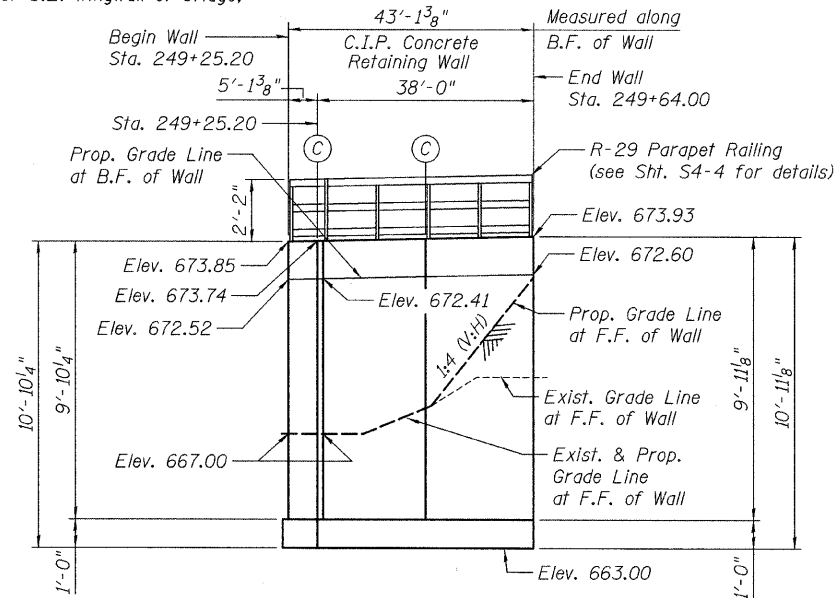
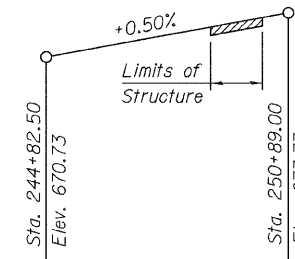


Bench Mark:
Chiseled box on top of S.E. wingwall of bridge,
Elevation 669.64



ELEVATION
(Looking at B.F. of Wall)



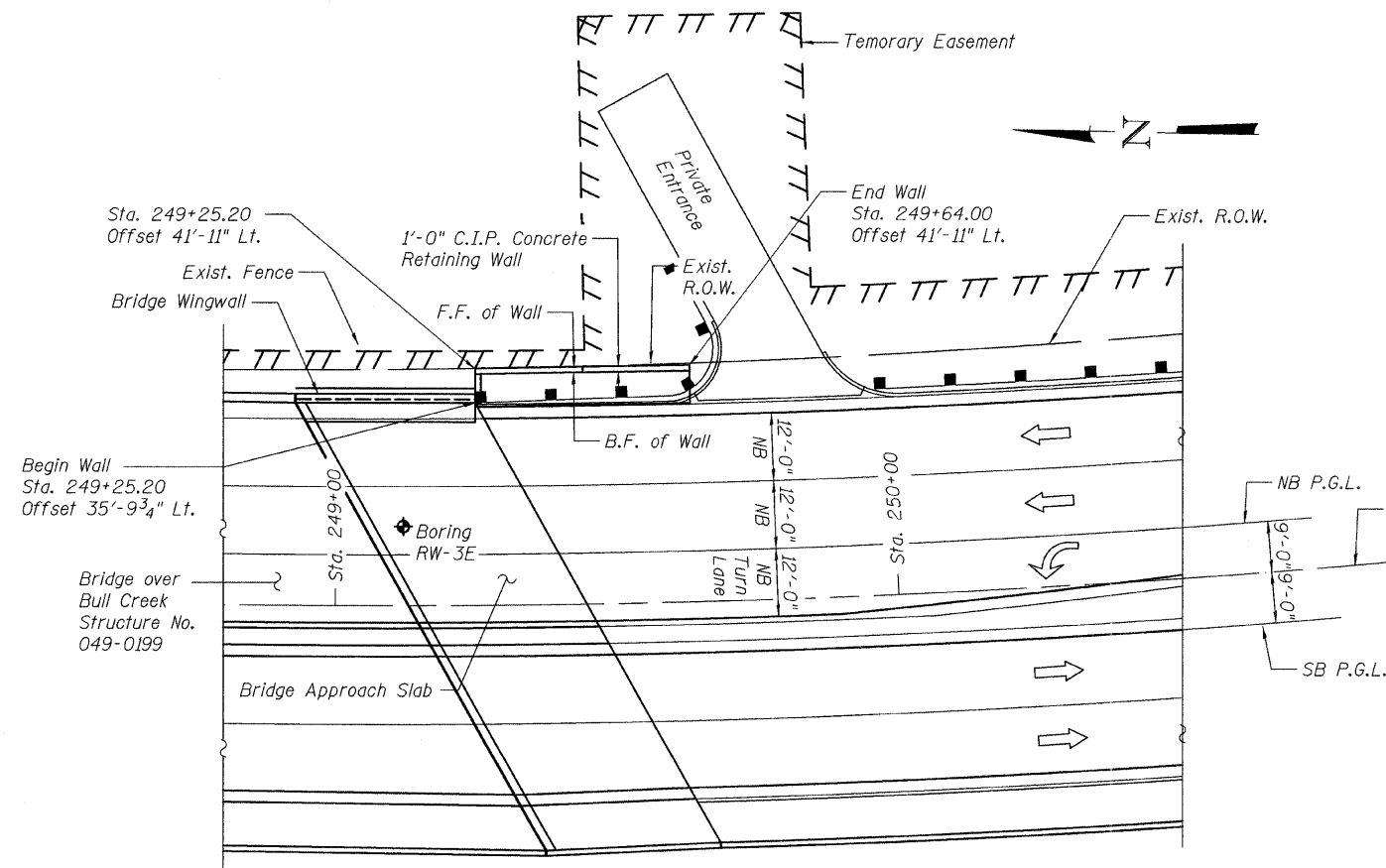
PROFILE GRADE
(along NB P.G.L.)

