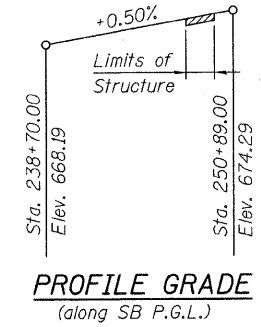


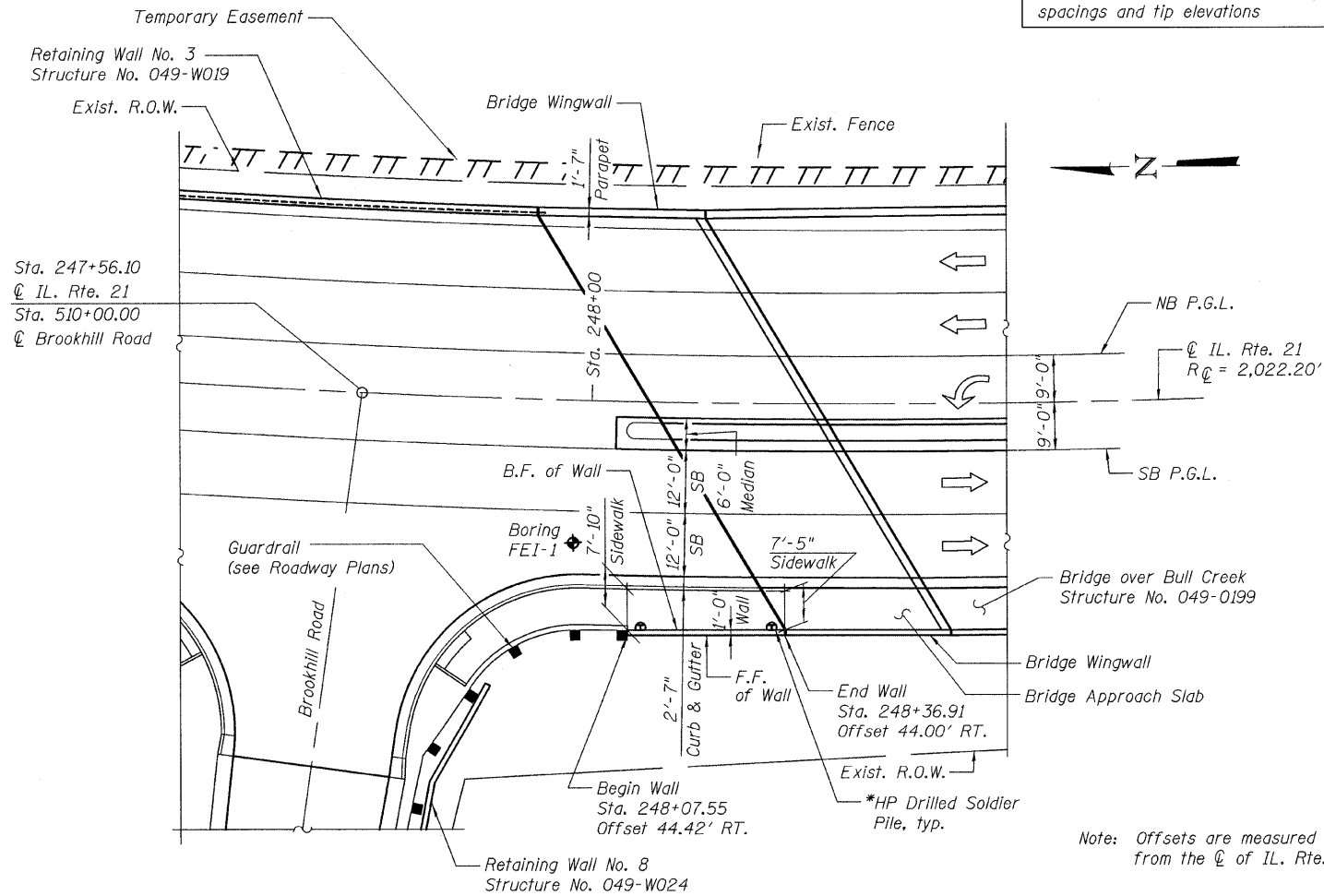
ELEVATION
(Looking at F.F. of Wall)

*See Sht's. S5-2 thru S5-4 for pile sections, spacings and tip elevations



PROFILE GRADE
(along SB P.G.L.)

