DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	SF	80	13.2/13.9	69R3	1204

Robert E. Bethel
REGISTERED MECHANICAL ENGINEER

12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ROBERT E. BETHEL — No. M018543 — Exp. 9/30/06 — MECHANICAL — STATE OF CALIFORNIA

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

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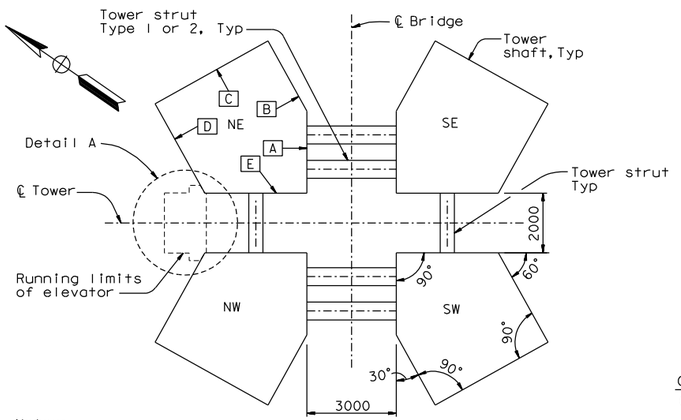
CALCULATED/ DESIGNED BY	CHECKED BY	ES	RB	DATE 5/3/02	DATE REVISED 5/3/02	REVISED BY 4/21/09	JNB

DESIGN OVERSIGHT — Bob Zandipour — May 12, 2009

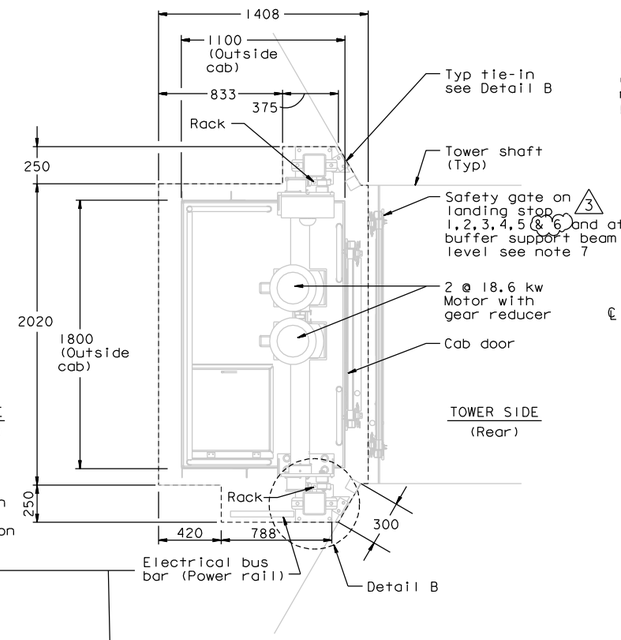
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — SAS STRUCTURE — Caltrans



Notes:
1. For longitudinal elevation looking North see "Elevator Detail No. 2" Sheet.

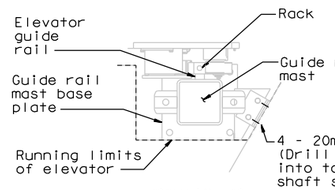
PLAN
1:100

LEGEND:
NE Northeast tower shaft designation
[A] Tower shaft skin plate designation

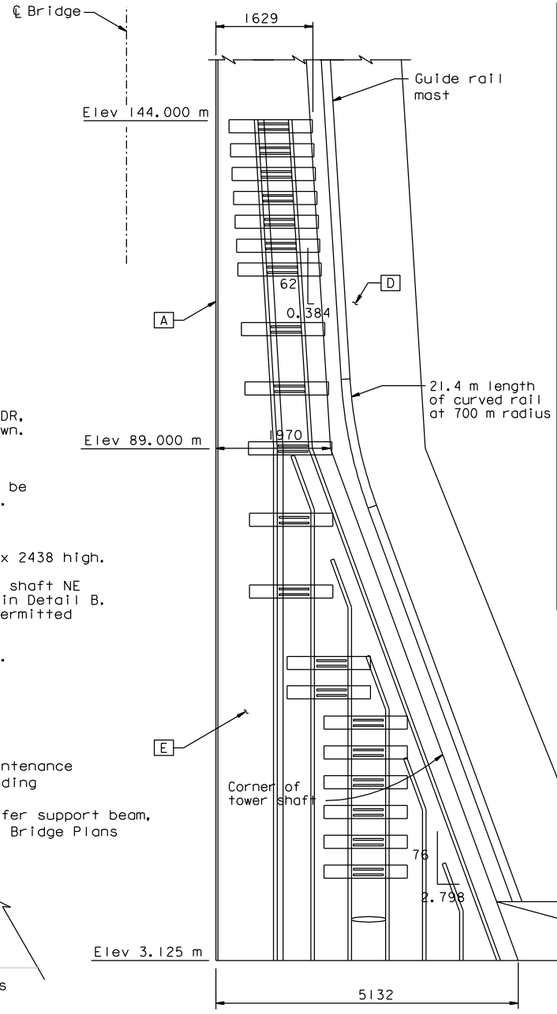


DETAIL A
1:20

NOTES:
1. Elevator to be USA Hoist Co., Inc. model 2000 DR, or approved equal, USA Hoist model 2000 DR shown.
2. Elevator to pass through running limits shown.
3. Elevator minimum clear inside dimensions shall be approximately 1676 wide x 965 deep x 2590 high.
4. Design wind velocity 190 km/hr at bridge deck.
5. Elevator minimum door size shall be 1475 wide x 2438 high.
6. Elevator guide rail mast shall attach to tower shaft NE & NW skin plate [D] only at the locations shown in Detail B. No supports, bracing or drive mechanisms are permitted between tower shafts.
7. For safety gate details see Special Provisions.



DETAIL B
(Plan Typ. Tie-In)
3048 max. Spacing
1:10

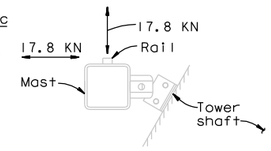


GUIDE RAIL GEOMETRY DEFINITION
Horiz=1:50
Vert =1:500

GENERAL DATA	
Model	2000 DR (USA Hoist Co.)
Classification	Rack & Pinion Elevator
Capacity	907 Kg
Speed	0.76 m/s
Car Weight	2948 Kg
Operation	Single Automatic Operation
Landing Served	1, 2, 3, 4, 5 & 6 [3]
Car & Hoistway Enclosure	
Car Safety	Rack & Pinion
Car/Hoistway Doors	Single vertical sliding panel /sliding door
Car Flooring/Roof	Aluminum Tread Plate
Car Walls-Exterior and Interior	Galvanized - G90 MCU Primer with Polysiloxane Top Coat (White) or Equal
Car Sled	Hot Dipped Galvanized
Car Glass Panels	Laminated Glass
Tower Tie-In	Hot Dipped Galvanized
Base Enclosure	Galvanized - G90
Buffer/Stroke	Spring Buffer/127 or Hydraulic Buffer/229
Governor/Trip Speed	210 fpm / 1.07 m/s
Machine Data	
Motor/Gear Box/Brake	90 Helical Bevel
Motor Kw	(2) 25HP / 18.6 Kw (Max Amp Operating Load Req. - 56.2)
Power Supply	480 Volts 100 A. 3 ph 60 Cy.
Guide Rail Mast (2 Each)	
Mast Section	TS 152 x 152 x 7.9 - A 500 Grade B
Mast Section Finish	Hot Dipped Galvanized
Mast Weight	113.4 Kg
Rack Material	AISI 1045 or Equiv.

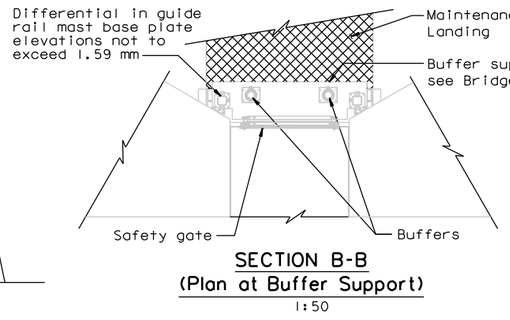
Vertical Loads At Bottom Of Guide Rail Masts (KN)		
	Per Mast	Per Buffer
Load Case 1 (Safety Set)	118.50	0
Load Case 2 (Buffer Impact)	127.29	63.65
Load Case 3	168.20	
Seismic (1g)		0

Horizontal Seismic Loads At Guide Rail Mast Tie-Ins



TOWER SIDE (CAB REAR) ELEVATION
Not To Scale

NOTES:
1. For tower shaft details, see Bridge Plans.
2. The elevator guide rail mast runs along the edge of tower shaft skin plate [D]
3. Details shown are for illustrative purposes only. Final design configuration and details, including guide rails and supports, are the responsibility of the elevator manufacturer.



