

Benchmark: MSI Control Point A103 - Sta. 87+53.72, 28.0' RT, Set 1/2" rebar 40' north of 2nd power pole north of Allen Road/Alta Lane intersection and 30' east of existing centerline of Allen Road. Elev. 753.22

Existing Structure: None.

Traffic Control: Road Closure, traffic will be detoured via Alta Lane and existing Alta Lane alignment.

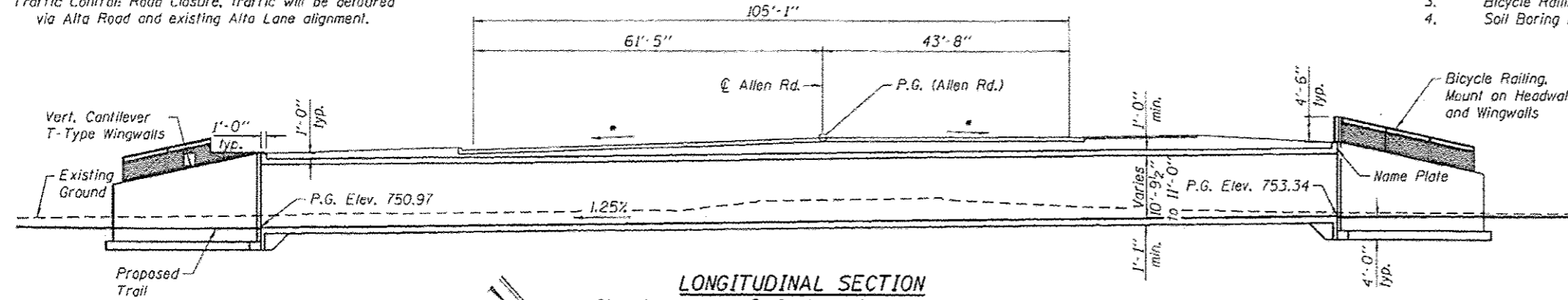
* Cross slope varies per intersection geometry.

INDEX OF SHEETS

1. General Plan
2. Box Culvert Details
3. Bicycle Railing
4. Soil Boring Profile

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	562
Structure Excavation	Cu. Yd.	854
Concrete Structures	Cu. Yd.	120.3
Reinforcement Bars, Epoxy Coated	Pound	95720
Bicycle Railing	Foot	138
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	400.3
Membrane Waterproofing for Culverts	Sq. Yd.	419
Geocomposite Wall Drain	Sq. Yd.	604
Pipe Underdrains for Structures 4"	Foot	544



LONGITUDINAL SECTION

Dimensions are along ϕ of culvert unless otherwise noted
Note: Precast Alternate is not allowed

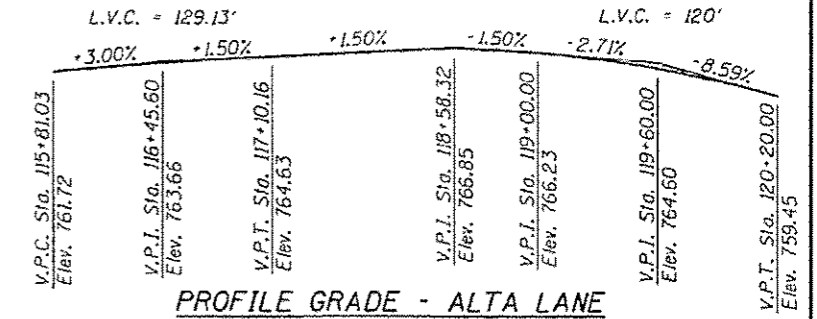
DESIGN SPECIFICATIONS
2012 LRFD Bridge Design Specifications w/2013 Interims

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

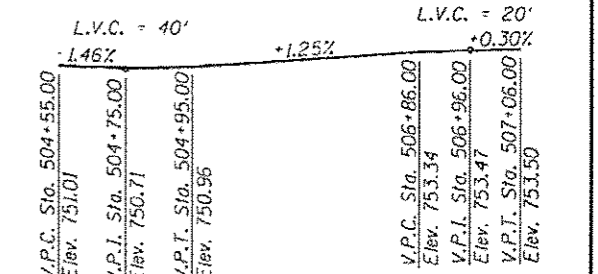
DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)



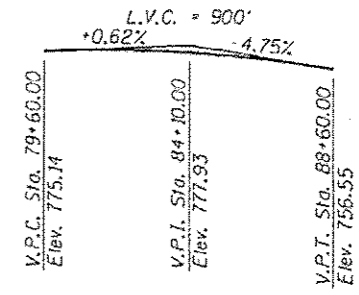
PROFILE GRADE - ALTA LANE

(along ϕ roadway)



PROFILE GRADE - ROCK ISLAND TRAIL

(along ϕ Rock Island Trail)

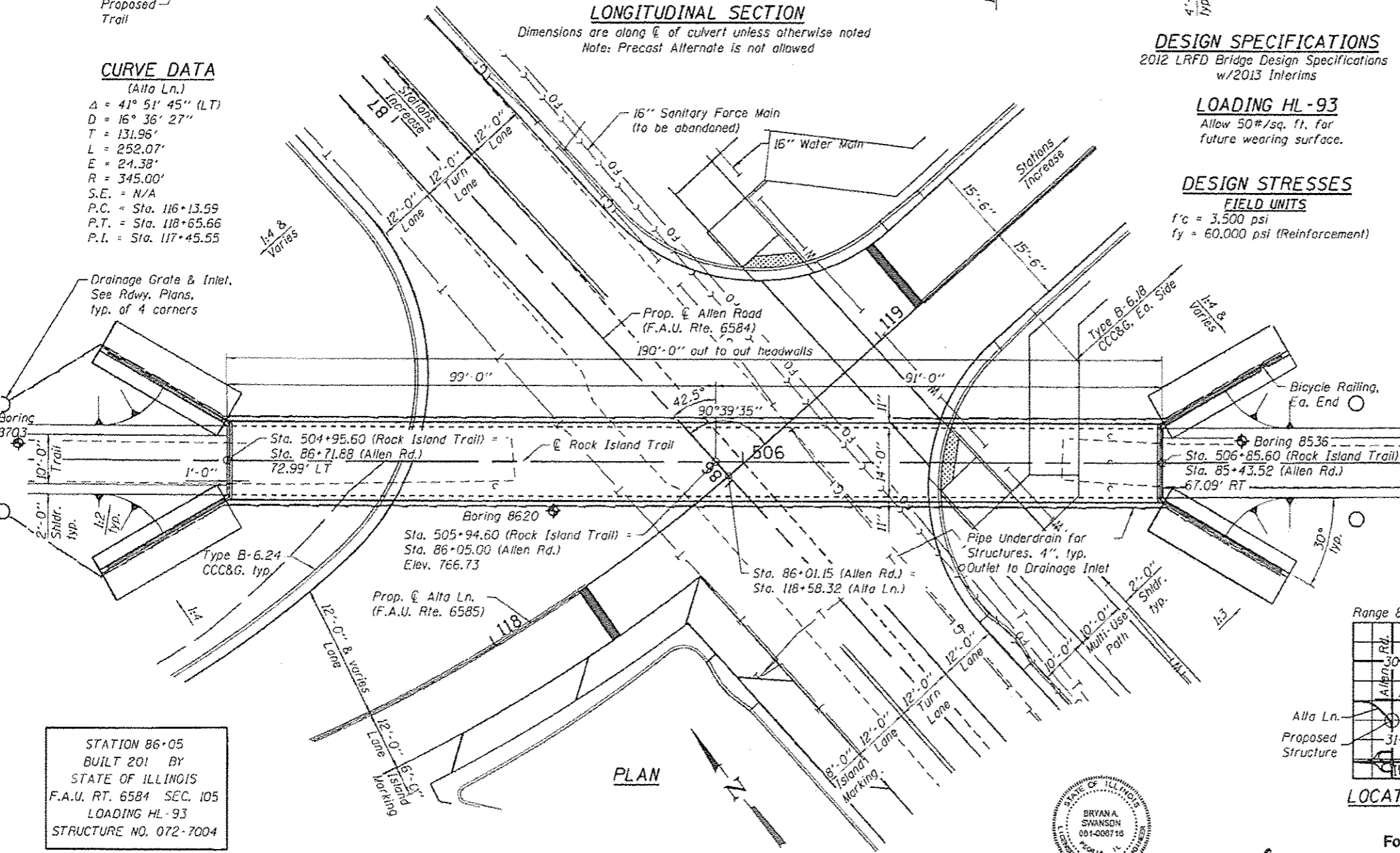


PROFILE GRADE - ALLEN ROAD

(along ϕ roadway)

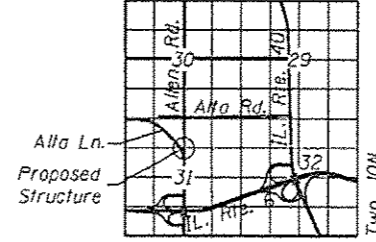
CURVE DATA

(Alta Ln.)
 $\Delta = 41^\circ 51' 45''$ (LT)
 $D = 16^\circ 36' 27''$
 $T = 131.96'$
 $L = 252.07'$
 $E = 24.38'$
 $R = 345.00'$
 $S.E. = N/A$
 $P.C. = \text{Sta. } 116+13.59$
 $P.T. = \text{Sta. } 118+65.66$
 $P.L. = \text{Sta. } 117+45.55$



PLAN

Range 8E 4th P.M.



LOCATION SKETCH

APPROVED
For Structural Adequacy Only

Bryan A. Swanson
Date Signed: 1/24/2014
Exp. Date: 11/30/2014
Debra L. ...
Engineer of Bridges & Structures

STATION 86+05
BUILT 201 BY
STATE OF ILLINOIS
F.A.U. RT. 6584 SEC. 105
LOADING HL-93
STRUCTURE NO. 072-7004

NAME PLATE
See Std. 515001