

Heavy Bk #45

I-5

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			*DELETED

5,7,8,9,10,11,14,15,18,21,
22,23,24,31 Thru 36,38,
40,49 Thru 52,57,58,59,
67 Thru 71, 81,84, 341,
342,344 Thru 351

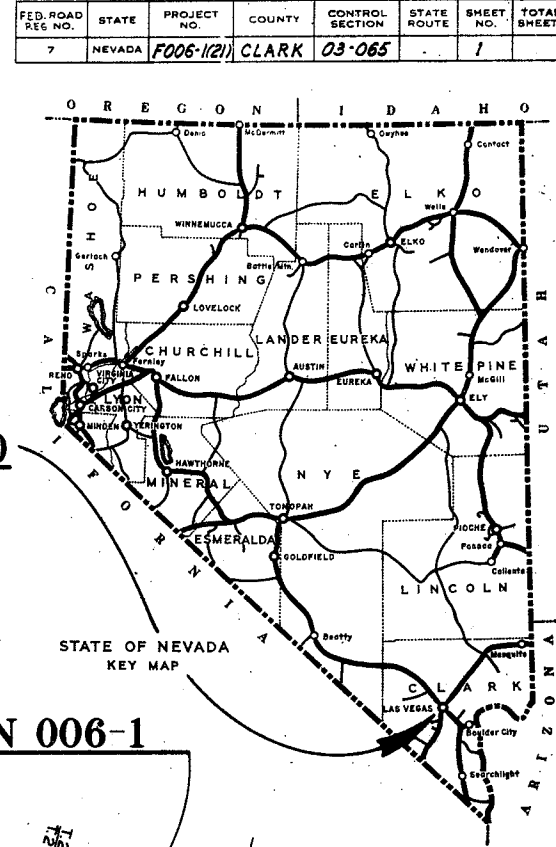
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LOCATION SKETCH
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ESTIMATE OF QUANTITIES

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DELETED	
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DELETED	
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STRUCTURE LISTS	

STATE OF NEVADA DEPARTMENT OF HIGHWAYS 1259 PLAN AND PROFILE OF PROPOSED STATE HIGHWAY CLARK COUNTY

DESIGN DESIGNATION	
ADT (1967) - NEW FACILITY	
ADT (1987) - 162,000	
DHV	7.5 %
D	51.5 %
T	5 %
V	60 mph

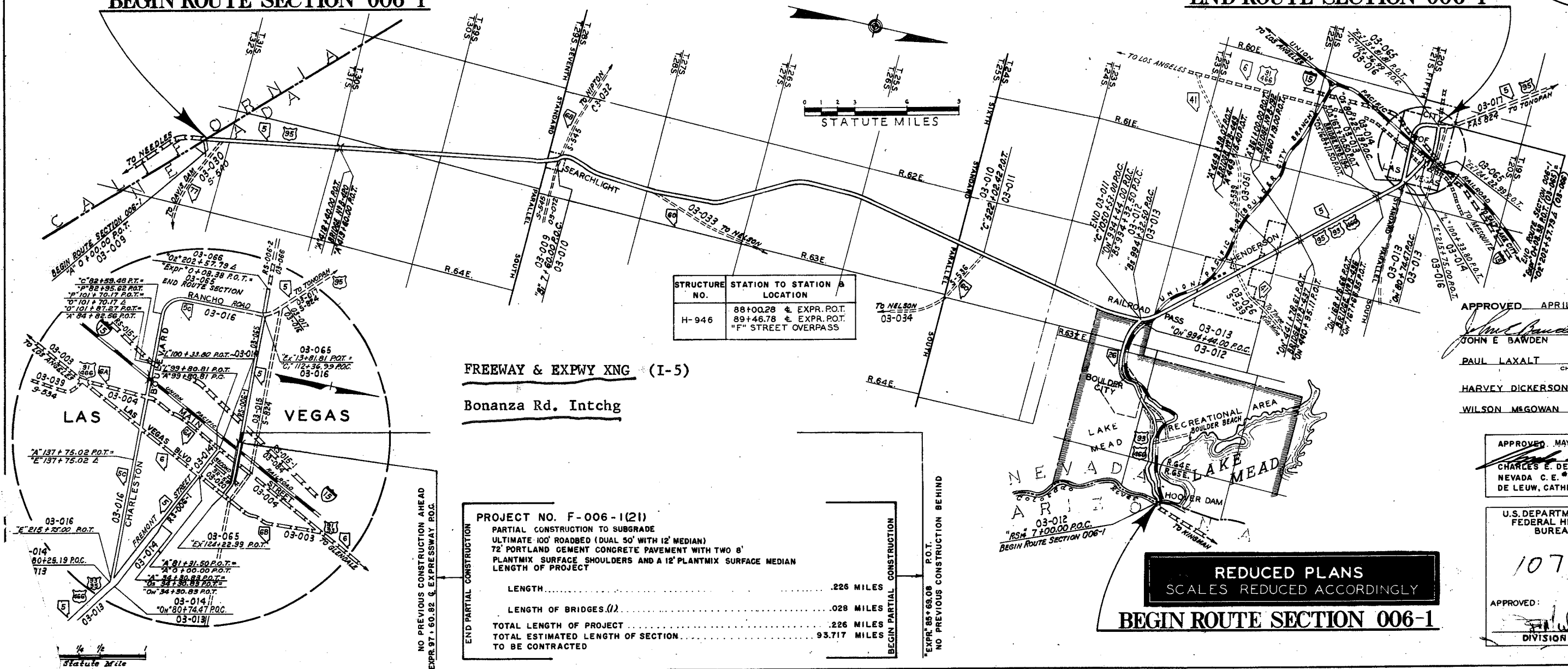


CALIF.-NEV. STATE LINE (SOUTH OF SEARCHLIGHT) TO LAS VEGAS, AND ARIZ.-NEV. STATE LINE (HOOVER DAM) TO RAILROAD PASS

PROJECT F-006-1 (21)

BEGIN ROUTE SECTION 006-1

END ROUTE SECTION 006-1



STRUCTURE NO.	STATION TO STATION & LOCATION
H-946	88+00.28 & EXPR. P.O.T. 89+46.78 & EXPR. P.O.T. "F" STREET OVERPASS

FREEWAY & EXPWY XNG (I-5)
Bonanza Rd. Intchg

PROJECT NO. F-006-1(21)	
PARTIAL CONSTRUCTION TO SUBGRADE	
ULTIMATE 100' ROADBED (DUAL 50' WITH 12' MEDIAN)	
72" PORTLAND CEMENT CONCRETE PAVEMENT WITH TWO 6"	
PLANTMIX SURFACE SHOULDERS AND A 12" PLANTMIX SURFACE MEDIAN	
LENGTH OF PROJECT	
LENGTH	226 MILES
LENGTH OF BRIDGES (1)	0.28 MILES
TOTAL LENGTH OF PROJECT	226 MILES
TOTAL ESTIMATED LENGTH OF SECTION TO BE CONTRACTED	93.717 MILES

APPROVED APRIL 19, 1967:
JOHN E. BAWDEN
STATE HIGHWAY ENGINEER
PAUL LAXALT
CHAIRMAN
HARVEY DICKERSON
WILSON MCGOWAN
BOARD OF DIRECTORS

APPROVED MAY 28, 1965
CHARLES E. DE LEUW
NEVADA C.E. #526
DE LEUW, CATHAR & COMPANY

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS

REDUCED PLANS
SCALES REDUCED ACCORDINGLY
BEGIN ROUTE SECTION 006-1

APPROVED:
DIVISION ENGINEER
DATE

CLV Hwy Bk #45

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RCB BOX CULVERT (SHEETS 1 & 3)	93-101	HI-1-9	DELETED
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GROOVED FINISH SLOPE PAVING	123-140	IE 1-18	STRUCTURE NOS. I 937 N&S INTERSTATE OVER EXPRESSWAY
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	316-321		STANDARD BRIDGE DETAILS
	322-338	J 1-19	DELETED
	339-351	K 1-12	LIGHTING &
	352-355	M 1-4	STRUCTURE LISTS
			DELETED

5,7,8,9,10,11,14,15,18,21,22,23,24,31 Thru 36, 38,40,49 Thru 52,57,58,59,67 Thru 71,81, 84, 341, 342, 344 Thru 351

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

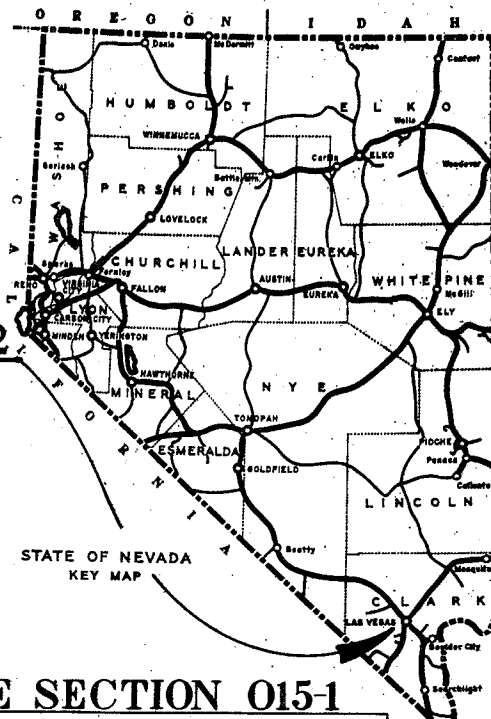
CLARK COUNTY

PROJECT I-015-1 (26)42

CALIF.-NEV. STATE LINE (NEAR JEAN)
TO 23 MILES NORTHEAST OF LAS VEGAS

DESIGN DESIGNATION
ADT (1967) = NEW FACILITY
ADT (1987) = 117,000
DHV = 7.5 %
D = 51.5 %
T = 5 %
V = 60 mph

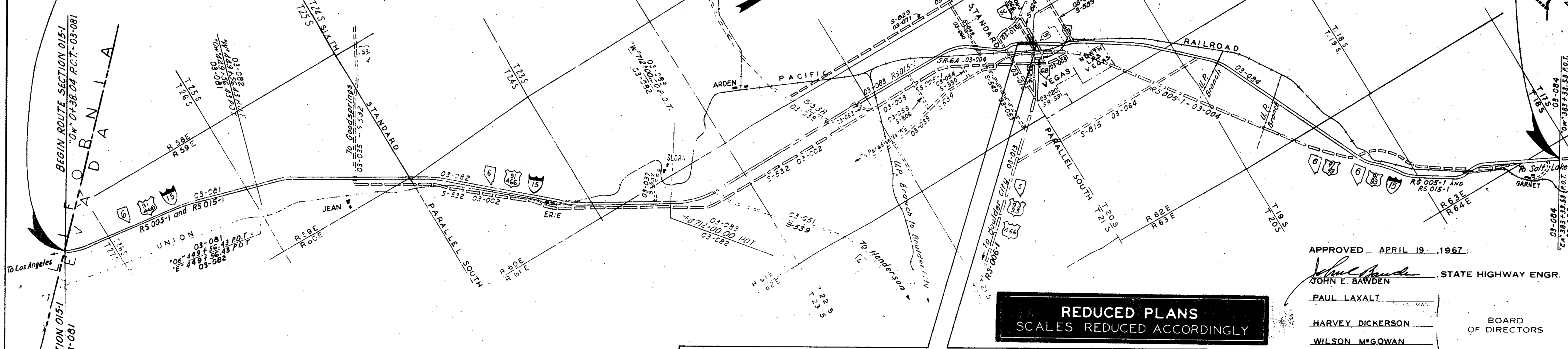
FED. ROAD DIST. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	I-015-1(26)42	CLARK	03-083		2



SHEET NO.	REF. SH.	CONTRACT PLAN SHEETS
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4-8	A-2-6	TYPICAL SECTIONS & CONSTRUCTION DETAILS
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13	B-5	ESTIMATE OF QUANTITIES
14-19	C-1-6	GEOMETRICS, HORIZONTAL & VERTICAL CONTROL PLANS
20-31	D-1-12	CLEARING, FENCING & EXISTING FACILITIES PLANS

BEGIN ROUTE SECTION 015-1

END ROUTE SECTION 015-1



REDUCED PLANS
SCALES REDUCED ACCORDINGLY

STRUCTURE NO.	STATION TO STATION	LOCATION
G-936 N&S	479+81.20 @ F.W.Y. 481+79.06 @ F.W.Y.	TRACK 287 OVERPASS
I-937 N&S	492+47.59 @ F.W.Y. 494+99.86 @ F.W.Y.	INTERSTATE OVER EXPRESSWAY
I-938 N&S	496+45.74 @ F.W.Y. 497+43.74 @ F.W.Y.	RAMP SW UNDER INTERSTATE
I-939	9+15.01 ES 12+22.01 ES	RAMP ES OVER EXPRESSWAY
I-940	9+06.22 SW 10+75.78 SW	RAMP SW OVER EXPRESSWAY
G-941 N&S	502+80.29 @ F.W.Y. 504+45.93 @ F.W.Y.	TRACK 213 OVERPASS

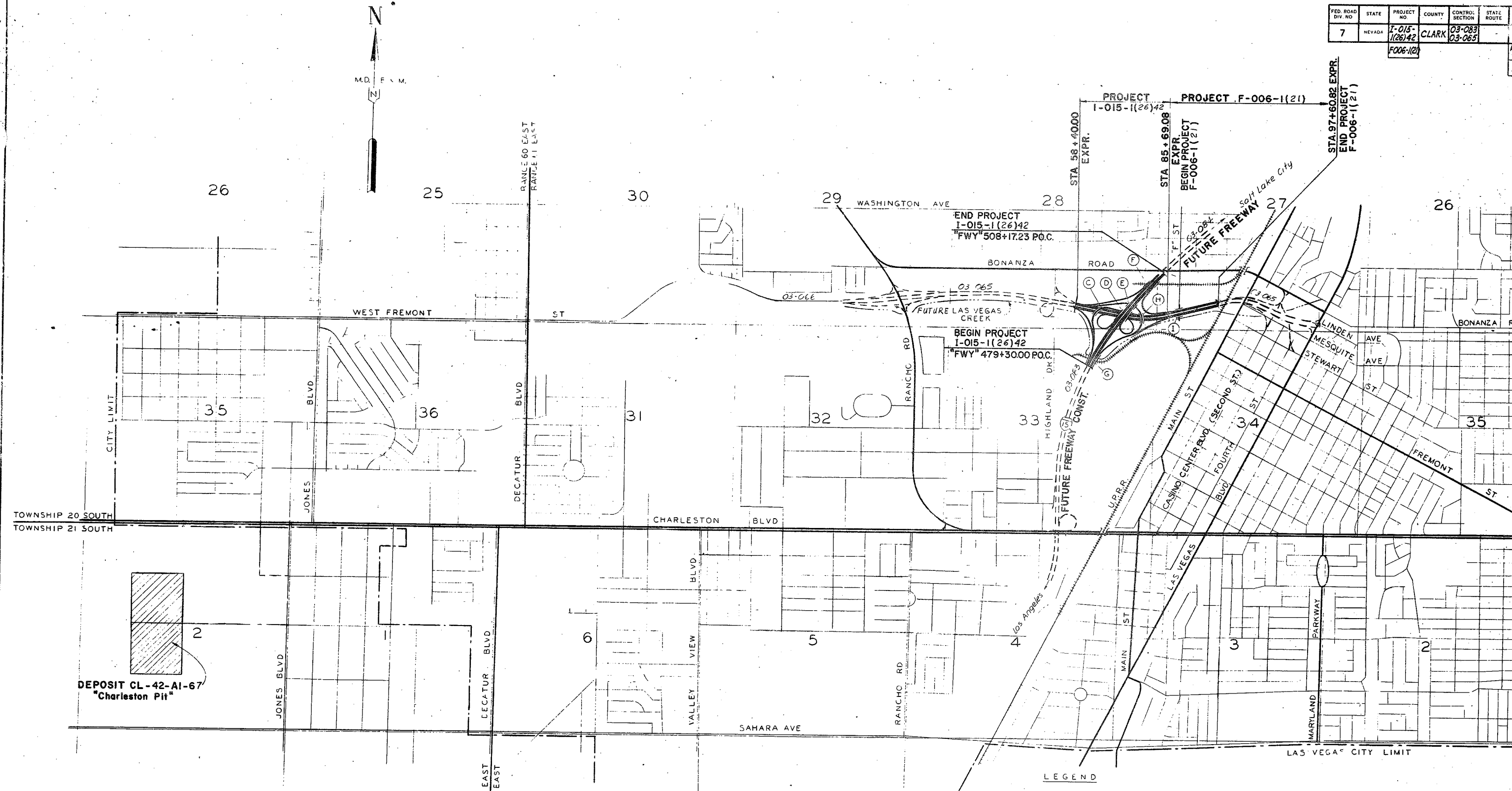
PROJECT I-015-1(26)42
PARTIAL CONSTRUCTION TO SUBGRADE
ULTIMATE 100' ROADBED (DUAL 50')
72' PORTLAND CEMENT CONCRETE PAVEMENT WITH
TWO 10' & TWO 4' PLANTMIX SURFACE SHOULDERS
LENGTH OF PROJECT 5.47 MILES
LENGTH OF BRIDGES AND OVERPASSES (4) 1.35 MILES
TOTAL ESTIMATED LENGTH OF ROUTE 66.725 MILES
TO BE CONTRACTED

APPROVED - APRIL 19, 1967:
JOHN E. BAWDEN, STATE HIGHWAY ENGR.
PAUL LAXALT
HARVEY DICKERSON, BOARD OF DIRECTORS
WILSON MCGOWAN

APPROVED MAY 28, 1965:
CHARLES E. DE LEUW, NEVADA C.E. #526
DE LEUW, CATHER & COMPANY

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS
APPROVED: [Signature] DIVISION ENGINEER

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	S
7	NEVADA	I-015-1(26)42	CLARK	03-083 03-065		
		F006-1(21)				



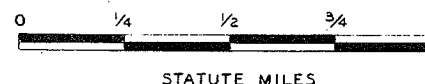
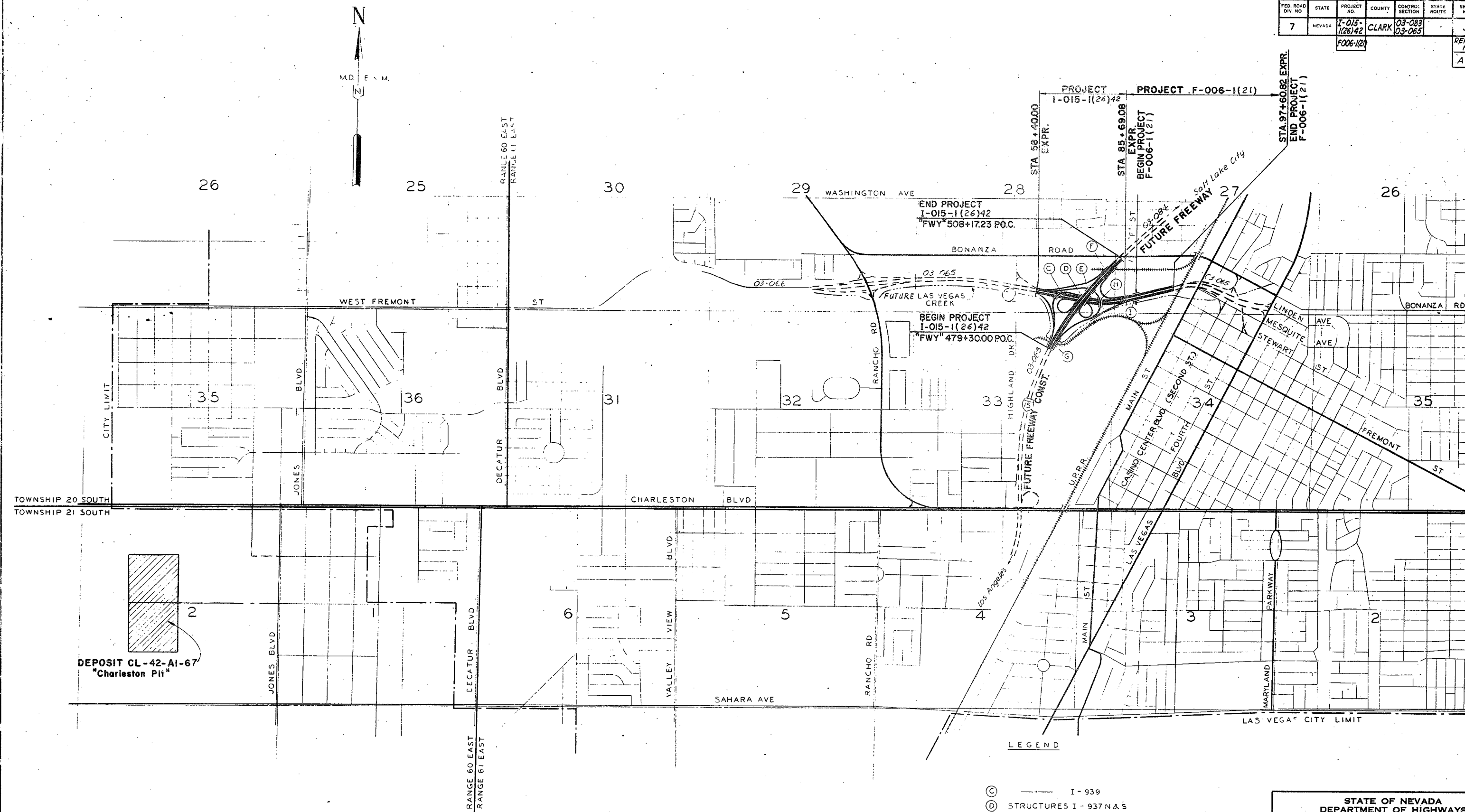
- (C) I-939
- (D) STRUCTURES I-937 N & S
- (E) I-938 N & S
- (F) G-941 N & S
- (G) G-936 N & S
- (H) STRUCTURE I-940
- (I) H-946

**STATE OF NEVADA
DEPARTMENT OF HIGHWAYS**

LOCATION SKETCH

DE LEUW, CATHER & COMPANY ENGINEERS SAN FRANCISCO, CALIFORNIA	SCALE: DESIGNED BY <i>FK</i> DRAWN BY <i>J.K.</i> CHECKED BY <i>J.B.</i> APPROVED BY
---	--

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SH. NO.
7	NEVADA	I-015-1(26)42 F-006-1(21)	CLARK	03-083 03-065		



- LEGEND
- (C) I - 939
 - (D) STRUCTURES I - 937 N & S
 - (E) I - 938 N & S
 - (F) G - 941 N & S
 - (G) G - 936 N & S
 - (H) STRUCTURE I - 940
 - (I) H - 946

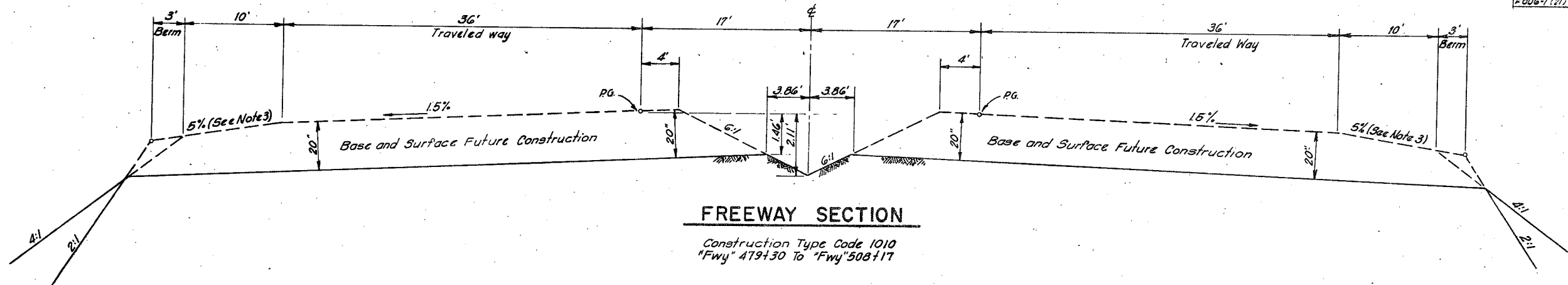
**STATE OF NEVADA
DEPARTMENT OF HIGHWAYS**

LOCATION SKETCH

DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

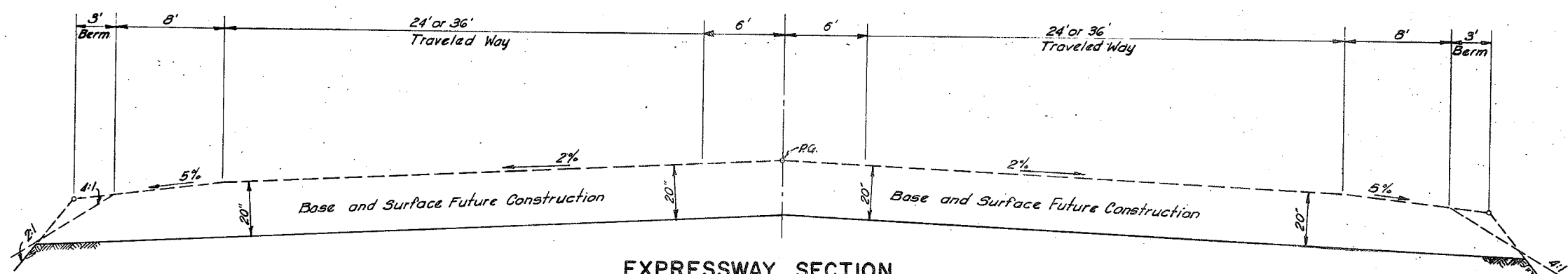
SCALE: _____
DESIGNED BY: *EL*
DRAWN BY: *J.K.*
CHECKED BY: *J.B.*
APPROVED BY: _____

FED. ROAD REG. NO.	STATE	PROJECT NO.	COUNTY	SECTION	ROUTE
7	NEVADA	1015-1(24) 42	CLARK	03-083 03-065	
		FOOS-1(21)			



FREEWAY SECTION

Construction Type Code 1010
"Fwy" 479+30 To "Fwy" 508+17



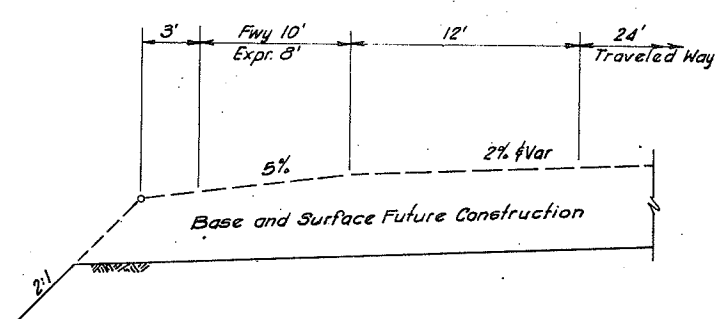
EXPRESSWAY SECTION

See "Superelevation" Tabulation for Limits
Construction Type Code 1010
"Expr" 58+40 To "Expr" 97+60

SUPERELEVATION				
STATION	LEFT	RIGHT	LINE	CURVE
479+30 - 508+17	+2%	TANG.	FWY.	RT.
58+40 - 72+75	TANG.	TANG.	EXPR.	
72+75 - 75+50		TRANS	EXPR.	
75+50 - 80+50	-7.5%	+7.5%	EXPR.	LT.
80+50 - 84+75		TRANS	EXPR.	
84+75 - 89+75	TANG.	TANG.	EXPR.	
89+75 - 95+50	TRANS		EXPR.	
95+50 - 97+60	+6%	-6%	EXPR.	RT.

- GENERAL NOTES:
- Profile Grade is on the upper plane of planimetry or concrete paving.
 - For Standard Superelevation transition Details See ref. sheet A-5.
 - Special shoulder transitions at noses and struts to be accomplished in accordance with elevations on the paving plans.
 - Berm widening (narrowing) from 0' to 3' to be accomplished in the 10' before the beginning (beyond the end of dike and/or guard rail).
 - Cross slope of subgrade is equal and parallel to the traveled way. The paving thicknesses are normal to the surface of pavement. Depth of subgrade is compacted thickness.
 - Alignment and grades are subject to adjustment.

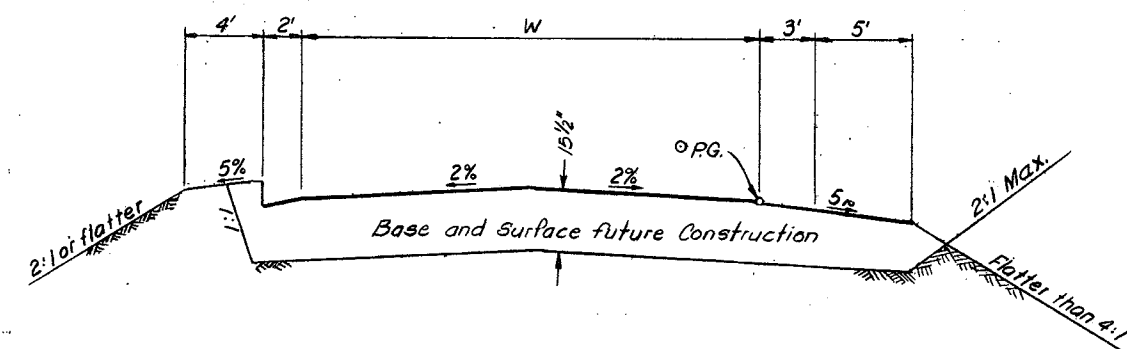
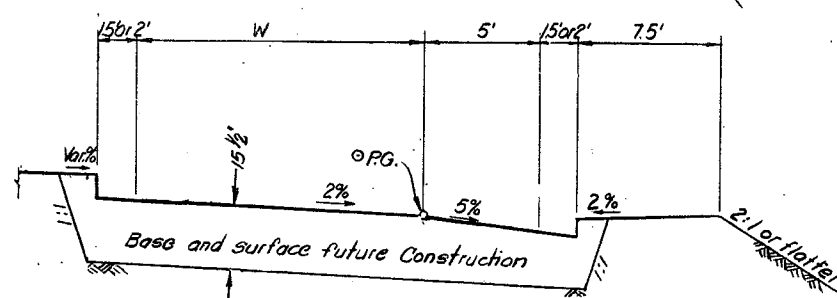
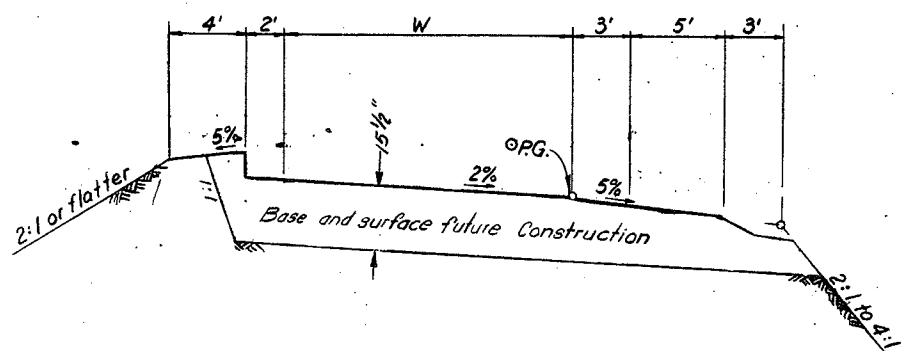
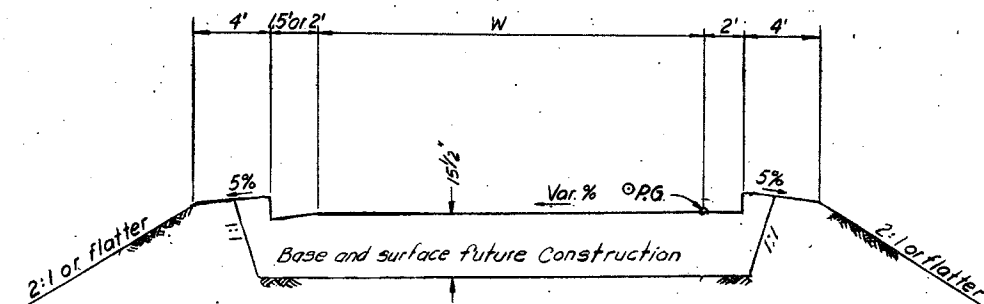
LEGEND
PG = Profile Grade
Subgrade



FREEWAY & EXPRESSWAY AUXILIARY LANE

See "Location" Tabulation above for Limits
Construction Type Code 1010

LOCATIONS
All Ramp Acceleration and Deceleration Lanes adjacent to freeway or Expressway
Expr- Sta. 67+17 to Sta 71+44.57 Rt.
Expr- Sta. 76+59.48 to Sta 81+59.08 Lt.



TYPICAL RAMP SECTIONS

No Scale

See Paving Plans for Location of Profile Grade Line as it varies.

RAMP VARIATIONS

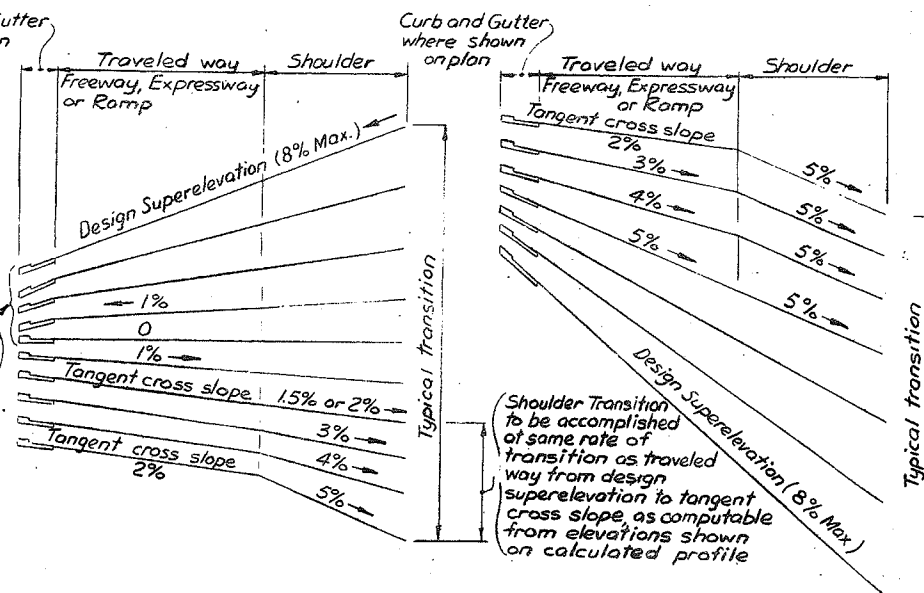
TABULATED BELOW ARE GENERAL LIMITS OF VARIATIONS IN RAMP PROPERTIES. SEE PAVING PLANS & DETAILS FOR EXACT LIMITS, AND DIMENSIONS SEE RAMP TYPICAL SECTIONS TO LEFT

RAMP DESIGNATION	STATION TO STATION	LEFT				RIGHT				SUPERELEVATION	LANE WIDTH
		DIKE	SIDEWALK	SCORED STRIP	CURB & GUTTER	DIKE	SIDEWALK	SCORED STRIP	CURB & GUTTER		
BONANZA INTERCHANGE	WS	0 + 00 - 1 + 52	SEE EXPRESSWAY							+2 to +8	0-12
		1 + 52 - 9 + 65	SEE RAMP ES							+8 to +7	12
		9 + 65 - 13 + 55	SEE RAMP ES							+7	12
		13 + 55 - 14 + 50	SEE FWY							*	24
		16 + 58 - 19 + 46	SEE FWY							-2	20-12
	SE	0 + 39 - 10 + 09	SEE FWY							+2	0-24
		12 + 36 - 17 + 39	SEE FWY							+7	24
		17 + 39 - 22 + 09	SEE RAMP SW							+7 to +6	12
		22 + 09 - 29 + 57	SEE EXPRESSWAY							*	12
		29 + 57 - 30 + 96	SEE EXPRESSWAY							*	12
BONANZA INTERCHANGE	SW	0 + 75 - 5 + 38	SEE RAMP SE							+8 to +8	12
		5 + 38 - 9 + 06	SEE RAMP SE							+8	12
		10 + 77 - 17 + 94	SEE RAMP SE							+8 to +8	12
		17 + 94 - 22 + 64	SEE RAMP SE							+8	12
	NW	0 + 00 - 1 + 35	SEE FWY							-2	0-6
		2 + 25 - 4 + 16	SEE FWY							-2 to +2	12
		4 + 16 - 10 + 97	SEE FWY							+8 to +2	12
		10 + 97 - 15 + 63	SEE RAMP SW							+2 to +8	12
		15 + 63 - 16 + 98	SEE EXPRESSWAY							+2 to +2	12
	NE	2 + 93 - 4 + 18	SEE FWY							*	13
BONANZA INTERCHANGE		4 + 18 - 12 + 35	SEE FWY							+8	13
		12 + 35 - 13 + 01	SEE EXPRESSWAY							+8 to +2	13-12
	ES	0 + 00 - 4 + 09	SEE EXPRESSWAY							+7.5 to +2	12
		4 + 09 - 9 + 15	SEE EXPRESSWAY							*	12
		12 + 22 - 17 + 60	SEE EXPRESSWAY							-8 to +7	12
		17 + 60 - 21 + 56	SEE RAMP WS							+7	12
	WN	0 + 00 - 1 + 19	SEE EXPRESSWAY							*	12-13
		1 + 19 - 11 + 91	SEE FWY							+8 & +2	13
		11 + 91 - 12 + 30	SEE FWY							*	13
		14 + 68 - 15 + 89	SEE FWY							+2	13-9
BONANZA INTERCHANGE	ER	17 + 14 - 17 + 90	SEE FWY							+2	3-0
		0 + 01 - 4 + 11	SEE EXPRESSWAY							+2 to +5	0-13
		4 + 11 - 14 + 04	SEE FWY							+5	13
		14 + 04 - 15 + 93	SEE FWY							+2 to +2	13

* Variable Superelevation

Curb and Gutter where shown on plan

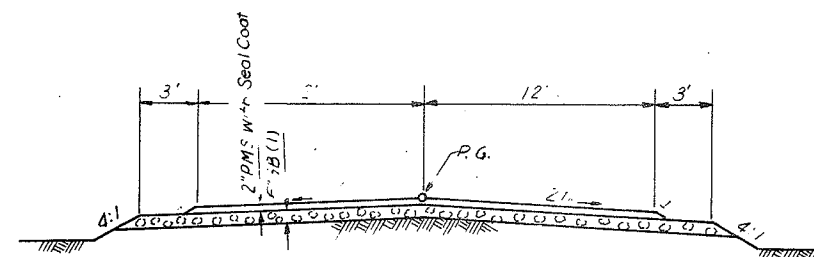
See Note 2 Sht. A4 Concerning gutter slopes



Notes:

- All Shoulder cross slope transitions not shown on plans shall be accomplished in accordance with the standard superelevations transitions illustrated above.
- If through the application of the above standards, the profile of the edge of shoulder has false low points or is not smooth, the shoulder cross slope transition rate shall be varied to produce a smooth edge profile with positive slopes both in the transverse and longitudinal directions.

STANDARD SUPERELEVATION TRANSITIONS



MESQUITE AVENUE (LINE MS)

Sta. 0+00 MS to 6+90 MS

PMS = Plantmix Surface

GBU = Type I Gravel Base

New Dbl. 10' x 12' R.C.B.

59.5'

Match Existing Pavement

2' PMS with Seal Coat
6" G.B. (I)

TYPICAL PAVEMENT REPLACEMENT F ST.

LAS VEGAS CREEK STA. 151+91.71 TO 152+51.71

NOTES:

- See Sheet A-2 for general notes
- Gutter slope is 1" per ft. where curb is on low side of sloping pavement. Vary to match cross slope where curb is on high side of sloping pavement. At roadway cross slope transitions, the full gutter slope shall be achieved within 25' from level roadway cross section.
- See grading or paving and drainage plans for side slope transitions.

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

**TYPICAL RAMP SECTION
AND
CONSTRUCTION DETAIL**
DOWNTOWN EXPRESSWAY-BONANZA INTERCHANGE
LAS VEGAS

DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE:
DESIGNED BY: J.W.
DRAWN BY: J.M.
CHECKED BY: J.B.
APPROVED BY: J.B.

	ASPHALT CEMENT 60-70 PENETRATION TONS	PLANTMIX SURFACING AGGREGATE TONS	LIQUID ASPHALT MC-250 SEAL COAT TONS	LIQUID ASPHALT MC-70 PRIME COAT TONS	GRAVEL BASE 1 TONS
MESQUITE AVENUE (MS LINE)	12.02	219	1.00	3.08	820.0
F STREET PATCHING	.20	15	.07	.20	45.0
PROJECT NO. F-006-1(21) TOTAL	12.22	234	1.07	3.28	865.0
USE	13.0	240	2.0	4.0	870.0

THEORETICAL APPLICATION OF SURFACING MATERIALS

LIQUID ASPHALT, TYPE MC-70 (PRIME)	0.375 GAL. PER SQ. YD.
LIQUID ASPHALT, TYPE MC-250 (SEAL COAT)	0.125 GAL. PER SQ. YD.
ASPHALT CEMENT, 60 TO 70 PENETRATION (PLANTMIX SURFACE)	4.50% TO 7.00% ASPHALT
SPECIFIC GRAVITY	2.64
VOIDS	10%

SUMMARY OF EARTH WORK QUANTITIES

	PROJECT I-015-1(26)42	PROJECT F-006-1(21)	GRAND TOTAL	U
ROADWAY EXC. (CU.YD.)	7,468		7,468	7,4
CHANNEL EXC. (CU.YD.)	37,446	11,573	49,019	49,0
BORROW (CU.YD.)	1,209,587	200,134	1,409,721	1,409,7

ESTIMATE OF QUANTITIES
 Freeway Station 479+30.00 to 508+17.23
 Expressway Station 85+69 to 97+61
 Quantities Shown are Approximate Only and are Subject to Increase or Decrease
 TO BE CONTRACTED

ITEM NO.	I-015-1(26)42	F-006-1(21)	TOTAL	UNIT	ITEM
11 0100	Lump Sum	Lump Sum	Lump Sum	---	Signs
11 0200	8,500	1,500	10,000	hr	Flagman
12 6000	Lump Sum	Lump Sum	Lump Sum	---	Urban Clearing
15 0100	7,470		7,470	cu yd	Roadway Excavation
15 0400	13	7	20	cu yd	Drainage Excavation
15 0500	37,447	11,573	49,020	cu yd	Channel Excavation
16 0100	1,209,590	200,140	1,409,730	cu yd	Borrow
21 0100	10,267	1,413	11,680	cu yd	Structure Excavation
22 0100	8,992	1,218	10,210	cu yd	Backfill
28 0200	Lump Sum	Lump Sum	Lump Sum	---	Furnish Water Equipment
30 0100		870	870	ton	Type 1 Gravel Base
34 1220		4	4	ton	Liquid Asphalt, Type MC-70
35 1320		2	2	ton	Liquid Asphalt, Type MC-250
40 2000		13	13	ton	Asphalt Cement, 60-70 Penetration
40 5500		240	240	ton	Plantmix Surface Aggregate
45 0100	12,019	1,774	13,793	cu yd	Class A Concrete
47 0100	2,824,734	364,766	3,189,500	lb	Reinforcing Steel
47 0200	180	290	470	sq yd	Mesh Reinforcement (6" x 6")
47 0210	18,230	6,260	24,490	sq yd	Mesh Reinforcement (6" x 12")
48 0060	4,215	307	4,522	lin ft	Bridge Rail, Type H
48 1000	930		930	lb	Structural Steel
50 0100	Lump Sum	Lump Sum	Lump Sum	---	Furnishing Pile Driving Equipment
50 0040	18,856	1,564	20,420	lin ft	Furnishing Steel Piles
50 0410	18,856	1,564	20,420	lin ft	Driving Steel Piles
50 0800	60	10	70	each	Metal Pile Splices
54 0181	290	110	400	lin ft	18-inch Corrugated Metal Pipe (Dipped)
54 2061	2		2	each	18-inch Metal End Sections (Dipped)
55 0053	1,689		1,689	lin ft	18-inch Reinforced Concrete Pipe, Class III
55 0073	155		155	lin ft	21-inch Reinforced Concrete Pipe, Class III
55 0093	522		522	lin ft	24-inch Reinforced Concrete Pipe, Class III
55 0095		292	292	lin ft	24-inch Reinforced Concrete Pipe, Class V
55 0133	160		160	lin ft	30-inch Reinforced Concrete Pipe, Class III
55 0153	840		840	lin ft	33-inch Reinforced Concrete Pipe, Class III
55 0154	96		96	lin ft	33-inch Reinforced Concrete Pipe, Class IV
55 2053	12		12	each	18-inch Precast End Sections
55 2093	2	1	3	each	24-inch Precast End Sections
55 2133	1		1	each	30-inch Precast End Sections
62 0100	280		280	lb	Castings
62 0200	9,810	670	10,480	lb	Structural Steel Grates
68 0110	3,407	1,006	4,413	cu yd	Class A Concrete Slope Paving
70 2040	9,720	2,880	12,600	lin ft	Construct 72-inch Chain Link Fence
70 5020	4	4	8	each	10-foot Metal Drive Gate
75 0100	19	11	30	each	Reference Monuments
77 0200	Lump Sum	Lump Sum	Lump Sum	---	Highway Lighting System
120 0130	8,050	1,880	9,930	sq yd	Pneumatically Placed Concrete Mortar (3-inch depth)
120 0140	1,500		1,500	sq yd	Pneumatically Placed Concrete Mortar (4-inch depth)
132 1050		85	85	lin ft	10-inch Asbestos Cement Pipe Conduit

FED. RD. RES. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	I-015-1(26)42 F-006-1(21)	Clark	03-083 03-065		13

Ref. Sh
 B-5

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	TAXI	DATE
7	NEVADA	50151-126142	CLARK	03-08		17

Benchmark
N 1/6 C-C Sec 33, 2"
IP with Brass Cap
marked "UPPL"
El. 2050.68

POINT	STATION	STATION	N COORD.	E COORD.
A	19+46.09 WS =	476+55.14 Fwy 65 Lt	83951.31	84231.4
B	15+97.26 WS =	28+99.89 RR 2 P7	84266.16	8573.31
C	21+56.13 ES =	13+55.48 WS 12 Lt	84486.74	8675.27
D	450+40.31 Fwy =	28+583 RR 237	84266.08	8657.37
E	0+39.17 SE =	470+430 Fwy 53 Rt	83341.29	8293.17
F	10+71.03 SE =	27+240 RR 287	84366.00	8749.13
G	0+74.95 SW =	17+3925 SE 24 Lt	84711.30	9242.89
H	124+42.11 LVC =	15+30.73 WS	84326.15	8601.93
I	125+30.83 LVC =	481+08.89 Fwy	84326.04	8690.65
J	126+29.22 LVC =	11+43.06 SE	84325.95	8789.04
K	N 1/6 C-C Sec 33-2"	IP/Brass Cap MK "UPPL"	83705.30	7630.27

