

STATE	ROUTE DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-2(2)	1968		

As Builts
Revised

AS Built Plans

Start Date : 21 June 1968
Completion Date : 13 June 1969
Contractor : swalling Construction Co.
Project Engineer : C. U. Drew

INDEX OF SHEETS
SEE SHEET 2

10

AS ADVERTISED

DESIGN DESIGNATION

ADT (1967) = 5200
ADT (1987) = 8650
DHV = 1125
D = 45-55 %
T = 7 %
V = 30 M.P.H.

PROJECT SUMMARY

WIDTH OF ROADWAY	VARIES
WIDTH OF PAVEMENT	VARIES
LENGTH OF GRADING	668' = 0.1265 MI.
LENGTH OF PAVING	668' = 0.1265 MI.
LENGTH OF STRUCTURE	296' = 0.056 MI.
LENGTH OF PROJECT	668' = 0.1265 MI.

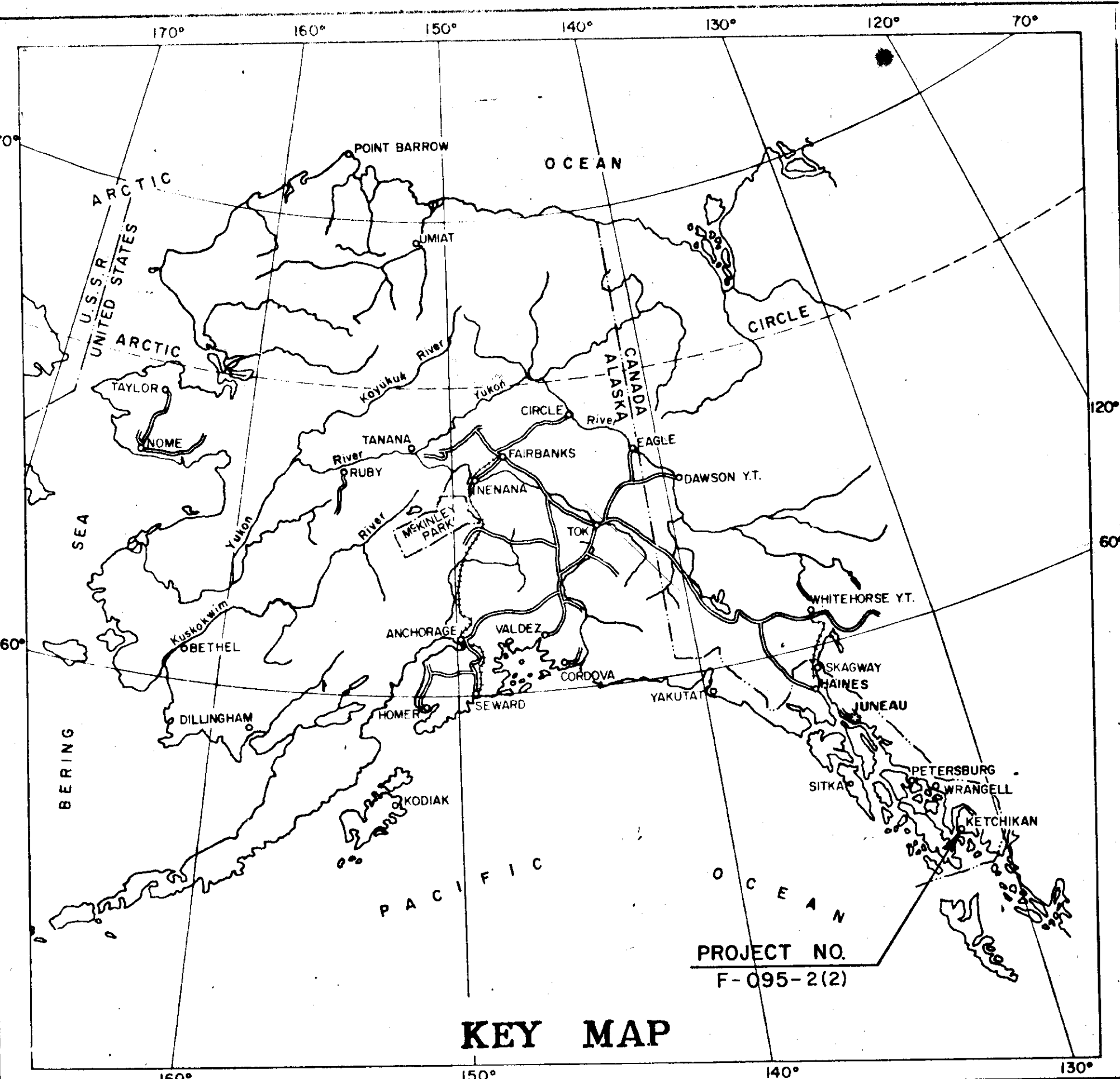
STATE OF ALASKA
DEPARTMENT OF HIGHWAYS

APPROVED
C. E. Starn
Acting COMMISSIONER OF HIGHWAYS Date 3/2/68

STATE OF ALASKA DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE PROPOSED HIGHWAY PROJECT

F-095-2(2)
FRONT STREET,
GRANT ST. TO MISSION ST. *No Change in Length*
KETCHIKAN
PAVING & STRUCTURE



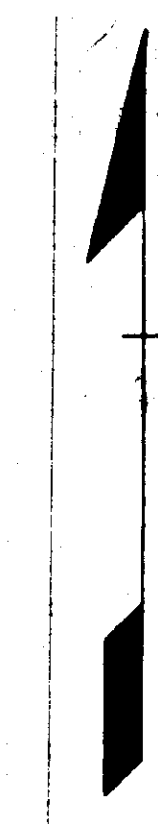
END OF PROJECT
STA. 6+43.00

CONVENTIONAL SIGNS
SEE SHEET 2.

BEGINNING OF PROJECT
STA. 0-25.00

TONGAS

NARROWS



INDEX OF SHEETS

DRAWING NO.	DESCRIPTION
1862	Index, Conventional Signs and Abbreviations, General Notes and Estimate of Quantities
1863	Alignment and Topography Sta. 0+25 to Sta. 2+50
1864	Alignment and Topography Sta. 2+50 to Sta. 5+21.60
1865	Alignment and Topography Sta. 5+21.6 to Sta. 6+43
1866	New Construction Sta. 0+25 to Sta. 2+50
1867	New Construction Sta. 2+50 to Sta. 5+21.60
1868	New Construction Sta. 5+21.6 to Sta. 6+43
1869	Test Piles
1870	Prestressed Concrete Girder
1871	Structural Slab and Diaphragms Sta. 2+74.86 to Sta. 5+21.52
1872	Structural Slab and Diaphragms at Mission St.
1873	Ground Slab Reinforcing and Miscellaneous Details.
1874	Piers Sta. 3+24.34 to Sta. 4+72.19
1875	Pile Bent at Sta. 0+23.73
1876	Details - Abutment Wall at Sta. 0+25.67 and Details - Wall at Mission St.
1877	Abutment Wall Details at Sta. 2+74.86 and Miscellaneous Details
1878	Abutment Wall Details at Sta. 5+21.60
1879	Retaining Wall Sta. 0+25.67 to Sta. 1+50.14
1880	Retaining Wall Sta. 1+50.14 to Sta. 2+74.86
1881	Retaining Wall Sta. 5+21.60 to Sta. 6+43
1882	Aluminum Railing, Box Inlets and Miscellaneous Details.
1883	Rail Details
1884	Details - Water Main
1885	Utility Vault and Miscellaneous Details
1886	Test Borings
1898	Fish House Wall
1899	List of Misc. Work
1899A	List of Misc. Work, Water Main Construction
D-1	standard culverts
D-3	standard drop inlets, catch basins & manholes
D-4	standard cast iron frames, covers & gratings
R-4	standard brass cap monuments & monument case
T-1	standard sign locations
T-2	standard mounting & misc. details
T-15	standard const. signing, barricades & barriers
T-16	standard const. signing
T-18	standard embedment & foundation details
T-19	standard post selection graph
T-20	standard project identification

GENERAL NOTES

- Specifications:**
Design: A. A. S. H. O. Standard Specifications for Highway Bridges, 1965 edition
Construction: State of Alaska Standard Specifications for Highway Construction, July, 1965, and the Special Provisions.
- Live Load:** HS20 - 44
- Concrete:** All structural concrete shall be Class "A" with a minimum compressive strength of 3,000 psi at 28 days. Concrete for pavement and prestressed girders shall conform to specification requirements.
- Reinforcing Steel:** All bar reinforcing steel shall be intermediate grade.
- Structural Steel:** All structural steel shall conform to ASTM A36 except anchor bolts shall conform to ASTM A307.
- Piling:** Piling shall be 10BP57 driven or seated into solid rock.
- The Contractor shall notify the Ketchikan Public Utilities District of his intentions to excavate in the vicinity of underground utilities prior to the time of excavation.
- Locations of underground utilities are approximate only.
- Grades and alignment shown on these plans are subject to minor revisions.
- All waste and/or surplus material encountered on this project will be disposed of by the Contractor at locations of his own choice and as approved by the engineer. There is no payment for overhaul of unclassified excavation designated as waste and/or surplus material by the engineer. No overhaul will be paid for borrow.

CONVENTIONAL SIGNS	
R/W	RIGHT-OF-WAY
⊙	INTERSECTION POINT
●	EXISTING UTILITY POLE
○	EXISTING WOOD PILE
•	NEW WOOD PILE
⊙	EXISTING MANHOLE
⊞	EXISTING TIMBER STRUCTURE
⊞	BOX INLET
⊞	GATE VALVE
⊞	EXISTING CORPORATION STOP
⊞	NEW ORISEAL VALVE
⊞	CONCRETE BLOCKING (FIGURE INDICATES SQ. FT. OF BEARING AREA)

ABBREVIATIONS	
B. F.	BLIND FLANGE
B. I.	BOX INLET
C. I.	CAST IRON
C. M. P.	CORRUGATED METAL PIPE
F. E.	FLANGE END
F. H.	FIRE HYDRANT
G. I.	GUTTER INLET
G. V.	GATE VALVE
H. E.	HUB END
H. P.	HIGH PRESSURE
H. S.	HOUSE SEWER
L. P.	LOW PRESSURE
M. H.	MANHOLE
R.	RADIUS
S. W.	SIDEWALK
W. M.	WATER MAIN
W. S.	WATER SERVICE
N. F.	NEAR FACE (REINF.)
F. F.	FAR FACE (REINF.)
V.	VERTICAL (REINF.)
H.	HORIZONTAL (REINF.)

ESTIMATE OF QUANTITIES

ITEM #	DESCRIPTION	UNIT	QUANTITY
202(1)	Removal of Structures & Obstructions	Lump Sum	All Req'd
202(5)	Removal of pipe, box inlets & fire hydrants	Lump Sum	All Req'd
203(3)	Unclassified Excavation	Cubic yard	500
203(5)	Borrow	Cubic yard	2,500
206(1)	Structure Excavation	Cubic yard	50
207(1)	Class 1 Excavation for Structures	Cubic yard	200
207(4)	Filter Material	Cubic yard	65
307(2)	Subbase, Grading B	Cubic yard	780
501(1)	Concrete Pavement	Square Yard	1,890
601(1)	Class A Concrete	Cubic Yard	520
602(1)	Reinforcing Steel	Pound	94,730 - 28,125# Galvanized 66,605# Non-Galvanized
602(2)	Welded Wire Fabric	Pound	19,400
603(6)	18" Bituminous Coated Corrugated Metal Pipe 16 Ga.	Lin. Ft.	5
603(6a)	24" Bituminous Coated Corrugated Metal Pipe 14 Ga.	Lin. Ft.	8
603(3)	Relay sewer & drain pipe	Lin. Ft.	61
604(2)	Inlets	Each	4
604(4)	Raising Existing Manhole & Inlet covers	Each	5
604(5)	6 Inch Concrete Pipe	Lin. Ft.	28
604(6)	8 Inch Concrete Pipe	Lin. Ft.	63
604(7)	8 Inch Concrete Bends	Each	1
608(1)	Concrete Sidewalk	Sq. yard	520
614(1)	Survey Monument	Each	2
615(1)	Standard Signs	Each	9
630(3)	Structural Steel Piles, Furnished & Driven	Lin. Ft.	150
630(9)	Test Piles (Structural Steel)	Each	4
632(1)	Prestressed Concrete Beams	Each	32
634(1)	Aluminum Bridge Railing	Lin. Ft.	560
640(6)	Fire Hydrant Furnished & Installed	Each	2
640(23a)	2" oriseal valve	Each	3
640(23b)	3/4" oriseal valve & blow-off line	Each	1
640(19)	Disconnect Existing Water Service	Each	12
640(10a)	8" Gate Valves	Each	3
640(10b)	6" Gate Valves	Each	1
640(20)	Plug Existing Water Main	Each	1
640(2a)	8" C I Water Pipe	Lin. Ft.	340
640(2b)	6" C I Water Pipe	Lin. Ft.	20
640(9)	2" Copper Service Line	Lin. Ft.	85
640(25)	Insulation	Lin. Ft.	60
640(24)	Excavation for Water Line	Cubic Yd.	90
646(1)	Utility vault & conduit installation	Lump Sum	All Req'd
647(1)	Drilling & Grouting	Lin. Ft.	400
648(1)	Incidental & Misc. Const.	Lump Sum	All Req'd
649(1)	Fish House Wall	Lump Sum	All Req'd
I	FURNISHING & MAINTAINING ENGINEERING FACILITIES	LUMP SUM	ALL REQ'D.

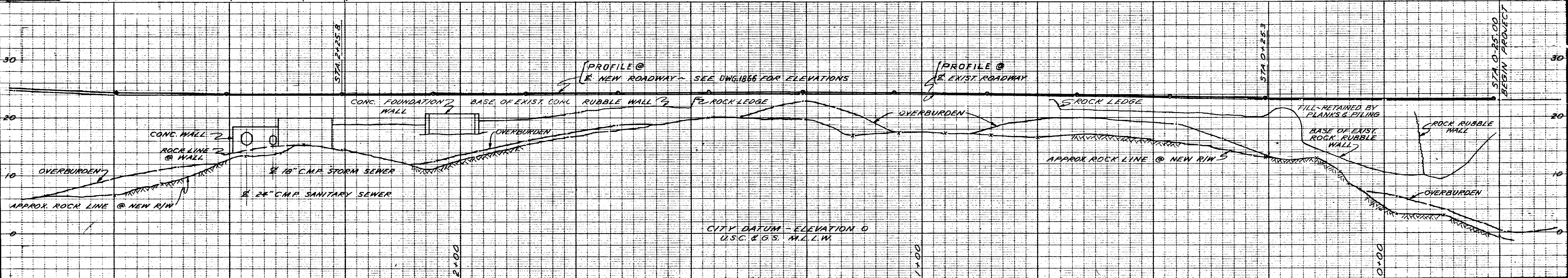
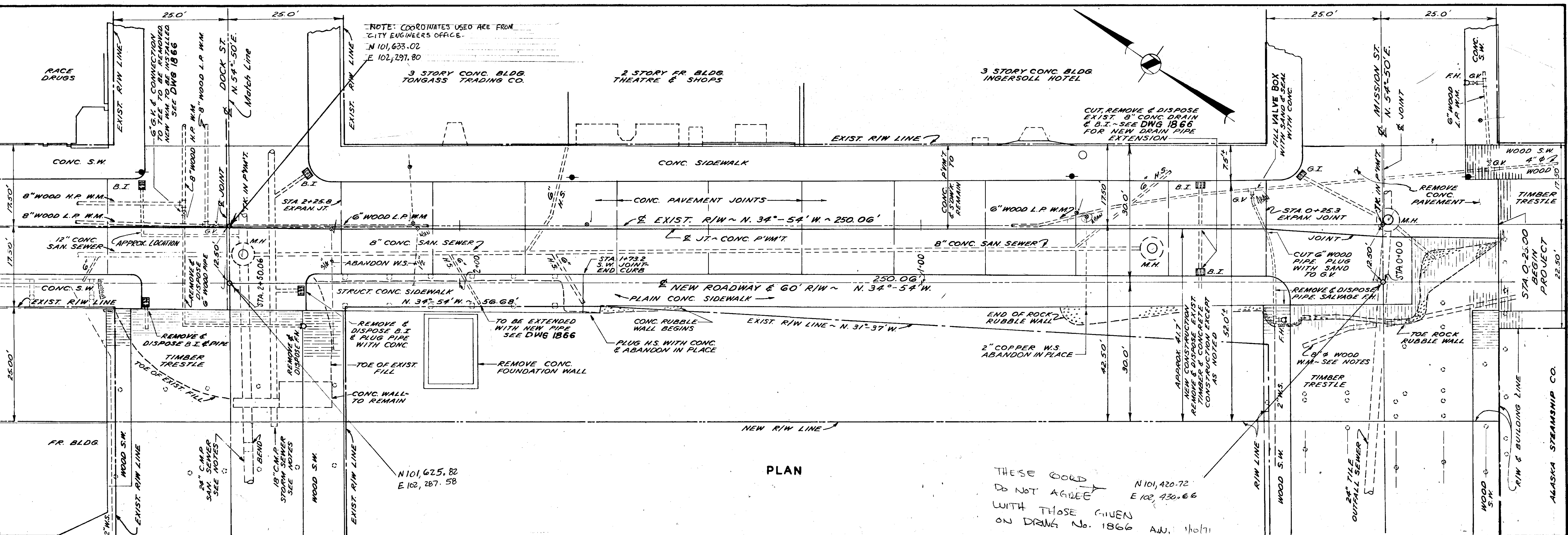
TABLE OF STANDARD SIGNS			
STATION	OFFSET	TYPE	NO.
6+20	29' R	No Right Turn	R3-1
5+91	29' R	No Parking Here to Corner	R7-1
5+51	29' R	No Parking Loading Zone	R7-6
5+06	29' R	No Parking Loading Zone	R7-6
4+00	11' R	No Parking Loading Zone	R7-6
3+20	11' R	No Parking Loading Zone	R7-6
2+90	11' R	No Parking Anytime	R7-1
2+31	29' L	STOP (24'x24')	R1-1
0-24	25' L	STOP (24'x24')	R1-1
TOTAL			9

AS ADVERTISED

FRONT STREET
GRANT ST. TO MISSION ST.
INDEX, CONVENTIONAL SIGNS &
ABBREVIATIONS, GENERAL NOTES, &
ESTIMATE OF QUANTITIES

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 3/12/69
Approved [Signature]
BRIDGE NO. 1080
DWNG. NO. 1862



- NOTES
- 8" WOOD WATER MAIN AT MISSION STREET. REMOVE & DISPOSE PIPE UNDER TRESTLE IN NEW CONSTRUCTION AREA.
 - 24" C.M.P. SANITARY SEWER AT DOCK STREET. CUT PIPE 12"± FROM FACE OF WALL. REMOVE 7'± OF PIPE TO VERTICAL BEND. CLEAN & COAT STUB WITH 2 COATS OF HOT ASPHALT. CONNECT STUB TO BEND WITH NEW 24" C.M.P. USE ASPHALT GRADE AASHTO M20 GRADE 120-150
 - 18" C.M.P. STORM SEWER AT DOCK STREET. CUT PIPE 12"± FROM FACE OF WALL. CLEAN & COAT STUB WITH 2 COATS OF HOT ASPHALT. CONNECT NEW 4' LENGTH OF 18" C.M.P. TO STUB.

ELEVATIONS ARE REFERENCED TO U.S.C. & G.S. B.M. ELEV. 33.86 MLLW LOCATED ON FACE OF KETCHIKAN COLD STORAGE CO. BUILDING AT CORNER OF FRONT & GRANT STREETS

HIGH TIDE OF RECORD ELEV. 20.8 MLLW

AS ADVERTISED

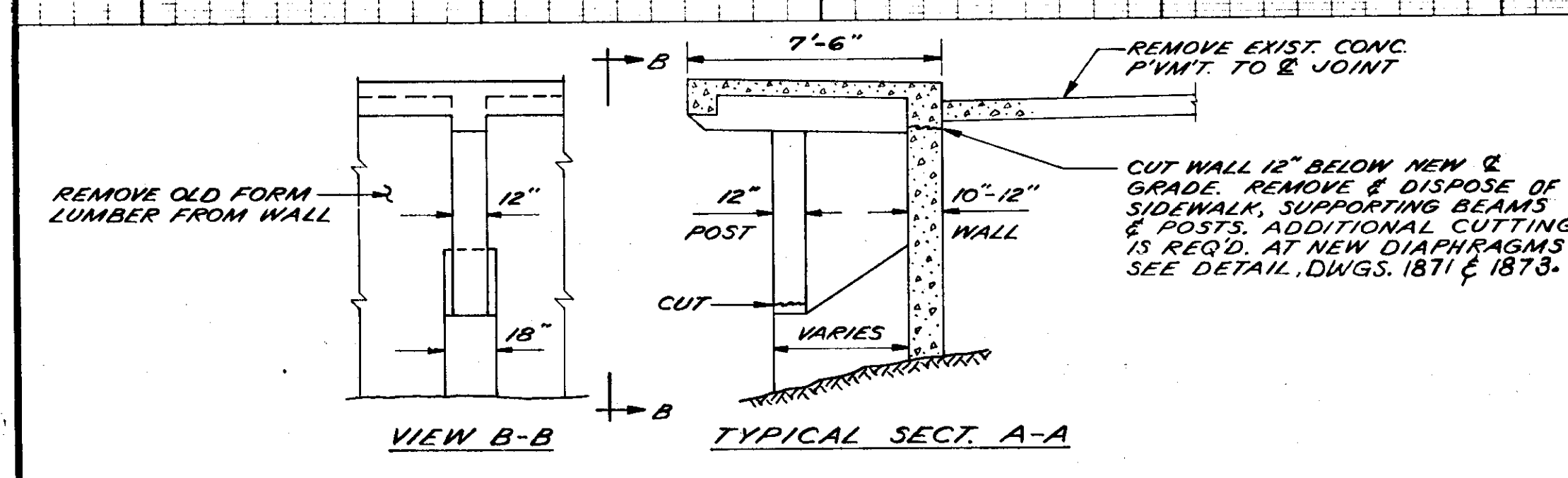
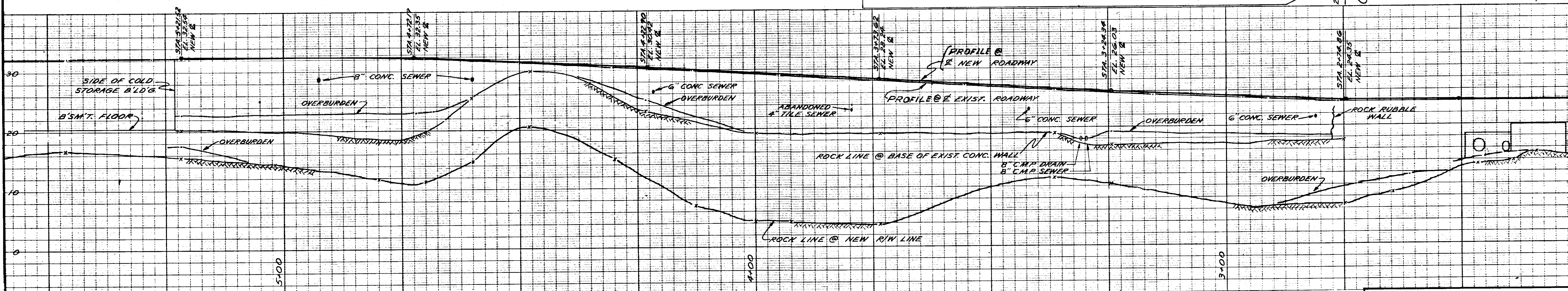
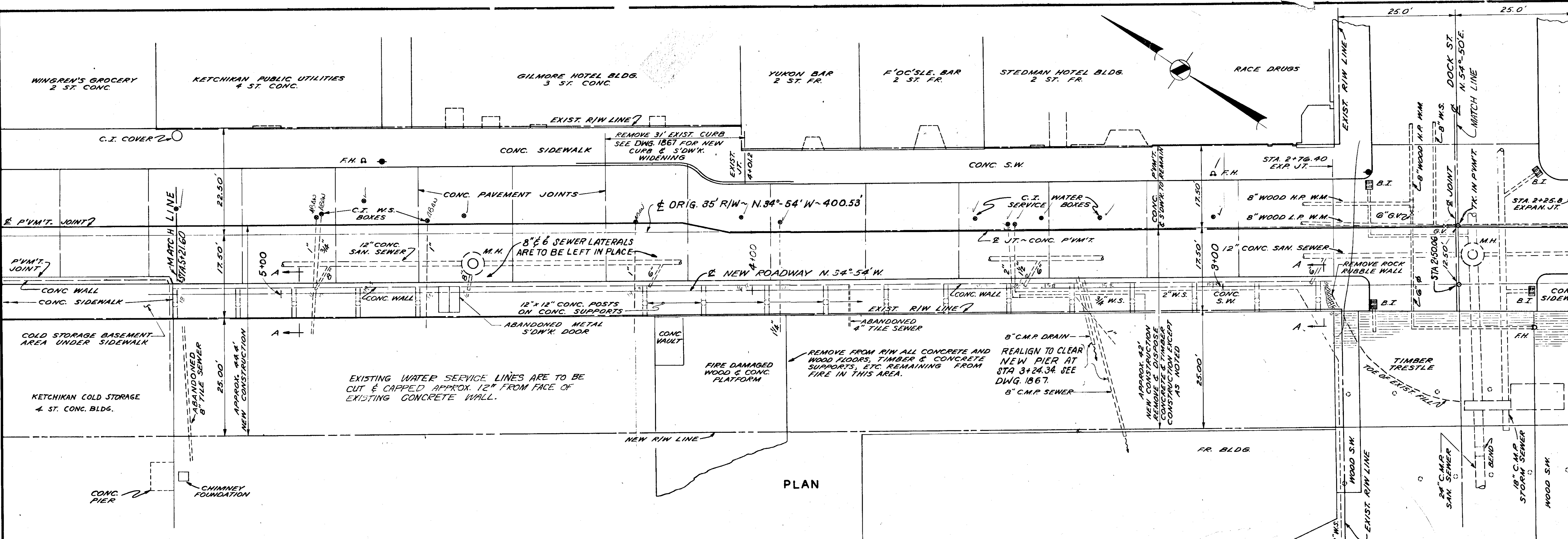
Note: Revised by Alaska Department of Highways, 1967.

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
FRONT STREET
GRANT ST. TO MISSION ST.
KETCHIKAN, ALASKA

ALIGNMENT & TOPOGRAPHY
STA. 0-25 TO STA. 2+50

LANGDALE AND CONNELL
1031 SECURITIES BLDG.
SEATTLE 1, WASHINGTON

DATE _____, 1966
DWNG. NO. 1863



NOTE: THE SEWER & DRAIN PIPES ON THE "PROFILE" ARE SHOWN AT EXISTING CONC. WALL.

Note: Revised by Alaska Department of Highways, 1957.

AS ADVERTISED

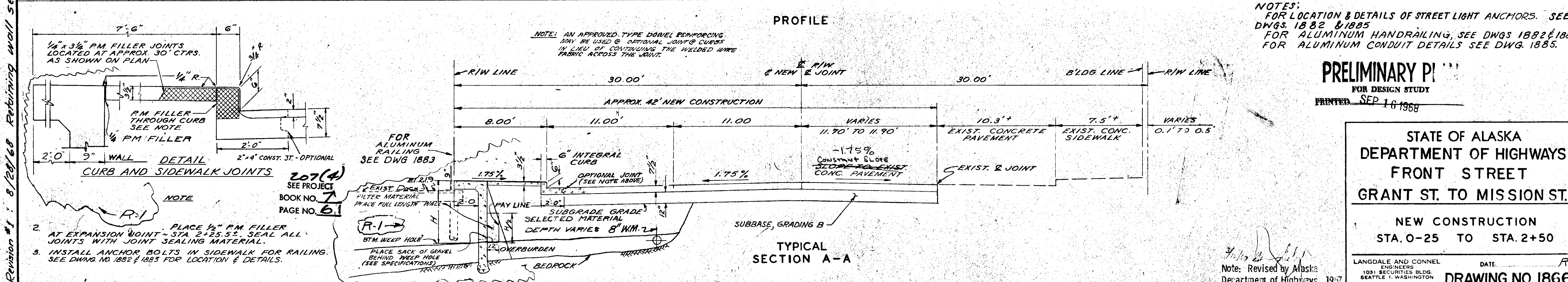
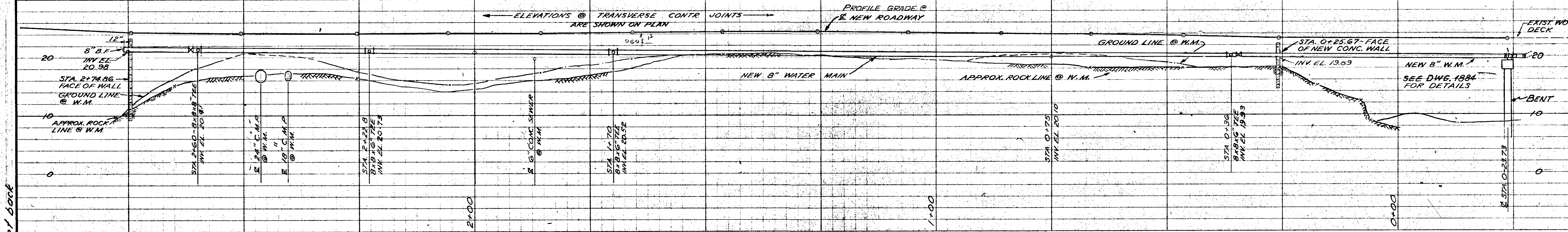
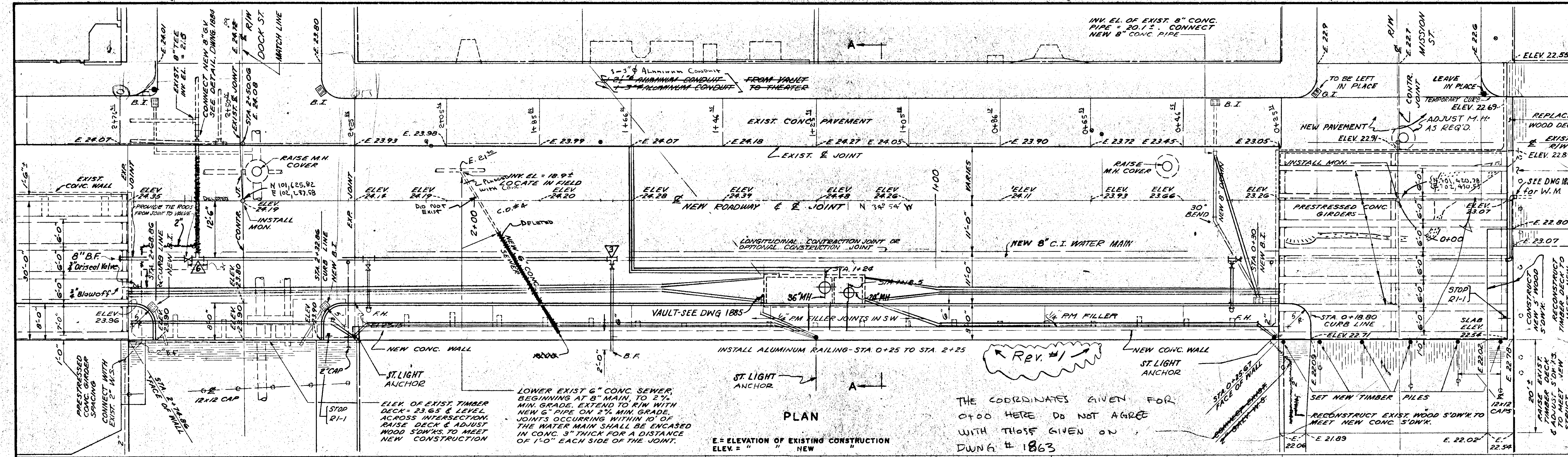
STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
FRONT STREET
GRANT ST. TO MISSION ST.
KETCHIKAN, ALASKA

ALIGNMENT & TOPOGRAPH
STA. 2+50 TO STA. 5+21.6

LANGDALE AND CONNELL
 ENGINEERS
 1031 SECURITIES BLDG.
 SEATTLE 1, WASHINGTON

DATE.....
 DWNG. NO. 1864

Revision #1: 8/20/68 Retaining wall set back



NOTES:
FOR LOCATION & DETAILS OF STREET LIGHT ANCHORS. SEE DWGS. 1882 & 1885
FOR ALUMINUM HANDRAILING, SEE DWGS 1882 & 1885.
FOR ALUMINUM CONDUIT DETAILS SEE DWG. 1885.

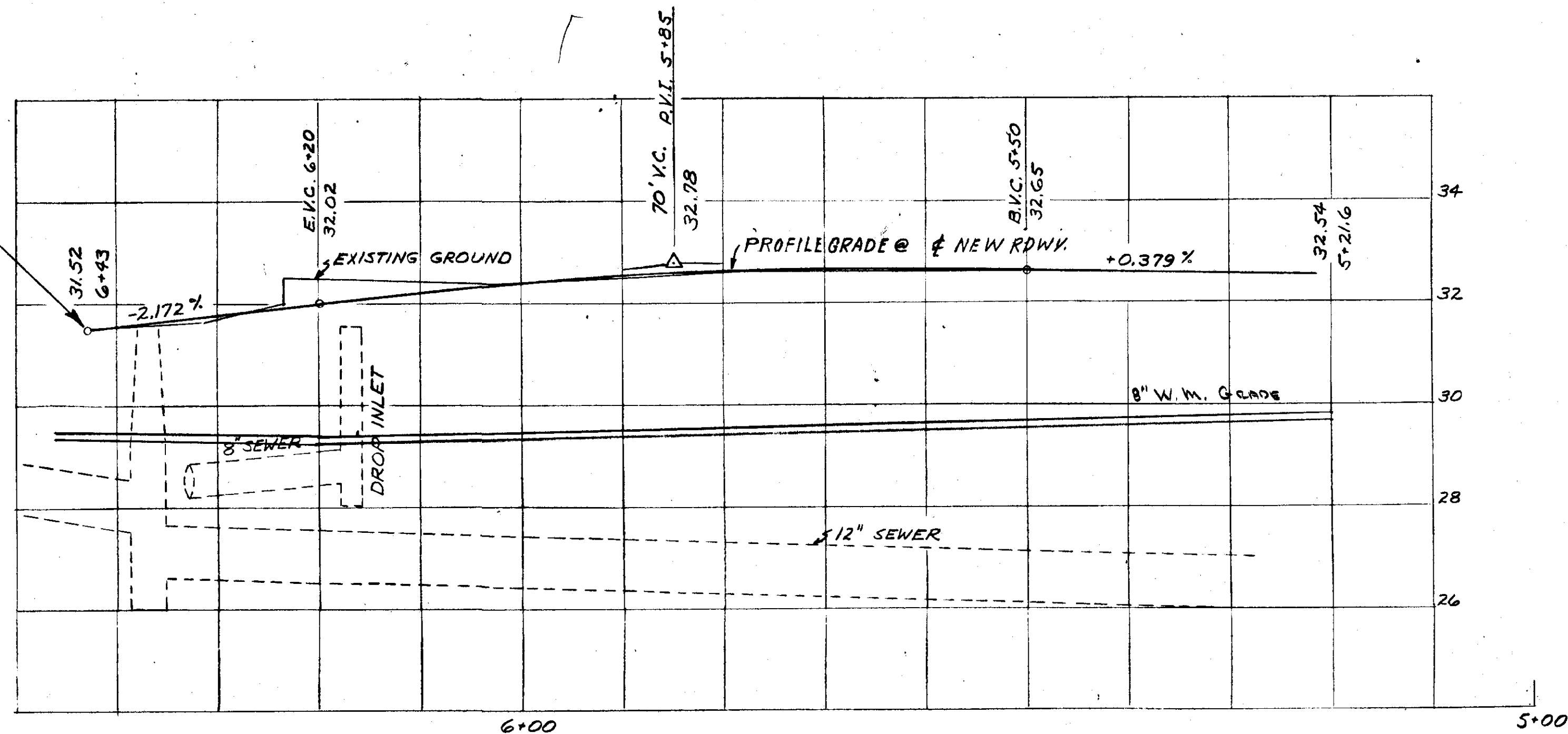
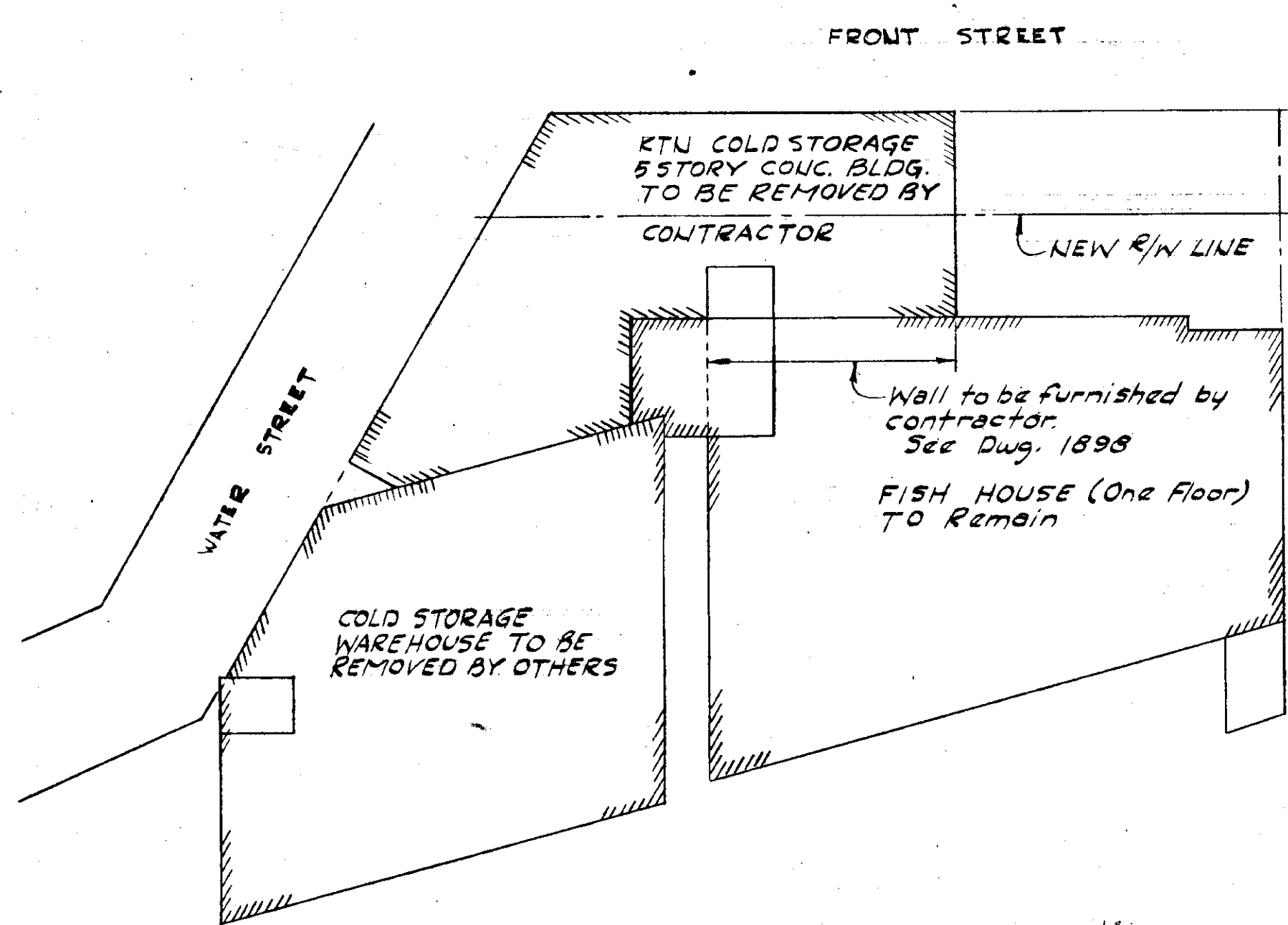
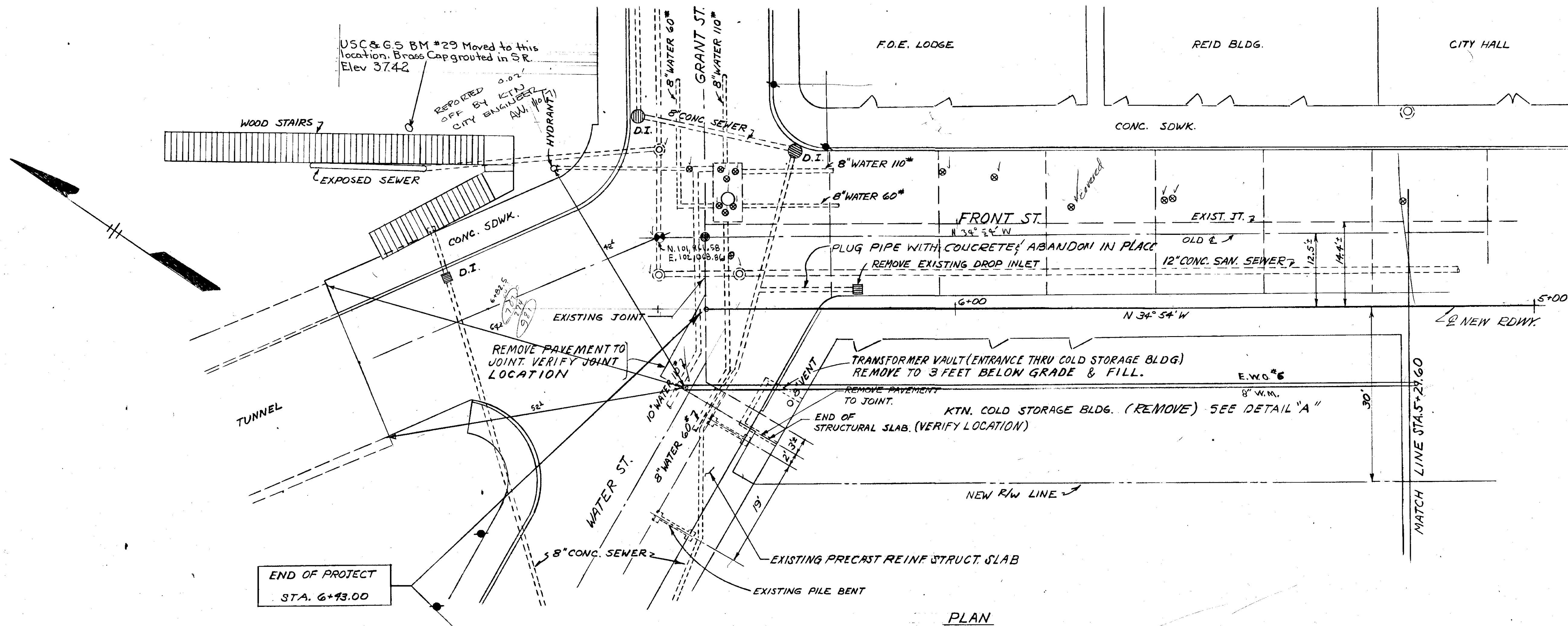
PRELIMINARY P
FOR DESIGN STUDY
PRINTED SEP 16 1968

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
FRONT STREET
GRANT ST. TO MISSION ST.

NEW CONSTRUCTION
STA. 0+25 TO STA. 2+50

LANGDALE AND CONNELL
1031 SEATTLE BLDG.
SEATTLE 1, WASHINGTON
Note: Revised by Alaska
Department of Highways, 1967.
DRAWING NO. 1866

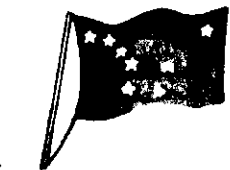
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-2(2)	1968		



FRONT STREET
GRANT ST. TO MISSION ST.
ALIGNMENT & TOPOGRAPHY
STA. 5+21.60 TO STA. 6+43.00

State of Alaska
DEPARTMENT OF HIGHWAYS
 Juneau, Alaska

Date 7/12/68
 Approved (Signature)

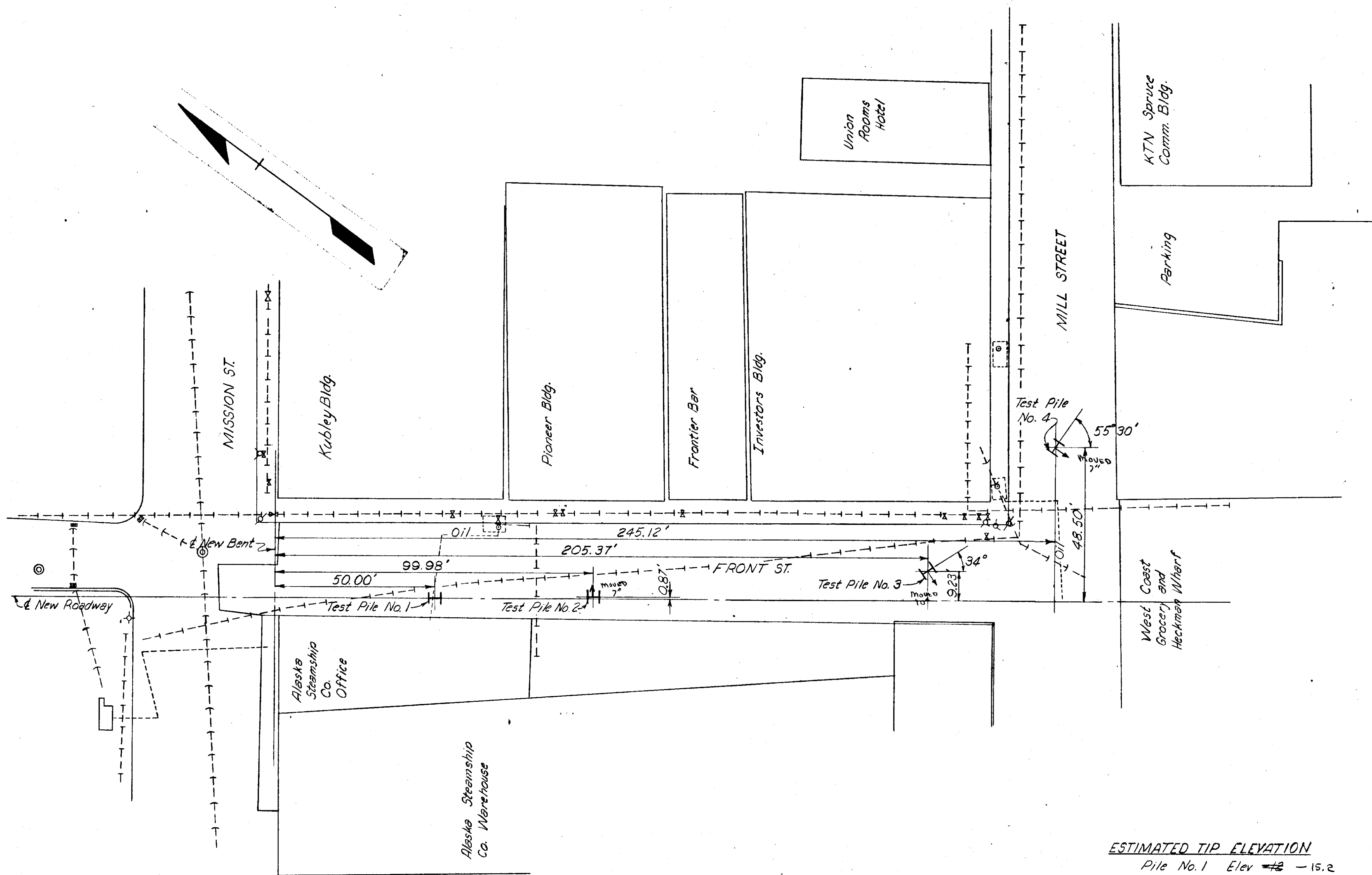


BRIDGE NO. 1080
 DWNG. NO. 1865

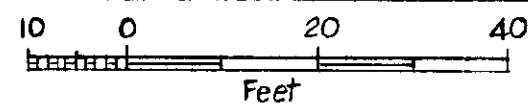
AS ADVERTISED

Checked By: J. D. E. Date: 7/12/68
 Drawn By: J. D. E. Date: 7/12/68
 Traced By: J. D. E. Date: 7/12/68

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-2(2)	1968		



PILE LOCATION PLAN

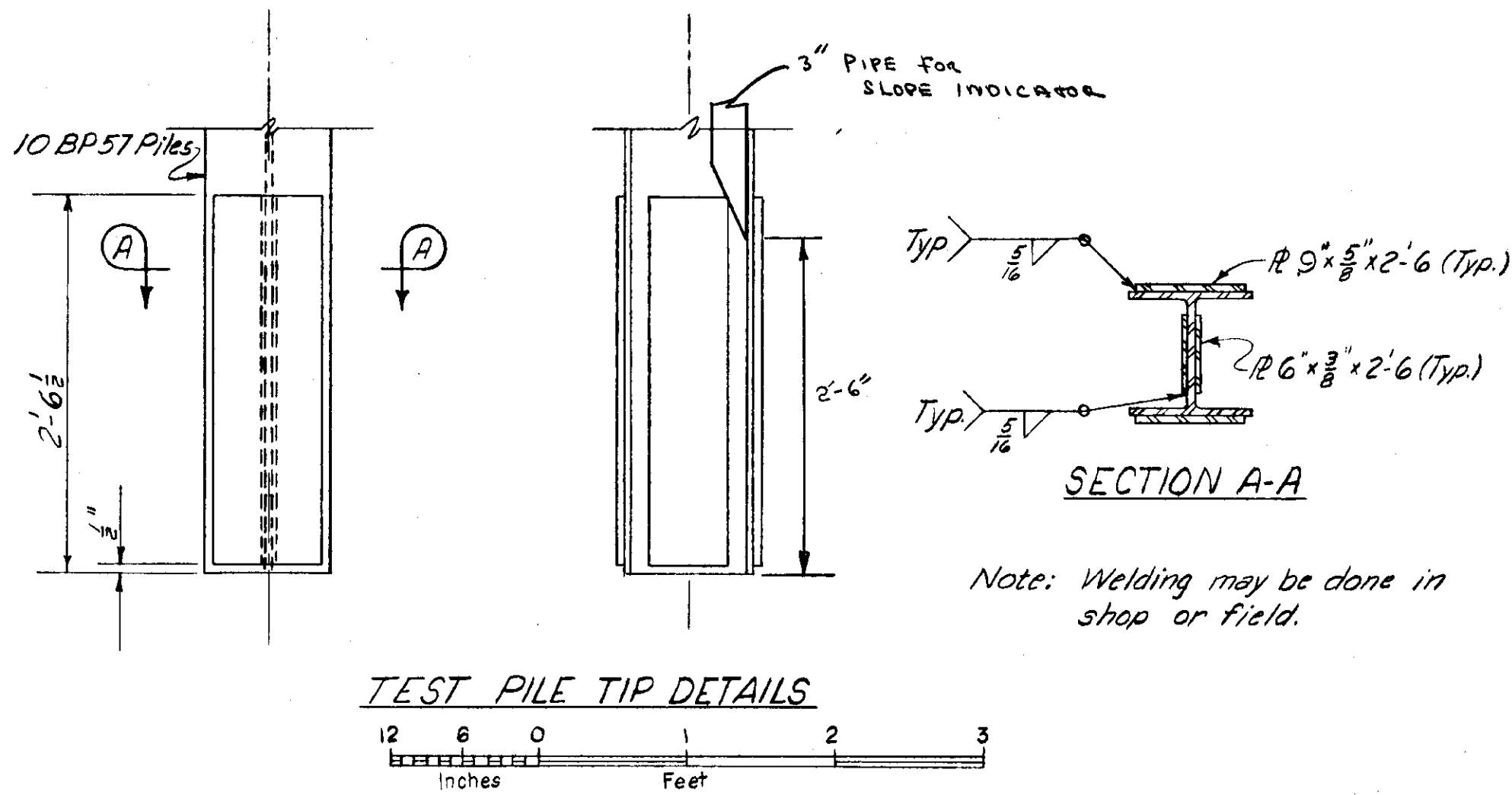


Note: Topography as of December, 1966.
All piles shall be 10BP 57 and shall be driven to refusal in bedrock.
Cut line at Pile No. 1 shall be relocated to clear pile.

ESTIMATED TIP ELEVATION

Pile No. 1 Elev. ~~+12~~ -15.2
Pile No. 2 Elev. ~~+16~~ -18.5
Pile No. 3 Elev. ~~+32~~ -30.2
Pile No. 4 Elev. ~~+55~~ -46.5

Cut-off Elevation = +19 for all piles



AS ADVERTISED

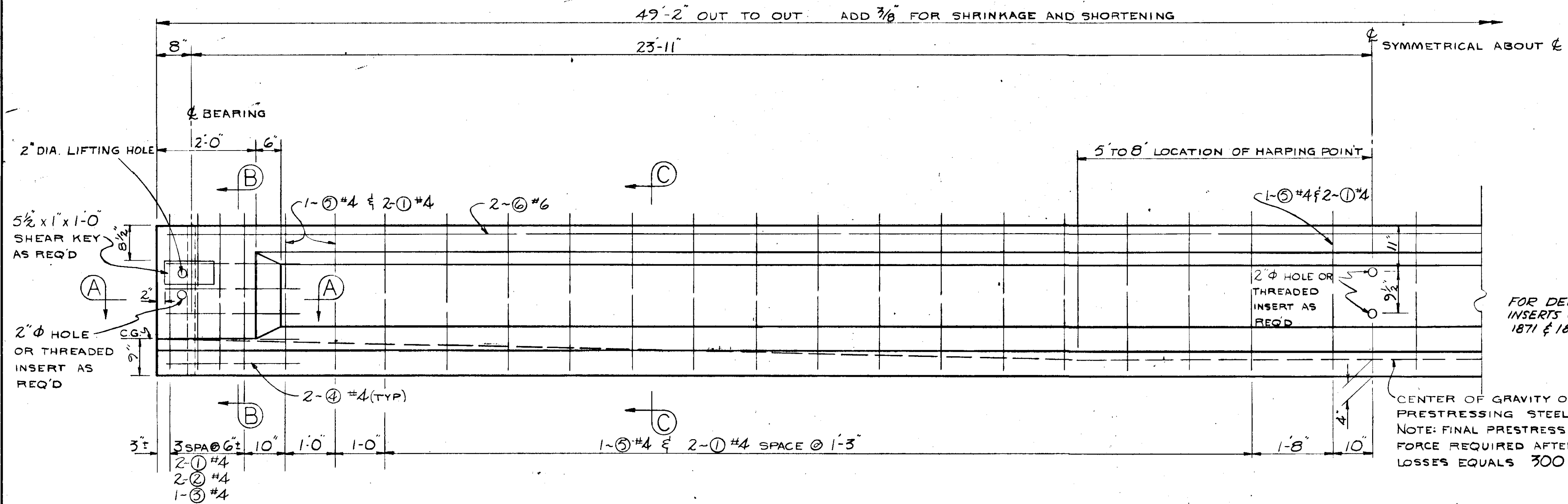
FRONT STREET
GRANT ST. TO MISSION ST.
TEST PILES

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

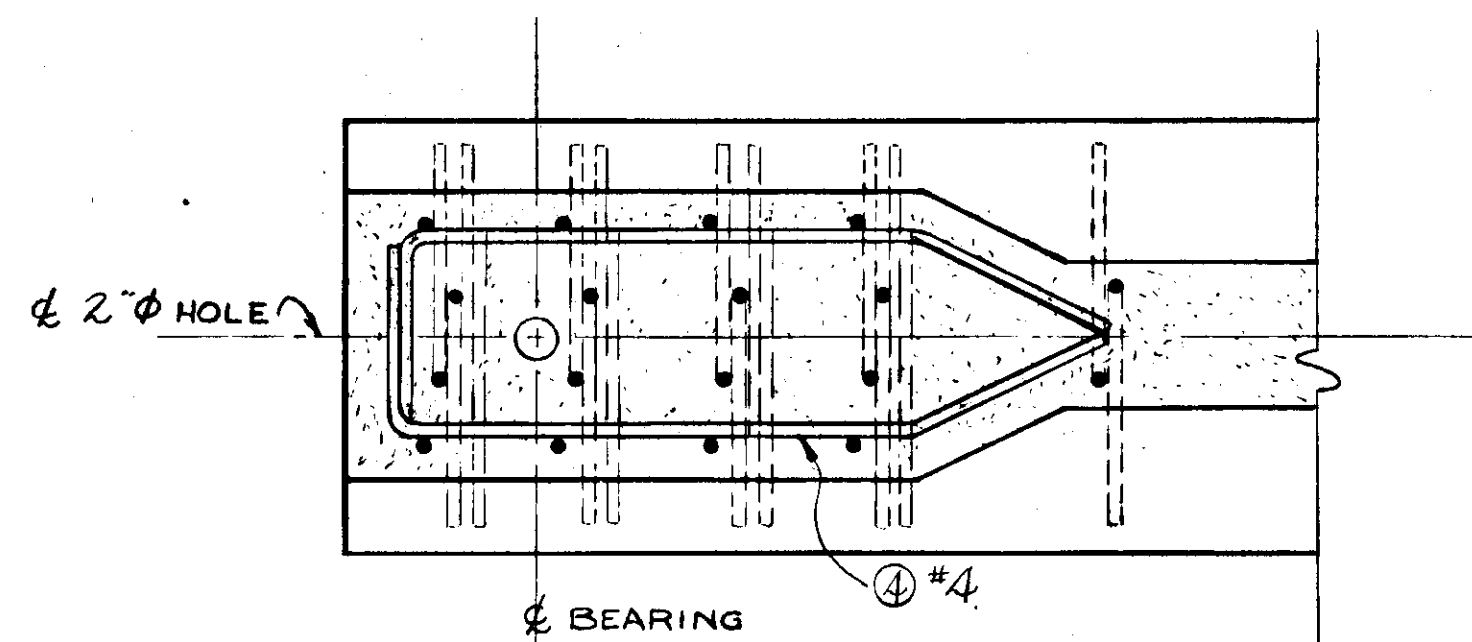
Date 3/2/68
Approved [Signature]

BRIDGE NO. 1080
DWNG. NO. 1869

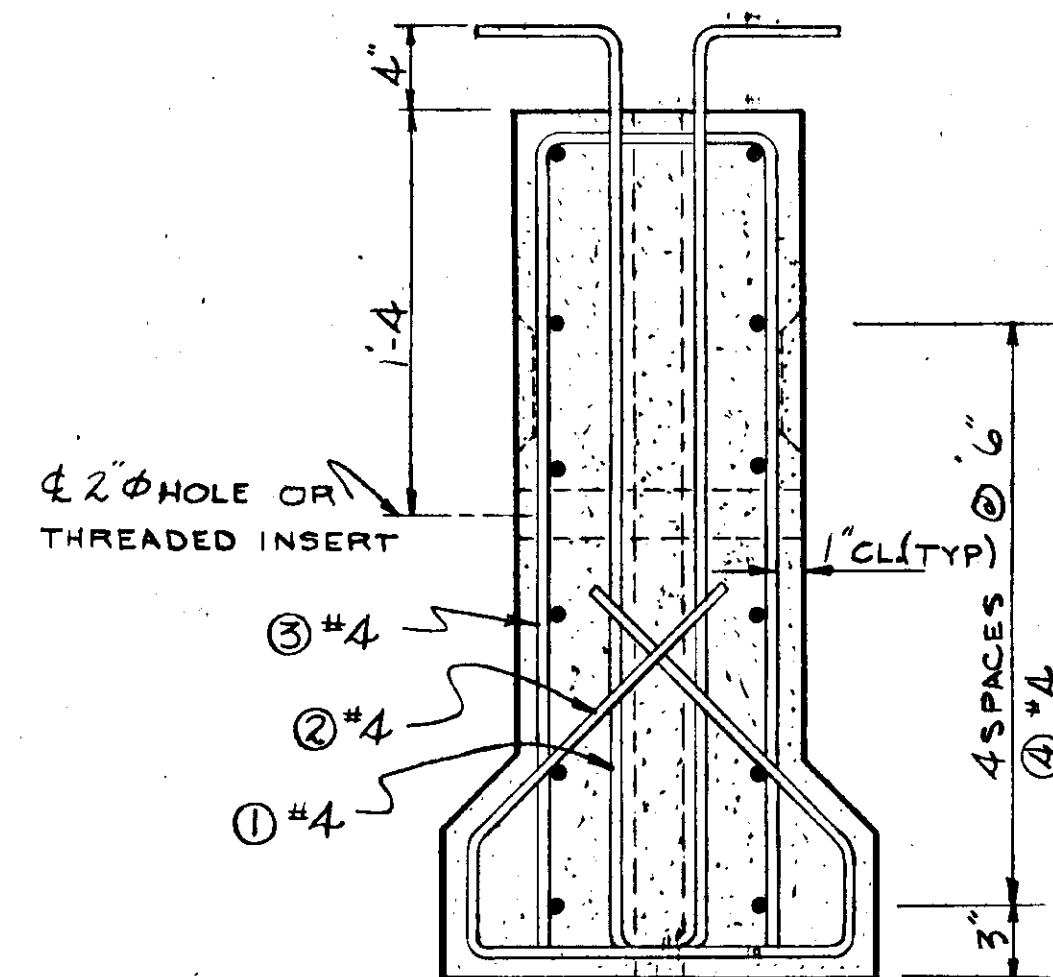
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-2(2)	1968	-	-



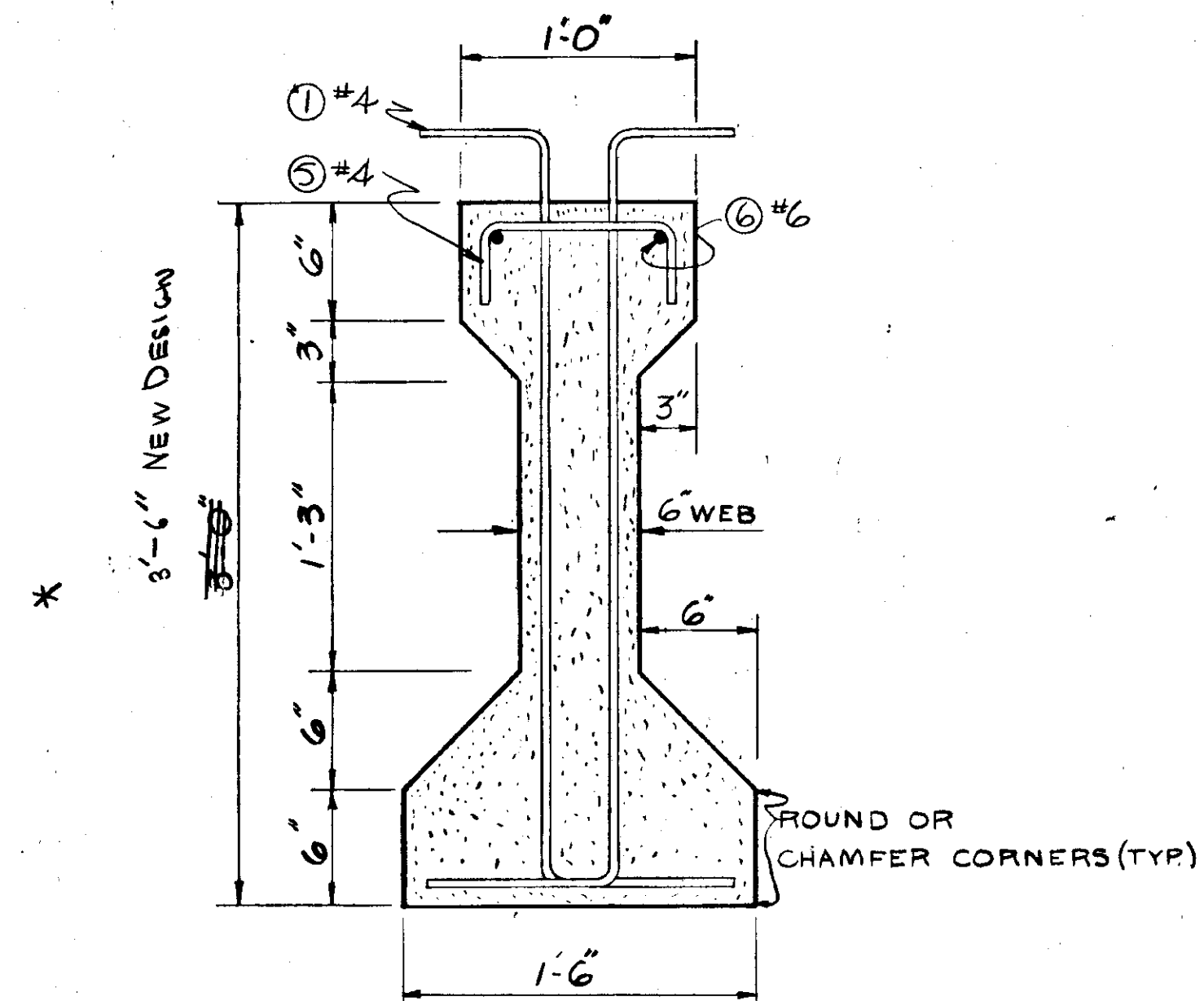
GIRDER ELEVATION
(32 GIRDERS REQ'D.)



SECTION A-A

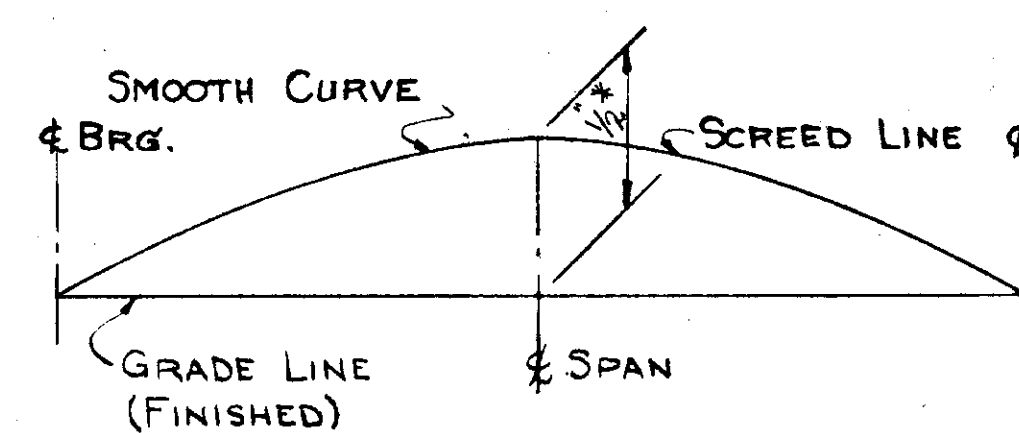


SECTION B-B



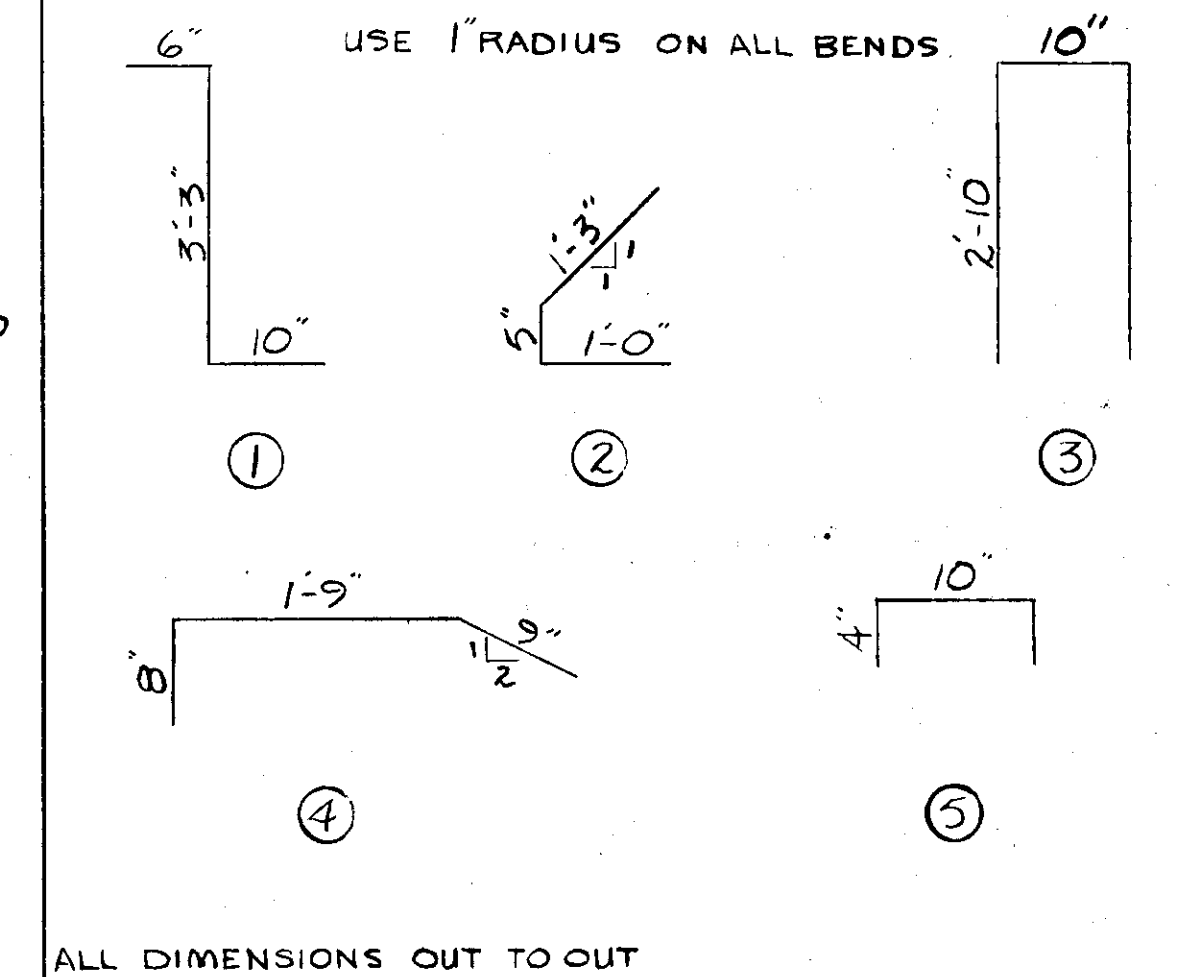
SECTION C-C

NOTE: BEAM SECTION USED IS STANDARD
AASHTO-PCI TYPE II BEAM.
SEE SPECIAL PROVISIONS



SCREED LINE

BAR LIST (ONE GIRDER)					
MARK	LOCATION	SIZE	LENGTH	BENT	No. REQ'D
1	GIRDER	#4	4'-7"		88
2	END BLOCK	#4	2'-8"		16
3	"	#4	6'-6"		8
4	"	#4	3'-2"		20
5	GIRDER	#4	1'-6"		36
6	"	#6	49'-0"	STR.	2



GENERAL NOTES

PRECAST PRESTRESSED CONCRETE. THE MINIMUM COMPRESSIVE STRESS SHALL BE 4000 PSI AT TRANSFER OF PRESTRESS AND 5000 PSI AT AGE OF 28 DAYS.

PRESTRESSING STEEL. USE 7 WIRE 1/2" OR 7/16" STRAND HAVING AN ULTIMATE TENSILE STRENGTH OF 270 OR 250 KSI. MINIMUM YIELD POINT STRESS SHALL BE A MINIMUM OF 85% OF ULTIMATE STRENGTH. PRETENSIONED PRESTRESSING STEEL SHALL BE SPACED AT 2" CENTER TO CENTER MINIMUM AT BEAM ENDS. FINAL PRESTRESSING FORCE AND LOCATION SHALL BE EQUIVALENT TO THAT SHOWN ON PLANS.

PRESTRESSING AND DIMENSION CHANGES. END BLOCK REINFORCING IS DESIGNED FOR PRETENSIONING METHODS ONLY. POST-TENSIONING MAY BE USED IF AN ADEQUATE INCREASE IN END BLOCK REINFORCING IS MADE. OMISSION OF END BLOCKS, WHEN PRETENSIONING IS USED, MAY BE APPROVED PROVIDING ADEQUATE REINFORCING STEEL IS USED IN END REGIONS. ALL CHANGES MUST BE SHOWN ON SHOP PLANS AND SUBMITTED FOR APPROVAL.

HANDLING GIRDERS. MAINTAIN GIRDER IN AN UPRIGHT POSITION AT ALL TIMES. LIFT BY MEANS OF YOKE FASTENED THROUGH HOLES AT GIRDER END. APPROXIMATE GIRDER WEIGHT IS 19,000 LBS. ALTERNATE LIFTING ATTACHMENTS MAY BE SUBMITTED FOR APPROVAL.

