

F.R.A.	STATE	FED. AID	SHEET	TOTAL
DIV. NO.	MAINE	PROJ. NO.	NO.	SHEETS
1	IN-01-1(8)	65	240	

SHEET NO.	INDEX
63	General Plan and Elevation
64	North Abutment
65	South Abutment
66	South Abutment Wing Walls
67	Pier Details
68	Framing Plan and Details
69	Cross Section and Details

NO.	ITEMS	QUANTITIES
204-12	Structural Earth Excavation, Abutts and Ret Walls	150 Cu Yds.
204-14	Structural Earth Excavation, Piers	270 Cu Yds.
204-15	Structural Rock Excavation, Piers	25 Cu Yds.
405-20	Reinforced Portland Cement Conc. Approach Slab	110 Sq. Yds.
701-33	Portland Cement Concrete, Abutts & Ret. Walls	700 Cu Yds.
701-37	Portland Cement Concrete, Substructure Columns, Column Bases, Benis, Collision Wall, Girders, Struts, etc.	110 Cu Yds.
701-40	Portland Cement Concrete, Roadway & Sidewalk Slabs on Steel Bridges	235 Cu Yds.
701-47	Portland Cement	1520 Bbls.
701-50	Portland Cement Concrete Fill	80 Cu Yds.
702-103	Structural Steel, Fabricated & Delivered	207,000 lbs.
702-104	Structural Steel, Erection	207,000 lbs.
708-9	Bronze or Copper Alloy Bearing and Expansion Plates, Delivered	330 lbs.
708-10	Bronze or Copper Alloy Bearing and Expansion Plates, Placing	330 lbs.
708-13	Reinforcing Steel, Delivered	29,000 lbs.
708-14	Reinforcing Steel, Placing	29,000 lbs.
708-17	Shear Connectors	Lump Sum
708-21	Cast-in-place Concrete Piles	300 Lin. Ft.
709-1	Membrane Waterproofing	645 Sq. Yds.
710-1	Damp Proofing	270 Sq. Yds.
804-6	French Drains	250 Cu Yds.
805-8	Bridge Rail, Delivered and Erected	400 Lin. Ft.
908-37	Bridge Anchorage	4 Each.
913-7	Bit-Treated Stone Slope Protection	250 Sq. Yds.

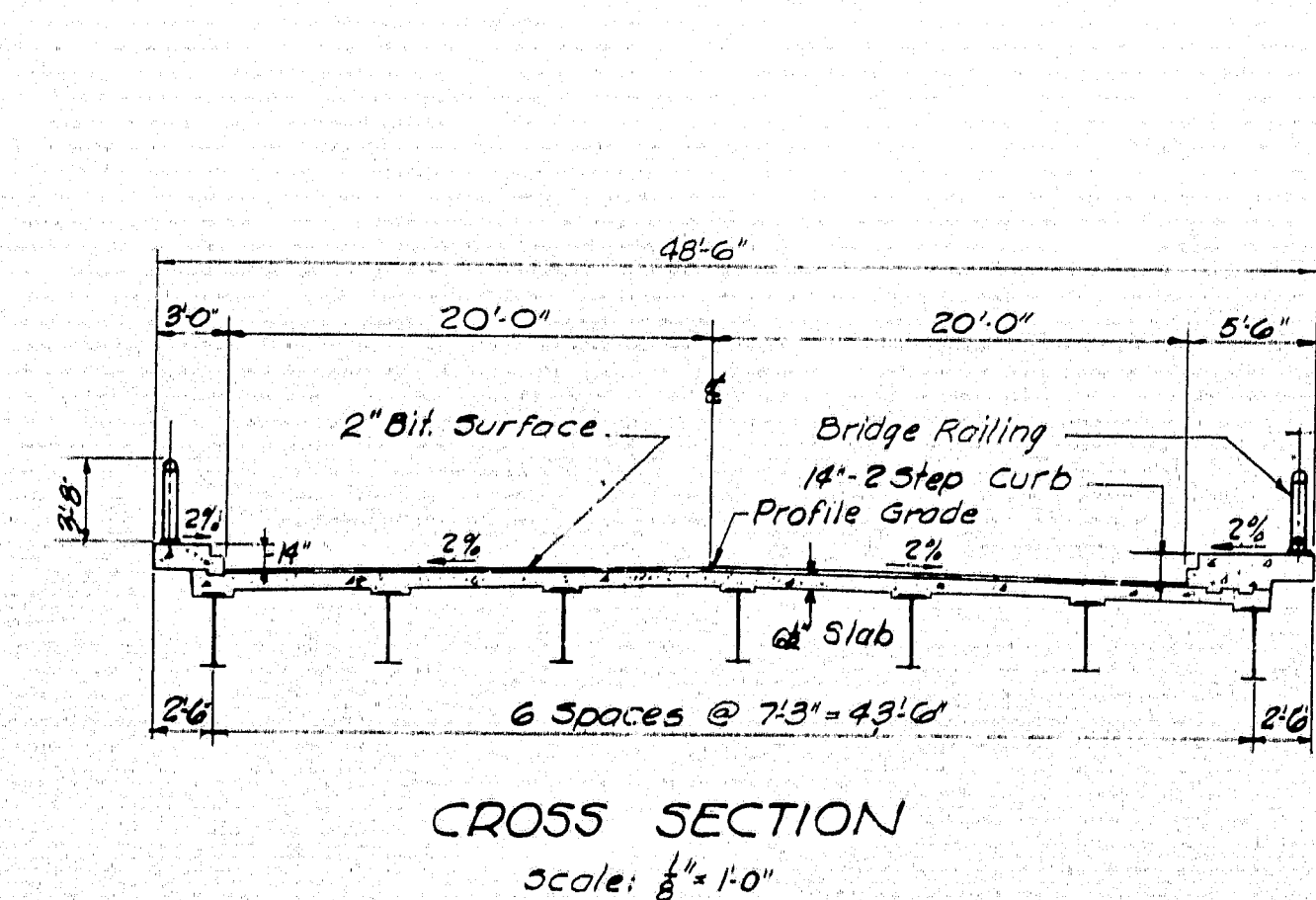
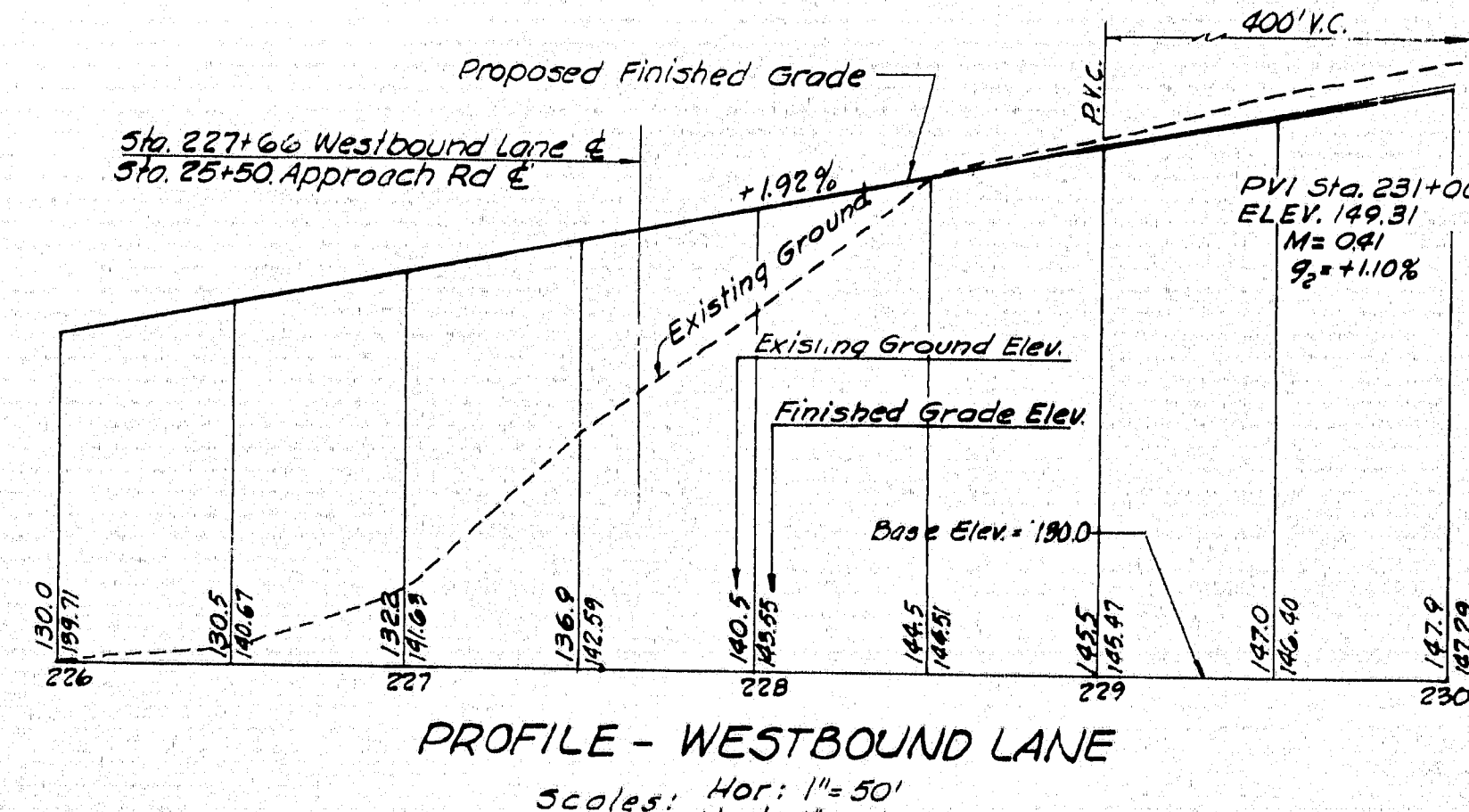
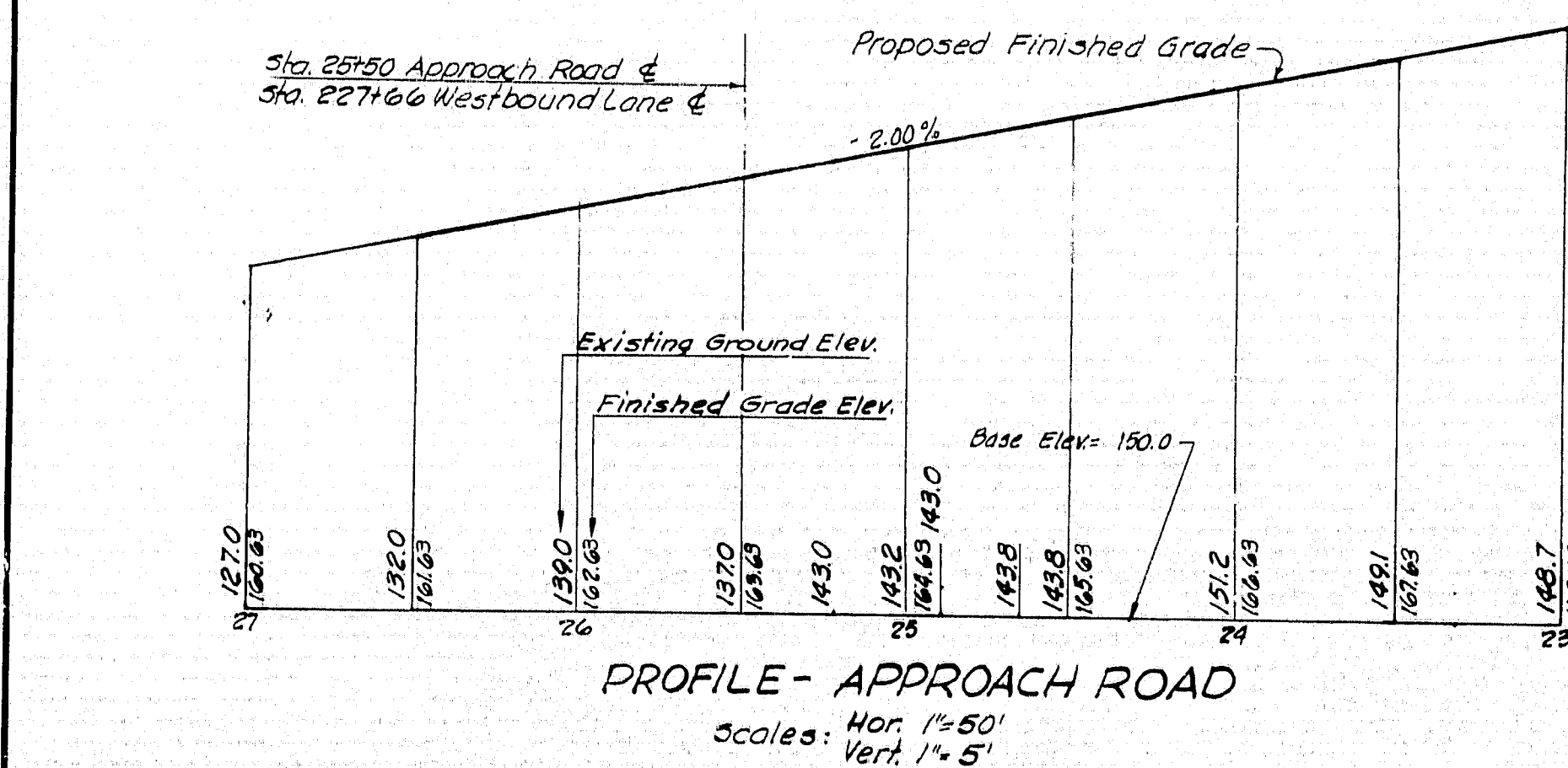
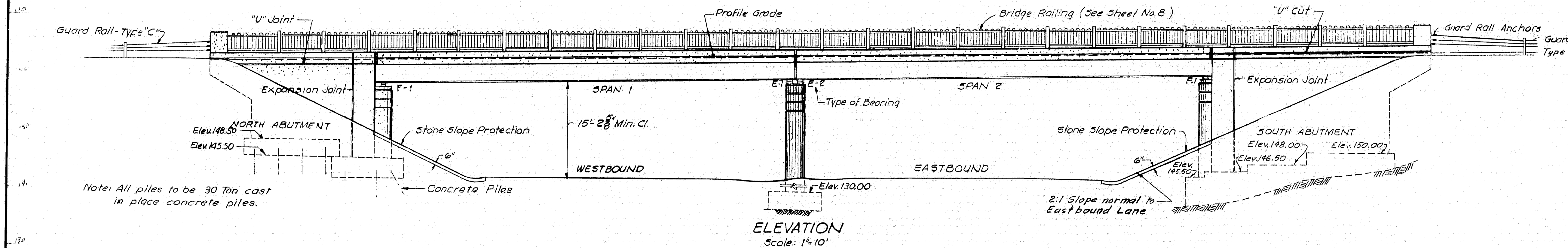
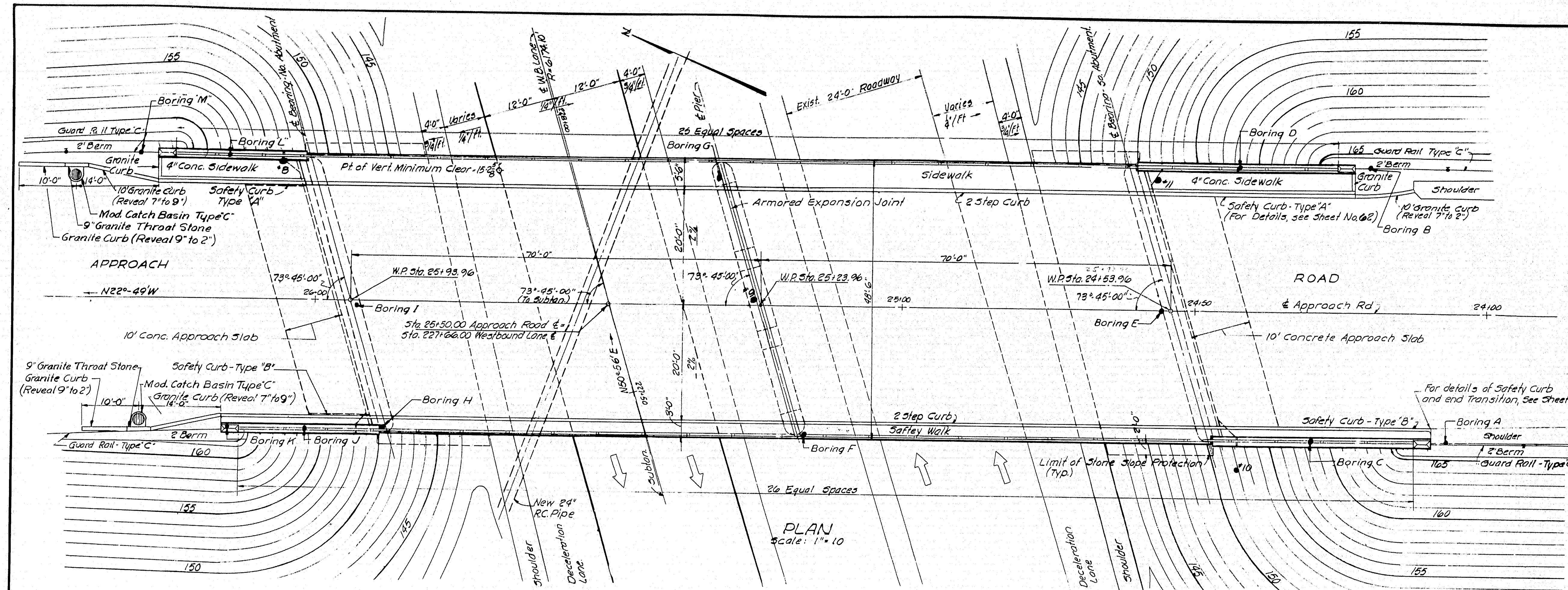
- GENERAL NOTES**
- Design is in accordance with the following specifications:
State of Maine, State Highway Commission
Bridge Division Specifications - Revision of 1956
A.A.S.H.O. 1953 Edition
 - Live Load - H-20-44
 - Concrete shall be as follows:
Footings, Piers, Abutments - Class "B" All
Concrete Decks & Approach Slabs - Class "A"
Elsewhere as noted on plans.
 - All reinforcement to conform to A.S.T.M. Specification A15 and deformations to A.S.T.M. Specification A305. All reinforcing steel to be intermediate grade new billet steel.
 - All steel with welded cover plates to conform to A.S.T.M. Spec. A373. All other steel shall conform to A.S.T.M. Spec. A373 or A7.
 - All elevations are referred to a base which is 0.00 Mean Sea Level.
 - Allowable stresses:
Reinforcing Steel - 20,000 p.s.i.
Structural Steel - 18,000 p.s.i.

