Bench Mark: Chiseled "□" top of N.E. wingwall S.N. 097-0031, Elev. 385.88

Existing Structure: S.N. 097-0031 built in 1932 as S.B.I. Route 139, Section 101-B, at Section 17+14.21
Super and substructure widened in 1978 as F.A. Route 857, Sec. 101BR-1. Structure consists of 2 spans of PPC deck beams (Spans 1 & 2) & 15 spans of reinf. conc. deck on steel beams (spans 3 thru 17) supported by closed (W) & spill thru pile bent (E) abutments & solid pile (1 & 2) & open conc. pile bent (3 thru 16) piers. 878'-4¾" bk.-bk. abuts. 33'-0" O.-O. deck. The existing structure shall be removed and replaced with the proposed bridge (S.N. 097-0071) and this proposed culvert (S.N. 097-2014). Traffic shall be maintained on a temporary run-around on the north side of the existing bridge during construction.

No salvage. Cost of removal of the existing structure shall be paid for with the proposed work for SN 097-0071 elsewhere in this contract.

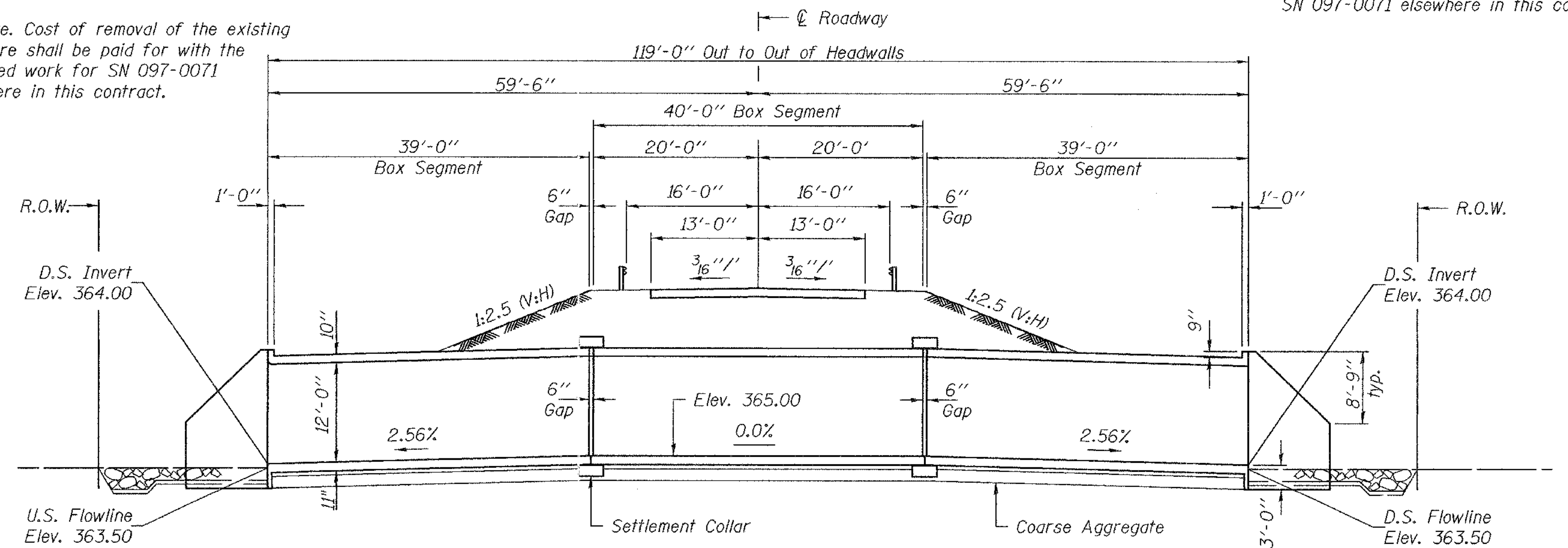
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Note: Elevations of the box segments are the elevations at time of construction. Settlement of the box segments is anticipated during and after the placement of the embankment.
For boring data, see structure plans for SN 097-0071 elsewhere in this contract.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 857	101BR-6	WHITE	100	47
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
6 SHEETS

Contract #98960



LONGITUDINAL SECTION
(Dimensions are @ Rt. L's to ℄ Roadway)

▼ H.W. Elev. 375.70

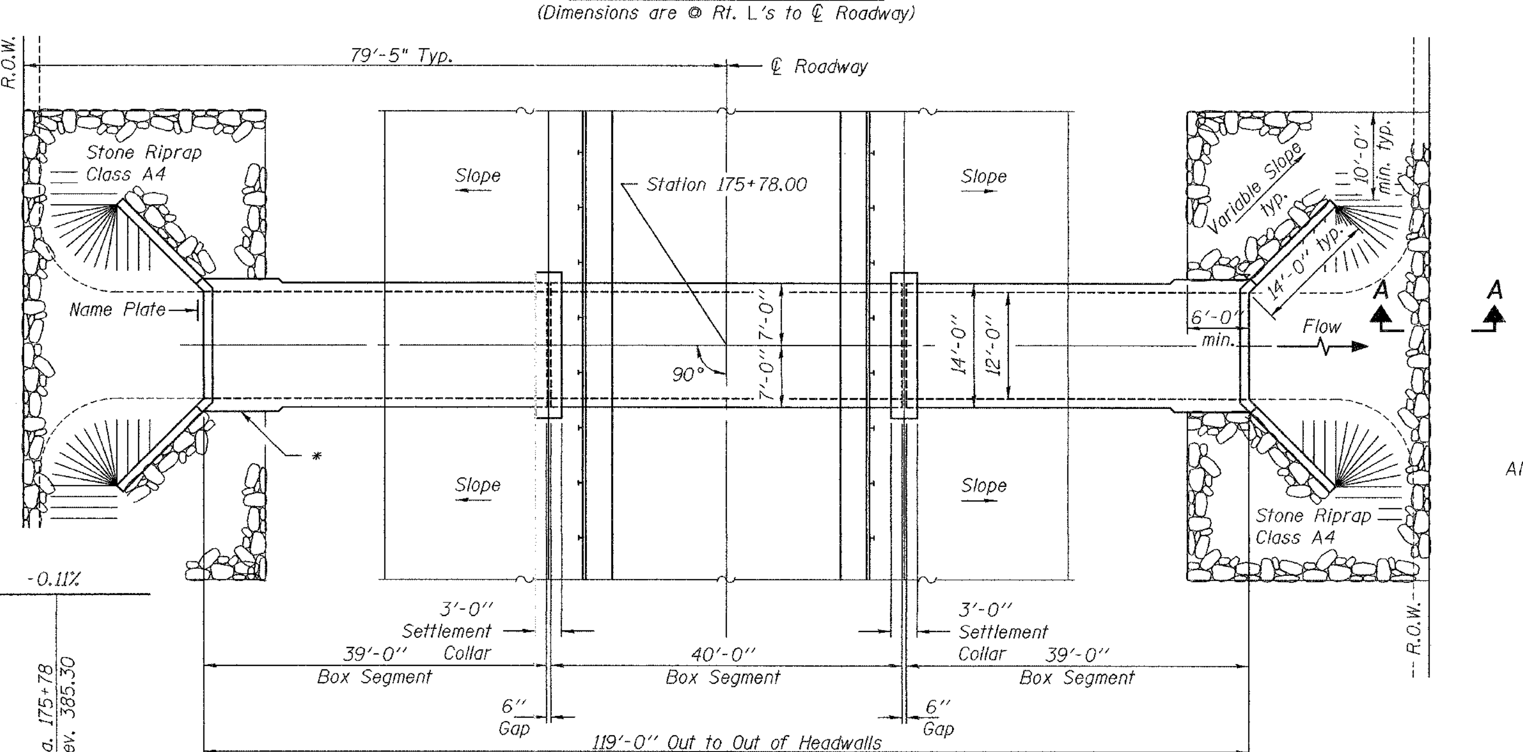
GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions
For backfilling and embankment, see Standard Specifications.
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Box Culverts	Cu. Yd.	268.7
Rock Fill	Cu. Yd.	157
Name Plates	Each	1
Reinforcement Bars	Pound	61960
Stone Riprap, Class A4	Sq. Yd.	282
Filter Fabric	Sq. Yd.	282

