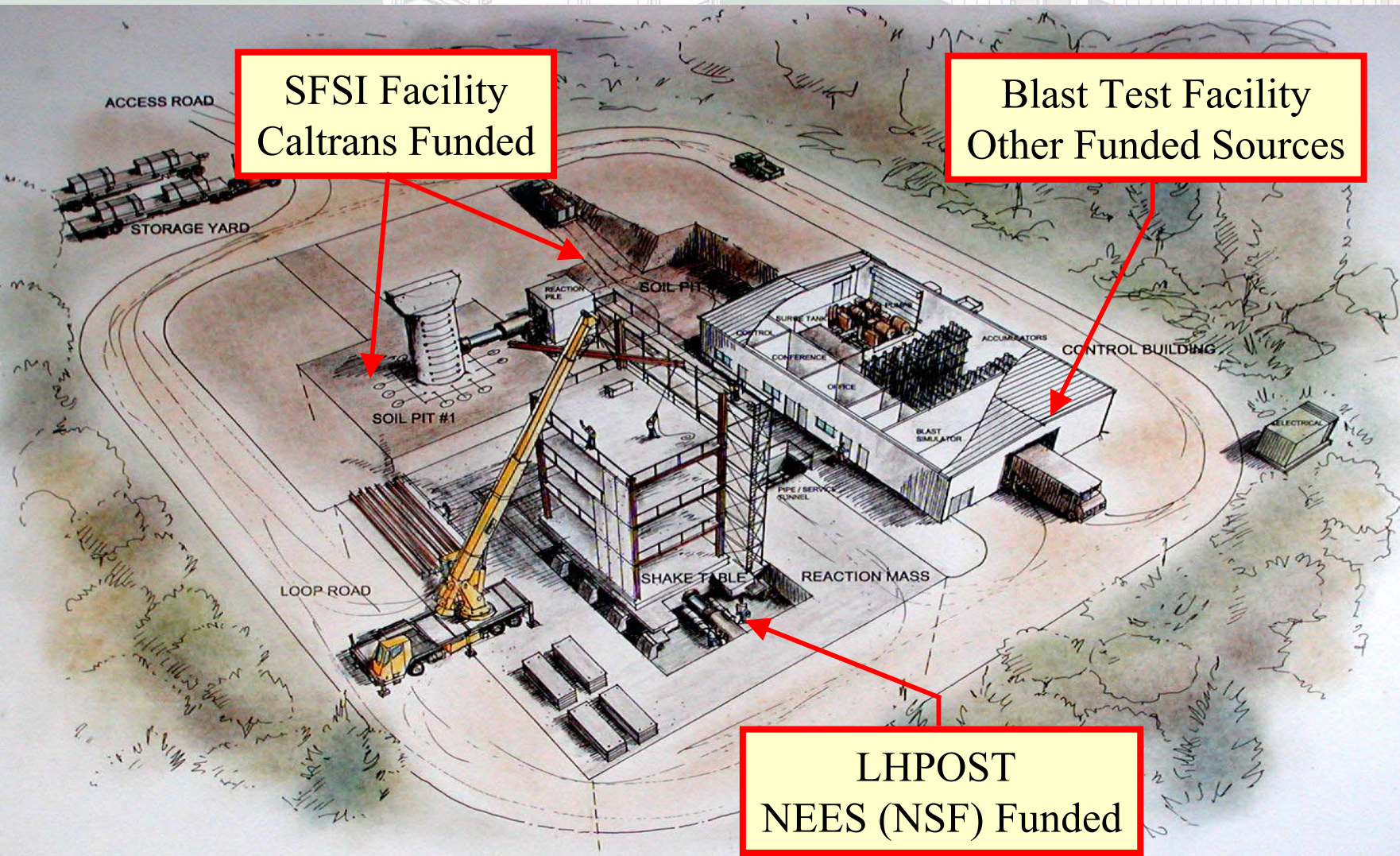


Camp Elliott Development Project

SFSI Facility
Caltrans Funded

Blast Test Facility
Other Funded Sources

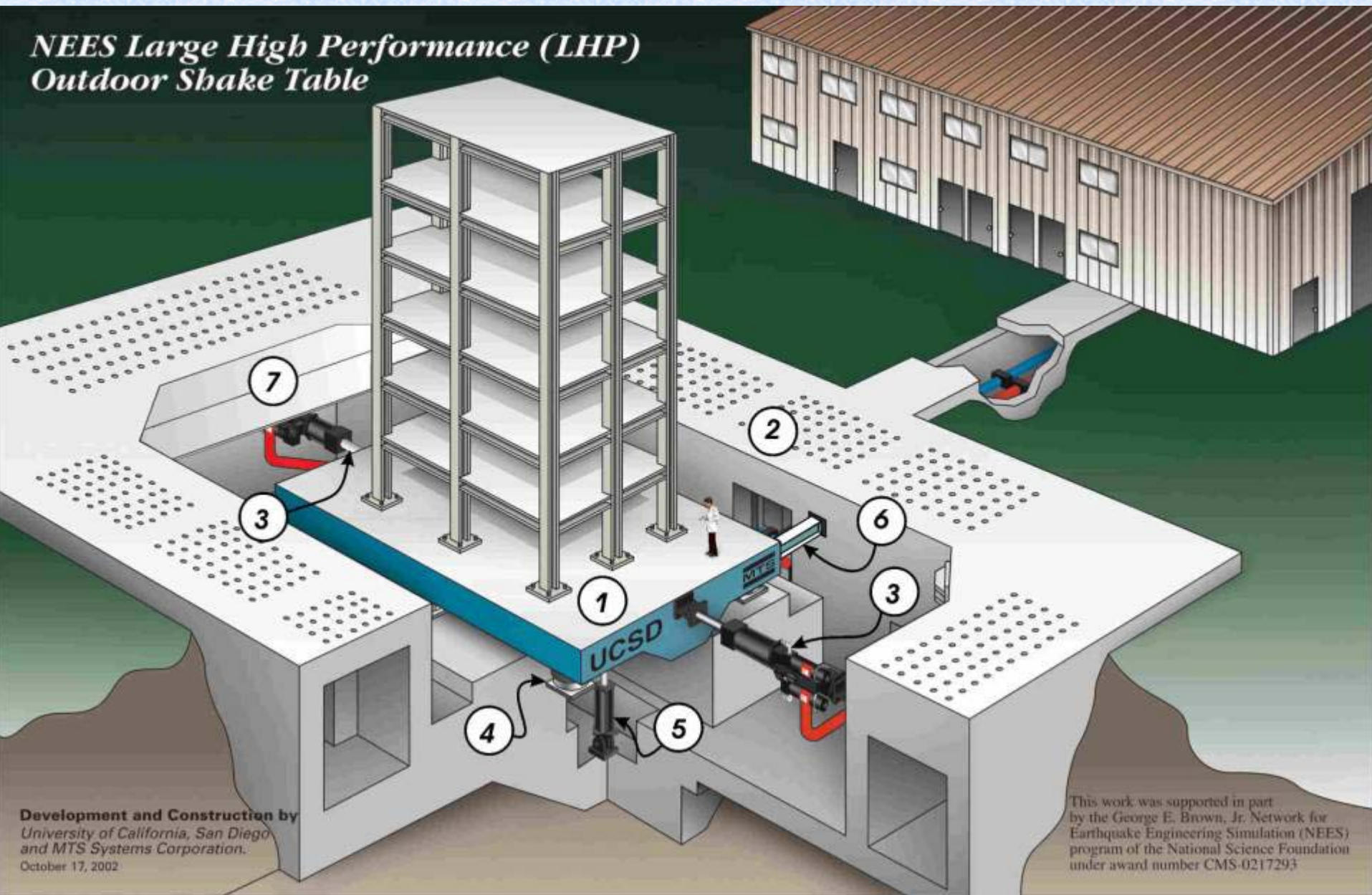
LHPOST
NEES (NSF) Funded



ELLIOT FIELD STATION
DEPARTMENT OF STRUTURAL ENGINEERING

UCSD-NEES Large High Performance Outdoor Shake Table (LHPOST)

NEES Large High Performance (LHP) Outdoor Shake Table



Development and Construction by
University of California, San Diego
and MTS Systems Corporation.
October 17, 2002

This work was supported in part
by the George E. Brown, Jr. Network for
Earthquake Engineering Simulation (NEES)
program of the National Science Foundation
under award number CMS-0217293

LHPOST Capabilities

Single DOF upgradeable to 6 DOF

Size: 7.6 m wide by 12.2 m long

Stroke: ± 0.75 m

Peak horizontal velocity: 1.8 m/s

Horizontal force capacity: 6.8 MN

Overturning moment capacity: 50MN-m for a 400 ton specimen

Vertical payload capacity: 20MN

Testing frequency range: 0-20 Hz

Web Cam Showing Reaction Mass



Web Cam Showing Control Building

AXIS Video Server - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media History Mail Print Edit Discuss

Address <http://198.202.124.233:65530/indexFrame.shtml?newstyle=One&cam=1> Go Links


Elliot Field Station Pump House

Video All

Video 1

Admin

Tue Sep 9 09:12:33 2003



(1 item remaining) <http://198.202.124.233:65530/cgi-bin/hugesize.jpg?motion=0&camera=1> Internet

Forced Vibration Testing



Overview of Test Set-up at Camp Elliott

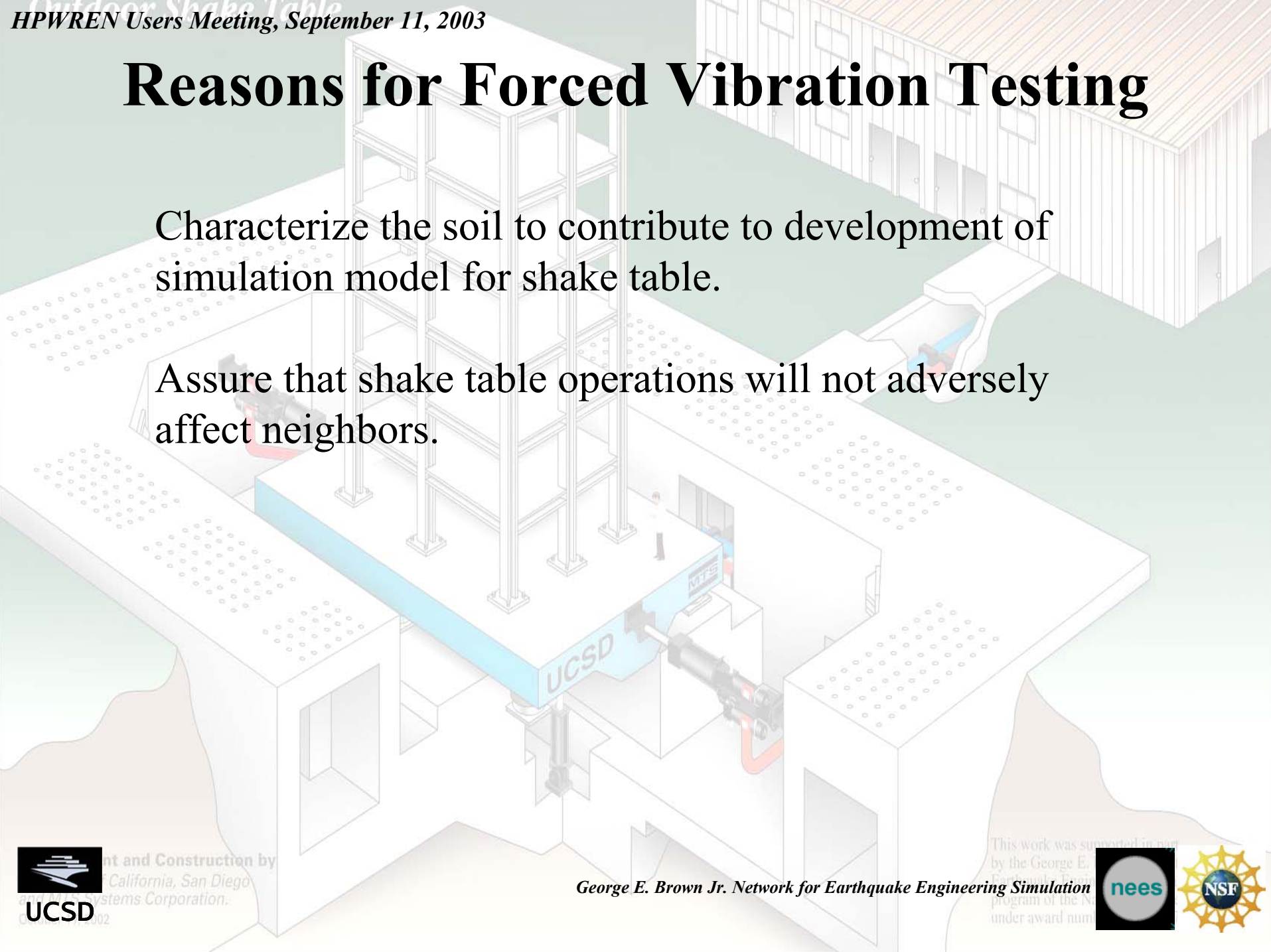


Shakers in LHPOST Reaction Mass Pit

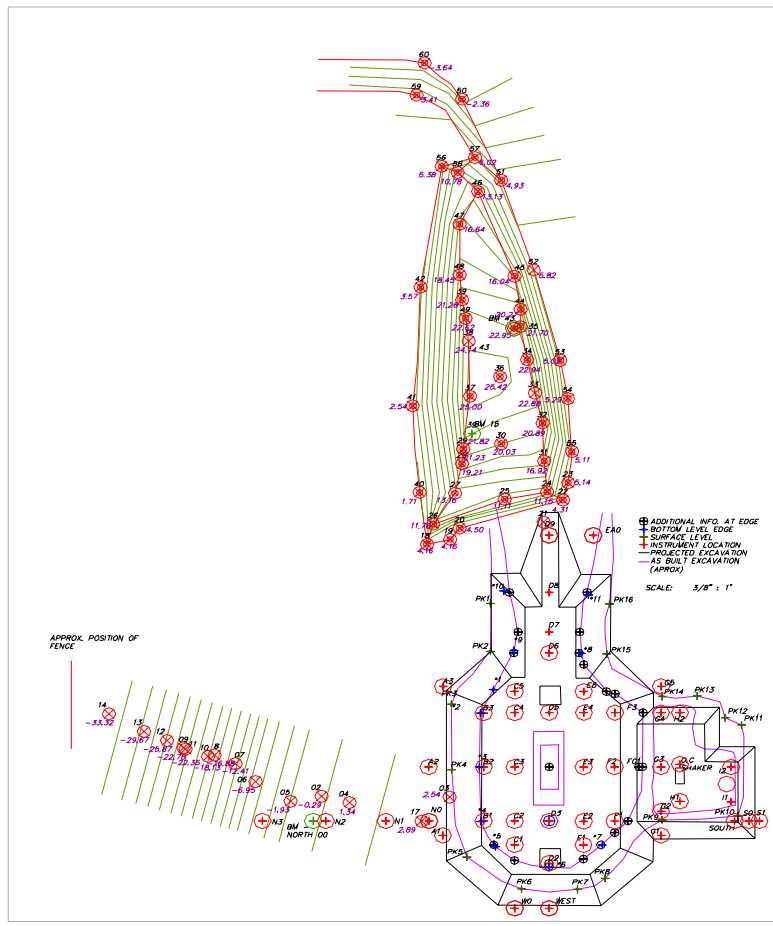
Reasons for Forced Vibration Testing

Characterize the soil to contribute to development of simulation model for shake table.

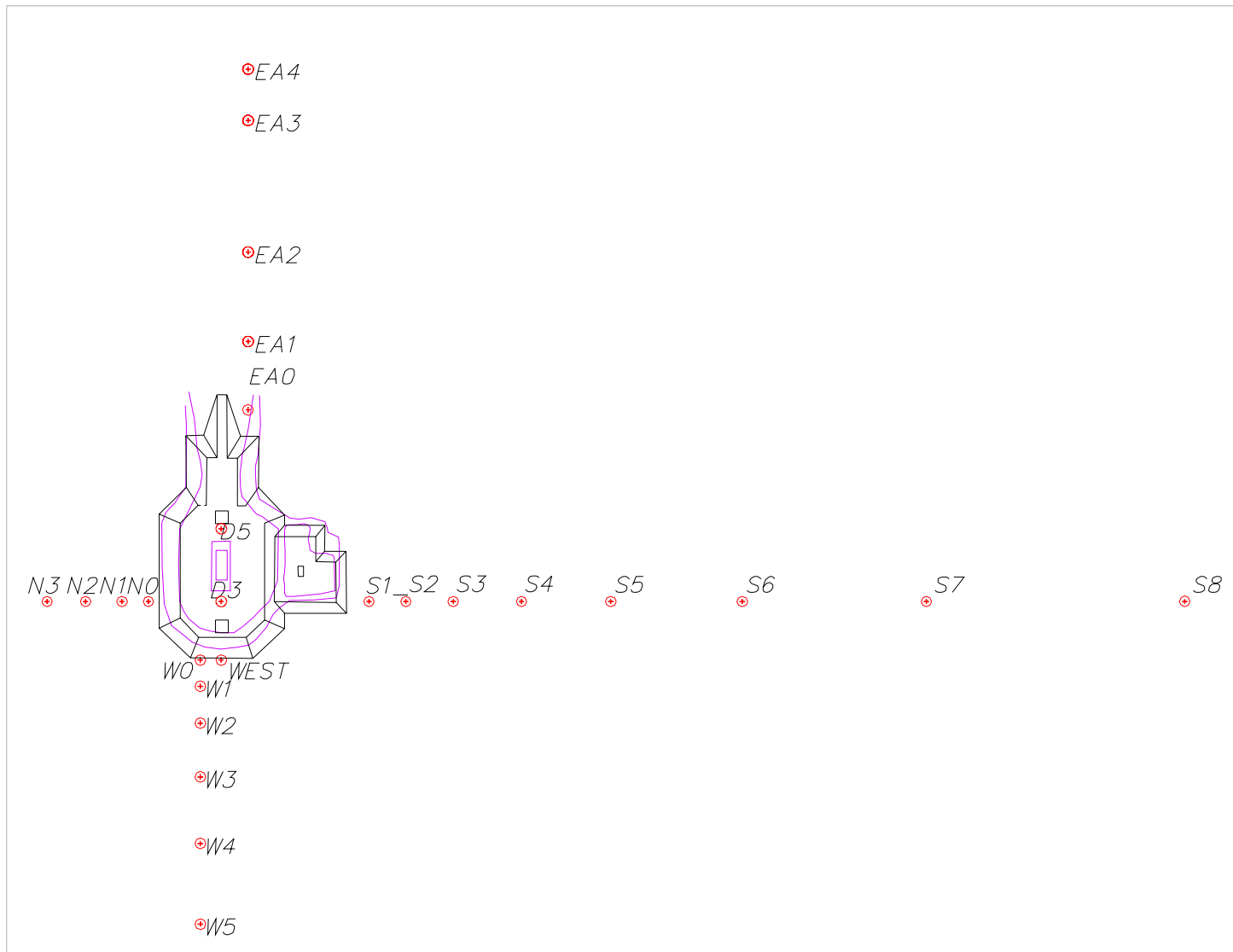
Assure that shake table operations will not adversely affect neighbors.