- Location of Borings shown thus "B".
- For Log of Borings see Information Drawing Sheet No. 1 of 1.
- Footings to rest on sound unweathered rock. If sound unweathered rock is below the Elev. of footing class "B" concrete fill shall be used from top of rock to bottom of footing.
- Footing Elev., south abutment and pier, may be modified by Engineer to suit local conditions.

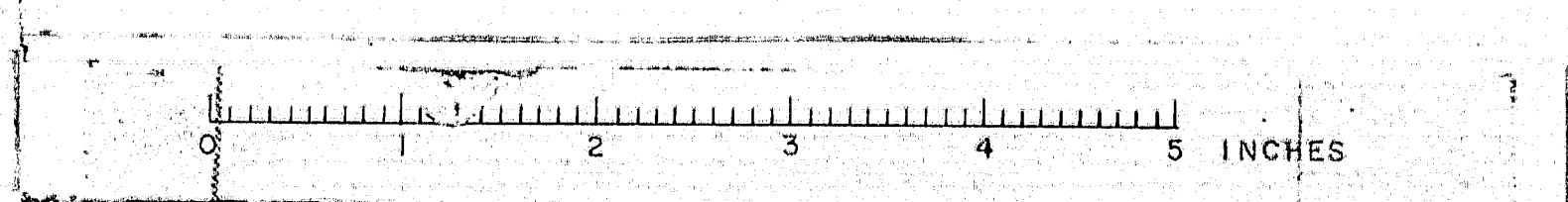
STATE HIGHWAY COMMISSION AUGUSTA, MAINE
FREEPORT BYPASS
BRIDGE STRUCTURE AT APPROACH ROAD INTERCHANGE
GENERAL PLAN AND ELEVATION
SHEET NO. 63 OF 240 SCALES AS NOTED AUG. 1956

