

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

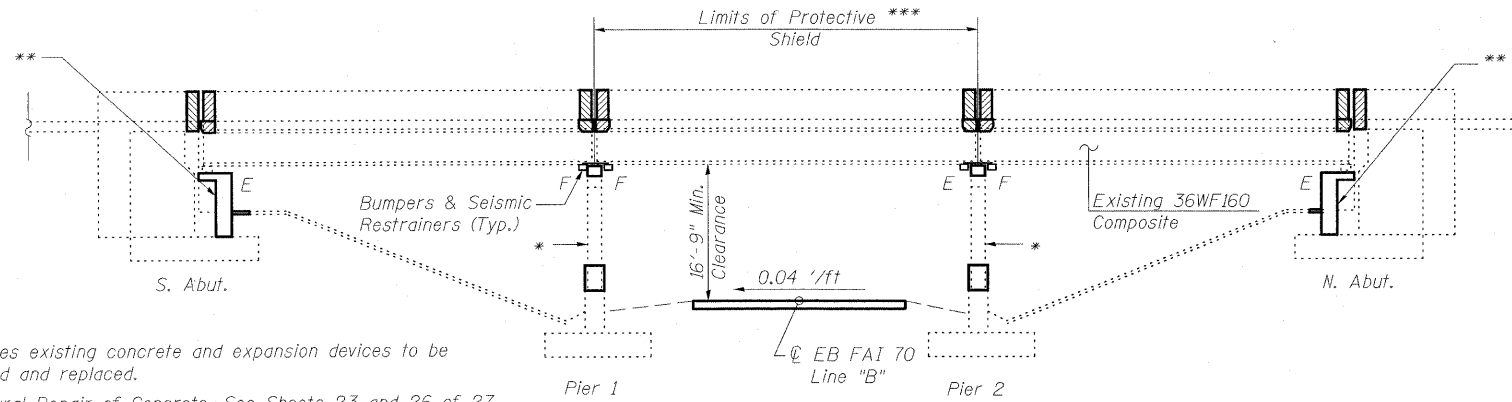
Bench Mark: Chiseled "□" Top of parapet wall at Southeast Corner of I-57 SB (Level 2) Bridge Elev. 557.27

Existing Structure: #025-0001 Constructed in 1960 & reconstructed in 1992 is 185'-7³/₄" BK to BK of abutments & 35'-8" out to out. The structure consists of three simple spans supported on hammer head piers and spill through abutments. The superstructure is a reinforced concrete deck that is composite with 36" deep steel wide flange beams. One lane of traffic shall be maintained using staged construction.

No salvage.

