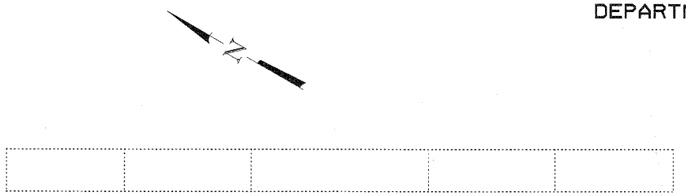
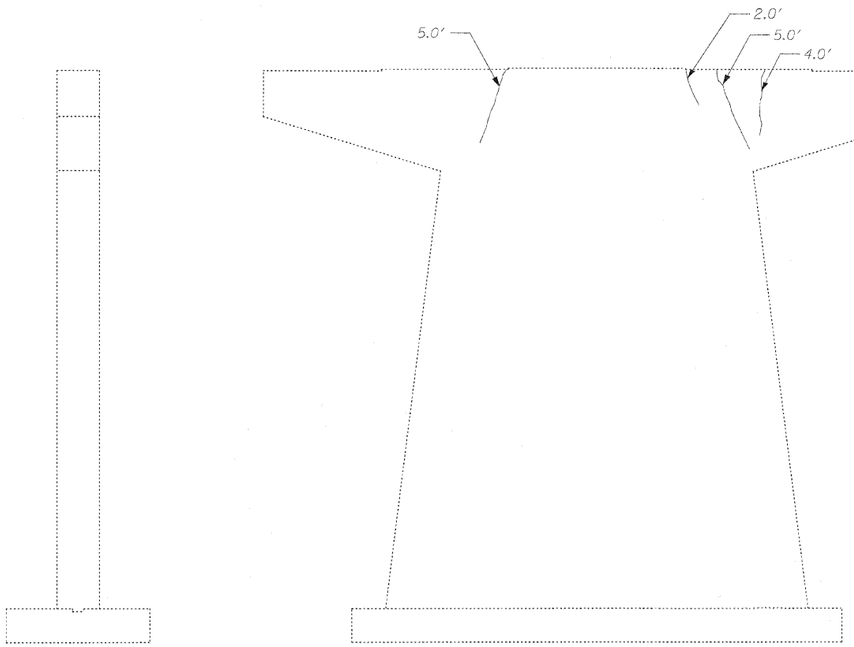
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

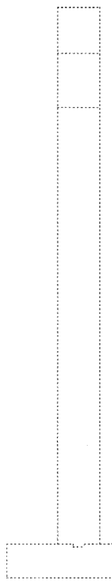


TOP PLAN

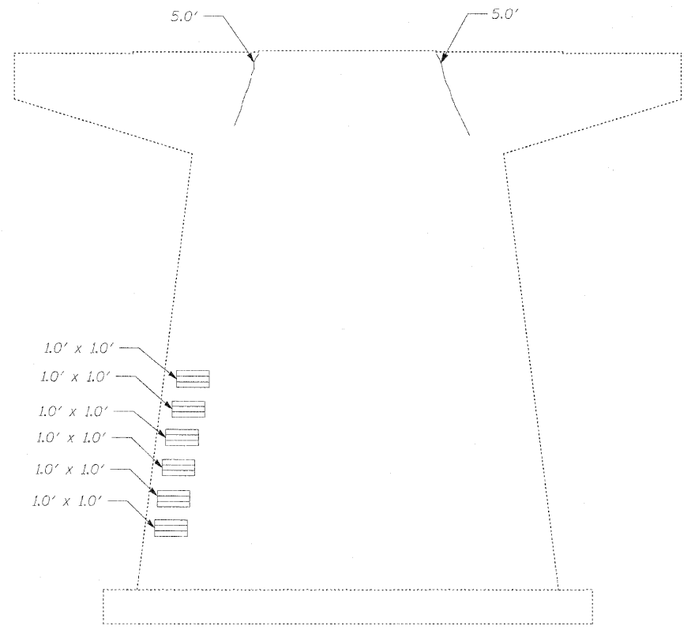


NORTH ELEVATION
(Looking South)

WEST ELEVATION
(Looking East)



SOUTH ELEVATION
(Looking North)



EAST ELEVATION
(Looking West)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Epoxy Crack Injection	Foot	26
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	6

PIER 5 REPAIRS
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	
CHECKED	
DRAWN	ASJ
CHECKED	SPK

Note:
Repair of the existing pier shall include but not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

Indicates limits of Epoxy Crack Injection

Indicates limits of Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)

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SHEET NO. 65	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	401
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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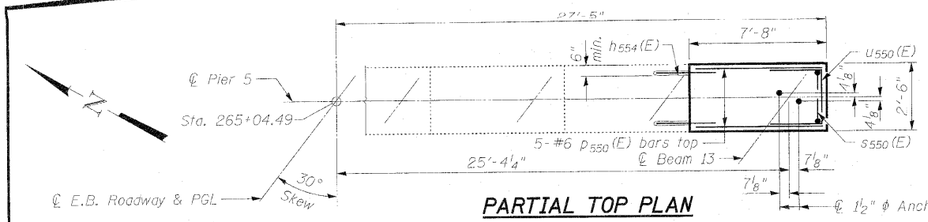
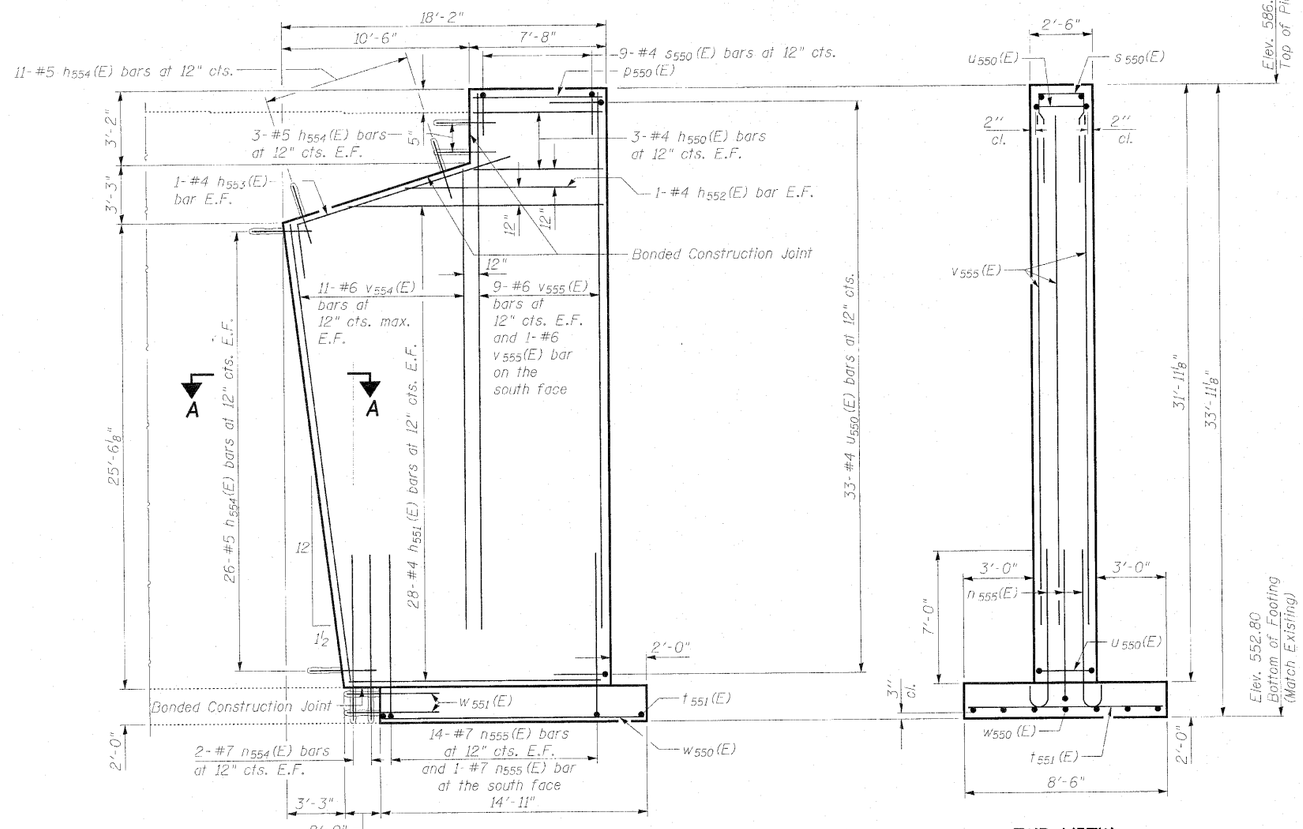
7/23/2018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



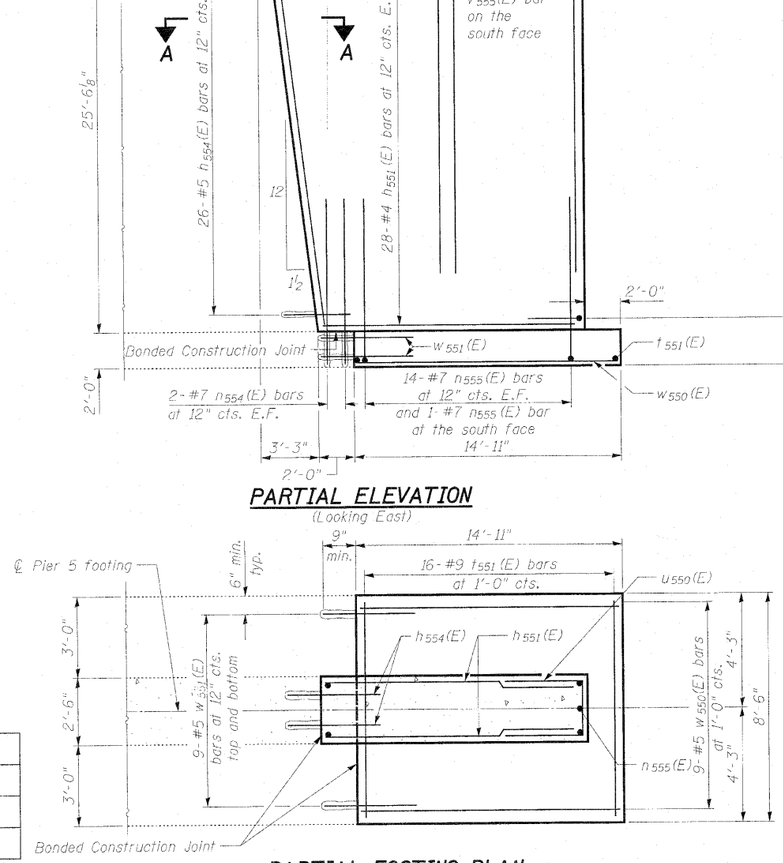
PARTIAL TOP PLAN



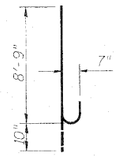
PARTIAL ELEVATION

(Looking East)

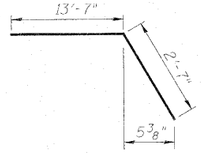
END VIEW



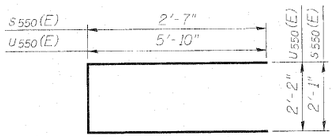
PARTIAL FOOTING PLAN



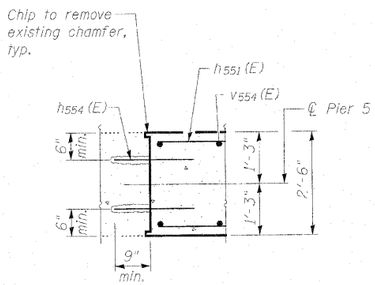
BAR n_{555}(E)



BAR h_{553}(E)



BARS s_{550}(E) & u_{550}(E)



SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_{550}(E)	6	#4	7'-4"	
h_{551}(E)	56	#4	14'-7"	
h_{552}(E)	2	#4	8'-5"	
h_{553}(E)	2	#4	16'-2"	
h_{554}(E)	80	#5	4'-2"	
n_{554}(E)	4	#7	7'-9"	
n_{555}(E)	29	#7	9'-7"	
p_{550}(E)	5	#6	7'-4"	
s_{550}(E)	9	#4	7'-3"	
t_{551}(E)	16	#9	8'-0"	
u_{550}(E)	33	#4	13'-10"	
v_{554}(E)	22	#6	25'-5"	
v_{555}(E)	19	#6	28'-9"	
w_{550}(E)	9	#5	14'-7"	
w_{551}(E)	18	#5	4'-2"	
Structure Excavation		Cu. Yd.	91	
Concrete Structures		Cu. Yd.	54.7	
Reinforcement Bars, Epoxy Coated		Pound	4,300	

Notes:

Space reinforcement in cap to miss anchor bolts.

Allowable soil bearing pressure is 7,500 psf on sound rock.

Epoxy grout h_{554}(E), n_{554}(E) and w_{551}(E) bars in 9" (min) drilled holes. See Section 584 of the Standard Specifications. Cost of hole drilling and epoxy grouting is included with Reinforcement Bars, Epoxy Coated.

Reinforcement bars that are to be grouted into existing concrete shall be spaced at least 6" from the edge of existing concrete. Contractor shall avoid drilling into existing reinforcement.

PIER 5 WIDENING
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	LAN
CHECKED	SPK
DRAWN	LAN
CHECKED	SPK

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SHEET NO. 66	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	402
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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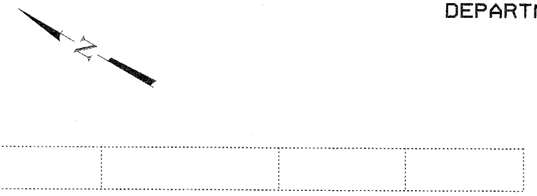
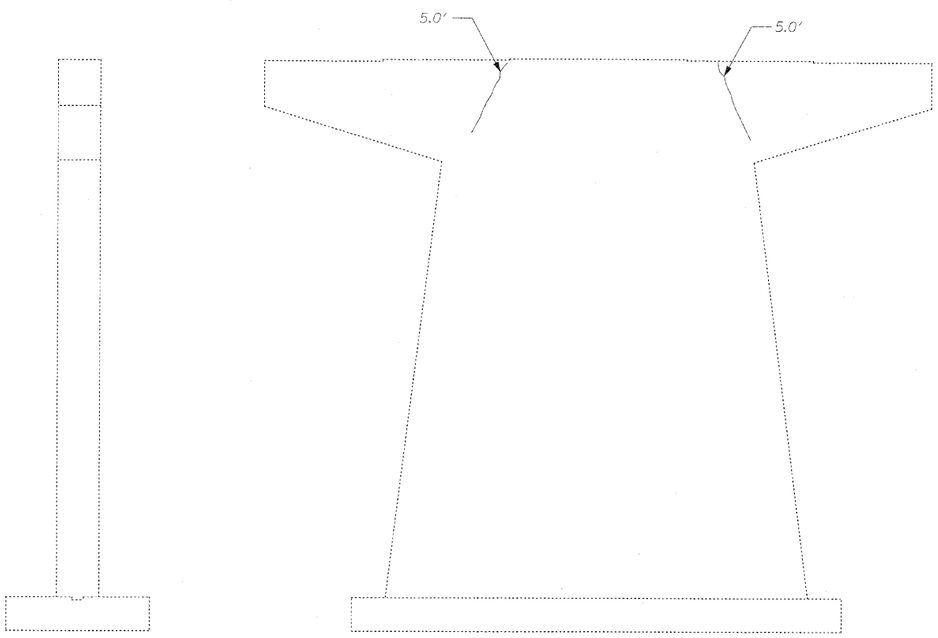
DEPARTMENT OF TRANSPORTATION



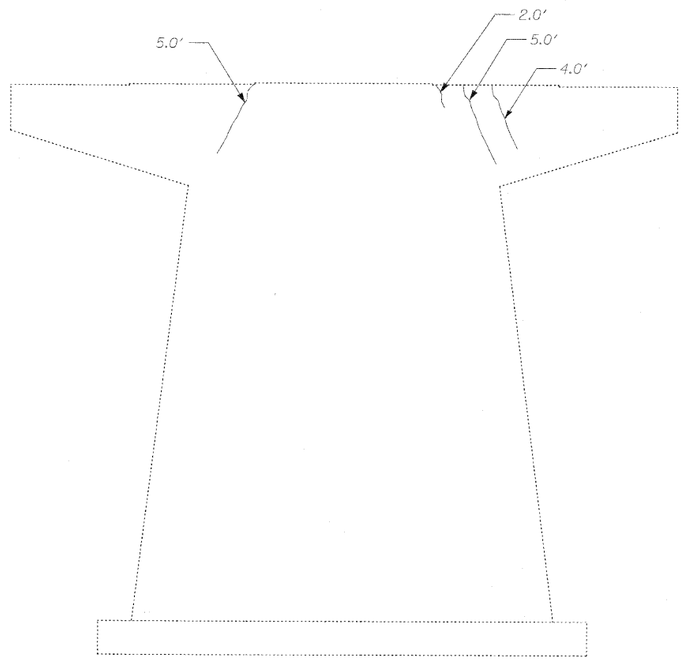
TOP PLAN



NORTH ELEVATION
(Looking South)

WEST ELEVATION
(Looking East)

SOUTH ELEVATION
(Looking North)



EAST ELEVATION
(Looking West)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Epoxy Crack Injection	Foot	26

PIER 6 REPAIRS
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	
CHECKED	
DRAWN	ASJ
CHECKED	SPK

Note:
Repair of the existing pier shall include but not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

Indicates limits of Epoxy Crack Injection

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SHEET NO. 67	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	403
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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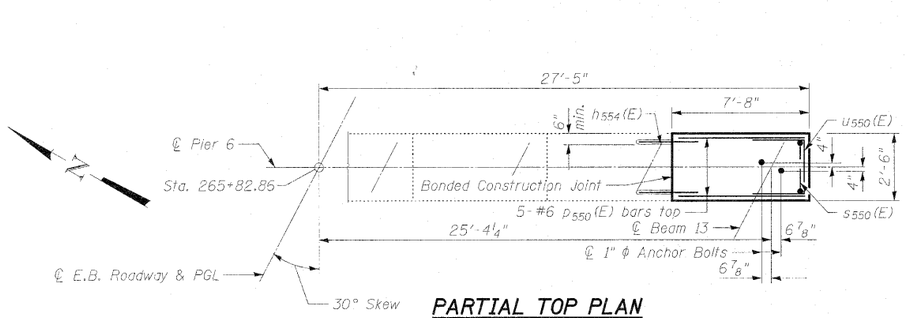
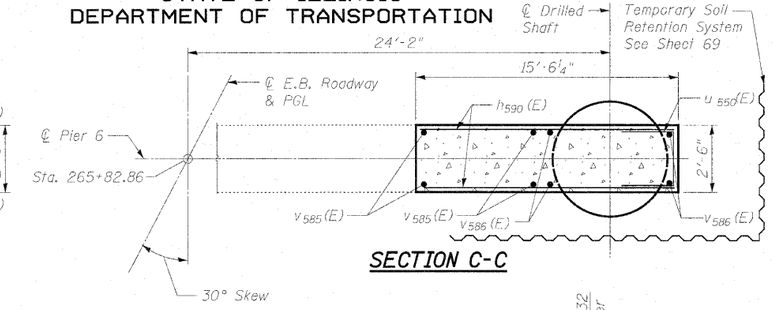
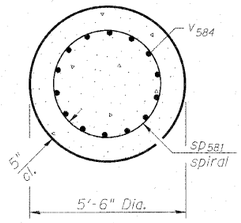
DEPARTMENT OF TRANSPORTATION



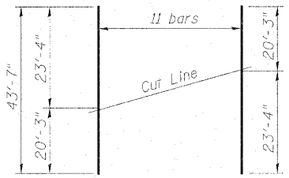
PARTIAL TOP PLAN



SECTION C-C

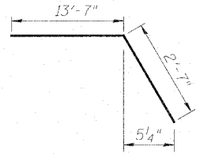


SECTION B-B

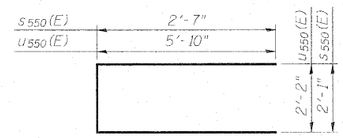


**** BAR v_{585}(E)**

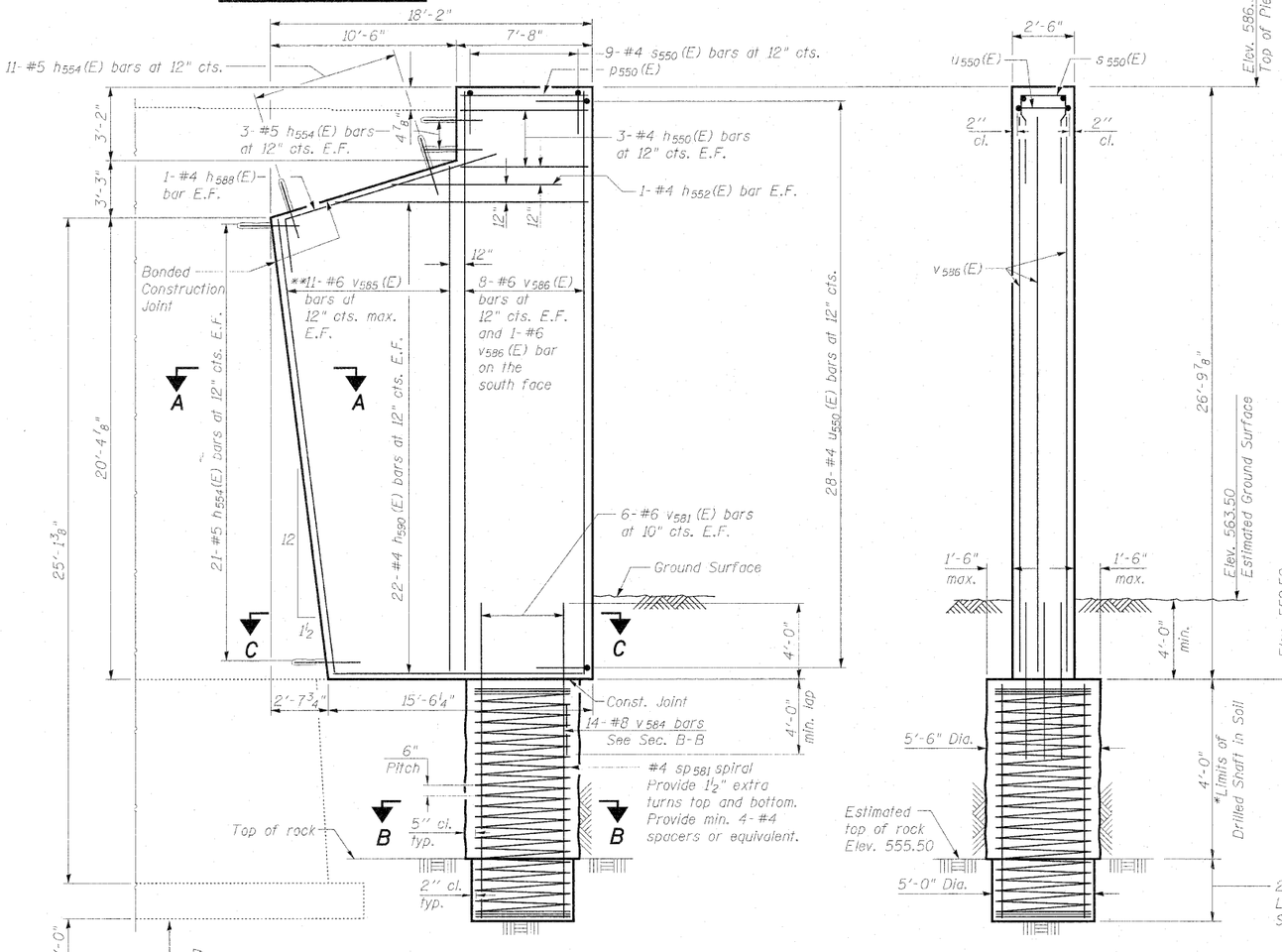
Order bars full length. Cut to fit as shown and place on one face of the pier. Use remainder of bars on the opposite face.



BAR h_{589}(E)

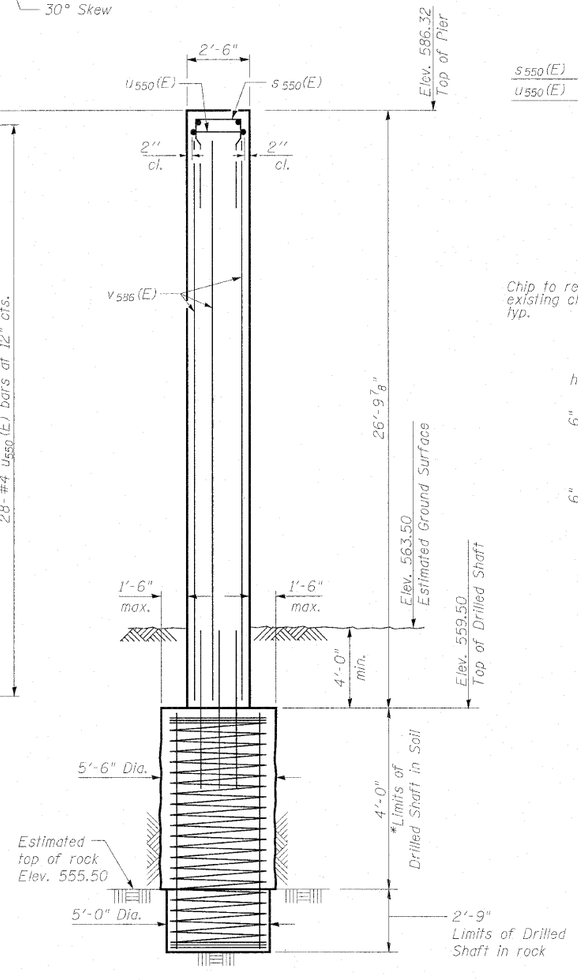


BARS s_{550}(E) & u_{550}(E)

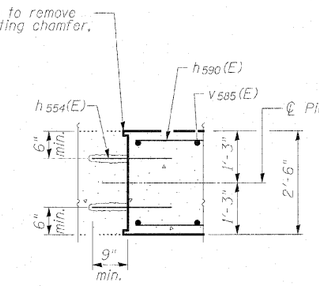


PARTIAL ELEVATION

(Looking East)



END VIEW



SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_{550}(E)	6	#4	7'-4"	
h_{552}(E)	2	#4	8'-5"	
h_{554}(E)	70	#5	4'-2"	
h_{589}(E)	2	#4	16'-2"	
h_{590}(E)	44	#5	15'-3"	
p_{550}(E)	5	#6	7'-4"	
s_{550}(E)	9	#4	7'-3"	
*** sp_{581}	1	#4	6'-4"	
u_{550}(E)	28	#4	7'-4"	
v_{584}	14	#8	6'-4"	
v_{581}(E)	12	#6	8'-0"	
v_{585}(E)	11	#6	43'-7"	
v_{586}(E)	17	#6	26'-7"	
Structure Excavation		Cu. Yd.	11	
Concrete Structures		Cu. Yd.	38.0	
Reinforcement Bars, Epoxy Coated		Pounds	2,840	
Reinforcement Bars		Pounds	400	
Drilled Shaft in Soil		Cu. Yd.	3.5	
Drilled Shaft in Rock		Cu. Yd.	2.0	
Temporary Soil Retention System		Sq. Ft.	112	

Notes:

Space reinforcement in cap to miss anchor bolts.

Allowable soil bearing pressure is 9,000 psf on sound rock.

Epoxy grout h_{554}(E) bars in 9" (min) drilled holes. See Section 584 of the Standard Specifications. Cost of hole drilling and epoxy grouting is included with Reinforcement Bars, Epoxy Coated.

Reinforcement bars that are to be grouted into existing concrete shall be spaced at least 6" from the edge of existing concrete. Contractor shall avoid drilling into existing reinforcement.

Minimum lap for spirals = 2'-0".

***Length is height of spiral.

* The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock elevation encountered and final top of shaft elevation.

PIER 6 WIDENING
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	LAN
CHECKED	SPK
DRAWN	ASJ
CHECKED	SPK

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SHEET NO. 68	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	404
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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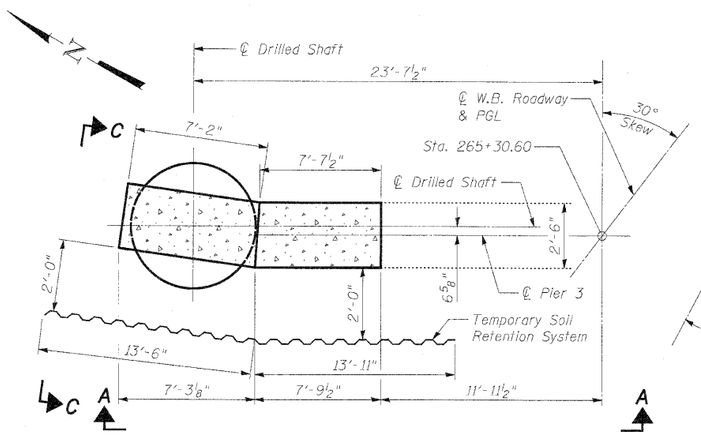
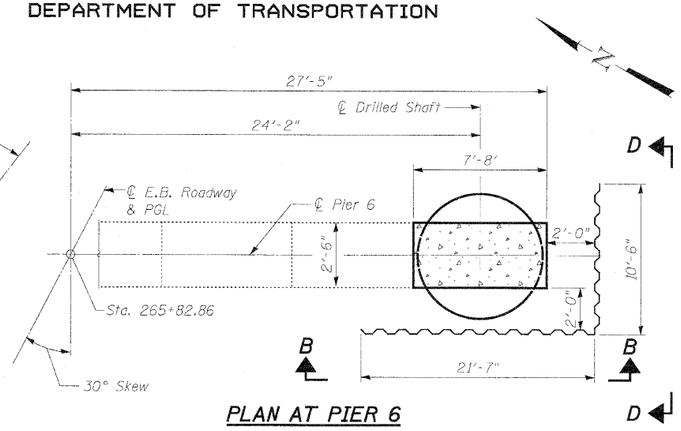
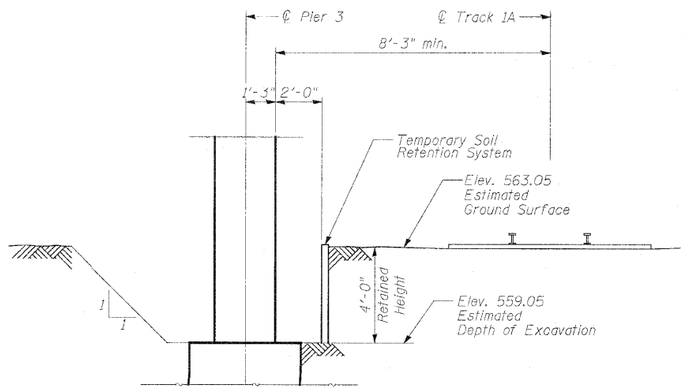
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



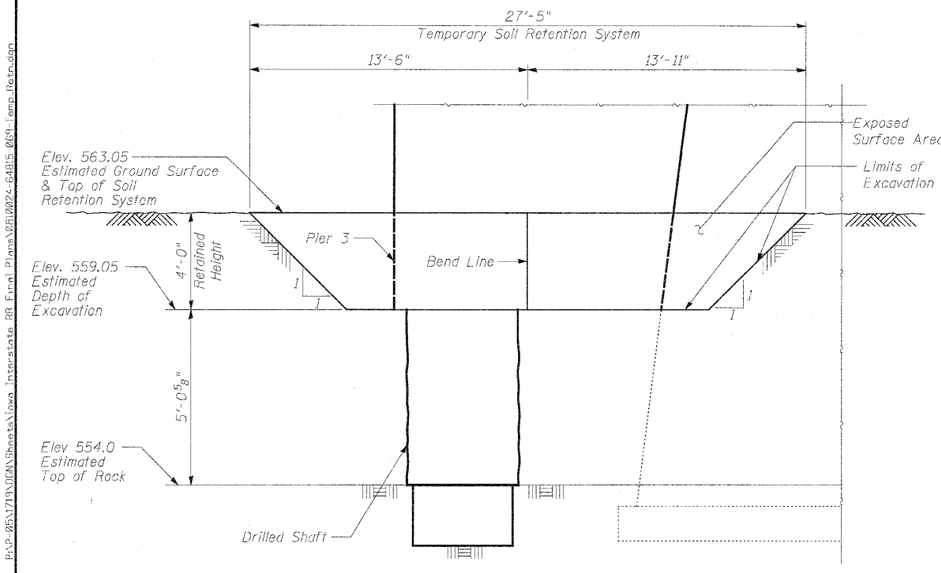
PLAN AT PIER 3



PLAN AT PIER 6

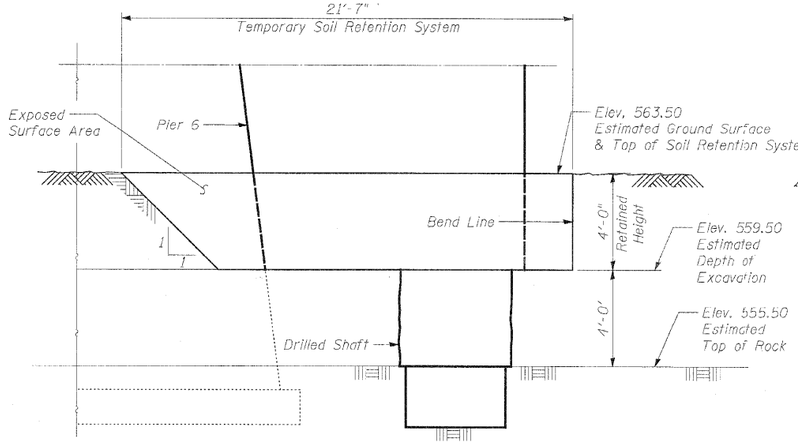


SECTION C-C



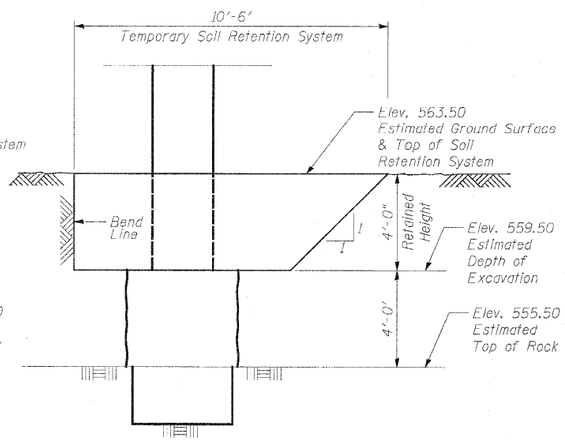
SECTION A-A

Note: For quantity see Sheet 62



SECTION B-B

Note: For quantity see Sheet 68



SECTION D-D

DESIGNED	ASJ
CHECKED	SPK
DRAWN	ASJ
CHECKED	SPK

TEMPORARY SOIL RETENTION SYSTEM
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

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SHEET NO. 69	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	405
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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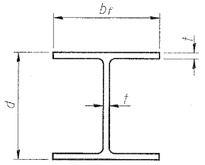
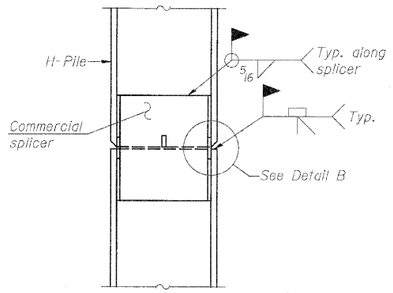
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

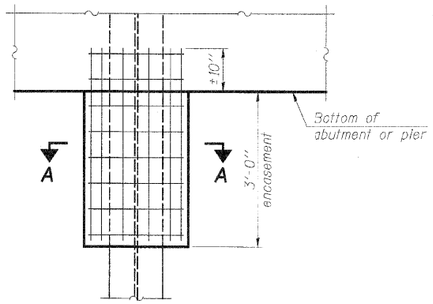


STEEL PILE TABLE

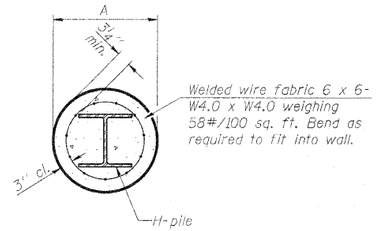
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	$14\frac{1}{4}''$	$14\frac{7}{8}''$	$\frac{13}{16}''$	30''
x102	14''	$14\frac{3}{4}''$	$\frac{11}{16}''$	30''
x89	$13\frac{7}{8}''$	$14\frac{3}{4}''$	$\frac{5}{8}''$	30''
x73	$13\frac{5}{8}''$	$14\frac{5}{8}''$	$\frac{1}{2}''$	30''
HP 12x84	$12\frac{1}{4}''$	$12\frac{1}{4}''$	$\frac{11}{16}''$	24''
x74	$12\frac{1}{8}''$	$12\frac{1}{4}''$	$\frac{5}{8}''$	24''
x63	12''	$12\frac{1}{8}''$	$\frac{1}{2}''$	24''
x53	$11\frac{3}{4}''$	12''	$\frac{7}{16}''$	24''
HP 10x57	10''	$10\frac{1}{4}''$	$\frac{9}{16}''$	24''
x42	$9\frac{3}{4}''$	$10\frac{1}{8}''$	$\frac{7}{16}''$	24''
HP 8x36	8''	$8\frac{1}{8}''$	$\frac{7}{16}''$	18''



ELEVATION



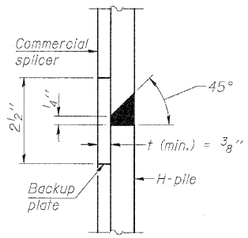
ELEVATION



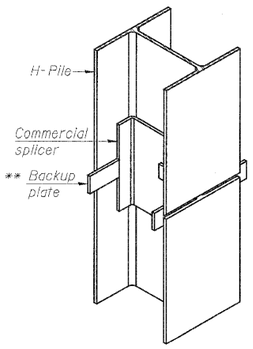
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

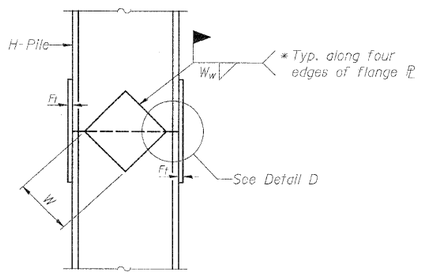
PILE ENCASEMENT



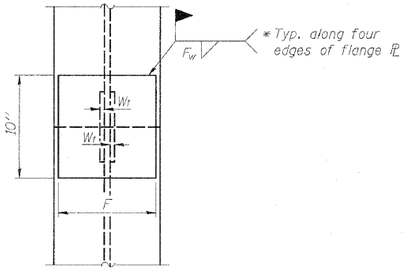
DETAIL "B"



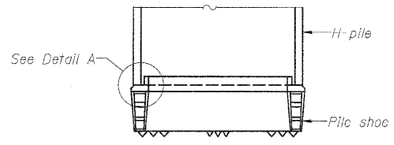
ISOMETRIC VIEW



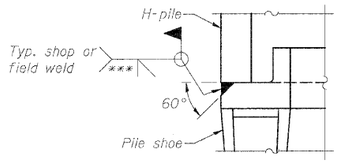
ELEVATION



END VIEW

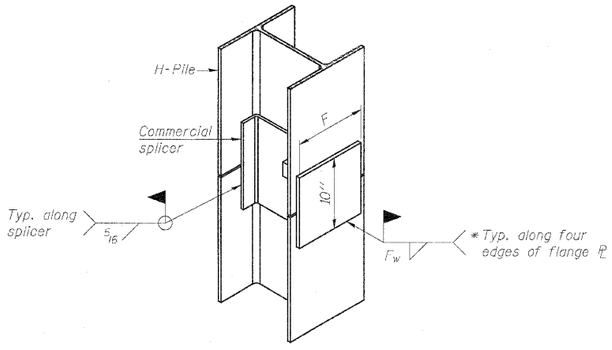


ELEVATION



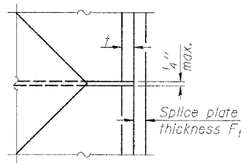
DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



DETAIL D

Designation	F	F_t	F_w	W	W_f	W_w
HP 14x117	$12\frac{1}{2}''$	1''	$\frac{7}{8}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x102	$12\frac{1}{2}''$	$\frac{7}{8}''$	$\frac{3}{4}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x89	$12\frac{1}{2}''$	$\frac{3}{4}''$	$\frac{11}{16}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x73	$12\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{9}{16}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
HP 12x84	10''	$\frac{7}{8}''$	$\frac{11}{16}''$	$6\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x74	10''	$\frac{7}{8}''$	$\frac{11}{16}''$	$6\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x63	10''	$\frac{5}{8}''$	$\frac{1}{2}''$	$6\frac{1}{2}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
x53	10''	$\frac{5}{8}''$	$\frac{1}{2}''$	$6\frac{1}{2}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
HP 10x57	8''	$\frac{3}{4}''$	$\frac{9}{16}''$	$5\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
x42	8''	$\frac{5}{8}''$	$\frac{9}{16}''$	$5\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
HP 8x36	7''	$\frac{5}{8}''$	$\frac{7}{16}''$	$4\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$

WELDED PLATE FIELD SPLICE

WELDED COMMERCIAL SPLICE ALTERNATE

* Interrupt welds ¼'' from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer ($\frac{5}{16}$'' min.).

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

HP PILE DETAILS
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	
CHECKED	-
DRAWN	ASJ
CHECKED	SPK

F-HP 11-1-09

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SHEET NO. 70	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	406
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

PLOT BY: ASJ N:\ROW\Sheets\Iowa Interstate RR Final Plans\081024-64815-W.B.HP Piles.dgn
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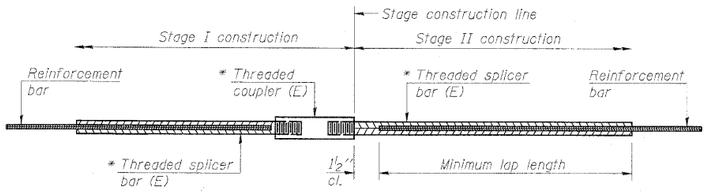
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

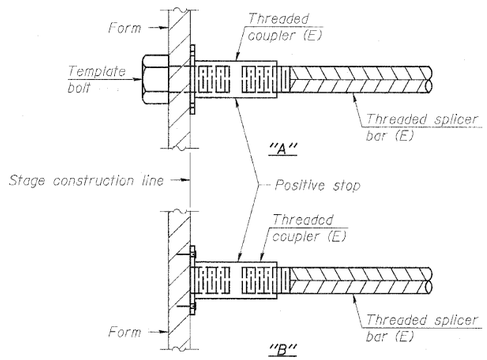
Minimum Lap Lengths				
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4' 8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

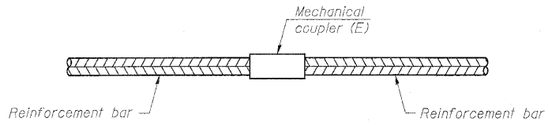
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



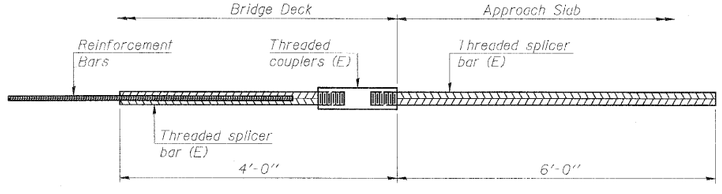
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



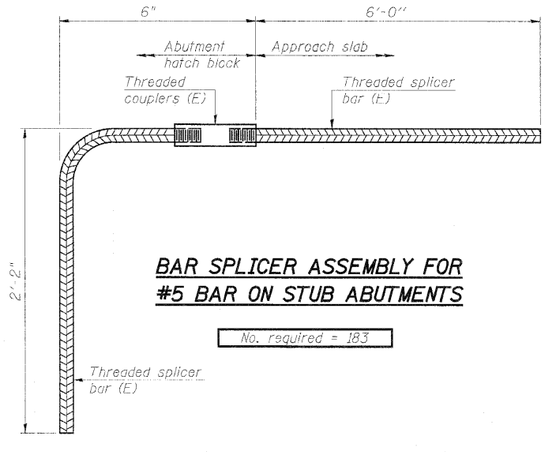
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON SEMI-INTEGRAL ABUTMENTS

No. required = 0



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 183

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See special provision for Mechanical Splicers.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO. 081-0024 (W.B.) STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	-
CHECKED	-
DRAWN	ASJ
CHECKED	SPK

BSD-1 11-1-09

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SHEET NO. 71	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	407
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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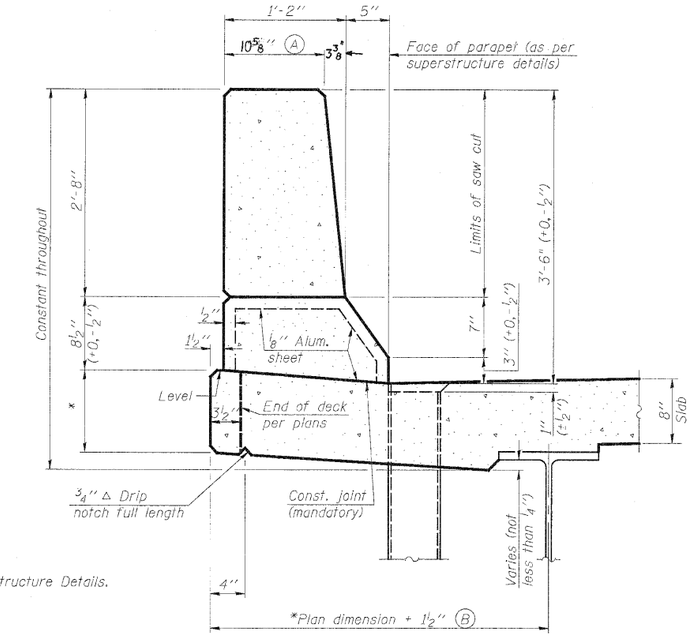
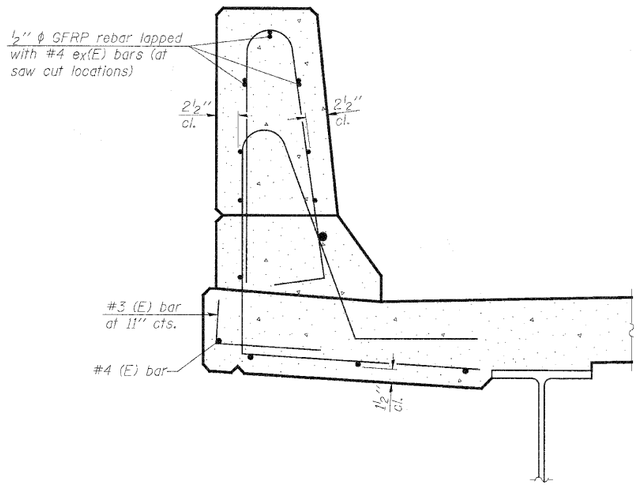
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



* See Superstructure Details.

SECTION
(Showing dimensions)



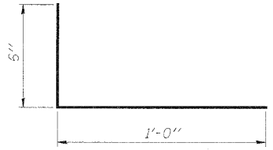
SECTION
(Showing reinforcement clearances for slip forming and additional reinforcement bars)

GENERAL NOTES

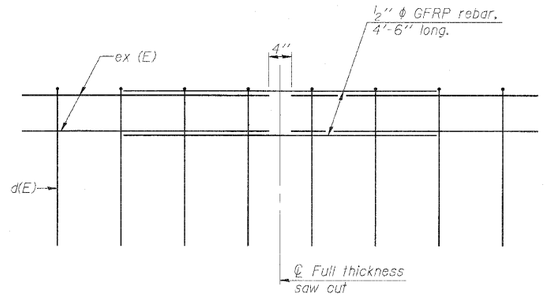
All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0218 cu. yds./ft. of parapet.

Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.

Steel superstructure shown. Other superstructure types similar.



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL
(Place as shown in parapet section at each parapet joint location.)

CONCRETE PARAPET
SLIPFORMING OPTION
STRUCTURE NO. 081-0024 (E.B.)
STRUCTURE NO. 081-0025 (W.B.)

DESIGNED	
CHECKED	-
DRAWN	ASJ
CHECKED	SPK

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SHEET NO. 72	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	408
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 1/17/06

ROUTE FAI 280 DESCRIPTION 92-045-02 (b) I-280 over the Chicago-Rock Island RR, .25 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB-1 LOCATION Blackhawk Twp. - 24 SW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. _____
Station _____

BORING NO. B-1a
Station 265+27
Offset 68.00ft Rt CL
Ground Surface Elev. 564.2 ft

Surface Water Elev. _____ ft
Stream Bed Elev. 559.3 ft

Groundwater Elev.:
First Encounter _____ ft
Upon Completion _____ ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
STIFF dark brown LOAM		1.3 P	18
561.70			
VERY STIFF dark brown LOAM	5 6 7	3.2 P	26
560.20			
-5			
STIFF gray SILTY CLAY LOAM	1 2 2	1.1 B	25
557.70			
VERY DENSE gray SHALE/LIMESTONE	9 100/3"		
555.70			
Borehole continued with rock coring.			
-10			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Page 1 of 1

Date 1/17/06

ROUTE FAI 280 DESCRIPTION 92-045-02 (b) I-280 over the Chicago-Rock Island RR, .25 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB-1 LOCATION Blackhawk Twp. - 24 SW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island CORING METHOD _____

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE _____

BORING NO. B-1a
Station 265+27
Offset 68.00ft Rt CL
Ground Surface Elev. 564.2 ft

Core Diameter 1.5 in
Top of Rock Elev. 557.20 ft
Begin Core Elev. 555.70 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: light gray-buff, dense, chalky and fractured. T.S.F.: 554.4 to 553.9	1	100	20	2.4	497
-10					
550.70					
As above: extremely fractured.	2	100	0	3.8	
-15					
545.70					
As above: extremely fractured.	3	80	0	8.2	
-20					
540.70					
End of Boring					
-25					

Color pictures of the cores _____
Cores will be stored for examination until _____
The "Strength" column represents the unlaxial compressive strength of the core sample (ASTM D-2938)
BBS, form 138 (Rev. 8-99)

SOIL BORING LOG B-1a
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	
CHECKED	
DRAWN	SV
CHECKED	SPK

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SHEET NO. 73	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	409
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 2/2/06

ROUTE FAI 280 DESCRIPTION 92-045-02 (b) I-280 over the Chicago-Rock Island RR, .25 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB-1 LOCATION Blackhawk Twp. - 24 SW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. _____
Station _____

BORING NO. B-2a
Station 264+35
Offset 61.00ft Rt CL
Ground Surface Elev. 564.6 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter _____ ft
Upon Completion _____ ft
After ____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM brown SILTY CLAY LOAM			0.8 P	20
	562.10			
STIFF dark brown SILTY CLAY LOAM		3 5 5	1.3 P	44
	560.60			
	-5			
MEDIUM/STIFF dark gray LOAM		1 2 4	1.0 B	35
	558.10			
SOFT gray SILTY CLAY LOAM		1 1 1	0.4 B	33
	555.60			
	-10			
Borehole continued with rock coring.				
	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Page 1 of 1

Date 2/2/06

ROUTE FAI 280 DESCRIPTION 92-045-02 (b) I-280 over the Chicago-Rock Island RR, .25 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB-1 LOCATION Blackhawk Twp. - 24 SW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island CORING METHOD _____

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE _____

BORING NO. B-2a
Station 264+35
Offset 61.00ft Rt CL
Ground Surface Elev. 564.6 ft

Core Diameter 1.5 In
Top of Rock Elev. 555.10 ft
Begin Core Elev. 554.60 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: white to gray, dense, severely fractured with pyrite vein visible in lower foot.		1	100	0	3	
	549.60 -15					
As above.		2	100	0	2.4	
	544.60 -20					
As above		3	100	0	3.8	
	539.60 -25					
End of Boring						
	-30					

Color pictures of the cores _____
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
BBS, form 138 (Rev. 8-99)

SOIL BORING LOG B-2a
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	
CHECKED	
DRAWN	SV
CHECKED	SPK

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SHEET NO. 74	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	410
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 2/6/06

ROUTE FAI 280 DESCRIPTION 92-045-02 (b) I-280 over the Chicago-Rock Island RR, .25 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB-1 LOCATION Blackhawk Twp. - 24 SW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. _____
Station _____

BORING NO. B-3a
Station 264+64
Offset 75.00ft Lt CL
Ground Surface Elev. 563.5 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter _____ ft
Upon Completion _____ ft
After ____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM dark brown SILTY CLAY LOAM			0.5 P	13
	561.00			
STIFF dark brown SILTY CLAY LOAM		6 3 5	1.2 B	43
	559.50			
	-5			
STIFF gray SILTY CLAY		2 2 4	1.1 B	26
	557.00			
VERY DENSE light gray weathered LIMESTONE		2 1 100/1"		
	554.00			
Borehole continued with rock coring.	-10			
	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Page 1 of 1

Date 2/6/06

ROUTE FAI 280 DESCRIPTION 92-045-02 (b) I-280 over the Chicago-Rock Island RR, .25 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB-1 LOCATION Blackhawk Twp. - 24 SW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island CORING METHOD _____

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE _____
Core Diameter 1.5 in
Top of Rock Elev. 556.50 ft
Begin Core Elev. 554.00 ft

BORING NO. B-3a
Station 264+64
Offset 75.00ft Lt CL
Ground Surface Elev. 563.5 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: light gray-buff, dense, fractured & chalky. T.S.F.: 552.4 to 552.0	-10	1	100	13	2.2	762
	549.00					
As above: no testable segments.	-15	2	100	7	2.8	
	544.00					
As above. T.S.F.: 542.9 to 542.5	-20	3	90	8	5	653
	539.00					
End of Boring	-25					

Color pictures of the cores _____
Cores will be stored for examination until _____
The "Strength" column represents the unlaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

SOIL BORING LOG B-3a
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	
CHECKED	
DRAWN	SV
CHECKED	SPK

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SHEET NO. 75	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	411
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 2/7/06

ROUTE FAI 280 DESCRIPTION 92-045-02 (b) I-280 over the Chicago-Rock Island RR, .25 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB-1 LOCATION Blackhawk Twp. - 24 SW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. _____
Station _____

BORING NO. B-4a
Station 264+00
Offset 75.00ft Lt CL
Ground Surface Elev. 563.6 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter _____ ft
Upon Completion _____ ft
After ____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM brown SILTY CLAY LOAM			0.6 P	24
561.10				
MEDIUM dark brown SILTY CLAY LOAM		5 4 4	0.8 P	24
559.60	-5			
MEDIUM gray SILTY CLAY LOAM		3 4 5	0.8 B	30
557.10				
MEDIUM gray SILTY CLAY LOAM, bottom 2" weathered LIMESTONE		4 6 69	1.0 B	30
554.60				
Borehole continued with rock coring.	-10			
	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Page 1 of 1

Date 2/7/06

ROUTE FAI 280 DESCRIPTION 92-045-02 (b) I-280 over the Chicago-Rock Island RR, .25 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB-1 LOCATION Blackhawk Twp. - 24 SW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island CORING METHOD _____

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE _____
Core Diameter 1.5 in
Top of Rock Elev. 555.10 ft
Begin Core Elev. 554.60 ft

BORING NO. B-4a
Station 264+00
Offset 75.00ft Lt CL
Ground Surface Elev. 563.6 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: light to dark gray, dense and fractured. T.S.F.: 551.0 to 550.6	-10	1	100	47	2.6	1029
549.60						
Dolomite: as above, fractured and laminated throughout.	-15	2	100	0	2.4	
544.60						
Dolomite: as above, severely fractured to 541.1, otherwise solid.	-20	3	100	40	2.8	659
539.60						
End of Boring	-25					

Color pictures of the cores _____
Cores will be stored for examination until _____
The "Strength" column represents the unlaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

SOIL BORING LOG B-4a
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	
CHECKED	
DRAWN	SV
CHECKED	SPK

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SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEET NO.76	280	81-1(VB-1)R	ROCK ISLAND	503	412
77 SHEETS			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Date 2/8/06

ROUTE FAI 280 DESCRIPTION 92-045-02 (b) I-280 over the Chicago-Rock Island RR, .25 m E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB-1 LOCATION Blackhawk Twp. - 24 SW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. _____
Station _____

BORING NO. B-5a
Station 265+44
Offset ft CL
Ground Surface Elev. 590.3 ft

Surface Water Elev. _____ ft
Stream Bed Elev. 560.8 ft

Groundwater Elev.:
First Encounter 552.8 ft ▼
Upon Completion ft
After ____ Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM brown SILTY CLAY LOAM			0.5 P	14
	587.80			
VERY STIFF brown LOAM		4 4 7	3.3 B	14
	586.30			
	-5			
VERY STIFF gray/brown LOAM		6 6 8	3.0 P	14
	583.80			
STIFF/VERY STIFF brown SANDY LOAM		2 5 7	2.0 S	9
	581.30			
	-10			
STIFF brown SANDY LOAM with GRAVEL		9 8 9	1.5 P	13
	578.80			
STIFF brown LOAM with GRAVEL		4 5 7	1.3 B	13
	576.30			
	-15			
STIFF brown CLAY LOAM		4 6 7	1.6 B	34
	573.80			
VERY STIFF brown/gray SANDY LOAM with GRAVEL		4 9 9	3.6 P	9
	571.30			
	-20			
MEDIUM brown dry fine SAND with SILTY LOAM lens		8 7 7		19
	568.80			
STIFF gray SANDY LOAM		4 8 9	1.1 P	14
	566.30			
	-25			
STIFF dark gray LOAM		4 7 8	1.6 S	
	563.80			
SOFT gray SILTY LOAM		1 1 3	0.4 P	24
	561.30			
	-30			
No Recovery		4 6 10		
	558.80			
STIFF gray SILTY CLAY		1 3 5	1.7 B	28
	556.30			
	-35			
STIFF gray SILTY CLAY		1 2 4	1.3 B	24
	553.80			
	▼			
VERY DENSE gray weathered LIMESTONE with SAND & GRAVEL		100/3"		
	551.80			
Auger Refusal at 38.5' Borehole continued with rock coring.	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Date 2/8/06

ROUTE FAI 280 DESCRIPTION 92-045-02 (b) I-280 over the Chicago-Rock Island RR, .25 m E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB-1 LOCATION Blackhawk Twp. - 24 SW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island CORING METHOD _____

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE _____

BORING NO. B-5a
Station 266+44
Offset ft CL
Ground Surface Elev. 590.3 ft

Core Diameter 1.5 in
Top of Rock Elev. 553.80 ft
Begin Core Elev. 551.80 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: buff gray, dense with occasional mudstone inclusions. T.S.F.: 549.8 to 549.4	-40	1	100	33	2.2	705.7
	546.60					
Dolomite: as above, with minor laminations T.S.F.: 546.1 to 545.6	-45	2	100	8	2	1043
	541.80					
Dolomite: as above to 540.6 then transitions to . . . . Shaley Clay: light gray, with occasional shale partings. No testable segments due to fragility.	-50	3	100	27	2	
	536.80					
End of Boring	-55					

Color pictures of the cores _____
Cores will be stored for examination until _____
The "Strength" column represents the unlaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

DESIGNED	
CHECKED	
DRAWN	SV
CHECKED	SPK

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SOIL BORING LOG B-5a
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

SHEET NO. 77	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	413
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

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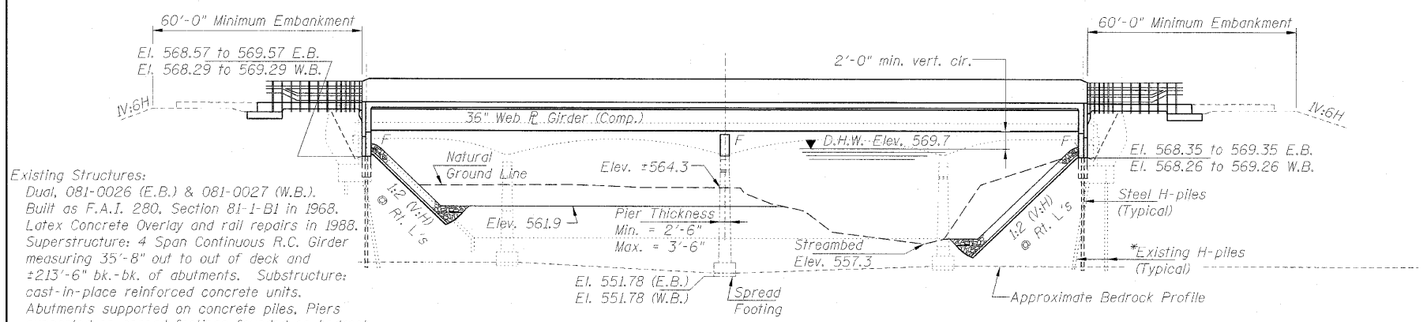
Bench Marks:
District 2 Network Monument 65723070, I-280 Sta. 283+33.88, 131.54' Rt. Elev. 579.52
B.M. 'A' = South most bearing seat on existing pier #2 - Elev. 569.19
B.M. 'B' = South most bearing seat on existing pier #5 - Elev. 569.18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



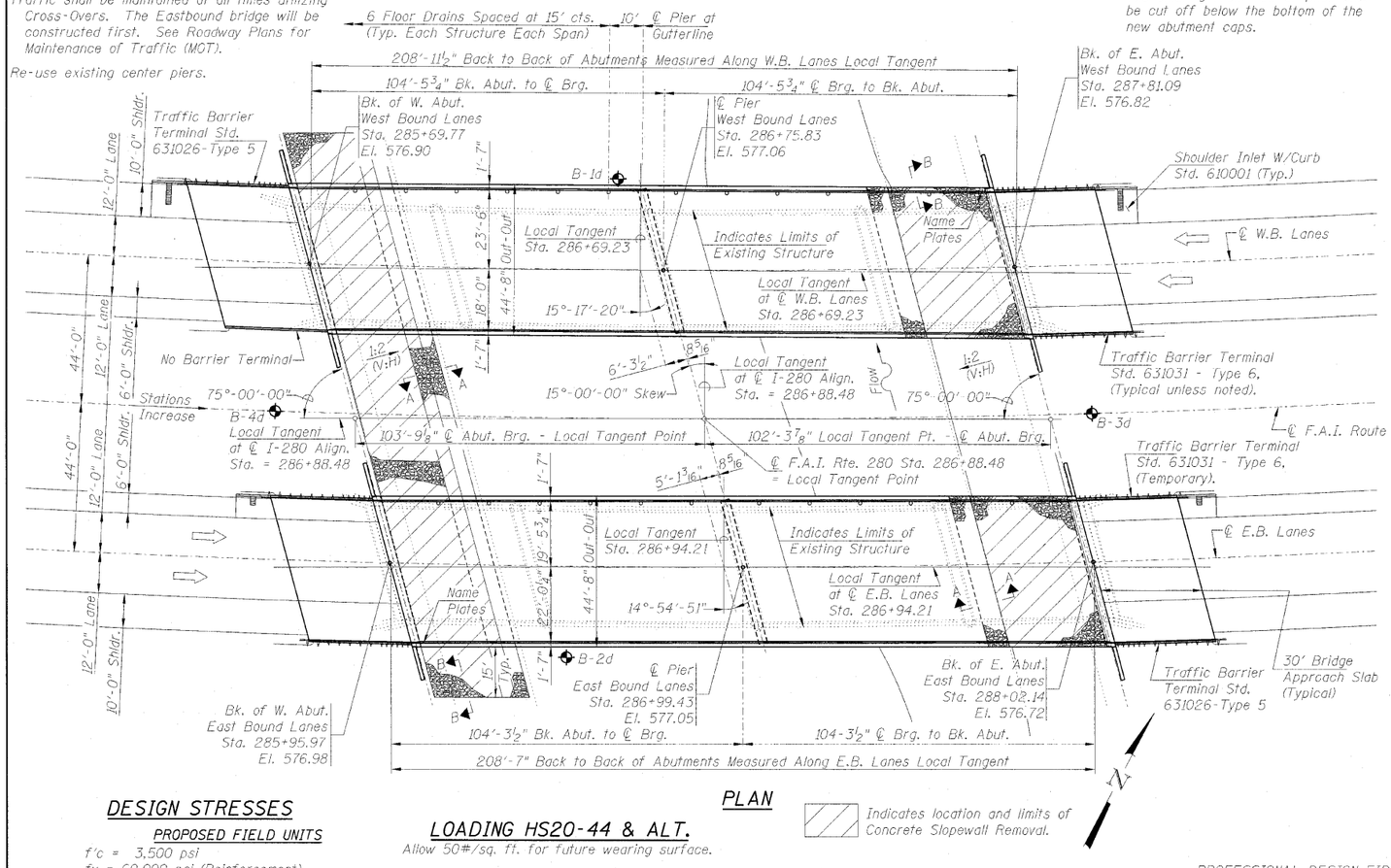
ELEVATION

Existing Structures:
Dual, 081-0026 (E.B.) & 081-0027 (W.B.).
Built as F.A.I. 280, Section 81-1-B1 in 1968.
Latex Concrete Overlay and rail repairs in 1988.
Superstructure: 4 Span Continuous R.C. Girder measuring 35'-8" out to out of deck and ±213'-6" bk.-bk. of abutments. Substructure: cast-in-place reinforced concrete units. Abutments supported on concrete piles. Piers supported on spread footings founded on bedrock.

Traffic shall be maintained at all times utilizing Cross-Overs. The Eastbound bridge will be constructed first. See Roadway Plans for Maintenance of Traffic (MOT).

Re-use existing center piers.

*The existing front row of piles shall be cut off below the bottom of the new abutment caps.



PLAN

Indicates location and limits of Concrete Slopewall Removal.

WATERWAY INFORMATION TABLE

Drainage Area = 62.8 sq. mi.
Existing Low Grade Elevation: 569.6 ft. at Sta. 297+59.91 (EOP)
Proposed Low Grade Elevation: 573.4 ft. at Sta. 292+00 Rt. & Sta. 288+50 Lt.

Flood	Frequency Year	Discharge cfs	Waterway Opening (sq ft) Existing	Waterway Opening (sq ft) Proposed	Natural H.W.E.	Head (ft) Existing	Head (ft) Proposed	Headwater Elev. (ft) Existing	Headwater Elev. (ft) Proposed
Ten-Year	10	5,930	887	1,118	568.4	0.4	0.0	568.8	568.4
Design	50	9,040	1,136	1,369	569.7	0.9	0.7	570.6	570.4
Base	100	10,400	1,233	1,478	570.3	0.9	0.8	571.2	571.1
Max	500	13,500	1,369	1,703	571.5	0.7	1.3	572.2	572.8

10-Year Velocity through Existing Structure = 7.86 fps 10-Year Velocity through Proposed Structure = 6.39 fps
DATUM: ALL ELEVATIONS NAVD 88.
ALL-TIME H.W.E. & DATE: 569.87 ft during April 1973, 565.10 ft during June 1936.

