

Via E-mail Only

July 22, 2016
Job No. 2947.102

BERLOGAR
STEVENS &
ASSOCIATES

Oakhurst Geologic Hazard Abatement District
c/o Permco Engineering
1470 Civic Court Suite 320
Concord, California 94520

Attention: Mr. Rick Angrisani

Subject: Slope Inclinometer Monitoring Program
Open Space Slope Below Lots 59 through 61
Pebble Beach Drive
Clayton, California

Gentlemen:

At your request, we have completed the following tasks at the subject site:

1. Take readings on Slope Inclinometers SI-1 and SI-2.
2. Walk the V-ditches and map apparent displacements.

Our findings are as follows:

Slope Inclinometers:

- | | |
|------|---|
| SI-1 | The plotting suggests that no significant movement has occurred since our last readings were taken in August of 2014. |
| SI-2 | The inclinometer casing has pinched at a depth of 71 feet. Therefore, we were unable to take readings between 71 feet and 125 feet in depth. To process the data collected in the upper 70 feet, we used the prior readings taken February 25, 2010 for depths of 71 to 125 feet to provide a data set for plotting purposes. While the plotting suggests that the upper 70 feet has not internally moved significantly since our last readings were taken in August of 2014, it is not possible to determine if the upper 70 feet has moved differentially relative to the materials below a depth of 70 feet. |

V-Ditch

The V-ditches below Pebble Beach Drive were walked in the field. Observations by our engineer indicate that no significant movement has occurred in the v-ditches since our last field exploration in 2014. Cracks A, B, C and E have been patched since our last observation. Crack D has not been patched. For a more in depth description, please see the attached Site Plan and photographs.

Note: Cracking of the AC Pavement was apparent in several locations on Pebble Beach Drive; one of these sections is presented on Plate 1, Site Plan and Appendix A, Photographs.

Please call if you have any questions.

Respectfully Submitted,

BERLOGAR STEVENS & ASSOCIATES



Matthew R. Gessner
Staff Engineer

MRG/FB:jmo

Attachments:

- Plate 1 – Site Plan
- Plate 2 – Slope Inclinator Plot SI-1
- Plate 3 – Slope Inclinator Plot SI-2
- Appendix A – Photographs



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DRAWN BY: CC

DATE: 7-5-16

JOB NUMBER: 2947.102



0 200



1"=200'

EXPLANATION

- SI-2
● SLOPE INCLINOMETER LOCATION
- ⓔ CRACK DESIGNATION LETTER
(SEE PHOTOGRAPHS)

