ROAD NUMBER	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
M3700,W2250	73-74	1	15

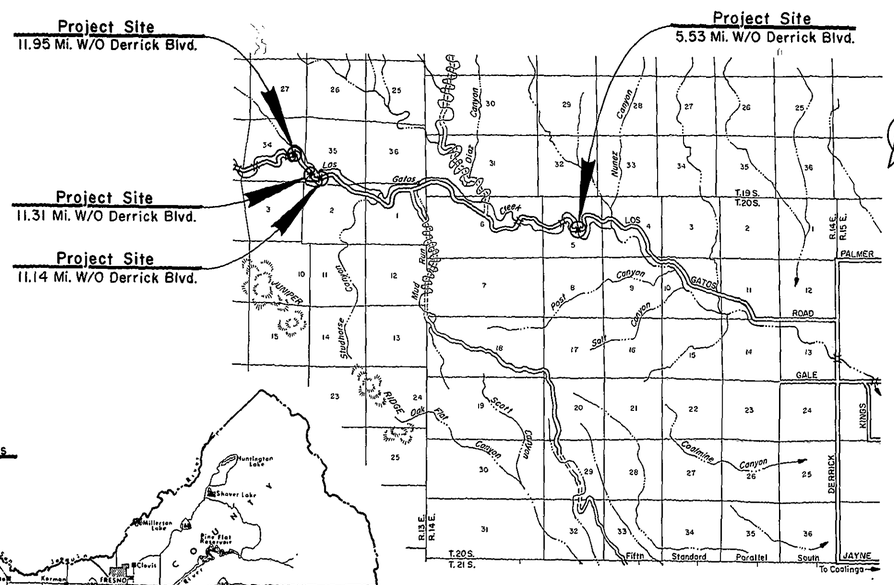
DEPARTMENT OF PUBLIC WORKS
COUNTY OF FRESNO

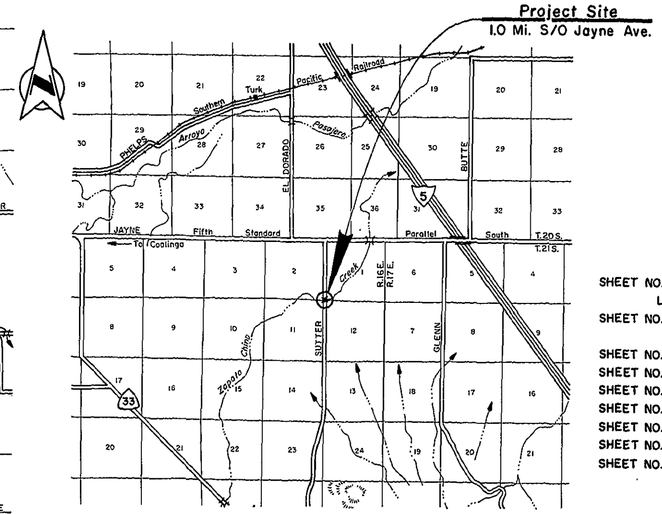
PLANS FOR CONSTRUCTION

LOS GATOS CREEK BRIDGES
ON LOS GATOS ROAD

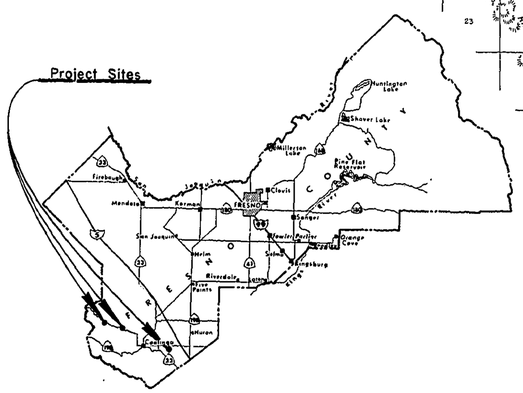
AND

ZAPATO CHINO CREEK BRIDGE
ON SUTTER AVENUE





Project Sites



SCALE IN MILES

0 1 2 3 4

APPROVAL RECOMMENDED Jerry K. Brown
Civil Engineer License No. 18419

APPROVED Clinton D. Beery
Director of Public Works
Civil Engineer License No. 9345

APPROVED John Kuala
Chairman Board of Supervisors

APPROVAL DATE July 9, 1974

INDEX OF SHEETS

SHEET NO. 1	TITLE SHEET
	LOS GATOS CREEK BRIDGES
SHEET NO. 2	TYPICAL CROSS SECTIONS
	PROFILE - 5.53 MI. W/O DERRICK
SHEET NO. 3-4	5.53 MI. W/O DERRICK
SHEET NO. 5-6	11.14 MI. W/O DERRICK
SHEET NO. 7-8	11.31 MI. W/O DERRICK
SHEET NO. 9-10	11.95 MI. W/O DERRICK
SHEET NO. 11	SLAB AND ABUTMENT DETAILS
SHEET NO. 12-14	ZAPATO CHINO CREEK BRIDGE
SHEET NO. 15	RAILING AND FENCE DETAILS

APPLICABLE STANDARD PLANS JANUARY 1973

A62-A.3
A62-BB

B0-1
D81-2
D83-4

74-02-6
J.D. Griggs
John A. Warda
12-10-74

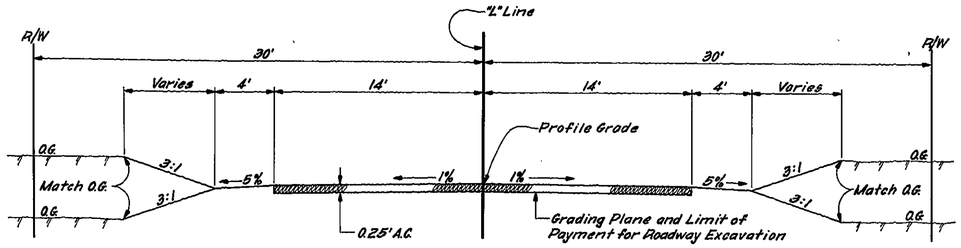
DRAWING NO.	5310-1
REVISION	

18-21

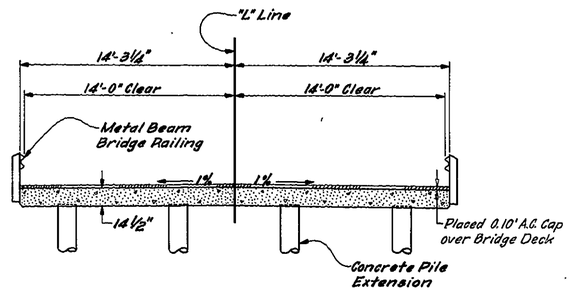
REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

PROJECT	SHEET No.	TOTAL SHEETS
LOS GATOS CREEK BRIDGES	2	15

APPROVED Thurz. O'Brien
FRESNO COUNTY ASS'T. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



LOS GATOS ROAD
Sta. "L" 0+20.00 to Sta. "L" 3+06.43
Sta. "L" 3+59.13 to Sta. "L" 6+50.78



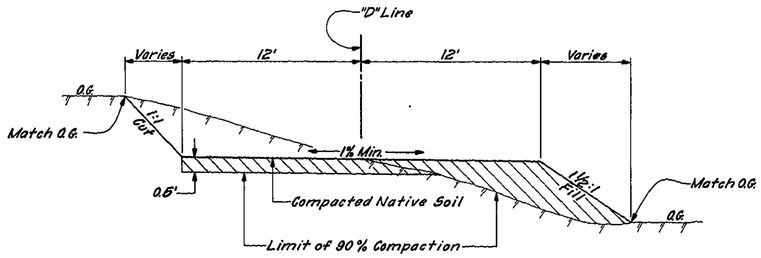
LOS GATOS CREEK BRIDGE

5.53 MILES W/O DERRICK BLVD.

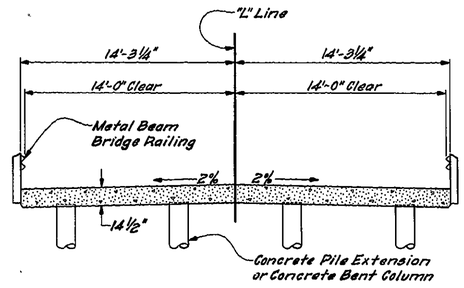
LEGEND

- 0.25' A.C. over Prepared Subgrade
- Variable Depth A.C. Cap

A.C. = Asphalt Concrete
P.C.C. = Portland Cement Concrete
O.G. = Original Ground
R/W = Right of Way Line
V.C. = Vertical Curve
F.L. = Flow Line
L.F. = Linear Foot
= Direction of Flow
T.O. = Top of Deck
—x— Existing Fence



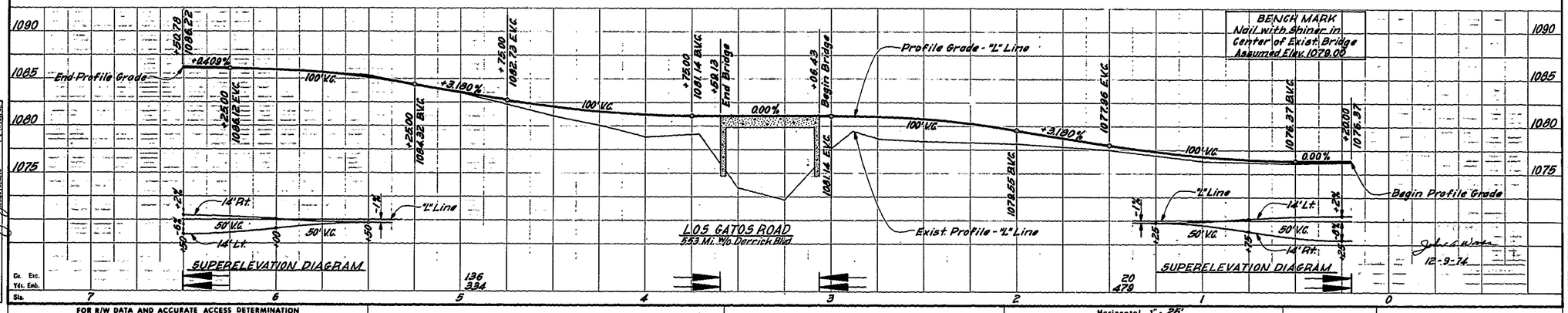
DETOURS



LOS GATOS CREEK BRIDGES

11.14, 11.31, and 11.95 MILES W/O DERRICK BLVD.

TYPICAL CROSS SECTIONS
No Scale



FOR R/W DATA AND ACCURATE ACCESS DETERMINATION SEE R/W RECORDS AT PUBLIC WORKS OFFICE

PROFILE SCALE: Horizontal 1" = 25' Vertical 1" = 5'

FORMAT:

DRAWING NO. 5310-2

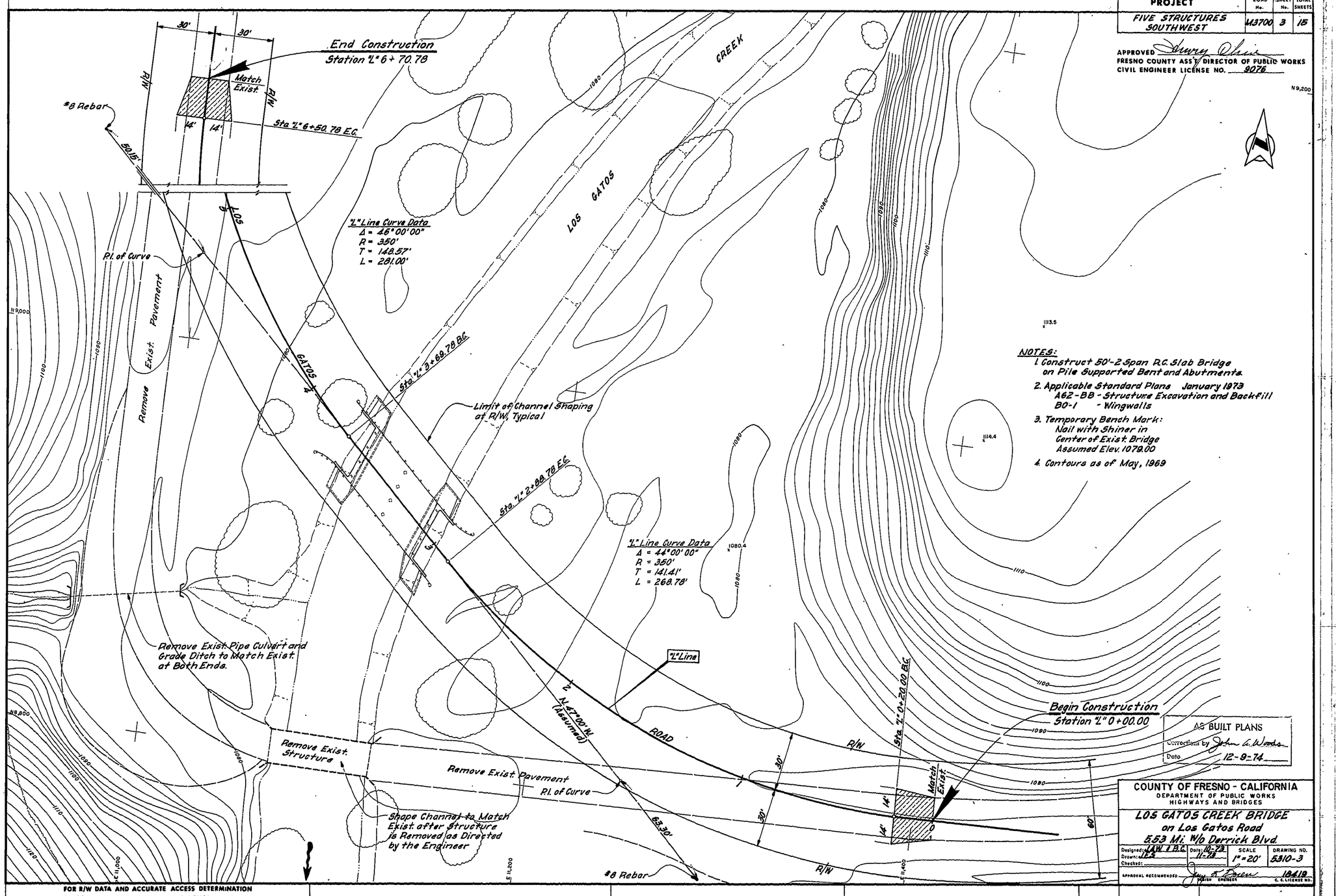
FIELD BOOK NO. — PAGE NO. —
DESIGNED JWB DATE 12-73 PROJECT ENGINEER
DRAWN JES
CHECKED
APPROVAL RECOMMENDED: Jack T. Boggs 18410 PROJECT ENGINEER

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

18-21

PROJECT	ROAD No.	SHEET No.	TOTAL SHEETS
FIVE STRUCTURES SOUTHWEST	413700	3	15

APPROVED
FRESNO COUNTY ASS'T. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



NOTES:

1. Construct 50'-2 Span R.C. Slab Bridge on Pile Supported Bent and Abutments.
2. Applicable Standard Plans January 1973
   A62-BB - Structure Excavation and Backfill
   B0-1 - Wingwalls
3. Temporary Bench Mark:
   Nail with Shiner in
   Center of Exist. Bridge
   Assumed Elev. 1079.00
4. Contours as of May, 1969

AS BUILT PLANS
Corrections by John A. Woods
Date 12-9-74

COUNTY OF FRESNO - CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

LOS GATOS CREEK BRIDGE
on Los Gatos Road
5.53 Mi. W/o Derrick Blvd.

