

| DIST | COUNTY | ROUTE | KILOMETER POST TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|------------------------------|----------|--------------|
| 12   | Ora    | 241   | 30.1                         | 3        | 19           |

Rich Hoisington

6/2/99

REGISTERED CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER

RICHARD W. HOISINGTON, JR.

No. 42267

Exp. 3/31/00

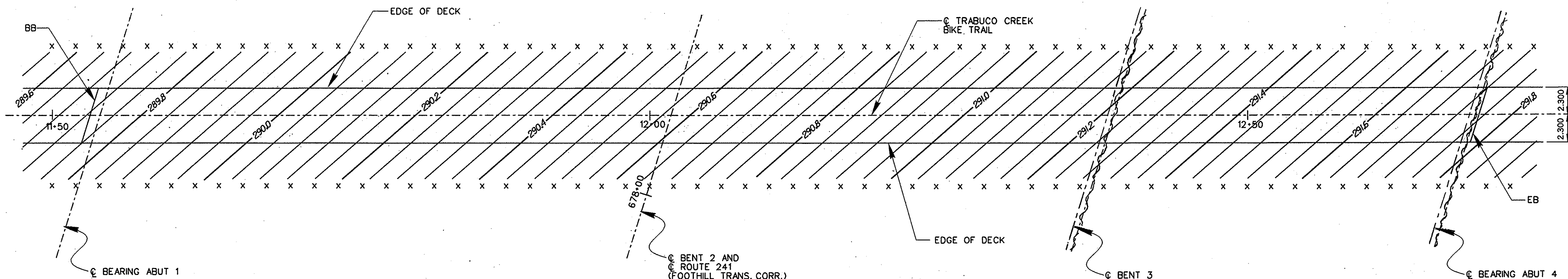
CIVIL

STATE OF CALIFORNIA

PLANS APPROVAL DATE

COUNTY OF ORANGE  
PUBLIC FACILITIES & RESOURCES DEPT.  
300 N. FLOWER STREET  
SANTA ANA, CA 92703-5000

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.



PLAN  
SCALE 1:200

DECK CONTOUR NOTES:

- X = 2 m INTERVAL MEASURED ALONG STATION LINE.
- CONTOURS DO NOT INCLUDE CAMBER.
- CONTOUR INTERVAL = 40 mm

GENERAL NOTES  
LOAD FACTOR DESIGN

DESIGN: BRIDGE DESIGN SPECIFICATIONS (1983 AASHTO WITH INTERIMS AND REVISIONS BY CALTRANS), AND TRANSPORTATION CORRIDOR AGENCY (TCA) DESIGN MEMORANDUM NO. 6, DATED 7/27/95

DEAD LOAD: INCLUDES 1.675 kPa FOR FUTURE WEARING SURFACE

LIVE LOADING: HS20-44 AND ALTERNATIVE AND PEDESTRIAN LOAD @ 4.07 kPa

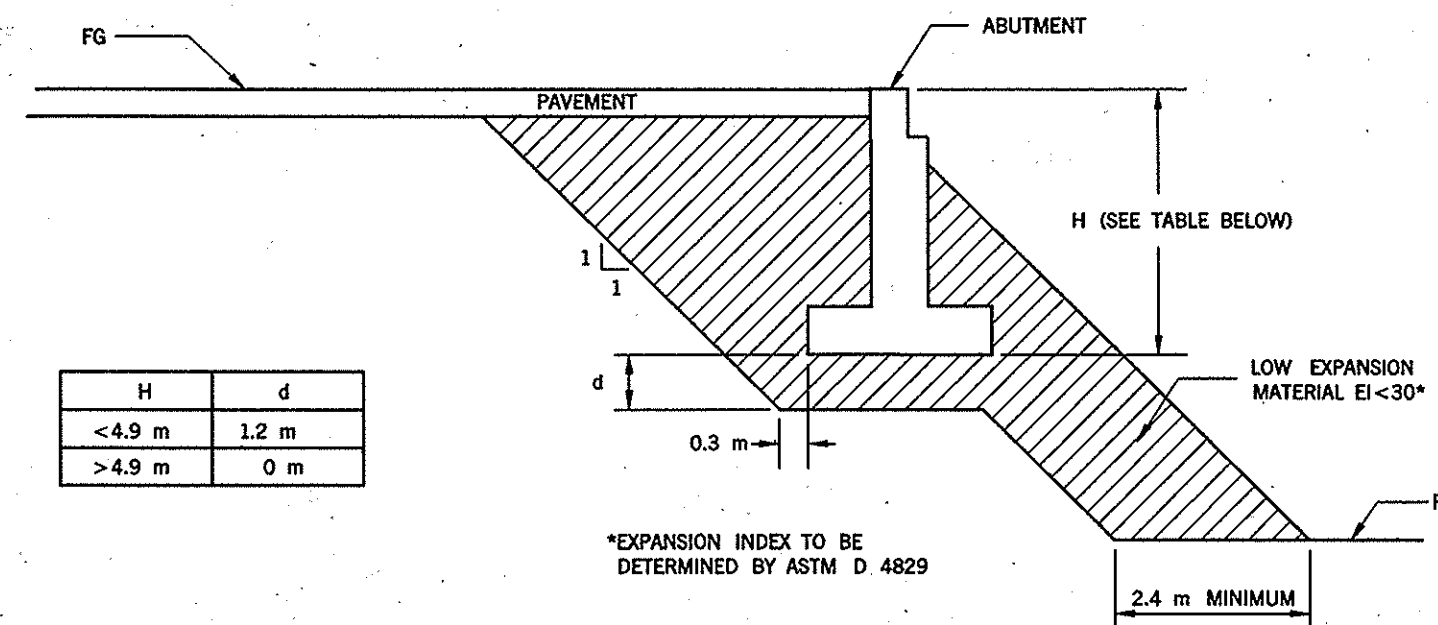
SEISMIC LOADING: 72 YEAR EVENT: SITE SPECIFIC RESPONSE SPECTRA FROM TABLE NO. 3 OF TRANSPORTATION CORRIDOR AGENCY (TCA) DESIGN MEMO-RANDUM NO. 6, DATED 7/27/95  
MAXIMUM CREDIBLE EVENT: ATC-32 ARS CURVE : FIGURE R3-5  
SOIL PROFILE TYPE 'C'  
MAGNITUDE : 7.25±.25  
PEAK BEDROCK ACCELERATION : 0.4g.