SECTION B-B
(Plan at Buffer Support)
1:50

CONTRACT CHANGE ORDER NO. __
SHEET ____ OF ____

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO
REVISIONS					
3	11/04/11	TOWER ELEVATOR EXTENSION	JNB	FS	203S2
2	08/26/11	ELEVATOR DETAILS	JNB	FS	85
1	07/17/09	ELEVATOR DETAILS	JNB	FS	85

REGISTERED PROFESSIONAL ENGINEER — JAL BIRDY — No. 41547 — Exp. 12-31-13 — CIVIL — STATE OF CALIFORNIA

FOR REVISIONS 1, 2 & 3

ELEVATOR DETAIL NO. 1

ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

M-33

LAST REVISION 00-00-00 — DATE PLOTTED => 04 NOV 2011 — TIME PLOTTED => 08:33:17

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

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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
04	SF	80	13.2/13.9	70R3	1204

Robert E Bethel
REGISTERED MECHANICAL ENGINEER

12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — ROBERT E. BETHEL — No. M018543 — Exp. 9/30/06 — MECHANICAL — STATE OF CALIFORNIA

T.Y. LIN / MOFFATT & NICHOL
825 BATTERY STREET
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FOR REVISIONS 1, 2 & 3

CONTRACT CHANGE ORDER NO. --

SHEET ____ OF ____

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO
		REVISIONS			
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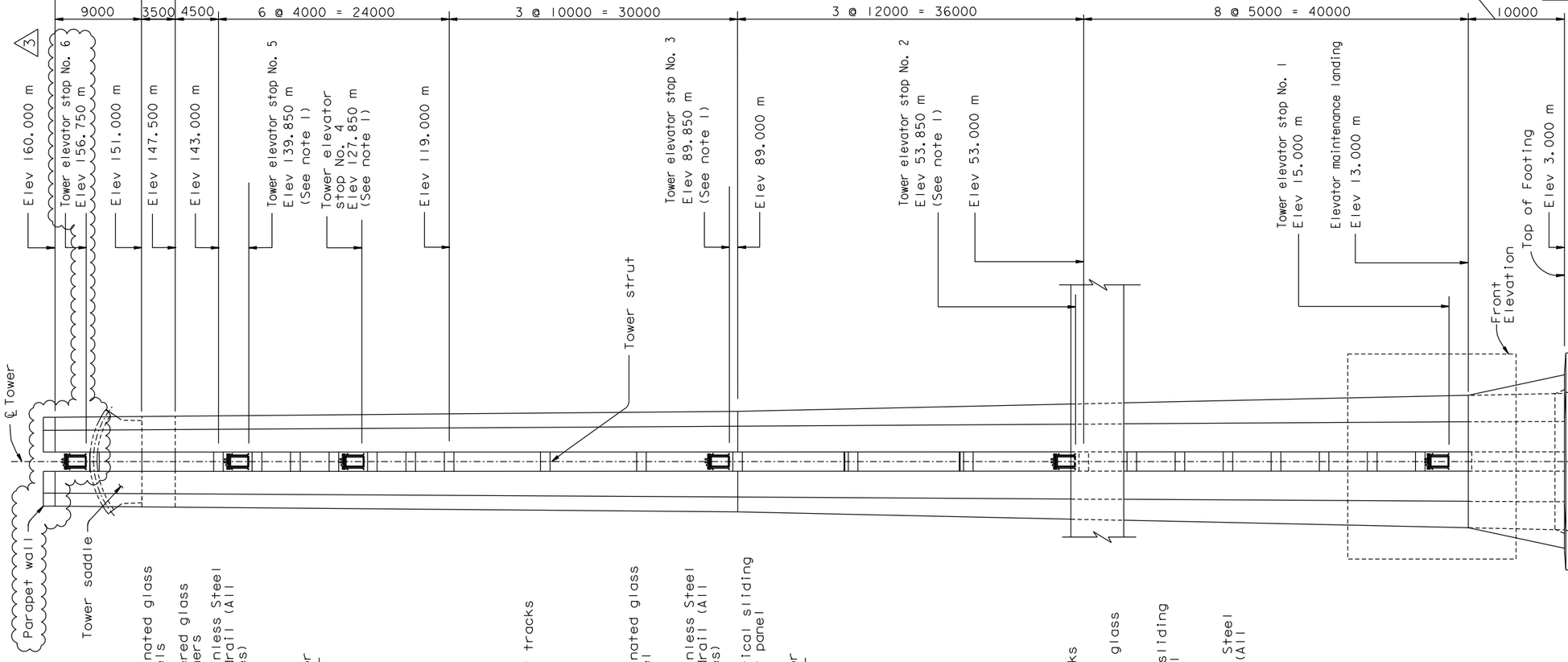
2	08/19/11	ELEVATOR DETAILS	JNB	FS	85
1	07/17/09	ELEVATOR DETAILS	JNB	FS	85

Caltrans Metric

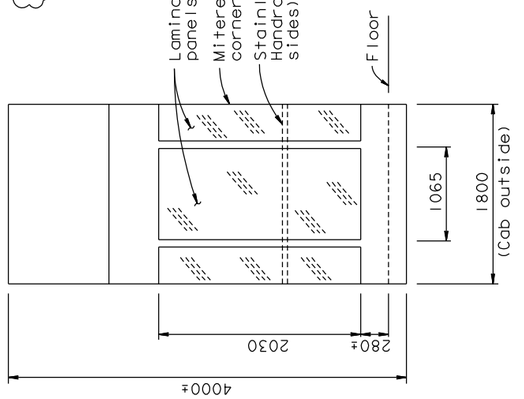
NOTES:

1. Elevation of tower elevation stops are given at the foot level (tower strut facade top PL, tower diaphragm at elevation 13.000 m).
2. For tower strut facade details, see Bridge Plans.
3. For tower diaphragm at elevation 13.000 m details, see Bridge Plans.
4. When elevator is not in use, it shall be parked at elev 15.000.
5. For elevator safety enclosures, see "Tower Elevator Enclosures" sheets.
6. For Tower Side Elevation, see "Elevator Detail No. 1" sheet.

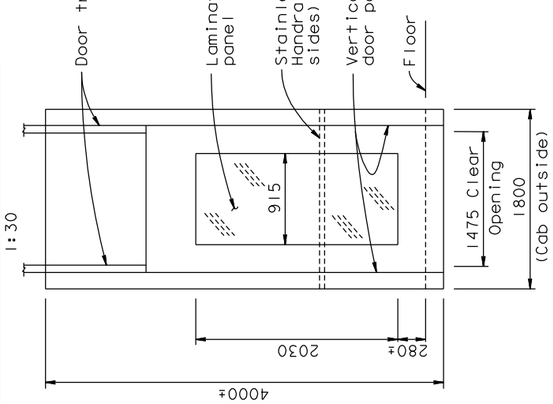
Legend: Tower elevator stop



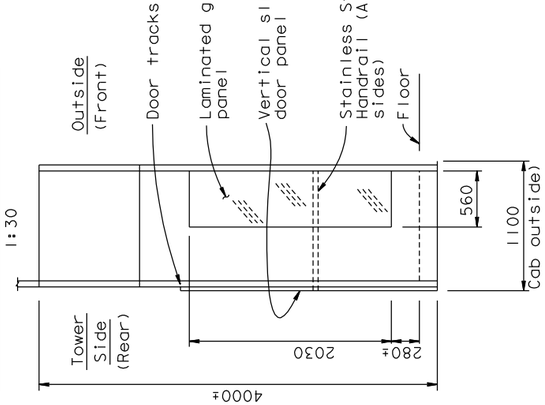
LONGITUDINAL ELEVATION LOOKING-NORTH
1:250



CAB FRONT ELEVATION
1:30



CAB REAR ELEVATION
1:30



CAB SIDE ELEVATION
(Typical both sides)

ELEVATOR DETAIL NO. 2

SCALE: 1:250

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M-34

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CHECKED BY	RB	5/3/02	DATE REVISED	4/21/09

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
SAS STRUCTURE
Caltrans
May 12, 2009
DESIGN OVERSIGHT
Bob Zandipour