FRONT STREET
GRANT ST. TO MISSION ST.
PRESTRESSED CONCRETE GIRDER

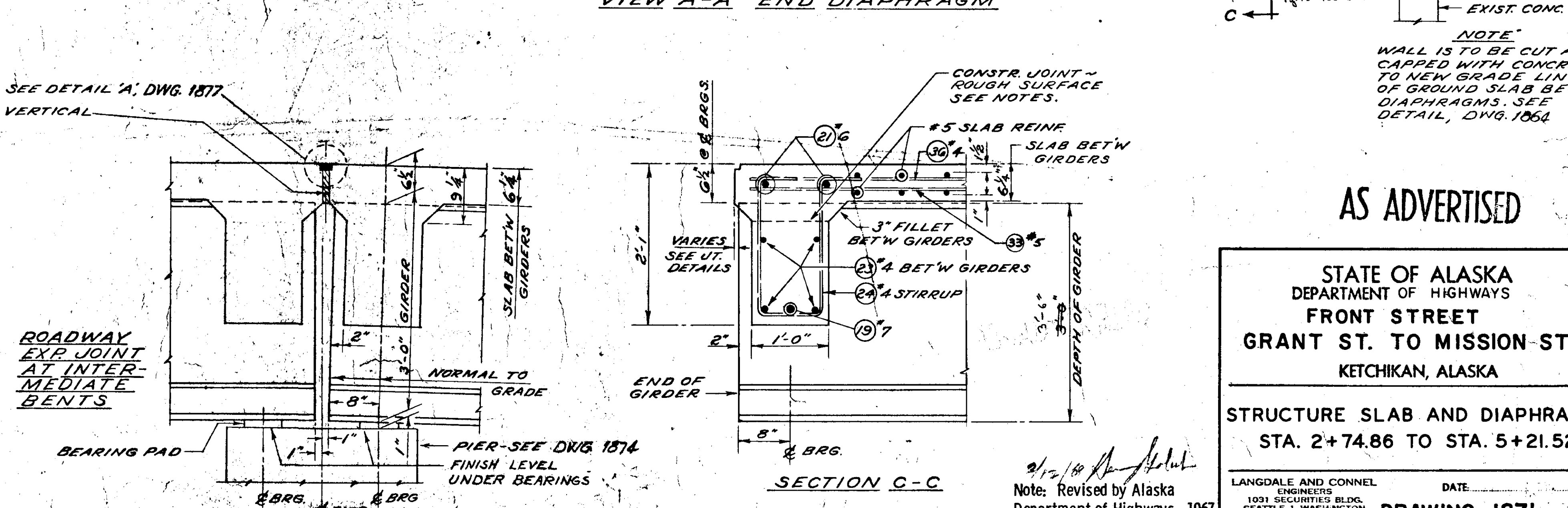
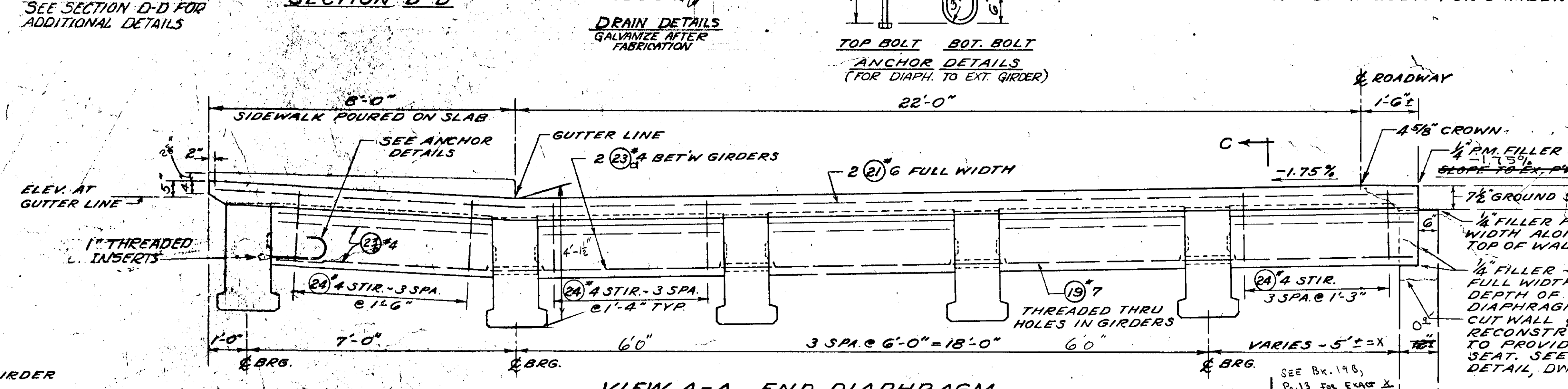
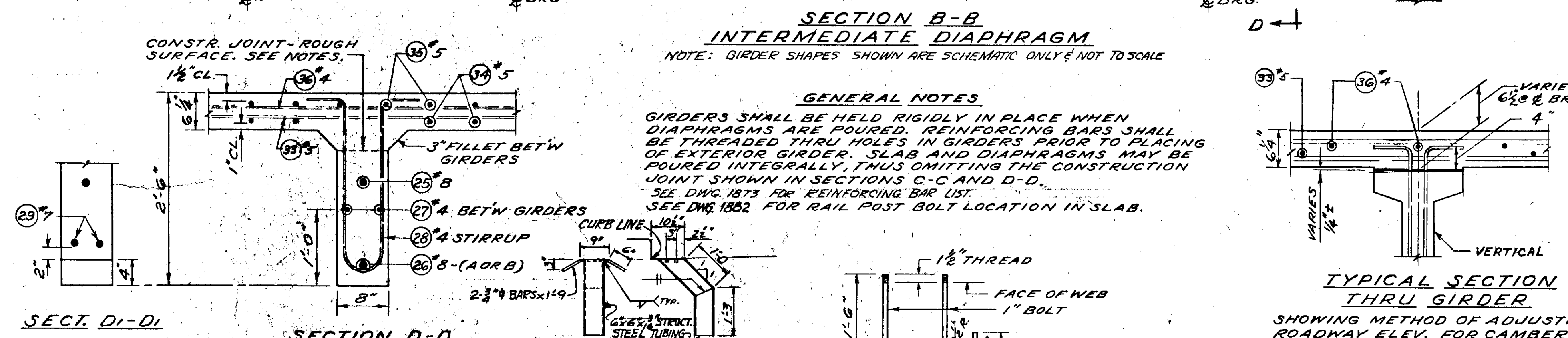
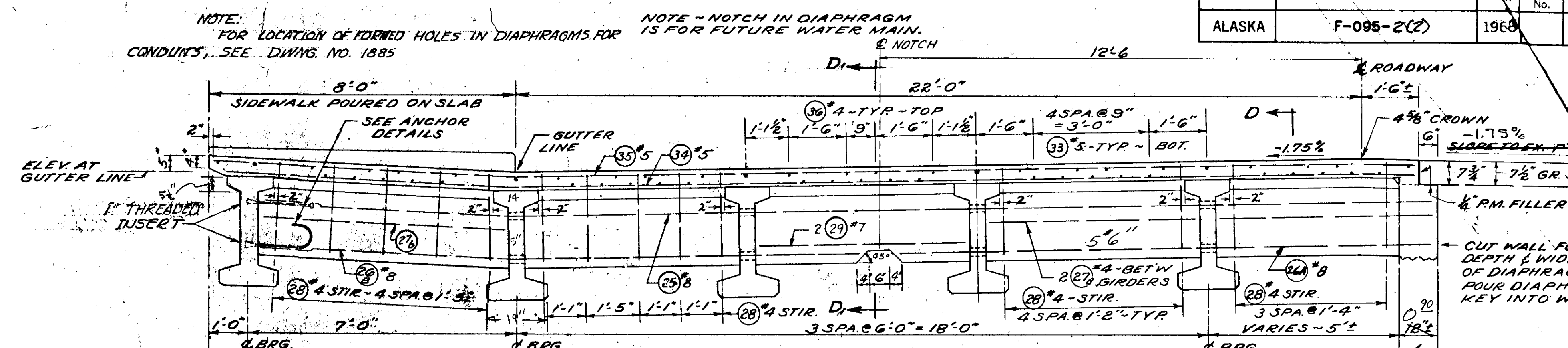
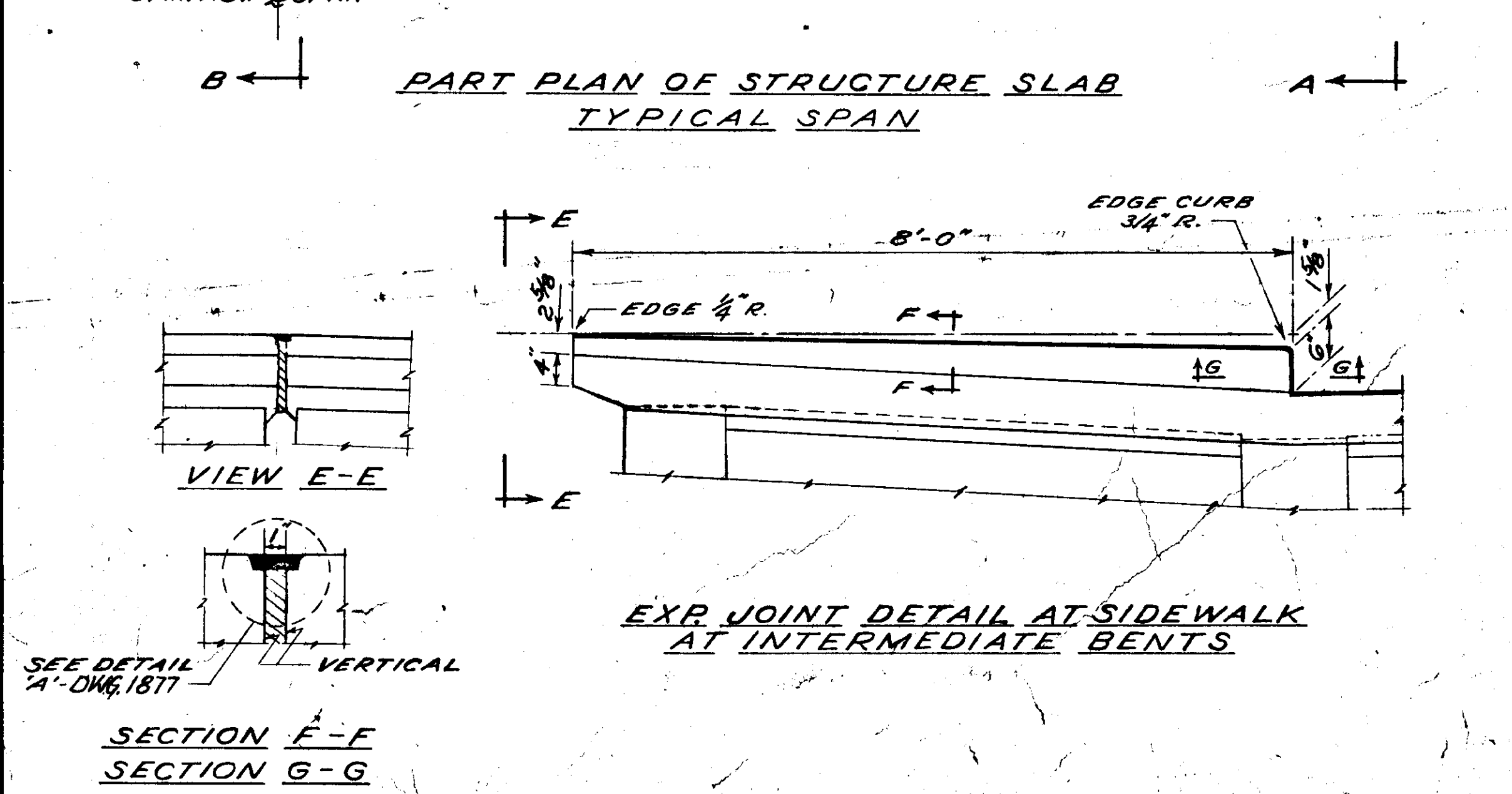
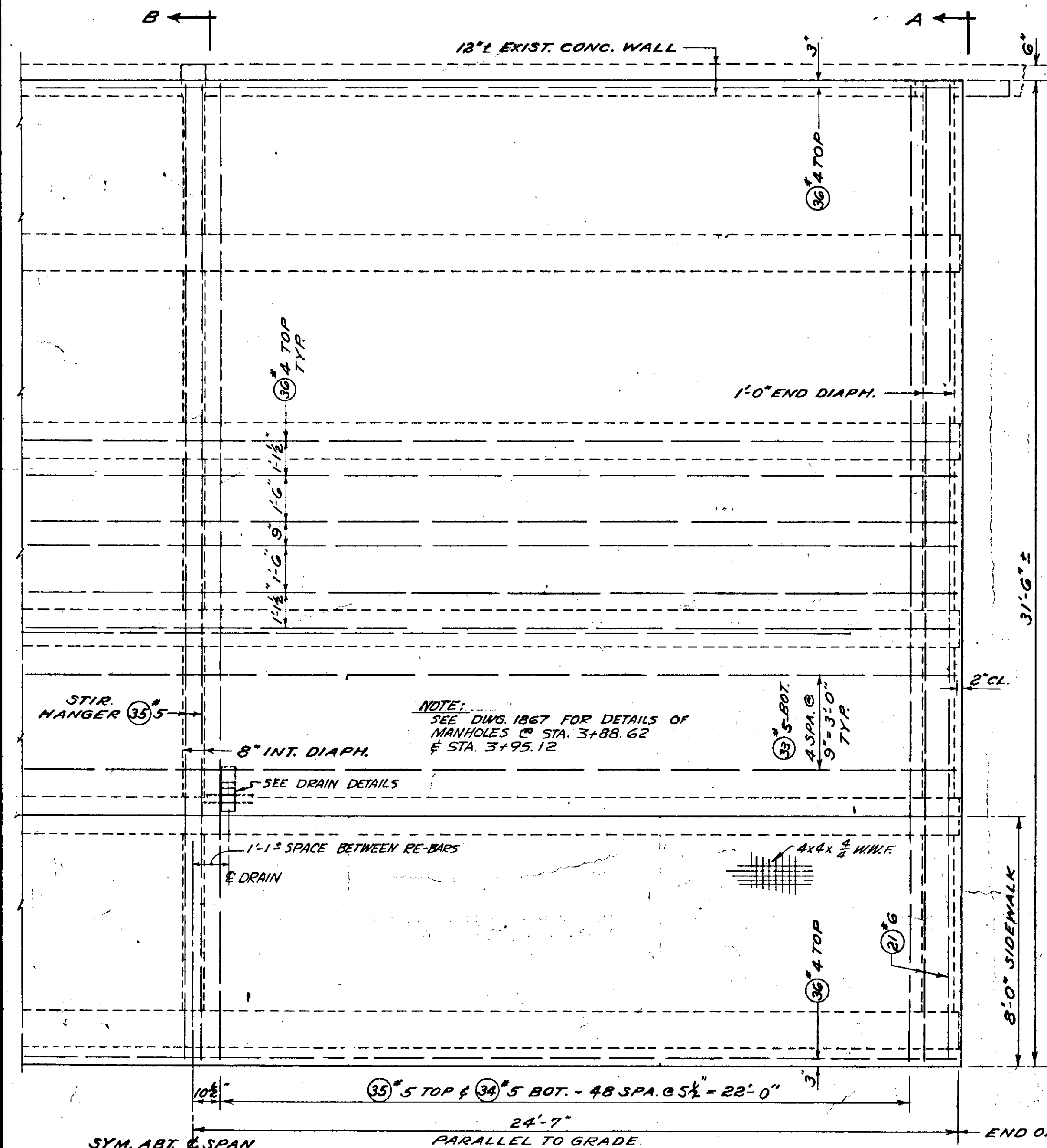
AS ADVERTISED

no scale

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7/1/68
Approved [Signature]

BRIDGE NO. 108
DWNG. NO. 187



AS ADVERTISED

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
FRONT STREET
GRANT ST. TO MISSION ST.
KETCHIKAN, ALASKA

STRUCTURE SLAB AND DIAPHRAGM
STA. 2+74.86 TO STA. 5+21.52

LANGDALE AND CONNELL
ENGINEERS
1931 SEQUOIA BLDG.
SEATTLE 1, WASHINGTON

DATE
Note: Revised by Alaska
Department of Highways, 1967

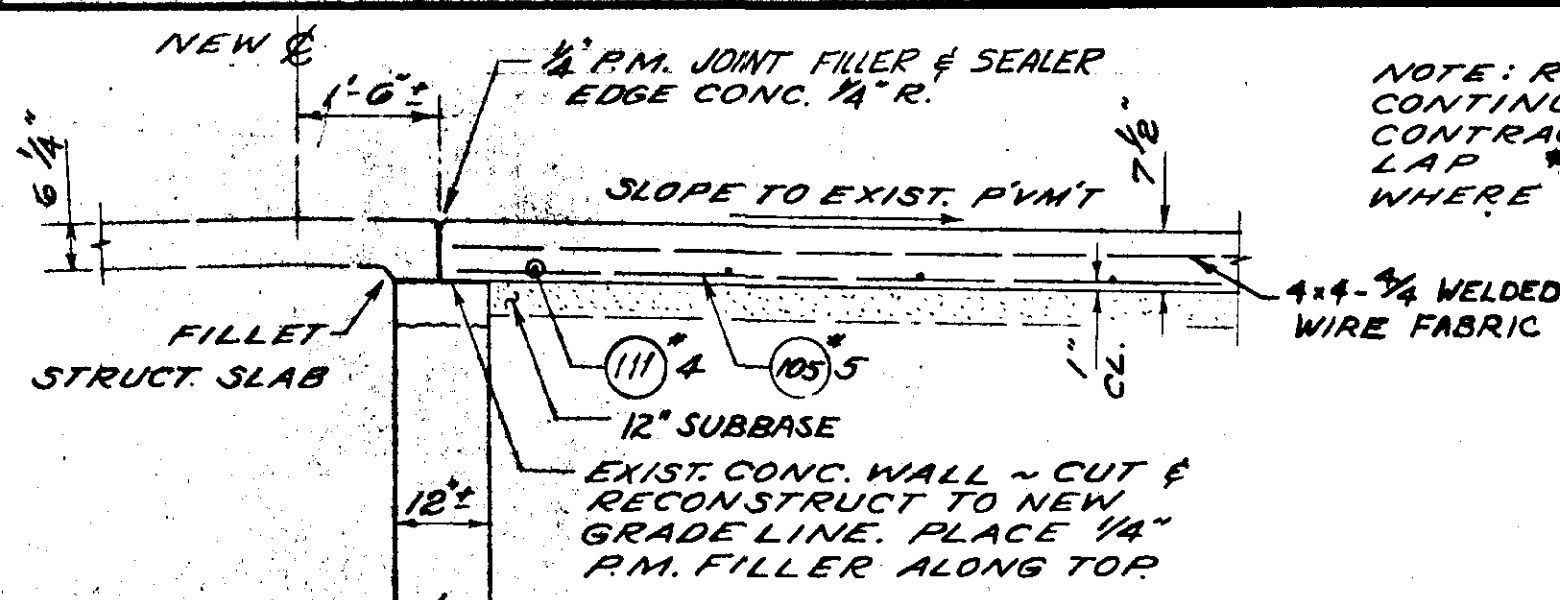
DRAWING 1871

BAR LIST

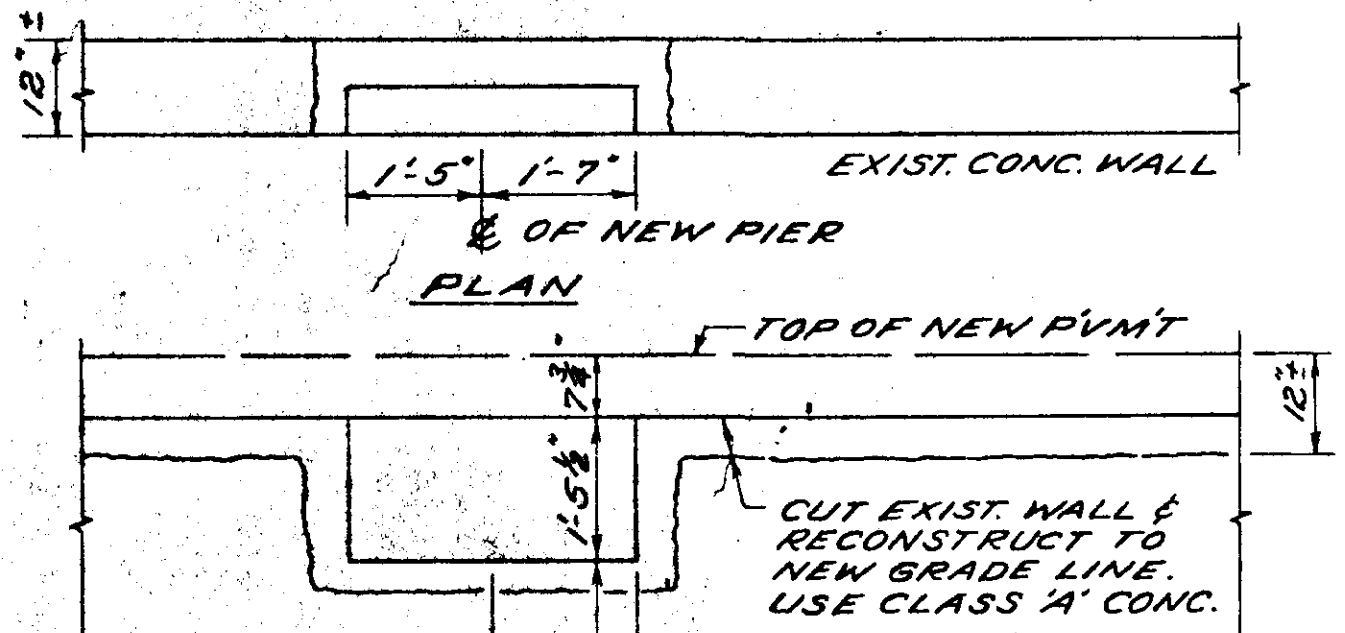
STRUCTURE SLAB & DIAPHRAGMS
DWGS 1871 & 1872

NOTE
LENGTH GIVEN INCLUDES LENGTH REQD
FOR SPLICES AS SHOWN ON THE PLANS.
ALL DIMENSIONS ARE OUT-TO-OUT.

MK.	LOCATION	SIZE	LENGTH FT.-IN.	NO. REQD	STRUCTURE AT MISSION ST. LENGTH FT.-IN.	NO. REQD	BENDING DIAGRAM
17	INTERMEDIATE DIAPH.	8			38'-3"	1	STR
18	END DIAPH.	7			38'-3"	2	STR
19	END DIAPH. - BOT.	7	32'-0"	2			STR
21	END DIAPH. - TOP (Transverse in Sbb)	6	31'-3"	4			STR
23a	END DIAPH. - WEBS BET'W GIRDERS	4	4'-9"	40	4'-9"	48	STR
24	END DIAPH. - STIRRUP	4	5'-5"	40	5'-5"	52	STR
25	INTERMEDIATE DIAPH. - TOP	8	30'-0"	1			STR
26a	INTERMEDIATE DIAPH. - BOT.	8	30'-0"	1			STR
27a	" " " " - WEBS BET'W GIRDERS	4	5'-3"	10	5'-3"	12	STR
28	" " " " - STIRRUP	4	5'-9"	24	5'-9"	26	STR
29	" " " " - AT BOT. OF DIAPH. WITH NOTCH FOR WATER PIPE	7	5'-5"	2	5'-5"	2	STR
30	STRUCTURE SLAB - Transverse @ End	6			40'-0"	4	
31	" " " " in Bot.	5			39'-9"	98	
32	" " " " in Top	5			40'-0"	100	
33	" " " " - LONGIT. in Bot	5	49'-0"	25	49'-0"	33	
34	" " " " - TRANSVERSE - BOT.	5	30'-9"	98			STR
35	" " " " - TOP	5	31'-2"	100			STR
36	" " " " - LONGIT. - TOP	4	49'-0"	26	49'-0"	34	STR
23B	End diaph. Web between girders (Ext.)	4	5'-9"	8			STR
27B	End diaph.	4	6'-3"	2			
Special	Hoops For M.H. ~ Sta 3+95.12 (in one span only)	5	13'-0"	2			
Special	" " " " " 3+88.62 (" " ")	5	9'-6"	2			



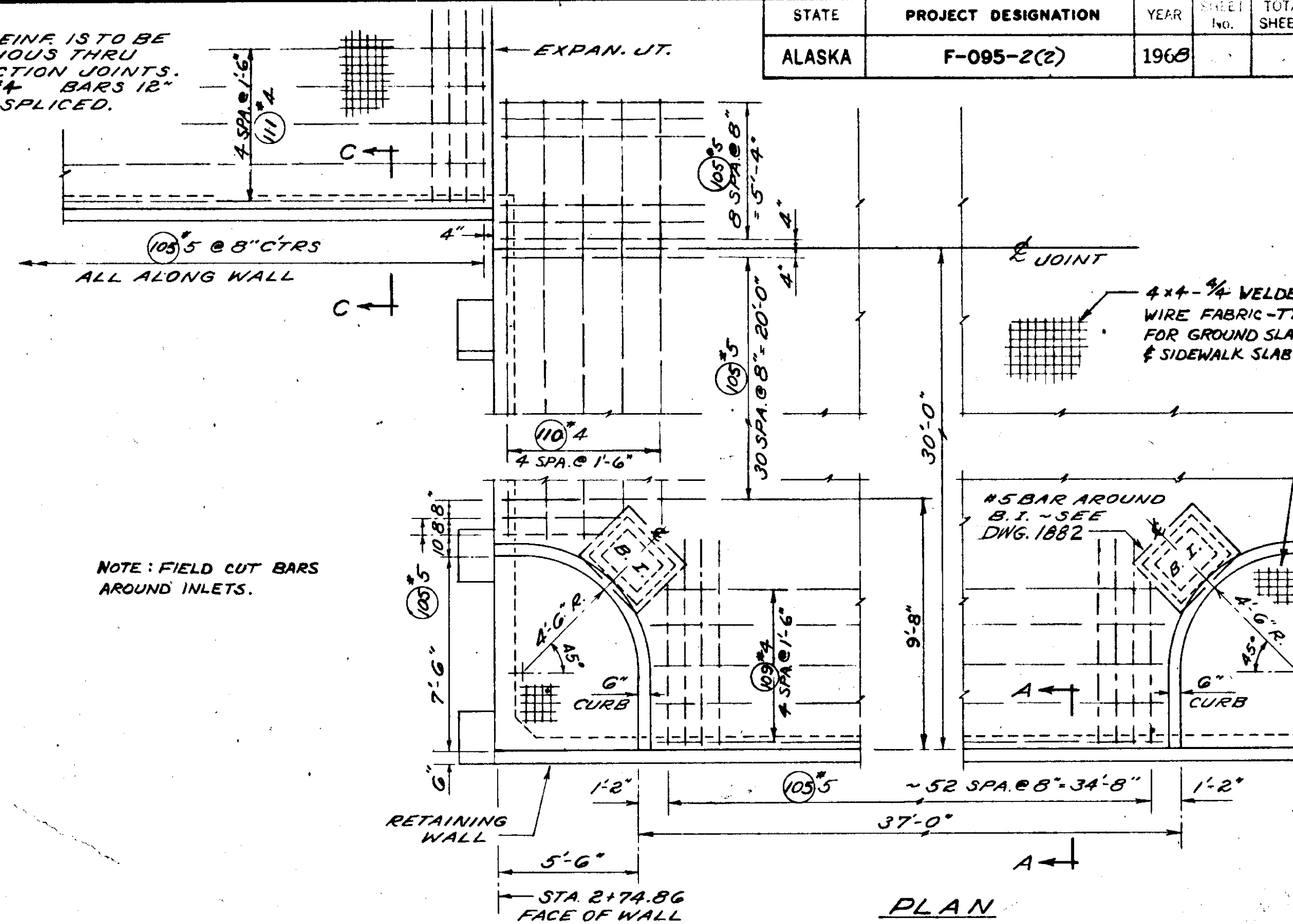
SECTION C-C



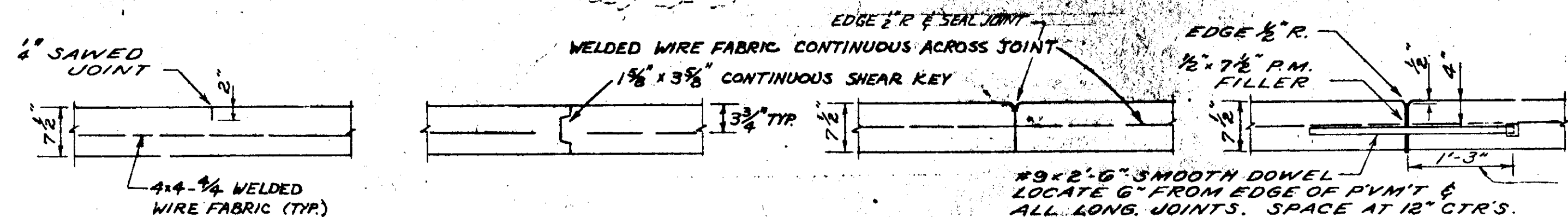
ELEVATION

TYPICAL DETAIL

SHOWING RECONSTRUCTION OF EXIST.
CONC. WALL AT NEW PIER LOCATIONS.
STA. 3+24.3, 3+73.6, 4+22.9 & 4+72.2.



PLAN
GROUND SLAB REINF.
AT DOCK ST. INTERSECTION



LONGITUDINAL
CONTRACTION JOINT

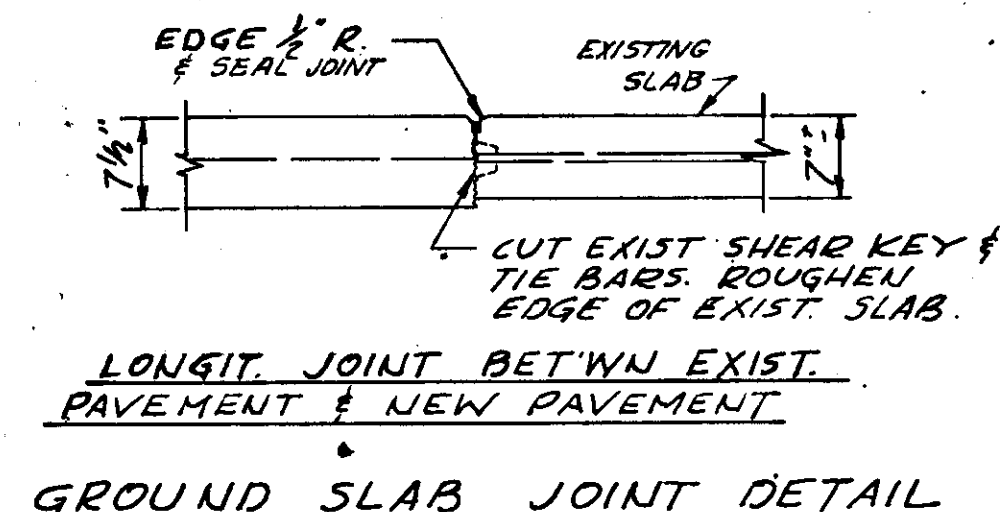
LONGITUDINAL CONSTR.
AND CENTERLINE JOINT

TRANSVERSE CONSTRUCTION EXPANSION JOINT

NOTE: AN APPROVED TYPE OF DOWEL REINFORCING MAY
BE USED @ JOINTS IN LIEU OF CONTINUING
THE WELDED WIRE FABRIC ACROSS THE JOINT.

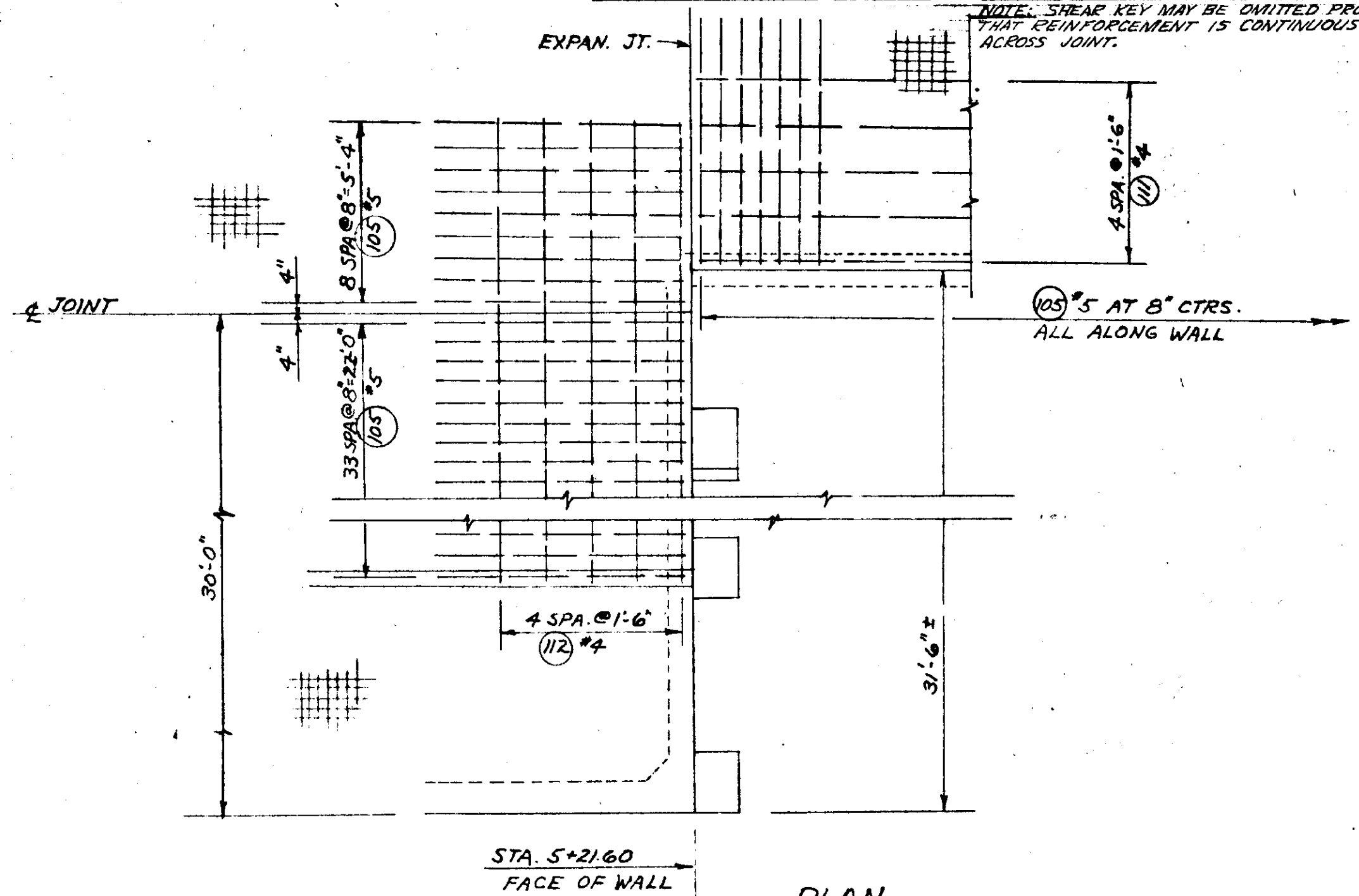
GROUND SLAB REINF.

MK.	Location	Size	Length	No.	Banding
105	Mission St. Intersection Slab	5	8'-0"	88	STR.
	End of Front St. Slab @ Mission St.			52	STR.
	AT Dock St. Intersection			95	
	Along Wall - Dock St. to Sta. 5+21.60			370	
	At Station 5+21.60			43	STR.
105	At Inlets & Man Holes	5	8'-0"	18	Field Bent
	Total "105"			666	
106	Mission St. Intersection	4	49'-0"	6	STR.
107	Mission St. Intersection	4	19'-0"	6	
108	End of Front St. Slab @ Mission St.	4	34'-0"	6	
109	Dock Street Intersection	4	35'-6"	5	
110	" " " "	4	37'-6"	5	
111	Along Wall - Dock St. to Sta. 5+21.60	4	36'-0"	35	
112	At Sta. 5+21.60	4	28'-0"	5	STR.
	Welded Wire				
	Fabric 4x4-1/4 - 20,000 Sp. Ft.				

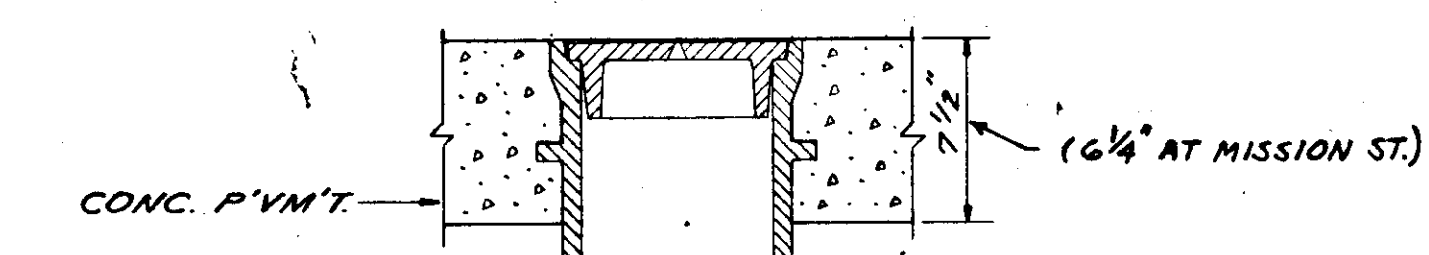


GROUND SLAB JOINT DETAIL

Note:
Seal all joints with Joint Sealing
Material.



