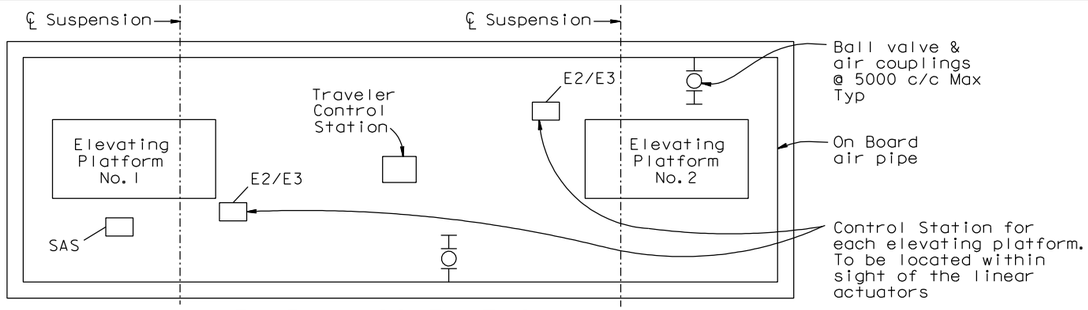

KEY PLAN SCHEMATIC

(EAST BOUND SHOWN, WEST BOUND SIMILAR)

NOTES:

For location of Traveler Control Stations see Assembly sheets for each traveler

PARTS FOR ELEVATING PLATFORM CONTROL

Part	Description	Size	Quantity/Traveler
L5-L6	Elevator Platform control Limit Valve	1/4"	1 or 2
6C	Shuttle Valve: Will be actuated by either L5 or L6 as necessary.	1/4"	0 or 1
31	Pressure Regulator set to limit pressure to 689 kPag (100 psig)	1 1/4"	1 or 2
31A	Pressure Regulator set to limit pressure to 485 kPag (70 psig)	3/4"	1 or 2
32	Full flow throttle and reverse valve for the linear actuator air motors with built-in emergency stop button. Deadman operation. Use same valve type as is used for trolley throttles.	1 1/4"	1 or 2
33	Linear Actuator Air Motor. Max air consumption 183 scfm per motor		1 or 2
34	Exhaust Choke Throttling Valve	To suit motor port	2 or 4 △7
35	Silencer	To suit motor port	2 or 4
36	Inline Lubricator: One Required at each air motor inlet.	3/4"	2 or 4
37	Quick Exhaust Valve	3/4"	2 or 4 △7
38	Piloted Safety Valve to allow flow only when Pedal Valve 40 is actuated. - Poppet Valve	1 1/4"	1 or 2
39	NOT USED		
40	Pedal Control Valve, located at the Elevated Platform Control Station. Operation: 1. To lift Elevated Platform, Pedal must be held depressed while operating the Throttle Valve. ⟨32⟩	1/4"	1 or 2
41	3-Way Manual Diversion Ball Valve with Latch-Lock Lever and Nut to allow isolation of Elevating Platforms for maintenance or repair without having to shut down the other air systems on the Traveler	1 1/4"	1
42	3-Way Normally Open Palm Button Valve	1/4"	1 OR 0

CONTRACT CHANGE ORDER NO. _____
SHEET ____ OF ____

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
△7	03/02/12	MISCELLANEOUS TRAVELER MODIFICATIONS	RH	AS	183S2
△6	01/06/12	MISCELLANEOUS TRAVELER MODIFICATIONS	RH	AS	183S1
△5	08/23/11	MISCELLANEOUS TRAVELER MODIFICATIONS	RH	AS	183
△4	02/25/11	TRAVELER MODIFICATIONS	RH	AS	183
△3	02/12/10	TRAVELER MODIFICATIONS	RH	AS	24S1
△2	08/21/09	TRAVELER MODIFICATIONS	RH	AS	24S1
△1	07/20/07	RAIL CHANGE & MISCELLANEOUS DETAILS	RD	NV	24

