

GENERAL NOTES

Superstructure:
3-10" I-Beams, 2-10" B and 3" planking. Fair condition.

Substructure:
Roughly laid flat field stone

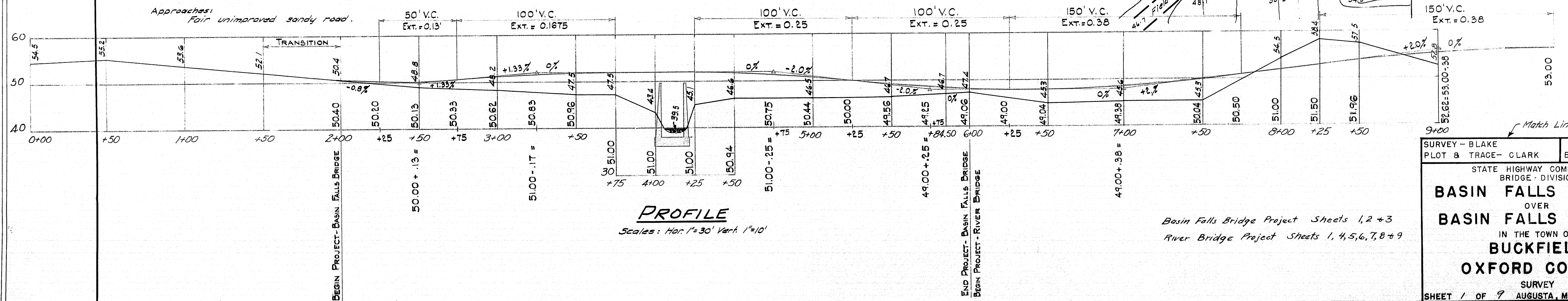
Stream:
High water in this stream caused by floods of the Neverscot River which flows in opposite direction of brook. Flood water drains across intervals to River below road. Extreme high water 1936, El. 49.5. Ordinary high water 2' to 3' over road. Low water present stage.

Foundation:
Flat sandy intervals. Sounding #1, U.S. corner about 2' @ edge of water. Rod penetrated thru firm fine sand to very slow driving @ El. 23.5, 16.0' below water. Probably sand and boulders.

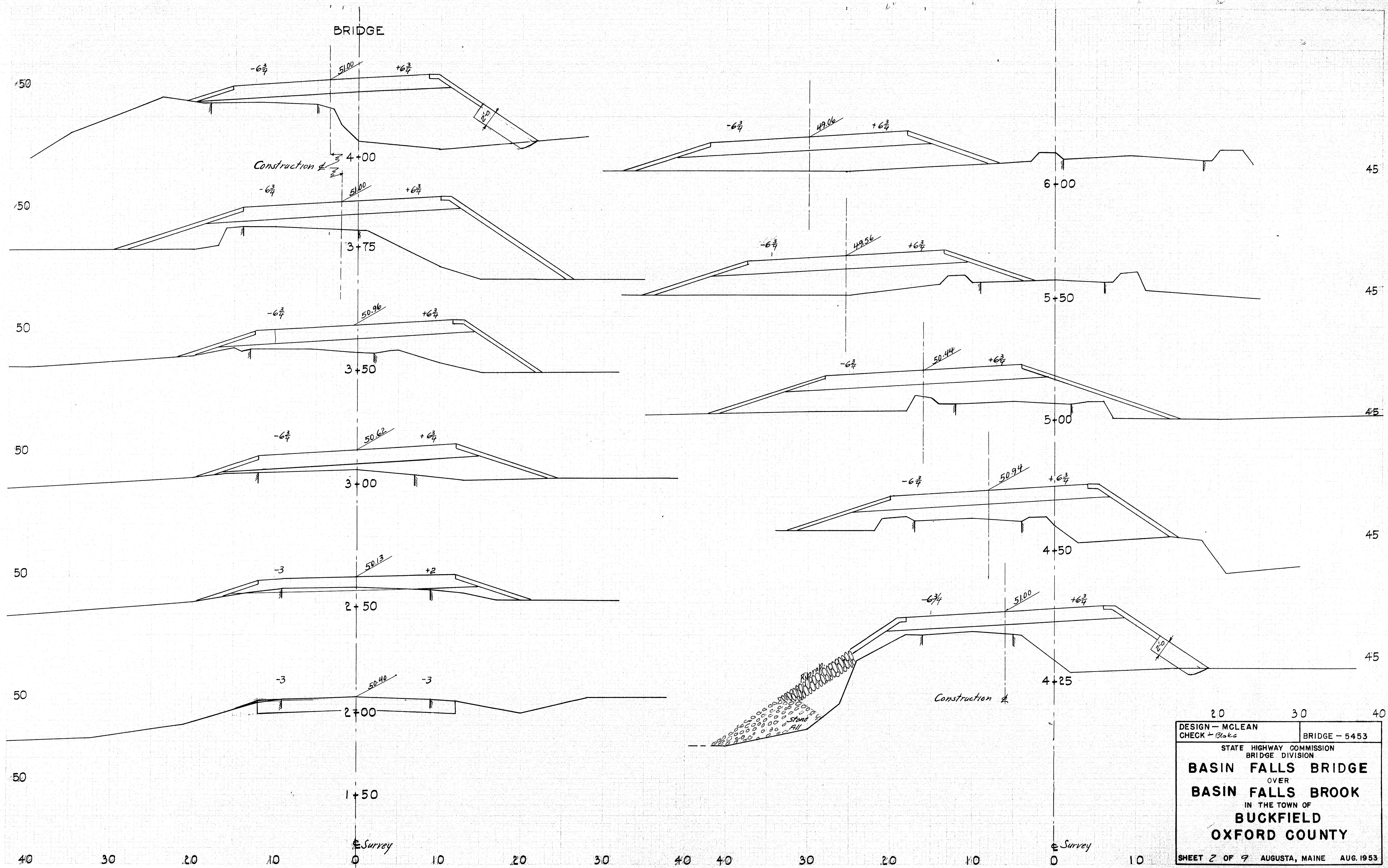
Approaches:
Fair unimproved sandy road.

PLAN
Scale: 1"=30'

PROFILE
Scales: Hor. 1"=30' Vert. 1"=10'