PLAN
GROUND SLAB REINF. AT STA. 5+21.60



STANDARD BRASS CAP
MONUMENT & MONUMENT CASE

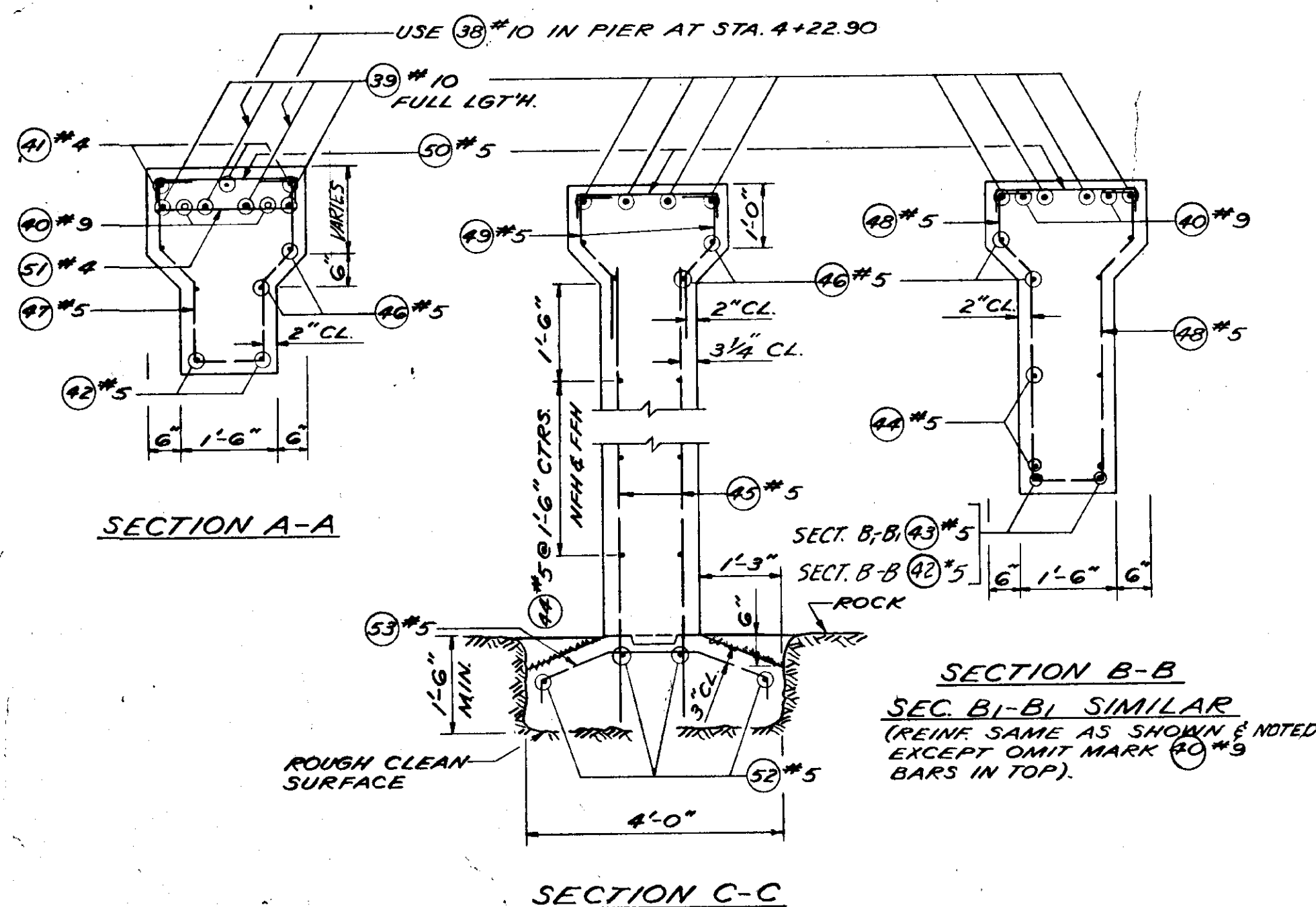
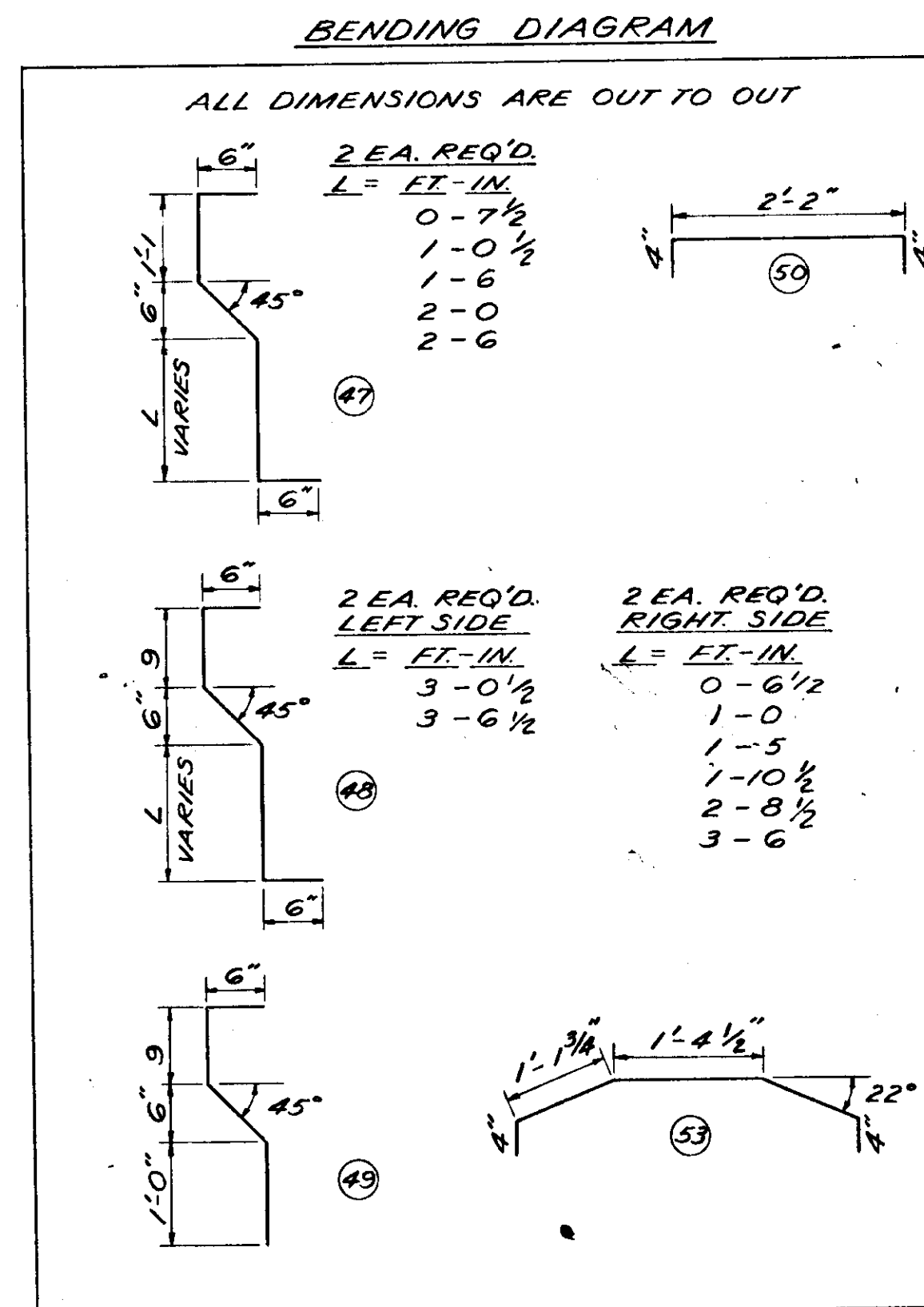
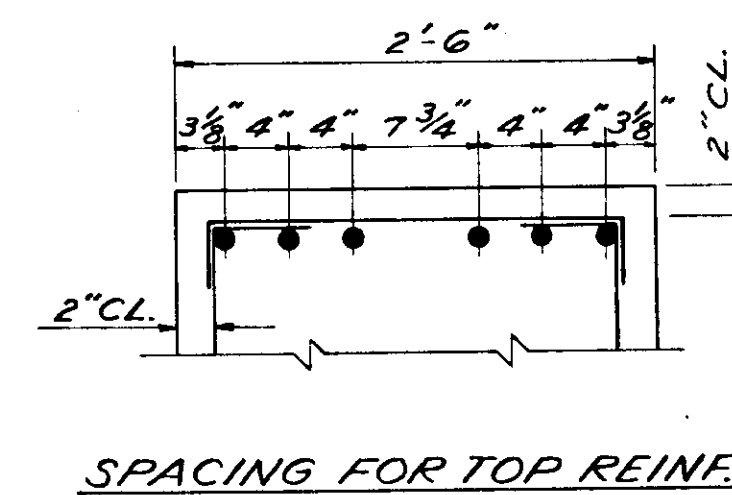
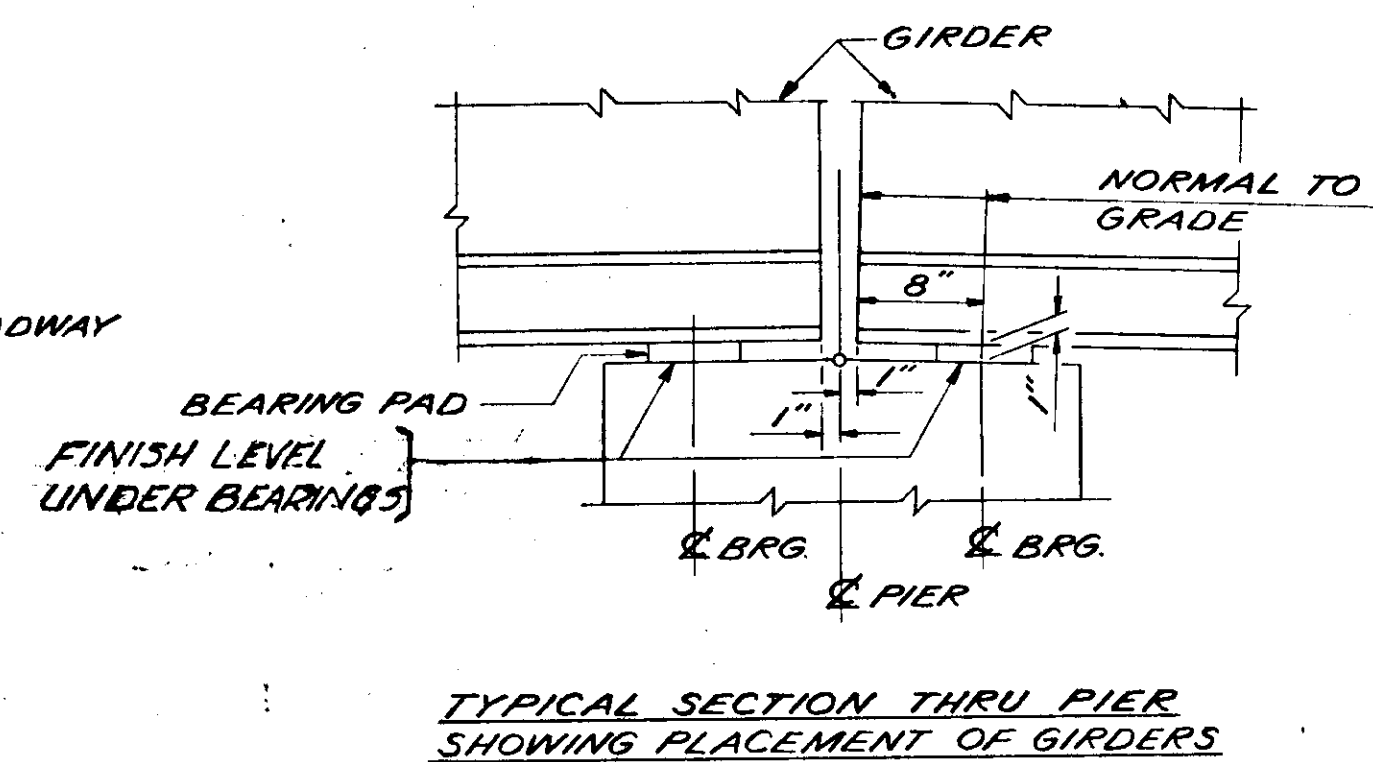
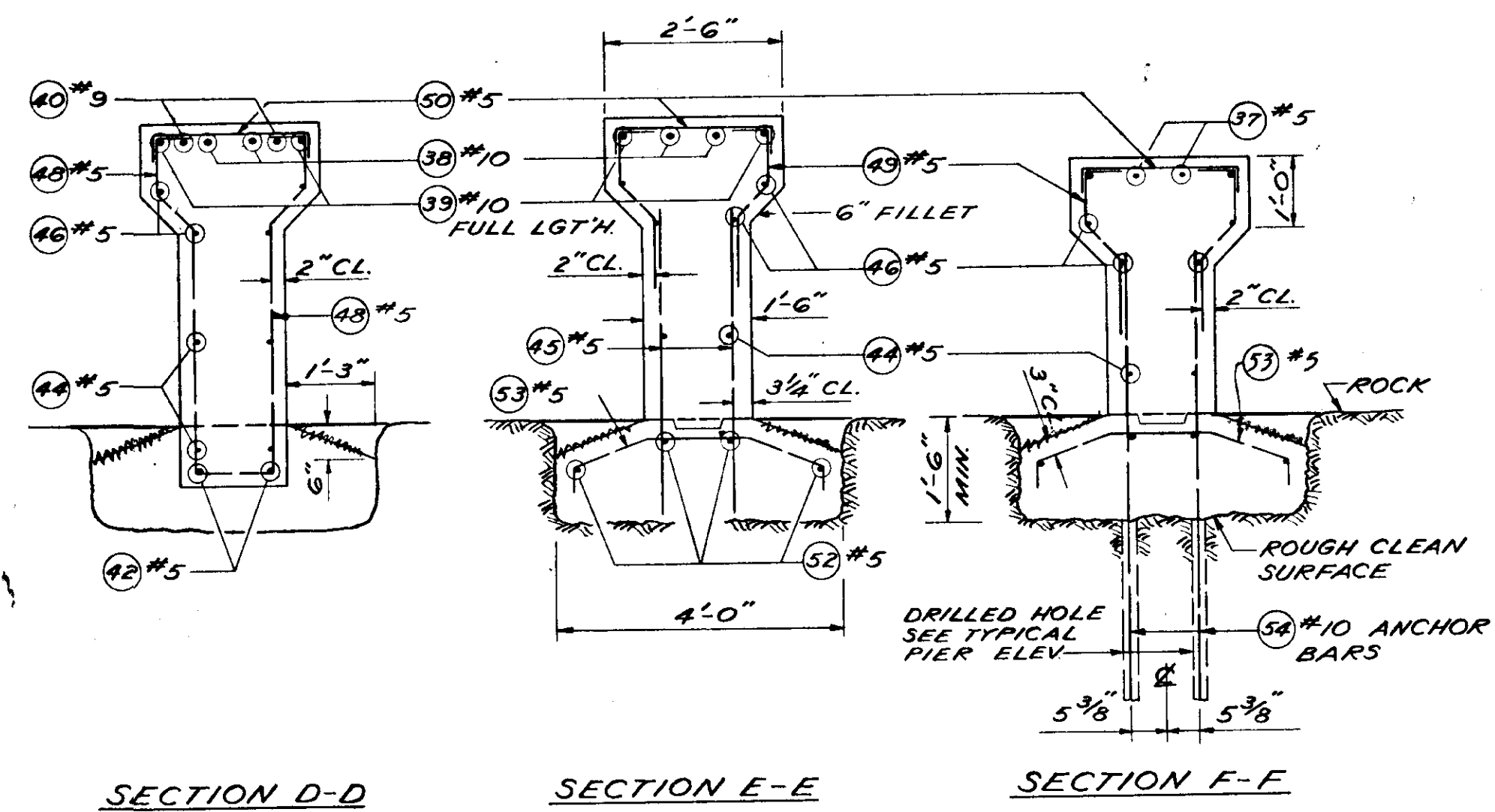
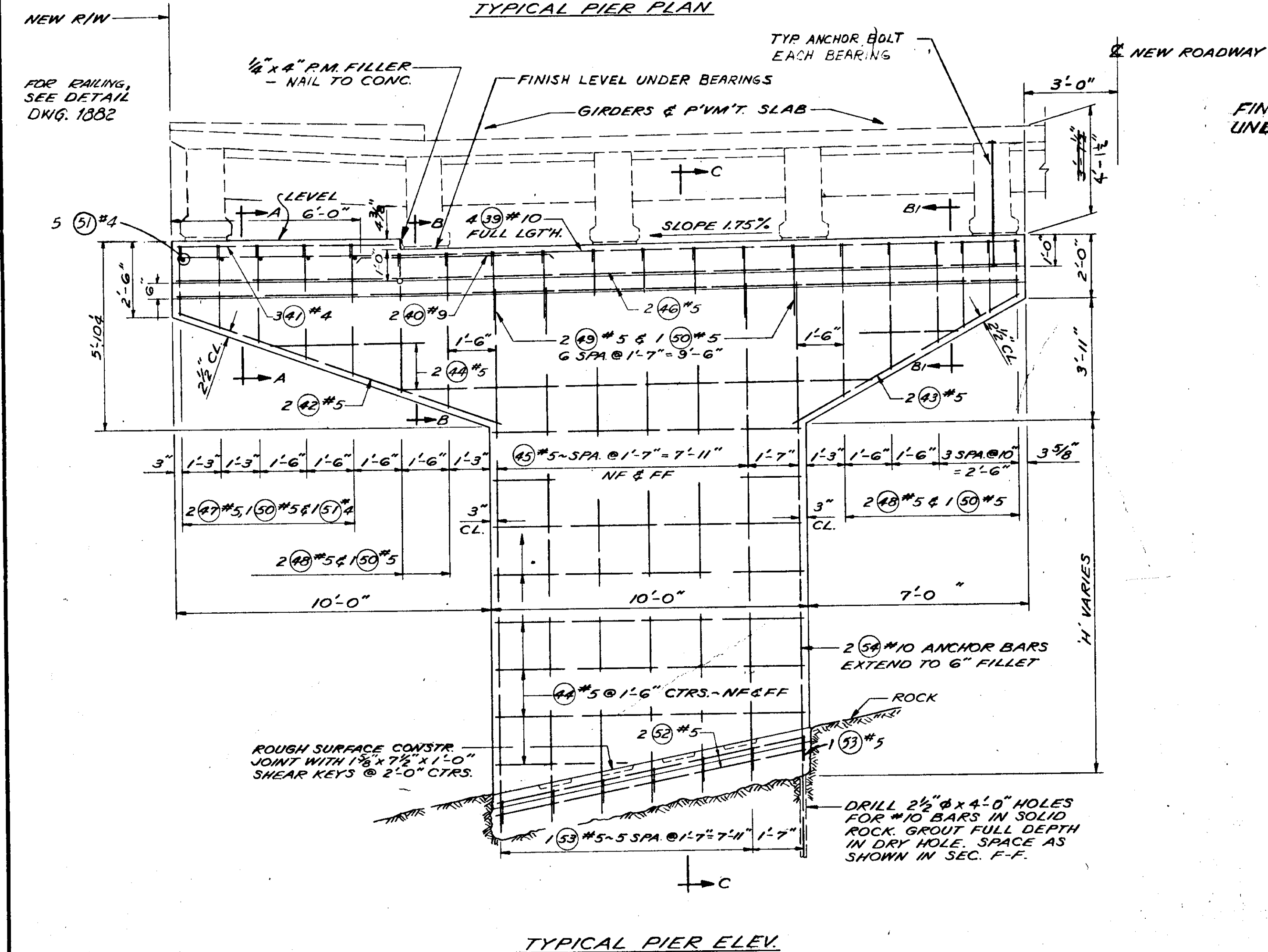
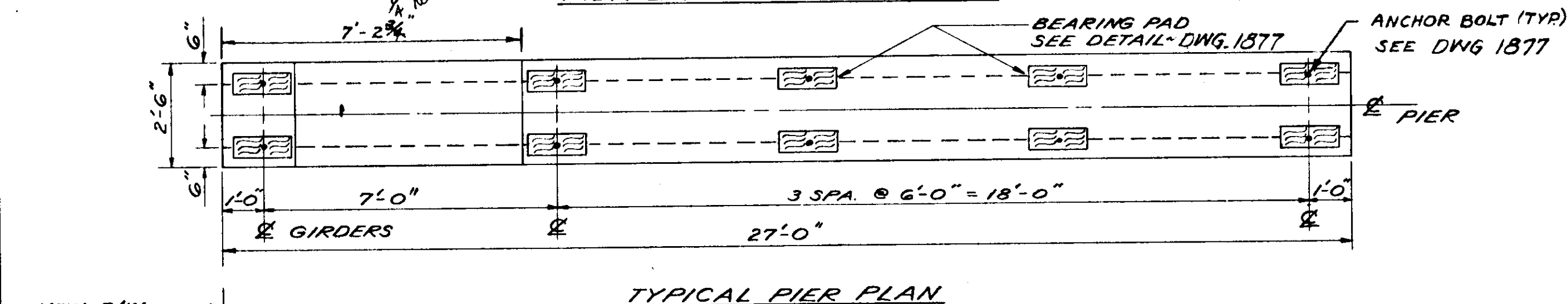
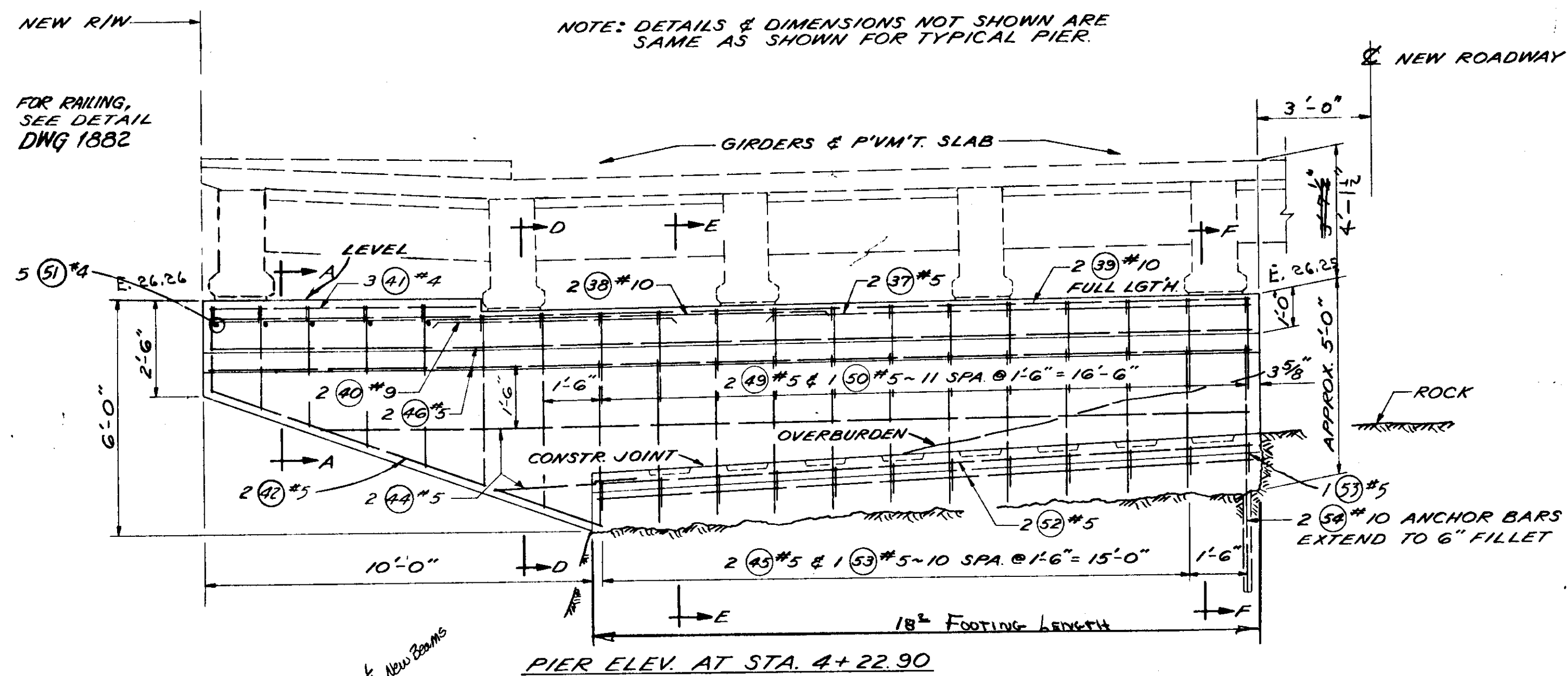
Note: Revised by Alaska
Department of Highways, 1967

AS ADVERTISED

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
FRONT STREET
GRANT ST. TO MISSION ST.
KETCHIKAN, ALASKA

GROUND SLAB REINFORCING
MISCELLANEOUS DETAILS

LANGDALE AND CONNELL
ENGINEERS
1031 SECURITIES BLDG.
SEATTLE 1, WASHINGTON
DATE: 1967
DRAWING NO. 1873



① BAR LIST

COL. A SHOWS BARS REQ'D. FOR PIER AT STA. 4+22.90
COL. B SHOWS BARS REQ'D. FOR ONE TYPICAL PIER

A MK.	B MK.	LOCATION	SIZE	LENGTH FT.-IN.	A-NO. REQ'D.	B-NO. REQ'D.
37	-	TOP OF PIER - HORIZ.	5	12-4	2	-
38	-	" " " "	10	16-0	2	-
39	39	" " " "	10	26-9	2	4
40	40	" " " " - LEFT SIDE	9	6-0	2	2
41	41	" " " " " "	4	6-11	3	3
42	42	BOTTOM - LEFT SIDE	5	11-0	2	2
-	43	" " " " RIGHT "	5	8-6	-	2
44	44	PIER FACE - HORIZ.	5	VARIES	4	VARIES
45	45	" " - VERT.	5	" "	22	12
46	46	" " - HORIZ. AT FILLET	5	26-9	4	4
47	47	STIRRUP - LEFT SIDE	5	VARIES	10	10
48	48	" " " " & RIGHT SIDE	5	VARIES	4*	16
49	49	" " " " CENTER	5	3-0	24	14
50	50	TOP OF PIER - TIE	5	2-10	19	20
51	51	" " " " - LEFT SIDE	4	2-2	5	5
52	52	FOUNDATION - HORIZ.	5	VARIES	4	4
53	53	" " " " - TIE	5	4-4	12	7
54	54	" " " " - ANCHOR BAR	10	VARIES	2	2

* LEFT SIDE ONLY
0 GALVANIZE ALL STEEL THIS SCHEDULE

* LEFT SIDE ONLY
① GALVANIZE ALL STEEL THIS SCHEDULE

① GALVANIZE ALL STEEL THIS SCHEDULE

GENERAL NOTES

SEE DWG. 1867 FOR PIER LOCATION & ELEVATIONS

AS ADVERTISED

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
FRONT STREET
GRANT ST. TO MISSION ST.
KETCHIKAN, ALASKA

PIERS
STA. 3+24.34 TO STA. 4+72.

LANGDALE AND CONNEL
ENGINEERS
1031 SECURITIES BLDG.
SEATTLE 1, WASHINGTON

DATE.....

DRAWING NO. 18

Note: Revised by Alaska Department of Highways, 1967.

DATE.....

DRAWING NO. 18

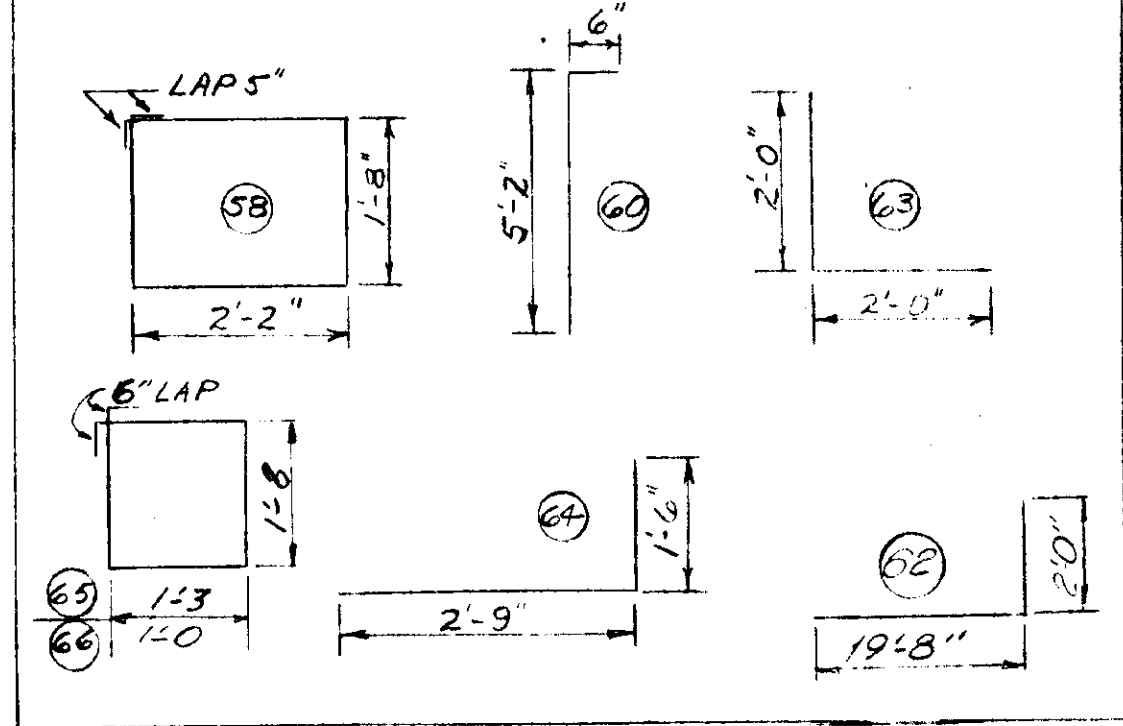
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-2(2)	1968		

① BAR LIST

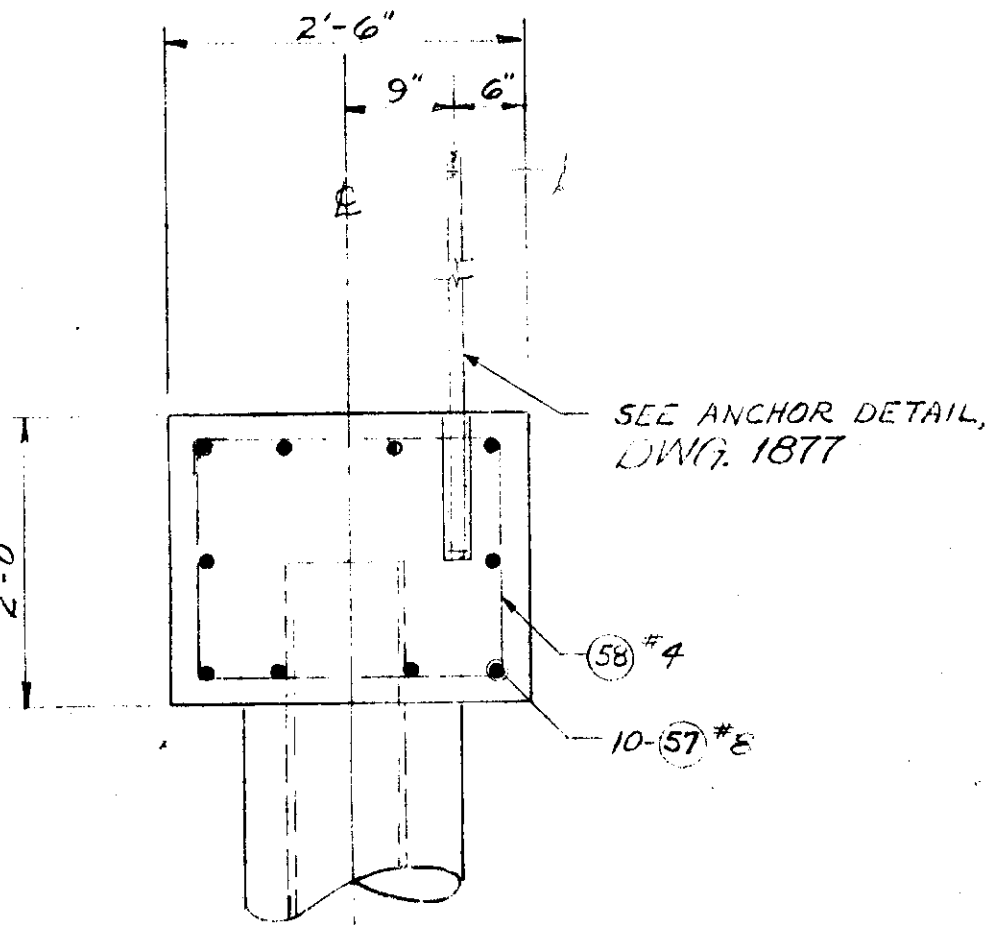
MARK	LOCATION	SIZE	LGTH.	NO. REQD.	
57	CAP - HORIZ.	8	59'-8"	10	STR.
58	CAP - HOOP	4	8'-6"	52	BENT
60	CAP & PVMT. SEAT - VERT.	4	5'-8"	20	BENT
61	CAP & PVMT. SEAT - VERT.	4	4'-8"	21	STR.
62	PVMT SEAT - HORIZ.	4	21'-8"	6	BENT
63	END OF WALL - HORIZ.	4	4'-0"	7	BENT
64	END OF WALL - HORIZ.	8	4'-3"	2	BENT
65	CAP TO CONCRETE BLOCK *	5	6'-10"	3	BENT
66	" " " " *	5	6'-4"	2	BENT

① GALVANIZE ALL STEEL THIS SCHEDULE
BENDING DIAGRAM.

ALL DIMENSIONS ARE OUT TO OUT.



* CONCRETE BLOCK FOR WATER MAIN, SEE DWG. 1884

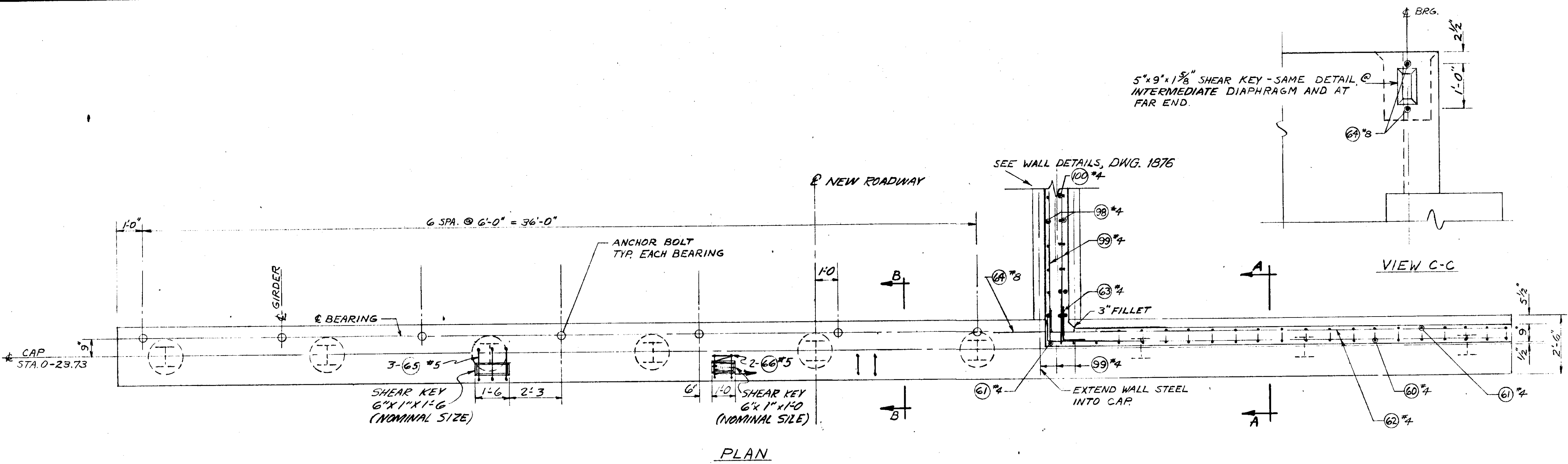


SEC. B-B AS ADVERTISED

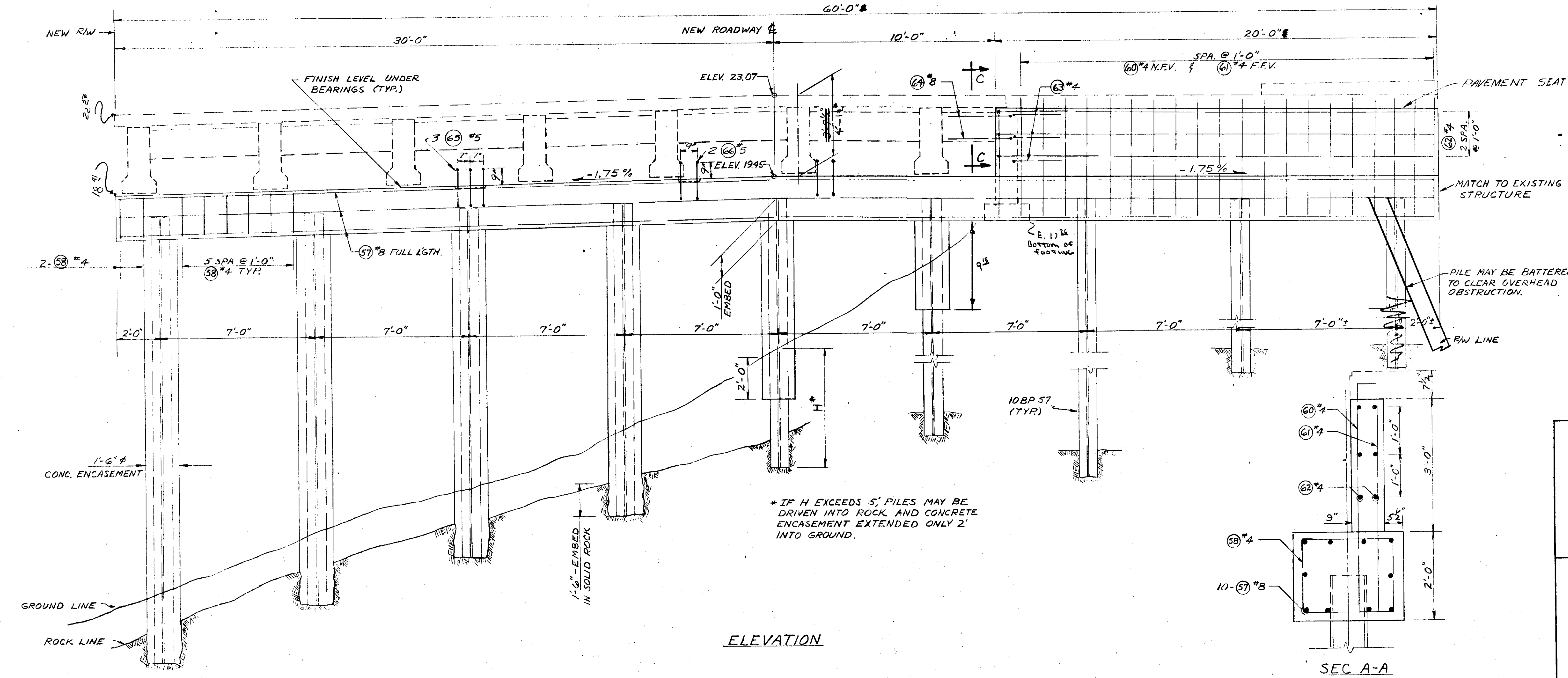
FRONT STREET
GRANT ST. TO MISSION ST.
PILE BENT
AT STA. 0-23.73

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

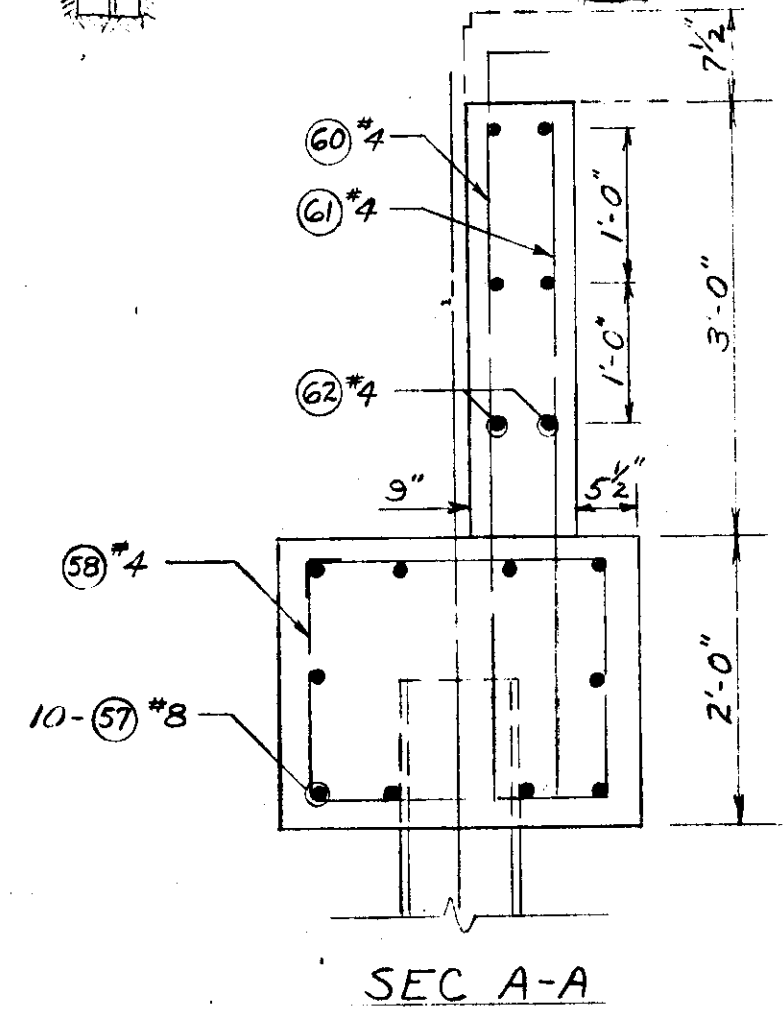
Date 3/12/68
Approved [Signature]
BRIDGE NO. 1080
DWNG. NO. 1875



PLAN



ELEVATION



SEC. A-A

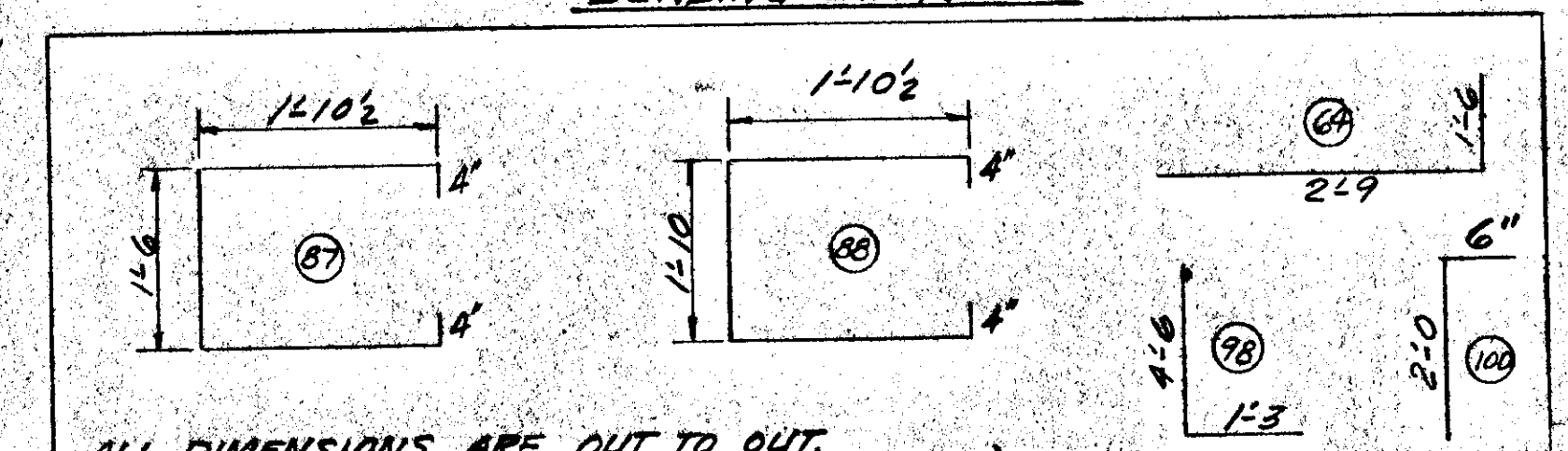
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Checked By: [Signature]
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BAR LIST
ABUTMENT & LONGITUDINAL WALL @ MISSION ST.