FAY, SPOFFORD & THORNDIKE, INC.
ENGINEERS

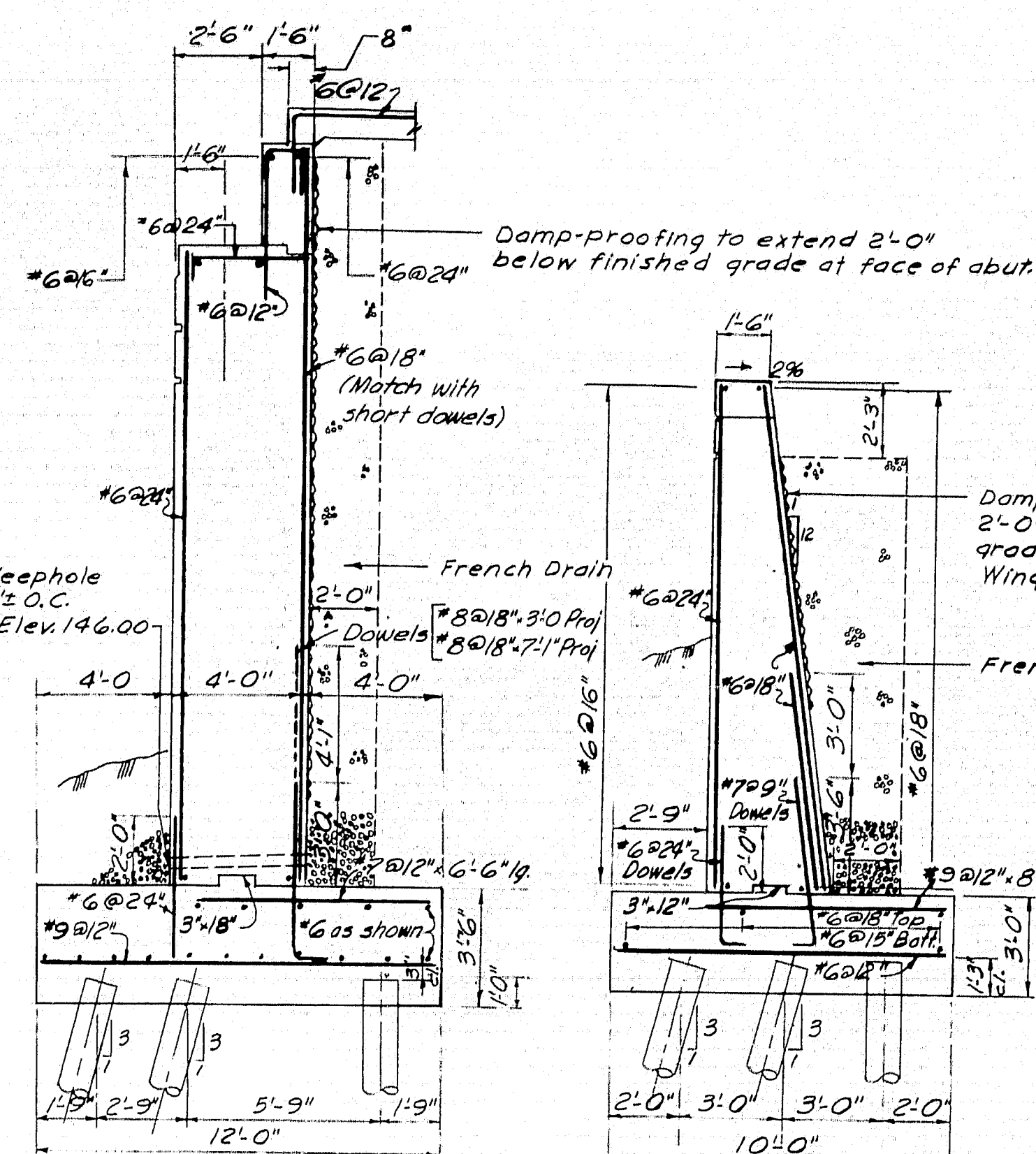
M-910



Qm-12
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DES. H.W.M.A.
DR. J.M.S.G.
TR. J.M.S.G.
CHK. C.C.B.
APP. H.W.M.

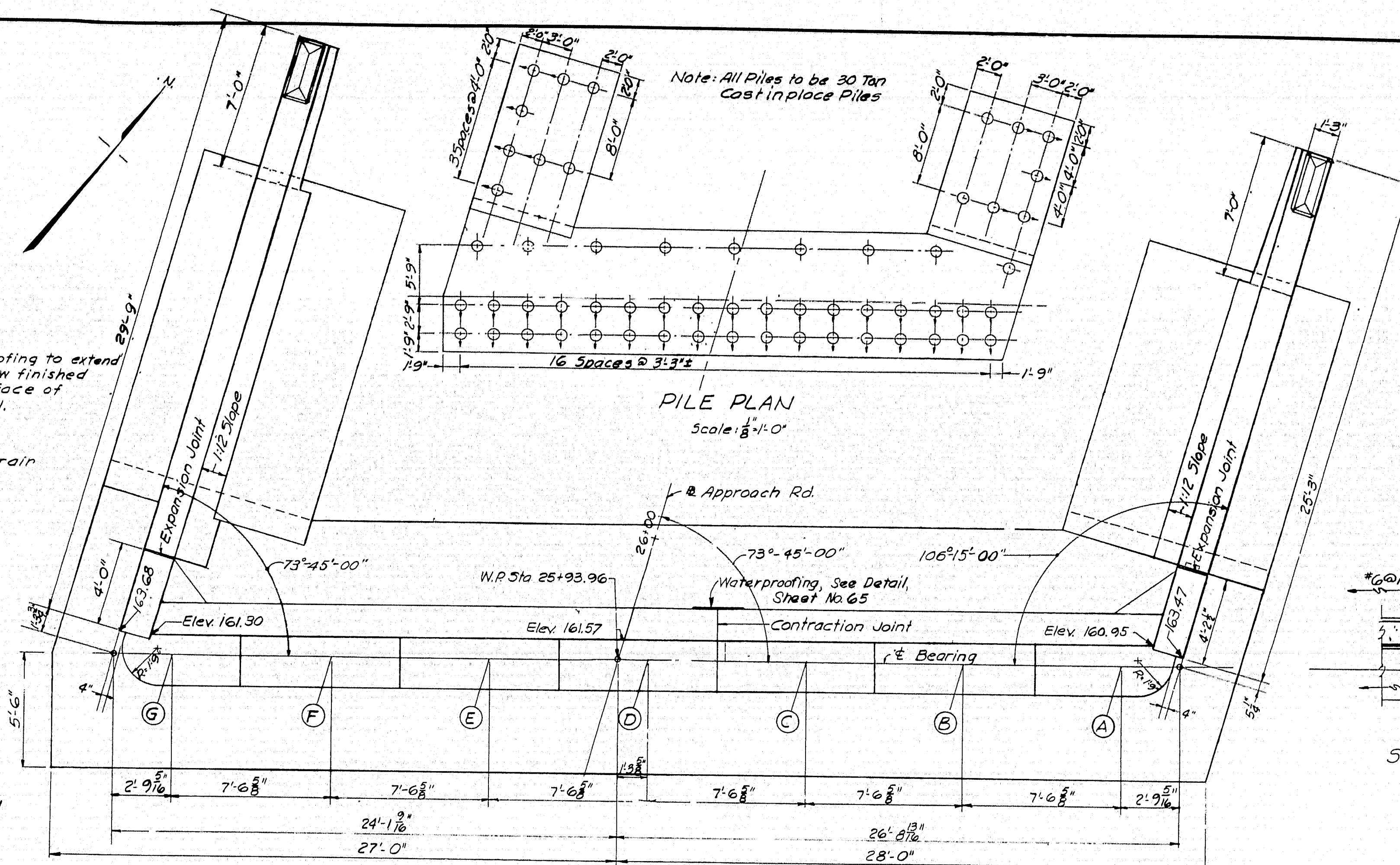


R. R. A.	STATE	FED. AID	SHEET	TOTAL
DIV. NO.	MAINE	PROJ. NO.	NO.	SHEETS
1	IN-01-1(18)	64	240	

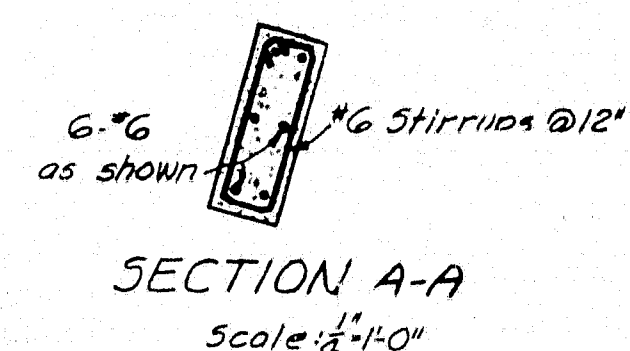


SECTION D-D
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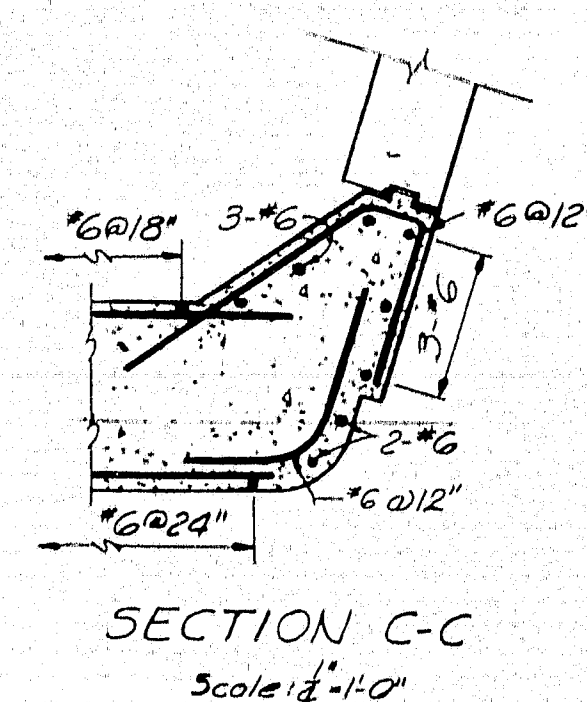
TYPICAL WING WALL SECTION
Scale: 1/4"=1'-0"