CURVE NO.	1st Total Curve	2	3	4	5	6	7	8	9	10	11 Used C-11.12
A	56'23'17"	47'42'13"	23'29'29"	7'38'06"	40'00'00"	50'30'00"	118'16'48"	36'53'12"	17'20'00"	20'08'00"	25'24'11"
R	6300.00'	1000.00'	1200.00'	7500.00'	1050.00'	700.00'	100.00'	230.00'	1000.00'	800.00'	6800.00'
L	6692.27'	832.58'	492.00'	999.40'	733.04'	669.86'	206.44'	148.07'	30'52'	281.11'	3014.91'
T	3645.22'	442.13'	249.51'	500.44'	382.17'	358.44'	167.35'	76.70'	152.43'	142.02'	1532.64'
P.C. STA.	446+33.45	6+94.92 (P.C.)	16+64.13	0+39.17	10+38.58 (P.C.)	115+52.59 (P.C.)	122+38.00'	127+21.86	131+63.61	136+06.13	479+30.00
N COORD.	81000.56	55137.53	84974.17	83341.29	See Pt. 4	85134.73	84473.59	84325.87	84547.83	84736.82	84168.98
E COORD.	7819.38	8626.61	8708.49	8293.17		8558.60	8516.34	8481.68	9254.83	9652.48	8605.13
PI: N COORD.	84645.78	84728.19	84727.00	83804.37	84569.37	84802.78	84326.28	84325.80	84639.21	84784.23	85524.52
E COORD.	7821.91	8793.69	8742.55	8462.92	8923.11	8693.84	8436.91	8438.38	9376.83	9786.35	9320.31
P.T. STA.	513+25.72	15+27.50	21+56.13	10+38.58 (P.C.)	17+71.61	122+22.45	124+44.44	128+69.93	134+66.13	138+87.24	509+44.91
N COORD.	86661.55	84329.12	84486.74	54238.12	84700.60	84487.28	84326.13	84371.78	84690.09	84874.82	86442.20
E COORD.	10859.07	8603.34	8675.27	8732.51	9282.04	8523.72	8604.26	9019.78	9520.51	9895.73	10547.84

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

**GEOMETRICS, HORIZONTAL
VERTICAL CONTROL PLAN**

STA 470+00 TO 489+00 FREE

BONANZA INTERCHANGE, LAS VEGAS

DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY: JBL
DRAWN BY: GC
CHECKED BY: JBL
APPROVED BY:

POINT	STATION	STATION	N COORD	E COORD
(A)	9+82.18 SW=	75+94.23 Expr.	85280.19	9843.16
(B)	13+33.60 SW=	16+45.36 WN	85577.62	9675.57
(C)	13+94.12 SW=	497+00.49 Fwy	85610.29	9624.69
(D)	22+63.77 SW=	15+63.13 NW-12' Lt.	85520.07	8781.46
(E)	30+96.40 SE=	81+92.26 Expr. 42' Rt.	85316.61	10445.04
(F)	0+00.00 WS=	58+40.00 Expr. 42' Rt.	85560.34	8111.08
(G)	0+00.00 ES=	76+59.48 Expr. 42' Lt.	85319.05	9909.43
(H)	3+94.87 ES=	14+02.84 WN	85389.72	9522.27
(I)	4+72.59 ES=	494+33.56 Fwy	85410.71	9447.44
(J)	0+93.78 NE=	5+36.12 ES	85427.87	9386.27

POINT	STATION	STATION	N COORD	E COORD
(K)	11+23.01 ES=	65+57.05 Expr.	85465.77	8823.10
(L)	0+00.00 NE=	495+00.00 Fwy-53' Lt.	85495.85	9450.86
(M)	1+76.20 NE=	70+72.77 Expr.	85368.11	9329.50
(N)	13+00.72 NE=	67+17.00 Expr. 42' Rt.	85394.25	8972.21
(O)	0+00.00 WN=	71+44.57 Expr. 42' Rt.	85313.27	9392.05
(P)	0+60.75 WN=	12+85.26 WN	85296.66	9450.40
(Q)	13+38.06 WN=	72+28.57 Expr.	85338.61	9482.47
(R)	17+90.18 WN=	498+57.00 Fwy 53' Rt.	85687.16	9770.30
(S)	0+00.00 NW=	505+00.00 Fwy-53' Lt.	86204.62	10166.03
(T)	2+03.97 NW=	26+42.39 RR 213	86079.05	10005.31
(U)	16+98.09 NW=	63+69.37 Expr. 42' Lt.	85542.56	8646.78
(V)	0+00.00 EH=	61+65.00 Expr. 42' Lt.	85581.27	8446.10
(W)	0+01.18 EN=	85+69.08 Expr. 42' Lt.	85510.52	10778.89
(X)	16+81.28 EN=	24+39.84 RR 213	86080.91	10207.85
(Y)	20+27.57 EN=	508+00.00 Fwy 53' Rt.	86312.42	10465.34
(Z)	493+60.00 Fwy=	71+44.57 Expr.	85354.52	9399.99
(AA)	503+71.58 Fwy=	25+44.05 RR 213	86079.95	10103.64
(A)	S 1/4 Sec. 28/27 CLV Tag in Conc. Mon.		86390.20	10286.93
(B)	Section Corner 2" x 2" Hub w/ Engr L.S. #1552		85027.24	10280.27

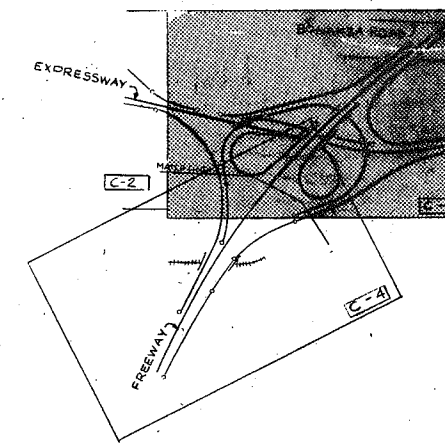
FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATION	DATE
7	NEVADA	1-015-1(26)42	CLARK	03-083		16

BM 2" Bolt @ E of Intersection of "H" St & Bonanza Road EL 2037.74

CURVE NO.	(22)	(23)	(24)
Δ	60°18'00"	50°30'00"	24°18'00"
R	560.00	760.00	800.00
L	589.36	669.86	336.17
T	325.27	358.44	171.17
P.C. Sta.	109+63.23	115+52.59(PCC)	142+14.25
N Coord.	85478.60	See PT. (22)	8509.13
E Coord.	8113.40	See PT. (22)	1016.13
P.I. N Coord.	85435.96	84802.78	8520.13
E Coord.	8435.87	8693.84	1029.13
P.T. Sta.	115+52.59(PCC)	122+22.45	145+14.25
N Coord.	85134.73	84487.28	8520.13
E Coord.	8558.60	8523.72	1046.13

CURVE NO.	(1)	(2)	(3)	(4)	Used Curve
Δ	56°23'17"	47°42'13"	16°00'00"	18°30'00"	25°24'11"
R	6800.00	1000.00'	120000'	120000'	6800.00'
L	6792.27	832.58'	335.01'	38746'	3014.91'
T	3645.22	442.13'	168.65'	19543'	1532.64'
P.C. Sta.	446+33.45	6+94.92(PCC)	20+56.88	27+08.93	479+30.00
N Coord.	81000.56	85137.53	84798.56	85142.47	84168.98
E Coord.	7819.38	8626.61	9549.97	10100.80	8605.13
P.I. N Coord.	84645.78	84728.19	84856.47	85257.57	85524.52
E Coord.	7821.91	8793.69	9708.36	10258.74	9320.31
P.T. Sta.	513+25.72	15+27.50	23+91.98	30+96.40	509+44.91
N Coord.	86661.55	84329.12	84955.80	85316.61	86442.18
E Coord.	10859.07	8603.34	9844.66	10445.04	10547.84

CURVE NO.	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Δ	174°09'03"	14°01'42"	56°52'47"	14°10'00"	113°30'50"	237°22'58"	56°00'42"	238°36'34"	5°55'51"	28°30'00"	23°55'12"	18°30'00"	30°25'00"	7°01'03"	134°30'48"	6°20'15"	5°09'45"
R	423.00'	800.00'	700.00'	1200.00'	180.00'	350.00'	180.00'	180.00'	6747.00'	150000'	1000.00'	800.00'	600.00'	1500.00'	250.00'	1500.00'	6800.00'
L	1285.71'	195.87'	694.92'	296.71'	643.89'	745.76'	342.16'	749.61'	698.41'	746.13'	417.48'	258.31'	318.52'	183.72'	586.93'	165.92'	612.69'
T	8279.83'	9843'	379.12'	149.11'	495.84'	186.14'	186.14'	349.52'	349.52'	380.95'	211.83'	130.29'	163.11'	91.97'	596.38'	83.04'	306.55'
P.C. Sta.	4+37.71	20+67.90	0+00.00	0+00.00	8+40.08	5+54.96	0+00.00	3+42.16(PCC)	10+91.77(PCC)	74+12.95	0+00.00	4+98.52	13+79.57	4+78.33	6+62.04(PCC)	12+48.97(PCC)	14+14.89(PCC)
N Coord.	84846.31	85550.58	85560.34	85319.05	85509.95	85093.53	85313.27	85303.69	85581.27	85897.70	85566.12	85398.89	85566.12	85377.37	85299.29	85834.68	86113.33
E Coord.	9579.60	8974.45	8111.08	9909.43	9093.61	9068.62	9392.05	See PT. (11)	See PT. (12)	9663.52	8446.10	9773.19	8960.69	10314.99	See PT. (18)	See PT. (19)	See PT. (20)
P.I. N Coord.	—	85523.45	85488.54	85322.95	—	—	85278.02	—	85425.26	85231.54	85621.38	85817.49	85511.67	85377.37	85299.29	85834.68	86113.33
E Coord.	—	8879.83	8483.34	9760.36	—	—	9574.81	—	9538.85	10037.58	8306.94	10225.57	85511.67	85377.37	9541.66	9959.95	10232.23
P.T. Sta.	17+23.42	22+63.77	6+94.92(PCC)	2+96.71	14+83.96	13+00.72	3+42.16(PCC)	10+91.77(PCC)	17+90.18	81+59.08	4+17.48	7+56.83	16+98.09	6+62.04(PCC)	12+48.97(PCC)	14+14.89(PCC)	20+27.57
N Coord.	85645.53	85520.07	See PT. (2)	85363.22	85152.65	85394.25	85106.76	85140.85	85687.16	85346.63	85742.39	85774.00	85542.56	85366.93	85769.24	85894.07	86312.42
E Coord.	9305.58	8781.46	—	9616.79	8683.89	8972.21	9647.17	9335.69	9770.30	10400.73	8064.24	9547.71	8646.78	10134.19	9908.82	10017.99	10465.34



STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

**GEOMETRICS, HORIZONTAL
VERTICAL CONTROL PLANS**

STA 489+00 TO 508+17.23 FR
BONANZA INTERCHANGE, LAS VEGAS

DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE:
DESIGNED BY: MAB
DRAWN BY: FGM
CHECKED BY: JBL
APPROVED BY:

FED. ROAD REG. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE
7	NEVADA	F-006-1(21)	CLARK	03-065	

POINT	STATION	STATION	N. COORD.	E. COORD.
(A)	8+62.43 "F" St.	152+21.71 LVC	85,424.95	11,085.88
(B)	88+73.53 Expr.	10+00.00 "F" St.	85,562.46	11,081.80
(C)	100+10.92 Expr.	72+23.36 UPRR	85,812.24	12,185.42
(D)	104+80.12 Expr.	105+76.84 Main (Line 0)	85,736.04	12,650.16
(E)	7+24.83 DW	106+74.99 Main (Line 0)	85,834.82	12,691.89
(F)	12+02.59 DW	71+36.58 UPRR	85,871.24	12,216.69
(G)	18+68.52 DW	93+91.08 Expr. 42' Lt.	85,738.84	11,562.48
(H)	0+00.00 WD	98+87.00 Expr. 42' Lt.	85,766.85	12,064.04
(I)	0+98.74 WD	72+71.82 UPRR	85,769.42	12,162.73
(J)	5+61.84 WD	105+08.16 Main (Line 0)	85,695.35	12,618.01
(K)	0+00.00 ML	104+59.19 Main (Line 0)	85,652.06	12,595.08
(L)	162+49.30 LVC	74+48.25 UPRR	85,613.53	12,080.12
(M)	6+90.15 MS		85,957.09	11,729.49
(N)	0+00.00 MS	11+78.98 "F" St.	85,741.36	11,076.48

POINT	LOCATION	DESCRIPTION	N. COORD.	E. COORD.
(A)	Random PT 35' Offs. PI Bon. & "D" St.; 2" X 2" Hub		86,410.04	11,801.30
(B)	"C" St. Pro 35' So Bon.	Set P-K Nail & Shiner	86,420.99	12,171.60
(C)	Random point	Set Nail & Shi. in RR Tie	86,431.10	12,513.38
(D)	PI Bonanza Rd.	Set Nail & Tin	86,433.35	12,589.56
(E)	PI Bonanza Rd.	Set Nail & Tin	86,434.39	12,823.74
(F)	PI Main & Bonanza Rd.	Found Nail	86,407.50	12,995.27
(G)	PI Bonanza Rd.	Set P-K with tin	86,249.85	13,292.26
(H)	PI Stew. Ave. & 2nd St.	Bolt	84,897.23	13,058.54
(I)	PI Main (0'16 Stew. Ave.	Nail	85,254.76	12,384.54
(J)	Random point	Set 2" X 2" Hub & Tack	85,478.04	11,963.42
(K)	Random point	Set 2" X 2" Hub & Tack	85,895.25	12,200.83
(L)	PI Main Sta. 104+89.69	Line 0" Nail & Shiner	85,679.03	12,609.36
(M)	PI 2nd St & Mesa Ave W	Nail & CVL Tag	85,321.42	13,283.61
(N)	Stewart Ave.	76+22.60 UPRR	85,459.47	11,998.48
(O)	PI Orig. Main & Stewart	Found Nail	85,253.66	12,387.19

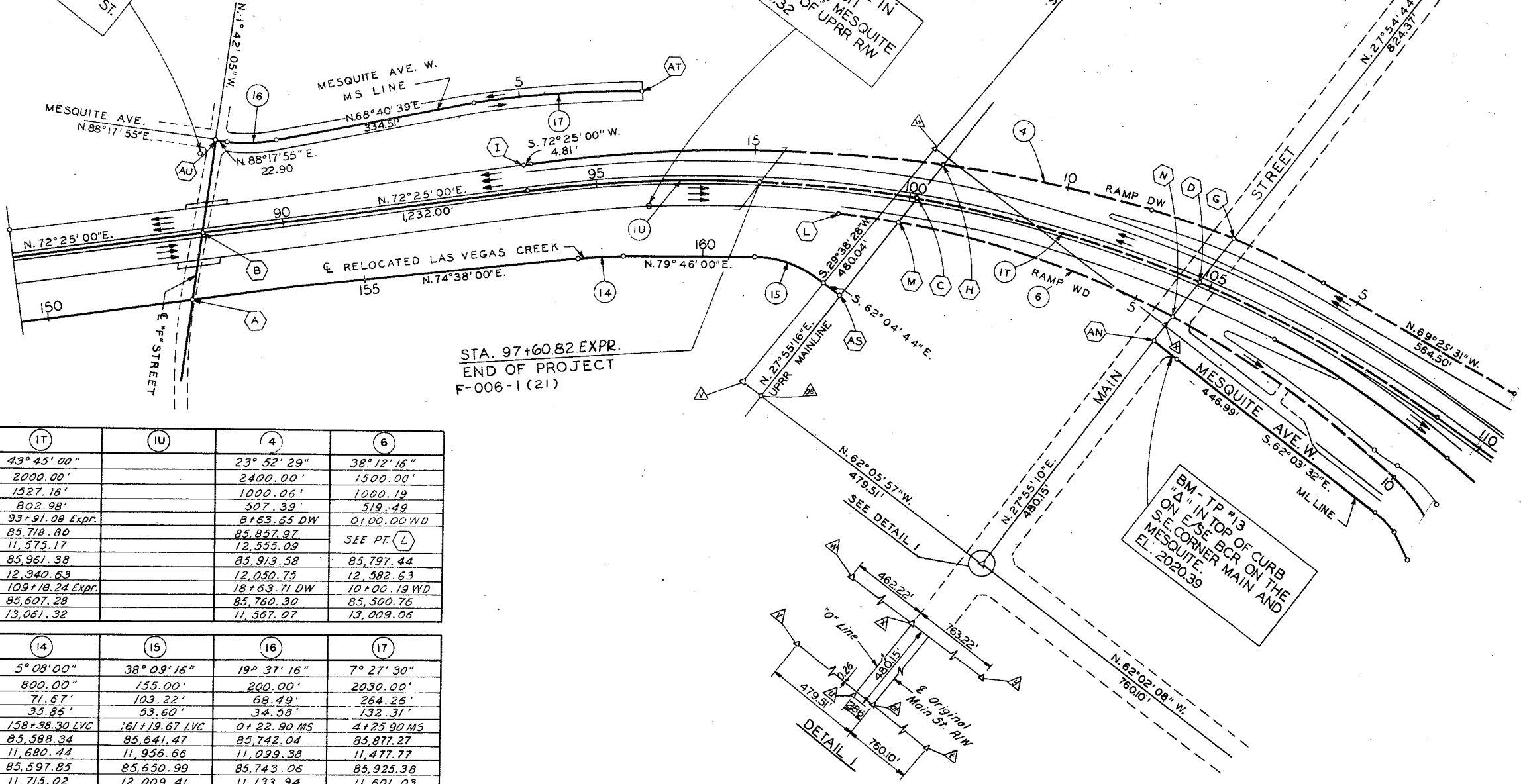
BM-TP-1 SPIKE IN
POWER POLE #1302
N.E. CORNER
MESQUITE AND "F" ST
EL. 2033.83

BM-TP-2 RR SPIKE IN
POWER POLE #751
SOUTH SIDE OF MESQUITE
300' WEST OF UPRR RW
EL. 2029.32

BM-TP-13
ON E/SE CORNER ON THE
MESQUITE MAIN AND
EL. 2020.39

	(IT)	(IU)	(4)	(6)
Δ	43° 45' 00"		23° 52' 29"	38° 12' 16"
R	2000.00'		2400.00'	1500.00'
L	1527.16'		1000.06'	1000.19'
T	802.98'		507.39'	519.49'
P.C. Sta.	93+91.08 Expr.		8+63.65 DW	0+00.00 WD
N. Coord.	85,718.80		85,857.97	
E. Coord.	11,575.17		12,555.09	SEE PT. (L)
P.I.N. Coord.	85,961.38		85,913.58	85,797.44
E. Coord.	12,340.63		12,050.75	12,582.63
P.T. Sta.	109+18.24 Expr.		18+63.71 DW	10+00.19 WD
N. Coord.	85,607.28		85,760.30	85,500.76
E. Coord.	13,061.32		11,567.07	13,009.06

	(14)	(15)	(16)	(17)
Δ	5° 08' 00"	38° 09' 16"	19° 37' 16"	7° 27' 30"
R	800.00'	155.00'	200.00'	2030.00'
L	71.67'	103.22'	68.49'	264.26'
T	35.86'	53.60'	34.38'	132.31'
P.C. Sta.	158+38.30 LVC	161+19.67 LVC	0+22.90 MS	4+25.90 MS
N. Coord.	85,588.34	85,641.47	85,742.04	85,877.27
E. Coord.	11,680.44	11,956.66	11,099.38	11,477.77
P.I.N. Coord.	85,597.85	85,650.99	85,743.06	85,925.38
E. Coord.	11,715.02	12,009.41	11,133.94	11,601.03
P.T. Sta.	159+00.98 LVC	162+22.89 LVC	0+91.39 MS	6+90.15 MS
N. Coord.	85,604.22	85,625.89	85,755.64	
E. Coord.	11,750.31	12,056.78	11,166.16	SEE PT. (AT)



STATE OF NEVADA
DEPARTMENT OF HIGHWAYS
GEOMETRICS, HORIZONTAL AND
VERTICAL CONTROL PLAN LA
STA. 90+00 TO STA. 105+00 EXPRESS
DOWNTOWN EXPRESSWAY, LAS V

GENERAL NOTES - CLEARING, FENCING, R.O.W. & EXISTING FACILITIES PLANS:

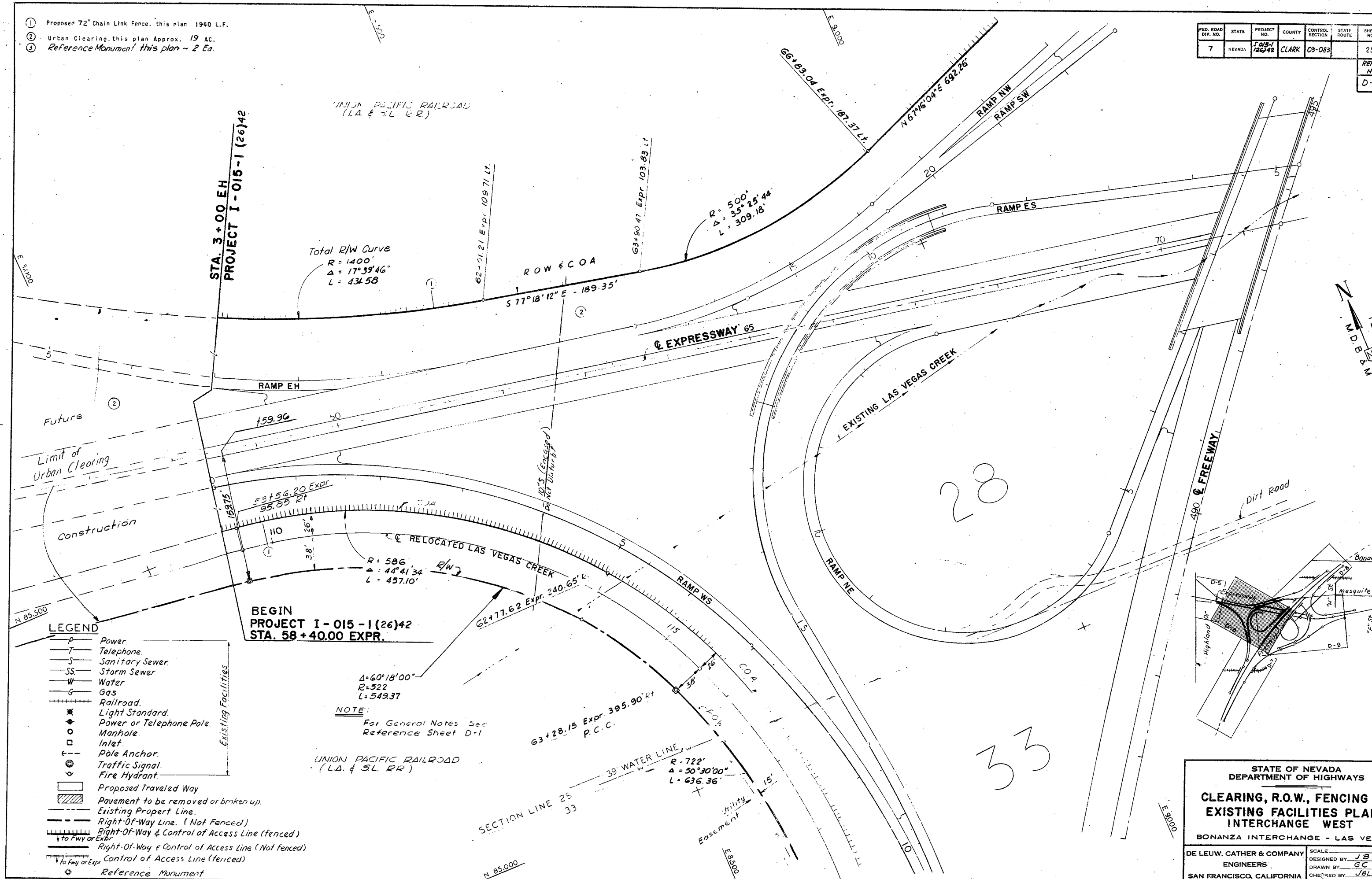
1. Major clearing and grubbing items are shown on these plans to the best of the Engineer's knowledge. The contractor is not relieved from responsibility for removing and disposing of other necessary items as required by the Engineer notwithstanding their omission from these plans. Attention is directed to Section 2.5 of the Standard Specifications.
2. To the best of the Engineer's knowledge, all public and private utilities including power, telephone, water, gas and sanitary sewer lines, are shown on these plans in their location prior to the start of utility relocation work. Relocation of all utilities, where necessary, is to be performed by others concurrently with or prior to commencement of construction under this contract. The contractor shall be solely responsible for ascertaining location of utilities and preventing damage thereto due to construction operations. Attention is directed to Section 7.15 of the Standard Specifications.
3. All control of access (C.O.A.) is to be fenced with 6' Chain Link Fence except where noted.
4. Right-of-Way markers shall be omitted where fence is constructed on Right-of-Way line. Where no fence is constructed on Right-of-Way line, a monument without marker post, conforming to the Standard Detail for "Reference Monument and Marker Post", shall be placed at the beginning and end of each curve and at each angle point in the Right-of-Way line, unless otherwise noted.
5. The entire area within the R.O.W. limits shall be cleared of all vegetation, including trees, in accordance with the Standard Specifications.
6. No direct payment shall be allowed for the removal of any buildings, sheds, shacks, and any other minor miscellaneous man made cultural features which lie within the Right-of-Way. Payment for said work shall be deemed included for payment in "Urban Clearing" or other items of work.
7. All gates to be 10' Single Metal Drive Gates and to be used by State Forces for maintenance purposes only.
8. No direct payment shall be allowed for removal of or breaking up of pavement and/or dike. Payment for said work shall be deemed included in "Roadway Excavation", "Urban Clearing" or other items of work.

FED. RD. DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.	S
7	NEVADA	I-015-1(26)42 F-006-1(21)	CLARK	03-083 03-065		20	

Ref. Sh
No.
D-1

- ① Proposed 72" Chain Link Fence, this plan 1940 L.F.
- ② Urban Clearing, this plan Approx. 19 AC.
- ③ Reference Monument, this plan ~ 2 Ea.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	1015-1 (26)42	CLARK	03-083		23



STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

**CLEARING, R.O.W., FENCING
EXISTING FACILITIES PLAN
INTERCHANGE WEST**

BONANZA INTERCHANGE - LAS VEGAS

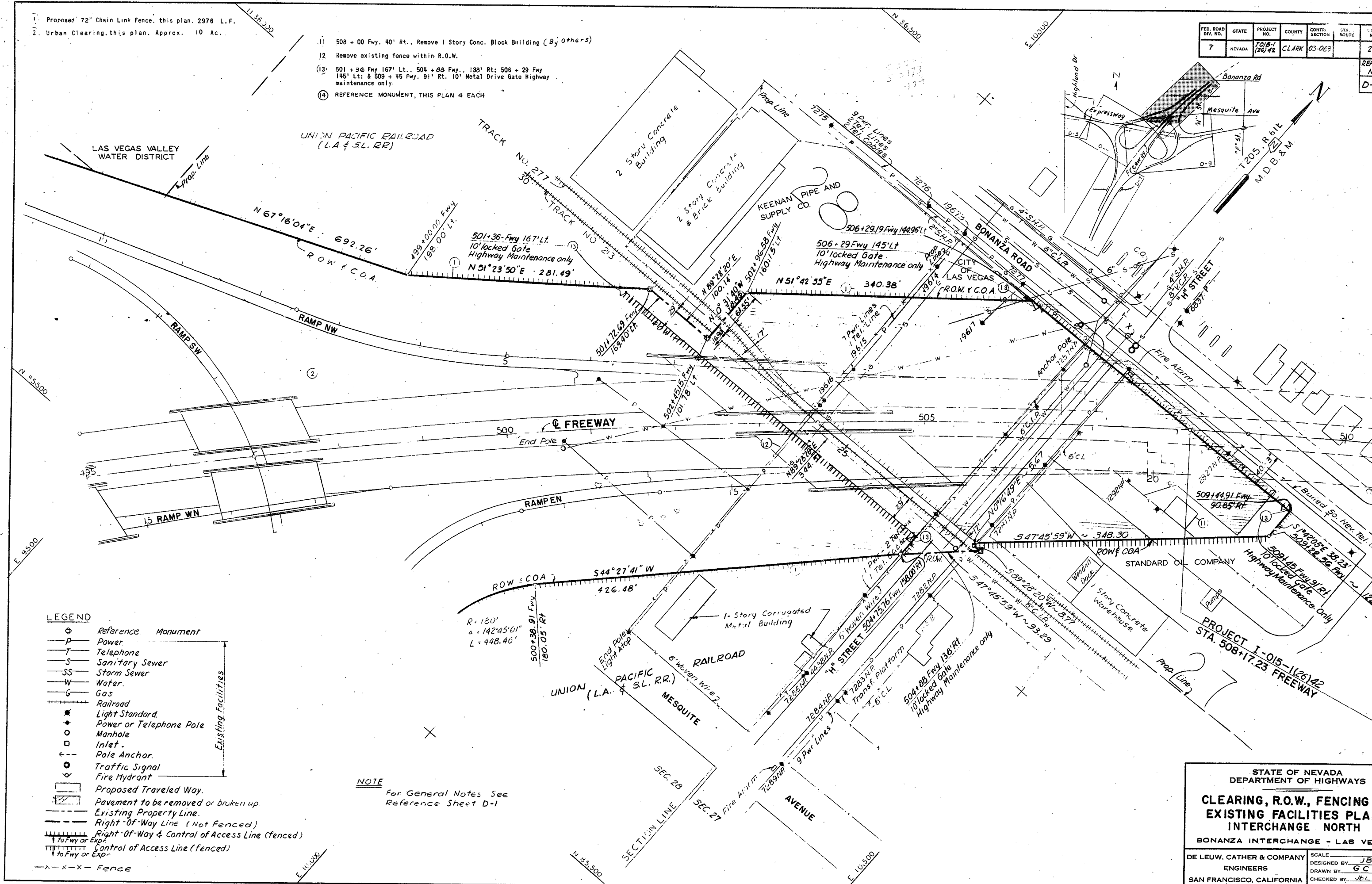
DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE: DESIGNED BY: J.B.
DRAWN BY: G.C.
CHECKED BY: J.B.L.
APPROVED BY: J.B.L.

1. Proposed 72" Chain Link Fence, this plan. 2976 L.F.
2. Urban Clearing, this plan. Approx. 10 Ac.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTRACT SECTION	STA. ROUTE
7	NEVADA	101B-1 (26) 42	CLARK	03-083	

- (1) 508 + 00 Fwy. 40' Rt.. Remove 1 Story Conc. Block Building (By Others)
- (2) Remove existing fence within R.O.W.
- (3) 501 + 36 Fwy 167' Lt., 504 + 66 Fwy., 138' Rt; 506 + 29 Fwy 145' Lt.; 508 + 45 Fwy. 91' Rt. 10' Metal Drive Gate Highway maintenance only.
- (4) REFERENCE MONUMENT, THIS PLAN 4 EACH



NOTE
For General Notes See
Reference Sheet D-1

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

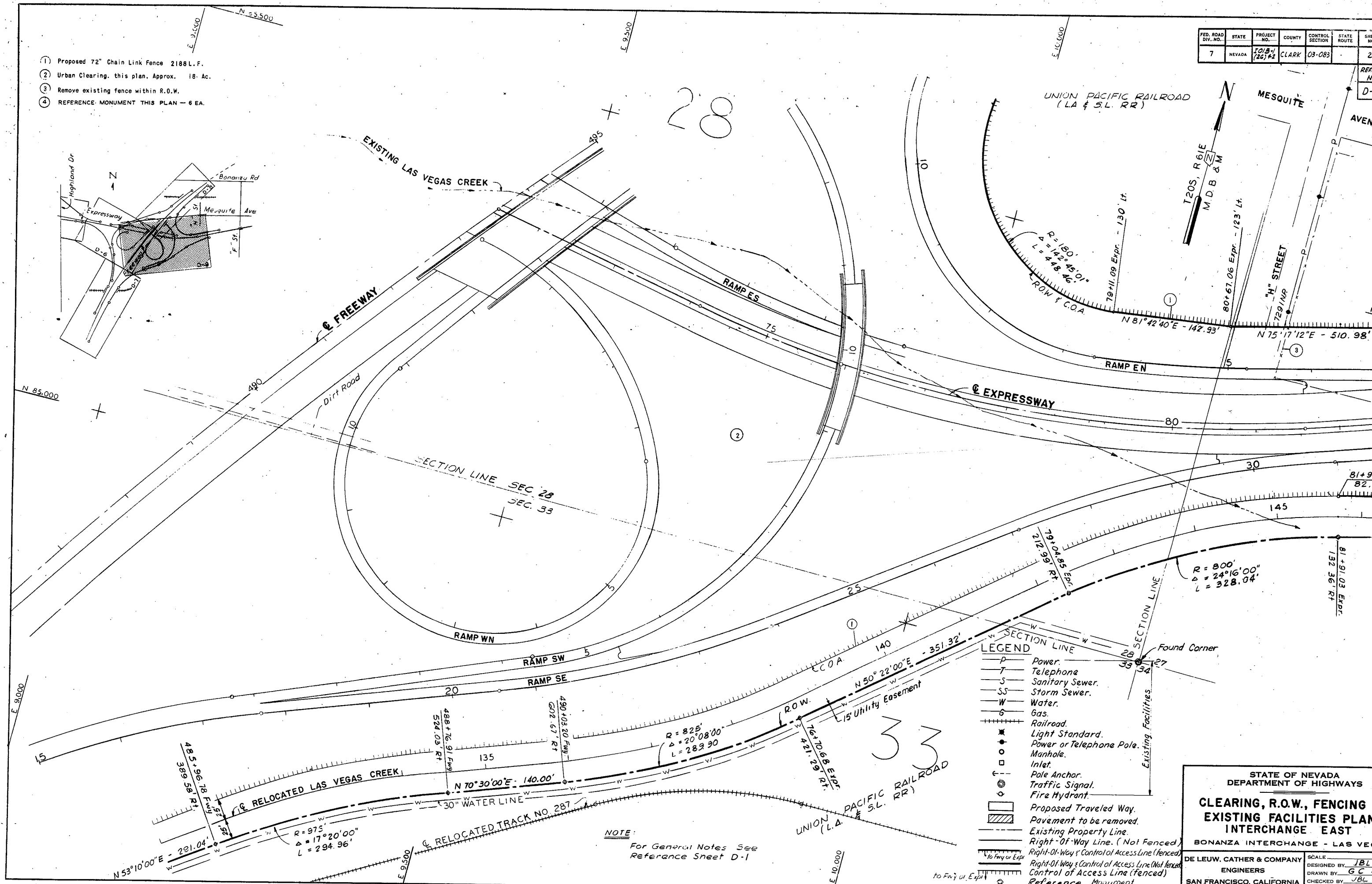
**CLEARING, R.O.W., FENCING
EXISTING FACILITIES PL
INTERCHANGE NORTH
BONANZA INTERCHANGE - LAS V**

DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE _____
DESIGNED BY JL
DRAWN BY GC
CHECKED BY Sh
APPROVED BY _____

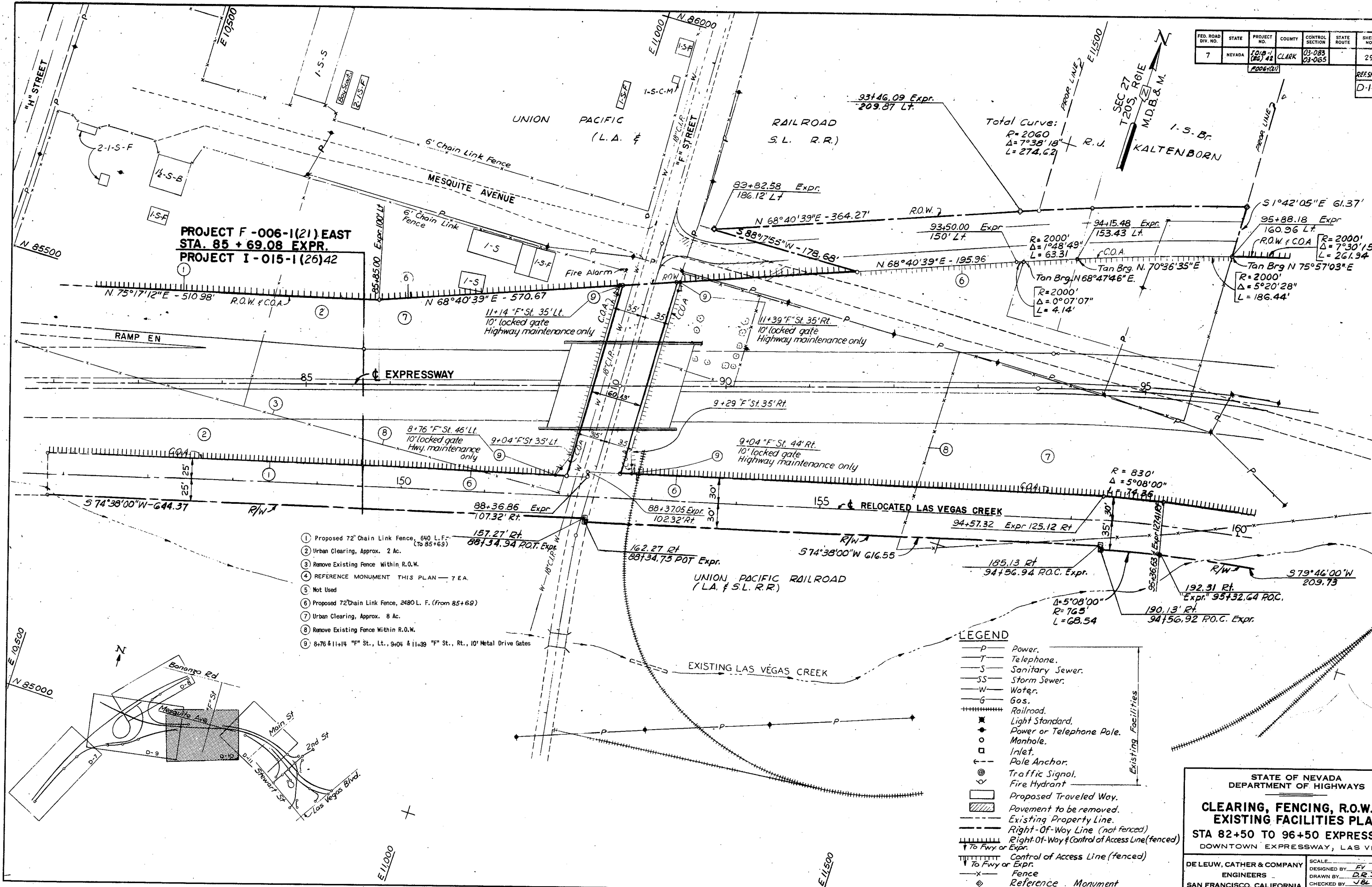
- ① Proposed 72" Chain Link Fence 2188 L.F.
- ② Urban Clearing, this plan, Approx. 18 Ac.
- ③ Remove existing fence within R.O.W.
- ④ REFERENCE MONUMENT THIS PLAN - 6 EA.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	1018-1 (26) #2	CLARK	03-083		2

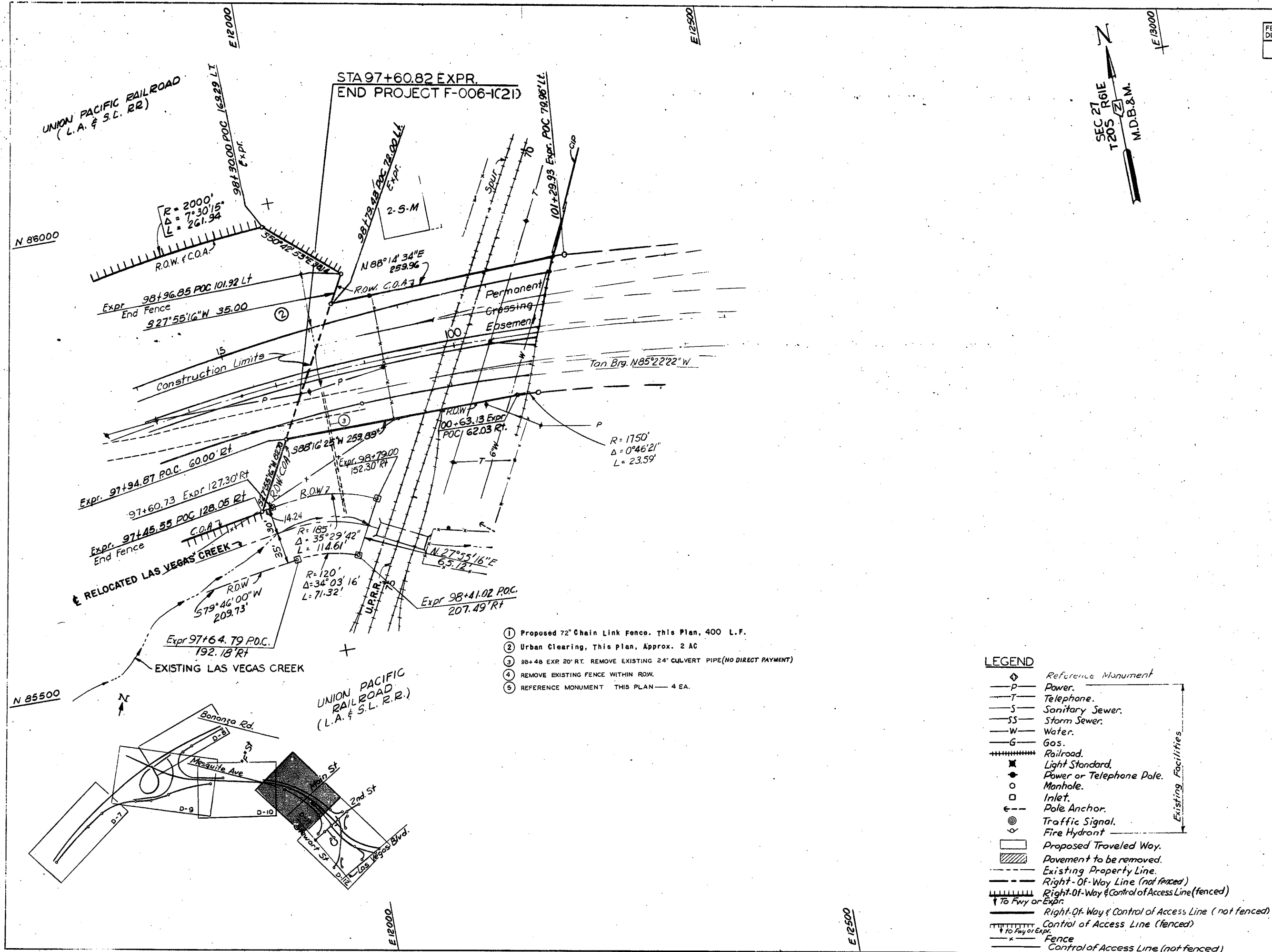


FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	1015-1 (26) 42	CLARK	03-083	03-065	29

REF. SHEET D-10



FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
	NEVADA	F-006-122	CLARK	03-065		50



STATE OF NEVADA DEPARTMENT OF HIGHWAYS	
CLEARING, FENCING, R.O.W. EXISTING FACILITIES PLAN	
STA 96+50 TO 98+50 EXPRESS DOWNTOWN EXPRESSWAY, LAS VEGAS	
DE LEUW, CATHY & COMPANY ENGINEERS SAN FRANCISCO, CALIFORNIA	DATE: 10/1/78 DRAWN BY: G.A. CHECKED BY: D.E. DESIGNED BY: F.V. APPROVED BY: J.B.L.

See Ref. Sheet E-21
For Drainage & Paving

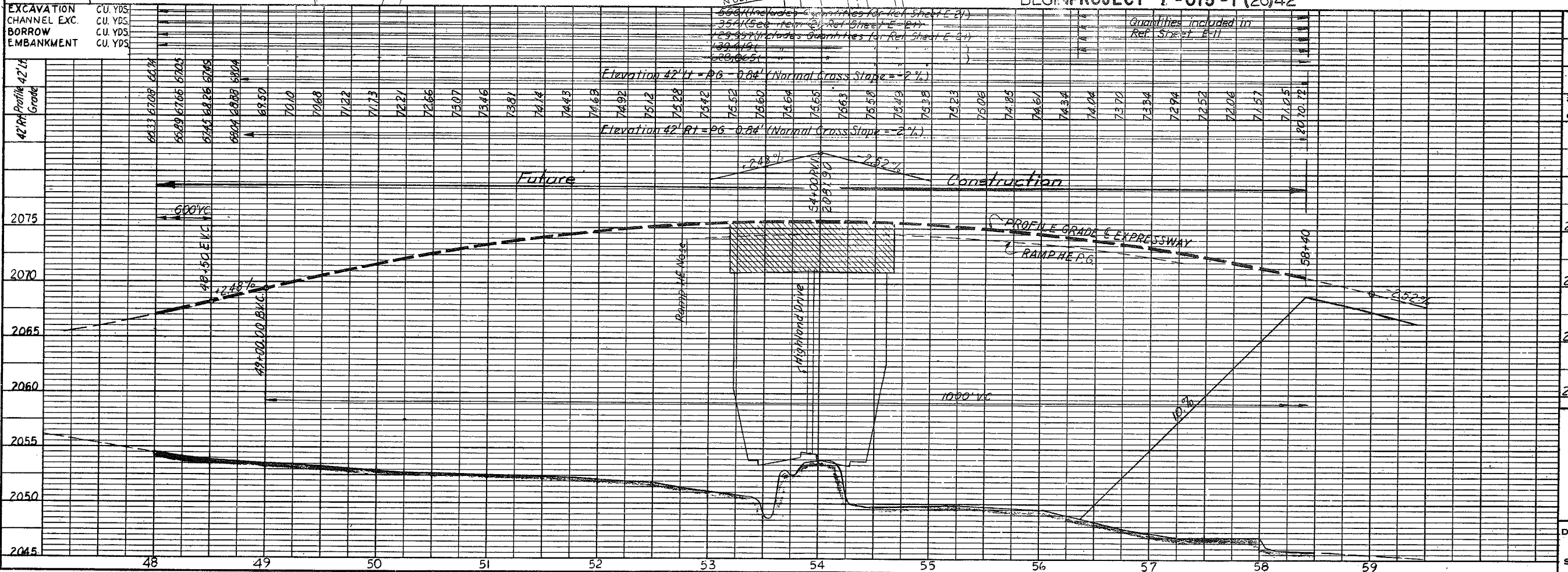
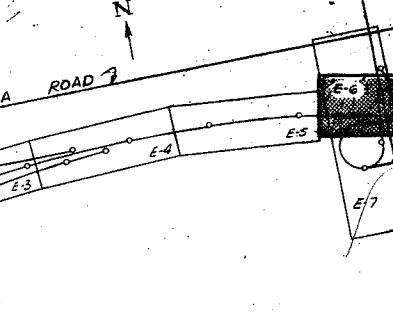
HIGHLAND DRIVE
OVERPASS
STRUCTURE
NO. 1-945

CURVE DATA ①
R=175'
Δ=15°02'48"
L=45.96'
T=23.11'

PROJECT END FUTURE
STA. 3+00 EH
BEGIN PROJECT I-015-1 (26)42

FED. ROAD DIST. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	DATE	SHEET NO.
7	NEVADA	1015-1 (26)42	CLARK	03-065		37
FOG01(2)						REF. NO. E-1

①	48+00 to 52+04	Expr.	Lt., P.M. Dike
②	50+04 to 52+06	Expr.	Lt., Guard Rail
③	54+70 to 56+72	Expr.	Lt., Guard Rail
④	54+72 to 58+40	Expr.	Lt., P.M. Dike
⑤	3+00 to 7+50	EH	Rt., P.M. Dike
⑥	3+00 to 7+50	EH	Rt., Scored Conc. Sho
⑦	3+00 EH to 0+50	EH	Lt., Type I Curb & Gutter
⑧	40+00 to 58+40	Expr.	Double Metal Beam
⑨	Not Used		
⑩	48+00 to 52+04	Expr.	Rt., P.M. Dike
⑪	52+04 to 52+80	Expr.	Rt., 2' x 12' x 50' to
⑫	Lt., Type I Curb & Gutter		
⑬	12+50 to 13+26	HE	Rt., Guard Rail
⑭	12+50 to 13+26	HE	Rt., P.M. Dike
⑮	12+50 to 13+55	HE	Rt., Scored Conc. Sho
⑯	Not Used		
⑰	15+17 to 17+10	HE	Rt., Guard Rail
⑱	15+10 HE	Rt.	to 58+40 Expr., Rt., P.
⑲	Highland Drive Overpass	Inting. Structure Appr.	