LEGEND:
F.F. = Front Face
B.F. = Back Face



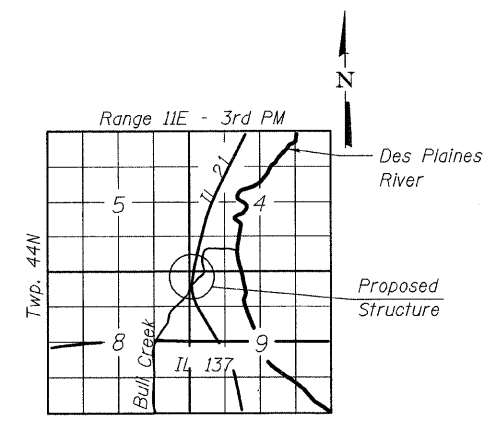
PLAN

Indicates Boring Locations

CURVE DATA
(@ IL. Rte. 21)
 $\Delta = 46^\circ-11'-38''$
 $D = 2^\circ-50'-00''$
 $T = 862.41'$
 $L = 1,630.37'$
 $E = 176.22'$
 $R = 2,022.20'$
 $S.E. = 2.90\%$
 $P.C. Sta. = 243+66.70$
 $P.T. Sta. = 259+97.07$
 $P.I. Sta. = 252+29.11$

DESIGN SPECIFICATIONS
AASHTO 2002 Standard
Specifications for Highway Bridges

DESIGN STRESSES
FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (Structural Steel
AASHTO M 270, Gr. 36
Soldier Piles)



LOCATION SKETCH

INDEX OF SHEETS

S5-1	GENERAL PLAN & ELEVATION
S5-2	PLAN & ELEVATION
S5-3	RETAINING WALL SECTION
S5-4	SOLDIER PILE SCHEDULE & DETAILS
S5-5	PARAPET RAILING
S5-6	SOIL BORING LOGS

TOTAL BILL OF MATERIAL

DESCRIPTION	UNIT	QUANTITY
Structure Excavation	Cu. Yd.	2
Concrete Structures	Cu. Yd.	13.8
Form Liner Textured Surface	Sq. Ft.	229
Stud Shear Connectors	Each	208
Reinforcement Bars, Epoxy Coated	Pound	2,260
Parapet Railing	Foot	30
Geocomposite Wall Drain	Sq. Yd.	16
Untreated Timber Lagging	Sq. Ft.	224
Furnishing Soldier Piles (HP Section)	Foot	97
Pipe Underdrains for Structures 4"	Foot	35
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	274
Stain For Concrete Structures	Sq. Yd.	26

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
[Signature]
ENGINEER OF BRIDGES AND STRUCTURES



[Signature]
BHADRESH N. SHAH
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS LIC. No. 081-004476
EXPIRES: 11-30-12

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 21 - RETAINING WALL NO. 5
F.A.P. 330 SEC. 128R-3
LAKE COUNTY
STATION 248+07.55 TO 248+36.91
STRUCTURE NO. 049-W021

CR CHRISTIAN-ROGE & ASSOCIATES, INC.

FILE NAME = D168953-01-GPE.dgn	USER NAME =	DESIGNED - J.C.N./B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION STRUCTURE NO. 049-W021	F.A.P. RTE. 330	SECTION 128R-3	COUNTY LAKE	TOTAL SHEETS 518	SHEET NO. 315
PLOT SCALE =	DRAWN - F.M.	REVISED -	SHEET NO. S5-1 OF S5-6 SHEETS			CONTRACT NO. 60953				
PLOT DATE =	CHECKED - B.N.S./J.C.N.	REVISED -	ILLINOIS FED. AID PROJECT							