

# ORANGE COUNTY ROAD DEPT.

STATE OF CALIFORNIA

PLANS FOR CONSTRUCTION ON

## LOS ALISOS BOULEVARD

BETWEEN

ROCKFIELD BOULEVARD

AND

MUIRLANDS BOULEVARD

INCLUDING

## BRIDGE AL-12

OVER

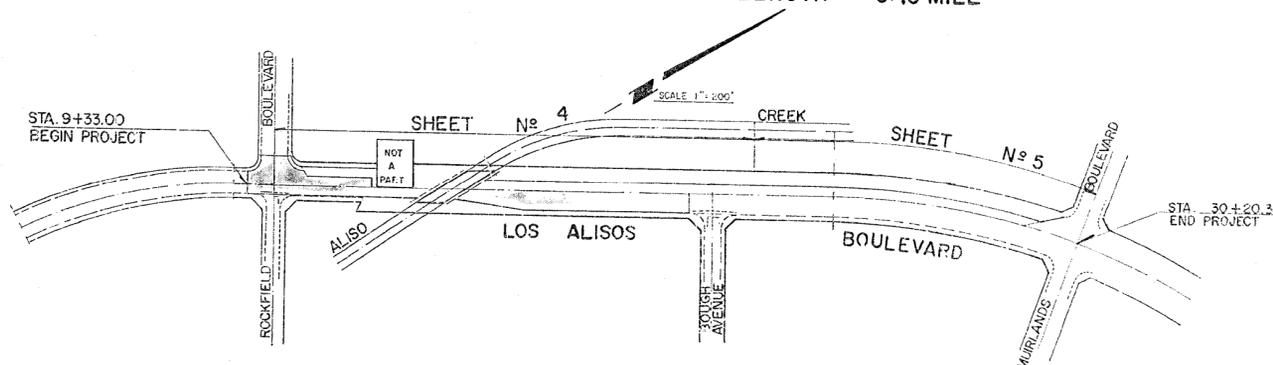
ALISO CREEK (O.C.F.C.D. FACILITY NO. JOI)

TOTAL LENGTH - 0.40 MILE



INDEX OF SHEETS

SHEET No	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS & C.B. DETAILS
3	DRAINAGE DETAILS & PIPE PROFILES
4-5	PLAN & PROFILE
6-9	CROSS SECTIONS
10-16	BRIDGE PLANS
17	ROAD CLOSURE



CONVENTIONAL SIGNS

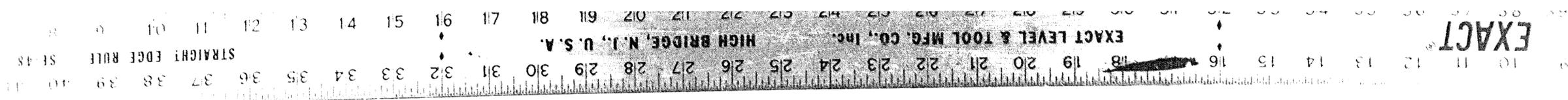
COUNTY LINE	FRUIT TREES
CITY LIMIT	EUCLYPTUS TREE
RAIL LINE	EVERGREEN TREE
BASE OR CURB LINE	PALM TREE
CONSTRUCTION	POWER POLE
RAILROAD TRACKS	TELEPHONE POLE
TRAVELER'S	GUY POLE & ANCHOR
WOOD FENCE	MANHOLE
CHAIN LINK FENCE	PIPE WARD
CONCRETE WALL	STANDPIPE
MASONRY WALL	WATER VALVE
BANK OR RETAINING WALL	GUARD RAIL
FILL SLOPE	LEVEE
ONE-WAY	MARSH
	SIDEWALKS
	NO. 12 LINE

**BENCH MARK** JOI-111-6  
 RR SPIKE W/ V. SIDE OF POWER  
 POLE # 1901256, 75' N.W. 1/4 OF  
 MUIRLANDS, 150' E. 1/4 OF CREEK.  
 ELEV. 402.55

PLANS PREPARED UNDER THE DIRECTION OF  
 Lorenzo A. Argolis 2/7/1973  
 LORENZO A. ARGOLIS C.E. No. 20927  
**E.L. PE ARRON & ASSOCIATES**  
 1945 BIRCH STREET  
 NEWPORT BEACH CALIFORNIA 92660  
 (714) 840-8803 (O.C.) 557-1230

APPROVED: *M. Aron* 3/16/73  
 ROAD COMMISSIONER R.C.E. 6978 DATE  
 1977

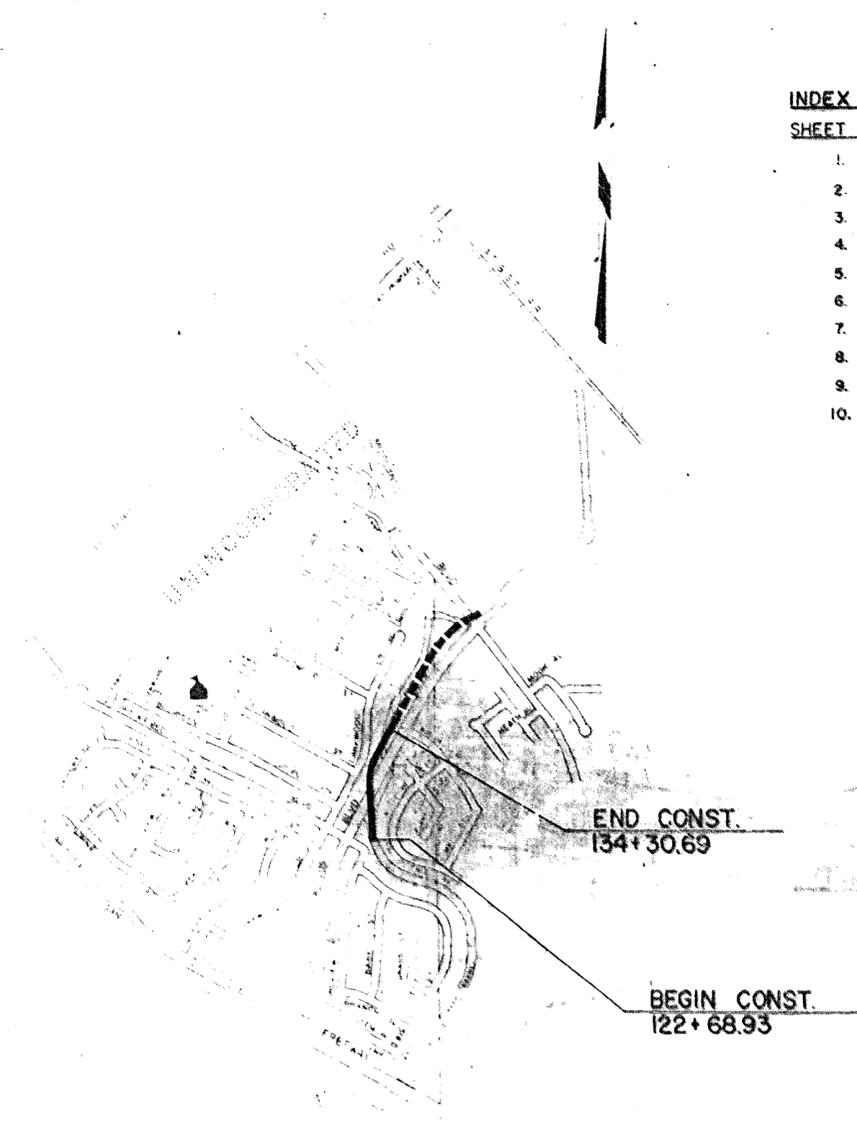
DR. 10 (11097) 40 7230E



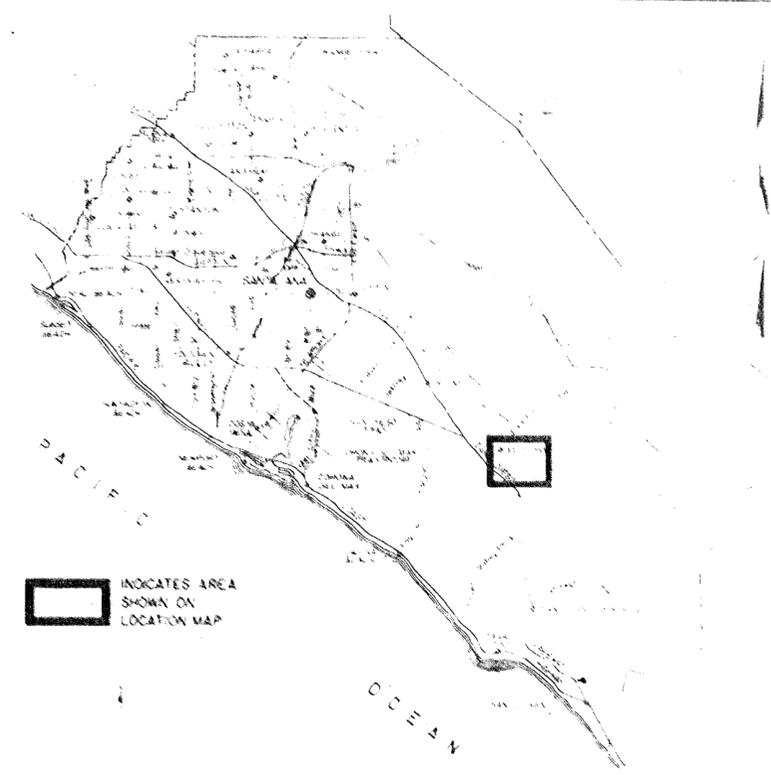
EXACT

**INDEX OF DRAWINGS**

SHEET NO.	TITLE
1.	LOCATION MAP
2.	PLAN & PROFILE, STATION 122+68.93 TO 134+30.69
3.	R.C. TERRACED CHANNEL DETAILS
4.	VERTICAL WALL RAMP & TRANSITION DETAILS
5.	MISC. STRUCTURAL DETAILS
6.	DROP STRUCTURE DETAILS
7.	DROP STRUCTURE DETAILS
8.	LOCAL DRAINAGE DETAILS
9.	SOIL BORINGS & MISC. DETAILS
10.	PAYLINES



**LOCATION MAP**  
SCALE 1" = 600'  
3 inches on original drawing



ORANGE COUNTY, CALIFORNIA  
VICINITY MAP

PLANS FOR  
THE CONSTRUCTION OF  
THAT PORTION OF  
**ALISO CREEK CHANNEL**  
FROM  
470' SOUTH OF LOS ALISOS BOULEVARD  
TO  
690' NORTH OF LOS ALISOS BOULEVARD  
FACILITY NO. JOI  
MARCH 1973

APPROVED: \_\_\_\_\_  
CHIEF ENGINEER

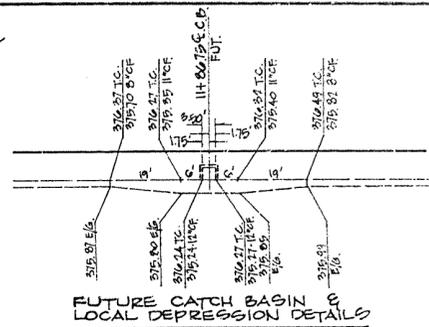
APPROVED: *W. H. ...*  
COUNTY ROAD COMMISSIONER

ORANGE COUNTY FLOOD CONTROL DISTRICT  
SANTA ANA CALIFORNIA

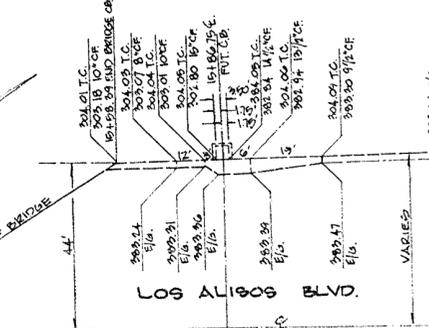
**CONSTRUCTION NOTES**

1. CONSTRUCT TYPE A-2 CONC CURB & GUTTER PER DETAIL ON SHEET 1
2. CONSTRUCT 4" CONC SIDEWALK PER DETAIL ON SHEET 1 & 2
3. CONSTRUCT C&G PER DETAIL ON SHEET 1 & 2
4. CONSTRUCT GRADED SHOULDER
5. FOR BRIDGE DETAILS SEE SHEET N-10 TO N-13
6. CONSTRUCT CATCH BASIN N-1 PER DETAIL ON SHEET N-2 & N-3
7. CONSTRUCT C&G PER DETAIL ON SHEET N-2 & N-3
8. CONSTRUCT CATCH BASIN N-2 PER DETAIL ON SHEET N-2 & N-3
9. CONSTRUCT DROP INLET PER DETAIL ON SHEET N-2 & N-3
10. CONSTRUCT CONC DRIVEWAY PER DETAILS ON SHEET 2

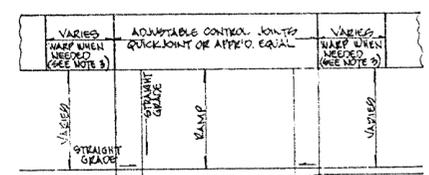
1. REMOVE
2. PROTECT IN PLACE
3. REMOVE & RELOCATE
4. REMOVE EXISTING PAVEMENT
5. REMOVE EXISTING CONC CURB & GUTTER & SIDEWALK
6. REMOVE TO R/L
7. REMOVE & RELOCATE BY OTHERS



**FUTURE CATCH BASIN & LOCAL DEPRESSION DETAILS**  
 SCALE 1"=10'



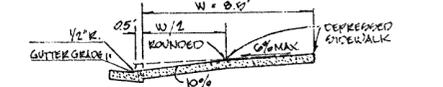
**FUTURE CATCH BASIN & LOCAL DEPRESSION DETAILS**  
 SCALE 1"=10'



**PLAN**



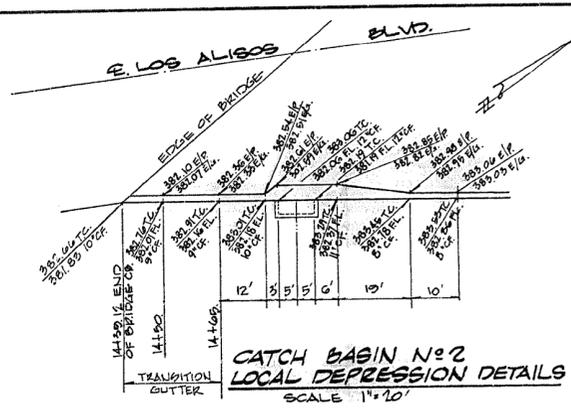
**ELEVATION**



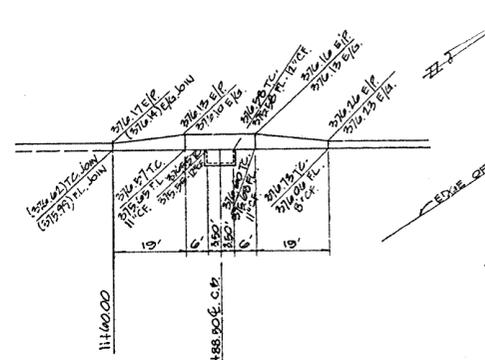
**SECTION DEPRESSED CURB DRIVEWAY APPROACH DETAILS**  
 NO SCALE

- NOTES:**
1. USE CASE 3 WHEN SIDEWALK SLOPE WOULD EXCEED 0% IN CASE 1. LONGITUDINAL SLOPE OF WARED AREA ADJACENT TO DRIVEWAY SHALL NOT VARY MORE THAN 0% FROM THE LONGITUDINAL GRADE LINE OF THE SIDEWALK.
  2. X=4'-0" EXCEPT FOR CURB HEIGHTS OVER 10" WHERE 3:1 SLOPES SHALL BE USED ON CURB SLOPE.
  3. SIDEWALK AND RAMP THICKNESS "T" AT DRIVEWAY SHALL BE 6" FOR RESIDENTIAL AND 8" FOR COMMERCIAL DRIVER.
  4. DIFFERENCE IN SLOPE OF THE DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 8 FEET FROM THE GUTTER LINE SHALL NOT EXCEED 1/8" TO REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED.