Designed: LAW & B.C.	Date: 10-73 11-74	SCALE 1" = 20'	DRAWING NO. 5310-3
Drawn: LLS			
Checked:			

APPROVAL RECOMMENDED [signature] CIVIL ENGINEER — C. E. LICENSE NO. 18418

FOR R/W DATA AND ACCURATE ACCESS DETERMINATION
SEE R/W RECORDS AT PUBLIC WORKS OFFICE

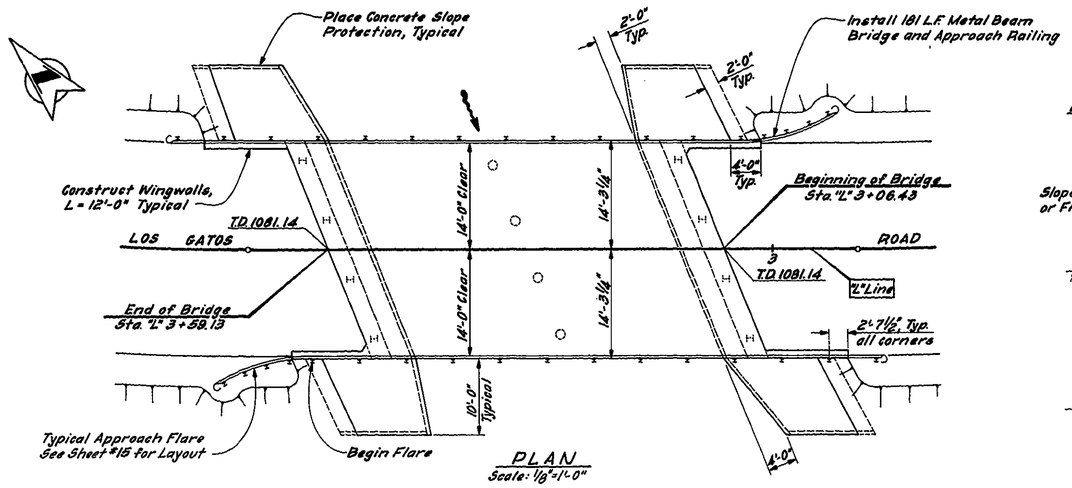
Compiled By CARTWRIGHT Aerial Surveys Inc.

18—21

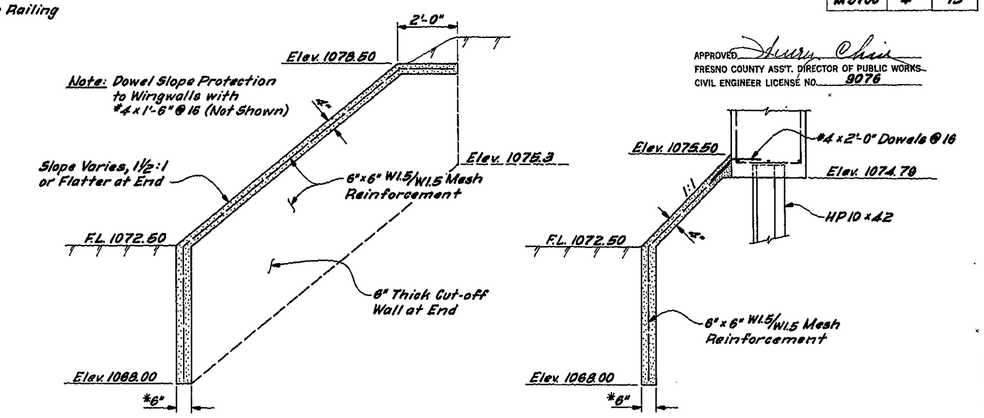
REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

COUNTY ROAD No.	SHEET No.	TOTAL SHEETS
M3700	4	15

APPROVED Henry Chen
FRESNO COUNTY ASST. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



PLAN
Scale: 1/8"=1'-0"



ALONG CHANNEL BANK

ALONG ABUTMENT

CONCRETE SLOPE PROTECTION
No Scale
*Thickness Varies, Not Less Than 6"

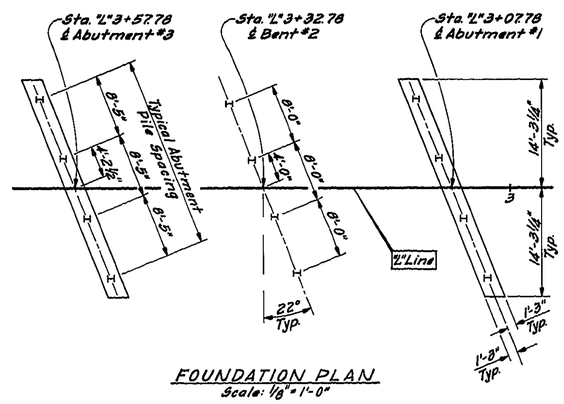
PILE NOTES:

All Piles to be HP10x42 - total 12
Pile Loading - 55 Tons

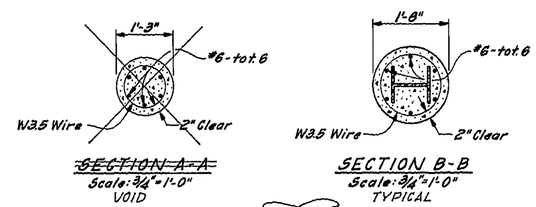
Top of Pile Elevations
Abutments 1 & 3: 1075.21
Bent #2: 1070.50

Top of Pile Extension Elevations
12' Lt. & Rt.: 1079.91
4' Lt. & Rt.: 1079.98

Minimum Pile Tip Elevations
Abutment #1: 1043.00
Bent #2: 1051.00 to 1089.00
Abutment #3: 1064.00

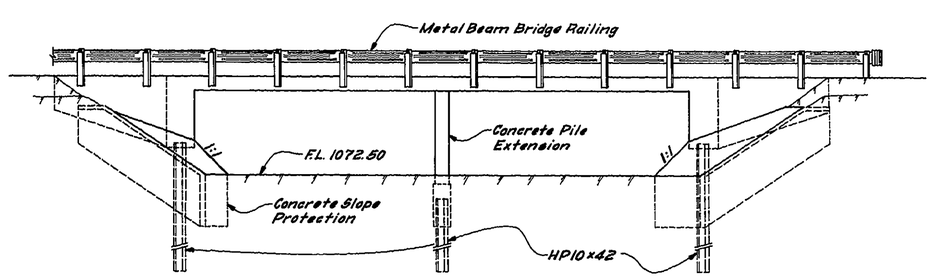


FOUNDATION PLAN
Scale: 1/8"=1'-0"

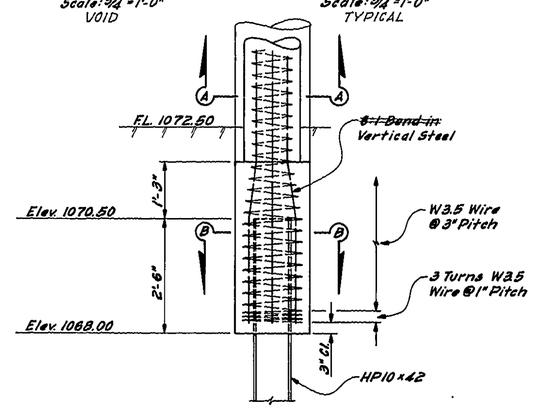


~~SECTION A-A~~
Scale: 3/4"=1'-0"
VOID

SECTION B-B
Scale: 3/4"=1'-0"
TYPICAL



ELEVATION
Scale: 3/16"=1'-0"



CONCRETE PILE EXTENSION
Scale: 3/4"=1'-0"

NOTES:
1. See Sheet #11 for Slab and Abutment Details.
2. See Sheet #15 for Railing Details.

AS BUILT PLANS
Corrections by John A. Woods
Date 12-9-74

COUNTY OF FRESNO — CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

LOS GATOS CREEK BRIDGE
5.53 Mi. W/o Derrick Blvd.
CONSTRUCTION DETAILS

DESIGNED BC	DATE 8-74	SCALE	DRAWING NO.
DRAWN LFS	8-74	As Shown	5310-4
CHECKED			

APPROVAL RECOMMENDED Henry R. Chen, DESIGN ENGINEER — C. E. LICENSE NO. 18410

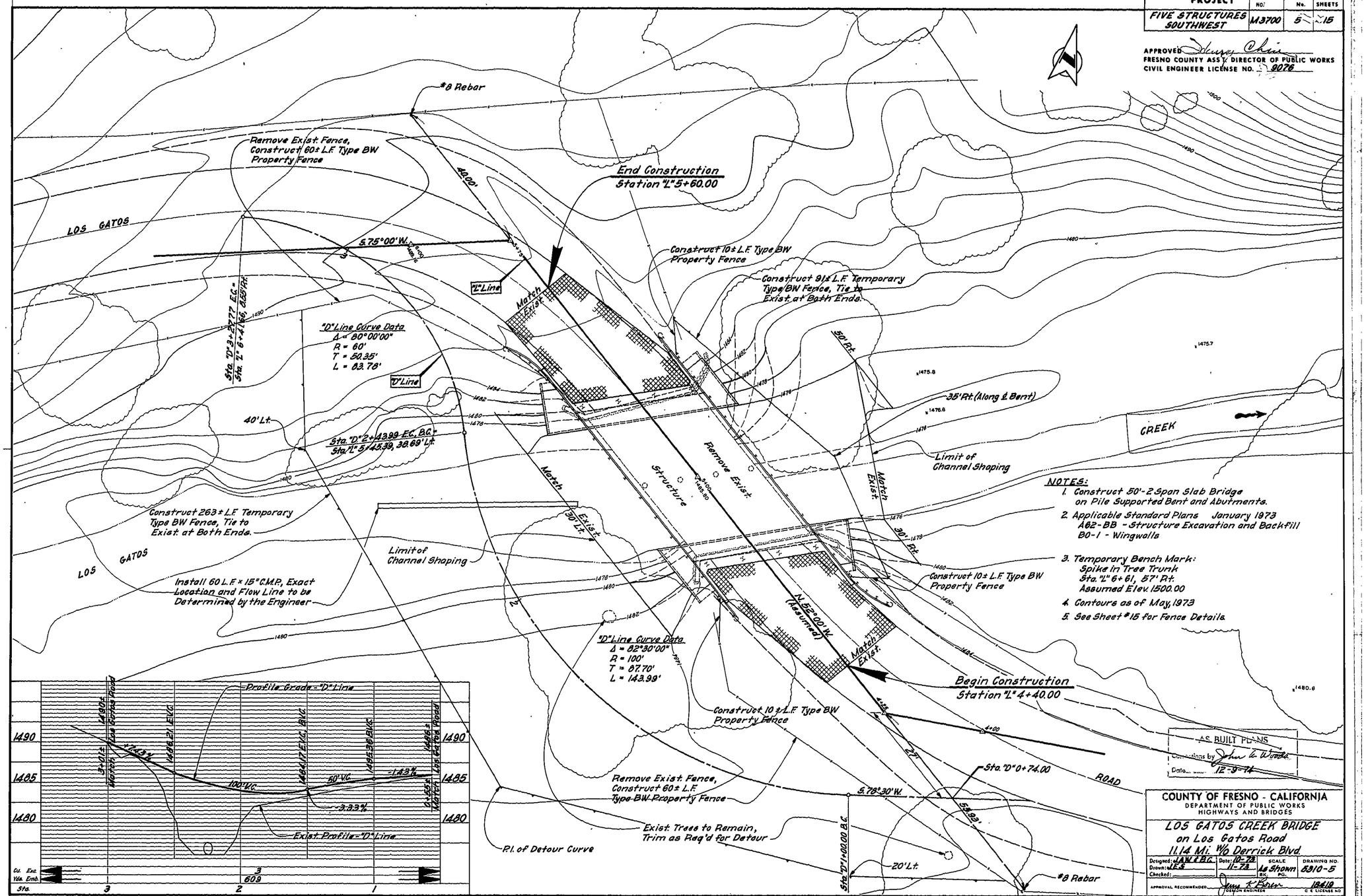
REVISION

18—21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

PROJECT	ROAD NO.	SHEET No.	TOTAL SHEETS
FIVE STRUCTURES SOUTHWEST	M3700	5	15

APPROVED
FRESNO COUNTY ASS'T. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



NOTES:

1. Construct 50'-2 Span Slab Bridge on Pile Supported Bent and Abutments.
2. Applicable Standard Plans January 1973
   A62-BB - Structure Excavation and Backfill
   B0-1 - Wingwalls
3. Temporary Bench Mark:
   Spike in Tree Trunk
   Sta. "L" 6+61, 57' Rt.
   Assumed Elev. 1500.00
4. Contours as of May, 1973
5. See Sheet #15 for Fence Details.

AS BUILT PLANS
Corrections by John C. Woods
Date 12-9-74

COUNTY OF FRESNO - CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

LOS GATOS CREEK BRIDGE
on Los Gatos Road
1.14 Mi. W/o Derrick Blvd.

Designed: JAW & BG	Date: 10-73	SCALE	DRAWING NO.
Drawn: JES	11-73	As Shown	5310-5
Checked:		BK. PG.	

APPROVAL RECOMMENDED: [signature] DESIGN ENGINEER — 12610 C.E. LICENSE NO.

FOR R/W DATA AND ACCURATE ACCESS DETERMINATION SEE R/W RECORDS AT PUBLIC WORKS OFFICE

PLAN SCALE: 1" = 10'

PROFILE SCALE: Horizontal 1" = 30' Vertical 1" = 5'

FORMAT: # 434

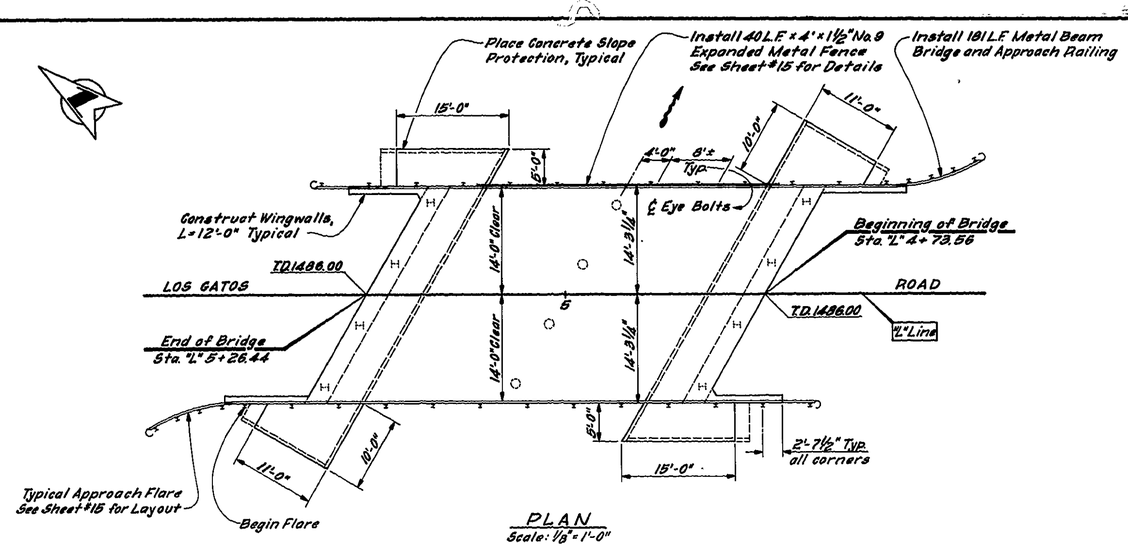
Compiled By CARTWRIGHT Aerial Surveys Inc.