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

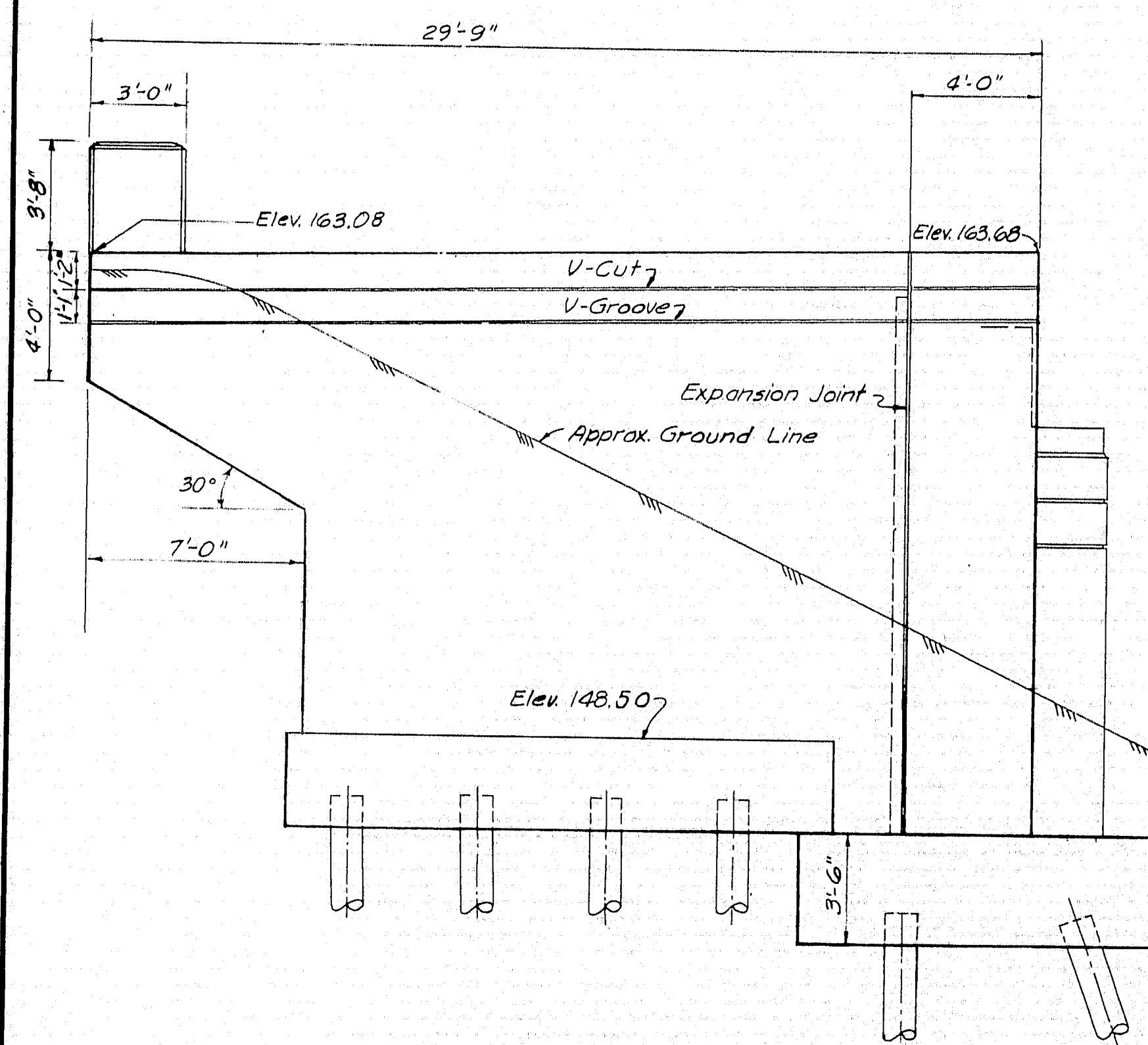


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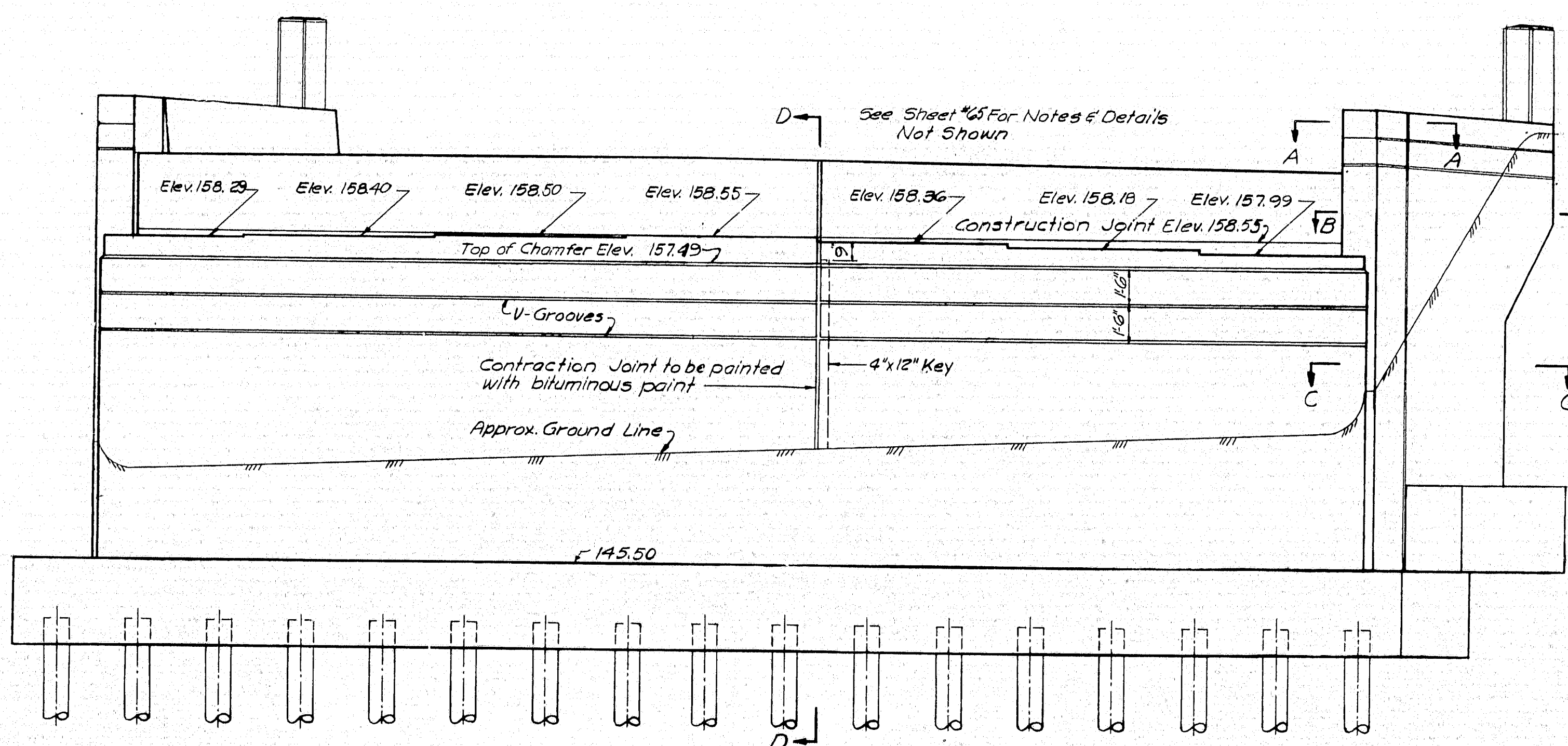


SECTION B-B
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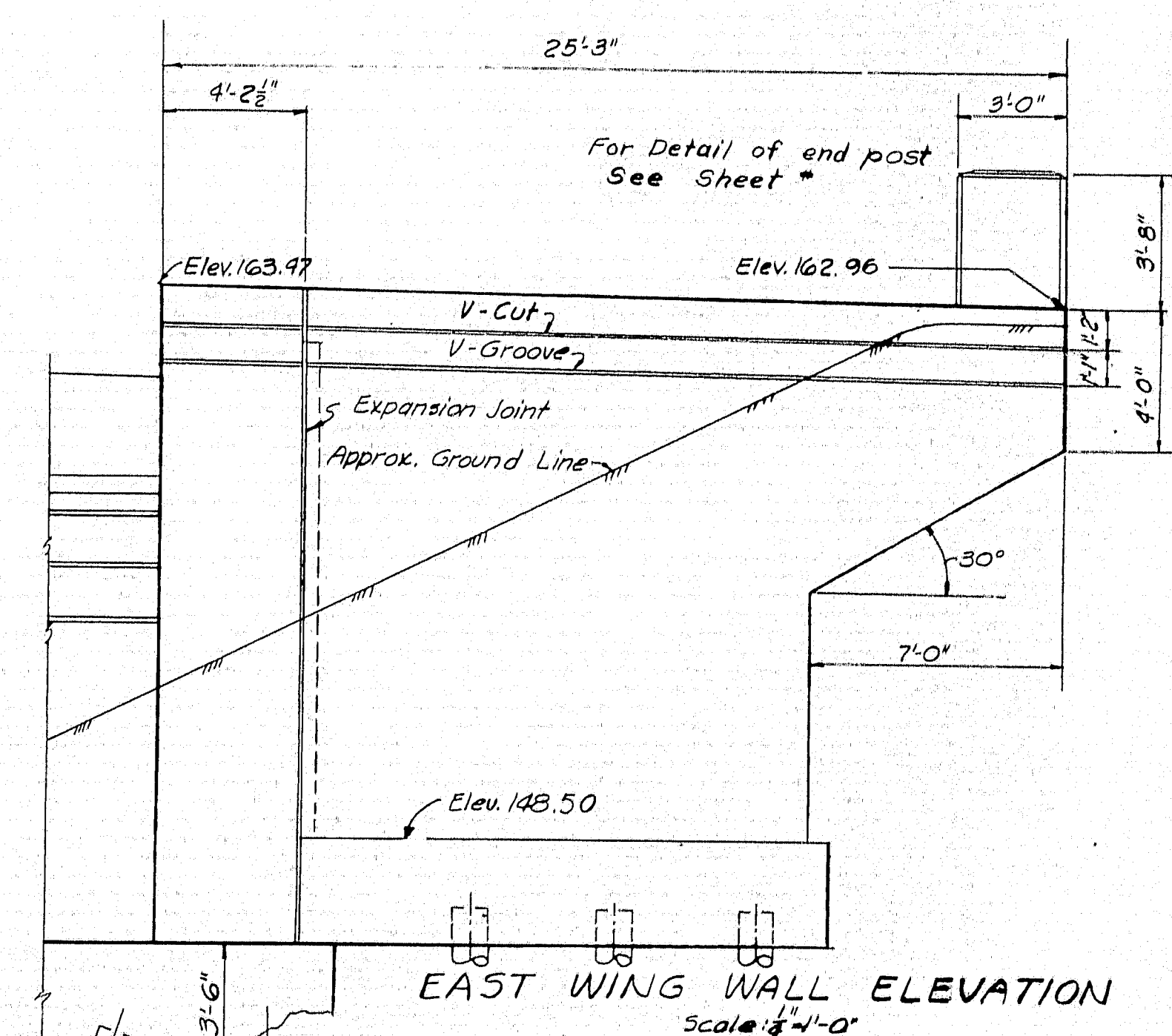
SECTION C-C
Scale: 1/4"=1'-0"



WEST WING WALL ELEVATION
Scale: 1/4"=1'-0"



