

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF INDIAN AFFAIRS

GALLUP AREA

NAVAJO RESERVATION

COUNTY OF APACHE

ROAD PLANS

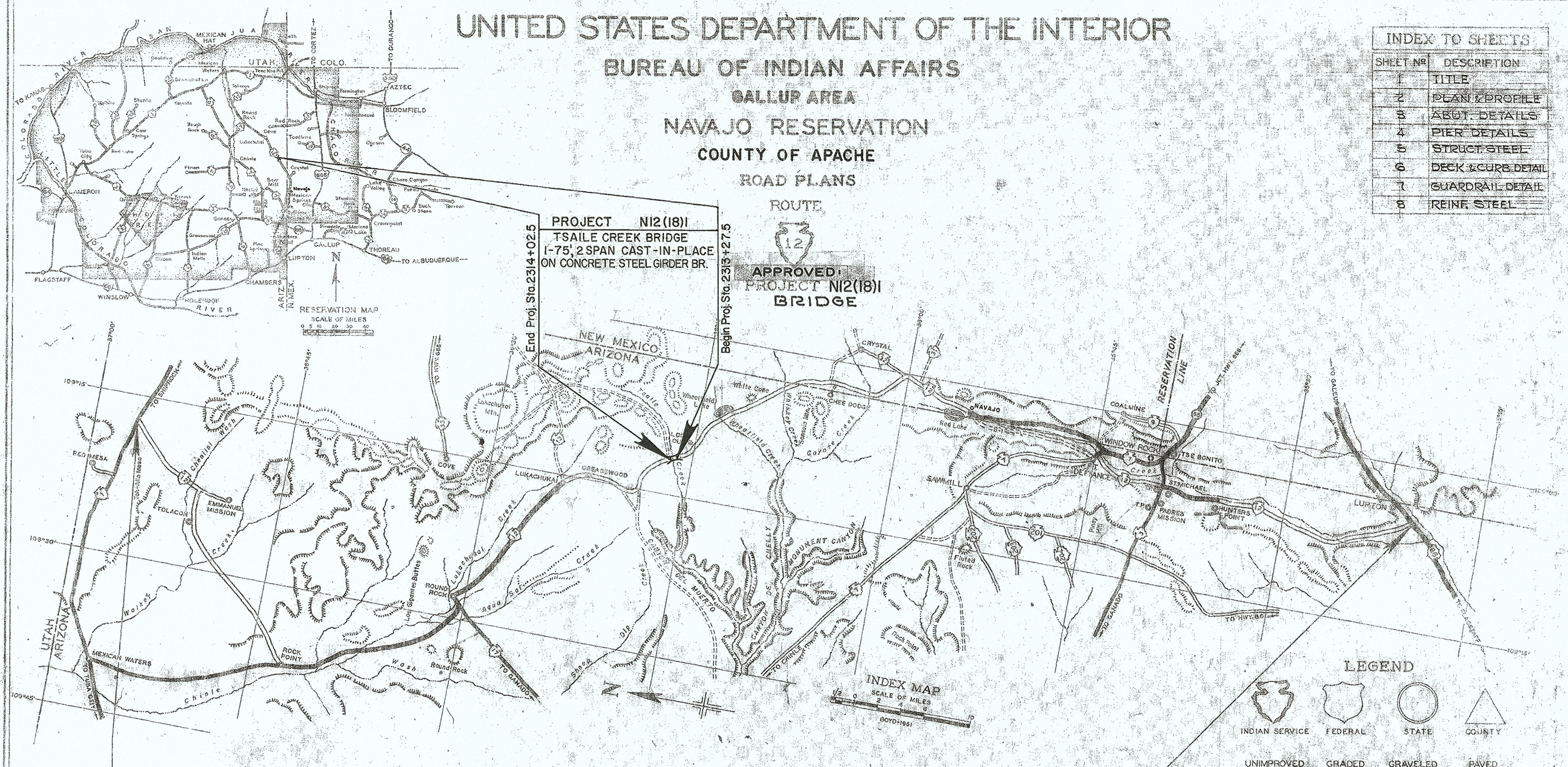
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SHEET NO.	DESCRIPTION
1	TITLE
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3	ABUT. DETAILS
4	PIER DETAILS
5	STRUCT. STEEL
6	DECK & CURB DETAIL
7	GUARDRAIL DETAIL
8	REIN. STEEL

PROJECT N12(18)1
TSAILE CREEK BRIDGE
1-75' 2 SPAN CAST-IN-PLACE
ON CONCRETE STEEL GIRDER BR.

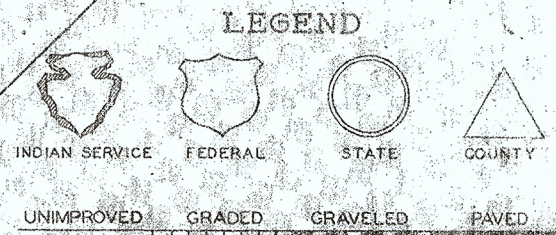
ROUTE
12
APPROVED
PROJECT N12(18)1
BRIDGE

End Proj. Sta. 2314+02.5

Begin Proj. Sta. 2313+27.5



AS BUILT



APPROVED FOR CONSTRUCTION

BUREAU OF INDIAN AFFAIRS		U.S. DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS	
AREA ROAD ENGINEER	DATE 10/1/64	DIVISION ENGINEER	DATE
AGENCY ROAD ENGINEER	DATE 1/3/64		
TRIBAL COUNCIL	DATE 1/1/64		
GENERAL SUPERINTENDENT	DATE 1/1/64		

N505

GENERAL NOTES

DESIGN SPECIFICATIONS: A.A.S.H.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES 1961, WITH TENTATIVE REVISION FOR 1961.

DESIGN DATA: H20-S16-44, LOADING IN ACCORDANCE WITH THE A.A.S.H.O. SPECIFICATIONS OF 1961. FC=1200 PSI, FS=20,000 PSI (REINFORCING STEEL) N=10.

STRUCTURAL STEEL: ALL STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. A-36. FIELD CONNECTIONS SHALL BE BOLTED USING $\frac{7}{8}$ " DIAMETER HIGH STRENGTH BOLTS CONFORMING TO A.S.T.M. A-325. WHERE THE SUM OF DEAD LOAD DEFLECTION AND PERMANENT CAMBER IS SUFFICIENTLY LARGE, THE BEAMS SHALL BE MILL CAMBERED. WHERE BEAMS ARE NOT MILL CAMBERED, DEPTH OF CONCRETE HAUNCHES MUST BE INCREASED TO COMPENSATE FOR DEAD LOAD DEFLECTION AND PERMANENT CAMBER. IN ALL CASES, BEAMS WITH NATURAL CAMBER SHALL BE FABRICATED WITH CAMBER UP.

