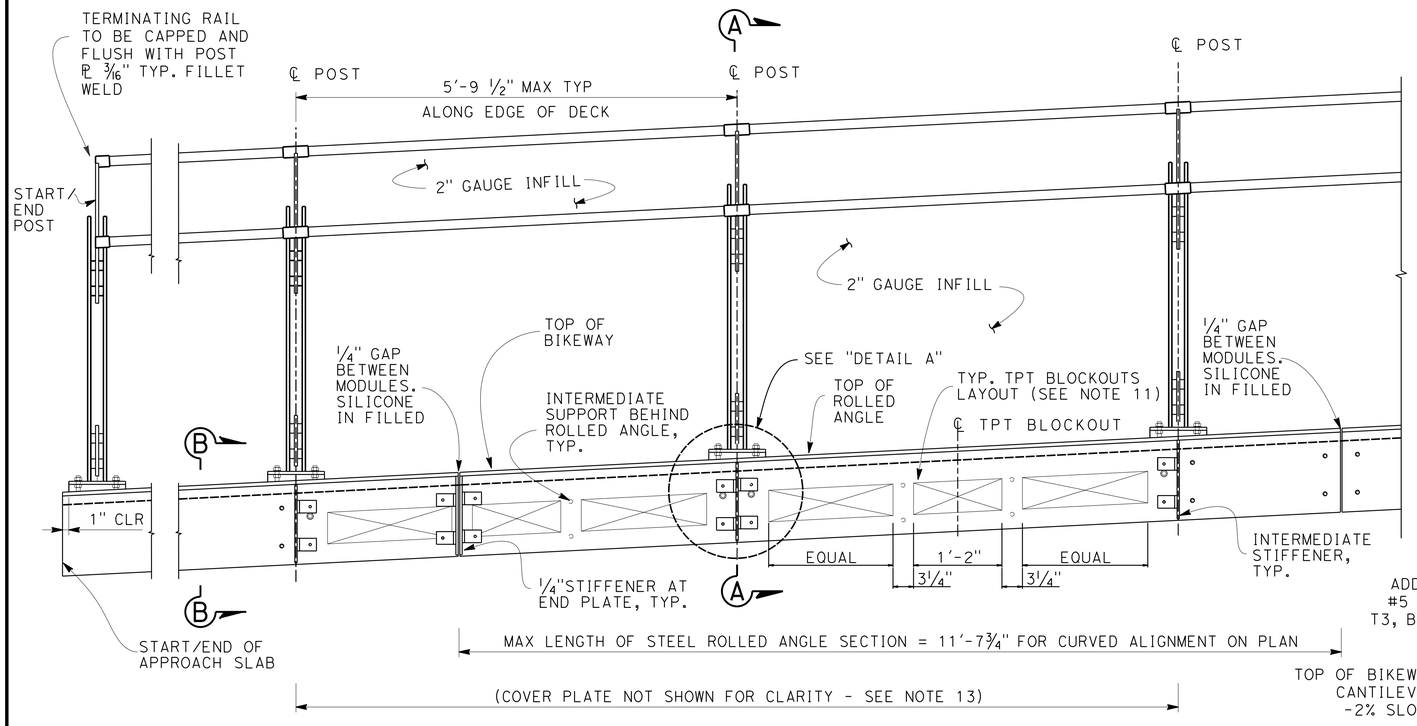
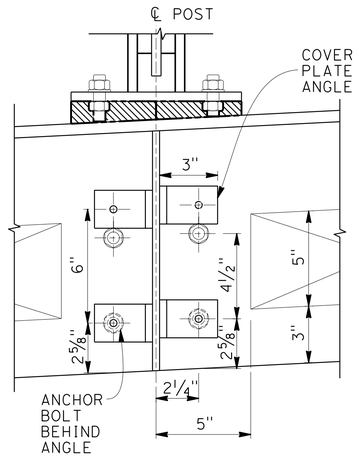


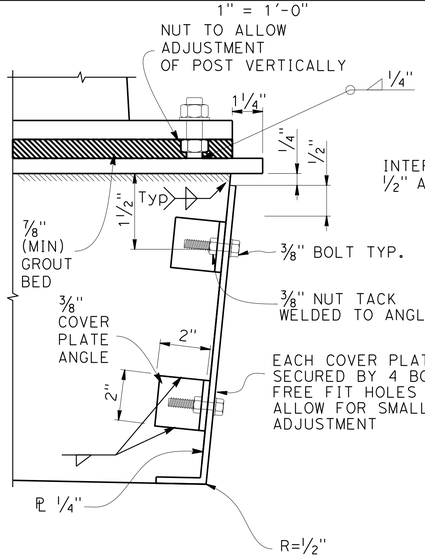
ELEVATION OF OUTER BIKEWAY RAILING TYP

1" = 1'-0"



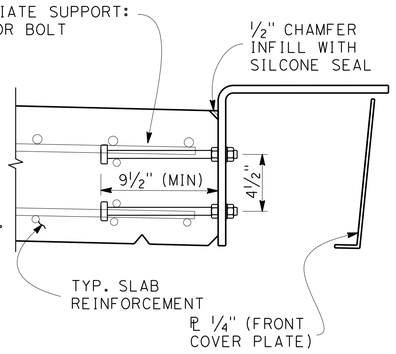
DETAIL A

3" = 1'-0"



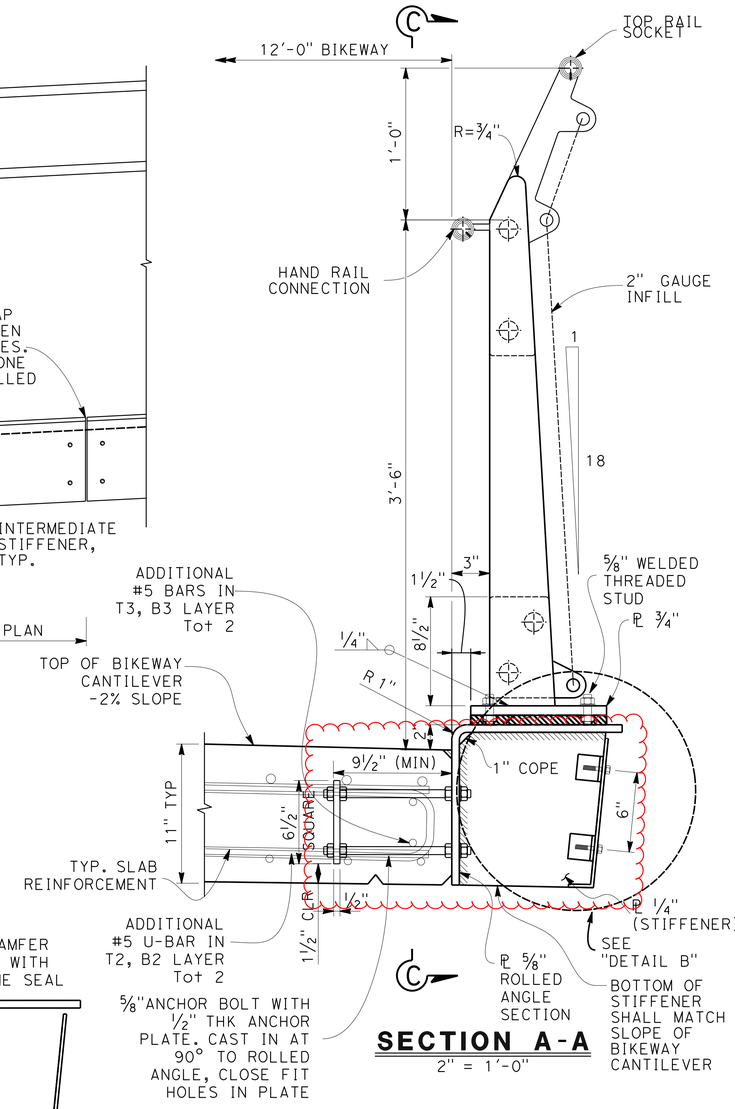
DETAIL B

3" = 1'-0"