SITE PLAN V-DITCH OBSERVATIONS

PEBBLE BEACH DRIVE
CLAYTON, CALIFORNIA
FOR
CITY OF CLAYTON

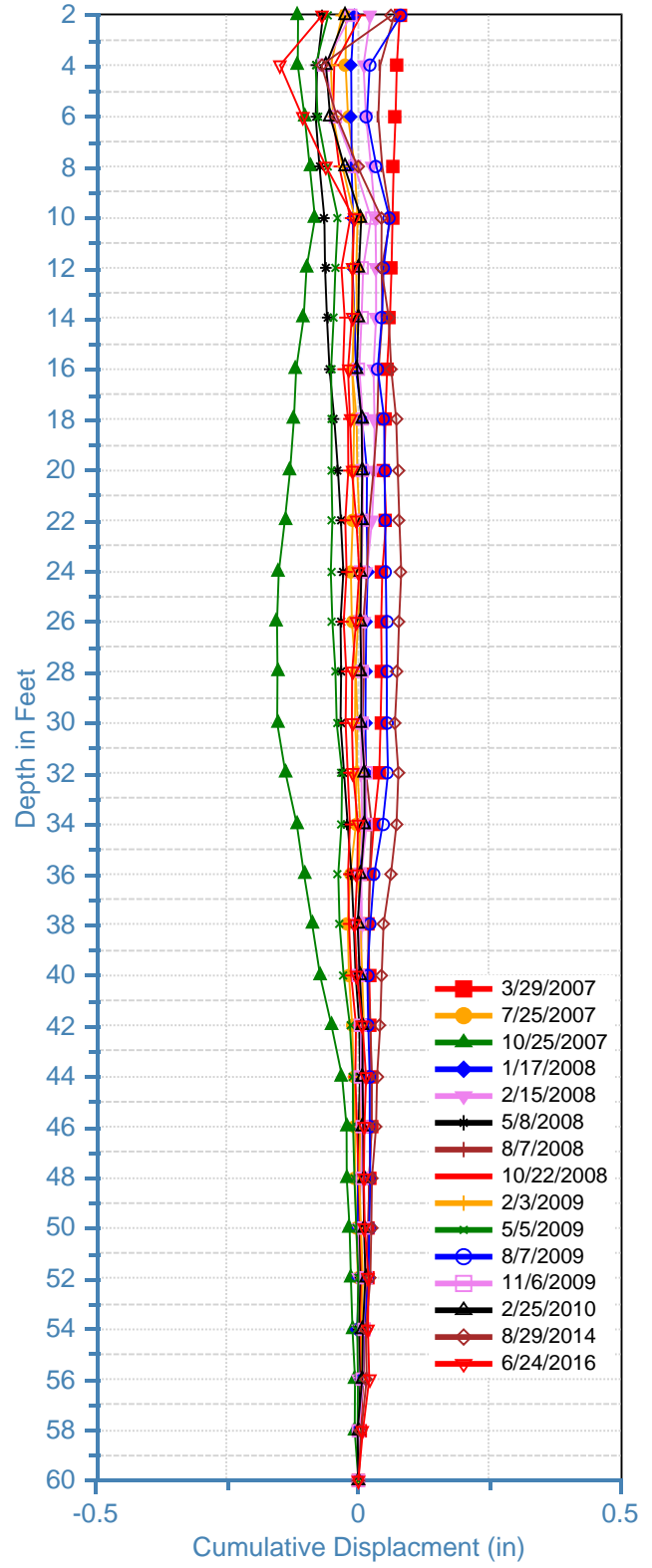
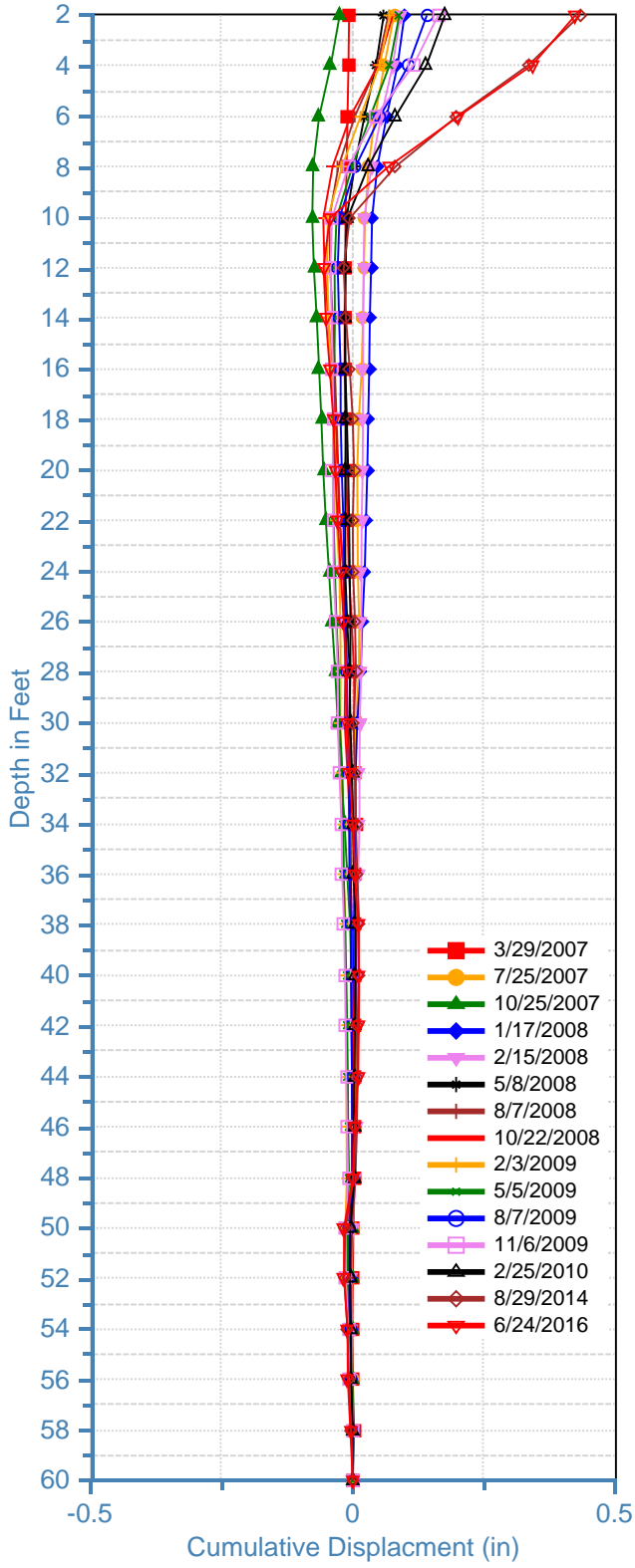
Berlogar Stevens & Associates