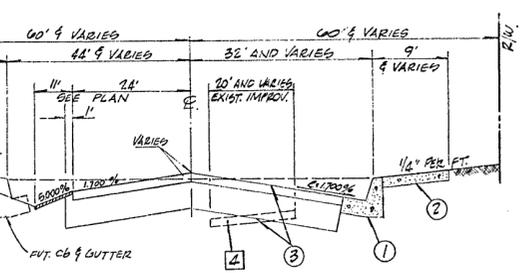
(11097)  
 Los Alisos Blvd Bridge  
 Sheet 2 of 19  
 Date: 03/21/11



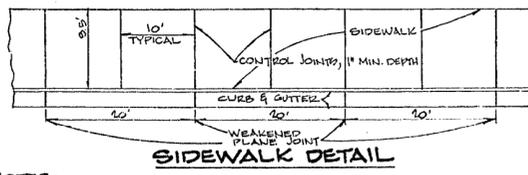
**CATCH BASIN #2 LOCAL DEPRESSION DETAILS**  
 SCALE 1"=10'



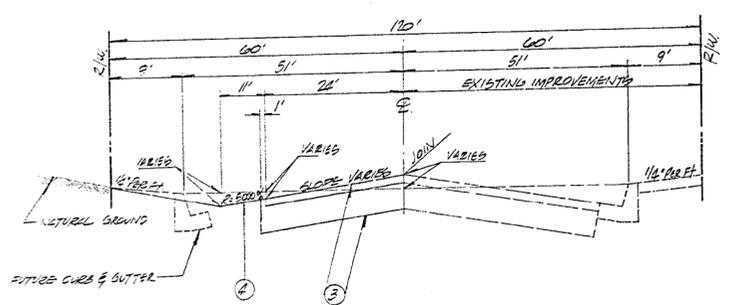
**CATCH BASIN #1 LOCAL DEPRESSION DETAILS**  
 SCALE 1"=10'



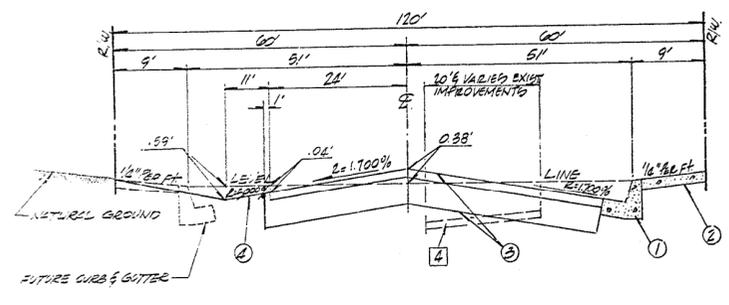
**SECTION F-F LOS ALISOS BOULEVARD**  
 FROM: STA. 14+00.00 TO STA. 14+39.12 R/L & STA. 14+00.00 TO STA. 14+39.12 L/R  
 NOT TO SCALE



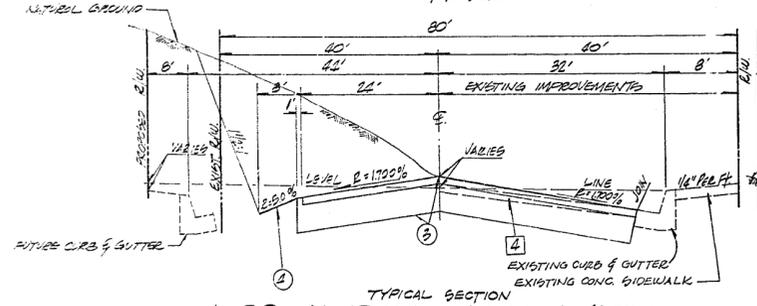
- NOTES:**
- THICKNESS = 4" STANDARD, 0" WITHIN DRIVEWAY AREA.
  - CURB & GUTTER: WEAKENED PLANE JOINTS SHALL BE PLACED AT EACH SIDE OF DRIVEWAY AT THE ENDS OF ALL CURB RETURNS, AND AT 10' INTERVALS (EXCEPT WITHIN CURB RETURNS) TO A MINIMUM DEPTH OF 1/2" WITH SQUARE FINISH.
  - SIDEWALK: CONTROL JOINTS SHALL BE CONSTRUCTED IN SIDEWALKS AT MINIMUM 20' INT. AT 10' INTERVALS, AND AT ENDS OF DRIVE APPROACHES, CURB RETURNS, AND TREE WELLS. JOINTS SHALL BE BECCER FINISHED (R=1/8").



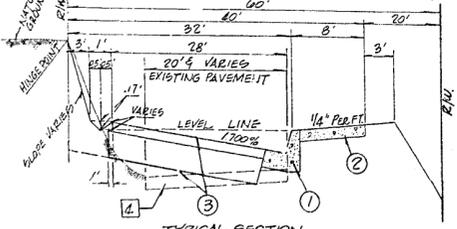
**TYPICAL SECTION LOS ALISOS BOULEVARD**  
 FROM: STA. 10+43.34 TO STA. 20+45.04 R/L  
 NOT TO SCALE



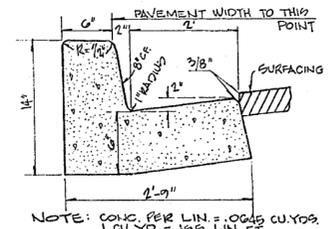
**TYPICAL SECTION LOS ALISOS BOULEVARD**  
 FROM: STA. 10+29.12 TO STA. 20+45.04 R/L & STA. 18+39.39 TO STA. 20+45.04 L/R  
 NOT TO SCALE



**TYPICAL SECTION LOS ALISOS BOULEVARD**  
 FROM: ROCKFIELD BLVD TO STA. 14+00.00  
 NOTE: SEE PLAN FOR IMPROVEMENTS STA. 9+33.00 TO STA. 10+00.00 (NOT TO SCALE)

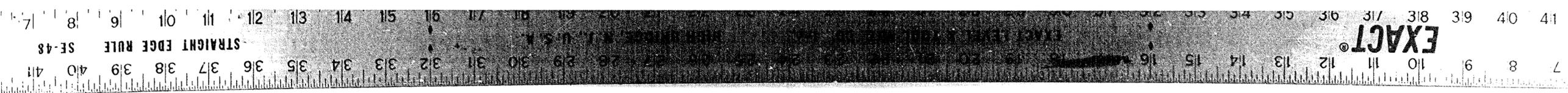


**TYPICAL SECTION LOS ALISOS BLVD**  
 FROM: STA. 12+00.00 TO STA. 14+00.00  
**SECTION G-G**

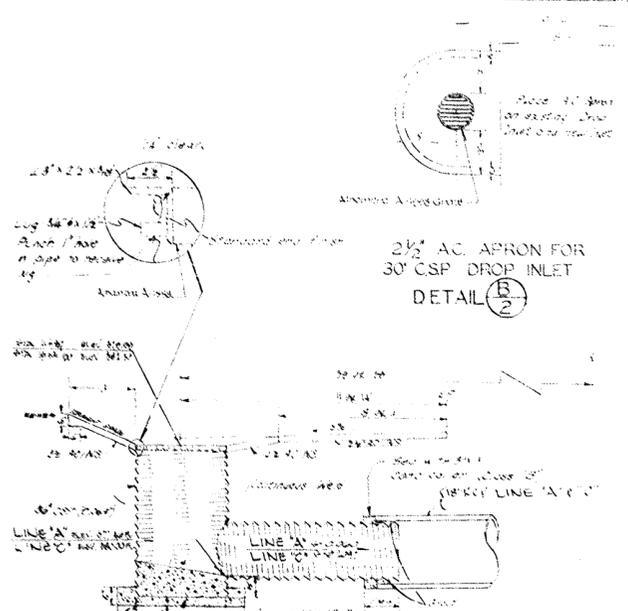
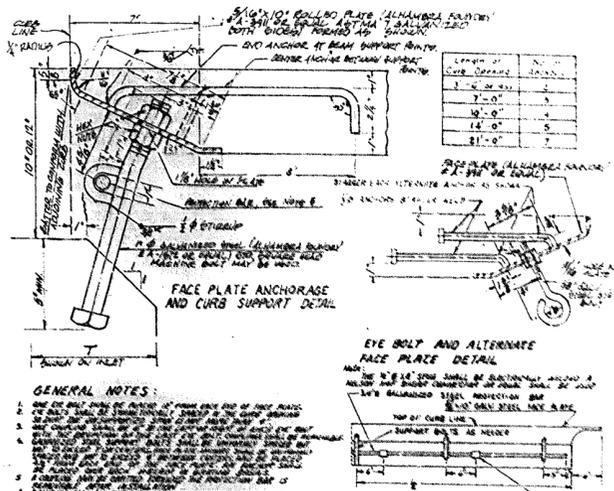
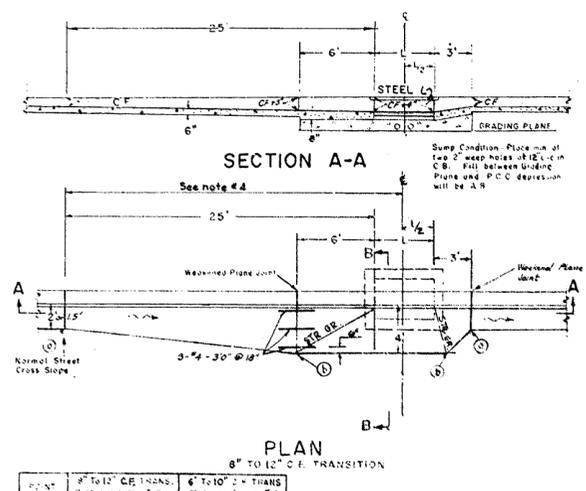
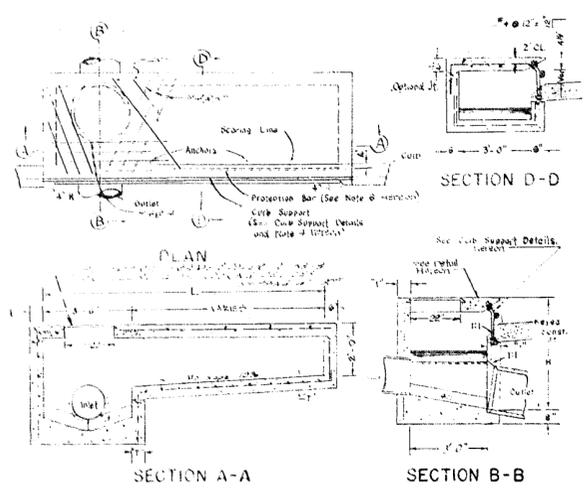


**TYPE A-2 CURB & GUTTER DETAIL**  
 NOTE: CONC. PER LIN. = .0045 CU. YDS. 1 CU. YD. = 135 LIN. FT.

DATE: 03/21/11  
 DESIGNED: J.E.  
 CHECKED: J.E.  
 APPROVED: J.E.



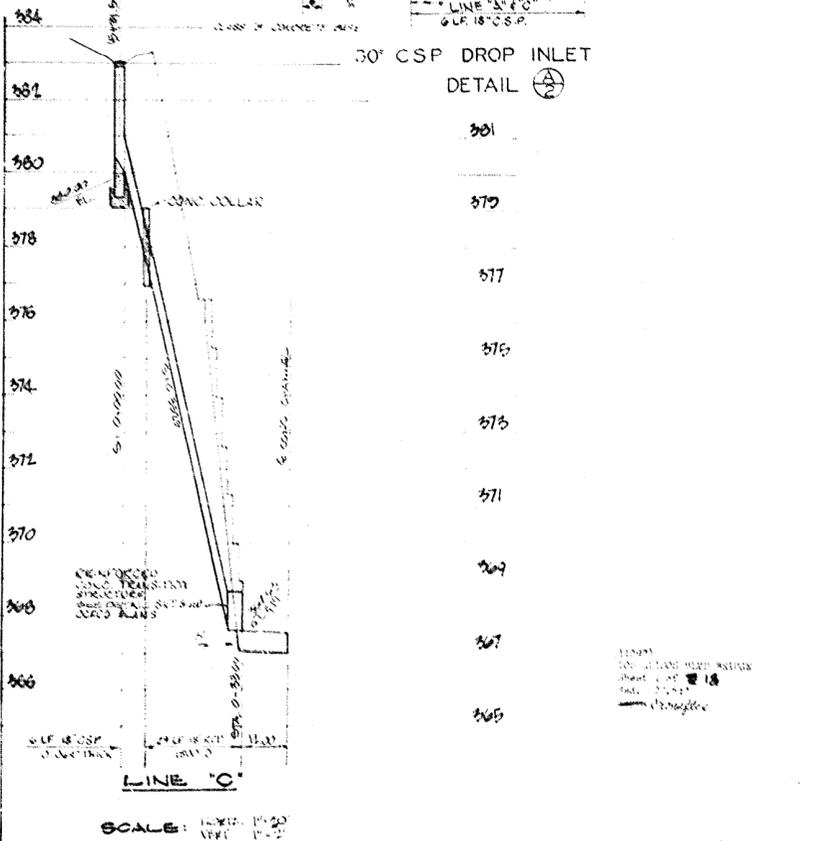
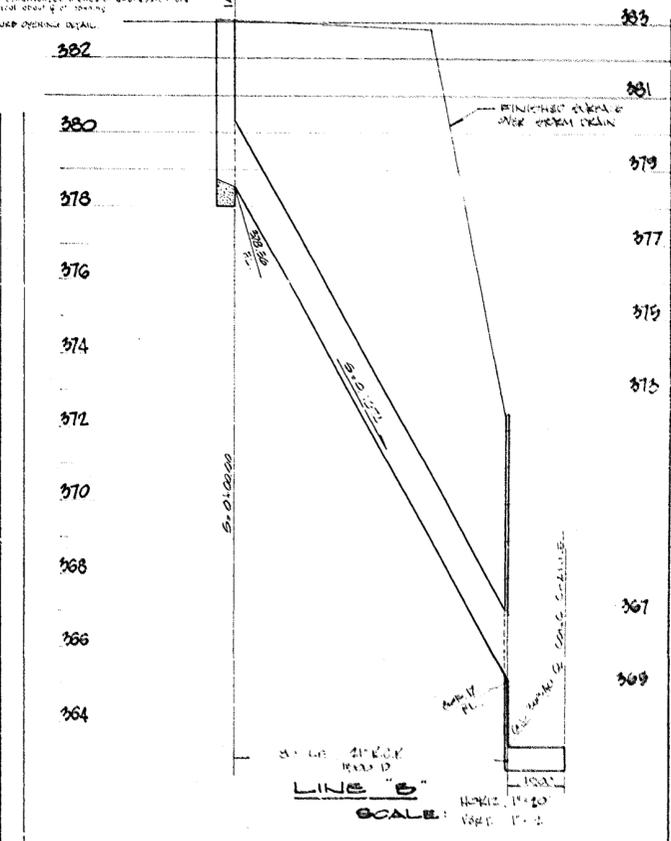
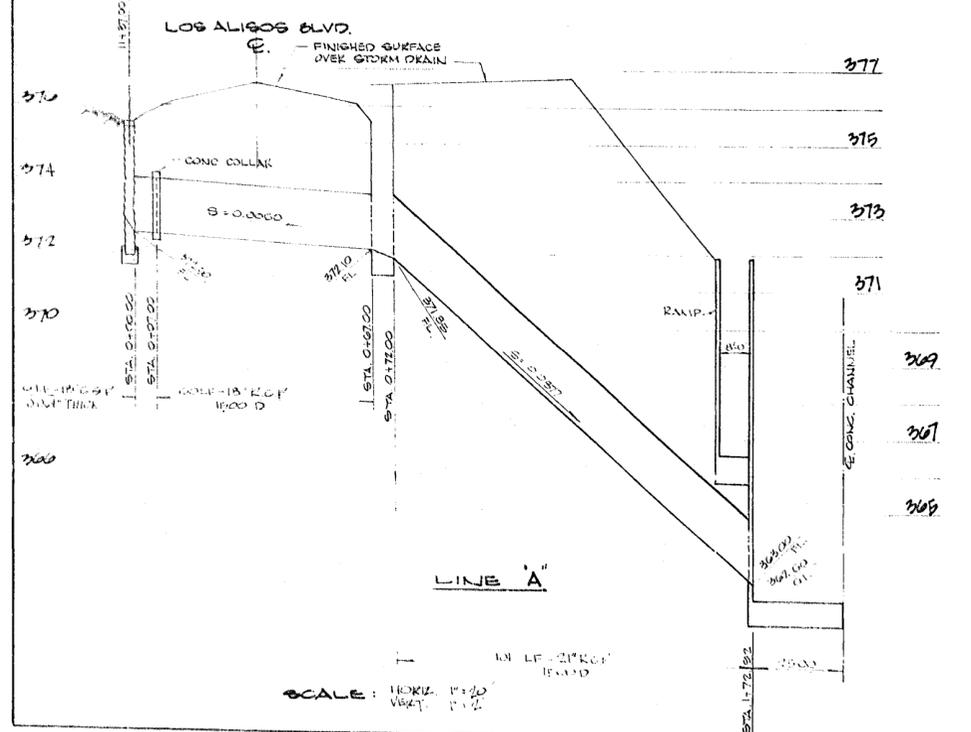
LOS ALISOS BOULEVARD  
 ROCKFELD BLVD TO MUIRLANDS BLVD  
 AS SHOWN



