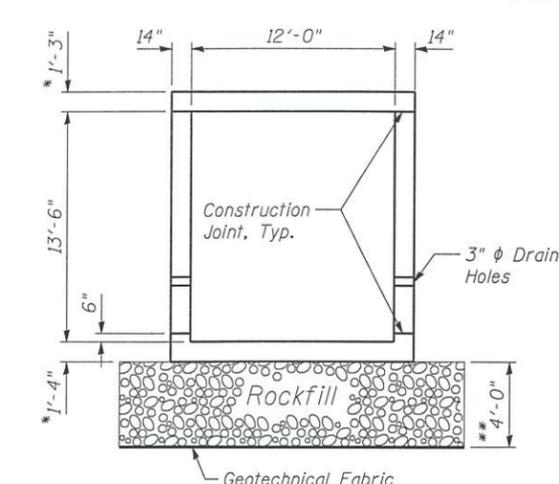
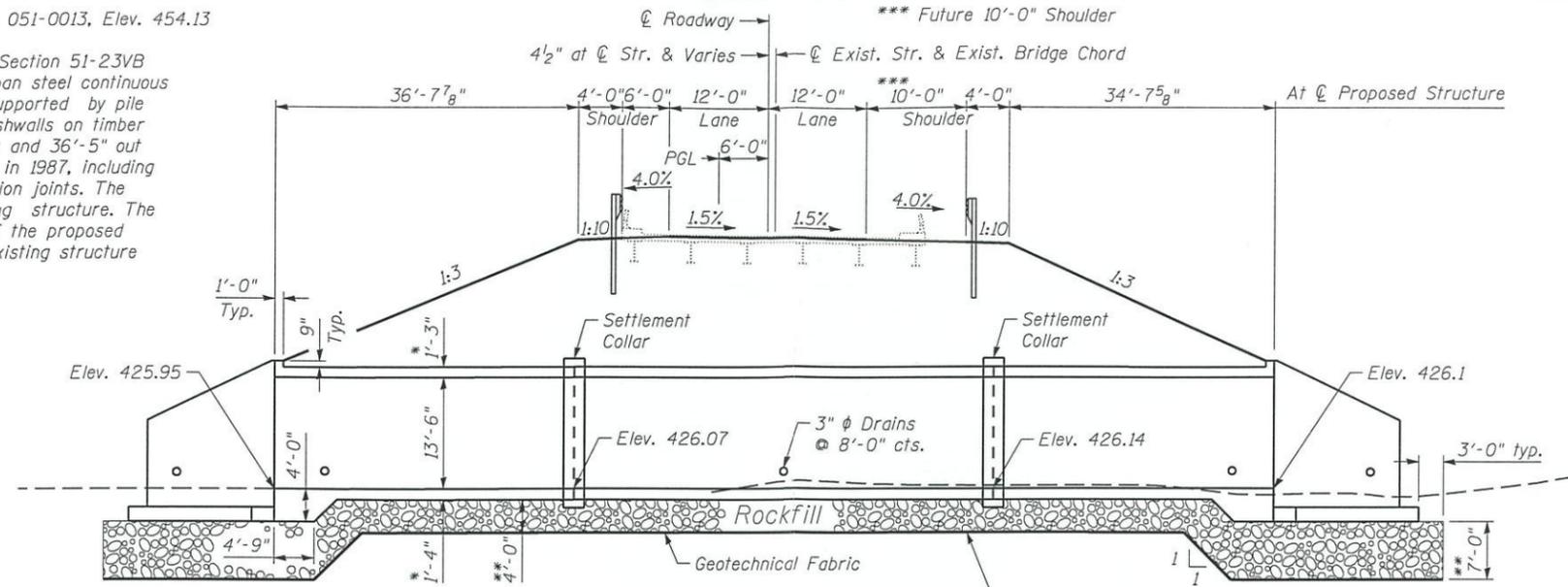


Benchmark: B.M. 802, Chiseled square on S.W. Corner S.N. 051-0013, Elev. 454.13

Existing structure: SN 051-0013 built in 1959 as FAI 64, Section 51-23VB at Sta. 583+60. The existing structure consists of a 3-span steel continuous multi-stringer superstructure with a CIP concrete deck supported by pile bent spill thru abutments and multi-column piers with crashwalls on timber pile supported footings. 151'-0" back-to-back of abutments and 36'-5" out to out of deck. Repairs were performed on the structure in 1987, including deck patching, rail retrofitting and replacement of expansion joints. The Proposed Structure is to be constructed under the existing structure. The structure will remain open to traffic during construction of the proposed culvert. Traffic will be detoured during demolition of the existing structure and placement of the proposed embankment.