NOTE:
Berms located in the roadside ditches both North and South of the structure East of the bridge are needed to eliminate over-the-road-flow. The height of the berms is based on the proposed design Headwater Elev. plus 3 ft. (570.4+3.0=573.4). Gated pipes are needed to provide positive drainage to Mill Creek.

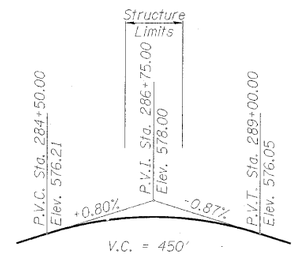
East bank slopewall removal limits restricted to proposed structure limits. Saw cut full depth required and included in cost of slopewall removal.

DESIGN SCOUR ELEVATION TABLE

	W. Abut.	Pier	E. Abut.
Eastbound Bridge Design Scour Elevation (ft.)	567.9	552.0	567.8
Westbound Bridge Design Scour Elevation (ft.)	567.6	552.5	567.7

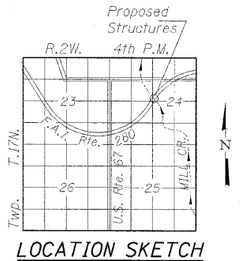
HORIZONTAL CURVE DATA

PI = 282+44.23
Δ = 44°-33'-32.32"
D = 1°-29'-59.84"
R = 3,819.83'
L = 2,970.69'
T = 1,565.03'
E = 308.17'
P.C. Sta. = 266+79.20
P.T. Sta. = 296+49.89
S.E. = 4.58%



PROFILE GRADE

F.A.I. Route 280 - Along ℄ W.B. & E.B. Lanes



LOCATION SKETCH

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

LICENSED STRUCTURAL ENGINEER
THOMAS E. HAVENAR
081-004723
STATE OF ILLINOIS
SIGNATURE
7/28/10
DATE
LIC. EXP. DATE: 11/30/10

DESIGN STRESSES

PROPOSED FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (Struct. Steel) (M270 Grade 50W)

EXISTING FIELD UNITS

f'c = 3,500 psi
fy = 40,000 psi (Reinforcement)

LOADING HS20-44 & ALT.

Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.034
Site Coefficient (S) = 1.0

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

GENERAL PLAN
F.A.I. ROUTE 280 OVER MILL CREEK
SECTION 81-1(B-1)R
ROCK ISLAND COUNTY
STA. 286+88.48
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

PROFESSIONAL DESIGN FIRM LICENSE #184-001084

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 1
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	414
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMM/JEH	5/21/10

09/07/2010
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $^{7}/_{8}$"in. ϕ, holes $^{15}/_{16}$"in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 309,080 W.B.L.
308,657 E.B.L.

All structural steel shall be AASHTO M 270 Grade 50W. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $^{1}/_{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

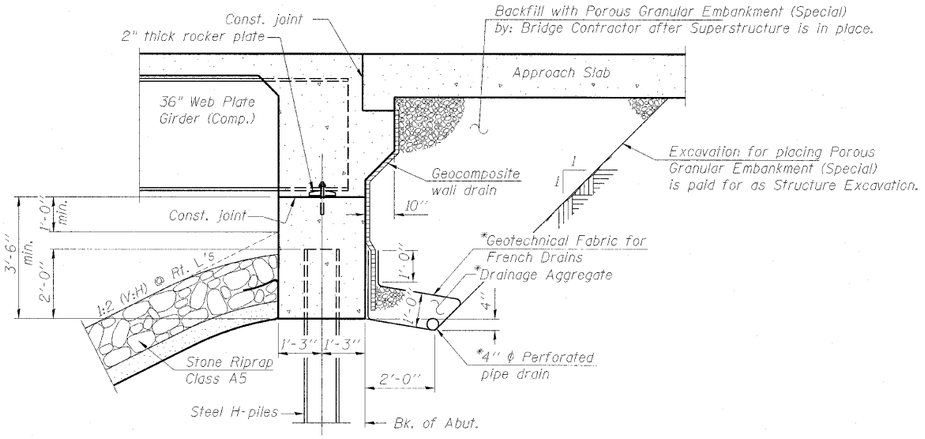
Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

In lieu of the hammer selection criteria and use of the FHWA Modified Gates formula specified in Section 512 of the Standard Specifications, the Contractor shall conduct a wave equation analysis to establish the driving criteria at all pile foundations which specify a nominal required bearing above 600 kips. The analysis and calculations shall be submitted to the Engineer for approval.

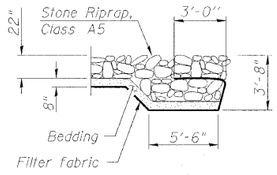
The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.



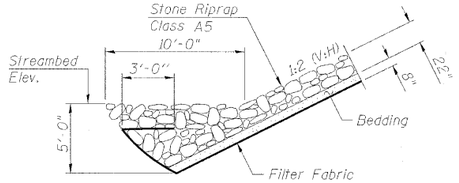
SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures.



SECTION B-B



SECTION A-A

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.	-	371	371
Stone Riprap, Class A5	Sq. Yd.	-	1022	1022
Filter Fabric	Sq. Yd.	-	1022	1022
Removal of Existing Structures No. 2	Each	2	-	2
Concrete Removal	Cu. Yd.	-	13.8	13.8
Concrete Slopewall Removal	Sq. Yd.	-	879	879
Structure Excavation	Cu. Yd.	-	461	461
Floor Drains	Each	24	-	24
Concrete Structures	Cu. Yd.	-	200.0	200.0
Concrete Superstructure	Cu. Yd.	923.5	-	923.5
Bridge Deck Grooving	Sq. Yd.	2370	-	2370
Concrete Encasement	Cu. Yd.	-	9.6	9.6
Protective Coat	Sq. Yd.	2910	-	2910
Furnishing and Erecting Structural Steel Bridge No. 5	L. Sum	1	-	1
Stud Shear Connectors	Each	6840	-	6840
Reinforcement Bars, Epoxy Coated	Pound	209450	30490	239940
Bar Splicers	Each	176	-	176
Furnishing Steel Piles HP 12x63	Foot	-	574	574
Driving Piles	Foot	-	574	574
		-	-	-
Pile Shoes	Each	-	28	28
Name Plates	Each	2	-	2
Anchor Bolts, 1"	Each	48	-	48
Anchor Bolts, 1¼"	Each	24	-	24
Geocomposite Wall Drain	Sq. Yd.	-	188	188
Pipe Underdrains for Structures 4"	Foot		340	340

INDEX OF SHEETS

1	General Plan
2	General Data
3	Substructure Layout
4-8	Top of Slab Elevations
9-12	Top of Slab Elevations - Approach Slabs
13-15	Superstructure Details - W.B.L.
16-18	Superstructure Details - E.B.L.
19-21	Bridge Approach Slab Details
22-23	Structural Steel Details - W.B.L.
24-25	Structural Steel Details - E.B.L.
26	Bearing Details
27	West Abutment - W.B.L.
28	East Abutment - W.B.L.
29	West Abutment - E.B.L.
30	East Abutment - E.B.L.
31	Existing Pier Concrete Removal Details
32	Pier - W.B.L.
33	Pier - E.B.L.
34	Bar Splicer Assembly and Mechanical Splicer Details
35	HP Pile Details
36	Concrete Parapet Slipform Option
37-40	Borings (Sheet 1 thru 4)

STATION 286+88.48
RE-BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. RT. 280 SEC. 81-1(B-1)R
LOADING HS20-44 & ALT
STRUCTURE NO. 081-0026

NAME PLATE - E.B.L.

See Std. 515001

STATION 286+88.48
RE-BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. RT. 280 SEC. 81-1(B-1)R
LOADING HS20-44 & ALT
STRUCTURE NO. 081-0027

NAME PLATE - W.B.L.

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slope. The pipes shall drain into concrete headwalls. (See Artical 601.05 of the Standard Specifications and Highway Standard 601101)

GENERAL DATA

STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

PROFESSIONAL DESIGN FIRM LICENSE #184-001084

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HANSON
Hanson Professional Services Inc.

JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 2
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	415
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
RECEIVED	NWA/JEH	5/21/10

09-SEP-2010
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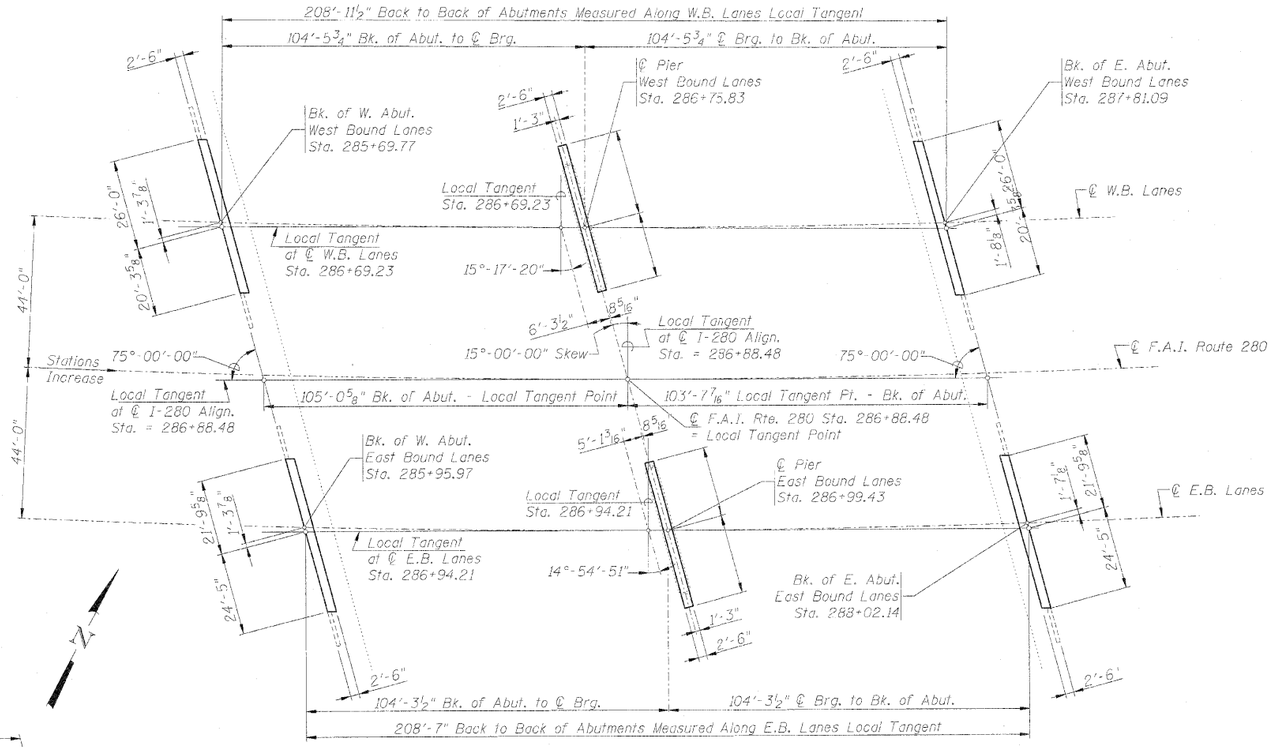
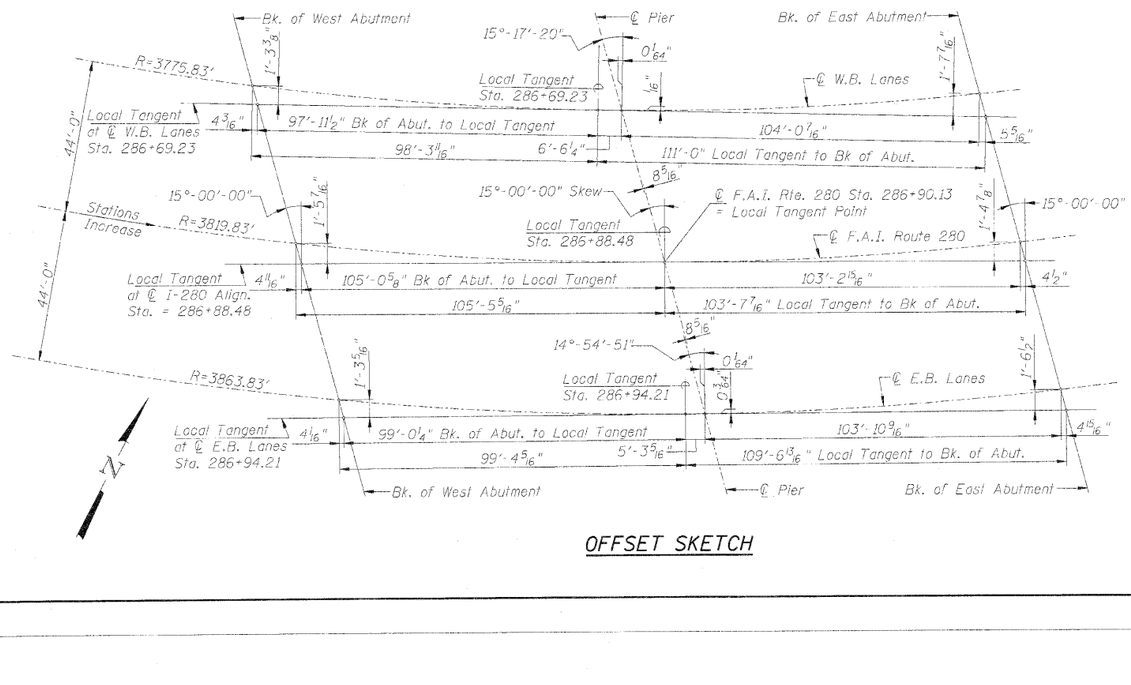
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SUBSTRUCTURE LAYOUT



OFFSET SKETCH

SUBSTRUCTURE LAYOUT
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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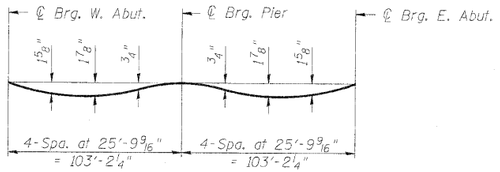
JOB NO.	SHEET NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
05R1532A	SHEET NO. 3	280	81-1(B-1)R	Rock Island	503	416
DATE 05/21/10	40 SHEETS			CONTRACT NO. 64815		
			ILLINOIS FED. AID PROJECT			

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVISED	MWM-SH	5/21/10

dp=0.1200
c:\workingfiles\3382\Dgn\3382D0026-D0027-64815.dgn

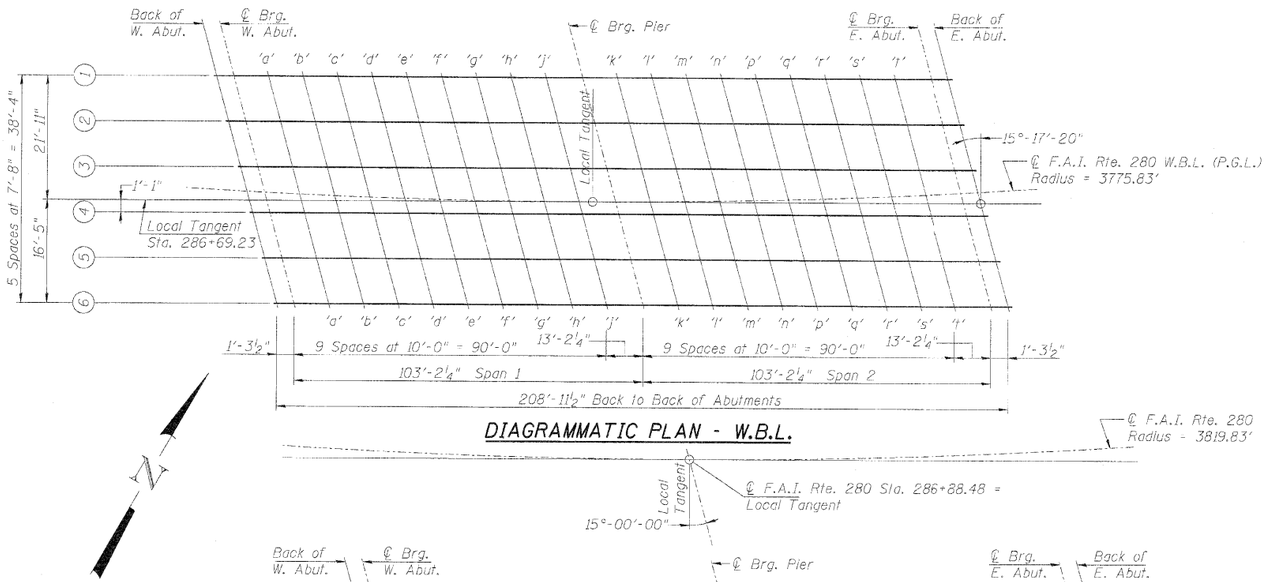
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



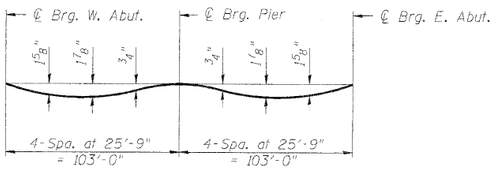
DEAD LOAD DEFLECTION DIAGRAM - W.B.L.

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets 5 & 6 of 40.



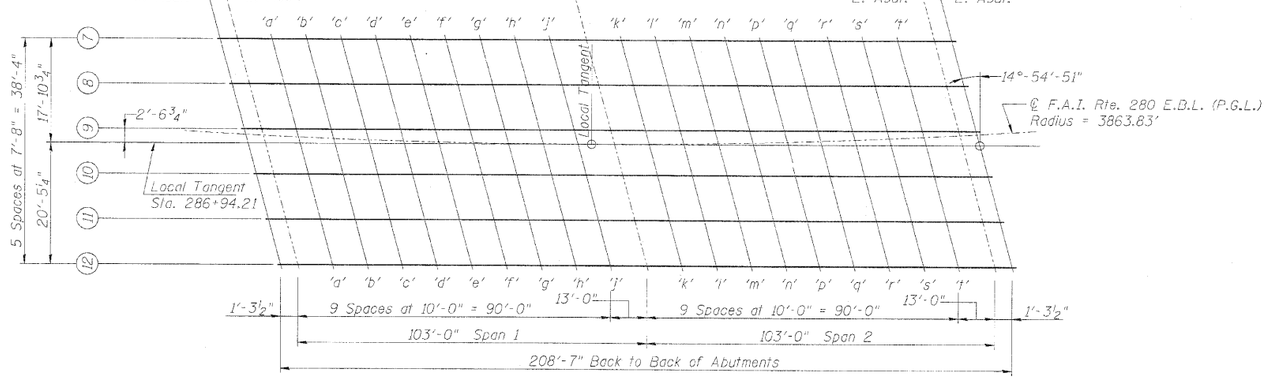
DIAGRAMMATIC PLAN - W.B.L.



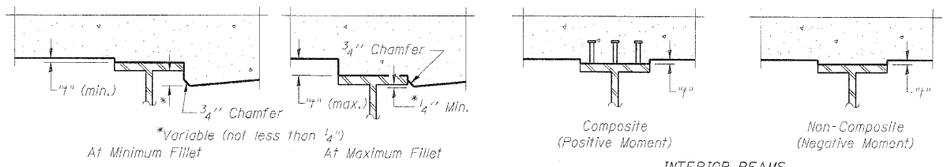
DEAD LOAD DEFLECTION DIAGRAM - E.B.L.

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets 7 & 8 of 40.



DIAGRAMMATIC PLAN - E.B.L.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 5 thru 8 of 40, minus 8" slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

TOP OF SLAB ELEVATIONS (Sheet 1 of 5)
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

LAYOUT	RGD	5/21/10
DRAWN	RGD	5/21/10
REVIEWED	MAW/JEH	5/21/10

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JOB NO.	SHEET NO. 4	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
05R1532A		280	81-1(B-1)R	Rock Island	503	417
DATE 05/21/10	40 SHEETS			CONTRACT NO. 64815		
			ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+63.49	-20.48	575.94	575.94
℄ Brg. W. Abut	285+64.80	-20.51	575.94	575.94
'a'	285+74.97	-20.78	575.96	576.03
'b'	285+85.14	-21.01	575.99	576.10
'c'	285+95.31	-21.22	576.00	576.15
'd'	286+05.49	-21.40	576.02	576.18
'e'	286+15.66	-21.55	576.03	576.19
'f'	286+25.83	-21.68	576.05	576.18
'g'	286+36.01	-21.78	576.05	576.15
'h'	286+46.18	-21.85	576.06	576.12
'j'	286+56.36	-21.90	576.06	576.08
℄ Brg. Pier	286+69.77	-21.92	576.06	576.06
'k'	286+79.95	-21.90	576.06	576.07
'l'	286+90.12	-21.86	576.05	576.10
'm'	287+00.30	-21.79	576.05	576.13
'n'	287+10.47	-21.70	576.04	576.16
'p'	287+20.65	-21.58	576.02	576.17
'q'	287+30.82	-21.43	576.01	576.17
'r'	287+40.99	-21.26	575.99	576.14
's'	287+51.16	-21.05	575.97	576.09
't'	287+61.33	-20.83	575.94	576.02
℄ Brg. E. Abut.	287+74.74	-20.49	575.91	575.91
Bk. E. Abut.	287+76.06	-20.45	575.90	575.90

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+65.83	-12.87	576.29	576.29
℄ Brg. W. Abut	285+67.14	-12.91	576.30	576.30
'a'	285+77.29	-13.16	576.32	576.38
'b'	285+87.44	-13.39	576.34	576.46
'c'	285+97.59	-13.59	576.36	576.51
'd'	286+07.74	-13.76	576.38	576.54
'e'	286+17.90	-13.91	576.39	576.55
'f'	286+28.05	-14.03	576.40	576.53
'g'	286+38.20	-14.13	576.41	576.50
'h'	286+48.36	-14.20	576.41	576.47
'j'	286+58.51	-14.24	576.41	576.44
℄ Brg. Pier	286+71.90	-14.25	576.41	576.41
'k'	286+82.05	-14.23	576.41	576.42
'l'	286+92.21	-14.18	576.40	576.45
'm'	287+02.36	-14.11	576.40	576.48
'n'	287+12.52	-14.01	576.38	576.51
'p'	287+22.67	-13.88	576.37	576.52
'q'	287+32.82	-13.73	576.35	576.52
'r'	287+42.97	-13.55	576.33	576.49
's'	287+53.12	-13.34	576.31	576.44
't'	287+63.27	-13.11	576.29	576.37
℄ Brg. E. Abut.	287+76.65	-12.76	576.25	576.25
Bk. E. Abut.	287+77.97	-12.73	576.25	576.25

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+68.16	-5.27	576.65	576.65
℄ Brg. W. Abut	285+69.47	-5.30	576.65	576.65
'a'	285+79.60	-5.55	576.68	576.74
'b'	285+89.73	-5.77	576.70	576.81
'c'	285+99.86	-5.96	576.71	576.86
'd'	286+09.99	-6.13	576.73	576.89
'e'	286+20.12	-6.27	576.74	576.90
'f'	286+30.26	-6.39	576.75	576.88
'g'	286+40.39	-6.48	576.76	576.85
'h'	286+50.52	-6.54	576.76	576.82
'j'	286+60.66	-6.58	576.77	576.79
℄ Brg. Pier	286+74.02	-6.58	576.76	576.76
'k'	286+84.15	-6.56	576.76	576.77
'l'	286+94.29	-6.50	576.75	576.80
'm'	287+04.42	-6.43	576.74	576.83
'n'	287+14.55	-6.32	576.73	576.85
'p'	287+24.68	-6.19	576.72	576.87
'q'	287+34.82	-6.03	576.70	576.87
'r'	287+44.95	-5.84	576.68	576.84
's'	287+55.08	-5.63	576.66	576.79
't'	287+65.20	-5.39	576.64	576.72
℄ Brg. E. Abut.	287+78.55	-5.04	576.60	576.60
Bk. E. Abut.	287+79.87	-5.00	576.60	576.60

P.G.L. WEST BOUND LANES

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+69.77	0.00	576.90	576.90
℄ Brg. W. Abut	285+71.09	0.00	576.90	576.90
'a'	285+81.28	0.00	576.94	577.00
'b'	285+91.46	0.00	576.97	577.08
'c'	286+01.63	0.00	576.99	577.14
'd'	286+11.79	0.00	577.01	577.18
'e'	286+21.95	0.00	577.03	577.19
'f'	286+32.09	0.00	577.05	577.18
'g'	286+42.23	0.00	577.06	577.15
'h'	286+52.37	0.00	577.06	577.12
'j'	286+62.49	0.00	577.07	577.09
℄ Brg. Pier	286+75.83	0.00	577.06	577.06
'k'	286+85.94	0.00	577.06	577.07
'l'	286+96.04	0.00	577.05	577.09
'm'	287+06.13	0.00	577.04	577.12
'n'	287+16.22	0.00	577.02	577.14
'p'	287+26.30	0.00	577.00	577.15
'q'	287+36.37	0.00	576.97	577.14
'r'	287+46.44	0.00	576.95	577.10
's'	287+56.50	0.00	576.91	577.04
't'	287+66.55	0.00	576.88	576.96
℄ Brg. E. Abut.	287+79.79	0.00	576.82	576.82
Bk. E. Abut.	287+81.09	0.00	576.82	576.82

Note: Offsets are from ℄ F.A.I. Rte. 280 W.B.L. (P.G.L.)

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMM/JEH	5/21/10

07-29-2009
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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 5
40 SHEETS

TOP OF SLAB ELEVATIONS - W.B.L. (Sheet 2 of 5)
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)IR	Rock Island	503	418
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+70.48	2.34	577.01	577.01
℄ Brg. W. Abut	285+71.79	2.31	577.01	577.01
'a'	285+81.90	2.07	577.03	577.09
'b'	285+92.01	1.85	577.05	577.17
'c'	286+02.12	1.66	577.07	577.22
'd'	286+12.23	1.50	577.08	577.25
'e'	286+22.34	1.37	577.10	577.25
'f'	286+32.46	1.26	577.10	577.24
'g'	286+42.57	1.17	577.11	577.21
'h'	286+52.68	1.12	577.11	577.17
'j'	286+62.80	1.09	577.12	577.14
℄ Brg. Pier	286+76.13	1.09	577.11	577.11
'k'	286+86.24	1.12	577.11	577.12
'l'	286+96.35	1.18	577.10	577.15
'm'	287+06.47	1.26	577.09	577.18
'n'	287+16.58	1.37	577.08	577.20
'p'	287+26.69	1.51	577.07	577.22
'q'	287+36.80	1.67	577.05	577.21
'r'	287+46.91	1.86	577.03	577.19
's'	287+57.02	2.08	577.01	577.13
't'	287+67.13	2.32	576.98	577.06
℄ Brg. E. Abut.	287+80.45	2.68	576.94	576.94
Bk. E. Abut.	287+81.76	2.72	576.94	576.94

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+72.80	9.95	577.36	577.36
℄ Brg. W. Abut	285+74.10	9.92	577.37	577.37
'a'	285+84.19	9.69	577.39	577.45
'b'	285+94.28	9.48	577.41	577.52
'c'	286+04.37	9.29	577.42	577.57
'd'	286+14.46	9.14	577.44	577.60
'e'	286+24.55	9.01	577.45	577.61
'f'	286+34.64	8.90	577.46	577.59
'g'	286+44.74	8.83	577.46	577.56
'h'	286+54.83	8.78	577.47	577.52
'j'	286+64.92	8.75	577.47	577.49
℄ Brg. Pier	286+78.23	8.76	577.46	577.46
'k'	286+88.32	8.80	577.46	577.47
'l'	286+98.41	8.86	577.45	577.50
'm'	287+08.51	8.95	577.44	577.53
'n'	287+18.60	9.06	577.43	577.55
'p'	287+28.69	9.21	577.41	577.57
'q'	287+38.78	9.38	577.40	577.56
'r'	287+48.87	9.57	577.38	577.53
's'	287+58.96	9.79	577.35	577.48
't'	287+69.04	10.04	577.33	577.41
℄ Brg. E. Abut.	287+82.34	10.41	577.29	577.29
Bk. E. Abut.	287+83.65	10.45	577.29	577.29

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+75.10	17.57	577.72	577.72
℄ Brg. W. Abut	285+76.41	17.54	577.72	577.72
'a'	285+86.47	17.31	577.74	577.81
'b'	285+96.54	17.10	577.76	577.88
'c'	286+06.61	16.92	577.78	577.93
'd'	286+16.68	16.77	577.79	577.95
'e'	286+26.75	16.65	577.80	577.96
'f'	286+36.83	16.55	577.81	577.94
'g'	286+46.90	16.48	577.82	577.91
'h'	286+56.97	16.43	577.82	577.87
'j'	286+67.04	16.42	577.82	577.84
℄ Brg. Pier	286+80.32	16.43	577.82	577.82
'k'	286+90.39	16.47	577.81	577.82
'l'	287+00.47	16.54	577.80	577.85
'm'	287+10.54	16.64	577.79	577.87
'n'	287+20.61	16.76	577.78	577.90
'p'	287+30.68	16.91	577.76	577.91
'q'	287+40.75	17.08	577.74	577.91
'r'	287+50.82	17.28	577.72	577.88
's'	287+60.89	17.51	577.70	577.83
't'	287+70.95	17.76	577.67	577.75
℄ Brg. E. Abut.	287+84.22	18.13	577.64	577.64
Bk. E. Abut.	287+85.52	18.17	577.63	577.63

Note: Offsets are from ℄ F.A.I. Rte. 280 W.B.L. (P.G.L.)

LAYOUT	Rad	5/21/10
DRAWN	Rad	5/21/10
REVIEWED	WMM-JEH	5/21/10

07/20/2010
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JOB NO. 05R1532A
DATE 05/21/10

SHEET NO. 6
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	419
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

TOP OF SLAB ELEVATIONS - W.B.L. (Sheet 3 of 5)
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+91.16	-16.50	576.21	576.21
℄ Brg. W. Abut	285+92.44	-16.54	576.21	576.21
'a'	286+02.37	-16.79	576.22	576.29
'b'	286+12.29	-17.02	576.24	576.35
'c'	286+22.22	-17.22	576.24	576.39
'd'	286+32.15	-17.39	576.25	576.41
'e'	286+42.08	-17.54	576.25	576.41
'f'	286+52.01	-17.67	576.25	576.39
'g'	286+61.94	-17.76	576.25	576.35
'h'	286+71.87	-17.83	576.25	576.30
'j'	286+81.81	-17.88	576.24	576.26
℄ Brg. Pier	286+94.72	-17.90	576.23	576.23
'k'	287+04.65	-17.89	576.22	576.23
'l'	287+14.58	-17.85	576.20	576.25
'm'	287+24.51	-17.78	576.19	576.27
'n'	287+34.45	-17.69	576.17	576.29
'p'	287+44.38	-17.57	576.15	576.30
'q'	287+54.31	-17.42	576.12	576.29
'r'	287+64.24	-17.25	576.10	576.25
's'	287+74.16	-17.06	576.07	576.19
't'	287+84.09	-16.84	576.04	576.11
℄ Brg. E. Abut.	287+97.00	-16.51	575.99	575.99
Bk. E. Abut.	287+98.28	-16.47	575.99	575.99

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+93.39	-8.89	576.56	576.56
℄ Brg. W. Abut	285+94.67	-8.92	576.57	576.57
'a'	286+04.57	-9.17	576.58	576.64
'b'	286+14.48	-9.39	576.59	576.70
'c'	286+24.39	-9.59	576.60	576.74
'd'	286+34.30	-9.76	576.60	576.76
'e'	286+44.21	-9.90	576.60	576.76
'f'	286+54.12	-10.02	576.61	576.74
'g'	286+64.03	-10.11	576.60	576.70
'h'	286+73.94	-10.18	576.60	576.65
'j'	286+83.86	-10.22	576.59	576.61
℄ Brg. Pier	286+96.74	-10.23	576.58	576.58
'k'	287+06.65	-10.21	576.57	576.58
'l'	287+16.57	-10.17	576.55	576.60
'm'	287+26.48	-10.10	576.54	576.62
'n'	287+36.39	-10.00	576.52	576.64
'p'	287+46.30	-9.88	576.49	576.64
'q'	287+56.21	-9.73	576.47	576.63
'r'	287+66.12	-9.55	576.44	576.60
's'	287+76.03	-9.35	576.41	576.54
't'	287+85.94	-9.12	576.38	576.46
℄ Brg. E. Abut.	287+98.81	-8.79	576.34	576.34
Bk. E. Abut.	288+00.09	-8.75	576.33	576.33

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+95.60	-1.28	576.92	576.92
℄ Brg. W. Abut	285+96.88	-1.31	576.92	576.92
'a'	286+06.77	-1.56	576.93	576.99
'b'	286+16.66	-1.77	576.94	577.06
'c'	286+26.55	-1.96	576.95	577.10
'd'	286+36.44	-2.13	576.95	577.12
'e'	286+46.33	-2.26	576.96	577.11
'f'	286+56.22	-2.38	576.96	577.09
'g'	286+66.11	-2.46	576.95	577.05
'h'	286+76.00	-2.52	576.95	577.00
'j'	286+85.90	-2.56	576.94	576.96
℄ Brg. Pier	286+98.76	-2.56	576.93	576.93
'k'	287+08.65	-2.54	576.92	576.93
'l'	287+18.54	-2.49	576.90	576.94
'm'	287+28.43	-2.41	576.88	576.97
'n'	287+38.33	-2.31	576.86	576.98
'p'	287+48.22	-2.18	576.84	576.99
'q'	287+58.11	-2.03	576.82	576.98
'r'	287+68.00	-1.85	576.79	576.94
's'	287+77.89	-1.64	576.76	576.88
't'	287+87.77	-1.41	576.73	576.80
℄ Brg. E. Abut.	288+00.62	-1.07	576.68	576.68
Bk. E. Abut.	288+01.90	-1.03	576.68	576.68

P.G.L. EAST BOUND LANES

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+95.98	0.00	576.98	576.98
℄ Brg. W. Abut	285+97.26	0.00	576.98	576.98
'a'	286+07.22	0.00	577.00	577.07
'b'	286+17.16	0.00	577.02	577.14
'c'	286+27.10	0.00	577.04	577.19
'd'	286+37.03	0.00	577.05	577.21
'e'	286+46.95	0.00	577.06	577.22
'f'	286+56.87	0.00	577.07	577.20
'g'	286+66.78	0.00	577.07	577.16
'h'	286+76.68	0.00	577.06	577.12
'j'	286+86.58	0.00	577.06	577.08
℄ Brg. Pier	286+99.43	0.00	577.05	577.05
'k'	287+09.31	0.00	577.03	577.04
'l'	287+19.18	0.00	577.01	577.06
'm'	287+29.05	0.00	576.99	577.07
'n'	287+38.91	0.00	576.97	577.09
'p'	287+48.76	0.00	576.94	577.09
'q'	287+58.61	0.00	576.91	577.07
'r'	287+68.45	0.00	576.87	577.03
's'	287+78.28	0.00	576.83	576.96
't'	287+88.11	0.00	576.79	576.87
℄ Brg. F. Abut.	288+00.87	0.00	576.73	576.73
Bk. E. Abut.	288+02.14	0.00	576.72	576.72

Note: Offsets are from ℄ F.A.I. Rte. 280 E.B.L. (P.G.L.)

07-2h280
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LAYOUT	Ned	5/21/10
DRAWN	Ned	5/21/10
REVISED	KNW-GH	5/21/10

TOP OF SLAB ELEVATIONS - E.B.L. (Sheet 4 of 5)
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 7
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1KB-1JR	Rock Island	503	420
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	285+97.81	6.33	577.27	577.27
℄ Brg. W. Abut	285+99.09	6.30	577.27	577.27
'a'	286+08.96	6.06	577.29	577.35
'b'	286+18.83	5.85	577.29	577.41
'c'	286+28.70	5.67	577.30	577.45
'd'	286+38.57	5.51	577.31	577.47
'e'	286+48.44	5.38	577.31	577.46
'f'	286+58.31	5.27	577.31	577.44
'g'	286+68.18	5.19	577.30	577.40
'h'	286+78.06	5.13	577.30	577.35
'j'	286+87.93	5.10	577.29	577.31
℄ Brg. Pier	287+00.76	5.11	577.28	577.28
'k'	287+10.64	5.14	577.26	577.28
'l'	287+20.51	5.19	577.25	577.29
'm'	287+30.38	5.27	577.23	577.31
'n'	287+40.25	5.38	577.21	577.33
'p'	287+50.13	5.51	577.19	577.34
'q'	287+60.00	5.67	577.16	577.32
'r'	287+69.87	5.86	577.13	577.29
's'	287+79.73	6.07	577.10	577.23
't'	287+89.60	6.31	577.07	577.15
℄ Brg. E. Abut.	288+02.43	6.65	577.02	577.02
Bk. E. Abut.	288+03.70	6.69	577.02	577.02

GIRDER 11

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	286+00.02	13.95	577.63	577.63
℄ Brg. W. Abut	286+01.29	13.91	577.63	577.63
'a'	286+11.14	13.68	577.64	577.70
'b'	286+20.99	13.48	577.65	577.76
'c'	286+30.84	13.30	577.65	577.80
'd'	286+40.69	13.15	577.66	577.82
'e'	286+50.54	13.02	577.66	577.81
'f'	286+60.39	12.92	577.66	577.79
'g'	286+70.25	12.84	577.65	577.75
'h'	286+80.10	12.79	577.65	577.70
'j'	286+89.95	12.77	577.64	577.66
℄ Brg. Pier	287+02.76	12.78	577.63	577.63
'k'	287+12.62	12.81	577.61	577.63
'l'	287+22.47	12.87	577.60	577.64
'm'	287+32.32	12.96	577.58	577.66
'n'	287+42.17	13.07	577.56	577.68
'p'	287+52.03	13.21	577.53	577.68
'q'	287+61.88	13.37	577.51	577.67
'r'	287+71.73	13.56	577.48	577.63
's'	287+81.58	13.78	577.45	577.57
't'	287+91.42	14.02	577.42	577.49
℄ Brg. E. Abut.	288+04.22	14.37	577.37	577.37
Bk. E. Abut.	288+05.50	14.41	577.36	577.36

GIRDER 12

Location	Station	Offset	Theoretical Grade Elevations	Theo. Grade Elevations Adj. for D.L. Deflection
Bk. W. Abut.	286+02.21	21.56	577.98	577.98
℄ Brg. W. Abut	286+03.48	21.53	577.98	577.98
'a'	286+13.31	21.30	577.99	578.05
'b'	286+23.14	21.11	578.00	578.11
'c'	286+32.97	20.93	578.01	578.15
'd'	286+42.80	20.78	578.01	578.17
'e'	286+52.63	20.66	578.01	578.17
'f'	286+62.47	20.57	578.01	578.14
'g'	286+72.30	20.50	578.00	578.10
'h'	286+82.14	20.45	578.00	578.05
'j'	286+91.97	20.43	577.99	578.01
℄ Brg. Pier	287+04.75	20.45	577.97	577.97
'k'	287+14.59	20.49	577.96	577.97
'l'	287+24.42	20.55	577.94	577.99
'm'	287+34.26	20.65	577.92	578.01
'n'	287+44.09	20.76	577.90	578.02
'p'	287+53.92	20.91	577.88	578.03
'q'	287+63.75	21.08	577.85	578.02
'r'	287+73.58	21.27	577.82	577.98
's'	287+83.41	21.49	577.79	577.92
't'	287+93.24	21.74	577.76	577.84
℄ Brg. E. Abut.	288+06.01	22.10	577.71	577.71
Bk. E. Abut.	288+07.28	22.14	577.71	577.71

Note: Offsets are from ℄ F.A.I. Rte. 280 E.B.L. (P.G.L.)

TOP OF SLAB ELEVATIONS - E.B.L. (Sheet 5 of 5)
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 8
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	421
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMM/JJH	5/21/10

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07/21/2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH EDGE of SHOULDER

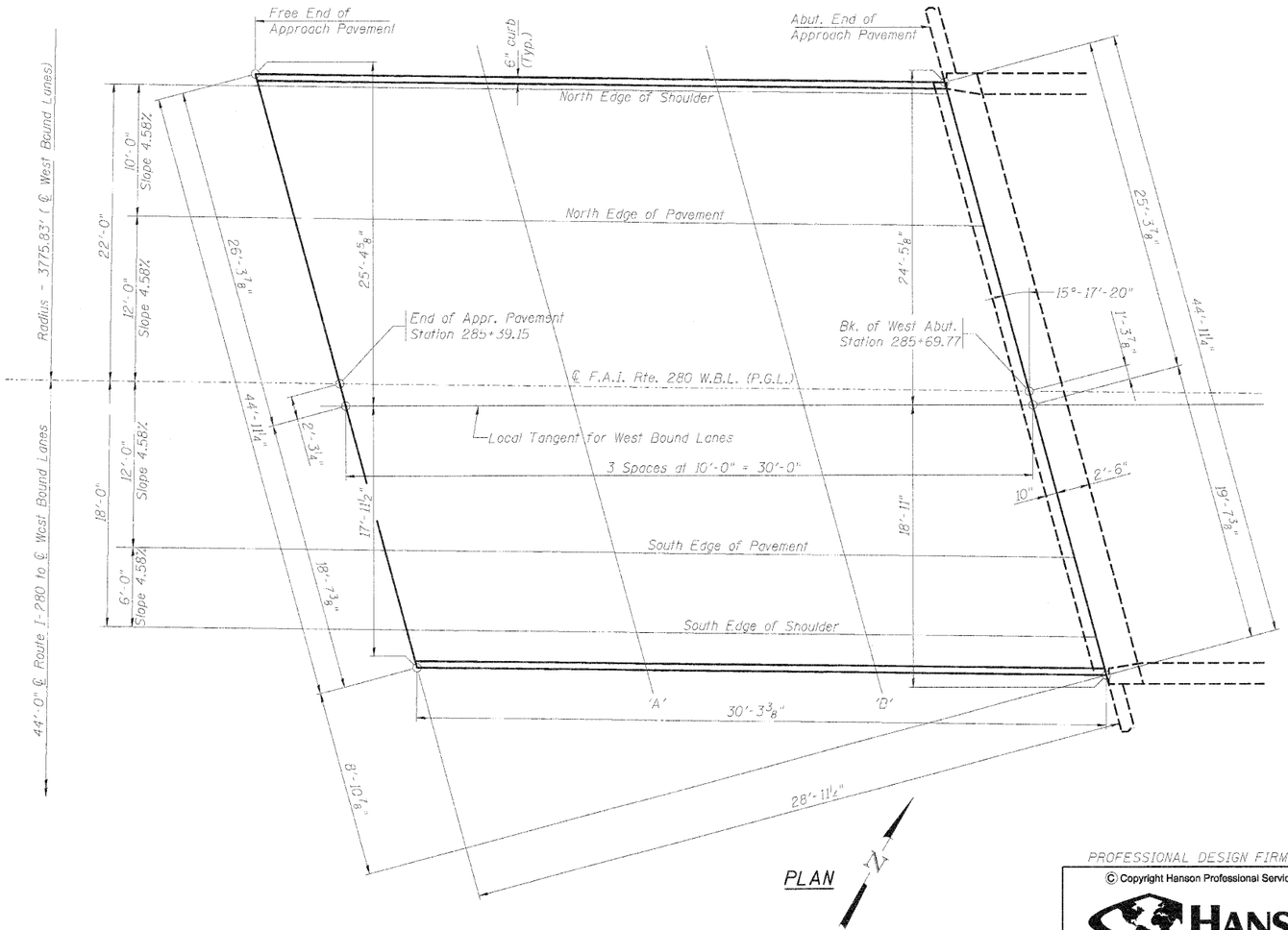
Location	Station	Offset	Theoretical Grade Elevations
Free End	285+32.20	-22.00	575.73
'A'	285+42.48	-22.00	575.78
'B'	285+52.75	-22.00	575.82
Abutment End	285+63.01	-22.00	575.87

NORTH EDGE of PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Free End	285+35.37	-12.00	576.21
'A'	285+45.62	-12.00	576.25
'B'	285+55.86	-12.00	576.30
Abutment End	285+66.09	-12.00	576.34

℄ ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
Free End	285+39.15	0.00	576.77
'A'	285+49.36	0.00	576.82
'B'	285+59.57	0.00	576.86
Abutment End	285+69.77	0.00	576.90



SOUTH EDGE of PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Free End	285+42.91	12.00	577.34
'A'	285+53.08	12.00	577.38
'B'	285+63.25	12.00	577.42
Abutment End	285+73.41	12.00	577.46

SOUTH EDGE of SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Free End	285+44.77	18.00	577.62
'A'	285+54.93	18.00	577.67
'B'	285+65.09	18.00	577.71
Abutment End	285+75.23	18.00	577.74

Note: Offsets are from ℄ F.A.I. Rte. 280 W.B.L. (P.G.L.)

TOP OF SLAB ELEVATIONS - WEST APPROACH - W.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMK/JEH	5/21/10

07/29/2010
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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 9
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	422
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH EDGE of SHOULDER

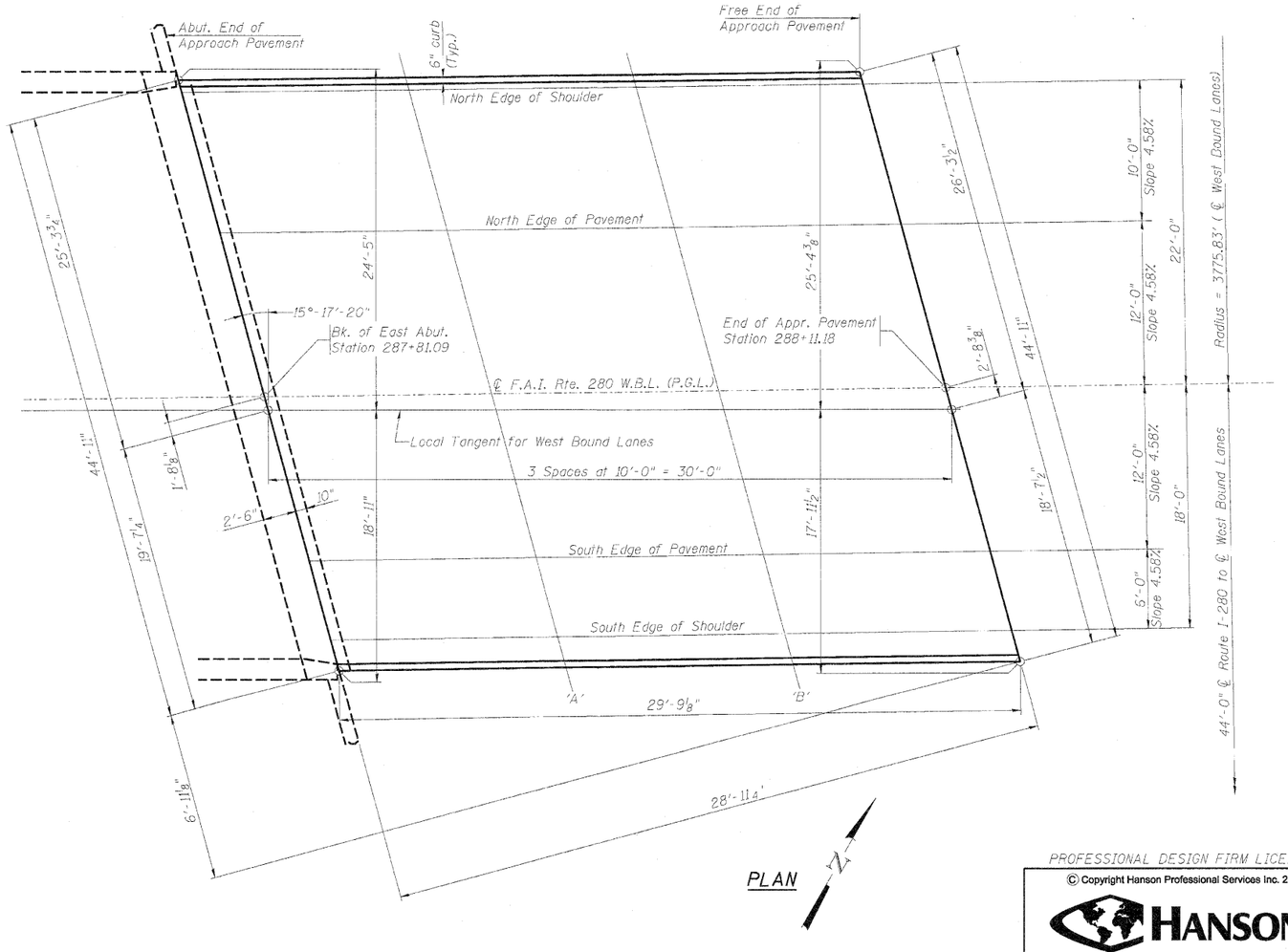
Location	Station	Offset	Theoretical Grade Elevations
Abutment End	287+75.67	-22.00	575.83
'A'	287+85.77	-22.00	575.79
'B'	287+95.86	-22.00	575.74
Free End	288+05.95	-22.00	575.69

NORTH EDGE of PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Abutment End	287+78.14	-12.00	576.28
'A'	287+88.21	-12.00	576.24
'B'	287+98.28	-12.00	576.19
Free End	288+08.34	-12.00	576.14

℄ ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
Abutment End	287+81.09	0.00	576.82
'A'	287+91.13	0.00	576.77
'B'	288+01.16	0.00	576.73
Free End	288+11.18	0.00	576.67



PLAN

SOUTH EDGE of PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Abutment End	287+84.02	12.00	577.36
'A'	287+94.02	12.00	577.31
'B'	288+04.02	12.00	577.26
Free End	288+14.01	12.00	577.21

SOUTH EDGE of SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Abutment End	287+85.48	18.00	577.62
'A'	287+95.46	18.00	577.58
'B'	288+05.45	18.00	577.53
Free End	288+15.42	18.00	577.48

Note: Offsets are from ℄ F.A.I. Rte. 280 W.B.L. (P.G.L.)

TOP OF SLAB ELEVATIONS - EAST APPROACH - W.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 10
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	423
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMM/JEH	5/21/10

07/30/2010
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH EDGE of SHOULDER

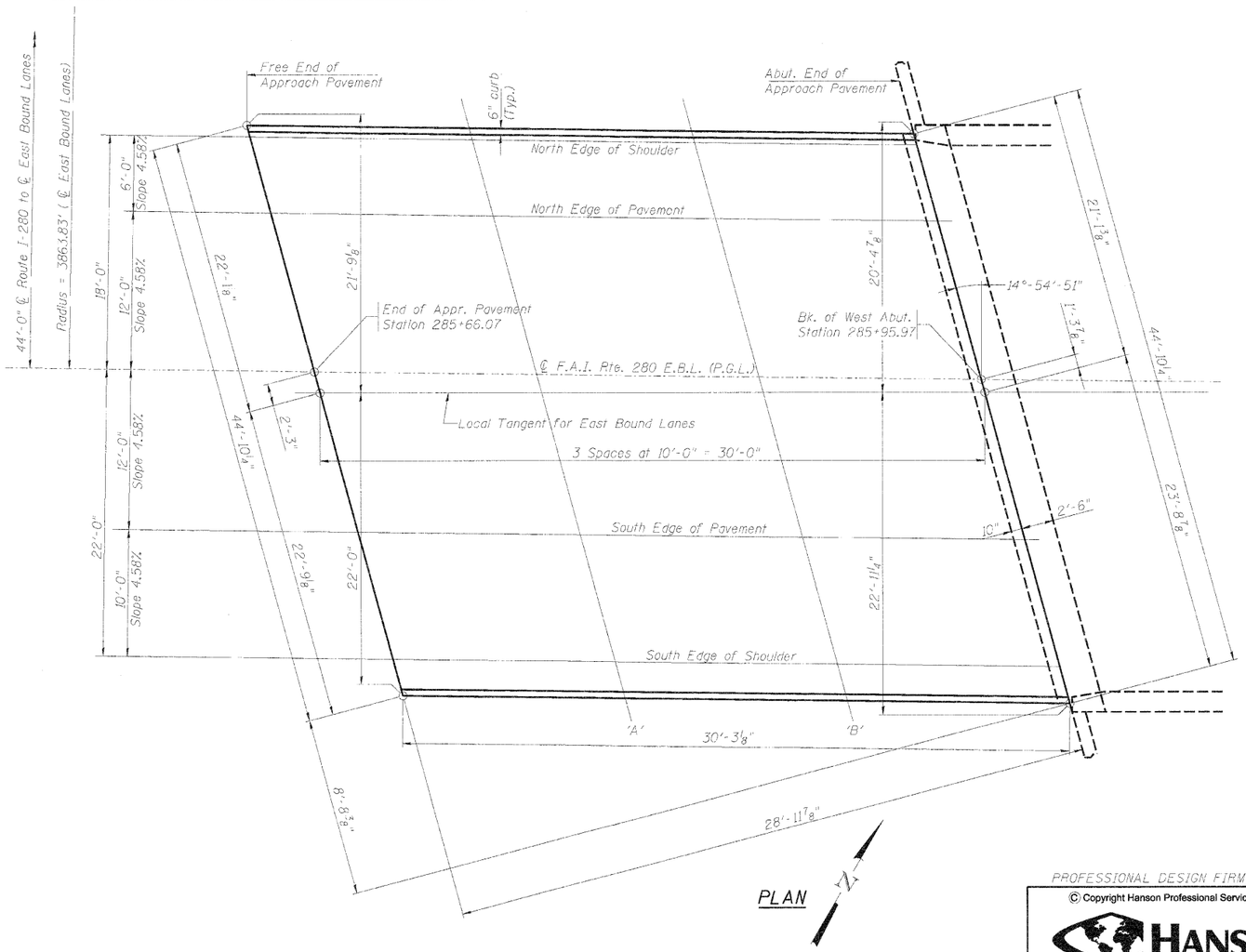
Location	Station	Offset	Theoretical Grade Elevations
Free End	285+60.65	-18.00	576.04
'A'	285+70.68	-18.00	576.08
'B'	285+80.70	-18.00	576.11
Abutment End	285+90.71	-18.00	576.14

NORTH EDGE of PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Free End	285+62.46	-12.00	576.32
'A'	285+72.48	-12.00	576.36
'B'	285+82.48	-12.00	576.39
Abutment End	285+92.47	-12.00	576.42

℄ ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
Free End	285+66.07	0.00	576.88
'A'	285+76.04	0.00	576.92
'B'	285+86.01	0.00	576.95
Abutment End	285+95.97	0.00	576.98



PLAN

SOUTH EDGE of PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Free End	285+69.64	12.00	577.45
'A'	285+79.59	12.00	577.48
'B'	285+89.52	12.00	577.51
Abutment End	285+99.45	12.00	577.54

SOUTH EDGE of SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Free End	285+72.61	22.00	577.92
'A'	285+82.52	22.00	577.95
'B'	285+92.43	22.00	577.98
Abutment End	286+02.33	22.00	578.00

Note: Offsets are from ℄ F.A.I. Rte. 280 E.B.L. (P.G.L.)

TOP OF SLAB ELEVATIONS - WEST APPROACH - E.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 11
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	424
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVISED	MMK/JEE	5/21/10

07/21/2010
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH EDGE of SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Abutment End	287+97.92	-18.00	575.92
'A'	288+07.78	-18.00	575.87
'B'	288+17.63	-18.00	575.81
Free End	288+27.48	-18.00	575.76

NORTH EDGE of PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Abutment End	287+99.33	-12.00	576.19
'A'	288+09.17	-12.00	576.14
'B'	288+19.01	-12.00	576.08
Free End	288+28.85	-12.00	576.02

℄ ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
Abutment End	288+02.14	0.00	576.72
'A'	288+11.95	0.00	576.67
'B'	288+21.76	0.00	576.61
Free End	288+31.56	0.00	576.56

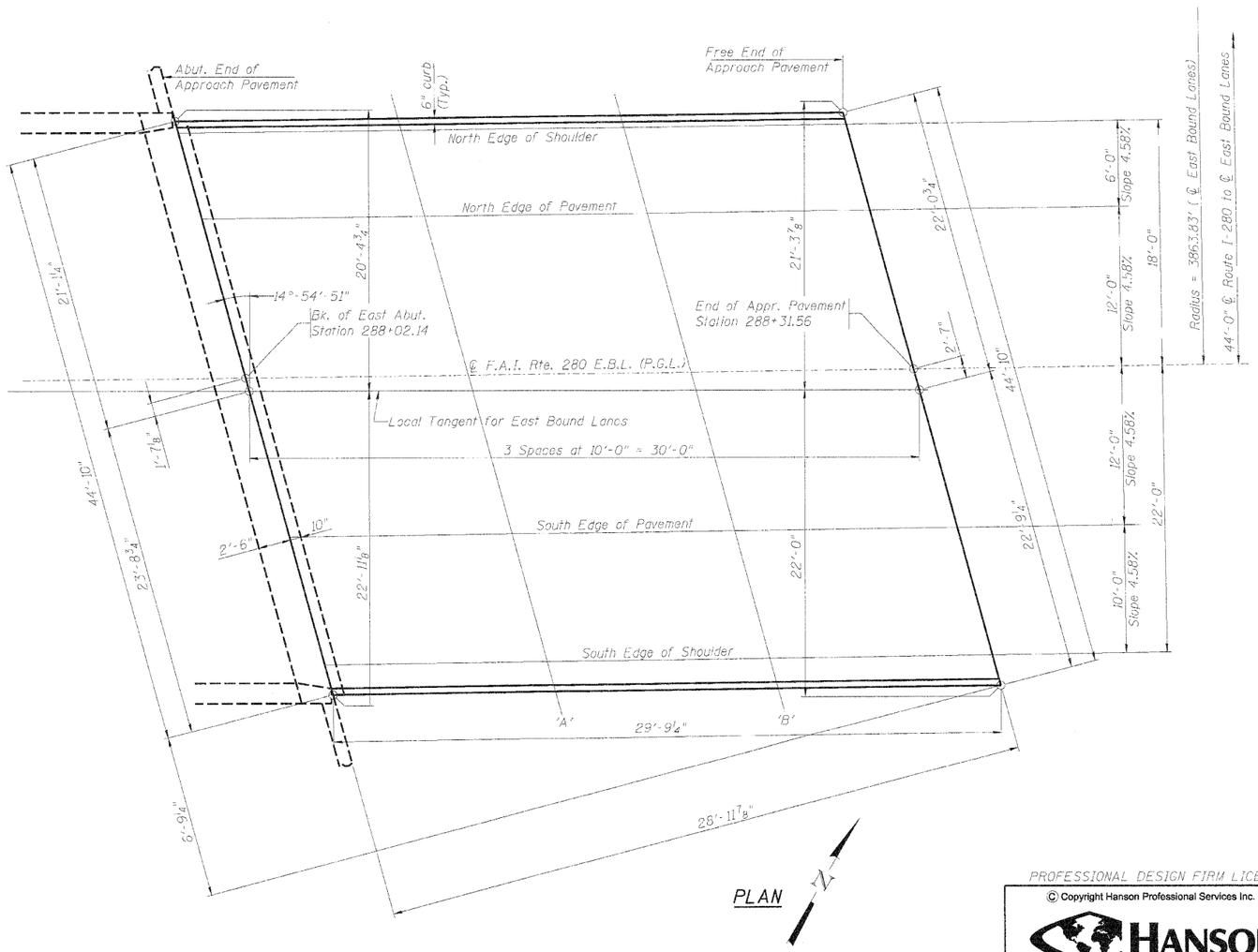
SOUTH EDGE of PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Abutment End	288+04.94	12.00	577.26
'A'	288+14.72	12.00	577.20
'B'	288+24.49	12.00	577.15
Free End	288+34.26	12.00	577.09

SOUTH EDGE of SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Abutment End	288+07.25	22.00	577.70
'A'	288+17.01	22.00	577.65
'B'	288+26.75	22.00	577.59
Free End	288+36.50	22.00	577.53

Note: Offsets are from ℄ F.A.I. Rte. 280 E.B.L. (P.G.L.)



TOP OF SLAB ELEVATIONS - EAST APPROACH - E.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 12
10 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	425
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MWM/JEF	5/21/10

GP-05/2000
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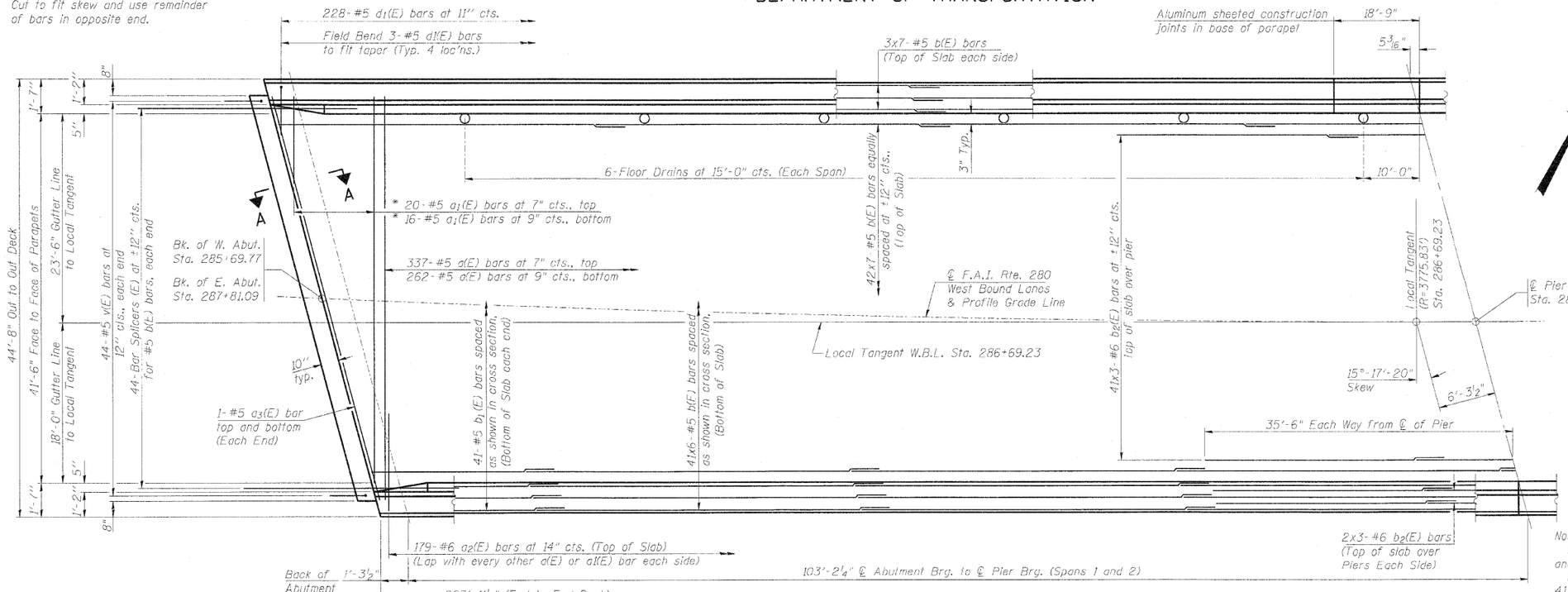
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

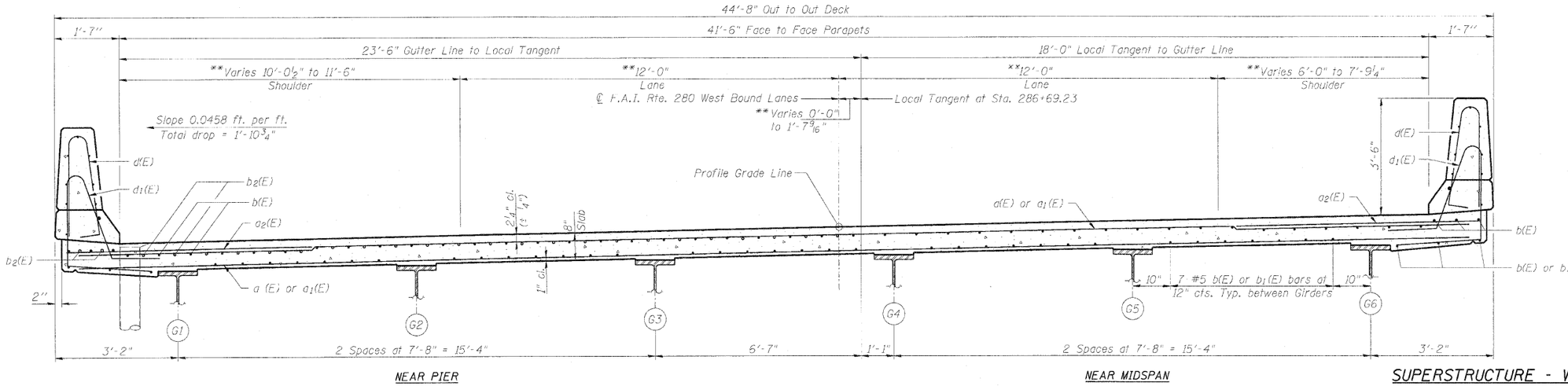
* Order a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



PARTIAL PLAN

MINIMUM BAR LAP
(Deck)
#5 bar = 3'-3"
#6 bar = 3'-10"

Notes:
See Sheet 15 of 40 for superstructure details and Bill of Material.
Bars indicated thus 41 x 6-#5 etc. indicates 41 lines of bars with 6 lengths per line.
See Sheet 15 of 40 for parapet reinforcement.
See Sheet 14 of 40 for Section A-A.