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

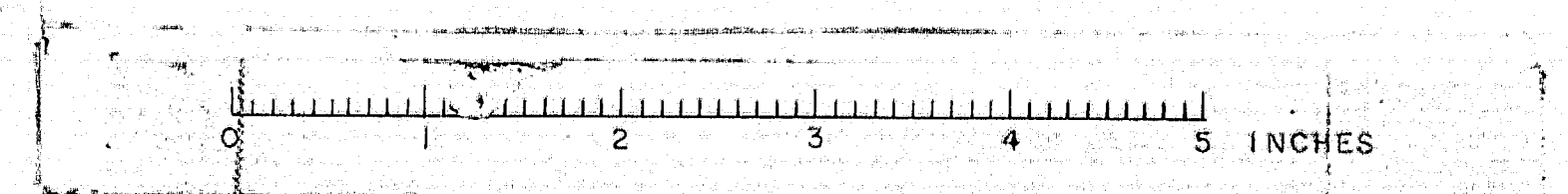


EAST WING WALL ELEVATION
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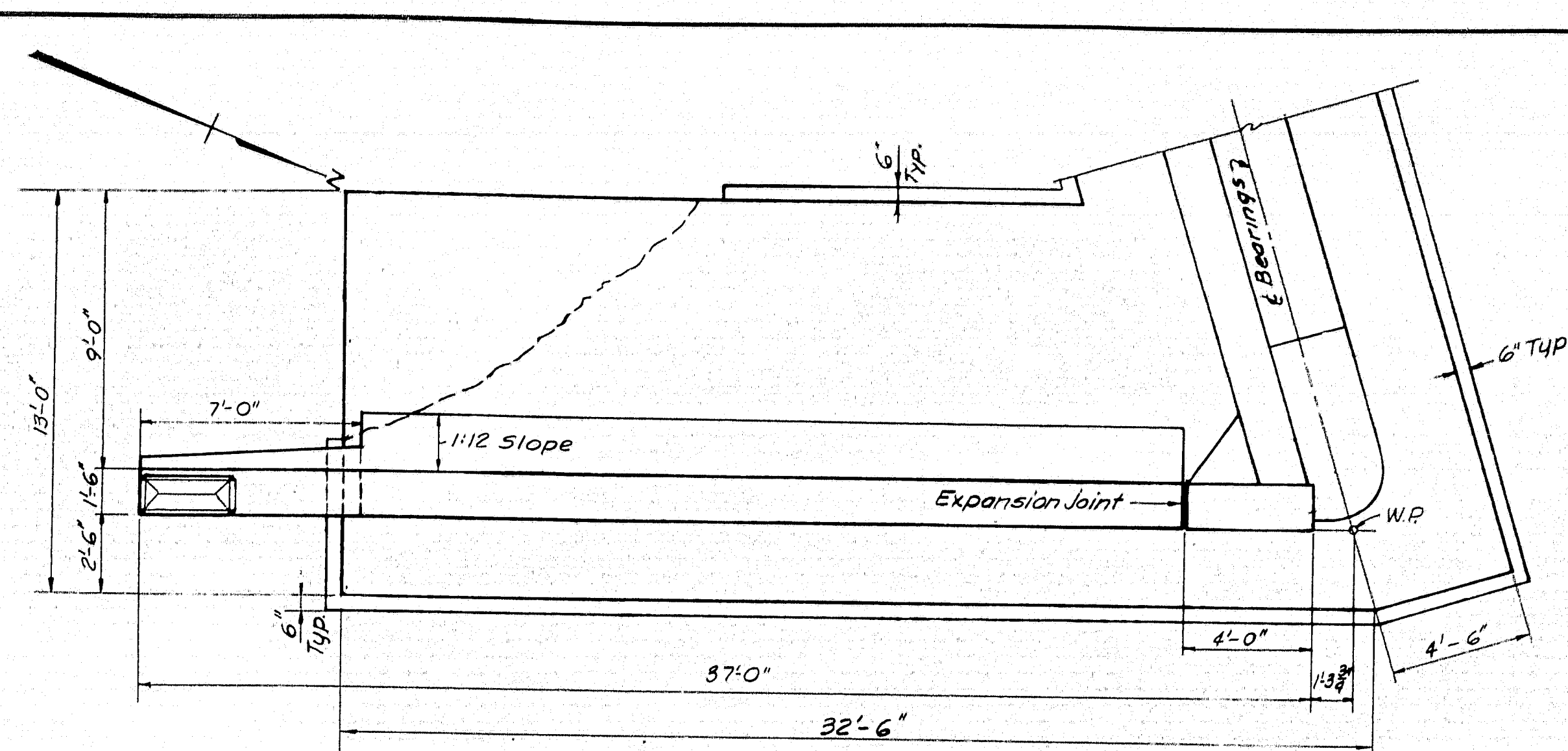
STATE HIGHWAY COMMISSION AUGUSTA, MAINE		
FREEPORT BYPASS		
BRIDGE STRUCTURE AT APPROACH ROAD INTERCHANGE		
NORTH ABUTMENT		
SHEET NO. 64 OF 240	SCALES AS NOTED	AUG. 1956

FAY, SPOFFORD & THORNDIKE, INC.
ENGINEERS

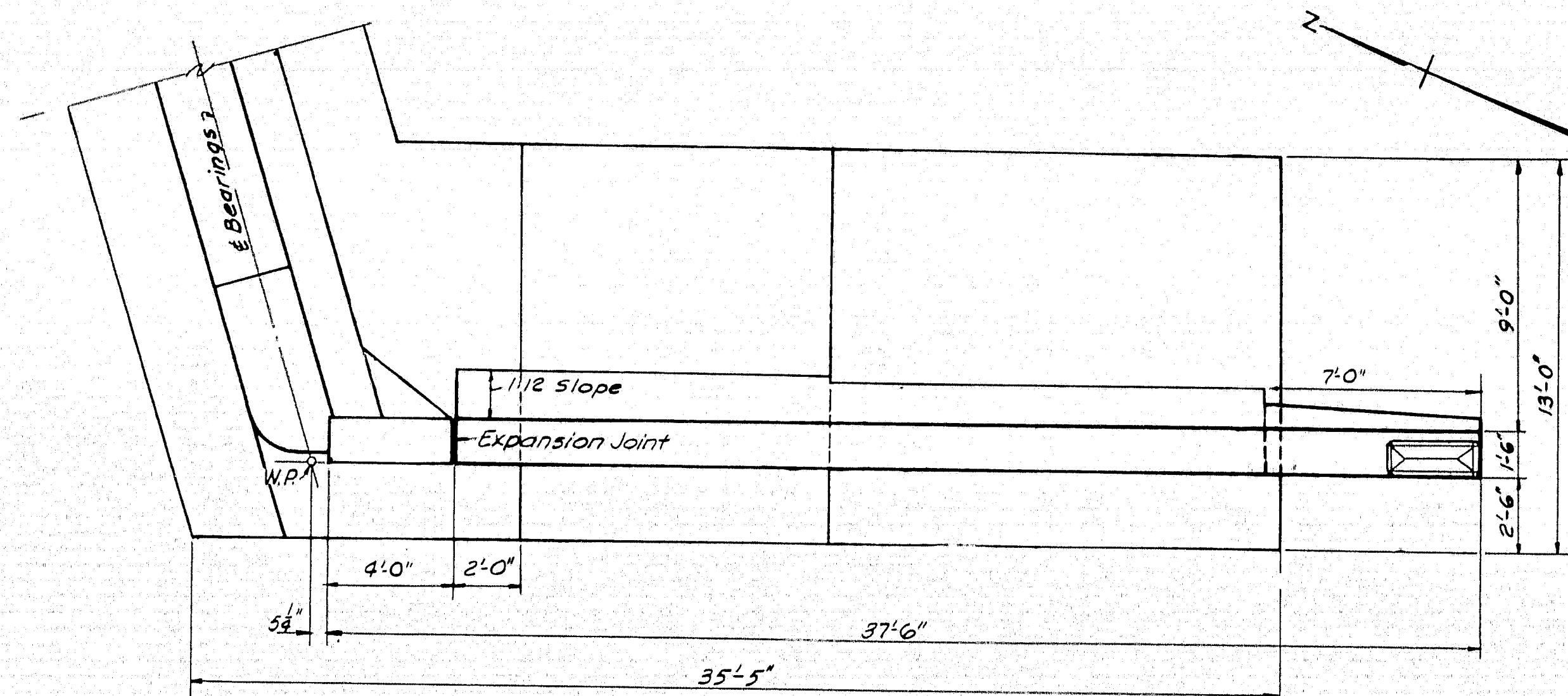
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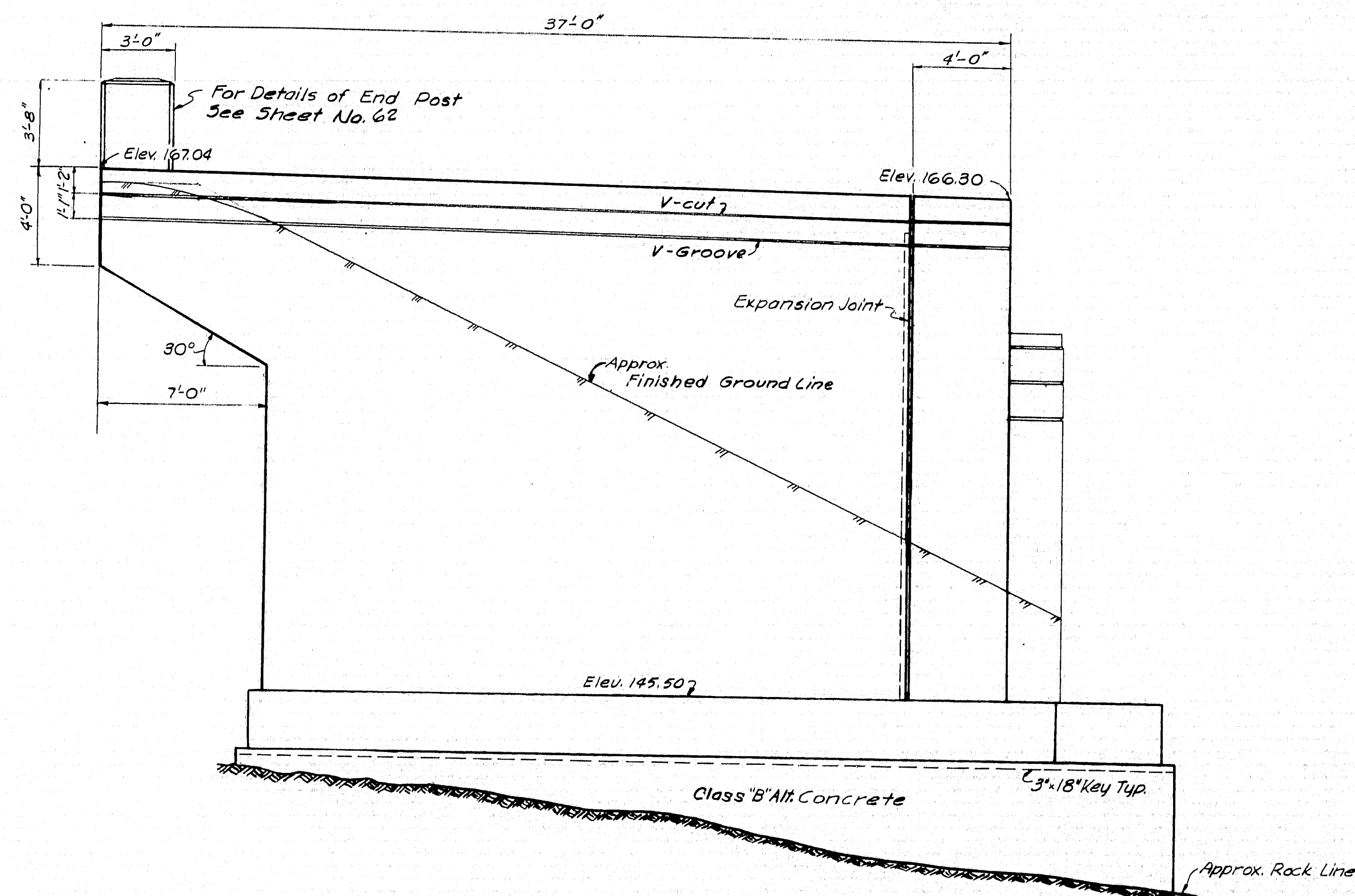
P. R. A.	STATE	FED. AID	SHEET	TOTAL
DIV. NO.	MAINE	PROJ. NO.	NO.	SHEETS
1		IN-01-108	66	240



