

Benchmark: Top of nut on fire hydrant located at the northwest corner of the intersection of Randall Road and Silver Glen Road. Elev. 809.17

Existing Structure: None

Salvage: None

Exhibit "B"

CURVE DATA (along C Path)

	CURVE 7 (C-7)	CURVE 8 (C-8)	CURVE 9 (C-9)	CURVE 10 (C-10)	CURVE 11 (C-11)
Δ =	86°11'13" (RT)	95°06'35" (RT)	5°06'35" (RT)	30°29'29" (RT)	30°29'29" (LT)
D =	424°24'47"	424°24'47"	19°05'54"	33°42'12"	33°42'12"
T =	12.63'	14.76'	13.39'	46.33'	46.33'
L =	20.31'	22.41'	26.75'	90.47'	90.47'
R =	13.50'	13.50'	300.00'	170.00'	170.00'
E =	4.99'	6.50'	0.30'	6.20'	6.20'
Sta. PI =	16+44.35	16+66.79	19+06.45	21+35.26	22+40.73
Sta. PC =	16+31.72	16+52.03	18+93.06	20+88.93	21+94.40
Sta. PT =	16+52.03	16+74.44	19+19.82	21+79.40	22+84.87

ROUTE NO.	SECTION	COUNTY	SHEET
FAU 2505	94-P4008-01-BR	KANE	4

Contract #83984

DESIGN SPECIFICATIONS
 2002 AASHTO with Interim Specifications
 1997 AASHTO Guide Specifications for the Design of Pedestrian Bridges
 2003 AASHTO Guide Specifications for Horizontally Curved Steel Girder Highway Bridges

LOADING H5 & PEDESTRIAN
 85 psf Pedestrian Loading
 MSE wall shall be designed for a min. surcharge of 85 psf and an equivalent fluid pressure of 50 psf.

DESIGN STRESSES

FIELD UNITS
 f'_c = 3,500 psi
 f_y = 60,000 psi (reinforcement)
 f_y = 50,000 psi (Struct.) (M270 Grade 50W)

