

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE
PROPOSED HIGHWAY PROJECT
RF-095-8 (23) &
BRF-095-8 (22)
LAWSON CREEK
GRADING, DRAINAGE,
PAVING & BRIDGE
WIDENING

AS BUILTS

LINDBROOK CONSTRUCTION CO.

PROJECT ENGR. LARRY GEISE

PROJECT BEGINNING: 4/24/74

PROJECT COMPLETION: 10/02/75

PROJECT SUMMARY

WIDTH OF SUBGRADE = 40'
WIDTH OF PAVEMENT = 40'
LENGTH OF GRADING = 1385.89' = 0.262 MI.
LENGTH OF PAVING = 1385.89' = 0.262 MI.
LENGTH OF BRIDGE = 304' = 0.058 MI.
LENGTH OF PROJECT = 643.48' = 0.122 MI.
LENGTH OF TEMPORARY CONNECTION = 1046.41' = 0.198 MI.

(NO CHANGE IN LENGTH)

DESIGN DESIGNATION

ADT (1970) = 3080
ADT (1995) = 7080
DHV (12%) = 850
D = 45-55
T = 5%
V = 45 MPH

TEMPORARY CONNECTION
539.47'

BEGIN PROJECT
BRF-095-8 (22)
STA. "0" 15+39.47

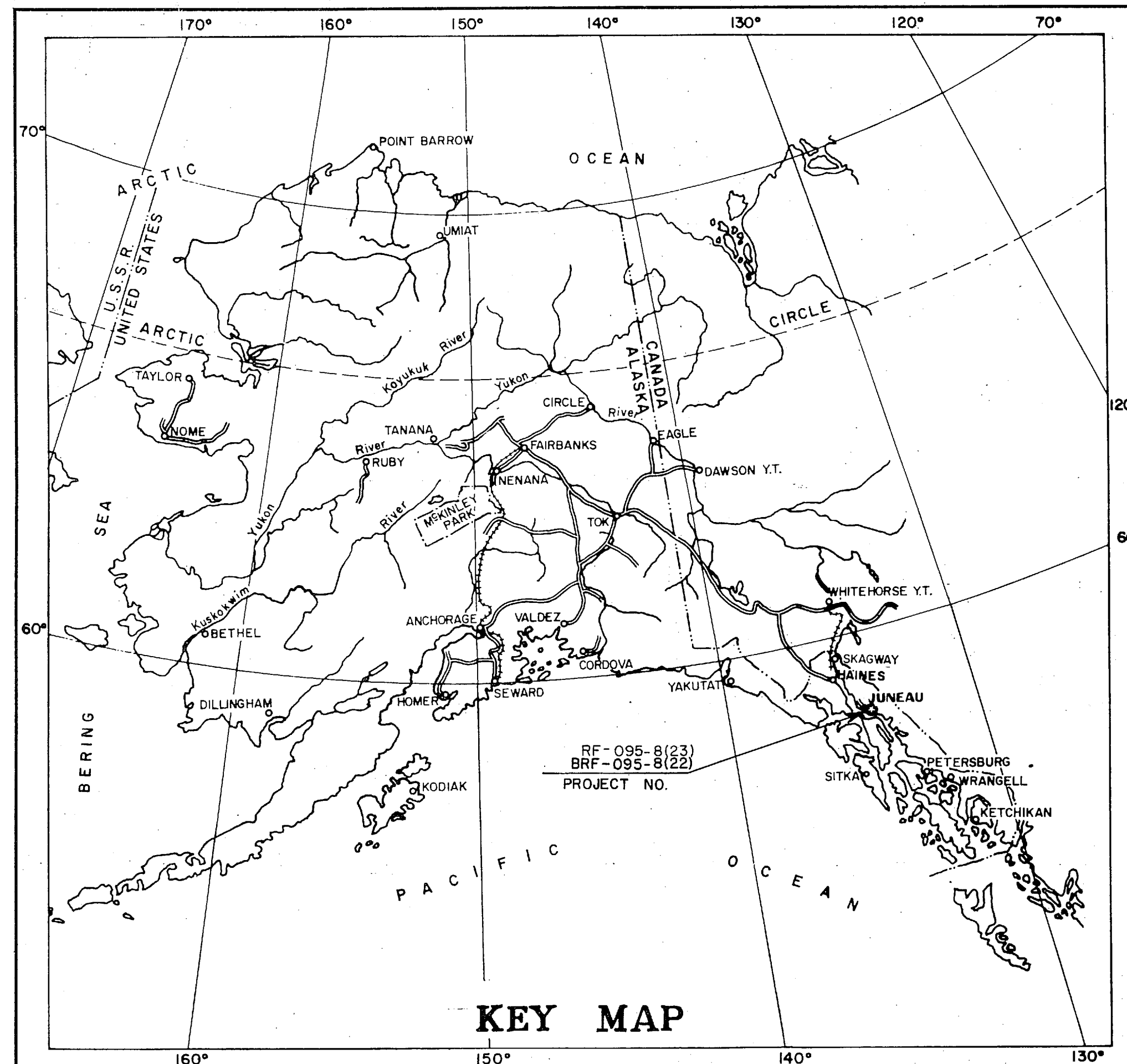
END PROJECT
BRF-095-8 (22)
STA. "0" 21+82.95

TEMPORARY CONNECTION
506.94'

BRIDGE NO. 788
STA. 17+80.95
to
STA. 20+84.95

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
APPROVED
Marian E. M. Date 2/26/73
SOUTHEAST DISTRICT ENGINEER

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
APPROVED
William Hall Date 10/10/73
COMMISSIONER OF HIGHWAYS



KEY MAP

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS & SUMMARY TABLES
3	ESTIMATE OF QUANTITIES
4-5	PLAN & PROFILE SHEETS
6	SIGNING PLANS
7-14	BRIDGE PLANS

The following standard drawings apply to this project: A-1, C-00.00, C-10.00, C-11.00, I-40.00, D-02.00, G-04.00, G-04.11, G-10.00, G-30.00, G-30.10, I-80.00, M-13.00, M-16.00, S-00.00, S-05.00, S-20.00

TYPICAL SECTION 8 SUMMARY TABLES

SUPERELEVATION TABLE - "O" LINE					
BEGIN TRANSITION	BEGIN FULL SUPER	END FULL SUPER	END TRANSITION	RATE %	DIR.
"O" 10+00.00	"O" 11+25.00	"O" 14+97.80	"O" 16+22.80	3.0 %	R
"O" 20+99.62	"O" 22+24.62	"O" 23+09.79	"O" 24+34.79	3.0 %	L
"O" 23+54.72	"O" 24+79.72	"O" 25+64.89	"O" 26+89.89	3.0 %	R

Note: Rotate about inside edge (Case 11, Std. I-8000).

SUPERELEVATION TABLE - "A" LINE					
BEGIN TRANSITION	BEGIN FULL SUPER	END FULL SUPER	END TRANSITION	RATE %	DIR.
"A" 3+20.00	"A" 4+10.00	"A" 4+37.00	"A" 5+02.06	3.0 %	R

Note: Rotate about $\bar{Q}$.

ROADWAY WIDENING		
STATION	SHOULDER OFFSET	REMARKS
"O" 11+00	15' Lt.	Begin widening
"O" 11+50	27' Lt.	End transition
"O" 17+55.95	27' Lt.	Begin transition
"O" 17+80.95	25' Lt.	End transition
"O" 20+84.95	25' Lt.	Begin transition
"O" 21+09.95	27' Lt.	End transition
"O" 25+50	27' Lt.	Begin transition
"O" 26+00	15' Lt.	End widening

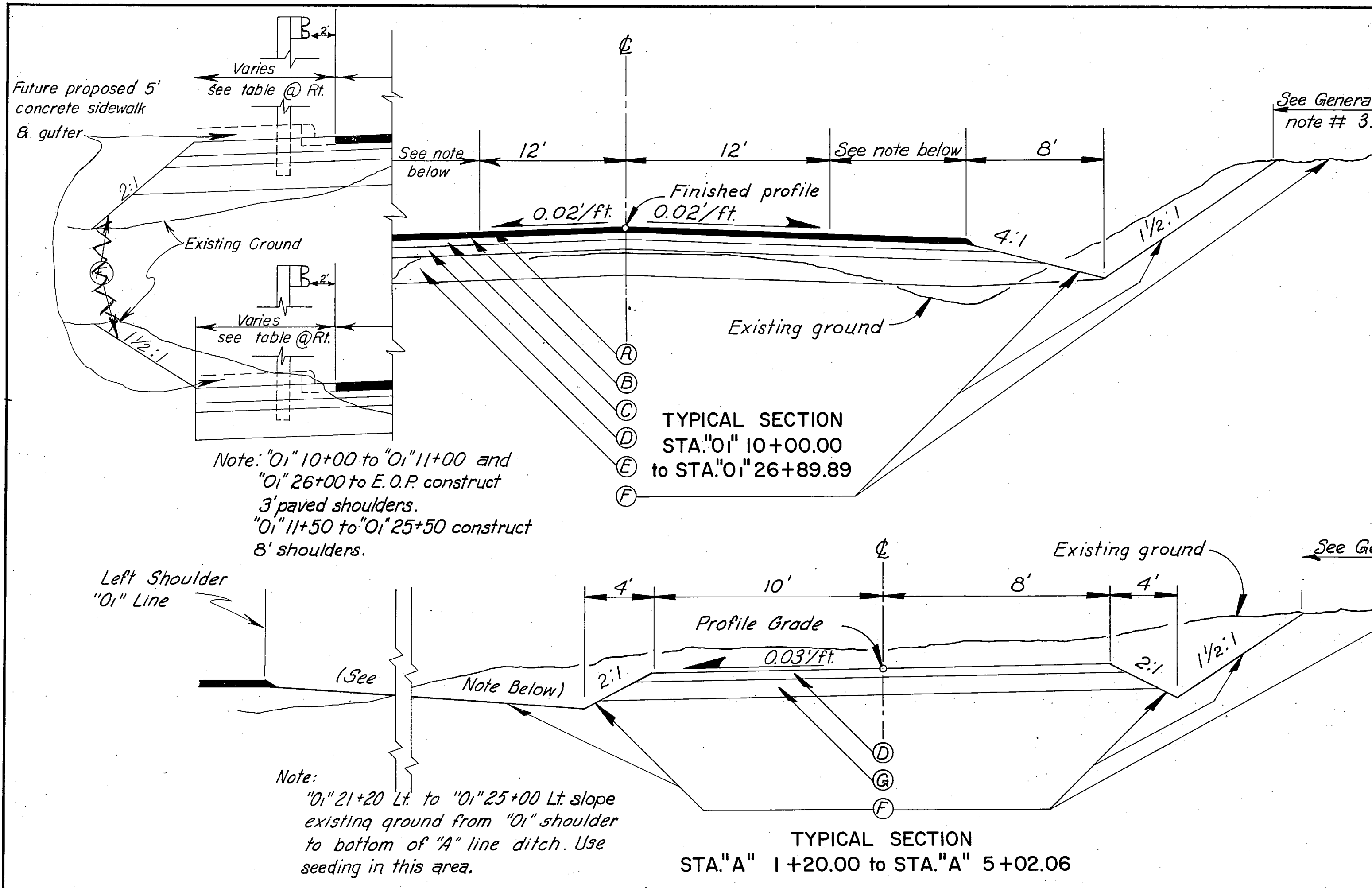
CULVERTS					
STATION	SIZE	LENGTH	INLET ELEV.	OUTLET ELEV.	REMARKS
"O" 13+65	18"	54'		67.90	Remove
"O" 13+65	24"	70' 66'	67.90	63.50	Install
"O" 15+29	18"	50'		67.90	Remove
"O" 15+29	24"	72' 68'	69.96	67.30	Install
"A" 4+40	18"	28'	67.70	67.00	Install

GUARDRAIL				
FROM STATION	OFFSET	TO STATION	OFFSET	
"O" 11+43.45	27.25' Lt.	"O" 17+80.95	25' Lt.	
"O" 17+05.95	24.25' Rt.	"O" 17+80.95	20' Rt.	
"O" 20+84.95	25' Lt.	"O" 23+84.95	29.25' Lt.	
"O" 20+84.95	20' Rt.	"O" 21+34.95	22.25' Rt.	

MONUMENTS			
STATION	LOC.	PT.	REMARKS
"O" 10+81.33	$\bar{Q}$	P.C.	*
"O" 15+39.47	P.T.	P.T.	
"O" 17+10.90	15' Lt.	P.O.T.	*
"O" 22+67.23	P.I.	P.I.	
"O" 25+22.33	P.I.	P.I.	

CASES			
STATION	LOC.	PT.	REMARKS
"O" 10+81.14	$\bar{Q}$	P.O.T.	*
"O" 15+39.47	P.T.	P.T.	
"O" 17+10.90	15' Lt.	P.O.T.	*
"O" 22+67.23	P.I.	P.I.	
"O" 25+22.33	P.I.	P.I.	

* Remove & Replace Existing.

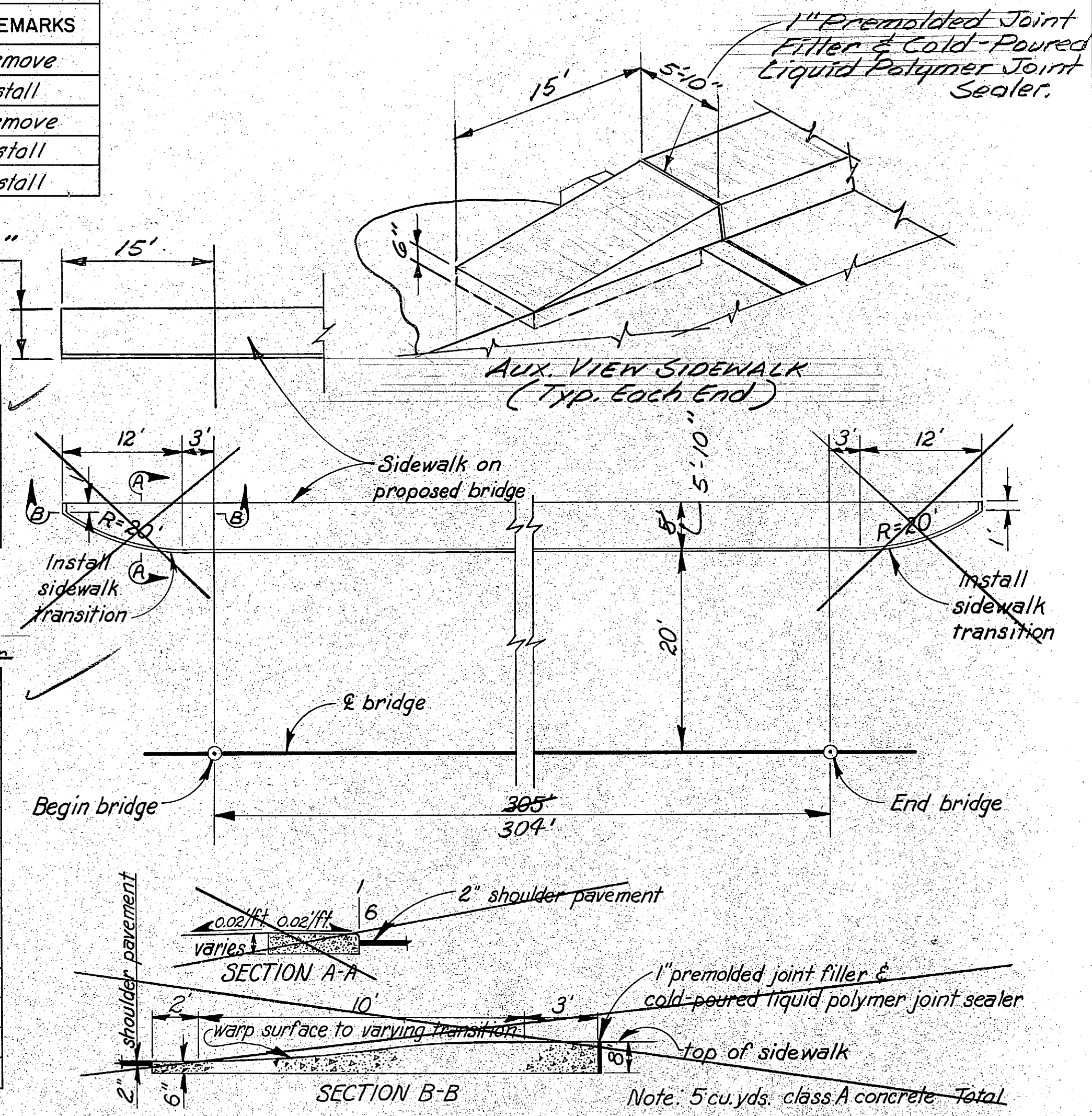


GENERAL NOTES

- Grades and alignment shown on these plans are subject to minor revisions.
- Culvert lengths and locations are approximate only and subject to minor revisions.
- Clearing & grubbing limits will be 15' beyond slope limits or to R/W whichever is smaller.

- Labeling Index
- (A) 2" Hot Asphalt Pavement *
 - (B) Prime Coat
 - (C) 6" Crushed Aggregate Base Course, Grading D-1
 - (D) 6" Subbase, Grading A
 - (E) 18" Selected Material
 - (F) Seeding
 - (G) 12" Selected Material
 - * 1 1/2" Hot Asphalt Pavement on Bridge Deck

BASIS OF ESTIMATE	
ITEM	ESTIMATING FACTOR
203(5B)	1.80 Tons per cu. yd.
301(1)	1.96 Tons per cu. yd.
304(1)	1.87 Tons per cu. yd.
401(1)	112 lbs. per sq. yd. in. depth
401(2)	7.5 % of item 401(1)
403(1)	0.25 qals per sq. yd., 2.56 qals. per Ton



SUMMARY

~~ESTIMATE~~ OF QUANTITIES

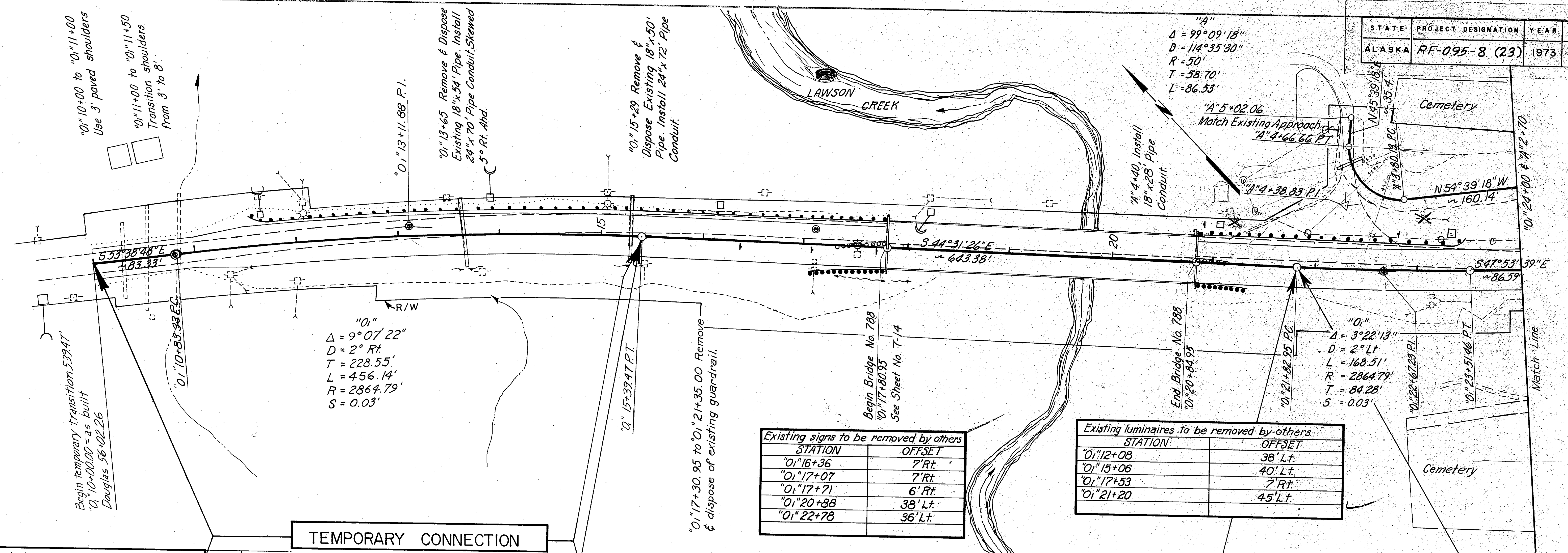
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RF-095-8 (23)	1973	3	14

ITEM No			ITEM			UNIT			SHEET NUMBERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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PLAN	SURVEYED	DATE
	NOTED	BY
	ALIGNED	
	RT. OF WAY	

PROFILE	SURVEYED	DATE
	NOTED	BY
	GRADES	
	STRUCTURE	

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RF-095-8 (23)	1973	4	14



Existing signs to be removed by others

STATION	OFFSET
0+16+36	7' Rt.
0+17+07	7' Rt.
0+17+71	6' Rt.
0+20+88	38' Lt.
0+22+78	36' Lt.