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0 20 40 60 80

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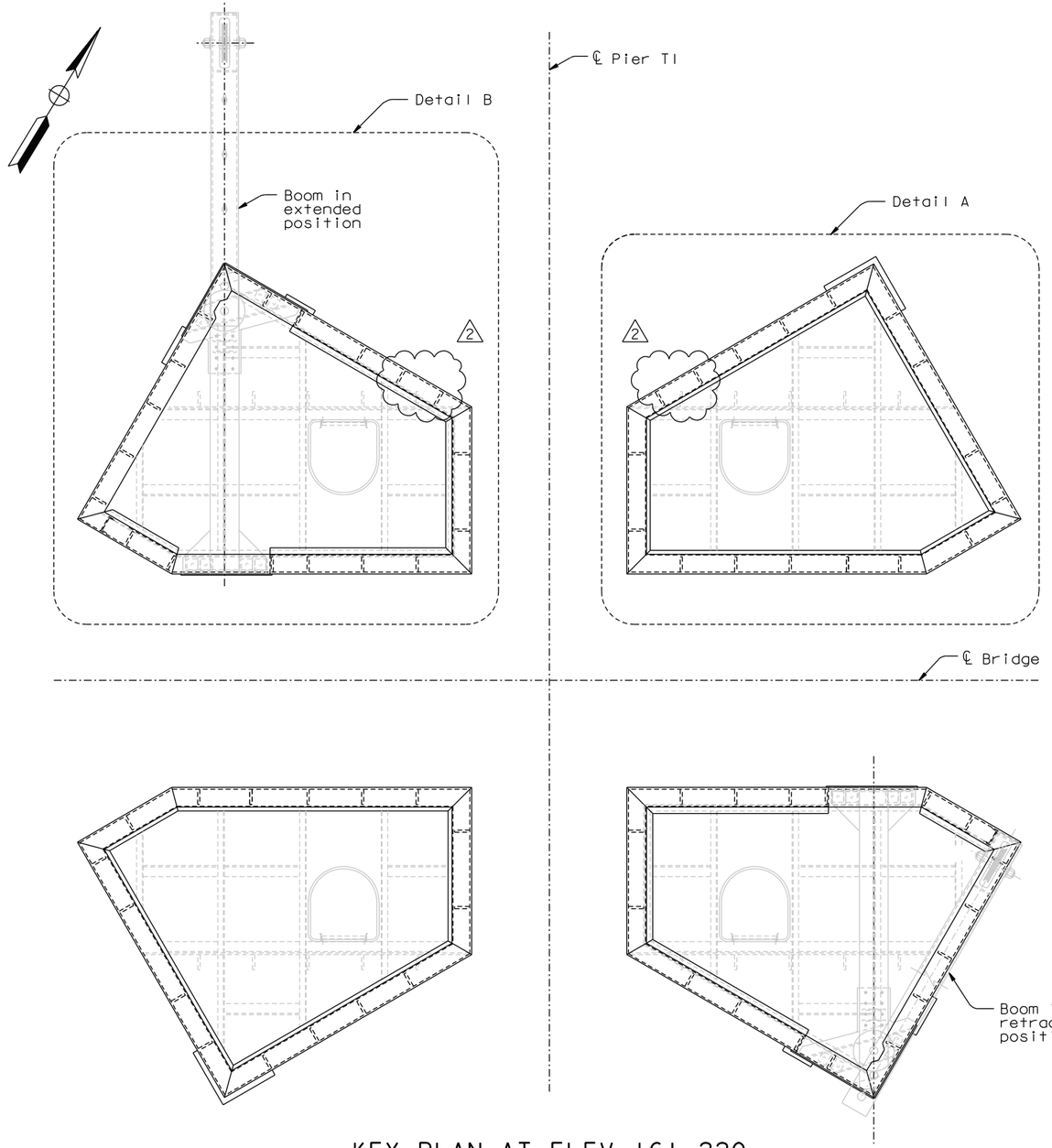
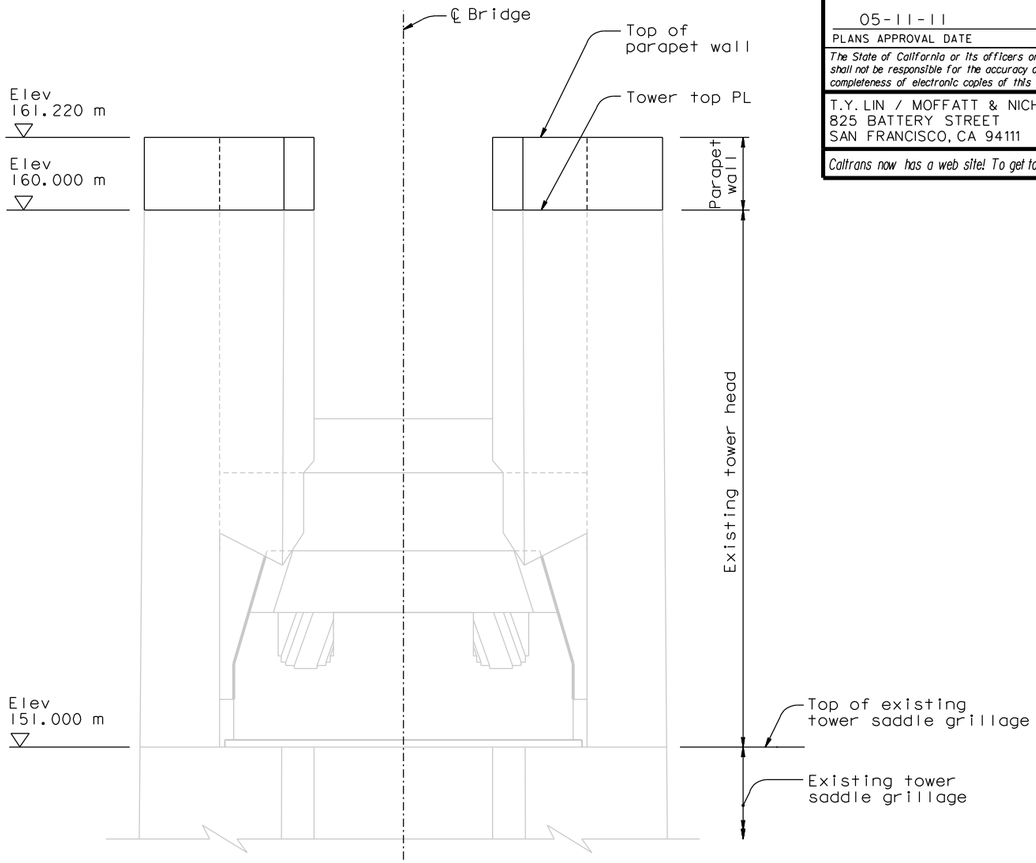


KEY PLAN AT ELEV 161.220

1:25



ELEVATION (Outrigger not shown for clarity)

1:50

NOTES:

1. For Detail A, see "Parapet Wall At Tower Head Details No.2" sheet.
2. For Detail B, see "Parapet Wall at Tower Head Details No.4" sheet.
3. The Contractor shall verify all field dimensions before ordering materials or fabrication.
4. All bolts shall be ASTM 325M galvanized UNO.
5. All steel shall be ASTM A709M Grade 345.
6. At the Contractor's option, shop weld may be used in lieu of field weld.

CONTRACT CHANGE ORDER NO. _____
SHEET ___ OF ___

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS (REVISIONS)	BY	CH'D	CCO#
2	11/04/11	TOWER ELEVATOR EXTENSION	NV	MN	203S2
1	09/16/11	TOWER SUSPENDER CABLE & ELEVATOR	NV	MN	203S1
0	05/11/11	PARAPET WALL AT TOWER HEAD	NV	MN	196

	BY	CHECKED
DESIGN	N. Vo	M. Nader
DETAILS	N. Vo	A. Baumberger
QUANTITIES	N. Vo	J. Duxbury

R. Valizadeh/V. Toan/Y.L./W.L./F.C.
DESIGN OVERSIGHT
SIGN OFF DATE 11/04/11

PREPARED FOR THE STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

R. Manzanarez
PROJECT ENGINEER

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Rev. Date: 5-18-98

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04	SF	80	13.2/13.9	800S5R2	1204

REGISTERED ENGINEER - CIVIL

05-11-11
PLANS APPROVAL DATE

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

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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)

PARAPET WALL AT TOWER HEAD DETAILS NO.1

REVISION DATES (PRELIMINARY STAGE ONLY): 05/11/11

SHEET 383S5R2 OF

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05-11-11
PLANS APPROVAL DATE

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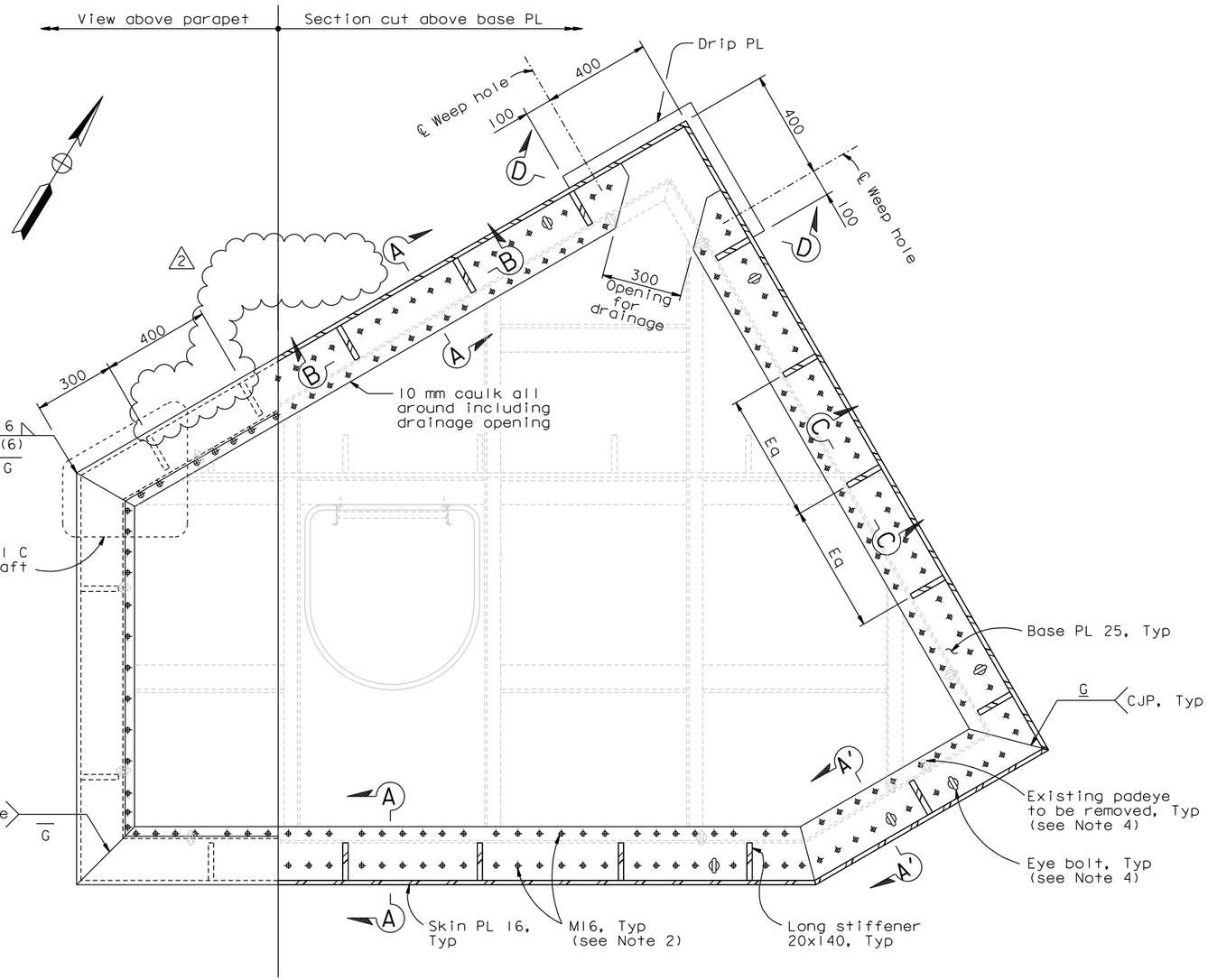
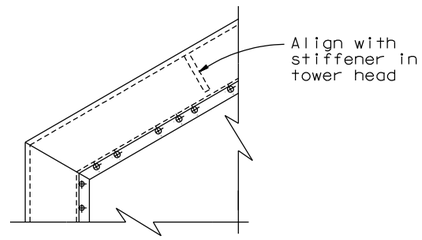


