



To: John Egan, PE, GE
Ron Hamburger, PE, SE
Phil Lovett
Kristin Gonsar
Greg Deierlein
Marko Schotanus
Craig Shields
Shah Vahdani

From: Debra Murphy, PE
Nathaniel Wagner, PE, PhD

Date: February 11, 2021

Project Number: 19-009

Subject: 301 Mission Retrofit Monitoring Report A: Results as of February 1, 2021

CONTEXT

This memorandum summarizes results from the monitoring plan implemented at the 301 Mission property. Instrumentation to monitor the structure prior to, during and after the retrofit was installed in January 2021, including piezometers and extensometers. Settlement markers installed in April 2009 and January 2017, survey prisms mounted on the exterior of the structure in December 2016, and crack gauges installed in April 2009 have also been monitored. This memorandum and the attached figures present pre-construction recordings, with measurements made through February 1, 2021. The figure numbering is set to be consistent with future memos for clarity and only those figures listed herein are included for Report A. Report A is developed at the request of the Engineering Design Review Team on February 2, 2021.

INTERPRETATION

Figure A-01 presents the instrument locations as referenced in later figures. Figure A-02 presents the historical settlement data interpreted from settlement markers installed on the B-1 Level of 301 Mission Tower. In addition, data from recent surveys are included. Figure A-05 presents historical lateral roof deflections in the project north-south and project east-west directions interpreted from survey prisms mounted on the exterior of the Tower, from InSAR data, and from a planar fit of the settlement marker data. In addition, data from recent surveys are included. Figure A-07 presents the historical groundwater elevation interpreted from piezometer readings at locations near 301 Mission.

CLOSING

Please contact us if you have any comments or questions, or if you would like to discuss the results presented in this memorandum.

FIGURES

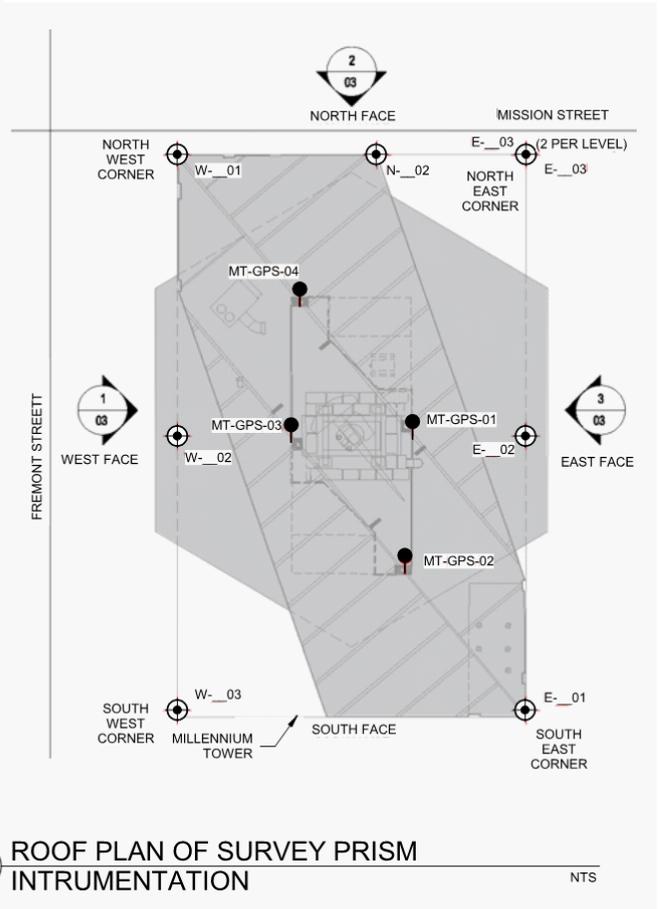
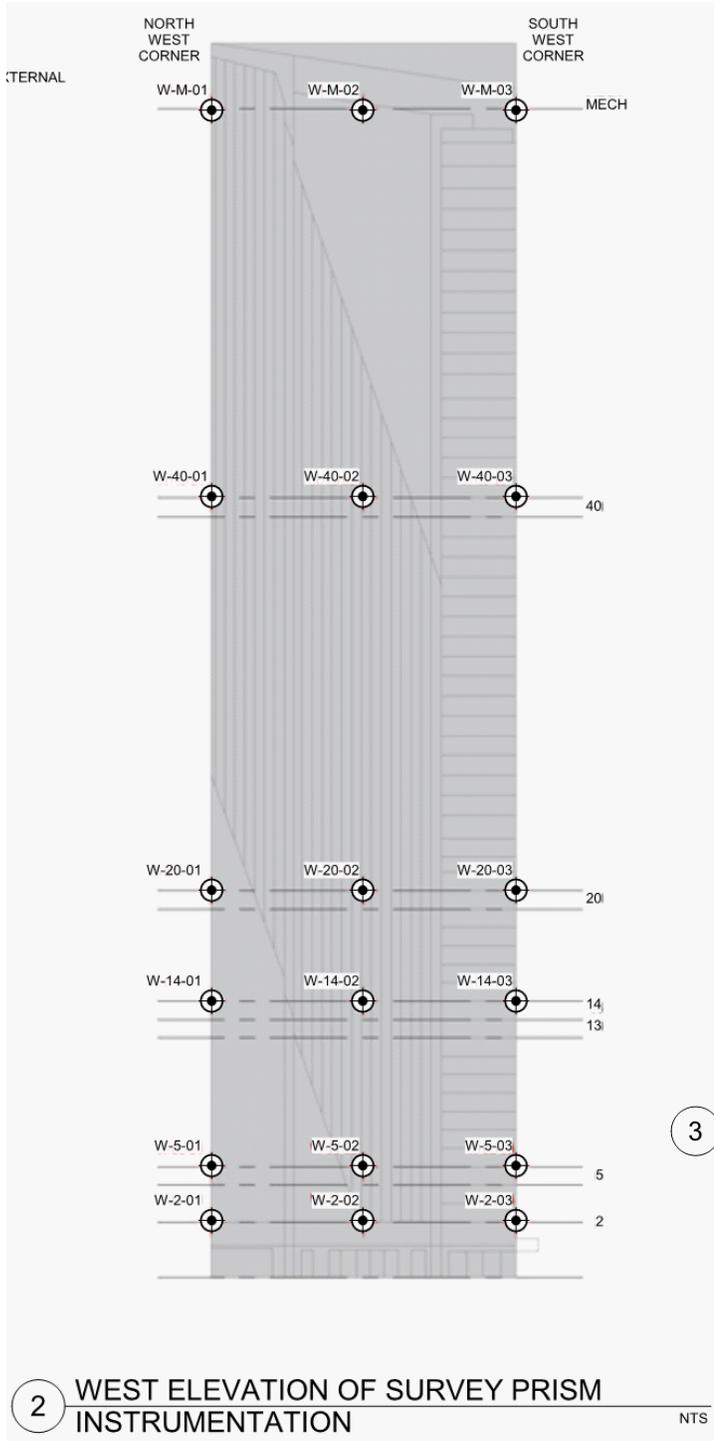
Figure A-01A – Instrument Location Map, Settlement Markers, Piezometers, Extensometers

Figure A-01B – Tower Survey Prism Location Schematic

Figure A-02 – Historical Settlement Marker Data

Figure A-05 – Historical Lateral Roof Deflection Data

Figure A-07 – Historical Groundwater Elevation Measurements at Locations Near 301 Mission



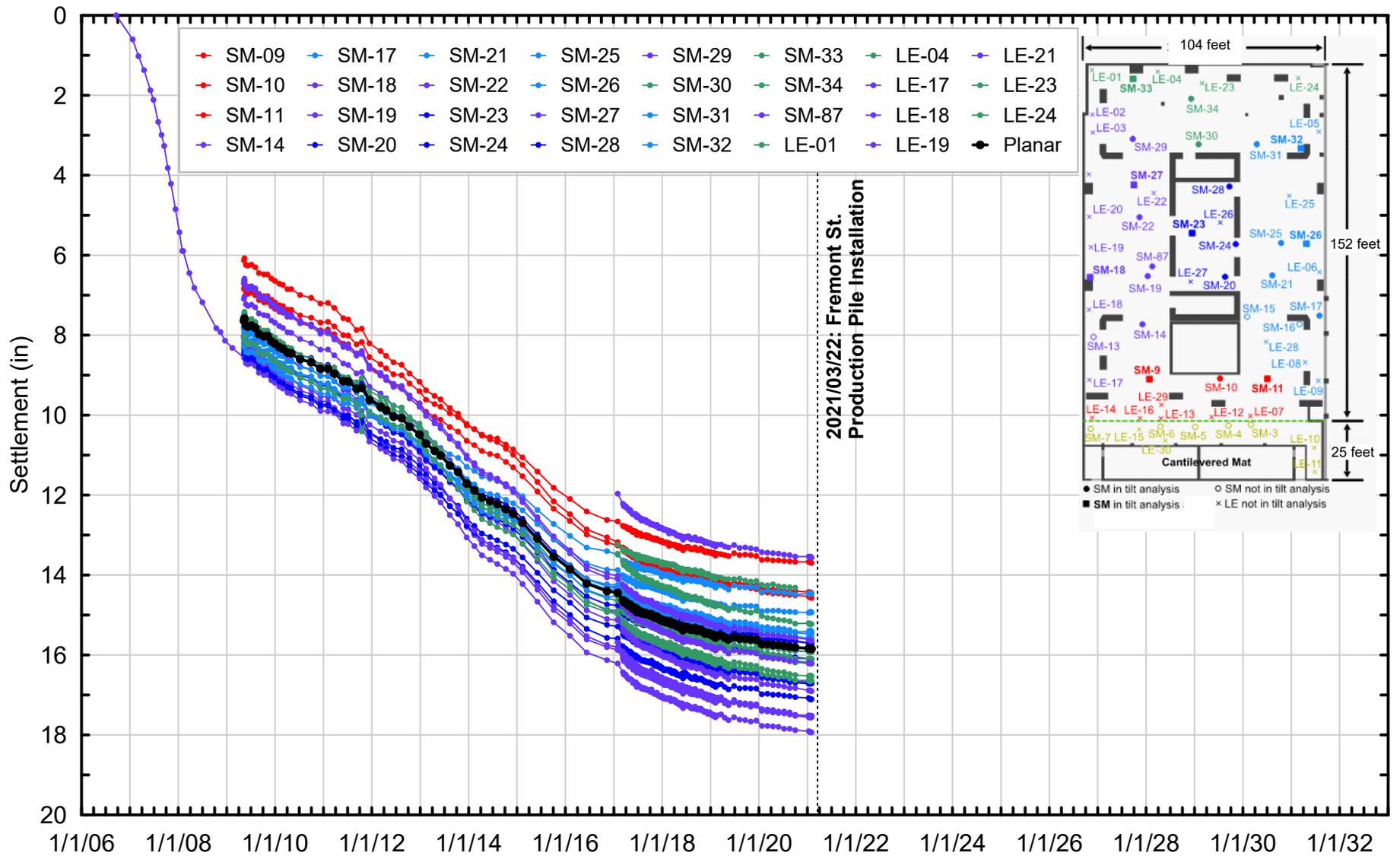
From 301 Mission Perimeter Pile Upgrade IFC 2020-02-25

