

SURVEY CONTROL

HORIZONTAL CONTROL

HORIZONTAL CONTROL IS BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 6, NAD 83 (1991.35 EPOCH) DATUM AS ESTABLISHED BY THE NATIONAL BUREAU OF SURVEYING AND MAPPING (NBSM) IN 1983. THE CONTROL POINT IS A 1.5" DIA. BRASS BENCHMARK, 1ST ORDER CONTROL POINT, 112202227 PER ROD 18880 AND 1ST ORDER CONTROL POINT 110035 PER ROD 18880. 1ST ORDER TIES WERE USED TO CONTROL THE SURVEY HORIZONTALLY. CONTROL POINTS PER IPM, 1999/2048 (04-04-00), 1ST ORDER TIES WERE USED TO CONTROL THE SURVEY VERTICALLY. CONTROL POINTS PER IPM, 1999/2048 (04-04-00), 1ST ORDER TIES WERE USED TO CONTROL THE SURVEY VERTICALLY. CONTROL POINTS PER IPM, 1999/2048 (04-04-00), 1ST ORDER TIES WERE USED TO CONTROL THE SURVEY VERTICALLY.

AT STATION: LWB PFI07
 NORTHING = 185471.531 ft
 EASTING = 640082.399 ft
 ELEVATIONS = 1749.299 ft

GROUND DISTANCE = 680.00 FT
 COMBINATION FACTOR = 0.9999855
 THE COMBINATION FACTOR = 0.9999855

BENCHMARKS

DESCRIPTION: TO 28"
 DESCRIPTION: STD. 500 BRASS STAMPED TO 258 1971" SET IN 2'x3' BOULDER 0.5' ABOVE GROUND. A STEEL PENCRIPT IS SET 16" SOUTH OF BENCHMARK.
 LOCATION: 0.2 MILES N/E ON TAVENR RD. FROM INT. RHESA ROAD 41' SOUTHWEST OF C/A. AND 25' SOUTH OF OUTLET 18' C/A.
 ELEVATION: 1613.360 ft
 DATUM: VERICAL DATUM IS NVD 1823.

SPREAD FOOTING DATA TABLE

SUPPORT LOCATION	WORKING STRESS DESIGN (WSD)
ABUTMENT 1	Permissible Gross Contact Stress (ksf) 66
RETAINING WALL 1	Permissible Gross Contact Stress (ksf) 66
RETAINING WALL 2	Permissible Gross Contact Stress (ksf) 7.5
Abutment 2 to Sta. 0+80.250	Permissible Gross Contact Stress (ksf) 2.5

PILE DATA TABLE

LOCATION	PILE TYPE	NOMINAL RESISTANCE	DESIGN TIP ELEVATIONS (FT.)	SPECIFIED TIP ELEVATIONS (FT.)
ABUTMENT 2	24"ODH	200 KIPS	1731.00 (1) 1727.00 (3)	1727.00 (3)
RETAINING WALL 2	16"ODH	90 KIPS	1728.00 (1) 1728.00 (2) 1728.00 (3)	1728.00 (3)

NOTE: Design tip elevations are controlled by: (1) Compression; (2) Tension; (3) Lateral loads

