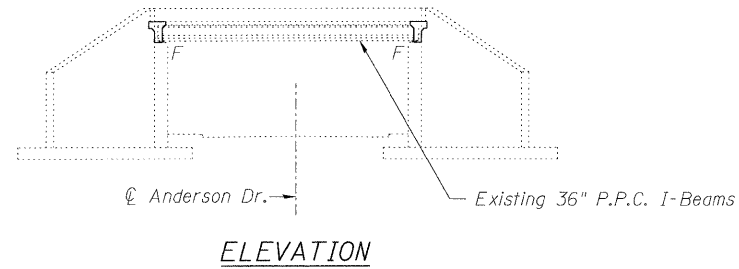


Existing Structure: S.N. 016-0372 built in 1965 as F.A Route 61, Section 531-3HB-1 at Station 351+81.46. Structure consists of single span precast prestressed concrete beam bridge on closed abutments with 52'-2" back-to-back abutments, 122'-0" out-to-out deck width. In 1991 a new overlay was added, and expansion joints, longitudinal joint, and barriers were reconstructed. Traffic is to be maintained utilizing stage construction.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

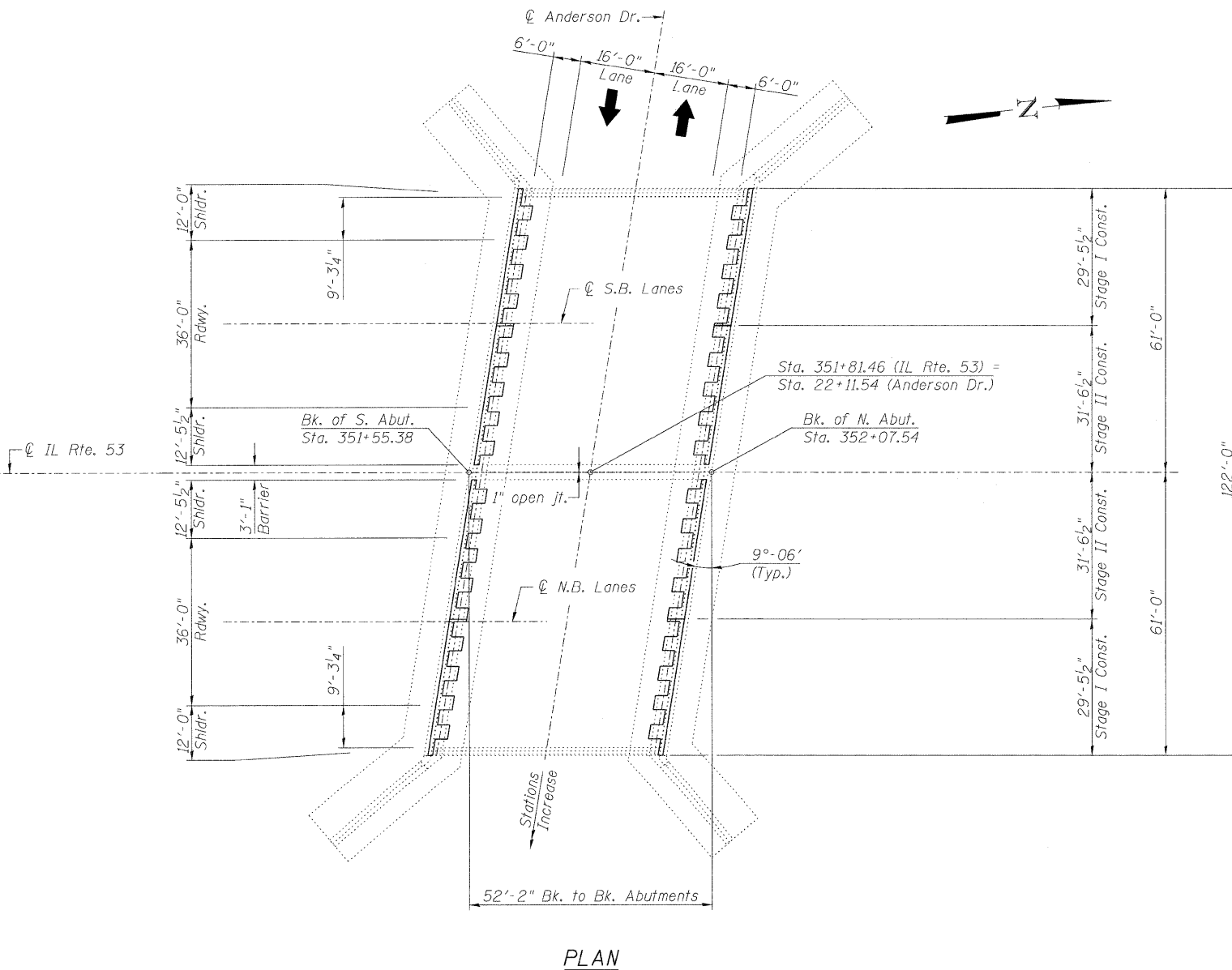
SCOPE OF WORK

1. Remove existing concrete slab at abutments.
2. Repair deck slab.
3. Repair substructure concrete.
4. Replace concrete slab and provide concrete end diaphragm at abutments.



INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes and Total Bill of Material
3. Temporary Concrete Barrier for Stage Construction
4. Deck Slab Repair
5. Abutment Concrete Repair
6. Concrete Removal Details
7. Abutment Modifications - 1
8. Abutment Modifications - 2
9. Bar Splicer Assembly and Mechanical Splicer Details



DESIGN STRESSES

FIELD UNITS (New Const.)

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

FIELD UNITS (Existing)

$f_c = 1,400$ psi (Superstructure)
 $f_c = 1,000$ psi (Substructure)
 $f_s = 20,000$ psi (Reinforcement and Structural Steel)

PRECAST PRESTRESSED UNITS (Existing)

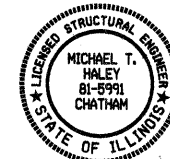
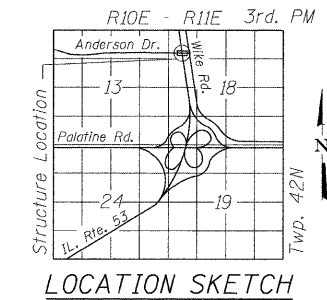
$f'_c = 5,000$ psi
 $f'_{cl} = 4,000$ psi
 $f'_s = 248,000$ psi (Strands)
 $f_{si} = 173,600$ psi (Strands)

DESIGN SPECIFICATIONS

(New Construction)
2002 AASHTO "Standard Specifications for Highway Bridges" 17th Edition

LOADING HS-20

(Existing Construction)



Michael J. Haley 2/8/10
Michael T. Haley Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2010

GENERAL PLAN AND ELEVATION
IL ROUTE 53 OVER ANDERSON DR.
F.A.I. 290-SEC (531-3.1,0305-302K)RS-5
COOK COUNTY
STATION 351+81.46
STRUCTURE NO. 016-0372

	SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	9 SHEETS	290	(531-3.1,0305-302K)RS-5	COOK	314	100
Designed By: ADB Date: 12/2009		Checked By: MTH File: 016-0372.sgn		CONTRACT NO. 60138		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT						