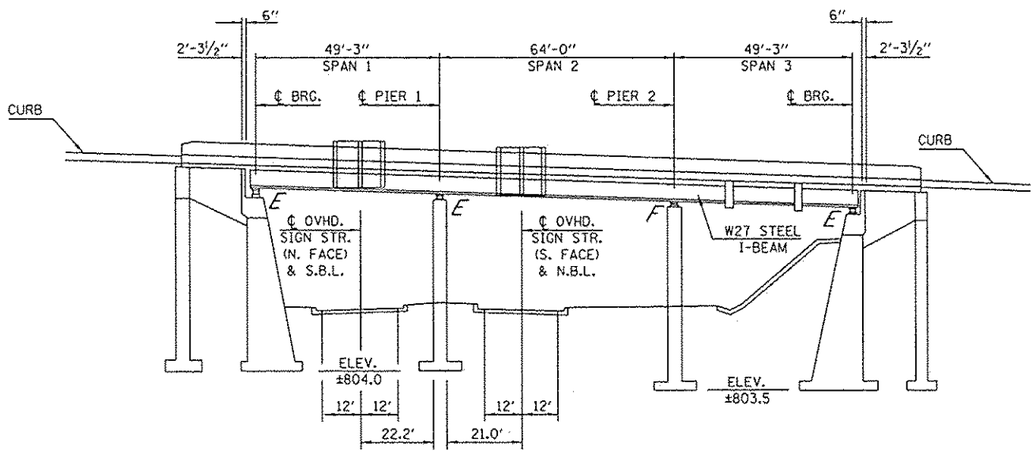
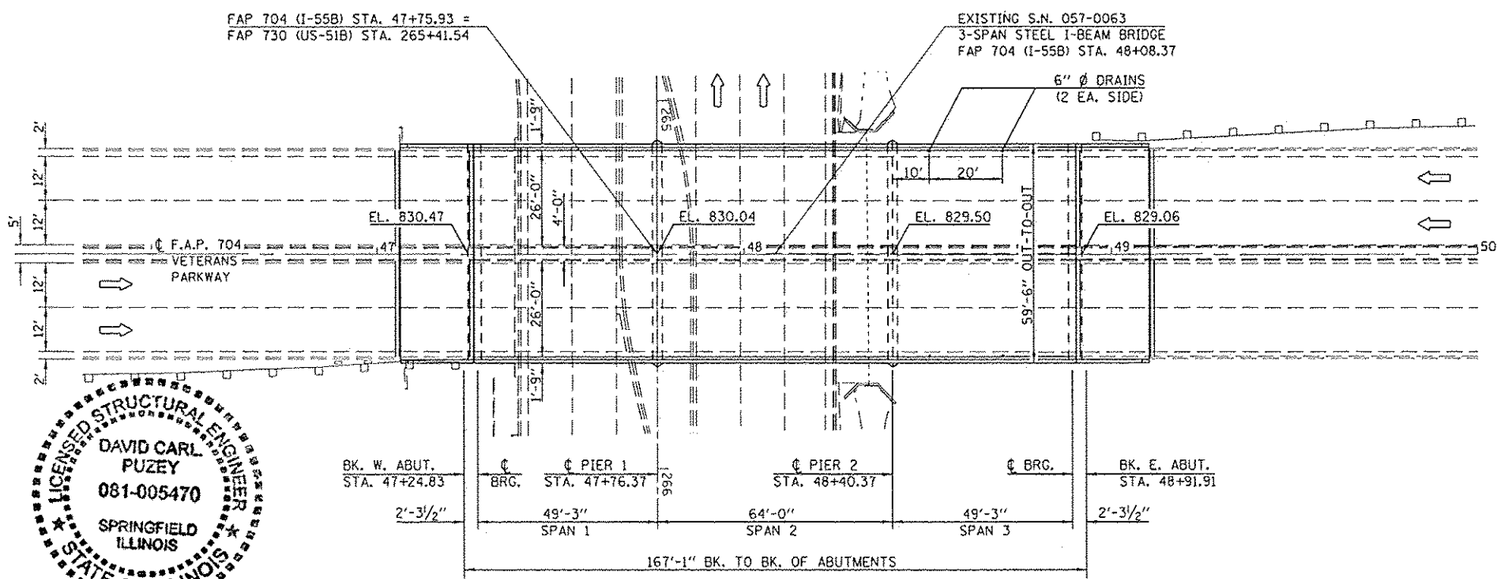
GENERAL PLAN & ELEVATION
S.N. 057–0063

• ELEVATIONS SHOWN HAVE BEEN TAKEN FROM AS-BUILT PLANS AND ARE INCLUDED FOR PERSPECTIVE ONLY.