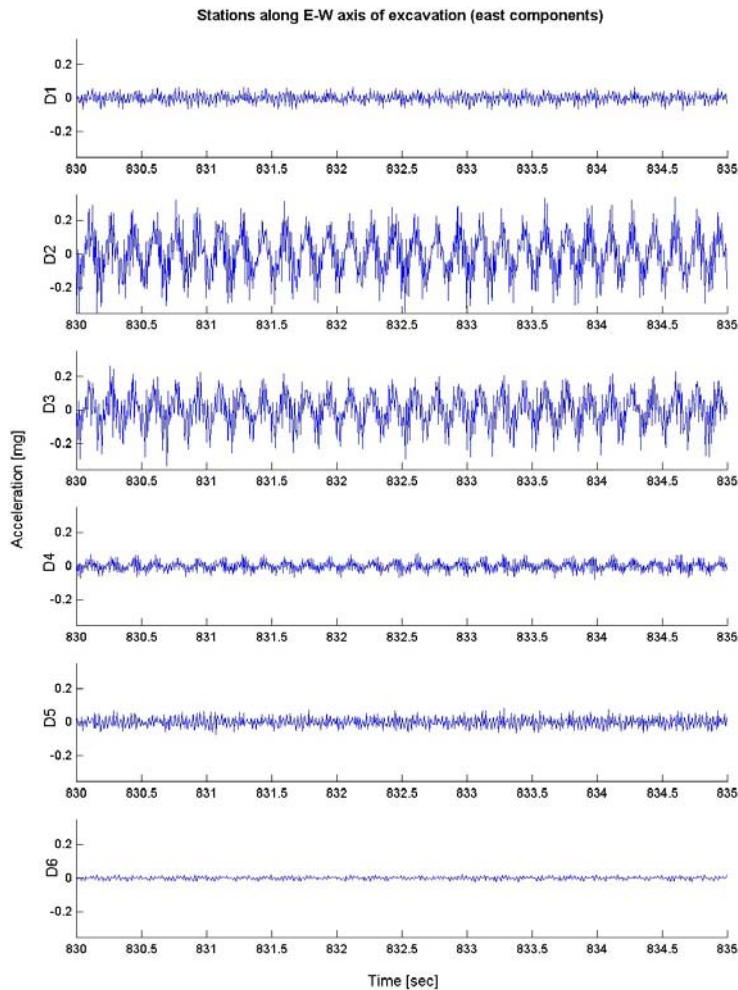
Excavation site plan with sensor locations and contour lines of slope and hill near excavation