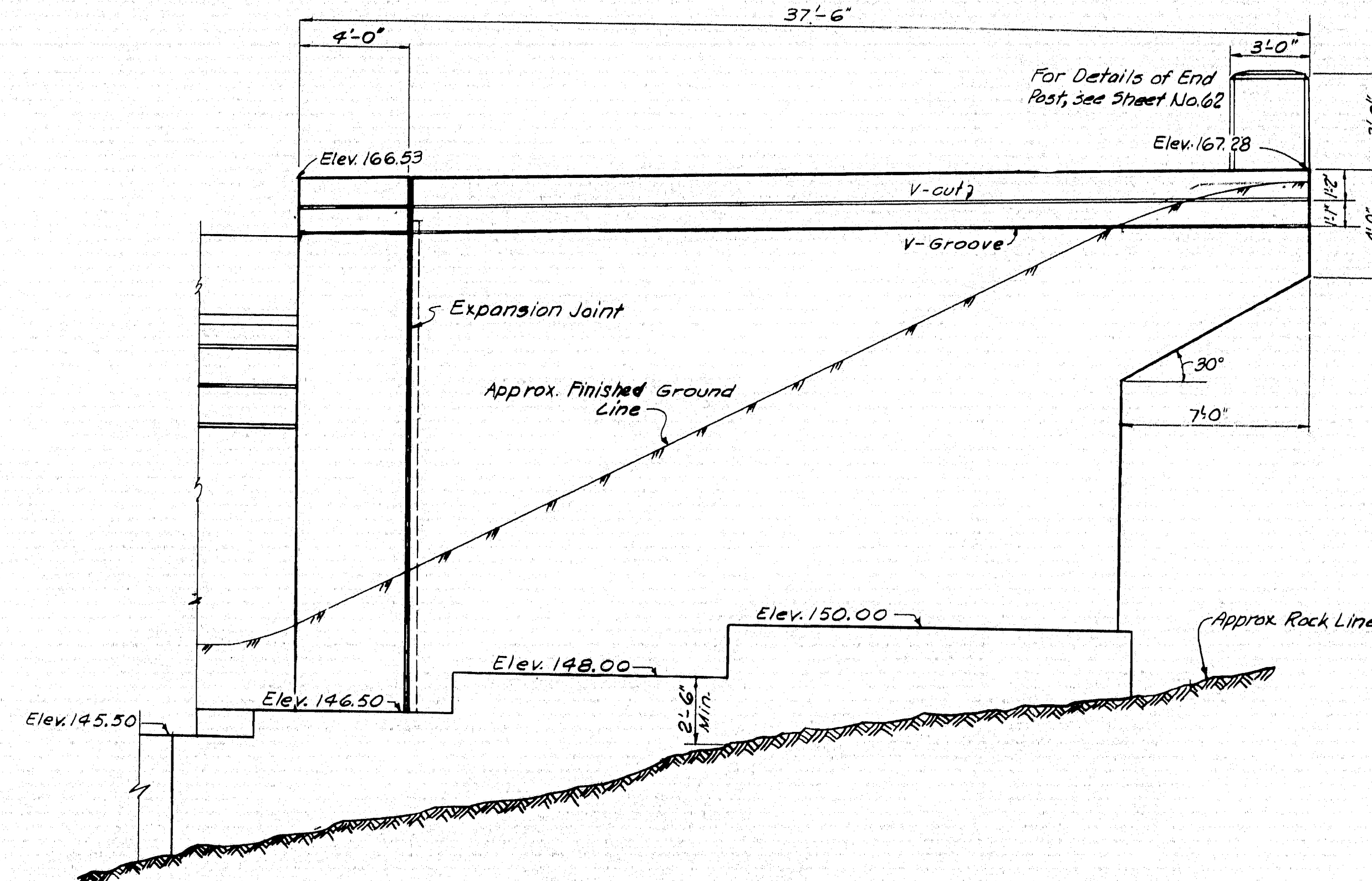
EAST WING WALL - PLAN
Scale: 1/4" = 1'-0"



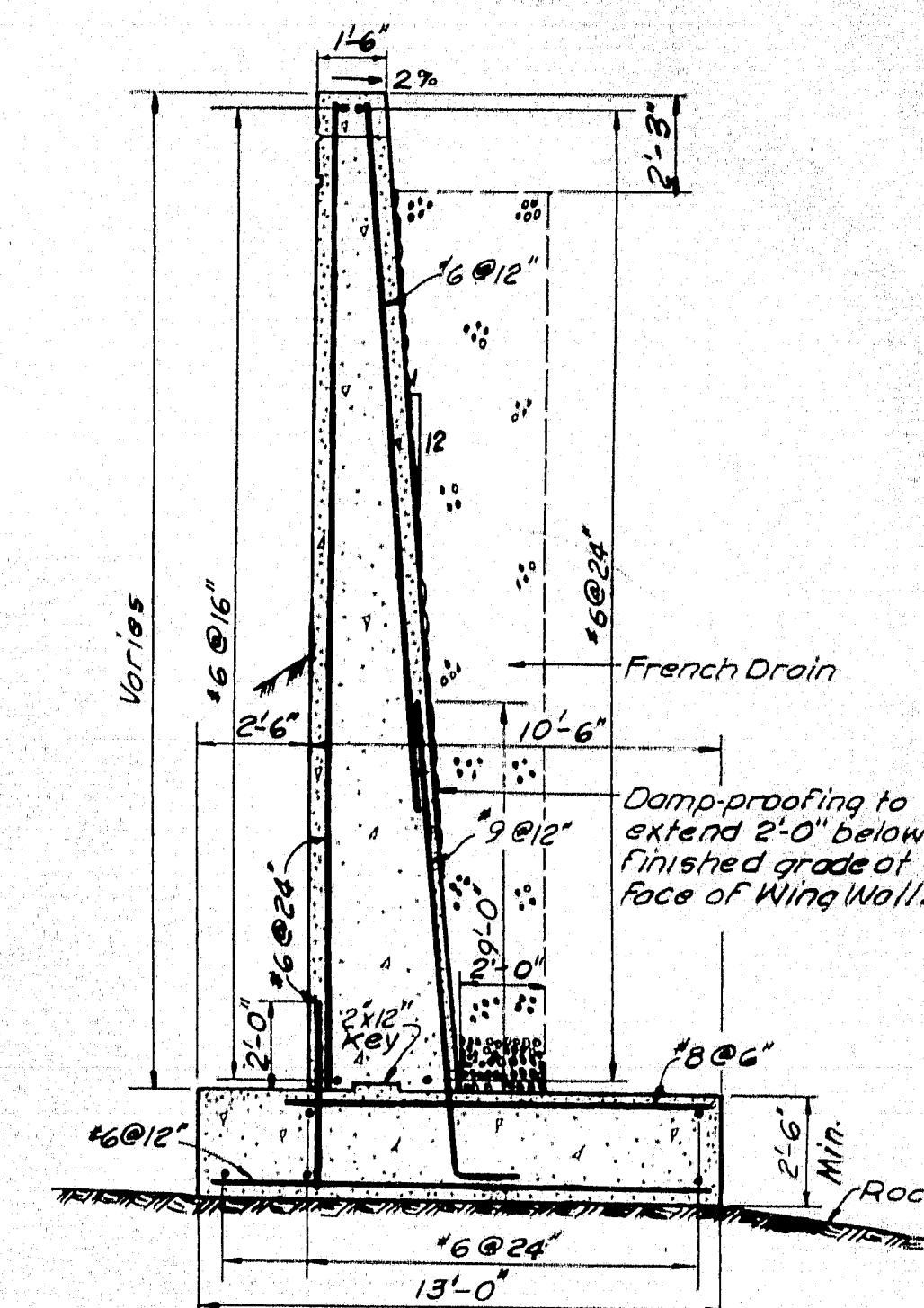
WEST WING WALL - PLAN
Scale: 1/4" = 1'-0"



EAST WING WALL - ELEVATION
Scale: 1/4" = 1'-0"



WEST WING WALL - ELEVATION
Scale: 1/4" = 1'-0"



TYPICAL WING WALL SECTION
Scale: 1/4" = 1'-0"

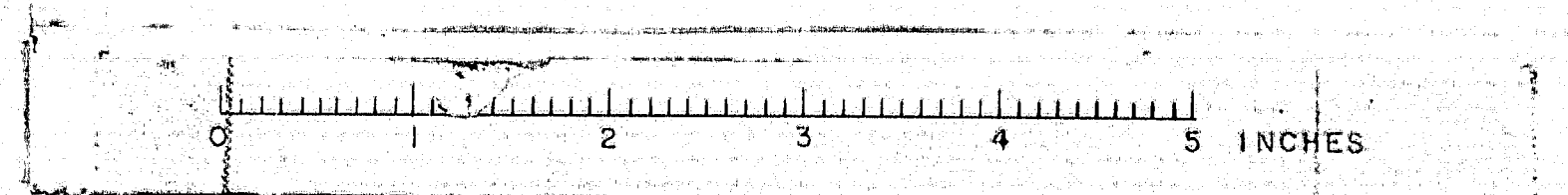
Note: Tie Bars to be placed parallel to rock surface. See Sheet 65 for notes and details not shown.

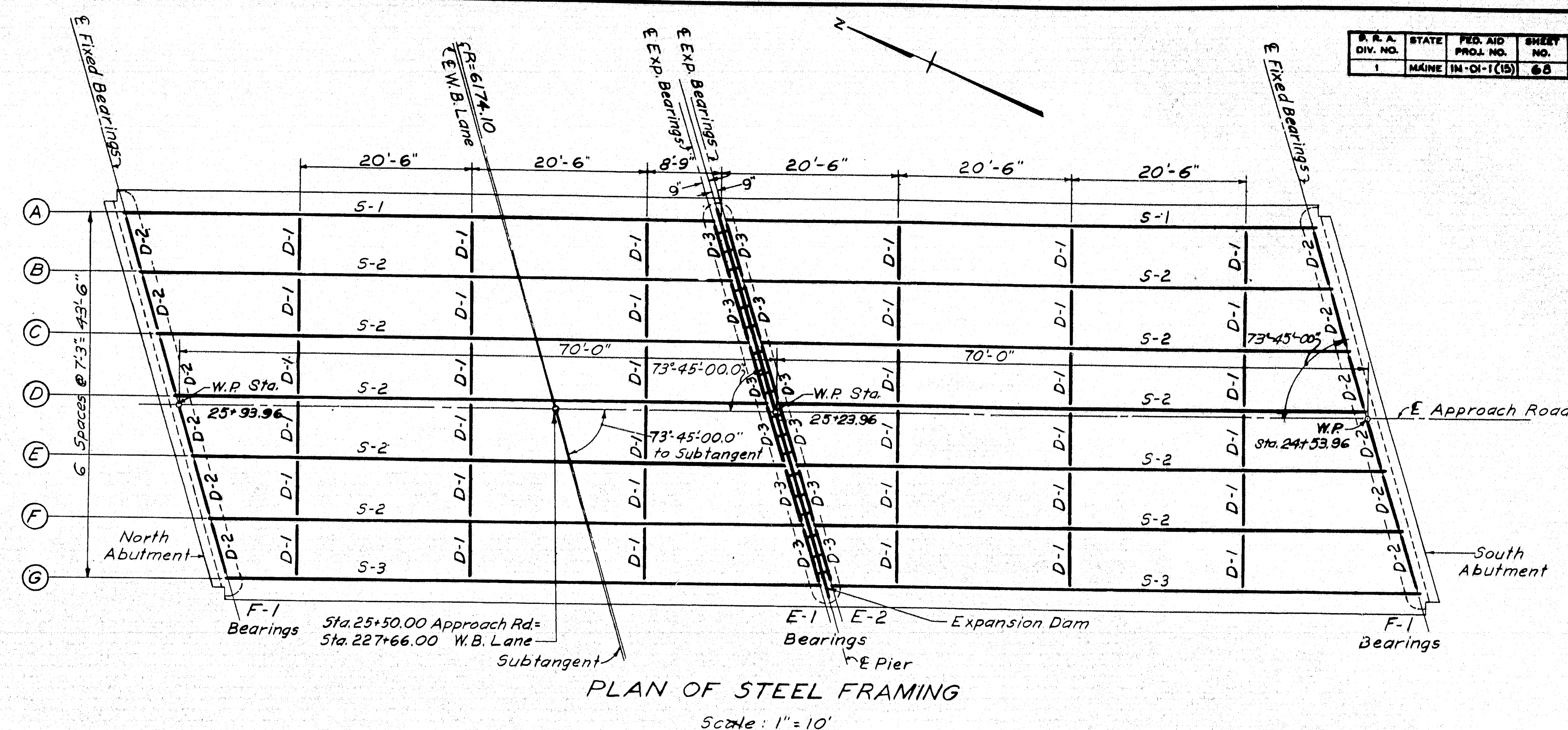
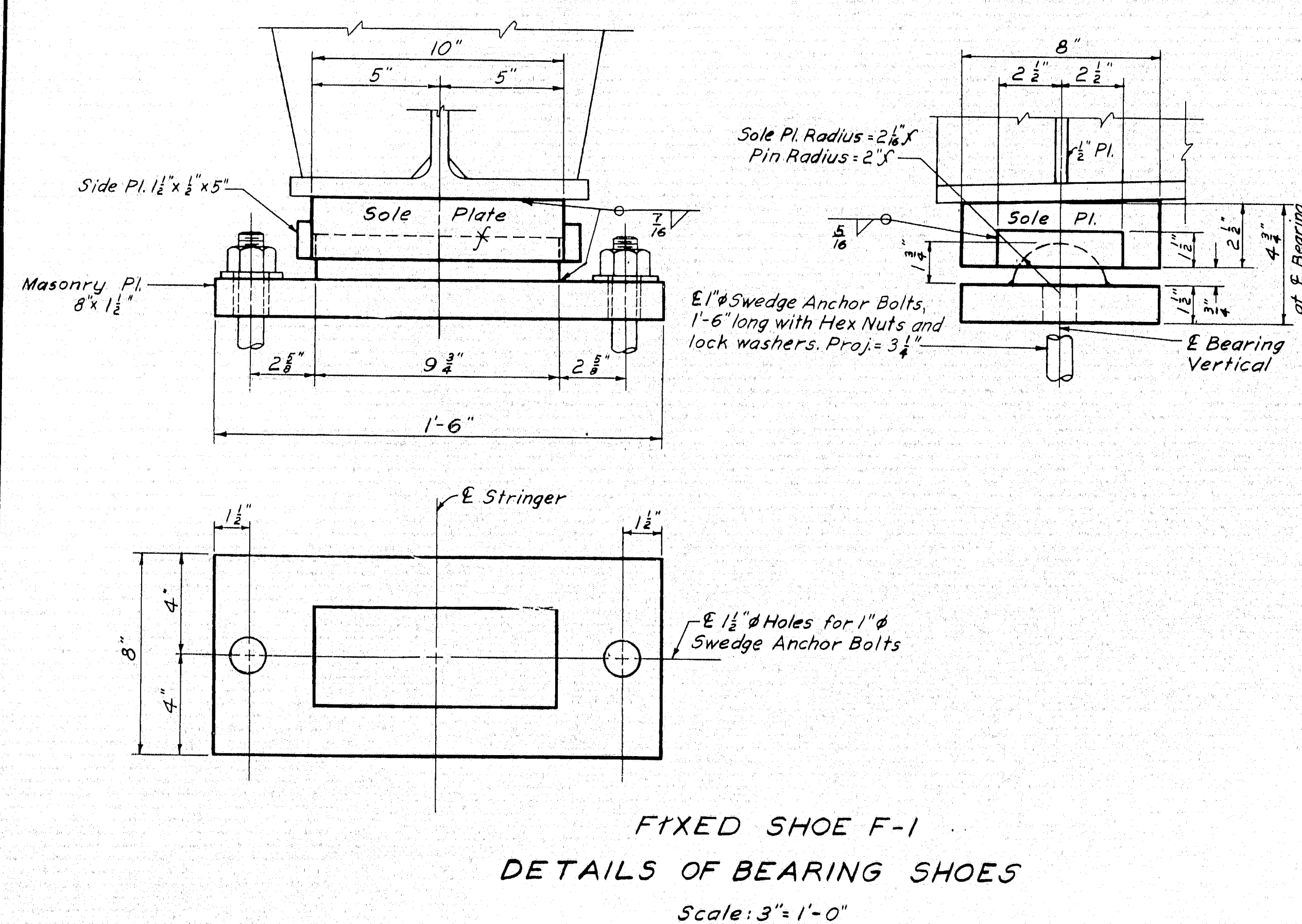
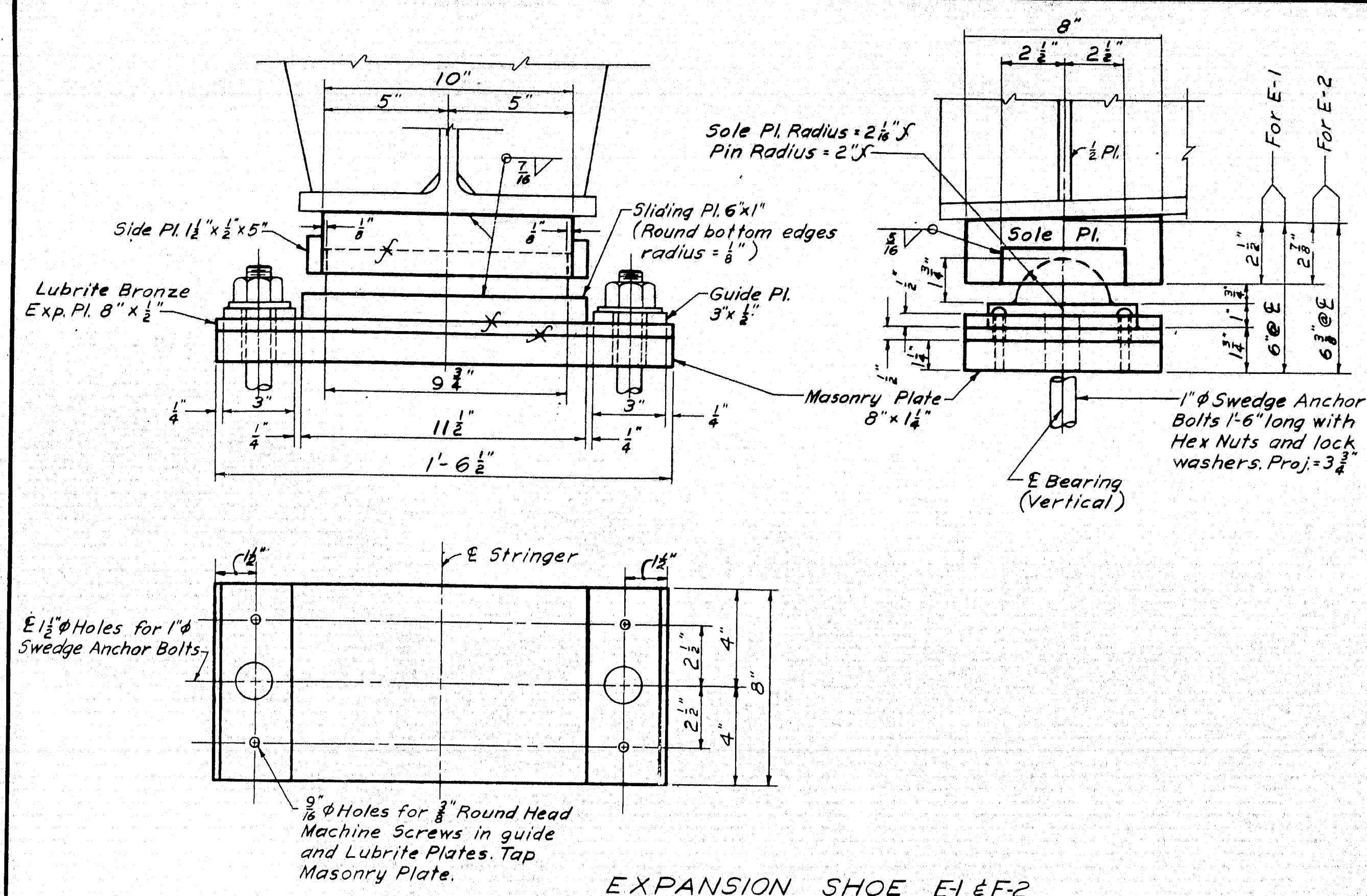
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DES. M.M.
DR. J.M.G.
TR. J.M.G.
CHK. J.C.B.
APPD. H.J.W.

