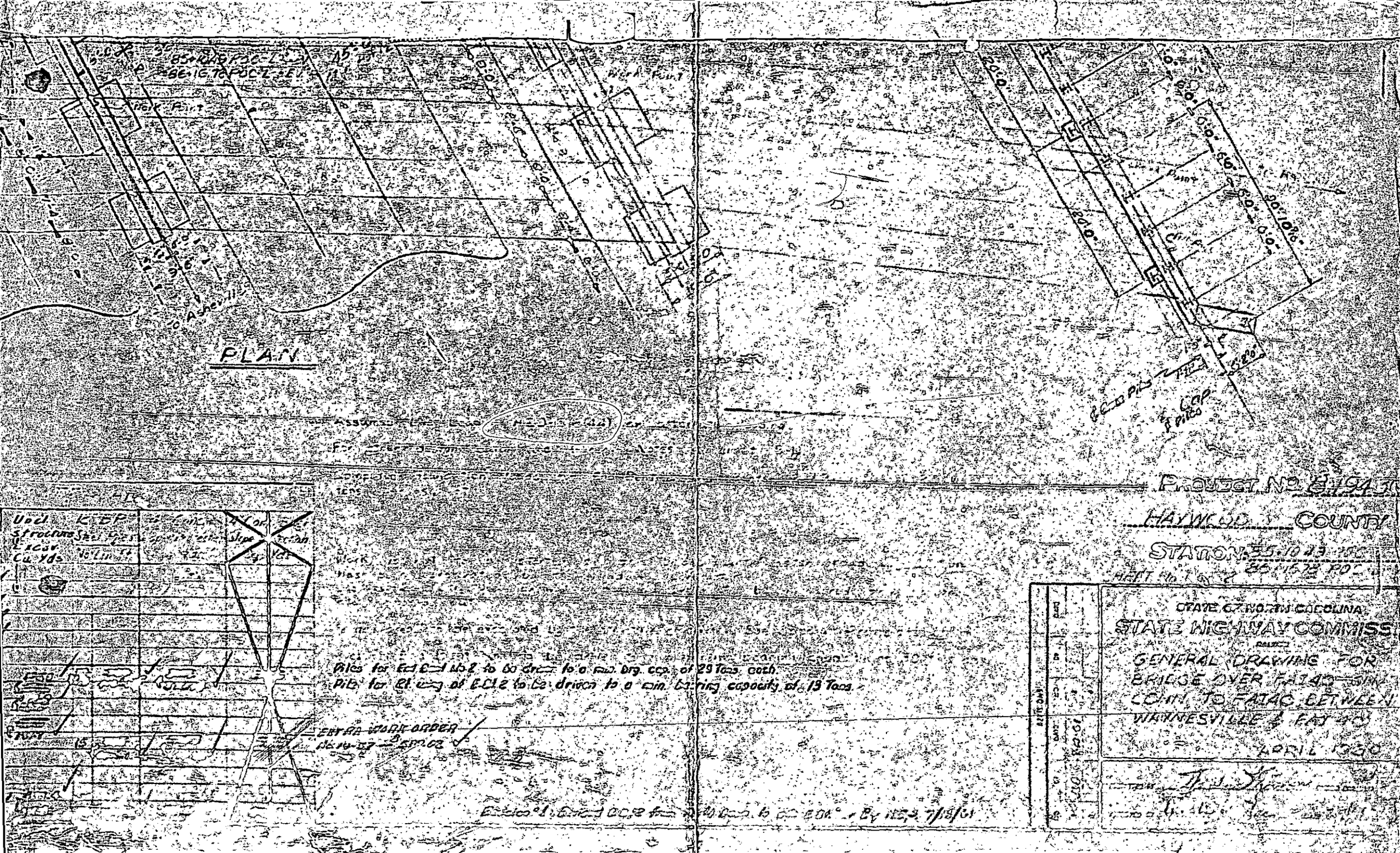
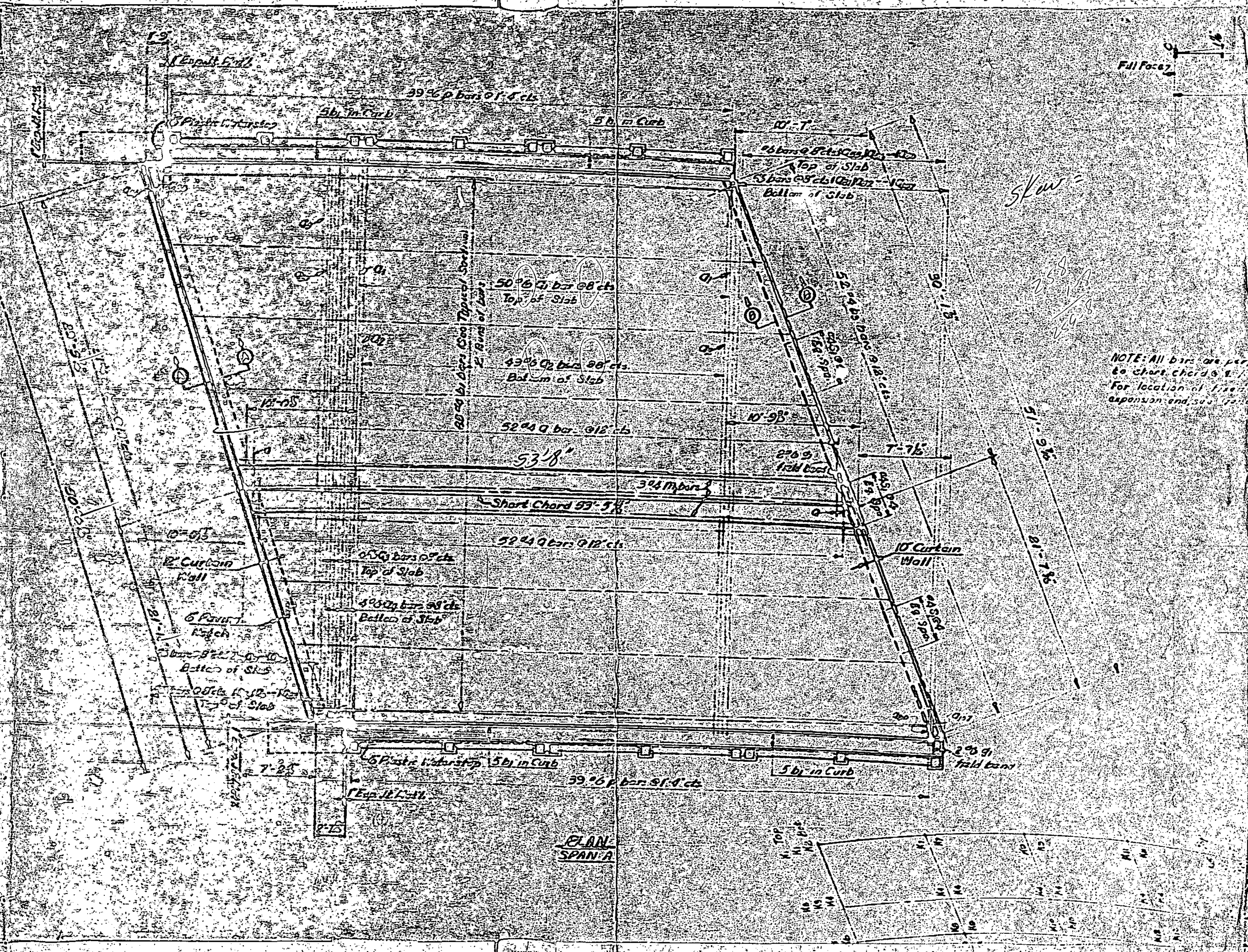
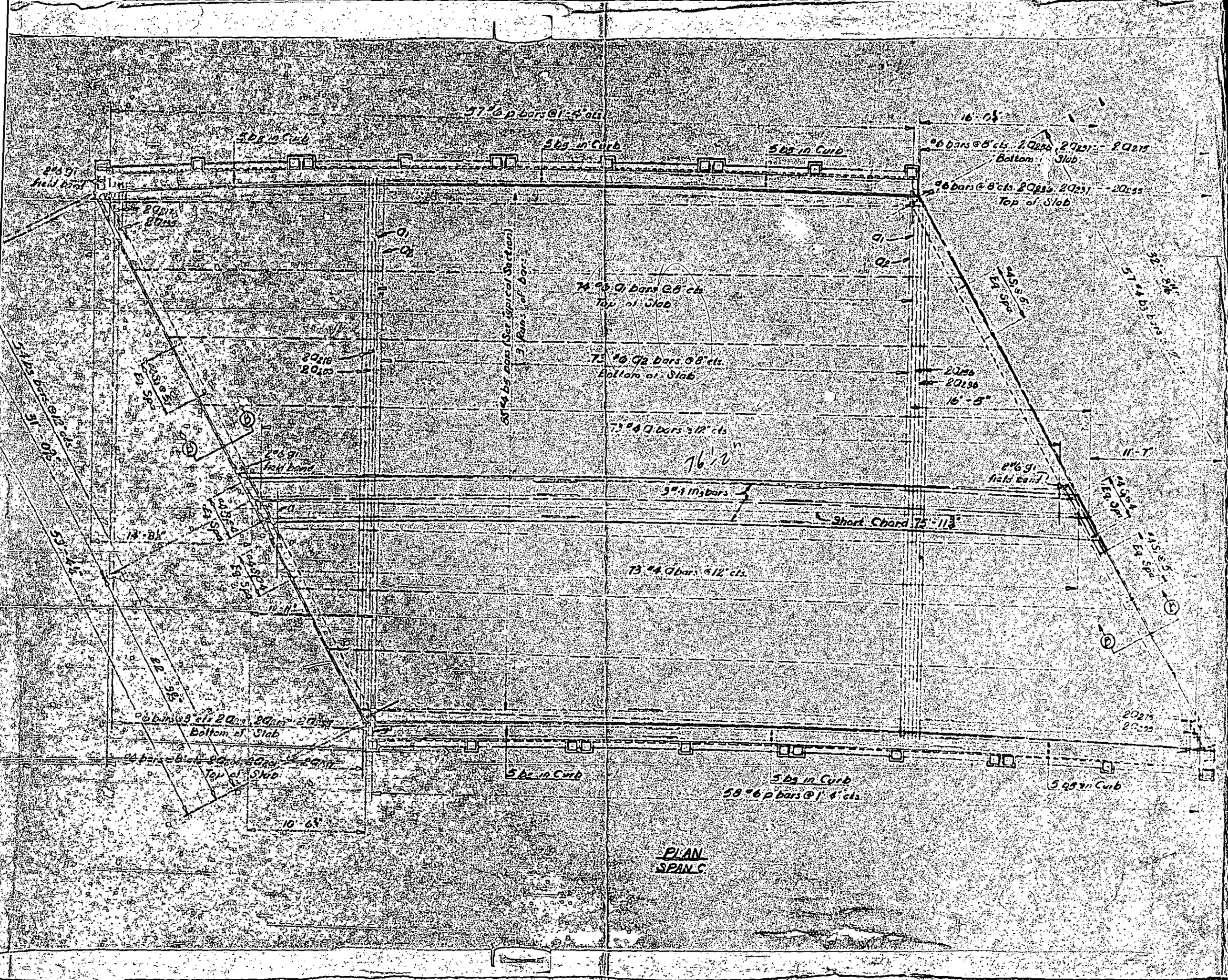
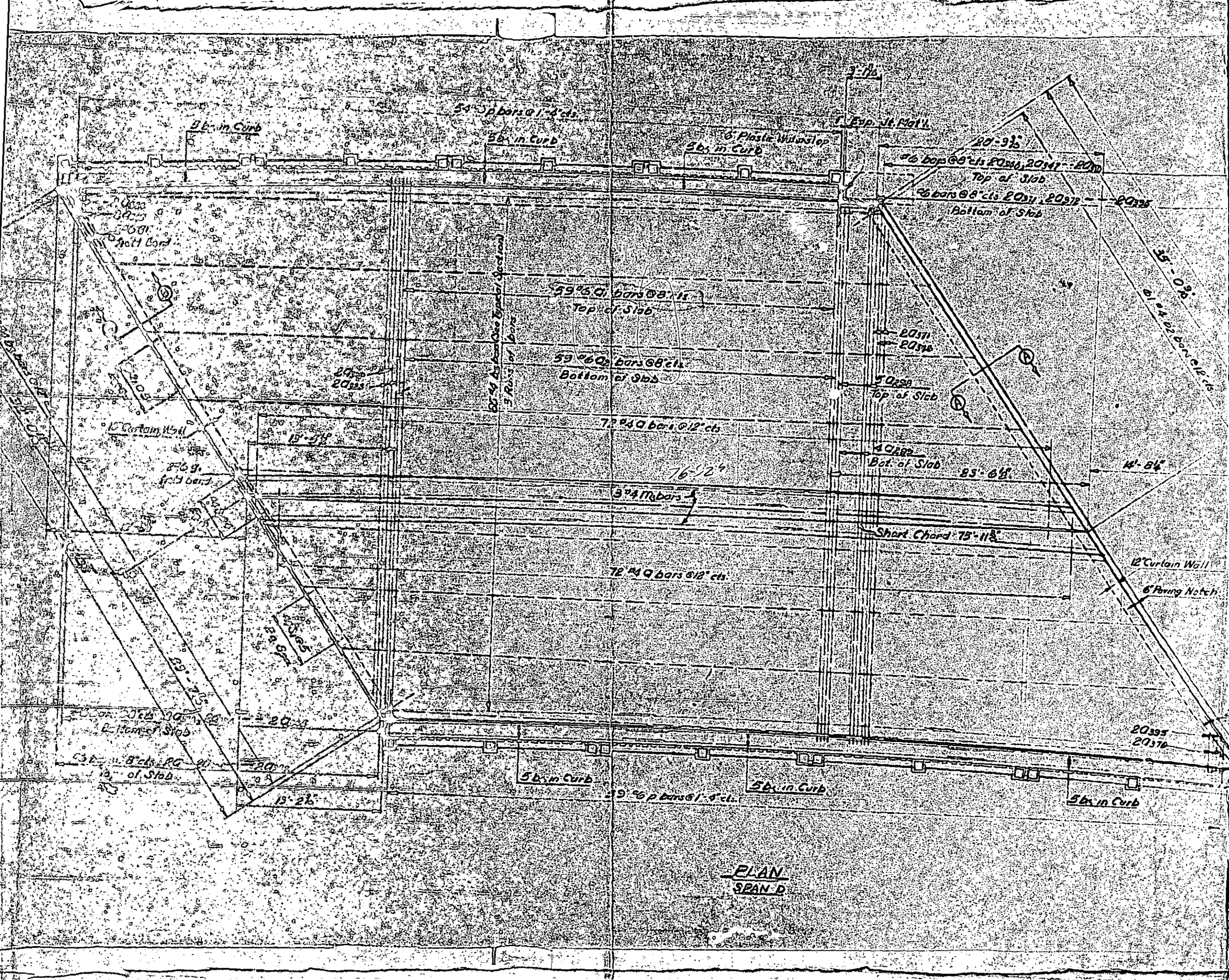

PLAN
Asheville
Piles for Ed E-1 ub 2 to be driven to a min. brg. cap. of 29 Tons each
Piles for El. bent of E-C1.2 to be driven to a min. bearing capacity of 13 Tons
EXTRA WORK ORDER
PROJECT NO. B-1941
HAYWOOD COUNTY
STATION: 55.0+43 PC
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
GENERAL DRAWING FOR
BRIDGE OVER FAIAO CREEK
CONN. TO FAIAO BETWEEN
WAYNESVILLE & EAST FORK
APRIL 1960
UNO3-94-50

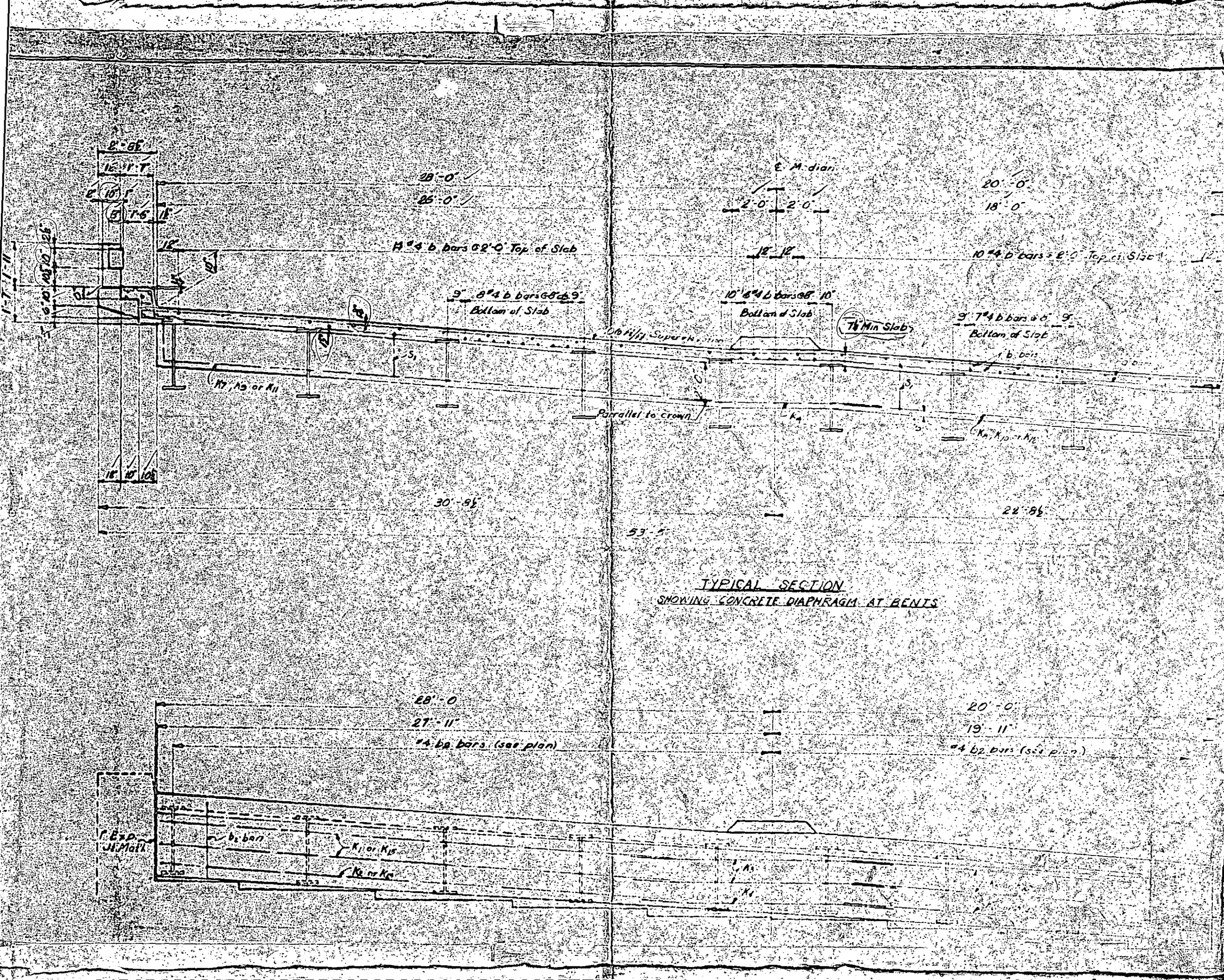

39 #6 p bars @ 1'-4" cts.
5 bs in Curb
5 b in Curb
6" Plastic Waterstop
10'-7"
Top of Slab
Bottom of Slab
Skew =
Full Face
50 #6 G1 bars @ 8" cts.
Top of Slab
43 #6 G2 bars @ 8" cts.
Bottom of Slab
52 #4 a bars @ 12" cts.
53'-8"
3 #4 M bars
Short Chord 53'-5 1/8"
52 #4 a bars @ 12" cts.
52 #4 bs bars @ 18" cts.
90'-1 3/8"
91'-9 7/8"
81'-7 3/8"
10'-9 3/8"
7'-7 1/2"
2 #5 g field bars
10" Curtain Wall
12" Curtain Wall
6" Paving Notch
Top of Slab
Bottom of Slab
7'-2 5/8"
2'-7 1/2"
6" Plastic Waterstop
5 bs in Curb
39 #6 p bars @ 1'-4" cts.
5 bs in Curb
2 #3 g1 field bars
NOTE: All bars are per... to short chord...
For location of fixed... expansion end, see...
PLAN
SPAN A

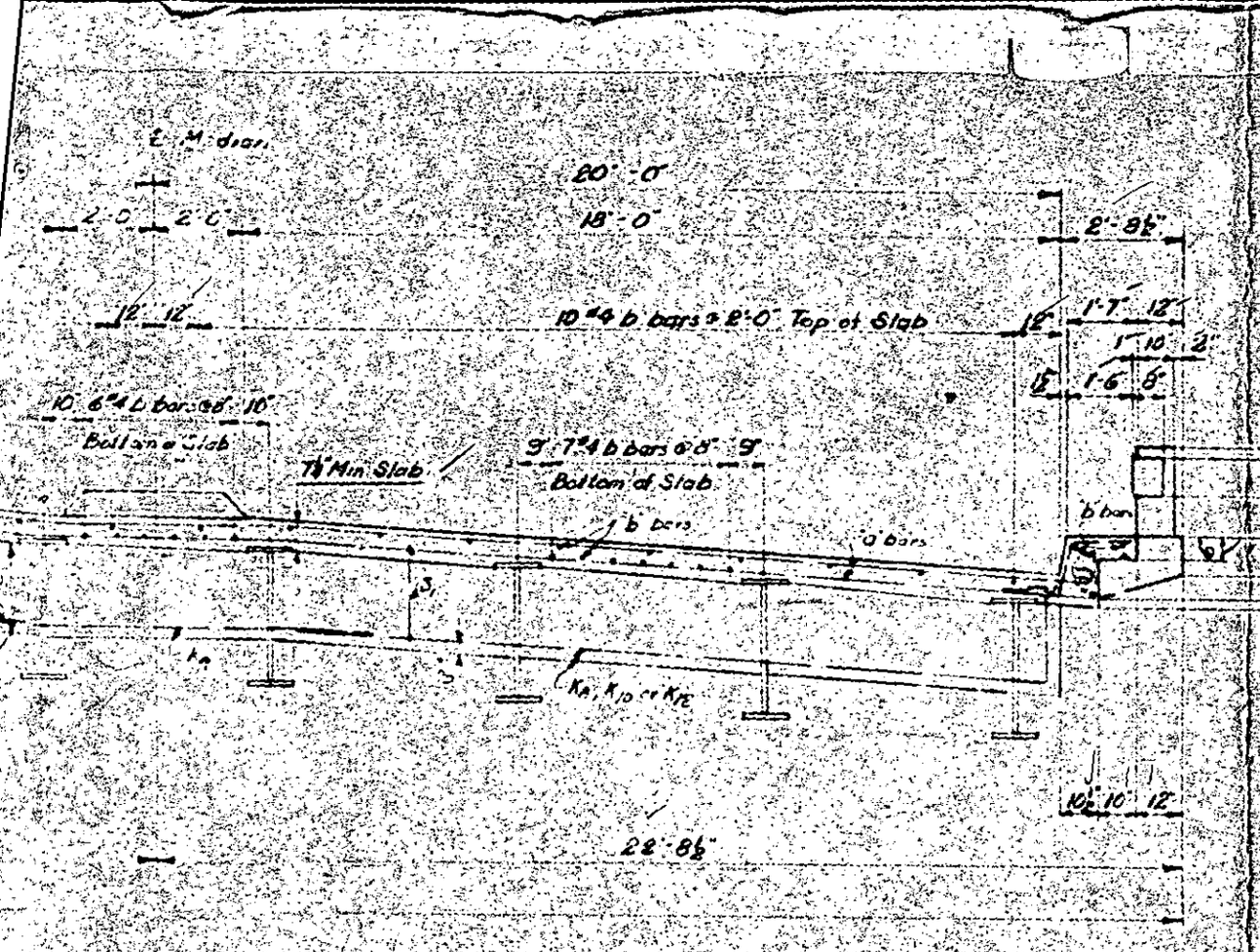
40 #6 p bars @1'-4" cts
5 bs in Curb
5 bs in Curb
12'-9⅜"
#6 bars @8" cts 20 - 20 - 20
Top of Slab
#6 bars @8" cts 20 - 20 - 20
Bottom of Slab
2 #6 g1 field band
48 #6 G1 bars @8" cts
Top of Slab
47 #6 G2 bars @8" cts
Bottom of Slab
51 #4 a bars @12" cts
53'-8"
54 #4 b bars @12" cts
91'-0⅝"
59'-4¼"
10" Curtain Wall
5'-2⅞"
13'-1⅝"
3 #4 M bars
Short Chord 53'-5 13/16"
51 #4 a bars @12" cts
28'-9 1/16"
58 #4 b bars @12" cts
90'-1⅝"
51'-9⅞"
12'-1⅝"
81'-7⅝"
Eq. Spa
5 bs in Curb
41 #5 p bars @1'-4" cts
5 bs in Curb
Bottom of Slab
Top of Slab
8'-8⅝"

PLAN
SPAN B

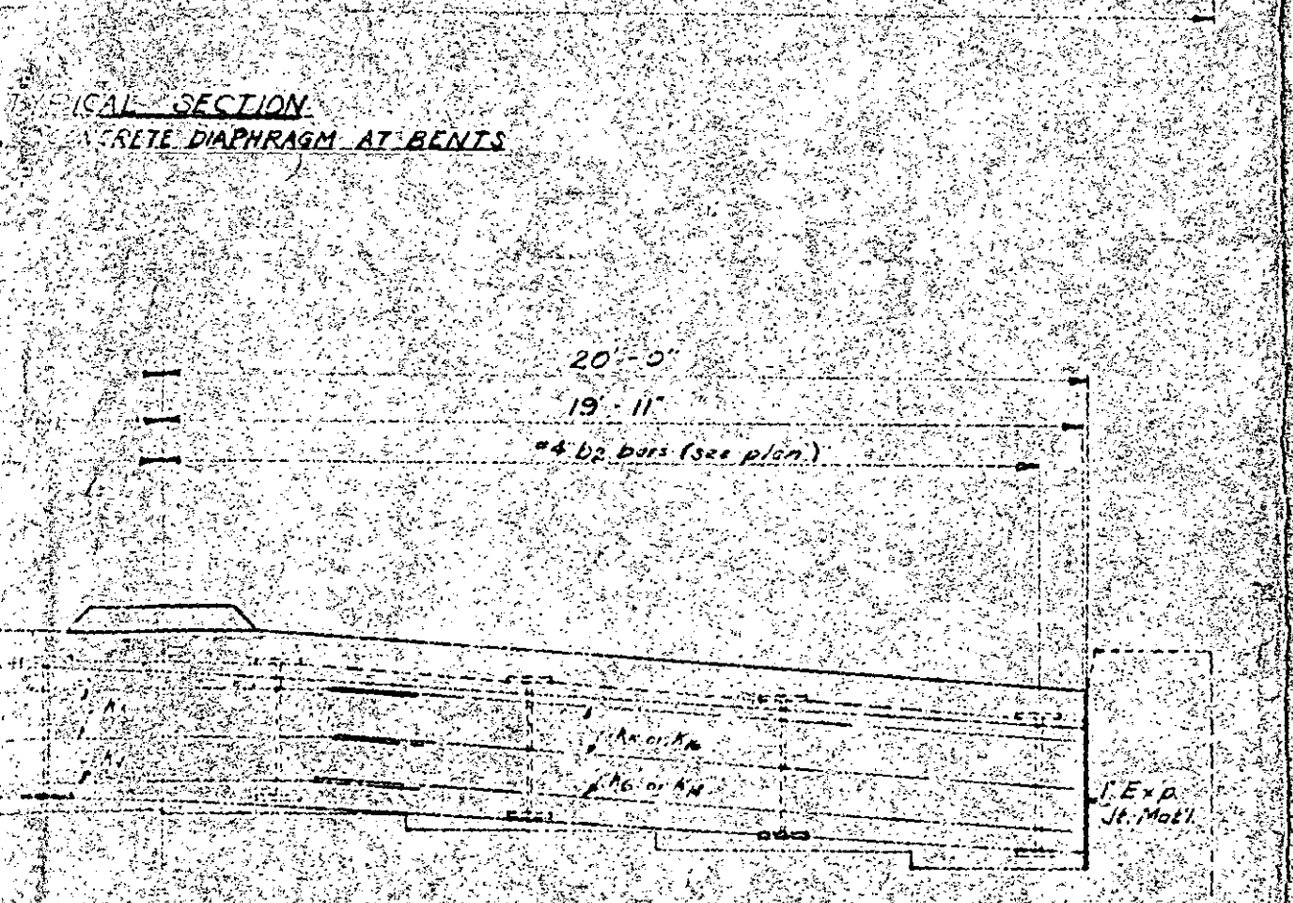

5bz in Curb
5bg in Curb
5bs in Curb
Field bend
Bottom of Slab
Top of Slab
Short Chord 75'-11½"
5bz in Curb
5bg in Curb
5bs in Curb
PLAN
SPAN C


5 lbs in Curb
54 #5 p bars @ 1'-4" cts.
6" Plastic Waterstop
1" Exp. Jt. Matl.
20'-9½"
#6 bars @ 8" cts 20346, 20347 - 20370
Top of Slab
#6 bars @ 8" cts 20311, 20312 - 20335
Bottom of Slab
59 #6 Q1 bars @ 8" cts
Top of Slab
59 #6 Q2 bars @ 8" cts.
Bottom of Slab
20371
20346
20309
Top of Slab
7 #4 Q bars @ 12" cts
40282
Bot. of Slab
85'-6⅝"
14'-8¼"
76'-2¼"
3 #4 M bars
Short Chord 75'-11⅝"
72 #4 Q bars @ 12" cts.
12" Curtain Wall
6" Paving Notch
35'-0⅝"
61 #4 D2 bars @ 12" cts
20395
20370
5 lbs in Curb
9 #6 P bars @ 1'-4" cts.
19'-2⅝"
PLAN
SPAN D

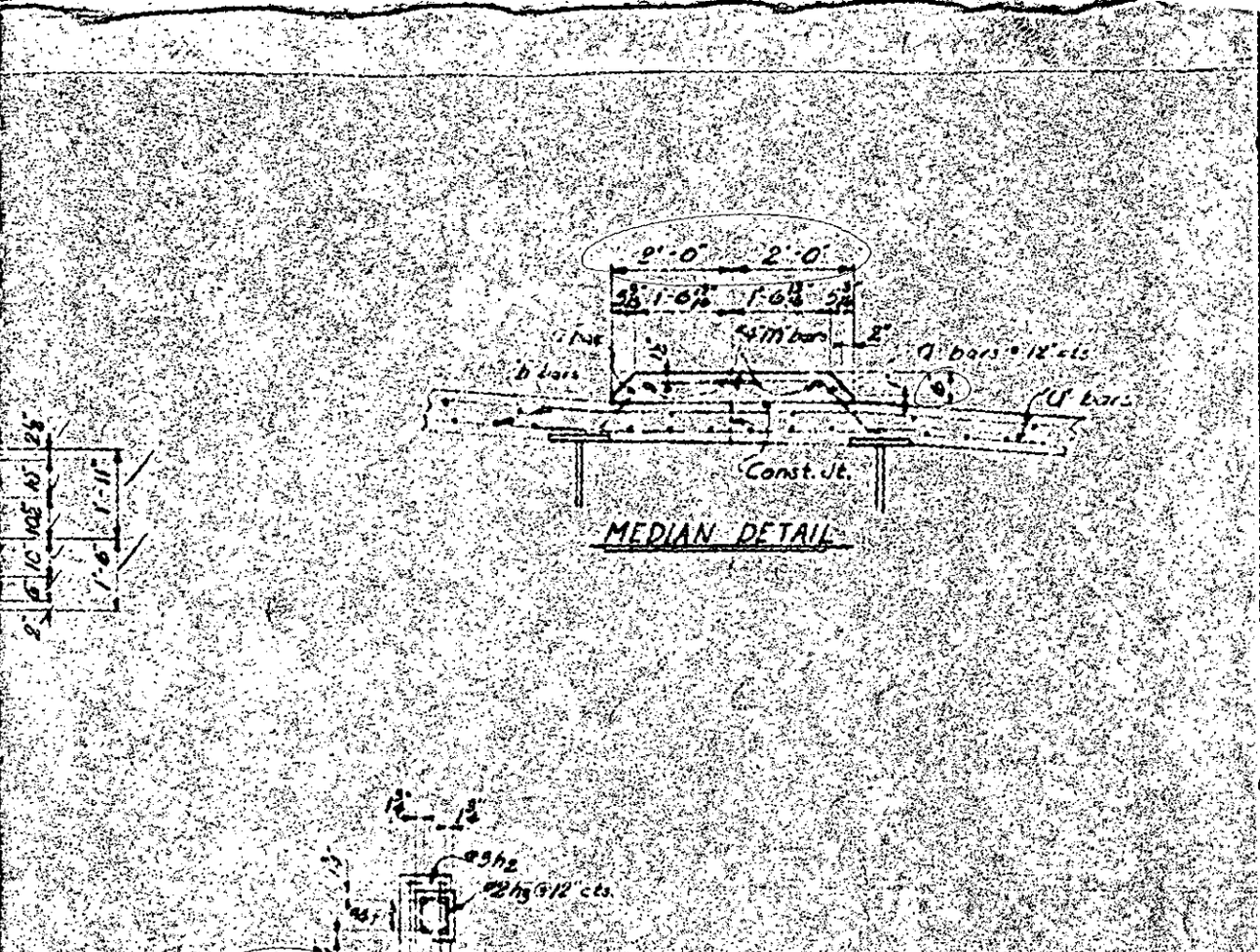

2'-6½"
28'-0"
26'-0"
℄ Median
2'-0"
2'-0"
20'-0"
18'-0"
#4 b bars @ 2'-0" Top of Slab
10 #4 b bars @ 2'-0" Top of Slab
3" 8 #4 b bars @ 8" @ 9"
Bottom of Slab
10" 6 #4 b bars @ 8" 10"
Bottom of Slab
7½" Min Slab
9" 7 #4 b bars @ 8" 9"
Bottom of Slab
Parallel to crown
30'-9½"
22'-8½"
53'-5"
TYPICAL SECTION
SHOWING CONCRETE DIAPHRAGM AT BENTS
28'-0"
27'-11"
#4 b2 bars (see plan)
20'-0"
19'-11"
#4 b2 bars (see plan)
Exp. Joint


℄ Median
20'-0"
18'-0"
2'-0"
2'-0"
2'-8½"
10 #4 b bars @ 2'-0" Top of Slab
10 #4 b bars @ 8" Bottom of Slab
7½" Min Slab
Bottom of Slab
b bars
a bars
Ka, K10 or K12
22'-8½"

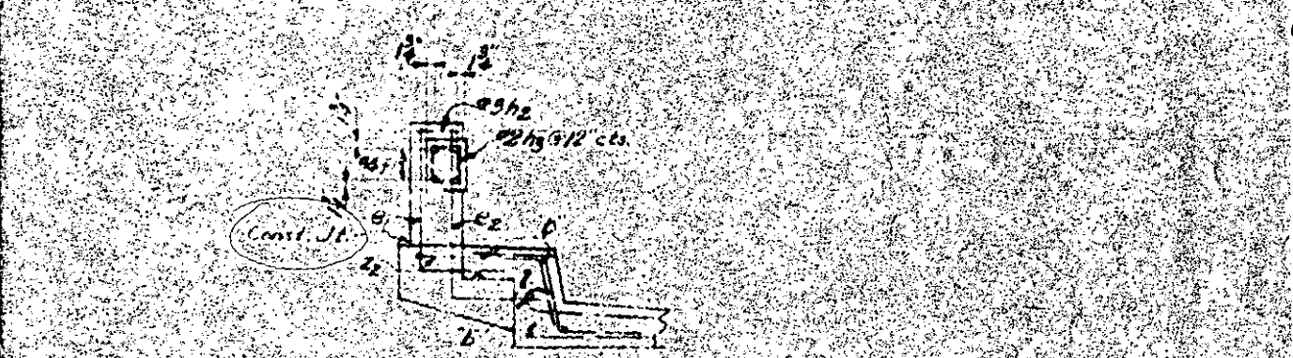
VERTICAL SECTION
CONCRETE DIAPHRAGM AT BENTS


20'-0"
19'-11"
#4 b2 bars (see plan)
Ka or K10
K6 or K14
℄ Exp. Jt. Mat'l.

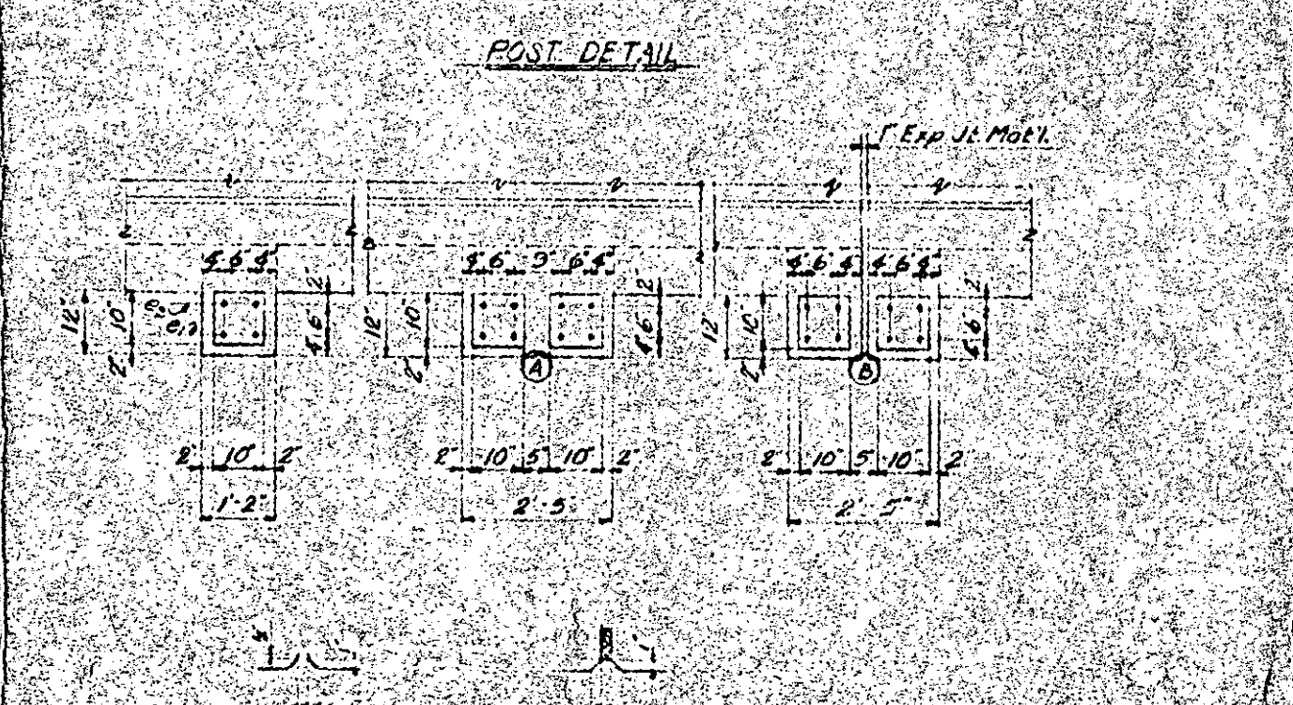
END VIEW


2'-0"
2'-0"
#4 m bars
a bars @ 12" cts.
b bars
a bars
Const. Jt.

MEDIAN DETAIL


#9 h2
#2 h3 @ 12" cts.
Const. Jt.

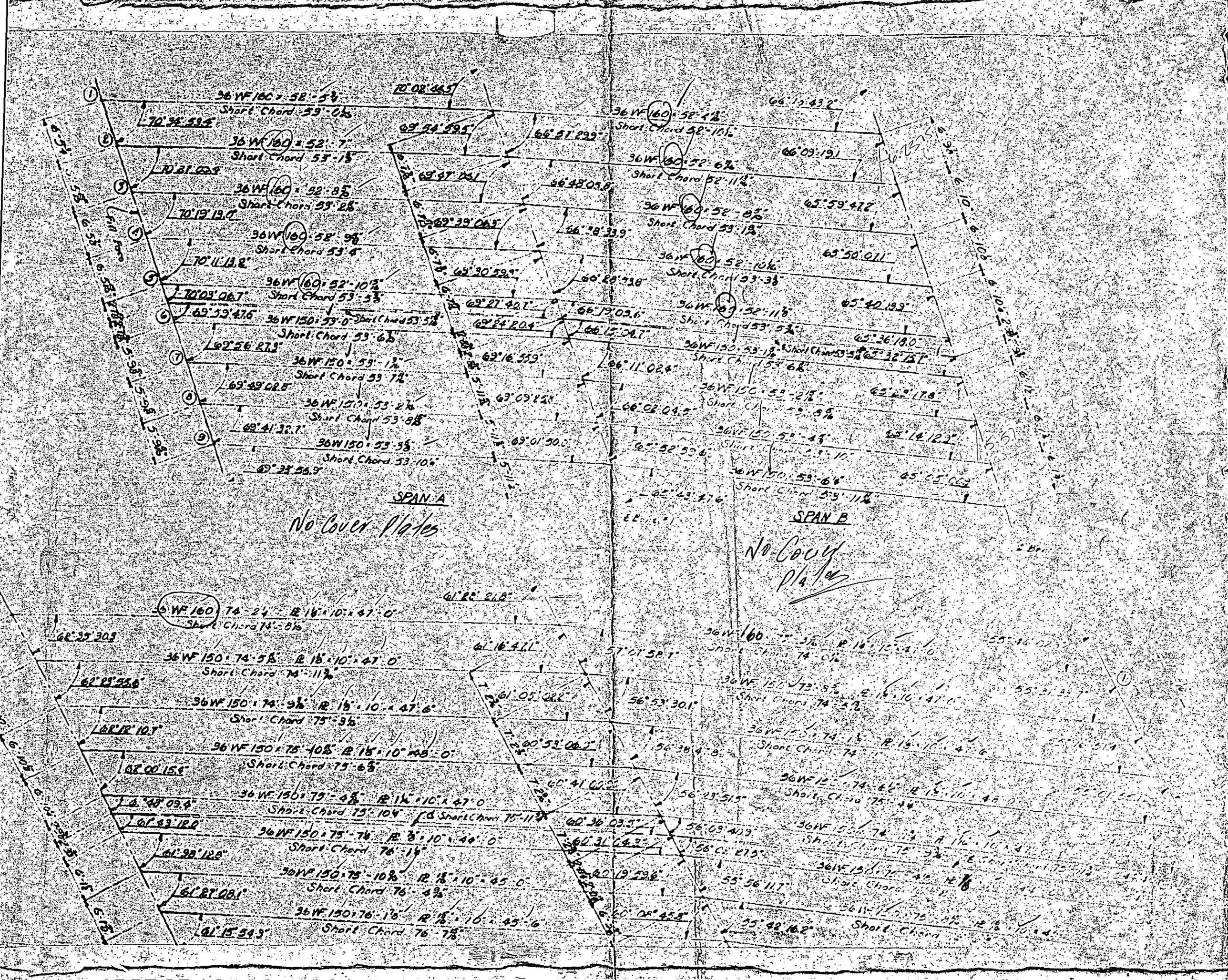
POST DETAIL

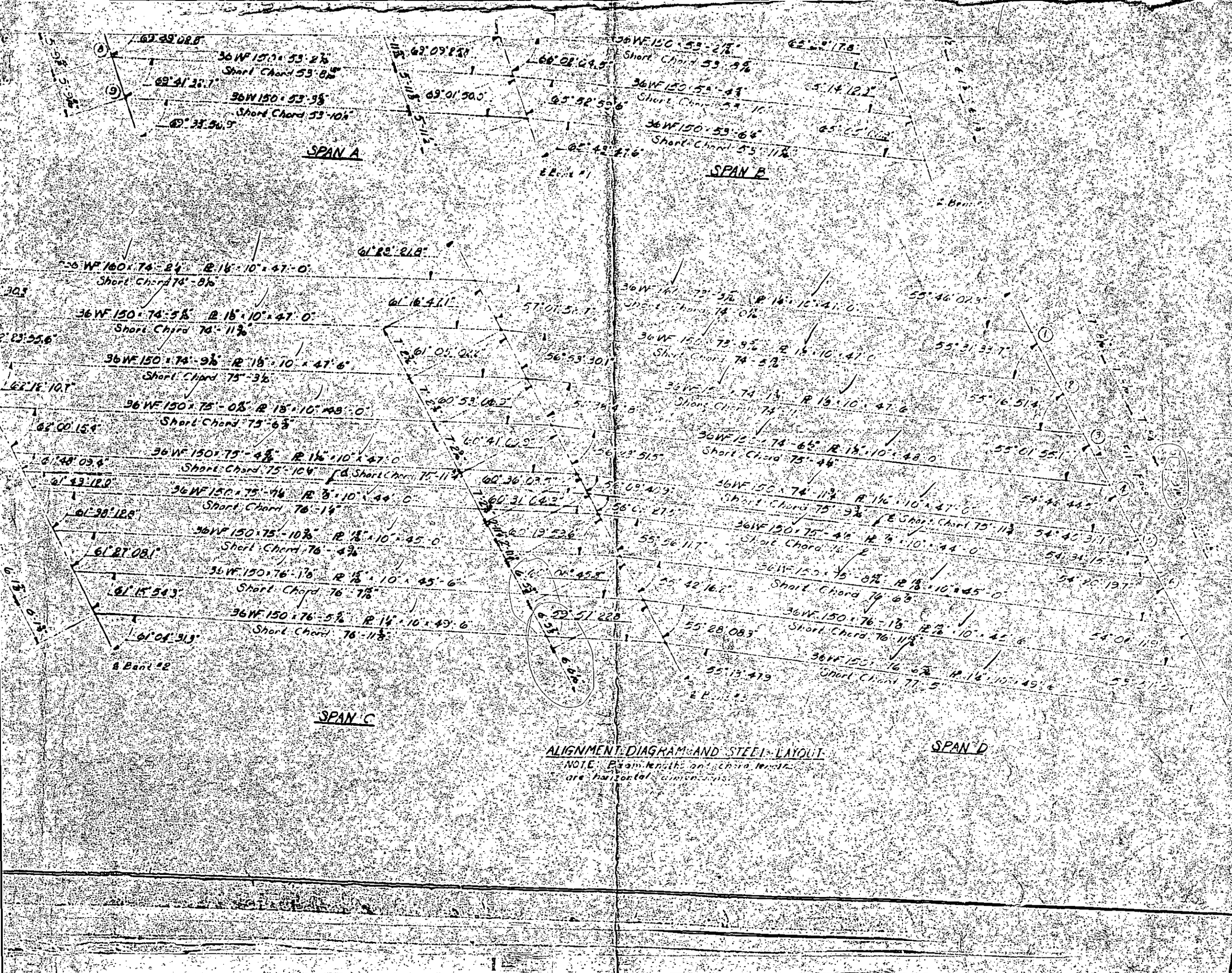

℄ Exp. Jt. Mat'l.
A
B
2'-10"
1'-2"
2'-10"
5"
2'-5"
2'-10"
5"
2'-5"

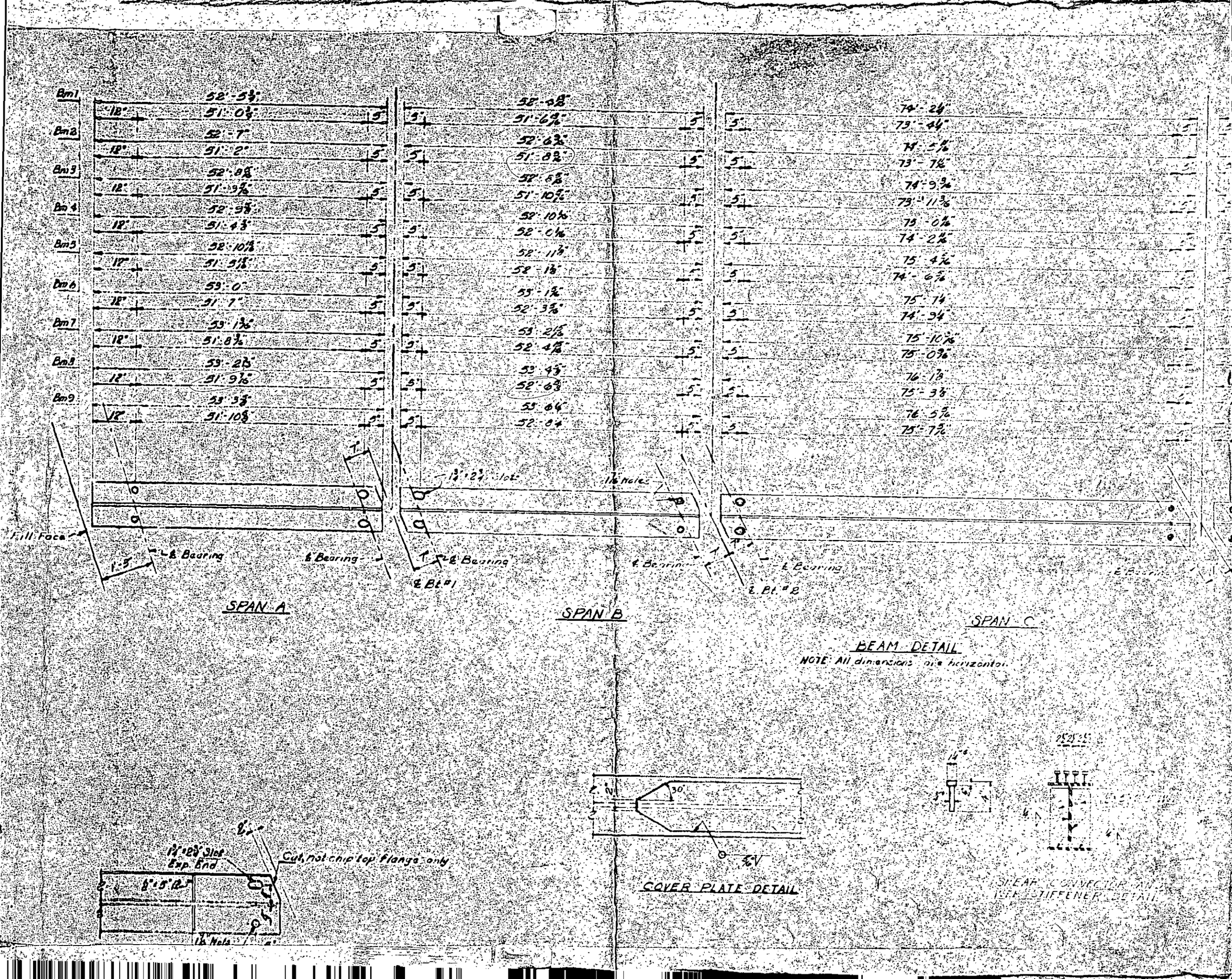
DETAIL A

DETAIL B

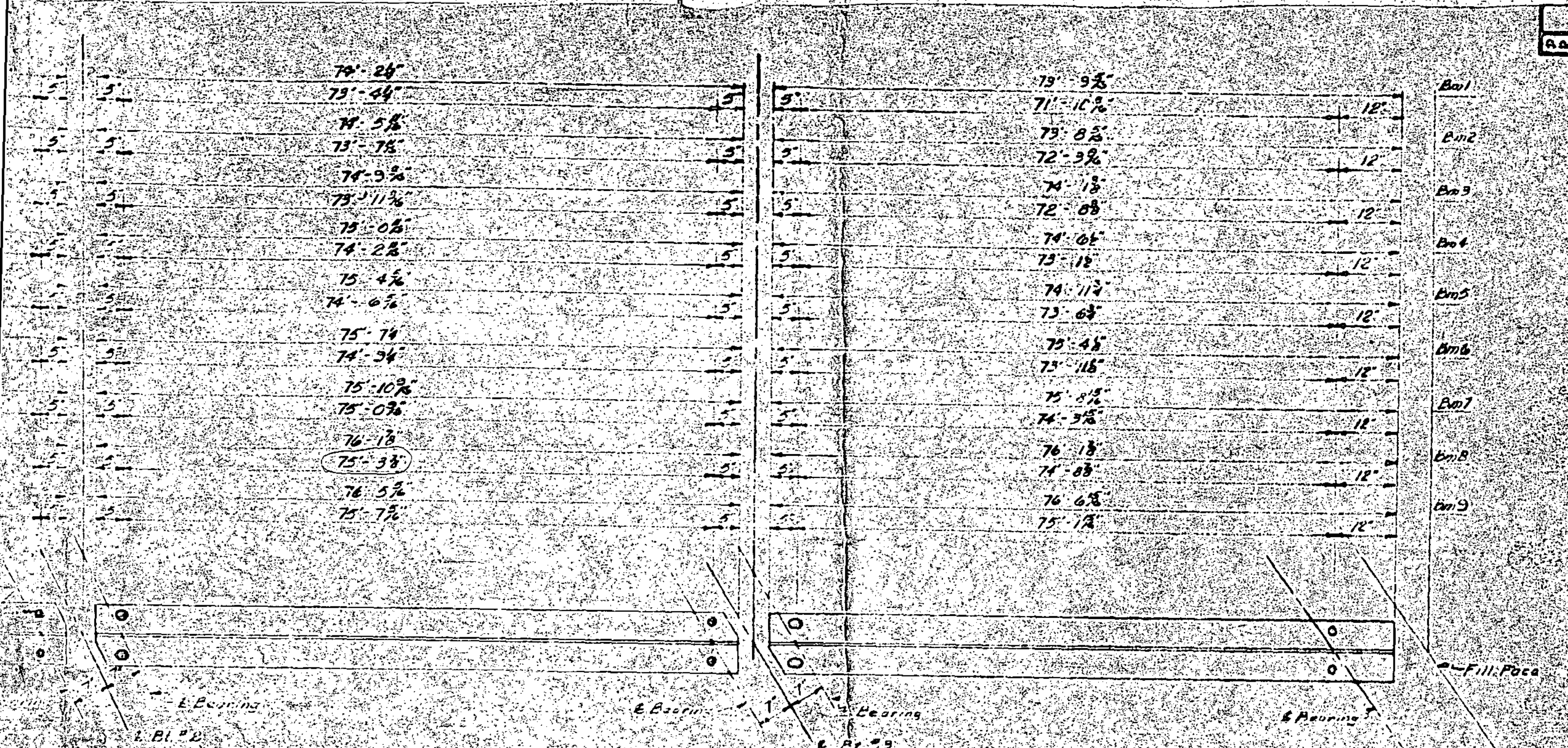
PROJECT No. 8:19430


SPAN A
No Cover Plates
SPAN B
No Cover Plates


SPAN A
SPAN B
SPAN C
SPAN D
36WF 150 × 53' 2½"
Short Chord 53' 8½"
36WF 150 × 53' 9½"
Short Chord 53' 10½"
36WF 160 × 74' 2¼" R 16' 10" × 47' 0"
Short Chord 74' 8½"
36WF 150 × 74' 5½" R 16' 10" × 47' 0"
Short Chord 74' 11½"
36WF 150 × 74' 9½" R 16' 10" × 47' 6"
Short Chord 75' 3½"
36WF 150 × 75' 0½" R 16' 10" × 48' 0"
Short Chord 75' 6½"
36WF 150 × 75' 4½" R 16' 10" × 47' 0"
Short Chord 75' 10½"
36WF 150 × 75' 7½" R 16' 10" × 44' 0"
Short Chord 76' 1½"
36WF 150 × 75' 10½" R 16' 10" × 45' 0"
Short Chord 76' 4½"
36WF 150 × 76' 1½" R 16' 10" × 45' 6"
Short Chord 76' 7½"
36WF 150 × 76' 5½" R 16' 10" × 45' 6"
Short Chord 76' 11½"
36WF 150 × 53' 2½"
Short Chord 53' 8½"
36WF 150 × 53' 4½"
36WF 150 × 53' 6½"
36WF 150 × 73' 3½" R 16' 10" × 41' 0"
Short Chord 74' 0½"
36WF 150 × 73' 9½" R 16' 10" × 47' 0"
Short Chord 74' 5½"
36WF 150 × 74' 1½" R 16' 10" × 47' 6"
36WF 150 × 74' 6½" R 16' 10" × 48' 0"
Short Chord 75' 4½"
36WF 150 × 74' 11½" R 16' 10" × 47' 0"
Short Chord 75' 9½"
36WF 150 × 75' 4½" R 16' 10" × 44' 0"
36WF 150 × 75' 8½" R 16' 10" × 45' 0"
Short Chord 76' 6½"
36WF 150 × 76' 1½" R 16' 10" × 45' 6"
Short Chord 76' 11½"
36WF 150 × 76' 6½" R 16' 10" × 45' 6"
Short Chord 77' 5"
ALIGNMENT DIAGRAM AND STEEL LAYOUT
NOTE: Diagram lengths and chord lengths are horizontal dimensions.


Bm1
52'-5 3/8"
12"
51'-0 3/8"
5"
Bm2
52'-7"
12"
51'-2"
5"
Bm3
52'-8 5/8"
12"
51'-9 7/16"
5"
Bm4
52'-9 7/8"
12"
51'-4 3/8"
5"
Bm5
52'-10 15/16"
12"
51'-5 15/16"
5"
Bm6
53'-0"
12"
51'-7"
5"
Bm7
53'-1 3/16"
12"
51'-8 3/16"
5"
Bm8
53'-2 1/8"
12"
51'-9 1/16"
5"
Bm9
53'-3 3/8"
12"
51'-10 5/8"
5"
Full Face
1'-5"
℄ Bearing
℄ Bearing
℄ Bearing
℄ Bl. #1
SPAN A
52'-0 1/8"
5"
51'-6 9/16"
5"
52'-6 3/16"
5"
51'-8 3/16"
5"
52'-8 5/16"
5"
51'-10 7/16"
5"
52'-10 1/16"
5"
52'-0 1/16"
5"
52'-11 1/8"
5"
52'-1 1/8"
5"
53'-1 3/16"
5"
52'-3 5/16"
5"
53'-2 15/16"
5"
52'-4 15/16"
5"
53'-4 5/8"
5"
52'-6 5/8"
5"
53'-6 1/4"
5"
52'-8 1/4"
5"
1 3/4"x2 3/4" slot
1 1/16" Holes
℄ Bearing
℄ Bearing
℄ Bl. #2
SPAN B
74'-2 1/4"
5"
73'-4 1/4"
5"
74'-5 5/16"
5"
73'-7 1/16"
5"
74'-9 3/16"
5"
73'-11 3/16"
5"
75'-0 5/16"
5"
74'-2 11/16"
5"
75'-4 3/16"
5"
74'-6 5/16"
5"
75'-7 1/4"
5"
74'-9 1/4"
5"
75'-10 3/16"
5"
75'-0 3/16"
5"
76'-1 3/8"
5"
75'-3 3/8"
5"
76'-5 3/16"
5"
75'-7 3/16"
℄ Bearing
℄ Bearing
SPAN C
BEAM DETAIL
NOTE: All dimensions are horizontal.
30°
3/16"V
COVER PLATE DETAIL
1/4"
STEAM CONVECTOR AND
TUBE STIFFENER DETAIL
1 3/4"x2 3/4" Slot
Exp. End
Cut, not chip top flange only
8"x5" R
1 1/16" Hole

9	aa
aa 1-40-1(	

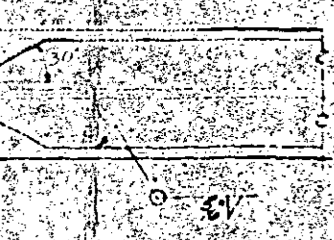


SPAN C

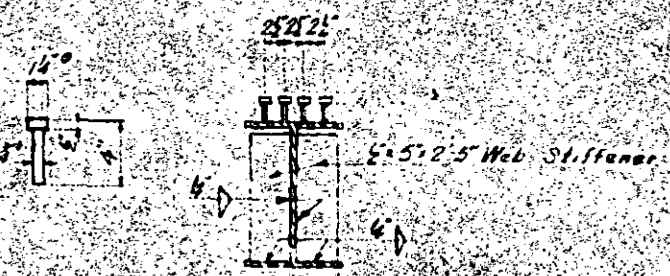
SPAN D

BEAM DETAIL

NOTE: All dimensions are horizontal.

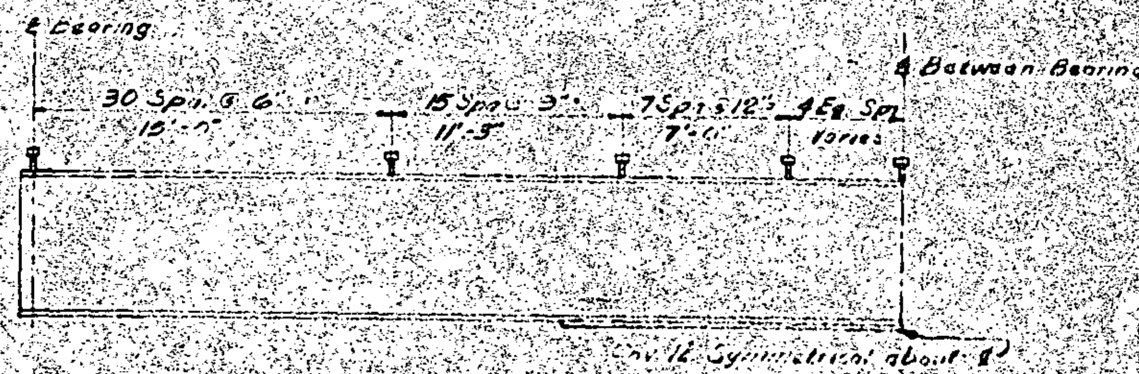


COVER PLATE DETAIL



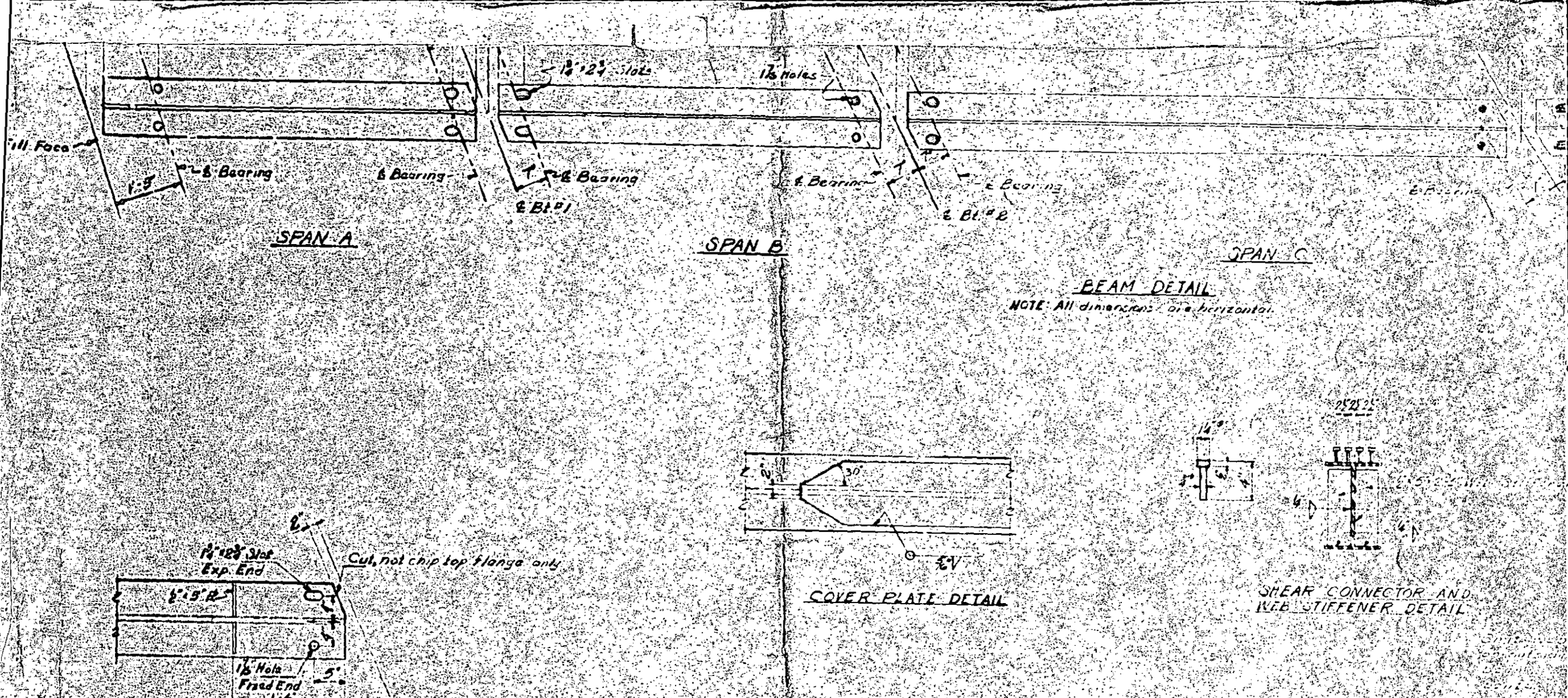
SHEAR CONNECTOR AND WEB STIFFENER DETAIL

Omit web stiffener on outside of outside beams and at end bents.



SPAN C or D

STUD SPACING



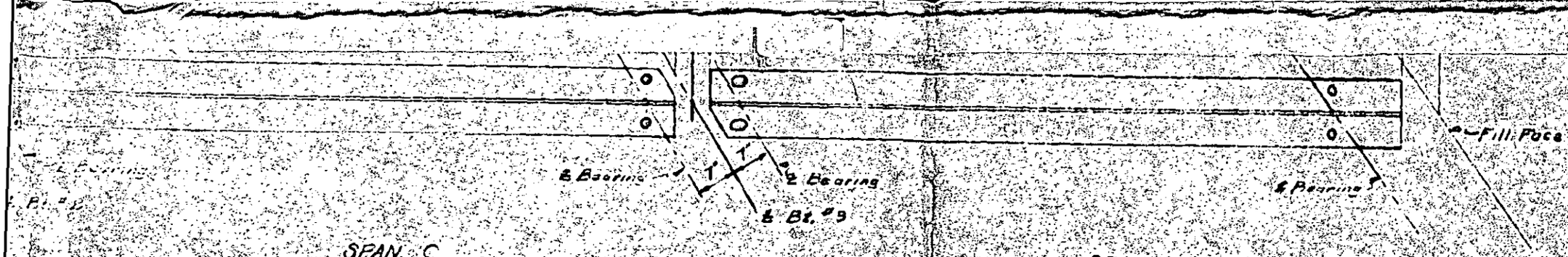
NOTE: Do not paint shear connectors or top flange of beams.
~~For option of Contractor of shear connectors see Special Provision.~~

BEAM DEFLECTION

	BEAM	1	2	3	4	5	6	7	8	9
SPAN A or B	Deflection due to weight of Beam	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	Deflection due to superimposed dead load	7/16"	3/8"	3/8"	3/8"	3/8"	3/8"	7/16"	7/16"	1/2"
	Total dead load deflection	9/16"	1/2"	1/2"	1/2"	1/2"	1/2"	9/16"	9/16"	5/8"
SPAN C or D	Deflection due to weight of Beam	5/8"	5/8"	5/8"	5/8"	5/8"	5/16"	5/16"	5/16"	5/16"
	Deflection due to superimposed dead load	1 1/2"	1 3/8"	1 3/8"	1 3/16"	1 3/8"	1 5/16"	1 3/8"	1 3/8"	1 3/8"
	Total dead load deflection	1 3/4"	1 5/8"	1 5/8"	1 7/16"	1 5/8"	1 5/8"	1 7/16"	1 7/16"	1 7/16"

BEAM DEFLEC

	BEAM
SPAN A or B	Total dead load deflection
	Superelev. Short Cond.
	Net Total (No Condition)
SPAN C or D	Total dead load deflection
	Superelev. Short Cond.
	Req'd. Camber (Condition)

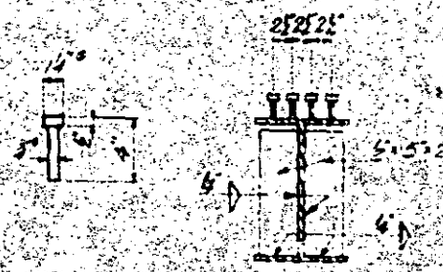


SPAN C

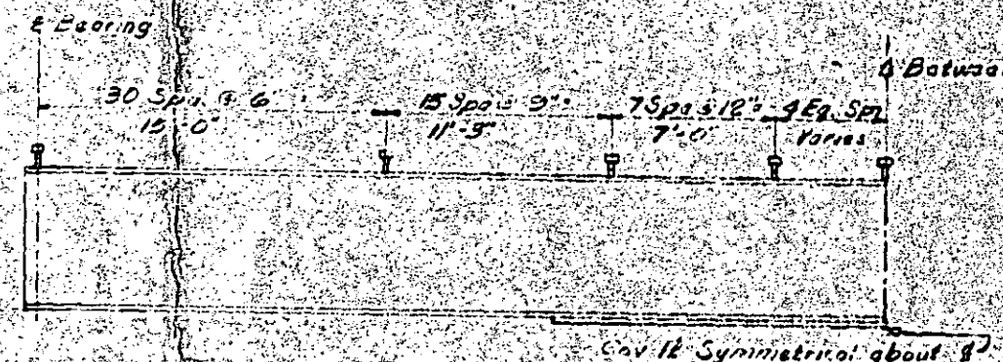
SPAN D

BEAM DETAIL

NOTE All dimensions are horizontal.