- ① Highland Drive Lt. Pneumatically Placed Mortar (Slope Protection) - See Sheet E-21
- ② Highland Drive Rt. Pneumatically Placed Mortar (Slope Protection) - See Sheet E-21
- ③ 50+27 to 54+56 Expr., Highland Drive Overpass Structure No. 1-046 - See Sheet E-21 Through 8
- ④ 50+75 Expr. 4" x 11 1/2" A.C.P. Concrete
- ⑤ 57+00 Expr. 4" x 11 1/2" A.C.P. Concrete
- ⑥ 4+75 EH 4" x 34" A.C.P. Concrete

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

PAVING PLAN
STA 48+00 TO 58+40 EXPRES
DOWNTOWN EXPRESSWAY
LAS VEGAS

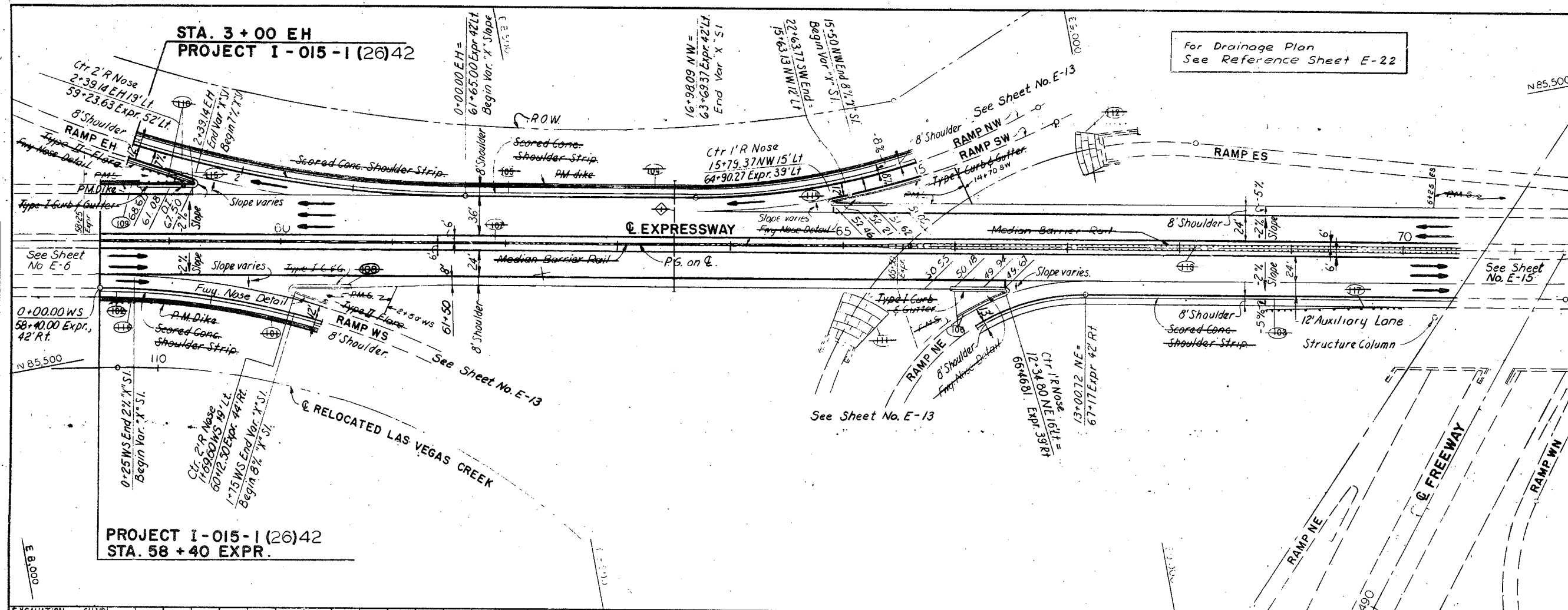
DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE:
DESIGNED BY: E.V.
DRAWN BY: G.C.
CHECKED BY: JBL
APPROVED BY:

STA. 3 + 00 EH
PROJECT I - 015 - I (26)42

For Drainage Plan
See Reference Sheet E-22

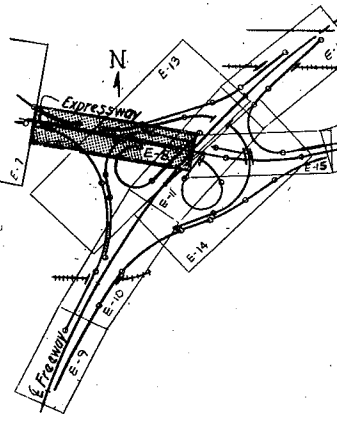
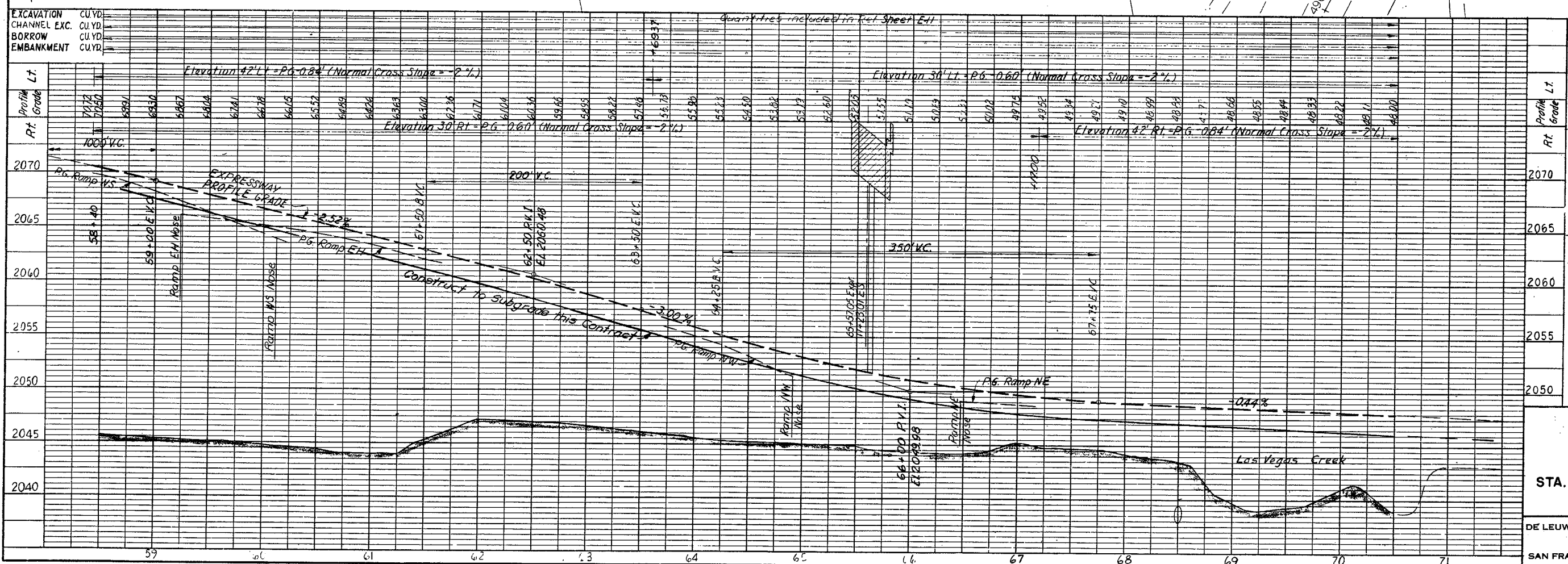
FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	1015-1 (26)42	CLARK	03-083		39



SEC. 28.6 E.
T. 20S. R. 6E.
M.D.B. & M.

- 101 0+00 to 2+00 WS, Rt., P.M. Strip
- 102 0+00 to 2+00 WS, Rt., Scored Strip
- 103 12+00 NE, Rt., to 70+50 Ex. Scored Conc. Strip
- 104 15+00 to 16+08 NW, Rt., 61' Ex. Lt., and 0+00 to 34' P.M. Dike
- 105 15+00 to 16+08 NW, Rt., 61' Ex. Lt., and 0+00 to 34' Scored Conc. Shoulder Strip
- 106 65+07 to 66+17 Ex. Rt., 12+35 NE Lt., Type I Curb
- 107 58+10 to 65+28 Ex. Double Barrier Rail
- 108 60+12 to 60+63 Ex. Rt., 2+00 WS Lt., Type I Curb
- 109 58+10 to 58+74 Ex. Lt., B
- 110 58+74 to 59+24 Ex. Lt., 3+00 EH, Lt., Type I Curb
- 111 65+00 Ex. Rt., Pneumatic Conc. Mortar (Slope Protect Structure) Plans
- 112 67+00 Ex. Lt., Pneumatic Conc. Mortar (Slope Protect Structure) Plans
- 113 65+28 to 70+50 Ex. Lt., 4' Hotel Beam Barrier Rail
- 114 15+00 to 15+70 NW, Lt., 61' Ex. Lt., Type I Curb
- 115 58+84 Ex. Lt., Std. Guard Installation Detail D
- 116 60+50 Ex. Rt., Std. Guard Installation Detail D
- 117 60+75 Ex. Rt., Std. Guard Installation Detail D
- 63+50 Ex. 4'x100' A.C.P.

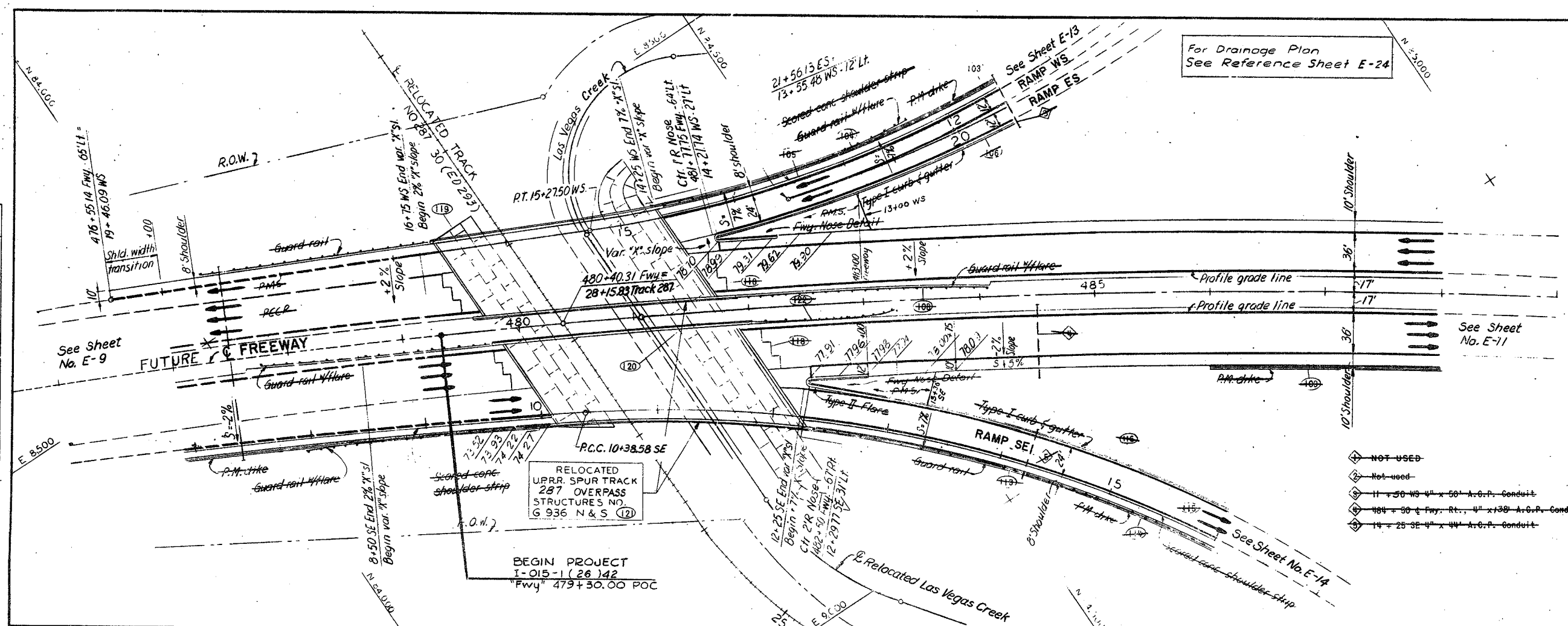
PROJECT I - 015 - I (26)42
STA. 58 + 40 EXPR.



STATE OF NEVADA
DEPARTMENT OF HIGHWAYS
PAVING PLAN
STA. 58+40 TO 70+50 EXPRES
BONANZA INTERCHANGE
LAS VEGAS
DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA
SCALE:
DESIGNED BY: FV
DRAWN BY: GC
CHECKED BY: JBL
APPROVED BY:

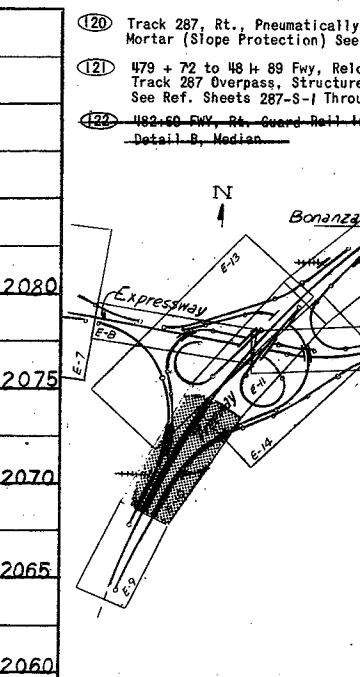
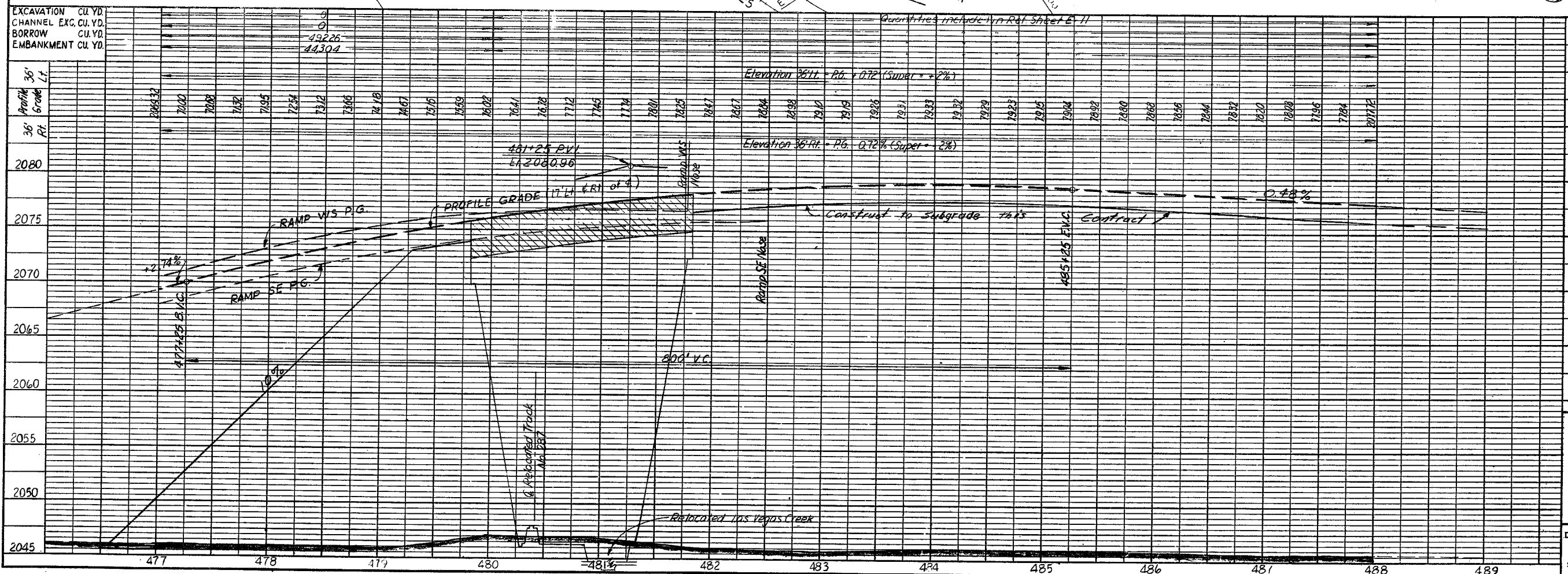
FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	SECTION	STATE ROUTE
7	NEVADA	1015-1 (20) 12	CLARK	03-083	

SEC 33
T20S, R6E
M.D.B. & M.



For Drainage Plan
See Reference Sheet E-24

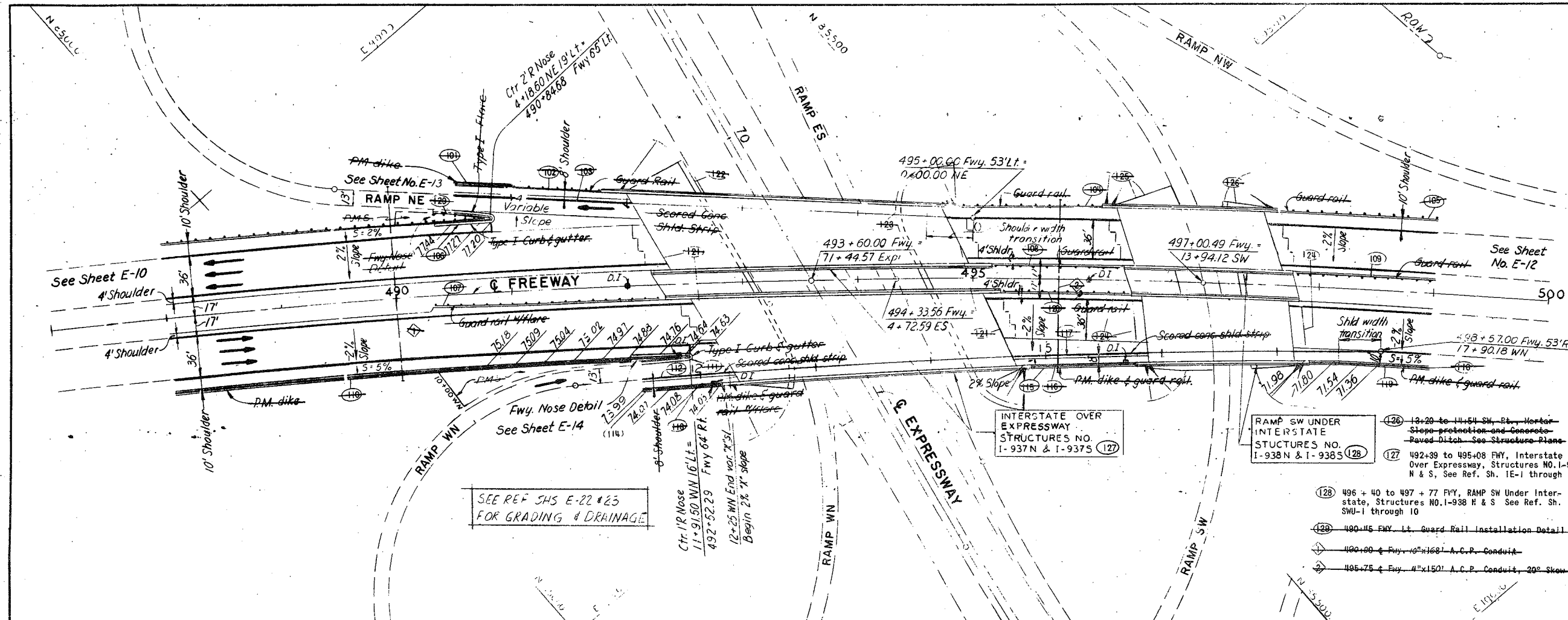
- (101) NOT USED
- (102) NOT USED
- (103) 11 + 50 to 14 + 50 WS, Rt., P.M. Dike
- (104) 12 + 53 to 14 + 51 WS, Rt., Guard Rail
- (105) 11 + 50 to 14 + 51 WS, Rt., Scored Conc. Shl
- (106) 19 + 50 to 22 + 22 WS, Lt., Type I Curb & Gutter
- (107) NOT USED
- (108) 481 + 87 to 483 + 89 Fwy, Lt., Guard Rail
- (109) 486 + 00 to 488 + 00 Fwy, Rt., P.M. Dike
- (110) NOT USED
- (111) NOT USED
- (112) NOT USED
- (113) 12 + 34 to 16 + 00 SE, Rt., Guard Rail
- (114) 12 + 36 to 16 + 00 SE, Rt., P.M. Dike
- (115) 12 + 36 to 16 + 00 SE, Rt., Scored Conc. Shl
- (116) 482 + 50 to 483 + 00 Fwy, Rt., & 12 + 30 Lt., Type I Curb & Gutter
- (117) Not Used
- (118) Track 287 Overpass Reinf. Street Approach
- (119) Track 287, Lt. Pneumatically Placed Conc. Mo Protection) See Structure Plans
- (120) Track 287, Rt., Pneumatically Placed Mortar (Slope Protection) See S
- (121) 479 + 72 to 48 + 89 Fwy, Reloc Track 287 Overpass, Structures See Ref. Sheets 287-S-1 Through
- (122) 482+50 Fwy, Rt., Guard Rail Line Detail B, Median



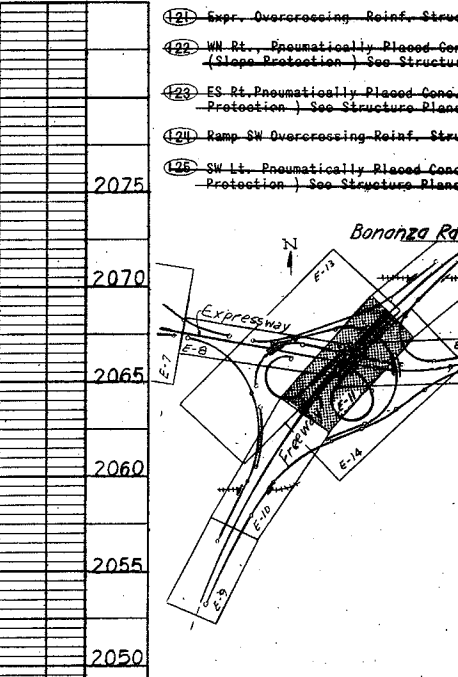
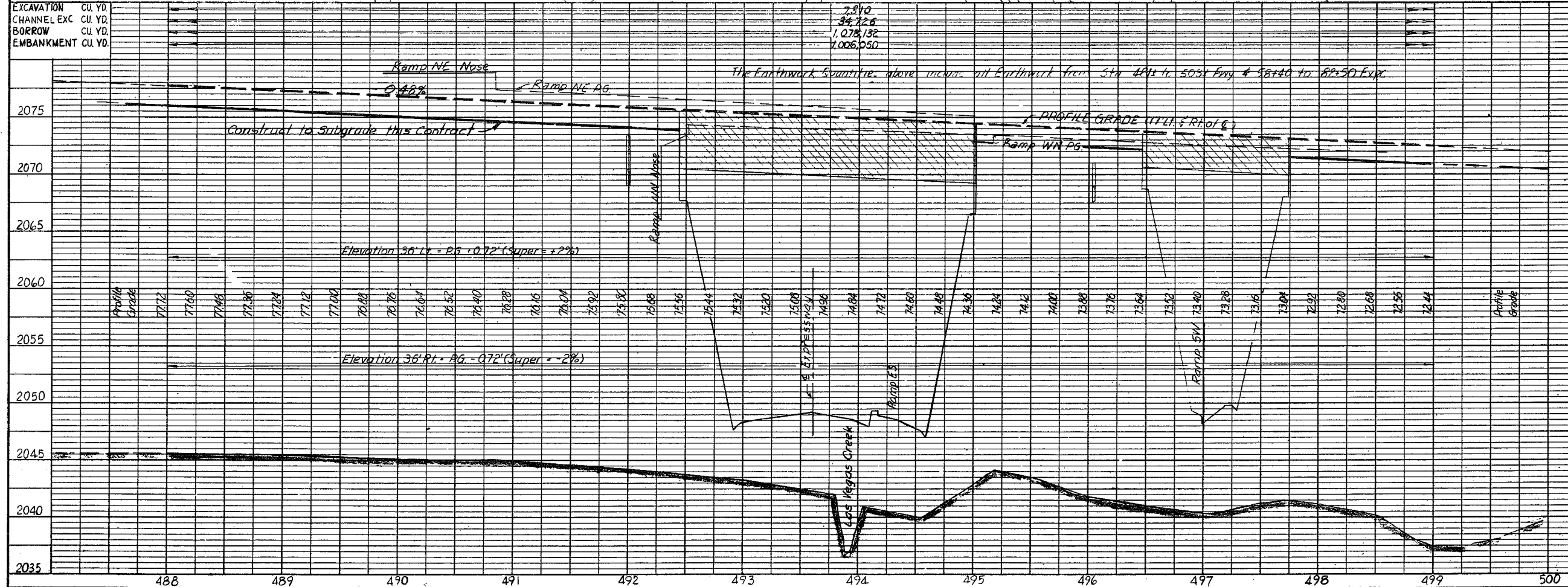
STATE OF NEVADA
DEPARTMENT OF HIGHWAYS
PAVING PLAN
STA. 477 TO 488 FREE
BONANZA INTERCHANGE
LAS VEGAS
DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA
SCALE
DESIGNED BY
DRAWN BY
CHECKED BY
APPROVED BY

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL	STATE
7	NEVADA	1018-1 (26)42	CLARK	03-083	RT. 12

SEC 28
T20S, R6E
M.D.B. & M.



- (101) 4+00 to 4+50 NE, Rt., P.M. Dike
- (102) 2+24 to 4+50 NE, Rt., Guard Rail
- (103) 2+95 to 4+50 NE, Rt., Scoured Conc. Shldr. Strip
- (104) 0+11 NE Rt. to 498+09 Fwy. Lt., Guard Rail
- (105) 407+63 to 408+00 Fwy, Lt., Guard Rail
- (106) 400+25 to 400+85 Fwy, Lt., 4' x 18 to 4' x 18 NE, Lt., Type I Curb & Gutter
- (107) 400+30 to 402+32 Fwy, Rt., Guard Rail
- (108) 405+15 to 406+20 Fwy, Lt., Guard Rail
- (109) 407+81 to 409+00 Fwy, Lt., Guard Rail
- (110) 408+00 to 402+02 Fwy, Rt., P.M. Dike
- (111) 402+02 to 402+52 Fwy, Rt., 4' x 18 to 4' x 18 WN, Lt., Type I Curb & Gutter
- (112) 11+50 to 12+30 WN, Rt., Scoured Conc. Shldr. Strip
- (113) 11+50 to 12+06 WN, Rt., P.M. Dike
- (114) 11+50 to 12+08 WN, Rt., Guard Rail
- (115) 14+67 to 15+78 WN, Rt., P.M. Dike
- (116) 14+85 to 15+80 WN, Rt., Guard Rail
- (117) 18+70 to 15+86 WN, Rt., Scoured Conc. Shldr. Strip
- (118) 17+31 WN, Rt. to 409+00 Fwy, Rt., P.M. Dike
- (119) 17+29 WN, Rt. to 409+00 Fwy, Rt., Guard Rail
- (120) 406+24 to 406+34 Fwy, Rt., Guard Rail
- (121) Expt. Overcrossing Reinf. Street
- (122) WN Rt., Pneumatically Placed Conc. (Slope Protection) See Structure
- (123) ES Rt. Pneumatically Placed Conc. (Slope Protection) See Structure
- (124) Ramp SW Overcrossing Reinf. Street
- (125) SW Lt., Pneumatically Placed Conc. (Slope Protection) See Structure



STATE OF NEVADA
DEPARTMENT OF HIGHWAY

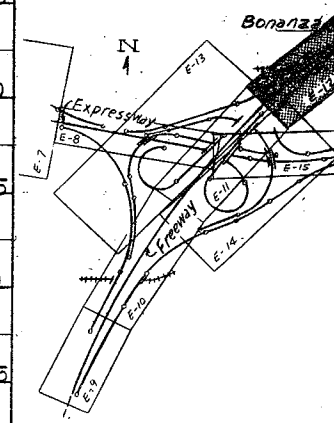
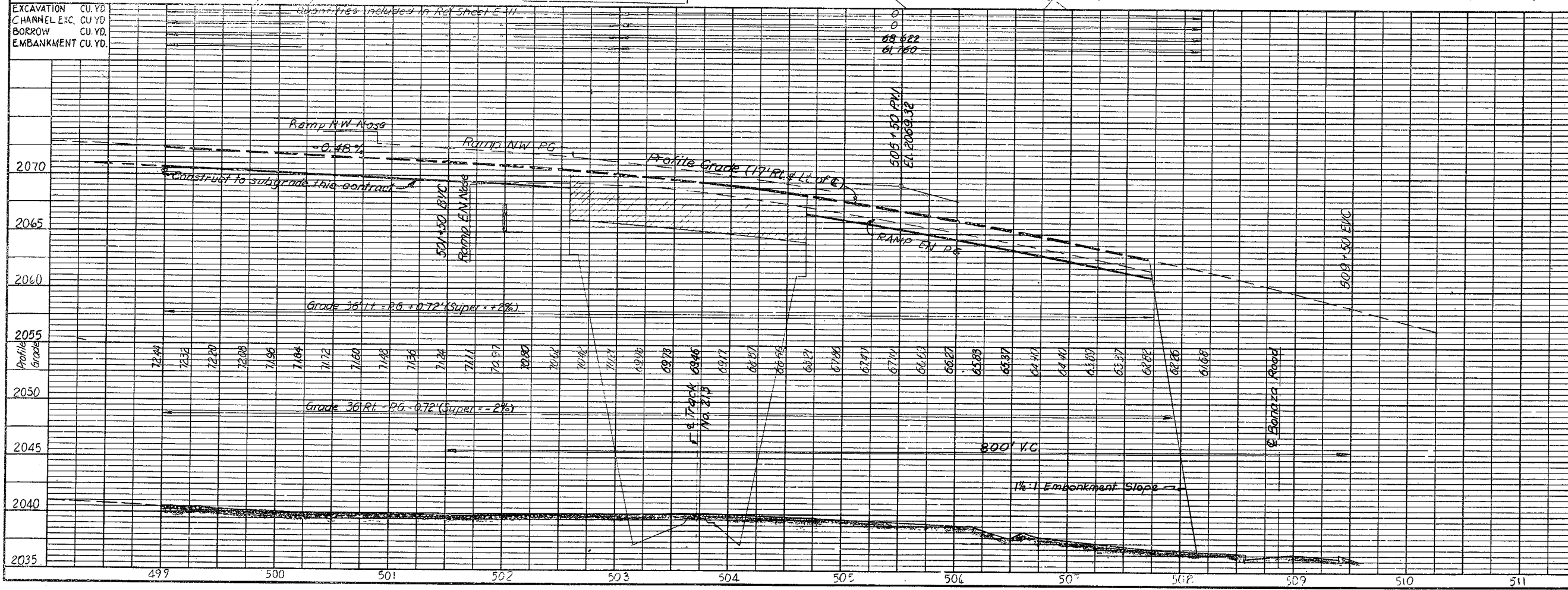
PAVING PLAN
STA. 488 TO 499 FREE

BONANZA INTERCHANGE
LAS VEGAS

DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY
DRAWN BY
CHECKED BY
APPROVED BY

101	3 + 95 to 7 + 00 HW, Rt., P.M. Dike
102	3 + 33 to 5 + 35 HW, Rt., Guard Rail
103	3 + 09 to 7 + 00 HW, Rt., Scored Conc. Shoulder
104	NOT USED
105	NOT USED
106	4 + 16 to 7 + 00 HW, Lt., 1 500 + 37 to Lt., Type 1 Curb & Gutter
107	489 + 00 to 489 + 95 Fwy, Lt., Guard Rail
108	400 + 00 to 482 + 95 Fwy, Lt., Guard Rail
109	NOT USED
110	500 + 73 to 502 + 75 Fwy, Rt., Guard Rail
111	400 + 00 to 480 + 95 Fwy, Rt., Guard Rail
112	480 + 00 to 501 + 20 Fwy, Rt., P.M. Dike
113	12 + 00 to 14 + 04 EN, Lt., 1 501 + 20 to Rt., Type 1 Curb & Gutter
114	12 + 00 to 15 + 04 EN, Rt., P.M. Dike
115	13 + 04 to 15 + 06 EN, Rt., Guard Rail
116	12 + 00 to 15 + 02 EN, Rt., Scored Conc. Shoulder
117	NOT USED
118	NOT USED
119	NOT USED
120	Track #213, Lt. Pneumatically Placed Conc. Protection) See Structure Plans
121	Track #213 Rt., Pneumatically Placed Conc. Protection) See Structure Plans.
122	Track #213 Overpass, Reinf. Struct., Approach
123	502 + 62 to 504 + 66 FWY, U.P.R.R. Spur 213 Structures 6-941 P & S, See Ref. Sheets 21 through 16.
124	501 + 50 Fwy, Guard Rail Installation Details



STATE OF NEVADA
DEPARTMENT OF HIGHWAY

PAVING PLAN

STA 499 TO 508+17.23 F

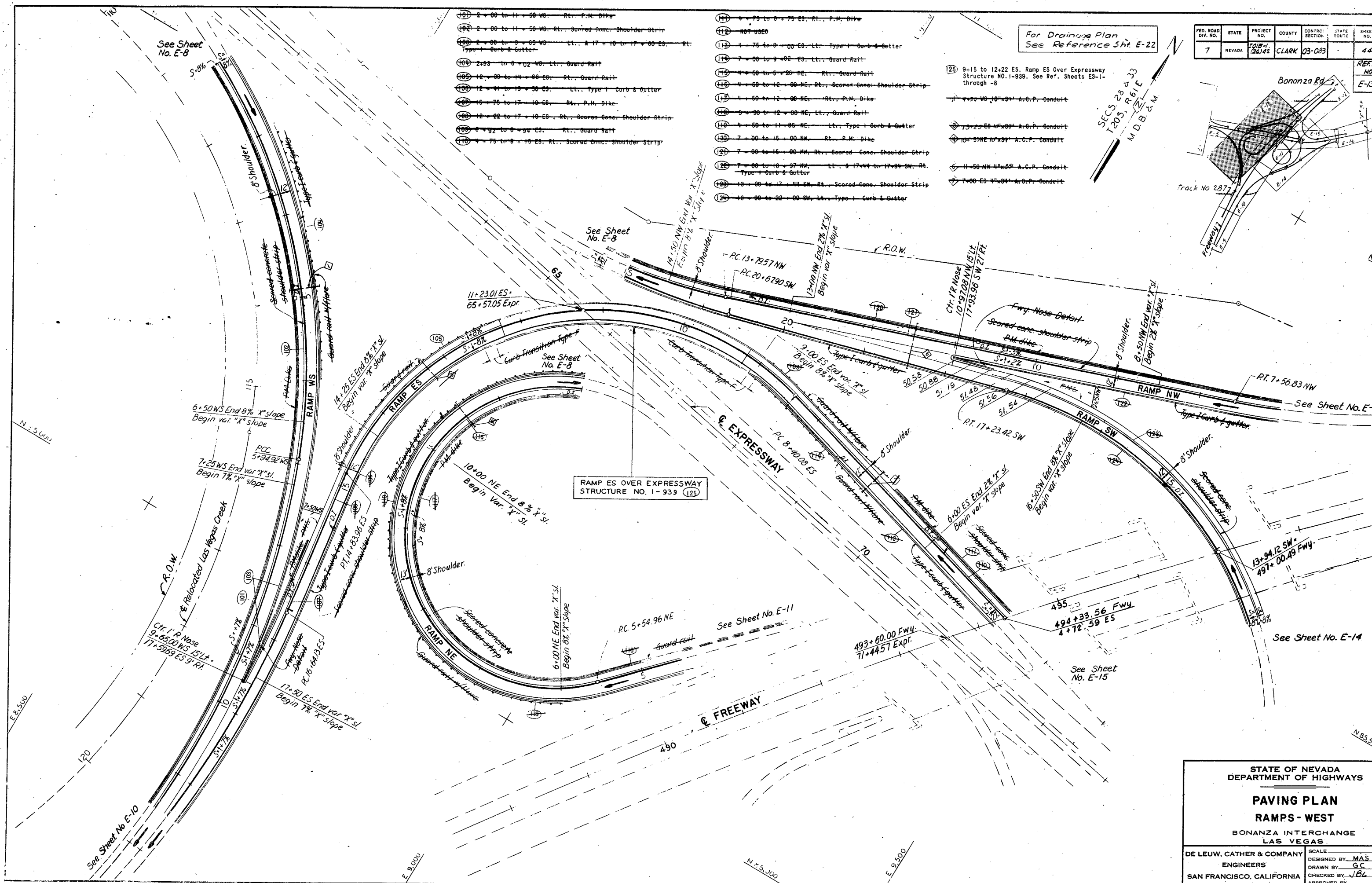
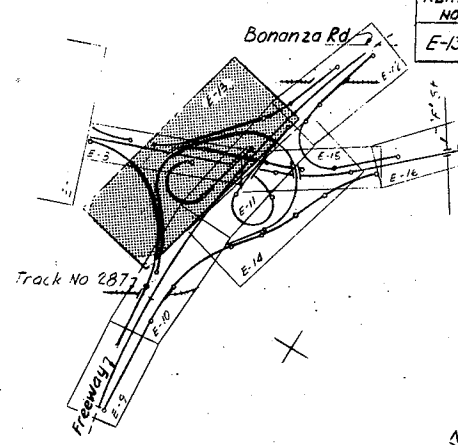
BONANZA INTERCHANGE
LAS VEGAS

JW. CATHER & COMPANY ENGINEERS FRANCISCO, CALIFORNIA	SCALE _____
	DESIGNED BY _____
	DRAWN BY _____
	CHECKED BY _____ ☒
	APPROVED BY _____

REF. NO. E-13

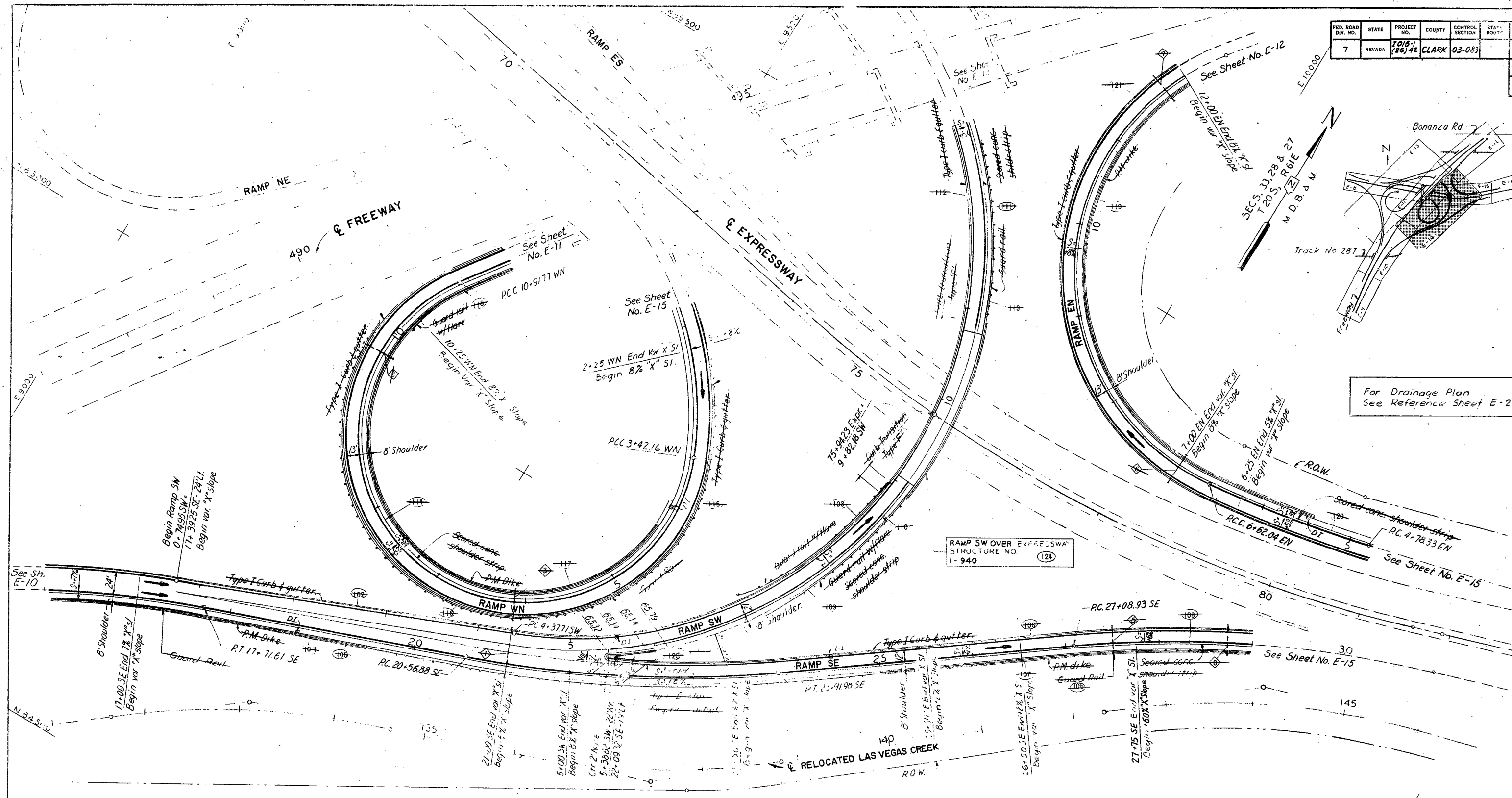
essway
ES-1-

SECS 28 & 33
T205, R61E
M.D.B. & M.