MARK	LOCATION	SIZE	LENGTH	NO.	TYPE	APPROX. LENGTH
ABUTMENT						
76	HORIZONTAL - FULL LENGTH	4	VARIES	12	STR.*	300'
79	ABUTMENT WALL VERTICAL	4	VARIES	20	"	100'
81	AT CORNER OF ABUT. WALL - HORIZ. & FILLET	4	2'-6"	12	"	
86	ABUTMENT WALL - GIRDER SEATS - VERT.	6	VARIES	17	"	60'
87	2'-0" GIRDER SEAT - TIES	4	5'-11"	20	BENT	
88	2'-4" END GIRDER SEAT - TIES	4	6'-3"	2	BENT	
90	ABUT. WALL @ GIRDER SEAT - VERT.	4	3'-6"	7	STR.	
91	ABUT. WALL - FAR FACE - VERT.	5	VARIES	23	STR.*	110'
92	ABUT. WALL - AT SIDEWALK SEAT - HORIZ.	4	7'-2"	2	STR.	
93	ABUT. WALL - ANCHOR BAR AT GIRDER SEAT	7	7'-0"	2	STR.	
LONGIT. WALL						
64	DIAPHRAGM TIE	8	4'-3"	4	BENT	
98	VERTICAL	4	5'-9"	100	BENT	
99	HORIZONTAL	4	25'-6"	18	STR.	
100	SLAB TIES	4	2'-6"	50	BENT	

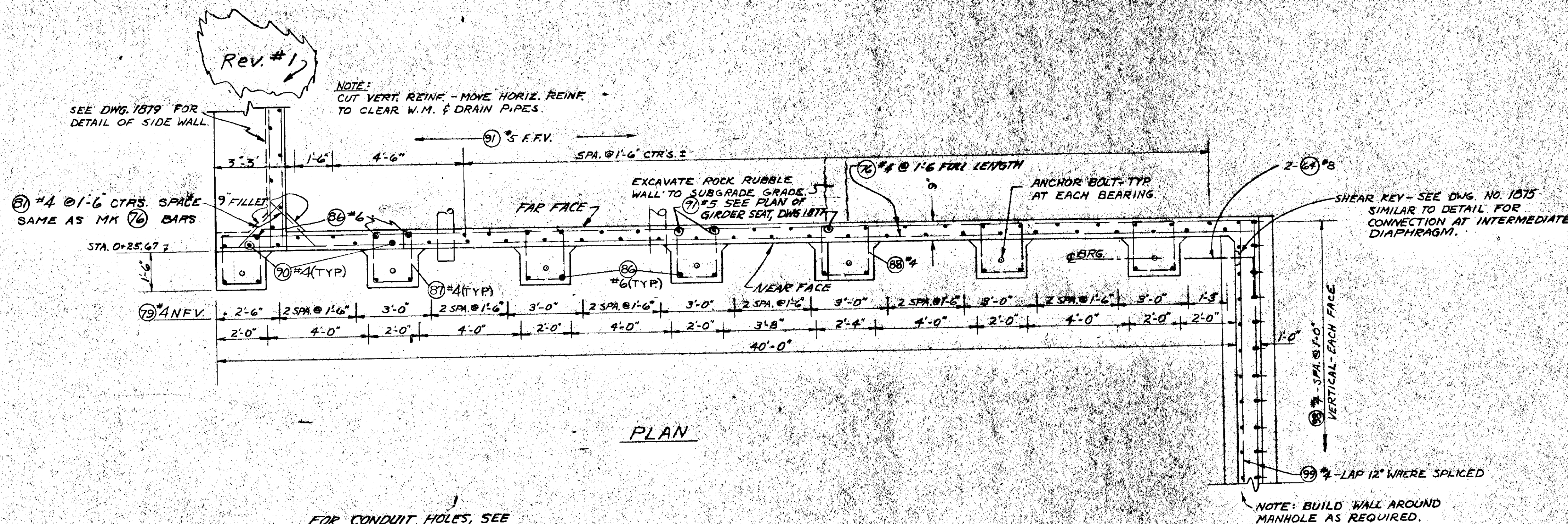
* CUT IN FIELD

BENDING DIAGRAMS

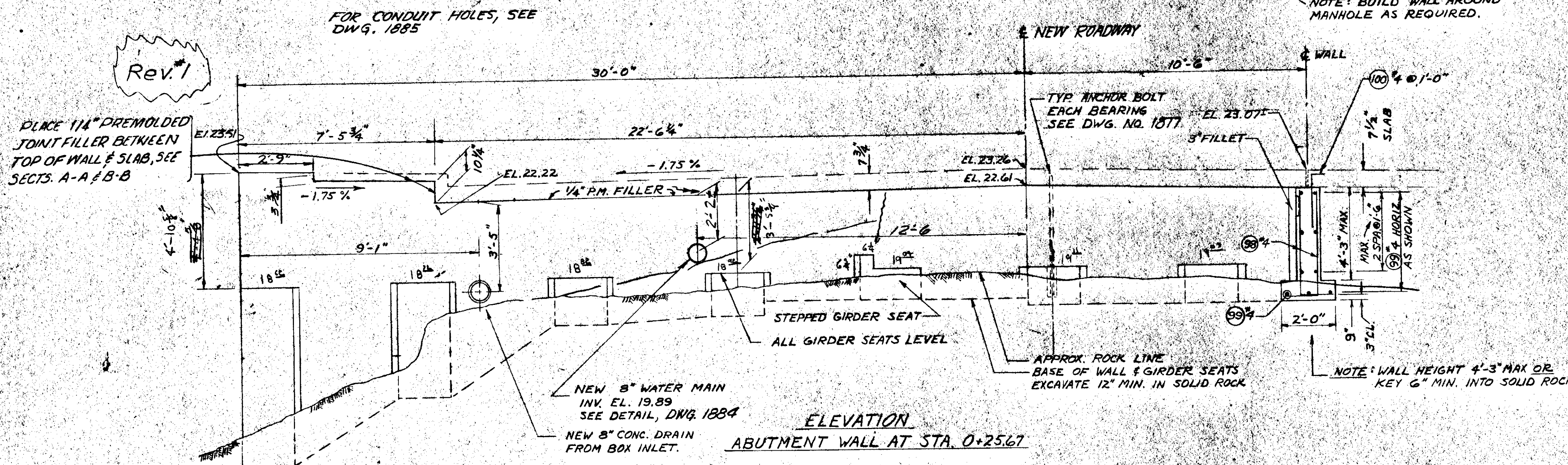


ALL DIMENSIONS ARE OUT TO OUT.

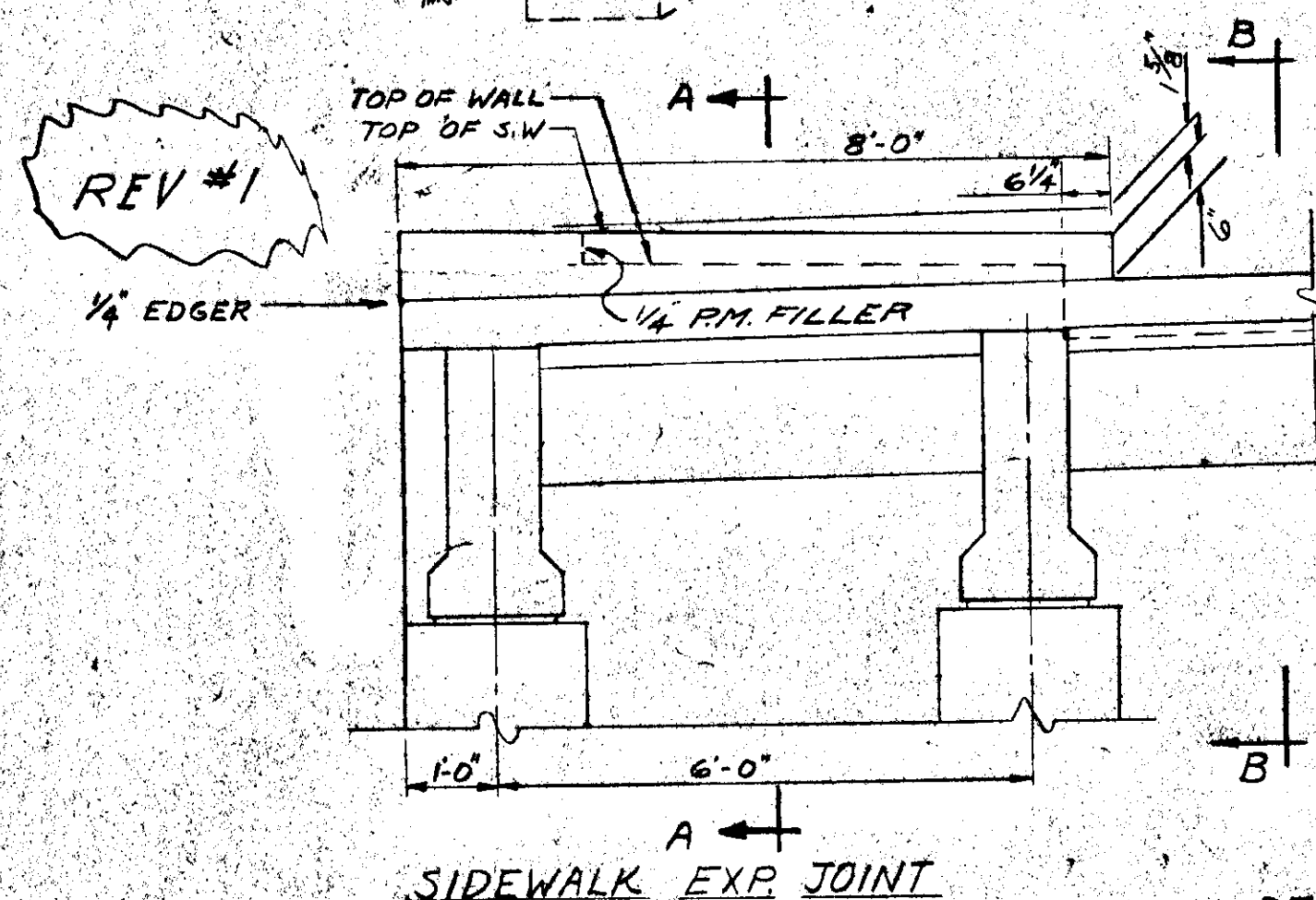
① GALVANIZE ALL STEEL THIS SCHEDULE



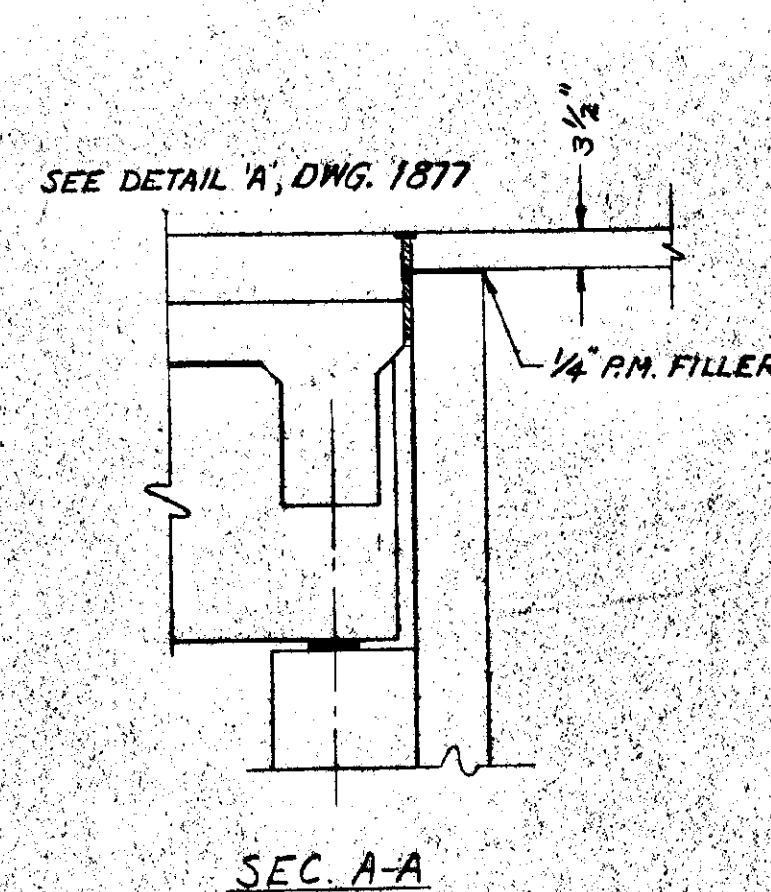
PLAN



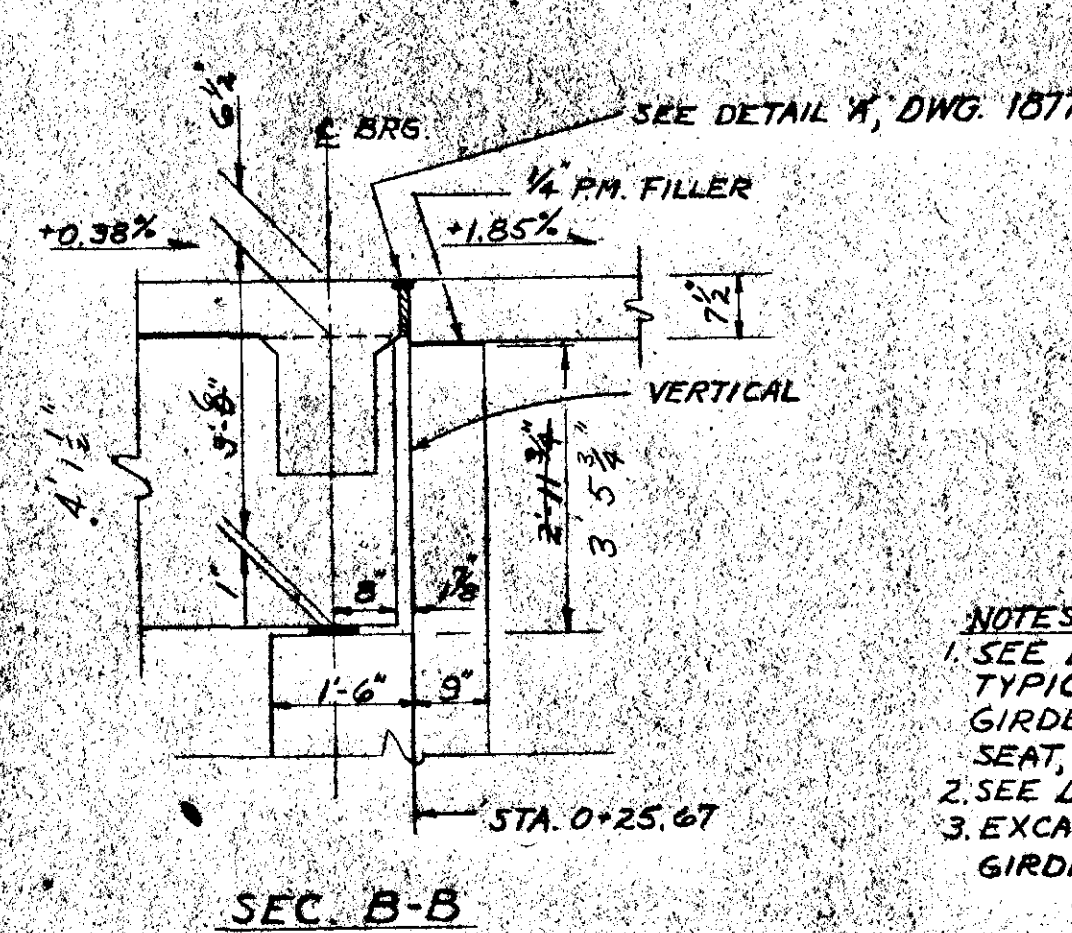
ELEVATION
ABUTMENT WALL AT STA. 0+25.67



SIDEWALK EXP. JOINT



DETAILS - ABUTMENT WALL AT STA. 0+25.67



SEC. B-B

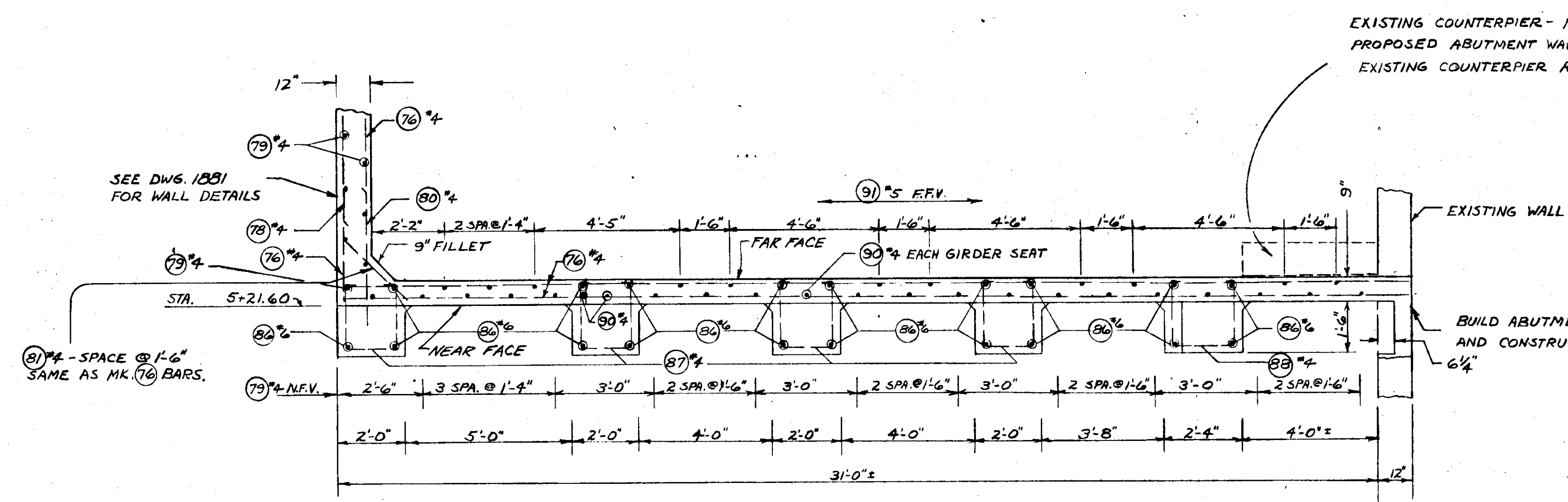
- NOTES:**
- SEE DWG. 1877 FOR TYPICAL WALL SECTION (ABUTMENT WALL) TYPICAL SECTION AT GIRDER SEAT, PLAN OF GIRDER SEAT, DETAIL OF STEPPED GIRDER SEAT, AND GIRDER ANCHORAGE DETAILS.
 - SEE DWG. 1879 FOR BAR LIST.
 - EXCAVATE TO GIVE 3\" MIN. CLEARANCE UNDER GIRDERS AT ALL POINTS.

PRELIMINARY
FOR DESIGN STUDY
PRINTED SEP 16 1968

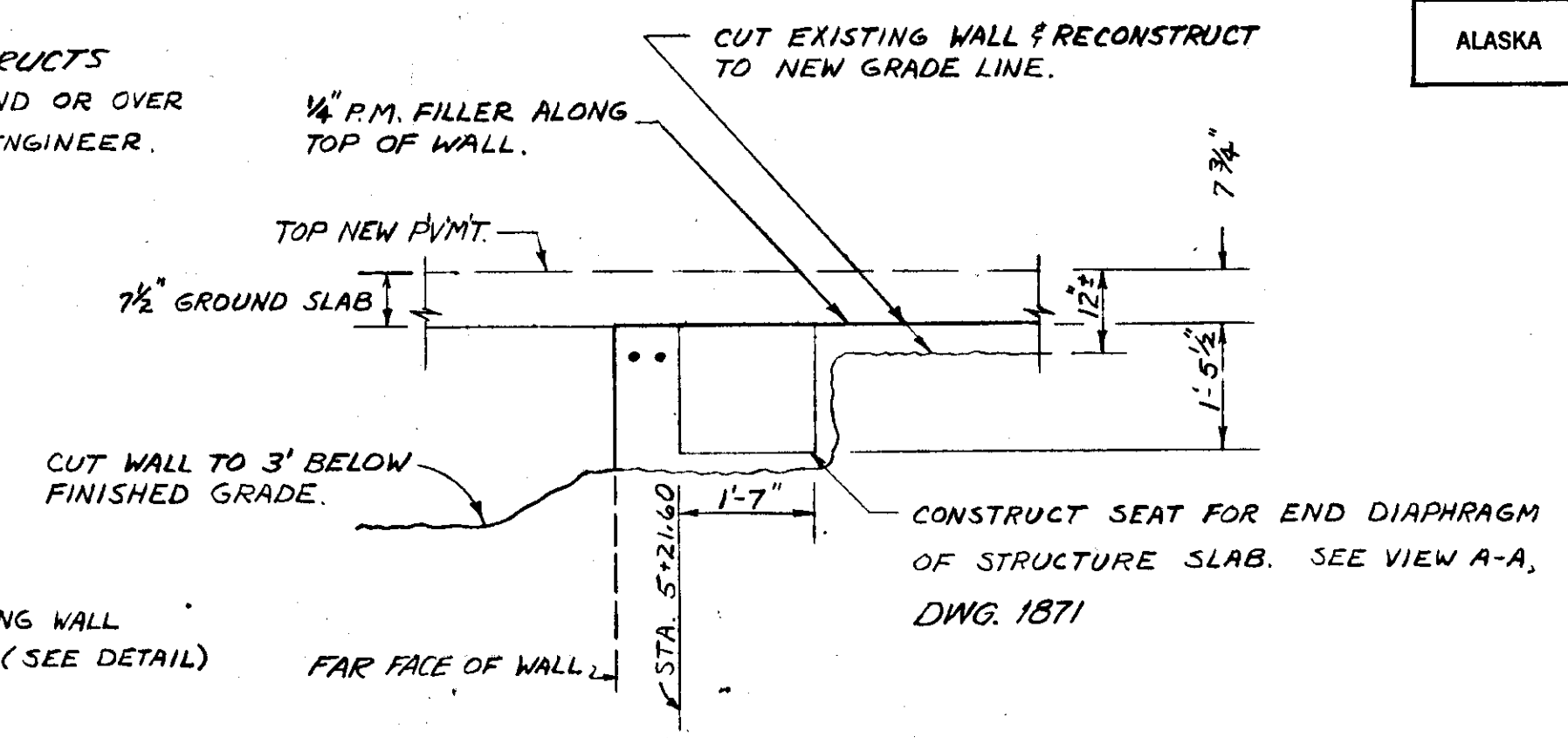
FRONT STREET
GRANT ST. TO MISSION ST.
DETAILS - ABUTMENT WALL AT STA. 0+25.67
AND
DETAILS - WALL AT MISSION ST.

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 9/14/68
Approved [Signature]
BRIDGE NO. 1080
DWG. NO. 1876



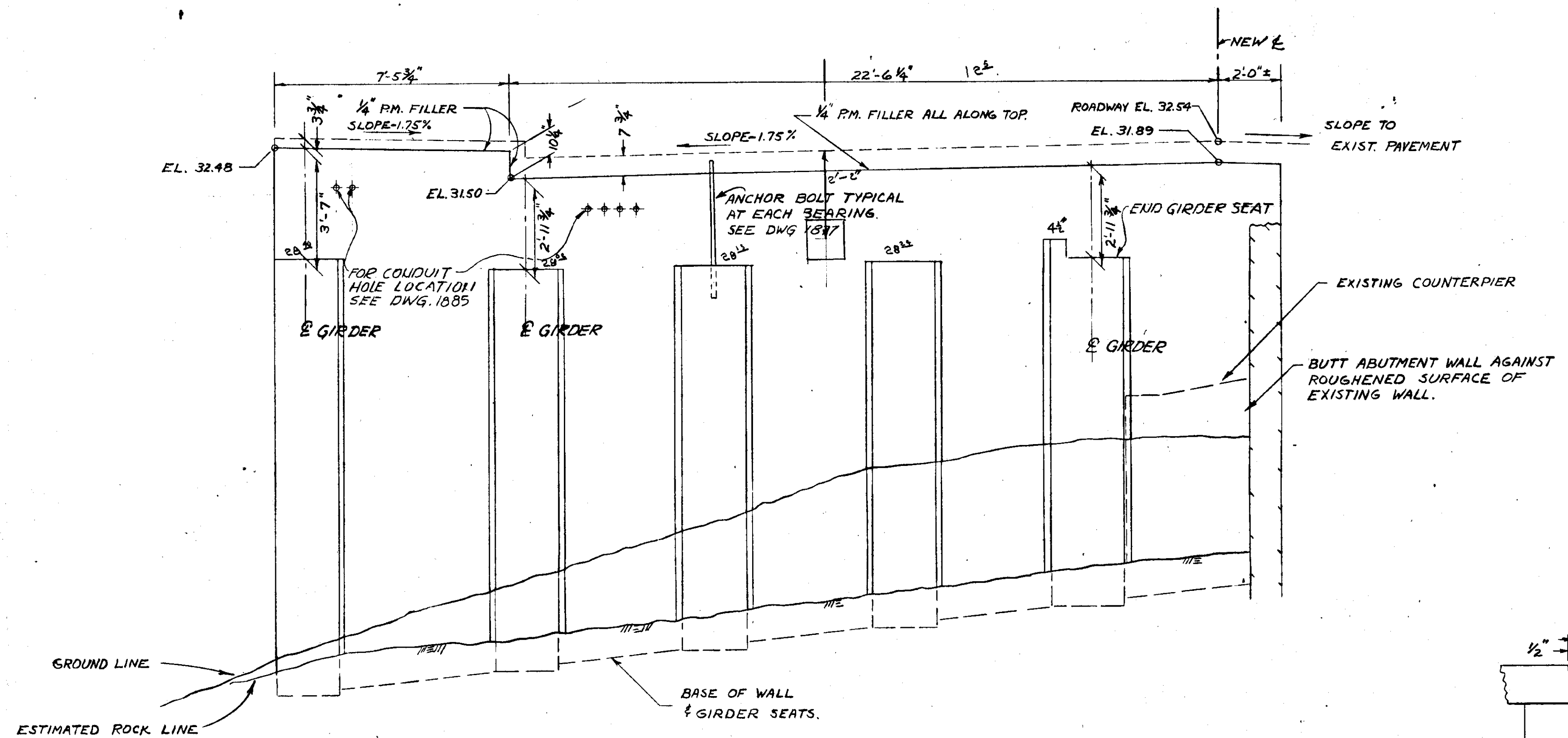
PLAN



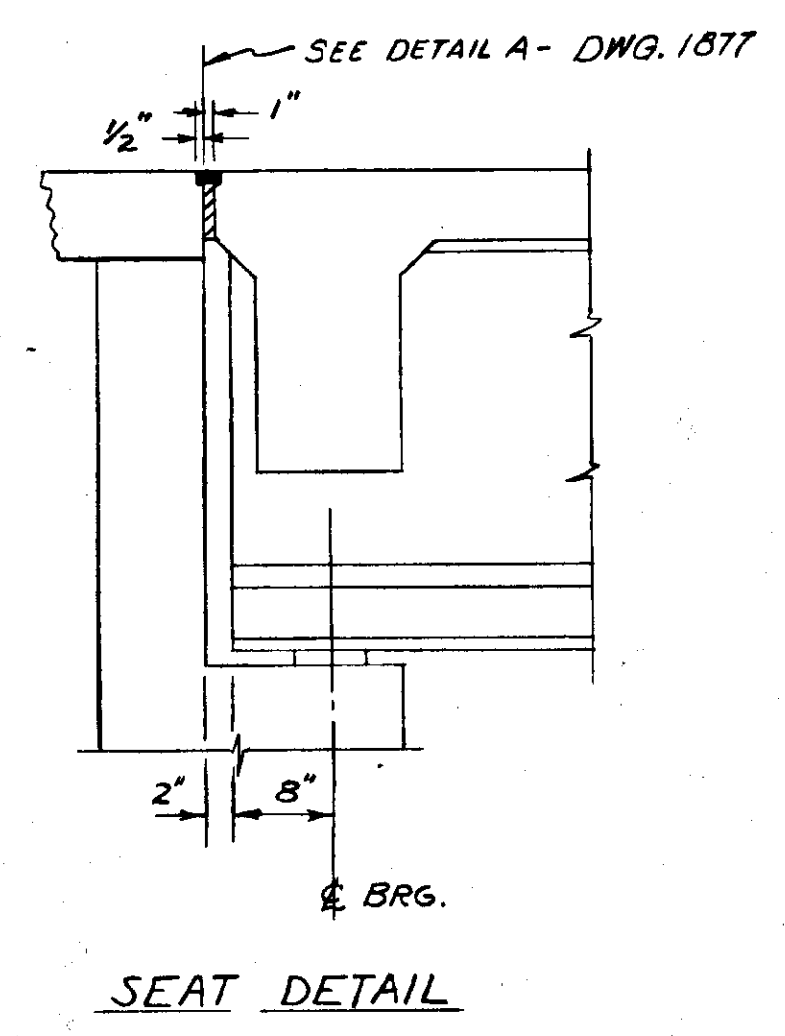
ELEVATION
SEAT DETAIL AT STA. 5+21.60

① REINFORCING STEEL - ABUTMENT @ STA. 5+21.60									
MK.	Location	Size	Length	No.	Bands	APPROX. LENGTH	Bending Diagrams		
76	Horizontal - Full Length	4	Varies	22	Str.	690			
79	Vertical - In Abut. Wall	4	"	16	"	240			
81	Corner - Wall Ties	4	2'-10	12	"	"			
86	Vertical - Girder Seats	6	Varies	19	Str.	250			
87	Girder Seat Ties	4	5'-11	51	Bend	"			
88	End Girder Seat Ties	4	6'-3	12	Bend	"			
90	Vertical - Girder Seats	4	3'-6	6	Str.	"			
91	" - Face of Wall	5	Varies	11	"	160			
92	Sidewalk Seat	4	7'-2	2	"	"			
95	Anchors	10	11'-6	8	Str.	"			

① GALVANIZE ALL STEEL THIS SCHEDULE



ELEVATION
ABUTMENT WALL AT STA. 5+21.60



NOTE:
SEE DWG. 1877 FOR TYPICAL WALL SECTION,
TYPICAL SECTION AT GIRDER SEAT, PLAN OF GIRDER
SEAT, AND DETAIL OF END GIRDER SEAT.

