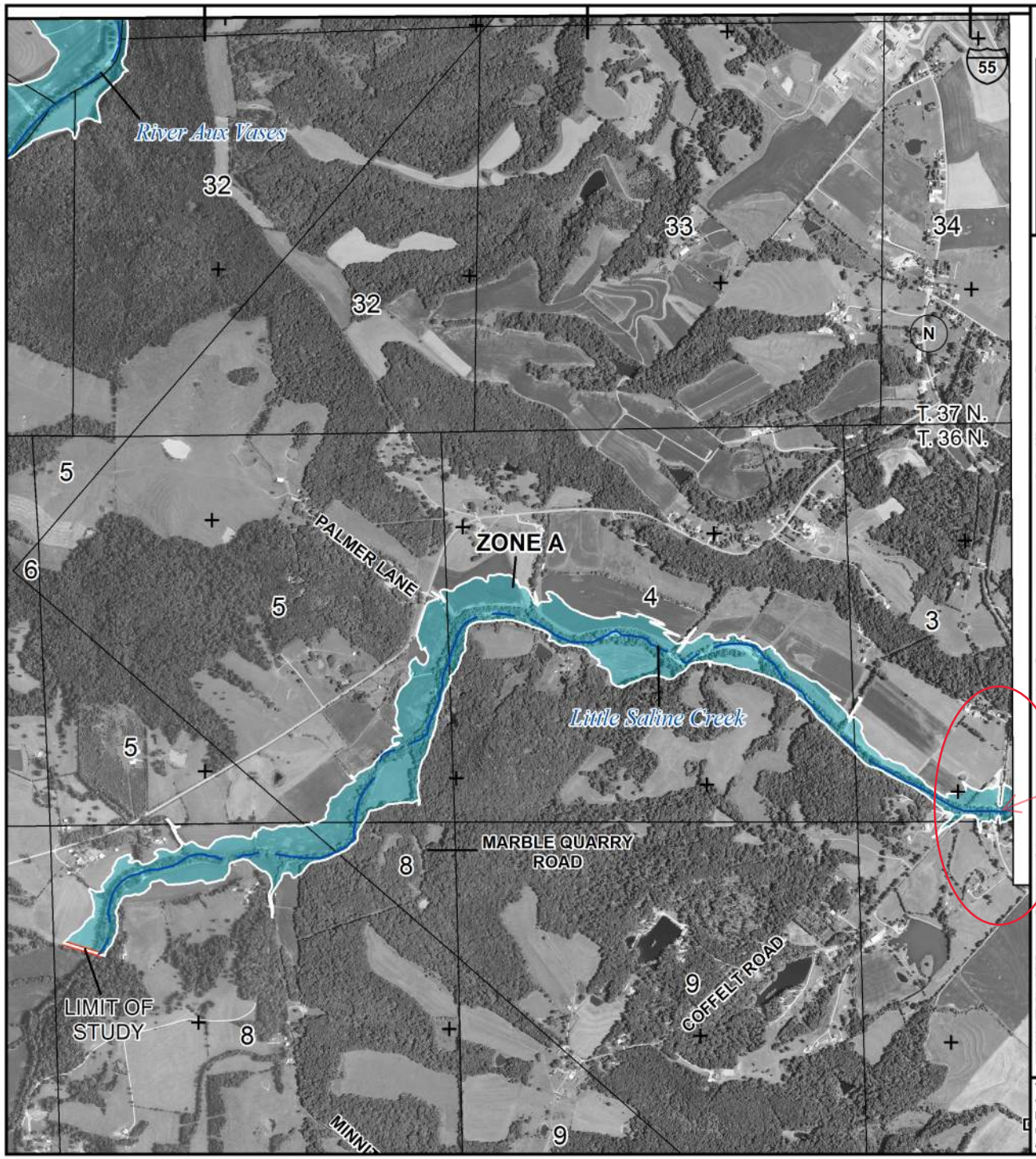


SCALE

N

Map Projection:
NAD 1983 StatePlane Missouri East FIPS 2
Western Hemisphere; Vertical Datum: NAVI

1 inch = 2,000 feet

FEMA

National Flood Insurance Program

STE. GENEVIEVE
COUNTY, MISSOURI
and Incorporated Areas

PANEL 350 OF 450

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
STE. GENEVIEVE COUNTY	290833	0425	E