NEAR PIER — NEAR MIDSPAN

**These Dimensions are Radial.

CROSS SECTION
(Looking East Upstation)

SUPERSTRUCTURE - W.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO.	SHEET NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
05R1532A	13	280	81-1(B-1)R	Rock Island	503	426
DATE 05/21/10	40 SHEETS			CONTRACT NO. 64815		
				ILLINOIS FED. AID PROJECT		

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MJM/JEH	5/21/10

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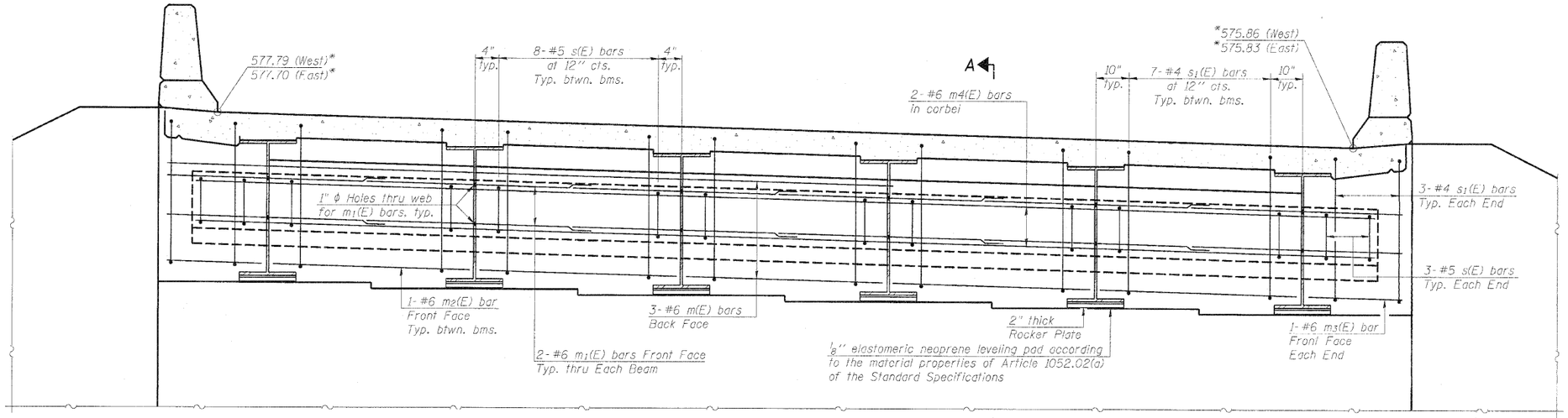
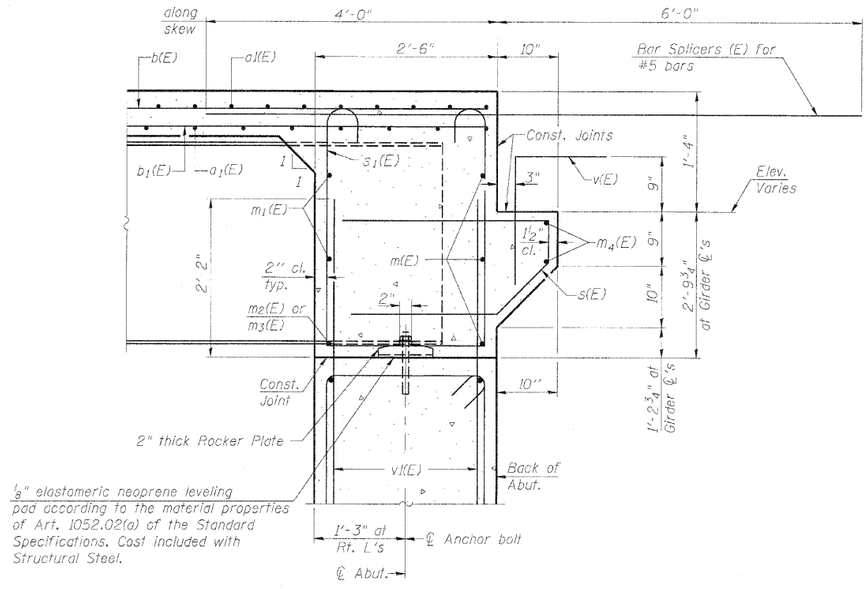
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



*Elevations taken at Back of Abutment.

DIAPHRAGM ELEVATION AT ABUTMENT

(West Abutment Shown East Abutment Similar by Opposite Hand)



SECTION A-A

Dimensions at right angles to abutment, except as shown.

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 15 of 40.
Concrete in diaphragm is included with Concrete Superstructure on sheet 15 of 40.
For details of bars s(E) & s1(E) see sheet 15 of 40.
The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

MIN. BAR LAP

#6 bar = 3'-4"

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MKM/JCH	5/21/10

07\20\2010
d:\working\files\05R2\05R1532A\05R1527 64815.dgn

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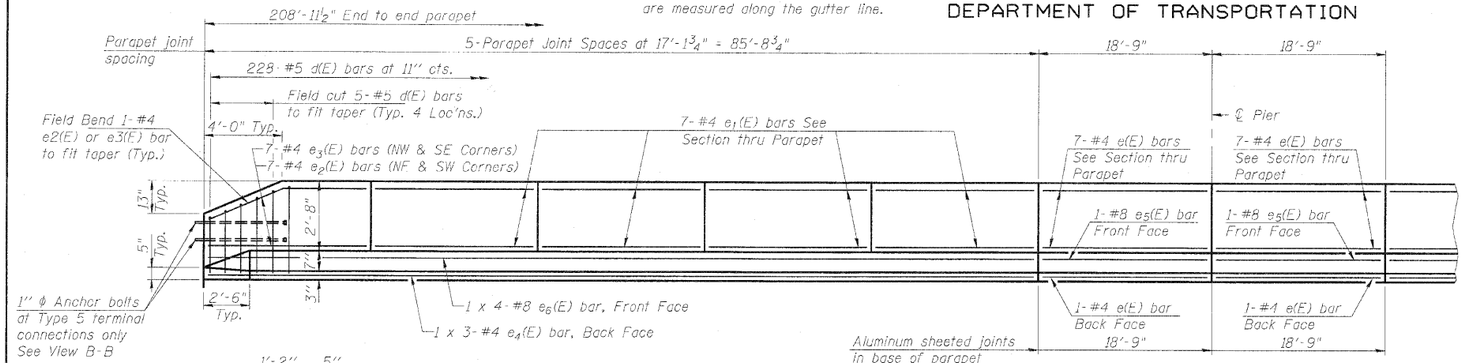
JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 14
40 SHEETS

INTEGRAL ABUTMENT DIAPHRAGM DETAILS - W.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	427
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

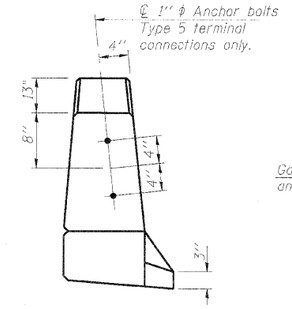
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Note:
All horizontal parapet dimensions are measured along the gutter line.

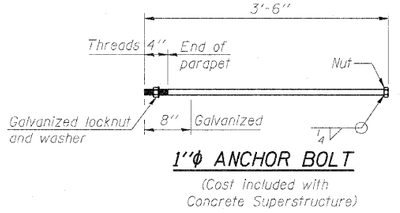


PARTIAL INSIDE ELEVATION OF PARAPET

(North Parapet Shown South Parapet Similar by Rotation)

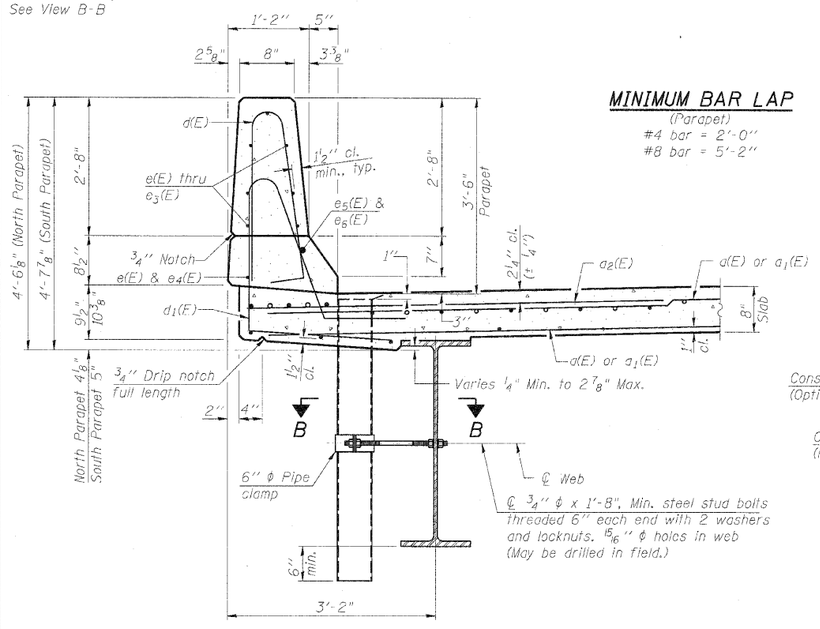


VIEW B-B



1"ϕ ANCHOR BOLT

(Cost included with Concrete Superstructure)

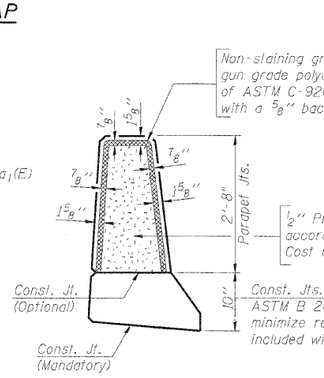


MINIMUM BAR LAP

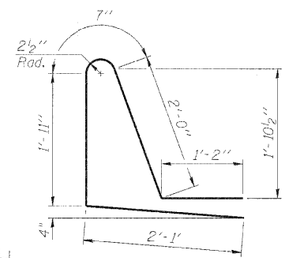
(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"

SECTION THRU PARAPET

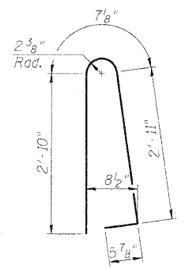
(North Parapet Shown South Similar)



PARAPET JOINT DETAILS



BAR d1(E)



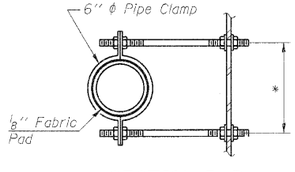
BAR d(E)

W.B.L. - SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	599	#5	43'-0"	——
a1(E)	36	#5	45'-3"	——
a2(E)	358	#6	6'-6"	——
a3(E)	4	#5	44'-7"	——
b(E)	582	#5	32'-7"	——
b1(E)	82	#5	17'-11"	——
b2(E)	135	#6	26'-3"	——
d(E)	456	#5	6'-10"	⌡
d1(E)	456	#5	7'-9"	⌡
e(E)	32	#4	18'-5"	——
e1(E)	112	#4	16'-10"	——
e2(E)	14	#4	16'-8"	——
e3(E)	14	#4	17'-3"	——
e4(E)	12	#4	29'-11"	——
e5(E)	4	#8	18'-5"	——
e6(E)	16	#8	25'-5"	——
m(E)	6	#6	45'-11"	——
m1(E)	24	#6	11'-3"	——
m2(E)	10	#6	7'-7"	——
m3(E)	4	#6	2'-11"	——
m4(E)	4	#6	44'-6"	——
s(E)	92	#5	6'-10"	⊐
s1(E)	82	#4	10'-6"	⊔
v(E)	88	#5	3'-9"	⌐
Reinforcement Bars, Epoxy Coated			Pound	72100
Concrete Superstructure			Cu. Yds.	332.9
Floor Drains			Each	12

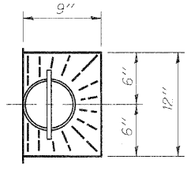
Bars indicated thus 1 x 3-#4 etc. indicates 1 line of bars with 3 lengths per line.

Notes:
Floor drains need not be painted.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.
Drains shall be located clear of all diaphragms.

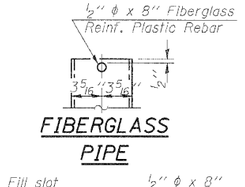


SECTION B-B

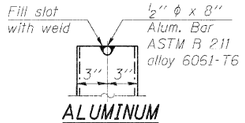
*Dimension as required by Pipe Clamp



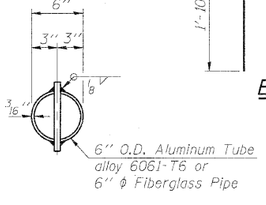
TOP PLAN



FIBERGLASS PIPE

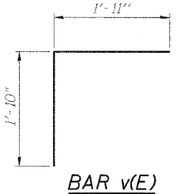


ALUMINUM TUBE

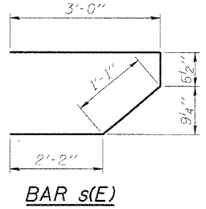


TOP PLAN

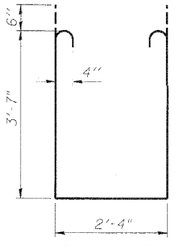
(Showing Aluminum Tube)



BAR v(E)



BAR s(E)



BAR s1(E)

SUPERSTRUCTURE DETAILS - W.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

LAYOUT	Rad	5/21/10
DRAWN	Rad	5/21/10
REVISED	MNM/JEB	5/21/10

07/21/2010
c:\work\highway\d0328026\d0328026d07.64815.dgn

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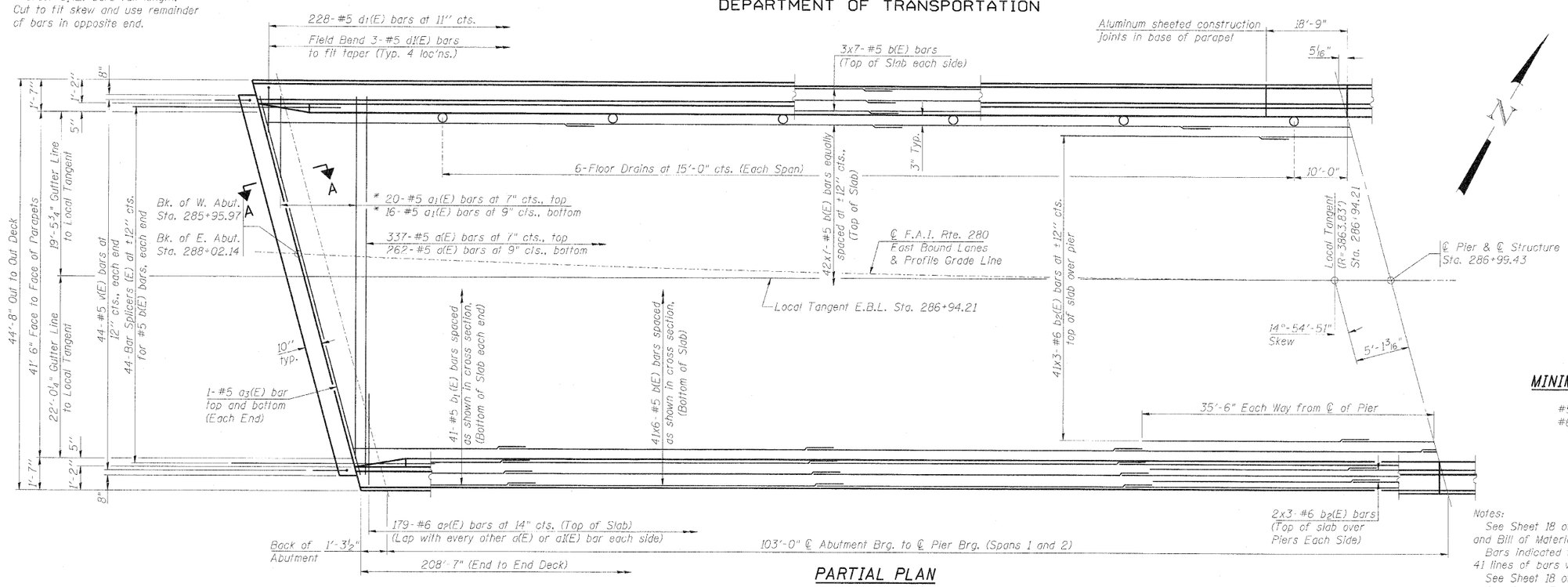
JOB NO.	SHEET NO. 15
05R1532A	40 SHEETS
DATE 05/21/10	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	428
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

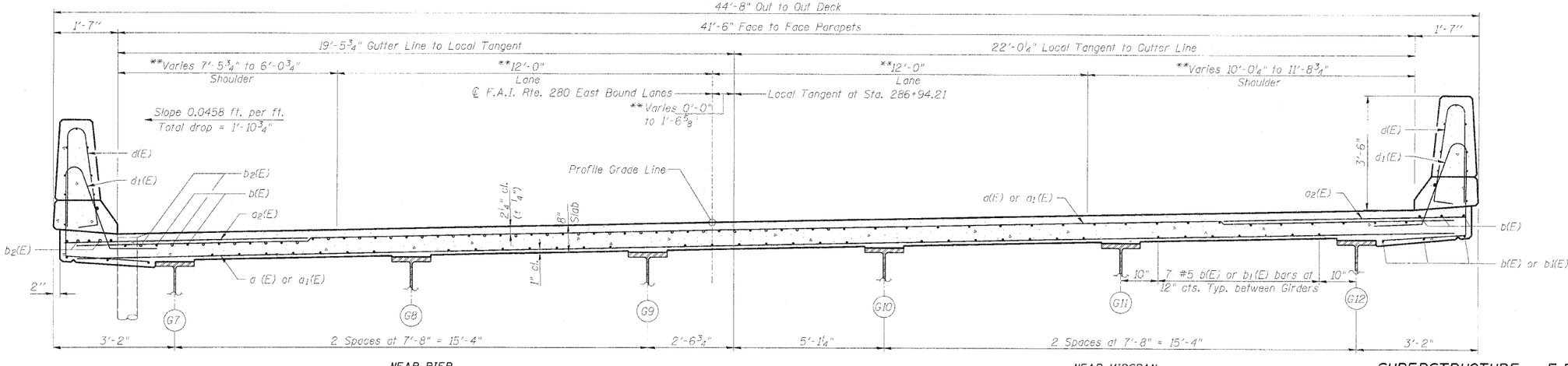
* Order a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



PARTIAL PLAN

MINIMUM BAR LAP
(Deck)
#5 bar = 3'-3"
#6 bar = 3'-10"

Notes:
See Sheet 18 of 40 for superstructure details and Bill of Material.
Bars indicated thus 41 x 6-#5 etc. indicates 41 lines of bars with 6 lengths per line.
See Sheet 18 of 40 for parapet reinforcement.
See Sheet 17 of 40 for Section A-A.



NEAR PIER — NEAR MIDSPAN

**These Dimensions are Radial.

CROSS SECTION
(Looking East Upstation)

SUPERSTRUCTURE - E.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO.	SHEET NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
05R1532A	16	280	81-1(B-1)R	Rock Island	503	429
DATE 05/21/10	40 SHEETS			CONTRACT NO. 64815		
				ILLINOIS	FED. AID PROJECT	

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
CHECKED	MMM/JEH	5/21/10

07/21/2010
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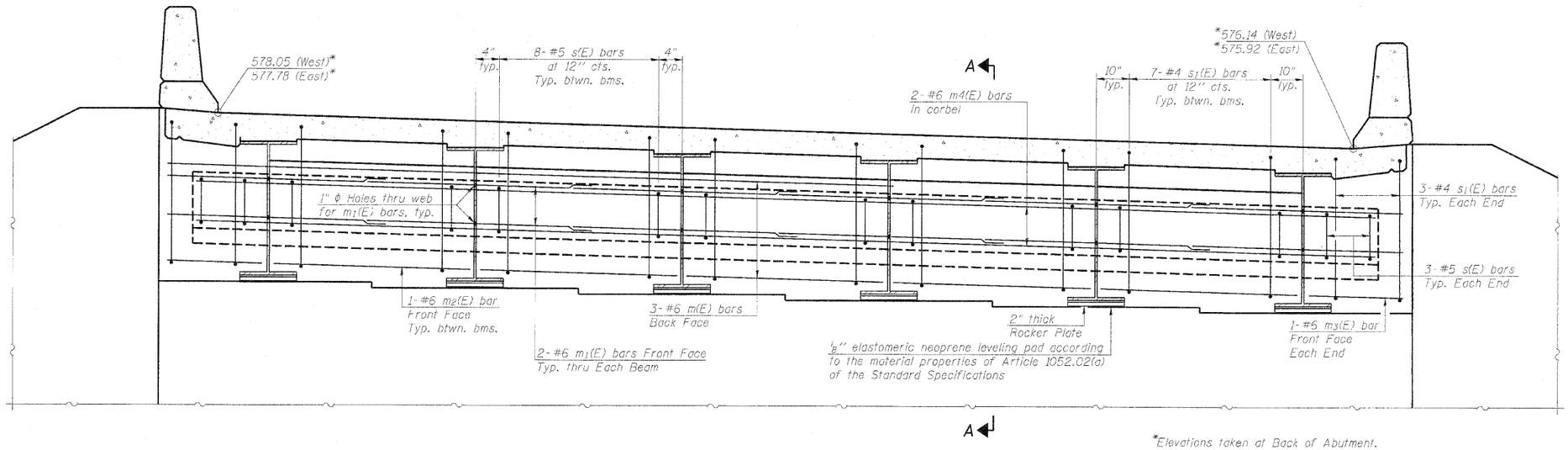
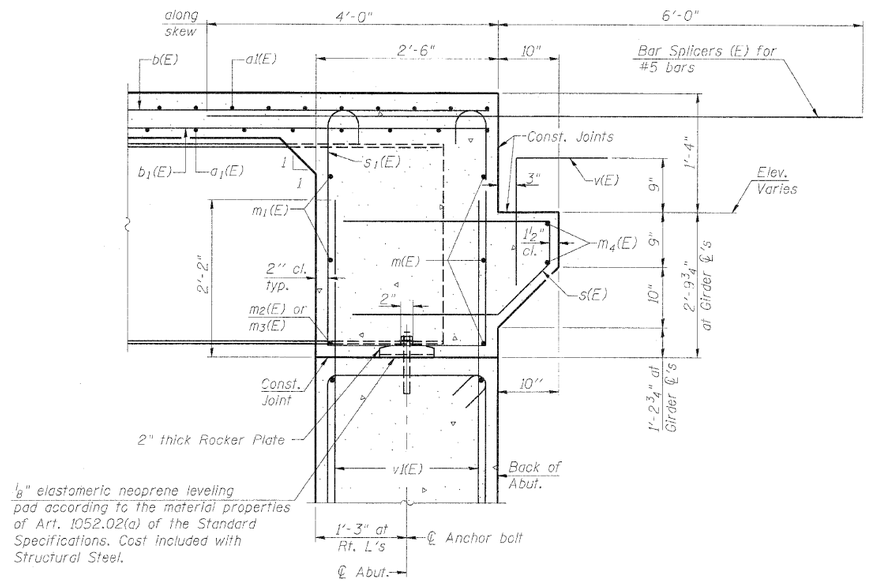
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



*Elevations taken at Back of Abutment.

DIAPHRAGM ELEVATION AT ABUTMENT

(West Abutment Shown East Abutment Similar by Opposite Hand)



SECTION A-A

Dimensions at right angles to abutment, except as shown.

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 18 of 40.
Concrete in diaphragm is included with Concrete Superstructure on sheet 18 of 40.
For details of bars s(E) & s_1(E) see sheet 18 of 40.
The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

MIN. BAR LAP

#6 bar = 3'-4"

INTEGRAL ABUTMENT DIAPHRAGM DETAILS - E.B.L. STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO.	SHEET NO. 17
05R1532A	
DATE 05/21/10	40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	430

CONTRACT NO. 64815

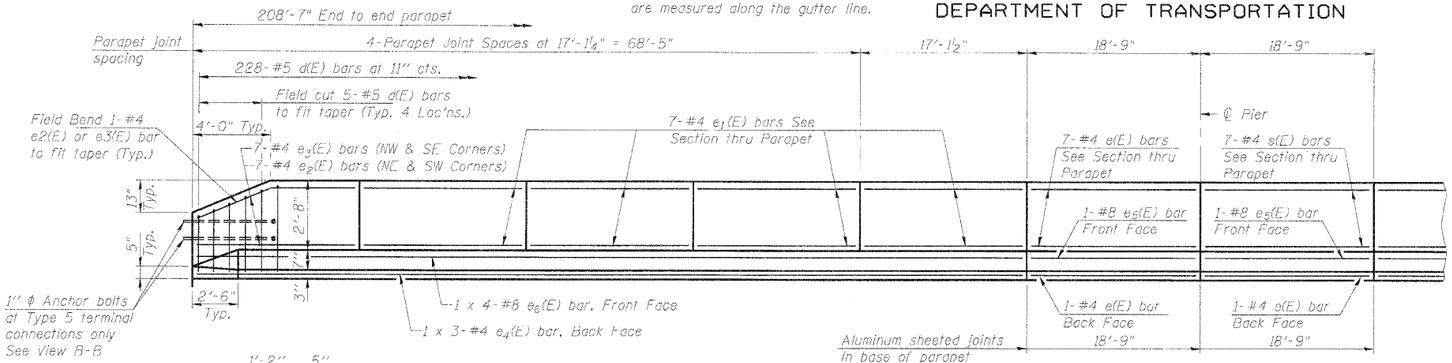
ILLINOIS FED. AID PROJECT

LAYOUT	Ned	5/21/10
DRAWN	Ned	5/21/10
PROTECHED	MMM-JEH	5/21/10

09/29/2009
c:\dwg\highway\1982\081982081026-081002700-64815.dgn

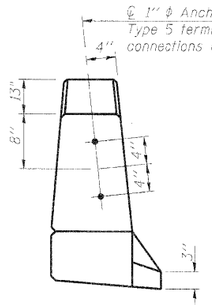
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Note:
All horizontal parapet dimensions are measured along the gutter line.

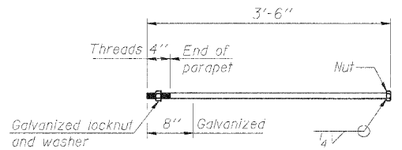


PARTIAL INSIDE ELEVATION OF PARAPET

(North Parapet Shown South Parapet Similar by Rotation)



VIEW B-B

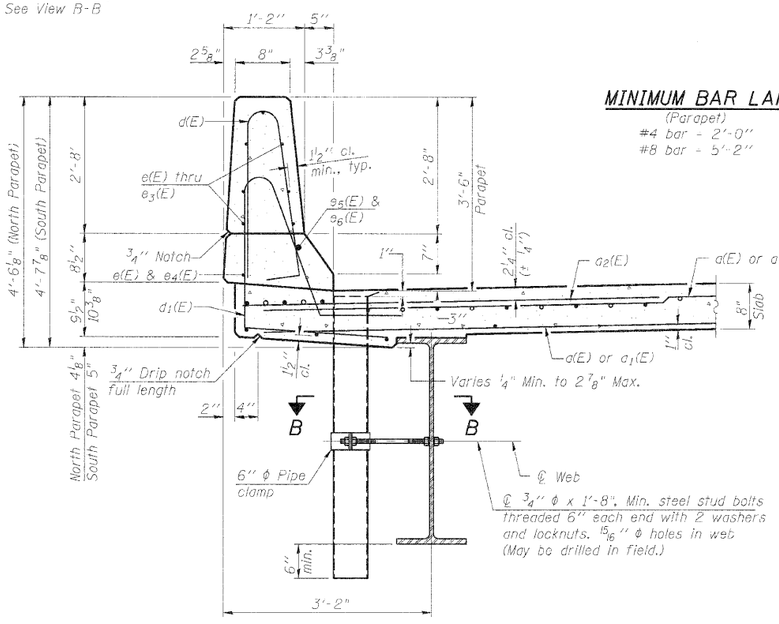


1"ϕ ANCHOR BOLT

(Cost included with Concrete Superstructure)

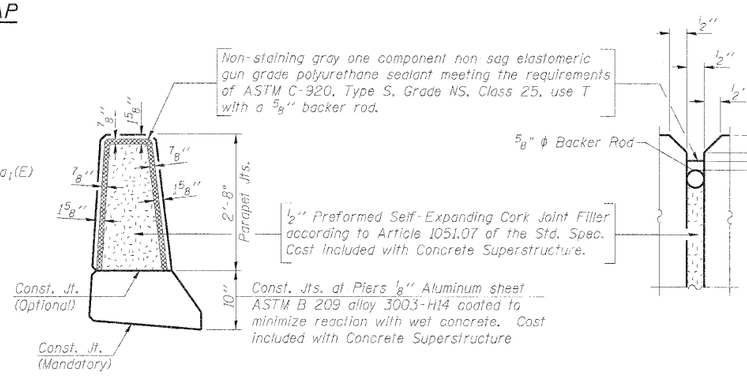
MINIMUM BAR LAP

(Parapet)
#4 bar - 2'-0"
#8 bar - 5'-2"



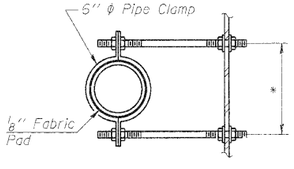
SECTION THRU PARAPET

(North Parapet Shown South Similar)



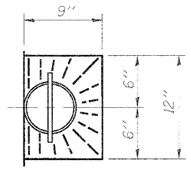
PARAPET JOINT DETAILS

Notes:
Floor drains need not be painted.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.
Drains shall be located clear of all diaphragms.

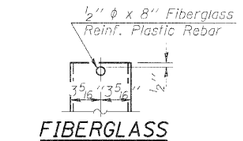


SECTION B-B

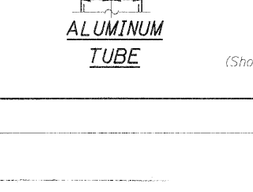
*Dimension as required by Pipe Clamp



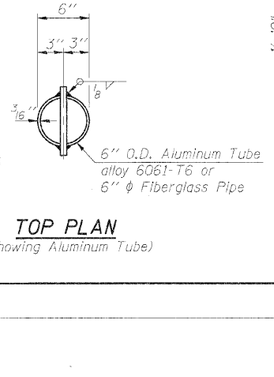
TOP PLAN



FIBERGLASS PIPE

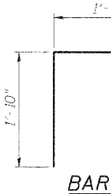


ALUMINUM TUBE

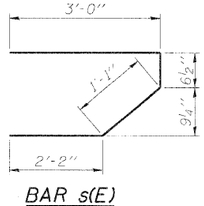


TOP PLAN

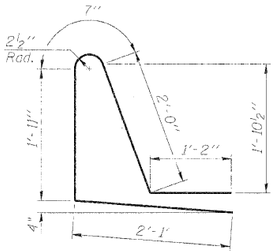
(Showing Aluminum Tube)



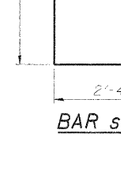
BAR v(E)



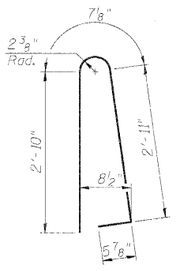
BAR s(E)



BAR d_1(E)



BAR s_1(E)



BAR d(E)

E.B.L. - SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	599	#5	43'-0"	—
a1(E)	36	#5	45'-3"	—
a2(E)	358	#6	6'-6"	—
a3(E)	4	#5	44' 7"	—
b(E)	582	#5	32'-7"	—
b1(E)	82	#5	17'-11"	—
b2(E)	135	#6	26'-3"	—
d(E)	456	#5	6'-10"	⌊
d1(E)	156	#5	7'-9"	⌊
e(E)	32	#4	18'-5"	—
e1(E)	112	#4	16'-10"	—
e2(E)	14	#4	16'-8"	—
e3(E)	14	#4	17'-3"	—
e4(E)	12	#4	29'-11"	—
e5(E)	1	#8	18'-5"	—
e6(E)	16	#8	25'-5"	—
m(E)	6	#6	45'-11"	—
m1(E)	24	#6	11'-3"	—
m2(E)	10	#6	7'-7"	—
m3(E)	4	#6	2'-11"	—
m4(E)	4	#6	44'-6"	—
s(E)	92	#5	6'-10"	⊐
s1(E)	82	#4	10'-6"	⊔
v(E)	88	#5	3'-9"	⌐
Reinforcement Bars, Epoxy Coated			Pound	72100
Concrete Superstructure			Cu. Yds.	332.2
Floor Drains			Each	12

Bars indicated thus 1 x 3-#4 etc. indicates 1 line of bars with 3 lengths per line.

SUPERSTRUCTURE DETAILS - E.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMV/JER	5/21/10

dhanson
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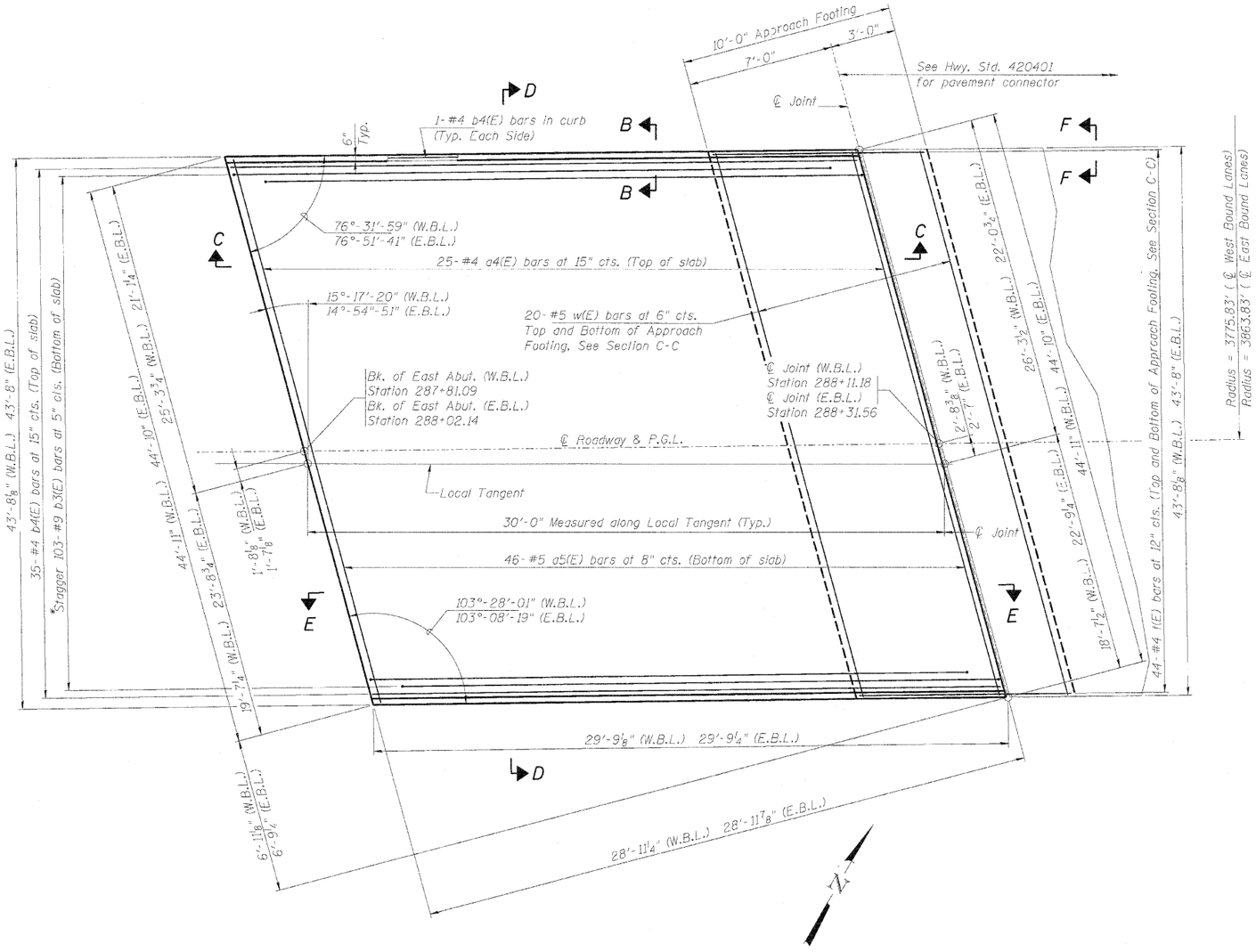
JOB NO.	SHEET NO. 18
05R1532A	
DATE	40 SHEETS
05/21/10	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	431
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



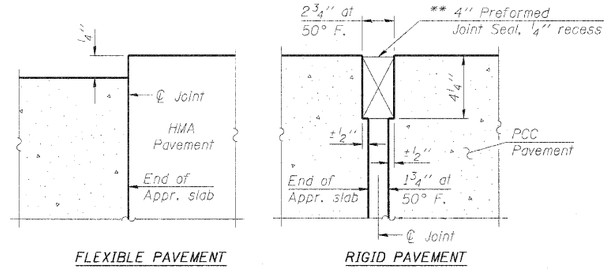
W.B.L. & E.B.L. - EAST APPROACH SLABS - PLAN VIEW

* Tilt #9 b3(E) bars as required to maintain clearance.

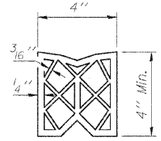
Note: For additional layout dimensions and geometry, See Sheets 10 or 12 of 40.

Notes:
Work this sheet with Sheet 21 of 40.
See sheet 21 of 40 for Sections C-C & D-D and View E-E.
d(E) and a1(E) bar spacings measured along Local Tangent.

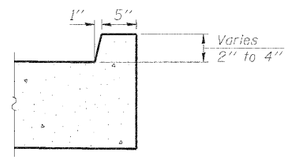
** Cost included with Concrete Superstructure.



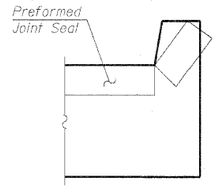
DETAIL A



PREFORMED JOINT SEAL



VIEW B-B



VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.

BRIDGE APPROACH SLAB DETAILS - EAST ABUTMENTS
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO.	SHEET NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
05R1532A	SHEET NO. 19	280	81-1(B-1)R	Rock Island	503	432
DATE 05/21/10	40 SHEETS			CONTRACT NO. 64815		
			ILLINOIS	FED. AID PROJECT		

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	DWM/CEH	5/21/10

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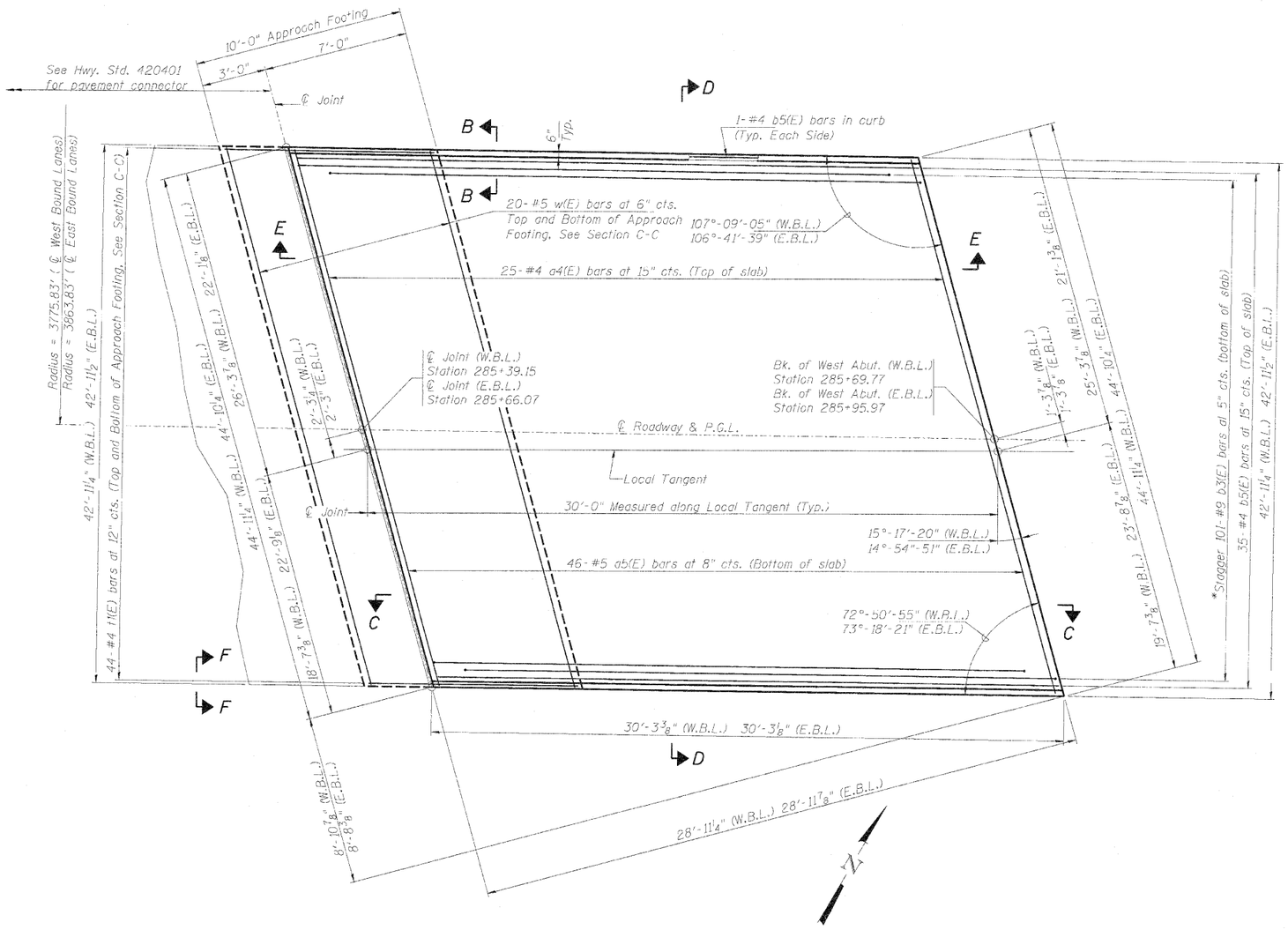
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:
Work this sheet with Sheet 21 of 40.
See sheet 21 of 40 for Sections C-C & D-D and View E-E.
a(E) and a1(E) bar spacings measured along Local Tangent.

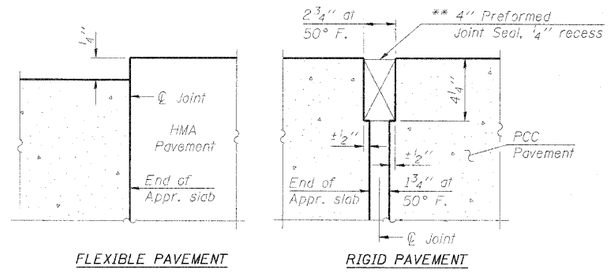
** Cost included with Concrete Superstructure.



W.B.L. & E.B.L. - WEST APPROACH SLABS - PLAN VIEW

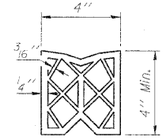
* Tilt #9 b3(E) bars as required to maintain clearance.

Note: For additional layout dimensions and geometry, See Sheets 9 or 11 of 40.

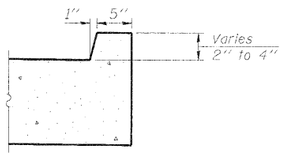


FLEXIBLE PAVEMENT — RIGID PAVEMENT

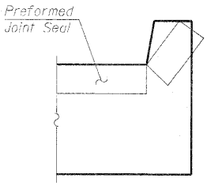
DETAIL A



PREFORMED JOINT SEAL



VIEW B-B



VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.

BRIDGE APPROACH SLAB DETAILS - WEST ABUTMENTS
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 20
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	433
		CONTRACT NO. 64815		
	ILLINOIS	FED. AID PROJECT		

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMP, JEH	5/21/10

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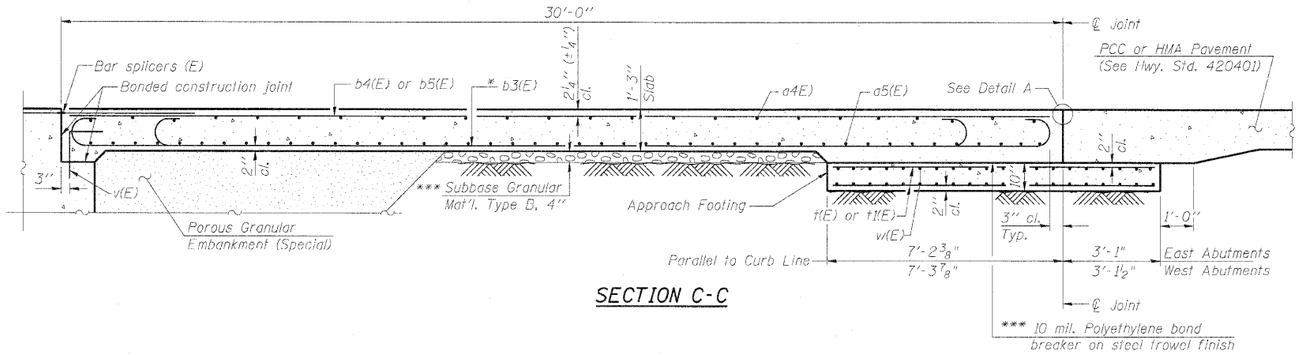
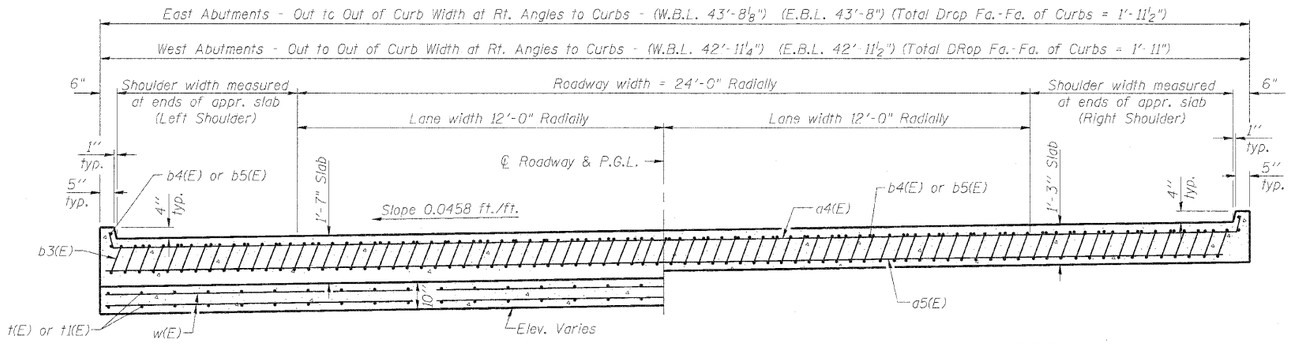
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

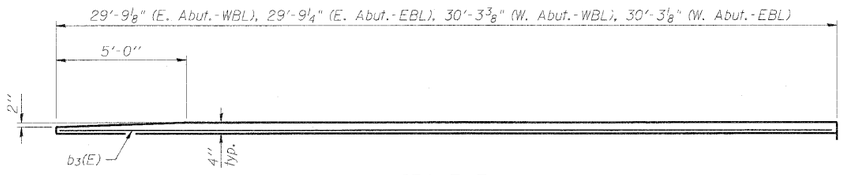


SECTION C-C

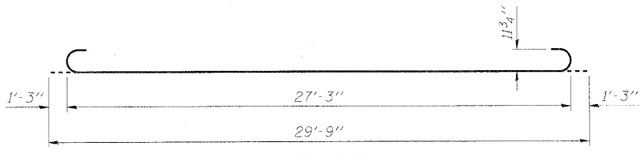


AT APPROACH FOOTING — NEAR ABUTMENT

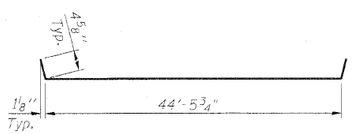
SECTION D-D
(See Plan for dimensions not shown)



VIEW E-E



BAR b3(E)



BAR a4(E)

Notes:
See sheets 19 or 20 of 40 for Detail A and View B-B.
Approach slab concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheets 15 or 18 of 40.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 34 of 40.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 40.

Approach Shoulder Widths at East Abutments (Measured Radially)

West Bound Lanes				East Bound Lanes			
Left Shoulder		Right Shoulder		Left Shoulder		Right Shoulder	
Joint End	Abut End	Joint End	Abut End	Joint End	Abut End	Joint End	Abut End
10.46'	10.46'	8.27'	8.19'	6.49'	6.49'	12.23'	12.15'

Approach Shoulder Widths at West Abutments (Measured Radially)

West Bound Lanes				East Bound Lanes			
Left Shoulder		Right Shoulder		Left Shoulder		Right Shoulder	
Joint End	Abut End	Joint End	Abut End	Joint End	Abut End	Joint End	Abut End
10.46'	10.46'	7.45'	7.55'	6.48'	6.49'	11.45'	11.55'

* Tilt #9 b_3(E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

EAST ABUTMENTS W.B.L. & E.B.L.
TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a4(E)	50	#4	45'-3"	
a5(E)	92	#5	44'-6"	
b3(E)	206	#9	29'-9"	
b4(E)	74	#4	29'-4"	
t(E)	176	#4	9'-11"	
w(E)	80	#5	44'-6"	
Concrete Superstructure		Cu. Yd.	129.2	
Concrete Structures		Cu. Yd.	27.7	
Reinforcement Bars, Epoxy Coated		Pound	32950	

WEST ABUTMENTS W.B.L. & E.B.L.
TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a4(E)	50	#4	45'-3"	
a5(E)	92	#5	44'-6"	
b3(E)	202	#9	29'-9"	
b5(E)	74	#4	29'-10"	
t1(E)	176	#4	10'-1"	
w(E)	80	#5	44'-6"	
Concrete Superstructure		Cu. Yd.	129.2	
Concrete Structures		Cu. Yd.	27.7	
Reinforcement Bars, Epoxy Coated		Pound	32560	

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	DMM/JEE	5/21/10

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07/21/2010

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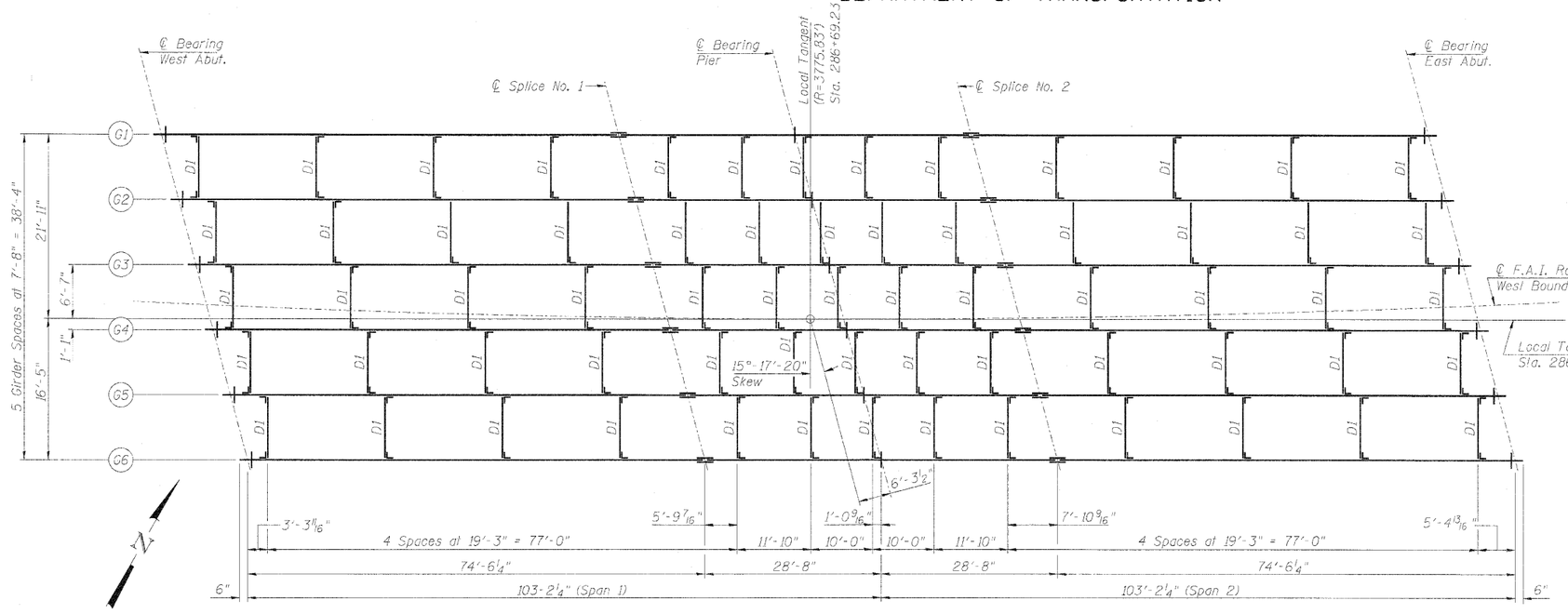
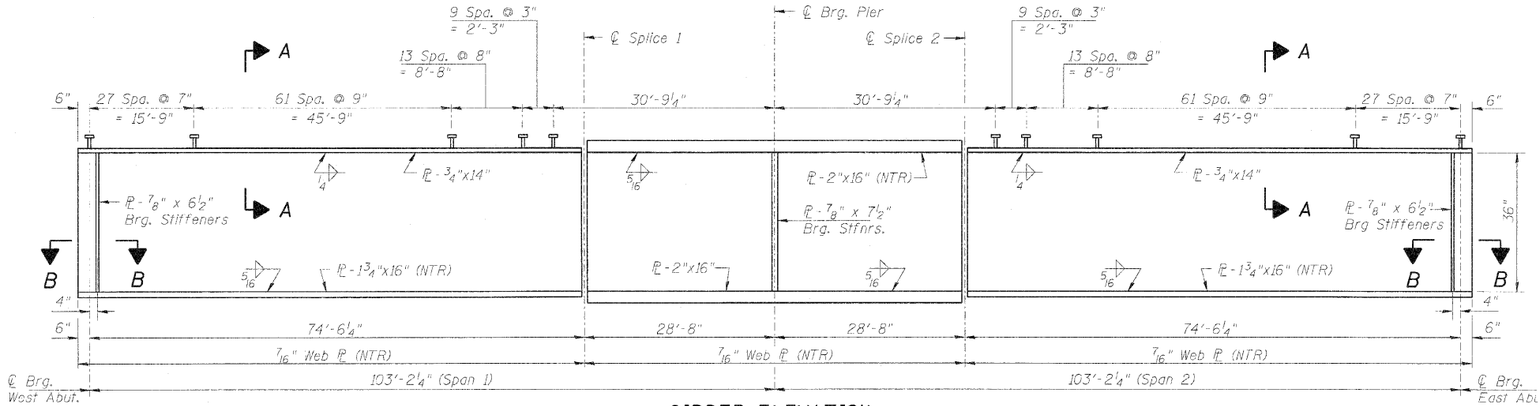
JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 21
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	434
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

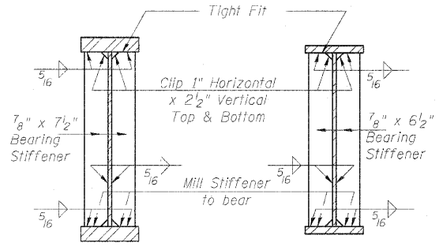
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FRAMING PLAN

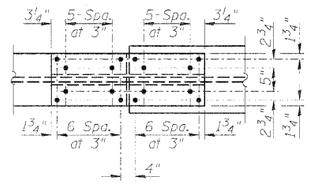


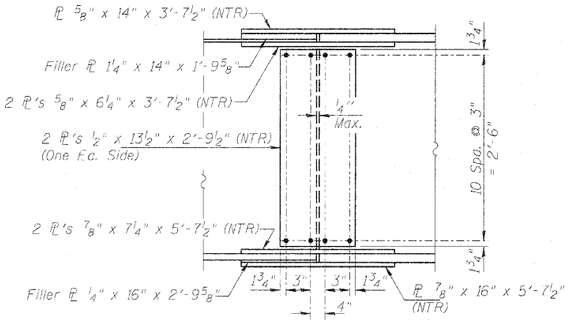
GIRDER ELEVATION



BRG. STIFFENERS AT PIERS

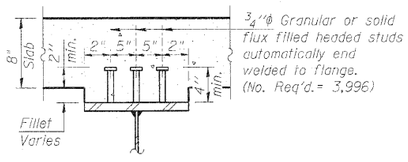
BRG. STIFFENERS AT ABUTMENTS



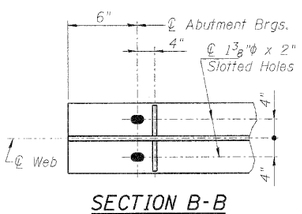


DETAIL - FIELD SPLICE

Note:
Use 7⁄8" ϕ H.S. Bolts with 15⁄16" ϕ holes for all splice connections.



SECTION A-A



SECTION B-B

Notes:
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

STRUCTURAL STEEL - W.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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GB NO.	SHEET NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
05R1532A	SHEET NO. 22	280	81-1(B-1)R	Rock Island	503	435
DATE 05/21/10	40 SHEETS			CONTRACT NO. 64815		
				ILLINOIS	FED. AID PROJECT	

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMF/JEH	5/21/10

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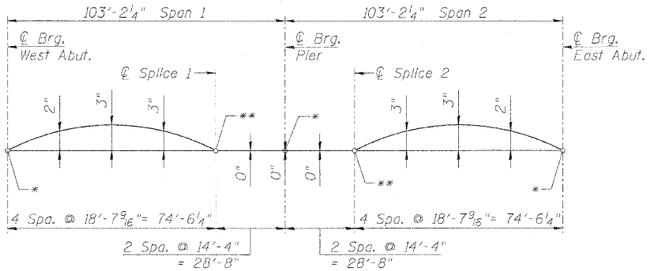
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CAMBER DIAGRAM

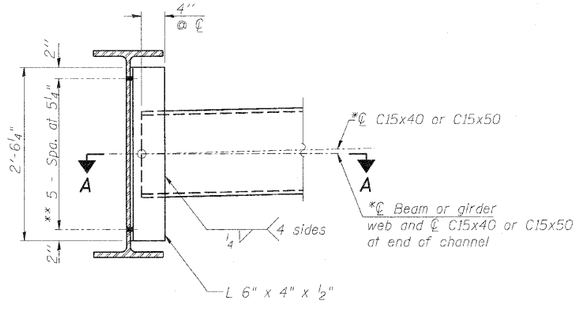
* See Table for Final Top of Web Elevations at abutments and piers.
** Theoretical Top of Web Elevations before dead load deflections.

TOP of WEB ELEVATIONS TABLE

For Fabrication Only

Girder Number	℄ Brg. W. Abut.	℄ Splice No. 1	℄ Brg. Pier	℄ Splice No. 2	℄ Brg. E. Abut.
Girder 1	575.12	575.10	575.10	575.09	575.09
Girder 2	575.47	575.46	575.45	575.44	575.43
Girder 3	575.83	575.81	575.80	575.79	575.78
Girder 4	576.19	576.16	576.15	576.14	576.12
Girder 5	576.54	576.51	576.50	576.49	576.47
Girder 6	576.90	576.86	576.85	576.84	576.81

SECTION A-A



INTERIOR DIAPHRAGM

(65 Required)

Note:
Two hardened washers required for each set of oversized holes.
*Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.
** ¾" ϕ HS bolts, 15/16" ϕ holes

INTERIOR GIRDER MOMENT TABLE			
		0.4 Span 1 or 0.6 Span 2	Pier
I_s	(in^4)	13154	24826
$I_c(n)$	(in^4)	40897	-
$I_c(3n)$	(in^4)	28489	-
S_s	(in^3)	970	1241
$S_c(n)$	(in^3)	1321	-
$S_c(3n)$	(in^3)	1226	-
Z	(in^3)	-	1358
w_L	(k/')	1.002	1.620
M_L	('k)	653	2322
$_sw_L$	(k/')	0.519	-
M_s	('k)	397	
M_L	('k)	995	793
M_{IM}	('k)	218	174
$\frac{5}{3}[M_L + I]$	('k)	2022	1610
M_a	('k)	3992	5113
*** M_u	('k)	5968	5657
f_s w_L non-comp	(ksi)	8.08	22.45
f_s w_L (comp)	(ksi)	3.88	-
f_s $\frac{5}{3}[M_L + M_I]$	(ksi)	18.36	15.57
f_s (Overload)	(ksi)	30.32	38.02
VR	(k)	71	-

***Compact section

INTERIOR GIRDER REACTION TABLE			
		W. Abut. or E. Abut.	Pier
R_w	(k)	57.4	204.8
R_L	(k)	53.6	80.1
R_I	(k)	11.7	17.6
R_{Total}	(k)	122.7	302.4

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads ($in.^4$ and $in.^3$).
$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads ($in.^4$ and $in.^3$).
$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).
Z: Plastic Section Modulus of the steel section in non-composite areas ($in.^3$).
w_L: Un-factored non-composite dead load (kips/ft.).
M_L: Un-factored moment due to non-composite dead load (kip-ft.).
$_sw_L$: Un-factored long-term composite (superimposed) dead load (kips/ft.)
M_s: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
M_L: Un-factored live load moment (kip-ft.).
M_I: Un-factored moment due to impact (kip-ft.).
M_a: Factored design moment (kip-ft.). $1.3\ [M_L + M_s + \frac{5}{3}(M_L + M_I)]$
M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
f_s (Overload): Sum of stresses as computed from the moments below (ksi). $M_L + M_s + \frac{5}{3}(M_L + M_I)$
f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi). $1.3\ [M_L + M_s + \frac{5}{3}(M_L + M_I)]$
VR: Maximum L + impact shear range within the composite portion of the span for stud shear connector design (kips).

Note:
M_L and R_L include the effects of centrifugal force and superelevation.

STRUCTURAL STEEL DETAILS - W.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 23
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	436
		CONTRACT NO. 64815		
	ILLINOIS	FED. AID PROJECT		

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMM JSR	5/21/10

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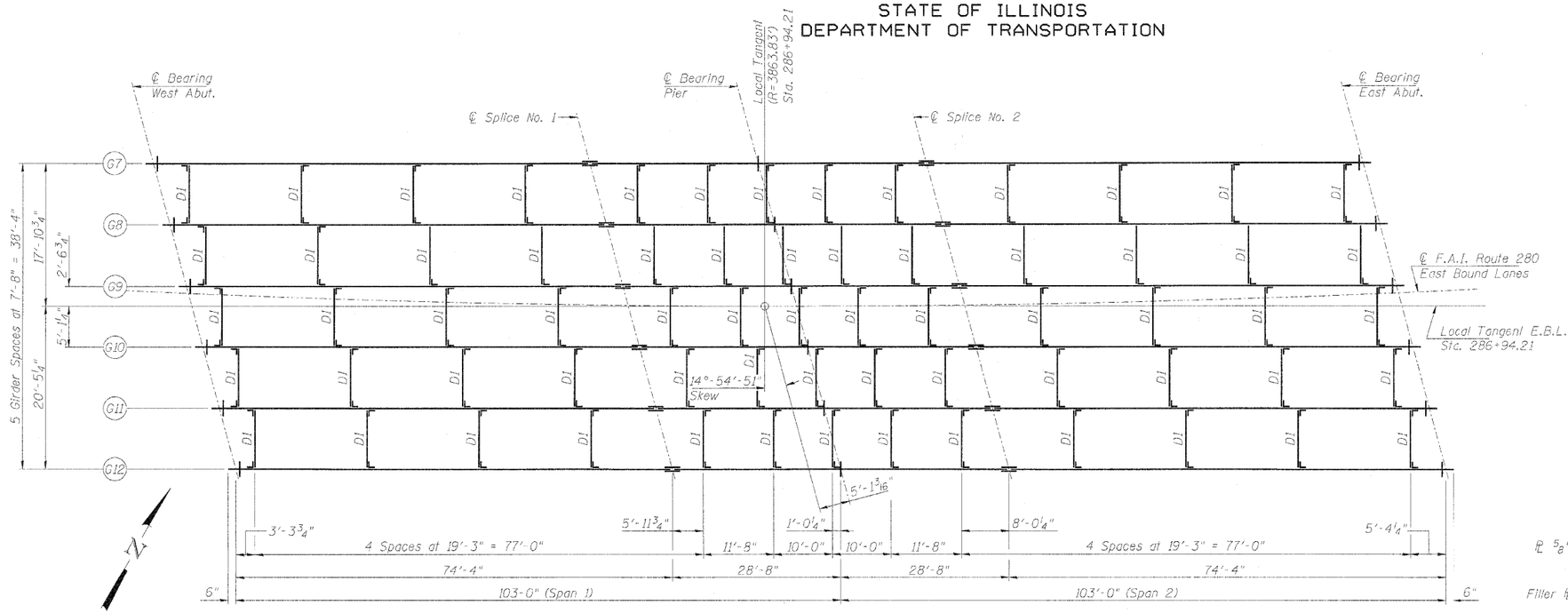
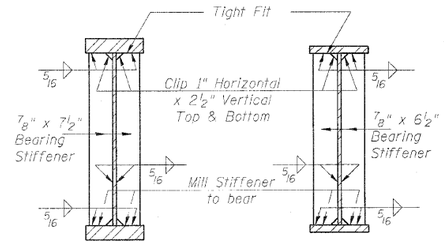
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



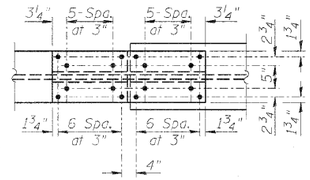
FRAMING PLAN

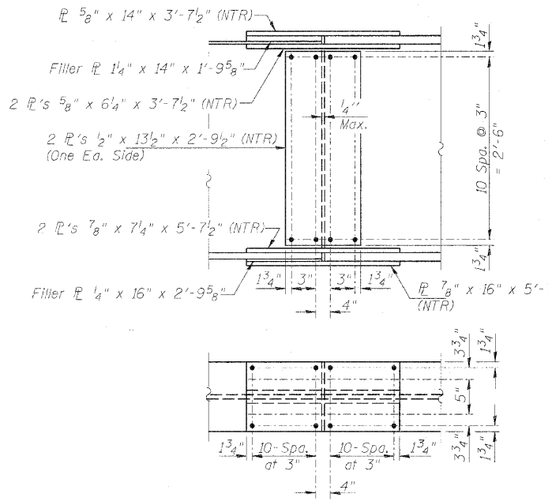
GIRDER ELEVATION



BRG. STIFFENERS AT PIERS

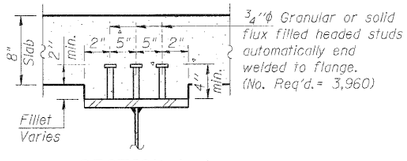
BRG. STIFFENERS AT ABUTMENTS



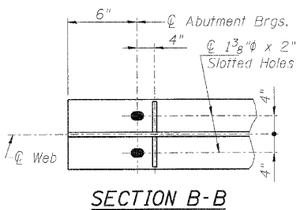


DETAIL - FIELD SPLICE

Note:
Use 7/8" ϕ H.S. Bolts with 15/16" ϕ holes for all splice connections.