ELEVATION



PLAN

LICENSED STRUCTURAL ENGINEER
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D. Carl Puzey 7/17/14
Expires 11/30/14

STRUCTURE 057-0063 WAS BUILT IN 1939 AS FA ROUTE 5, SECTION 1-H-B AT STATION 48+08.5 BY THE STATE OF ILLINOIS IN MCLEAN COUNTY. IN 1972, THE WEST ABUTMENT AND APPROACH SLABS WERE RECONSTRUCTED WITH FA ROUTE 2, SECTION (56R-1). THE STRUCTURE WAS REHABILITATED IN 1984 WITH FAP ROUTE 704, SECTION 1HBR. WITH THE REHABILITATION SECTION, THE SUBSTRUCTURE WAS RAISED TO PROVIDE ADDITIONAL VERTICAL CLEARANCE OVER US-51 AND A STEEL BEAM SUPERSTRUCTURE WAS PLACED. FINALLY, CRASH WALL EXTENSIONS WERE ADDED TO PIER 1 WITH FAP ROUTE 730, SECTION (56)RS-2 IN 2008.

THE EXISTING STRUCTURE IS A THREE-SPAN STRUCTURE WITH A BACK-TO-BACK OF ABUTMENT LENGTH OF 167'-1". THE STRUCTURE HAS TWO APPROACH SPANS AT 18'-11½" GIVING A TOTAL STRUCTURE LENGTH OF 205'-0". ORIGINALLY, THE APPROACH SLABS WERE RESTING ON FILLED ABUTMENTS. HOWEVER, WITH THE SUPERSTRUCTURE REPLACEMENT SECTION IN 1984, THE WEST ABUTMENT WAS CONVERTED TO A VAULTED ABUTMENT. THE REINFORCED CONCRETE DECK HAS TWO TRAVEL LANES IN EACH DIRECTION WITH A 4'-0" BARRIER CURB BONDED MEDIAN BETWEEN. THE TOTAL DECK WIDTH IS 56'-0" FROM PARAPET TO PARAPET AND HAS AN OUT-TO-OUT WIDTH OF 59'-6". THE SUPERSTRUCTURE CONSISTS OF NINE 27" WIDE-FLANGE STEEL BEAMS SUPPORTING A 7½" R.C. DECK. THE SUPERSTRUCTURE IS SUPPORTED BY TWO VAULTED ABUTMENTS (ONE FILLED) ON SPREAD FOOTINGS AND TWO MULTI-COLUMN PIERS ON SPREAD FOOTINGS. THE WEST VERTICAL ABUTMENT FACE IS EXPOSED TO TRAFFIC AND THE EAST ABUTMENT IS PROTECTED WITH STABILIZED FILL.

METHOD OF CONSTRUCTION: STAGE CONSTRUCTION

SEE PROPOSED IMPROVEMENTS ON THIS SHEET.

PROPOSED WORK

1. REPLACE HATCH BLOCKS AND PERFORM PARTIAL-DEPTH PATCHING ON APPROACH SLABS.
2. PLACE POLYMER CONCRETE NOSING IN NEW HATCH BLOCKS AND REPLACE PREFORMED JOINT SEALS WITH SILICONE JOINT SEALER.
3. PERFORM STRUCTURAL CONCRETE REPAIR ON SUBSTRUCTURE UNITS AS NEEDED.

TOTAL BILL OF MATERIALS

ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	7.0
REINFORCEMENT BARS, EPOXY COATED	POUND	820.0
BAR SPLICERS	EACH	28
CONCRETE SUPERSTRUCTURE	CU YD	6.2
POLYMER CONCRETE	CU FT	17.1
APPROACH SLAB REPAIR (PARTIAL)	SQ YD	5.8
SILICONE JOINT SEALER, 1¾"	FOOT	58.0
SILICONE JOINT SEALER, 2¾"	FOOT	58.0
STRUCTURAL REPAIR OF CONCRETE, (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	379.4
PROTECTIVE COAT	SQ YD	17.5

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM. COST INCLUDED WITH CONCRETE REMOVAL.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

THE DECK SURFACE SHALL HAVE ITS FINAL FINISH TINED ACCORDING TO ARTICLE 420.09(e)(1) OF THE STANDARDS SPECIFICATIONS. COST INCLUDED WITH CONCRETE SUPERSTRUCTURE.

JOINT OPENINGS SHALL BE ADJUSTED ACCORDING TO ARTICLE 520.04 OF THE STD. SPECS. WHEN THE DECK IS POURED AT AN AMBIENT TEMPERATURE OTHER THAN 50° F.