

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

LOADING

Wind Loading on Noise Wall = 35 psf

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 36,000$ psi (M270 Grade 36)

GENERAL NOTES

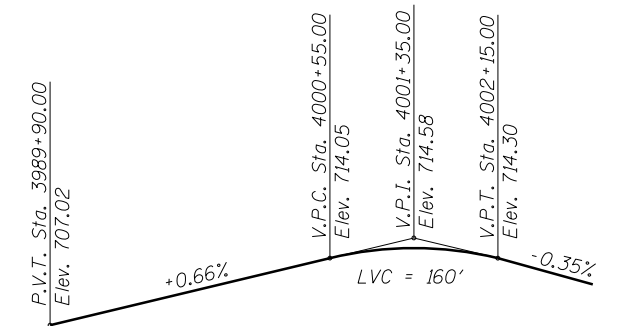
1. Reinforcement bars designated (E) shall be epoxy coated.
2. The Contractor is responsible for the design and performance of the lagging using no less than 3" nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.
3. Concrete sealer shall be applied to exposed surfaces of the front, top, and back face of wall.

HORIZONTAL CURVE DATA

Proposed Curve PRIL59-5
 PI Sta. = 3999+75.03
 $\Delta = 1^\circ 46' 45''$ (RT)
 $D = 0^\circ 48' 53''$
 $R = 7,033.45'$
 $T = 109.21'$
 $L = 218.40'$
 $E = 0.85'$
 P.C. Sta. = 3998+65.83
 P.T. Sta. = 4000+84.23

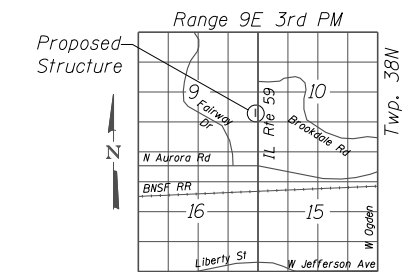
TOTAL BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|--|---------|--------|
| Structure Excavation | Cu. Yd. | 164 |
| Concrete Structures | Cu. Yd. | 60.8 |
| Concrete Sealer | Sq. Ft. | 1,844 |
| Stud Shear Connectors | Each | 197 |
| Reinforcement Bars, Epoxy Coated | Pound | 10,490 |
| Geocomposite Wall Drain | Sq. Yd. | 68 |
| Untreated Timber Lagging | Sq. Ft. | 732 |
| Furnishing Soldier Piles (W Section) | Foot | 990 |
| Pipe Underdrains for Structures, 4" | Foot | 282 |
| Drilling and Setting Soldier Piles (In Soil) | Cu. Ft. | 4,635 |



PROFILE GRADE

(along edge of pavement proposed IL Route 59)



LOCATION SKETCH

FILE NAME = ...60R31-W049-002-GPE2.dgn



Zroka Engineering, P.C.
 4216 North Hermitage
 Chicago, IL 60613

| | |
|-------------------|-----------|
| DESIGNED - JLA | REVISED - |
| CHECKED - LAS | REVISED - |
| DRAWN - SAW | REVISED - |
| CHECKED - JLA | REVISED - |
| SCALE - NONE | |
| DATE - 12/14/2012 | |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES & BILL OF MATERIAL
 STA. 3998 + 14.82 TO STA. 4000 + 80.06 SN 022-W049**

SHEET NO. SB-2 OF SB-10 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------------|--------|--------------|-----------|
| 338 | (112 & 113) WRS-6 | DUPAGE | 734 | 500 |
| CONTRACT NO. 60R31 | | | | |

ILLINOIS FED. AID PROJECT