DETAIL A
1:10

(NE shaft shown; SW shaft similar except as noted in Detail C)



DETAIL C (SW shaft)
1:10

NOTES:

1. For Sections A-A, A'-A', B-B, C-C and D-D, see "Parapet Wall At Tower Head Details No. 3" sheet.
2. At the Contractor's option, 5/8 inch Dia A325 HS bolts may be used in lieu of M16 A325M bolts.
2. 3. Note deleted.
4. Replace each existing padeye to be removed as follows:

Bolted option:

Install 16 mm Dia x 100 mm long Crosby forged shoulder eye bolt or equivalent at location shown in the base plate (must be between 2 HS bolts and not adjacent to stiffener). Spacer plate shall be provided to ensure full thread engagement of the nut. Nut shall be installed snug-tight. Jam nut or lock nut shall be used to prevent bolt nut from backing off. See Section A'-A'.

Welded option:

Install Crosby No. 4 padeye or equivalent as close to skin plate and adjacent stiffener as possible with the required clearance for all-around welding of padeye to base plate.

100% PS&E

CONTRACT CHANGE ORDER NO. ____
SHEET ____ OF ____

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

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1	09/16/11	TOWER SUSPENDER CABLE & ELEVATOR	NV	MN	203S1
0	05/11/11	PARAPET WALL AT TOWER HEAD	NV	MN	196

REVISIONS

R. Valizadeh/V. Toan/Y.L./W.L./F.C.
DESIGN OVERSIGHT
SIGN OFF DATE 11/04/11

	BY	CHECKED
DESIGN	N. Vo	M. Nader
DETAILS	N. Vo	A. Baumberger
QUANTITIES	N. Vo	J. Duxbury

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

R. Manzanarez
PROJECT ENGINEER

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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)

PARAPET WALL AT TOWER HEAD DETAILS NO. 2

Rev. Date: 5-18-98

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

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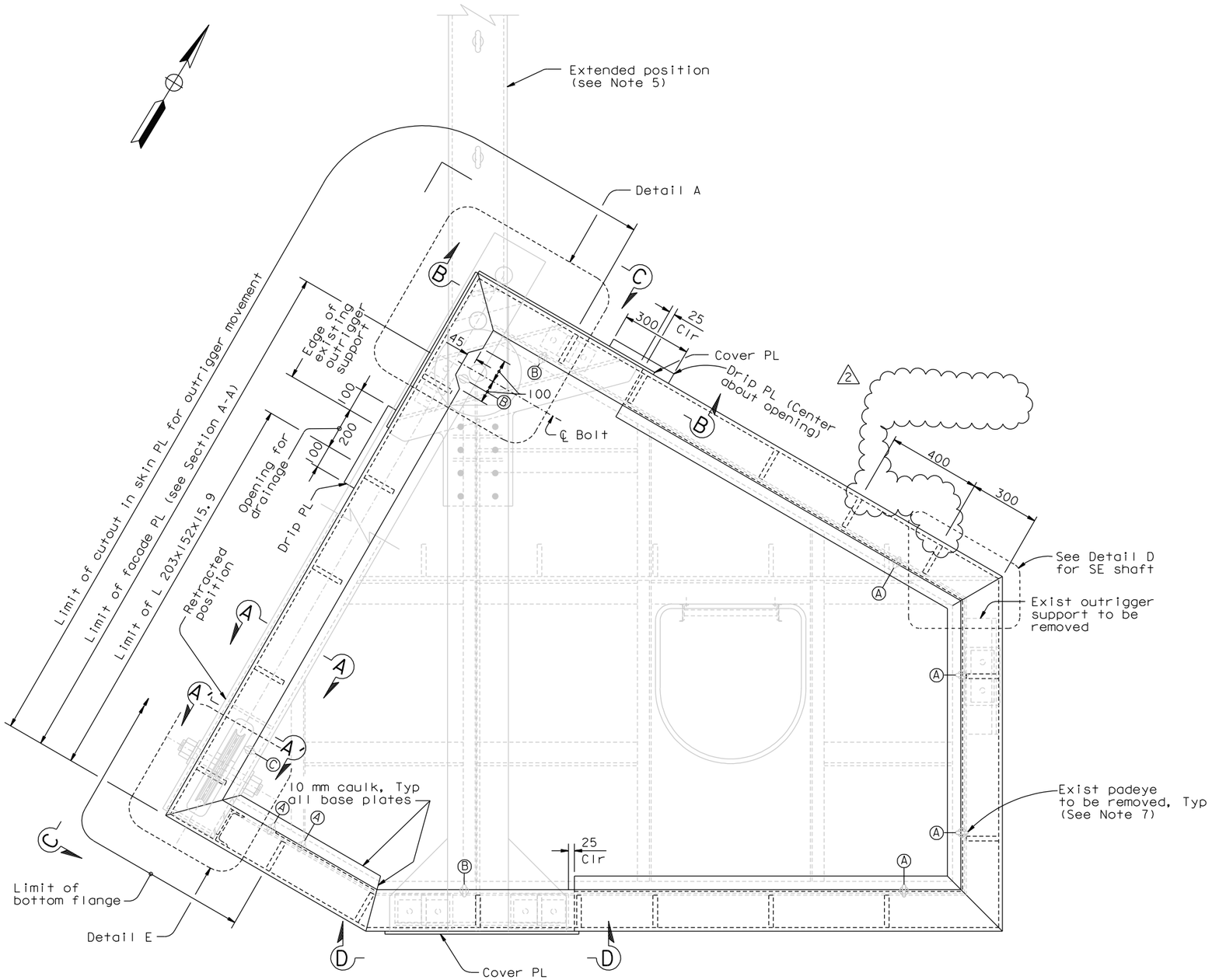
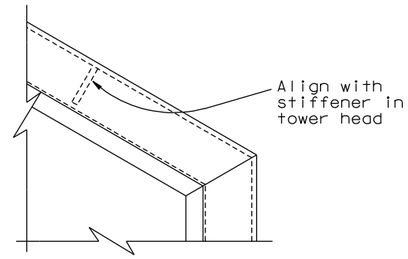


DETAIL B
1:10

(NW shaft shown; SE shaft similar except as noted in Detail D)



DETAIL D (SE shaft)
1:10

NOTES:

1. For typical section and typical connection to existing tower head, see details for papapet wall without outrigger on "Parapet Wall At Tower Head Details No.3" sheet.
2. For Section A-A, Detail A and Detail E, see "Parapet Wall At Tower Head Details No.5" sheet.
3. For Section B-B and View C-C, see "Parapet Wall At Tower Head Details No.6" sheet.
4. For View D-D, see "Parapet Wall At Tower Head Details No.6" sheet
5. For outrigger beam details, see "Tower Access Details No.16A" thru "Tower Access Details No.16D" sheets.

△2
6. Note deleted.

7. For details and locations of relocated padeyes:
   - Ⓐ - See Note 4 on "Parapet Wall At Tower Head Details No.2" sheet.
   - Ⓑ - See Note 5, this sheet.
   - Ⓒ - See Section A'-A' on "Parapet Wall At Tower Head Details No.5" sheet.

CONTRACT CHANGE ORDER NO. ____
SHEET ___ OF ___

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△0	05/11/11	PARAPET WALL AT TOWER HEAD	NV	MN	196

REVISIONS

	BY	CHECKED
DESIGN	N. Vo	M. Nader
DETAILS	N. Vo	A. Baumberger
QUANTITIES	N. Vo	J. Duxbury

PREPARED FOR THE STATE OF CALIFORNIA
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DESIGN OVERSIGHT
SIGN OFF DATE 11/04/11

R. Manzanarez
PROJECT ENGINEER

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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)