SEISMIC DATA

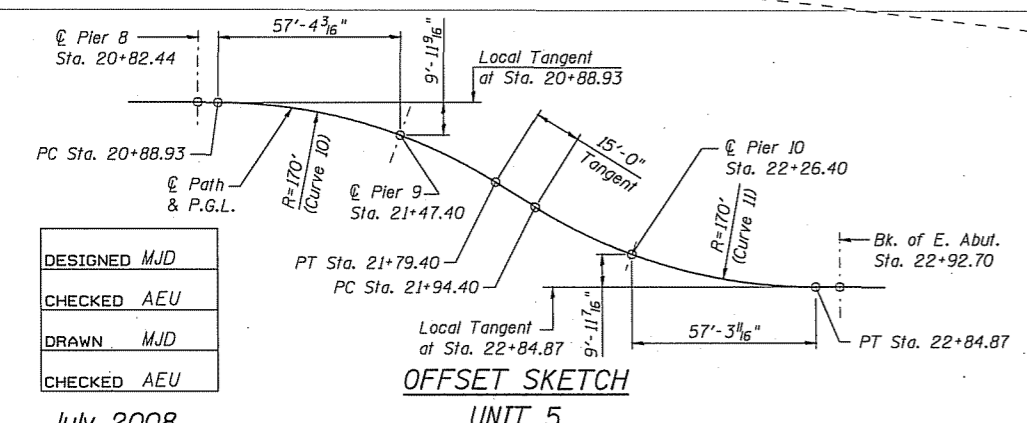
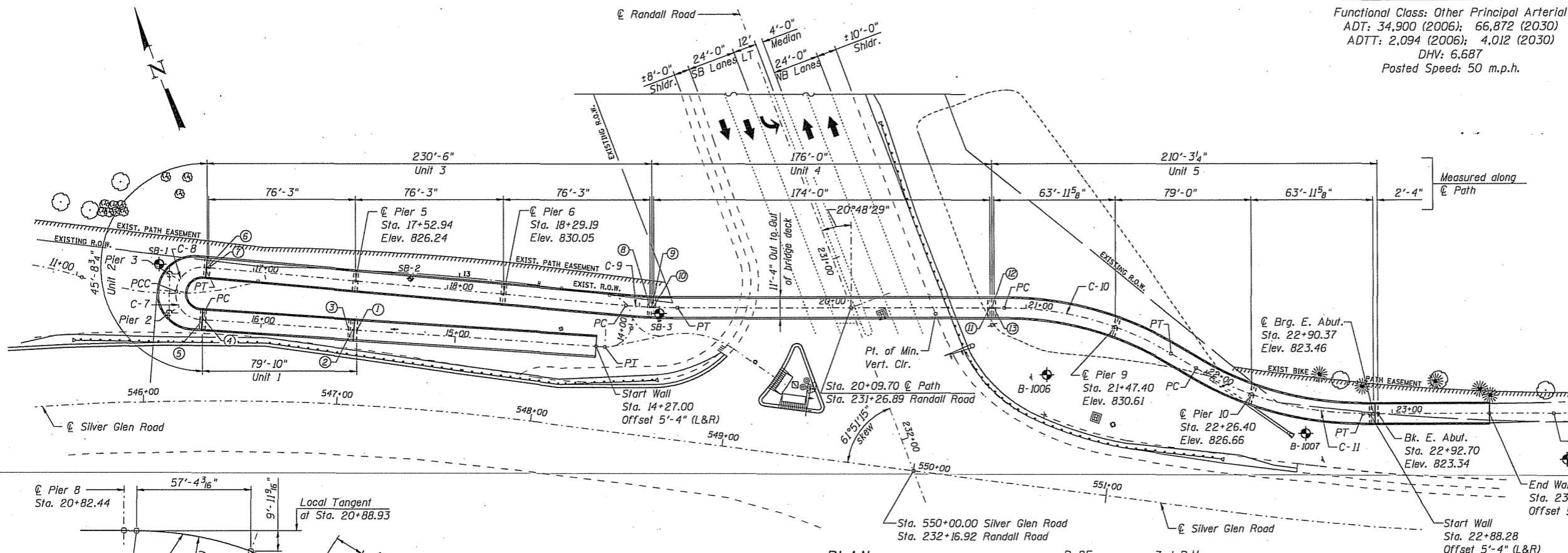
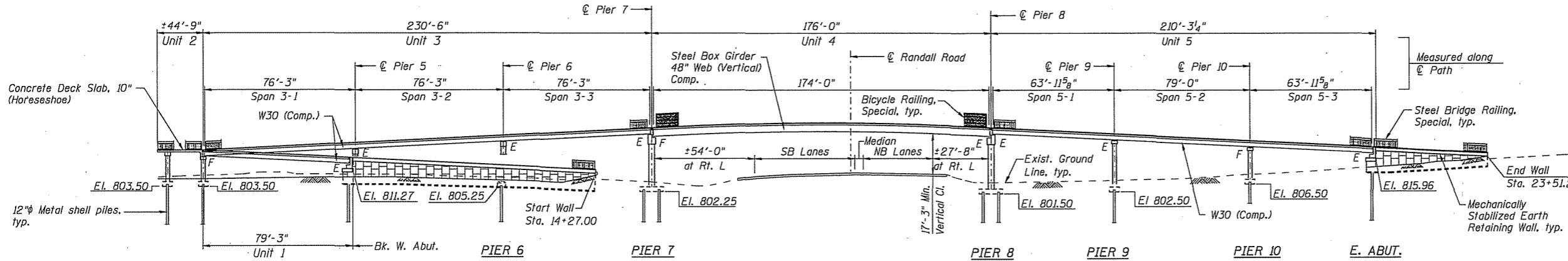
Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.04g
 Site Coefficient (S) = 1.0

HIGHWAY CLASSIFICATION

Functional Class: Other Principal Arterial
 ADT: 34,900 (2006); 66,872 (2030)
 ADTT: 2,094 (2006); 4,012 (2030)
 DHV: 6.687
 Posted Speed: 50 m.p.h.

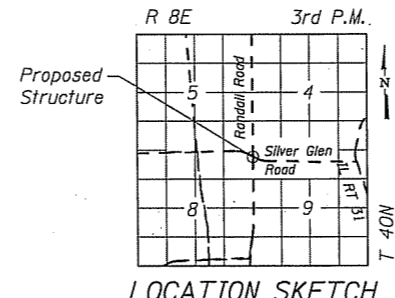
DATA POINTS

① Bk. W. Abut. Sta. 15+50.39 Elev. 818.26	⑦ E. Brg. Pier 4 Sta. 16+76.69 Elev. 822.42
② E. Brg. W. Abut. Sta. 15+52.72 Elev. 818.38	⑧ W. Brg. Pier 7 Sta. 19+05.44 Elev. 833.86
③ End Wall Sta. 15+54.80 Offset 5'-4" (L&R)	⑨ E. Brg. Pier 7 Sta. 19+06.44 Elev. 833.91
④ E. Brg. Pier 1 Sta. 16+29.47 Elev. 822.18	⑩ E. Brg. Pier 7 Sta. 19+07.44 Elev. 833.96
⑤ E. Brg. Pier 1 Sta. 16+30.22 Elev. 822.22	⑪ W. Brg. Pier 8 Sta. 20+81.44 Elev. 833.91
⑥ E. Brg. Pier 4 Sta. 16+75.94 Elev. 822.39	⑫ E. Brg. Pier 8 Sta. 20+82.44 Elev. 833.86
	⑬ E. Brg. Pier 8 Sta. 20+83.44 Elev. 833.81



Note: Wall offsets are measured from the C Bike Path to the front face of precast panels.

Indicates Soil Boring Location



RH&A
 Robert H. Anderson & Associates, Inc.
 Consulting Engineers
 Timbers Professional Center
 220 West River Drive, St. Charles, IL 60174
 Phone - 630.584.3530 Fax - 630.584.3047

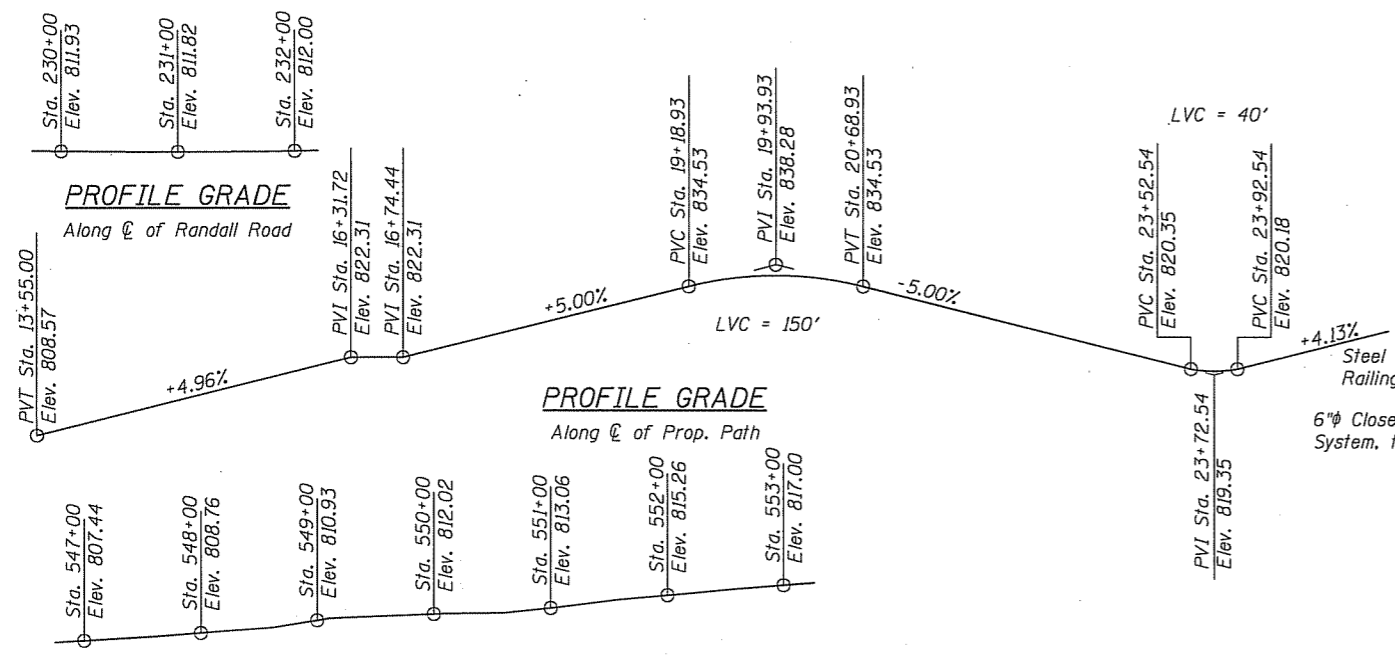
**GENERAL PLAN & ELEVATION
 PEDESTRIAN BRIDGE OVER
 RANDALL ROAD AT SILVER GLEN ROAD
 FAU 2505, SECTION 94-P4008-01-BR
 KANE COUNTY
 STRUCTURE NUMBER 045-9000**

July 2008

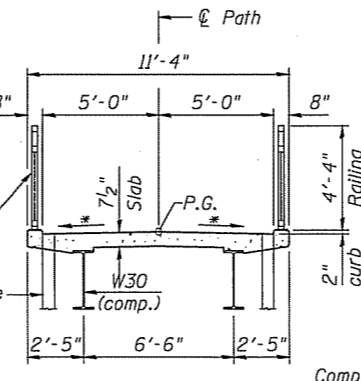
DESIGNED	MJD
CHECKED	AEU
DRAWN	MJD
CHECKED	AEU