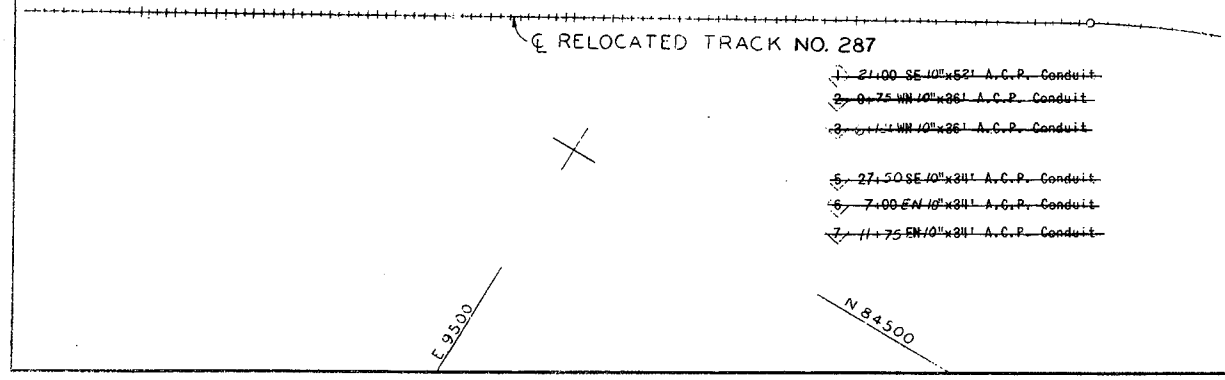


SCALE _____
DESIGNED BY MAS
DRAWN BY GC
CHECKED BY JBL
APPROVED BY _____

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE
7	NEVADA	1015-1 (26) 42	CLARK	03-083	4



For Drainage Plan
See Reference Sheet E-23



- 101 NOT USED
- 102 16+00 SE, Lt. to 8+95 SW, Lt., Type I Curb & Gutter
- 103 6+00 to 8+93 SW, Lt., Guard Rail
- 104 16+00 to 10+50 SE, Rt., P.M. Dike
- 105 16+00 to 20+00 SE, Rt., Guard Rail
- 106 5+00 to 5+80 SW, Rt., 22+00 to 28+00 SE, Lt., Type I Curb & Gutter
- 107 25+00 to 20+00 SE, Rt., P.M. Dike
- 108 16+00 to 20+00 SE, Rt., Scored Conc. Shoulder Strip
- 109 7+00 to 8+92 SW, Rt., Guard Rail
- 110 5+80 to 9+05 SW, Rt., Scored Conc. Shoulder Strip
- 111 10+77 to 13+00 SW, Rt., Scored Concrete Shoulder Strip
- 112 10+00 to 13+00 SW, Lt., Type I Curb & Gutter

- 113 10+00 to 12+80 SW, Lt., Guard Rail
- 114 1+75 to 11+50 WN, Rt., Scored Conc. Shoulder Strip
- 115 1+75 to 11+50 WN, Lt., Type I Curb & Gutter
- 116 2+40 to 10+00 WN, Lt., Guard Rail
- 117 8+95 to 11+50 WN, Rt., P.M. Dike
- 118 10+05 to 11+50 WN, Rt., Guard Rail
- 119 5+45 to 12+00 EN, Rt., P.M. Dike
- 120 4+75 to 12+00 EN, Rt., Scored Conc. Shoulder Strip
- 121 4+75 to 12+00 EN, Lt., Type I Curb & Gutter
- 122 NOT USED
- 123 NOT USED
- 124 9+06 to 10+76 SW, Ramp SW Over Expressway Structure I-940. See Ref. Sheets SW-1 through -7
- 125 22+50 SE, Lt., Guard Rail Installation Detail - 4

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

PAVING PLAN
RAMPS - EAST

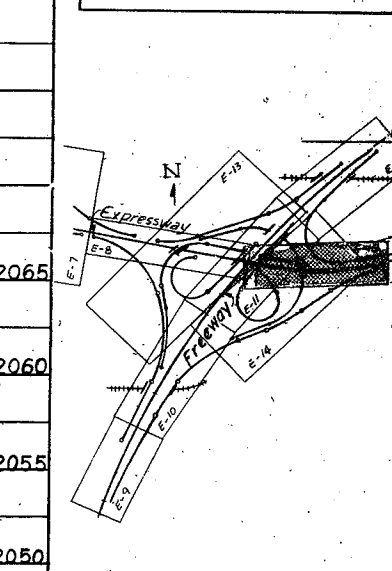
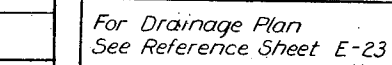
BONANZA INTERCHANGE
LAS VEGAS

DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE: _____
DESIGNED BY: F
DRAWN BY: M
CHECKED BY: J
APPROVED BY: _____

M. D. B. & M.

(101) 0 + 00 to 4 + 75 ES, Rt., P.M. 511
(102) 1 + 75 to 4 + 75 ES, Rt., Scored Conc
(103) NOT USED
(104) 4 + 00 to 4 + 75 ES, Lt., & 71 + 02
Expr., Lt., Type I Curb & Gutter
(105) NOT USED
(106) 2 + 25 to 4 + 75 EN, Rt., Scored Conc
(107) NOT USED
(108) 4 + 11 to 4 + 75 EN, Lt., & 81 + 00 &
Expr., Lt., Type I Curb & Gutter
(109) NOT USED
(110) NOT USED
(111) 70 + 50 Expr. Rt. to 1 + 75 WN, Rt. Scored
Shoulder Strip
(112) 1 + 10 to 1 + 75 WN, Lt., & 72 + 67 &
Expr., Rt., Type I Curb & Gutter
(113) NOT USED
(114) 28 + 00 to 28 + 57 SE, Lt., & 80
80 + 50 Expr., Rt., Type I Curb
(115) 28 + 00 to 30 + 00 SE, Rt., P.M. D
(116) 28 + 00 to 30 + 08 SE, Rt., Scored Co
76 + 00
(117) Expr. Rt., Pneumatically Placed Conc.
Protection) See Structure Plans
76 + 00
(118) Expr. Lt., Pneumatically Placed Conc.
Protection) See Structure Plans
(119) 70+50 to 76+37 Expr. Lt. & Rt. Single
Barbed Rail
(120) 28+00 to 28+08.5 SE, Rt., Guard Rail
(121) 76+37 to 82+60 Expr. & Double Metal B
Rail
(122) 72+00 Expr. Lt., Guard Rail Installat
(123) 82+25 Expr. Lt., Guard Rail Installat



STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

PAVING PLAN

STA. 70+50 TO 82+50 EXPRES

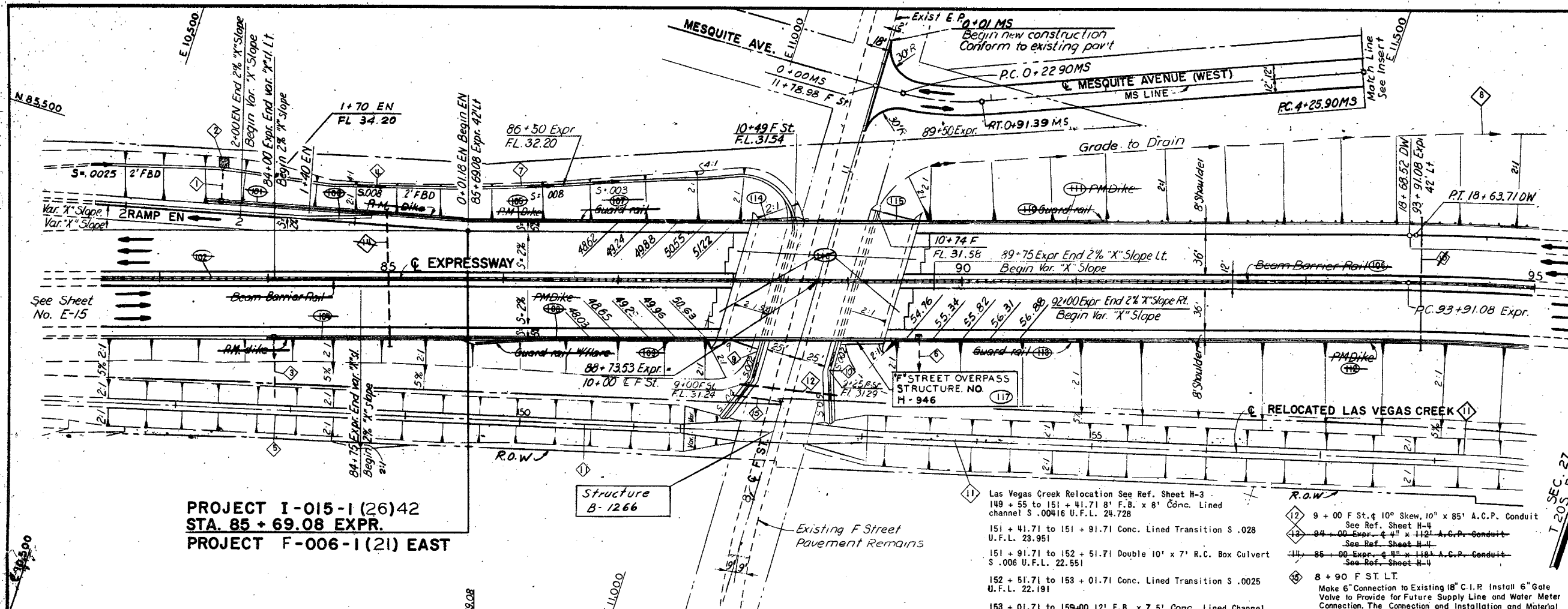
**BONANZA INTERCHANGE
LAS VEGAS**

DE LEUW, CATHÉ & COMPANY
ENGINEERS

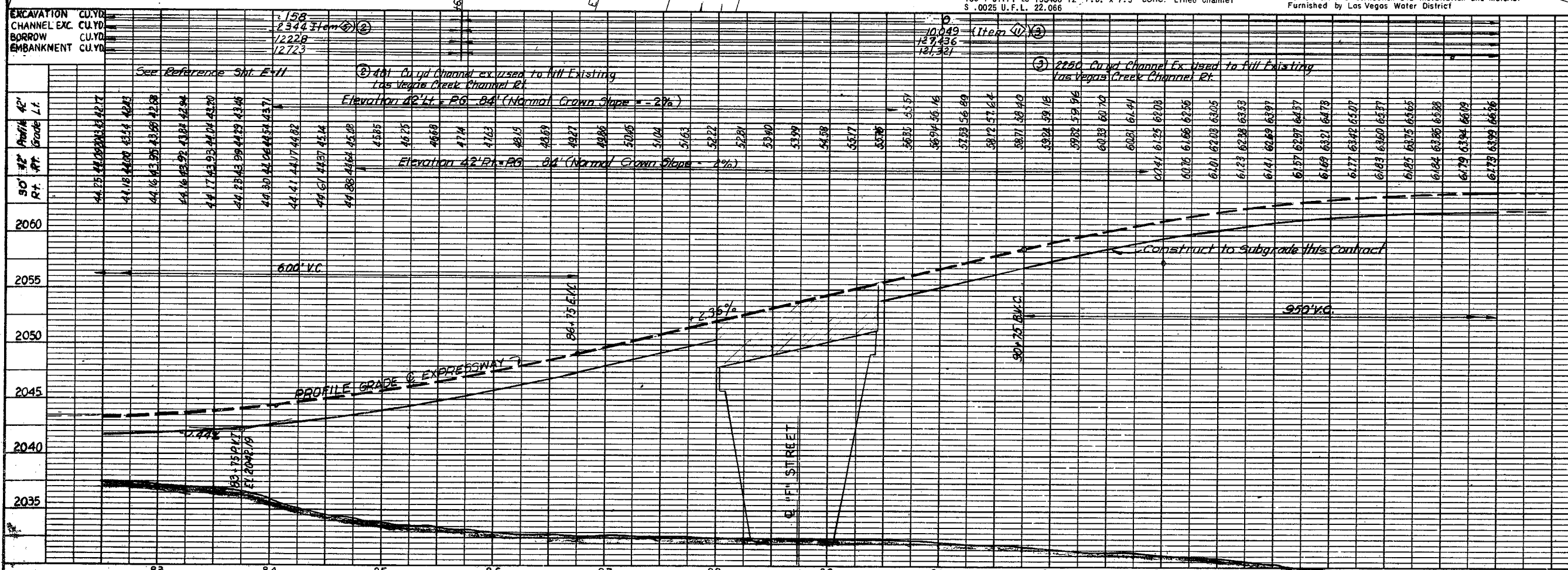
SAN FRANCISCO, CALIFORNIA

SCALE _____
DESIGNED BY RV
DRAWN BY MB
CHECKED BY JB
APPROVED BY _____

FED. ROAD DIST. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SH. NO.
7	NEVADA	1015-1 (26)42	CLARK	03-065		4
F006-1(21)						



PROJECT I-015-1 (26)42
STA. 85 + 69.08 EXPR.
PROJECT F-006-1 (21) EAST



1. 2 + 20 EN 8' Rt. Type 3 A.A.D.I. G.E. 18" x 25' R.C.P. S. 10 U.I.E. 38.90
2. 2 + 30 EN 33' Rt. 18" R.C.P. ES Con. Ditch protection 5' x 10' (See Sheet H-3)
3. 84 + 00 Expr. 50' Rt. Type 3 A.A.D.I. 48.81 18" x 50' C.M.P. U.I.E. 39.00 See C.M.P. Downdrain Detail Ref. She Discharge to Las Vegas Creek Sta. 14
4. 3 + 20 EN to 0 + 01 EN 2' F.B.D., R
5. Las Vegas Creek Relocation See Ref. 146+00 to 149+55, 8' F.B. x 8' Conc. Channel S. 00416 U.F.L., 26.205
6. 89 + 60 Expr. 50' Rt. Type 3 A.A.D.I. 61., 18" x 76' C.M.P. U.I.E. 4900 L. See C.M.P. Downdrain Detail Ref. She charge to Las Vegas Creek Sta. 153 +
7. 0 + 01 EN Rt. to 10 + 49 F. St. Lt., Rdw. Exc.
8. 89+30 to 95+00 Expr. Lt., Grade to D
9. 10 + 49 F St. Lt. to 151 + 80 Las V P.C. Paved 2' F.B.D. See Ref. Sheet Ditch Inlet See Ref. Sheet H-4
10. 10 + 74 F St. Rt., to 152 + 70 Las P.C. Paved 2' F.B.D. See Ref. Sheet Ditch Inlet See Ref. Sheet H-4

- 101 0+01 to 2+20 EN Rt., P.M. Dike
- 102 82+50 to 85+69 Expr., Double Metal Barrier Rail
- 103 0+05 to 0+25 EN Rt., Scored Concrete Shoulder Strip
- 104 83+05 to 85+69 Expr. Rt., P.M. D
- 105 85+69 to 88+01 Expr. Lt., P.M. D
- 106 85+69 to 95+00 Expr., Double Metal Rail
- 107 88+01 to 89+03 Expr. Lt., Guard Ra
- 108 85+69 to 87+72 Expr. Rt., P.M.
- 109 86+72 to 87+74 Expr. Rt., Over
- 110 89+76 to 95+00 Expr. Lt., Over
- 111 80+70 to 81+25 Expr. Lt., P.M.
- 112 89+46 to 95+00 Expr. Rt., P.M.
- 113 80+44 to 81+46 Expr. Rt., Guard
- 114 "F" St. Lt., Pneumatically Placed Co See Structure Plans, Sheet No. FS-
- 115 "F" St. Rt., Pneumatically Placed Co See Structure Plans, Sheet No. FS-
- 116 "F" St. Overpass Rein. Struc Approaches. See Sheet No. FS-1
- 117 88 + 74 Expr. "F" Street Structure NO. H-946. See Ref. S through -9

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

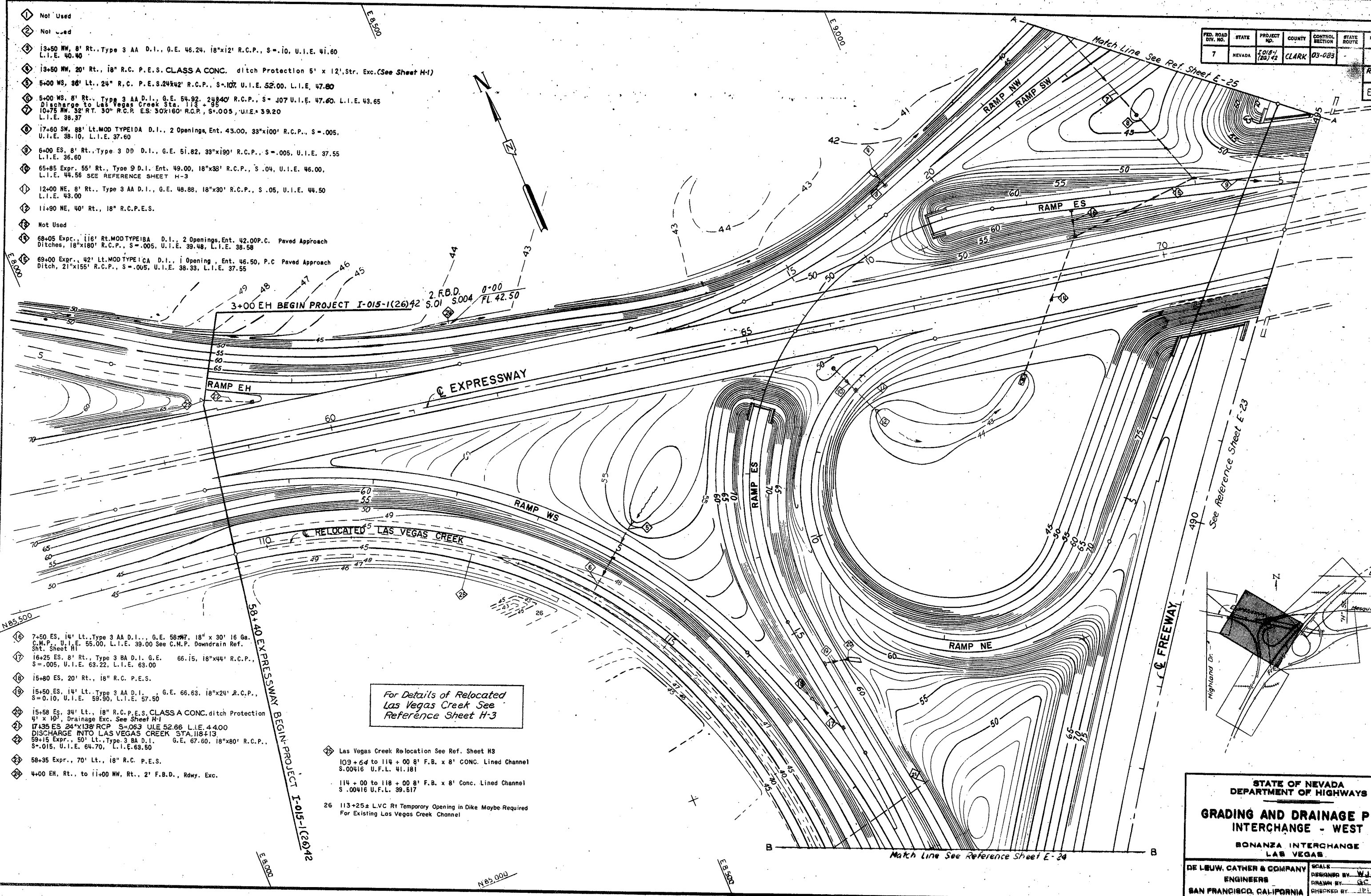
PAVING AND DRAINAGE PL.
STA. 82 + 50 TO 95 + 00 EXPRESS
DOWNTOWN EXPRESSWAY
LAS VEGAS

DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY J.W.
DRAWN BY J.W.
CHECKED BY J.W.
APPROVED BY J.W.

- 1 Not Used
2 Not Used
3 13+50 NW, 8' Rt., Type 3 AA D.I., G.E. 45.24, 18"x12' R.C.P., S=.10, U.I.E. 41.60
L.I.E. 40.40
4 13+50 NW, 20' Rt., 18" R.C. P.E.S. CLASS A CONC. ditch Protection 5' x 12' Str. Exc. (See Sheet H-1)
5 5+00 WS, 38' Lt., 24" R.C. P.E.S. 24"x42" R.C.P., S=.107, U.I.E. 52.00, L.I.E. 47.80
6 5+00 WS, 8' Rt., Type 3 AA D.I., G.E. 54.92, 24"x40" R.C.P., S=.107, U.I.E. 47.60, L.I.E. 43.65
Discharge to Las Vegas Creek Sta. 113+95
7 10+75 NW, 32' Rt., 30" R.C.P. ES: 30"x160" R.C.P., S=.005, U.I.E. 39.20
L.I.E. 38.37
8 17+60 SW, 88' Lt., MOD TYPE 1A D.I., 2 Openings, Ent. 43.00, 33"x100" R.C.P., S=.005,
U.I.E. 38.10, L.I.E. 37.60
9 6+00 ES, 8' Rt., Type 3 DD D.I., G.E. 51.82, 33"x190" R.C.P., S=.005, U.I.E. 37.55
L.I.E. 36.60
10 65+85 Expr. 55' Rt., Type 9 D.I. Ent. 49.00, 18"x38" R.C.P., S=.04, U.I.E. 46.00,
L.I.E. 44.56 SEE REFERENCE SHEET H-3
11 12+00 NE, 8' Rt., Type 3 AA D.I., G.E. 48.88, 18"x30" R.C.P., S=.05, U.I.E. 44.50
L.I.E. 43.00
12 11+90 NE, 40' Rt., 18" R.C.P.E.S.
13 Not Used
14 68+05 Expr., 116' Rt., MOD TYPE 1A D.I., 2 Openings, Ent. 42.00 P.C. Paved Approach
Ditches, 18"x180" R.C.P., S=.005, U.I.E. 39.48, L.I.E. 38.58
15 69+00 Expr., 42' Lt., MOD TYPE 1A D.I., 1 Opening, Ent. 46.50, P.C. Paved Approach
Ditch, 21"x155" R.C.P., S=.005, U.I.E. 38.33, L.I.E. 37.55

FED. ROAD DIST. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE
7	NEVADA	1015-1 (26) 42	CLARK	03-083	



STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

**GRADING AND DRAINAGE PLAN
INTERCHANGE - WEST**

BONANZA INTERCHANGE
LAS VEGAS

DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE:
DESIGNED BY: W.J.
DRAWN BY: G.C.
CHECKED BY: J.P.

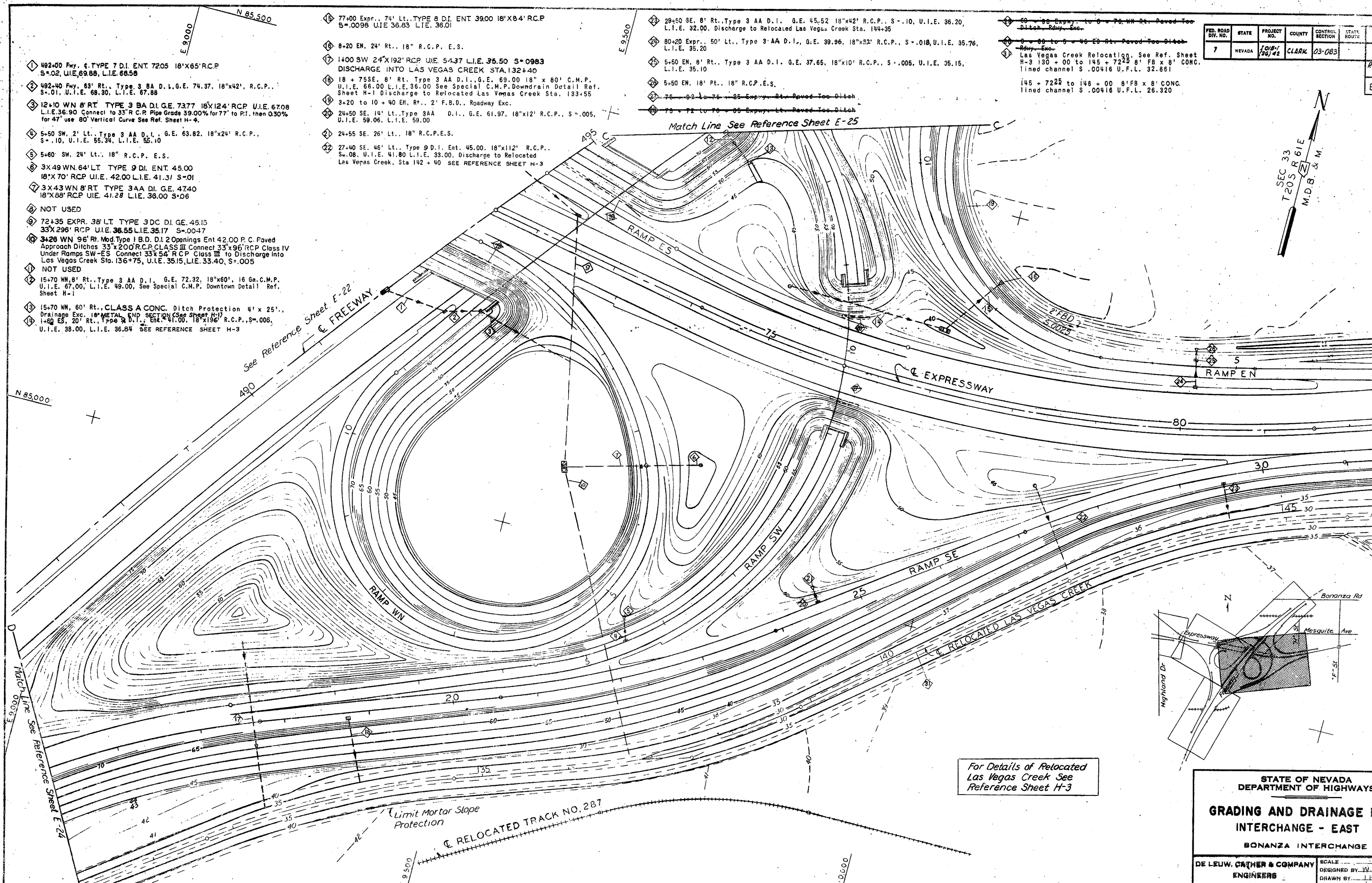
- 482+00 Fwy. 4 TYPE 7 D.I. ENT. 72.05 18"x65" R.C.P. S=0.02, U.I.E. 69.88, L.I.E. 68.58
- 482+40 Fwy. 63' Rt., Type 3 AA D.I., G.E. 74.37, 18"x42", R.C.P., S=0.01, U.I.E. 69.30, L.I.E. 67.88
- 12+10 WN 8' RT. TYPE 3 BA D.I. G.E. 73.77 18"x124" RCP U.I.E. 67.08 L.I.E. 36.90 Connect to 33" R.C.P. Pipe Grade 39.00% for 77' to P.I. then Q30% for 47' use 80' Vertical Curve See Ref. Sheet H-4.
- 5+50 SW. 2' Lt., Type 3 AA D.I., G.E. 63.82, 18"x24" R.C.P., S=0.10, U.I.E. 65.34, L.I.E. 55.10
- 5+60 SW. 24' Lt., 18" R.C.P. E.S.
- 3x49 WN. 64' LT. TYPE 9 D.I. ENT. 45.00 18"x70" RCP U.I.E. 42.00 L.I.E. 41.31 S=0.01
- 3x43 WN 8' RT. TYPE 3AA D.I. G.E. 47.40 18"x88" RCP U.I.E. 41.28 L.I.E. 38.00 S=0.06
- NOT USED
- 72+35 EXPR. 38' LT. TYPE 3 DC D.I. G.E. 46.15 33"x296" RCP U.I.E. 36.55 L.I.E. 35.17 S=0.047
- 3+28 WN 96' Rt. Mod. Type 1 B.D. D.I. 2 Openings Ent. 42.00 P.C. Paved Approach Ditches 33"x200" RCP CLASS III Connect 33"x96" RCP Class IV Under Ramps SW-ES Connect 33"x54" RCP Class III to Discharge into Las Vegas Creek Sta. 136+75, U.I.E. 35.15, L.I.E. 33.40, S=0.005
- NOT USED
- 15+70 WN 8' Rt., Type 3 AA D.I., G.E. 72.32, 18"x60", 16 Ga. C.M.P., U.I.E. 67.00, L.I.E. 49.00, See Special C.M.P. Downtown Detail Ref. Sheet H-1
- 15+70 WN, 60' Lt., CLASS A CONC. Ditch Protection 4' x 25", Drainage Exc. 18" METAL END SECTION (See Sheet H-1)
- 1+80 ES, 20' Rt., Type 3 D.I., G.E. 41.00, 18"x196" R.C.P., S=0.006, U.I.E. 38.00, L.I.E. 36.84 SEE REFERENCE SHEET H-3

- 77+00 Expr., 74' Lt., TYPE 8 D.I. ENT. 39.00 18"x84" R.C.P. S=0.0098 U.I.E. 36.83 L.I.E. 36.01
- 8+20 EN, 24' Rt., 18" R.C.P. E.S.
- 1400 SW 24"x192" RCP U.I.E. 54.37 L.I.E. 35.50 S=0.083 DISCHARGE INTO LAS VEGAS CREEK STA. 132+40
- 18 + 75SE, 8' Rt., Type 3 AA D.I., G.E. 69.00 18" x 80' C.M.P. U.I.E. 66.00 L.I.E. 36.00 See Special C.M.P. Downdrain Detail Ref. Sheet H-1 Discharge to Relocated Las Vegas Creek Sta. 133+55
- 3+20 to 10 + 40 EN, Rt., 2' F.B.D., Roadway Exc.
- 24+50 SE, 14' Lt., Type 3AA D.I., G.E. 61.97, 18"x12" R.C.P., S=0.005, U.I.E. 59.06, L.I.E. 59.00
- 24+55 SE, 26' Lt., 18" R.C.P. E.S.
- 27+40 SE, 46' Lt., Type 9 D.I. Ent. 45.00, 18"x112" R.C.P., S=0.08, U.I.E. 41.80 L.I.E. 33.00, Discharge to Relocated Las Vegas Creek, Sta. 142 + 40 SEE REFERENCE SHEET H-3

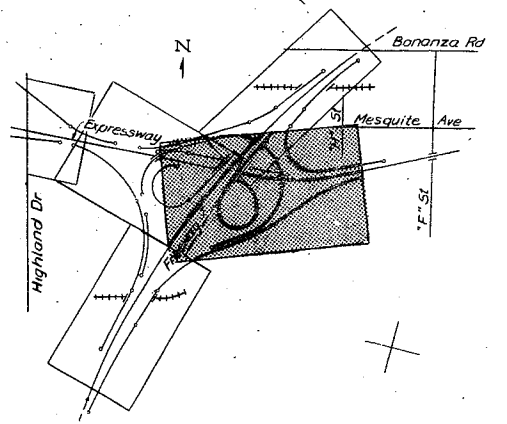
- 29+50 SE, 8' Rt., Type 3 AA D.I., G.E. 45.52 18"x42" R.C.P., S=0.10, U.I.E. 36.20, L.I.E. 32.00, Discharge to Relocated Las Vegas Creek Sta. 144+35
- 80+20 Expr., 50' Lt., Type 3 AA D.I., G.E. 39.96, 18"x32" R.C.P., S=0.018, U.I.E. 35.76, L.I.E. 35.20
- 5+50 EN, 8' Rt., Type 3 AA D.I., G.E. 37.65, 18"x10" R.C.P., S=0.005, U.I.E. 35.15, L.I.E. 35.10
- 5+50 EN, 18' Pt., 18" R.C.P. E.S.
- 75 + 02 to 76 + 25 Expr., Rt., Paved Too Ditch
- 75 + 72 to 76 + 05 Expr., Lt., Paved Too Ditch

- 68 + 80 Expr., 10 + 0 + 70 WN Rt., Paved Too Ditch, Rdwy. Exc.
- 0 + 00 to 0 + 40 ES Rt., Paved Too Ditch, Rdwy. Exc.
- Las Vegas Creek Relocation, See Ref. Sheet H-3 130 + 00 to 145 + 72+25 8' FB x 8' CONC. lined channel S .00416 U.F.L. 32.861
- 145 + 72+25 to 148 + 00 8' FB x 8' CONC. lined channel S .00416 U.F.L. 26.320

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	1018-1 (26) 42	CLARK	03-083		5



For Details of Relocated Las Vegas Creek See Reference Sheet H-3



STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

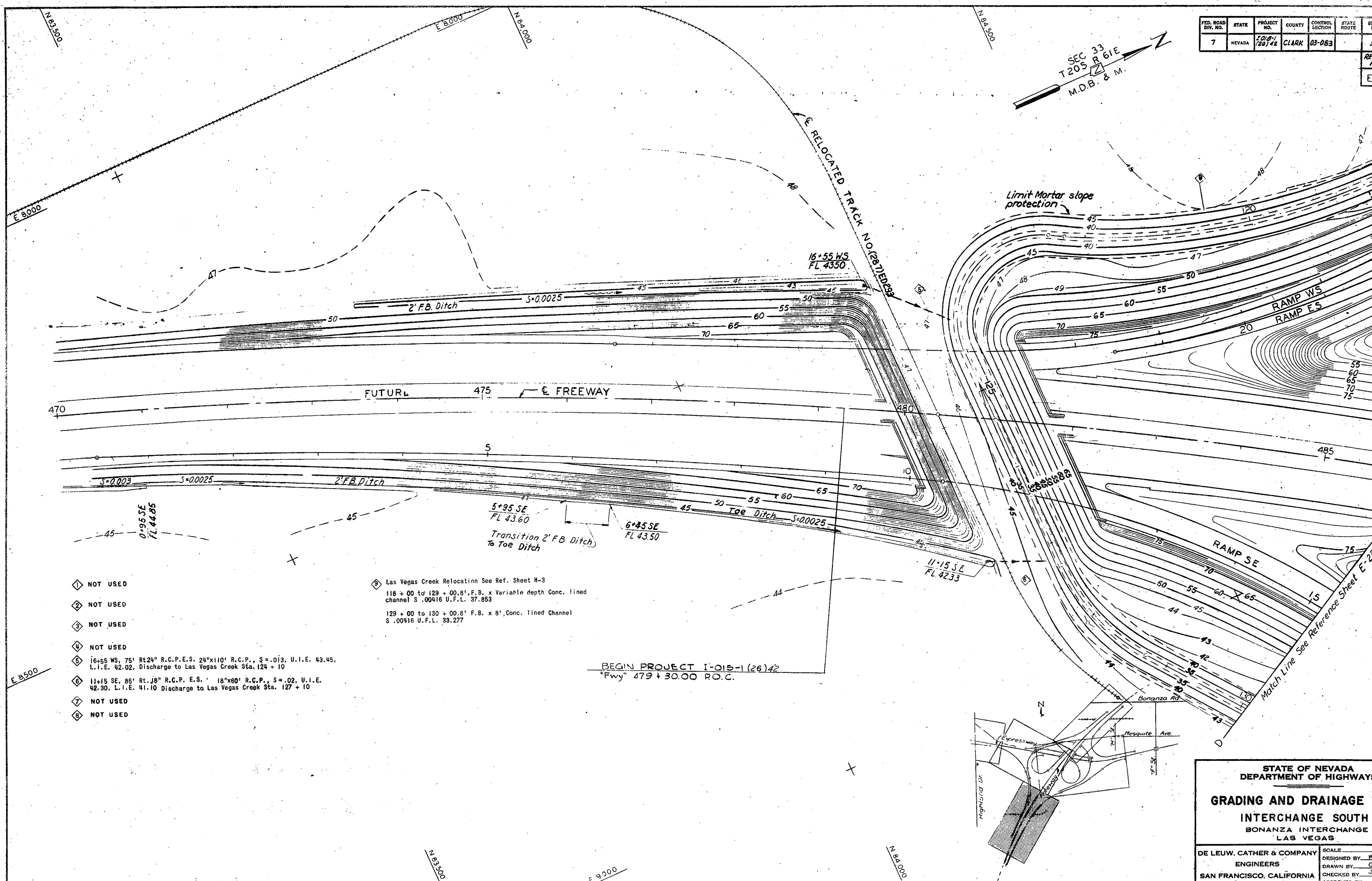
**GRADING AND DRAINAGE P
INTERCHANGE - EAST**

BONANZA INTERCHANGE

DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY W.J.B.
DRAWN BY J.E.S.
CHECKED BY J.E.L.
APPROVED BY

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	SECTION	ROUTE	SHEET NO.
7	NEVADA	1-013-1(26)42	CLARK	03-083		5



- ① NOT USED
- ② NOT USED
- ③ NOT USED
- ④ NOT USED
- ⑤ 16+55 WS, 75' Rt. 24" R.C.P.E.S. 24"x110' R.C.P., S=.013, U.I.E. 43.45, L.I.E. 42.02, Discharge to Las Vegas Creek Sta. 124 + 10
- ⑥ 11+15 SE, 85' Rt. 18" R.C.P. E.S. 18"x80' R.C.P., S=.02, U.I.E. 42.30, L.I.E. 41.10 Discharge to Las Vegas Creek Sta. 127 + 10
- ⑦ NOT USED
- ⑧ NOT USED

⑨ Las Vegas Creek Relocation See Ref. Sheet H-3
 118 + 00 to 129 + 00.8' F.B. x Variable depth Conc. lined channel S .00416 U.F.L. 37.853
 129 + 00 to 130 + 00.8' F.B. x 8' Conc. lined Channel S .00416 U.F.L. 33.277

BEGIN PROJECT 1-013-1(26)42
 "Fwy" 479 + 30.00 R.O.C.

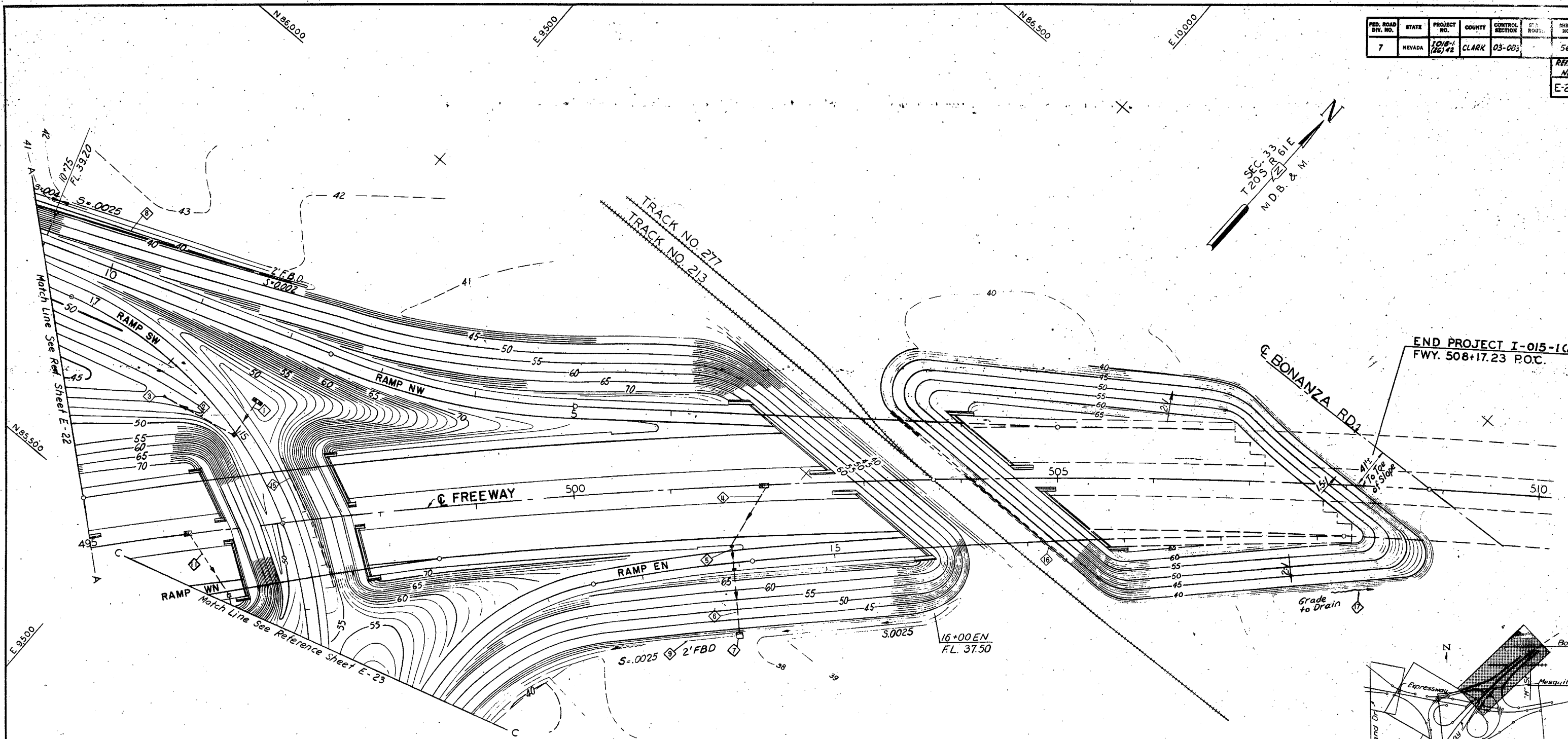
STATE OF NEVADA
 DEPARTMENT OF HIGHWAYS

GRADING AND DRAINAGE
INTERCHANGE SOUTH
BONANZA INTERCHANGE
LAS VEGAS

DE LEUW, CATHY & COMPANY
 ENGINEERS
 SAN FRANCISCO, CALIFORNIA

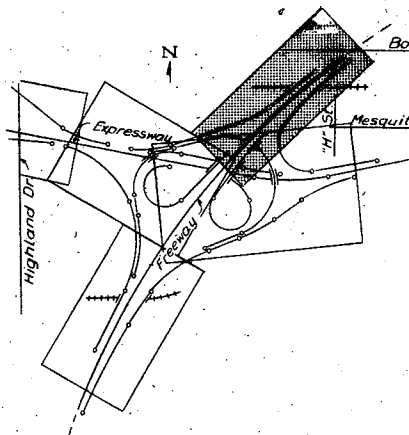
SCALE
 DESIGNED BY W
 DRAWN BY G
 CHECKED BY J
 APPROVED BY

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	S. ROUTE	SH. NO.
7	NEVADA	1015-1 (26) 42	CLARK	03-08		5
						RE
						E-2



- ① 15+15 SW, 40' Rt. TYPE 8 DI ENT 4700. 18"x40' R.C.P., S=.015, U.I.E. 44.83, L.I.E. 44.19
- ② 15+00 SW, 2' Lt., Type 3 BA D.I., G.E. 47.13, 18"x80' R.C.P., S=.005, U.I.E. 44.00, L.I.E. 43.60
- ③ 15+75 SW, 30' Lt., 18" R.C.P.E.S.
- ④ 502+00 Fwy, 6, TYPE 7 DI ENT 6725 18"x73' R.C.P. S=.011, U.I.E. 65.08 L.I.E. 64.28
- ⑤ 501+60 Fwy, 63' Rt., Type 3 AA D.I., G.E. 69.93, 18"x26' R.C.P., S=.01, U.I.E. 64.20 L.I.E. 63.94
- ⑥ 13+94 EN, 8' Rt., Type 3 AA D.I., G.E. 68.57, 18"x70' 16 Ga. C.M.P., U.I.E. 63.90 L.I.E. 37.10; See Special C.M.P. Down Drain Detail Ref. Sheet H-1
- ⑦ 13+94 EN, 72' Rt., Class A Concrete ditch protection 5' x 8' 18" METAL END SECTION
- ⑧ 8+00 to 11+00 NW, Rt., 2' F.B.D., Rdwy. Exc.
- ⑨ 10+40 to 16+00 EN, Rt., 2' F.B.D., Rdwy. Exc.
- ⑩ NOT USED
- ⑪ 496+04 Fwy, 6, Type 7 DI, ENT. 70.11 18"x76' RCP S=.011, U.I.E. 67.94, L.I.E. 67.10

- ⑫ Not Used
- ⑬ Not Used
- ⑭ Not Used
- ⑮ 23 + 78 to 26 + 19 Track 213 Lt. Paved Toe Ditch, Rdwy. Exc.
- ⑯ 19 + 45 EN to 509 + 00 Fwy, Rt. GRADE TO DRAIN.



STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

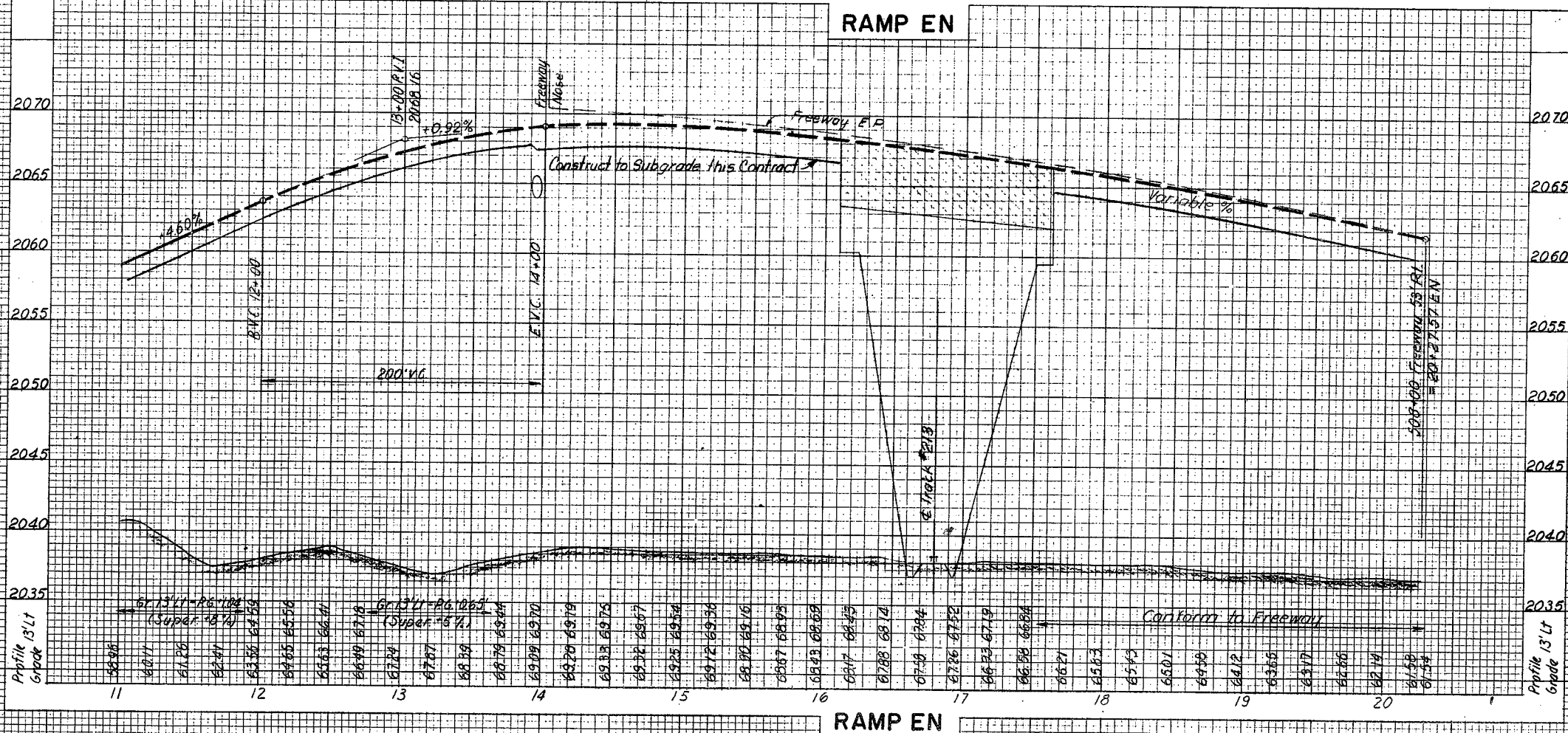
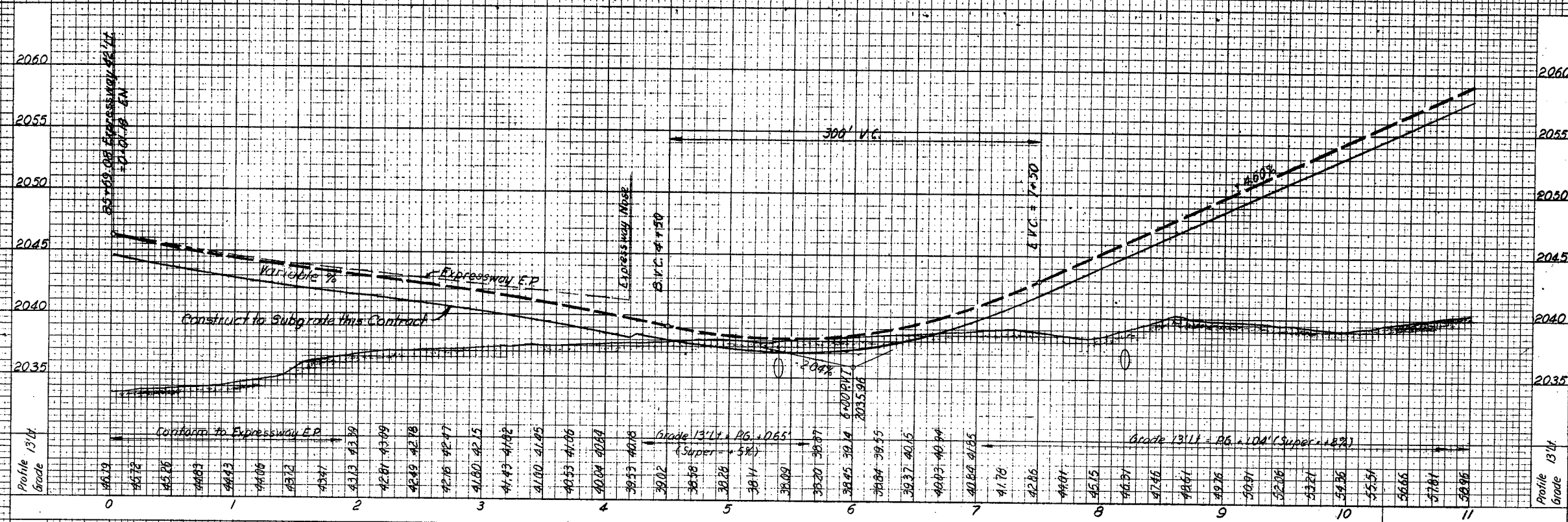
**GRADING AND DRAINAGE PLAN
INTERCHANGE - NORTH
BONANZA INTERCHANGE
LAS VEGAS**

DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY
DRAWN BY
CHECKED BY
APPROVED BY

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	201-1-201/2	CLARK	03-083		61

REF. N. F.