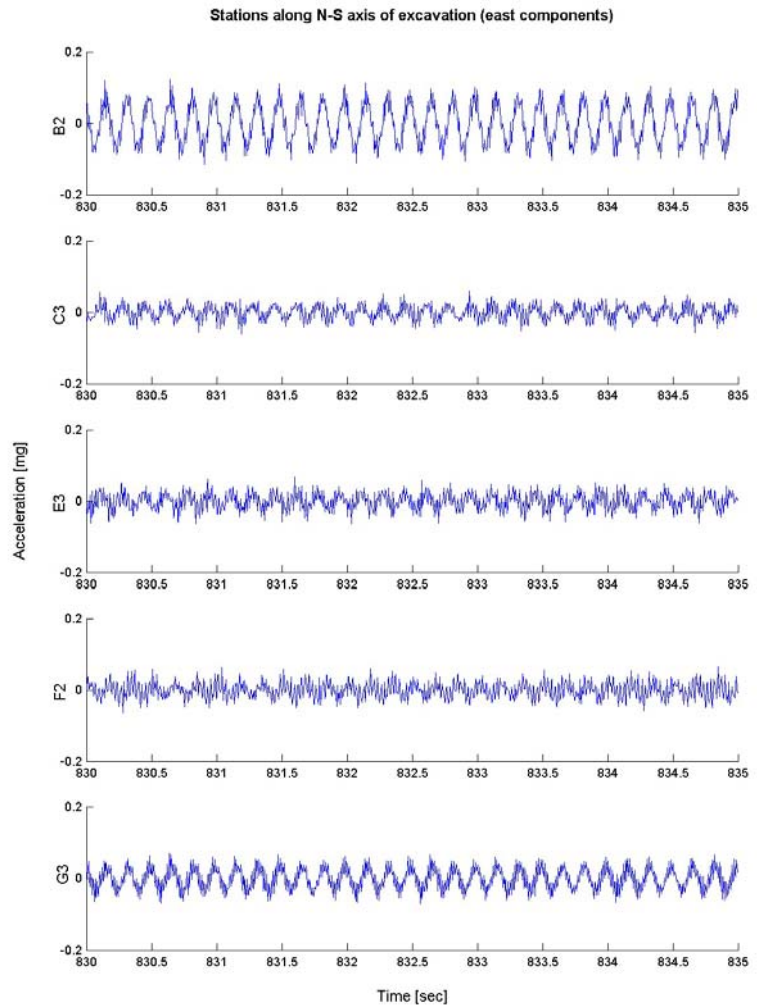
Sensor locations outside excavation



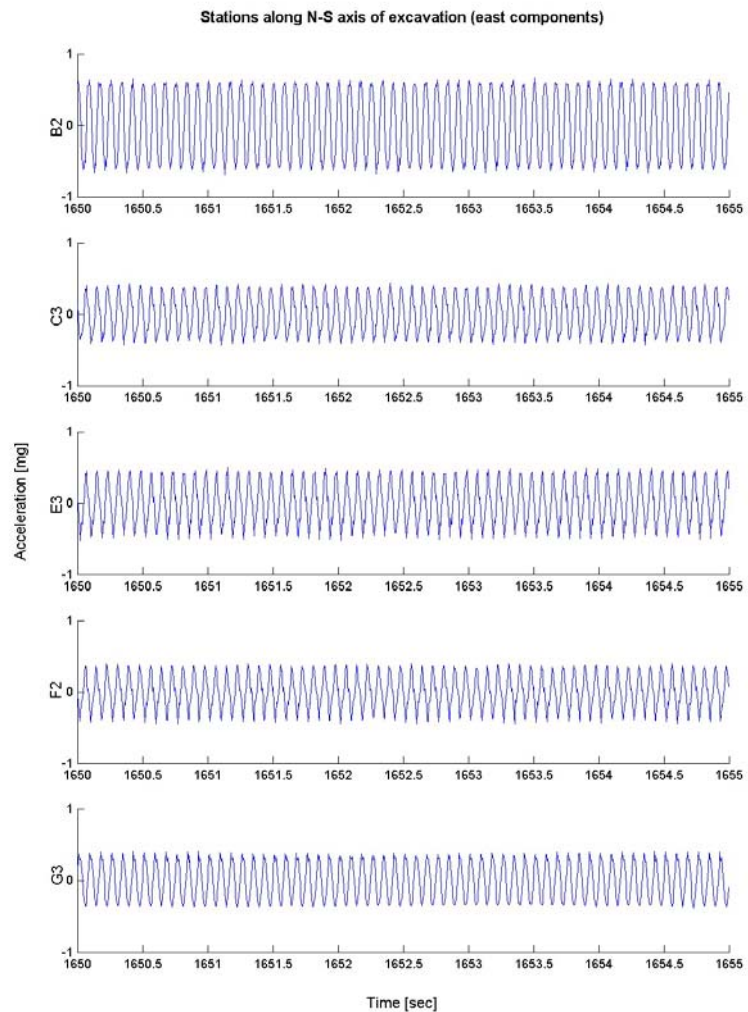
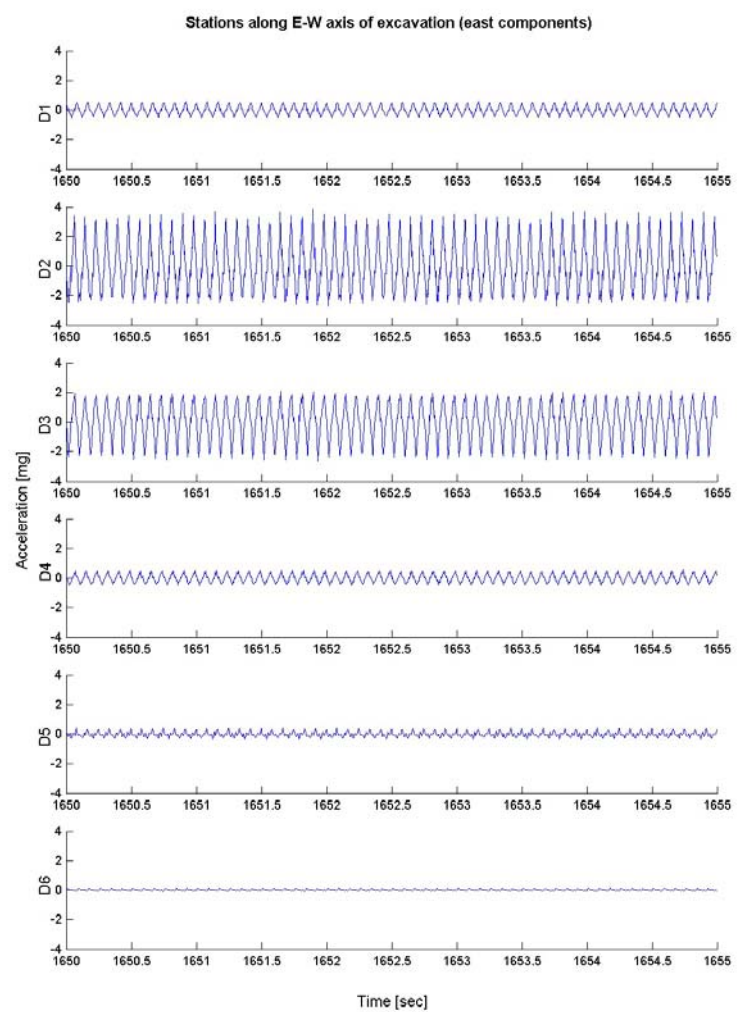
Traces of selected channels inside excavation due to West UCLA shaker with empty basket at 6 Hz frequency acting in E-W direction (5 sec of response)



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Traces of selected channels inside excavation due to West UCLA shaker with empty basket at 12 Hz frequency acting in E-W direction (5 sec of response)

