

**BRIDGE GENERAL NOTES  
LOAD & RESISTANCE FACTOR DESIGN**

**DESIGN:** AASHTO LRFD Bridge Design Specifications, 4th Edition and Caltrans Amendments, preface dated Dec. 2008, & 2008 AASHTO LRFD Interim Revisions; except that Standard Bridge Details XS sheets are designed using Bridge Design Specifications (9th AASHTO with Revisions by Caltrans)

**SEISMIC DESIGN:** Project Specific Design Criteria which refer to Caltrans Seismic Design Criteria (SDC) Version 1.6

**DEAD LOAD:** Includes 6.25 psf for future wearing surface

**LIVE LOADING:** HL93 with Low-Bay and permit design load  
HL93 increased by a factor of 10% for approach structures including foundations and main span bridge superstructure, cable stays and dampers per the project specific design criteria

**PEDESTRIAN LIVE LOADING:** 0.075 ksf

**CREEP AND SHRINKAGE:** CEB-FIP model Code 1990  
Average Relative Humidity = 70%  
Average Ambient Temperature = 60°F

**SEISMIC LOAD:** Two levels of design earthquake are considered in combination with project specific design criteria  
Functional Evaluation Earthquakes (FEE):  
60% probability of occurrence in 100 years (100 year return period)  
Peak ground acceleration: 0.2g

**CONCRETE:** For "Concrete Notes" see "GENERAL NOTES No.2" sheet.

**PRESTRESSED CONCRETE:** For "Prestressing Notes" see "GENERAL NOTES No.2" sheet.

**STRUCTURAL STEEL:** ASTM A709 Grade 50  
Plates and Shapes:  $f_y = 50$  ksi ASTM A709 Grade HPS 50W

**HIGH STRENGTH THREADED RODS:** ASTM A722

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

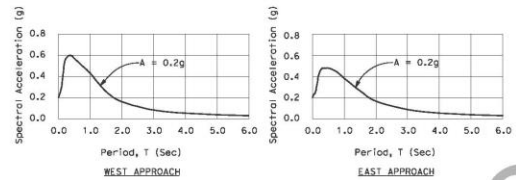
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

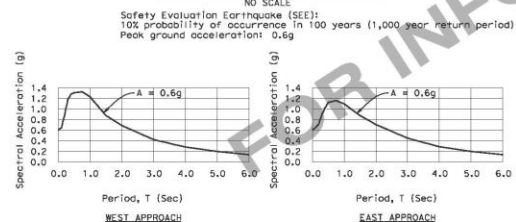
Part of Long Beach  
825 Harbor Plaza, Long Beach, CA 90802

SF1 - SHIMICK/FCC/IMPREGILO JV  
11 Golden Shore Suite 330, Long Beach, CA 90802

Arup In association with BCA  
12777 West Jefferson Blvd, Los Angeles, CA 90065



**FEE ARS DESIGN CURVE**



**SEE ARS DESIGN CURVE**

**07-53-3000-ST00-B1-1201A**

FOR INFORMATION ONLY

NOT FOR CONSTRUCTION

**GERALD DESMOND BRIDGE (REPLACE)**

DESIGN OVERSIGHT	DESIGN	BY	CHECKED	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	NEEL CARSTAIRS PROJECT ENGINEER	DESIGN NO. 53-3000	<b>MAIN SPAN AND APPROACHES</b>
DATE OF DATE	DRAWN	BY	CHECKED	PROJECT NUMBER & PHASE 07000210804	CONTRACT NO.:	REVISIONS	<b>GENERAL NOTES No.1</b>
DESIGN DETAIL SHEET (ENCL.1) SHEET 03/14/13	FOR RELEASE TO: ALL WORKERS	0	1	2	3	4	40

