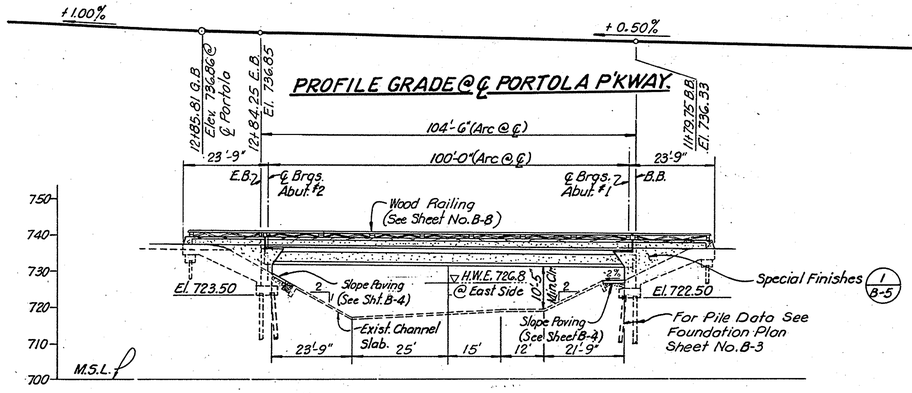


Existing Rip-Rap to be removed both sides. See sheet B-4 for typical detail.

W'LY. ELEVATION

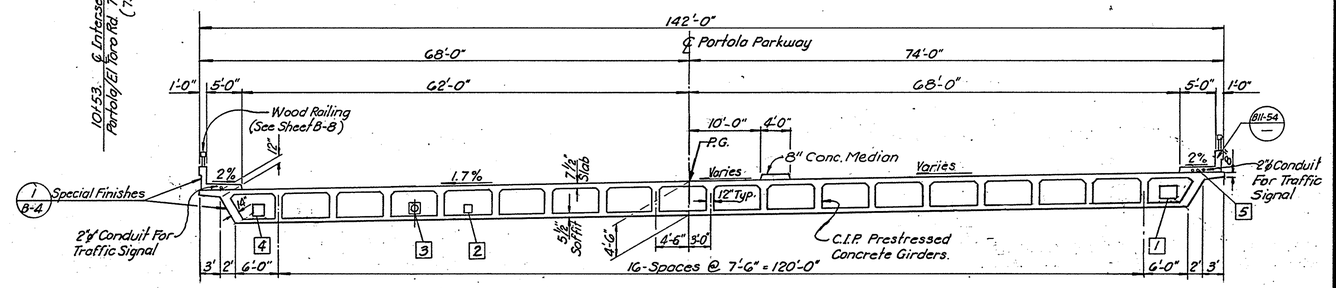
1" = 20'

Notes:

1- Channel slab to be constructed by others. Maximum channel slab loading shall not exceed 1200 p.s.f.

2- For structure excavation and back fill limits see sheet no. B-8

3- Channel and road work per separate plans.