18—21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

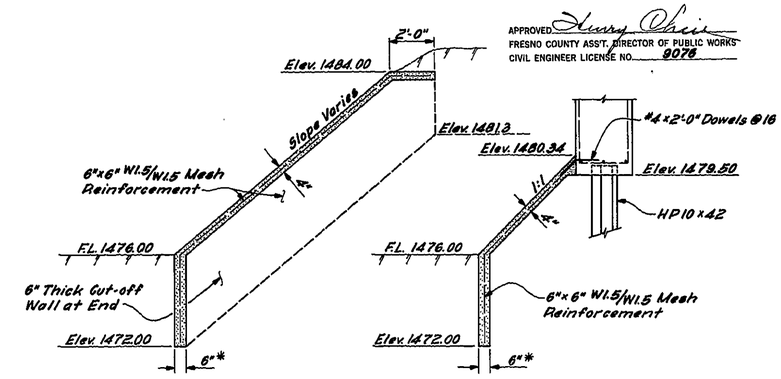
COUNTY ROAD No.	SHEET No.	TOTAL SHEETS
M3700	6	15

APPROVED Harry Chen
FRESNO COUNTY ASS'T. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



PLAN
Scale: 1/8" = 1'-0"

Note: Dowel Slope Protection to Wingwalls with #4 × 1'-8" @ 16" (Not Shown)



ALONG CHANNEL BANK

ALONG ABUTMENT

CONCRETE SLOPE PROTECTION
No Scale
* Thickness Varies, Not Less Than 6"

PILE NOTES:

All Piles to be HP10 × 42 - total 12

Pile Loading - 55 Tons

Minimum Pile Tip Elevation

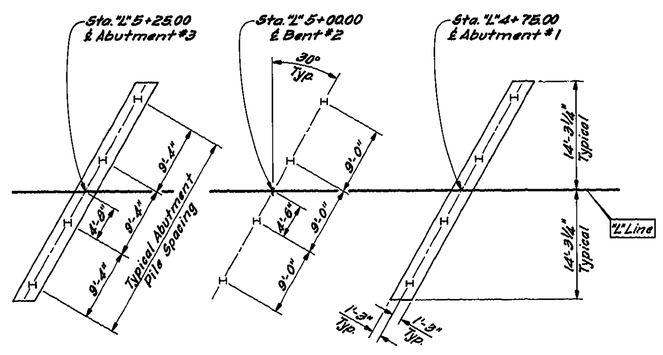
Abut. #1	Bent #2	Abut. #3
1465	1464	1467

Top of Pile Elevations

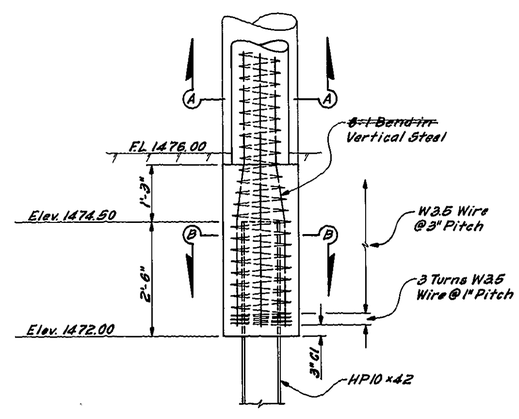
Abut's 1 & 3	Bent #2
1479.92	1474.50

Top of Pile Extension Elevations

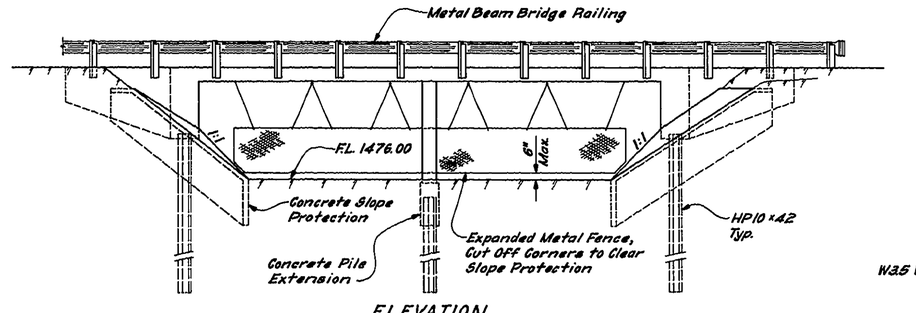
13'-6" Lt. & Rt.	4'-6" Lt. & Rt.
1484.66	1484.81



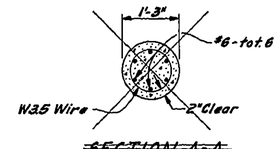
FOUNDATION PLAN
Scale: 1/8" = 1'-0"



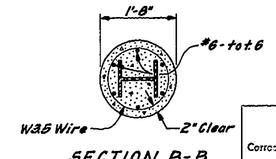
CONCRETE PILE EXTENSION
Scale: 3/4" = 1'-0"



ELEVATION
Scale: 3/16" = 1'-0"



~~SECTION A-A~~
Scale: 3/4" = 1'-0"
VOID



SECTION B-B
Scale: 3/4" = 1'-0"
TYPICAL

NOTES:
1. See Sheet #11 for Slab and Abutment Details.
2. See Sheet #15 for Railing Details.

AS BUILT PLANS
Corrections by John L. Woods
Date 12-9-74

COUNTY OF FRESNO — CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

LOS GATOS CREEK BRIDGE
1.14 Mi. W/O Derrick Blvd.
CONSTRUCTION DETAILS

DESIGNED BC	DATE 5-74	SCALE	DRAWING NO.
DRAWN LCR	5-74	As Shown	5310-6
CHECKED			

APPROVAL RECOMMENDED: Jack K. Brown
DESIGN ENGINEER
18 & 19
C. E. LICENSE NO.

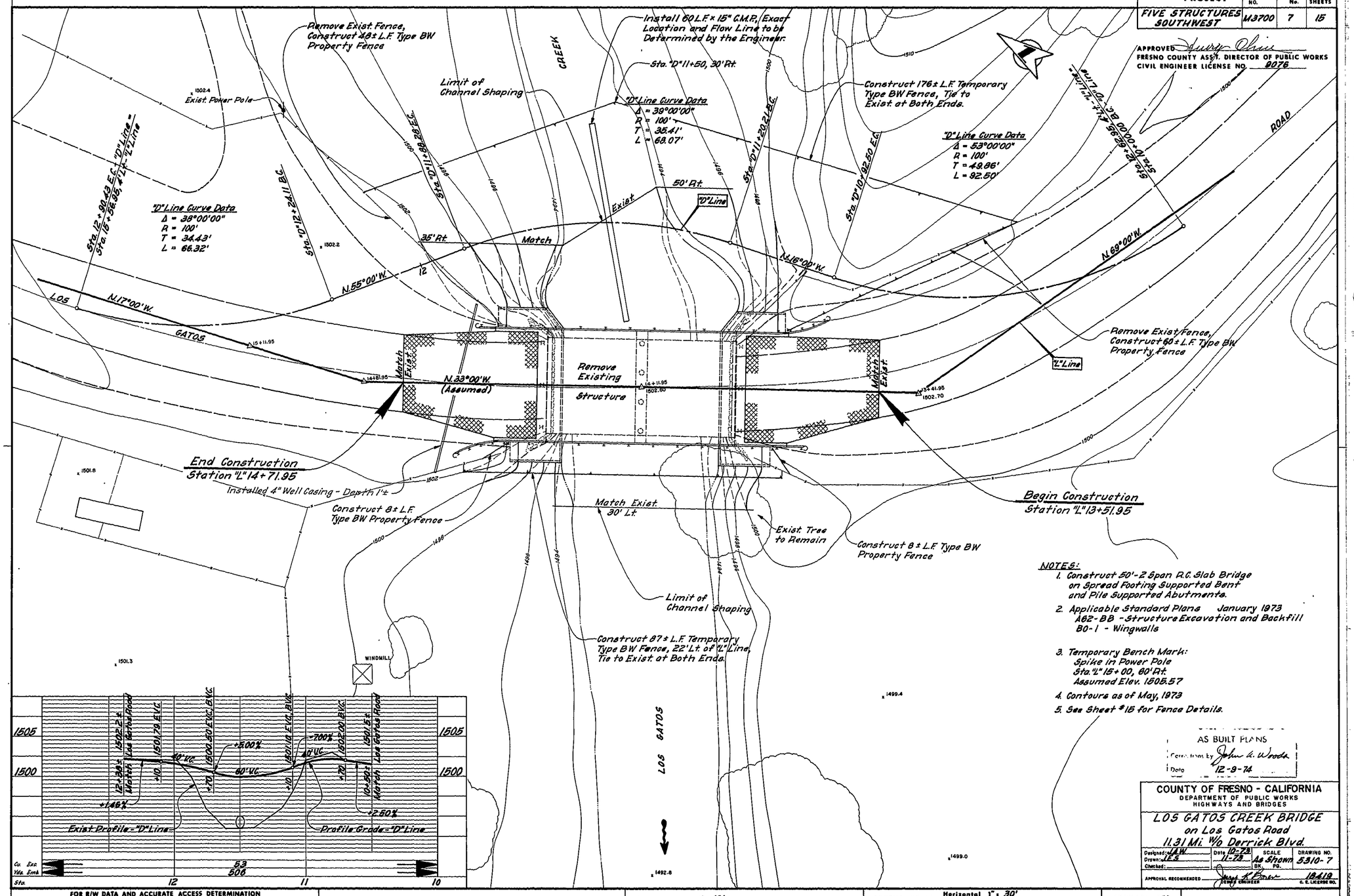
REVISION

18—21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
=3 INCHES ON ORIGINAL PLAN

PROJECT	ROAD NO.	SHEET No.	TOTAL SHEETS
FIVE STRUCTURES SOUTHWEST	M3700	7	15

APPROVED
FRESNO COUNTY ASS'T. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



NOTES:

1. Construct 50'-2 Span P.C. Slab Bridge on Spread Footing Supported Bent and Pile Supported Abutments.
2. Applicable Standard Plans January 1973
   A62-BB - Structure Excavation and Backfill
   B0-1 - Wingwalls
3. Temporary Bench Mark:
   Spike in Power Pole
   Sta. "L" 15+00, 60' Rt.
   Assumed Elev. 1505.57
4. Contours as of May, 1973
5. See Sheet #16 for Fence Details.

AS BUILT PLANS
Corrections By John A. Woods
Date 12-9-74

COUNTY OF FRESNO - CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

LOS GATOS CREEK BRIDGE
on Los Gatos Road
11.31 Mi. W/o Derrick Blvd.

Designed: J.A.W.	Date 10-73	SCALE	DRAWING NO.
Drawn: E.S.	11-73	As Shown	5310-7
Checked:		BK. PG.	

APPROVAL RECOMMENDED Jerry L. Fowler, PUBLIC WORKS ENGINEER — C. E. LICENSE NO. 18419

FOR R/W DATA AND ACCURATE ACCESS DETERMINATION SEE R/W RECORDS AT PUBLIC WORKS OFFICE

PLAN SCALE: 1" = 10'

PROFILE SCALE: Horizontal 1" = 30' Vertical 1" = 5'

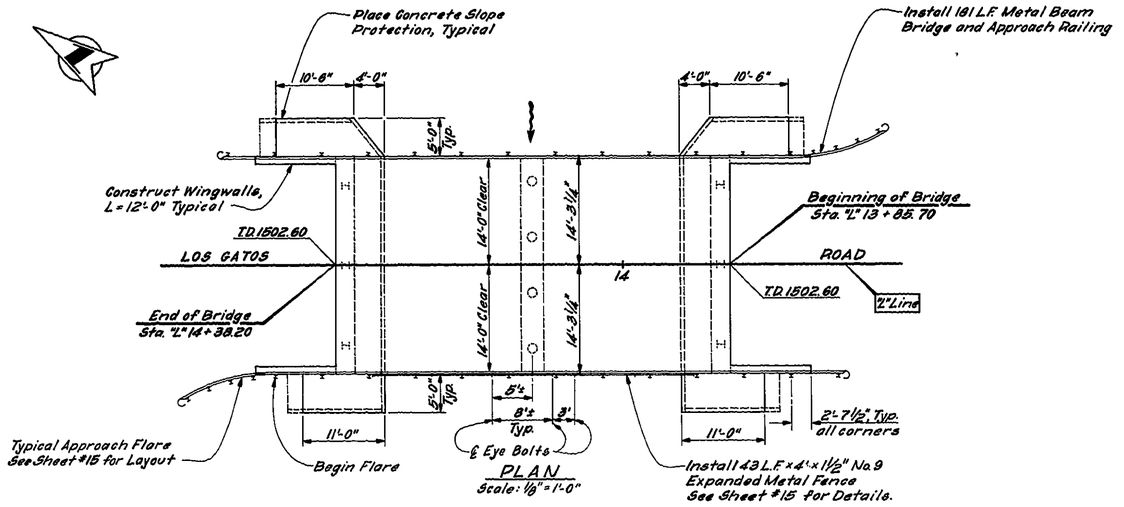
FORMAT: 435

Compiled By CARTWRIGHT Aerial Surveys Inc.

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

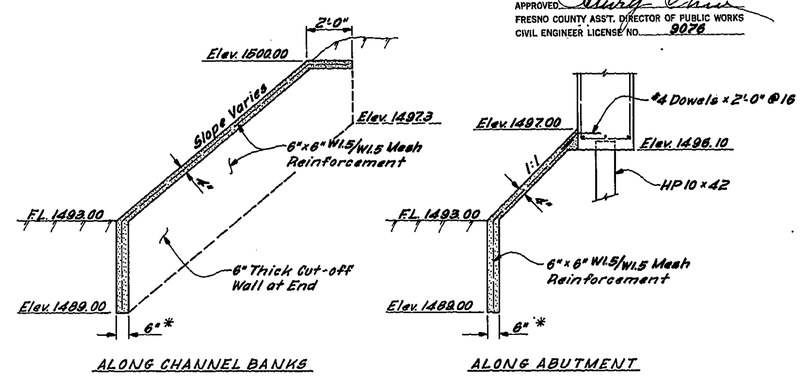
COUNTY ROAD No.	SHEET No.	TOTAL SHEETS
M3700	8	15

APPROVED Henry Ohm
FRESNO COUNTY ASS'T. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



PLAN
Scale: 1/8" = 1'-0"

Note: Dowel Slope Protection to Wingwalls with #4 x 1'-6" @ 16 (Not Shown)



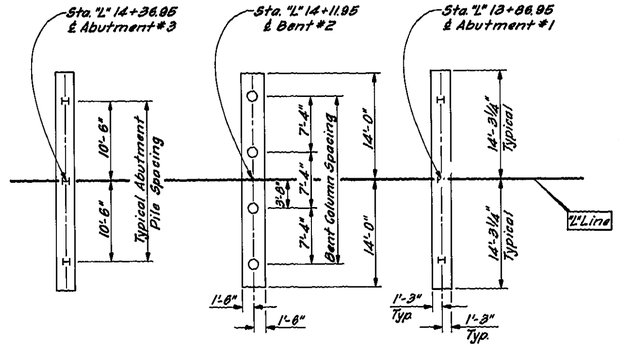
ALONG CHANNEL BANKS

ALONG ABUTMENT

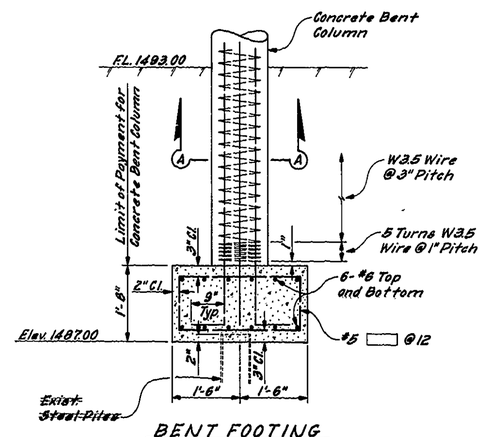
CONCRETE SLOPE PROTECTION
No Scale
* Thickness Varies, Not Less Than 6"

PILE NOTES:

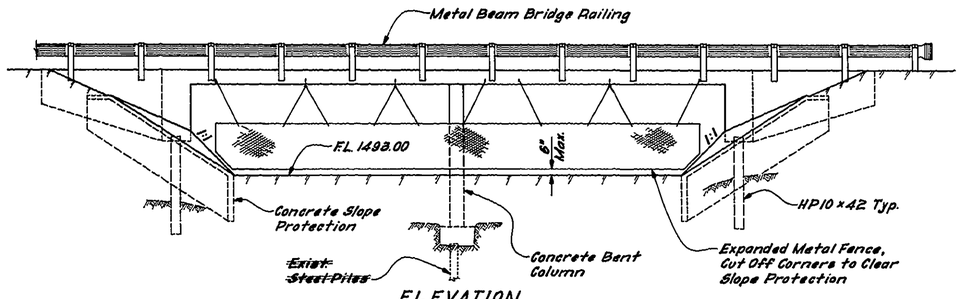
All Piles to be HP10 x 42 - total 6
Pile Loading - 55 Tons
Minimum Pile Tip Elevation - 1488
Top of Pile Elevation - 1498.52
Top of Bent Column Elevations
11'-0" Lt. ℄ Rt. 1501.27
3'-8" Lt. ℄ Rt. 1501.42



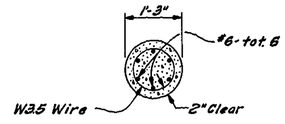
FOUNDATION PLAN
Scale: 1/8" = 1'-0"



BENT FOOTING
Scale: 3/4" = 1'-0"



ELEVATION
Scale: 3/16" = 1'-0"



SECTION A-A
CONCRETE BENT COLUMN
Scale: 3/4" = 1'-0"

NOTES:
1. See Sheet #11 for Slab and Abutment Details.
2. See Sheet #15 for Railing Details.

AS BUILT PLANS
Corrections by John A. Woods
Date 12-9-74

COUNTY OF FRESNO — CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

LOS GATOS CREEK BRIDGE
11.31 Mi. W/o Derrick Blvd.
CONSTRUCTION DETAILS

DESIGNED RC	DATE 5-74	SCALE	DRAWING NO.
DRAWN RCB	5-74	As Shown	5310-8
CHECKED			

APPROVAL RECOMMENDED Henry Ohm
CIVIL ENGINEER — C.E. LICENSE NO. 18410

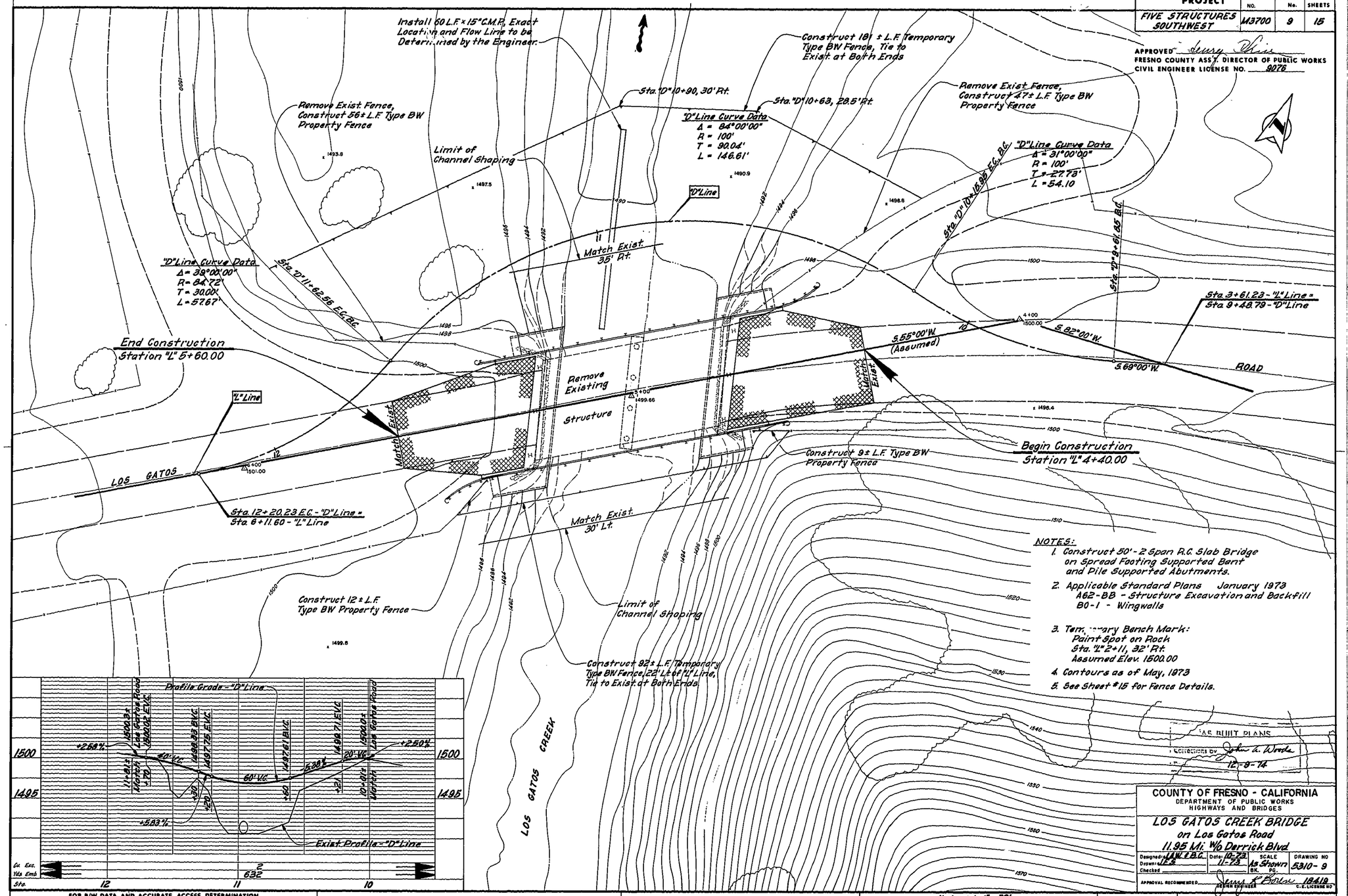
REVISION

18—21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
←3 INCHES ON ORIGINAL PLAN→

PROJECT	ROAD NO.	SHEET No.	TOTAL SHEETS
FIVE STRUCTURES SOUTHWEST	M3700	9	15

APPROVED [signature]
FRESNO COUNTY ASS'T. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



NOTES:

1. Construct 50'-2 Span R.C. Slab Bridge on Spread Footing Supported Bent and Pile Supported Abutments.
2. Applicable Standard Plans January 1973
   A62-BB - Structure Excavation and Backfill
   B0-1 - Wingwalls
3. Temporary Bench Mark:
   Paint Spot on Rock
   Sta. "L" 2+11, 32' Rt.
   Assumed Elev. 1500.00
4. Contours as of May, 1973
5. See Sheet #15 for Fence Details.

AS BUILT PLANS
Corrections by John A. Wrede 12-8-74

COUNTY OF FRESNO - CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

LOS GATOS CREEK BRIDGE
on Los Gatos Road
11.95 Mi. W/o Derrick Blvd.

Designed	J.W.E.B.C.	Date 10-73	SCALE	DRAWING NO
Drawn	J.E.S.	11-73	As Shown	5310-9
Checked		BK.	PG.	

APPROVAL RECOMMENDED [signature] 18419
DESIGN ENGINEER C.E. LICENSE NO.

FOR R/W DATA AND ACCURATE ACCESS DETERMINATION SEE R/W RECORDS AT PUBLIC WORKS OFFICE

PLAN SCALE: 1" = 10'

PROFILE SCALE: Horizontal 1" = 30' Vertical 1" = 5'

FORMAT: # 436

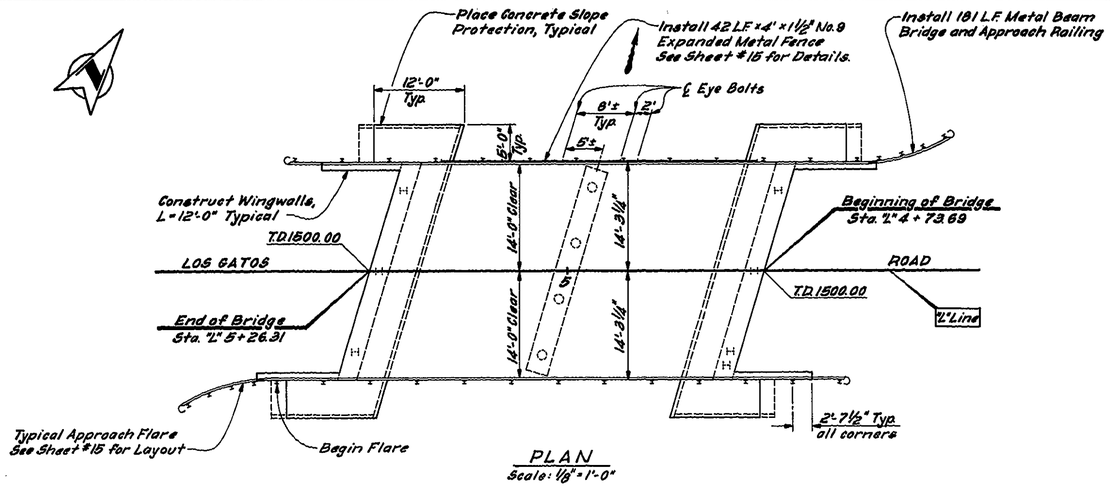
Compiled By CARTWRIGHT Aerial Surveys Inc.

18-21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
0-3 INCHES ON ORIGINAL PLAN

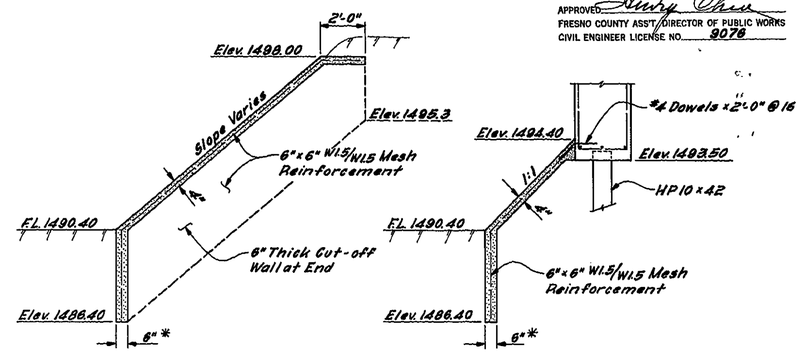
COUNTY ROAD No.	SHEET No.	TOTAL SHEETS
M3700	10	15

APPROVED: Henry Chen
FRESNO COUNTY ASS'T DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9078



PLAN
Scale: 1/8" = 1'-0"

Note: Dowel Slope Protection to Wingwalls with #4 x 1'-6" @ 16 (Not Shown)



ALONG CHANNEL BANKS

ALONG ABUTMENTS

CONCRETE SLOPE PROTECTION
No Scale
* Thickness Varies, Not Less Than 6"

PILE NOTES:

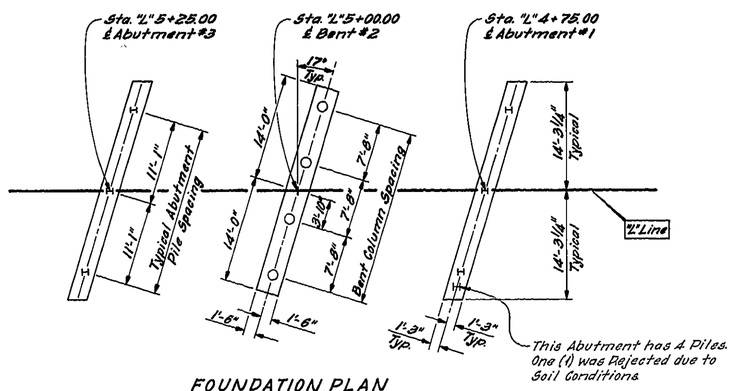
All Piles to be HP 10 x 42 - total 6

Pile Loading - 55 Tons

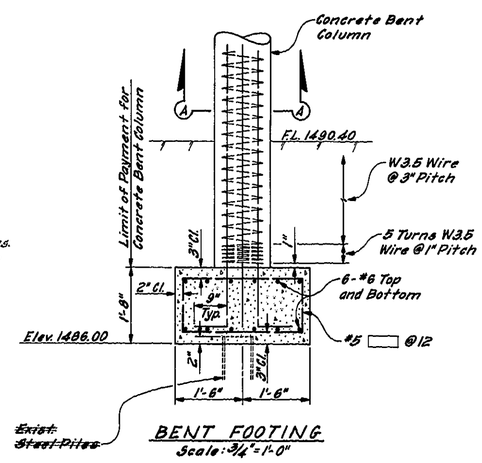
Minimum Pile Tip Elevations
Abut. #1 1485.5
Abut. #3 1484

Top of Pile Elevation - 1493.92

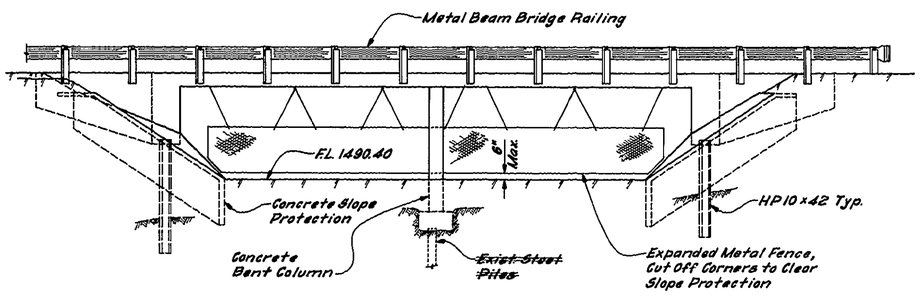
Top of Bent Column Elevations
11'-6" Lt. & Rt. 1498.67
3'-10" Lt. & Rt. 1498.81



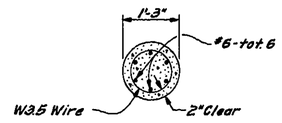
FOUNDATION PLAN
Scale: 1/8" = 1'-0"



BENT FOOTING
Scale: 3/4" = 1'-0"



ELEVATION
Scale: 3/16" = 1'-0"



SECTION A-A
CONCRETE BENT COLUMN
Scale: 3/4" = 1'-0"

NOTES:
1. See Sheet #11 for Slab and Abutment Details.
2. See Sheet #15 for Railing Details.

