STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

ENGINEER'S DAILY REPORT

LAN Engineering Consultant JR 4-10-08

REPORT NO.	DATE	
456 (7-day)	March 13, 2008	M T W T F S S (DAY)
NORMAL WORK HOUR: START: 7:00AM STOP: 3:30PM	WEATHER: OVERCAST/SUNNY	
LOCATION : Construction Field Office :	333 Burma Road, Oakland 94607	
Working Drawing Campus Office :	375 Burma Road, Oakland 94607	

04-SF-80-13.2/13.9
Contract No. 04-0120F4
{SAS Superstructure}

Caltrans Supervisor:
Gary Lai
Senior Bridge Engineer

Office Work:

- **MEP Shop Drawing Work.**
  - Worked on the master penetration list.
  - Updated the priority submittal list.
  - Posted MEP Penetration Chart for Sub. 552.

- **CCO # 42S1 – Review and Comments.**
  - On-going review of the CCO with Sandy Michelotti.
  - Due Date for review comments is March 17, 2008.

- **Aviation Warning Light Issue.**
  - Response from Maxwell Takaki PB. See attached email.

- **CCO # 72 – Priority for processing - Review and Comments.**
  - Will start this review after the completion of CCO#42S1 with Sandy Michelotti.
  - See Email attachment.

- **Elevator power feed issue.**
  - PB is working on the issues on the power feed to the elevation equipment from the source at the substation. See attached email for update status.

- **MEP CCO Meeting (Caltrans-PB-T.Y. Lin)**
  - Received a copy of the meeting agenda for tomorrow.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

ENGINEER'S DAILY REPORT

LAN Engineering Consultant

REPORT NO.	DATE	
456 {7-day}	March 13, 2008	M T W T F S S (DAY)

- **RFI 1134 Response Revision #3 from PB.**
  - Received an updated revision to the RFI # 1134 from PB.
  - This RFI will be incorporated in the CCO # 70.
  - Will review this in the CCO # 70 package.
  - See email attachment.

Any questions or comments you can reach me at (916) 919-7158. My E-Mail address is Mike.Travis@LANEngineering.com or Michael_Travis@dot.ca.gov

END OF REPORT

Work hours 0520-1830 – 8 hours regular / 3 hours OT

Attachments:

1. Submittal 552 MEP Chart Posted email.
2. Aviation Warning Lights Email PB
3. CCO 72 email
4. Elevator power feed issue Email PB.
5. MEP CCO Mtg. #28 Agenda
6. RFI 1134_response Rev 3 Email PB.

SIGNATURE

Name	TITLE
Michael F. Travis	Electrical Engineer – LAN Engineering

Michael
Travis/HQ/Caltrans/CAGov
03/13/2008 09:33 AM

To Philip He/D04/Caltrans/CAGov@DOT
cc Gary J Lai/D04/Caltrans/CAGov@DOT
bcc
Subject Submittal # 552 - MEP Penetration Chart has been Posted in X: Dive

Penetration Chart Has Been Posted.

Michael Travis
SFOBB Construction Offices
Design Campus Building
375 Burma Road
Oakland Ca. 94607
Phone: 510-808-4618

"Takaki, Maxwell"
<Takaki@pbworld.com>
03/13/2008 09:54 AM

To <Michael_Travis@dot.ca.gov>
cc "Mike Travis" <mike.travis@Lanengineering.com>, "Sanei, Abdi" <Sanei@pbworld.com>
bcc
Subject RE [3]: Aviation Warning Lights

Mike,

Thanks for sharing this information with me. The Caltrans information is consistent with the information I received from Automatic Power technical engineer, that the lens melted when test simulated failure in the flashing unit as required by FAA AC 150/5345-43F. It is the heat that was a problem, which other manufacturers, such as Crouse-Hinds and Siemens don't have.

LED obstruction light is the way to go as we discussed. As Patrick McCard witnessed, LED does not build up heat. It is good for some application and not so good for other application, such as the blue LED taxiway lights at the airports. Considerable energy savings from traditional 30 W quartz lamp down to 8 W LED lamp but airports in the snow countries have to either elevate LED lamp above the traditional 14-inch height or in northern states/countries where snowfalls are common, they add a heater to individual LED taxiway lights to melt the snow so that pilots could see the taxiway edges.

Regards,
Max Takaki

-----Original Message-----
From: Michael Travis [mailto:Michael_Travis@dot.ca.gov]
Sent: Wednesday, March 12, 2008 1:59 PM
To: Takaki, Maxwell
Subject: Fw: Aviation Warning Lights

FYI
----- Forwarded by Michael Travis/HQ/Caltrans/CAGov on 03/12/2008 01:58 PM-----
Sandra Michelotti/D04/Caltrans/CAGov 03/12/2008 01:33PM
To: Bill Shedd/D04/Caltrans/CAGov@DOT
Cc; Michael Travis/HQ/Caltrans/CAGov@DOT
Subject: Fw: Aviation Warning Lights

For your info. This email is from Pat McCard, supervisor of the Carquinez Bridge.

Sincerely,
Sandra Michelotti
Electrical Inspector
Cell 510-681-4275
Office 510-286-0514
Fax 510-286-0550
----- Forwarded by Sandra Michelotti/D04/Caltrans/CAGov on 03/12/2008 01:27PM -----
Patrick McCard/D04/Caltrans/CAGov03/12/2008 12:01PM
To: Sandra Michelotti/D04/Caltrans/CAGov@DOT
Cc: Renato Fortaleza/D04/Caltrans/CAGov@DOT
Subject: Re: Aviation Warning Lights (Document link: Sandra Michelotti)

Sandy- we had the FLOB FA250 fixtures with Halogen-3 to 4 years old, and we were changing out the burned up contacts because of the high amperage. They also contribruted to burned up power supplies. We replaced them with the LED version and they look great, but it is up to the test of time since they were recently installed. On another note, please consult with Rene Fortalaza since his input is vital because of their vested interest. Also, it was optional, but we had a sync wire tied to a GPS so that the flashes were synconized. This feature is not mandated by FAA and it never functioned as designed. The excuse was of the electro-magnetic interference from High Voltage lines.

Model FLOB-250.24V FAA L-864 &ICAO Annex 14, Chapter 6
- This medium intensity, omnidirectional, red obstruction light complies with FAA L-864 for a flash
rate of 20 flashes per minute. The light consists of an aviation red, FA-250 lantern containing six each,
24-volt, 150 watt, prefocussed, high pressure halogen, marine signal lamps mounted on a six-place
flashchanger.

Sandra Michelotti/D04/Caltrans/CAGov 03/12/2008 08:18AM
To: Renato Fortaleza/D04/Caltrans/CAGov@DOT, Patrick McCard/D04/Caltrans/CAGov@DOT, Joe Gillis/D04/Caltrans/CAGov@DOT
Cc: Renato Dacquel/D04/Caltrans/CAGov@DOT, Bill Shedd/D04/Caltrans/CAGov@DOT
Subject: Aviation Warning Lights

Hello Rene, Pat and Joe,

As you may know, I am now working with Caltrans on the New Bay Bridge Project. I have a few questions regarding the aviation warning lights that were installed on the bridges you and your crew maintain.
I know you have been replacing the aviation warning lights, can you please provide me with a brief description of the fixture failure, the model number and the life years of those being replaced?
Thank you for your time.

Sincerely,
Sandra Michelotti
Electrical Inspector (CEII)
Cell 510-681-4275
Office 510-286-0514
Fax 510-286-0550

Mike Travis

From: Bill Shedd [bill_shedd@dot.ca.gov] **Sent:** Thu 3/13/2008 2:57 PM
To: Saeed Shahmirzai
Cc: Sandra Michelotti; Mike Travis; Grady Hart; George Boughosn; Sharad Patel
Subject: Re: Fw: CCO 72
Attachments:

Thanks!

Saeed Shahmirzai/D04/Caltrans/CAGov
03/13/2008 02:12 PM

To: Bill Shedd/D04/Caltrans/CAGov@DOT
cc: KingN@pbworld.com, GarciaR@pbworld.com
Subject: Fw: CCO 72

Bill,

RFI 270's subject was already included in CCO 72 submittal.

Please update the CCO log to include RFI 270 as part of CCO 72.

Thanks
Saeed Shahmirzai
Senior Design / Construction Liaison
925-765-0859

From: Garcia, Rocky
Sent: Thu 3/13/2008 9:08 AM
To: Shahmirzai, Saeed
Cc: King, Nick; Walieddine, Fadi
Subject: FW: CCO 72

Saeed,

I have reviewed and verified the requested changes per RFI-270 and found

that we have already incorporated the electrical related changes under CCR-49, RFI-941 and RFI-942 which we have converted and submitted as CCO-72. In conclusion, the required changes have been reflected based on the changes depicted on TY Lin drawing sheets 813C and 813S3. Thus, no additional change to electrical plans is required. However, perhaps we should include RFI-270 in the list of associated RFIs section of CCO-72 memorandum to close this issue.

I hope the above provides the information you are looking for. Please let me know if you have addition questions.

Regards,
Rocky Garcia

PB Power
A Parsons Brinckerhoff Company
303 Second Street, Suite 700 North
San Francisco, California 94107
Tel: (415) 243-4735
Email: garciaR@pbworld.com

----- Original Message -----

From: Bill Shedd
Sent: 03/12/2008 04:03 PM
To: Saeed Shahmirzai
Cc: Grady Hart; George Boughosn; Sharad Patel; Sandra Michelotti; Mike.Travis@LANEngineering.com; tho@tylin.com
Subject: CCO 72

Saeed,

We are reviewing the CCO 72 package and we intend to respond back to you by the end of next week with our comments. Please confirm if RFI 270 is included in your package.

This CCO is hot and we need to get it to the Contractor ASAP.

Thanks,

Bill Shedd
Construction Senior, SAS Bay Bridge

"Takaki, Maxwell" <Takaki@pbworld.com>
03/13/2008 11:23 AM

To "Guggemos, Al" <Guggemos@pbworld.com>
cc "Walieddine, Fadi" <Walieddine@pbworld.com>, "Lucas, Ellery" <Lucas@pbworld.com>, "Garcia, Rocky" <GarciaR@pbworld.com>, "Estoque, Saturnino"
bcc
Subject RE [5]: Rack & Pinion Elevator Motor Feeder Requirement

Al,

Thanks for sharing this information with me. Based on the Peter Pold's (USA Hoist) reply below, I presume you are revising sheet 272/1204 (E-265) to eliminate Ckt UP210-9 (Car Lighting and Accessory Circuit).

Regards,
Max Takaki
PB Oakland FO
510-808-4558
415-290-1056 cell

From: Guggemos, Al
Sent: Thursday, March 13, 2008 9:35 AM
To: Peter Pold
Cc: Walieddine, Fadi; Lucas, Ellery; Garcia, Rocky; Estoque, Saturnino; Takaki, Maxwell
Subject: RE: RE [1]: Rack & Pinion Elevator Motor Voltage Requirement

Peter,

Thanks for your quick response and help on this matter. We will look at placing the XFMR in the Pit next to the Fused Disconnect Switch.

Backtracking a little bit ... the Base Controller sheet of the Electrical Schematic submittal shows a fused disconnect switch rated 100 Amp (480 VAC, 3-PH, 60 Hz feeder connection with GND and N). We will place the XFMR between the disconnect switch and the Base Controller terminals.