SOIL ENGINEERS * ENGINEERING GEOLOGISTS

BASE: COMPILATION OF RECORD PLANS UDI-TETRAD DATED 10-7-96, AND FIGURE IIIA-2 HALLENBECK 1988

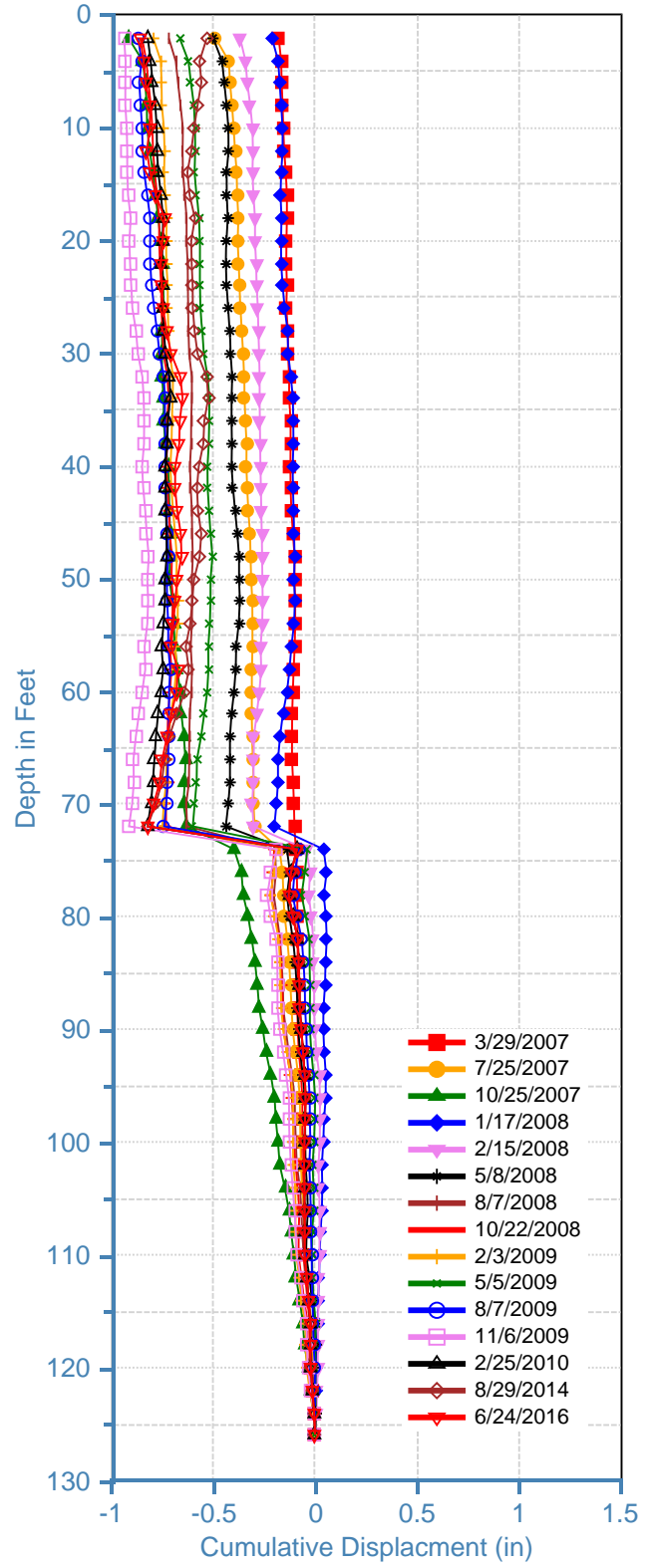
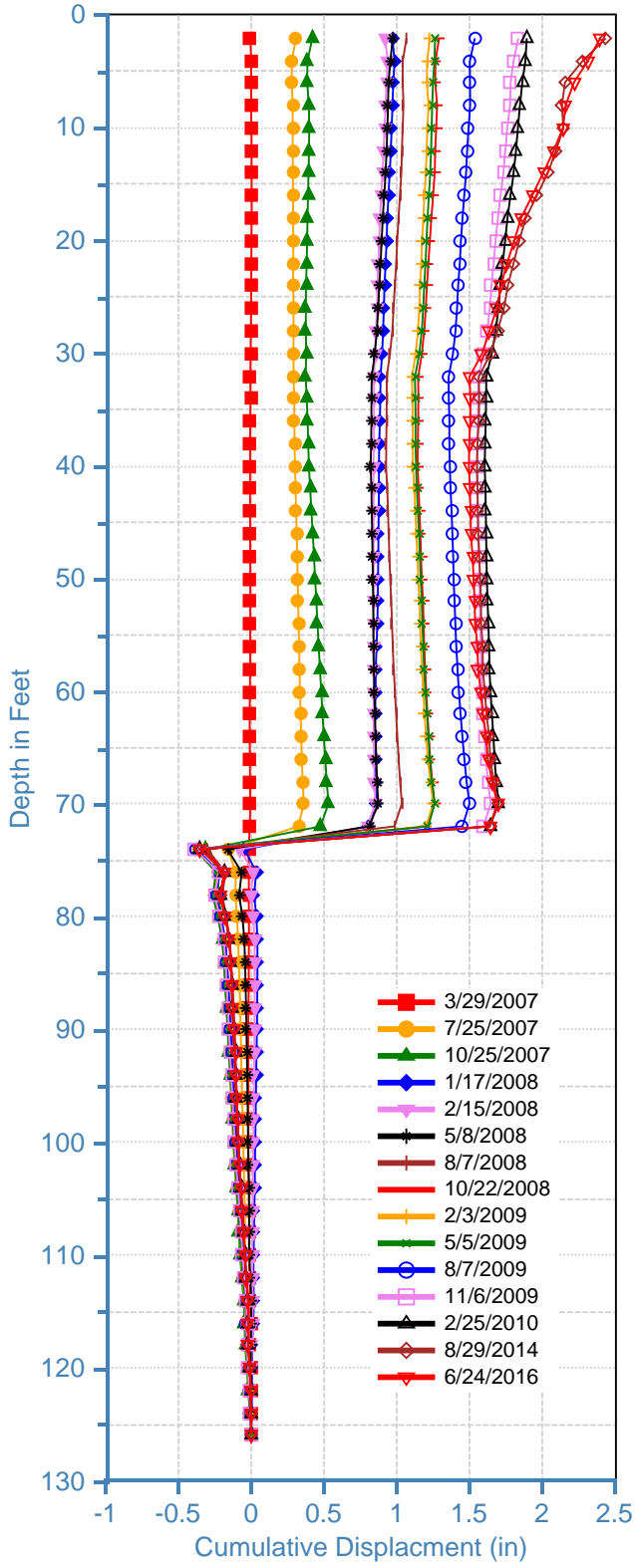
SI-1, A-Axis