Existing luminaires to be removed by others

STATION	OFFSET
0+12+08	38' Lt.
0+15+06	40' Lt.
0+17+53	7' Rt.
0+21+20	45' Lt.

Horizontal Control: Alignment based on monuments at As Built stations 56+83.40 (0+10+81.14) and 63+14.28 (0+17+10.90, 15' Lt.) with State Plane Coordinates:
 56+83.40: N 235° 51' 67.478 E 2542062.730
 63+14.28: N 235° 7' 56.084 E 2542539.692
 A scale factor of 0.9999323 was used to convert grid distances to ground distances.

Vertical Control: Control based on As Built monument 63+14.28 (0+17+10.90, 15' Lt.) with an elevation of 73.56 M.L.L.W.

TEMPORARY CONNECTION
BEGIN PROJECT BR-095-8(22)
STA. "0" 15+ 39.47

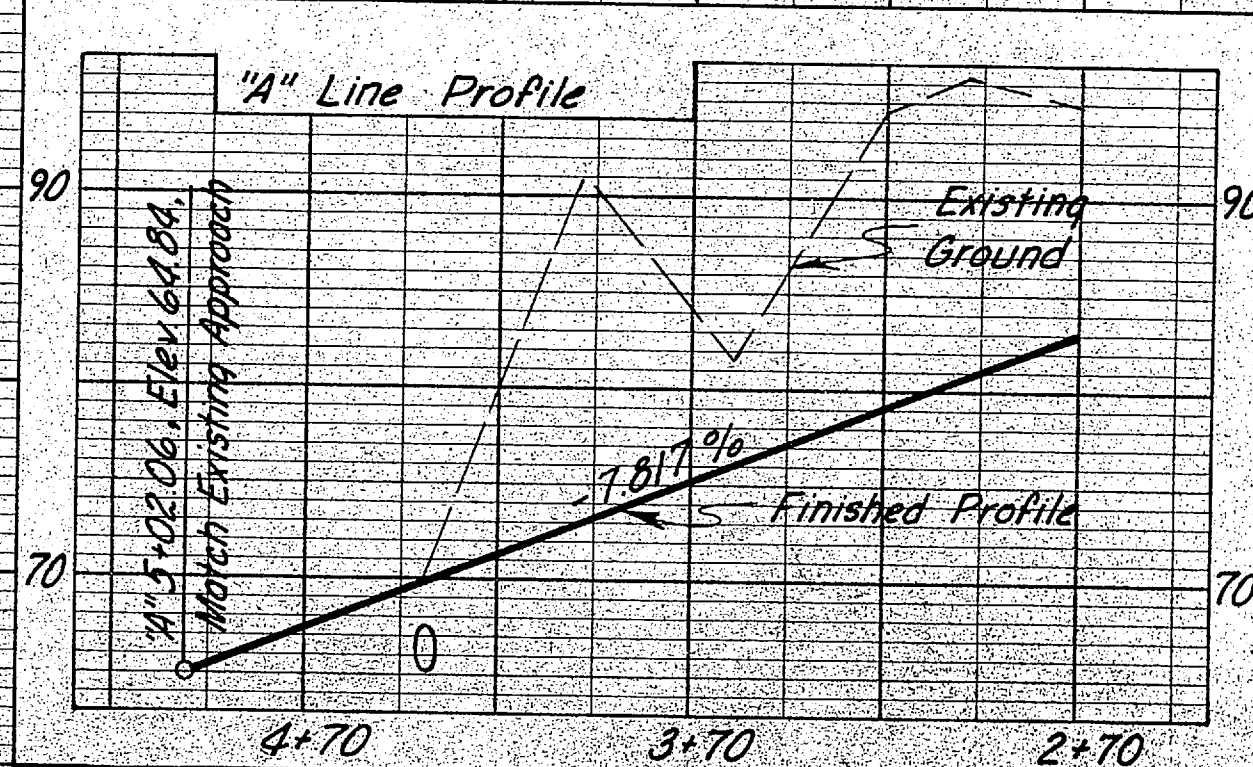
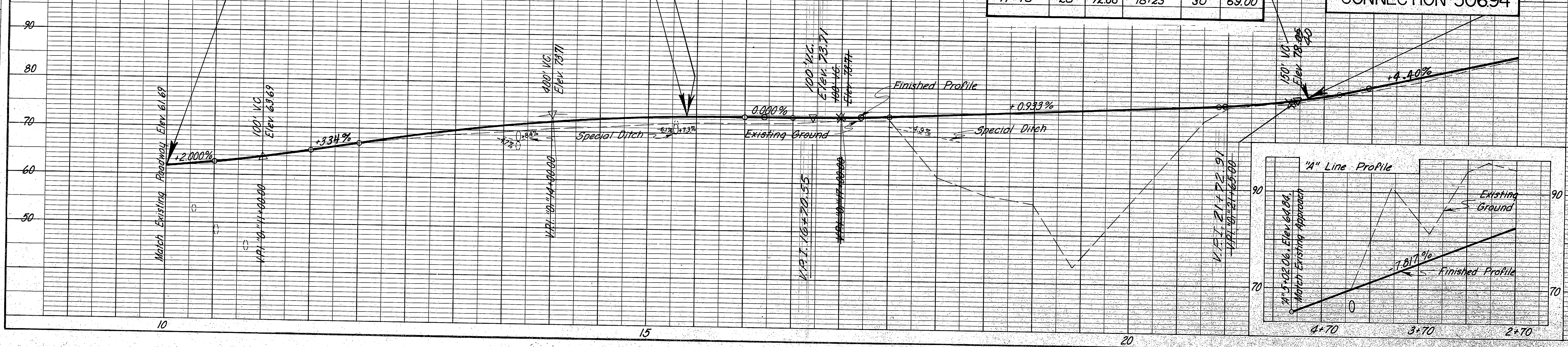
Embankment: 1,627 cu yds. (includes 1,358 cu yds. selected material)
 Unclassified Excavation: 10,114 cu yds. (includes 9,085 cu yds. waste)
 Borrow: 598 Cu Yds.

SPECIAL DITCH Rt. of "0" LINE

FROM			TO		
Station	Offset	Elev.	Station	Offset	Elev.
13+50	28'	68.60	13+65	32'	67.90
13+65	32'	67.90	13+80	28'	69.16
15+14	28'	70.87	15+29	32'	69.97
15+29	32'	69.96	15+44	28'	71.05
17+48	28'	72.66	18+23	30'	69.00

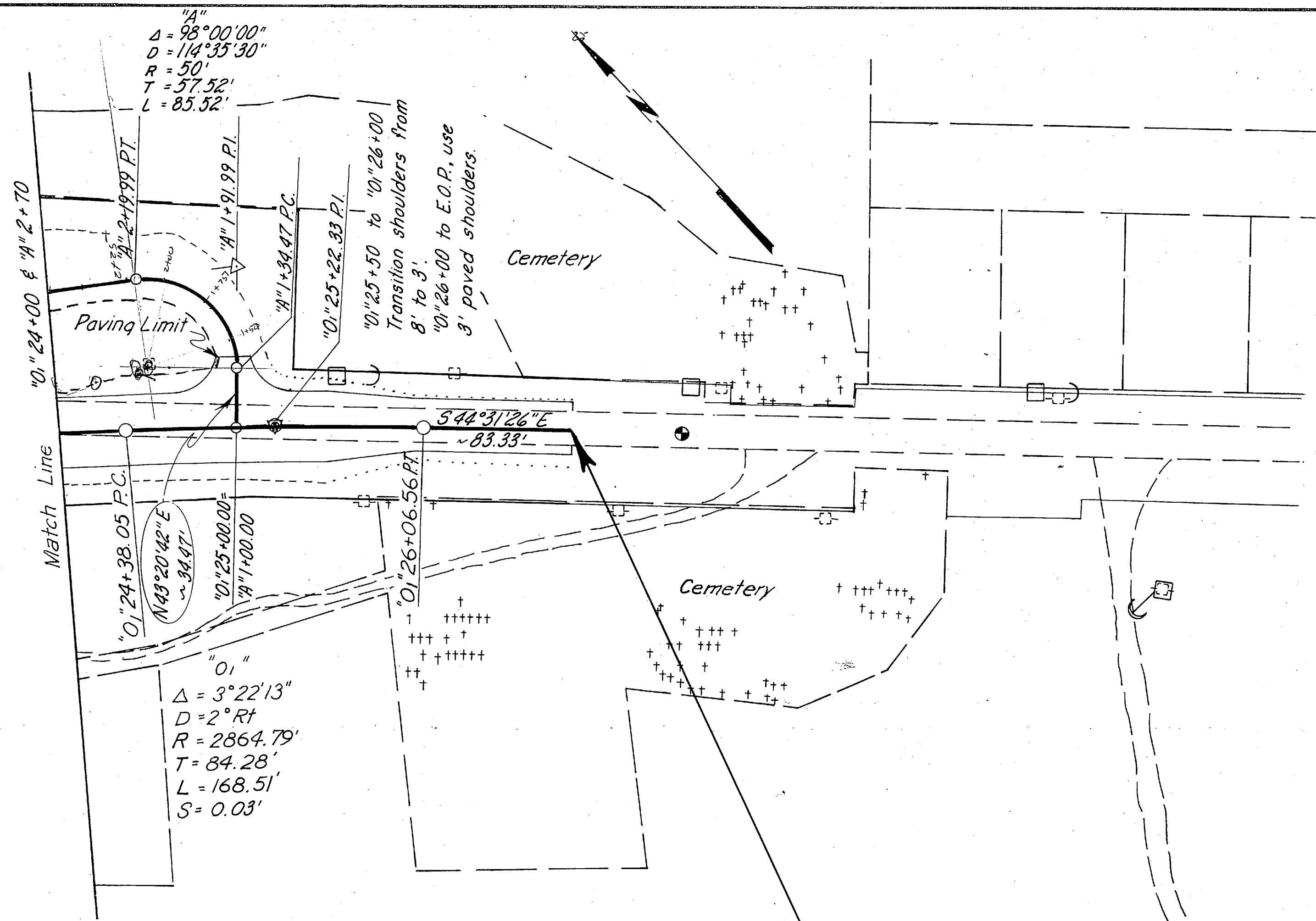
END PROJECT BR-095-8(22)
STA. "0" 21+ 82.95

BEGIN TEMPORARY CONNECTION 50694'



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	RF-095-8 (23)	1973	5	14

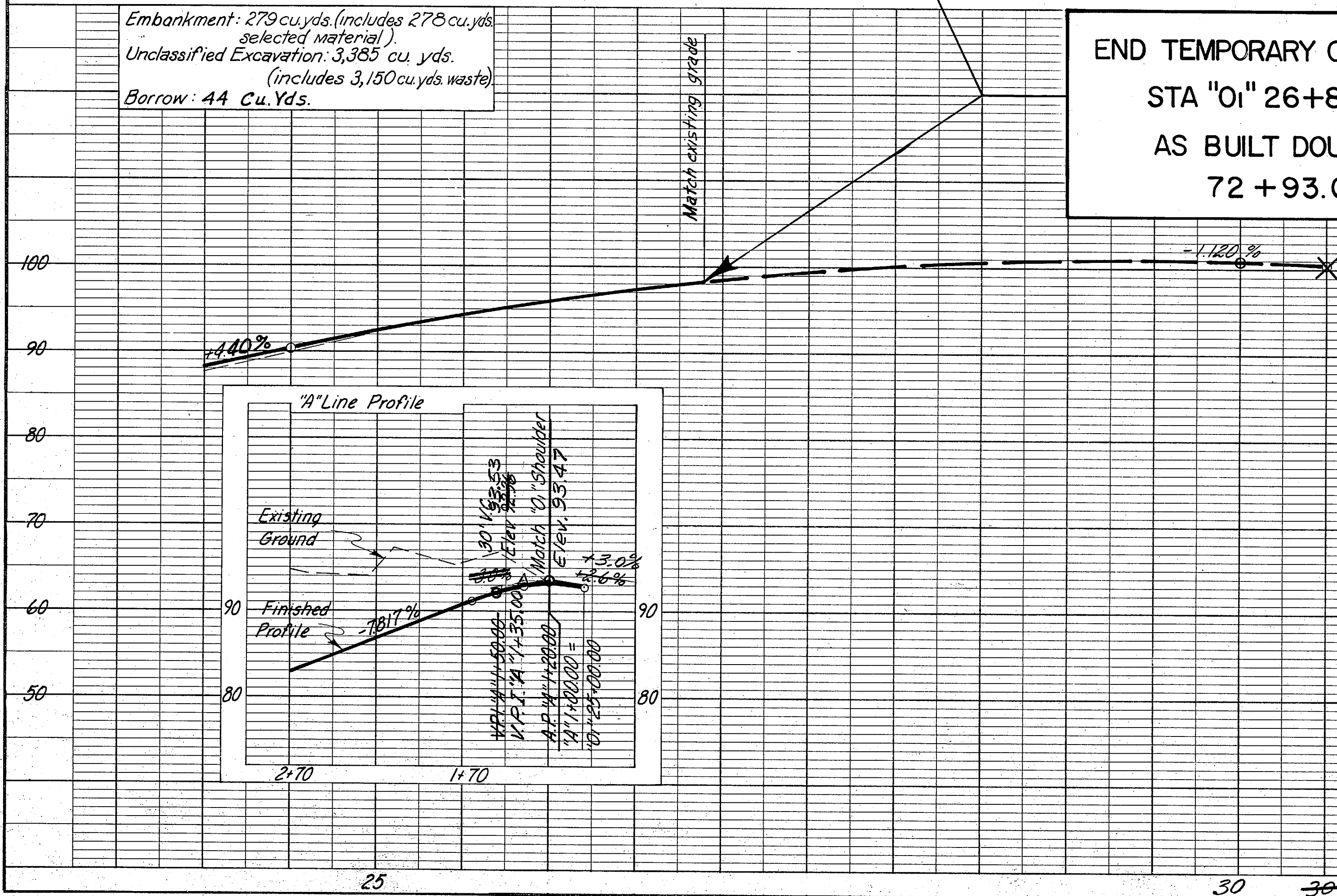
PLAN	DATE	BY
SURVEYED		
ALIGNED		
NOTE BOOK		
RT. OF WAY CHECKED		
NO.		



PROFILE	DATE	BY
SURVEYED		
PLOTTED		
NOTE BOOK		
STRUCTURE NOTING CH/KO		
NO.		

Embankment: 279 cu. yds. (includes 278 cu. yds. selected material).
 Unclassified Excavation: 3,385 cu. yds. (includes 3,150 cu. yds. waste).
 Borrow: 44 Cu. Yds.

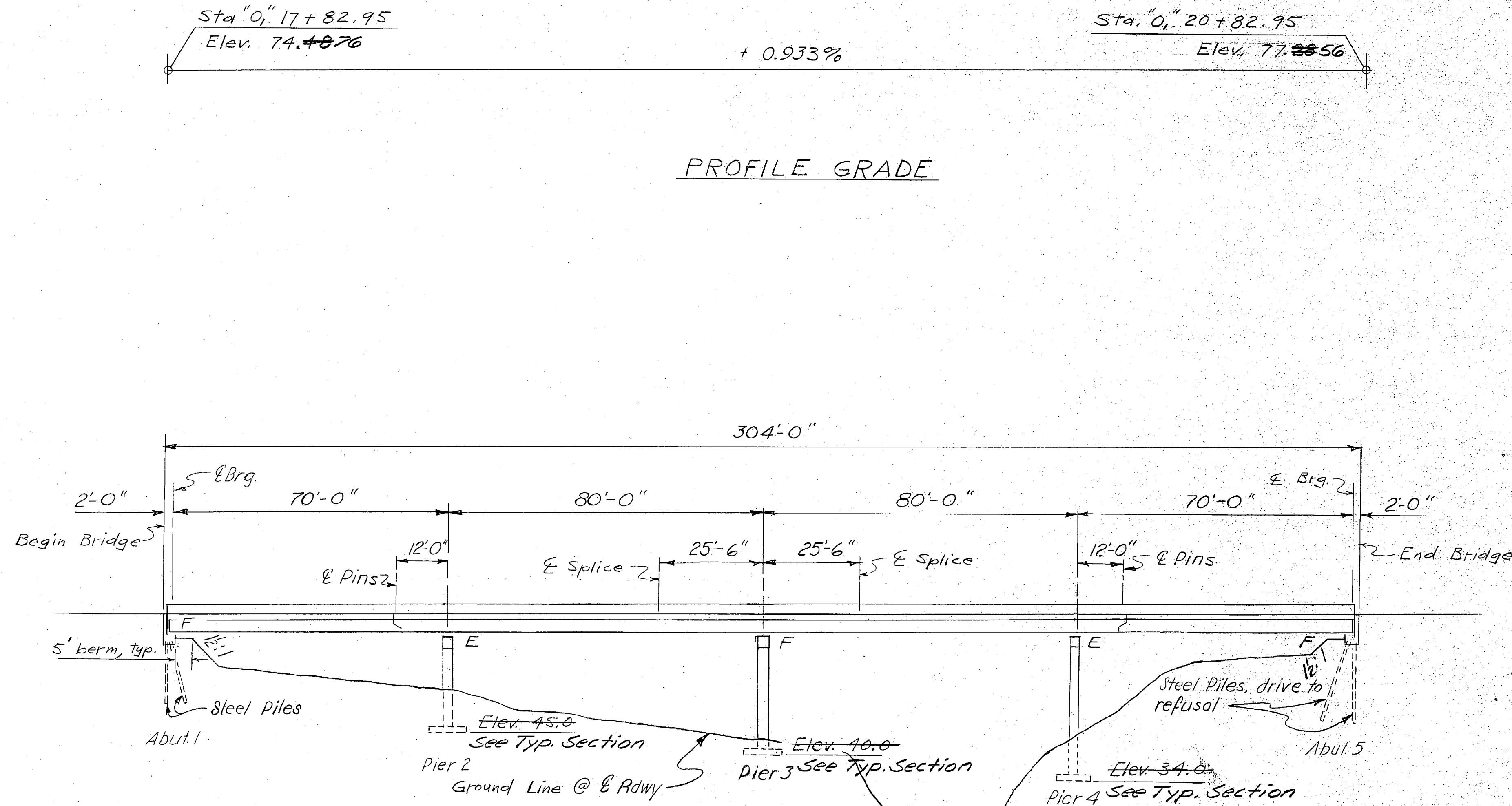
END TEMPORARY CONNECTION
 STA "01" 26+89.89=
 AS BUILT DOUGLAS
 72+93.08