REINFORCED CONCRETE:  $f_y=420$  MPa  
 $f'_c=28$  MPa  
 $n=8$   
TRANSVERSE DECK SLAB (WORKING STRESS DESIGN)  
 $f_s=140$  MPa  
 $f'_c=8.25$  MPa  
 $n=10$

PRESTRESSED CONCRETE: SEE PRESTRESSING NOTES ON "GIRDER LAYOUT" SHEET.

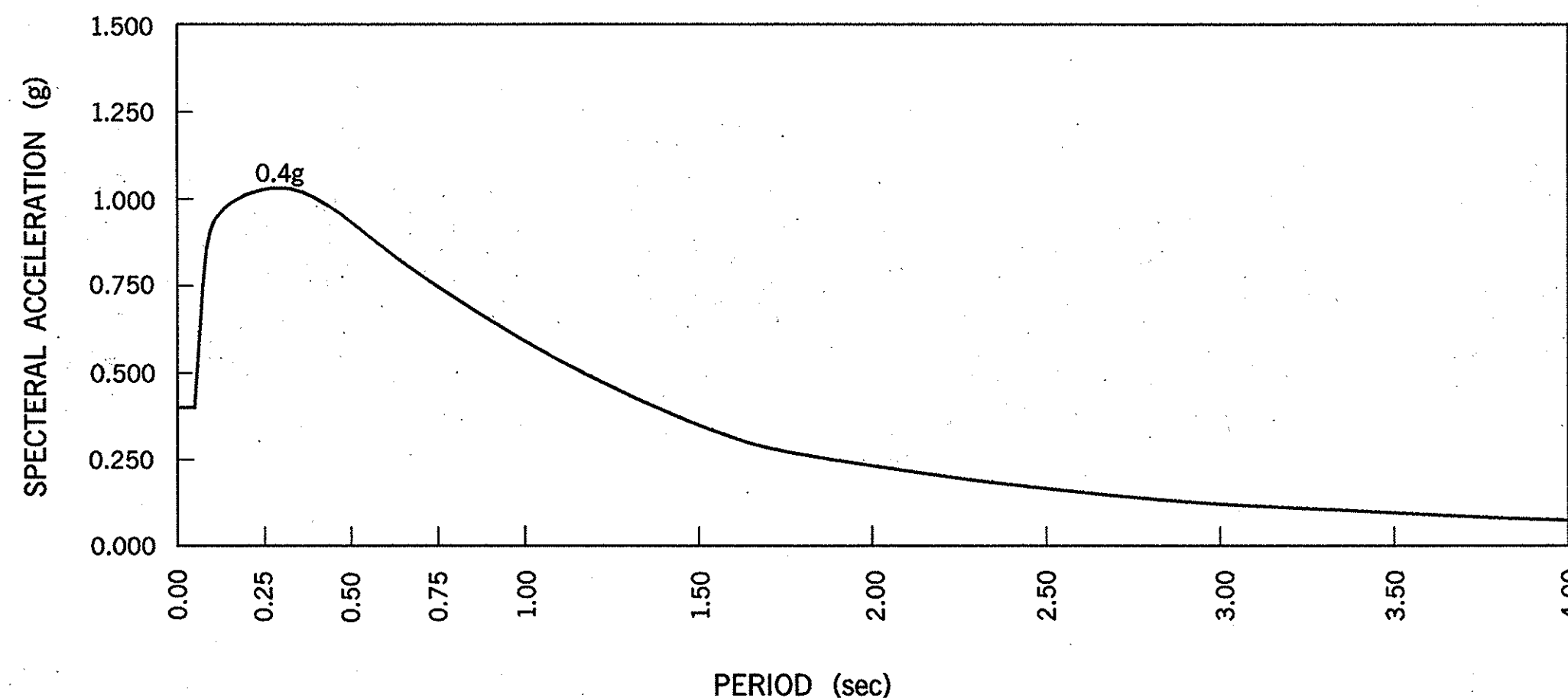
FOOTING PRESSURE:

