CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 50 Suppl. No. 0 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 **FED. AID LOC.:**

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. ***NOTE: This change order is not effective until approved by the Engineer.***

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Provide additional reinforcement to the shear plates at Hinge A as shown on sheets three (3) through six (6) of this change order.

The following revised sheets detail all changes:

Revised Contract Plan Sheet Nos. 631R1, 633R1, 675R1 and 697R1 (of 1204).

Estimate of Increase in Contract Items at Contract Unit Price:

Item #55 (F), FURNISH STRUCTURAL STEEL (BRIDGE) (BOX GIRDER)

6,081 kg (+ 0.02 %) @ $9.00 /kg = +$54,729.00 (+ 0.65 %)

Item #56 (F), ERECT STRUCTURAL STEEL (BRIDGE) (BOX GIRDER)

6,081 kg (+ 0.02 %) @ $1.00 /kg = +$6,081.00 (+ 0.65 %)

The quantity increase shown herein for Item #55, FURNISH STRUCTURAL STEEL (BRIDGE) (BOX GIRDER), when combined with the quantity shown in the Engineer's Estimate, and as modified by any previous change orders or revisions to dimensions made by the Engineer, shall be the final quantity for which payment will be made.

The quantity increase shown herein for Item #56, ERECT STRUCTURAL STEEL (BRIDGE) (BOX GIRDER), when combined with the quantity shown in the Engineer's Estimate, and as modified by any previous change orders or revisions to dimensions made by the Engineer, shall be the final quantity for which payment will be made.

Estimated total cost of Increase in Contract Item..... $60,810.00

Adjustment of Compensation at Agreed Lump Sum:

Perform additional detailing, painting and Engineering work required for this change.

For this work, the Contractor will receive a sum of $15,356.00. This sum constitutes full and complete compensation for furnishing all labor, material, tools, Chinese Value Added Taxes (VAT) and incidentals including all markups by reason of this change.

Estimated cost of Adjustment of Compensation at Lump Sum $15,356.00

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO:	50	Suppl. No.	0	Contract No.	04 – 0120F4	Road	SF-80-13.2/13.9	FED. AID LOC.:

Consideration of a time adjustment will be deferred until completion of the work specified herein. Determination of a commensurate time adjustment will be made in accordance with Section 10-1.13, "PROGRESS SCHEDULE (CRITICAL PATH METHOD)" and Section 10-1.14, "TIME-RELATED OVERHEAD" of the Special Provisions, as well as Section 8-1.07, "LIQUIDATED DAMAGES", of the Standard Specifications.

Estimated Total Cost of this Change Order..... $76,166.00

Estimated Cost: **Increase** ☒ **Decrease** ☐ **$76,166.00**

By reason of this order the time of completion will be adjusted as follows: **Deferred**

Submitted by

Signature **Resident Engineer**
Brian Boal for Gary Pursell, Sup. TE **Date** 5/14/2009

Approval Recommended by

Signature **Supervising Bridge Engineer**
Mark P. Woods for Richard Morrow, Sup. TE **Date** 14 May 2009

Engineer Approval by

Signature **Supervising Transportation Engineer**
Gary Pursell, Sup. TE **Date** 6/9/09

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature (Print name and title) Michael D. Flowers Project Director **Date** 6.5.09

OPENING LOCATION TABLE		
SHEAR PLATE TYPE	WORKING LINE	PANEL POINT (see Note 5)
2	E3, W3	8.5 (East), 9.5, 10.5, 11.5, 12.5, 13.5, 112.5, 113.5, 114.5
2	E4, W4	8.5 (East), 9.5, 10.5, 11.5, 12.5, 13.5, 112.5, 113.5, 114.5