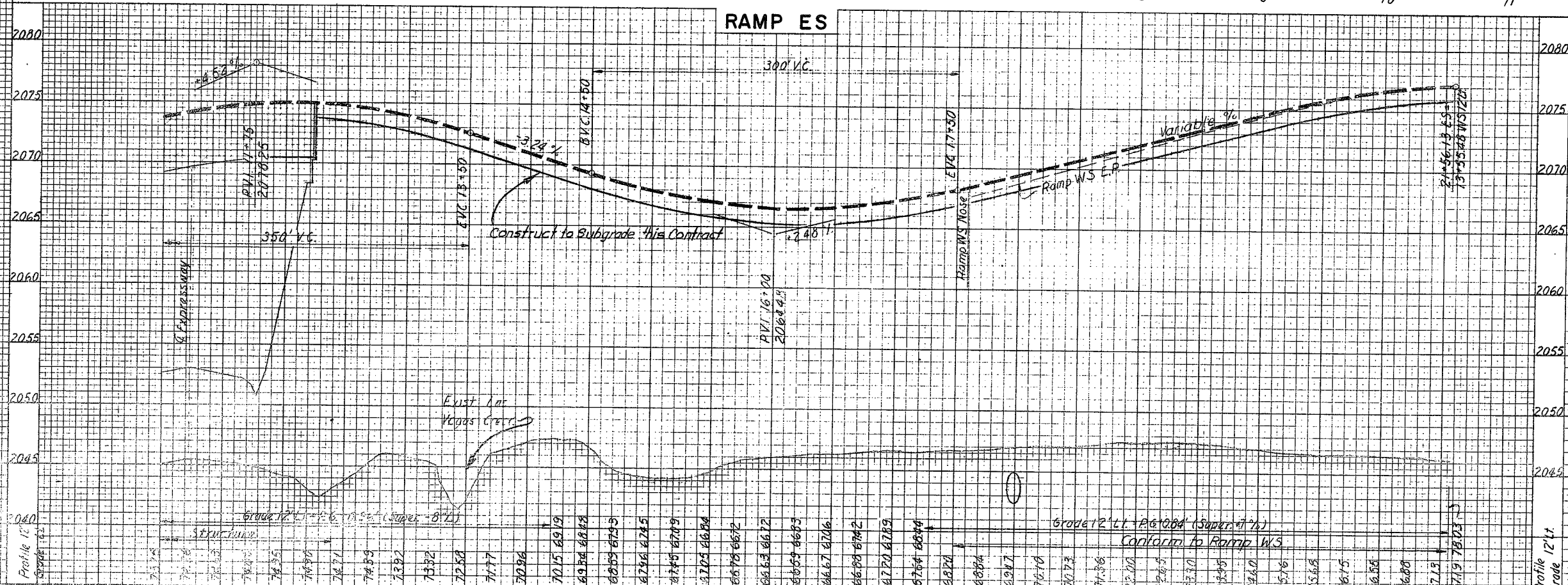
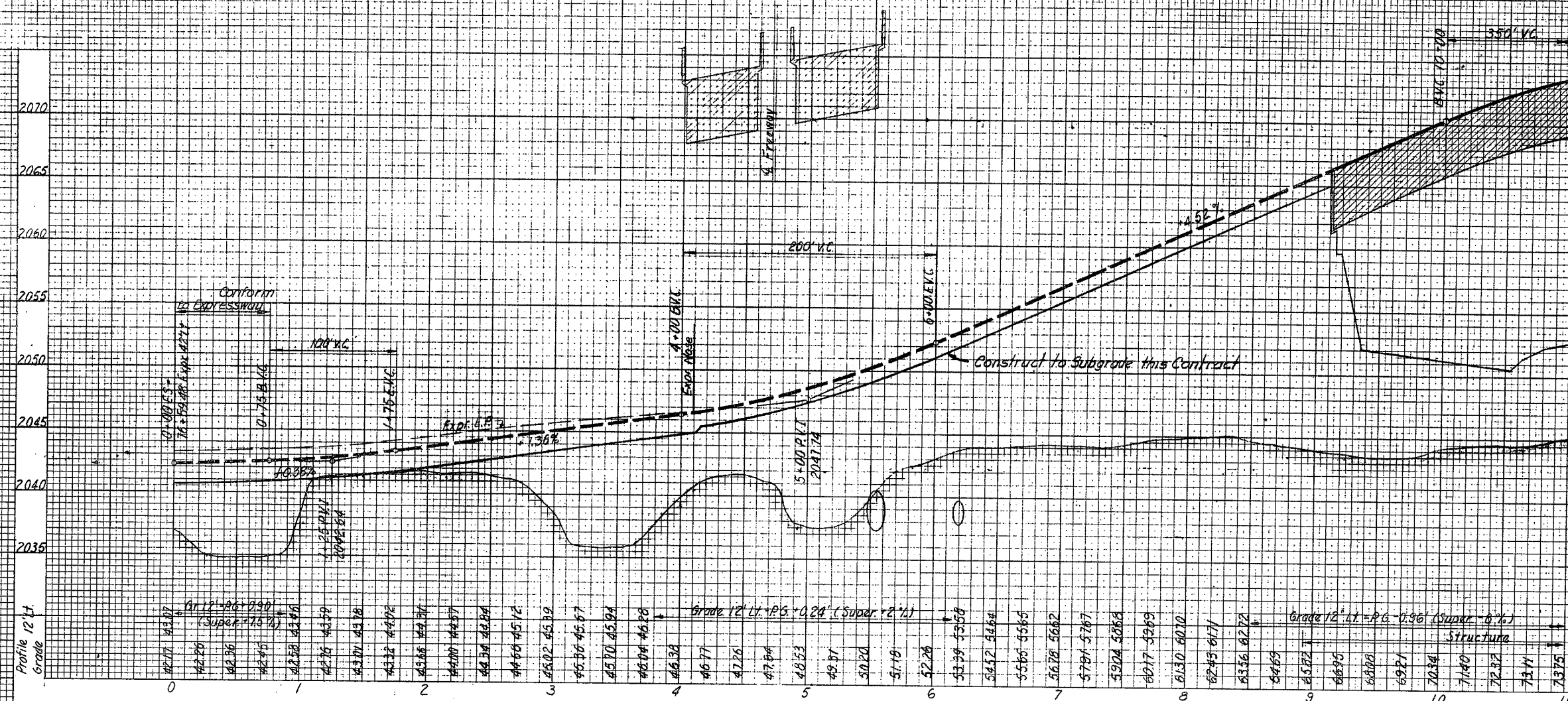
STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

PROFILE
RAMP EN
BONANZA INTERCHANGE
LAS VEGAS

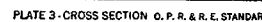
DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE:
DESIGNED BY: E.V.
DRAWN BY: F.M.
CHECKED BY: J.E.L.
APPROVED BY:

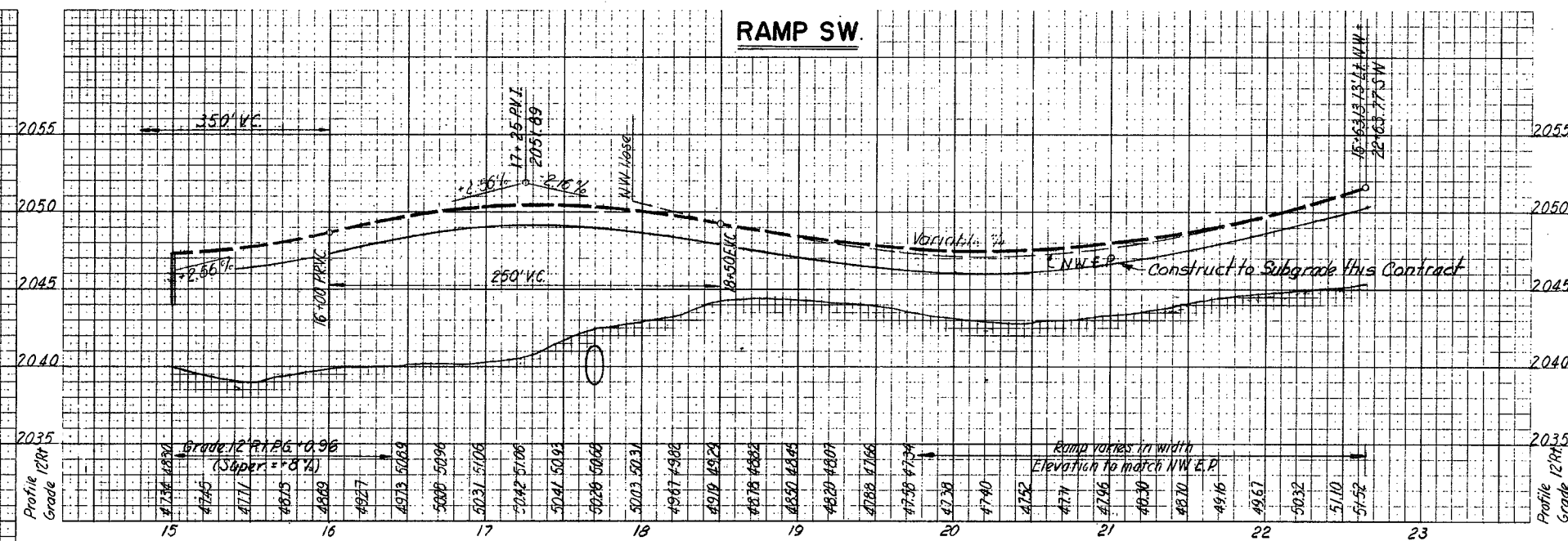
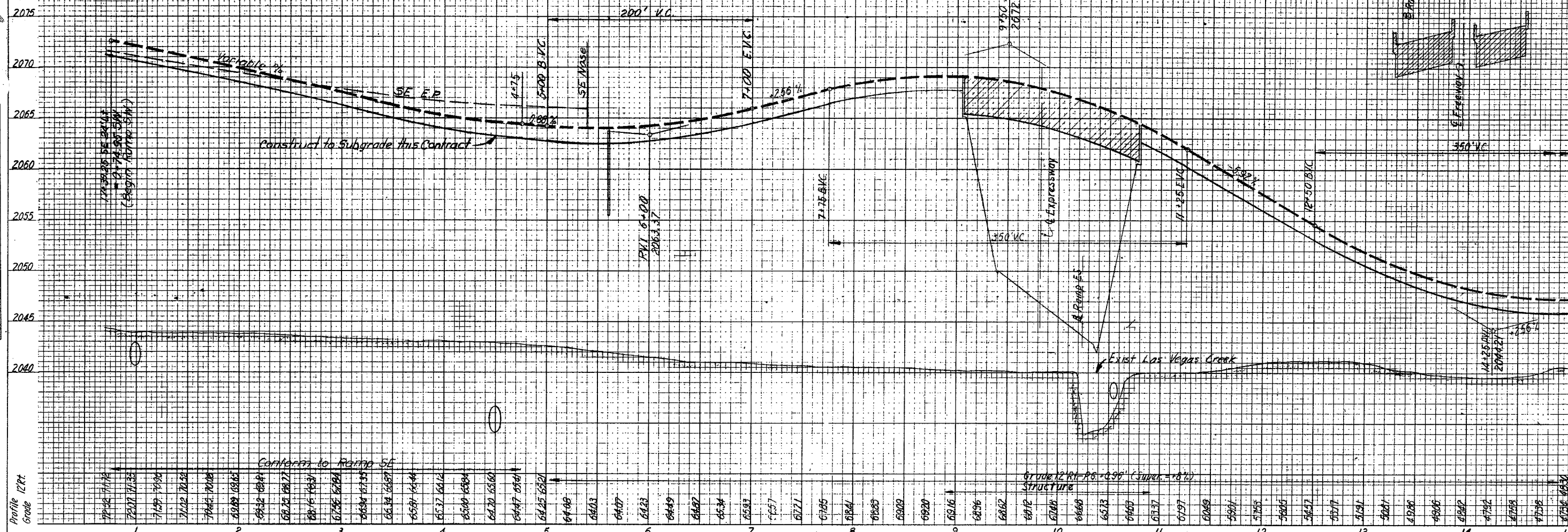
FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE
7	NEVADA	1015-1 (26)42	CLARK	03-083	



DE LEUW, CATHY & COMPANY ENGINEERS SAN FRANCISCO, CALIFORNIA	SCALE _____
	DESIGNED BY <u>P.L.</u>
	DRAWN BY <u>FM</u>
	CHECKED BY <u>JB</u>
APPROVED BY _____	



FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	
7	NEVADA	1015-1 (26) 42	CLARK	03-083		6



STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

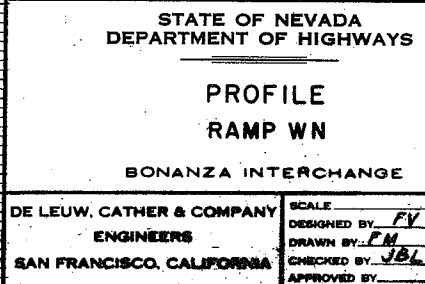
PROFILE
RAMP SW

BONANZA INTERCHANGE

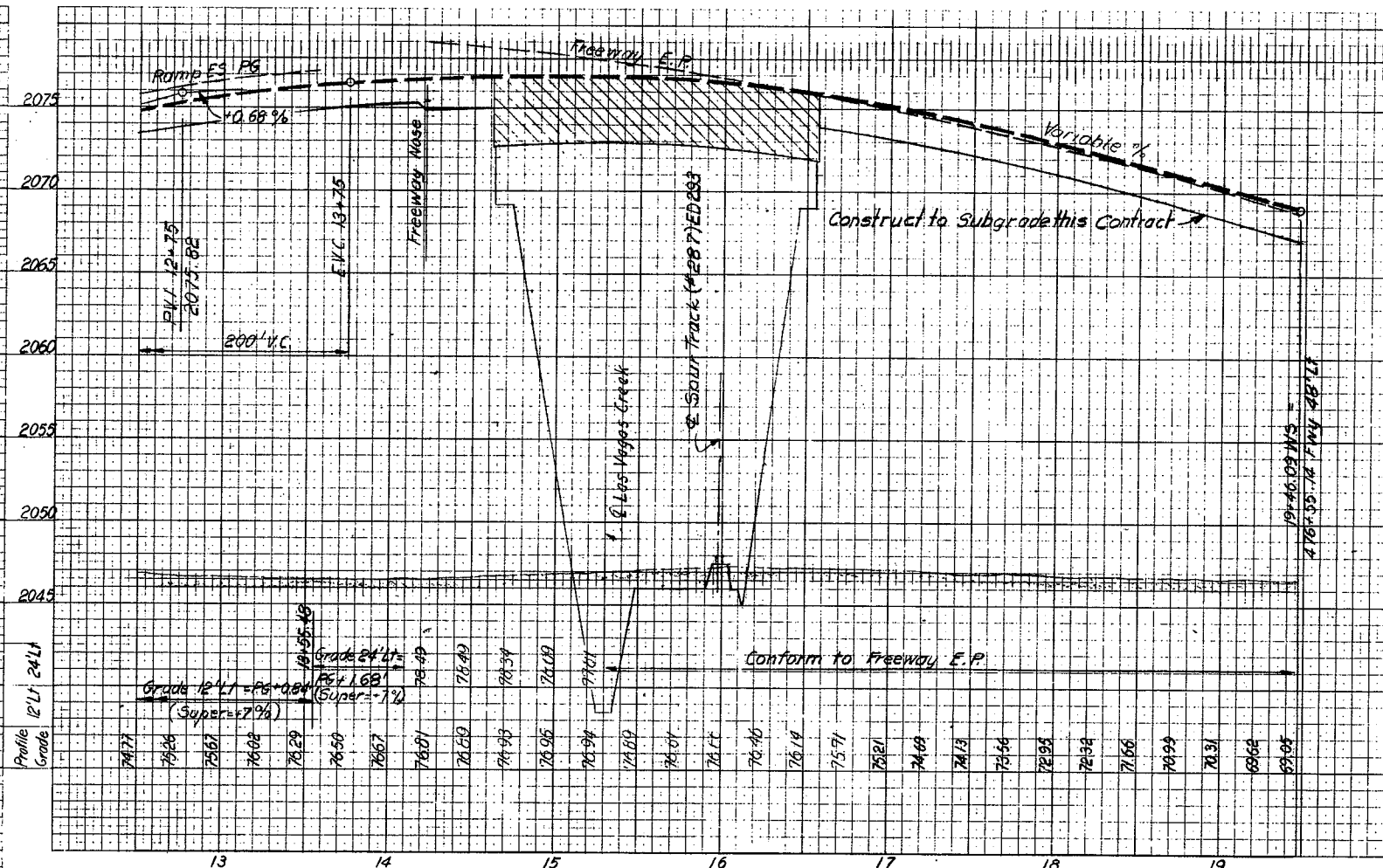
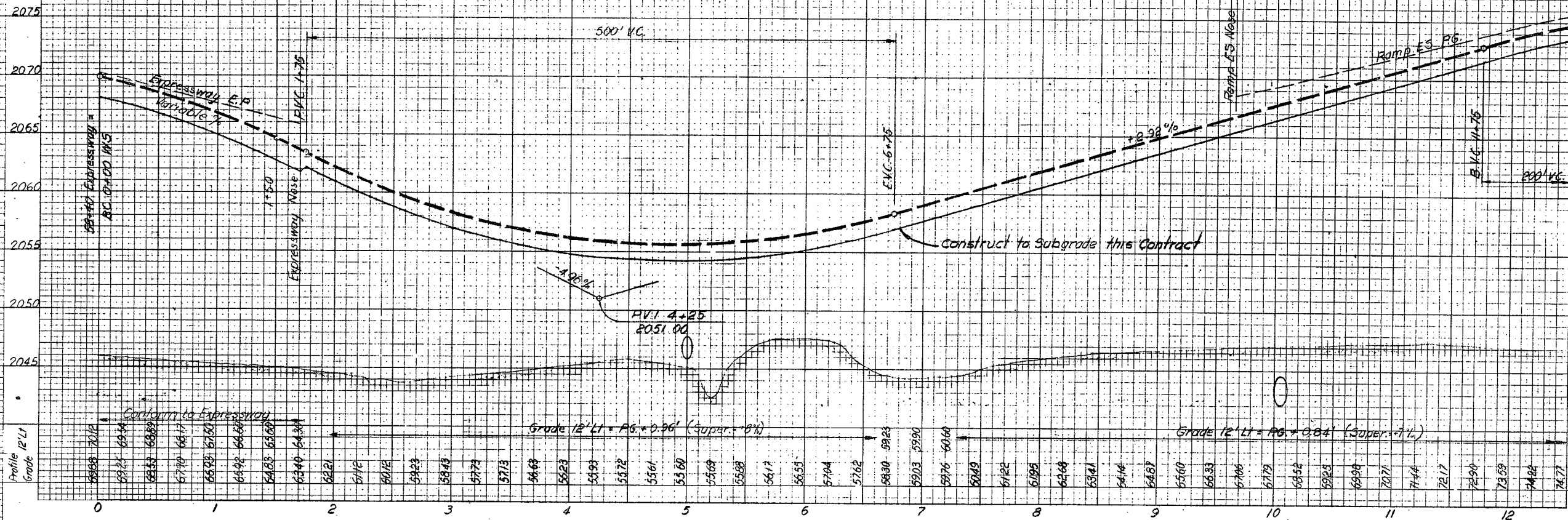
DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE _____
DESIGNED BY RL
DRAWN BY FM
CHECKED BY JL
APPROVED BY _____

NOTE BOOK	TEMPLATE
NO.	AREAS
	AREAS CHECKED



FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE
7	NEVADA	1015-1/24/42	CLARK	03-083	



RAMP WS

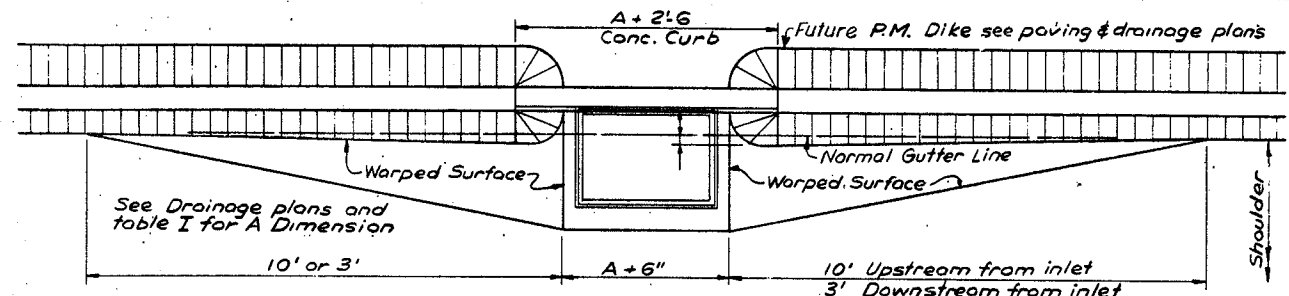
STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

**PROFILE
RAMP WS**

BONANZA INTERCHANGE

DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY *D*
DRAWN BY *FM*
CHECKED BY *JB*
APPROVED BY



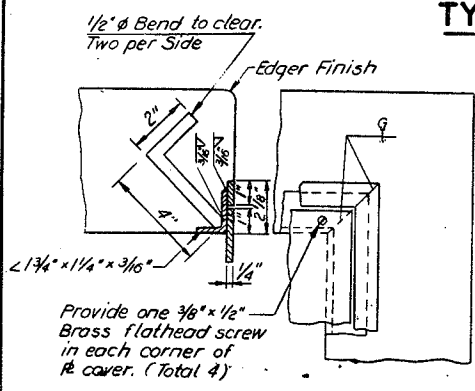
TYPE 3 DROP INLET IN P.M. DIKE

A Dimension

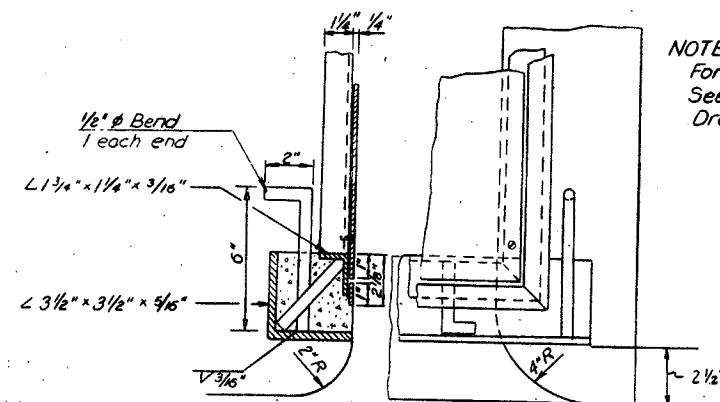
2'-6"	3'-0"	3'-6"	4'-0"
2'-0" AA	AB	AC	AD
2'-6" BA	BB	BC	BD
3'-0" CA	CB	CC	CD
3'-6" DA	DB	DC	DD
4'-0" EA	EB	EC	ED

TABLE I
DROP INLET DIMENSIONS
Applies to Types 1, 2 & 3 Drop Inlet

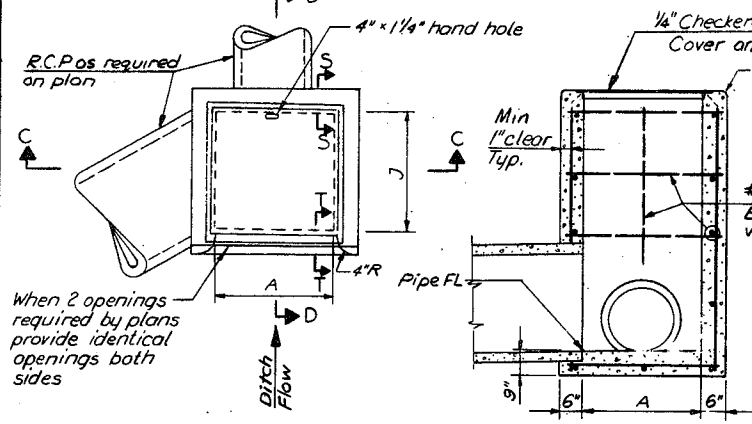
NOTE:
For details of type 3 D.I.
See State Standard Type 3
Drop Inlet detail sheet.



SECTION S-S

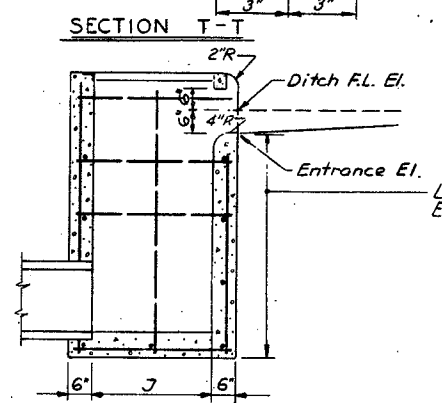


SECTION T-T



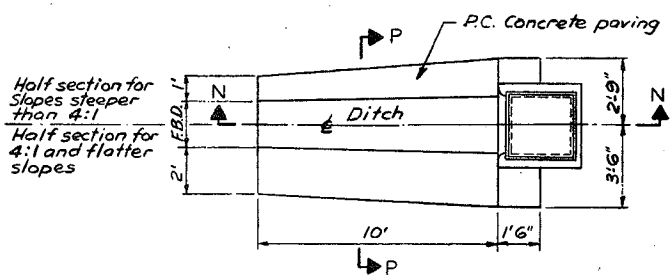
PLAN

SECTION C-C

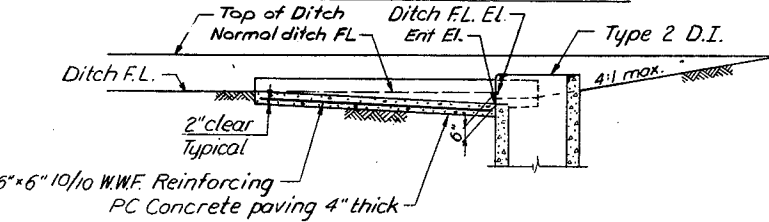


SECTION D-D

MODIFIED TYPE I DROP INLET

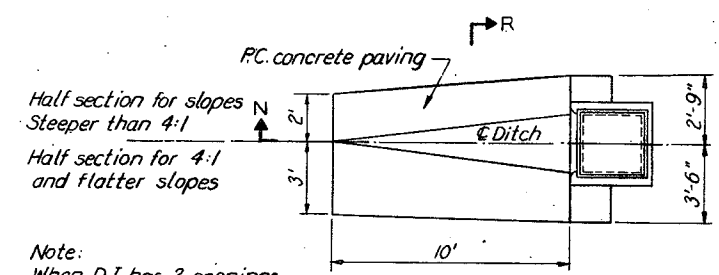


PLAN FOR FLAT BOTTOM DITCH



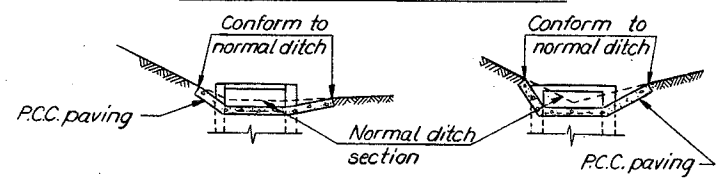
SECTION N-N

PAVED APPROACH DITCH



PLAN FOR VEE SHAPED DITCH

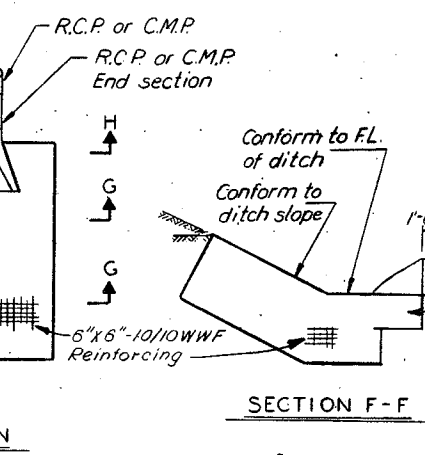
Note:
When D.I. has 2 openings
pave ditch both sides of D.I.



SECTION P-P

SECTION R-R

TOE AND F.B. DITCH



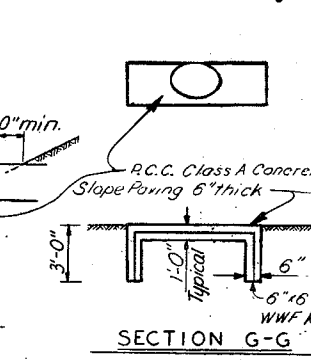
PLAN

SECTION F-F

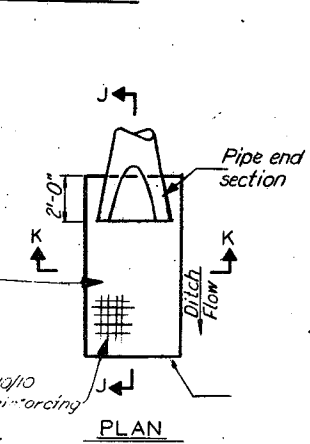
DITCH NORMAL TO PIPE CLASS A CONCRETE SLOPE PAVING DITCH PROTECTION

RISER PIPE

Rt. Sta. 96+80 Expressway



SECTION G-G

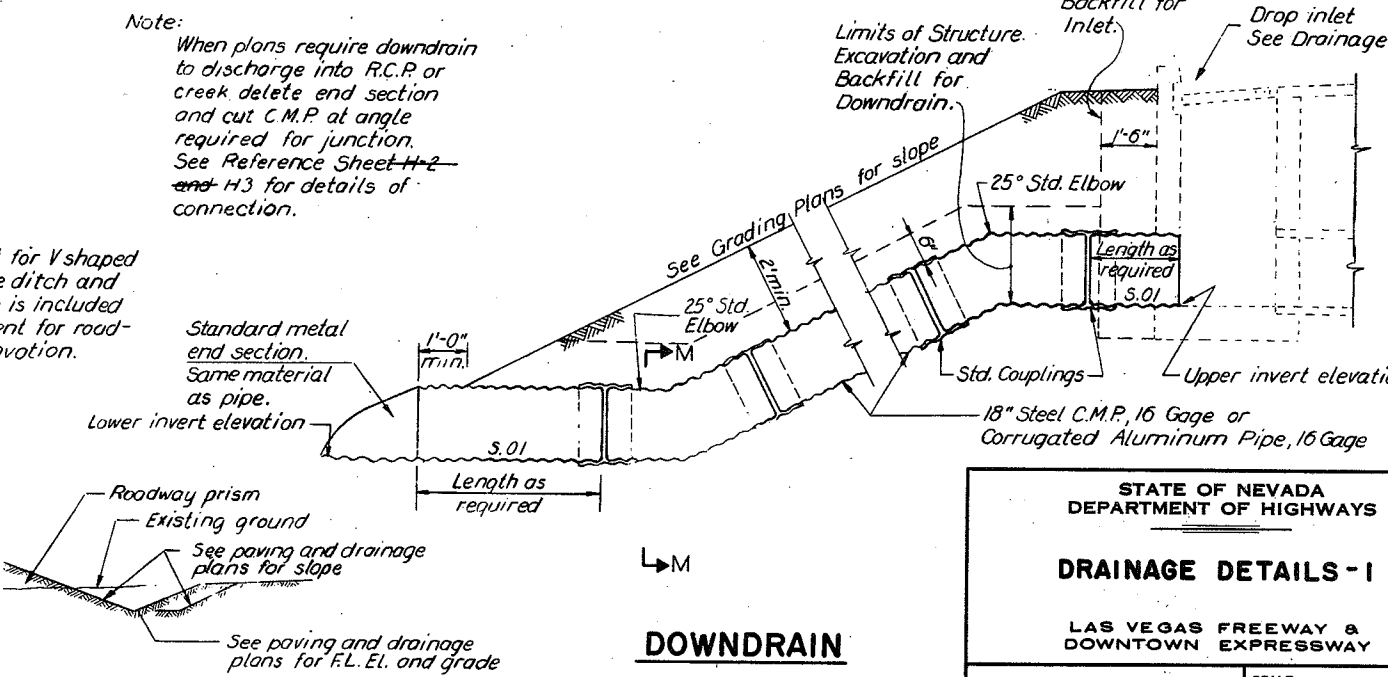


SECTION J-J

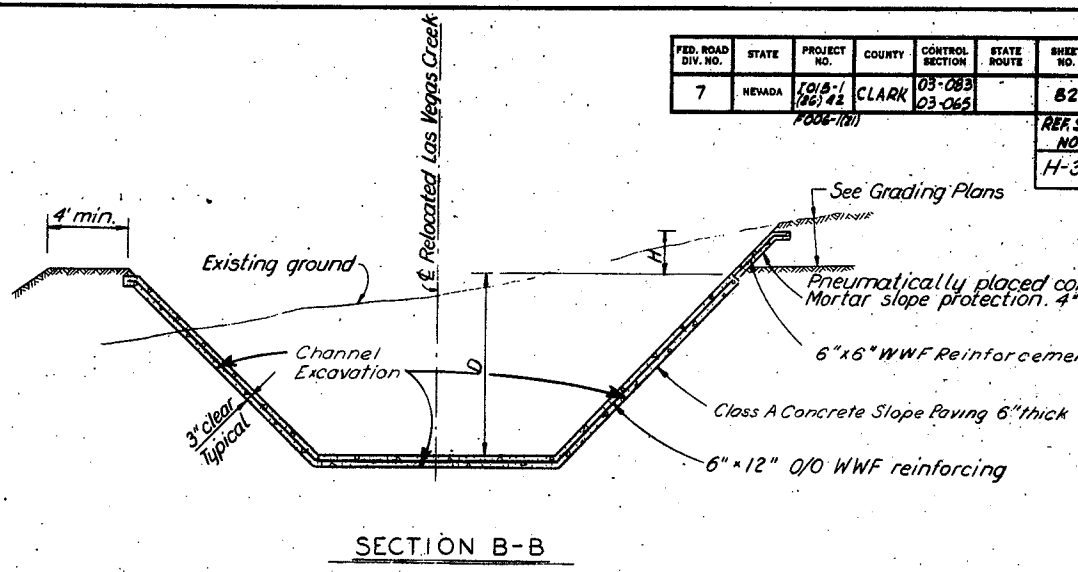
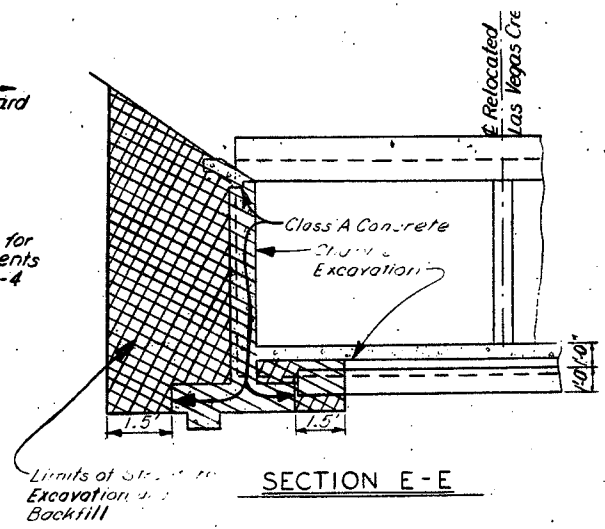
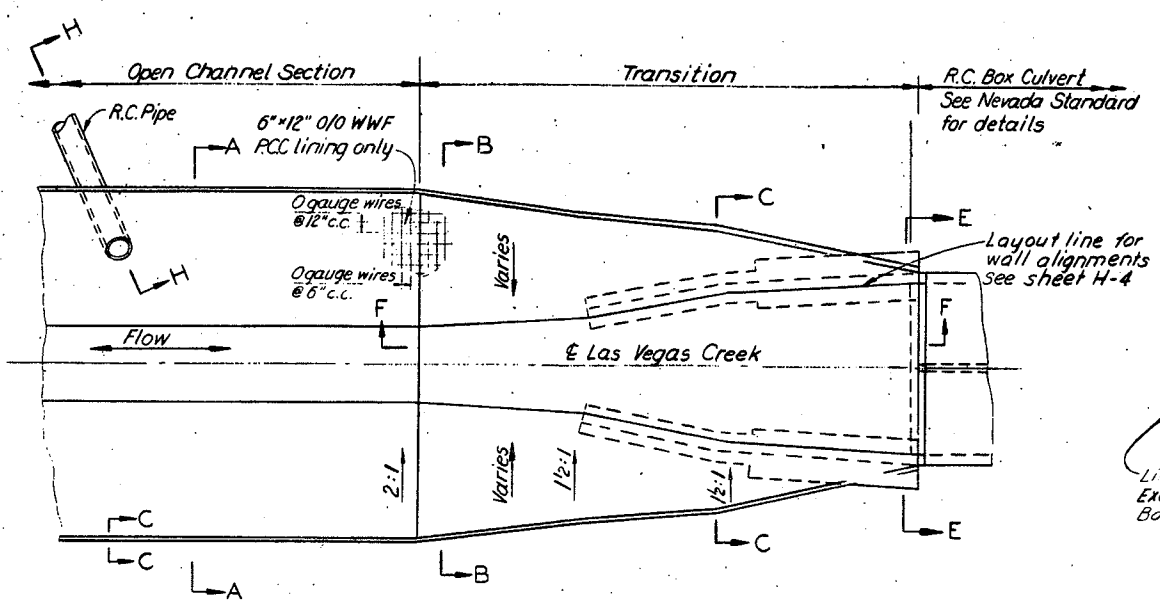
DITCH PARALLEL TO PIPE

Note: For width and length of Class A Conc. see drainage plans.

Limits of Structure. Excavation and Backfill for Inlet.

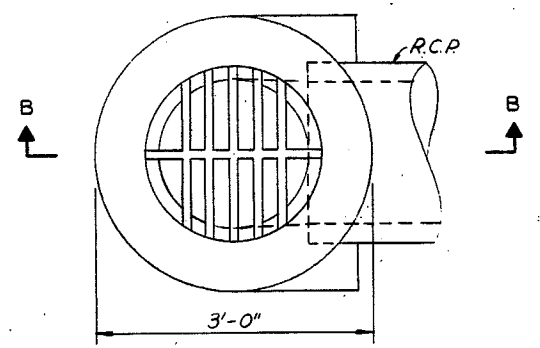


DOWNDRAIN

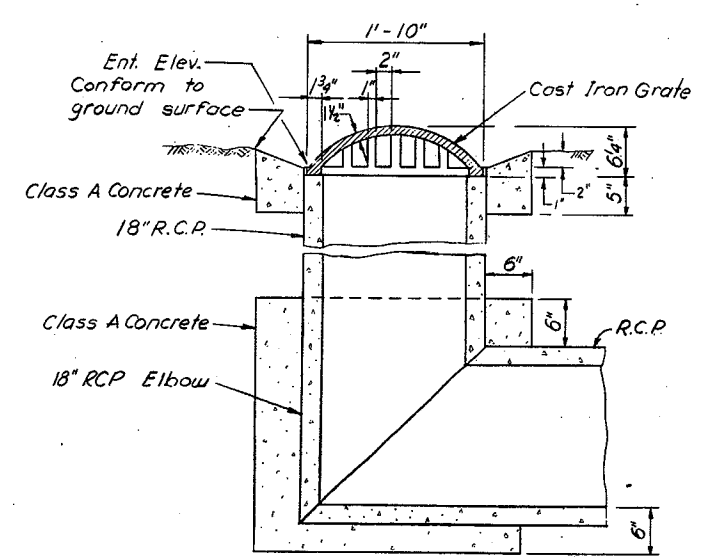


Notes:
For alignment of center line of Las Vegas Creek relocation see sheets C-2 to C-6.
For alignment of transitions see sheet H-4.

PLAN

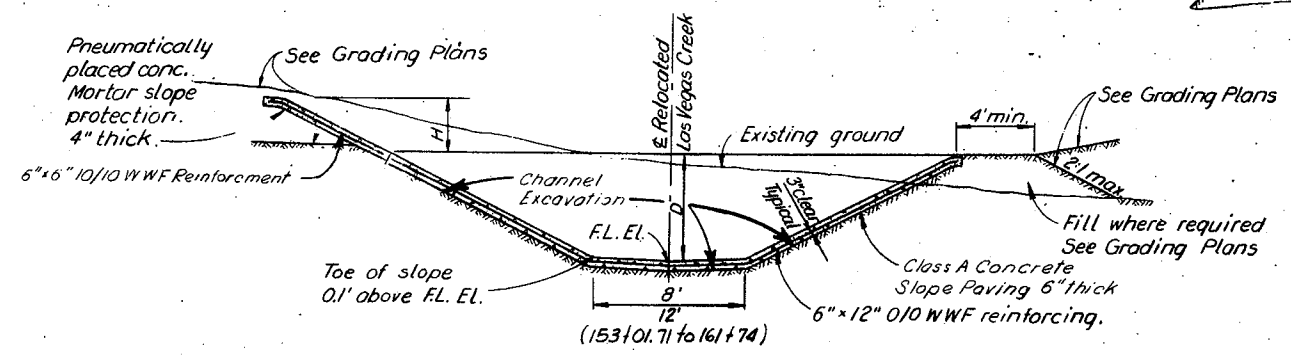


PLAN



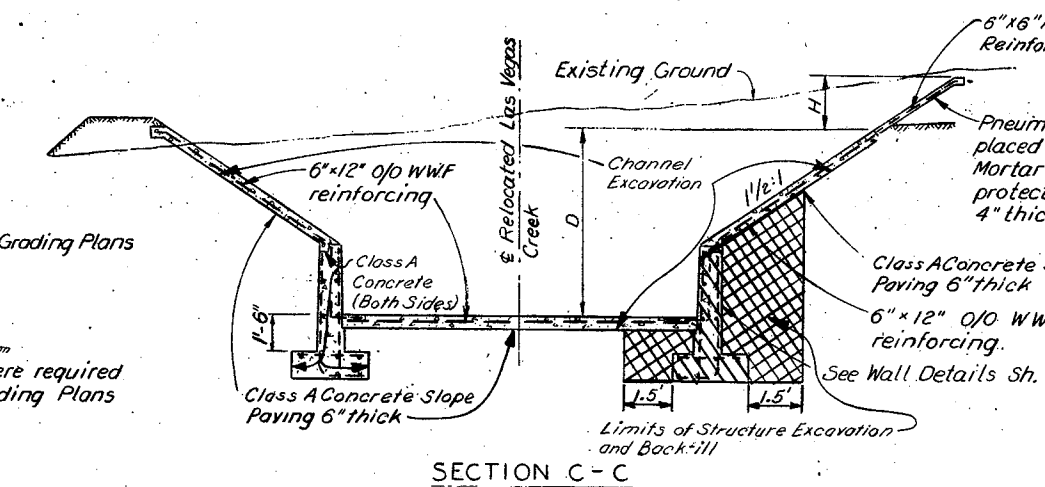
SECTION B-B

TYPE 9 DROP INLET

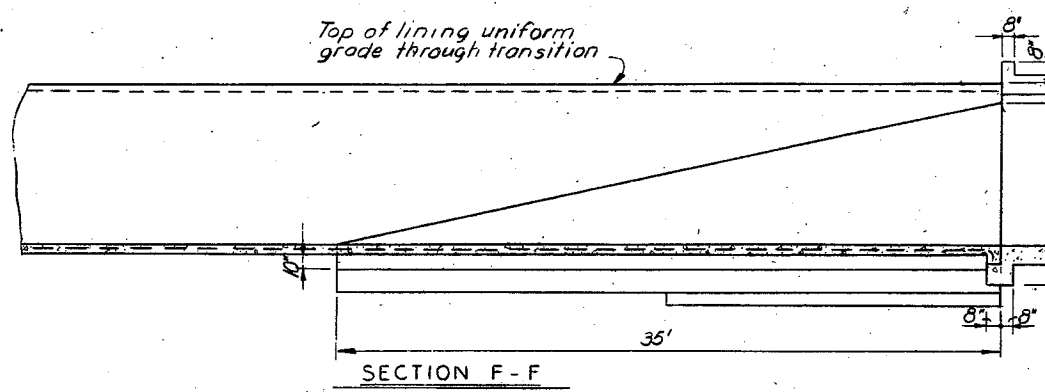


From Sta.	To Sta.	Slope	D	Rt. Side H	D	Lt. Side H
109+64	118+00	2:1	80'	0	80'	0
118+00	123+90	2:1	80'to 110'	0.5'to 1.5'	80'to 10.5'	0.5'to 1.5'
123+90	124+40	2:1 to 1 1/2:1	110'to 107'	0	105'to 10.1'	1.5'
124+40	127+25	1 1/2:1	107'to 91'	0.5'to 1.0'	101'to 8.0'	0
127+25	127+50	1 1/2:1	91'to 90'	1.0'	80'	20'
127+50	128+00	1 1/2:1 to 2:1	90'to 8.7'	1.0'	80'	20'to 1.5'
128+00	129+00	2:1	8.7'to 8.0'	1.0'to 1.5'	80'	1.5'to 0.5'
129+00	145+72.25	2:1	8.0'	1.5'to 3.0'	80'	0
145+72.25	151+41.71	2:1	8.0'	0	80'	0
153+01.71	161+74	2:1	7'-6"	0	7'-6"	0 to 2.0'

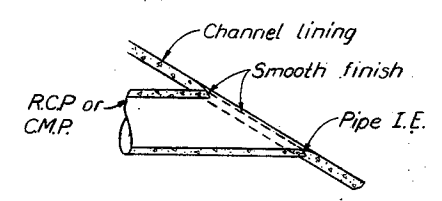
SECTION A-A



SECTION C-C



SECTION F-F



SECTION H-H

LAS VEGAS CREEK DETAILS

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

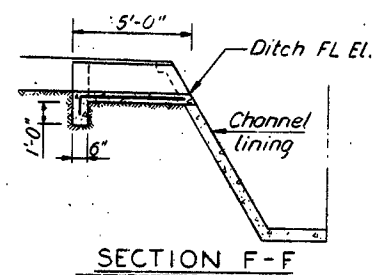
DRAINAGE DETAILS - 3

LAS VEGAS FREEWAY &
DOWNTOWN EXPRESSWAY

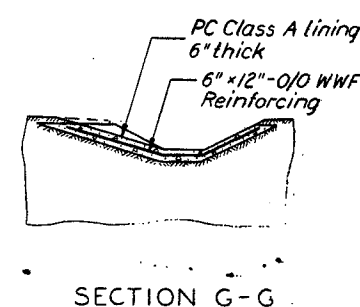
DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE:
DESIGNED BY: W.J.E.
DRAWN BY: M.B.
CHECKED BY: J.B.L.
APPROVED BY:

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	1018-1 (18) 42	CLARK	03-083 03-065		83
P0047(11)						REF. SH. NO. H-4

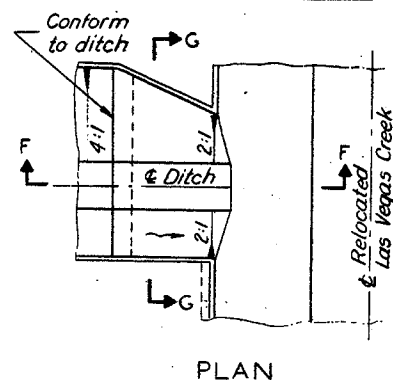


SECTION F-F

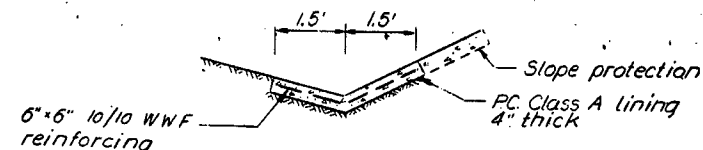


SECTION G-G

PAVED DITCH INLET

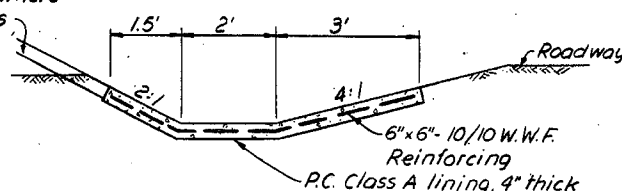


PLAN



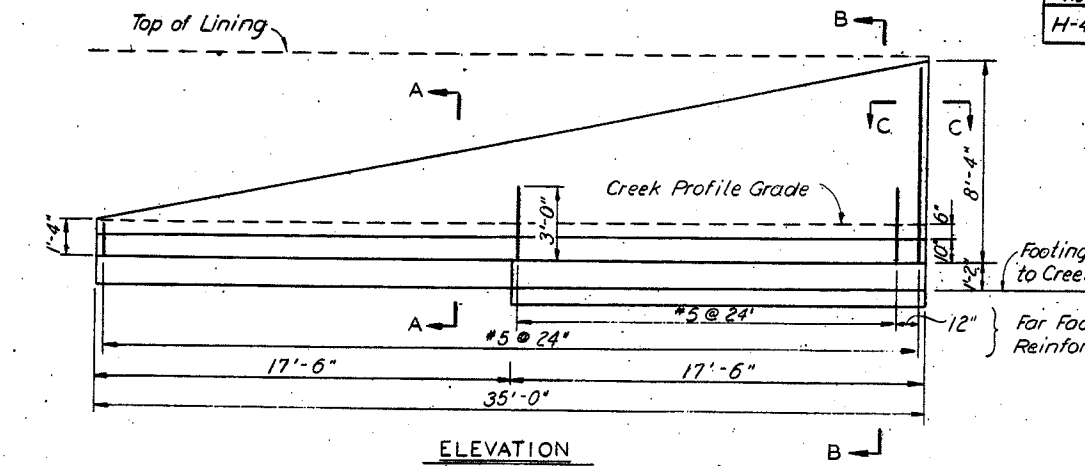
PAVED TOE DITCH

Mortar Slope protection where required on paving plans

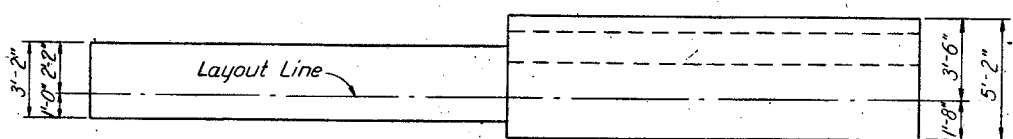


PAVED F.B. DITCH

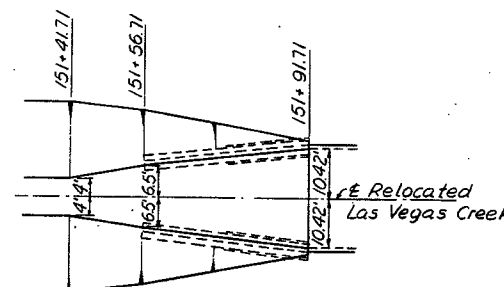
Rt. 10+49 F.St. to Las Vegas Creek
Lt. 10+74 F.St. to Las Vegas Creek



