

**BENCHMARK:** BM #55 APPROXIMATE STA 166+92.60, 49.0 LT @ PLAINFIELD-NAPERVILLE ROAD. CUT (O) ON WEST SIDE OF PLAINFIELD-NAPERVILLE ROAD ON NORTHEAST CORNER OF EXISTING TOP OF HEADWALL. EL 643.17

**EXISTING STRUCTURE:** NONE

**DESIGN SPECIFICATIONS**  
2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES

**DESIGN METHOD**  
LOAD FACTOR: STEM AND FOOTINGS  
ALLOWABLE STRESS DESIGN: PILE LOADS

**GENERAL NOTES**

- DESIGN SPECIFICATIONS: 2002 AASHTO.
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31, M42 OR M53 GRADE 60.
- THE BACK FACE OF RETAINING WALL SHALL BE WATERPROOFED ACCORDING TO ARTICLE 503.18 OF THE STANDARD SPECIFICATIONS.
- SEE SHEET S-02 FOR DETAILS OF PIPE UNDERDRAIN, GEOCOMPOSITE WALL DRAIN AND STRUCTURE EXCAVATION LIMITS.
- ANY DEWATERING NECESSARY DURING EXCAVATION SHALL BE COMPLETED BY THE CONTRACTOR AT NO ADDITIONAL COST.

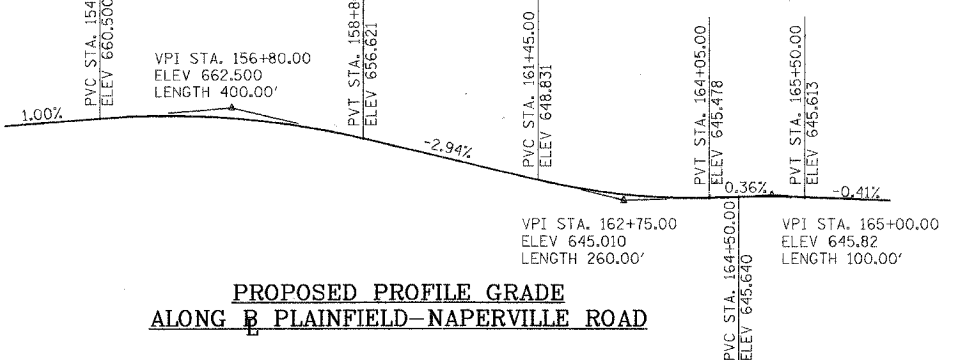
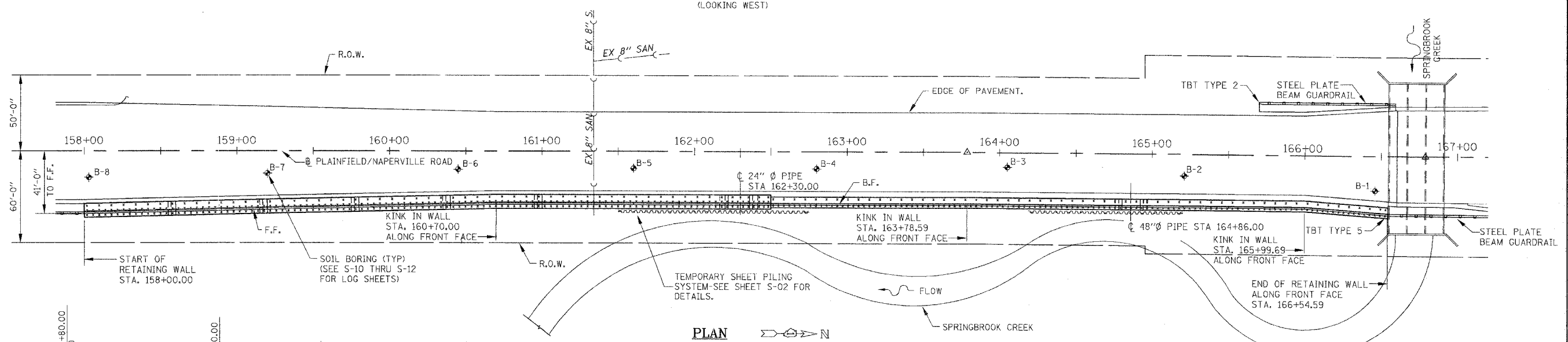
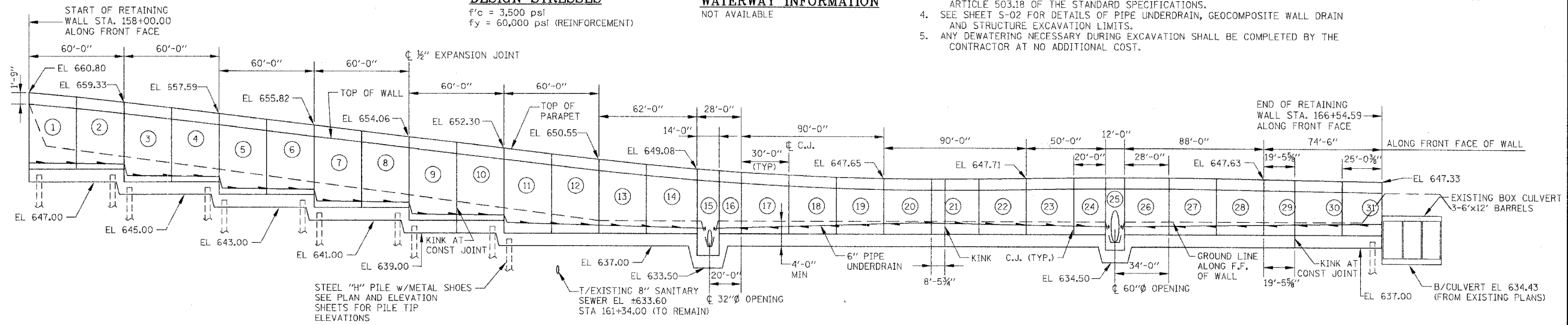
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2545	*	WILL	147	80
FEDERAL DIST. NO. 7			ILLINOIS	FED. AID PROJECT:
* 98-00036-19-FP			CONTRACT NO. 83896	