The lighting circuit I was talking about is also on this same sheet and is labeled as a Light Power Disconnect 120 VAC, 1-PH, 60 Hz, 16 Amp. The diagram shows a 120 power connection to the neutral in the Car Controller. This circuit looks incomplete. What about our 120 VAC circuit neutral?

Please let me know if you have any questions. Thanks.

Regards,

AL GUGGEMOS
PB Power, Supervising Electrical Designer
303 Second Street - Suite 700N
San Francisco, CA 94107
Office: 415.243.4768; Cell: 510.823.4844
guggemos@pbworld.com

From: Peter Pold [mailto:ppold@usahoist.com]
Sent: Thursday, March 13, 2008 8:29 AM
To: Guggemos, Al
Cc: Jay Cook

Subject: RE: RE [1]: Rack & Pinion Elevator Motor Voltage Requirement

Al,

The elevator requires a total load of approximately 70 Amps continuous when running. The elevator cab light is part of this load since this elevator is supplied thru power rails and it would not make sense to run a separate power rail just for the light. We us a large enough UPS to keep the lights and alarm operational for at least 5 hours in case of a power outage. The transformer should be a minimum of 75KVA. A isolation type transformer is preferred to separate the elevator control from any other electronic equipment.
The current rating is based on a preliminary design assuming 2 x 20 HP is sufficient. This could still change and I would suggest to install a 100Amp supply for the elevator to be sure that there will be no problems.

Regards

PETER POLD
MID-AMERICAN ELEVATOR EQUIPMENT CO INC
GENERAL MANAGER / CHIEF ENGINEER

-----Original Message-----
From: Guggemos, Al [mailto:Guggemos@pbworld.com]
Sent: Wednesday, March 12, 2008 5:57 PM
To: Peter Pold
Cc: Garcia, Rocky; Walieddine, Fadi; Lucas, Ellery; Takaki, Maxwell
Subject: FW: RE [1]: Rack & Pinion Elevator Motor Voltage Requirement

Peter,

My name is Al Guggemos and I'm a part of the SF Bay Bridge team at Parsons Brinckerhoff in San Francisco. I am verifying the Elevator VFD load for electrical power distribution needs. Can you please tell me the total load at the VFD that our feeder and system will see? From looking at the submittals I don't see any separate control power supply so the power feeder takes care of everything but the small feeder for lighting and emergency control needs. Also, it looks like we will have to invest in the addition of an isolation transformer after the main fused disconnect switch to provide a neutral for the VFD. Please recommend a XFMR rating. Let me know if you have any questions. Thanks.

Regards,

AL GUGGEMOS
Parsons Brinckerhoff, Supervising Electrical Designer
303 Second Street - Suite 700N
San Francisco, CA 94107
Office: 415.243.4768; Cell: 510.823.4844
guggemos@pbworld.com

From: Takaki, Maxwell
Sent: Wednesday, March 12, 2008 1:58 PM
To: Guggemos, Al
Subject: FW: RE [1]: Rack & Pinion Elevator Motor Voltage Requirement

Al, Peter Pold's e-mail address below. Regards, Max

From: Peter Pold [mailto:ppold@usahoist.com]
Sent: Friday, August 10, 2007 5:54 AM

To: Takaki, Maxwell
Cc: Jay Cook
Subject: RE: Rack & Pinion Elevator Motor Voltage Requirement

Max,

The supply voltage for the control system including the VFD is 460VAC nominal 3 phase 60 Hz. The minimum is minus 5% the maximum is plus 10% of 460V.
An isolation transformer at the feeder level (not on the car) can be used if the 4% THD caused by the VFD to the line is not acceptable. We will not include a isolation transformer with our system.
The voltage for both motors is 460VAC, the motors are wired parallel and appear to the VFD as one 40 Hp motor. Both motors are running together synchronized by the rack.

I hope I answered all your questions

Best regards,

PETER POLD
MID-AMERICAN ELEVATOR EQUIPMENT CO INC
GENERAL MANAGER / CHIEF ENGINEER

-----Original Message-----
From: Takaki, Maxwell [mailto:Takaki@pbworld.com]
Sent: Thursday, August 09, 2007 12:37 PM
To: Peter Pold
Subject: Rack & Pinion Elevator Motor Voltage Requirement

Peter,

Have a question regarding the supply voltage to two each 20 Hp, 460 V motors for 5-stop.762 M/S Simplex rack & pinion DLD elevator. What is the minimum acceptable voltage, which will provide the manufacturer specified torque? Do you recommend isolation transformer for VFD driven motors similar to any other VFD driven motor applications? Do both motor run at the simultaneously or only at the starting of the elevator?

Your reply is greatly appreciated.

Regards,
Max Takaki
PB Oakland, CA FO
510-808-4558

MEP CCO WEEKLY STATUS MEETING NO. 028

March 07, 2008 - 9:00 a.m.