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

Caltrans Metric

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	631R1	1204

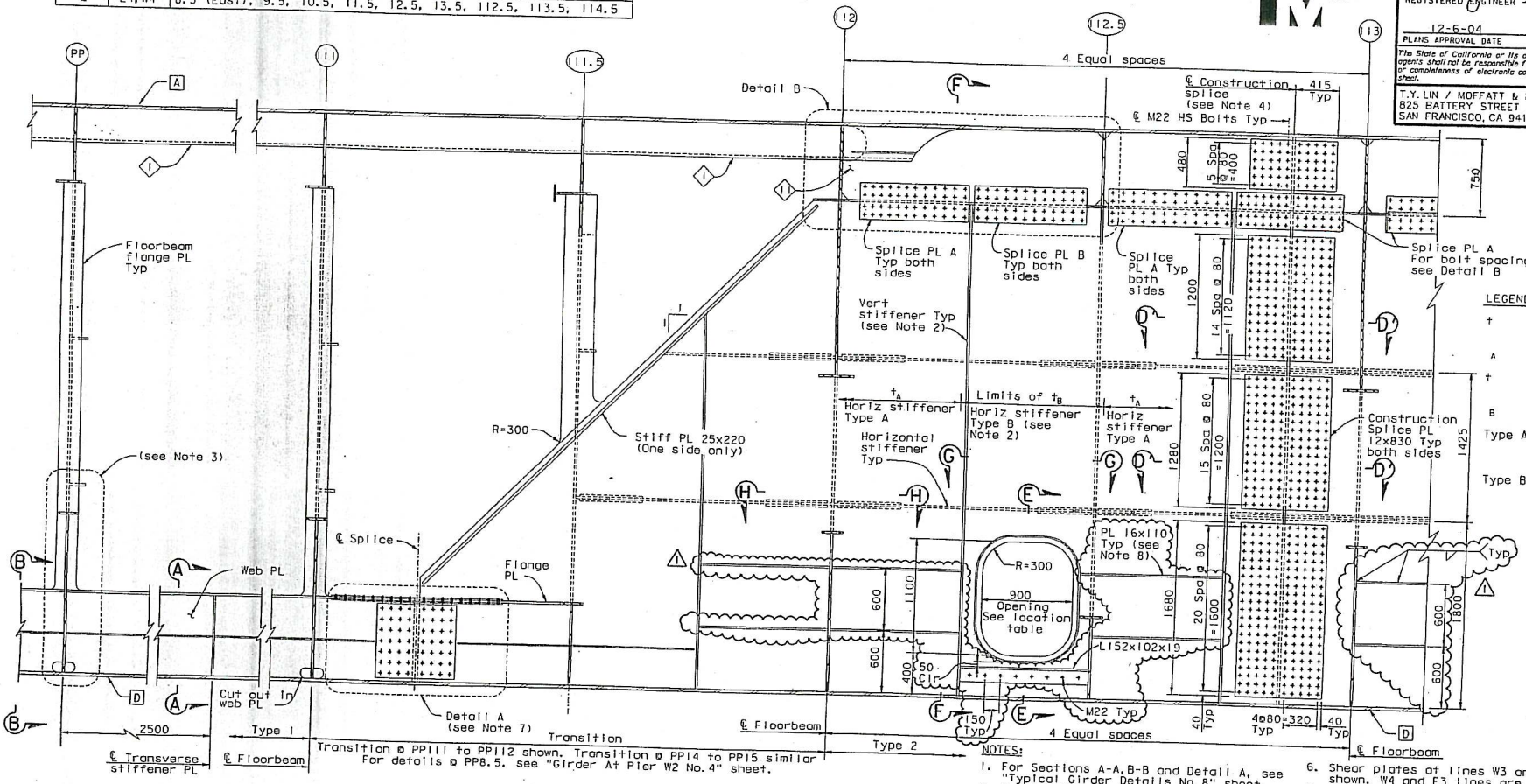
George Baker
REGISTERED ENGINEER - CIVIL

12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER George S. Baker No. C57112 Exp. 12/31/05 CIVIL 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



LEGEND:

- t — Typical thickness of longitudinal shear plate type 2 (see Notes 2 and 5)
- t_A — Thickness of long shear plate type 2 strip with opening (see Notes 2 and 5)
- Type A — Typical horizontal stiffener size (see Note 5)
- Type B — Horizontal stiffener in strip with opening (see Note 5)

NOTES:

1. For Sections A-A, B-B and Detail A, see "Typical Girder Details No. 8" sheet.
2. For Sections E-E, F-F, G-G, H-H, Detail B and details not shown, see "Typical Girder Details No. 9" sheet.
3. For floorbeam details, see "Typical Floorbeam Details" sheets.
4. For location of girder splice, see "Girder Framing Plan" sheets.
5. For plate sizes and openings in east transition, see "Girder at East Transition No. 9" sheet.
6. Shear plates at lines W3 and E4 shown. W4 and E3 lines are similar.
7. Detail A shall be used to splice the longitudinal shear plate Type 1 at box girder splice locations.
8. Lower panel stiffeners shall be placed as shown in Longitudinal shear plate along E3, E4, W3 and W4 lines from PP111.75 to the E2 floorbeam, and from the E2 floorbeam to PP120. Stiffeners shall also be placed along E4 and W4 lines from PP120 to 127. For details at the E2 floorbeam, see "Girder at Pier E2 No. 2" sheet.