SECTION A-A



SECTION B-B

Notes:
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 24
40 SHEETS

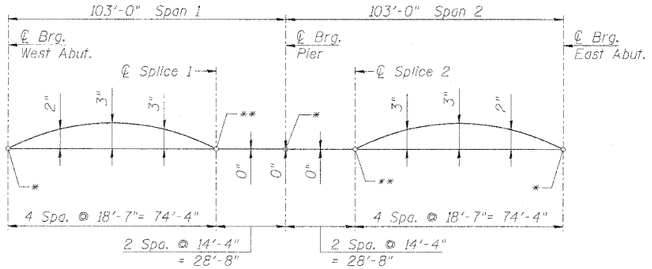
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	437
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

STRUCTURAL STEEL - E.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
RECHECKED	MMM/JEH	5/21/10

07CN0280
c:\workingfiles\d3\82\D0\D0\D0\D0\D0\D0027-646.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CAMBER DIAGRAM

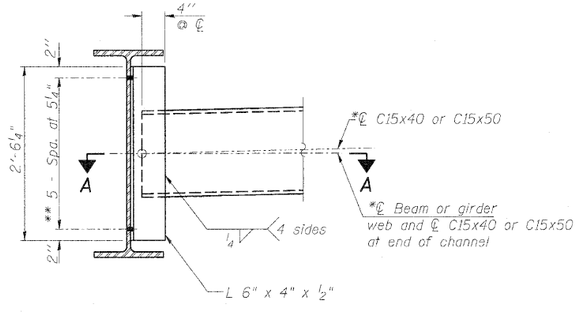
* See Table for Final Top of Web Elevations at abutments and piers.
** Theoretical Top of Web Elevations before dead load deflections.

TOP of WEB ELEVATIONS TABLE

For Fabrication Only

Girder Number	℄ Brg. W. Abut.	℄ Splice No. 1	℄ Brg. Pier	℄ Splice No. 2	℄ Brg. E. Abut.
Girder 7	575.39	575.30	575.27	575.24	575.17
Girder 8	575.74	575.65	575.62	575.58	575.51
Girder 9	576.10	576.00	575.96	575.93	575.86
Girder 10	576.45	576.35	576.31	576.28	576.20
Girder 11	576.81	576.70	576.66	576.63	576.55
Girder 12	577.16	577.05	577.01	576.97	576.89

SECTION A-A



INTERIOR DIAPHRAGM

(65 Required)

Note:
Two hardened washers required for each set of oversized holes.
*Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
The alternate, if utilized, shall be provided at no additional cost to the Department.
**3/4" ϕ HS bolts, 15/16" ϕ holes

INTERIOR GIRDER MOMENT TABLE			
		0.4 Span 1 or 0.6 Span 2	Pier
I_s	(in^4)	13154	24826
$I_c(n)$	(in^4)	40897	-
$I_c(3n)$	(in^4)	28483	-
S_s	(in^3)	970	1241
$S_c(n)$	(in^3)	1321	-
$S_c(3n)$	(in^3)	1226	-
Z	(in^3)	-	1358
w_D	(k/')	1.001	1.620
M_D	('k)	650	2314
w_{D_S}	(k/')	0.519	-
M_{D_S}	('k)	395	-
M_L	('k)	993	790
M_{IM}	('k)	218	173
$\frac{5}{3}(M_L + I)$	('k)	2017	1605
M_n	('k)	3981	5094
*** M_u	('k)	5968	5657
f_s D non-comp	(ksi)	8.04	22.37
f_s D (comp)	(ksi)	3.87	-
$f_s \frac{5}{3}(M_L + M_I)$	(ksi)	18.32	15.52
f_s (Overload)	(ksi)	30.24	37.88
VR	(k)	71	-

***Compact section

INTERIOR GIRDER REACTION TABLE			
		W. Abut. or E. Abut.	Pier
R_D	(k)	57.3	204.4
R_L	(k)	53.6	80
R_I	(k)	11.7	17.5
R_{Total}	(k)	122.5	301.9

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads ($in.^4$ and $in.^3$).
$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads ($in.^4$ and $in.^3$).
$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).
Z: Plastic Section Modulus of the steel section in non-composite areas ($in.^3$).
w_D: Un-factored non-composite dead load (kips/ft.).
M_D: Un factored moment due to non-composite dead load (kip-ft.).
w_{D_S}: Un-factored long-term composite (superimposed) dead load (kips/ft.)
M_{D_S}: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
M_L: Un-factored live load moment (kip-ft.).
M_I: Un-factored moment due to impact (kip-ft.).
M_n: Factored design moment (kip-ft.). $1.3\,[M_D + M_{D_S} + \frac{5}{3}(M_L + M_I)]$
M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
f_s (Overload): Sum of stresses as computed from the moments below (ksi). $M_D + M_{D_S} + \frac{5}{3}(M_L + M_I)$
f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi). $1.3\,[M_D + M_{D_S} + \frac{5}{3}(M_L + M_I)]$
VR: Maximum M_L + impact shear range within the composite portion of the span for stud shear connector design (kips).

Note:
M_L and R_L include the effects of centrifugal force and superelevation.

DATE	BY	DESCRIPTION
5/21/10	Rod	
5/21/10	Rod	
5/21/10	MNK/JEH	

DRAWN
CHECKED

DP\PLS010
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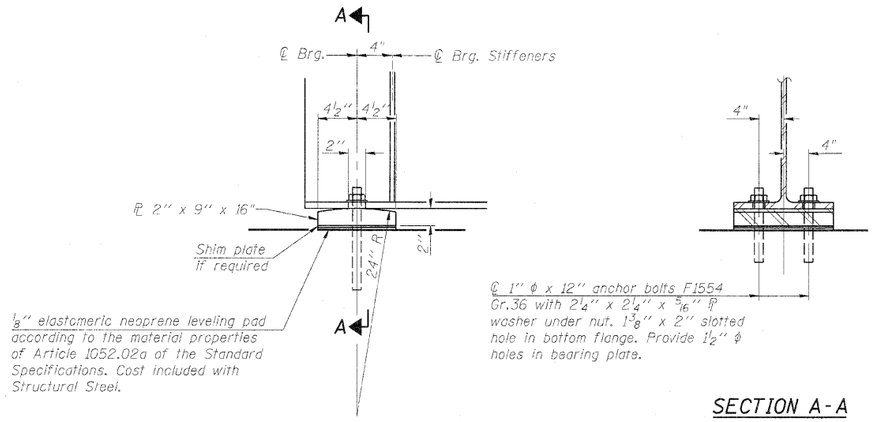
JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 25
40 SHEETS

STRUCTURAL STEEL DETAILS - E.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	438
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

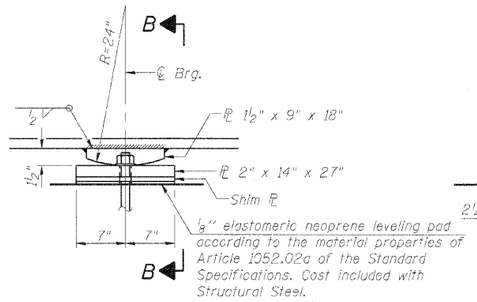
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



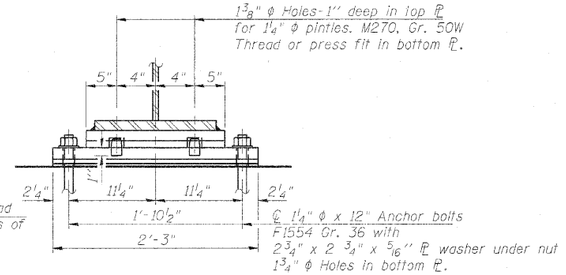
ELEVATION AT ABUTMENT

SECTION A-A

INTEGRAL ABUTMENT FIXED BEARING DETAILS

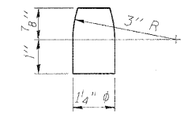


ELEVATION AT PIER



SECTION B-B

FIXED PIER BEARING DETAILS



PINTLE

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts may be either cast in place or installed in holes drilled after the supported member is in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Steel members required for the bearing assembly shall be included in the cost of Structural Steel.

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The anchor bolt lengths shown are the required total lengths for cast-in-place headed anchor bolts. The required total length for the sealed capsule alternate anchor bolt shall be according to the manufacturer's recommendations.

The structural steel plates and pintles of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50W.

BILL OF MATERIAL - W.B.L. & E.B.L.

Item	Unit	Total
Anchor Bolts, 1"	Each	48
Anchor Bolts, 1¼"	Each	24

BEARING DETAILS
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMM/JEH	5/21/10

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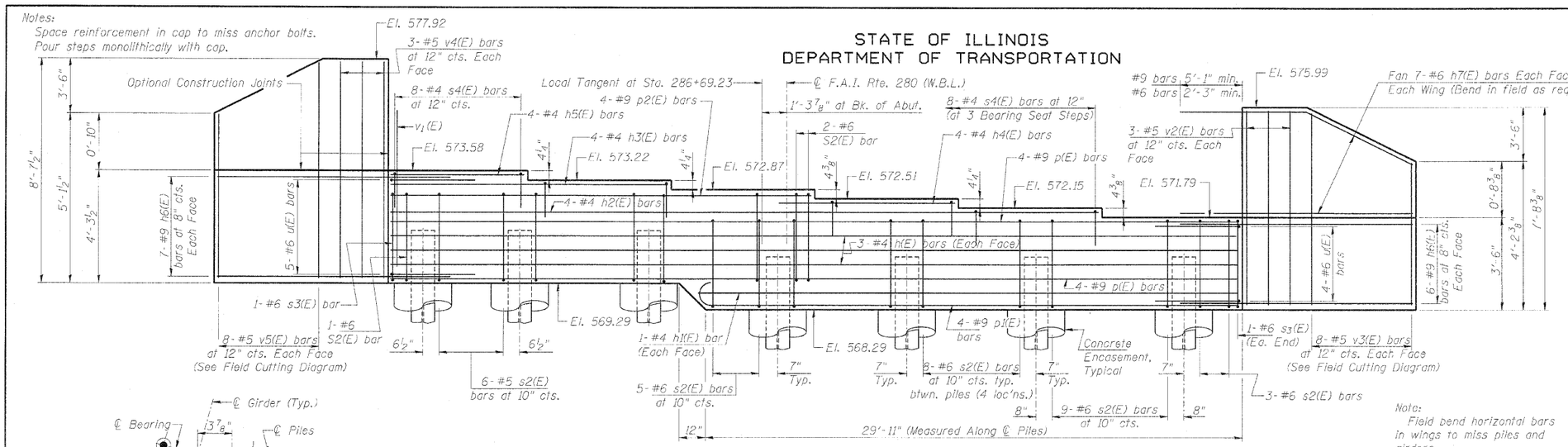
JOB NO.	SHEET NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
05R1532A	SHEET NO. 26	280	81-1(B-1)R	Rock Island	503	439
DATE 05/21/10	40 SHEETS			CONTRACT NO. 64815		
			ILLINOIS FED. AID PROJECT			

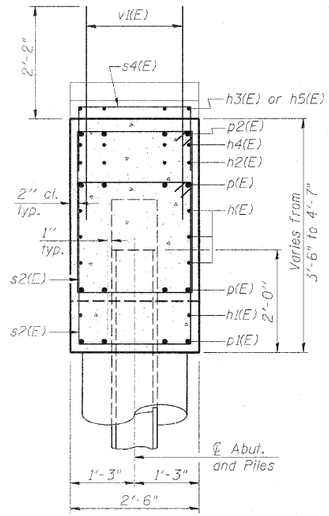
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.

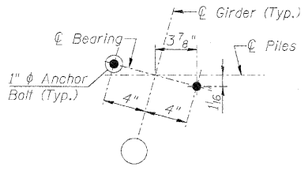


ELEVATION
(Elevation Section - Cut Along ℄ Piles - Looking West)

Note:
Field bend horizontal bars in wings to miss piles and girders.
Field cut h2(E), p2(E), h3(E) & h5(E) bars to fit skewed end.



SEC. THRU ABUT.

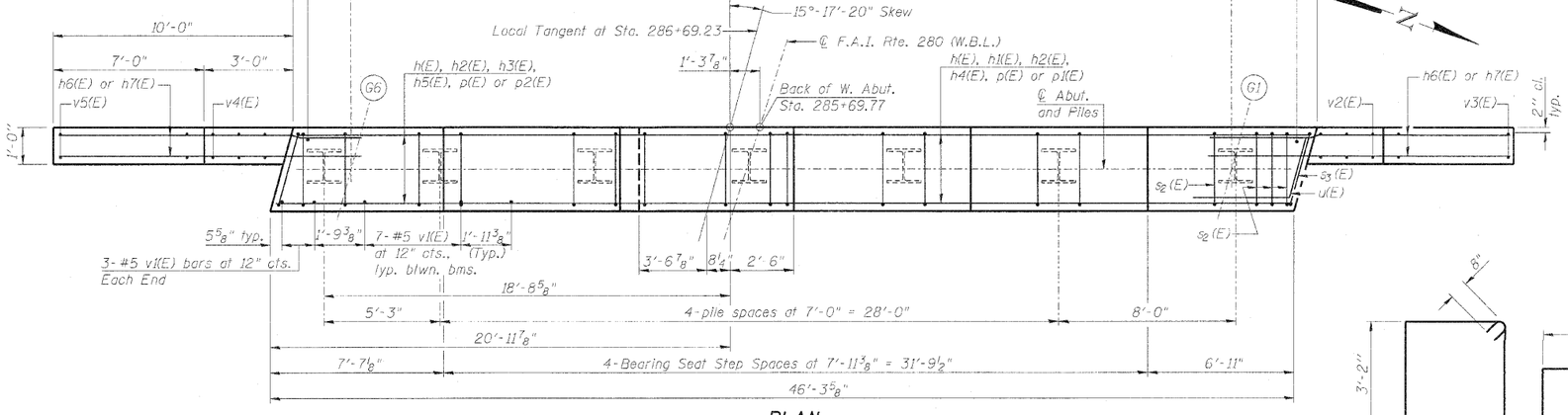


ANCHOR BOLT LAYOUT
(Typical all Girder Locations)

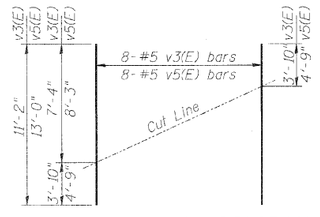
BILL OF MATERIAL - W. Abut. - W.B.L.

Bar	No.	Size	Length	Shape
h(E)	6	#4	45'-11"	
h1(E)	2	#4	30'-0"	
h2(E)	4	#4	39'-0"	
h3(E)	4	#4	15'-2"	
h4(E)	4	#4	9'-5"	
h5(E)	4	#4	7'-3"	
h6(E)	26	#9	14'-11"	
h7(E)	28	#6	12'-6"	
p(E)	8	#9	45'-11"	
p1(E)	4	#9	31'-4"	
p2(E)	4	#9	23'-2"	
s2(E)	58	#6	12'-0"	
s3(E)	2	#6	12'-2"	
s4(E)	32	#4	4'-8"	
u(E)	9	#6	9'-9"	
v1(E)	88	#5	4'-4"	
v2(E)	6	#5	7'-4"	
v3(E)	8	#5	11'-2"	
v4(E)	6	#5	8'-3"	
v5(E)	8	#5	13'-0"	
Structure Excavation		Cu. Yd.	116	
Concrete Structures		Cu. Yd.	22.5	
Reinforcement Bars, Epoxy Coated		Pound	6260	
Furnishing Steel Piles, HP12x63		Foot	133	
Driving Piles		Foot	133	
Concrete Encasement		Cu. Yd.	2.4	
Pile Shoes		Each	7	

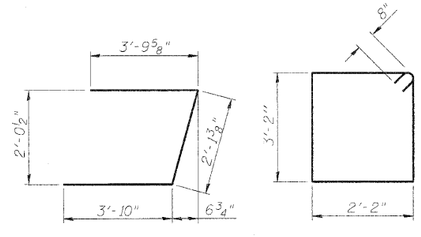
For details of Bar Splicers, see sheet 34 of 40.
For details of piles and Concrete Encasement, see sheet 35 of 40.



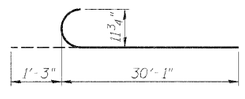
PLAN



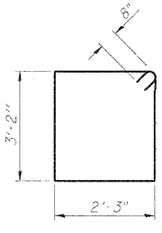
FIELD CUTTING DIAGRAM
Order v3(E) & v5(E) full length. Cut as shown and use remainder of bars in opposite face.



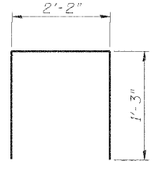
BAR u(E) BAR s2(E)



BAR p1(E)



BAR s3(E)



BAR s4(E)

PILE DATA

Type:	HP12x63
Nominal Required Bearing:	497 Kips
Allowable Resistance Available:	166 Kips
Est. Length:	19 Feet
No. Production Piles:	7
No. Test Piles:	-

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
RECHECKED	MMM	5/21/10

07/29/2010
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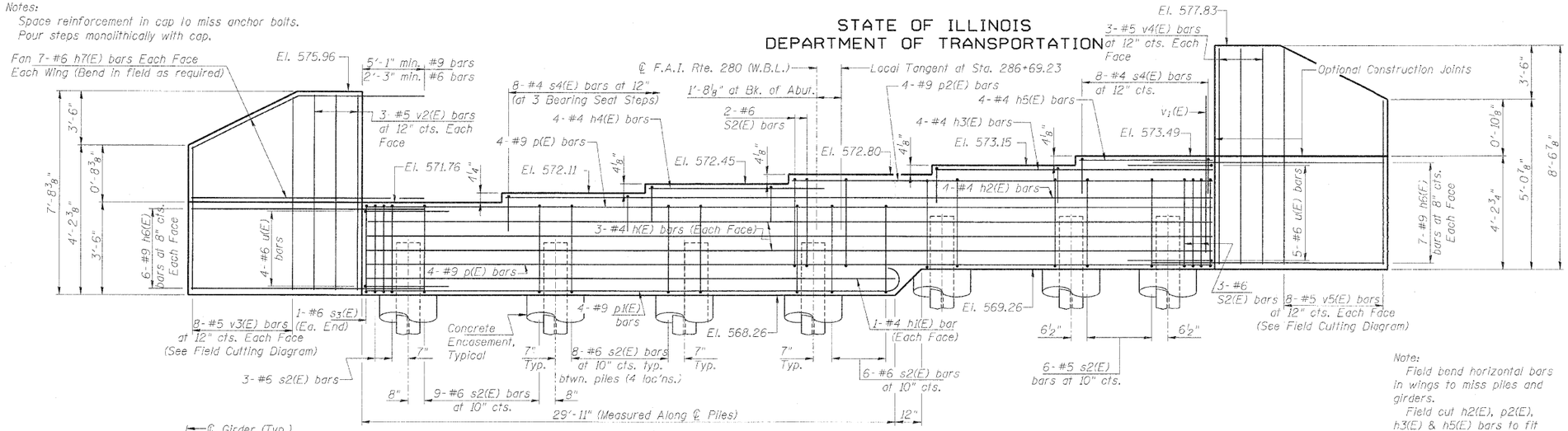
JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 27
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	440
		CONTRACT NO. 64815		
	ILLINOIS	FED. AID PROJECT		

WEST ABUTMENT - W.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

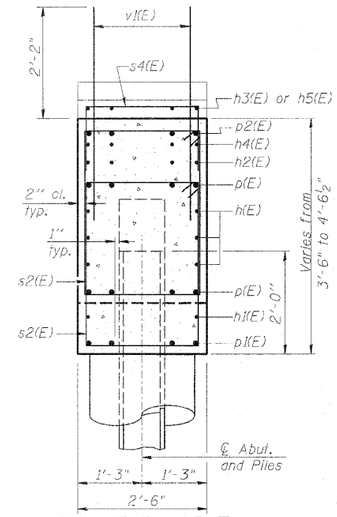
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

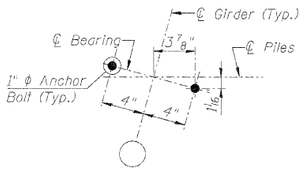


ELEVATION
(Elevation Section - Cut Along ℄ Piles - Looking East)

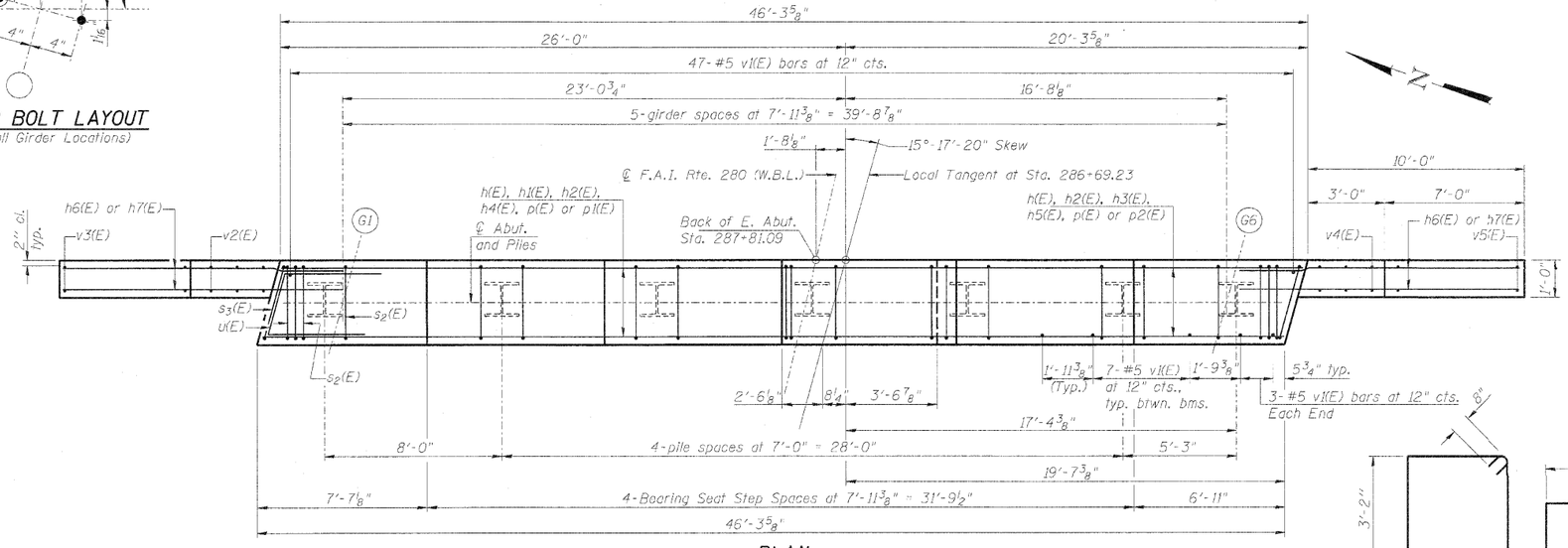
Note:
Field bend horizontal bars in wings to miss piles and girders.
Field cut h2(E), p2(E), h3(E) & h5(E) bars to fit skewed end.



SEC. THRU ABUT.



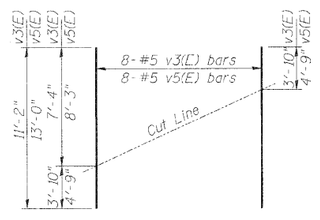
ANCHOR BOLT LAYOUT
(Typical all Girder Locations)



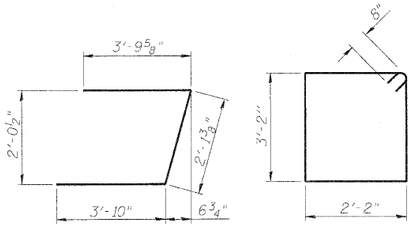
PLAN

PILE DATA

Type:	HP12x63
Nominal Required Bearing:	497 Kips
Allowable Resistance Available:	166 Kips
Est. Length:	20 Feet
No. Production Piles:	7
No. Test Piles:	-

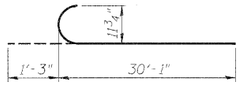


FIELD CUTTING DIAGRAM
Order v3(E) & v5(E) full length. Cut as shown and use remainder of bars in opposite face.

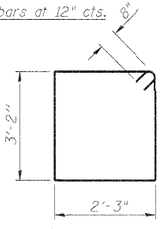


BAR u(E)

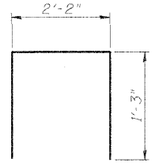
BAR s2(E)



BAR p1(E)



BAR s3(E)



BAR s4(E)

BILL OF MATERIAL - E. Abut. - W.B.L.

Bar	No.	Size	Length	Shape
h1(E)	6	#4	45'-11"	
h1(E)	2	#4	30'-0"	
h2(E)	4	#4	39' 0"	
h3(E)	4	#4	15'-2"	
h4(E)	4	#4	9'-5"	
h5(E)	4	#4	7' 3"	
h6(E)	26	#9	14'-11"	
h7(E)	28	#6	12'-6"	
p(E)	8	#9	45'-11"	
p1(E)	4	#9	31'-4"	
p2(E)	4	#9	23'-2"	
s2(E)	61	#6	12'-0"	
s3(E)	2	#6	12'-2"	
s4(E)	32	#4	4'-8"	
u(E)	9	#6	9'-9"	
v1(E)	88	#5	4'-4"	
v2(E)	6	#5	7'-4"	
v3(E)	8	#5	11'-2"	
v4(E)	6	#5	8'-3"	
v5(E)	8	#5	13'-0"	
Structure Excavation		Cu. Yd.	115	
Concrete Structures		Cu. Yd.	22.4	
Reinforcement Bars, Epoxy Coated		Pound	6260	
Furnishing Steel Piles, HP12x63		Foot	140	
Driving Piles		Foot	140	
Concrete Encasement		Cu. Yd.	2.4	
Pile Shoes		Each	7	

For details of Bar Splicers, see sheet 34 of 40.
For details of piles and Concrete Encasement, see sheet 35 of 40.

EAST ABUTMENT - W.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

PROFESSIONAL DESIGN FIRM LICENSE #184-001084

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 28
40 SHEETS

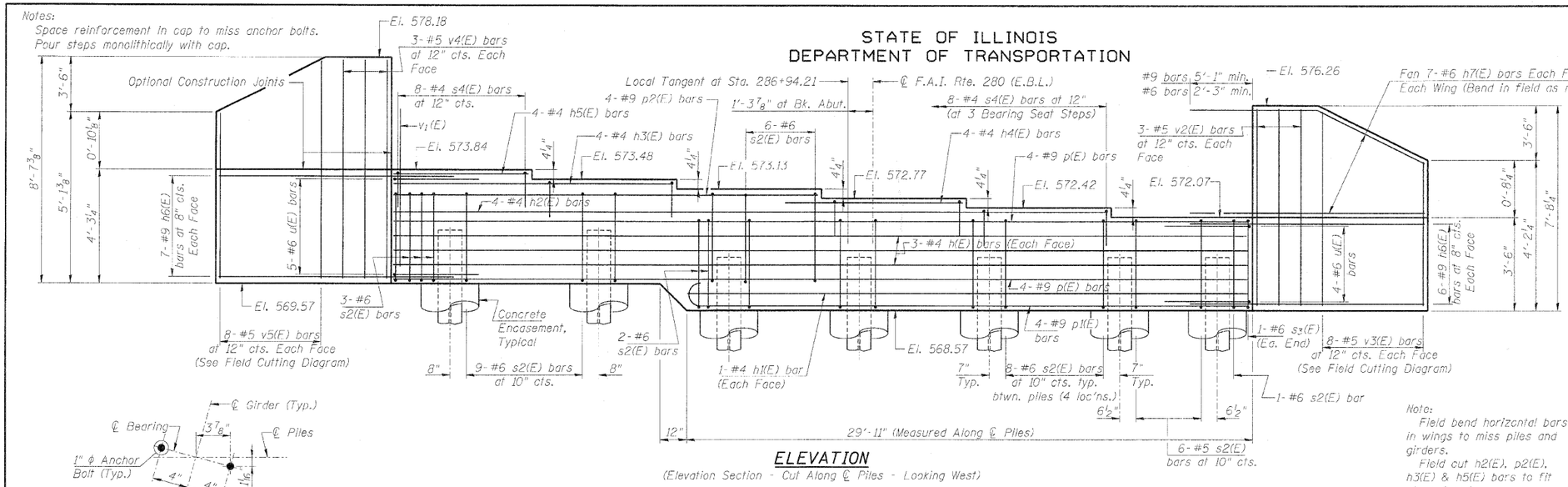
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	441
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
CHECKED	MMV/ZEH	5/21/10

d:\workingroot\c3d\R1532A\Sheets\R1532A-E&W.dgn
07/20/2010

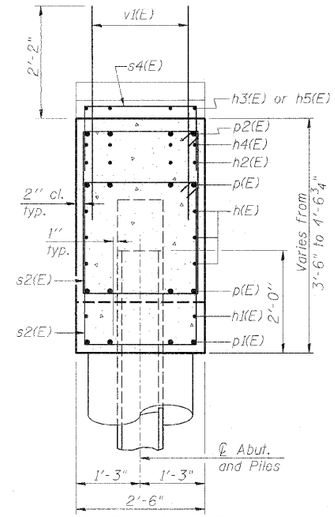
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.

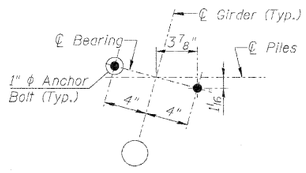


ELEVATION
(Elevation Section - Cut Along ℄ Piles - Looking West)

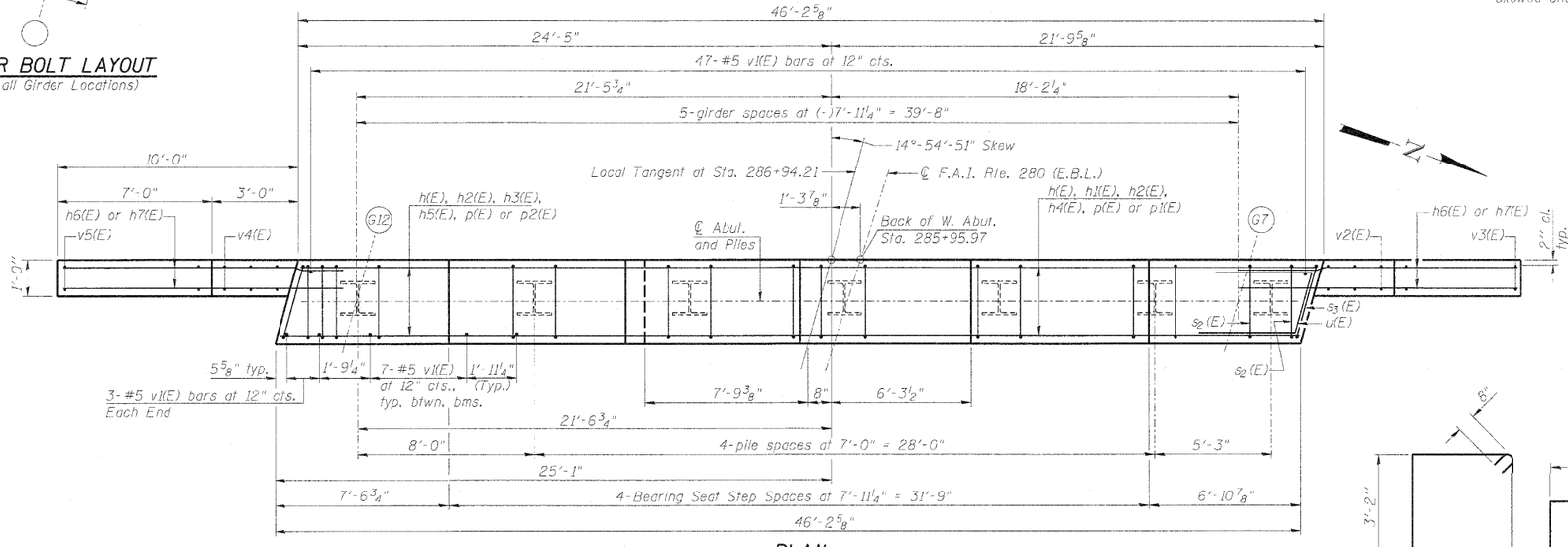
Note:
Field bend horizontal bars in wings to miss piles and girders.
Field cut h2(E), p2(E), h3(E) & h5(E) bars to fit skewed end.



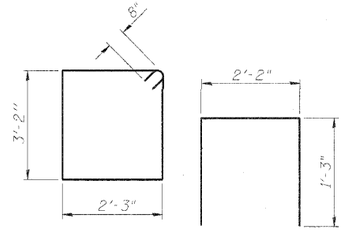
SEC. THRU ABUT.



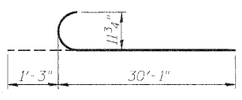
ANCHOR BOLT LAYOUT
(Typical all Girder Locations)



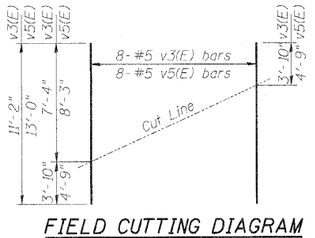
PLAN



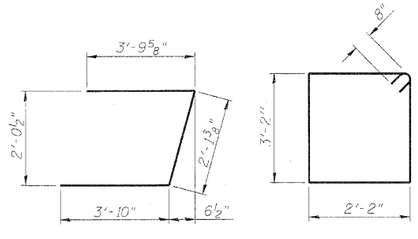
BAR s3(E) BAR s4(E)



BAR p1(E)



FIELD CUTTING DIAGRAM
Order v3(E) & v5(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR u(E) BAR s2(E)

PILE DATA

Type:	HP12x63
Nominal Required Bearing:	497 Kips
Allowable Resistance Available:	166 Kips
Est. Length:	21 Feet
No. Production Piles:	7
No. Test Piles:	-

BILL OF MATERIAL - W. Abut. - E.B.L.

Bar	No.	Size	Length	Shape
h(E)	6	#4	45'-11"	
h1(E)	2	#4	30'-0"	
h2(E)	4	#4	39'-0"	
h3(E)	4	#4	15'-2"	
h4(E)	4	#4	9'-5"	
h5(E)	4	#4	7'-3"	
h6(E)	26	#9	14'-11"	
h7(E)	28	#6	12'-6"	
p(E)	8	#9	45'-11"	
p1(E)	4	#9	31'-4"	
p2(E)	4	#9	23'-2"	
s2(E)	59	#6	12'-0"	
s3(E)	2	#6	12'-2"	
s4(E)	32	#4	4'-8"	
u(F)	9	#6	9'-9"	
v1(E)	88	#5	4'-4"	
v2(E)	6	#5	7'-4"	
v3(E)	8	#5	11'-2"	
v4(E)	6	#5	8'-3"	
v5(E)	8	#5	13'-0"	
Structure Excavation		Cu. Yd.	115	
Concrete Structures		Cu. Yd.	22.4	
Reinforcement Bars, Epoxy Coated		Pound	6260	
Furnishing Steel Piles, HP12x63		Foot	147	
Driving Piles		Foot	147	
Concrete Encasement		Cu. Yd.	2.4	
Pile Shoes		Each	7	

For details of Bar Splicers, see sheet 34 of 40.
For details of piles and Concrete Encasement, see sheet 35 of 40.

WEST ABUTMENT - E.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 29
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	442
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

LAYOUT	Red	5/21/10
DRAWN	Red	5/21/10
CK'D (MED)	MMV (AEH)	5/21/10

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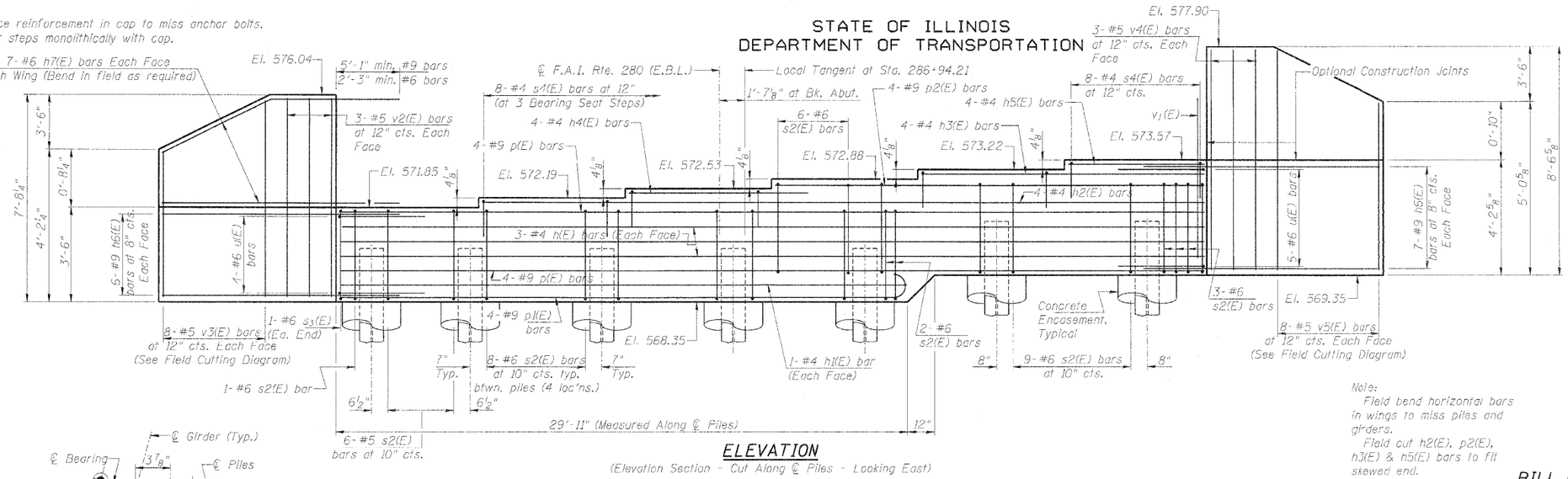
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.

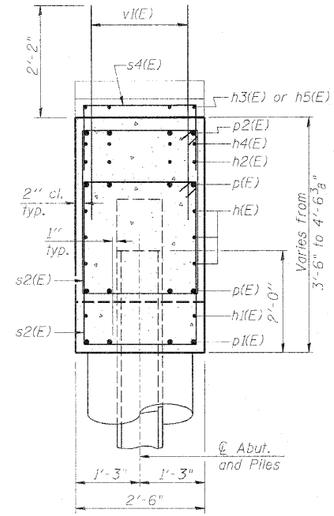
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



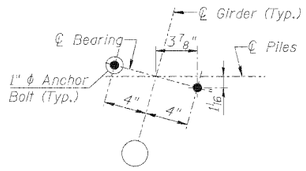
ELEVATION

(Elevation Section - Cut Along ℄ Piles - Looking East)

Note:
Field bend horizontal bars in wings to miss piles and girders.
Field cut h2(E), p2(E), h3(E) & h5(E) bars to fit skewed end.

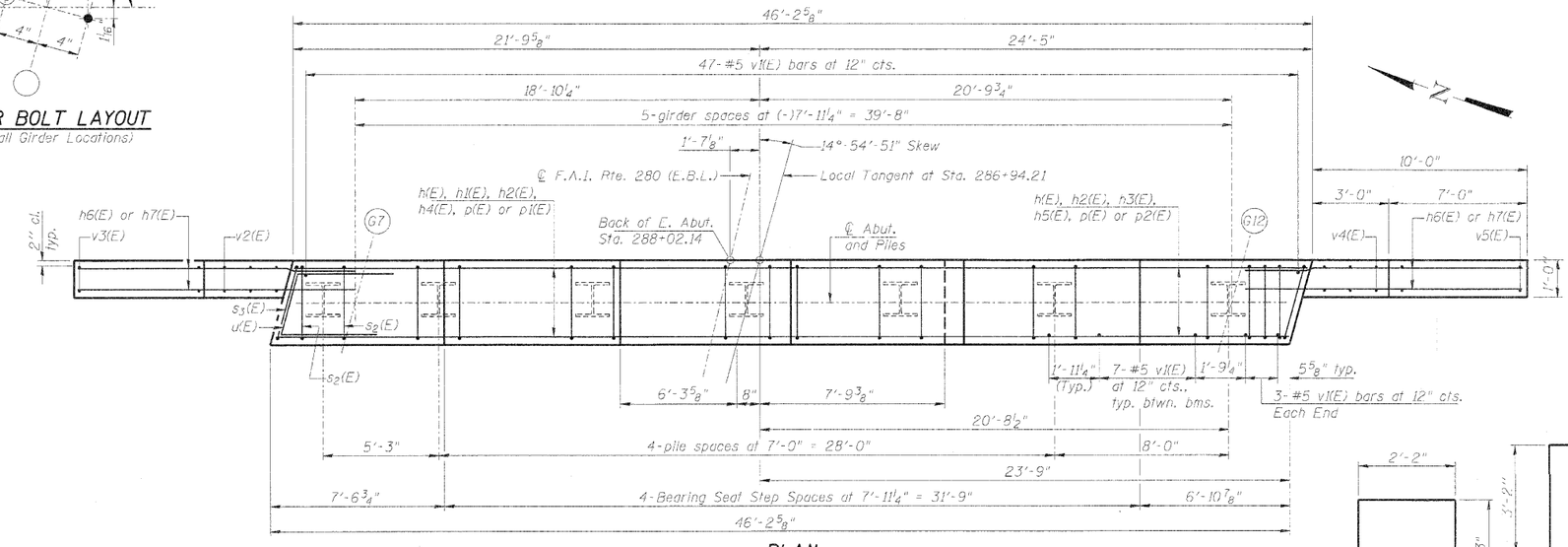


SEC. THRU ABUT.



ANCHOR BOLT LAYOUT

(Typical all Girder Locations)

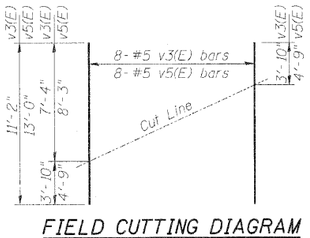


PLAN

BILL OF MATERIAL - E. Abut. - E.B.L.

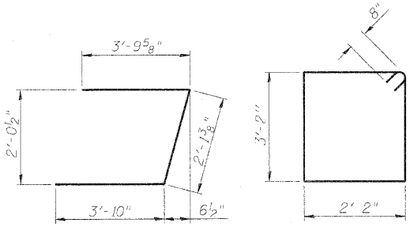
Bar	No.	Size	Length	Shape
h(E)	6	#4	45'-11"	
h1(E)	2	#4	30'-0"	
h2(E)	4	#4	39'-0"	
h3(E)	4	#4	15'-2"	
h4(E)	4	#4	9'-5"	
h5(E)	4	#4	7'-3"	
h6(E)	26	#9	14'-11"	
h7(E)	28	#6	12'-6"	
p(E)	8	#9	45'-11"	
p1(E)	4	#9	31'-4"	
p2(E)	4	#9	23'-2"	
s2(E)	59	#6	12'-0"	
s3(E)	2	#6	12'-2"	
s4(E)	32	#4	4'-8"	
u(E)	9	#6	9'-9"	
v1(E)	88	#5	4'-4"	
v2(E)	6	#5	7'-4"	
v3(E)	8	#5	11'-2"	
v4(E)	6	#5	8'-3"	
v5(E)	8	#5	13'-0"	
Structure Excavation		Cu. Yd.	115	
Concrete Structures		Cu. Yd.	22.3	
Reinforcement Bars, Epoxy Coated		Pound	6260	
Furnishing Steel Piles, HP12x63		Foot	154	
Driving Piles		Foot	154	
Concrete Encasement		Cu. Yd.	2.4	
Pile Shoes		Each	7	

For details of Bar Splicers, see sheet 34 of 40.
For details of piles and Concrete Encasement, see sheet 35 of 40.



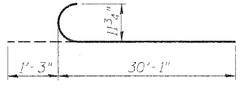
FIELD CUTTING DIAGRAM

Order v3(E) & v5(E) full length. Cut as shown and use remainder of bars in opposite face.



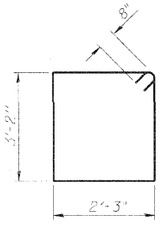
BAR u(E)

BAR s2(E)



BAR p1(E)

BAR s4(E)



BAR s3(E)

PILE DATA

Type:	HP12x63
Nominal Required Bearing:	497 Kips
Allowable Resistance Available:	166 Kips
Est. Length:	22 Feet
No. Production Piles:	7
No. Test Piles:	-

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
CHECKED	MJM/JEH	5/21/10

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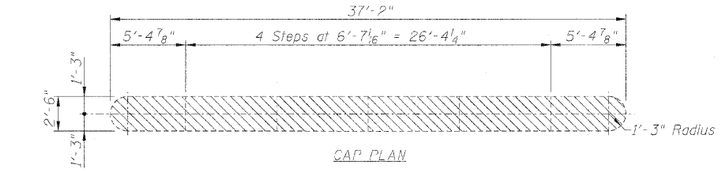
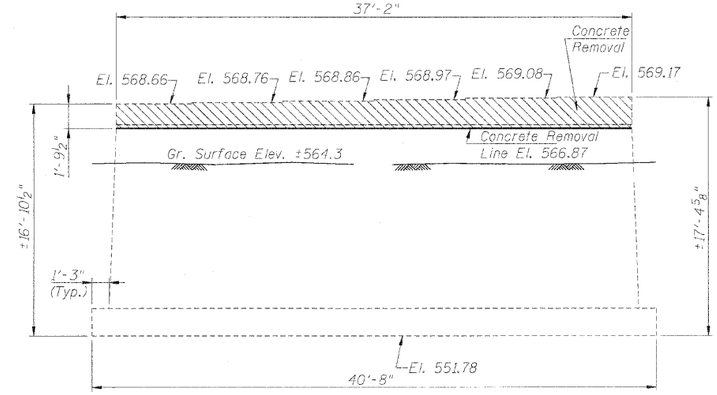
JOB NO. 05R1532A	SHEET NO. 30	F.A. RTE. 280	SECTION 81-1(B-1)R	COUNTY Rock Island	TOTAL SHEETS 503	SHEET NO. 443
DATE 05/21/10	40 SHEETS			CONTRACT NO. 64815		
			ILLINOIS	FED. AID PROJECT		

EAST ABUTMENT - E.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

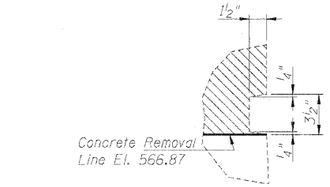
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



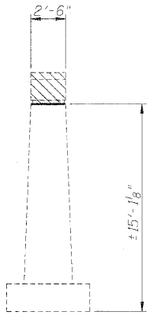
CAP PLAN



ELEVATION VIEW



REGLET LINE
(Perimeter of Pier - Typical)



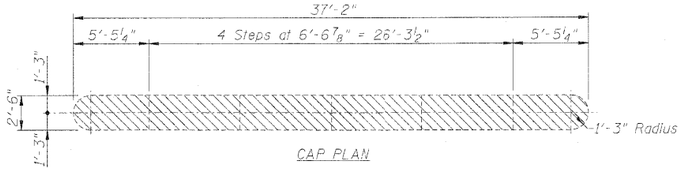
END VIEW

CONCRETE REMOVAL DETAILS - EXISTING PIER 2 - W.B.L.

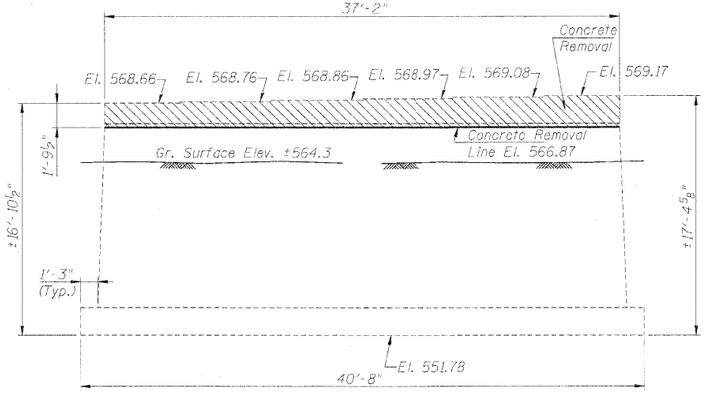
(W.B.L. - Looking East - UpStation)

BILL OF MATERIAL - W.B.L.

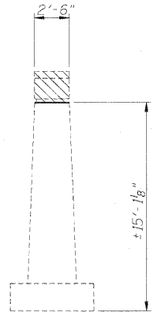
Item	Unit	Total
Concrete Removal	Cu. Yd.	6.9



CAP PLAN



ELEVATION VIEW



END VIEW

CONCRETE REMOVAL DETAILS - EXISTING PIER 5 - E.B.L.

(E.B.L. - Looking East - UpStation)

BILL OF MATERIAL - E.B.L.

Item	Unit	Total
Concrete Removal	Cu. Yd.	6.9

Note:
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

EXISTING PIER CONCRETE REMOVAL DETAILS
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 31
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	444

CONTRACT NO. 64815
ILLINOIS FED. AID PROJECT

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MMW/ABH	5/21/10

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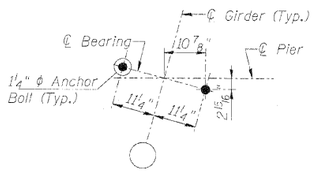
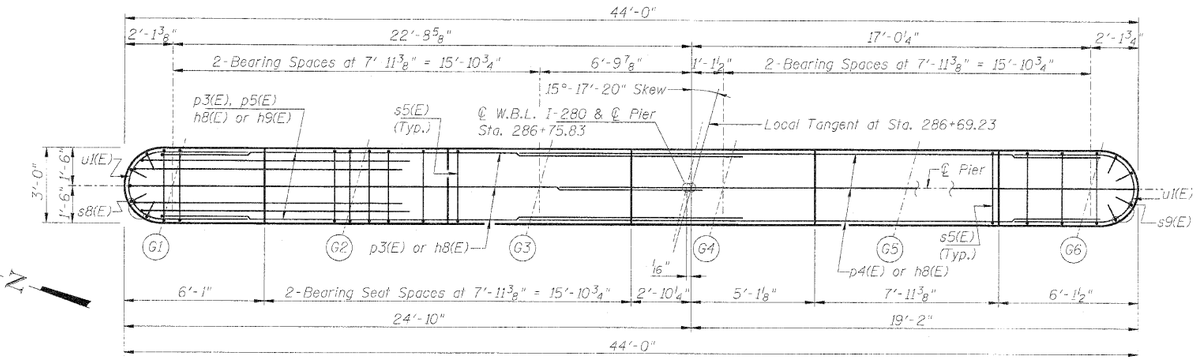
07-21-2010

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.

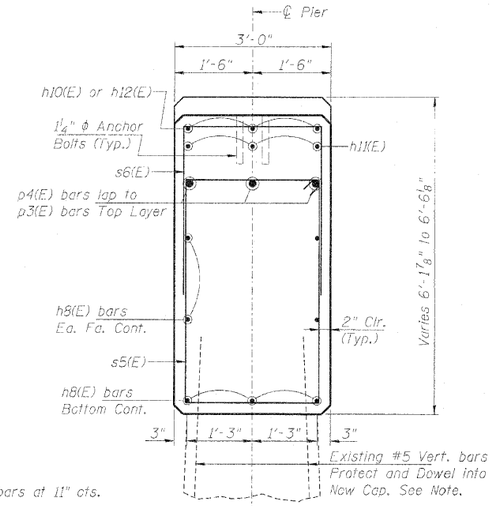
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



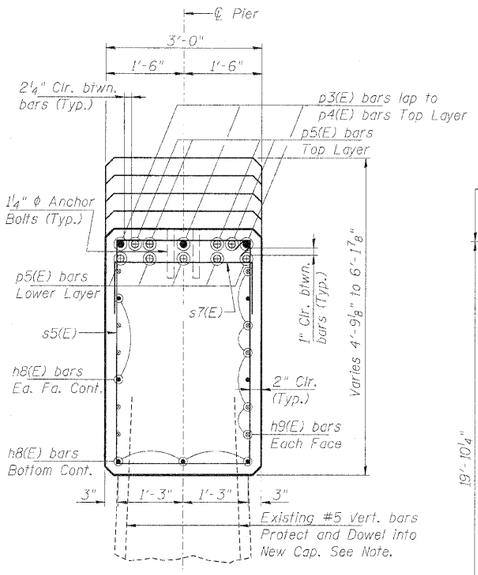
ANCHOR BOLT LAYOUT
(Typical all Girder Locations)



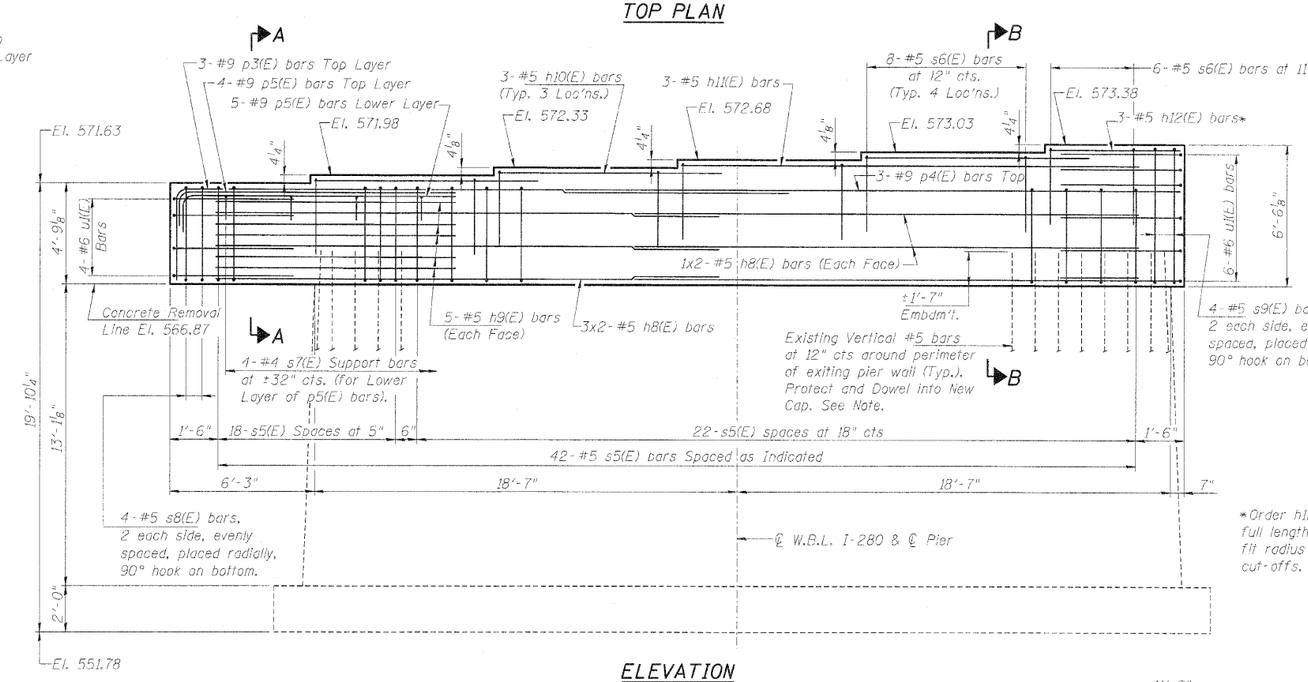
TOP PLAN



SECTION B-B



SECTION A-A



ELEVATION
(Looking East)

*Order h12(E) bars full length cut to fit radius and waste cut-offs.

BILL OF MATERIAL - PIER - W.B.L.

Bar	No.	Size	Length	Shape
h8(E)	14	#5	22'-2"	——
h9(E)	10	#5	10'-9"	——
h10(E)	9	#5	9'-9"	——
h11(E)	3	#5	20'-5"	——
h12(E)	3	#5	5'-9"	——
p3(E)	3	#9	30'-11"	⌐ ¬
p4(E)	3	#9	26'-7"	——
p5(E)	9	#9	13'-4"	⌐ ¬
s5(E)	42	#5	15'-1"	□
s6(E)	38	#5	9'-2"	⊏ ⊐
s7(E)	4	#4	4'-8"	⊏ ⊐
s8(E)	4	#5	5'-9"	⌐ ¬
s9(E)	4	#5	7'-6"	⌐ ¬
u1(E)	10	#6	11'-8"	⊃
Concrete Structures			Cu. Yd.	27.1
Reinforcement Bars, Epoxy Coated			Pound	2870

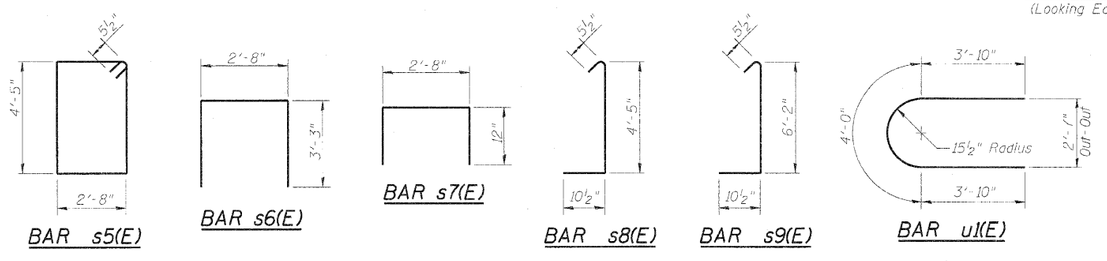
Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete removal.

Bars damaged or not salvaged shall be replaced with either drilled and epoxy grouted bars or IDOT approved mechanical splicers of the same size as directed by the Engineer. No additional compensation will be allowed for either method.

MINIMUM BAR LAP

#5 bar = 3'-3"
#6 bar = 3'-10"
#9 bar = 9'-8"



PIER - W.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 32
40 SHEETS

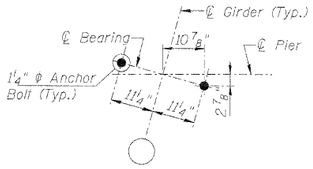
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	445
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

LAYOUT	3rd	5/21/10
DRAWN	3rd	5/21/10
CHECKED	MM/JSH	5/21/10

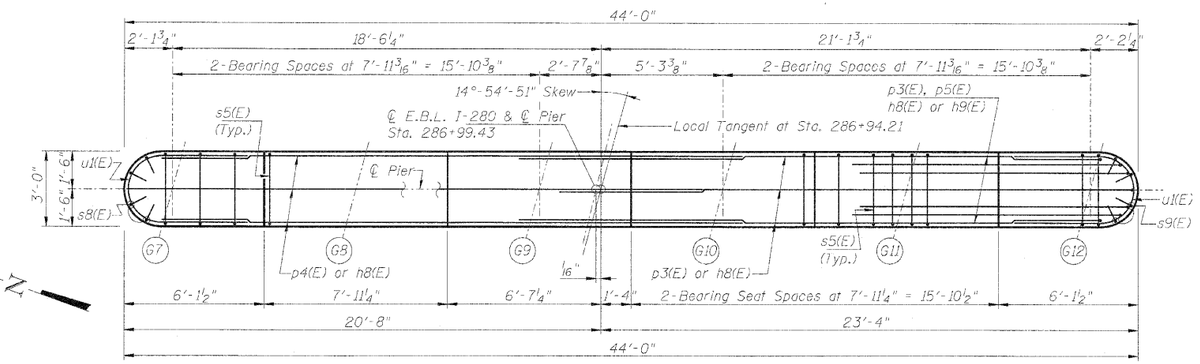
3YDX3000
c:\working\plans\0380\280026-DRX0027-64815.dgn

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.

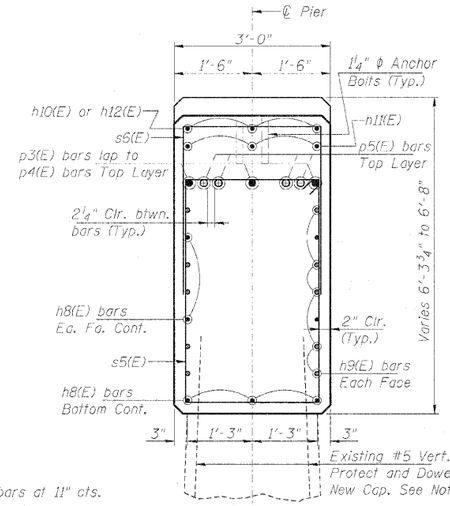
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



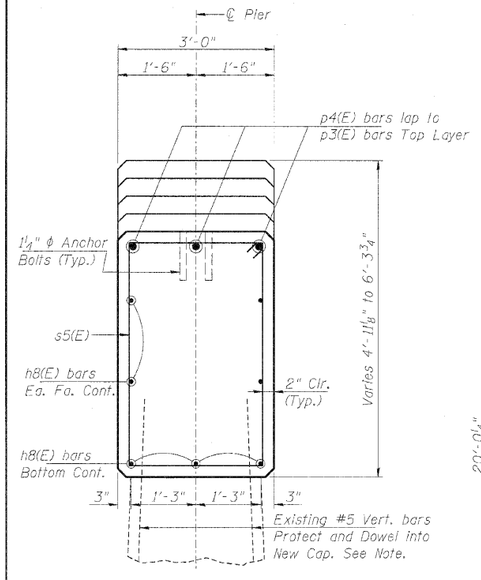
ANCHOR BOLT LAYOUT
(Typical all Girder Locations)



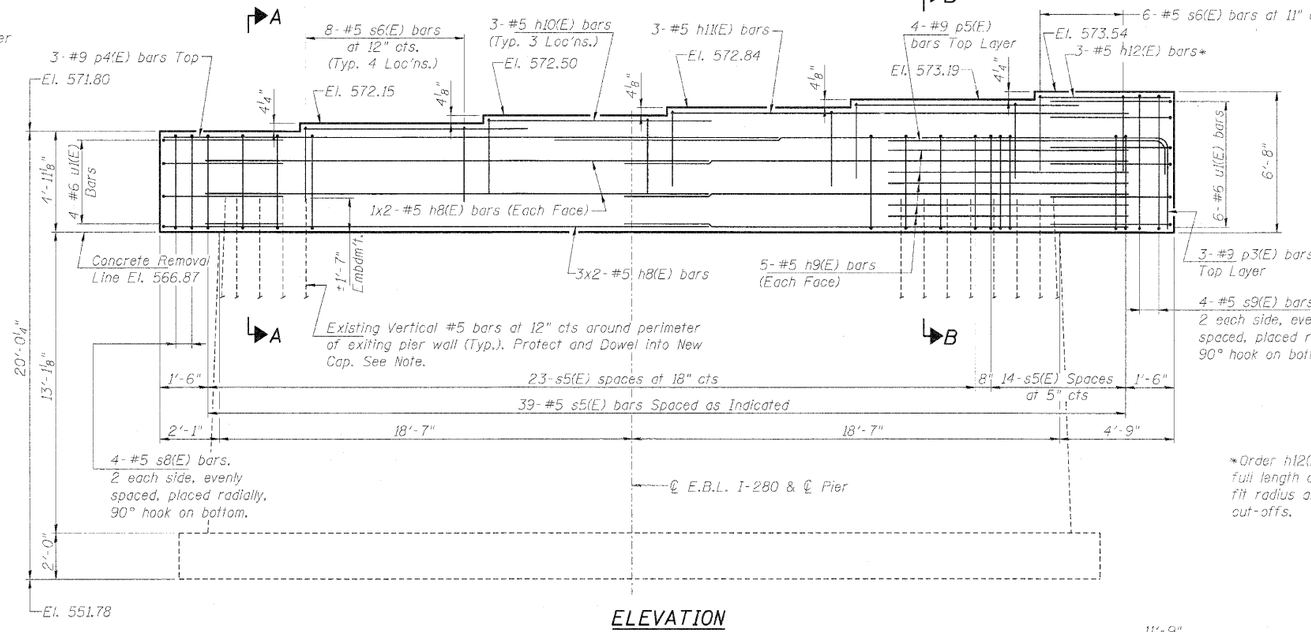
TOP PLAN



SECTION B-B



SECTION A-A



ELEVATION
(Looking East)

*Order h12(E) bars full length cut to fit radius and waste cut-offs.

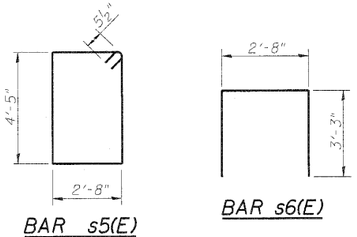
BILL OF MATERIAL - PIER - E.B.L.

Bar	No.	Size	Length	Shape
h8(E)	14	#5	22'-2"	——
h9(E)	10	#5	10'-9"	——
h10(E)	9	#5	9'-9"	——
h11(E)	3	#5	20'-5"	——
h12(E)	3	#5	5'-9"	——
p3(E)	3	#9	30'-11"	⌐
p4(E)	3	#9	26'-7"	——
p5(E)	4	#9	13'-4"	⌐
s5(E)	39	#5	15'-1"	☐
s6(E)	38	#5	9'-2"	☐
s8(E)	4	#5	5'-9"	⌋
s9(E)	4	#5	7'-6"	⌋
u1(E)	10	#6	11'-8"	⊃
Concrete Structures			Cu. Yd.	27.9
Reinforcement Bars, Epoxy Coated			Pound	2580

Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete removal.
Bars damaged or not salvaged shall be replaced with either drilled and epoxy grouted bars or IDOT approved mechanical splicers of the same size as directed by the Engineer. No additional compensation will be allowed for either method.