AS ADVERTISED

FRONT STREET
GRANT ST. TO MISSION ST.
ABUTMENT WALL DETAILS
AT STA. 5+21.60

Revision #1: 8/28/68 Retaining wall set back

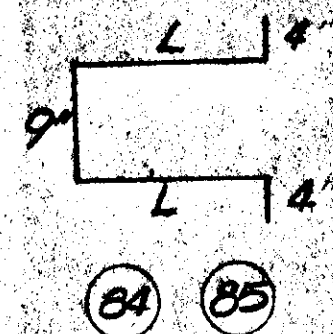
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-2(2)	1968		

RETAINING WALLS
REINFORCING STEEL ~ STA. 0+25.67 TO STA. 1+50.14

MARK	LOCATION	SIZE	LENGTH FT.-IN.	NUMBER	APPROX. TOTAL LENGTH	BEND
76	RETAINING WALL - HORIZ. - FULL LGTH.	4	VARIES		1,750'	
77	" WALL AT COUNTERPIERS	4	6'-0"	35		
78	" " BETW. "	4	5'-0"	16		
79	RETAINING WALL - VERT.	4	VARIES		1,250'	
80	AT COR. OF RET. & ABUT. WALL - HORIZ.	4	4'-0"	6		
82	COUNTERPIER	7	VARIES		200'	
83	"	11	10'-0"	2		
84	"	4	SEE TABLE			BENT
97	COUNTERPIER	10	6'-0"	2		
101	AT COUNTERPIER ANCHORS	4	7'-0"	12		

STA. 0+25.67 TO STA. 1+50.14
84 BAR TABLE

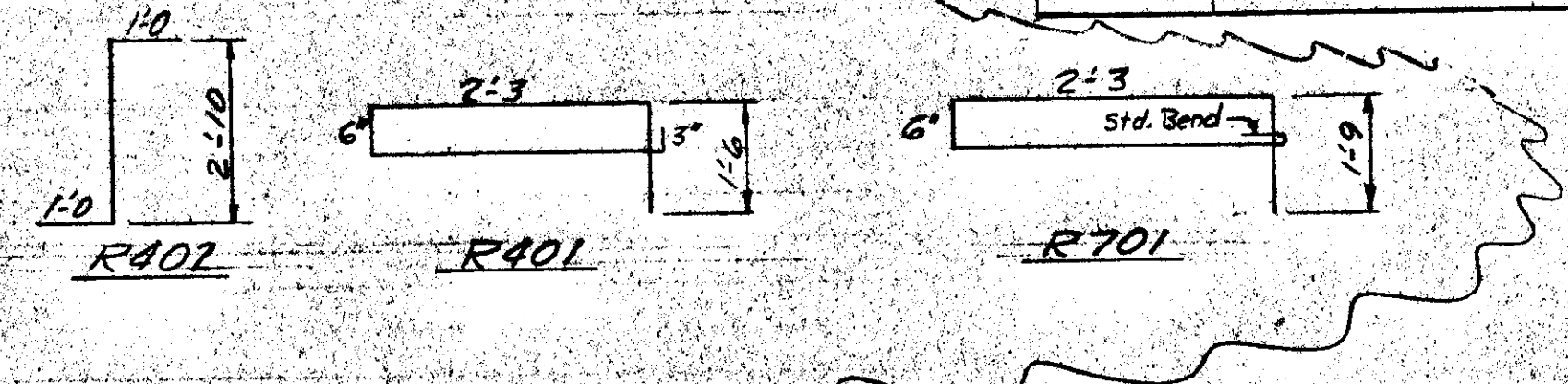
NO. BAR	LENGTH (L)	TOTAL LENGTH
12	1'-1"	3'-7"
12	1'-7"	4'-7"
12	2'-1"	5'-7"
9	2'-7"	6'-7"
2	3'-1"	7'-7"



REVISION NO. 1 RE-BAR LIST
STA. 0+25 TO STA. 2+25±

MARK	SIZE	NO.	LENGTH	TYPE
R401	4	80	6'-9"	Bent
R402	4	18	4'-10"	Bent
R701	7	120	7'-7"	Bent
R6R	4	6	VARIES*	

* 1400± LIFT



STA. 1+50.14 TO STA. 2+74.86

84 BAR TABLE

NO. BAR	LENGTH (L)	TOTAL LENGTH
8	1'-1"	3'-7"
8	1'-7"	4'-7"
8	2'-1"	5'-7"
6	2'-7"	6'-7"
5	3'-1"	7'-7"
4	3'-7"	8'-7"
2	4'-1"	9'-7"
1	4'-7"	10'-7"

85 BAR TABLE

NO. BAR	LENGTH (L)	TOTAL LENGTH
4	1'-4"	4'-1"
4	1'-10"	5'-1"
4	2'-4"	6'-1"
4	2'-10"	7'-1"
3	3'-4"	8'-1"
3	3'-10"	9'-1"
2	4'-4"	10'-1"
1	4'-8"	10'-9"
1	5'-0"	11'-5"
1	5'-4"	12'-1"

STA. 5+21.60 TO STA. 6+34.0±

NO. BAR	LENGTH (L)	TOTAL LENGTH	NO. BAR	LENGTH (L)	TOTAL LENGTH
11	1'-4"	4'-1"	11	4'-8"	10'-9"
11	1'-10"	5'-1"	11	5'-0"	11'-5"
11	2'-4"	6'-1"	11	5'-4"	12'-1"
11	2'-10"	7'-1"	8	5'-8"	12'-9"
11	3'-4"	8'-1"	7	6'-0"	13'-5"
11	3'-10"	9'-1"	7	6'-4"	14'-1"
11	4'-4"	10'-1"	6	6'-8"	14'-9"

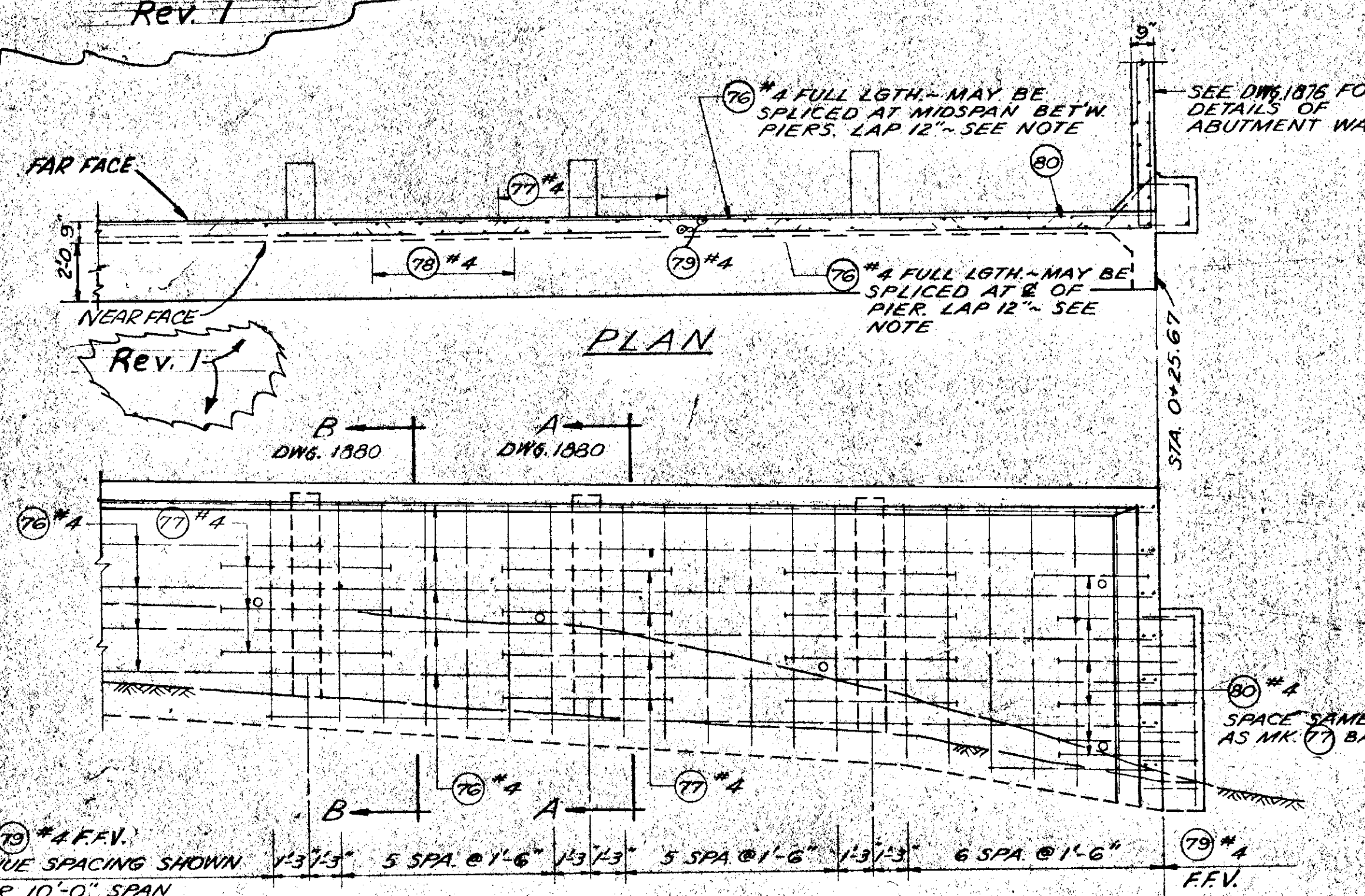
LOGANVILLE ALL STEEL
THIS SCHEDULE

REINFORCING STEEL ~ STA. 1+50.14 TO STA. 2+74.86

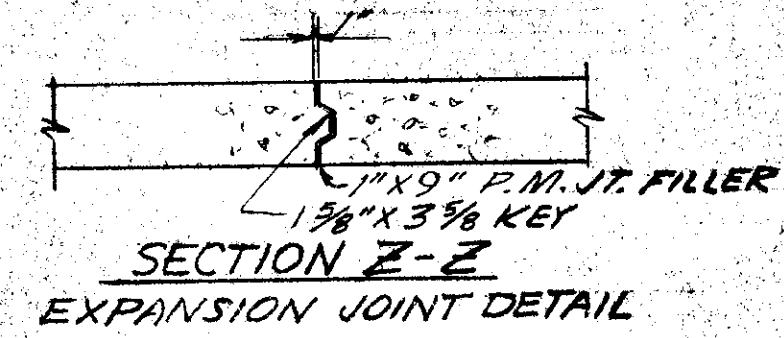
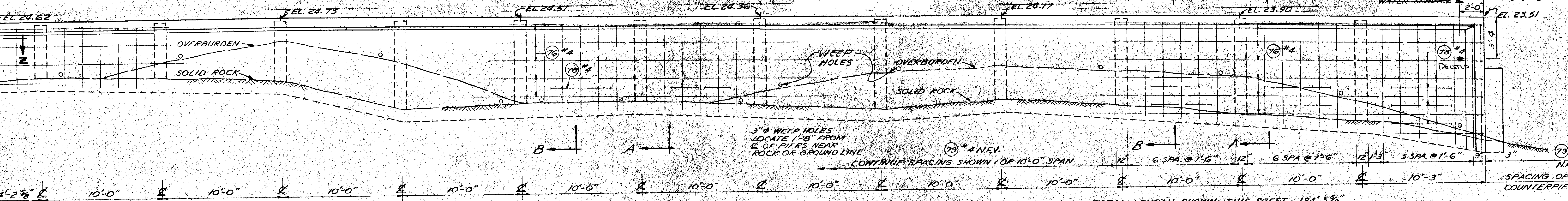
MARK	LOCATION	SIZE	LENGTH FT.-IN.	NUMBER	APPROX. TOTAL LENGTH	BEND
76	RETAINING WALL - HORIZ. - FULL LENGTH	4	VARIES		1,840'	
77	RET. WALL AT COUNTERPIERS	4	6'-0"	70		
78	RET. WALL BETWEEN COUNTERPIERS	4	5'-0"	33		
79	RETAINING WALL - VERTICAL	4	VARIES		1,750'	
80	AT COR. OF RET. & ABUT. WALL - HORIZ.	4	4'-0"	14		
82	COUNTERPIER	7	VARIES		60'	
83	"	11	10'-0"	19		
84	"	4	SEE TABLE			BENT
85	COUNTERPIER	4	"			BENT
97	COUNTERPIER	10	VARIES		150'	
101	AT COUNTERPIER ANCHORS	4	VARIES	12	90'	

REINFORCING STEEL ~ STA. 5+21.60 TO STA. 6+34.0±

MARK	LOCATION	SIZE	LENGTH FT.-IN.	NUMBER	APPROX. TOTAL LENGTH	BEND
76	RETAINING WALL - HORIZ. - FULL LENGTH	4	VARIES		2,600'	
77	RET. WALL AT COUNTERPIERS	4	6'-0"	174		
78	RET. WALL BETWEEN COUNTERPIERS	4	5'-0"	86		
79	RETAINING WALL - VERTICAL	4	VARIES		2,600'	
80	AT COR. OF RET. & ABUT. WALL - HORIZ.	4	4'-0"	16		
83	"	11	10'-0"	33		
85	COUNTERPIER	4	SEE TABLE			BENT
97	COUNTERPIER	10	VARIES		300'	
101	AT COUNTERPIER ANCHORS	4	VARIES	11	110'	



PLACE 1" X 9" P.M. FILLER
AT END OF WALL - FULL
DEPTH TO ROCK



TOP ELEVATION SHOWS FAR FACE STEEL
BOTTOM ELEVATION SHOWS NEAR FACE STEEL
ELEVATION

NOTE
PLACE MARK 77 BARS ON E OF COUNTERPIERS.
" " 78 " BETWEEN " "
FULL LENGTH LONGITUDINAL BARS (MARK 76) MAY BE
SPliced AT CONTRACTORS EXPENSE AS NOTED ON
PLAN DETAIL. SPlice SHALL NOT OCCUR IN ADJACENT
BARS AT THE SAME LOCATION.
PLACE CONTRACTION JOINTS AT 30'± CENTERS AND
AT 2'-6" FROM PIERS, SEE DETAIL, DWG 1880.

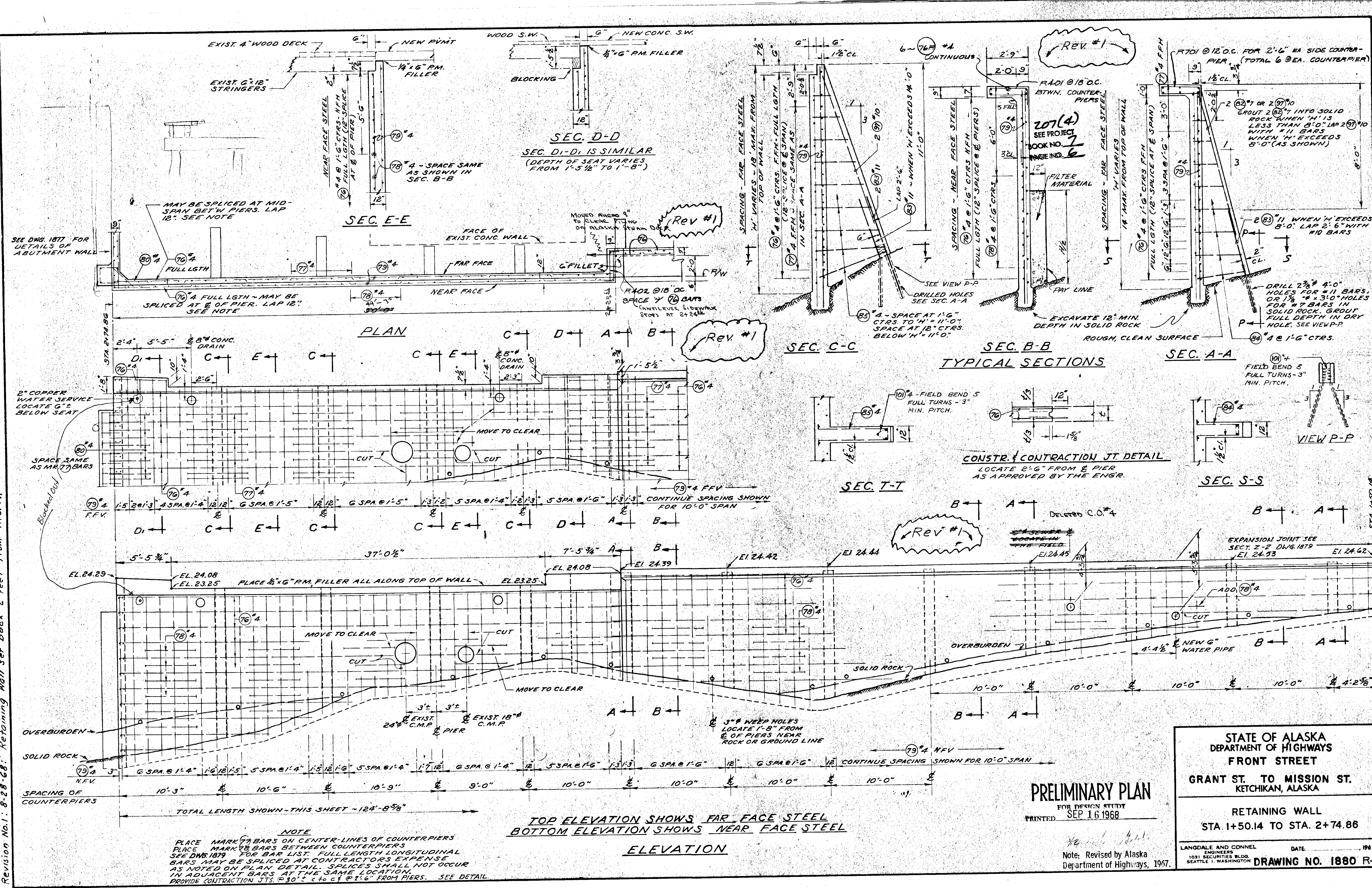
PRELIMINARY PLAN
FOR DESIGN STUDY
PRINTED SEP 16 1968

LANGDALE AND CONNELL
ENGINEERS
1931 SECURITY BLDG.
SEATTLE 1, WASHINGTON

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
FRONT STREET
GRANT ST. TO MISSION ST.
KETCHIKAN, ALASKA

RETAINING WALL
STA. 0+25.67 TO STA. 1+50.14

DRAWING NO. 1879



Revision No. 1: 8-28-68: Retaining Wall Set Deck 2 feet from

NOTE
PLACE MARK 79 BARS ON CENTER LINES OF COUNTERPIERS
PLACE MARK 76 BARS BETWEEN COUNTERPIERS
FOR BAR LIST. FULL LENGTH LONGITUDINAL
BARS MAY BE SPLICED AT CONTRACTIONS EXPENSE
AS NOTED ON PLAN. DETAIL SPLICES SHALL NOT OCCUR
IN ADJACENT BARS AT THE SAME LOCATION.
PROVIDE CONTRACTION JTS. @ 30' ± c to c @ 2' 6" FROM PIERS. SEE DETAIL.

TOP ELEVATION SHOWS FAR FACE STEEL
BOTTOM ELEVATION SHOWS NEAR FACE STEEL
ELEVATION

PRELIMINARY PLAN
FOR DESIGN STUDY
PRINTED SEP 16 1968

Note: Revised by Alaska
Department of Highways, 1967.

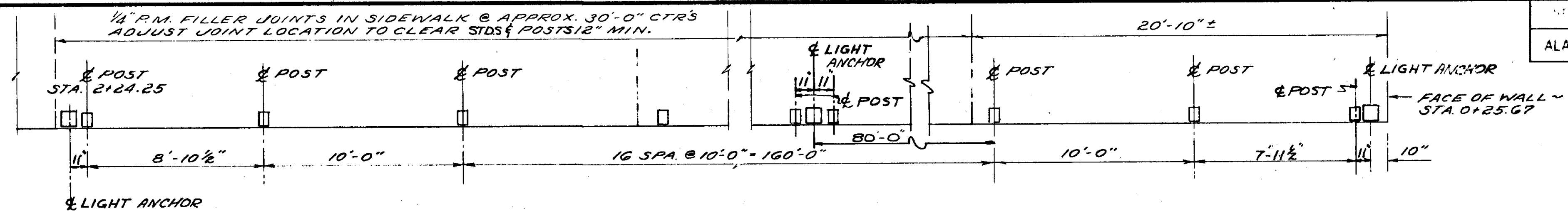
STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
FRONT STREET
GRANT ST. TO MISSION ST.
KETCHIKAN, ALASKA

RETAINING WALL
STA. 1+50.14 TO STA. 2+74.86

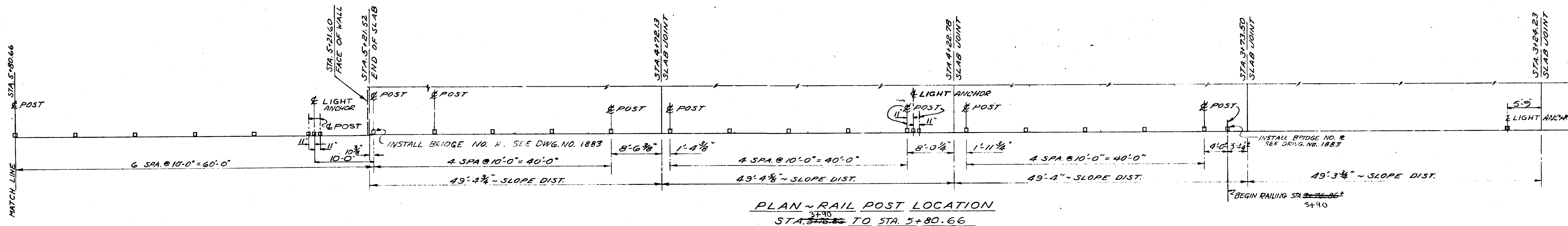
LANGDALE AND CONNELL
ENGINEERS
1031 SEQUOIA BLDG.
SEATTLE 1, WASHINGTON

DATE: 1968
DRAWING NO. 1880 R

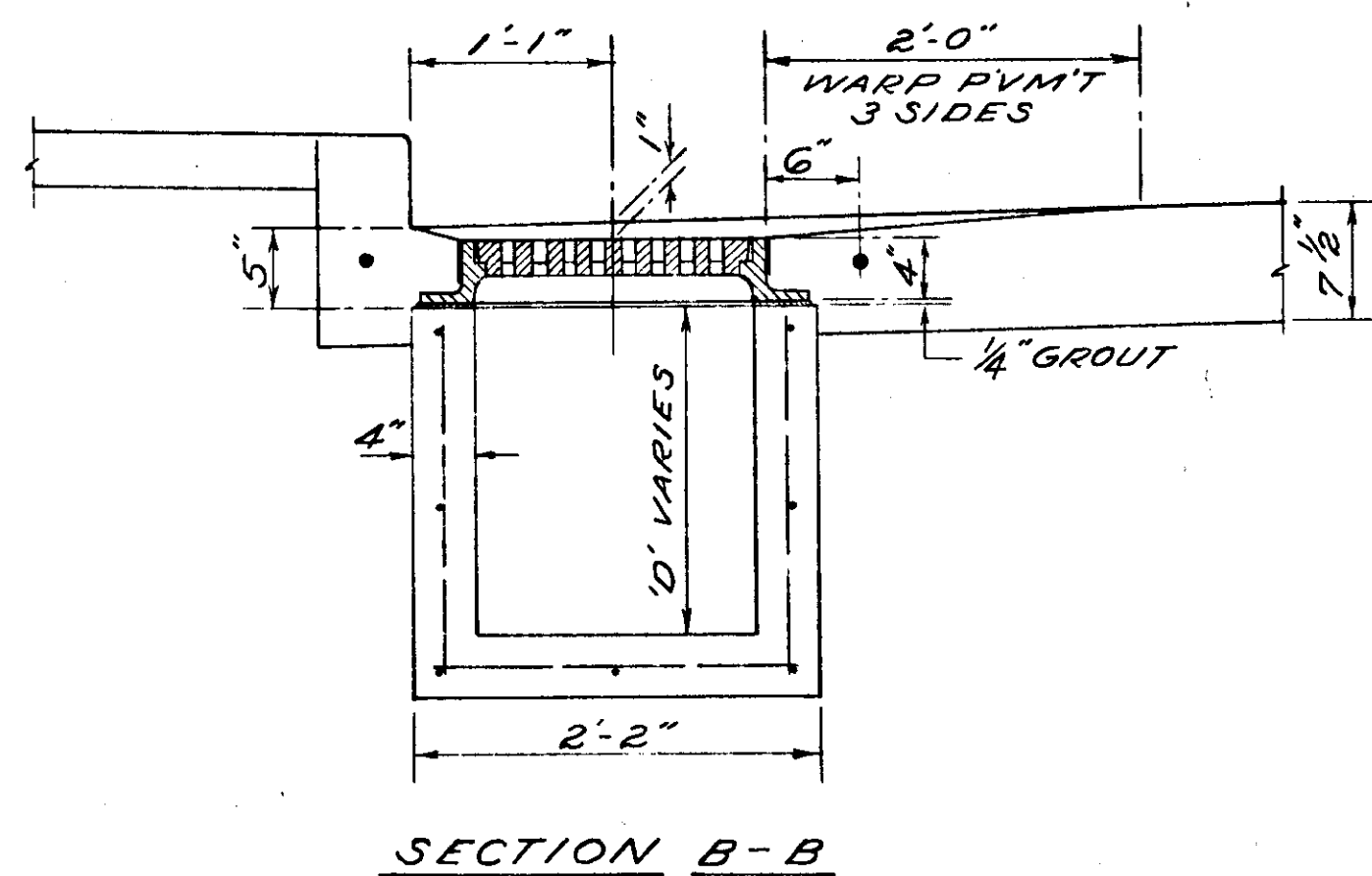
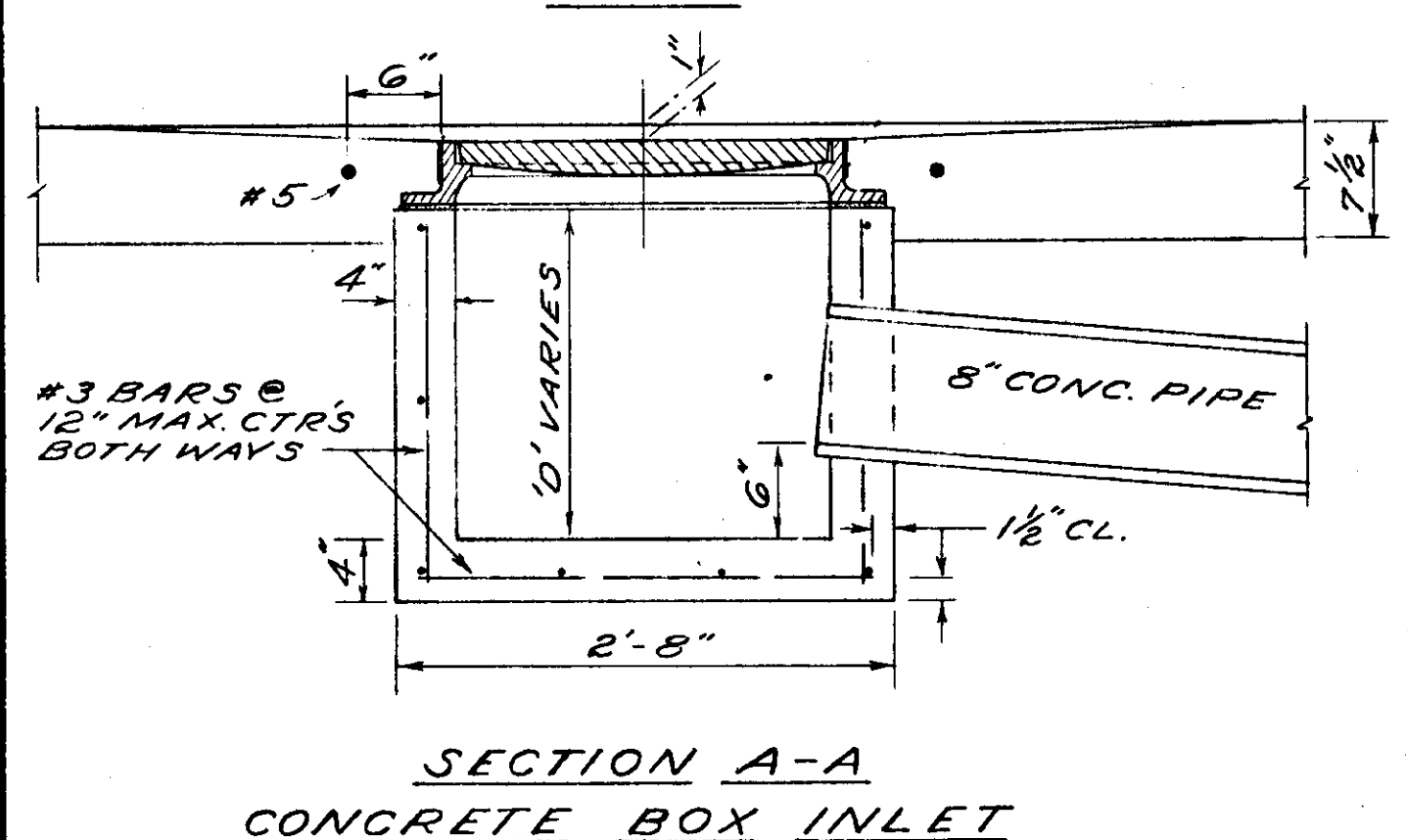
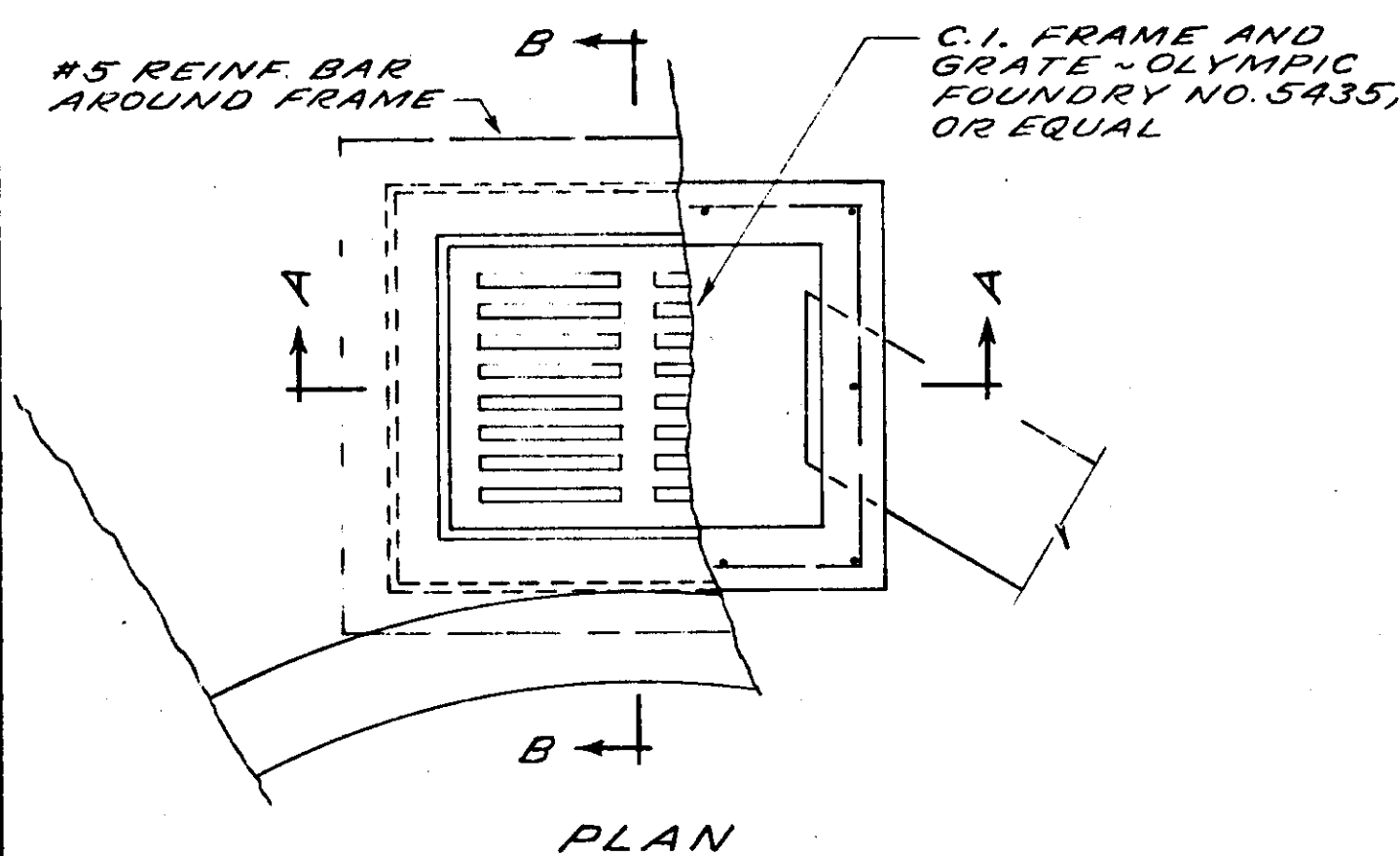
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-2(2)	1968		



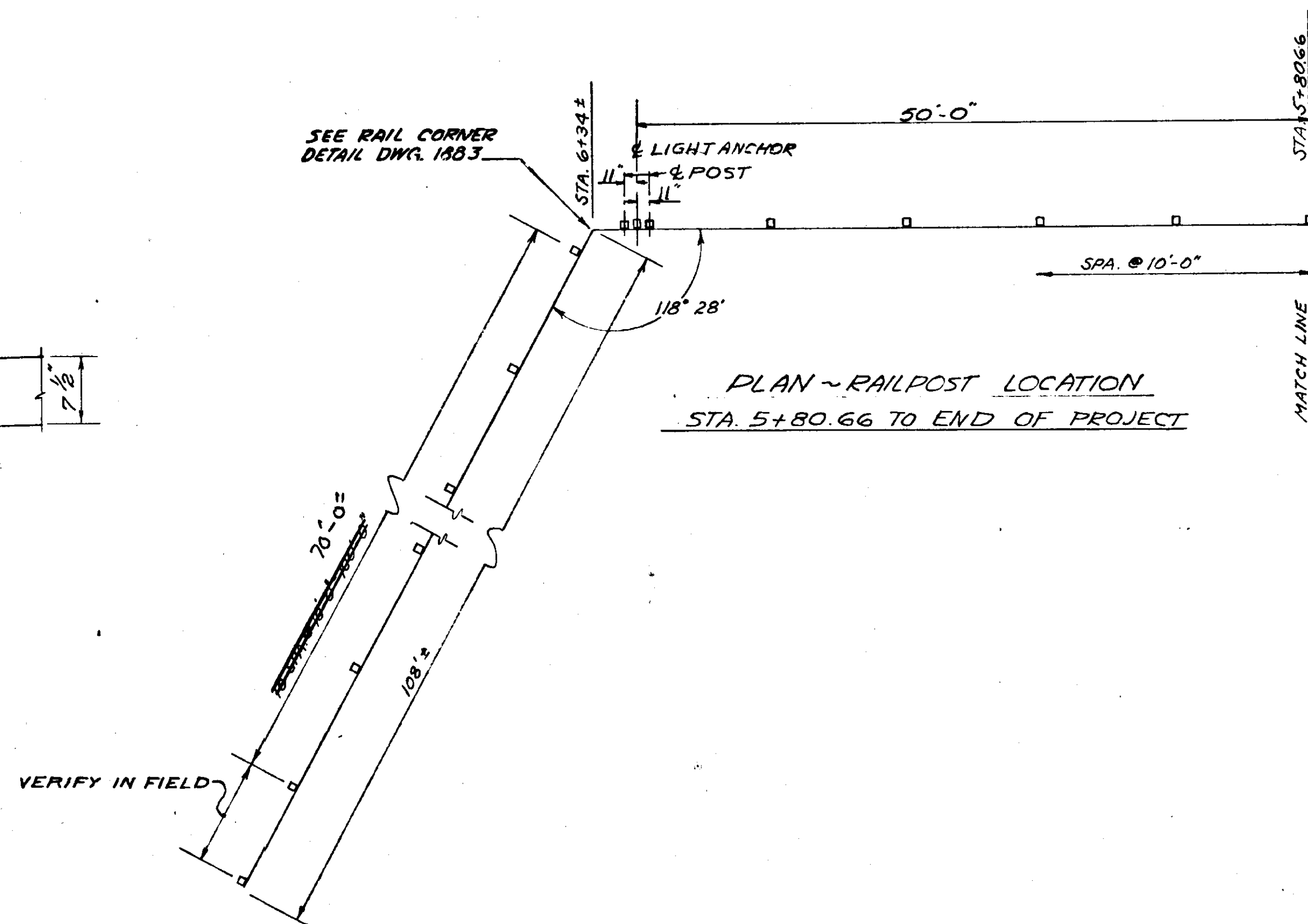
PLAN ~ RAIL POST LOCATION
STA. 0+25 TO STA. 2+25



PLAN ~ RAIL POST LOCATION
STA. 3+40 TO STA. 5+80.66



NOTE
4 INLETS REQUIRED
'D' = 3'-10 3/4" AT STA. 0+30.
'D' = 1'-3" AT STA. 2+32 ± & 2+69.5 ±
& 6+30 ±. INLETS MAY BE
CAST-IN-PLACE OR PRECAST.



NOTE:
FOR RAIL DETAILS, SEE DWG. NO. 1883

AS ADVERTISED

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
FRONT STREET
GRANT ST. TO MISSION ST.
KETCHIKAN, ALASKA

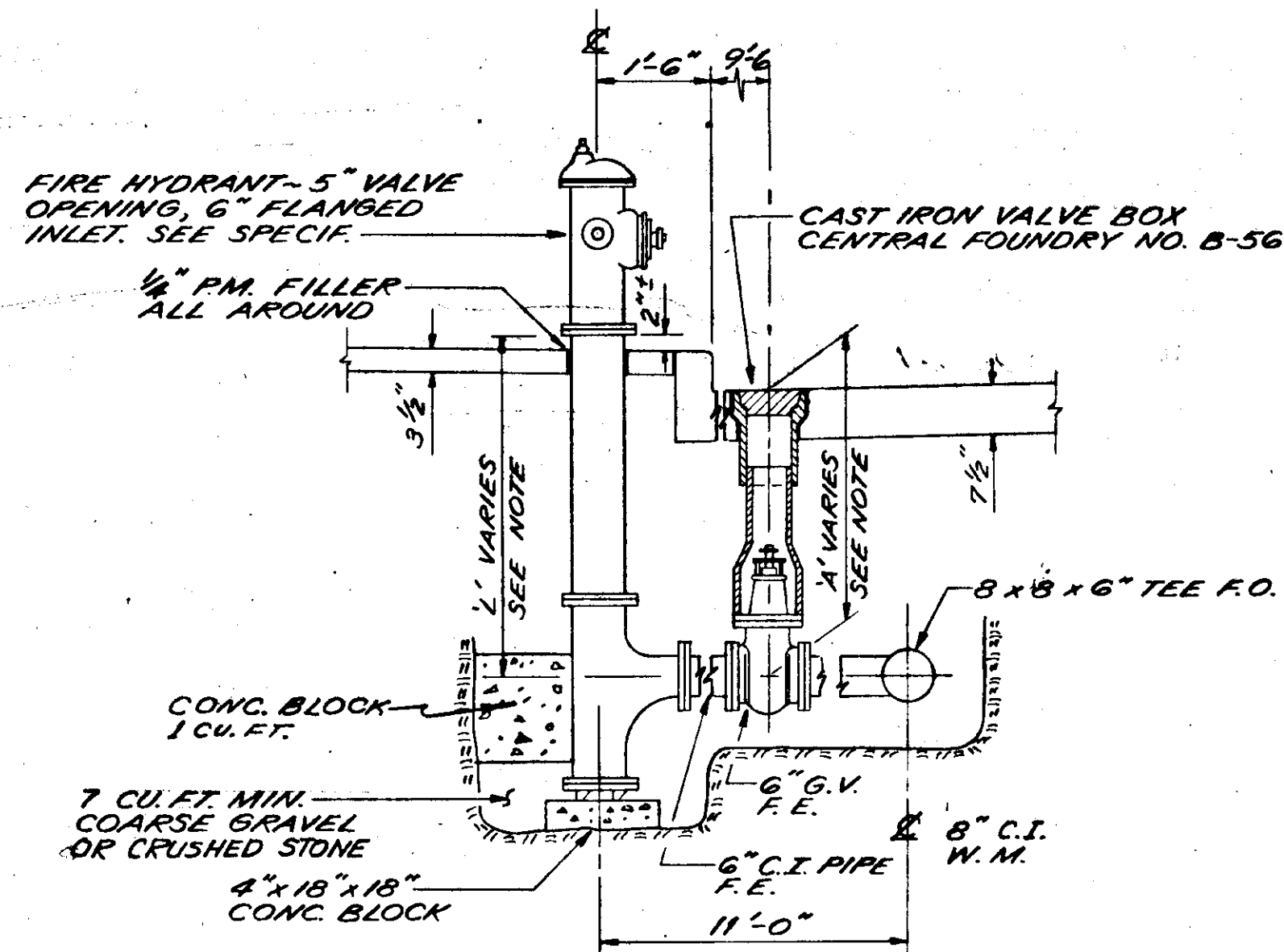
ALUMINUM RAILING
BOX INLETS
MISC. DETAILS

3/1/68 *[Signature]*
Note: Revised by Alaska
Department of Highways, 1967.