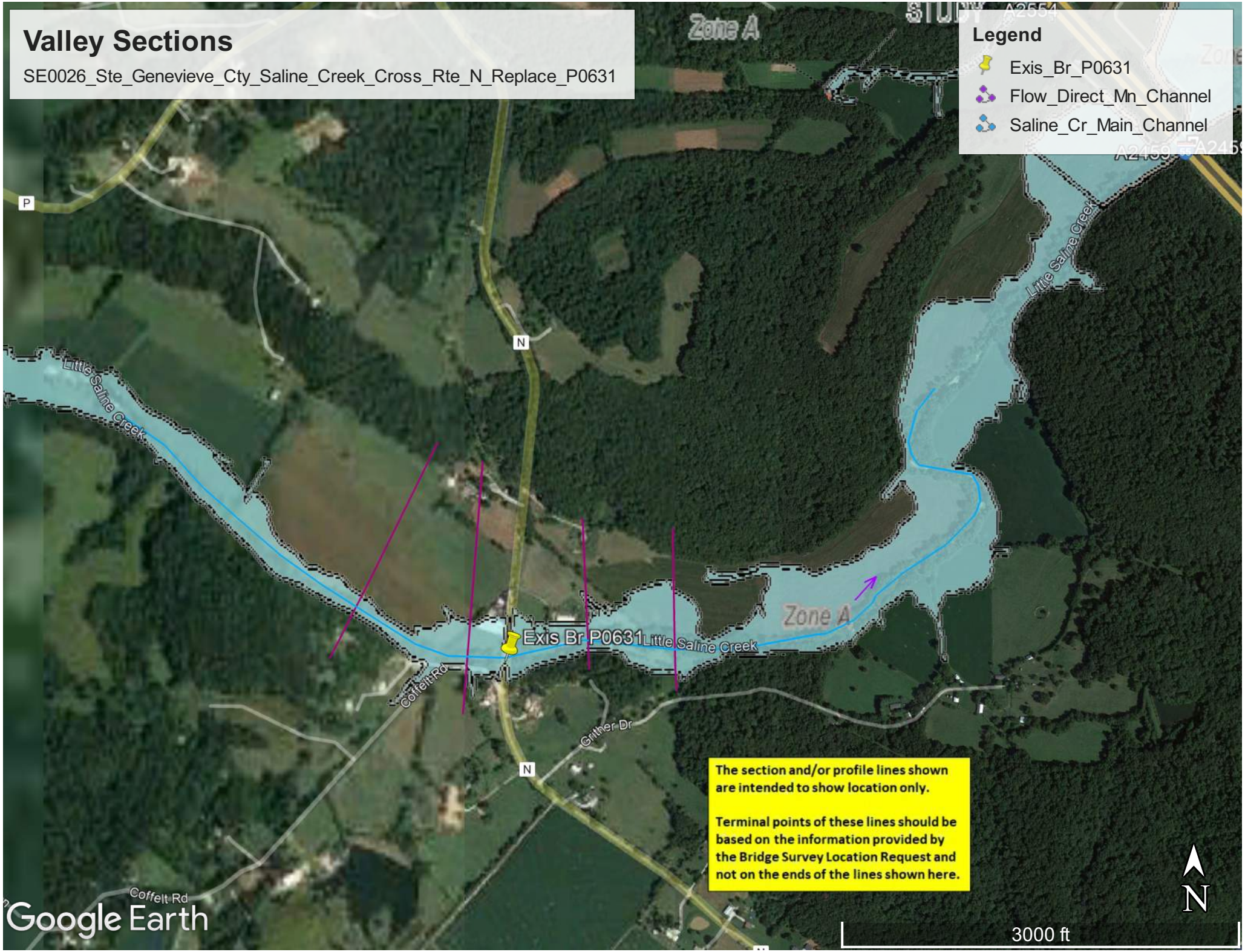
P0631 Br. Loc.

VERSION NUMBER
2.3.3.3

MAP NUMBER
29186C0350E

MAP REVISED
February 15, 2019

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at https://msc.fema.gov.


Valley Sections
SE0026_Ste_Genevieve_Cty_Saline_Creek_Cross_Rte_N_Replace_P0631
Legend
Exis_Br_P0631
Flow_Direct_Mn_Channel
Saline_Cr_Main_Channel
Zone A
Little Saline Creek
Exis Br P0631
Coffelt Rd
Grither Dr
The section and/or profile lines shown are intended to show location only.
Terminal points of these lines should be based on the information provided by the Bridge Survey Location Request and not on the ends of the lines shown here.
N
3000 ft
Google Earth

S12/19

Job No. SE0026

Replaces Bridge No. P0631

Missouri Department of Transportation

Bridge Survey Location Request

Page 1 to be completed by District staff.