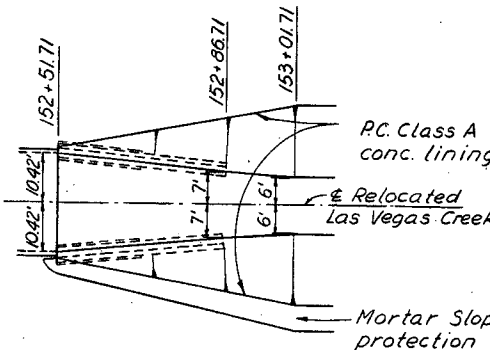
ELEVATION



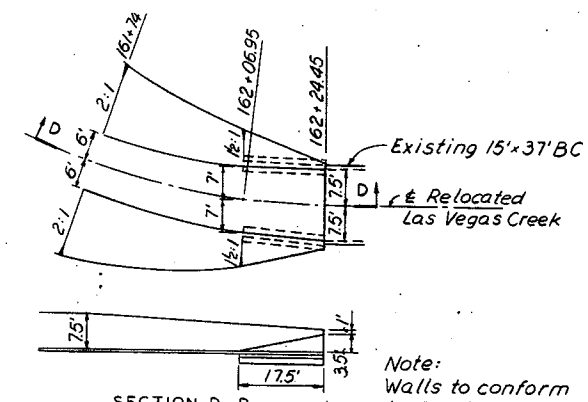
PLAN



STA 151+41.71 TO 151+91.71 LAS VEGAS CREEK

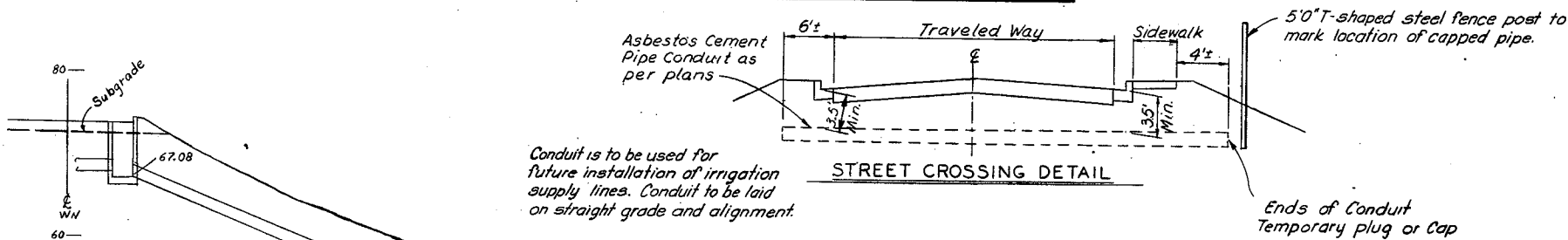


STA 152+51.71 TO 153+01.71 LAS VEGAS CREEK

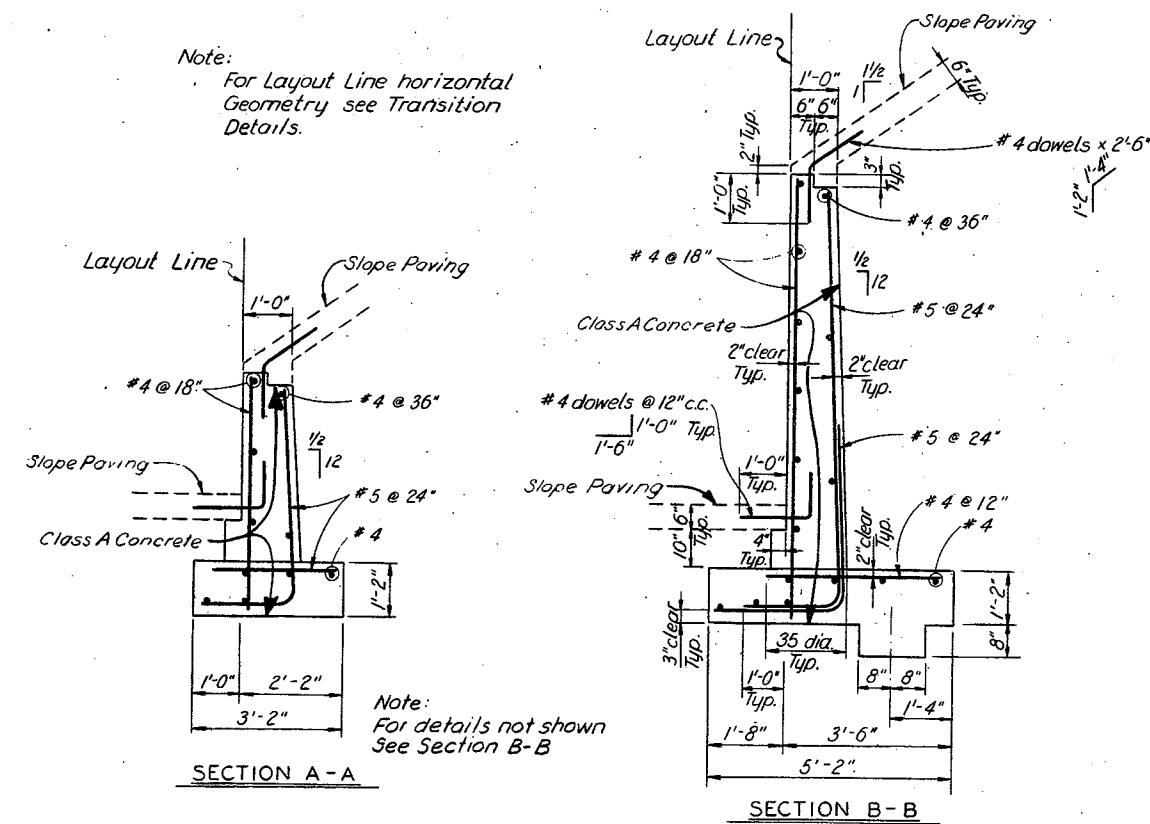


STA 161+74 TO 162+24.45 LAS VEGAS CREEK

LAS VEGAS CREEK TRANSITION DETAILS

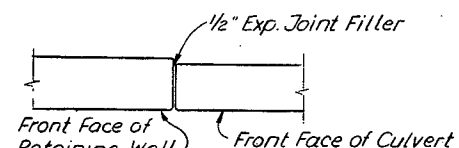


ASBESTOS CEMENT PIPE CONDUIT



SECTION A-A

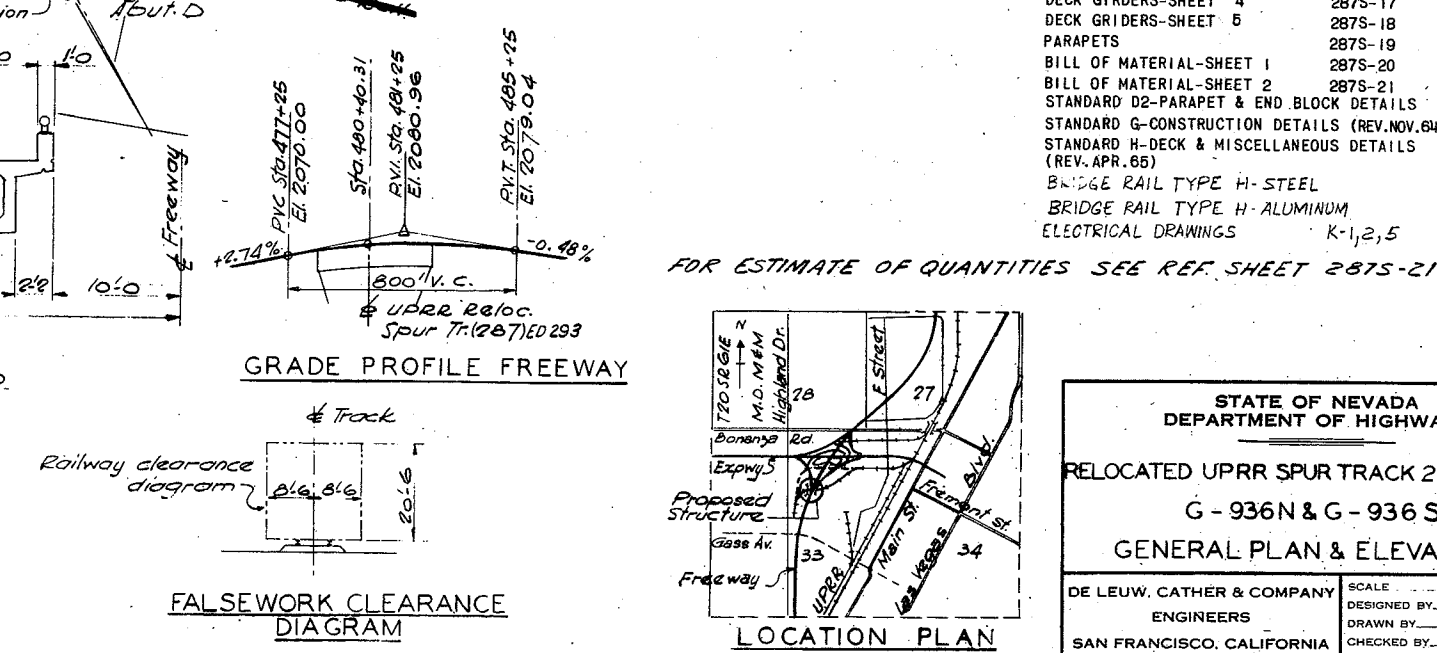
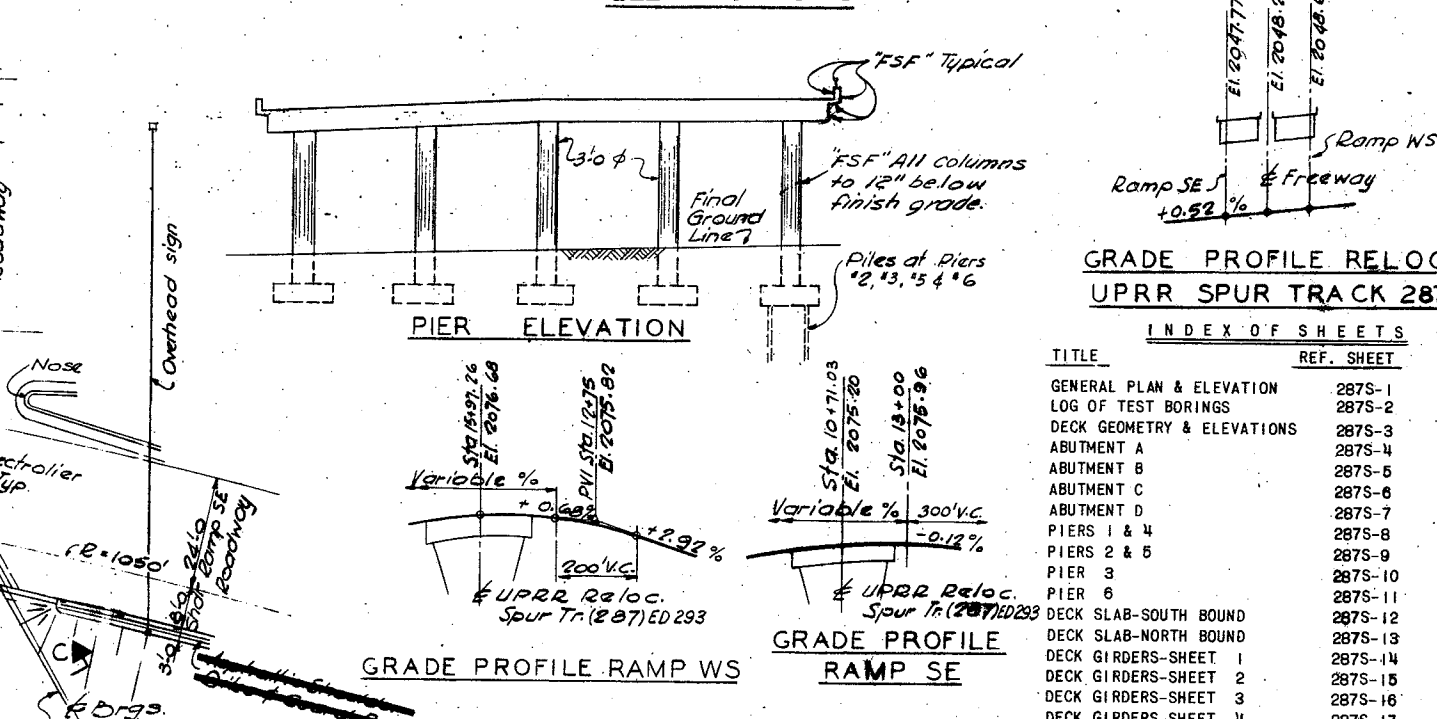
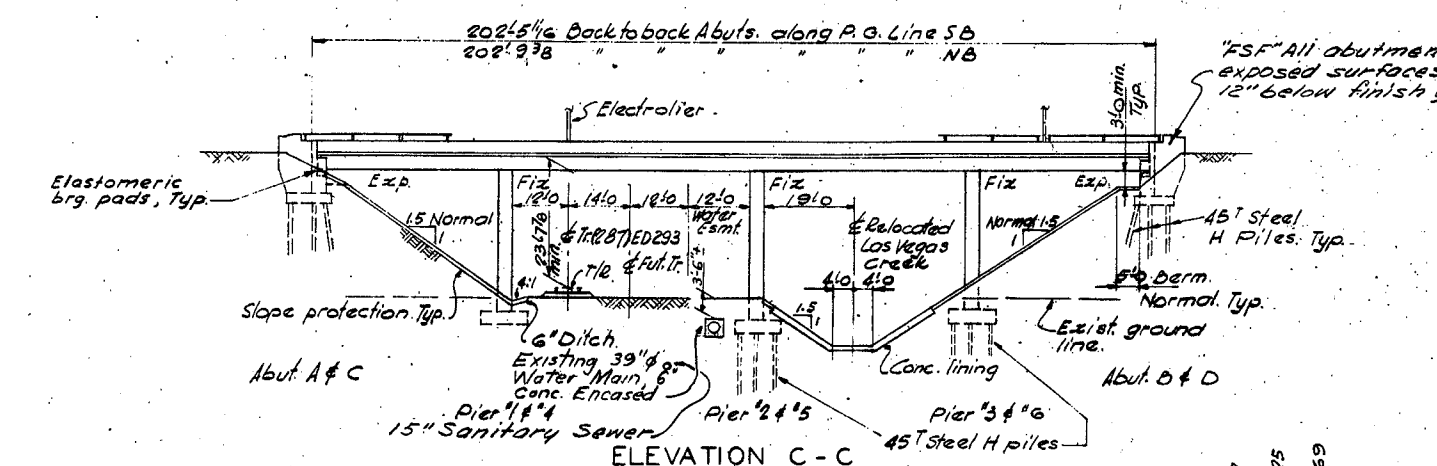
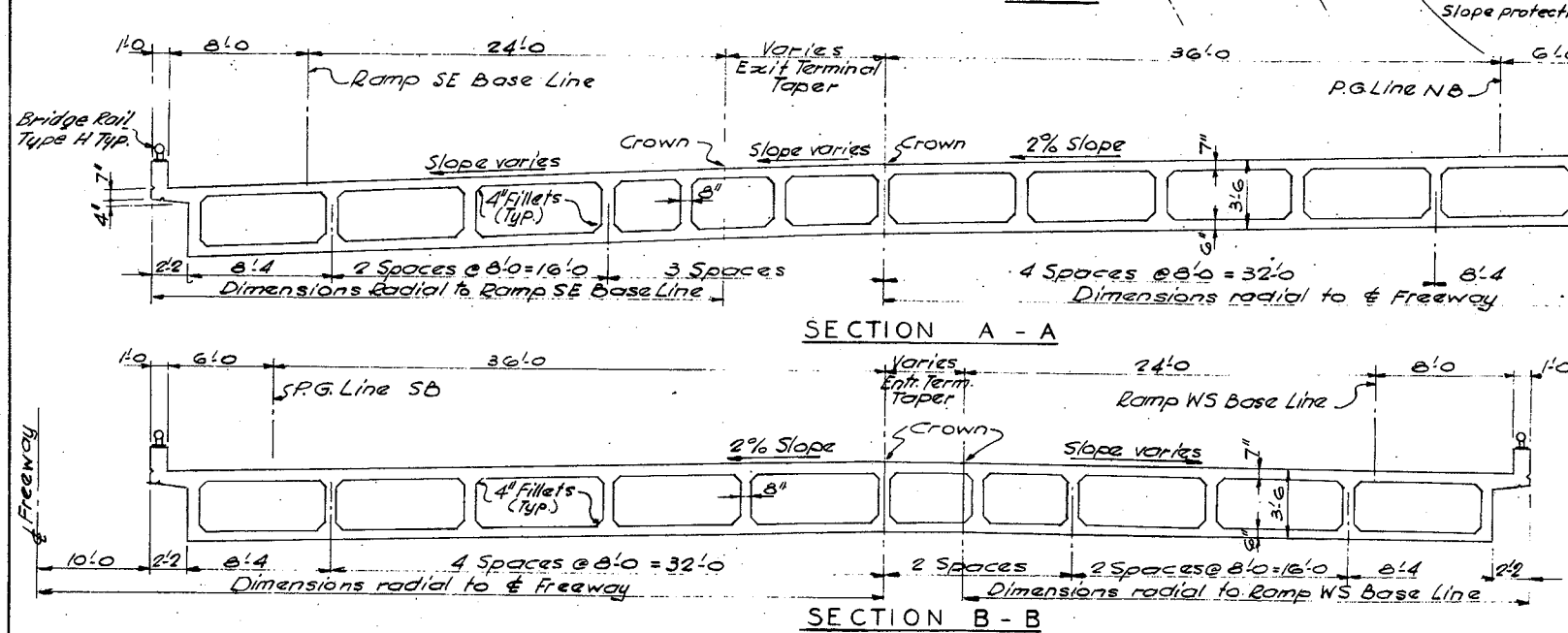
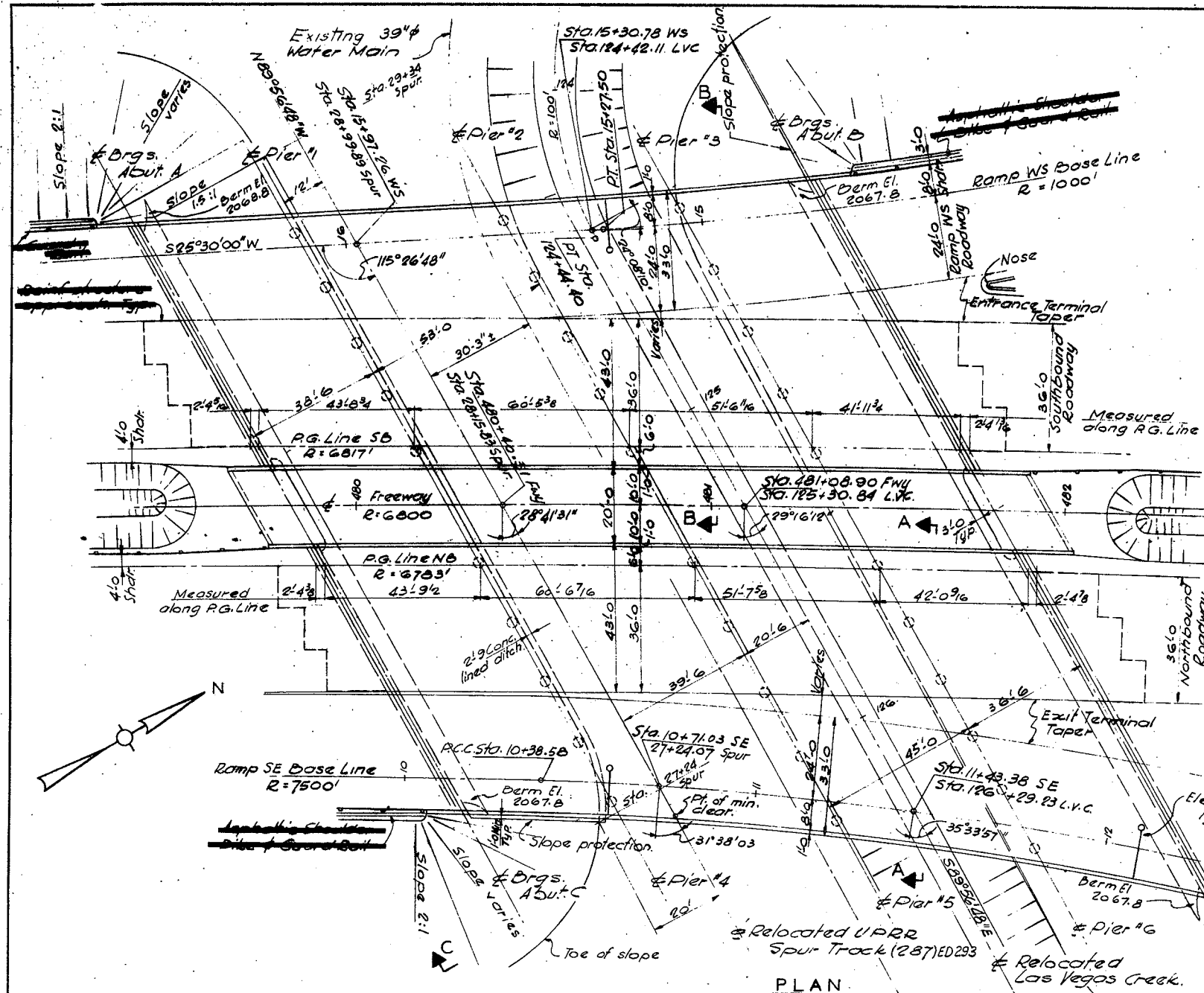
SECTION B-B



SECTION C-C

RETAINING WALL DETAILS

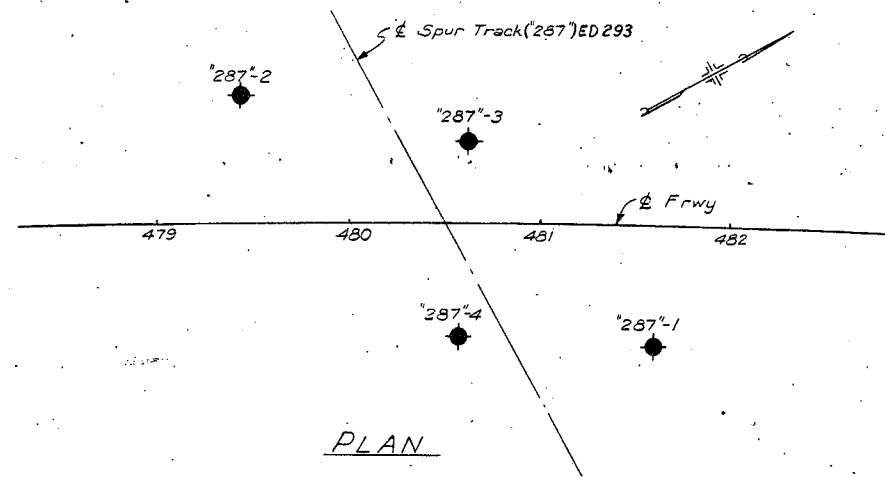
STATE OF NEVADA DEPARTMENT OF HIGHWAYS	
DRAINAGE DETAILS - 4	
LAS VEGAS FREEWAY & DOWNTOWN EXPRESSWAY	
DE LEUW, CATHY & COMPANY ENGINEERS SAN FRANCISCO, CALIFORNIA	SCALE: DESIGNED BY W.B. DRAWN BY M.B.L. CHECKED BY J.B.L. APPROVED BY



GRADE PROFILE RELOC. UPRR SPUR TRACK 287

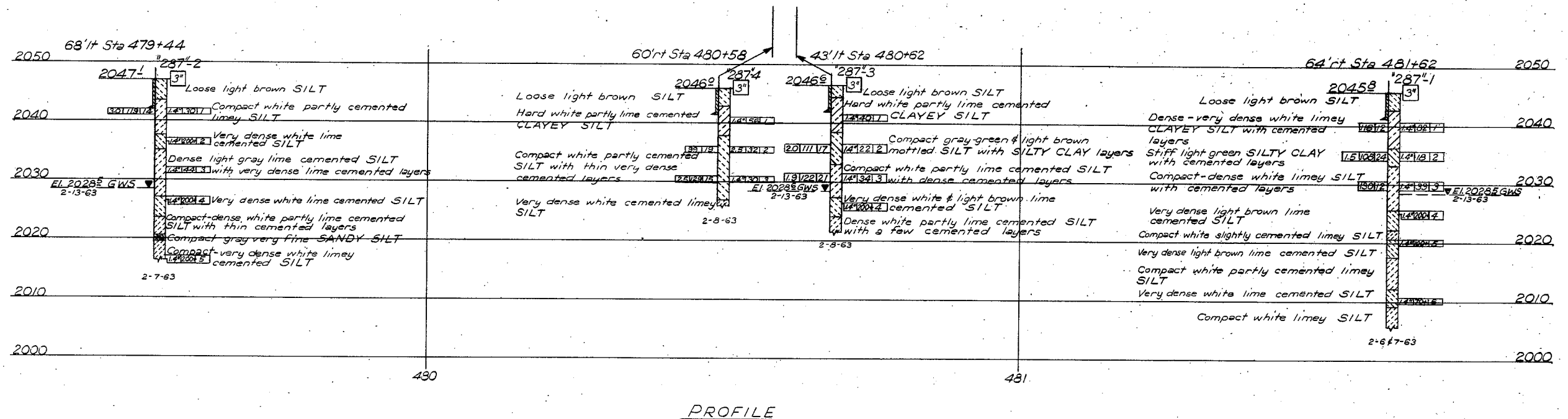
TITLE	REF. SHEET
GENERAL PLAN & ELEVATION	287S-1
LOG OF TEST BORINGS	287S-2
DECK GEOMETRY & ELEVATIONS	287S-3
ABUTMENT A	287S-4
ABUTMENT B	287S-5
ABUTMENT C	287S-6
ABUTMENT D	287S-7
PIERS 1 & 4	287S-8
PIERS 2 & 5	287S-9
PIER 3	287S-10
PIER 6	287S-11
DECK SLAB-SOUTH BOUND	287S-12
DECK SLAB-NORTH BOUND	287S-13
DECK GIRDERS-SHEET 1	287S-14
DECK GIRDERS-SHEET 2	287S-15
DECK GIRDERS-SHEET 3	287S-16
DECK GIRDERS-SHEET 4	287S-17
DECK GIRDERS-SHEET 5	287S-18
PARAPETS	287S-19
BILL OF MATERIAL-SHEET 1	287S-20
BILL OF MATERIAL-SHEET 2	287S-21
STANDARD D2-PARAPET & END BLOCK DETAILS (REV. NOV. 64)	
STANDARD H-DECK & MISCELLANEOUS DETAILS (REV. APR. 65)	
BRIDGE RAIL TYPE H-STEEL	
BRIDGE RAIL TYPE H-ALUMINUM	
ELECTRICAL DRAWINGS	K-1,2,5

FOR ESTIMATE OF QUANTITIES SEE REF. SHEET 287S-21



BM BA-2

Top of 3/4" rebar 150' S of RR & 200' S of SW corner Texaco Bulk Plant Elev. 2044.68



LEGEND OF EARTH MATERIALS

SIZE CLASSIFICATION

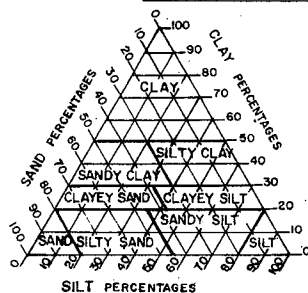


Diagram showing the basis of grain size distribution used in determination of class names. Size classification is based on the Wentworth grade scale in field classification or the A.S.T.M. grade scale in the laboratory sieve analysis.

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

MATERIAL SYMBOLS

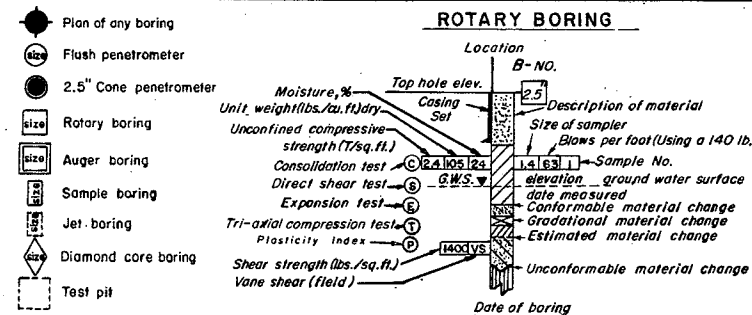
Gravel	Peat or organic matter
Sand	Fill material
Silt	Shale
Clay	Sandstone
Sandy clay or clayey sand	Limestone
Sandy silt or silty sand	Metamorphic rock
Silty clay or clayey silt	Igneous rock

CONSISTENCY CLASSIFICATION

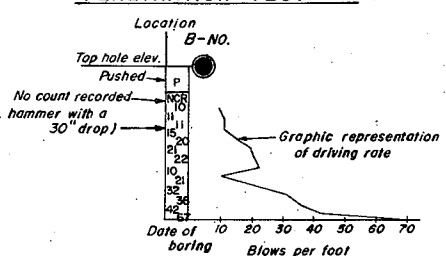
According to the Standard Penetration Test.		
No. of blows	Granular	Cohesive
0-5	very loose	very soft
6-10	loose	soft
11-20	slightly compact	stiff
21-35	compact	very stiff
36-70	dense	hard
70+	very dense	very hard

LEGEND OF BORING OPERATIONS

ROTARY BORING



PENETRATION TEST



MOORE AND TABER
ENGINEERS - GEOLOGISTS

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

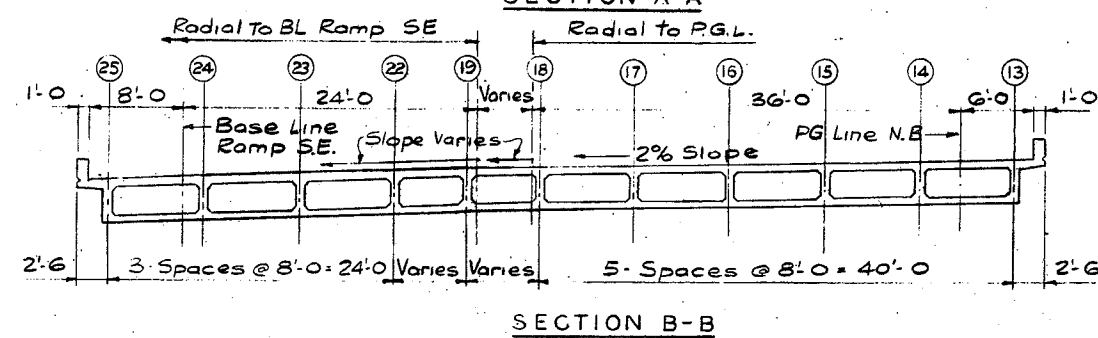
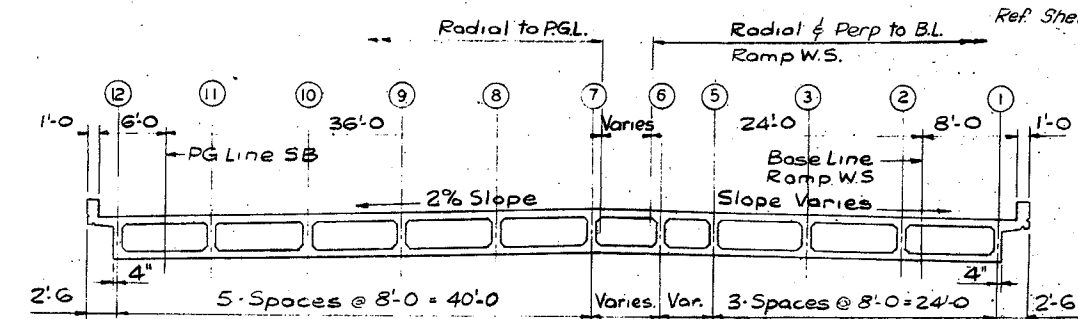
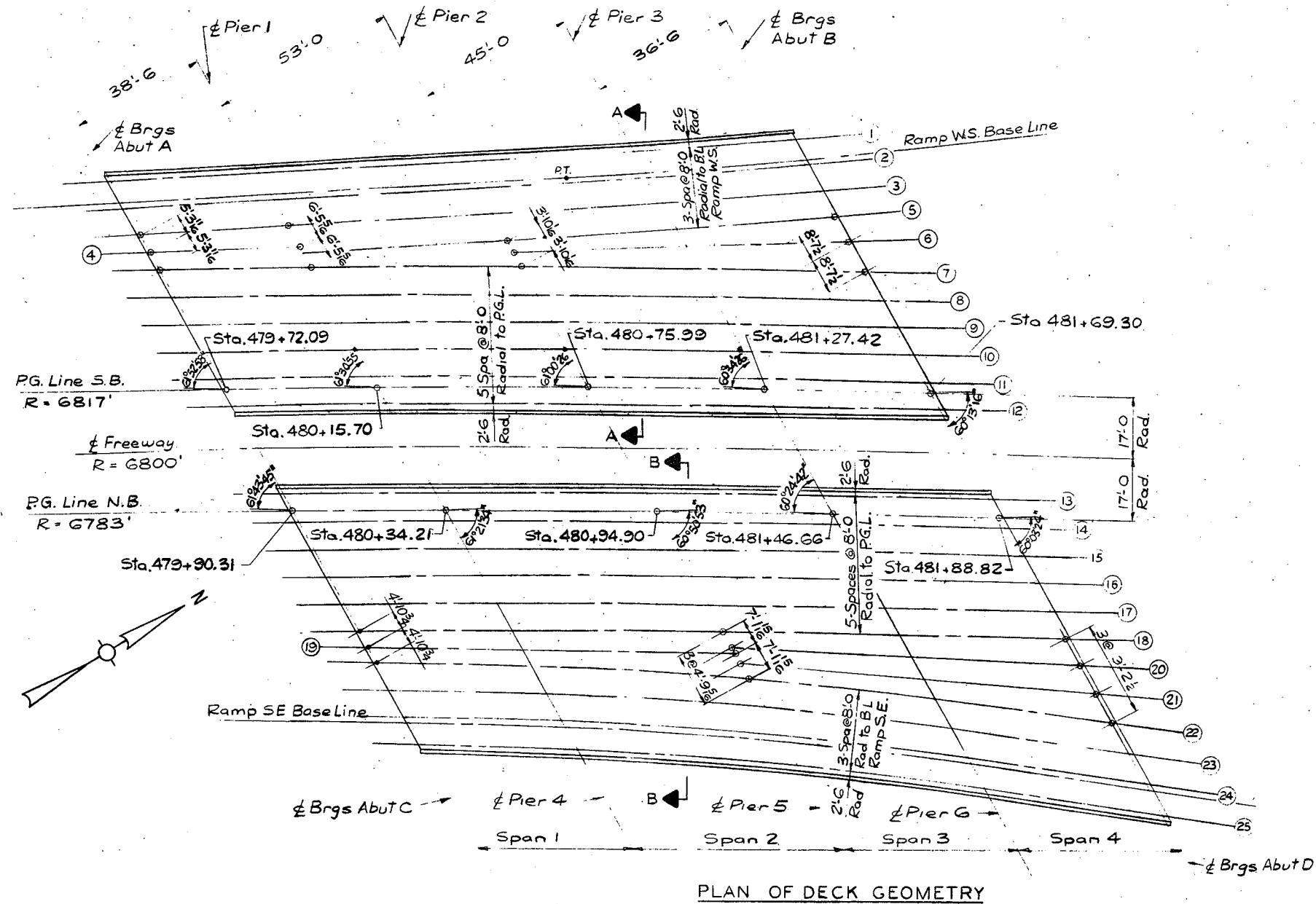
LOG OF TEST BORINGS

RELOCATED UPRR SPUR TRACK 287 ON

G-936N & G-936 S

DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY
DRAWN BY
CHECKED BY
APPROVED BY



GENERAL NOTES

DESIGN SPECIFICATIONS: A.A.S.H.O. Standard Specifications for Highway Bridges, 8th edition dated 1961

CONSTRUCTION SPECIFICATIONS: State of Nevada Department of Highways "Standard Specifications for Road and Bridge Construction 1961", except as noted below and in the special provisions for this contract.

LIVE LOAD: H20-S16-44 or Alternate Load;

CONCRETE: All concrete to be class A
f'c = 3000 psi ultimate compressive strength in 28 days.

Design f'c = 1200 psi except as noted
Stresses f'c = 1000 psi substructures with earth pressure.

REINFORCEMENT: All reinforcing bars to be intermediate grade deformed type fs = 20,000 psi. Dimensions to center of bars unless otherwise shown.

FORMS: Falsework shall not be removed from any span until the concrete in that span and in the contiguous (adjoining) spans has attained a compressive strength not less than twice the design unit stress.

CONSTRUCTION JOINTS: No construction joints shall be used except by permission of the Engineer or as shown on the plans. Girders, Pier caps, and slabs shall be poured in one continuous operation from end to end of individual units between construction joints and edges of slabs.

CAMBER: Falsework to be constructed to provide a camber for dead load deflection as shown in the plans in addition to allowance for shrinkage and settlement.

FOUNDATION: Footings for Piers 1, 3, 4 & 6 designed for allowable soil pressure of 2.5 tons/square foot.

CONSTRUCTION TYPE CODE: X221

FINISHING: Surfaces requiring a fine finish are designated on these plans by the abbreviation "FSF".

LINE	BRGS ABUT. A	1 ₄	1 ₂	3 ₄	PIER # 1	1 ₄	1 ₂	3 ₄	PIER # 2	1 ₄	1 ₂	3 ₄	PIER # 3	1 ₄	1 ₂	3 ₄	BRGS ABUT. B
1	6.05	6.20	6.32	6.43	6.52	6.62	6.69	6.76	6.75	6.74	6.70	6.67	6.62	6.60	6.59	6.56	6.53
2	6.04	6.19	6.34	6.47	6.56	6.69	6.79	6.86	6.93	6.95	6.96	6.99	7.00	7.00	7.00	7.00	7.00
3	6.00	6.17	6.34	6.49	6.62	6.79	6.90	7.06	7.17	7.24	7.28	7.35	7.40	7.44	7.47	7.50	7.57
4	5.98	6.16	6.34	6.50	6.65	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	6.67	6.87	7.04	7.24	7.40	7.53	7.63	7.72	7.81	7.88	7.95	8.03	8.10
6	-	-	-	-	-	-	-	-	7.50	7.64	7.78	7.91	8.06	8.20	8.37	8.44	8.59
7	5.92	6.11	6.30	6.49	6.67	6.91	7.14	7.37	7.58	7.76	7.93	8.09	8.25	8.37	8.49	8.60	8.71
8	5.83	6.03	6.21	6.40	6.58	6.82	7.05	7.27	7.48	7.66	7.82	7.99	8.14	8.26	8.38	8.49	8.60
9	5.75	5.94	6.13	6.31	6.49	6.72	6.95	7.17	7.38	7.56	7.72	7.88	8.03	8.15	8.27	8.38	8.48
10	5.66	5.85	6.04	6.22	6.40	6.63	6.86	7.07	7.28	7.46	7.62	7.77	7.92	8.04	8.15	8.26	8.37
11	5.58	5.77	5.95	6.13	6.30	6.54	6.76	6.98	7.18	7.35	7.51	7.67	7.82	7.93	8.04	8.15	8.25
12	5.49	5.68	5.86	6.04	6.21	6.44	6.67	6.89	7.08	7.25	7.41	7.58	7.71	7.82	7.93	8.03	8.14

NOTE: Add 2070.00 to all elevations

LINE	BRGS ABUT. C	1 ₄	1 ₂	3 ₄	PIER # 4	1 ₄	1 ₂	3 ₄	PIER # 5	1 ₄	1 ₂	3 ₄	PIER # 6	1 ₄	1 ₂	3 ₄	BRGS ABUT. D
13	5.90	6.08	6.26	6.43	6.60	6.82	7.04	7.24	7.44	7.60	7.75	7.90	8.04	8.15	8.25	8.35	8.45
14	5.81	5.99	6.17	6.34	6.51	6.73	6.94	7.14	7.34	7.49	7.64	7.79	7.93	8.03	8.14	8.23	8.33
15	5.73	5.90	6.08	6.25	6.41	6.63	6.84	7.04	7.23	7.39	7.54	7.68	7.81	7.92	8.02	8.11	8.21
16	5.64	5.81	5.99	6.15	6.32	6.53	6.74	6.94	7.13	7.28	7.43	7.57	7.70	7.80	7.90	8.00	8.09
17	5.55	5.72	5.89	6.06	6.22	6.43	6.64	6.83	7.02	7.17	7.32	7.45	7.58	7.69	7.78	7.88	7.96
18	5.46	5.63	5.80	5.96	6.12	6.33	6.54	6.73	6.91	7.06	7.20	7.34	7.47	7.57	7.66	7.75	7.84
19	5.38	5.53	5.68	5.85	6.00	6.19	6.40	6.61	6.82	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	6.86	7.00	7.15	7.27	7.39	7.49	7.58	7.66	7.74
21	-	-	-	-	-	-	-	-	6.71	6.86	7.00	7.13	7.27	7.38	7.47	7.55	7.63
22	5.27	5.41	5.56	5.70	5.85	6.01	6.18	6.34	6.51	6.63	6.75	6.86	6.96	7.02	7.10	7.16	7.22
23	4.99	5.12	5.25	5.37	5.49	5.64	5.79	5.92	6.06	6.18	6.27	6.35	6.46	6.52	6.58	6.64	6.70
24	4.70	4.82	4.94	5.04	5.14	5.27	5.40	5.51	5.62	5.71	5.79	5.87	5.96	6.02	6.07	6.10	6.16
25	4.41	4.50	4.59	4.69	4.80	4.90	5.01	5.09	5.16	5.23	5.30	5.36	5.44	5.48	5.52	5.57	5.62

NOTE: Add 2070.00 to all elevations.

