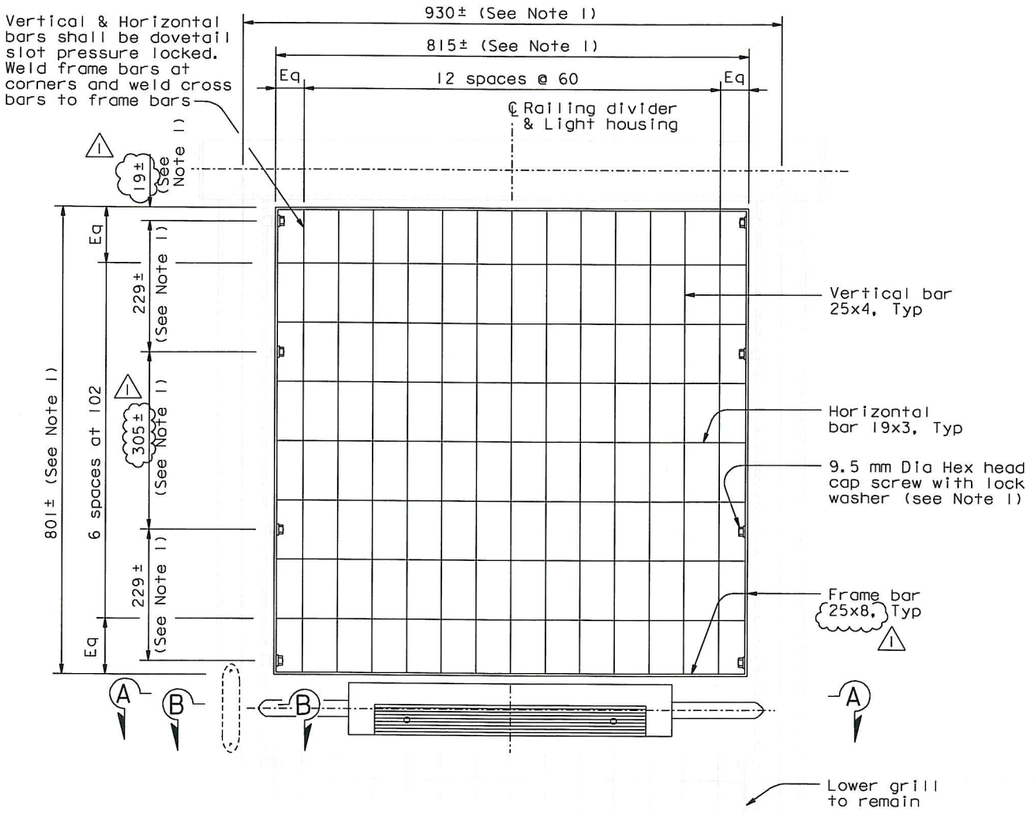
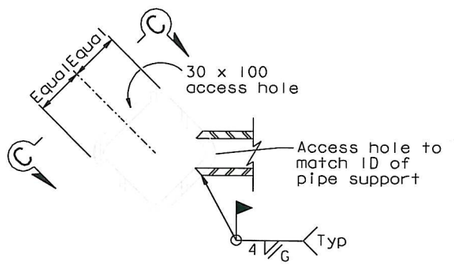
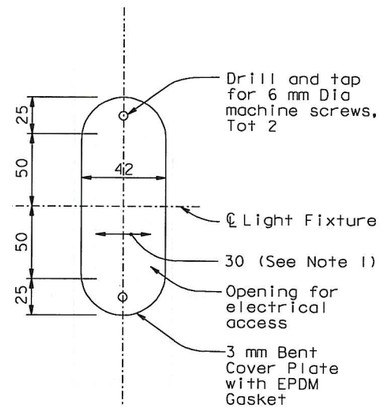




SECTION B-B

1:2



VIEW C-C

1:2

RAILING DIVIDER MODIFICATION PROCEDURE:

1. Remove and install new upper railing grill.
2. Remove and install new light housing.
3. Drill and tap holes, install new access hole cover plates.
4. Galvanized surfaces shall be repaired. Areas with damaged paint or with no paint shall be cleaned and painted.

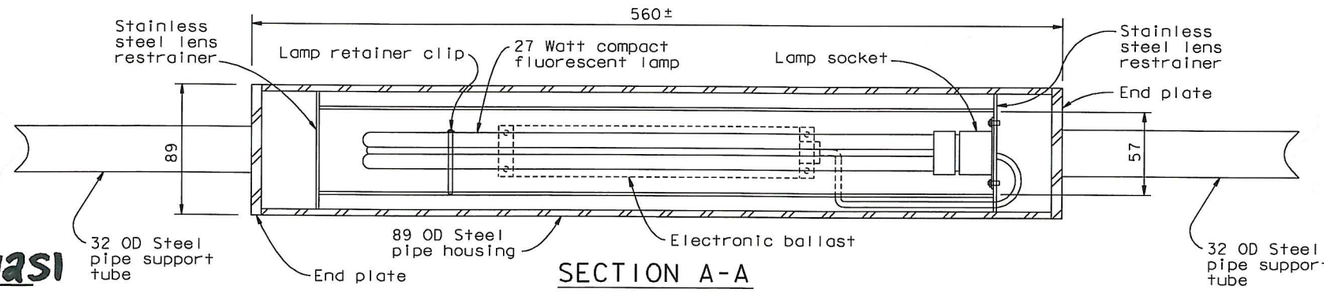
NOTES:

1. The Contractor shall field verify dimensions prior to fabrication.

OAKLAND APPROACH STRUCTURES

RAILING DIVIDER DETAIL

1:5



SECTION A-A

1:2

CONTRACT CHANGE ORDER NO. 192S1

SHEET 2 OF 3

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
1	02/10/12	OTD DIVIDER RAIL MODIFICATIONS	AB	TH	192S1
0	06/22/11	OTD DIVIDER RAIL MODIFICATIONS	TH	JD	192

REVISIONS

	BY	CHECKED
DESIGN	T. Ho	J. Duxbury
DETAILS	T. Ho	J. Duxbury
QUANTITIES	T. Ho	J. Duxbury

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

W. Long, Y. Liu
DESIGN OVERSIGHT
SIGN OFF DATE 02/10/12

R. Manzanarez
PROJECT ENGINEER

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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DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF, Ala	80	13.9/14.3, 0.0/2.7	1165R1	1204

Caltrans Metric

REGISTERED ENGINEER - CIVIL

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

06-22-11
PLANS APPROVAL DATE

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T.Y. LIN / MOFFATT & NICHOL
TWO HARRISON STREET
SAN FRANCISCO, CA 94105

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SAN FRANCISCO OAKLAND BAY BRIDGE
EAST SPAN SEISMIC SAFETY PROJECT

OAKLAND APPROACH STRUCTURES CLEANUP ITEMS

BIKEPATH RAILING DIVIDER

BRIDGE NO. 34-0006 L/R
KILOMETER POST 13.9/14.3, 0.0/2.7

DISREGARD PRINTS BEARING EARLIER REVISION DATES → 06/22/11

REVISION DATES (PRELIMINARY STAGE ONLY)

SHEET 748R1 OF

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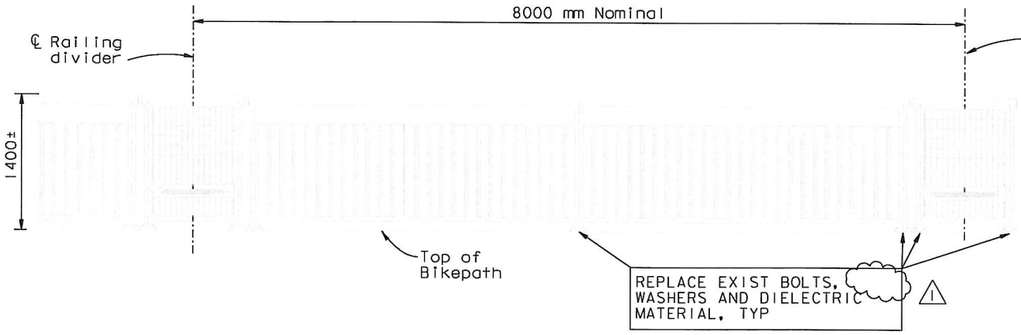
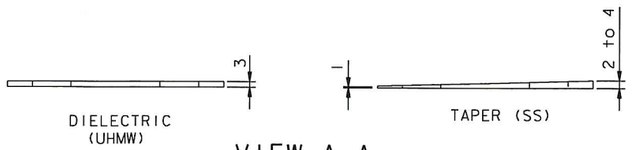
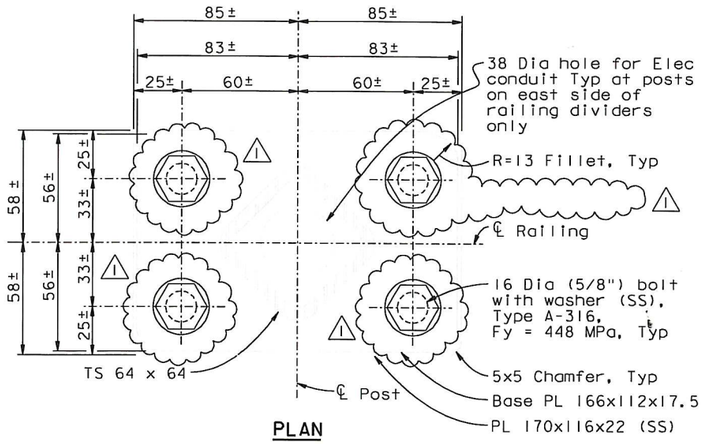


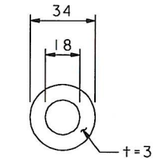
EXISTING BIKEPATH RAILING - TYPICAL ELEVATION
1:30



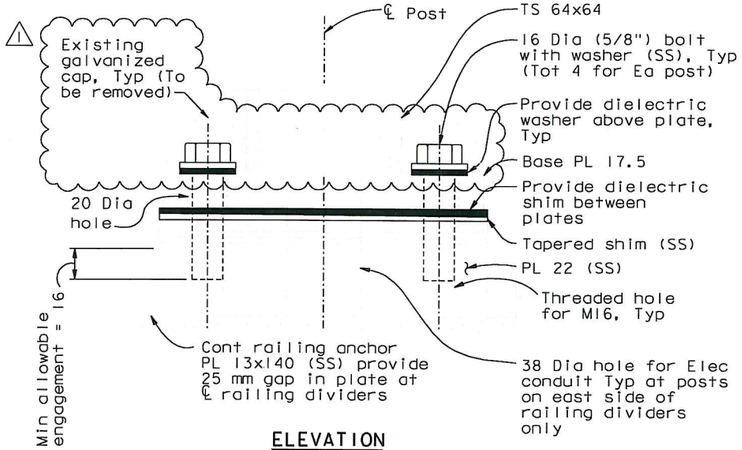
VIEW A-A
1:1.5



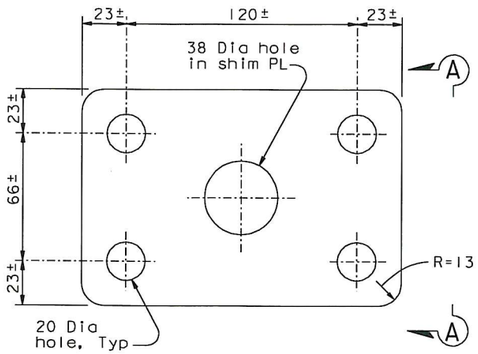
PLAN



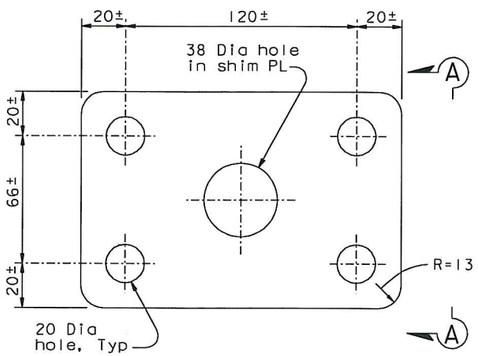
DIELECTRIC WASHER
1:1.5



ELEVATION



SHIM DETAIL (See Note 3)
1:1.5



ALTERNATE SHIM DETAIL
1:1.5

TYPICAL EXISTING POST BASEPLATE
1:1.5

BOLT AND SHIM REPLACEMENT PROCEDURE:

1. Remove and discard bolt, cap and washer.
2. Remove and discard the dielectric material above and below the base plate.
3. Clean out and dry the threaded anchor hole.
4. If needed, replace the top most existing stainless steel standard shim with a new stainless steel tapered shim of thickness and taper necessary to properly align top rail of bikepath railing.
5. Install dielectric shim (UHMW) below base plate.
6. Install dielectric washer (1) (UHMW) above base plate.
7. Insert new bolt (cap) and washer. The length of the bolt shall be such that the engagement length into the PL 22 is a minimum of 16 mm.
8. Bolts shall be tightened to "Snug Tight Plus 1/4 Turn". Bolts shall be installed with thread locking compound.

NOTES:

1. Bolt and shim replacement shall be performed on all railing divider posts and all standard railing posts on the North and South side bikepath railing.
2. The Contractor shall verify all controlling field dimensions before ordering or fabrication any material or performing any work that might thereby be affected.
3. The alternate shim dimensions shall be used as directed by the Engineer.
4. (1) Any damage to baseplate or post shall be repaired as directed by the Engineer.

CONTRACT CHANGE ORDER NO. 192S1
SHEET 3 OF 3

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF, Ala	80	13.9/14.3, 0.0/2.7	1165SIR1	1204

Caltrans Metric

REGISTERED ENGINEER - CIVIL
08-26-11
PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER — James P. Duxbury, No. C 64677, Exp. 06/30/13, CIVIL, STATE OF CALIFORNIA

T.Y. LIN / MOFFATT & NICHOL
TWO HARRISON STREET
SAN FRANCISCO, CA 94105

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MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
1	02/10/12	OTD DIVIDER RAIL MODIFICATIONS	AB	JD	192S1
0	08/26/11	OTD DIVIDER RAIL MODIFICATION	JD	TH	192

REVISIONS

	BY	CHECKED
DESIGN	J. Duxbury	T. Ho
DETAILS	A. Baumberger	T. Ho
QUANTITIES	A. Baumberger	T. Ho

W. Long, Y. Liu
DESIGN OVERSIGHT
SIGN OFF DATE 02/10/12

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

R. Manzanarez
PROJECT ENGINEER

BRIDGE NO. 34-0006L/R
KILOMETER POST 13.9/14.3, 0.0/2.7

SAN FRANCISCO OAKLAND BAY BRIDGE EAST SPAN SEISMIC SAFETY PROJECT

OAKLAND APPROACH STRUCTURES CLEANUP ITEMS

HANDRAIL ADJUSTABILITY DETAILS

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): 08/26/11

SHEET 748SIR1 OF

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