POINT	9" TO 12" C.E. INKING	6" TO 10" C.E. TRANS
1	50	38
2	47	34

Based on 1.7% Street Crossfall

- GENERAL NOTES:
1. SEE THE ONLY CURB DETAIL FOR FACE PLATE AND CURB SUPPORT DETAIL.
  2. LOCAL DEPRESSIONS AND PROTRUSIONS SHALL BE REMOVED OR GRADUALLY TRANSITIONED TO THE SURROUNDING GRADE.
  3. ALL CURB OPENINGS SHALL BE PROTECTED BY A BALANCED STEEL FACE PLATE.
  4. IN ALL CURB OPENINGS, THE FACE PLATE SHALL BE SUPPORTED BY AN EYE BOLT AND AN ALTERNATE FACE PLATE DETAIL.
  5. THE FACE PLATE SHALL BE SUPPORTED BY AN EYE BOLT AND AN ALTERNATE FACE PLATE DETAIL.
  6. THE FACE PLATE SHALL BE SUPPORTED BY AN EYE BOLT AND AN ALTERNATE FACE PLATE DETAIL.
  7. THE FACE PLATE SHALL BE SUPPORTED BY AN EYE BOLT AND AN ALTERNATE FACE PLATE DETAIL.
  8. THE FACE PLATE SHALL BE SUPPORTED BY AN EYE BOLT AND AN ALTERNATE FACE PLATE DETAIL.
  9. THE FACE PLATE SHALL BE SUPPORTED BY AN EYE BOLT AND AN ALTERNATE FACE PLATE DETAIL.

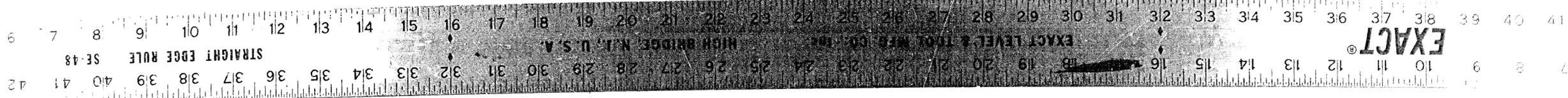


SCALE: HORIZ. 1"=20'  
 VERT. 1"=2'

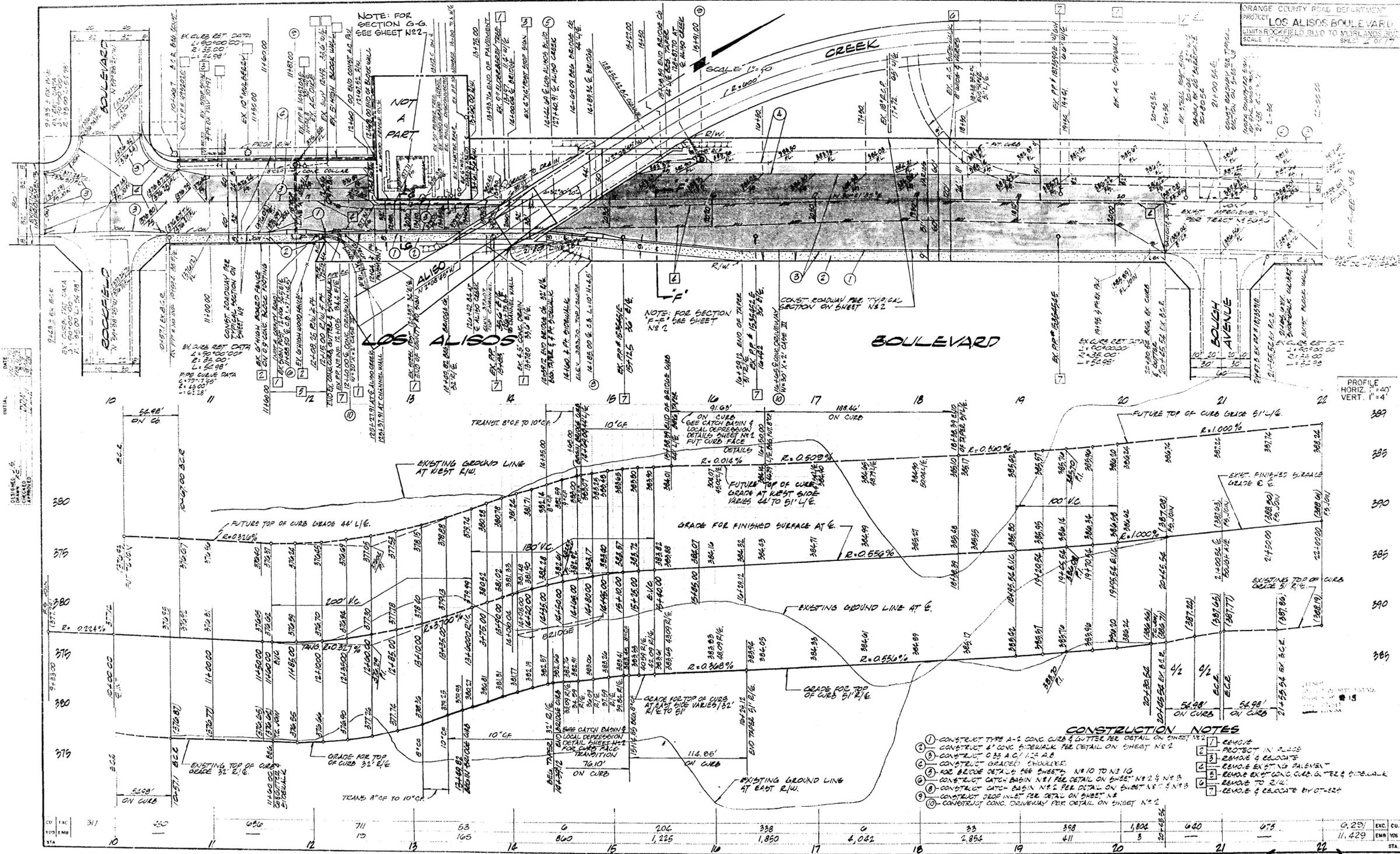
SCALE: HORIZ. 1"=20'  
 VERT. 1"=2'

SCALE: HORIZ. 1"=20'  
 VERT. 1"=2'

(11097) 110 72508

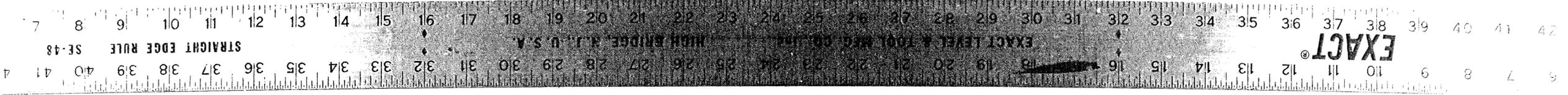


ORANGE COUNTY ROAD DEPARTMENT  
 PROJECT: LOS ALISOS BOULEVARD  
 FROM: ROCKFORD ROAD TO MURLANDS DRIVE  
 SCALE: 1"=40'  
 SHEET: 11 OF 17



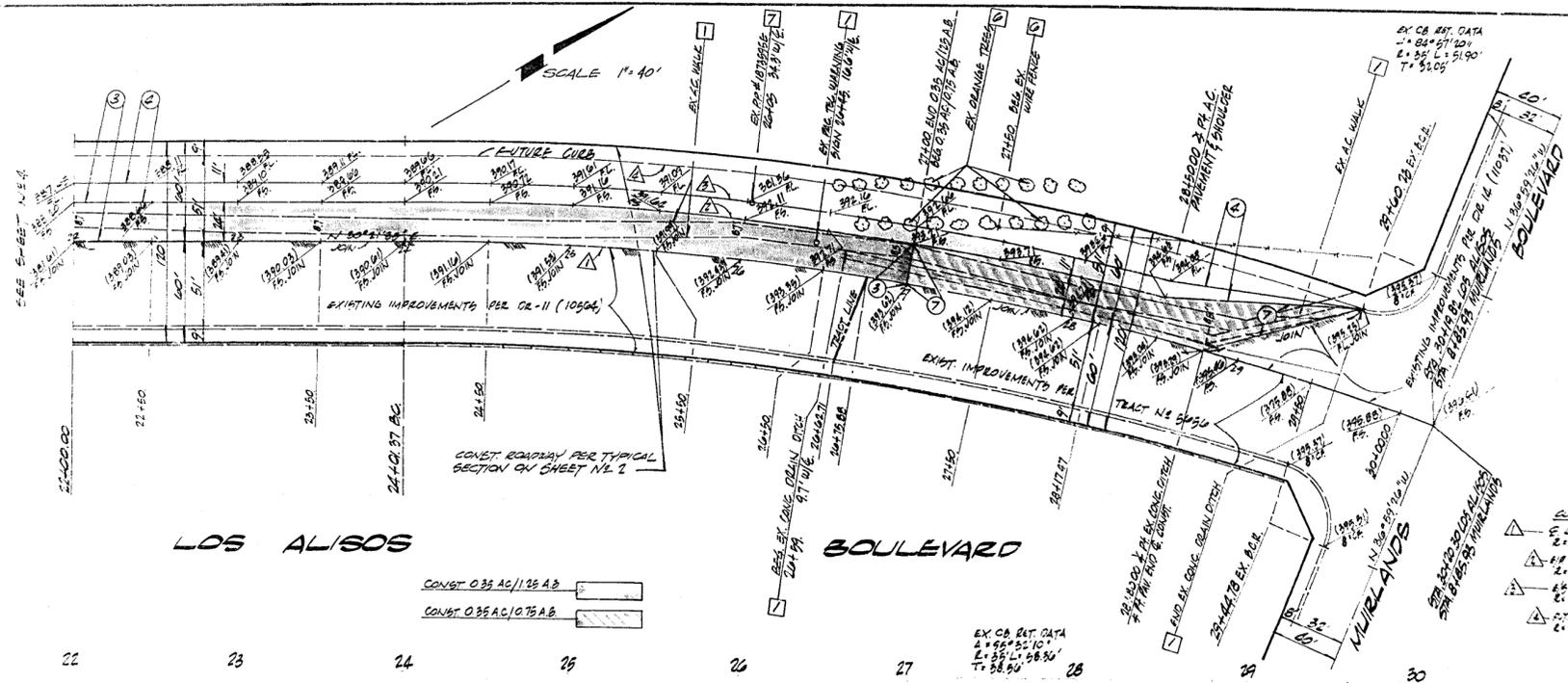
(11097)

110 72398



ORANGE COUNTY ROAD DEPARTMENT  
 PROJECT **LOS ALISOS BOULEVARD**  
 LIMITS ROCKFIELD BLVD TO MURLANDS BLVD  
 SCALE 1" = 40' SHEET 5 OF 7

- CONSTRUCTION NOTES**
- ② CONST 0.35 AC, 12" A.B.
  - ③ CONST GRADED SHOULDER
  - ④ CONST 0.35 AC, 10.75" A.B.
  - ⑤ 2" CONC. & REINFORC. P.C. CURB
  - ⑥ 2" CONC. & REINFORC. P.C. CURB
  - ⑦ 2" CONC. & REINFORC. P.C. CURB

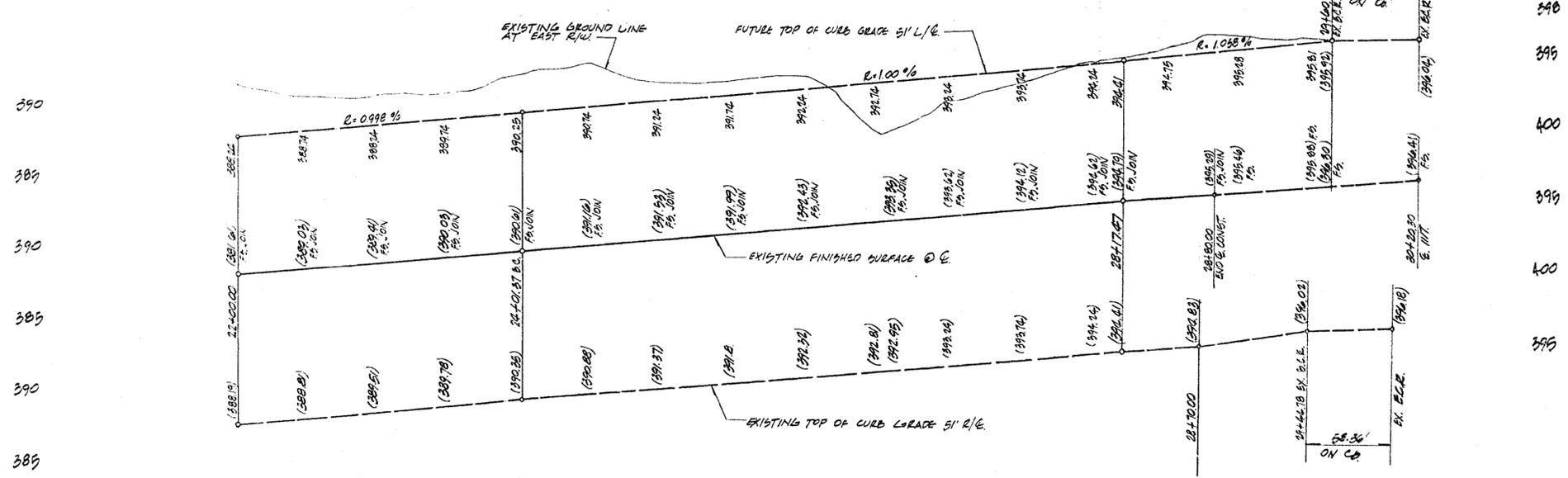


**LOS ALISOS BOULEVARD**

CONST 0.35 AC/12" A.B.  
 CONST 0.35 AC/10.75" A.B.