LANGDALE AND CONNELL
ENGINEERS
1231 SECURITIES BLDG.
SEATTLE 1, WASHINGTON

DATE

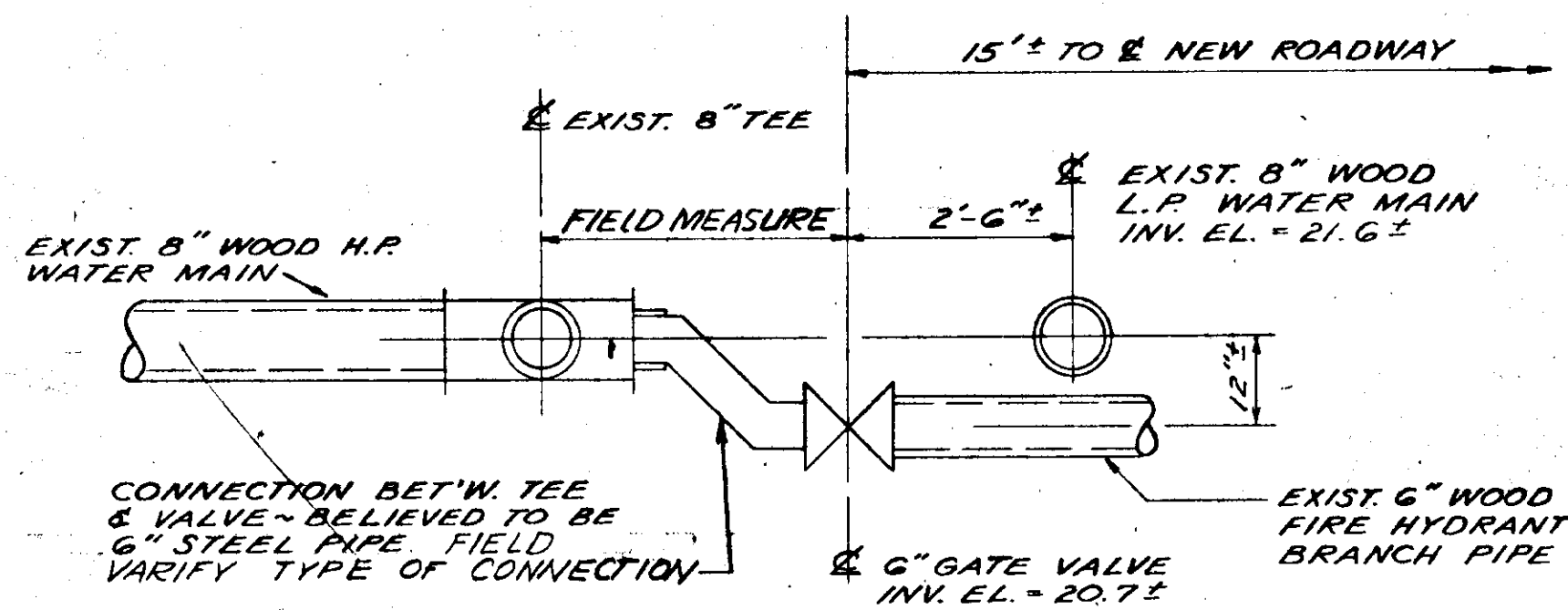
DRAWING NO. 1883



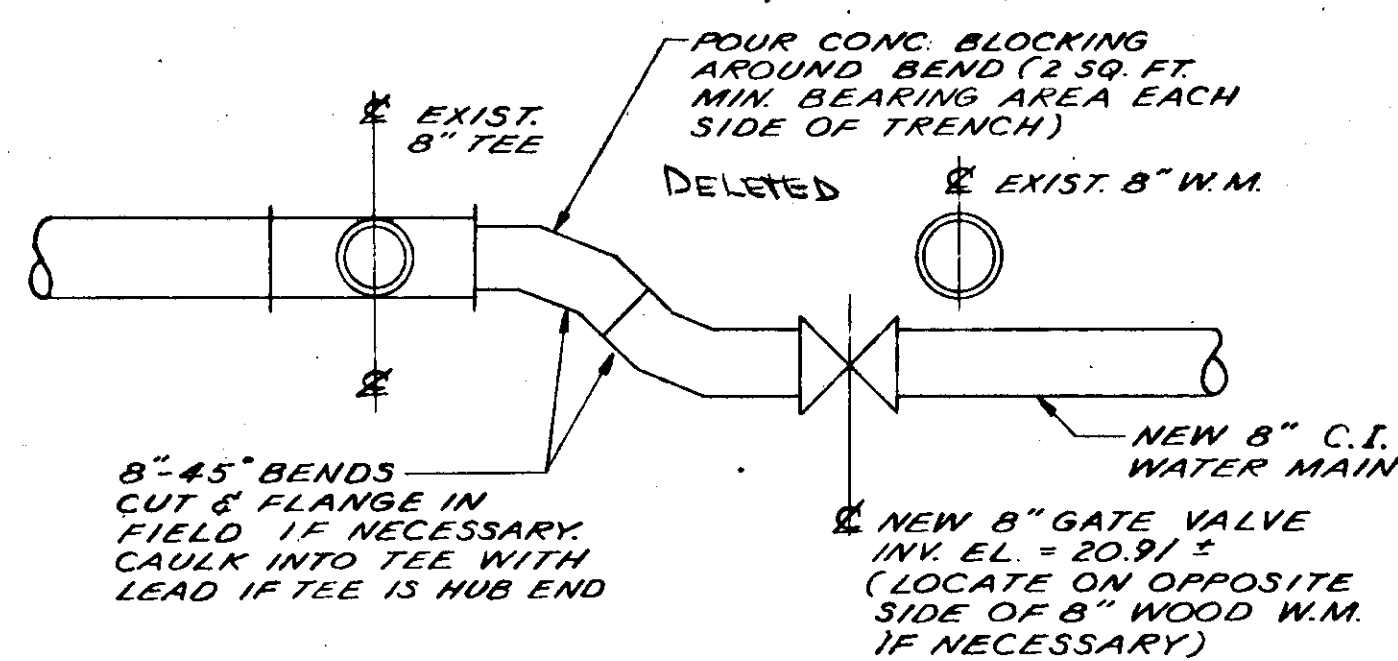
FIRE HYDRANT DETAIL
NOT TO SCALE

NOTE

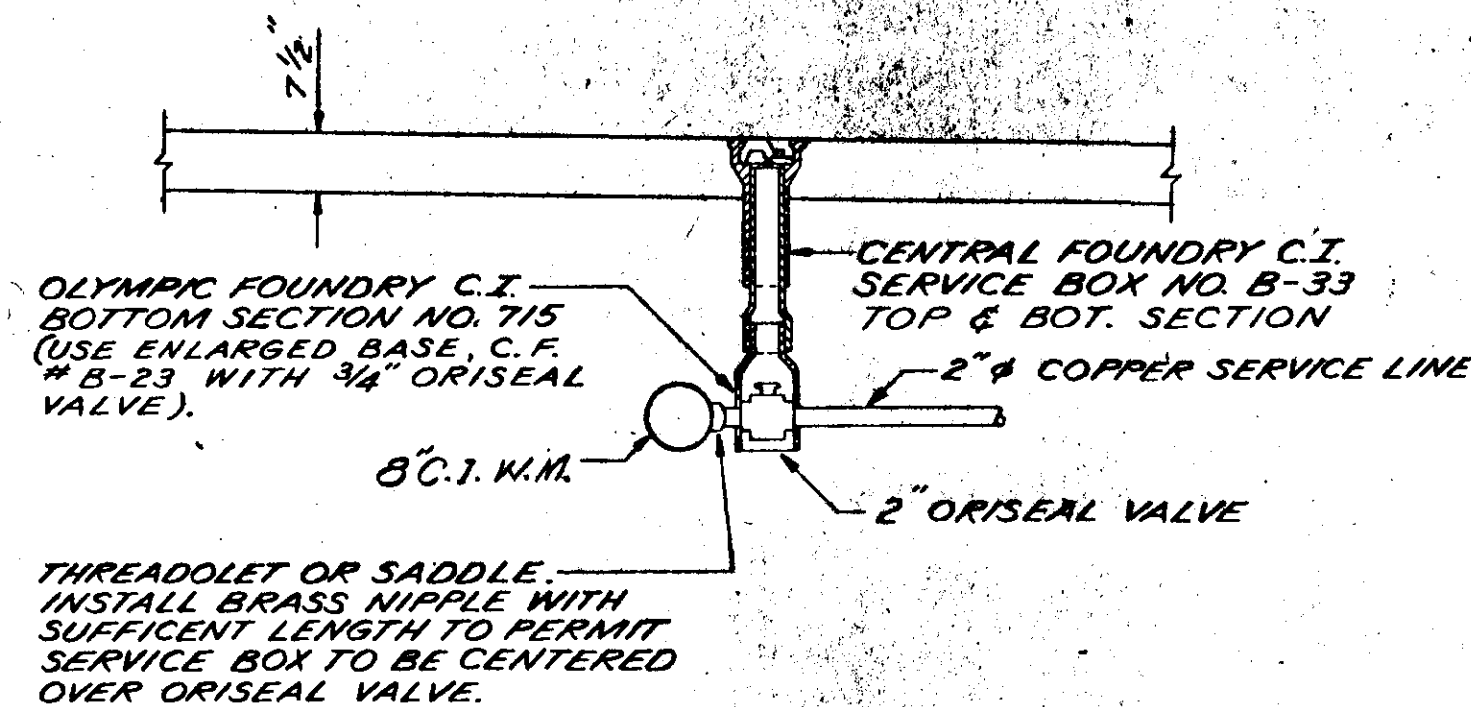
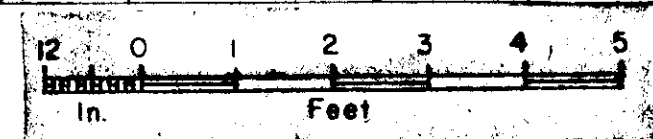
1. USE SCREW ON FLANGES ON 6" C.I. PIPE. SEE SPECIF.
2. DEPTH $X' = 2'-10"$, $Y' = 3'-6"$ @ STA. 0+36
DEPTH $X' = 4'-3"$, $Y' = 4'-11\frac{1}{2}"$ @ STA. 2+22.8



DETAIL- CONNECTION OF EXIST. FIRE HYDRANT BRANCH PIPE TO WATER MAIN AT DOCK STREET



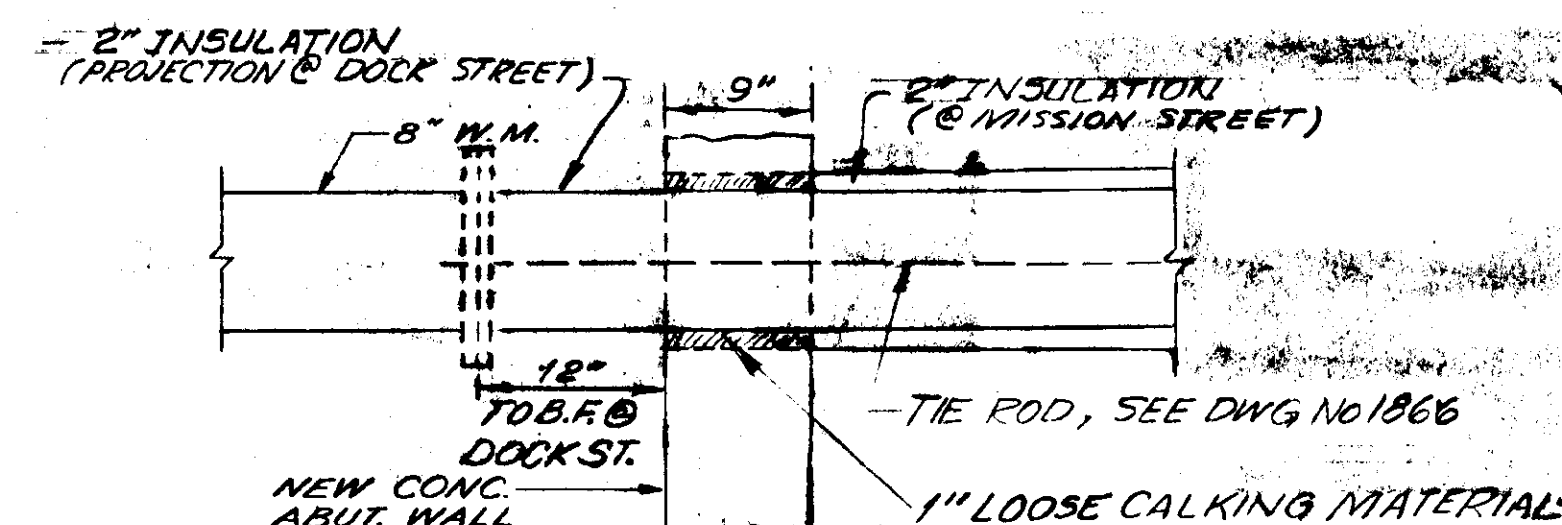
DETAIL- CONNECTION OF NEW WATER MAIN @ DOCK STREET



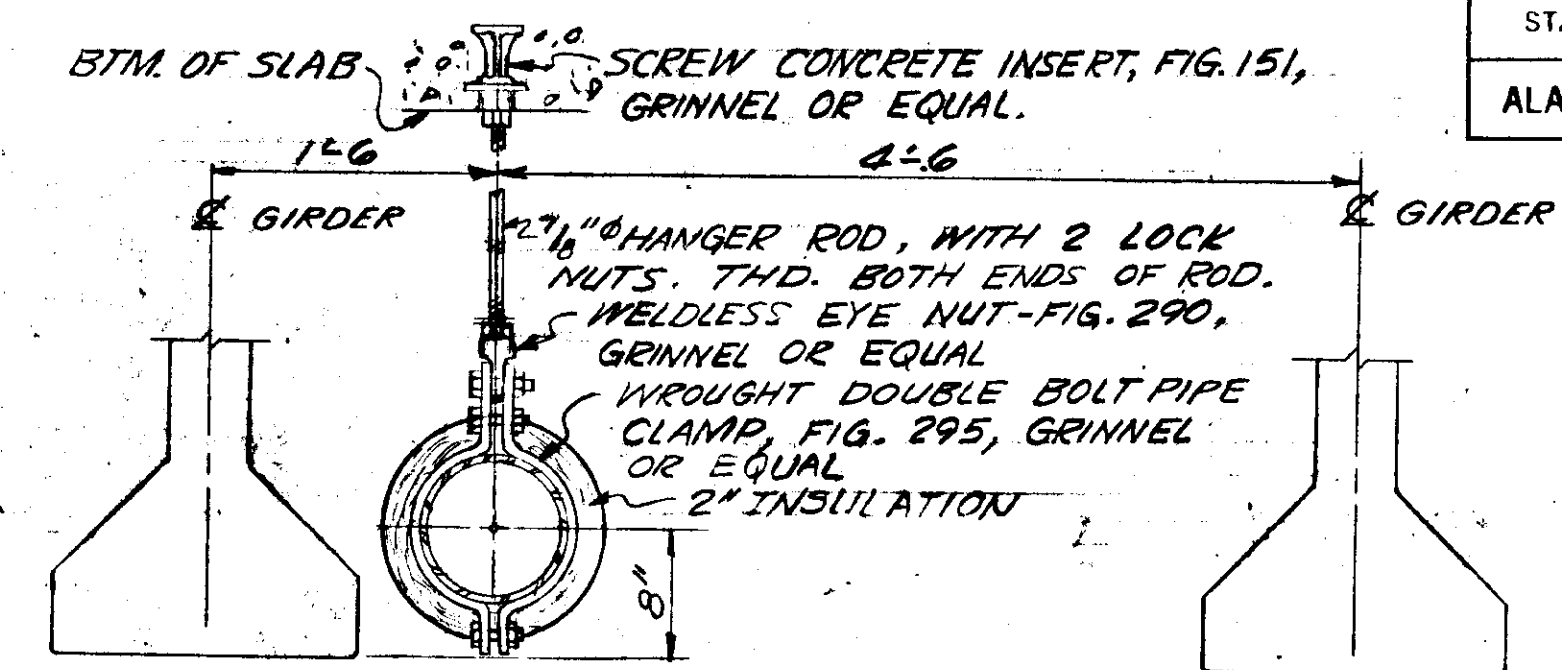
WATER SERVICE LINE CONNECTION
NOT TO SCALE

NOTE

1. CONNECT NEW SERVICE LINES TO EXISTING SERVICE PIPE AS SHOWN ON PLAN SHEET. CONNECTIONS TO EXISTING PIPE ARE TO BE MADE USING APPROPRIATE COUPLINGS AND BENDS AS REQ'D.
2. CHLORINATE ALL NEW SERVICE LINES TO THE POINT OF CONNECTION WHEN WATER MAIN IS CHLORINATED. CONTRACTOR IS TO FURNISH TEMPORARY VALVES FOR USE DURING THIS PERIOD.

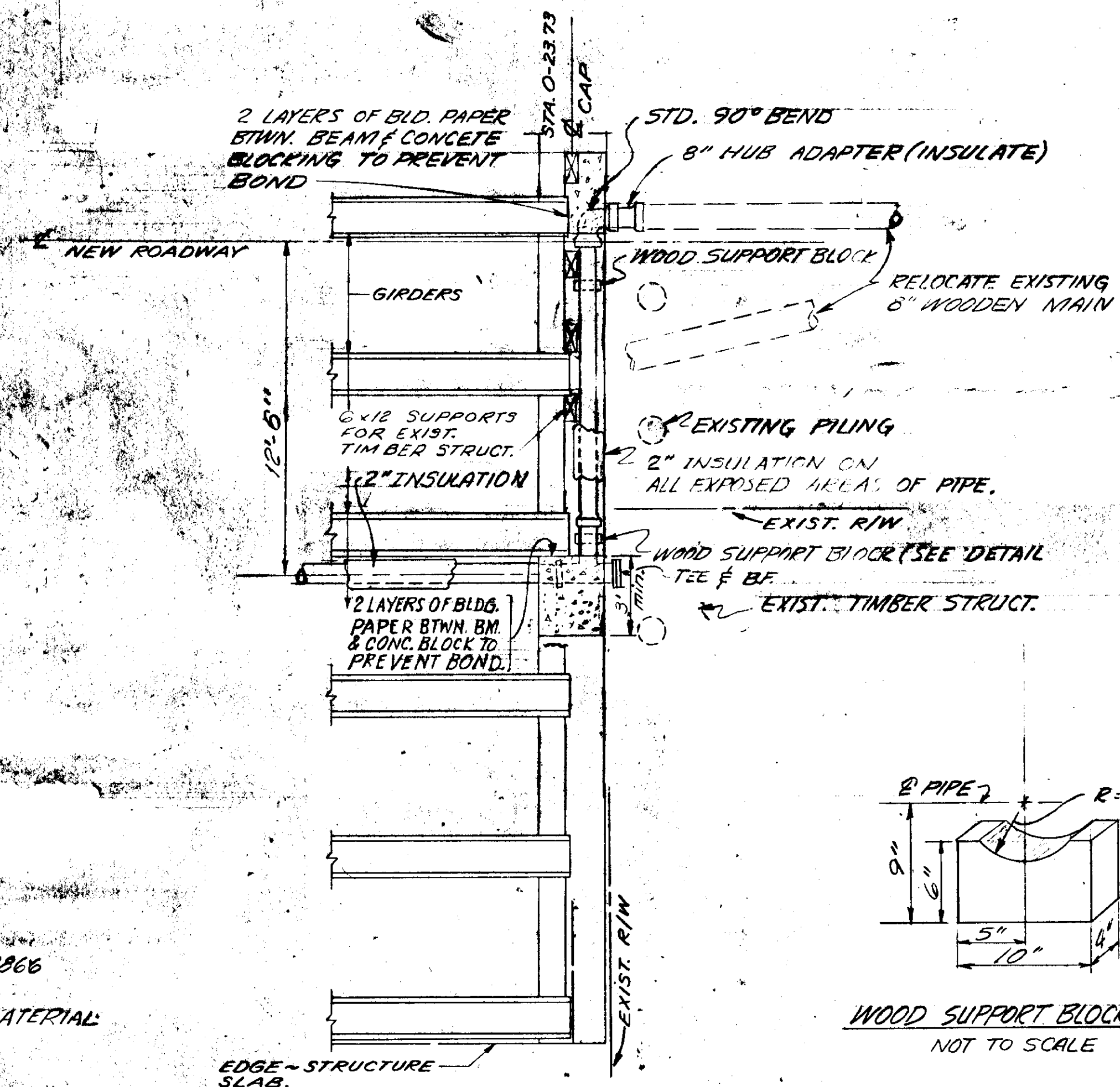


DETAIL OF WATER MAIN AT ABUTMENT WALL MISSION STREET AND DOCK STREET
NOT TO SCALE

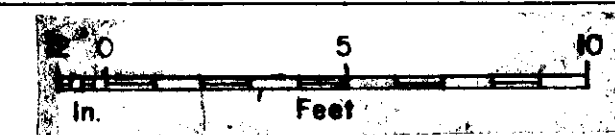


NOTE: GALVANIZE HANGER ASSEMBLY. LOCATE HANGER ASSEMBLIES @ 1/3 POINTS OF 49' SPAN

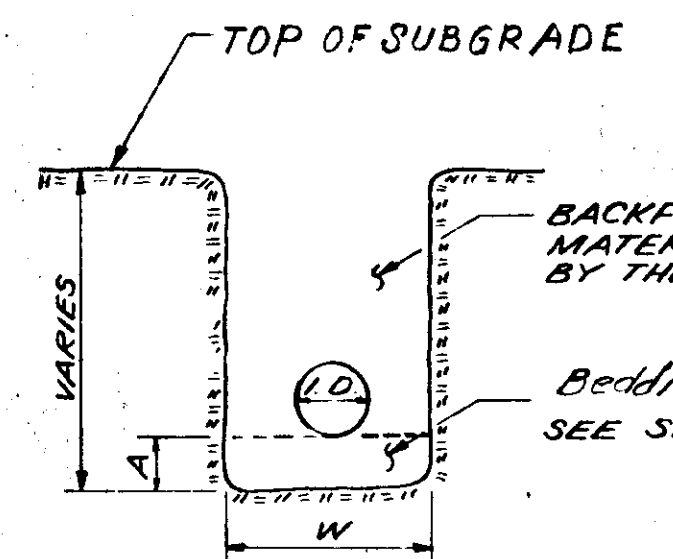
HANGER ASSEMBLY FOR WATER MAIN
2 Required



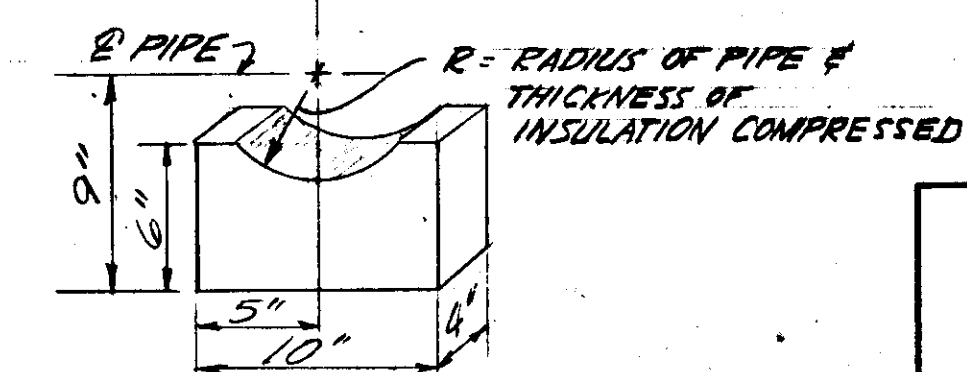
PLAN WATER MAIN CONNECTION AT MISSION ST.



	A	W
TRENCH IN EARTH	4"	6"
TRENCH IN ROCK	6"	8"
WATER PIPE	4"	6"
COPPER TUBING	0	2"



PAY LIMITS FOR EXCAVATION FOR WATER LINE



WOOD SUPPORT BLOCK DETAIL
NOT TO SCALE

AS ADVERTISED

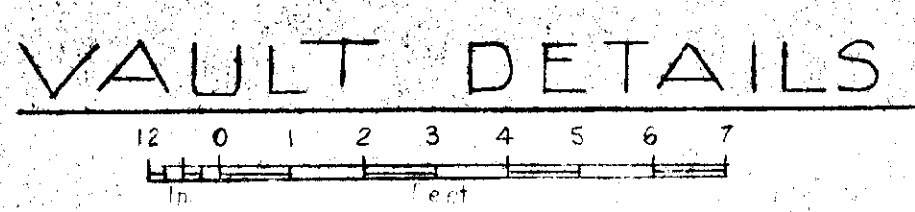
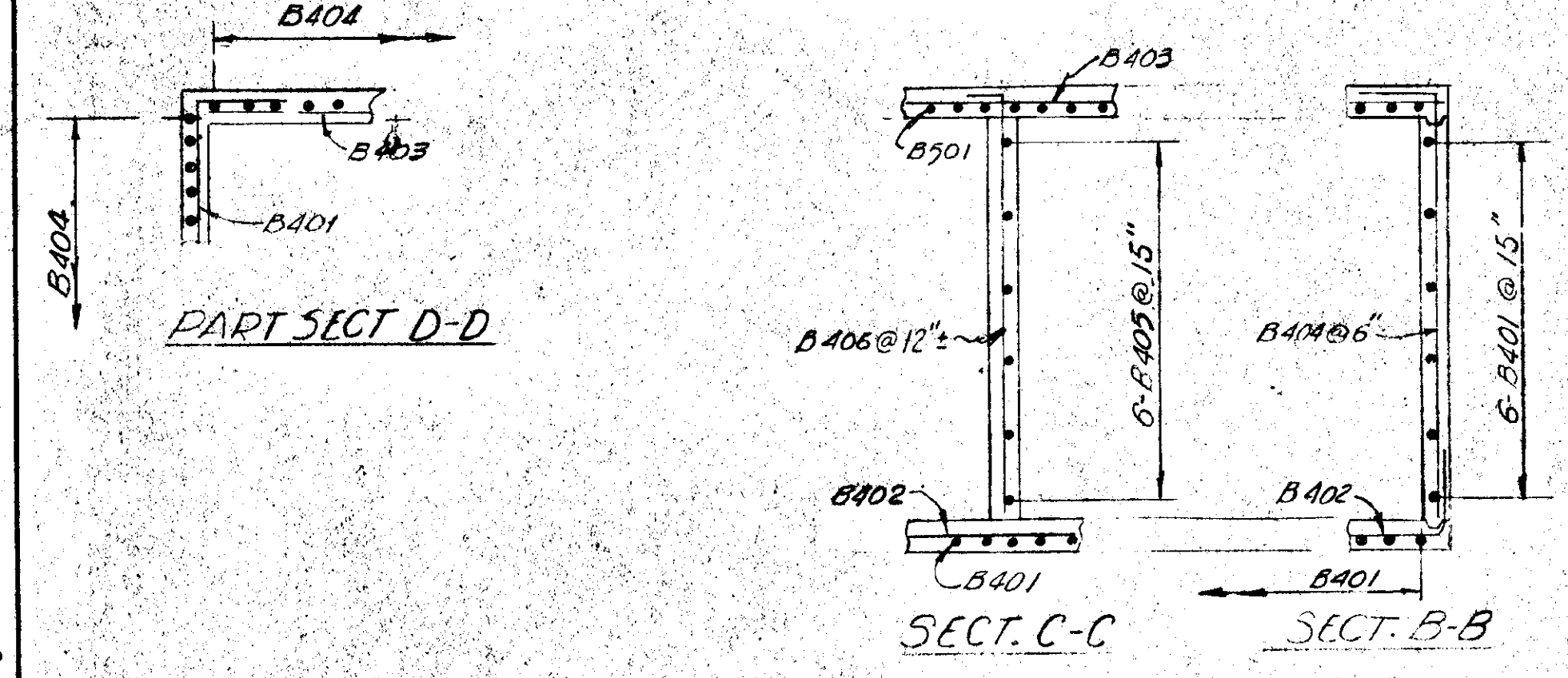
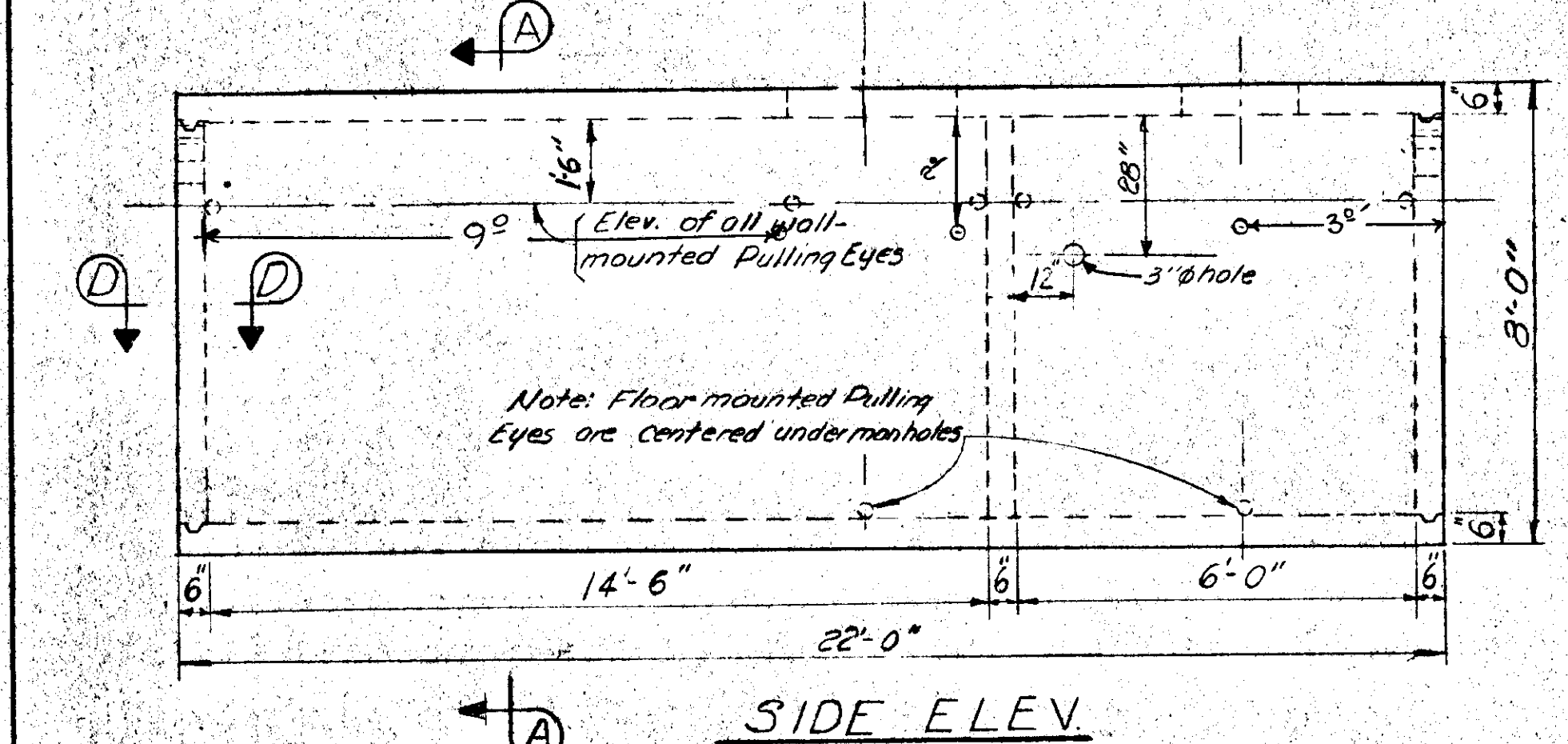
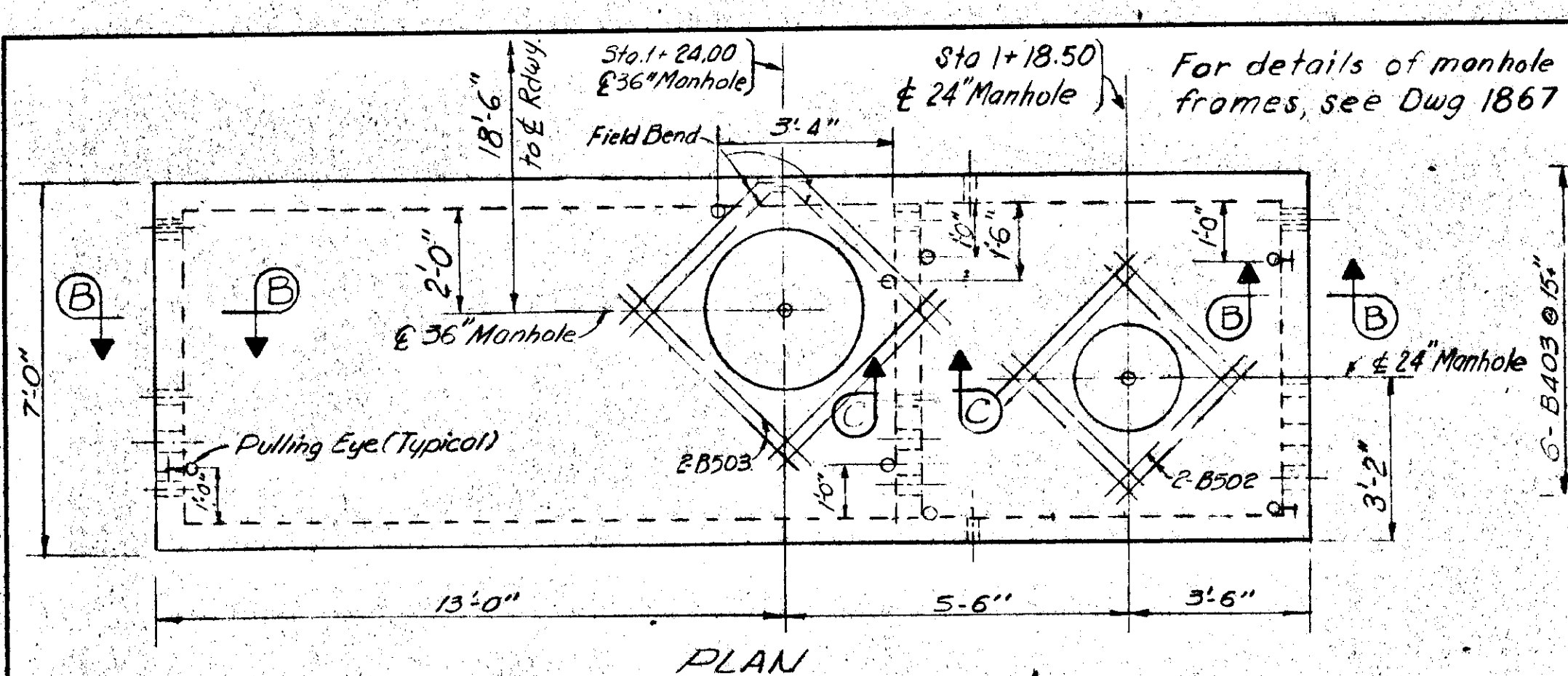
STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
FRONT STREET
GRANT ST. TO MISSION ST.
KETCHIKAN, ALASKA