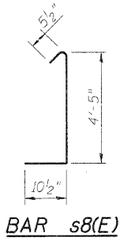
MINIMUM BAR LAP

#5 bar = 3'-3"
#6 bar = 3'-10"
#9 bar = 9'-8"

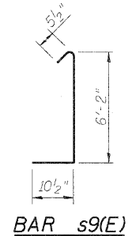


BAR s5(E)

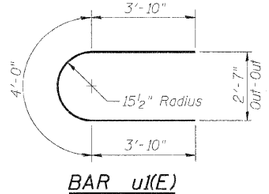
BAR s6(E)



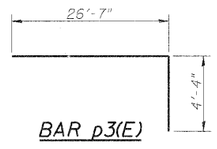
BAR s8(E)



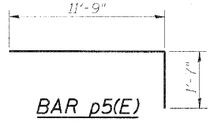
BAR s9(E)



BAR u1(E)



BAR p3(E)



BAR p5(E)

PIER - E.B.L.
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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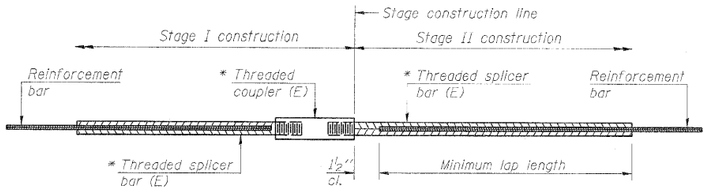
JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 33
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	446
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
CHECKED	MMM/ZEH	5/21/10

07/21/2010
current:hg/sheet/3920/3920026-DR00027-64815.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

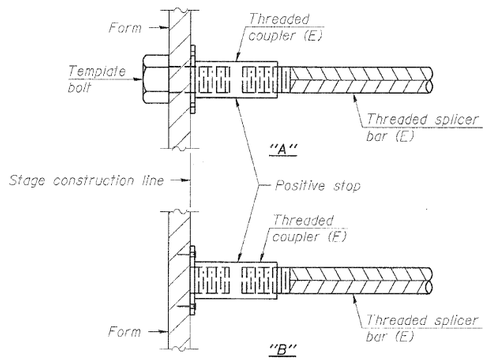
Minimum Lap Lengths				
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

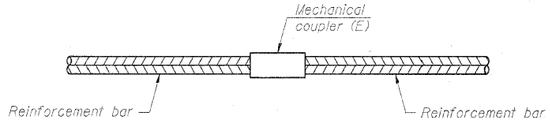
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



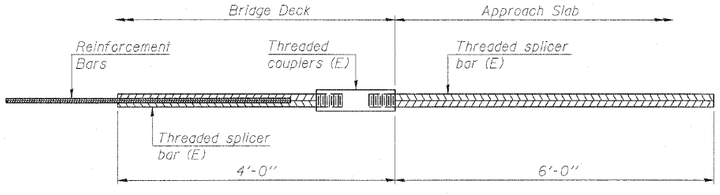
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



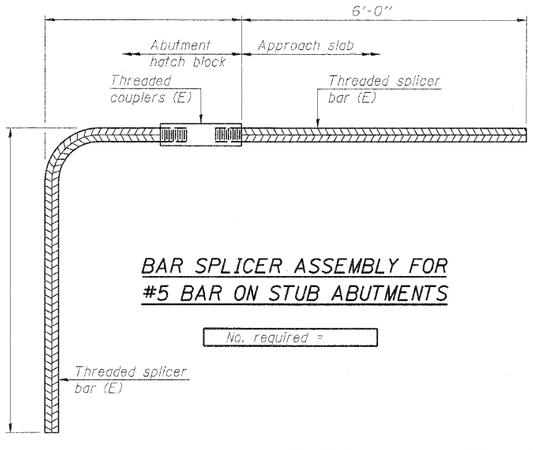
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 88	W.B.L.
No. required = 88	E.B.L.



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See special provision for Mechanical Splicers.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BAR SPLICER ASSEMBLY and MECHANICAL SPLICER DETAILS STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 34
40 SHEETS

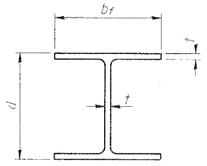
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	447
		CONTRACT NO. 64815		
		ILLINOIS FED. AID PROJECT		

LAYOUT	Rod	5/21/10
DRAWN	BG	5/21/10
REVIEWED	MM/JES	5/21/10

07/21/2010
c:\workingfiles\03R1532A\081-0026\081-0027 64815.dgn

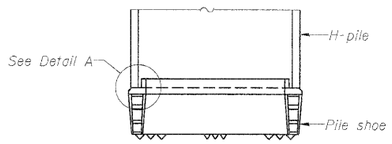
BSD-1 11-1-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

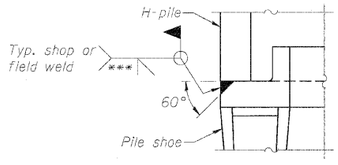


STEEL PILE TABLE

Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	$14\frac{1}{4}''$	$14\frac{7}{8}''$	$\frac{13}{16}''$	30''
x102	14''	$14\frac{3}{4}''$	$\frac{11}{16}''$	30''
x89	$13\frac{7}{8}''$	$14\frac{3}{4}''$	$\frac{5}{8}''$	30''
x73	$13\frac{5}{8}''$	$14\frac{5}{8}''$	$\frac{1}{2}''$	30''
HP 12x84	$12\frac{1}{4}''$	$12\frac{1}{4}''$	$\frac{11}{16}''$	24''
x74	$12\frac{1}{8}''$	$12\frac{1}{4}''$	$\frac{5}{8}''$	24''
x63	12''	$12\frac{1}{8}''$	$\frac{1}{2}''$	24''
x53	$11\frac{3}{4}''$	12''	$\frac{7}{16}''$	24''
HP 10x57	10''	$10\frac{1}{4}''$	$\frac{9}{16}''$	24''
x42	$9\frac{3}{4}''$	$10\frac{1}{8}''$	$\frac{7}{16}''$	24''
HP 8x36	8''	$8\frac{1}{8}''$	$\frac{7}{16}''$	18''

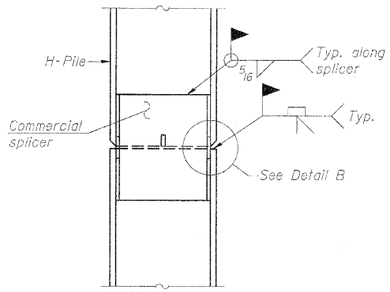


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



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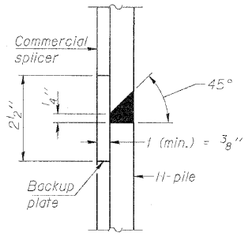
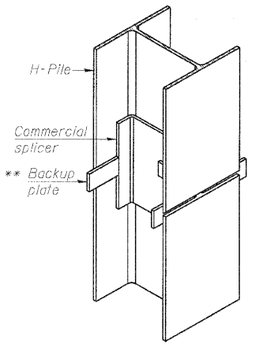
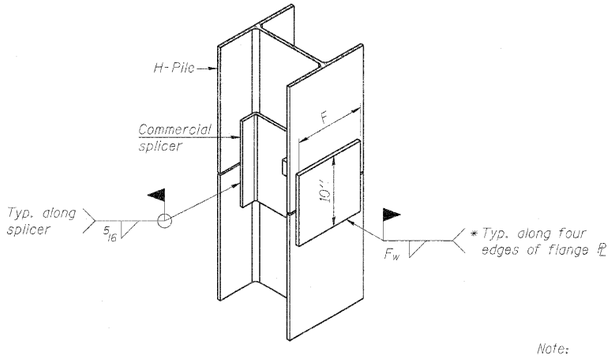


DETAIL "B"



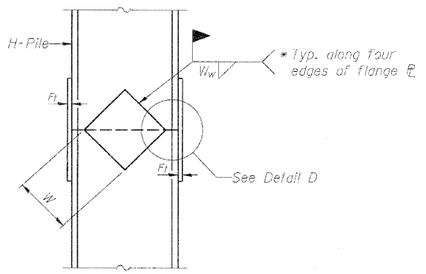
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

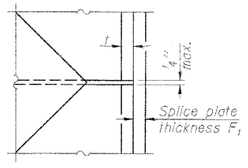


ISOMETRIC VIEW

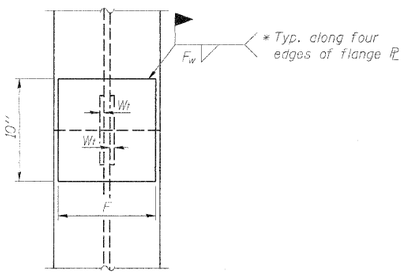
WELDED COMMERCIAL SPLICE ALTERNATE



ELEVATION



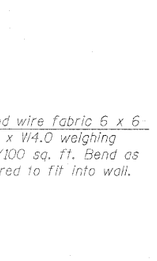
DETAIL D



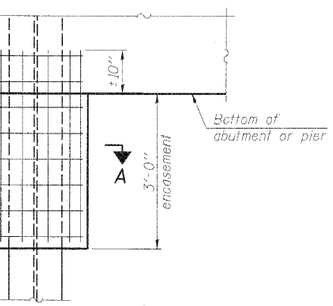
END VIEW

Designation	F	F_f	F_w	W	W_f	W_w
HP 14x117	$12\frac{1}{2}''$	1''	$\frac{7}{8}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x102	$12\frac{1}{2}''$	$\frac{7}{8}''$	$\frac{3}{4}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x89	$12\frac{1}{2}''$	$\frac{3}{4}''$	$\frac{11}{16}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x73	$12\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{9}{16}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
HP 12x84	10''	$\frac{7}{8}''$	$\frac{11}{16}''$	$6\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x74	10''	$\frac{7}{8}''$	$\frac{11}{16}''$	$6\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x63	10''	$\frac{5}{8}''$	$\frac{1}{2}''$	$6\frac{1}{2}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
x53	10''	$\frac{5}{8}''$	$\frac{1}{2}''$	$6\frac{1}{2}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
HP 10x57	8''	$\frac{3}{4}''$	$\frac{9}{16}''$	$5\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
x42	8''	$\frac{5}{8}''$	$\frac{9}{16}''$	$5\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
HP 8x36	7''	$\frac{5}{8}''$	$\frac{7}{16}''$	$4\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$

WELDED PLATE FIELD SPLICE



SECTION A-A



ELEVATION

PILE ENCASEMENT

Note:
Forms for encasement may be omitted when soil conditions permit.

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

* Interrupt welds ¼'' from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer ($\frac{5}{16}''$ min.).

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JOB NO.	SHEET NO. 35
05R1532A	
DATE	40 SHEETS
05/21/10	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	448
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

HP PILE DETAILS
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
RECHECKED	MMM/JEH	5/21/10

07/29/2010
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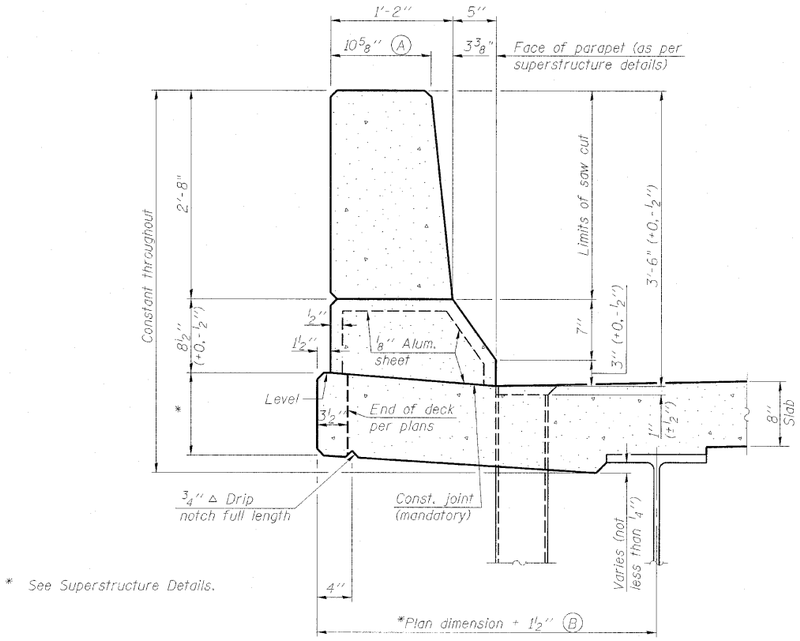
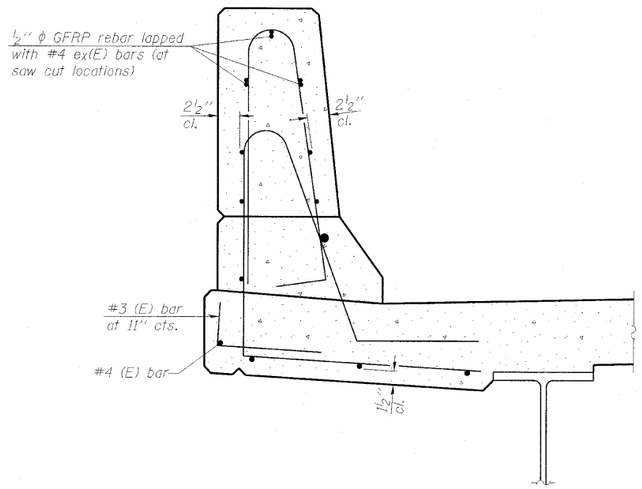
F-HP 11-1-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION
(Showing dimensions)



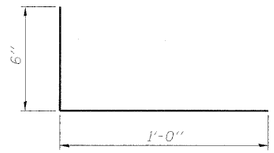
SECTION
(Showing reinforcement clearances for slip forming and additional reinforcement bars)

GENERAL NOTES

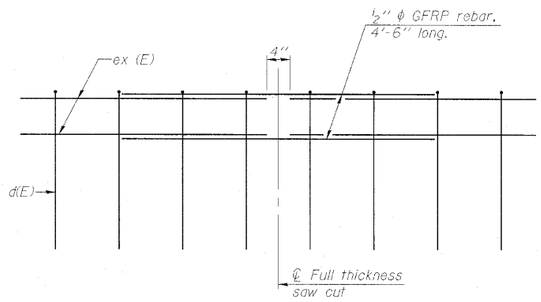
All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. of parapet.

Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.

Steel superstructure shown. Other superstructure types similar.



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL
(Place as shown in parapet section at each parapet joint location)

CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

PROFESSIONAL DESIGN FIRM LICENSE #184-001084

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JOB NO.	SHEET NO. 36	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
05R1532A		280	81-1(B-1)R	Rock Island	503	449
DATE 05/21/10	40 SHEETS			CONTRACT NO. 64815		
				ILLINOIS FED. AID PROJECT		

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	NWA/AEH	5/21/10

09:27:00
o:\active_work\dn_mt_dwg\dums\36324081X25-080027-64815.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 2/15/06

ROUTE FAI 280 DESCRIPTION P92-045-02 I-280, bridge over Mill Creek, 0.6 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB & 81-1-HB-1 & 2 LOCATION Blackhawk Twp, - 24SE, SEC., TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. _____
Station _____

BORING NO. B-1d
Station 286+64
Offset 71.00ft Lt CL
Ground Surface Elev. 567.6 ft

Surface Water Elev. _____ ft
Stream Bed Elev. 551.6 ft

Groundwater Elev.:
First Encounter 557.6 ft ▼
Upon Completion _____ ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
DRY brown fine SAND				
565.10				
VERY LOOSE/LOOSE brown fine SAND	1 2 2			
563.10				
-5				
MEDIUM brown SILTY LOAM	1 1 2	0.6 B		
560.60				
VERY LOOSE gray very moist fine SAND	1 1 2			
558.60				
▼ -10				
LOOSE gray fine SAND	2 2 4			
556.10				
MEDIUM gray weathered LIMESTONE	12 8 10			
553.60				
-15				
VERY DENSE gray SHALE	100/6"			
551.60				
Borehole continued with rock coring.				
-20				

The Unconfined Compressive Strength (UCS) Failure Mode is Indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Page 1 of 1

Date 2/15/06

ROUTE FAI 280 DESCRIPTION P92-045-02 I-280, bridge over Mill Creek, 0.6 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB & 81-1-HB-1 & 2 LOCATION Blackhawk Twp, - 24SE, SEC., TWP. 17N, RNG. 2W

COUNTY Rock Island CORING METHOD _____

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE _____
Core Diameter 1.5 in
Top of Rock Elev. 555.60 ft
Begin Core Elev. 551.60 ft

BORING NO. B-1d
Station 286+64
Offset 71.00ft Lt CL
Ground Surface Elev. 567.6 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: buff-gray, dense, with no testable segments	1	90	13	3.8	
-20					
546.60					
Dolomite: As above, with minor laminations. T.S.F.: 545.3 to 544.8	2	100	25	4	824.5
-25					
541.60					
Dolomite: As above T.S.F.: 540.2 to 539.7	3	100	27	4	495.7
-30					
536.60					
End of Boring					
-35					

Color pictures of the cores _____
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

07/20/2010
c:\workingfolder\336\336\336-08\0027-6-6815.dgn

LAYOUT	Red	5/21/10
DRAWN	Red	5/21/10
RETRIEVED	MM/JBH	5/21/10

BORINGS (Sheet 1 of 4)
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

PROFESSIONAL DESIGN FIRM LICENSE #184-001084

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 37
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	450
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 2/27/06

ROUTE FAI 280 DESCRIPTION P92-045-02 I-280 over Mill Creek, 0.6 m. E. of US 67 LOGGED BY M. Vock

SECTION 81-1VB & 81-1-HB-1 & 2 LOCATION Blackhawk Twp. - 24SE, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.
Station

BORING NO. B-2d
Station 286+50
Offset 72.00ft Rt CL
Ground Surface Elev. 566.6 ft

Surface Water Elev. ft
Stream Bed Elev. 551.0 ft

Groundwater Elev.:
First Encounter 559.6 ft ▼
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
DRY brown fine SAND	0			
565.10				
MEDIUM brown SILTY LOAM		3 3 6	1.8 P	
562.80				
LOOSE brown fine SAND	-5	2 3 3		
560.60				
VERY LOOSE gray very moist fine SAND		1 1 2		
557.60				
MEDIUM gray weathered LIMESTONE	-10	4 16 18		
555.60				
VERY DENSE weathered LIMESTONE		100/1"		
553.60				
Borehole continued with rock coring.	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Page 1 of 1

Date 2/27/06

ROUTE FAI 280 DESCRIPTION P92-045-02 I-280 over Mill Creek, 0.6 m. E. of US 67 LOGGED BY M. Vock

SECTION 81-1VB & 81-1-HB-1 & 2 LOCATION Blackhawk Twp. - 24SE, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island CORING METHOD

STRUCT. NO.
Station

CORING BARREL TYPE & SIZE
Core Diameter 1.5 In
Top of Rock Elev. 557.60 ft
Begin Core Elev. 553.60 ft

BORING NO. B-2d
Station 286+50
Offset 72.00ft Rt CL
Ground Surface Elev. 566.6 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: buff-white gray, dense and considerably fractured with some pitting evident.	-15	1	95	0	4	
548.60						
Dolomite: as above, though not as fractured. T.S.F.: 544.3 to 543.6	-20	2	100	25	3.2	809
543.90						
Dolomite: as above T.S.F.: 542.6 to 542.1	-25	3	100	10	3.8	449
538.60						
End of Boring	-30					

Color pictures of the cores
Cores will be stored for examination until
The "Strength" column represents the unlaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

BORINGS (Sheet 2 of 4)
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

PROFESSIONAL DESIGN FIRM LICENSE #184-001084

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 38
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	451

CONTRACT NO. 64815
ILLINOIS FED. AID PROJECT

LAYOUT	Rod	5/21/10
DRAWN	WVZ	5/21/10
REVIEWED	MWM/JEH	5/21/10

07/29/2010
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 2/28/06

ROUTE FAI 280 DESCRIPTION P92-045-02 I-280 over Mill Creek, .6 m. E. of US 67 LOGGED BY M. Vock

SECTION 81-1VB & 81-1-HB-1 & 2 LOCATION Blackhawk Twp. - 23SE, SEC., TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.
Station

BORING NO. B-3d
Station 288+05
Offset ft CL
Ground Surface Elev. 573.6 ft

Surface Water Elev. ft
Stream Bed Elev. 551.6 ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MOIST brown SANDY LOAM			11
571.60			
LOOSE brown SANDY LOAM	6 3 7		13
570.10			
-5 MEDIUM dark gray SANDY CLAY LOAM	5 7 10	1.7 S	15
567.60			
STIFF dark gray SILTY CLAY LOAM	3 3 6	1.2 E	21
565.10			
-10 VERY LOOSE gray SILTY CLAY LOAM	1 1 2	1.2 B	21
562.60			
VERY LOOSE gray sandy SILTY CLAY LOAM	1 1 1	0.8 B	25
559.60			
-15 VERY LOOSE gray fine SAND	1 2 2		
557.60			
VERY DENSE gray weathered LIMESTONE	16 100/5"		
555.10			
Borehole continued with rock coring.			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Page 1 of 1

Date 2/28/06

ROUTE FAI 280 DESCRIPTION P92-045-02 I-280 over Mill Creek, .6 m. E. of US 67 LOGGED BY M. Vock

SECTION 81-1VB & 81-1-HB-1 & 2 LOCATION Blackhawk Twp. - 23SE, SEC., TWP. 17N, RNG. 2W

COUNTY Rock Island CORING METHOD

STRUCT. NO.
Station

CORING BARREL TYPE & SIZE
Core Diameter 1.5 in
Top of Rock Elev. 557.10 ft
Begin Core Elev. 555.10 ft

BORING NO. B-3d
Station 288+05
Offset ft CL
Ground Surface Elev. 573.6 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: buff white, dense, chalky and fragmented. T.S.F.: 553.1 to 552.6	1	100	22	4	799.4
-20					
550.10					
Dolomite: as above, though more pitted and pocked, with occasional laminations T.S.F.: 545.6 to 545.3	2	100	13	3	545.5
-25					
545.10					
Dolomite: as above with an 8 inch fractured zone at midpoint T.S.F.: 544.4 to 544.0	3	100	37	3.4	874.6
-30					
540.10					
End of Boring					
-35					

Color pictures of the cores
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MNM/JSH	5/21/10

07/21/2010
c:\workingfiles\05R1532\Drawings\05R1532-SHEET-64815.dgn

PROFESSIONAL DESIGN FIRM LICENSE #184-001084

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JOB NO. 05R1532A
DATE 05/21/10

SHEET NO. 39
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	452
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

BORINGS (Sheet 3 of 4)
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 3/2/06

ROUTE FAI 280 DESCRIPTION P92-045-02 I-280 over Mill Creek, .6 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB & 81-1-HB-1 & 2 LOCATION Blackhawk Twp. - 24SE, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. _____
Station _____

BORING NO. B-4d
Station 285+63
Offset ft CL
Ground Surface Elev. 573.6 ft

Surface Water Elev. _____ ft
Stream Bed Elev. 551.6 ft

Groundwater Elev.:
First Encounter 558.6 ft ▼
Upon Completion _____ ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM brown LOAM			0.5 P	12
	571.10			
STIFF brown SANDY LOAM		8 13 20	1.8 P	13
	569.60			
VERY STIFF dark gray LOAM	-5	5 6 9	2.1 P	15
	567.10			
MEDIUM dark gray LOAM		2 5 9	1.0 P	15
	564.60			
MEDIUM dark gray SANDY LOAM	-10	4 3 4	0.8 B	15
	562.10			
STIFF dark gray SANDY LOAM		2 4 5	1.8 P	13
	559.10			
MEDIUM dirty SAND & GRAVEL	▼-15	9 13 10		
	557.10			
VERY DENSE tan/light gray weathered LIMESTONE		100/7		
	555.10			
Borehole continued with rock coring.	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Page 1 of 1

Date 3/2/06

ROUTE FAI 280 DESCRIPTION P92-045-02 I-280 over Mill Creek, .6 m. E. of US 67 LOGGED BY W. Garza

SECTION 81-1VB & 81-1-HB-1 & 2 LOCATION Blackhawk Twp. - 24SE, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island CORING METHOD _____

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE _____
Core Diameter 1.5 in
Top of Rock Elev. 556.60 ft
Begin Core Elev. 555.10 ft

BORING NO. B-4d
Station 285+63
Offset ft CL
Ground Surface Elev. 573.6 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: buff-white, dense with occasional laminations, some crystalline faces visible. T.S.F.: 553.1 to 552.6	-20	1	100	30	2.6	803.3
	550.10					
Dolomite: as above with pyrite crystals visible T.S.F.: 547.7 to 547.1	-25	2	100	37	2.6	493.8
	545.10					
Dolomite: as above T.S.F.: 544.3 to 543.7	-30	3	100	45	4.8	578.5
	540.10					
End of Boring	-35					

Color pictures of the cores
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

LAYOUT	Rod	5/21/10
DRAWN	Rod	5/21/10
REVIEWED	MWF/SH	5/21/10

d:\projects\p92\038\0256-080027 64815.dgn

BORINGS (Sheet 4 of 4)
STRUCTURE NUMBERS 081-0026 (E.B.) & 081-0027 (W.B.)

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JOB NO. 05R1532A
DATE 05/21/10
SHEET NO. 40
40 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1)R	Rock Island	503	453
		CONTRACT NO. 64815		
	ILLINOIS FED. AID PROJECT			

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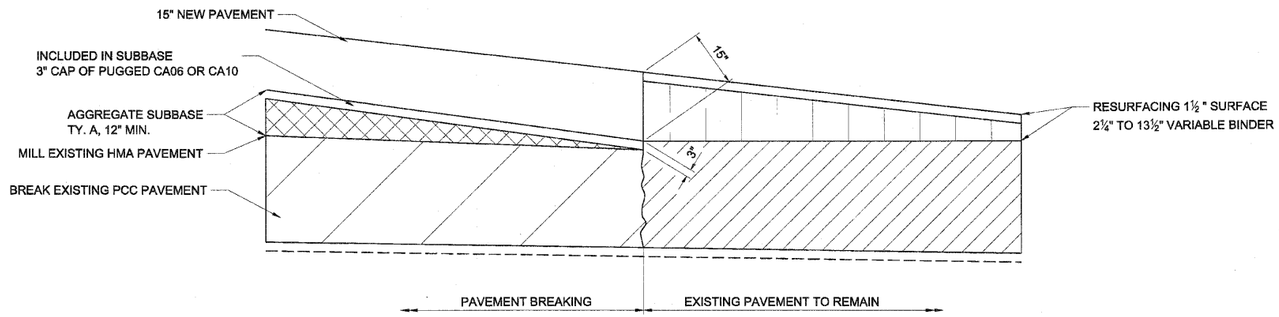
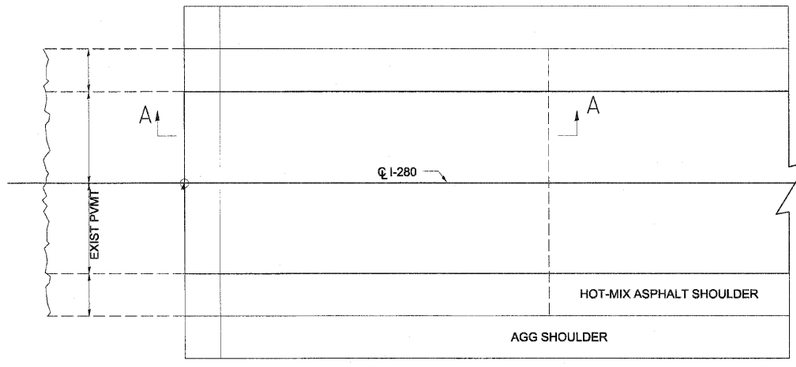
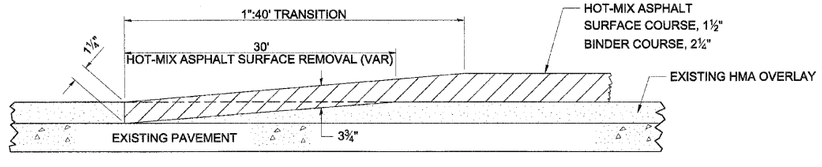


PAVEMENT MATING DETAIL



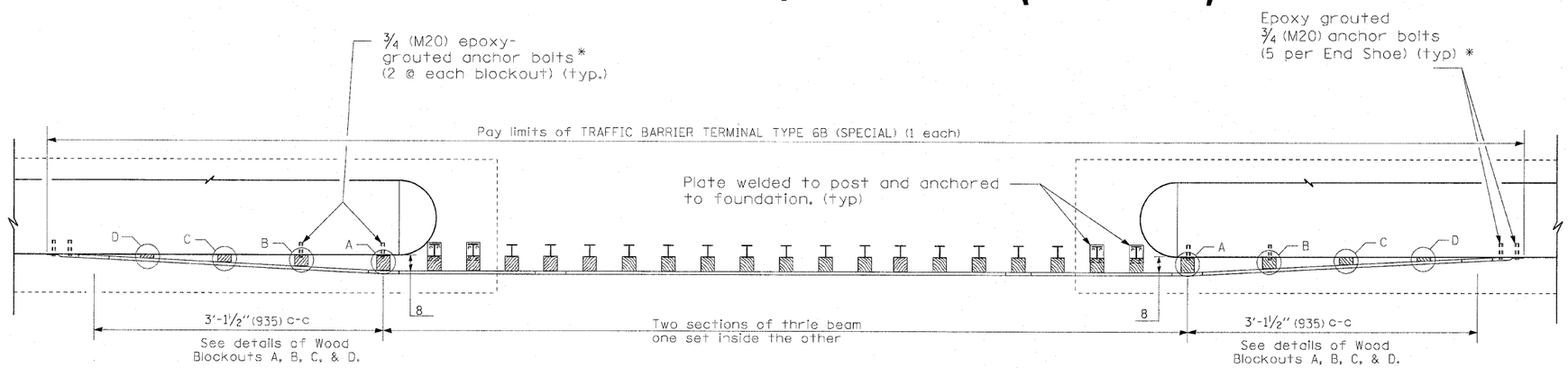


SECTION A–A

BUTT JOINT

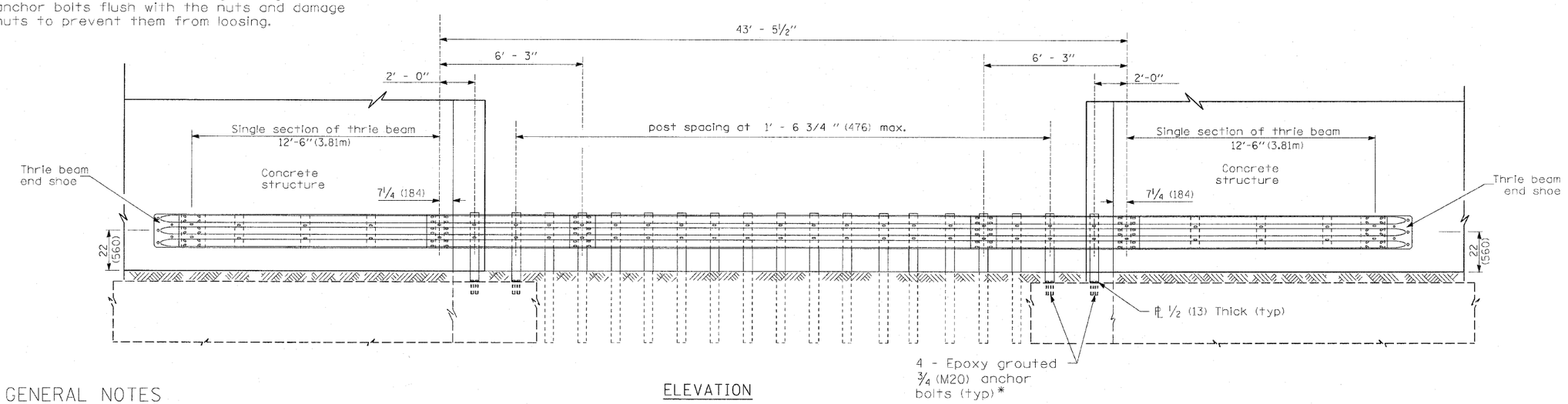
FILE NAME = D264815-sht-details21.dgn	USER NAME = Pep00836	DESIGNED - JDW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT DETAILS				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - DAP	REVISED -						280	81-1HB-1,HB,HB-1,HB-2,VB,VB-1R	ROCK ISLAND	503	454
MODEL NAME = Pavement Mating Detail	PLOT SCALE = 50.0000 ' / in.	CHECKED - DES	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.			CONTRACT NO. 64815		
	PLOT DATE = 08\19\2010	DATE - 07/23/10	REVISED -						FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 7		

TRAFFIC BARRIER TERMINAL, TYPE 6B (SPECIAL)



PLAN

* With standard washers. After tightening, cut the anchor bolts flush with the nuts and damage the nuts to prevent them from loosing.



ELEVATION

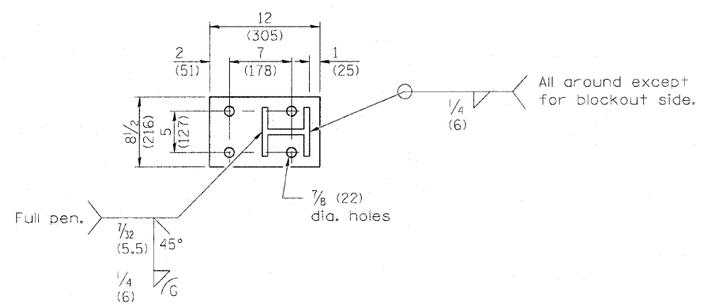


PLATE DETAIL

GENERAL NOTES

This work shall be done according to Section 631 of the Standard Specifications and this detail.

See Standard 630001 for details of guardrail not shown.

Thrie beam rail shall be bolted to block-out at all posts.

Posts located above pier foundation shall have plate attached to post and anchored to foundaton.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

The Traffic barrier Terminal, Type 6B (Special) will be measured for payment, complete in place, in units of each.

This work shall be paid for at the contract unit price per each for TRAFFIC BARRIER TERMINAL, TYPE 6B (SPECIAL).

DISTRICT STANDARD 90.1 SHEET 1 OF 2

* 81-1(B-1, HB, HB-1, HB-2, VB, VB-1)R

FILE NAME = c:\pw_work\pwidot\condermenee\d0179717\D264815-sht-details-ty6B.dgn	USER NAME = condermenee	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 12.7500 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = Fri Nov 19 09:56:55 2010	DATE - 11-09-2010	REVISED -

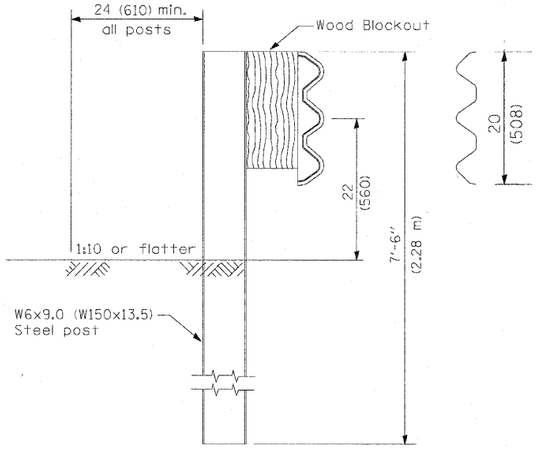
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 /DISTRICT 2 STANDARD

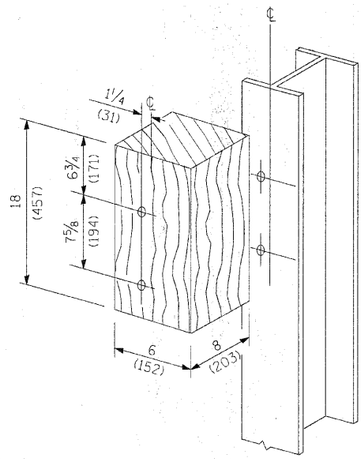
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	*	ROCK ISLAND	503	455
		CONTRACT NO. 64815		
	ILLINOIS	FED. AID PROJECT		

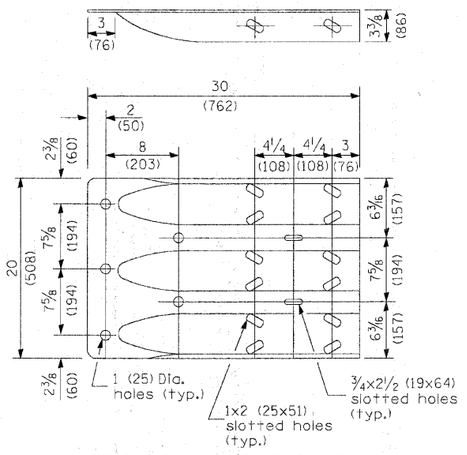
TRAFFIC BARRIER TERMINAL, TYPE 6B (SPECIAL)



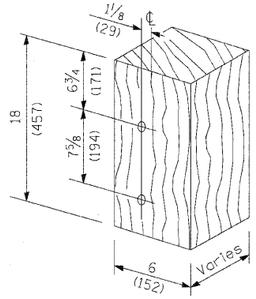
SECTION A-A



WOOD BLOCKOUT DETAIL

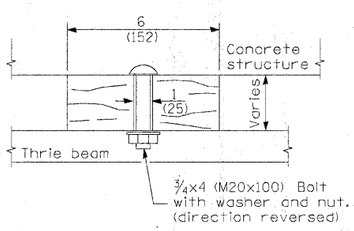


THRIE BEAM END SHOE DETAIL

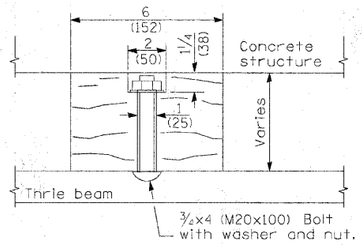


MODIFIED THICKNESS DETAIL

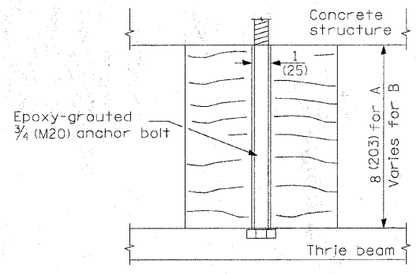
WOOD BLOCKOUTS A, B, C, & D



WOOD BLOCKOUT D



WOOD BLOCKOUT C



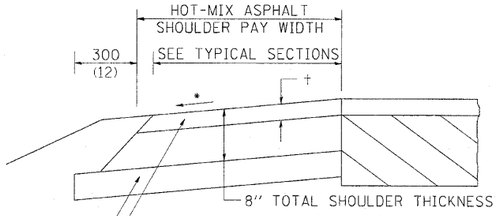
WOOD BLOCKOUT A & B

DISTRICT STANDARD 90.1 SHEET 2 OF 2

* 81-1(B-1, HB, HB-1, HB-2, VB, VB-1)R

FILE NAME = c:\pw_work\pwidot\condermanee\d0179717\D264815-sht-details-ty6B.dgn	USER NAME = condermanee	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**REGION 2 /DISTRICT 2 STANDARD**			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -					280	*	ROCK ISLAND	503	456
	PLOT SCALE = 12.7500 ' / IN.	CHECKED -	REVISED -							CONTRACT NO. 64815		
	PLOT DATE = Wed Nov 10 11:08:42 2010	DATE - 11-09-2010	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		

HOT–MIX ASPHALT SHOULDER



GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 *40603310. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 *40603310 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 *40603310. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 *40603310.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

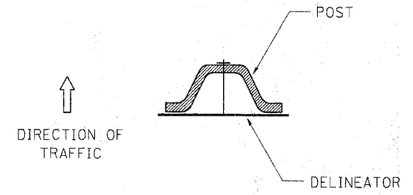
* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

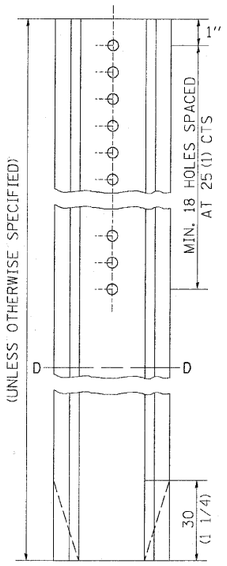
REVISED - 11-01-07

HOT–MIX ASPHALT SHOULDER 23.4a

DELINEATOR AND POST ORIENTATION



SECTION D-D



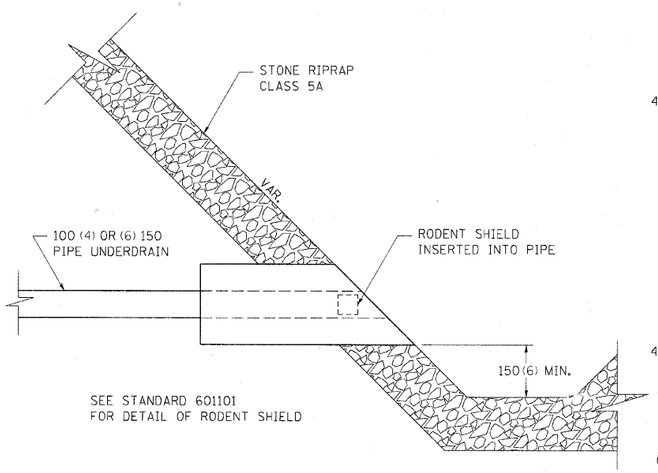
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180° . THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHECD AS SHOWN ABOVE.

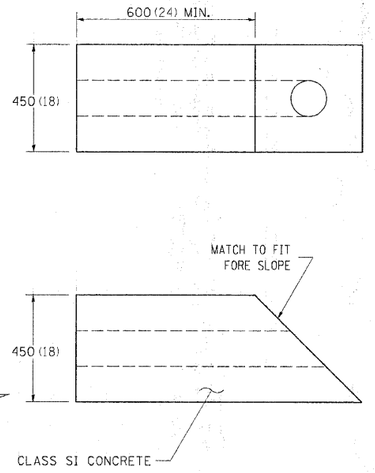
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

DELINEATOR AND POST ORIENTATION 37.4

CONCRETE HEADWALLS FOR PIPE DRAINS





ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 10-15-04

CONCRETE HEADWALLS FOR PIPE DRAINS 27.4

INTENTIONALLY LEFT BLANK

* 81-1(B-1, HB, HB-1, HB-2, VB, VB-1)R

REVISED - 11-8-10	REGION 2 / DISTRICT 2 STANDARD	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -		280	*	ROCK ISLAND	503	457
REVISED -				CONTRACT NO. 64815		
REVISED -	SCALE: 200.0000 /	SHEET NO. __ OF ___ SHEETS	STA. _____ TO STA. _____	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT

PLOT DATE = Wed Nov 10 11:19:09 2010

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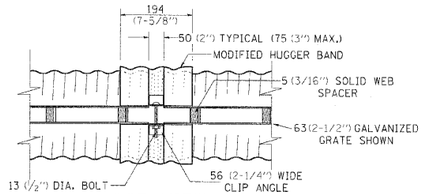
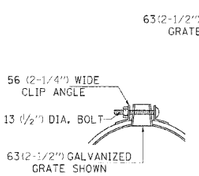
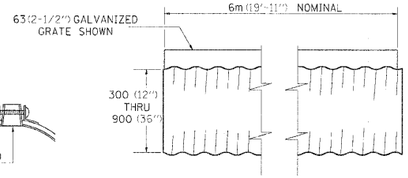
SLOTTED DRAIN PIPE



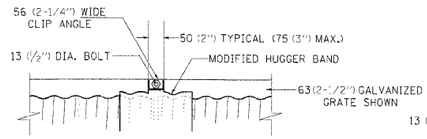
TOP VIEW



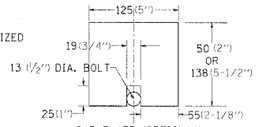
END VIEW



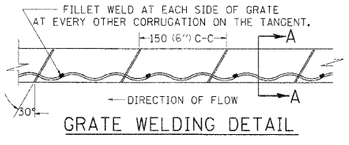
TYPICAL PIPE SECTION



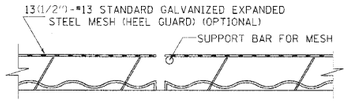
SIDE VIEW



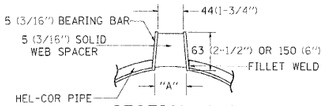
GAP PLATE (OPTIONAL)
MAY BE PLACED DIRECTLY OVER BAND BOLT TO PROVIDE CONTINUOUS FORM FOR GROUTING.



GRATE WELDING DETAIL

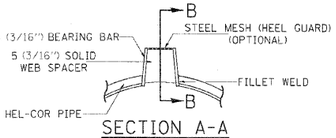


SECTION B-B



SECTION A-A

STANDARD DETAIL



SECTION A-A

DETAIL WITH MESH

(TRAPEZOIDAL GALVANIZED GRATE SHOWN)

STANDARD SIZES						
GAGE OF PIPE	DIAMETER OF PIPE					
	300 (12")	375 (15")	450 (18")	600 (24")	750 (30")	900 (36")
16	X	X	X	X	X	X
14	X	X	X	X	X	X
12	N.A.	N.A.	N.A.	N.A.	X	X

GRATE TYPE		"A"
VERT	63 (2-1/2")	44 (1-3/4")
VERT	150 (6")	44 (1-3/4")
TRAP	63 (2-1/2")	56 (2-1/4")
TRAP	150 (6")	75 (3")

VERT = VERTICAL
TRAP = TRAPIZOIDAL

SLOTTED DRAIN NOTES

1. GRATING IS AVAILABLE IN DEPTHS OF 63 (2-1/2") AND 150 (6").
2. VERTICAL GRATING (STRAIGHT SIDES) WITH VERTICAL SPACERS IS ALSO AVAILABLE.
3. FOR 150 (6") VERTICAL & TRAPIZOIDAL REQUIREMENTS, THE SLOTTED DRAIN BAND MAY BE FURNISHED WITH THE 100 (4") TECHCO BAND ANGLE.
4. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
5. REFERENCE CONTECH BAND MANUAL DWG. NO. 1008466 FOR BAND DETAILS.

MANUFACTURING TOLERANCES

1. VERTICAL BOW ± 10 (3/8")
2. HORIZONTAL BOW ± 16 (5/8")
3. TWIST ± 13 (1/2")

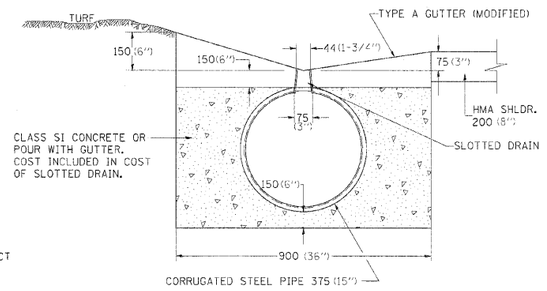
NOTES

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

THE SLOTTED DRAIN SHALL BE CORRUGATED PIPE CULVERT WITH INTEGRAL SLOTTED DRAINS. BEFORE PLACING THE CONCRETE ADJACENT TO THE PIPE, THE SLOT SHALL BE COVERED BY EITHER THIN, FLAT METAL SHEETING OR BY A BOARD NOTCHED TO FIT OVER THE GRATE BARS. THIS COVERING MUST FIT CLOSELY IN THE SLOT TO PREVENT ENTRY OF CONCRETE INTO THE PIPE. PAVING OVER THE SLOTTED DRAIN WILL THEN BE ONE CONTINUOUS OPERATION OVER THE PROTECTED DRAIN. THE PROTECTION FOR THE DRAIN SLOT SHALL THEN BE REMOVED. THE PIPE SHALL DRAIN INTO THE SIDE OF THE INLET. THE OPENING WHERE THE SLOT IS REMOVED SHALL BE COVERED TO PREVENT CONCRETE FROM ENTERING THE PIPE.

THE CORRUGATED STEEL PIPE USED IN THE SLOTTED DRAIN SHALL MEET THE REQUIREMENTS OF AASHTO M-36/ASTM A 760. THE CMP SHALL BE GALVANIZED OR ALUMINIZED STEEL TYPE 2. STEEL GRATING SHALL MEET THE GALVANIZING REQUIREMENTS OF AASHTO M-111. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR SLOTTED DRAIN PIPE, AND SHALL INCLUDE ELBOWS.

USE APPROVED END CAP TO PREVENT CONCRETE ENTRY INTO THE PIPE DURING GUTTER CONSTRUCTION ON THE UPSTREAM END OF PIPE.

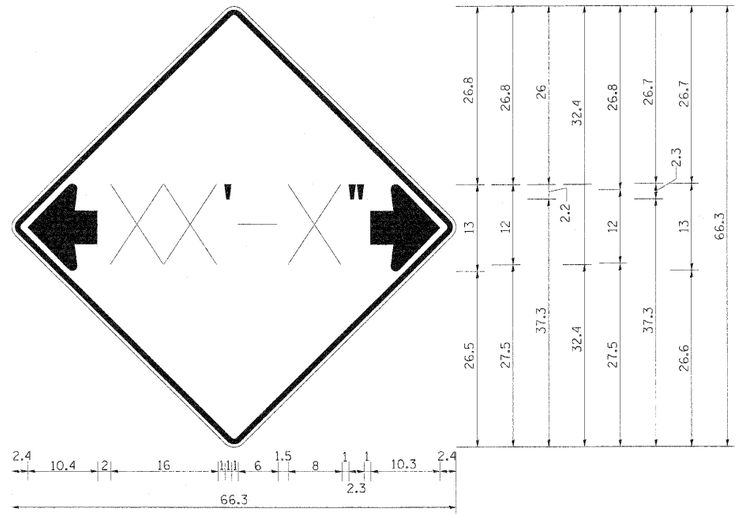


ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

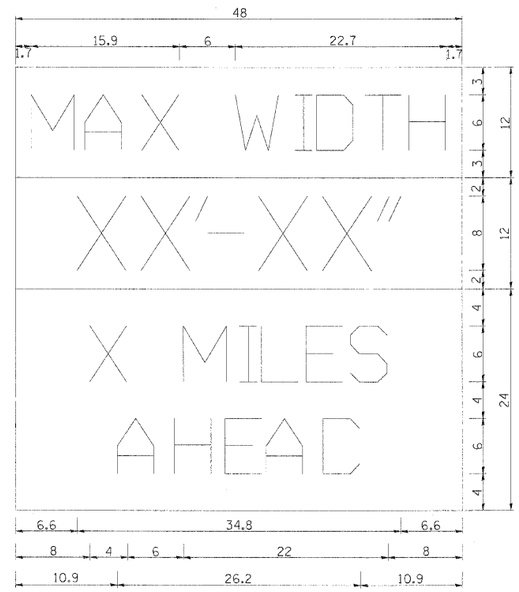
REVISED - 1-9-08

SLOTTED DRAIN PIPE 61.2

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES
W12-2 - Horizontal Clearance Sign 48.0" across sides, 1.9" Radius, 0.8" Border, 0.5" Indent, Black on Orange; Standard Arrow Custom 10.4" X 8.1" 180° Black 11 Inch D Series Lettering; Standard Arrow Custom 10.4" X 8.1" 0°



W12-1103 (Width is 8D);
No border, Black on White;
[MAX WIDTH] D;

No border, Black on Orange;
[XX'-XX"] D;

No border, Black on White;
[X MILES] D; [AHEAD] D;

All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

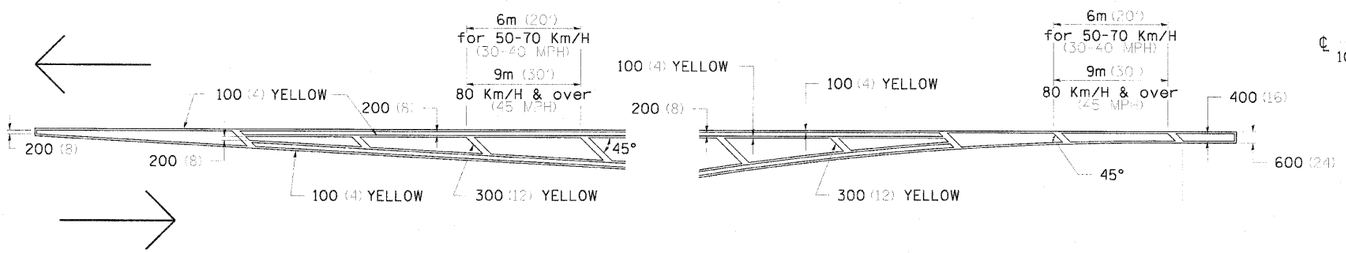
REVISED - 5-15-09

INFORMATIONAL WARNING SIGNS (FOR NARROW TRAVEL LANES) 39.2

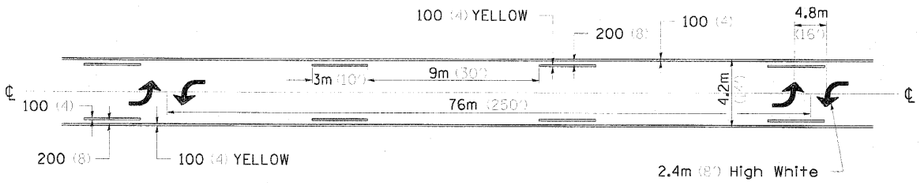
FILE NAME = D2R4815-sht-D2-Details02.dgn	USER NAME = Pop02838	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 /DISTRICT 2 STANDARD	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			280	81-1XB-1,HB,HB-1,HB-2,VB,VB-1R	ROCK ISLAND	503	458
MODEL NAME = D2 Detail 02	PLOT SCALE = 50.2000 ' / in.	CHECKED -	REVISED -					CONTRACT NO. 64815		
	PLOT DATE = 8/19/2010	DATE - 07/23/10	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 7		

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

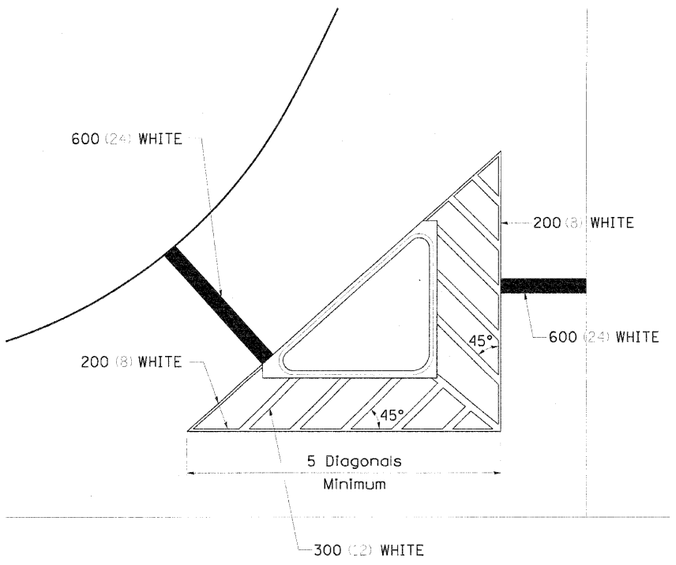


MEDIAN PAVEMENT MARKING

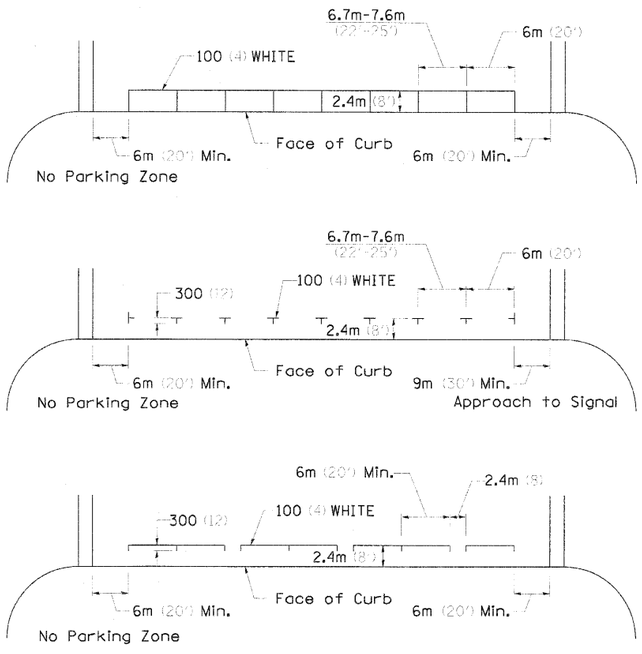


** ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH

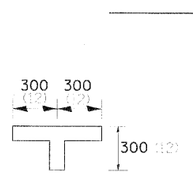


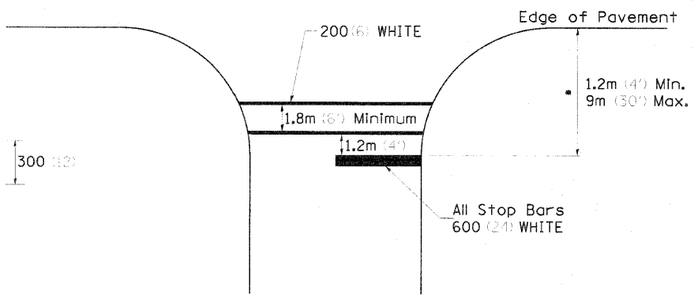
TYPICAL PARKING SPACING



STANDARD CROSSWALK MARKING

See Schedules for Locations





• Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

TYPICAL PAVEMENT MARKINGS SHEET 1 OF 3 41.1

FILE NAME =	USER NAME = mader02377	DESIGNED -	REVISED - 10-21-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 /DISTRICT 2 STANDARD	F.A.I. RTE.	SECTION	COUNTY / TOTAL SHEETS / SHEET NO.
		DRAWN -	REVISED -			280	81-1IB-1,HB,HB-1,HB-2,VB,VB-1R	ROCK ISLAND / 503 / 459
MODEL NAME =	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -					CONTRACT NO. 64815
D2 Detail 03	PLOT DATE = 8/28/2010	DATE - 07/23/10	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 7	

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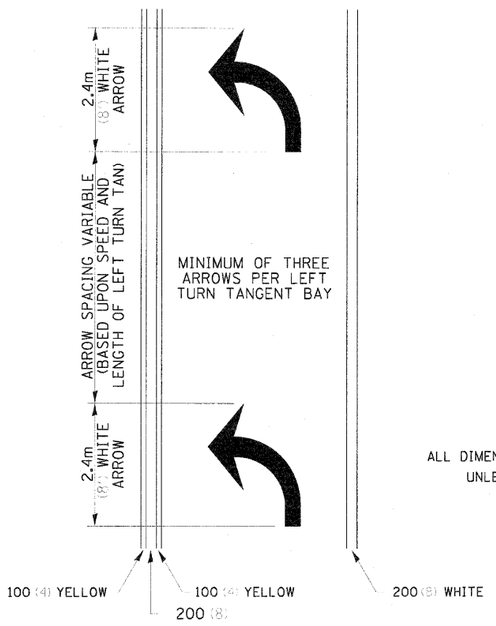
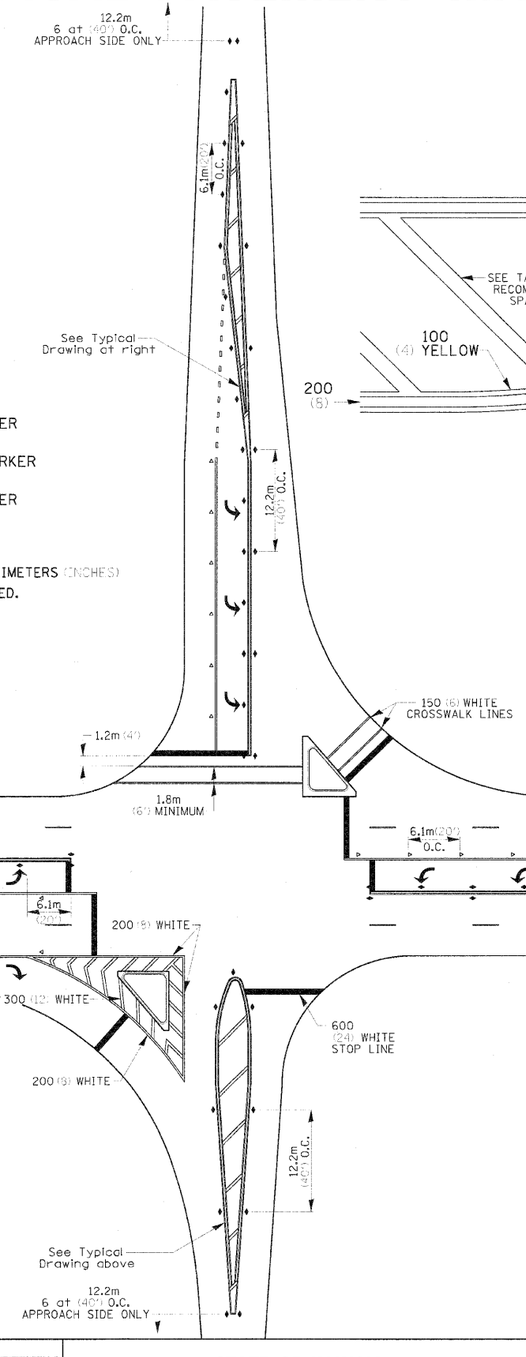
TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT

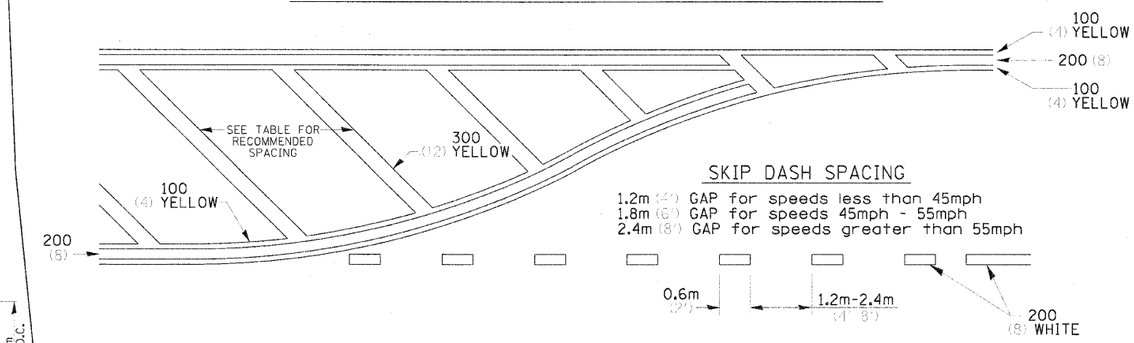




◀ ONE-WAY AMBER MARKER
◁ ONE-WAY CRYSTAL MARKER
◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN

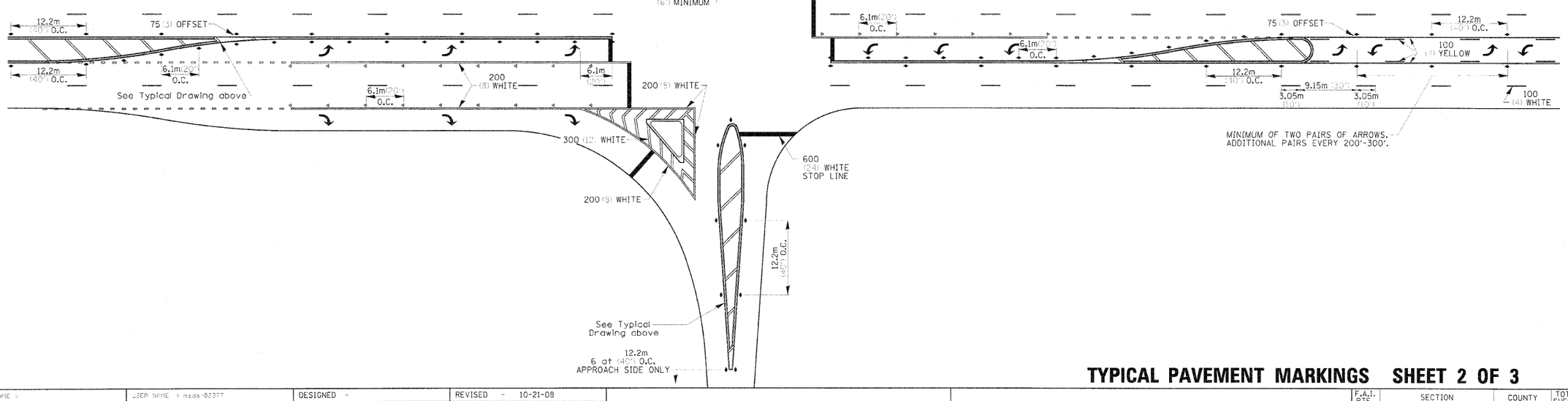


SKIP DASH SPACING
1.2m (4') GAP for speeds less than 45mph
1.8m (6') GAP for speeds 45mph - 55mph
2.4m (8') GAP for speeds greater than 55mph

RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 50Km/H (30MPH)	15.3m (50')	4.53m (15')	3.05m (10')
50-60Km/H (30-40MPH)	22.9m (75')	6.1m (20')	4.53m (15')
70Km/H (45MPH) & over	22.9m (75')	9.05m (30')	6.1m (20')

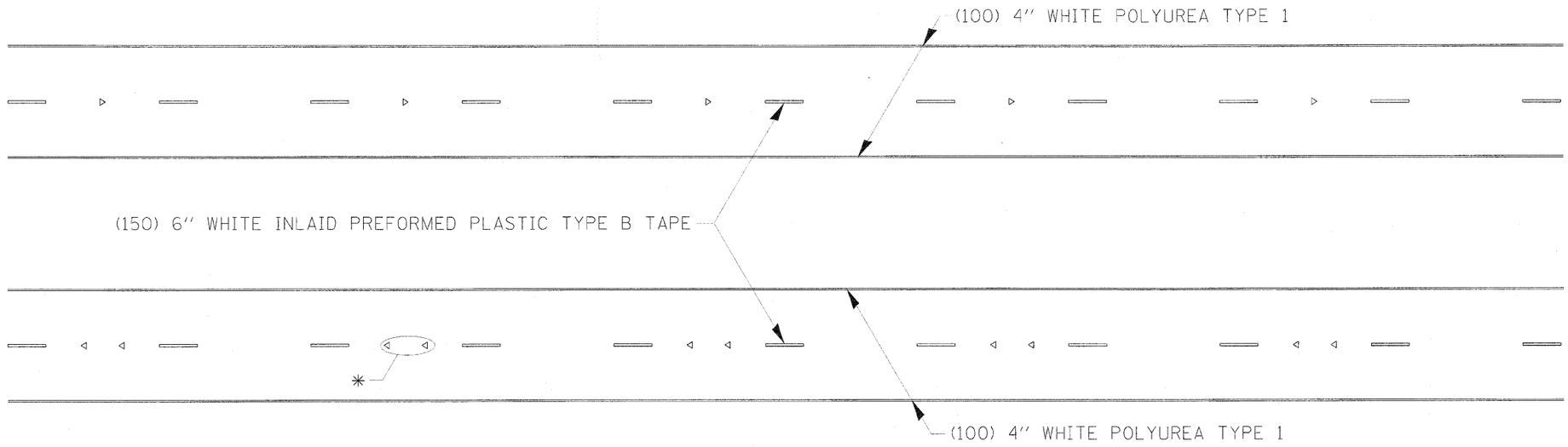
NOTE: If the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



TYPICAL PAVEMENT MARKINGS SHEET 2 OF 3 41.1

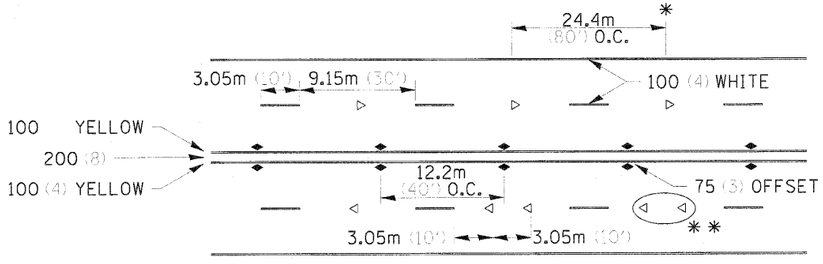
FILE NAME =	USER NAME = msds-02377	DESIGNED -	REVISED - 10-21-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 /DISTRICT 2 STANDARD	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN	REVISED -			280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	460
MODEL NAME =	PLOT SCALE = 50.0002 '/ in.	CHECKED -	REVISED -					CONTRACT NO. 64815		
D2 Detail 24	PLOT DATE = 07\25\2012	DATE 07/23/10	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 7		

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT ≥ 25,000.

