

03-08-13 LETTING ITEM 045

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
**PLANS FOR PROPOSED
 HIGHWAY BRIDGE PROGRAM**
 BROWN COUNTY

**LEE ROAD DISTRICT SECTION 10-04118-00-BR
 TOWNSHIP ROAD 141 OVER WELLS FORK
 PROJECT NO. BROS-0009(221)
 JOB NUMBER C-96-261-10**

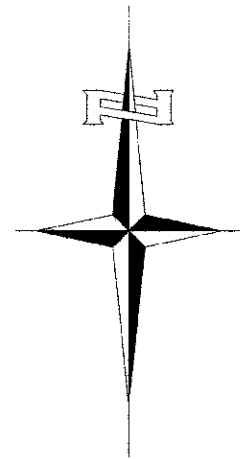
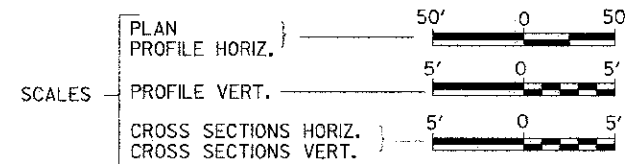
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 141	10-04118-00-BR	BROWN	24	1
FED. ROAD DIST. NO. 7		ILLINOIS	CONTRACT NO. 93588	

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	GENERAL NOTES, DETAILS, TYPICAL SECTIONS, TIE POINTS
3.	SUMMARY OF QUANTITIES, SCHEDULES OF QUANTITIES
4.	TRAFFIC CONTROL PLAN
5.	EROSION CONTROL PLAN
6.	PLAN AND PROFILE
7.-18.	STRUCTURE PLANS
19.-24.	CROSS SECTIONS

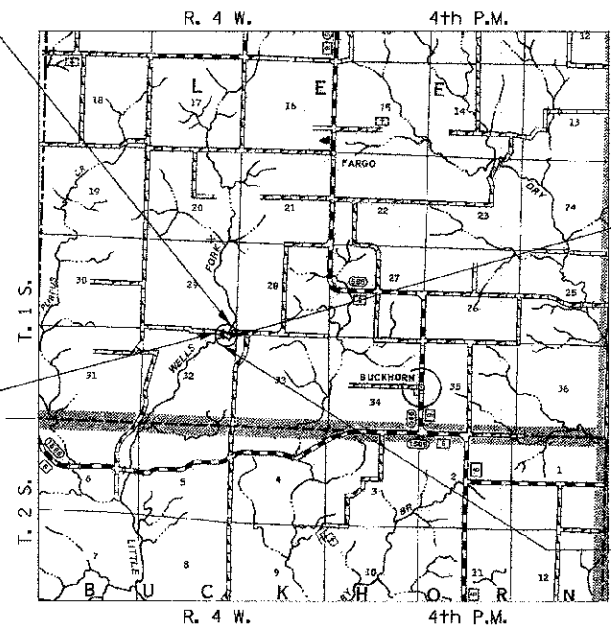
REQUIRED HIGHWAY STANDARDS

- 000001-06
- 280001-07
- 515001-03
- 635006-03
- 701901-02
- BLR 21-9



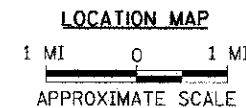
EXISTING STRUCTURE SN 005-3406
 THREE SPAN BRIDGE WITH STEEL TRUSS WITH
 TIMBER DECK CENTER SPAN ON STEEL COLUMN
 PIERS. APPROACH SPANS CONSIST OF TIMBER
 DECK ON STEEL STRINGERS ON CONC. CAPPED
 TIMBER LAGGING CLOSED ABUTMENTS,
 ±75' BK TO BK, AND ±14' O TO O DECK,
 NO SKEW (TO BE REMOVED)

SECTION 10-04118-00-BR
 BEGINS
 STATION 16+50.00



SECTION 10-04118-00-BR
 ENDS
 STATION 21+50.00

PROPOSED STRUCTURE NO. 005-3407
 THREE SPAN 17" P.P.C. DECK BEAM STRUCTURE
 ON CONC. PILE BENT SPILL THRU ABUTMENTS
 AND CONC. ENCASED PILE BENT PIERS,
 108'-6" BK. TO BK. AND 24'-0" O. TO O.,
 30° LT. AH. SKEW



NET LENGTH OF PROJECT = 500.00 FEET = 0.095 MILES
 DESIGN CLASSIFICATION: LOCAL ROAD (NON-URBAN)
 DESIGN ADT: 40 (2012)
 DESIGN SPEED: 30 MPH

UTILITY COMPANIES

ILLINOIS RURAL ELECTRIC
 WINCHESTER, ILLINOIS

ADAMS TELEPHONE COOPERATIVE
 GOLDEN, ILLINOIS

FRONTIER COMMUNICATION
 JACKSONVILLE, ILLINOIS

J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123
 OR 811

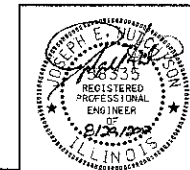
LEE ROAD DISTRICT

CONTRACT NO. 93588

Hutchison Engineering, Inc.
 JACKSONVILLE-SHOREWOOD-PEORIA

2012

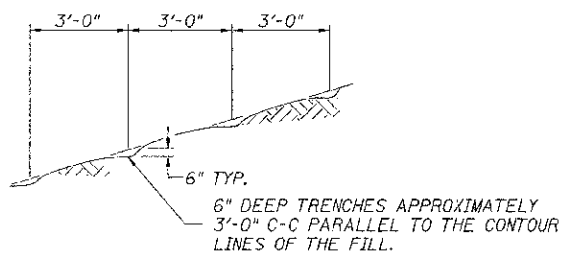
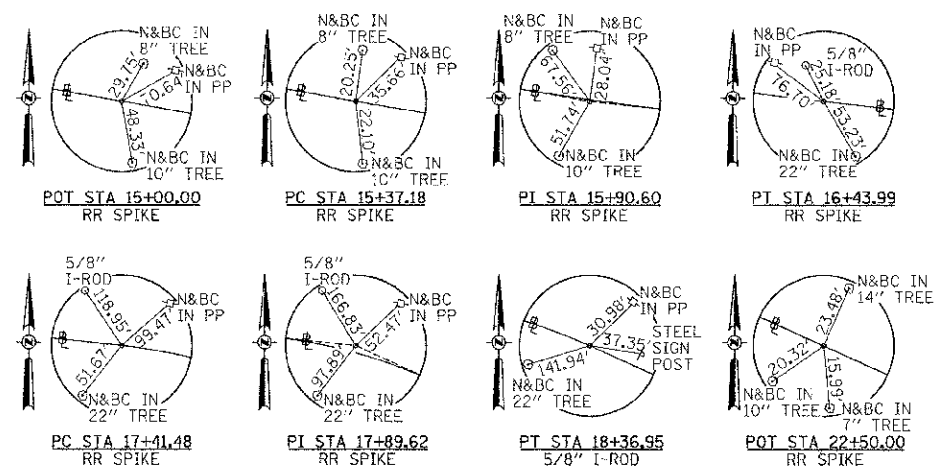
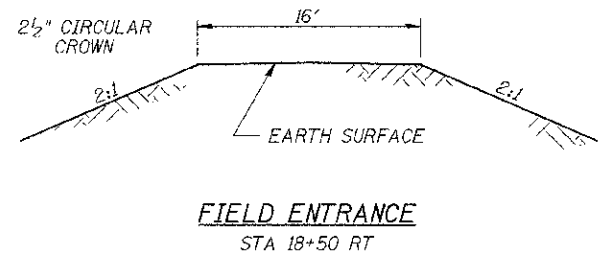
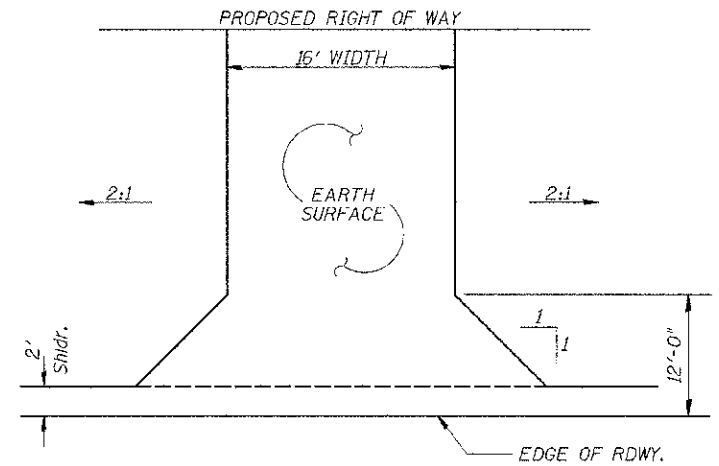
JOB#3017



Li. Exp. 11/30/2013
 SIGNATURE

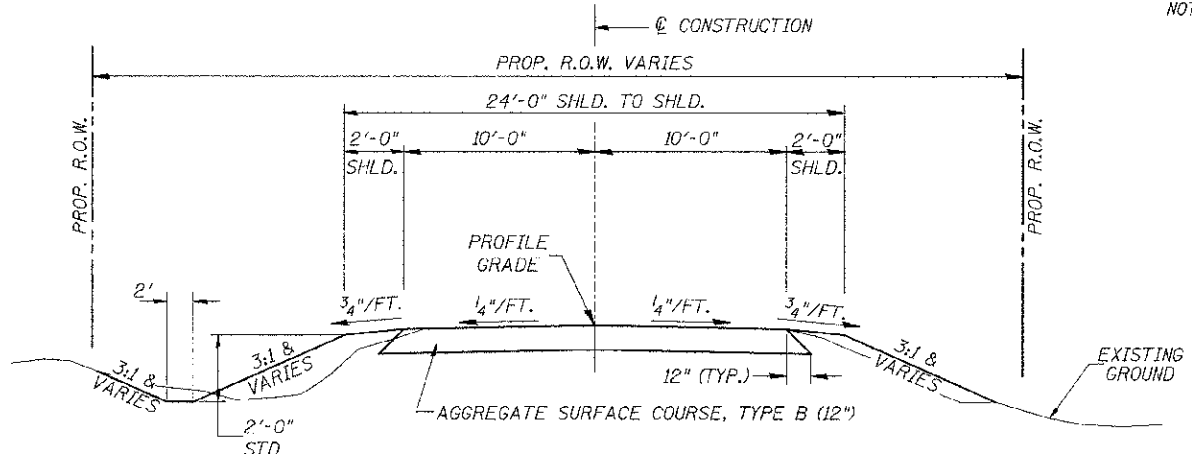
ENGINEERS SEAL

APPROVED	<i>John Wilson</i>	8-30-12	2012
LEE ROAD DISTRICT HIGHWAY COMMISSIONER			
APPROVED	<i>Chad Johnson</i>	8-30-12	2012
BROWN COUNTY ENGINEER			
PASSED	November 26, 2012		2012
<i>Terrance H. Fountain</i>			
DISTRICT SIX ENGINEER OF LOCAL ROADS & STREETS			
PASSED	November 26		2012
<i>Ron Dehambauer</i>			
DISTRICT SIX ENGINEER OF CONSTRUCTION			
Released For Bid Based on Limited Review	November 26, 2012		2012
<i>Roger L. Driskell</i>			
DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER			
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			

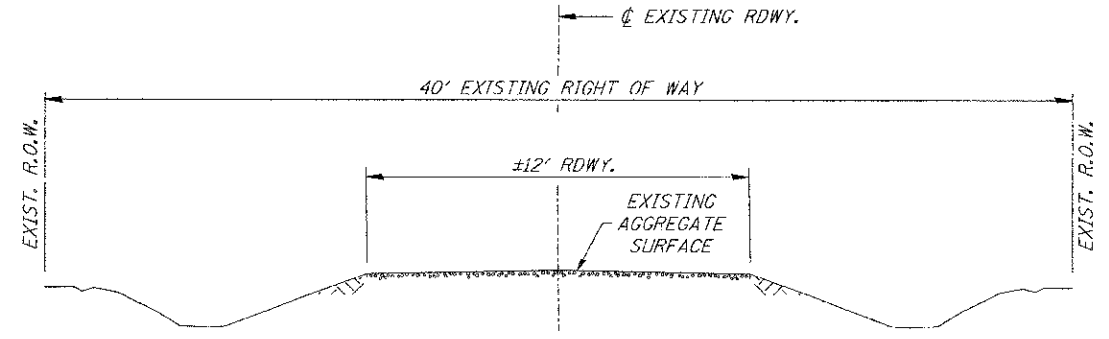


NOTE: ALL SLOPES 3:1 OR STEEPER AND GREATER THAN 5' IN HEIGHT SHALL BE CONTOUR PLOWED AS SHOWN IN DETAIL, COST SHALL BE INCLUDED WITH SEEDING, CLASS 2 (SPECIAL).

DETAIL OF CONTOUR PLOWING



PROPOSED TYPICAL SECTION
 STA. 16+50.00 TO STA. 19+31.36
 STA. 20+39.86 TO STA. 21+50.00
 EXCEPT TRANSITIONS
 BRIDGE OMISSION
 STA. 19+31.36 TO STA. 20+39.86



EXISTING TYPICAL SECTION

GENERAL NOTES

PLAN QUANTITIES FOR TREE REMOVAL HAVE BEEN BASED ON ALL TREES WITHIN THE PROPOSED RIGHT OF WAY. THIS QUANTITY MAY BE REVISED DURING CONSTRUCTION, AT THE DIRECTION OF THE ENGINEER, BY DELETING FROM THE TREE REMOVAL QUANTITIES, SUCH TREES THAT DO NOT INTERFERE WITH THE PROPOSED CONSTRUCTION.

THE REMOVAL OF EXISTING AGGREGATE SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE NEW BRIDGE SHALL BE REMOVED AS EARTH EXCAVATION AND NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

ALL WASTE OR UNDESIRABLE MATERIAL AS IDENTIFIED BY THE ENGINEER SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCES CAUSED BY THE SAID UTILITY ADJUSTMENTS.

THE PROFILE GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND IN THE STATION CROSS SECTIONS ARE TO THE TOP OF THE FINISHED SURFACE.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION

THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND TRENCHING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

ALL ELEVATIONS SHOWN REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

FILE NAME = V:\Brow\1017 - Brown\2017\1001.dwg	USER NAME = a.thomas	DESIGNED -	REVISED -	BROWN COUNTY TOWNSHIP ROAD 141 OVER WELLS FORK	GENERAL NOTES, DETAILS, TYPICAL SECTIONS, TIE POINTS	RTL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -			TR 141	10-04118-00-BR	BROWN	24	2	
		CHECKED -	REVISED -			CONTRACT NO. 09588					
		DATE - 3/07/11	REVISED -			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BROS-000022					
				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. 16+50.00 TO STA. 21+50.00					

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	50
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	24
20200100	EARTH EXCAVATION	CU YD	210
20300100	CHANNEL EXCAVATION	CU YD	600
① 20400800	FURNISHED EXCAVATION	CU YD	150
① 20100220	POROUS GRANULAR EMBANKMENT	CU YD	13.5
28000305	TEMPORARY DITCH CHECKS	FOOT	84
28000400	PERIMETER EROSION BARRIER	FOOT	370
28000500	INLET AND PIPE PROTECTION	EACH	1
28200200	FILTER FABRIC	SQ YD	505
28300400	AGGREGATE DITCH	TON	18
① 40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	500
① 50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	60
50200300	COFFERDAM EXCAVATION	CU YD	70
① 50201101	COFFERDAM (TYPE 1) (LOCATION-1)	EACH	1
① 50201102	COFFERDAM (TYPE 1) (LOCATION-2)	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	100.9
50300280	CONCRETE ENCASEMENT	CU YD	11.6
① 50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	2,548
50800105	REINFORCEMENT BARS	POUND	8,550
* 50900205	STEEL RAILING, TYPE S1	FOOT	217
51201400	FURNISHING STEEL PILES HP10x42	FOOT	405
51202305	DRIVING PILES	FOOT	135
51203400	TEST PILE STEEL HP10x42	EACH	2
51500100	NAME PLATES	EACH	1
54200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	30
67100100	MOBILIZATION	L SUM	1
* ① 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
① X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.4
① X2810228	STONE RIPRAP, CLASS B4 (SPECIAL)	TON	365
① ② X5150110	NAME PLATES (SPECIAL)	EACH	1
① X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1
① Z0065000	SETTING PILES IN ROCK	EACH	10

① SEE SPECIAL PROVISIONS
② NON-PARTICIPATING ITEM

CONSTRUCTION CODE TYPE: 0011
BRIDGE CODE TYPE: X080

* SPECIALTY ITEMS

TREE REMOVAL

STATION	OFFSET	SIDE	6 TO 15 UNITS	OVER 15 UNITS
19+48	24'	RIGHT		24
19+52	19'	RIGHT	6	
19+52	19'	RIGHT	6	
19+52	19'	RIGHT	6	
19+99	23'	RIGHT	6	
19+99	23'	RIGHT	8	
20+09	15'	RIGHT	12	
20+14	13'	RIGHT	6	
TOTAL			50	24

TEMPORARY DITCH CHECKS

STATION	SIDE	FOOT
16+50	LEFT	12
17+40	LEFT	12
19+27	RIGHT	12
20+50	LEFT	12
20+68	LEFT	12
20+86	LEFT	12
21+18	LEFT	12
TOTAL		84

PERIMETER EROSION BARRIER

STATION TO STATION	SIDE	FOOT
16+50 - 17+25	RIGHT	75
18+25 - 19+41	LEFT	130
18+35 - 18+65	RIGHT	30
20+30 - 21+50	RIGHT	135
TOTAL		370

EARTHWORK SUMMARY

STATION TO STATION	EARTH EXCAVATION	CHANNEL EXCAVATION	STRUCTURE EXCAVATION	COFFERDAM EXCAVATION	FILL	WASTE (SHORTAGE)
	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
RDWY 16+50.00 - 19+31.36	157				335	(217)
RDWY 20+39.86 - 21+50.00	112				16	68
CHANNEL		600				
STRUCTURE			60			
COFFERDAM				70		
TOTAL		269	600	60	70	351 (149)
USE		270	600	60	70	(150)

(@ 25% SHRINKAGE)

AGGREGATE SURFACE COURSE, TYPE B

STATION TO STATION	THICKNESS	WIDTH	LENGTH	TON
16+50.00 - 17+70.00	1.00'	16.29' AVG.	120.00'	137
17+70.00 - 19+31.36	1.00'	21.00'	161.36'	237
20+39.86 - 21+50.00	1.00'	16.37' AVG.	110.14'	126
TOTAL				500