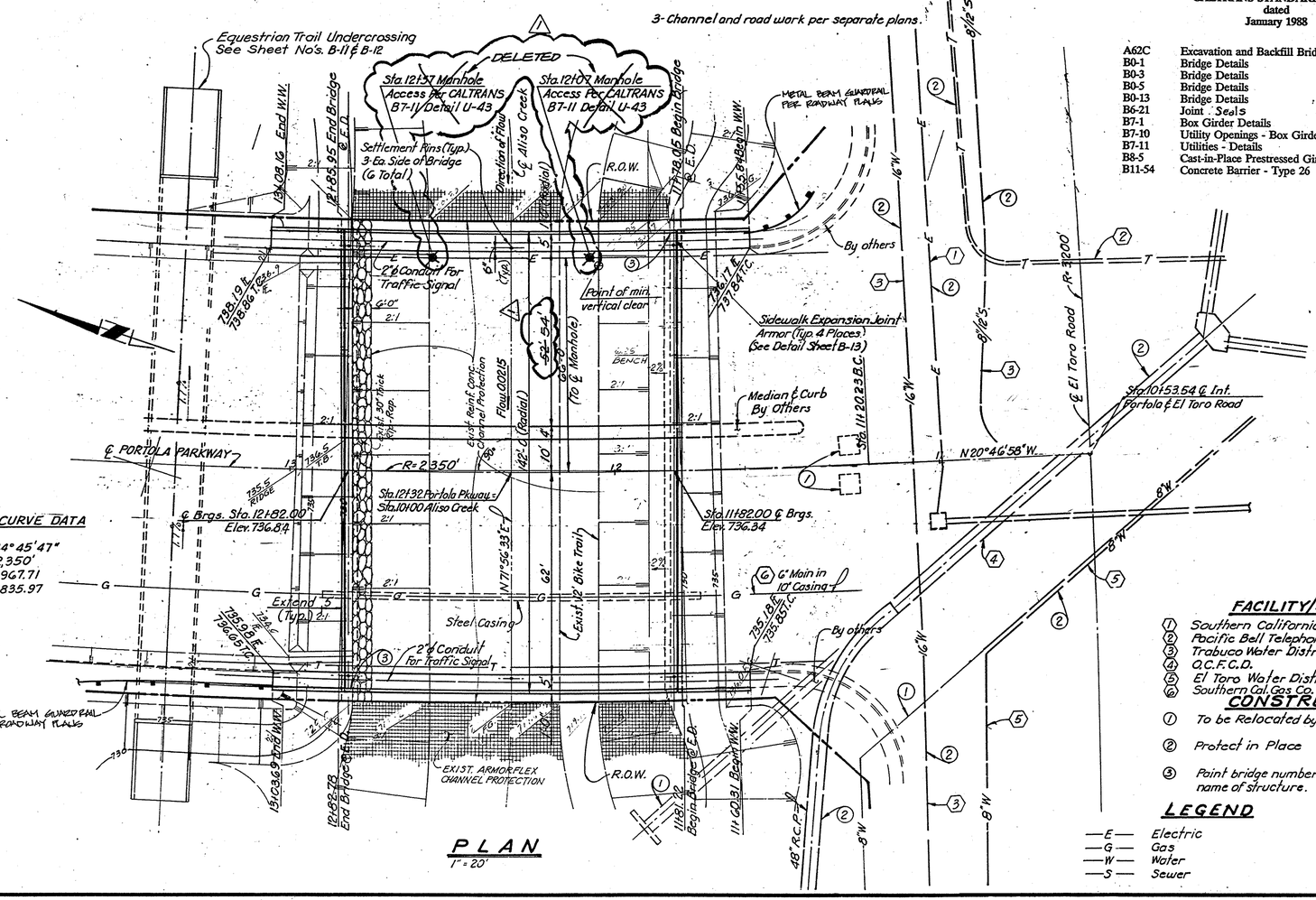


TYPICAL SECTION

(Looking North @ ℄ Creek)

1" = 10'

[X] - For Utility Opening Sizes & Assignments Refer to Utility Opening Schedule on Sheet B-4)



CURVE DATA

Δ = 44° 45' 47"
R = 2,350'
T = 967.71
L = 1,835.97

PLAN

1" = 20'

CALTRANS STANDARD PLANS dated January 1988

A62C	Excavation and Backfill Bridge
B0-1	Bridge Details
B0-3	Bridge Details
B0-5	Bridge Details
B0-13	Bridge Details
B6-21	Joint Seals
B7-1	Box Girder Details
B7-10	Utility Openings - Box Girder
B7-11	Utilities - Details
B8-5	Cast-in-Place Prestressed Girder Details
B11-54	Concrete Barrier - Type 26

SPECIFICATIONS:

Design — AASHTO Design Specifications for Highway Bridges dated 1983 with subsequent revisions and additions from the State of California Department of Transportation (CALTRANS.) Bridge Design and Detail Manuals.

