

CONTRACT NO. 60B86			
F.A.I. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2006-032 BY WILL	505	260
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

**DESIGN SPECIFICATIONS:**

AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002

**DESIGN LOADING:**

HS20-44 and Alt. Military Loading  
Future Wearing Surface = 50 psf

**DESIGN STRESSES:**

**New Construction:**  
Concrete -  $f'_c = 3,500$  psi  
Reinforcement -  $f_y = 60,000$  psi  
Structural Steel -  $f_y = 50,000$  psi (M270, Gr 50)

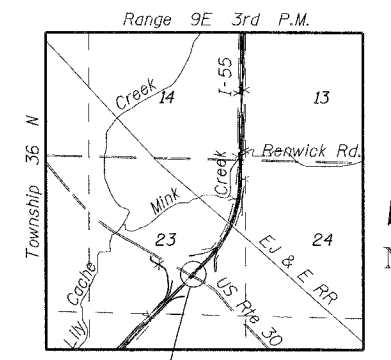
**Existing Construction:**

**1955 Construction (Original):**  
 $f_s$  Structural Steel = 18,000 psi  
 $f_s$  Reinforcing Steel = 20,000 psi  
 $f_c$  Concrete = 800 psi (Abutments)  
 $f_c$  Concrete = 1200 psi (Piers)

**1977 Construction (Widening):**  
 $f_s$  Structural Steel = 20,000 psi  
 $f_s$  Reinforcing Steel = 20,000 psi  
 $f_c$  Concrete = 1400 psi (Substructure)

**SEISMIC DATA:**

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.04g  
Site Coefficient (S) = 1.0



**LOCATION MAP**

**Notes:**

- For PGL of US 30 and I-55, See Sht. SC-2.
- Remove and reinstall Name Plates located on NW Wingwall of SN 099-0016 and SE Wingwall of SN 099-0017. Cost Included with Name Plates, 2.0 Each. See Sht. SC-14 for reinstalled locations.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
FAI ROUTE 55  
US 30 (PLAINFIELD ROAD) TO LILY CACHE SLOUGH  
SB & NB I-55 OVER US RTE. 30, S.N. 099-0016 & 099-0017  
STA. 587+80.82, SECTION 2006-032 BY WILL COUNTY

**GENERAL PLAN & ELEVATION**

SCALE: DRAWN BY PA  
DATE 07/21/06 CHECKED BY MJK

**TENG**  
TENGG & ASSOCIATES, INC.  
ENGINEERS/ARCHITECTS/PLANNERS  
CHICAGO, ILLINOIS

**BENCHMARKS:**

BM 3191 Square cut on northwest edge of 2 foot diameter concrete light pole base #MC2 on south side Route 30 and about 400 feet northwest of I-55. El. 607.08

**EXISTING STRUCTURES:**

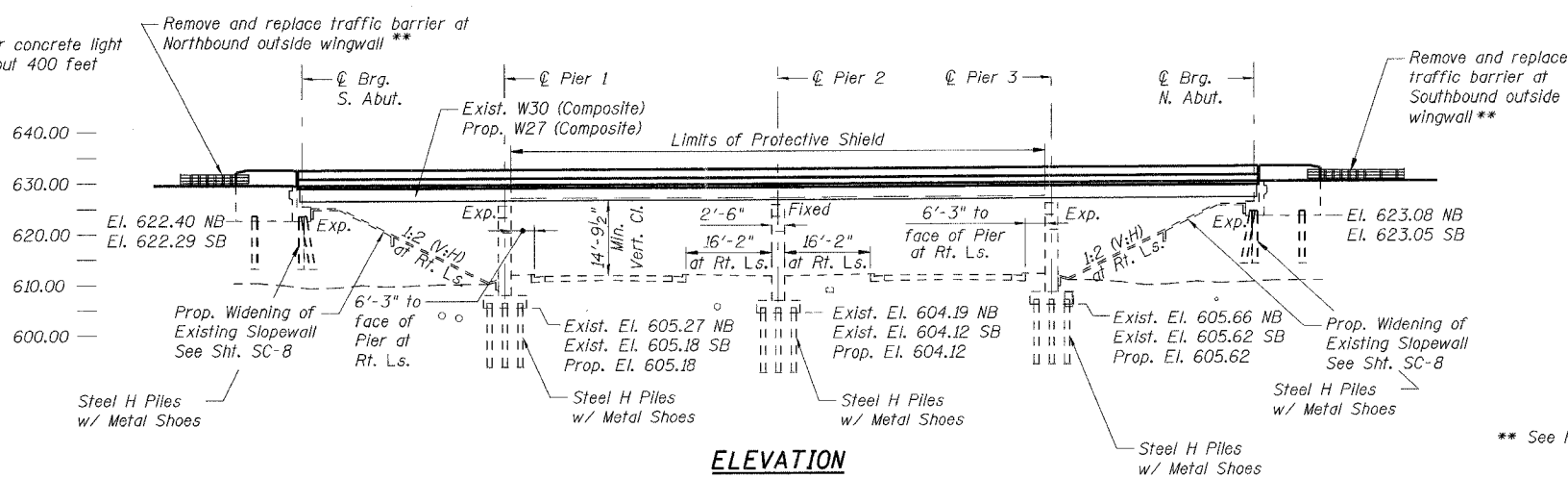
Existing Bridges No. 099-0016 Southbound Bridge at Sta. 587+71.51 (S. Abut.) and No. 099-0017 Northbound Bridge at Sta. 587+90.13 (N. Abut.) F.A.I.-55 were built in 1955 as F.A. Route 34 - Project 1N-187(9), Section 27HB, widened in 1977 as U.S.30 - Project I-55-6 I-55-6(123)246 Section (99-182)R-5. In 1994, the concrete deck was scarified 1/4" and resurfaced and the superstructure was rehabilitated as F.A.I. Section 27HB-BR(89). They are 4-span continuous non-composite wide flange beam bridges with a 6 3/4" concrete deck slab and 2" overlay, 41'-10" out-to-out of structure and 191'-0" Back-to-Back Abutments.