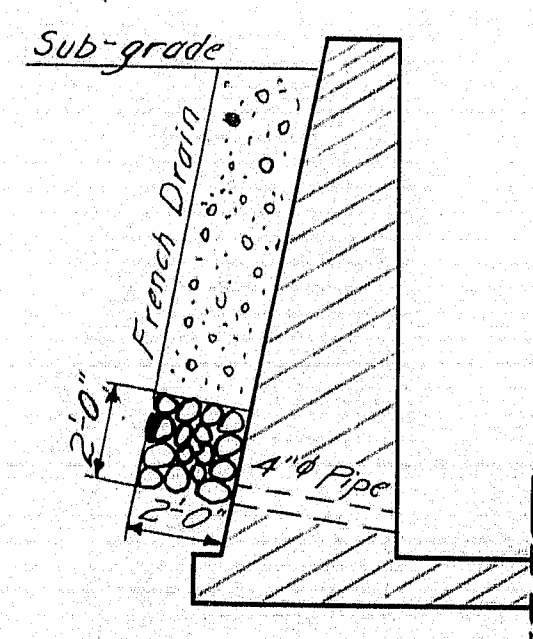
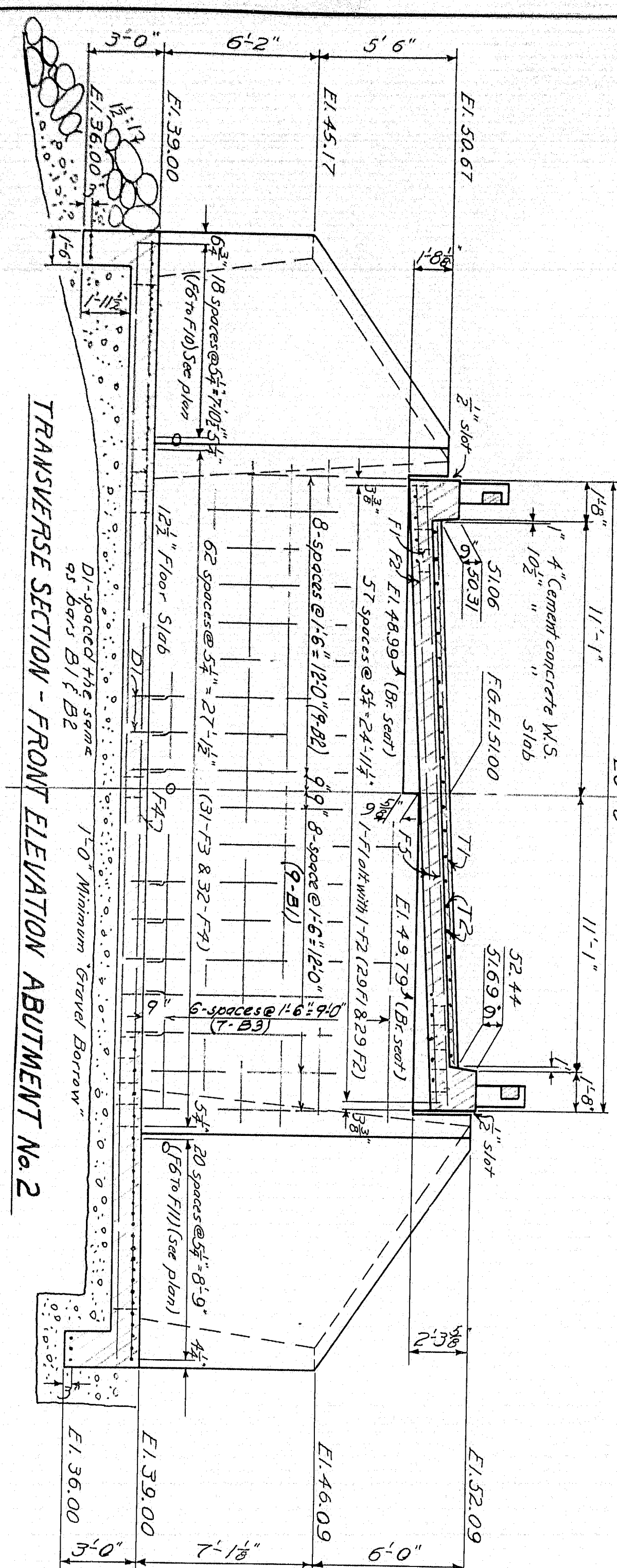


SURVEY - BLAKE		BRIDGE - 5453
PLOT & TRACE - CLARK		
STATE HIGHWAY COMMISSION		
BRIDGE DIVISION		
BASIN FALLS BRIDGE		
OVER		
BASIN FALLS BROOK		
IN THE TOWN OF		
BUCKFIELD		
OXFORD COUNTY		
SURVEY		
SHEET 1 OF 9 AUGUSTA, MAINE DEC. 1950		

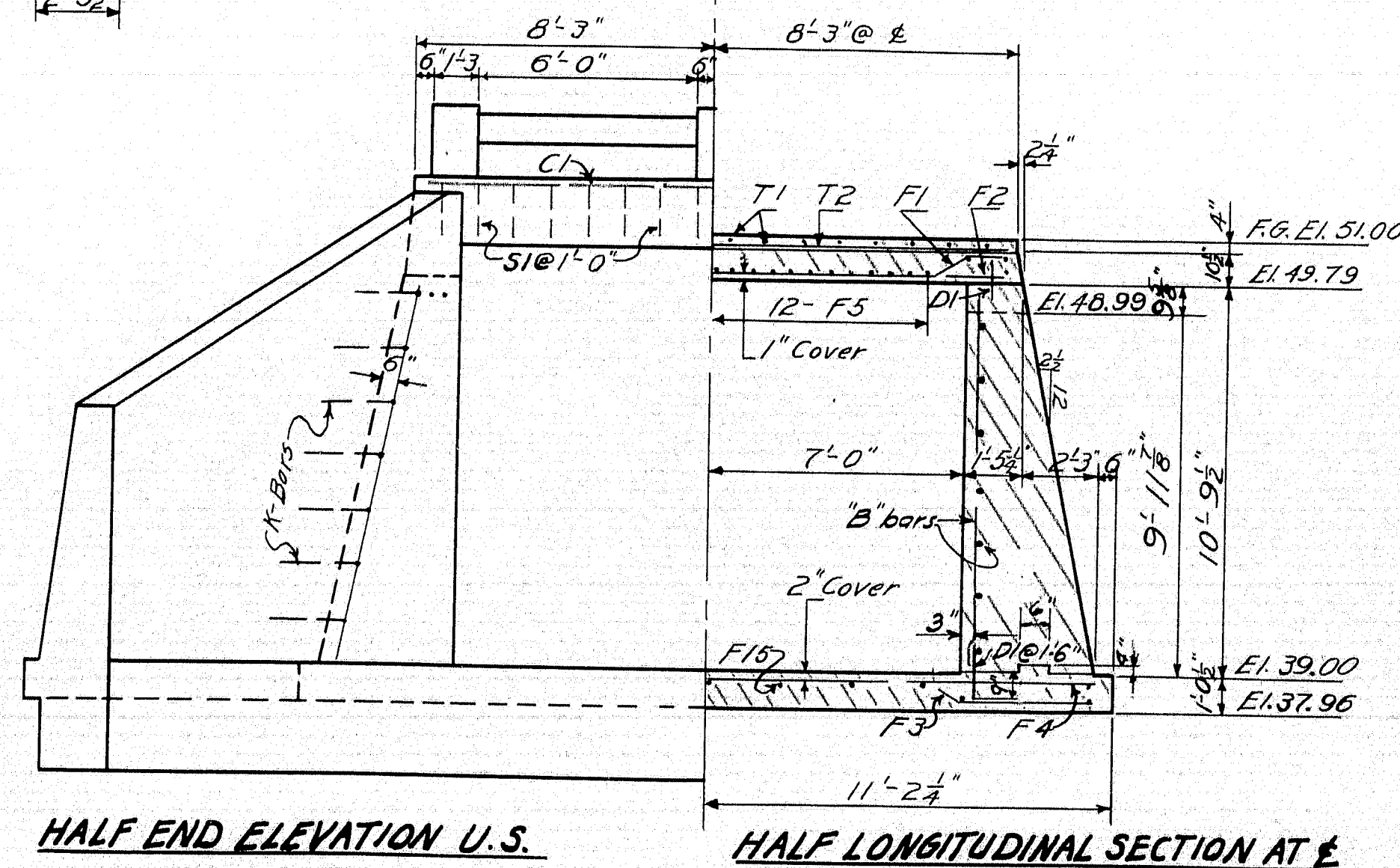
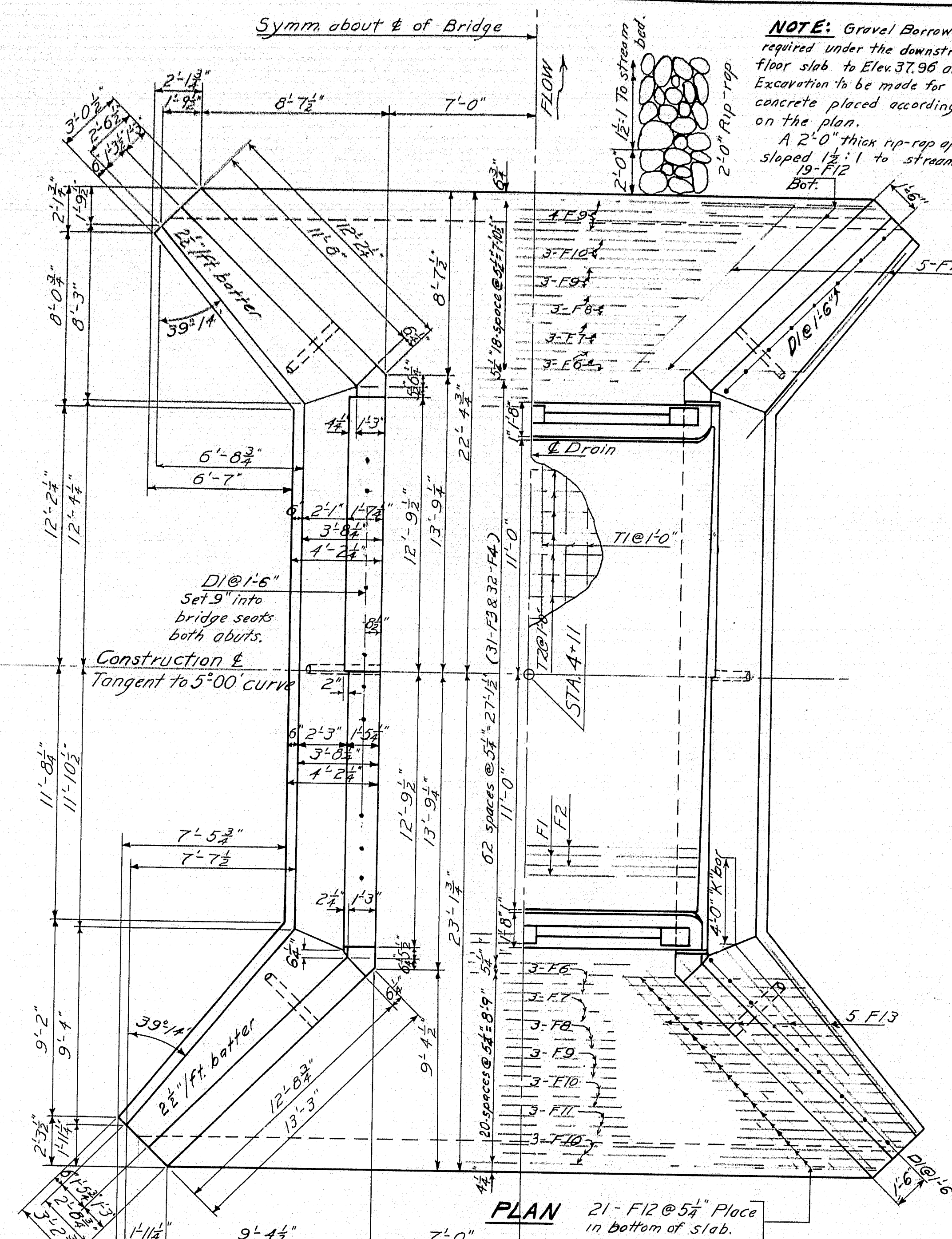