AS BUILT PLANS
Corrections by John A. Weeks
Date 12-9-74

COUNTY OF FRESNO — CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

LOS GATOS CREEK BRIDGE
11.95 Mi. W/O Derrick Blvd.
CONSTRUCTION DETAILS

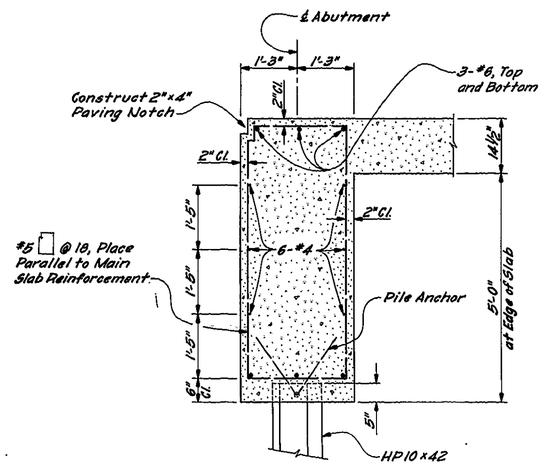
DESIGNED: BG	DATE: 4-74	SCALE	DRAWING NO.
DRAWN: BG	5-74	As Shown	5310-10
CHECKED:			
APPROVAL RECOMMENDED:	DESIGN ENGINEER	C. E. LICENSE NO. 18418	
REVISION			

18-21

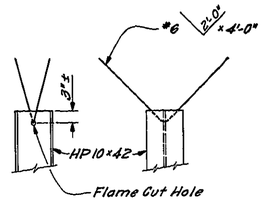
REDUCED PLAN
USE SCALE BELOW
0 1 2 3
#3 INCHES ON ORIGINAL PLAN—#

PROJECT	SHEET No.	TOTAL SHEETS
LOS GATOS CREEK BRIDGES	11	15

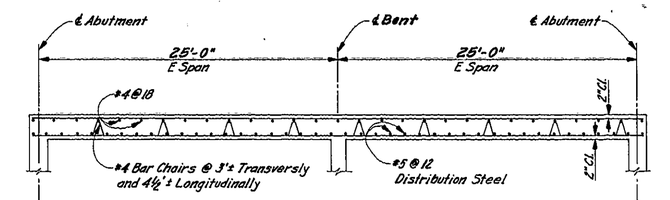
APPROVED: Harry Chen
FRESNO COUNTY ASS'T. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



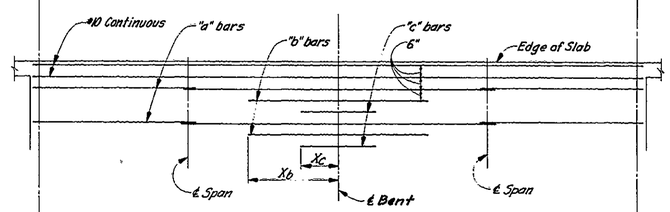
ABUTMENT DETAIL
Scale: 3/4" = 1'-0"



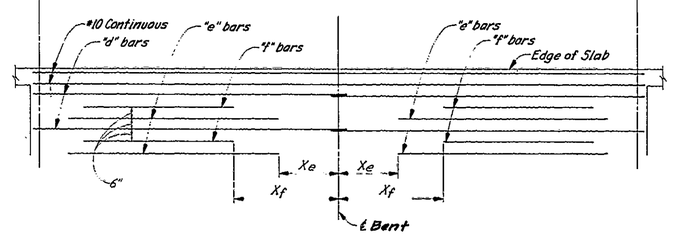
PILE ANCHOR
Scale: 3/4" = 1'-0"



LONGITUDINAL SECTION



REINFORCEMENT - TOP OF SLAB

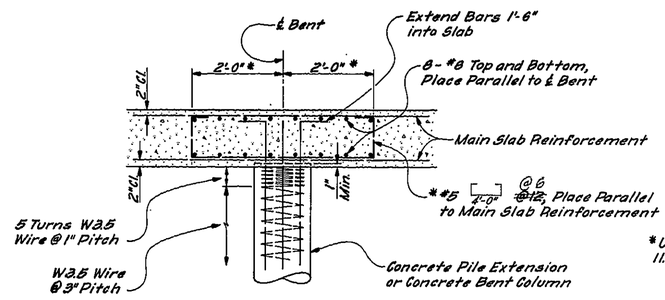


REINFORCEMENT - BOTTOM OF SLAB

SLAB DETAILS - 2 SPANS

LENGTH OF SPAN			25'-0"	*
REINFORCEMENT	TOP OF SLAB "a" bars	Size	#10	#11
		Length	52'-0"	
	TOP OF SLAB "b" bars	Size	#9	#10
		Length	12'-0"	
		X_b	6'-0"	
	TOP OF SLAB "c" bars	Size	#8	
		Length	6'-0"	
		X_c	3'-0"	
	BOTTOM OF SLAB "d" bars	Size	#10	#11
		Length	52'-0"	
	BOTTOM OF SLAB "e" bars	Size	#9	#11
		Length	18'-0"	
		Xe	6'-0"	
	BOTTOM OF SLAB "f" bars	Size	#8	
		Length	13'-0"	
		X_f	8'-6"	
T = Thickness of Slab			14½"	

* At Bridge 8.53 Size of Rebar Changed as per Request of Supplier.



*Use #5 ⊔ @ 6 4'-0" ~~@9~~ on 11.14 Mile Site.

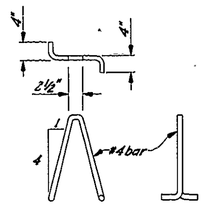
BENT CAP DETAIL
Scale: 3/4" = 1'-0"

GENERAL NOTES

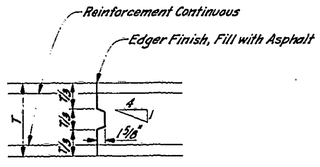
DESIGN: A.A.S.H.O. Dated 1971 with Revisions and as Supplemented by "BRIDGE PLANNING AND DESIGN MANUAL"

LIVE LOADING: HS20-44 and Alternative

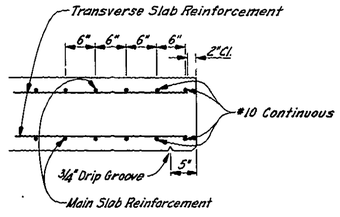
REINFORCED CONCRETE: f_s = 24,000 psi, except 20,000 psi in Stirrups
f_c = 1,300 psi
n = 10



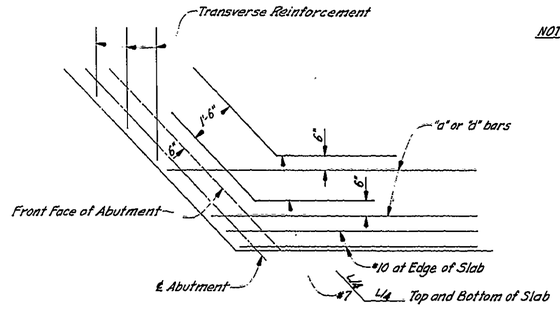
BAR CHAIR DETAIL



LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINT



EDGE OF SLAB DETAIL



OBTUSE CORNER DETAIL
Skew over 20°

NOTES:
1. Splices in Top Main Reinforcement to be Located Near Center of Span.
2. Splices in Bottom Main Reinforcement to be Located Near Pier.
3. Spacing of all Transverse Reinforcement is Measured along ℄ Roadway.
4. Skew 0° to 20°: Place all Transverse Reinforcement Parallel to Pier.
5. Skew over 20°: Place all Transverse Reinforcement Perpendicular to ℄ Bridge.
6. Transverse Construction Joints if used are to be Placed 1/4 Point of Span.
7. Longitudinal Construction Joints if used are to be Placed at Edge of Travel Lanes.

John L. Wrede
12-9-74

LOS GATOS CREEK BRIDGES
SLAB AND ABUTMENT DETAILS

COUNTY OF FRESNO - CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

DRAWING NO. 5310-11

FIELD BOOK NO. | DESIGNED JAN 1980 | DRAWN 3-74 | CHECKED 4-74 | Jerry K. Brown 12-9-74 | REVISIONS | APPROVED

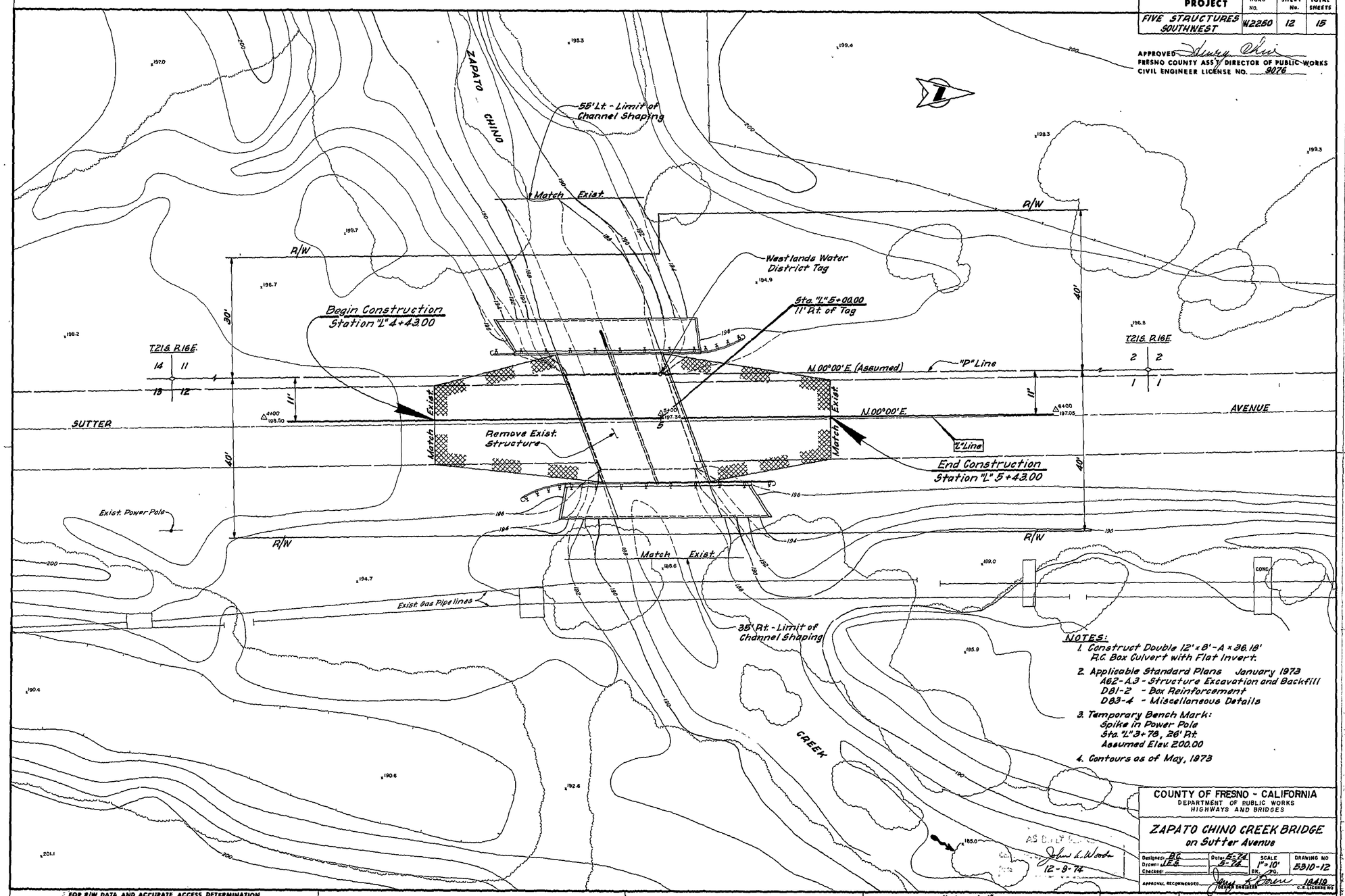
K-E

18-21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

PROJECT	ROAD NO.	SHEET No.	TOTAL SHEETS
FIVE STRUCTURES SOUTHWEST	W2260	12	15

APPROVED: [signature]
FRESNO COUNTY ASS'T DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



NOTES:
1. Construct Double 12' x 8'-A x 36.18' R.C. Box Culvert with Flat Invert.
2. Applicable Standard Plans January 1973
   A62-A,3 - Structure Excavation and Backfill
   D81-2 - Box Reinforcement
   D83-4 - Miscellaneous Details
3. Temporary Bench Mark:
   Spike in Power Pole
   Sta. "L" 3+78, 26' Rt.
   Assumed Elev. 200.00
4. Contours as of May, 1973

COUNTY OF FRESNO - CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

ZAPATO CHINO CREEK BRIDGE on Sutter Avenue

Designed: B.C.	Date: 5-74	SCALE 1"=10'	DRAWING NO
Drawn: L.E.G.	5-74	BK. PG.	53/0-12
Checked:			

APPROVAL RECOMMENDED: [signature] DESIGN ENGINEER
12-9-74
12410 C.E. LICENSE NO.

AS BUILT PLANS
John L. Woods
12-9-74

FOR R/W DATA AND ACCURATE ACCESS DETERMINATION SEE R/W RECORDS AT PUBLIC WORKS OFFICE

PLAN SCALE: 1" = 10'

PROFILE SCALE: Horizontal 1" = Vertical 1" =

FORMAT:

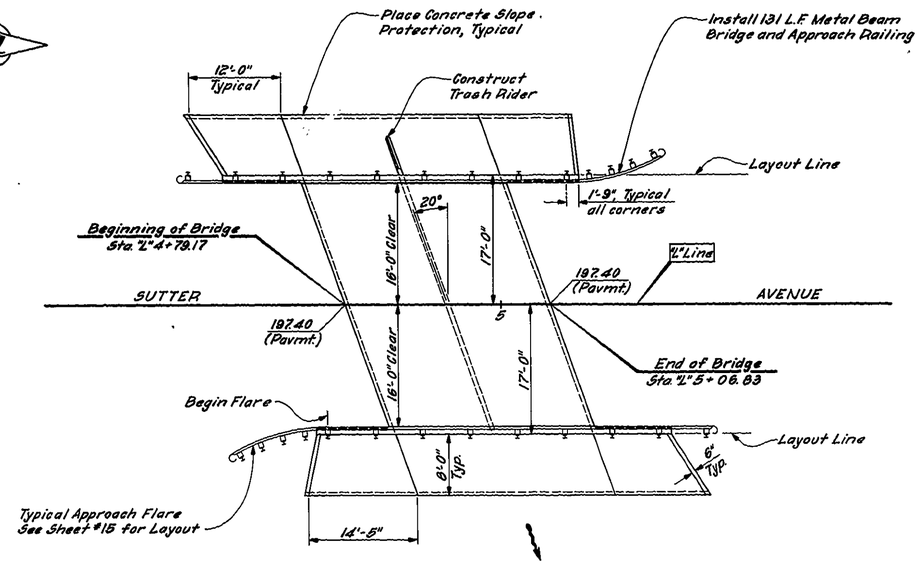
Compiled By CARTWRIGHT Aerial Surveys Inc.

18—21

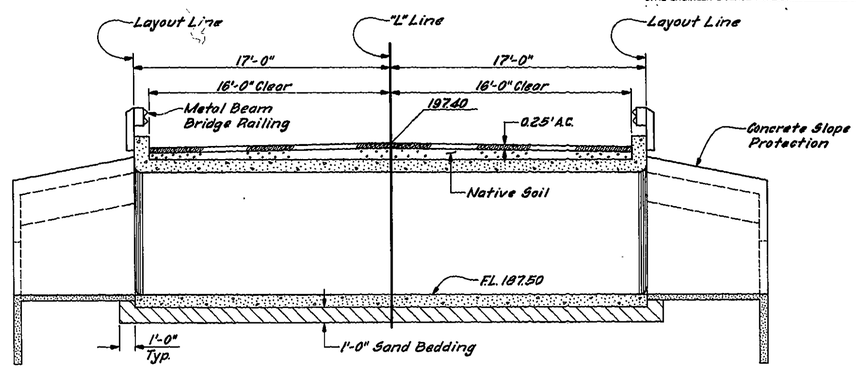
REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

COUNTY ROAD No.	SHEET No.	TOTAL SHEETS
W2250	13	15

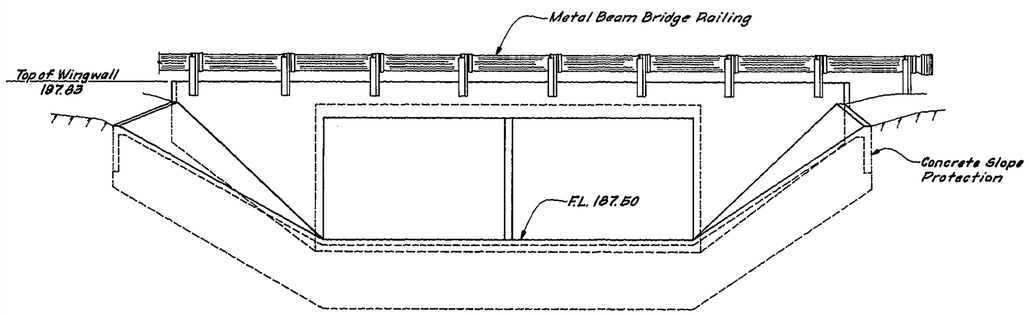
APPROVED [signature]
FRESNO COUNTY ASS'T. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 8076



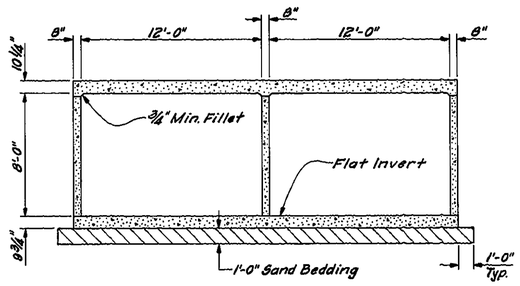
PLAN
Scale: 1/8"=1'-0"



TYPICAL SECTION
NORMAL TO "L" LINE



ELEVATION
Scale: 1/4"=1'-0"



TYPICAL SECTION
NORMAL TO BOX WALLS

NOTES:
1. See Sheet #14 for Trash Rider, Wingwall, and Slope Protection Details.
2. See Sheet #15 for Railing Details.

