Existing Structure: S.N. 006-0110, originally built in 1936 as S.A. Route 21. In 1970 the deck was replaced and an interior beam line was added. The existing structure consists of 8 spans - 3 span continuous steel, 4 span continuous steel, and 1 span simple span. The deck to back wall width is 480'-6" and the out to out bridge width is 35'-9". Structure to be removed and replaced.

Traffic to be maintained utilizing stage construction.

Notes:
- No deck drains will be permitted in the span over tracks or within 10' of crossings of a railroad parallel line.
- Existing abandoned pumphouse to be removed by others.

Top of Rail CSX Railroad

**DESIGN SPECIFICATIONS**

- 2010 AASHTO LRFD Bridge Design Specifications
- Design Spectral Acceleration at 0.2 sec. (S  ) = 0.090g
- Design Loadings HL-93
- Two-way traffic  Directional Dist. 50:50
- FHWA Bridge Design Specifications
- Functional Class: Other Principal Arterial (Urban)

**SEISMIC DATA**

- Seismic Performance Zone (SPZ) = 1
- Soil Site Class = B

**LOADING HL-93**

Allow 50% for future loading.

**FIELD UNITS**

- f = 50,000 psi (M270 Grade 50W)
- y = 65,000 psi (reinforcement)
- y = 50,000 psi (M70 Grade 50M)

**DESIGN STRESSES**

- Design Spectral Acceleration at 0.2 sec. (S  ) = 0.090g
- Soil Site Class = B

**HIGHWAY CLASSIFICATION**

- F.A.P. Rte. 698 - Ill. Rte. 89
- F.A.P. Rte. 698 - Sec. IVBR

**DESIGN STRESSES**

- Mile Post 104.34 (CSX R.R.)
- State of Illinois Route 89 Over CSX Railroad
- Bureau County
- Location: Range 11E - 4th. PM

**PROFILE GRADE**

- Existing Ground
- Elevation 455.01
- Estimated Top of Rock

**CROSS SECTION**

- Stage I Removal = 20'-0"
- Stage II Removal = 16'-9"
- Stage III Const.

**ELEVATION**

- Stage Const. Line
- User Name
- Federal Aid Project
- Salvage: Existing aluminum rail to be removed from west side of bridge and attached to the new west parapet.

**LOCATION SKETCH**

- Cross Section
- Elevation
- Plan
- Profile Grade
- Section A-A
- Type 6 Rail Attachment Detail
- Profile Grade
- Top of Rail CSX Railroad

**GENERAL PLAN & ELEVATION**

- Illinois Route 89 Over CSX Railroad
- Bureau County
- Station 32+30.00
- Structure No. 006-0164

**REVISED**

- Bureau County
- Stage I Removal = 20'-0"
- Stage II Removal = 16'-9"
- Stage III Const.
details
illinois route 89 over
csx railroad
f.a.p. rte. 698 - sec. ivbr
bureau county
station 32+32.00
structure no. 006-0164

temporary MSE wall detail

existing ground line

stage I pier removal

stage II pier removal

stage I traffic

stage II traffic

stage II removal

stage I removal

pier sketch

section thru abutments

approach slab

structure excavation

drainage aggregate

porous granular

pipe drain

french drains

geocomposite

backfill

porous granular

structure excavation

embankment fill material shall be placed under existing structure and across entire embankment width to an elevation where compaction is no longer feasible due to lack of sufficient vertical clearance. elevation to be determined in final design.

limits of reinforced soil mass

Select Fill

siltstone

siltstone

w36 i-beam, full length

stage I pier removal

stage II pier removal

stage I construction

stage II construction

stage I traffic

stage II traffic

1'-3'' piles

steel H

w36 (comp.

full length)

 existing ground line

Embankment fill material shall be placed under existing structure and across entire embankment width to an elevation where compaction is no longer feasible due to lack of sufficient vertical clearance. Elevation to be determined in final design.

limits of reinforced soil mass

Select Fill

siltstone

siltstone

w36 i-beam, full length

stage I pier removal

stage II pier removal

stage I construction

stage II construction

stage I traffic

stage II traffic

1'-3'' piles

steel H

w36 (comp.

full length)