

**Bench Mark**  
Cut Square in SW corner of parapet on existing bridge over Spring Brook Creek Elev. 690.92

**Existing Structure**  
None

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

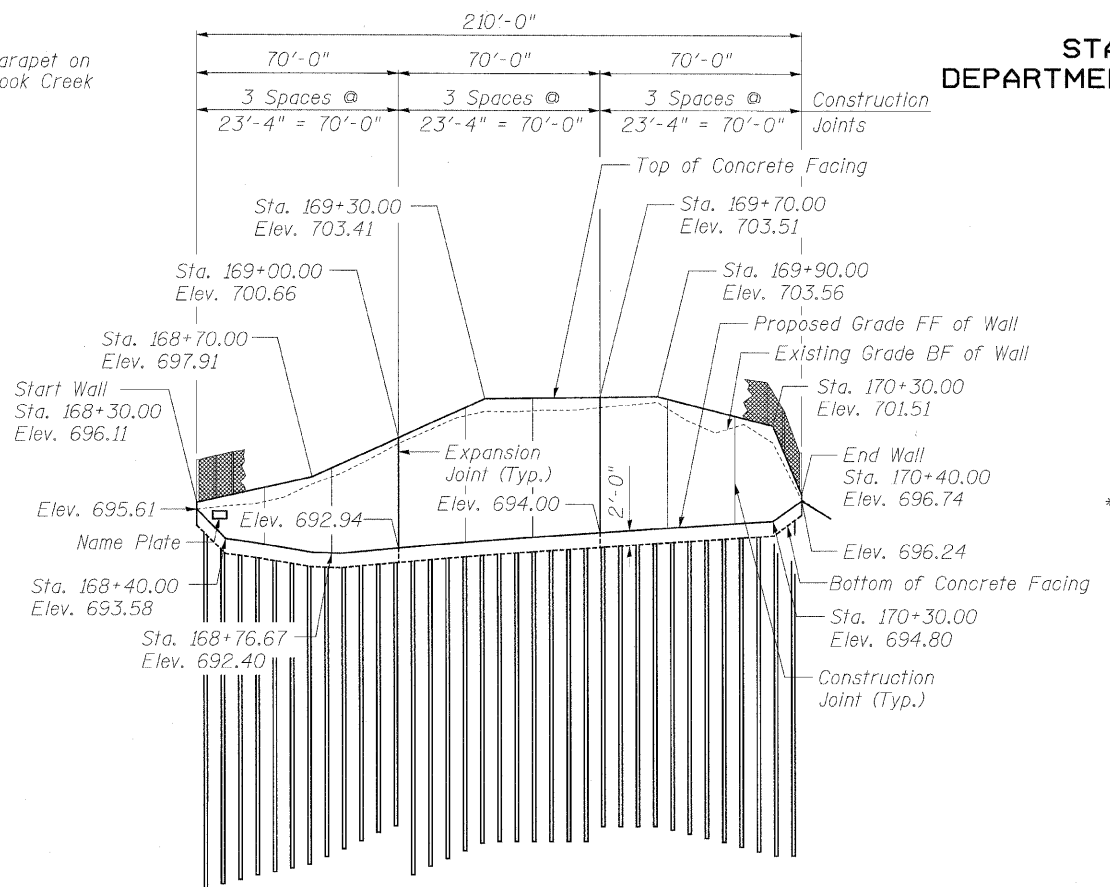
**GENERAL NOTES**

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
2. All construction joints shall be bonded.
3. The Contractor is responsible for the design and performance of the untreated timber lagging using no less than 3" nominal rough-sawn thickness and timber with a minimum allowable bending stress  $f_b$  of 1000 psi.
4. Protective coat shall be applied to exposed surfaces of the front face of wall above the finished grade.
5. Reinforcement bars designated (E) shall be epoxy coated.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	280
Concrete Structures	Cu. Yd.	114.6
<b>Form Liner Textured Surface</b>	Sq. Ft.	1,542
Stud Shear Connectors	Each	352
Untreated Timber Lagging	Sq. Ft.	1,857
Furnishing Soldier Piles (HP14x117)	Foot	1,011
Reinforcement Bars, Epoxy Coated	Pound	12,110
Driving Soldier Piles	Foot	1,011
Name Plates	Each	1
Geocomposite Wall Drain	Sq. Yd.	195
Pipe Underdrains for Structures, 4"	Foot	210
* Chain Link Fence, 4' Attached to Structure	Foot	210
Protective Coat	Sq.Yd.	171