MULTI–LANE / DIVIDED



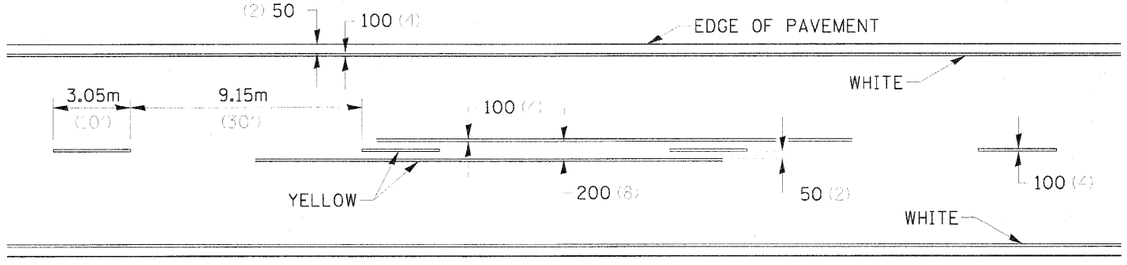
SYMBOLS

* REDUCE TO 12.2m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 15Km/H (10MPH) LOWER THAN POSTED SPEEDS.

** USE DOUBLE MARKERS WHEN ADT ≥ 25,000

MULTI–LANE / UNDIVIDED

TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



TYPICAL PAVEMENT MARKINGS SHEET 3 OF 3 41.1

FILE NAME =	USER NAME = hsdot30327	DESIGNED -	REVISED - 10-21-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 /DISTRICT 2 STANDARD	F.A.I. RTE.	SECTION / COUNTY / TOTAL SHEETS / SHEET NO.
MODEL NAME = 02 Design 05		DRAWN -	REVISED -			280	81-1WB-1,WB,HB-1,HB-2,VB,VB-1R / ROCK ISLAND / 503 / 461
	PLOT SCALE = 52.0000 '/ in.	CHECKED -	REVISED -				CONTRACT NO. 64815
	PLOT DATE = 07\26\2010	DATE - 07/23/10	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 7	ILLINOIS FED. AID PROJECT 7

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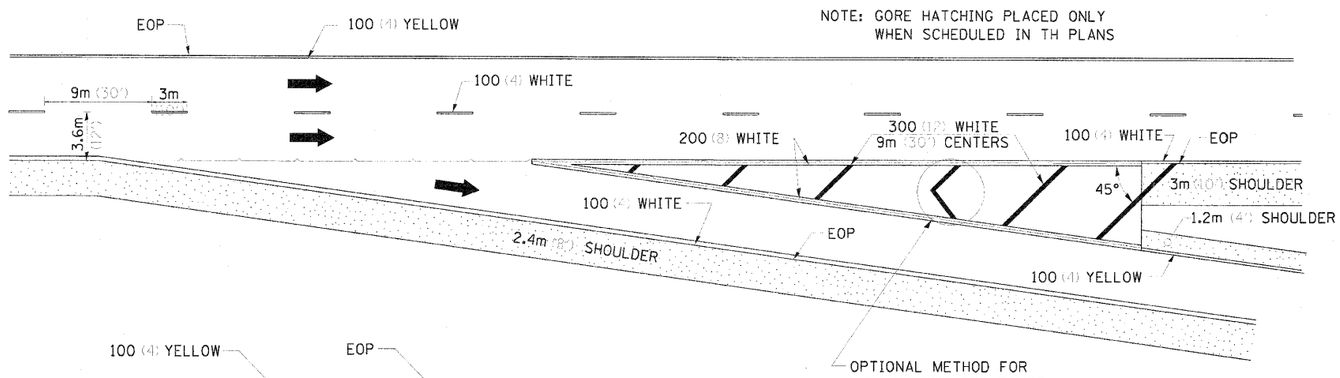
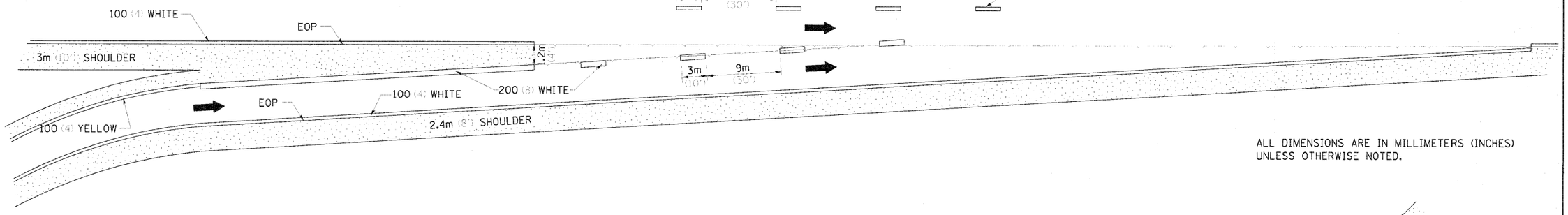
PAINTING DETAILS

EXIT RAMP

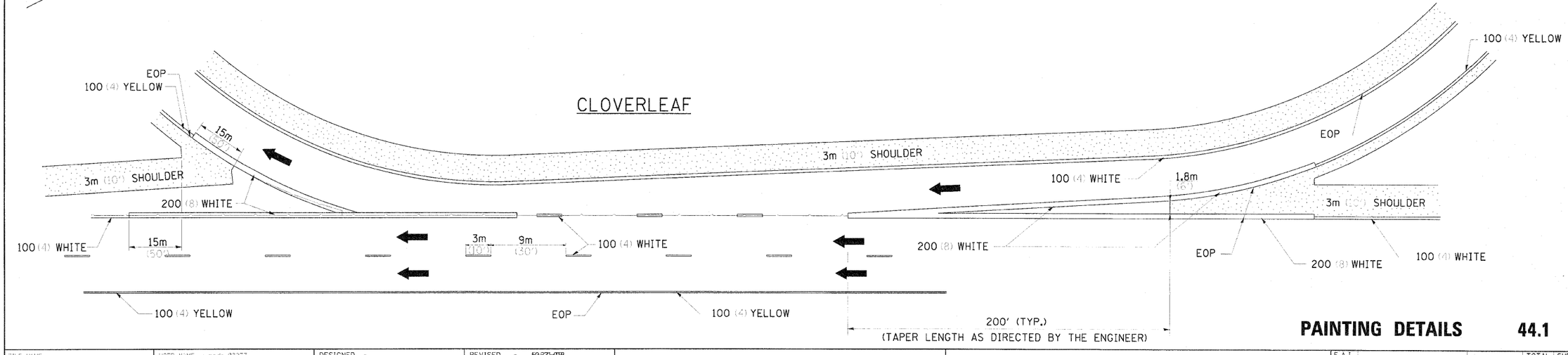


ENTRANCE RAMP



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

CLOVERLEAF



PAINTING DETAILS 44.1

FILE NAME =	USER NAME = mcdo-02377	DESIGNED -	REVISED - 50221-00B	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 /DISTRICT 2 STANDARD	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			280	81-1IB-1,4B,4B-1,4B-2,4B,4B-1R	ROCK ISLAND	503	462
MODEL NAME =	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -					CONTRACT NO. 64815		
D2 Detail 28	PLOT DATE = 07/26/2010	DATE - 07/23/10	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 7		

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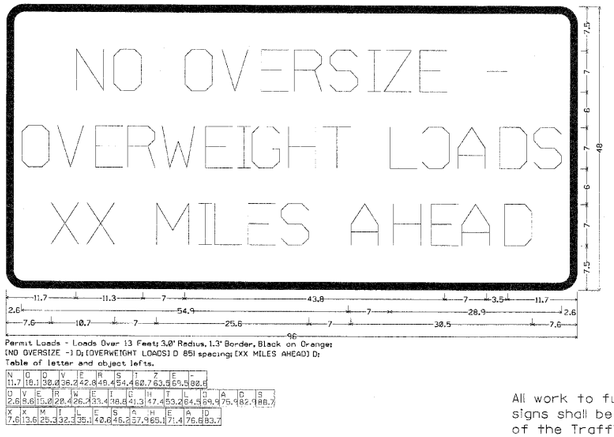
ROAD CLOSED TO OVERSIZED LOADS



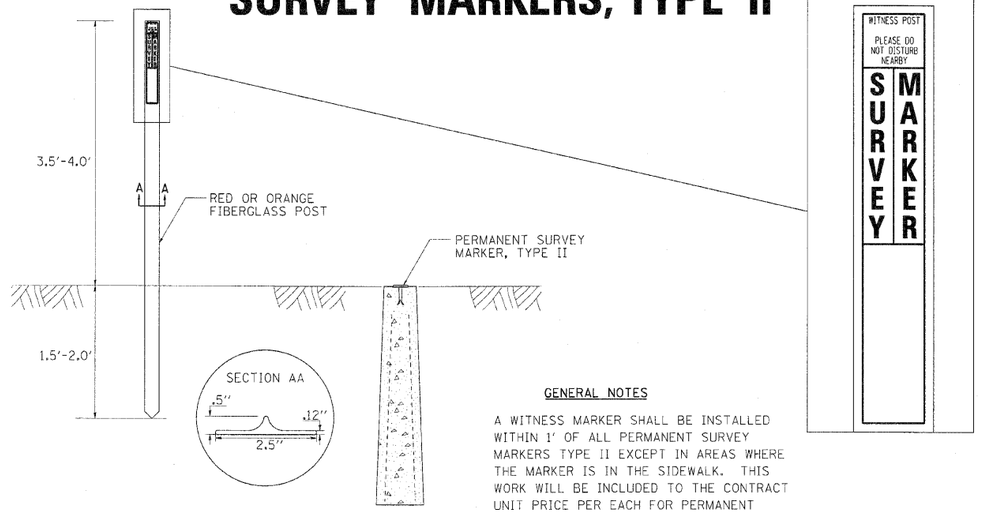
All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 3-11-09

ROAD CLOSED TO OVERSIZED LOADS 40.4

WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II



GENERAL NOTES

A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.

TYPICAL MEDIAN CROSSOVER CLOSURE

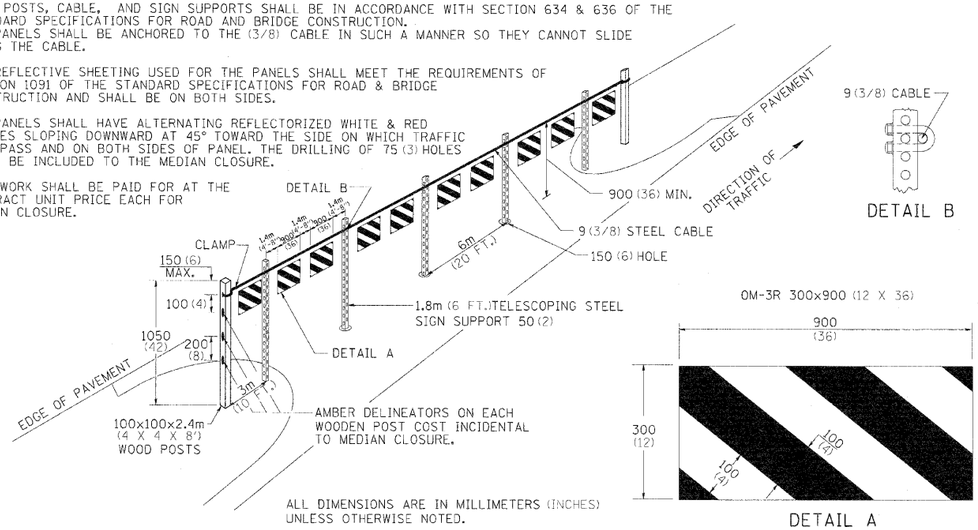
GENERAL NOTES

WOOD POSTS, CABLE, AND SIGN SUPPORTS SHALL BE IN ACCORDANCE WITH SECTION 634 & 636 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
THE PANELS SHALL BE ANCHORED TO THE (3/8) CABLE IN SUCH A MANNER SO THEY CANNOT SLIDE ALONG THE CABLE.

THE REFLECTIVE SHEETING USED FOR THE PANELS SHALL MEET THE REQUIREMENTS OF SECTION 1091 OF THE STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION AND SHALL BE ON BOTH SIDES.

ALL PANELS SHALL HAVE ALTERNATING REFLECTORIZED WHITE & RED STRIPES SLOPING DOWNWARD AT 45° TOWARD THE SIDE ON WHICH TRAFFIC WILL PASS AND ON BOTH SIDES OF PANEL. THE DRILLING OF 75 (3) HOLES SHALL BE INCLUDED TO THE MEDIAN CLOSURE.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR MEDIAN CLOSURE.

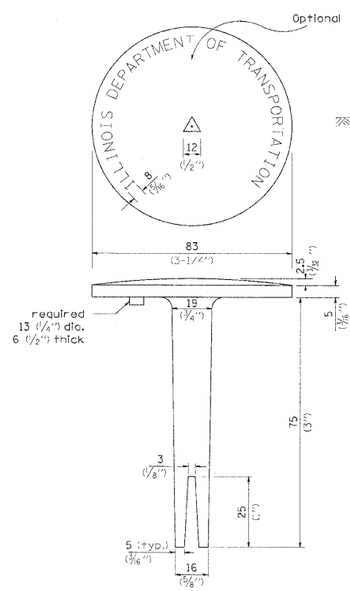


ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

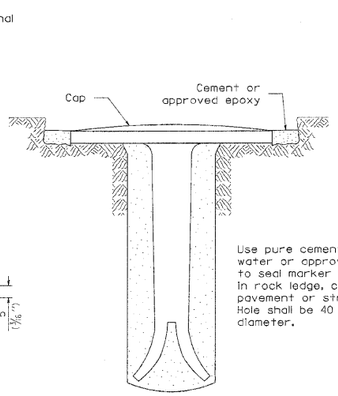
REVISED - 5-27-09

TYPICAL MEDIAN CROSSOVER CLOSURE 98.4

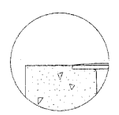
PERMANENT SURVEY MARKERS, TYPE II



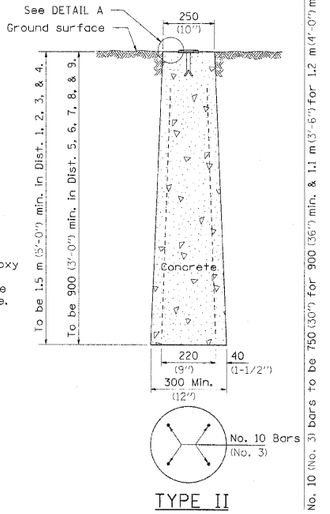
BRASS OR ALUMINUM TABLET



TYPE II



DETAIL A



TYPE II

CAST-IN-PLACE MARKER

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 10-21-08

WITNESS MARKER & PERMANENT SURVEY MARKERS, TYPE II 66.2

FILE NAME = D264815-cht-D2-Details07.dgn	USER NAME = Pap00836	DESIGNED -	REVISED -
		DRAWN -	REVISED -
MODEL NAME = D2 Detail 07	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -
	PLOT DATE = 08\19\2010	DATE 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 /DISTRICT 2 STANDARD

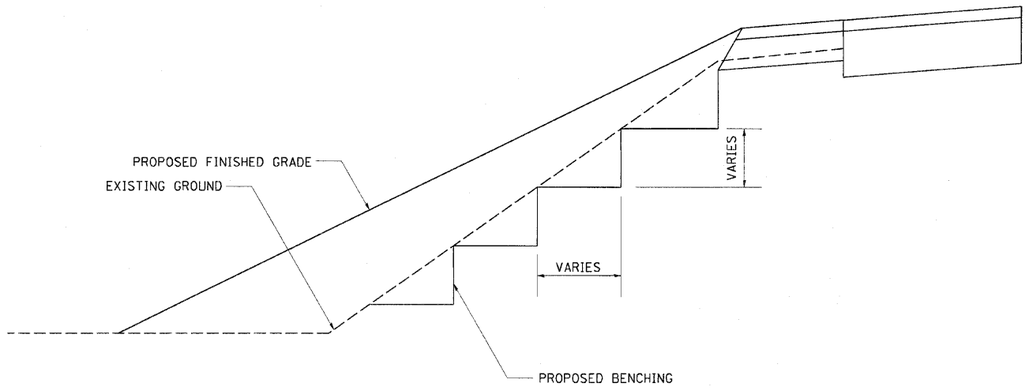
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1HB-1,WB,HB-1,HB-2,VB,VB-DR	ROCK ISLAND	503	463

CONTRACT NO. 64815

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT 7

TYPICAL BENCHING ON EXISTING EMBANKMENT



REVISED - 2-22-06

TYPICAL BENCHING ON EXISTING EMBANKMENT **50.4**

TREE REPLACEMENT SCHEDULE

CODE NUMBER	SCIENTIFIC NAME	COMMON NAME	SIZE	UNIT	QUANTITY
A2001814	TREE, ACER SACCHARUM GREEN MOUNTAIN	GREEN MOUNTAIN SUGAR MAPLE	1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	7
A2006514	TREE, QUERCUS BICOLOR	SWAMP WHITE OAK	1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	12
A2006714	TREE, QUERCUS MACROCARPA	BUR OAK	1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	12
A2006914	TREE, QUERCUS PALUSTRIS	PIN OAK	1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	12

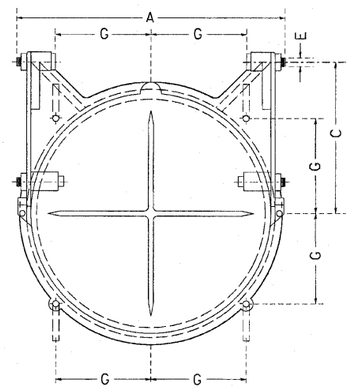
LAYOUT SHALL BE PERFORMED BY DISTRICT TWO OPERATIONS STAFF.
MULCH SHALL BE HARDWOOD CHIPS, 5 FOOT WIDTH, 4 INCH DEPTH WITH WEED BARRIER.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

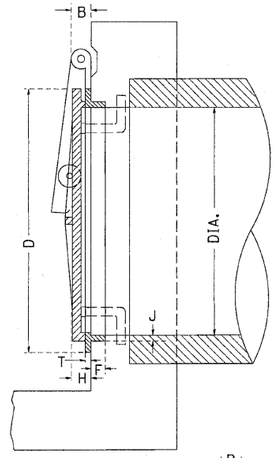
REVISED - 8-10-05

TREE REPLACEMENT SCHEDULE **90.4**

AUTOMATIC FLAP GATE



FRONT ELEVATION



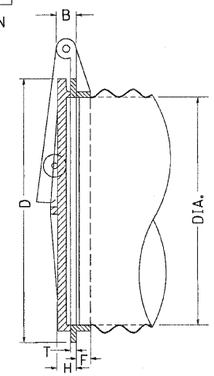
SECTION

IT IS INTENTED THAT THE AUTOMATIC FLAP GATES SHALL BE A COMMERCIAL PRODUCT PRODUCED BY A RELIABLE MANUFACTURER. THE GATE MAY BE MADE OF CAST IRON, CAST STEEL OR OTHER SUITABLE MATERIALS. THE DESIGN MAY DIFFER FROM THE DRAWING IF IT WILL WORK IN A SATISFACTORY, TROUBLE FREE MANNER AND WILL WITHSTAND THE WATER PRESSURE AT THE INSTALLATION LOCATION. THE GATE SHALL BE APPROVED BY THE ENGINEER.

THE SIZE OF AUTOMATIC FLAP GATES SHALL REFER TO THE DIAMETER OF THE OUTLET PIPE OR OPENING.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR FLAP GATE OF THE SIZE SPECIFIED AND SHALL INCLUDE ALL MATERIALS AND COMPLETE INSTALLATION.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



SECTION SHOWING METHOD OF APPLICATION TO CORRUGATED METAL PIPE

TABLE OF DIMENSIONS

DIAM	A	B	C	D	E	F	G	H	J	T
200 (8)	273 (10 3/4)	35 (1 3/8)	144 (5 11/16)	254 10	13 (1/2)	29 (1 1/8)	90 (3 9/16)	32 (1 1/4)	19 (3/8)	10 (3/8)
250 (10)	324 (12 3/4)	35 (1 3/8)	181 (7 1/8)	311 (12 1/4)	13 (1/2)	29 (1 1/8)	111 (4 3/8)	38 (1 1/2)	13 (1/2)	11 (7/16)
300 (12)	375 (14 3/4)	35 (1 3/8)	216 (8 1/2)	368 (14 1/2)	13 (1/2)	29 (1 1/8)	130 (5 1/8)	38 (1 1/2)	13 (1/2)	13 (1/2)
350 (14)	438 (17 1/4)	35 (1 3/8)	251 (9 7/8)	425 (16 3/4)	13 (1/2)	32 (1 1/4)	151 (5 15/16)	38 (1 1/2)	13 (1/2)	14 (9/16)
375 (15)	451 (17 3/4)	35 (1 3/8)	270 (10 5/8)	451 (17 3/4)	13 (1/2)	32 (1 1/4)	159 (6 1/4)	38 (1 1/2)	13 (1/2)	14 (9/16)
400 (16)	489 (19 1/4)	35 (1 3/8)	286 (11 1/4)	476 (18 3/4)	13 (1/2)	32 (1 1/4)	168 (6 5/8)	38 (1 1/2)	13 (1/2)	14 (9/16)
450 (18)	565 (22 1/4)	51 2	321 (12 5/8)	533 21	19 (3/4)	40 (1 9/16)	189 (7 7/16)	44 (1 3/4)	14 (9/16)	14 (9/16)
500 (20)	629 (24 3/4)	51 2	359 (14 1/8)	603 (23 3/4)	19 (3/4)	35 (1 3/8)	210 (8 1/4)	44 (1 3/4)	16 (5/8)	16 (5/8)
525 (21)	641 (25 1/4)	51 2	378 (14 7/8)	616 (24 1/4)	19 (3/4)	35 (1 3/8)	217 (8 9/16)	44 (1 3/4)	16 (5/8)	16 (5/8)
600 (24)	718 (28 1/4)	51 2	432 17	699 (27 1/2)	19 (3/4)	38 (1 1/2)	248 (9 3/4)	44 (1 3/4)	16 (5/8)	16 (5/8)
750 (30)	895 (35 1/4)	64 (2 1/2)	521 (20 1/2)	864 34	25 1	40 (1 9/16)	305 12	51 2	27 (1 1/16)	16 (5/8)
900 (36)	1054 (41 1/2)	64 (2 1/2)	635 25	1038 (40 7/8)	25 1	52 (2 1/16)	367 (14 7/16)	57 (2 1/4)	29 (1 1/8)	17 (11/16)
1050 (42)	1207 (47 1/2)	64 (2 1/2)	756 (29 3/4)	1194 47	25 1	59 (2 5/16)	422 (16 5/8)	57 (2 1/4)	29 (1 1/8)	19 (3/4)
1200 (48)	1359 (53 1/2)	64 (2 1/2)	864 34	1372 54	25 1	70 (2 3/4)	484 (19 1/16)	57 (2 1/4)	35 (1 3/8)	19 (3/4)
1350 (54)	1543 (60 3/4)	64 2 1/2	965 38	1581 (62 1/4)	32 (1 1/4)	70 (2 3/4)	559 22	76 3	38 (1 1/2)	22 (7/8)
1500 (60)	1702 (67)	64 (2 1/2)	1067 42	1740 (68 1/2)	32 (1 1/4)	70 (2 3/4)	616 (24 1/4)	76 3	38 (1 1/2)	24 (15/16)
1650 (66)	1855 (73 3/8)	64 (2 1/2)	1194 47	1905 75	32 (1 1/4)	73 (2 7/8)	673 (26 1/2)	76 3	38 (1 1/2)	25 1
1800 (72)	2007 (79)	64 (2 1/2)	1295 51	2083 82	32 (1 1/4)	76 3	737 29	76 3	38 (1 1/2)	25 1
1950 (78)	2184 (86)	64 (2 1/2)	1403 (55 1/4)	2254 (88 3/4)	32 (1 1/4)	89 (3 1/2)	797 (31 3/8)	76 3	41 (1 5/8)	29 (1 1/8)
2100 (84)	2350 (92 1/2)	89 (3 1/2)	1511 (59 1/2)	2426 (95 1/2)	38 (1 1/2)	89 (3 1/2)	857 (33 3/4)	76 3	44 (1 3/4)	32 (1 1/4)

• 81-1(B-1, HB, HB-1, HB-2, VB, VB-1)R

REVISED - 3-22-10	**REGION 2 / DISTRICT 2 STANDARD**	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -		280	•	ROCK ISLAND	503	464
REVISED -				CONTRACT NO. 64815		
REVISED -	SCALE: 50.0612 1/ IN. SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

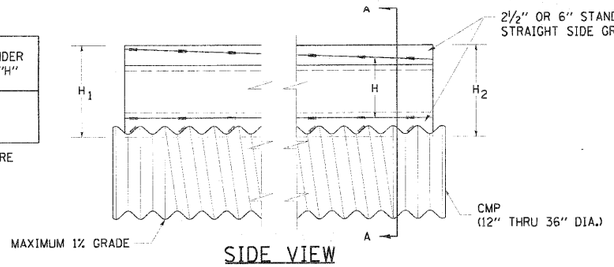
PLOT DATE = Fri Sep 03 12:49:15 2010

AUTOMATIC FLAP GATE **73.2**

SLOTTED DRAIN PIPE

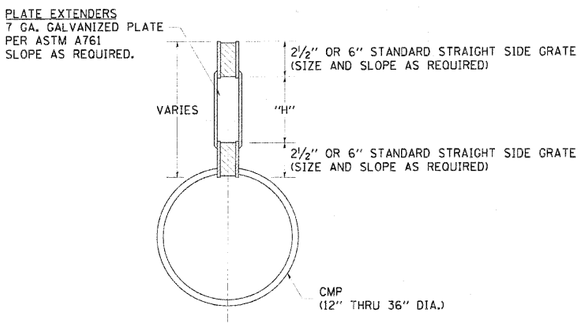
LOADING CONDITION	MAX. EXTENDER HEIGHT - "H"
H20/H25 • 750 PSI CONCRETE	19"

• 125 PSI TIRE PRESSURE



SIDE VIEW

DETAIL WITH VARIABLE HEIGHT GRATE



SECTION A-A

GENERAL

Class SI Concrete shall be used throughout.
This specification covers Slottted Drain used for the removal of water as shown on the plans.
The Slotted Drain shall be Corrugated Pipe Culvert with Integral Slotted Drains.
Before placing the concrete adjacent to the pipe, the slot shall be covered by either thin, flat metal sheeting or by a board notched to fit over the grate bars. This covering must fit closely in the slot to prevent entry of concrete into the pipe. Paving over the slotted drain will then be one continuous operation over the protected drain. The protection for the drain slot shall then be removed. The pipe shall drain into the side of the inlet. The opening where the slot is removed shall be covered to prevent concrete from entering the pipe.
The Corrugated Steel Pipe used in the Slotted Drain shall meet the requirements of AASHTO M36/ASTM A760.
The CMP shall be ALUMINIZED STEEL Type 2.
The diameter shall be as shown on the plans.
Steel grating shall meet the galvanizing requirements of AASHTO M111.
This work will be paid for at the contract unit price per foot for SLOTTED DRAIN of the pipe diameter specified WITH VARIABLE SLOT,or SLOTTED DRAIN, of the pipe diameter specified, WITH 6" SLOT, and shall include concrete and grating for depth specified on plans.
Use approved end cap to prevent concrete entry into the pipe during gutter construction on the upstream end of the pipe.

CONNECTIONS

The Corrugated Steel Pipe shall have a minimum of two rerolled annular ends.
The Slotted Drain bands shall be modified HUGGER Bands to secure the pipe and prevent infiltration of the backfill.
When the Slotted Drain is banded together, the adjacent grates shall have a maximum 3" gap.

GRATES

The grates shall be manufactured from ASTM A670, Grade 36 steel. The spacers and bearing bars (sides) shall be 3/16 " material ±0.008".
The spacers shall be on 6" centers and welded on both sides to each bearing bar (sides) with four (4) 1- 1/4 " long 3/16 " fillet welds on each side of the bearing bar.
The plate extender shall be 7 gage steel meeting ASTM A761.
The engineer may call for tensile strength tests on the grate if the grate is not in compliance with the above spacer specifications. If tensile strength tests are called for, minimum results for an in-place spacer pulled perpendicular to the bearing bar shall be:
T= 12,000 pounds for 2- 1/2 " grate
T= 15,000 pounds for 6" grate

GALVANIZING

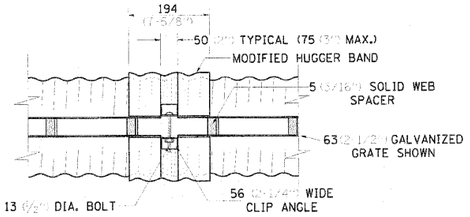
The grate and plate extenders shall be galvanized in accordance with ASTM A123 except with a 2 oz. galvanized coating.

GRATE ATTACHED TO CSP

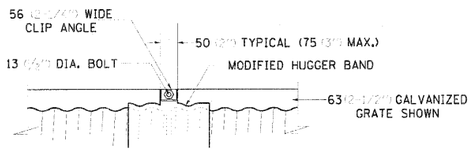
The grate shall be fillet welded with a minimum weld 1" long to the CSP on each side of the grate at every other corrugation.

TOLERANCES - FINISHED SLOTTED DRAIN - 20' LENGTHS

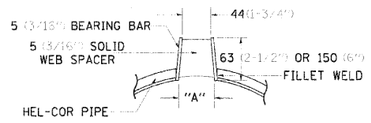
Vertical Bow= ± 3/8 "
Horizontal Bow= ± 5/8 "
Twist= ± 1/2 "



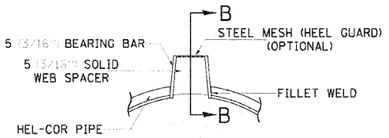
TOP VIEW



SIDE VIEW



SECTION A-A
STANDARD DETAIL



SECTION A-A
DETAIL WITH MESH

(TRAPEZOIDAL GALVANIZED GRATE SHOWN)

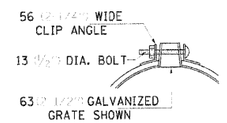
STANDARD SIZES						
GAGE OF PIPE	DIAMETER OF PIPE					
	300 (12")	375 (15")	450 (18")	600 (24")	750 (30")	900 (36")
16	X	X	X	X	X	X
14	X	X	X	X	X	X
12	N.A.	N.A.	N.A.	N.A.	X	X

GRATE TYPE		"A"
VERT	63 (2-1/2")	44 (1-3/4")
VERT	150 (6")	44 (1-3/4")
TRAP	63 (2-1/2")	56 (2-1/4")
TRAP	150 (6")	75 (3")

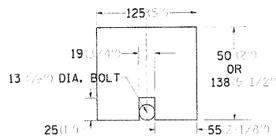
VERT = VERTICAL
TRAP = TRAPIZOIDAL

SLOTTED DRAIN NOTES

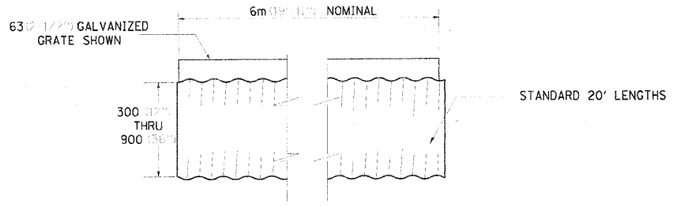
1. GRATING IS AVAILABLE IN DEPTHS OF 63 (2-½") AND 150 (6").
2. VERTICAL GRATING (STRAIGHT SIDES) WITH VERTICAL SPACERS IS ALSO AVAILABLE.
3. FOR 150 (6") VERTICAL & TRAPIZOIDAL REQUIREMENTS, THE SLOTTED DRAIN BAND MAY BE FURNISHED WITH THE 100 (4") TECHCO BAND ANGLE.
4. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
5. DIMENSIONS FOR H_1 AND H_2 AS REQUIRED.
6. H_1 AND H_2 MEASURED FROM TOP OF GRATE TO BOTTOM OF GRATE.



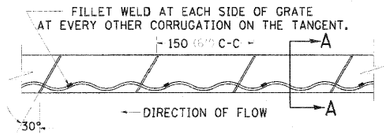
END VIEW



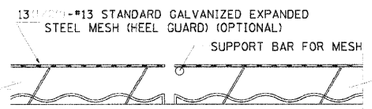
GAP PLATE (OPTIONAL)
MAY BE PLACED DIRECTLY OVER BAND BOLT TO PROVIDE CONTINUOUS FORM FOR GROUTING.



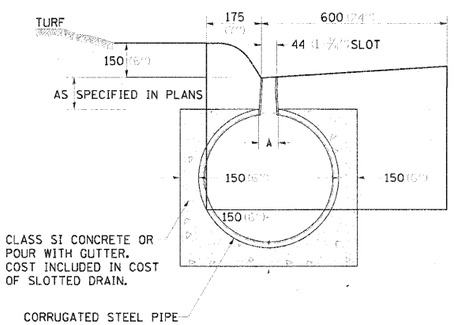
TYPICAL PIPE SECTION



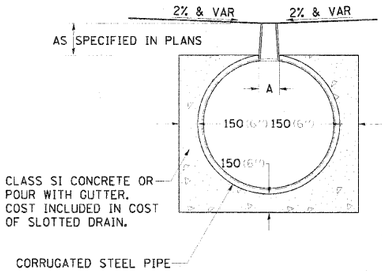
GRATE WELDING DETAIL



SECTION B-B



DETAIL FOR CURB & GUTTER



DETAIL FOR CROSSOVERS, DRIVEWAYS, OR PARKING LOTS

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

SLOTTED DRAIN PIPE 68.1

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FILE NAME =	USER NAME = nedar20177	DESIGNED -	REVISED - 1-11-08
		DRAWN -	REVISED -
MODEL NAME =	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
DG Detail 07	PLOT DATE = 07\23\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 /DISTRICT 2 STANDARD

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	465
			CONTRACT NO. 64815	
FED. ROAD DIST. NO. 7	ILLINOIS FED. AID PROJECT 7			

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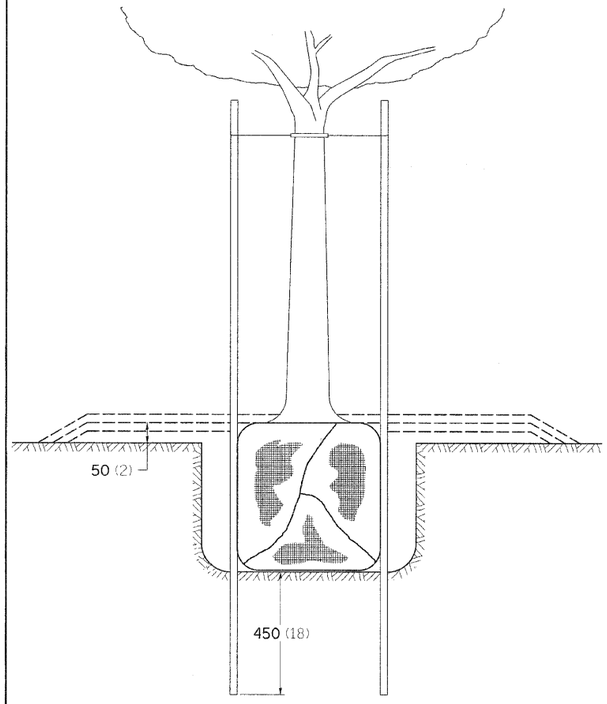
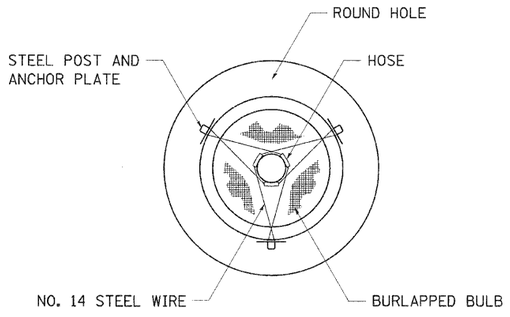
DETAILS OF PLANTING AND BRACING TREES

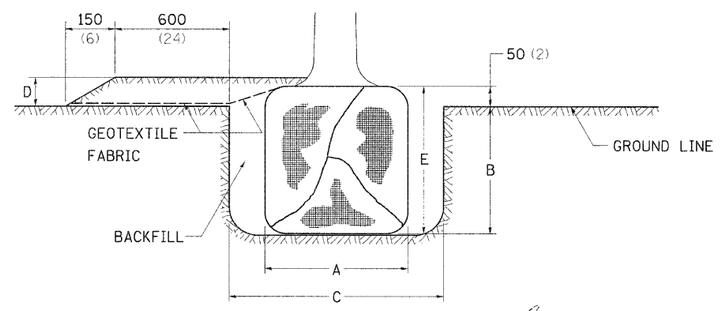


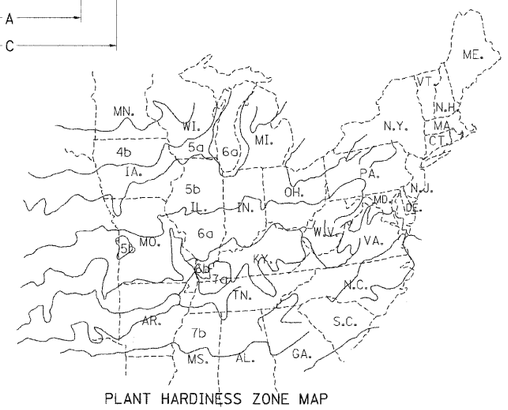
TREES SMALLER THAN 115 (4½) IN DIAMETER



SMALL TREE SIZE	A DIAMETER OF BALL OR ROOT SYS.	B DEPTH OF HOLE EXCAVATION	C WIDTH OF HOLE EXCAVATION	D THICKNESS OF MULCH COVER	E DEPTH OF BALL OR ROOT SYS.	F VOLUME OF MULCH COVER m^3 (CU. YDS.)
1.5-1.8m (5'-6')	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.5-1.8m (5'-6') BB	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.8-2.0m (6'-7') BB	450 (18)	300 (12)	750 (30)	100 (4)	350 (14)	0.41 (0.54)
2.0-2.4m (7'-8') BB	500 (20)	275 (11)	750 (30)	100 (4)	325 (13)	0.41 (0.54)
2.4-3.0m (8'-10') BB	600 (24)	350 (14)	900 (36)	100 (4)	400 (16)	0.47 (0.61)
3.0-3.6m (10'-12') BB	650 (26)	375 (15)	900 (36)	100 (4)	425 (17)	0.47 (0.61)

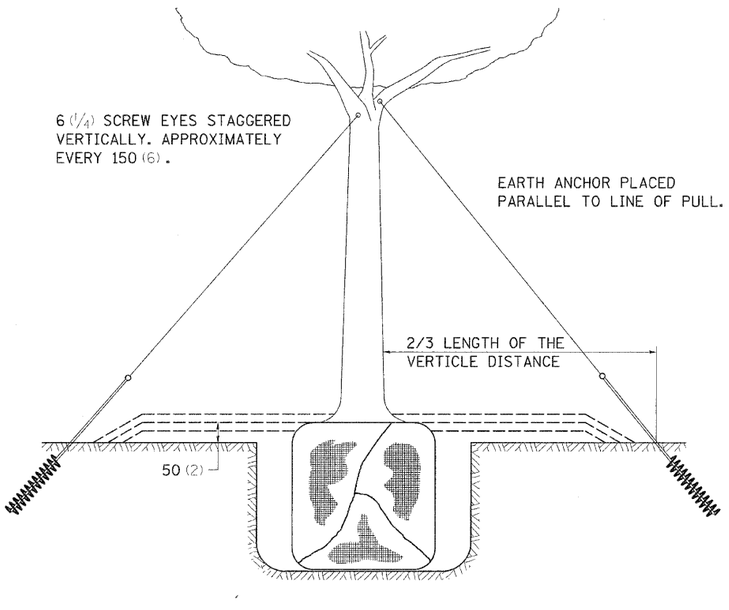
LARGE TREE SIZE	A DIAMETER OF BALL OR ROOT SYS.	B DEPTH OF HOLE EXCAVATION	C WIDTH OF HOLE EXCAVATION	D THICKNESS OF MULCH COVER	E DEPTH OF BALL OR ROOT SYS.	F VOLUME OF MULCH COVER m^3 (CU. YDS.)
0-50 (0-2)	500 (20)	275 (11)	900 (36)	100 (4)	325 (13)	0.47 (0.61)
50-65 (2-2½)BB	600 (24)	350 (14)	1200 (48)	100 (4)	400 (16)	0.60 (0.78)
65-75 (2½-3)BB	700 (28)	425 (17)	1200 (48)	100 (4)	475 (19)	0.60 (0.78)
75-90 (3-3½) BB	800 (32)	425 (17)	1500 (60)	100 (4)	475 (19)	0.73 (0.96)
90-100 (3½-4) BB	900 (36)	500 (20)	1500 (60)	100 (4)	550 (22)	0.73 (0.96)
100-115 (4-4½) BB	1000 (40)	550 (22)	1800 (72)	100 (4)	600 (24)	0.89 (1.16)
115-125 (4½-5) BB	1100 (44)	600 (24)	1800 (72)	100 (4)	650 (26)	0.89 (1.16)
125-140 (5-5½) BB	1200 (48)	675 (27)	2100 (84)	100 (4)	725 (29)	1.06 (1.38)



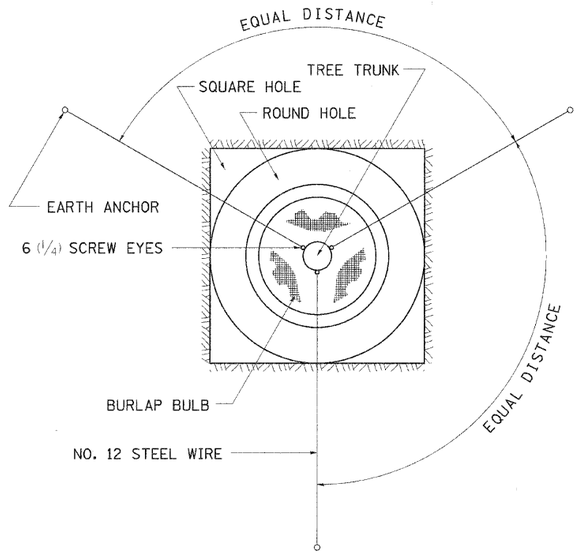


PLANT HARDINESS ZONE MAP

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
PUBLICATION NO. 814



TREES OVER 115 (4½) IN DIAMETER



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

DETAILS OF PLANTING AND BRACING TREES 92.1

FILE NAME = 0264815-sht-D2-Details11.dgn	USER NAME = Almj01238	DESIGNED - JDW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 /DISTRICT 2 STANDARD				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - DAP	REVISED -						280	81-1(B-1,WB,HB-1,WB-2,VB,VB-1)R	ROCK ISLAND	503	466A
MODEL NAME = D2 Detail 11	PLOT SCALE = 50.0000 ' / in.	CHECKED - DES	REVISED -								CONTRACT NO. 64815		
	PLOT DATE = 08\25\2010	DATE - 07/23/10	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 7		

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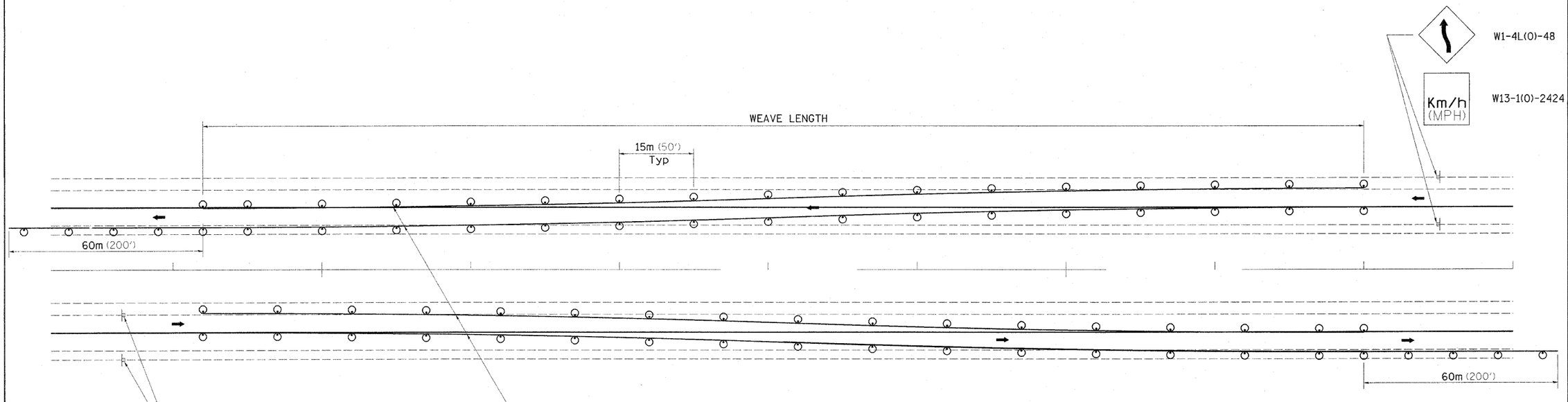
TRAFFIC CONTROL TYPICAL WEAVE



LEGEND

- DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHTS
- SIGN ON PERMANENT MOUNT

DESIGNER NOTE:

1. USE ON LONG 4-LANE PROJECTS WHERE THE CONTRACTOR MAY CHANGE A PORTION OF THE WORK TO THE OPPOSITE LANE.
2. USE WHERE THE PROJECT IS ADJACENT TO ANOTHER AND THE CONTRACTOR COULD BE WORKING ON DIFFERENT LANES.
3. TEMPORARY PAVEMENT MARKING SHALL BE USED WHEN TYPICAL WEAVE IS USED FOR 14 DAYS OR MORE.
4. TRAFFIC CONTROL TYPICAL WEAVE SHALL BE INCLUDED IN THE COST OF THE SPECIFIC TRAFFIC CONTROL STANDARDS OF ITEMS.

STANDARD WEAVE CONDITIONS FOR DIFFERENT SPEED LIMITS

POSTED SPEED LIMIT	ADVISORY SPEED LIMIT	WEAVE LENGTH
110 Km/h (65 MPH)	80 Km/h (45 MPH)	240m (780 FT.)
90 Km/h (55 MPH)	60 Km/h (35 MPH)	200m (660 FT.)
80 Km/h (45 MPH)	40 Km/h (25 MPH)	165m (540 FT.)

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL TYPICAL WEAVE 39.1

FILE NAME = D264815-sht-D2-Details8.dgn	USER NAME = Almy01238	DESIGNED -	REVISED - 9/2/10 EEC	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 /DISTRICT 2 STANDARD				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -						280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	466 B
MODEL NAME = D2 Detail 10	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -								CONTRACT NO. 64815		
	PLOT DATE = 8/25/2010	DATE - 07/23/10	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 7		

64' MEDIAN SINGLE LANE CROSSOVER

(POSTED SPEED LIMIT 65 MPH, WORK ZONE SPEED LIMIT 55 MPH)

TYPICAL SECTION

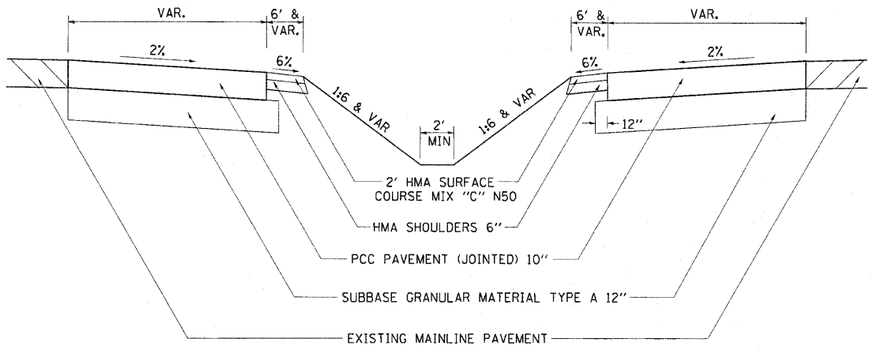
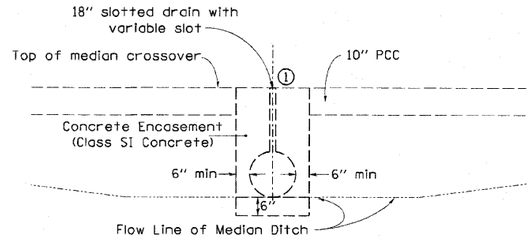
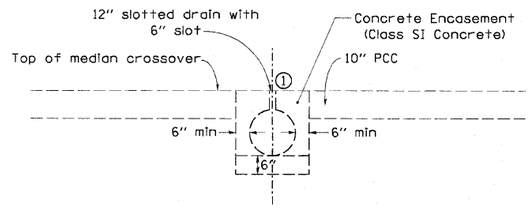


TABLE OF OFFSETS AND DROPS										
Distance feet from location station	0	60' (B)	75'	100'	125'	150'	175'	200'	225'	236.83' (C)
Offsets feet from inside edge of pavement	32'	30'	27.18'	22.80'	18.84'	15.27	12.11	9.35'	6.98	6'
Drop feet from inside edge of pavement	0.64'	0.6'	0.54'	0.456'	0.377'	0.31'	0.24'	0.187'	0.139'	0.12'



SECTION A–A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A–A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2651.79 Sq. Yds.)	SUBBASE GRANULAR MATERIAL TYPE A, 12"
(2509.74 Sq. Yds.)	P.C.C. CONCRETE, (JOINTED)10"
(79.2 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(707.03 Sq. Yds.)	HMA SHOULDERS 6"

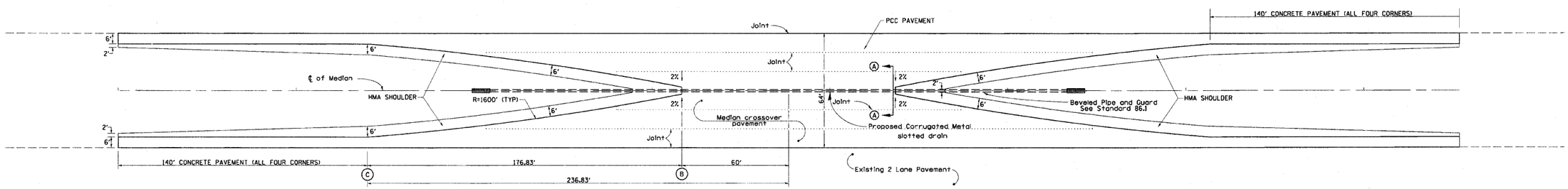
Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is disigned using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement). The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL

* 81-1(B-1, HB, HB-1, HB-2, VB, VB-1)R

FILE NAME = c:\pw_work\pwidot\condermanse\d0179717\D204502_sht_D2_Std.dgn	USER NAME = condermanse	DESIGNED -	REVISED - 1-15-08
		DRAWN -	REVISED -
	PLOT SCALE = 50.0610 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = Fri Sep 03 12:49:39 2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

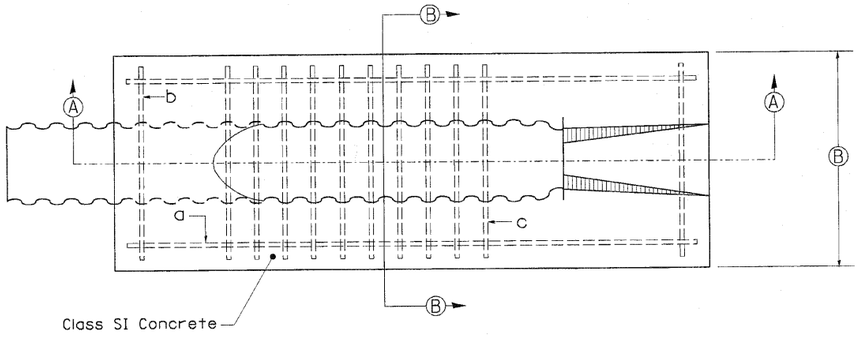
REGION 2 / DISTRICT 2 STANDARD

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	*	ROCK ISLAND		466C
		CONTRACT NO. 64815		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

64' MEDIAN CROSSOVER SHEET 77.1

BEVELED PIPE & GUARD DETAIL



PLAN VIEW

12 PIPE REINFORCING SCHEDULE			
Mark Req'd	Bar Size	Length	No.
a	5	110	2
b	5	32	2
c	8	34	10

18 PIPE REINFORCING SCHEDULE			
Mark Req'd	Bar Size	Length	No.
a	5	162	2
b	5	38	2
c	8	40	18

GENERAL NOTES:

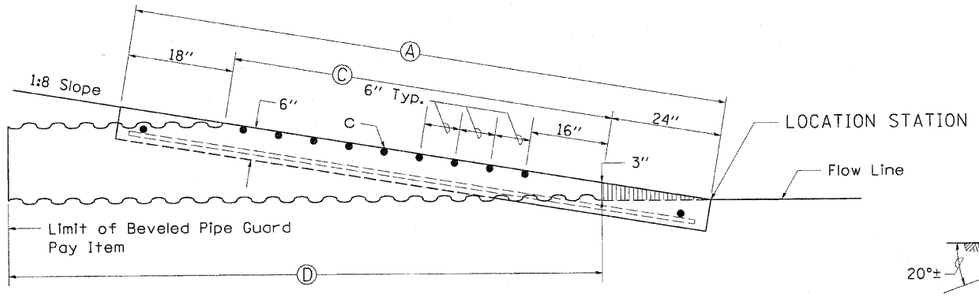
Details shown hereon are for the construction of beveled pipe and guard. Alternate designs, methods of construction or materials may be submitted to the Engineer for approval. All methods of construction and materials involved shall conform to current Standard Specifications.

Reinforcing steel used in construction of "Beveled Pipe and Guard" shall be deformed bars meeting the requirements of Article 1006.10 of the Standard Specifications. All steel bars shall be hot-dip galvanized in accordance with ASTM A 123 specifications.

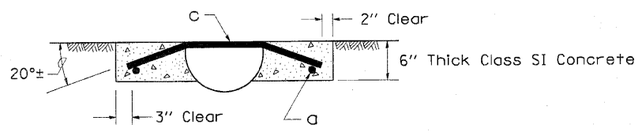
Concrete used in construction of the beveled pipe and guard shall be Class "SI" Concrete.

The corrugated metal pipe shall be cut to fit the 1:8 foreslope. Slots shall be cut into the C.M.P. for placement of the 'b' and 'c' bars. After the foreslope has been placed, the 'b' and 'c' bars shall be fitted into the slots cut in the C.M.P. so they will be in proper position when the concrete collar is poured.

This work shall be paid for at the contract unit price per Each for "Beveled Pipe and Guard", as shown hereon and as directed by the Engineer.



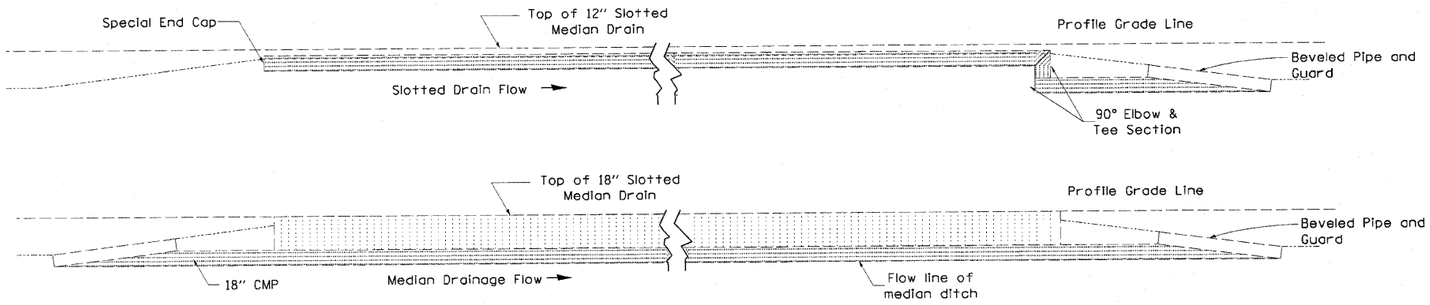
SECTION A-A



SECTION B-B

TABLE OF DIMENSIONS				
PIPE SIZE	A	B	C	D
12	9'-6'	36	6'	10'
18	13'-10"	42	10'-4"	14'-10"

TYPICAL SECTION THRU CENTERLINE OF MEDIAN CROSSOVER

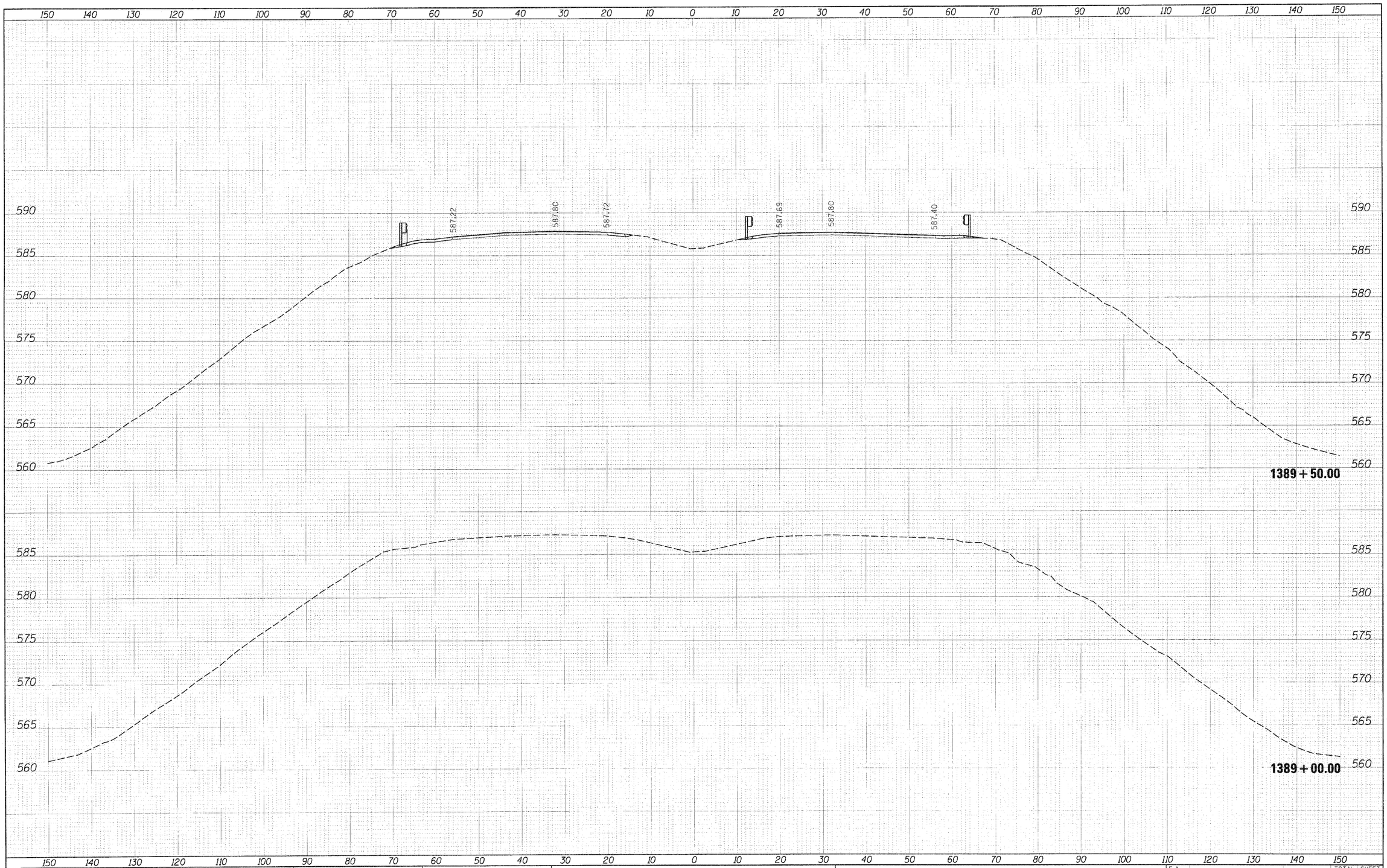


ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

* 81-1(B-1, HB, HB-1, HB-2, VB, VB-1)R

FILE NAME =	USER NAME = condermanee	DESIGNED -	REVISED - 5-27-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD		F.A.I. RTE.	SECTION	COUNTY / TOTAL SHEETS / SHEET NO.
c:\pw_work\pwidot\condermanee\d0179717\D224502.sht_02.Std.dgn		DRAWN -	REVISED -				280	*	ROCK ISLAND / 466D
	PLOT SCALE = 50.1458 ' / IN.	CHECKED -	REVISED -						CONTRACT NO. 64815
	PLOT DATE = Fri Sep 03 12:50:29 2010	DATE -	REVISED -		SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

BEVELED PIPE & GUARD DETAIL 86.1

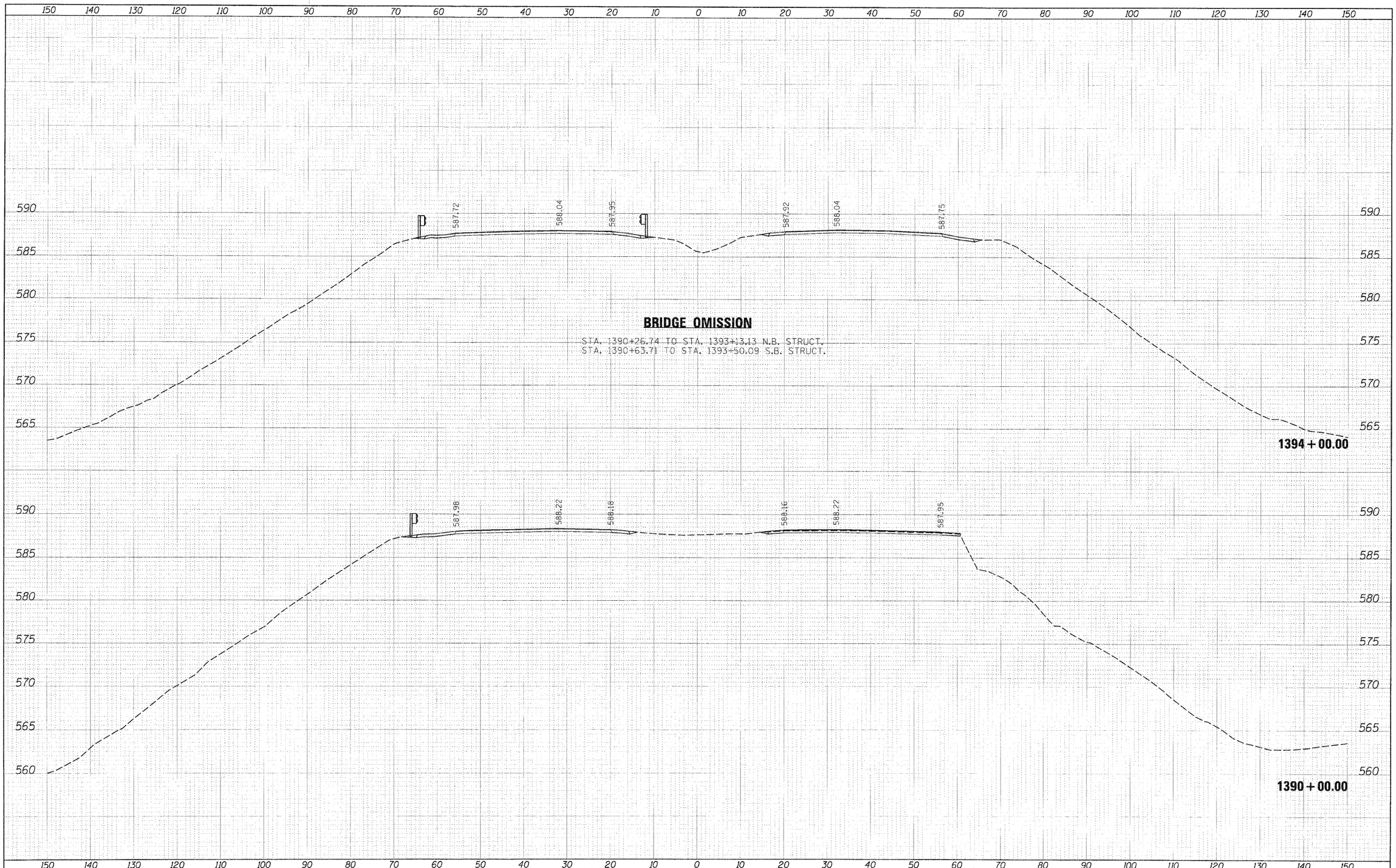


FILE NAME = JOB4815-sht-xsect_IL92.dgn MODEL NAME = XS_IL92_01	USER NAME = Hussey,Zach PLOT SCALE = 10.0000 ' / in. PLOT DATE = 07/26/2010	DESIGNED - JDW DRAWN - DAP CHECKED - DES DATE - 07/23/10	REVISED - REVISED - REVISED - REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**	**ILLINOIS ROUTE 92 CROSS SECTIONS** SCALE: SHEET NO. OF SHEETS STA. 1389+00.00 TO STA. 1389+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,+B,+B-1,+B-2,+B,+B-1)R	ROCK ISLAND	503	467
		CONTRACT NO. 64815		
	7 ILLINOIS FED. AID PROJECT 7			

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		



FILE NAME = 0264816-plotsheet_ill92.dgn	USER NAME = russo@241	DESIGNED - JDW	REVISED -
MODEL NAME =		DRAWN - DAP	REVISED -
XS_ILL92.22	PLOT SCALE = 10.02EX / in.	CHECKED - DES	REVISED -
	PLOT DATE = 07/20/2010	DATE - 07/23/10	REVISED -

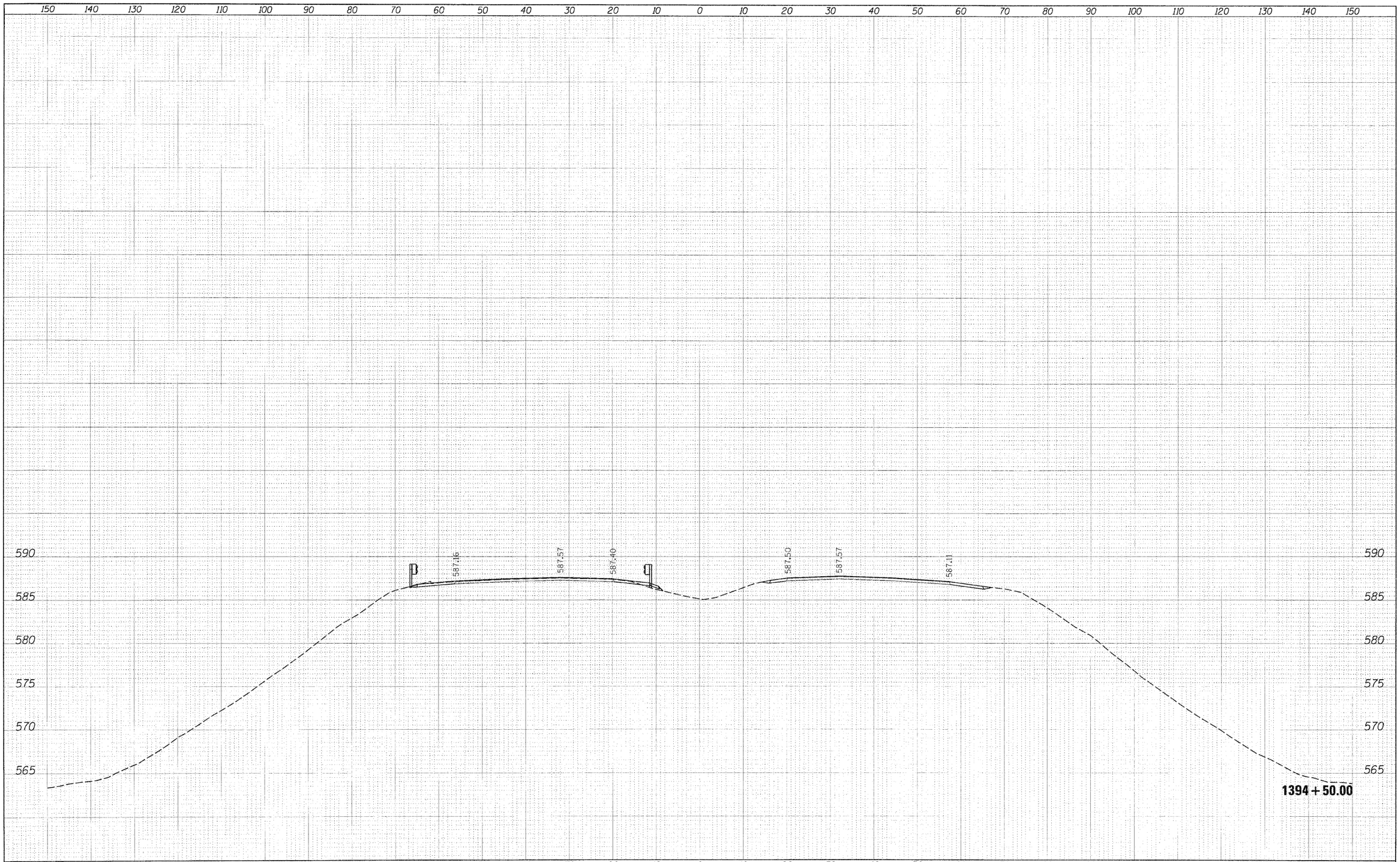
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 92 CROSS SECTIONS

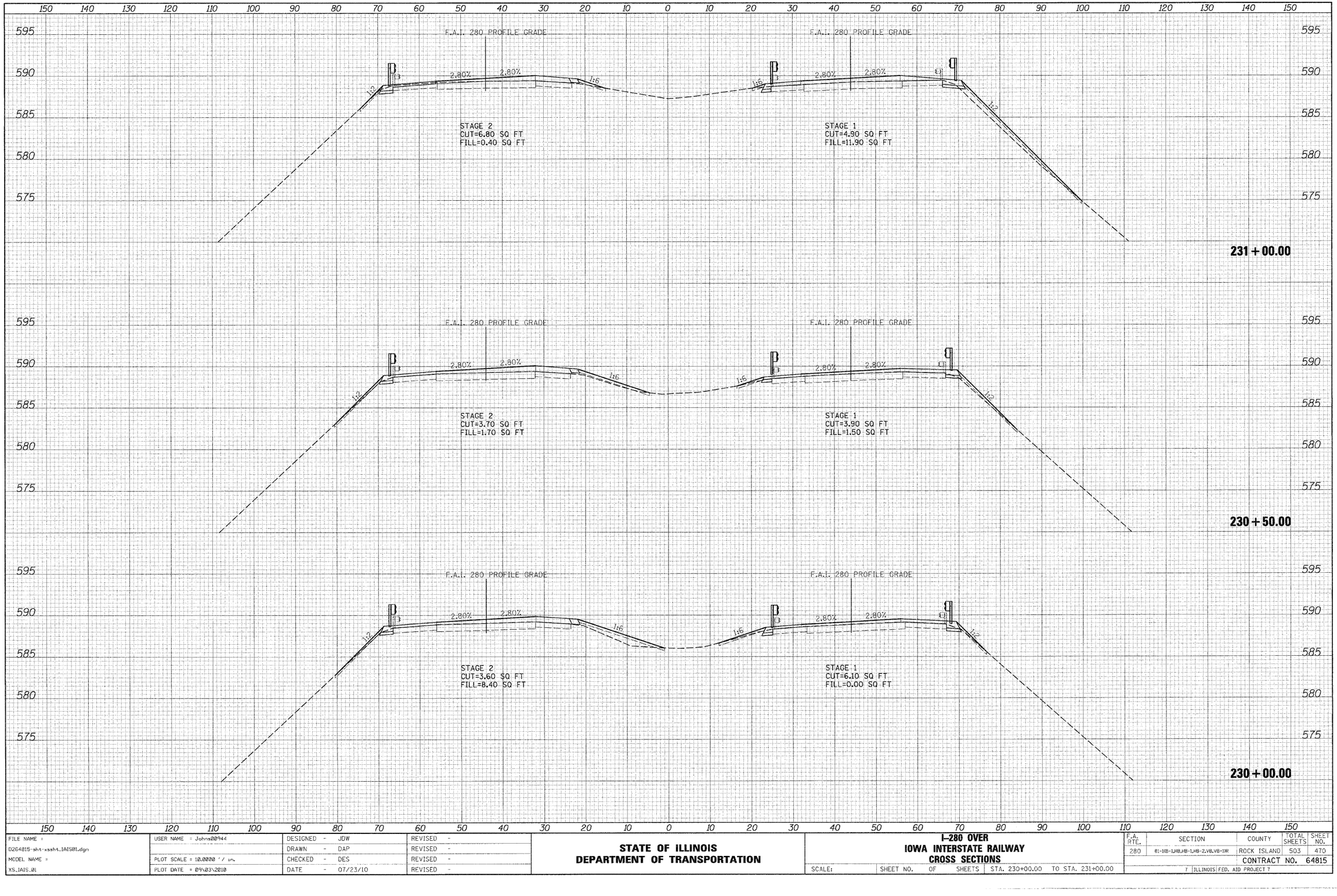
SCALE: | SHEET NO. OF SHEETS | STA. 1390+00.00 TO STA. 1394+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1IB-1,HB,HB-1,HB-2,VB,VB-1R	ROCK ISLAND	503	468
		CONTRACT NO. 64815		
	7 ILLINOIS FED. AID PROJECT 7			

DATE	BY	ORIGINAL SURVEY	FINAL SURVEY
		SURVEYED	SURVEYED
		PLOTTED	PLOTTED
		NOTE BOOK	TEMPLATE
		INIT.	AREAS
			AREAS CHECKED



FILE NAME = D:\648\Sheets\sht_IL92.dgn	USER NAME = tbaus2004	DESIGNED - JDW	REVISED -	**STATE OF ILLINOIS**	**ILLINOIS ROUTE 92 CROSS SECTIONS**	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
MODEL NAME = XS_ILSCALE3	PLOT SCALE = 12.0000 ' / in.	DRAWN - DAP	REVISED -	**DEPARTMENT OF TRANSPORTATION**	SCALE: SHEET NO. OF SHEETS STA. 1394+50.00 TO STA. 1394+50.00	280	81-1IB-1,HB,HB-1,HB-2,VB,VB-1R	ROCK ISLAND	503	469
	PLOT DATE = 07/26/2010	CHECKED - DES	REVISED -					CONTRACT NO. 64815		
		DATE - 07/23/10	REVISED -					7 ILLINOIS FED. AID PROJECT 7		



FINAL SURVEY NOTE BOOK | SURVEYED | PLOTTED | TYPED | AREAS | AREAS CHECKED | BY | DATE | NO.