No salvage.

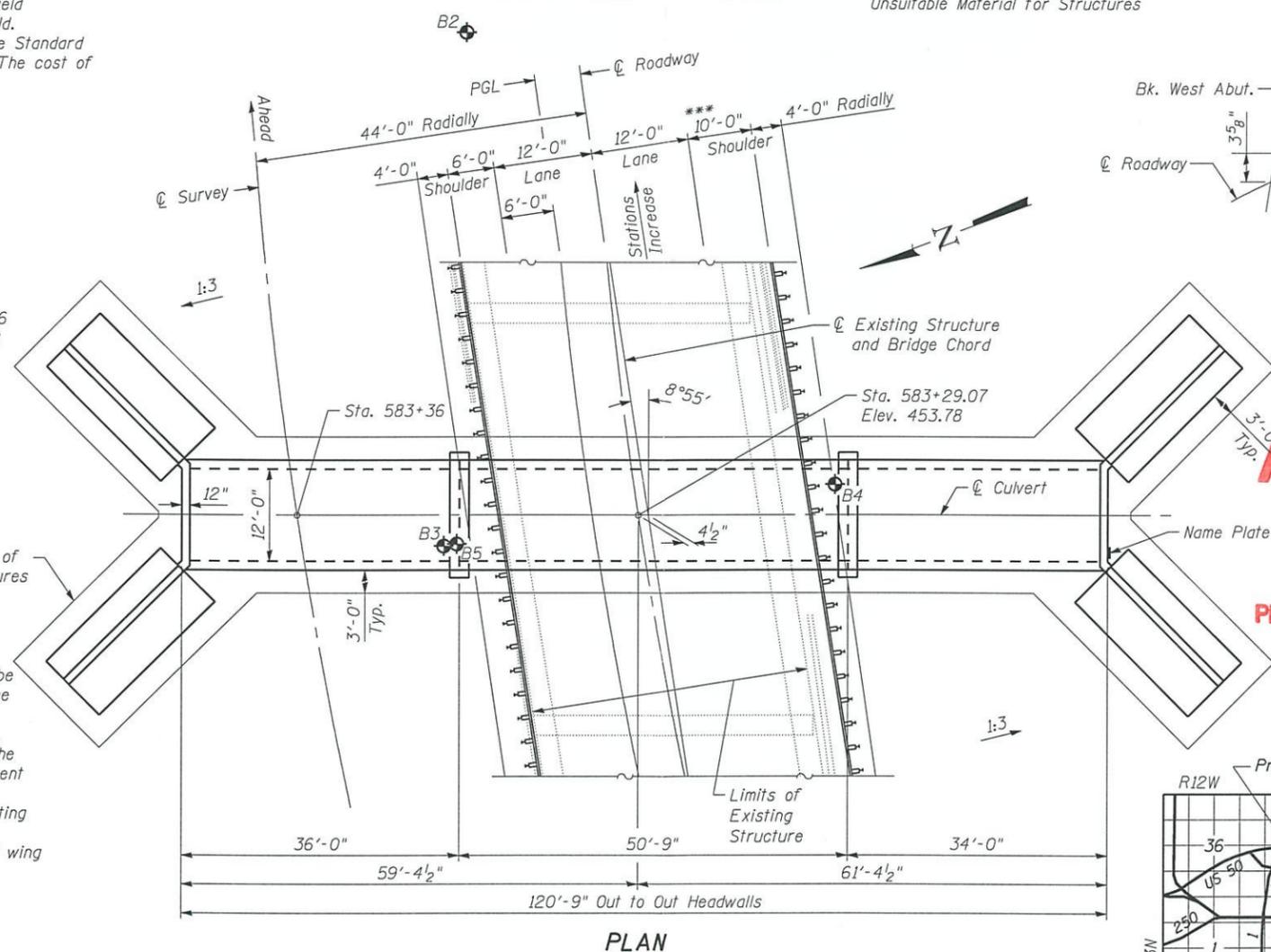
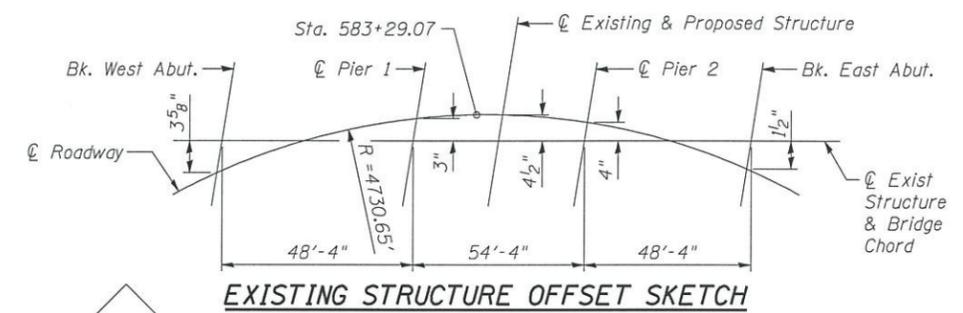
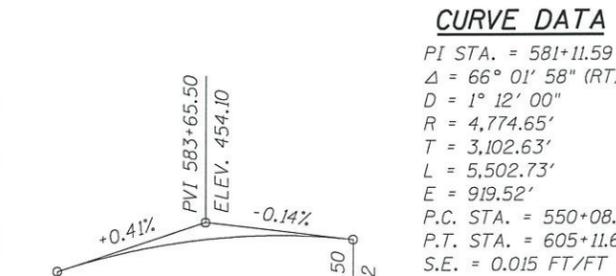
Precast alternate is not allowed.



