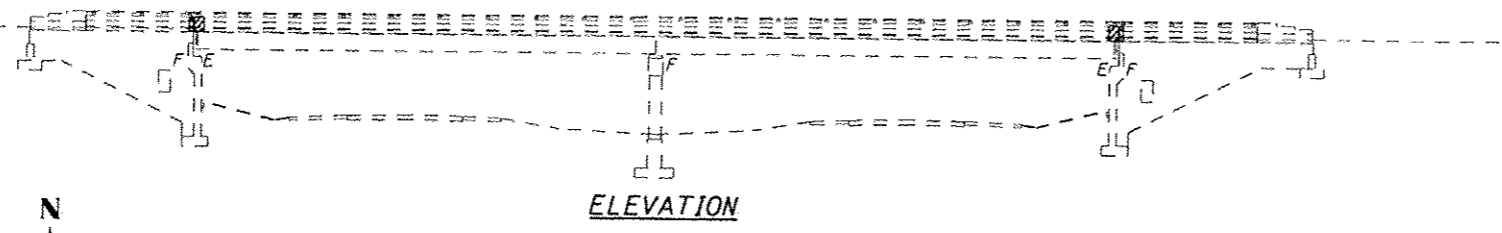


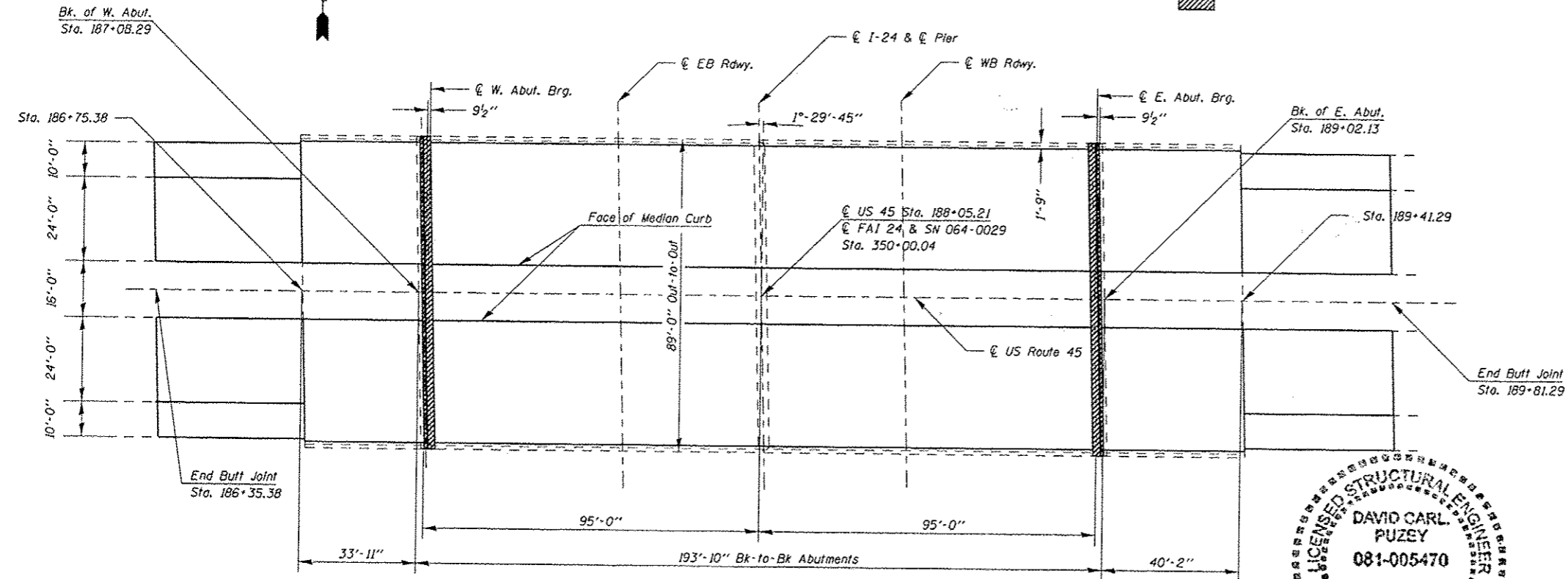
GENERAL NOTES

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with CONCRETE SUPERSTRUCTURES. Reinforcement bars designated (E) shall be epoxy coated. All structural steel shall be AASHTO M 270 Grade 36 unless otherwise noted. No field welding is permitted except as specified in the contract documents. Prior to pouring the new concrete section, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in CONCRETE REMOVAL. Plan dimensions and details relative to 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 the 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 in CONCRETE REMOVAL. 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. The Contractor shall use extreme care during concrete removal so as not to damage the PPC Deck Beam. Existing structural steel shall only be cleaned and painted as required by the Special Provision "Cleaning and Painting Adjacent Areas of Existing Steel Structures." The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts - 3/4" φ, holes - 7/8" φ, unless otherwise noted.



ELEVATION

Limits of Concrete Removal



PLAN



TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Polymerized HMA Surface Course, Mix 'D', N90	Ton	218
HMA Shoulders	Ton	20
Concrete Removal	Cu. Yd.	18.2
Concrete Superstructures	Cu. Yd.	20.9
Furnishing and Erecting Structural Steel	Pound	4830
Reinforcement Bars, Epoxy Coated	Pound	2940
Bar Splicers	Each	48
Preformed Joint Strip Seal	Foot	182
Elastomeric Bearing Assembly, Type I	Each	24
Anchor Bolts, 1"	Each	48
Waterproofing Membrane System	Sq. Yd.	1437
Jack and Remove Existing Bearings	Each	24
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	62
Deck Slab Repair (Partial)	Sq. Yd.	6

DESIGN STRESSES

NEW CONSTRUCTION
FIELD UNITS
 $f'_c = 3500$ psi
 $f_y = 60,000$ psi (reinforcement)

ORIGINAL CONSTRUCTION
FIELD UNITS
Concrete (Cast-in-place)
 $f'_c = 3,500$ psi
 $f'_c = 1,200$ psi (deck)
 $f'_c = 1,400$ psi (substructure)
 $f'_c = 1,000$ psi (with earth pressure)
 $v = 75$ psi (footings)
 $n = 10$

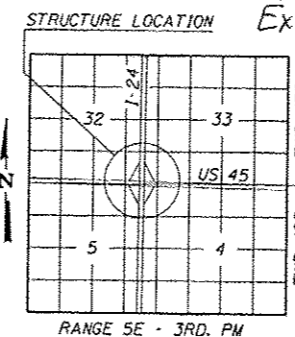
Reinforcing Steel
 $f_s = 20,000$ psi

Structural Steel
 $f_s = 20,000$ psi (A36)

Live Loading HS20-44
Dead Loading = 25 psf

SCOPE OF WORK

- 1) Setup TC&P 701423 with barrier for Stage I work in the EB & WB driving lanes of US 45.
- 2) Perform joint reconstruction, bearing replacement, deck repair, waterproofing membrane system, and HMA overlay.
- 3) Adjust TC&P 701423 for Stage II with barrier work in the EB & WB passing lanes of US 45 as well as the turn lanes onto I-24 ramps.
- 4) Perform joint reconstruction, bearing replacement, deck repair, waterproofing membrane system, and HMA overlay.
- 5) Remove TC&P 701423.



LOCATION SKETCH

GENERAL PLAN
US 45 OVER FAI 24
SECTION D9 CM BRIDGE REPAIR 2014-1
MASSAC COUNTY
STRUCTURE NUMBER 064-0029