**SALVAGE:**

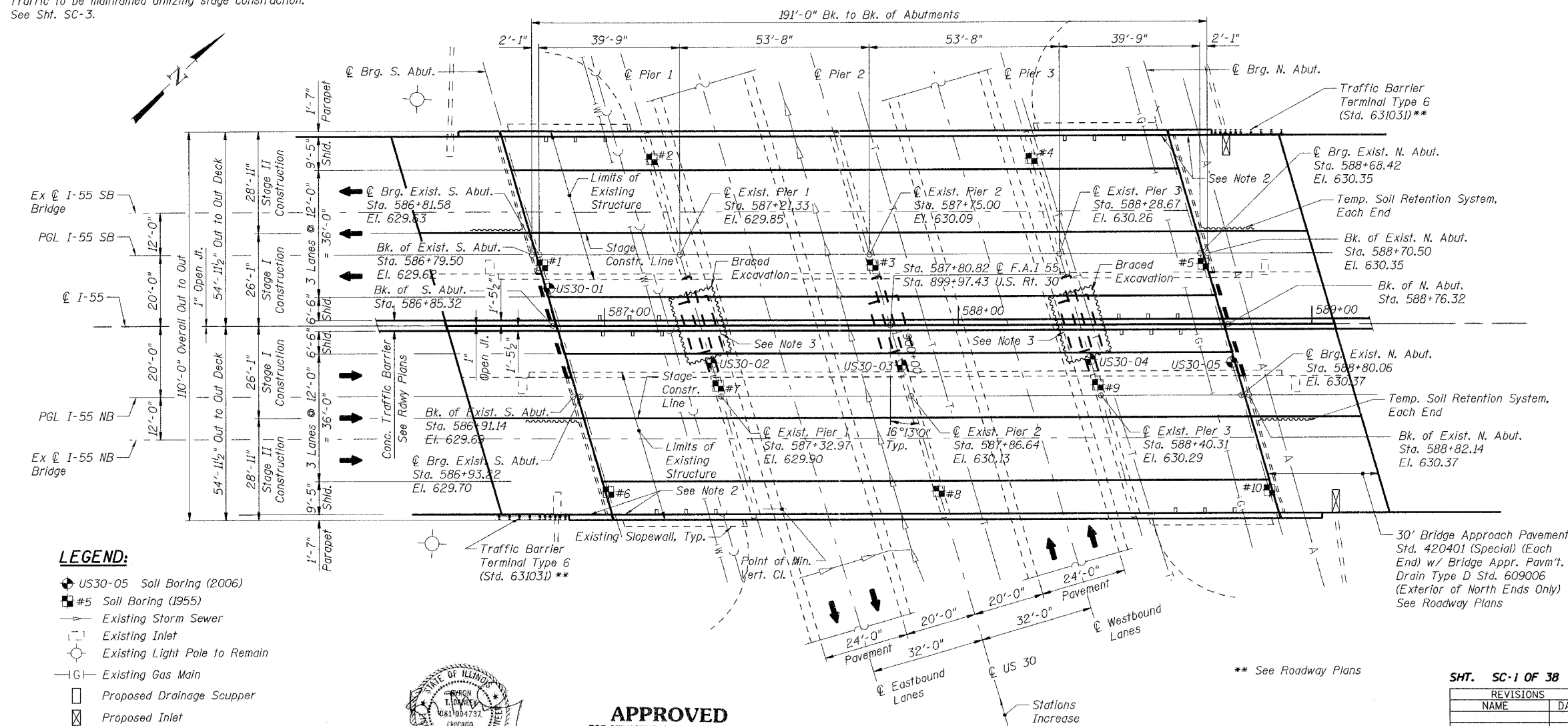
None.

**STAGING:**

Traffic to be maintained utilizing stage construction. See Sht. SC-3.



**ELEVATION**



**PLAN**

**LEGEND:**

- US30-05 Soil Boring (2006)
- #5 Soil Boring (1955)
- Existing Storm Sewer
- Existing Inlet
- Existing Light Pole to Remain
- Existing Gas Main
- Proposed Drainage Scupper
- Proposed Inlet
- Existing Aerial
- Existing Telephone Utility
- Existing Sanitary Sewer
- Existing Water Main



**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES

DATE 6/22/06  
EXP. 11/30/06

\*\* See Roadway Plans

SHT. SC-1 OF 38

REVISIONS	
NAME	DATE

**MORCOM, N.V., INC.**  
CONSULTING ENGINEERS  
CHICAGO, ILLINOIS

PLOT DATE = 08/07/06  
 PLOT SCALE = AS SHOWN  
 USER NAME = MUSER