PARAPET WALL AT TOWER HEAD DETAILS NO. 4

REVISION DATES (PRELIMINARY STAGE ONLY): 05/11/11

SHEET 383S8R2 OF

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	800S8R2	1204

REGISTERED ENGINEER - CIVIL
05-11-11
PLANS APPROVAL DATE

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

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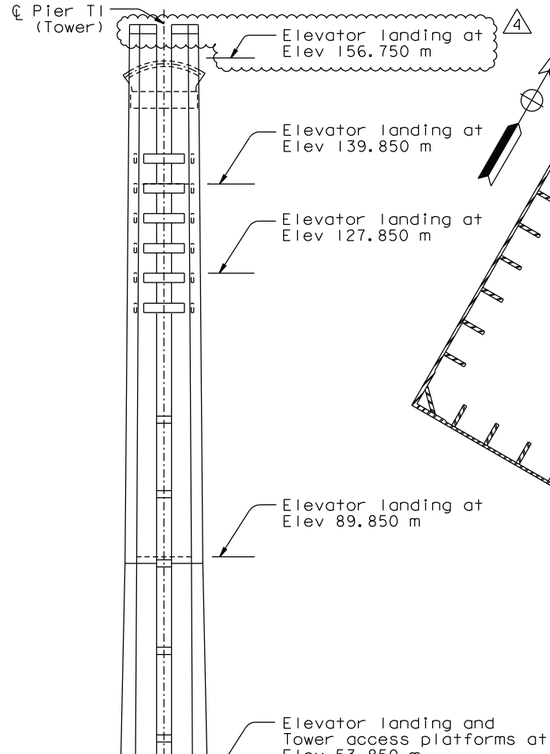
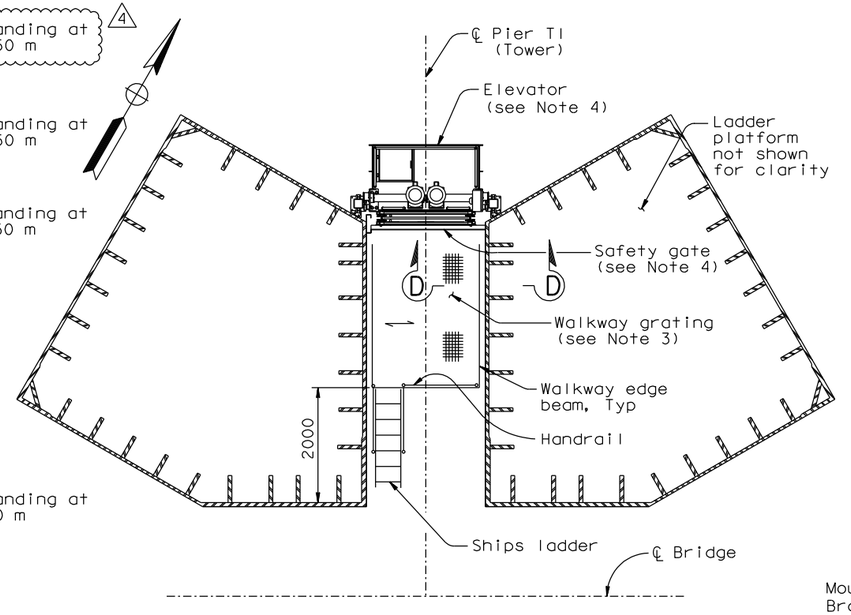


ELEVATION (Looking North)

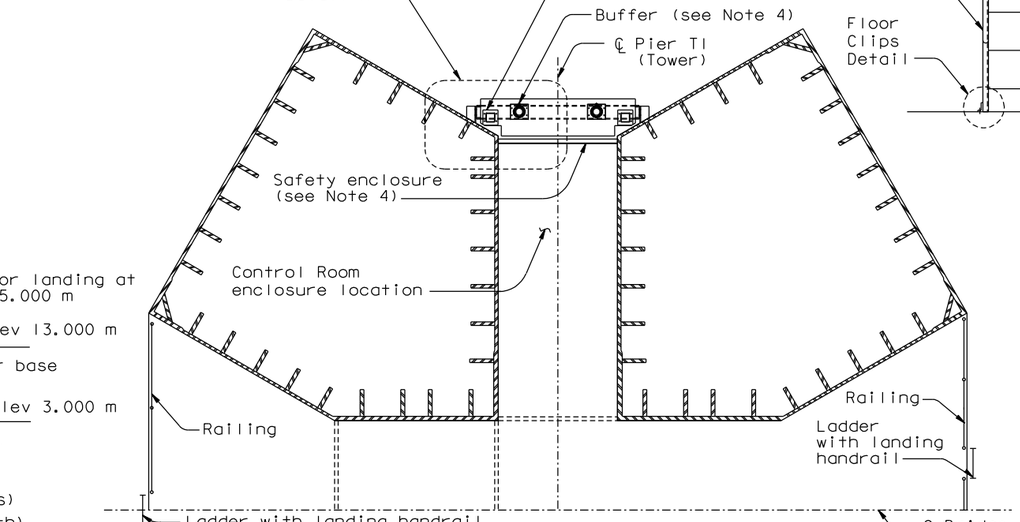
1:400



PARTIAL PLAN AT 15.000 M

SECTION A-A

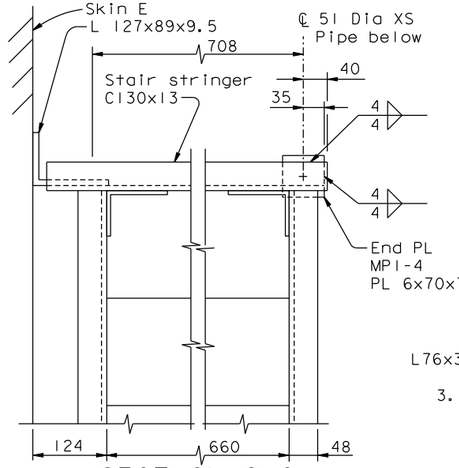
1:50



PARTIAL PLAN AT 13.000 M

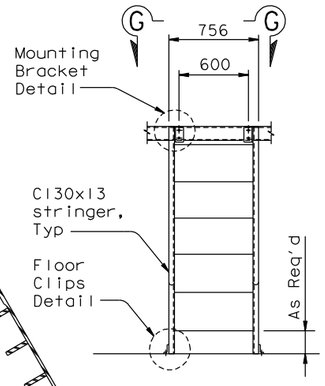
SECTION B-B

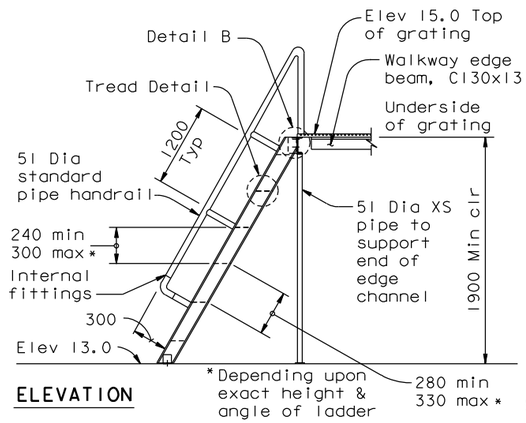
1:50



SECTION G-G

1:2.5

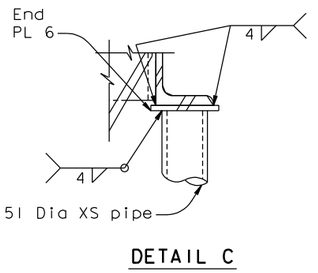




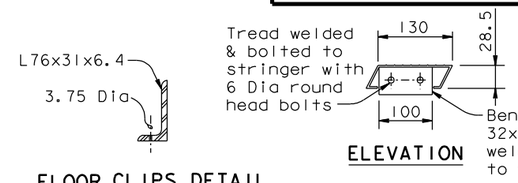
ELEVATION

SHIPS LADDER DETAILS

1:25



DETAIL C

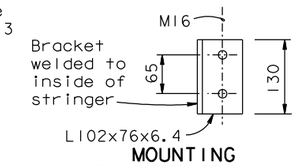


FLOOR CLIPS DETAIL

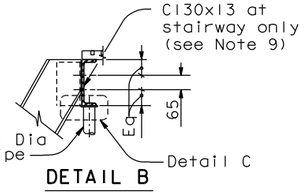
ELEVATION

PLAN

TREAD DETAIL (See Note 8)



MOUNTING BRACKET DETAIL



DETAIL B

NOTES:

1. For elevator landing details at elevations 139.850 and 89.850, see "Tower Access Details No.3" sheet.
2. For ladder and landing handrail details, see "Tower Access Details No.7" sheet. For railing details, see Tower Access Details No.8" sheet.
3. Gratings at elevation 15.000 shall have a working load of 7 kN/m (145psf).
4. For elevator and elevator appurtenances, see "Road Plans" sheets.
5. (NOTE DELETED)
6. For elevator landing details at elevation 53.850, see "Tower Access Details No.10" sheet.
7. For Detail A, Section C-C and Section D-D, see "Tower Elevator Support Details No.2" sheet.
8. At the Contractor's option, stair treads may be C130x13. The top outward facing corner of each channel shall be ground to radius of 3 mm. Tread shall be provided with a slip-resistant surface.
9. At the Contractor's option, C130x10.4 may be used for the platform grating support beam at top of stairway only.
10. For elevator landing details at Elevation 156.750, see "Tower Access Details No.31" sheet.

CONTRACT CHANGE ORDER NO. ____

SHEET ___ OF ___

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

FOR REVISIONS ONLY

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
4	11/04/11	TOWER ELEVATOR EXTENSION	TH	MN	203S2
3	08/19/11	ELEVATOR DETAILS	TH	MN	85
2	10/15/10	HANDRAIL AND PLATFORMS	TH	MN	114
1	07/17/09	ELEVATOR DETAILS	TH	MN	85

REVISIONS

DESIGN OVERSIGHT: R. Valizadeh/V. Toan/Y.L./W.L./F.C.

SIGN OFF DATE 11/04/11

	BY	CHECKED
DESIGN	G. Baker	L. Rus
DETAILS	S. Camo	L. Rus
QUANTITIES	D. Turner	J. Leventini

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

R. Manzanarez, PROJECT ENGINEER

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

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

Rev. Date: 5-18-98

CU 04
EA 0120F1

DISREGARD PRINTS BEARING EARLIER REVISION DATES

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)

TOWER ELEVATOR SUPPORT DETAILS NO.1

REVISION DATES (PRELIMINARY STAGE ONLY): 04/08/02 | 07/01/02 | 12/19/02 | 11/13/05

SHEET 522R4 OF

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	939R4	1204

Caltrans Metric

George Baker
REGISTERED ENGINEER - CIVIL
12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER * George S. Baker * No. C 57112 Exp. 12/31/05 CIVIL * STATE OF CALIFORNIA *

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REGISTERED PROFESSIONAL ENGINEER - Tien Hung Ho - No. C 43990 Exp. 06/30/13 CIVIL STATE OF CALIFORNIA

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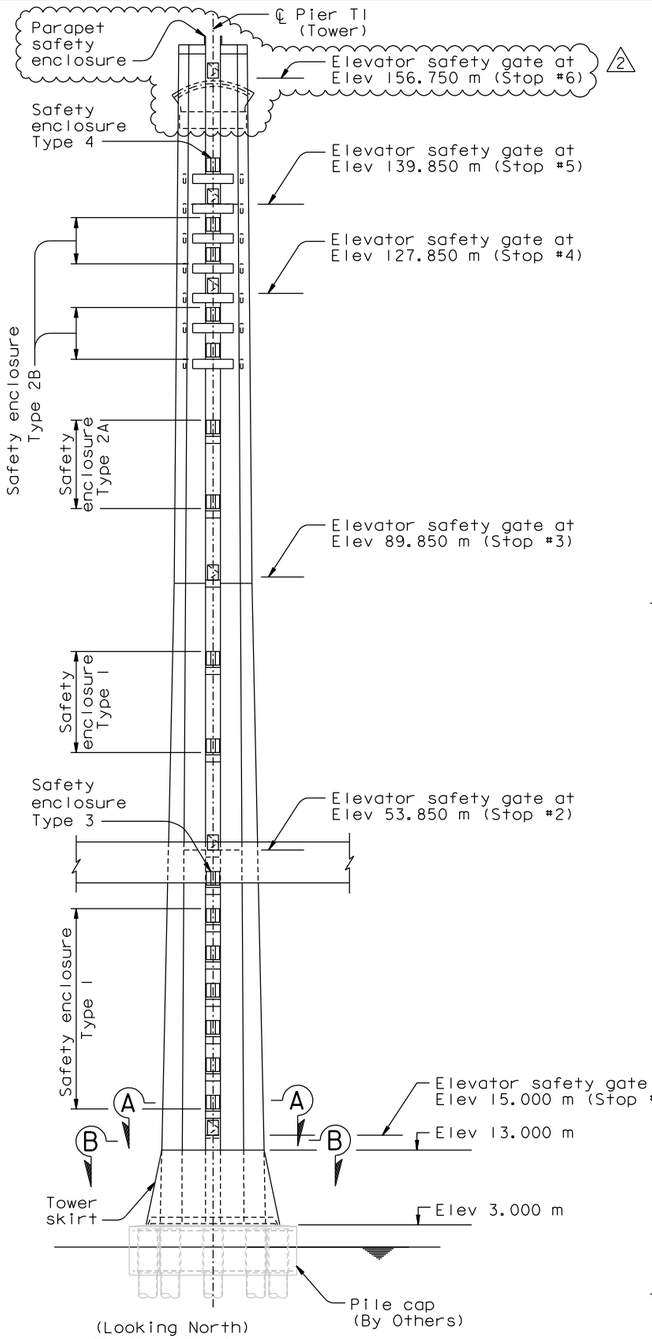
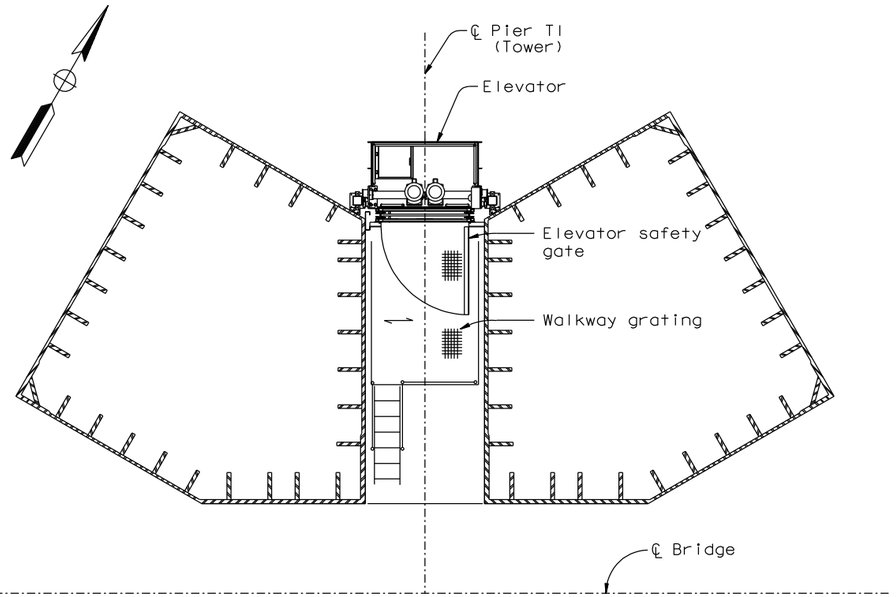


(Looking North)

ELEVATION

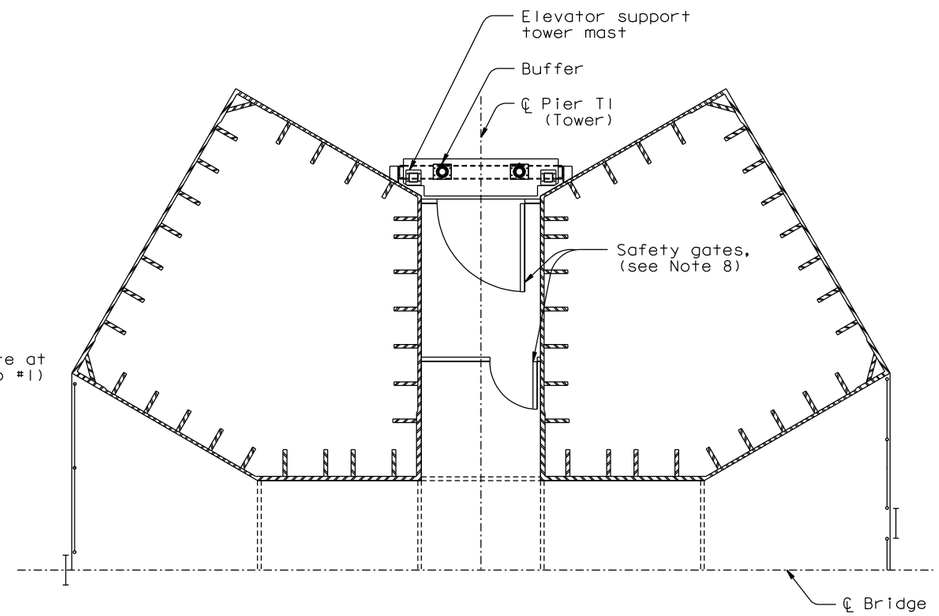
1:400



PARTIAL PLAN AT 15.000 M

SECTION A-A

1:50



PARTIAL PLAN AT 13.000 M

SECTION B-B

1:50

NOTES:

1. For elevator safety gate details (at Elevator Stops #1, 2, 3, 4, and 5,) see "Tower Elevator Enclosure Details No. 2" sheet. 2
2. For elevator safety enclosure (Types 1, 2A, 2B, 3 and 4) details, see "Tower Elevator Enclosure Details No.3" sheet. 2
3. All C, L, WT sections and plates shall be structural steel A709M Grade 345. All components for elevator safety gates and elevator safety enclosures shall be powder coated black.
4. Welded wire mesh shall be of 4 mm (5/32 inch) Dia galvanized steel wires complete with (1"x1"x16 gauge) U-band frames, powder coated black, by Flynn Enslow or equivalent.
5. Cables shall be 3.2 mm (1/8 inch) diameter 1x19 wire ropes galvanized steel, powder coated black, by Cable Moore or equivalent. Cables shall be tensioned to 350 pound force maximum at both ends with Tuner Turnbuckle tensioners by Cable Moore or equivalent.
6. Gate hinges shall be 120 mm weld-on fixed hinge pin stainless steel #SSWM048FP, powder coated black, by H.A.Guden or equivalent.
7. Cable/wire mesh connections shall be galvanized steel "Separator clamps", powder coated black, by Cable Moore or equivalent.
8. For safety gates at Elev 13.000 m, see "Road Plans".
9. The Contractor shall field verify the clear distance between tower shafts at all gates and enclosures elevations prior to fabrication.
10. For elevator safety gate details at Elevator Stop #6, see "Tower Elevator Enclosure Details No.5" sheet. 2
11. For parapet safety enclosure details, see "Tower Elevator Enclosure Details No.6" sheet.