Bridge over: Saline Creek Route: N

County: Ste. Genevieve Section: Survey 3060 Township: 36 North Range: 9 East

Latitude: 37°50'46.87"N Longitude: 90°1'54.87"W

District Contact: Garrett Galyean (573-472-5221) Date: 5/4/2023

HIGH WATER ELEVATIONS AT PROPOSED BRIDGE SITE

Recorded high water elevations or elevation of high water marks

Extreme High Water (EHW) (Give date(s) of occurrence)		
Elevations and date(s) of same	Location	Source of information
9.0" Below (1991)	Below South End of Bridge Floor	HW Book 8183

Existing Bridge Overtopped ☐ Yes ☐No ☒Unknown	Existing Roadway Overtopped ☐ Yes ☐No ☒Unknown
	Approx. Overtopping Location(s):

LOCATION OF NEW BRIDGE

Replace in Existing Location	☒	Provide details of any proposed changes to profile grade below or as an attachment.
Relocation (near existing Structure)	☐	Provide details of proposed location and grade of the roadway across the floodplain, any proposed/potential channel changes or modifications, etc. below or as an attachment.
New Route	☐	
Other:	☐	

Additional Information:

page 2 & subsequent pages to be completed by Bridge Division

Note: Proposed elevations, distances, etc. are based on the best available data at the time the form was completed. Actual field conditions or recently acquired data may require deviation from the proposed values. Please contact the Bridge Division with concerns regarding the proposed values or if large deviations from these values are required.

Note: The information below supplements the survey requirements noted in the EPG, please consult EPG 238 for additional surveying requirements.

Bridge Contact: Wayne Elliott, Phone No.573-526-5414 & email: Wayne.Elliott@modot.mo.gov

Survey Type: **1D Survey**

Stream Crossing Survey Location Details (1D)

Item		Requirement	Standard Guidance		Specific Guidance	
Profiles* (EPG 238.3.36.1.3)	C/L Profile	Terminal Point	Limit of Longest offset Profile		Use Standard Guidance	
	Upstream Offset Profile	Terminal Point	Same as Valley Sections		Elevation =	440
		Offset Distance	On Natural Ground		Estimated Distance =	30 ft.
	Downstream Offset Profile	Terminal Point	Same as Valley Sections		Elevation =	440
		Offset Distance	On Natural Ground		Estimated Distance =	30 ft.
	Special	N/A				
Streambed Profiles** (EPG 238.3.36.3.6)		Length	Natural Stream	Section limits (Min. of 1000' each side of crossing.)	Use Natural Stream Guidance	
			Drainage Ditch	500' Each Side of Crossing		
		Elevation Intervals	Within 1000' of Crossing	Nat. Stream 25'	Use Natural Stream Guidance (see EPG 238.3.36.3.6 if a significant slope change is encountered)	
				Drain. Ditch 50'		
			Beyond 1000' from Crossing	At Vertical and Horizontal Break Points (200' max.)		
Valley Sections (EPG 238.3.36.3.8), (EPG 750.3.1.1)		Terminal Point	Natural Stream	5' above EHW	Elevation =	440
			Drainage Ditch	25' Beyond Bankside Toe of Levee	Distance =	N/A

Item	Requirement	Standard Guidance		Specific Guidance
Water Surface Profile (EPG 238.3.36.3.7)	**Water Surface Profile Data Needed?** ☐ Yes ☒ No			
	Locations with flowing water	Drainage Ditch	100' and 200' each side of Crossing	Use Water Surface Profile Standard Guidance

Item	Requirement	Standard Guidance	Specific Guidance
Typical Channel Sections (EPG 238.3.36.3.9)	**Typical Channel Section Data Needed?** ☐ Yes ☒ No		
	Within 300' each side of Centerline	Provide when Needed (i.e., Culvert on Perennial and Intermittent Stream)	

Item	Requirement	Standard Guidance	Specific Guidance
Existing Bridge Data	**Existing Bridge Data Needed?** ☐ Yes ☒ No		
	Description	Provide General Description	N/A

Item	Requirement	Standard Guidance	Specific Guidance	
Other Bridges (EPG 238.3.36.3.10)	Other Bridge Data Needed? ☐ Yes ☒ No			
	Description	Provide General Description	N/A	
	Profile Location	C/L Structure	N/A	
	Profile Terminal Point	5’ above EHW	Elevation =	N/A

* additional profiles may be needed for relocated routes

** at confluent streams provide proposed data for both streams as appropriate.

Additional Information:

Additional Documents Provided:

Image & kmz file showing Valley Section Locations.