AS BUILT PLANS
Corrections by John A. Woods
Date 12-9-74

COUNTY OF FRESNO — CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

ZAPATO CHINO CREEK BRIDGE
on Sutter Ave.
CONSTRUCTION DETAILS

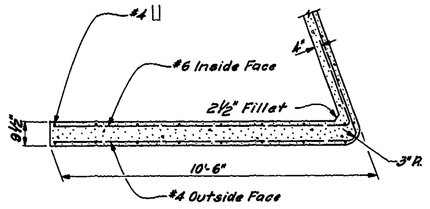
DESIGNED: BG	DATE: 5-74	SCALE	DRAWING NO.
DRAWN: LEE	5-74	As Shown	B310-13
CHECKED:			
APPROVAL RECOMMENDED: [signature] PROJ. ENGINEER		C.E. LICENSE NO. 18419	
REVISION			

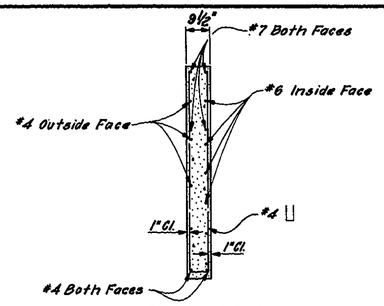
18—21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

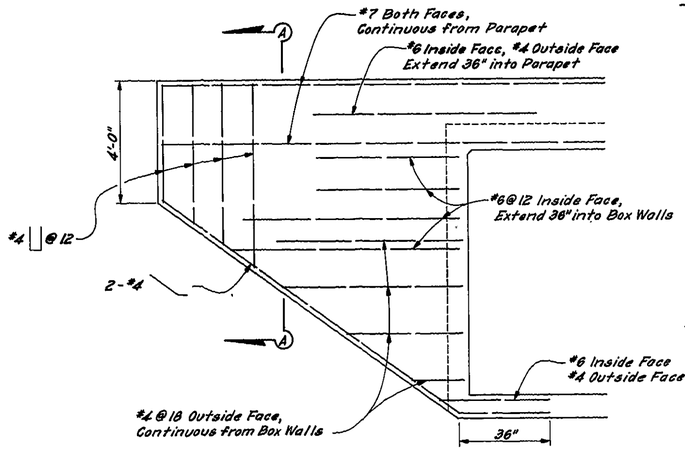
COUNTY ROAD NO.	SHEET NO.	TOTAL SHEETS
W2250	14	15

APPROVED: [signature]
FRESNO COUNTY ASST. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076

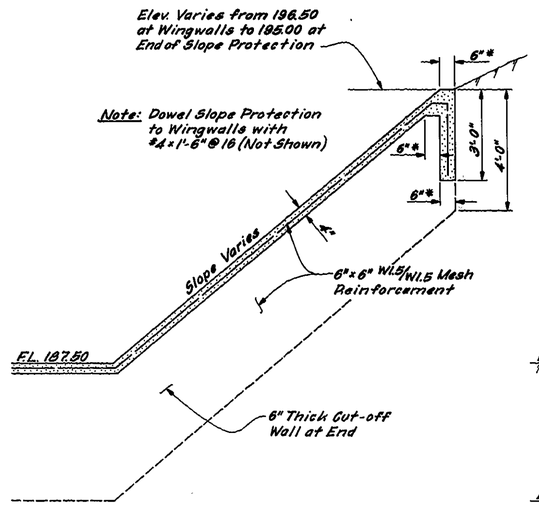




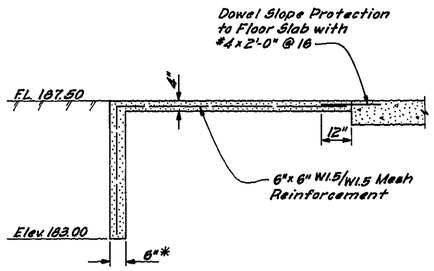
SECTION A-A



WINGWALL DETAILS
Scale: ½"=1'-0"

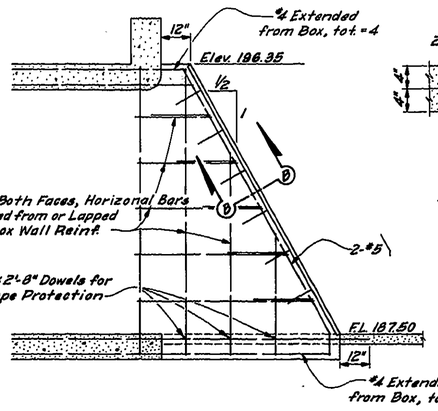


CHANNEL BANKS

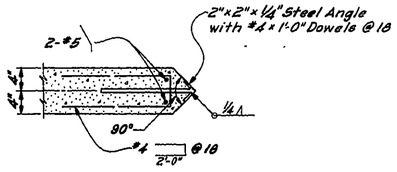


CHANNEL BOTTOM

CONCRETE SLOPE PROTECTION
No Scale
* Thickness Varies, Not Less Than 6"



TRASH RIDER DETAIL
Scale: ½"=1'-0"



SECTION B-B
No Scale

AS BUILT PLANS
Corrections by John L. Woods
Date 12-9-74

COUNTY OF FRESNO — CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

ZAPATO CHINO CREEK BRIDGE
on Sutter Ave.
CONSTRUCTION DETAILS

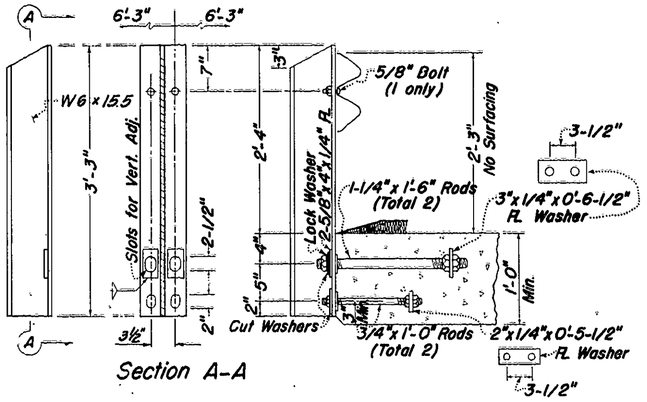
DESIGNED BG	DATE 5-74	SCALE	DRAWING NO.
DRAWN LEB		As Shown	5310-14
CHECKED			
APPROVAL RECOMMENDED [signature] DESIGN ENGINEER		18419 C. E. LICENSE NO.	
REVISION			

18-21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

COUNTY ROAD No.	SHEET No.	TOTAL SHEETS
M3700 W2250	15	15

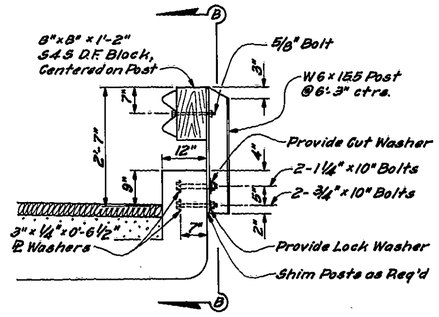
APPROVED: FRESNO COUNTY ASST. DIRECTOR OF PUBLIC WORKS
CIVIL ENGINEER LICENSE NO. 9076



Section A-A

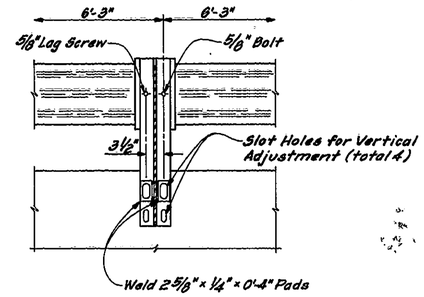
RAIL POST FOR THIN SLABS

No Scale



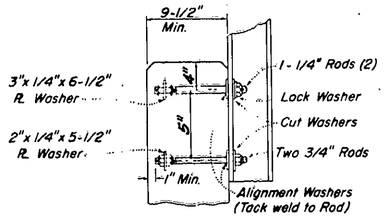
RAIL POST ON PARAPET

Scale: 3/4"=1'-0"



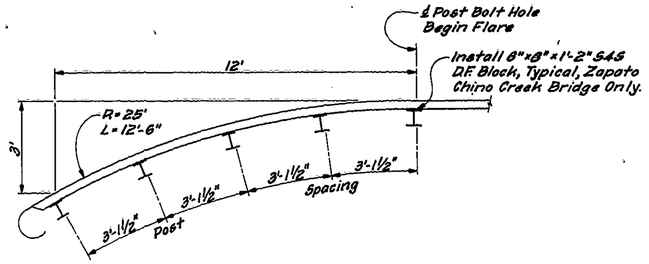
SECTION B-B

Scale: 1"=1'-0"



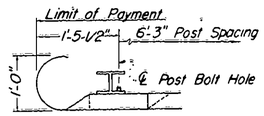
RAIL POST ON WALL

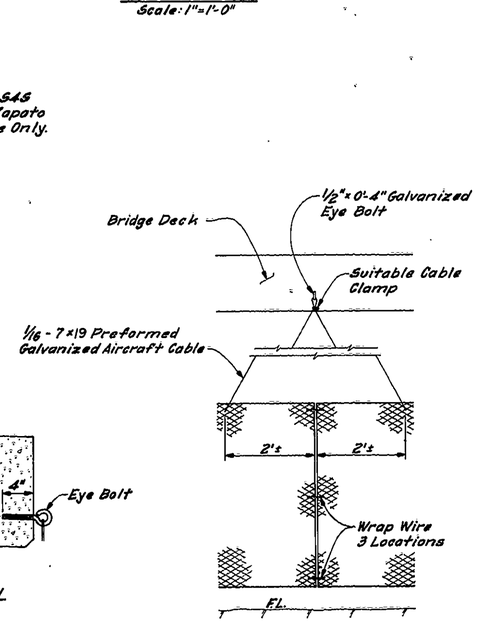
No Scale



TYPICAL APPROACH FLARE LAYOUT

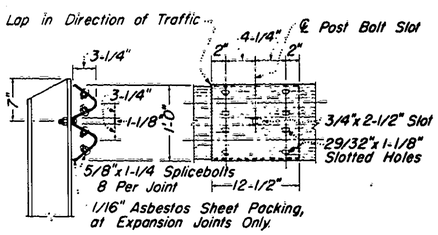
No Scale





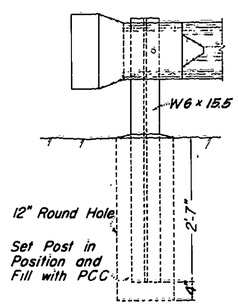
EXPANDED METAL FENCE DETAILS

No Scale



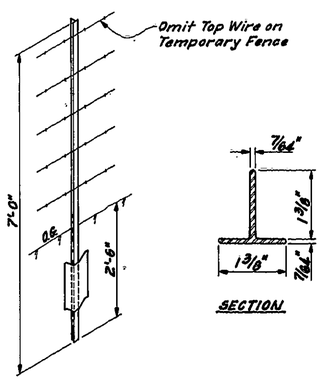
RAIL SPLICE

No Scale



POST ON SHOULDER

No Scale



METAL FENCE POST

TYPE BW FENCE

No Scale

John A. Worde
12-9-74

COUNTY OF FRESNO — CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
HIGHWAYS AND BRIDGES

5 STRUCTURES SOUTHWEST
RAILING AND FENCE DETAILS

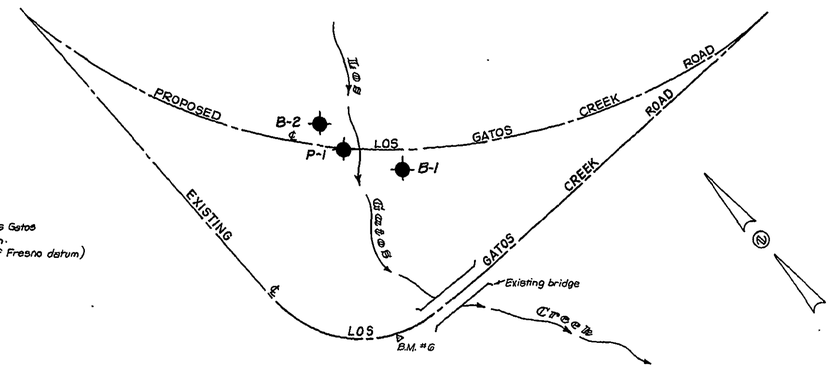
DESIGNED	DATE	SCALE	DRAWING NO.
DRAWN:	5-74	As Shown	5310-15
CHECKED:	5-74		
APPROVAL RECOMMENDED:	PROJECT ENGINEER		C. E. LICENSE NO. 10418

REVISION

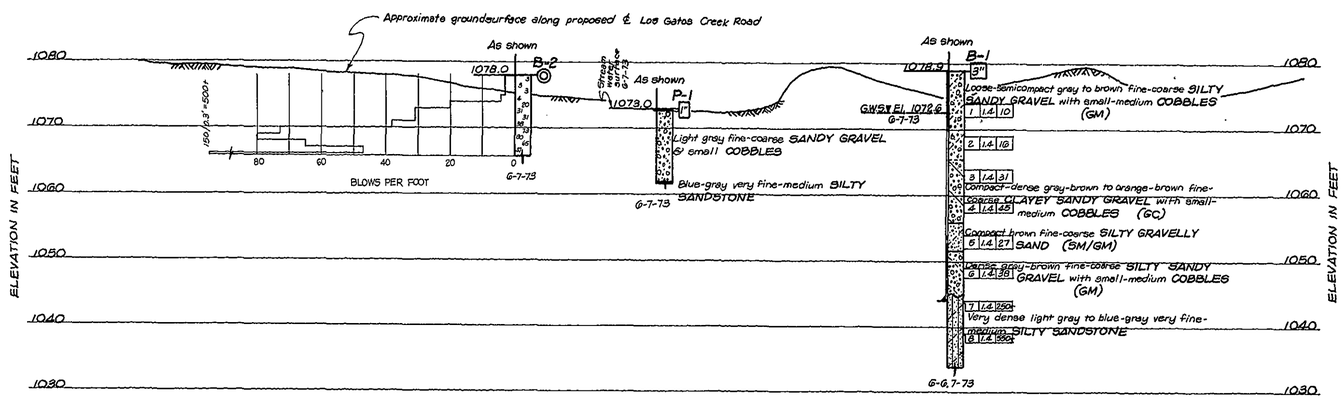
18-21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

-NOTE-
B.M. #6 Point on pavement, existing Los Gatos Creek Road, location as shown. Elevation 1080.34 (County of Fresno datum)



PLAN
Scale: 1"=50'

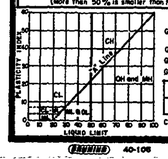


PROFILE
Scale:
Horizontal 1"=10'
Vertical 1"=10'

LEGEND OF EARTH MATERIALS

UNIFIED SOIL CLASSIFICATION

Pt	OH	CH	MH	OL	CL	ML	SC	SM	SP	SW	GC	GM	GP	GW
Highly organic soils	Silts and clays Liquid limit greater than 50			Silts and clays Liquid limit less than 50			Sands with fines >12% fines		Clean sands <5% fines		Gravels with fines >12% fines		Clean gravels <5% fines	
Fine grained soils (More than 50% is smaller than Nº 200 sieve)							Sands - more than 50% of coarse fraction is smaller than Nº 4 sieve.				Gravels - more than 50% of coarse fraction is larger than Nº 4 sieve.			
							Coarse grained soils (More than 50% is larger than Nº 200 sieve)							



LABORATORY CLASSIFICATION CRITERIA

GW and SW - $C_u = \frac{D_{60}}{D_{10}}$ greater than 4 for GW & 6 for SW; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 & 3.

GP and SP - Clean gravel or sand not meeting requirements for GW and SW.

GM and SM - Atterberg limits below "A" line or P.I. less than 4.

GC and SC - Atterberg limits above "A" line with P.I. greater than 7.