SIGNING SCHEDULE																
No.	Station	Dist from E		Code No.	Legend	Sign panel thickness				No. of Posts	Post				Facing traffic	Remarks
		Lt	Rt			Size	Unframed	Framed	Area S.F.		Size	Length	Embedment			
68	0+17+75		23'	T1-10	Lawson Creek *	24"x48"	✓		8.00	1	Tube	2"	16'	5'	S.B.	See notes
69	0+20+90	28'		T1-10	Lawson Creek *	24"x48"	✓		8.00	1	Tube	2"	16'	5'	N.B.	See notes
70	0+1+40	22'		R1-1	Stop	30"x30"	✓		6.25	1	Tube	2"	16'	5'	W.B.	See notes
71	0+13+00	39'		W5-1	Roadway Narrows	36"x36"	✓		9.00	1	Tube	2"	21'	5'	S.B.	See notes
72	0+23+00		32'	W5-1	Roadway Narrows	36"x36"	✓		9.00	1	Tube	2"	21'	5'	N.B.	See notes

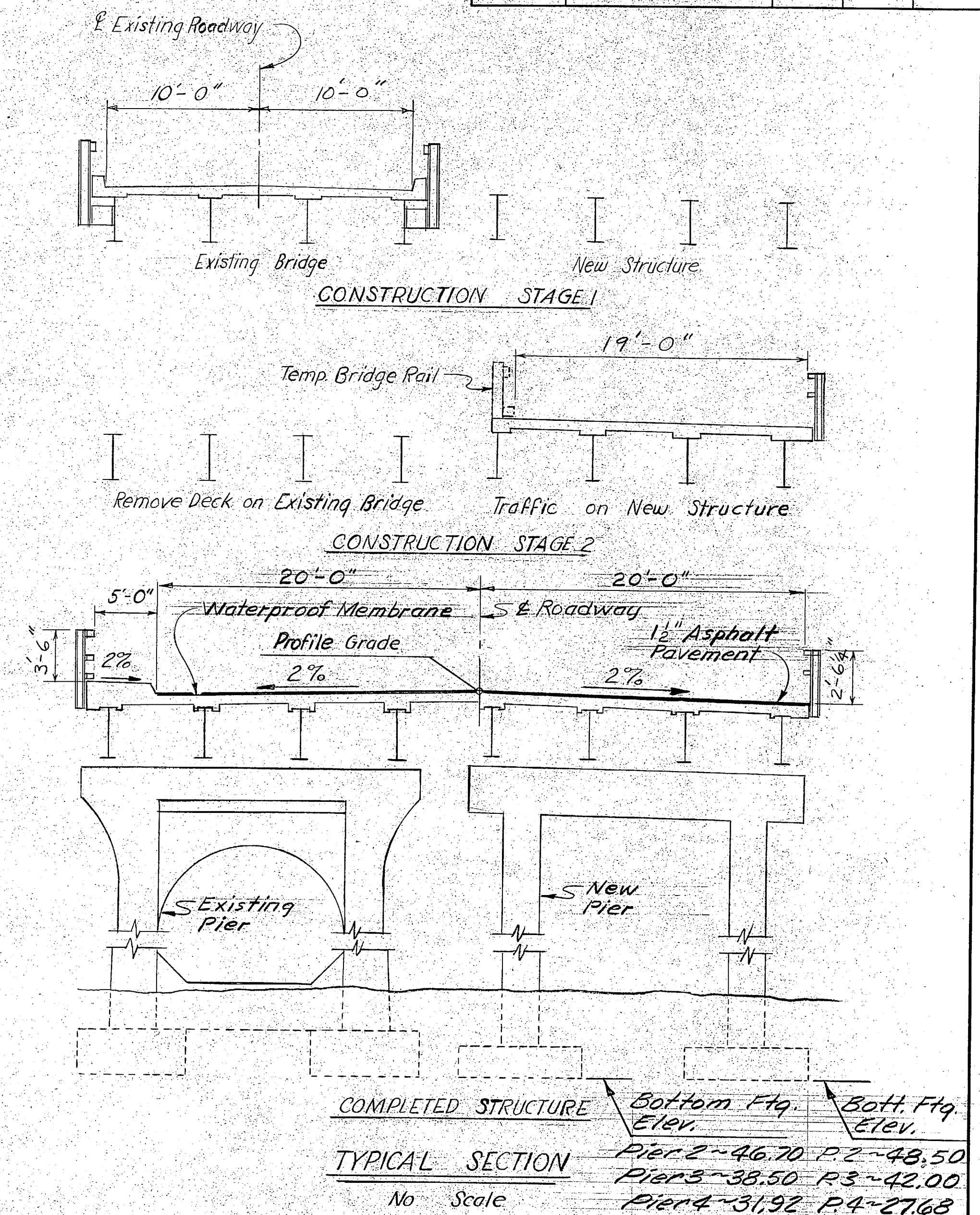
- Notes
- All posts are 2" perforated galvanized steel tubing, 12 ga., See S-30.00.
 - All sign blanks are 0.063 in thickness. Aluminum as indicated in Sec. 615 Standard Specs.
 - 6" U.C., 4 1/2" L.C. letters. *
 - Sign locations are approximate and shall be located by the engineer.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRF-095-8 (22)	1973	7	15

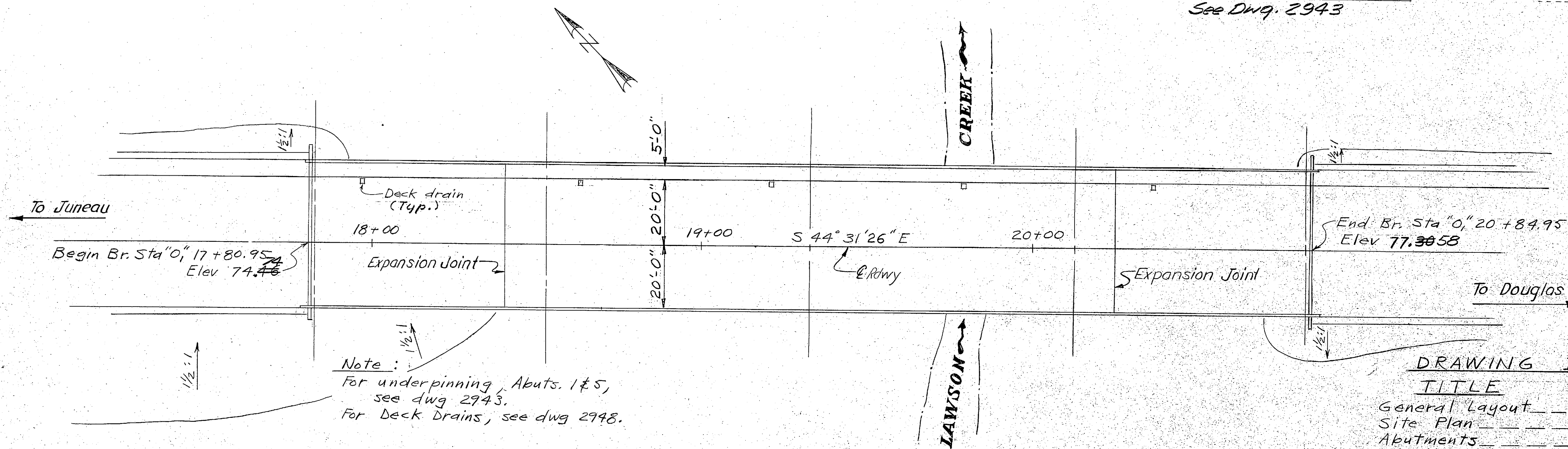


Estimated Elev. of Pile Tips	
Abut. 1	44'
Abut. 5	44'

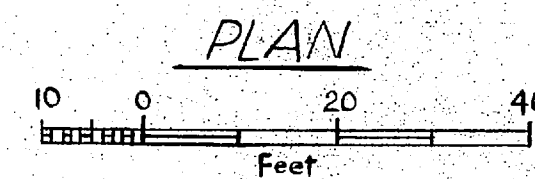
See Dwg. 2943



Design Live Load: HS 20-44



Note:
For underpinning, Abuts. 1 & 5,
see dwg. 2943.
For Deck Drains, see dwg. 2948.



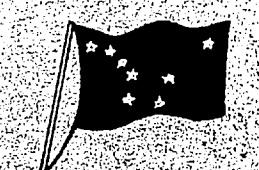
Standard Drawings:
G-04.00, G-10.00, G-30.10

DRAWING INDEX	
TITLE	DWG. NO.
General Layout	2941
Site Plan	2942
Abutments	2943
Piers	2944
Framing Plan	2945
Bearings, Pins & Splices	2946
Typical Section	2947
Deck Sections	2948
Railing	2949

LAWSON CREEK BRIDGE
(WIDENING)
Route No. F-095
GENERAL LAYOUT

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date: 9-25-73
Approved: [Signature]



BRIDGE NO. 788
DWG. NO. 2941

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRF-095-8(22)	1973	8	15

GENERAL NOTES:**SPECIFICATIONS:**

Design: A.A.S.H.O. Standard Specifications for Highway Bridges, 1969 Edition, with latest interim specifications.

Construction: State of Alaska Standard Specifications for Highway Construction, July 1972, and the Special Provisions.

Live Load: HS 20-44

Dead Load: Includes 25 psf for future pavement.

Unit Stresses:

Reinforced Concrete: $f_c = 1200 \text{ psi}$, $f_s = 20,000 \text{ psi}$, $n = 10$.
Structural Steel: Bending Stress in extreme fiber, A57M A36, $f_s = 20,000 \text{ psi}$.

Concrete: Concrete for deck shall be Class "A-A". All other concrete shall be Class "A".

Reinforcing Steel: All reinforcing steel shall be Grade 40.

Structural Steel: Structural steel shall be A36 unless noted. All connections shall be made with 8" A325 bolts unless otherwise noted.

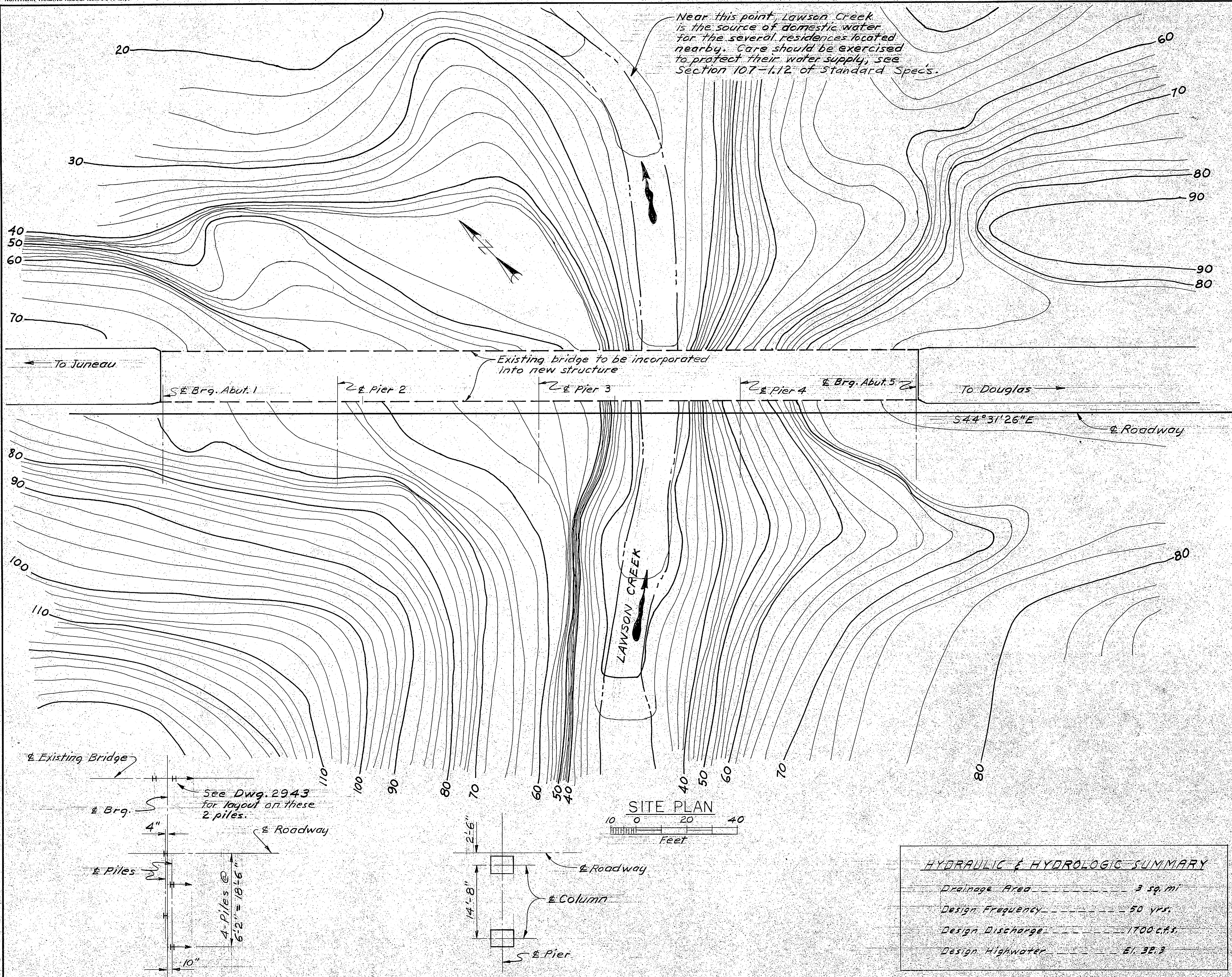
Piles: Type HP 10x57 or HP 57
Design Load: 50 Tons

Note: Details and dimensions are shown for the existing structure as taken from the original design drawings. Contractor shall verify details and dimensions of the existing structure as shown and shall obtain additional dimensions that are necessary for fabrication of structural steel to work the existing structure.

Timber: Timber shall be construction grade Douglas Fir, Sitka Spruce or Hemlock.

ESTIMATED QUANTITIES

Item	Unit	Substr.	Super.	Total
Removal of Bridge Sections	Lump Sum			
Class I Excavation for Structures	Cu. Yds.	460		460
Class "A" Concrete	Cu. Yds.	709.6	47.3	156.9
Class "A-A" Concrete	Cu. Yds.		327.6	327.6
Elastomeric Compression Seals	Lump Sum			
Reinforcing Steel	Lbs.	19,990	98,360	118,350
Structural Steel, Furnished, Fabricated, & Erected	Lbs.		212,130	212,130
Structural Steel, Work on Existing Frame	Lump Sum			
Stud Shear Connectors	Each		3,480	3,480
Structural Steel Piles, Furnished & Driven	Lin. Ft.	328		328
2-Rail Metal Bridge Railing	Lin. Ft.		305	305
3-Rail Metal Bridge Railing	Lin. Ft.		305	305
Temporary Bridge Railing	Lin. Ft.		305	305
Waterproofing Membrane	Sq. Yd.		1368	1368



PILE LAYOUT AT ABUT. 1
(ABUT. 5 MIRROR IMAGE)

TYPICAL FOOTING LAYOUT
AT PIERS

HYDRAULIC & HYDROLOGIC SUMMARY

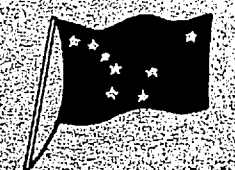
Drainage Area	3 sq. mi.
Design Frequency	50 yrs.
Design Discharge	1700 cfs.
Design Highwater	El. 32.3

LAWSON CREEK BRIDGE
(WIDENING)

ROUTE NO. F-095

SITE PLAN

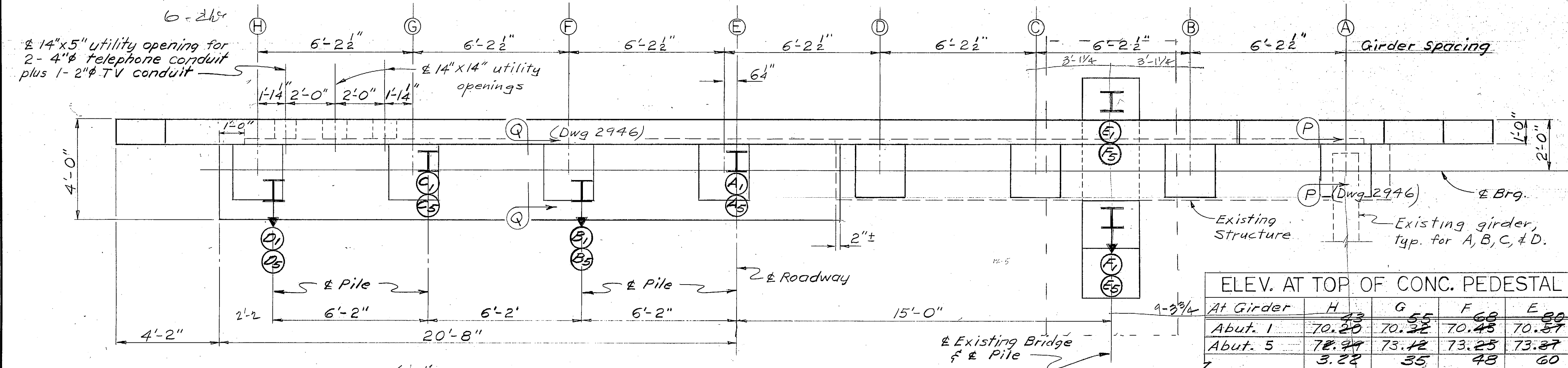
State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska



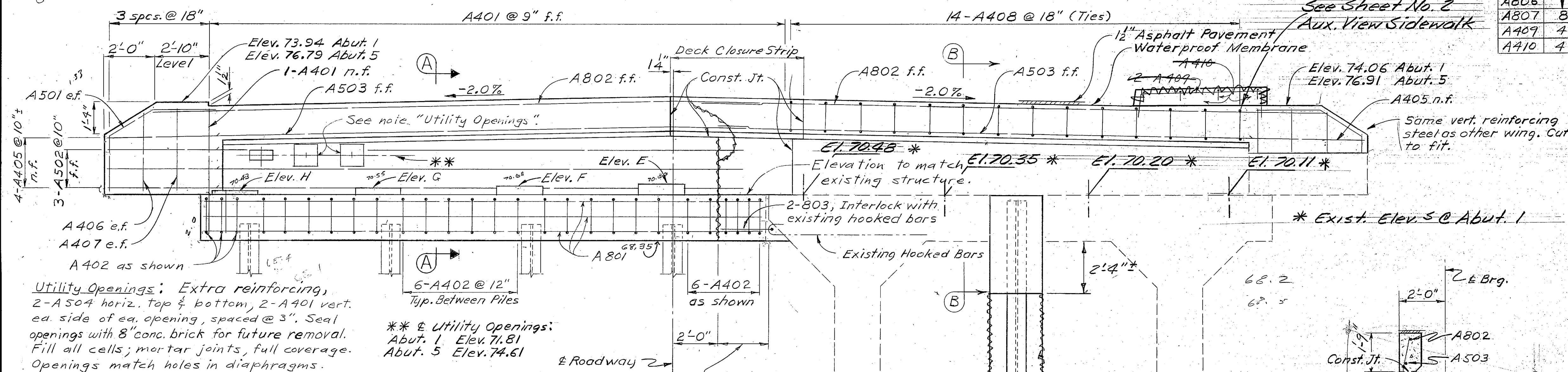
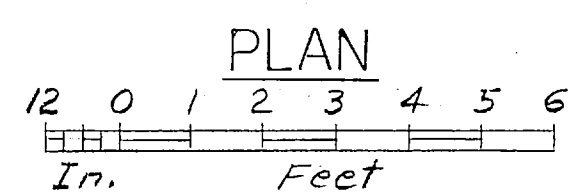
Date: 9-25-73
Approved: [Signature]

BRIDGE NO. 788
DWG. NO. 2942

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRF-095-8(22)	1973	9	15

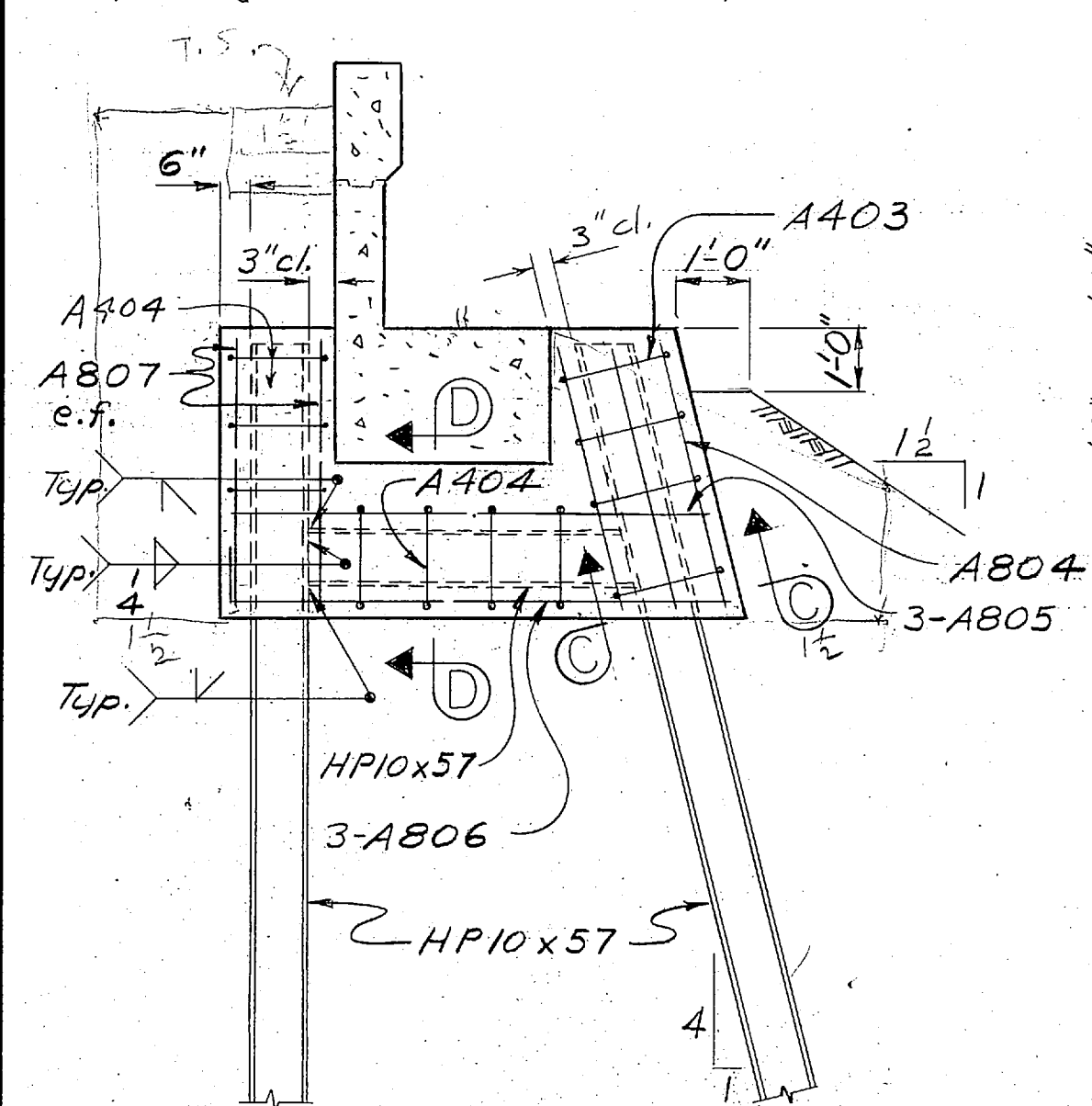


Note: Abut. 1 is shown. Abut. 5 is mirror image except for elevations.

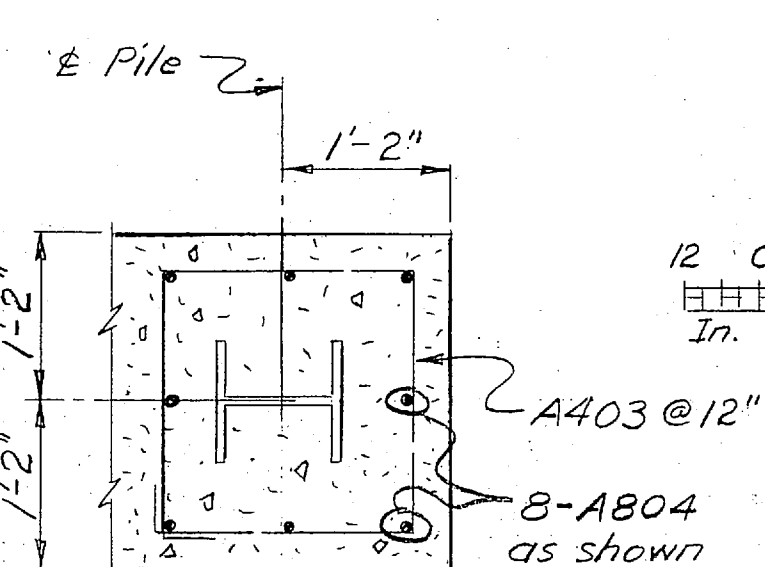


Utility Openings: Extra reinforcing, 2-A504 horiz. top & bottom, 2-A401 vert. ea. side of ea. opening, spaced @ 3". Seal openings with 8" conc. brick for future removal. Fill all cells; mortar joints, full coverage. Openings match holes in diaphragms.

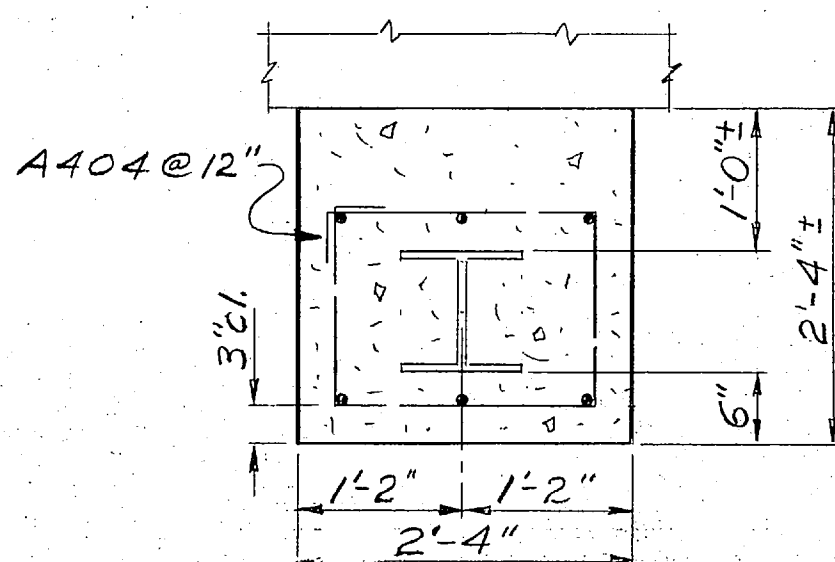
** & Utility Openings:
Abut. 1 Elev. 74.81
Abut. 5 Elev. 74.61



SECTION B-B
(No Scale)



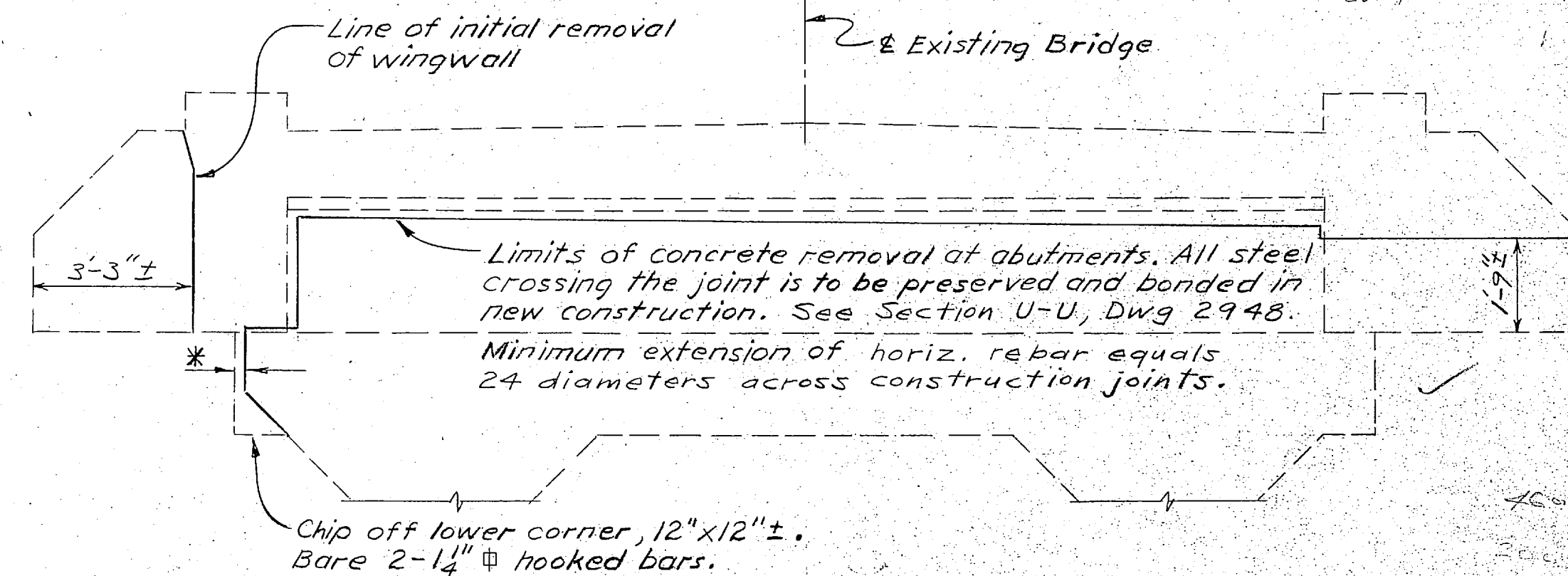
SECTION C-C
(No Scale)



SECTION D-D
(No Scale)

PILE TIP ELEV.					
(A)	(B)	(C)	(D)	(E)	(F)
48.6	51.4	51.3	56.5	48.2	48.9
(A)	(B)	(C)	(D)	(E)	(F)
47.7	47.3	45.9	49.1	46.5	47.0

Note: Backfill abutments with free-draining granular soil to insure against water pressure and ice thrust.



ELEVATION
EXISTING ABUTMENT
(No Scale)

REINFORCING STEEL (EACH ABUT.)					Bending Diagrams	
Mark	Size	No.	Length	Type		
A401	4	40	5'-6"			
A402	1	27	11'-3"	Bent		
A403	4	8	8'-3"	Bent		
A404	7	7	7'-5"	Bent		
A405	8	8	4'-9"			
A406	4	4	3'-4"			
A407	4	4	3'-6"			
A408	4	14	2'-6"	Bent		
A501	5	4	7'-2"	Bent		
A502	5	4	27'-9"			
A503	5	2	28'-0"			
A504	5	4	8'-0"			
A801	8	10	24'-5"			
A802	2	2	26'-2"			
A803	2	2	3'-4"	Bent		
A804	8	4	4'-0"			
A805	2	2	7'-3"			
A806	2	2	8'-7"	Bent		
A807	8	4	4'-0"			
A809	4	2	7'-5"	Bent		
A410	4	4	1'-5"	Bent		

ABUTMENT CONSTRUCTION SEQUENCE:

1. With traffic on existing bridge (girders A through D) remove westerly wingwalls to clear new abutments. Shore roadway embankment at abutments.
2. Complete new structure (girders E through H) to construction joint at closure strip in deck and abutments.
3. Move traffic to new structure.
4. Remove deck of existing bridge, top of backwall and easterly wingwall to construction joint, and chip off end of bridge seat at construction joint as shown.
5. Adjust girders for proper alignment, grade and clearance at pins. See Elev. P-P Dwg. 2946.
6. Drive piles for underpinning between girders B and C. Place concrete in such manner to ensure full contact with underside of existing abutment. See Section B-B.
7. Cast new deck (girders A through D) and complete backwall and wingwall.
8. Complete abutment closure and deck closure strips.

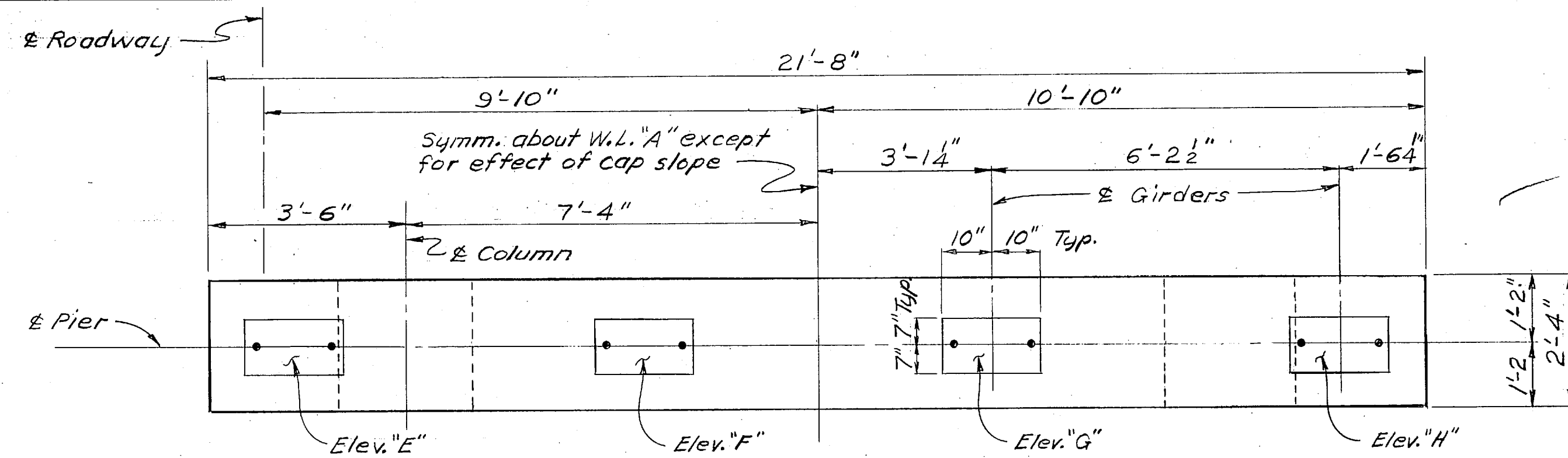
LAWSON CREEK BRIDGE (WIDENING) ROUTE NO. F-095 ABUTMENTS

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 9-25-73
Approved [Signature]

BRIDGE NO. 788
DWG. NO. 2943

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRF-095-8(22)	1973	10	15



PLAN

Finish Brg. areas to elevations shown in Table A.

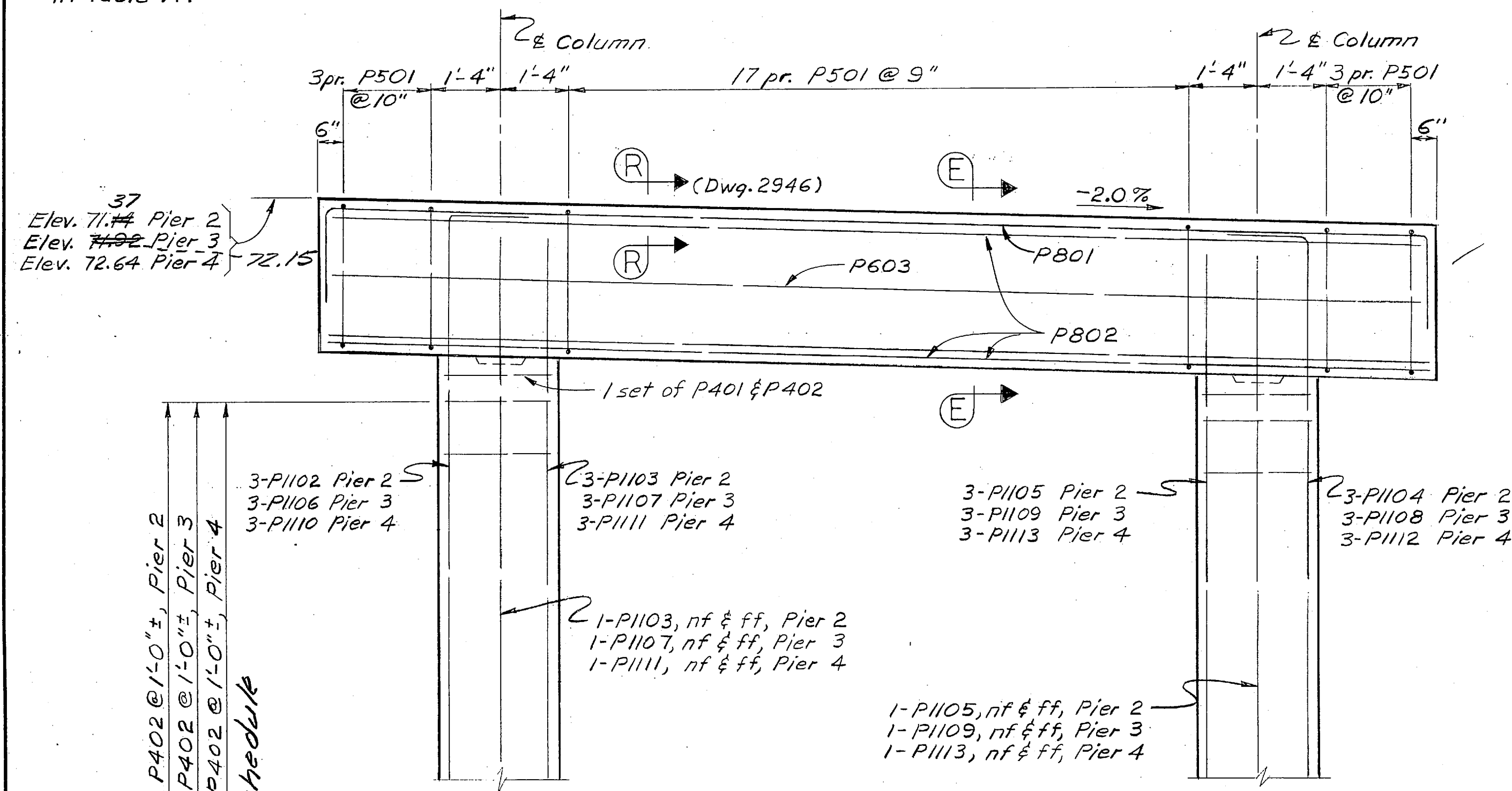
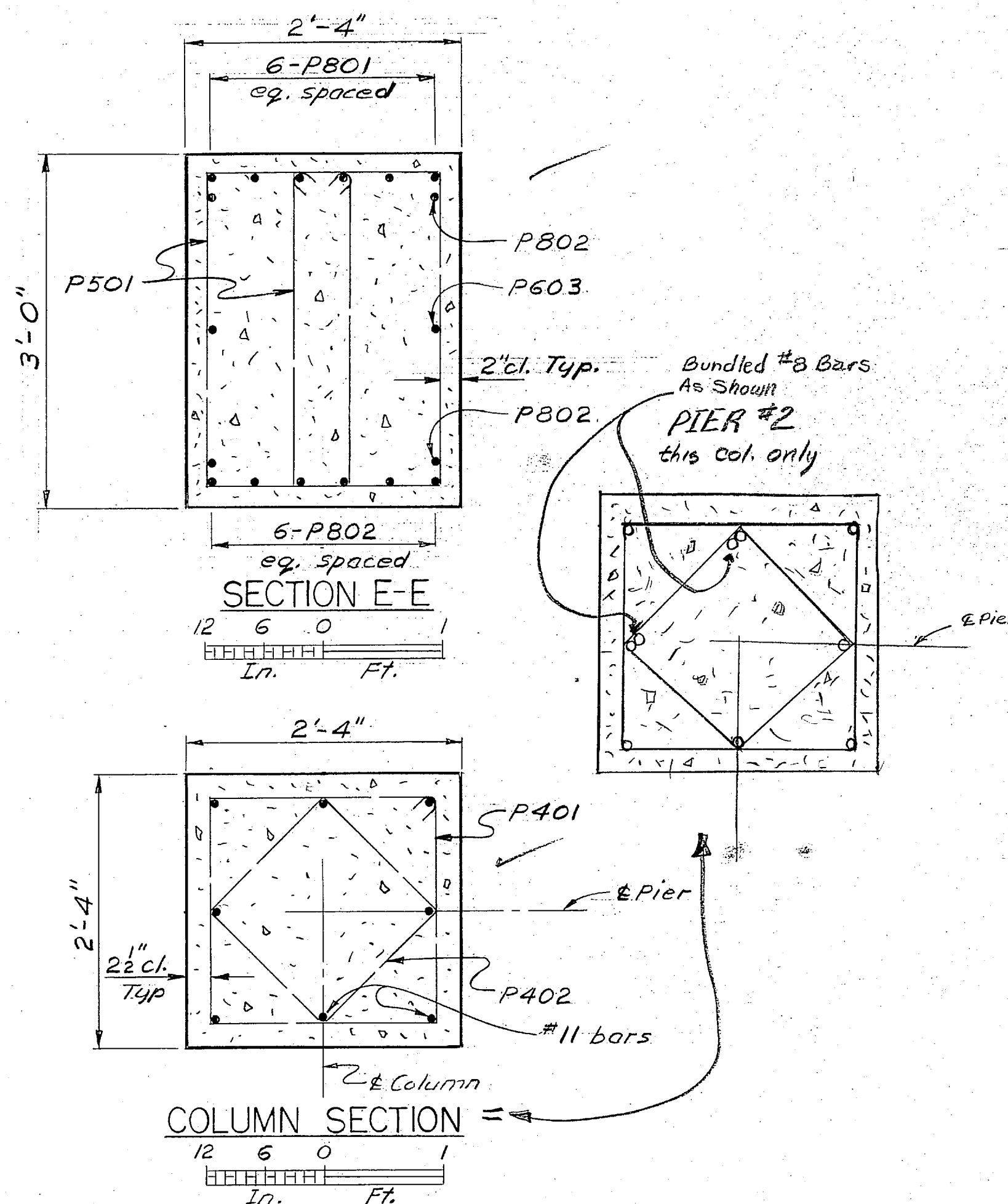