FOR REDUCED PLANS
 ORIGINAL SCALE IS IN INCHES

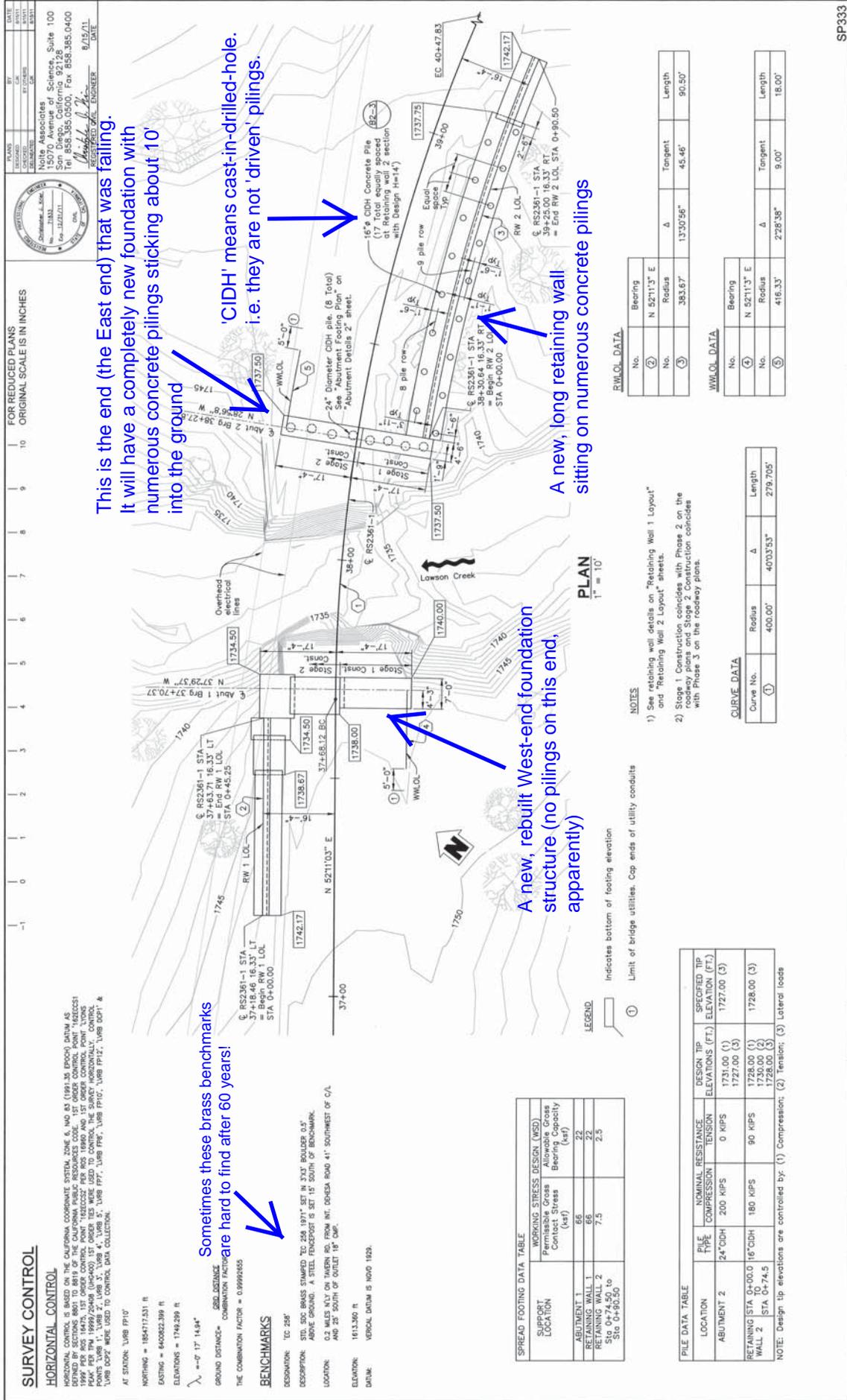
DATE: 8/15/01
 BY: [Signature]
 CHECKED: [Signature]
 DESIGNED: [Signature]
 DRAWN: [Signature]
 NOTED: [Signature]
 Note Associates
 92128
 San Diego, California 92128
 Tel: 858.385.0500, Fax: 858.385.0400
 REGISTERED CIVIL ENGINEER

This is the end (the East end) that was failing. It will have a completely new foundation with numerous concrete pilings sticking about 10' into the ground

'CIDH' means cast-in-drilled-hole. i.e. they are not 'driven' pilings.

A new, rebuilt West-end foundation structure (no pilings on this end, apparently)

A new, long retaining wall sitting on numerous concrete pilings



RWLOL DATA

No.	Bearing	Radius	Δ	Tangent Length
2	N 52°17'3" E	383.67'	13°00'56"	45.46'
3				90.50'

WWLOL DATA

No.	Bearing	Radius	Δ	Tangent Length
4	N 52°17'3" E	416.33'	2°28'38"	9.00'
5				18.00'

CURVE DATA

Curve No.	Radius	Δ	Length
1	400.00'	40°03'53"	279.705'

- NOTES**
- See retaining wall details on "Retaining Wall 1 Layout" and "Retaining Wall 2 Layout" sheets.
 - Stage 1 Construction coincides with Phase 2 on the roadway plans and Stage 2 Construction coincides with Phase 3 on the roadway plans.