Roadway Design Notes for Bridge Survey:

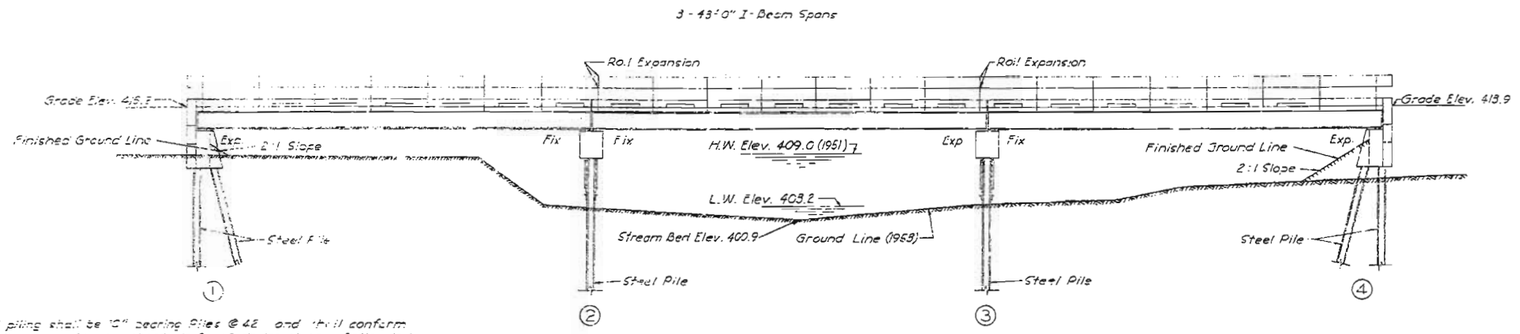
The Bridge Survey should include all the pertinent items listed in EPG 747 and the Bridge Survey Checklist.

Bridge Design Notes:

TMS Flood Report Data, FEMA Zone A or FIS Data FM29186C0350E, Special Conditions. etc.

MISSOURI STATE HIGHWAY DEPARTMENT

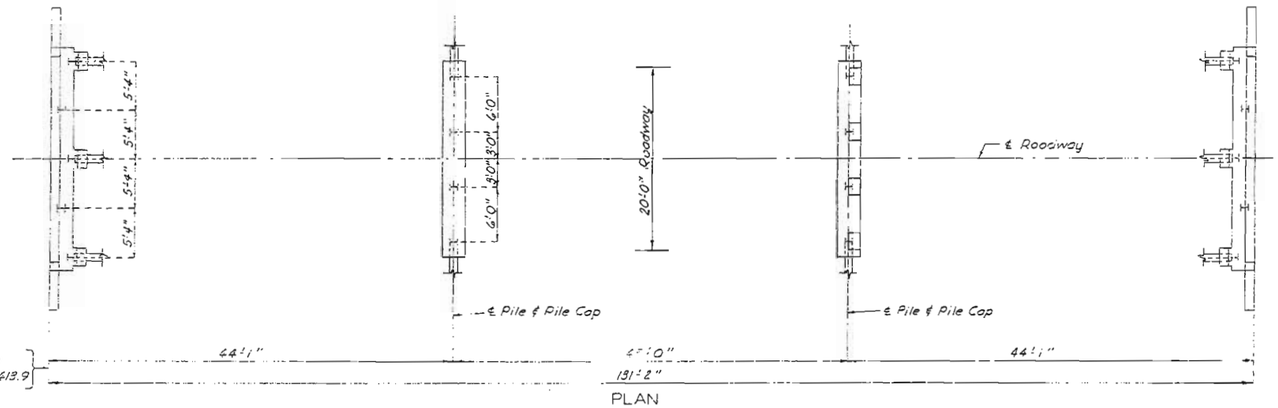
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	(BRF-5(7) Sec.(5.1))	19		