Attendees:

[X] George Bou-Ghosn (CT)	[ ] Alex Sanjines (TYLin)	[X] Sandra Michelotti (CT)	[X] Tom Ho (TYLin)
[X] Bill Shedd (CT)	[X] Scott Fabel (CT)	[X] April Smith (CT)	[X] Rachel Liu (CT)
[X] Grady Hart (CT) - Author	[ ] James Duxbury (TYLin)	[X] Martin Chandrawinata (CT)	[ ] Imad Abed (BATA)
[X] Michael Travis (CT)	[X] Saeed Shalunitzi (PB)	[ ] Nick King (PB)	[X] Sam Patel
[X] Mike Forner (CT)	[ ] Gary Pursell (CT)	[ ] Alex Binai (CT)	

New Business:

Date		Issue	Resolution
2/29	1	RFI Process as it relates to CCOs.	Tabled until next meeting when Bill can be present
3/7			Will be discussed at 03/11 Meeting. Intention is to verify list, place in logical order & group CCOs with support of entire Team (ABF, PB, TYLin and CT
3/7	2	CCR Process	Will be discussed at 03/11 Meeting

CCO STATUS

CCO / CCR NO.	DESCRIPTION	MTG DATE	ACTIONS	PRIORITY	DUE DATE	BIC
31	**Mechanical Modifications**					
	CCR 41 & RFIs 189, 481, 482, 495, 511, 729	2/8/08	PB returned a hard copy CCO Package to George - CT to review.	A		PB
		2/15/08	PB to deliver RacheTs comment revisions on 2/18/08.		2/18/08	
		2/22/08	PB to resubmit entire Package 2/28.		2/28/08	
		2/29/08	CT completed review. PB to resubmit with format corrections.		2/29/08	
		3/7/08	PB revising stamp on one drawing.		3/10/08	
42	**Electrical Modification**					
	RFI 726R1	1/29/07	Grady sent Sandy's review comments to PB. RFI 726 will also be added. Due Date 2/15/08	A	2/15/08	PB
		2/8/08	PB to determine if RFI 726R1 is to be included in CCO.			
		2/15/08	PB to deliver complete CCO Package on 2/20/08.		2/20/08	
		2/22/08	CT reviewing CCO Package from PB. Complete review by 2/28.		2/28/08	
		2/29/08	Mike to meet with TYLin & PB to clarify pole issues. CT returning comments today.		2/29/08	
		3/7/08	Will be discussed at 03/11 Meeting		3/11/08	
42S1	**Cable Tray Changes**					
	CCRs 51, 52 & RFIs 378, 584, 919Rx, 1038	1/25/08	CT will send partial ATP Package (Structural) to ABF on 1/28/08. The complete ATP Package (Electrical & Structural) will be sent to ABF on 2/28/08.	A		CT
		2/11/08	Partial ATP Package (Structural) was resubmitted to CT on 2/11/08 and Mike is reviewing it.			
	Transition from W2 cap beam to OBG	2/8/08	PB to submit ATP Package to CT on 2/8/08 or 2/11/08.		2/11/08	
		2/15/08	Partial ATP to be issued to ABF today.		2/15/08	
		2/15/08	PB to send a complete Package to CT 2/28/08.		2/28/08	
		2/22/08	PB to update delivery date by 2/22.		2/22/08	
		2/29/08	PB submitted to CT 2/28/08. Review due on 3/7/08.		3/7/08	
		3/7/08	CT review due date on 3/17/08		3/17/08	
43	**Lighting Revisions**					
	RFI 969Rx & CCR 31		TYLin CCO Package is reviewed with no comments.	C		TYLin CT PB
			PB is finishing routing details. Due date is 4/08.			
		2/15/08	PB to submit complete Package by 4/08.		4/1/08	
		3/7/08	Will be discussed at 03/11 Meeting		3/11/08	
44	**Barrier Modifications**					
	RFIs 565R4, 1064, 993, 1168 & CCR 34		Extra HLS holes are included in both CCO 42 & 44. Revisions to sheets will effect both CCOs.	A		TYLin CT PB
	1. Eliminate barrier mounted call boxes & bike path call boxes	1/18/08	Handrail Count directions given to Designers on 12/14/07. CT is waiting on Steve's rail recount. TYLin may add 1 pole for HLS. ATP Letter sent for barrier bolt holes on 1/15/08.			
		1/25/08	Rob is reviewing Package. Due date is 1/29/08.		1/29/08	
	2. Add 18 steel & 74 concrete barrier mounted handrail	2/1/08	TYLin responded to RFI 1168 on 2/6/08 & will revise Package, while CT reviews old PB Package.			
		2/8/08	RFI 1168 under review by CT.			
	3. Install the SAS steel barrier mounted rails at CB 143A, 143B, 243A, 243B	2/15/08	TYLin to include RFI 1168 in CCO 44.			
		2/22/08	CT to finish review & send comments to PB & TYLin. Bill & Saeed to confirm scope with Chris & Scott to confirm with Brandan.		2/28/08	
		2/29/08	CT to finish review & send comments to PB & TYLin. Bill & Saeed to confirm scope with Chris & Scott to confirm with Brandan. Waiting for CCO 42 to be issued.			
		3/7/08	Martin to verify what has been issued by ATP with the current scope of CCO 44. TYLin to revise Detail Sheet 9035 (RFI 1163)			
55	**Service Platforms Electrical Changes**					
	RFIs 451Rx, 1136 & CCR 53	11/30/08	Processing email sent to Designers. Due date is 04/08.	B	4/1/08	PB
	1. Change in breaker rating & cable size for TOS controller cabinets. Cable tray changes to accommodate TOS splice closure inside cable tray.	2/15/08	Delivery date for Package is 04/08.		4/1/08	
	2. Rearrange equipment racks at the service platform to avoid interference with the platform stairs.					
59	**Additional OBG Penetrations**					
	RFIs 834Rxx, 839 & 1029	1/4/08	Grady is gathering data to prepare scope of work.	A		CT
		1/8/08	Response to RFCO 22 issued in STL 998. Max is working on penetrations. Due date is 05/08.		5/1/08	
		2/15/08	ATP effort is ongoing through the submittal review process. (Penetration Charts)			
		2/15/08	Scott suggested a partial CCO for the Panel Points completed to date.			
		2/22/08	CT to discuss partial CCO release per Panel Point with ABF for concurrence.		2/28/08	
		2/29/08	No change. A comprehensive list issued 2/27 as 05.03.01-001452.			
		3/7/08	Scott to discuss a partial CCO for the Panel Points completed to date with Chris (ABF)		3/7/08	
61	**Electrical Warning Systems**					
	CCRs 32 & 46	2/15/08	PB to submit a Breakdown List 2/20/08 to establish scope & meet with CT for final agreement.	A	2/20/08	CT PB
		2/29/08	TYLin to provide specification 3/3. Mike is reviewing package and Bill & Saeed to confirm scope.		3/3/08	
		3/7/08	CT to return CCR 32 review comments today. PB to submit CCR 46 03/10/08.		3/7/08	
68	**Additional Tower Penetrations**					
	RFIs 834Rxx, 839 & 1029	1/4/08	Grady is gathering data to prepare scope of work.			

CCO/ CCR NO.	DESCRIPTION	MTG DATE	ACTIONS	PRIORITY	DUE DATE	BIC
		1/4/08	Response to RFCO 22 issued in STL 998.			
		1/8/08	Due date is 05/08.		5/1/08	
		2/8/08	PB revised CCO delivery date to 5/08.		5/1/08	
		2/15/08	ATP effort is ongoing through the submittal review process. (Penetration Charts)			
		2/15/08	Scott suggested a partial CCO for the Panel Points completed to date.	A		CT
		2/22/08	See notes on CCO 59.			
		2/29/08	No change. A comprehensive list issued 2/27 as 05.03.01-001452.			
		3/7/08	Scott to discuss a partial CCO for the Panel Points completed to date with Chris (ABF).		3/7/08	
70	**Tower Utility Panels**					
	CCRs 42 & RFI 1134		(See CCRs for status)			
		2/15/08	RFI 1134 requires a response by 2/28/08.		2/28/08	
		2/15/08	PB to meet with Mike to discuss scope 2/18/08.		2/18/08	
		2/22/08	PB to deliver preliminary plans 3/7/08.	A	3/7/08	CT
		3/7/08	CT returned comments today. RFI 1134 is open.			
		3/12/08	Mike is reviewing the package.			
72	**Cable Electrical**					
	CCRs 45, 49, 66 & RFIs 941 & 942		Mike to complete review by 2/28. Bill & Saeed to confirm scope with Chris & Scott to confirm with Brandan.		2/28/08	
		2/22/08	Spec change needed from TYLin by 2/28.			
	UL Lights are needed, Ref. SUB 417, GMU lights will be used. TYLin will be change the 'UL' Spec.	2/29/08	CT conducting technical review. TYLin to officially forward CCR 49.	A		PB
		3/7/08	PB to submit Package today.		3/7/08	
73	**Conduit Revision Along Bike Path**					
	Unsightly conduit on Skyway & SAS					
				C		
74	**Strong Motion System**					
	CCR 50	12/28/07	CDMG reviewing sensor locations. Due date is 1/28/08.		1/28/08	
	Change in location of sensor boxes per CDMG.	2/29/08	PB Package to be submitted today.			
		3/4/08	Sam is reviewing package.	B	3/14/08	CT

CCR STATUS

32	**USCG Navigation Lighting (CCO 61)**					
	Changes in Nav. Lights NV-1 (Green Lantern) per SUB-171	1/25/08	PB working on Package. Due date is 02/08.		2/1/08	
		2/1/08	Sam, Sandi & Mike reviewing PB Package			
		2/15/08	CT to return review comments to PB to 2/28/08.		2/28/08	
		3/7/08	CT to provide comments today.	A	3/7/08	CT
		3/12/08	Bill is reviewing the addition of LED lights to the system. No due date established. Sam's comments sent to PB on 3/7.			
43	**Interior Tower Issues from 3-9m**					
	Shop Dwg submittal revealed illumination deficiency. Sump pump submittal revealed potential hazard due to lack of grating for the sump pit.	9/14/07	Revised proposal sent to Designers.			
				C		PB TYLin
44	**Bridge Painting & Misc.**					
	Railings, cable handrails, platforms & misc. visible items	11/23/07	April & Gary P. are gathering data to prepare scope of work. Due date is 04/08.		4/1/08	
				C		CT
46	**Fog, Bell & Horn per USCG (CCO 61)**					
	FD-5 Panel, Additional 1-mile Bell at E3 and 1 Horn at E2 on the Skyway.		PB to design panel / final electrical routing			
			PB is working on package. Due date is 2/08.		2/1/08	
		2/1/08	Sam to review and return to PB ASAP.			
		2/15/08	Sam to review and return to PB by 2/28/08.	A	2/28/08	PB
		3/7/08	CT returned comments today.		3/7/08	
47	**Elevator Options**					
	RFI 536		CT is waiting for ABF's revision to Submittal 235 and an RFI			
	Elevator Pit and provisions for the phone system and electrical work may need modifications. Reference: SUB-235		Martin is reviewing 235R. Due date is 2/2/08.		2/2/08	
		2/1/08	Response to SUB-235 returned to ABF.	B		ABF
49	**Main Cable & Tower Marker Lights (CCO 72)**					
	RFIs 270, 941 & 942	12/14/07	Response issued for SUB 105.			
	Stanchions, strong motion attachments, etc.	12/28/07	PB to finish routing of conduit on 1/22/08.		1/22/08	
		2/1/08	Revised Package received from PB on 1/31/08. CT to review.		1/31/08	
	UL Lights are needed, Ref. SUB 417, GMU lights will be used. TYLin will be change the 'UL' Spec.	2/15/08	CT reviewing the 2/6 PB revision. Mike to review ASAP. Awaiting TYLin portion of the Package.	A		
		2/22/08	See notes on CCO 61. Mike to send comments to PB & TYLin.		2/28/08	
			See CCO 72.			
53	**TOS (CCO 55)**					
	RFI 451Rx	2/29/08	PB will provide details. Due date is 4/08.		4/1/08	
	Change in breaker rating and cable size for TOS controller cabinets. Cable tray changes to accommodate TOS splice closure inside cable tray.	3/4/08	Sam is reviewing package.		3/24/08	
				B		CT
58	**Grounding Issues at Misc. Locations**					
	RFI 707Rx	1/18/08	Grady is reviewing Package. Due date is 1/22/08.		1/22/08	
		2/1/08	Grady to discuss with Mike on 2/8/08.		2/8/08	
		2/15/08	CT & PB to meet on 2/18/08 to discuss scope.		2/18/08	
		2/22/08	PB to deliver Package by 3/7/08.	B	3/7/08	PB

"King, Nick"
<KingN@pbworld.com>
03/13/2008 08:28 PM

To <gary_j_lai@dot.ca.gov>, <alex.sanjines@tylin.com>, "Antonio, Andre" <Antonio@pbworld.com>, "Bill Shedd" <Bill_Shedd@dot.ca.gov>, "Carol Choi" <CChoi@tylin.com>,
cc
bcc
Subject RFI 1134 response, revised 3/13/2008

Ladies and Gentlemen,

Please find the attached response to RFI 1134, revised according to input from both the contractor and Caltrans.

Nick King
Lead Design/Construction Coordinator
Parsons-Brinckerhoff
kingn@pbworld.com


RFI 1134 Sketches 3-11-08.pdf


PB Response to RFI 1134 (2).doc

PB Americas, Inc / PB Power
303 2nd St Suite 700N, San Francisco, CA 94107-1317
Main Desk: (415) 243-4600 Fax: (415) 243-9501

RFI Response

To: Caltrans

Attn: Bill Shedd, Jing Chen

Project: 04-0120F4 - SAS

Response Date: 03/13/2008

RFI No: 1134

Subject: Panels, Circuit Breakers, Transformer at Tower Elev 89.85

Response:

Subject RFI requested complete details for the relocation of panelboards, UP210-1A and UP210-1B, and associated circuit breakers and transformers from outside to inside the tower shafts at elevation 89.85, including but not limited to, mounting racks dimensionally located within the shafts, mounting penetrations, and attachments, conduit support, etc., and whether pullboxes 2G and 2H remain outdoor or relocated inside the tower shafts.

The answers to the RFI are shown on attached sketches.

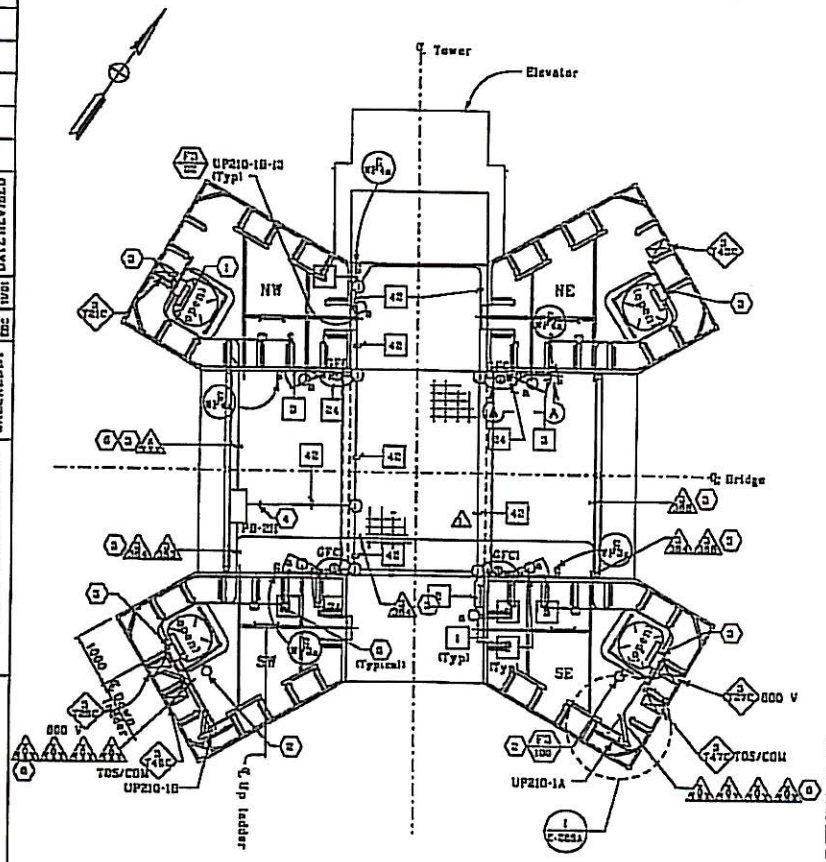
Revision/Impact to following Specification sections:

- **None**

Potential Design/Cost Impact from this RFI:

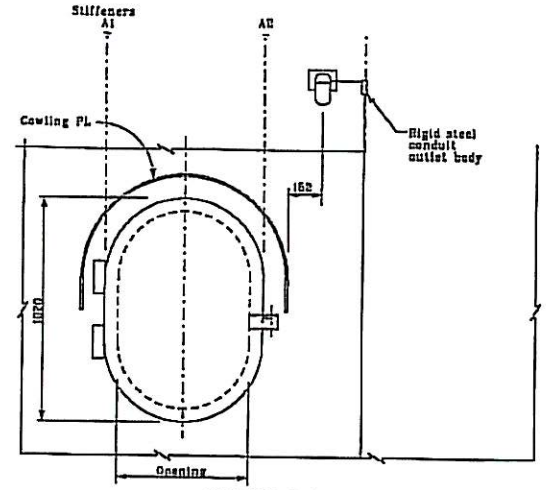
- ☐ No Change.
- ☐ Change with no cost
- ☐ Change with cost.
- ☐ Change with Credit.
- ☒ Change, but cost cannot be determined at this time

Date: 01/24/2008	**Respondent:**	Max Takaki	**Phone No.:** (510) 808-4558
(rev) 03/07/2008			
(rev) 03/13/2008	**QA/QC:**	Nino Estoque	**Phone No.:** (415) 243-4618
		Nick King	**Phone No.:** (510) 808-4610



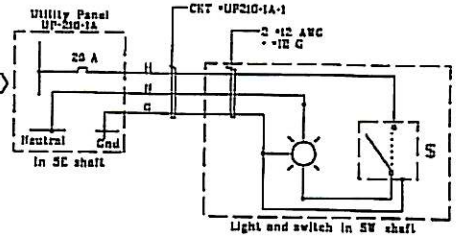
PLAN AT ELEVATION 89.85 m

SCALE: 1:40



SECTION A–A
ACCESS OPENING DOOR

NO SCALE



120 V ELECTRICAL EQUIPMENT TASK LIGHTING WIRING DIAGRAM

SHOWN FOR CIRCUIT *UP210-1A-1 ONLY. LIGHT IN SE SHAFT IS SIMILAR BUT FED FROM UP-210-1B-1 IN THE SW SHAFT.

SHEET NOTES:

1. For tower shaft ladder and platform lighting and power layout, see section B-B on sheet E-284.
2. Electrical distribution equipment service light mounted under ceiling.
3. Conduit and penetration I-beam at Elevations above 92.50 m. See Sheet E-285B for details. For shaft lighting and receptacle distribution box details, see Detail 2, Sheet E-284D.
4. Connect to platform lights and receptacles.
5. Multiple switches at certain elevations. See sheet E-284, E-284A, & E-284D for details.
6. New conduit numbers to be assigned.

NOTES:

1. References:
   - For typical conduit installation details, see sheet E-280.
   - For utility panel UP-210-1A and UP-210-1B panel schedules, see sheets E-270 and E-280.
   - For types of pull boxes, splice boxes and enclosures, see sheets E-03 and E-100.
   - For conduit and cable tray schedules, see sheets starting at E-401.
   - For lighting installation details, see sheet E-287.
   - For lighting fixture schedule, see sheet E-273.
   - For vertical conduit runs supports system, see sheet E-287.
2. All conduits and fittings routed exposed at grating shall be rigid galvanized steel, PVC coated.
3. Fixture mounting height elevation shall be 2.125 m above floor/platform elevation UNO.
4. Electrical conduits shall enter the tower shafts between stiffeners A3 and A4 only. For conduit entry details, see Structural Utility drawings.
5. For other related work not shown on this sheet, see Electrical Special Provisions.

DETAILS
TOWER AND SUSPENSION CABLE TOWER POWER AND LIGHTING

AS NOTED

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

RFI 1134-SK-E-285

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SF	80	13.2/13.9	285R	1204

REGISTERED ELECTRICAL ENGINEER

PLANS APPROVAL DATE

PB POWER, Inc.
A Parsons Brinckerhoff Company
303 Second St., Suite 700N
San Francisco, CA 94107-1317

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CALCULATED/DESIGNED BY: FX
CHECKED BY: ENC
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REVISED BY: ENC
DATE REVISED: 00-00-00
DATE PLOTTED = !DATE
TIME PLOTTED = !TIME

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

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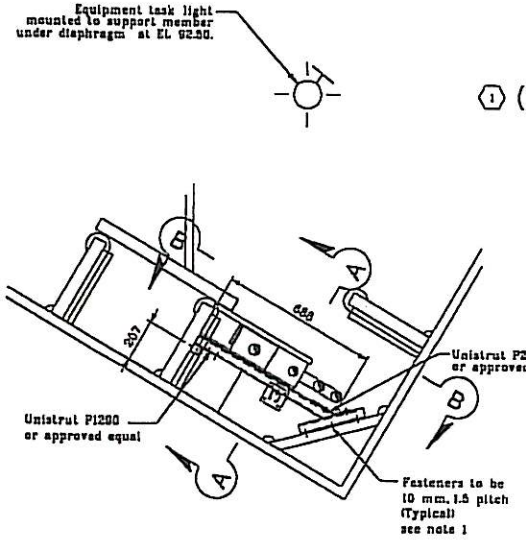
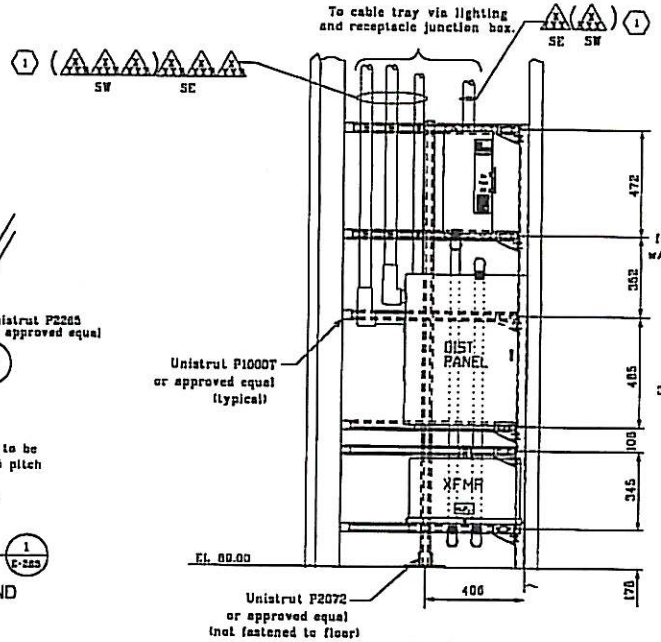
CU 04251 | EA 0120F1