TABLE "A"				
TOP OF CONC. ELEV. AT BEARINGS				
Location	E	F	G	H
Pier 2	71.434	70.85	70.85	70.7396
Pier 3	72.88	71.39	71.39	71.5174
Pier 4	72.61	72.48	72.36	72.23

For detail of bearings, See Dwg. 2946.



REINFORCING STEEL (PIERS)				
Mark	Size	No.	Length	Type
Pier 2				
P401	4	46	8'-5"	Bent
P402	4	46	6'-3"	Bent
P501	5	46	8'-9"	Bent
P601	6	50	6'-6"	
P602	6	46	8'-6"	
P603	6	2	21'-3"	
P801	8	6	25'-3"	Bent
P802	8	10	21'-3"	
P1101	11	16	7'-3"	Bent
P1102	11	3	25'-5"	Bent
P1103	11	5	23'-4"	
P1104	11	3	28'-10"	Bent
P1105	11	5	23'-6"	
Pier 3				
P401	4	583	8'-5"	Bent
P402	4	583	6'-3"	Bent
P501	5	46	8'-9"	Bent
P601	6	50	6'-6"	
P602	6	46	8'-6"	
P603	6	2	21'-3"	
P801	8	6	25'-3"	Bent
P802	8	10	21'-3"	
P1101	11	16	7'-3"	Bent
P1106	11	3	33'-2"	Bent
P1107	11	5	30'-2"	
P1108	11	3	30'-10"	Bent
P1109	11	5	28'-10"	
Pier 4				
P401	4	728	8'-5"	Bent
P402	4	728	6'-3"	Bent
P501	5	46	8'-9"	Bent
P601	6	50	6'-6"	
P602	6	46	8'-6"	
P603	6	2	21'-3"	
P801	8	6	25'-3"	Bent
P802	8	10	21'-3"	
P1101	11	16	7'-3"	Bent
P1110	11	3	40'-11"	Bent
P1111	11	5	38'-11"	
P1112	11	3	40'-7"	Bent
P1113	11	5	38'-7"	

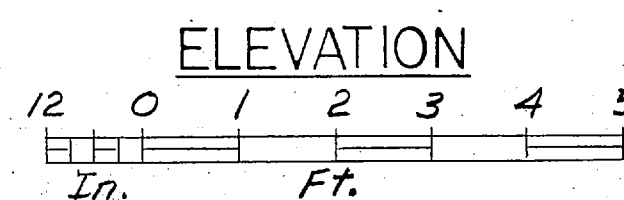
LAWSON CREEK BRIDGE
(WIDENING)

ROUTE NO. F-095

PIERS

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, AlaskaDate 9-25-73
Approved J. J. J. J.BRIDGE NO. 788
DWG. NO. 2944

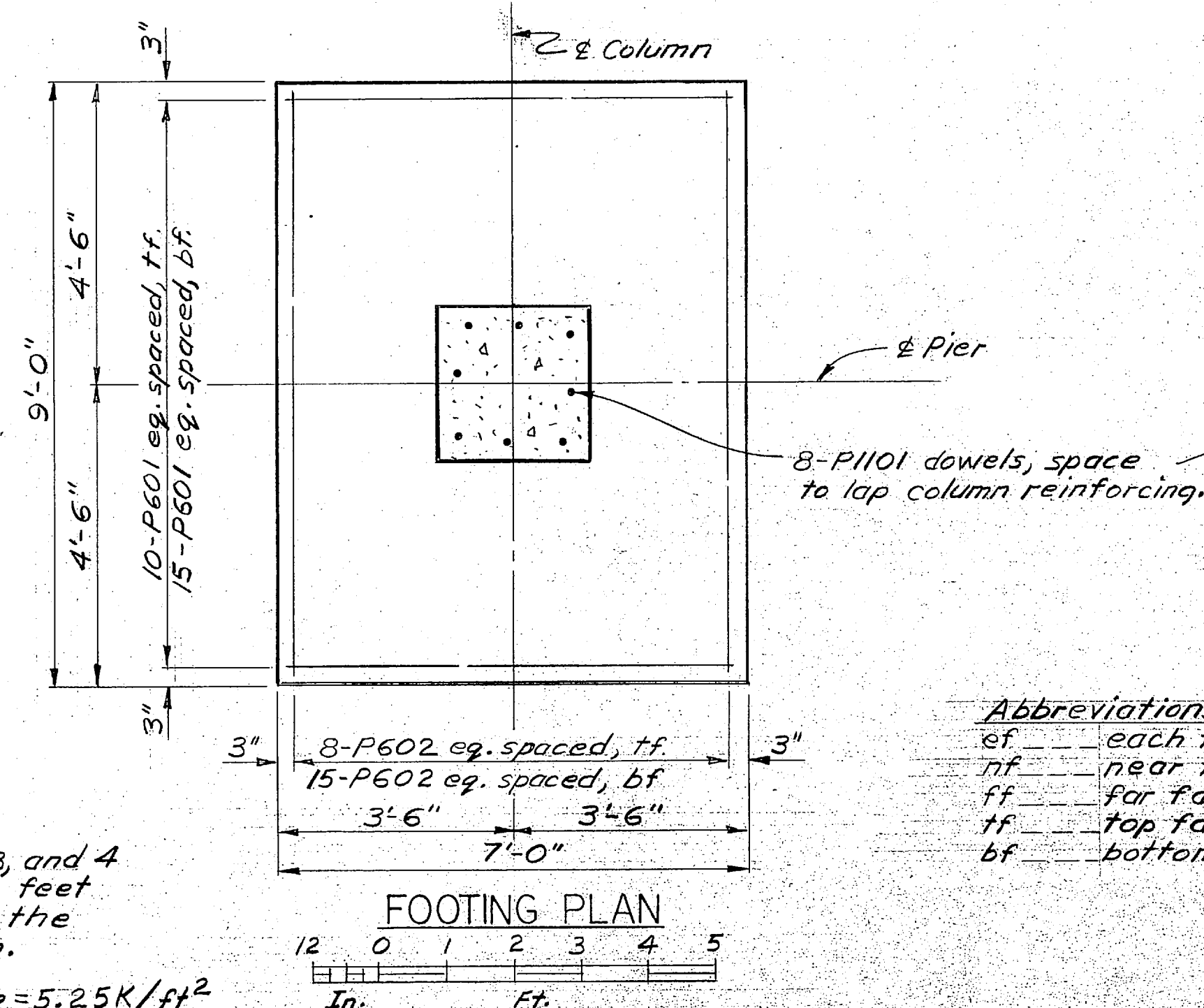
Designed By: J. M. J. J.
Checked By: J. M. J. J.
Drawn By: J. M. J. J.
Traced By: J. M. J. J.



See Typical Section
Dwg. No. 2941

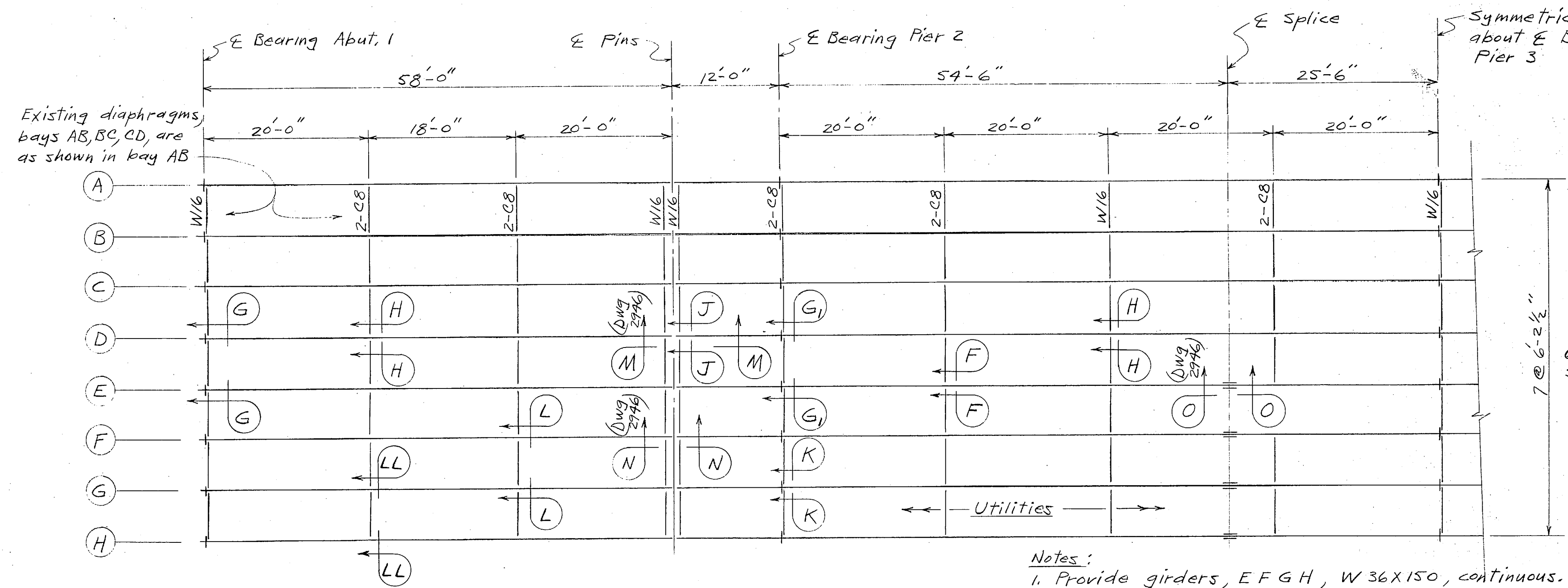
Note: The footings for Piers 2, 3, and 4 shall be set at least two feet below the top surface of the underlying rock stratum.

Max. Foundation Pressure = 5.25K/ft²

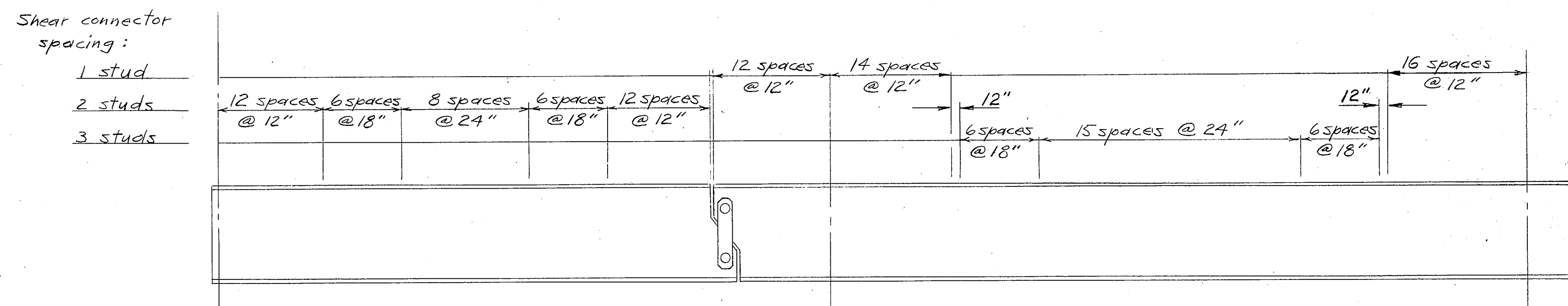


Abbreviations:
ef — each face
nf — near face
ff — far face
tf — top face
bf — bottom face

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRF 095-8 (22)	1973	11	15

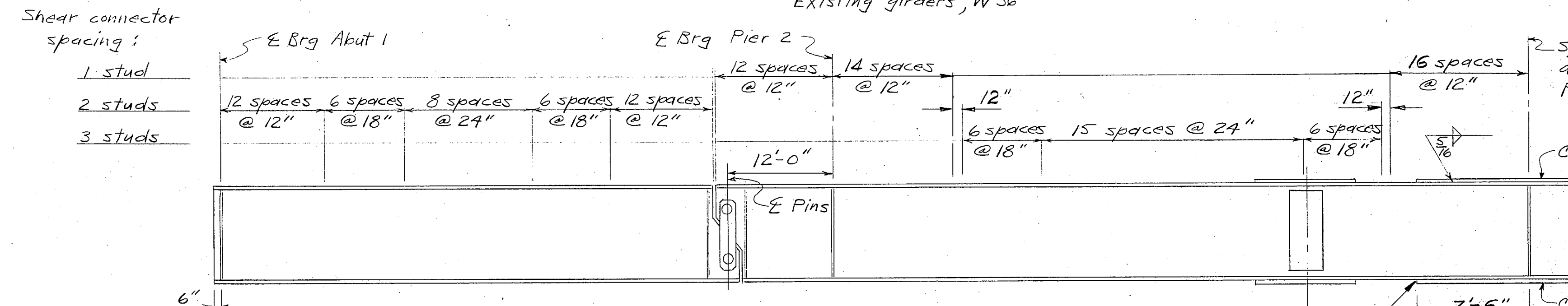


FRAMING PLAN



GIRDERS A, B, C, D

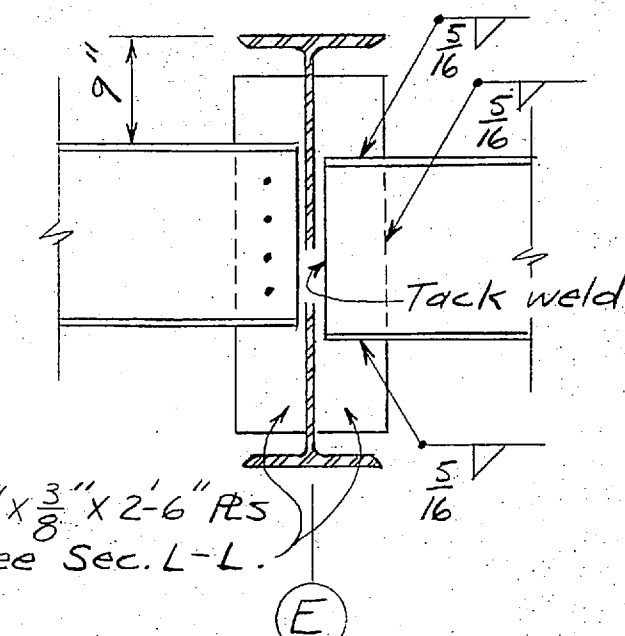
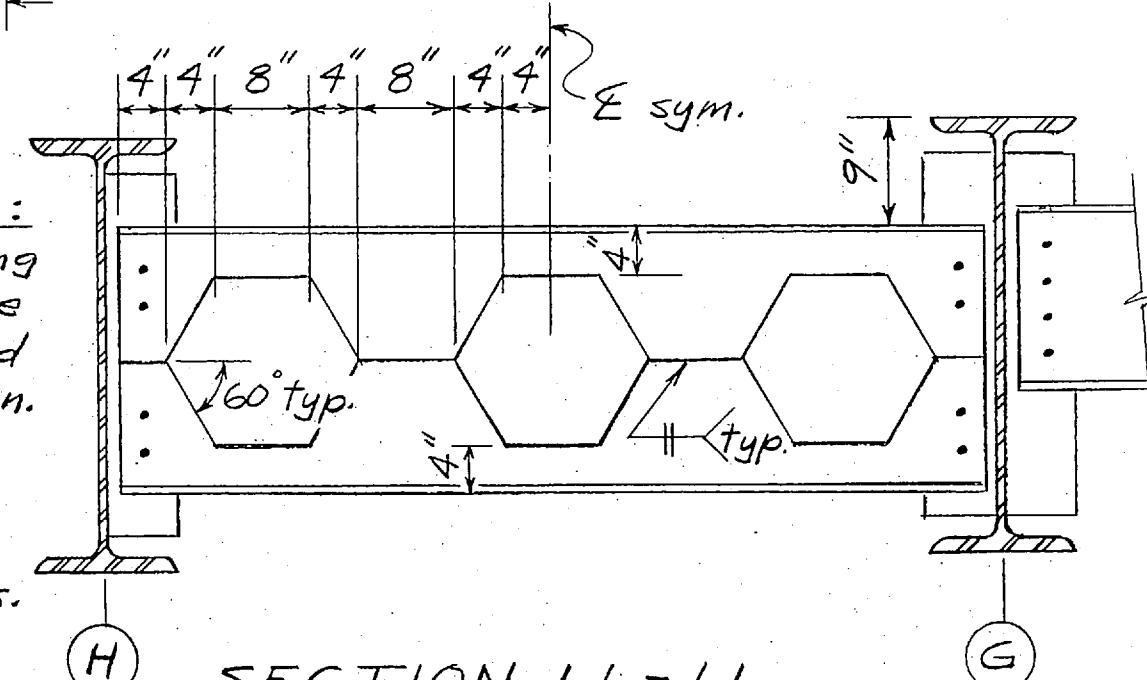
Existing girders, W36