ORIGINAL SURVEY NOTE BOOK | SURVEYED | PLOTTED | TYPED | AREAS | AREAS CHECKED | BY | DATE | NO.

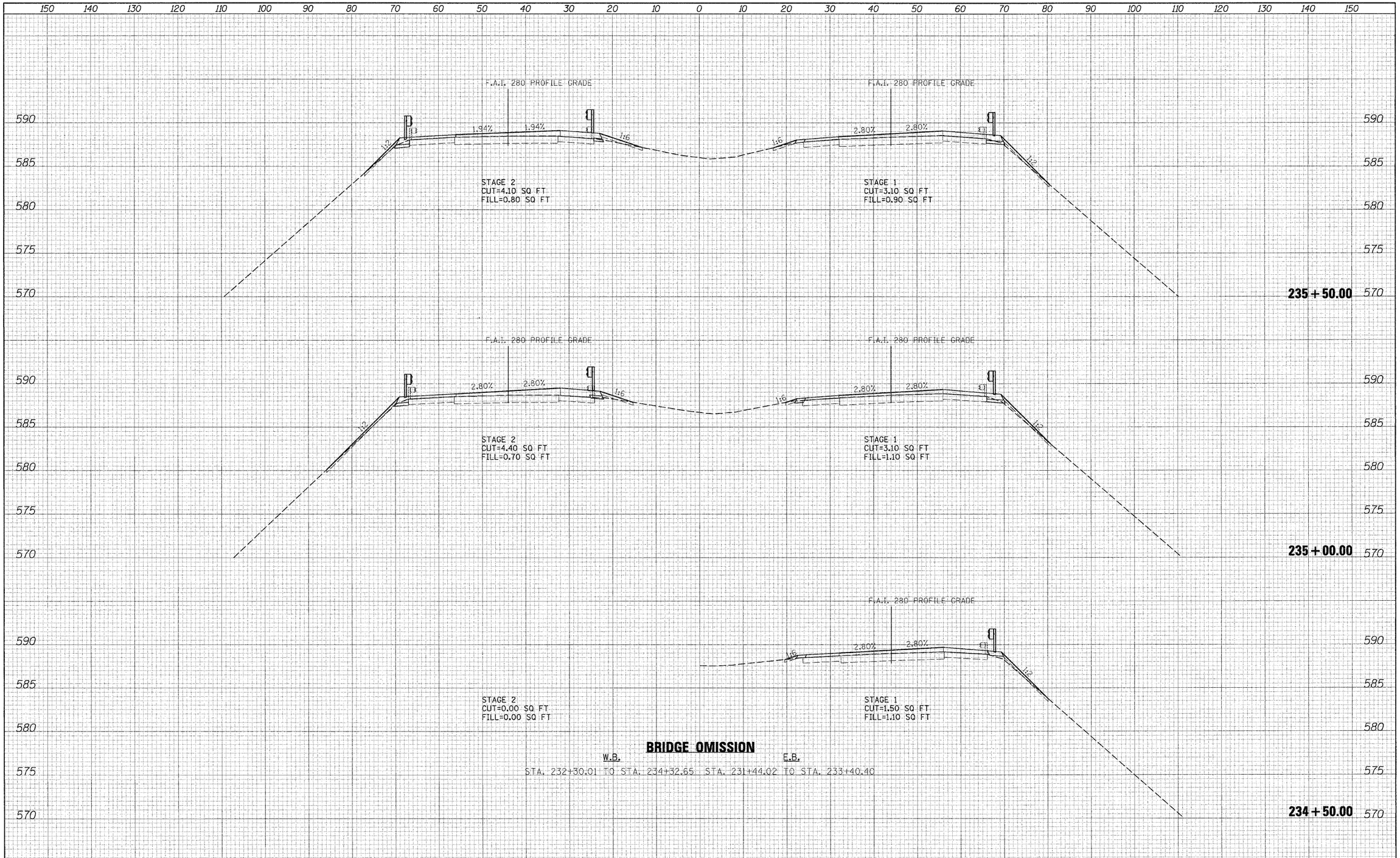
FILE NAME = D264815-sht-xssht_IAIS01.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_IAIS_01	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 OVER
IOWA INTERSTATE RAILWAY
CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 230+00.00 TO STA. 231+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,H8,HB-1,H8-2,V8,VB-1)R	ROCK ISLAND	503	470
			CONTRACT NO. 64815	
7	ILLINOIS FED. AID PROJECT 7			



BRIDGE OMISSION

W.B.	E.B.
STA. 232+30.01 TO STA. 234+32.65	STA. 231+44.02 TO STA. 233+40.40

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

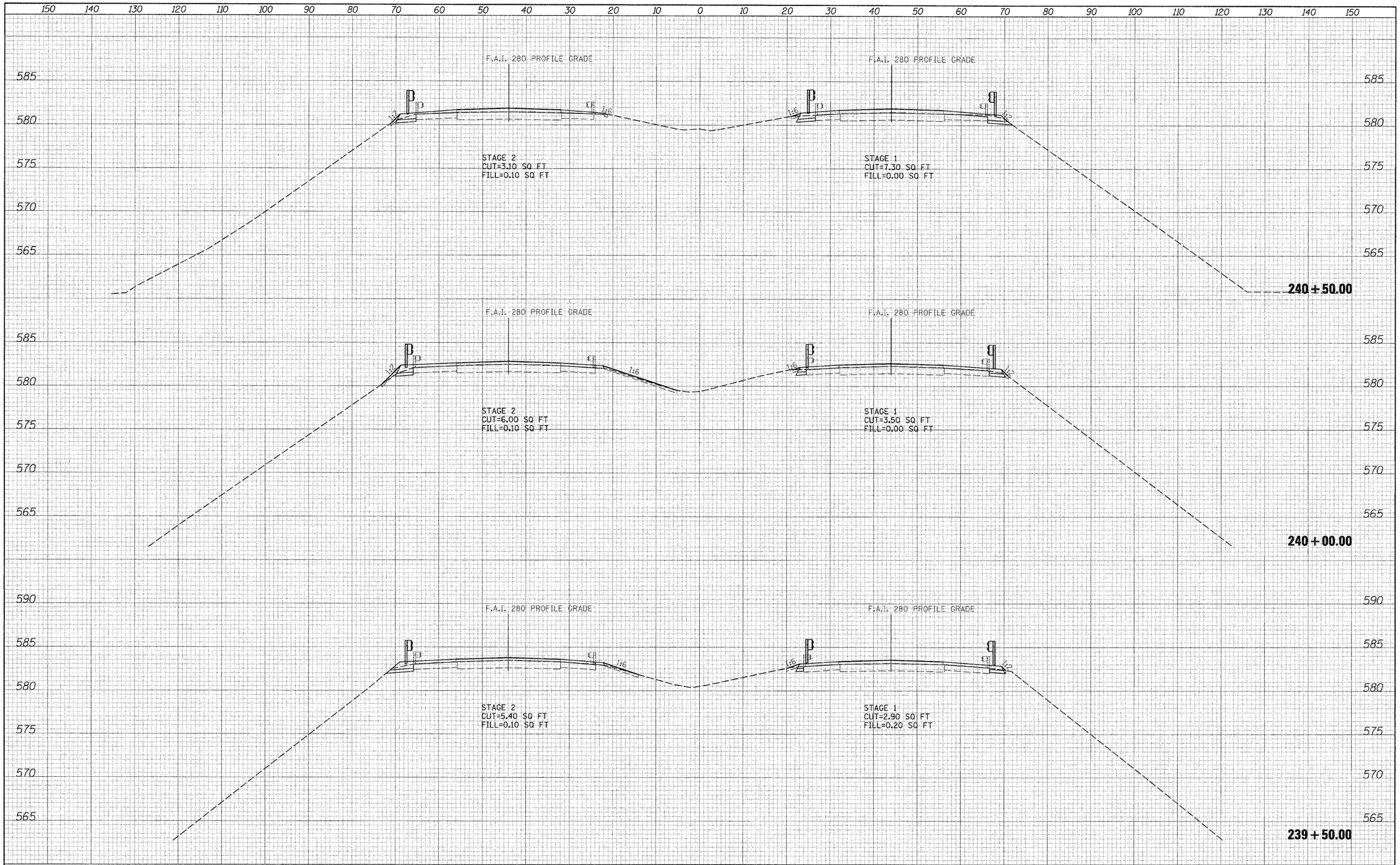
FILE NAME = D264815-sht-xssht_IAIS02.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_IAIS_02	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 OVER
IOWA INTERSTATE RAILWAY
CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 234+50.00 TO STA. 235+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	471
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY

SURVEYED	BY
PLOTTED	DATE
TRANSLATE	
AREAS	
NOTE BOOK	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY

SURVEYED	BY
PLOTTED	DATE
TRANSLATE	
AREAS	
NOTE BOOK	
AREAS CHECKED	
NO.	

FILE NAME = D264815-sht-xssht_I280_4TH.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_4TH_01	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 OVER 4TH STREET

SCALE: | SHEET NO. OF SHEETS | STA. 239+50.00 TO STA. 240+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1HB-1,1HB,1HB-1,1HB-2,VB,VB-1R	ROCK ISLAND	503	472
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

580 575 570 565 560

F.A.I. 280 PROFILE GRADE

STAGE 2
CUT=5.10 SQ FT
FILL=0.00 SQ FT

1:2 1:6

F.A.I. 280 PROFILE GRADE

STAGE 1
CUT=3.60 SQ FT
FILL=0.00 SQ FT

1:6 1:2

244+00.00

F.A.I. 280 PROFILE GRADE

STAGE 2
CUT=4.00 SQ FT
FILL=0.10 SQ FT

1:2 1:6

F.A.I. 280 PROFILE GRADE

STAGE 1
CUT=4.60 SQ FT
FILL=0.00 SQ FT

1:6 1:2

243+50.00

F.A.I. 280 PROFILE GRADE

STAGE 2
CUT=3.40 SQ FT
FILL=0.10 SQ FT

1:2 1:6

F.A.I. 280 PROFILE GRADE

STAGE 1
CUT=4.90 SQ FT
FILL=0.00 SQ FT

1:6 1:2

243+00.00

BRIDGE OMISSION

W.B. E.B.

STA. 240+87.85 TO STA. 242+46.77 STA. 240+87.85 TO STA. 242+46.77

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = D264815-sht-xssht_I280_4TH2.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_4TH_02	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 OVER 4TH STREET

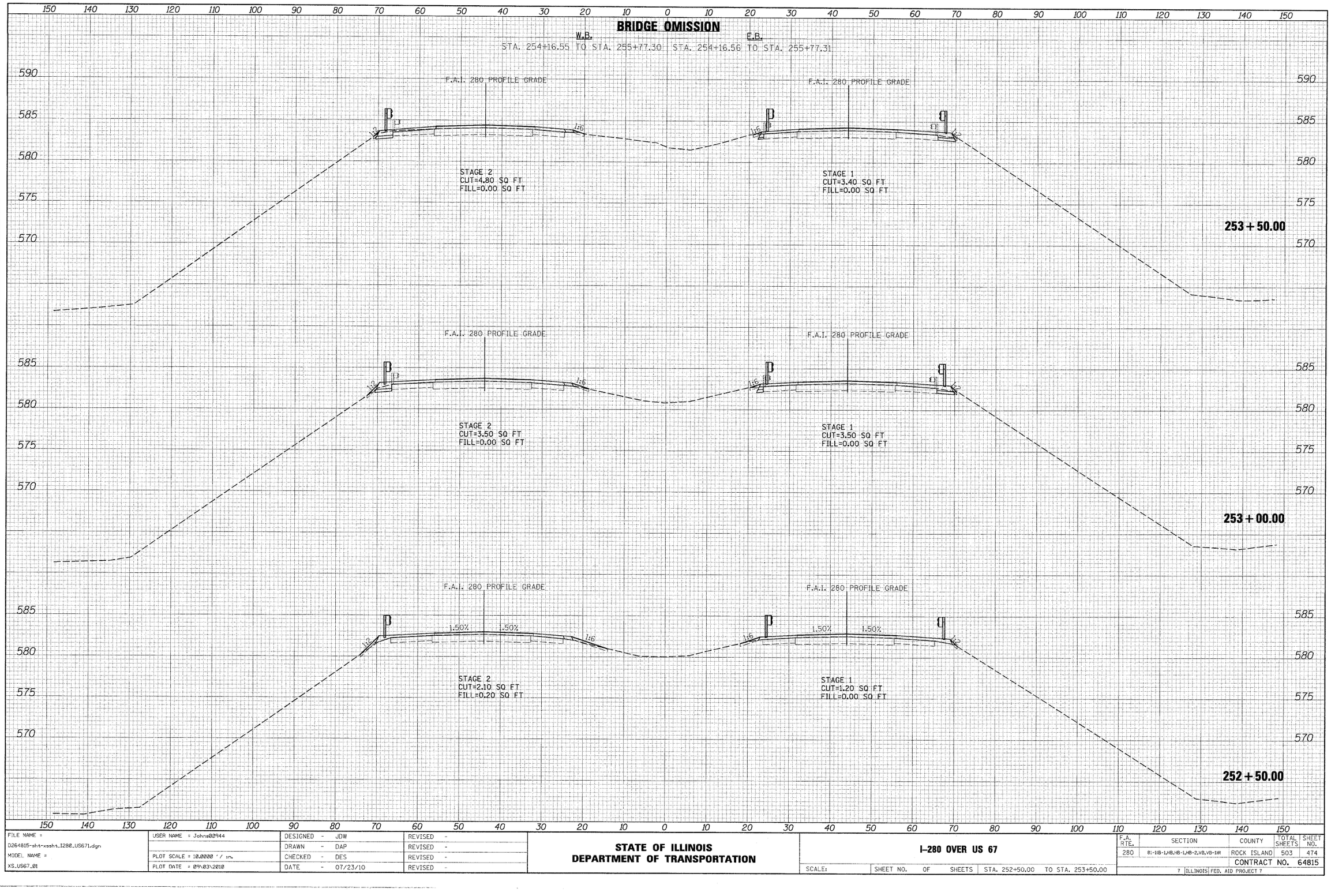
SCALE: | SHEET NO. OF SHEETS | STA. 243+00.00 TO STA. 244+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1XB-1,1HB,HB-1,1HB-2,VB,VB-1R	ROCK ISLAND	503	473
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			

BRIDGE OMISSION

W.B. STA. 254+16.55 TO STA. 255+77.30

E.B. STA. 254+16.56 TO STA. 255+77.31



FINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED				
PLOTTED				
TOPO PLOTTED				
AREAS				
AREAS CHECKED				

ORIGINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED				
PLOTTED				
TOPO PLOTTED				
AREAS				
AREAS CHECKED				

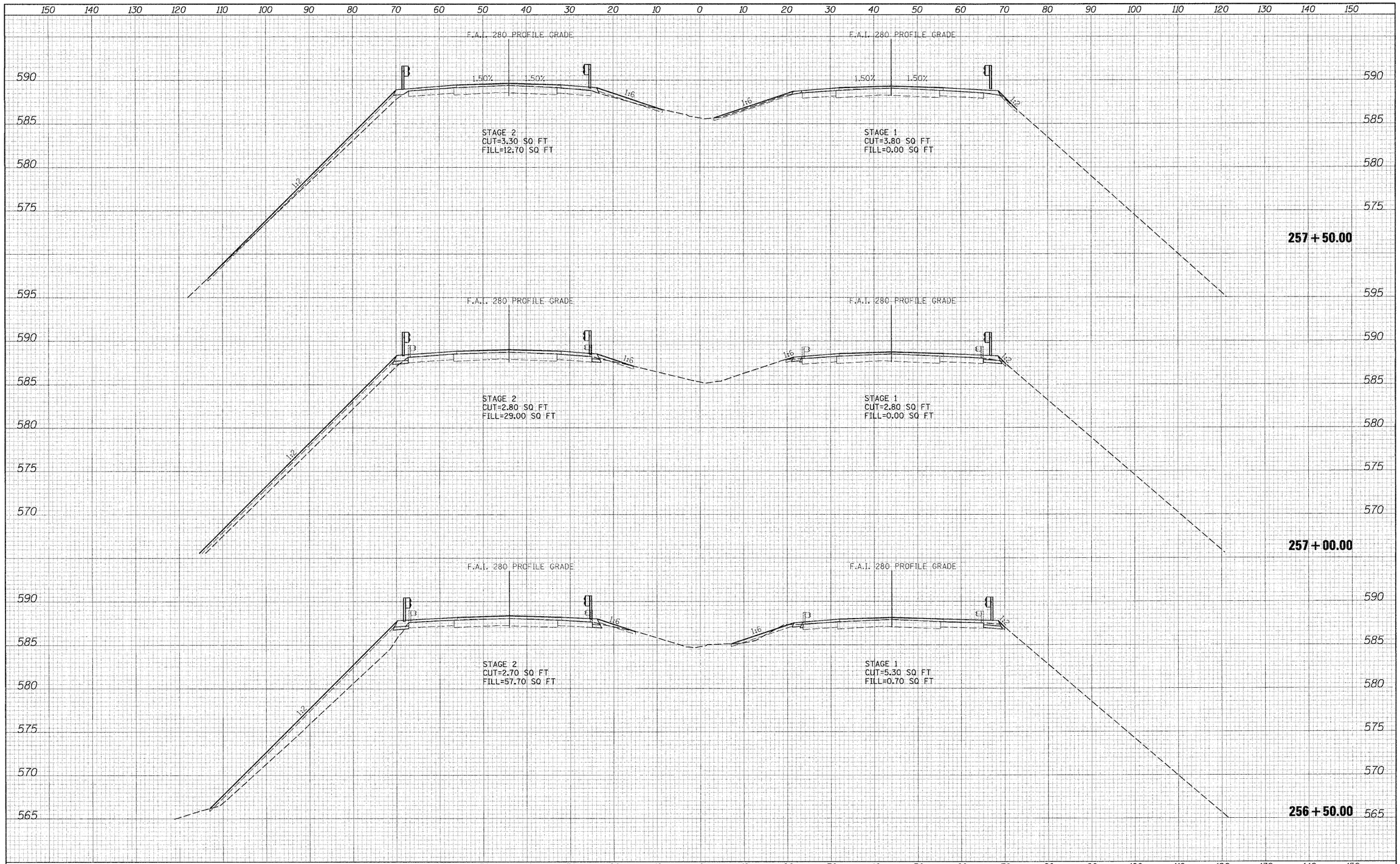
FILE NAME = D264815-sht-xssht_1280_US67I.dgn	USER NAME = Johns02944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_US67_01	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 29\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 OVER US 67

SCALE: | SHEET NO. OF SHEETS | STA. 252+50.00 TO STA. 253+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1XB-1,WB,WB-1,WB-2,VB,VB-1R	ROCK ISLAND	503	474
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			

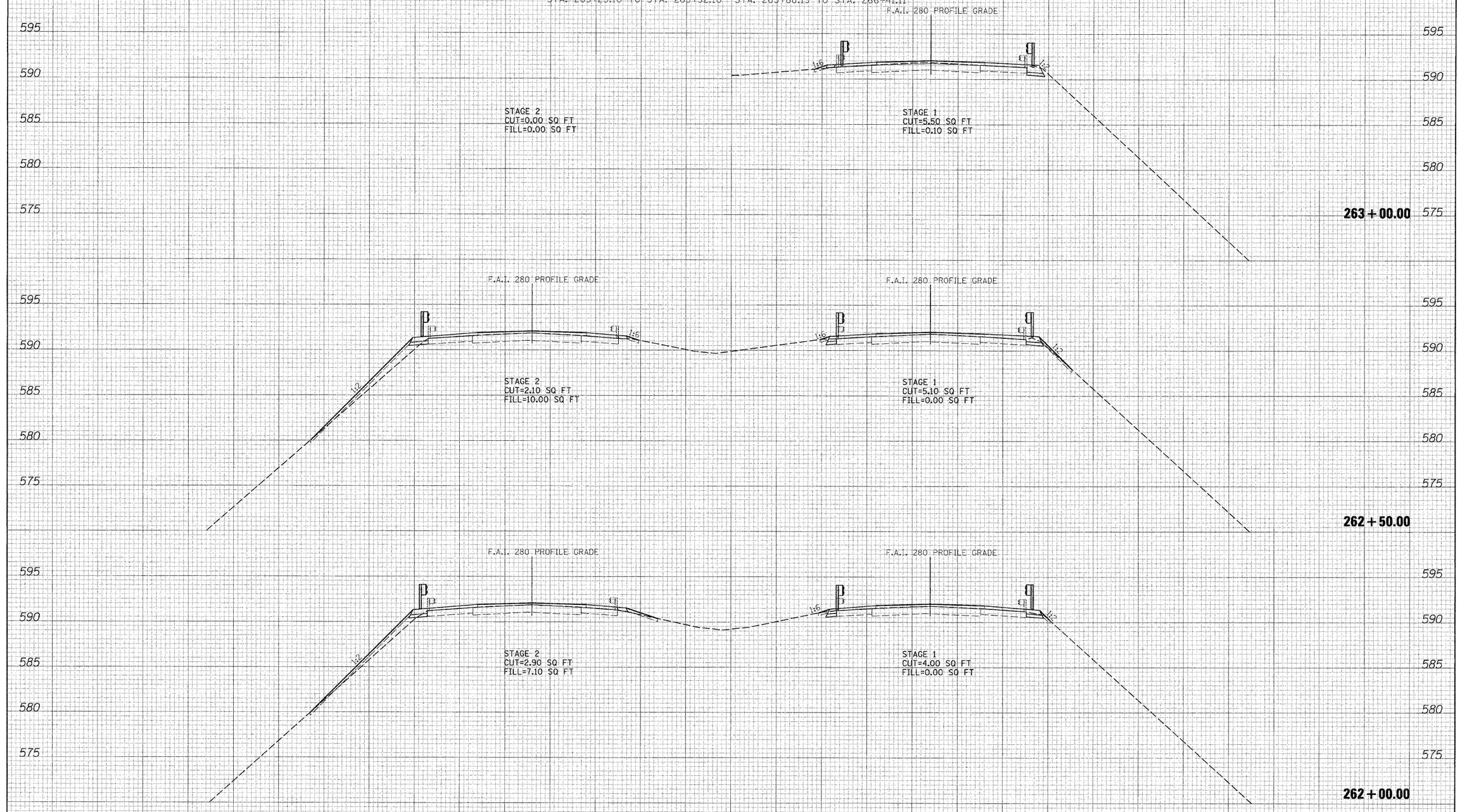

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
590
585
580
575
595
570
565
F.A.I. 280 PROFILE GRADE
1.50%
1.50%
1:6
1:2
STAGE 2
CUT=3.30 SQ FT
FILL=12.70 SQ FT
STAGE 1
CUT=3.80 SQ FT
FILL=0.00 SQ FT
257+50.00
STAGE 2
CUT=2.80 SQ FT
FILL=29.00 SQ FT
STAGE 1
CUT=2.80 SQ FT
FILL=0.00 SQ FT
257+00.00
STAGE 2
CUT=2.70 SQ FT
FILL=57.70 SQ FT
STAGE 1
CUT=5.30 SQ FT
FILL=0.70 SQ FT
256+50.00

| | | |

BRIDGE OMISSION

W.B. STA. 263+23.10 TO STA. 265+92.10

E.B. STA. 263+68.19 TO STA. 266+41.11



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRIANGULATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRIANGULATE — AREAS — AREAS CHECKED — BY — DATE

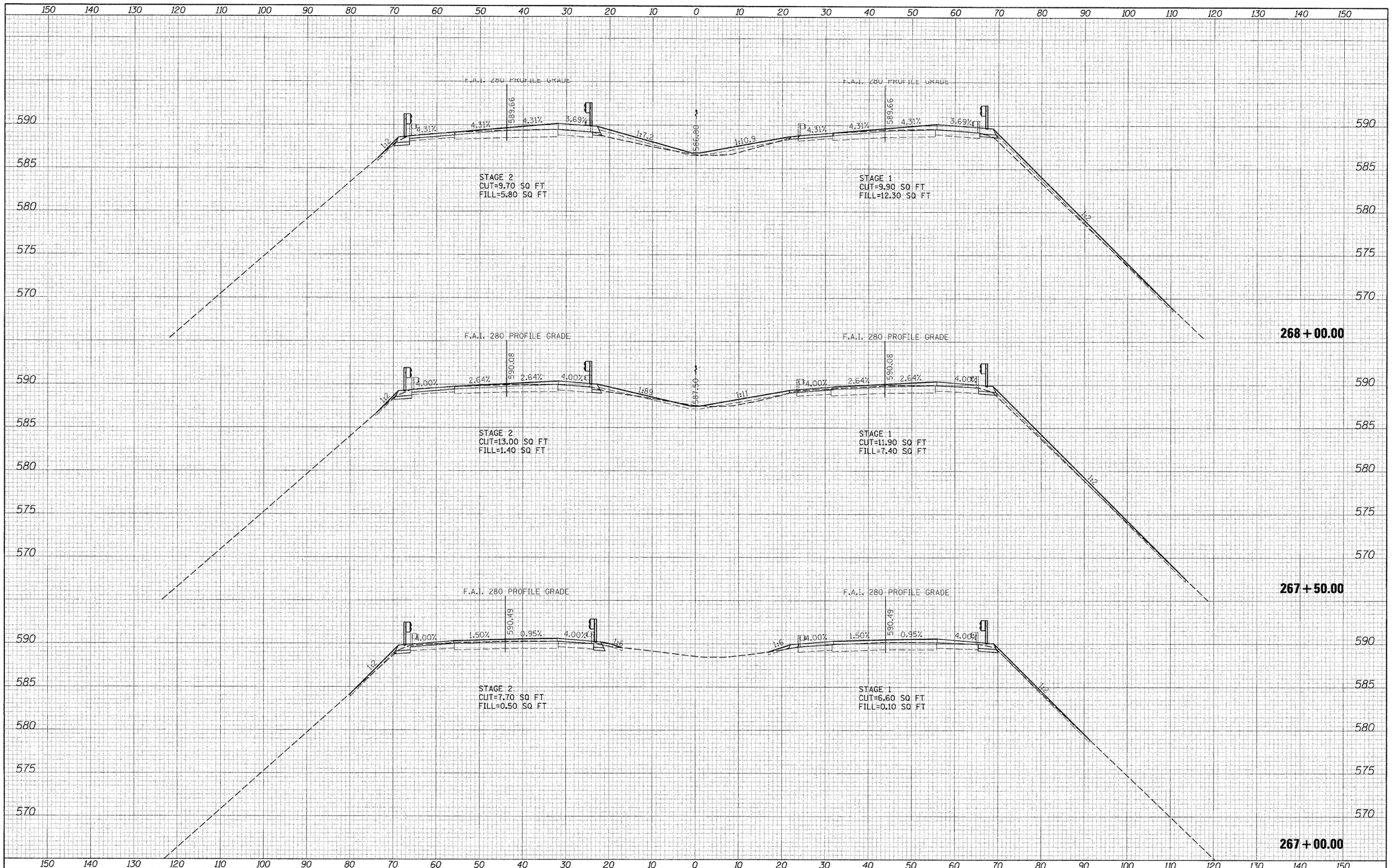
FILE NAME = D264815-sht-xssht_CRIPRRL.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_CRIPRR_01	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 OVER CRI & PRR RAILROAD

SCALE: | SHEET NO. OF SHEETS | STA. 262+00.00 TO STA. 263+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1IB-1,HB,HB-1,HB-2,VB,VB-1R	ROCK ISLAND	503	476
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

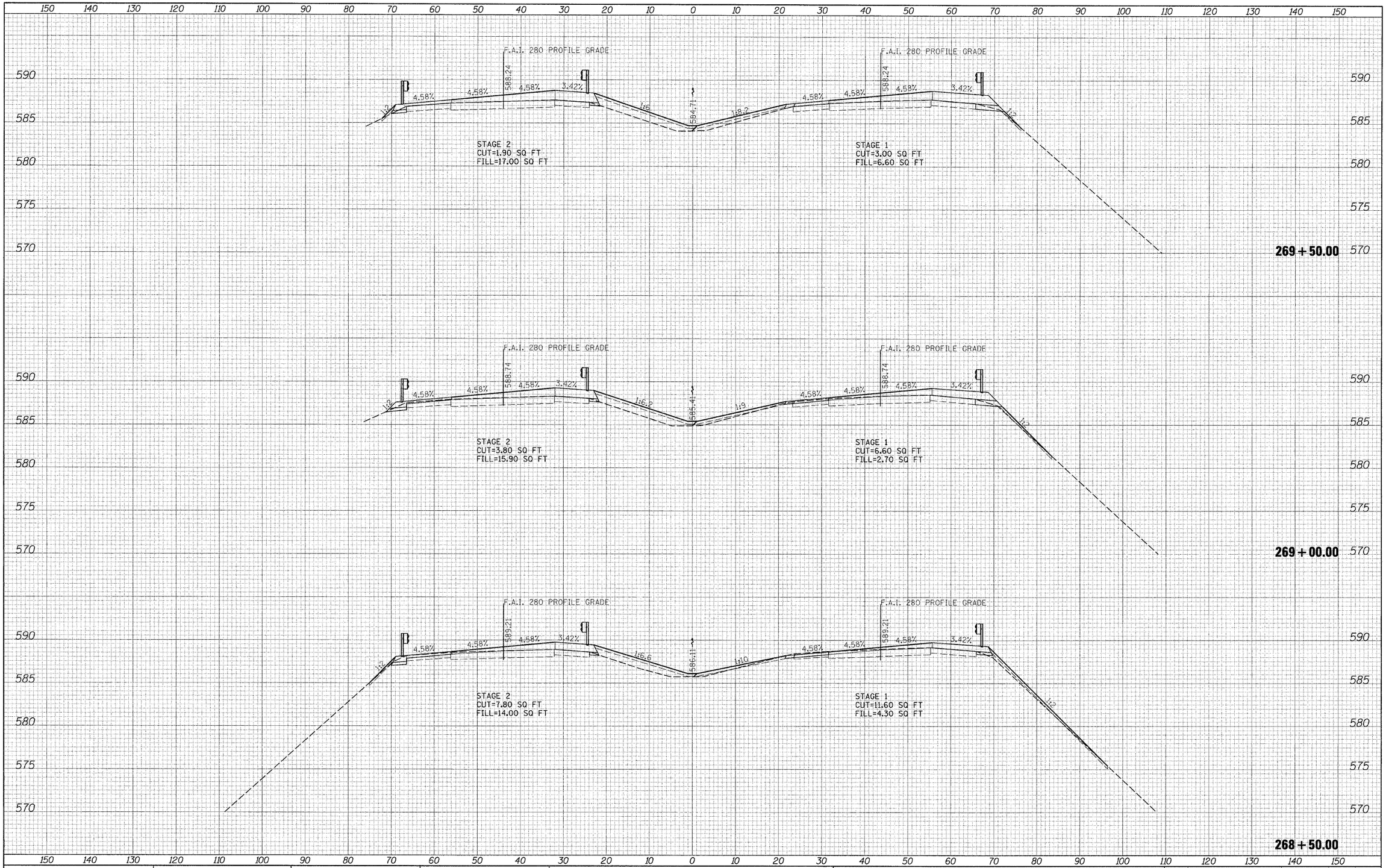
FILE NAME = D264815-sht-xssht_CRIPRR2.dgn	USER NAME = Johns00344	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME =	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
XS_CRIPRR_02	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 OVER CRI & PRR RAILROAD

SCALE: | SHEET NO. OF SHEETS | STA. 267+00.00 TO STA. 268+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1KB-1,1KB,4B-1,1KB-2,2B,2B-1R	ROCK ISLAND	503	477
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TRIANGULATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TRIANGULATE
AREAS
AREAS CHECKED
BY
DATE

FILE NAME = 0264815-sht-xssht_I280I.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_I280_01_West	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 268+50.00 TO STA. 269+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	478
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

590 585 580 575 570

F.A.I. 280 PROFILE GRADE

4.58% 4.58% 4.58% 3.42%

1:2 1:6

562.62

1:8

4.58% 4.58% 4.58% 3.42%

1:2

STAGE 2
CUT=0.10 SQ FT
FILL=25.70 SQ FT

STAGE 1
CUT=0.40 SQ FT
FILL=12.50 SQ FT

271 + 00.00

F.A.I. 280 PROFILE GRADE

4.56% 4.58% 4.58% 3.42%

1:2 1:6

563.32

1:8

4.58% 4.58% 4.58% 3.42%

1:2

STAGE 2
CUT=0.50 SQ FT
FILL=19.30 SQ FT

STAGE 1
CUT=0.40 SQ FT
FILL=8.20 SQ FT

270 + 50.00

F.A.I. 280 PROFILE GRADE

4.58% 4.58% 4.58% 3.42%

1:2 1:6

584.02

1:8

4.58% 4.58% 4.58% 3.42%

1:2

STAGE 2
CUT=0.20 SQ FT
FILL=25.00 SQ FT

STAGE 1
CUT=0.50 SQ FT
FILL=7.80 SQ FT

270 + 00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED/LTE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED/LTE — AREAS — AREAS CHECKED — BY — DATE

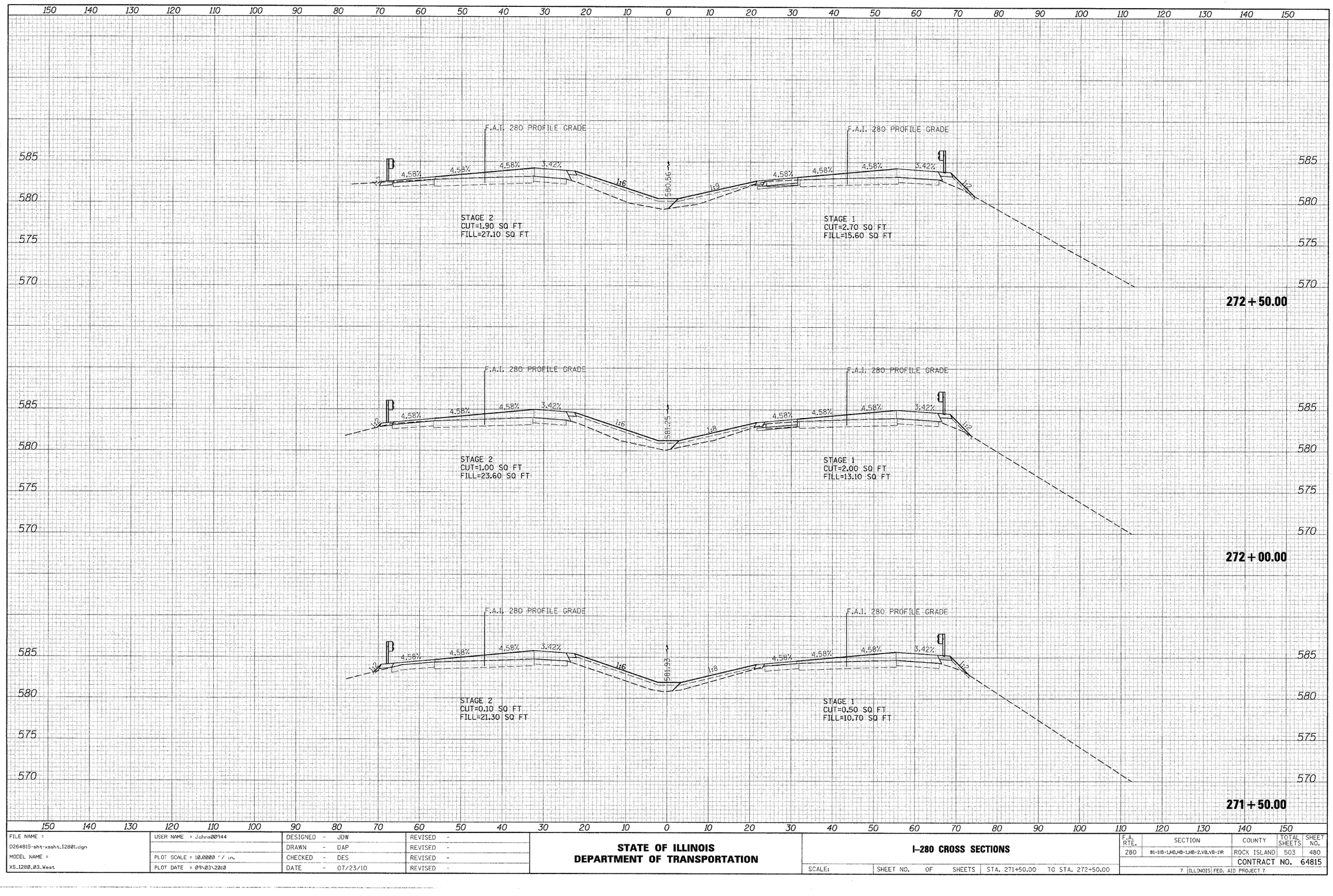
FILE NAME =	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
D264815-sht-xssht_I280I.dgn		DRAWN - DAP	REVISED -
MODEL NAME =	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
XS_I280.02.West	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 270+00.00 TO STA. 271+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	479
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	SUBMITTED	
NO.	AREAS	
	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	SUBMITTED	
NO.	AREAS	
	AREAS CHECKED	

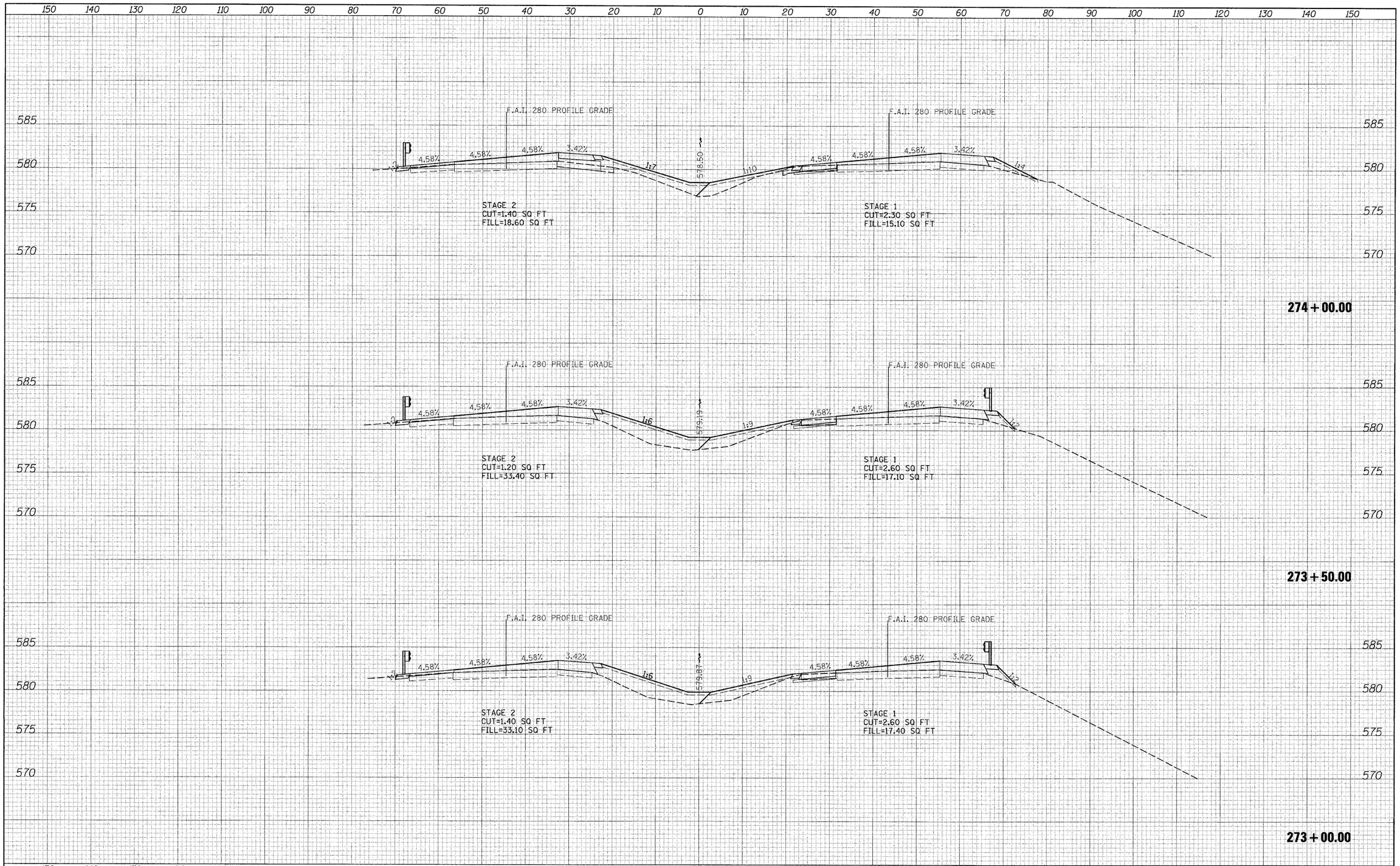
FILE NAME = D264815-sht-xssht_12801.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_1280.03_West	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 271+50.00 TO STA. 272+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	480
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRANSMITTED — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRANSMITTED — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = D264815-sht-xssht_I280I.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_I280.24_West	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 29\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

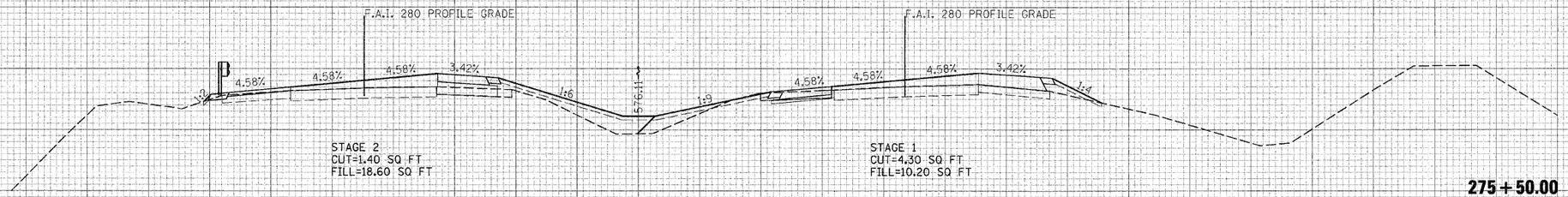
I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 273+00.00 TO STA. 274+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	481
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

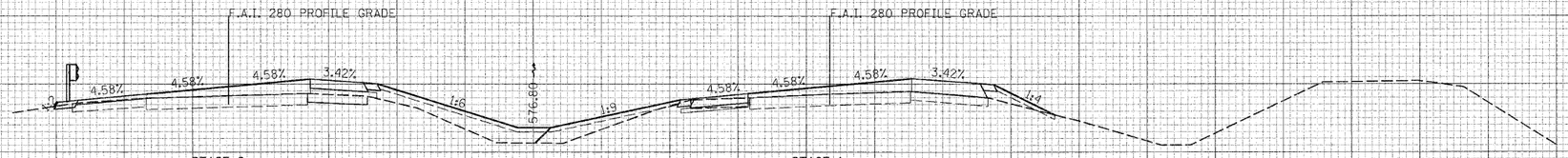
585 580 575 570



STAGE 2
CUT=1.40 SQ FT
FILL=18.60 SQ FT

STAGE 1
CUT=4.30 SQ FT
FILL=10.20 SQ FT

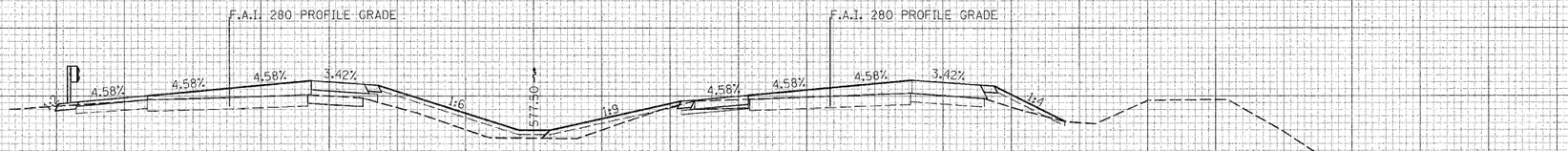
275+50.00



STAGE 2
CUT=1.30 SQ FT
FILL=20.50 SQ FT

STAGE 1
CUT=3.00 SQ FT
FILL=13.10 SQ FT

275+00.00



STAGE 2
CUT=1.30 SQ FT
FILL=17.80 SQ FT

STAGE 1
CUT=3.40 SQ FT
FILL=10.80 SQ FT

274+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FILE NAME = D264815-sht-xssht_I280I.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME =	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
XS_I280_05_West	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

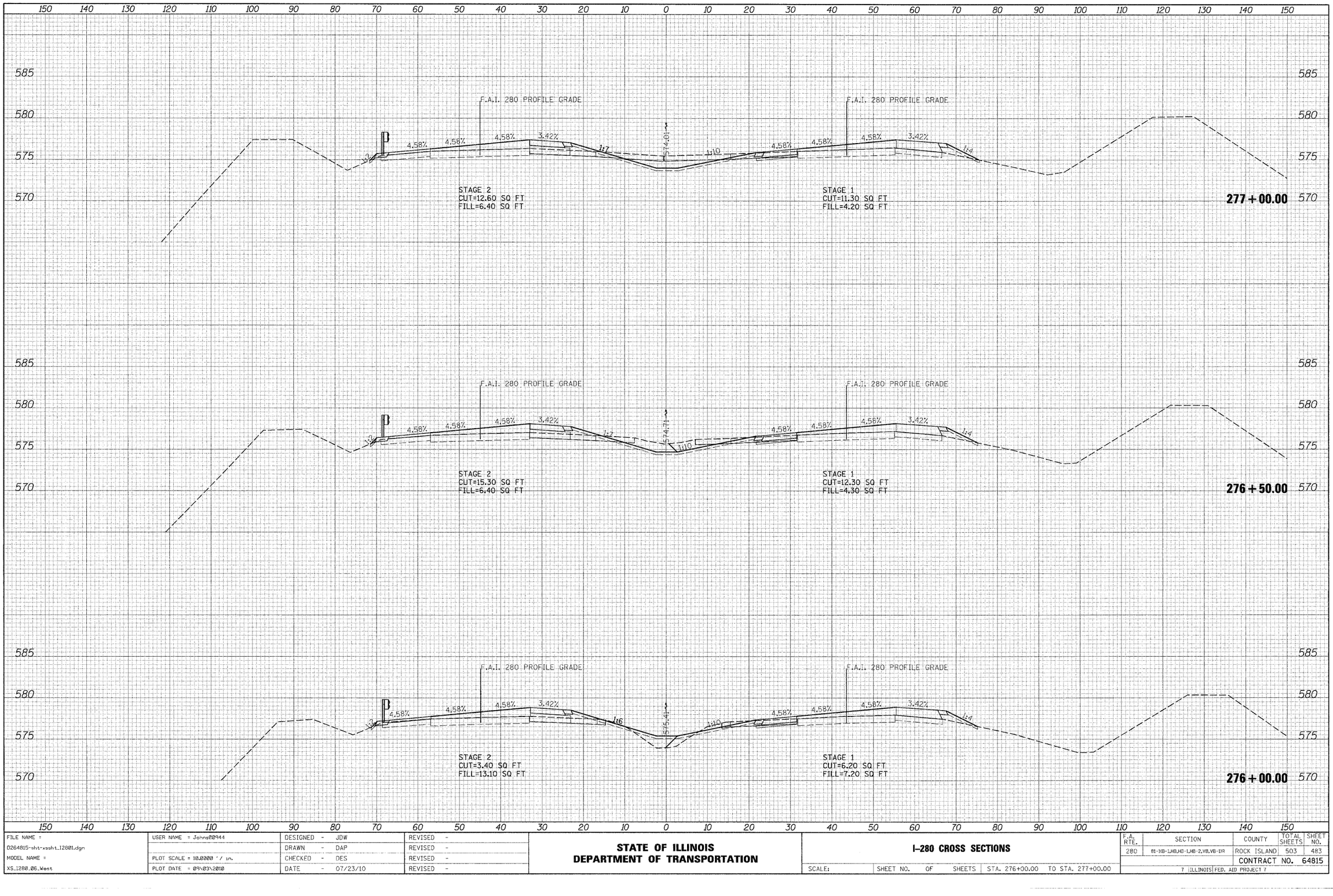
I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 274+50.00 TO STA. 275+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1IB-1,HB,MB-1,MB-2,VB,VB-1IR	ROCK ISLAND	503	482
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			

FINAL SURVEY — NOTE BOOK — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE — NO.

ORIGINAL SURVEY — NOTE BOOK — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE — NO.



