

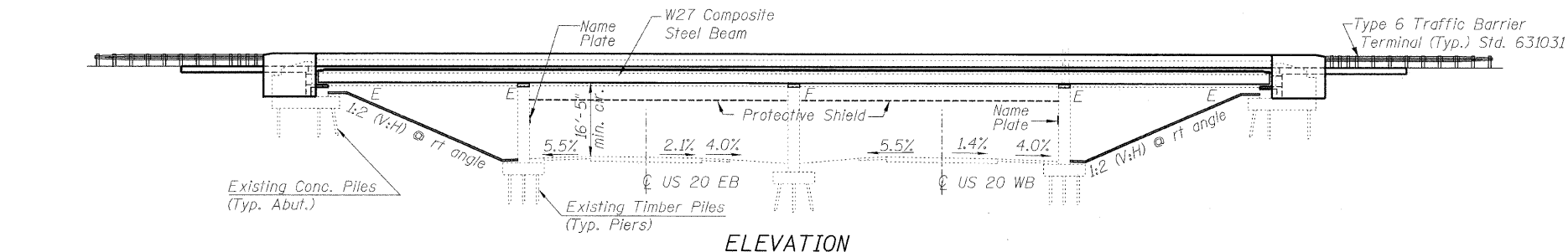
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

|                       |          |                    |              |           |                          |
|-----------------------|----------|--------------------|--------------|-----------|--------------------------|
| F.A.P. RTE.           | SECTION  | COUNTY             | TOTAL SHEETS | SHEET NO. | SHEET NO. 1<br>27 SHEETS |
| 301                   | 1-HBR-2F | WINNEBAGO          | 29           | 3         |                          |
| FED. ROAD DIST. NO. 7 | ILLINOIS | CONTRACT NO. 64F62 |              |           |                          |

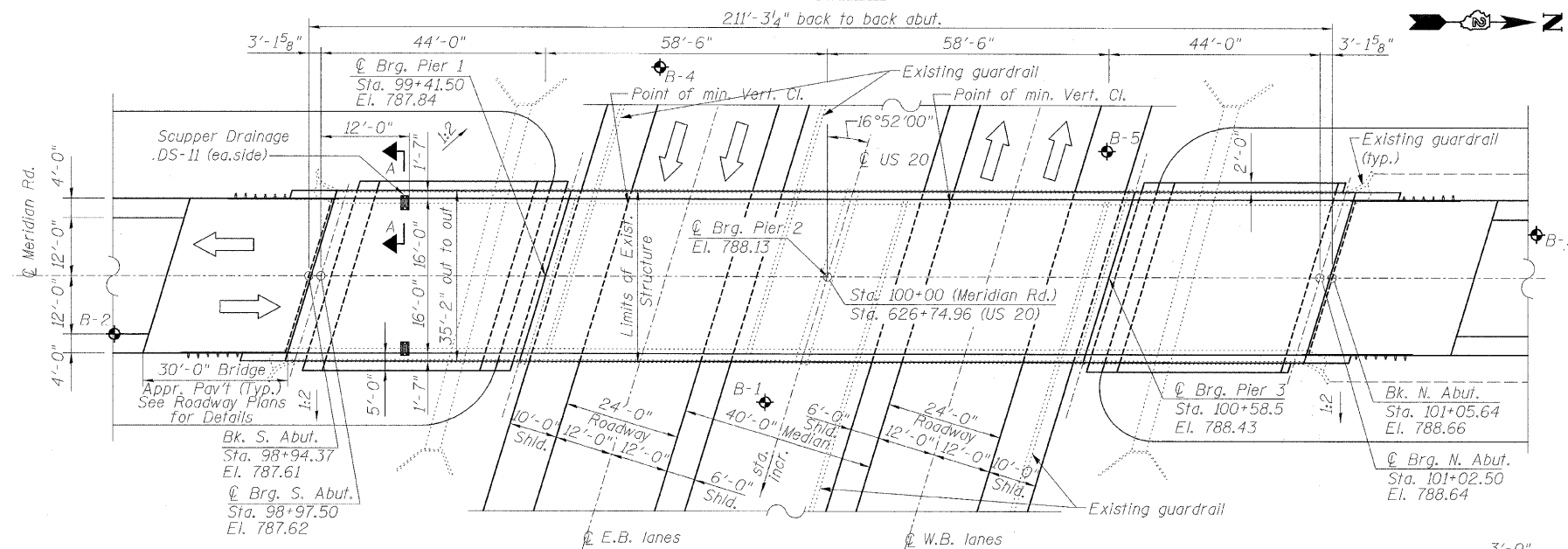
Bench Mark: #413 STA. 98+81.96, 21.53' RT EL. 787.14 Chiseled square in top of wingwall

Existing Structure: S.N. 101-0096 built 1964 as F.A. 194, Section 1HB-2. Structure consists of four span continuous WF beams and reinforced concrete deck supported by closed abutments and hammerhead piers. 209'-2" back-to-back abutments. 35'-8" out-to-out deck. Superstructure to be removed and replaced using bridge closure.