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
1	07/31/07	HINGE A REACTION-SHEAR PLATES	DT	GB	50

REVISIONS

CONTRACT CHANGE ORDER NO. 50
SHEET 3 OF 6

REGISTERED PROFESSIONAL ENGINEER Daniel J. Turner No. C 65033 Exp. 06/30/09 CIVIL STATE OF CALIFORNIA

FOR REVISIONS ONLY

LONGITUDINAL SHEAR PLATE ELEVATION

1:20

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

R. Vaziadeh/V. Toan/Y.L./W.L./F.C.
DESIGN OVERSIGHT
Ron Vaziadeh / Vong Toan / Y. Liu
SIGN OFF DATE 07/31/07

Rev. Date: 5-15-98

DESIGN	BY G. Baker	CHECKED P. Ritchie	
DETAILS	BY S. Como	CHECKED T. McMeans	
QUANTITIES	BY G. Baker	CHECKED M. Roberts	

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

R. Manzanarez
PROJECT ENGINEER

CU 04
EA 0120F1

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

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY) 9/25/01 9/25/01 9/25/01 9/25/01 9/25/01 11/13/01

SHEET 214R1 OF

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

TYPICAL GIRDER DETAILS NO. 7

FILE => I:\bb\04-012001\sas\contract plans and cco\cco\in progress\cco50\dgn\agdkd04.dgn

USERNAME => \\signature\ DATE PLOTTED => 31 JUL 2007 TIME PLOTTED => 10:41:49

100 % PS&E

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	633R1	1204

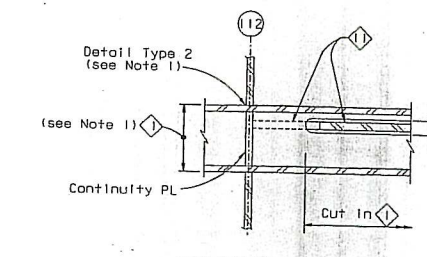
George Baker
REGISTERED ENGINEER - CIVIL
12-6-04
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER George S. Baker No. C57112 Exp. 12/31/05 CIVIL STATE OF CALIFORNIA

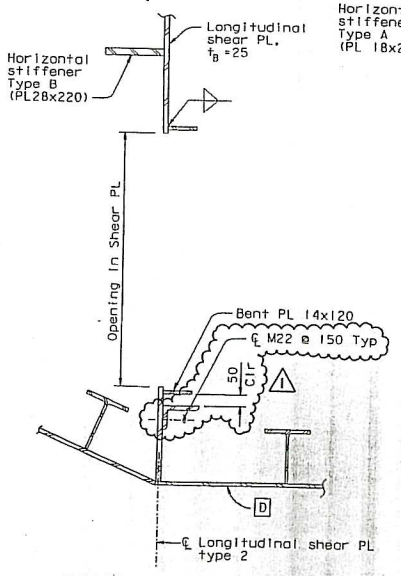
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

T.Y. LIN / MOFFATT & NICHOL
B25 BATTERY STREET
SAN FRANCISCO, CA 94111

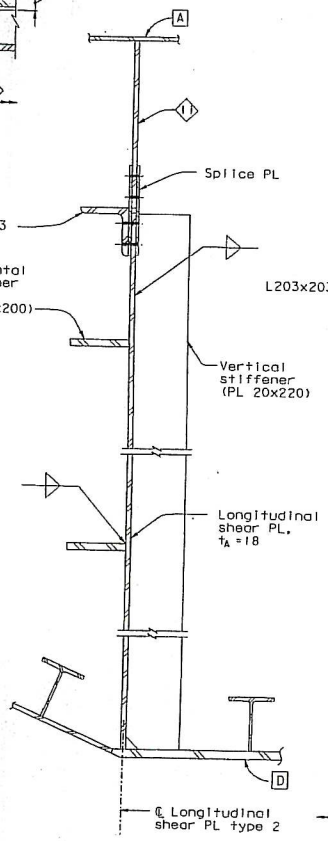
Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov



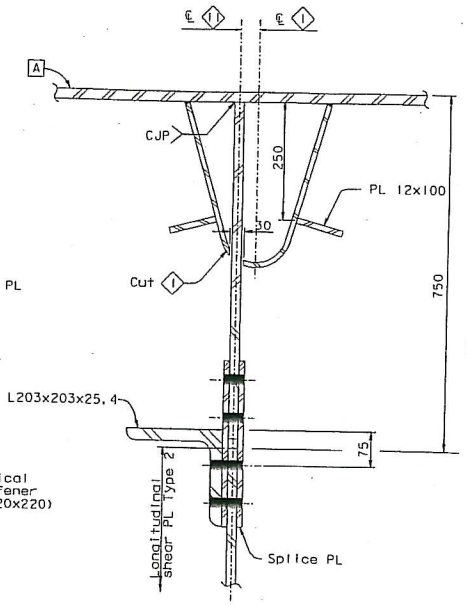
SECTION K-K
1:5



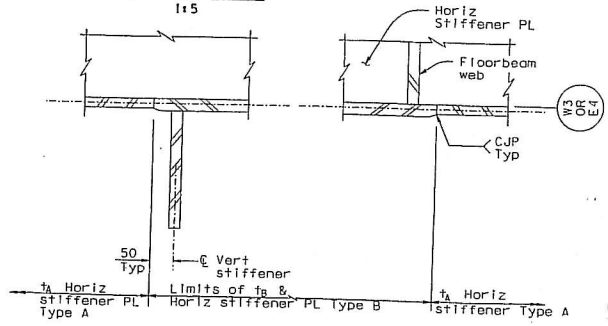
SECTION E-E
1:10



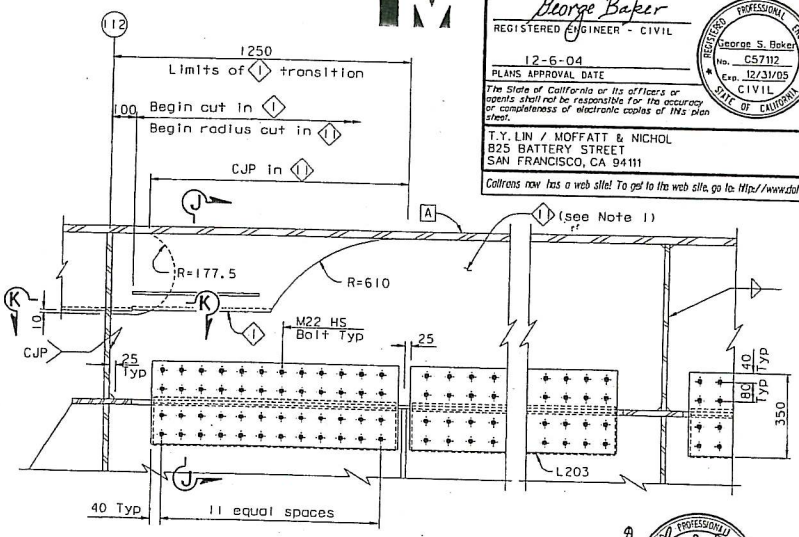
SECTION F-F
1:10



SECTION J-J
1:5

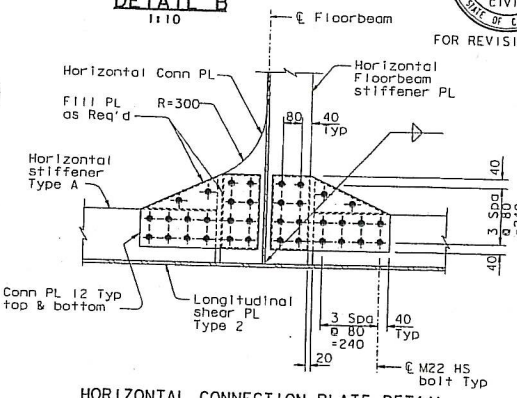


SECTION G-G
1:5



TRANSITION @ PP112 SHOWN
PP14 SIMILAR

DETAIL B
1:10



HORIZONTAL CONNECTION PLATE DETAIL

SECTION H-H
1:10

REGISTERED PROFESSIONAL ENGINEER Daniel J. Turner No. C 65033 Exp. 06/30/09 CIVIL STATE OF CALIFORNIA

FOR REVISIONS ONLY

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
1	07/31/07	HINGE A REACTION-SHEAR PLATES	DT	GB	50