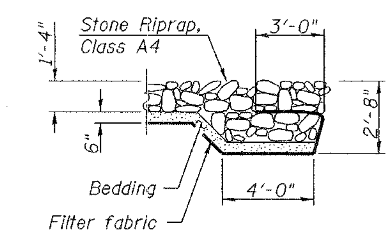
INDEX OF SHEETS



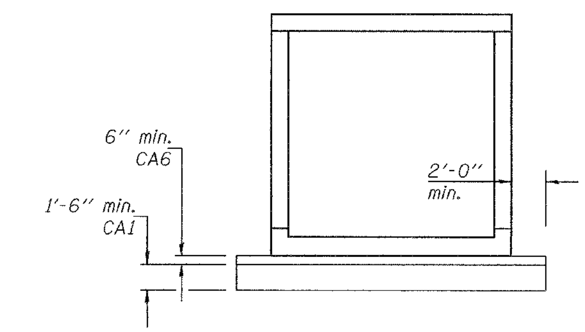
PLAN

PROFILE GRADE
(along ℄ of roadway)

*Note: Soil/riprap to be placed to the barrel at all four corners.



SECTION A-A



SECTION THRU BARREL

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

STATION 175+78.00
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 857
SEC 101BR-6
LOADING HS20
STR. NO. 097-2014

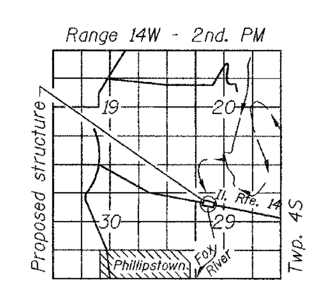
NAME PLATE
See Std. 515001

Notes: The Contractor shall remove a minimum depth of 2'-0" of the existing soil within the footprint of the culvert plus an additional 2'-0" on each side of of the culvert along the CL Rdwy direction. Cost of removal of soil is included in the cost of Rock Fill. The Contractor shall place the following coarse aggregate layers:
Place and compact coarse aggregate CA1 to a minimum depth of 1'-6".
On top of the base CA1, place and compact coarse aggregate CA6 to a minimum depth of 6". Cost is included as Rock Fill.
See Special Provision.

WATERWAY INFORMATION

Drainage Area = 29400.0 sq. mi.
P. Low Grade Elev. 385.1 ft. @ Sta. 169+50
E. Low Grade Elev. 385.1 ft. @ Sta. 169+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design		8284	8765	3789	375.7	0.2	0.3	375.9	376.0
Base	100	9381	9460	4109	376.6	0.3	0.3	376.9	376.9
Overtopping									
Max. Calc.	500	10424	10021	4370	377.3	0.3	0.4	377.6	377.7



LOCATION SKETCH

DESIGNED -
CHECKED -
DRAWN -
CHECKED - AJB/FT

December 4, 2006
EXAMINED
ENGINEER OF BRIDGE DESIGN
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
LICENSED STRUCTURAL ENGINEER
081-004625
SPRINGFIELD
EXPIRES 11-30-2008

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 14 OVER FOX RIVER
F.A.P. ROUTE 857 - SECTION 101BR-6
WHITE COUNTY
STATION 175+78.00
STRUCTURE NO. 097-2014

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