TABLES OF THEORETICAL DECK ELEVATIONS

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

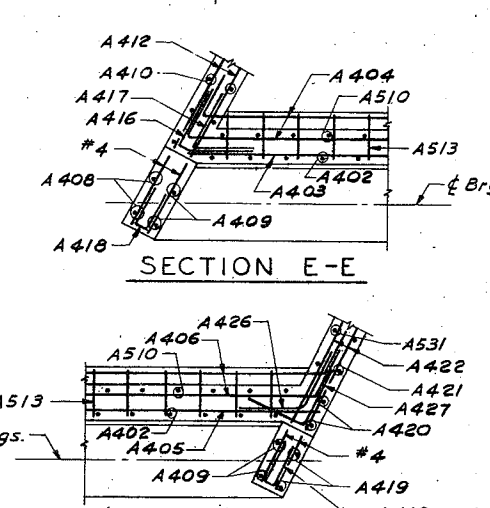
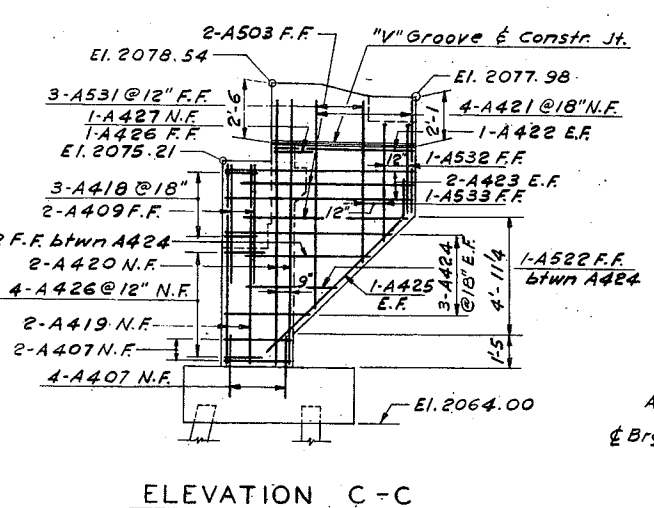
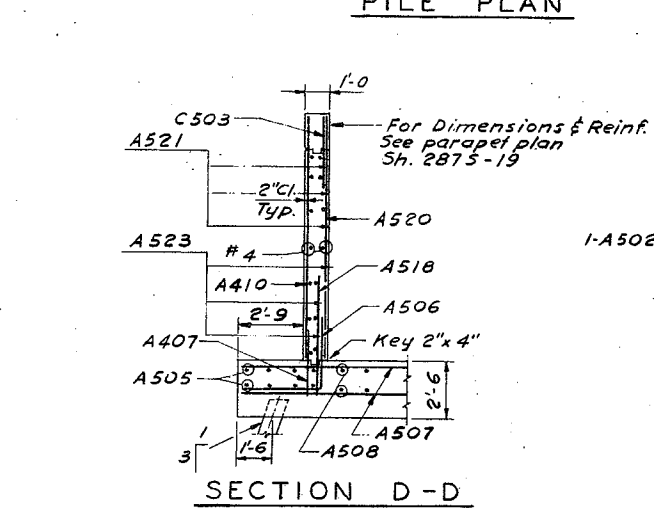
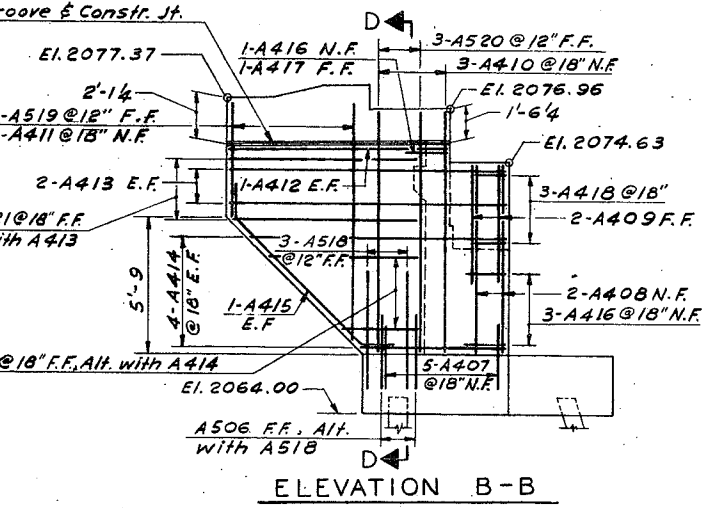
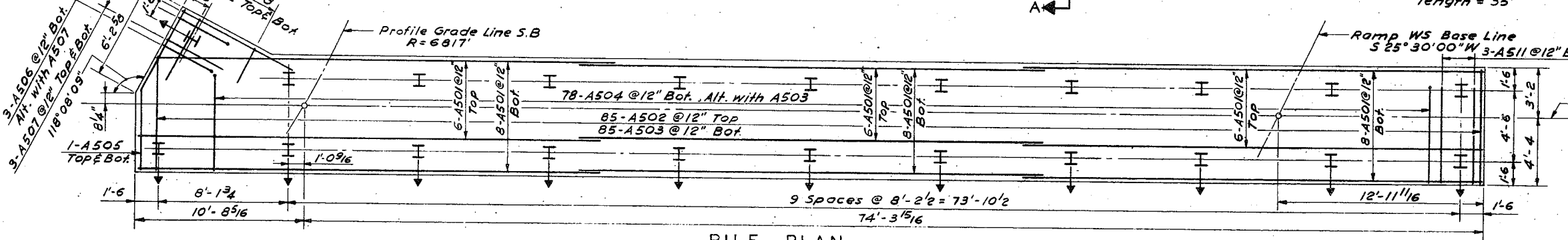
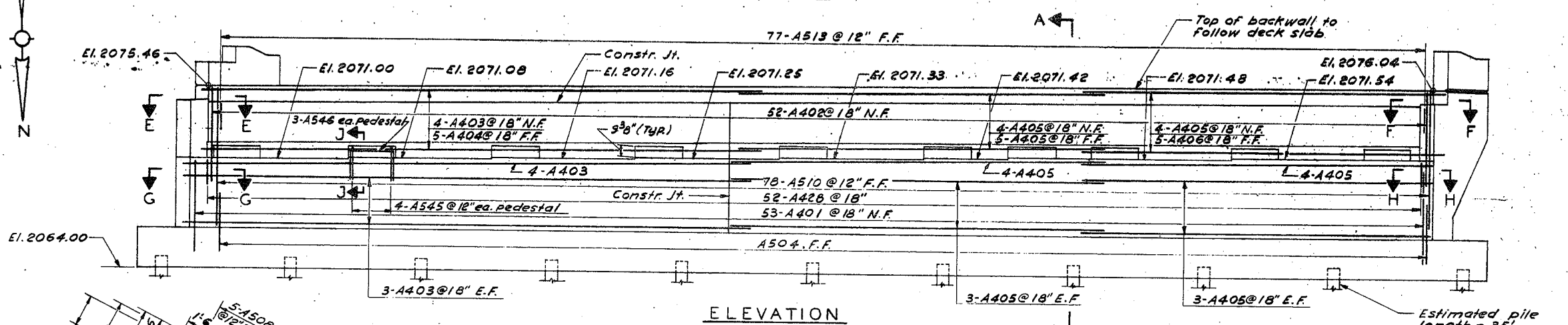
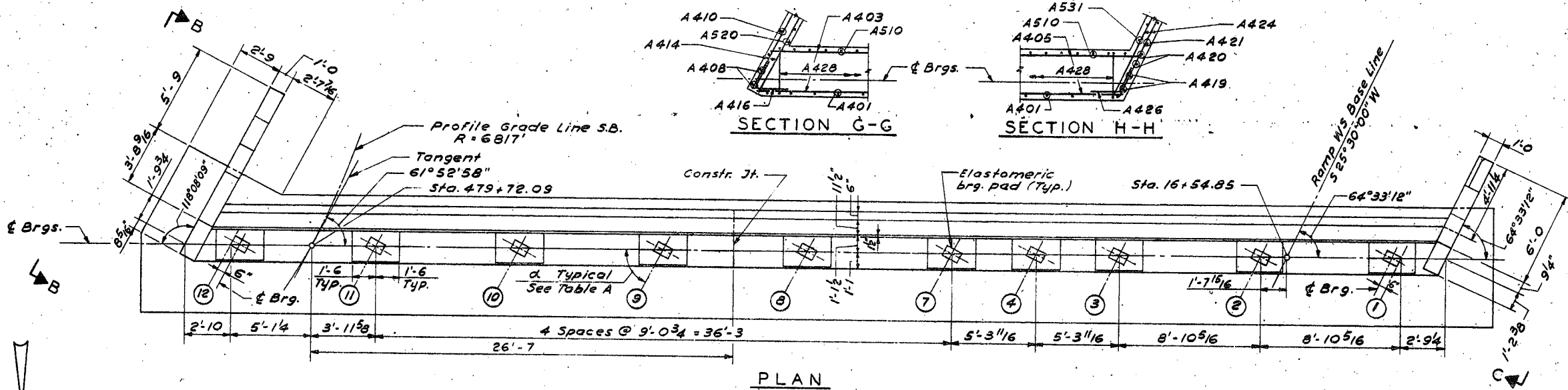
RELOCATED U.P.R.R. SPUR TR
287 OVERPASS
G-936N & G-936S
DECK GEOMETRY & ELEVATION

DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY P.B.
DRAWN BY D.R.
CHECKED BY J.W.
APPROVED BY S.A.

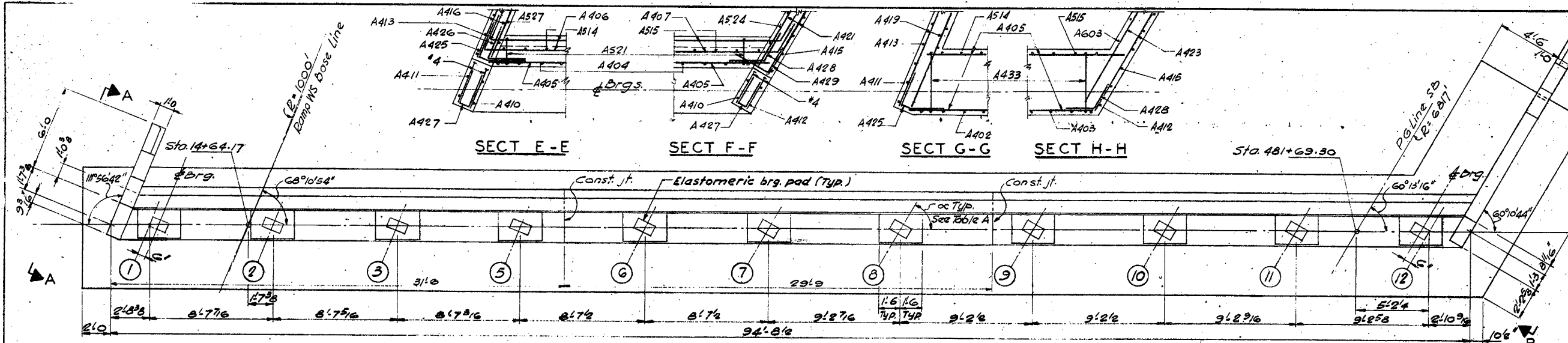
Girder	α
1	64° 33' 12"
2	64° 33' 12"
3	64° 33' 12"
4	63° 11' 24"
7	62° 02' 29"
8	62° 00' 21"
9	61° 58' 12"
10	61° 56' 04"
11	61° 53' 55"
12	61° 51' 45"

TABLE A

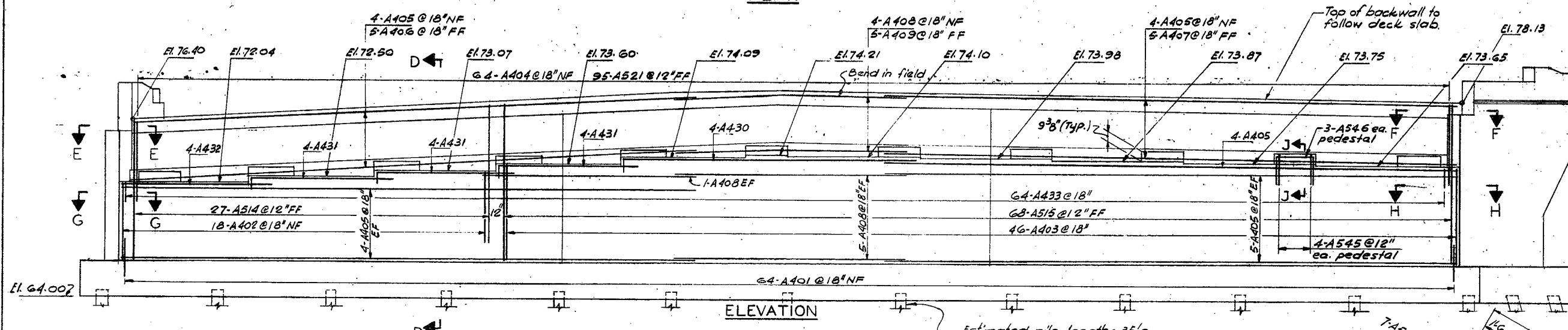


NOTES:
 Piles shall be 10BP42 Capacity 45 Ton
 Estm. pile tip elevation 2033.00
 For allowable pile splice and
 embankment construction details
 see Std. G
 For "V" Groove detail see Std. H
 ‡ Denotes battered pile

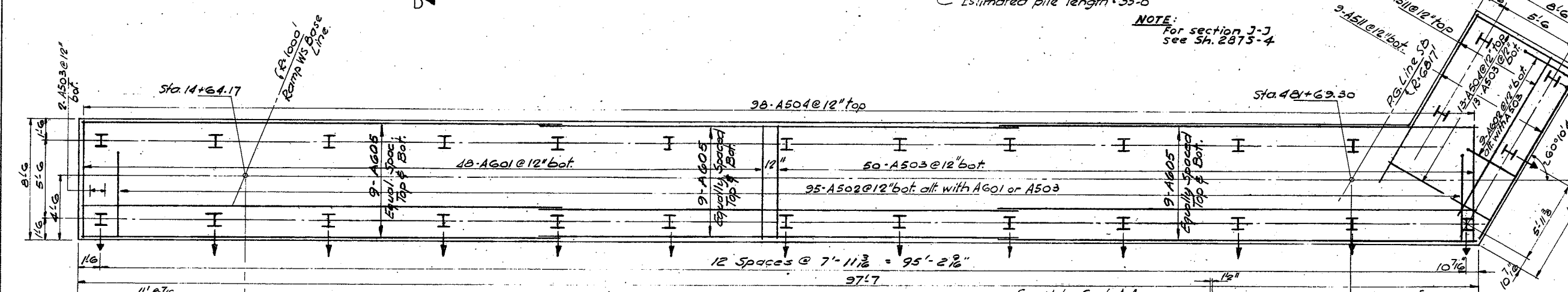
FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	1015-1 (287) 42	CLARK	03-085		10



PLAN



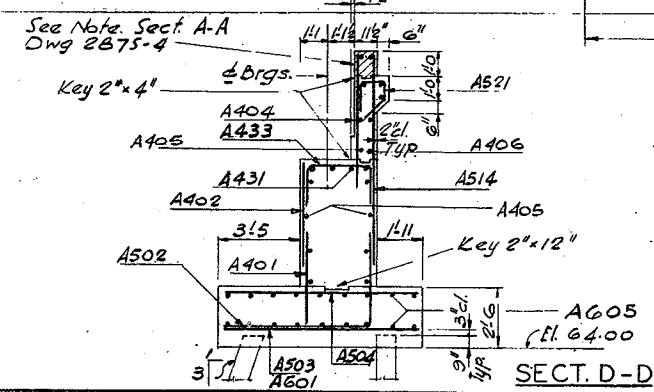
ELEVATION



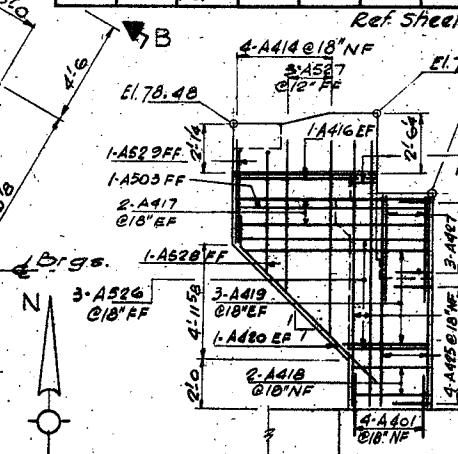
PILE PLAN

GIRDER	∞
1	68° 01' 54"
2	68° 12' 58"
3	68° 23' 51"
5	68° 34' 33"
6	63° 24' 36"
7	60° 23' 27"
8	60° 21' 10"
9	60° 18' 52"
10	60° 16' 35"
11	60° 14' 16"
12	60° 11' 58"

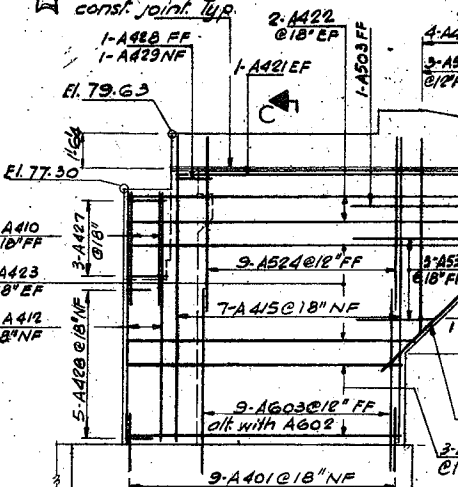
TABLE A



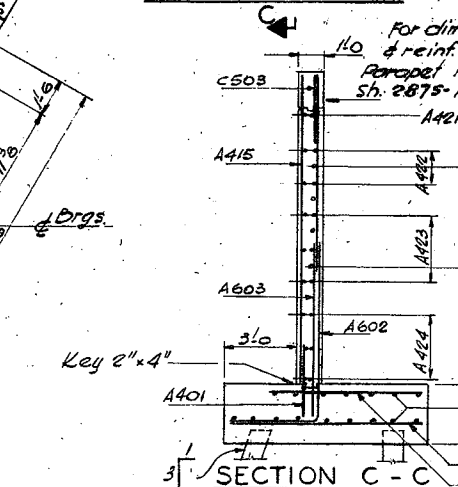
SECTION D-D



ELEVATION A



ELEVATION B-B



SECTION C-C

See NOTES Dwg. 2875-4
Add 2000 to all Elevations.

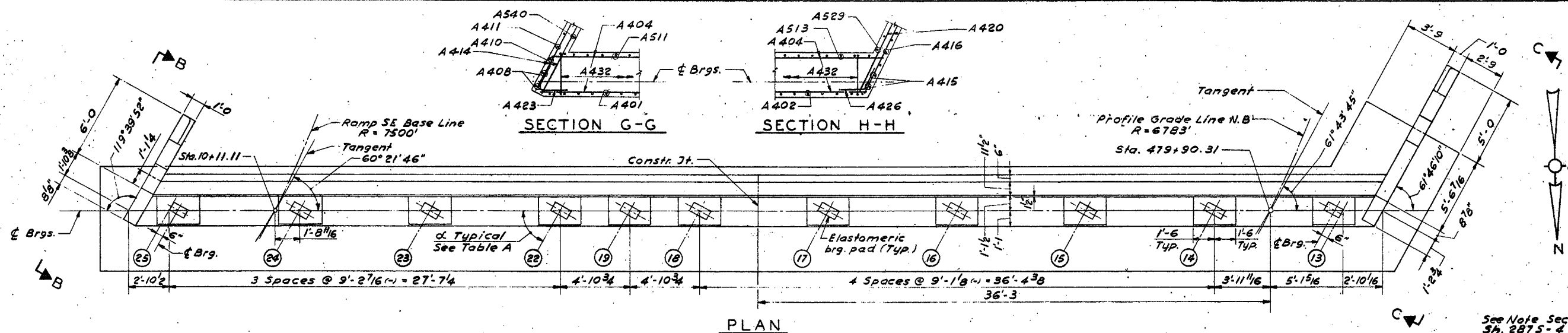
STATE OF NEVADA
DEPARTMENT OF HIGHWAYS
RELOCATED UPRR SPUR TR
287. OVERPASS
G-936N & G-936 S
ABUTMENT B

DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

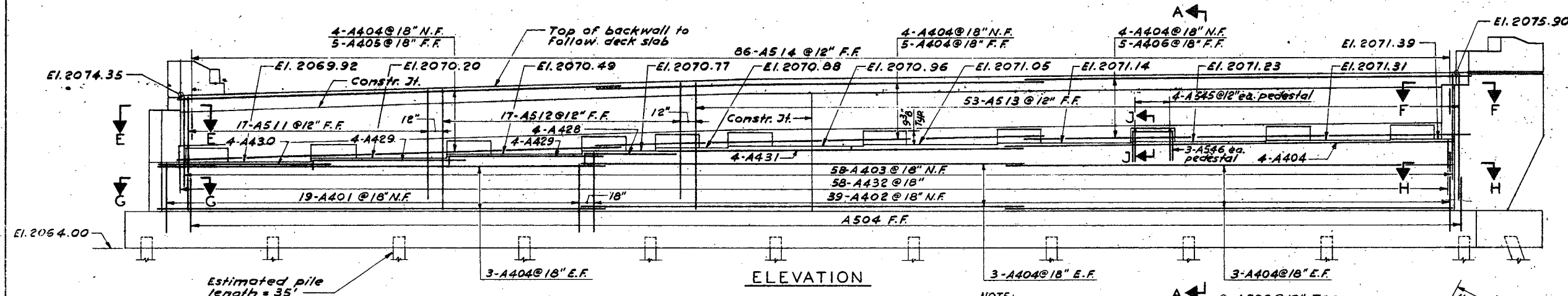
SCALE
DESIGNED BY
DRAWN BY
CHECKED BY
APPROVED BY

Girder	d
13	61° 44' 59"
14	61° 42' 48"
15	61° 40' 37"
16	61° 38' 25"
17	61° 36' 13"
18	61° 34' 01"
19	60° 28' 55"
22	60° 26' 19"
23	60° 24' 14"
24	60° 22' 09"
25	60° 20' 04"

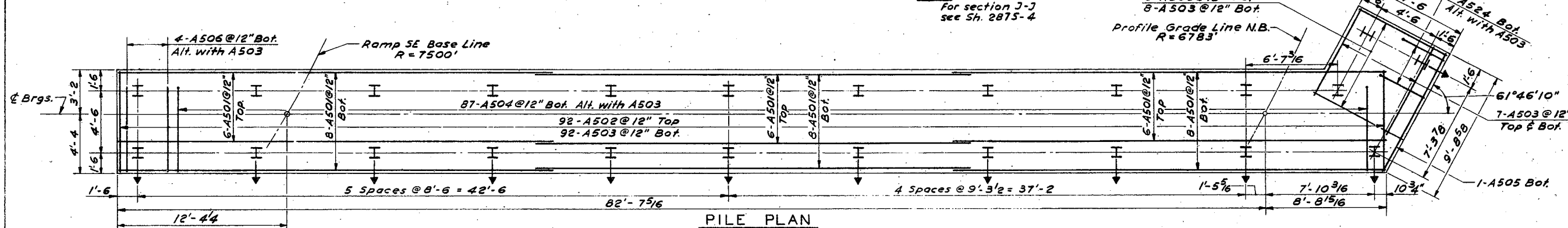
TABLE A



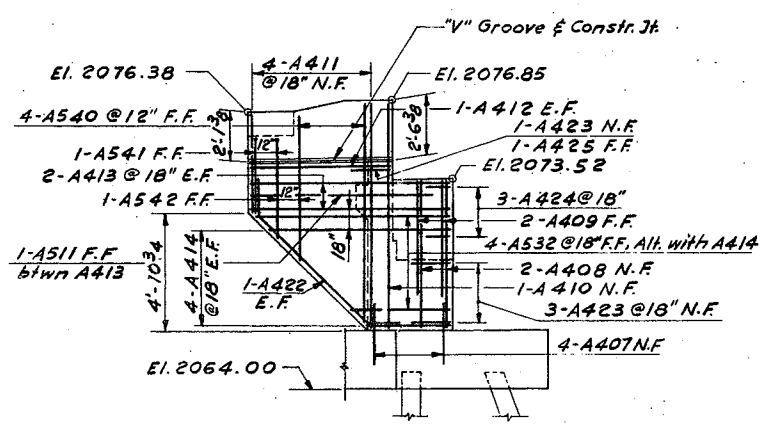
PLAN



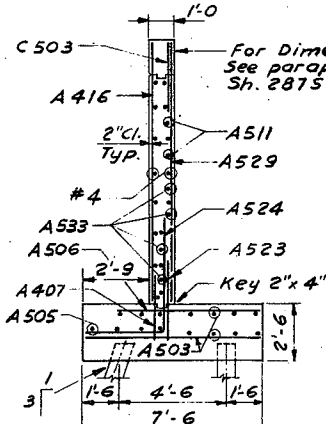
ELEVATION



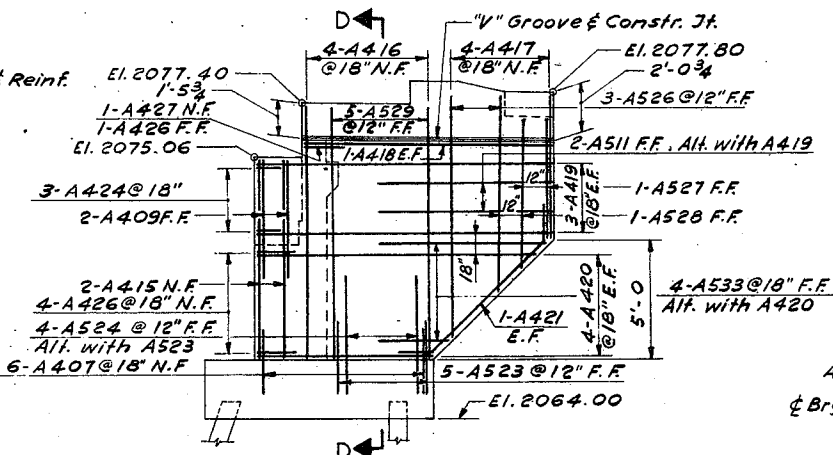
PILE PLAN



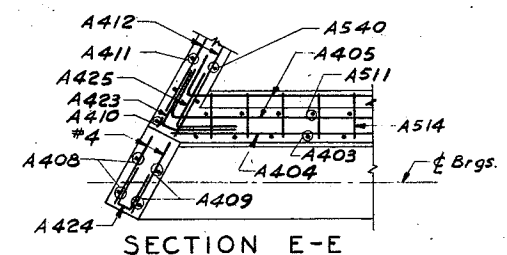
ELEVATION B-B



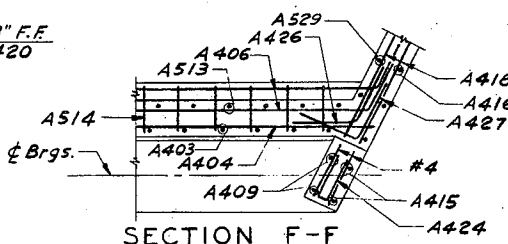
SECTION D-D



ELEVATION C-C



SECTION E-E

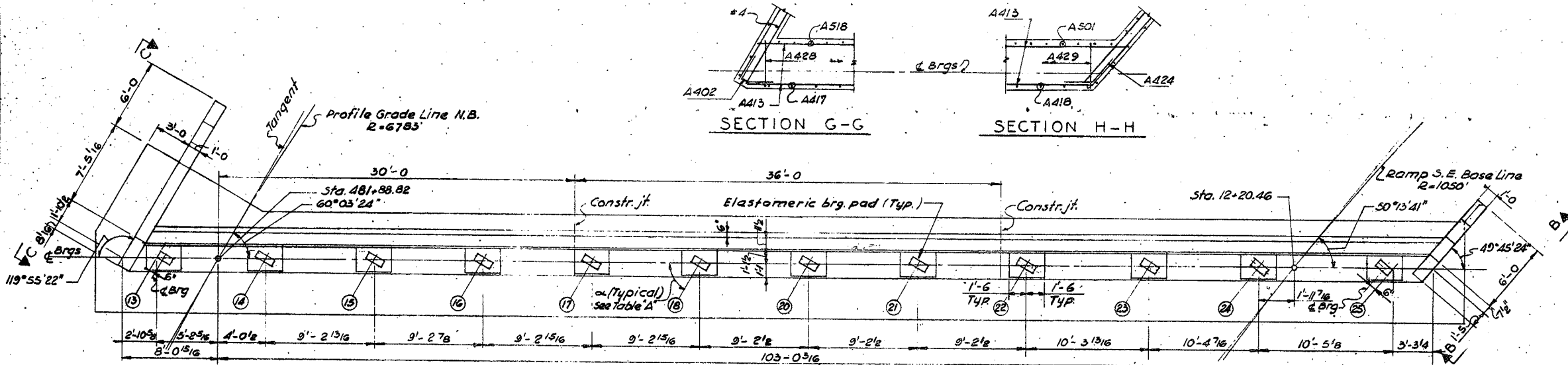


SECTION F-F

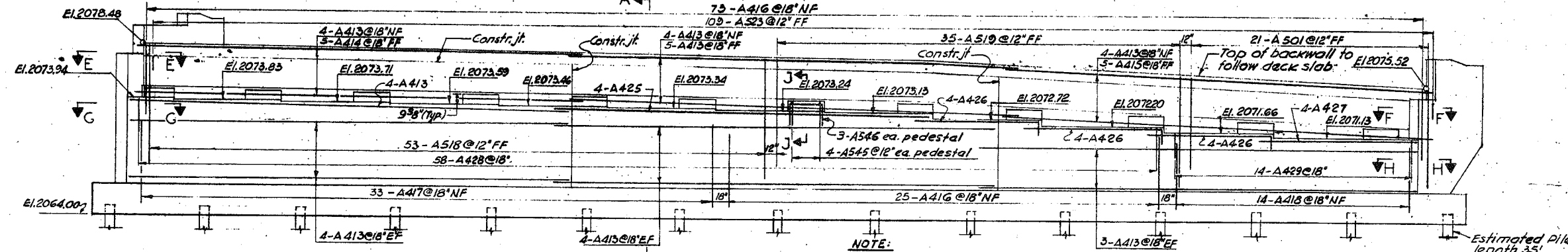
For Notes see Sh. 2875-4

Table 'A'

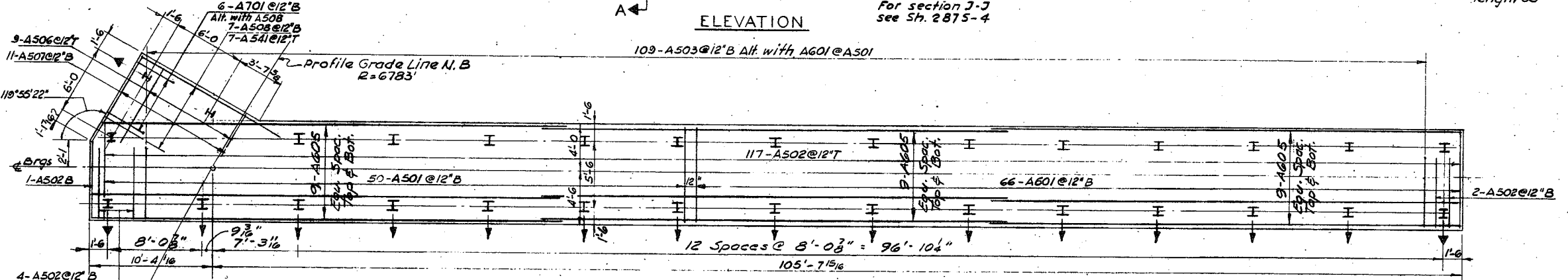
Girder	α
13	60° 04' 43"
14	60° 02' 22"
15	60° 00' 02"
16	59° 57' 41"
17	59° 55' 20"
18	59° 52' 58"
20	57° 59' 06"
21	55° 47' 55"
22	51° 00' 20"
23	50° 39' 16"
24	50° 17' 46"
25	49° 55' 49"



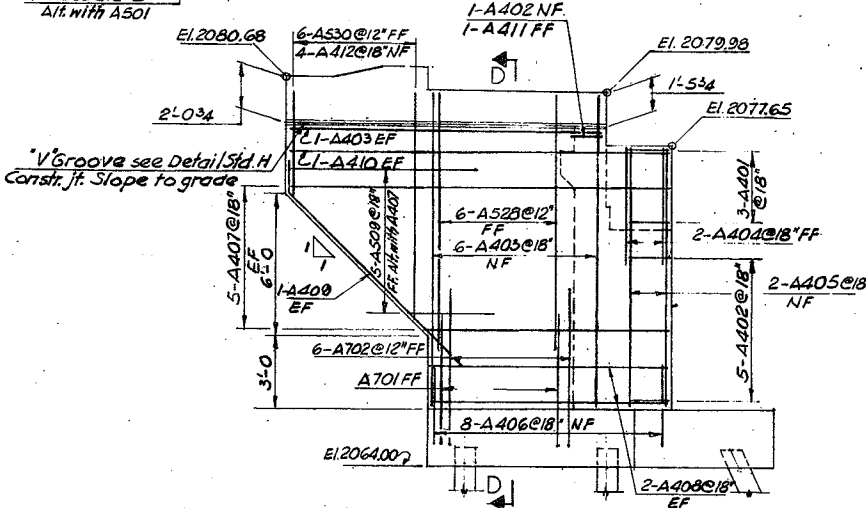
PLAN



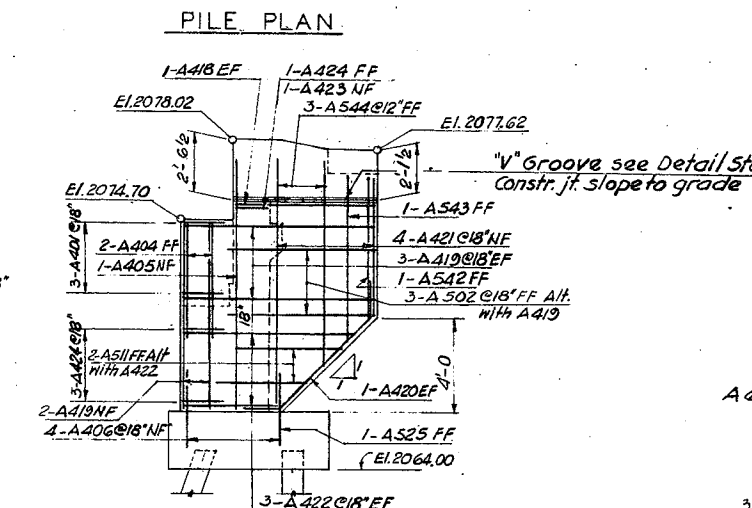
ELEVATION



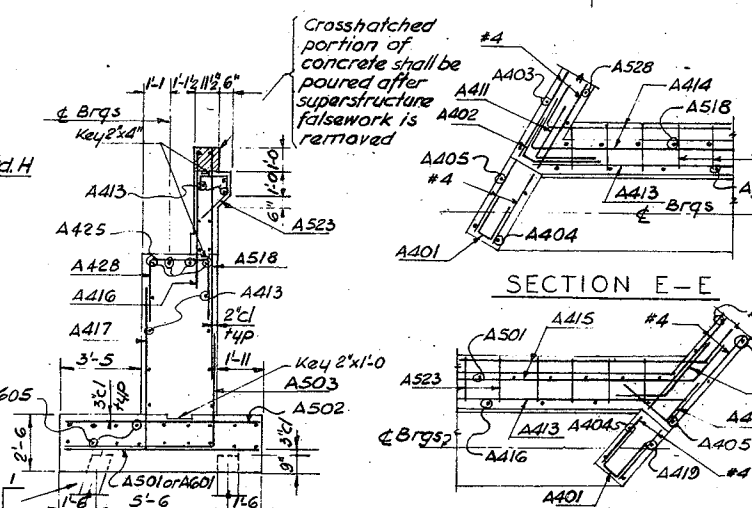
PILE PLAN



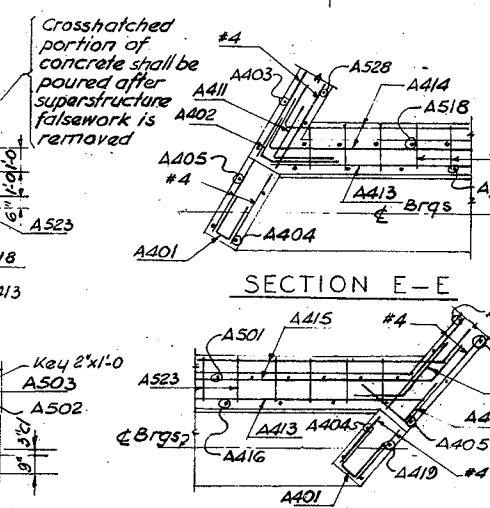
ELEVATION C-C



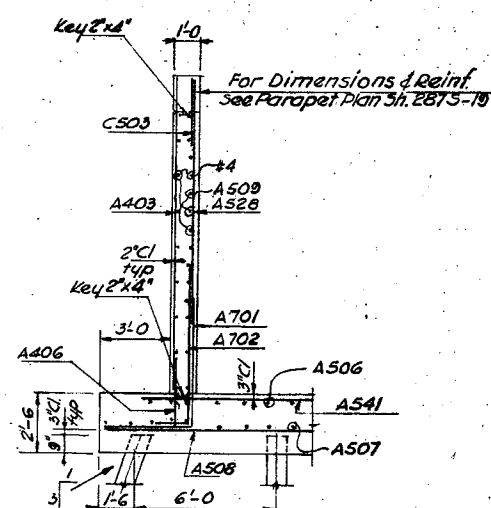
ELEVATION B-B



SECTION A-A



SECTION F-F

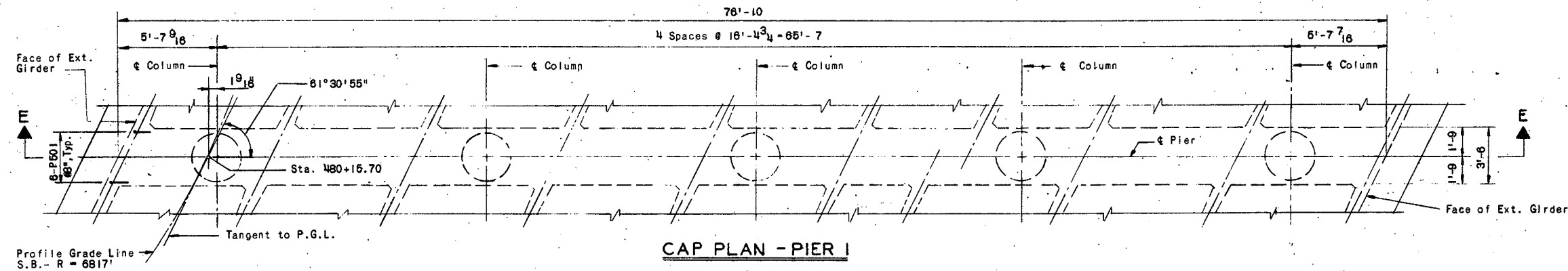


SECTION D-D

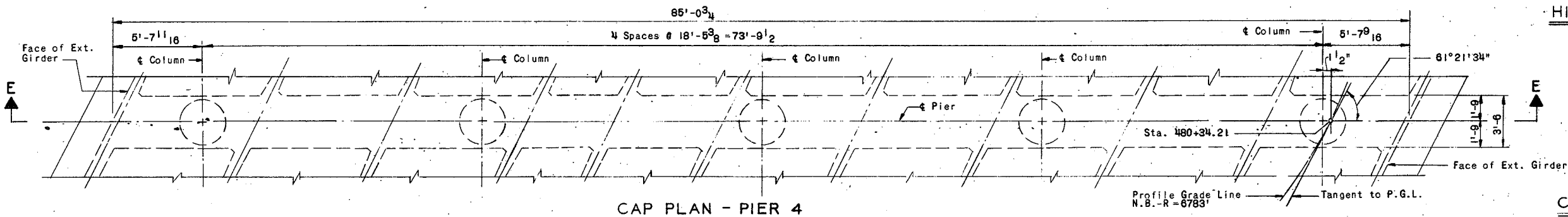
For notes see Sh. 2875-4

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SH. #
7	NEVADA	1019-1 (24) 46	CLARK	03-083		K

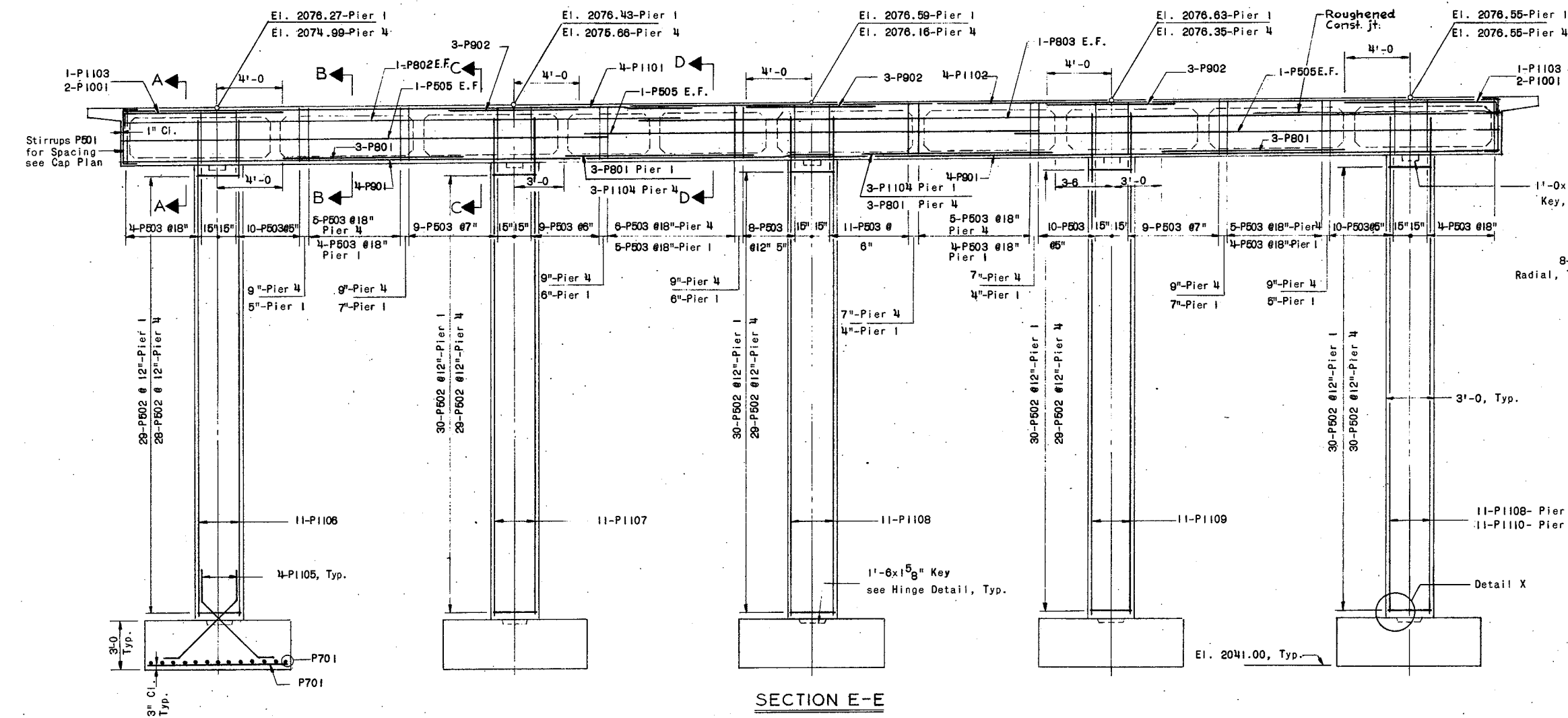
Ref. Sheet 287S-B



CAP PLAN - PIER 1

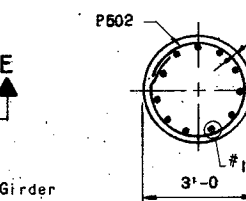


CAP PLAN - PIER 4

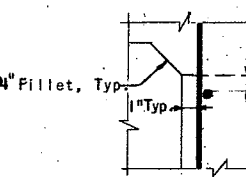


SECTION E-E

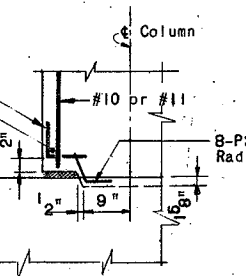
HINGE DETAIL



COLUMN SECTION



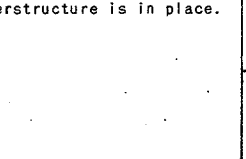
DETAIL Y



DETAIL X



FOOTING PLAN



STATE OF NEVADA
DEPARTMENT OF HIGHWAY

RELOCATED UPRR SPUR
287 OVERPASS
G-936N & G-936S
PIERS 1 & 4

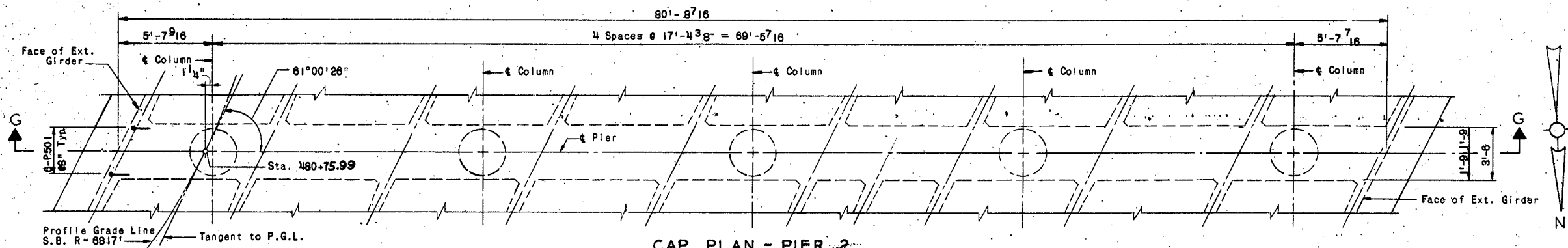
DE LEUW, CATHY & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY
DRAWN BY
CHECKED BY
APPROVED BY

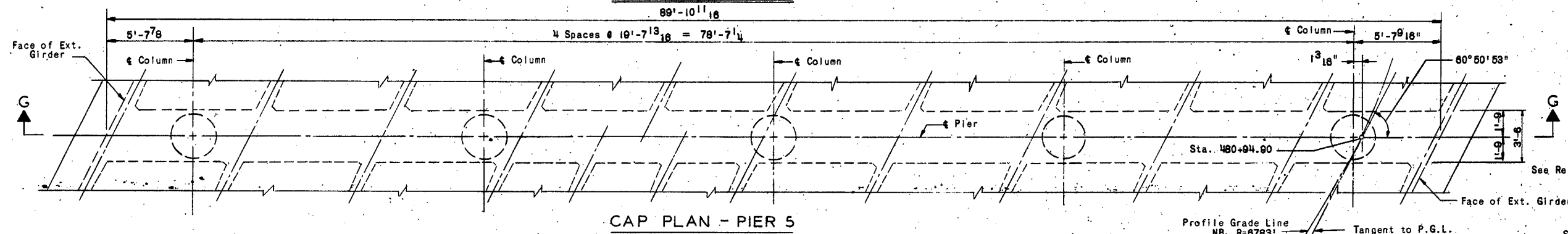
NOTE:
All Columns must be braced
until Superstructure is in place.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	1018-12542	CLARK	03-083		1

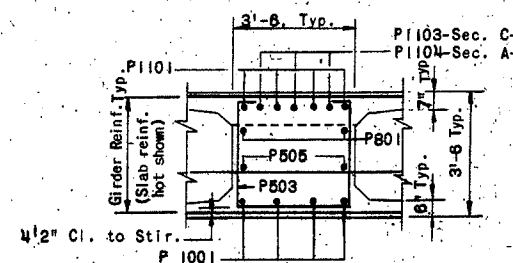
Ref. Sheet 2875-8



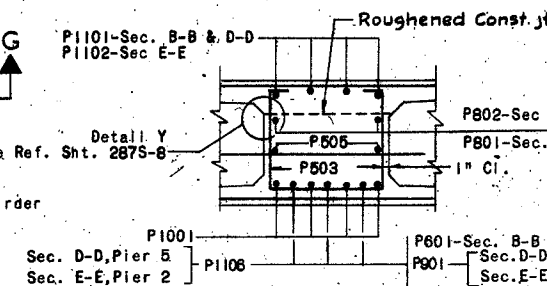
CAP PLAN - PIER 2



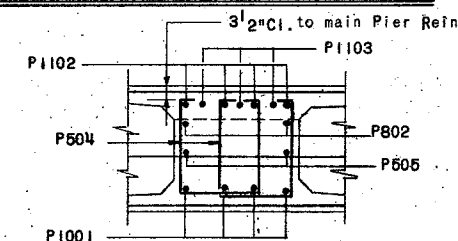
CAP PLAN - PIER 5



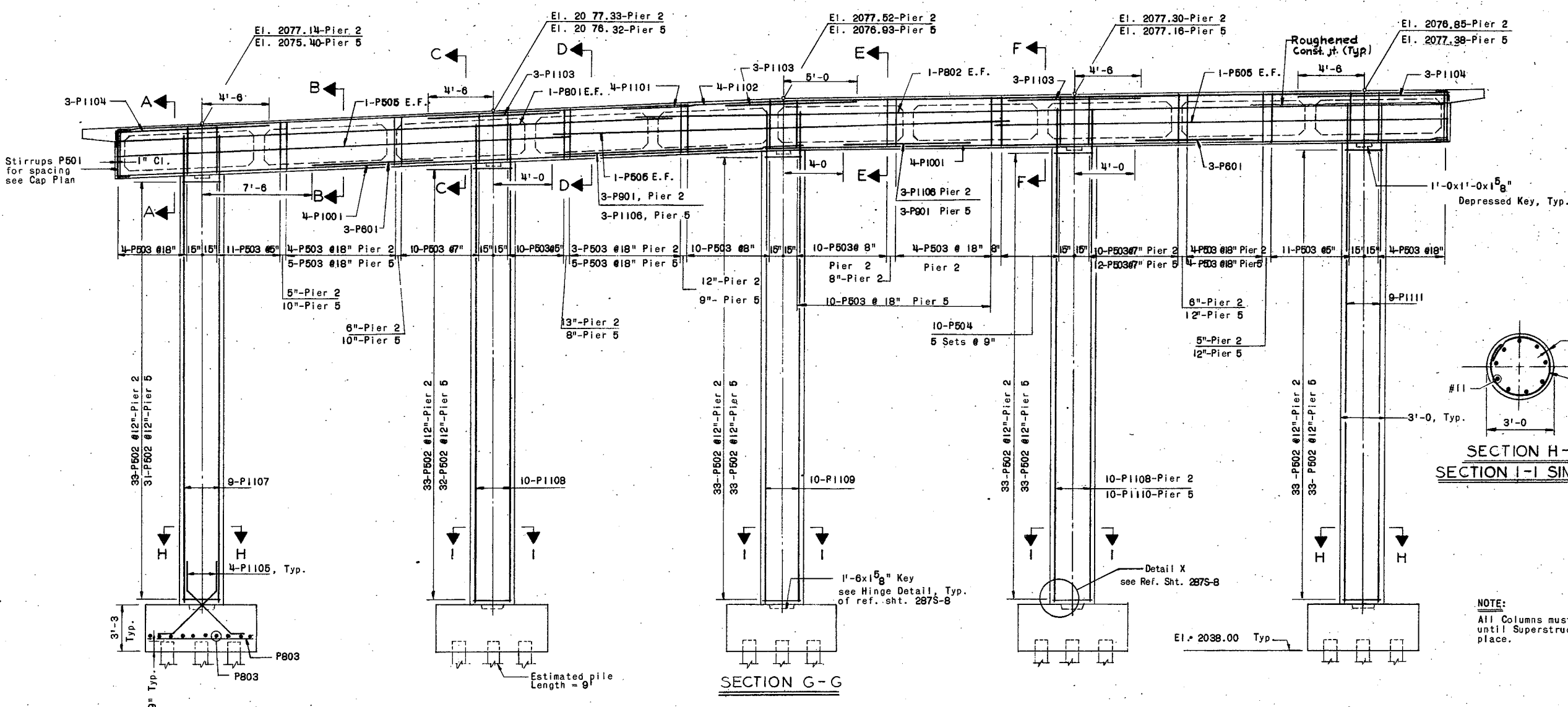
SECTIONS A-A & C-C



SECTIONS B-B, D-D & E-E

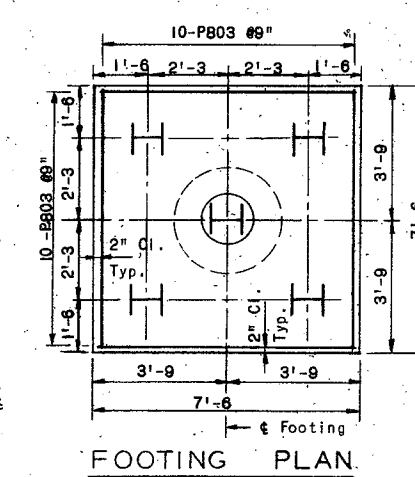


SECTION F-F



SECTION G-G

SECTION H-H
SECTION I-I SIMILAR



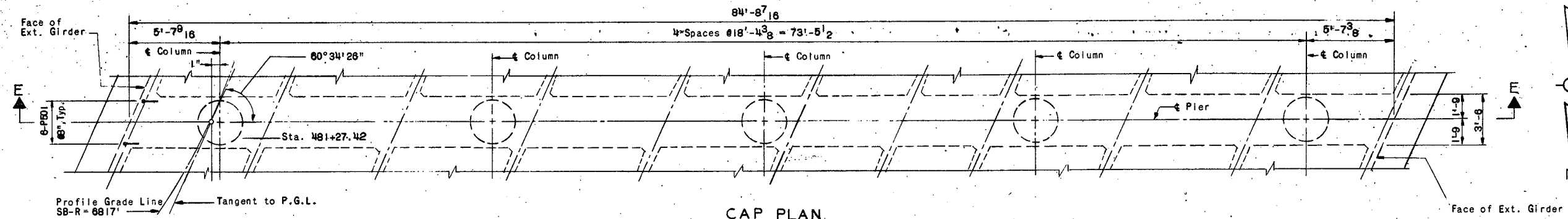
FOOTING PLAN

NOTE:
All Columns must be braced
until Superstructure is in
place.

