DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	426R1	1204

REGISTERED ENGINEER - CIVIL

12-6-04
PLANS APPROVAL DATE

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.

REGISTERED PROFESSIONAL ENGINEER Marwan N. Nader No. C 054426 Exp. 12/31/11 CIVIL STATE OF CALIFORNIA

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

Caltrans Metric

STRUCTURAL COMPONENT	PANEL POINTS PP	STEEL GRADE	SPCM	TM/SRM	TTP
BOX GIRDER					
Girder Plates					
Face A	PP8 - PP110	A 709M Grade 345		X	
Face B, H	PP8 - PP110	A 709M Grade 345	*	X	
Face C	PP8 - PP110	A 709M Grade 345	*	X	
Face D	PP8 - PP110	A 709M Grade 345	*	X	
Face E	PP8 - PP110	A 709M Grade 345	*	X	
Face F	PP8 - PP110	A 709M Grade 345	*	X	
Face Q	PP8 - PP110	A 709M Grade 345			
All Faces (except architectural plates)	PP 110-Hinge A	A 709M Grade 345	*	X	*
Architectural Plates	PP 110-Hinge A	A 709M Grade 345			
Girder Stiffeners					
All Faces	PP8-PP110	A 709M Grade 345**		X	
Architectural Plates	PP 110-Hinge A	A 709M Grade 345			
All Other Faces	PP 110-Hinge A	A 709M Grade 345**		X	
Rib Transitions and terminations		A 709M Grade 345		X	
Longitudinal Shear Plates					
Type 1		A 709M Grade 345		X	
Type 2 (W3 & E3 Lines)	PP120-PP127	A 709M Grade 345	X	X	* 1
Type 2 (Typical)				X	
Longitudinal Truss Gusset C & E	PP 9 to 118	A 709M Grade 345		X	
Stiffeners Plates for Access from Girder to Cross Beam	Typical at Cross Beams	A 709M Grade 345			
CROSS BEAM					
Typical and at Pier E2	PP8 - PP119	A 709M Grade 345	*	X	* 1
At East Anchorage			X	X	
FLOOR BEAM		A 709M Grade 345	*	X	*
HINGE A BULKHEADS	PP 127, 128.3	A 709M Grade 345	*	X	
SUSPENSION SYSTEM					
Suspender Brackets		A 709M Grade 345		X	
Cable Brackets		A 709M Grade 345		X	
Saddle Support Beam		A 709M Grade 345		X	
EAST CABLE ANCHORAGE		A 709M Grade 345	X	X	
Top Anchorage Plate		A 709M Grade 345	X	X	
PT Strand Stiffeners	PP 8	A 709M Grade 345		X	
End Stiffeners Plates	PP 8	A 709M Grade 345		X	
Bearing Stiffeners, Shear Key Stiffeners, Girder Key Plates, PL 50x700 1	PP119	A 709M Grade 345		X	X
Girder Diaphragm Plates	PP119	A 709M Grade 345		X	X
East Saddle Grillages	PP119	A 709M Grade 345	X	X	X
Girder Edge Beams	PP115 to PP128	A 709M Grade 345		X	
Girder Plate "K"	PP 117.5 to PP121	A 709M Grade 345	X	X	
Girder Plate "Vertical"	PP 120 to PP125	A 709M Grade 345	X	X	
End Block Plate	PP 128.3 to Hinge A	A 709M Grade 345		X	

** Stiffener plates 2 and 10 from PP8 to Hinge A are A709M HPS 485W

ABBREVIATIONS:

SPCM - Seismic Performance Critical Member
TM/SRM - Tension Member / Stress Reversal Member (See note 3)
TTP - Through Thickness Properties

