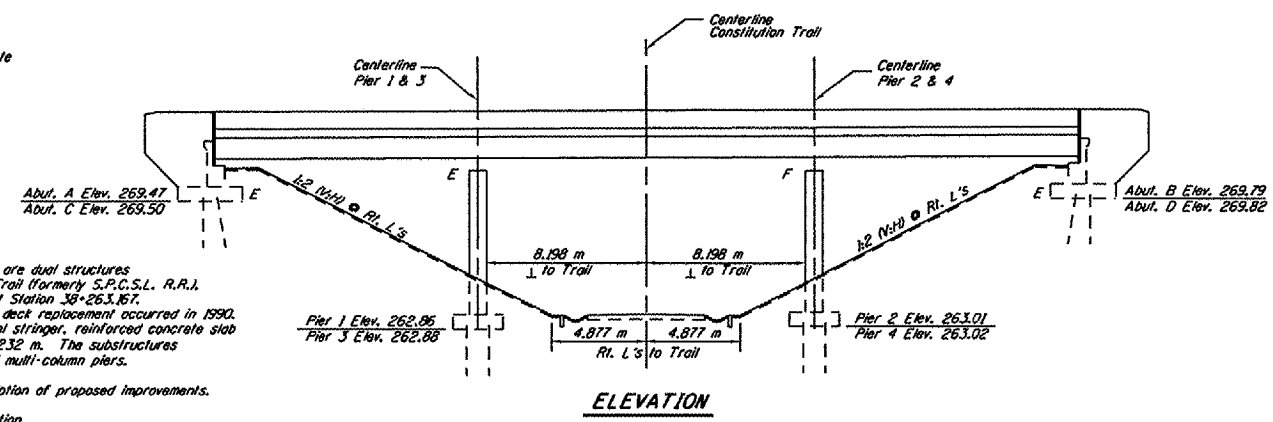


ROUTE NO.	SECTION	COUNTY	SHEET	TOTAL SHEETS
FAI 55		McLEAN	87	144
FED. ROAD DIST. NO. 7		ALLIANCE	FED. AID PROJECT	
• (57-4)RS-3 & 1				

Benchmark: MP-5 brass label set in concrete
Sta. 38+480.200 Elev. 270.21 m



Existing Structures
Structure Number 057-0026 and 057-0027 are dual structures carrying F.A.I. 55 over Constitution Trail (formerly S.P.C.S.L. R.R.). Section (57-4) RS-3 & 1, McLean County of Station 38+263.167. Structures were built in 1962, widening and deck replacement occurred in 1990. The superstructures consist of 3 span, steel stringer, reinforced concrete slab deck with dk. to bk. abutment length of 46.232 m. The substructures consist of concrete pile bent abutments and multi-column piers.

See proposed work on this sheet for description of proposed improvements.
Traffic to be maintained by staged construction.

Proposed Work

1. Expansion joint removal and replacement.
2. Partial deck removal and replacement.
3. Add stud shear connectors at abutment ends of beams.
4. Remove existing expansion bearings of abutments and replace with elastomeric bearings.
5. Structural repair of concrete at abutments.

Item	Unit	Super	Sub.	Total
CONCRETE REMOVAL	CU M	93.6	0.7	93.6
PREFORMED JOINT STRIP SEAL	METER	87.3	--	87.3
CONCRETE SUPERSTRUCTURE	CU M	93.6	--	93.6
BRIDGE DECK GROOVING	SO M	332	--	332
PROTECTIVE COAT	SO M	406	--	406
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 125 MM)	SO M	--	1.0	1.0
FURNISHING AND ERECTING STRUCTURAL STEEL	KG	3730	--	3730
REINFORCEMENT BARS, EPOXY COATED	KG	12870	--	12870
PROTECTIVE SHIELD	SO M	464	--	464
BAR SPLICERS	EACH	186	--	186
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24	--	24
ELASTOMERIC BEARING ASSEMBLY TYPE II	EACH	24	--	24
STUD SHEAR CONNECTORS	EACH	2016	--	2016
JACK AND REMOVE EXISTING BEARINGS	EACH	48	--	48

General Notes

Reinforcement Bars designated (E) shall be Epoxy Coated.
All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type I. Cost included with Furnishing and Erecting Structural Steel.
Field welding of construction accessories will not be permitted to beams or girders.
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.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and all other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of existing concrete. All heavy rust and other highly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.

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

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

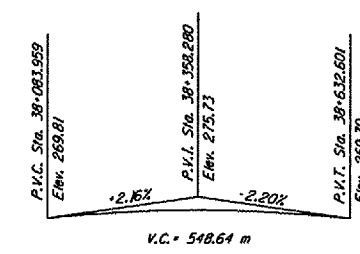
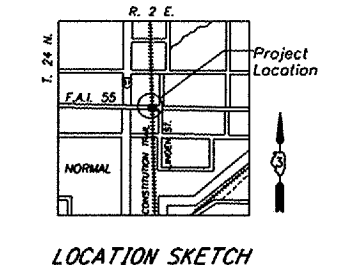
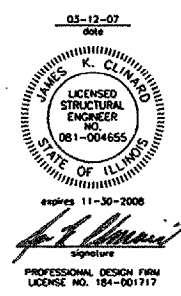
Reinforcement Bars shall conform to the requirements of ASTM A706 Grade 60 (IL. MOD.) See Special Provisions.

DESIGN STRESSES

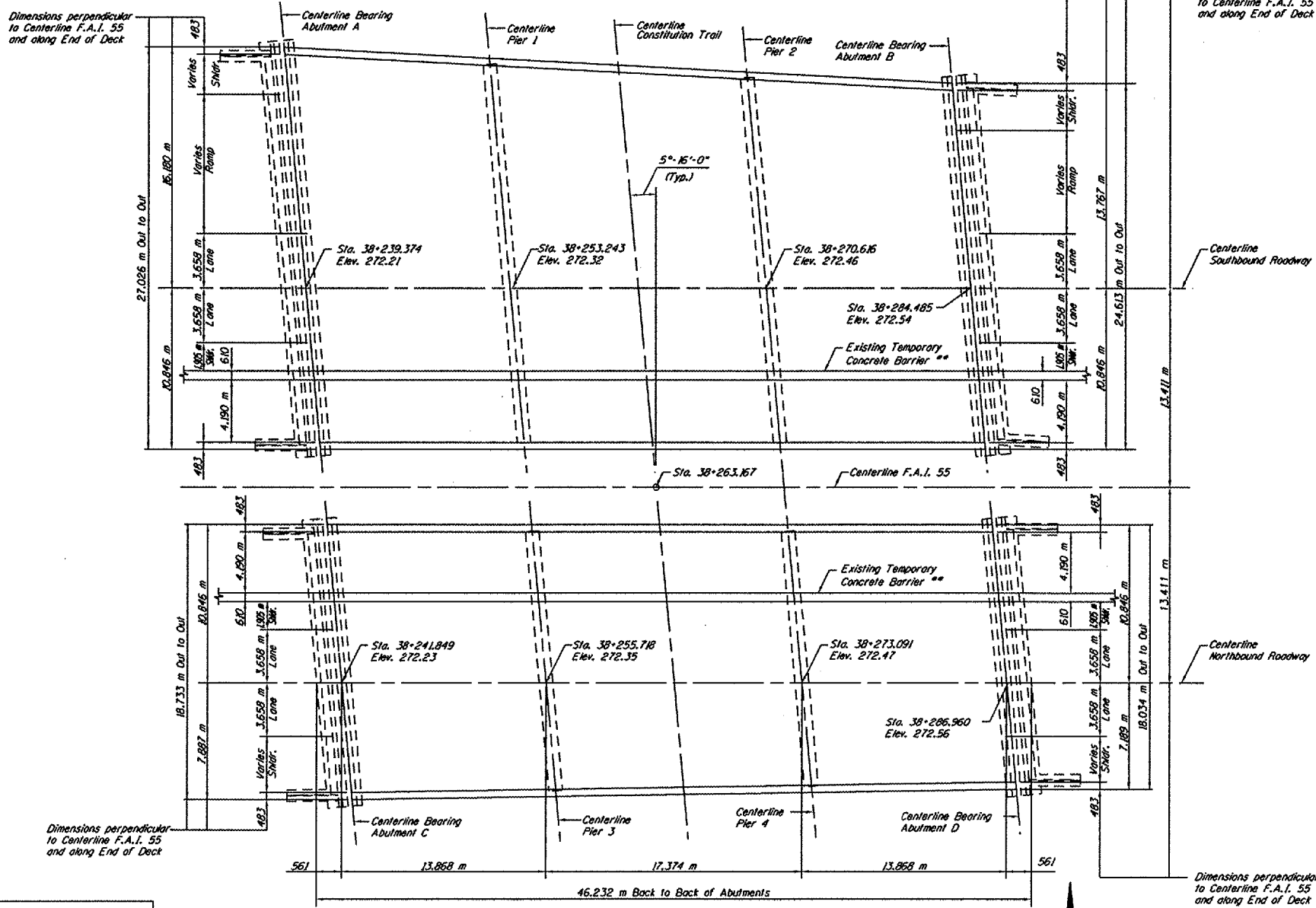
EXISTING CONSTRUCTION
Concrete: f'c = 24 Mpa
Reinforcement: f_s (1962) = 138 Mpa
f_y (1990) = 400 Mpa
Structural Steel: f_s (1962) = 124 Mpa
f_y (1990) = 248 Mpa
Design Loading: MS18 & Alternate
Allow 1.2 kN/m for future wearing surface.
Design Specifications: AASHTO (1983) plus 1984 thru 1988 Interims.

DESIGN STRESSES

(NEW CONSTRUCTION)
Concrete: f'c = 24 Mpa
Reinforcement: f_y = 400 Mpa
Structural Steel: f_y = 248 Mpa
Design Specifications: AASHTO 2002 and Interims



PROFILE GRADE F.A.I. 55



PLAN

DESIGNED	GAE
CHECKED	JDA
DRAWN	NO
CHECKED	GAE

** To be relocated
See sheet 2 of 14

CHAMLIN ASSOCIATES
PERU ILLINOIS MORRIS

GENERAL PLAN AND ELEVATION
F.A.I. 55 OVER CONSTITUTION TRAIL
SECTION (57-4)RS-3 & 1
McLEAN COUNTY
SN 057-0026 (NB)
SN 057-0027 (SB)
STA. 38+263.167