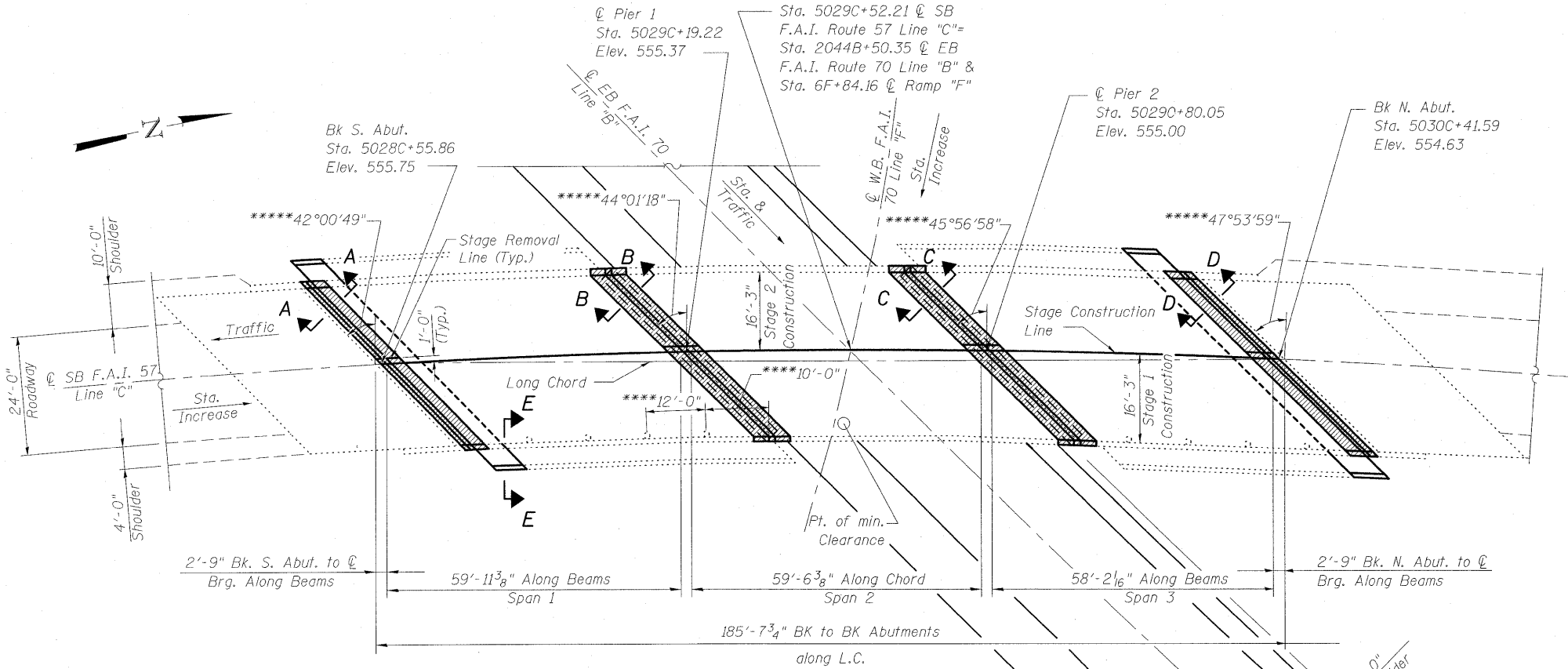
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ELEVATION

- ▨ Indicates existing concrete and expansion devices to be removed and replaced.
- * Structural Repair of Concrete. See Sheets 23 and 26 of 27 for Limits of concrete repair.
- ** Limits of Unsound Concrete Removal and cleaning of existing rebars. See Sheet 15 and 18 of 27 for limits of repair.
- *** See sheet 5 of 27 for transverse limits.



PLAN

For sections A-A, B-B, C-C, D-D and E-E See Sheet 3 of 27.

DESIGN SPECIFICATIONS

- 2002 AASHTO Standard Specifications for Highway Bridges
- 1995 F.H.W.A. Seismic Retrofitting Manual for Highway Bridges
- 2006 F.H.W.A. Seismic Retrofitting Manual for Highway Structures Part 1-Bridges (Reference Only)

SEISMIC DATA

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.075 g
Site Coefficient = 1.0

DESIGN STRESSES

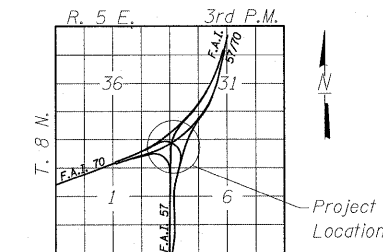
- New Construction
- f'c = 3,500 psi
 - fy = 60,000 psi (Reinforcement)
 - fy = 50,000 psi (Structural Steel)
 - (AASHTO M270 Grade 50)
- Existing Structure
- f'c = 3500 psi
 - fy = 40,000 psi (Sub) (Reinforcement)
 - fy = 33,000 psi (Structural Steel)
 - fy = 60,000 psi (Super) (Reinforcement)

LOADING HS20-44 & ALT.

No Future Wearing Surface

**** Existing floor drains @ ±12'-0" on center and 10'-0" clr. from all substructure elements. No drains in Span 2.

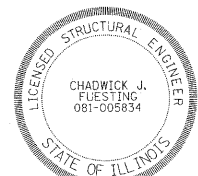
**** Skew angle measured to tangent at intersection of roadway & substructure.



LOCATION SKETCH

GENERAL PLAN
SOUTHBOUND F.A.I. ROUTE 57
OVER EASTBOUND
F.A.I. ROUTE 57-70
STATION 5029C+52.21
STRUCTURE NO. 025-0001

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



EXP. 11-30-2010
Chadwick J. Fleesting 4/29/2010

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

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ENGINEER OF BRIDGES AND STRUCTURES

Illinois Design Firm Number 184.001670



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SHEET NO. 1 27 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)-2	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1355
	SN 025-0001		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					