STEEL BRIDGE RAILING: ALL ITEMS OF RAIL CONSTRUCTION ARE INCLUDED IN THE CONTRACT. ITEM 422(2), STEEL BRIDGE RAILING, INCLUDED ARE BEAM TYPE GUARDRAIL, STEEL POSTS AND ALL RAIL AND POSTS SECURING BOLTS, NUTS, WASHERS AND SHIMS. PAV LENGTH FOR ITEM 422(2) SHALL BE MEASURED CENTER TO CENTER OF FIRST AND LAST RAIL POSTS.

PAINT: ALL STRUCTURAL STEEL AND RAILING POSTS SHALL BE GIVEN ONE SHOP COAT OF RED LEAD IRON OXIDE PAINT. BOLTED JOINTS AND SURFACES IN CONTACT WITH CONCRETE SHALL NOT BE PAINTED. SURFACES INACCESSIBLE AFTER ERECTION SHALL BE GIVEN TWO COATS OF PAINT IN THE FIELD. FIELD PAINT SHALL CONSIST OF ONE COAT OF TINTED RED LEAD IRON OXIDE PAINT FOLLOWED BY ONE FINISH COAT OF ALUMINUM. ALL PAINT AND WORKMANSHIP SHALL CONFORM TO A.A.S.H.O. SPECIFICATIONS.

CONCRETE: ALL CONCRETE SHALL BE CLASS "A" (CAE) UNLESS OTHERWISE DESIGNATED. AIR ENTRAINING AGENTS SHALL MEET WITH THE APPROVAL OF THE ENGINEER. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS. ALL CORNERS AND EXPOSED EDGES SHALL BE CHAMFERED $\frac{3}{4}$ " UNLESS OTHERWISE NOTED.

CONCRETE SLOPE PAVING: ALL CONCRETE FOR SLOPE PAVING SHALL BE CLASS "B" CONCRETE.

BEARINGS: ALL BEARING SEATS SHALL BE FINISHED HIGH AND GROUND OR RUBBED TO $\frac{1}{16}$ " OF FINISHED ELEV. NO SEPARATE PAYMENT SHALL BE MADE FOR PREFORMED FABRIC PADS. PAYMENT FOR THESE PADS SHALL BE INCIDENTAL TO ITEM 420(C) STRUCTURAL STEEL, FURNISHED, FABRICATED AND ERECTED.

BORROW EXCAVATION: CASE I REQUIRED FOR BRIDGE APPROACHES SHALL BE OBTAINED WITHIN THE LIMITS OF THE RIGHT-OF-WAY FROM STATION 2305+00 TO STATION 2320+00.

HYDRAULIC DATA

Drainage Area 53 Sq. Mi.
*Peak Discharge 6765 Cfs
Flow Line Elevation 7093 ±
Normal Water Surface Elevation 7094 ±
Velocity Thru Bridge 20.9 Fps.
*Based on 25 year frequency using Geological Survey Circular #464

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
107(4)	Borrow Excavation, Case I	1500.0	C.Y.
103(2)	Excav. for Structures (Bridge)	600	C.Y.
111(4)	Removal of Existing Bridge	1	Unit
406(1)	Class "A" Concrete	136.63	C.Y.
406B(1)	Concrete Slope Paving	3650	S.Y.
407(1)	Reinforcement Steel	23,312	Lbs.
420(1)	Struct. Steel, Furnished, Fabricated & Erected	42,225	Lbs.
422(2)	Steel Bridge Railing	142.3	L.F.

