

Project No.  
**9050.000.004**

June 6, 2017

Mr. Zach Reilly  
Kiewit/Manson, AJV  
4650 Business Center Drive  
Fairfield, CA 94804

Subject: Piers E4 – E18 Demolition – San Francisco Bay Oakland Bay Bridge East Span  
Foundation Removal Project (EA-013574)  
City and County of San Francisco, California

**SWPPP AMENDMENT 11 – BLAST DEBRIS CONTAINMENT PLAN  
(MCCHWP AMENDMENT 05)**

- References:
1. SWPPP, Pier E4 – E18 Demolition, SFOBB East Span Foundation Removal Project, City and County of San Francisco, California, May 9, 2016 (WDID No. 2 38C376691).
  2. SWMPPP Amendment 03, MCCHWP Amendment 01, SFOBB East Span Foundation Removal Project, City and County of San Francisco, California, August 18, 2016

Dear Mr. Reilly:

As requested, SWPPP Amendment No. 11 has been prepared to update the sections of the project SWPPP (Stormwater Pollution Prevention Plan) entitled the project Materials Collection, Containment, and Handling Work Plan (MCCHWP) as it relates to the San Francisco Bay Oakland Bay Bridge East Span foundation demolition project in San Francisco and Alameda Counties. The activities associated with this amendment are being incorporated into the referenced project SWPPP and specifically the MCCHWP, which has been classified as a Risk Level 1 site under the Statewide General Construction Permit (Construction General Permit Order 2009-0009-DWQ).

Work pursuant to this amendment is intended to improve the containment of debris generated by the explosive demolition of the old Bay Bridge foundations for Piers E6 – E18. In addition to SWPPP Amendment 03 (MCCHWP Amendment 01), this amendment describes post-blast debris containment for blast events of two and three piers as planned to be performed in 2017. Post-blast debris containment for blast events of two and three piers will be similar to single-pier blast events. In addition, the amount of debris to be contained for multiple smaller piers will be similar to the amount for the blast events of single, larger E4 and E5 piers. Based on the experience from blasting piers E3, E4 and E5, the contractor will eliminate the secondary downstream debris boom (described as Boom 3 in SWPPP Amendment 03, MCCHWP Amendment 01). The contractor will use the same type of debris boom as specified in SWPPP Amendment 03, MCCHWP Amendment 01).

## POST-BLAST CONTAINMENT STRATEGY

Prior to the blast, a debris boom (Boom 1) will be placed and anchored downstream of each pier as shown for a two-pier blasting scenario on Water Pollution Control Drawings (WPCD) 1, and for a three-pier blasting scenario on WPCD 2.

A second debris boom (Boom 2) on standby for each pier will be tied to adjacent barges to be placed and anchored upstream of the pier as shown for a two-pier blast scenario on WPCD 3, and for a three-pier blast scenario on WPCD 4.

The secondary debris boom, Boom 2 will be deployed if the site superintendent determines that the debris containment and collection will be affected by tide change, wind, or any other factors. It has been the experience of the contractor during blast events of Piers E4 and E5 that the single downstream debris boom, Boom 1, has been sufficient to contain all debris during blast events without employing Boom 2 upstream or placing a second boom downstream of Boom 1.

## POST-BLAST COLLECTION STRATEGY

The post-blast collection will be as described in SWPPP Amendment 03, MCCHWP Amendment 01, except that excess foam will not be removed by the contractor.


## CLOSING

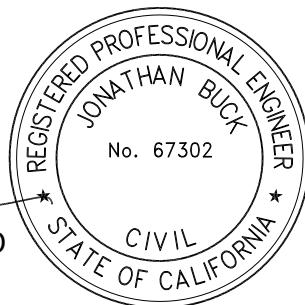
Caltrans will also continue to conduct in-water quality monitoring in accordance with the approved Sampling and Analysis Plan for mechanical dismantling.

SWPPP Amendment No. 11 (MCCHWP Amendment 05) and its attachments will be archived in the project MCCHWP. All other portions of the approved MCCHWP and Amendments will remain in effect. Please contact us if you have any further questions.

Sincerely,

ENGEO Incorporated

  
Jonathan Buck, PE, QSD  
jb/jam/jf

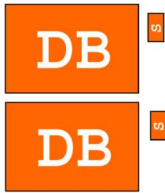
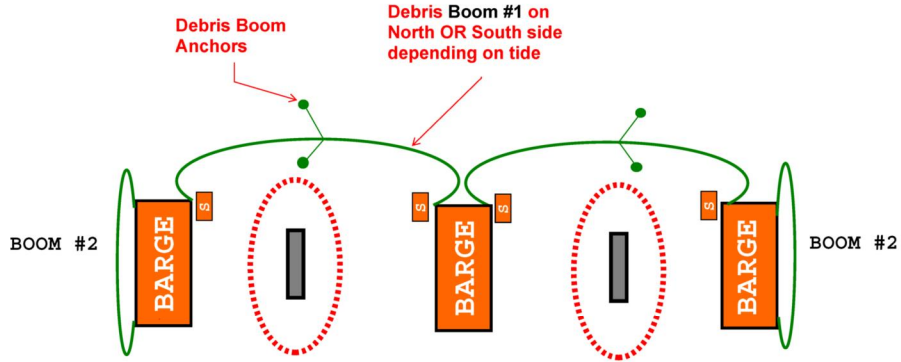


  
Jeff Fippin, GE

Attachments: WPCDs 1 - 4 – Materials Handling Plan Piers E6 – E18




COPYRIGHT © 2017 BY ENGeo INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED OR EXCERPTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGeo INCORPORATED.