**PIPE CULVERTS,
CLASS D,
TYPE 1 15"**

STATION	SIDE	FOOT
15+50	RIGHT	30
TOTAL		30

AGGREGATE DITCH**

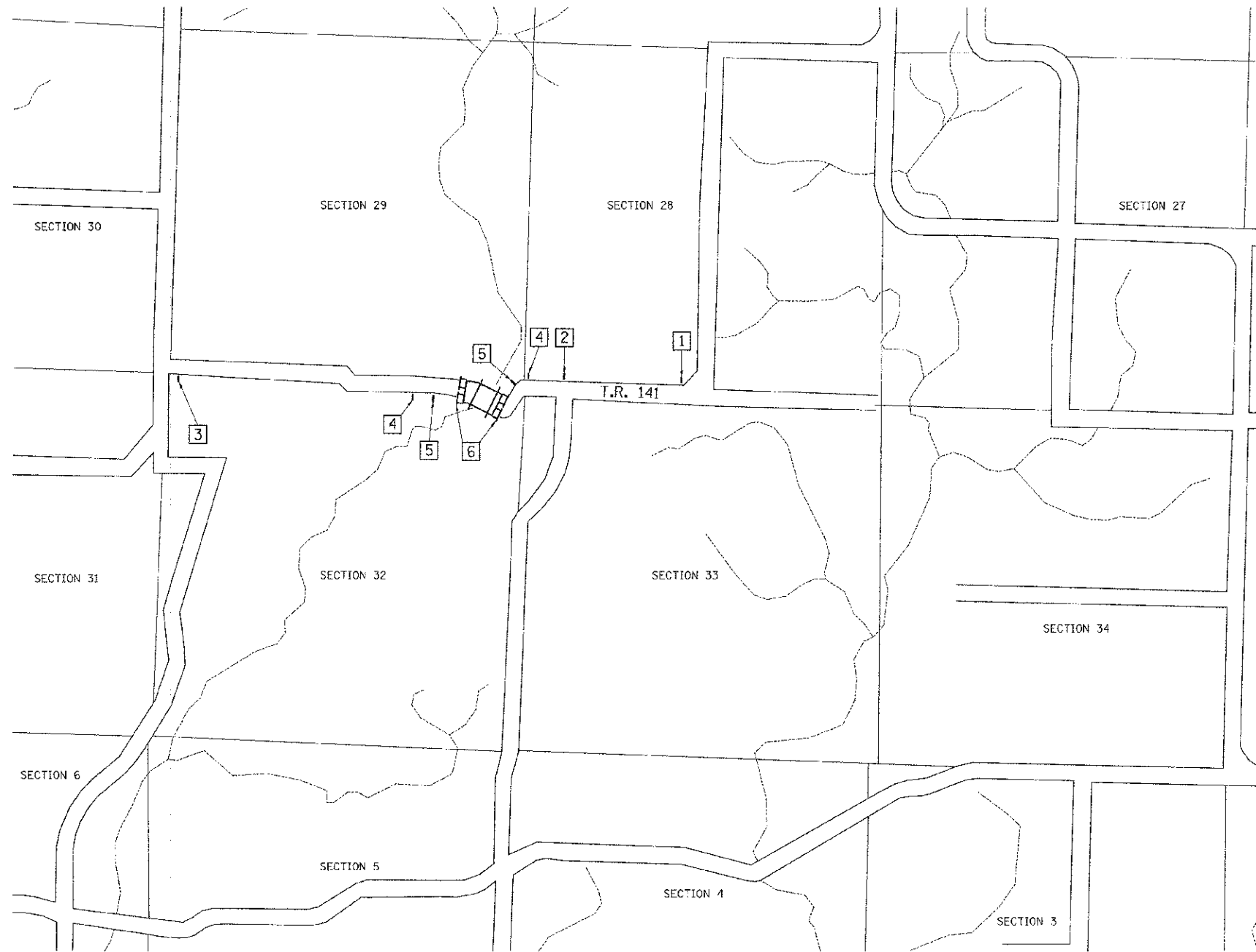
STATION TO STATION	SIDE	WIDTH	TON	FILTER FABRIC (SQ YD)
20+50 - 21+00	LEFT	6'	18	35
TOTAL			18	35

** Aggregate Ditch shall conform to material type B-3 of the Standard Specifications

INLET AND PIPE PROTECTION

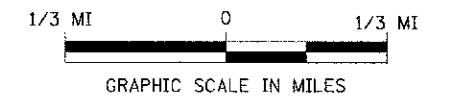
STATION	SIDE	EACH
18+35	RIGHT	1
TOTAL		1

R 4 W, 4th PM



- 1 ROAD CLOSED
1/2 MILE AHEAD
LOCAL TRAFFIC ONLY
R11-3
- 2 ROAD CLOSED
1/4 MILE AHEAD
LOCAL TRAFFIC ONLY
R11-3
- 3 ROAD CLOSED
3/4 MILE AHEAD
LOCAL TRAFFIC ONLY
R11-3
- 4 ROAD CLOSED
AHEAD
W20-3
- 5 ROAD CLOSED
500 FT
W20-3
- 6 TYPE III BARRICADES

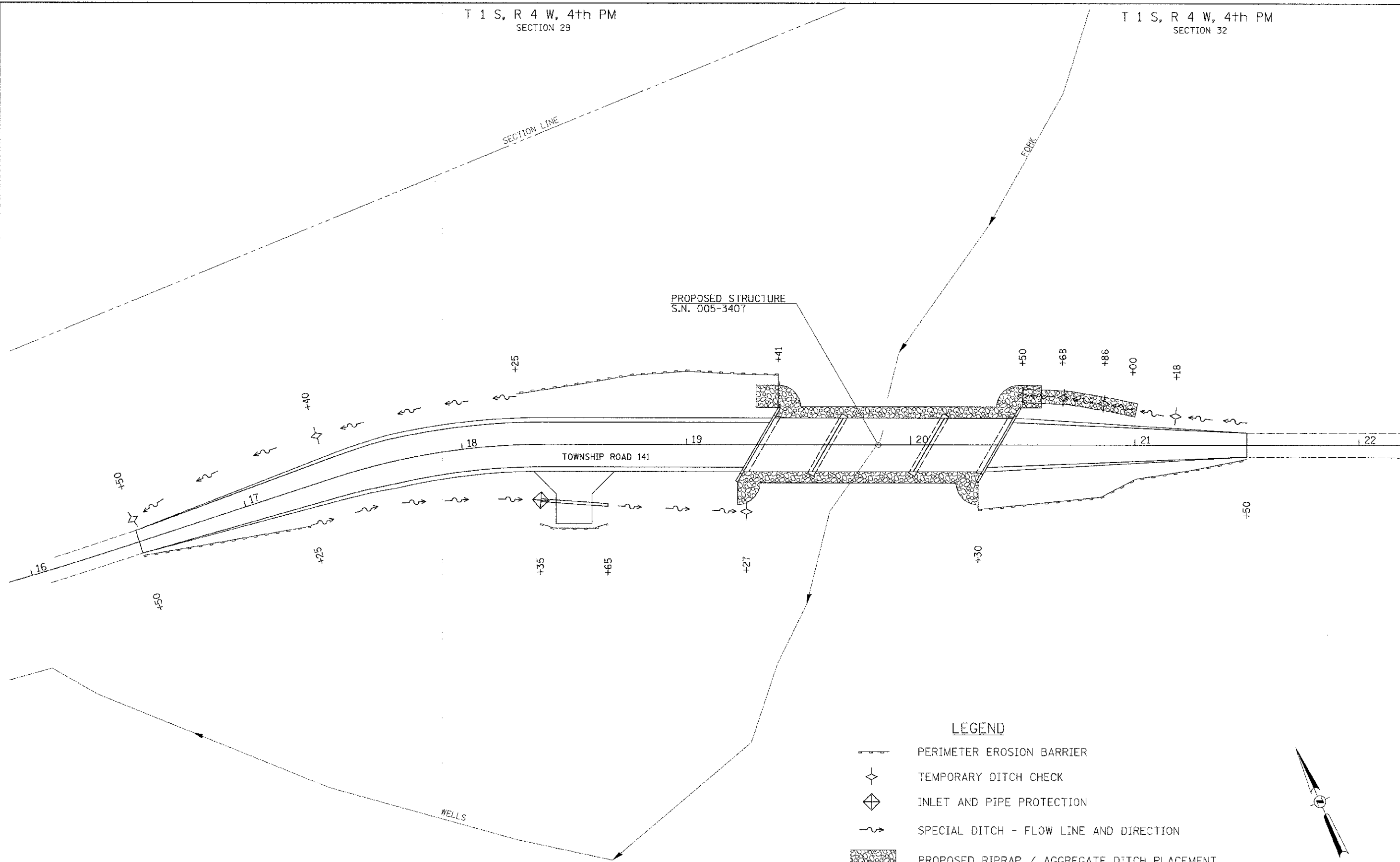
SEE STANDARD BLR 21
AND SPECIAL PROVISIONS



FILE NAME = V:\Bridge\3817 - Brown\3817b001.dgn	USER NAME = othomas	DESIGNED -	REVISED -	BROWN COUNTY TOWNSHIP ROAD 141 OVER WELLS FORK	TRAFFIC CONTROL PLAN			RYE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -		TR 141	10-04118-00-BR	BROWN	24	4			
		PLT SCALE = 1/8" = 1' / 8"	CHECKED -		REVISED -	CONTRACT NO. 9388						
		PLT DATE = 8/25/2012	DATE = 03/02/09		REVISED -	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 16+50.00 TO STA. 21+50.00			FED. ROAD DIST. NO. 7 [ILLINOIS] FED. AID PROJECT BR05-0009(221)			






T 1 S, R 4 W, 4th PM
SECTION 29

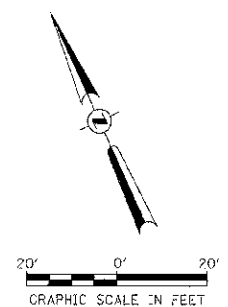
T 1 S, R 4 W, 4th PM
SECTION 32



T 1 S, R 4 W, 4th PM
SECTION 32

LEGEND

-  PERIMETER EROSION BARRIER
-  TEMPORARY DITCH CHECK
-  INLET AND PIPE PROTECTION
-  SPECIAL DITCH - FLOW LINE AND DIRECTION
-  PROPOSED RIPRAP / AGGREGATE DITCH PLACEMENT



FILE NAME =	USER NAME = cthomas	DESIGNED -	REVISED -
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	PLOT SCALE = 28.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/29/2012	DATE -	REVISED -

**BROWN COUNTY
TOWNSHIP ROAD 141
OVER WELLS FORK**

EROSION CONTROL PLAN
SCALE: 1" = 20' | SHEET NO. 1 OF 1 SHEETS | STA. 16+50.00 TO STA. 21+50.00

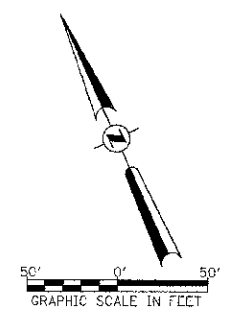
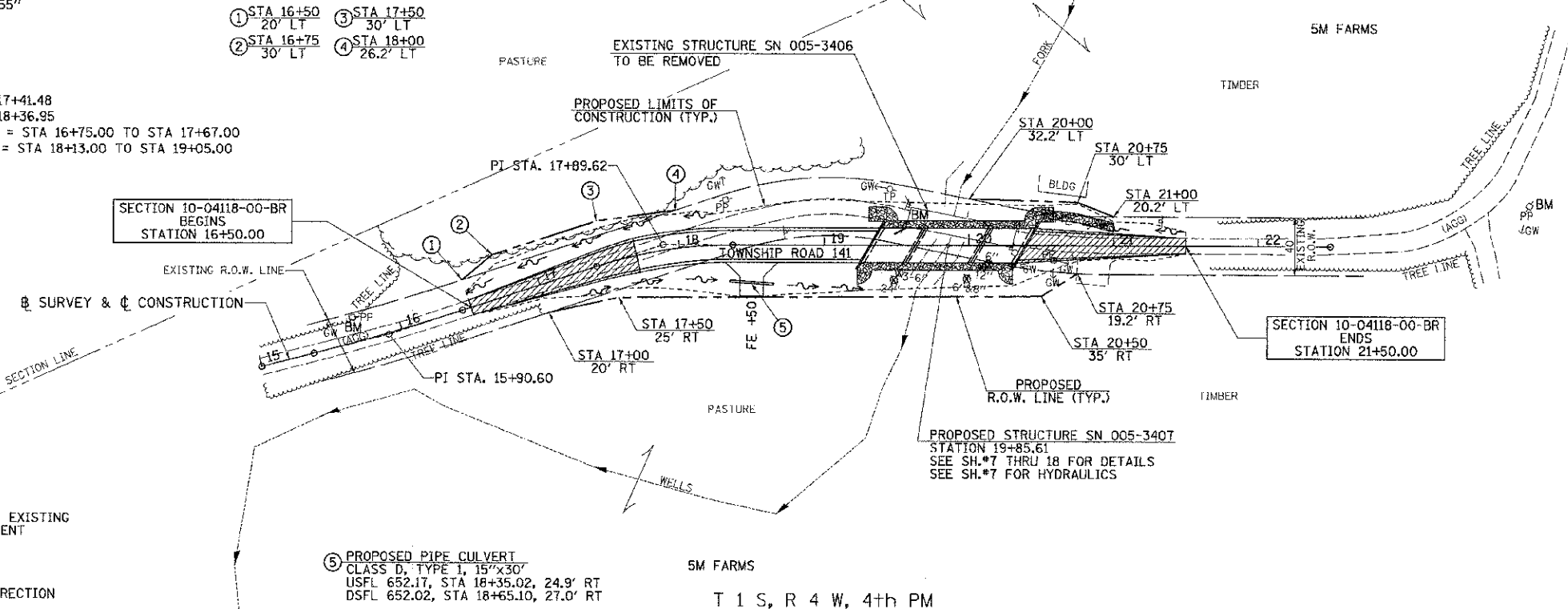
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 141	10-C4118-00-BR	BROWN	24	5
CONTRACT NO. 3588				
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BROS-0009221		

CURVE DATA #1
 PI STA. = 15+90.60
 $\Delta = 3^\circ 56' 53''$ (LT)
 $D = 3^\circ 41' 47''$
 $R = 1,550.00'$
 $T = 53.42'$
 $L = 106.81'$
 $E = 0.92'$
 $e = 4.0\%$
 P.C. STA. = 15+37.18
 P.T. STA. = 16+43.99

CURVE DATA #2
 PI STA. = 17+89.62
 $\Delta = 18^\circ 13' 58''$ (RT)
 $D = 19^\circ 05' 55''$
 $R = 300.00'$
 $T = 48.14'$
 $L = 95.47'$
 $E = 3.84'$
 $e = 4.0\%$
 P.C. STA. = 17+41.48
 P.T. STA. = 18+36.95
 SE ATTAINED = STA 16+75.00 TO STA 17+67.00
 SE REMOVED = STA 18+13.00 TO STA 19+05.00

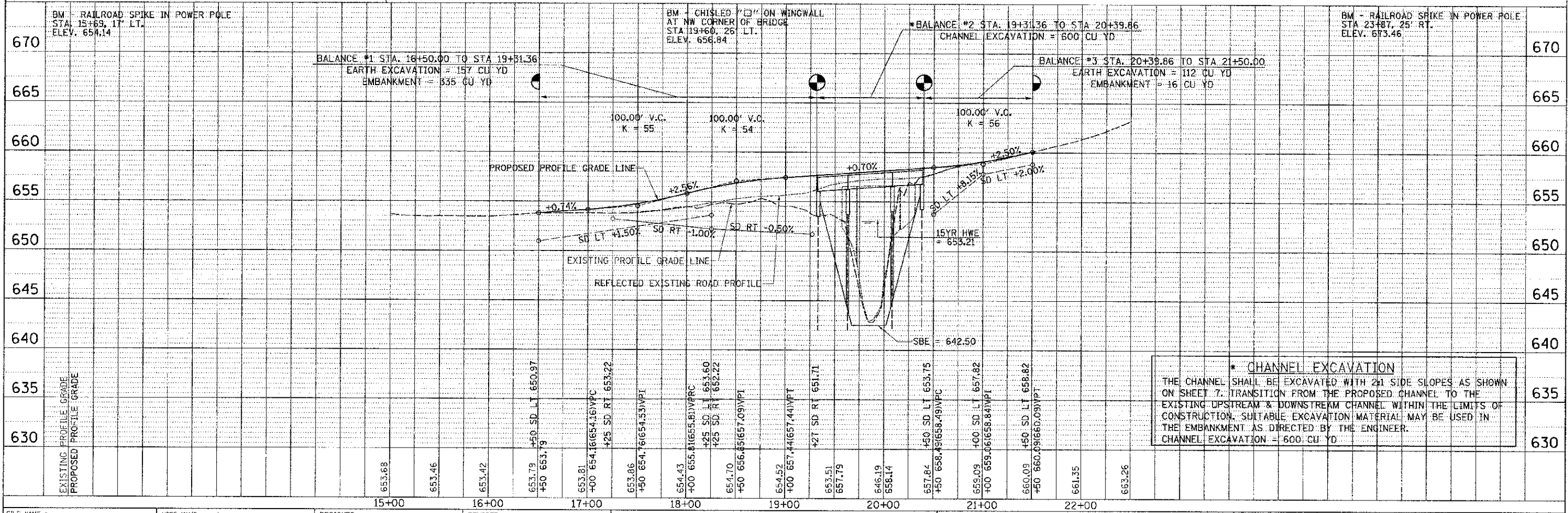
T 1 S, R 4 W, 4th PM
 SECTION 29

T 1 S, R 4 W, 4th PM
 SECTION 32



DATE	
BY	
REVISION	
NO.	
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DATE	
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REVISION	
NO.	