The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.

The Rockfill shall be capped with 6 in. of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for Rockfill.

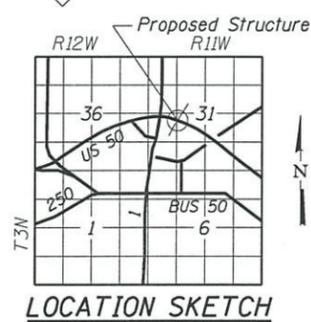
SECTION THRU BARREL
 * Slab thickness subject to refinement during final design.
 ** Rockfill - Replacement, 4'-0" depth below barrel, 7'-0" depth below wingwalls



Sequence of Construction
 The proposed culvert and a limited portion of the embankment will be constructed in Stage 1, with the existing overhead structure in-place and open to traffic. Once the road is closed to traffic, the contractor will be allowed 30 days to remove the existing structure, complete the embankment and to re-open the road to traffic. If the Engineer closes the road to traffic before Stage 1 of the embankment is complete the contractor will be allowed an additional 15 days to complete Stage 1 of the embankment along with Stage 2. The existing piers shall be removed down to the top of the existing crash walls prior to completing Stage 2 of the embankment. Existing abutment wing walls and back walls shall be removed down to the abutment seats. Abutment caps shall be left in place. Existing concrete slopewall shall be removed.

Monitoring of the Existing Structure
 The Engineer will establish and monitor Control Points on each end of each pier during Stage 1 construction of the embankment. The existing structure will be closed to traffic in the event of any settlement or movement of the existing piers exceeding 1 inch in any direction.

APPROVED
 MAR 14 2018
 AS A BASIS FOR
 PREPARATION OF DETAILED PLANS



HIGHWAY CLASSIFICATION
 F.A.P. Rte. 327 (IL Rte. 50)
 Functional Class: Other Principal Arterial
 ADT: 5600 (2019); 7000 (2039)
 ADTT: 952 (2019); 1190 (2039)
 DHV: 770 (2039)
 Design Speed: 55 m.p.h.
 Posted Speed: 55 m.p.h.
 2 -Way Traffic
 Directional Distribution: 51:49

LOADING HL-93
 Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
 2017 AASHTO LRFD
 Bridge Design Specifications, 8th Edition

DESIGN STRESSES
FIELD UNITS
 f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)

GENERAL PLAN AND ELEVATION
U.S. ROUTE 50 OVER ABANDONED RAILROAD
F.A.P. ROUTE 327 SECTION (51-23VB)B-1
LAWRENCE COUNTY
STATION 583+29.07
STRUCTURE NO. 051-8634

CEC Civil and Structural Engineering	Cummins Engineering Corporation	JOB = 2480.2	DESIGNED - AAN	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.P. RTE. = 327	SECTION = (51-23VB)B-1	COUNTY = LAWRENCE	TOTAL SHEETS =	SHEET NO. =
		FILE = 0518634-74113-01-TS&L.dgn	CHECKED - MDC	REVISED -						
		DATE = 2/28/2018	DRAWN - SJS	REVISED -						
			CHECKED - MDC	REVISED -						