

NOTE: This bridge is to be built on a 0.00% grade. The handrails, girders, slabs and curbs shall conform to the grade. Handrail posts to be built plumb. The elevations shown do not include any allowance for the settlement of the individual spans or for permanent camber which shall be provided for in addition to the settlement allowance. After the structure has been formed the finished structure shall have the elevations shown plus the allowance for permanent camber specified by the Engineer.

ELEVATION AT C

DIVISION OF CLASS "A" CONCRETE	
Standard coarse aggregate No 3 Cu. Yds	702.9
Standard coarse aggregate No 2 Cu. Yds	28.9
Total Class "A" Concrete Cu. Yds	731.8

CONCRETE RIP RAP - All concrete shall be Class "B" Standard size No 3 coarse aggregate shall be used. Reinforcing shall be #6 Elec. Welded Mesh. Wires in mesh to be spaced @ 6" c/c's each way. All splices of mesh to be @ Linear feet of wire mesh 5'-0" wide required is approx. 2450'. Construction joints @ 4'-0" c/c's in rip rap except in curved portions where spacing will vary.

NOTE: Footings to be carried down at least 6" into rock and shall have a minimum thickness as shown on plans.

NOTE: Steel piles in End Bents to be driven to a minimum bearing capacity of 38 tons each.

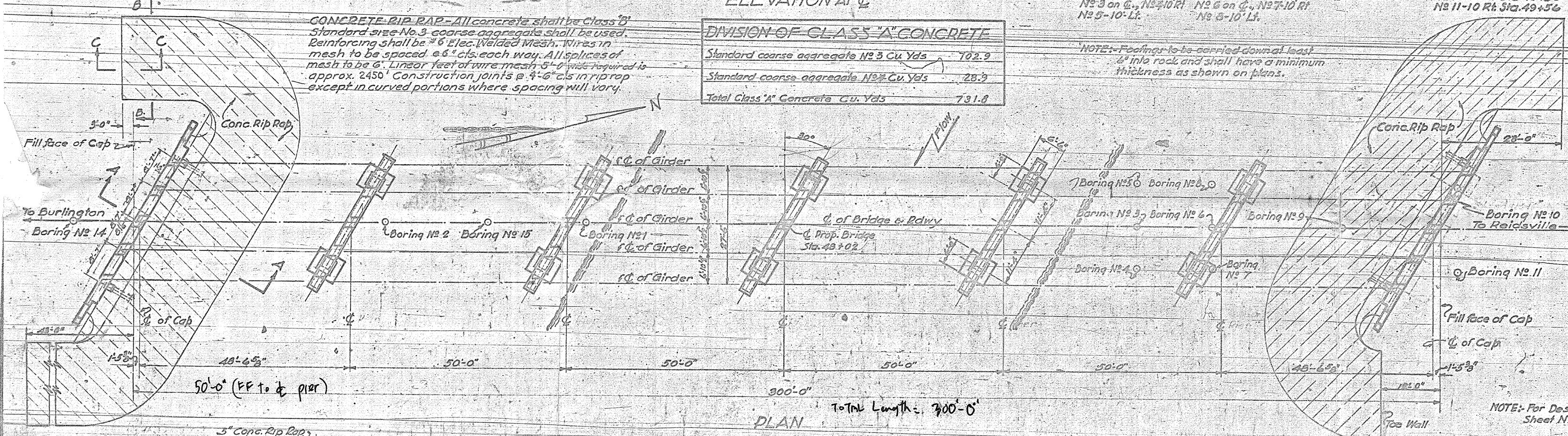
NOTE: Piles in End Bents shall not be driven until after fill has been placed. See Special Provisions.

Excavation for End Bent Caps will not be measured and paid for as a separate item. The entire cost of this work to be included in the unit price bid for Class "A" Concrete.

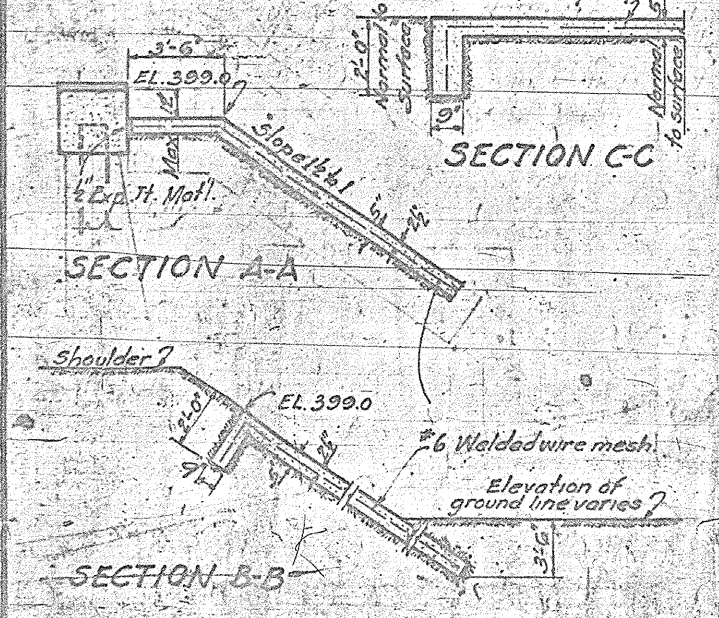
Test piles will not be required. Order list for piles to be based on the following lengths: 7'-28" and 7'-25" - 4". No paint required on steel piles.

Computed Foundation Load: Int. Bents = 45 tons per sq. ft.

NOTE: For Design Data and General Note see Sheet No 44

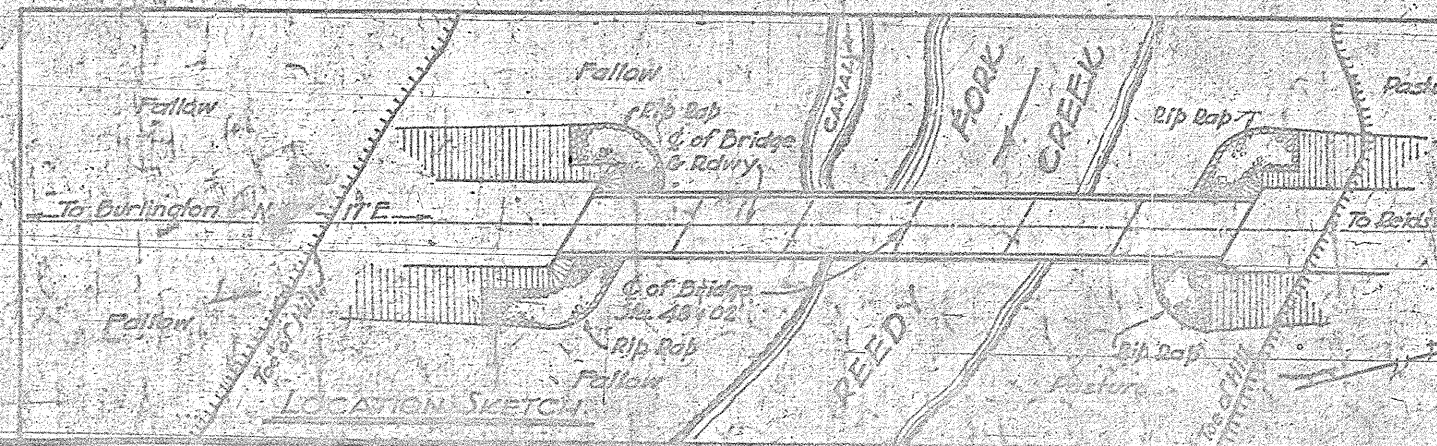


PLAN Total Length = 700'-0"



TOTAL BILL OF MATERIAL						
	Class "A" Concrete Cu. Yds.	Reinforcing Steel Lbs.	Plates & Dolly Lbs.	Conc. Rip Rap Cu. Yds.	12" @ 53" Steel Pile No.	12" @ 53" Steel Pile Lbs.
Superstructure	545.4	151,233			14	1,172
End Bent No 1	13.2	3037				
Int. Bent No 1	31.8	4740				
Int. Bent No 2	31.8	4860				
Int. Bent No 3	31.2	10601				
Int. Bent No 4	31.2	4860				
Int. Bent No 5	20.4	4584				
End Bent No 2	13.2	3037				
Approach Curbs	14	116				
Total	731.8	191,927	4706	180	153	11,500

BILL OF STEEL PER SPAN BY SPANS																									
Span	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Span A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Span B																									
Span C																									
Span D																									
Span E																									
Span F																									
Span G																									
Span H																									
Span I																									
Span J																									
Span K																									
Span L																									
Span M																									
Span N																									
Span O																									
Span P																									
Span Q																									
Span R																									
Span S																									
Span T																									
Span U																									
Span V																									
Span W																									
Span X																									
Span Y																									
Span Z																									



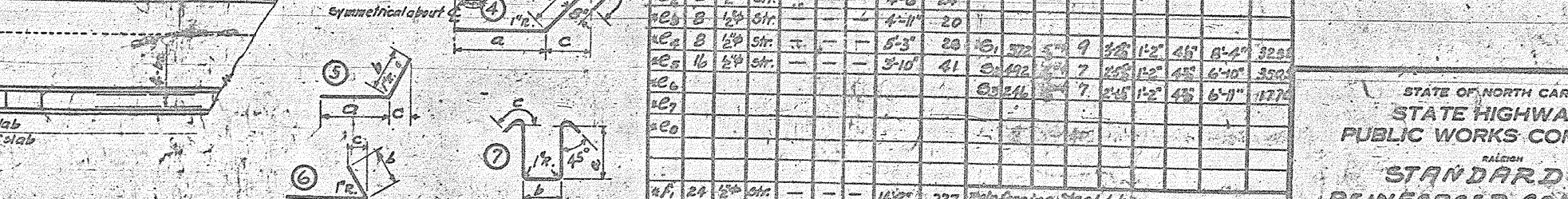
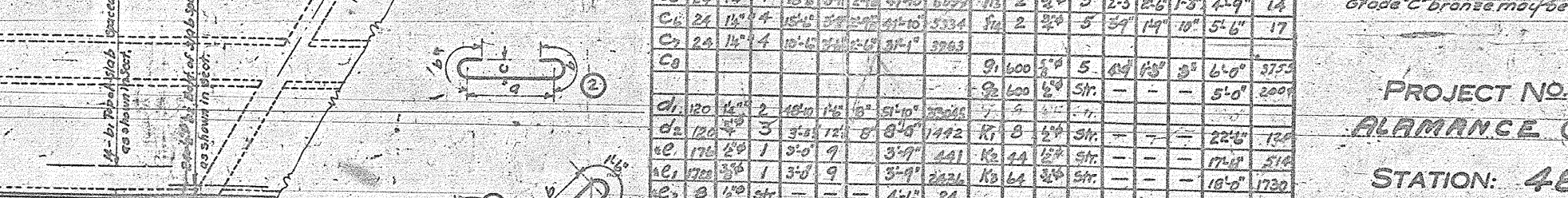
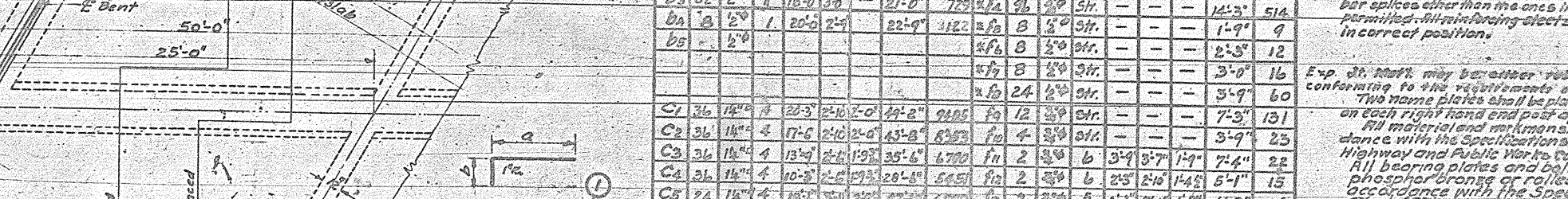
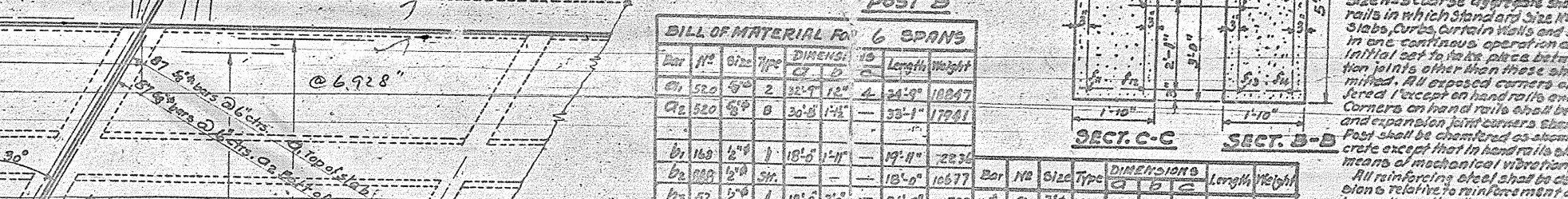
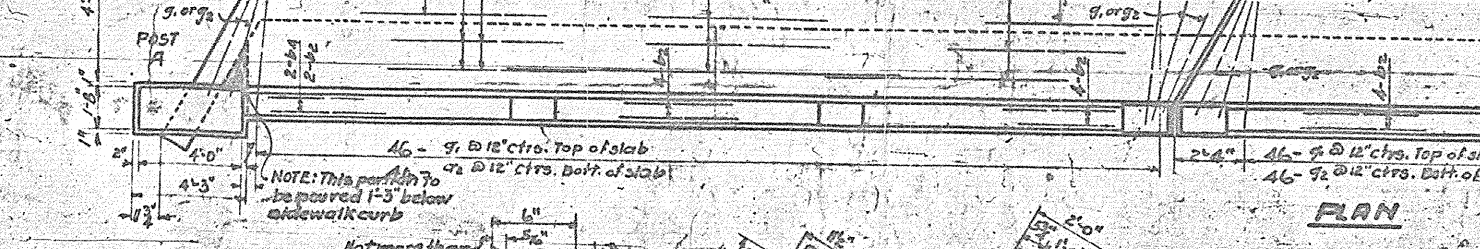
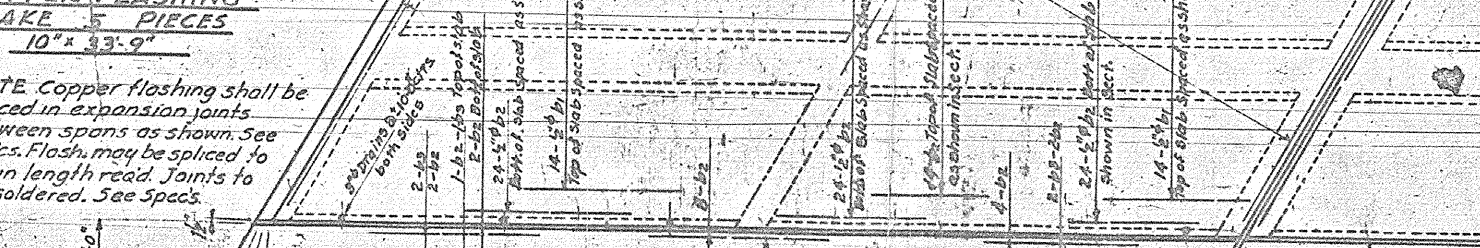
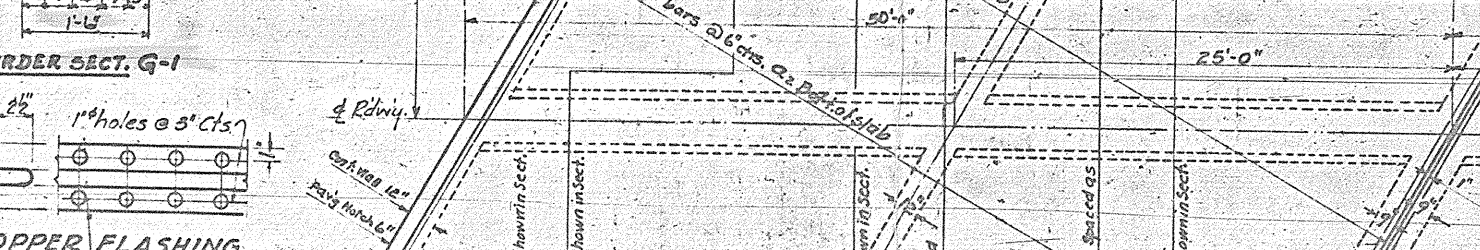
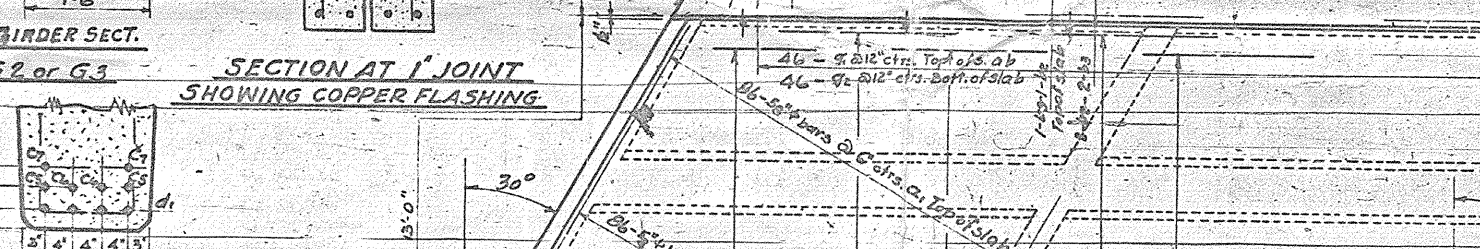