DESIGN - MCLEAN	BRIDGE - 5453
CHECK - Blake	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
BASIN FALLS BRIDGE	
OVER	
BASIN FALLS BROOK	
IN THE TOWN OF	
BUCKFIELD	
OXFORD COUNTY	
SHEET 2 OF 9 AUGUSTA, MAINE AUG. 1953	

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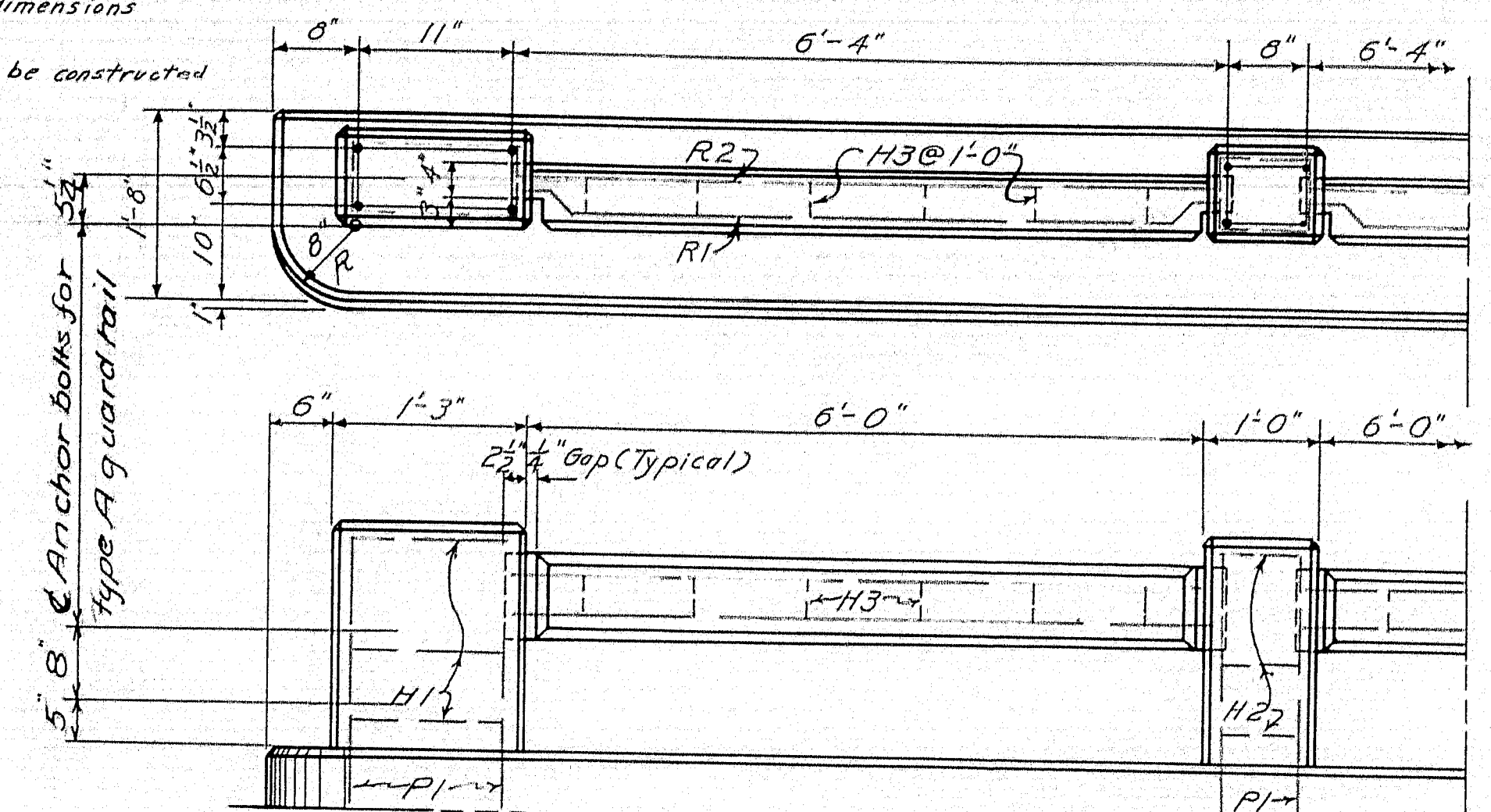


Note: Exact location of 4" pipe to be determined by Engineer in the field.



NOTE: Gravel Borrow to be placed where required under the downstream portion of the floor slab to Elev 37.96 and thoroughly compacted. Excavation to be made for cut-off wall and concrete placed according to the dimensions on the plan.

