

FED. ROAD DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
10	OHIO	264 RE	1932

1
75

S. H. No. 31 SEC'S. D & E - ELYRIA
LORAIN COUNTY.
LOR-20 - (18.23 - 21.29)

No PID
C No. 320013

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

CLEVELAND - ELYRIA ROAD

S. H. NO. 31 PET. NO. 7566 SEC S. D. E. & ELYRIA

LORAIN COUNTY

FEDERAL AID PROJECT NO. 264. RE.
ELYRIA & RIDGEVILLE TWPS. JANUARY 1932

The Standard Specifications of the STATE OF OHIO, Department of Highways, in force on date of contract will govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that right of way has been provided, and all buildings to be removed and paid for by the State.

Approved: R.P. Lagron
Date 5-27-32 Resident District
Deputy Director.

Approved: E.R. Ault
Date 8-32 Resident Division
Deputy Director.

Approved: Ernest Hilty
Date 7-1-32 Chief Engineer
Bureau of Construction

Approved: _____
Date _____ Chief Engineer
Bureau of Maintenance

Approved: _____
Date _____ Chief Engineer
Bureau of Bridges

Approved: A.P. Chapman
Date 6-2-32 Chief Engineer
1st Asst. Director

Approved: O.W. Merrill
Date 4-21-33 State Highway Director

Recommended for approval: _____
Date _____ District Engineer
Bureau of Public Roads.

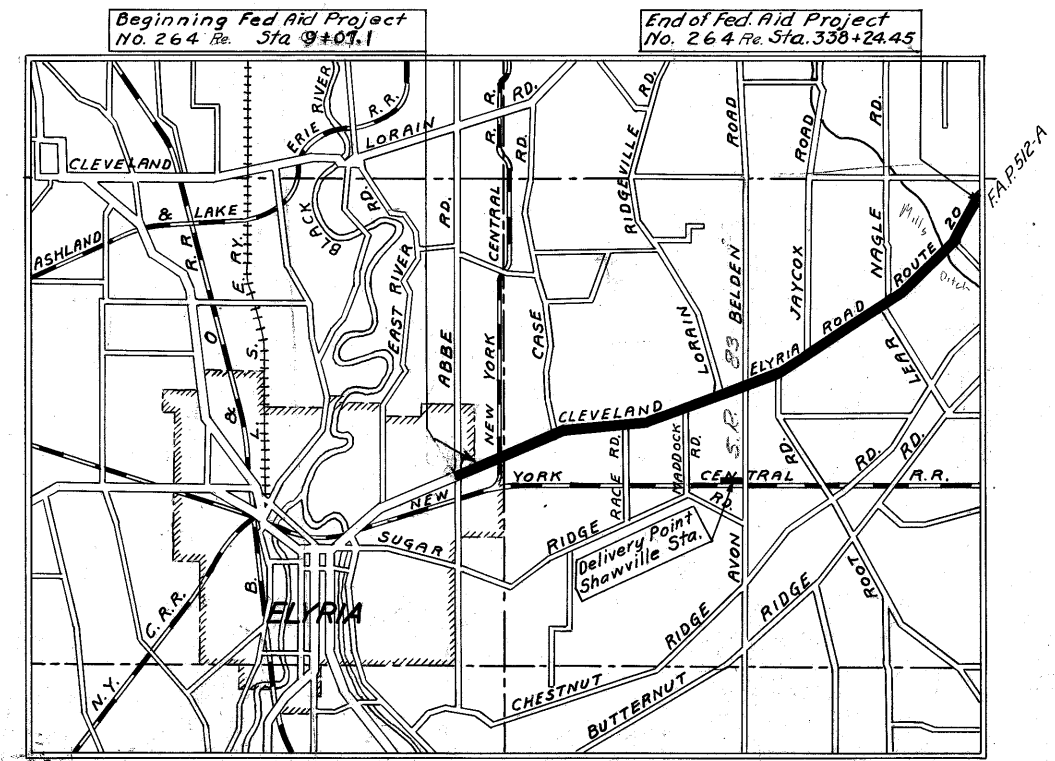
Recommended for approval: _____
Date _____ Chief Engineer
Bureau of Public Roads.

Approved: _____
Date _____ Chief of Bureau.

RESIDENT ENGR'S PLAN R
Date Dec-31 Line by J
" Jan-32 Levels by J
" April-32 Drawn by R.S.
" April-32 Checked by J
" 4-28-32 To Div. Office by J

CONVENTIONAL SIGNS

State Line	=====
County Line	-----
Township Line	- - - - -
Section Line
Property Line Not Fenced.	-----
Center Line	o-----o
City or Village Line	-----
Fence	-----
Telephone or Telegraph	T T T T
Steam Railroad	=====
Electric Railroad	=====
Drain Pipe New	-----
Drain Pipe Old	-----



LOCATION PLAN
SCALE OF MILES

PORTION TO BE IMPROVED
IMPROVED ROADS
DETOURS SHOWN THUS

SCALES

PLAN	1" = 50'
PROFILE VERTICAL	1" = 10'
PROFILE HORIZONTAL	1" = 50'
CROSS SECTION	1" = 5'

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SUPPLEMENTAL STANDARD
DRAWINGS NO 95-98-100-300-305
B.C.A. R.R.A. C.W-A,
A.C.A.

We the Commissioners of Lorain County, hereby approve these plans and certify that the right-of-way 60 feet wide is available for the construction, maintenance and repair of the above highway.

C. D. Murray
George Rhoads
Thomas Peckles

Date 4-26 County Commissioners.

OK For 11 foot traffic width and
relaying old brick, Grd. & strgs
E.S.M. 4/26

CONSTRUCTION
BUREAU
AUG 24 1932
GROUND PHOTOLAB

3-L LOR-20-(18.23-21.29)
LORAIN 31 D.E & ELYRIA

Contract No. 5575 & 5576

FED. RD. DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
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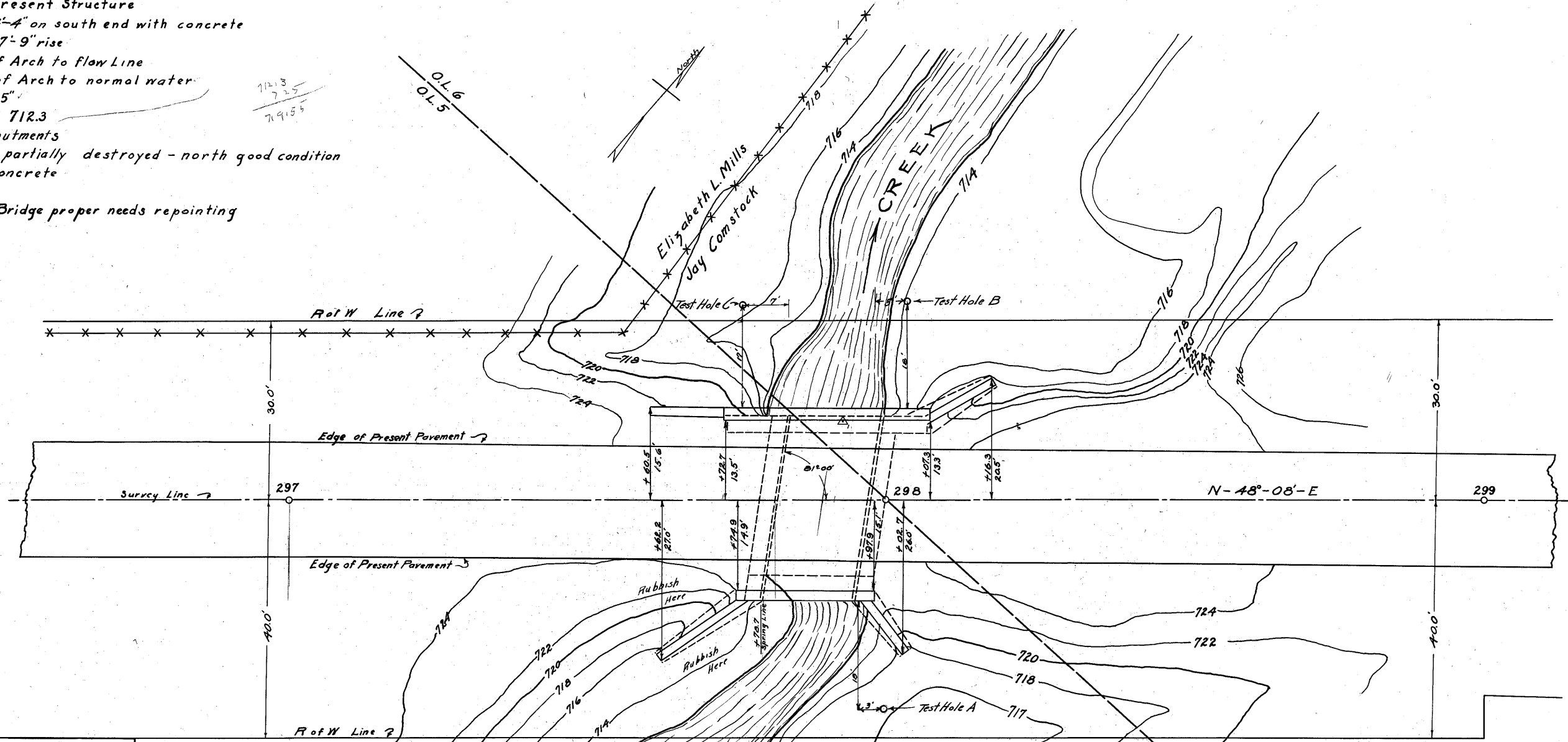
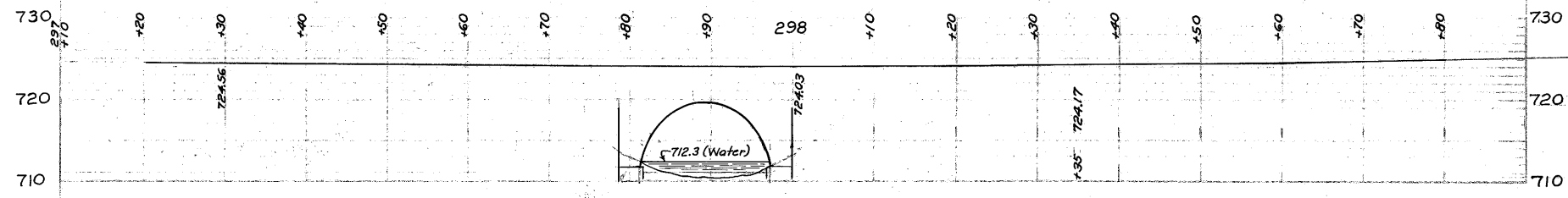
LORAIN COUNTY
S.H. NO. 31 SEC. E
SITE PLAN
LO-20-249

Bridge Data

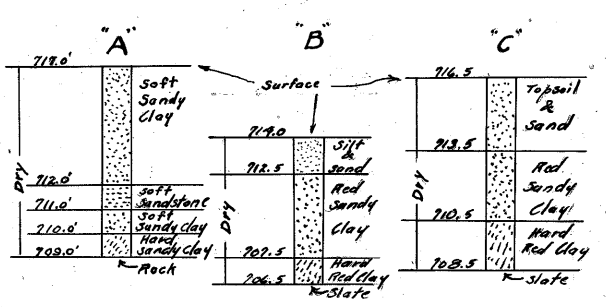
Drainage Area 5 Sq Miles
Length of Watershed 4.5 Miles
Total Fall 70 Feet
Fall Last Mile 21 Feet

Present Structure

Sandstone Arch widened 4'-4" on south end with concrete
Clear Span 16'-0" with 7'-9" rise
Clear Height 9'-3" top of Arch to flow Line
Clear Height 7'-4" top of Arch to normal water
Clear Roadway 28'-5"
Normal Water Line El 712.3
Stone and Concrete Abutments
Concrete Rails - south partially destroyed - north good condition
Wings - NE, SE & SW - Concrete
NW - Stone
Sandstone portion of Bridge proper needs repointing



SOIL TEST DATA

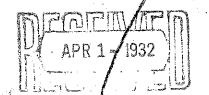


Note: These soundings represent the best information obtainable, but the State of Ohio does not guarantee the correctness thereof
Mar 28 1932
No Scale

Elizabeth L. Mills

Note: Fourth Test Hole Was Not Drilled on Account of Rubbish in S.W. Corner

Checked and Approved
By *H. Lagron*
Resident District
Deputy Director
Date 3-26-32



SITE PLAN
S.H. NO. 31 LO-20-249 SEC. E
FRENCH CREEK
LORAIN COUNTY
STATE OF OHIO
SCALE 1"=10' MARCH 1932

SURVEYED E.V.R.	PRESENT TOPOGRAPHY DRAWN E.W.R. & G.F.G.	PROPOSED WORK DRAWN
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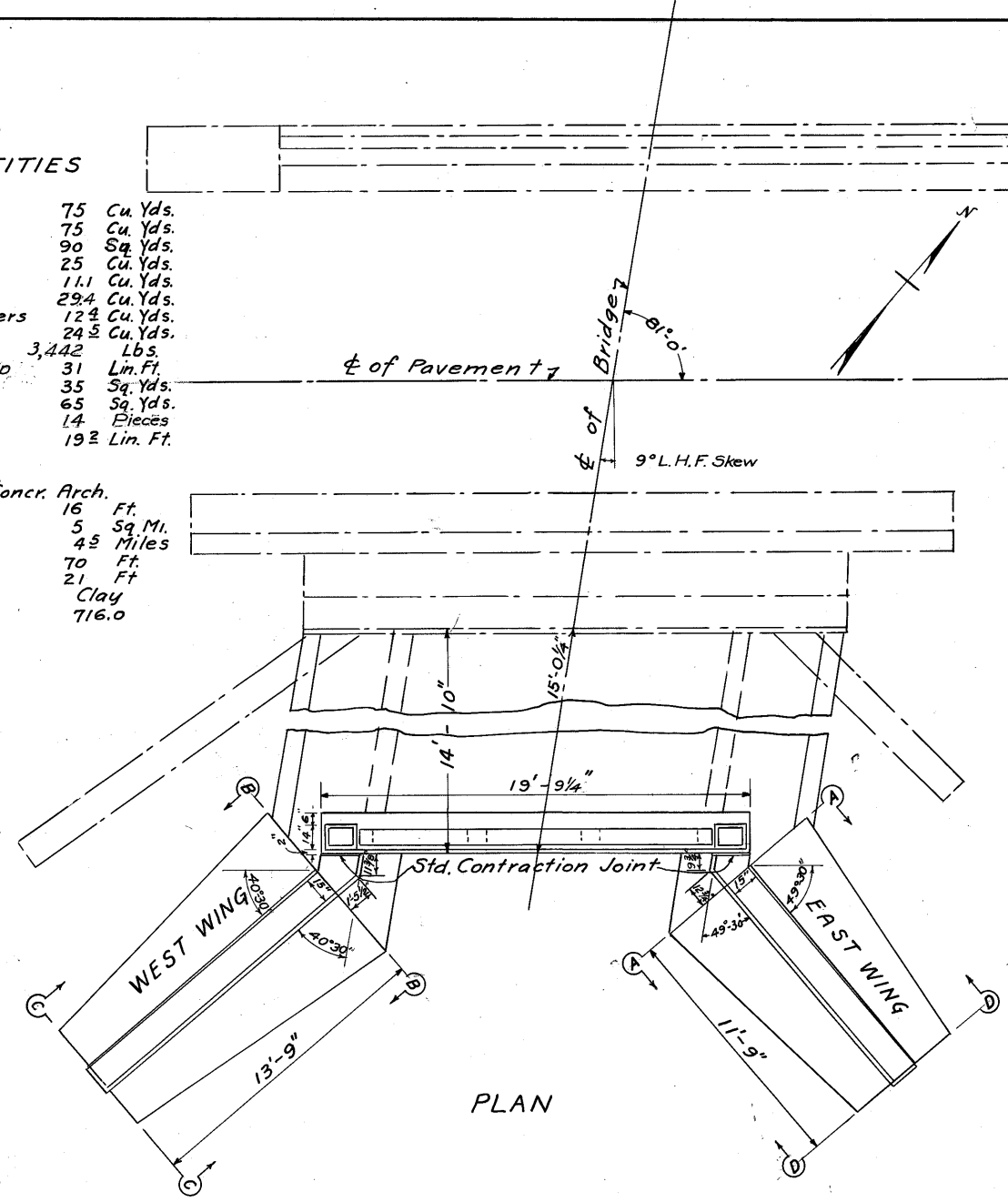
Now LO-20-237
New LOR-20-2372

ESTIMATED QUANTITIES

Excavation Unclassified	75	Cu. Yds.
Channel Excavation	75	Cu. Yds.
Old Masonry Repointed	90	Sq. Yds.
Masonry Removed	25	Cu. Yds.
1:6 1/2 Concr. Arch Footers	11.1	Cu. Yds.
1:5 1/2 Concr. Arch Ring	29.4	Cu. Yds.
1:5 1/2 Concr. Wing Wall Footers	12.4	Cu. Yds.
1:5 1/2 Concr. Walls	24.5	Cu. Yds.
Reinforcing Steel	3,442	Lbs.
24 oz Copper Cont. Jt. 12" Strip	31	Lin. Ft.
Type B Water proofing	35	Sq. Yds.
Type A Water proofing	65	Sq. Yds.
Dowels 3/4" x 24" (With holes)	14	Pieces
Railing Type RR 4	192	Lin. Ft.

BRIDGE DATA

Present Bridge- Stone & Concr. Arch	16	Ft.
Span	5	Sq. Mi.
Drainage Area	4.5	Miles
Length of Watershed	70	Ft.
Total Fall	21	Ft.
Fall Last Mile	Clay	
Foundation	716.0	
High Water Level		



WORK REQUIRED.

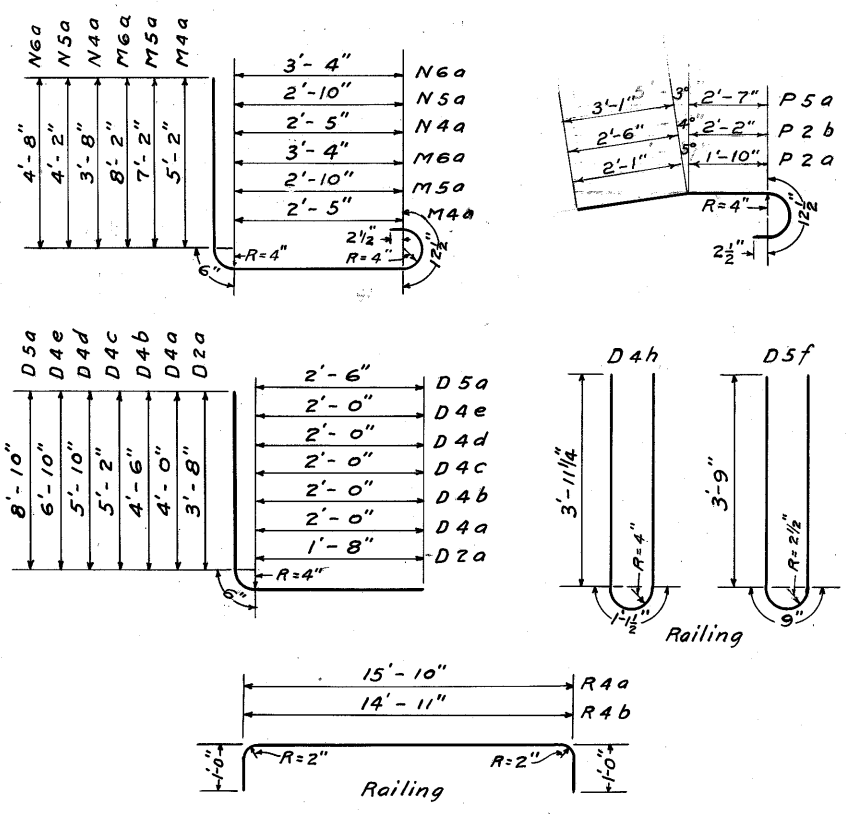
Remove existing rail and wings on right. Extend remaining arch to right with 16'-0" x 14'-10" concrete arch. Build Std. Wings & Parapet with Conc. Rail.

A strip of Type "B" water proofing 36" wide is to be placed over the back of the contraction joints, construction joints in arch ring and abutments above footers, construction joint between spandrel wall and arch barrel and joint between old and new work.

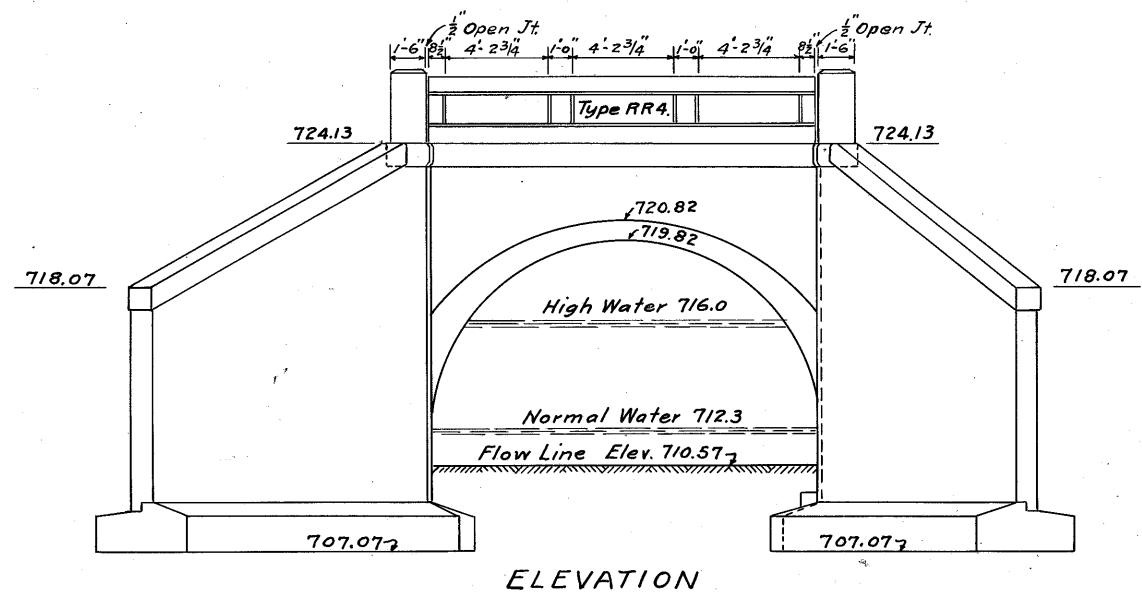
The remaining surface of the extrados of arch barrel, backs of abutments and backs of wings shall be water proofed with Type "A" water proofing.

Standard 24 oz. Copper Contraction joints are to be placed between the wings and the spandrel wall and the abutments extending from top of wall to top of footers.

4 inch weep holes are to be placed at the locations shown. The french drains are to extend full length of abutments and wings. Payment for weep holes and french drains to be included in excavation and back fill.



Mark	Size	Length	Number	Weight	Spacing	Kind
A2a	1/2" φ	9'-0"	30	180	1'-0"	Str.
A2b	"	10'-3"	30	205	"	"
A2c	"	10'-8"	30	214	"	"
A2d	"	9'-2"	30	184	"	"
A2e	"	4'-0"	60	160	"	"
B2a	"	14'-6"	38	368	2'-0" Appr.	"
Cxa	1/4" φ	2'-0"	52	17	"	Bent
Cxb	"	2'-6"	8	3	"	"
Cxc	"	3'-0"	8	4	"	"
D2a	1/2" φ	5'-10"	4	16	1'-0"	"
D4a	5/8" φ	6'-6"	2	14	"	"
D4b	"	7'-0"	2	15	"	"
D4c	"	7'-8"	2	16	"	"
D4d	"	8'-4"	2	17	"	"
D4e	"	9'-4"	2	19	"	"
D4f	"	19'-0"	3	59	"	"
D4g	"	5'-0"	2	10	"	"
D5a	3/4" φ	11'-10"	2	36	"	"
D5b	"	8'-0"	2	24	"	Str.
D5c	"	10'-6"	2	32	"	"
D5d	"	7'-0"	2	21	"	"
D5e	"	9'-3"	2	28	"	"
M4a	5/8" φ	9'-4"	5	49	2'-0"	Bent
M5a	3/4" φ	11'-9"	6	106	15"	"
M6a	7/8" φ	13'-3"	8	217	13"	"
N4a	3/8" φ	7'-10"	5	41	2'-0"	"
N5a	3/4" φ	8'-9"	6	79	15"	"
N6a	7/8" φ	9'-9"	10	199	13"	"
P2a	1/2" φ	5'-2"	9	31	1'-0"	"
P2b	"	5'-11"	12	47	7/2"	"
P5a	3/4" φ	6'-11"	12	125	9 3/4"	"
O2a	1/2" φ	9'-3"	5	31	2'-0"	Str.
O4a	5/8" φ	11'-3"	6	70	15"	"
O4b	"	13'-3"	10	138	13"	"
R4a	"	4'-6"	2	9	Shown	"
R4b	"	8'-3"	2	17	Shown	"
R4c	"	13'-9"	6	86	2'-0"	"
R4e	"	15'-7"	3	49	Shown	"
R4d	"	12'-6"	1	13	Shown	"
R4f	"	14'-4"	3	45	Shown	"
R4g	"	11'-0"	2	23	Shown	"
R4h	"	12'-2"	9	114	2'-0"	"
R4i	"	9'-6"	1	10	Shown	"
R4j	"	13'-0"	3	41	Shown	"
T6a	7/8" φ	5'-0"	12	123	6 1/2"	"
D4h	5/8" φ	9'-0"	4	38		Bent
D5f	3/4" φ	8'-3"	8	99		"
R4a	5/8" φ	17'-10"	2	Included in payment for railing		"
R4b	"	16'-11"	2			"
R1c	3/8" φ	15'-10"	2			Str.
TOTAL				3442	Lbs.	

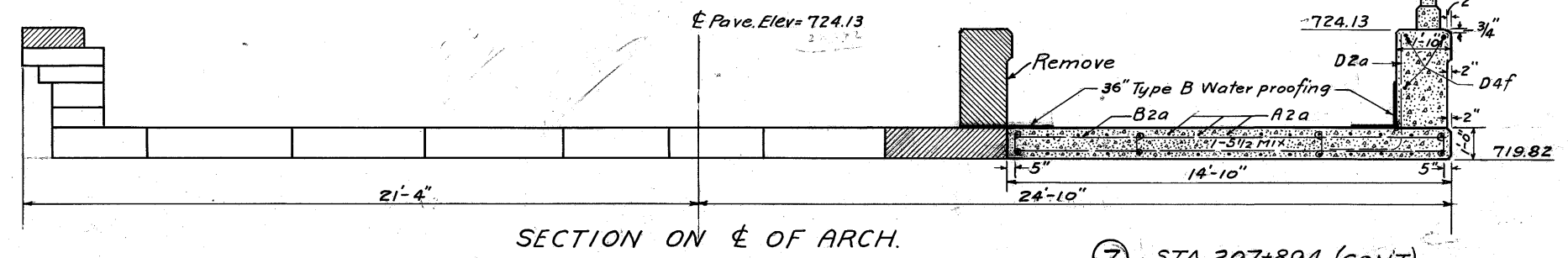
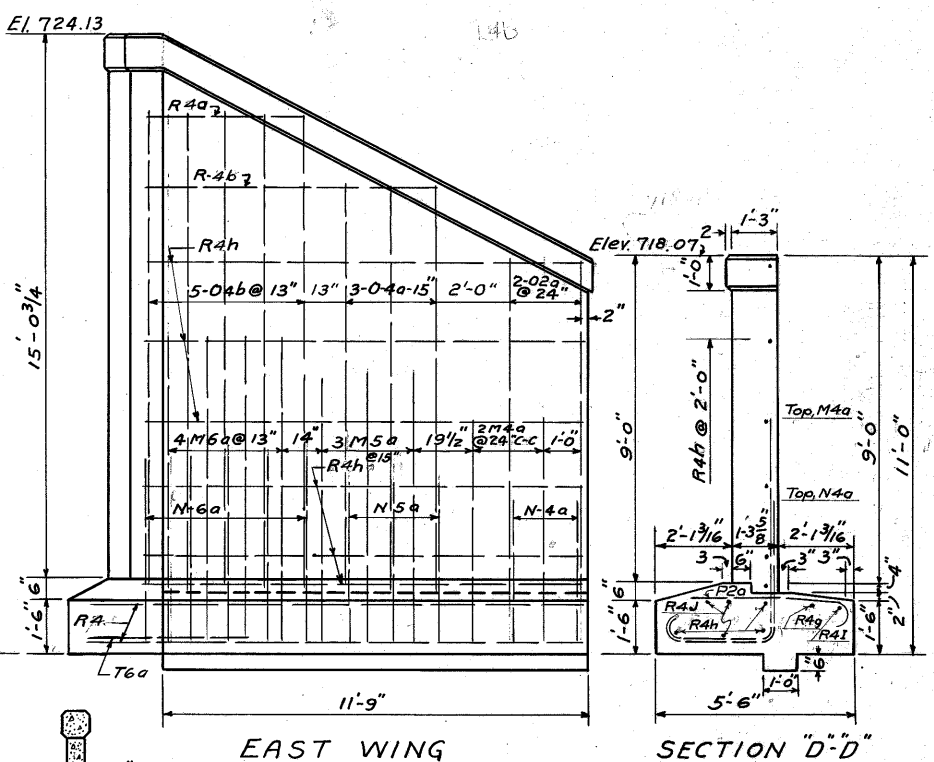
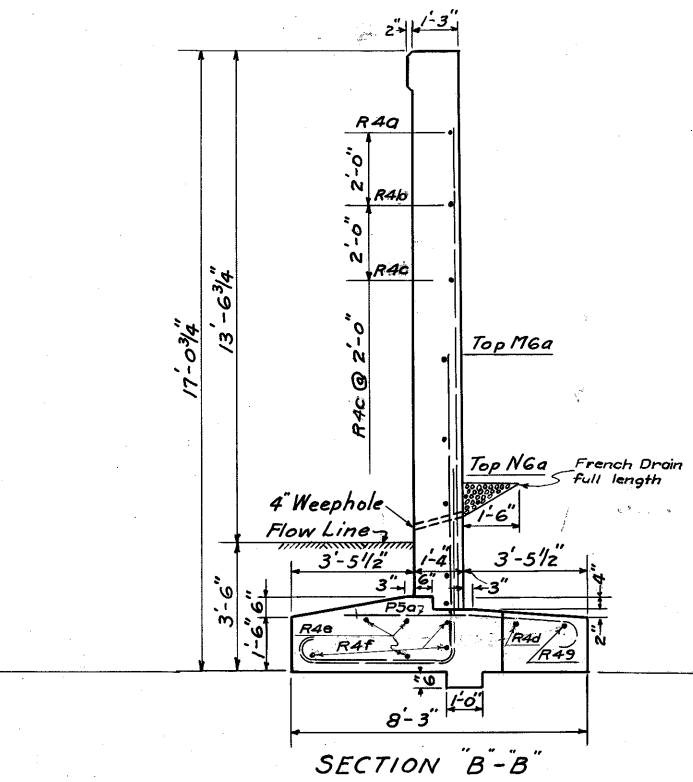
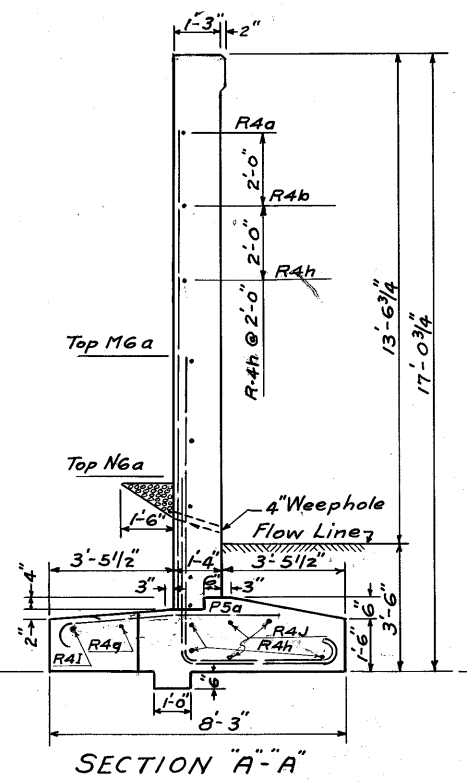
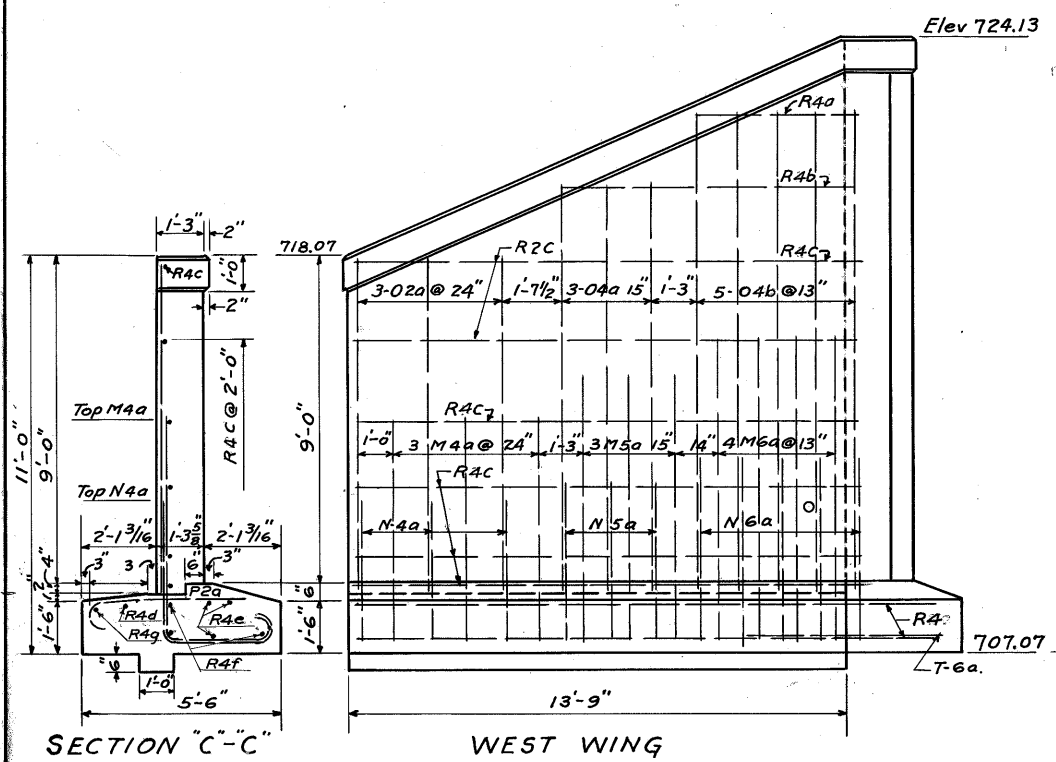
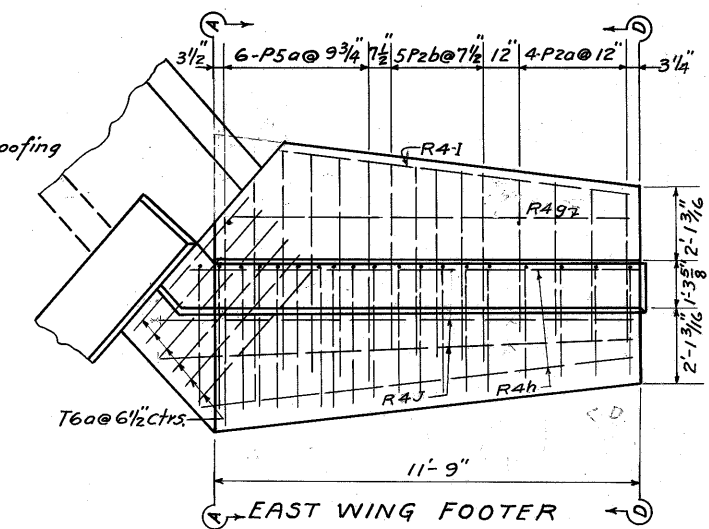
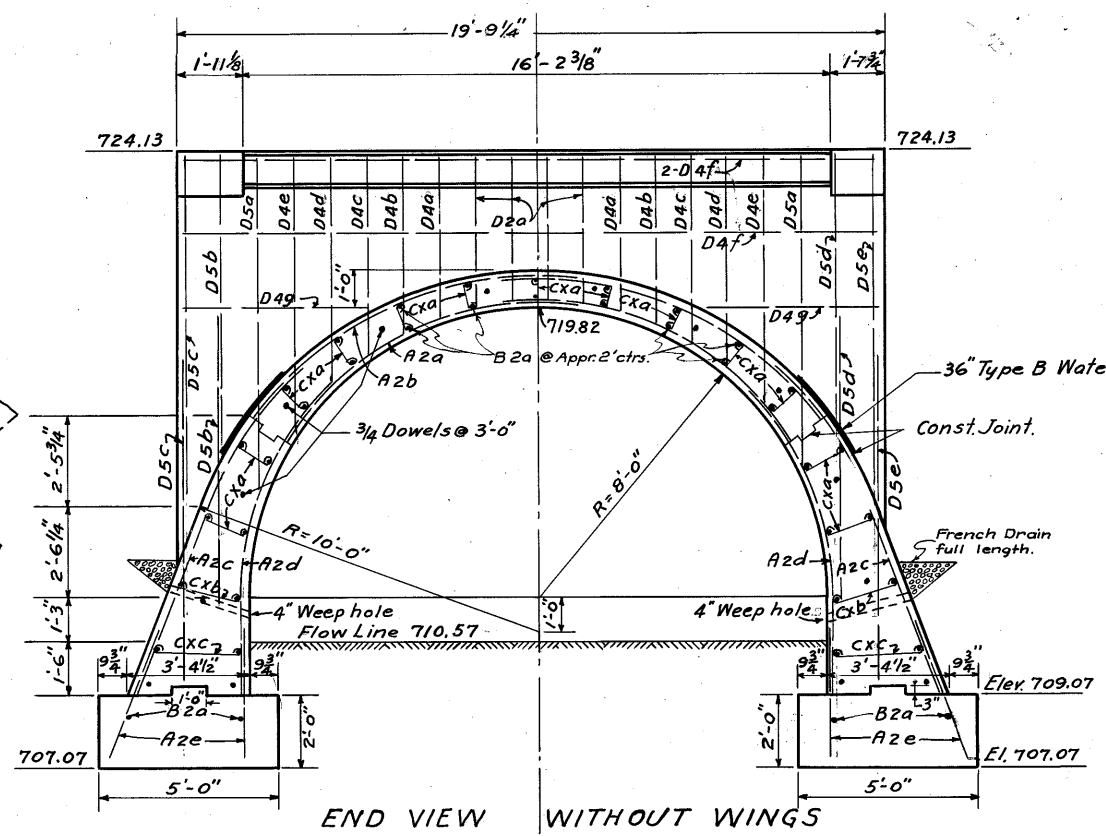
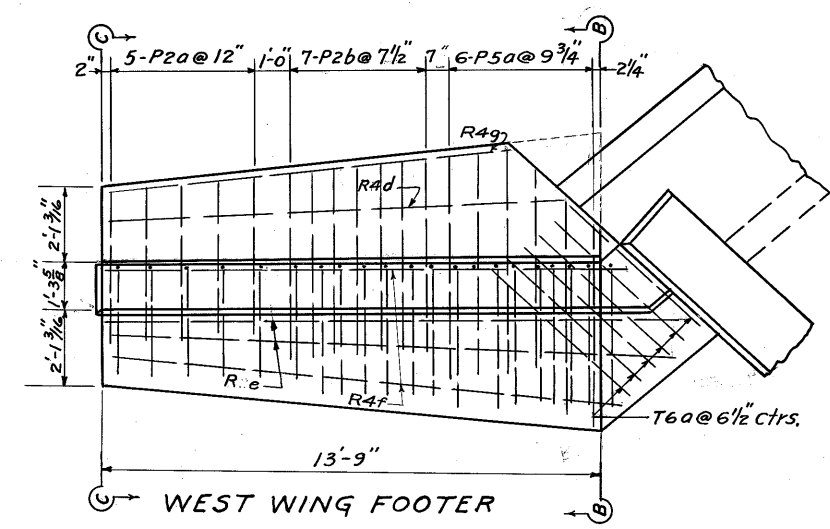