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2505	94-P4008-01-BR	KANE	4	2
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

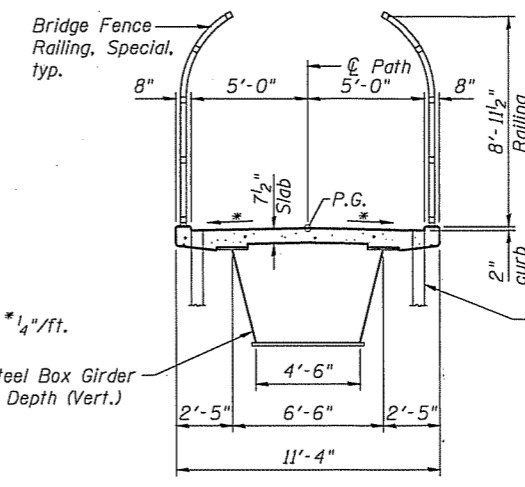
Contract #83984



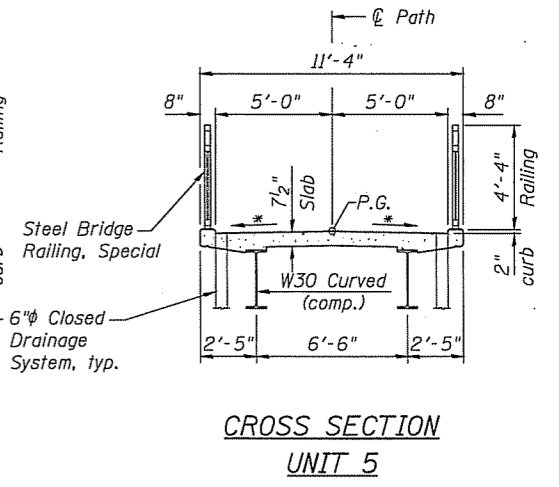
Steel Bridge Railing, Special
6"φ Closed Drainage System, typ.