Fines (silt or clay)	Fine sand	Medium sand	Coarse sand	Fine gravel	Coarse gravel	Cobbles	Boulders
Sieve sizes	#200	#40	#10	#4	3/4"	3"	12"

Classification of earth materials shown on this sheet is based on field inspection and should not be construed to imply laboratory analysis unless so stated.

MATERIAL SYMBOLS

Gravel
Sand
Silt
Clay
Sandy clay or clayey sand
Sandy silt or silty sand
Silty clay or clayey silt
Peat or organic matter
Fill material
Shale
Sandstone
Limestone
Metamorphic rock
Igneous rock

CONSISTENCY CLASSIFICATION FOR SOILS

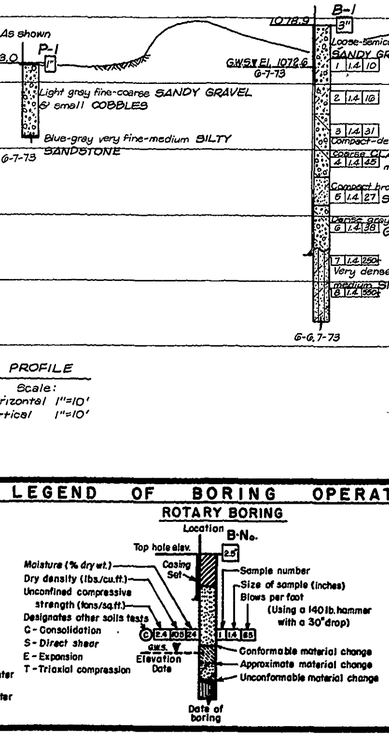
According to the Standard Penetration Test

Nº of blows	Granular	Cohesive
0-5	Very loose	Very soft
6-10	Loose	Soft
11-20	Semicompact	Stiff
21-35	Compact	Very stiff
36-70	Dense	Hard
>70	Very dense	Very hard

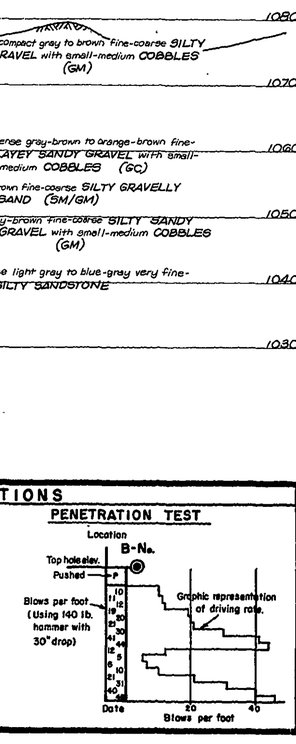
LEGEND OF BORING OPERATIONS

Plan of any boring
Rotary boring
Diamond core boring
Auger boring
Sample boring
Jet boring
Test pit
2¼" Cone penetrometer
2½" Cone penetrometer

ROTARY BORING



PENETRATION TEST



MOORE & TABER NORTHERN CALIFORNIA CONSULTING ENGINEERS AND GEOLOGISTS

APPROVED H. R. Taber 12 Sep 73
REGISTERED CIVIL ENGINEER No. 9165

JOB No. 973/22F-4

COUNTY OF FRESNO

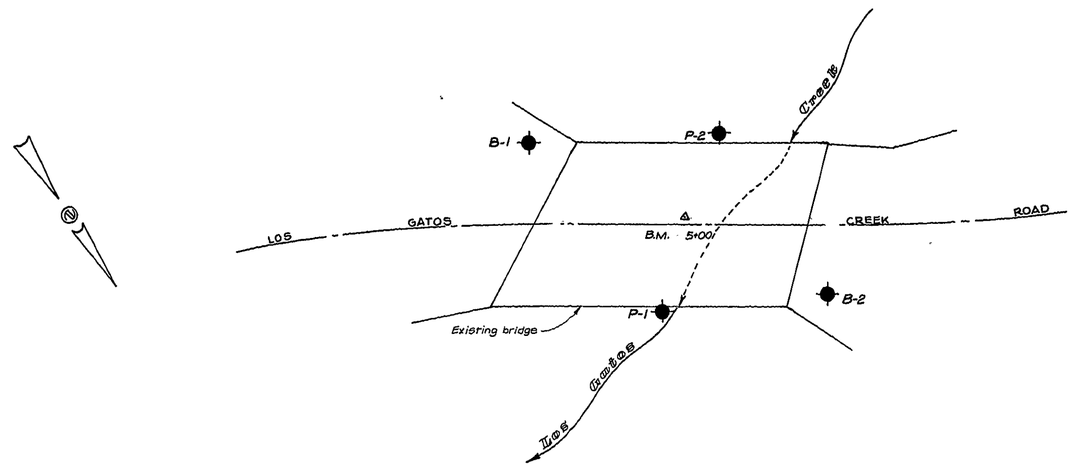
LOS GATOS CREEK ROAD
-BRIDGE 5.5 miles west
of Derrick Avenue

LOG OF TEST BORINGS

Scale As shown	Date June 1973	By RFE / Check by	Drawing

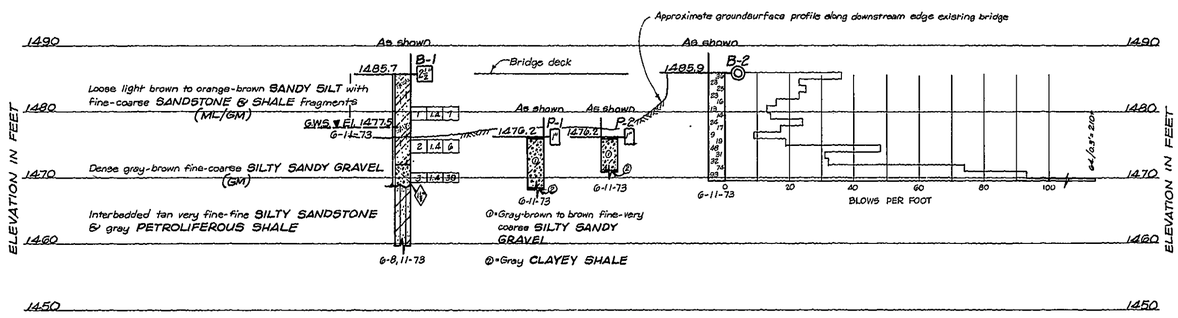
REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

18—21



-NOTE-
B.M. Photogrammetric control point, nail & shiner, Sta. 5+00, Elevation 1485.80 (County of Fresno datum)

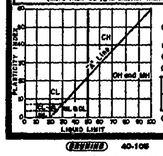
PLAN
PROFILE



LEGEND OF EARTH MATERIALS

UNIFIED SOIL CLASSIFICATION

Pt	OH	CH	MH	OL	CL	ML	SC	SM	SP	SW	GC	GM	GP	GW
Highly organic soils	Silts and clays Liquid limit greater than 50			Silts and clays Liquid limit less than 50			Sands with fines >12% fines		Clean sands <5% fines		Gravels with fines >12% fines		Clean gravels <5% fines	
	Fine grained soils (More than 50% is smaller than Nº 200 sieve)						Sands - more than 50% of coarse fraction is smaller than Nº 4 sieve.				Gravels - more than 50% of coarse fraction is larger than Nº 4 sieve.			
							Coarse grained soils (More than 50% is larger than Nº 200 sieve)							



LABORATORY CLASSIFICATION CRITERIA

GW and SW - $C_u = \frac{D_{60}}{D_{10}}$ greater than 4 for GW & 6 for SW; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 & 3.

GP and SP - Clean gravel or sand not meeting requirements for GW and SW.

GM and SM - Atterberg limits below "A" line or P.I. less than 4.

GC and SC - Atterberg limits above "A" line with P.I. greater than 7.

Fines (silt or clay)		Fine sand	Medium sand	Coarse sand	Fine gravel	Coarse gravel	Cobbles	Boulders
Sieve sizes	#200	#40	#10	#4	3/8"	3"	12"	

Classification of earth materials shown on this sheet is based on field inspection and should not be construed to imply laboratory analysis unless so stated.

MATERIAL SYMBOLS

Gravel
Sand
Silt
Clay
Sandy clay or clayey sand
Sandy silt or silty sand
Silty clay or clayey silt
Peat or organic matter
Fill material
Shale
Sandstone
Limestone
Metamorphic rock
Igneous rock

CONSISTENCY CLASSIFICATION FOR SOILS

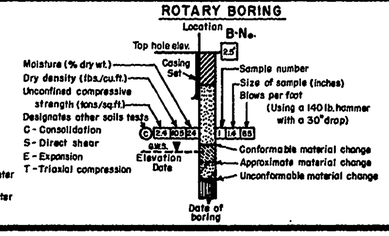
According to the Standard Penetration Test

Nº of blows	Granular	Cohesive
0-5	Very loose	Very soft
6-10	Loose	Soft
11-20	Semicompact	Stiff
21-35	Compact	Very stiff
36-70	Dense	Hard
>70	Very dense	Very hard

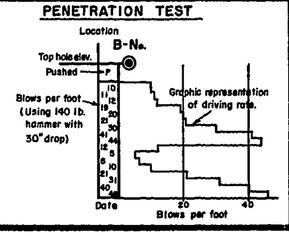
LEGEND OF BORING OPERATIONS

Plan of any boring
Rotary boring
Diamond core boring
Auger boring
Sample boring
Jet boring
Test pit
2¼" Cone penetrometer
2½" Cone penetrometer

ROTARY BORING



PENETRATION TEST



MOORE & TABER NORTHERN CALIFORNIA
CONSULTING ENGINEERS AND GEOLOGISTS

APPROVED H. R. Taber 26 Sep 73
REGISTERED CIVIL ENGINEER No. 9165

JOB No. 973/22F-5

COUNTY OF FRESNO

LOS GATOS CREEK ROAD
-BRIDGE 11.4 miles west of Derrick Avenue

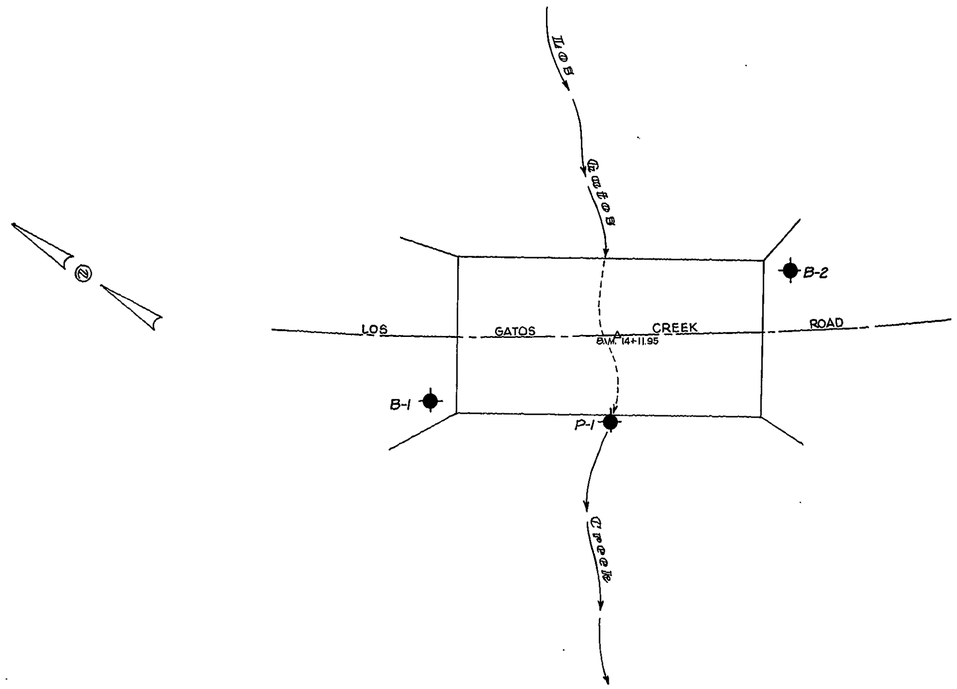
LOG OF TEST BORINGS

Scale 1" = 10'	Date June 1973	By RFE	Drawing
		Check by	

40-108

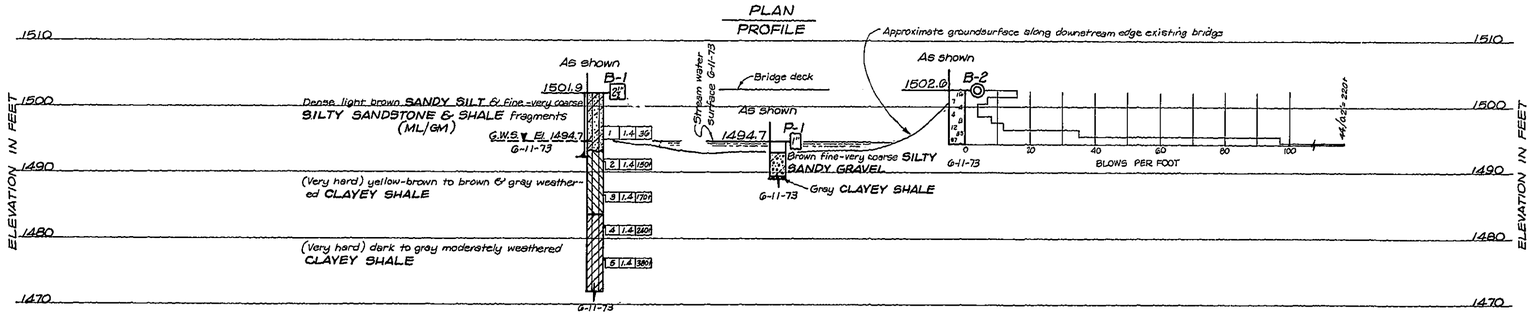
18—21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN



-NOTE-
B.M. Photogrammetric control point, nail and shiner, Sta 14+11.95. Elevation 1502.60 (County of Fresno datum)

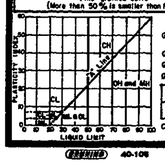
PLAN
PROFILE



LEGEND OF EARTH MATERIALS

UNIFIED SOIL CLASSIFICATION

Pt	OH	CH	MH	OL	CL	ML	SC	SM	SP	SW	GC	GM	GP	GW
Highly organic soils	Silts and clays Liquid limit greater than 50			Silts and clays Liquid limit less than 50			Sands with fines >12% fines		Clean sands <5% fines		Gravels with fines >12% fines		Clean gravels <5% fines	
	Fine grained soils (More than 50% is smaller than Nº 200 sieve)						Sands - more than 50% of coarse fraction is smaller than Nº 4 sieve.				Gravels - more than 50% of coarse fraction is larger than Nº 4 sieve.			
							Coarse grained soils (More than 50% is larger than Nº 200 sieve)							



LABORATORY CLASSIFICATION CRITERIA

GW and SW - $C_u = \frac{D_{60}}{D_{10}}$ greater than 4 for GW & 6 for SW; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 & 3.

GP and SP - Clean gravel or sand not meeting requirements for GW and SW.

GM and SM - Atterberg limits below "A" line or P.I. less than 4.

GC and SC - Atterberg limits above "A" line with P.I. greater than 7.

Fines (silt or clay)	Fine sand	Medium sand	Coarse sand	Fine gravel	Coarse gravel	Cobbles	Boulders
Sieve sizes	#200	#40	#10	#4	3/4"	3"	12"

Classification of earth materials shown on this sheet is based on field inspection and should not be construed to imply laboratory analysis unless so stated.

MATERIAL SYMBOLS

Gravel
Sand
Silt
Clay
Sandy clay or clayey sand
Sandy silt or silty sand
Silty clay or clayey silt
Peat or organic matter
Fill material
Shale
Sandstone
Limestone
Metamorphic rock
Igneous rock

CONSISTENCY CLASSIFICATION FOR SOILS

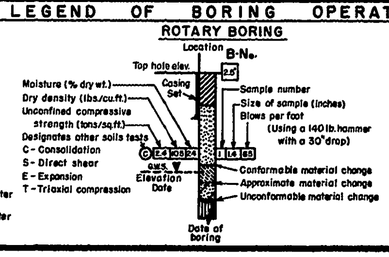
According to the Standard Penetration Test

Nº of blows	Granular	Cohesive
0-5	Very loose	Very soft
6-10	Loose	Soft
11-20	Semicompact	Stiff
21-35	Compact	Very stiff
36-70	Dense	Hard
>70	Very dense	Very hard

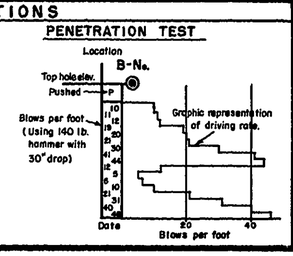
LEGEND OF BORING OPERATIONS

Plan of any boring
Rotary boring
Diamond core boring
Auger boring
Sample boring
Jet boring
Test pit
2¼" Cone penetrometer
2½" Cone penetrometer

ROTARY BORING



PENETRATION TEST



MOORE & TABER NORTHERN CALIFORNIA
CONSULTING ENGINEERS AND GEOLOGISTS

APPROVED H.R. Taber 7 Dec 73
REGISTERED CIVIL ENGINEER No. 9165

JOB No. 373/22F-6

COUNTY OF FRESNO

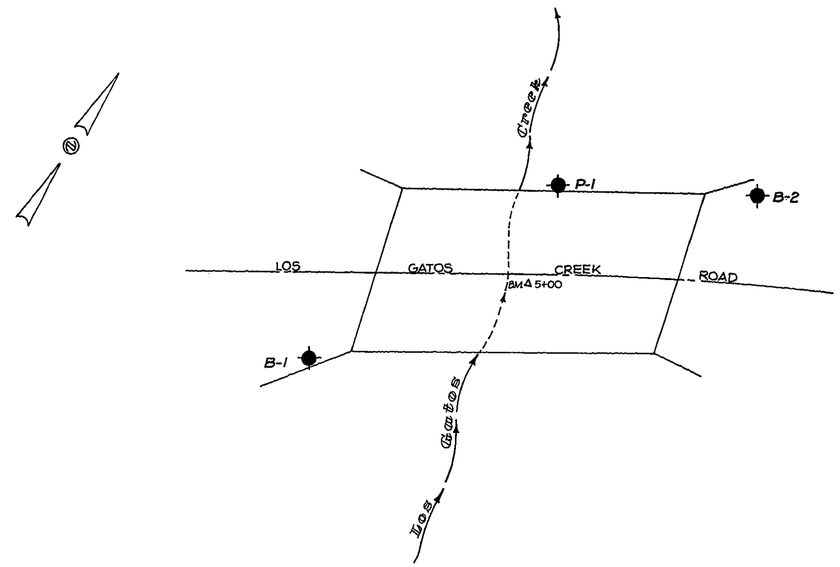
LOS GATOS CREEK ROAD
-BRIDGE 11.31 miles west
of Derrick Avenue

LOG OF TEST BORINGS

Scale 1" = 10'	Date June 1973	By RFE	Drawing
		Check by	

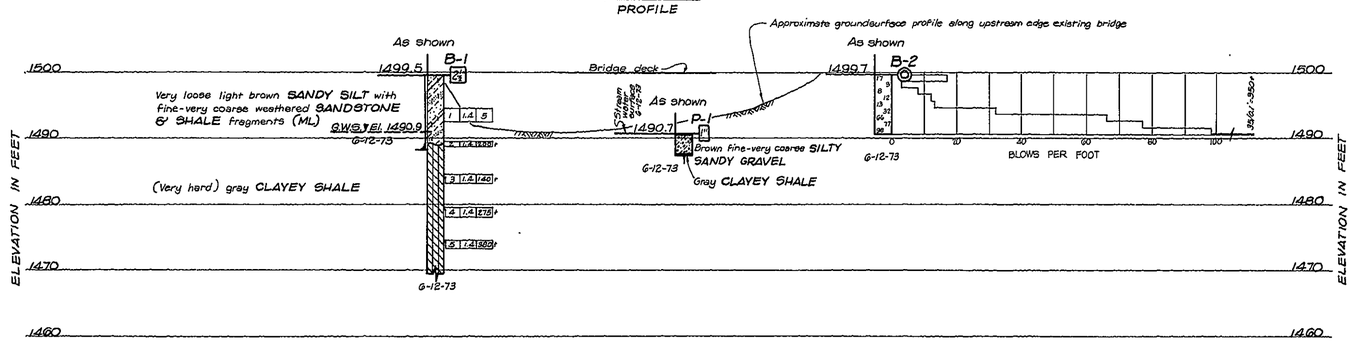
18—21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN



-NOTE-
B.M. Photogrammetric control point, nail & shiner, Sta. 5+00. Elevation 1499.66. (County of Fresno datum)

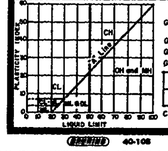
PLAN
PROFILE



LEGEND OF EARTH MATERIALS

UNIFIED SOIL CLASSIFICATION

Pt	OH	CH	MH	OL	CL	ML	SC	SM	SP	SW	GC	GM	GP	GW
Highly organic soils	Silts and clays Liquid limit greater than 50			Silts and clays Liquid limit less than 50			Sands with fines >12% fines		Clean sands <5% fines		Gravels with fines >12% fines		Clean gravels <5% fines	
							Sands - more than 50% of coarse fraction is smaller than No 4 sieve.				Gravels - more than 50% of coarse fraction is larger than No 4 sieve.			
	Fine grained soils (More than 50% is smaller than No 200 sieve)						Coarse grained soils (More than 50% is larger than No 200 sieve)							



LABORATORY CLASSIFICATION CRITERIA

GW and SW - $C_u = \frac{D_{60}}{D_{10}}$ greater than 4 for GW & 6 for SW; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 & 3.

GP and SP - Clean gravel or sand not meeting requirements for GW and SW.

GM and SM - Atterberg limits below "A" line or P.I. less than 4.

GC and SC - Atterberg limits above "A" line with P.I. greater than 7.

Fines (silt or clay)	Fine sand	Medium sand	Coarse sand	Fine gravel	Coarse gravel	Cobbles	Boulders
Sieve sizes	#200	#40	#10	#4	3/4"	3"	12"

Classification of earth materials shown on this sheet is based on field inspection and should not be construed to imply laboratory analysis unless so stated.

MATERIAL SYMBOLS

Gravel
Sand
Silt
Clay
Sandy clay or clayey sand
Sandy silt or silty sand
Silty clay or clayey silt
Peat or organic matter
Fill material
Shale
Sandstone
Limestone
Metamorphic rock
Igneous rock

CONSISTENCY CLASSIFICATION FOR SOILS

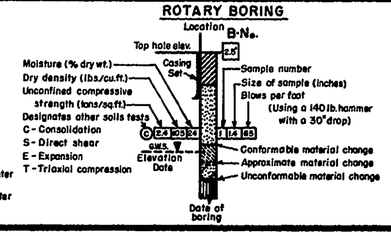
According to the Standard Penetration Test

Nº of blows	Granular	Cohesive
0-5	Very loose	Very soft
6-10	Loose	Soft
11-20	Semicompact	Stiff
21-35	Compact	Very stiff
36-70	Dense	Hard
>70	Very dense	Very hard

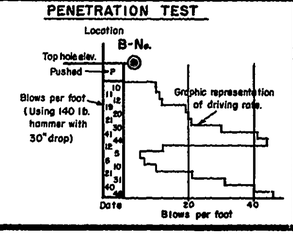
LEGEND OF BORING OPERATIONS

Plan of any boring
Rotary boring
Diamond core boring
Auger boring
Sample boring
Jet boring
Test pit
2¼" Cone penetrometer
2½" Cone penetrometer

ROTARY BORING



PENETRATION TEST



MOORE & TABER NORTHERN CALIFORNIA
CONSULTING ENGINEERS AND GEOLOGISTS

APPROVED [illegible] 26 Nov 73
REGISTERED CIVIL ENGINEER No. 9162

JOB No. 373/22F-7

COUNTY OF FRESNO

LOS GATOS CREEK ROAD
-BRIDGE 11.95 miles west
of Derrick Avenue

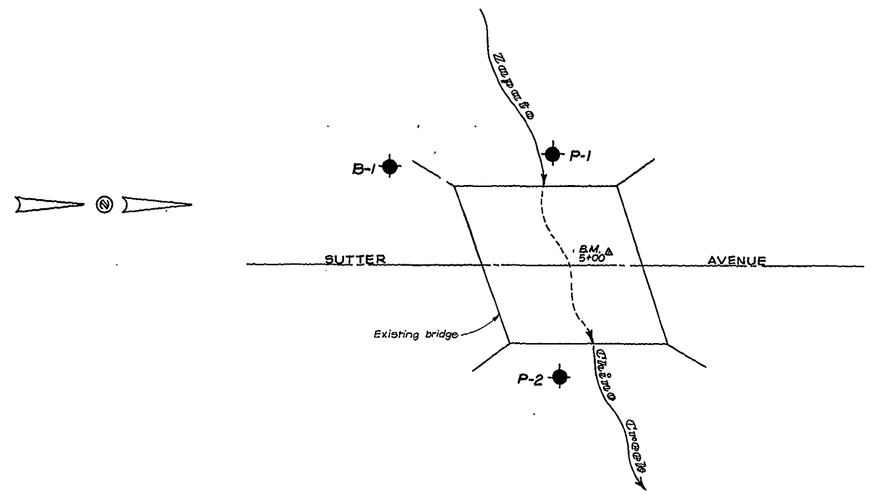
LOG OF TEST BORINGS

Scale 1" = 10'	Date June 1973	By RFE / Check by	Drawing

40-108

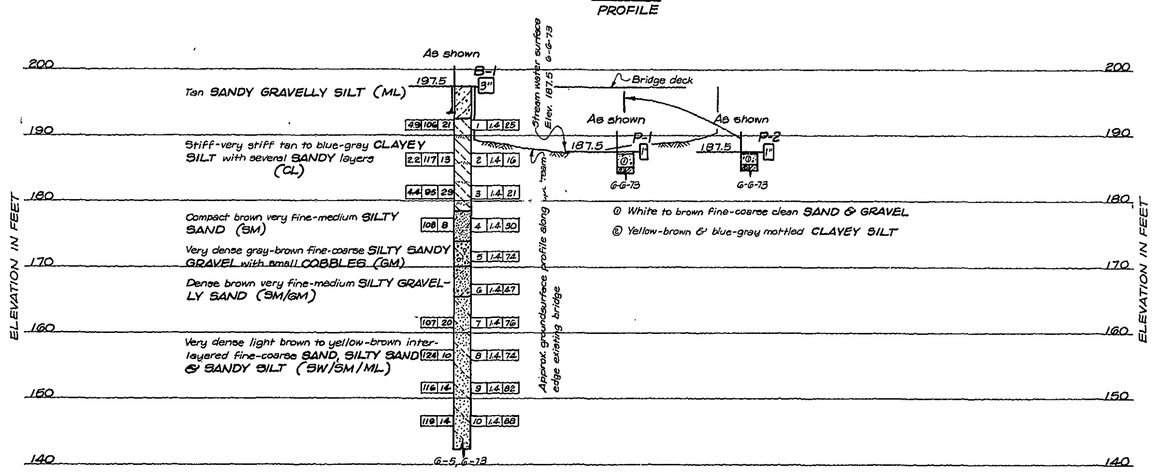
18—21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN



-NOTE-
B.M. Nail and shiner, 5+00, Elevation 197.34 (County of Fresno datum)

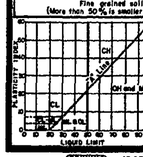
PLAN
PROFILE



LEGEND OF EARTH MATERIALS

UNIFIED SOIL CLASSIFICATION

PI	OH	CH	MH	OL	CL	ML	SC	SM	SP	SW	GC	GM	GP	GW
Highly organic soils	Silts and clays Liquid limit greater than 50			Silts and clays Liquid limit less than 50			Sands with fines >12% fines		Clean sands <5% fines		Gravels with fines >12% fines		Clean gravels <5% fines	
Fine grained soils (More than 50% is smaller than Nº 200 sieve)							Sands - more than 50% of coarse fraction is smaller than Nº 4 sieve.				Gravels - more than 50% of coarse fraction is larger than Nº 4 sieve.			
Coarse grained soils (More than 50% is larger than Nº 200 sieve)														



LABORATORY CLASSIFICATION CRITERIA

GW and SW - $C_u = \frac{D_{60}}{D_{10}}$ greater than 4 for GW & 6 for SW; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 & 3.

GP and SP - Clean gravel or sand not meeting requirements for GW and SW.

GM and SM - Atterberg limits below "A" line or P.I. less than 4.

GC and SC - Atterberg limits above "A" line with P.I. greater than 7.

Fines (silt or clay)	Fine sand	Medium sand	Coarse sand	Fine gravel	Coarse gravel	Cobbles	Boulders
Sieve sizes	#200	#40	#10	#4	3/4"	3"	12"

Classification of earth materials shown on this sheet is based on field inspection and should not be construed to imply laboratory analysis unless so stated.

MATERIAL SYMBOLS

Gravel
Sand
Silt
Clay
Sandy clay or clayey sand
Sandy silt or silty sand
Silty clay or clayey silt
Peat or organic matter
Fill material
Shale
Sandstone
Limestone
Metamorphic rock
Igneous rock

CONSISTENCY CLASSIFICATION FOR SOILS

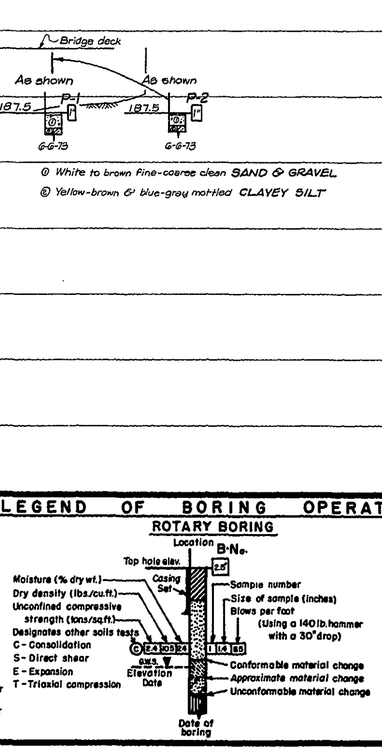
According to the Standard Penetration Test

Nº of blows	Granular	Cohesive
0-5	Very loose	Very soft
6-10	Loose	Soft
11-20	Semicompact	Stiff
21-35	Compact	Very stiff
36-70	Dense	Hard
>70	Very dense	Very hard

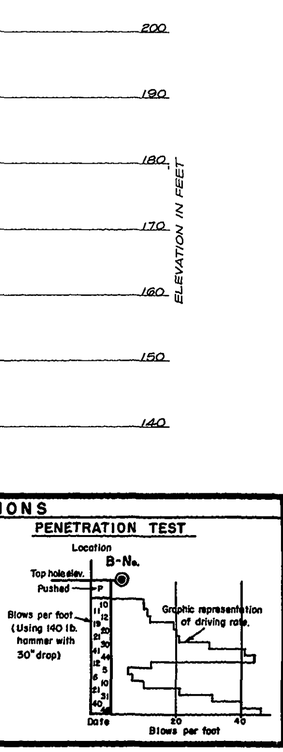
LEGEND OF BORING OPERATIONS

Plan of any boring
Rotary boring
Diamond core boring
Auger boring
Sample boring
Jet boring
Test pit
2¼" Cone penetrometer
2½" Cone penetrometer

ROTARY BORING



PENETRATION TEST



MOORE & TABER NORTHERN CALIFORNIA
CONSULTING ENGINEERS AND GEOLOGISTS

APPROVED H. R. Taber 11 Sep 73
REGISTERED CIVIL ENGINEER No. 9165

JOB No. 973/22F-3

COUNTY OF FRESNO

SUTTER AVENUE BRIDGE AT ZAPATO CHINO CREEK

LOG OF TEST BORINGS

Scale 1"=10'	Date June 1973	By RFE	Drawing
		Check by	

18—21

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN