

ROUTE NO.	SECTION	COUNTY	SHEET	TOTAL SHEETS
FAI 55	#	McLEAN	87	83
FED. ROAD DIST. NO. 7	ALLIANCE	FED. AID PROJECT		

SHEET NO. 1  
5 SHEETS

(57-4)RS-3 & 1

Proposed Work

1. Replace all four abutment PJS Expansion Joints with Silicone Joint Sealer.
2. Deck patching and remove and replace bituminous overlay and waterproofing membrane.
3. Plug deck drains near abutments and piers.
4. Structural repair of concrete of north curb of bridge deck and patch west slope wall of SN 057-0029 (SB).
5. Riprap along southwest and northeast slope soil of SN 057-0028 (NB).

Traffic to be maintained by staged construction.

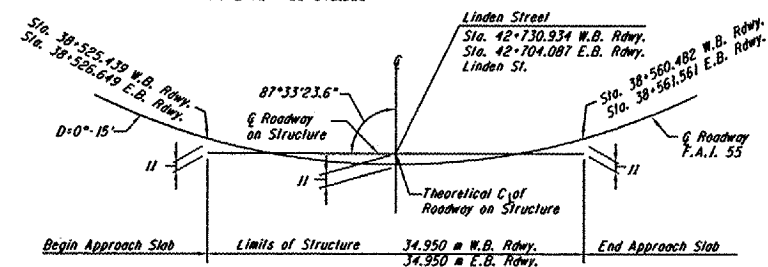
TOTAL BILL OF MATERIALS				
Item	Unit	Super	Sub.	Total
STONE RIPRAP, CLASS A3	SD M	--	6	6
HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SD M	814.4	--	814.4
SLOPE WALL REMOVAL	SD M	--	0.4	0.4
SLOPE WALL 100 mm	SD M	--	0.4	0.4
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 125 MM)	SD M	0.4	--	0.4
WATERPROOFING MEMBRANE SYSTEM	SD M	814.4	--	814.4
SILICONE JOINT SEALER	METER	53.3	--	53.3
PLUG EXISTING DECK DRAINS	EACH	16	--	16
DECK SLAB REPAIR (PARTIAL)	SD M	95.7	--	95.7
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX E, W90	WTON	74.2	--	74.2

General Notes

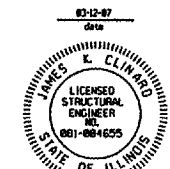
Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

All dimensions are in millimeters (mm) except as noted.

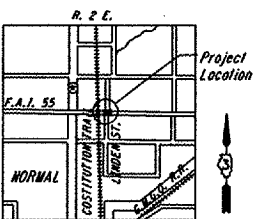
CURVE  
 PT STA. = 38+663.038  
 $\Delta = 3^\circ 00' 00''$   
 $D = 0^\circ 15'$   
 $R = 6985.515$  m  
 $T = 182.922$  m  
 $L = 365.761$  m  
 $E = 2.394$  m  
 $S.E. = \text{None}$   
 PC STA. = 38+480.199  
 PT STA. = 38+845.960



DETAIL-STRUCTURE LOCATION ON F.A.I. 55  
NO SCALE



PROFESSIONAL DESIGN FIRM  
 LICENSE NO. 084-087177



LOCATION SKETCH

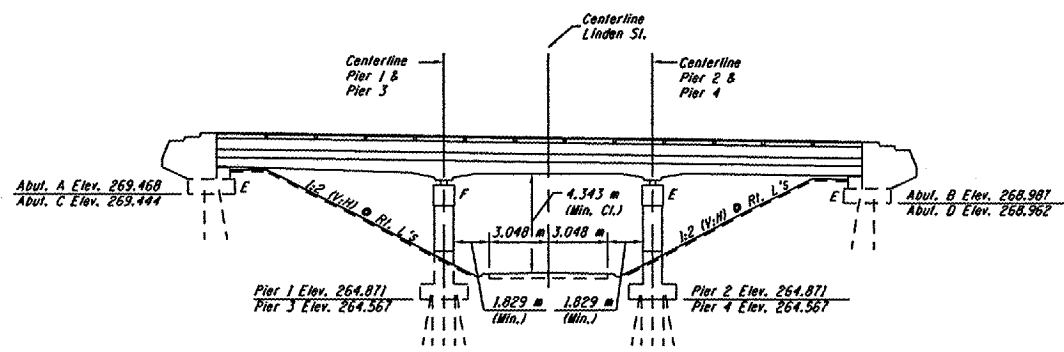
GENERAL PLAN AND ELEVATION  
 F.A.I. 55 OVER LINDEN STREET  
 SECTION (57-4)RS-3 & 1  
 McLEAN COUNTY  
 SN 057-0028 (NB)  
 SN 057-0029 (SB)  
 STA. 38+543.992

CHAMLIN ASSOCIATES  
 PERU ILLINOIS MORRIS

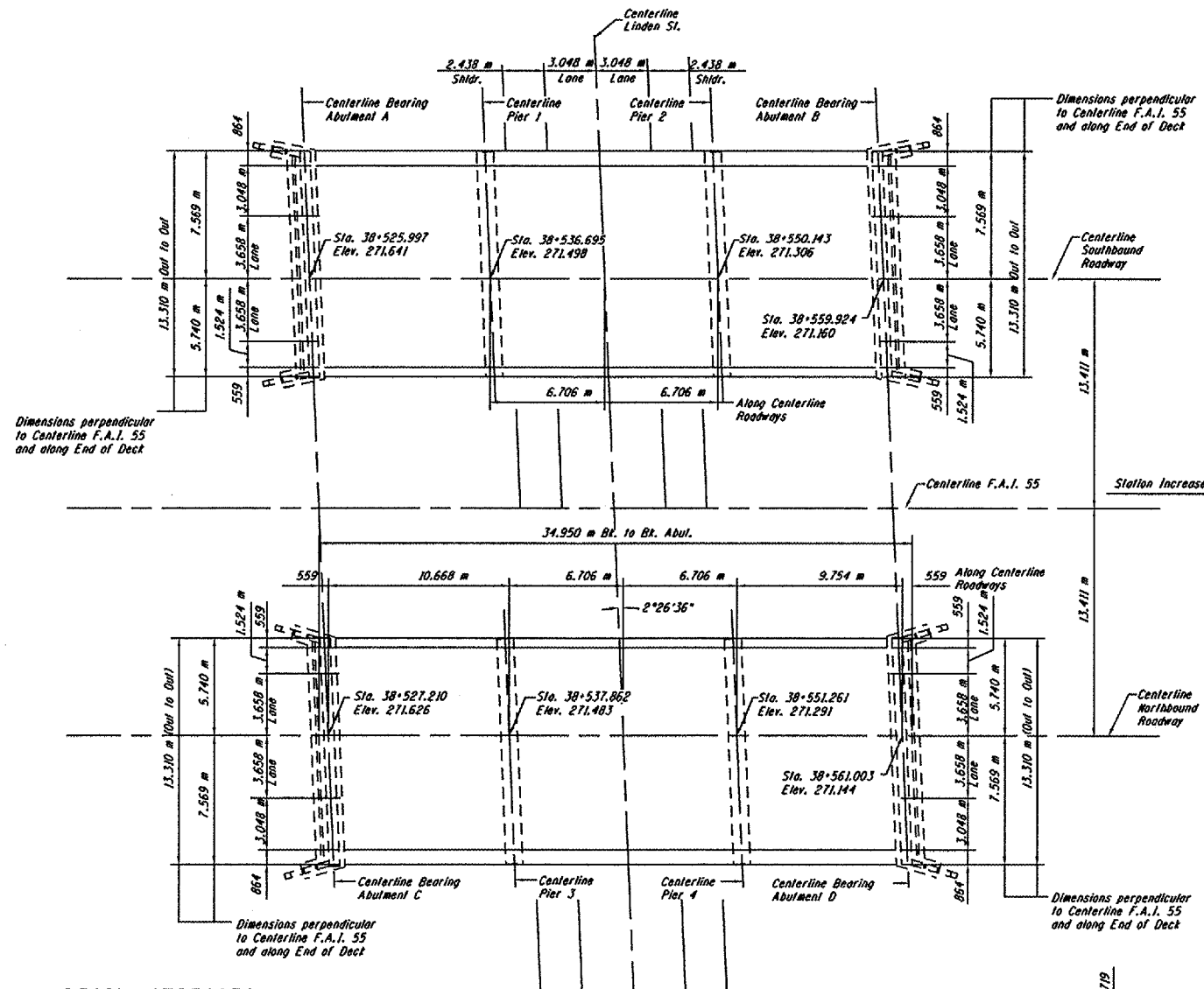
Benchmark: #23 nail in 915 mm cottonwood tree 15.850 m Lt. Sta. 38+561.887 Elev. 266.591

Existing Structures

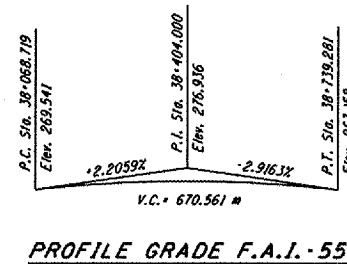
Structure Number 057-0028 (NB) and 057-0029 (SB) are dual structures carrying FAI Route 55 over Linden Street, Section 57-4HB-5, McLean County at Station 38+543.992. Structures were built in 1962 as a continuous slab deck supported by 2 multiple column piers and pile bent abutments. Structures are 13.310 m out-to-out and 34.950 m long. In 1974 the expansion joints were replaced and the deck was waterproofed and resurfaced with 38 mm surface course. In 1992 the outside curbs were retrofitted with new steel railing, deck drains, neoprene expansion joints, and various bearings were replaced. Longitudinal deck joints were eliminated, the waterproofing and surfacing was replaced, and concrete repairs were performed on the substructure.



ELEVATION



PLAN



PROFILE GRADE F.A.I. 55

DESIGN STRESSES (EXISTING CONSTRUCTION)

DESIGNED	JDA
CHECKED	JKC
DRAWN	NQ
CHECKED	JDA

Concrete:  $f'_c = 24.1$  Mpa  
 Reinforcement:  $f_s = 138$  Mpa  
 Structural Steel:  $f_s = 124$  Mpa  
 Design Loading: MS18 & Alternate  
 Design Specifications: AASHTO 1957