\* SEE THE SPECIAL PROVISIONS



**ELEVATION**

STATION 168+30.00  
BUILT 200\_ BY  
STATE OF ILLINOIS  
F.A.U. RT. 2578 SEC. 532B  
STR. NO. 022-W031

**NAME PLATE**  
(See Std. 515001)

**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY  
*Ralph E. Anderson (TS)*  
ENGINEER OF BRIDGES AND STRUCTURES

**HIGHWAY CLASSIFICATION**

F.A.U. Route 2578 - Illinois Route 53  
Functional Class: Suburban Minor Arterial  
ADT: 25,800 (2000), 31,000 (2020)  
Design Speed: 45 mph  
Posted Speed: 45 mph

**DESIGN SPECIFICATIONS**

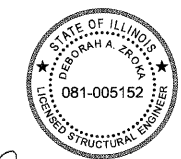
2002 AASHTO Standard  
Specifications for Highway Bridges

**DESIGN STRESSES**

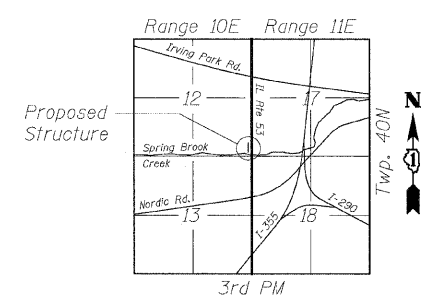
$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)  
 $f_y = 36,000$  psi (M270 Grade 36, Soldier Pile)