GIRDERS E, F, G, H

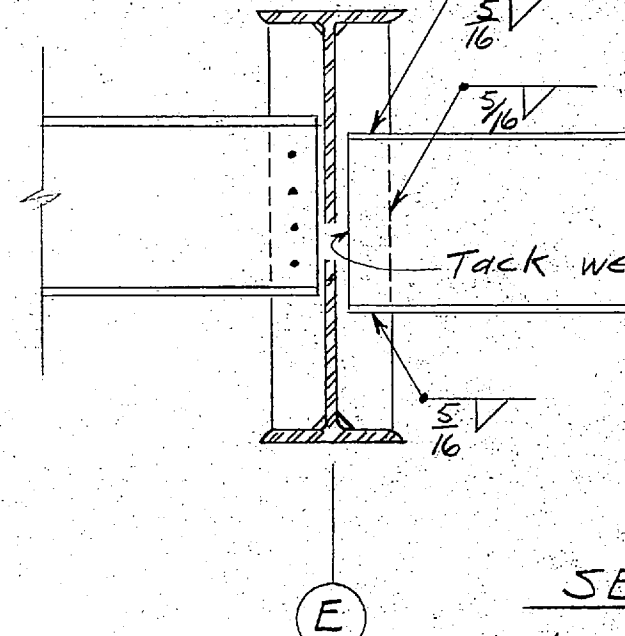
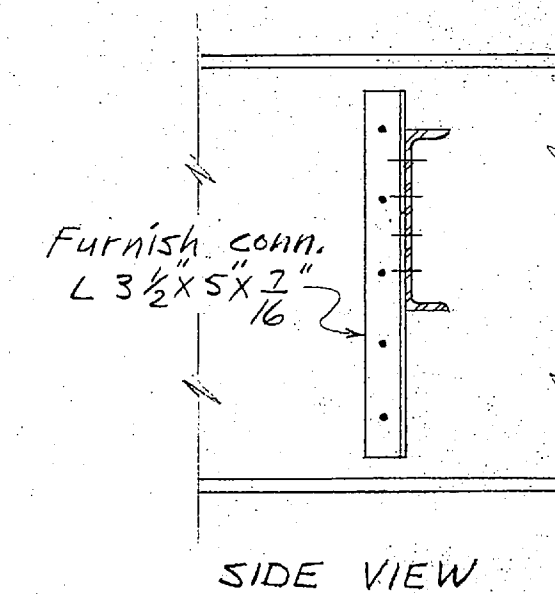
W 36 X 150

Bay GH-utility bay:
Cut C15 X 33.9 along zig-zag line to make open web expanded diaphragm as shown. Use 4-7/8" HS bolts ea. end, as shown. See Sections K-K and L-L for conn. pls.



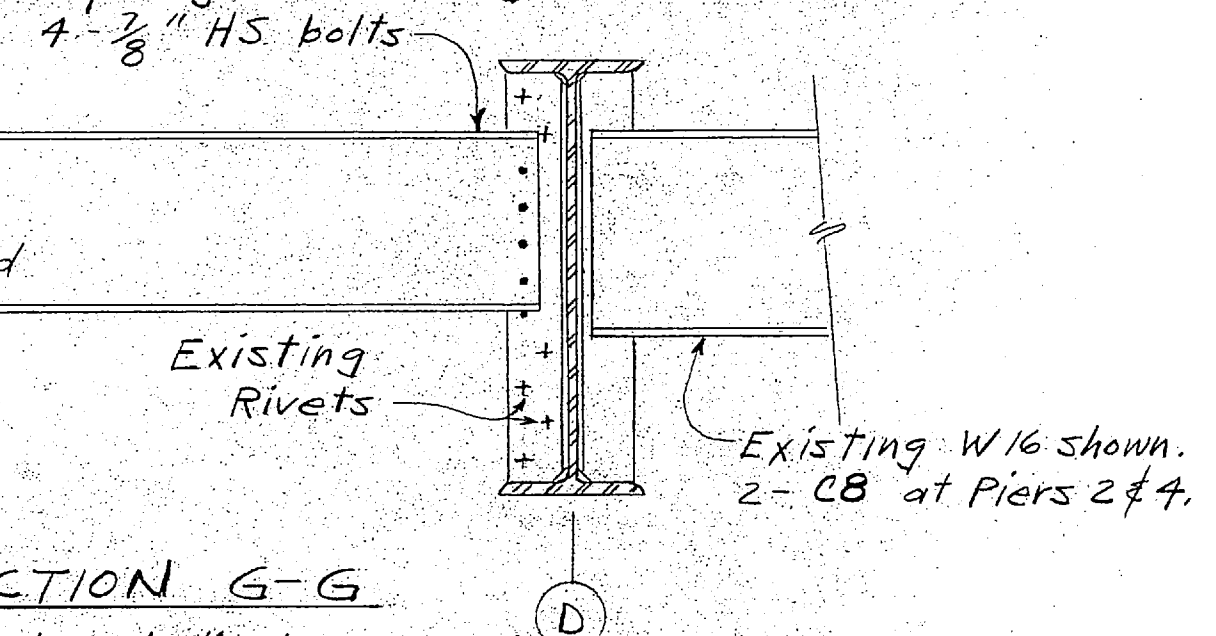
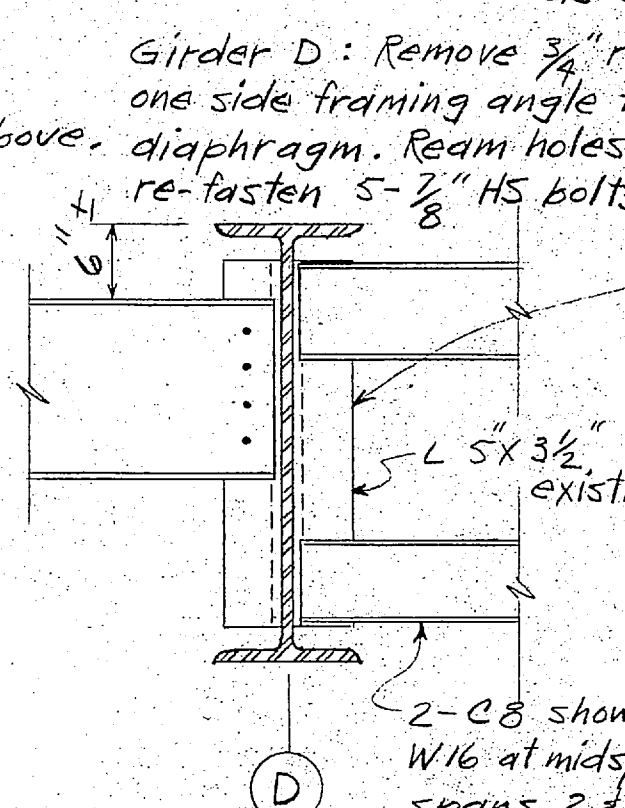
SECTION F-F

Connect diaphragms in bay DE as follows:
Girder D - bolted
Girder E - welded, as shown above.



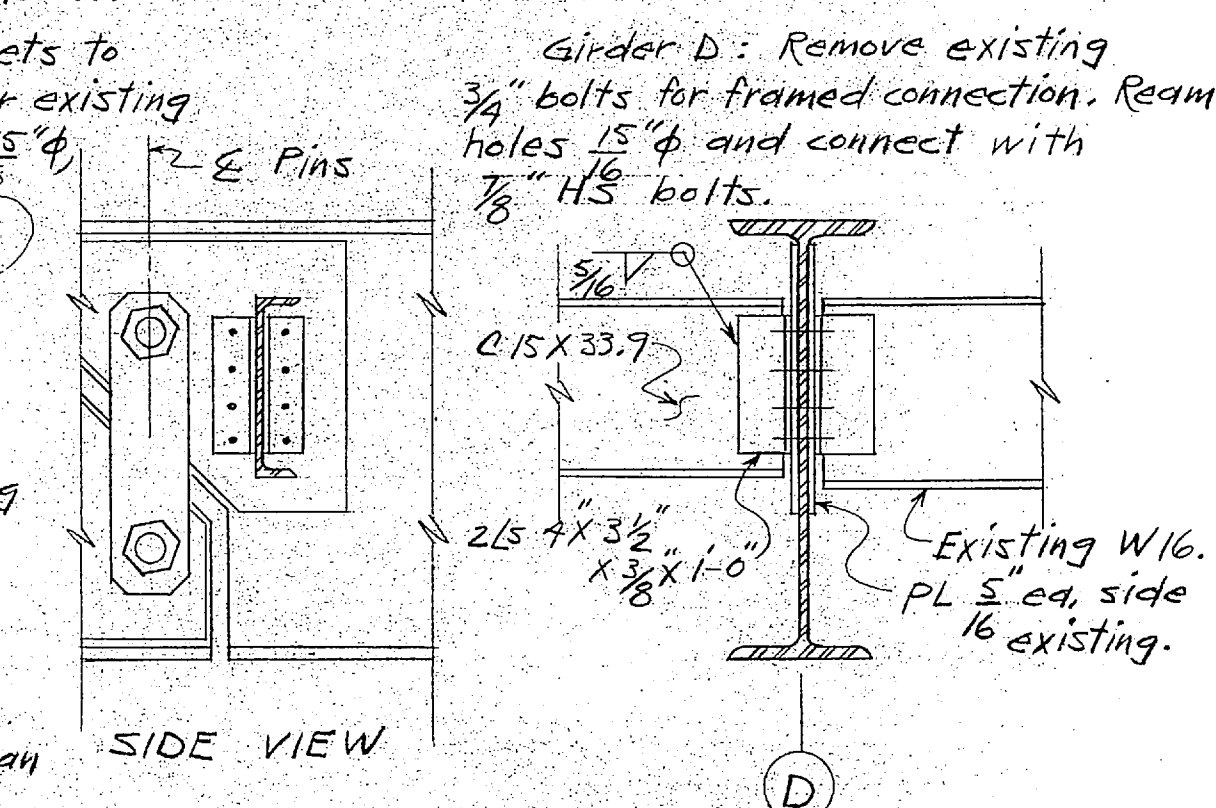
SECTION G-G

Typical at end diaphragms
Section G1-G1 similar except as shown.



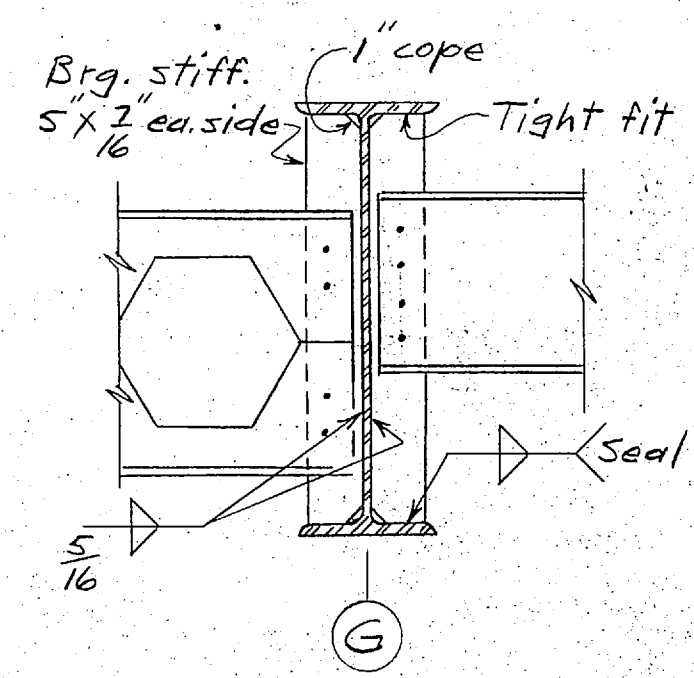
SECTION H-H

Typical at intermediate diaphragms.



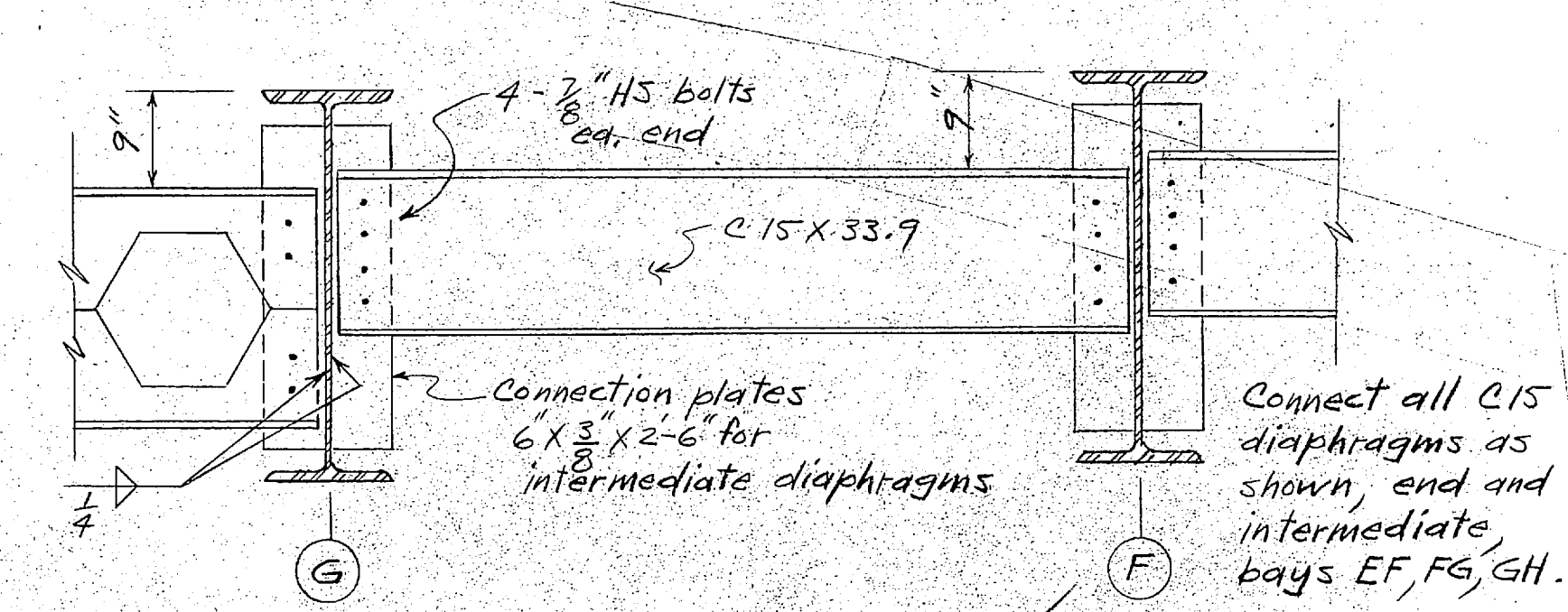
SECTION J-J

Typical at pins, each side.



SECTION K-K

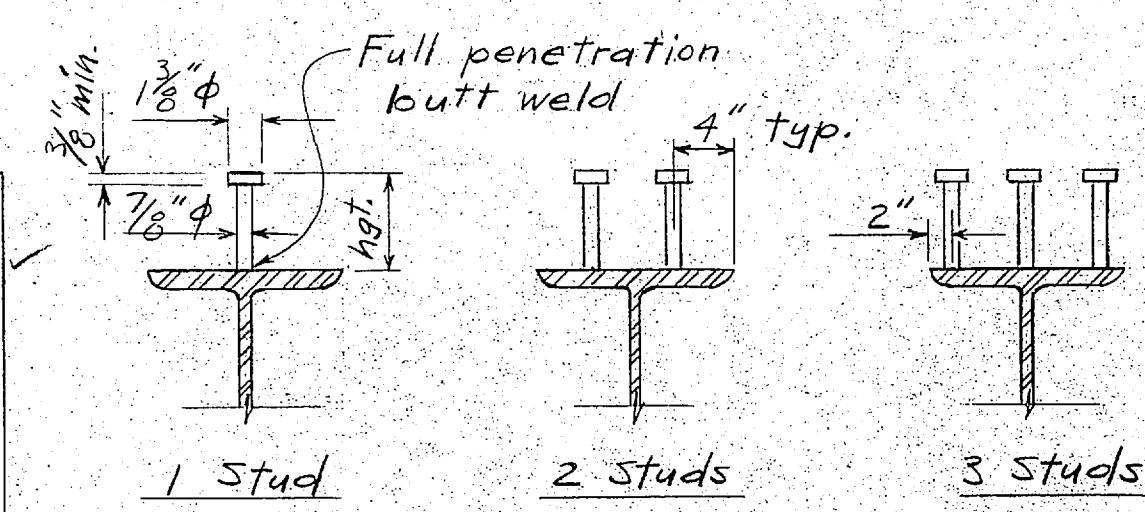
Typical bearing stiffeners, girders E, F, G, H.



SECTION L-L

Schedule Stud

Girder	Stud Hgt.
A	4 1/2"
B	4 1/2"
C	6"
D	7 1/2"
E	4 1/2"
F	4 1/2"
G	4 1/2"
H	4 1/2"



SHEAR CONNECTOR DETAIL

See Schedule for height of connector.