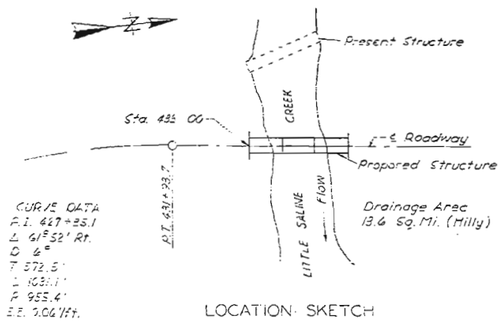
GENERAL ELEVATION

Note: All piling shall be "C" bearing Piles @ 42 and shall conform with details and notes on sheet No. 2 of design plans. Estimated Quantities shown on plans are based on the following lengths: 10@35'-10" and 6@40'-10". These indicated lengths are approximate only. Proper lengths to give required bearing and/or penetration will be authorized by the Engineer.

All piles shall be driven to or into solid rock, boulders, shale, or cemented gravel; or to not less than full length authorized and to sustain a load of at least 30 ton per pile. A gravity hammer may be used for driving if desired.



PLAN



LOCATION SKETCH

419

GENERAL NOTES:

Design Specifications A.A.S.H.O. - 1953
Loading H10-44
Class "B" Concrete Stress 1000 #/in²
Reinforcing Steel Stress 18,000 #/in²
Structural Steel Stress 12,000 #/in²
All concrete shall be Class "B".

Rivets ⅞" ϕ; Holes 1" ϕ except in handrail where rivets shall be ¾" ϕ, holes 1/16" ϕ. Field connections shall be riveted, or if the Contractor desires to eliminate all field riveting on this project, he may use machine bolts except for the ⅞" ϕ button head bolts specified for handrail. Heads and nuts of machine bolts shall be American Standard Regular.

Paint: Shop, none. Field contact surfaces of bolted field connections one coat of red lead and surfaces inaccessible after erection three coats of red lead. No other paint to be applied by the Contractor except as noted for Steel Pile. Red lead required shall be furnished by the Contractor. Payment for cleaning and painting such surfaces will be included in unit price bid for Fabricated Structural Steel.

Where joint filler is specified on plans it shall conform with the requirements for Premoulded Material for filler as given in Section 38-19A(1)h of the Standard Specifications.

For requirements on welding electrodes see Special Provisions. Qualification of welding operators will be required.

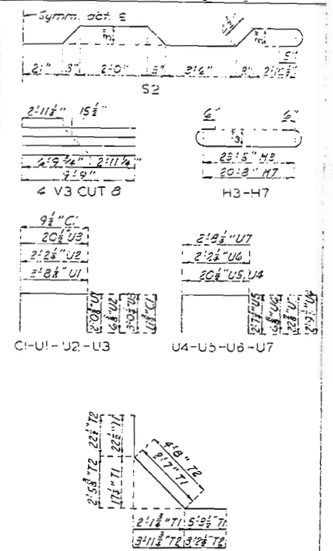
Surfaces of piles at Bents No. 1 and 4 from bottom of concrete cap to 3'-0" below present ground line shall be painted with one coat of an approved brand of emulsified asphalt paint. Payment for excavating around piles below present ground line and backfilling same, furnishing emulsified asphalt paint and cleaning and painting steel surfaces specified will be included in the unit price bid for other items.

FINISHED

B.M. #12 Elev. 408.13 N&W in root "B" Elm. 200' Lt. Sta. 432+85 (U.S.G.S. Datum)

COMPLETE BILL OF REINFORCING STEEL

No.	Size	Length	Mark	Location	Bending Sketches & Cutting Diagrams
		End Bents No. 1 & 4			
4	#6	22'-3"	H1	Bk. Wall	
4	#6	22'-3"	H2	"	
16	#6	24'-0"	H3	Beam	
8	#6	24'-0"	H4	"	
12	#6	7'-6"	H5	Wing	
4	#6	5'-6"	H6	"	
3	#6	9'-9"	T	"	
8	#6	9'-9"	T2	"	
96	#4	7'-9"	U1	Beam	
16	#4	9'-8"	U2	"	
48	#7	7'-9"	U3	"	
12	#7	7'-3"	U4	"	
16	#7	7'-0"	U5	"	
88	#5	4'-6"	V1	Bk. Wall	
24	#4	8'-9"	V2	Beam	
8	#4	9'-9"	V3	Wing	
4	#6	7'-3"	V4	"	
		Int. Bents No. 2 & 3			
16	#6	23'-3"	H7	Beam	
4	#6	21'-5"	H8	"	
12	#6	8'-8"	U6	"	
88	#4	6'-6"	U7	"	
		Superstructure			
172	#5	2'-9"	C1	Curb	
24	#6	23'-3"	C2	"	
12	#6	22'-9"	C3	"	
262	#4	22'-0"	S1	Slab	
131	#4	24'-0"	S2	"	
120	#4	22'-9"	S3	"	
64	#4	22'-3"	S4	"	