STRUCTURAL COMPONENT	STEEL GRADE	SPCM	TM/SRM	TTP
Tower Shaft				
Tower Skin PL	A 709M Grade 345		See Note 4	X
Longitudinal Stiffener PL	A 709M Grade 345		See Note 4	X
Diagonal Stiffener PL	A 709M Grade 345		See Note 4	X
Tower Base Shear PL				
Tower Base Shear PL (Skin PL)	A 709M Grade 345			X
Tower Base Shear PL (Stiffener PL)	A 709M Grade 345			X
Tower Splice at 50.300 m, 83.000 m, 114.000 m				
Typical	A 709M Grade 345		See Note 4	X
Longitudinal Stiffener Splice PL	A 709M HPS 485W		See Note 4	X
Tower Splice at 146.280 m	A 709M HPS 485W		See Note 4	X
Tower Strut				
Shear Link	Shear Link Grade 345	X	X	X
Shear Link at Connection	Shear Link Grade 485	X	X	X
Shear Link Stiffener PL	A 709M Grade 345	X	X	X
Flange Splice PL	Shear Link Grade 485	X	X	X
Web Connection PL	Shear Link Grade 485	X	X	X
Doubler PL	A 709M HPS 485W		X	X
Tower Cross Bracing	A 709M Grade 345	X	X	X
Tower Strut Facade	A 709M Grade 345			
Tower Diaphragm Type 1A and 1B	A 709M Grade 345			
Tower Diaphragm Type 2A, 2B, 2C, 3A and 3B				
Diaphragm PL	A 709M HPS 485W		X	X
Web PL	A 709M HPS 485W			X
Connection PL	A 709M HPS 485W			X
Splice PL	A 709M HPS 485W			X
Channel	A 709M Grade 345			
Fit Lug PL	A 709M Grade 345			
Intermediate Stiffener PL	A 709M Grade 345			
Tower Diaphragm at 9 m and 13 m	A 709M Grade 345			
Tower Anchorage	A 709M Grade 345		See Note 4	X
Tower Skirt	A 709M Grade 345			
Tower Saddle Grillage				
Typical	A 709M HPS 485W		X	X
Top PL	A 709M Grade 345			X
Angle	A 709M Grade 345			
Bracket For Suspender at Tower	A 709M HPS 485W		X	X
Tower Saddle				
Built-up Portion (t ≤ 100)	A 709M Grade 345			X
Built-up Portion (t > 100)	A 572M (modified) Grade 345			X
Tower Head				
Tower Head Skin PL	A 709M Grade 345			
Tower Head Stiffener PL	A 709M Grade 345			
Tower Head Diaphragm	A 709M Grade 345			
Tower Top Diaphragm	A 709M Grade 345			

STRUCTURAL COMPONENT	STEEL GRADE	SPCM	TM/SRM	TTP
Extra Strong Steel Pipe				
At Cap Beam Transverse Tendons	A 53 Type S Grade B			
At Tie Down Cables	A 709M Grade 345			
Closure Joint	A 709M HPS 485W		X	X
Hinge K Beam				
Pipe Beam Tubular (t=100)	Pipe Beam Grade 690	X	X	X
Pipe Beam Tubular (t=80)	Pipe Beam Grade 485	X	X	X
Anchorage PLs, Ring Stiffener PLs, Stiffener PLs	Pipe Beam Grade 485		X	X
West Deviation Saddle				
Built-up Portion (t ≤ 100)	A 709M HPS 485W			X
Built-up Portion (t > 100)	A 572M (modified) Grade 345			X
West Jacking Frame				
Jacking Frame	A 709M HPS 485W			X
Frame Blocking	A 709M HPS 485W			

LEGEND:

X - "Indicates that the entire structural component has the indicated property".

* - "Indicates that a limited portion of the structural component has the indicated property, as shown on the plans".

NOTES:

1. For definition of structural components, see the detail drawings.
2. All welds and splice plates to SPCM plates shall be SPCM quality.
3. A blank in "TM/SRM" Column indicates member does not sustain tension.
4. The "TM/SRM" designation shall apply only to welds which are within 30° of horizontal in their final erected position.
5. At the Contractor's option, it is acceptable to use SPCM/TTP grade steel for panels with lifting lugs in areas where SPCM/TTP is not required per design. 1

CONTRACT CHANGE ORDER NO. ____
SHEET ___ OF ___

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

100% PS&E

DATE PLOTTED => 30 AUG 2011 TIME PLOTTED => 09:32:32

USERNAME => PTom

R. Valizadeh/V. Toan/Y.L./W.L./F.C.
DESIGN OVERSIGHT
Y. Liu
SIGN OFF DATE 09/01/11

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
1	09/01/11	EAST END OBG	MN	DT	87

REVISIONS

	BY	CHECKED
DESIGN	M. Nader	S. Rodriguez
DETAILS	T. Ho	S. Rodriguez
QUANTITIES	D. Harrison	N. Vo

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

R. Manzanarez
PROJECT ENGINEER

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

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

GENERAL NOTES NO. 4

Rev. Date: 5-18-98

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

CU 04
EA 0120F1

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY) 04/30/02 01/07/02 12/14/02 10/13/05 12/07/05

SHEET 009R1 OF

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