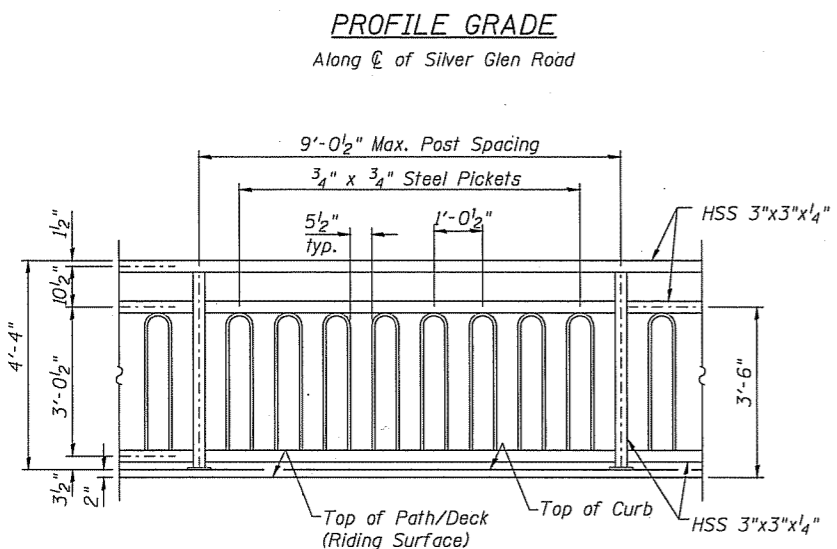
CROSS SECTION
UNITS 1 & 3



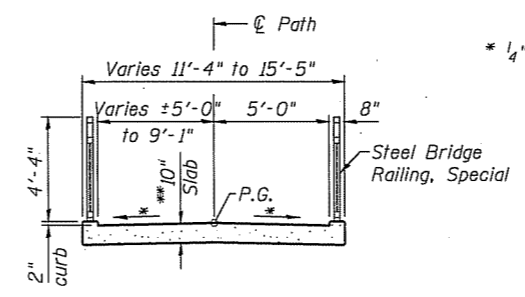
CROSS SECTION
UNIT 4



CROSS SECTION
UNIT 5

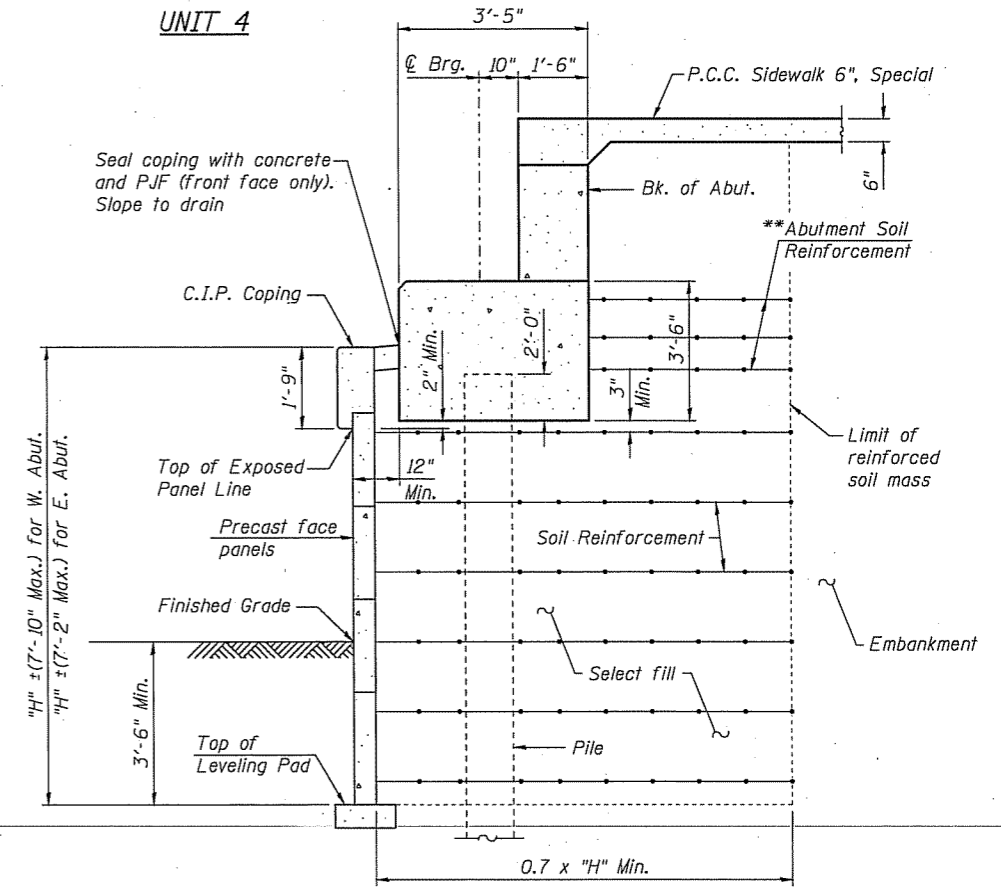


STEEL BRIDGE RAILING, SPECIAL



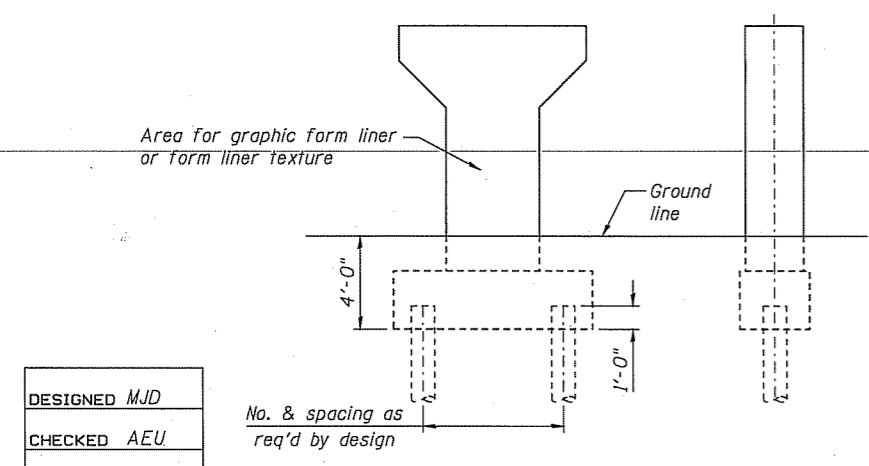
CROSS SECTION
UNIT 2

* Thickness to be refined in design phase

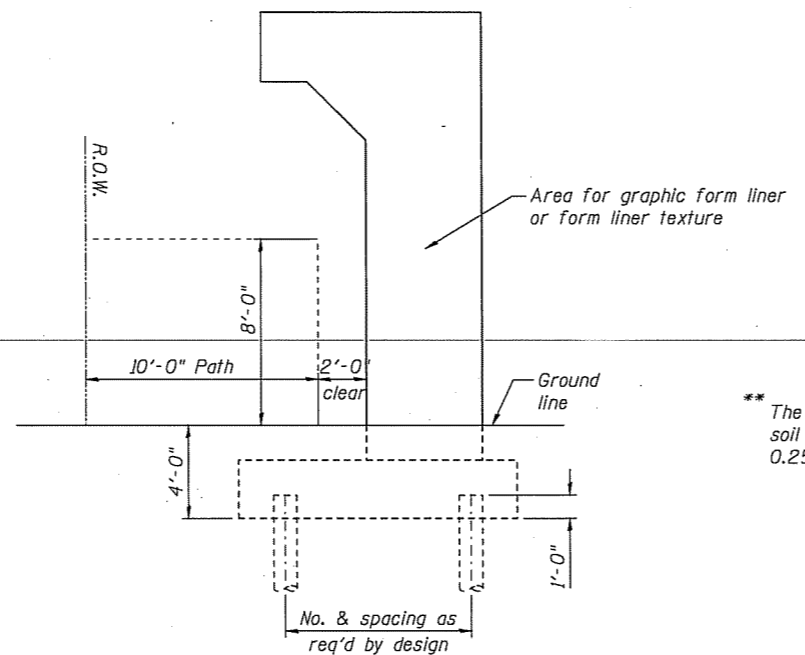


SECTION THROUGH ABUTMENTS

** The MSE wall supplier shall design the abutment soil reinforcement to resist a horizontal load of 0.25 kips/ft. of abutment.



TYPICAL PIER SKETCH