FINAL SURVEY

NO.	NOTE BOOK	AREAS CHECKED	BY	DATE
	SURVEYED			
	PLOTTED			
	TYPED			
	AREAS			

ORIGINAL SURVEY

NO.	NOTE BOOK	AREAS CHECKED	BY	DATE
	SURVEYED			
	PLOTTED			
	TYPED			
	AREAS			

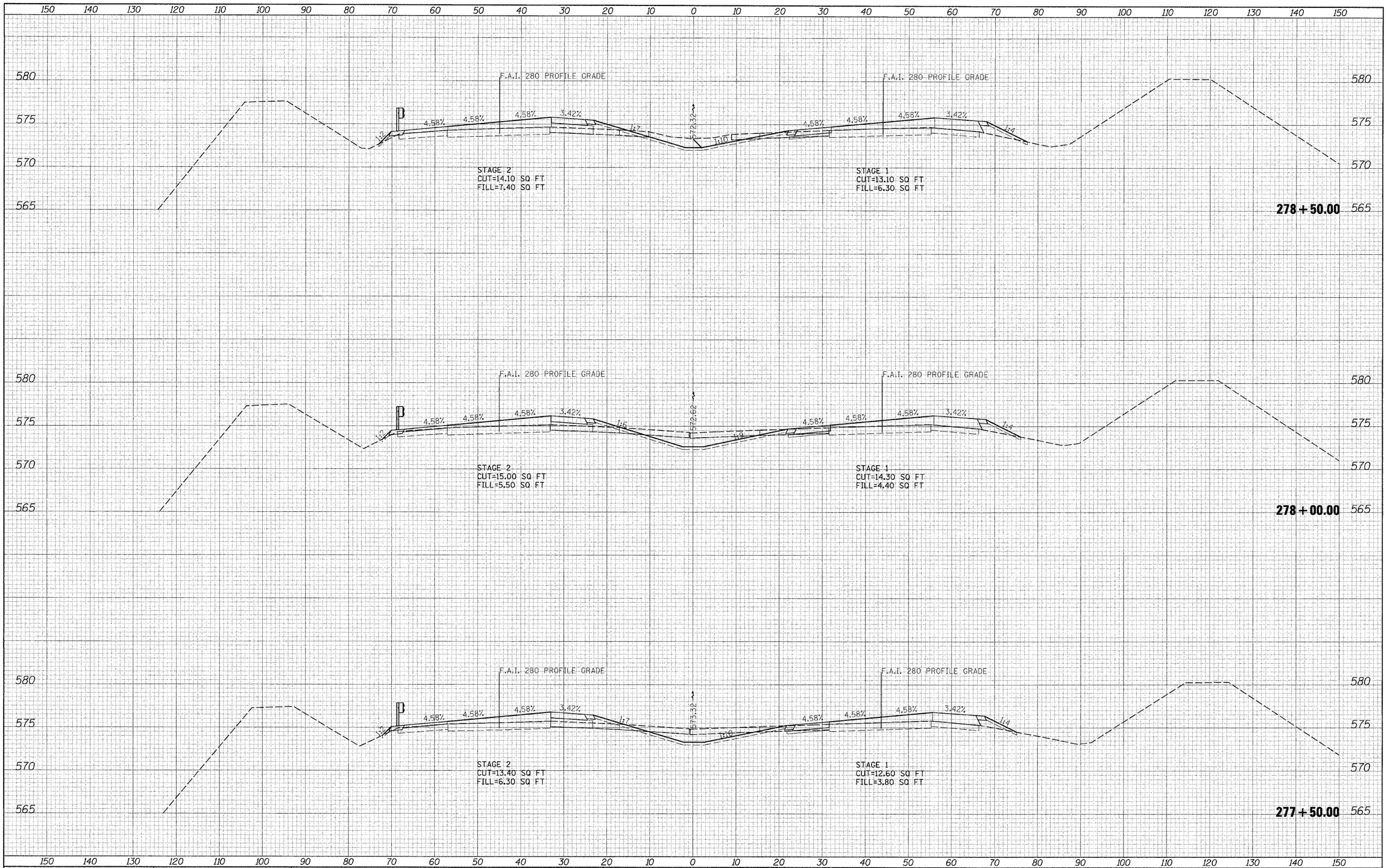
FILE NAME =	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
D264815-sht-xssht_I280I.dgn		DRAWN - DAP	REVISED -
MODEL NAME =	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
XS_I280.06_West	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 276+00.00 TO STA. 277+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1KB-1,HB,HB-1,HB-2,VB,VB-DR	ROCK ISLAND	503	483
		CONTRACT NO. 64815		
	7 ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY
SURVEYED
PLOTTED
TRIANGULATE
NOTE BOOK
AREAS
NO.
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
SURVEYED
PLOTTED
TRIANGULATE
NOTE BOOK
AREAS
NO.
AREAS CHECKED
BY
DATE

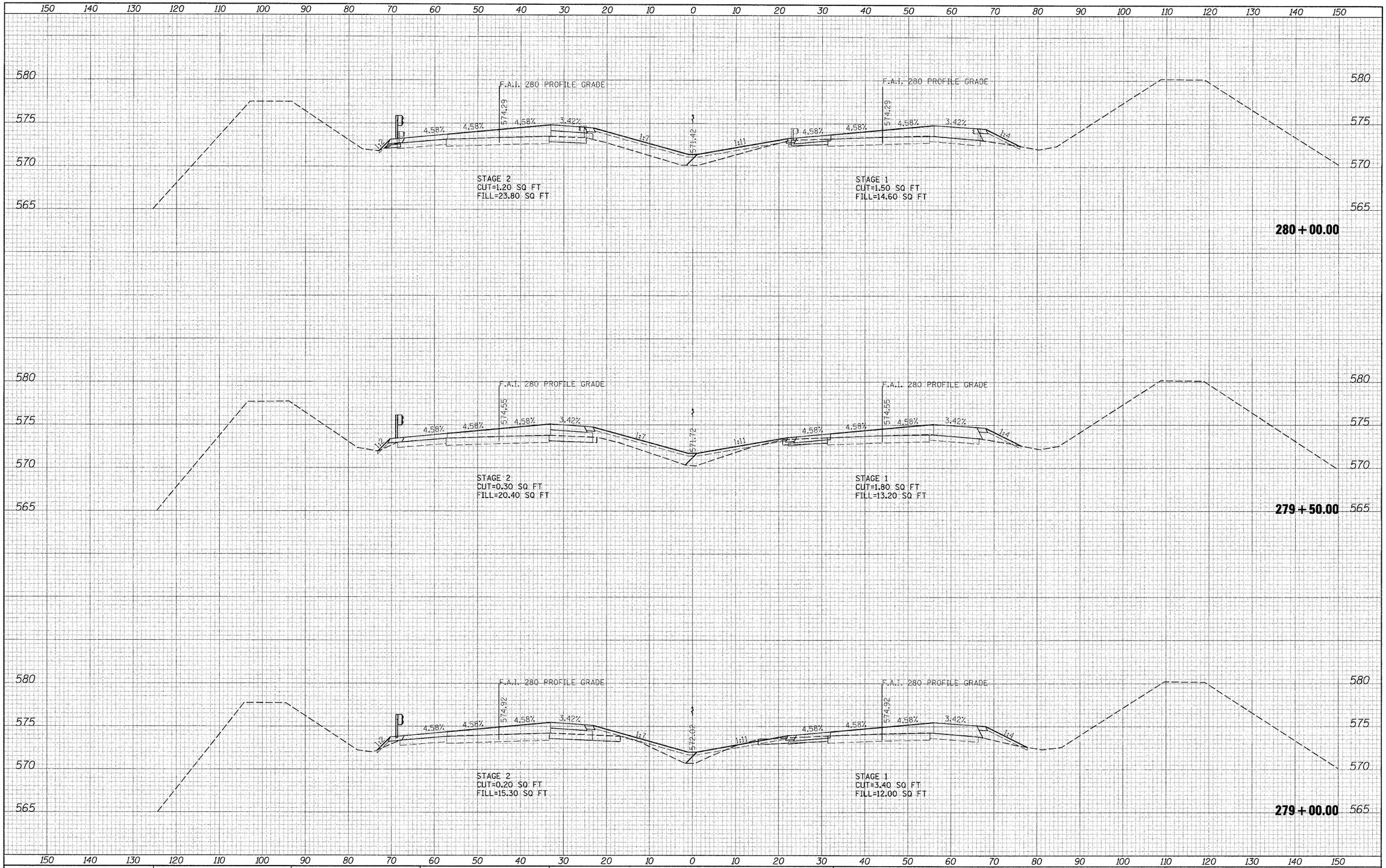
FILE NAME = D264815-sht-xsht_12801.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_1280_07_West	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 277+50.00 TO STA. 278+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	484
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY	DATE	BY
SURVEYED		
PLOTTED		
NOTE BOOK	TOTAL AREAS	
NO.	AREAS CHECKED	

ORIGINAL SURVEY	DATE	BY
SURVEYED		
PLOTTED		
NOTE BOOK	TOTAL AREAS	
NO.	AREAS CHECKED	

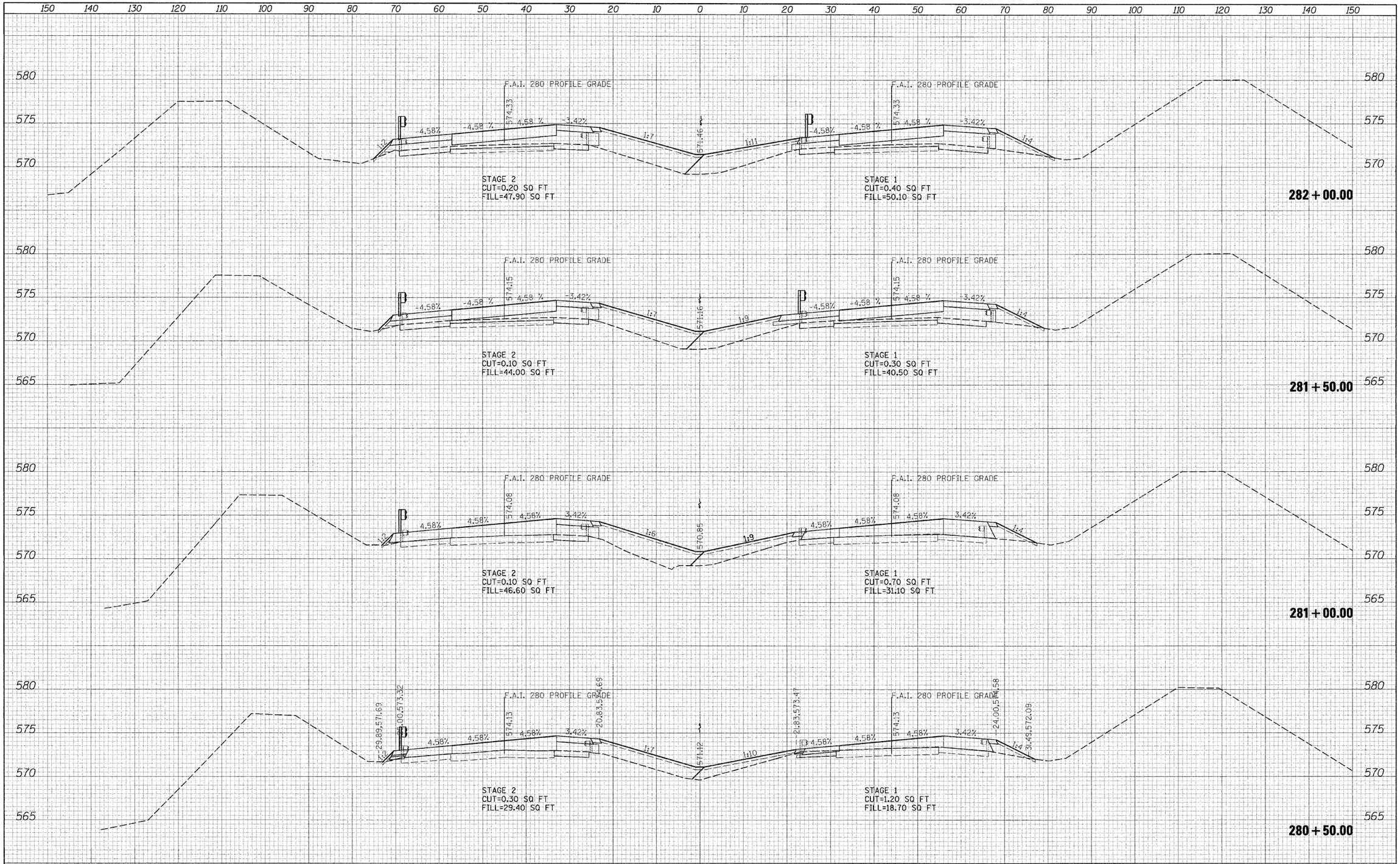
FILE NAME = D264815-sht-xssht_I280l.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_I280_08_West	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 279+00.00 TO STA. 280+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	485
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRANSMITTED — AREAS — AREAS CHECKED — BY — DATE

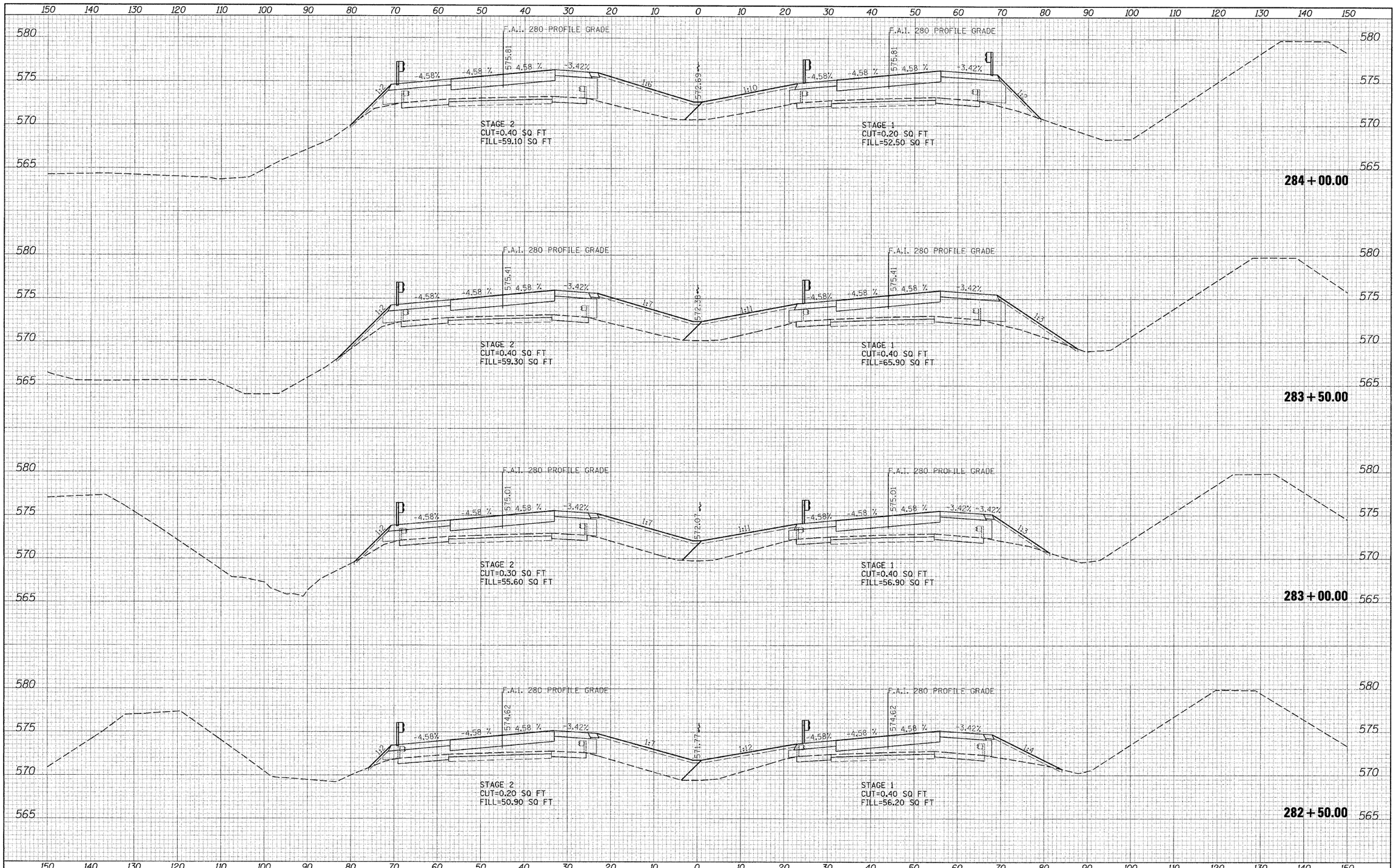
ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRANSMITTED — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = D264815-sht-xssht_I280I.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
		DRAWN - DAP	REVISED -	
MODEL NAME = XS_I280_09_West	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -	
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -	

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 280+50.00 TO STA. 282+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,NB,NB-1,NB-2,VB,VB-1)R	ROCK ISLAND	503	486
		CONTRACT NO. 64815		
7	ILLINOIS	FED. AID PROJECT 7		



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = D264815-sht-xssht_I280l.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_I280_10_West	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 282+50.00 TO STA. 284+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1IB-1,4B,4B-1,4B-2,V8,V8-1R	ROCK ISLAND	503	487
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			

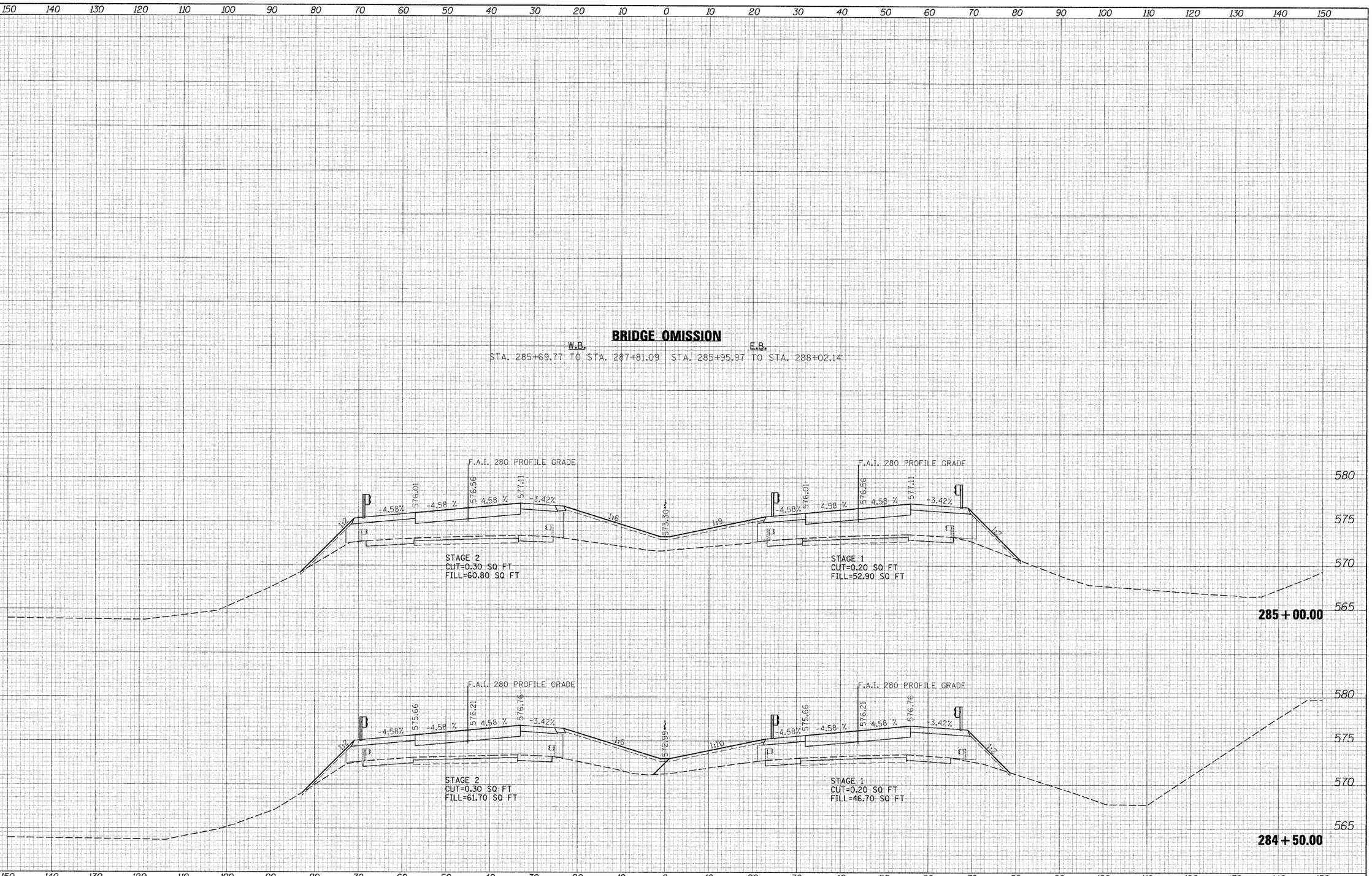
FINAL SURVEY	NOTE BOOK	SURVEYED	PLOTTED	TYPICALS	AREAS	AREAS CHECKED	BY	DATE
NO.								

ORIGINAL SURVEY	NOTE BOOK	SURVEYED	PLOTTED	TYPICALS	AREAS	AREAS CHECKED	BY	DATE
NO.								

BRIDGE OMISSION

W.B. STA. 285+69.77 TO STA. 287+81.09

E.B. STA. 285+95.97 TO STA. 288+02.14



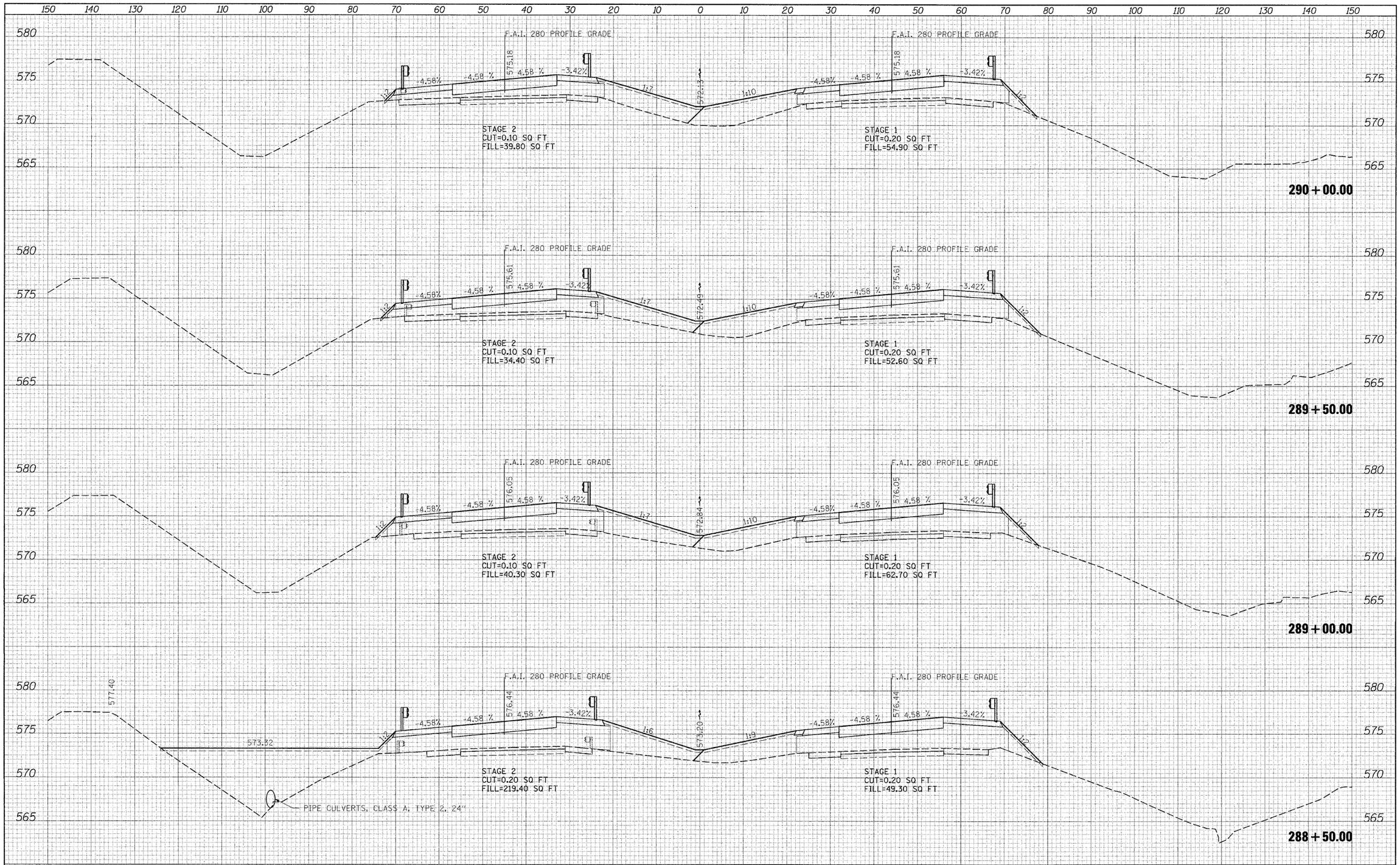
FILE NAME =	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
D264815-sht-xssht_12801.dgn		DRAWN - DAP	REVISED -
MODEL NAME =	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
XS_1280_11_West	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 284+50.00 TO STA. 285+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1HB-1,HB,HB-1,HB-2,VB,VB-1JR	ROCK ISLAND	503	488
		CONTRACT NO. 64815		
7 ILLINOIS FED. AID PROJECT 7				



FINAL SURVEY	ORIGINAL SURVEY	BY	DATE
SURVEYED	SURVEYED		
PLOTTED	PLOTTED		
TRIANGULATE	TRIANGULATE		
NOTE BOOK	AREAS		
NO.	AREAS CHECKED		

FILE NAME = D264815-sht-xssht_I280Z.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_I280_01_East	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 288+50.00 TO STA. 290+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1VB-1,1HB,HB-1,1HB-2,VB,VB-1,1R	ROCK ISLAND	503	489
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

580 575 570 565

F.A.I. 280 PROFILE GRADE

573.39 | -4.58% | 4.58% | 4.58% | 3.42% | 1:7 | 570.71 | 1:12 | -4.58% | 4.58% | 573.39 | 4.58% | 3.42% | 573.32 | 574.24

STAGE 2
CUT=0.00 SQ FT
FILL=40.20 SQ FT

STAGE 1
CUT=0.60 SQ FT
FILL=362.70 SQ FT

PIPE CULVERTS, CLASS A, TYPE 2, 30"
564.53

292+00.00

F.A.I. 280 PROFILE GRADE

573.88 | -4.58% | 4.58% | 4.58% | 3.42% | 1:7 | 571.07 | 1:12 | -4.58% | 4.58% | 573.88 | 4.58% | 3.42% | 1:2

STAGE 2
CUT=0.20 SQ FT
FILL=46.80 SQ FT

STAGE 1
CUT=0.30 SQ FT
FILL=57.90 SQ FT

291+50.00

F.A.I. 280 PROFILE GRADE

1:2 | -4.58% | -4.58 % | 574.31 | 4.58 % | 3.42% | 1:7 | 571.42 | 1:11 | -4.58% | -4.58 % | 574.31 | 4.58 % | 3.42% | 1:2

STAGE 2
CUT=0.10 SQ FT
FILL=38.20 SQ FT

STAGE 1
CUT=0.20 SQ FT
FILL=52.20 SQ FT

291+00.00

F.A.I. 280 PROFILE GRADE

1:2 | -4.58% | -4.58 % | 574.75 | 4.58 % | 3.42% | 1:7 | 571.78 | 1:11 | -4.58% | -4.58 % | 574.75 | 4.58 % | 3.42% | 1:2

STAGE 2
CUT=0.20 SQ FT
FILL=39.20 SQ FT

STAGE 1
CUT=0.20 SQ FT
FILL=54.00 SQ FT

290+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TYPED — AREAS — AREAS CHECKED — BY — DATE

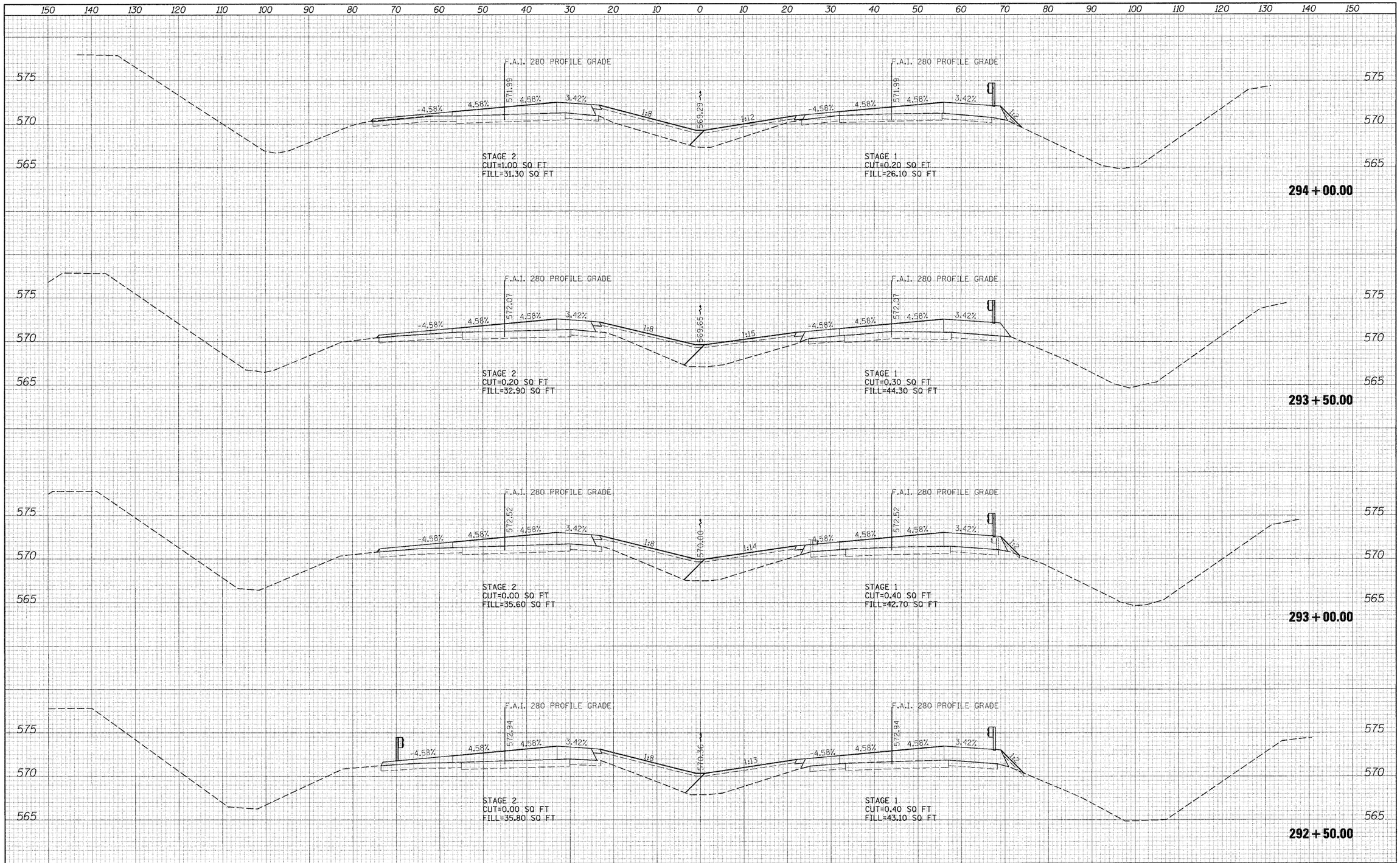
FILE NAME = D264815-sht-xssht_I280Z.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME =	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
XS_I280.02_East	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 290+50.00 TO STA. 292+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	490
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY NOTE BOOK NO.
SURVEYED
PLOTTED
TRACED
AREAS
AREAS CHECKED
BY
DATE

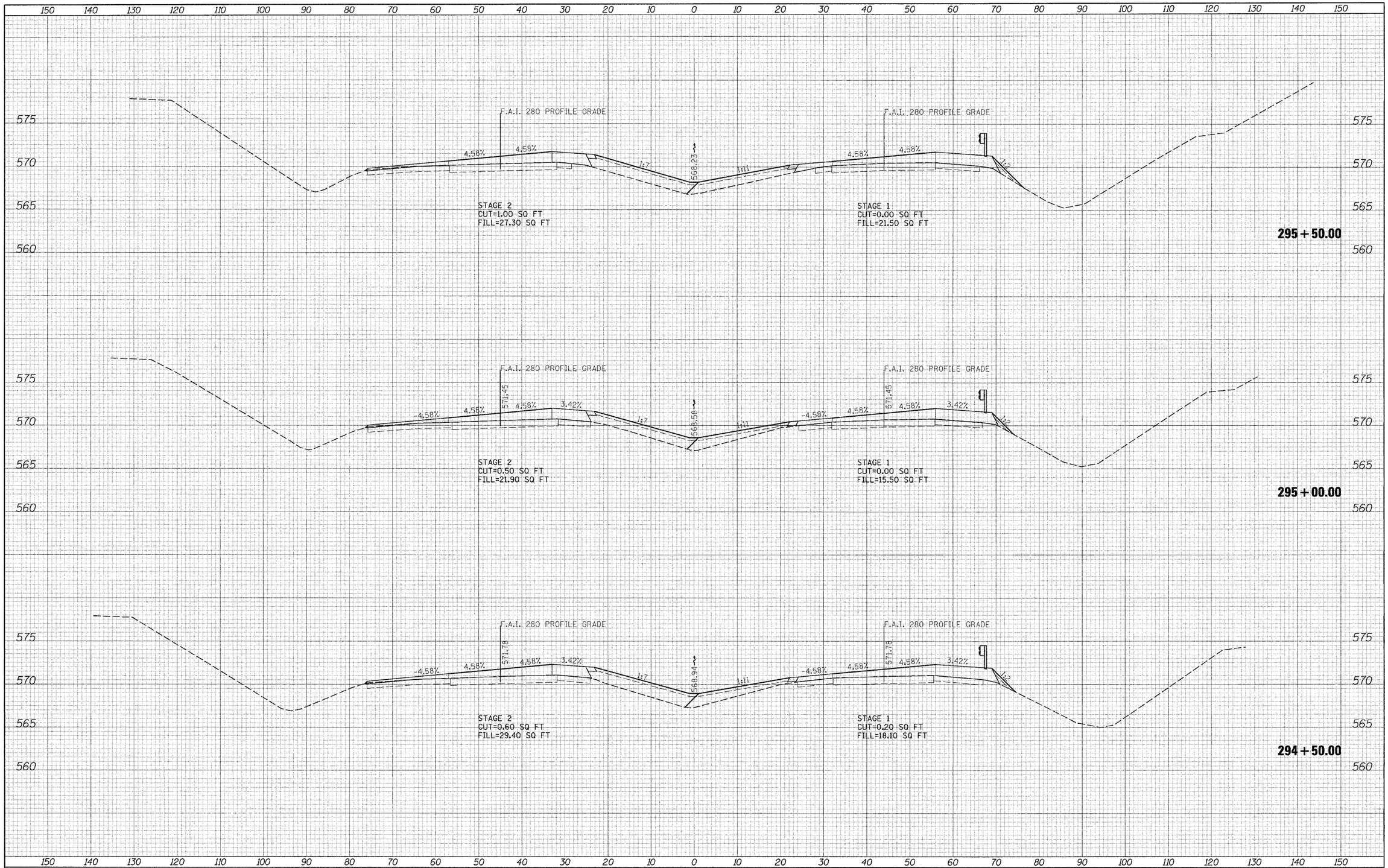
ORIGINAL SURVEY NOTE BOOK NO.
SURVEYED
PLOTTED
TRACED
AREAS
AREAS CHECKED
BY
DATE

FILE NAME = D264815-sht-xssht_12802.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
		DRAWN - DAP	REVISED -	
MODEL NAME = XS_1200_03_East	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -	
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -	

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 292+50.00 TO STA. 294+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1IB-1,HB,WB-1,HB-2,VB,VB-1R	ROCK ISLAND	503	491
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRIANGULATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TRIANGULATE — AREAS — AREAS CHECKED — BY — DATE

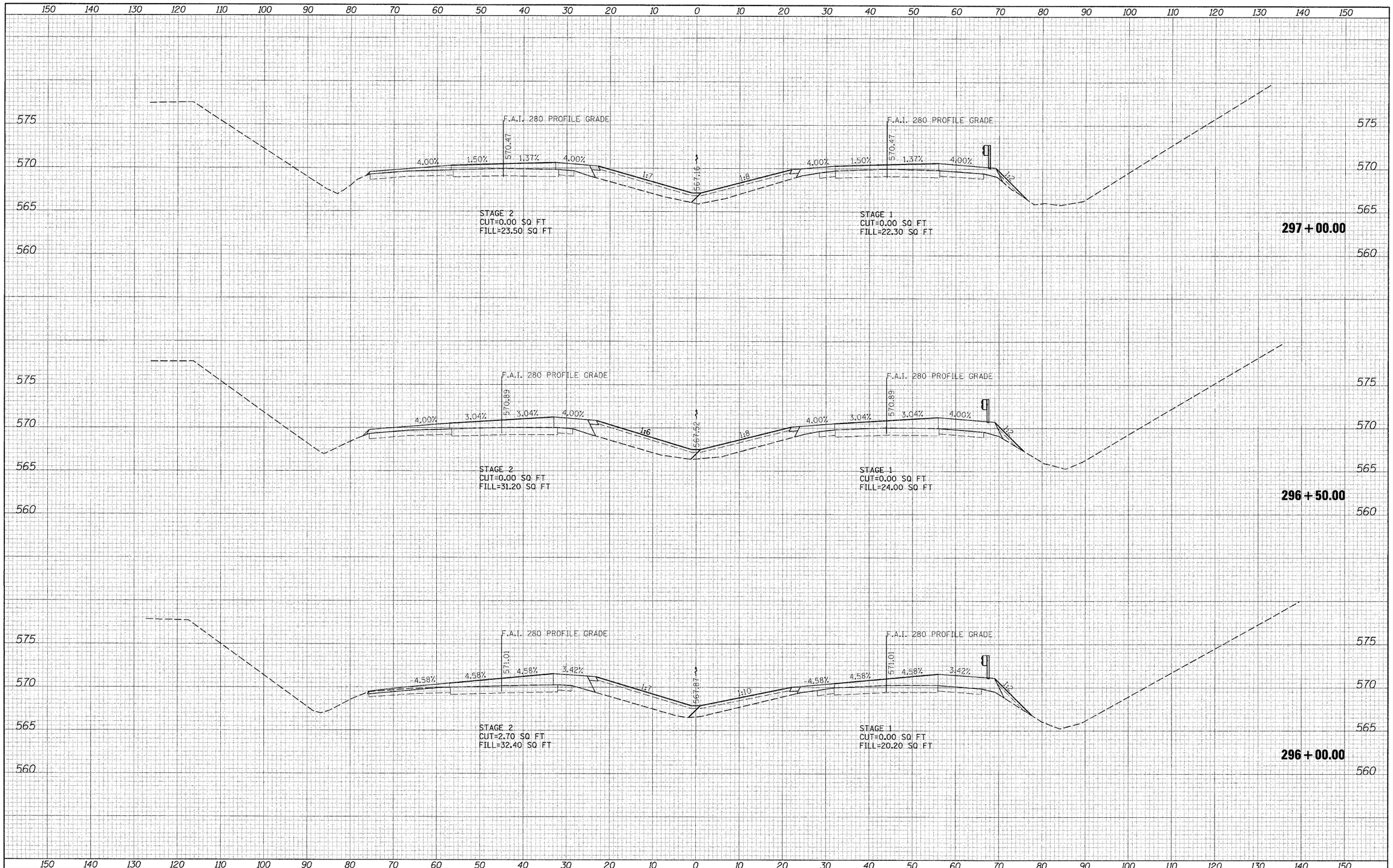
FILE NAME = D2G4815-sht-xssht_12802.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_1280_04_East	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 294+50.00 TO STA. 295+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	492
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
NO.	AREAS	AREAS CHECKED

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
NO.	AREAS	AREAS CHECKED

FILE NAME = D264815-sht-xsht_I2802.dgn	USER NAME = Johns00944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_I280_05_East	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 8\03\2010	DATE - 07/23/10	REVISED -

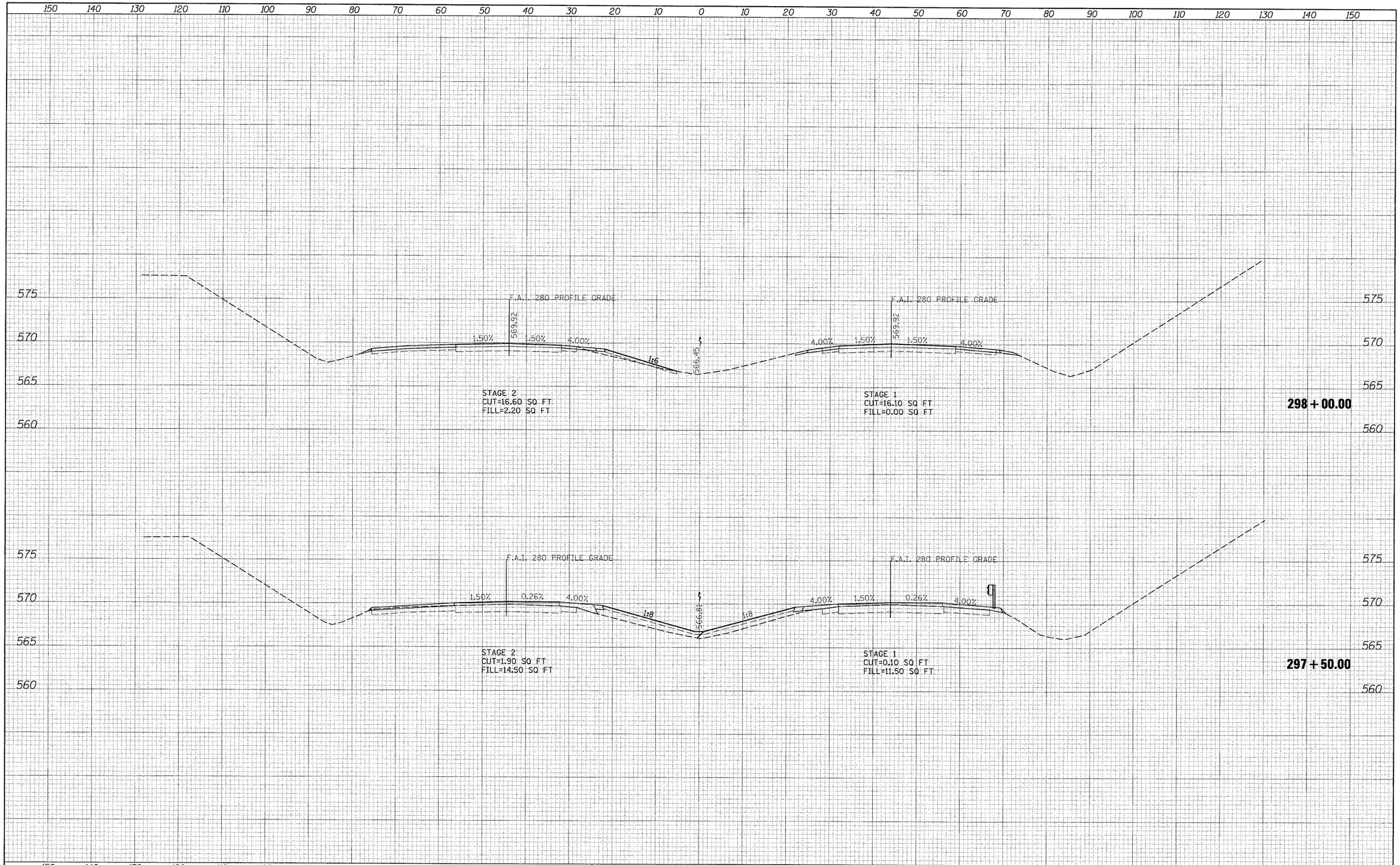
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 296+00.00 TO STA. 297+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	493
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TOPSOIL AREAS	
NO.	AREAS CHECKED	



ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK	TOPSOIL AREAS	
NO.	AREAS CHECKED	

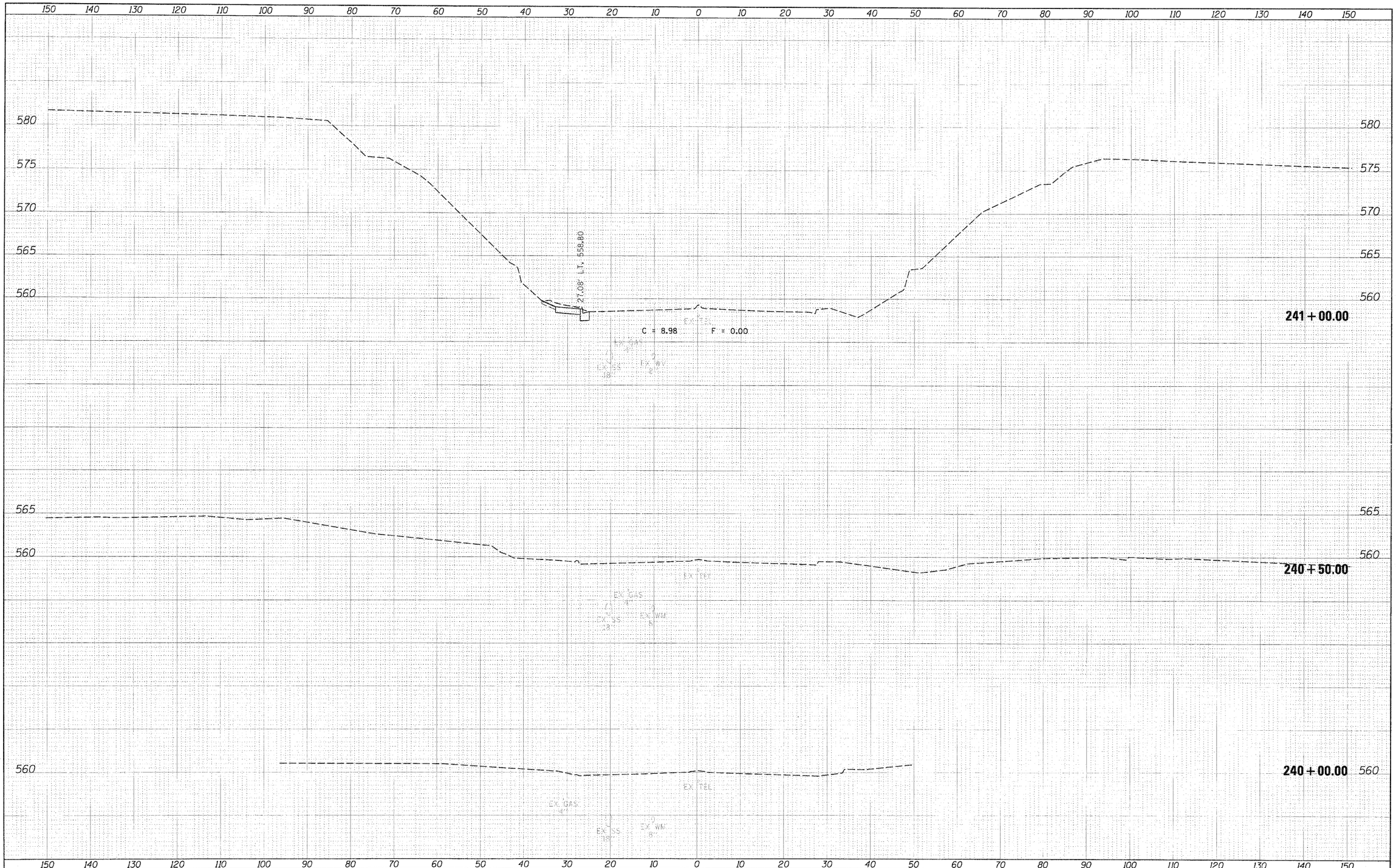
FILE NAME = 0264815-sht-xsht_12802.dgn	USER NAME = Johns80944	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED -
MODEL NAME = XS_1280.06_East	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED -
	PLOT DATE = 09\03\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-280 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 297+50.00 TO STA. 298+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1GB-1,WB,WB-1,WB-2,VB,VB-1)R	ROCK ISLAND	503	494
		CONTRACT NO. 64815		
7 ILLINOIS FED. AID PROJECT 7				

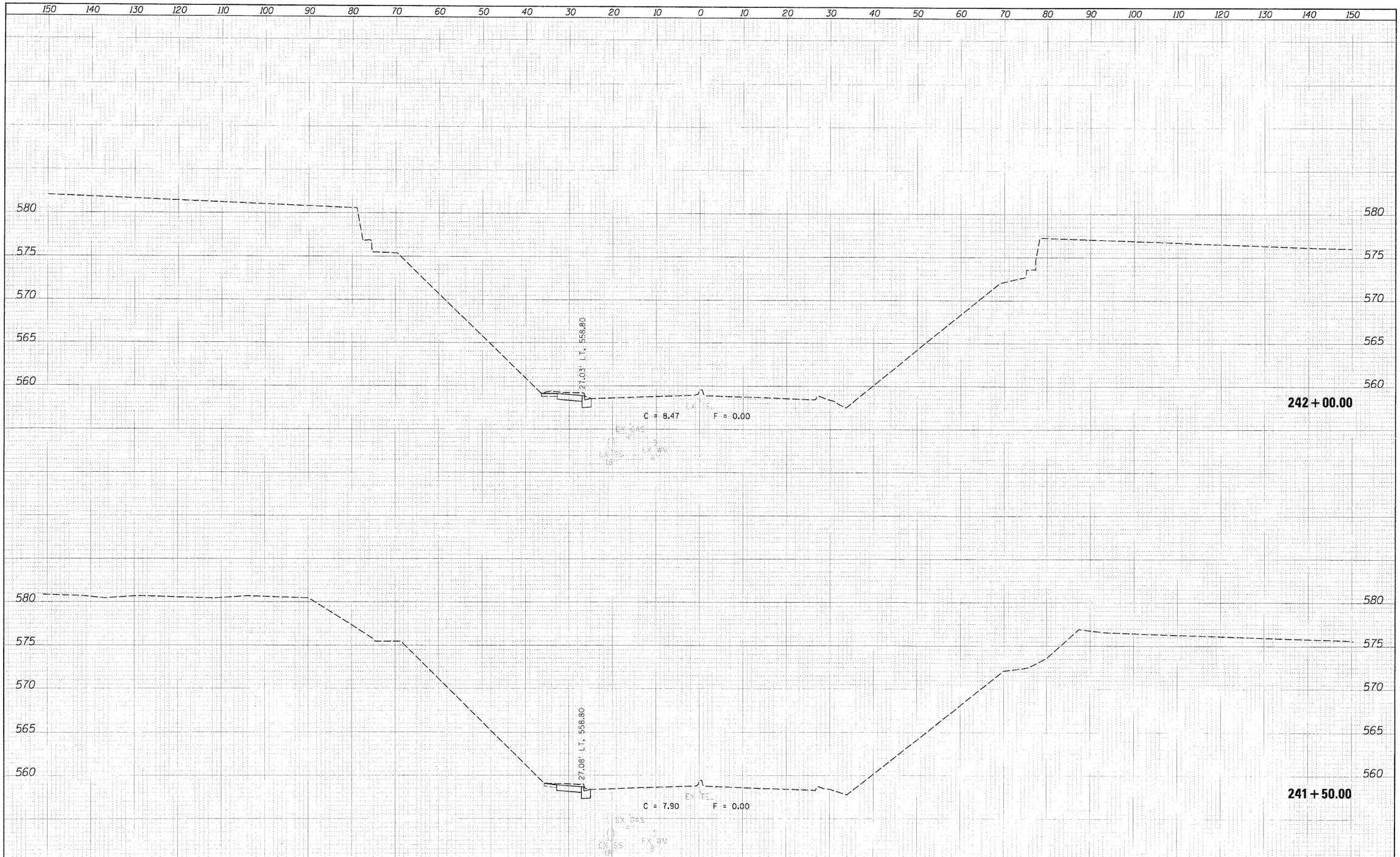


FILE NAME = D0648IE-sht-xsshts_4TH.dgn	USER NAME = Hussu02411	DESIGNED - JDW	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**4TH STREET CROSS SECTIONS**
MODEL NAME = XS_4TH_01	PLOT SCALE = 10.2082 ' / in.	DRAWN - DAP	REVISED -		SCALE: SHEET NO. OF SHEETS STA. 240+00.00 TO STA. 241+00.00
	PLOT DATE = 07/26/2010	CHECKED - DES	REVISED -		
		DATE 07/23/10	REVISED -		

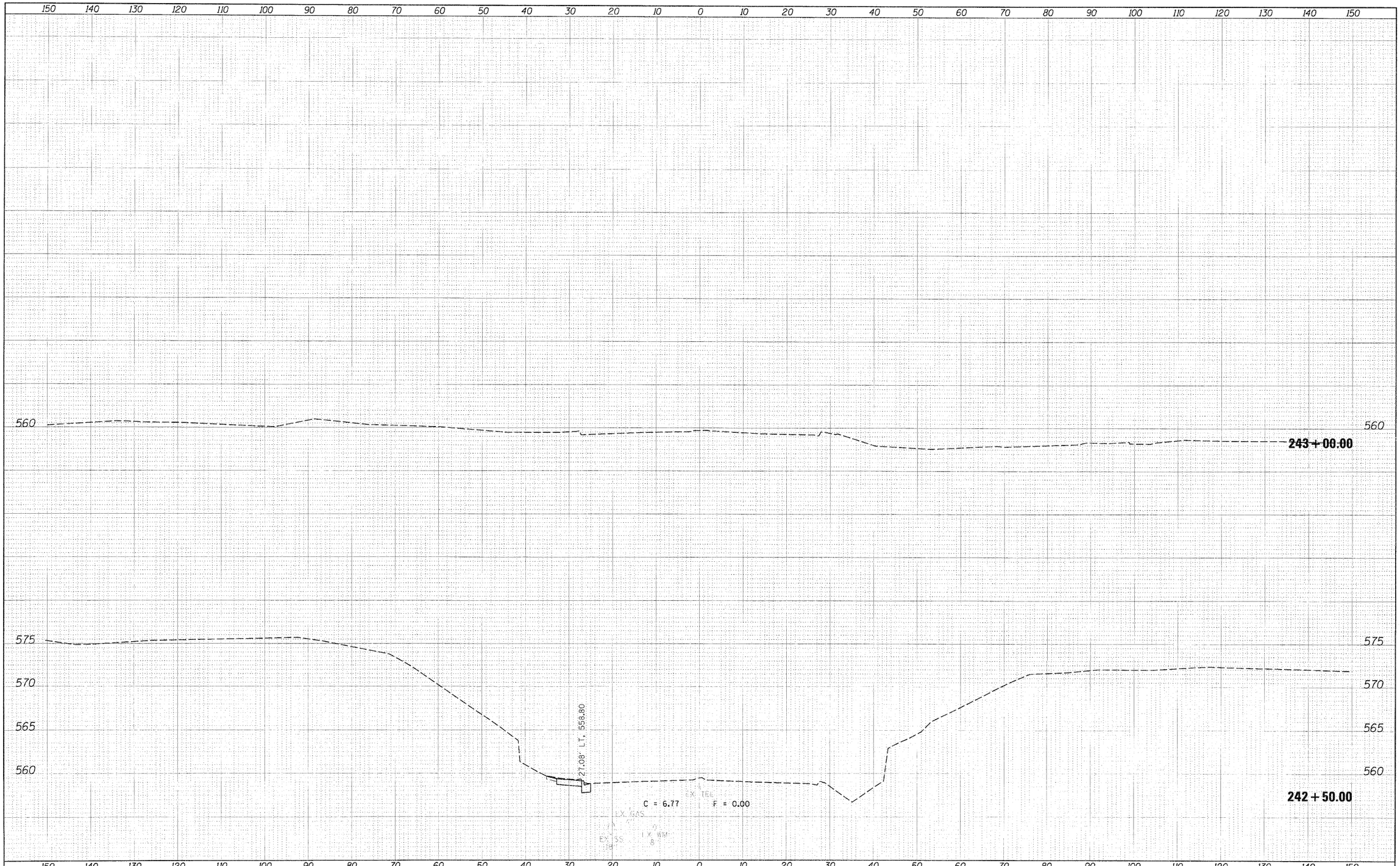
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1KB-1,HB,HB-1,HB-2,VB,VB-1R	ROCK ISLAND	503	495
		CONTRACT NO. 64815		
	7 ILLINOIS FED. AID PROJECT 7			

ORIGINAL SURVEY — SURVEYED — DATE; BY; NOTE BOOK — COMPUTED — CHECKED; AREAS — TEMP. AIR; NO. — AREAS — AREAS CHECKED

FINAL SURVEY — SURVEYED — DATE; BY; NOTE BOOK — COMPUTED — CHECKED; AREAS — TEMP. AIR; NO. — AREAS — AREAS CHECKED



FILE NAME = D264815-plot-xsaht-s_4TH.cgn	USER NAME = Hussj02411	DESIGNED - JDW	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**4TH STREET CROSS SECTIONS**	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
MODEL NAME = XS_4TH_02	PLOT SCALE = 22.0000 ' / in.	DRAWN - DAP	REVISED -			280	81-1KB-1,1HB,HB-1,HB-2,VB,VB-1JR	ROCK ISLAND	503	496
	PLOT DATE = 07\26\2210	CHECKED - DES	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. 241+50.00 TO STA. 242+00.00		CONTRACT NO. 64815	
		DATE - 07/23/10	REVISED -					7 ILLINOIS FED. AID PROJECT 7		



FILE NAME = D264815\sht\xssht_4TH_sign	USER NAME = Pusw024-11	DESIGNED - JDW	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**4TH STREET CROSS SECTIONS**	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
MODEL NAME =	PLOT SCALE = 2.0000 ' / in.	DRAWN DAP	REVISED -		SCALE: SHEET NO. OF SHEETS STA. 242+50.00 TO STA. 243+00.00	280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	497
XS_4TH_23	PLOT DATE = 07/26/2010	CHECKED DES	REVISED -					CONTRACT NO. 64815		
		DATE - 07/23/10	REVISED -					7 ILLINOIS FED. AID PROJECT 7		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

585
580
575
570

62+00.00

C = 42.74 F = 0.01

EX GAS
EX WM
EX GAS
EX WM

570

61+50.00

EX GAS
EX WM

565

61+00.00

EX WM
EX GAS
EX WM

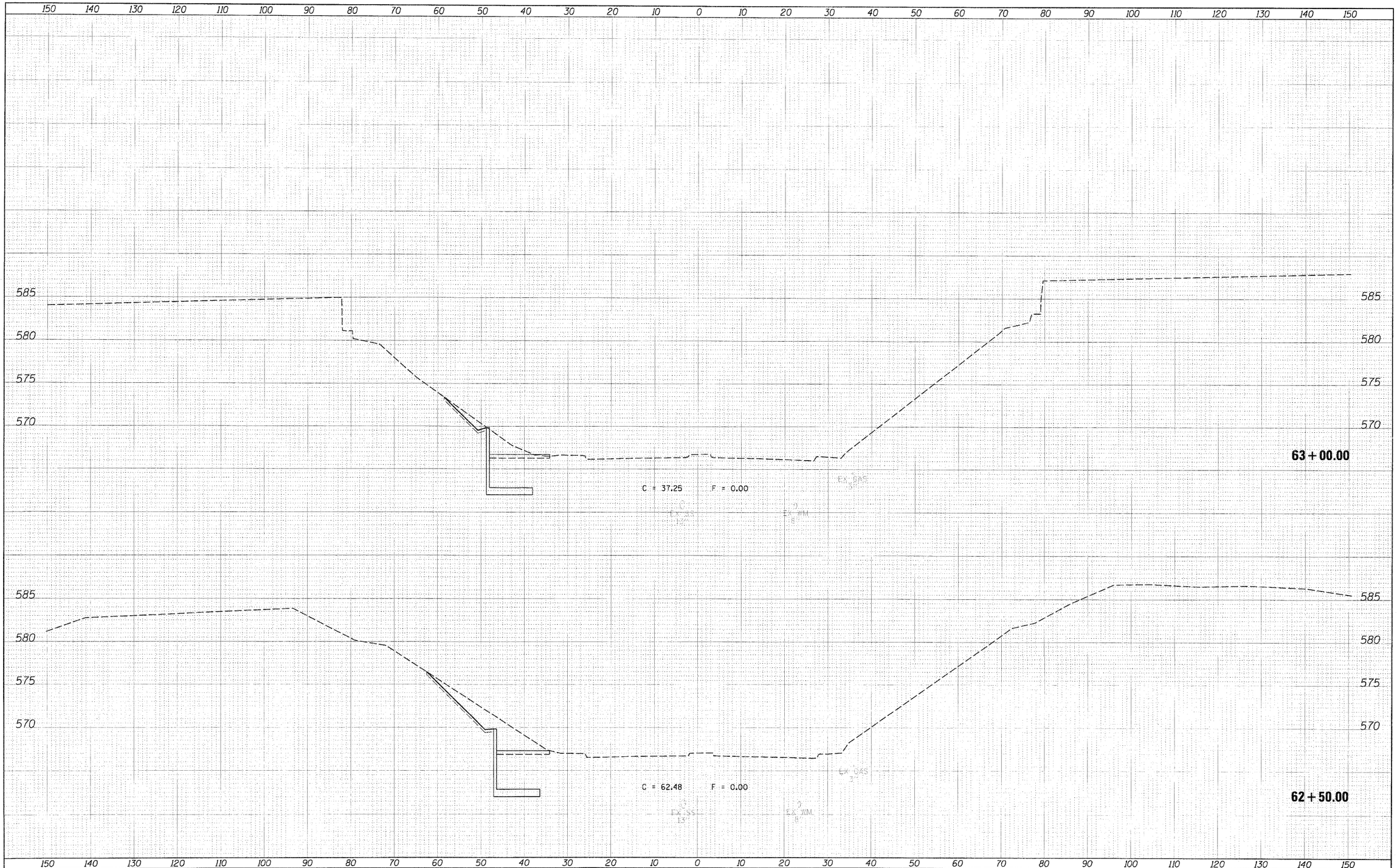
FILE NAME = D264815-xhs-xssht_US67.dgn	USER NAME = Hunsu20411	DESIGNED - JDW	REVISED -
		DRAWN - DAP	REVISED
MODEL NAME =	PLOT SCALE = 10.0000 ' / in.	CHECKED - DES	REVISED
XS_US67_01	PLOT DATE = 07\26\2010	DATE - 07/23/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 67 CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 61+00.00 | TO STA. 62+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	61-1KB-1,1HB,HB-1,HB-2,VB,VB-1R	ROCK ISLAND	503	498
		CONTRACT NO. 64815		
	7 ILLINOIS FED. AID PROJECT 7			



FILE NAME = D0648(5)-sht-xsecnL0557.dgn	USER NAME = Russo@041	DESIGNED - JDW	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**US 67 CROSS SECTIONS**	F.A. RTE. 280	SECTION 81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	COUNTY ROCK ISLAND	TOTAL SHEETS 503	SHEET NO. 499
MODEL NAME = XS_US67_02	PLOT SCALE = 10.0000 ' / in.	DRAWN - DAP	REVISED -							
	PLOT DATE = 07/26/2010	CHECKED - DES	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. 62+50.00 TO STA. 63+00.00		CONTRACT NO. 64815	
		DATE - 07/23/10	REVISED -					7 ILLINOIS FED. AID PROJECT 7		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

565

565

64 + 00.00

EX GAS

EX SS

EX WM

575

570

565

63 + 50.00 565

EX GAS

EX WM

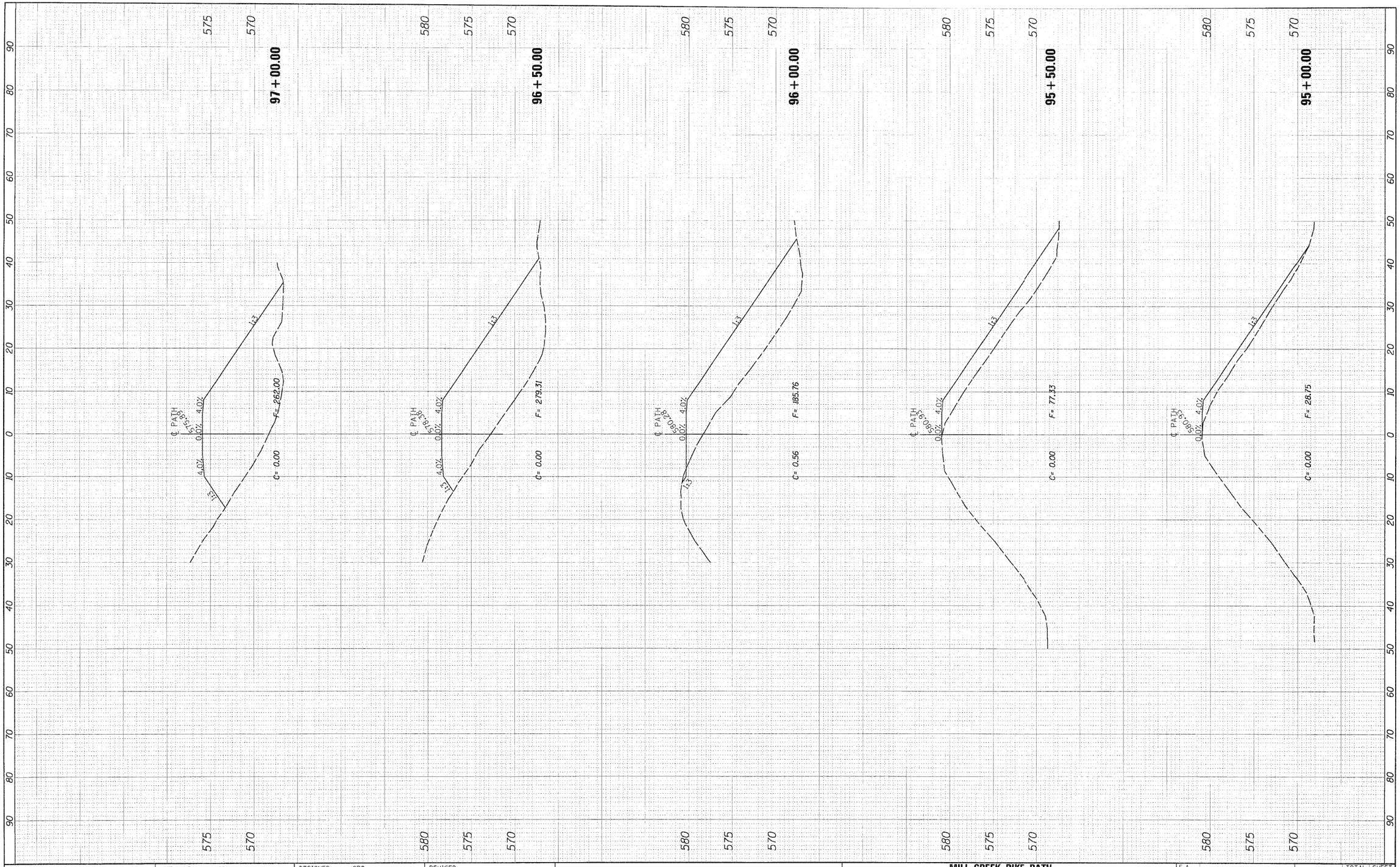
EX SS

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FILE NAME = D0548IE-sht-xssht 1567.dgn	USER NAME = P...ssu004.1	DESIGNED - JDW	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**US 67 CROSS SECTIONS**
MODEL NAME =		DRAWN - DAP	REVISED -		
XS_1567.23	PLOT SCALE = 10.000'Z / in.	CHECKED - DES	REVISED -		
	PLOT DATE = 07/26/2012	DATE - 07/23/10	REVISED -		SCALE: SHEET NO. OF SHEETS STA. 63+50.00 TO STA. 64+00.00

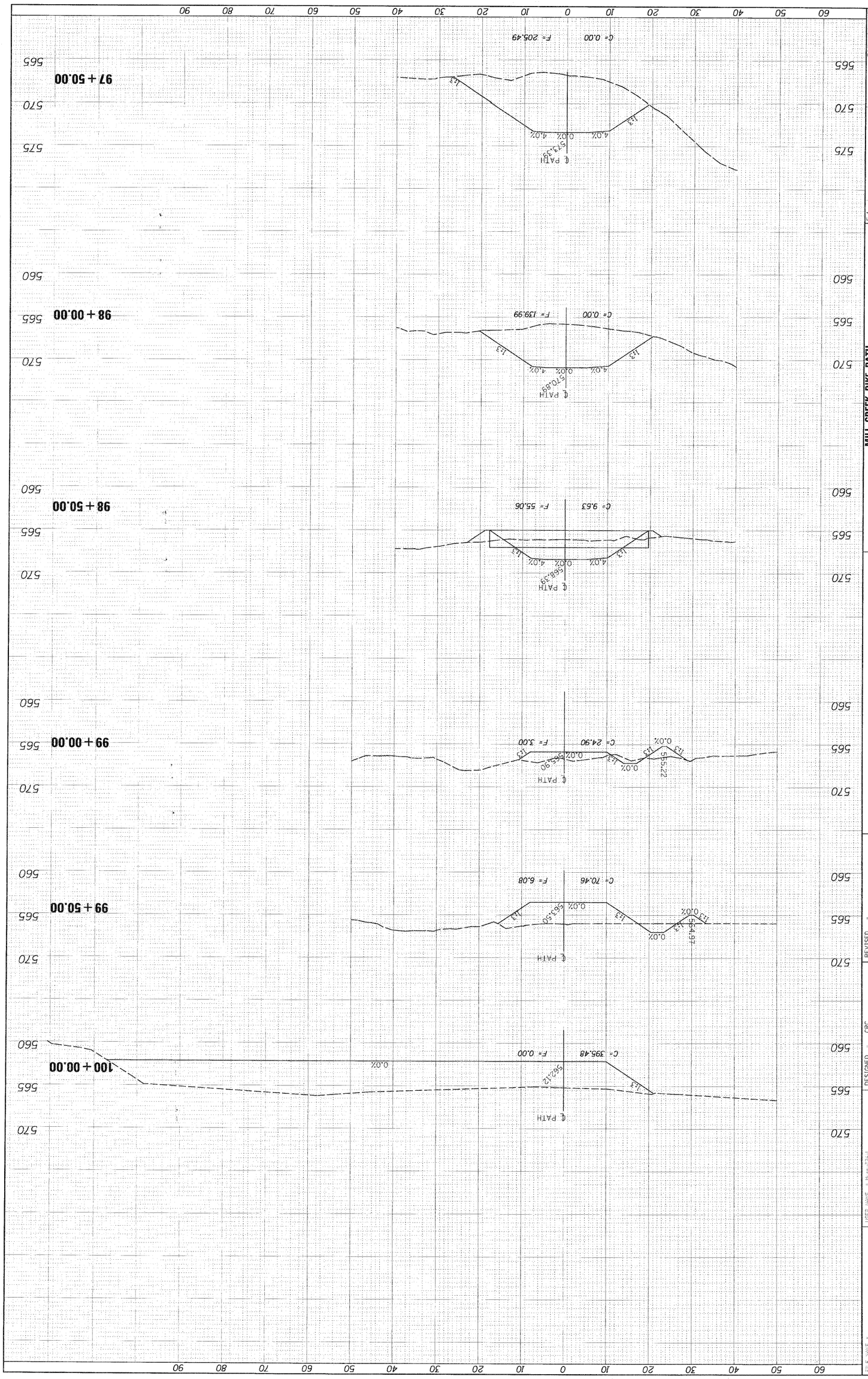
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1(B-1,HB,HB-1,HB-2,VB,VB-1)R	ROCK ISLAND	503	500
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			

ORIGINAL SURVEY | SURVEYED | PLOTTED | NOTE BOOK | VOL. | PAGE | AREAS | AREAS CHECKED | BY | DATE
FINAL SURVEY | SURVEYED | PLOTTED | NOTE BOOK | VOL. | PAGE | AREAS | AREAS CHECKED | BY | DATE



FILE NAME = c:\pwise_work\dot_not_delete\dms13674\C264815-sht-xs-BIKE.dgn	USER NAME = HJasu2841	DESIGNED - CRC	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**MILL CREEK BIKE PATH CROSS SECTIONS**
	PLOT SCALE = 10.3020 ' / in.	DRAWN - JDM	REVISED -		SCALE: 1" = 10' SHEET NO. OF SHEETS STA. 95+00.00 TO STA. 97+00.00
	PLOT DATE = 8/23/2010	CHECKED - CRC	REVISED -		
		DATE - 07/23/10	REVISED -		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1KB-1,HB,HB-1,WB-2,VB,VB-1IR	ROCK ISLAND	503	501
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MILL CREEK BIKE PATH
CROSS SECTIONS

SCALE: 1" = 10' | SHEET NO. OF SHEETS | STA. 97+50.00 TO STA. 100+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1HB-1,HB-2,VB,VB-1R	ROCK ISLAND	503	502

CONTRACT NO. 64815

7 ILLINOIS FED. AID PROJECT 7

	DESIGNED	-	CRC
	DRAWN	-	JDM
	CHECKED	-	CRC
	DATE	-	07/23/10

REVISED	-
REVISED	-
REVISED	-
REVISED	-

USER NAME = Name23rd

PLOT SCALE = 1.0000 ' / in.

PLOT DATE = 8/26/2010

FILE NAME =

FINAL SURVEY
NOTE BOOK
NO.

BY | DATE
COMPUTED
PLOTTED
TEMPLATE
AREA
AREA CHECKED

ORIGINAL SURVEY
NOTE BOOK
NO.

SURVEYED
PLOTTED
TEMPLATE
AREA
AREA CHECKED

BY | DATE

102 + 00.00

0.0%

℄ PATH

56'-1.90

F= 0.00

C= 493.93

APPROXIMATE LOCATION OF EXISTING SLOPEWALL

101 + 80.00

0.0%

℄ PATH

56'-1.90

F= 0.00

C= 447.24

APPROXIMATE LOCATION OF EXISTING SLOPEWALL

BRIDGE ABUT

101 + 50.00

0.0%

℄ PATH

56'-1.90

F= 0.00

C= 350.39

APPROXIMATE LOCATION OF EXISTING SLOPEWALL

BRIDGE ABUT

101 + 00.00

0.0%

℄ PATH

56'-1.90

F= 0.00

C= 344.81

APPROXIMATE LOCATION OF EXISTING SLOPEWALL

100 + 50.00

0.0%

℄ PATH

56'-1.90

F= 0.00

C= 309.74

APPROXIMATE LOCATION OF EXISTING SLOPEWALL

BRIDGE ABUT

570 565 560 575 570 565 560 575 570 565 560 570 565 560 575 570 565 560

0 10 20 30 40 50 60 70 80 90

FILE NAME = c:\pwise.work\de.mst_delete\dma13674\D084815-sht-xx-BI-E.dgn

USER NAME = Huss_0241

PLOT SCALE = 10.0000 ' / in.

PLOT DATE = 27\23\20.0

DESIGNED - CRC	DRAWN - JDM	CHECKED - CRC
DATE - 07/23/10		

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MILL CREEK BIKE PATH
CROSS SECTIONS

SCALE: 1" = 10' SHEET NO. OF SHEETS STA. 100+50.00 TO STA. 102+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1IB-1,HB,HB-1,HB-2,VB,VB-1R	ROCK ISLAND	503	503
		CONTRACT NO. 64815		
7	ILLINOIS FED. AID PROJECT 7			