*** CHANNEL EXCAVATION**
 THE CHANNEL SHALL BE EXCAVATED WITH 2:1 SIDE SLOPES AS SHOWN ON SHEET 7. TRANSITION FROM THE PROPOSED CHANNEL TO THE EXISTING UPSTREAM & DOWNSTREAM CHANNEL WITHIN THE LIMITS OF CONSTRUCTION. SUITABLE EXCAVATION MATERIAL MAY BE USED IN THE EMBANKMENT AS DIRECTED BY THE ENGINEER.
 CHANNEL EXCAVATION = 600 CU YD

FILE NAME =	USER NAME = ethompa	DESIGNED -	REVISED -	BROWN COUNTY TOWNSHIP ROAD 141 OVER WELLS FORK	PLAN AND PROFILE	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NC.	
V:\Bridge\2017 - Brown\3017P001.dgn		DRAWN -	REVISED -			TR 141	10-04118-00-BR	BROWN	24	6	
		CHECKED -	REVISED -			CONTRACT NO. 93588					
		DATE -	REVISED -			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BR05-0099(221)					

B.M. RR Spike in Power Pole
Sta. 15+69, 17' Lt.
Elev. 654.14

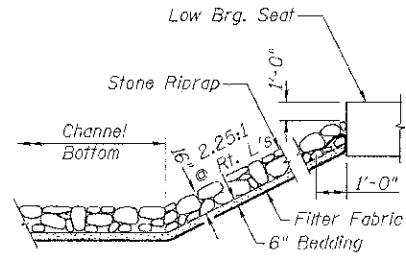
RR Spike in Power Pole
Sta. 23+87, 25' Rt.
Elev. 673.46

Existing Structure:

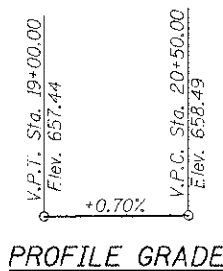
Three span bridge with a steel truss with timber deck main span on steel column piers. The approach spans consist of timber deck on steel stringer superstructure on concrete cap on timber pile with timber lagging closed abutments. The structure is +75' back to back of abutments, +14'-2" out to out of deck, and is not skewed. Str. No. 005-3406

Salvage: Structural Steel, Deck Planking

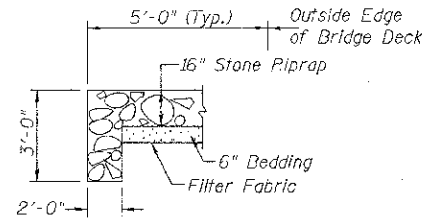
Road to be closed to traffic during construction.



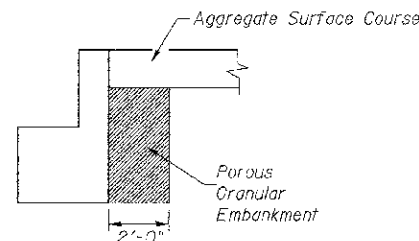
STONE RIPRAP DETAIL



PROFILE GRADE



SECTION A-A



SECTION B-B

DESIGN SCOUR TABLE

Location	W. Abut	Pier 1	Pier 2	E. Abut
Design Scour Elevation	653.44	640.21	640.32	654.18

WATERWAY INFORMATION

Drainage Area = 6.24 Sq. Mi.		Low Grade Elev. = 653.42 @ Sta. 16+00.00							
Flood	Freq. Yr.	0 C.F.S.	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.			
Design	15	1,454	319	544	653.21	0.05	0.04	653.26	653.25
Base	100	2,330	452	686	655.04	0.00	0.00	655.04	655.04

OVER-THE-ROAD AREA

Freq. Yr.	Existing	Proposed
15	0	0
100	365	273

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications

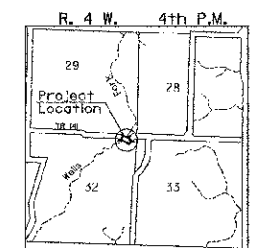
DESIGN STRESSES

(FIELD UNITS) $f'_c = 3,500$ p.s.i. $f_y = 60,000$ p.s.i. (Rein.)

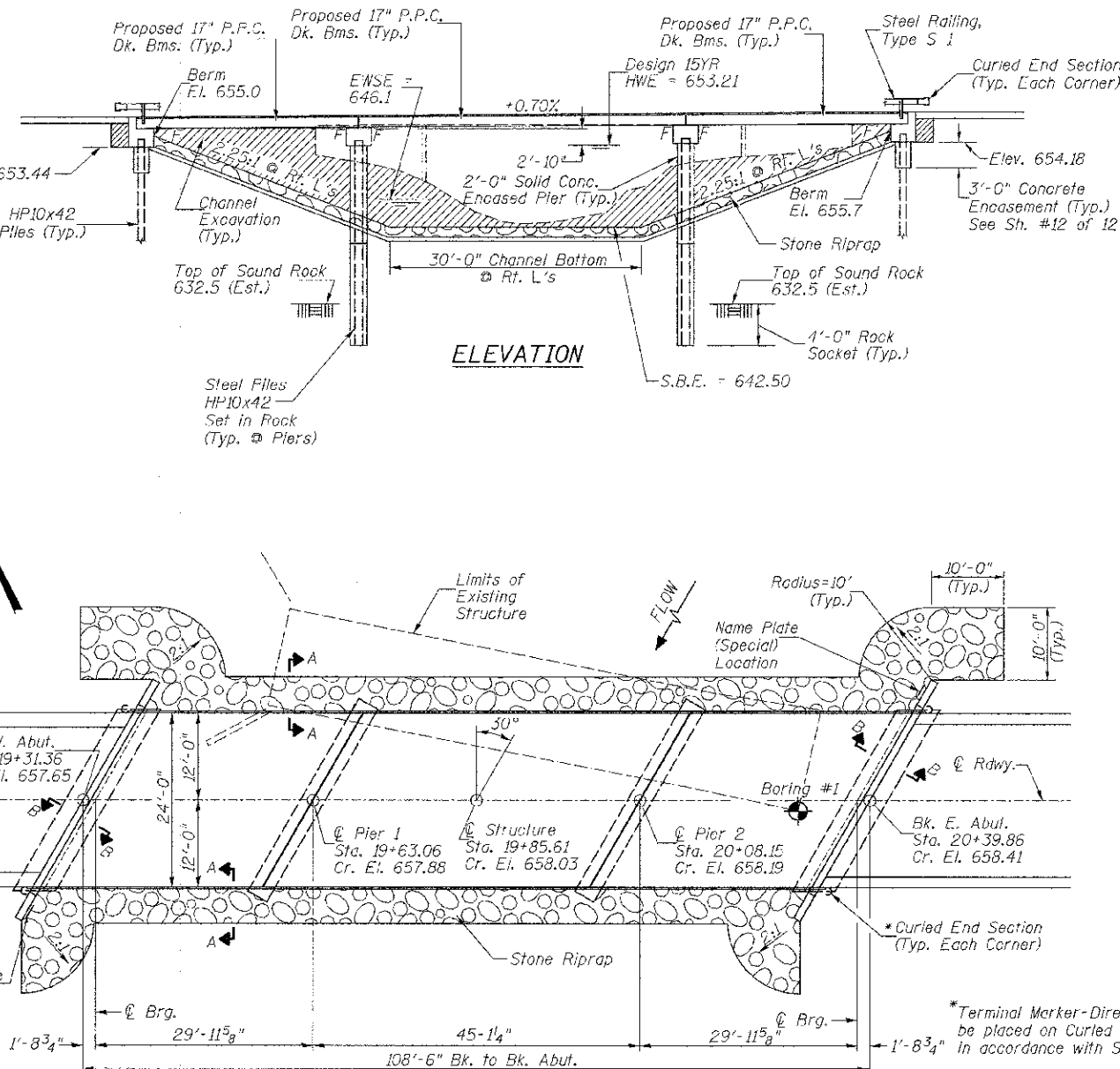
(PRECAST PRESTRESSED UNITS) $f'_c = 6,000$ p.s.i. $f'_{ci} = 5,000$ p.s.i. $f'_s = 270,000$ p.s.i. ($1/2$ " Strands) $f'_{si} = 201,960$ p.s.i. ($1/2$ " Strands)

LOADING HL-93

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



LOCATION SKETCH



PLAN

GENERAL NOTES

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at the substructures specified or approved by the Engineer before ordering the remainder of the piles.
For Soil Boring Logs, See Special Provisions.
A Corrosion Inhibitor shall be used in the concrete for Precast Prestressed Concrete Deck Beams according to Article 1020.05(b)(12) of the Standard Specifications.
Reinforcement Bars shall conform to the requirements of ASTM A706 Grade 60. Reinforcement Bars designated (E) shall be epoxy coated.
Layout of the slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
The top surface of the beams shall be finished according to the 1001 Manual for Fabrication of Precast Prestressed Concrete Products.
The existing structural steel coating may contain lead. The contractor should take appropriate precautions to deal with the presence of lead on this project.
Excavation behind the existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
Each Pier Stem shall be constructed in single continuous concrete pour.

**WELLS FORK
BUILT 201 BY
LEE ROAD DISTRICT
BROWN COUNTY
SEC. 10-04118-00-BR
T.R. 141 STATION 19+85.61
F.A. PROJ. BROS-0009(221)
STR. NO. 005-3407 LOADING HL-93**

**EMMETT AND ALMEDA MCNEFF
AND FAMILY
KNOWN AS "GOOSE HOLLER"**

NAME PLATE

Locate Name Plate at S.W. Wingwall
Corner of Bridge (See Std. 515001)

NAME PLATE (SPECIAL)

Locate Name Plate at N.E. Wingwall
Corner of Bridge (See Std. 515001)

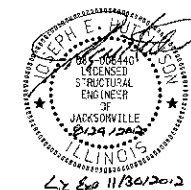
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUB.	TOTAL
Channel Excavation	CU YD	---	600	600
Stone Riprap, Class B4 (Special)	TON	---	365	365
Filter Fabric	SQ YD	---	470	470
Removal of Existing Structures	EACH	---	---	1
Structure Excavation	CU YD	---	60	60
Cofferdam Excavation	CU YD	---	70	70
Concrete Structures	CU YD	---	100.9	100.9
Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	2,548	---	2,548
Reinforcement Bars	POUND	---	8,550	8,550
Steel Railing, Type S1	FOOT	217	---	217
Furnishing Steel Piles HP10x42	FOOT	---	405	405
Driving Piles	FOOT	---	135	135
Test Pile Steel HP10x42	EACH	---	2	2
Setting Piles in Rock	EACH	---	10	10
Concrete Encasement	CU YD	---	11.6	11.6
Name Plates	EACH	---	1	1
Name Plates (Special)	EACH	---	1	1
Porous Granular Embankment	CU YD	---	13.5	13.5
Cofferdam (Type 1) (Location-1) (Pier #1)	EACH	---	1	1
Cofferdam (Type 1) (Location-2) (Pier #2)	EACH	---	1	1
Terminal Marker - Direct Applied	EACH	4	---	4

See Special Provisions

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specification for Highway Bridges. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

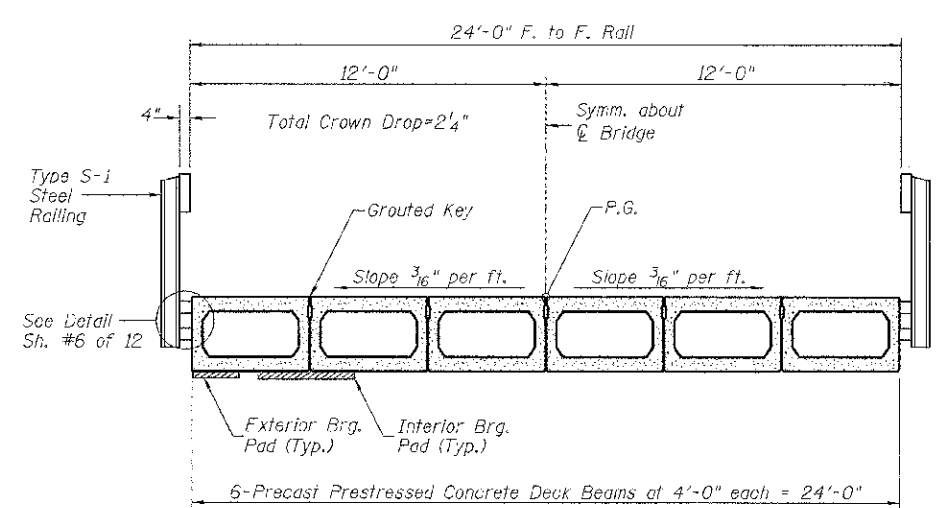
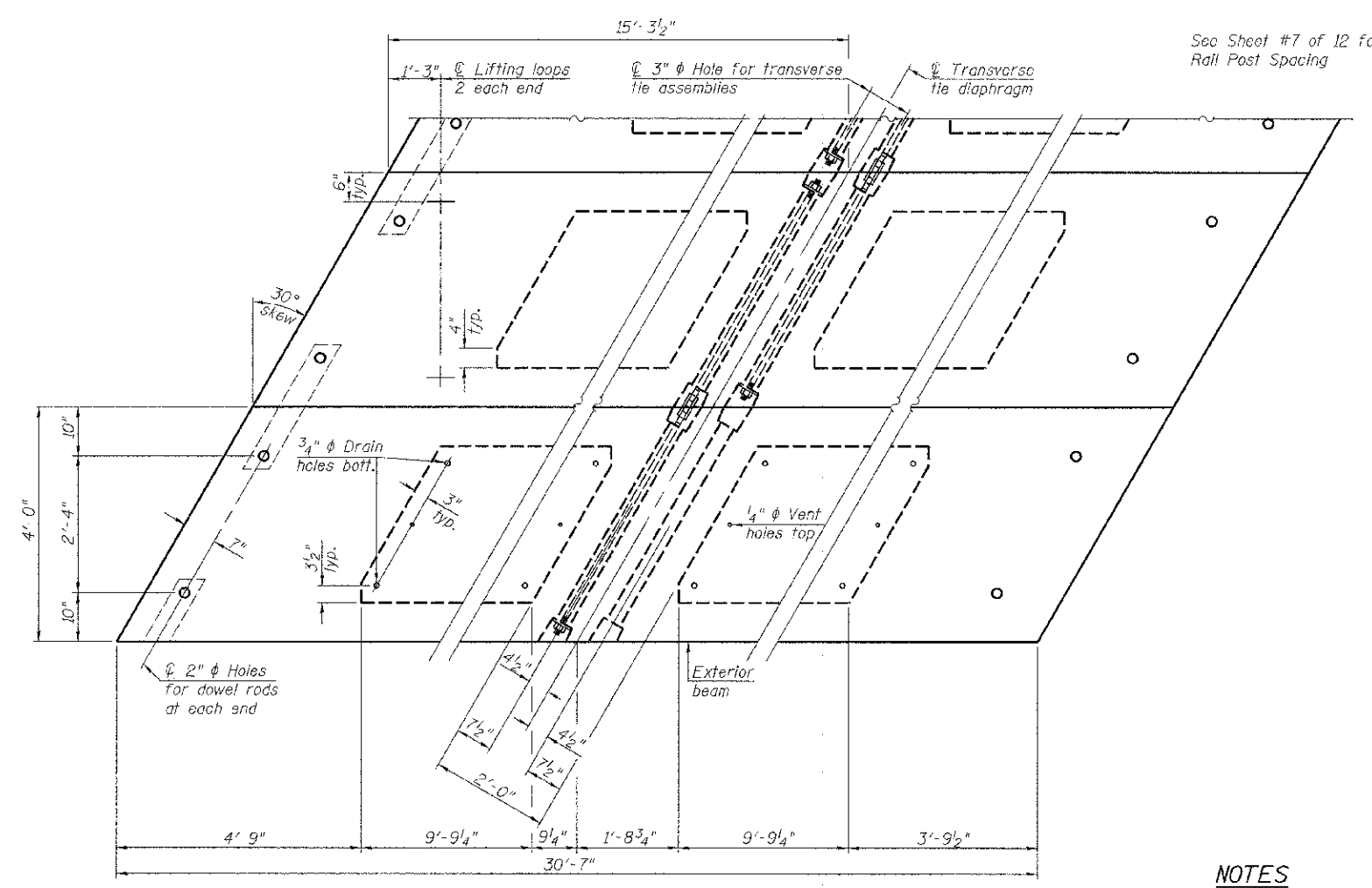
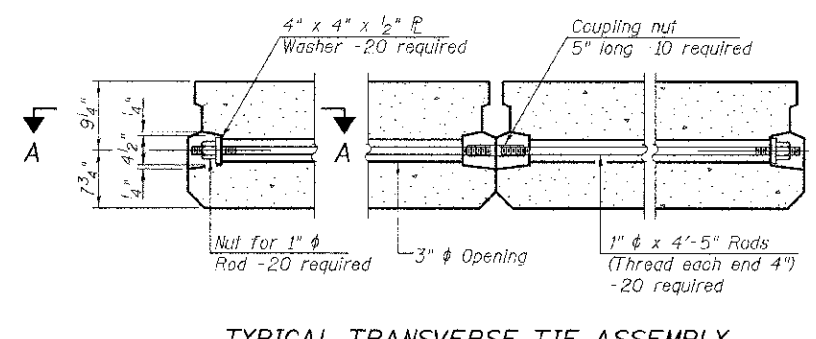
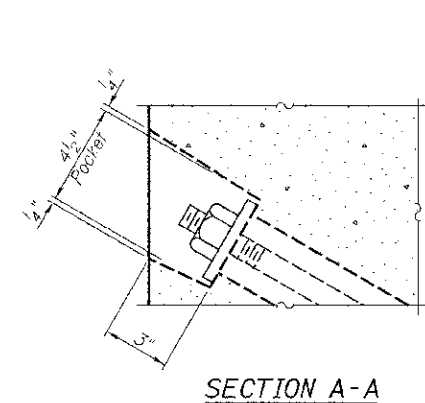
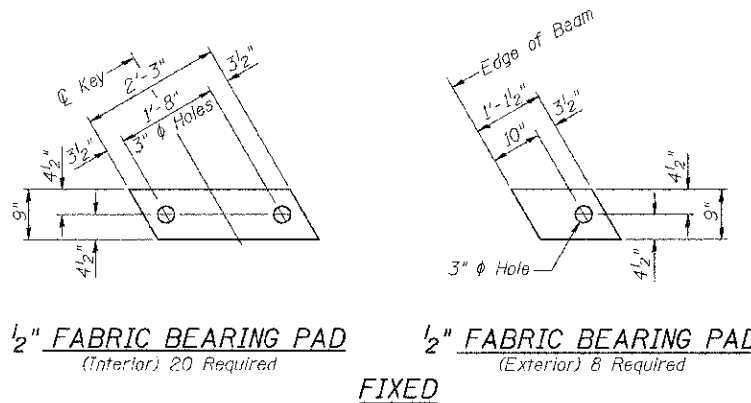
DESIGNED	C.T.M.
CHECKED	S.T.M./J.E.H.
DRAWN	C.T.M.
CHECKED	S.T.M./J.E.H.