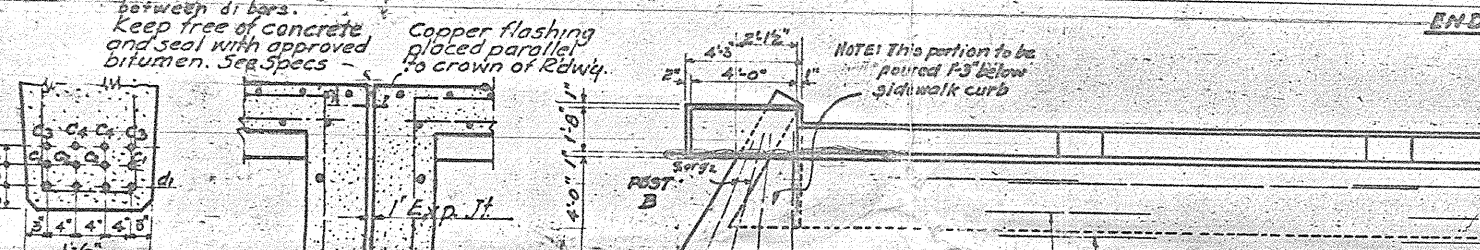
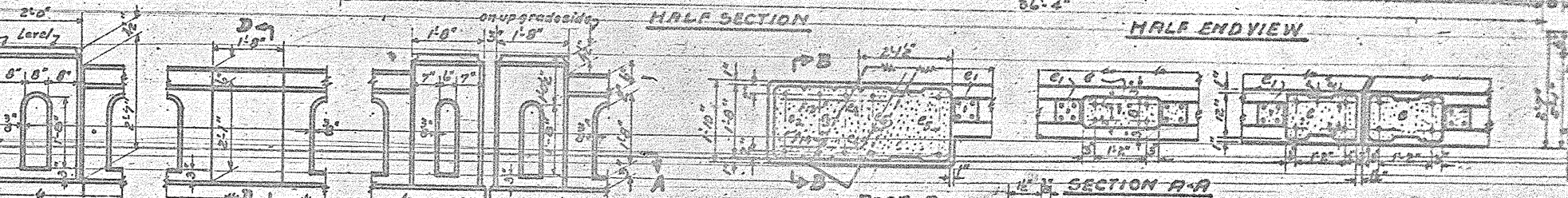
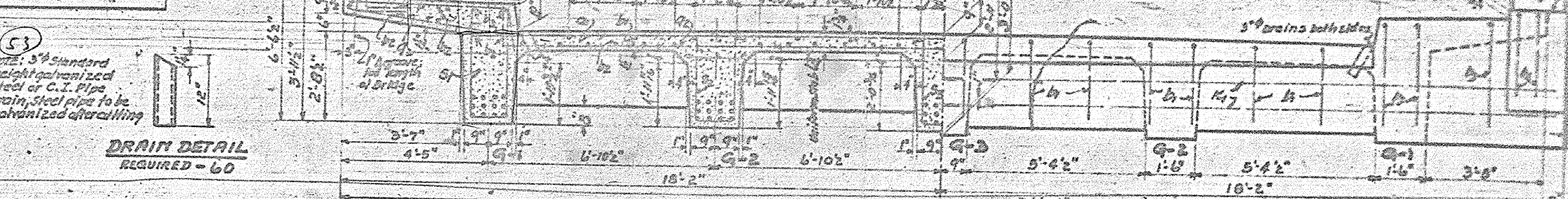
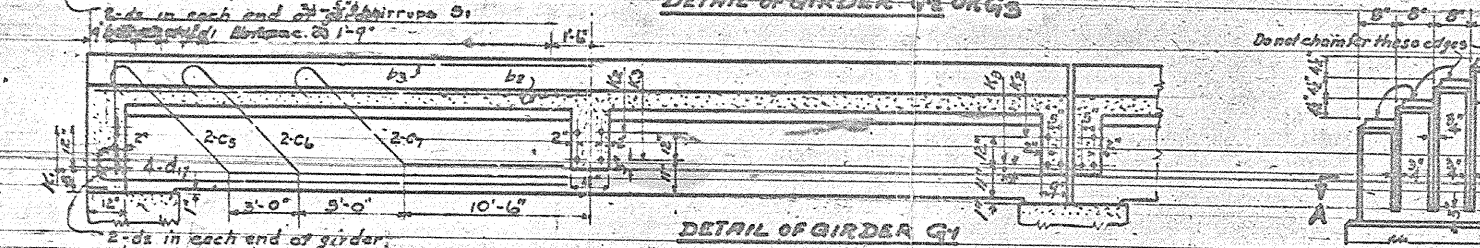
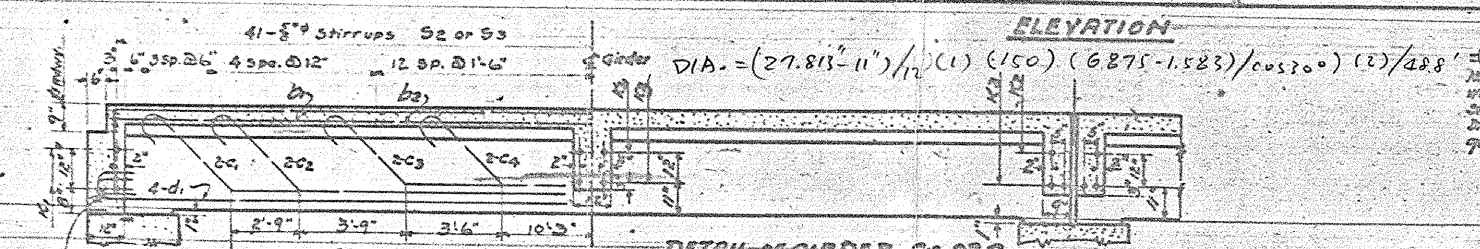
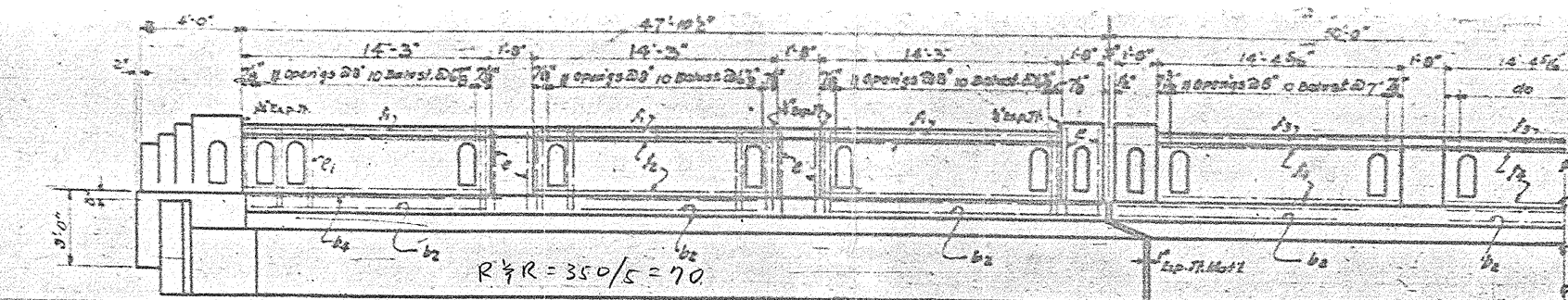
PROJECT NO. 5103
ALAMANCE COUNTY
STATION: 48+02

STATE OF NORTH CAROLINA
STATE HIGHWAY AND
PUBLIC WORKS COMMISSION
GENERAL DRAWING
FOR
BRIDGE OVER
REEDY FORK CREEK
DEC 1942

DESIGNED BY: J.B. Bunting
DRAWN BY: W. Vance
CHECKED BY: W. Vance
DATE: Dec. 1942

DESIGNED BY: J.B. Bunting
DRAWN BY: W. Vance
CHECKED BY: W. Vance
DATE: Dec. 1942

Revised for note regarding Rip Rap, 12-22-47
Includes 12" @ 53" steel pile to be paid for as Reinforcing Steel



DESIGN DATA:
Specifications:
Assumed Live Load:
Impact Allowance:
Steel in Tension:
Concrete in Compression:
Concrete in Shear:

GENERAL NOTE:
Class 'A' Concrete shall be used
Size No. 3 coarse aggregate shall
be used in which standard size No.
3 bars, curbs, curtain walls and
in one continuous operation and
initial set to be placed in these
joints other than these other
material. All exposed corners of
braced, except on hand rails and
curbs or hand rails shall be
and expansion joint curbs shall
be chamfered as shown
except that in hand rails the
means of mechanical vibration.
All reinforcing steel shall be cut
and bent to minimum length
bar splices other than the ones in
permitted. All reinforcing steel
in correct position.

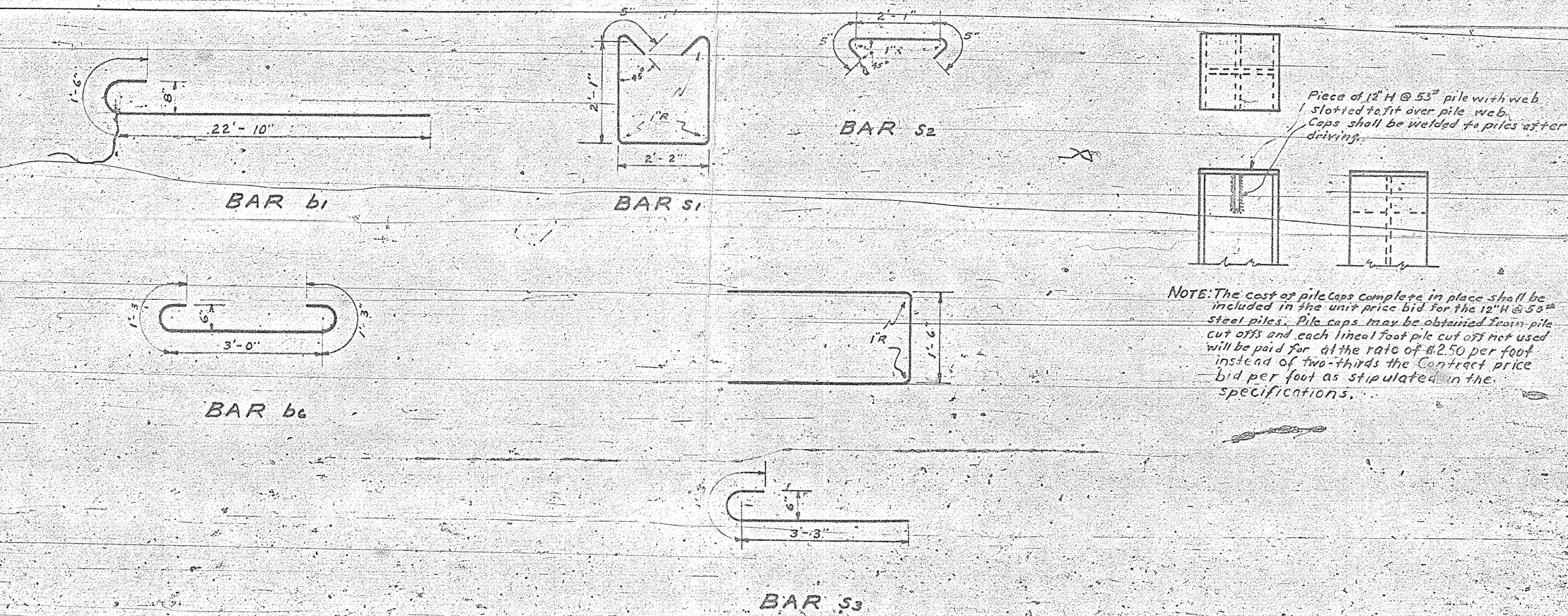
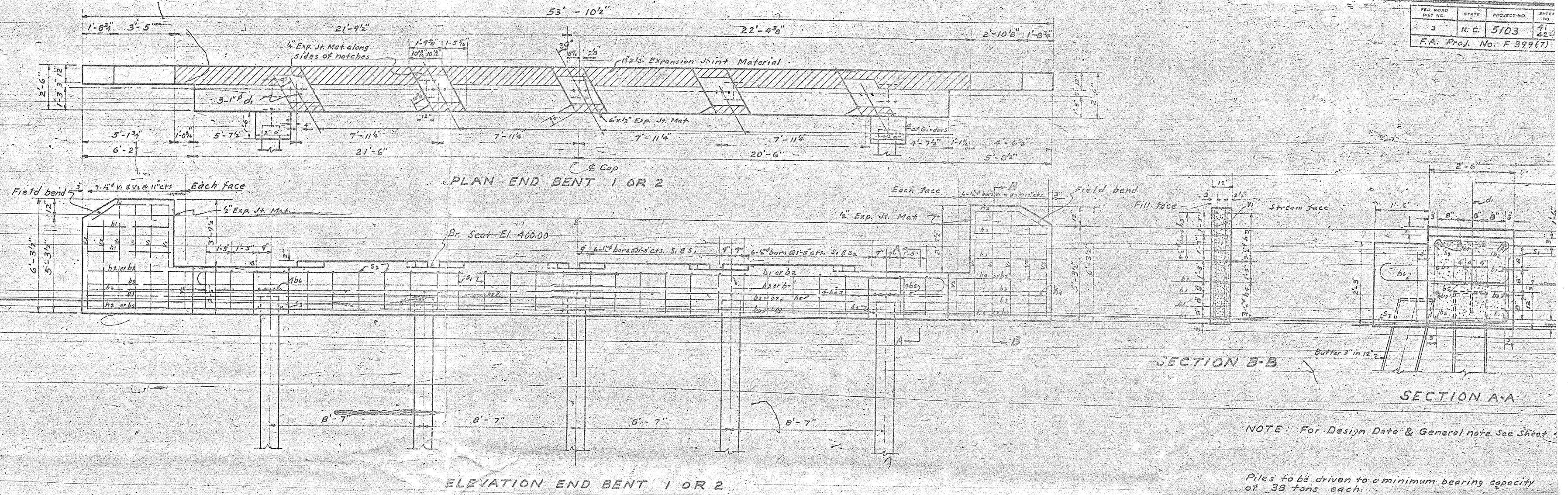
Exp. St. Mark. may be either rods
conforming to the requirements of
Two name plates shall be placed
on each right hand end post and
All material and workmanship
shall conform to the specifications of
Highway and Public Works Dept.
All bearing plates and bolts
phosphor bronze or rolled
steel grade with the steel
Grade C bronze may be used.

PROJECT NO. ALAMANCE C
STATION: 4B

STATE OF NORTH CAROLINA
STATE HIGHWAY
PUBLIC WORKS COMMISSION
STANDARD
REINFORCED CONCRETE
DECK GIRDER
30° LEFT HAND
SPAN 26'-0"
JANUARY 1928

J. B. Gentry
New York

SPECIAL	ASSEMBLED BY	DATE
STANDARD	CHECKED BY	DATE



BILL OF MATERIAL ONE END BENT

Bar No	Size	Length	Weight
b1	6 1/4"	24'-4"	776
b2	4 1/4"	29'-0"	616
b3	4 1/4"	28'-6"	388
b4	8 1/2"	22'-0"	177
b5	9 1/2"	2'-3"	13
b6	8 1/2"	5'-0"	66
b7	4 1/4"	22'-9"	310
b8	2 1/4"	23'-5"	247
d1	15 1/8"	3'-0"	120
h1	6 1/2"	4'-9"	19
h2	3 1/2"	8'-0"	16
h3	6 1/2"	4'-3"	17
h4	3 1/2"	7'-6"	15
s1	29 1/2"	7'-2"	139
s2	29 1/2"	2'-11"	57
s3	2 3/4"	10'-6"	32
v1	1 1/2"	5'-9"	54
v2	4 1/4"	2'-3"	6
v3	8 1/2"	5'-0"	27
Reinforcing steel Lbs.			3037
Conc. Class "A" Cu Yds.			13.2

12" H @ 53" Steel piles No. 7
 Approx. Lin. Ft. steel piles 196 End Bent 1
 Approx. Lin. Ft. steel piles 175 End Bent 2

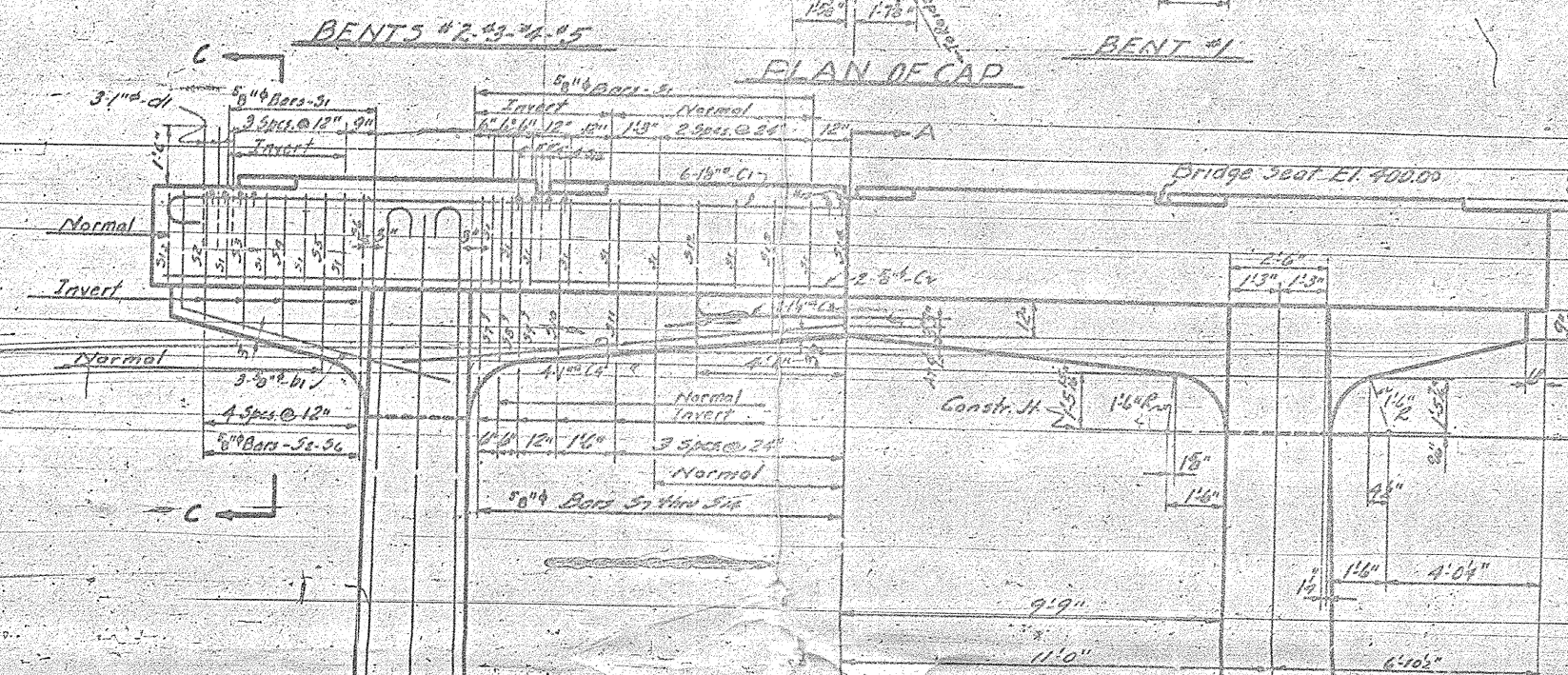
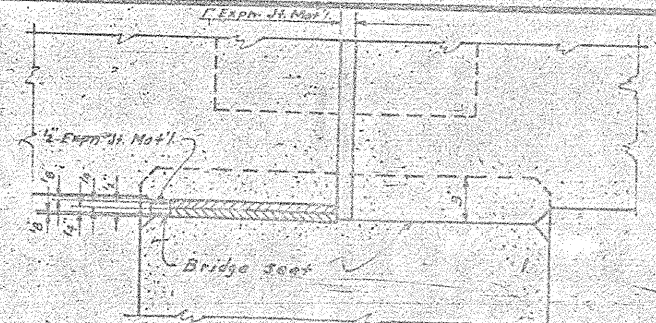
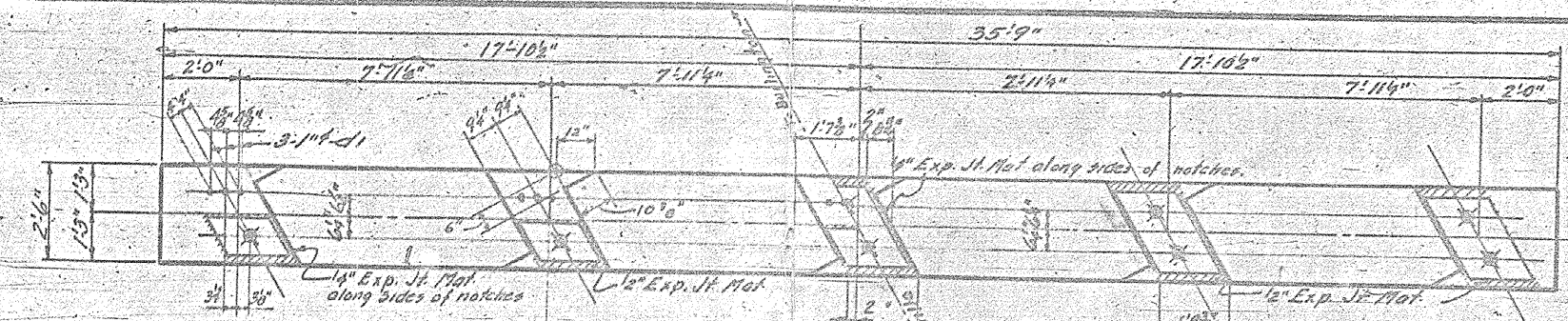
PROJECT NO. 5103
 ALAMANCE COUNTY
 STATION: 48+02

STATE OF NORTH CAROLINA
 STATE HIGHWAY AND
 PUBLIC WORKS COMMISSION
 RALEIGH
 SUBSTRUCTURE DETAIL
 FOR BRIDGE OVER
 REEDY FORK CREEK
 DECEMBER 1947

SUBMITTED BY: J.B. Frazier, Jr.
 APPROVED BY: W. Vance Bowers, STATE HIGHWAY ENGINEER

SPECIAL	ASSEMBLED BY	DATE
STANDARD	CHECKED BY	DATE
DESIGNED BY	R. A. SHOW	DATE Dec. 1946
DRAWN BY	R. A. SHOW	DATE Dec. 1946
CHECKED BY	W. J. Brown	DATE Jan. 1947

Revised for notes regarding payment for pile cut-offs - 12-22-47



DETAIL AT SINGLE EXPANSION BENT SHOWING PLATES
 DOUBLE EXPANSION BENT SIMILAR

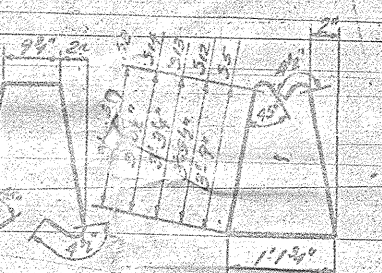
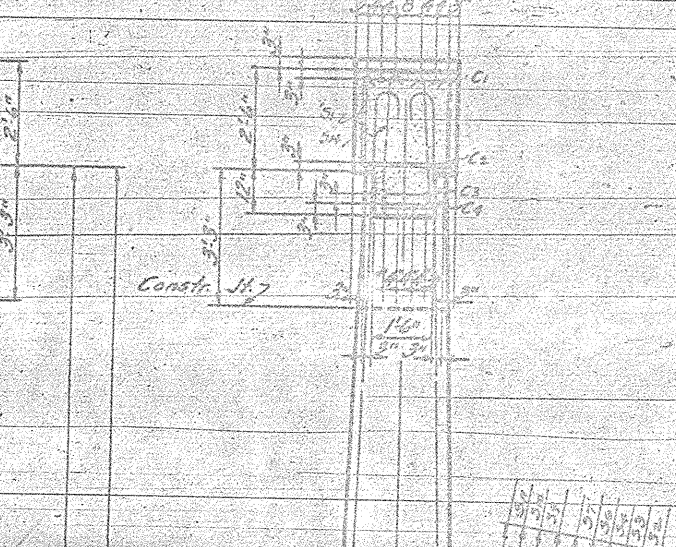
SECTION CC

