inspection agreement calls for an in-depth inspection to identify problems which may not be readily detectable with a visual review in the annual inspection, such as evaluation of guy wire tension and inspection of welds of tower leg columns to their base plates.

SGH provided Electronics Research, Inc. (ERI) and Sutro Tower inspection protocols and a series of standard forms for recording observations. ERI used a slightly modified version of this form, containing all required information, and accompanying commentary and photographs documenting their observations. ERI’s observations are documented in a report entitled: *Field Inspection Report, NE Stack C, Leg C, and South Truss Levels 2-6*, dated 1 September 2021. We also reviewed a report by Best Endeavors, entitled *Tower Guy Tension Report*, 5 January – 14 January 2021, and ERI supplemental report No. 367789L, dated 29 June 2020.

We reviewed these reports and performed on-site observations of conditions reported therein as needed to clarify the conditions reported. We also performed calculations as necessary to determine if corrective action is required for items reported as structural damage. Most of ERI’s observations of structural conditions involved bolts, and nuts, exhibiting rust in varying amounts. We recommend treatment and/or replacement of these bolts and nuts as described

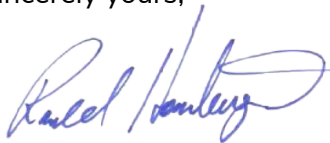
in the ERI Corrosion Control Standard Operating Procedure, STI-SOP-001 dated 6 July 2021. Table 1 below summarizes the other significant structural observations noted by ERI as requiring additional engineering evaluation and our recommendations for corrective actions as required. None of these conditions appear particularly severe and should be addressed as part of routine maintenance to occur over the next year.

Table 1: Summary of Exception Items Evaluation

No.	Location	Description	Action Required
2	Stack C Column leg a, Elev 6.32	Minor rust on bracket	Treat per SOP-001
3	Stack C Column leg b, Elev 6.32	Minor rust on bracket	Treat per SOP-001
4	Stack C Column leg a, Elev 6.26	Minor rust on bracket	Treat per SOP-001
5	Stack C Column leg b, Elev 6.26	Minor rust on bracket	Treat per SOP-001
6	Truss level 6 – Stack Guy system	Rust on cotter pins	Replace pins
37	Truss level 6 – 6.4-6.5	Loose stitch bolt on diagonal	Confirm tightened
38	Truss level 6 – 6.4-6.5	Loose stitch bolt on vertical	Confirm tightened
39	Truss level 6 – 6.6	Missing stitch bolt on vertical	Replace
40	Truss level 6 – 6.5-6.6	Loose stitch bolt on diagonal	Confirm tightened
41	South truss level 6 chord	Deformed flange on chord	No action required
42	Truss level 6 – 6.22	Loose bolts, diagonal	Confirm tightened
43	Truss level 6 – 6.24	Loose bolts, wind brace	Confirm tightened
54	Throughout	Strand dampers in poor condition	Replace

Please let us know when you are prepared to conduct the next annual inspections so that we may provide the appropriate forms and instructions.

Sincerely yours,



Ronald O. Hamburger, S.E.
Senior Principal
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