STATE HIGHWAY COMMISSION AUGUSTA, MAINE		
FREEPORT BYPASS		
BRIDGE STRUCTURE AT APPROACH ROAD INTERCHANGE		
SOUTH ABUTMENT WING WALLS		
SHEET NO. 66 OF 240	SCALES AS NOTED	AUG. 1956
FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS		

M-913





SCHEDULE FOR STRINGERS, COVER PLATES AND SPIRAL SHEAR CONNECTORS

NO.	SIZE	COVER PLATE	CAMBER	SPIRAL SHEAR CONNECTORS			
				SPIRAL "A"	SPIRAL "B"	SPIRAL "C"	SPIRAL "D"
LENGTH	PITCH	LENGTH	PITCH	LENGTH	PITCH	LENGTH	PITCH
5-1	36 WF 150	10' x 7/16"	FULL LENGTH 12"	10'-0"	8"	8'-0"	12"
5-2	36 WF 150	10' x 7/16"	52'	10'-0"	6"	7'-6"	9"
5-3	36 WF 150	8' x 7/16"	FULL LENGTH 12"	9'-0"	9"	10'-0"	12"

Note: Full length Cover Plates to extend within 6" of Sole Plates

NOTES

SPIRAL

- All spirals are 3/4" round bars having a mean diameter of 4 1/2".
- Spirals are to be welded to stringers with 2-9/16" welds, 2 1/4" long at each point of contact.
- Spirals are not to include laps of 1/2 the smaller pitch.
- Stud shear connectors may be substituted for spirals with the approval of the Engineer.

CAMBER

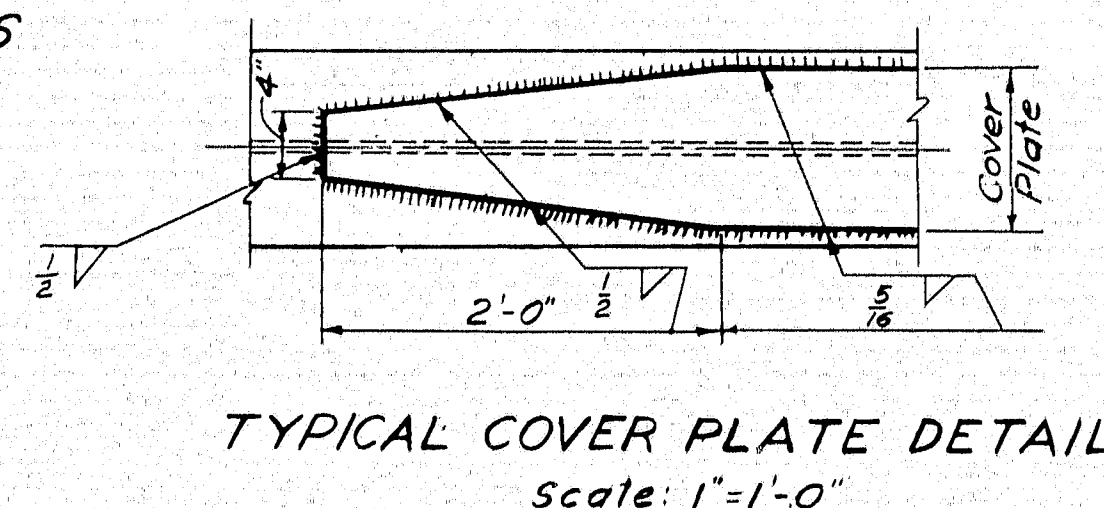
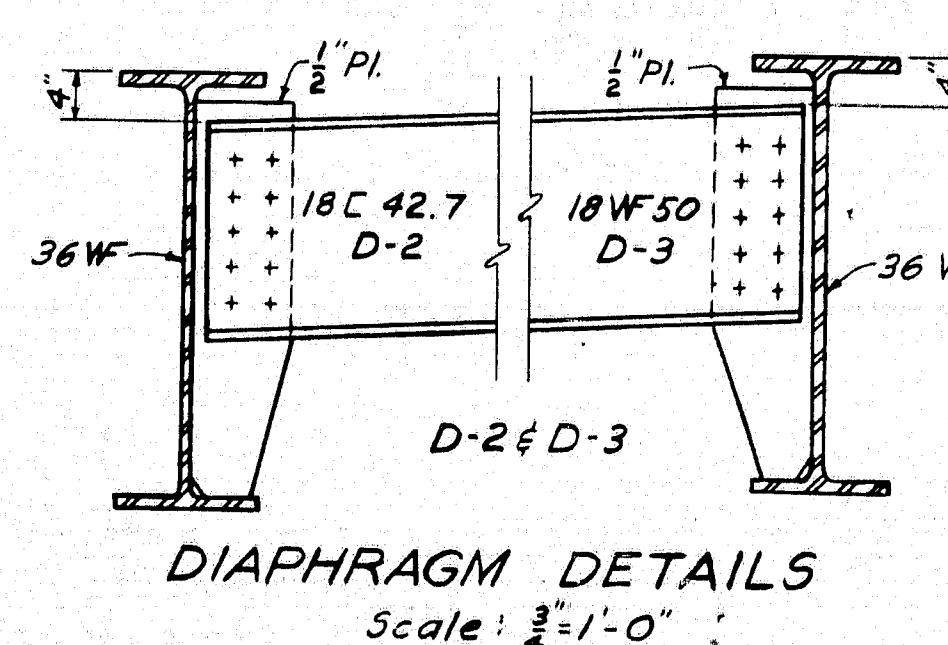
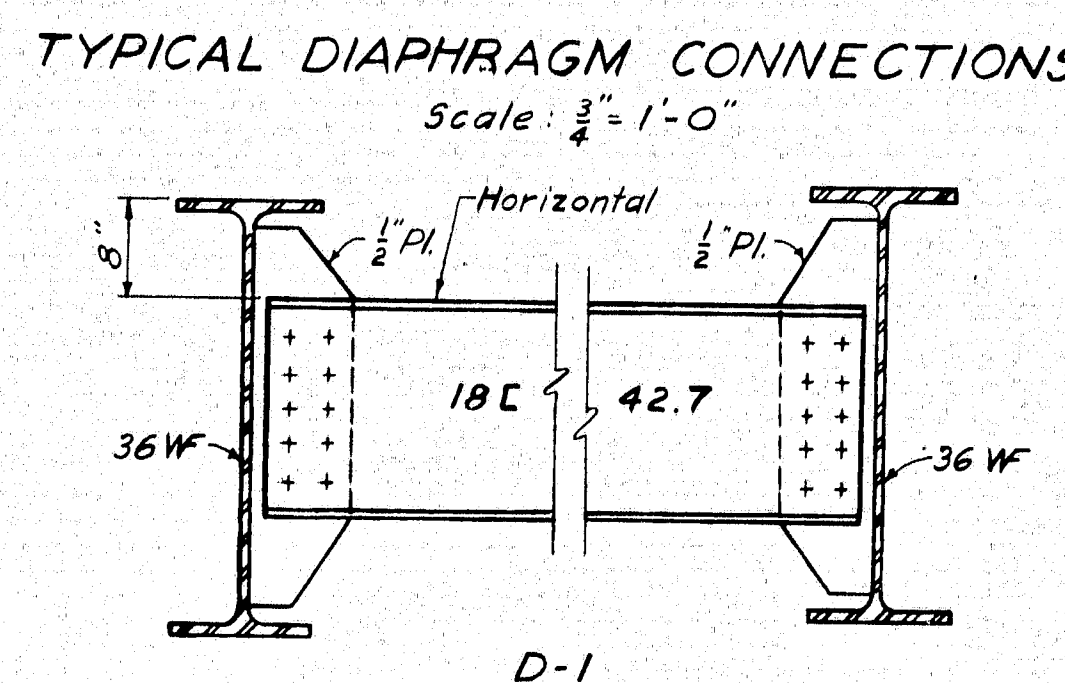
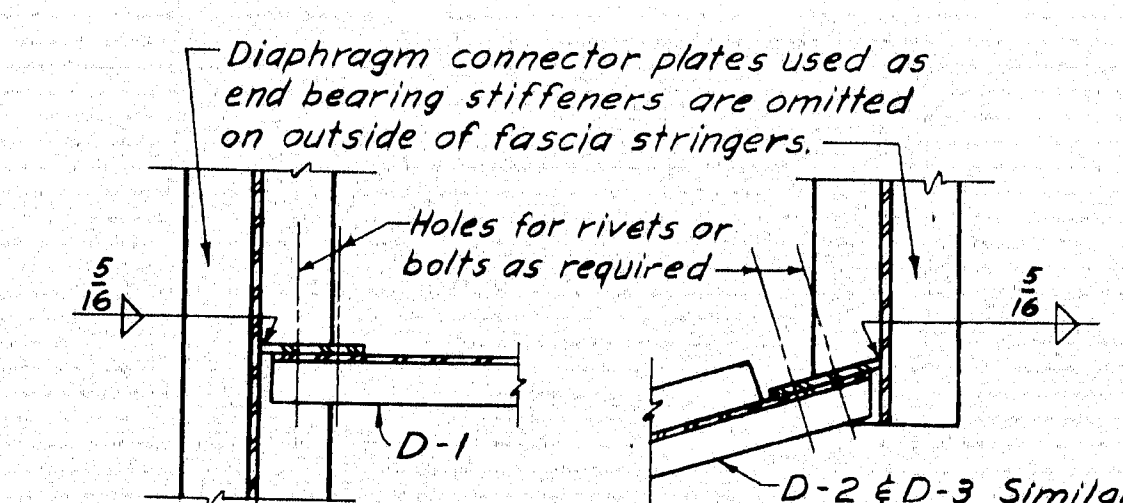
- Where the camber required is less than the minimum likely to remain permanent, the beam shall be cambered for such minimum.

ALIGNMENT

- All dimensions shown on "Plan of Steel Framing" are horizontal.
- All W.P.s (Working Points) are on the E of Approach Road.
- Abutments are parallel to Subtangent or W.B. Lane.
- Stringers are parallel to the E Approach Road.

DIAPHRAGM

- Intermediate diaphragms are horizontal.
- End diaphragms at bearings slope with roadway.
- Diaphragms to be connected with 1" rivets, or high tensile strength bolts.



ALTERNATE SHEAR CONNECTOR DETAIL

NOTE: For an alternate, 2 1/2" studs as detailed above maybe substituted for each spiral pitch.

STATE HIGHWAY COMMISSION AUGUSTA, MAINE	
FREEPORT BYPASS	
BRIDGE STRUCTURE AT APPROACH ROAD INTERCHANGE	
FRAMING PLAN AND DETAILS	
SHEET NO. 68 OF 240	SCALES AS NOTED
AUG. 1955	

FAY, SPOFFORD & THORNDIKE, INC.
ENGINEERS

M-915

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DES.	M.M.
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TR.	J.J.S.
CHK.	C.C.B.
APP.	H.J.W.

STATE HIGHWAY COMMISSION AUGUSTA, MAINE		
FREEPORT BYPASS		
BRIDGE STRUCTURE AT APPROACH ROAD INTERCHANGE		
CROSS SECTION AND DETAILS		
SHEET NO. 69 OF 240	SCALES AS NOTED	AUG. 1956