Project No: 19-009	Date: 2/11/2021	Created By: NBW	Checked By: DGM	Figure No: A-01B
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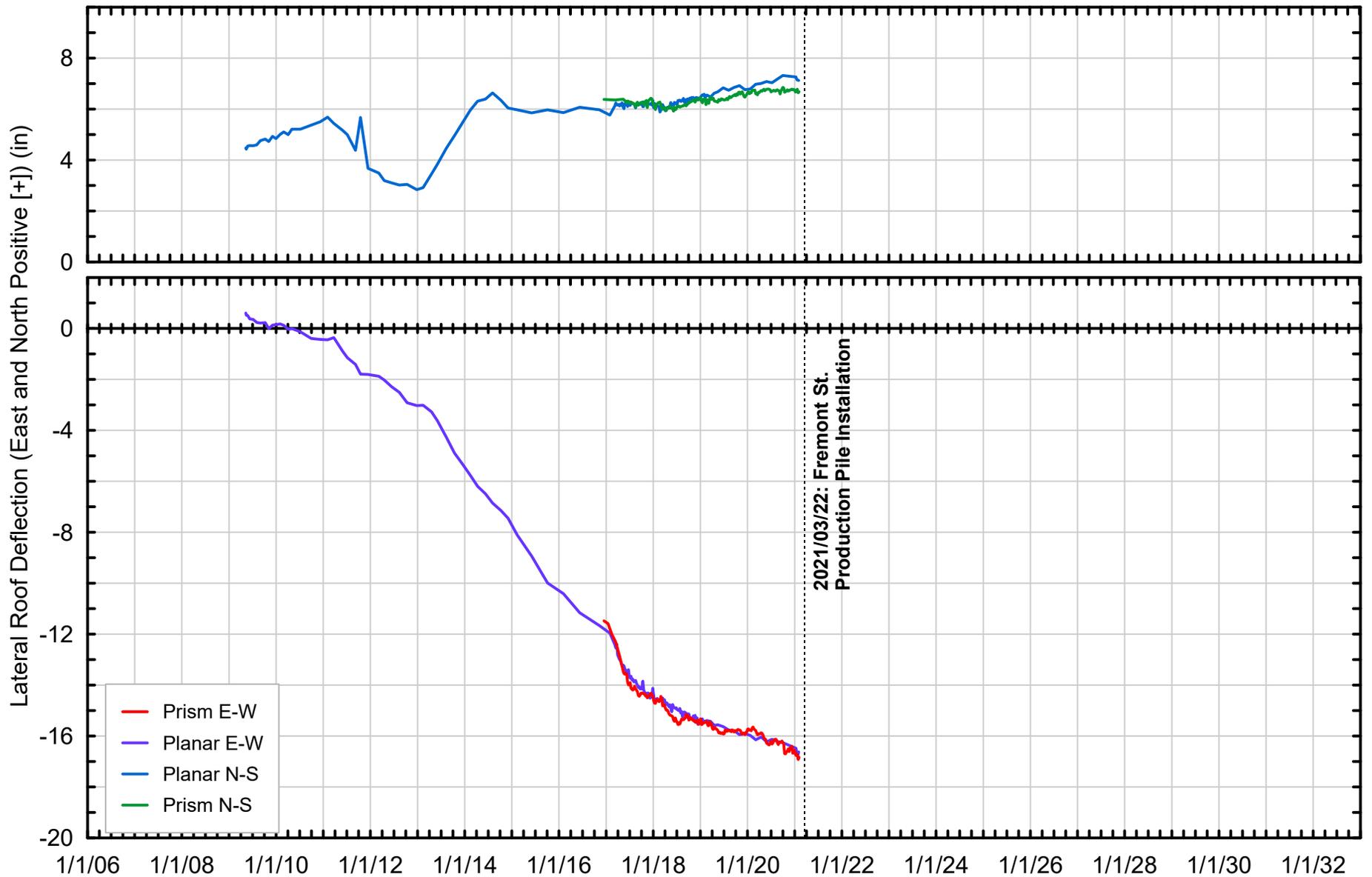


TOWER SURVEY PRISM LOCATION SCHEMATIC

Instrumentation Monitoring for the Perimeter Pile Upgrade
City and County of San Francisco, California



Project No: 19-009	Date: 2/11/2021	Created By: NBW	Checked By: DGM	Figure No: A-02
		HISTORICAL SETTLEMENT MARKER DATA		
		Instrumentation Monitoring for the Perimeter Pile Upgrade City and County of San Francisco, California		