REVISIONS

CONTRACT CHANGE ORDER NO. 50
SHEET 4 OF 6

NOTES:

1. For details of 1 and 1, see "Typical Girder Details No. 3" and "Typical Girder Details No. 4" sheets.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

R. Valizadeh/V. Toan/Y.L./H.L./F.C.
DESIGN OVERSIGHT
Roya Valizadeh / Vong D. Toan / Y. Liu
SIGN OFF DATE 07/31/07
Rev. Date: 3-15-95

	BY	CHECKED
DESIGN	G. Baker	P. Ritchie
DETAILS	S. Como	T. McMeans
QUANTITIES	G. Baker	M. Roberts

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

R. Manzanaraz
PROJECT ENGINEER

BRIDGE NO. 34-0006L/R
KILOMETER POST 13.2/13.9
CU 04
EA 0120F1

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

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY) 3/14/05 3/24/06 11/30/06 12/11/06

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

TYPICAL GIRDER DETAILS NO. 9

SHEET 216R1 OF

FILE => I:\bb\04-012001\sas\contract plans and cco\cco\in progress\cco#50\dgn\aggdkd05a.dgn

100 % PS&E

USERNAME => vrignatova DATE PLOTTED => 31 JUL 2007 TIME PLOTTED => 10:42:28

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	675R1	1204

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

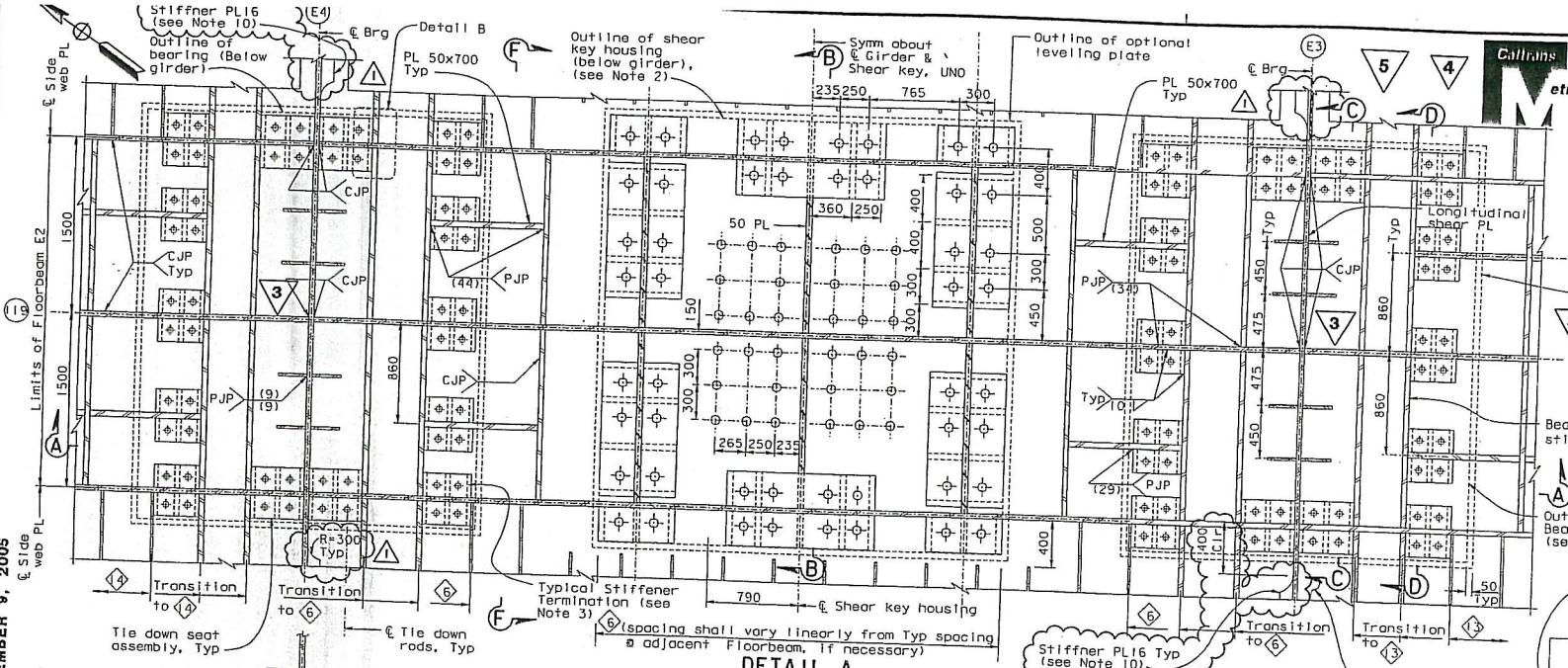
REGISTERED PROFESSIONAL ENGINEER George S. Baker No. C57112 Exp. 12/31/05 CIVIL STATE OF CALIFORNIA