**INDEX OF SHEETS**

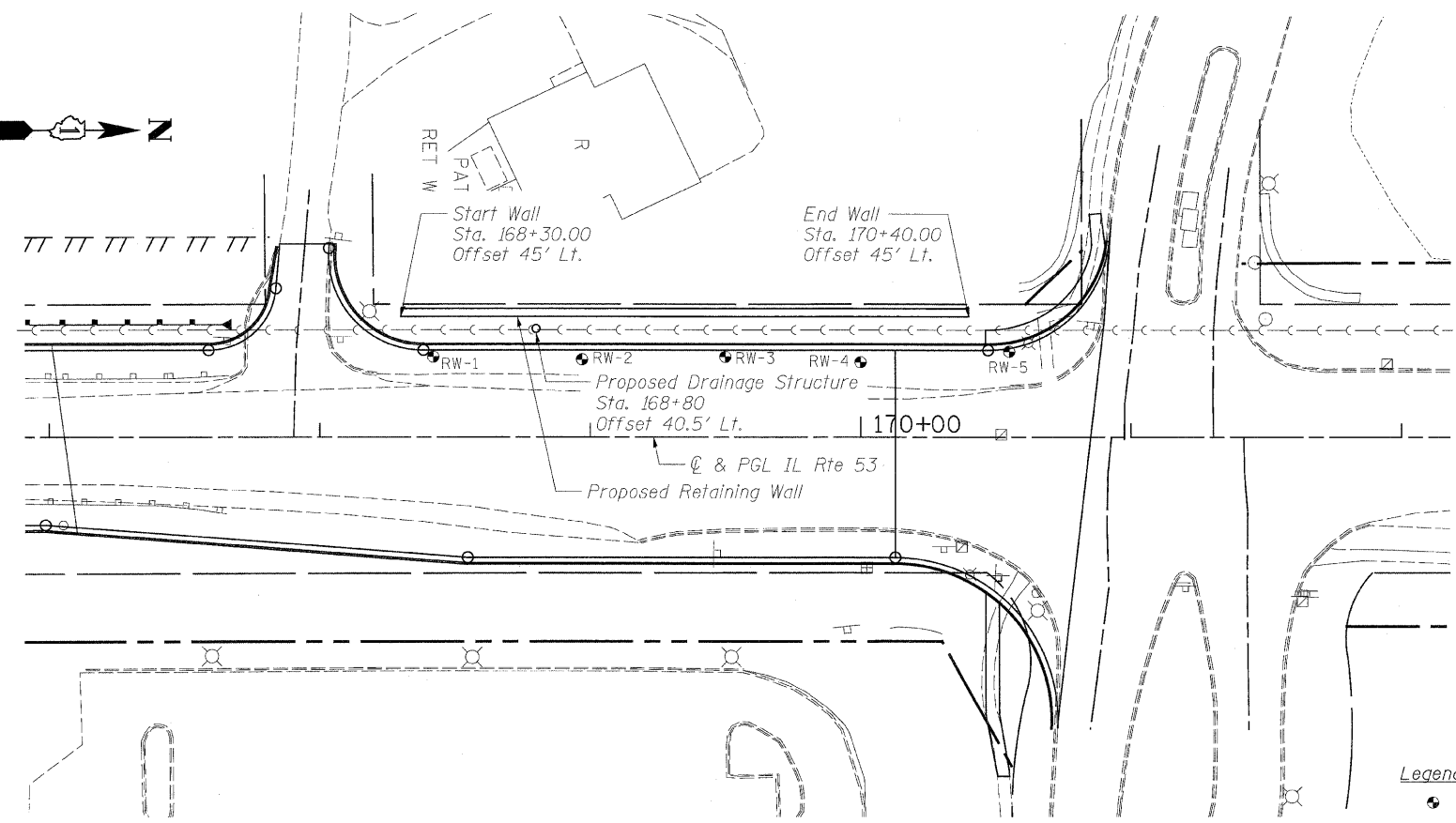
Sheet	Title
1	General Plan & Elevation
2	Soldier Pile Layout
3	Typical Sections & Details
4	Concrete Facing
5	Concrete Facing & Details
6	Rustication Details
7-10	Boring Logs



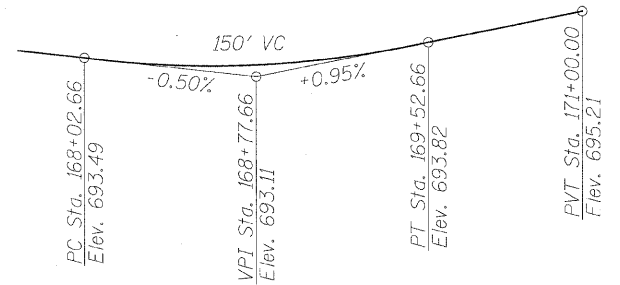
*Deborah A. Zroka*  
DEBORAH A. ZROKA, S.E.  
NO. 081-005152  
EXP. DATE: 11/30/2010



**LOCATION SKETCH**



**PLAN**



**PROFILE GRADE**  
(Along IL Rte 53)

- Legend**
- Soil Boring
  - FF Front Face
  - BF Back Face
  - 8" Sanitary Sewer

Note:  
All stations and offsets are given at the front face of the concrete facing.

**ZROKA** engineering  
Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613  
Date: 04-10-09 Drawn By: SW Checked By: LS

**GENERAL PLAN & ELEVATION**  
**ILLINOIS ROUTE 53 (FAU 2578)**  
**RETAINING WALL**  
**FAU 2578 SECTION 532B**  
**STRUCTURE NO. 022-W031**  
**DUPAGE COUNTY**  
**STA. 168+30.00 TO STA. 170+40.00**

SHEET NO. 1 OF 10 SHEETS	F.A.U. RTE. 2578	SECTION 532B	COUNTY DUPAGE	TOTAL SHEETS 117	SHEET NO. 71
	SN 022-W031		CONTRACT NO. 62881		
DATE: 6/12/09	FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		