|                    | SERVICE :<br>(LOAD GROUPS I THRU VI) | ULTIMATE :<br>(LOAD GROUP VII) |
|--------------------|--------------------------------------|--------------------------------|
| ABUTMENT FOOTINGS: | 172 kPa / 172 kPa                    | 516 kPa / 450 kPa              |
| BENT FOOTINGS:     | 268 kPa / 140 kPa                    | 804 kPa / 317 kPa              |



NOTE: PER THE PROJECT GEOTECHNICAL REPORT, ASTM 4829 TESTS ON TWO SAMPLES TAKEN AT ABUTMENT 1 PRODUCED EXPANSION INDEX VALUES OF 13 AND 14.

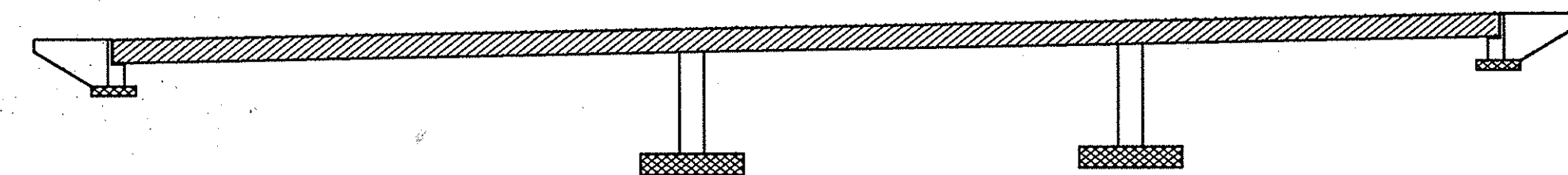
EARTHWORK DETAIL : LOW EXPANSION  
MATERIAL IN BRIDGE EMBANKMENTS  
NO SCALE



ATC-32, FIG-R3-5 ARS CURVE (SOIL TYPE "C")

AS BUILT

CORRECTIONS BY G. CUNNINGHAM/ RWH  
CONTRACT NO. 1296-NMC-0130  
DATE 5-8-01 / 6-1-01



CONCRETE STRENGTH & TYPE LIMITS  
NO SCALE

LEGEND

- STRUCTURAL CONCRETE, BRIDGE ( $f'_c=35$  MPa @ 28 DAYS)
- STRUCTURAL CONCRETE, BRIDGE ( $f'_c=28$  MPa @ 28 DAYS)
- STRUCTURAL CONCRETE, BRIDGE FOOTING ( $f'_c=28$  MPa @ 28 DAYS)

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

Steve Nakao  
DESIGN OVERSIGHT  
6/4/99  
SIGN OFF DATE  
STEVE NAKAO

|            |                    |                                     |
|------------|--------------------|-------------------------------------|
| DESIGN     | BY RICH HOISINGTON | CHECKED JOHN SARAH McLEAN & SCHULTZ |
| DETAILS    | BY RICH HOISINGTON | CHECKED JOHN SARAH McLEAN & SCHULTZ |
| QUANTITIES | BY RICH HOISINGTON | CHECKED JOHN SARAH McLEAN & SCHULTZ |

PREPARED FOR THE  
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

RICH HOISINGTON  
PROJECT ENGINEER

BRIDGE NO.  
55-953  
KILOMETER POST  
30.1

TRABUCO CREEK BIKE TRAIL OVERCROSSING  
DECK CONTOURS

DESIGN DETAIL SHEET (METRIC) (REV. 9/2/98)

ORIGINAL SCALE IN MILLIMETERS  
FOR REDUCED PLANS

CU  
EA

DISREGARD PRINTS BEARING  
EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)  
3/31/99 5/24/99

Scale 200:1

FILE -> \$REQUEST  
d:/cadd/metric/trabuco/dekcontr.dgn (3D)

DATE PLOTTED -> \$DATE 06/13/99  
TIME PLOTTED -> \$TIME 4:00 PM  
USERNAME -> \$USER H.P.