# DEBRIS CONTAINMENT MAP: Boom 1 Deployment



NOTE: Drawing is not to scale.

## KEY

-  KM Derrick Barge
-  Barge/Skiff
-  Blast Attenuation System

## STAGE SUMMARY

Prior to the blasting activity, a debris boom (Boom #1) will be employed downstream of the pier and anchored as shown. Two other debris booms (Boom #2) will be on standby.

4 skiffs will be deployed as shown and 2 skiffs will be with the Derrick Barge.



## EXPLANATION (BMP's)

SCHEDULING (SS-1)

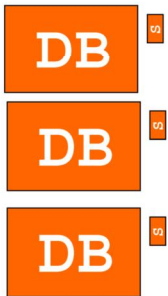
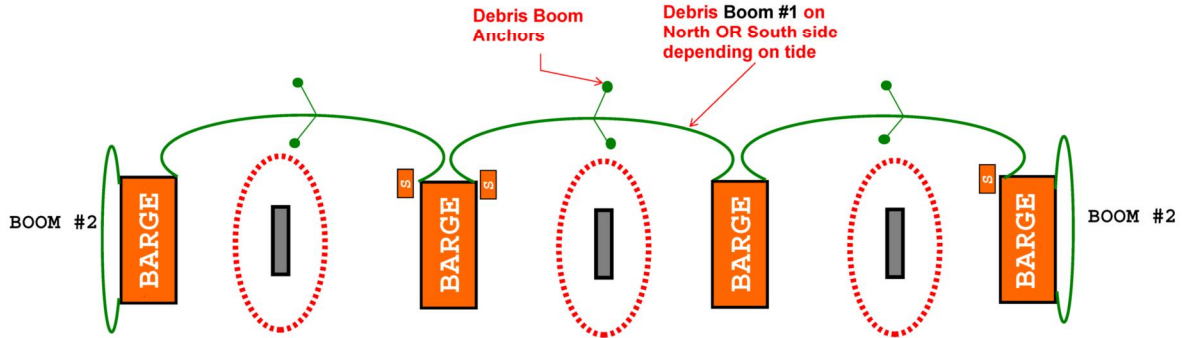


MATERIALS HANDLING PLAN PIERS E6 - E18  
 WATER POLLUTION CONTROL PLAN  
 OAKLAND, CALIFORNIA

PROJECT NO.: 9050.000.004  
 SCALE: NO SCALE  
 DRAWN BY: SRP CHECKED BY: JDB

FIGURE NO.  
**1**

## DEBRIS CONTAINMENT MAP: Boom 1 Deployment



NOTE: Drawing is not to scale.

### KEY

**DB** KM Derrick Barge

**BARGE** **S** Barge/Skiff

Blast Attenuation System



### STAGE SUMMARY

Prior to the blasting activity, a debris boom (Boom #1) will be employed downstream of the pier and anchored as shown. Two other debris booms (Boom #2) will be on standby.

3 skiffs will be deployed as shown and 3 skiffs will be with the Derrick Barge.

### EXPLANATION (BMP's)

SCHEDULING (SS-1)



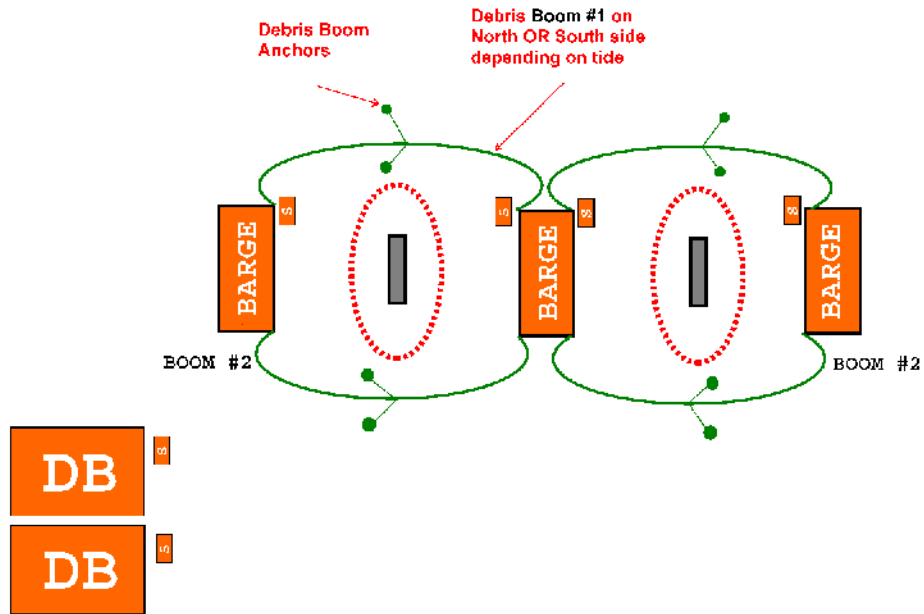
MATERIALS HANDLING PLAN PIERS E6 - E18  
WATER POLLUTION CONTROL PLAN  
OAKLAND, CALIFORNIA