CONTRACT CHANGE ORDER NO. ____
SHEET ___ OF ___

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
		REVISIONS			
2	11/04/11	TOWER ELEVATOR EXTENSION	AB	TH	203S2
1	11/02/11	ELEVATOR DETAILS	GM	TH	85
0	08/26/11	ELEVATOR DETAILS	GM	TH	85

	BY	CHECKED
DESIGN	G. Mok	T. Ho
DETAILS	G. Mok	T. Ho
QUANTITIES	G. Mok	T. Ho

R. Valizadeh/V. Toan/Y.L./W.L./F.C.
DESIGN OVERSIGHT
SIGN OFF DATE 11/04/11

Rev. Date: 5-18-98

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

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

CU 04
EA 0120F1

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R. Manzanarez
PROJECT ENGINEER

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

DISREGARD PRINTS BEARING EARLIER REVISION DATES → 08/26/11

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

TOWER ELEVATOR ENCLOSURE DETAILS NO. 1

REVISION DATES (PRELIMINARY STAGE ONLY) 08/26/11

SHEET 523S1R2 OF

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DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	940S1R2	1204

Caltrans Metric

REGISTERED ENGINEER - CIVIL

08-26-11
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Tien Hung Ho — No. C 43990 — Exp. 06/30/13 — CIVIL — STATE OF CALIFORNIA

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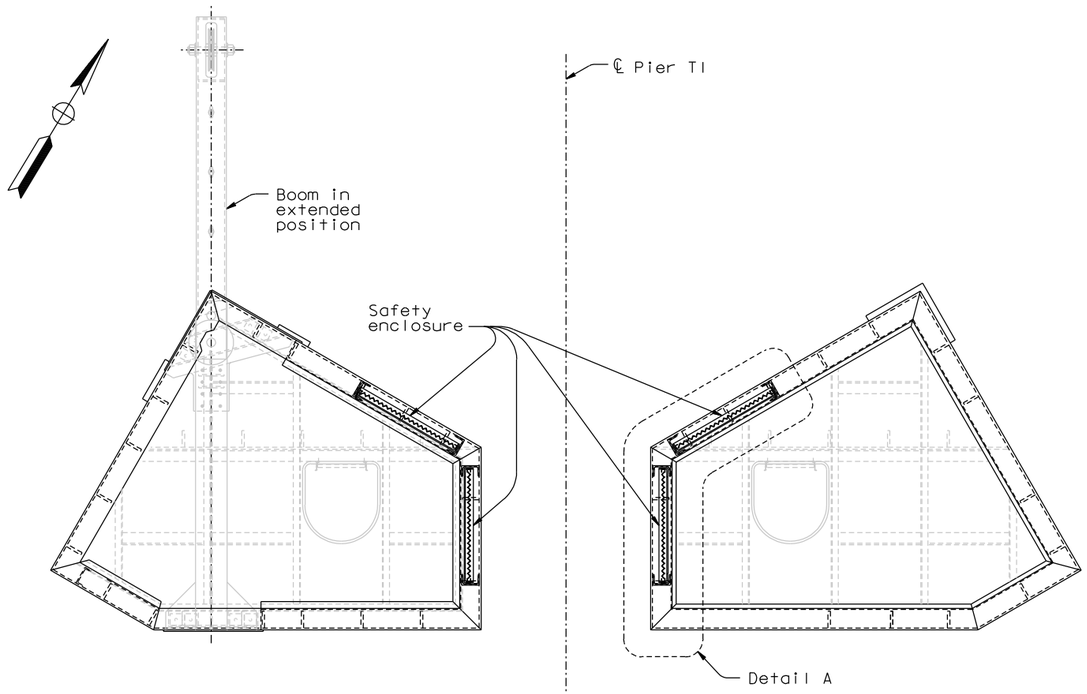
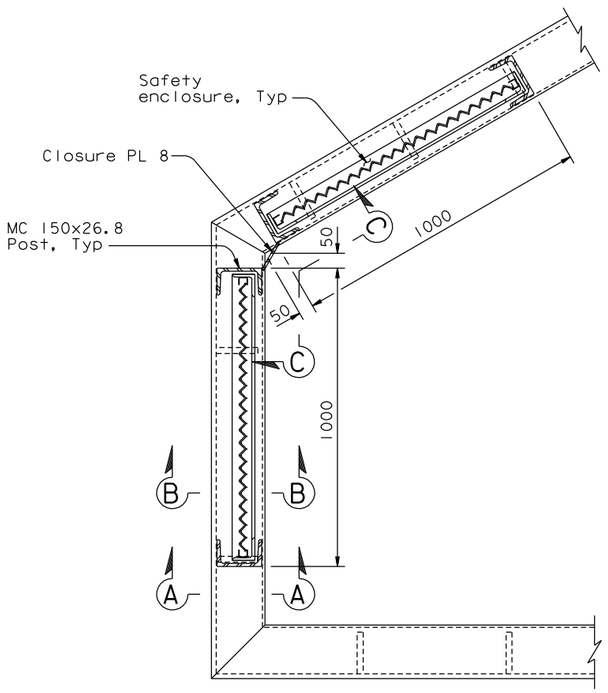
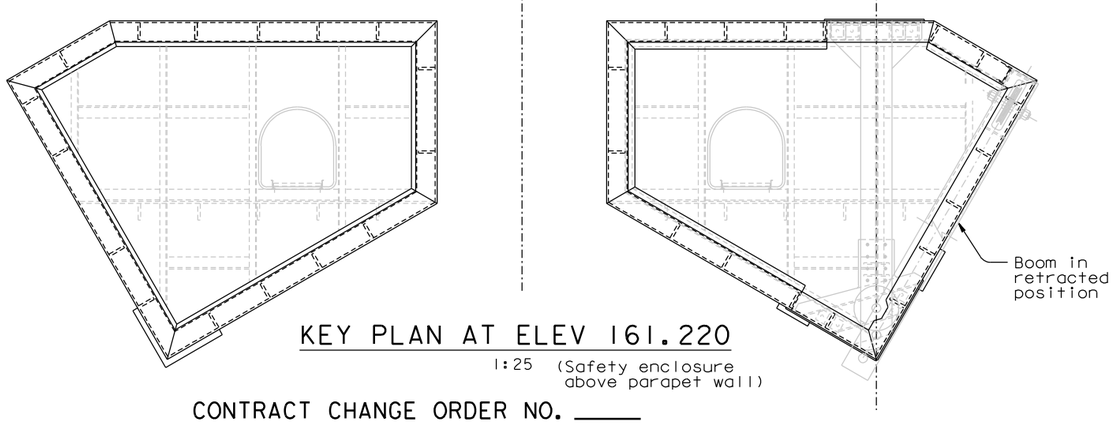




DETAIL A
1:10



KEY PLAN AT ELEV 161.220
1:25 (Safety enclosure above parapet wall)

NOTES:

1. For Sections A-A, B-B and View C-C, see "Tower Elevator Enclosure Details No.7" sheet.

CONTRACT CHANGE ORDER NO. _____
SHEET ___ OF ___

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

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DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	940S4B	1204

REGISTERED ENGINEER - CIVIL
11-04-11
PLANS APPROVAL DATE
Marwan N. Nader No. C 054426 Exp. 12/31/11 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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MARK	DATE	REVISIONS	BY	CH'D	CCO#
0	11/04/11	TOWER ELEVATOR SAFETY ENCLOSURE	NV	MN	203S2

R. Valizadeh/V. Toan/Y.L./W.L./F.C.
DESIGN OVERSIGHT
SIGN OFF DATE 11/04/11

	BY	CHECKED	BY
DESIGN	N. Vo	M. Nader	
DETAILS	N. Vo	A. Baumberger	
QUANTITIES	N. Vo	J. Duxbury	

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)

TOWER ELEVATOR ENCLOSURE DETAILS NO.6

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

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REVISION DATES (PRELIMINARY STAGE ONLY): 11/04/11

SHEET 523S4B OF

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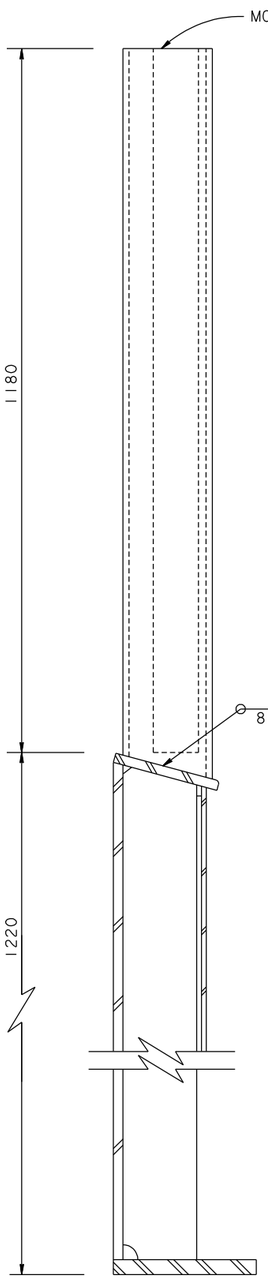
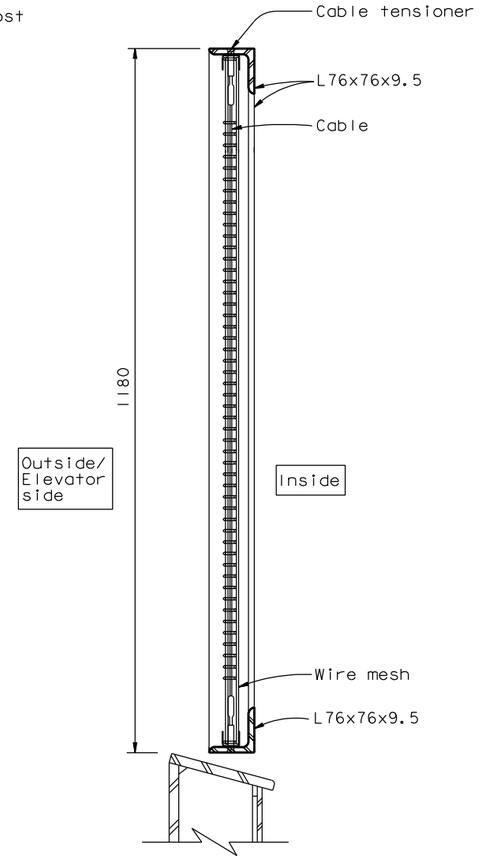
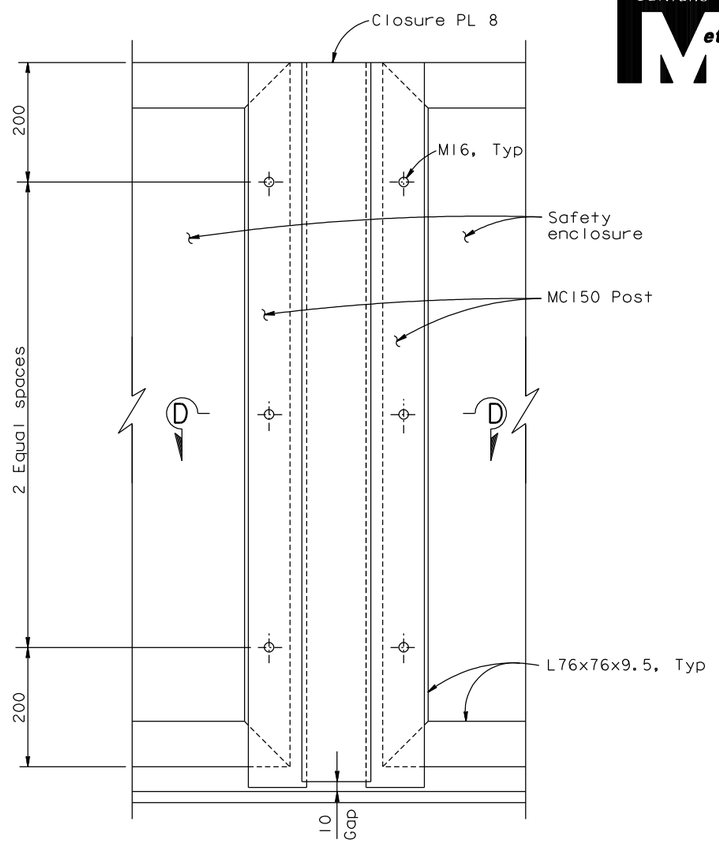