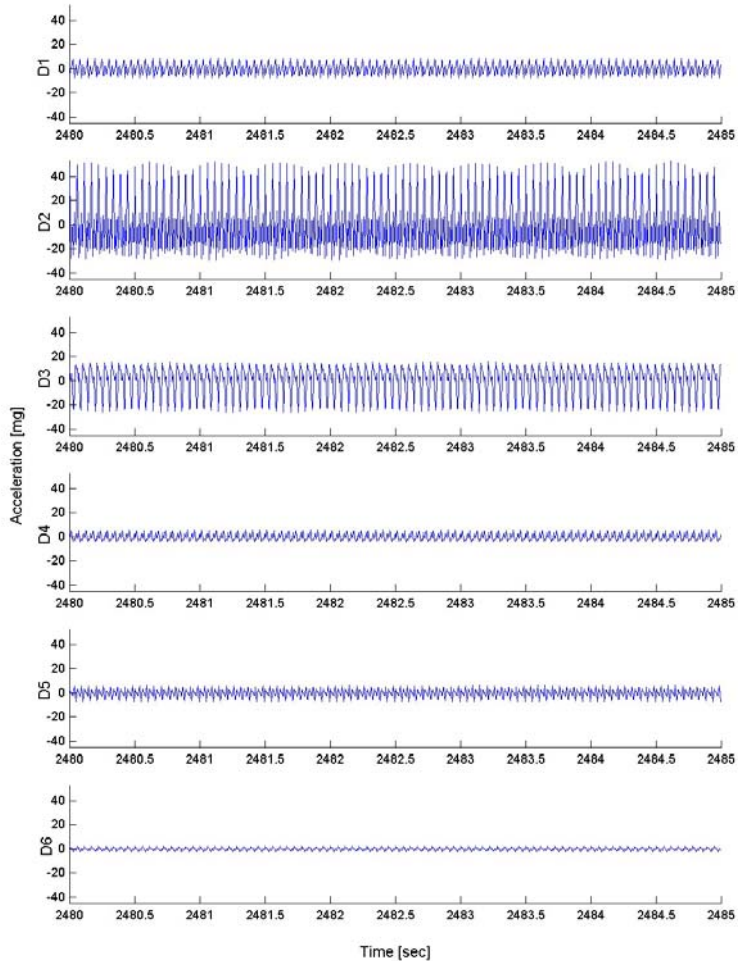


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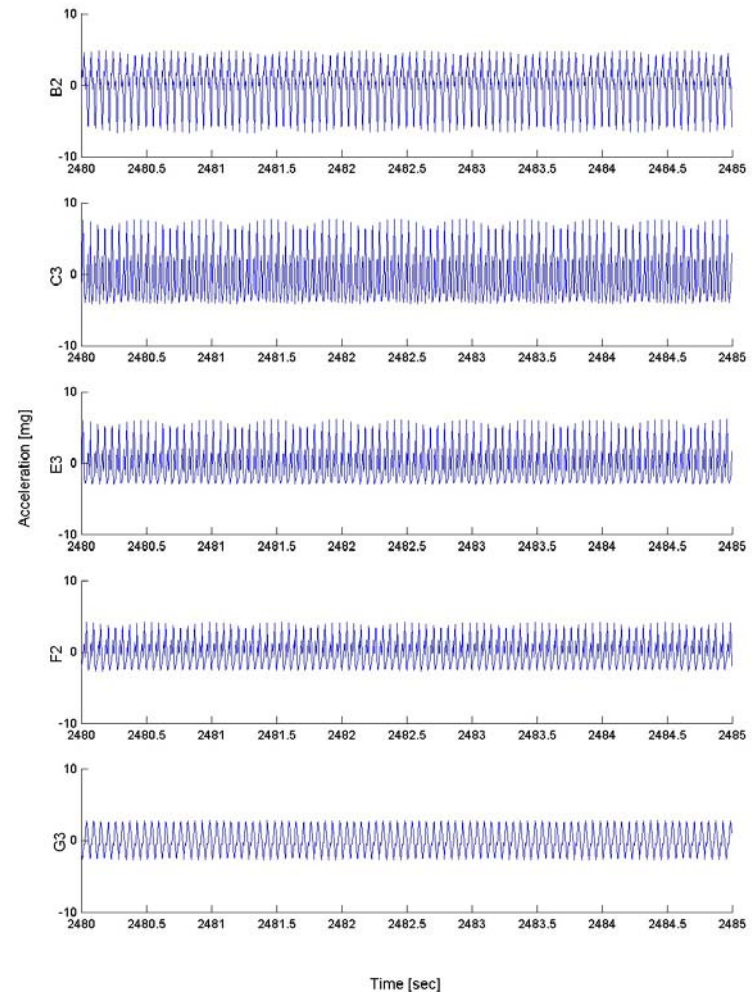


Traces of selected channels inside excavation due to West UCLA shaker with empty basket at 18 Hz frequency acting in E-W direction (5 sec of response)