SHEAR CONNECTOR AND WEB STIFFENER DETAIL



SPAN C or D

STUD SPACING

Omit web stiffener on outside of outside beams and at end banks.

Omit shear connectors on outside beams.

[illegible] Special Provision

DEFLECTION

	1	2	3	4	5	6	7	8	9
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

BEAM DEFLECTION AND CAMBER

	BEAM	1	2	3	4	5	6	7	8	9
SPAN A or B	Total dead load deflection	9/16"	1/2"	1/2"	1/2"	1/2"	1/2"	9/16"	9/16"	5/8"
	Superelev. & vert. curve and	1/16"	1/16"	1/16"	1/16"	3/16"	1/8"	1/16"	1/16"	1/16"
	Net Total (No Camber)	1/2"	7/16"	7/16"	7/16"	11/16"	7/16"	1/2"	1/2"	9/16"
SPAN C or D	Total dead load deflection	1 3/16"	1 1/8"	1 1/16"	1 1/16"	1 1/8"	1 1/8"	1 1/16"	1 1/16"	1 15/16"
	Superelev. & vert. curve and	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
	Reqd. Beam Camber	1 5/16"	1 1/4"	1 3/16"	1 1/16"	2"	1 1/4"	1 3/16"	1 3/16"	1 13/16"

PROJECT No. B-13430

HAYWOOD COUNTY

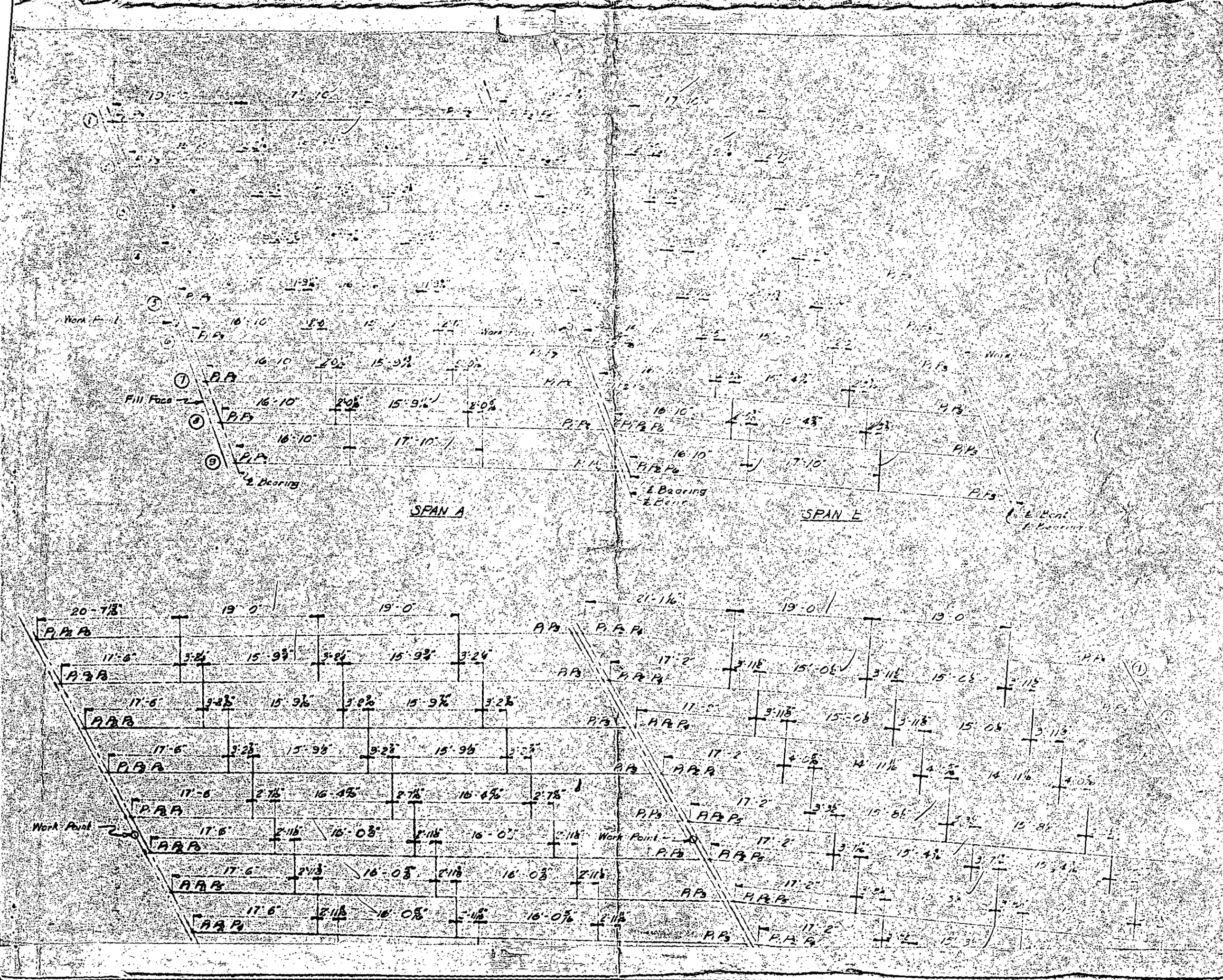
STATION 85+1049 P.O.C.
L. Rev.

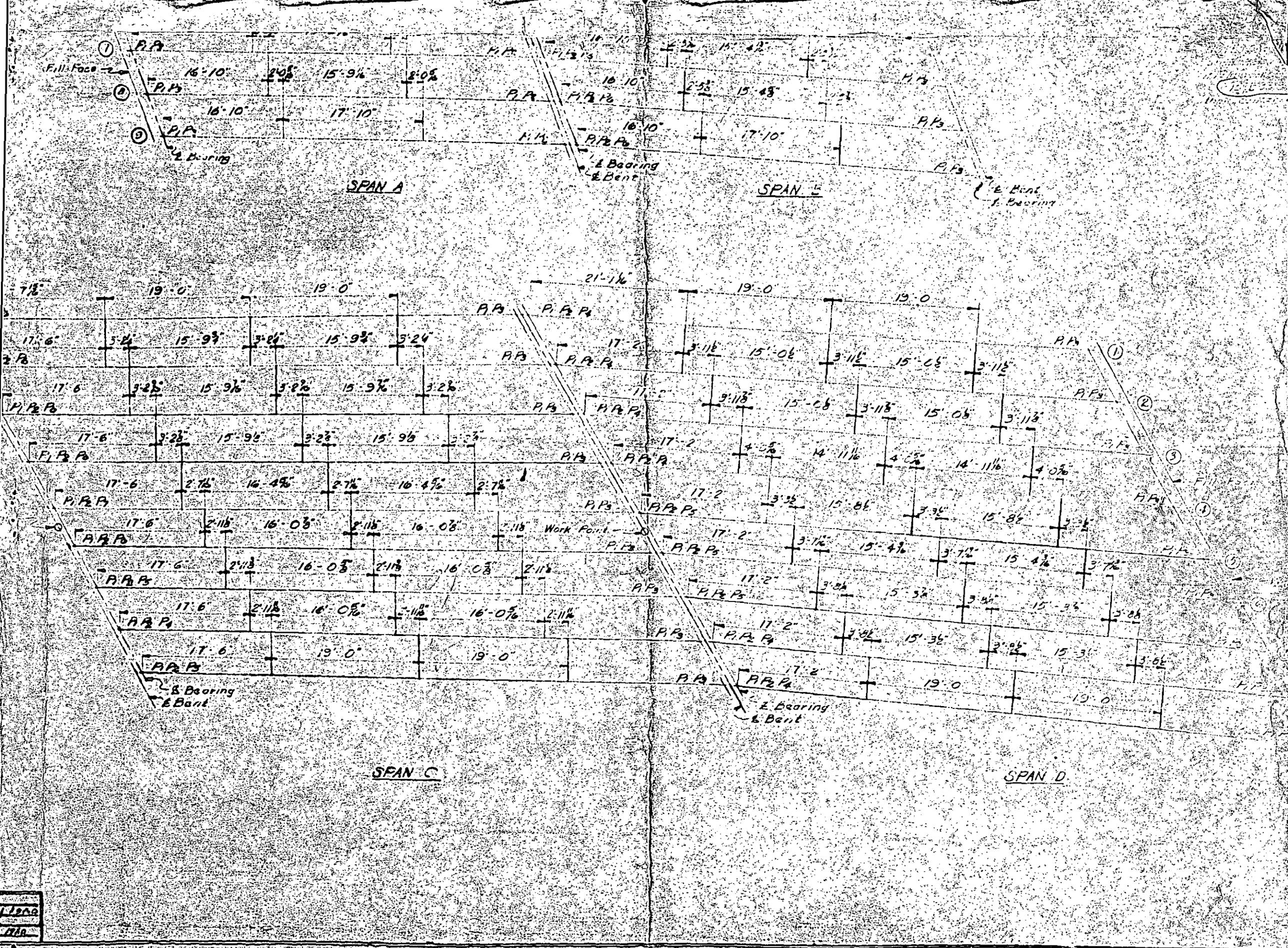
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION

STEEL LAYOUT

April 1960

HGT


SPAN A
SPAN E
Work Point
Fill Face
℄ Bearing
℄ Bent
P1 P2 P3
P1 P2 P4
P1 P2 P5
P1 P2 P6
16'-10"
17'-10"
15'-9½"
2'-0½"
19'-0"
20'-7½"
17'-6"
3'-2½"
15'-9½"
2'-7½"
16'-4½"
2'-11½"
16'-0½"
21'-1½"
17'-2"
3'-11½"
15'-0½"
4'-0½"
14'-11½"
3'-3½"
15'-8½"
3'-7½"
15'-4½"


Fill Face
℄ Bearing
SPAN A
℄ Bearing
℄ Bent
SPAN B
℄ Bent
℄ Bearing
SPAN C
Work Point
℄ Bearing
℄ Bent
SPAN D