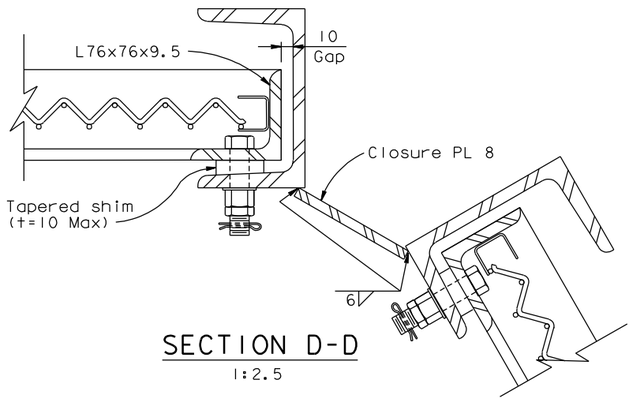
SECTION A-A
1:5



SECTION B-B (See Note 1)
1:5



VIEW C-C (Developed)
1:5



SECTION D-D
1:2.5

NOTES:

1. For enclosure details not shown, see "Tower Elevator Enclosure Details No.2" sheet.

CONTRACT CHANGE ORDER NO. _____
SHEET ___ OF ___

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

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DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	940S4C	1204

REGISTERED ENGINEER - CIVIL
11-04-11
PLANS APPROVAL DATE
Marwan N. Nader No. C 054426 Exp. 12/31/11 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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MARK	DATE	REVISIONS	BY	CH'D	CCO#
0	11/04/11	TOWER ELEVATOR EXTENSION	NV	MN	203S2

DESIGN BY N. Vo — CHECKED M. Nader
DETAILS BY N. Vo — CHECKED A. Baumberger
QUANTITIES BY N. Vo — CHECKED J. Duxbury

R. Valizadeh/V. Toan/Y.L./W.L./F.C.
DESIGN OVERSIGHT
SIGN OFF DATE 11/04/11

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)

TOWER ELEVATOR ENCLOSURE DETAILS NO. 7

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): 11/04/11

SHEET 523S4C OF

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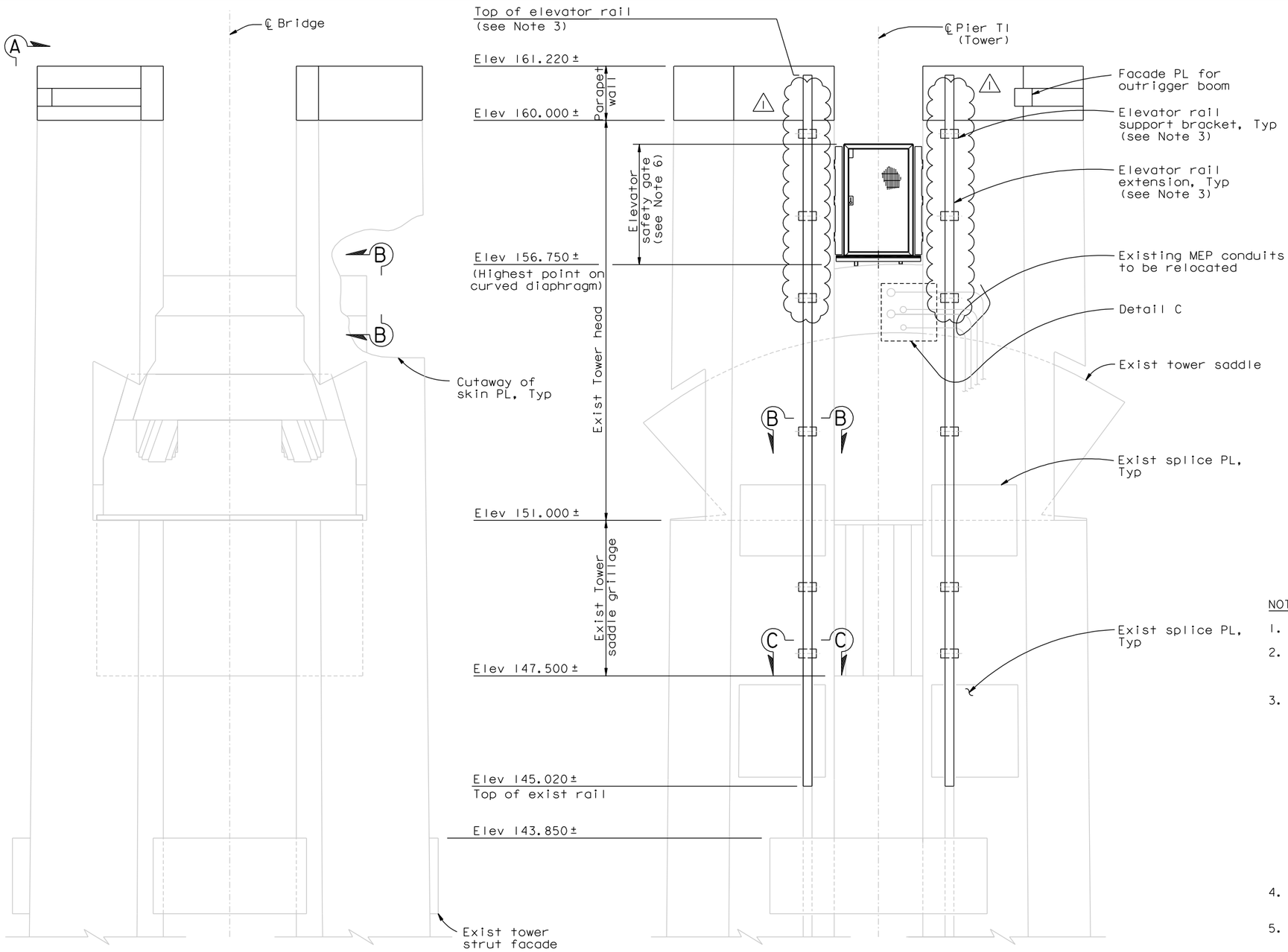

A ELEVATION LOOKING EAST
1:50

VIEW A-A
1:50

TOWER TOP

CONTRACT CHANGE ORDER NO. ____
SHEET ___ OF ___

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

NOTES:

1. All steel shall be ASTM A709M Grade 345 UNO.
2. High strength bolts shall be ASTM A325M. At the Contractor's option, equivalent imperial A325 may be used.
3. The following shall be determined by the elevator manufacturer and submitted for review and approval of the Engineer:
   - Details and locations of elevator rail support brackets and connection to supporting structure. Spacing of support brackets shall not exceed 3048 mm.
   - Top of elevator rail elevation and stopper details. Top of elevator rail shall not extend above top of parapet wall. (1)
   - Details of elevator rail (mast and rack) and connections to support brackets.
4. For Sections B-B and C-C, see "Tower Elevator Extension Details No. 3" sheet.
5. For Detail C, see "Tower Elevator Extension Detail No. 4" sheet.
6. For safety gate details, see "Tower Elevator Enclosure Details" sheets.
7. For View B-B, see "Tower Elevator Extension Details No. 4" sheet.

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	940S6R1	1204

REGISTERED ENGINEER - CIVIL
09-16-11
PLANS APPROVAL DATE

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

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MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
1	11/04/11	TOWER ELEVATOR EXTENSION	NV	MN	203S2
0	09/16/11	TOWER SUSPENDER CABLE & ELEVATOR	NV	MN	203S1

REVISIONS

R. Valizadeh/V. Toan/Y.L./W.L./F.C.
DESIGN OVERSIGHT
SIGN OFF DATE 11/04/11

	BY	CHECKED
DESIGN	N. Vo	M. Nader
DETAILS	N. Vo	M. Nader
QUANTITIES	N. Vo	M. Nader

PREPARED FOR THE
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

R. Manzanarez
PROJECT ENGINEER

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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)

TOWER ELEVATOR EXTENSION DETAILS NO. 2

Rev. Date: 5-18-98

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

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EA 0120F1

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY): 09/16/11

SHEET 523S6R1 OF

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