SI-1, B-Axis



SI-2, A-Axis

SI-2, B-Axis



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2947.100 - Open Space Slope Below Lots 59-61
Baseline Reading Date: 2-20-07
A+=N41E B+=S49E
Reading 8-29-14 refusal at 70 feet
All subsequent readings start at 70 feet

APPENDIX A

Photographs

PHOTOGRAPHS OF CRACKS IN PAVEMENT AND V-DITCHES

PEBBLE BEACH DRIVE CLAYTON, CA

JUNE 30, 2016



Cracks in AC pavement along Pebble Beach drive in the same location as previous observations. Viewed looking Northwest from the southeast edge of Interpreted deformation zone



CRACK A

Crack A has been patched since our last observation in 2014. This is the most northern crack of 4 located on the mid-slope v-ditch approximately 100 feet southwest of Slope Inclinometer SI_2.





CRACK B

Crack B has been patched since our last observation in 2014. This is the second crack from the north along the mid-slope v-ditch.





CRACK C

Crack C has been patched since our last observation in 2014. This is the opposite end of the concrete section shown in CRACK B.





CRACK D

Crack D has not been patched since our last observation in 2014. This crack is the southernmost crack of the series of 4 located in the concrete V-ditch along the mid-slope bench.





CRACK E

Crack E has been patched since our last observation in 2014. This crack is located in the lower V-ditch.