DETAILS - WATER MAIN

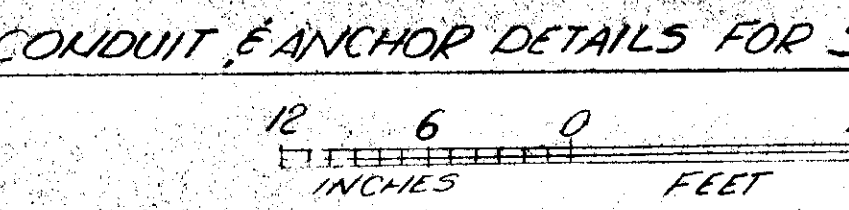
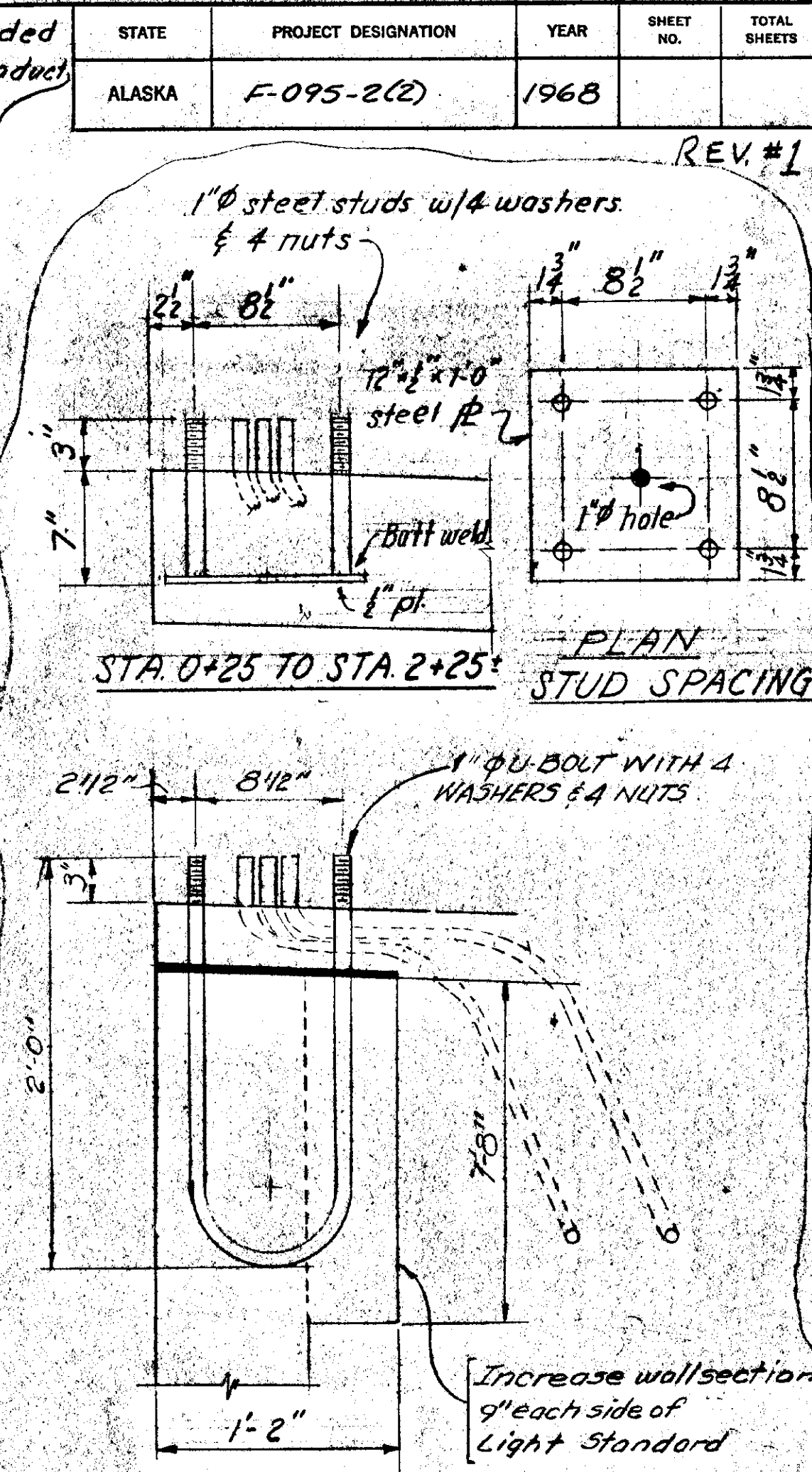
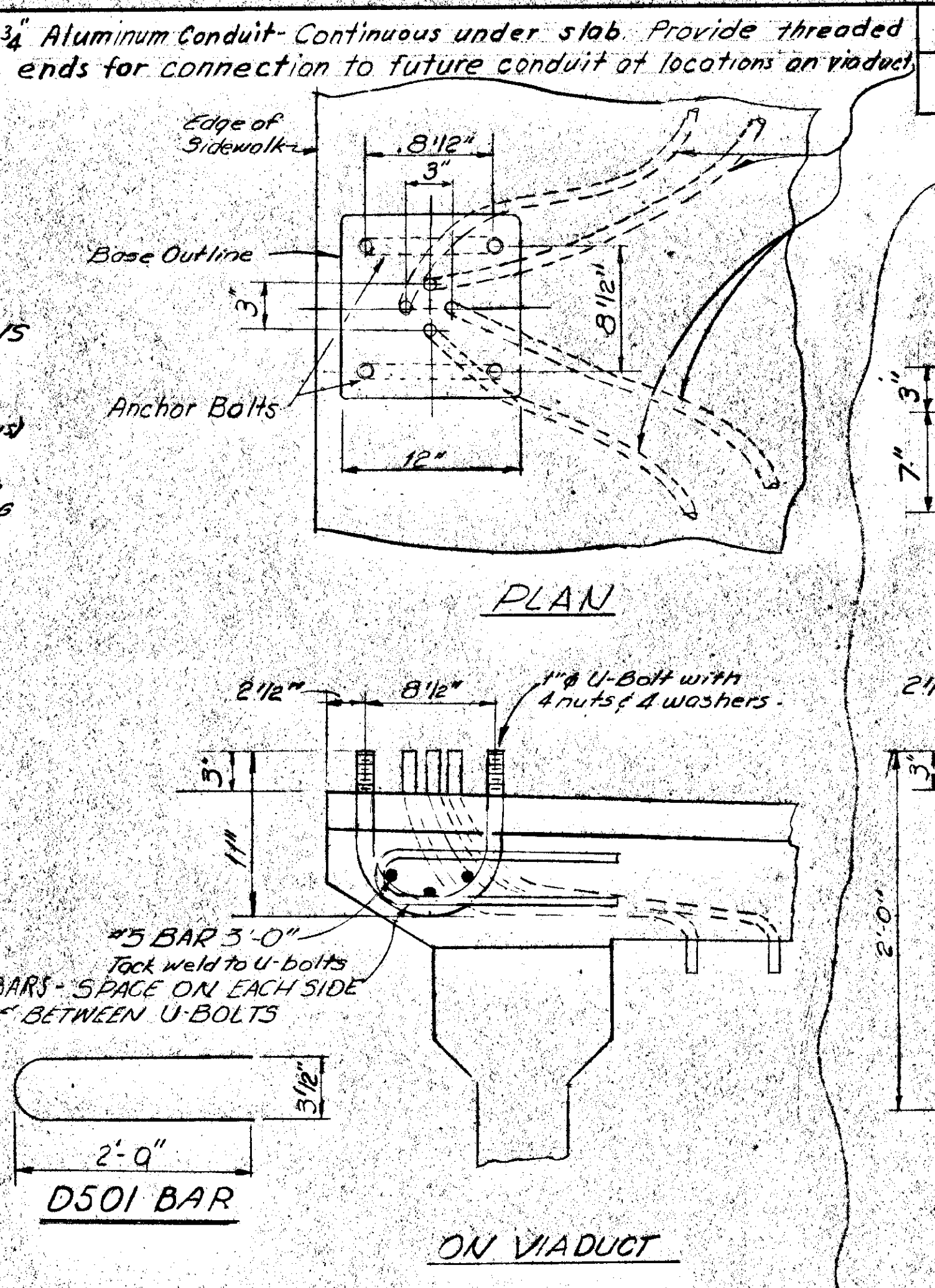
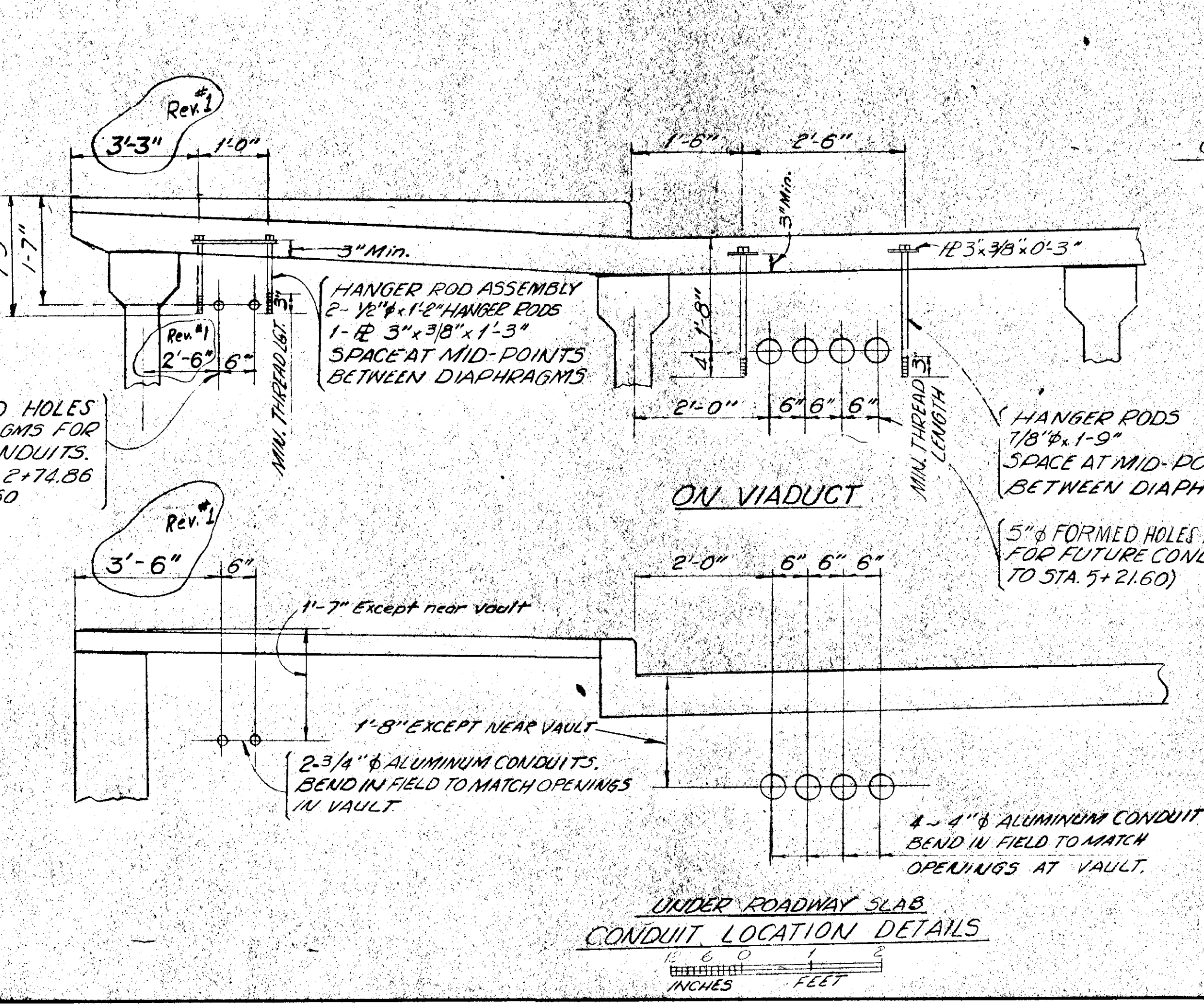
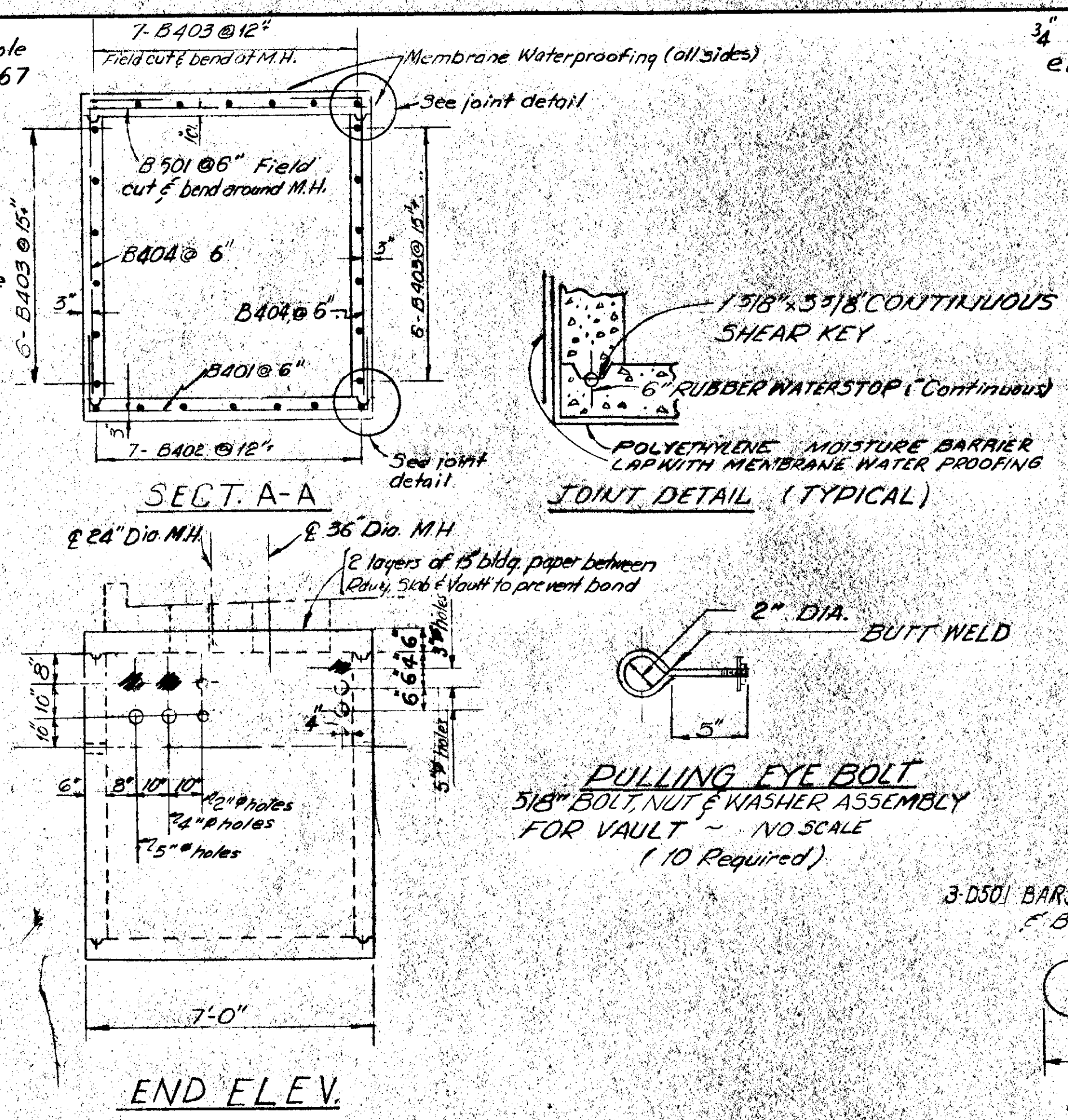
7/12/68
Note: Revised by Alaska
Department of Highways, 1967.

LANGDALE AND CONNELL
ENGINEERS
1031 SEQUOIA BLDG.
SEATTLE 1, WASHINGTON
DATE
DRAWING NO. 1884

Revision No. 1: 8-28-68: Change Anchor Bolts for Light Std. & location of Conduit for Retaining Wall set back.



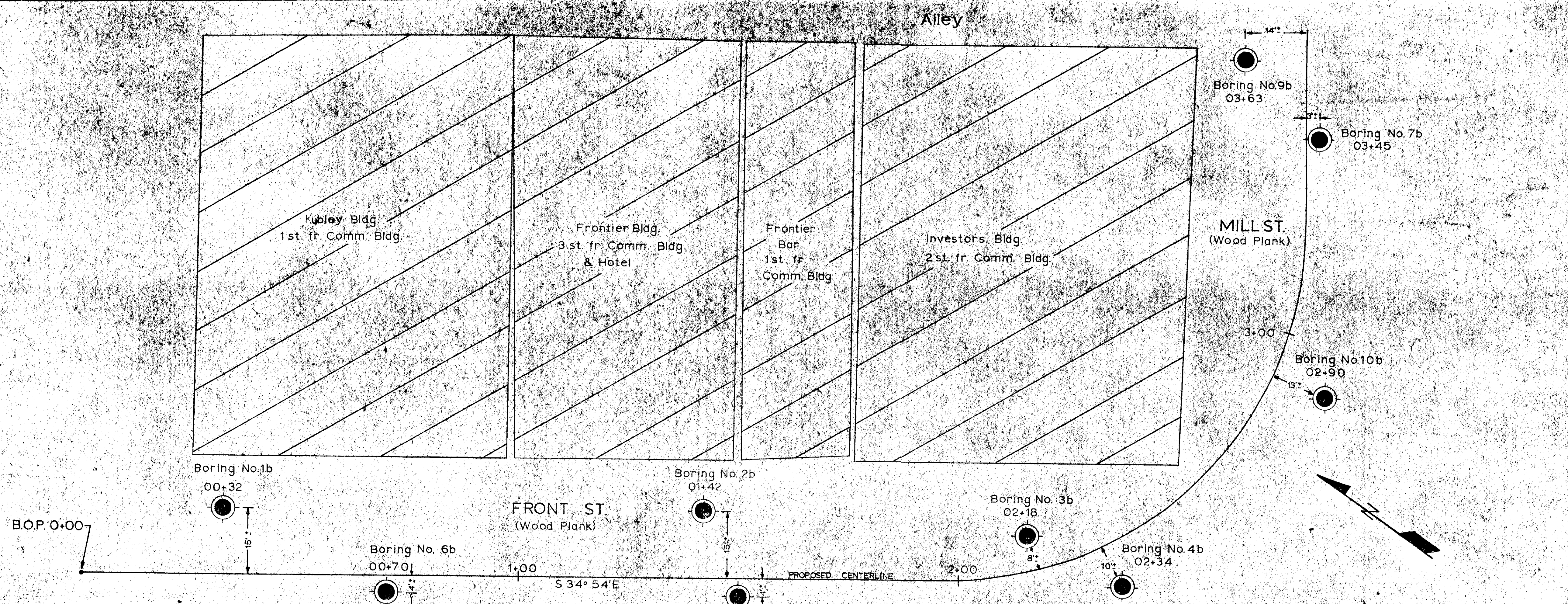
REINFORCING STEEL FOR VAULT					
MARK	NO.	SIZE	LENGTH	TYPE	BENDING DIAGRAMS
B401	56	4	10'-2"	Bent	
B402	7	4	24'-8"	Bent	
B403	19	4	21'-8"	St.	
B404	116	4	8'-9"	Bent	
B405	6	4	7'-8"	Bent	
B406	6	4	7'-9"	Bent	<u>B401, B402, & B405</u> Dimensions are out to out. <u>B404 & B406</u>
B501	44	5	6'-8"	St.	
B502	8	5	4'-0"	St.	
B503	8	5	5'-0"	St.	



NOTES
Conduits shall be provided from Sta. 0+25.6 to Sta. 2+74.86 & from Sta. 5+21.60 to end of project at Sta. 6+43.1. Extend conduits through abutment walls 6" and cap.
All hanger rods & assemblies for supporting conduits and all anchor bolts, plates, washers, and nuts for street light standards shall be galvanized.

PRELIMINARY PLAN
FOR DESIGN STUDY
SEP 16 1968

FRONT STREET
GRANT ST. TO MISSION ST.
UTILITY VAULT & MISC. DETAILS



STATE	ROUTE	SECTION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	F-095-2(2)		1968		

KEY TO BORING LOGS

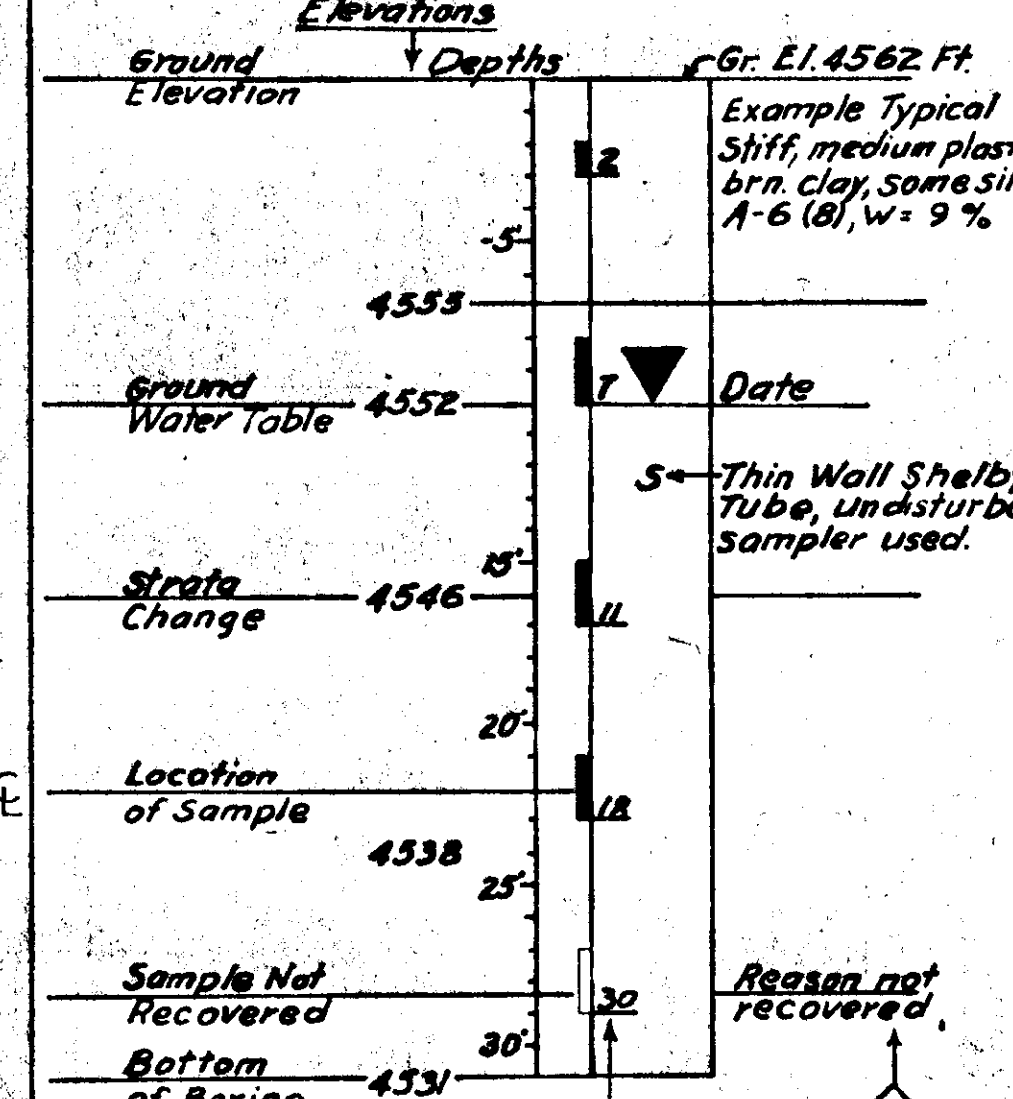
RELATIVE DENSITY (SAND & SILT)

Very Loose - Less than 4 blows per foot.
Loose - 4 to 10 blows per foot.
Medium - 10 to 30 blows per foot.
Dense - 30 to 50 blows per foot.
Very Dense - More than 50 blows per foot.

CONSISTENCY (CLAY)

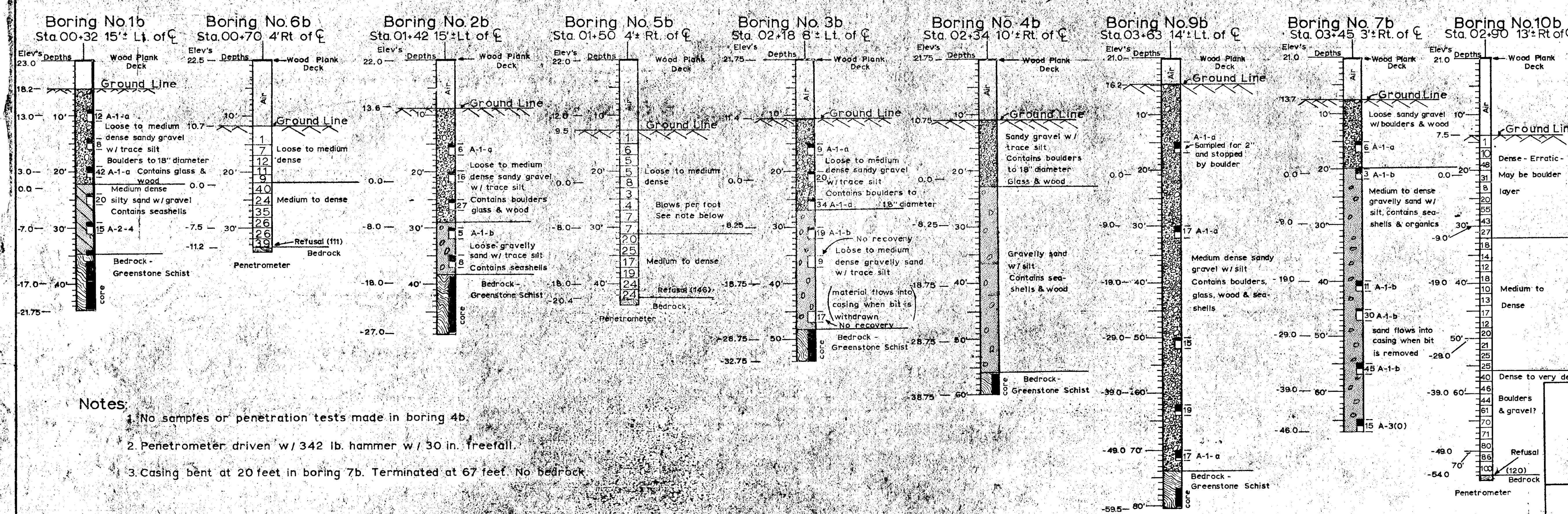
Very Soft - Less than 2 blows per foot.
Soft - 2 to 4 blows per foot.
Medium - 4 to 8 blows per foot.
Stiff - 8 to 15 blows per foot.
Very Stiff - 15 to 30 blows per foot.
Hard - More than 30 blows per foot.

Boring (Test Hole) No. Station
0+00 & or Lt. or Rt. in Ft. Offset



No. of blows of a 140 lb hammer falling 30 inches required to drive a std. 1 1/8" I.D. 2" O.D. Sample tube 1 Ft.

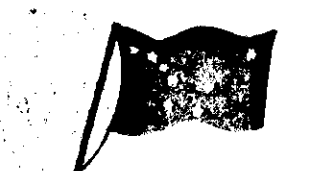
Abbreviations
L.L. - Liquid Limit in %
P.I. - Plastic Index in %
W. G. - Well Graded
Pen. - Penetration



- Notes:**
- No samples or penetration tests made in boring 4b.
 - Penetrometer driven w/ 342 lb. hammer w/ 30 in. freefall.
 - Casing bent at 20 feet in boring 7b. Terminated at 67 feet. No bedrock.

AS ADVERTISED

STATE OF ALASKA
DEPARTMENT OF HIGHWAYS
MATERIALS SECTION



**FRONT STREET
TEST BORINGS**

DATA R.M.	PROJECT NO. F-095-2(3)
EXAM R.N.G.	DATE NOV 22 1968

EA.	REMOVE FIRE HYDRANT	202(5)					
L.F.	REMOVE WATER & DRAIN PIPE	202(5)					
EA.	REMOVE INLET	202(5)					
L.F.	NEW 18" C.M.P.	603(6)					
L.F.	NEW 24" C.M.P.	603(6A)					
L.F.	RELAY SEWER & DRAIN PIPE	603(33)					

MISCELLANEOUS WORK ITEMS SHOWN ON ALIGNMENT AND TOPOGRAPHY SHEETS							
STA.	DESCRIPTION						
0-25 to 0+20	Remove and dispose 8" wood water main pipe suspended under timber structure at Mission Street.	45					
0+25	Cut 6" wood fire hydrant branch pipe. Remove and dispose pipe in new construction area. Remove fire hydrant and tee and deliver to Ketchikan Public Utilities storage area. Check closure of fire hydrant gate valve and stop all leakage. Fill valve box with tamped sand and cap with 3" thickness of concrete flush with pavement surface. Fill 6" wood pipe remaining under existing pavement with rammed sand. All ITEM 202(5)	1	20				
0+39.5	Remove and dispose concrete box inlet and 8" concrete pipe in new construction area. Salvage metal grate.	17	1				
0+64 to 2+10 to 2+28	Abandon water service in place. Fill service box with sand and cap with 3" thickness of concrete flush with pavement surface. ITEM 202(5)						
1+73	Plug 6" concrete sewer with concrete and abandon in place. ITEM 202(5)						
2+34	Remove and dispose box inlet, plug pipe with concrete and abandon in place.		1				
2+34.5 to 2+60	Remove and dispose 6" wood fire hydrant branch pipe, fire hydrant, gate valve and connection to tee. The concrete pavement slab that is to remain shall be cut and removed to 12" clear of the trench. All ITEM 202(5). New concrete pavement to be placed under ITEM 202(1).	1	49				
2+40	Cut the 18" C.M.P. storm sewer 12" from face of wall. Clean exterior surface of stub projecting from wall and apply two coats of hot asphalt as used on the new pipe to be installed. Connect new 18" C.M.P. to extend storm sewer beyond face of new concrete wall as shown on the plan.		3	5			
2+46	Cut the 24" C.M.P. sanitary sewer 12" from face of wall. Remove and dispose pipe to the vertical bend. Clean and coat exterior surface of stub projecting from wall as described above. Install new 24" C.M.P. to replace pipe removed.		8	8			
2+68	Remove and dispose concrete box inlet and outlet pipe.	5	1				
3+30	Re-align 8" C.M.P. drain and 8" C.M.P. sewer to clear new pier construction. Pipes are exposed.					46	
2+75 to 5+25	Remove and dispose old form lumber from existing wall. ITEM 202(1)						
5+17	Remove and dispose drop inlet, plug pipe with concrete and abandon in place.		1				
6+30	Remove and dispose transformer vault to 3 feet below grade. Fill with select material.						
TOTALS:		2	147	4	5	8	46

MISCELLANEOUS WORK ITEMS SHOWN ON NEW CONSTRUCTION SHEETS							
NOT INCLUDING WATER SYSTEM							
STA.	DESCRIPTION						
0-25 to 0+25.7	Remove wood decking outside limits of new construction area in Mission and Front Streets as necessary to accomplish new construction. Set 6 new wood piles at Mission Street. Adjust and/or replace caps, stringers and decking as necessary to meet new structure. Reconstruct wood sidewalk on N. W. side of Mission Street to meet new concrete sidewalk. Construct wood sidewalk on S. E. side of Mission Street on top of new structure slab to meet existing wood sidewalk on Front Street. All work to be as authorized by the Engineer. ITEM 648(1)						
0+00	Install survey monument at intersection of Mission Street and new Front Street centerlines.						1
0+00	Adjust existing C. I. frame and cover on manhole as required.						1
0+19	Adjust existing metal inlet grate as required.						1
0+30	Construct box inlet. Install new 8" outlet pipe.		6	1	1		
0+39.5	Connect new 8" concrete pipe to existing 8" concrete pipe from box inlet on North side of Front Street. Lay new pipe to new box inlet at Sta. 0+30.		32	1			
0+50	Raise existing C. I. frame and cover on manhole to meet new pavement grade.						1
2+03	Lower existing 6" concrete sewer. Extend thru new wall with new 6" pipe and plug for future use.	15	28				
2+25 to 2+76	Dock Street - cut stringers to seat on new concrete wall. Adjust stringers and decking to meet new pavement and sidewalks; all as authorized by the Engineer. ITEM 648(1)						
2+32+ to 2+69.5+	Construct box inlet. Install new 8" outlet pipe.		9	1	1		
			8	1	1		
2+47	Raise existing C. I. frame and cover on manhole to meet new pavement grade.						1
2+50	Install survey monument at intersection of Dock Street and new Front Street centerlines.						1
4+59	Raise existing C. I. frame and cover on manhole to meet new pavement grade.						1
5+29	Construct box inlet. Install new 8" outlet pipe.		8	1	1		
TOTALS:		15	28	63	1	4	5 2

L.F.	RELAY SEWER & DRAIN PIPE	603(33)
L.F.	6" CONCRETE PIPE	604(5)
L.F.	8" CONCRETE PIPE	604(6)
EA.	8" CONCRETE BEND (30°)	604(7)
EA.	BOX INLET	604(2)
EA.	METAL FRAME & GRATE	604(2)
EA.	ADJUST MANHOLE & INLET	604(4)
EA.	INSTALL SURVEY MONUMENT	14(1)

AS ADVERTISED

FRONT STREET
GRANT ST. TO MISSION ST.
LIST OF MISC. WORK

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 3/12/68
Approved [Signature]

BRIDGE NO. 1080
DWG. NO. 1899

STATE	PROJECT DESIGNATION	YEAR	
ALASKA	F-095-2(2)	1968	

WATER MAIN CONSTRUCTION		L.F. 8" CAST IRON PIPE WITH INSULATION	L.F. 8" CAST IRON PIPE WITHOUT INSULATION	L.F. 6" CAST IRON PIPE	EA. 8" GATE VALVE	EA. 6" GATE VALVE	EA. 8 x 8 x 8" TEE	EA. 8 x 8 x 8" TEE F.E.	EA. 8 x 8 x 6" TEE F.O.	EA. 8" 45° BEND	EA. 8" HUB TO FLANGE ADAPTER	EA. 8" BLIND FLANGE	EA. 6" BLIND FLANGE	EA. 2" ORISEAL VALVE	EA. 3/4" ORISEAL VALVE	L.F. 2" COPPER TUBING	L.F. 3/4" COPPER TUBING	EA. 2 x 2 x 3/4" COPPER TEE	EA. 2" COPPER QUARTER BEND	EA. C.I. VALVE BOX	EA. C.I. SERVICE BOX FOR 2" VALVE	EA. C.I. SERVICE BOX FOR 3/4" VALVE	EA. FIRE HYDRANT	EA. 6" C.I. SHORT PIPE CONNECTION TO F. H.	EA. 2" SERVICE CAP	EA. 1 1/2" SERVICE CAP	EA. 1-1/4" SERVICE CAP	EA. 1" SERVICE CAP	EA. 3/4" SERVICE CAP	EA. 8" 90° BEND	
STA.	DESCRIPTION																														
0-25	Relocate existing 8" wood water main, suspended under timber structure, to meet alignment of new water main.																														
0-25 to 0+25	Install new 8" insulated cast iron water main pipe. Support pipe as shown in the plans. Connect to existing 8" wood main with 8" hub to flange adapter. All connections in cast iron pipe to be made with flanged joints.	60					/				/	/																		/	
0+25 to 2+76	Install 8" cast iron main pipe with 8 x 8 x 8" tee located at Sta. 2+60. Connect new 8" gate valve to existing 8" tee on 8" high pressure main at Dock Street with 45° bends as shown in the plans. Anchor pipe in new concrete wall at Sta. 0+25.67 and Sta. 2+74.86. Connect 8" gate valve to tee at Sta. 0+36 and Sta. 2+60. Insulate extension of main beyond wall at Sta. 2+74.88.		280*		3		/			2		/									3										
0+27.5	Install 2" Oriseal valve. Install 2" copper tubing to extend thru new concrete wall and connect to existing 2" galvanized steel water service line as indicated in the plans.													/		25			/		/										
0+36 & 2+22.8	Install new fire hydrant as shown in the plans. All connections from tee to hydrant to be made with flanged joints.				/	/		/	/											/	/		/	/							
2+60	Install 2" Oriseal valve. Install 2" copper tubing with 2" 90° bend and 2 x 2 x 3/4" tee located at Sta. 2+72.5. Connect 3/4" Oriseal valve to tee and install 3/4" copper tubing thru abutment wall at Sta. 2+74.86. Install 2" copper tubing to extend from tee thru retaining wall at Sta. 2+72.5 and connect to existing 2" galvanized steel water service line as indicated in the plans.													/	/	40	5	/	/		/	/									
1+70	Install 6" water service for future use. All connections from tee to be made with flanged joints.			20	/			/				/								/											
2+27	Install 2" Oriseal valve. Install 2" copper tubing to extend through retaining wall and cap.												/			20					/										
3+44	Cap existing 1-1/2" copper water service.																										/				
3+45	Cap existing 2" copper water service.																									/					
3+94	Cap existing 1-1/4" copper water service.																											/			
4+24 4+69 4+93	Cap existing 1" copper water service.																												/	/	/
4+92	Cap existing 3/4" copper water service.																												/		
TOTALS:		60 L.F.	280 L.F.	20 L.F.	3 EA.	3 EA.	/ EA.	/ EA.	3 EA.	2 EA.	/ EA.	2 EA.	/ EA.	3 EA.	/ EA.	85 L.F.	5 L.F.	/ EA.	2 EA.	6 EA.	3 EA.	/ EA.	2 EA.	2 EA.	4* EA.	/ EA.	/ EA.	3 EA.	/ EA.	3 EA.	/

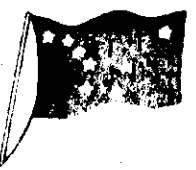
* 1 known
3 estimated between Sta. 5+21 & 6+43

AS ADVERTISED

FRONT STREET
GRANT ST. TO MISSION ST.
LIST OF MISC. WORK
WATER MAIN CONSTRUCTION

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska

Date 7/1/68
Approved [Signature]



BRIDGE NO. 1080
DWNG. NO. 1899

Designed By
Checked By
Drawn By
Checked By
Traced By