8/29/2012
Illinois Structural No. 6440
Expires 11/30/2012

**GENERAL PLAN & ELEVATION
BROWN COUNTY
SECTION 10-04118-00-BR
T.R. 141 OVER WELLS FORK**

SHEET NO. 1	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS	TR 141	10-04118-00-BR	BROWN	24	7
S.N. 005-3407			CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0009(221)		



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
① Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	1,468

① See Special Provisions

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 7/8" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706, Grade 50.

Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

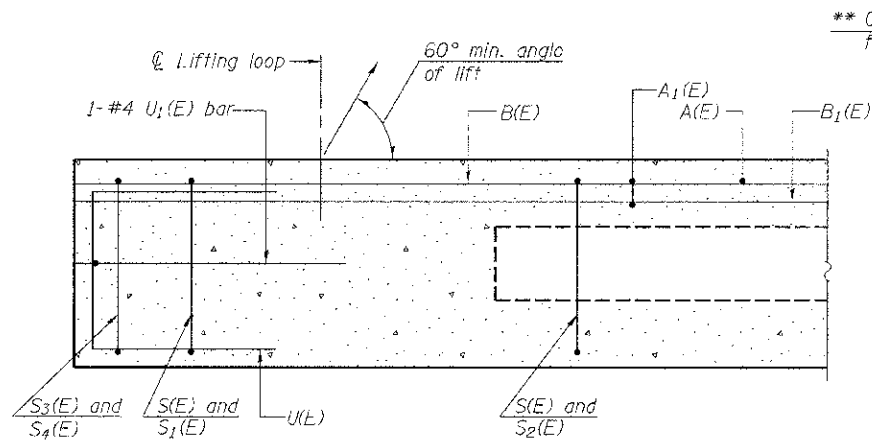
Note: Connect beams in pairs with the transverse tie configuration shown.

PLAN VIEW

CROSS SECTION

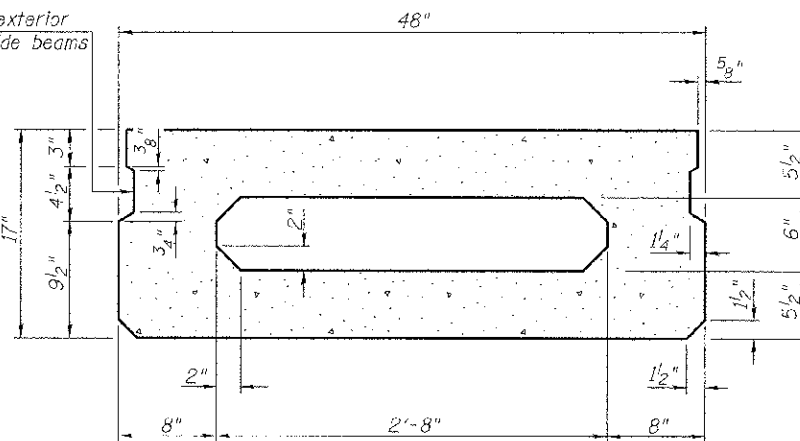
SUPERSTRUCTURE - SPANS 1 & 3
BROWN COUNTY
SECTION 10-04118-00-BR
T.R. 141 OVER WELLS FORK

SHEET NO. 2	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
12 SHEETS	TR 141	10-04118-00-BR	BROWN	24	8
S.N. 005-3407			CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BR05-0009(221)		



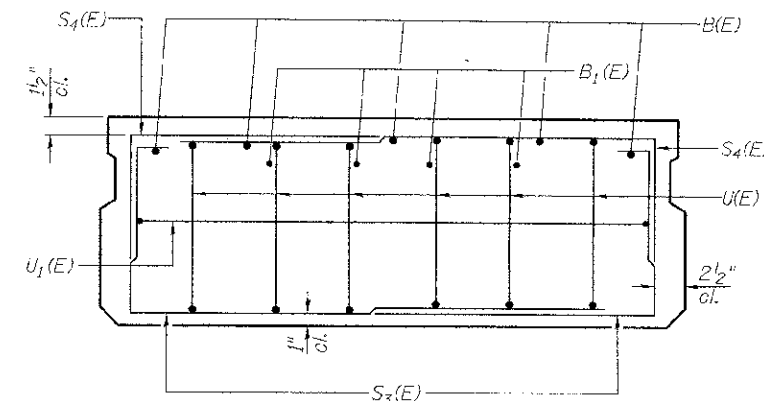
SECTION C-C

** Omit key on exterior face of outside beams

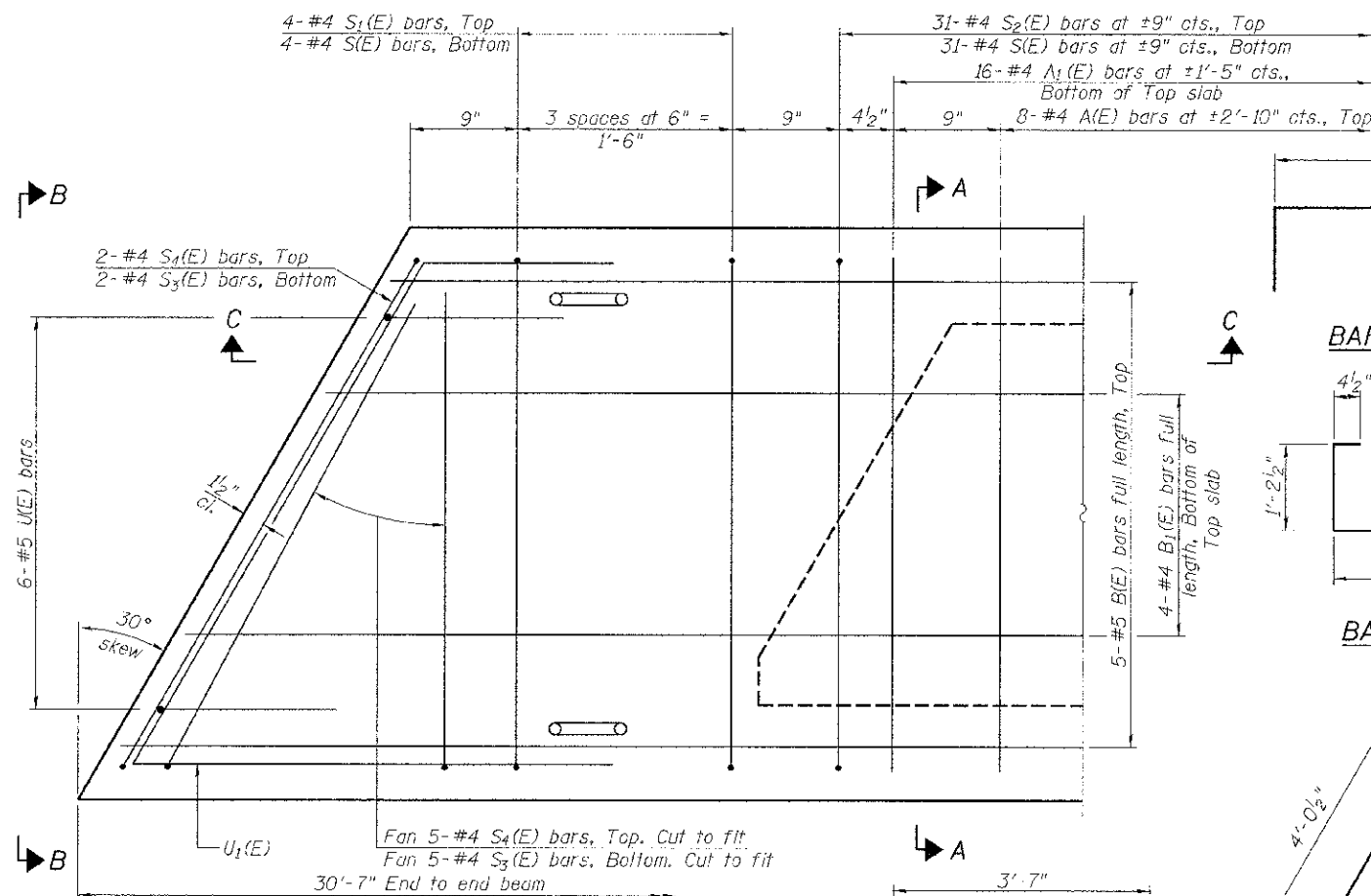


SECTION A-A (Showing dimensions)

** Rail post anchor devices (Sheet 6 of 12) to be cast into exterior face of outside beams.



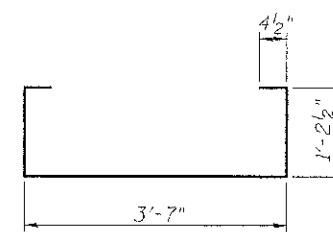
VIEW B-B



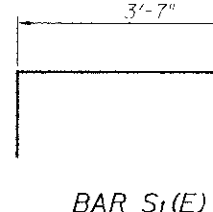
PLAN VIEW

Note: Spacing of S(F) and S2(F) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

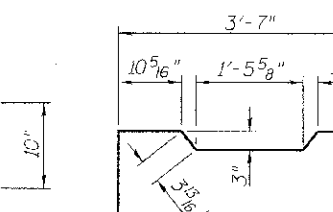
MINIMUM BAR LAP
#4 bar = 2'-0"
#5 bar = 2'-6"



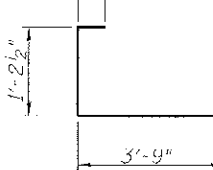
BAR S(E)



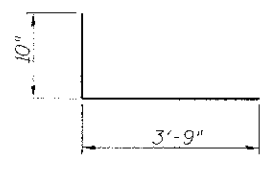
BAR S1(E)



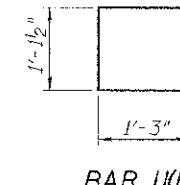
BAR S2(E)



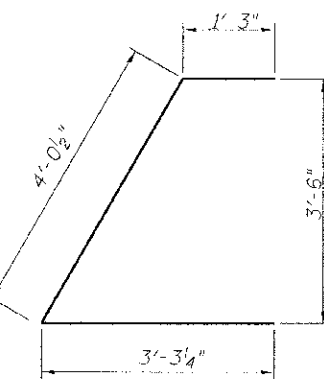
BAR S3(E)



BAR S4(E)

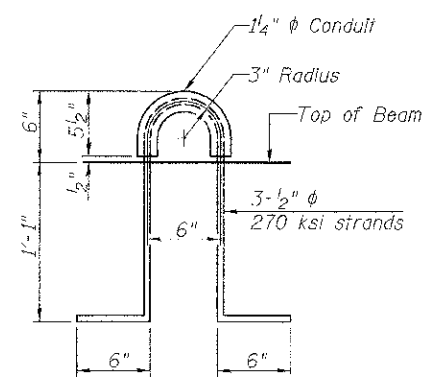


BAR U(E)

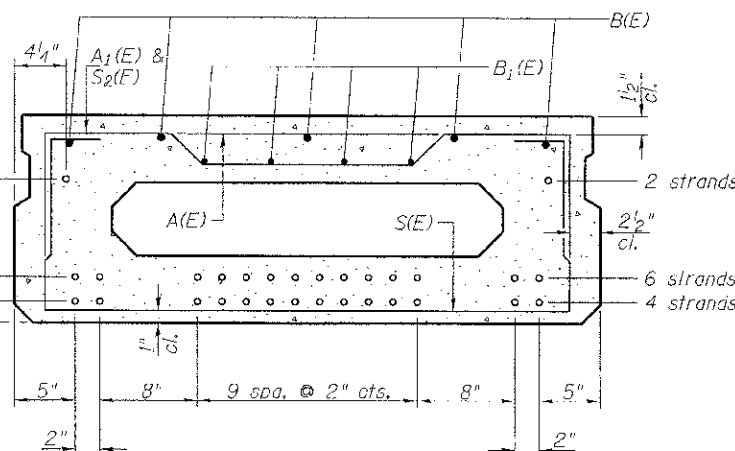


BAR U1(E)

BAR A1(E)



LIFTING LOOP DETAIL



SECTION A-A

12-1/2" Strands Each Strand Stressed to 30,900 Lbs.
4-Strands 1 3/4" up, 6-Strands 3 3/4" up, 2-Strands 11 3/4" up
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST-ONE BEAM ONLY (For information only)

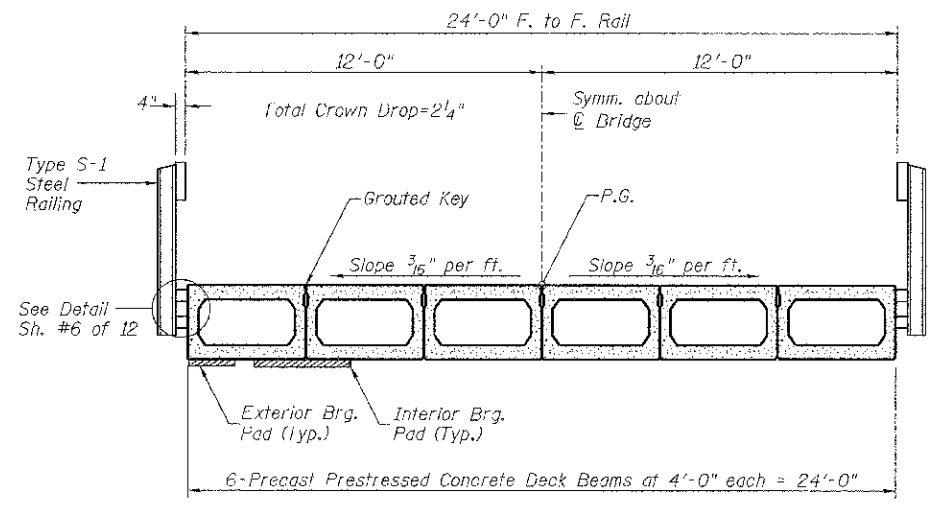
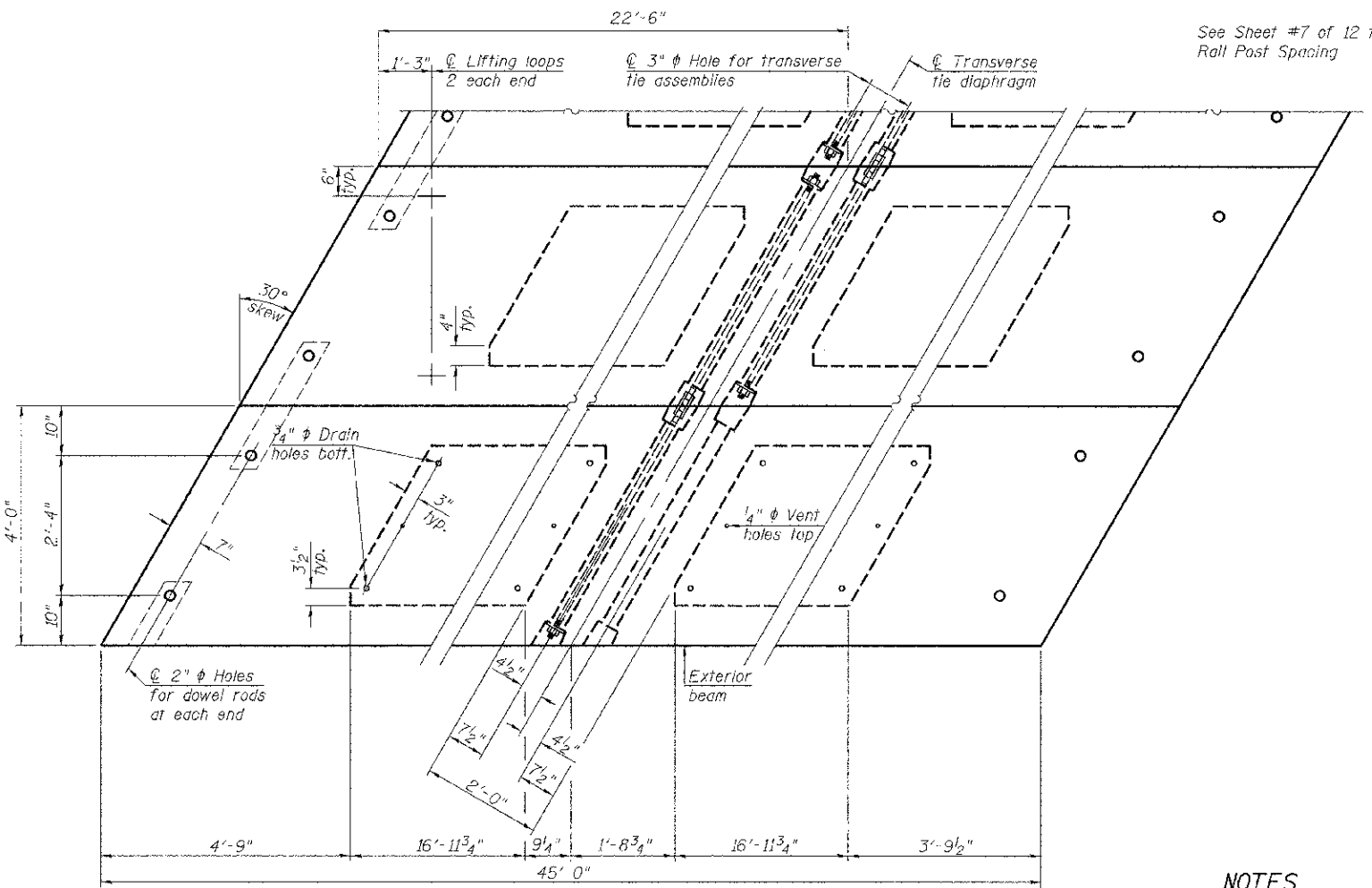
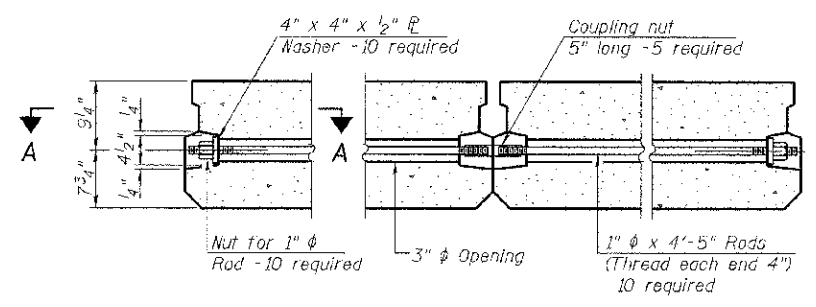
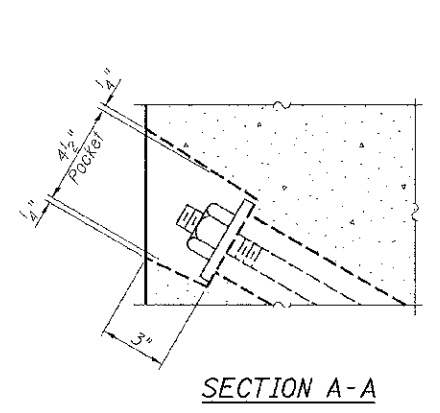
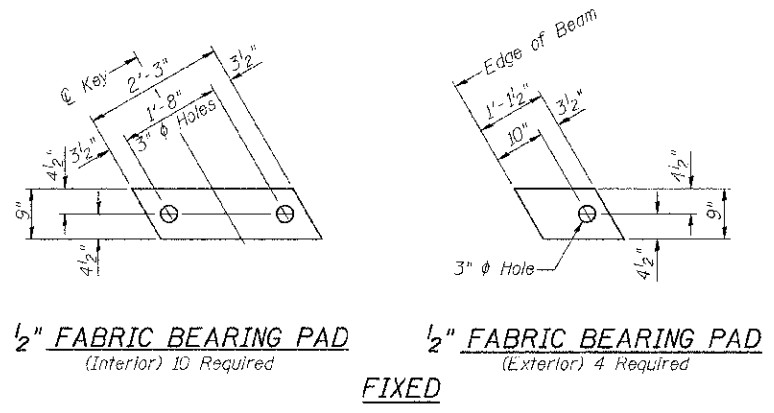
Bar	No.	Size	Length	Shape
A(E)	8	#4	3'-7"	—
A1(F)	16	#4	3'-10"	—
B(E)	5	#5	*30'-4"	—
B1(E)	4	#4	*30'-4"	—
S(E)	39	#4	6'-9"	□
S1(E)	8	#4	5'-3"	□
S2(E)	31	#4	5'-6"	□
S3(E)	14	#4	5'-4"	□
S4(E)	14	#4	4'-7"	□
U(E)	12	#5	3'-8"	□
U1(F)	2	#4	8'-7"	□

*Total Length, Lap as Necessary.