EX. CB. DAT. DATA  
 E. 21.24° 40' 00"  
 E. 100.00' L. 147.84'  
 E. 18.12° 14' 48.01"  
 E. 2.14° 14' 48.01"  
 E. 1.83° 14' 48.01"  
 E. 1.83° 14' 48.01"  
 E. 1.83° 14' 48.01"

PROFILE  
 HORIZ. 1" = 40'  
 VERT. 1" = 4'

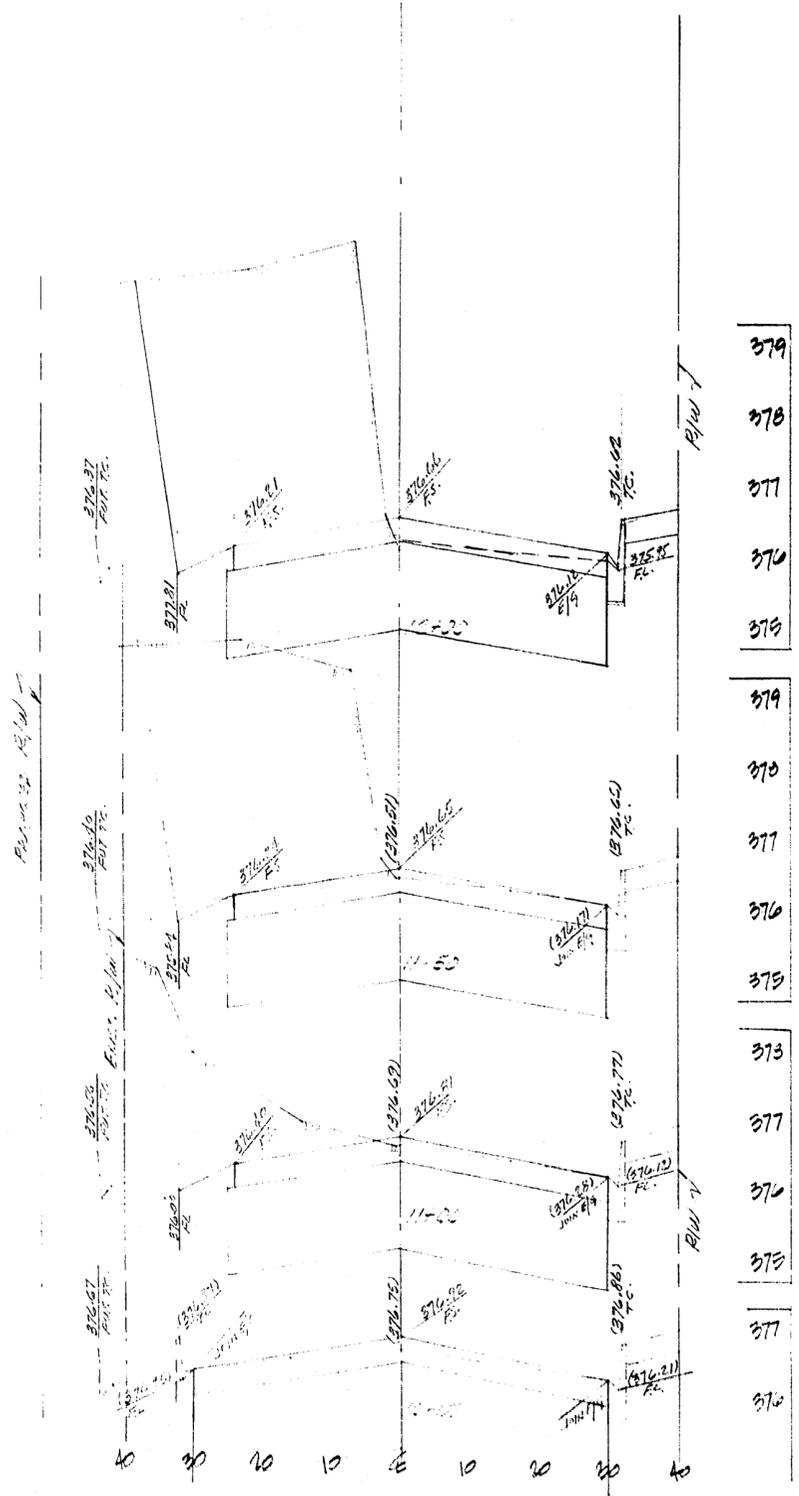


CU	EMB	12,000	5,709	171
TOTAL	EMB	12,000	5,709	171
TOTAL	EMB	11,600	5,709	171

(11097)

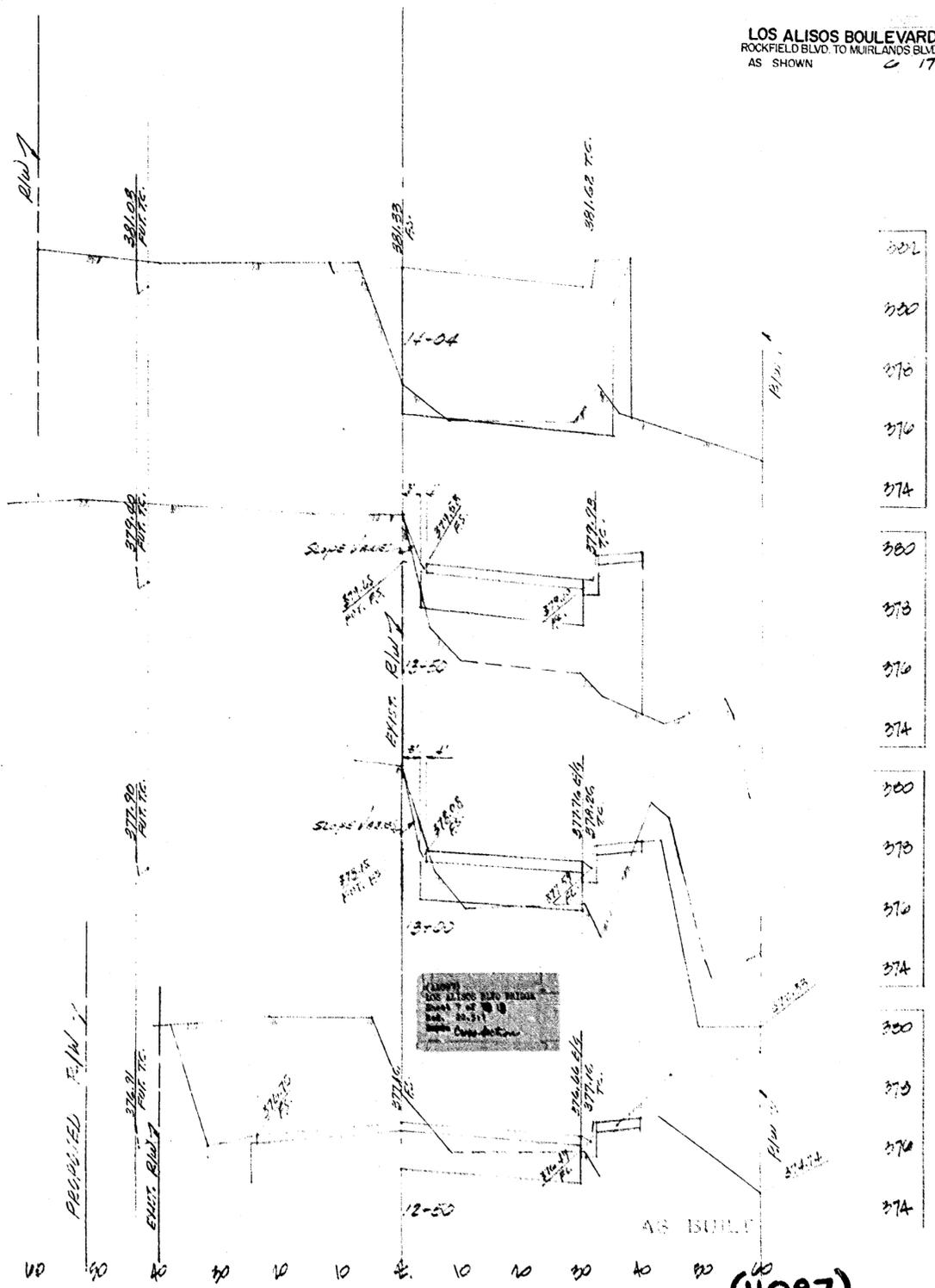


LOS ALISOS BOULEVARD  
ROCKFIELD BLVD. TO MUIRLANDS BLVD.  
AS SHOWN C 17



- 379
- 378
- 377
- 376
- 375
- 379
- 378
- 377
- 376
- 375
- 373
- 377
- 376
- 375
- 377
- 376

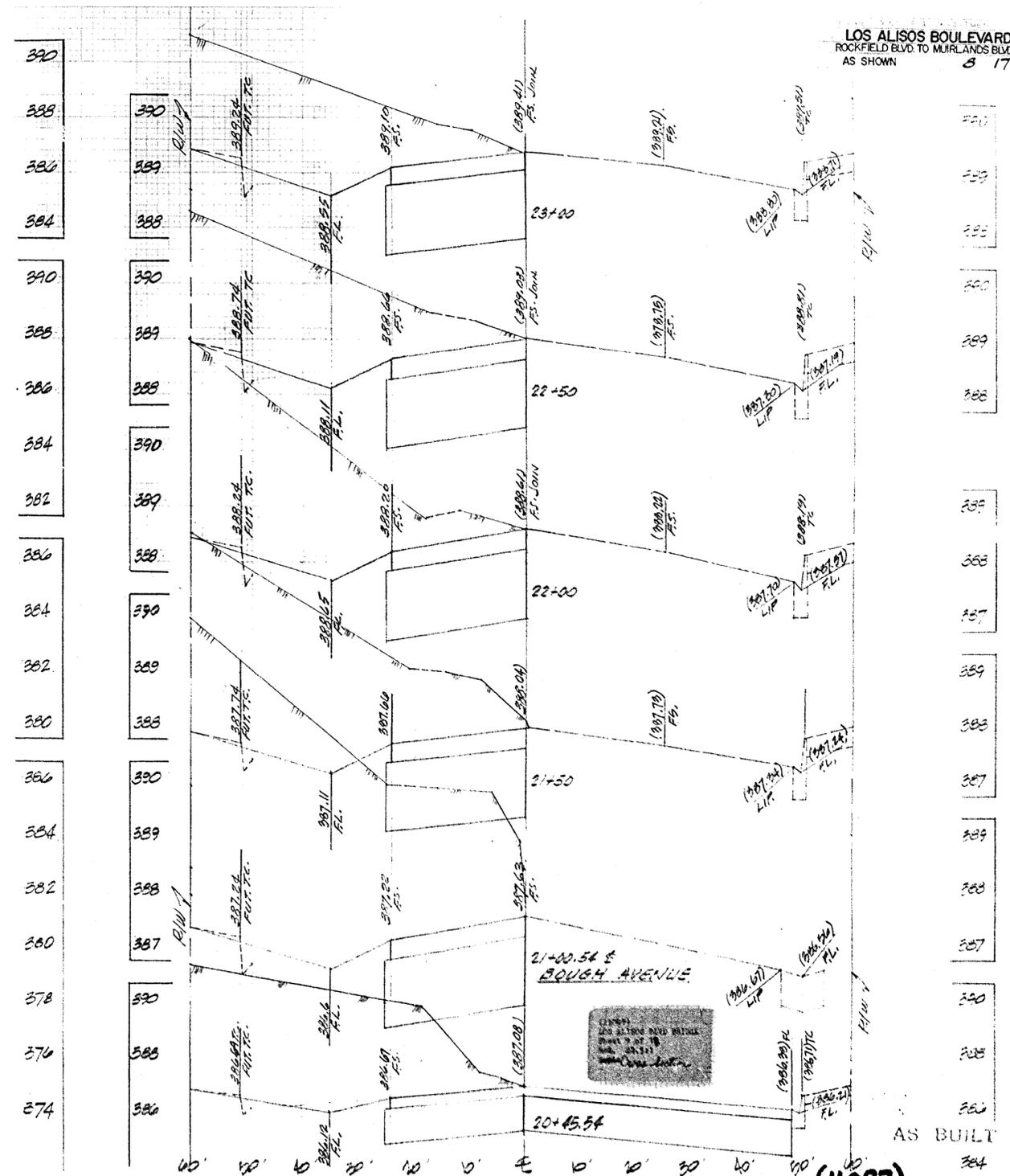
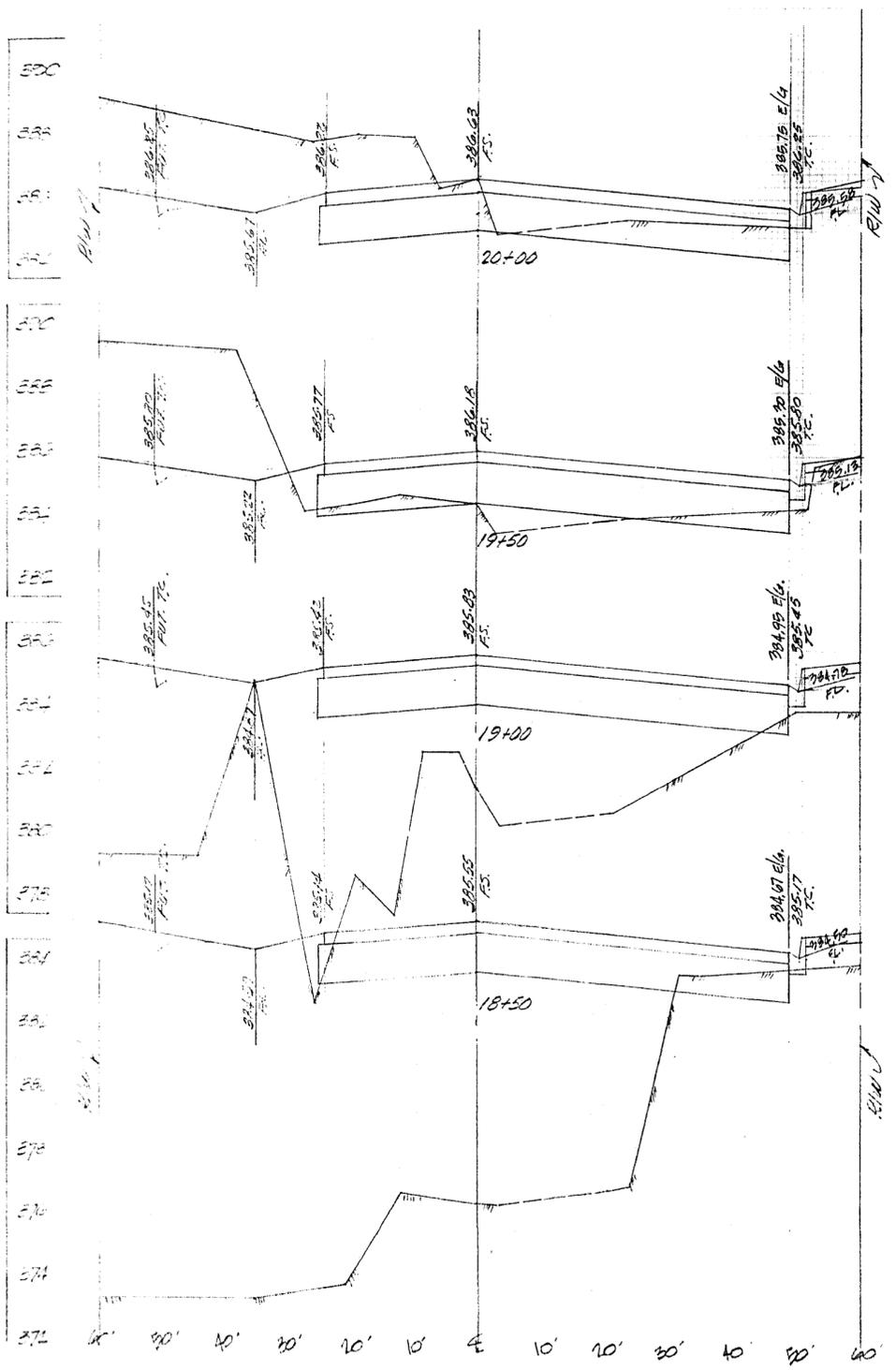
- 382
- 380
- 378
- 376
- 374
- 380
- 378
- 376
- 374
- 380
- 378
- 376
- 374
- 380
- 378
- 376
- 374



