

**Angela  
Haack/D04/Caltrans/CAGov**  
10/13/2011 02:03 PM

To Joe Garcia/D04/Caltrans/CAGov@DOT  
cc  
bcc  
Subject Fw: Extra Cable Mounted Roadway Lights

CCO 167S2

Angela Haack  
CCO Engineer  
SFOBB - SAS  
(510) 622-5196

----- Forwarded by Angela Haack/D04/Caltrans/CAGov on 10/13/2011 01:59 PM -----

**Steven  
Hulsebus/D04/Caltrans/CAGov**  
v  
10/13/2011 02:02 PM

To Bill Shedd/D04/Caltrans/CAGov@DOT  
cc Angela Haack/D04/Caltrans/CAGov@DOT, Bill  
Casey/D04/Caltrans/CAGov@DOT, Clive  
Endress/D04/Caltrans/CAGov@DOT, KingN@pbworld.com,  
Saeed Shahmirzai/D04/Caltrans/CAGov@DOT  
Subject Re: Extra Cable Mounted Roadway Lights 📎

Bill,  
Clive will provide me the justification by Monday and I'll get you the CCO request by Tuesday.  
I talked to Clive and based on my conversation with you I will recommend a CCO for this.  
You'll get the signed memo by Tuesday.  
Thanks  
Bill Shedd/D04/Caltrans/CAGov



**Bill  
Shedd/D04/Caltrans/CAGov**  
10/12/2011 03:45 PM

To Steven Hulsebus/D04/Caltrans/CAGov@DOT  
cc Bill Casey/D04/Caltrans/CAGov@DOT, Saeed  
Shahmirzai/D04/Caltrans/CAGov@DOT, Clive  
Endress/D04/Caltrans/CAGov@DOT, Angela  
Haack/D04/Caltrans/CAGov@DOT, KingN@pbworld.com  
Subject Extra Cable Mounted Roadway Lights

Steve,

As discussed, at last week's visit to Musco to observe the progress of the light poles and light fixtures, there were discussions regarding extra cable-mounted roadway light fixtures at the following 2 locations:

1. At Panel Point 80 of the east end of the e/b side of the SAS, the plan calls for only 2 light fixtures. All of the other clusters have 3 fixtures. Musco indicated that 3 light fixtures would be required to meet the lighting standards of the contract. Therefore, an additional fixture is required.
2. At the same Panel Point, on the w/b bridge, there are no fixtures. The minimum light could probably be achieved, but there will be only 8 clusters of cable-mounted roadway light fixtures, while on the e/b side there will be 9 clusters. Clive indicated that the addition of three fixtures would create

symmetry.

Upon your direction, we will proceed with this CCO.

Thanks,

Bill Shedd  
Construction Senior, SAS Bay Bridge

# Memorandum

*Flex your power!  
Be energy efficient!*

**To:** BILL CASEY  
Supervising Engineer  
SFOBB SAS

**Date:** October 25, 2011

**File:** 04-SF-80-13.2/13.9  
04-0120F4  
SAS

**Attn:** Kannu Balan/Bill Shedd

**From:** STEVEN HULSEBUS  
District Division Chief  
Office of Toll Bridge Design

**Subject:** Contract Change Order Request- for adding light fixtures on the main cable.

Please initiate a contract change order to add extra light fixtures for achieving the necessary light level and providing symmetry and uniformity across the SAS at the following two locations:

1. At Panel Point 80 of the eastbound side of the SAS, the plan calls for only two light fixtures, an additional fixture should be added to meet the lighting standards of the contract per information provided by Bill Shedd in his e-mail of 10/12/11.
2. At the Panel Point 80 of the westbound side of the SAS, there are no fixtures in the contract plan. It is requested to add three light fixtures to maintain symmetry and uniformity with the eastbound side per input from the bridge architect and Clive Endress

Justification for these requests comes from Clive Endress and the bridge architect (Don MacDonald). Quoting from Clive:

“Please provide an additional bracket with light fixtures on the main cable (westbound) of the SAS to provide symmetry and uniformity across the span. Especially in a westbound direction, the main suspension cables act as a portal, or gateway to the main span and tower. The light fixtures which are attached to and arranged in clusters (of 3) along the cable are located such that they are opposite each other in east and west-bound directions; they are an important element in reinforcing the symmetry of this gateway experience. Although a first cluster of lights (west-bound) is apparently not necessary for required light levels, it is a very important element architecturally in maintaining the symmetry at this point on the bridge. It is therefore recommended that this cluster of three lights be added to the main cable at Panel point 80.”

BILL CASEY  
October 25, 2011  
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If you have any questions or need additional information please contact me at (510) 286-5085.

Cc: K.Terpstra, J. Uozumi, M. Ma/J. Chen