Note: See sheet 2 of 12 for additional details and Bill of Material.

SUPERSTRUCTURE DETAILS - SPANS 1 & 3
BROWN COUNTY
SECTION 10-04118-00-BR
T.R. 141 OVER WELLS FORK

SHEET NO. 3 12 SHEETS	ROUTE NO. TR 141	SECTION 10-04118-00-BR	COUNTY BROWN	TOTAL SHEETS 24	SHEET NO. 9
	S.N. 005-3407		CONTRACT NO. 93588		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BR05-0009(221)		



See Sheet #7 of 12 for Roll Post Spacing

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2 inch and the nominal cross-sectional area shall be 0.153 sq. in. The 1 inch diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706, Grade 60.

Two 1/8 inch fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2 1/2 inch diameter lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

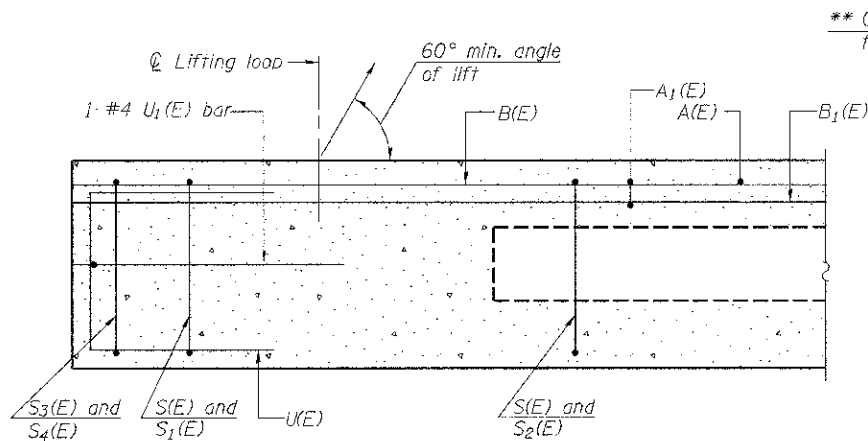
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
① Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	1,080

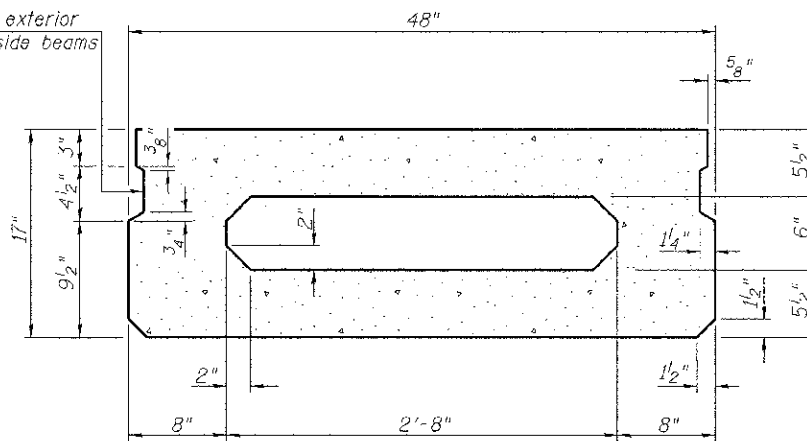
① See Special Provisions

SUPERSTRUCTURE - SPAN 2
BROWN COUNTY
SECTION 10-04118-00-BR
T.R. 141 OVER WELLS FORK

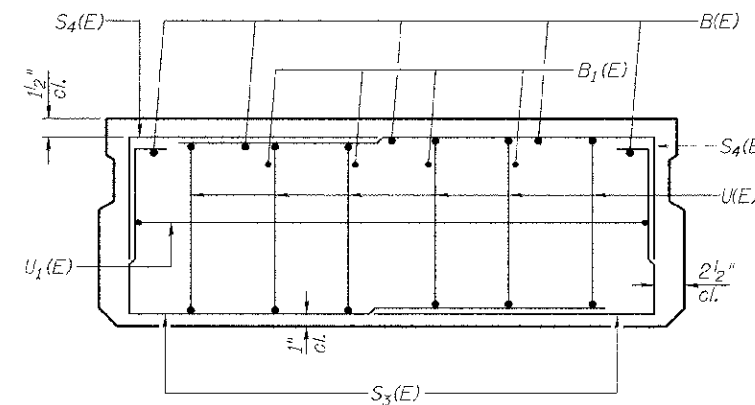
SHEET NO. 4 12 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 141	10-04118-00-BR	BROWN	24	10
	S.N. 005-3407		CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0009(221)		



SECTION C-C



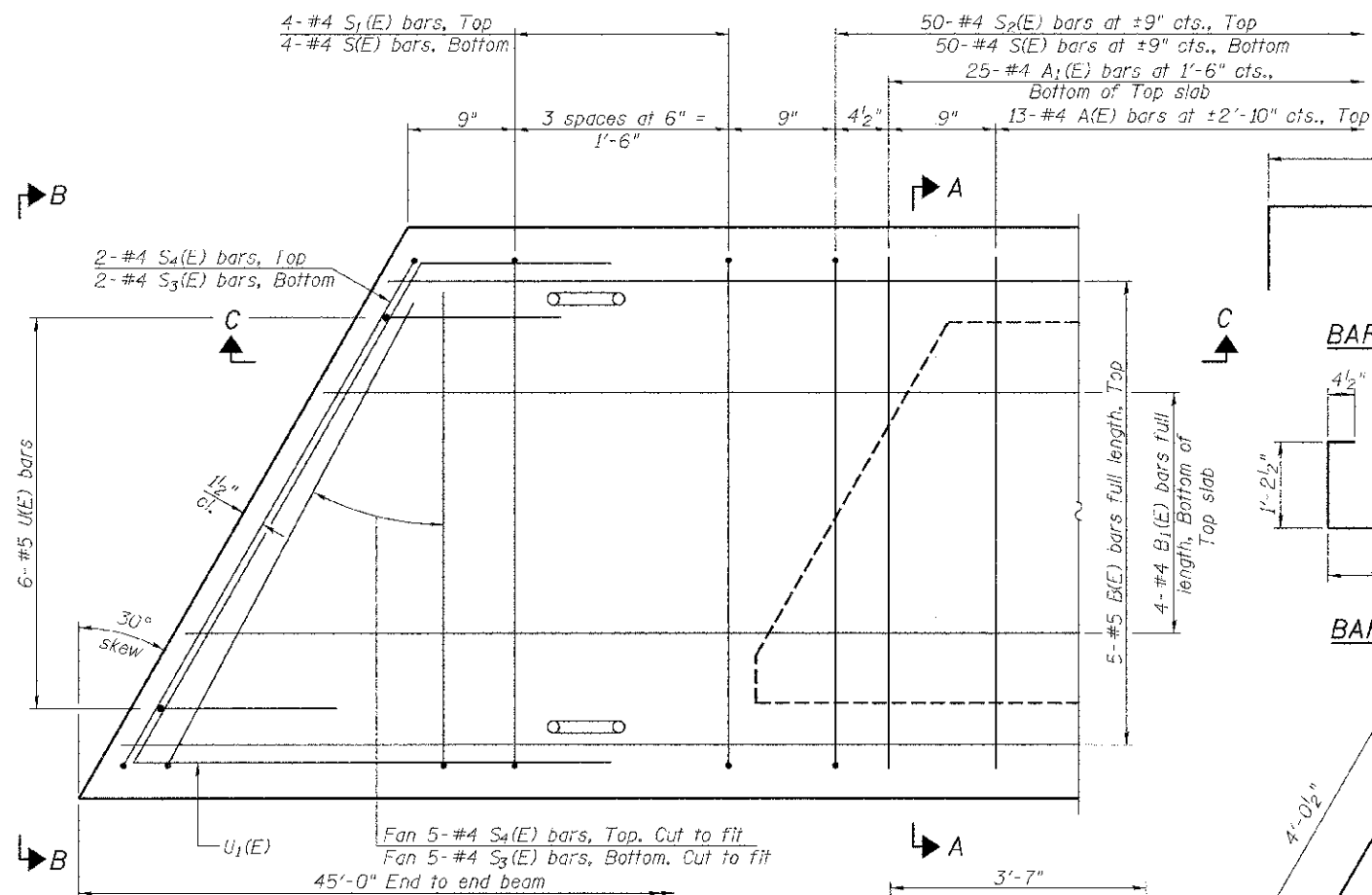
SECTION A-A
(Showing dimensions)



VIEW B-B

** Omit key on exterior face of outside beams

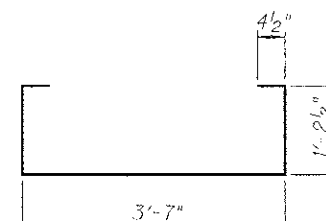
** Rail post anchor devices (Sheet 6 of 12) to be cast into exterior face of outside beams.



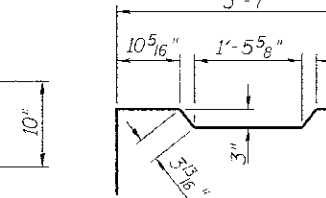
PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

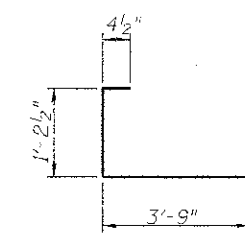
MINIMUM BAR LAP
#4 bar = 2'-0"
#5 bar = 2'-6"



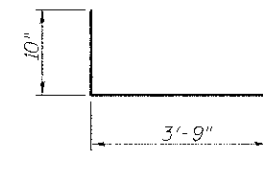
BAR S1(E)



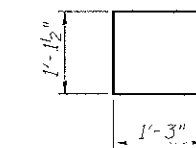
BAR S2(E)



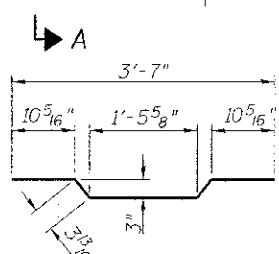
BAR S3(E)



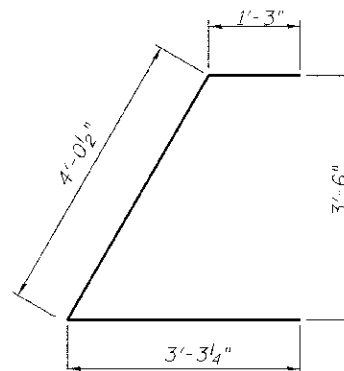
BAR S4(E)



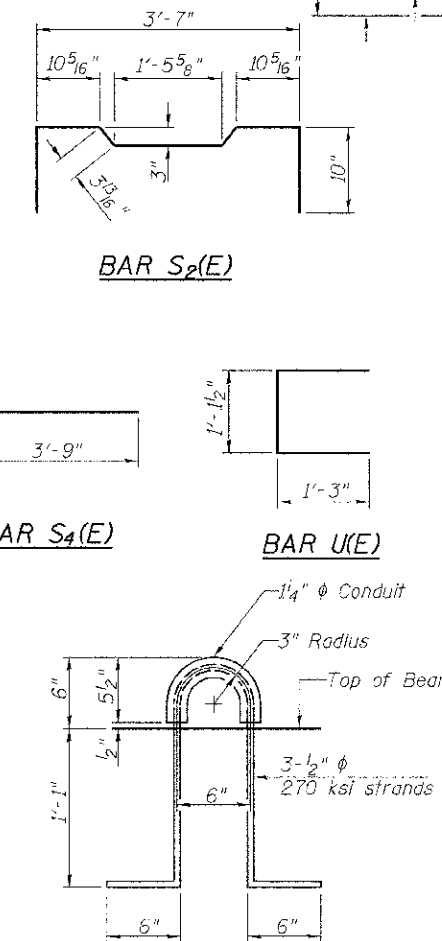
BAR U(E)



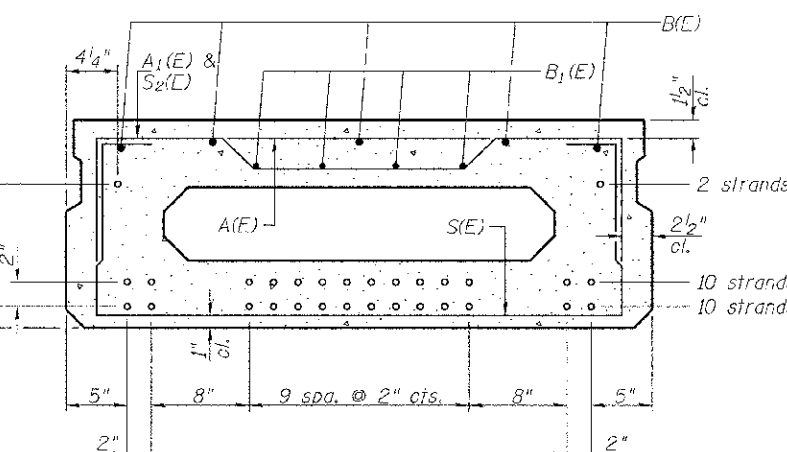
BAR A1(E)



BAR U1(E)



LIFTING LOOP DETAIL



SECTION A-A

22-1/2" φ Strands Each Strand Stressed to 30,900 Lbs.
10-Strands 1 3/4" up, 10-Strands 3 3/4" up, 2-Strands 11 3/4" up
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST-ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	13	#4	3'-7"	—
A1(E)	25	#4	3'-10"	—
B(E)	5	#5	*44'-9"	—
B1(E)	4	#4	*44'-9"	—
S(E)	61	#4	6'-9"	⌋
S1(E)	8	#4	5'-3"	⌋
S2(E)	50	#4	5'-6"	⌋
S3(E)	14	#4	5'-9"	⌋
S4(E)	14	#4	5'-0"	⌋
U(E)	12	#5	3'-8"	⌋
U1(E)	2	#4	8'-7"	⌋

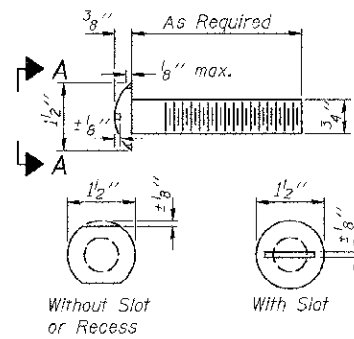
*Total Length, Lap as Necessary.

Note: See sheet 4 of 12 for additional details and Bill of Material.