INDEX OF SHEETS

S4-1	GENERAL PLAN & ELEVATION
S4-2	PLAN & ELEVATION
S4-3	RETAINING WALL SECTIONS
S4-4	PARAPET RAILING
S4-5	SOIL BORING LOGS

TOTAL BILL OF MATERIAL

DESCRIPTION	UNIT	QUANTITY
Structure Excavation	Cu. Yd.	80
Concrete Structures	Cu. Yd.	25.2
Form Liner Textured Surface	Sq. Ft.	281
Reinforcement Bars, Epoxy Coated	Pound	3,950
Parapet Railing	Foot	43
Geocomposite Wall Drain	Sq. Yd.	15
Porous Granular Embankment, Special	Cu. Yd.	18
Stain For Concrete Structures	Sq. Yd.	33



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

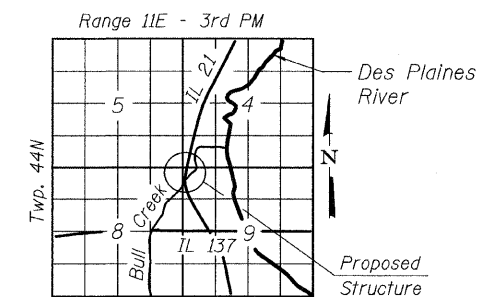
DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (Structural Steel)

LEGEND:

- F.F. = Front Face
- B.F. = Back Face
- C.I.P. = Cast-In-Place
- (C) = Construction Joint



LOCATION SKETCH



B. N. Shah
 BHADRESH N. SHAH Aug. 15, 2011
 LICENSED STRUCTURAL ENGINEER
 STATE OF ILLINOIS LIC. No. 081-004476
 EXPIRES: 11-30-12

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 21 - RETAINING WALL NO. 4
F.A.P. 330 SEC. 128R-3
LAKE COUNTY
STATION 249+25.20 TO 249+64.00
STRUCTURE NO. 049-W020

CHRISTIAN-ROGE & ASSOCIATES, INC.

FILE NAME = D160953-01GPE.dgn	USER NAME =	DESIGNED - J.C.N./B.N.S.	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION STRUCTURE NO. 049-W020	F.A.P. RTE. = 330	SECTION = 128R-3	COUNTY = LAKE	TOTAL SHEETS = 518	SHEET NO. = 310		
PLOT SCALE =	CHECKED - B.N.S.	REVISIONS -	SHEET NO. S4-1 OF S4-5 SHEETS			CONTRACT NO. 60953		ILLINOIS FED. AID PROJECT				
PLOT DATE =	DRAWN - F.M.	REVISIONS -										
	CHECKED - B.N.S./J.C.N.	REVISIONS -										