

BENCHMARK

North bolt of fire hydrant @ N.W. corner of East Main and North Water Street (Mueller bolt)
Elev. 559.10

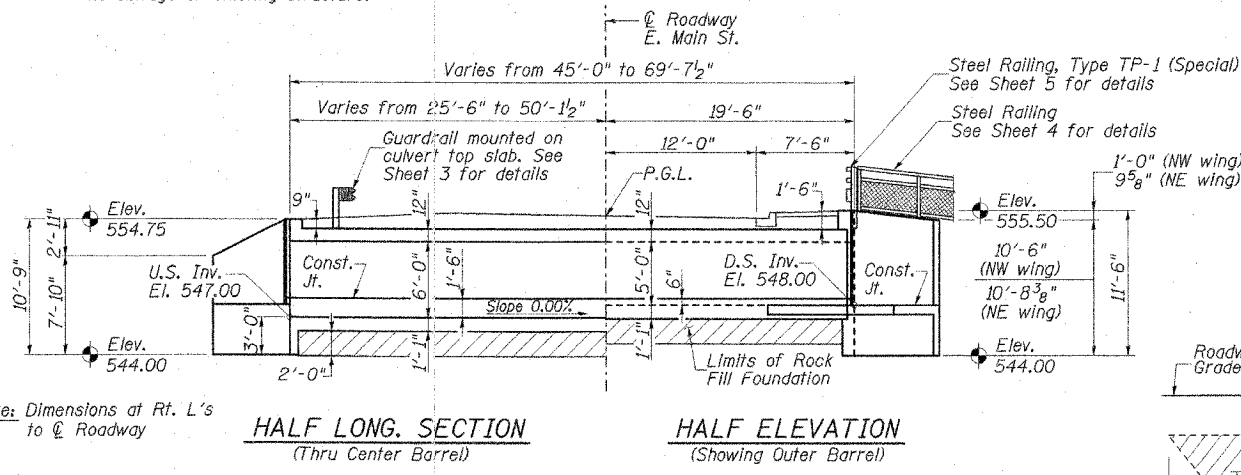
EXISTING STRUCTURE

S.N. 084-0079 - Original construction date unknown and widened in 1927. The structure is a simple span concrete slab bridge with an adjacent double barrel box culvert. The structure length is 48'-0" and the structure width is 59'-0".

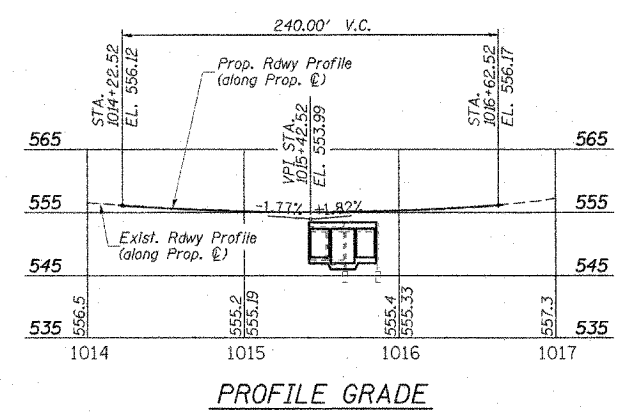
No salvage of existing structure.

PROPOSED STRUCTURE

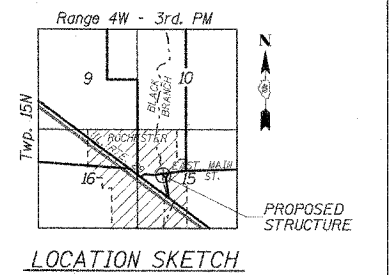
New triple barrel box culvert with 12'-0" end spans and 15'-0" interior span. East Main Street to be closed during construction and traffic to be maintained utilizing a detour route.