PROJECT NO.: 9050.000.004	
SCALE: NO SCALE	
DRAWN BY: SRP	CHECKED BY: JDB

FIGURE NO.  
**2**




COPYRIGHT © 2017 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED OR EXCERPTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

# DEBRIS CONTAINMENT MAP: Boom 1 and 2 Deployment



NOTE: Drawing is not to scale.

## KEY

-  KM Derrick Barge
-  Barge/Skiff
-  Blast Attenuation System

## STAGE SUMMARY

If after the blast, it is determined that Boom #1 is not adequately containing all debris, Boom #2 will be employed upstream of the piers as shown. The area will be secured such that debris containment and collection can continue as necessary until debris is adequately collected.

4 skiffs will be deployed as shown and 2 skiffs will be with the Derrick Barge.



## EXPLANATION (BMP's)

SCHEDULING (SS-1)



MATERIALS HANDLING PLAN PIERS E6 - E18  
 WATER POLLUTION CONTROL PLAN  
 OAKLAND, CALIFORNIA

PROJECT NO.: 9050.000.004

SCALE: NO SCALE

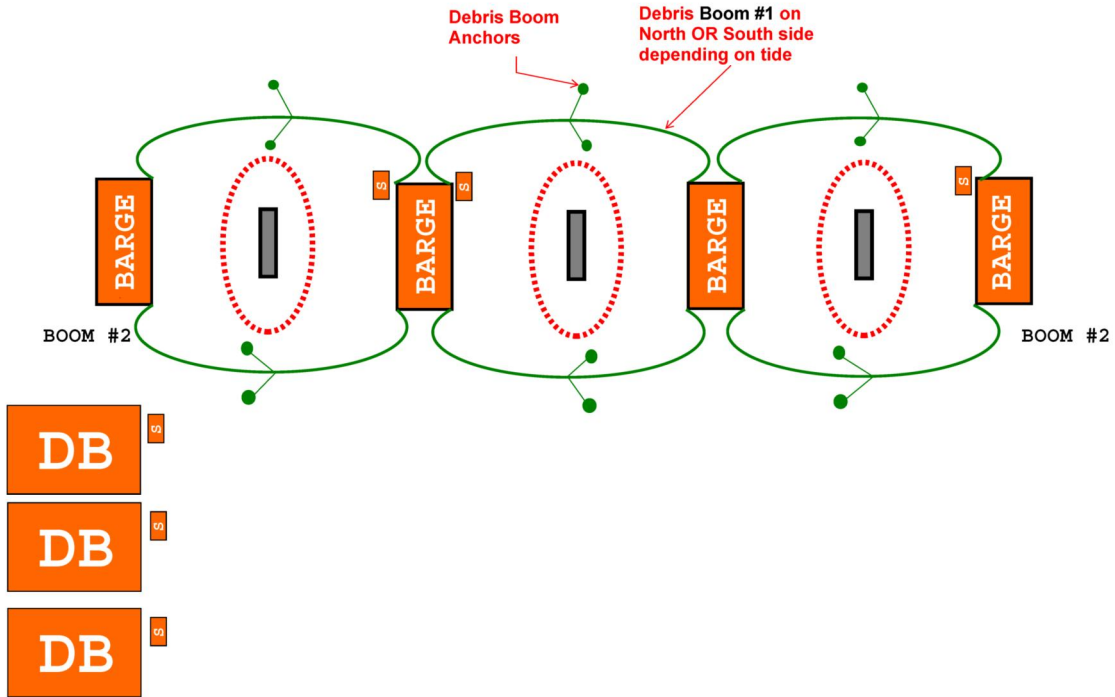
DRAWN BY: SRP

CHECKED BY: JDB

FIGURE NO.

3

# DEBRIS CONTAINMENT MAP: Boom 1 and 2 Deployment



NOTE: Drawing is not to scale.

## KEY

**DB** KM Derrick Barge

**BARGE S** Barge/Skiff

**(Dashed Red Oval)** Blast Attenuation System



## STAGE SUMMARY

If after the blast, it is determined that Boom #1 is not adequately containing all debris, Boom #2 will be employed upstream of the piers as shown. The area will be secured such that debris containment and collection can continue as necessary until debris is adequately collected.

3 skiffs will be deployed as shown and 3 skiffs will be with the Derrick Barge.

## EXPLANATION (BMP's)

SCHEDULING (SS-1)