- 382
- 380
- 378
- 376
- 374
- 380
- 378
- 376
- 374
- 380
- 378
- 376
- 374
- 380
- 378
- 376
- 374

(11097) 11.0 72398





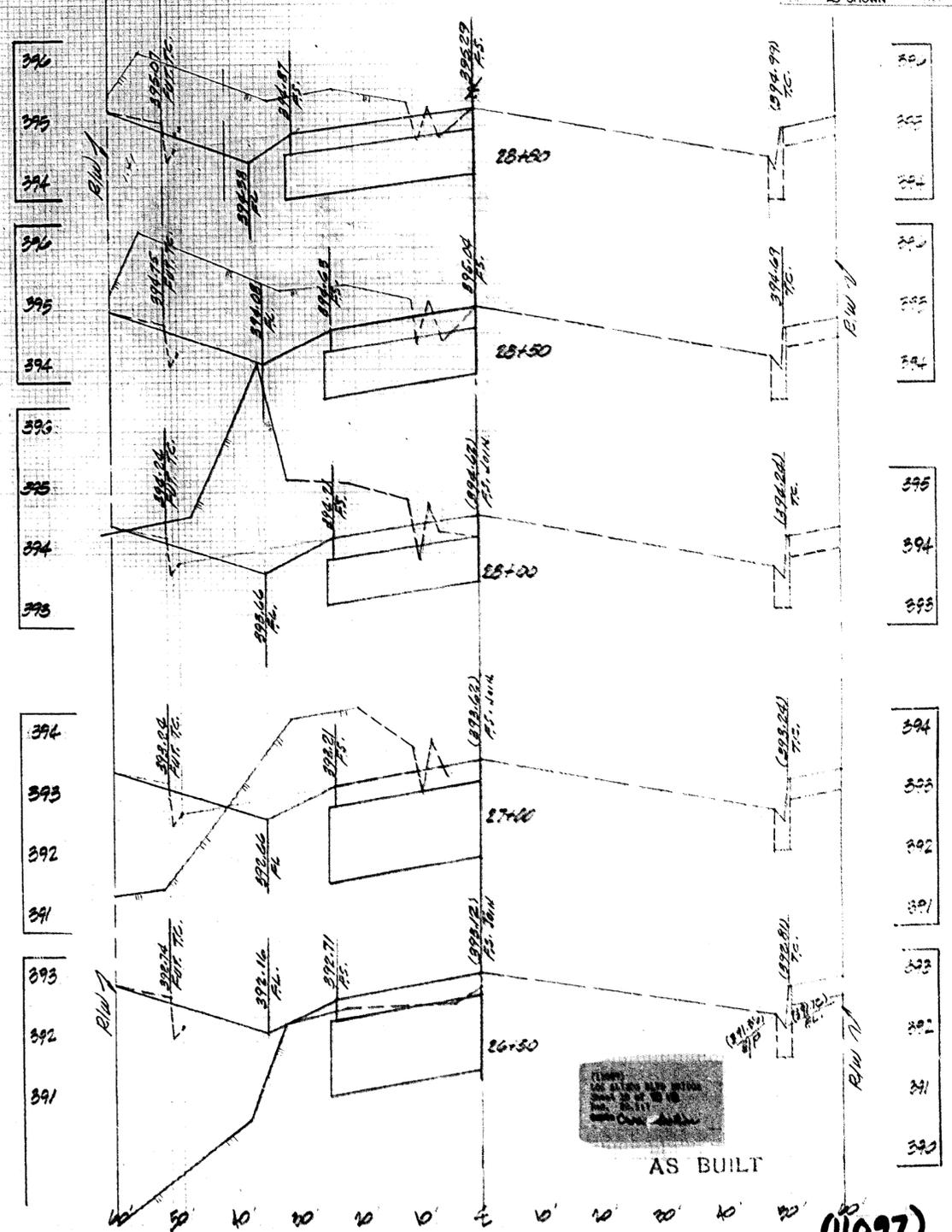
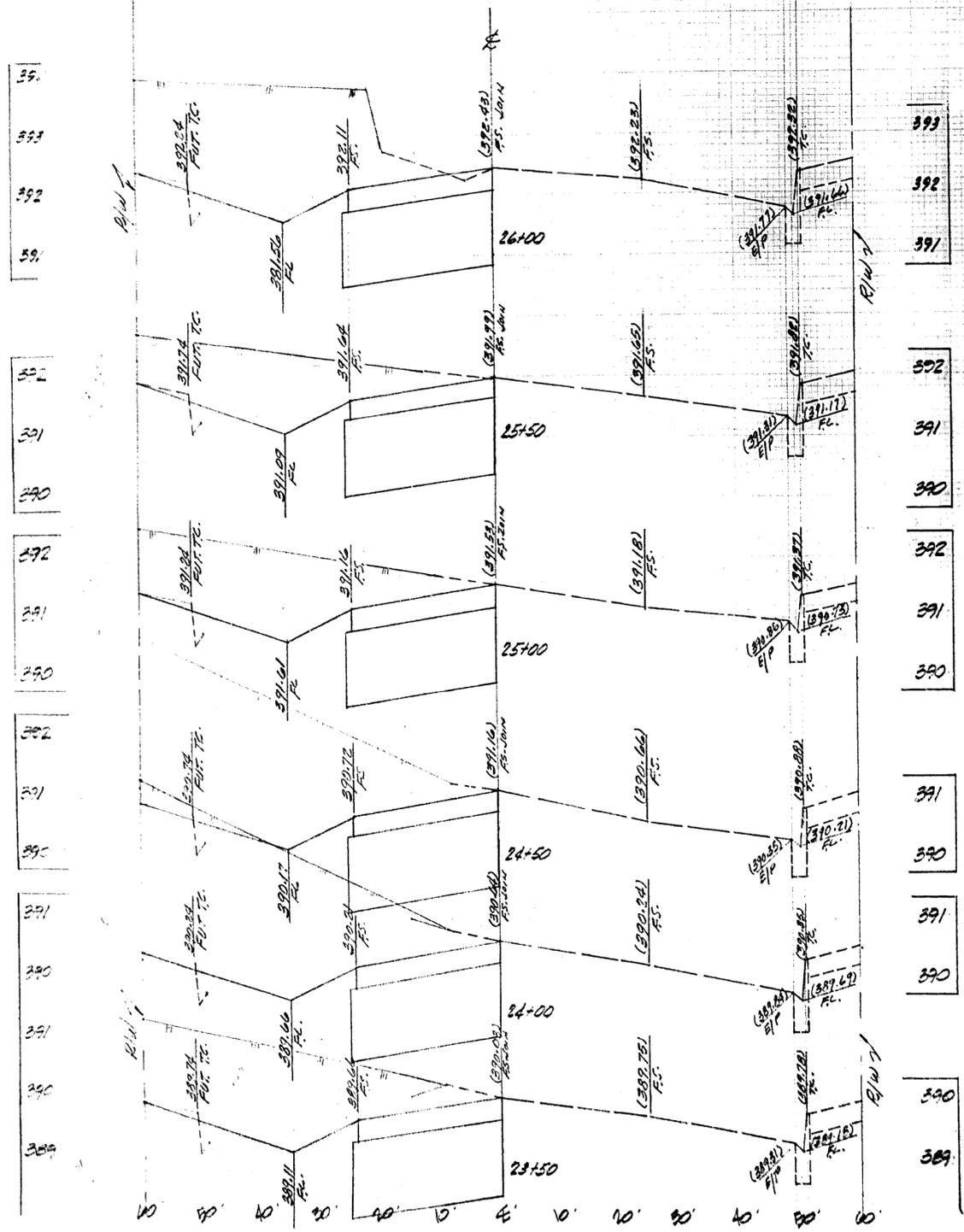
LOS ALISOS BOULEVARD  
ROCKFIELD BLVD. TO MUIRLANDS BLVD.  
AS SHOWN 8 17

(11097)

AS BUILT  
72598



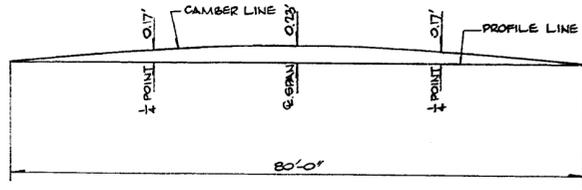
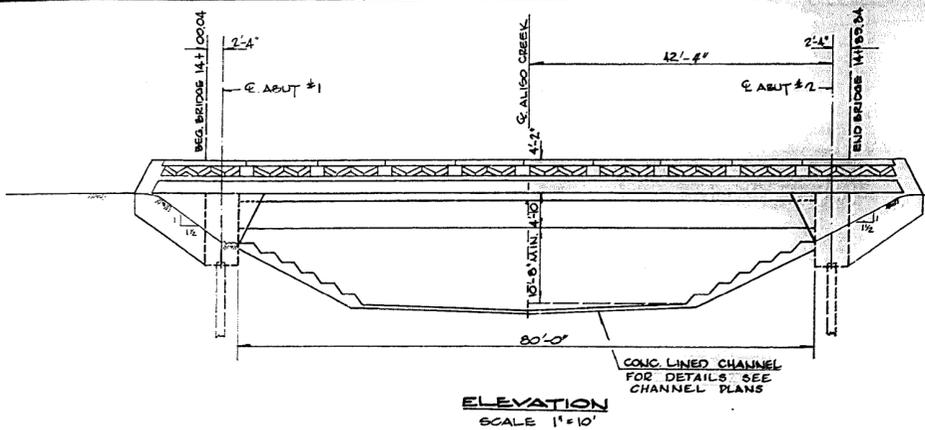
LOS ALISOS BOULEVARD  
ROCKFIELD BLVD. TO MURLANDS BLVD.  
AS SHOWN 17



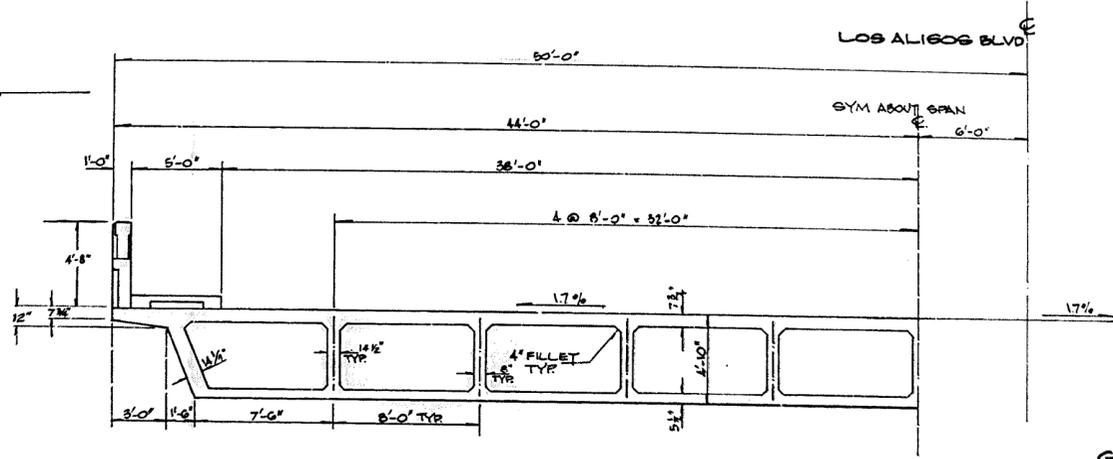
AS BUILT

(11097)

MA 12398

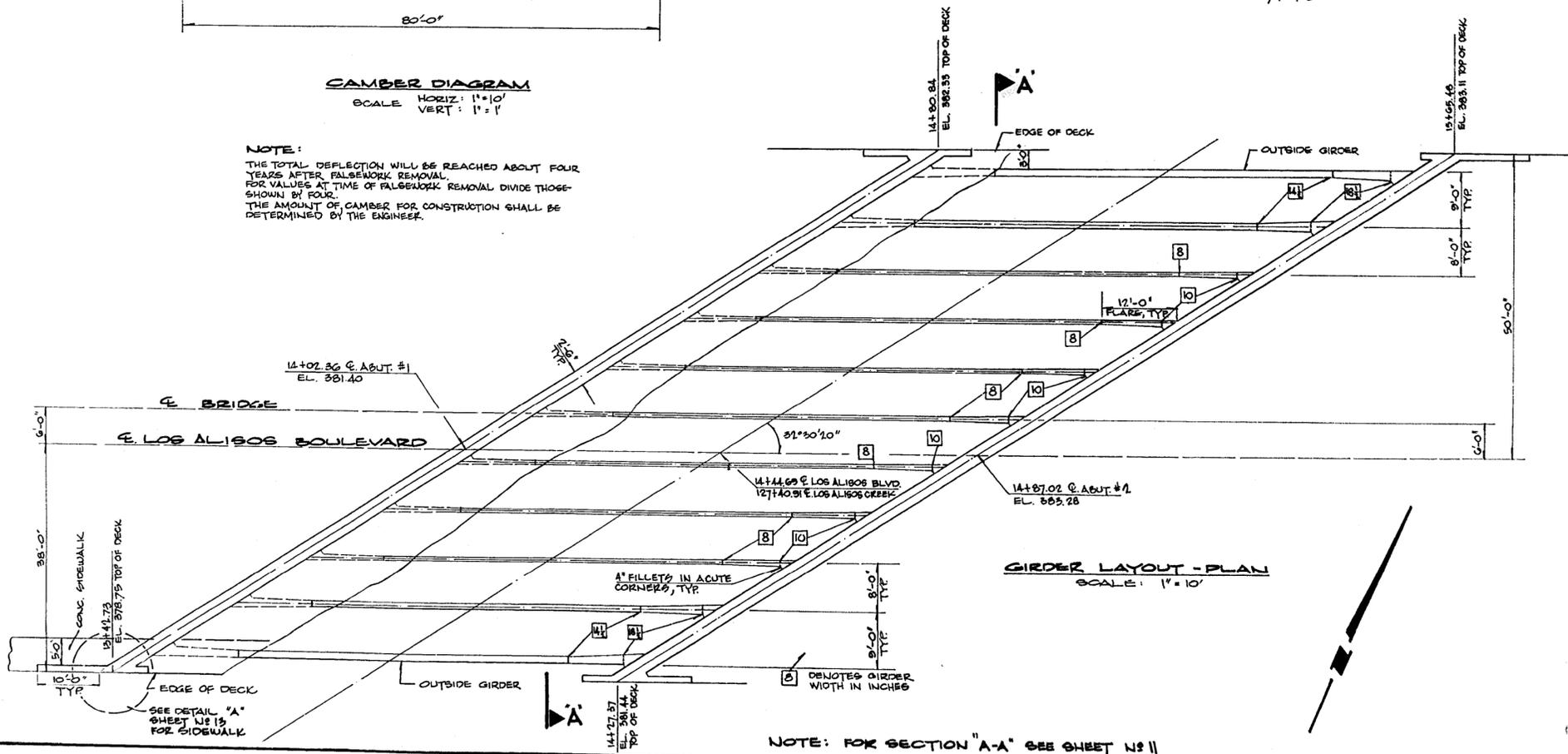


**NOTE:**  
THE TOTAL DEFLECTION WILL BE REACHED ABOUT FOUR YEARS AFTER FALSEWORK REMOVAL. FOR VALUES AT TIME OF FALSEWORK REMOVAL DIVIDE THOSE SHOWN BY FOUR. THE AMOUNT OF CAMBER FOR CONSTRUCTION SHALL BE DETERMINED BY THE ENGINEER.