PIER SKETCH
PIERS 5 & 6

DESIGNED	MJD
CHECKED	AEU
DRAWN	MJD
CHECKED	AEU

July 2008

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DETAILS
PEDESTRIAN BRIDGE OVER
RANDALL ROAD AT SILVER GLEN ROAD
FAU 2505, SECTION 94-P4008-01-BR
KANE COUNTY
STRUCTURE NUMBER 045-9000

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Salvage: None

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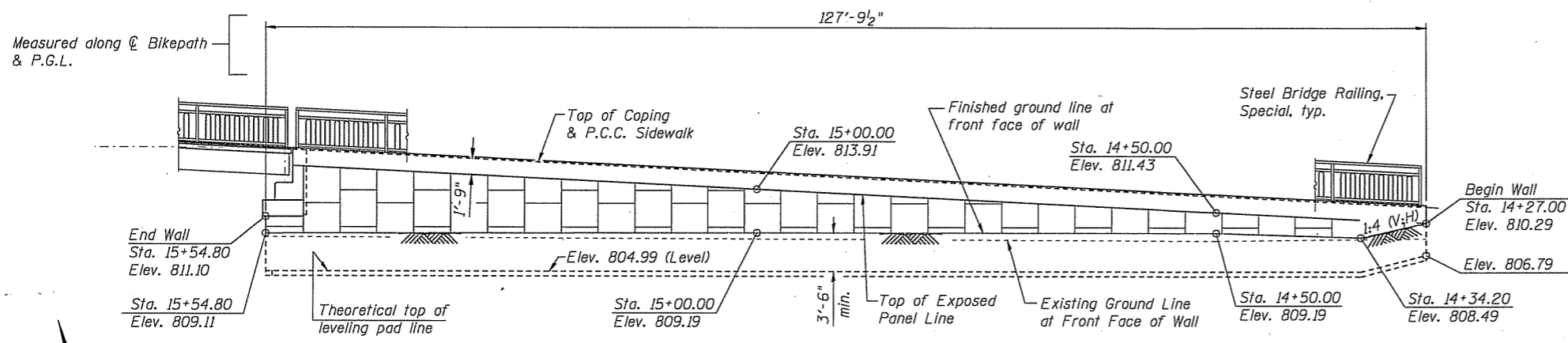
DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