No Salvage.



ELEVATION



PLAN

STATION 626+74.96  
RE-BUILT 20... BY  
STATE OF ILLINOIS  
F.A.P. 301 - SEC. 1-HBR-2  
LOADING HL93  
STR. NO. 101-0096

NAME PLATE

See Std. 515001  
Place Name Plate next to existing Name Plates.

**DESIGN SPECIFICATIONS**  
2007 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS  
4th Edition with 2008 Interims for Super Structures  
1995 FHWA Seismic Retrofit Manual

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION)

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)  
 $f_y = 50,000$  psi (AASHTO M270 GRADE 50)

FIELD UNITS (EXISTING CONSTRUCTION)

$f_c = 1,000$  psi Substructure (with earth pressure)  
 $f_c = 1,400$  psi Substructure (without earth pressure)  
 $f_s = 20,000$  psi (reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1  
Bedrock Acceleration Coefficient (A) = 0.04  
Site Coefficient (S) = 1.2

LOADING HL-93

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

APPROVED

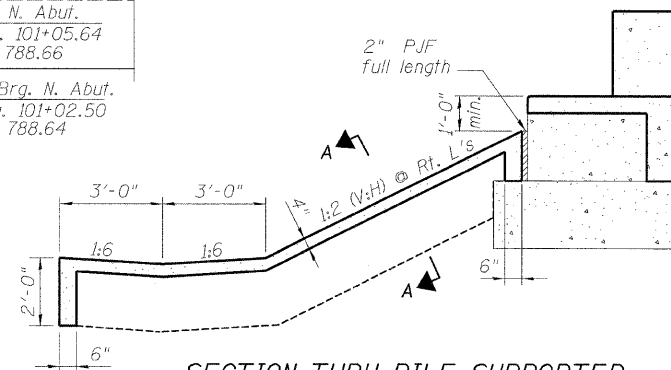
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (TS)  
ENGINEER OF BRIDGES AND STRUCTURES

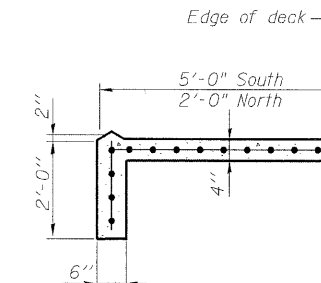


Licensed Structural Engineer  
(Illinois Structural Engineer's Seal)

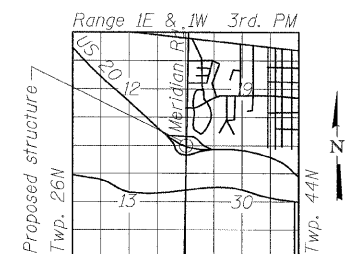
MY LICENSE EXPIRES 11/30/2010



SECTION THRU PILE SUPPORTED  
STUB ABUTMENT  
(Horiz. dim. @ Rt. L's)



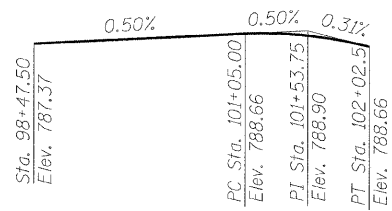
SECTION A-A



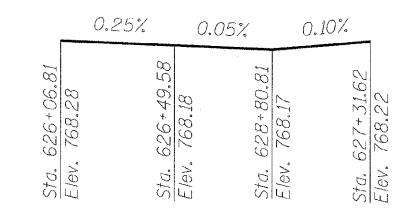
LOCATION SKETCH

◆ Indicates Soil Boring

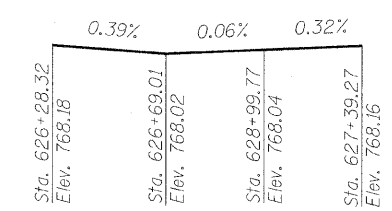
| No. | Station     | Offset |
|-----|-------------|--------|
| B-1 | Sta. 99+87  | 26'R   |
| B-2 | Sta. 98+52  | 12'R   |
| B-3 | Sta. 101+50 | 9'L    |
| B-4 | Sta. 99+65  | 49'L   |
| B-5 | Sta. 100+58 | 26'L   |



PROFILE GRADE  
(along Meridian Rd.)  
LVC-97.50



US 20 WB PAVEMENT ELEV.  
US 20 Crown @



US 20 EB PAVEMENT ELEV.  
US 20 Crown @

|          |           |
|----------|-----------|
| DESIGNED | GUN / OAO |
| CHECKED  | FCO       |
| DRAWN    | TCS / GUN |
| CHECKED  | FCO       |



55 East Jackson Blvd.  
Suite 200  
Chicago, IL 60604  
312-366-8721

PROJECT NUMBER  
2945

GENERAL PLAN & ELEVATION  
MERIDIAN ROAD OVER US 20  
F.A.P. 301 (US 20) - SEC. 1-HBR-2F  
WINNEBAGO COUNTY  
STATION 100+00  
STRUCTURE NO. 101-0096