Note:
Concrete in arch footers is to be 1:6 1/2 Mix, and all remaining concrete is to be 1:5 1/2 Mix.
Details not shown here are to be in accordance with Drawings No CW-A and AC-A, & RR-A

BR. NO. LO 20-249
GENERAL PLAN & ELEVATION
SH. NO. 31 SEC. E-BR.
FRENCH CREEK
LORAIN COUNTY
STATE OF OHIO
SCALE 1/4" = 1'-0" APRIL 1932

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.M.H.	J.M.H.	J.M.G.			4-21-32	

No. 7 Sta 297+89.4

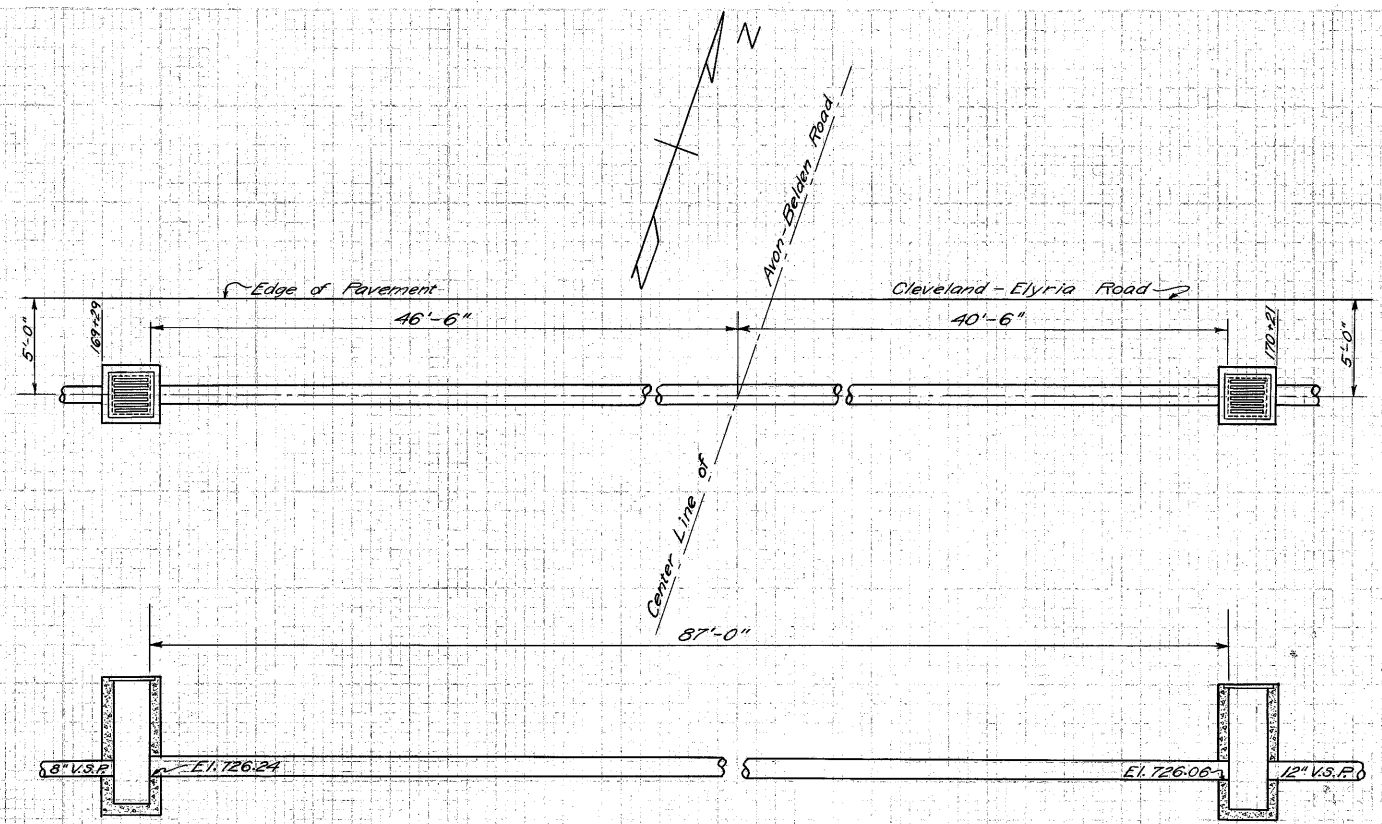


BR. NO. LO 20-249
ABUTMENT & WING DETAILS
S.H. NO. 31 SEC. E-BR.
FRENCH CREEK
LORAIN COUNTY
STATE OF OHIO
SCALE 3/8" = 1'-0" APRIL 1932

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
					4-20-32	

FED. RD. DIST. NO.	STATE	FED. AID PROJ.	FISCAL YEAR	71 75
10	OHIO	264 Pb	1932	

LORAIN COUNTY
S. H. 31 SECS. D, E, & ELYRIA



CULVERT DATA
 TYPE 12" Pipe
 SIZE 12" x 87'
 WORK REQUIRED
 Place 87' of 12" V.S.P. enc., or 12" Re.C.P.
 Build 2 Standard No. 2 Catch Basins,
 Side Inlets omitted.
 Refer to Standard Drawings Nos. 300, & 305

ESTIMATED QUANTITIES
 Excavation — 40 Cu. Yds.
 12" V.S.P. or Re.C.P. — 87 Lin. Ft.
 Std. No. 2 Catch Basins — 2 Units.

STA. 169+87.2 No. 5