**DESIGN STRESSES**

f'c = 3,500 psi  
fy = 60,000 psi (REINFORCEMENT)

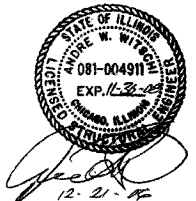
**WATERWAY INFORMATION**

NOT AVAILABLE



**TOTAL BILL OF MATERIAL**

ITEMS	UNIT	TOTAL
STRUCTURE EXCAVATION	CU YD	2,310
CONCRETE STRUCTURES	CU YD	917.3
REINFORCEMENT BARS, EPOXY COATED	POUND	96,050
ALUMINUM RAILING, TYPE L	FT	853
FURNISHING STEEL PILES HP10X42	FT	7,183.0
DRIVING STEEL PILES	FT	7,183.0
TEST PILE STEEL HP10X42	EA	4
METAL SHOES	EA	457
PIPE DRAINS 6"	FT	9
PIPE UNDERDRAINS FOR STRUCTURES 6"	FT	841
TEMPORARY SHEET PILING	SQ FT	2,673



I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS RETAINING WALL DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF THE STRUCTURE AND COMPLIES WITH REQUIREMENTS OF THE CURRENT AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.

**LEGEND**  
F.F. FRONT FACE OF WALL (7) INDICATES WALL PANEL  
B.F. BACK FACE OF WALL  
R.O.W. RIGHT OF WAY (O) INDICATES SOIL BORING  
TEMPORARY SHEET PILING

NO.	DATE	REVISION	BY

WILL COUNTY DEPARTMENT OF HIGHWAYS  
PLAINFIELD-NAPERVILLE ROAD (C.H. 14)  
ROADWAY RECONSTRUCTION  
RETAINING WALL  
GENERAL PLAN AND ELEVATION

McDonough Associates Inc. Engineers/Architects  
DESIGNED BY: JCE  
CHECKED BY: AWW  
DRAWN BY: JCE

SCALE: N.T.S.

S-01