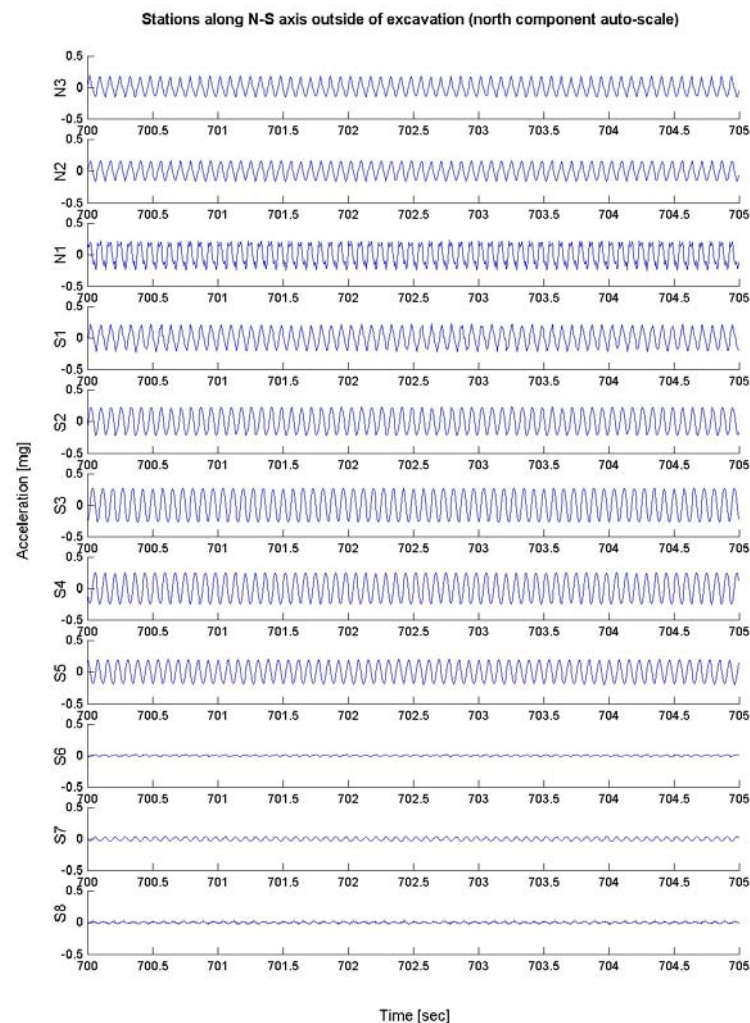
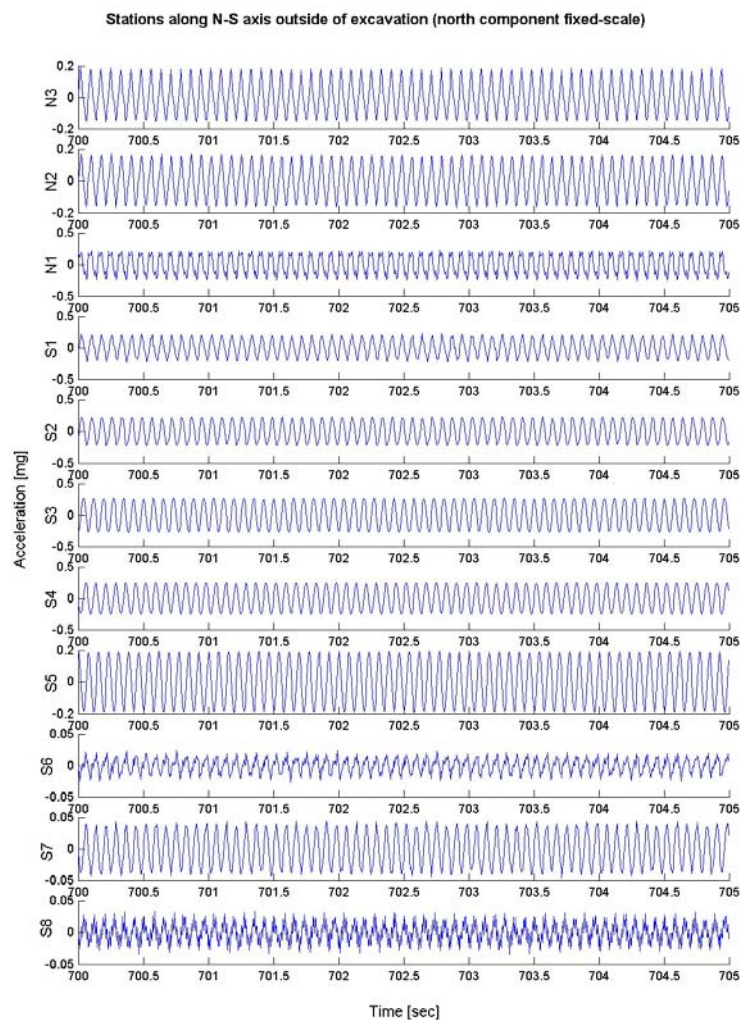
Stations along E-W axis of excavation (east components)



Stations along N-S axis of excavation (east components)



Traces of selected channels outside excavation due to West UCLA shaker with empty basket at 13 Hz frequency acting in N-S direction (5 sec of response)



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Current Construction Activity

Live Webcams showing construction activity at Camp Elliott can be found at:

NEES-UCSD LHPOST website: <http://structures.ucsd.edu/NEES>

Reaction Mass: <http://198.202.124.233:65531/>

Butler Building: <http://198.202.124.233:65530/>