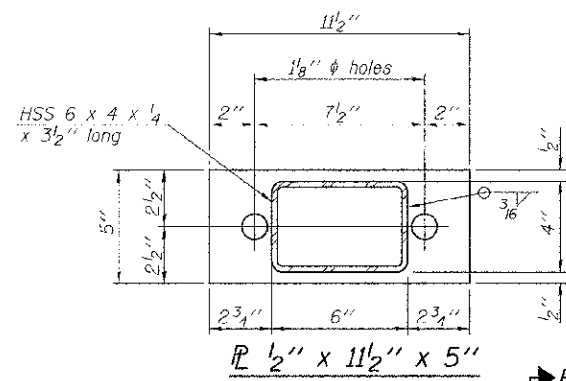
SUPERSTRUCTURE DETAILS - SPAN 2
BROWN COUNTY
SECTION 10-04118-00-BR
T.R. 141 OVER WELLS FORK

SHEET NO. 5 12 SHEETS	ROUTE NO. TR 141	SECTION 10-04118-00-BR	COUNTY BROWN	TOTAL SHEETS 24	SHEET NO. 11
	S.N. 005-3407		CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT BROS-0009(221)		

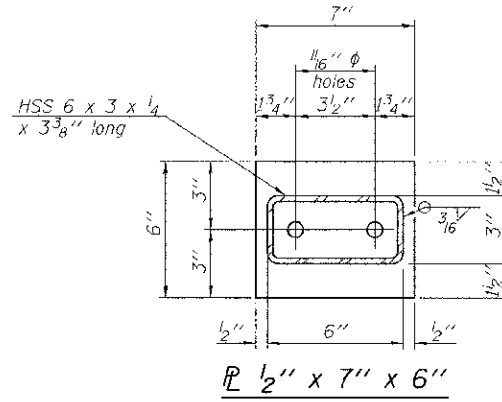
FOR RAIL POST SPACING SEE SH.#7 OF 12



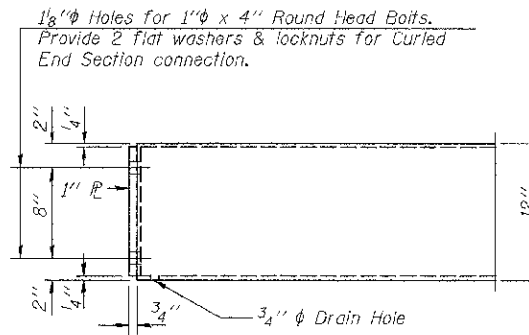
VIEW A-A
ROUND HEAD BOLT



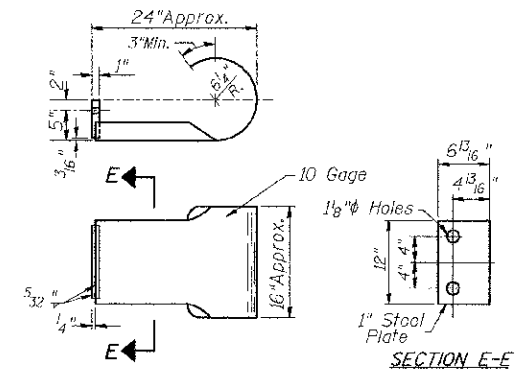
SECTION B-B
R 1/2" x 11 1/2" x 5"



SECTION C-C
R 1/2" x 7" x 6"

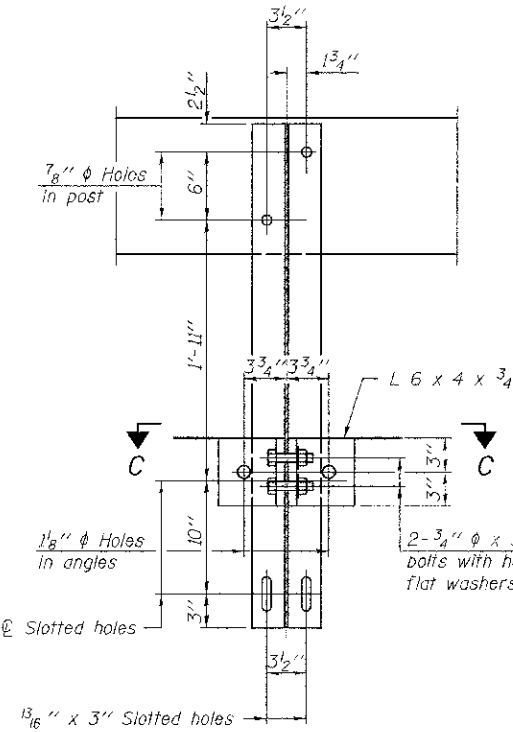


END OF RAIL DETAILS

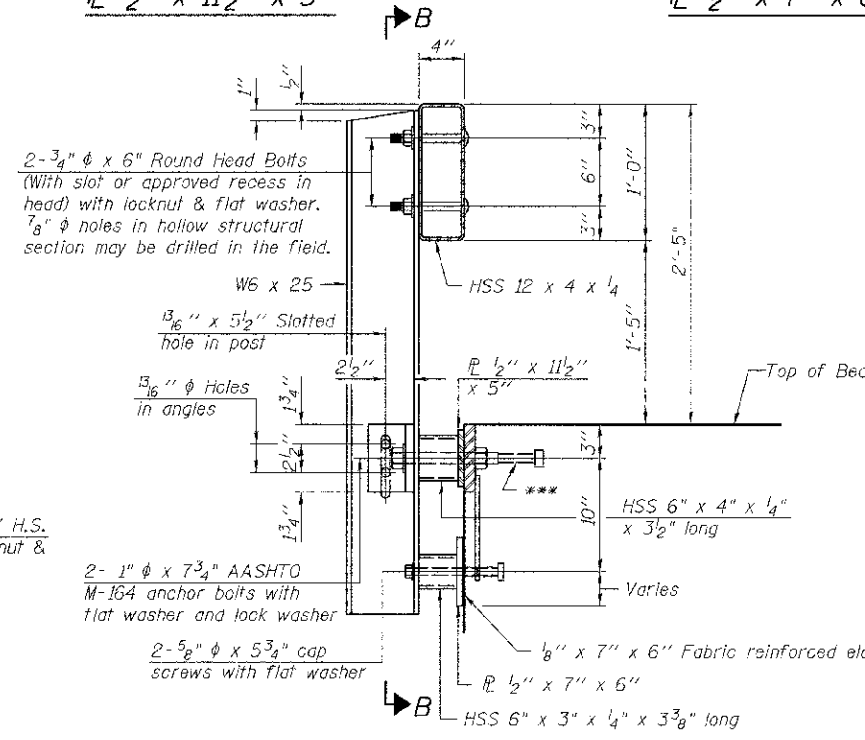


SECTION E-E
CURLLED END SECTION

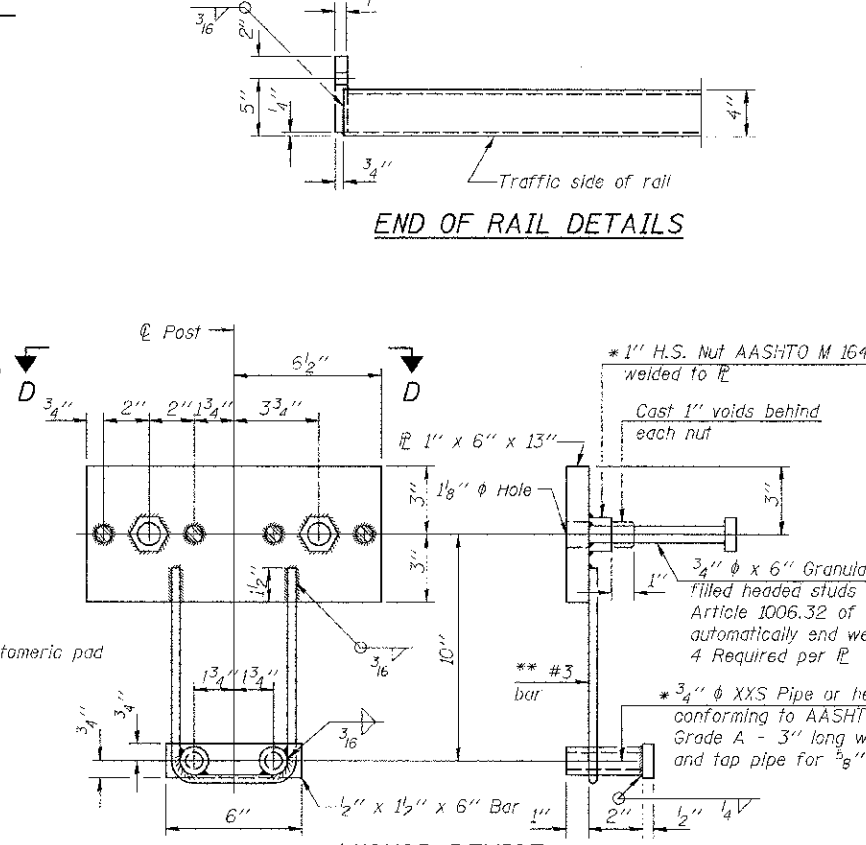
(4 Req'd) Cost Included with Steel Railing, Type S-1. Terminal Markers - Direct Applied shall be placed on end of each Curled End Section. (Each Corner)



SECTION B-B

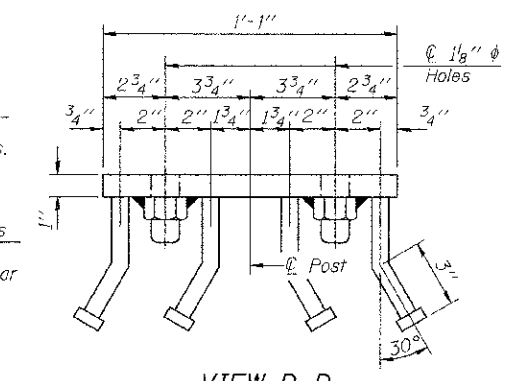


SECTION AT RAILING POST

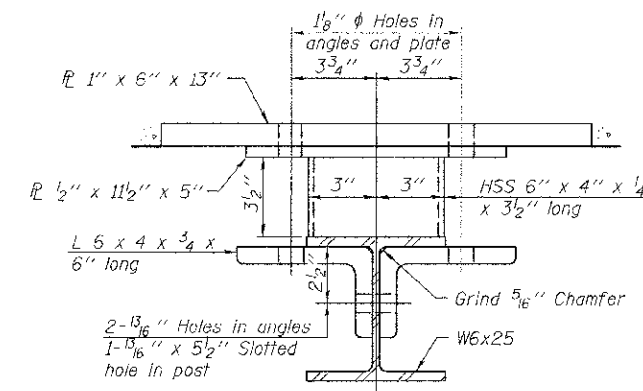


ANCHOR DEVICE

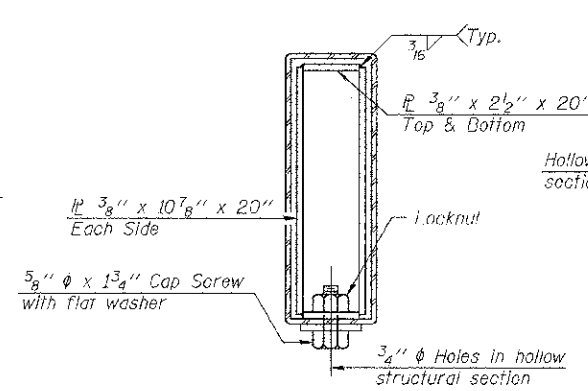
* Threaded areas shall be plugged or blocked off during casting of beam.



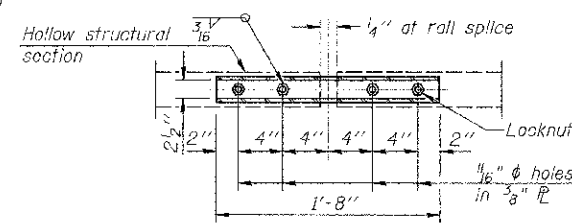
VIEW D-D



SECTION C-C



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE TYPICAL

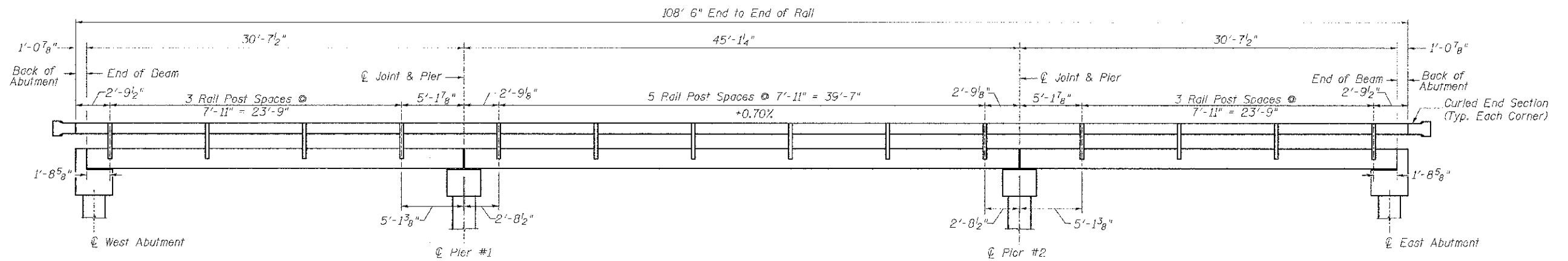
** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2 inch.

BILL OF MATERIAL

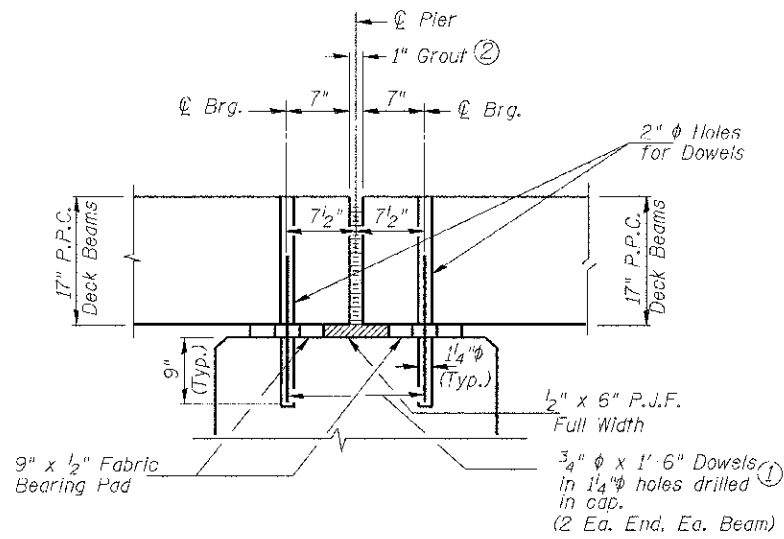
Item	Unit	Quantity
Steel Railing, Type S-1	FOOT	217

STEEL RAILING, TYPE S-1
BROWN COUNTY
SECTION 10-04118-00-BR
T.R. 141 OVER WELLS FORK

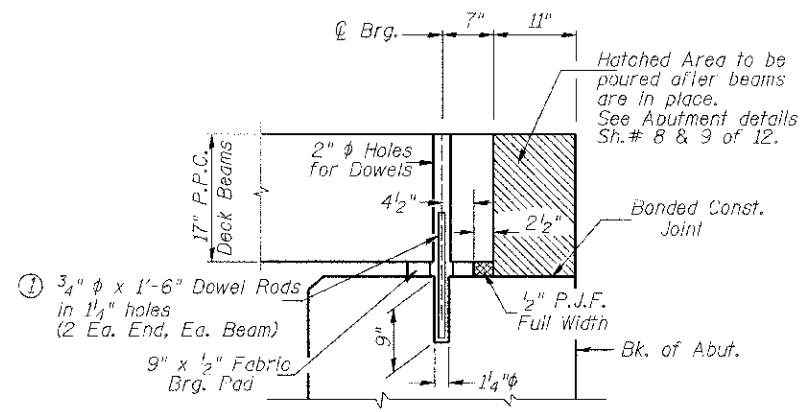
SHEET NO. 6 12 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 141	10-04118-00-BR	BROWN	24	12
S.N. 005-3407			CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0009221J		



RAIL POST SPACING



SECTION THRU PIERS
(At Right Angles)

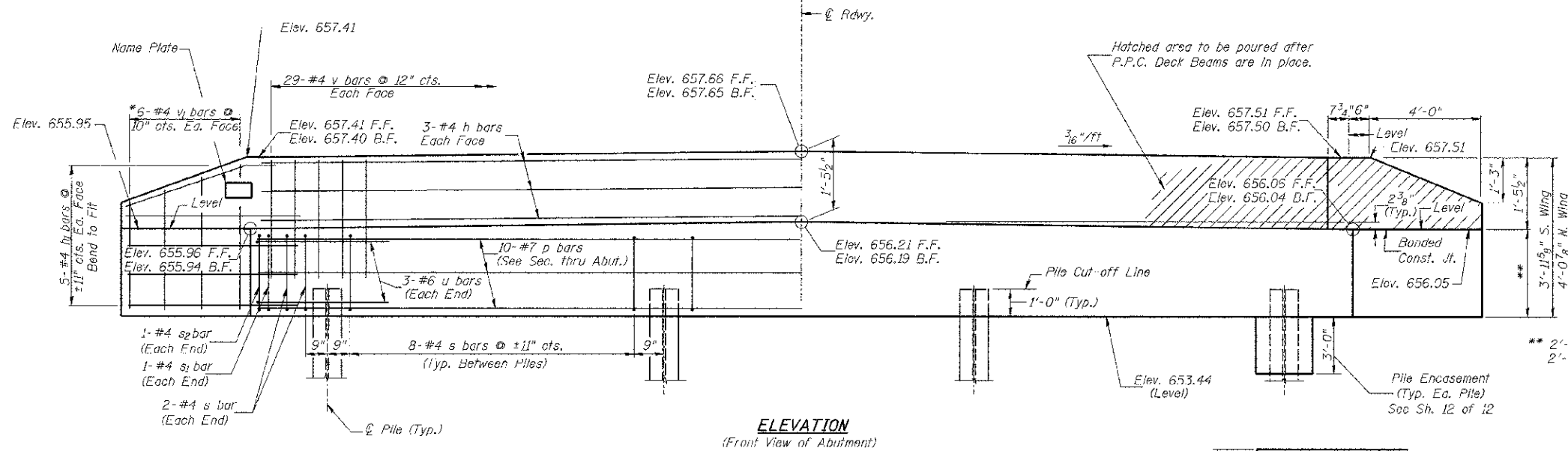
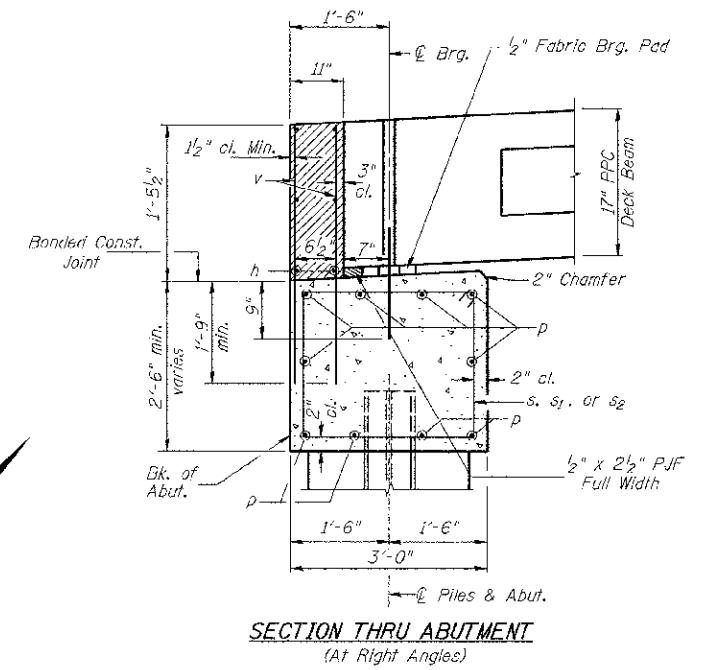
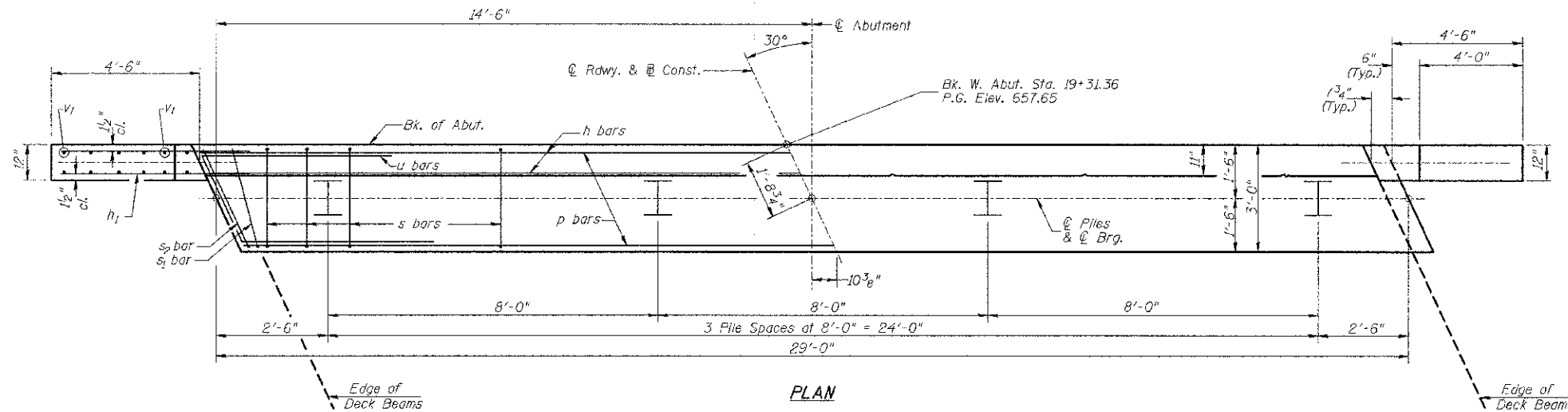


SECTION THRU ABUTMENTS
(At Right Angles)

- ① Dowel Rods to be grouted after beams are in place and allowed to cure (Min. 24 hr.) prior to grouting the shear keys.
- ② 1" Joint shall be packed with a very dry mix of 2:1 sand and P.C. mortar. 1" Dimension may vary plus or minus to accommodate tolerance in beam lengths.