**GENERAL NOTES**

- SPECIFICATIONS:**  
DESIGN: A.A.S.H.O. DATED 1939 WITH SUBSEQUENT REVISIONS, AND CALIFORNIA DIVISION OF HIGHWAYS BRIDGE PLANNING AND DESIGN MANUAL.
- CONSTRUCTION:**  
STANDARD SPECIFICATIONS, DIVISION OF HIGHWAYS, CALIF. DATED JAN. 1971 AND THE SPECIAL PROVISIONS.
- LIVE LOADING:**  
H20 - S16-44
- UNIT STRESSES:**  
REINFORCING STEEL:  
f<sub>y</sub> TENSION = 74,000 PSI.; 50,000 PSI. IN GLASS
- CONCRETE: f<sub>c</sub> = 1,500 PSI.; 1,100 PSI. IN S.L.B.  
f<sub>c</sub> = 3,450 PSI. @ 28 DAYS  
w = 10  
c = 60 PSI.
- PILE LOADING:**  
45 TONS, CLASS 45-1 PER SHEET N°15,
- REINFORCEMENT:**  
EMBEDMENT IS CLEAR TO OUTSIDE OF BAR AND 18" TO MAIN REINFORCEMENT, EXCEPT AS NOTED. BUCKING FOR HOOKS IS FOUR DIAMETERS, EXCEPT AS NOTED. WHERE REINFORCING BARS ARE SPICED THEY SHALL HAVE A 40 DIAMETER LAP UNLESS OTHERWISE NOTED.
- CONCRETE:**  
CLASS "A" USING TYPE II PORTLAND CEMENT. (COLORED AS PER SPEC. PROVISIONS)
- BENCH MARK:**  
J01 - III-0  
R.R. SPIKE W/LY. SIDE OF POWER POLE #1091254E,  
74' N.W. LY. OF MUIRLANDS, 190' ELY. OF CREEK.  
ELEV. 402.83

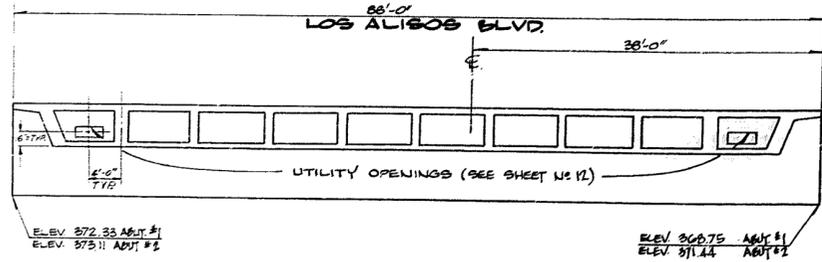


**NOTE:** FOR SECTION "A-A" SEE SHEET N° 11

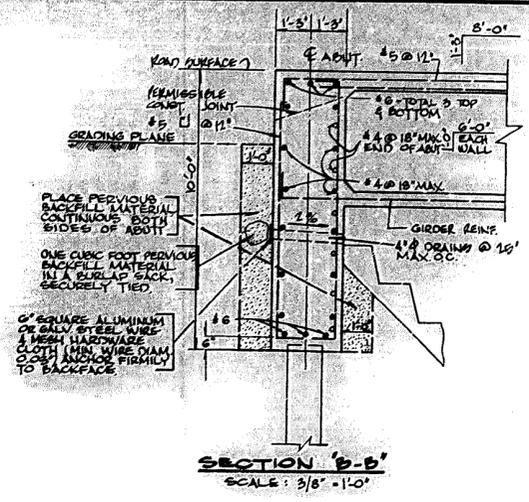
ORANGE COUNTY ROAD DEPARTMENT	
LOS ALIBOS BLVD. BRIDGE AL-12 OVER ALIBO CREEK	
GENERAL PLAN	
AS NOTED	SHEET 10 OF 17

(11097)  
LOS ALIBOS BLVD BRIDGE  
Sheet 11 of 17  
Red. 22,511  
Scale 1/4" = 1'-0"

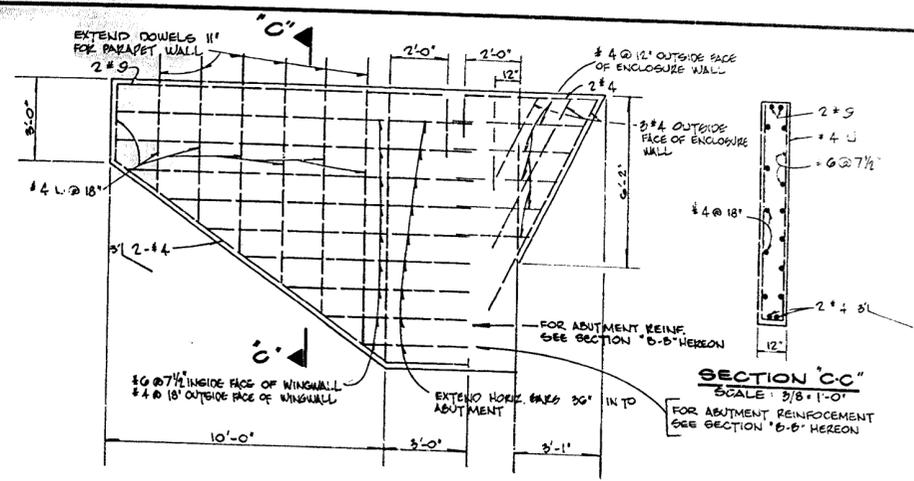
(11097)  
W. D. 72390



**SECTION A-A - ABUTMENT #1**  
 ABUTMENT #2 SIMILAR BUT OPP. HAND  
 SCALE: 1/8" = 1'-0"



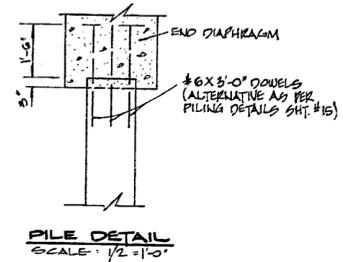
**SECTION B-B**  
 SCALE: 3/8" = 1'-0"



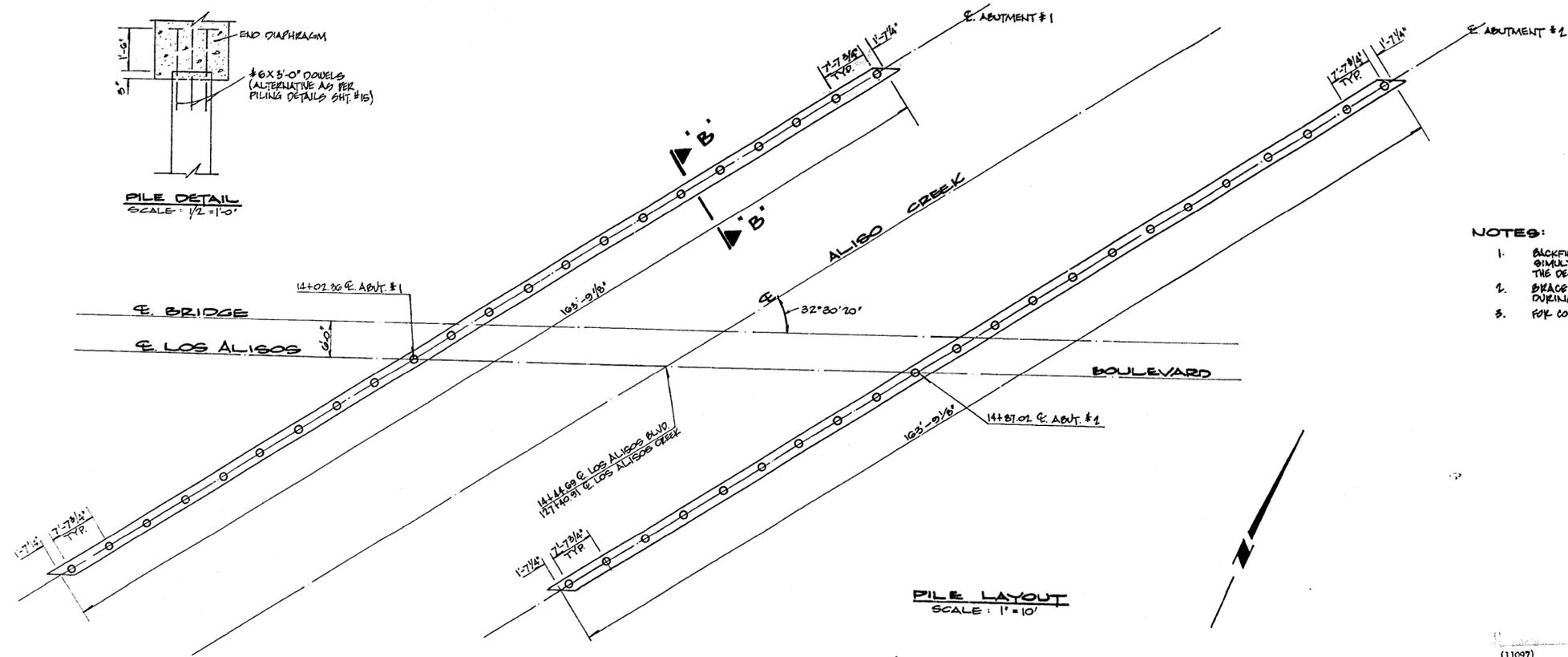
**TYPICAL WINDOW WALL ELEVATION**  
 SCALE: 3/8" = 1'-0"

**PILING DATA**

FOOTING	EST. PILE TIP ELEV.	PILE CUTOFF ELEVATIONS
ABUT #1	330.00	FROM: 369.00 TO 372.98'
ABUT #2	330.00	FROM: 371.69 TO 373.36'



**PILE DETAIL**  
 SCALE: 1/2" = 1'-0"



**PILE LAYOUT**  
 SCALE: 1" = 10'

- NOTES:**
- BACKFILL BEHIND ABUTMENT SHALL BE PLACED SIMULTANEOUSLY AT BOTH ABUTMENTS AFTER THE DECK IS COMPLETED.
  - BRACE ABUTMENTS AND WINDOW WALLS AS REQUIRED DURING CONSTRUCTION.
  - FOR CONCRETE PILE DETAILS SEE SHEET 15.

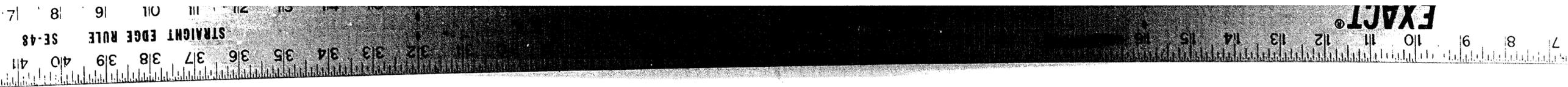
ORANGE COUNTY ROAD DEPARTMENT

LOS ALIBOS BLVD.  
 BRIDGE AL-12  
 OVER  
 ALIBO CREEK

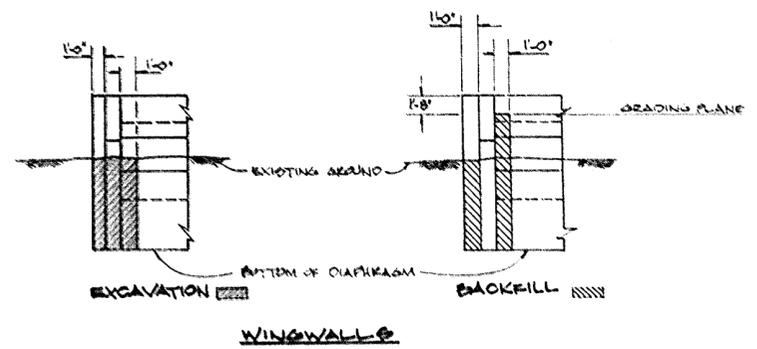
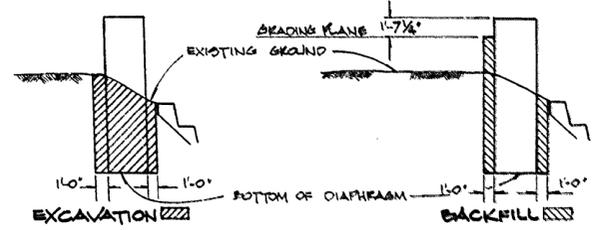
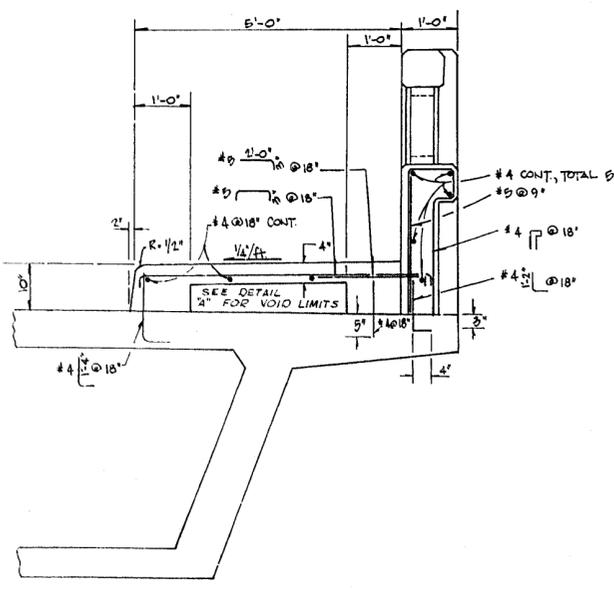
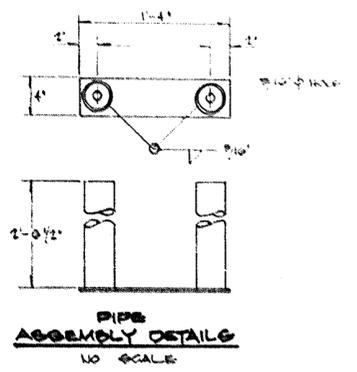
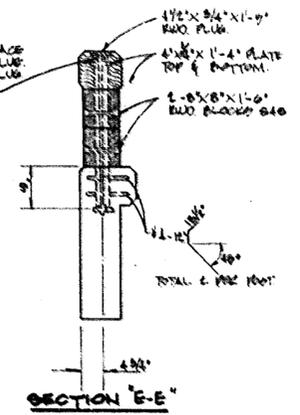
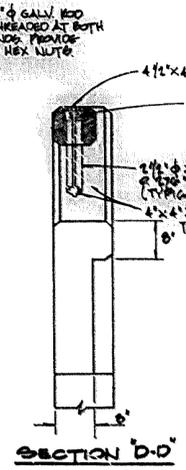
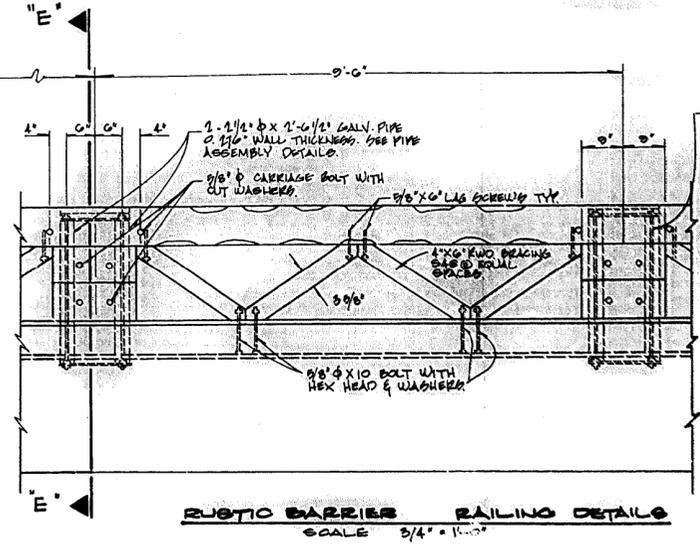
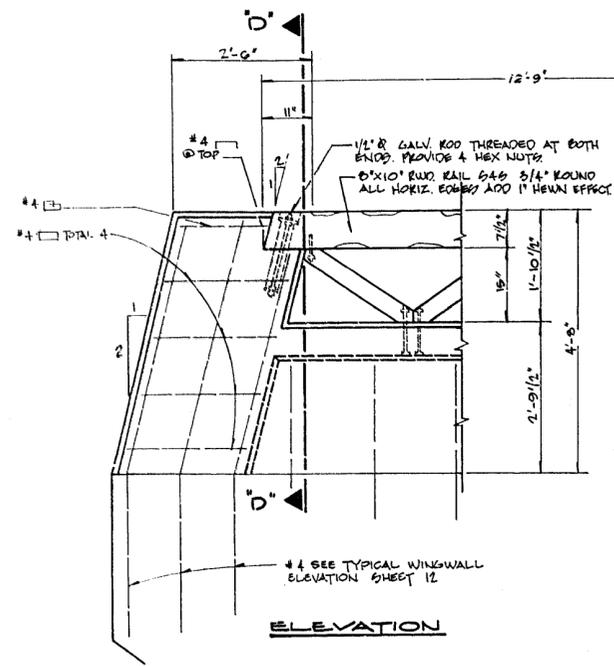
ABUTMENT & FOUNDATION  
 DETAILS