Note: Dimensions at Rt. L's to \odot Roadway



F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
556	04-00119-03-BR	SANGAMON	26	15
STA. TO STA.		FED. AID PROJECT		
FED. ROAD DIST. NO. 5 ILLINOIS		SHEET 1 OF 6		



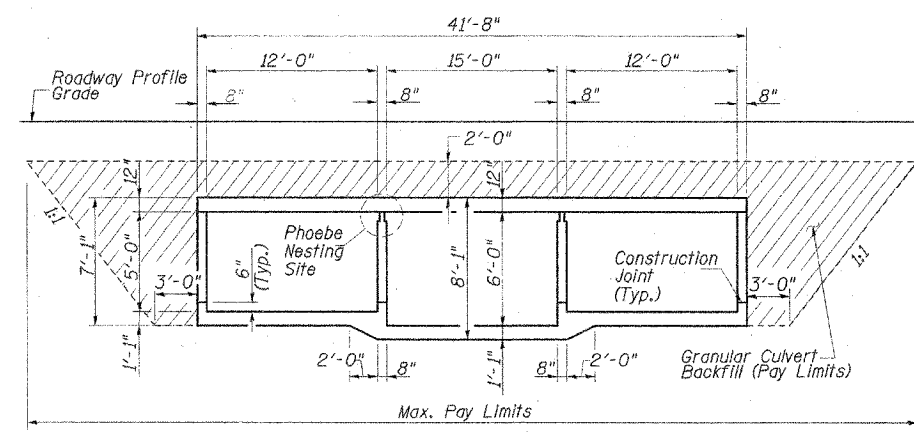
LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO "Standard Specifications for Highway Bridges"

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)



BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures	Each	1
Reinforcement Bars	Pound	42,640
Reinforcement Bars, Epoxy Coated	Pound	200
Steel Railing	Foot	30
Steel Railing, Type TP-1 (Special)	Foot	40
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	235.7
Rock Fill Foundation	Tons	531
Granular Culvert Backfill	Cu. Yd.	466

WATERWAY INFORMATION

Exist. Low Grade Elev. 555.04 @ Sta. 1015+42.81					
Drainage Area = 3.90 sq. mi. Prop. Low Grade Elev. 555.32 @ Sta. 1015+40.00					
Flood Yr.	Freq.	C.F.S.	Opening Sq. Ft.	Nat. Head - Ft.	Headwater El.
Design	30	1004.03	123.61	210.00	555.91
Base	100	1369.90	123.61	210.00	556.57
Overtopping	10	611.65	123.61	210.00	555.21
Max. Calc.	500	1875.17	123.61	210.00	557.29

CONSTRUCTION PERMITS: THIS PROJECT HAS BEEN APPROVED FOR CONSTRUCTION UNDER STATEWIDE PERMIT NO. 12 AS ISSUED BY THE DEPARTMENT OF NATURAL RESOURCES/ OFFICE OF WATER RESOURCES.

GENERAL NOTES:

1. Reinforcement bars shall conform to the requirements of the ASTM A706 grade 60. (See Special Provision.)
2. All construction joints shall be bonded.
3. Exposed edges shall have a 3/8" chamfer.
4. Precast culvert alternative will not be allowed.

BLACK BRANCH
 BUILT 200... BY
 SANGAMON COUNTY
 SEC. 04-00119-03-BR
 F.A.S. RTE. 556 STA. 1015+58.04
 STR. NO. 084-8010 LOADING HS20