LAWSON CREEK BRIDGE
(WIDENING)
ROUTE NO. F-095
FRAMING PLAN

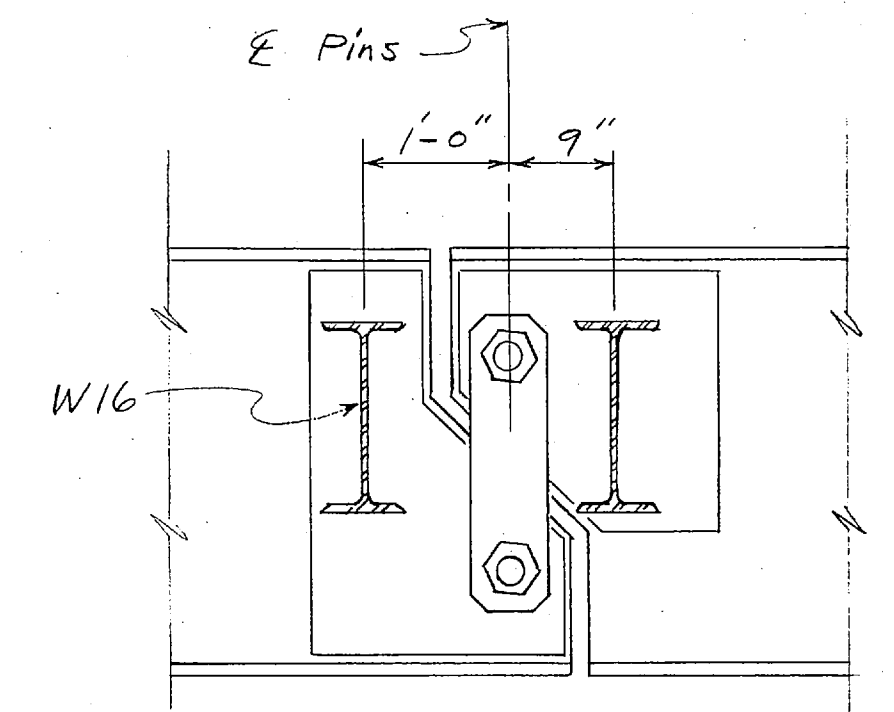
State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7-25-73
Approved [Signature]

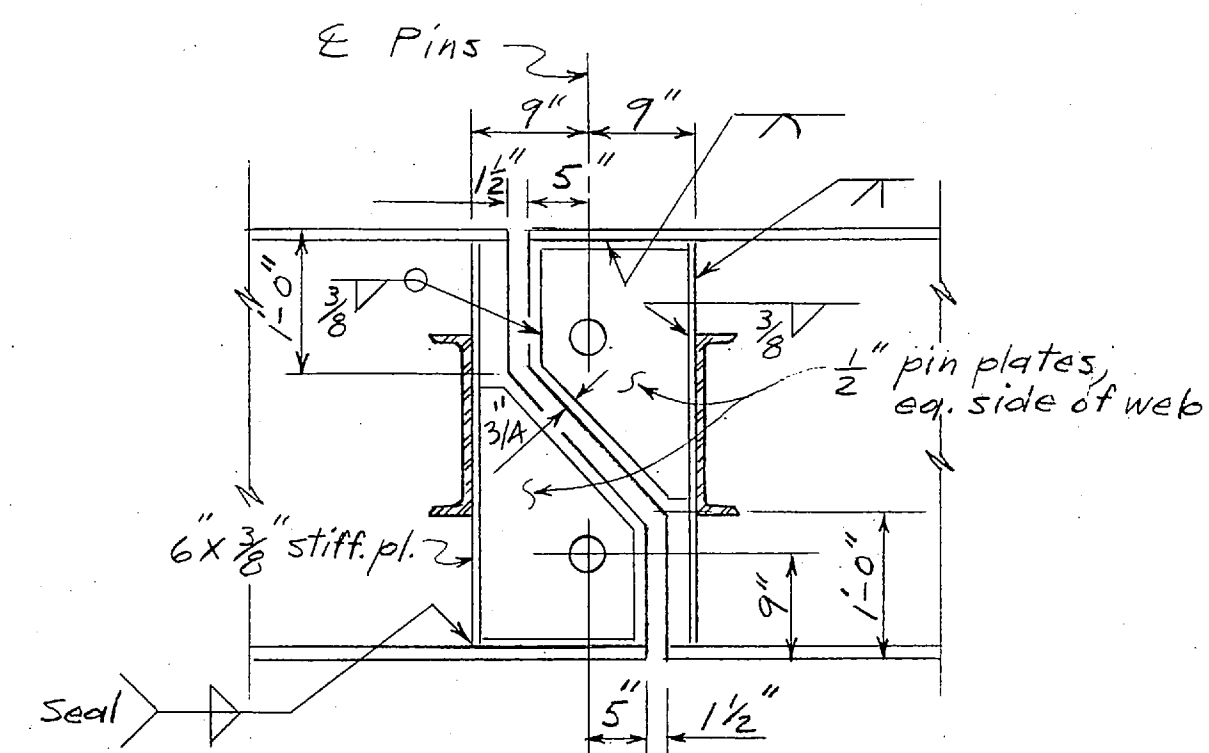
BRIDGE NO. 788
DWG. NO. 2945

Designed By J.M. Date 7-23-73
Checked By J.M. Date 7-23-73
Drawn By J.M. Date 7-23-73
Checked By J.M. Date 7-23-73
Traced By J.M. Date 7-23-73

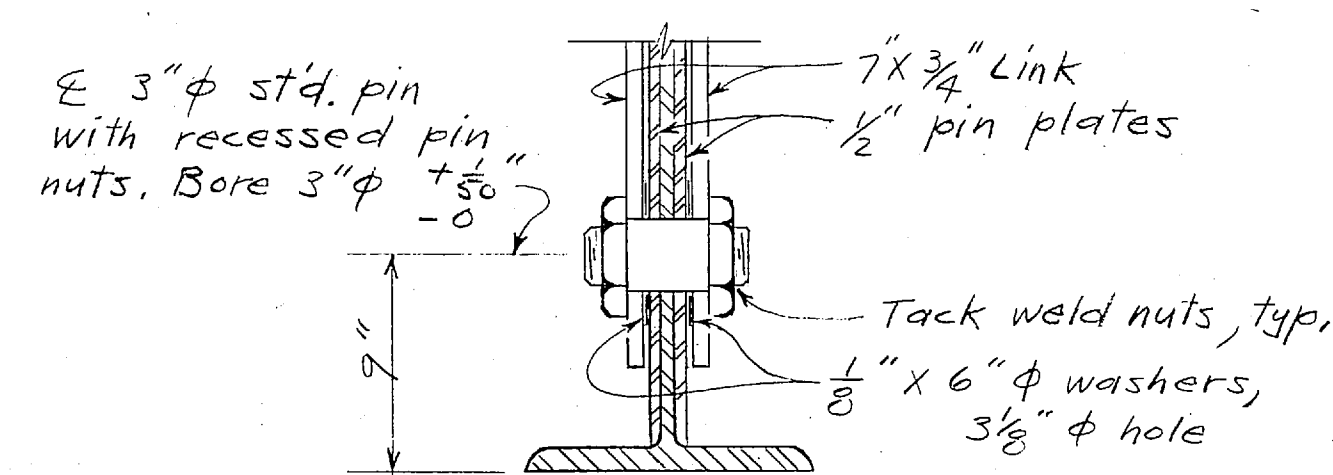
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRF-095-8(22)	1973	12	15



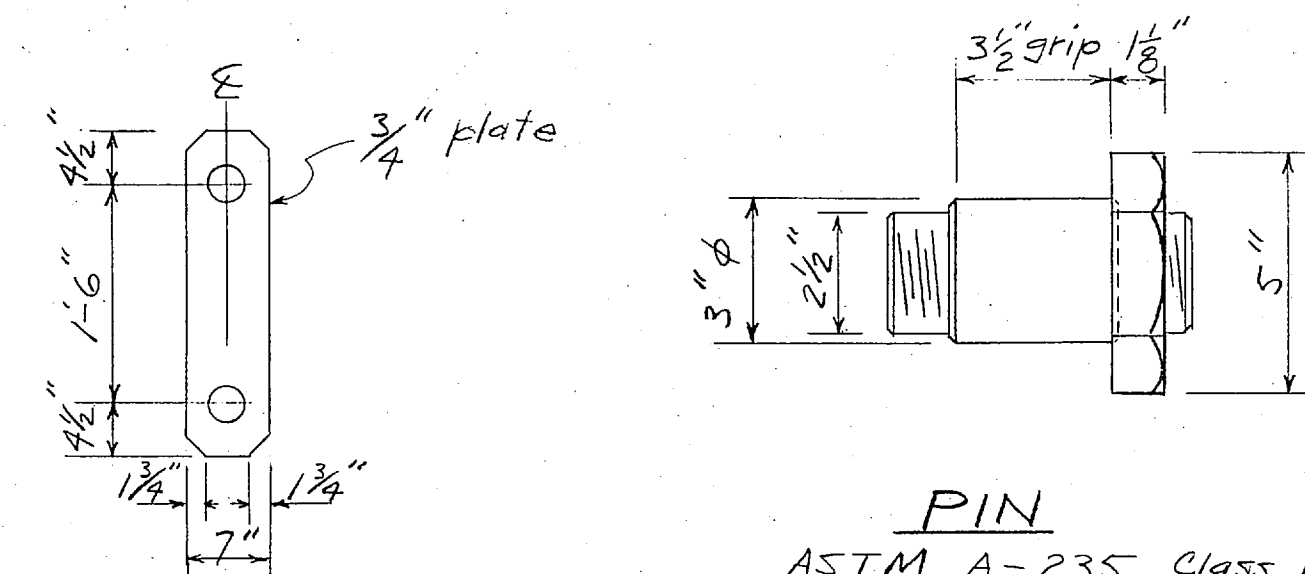
ELEV M-M
PIN CONNECTION ~ GIRDER D
Dwg 2945



ELEV N-N
PIN CONNECTION ~ GIRDERS E, F, G, H
Dwg 2945



PART SECTION ON E PINS

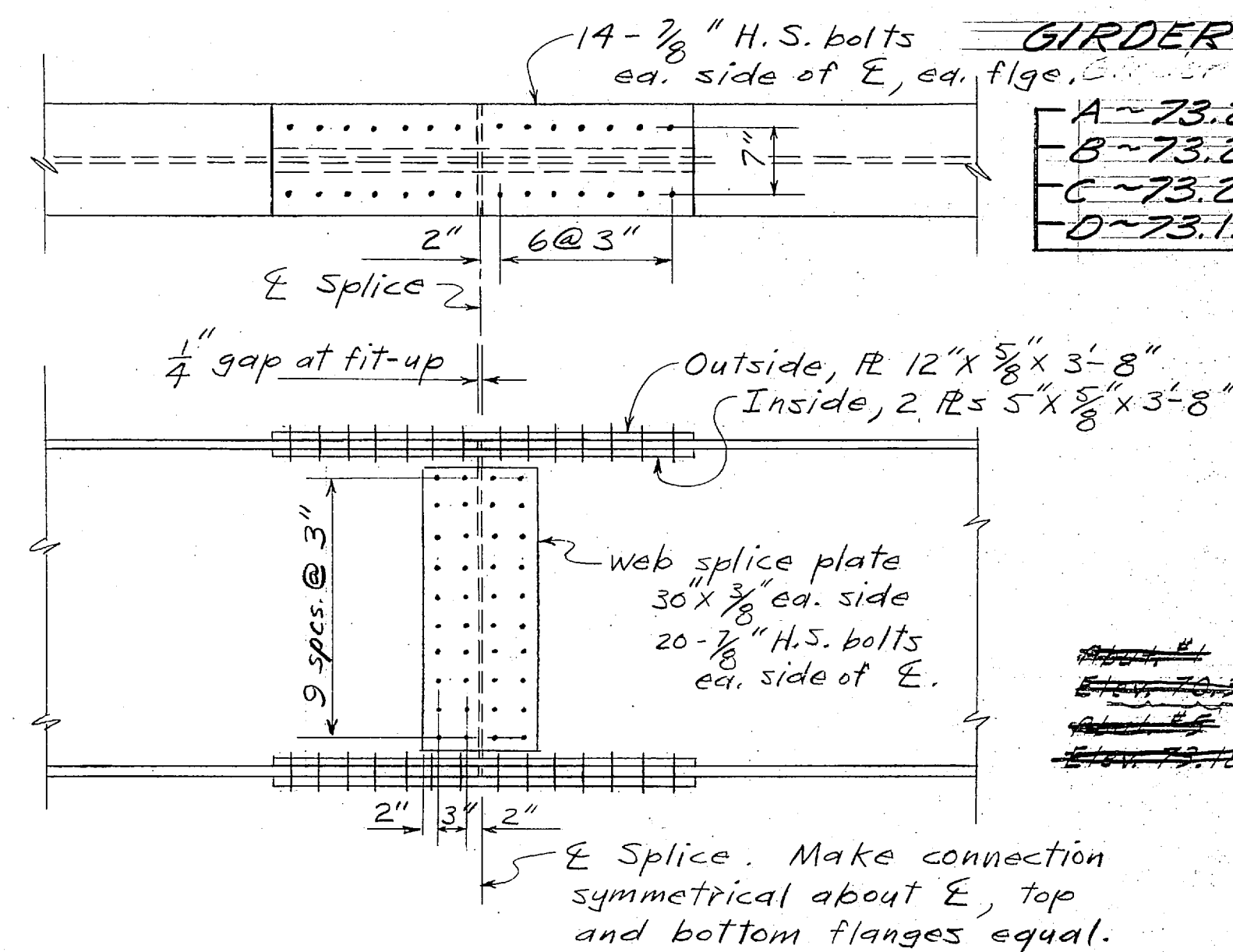


LINK
(16 Required)

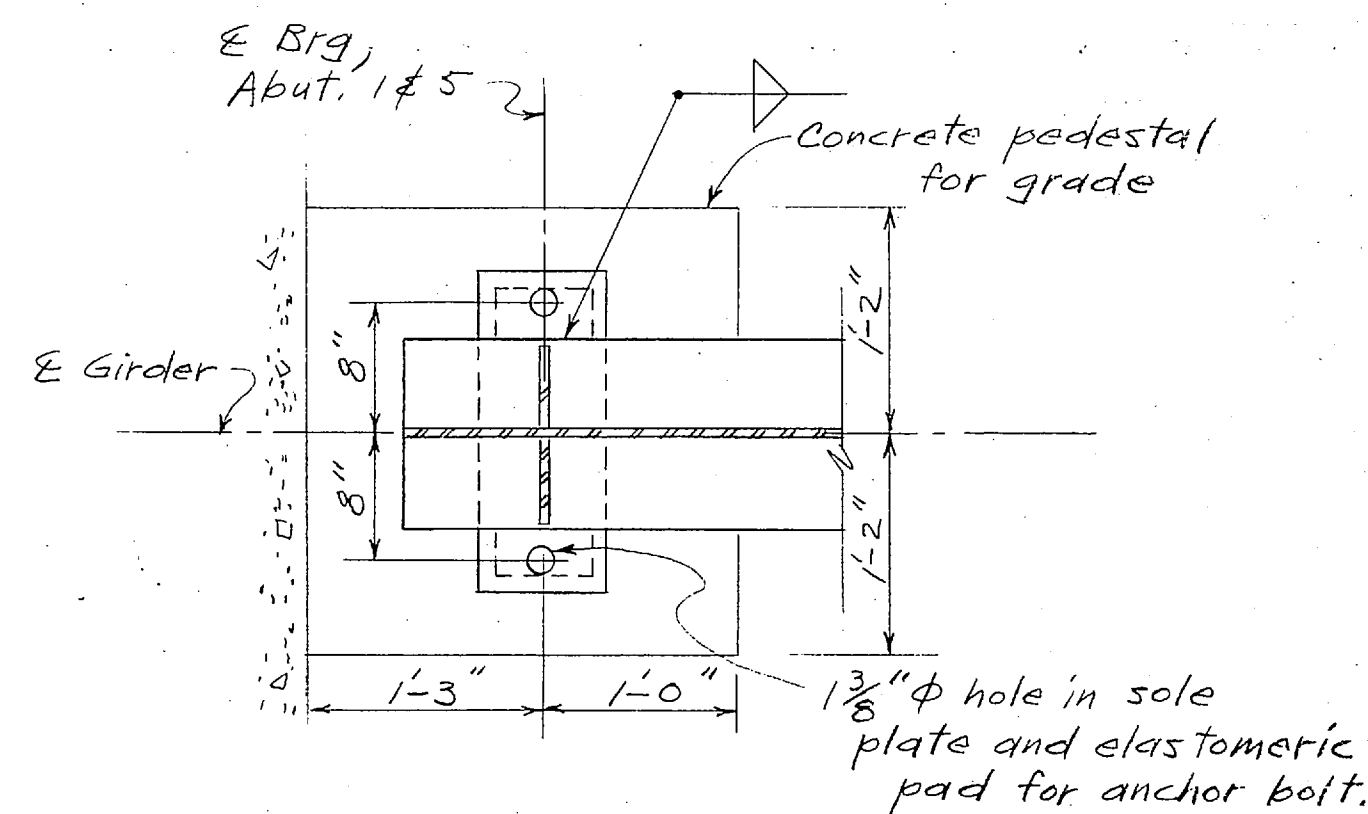
PIN DETAILS

Note location of W16 diaphragm on girder D. Modify location of 6x3/8" stiff plate, girder E bay DE, to meet diaphragm from girder D. Increase size of pin plate on girder E accordingly.

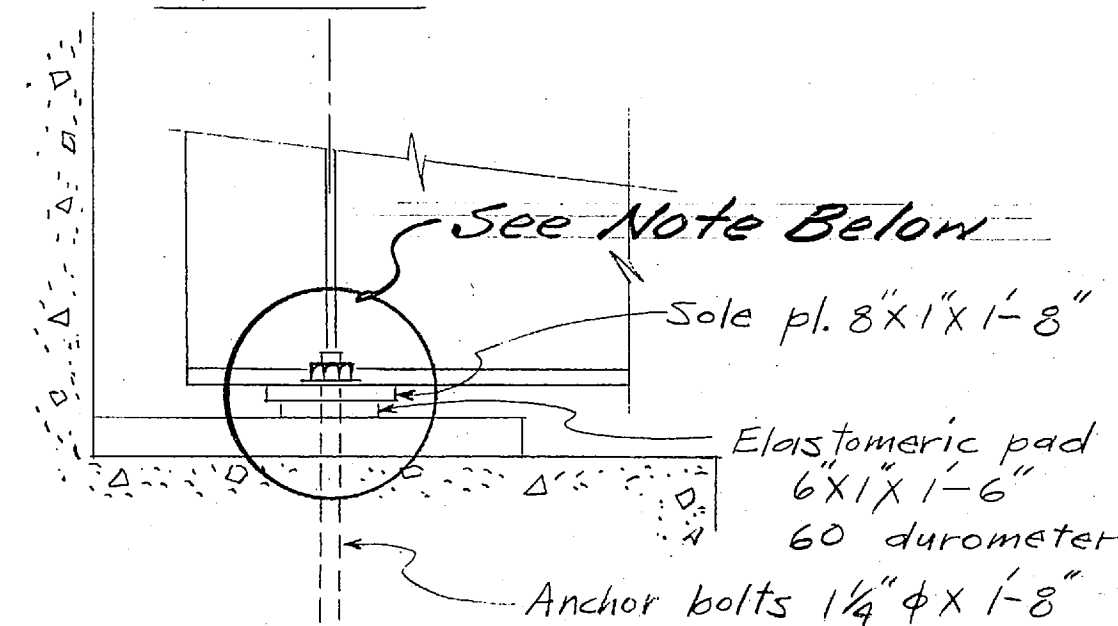
PIN
ASTM A-235 Class E
16 pins required
32 nuts required