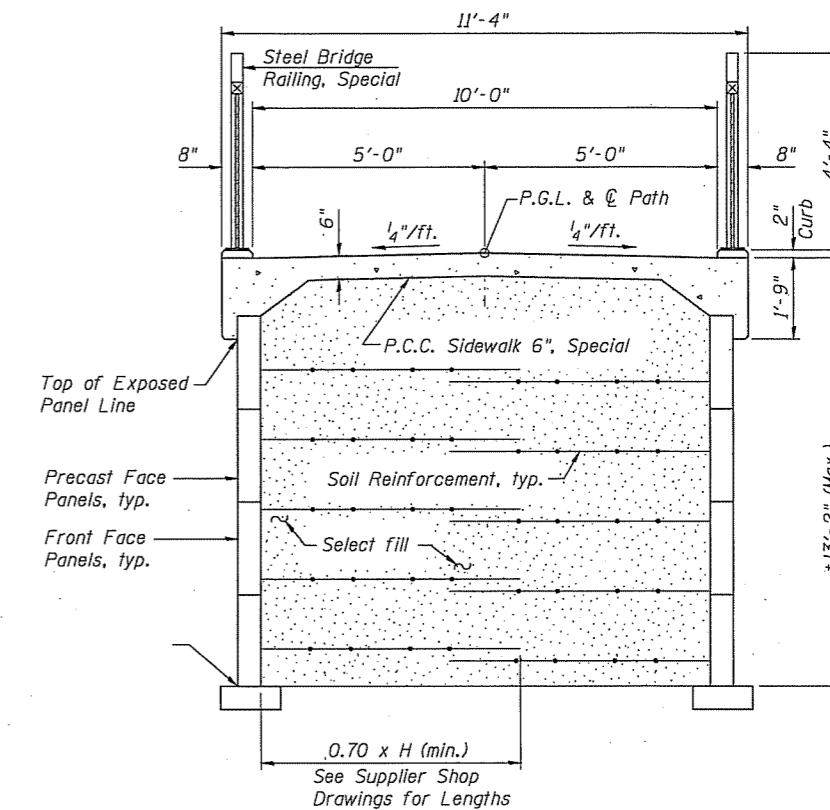
PRECAST UNITS
 $f'_c = 4,500$ psi (Precast Panels)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2505	94-P4008-01-BR	KANE	4	3

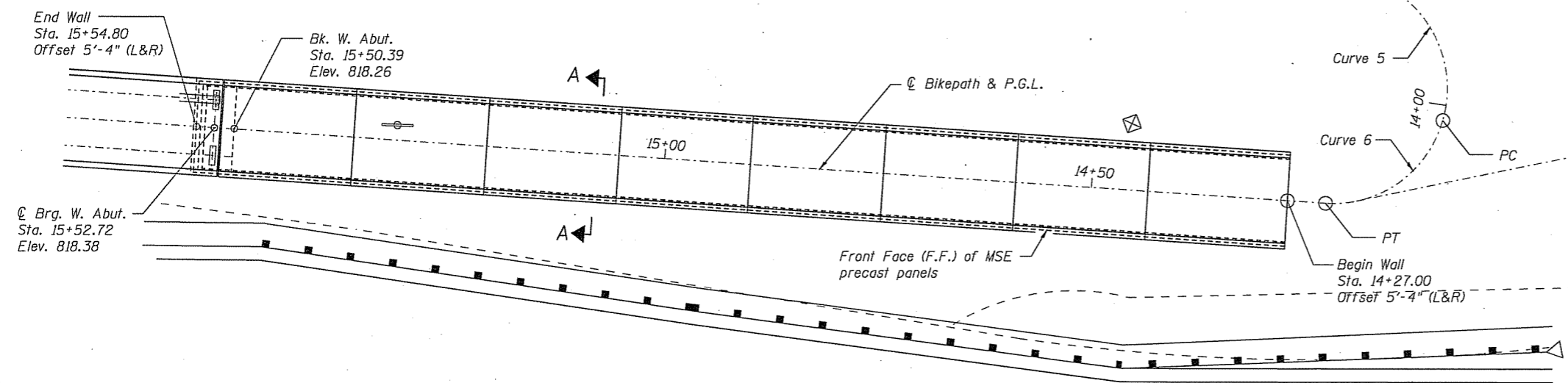
Contract #83984



SOUTHWEST MSE WALL ELEVATION
(Northwest Wall Similar)
(Looking at Front Face of Wall)



SECTION A-A



WEST MSE WALL PLAN

Note:
Wall offsets are measured from & bikepath to front face of precast panels.

DESIGNED	MJD
CHECKED	AEU
DRAWN	MJD
CHECKED	AEU

July 2008

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WEST M.S.E. WALL DETAILS
PEDESTRIAN BRIDGE OVER
RANDALL ROAD AT SILVER GLEN ROAD
FAU 2505, SECTION 94-P4008-01-BR
KANE COUNTY
STRUCTURE NUMBER 045-9000