SECTION B-B

2" = 1'-0"



SECTION A-A

2" = 1'-0"

RELEASED FOR CONSTRUCTION
IN ACCORDANCE WITH SECTION 2.4.2.5.4,
OF BOOK 2, PROJECT REQUIREMENTS
08/13/2015
SIGNED DATE
SHIMMICK / FCC / IMPREGLIO, A JOINT VENTURE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	710	3.6/6.0		

07/14/15
REGISTERED CIVIL ENGINEER DATE

08/13/2015
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER MATTHEW L. CARTER No. C82283 Exp.03/31/16 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.

Port of Long Beach
925 Harbor Plaza, Long Beach, CA 90802

SFI - SHIMMICK/FCC/IMPREGILO JV
11 Golden Shore Suite 330, Long Beach, CA 90802

Arup in association with Biggs Cardosa
12777 West Jefferson Blvd, Los Angeles, CA 90066

NOTES:

1. Details relate to Class 1 Bikeway Barrier: Typical Section 1.
2. For SECTION C-C see "BIKEWAY RAILING DETAILS No.2" sheet.
3. 12'-0" MIN clear distance to be provided between inner and outer handrails (measured from closest face).
4. All posts shall be installed vertical. Rail and steel angle shall be installed parallel to the deck superstructure.
5. All post and plate to be structural steel to be as per "GENERAL NOTES" sheet.
6. All railing posts and plate to be painted in accordance with the specification. Barrier cover plate and mounting lugs shall be painted to the same color/specification.
7. All rails shall be grade 316L stainless steel with a polished finish 0.5um Ra. All welds shall be pollished.
8. 2" gauge infill shall be a proprietary expandable netting system comprising stainless steel cables and ferrules (connections). All infill components shall be 316L stainless steel.
9. Railing edges shall be ground smooth to eliminate sharp edges.
10. Anchor bolts to be grade F1554 Gr36 (galvanized) unless otherwise specified.
11. Blockouts shall be provided to accommodate the TPT openings. Where necessary the typical blockout configuration shall be adjusted to suit the location.
12. Inner and outer post to be aligned. At sign/lighting mast locations, mast to be aligned with outer post.
13. Cover plate is continuous except at movements joints and gaps between modules.
14. Rolled angle\ anchorage to be cast with bikeway slab. Contractor and formwork designer are responsible for any modifications required for suitability as formwork.
15. Vibration and vandal proof fixing screws are required to secure the rail into the post fixings. They shall have dome shape head with a shaped depression to take a special tool for driving the fixing (not Allen key) and shall be countersunk. Other means of rendering the fixings vandal proof will be considered. The design of the fixings must allow them to be withdrawn should the rail need replacing.
16. Silcone seal shall be Sikasil 728 NS or approved equivalent.

07-53-3000-STRWA-T1-6601

GERALD DESMOND BRIDGE (REPLACE)

WEST APPROACH

BIKEWAY RAILING DETAILS No.1

DESIGN	BY M. CARTER	CHECKED M.BODEMAR	
DETAILS	BY C.DONOVAN	CHECKED M.BODEMAR	
QUANTITIES	BY	CHECKED	

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

NEIL CARSTAIRS
PROJECT ENGINEER

BRIDGE NO. 53-3000
POST MILES 3.82

DESIGN OVERSIGHT
SIGN OFF DATE

DESIGN DETAIL SHEET (ENGLISH) (REV. 03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 1820
PROJECT NUMBER & PHASE: 07000210804 CONTRACT NO.:

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET	OF
2014 07/10	2014 10/31	2015 06/08	2015 07/14	104	118

FILE => 07-53-3000-STRWA-T1-6601.dgn

USERNAME => jcmes.reilly DATE PLOTTED => 2015-07-21 TIME PLOTTED => 17:42:27