SP333
 SCALE HOR. AS SHOWN, VERT. AS SHOWN
 LAWSON VALLEY ROAD BRIDGE EAST
 OVER LAWSON CREEK (57C-0726)
 BRIDGE PLAN, 3B OF 20B
 SHEET 14 OF 39 SHEETS

PLANS	BY	DATE
DESIGNED	BY	REVISED
CHECKED	BY	DATE
APPROVED	BY	DATE

NCI Associates
 14070
 San Diego, California 92128
 Tel 619.385.0500, Fax 619.385.0400
 8/15/11

FOR REDUCED PLANS
 ORIGINAL SCALE IS IN INCHES

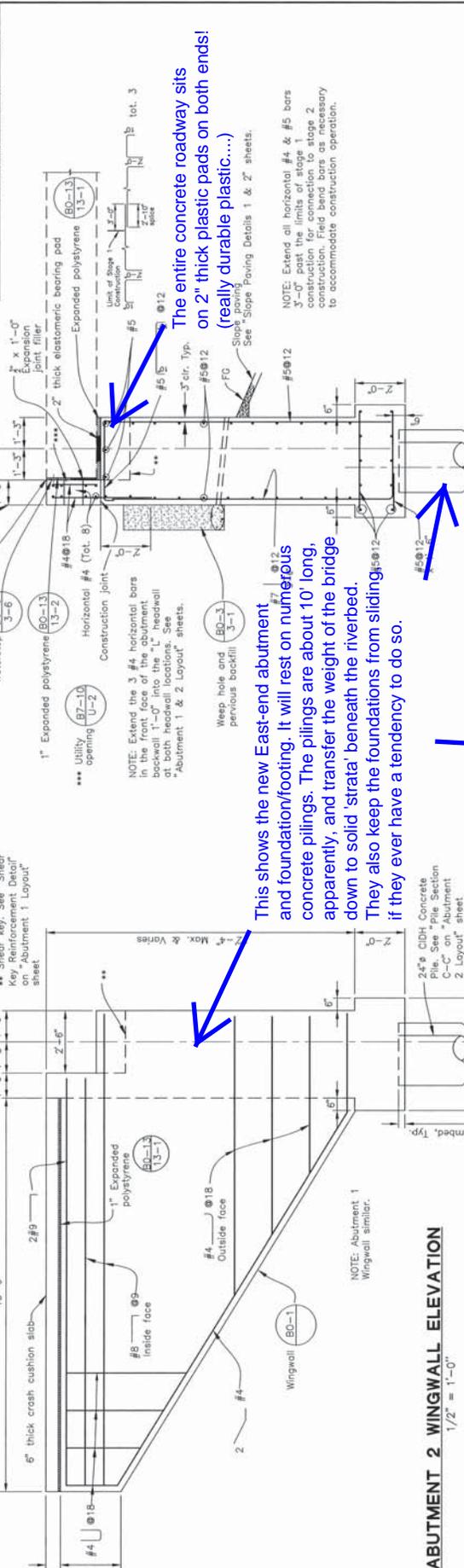
Joint Seal Type B (B5-21)
 MR = 1"

Waterstop (B0-3)
 Expansion joint filler

1" Expanded polystyrene (B0-13)
 Construction joint

Horizontal #4 (Tot. 6)
 Construction joint

NOTE: Extend the 3 #4 horizontal bars in the front face of the abutment backwall 1'-0" into the "L" headwall at both headwall locations. See "Abutment 1 & 2 Layout" sheets.



The entire concrete roadway sits on 2" thick plastic pads on both ends! (really durable plastic....)