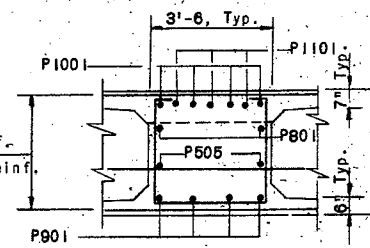
STATE OF NEVADA DEPARTMENT OF HIGHWAY	
RELOCATED UPRR SPUR 287 OVERPASS G-936N & G-936S PIERS 2 & 5	
DESIGNED BY DELEUW, CATHY & COMPANY ENGINEERS SAN FRANCISCO, CALIFORNIA	SCALE: DRAWN BY CHECKED BY APPROVED BY

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE
7	NEVADA	1918-1 (26) 42	CLARK	03-083	

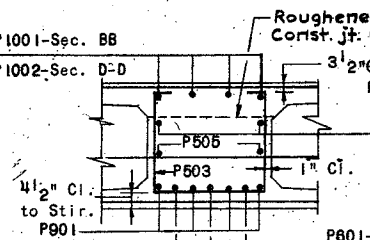
Ref. Sheet



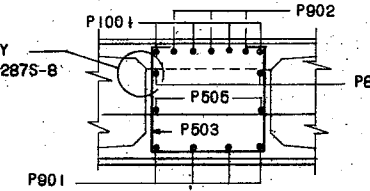
CAP PLAN



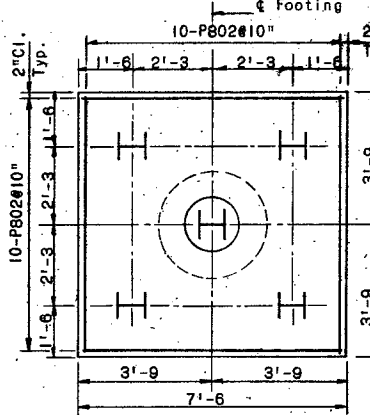
SECTION A-A



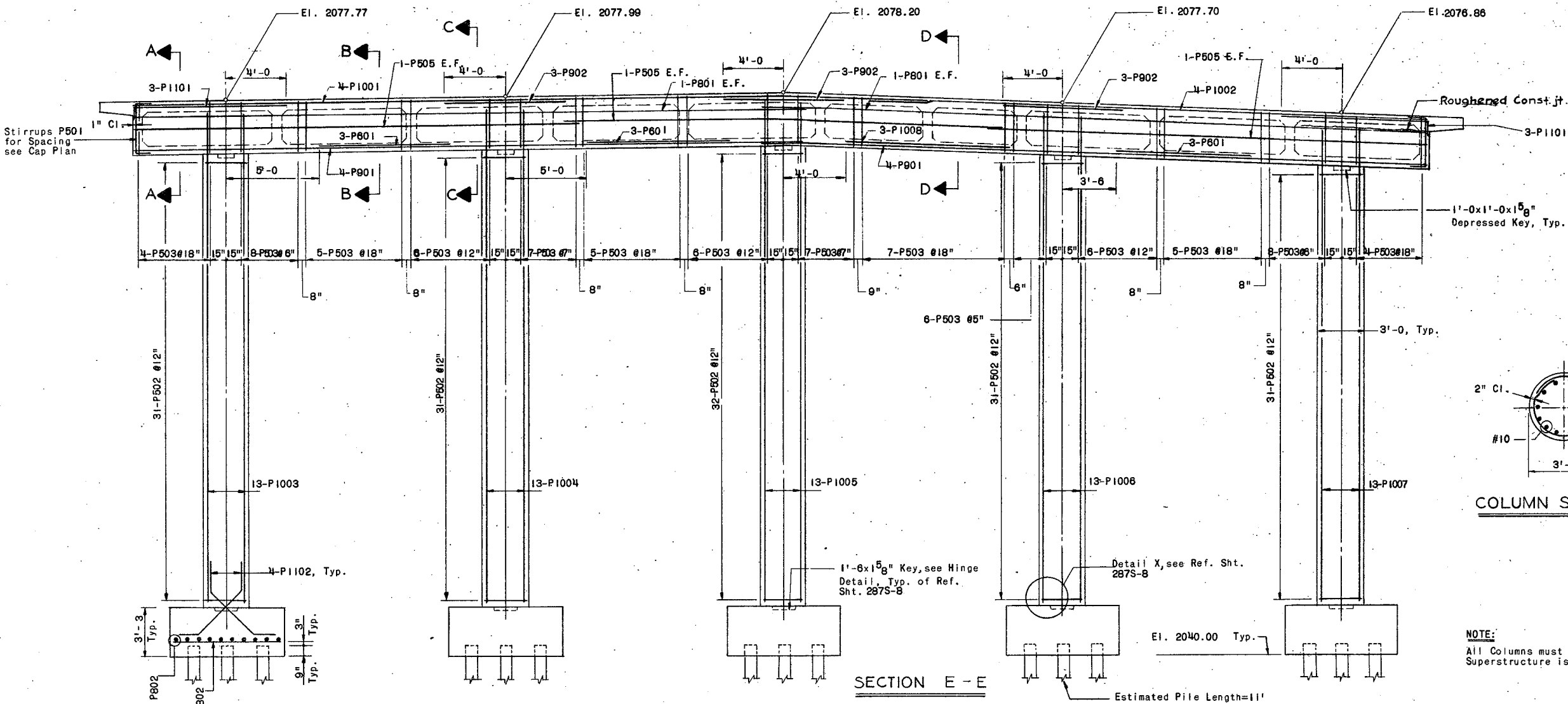
SECTIONS B-B & D-D



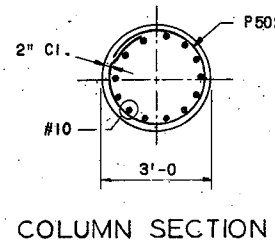
SECTION C-C



FOOTING PLAN



SECTION E-E



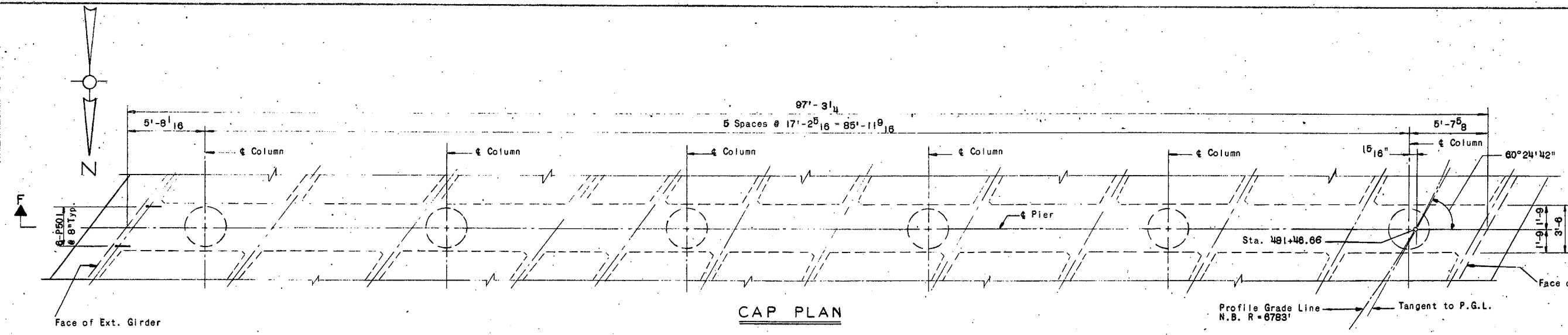
COLUMN SECTION

NOTE:
All Columns must be braced until
Superstructure is in place.

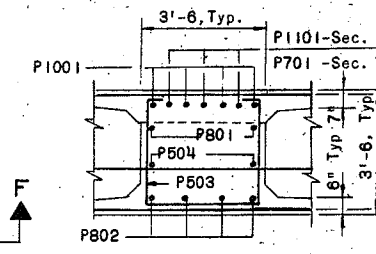
STATE OF NEVADA DEPARTMENT OF HIGHWAYS	
RELOCATED UPRR SPUR 287 OVERPASS G-936 N & G-936 S PIER 3	
DESIGNED BY DE LEUW, CATHY & COMPANY ENGINEERS SAN FRANCISCO, CALIFORNIA	SCALE DRAWN BY CHECKED BY APPROVED BY

F.D. RUN/NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SH. NO.
7	NEVADA	1018-1 (26) 42	CLARK	Q3-083		11

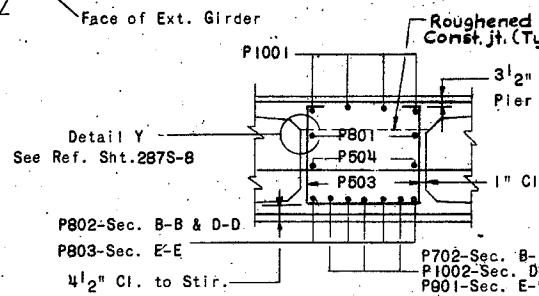
Ref. Sheet: 26



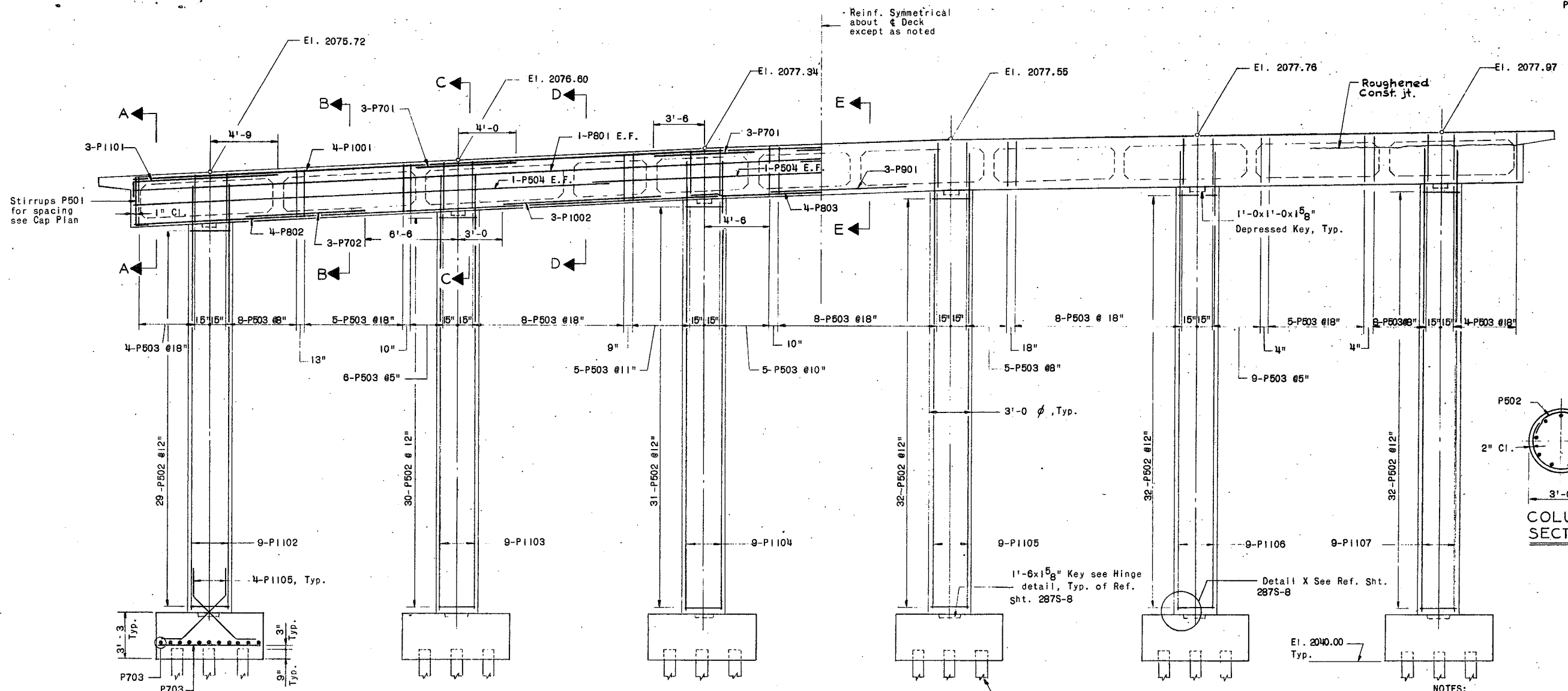
CAP PLAN



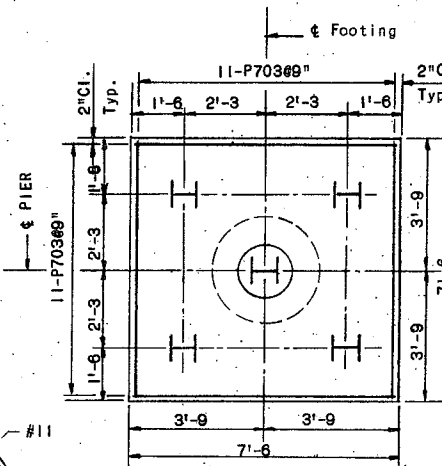
SECTIONS A-A & C-C



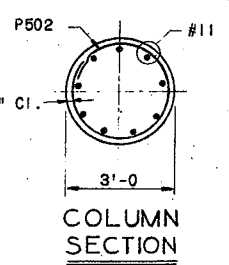
SECTIONS B-B, D-D & E-E



SECTION F-F



FOOTING PLAN



COLUMN SECTION

NOTES:
All Columns must be braced until Superstructure is in place

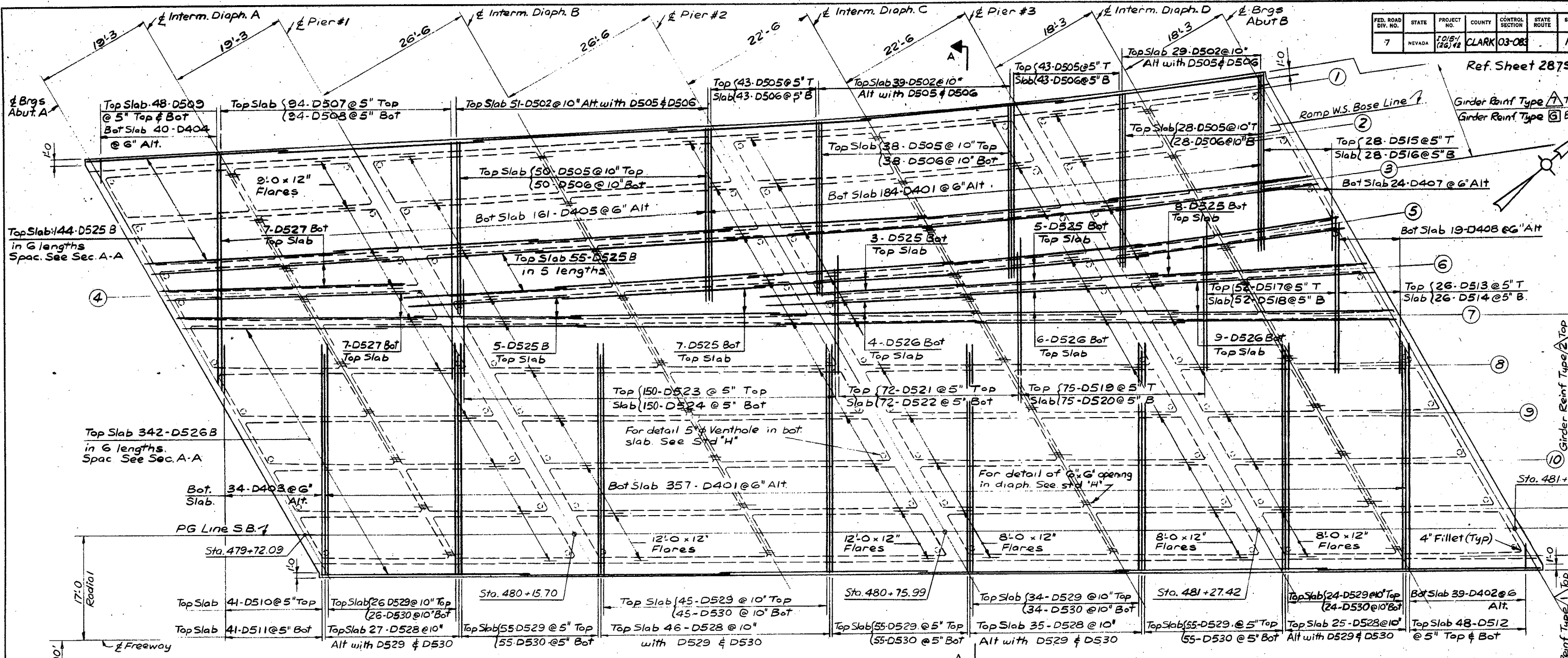
STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

RELOCATED UPRR SPUR
287 OVERPASS
G-936N & G-936S
PIER 6

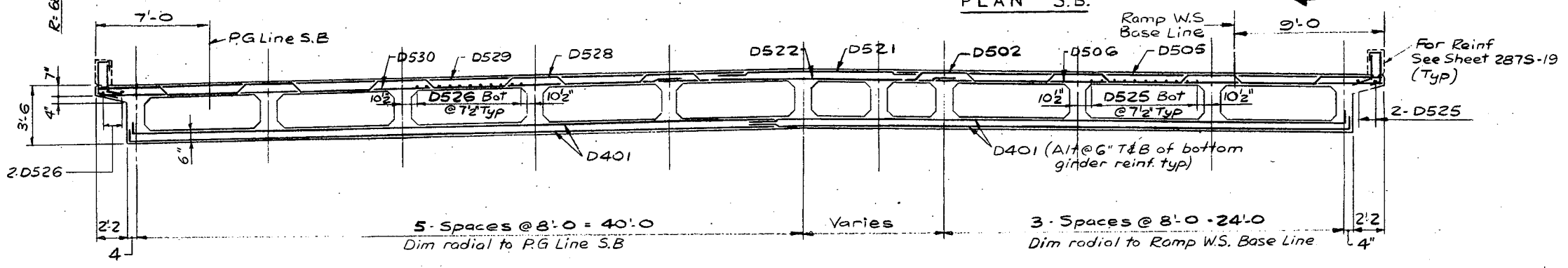
DELEUW, CATHAR & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY
DRAWN BY
CHECKED BY
APPROVED BY

Ref. Sheet 287S

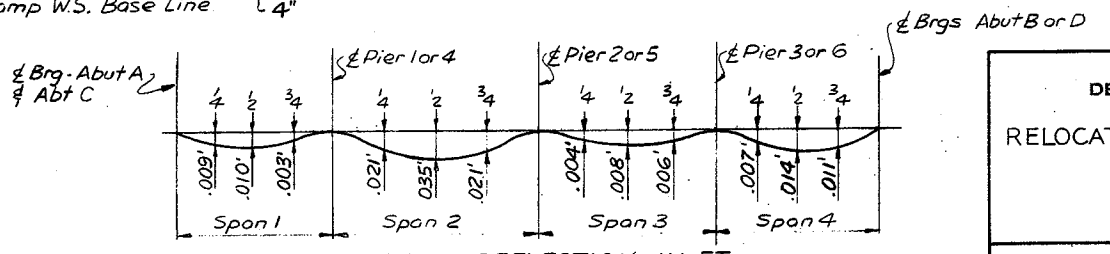


PLAN S.B.



SECTION A-A

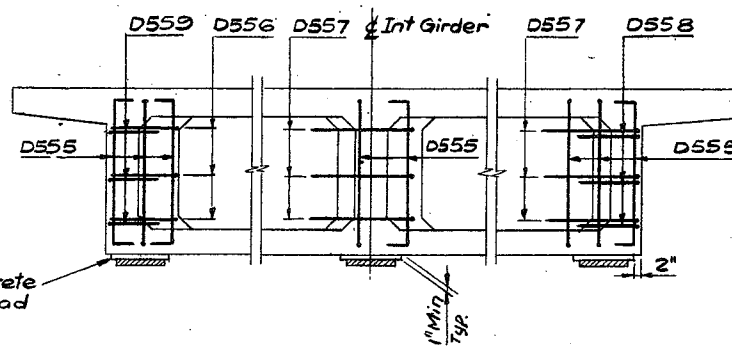
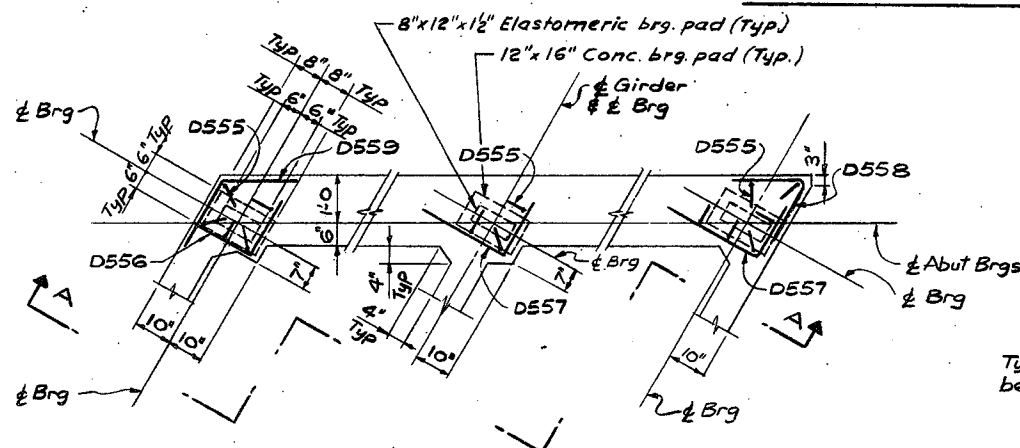
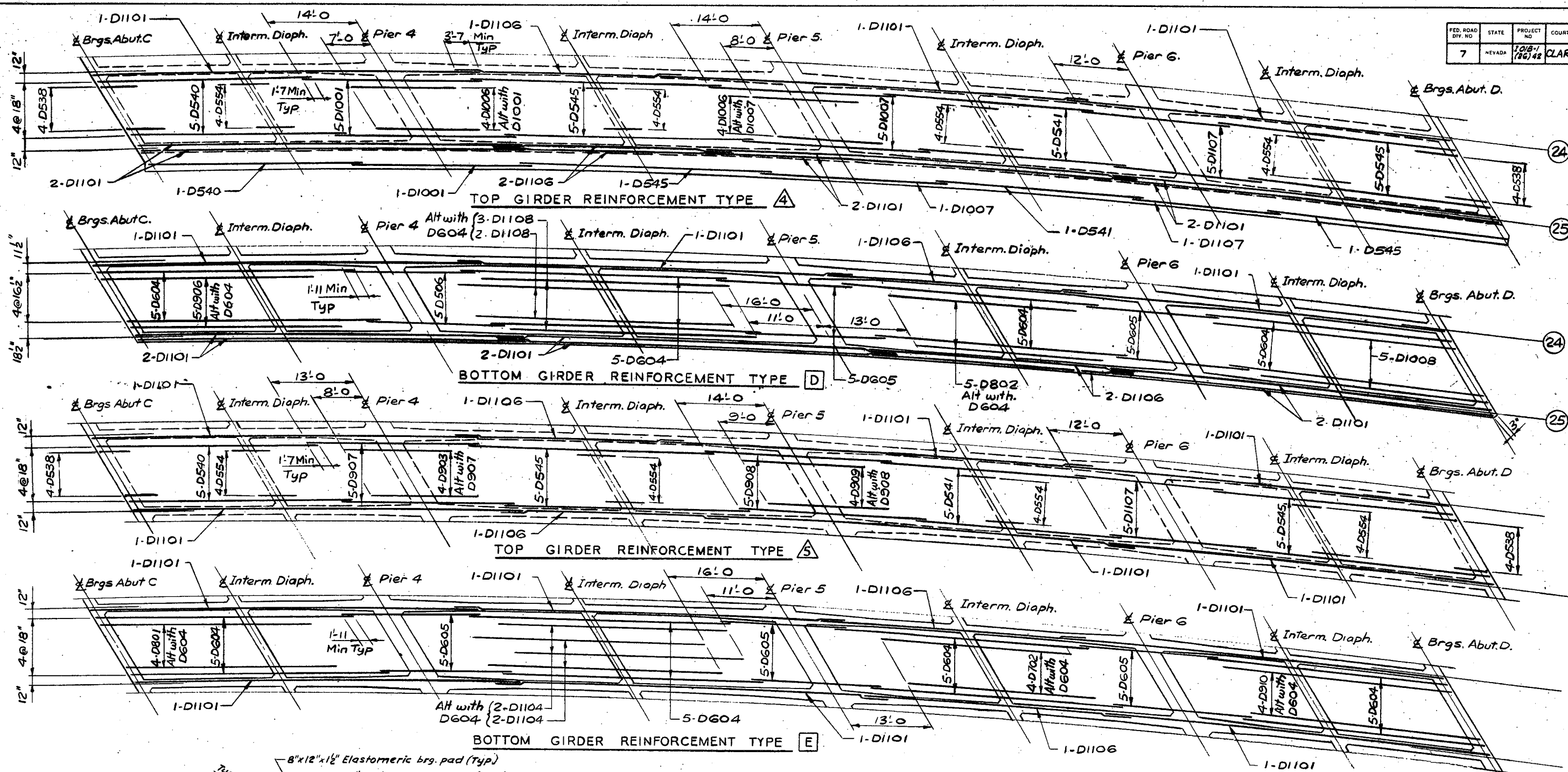
Note: For clarity web and girder reinf. not shown. For details see Std. 'H'



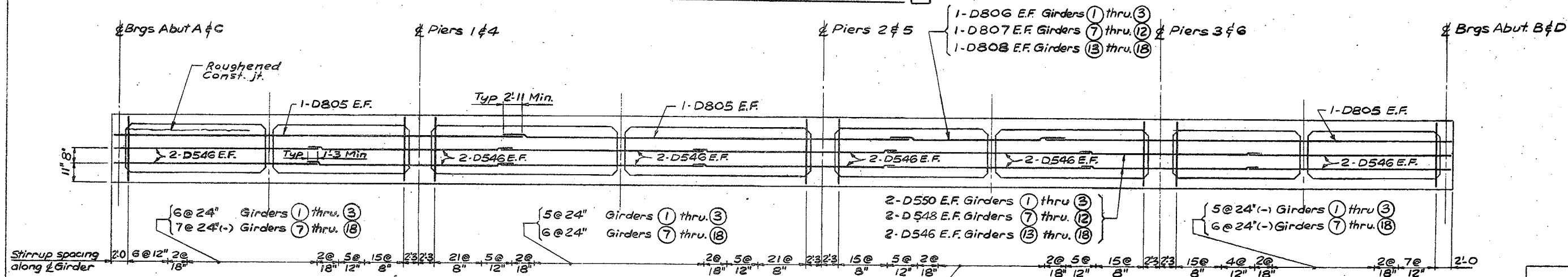
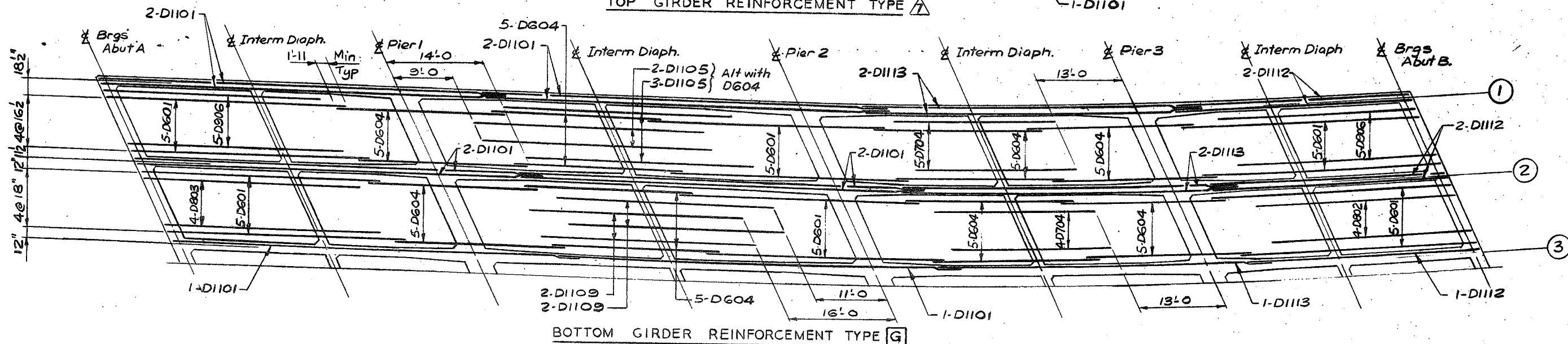
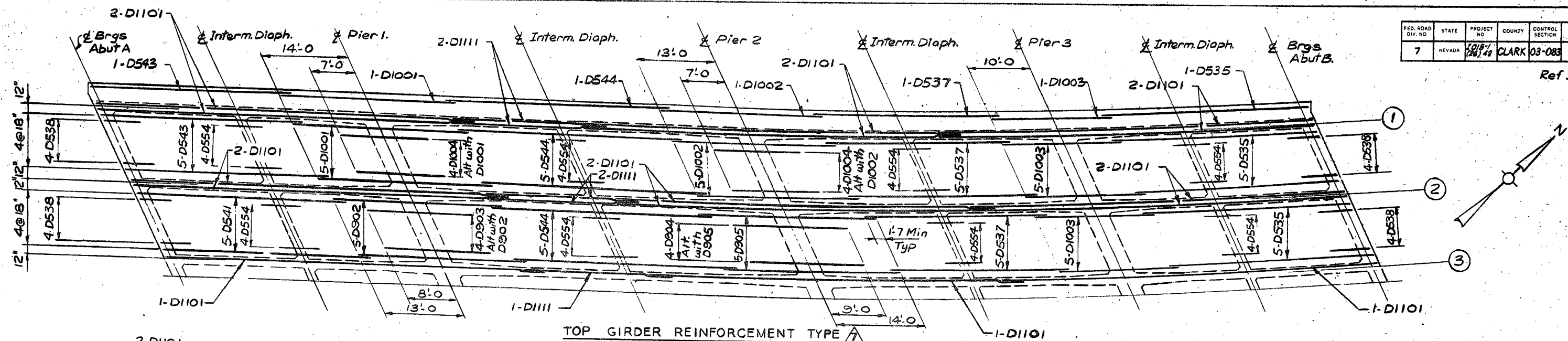
DEAD LOAD DEFLECTION IN FT
Ultimate value (5/4)

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE
7	NEVADA	1015-1 (16) 42	CLARK	03-083	

Ref Sheet

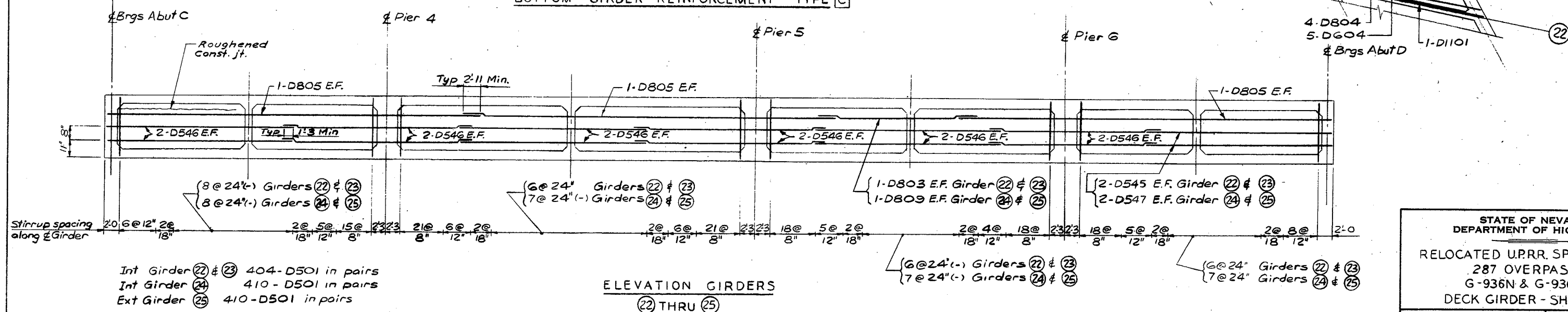
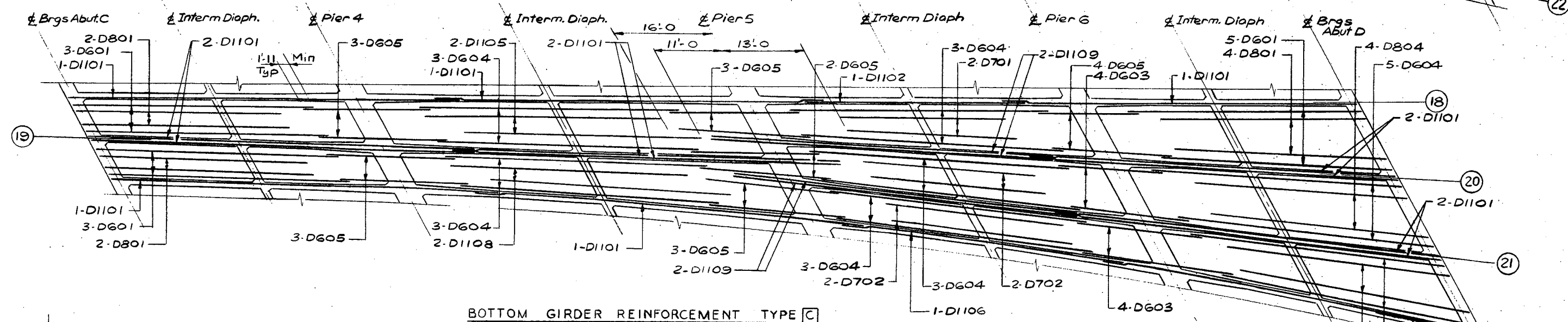
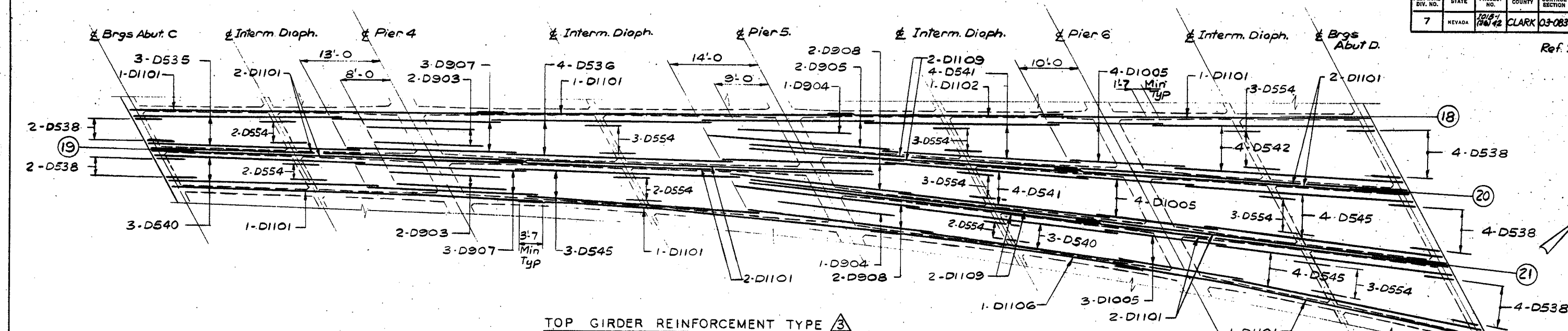


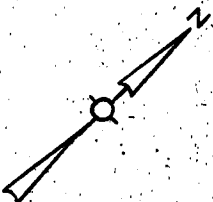
STATE OF NEVADA DEPARTMENT OF HIGHWAY	
RELOCATED U.P.R.R. SPUR TR 287 OVERPASS G-936N & G-936 S DECK GIRDERS - SHEET 2	
DE LEUW, CATHER & COMPANY ENGINEERS SAN FRANCISCO, CALIFORNIA	SCALE DESIGNED BY DRAWN BY CHECKED BY APPROVED BY



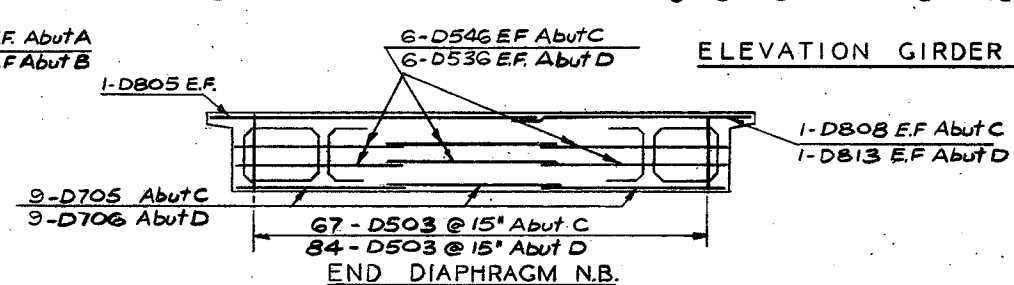
- Ext. Girder ① 370-D501 in pairs
- Ext. Girder ② 378-D501 in pairs
- Ext. Girder ③ 378-D501 in pairs
- Int. Girder ② and ③ 370-D501 in pairs
- Int. Girder ⑦ thru ⑪ 378-D501 in pairs
- Int. Girder ⑫ thru ⑮ 378-D501 in pairs

ELEVATION GIRDERS
① THRU ③ & ⑦ THRU ⑮

Ref. Sheet. 28

Ref Sheet 2

Interm Dioph.

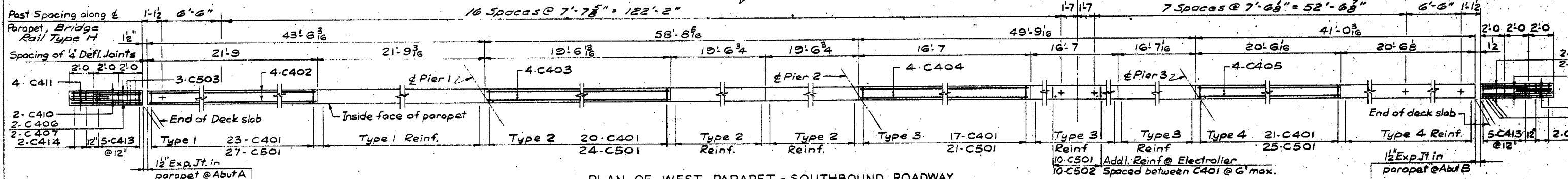


DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

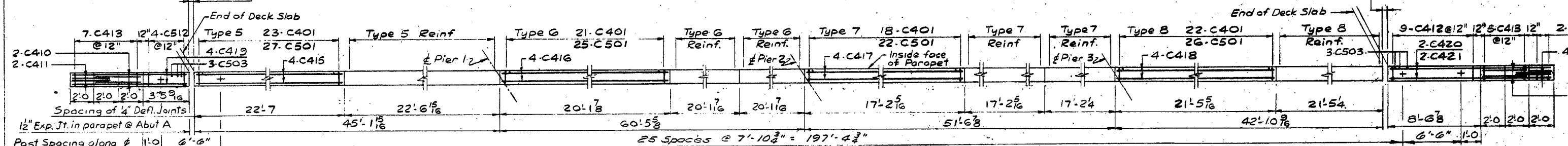
SCALE _____
DESIGNED BY F
DRAWN BY D
CHECKED BY J
DATE B

FED. ROAD DIV. NO.	STATE	PROJECT NO.	COUNTY	CONTROL SECTION	STATE ROUTE	SHEET NO.
7	NEVADA	1015-1/10/11	CLARK	03-083		12

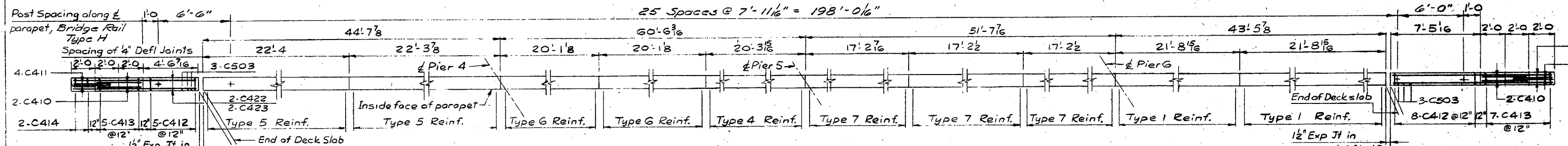
Ref. Sheet 2



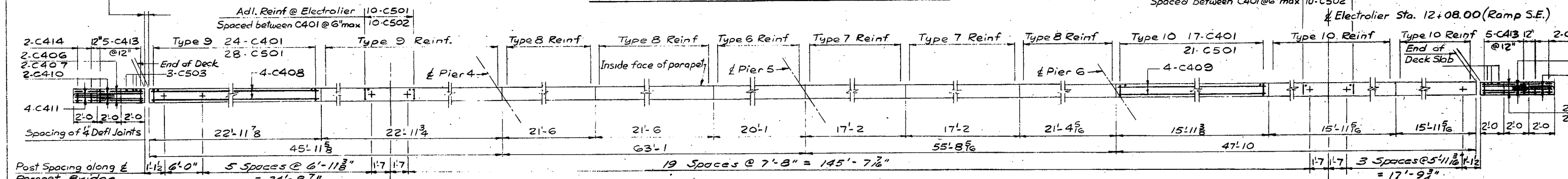
PLAN OF WEST PARAPET - SOUTHBOUND ROADWAY



PLAN OF EAST PARAPET - SOUTHBOUND ROADWAY



PLAN OF WEST PARAPET - NORTHBOUND ROADWAY



PLAN OF EAST PARAPET - NORTHBOUND ROADWAY

Notes.

- For all parapet details see Std. D2.
- + Indicates = Bridge Rail Post.
- Place 1-C401 @ each side of rail post anchor bolt assemblies 2" clear, others at 12" maximum between assemblies.
- Place 5-C501 @ G" at each side of joints, others at 12" maximum.
- Dimensions along inside face of parapet, except as noted.

STATE OF NEVADA DEPARTMENT OF HIGHWAYS	
RELOCATED UPRR SPUR TR 287 OVERPASS G-936N & G-936S PARAPETS	
DE LEUW, CATHAR & COMPANY ENGINEERS SAN FRANCISCO, CALIFORNIA	SCALE DESIGNED BY DRAWN BY CHECKED BY APPROVED BY

Ref. Sheet 287S-20

LOC.	MARK	a	b
ABUTMENT A	A504	6'-1	3'-9
"	A506	3'-5	3'-2
"	A532	3'-11	8"
"	A533	4'-11	8"
"	A427	1'-9	1'-9
ABUTMENT B	A502	6'-2	4'-11
"	A430	20'-6	9"
"	A431	9'-8	9"
"	A528	5'-0	8"
"	A529	4'-0	8"
"	A429	1'-9	1'-9
"	A602	8'-6	3'-8
ABUTMENT C	A504	6'-1	3'-11
"	A428	6'-3	9"
"	A429	10'-6	9"
"	A524	5'-0	3'-5
"	A527	5'-1	8"
"	A528	6'-1	8"
"	A427	1'-9	1'-9
"	A541	3'-9	8"
"	A542	4'-9	8"
ABUTMENT D	A503	6'-2	4'-9
"	A426	11'-6	9"
"	A423	1'-9	1'-9
"	A542	5'-9	8"
"	A543	6'-9	8"
"	A701	5'-6	3'-7
"	A702	6'-6	1'-6
ABUT' S	A545	2'-9	2'-3
PIERS	P301	9"	9"
PIERS 1&4	P1001	8'-6	1'-6
" "	P1103	8'-6	"
PIERS 2&5	P1104	10'-0	"
PIER 3	P1101	9'-5	"
PIER 6	P1101	10'-5	1'-6

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS
RELOCATED UPRR SPUR
287 OVERPASS
G-936N & G-936S
BILL OF MATERIAL - SHEET

DE LEUW, CATHER & COMPANY
ENGINEERS
SAN FRANCISCO, CALIFORNIA

SCALE
DESIGNED BY
DRAWN BY
CHECKED BY