ESTIMATED QUANTITIES

Item		Substr.	Superstr.	Total
Class "B" Concrete	Cu. Yds.	38.8	62.6	101.4
Reinforcing Steel	Lbs.	4,790	10,590	15,380
Fabricated Structural Steel	Lbs.	1,490	51,590	53,280
Steel Piles in Place	Lin. Ft.	416		416
Steel Pile Cut-offs	Lin. Ft.	54		54
Gray Iron Alloy Castings	Lbs.		1280	1,280

Note: Estimated Quantities of Fabricated Structural Steel Substructure is for angle Sway Bracing on interior Bents.

BRIDGE OVER LITTLE SALINE CREEK

STATE ROAD FROM ROUTE 32 NORTH TO STE. GENEVIEVE

ABOUT [illegible] S. OF STE. GENEVIEVE

PROJECT NO. S-[illegible] **STA.** 433+00

STE. GENEVIEVE **COUNTY**

SUBMITTED BY J. A. Williams BRIDGE ENGINEER DATE 2/17/1955

APPROVED Ray M. Whitton CHIEF ENGINEER DATE 2/17/1955

FINISHED

FINISHED

STD. DWG. R631

Drawn July 1954 by H.M.W.
Checked April 1954 by C.S.M.

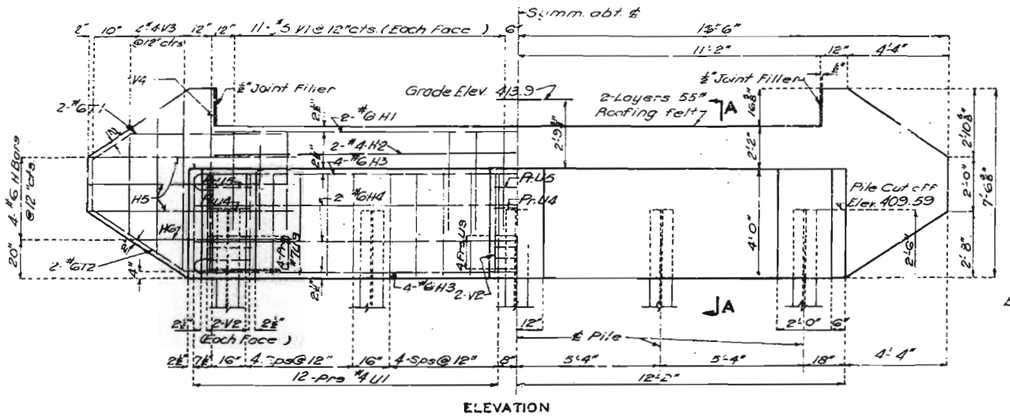
Note: This drawing is not to scale. Follow dimensions.