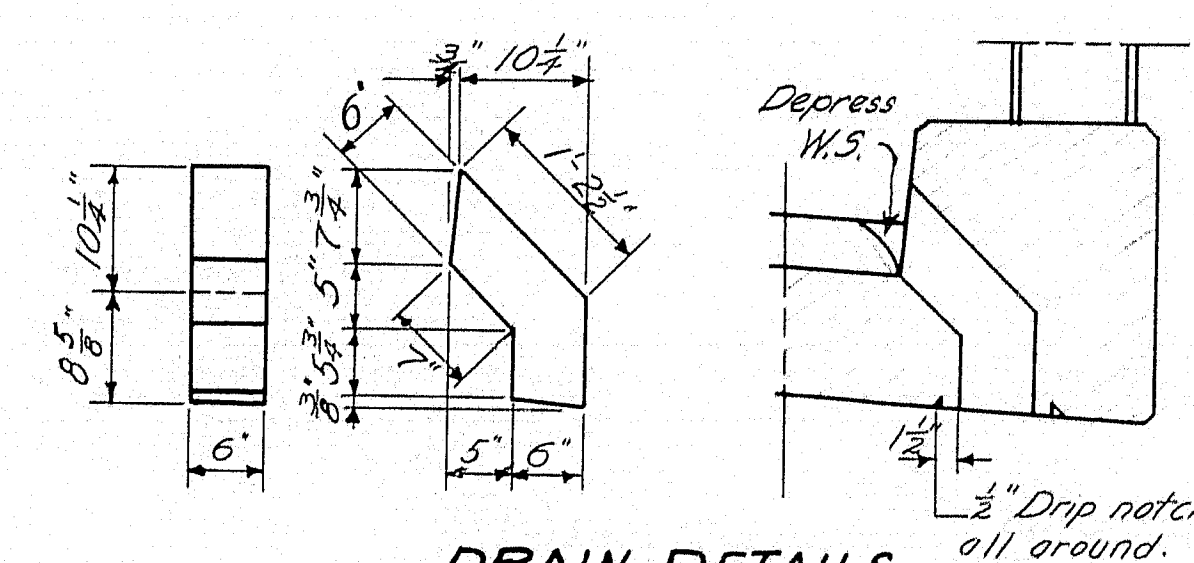
A 2'0" thick rip-rap apron shall be constructed sloped 1 1/2 : 1 to stream bed.



RAIL DETAILS

Curb to be cast with slab. Steel "Pl" for posts to be set in position before curb is cast. The rail bars are to be precast and set in position so the ends project into post's E.S.". Wrap the tongue ends with two layers of heavy roofing. Cast posts. After forms are removed, cut away all exposed roofing.

All exposed edges of concrete to be chamfered $\frac{3}{8}$ " unless otherwise shown.

[illegible]

All reinforcing bars shall conform to A.S.T.M. Specifications A 305-49 except as noted.
* Plain round

— GENERAL NOTES

DESIGN
Loading - 415 kN
 $f_s = 18000 \text{ N/mm}^2$
 $f_c = 1200 \text{ N/mm}^2$
 $n = 10$

CONCRETE CLASSIFICATION
Class A - Top and floor
Class B - Wearing surface
Class B - Abutments
Class Y - Rail

K-bars to be placed 6" from back form at intersection of wings and breast wall spaced 14-6" vertically; also 6" below bridge seat at 4" centers. Bend in field to fit form.

Cover the $\frac{1}{2}$ slots between parapets and curbs with 2 layers of heavy roofing 10' wide. Coat the surface of the concrete and the contact surface of the roofing with a suitable grade of roofing cement. Areas to be covered are to be recessed 1".

DESIGN - HAMILTON
TRACE - SMITH
CHECK - *Stacy*

BRIDGE - 3453

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

BASIN FALLS BRIDGE
OVER
BASIN FALLS BROOK
IN THE TOWN OF
BUCKFIELD
OXFORD COUNTY

BRIDGE DETAILS

SHEET 3 OF 7 AUGUSTA, MAINE AUG. 1964

GENERAL NOTES

Superstructure:
5- I-Beams, 2-Cx transverse and 3' longitudinal planking
Fair condition. Pony Truss, Fair condition (Rusty).

Substructure:
Roughly laid split field stone, fair condition.

Stream:
Large deep hole downstream from bridge. Extreme
high water 1936, El. 49.5. Low water present stage

Foundation:
Large boulders in sandy stream bed.
Sounding #1, Sta. 10+88 edge of water, rod penetrated
thru fine sand to very slow driving @ El. 26.0, 110'
below water. Probably sand and boulders.
Sounding #2, 35' left of Sta. 10+17. Rod penetrated 120'
below ground, El. 30.7. Same material & conditions as #1.

Approaches
Sandy unimproved road, fair

Foundation (cont.)
Sounding #1a, Sta. 11+22, to Elev. 32.0 Very easy driving
Elev. 32.0 to Elev. 31.1 1/2" / blow
31.1 to 30.4 1/2" / blow
30.4 to 30.3 1/2" / blow
30.0 Refusal.

Sounding #2a, 15' right Sta. 9+92, to Elev. 34.8 Easy driving
Elev. 34.8 to Elev. 33.5 1/2" / blow
33.5 to 33.2 1/2" / blow
33.2 to 32.7 1/2" / blow
32.7 to 32.0 1/2" / blow
32.0 to 31.1 1/2" / blow
31.1 to 30.8 1/2" / blow
30.8 Refusal.

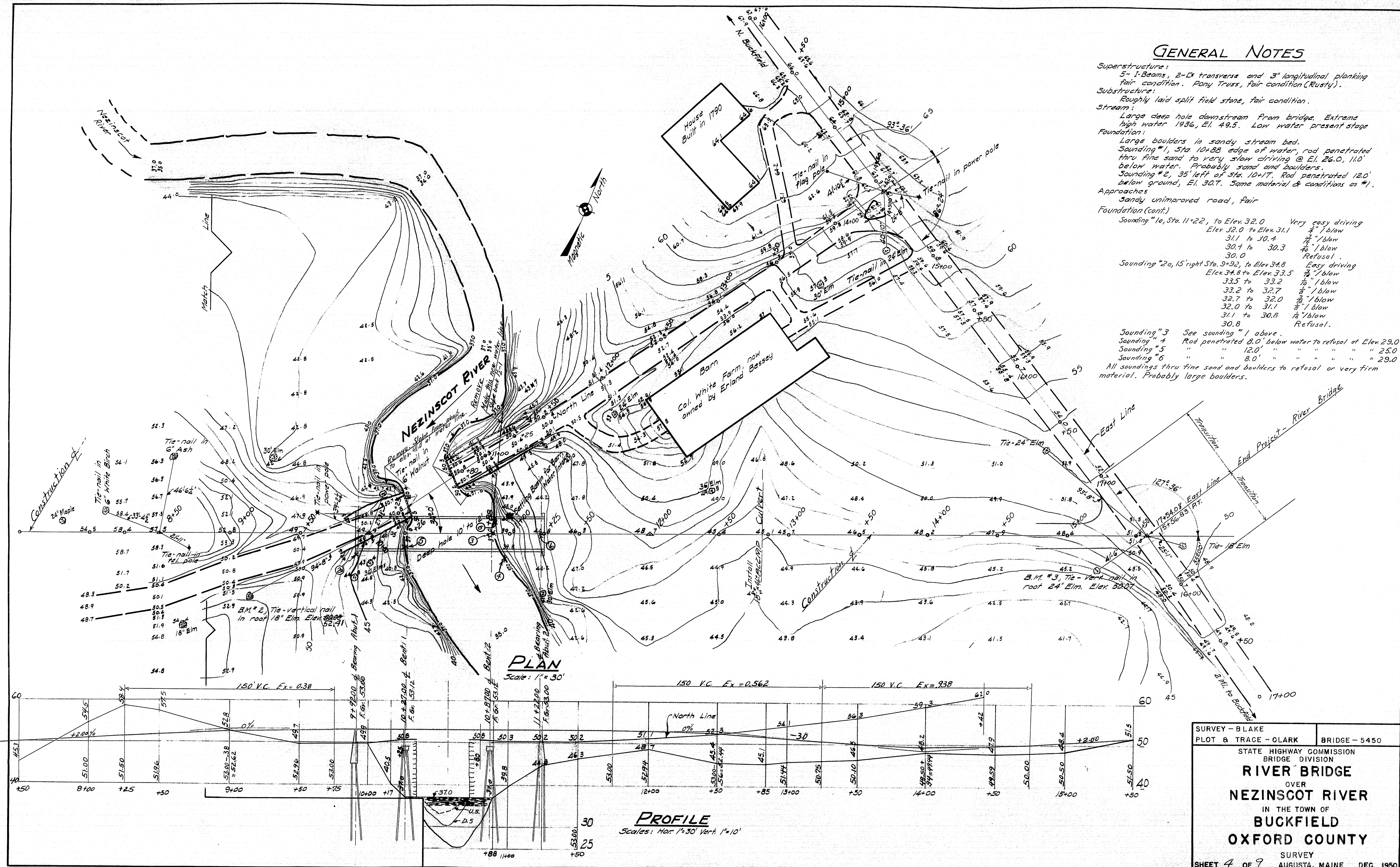
Sounding #3 See sounding #1 above.

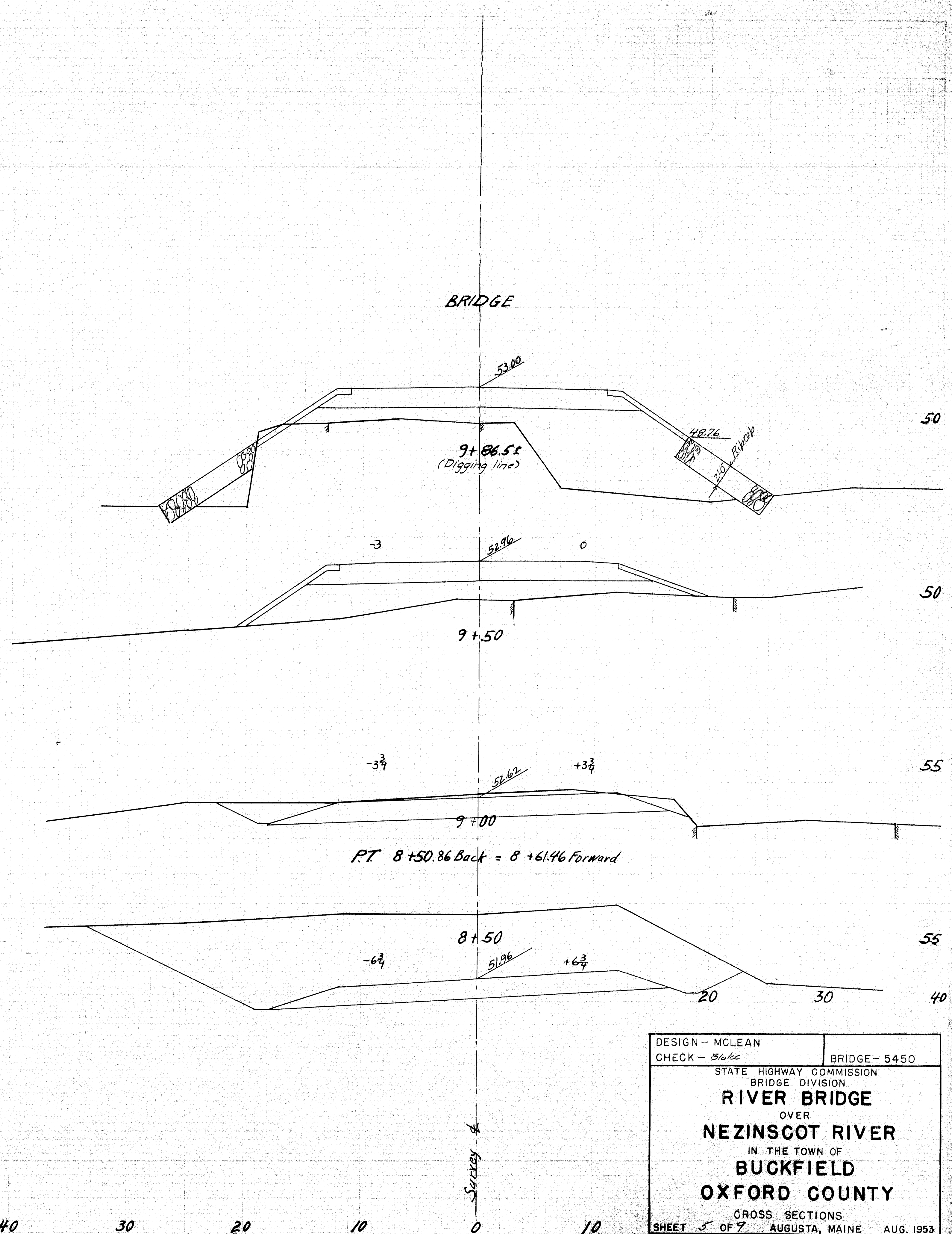
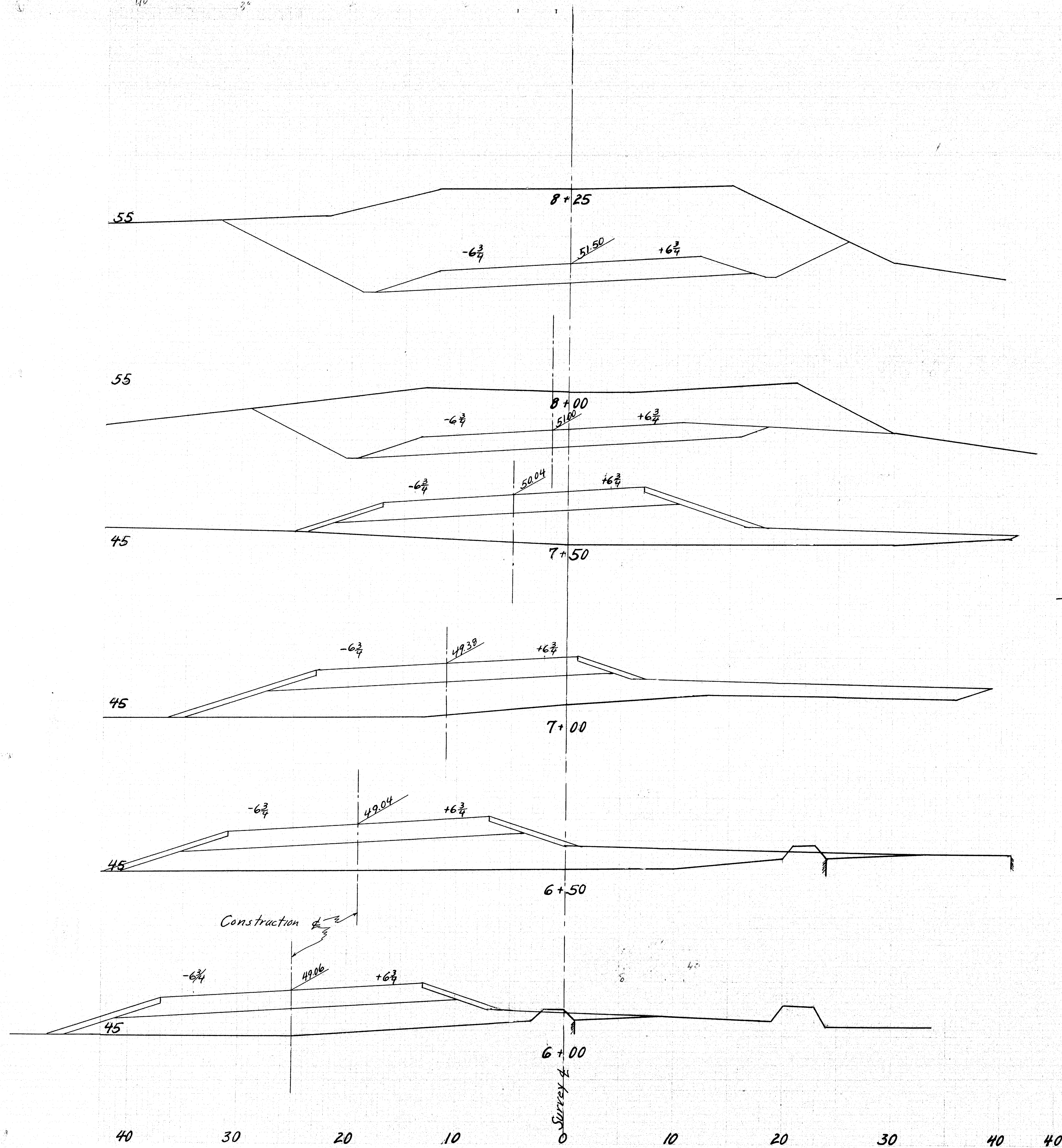
Sounding #4 Rod penetrated 8.0' below water to refusal at Elev. 29.0

Sounding #5 " " 12.0' " " " " 25.0

Sounding #6 " " 8.0' " " " " 29.0

All soundings thru fine sand and boulders to refusal or very firm material. Probably large boulders.





DESIGN - MCLEAN	BRIDGE - 5450
CHECK - Blake	STATE HIGHWAY COMMISSION
	BRIDGE DIVISION
RIVER BRIDGE	
OVER	
NEZINSCOT RIVER	
IN THE TOWN OF	
BUCKFIELD	
OXFORD COUNTY	
CROSS SECTIONS	
SHEET 5 OF 7	AUGUSTA, MAINE AUG. 1953

59-34

0 1 2 3 4 5 INCHES

REAR ELEVATION

Symmetrical about the Roadway

HALF PLAN - ABUTMENTS

FRONT ELEVATION

HALF PILE PLAN

SECTION A-A

Design pile load - 20 tons

LONGITUDINAL SECTION

Scale 1/4" equals 1'-0"

Payment for the necessary unwatering of foundation pits to be included under contract item 204-12. 5 ft. earth excav. abuts. & retaining walls.

DESIGN & DETAIL - MCLAIN	BRIDGE - 5450
TRACE - CUTTING	
CHECK - E	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
RIVER BRIDGE	
OVER	
NEZINSCOT RIVER	
IN THE TOWN OF	
BUCKFIELD	
OXFORD COUNTY	
ABUTMENTS	
SHEET 7 OF 9	AUGUSTA, MAINE AUG. 1953

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END VIEW

SECTION CC

SECTION DD

QUARTER PLAN OF STEEL

SCHEDULE STRUCTURAL STEEL

MARK	NO	DESCRIPTION	LENGTH	LOCATION	SHOP WORK
A ₁	4	L 6" x 4" x 3/8"	7' 6"	Bent 1 & 2 Bracing	
A ₂	8	L 6" x 4" x 3/8"	9' 0"	" "	
A ₃	16	L 6" x 4" x 3/8"	10' 0"	" "	
A ₄	8	L 6" x 4" x 3/8"	4' 0"	" "	
A ₅	16	L 3 1/2" x 2 1/2" x 5/16"	1' 8"	B ₁ to F _B	
A ₆	16	L 3 1/2" x 2 1/2" x 5/16"	1' 8"	B ₂ to F _B	
A ₇	8	L 6" x 4" x 3/8"	1' 0"	Shelf angle B ₁ to F _B	
B ₁	8	27" W 94"	35' 4 1/2"	Stringer Span 1 & 3	Comber 14
B ₂	4	36" W 170"	59' 11"	Stringer Span 2	Comber 22
F _B	2	36" W 150"	25' 0"	Floor beam	
B _{P1}	16	8" BP 36"	30' 0"	Bearing Pile, Bent 1 & 2	
B _{P2}	4	10" BP 42"	32' 0"	End Pile, Bent 1 & 2	
B _{P3}	13	8" BP 36"	20' 0"	Abut. 1 (see sheet 7)	
B _{P4}	13	8" BP 36"	25' 0"	Abut. 2	
P ₁	24	A 7" x 7/8"	1' 11"	Diaphragms, Span 1 & 2	
P ₂	12	A 7" x 7/8"	2' 7"	" Span 3	
P ₃	8	A 10" x 1 1/2"	1' 6"	Bearing Abut. 1 & 2	see detail
P ₄	16	A 10" x 3/4"	1' 6"	" "	see detail
P ₅	48	A 4 1/2" x 3/8"	0' 8 3/4"	Pile cap, Bent 1 & 2	
P ₆	20, 26	A 10" x 7/8"	0' 10"	Pile cap, Abut. 1 & 2	see detail
P ₇	8	A 4" x 1"	1' 2"	Shelf plate F _B	
P _{C1}	8	10" W 49"	5' 0"	Pile cap, Bent 1 & 2	
A _{B1}	16	Shelf plate 1" x 10" x 1/2"	1' 4"	Bearings Abut. 1 & 2	see detail
C ₁	18	15" L 33.9"	6' 5"	Diaphragms	
P ₈	4	A 5" x 1"	1' 1"	Shelf plate F _B	
P ₉	4	A 5" x 1 1/2"	1' 0"	" "	
P ₁₀	4	A 5" x 3/4"	1' 0"	" "	

NOTE
Specifications: Structural steel shall conform to that for welded bridges as adopted by the American Welding Society. Fabrication and erection shall conform to Maine State Highway Commission, Standard Specifications, May, 1953.
All welds to be fillet unless noted.
The order in which the welding is performed must be approved by the engineer.
The bracing for bents 1 & 2 is ordered long. Cut after welding to present a neat appearance. Cut offs to be property of Contractor.

Note: if necessary, one splice per pile will be permitted. Splices to be below ground elevation or as directed by the engineer. Pile splices to be butt-welded.

Payment for structural steel to be made according to quantities shown in schedule.

Note: Pile caps P₆ and P_{C1} to be paid for as structural steel.

DESIGN & DETAIL - MCLEAN
TRACE - MCLEAN
CHECK - V.S.

BRIDGE - 5450

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

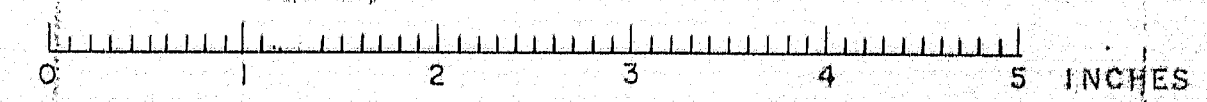
RIVER BRIDGE

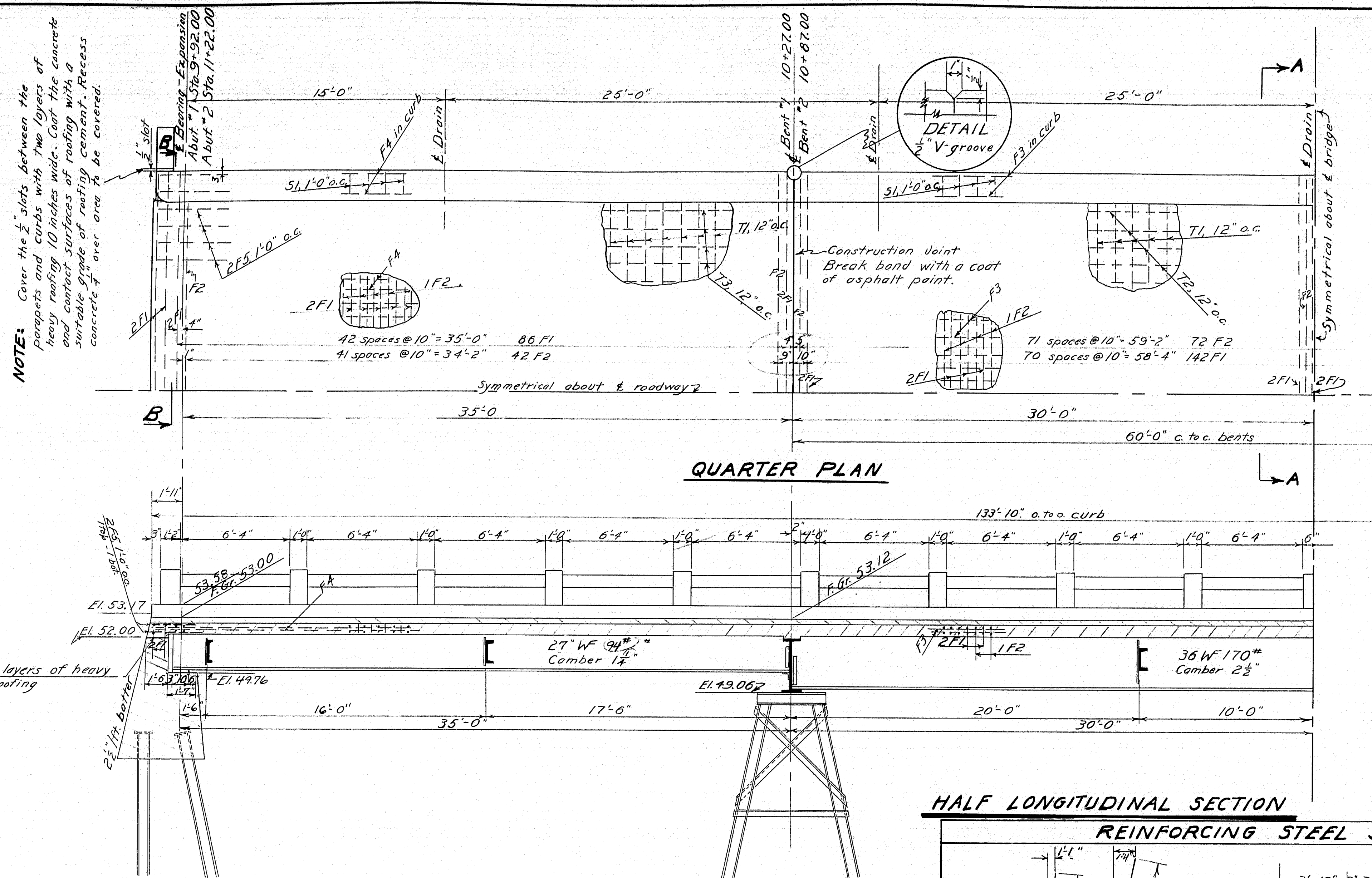
OVER
NEZINSCOT RIVER

IN THE TOWN OF
BUCKFIELD

OXFORD COUNTY

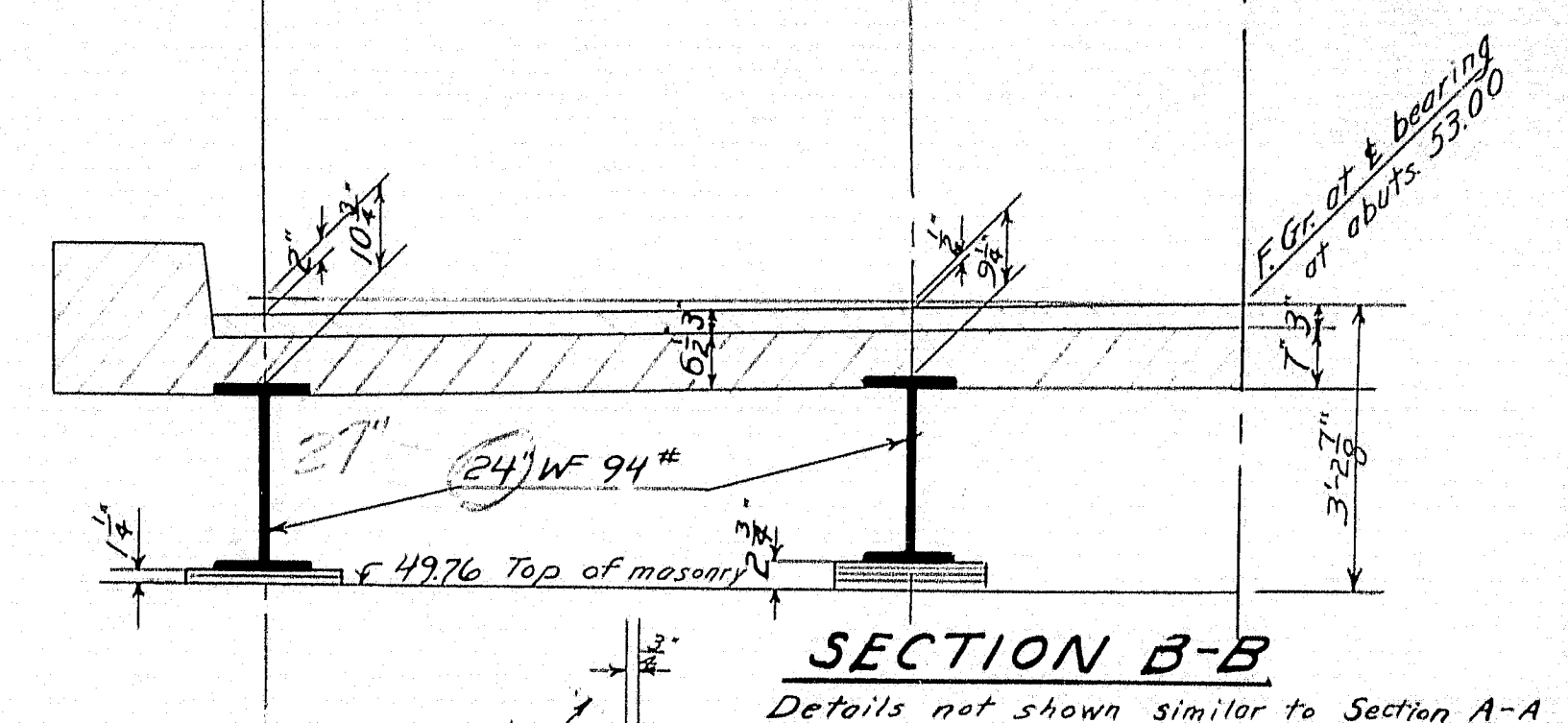
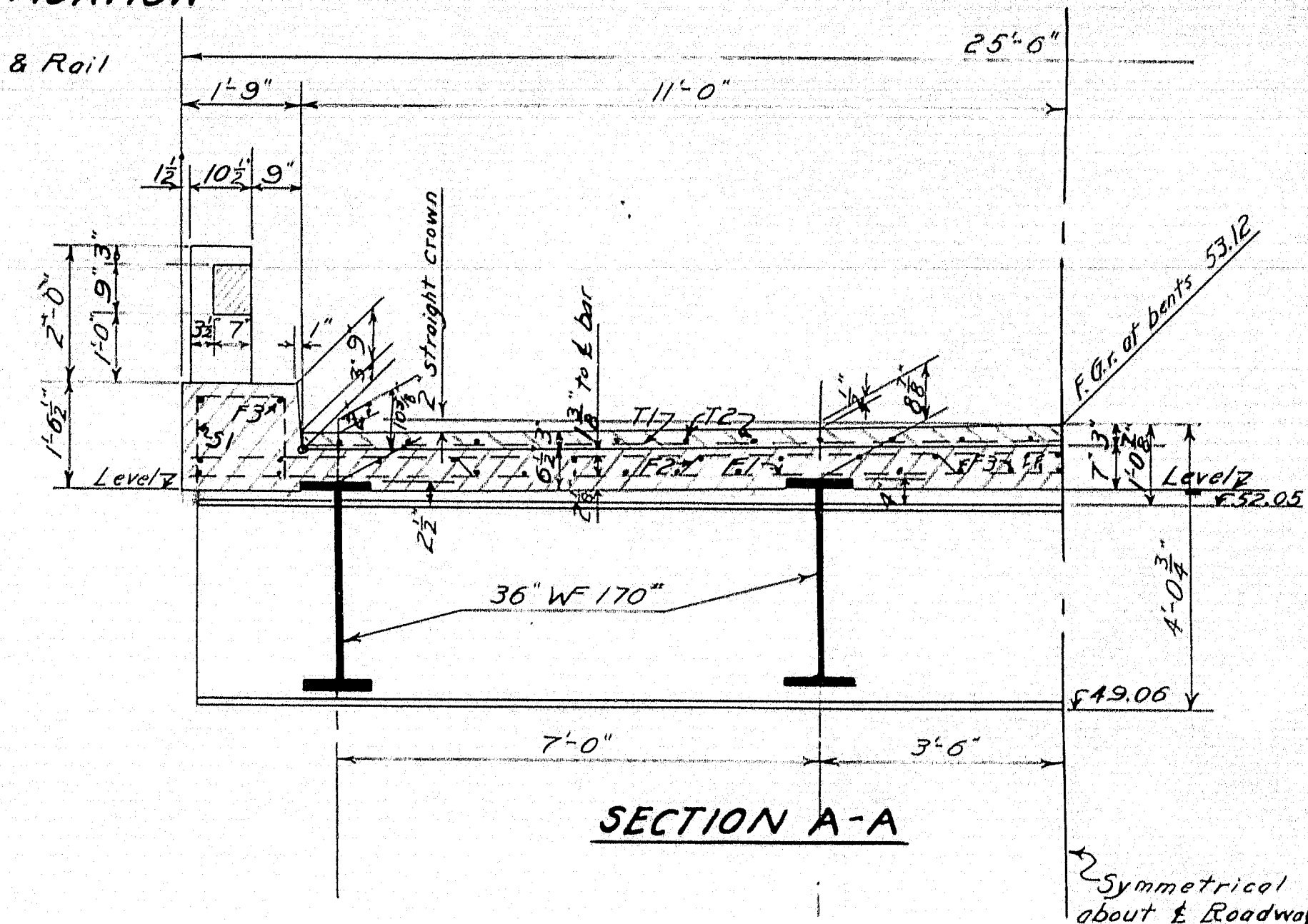
STRUCTURAL STEEL
SHEET 8 OF 9 AUGUSTA, MAINE AUG. 1953