DETAIL AT EL 89.85 m (1 / E-285)
SCALE: 1 : 10

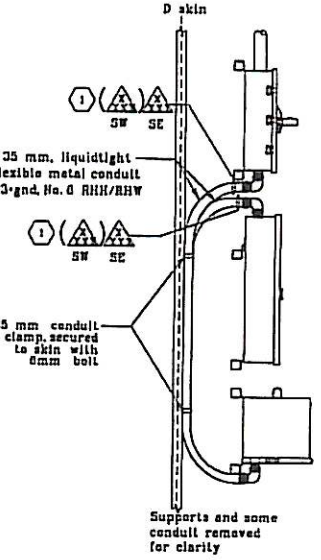
SE SHOWN, SW TYPICAL BUT OPPOSITE HAND



SECTION B–B
ELEVATION

SOUTHEAST SHOW
SOUTHWEST OPPOSITE HAND
SCALE: 1 : 10

DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE CHANGED TO FACILITATE INSTALLATION



SECTION A–A
SIDE VIEW
SCALE: 1 : 10

SHEET NOTES:

(1) New conduit numbers to be assigned.

NOTES:

1. Bolt lengths to be long enough to fully engage all materials through which they pass, including all washers and nuts, and where attaching to structural steel be anchored in threads to a depth at least 1.2 times the bolt diameter. Holes in structural members shall be drilled and bottom tapped to 5 mm minimum deeper than the depth to which the bolt will engage the steel.

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	DIGEST No	TOTAL SHEETS
04	SF	80	13.2/13.9	28851	1204

REGISTERED ELECTRICAL ENGINEER&DATE

PLANS APPROVAL DATE

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San Francisco, CA 94107-1317

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DATE REVISED: 8/01 11/01

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DETAILS
TOWER AND SUSPENSION CABLE
TOWER POWER AND LIGHTING
AS NOTED

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RFI 1134–SK–E–285A

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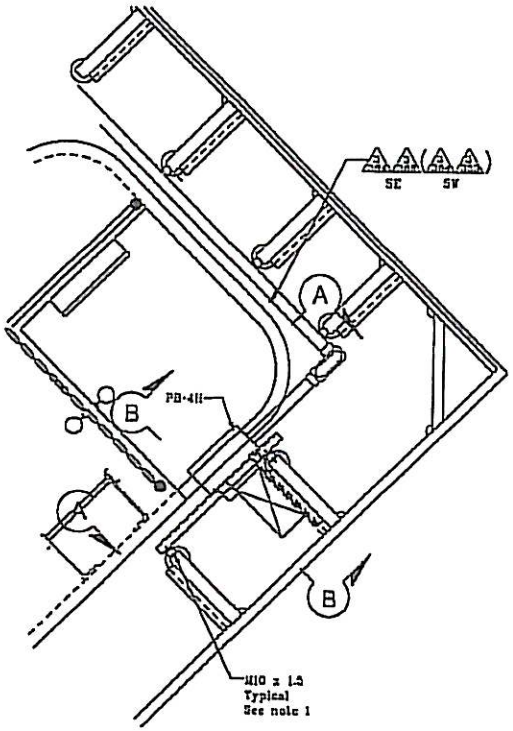
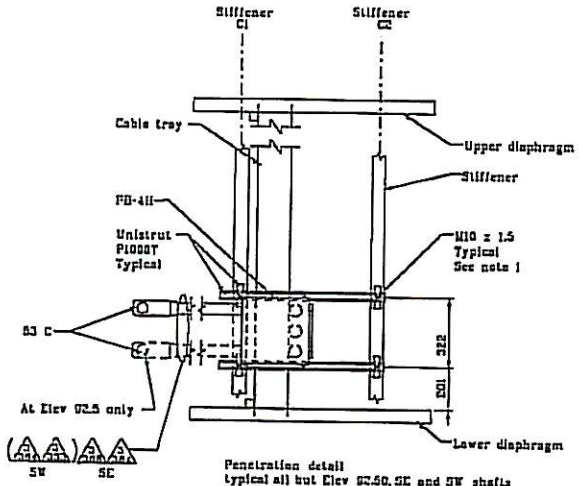
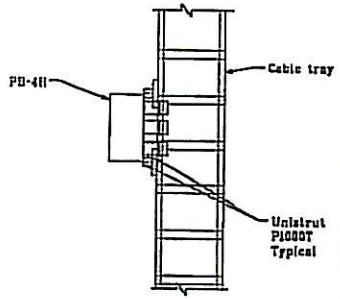


DETAIL 1
SCALE: 1:10



Penetration detail
typical all but Elev 92.50, SE and SW shafts
which has a PB-4C box 1400 x 350 x 152)
Stiffener location shown for SE. NW similar and
SW and NE are opposite hand.

SECTION A–A
SCALE: 1:10



SECTION B–B
SCALE: 1:10

NOTE

1. Bolt lengths to be long enough to fully engage all materials through which they pass, including all washers and nuts, and where attaching to structural steel be anchored in threads to a depth at least 1.2 times the bolt diameter. Holes in structural members shall be drilled and bottom tapped to 5 mm minimum deeper than the depth to which the bolt will engage the steel.

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	PROJECT No.	TOTAL SHEETS
04	SF	80	13.2/13.0	28683	1204

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DESIGN OVERSIGHT
REZAD GOLESHOHAMADI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

DETAILS
TOWER AND SUSPENSION CABLE
TOWER POWER AND LIGHTING
SCALE AS NOTED

RFI-1134-E-285C

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CU 04351 | EA 012071