AS NOTED SHEET 11 OF 17  
 (11097)  
 410.72398

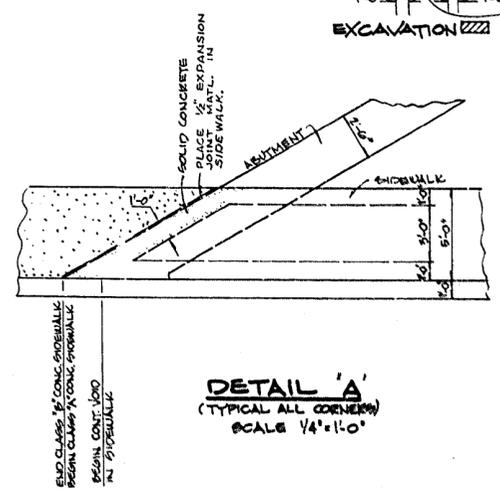




- NOTES:**
1. RAILING SHALL CONFORM TO HORIZONTAL AND VERTICAL ALIGNMENT
  2. RAILS SHALL BE NORMAL TO RAILING
  3. COUNTERSINK ALL LAG SCREWS & BOLTS AT TIMBER CONNECTIONS
  4. WALLS ARE TO BE BACKFILLED BEFORE RAILING IS PLACED
  5. ALL REINFORCEMENT IN PARAPET WALLS SHALL HAVE A CLEAR COVER OF 1".
  6. REINFORCED FORMS AND RAILS SHALL BE EXACTLY HEAVY DUTY REINFORCED
  7. ALL TIMBER CONNECTIONS SHALL BE GALVANIZED



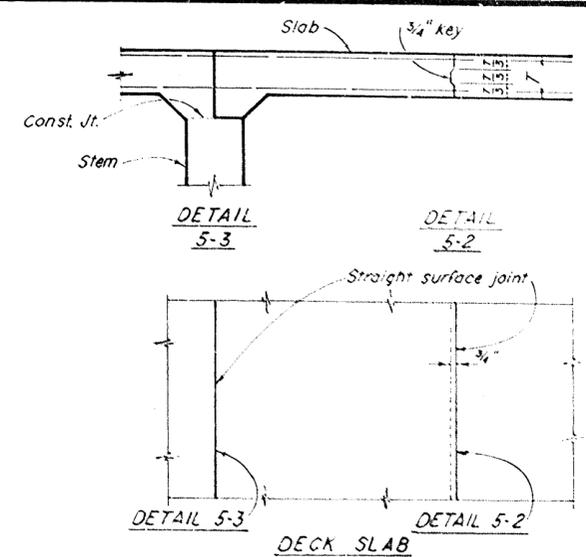
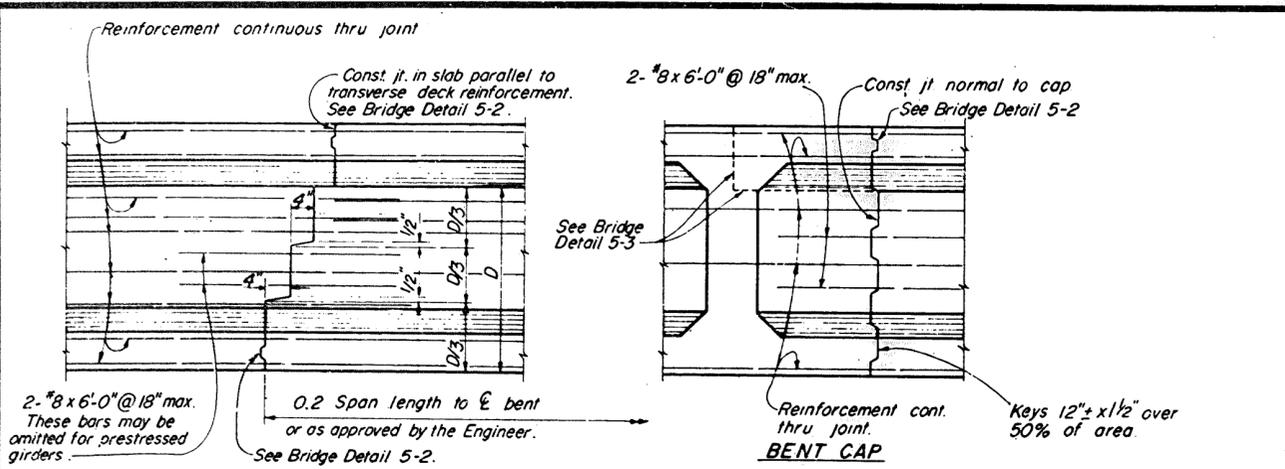
**STRUCTURAL EXCAVATION AND BACKFILL DETAILS**  
NO SCALE



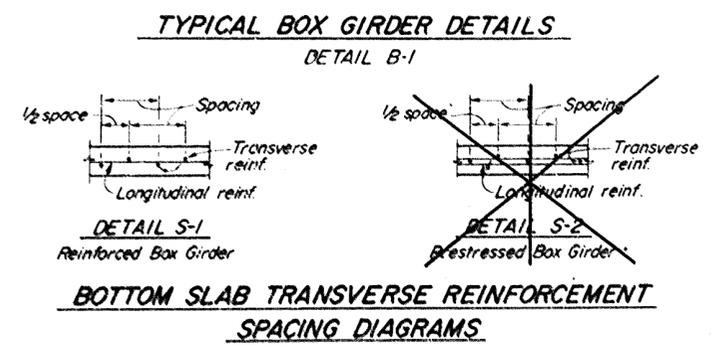
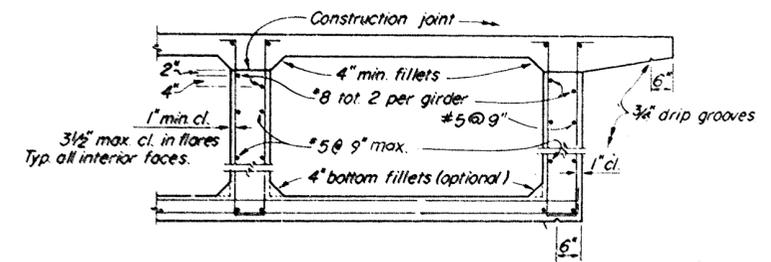
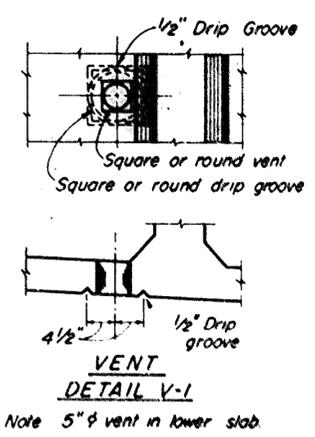
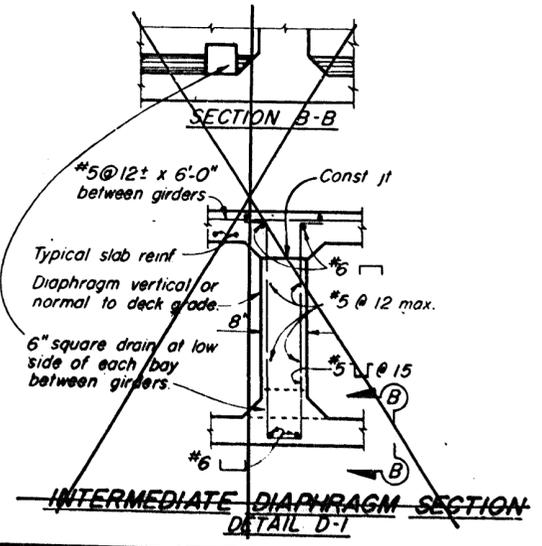
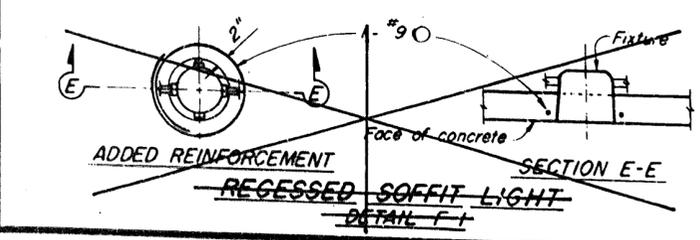
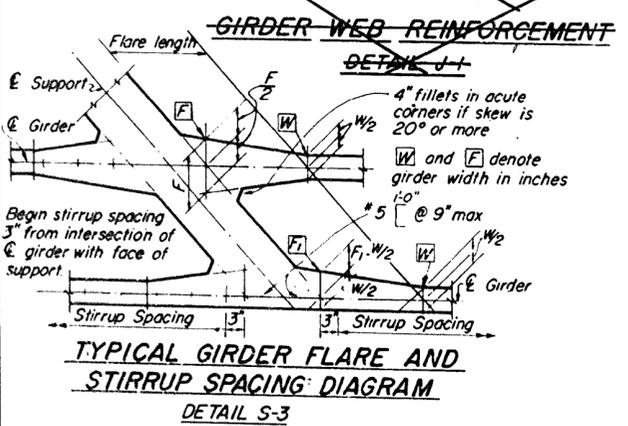
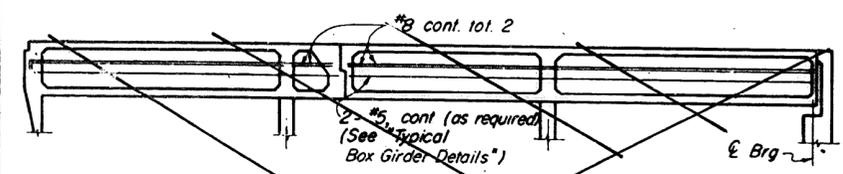
(11097)  
LOS ALIBOS BLVD. BRIDGE  
SHEET 18 OF 18  
REV. 02.51  
BY LEMAN

ORANGE COUNTY ROAD DEPARTMENT	
LOS ALIBOS BLVD BRIDGE AL-12 OVER ALISO CREEK	
SIDEWALK, RUSTIC BARRIER RAILING DETAILS AND STRUCTURAL EXCAVATION & BACKFILL	
AS NOTED	SHEET 18 OF 17

(11097) 410.72598



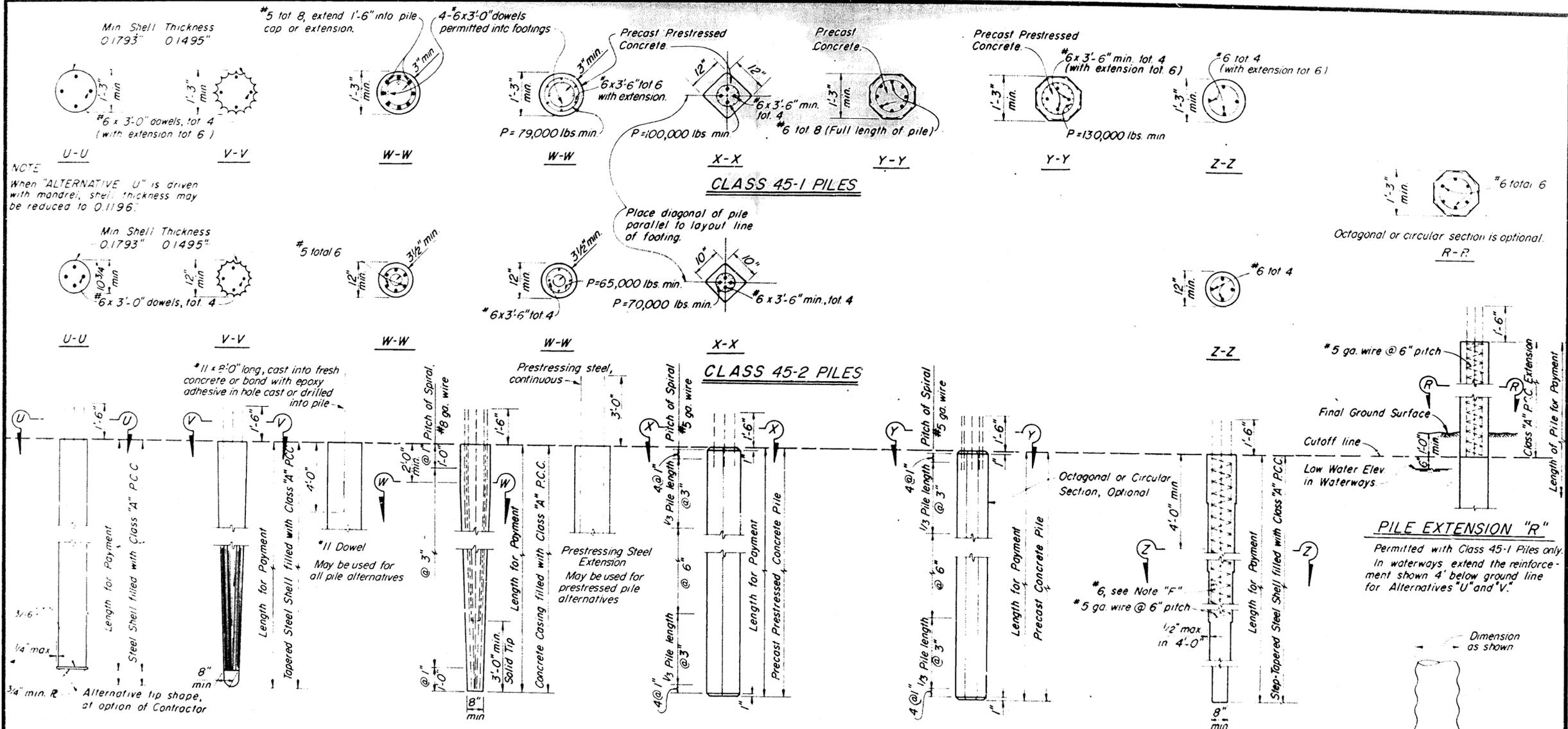
**LONGITUDINAL CONSTRUCTION JOINTS**  
Note: Longitudinal construction joints in slab, if required, are to be located at edge of traffic lanes except as approved by the Engineer.