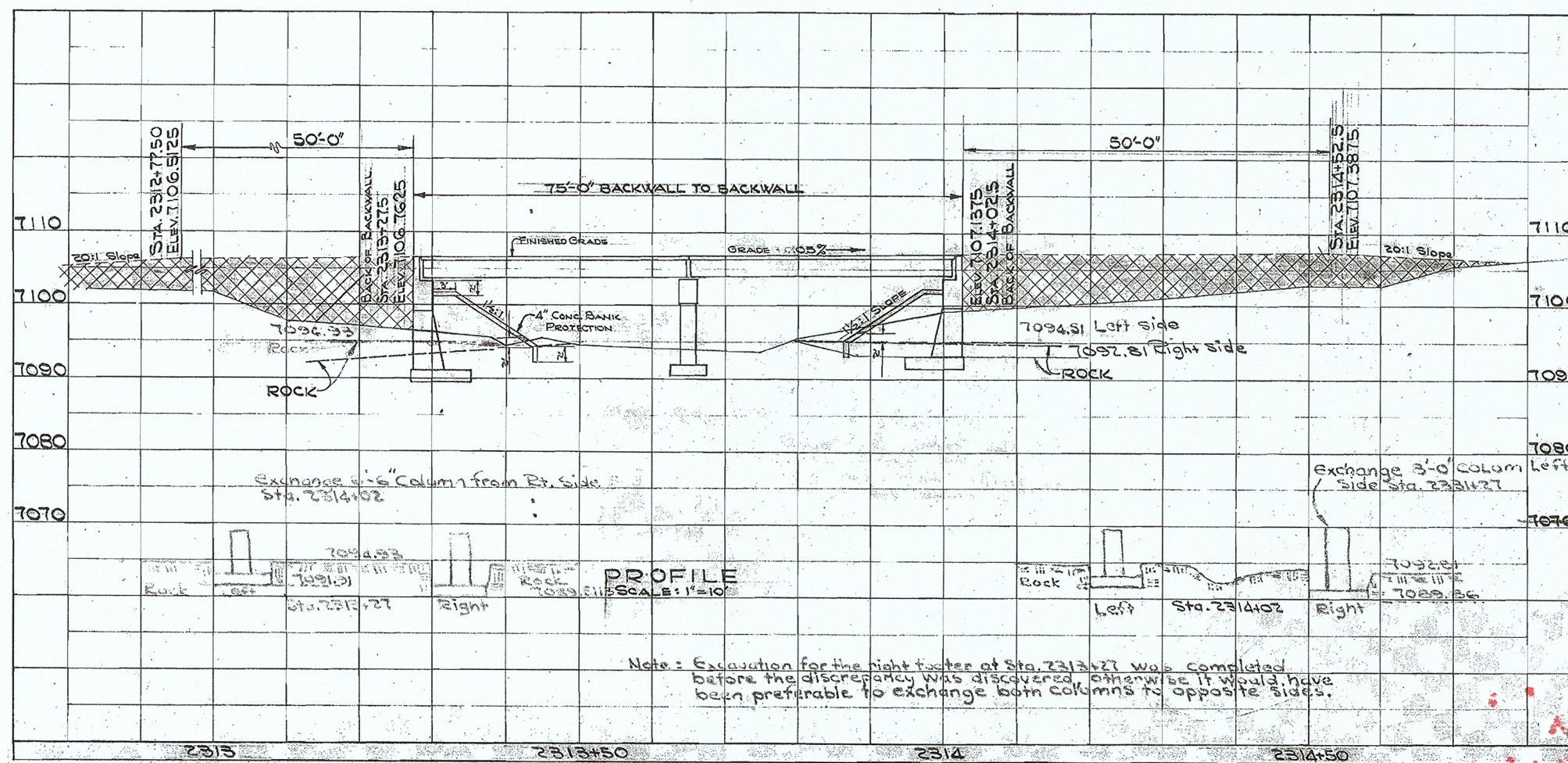
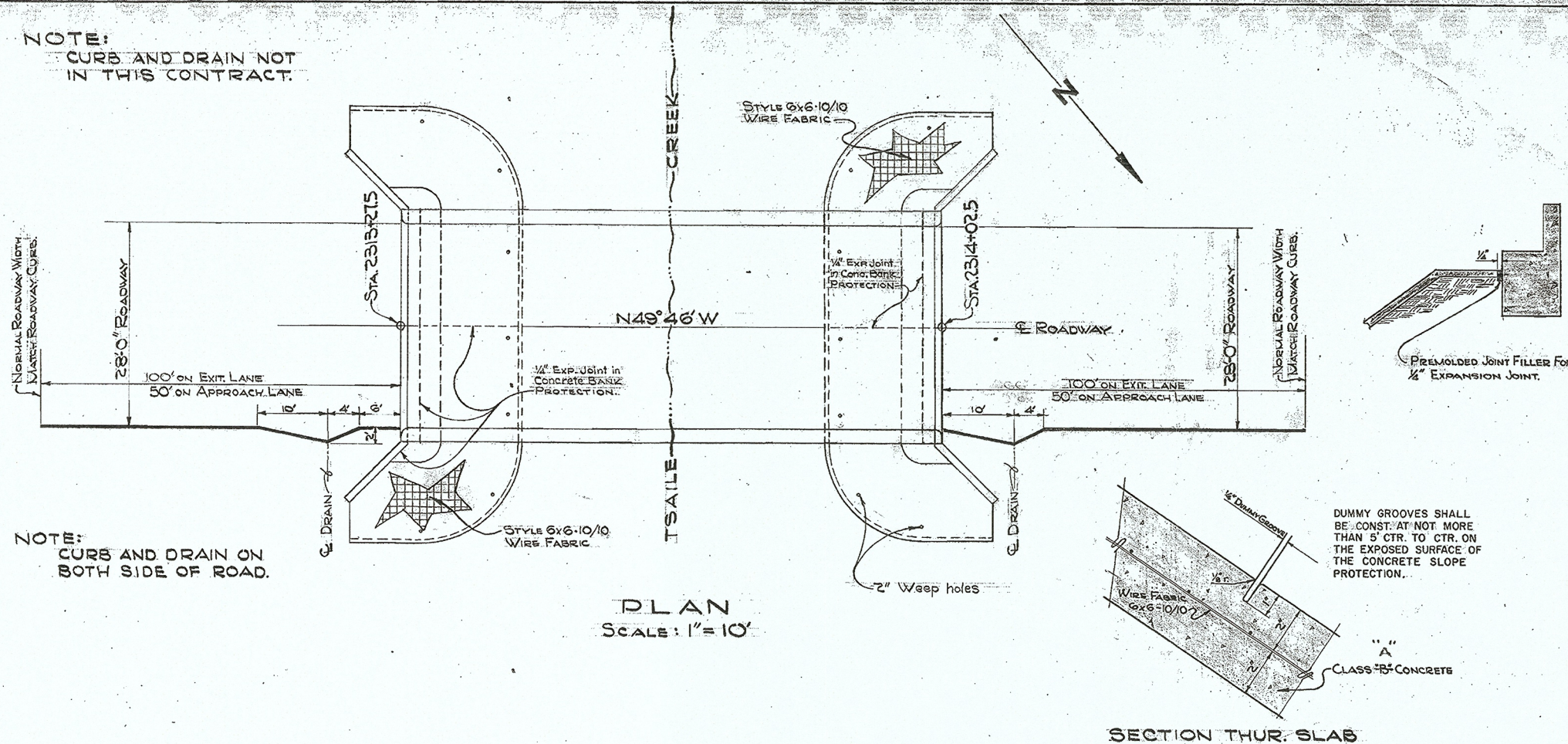
Standard Specifications for Construction Roads and Bridges on Federal Highway Projects, FP-61, in correlation with the Special Provisions shall govern the construction of this Project.
SIGNS: Signs and Barricades as shown in the "Manual on Uniform Traffic Control Devices for Streets and Highways, 1961 Edition" as published by the U.S. Department of Commerce, Bureau of Public Roads, and/or as directed by the Engineer will be required.