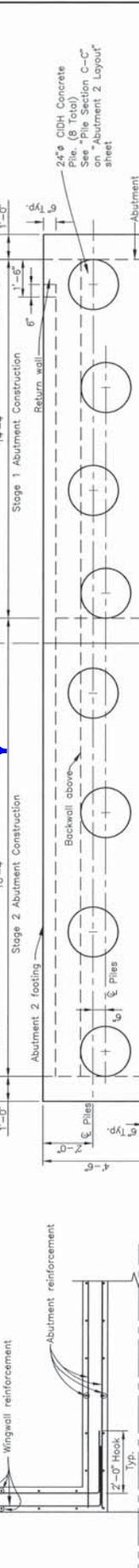
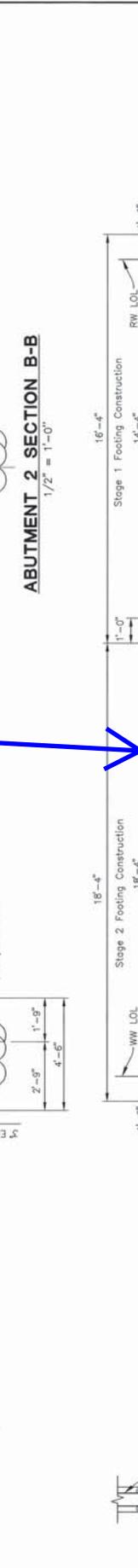
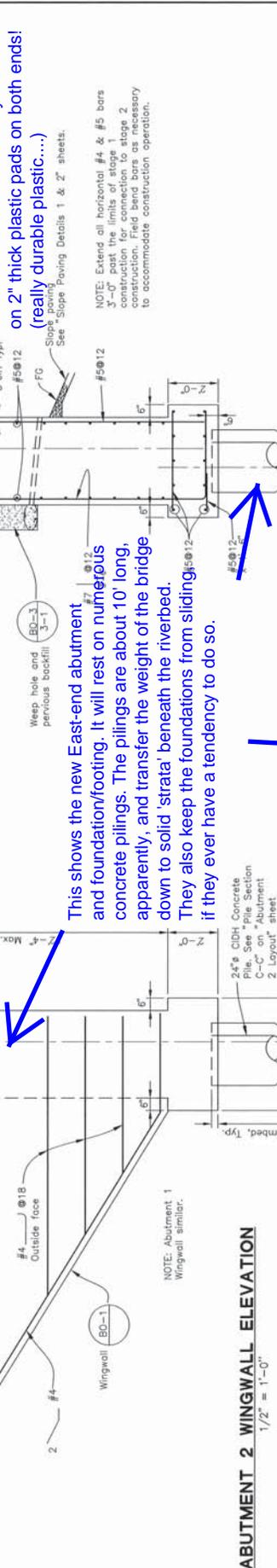
This shows the new East-end abutment and foundation/footing. It will rest on numerous concrete pilings. The pilings are about 10' long, apparently, and transfer the weight of the bridge down to solid 'strata' beneath the riverbed. They also keep the foundations from sliding if they ever have a tendency to do so.

NOTE: Extend all horizontal #4 & #5 bars 3'-0" off the end of the abutment construction for connection to stage 2 construction. Field bend bars as necessary to accommodate construction operation.

24" x 24" CIDH Concrete Pile. See "Pile Section C-C" on "Abutment 2 Layout" sheet.

ABUTMENT 2 SECTION B-B
 1/2" = 1'-0"

ABUTMENT 2 FOOTING PLAN
 1/2" = 1'-0"