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DESIGN STRESSES

FIELD UNITS

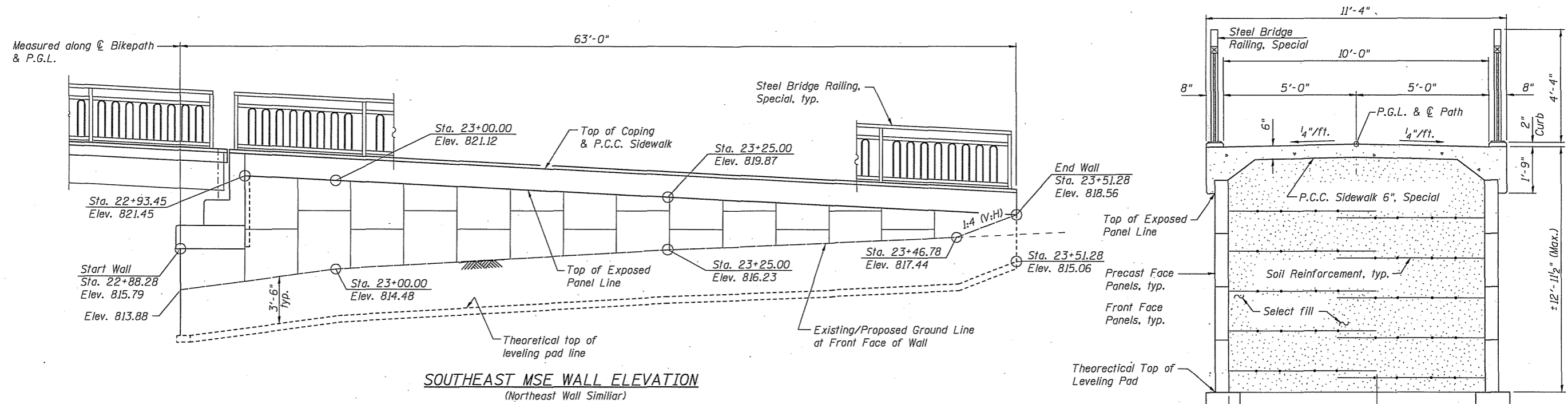
$f'_c = 3,500$ psi
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PRECAST UNITS

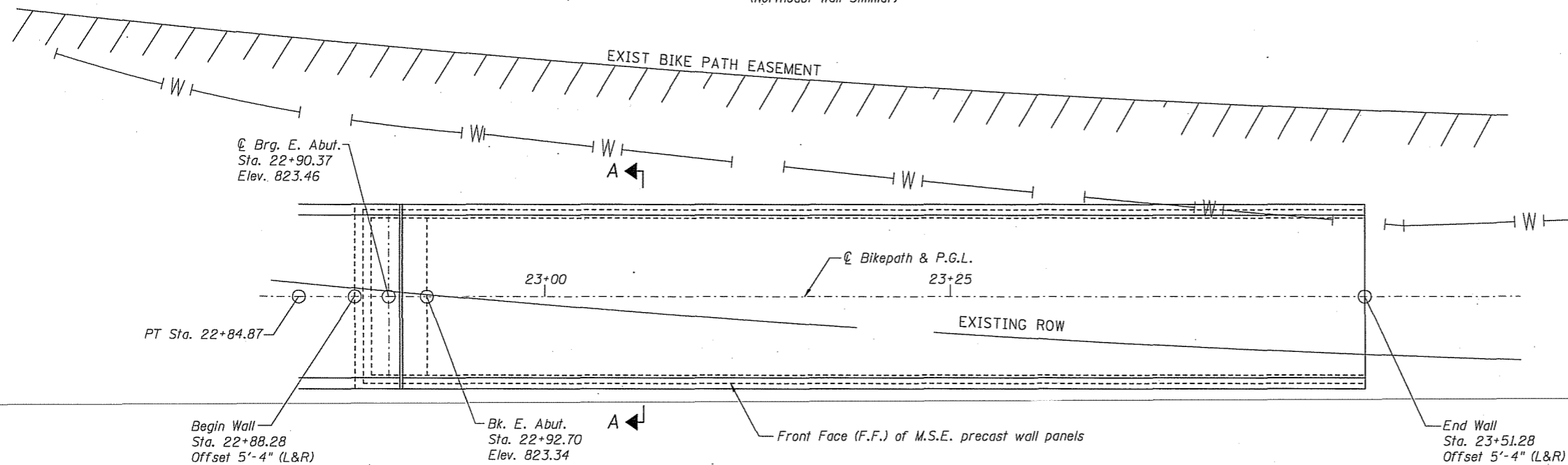
$f'_c = 4,500$ psi (Precast Panels)

ROUTE NO.	SECTION	COUNTY	ITEM SHEETS	SHEET
FAU 2505	94-P4008-01-BR	KANE	4	4
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

Contract #83984



SECTION A-A



EAST MSE WALL PLAN

Note:
Wall offsets are measured from \odot bikepath to front face of precast panels.
See Sheet 1 for boring locations.

DESIGNED	MJD
CHECKED	AEU
DRAWN	MJD
CHECKED	AEU

July 2008

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EAST M.S.E. WALL DETAILS
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