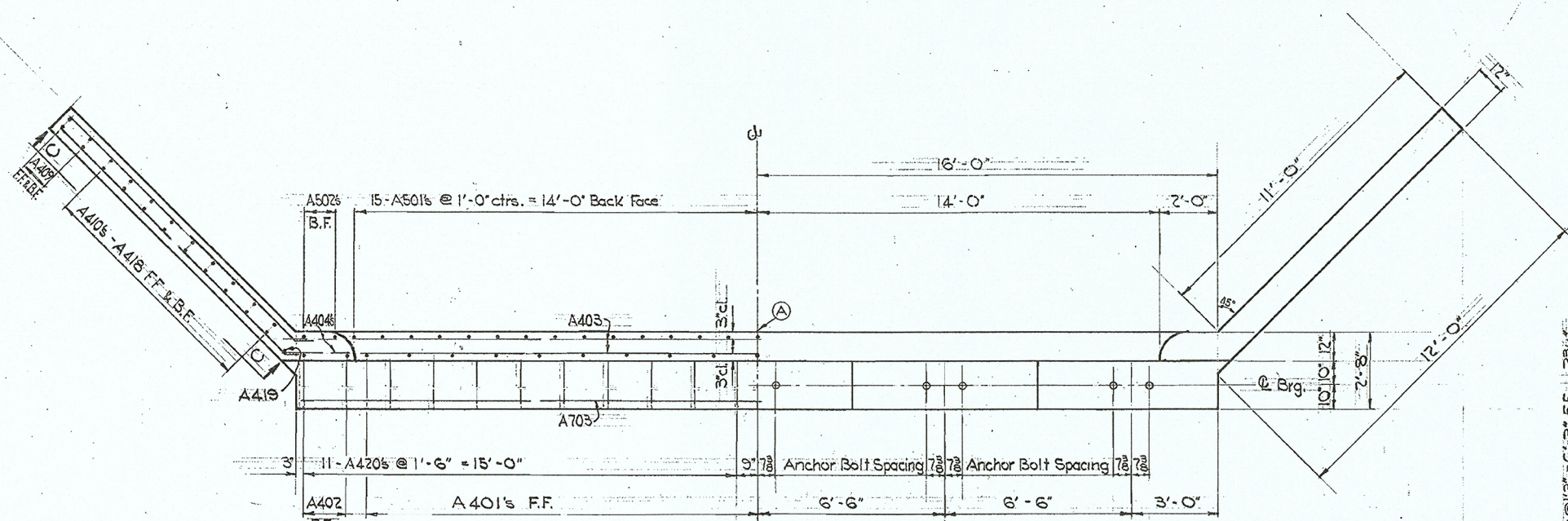
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
GALLUP AREA BRANCH OF ROADS

PLAN & PROFILE BANK PROTECTION
DETAILS & GENERAL NOTES

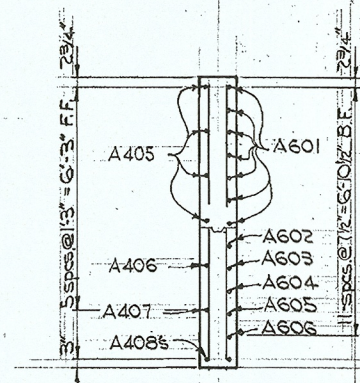
DRAWN BY E. J. HAYES
CHECKED BY J. L. HAYES
DATE 12/1/61
PROJECT N1200
STATION 2306S
SHEET 2 OF 8

NOTE:
CURB AND DRAIN NOT
IN THIS CONTRACT.