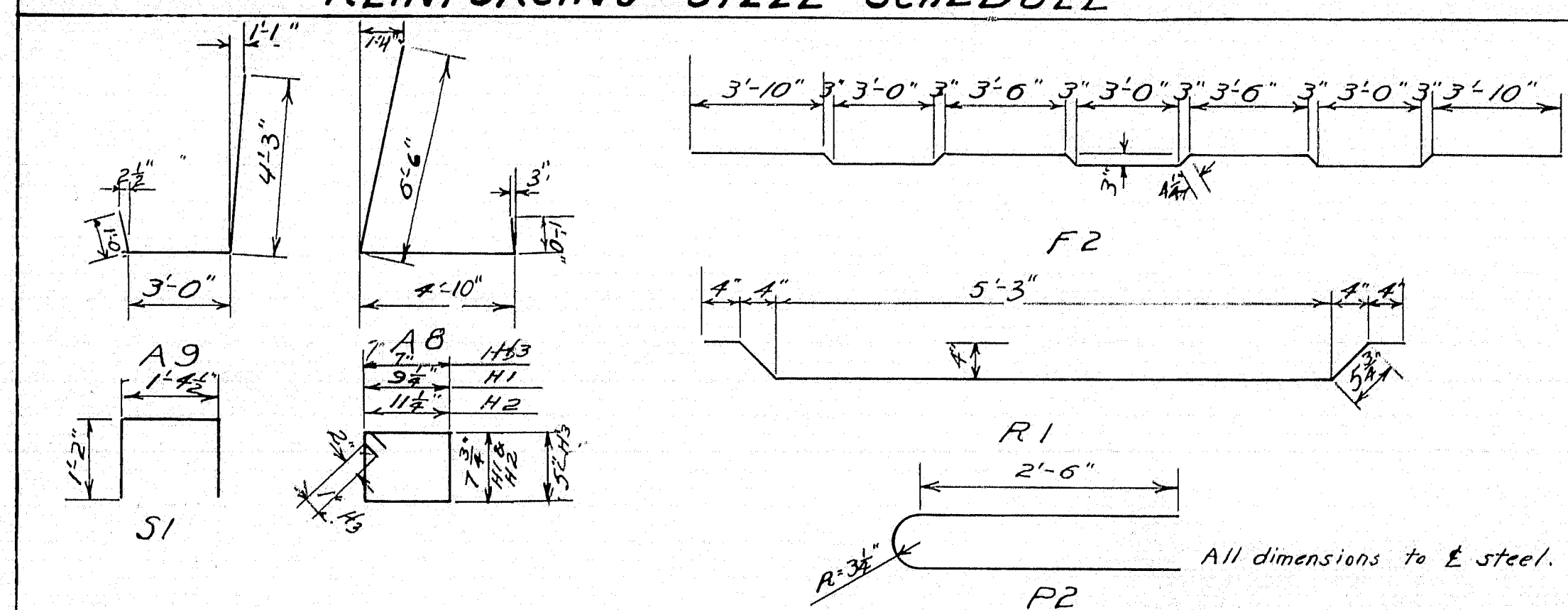
CONCRETE CLASSIFICATION

Class A Slab
Class Y Wearing Surface & Rail
Class B Abutments



HALF LONGITUDINAL SECTION

REINFORCING STEEL SCHEDULE



MARK	SIZE	NO.	LENGTH	LOCATION	MARK	SIZE	NO.	LENGTH	LOCATION
BENT BARS									
A8	"4	48	12'-4"	Abutments	R1	"4	72	6'-10"	Rail
A9	"4	48	8'-3"	Abutments	S1	"4	268	3'-8"	Curb
F2	"5	156	25'-9 1/2"	Slab	H1	"3	102	3'-2"	Interior posts
P2	"6	76	5'-10"	Posts	H2	"3	12	3'-6"	End posts
STRAIGHT BARS									
A1	"6	8	26'-0"	Abutments	H3	"2	216	2'-2"	Rail bars
A2	"6	8	23'-6"	"	F3	"4	92	31'-0"	Long slab Span "2
A3	"6	8	30'-0"	"	F4	"4	92	36'-9"	" " " 183
A4	"4	8	5'-0"	Wing Abutments	F5	"4	104	4'-0"	Slab, over abutments
A5	"4	8	6'-4"	"	T1	"3	134	21'-8"	Wearing Surface
A6	"4	8	7'-8"	"	T2	"3	44	30'-6"	"
A7	"4	16	3'-0"	"	T3	"3	44	36'-7"	"
F1	"5	322	25'-2"	Slab	R2	"4	72	6'-7"	Rail

DRAIN DETAIL

"24 gage galvanized iron
10 required

Design made under the A.A.S.H.O.
Standard Specifications for Highway Bridges
1953.

LOADING: H15-44
S₁₆ 19,000 L₁₆ 1200 n=10

RAIL DETAIL

NOTE: Curb to be cast with slab. Bars P to be set in position before curb concrete is cast. The rail bar is to be precast and set in position so the tongue ends project into the posts 2 1/2". Wrap the tongue ends with two layers of heavy roofing. Chamfer edges of concrete rail 1/2" unless otherwise shown. Construct wire stirrups from a single strand of "9 annealed wire. Make a complete turn around each reinforcing bar.

DESIGN & DETAIL - MCLEAN
TRACE - CUTTING
CHECK - V.S.
BRIDGE - 5450
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
RIVER BRIDGE
OVER
NEZINSCOT RIVER
IN THE TOWN OF
BUCKFIELD
OXFORD COUNTY
SUPERSTRUCTURE
SHEET 9 OF 9 AUGUSTA, MAINE AUG. 1953