ELEV O-O
GIRDER SPLICE
Dwg 2945

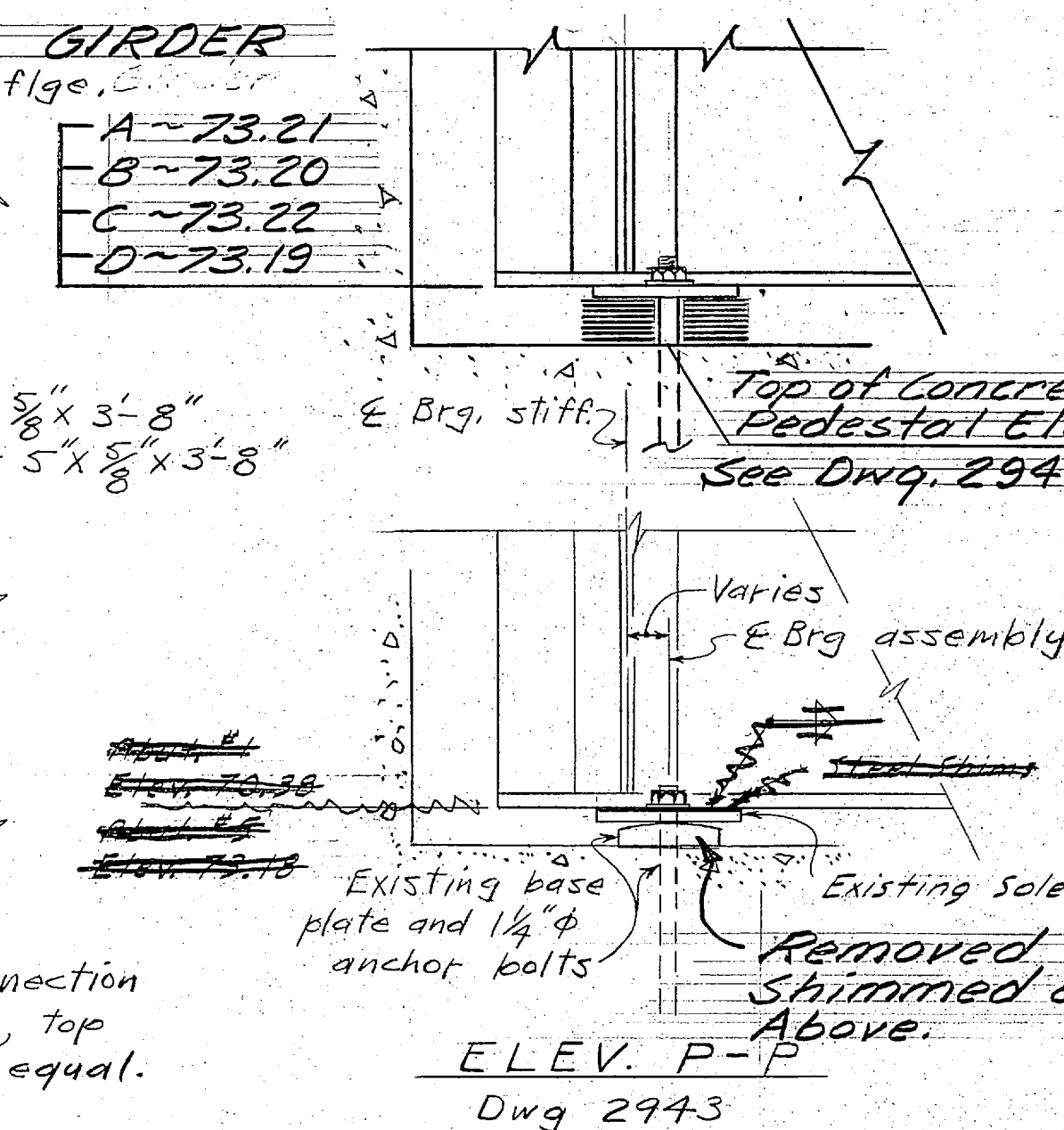


PLAN



ELEV Q-Q
ABUTS. 1 & 5
Dwg 2943

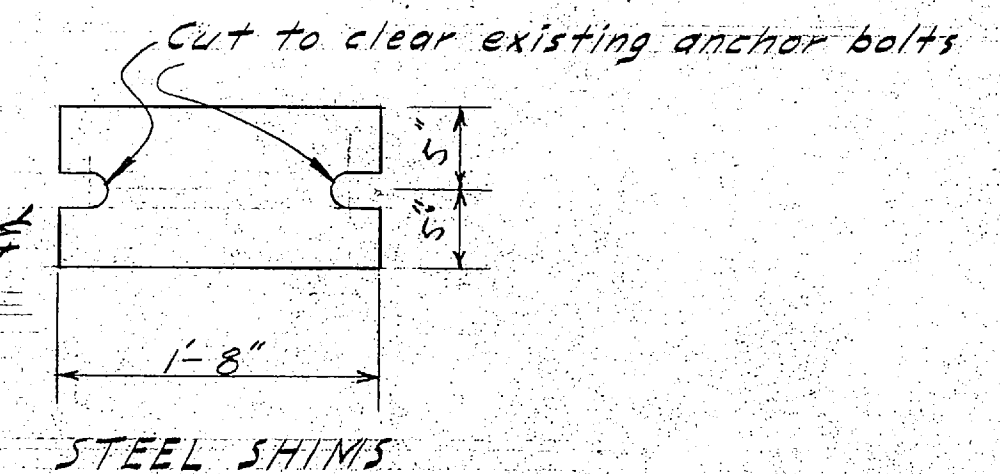
Note:
Bearing Detail Encircled Above
Incorporated Into Existing Girders
A, B, C, & D @ Abutment No. 1 Only.



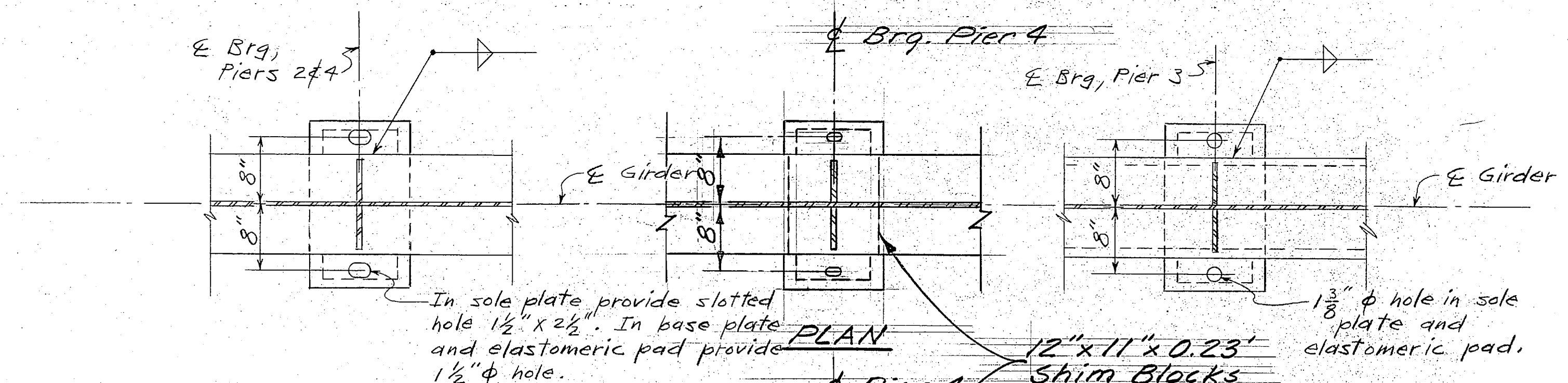
ELEV P-P
Dwg 2943

Notes:

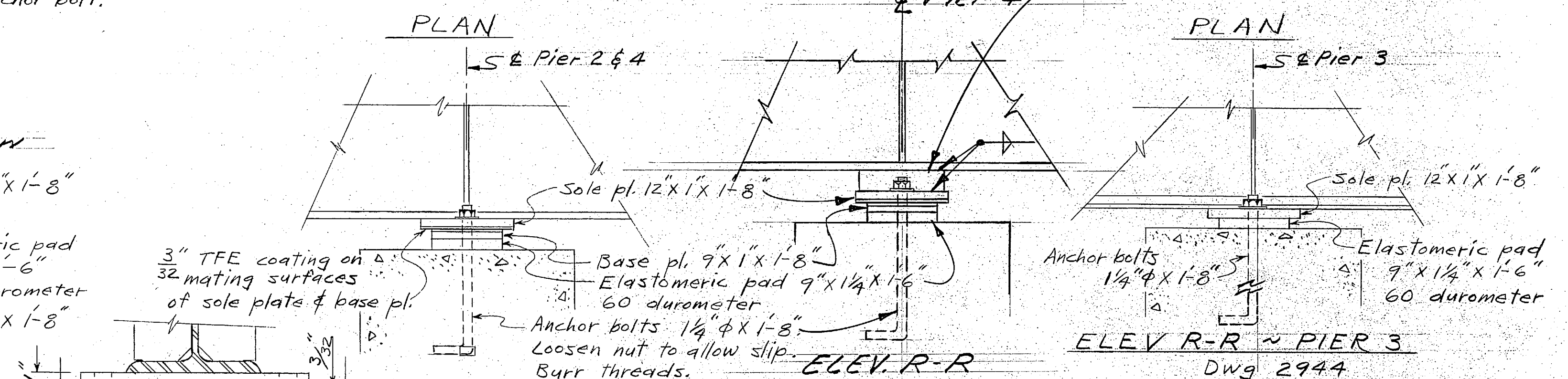
1. Raise ends of 4 girders uniformly (required jack under each girder).
2. Remove 4-1" machine bolts to free existing sole plates.
3. Place steel shims above existing sole plates to adjust girders to the proper grade.
4. Lower girders uniformly and position girders on sole plates to restore alignment and clearance at E pins, as directed by the Engineer.
5. Field weld girders to sole plates.



BEARINGS - GIRDERS A, B, C, D - ABUTS. 1 & 5 ONLY



PLAN



ELEV R-R
PIERS 2 & 4
Dwg 2944

Note:
Dwg. 2944
For all bearings, finish or grind area beneath elastomeric pad to a level and smooth surface at tabular elevations shown (Dwg 2943 & 2944).

ELEV R-R ~ PIER 3
Dwg 2944

LAWSON CREEK BRIDGE
(WIDENING)
ROUTE NO. F-095
BEARINGS, PINS & SPLICES

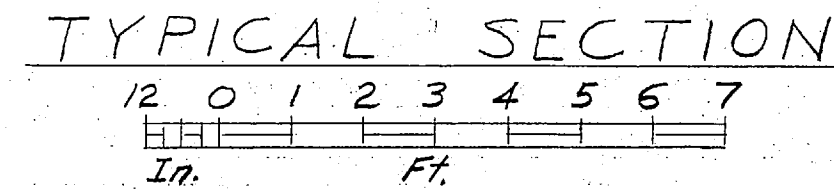
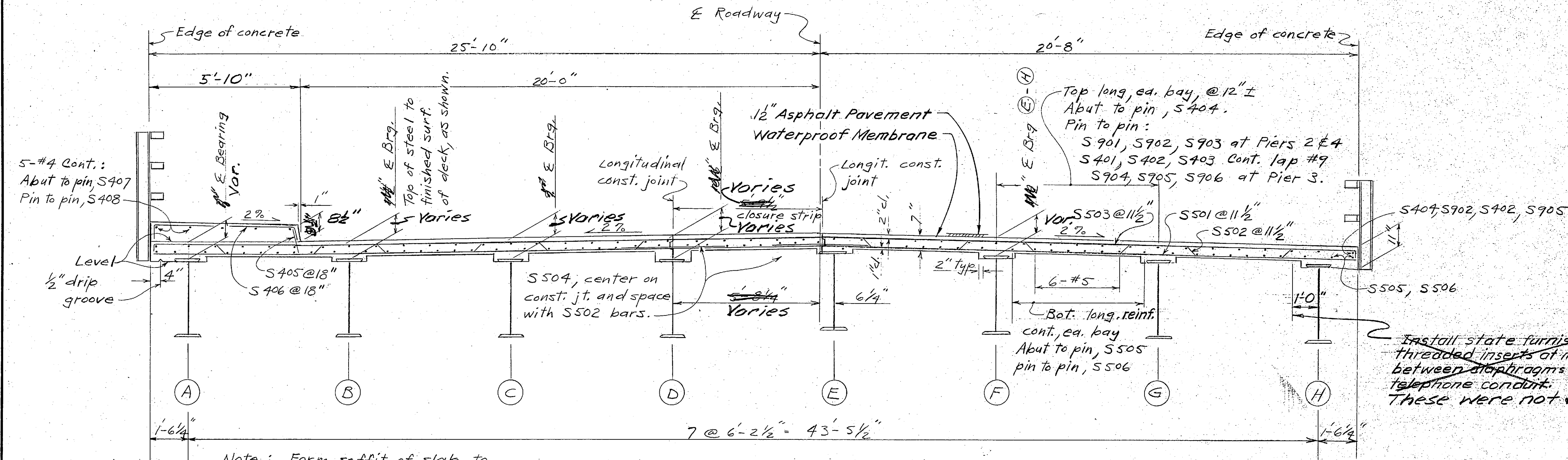
State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date: 9-25-73
Approved: [Signature]

BRIDGE NO. 788
DWG. NO. 2946

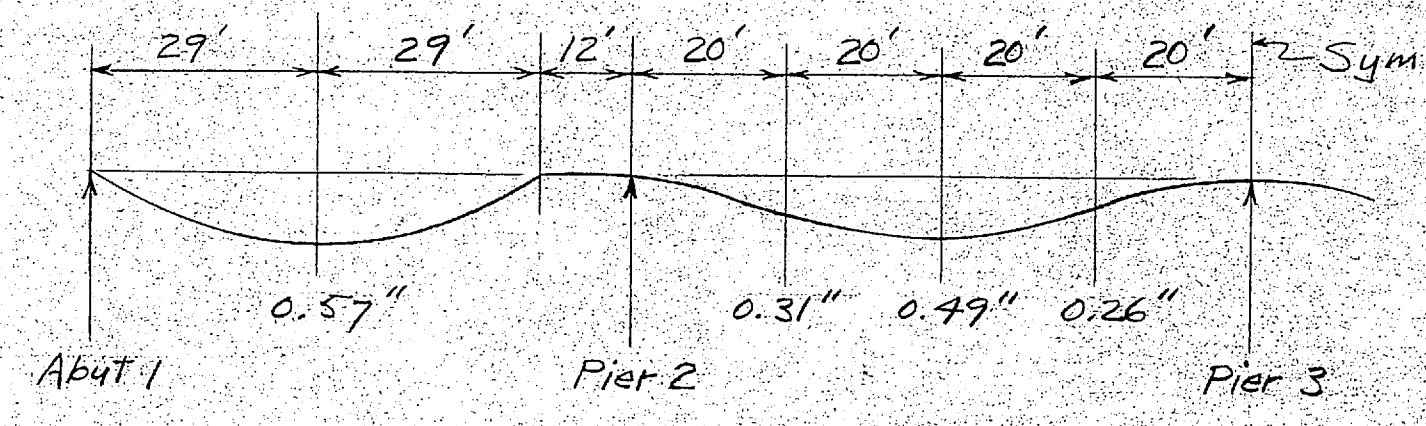
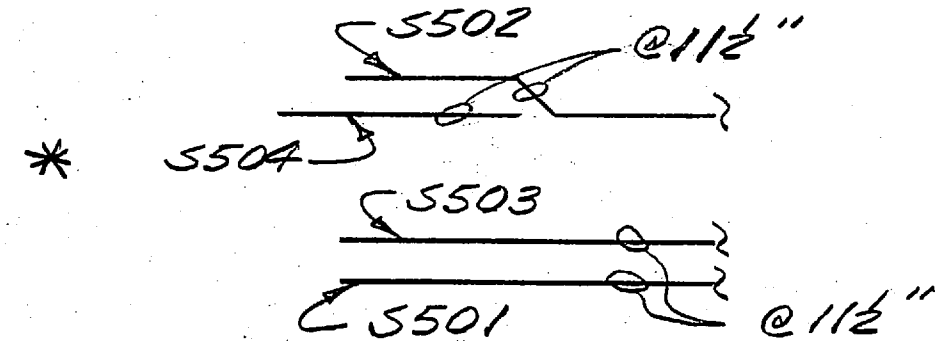
ANCHOR BOLT DETAIL
(Typical)

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BRF-095-8 (22)	1973	13	15

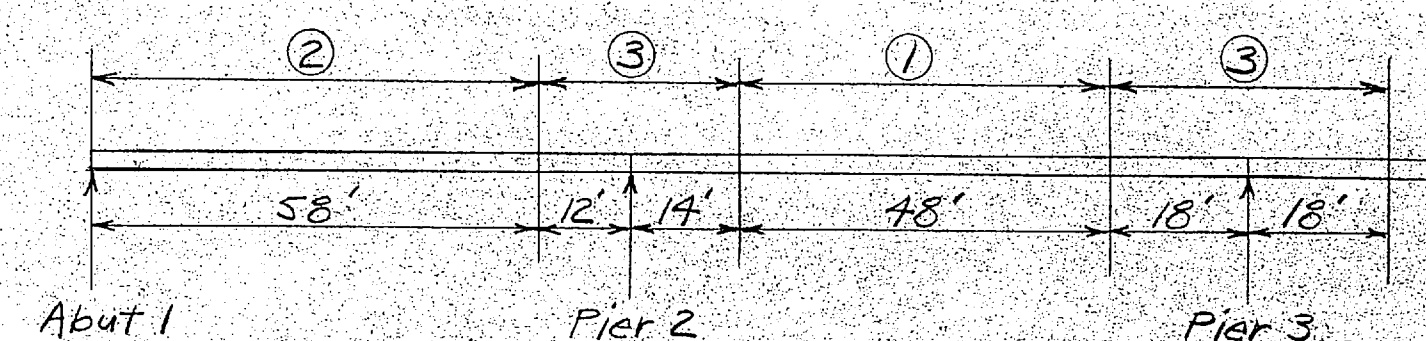


REINFORCING SCHEDULE				
MARK	SIZE	NO.	LENGTH	BENDING DIAGRAM
S401	4	44	44'-3"	5'-5"
S402	4	32	38'-3"	
S403	4	14	48'-3"	
S404	4	90	58'-0"	
S405	4	206	1'-2"	
S406	4	206	6'-8"	BENT
S407	4	10	58'-0"	
S408	4	5	188'-10"	
S501	5	634	22'-5"	
S502	5	628	23'-6"	BENT
S503	5	634	22'-5"	
S504	5	628	4'-0"	
S505	5	120	58'-0"	
S506	5	60	188'-10"	
S507	5	748	5'-8"	
S801	8	4	22'-5"	
S802	8	2	5'-8"	
S901	9	44	32'-0"	
S902	9	32	36'-0"	
S903	9	14	30'-0"	
S904	9	22	36'-0"	
S905	9	16	40'-0"	
S906	9	7	32'-0"	

* Based on 40'-0" lengths plus 20 dia. laps (min splice equals 12").



DEAD LOAD DEFLECTION CURVE (No Scale)



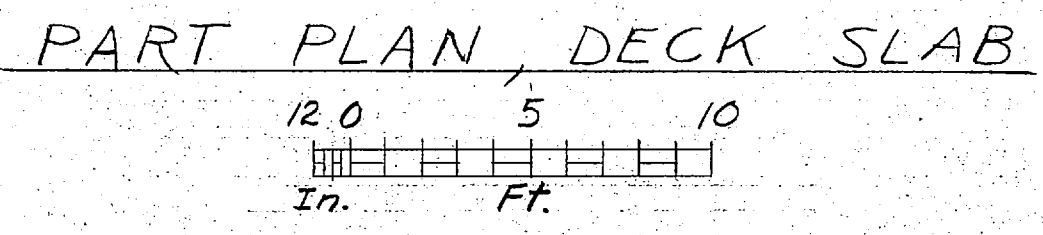
SLAB PLACING SEQUENCE (No Scale)

Note: Closure strip shall be placed after all other concrete but is not otherwise subject to placing sequence.

Set forms to compensate for deflection of steel girders under DL wgt of slab.

Place concrete for the deck in the numbered sequence shown. Higher numbered sections may be placed as soon as all concrete in lower numbered sections in adjacent spans is in place.

Notes: "Part Plan" is schematic, for reference only. See Dwg 2948 for the following sections: T-T, U-U, V-V, W-W, X-X.



LAWSON CREEK BRIDGE
(WIDENING)
ROUTE NO. F-095
TYPICAL SECTION

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 9-25-73
Approved [Signature]

BRIDGE NO. 788
DWG. NO. 2947

Designed By J.M. Date 2-73
Checked By J.M. Date 2-73
Drawn By J.M. Date 2-73
Checked By J.M. Date 2-73
Traced By J.M. Date 2-73