RAIL POST SPACING AND
SUPERSTRUCTURE DETAILS
BROWN COUNTY
SECTION 10-04118-00-BR
T.R. 141 OVER WELLS FORK

SHEET NO. 7 12 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 141	10-04118-00-BR	BROWN	24	13
S.N. 005-3407			CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0009221		



WEST ABUTMENT BILL OF MATERIAL

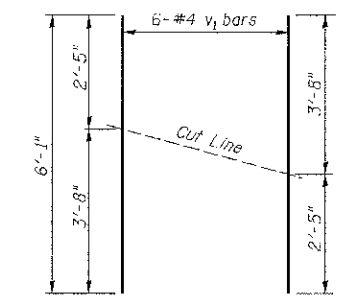
BAR	NO.	SIZE	LENGTH	SHAPE
h	6	#4	28'-9"	—
h1	20	#4	6'-6"	—
p	10	#7	28'-9"	—
s	28	#4	10'-5"	□
s1	2	#4	7'-8"	□
s2	2	#4	8'-4"	□
u	6	#6	12'-0"	□
v	58	#4	3'-2"	—
v1	12	#4	6'-1"	—
Concrete Structures		CU YD	11.2	
Reinforcement Bars		POUND	1,290	
Structure Excavation		CU YD	30	
Name Plates		EACH	1	
Furnishing Steel Piles HP10x42		FOOT	66	
Driving Piles		FOOT	66	
Test Pile Steel HP10x42		EACH	1	
Concrete Encasement		CU YD	1.4	

DESIGN STRESSES
 $f'_c = 3,500$ p.s.i.
 $f_y = 60,000$ p.s.i.

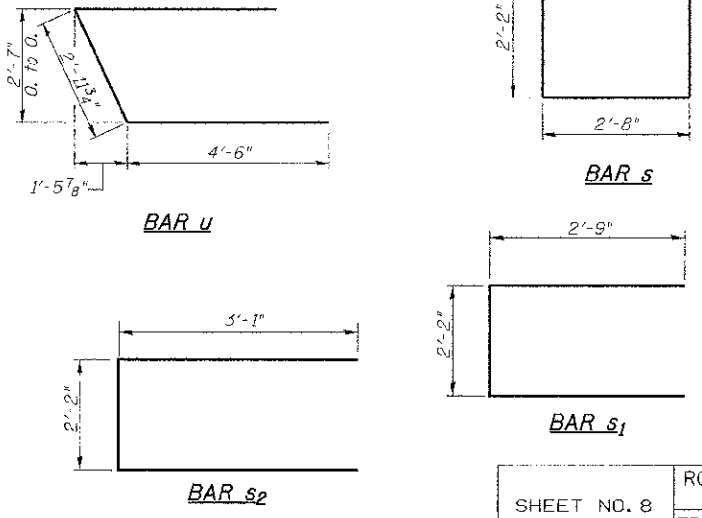
- NOTES**
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
 - Reinforcement bars shall conform to ASTM A706 Grade 60.

PILE DATA

Type & Size:	Steel HP10x42
Nominal Required Bearing:	335 kips
Factored Resistance Available:	184 kips
Est. Length:	22'
No. Req'd:	4 (Includes 1 Test Pile)

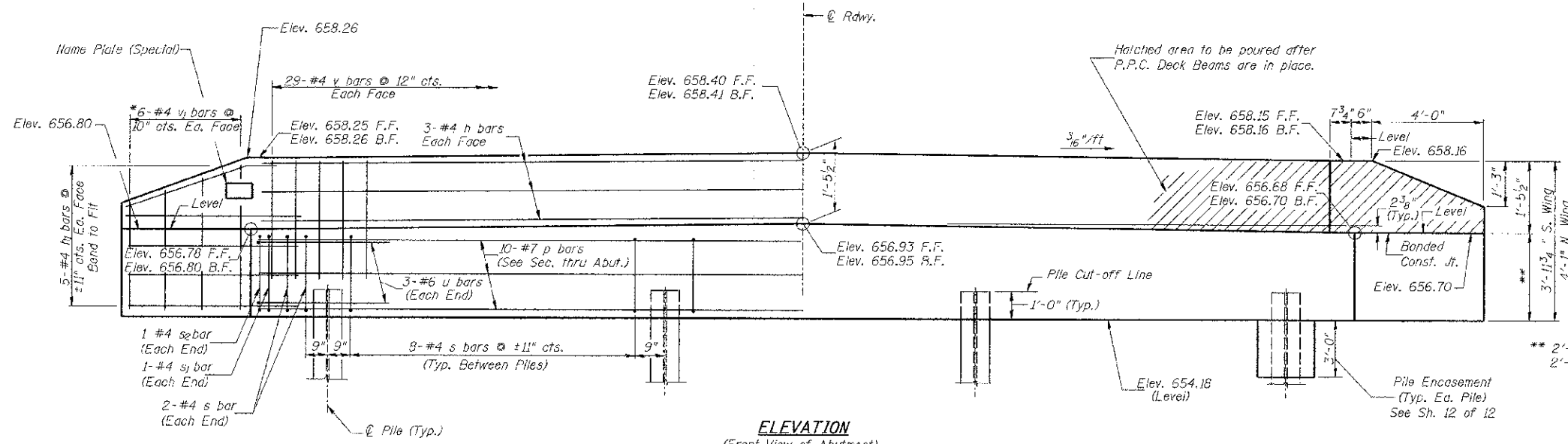
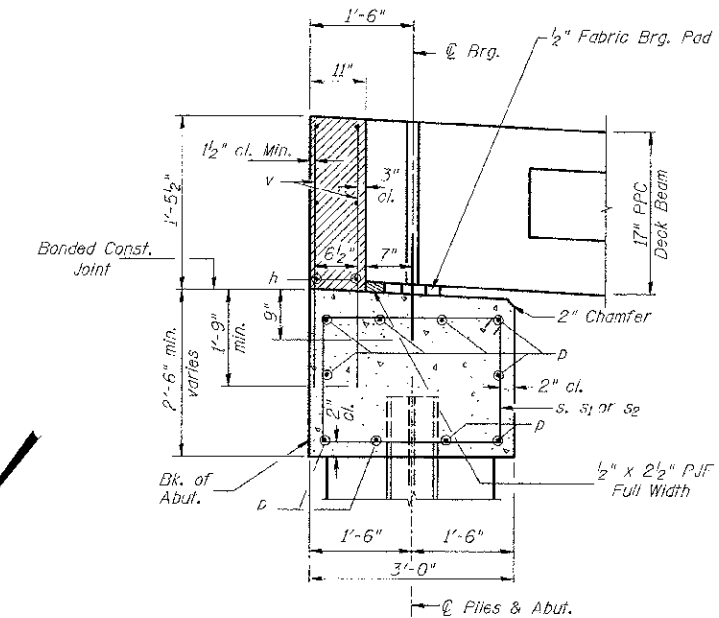
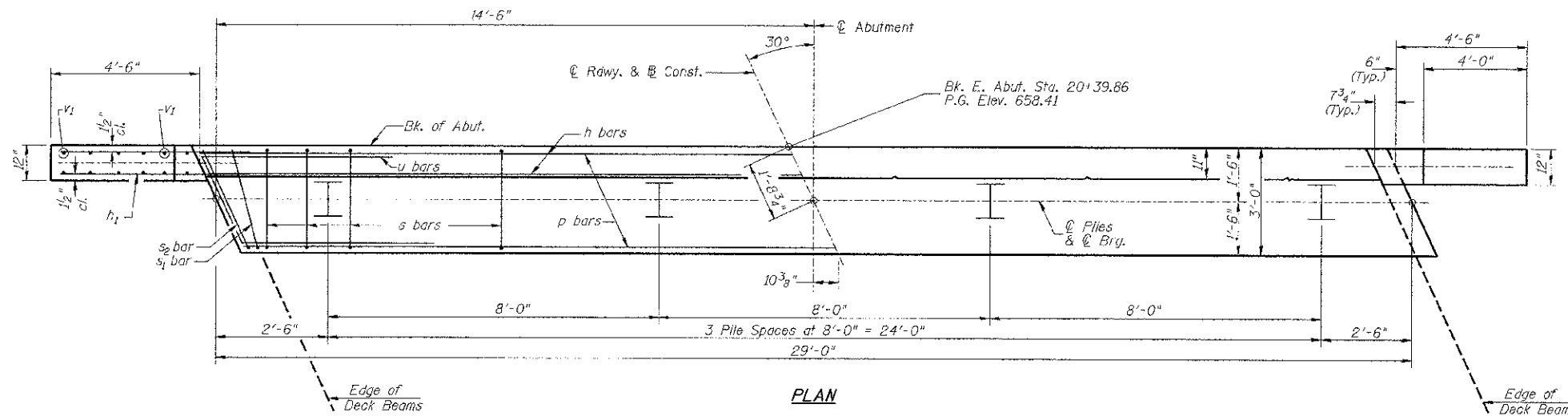


*Order v1 bars full length. Cut as shown and use remainder of bars in opposite face.



WEST ABUTMENT BROWN COUNTY SECTION 10-04118-00-BR T.R. 141 OVER WELLS FORK

SHEET NO. 8 12 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 141	10-04118-00-BR	BROWN	24	14
	S.N. 005-3407		CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BROS-0009(221)			



EAST ABUTMENT BILL OF MATERIAL

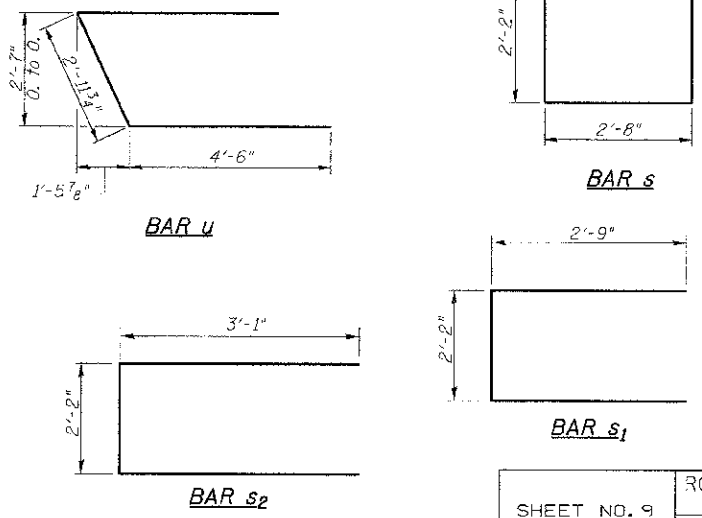
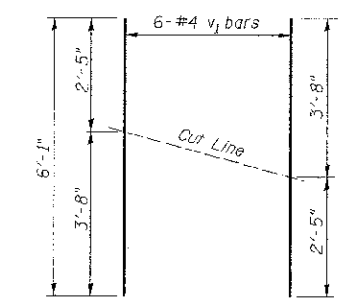
BAP NO.	NO.	SIZE	LENGTH	SHAPE
h	6	#4	28'-9"	—
h1	20	#4	6'-6"	—
p	10	#7	28'-9"	—
s	28	#4	10'-5"	□
s1	2	#4	7'-8"	□
s2	2	#4	8'-4"	□
u	6	#6	12'-0"	—
v	58	#4	5'-2"	—
v1	12	#4	6'-1"	—
Concrete Structures				CU YD 11.2
Reinforcement Bars				POUND 1,290
Structure Excavation				CU YD 30
Name Plates (Special)				EACH 1
Furnishing Steel Piles HP10x42				FOOT 69
Driving Piles				FOOT 69
Test Pile Steel HP10x42				EACH 1
Concrete Encasement				CU YD 1.4

DESIGN STRESSES
 $f'_c = 3,500$ p.s.i.
 $f_y = 60,000$ p.s.i.

- NOTES**
- This Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
 - Reinforcement bars shall conform to ASTM A706 Grade 60.

PILE DATA

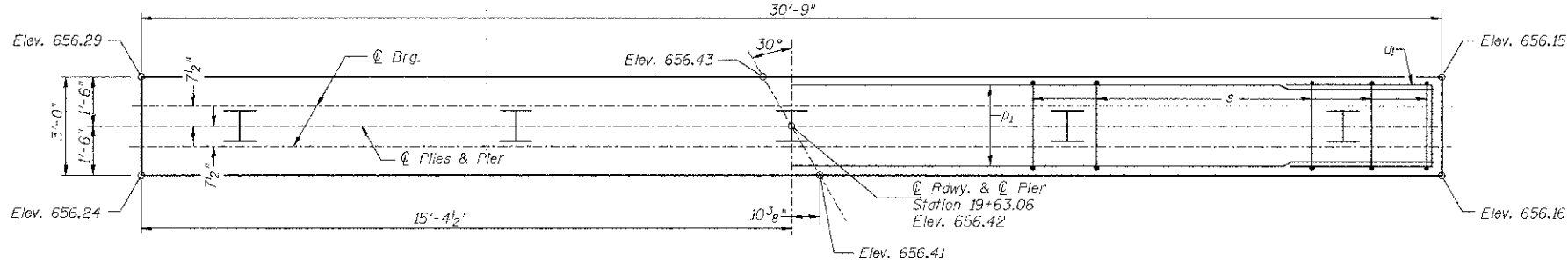
Type & Size: Steel HP10x42
 Nominal Required Bearing: 335 kips
 Factored Resistance Available: 184 kips
 Est. Length: 23'
 No. Req'd: 4 (Includes 1 Test Pile)



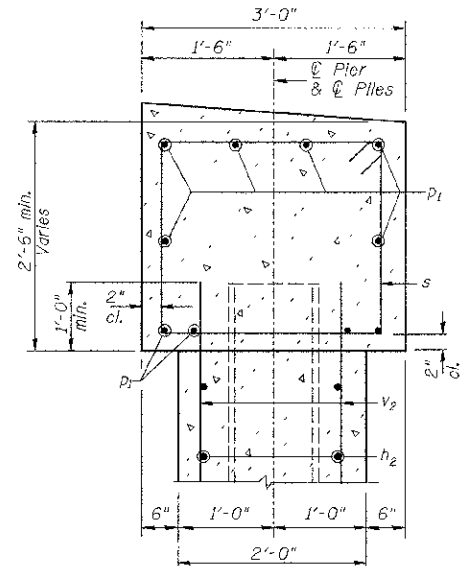
EAST ABUTMENT BROWN COUNTY SECTION 10-04118-00-BR T.R. 141 OVER WELLS FORK

SHEET NO. 9 12 SHEETS	ROUTE NO. TR 141	SECTION 10-04118-00-BR	COUNTY BROWN	TOTAL SHEETS 24	SHEET NO. 15
	S.N. 005-3407		CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0009(221)		

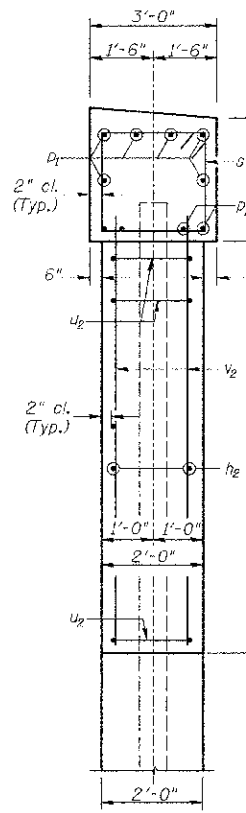
NOTES:
 All edges shall have standard $\frac{3}{4}$ " chamfer.
 The Pier Stem shall be constructed in a single continuous concrete pour.