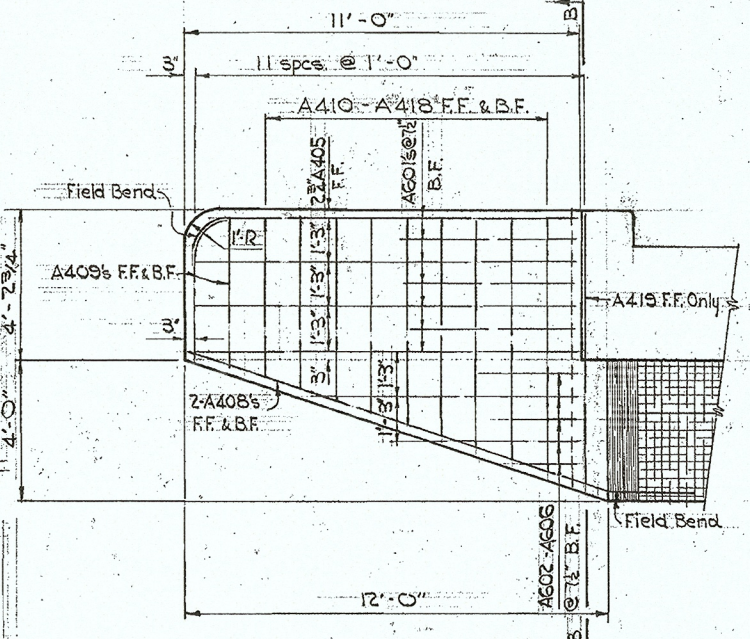




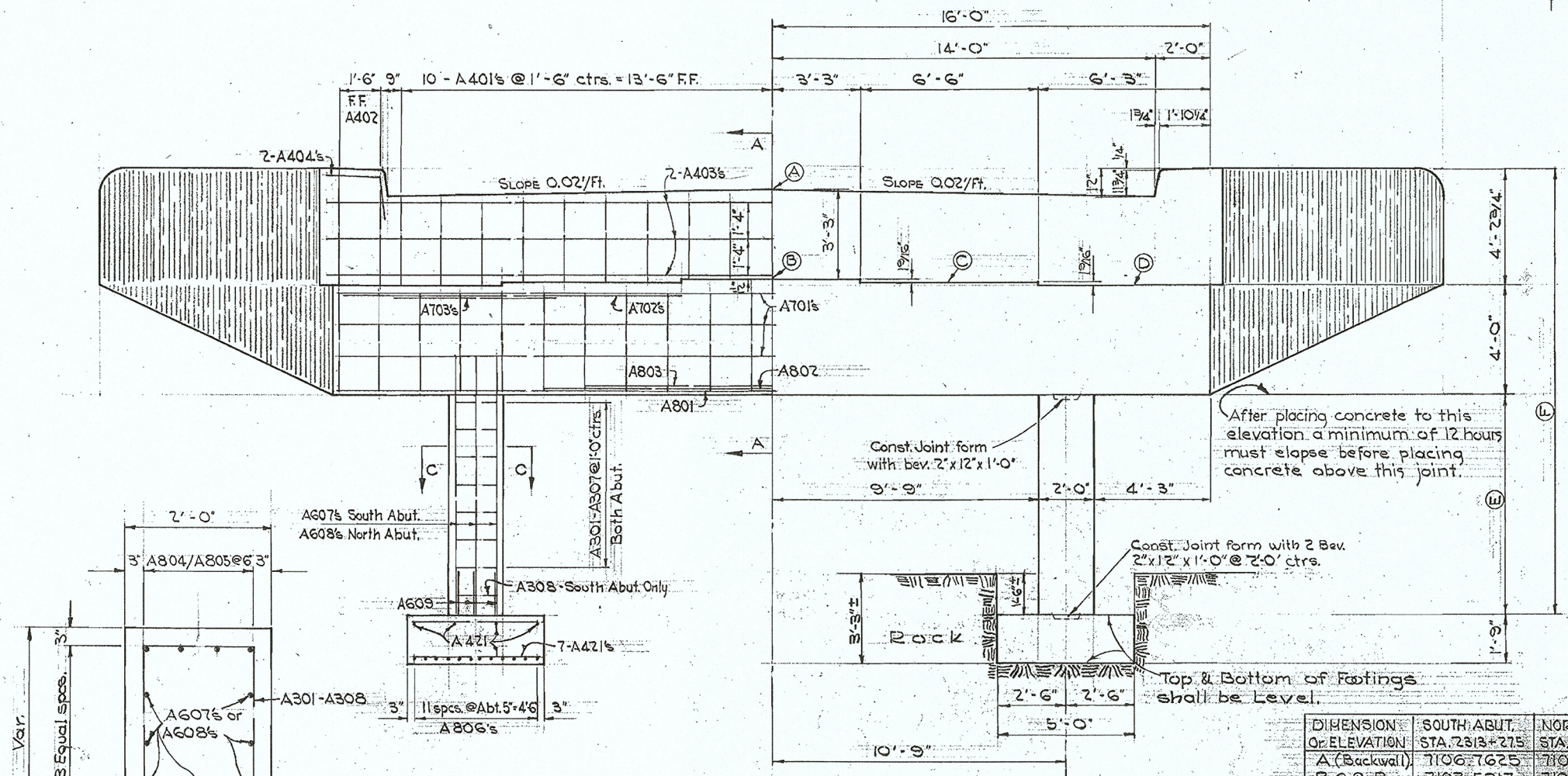
PLAN OF CAP & WINGS



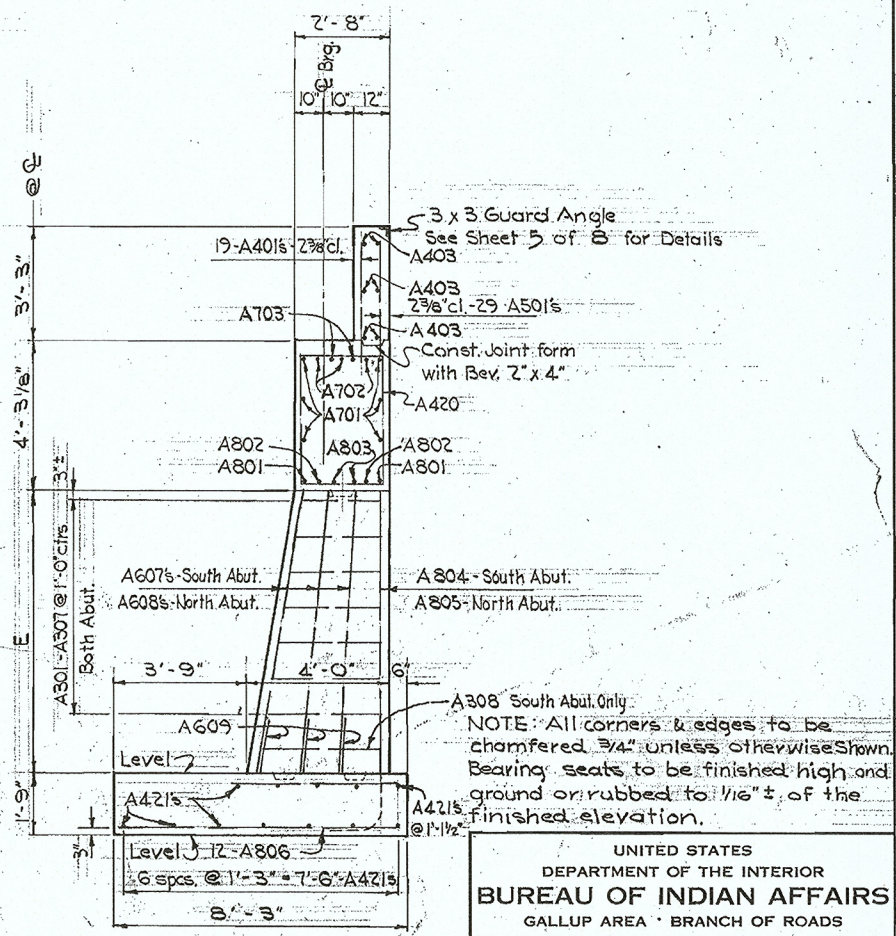
SEC. B-B



VIEW C-C



ELEVATION



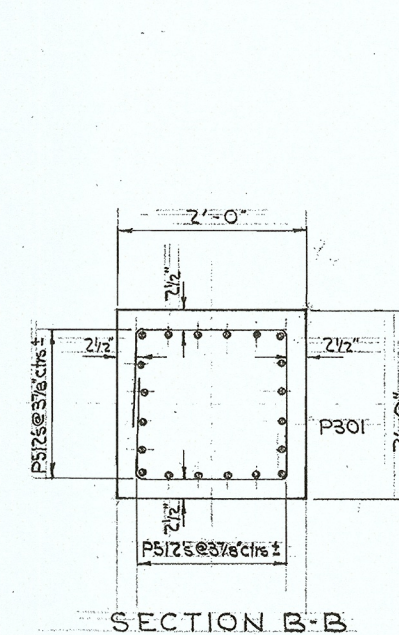
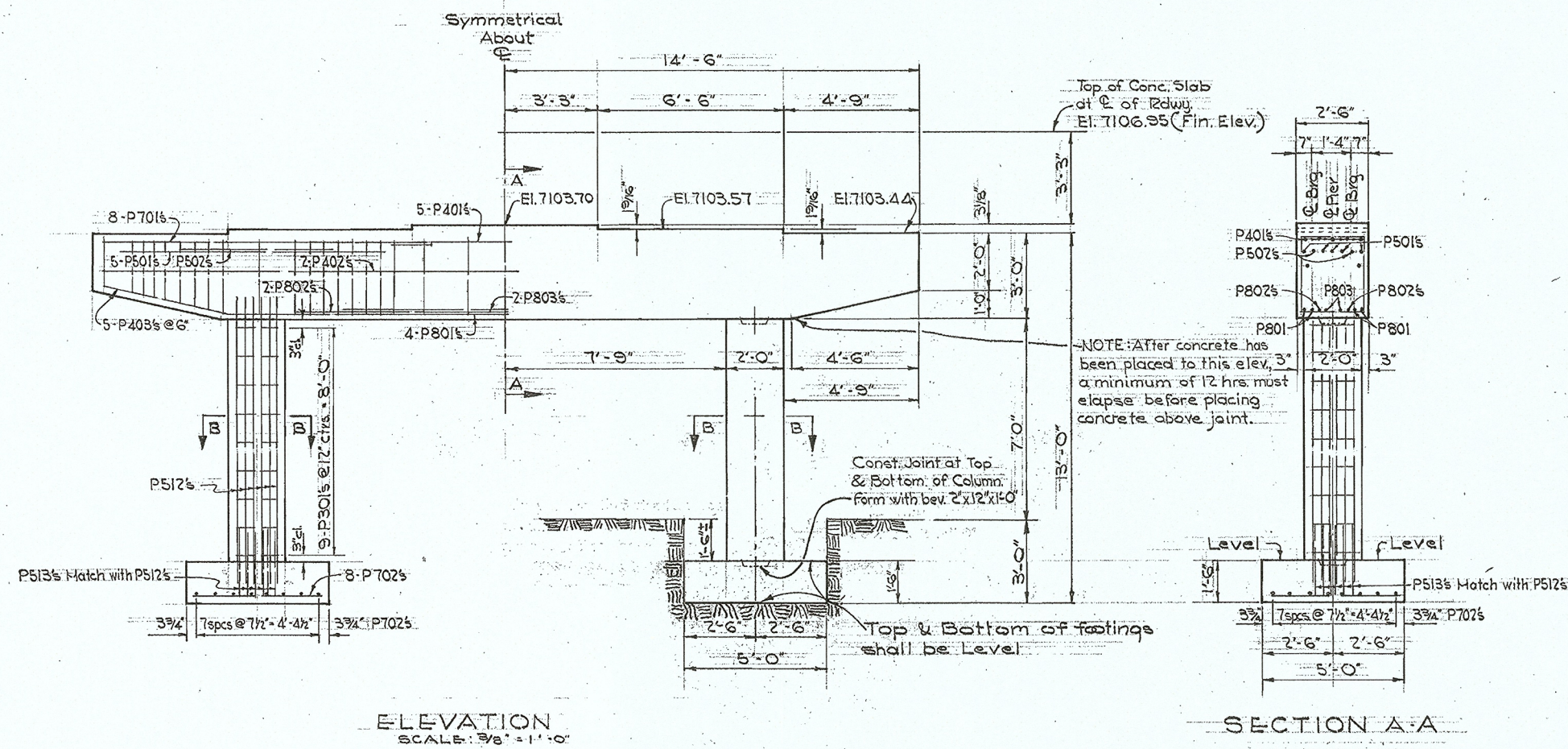
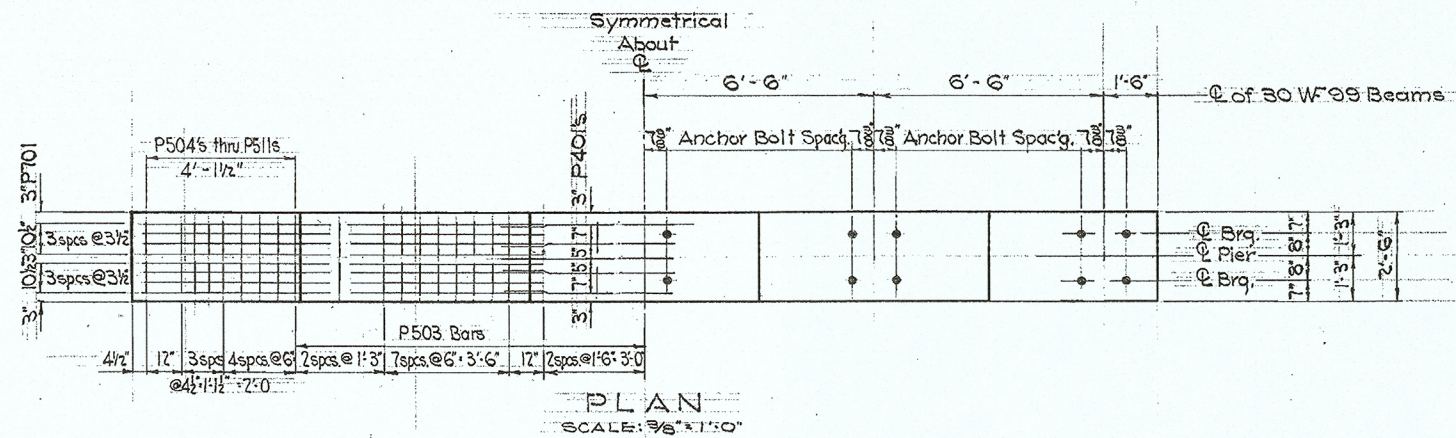
SECTION A-A

DIMENSION OR ELEVATION	SOUTH ABUT. STA. 7313+275	NORTH ABUT. STA. 7314+025
A (Backwall)	7106.7625	7107.1375
B @ E Brg.	7103.5217	7103.8783
C @ E Brg.	7103.3915	7103.7481
D @ E Brg.	7103.2613	7103.6179
E	8'-0"	8'-6"
F	16'-2 3/4"	14'-8 3/4"

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GALLUP AREA - BRANCH OF ROADS

ABUTMENT DETAILS

DESIGNED REF	DATE 12-6	CHECKED	DATE	PROJECT N12(13)
DRAWN	DATE	CHECKED	DATE	STATION 2313+65
QUANTITIES	DATE	CHECKED	DATE	
REVISIONS				
NO.	BY	DATE	REMARKS	SHEET 3 OF 8