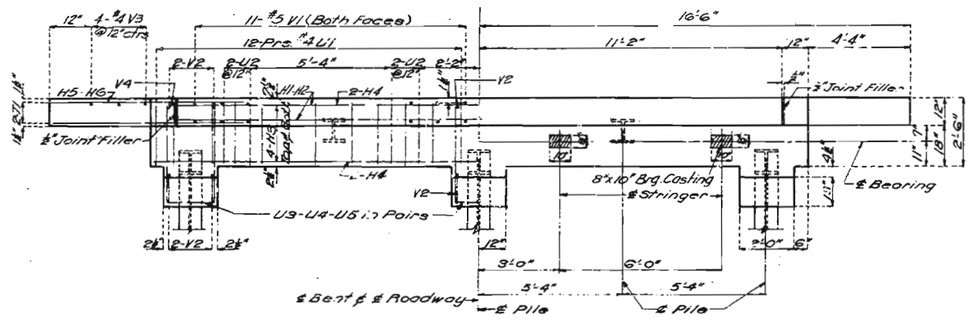
Sheet No. 1 of 4

SEE FINAL PLANS BROWN-LINES

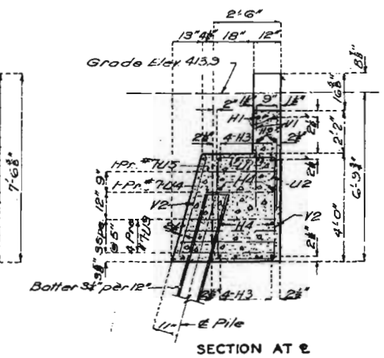
MISSOURI STATE HIGHWAY DEPARTMENT

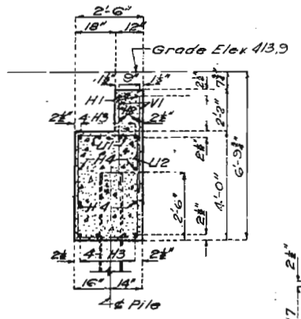
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	S-1095(1) SEC.A(SN)	19		

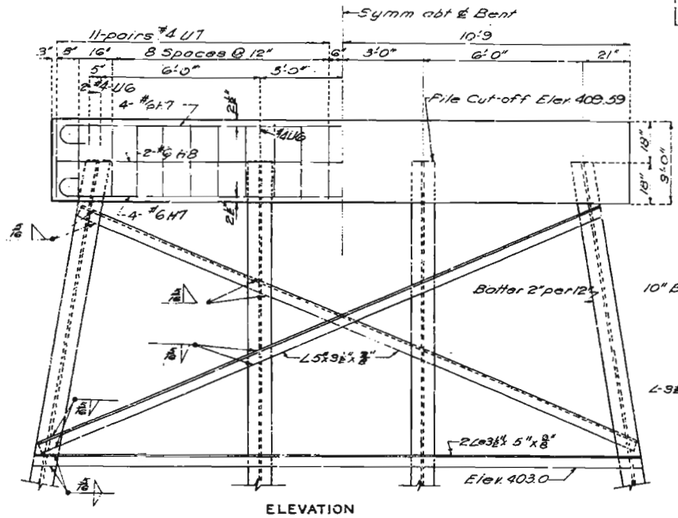


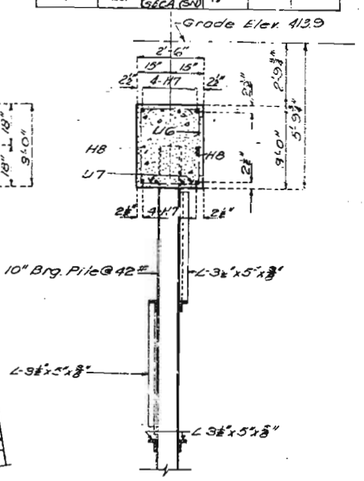


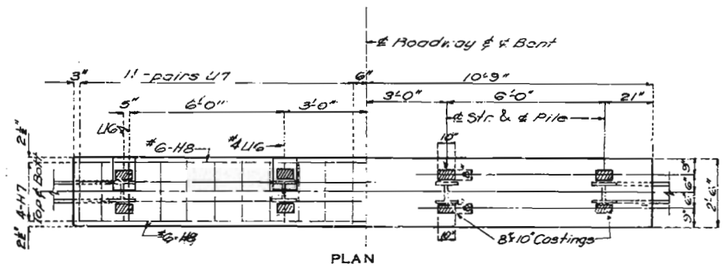
DETAIL OF BENTS NO 1&4





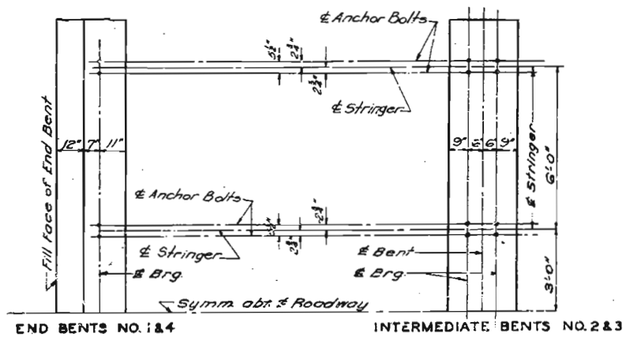




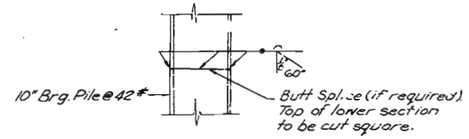


DETAILS OF INTERMEDIATE BENTS NO. 2&3

Note: ½" Monolithic haunch on Bt No. 3 only. See Sheet No. 4 of 4.