BILLS OF MATERIAL

Bar	No.	Size
B1	6	1 1/2"
C1	6	1 1/2"
C2	2	1 1/2"
C3	2	1 1/2"
C4	2	1 1/2"
d1	15	1/2"
d2	15	1/2"
d3	24	3/8"
d4	2	"
d5	2	"
d6	2	"
d7	2	"
d8	2	"
d9	2	"
d10	2	"
d11	2	"
d12	2	"
d13	2	"
d14	20	1/2"
d15	24	1/2"
d16	24	"
V1	16	1 1/2"
V2	16	1 1/2"

Bents #2-3-4-5 (only)

(only) Bents #2-3-4-5 (only) Bent #5



BENT #1

Reinforcing Steel - L
 Class "A" Conc.

BENT #2

Reinforcing Steel - L
 Class "B" Concrete Co.

BENT #3

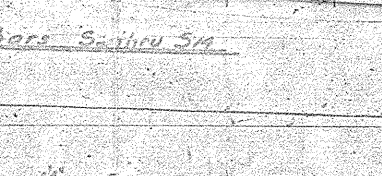
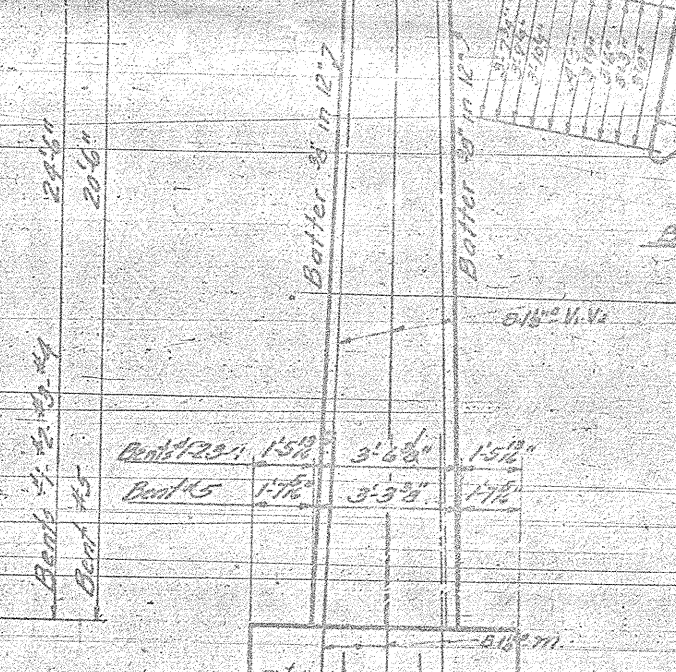
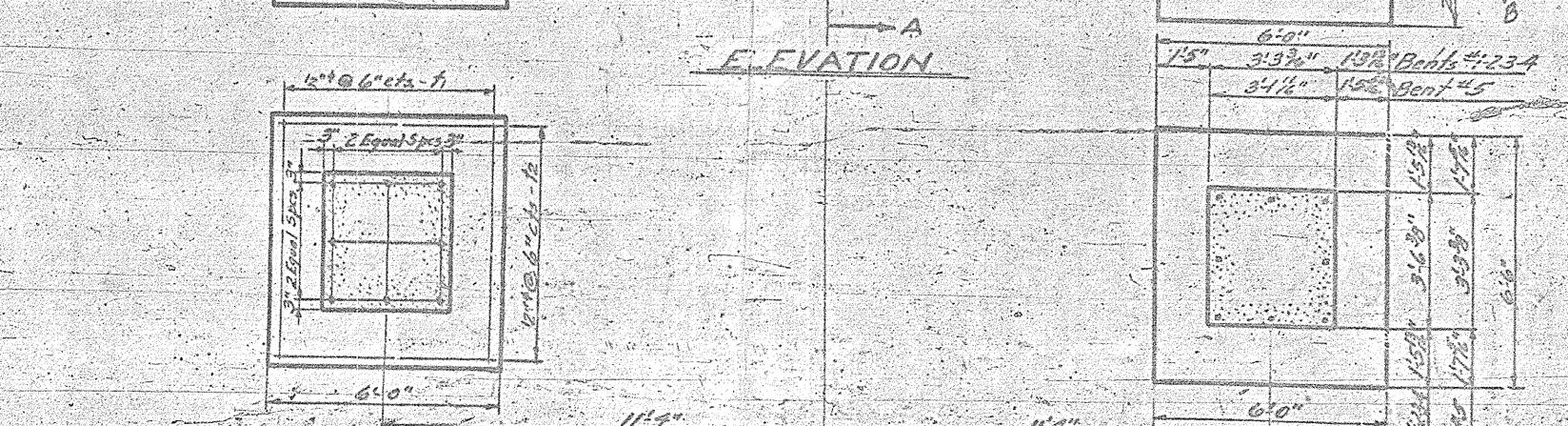
Reinforcing Steel - L
 Class "A" Concrete Co.

BENT #4

Reinforcing Steel - L
 Class "A" Concrete Co.

BENT #5

Reinforcing Steel - L
 Class "A" Concrete Co.



PROJECT NO. 5
 ALAMANCE CO.
 STATION: 78+00
 INT. BENTS #1-2-3-4-5

STATE OF NORTH CAROLINA
 STATE HIGHWAY DEPARTMENT
 PUBLIC WORKS COMMISSION
 SUBSTRUCTURE DESIGN
 FOR BRIDGE OVER
 REEDY FORK CREEK
 MARCH 1943
 SUBMITTED BY: J. R. Parlier, Jr.
 APPROVED BY: W. T. ...

STANDARD. DESIGNED BY: J. R. Parlier, Jr. DATE: 1/15/43
 DRAWN BY: G. B. W. DATE: 1/15/43
 CHECKED BY: G. B. W. DATE: 1/15/43

SECTION B-B

SECTION A-A

ELEVATION