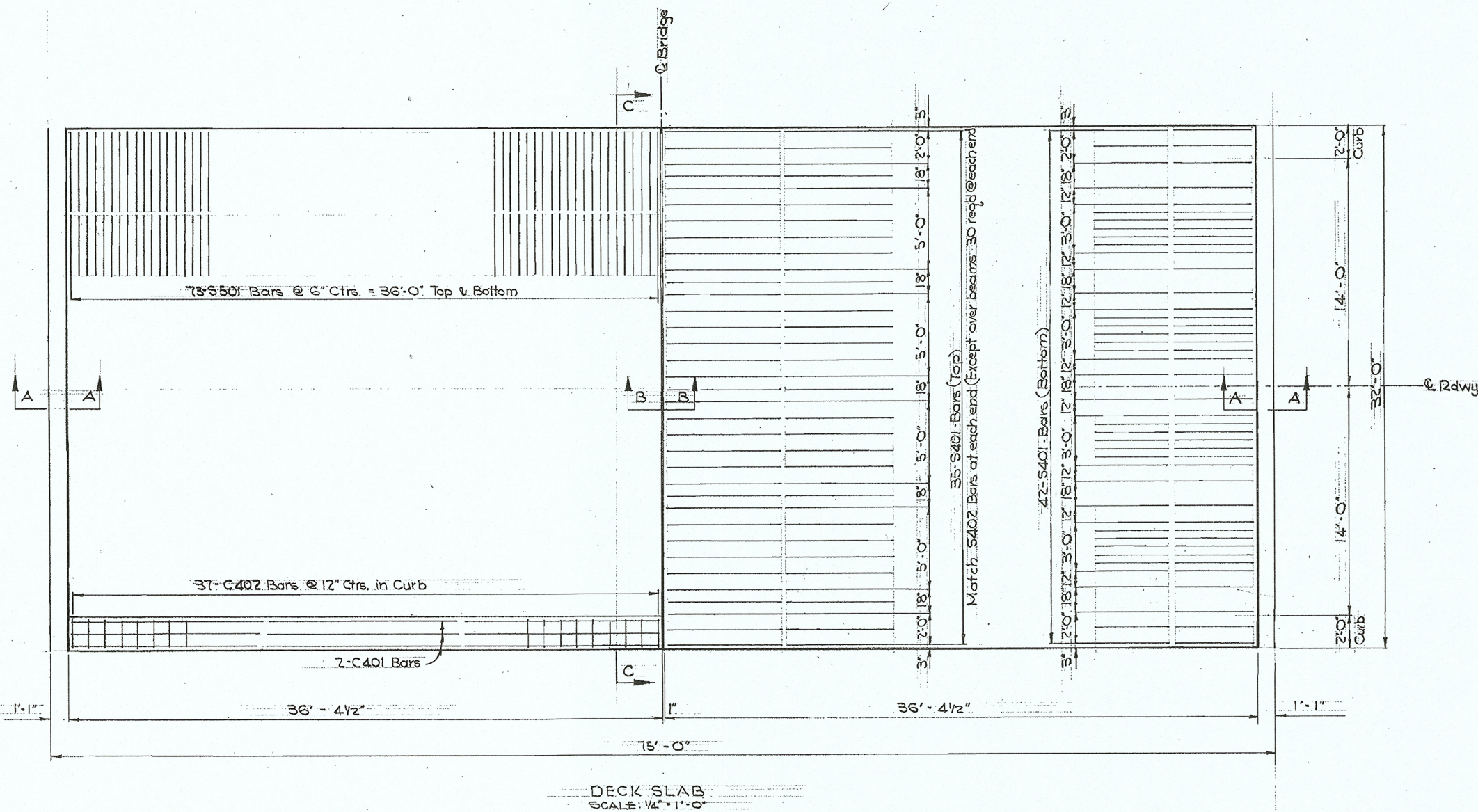
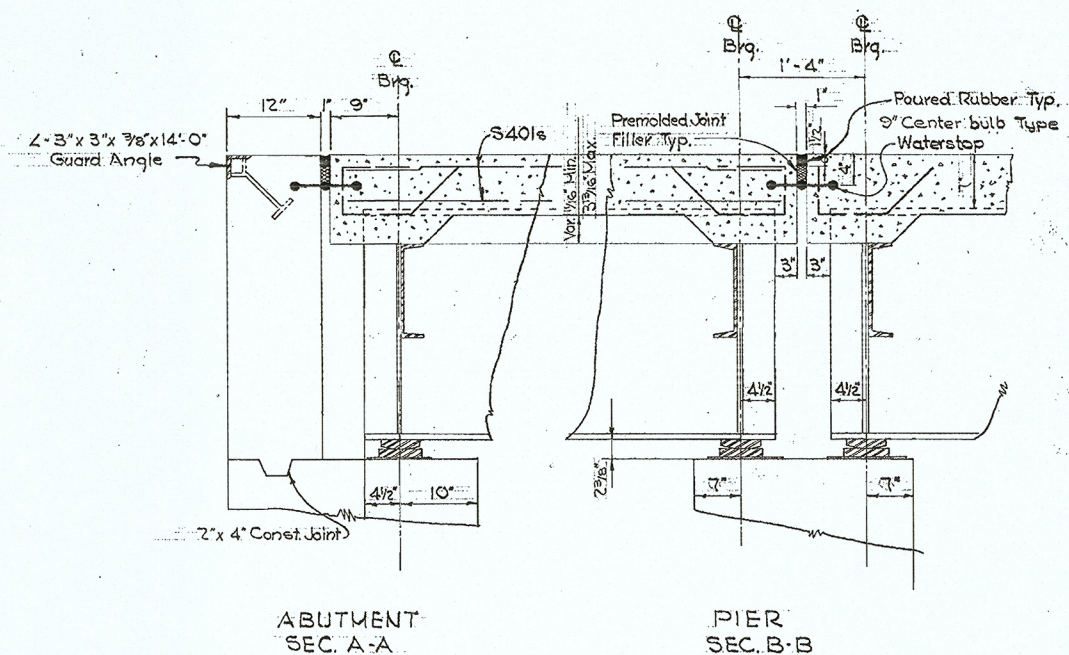
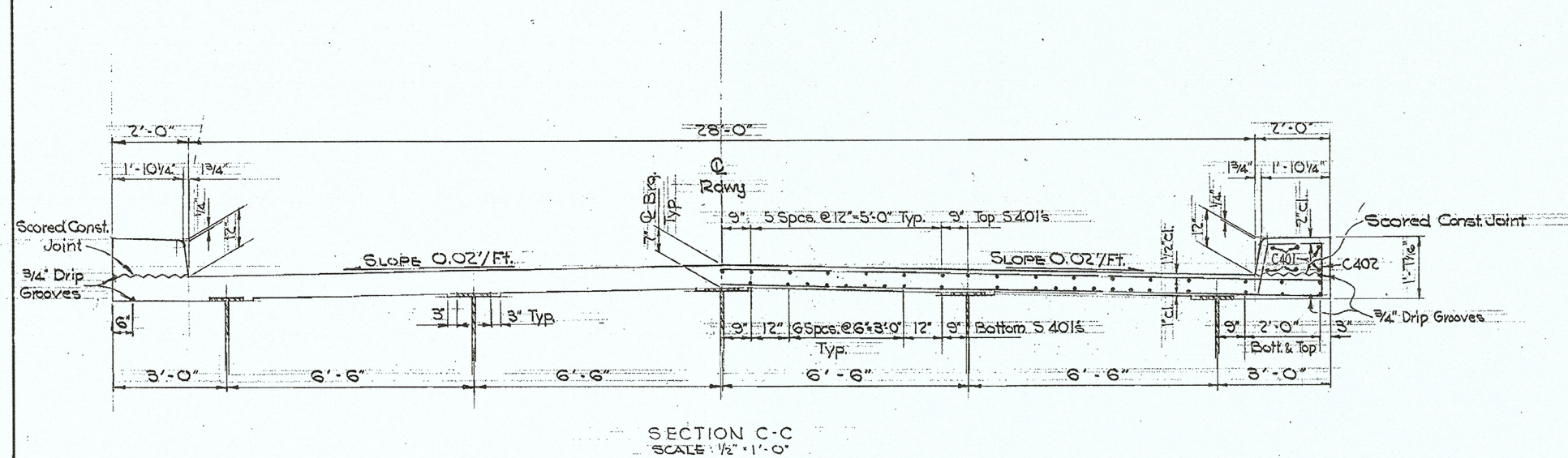