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

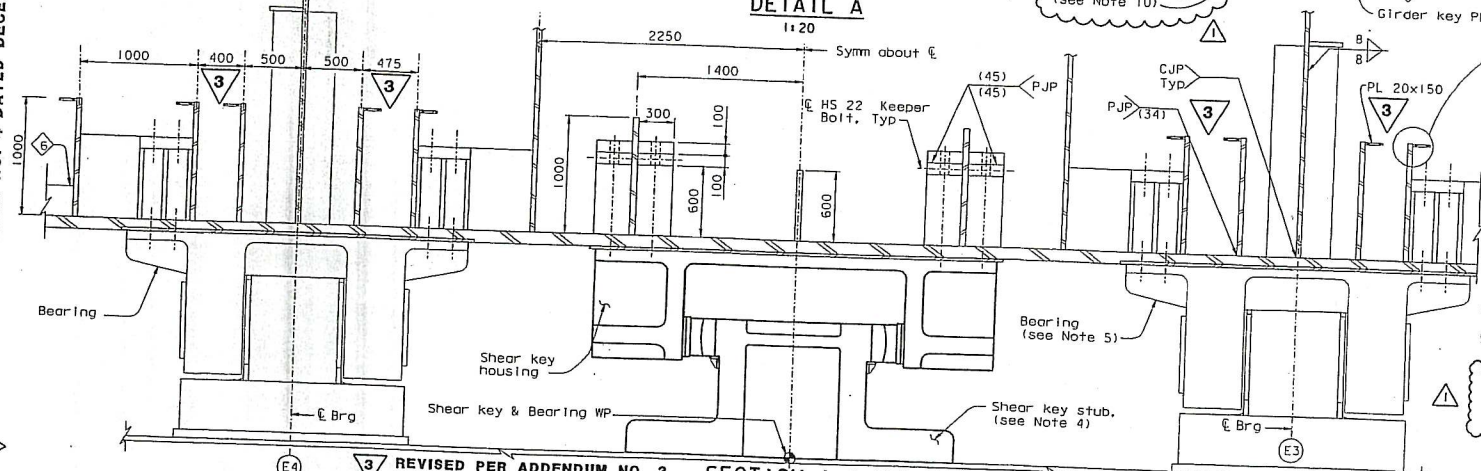
Caltrans Metric



DETAIL A
1:20

LEGEND

- 75 Dia anchor bolt (A354 Gr. BD)
- 64 Dia anchor bolt (A354 Gr. BD)
- 29 Dia anchor bolt (A354 Gr. BD)
- 50 Dia anchor bolt (A354 Gr. BD)
- † - thickness of terminating plate in T-joint



SECTION A-A
1:20

NOTES:

1. For girder plate thickness, see "Typical Girder Details No. 1" sheet.
2. For details of shear key housing, see "Pier E2 Shear Key" sheets.
3. For typical girder stiffener termination, see "Typical Girder Details No. 16" sheet.
4. For details of shear key, see "Pier E2 Shear Key Details" sheets.
5. For details of bearing, see "Pier E2 Bearing Details" sheets.
6. For Section F-F, see "Girder At Pier E2 No. 6" sheet.
7. For bolt and rod locations, see "Pier E2 Shear Key Details" and "Pier E2 Bearing Details" sheets.
8. For Pier E2 bearing and shear key location, see "Pier E2 Bearing And Shear Key Layout" sheet.
9. For Section B-B, C-C, D-D and detail B, see "Girder At Pier E2 No. 3" sheet.
10. For termination of stiffener plate 16 at E2 floorbeam, see Detail G on "Typical Floorbeam Details No. 4" sheet. For other stiffener details see "Typical Girder Details No. 7" sheet.

Daniel J. Turner
REGISTERED PROFESSIONAL ENGINEER Daniel J. Turner No. C 65033 Exp. 06/30/09 CIVIL STATE OF CALIFORNIA

FOR REVISIONS ONLY

REVISED PER ADDENDUM NO. 4 DATED DECEMBER 9, 2005

REVISED PER ADDENDUM NO. 3 DATED NOVEMBER 7, 2005

REVISED PER ADDENDUM NO. 5 DATED DECEMBER 21, 2005

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

R. Vallzadeh/V. Toan/Y.L./B.L./F.C.
DESIGN OVERSIGHT
Ron Vallzadeh / Vang Toan / Y. Liu
SIGN OFF DATE 07/31/07

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
1	07/31/07	HINGE A REACTION-SHEAR PLATES	DT	GB	50

REVISIONS

CONTRACT CHANGE ORDER NO. 50
SHEET 5 OF 6

	BY	CHECKED
DESIGN	G. Baker	P. Ritchie
DETAILS	C. Mauch	T. McMeans
QUANTITIES	D. Turner	M. Roberts

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

R. Manzanarez
PROJECT ENGINEER

CU 04
EA 0120F1

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

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)

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

GIRDER AT PIER E2 NO. 2

SHEET 25BR1 OF

FILE => I:\bb\04-012001\sas\contract plans and cco\cco\in progress\cco50\dgn\aggdd07.dgn

USERNAME => vigonotvs DATE PLOTTED => 31 JUL 2007 TIME PLOTTED => 10:43:01

100 % PS&E

4 REVISED PER ADDENDUM NO. 4 DATED DECEMBER 9, 2005

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

Caltrans Metric

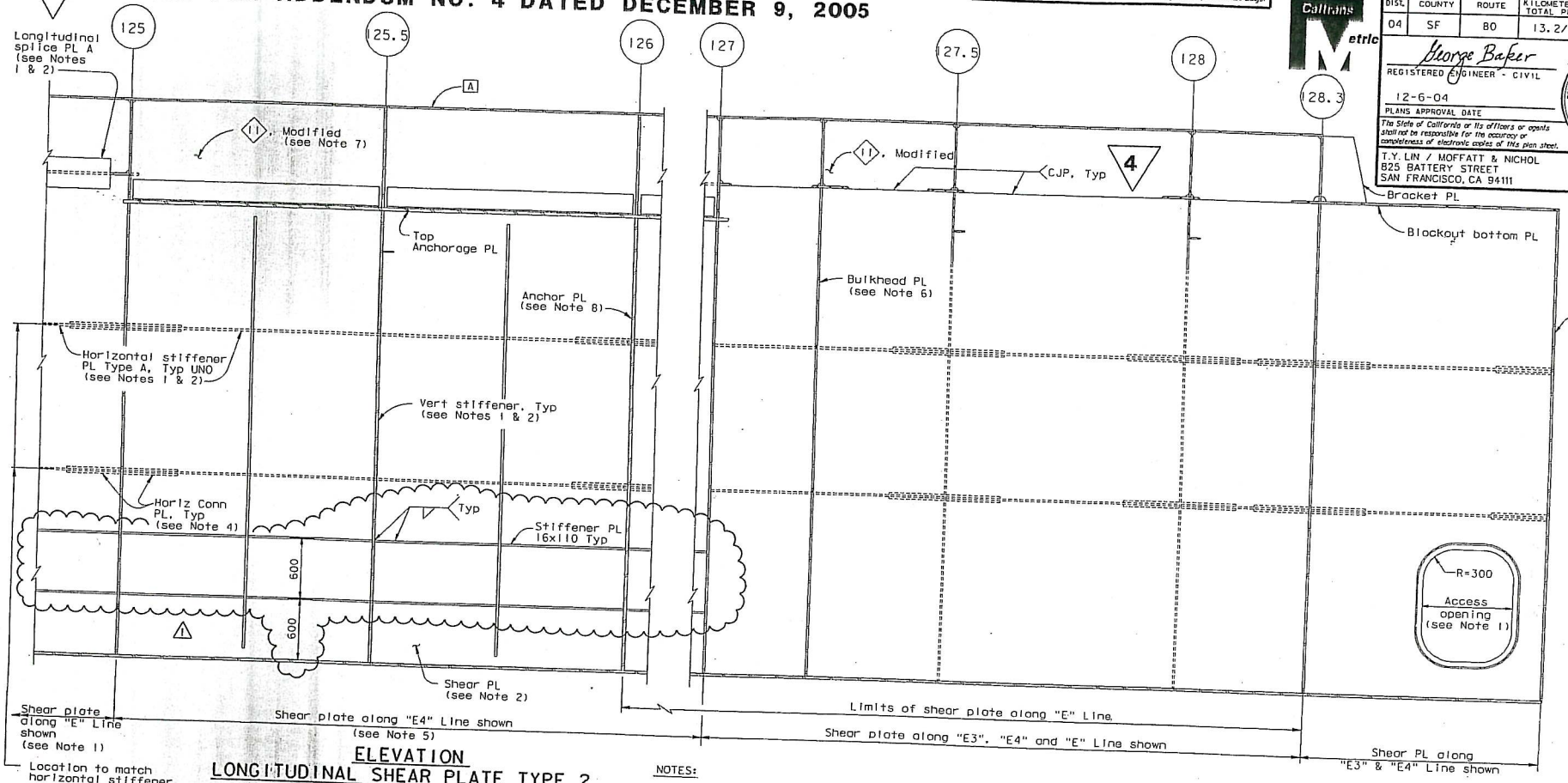
DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	697R1	1204

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

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



ELEVATION
LONGITUDINAL SHEAR PLATE TYPE 2
SECTION B-B

1:20
("E" Line girder shown, "W" Line girder similar)

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
1	07/31/07	HINGE A REACTION-SHEAR PLATES	DT	GB	50

REVISIONS

CONTRACT CHANGE ORDER NO. 50
SHEET 6 OF 6

REGISTERED PROFESSIONAL ENGINEER Daniel J. Turner No. C 65033 Exp. 06/30/09 CIVIL STATE OF CALIFORNIA

FOR REVISIONS ONLY

NOTES:

1. Longitudinal shear plate type 2 from PP115 to PP125 is similar to longitudinal shear plate type 2 in typical girder section type 2. For details not shown, see "Typical Girder Details No. 7" sheet.
2. For longitudinal shear plate dimension table and access opening locations from PP115 to hinge A, see "Girder At East Transition No. 9" sheet.
3. For floorbeam details not shown, see "Floorbeam At East Transition" sheets.
4. For horizontal connection plate detail, see "Typical Girder Details No. 9" sheet.
5. For detail of longitudinal shear plate type 2 along "E3" Line from PP125 to PP127, see "Girder At East Transition No. 6" sheet.
6. For details of bulkhead plate, see "Floorbeam At Transition No. 8" sheet.
7. For details of 11, Modified not shown see 12 on "Girder At East Transition No. 17" sheet.
8. For details of anchor PL, see "East Cable Anchorage "E" Line Layout" and "East Cable Anchorage "W" Line Layout" sheets.
9. For details of end girder PL, see "Floorbeam At East Transition No. 10" sheet.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

R. Valizadeh/V. Toan/Y.L./M.L./F.C.
DESIGN OVERSIGHT
Roya Valizadeh / Vonn Toan / Y. Liu
SIGN OFF DATE 07/31/07
Rev. Date: 5-18-98

DESIGN	BY G. Baker	CHECKED P. Ritchie	
DETAILS	BY M. Guiyas	CHECKED T. McMeans	
QUANTITIES	BY G. Baker	CHECKED M. Roberts	

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

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

REVISION DATES (PRELIMINARY STAGE ONLY) 5/01/97 05/04/97 05/07/97 05/08/97 05/09/97 11/07/97 11/11/97

SHEET 280R1 OF

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

GIRDER AT EAST TRANSITION NO. 15

FILE => I:\bb\04-012001\sas\contract plans and cco\cco\in progress\cco#50\dgn\ogand17.dgn

100 % PS&E

TIME PLOTTED => 10:41:11
DATE PLOTTED => 31 JUL 2007
USERNAME => v1gnatova