NAME PLATE

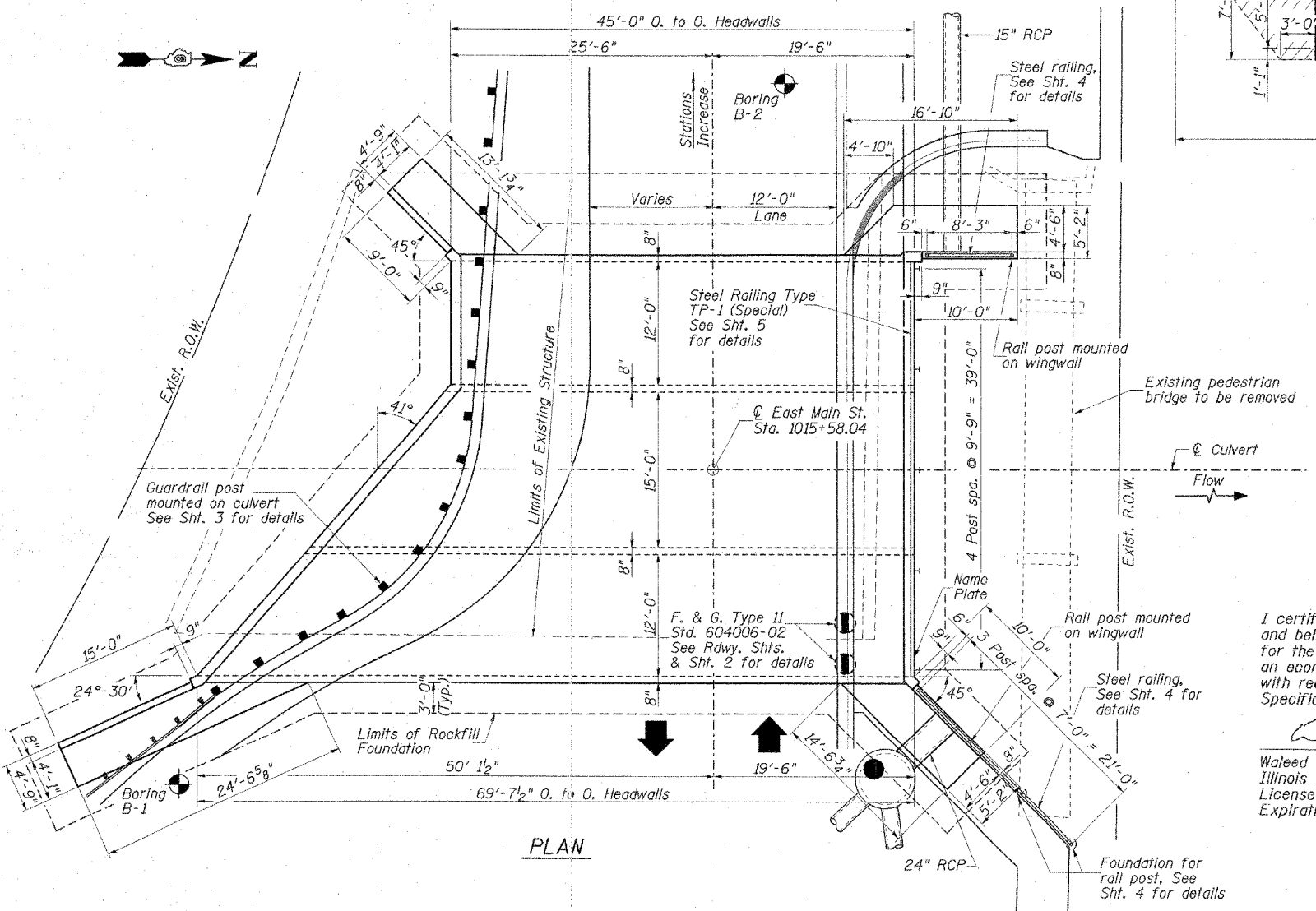
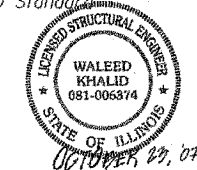
See Std. 515001

BORING DATA

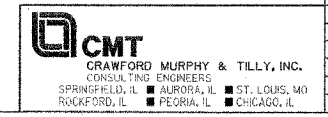
Boring No.	Station	Offset
B-1	1015+27	53' Lt.
B-2	1015+95	5' Rt.

I certify that to the best of my knowledge, information and belief, that this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges."

Waleed Khalid, S.E.
 Illinois Licensed Structural Engineer
 License Number: 081-006374
 Expiration Date: November 30, 2008



1:\s\projects\04-00119-03-BR\Drawings\GENERAL_PLAN.DWG 11/1/2007



REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
 F.A. ROUTE 556 (EAST MAIN STREET)
 EAST MAIN STREET OVER
 BLACK BRANCH
 SECTION 04-00119-03-BR STA. 1015+58.04
 STR. NO. 084-8010 - SANGAMON COUNTY
 SCALE: NONE DRAWN BY: GLD
 DATE: 10/15/07 CHECKED BY: WK