REVISIONS

REVISION △6 SUPERSEDES REVISIONS △4 & △5

REGISTERED PROFESSIONAL ENGINEER R. Henriksen No. M 029816 Exp. 06/30/12 MECHANICAL STATE OF CALIFORNIA

FOR REVISIONS ONLY

R. Valizadeh/V. Toan/Y.L./W.L./F.C.
DESIGN OVERSIGHT
Roger Valizadeh / Vong Toan / Y. Liu
SIGN OFF DATE 03/02/12

Rev. Date: 5-18-98

DESIGN	BY R. Scott	CHECKED R. Henriksen	
DETAILS	BY Z. Istre	CHECKED J. Otter	
QUANTITIES	BY R. Scott	CHECKED T. Ho	

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

R. Manzanarez
PROJECT ENGINEER

BRIDGE NO. 34-0006L/R
KILOMETER POST 13.2/13.9

CU 04
EA 0120F1

DISREGARD PRINTS BEARING EARLIER REVISION DATES 12/19/08

Caltrans Metric

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	1135R7	1204

REGISTERED ENGINEER - CIVIL
12-19-08
PLANS APPROVAL DATE
REGISTERED PROFESSIONAL ENGINEER Roupen Donikian No. C 56519 Exp. 06/30/09 STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

T.Y. LIN / MOFFATT & NICHOL
825 BATTERY STREET
SAN FRANCISCO, CA 94111

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

TRAVELER AIR SYSTEM NOTES:

1. All double check valves shall be installed horizontally.
2. All vents without silencers unless noted otherwise shall have a minimum of 300 mm of pipe and terminate with a screened downturned elbow.
3. Flexible hose (not to exceed 750 mm in length unless otherwise noted or shown) may be used for final connections to equipment.
4. All pipe sizes are typical for similar locations.
5. On board rigid pipe to be SCHED 40.
6. Provide support to 2" pipe within 150 mm of each pipe hose connection and at 1800 intervals maximum.
7. Provide downturned elbow and reducer as required at each equipment connection.
8. Provide sufficient flexible connection hose to accommodate traveler movement (12,000 mm length).
9. Mount throttle and whistle valves so as to be accessible by hand.
10. Mount main system pilot valves (Dead Man Switch) so as to be operated by foot.
11. Fabricator to design and provide a steel framed, plywood sheathed control console. Provide weather cover for all controls.
12. Traveler operating speed 6.1 m/min (20 fpm) fully loaded going up grade.
13. Anticipated trolley air consumption at full speed is 33 scfm per motorized trolley.
14. Pneumatic schematics illustrate the principles of the pneumatic systems. System manufacturer is to review pneumatic schematics; carry out detailed layout of the system; make any detailed modifications necessary to ensure the proper operation of the systems.
15. For functional description of components and other requirements, see specification.
16. Elevating platform drives and actuators are designed to operate with air pressure in the range from 490 to 690 kPa (70 to 100 psig). Provide pressure relief valves to avoid supply of excessive pressure to the drive motor so as to avoid excessive motor stall-out torque.
17. SAS EB & WB Travelers have 4 suspension systems (12 motors) and one elevating platform each.
18. E2/E3 EB & WB Travelers have 8 suspension systems (24 motors) & two elevating platforms each. These travelers change suspension systems when Hinge A is crossed.
19. Quick disconnects items 11 & 12 are only on the E2/E3 Travelers. SAS Travelers are to be piped with fixed connections.
20. Main system pilot valves (item ⟨5⟩) - 1 required for operator facing east and 1 required for operator facing west.

SAN FRANCISCO OAKLAND BAY BRIDGE
EAST SPAN SEISMIC SAFETY PROJECT
SELF-ANCHORED SUSPENSION BRIDGE
(SUPERSTRUCTURE & TOWER)

TRAVELER AIR SYSTEM-02A

REVISION DATES (PRELIMINARY STAGE ONLY) 12/19/08

SHEET 718R7 OF

FILE => I:\bb\04-012001\sas\contract plans and cco\cco\cco#183s2\1-original 03-02-12\dgn\aktrv121a.dgn

USERNAME => DWinrow DATE PLOTTED => 01 MAR 2012 TIME PLOTTED => 11:59:29

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