ANCHOR BOLT PLAN



DETAILS OF STEEL PILE

BRIDGE OVER LITTLE SALINE CREEK

STATE ROAD FROM ROUTE 32 NORTH TO STE. GENEVIEVE
ABOUT 10.0 MILES S. OF STE. GENEVIEVE
PROJECT NO. S-1095(1) SEC. A(SN) STA. 433+00

STE. GENEVIEVE COUNTY

420

Drawn July 1954 by H.M.W.
Traced July 1954 by S.W.S.
Checked Aug. 1954 by C.L.A.

Note: This drawing is not to scale, Follow Dimensions

Sheet No. 2 of 4.

P-631

STATE | FEDERAL ROUTE | SHEET NO.
MO | I-55 (1) | 4
SECT | 4

STE. GENEVIEVE 5(M)
T 36 N R 9 E

FINAL PLANS

FP
30.0 Ac.
33.5 Ac.
18" R.C.
F. P.

PI 410+94.0
Δ 9°00' Lt
D 3°
T 150.3
L 300.0
R 1910.1
S.E. 0.03/Ft

PC 409+43.7
PT 412+43.7
N 45°45' E
N 54°45' W
Pasture
Cultivated
Barn
Well
Gas
Fence
30' Dr. Esm't
XAVIER F. GRITHER
DONALD F. DONZE
410
415

Sta. 413+20
36" X 18" Pipe
D.A. 6 Ac ~ 0.6 Ld.
Sk. 20° L.A.

XAVIER F. GRITHER
Sta. 418+15
38" X 18" Pipe
D.A. 6 Ac ~ 0.6 Ld.
Sk. 20° L.A.

A. ROTH
420
425
35' 40' Dr. Esm't
Cultivated
Spl. 5' F.B. Ditch
97° 45'
PC 421+69.6
Sta 425+40
44" X 24" Pipe
D.A. 12 Ac. ~ 0.6 Ld
Sk. 30° L.A.

430
No Ties
P.I. 427+35.1
Δ 61° 52' Rt
D 6°
T 572.5
L 1081.1
E 188.4
R 955.4
S.E. .06/Ft
PT 431+08.7
Spl. 5' F.B. Ditch
Dr. Esm't
Sta. 433 too
Bridge
12. 3-40' I.B. Spans
See Br. Dwg. # P-631
D.A. 13.6 Sq. Mi. ~ 0.6 Ld
Clear Roadway 20'
3' Rock Blanket @ North Abt.
Sta 431+25 to 432+75
Taper Roadbed from 24' to 26'
Sta. 432+75 to 433+00
26' Roadbed

16" Cotton wood
5" Twin Sycamore
P.O.T. 434+07.0
Dorothy Easement
Frank Lipp
440
ARTHUR ROTH
Sta. 434+30.7 to 434+55.7
26' Roadbed.
Sta. 434+55.7 to 436+05.7
Taper Roadbed from 26' to 24'
-30' X 30'
+80 FE 1.5 to 2.2
30 Brk

Clearing
Grubbing
From Sta. 409+00
M.G. Cl. 1 = 20.0 Sta.s
M.G. Cl. 1 (Rocks) = 7.1 Sta.s
Cl. A = 977 Cu. Yds.
Cl. A Box = 158 Cu. Yds.
Cl. E = 17 Cu. Yds.
M.G. Cl. 1 (Rocks) = 1.2 Sta.s
Bridge Excavation
Cl. A = 1970 C.Y.
Cl. A Box = 1470 C.Y.
M.G. Cl. 1 (Rocks) = 1.6 Sta.s
Bench Marks by S.J.S. Durham
BM #10 A. N & W in 4" Persimmon tree
160' Lt. Sta 421+30 Elev 434.61
BM. N.W. in 12" Sycamore 30' Rt
Sta 434+25 Elev 404.97

PLATE 1—PLAN-PROFILE O P R & R E STANDARD
U S BLUF, Clinton

FED. ROAD DIST. NO.	STATE	FEDERAL PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO	S-1015 (1) Sec. A		5	
DIV. NO.	COUNTY		ROUTE	SEC.	
6	STE. GENEVIEVE		5N(1)		

T 36N R9E

FINAL PLANS