(11097)  
LOG ALIBO BLVD BRIDGE  
Sheet 12 of 18  
Rev. 02-11  
Orange County, CA

ORANGE COUNTY ROAD DEPARTMENT  
LOG ALIBO BLVD.  
BRIDGE AL-12  
OVER  
ALIBO CREEK  
MISCELLANEOUS DETAILS  
BOX GIRDER  
SCALE: NO SCALE SHEET 12 OF 18

(11097)



**ALTERNATIVE "U" ALTERNATIVE "V"**

**ALTERNATIVE "W"**

**ALTERNATIVE "X"**

**ALTERNATIVE "Y"**

**ALTERNATIVE "Z"**

**CORRUGATED ALTERNATIVE "Z"**

**PILE NOTES:**

Alternatives "W" and "Y" may be driven full length or may be extended. All exposed piles or pile extensions shall be consistent in cross-section throughout the project.

**PRECAST PRESTRESSED PILES:**

P = Prestressing Force (After losses) shown, then "P" shall provide 700 psi min. Concrete Strength: f'c @ 28 days = 6,000 p.s.i. (Alternative "X")  
4,500 p.s.i. (Alternative "Y")  
5,000 p.s.i. (Alternative "W")

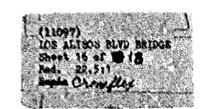
Alternative "X" may not extend above ground line nor be used with pile extension "R". #11 Dowel or Prestressing Steel Extension shall be used only with footings below ground line.

**NOTE F:** In Alternative "Z" the No. 6 bars shall extend a minimum of 12' below the lowest of the following:

1. Bottom of footing.
  2. Top of final ground surface.
  3. Top of original ground surface when piles are driven through fills.
  4. Bottom of predrilled holes greater than pile diameter.
- Unless indicated to the contrary all piles shall be class 45-1.

Class 45-1 piles may be substituted for Class 45-2 piles. A 10" minimum diameter pipe extension (thickness = 0.1793" min.) may be used at the tip of Alternatives "V" or "Z" when taper is 30' or more in length. All dowels or bars extending into slab or footing having a depth less than 2'-0" shall be hooked.

DESIGN LOADING = 45 TONS



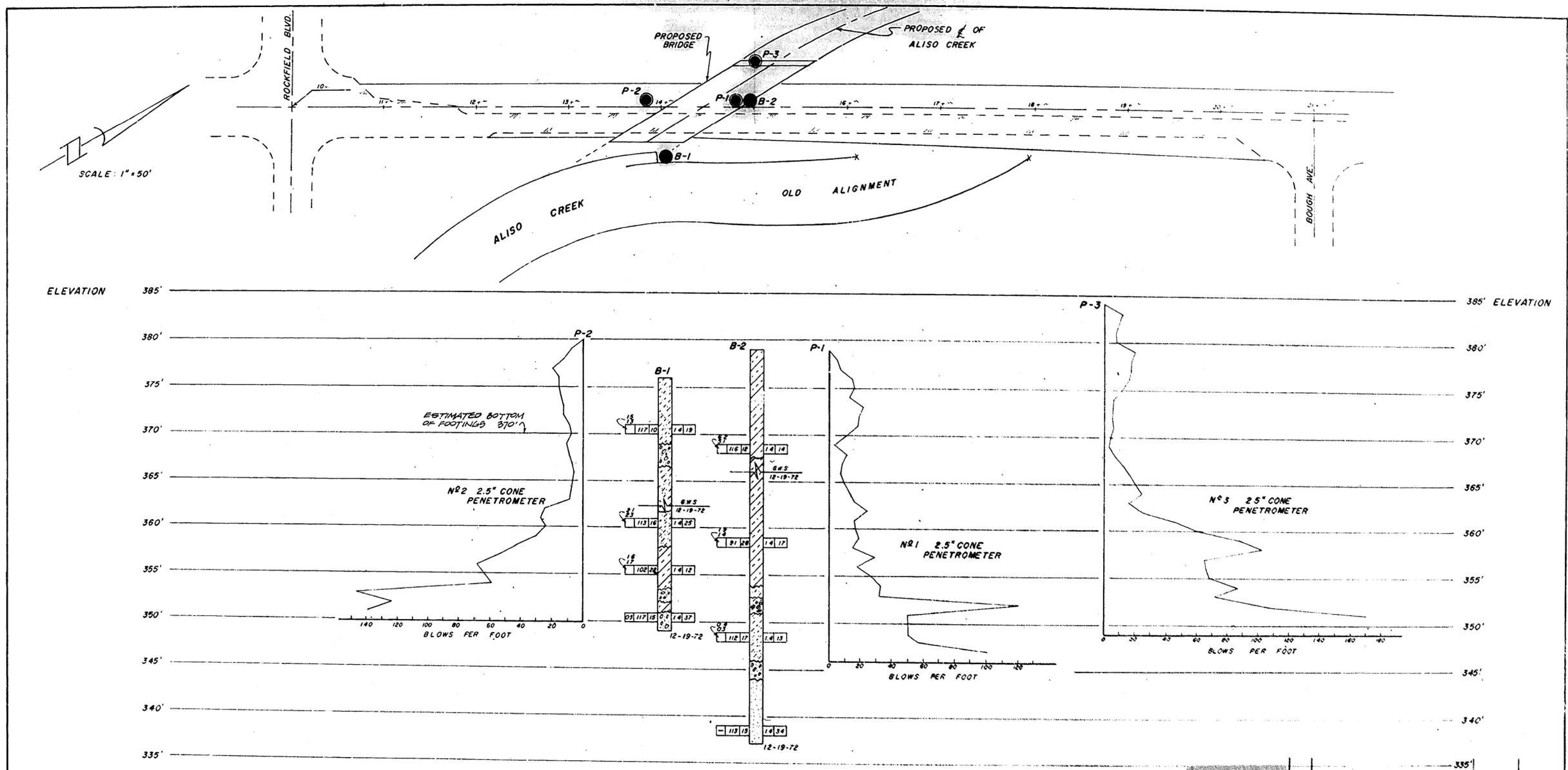
ORANGE COUNTY ROAD DEPARTMENT

LOS ALIBOS BLVD. BRIDGE AL-12 OVER ALIBO CREEK

PILING DETAILS

NO SCALE

(11097)



FIELD STUDY BY: S. STANCOVIC  
 DRAWN BY: J. M. BILKOWITZ  
 CHECKED BY:

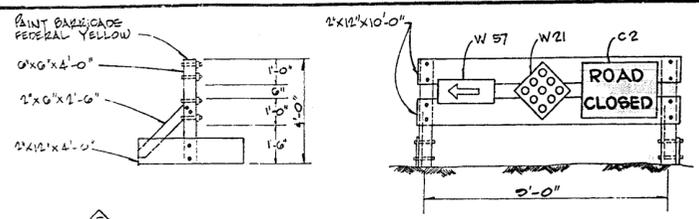
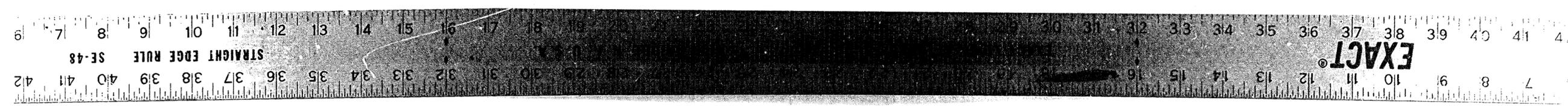
LEGEND OF EARTH MATERIALS																							
SIZE CLASSIFICATION	MATERIAL SYMBOLS	CONSISTENCY CLASSIFICATION																					
<p>CLASSIFICATION OF EARTH MATERIAL SHOWN ON THIS SHEET IS BASED ON MECHANICAL ANALYSIS UNLESS OTHERWISE INDICATED.</p>	<ul style="list-style-type: none"> <li>GRAVEL</li> <li>SAND</li> <li>SILT</li> <li>CLAY</li> <li>SANDY CLAY OR CLAYEY SAND</li> <li>SANDY SILT OR SILTY SAND</li> <li>SILTY CLAY OR CLAYEY SILT</li> <li>SILT PERCENTAGES</li> </ul>	<p>ACCORDING TO THE STANDARD PENETRATION TEST</p> <table border="1"> <tr> <th>NO. OF BLOWS</th> <th>GRAULKAR</th> <th>CONESIVE</th> </tr> <tr> <td>0-5</td> <td>VERY LOOSE</td> <td>VERY SOFT</td> </tr> <tr> <td>6-10</td> <td>LOOSE</td> <td>SOFT</td> </tr> <tr> <td>11-20</td> <td>SLIGHTLY COMPACT</td> <td>STIFF</td> </tr> <tr> <td>21-35</td> <td>COMPACT</td> <td>VERY STIFF</td> </tr> <tr> <td>36-70</td> <td>DENSE</td> <td>HARD</td> </tr> <tr> <td>71+</td> <td>VERY DENSE</td> <td>VERY HARD</td> </tr> </table>	NO. OF BLOWS	GRAULKAR	CONESIVE	0-5	VERY LOOSE	VERY SOFT	6-10	LOOSE	SOFT	11-20	SLIGHTLY COMPACT	STIFF	21-35	COMPACT	VERY STIFF	36-70	DENSE	HARD	71+	VERY DENSE	VERY HARD
	NO. OF BLOWS	GRAULKAR	CONESIVE																				
	0-5	VERY LOOSE	VERY SOFT																				
	6-10	LOOSE	SOFT																				
	11-20	SLIGHTLY COMPACT	STIFF																				
	21-35	COMPACT	VERY STIFF																				
	36-70	DENSE	HARD																				
	71+	VERY DENSE	VERY HARD																				
	<ul style="list-style-type: none"> <li>PEAT OR ORGANIC MATTER</li> <li>FILL MATERIAL</li> <li>SHALE</li> <li>SANDSTONE</li> <li>LIMESTONE</li> <li>METAMORPHIC ROCK</li> <li>IGNEOUS ROCK</li> </ul>																						

LEGEND OF BORING OPERATIONS		
ROTARY BORING	PENETRATION TEST	TEST PIT
<ul style="list-style-type: none"> <li>PLAN OF ANY BORING</li> <li>STANDARD PENETROMETER</li> <li>2.5" CONE PENETROMETER</li> <li>ROTARY BORING</li> <li>AUGER BORING</li> <li>SAMPLE BORING</li> <li>JET BORING</li> <li>DIAMOND CORE BORING</li> <li>TEST PIT</li> </ul>	<p>UNCLIMBED COMPRESSION STRENGTH (1.25 FT)</p> <p>CONSOLIDATION TEST</p> <p>DIRECT SHEAR TEST</p> <p>EXPANSION TEST</p> <p>AUTOMATIC TRIP HAMMER</p> <p>SAFT HAMMER</p>	

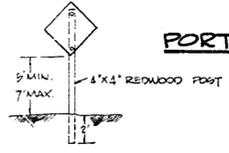
ORANGE COUNTY ROAD DEPARTMENT  
 MATERIALS LABORATORY  
 LOG OF TEST BORINGS  
 FOR  
**PROPOSED  
 LOS ALISOS BRIDGE  
 OVER  
 ALISO CREEK**

SCALE - SHOWN      BRIDGE AL-12      DRAWING

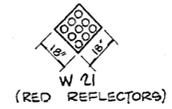
(11097)



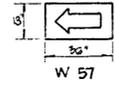
**PORTABLE TIMBER BARRICADES**  
NO SCALE



**ROADSIDE SIGN C-19**  
NO SCALE

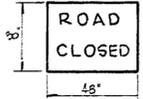


W 21  
(RED REFLECTORS)



W 57

ALL ROADSIDE SIGNS SHALL CONFORM TO CURRENT MUTCD & STATE OF CALIFORNIA SIGN CHART.

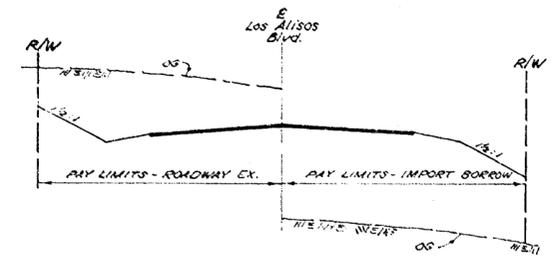
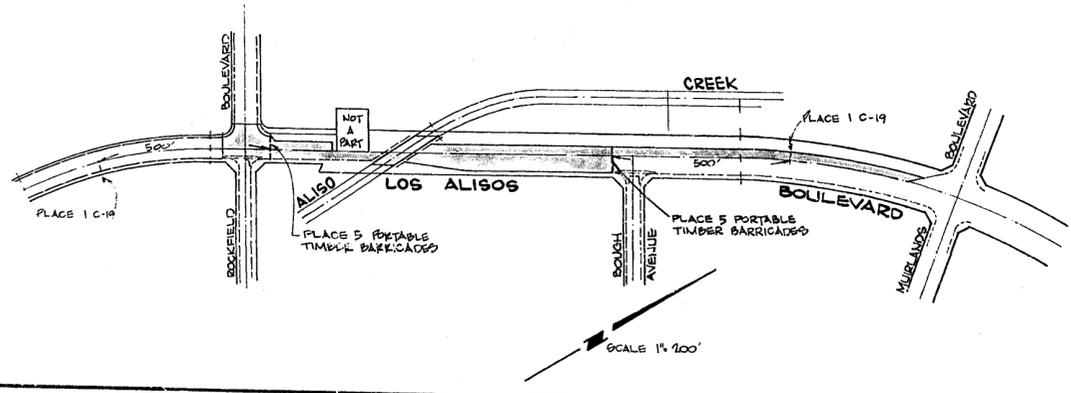


C 2



C 19

**ROADSIDE SIGN DETAILS**  
NO SCALE



**EARTHWORK PAY LIMITS**  
(FOR ROADWORK ITEMS ONLY)  
NO SCALE

(11097)  
LOS ALISOS BLVD BRIDGE  
Sheet 18 of 28  
Rev. 03.91  
LINEN

ORANGE COUNTY ROAD DEPARTMENT	
LOS ALISOS BLVD. BRIDGE AL-12 OVER ALISO CREEK	
ROAD CLOSURE	
SHEET 18 of 28	NO. 11-098

(11097)