NOTE: All corners and edges to be chamfered 3/4" unless otherwise noted. All bearing seats to be finished high and robbed or ground to 1/16" ± of finished elevation.

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PIER DETAILS

DESIGNED	DATE	CHECKED	DATE	PROJECT
DRAWN	DATE	CHECKED	DATE	STATION
QUANTITIES	DATE	CHECKED	DATE	
REVISIONS				
NO.	BY	DATE	REMARKS	



NOTE: All corners and edges to be chamfered $\frac{3}{4}$ " unless otherwise shown.

UNITED STATES			
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GALLUP AREA - BRANCH OF ROADS			
DECK & CURB DETAILS			
TSAILE CREEK			
DESIGNED <u>REE</u>	DATE <u>1/25</u>	CHECKED	DATE
DRAWN	DATE	CHECKED	DATE
QUANTITIES	DATE	CHECKED	DATE
REVISIONS			
NO.	BY	DATE	REMARKS
			PROJECT <u>N12(18) I</u>
			STATION <u>72313+65</u>
			SHEET <u>6</u> OF <u>8</u>

Mark	Location	Size	Length	No.Bars	Total Length	Sketch
WINGWALLS						
						Dimensions "A"
A405	Abut. Wingwalls	#4	12'-6"	16	200'-0"	11'-0"
A406	Abut. Wingwalls	#4	8'-9"	4	35'-0"	7'-3"
A407	Abut. Wingwalls	#4	5'-0"	4	20'-0"	3'-6"
A408	Abut. Wingwalls	#4	13'-9"	8	110'-0"	12'-3"
A601	Abut. Wingwalls	#6	12'-6"	28	350'-0"	11'-0"
A602	Abut. Wingwalls	#6	10'-9"	4	43'-0"	9'-3"
A603	Abut. Wingwalls	#6	8'-9"	4	35'-0"	7'-3"
A604	Abut. Wingwalls	#6	6'-9"	4	27'-0"	5'-3"
A605	Abut. Wingwalls	#6	5'-0"	4	20'-0"	3'-6"
A606	Abut. Wingwalls	#6	3'-0"	4	12'-0"	1'-6"
A409	Abut. Wingwall	#4	4'-3"	16	68'-0"	
A410	Abut. Wingwall	#4	4'-6"	8	36'-0"	
A411	Abut. Wingwall	#4	5'-0"	8	40'-0"	
A412	Abut. Wingwall	#4	5'-3"	8	42'-0"	
A413	Abut. Wingwall	#4	5'-6"	8	44'-0"	
A414	Abut. Wingwall	#4	6'-0"	8	48'-0"	
A415	Abut. Wingwall	#4	6'-3"	8	50'-0"	
A416	Abut. Wingwall	#4	6'-6"	8	52'-0"	
A417	Abut. Wingwall	#4	7'-0"	8	56'-0"	
A418	Abut. Wingwall	#4	7'-3"	8	58'-0"	
A419	Abut. Wingwall	#4	7'-6"	4	30'-0"	
CAPS						
A420	Abut. Cap	#4	12'-9"	44	561'-0"	
A701	Abut. Cap	#7	31'-6"	12	378'-0"	
A702	Abut. Cap	#7	12'-3"	12	147'-0"	
A703	Abut. Cap	#7	5'-9"	8	46'-0"	
A801	Abut. Cap	#8	31'-6"	4	126'-0"	
A802	Abut. Cap	#8	16'-3"	4	65'-0"	
A803	Abut. Cap	#8	13'-6"	4	54'-0"	
COLUMNS						
						Dimension "A"
A301	Abut. Col.	#3	8'-1"	4	32'-4"	2'-3"
A302	Abut. Col.	#3	8'-5"	4	33'-8"	2'-5"
A303	Abut. Col.	#3	8'-9"	4	35'-0"	2'-7"
A304	Abut. Col.	#3	9'-1"	4	36'-4"	2'-9"
A305	Abut. Col.	#3	9'-5"	4	37'-8"	2'-11"
A306	Abut. Col.	#3	9'-9"	4	39'-0"	3'-1"
A307	Abut. Col.	#3	10'-1"	4	40'-4"	3'-3"
A308	South Abut. Only	#3	10'-5"	2	20'-10"	3'-5"
A607	South Abut. Only (Col.)	#6	9'-9"	14	136'-6"	
A608	North Abut. Only (Col.)	#6	8'-3"	14	115'-6"	
A609	Abut. Col.	#6	3'-0"	28	84'-0"	
A804	South Abut. Only (Col.)	#8	12'-5"	8	99'-4"	
A805	North Abut. Only (Col.)	#8	11'-0"	8	88'-0"	
FOOTINGS						
A806	Abut. Footings	#8	8'-0"	48	384'-0"	
A421	Abut. Footings	#4	4'-9"	64	304'-0"	

[illegible]