Construction — State of California Department of Transportation Standard Specifications dated. January 1988 and the Special Provisions.

Dead Load — Includes ~~35~~ 20 p.s.f. for Future Wearing Surface. (NOTE: Allowance reduced from 35 psf due to soffit slab thickness increase from 5½" to 6" and over-pour on top deck slab. See note on sheet B-6) 1

Live Load — HS 20-44 and Alternate and Permit Design Loads (PTS)

Seismic Loads — Causative Fault: Whittier-Elsinore, Maximum credible: Richter magnitude 7.5, Distance to fault: 12 miles N, Depth to rock-like material 0' to 10' Maximum credible peak rock acceleration "A" = 0.41g, Method used: Response spectrum maximum mode shape No. 3.

Piles — 18" Diameter 70 Ton Cast-in-Drilled-Hole Piles.

Reinforcement — Embedment is clear to the outside of the bar and is 2" to main reinforcement except as shown. Where reinforcement bars are spliced: Lap 45 bar dia. minimum for #3-#8. Lap 60 bars diameters minimum for #9-#11. All reinforcement fy = 60,000 p.s.i. (A.S.T.M. A615 Grade 60 Steel.)

Prestressing Strands:- Fy = 270,000 p.s.i. Low relaxation strands.

Concrete — Superstructure (Bridge deck) f'c = 4,500 p.s.i. at 28 days.
Piles f'c = 5,000
All other concrete f'c = 3,250 p.s.i. (Includes Abutments, Wingwalls, Barriers, Sidewalks, Median, Etc.)

PRESTRESSING NOTES:

Pj = 24,610 kips total at jacking end As = Pj/0.75 f's.

Total number of girders = 19

Concrete: f'c = 4,500 p.s.i. at 28 days. f'ci = 3,500 p.s.i. at time of stressing (Min. of 10 days after deck placement.)

1- Design based on μ = 0.25 and K = 0.0002. Pj specified at jacking end includes friction losses and provisions for 20,000 p.s.i. loss in stress.

2- Tendons to be jacked to 0.75 f's and anchored at an equivalent anchor set 3/8".

3- Contractor to submit elongation and jacking calculations based on initial force coefficient being 0.95 ⊠ at sta. 11+82.00.

4- Stressing shall be performed from Left end-abutment no. 2.

Note: See Sheet B-3 For Quantity Estimates.

FACILITY/SUBSTRUCTURE OWNER

1. Southern California Edison
2. Pacific Bell Telephone
3. Trabuco Water District
4. O.C.F.C.D.
5. El Toro Water District
6. Southern Cal. Gas Co.

CONSTRUCTION NOTES

1. To be Relocated by Others
2. Protect in Place
3. Point bridge number and name of structure.

LEGEND

—E— Electric
—G— Gas
—W— Water
—S— Sewer

REGISTERED PROFESSIONAL ENGINEER PAUL R. YOUNG No. S 3000 Exp. 9-30-91 STRUCTURAL

Robert Bein, William Frost & Associates
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
P.O. BOX 19739 • 14725 ALTON PARKWAY, IRVINE, CALIFORNIA 92718
(714) 472-3505

MARK	DATE	DESCRIPTION
1	11-01-93	"AS BUILT" REVISIONS

REVISIONS

DESIGNED W. RESHAD
DRAWN J. SALDANA CHECKED S. SHEIKH

ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY

PORTOLA BRIDGE OVER ALISO CREEK

GENERAL PLAN

PREPARED UNDER SUPERVISION OF Paul R. Young 4-12-91
PAUL R. YOUNG DATE

SCALE AS SHOWN | DATE | DWG. NO. | SHEET B2 OF 13

DR. 14 (16108)
Sheet 2 Of 13

DR. 14 (16108)