REVISIONS	BY	APPROVED	DATE	COORDINATE INDEX
				214 - N - 1839 - E
				CONSTR. COMP.
				FIELD REVISIONS

COUNTY OF SAN DIEGO
 DEPARTMENT OF PUBLIC WORKS
 5500 OVERLAND AVENUE, SAN DIEGO, CA 92123-1235

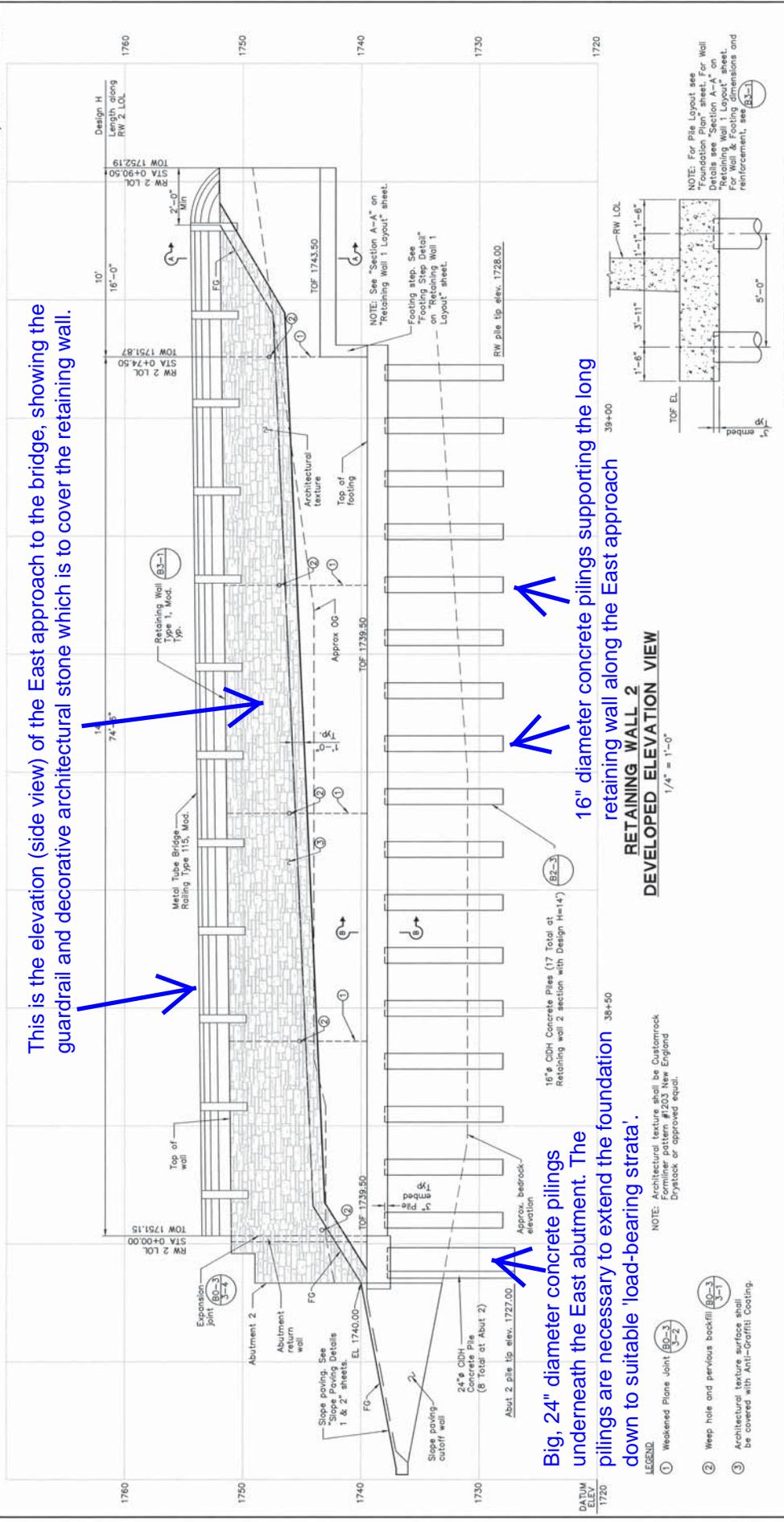
LAWSON VALLEY ROAD BRIDGE EAST
 OVER LAWSON CREEK (57C-0726)

SHEET 18 OF 38 SHEETS
 ABUTMENT DETAILS 2

PLANS BY DATE
 REVISIONS BY DATE
 REGISTERED CIVIL ENGINEER
 8/13/11

15070 Avenue of Science, Suite 100
 San Diego, California 92128
 Tel 858.385.0500, Fax 858.385.0400

FOR REDUCED PLANS
 ORIGINAL SCALE IS IN INCHES



This is the elevation (side view) of the East approach to the bridge, showing the guardrail and decorative architectural stone which is to cover the retaining wall.

Big, 24" diameter concrete piling underneath the East abutment. The piling are necessary to extend the foundation down to suitable 'load-bearing strata'.

16" diameter concrete piling supporting the long retaining wall along the East approach

RETAINING WALL 2
 DEVELOPED ELEVATION VIEW
 1/4" = 1'-0"

NOTE: Architectural texture shall be Customrock Formliner pattern #203 New England Drystack or approved equal.

- LEGEND
- ① Wakened Plane Joint (B0-3, 3-2)
 - ② Weep hole and previous backfill (B0-3, 3-1)
 - ③ Architectural texture surface shall be covered with Anti-Graffiti Coating.

NOTE: For Pile Layout see "Foundation Plan" sheet. For Wall Details see "Section A-A" on "Retaining Wall 1 Layout" sheet. For Wall & footing dimensions and reinforcement see (B3-1)

NO SCALE

SP333

COUNTY OF SAN DIEGO
 DEPARTMENT OF PUBLIC WORKS
 5500 OVERLAND AVENUE, SAN DIEGO, CA 92121-1235

REVISIONS BY APPROVED DATE

COORDINATE INCHES: 214 - N 1839 - E

CONTRACT NO. 07-026

FIELD REVISIONS

LAWSON VALLEY ROAD BRIDGE EAST
 OVER LAWSON CREEK (57C-0726)

RETAINING WALL 2 LAYOUT

SCALE: SEE AS SHOWN, UNIT AS SHOWN
 I/A: 202009/1009222.e - R52481-1
 BRIDGE PLAN 138 OF 208
 SHEET 24 OF 39 SHEETS