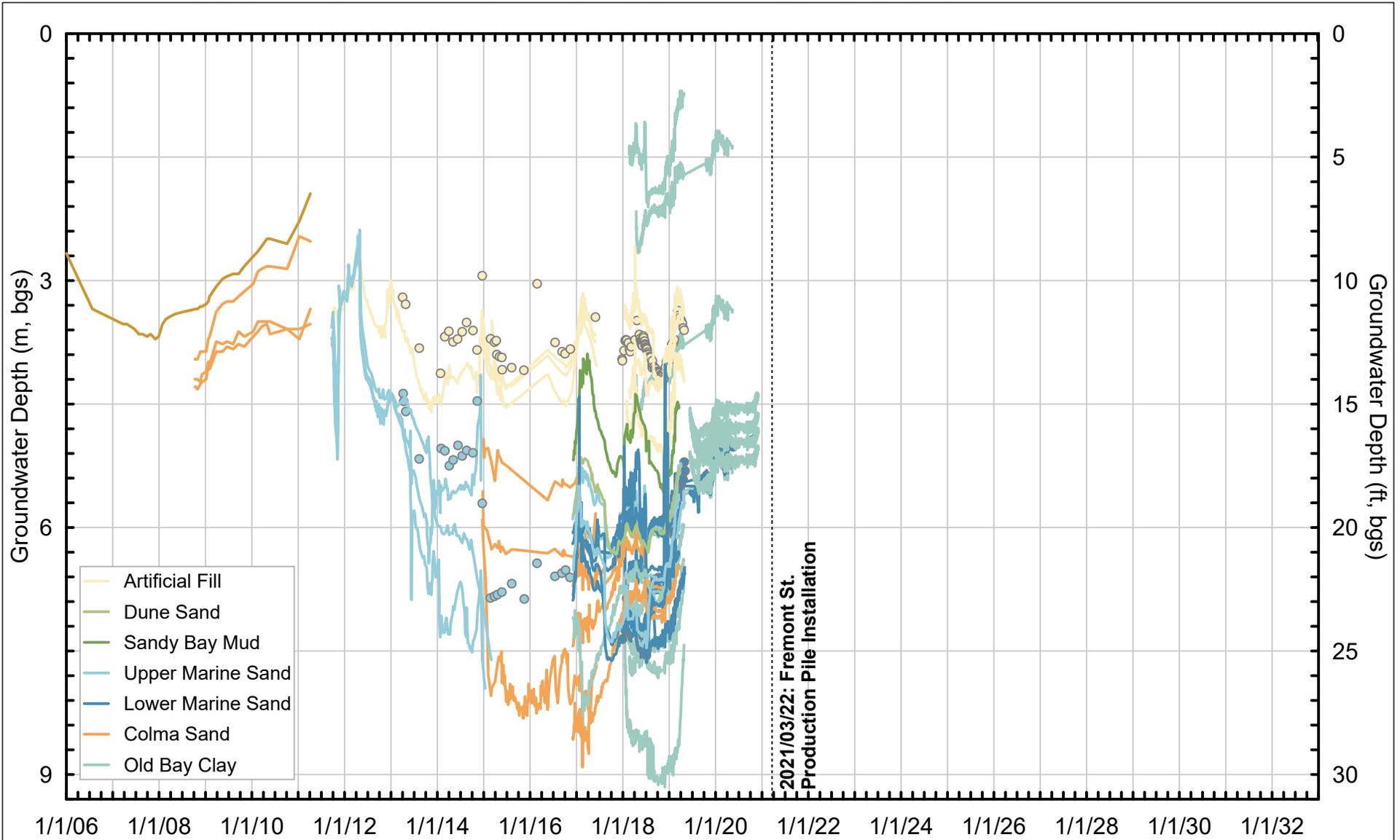


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HISTORICAL LATERAL ROOF DEFLECTION DATA

Instrumentation Monitoring for the Perimeter Pile Upgrade
City and County of San Francisco, California



Project No: 19-009	Date: 2/11/2021	Created By: NBW	Checked By: DGM	Figure No: A-07
		HISTORICAL GROUNDWATER ELEVATION MEASUREMENTS AT LOCATIONS NEAR 301 MISSION		
		Instrumentation Monitoring for the Perimeter Pile Upgrade City and County of San Francisco, California		