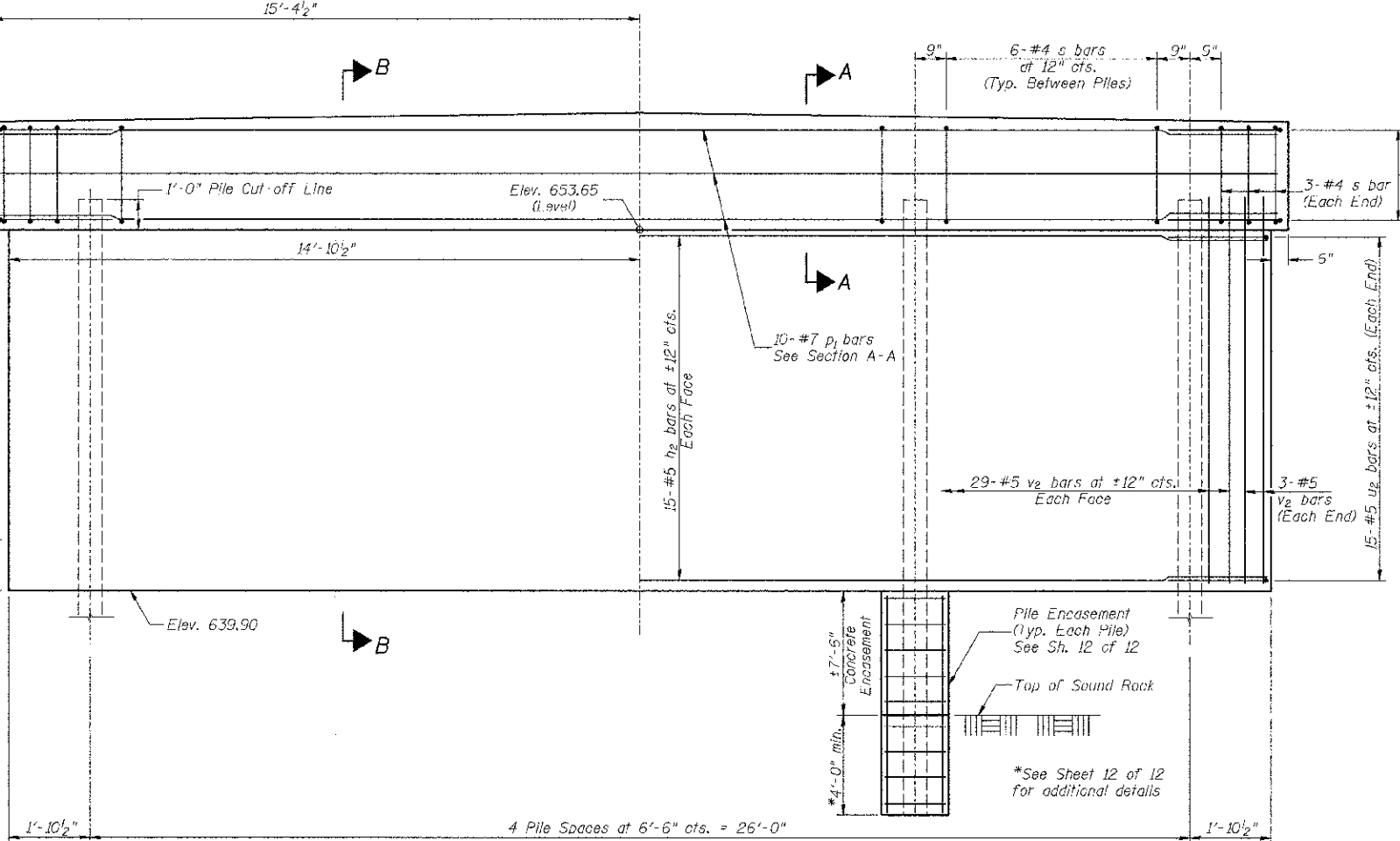
TOP PLAN



SECTION A-A

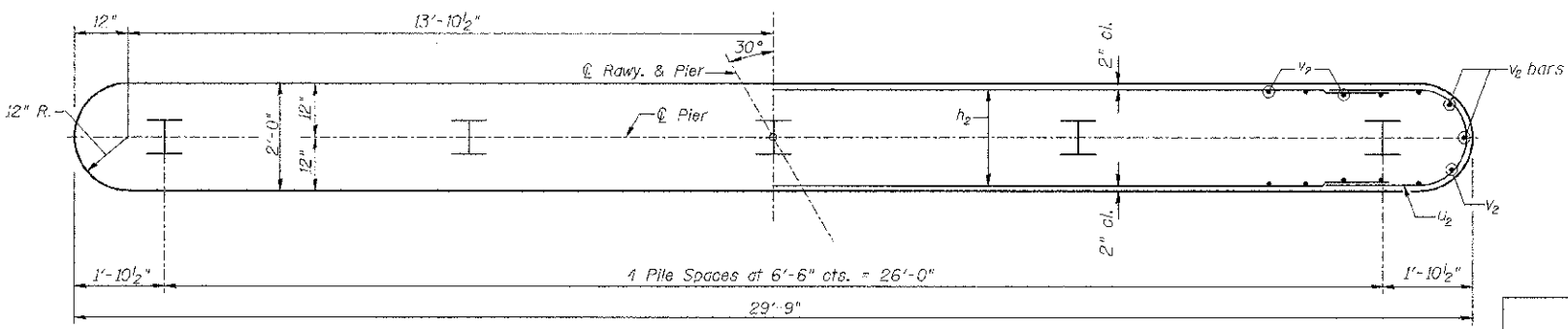


SECTION B-B



ELEVATION
(Looking Upstation)

PILE DATA
 Type & Size: Steel HP10x42
 Nominal Required Bearing: Set in Rock (335 kips)
 Factored Resistance Available: Set in Rock (184 kips)
 Est. Length: 27'
 No. Req'd: 5

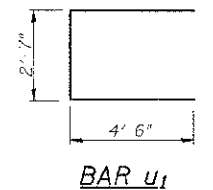


FOOTING PLAN

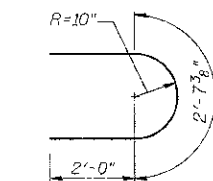
**PIER #1
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
h_2	30	#5	27'-5"	—
p_1	10	#7	30'-6"	—
s	30	#4	10'-5"	□
u_1	6	#6	11'-7"	□
u_2	30	#5	6'-8"	⌒
v_2	64	#5	14'-7"	—
Concrete Structures			CU YD	39.0
Reinforcement Bars			POUND	2,980
Cofferdam Excavation			CU YD	35
Furnishing Steel Piles HP10x42			FOOT	135
① Setting Piles in Rock			EACH	5
Concrete Encasement			CU YD	4.4
① Cofferdam (Type 1) (Location-1)			EACH	1

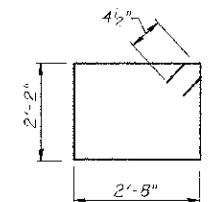
① See Special Provisions



BAR u_1



BAR u_2

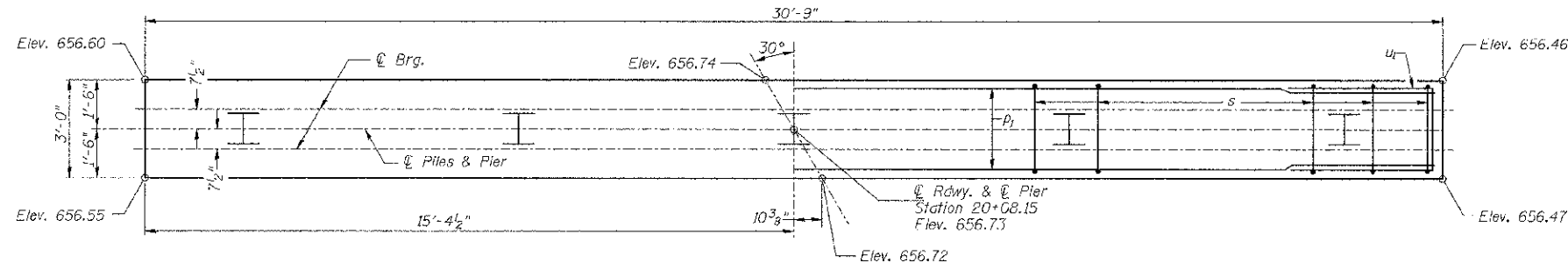


BAR s

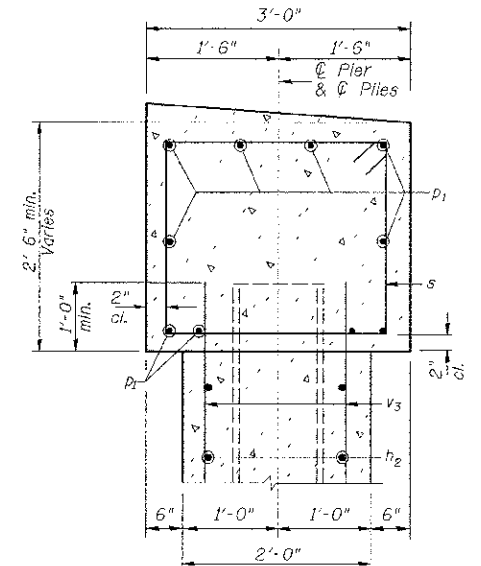
**PIER #1
BROWN COUNTY
SECTION 10-04118-00-BR
T.R. 141 OVER WELLS FORK**

SHEET NO. 10 12 SHEETS	ROUTE NO. TR 141	SECTION 10-04118-00-BR	COUNTY BROWN	TOTAL SHEETS 24	SHEET NO. 16
	S.N. 005-3407		CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0009(221)		

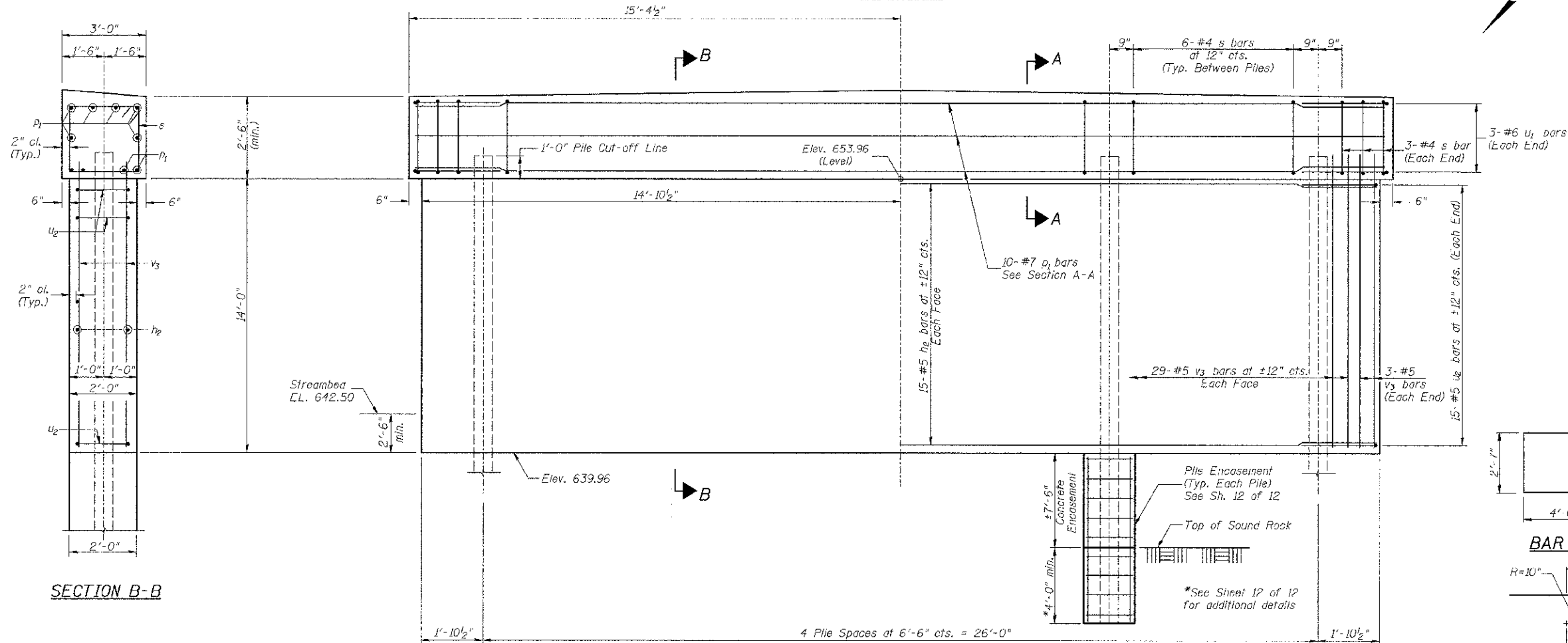
NOTES:
 All edges shall have standard 3/4" chamfer.
 The Pier Stem shall be constructed in a single continuous concrete pour.



TOP PLAN



SECTION A-A



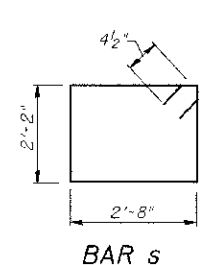
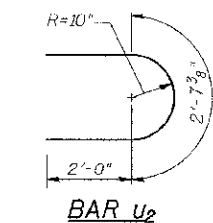
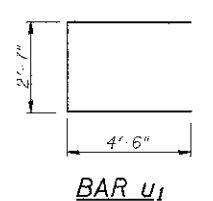
ELEVATION
(Looking Upstream)

SECTION B-B

**PIER #2
BILL OF MATERIAL**

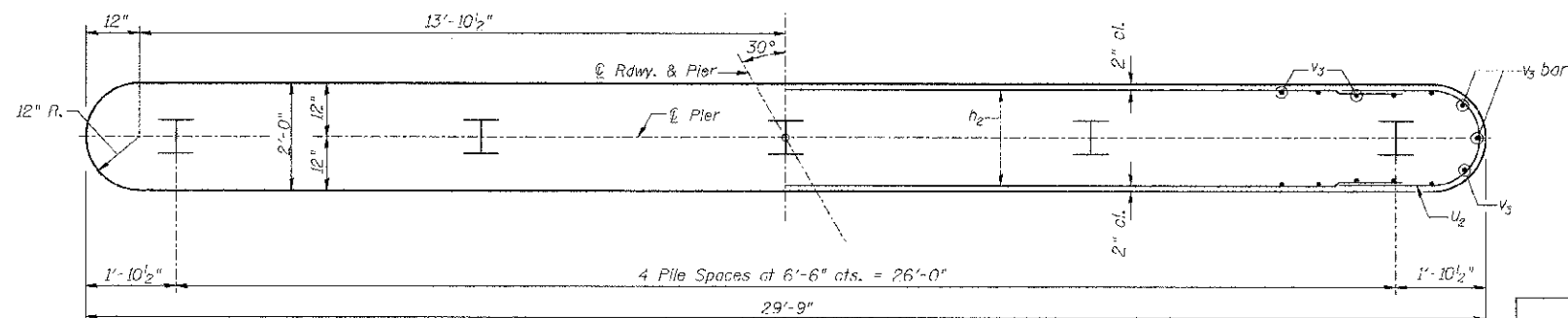
BAR	NO.	SIZE	LENGTH	SHAPE
h ₂	30	#5	27'-5"	—
p ₁	10	#7	30'-6"	—
s	30	#4	10'-5"	□
u ₁	6	#6	11'-7"	—
u ₂	30	#5	6'-8"	—
v ₃	64	#5	14'-10"	—
Concrete Structures		CU YD	39.5	
Reinforcement Bars		FOUND	2,990	
Cofferdam Excavation		CU YD	35	
Furnishing Steel Piles HPI0x42		FOOT	135	
① Setting Piles in Rock		EACH	5	
Concrete Encasement		CU YD	4.4	
① Cofferdam (Type I) (Location-2)		EACH	1	

① See Special Provisions



PILE DATA

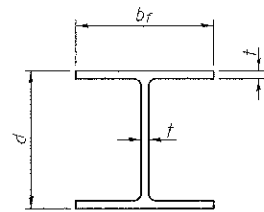
Type & Size: Steel HPI0x42
 Nominal Required Bearing: Set in Rock (335 kips)
 Factored Resistance Available: Set in Rock (184 kips)
 Est. Length: 27'
 No. Req'd.: 5



FOOTING PLAN

SHEET NO. 11 12 SHEETS	ROUTE NO. TR 141	SECTION 10-04118-00-BR	COUNTY BROWN	TOTAL SHEETS 24	SHEET NO. 17
	S.N. 005-3407		CONTRACT NO. 99588		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT 9B05-0009(221)			

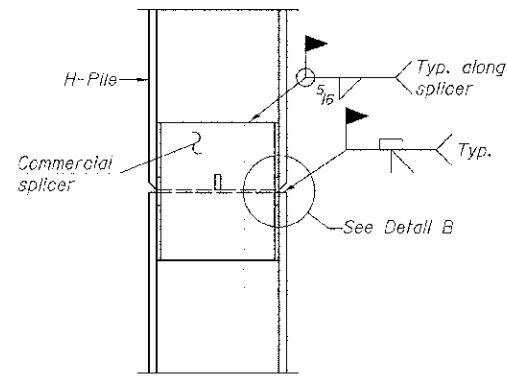
**PIER #2
BROWN COUNTY
SECTION 10-04118-00-BR
T.R. 141 OVER WELLS FORK**



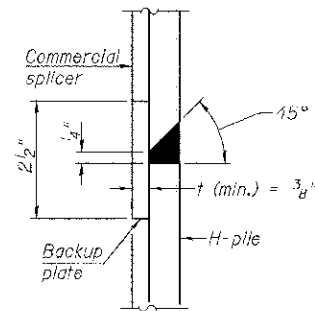
STEEL PILE TABLE

Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"

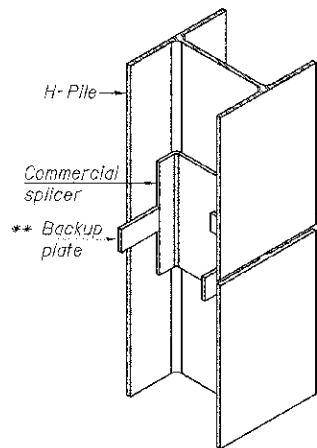
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



ELEVATION

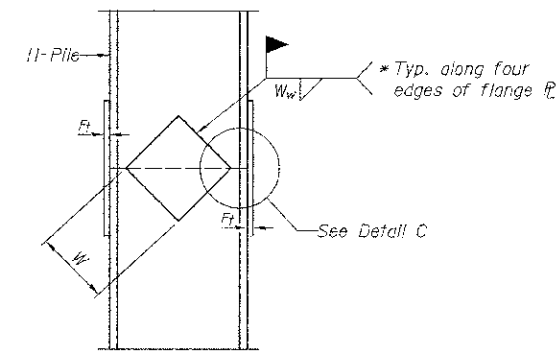


DETAIL "B"

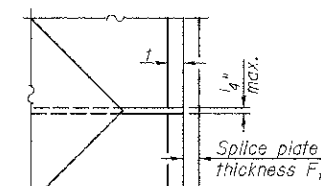


ISOMETRIC VIEW

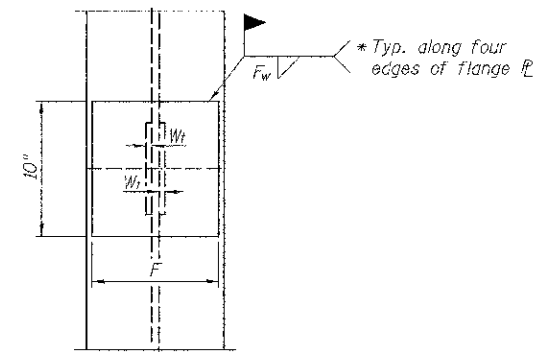
WELDED COMMERCIAL SPLICE



ELEVATION

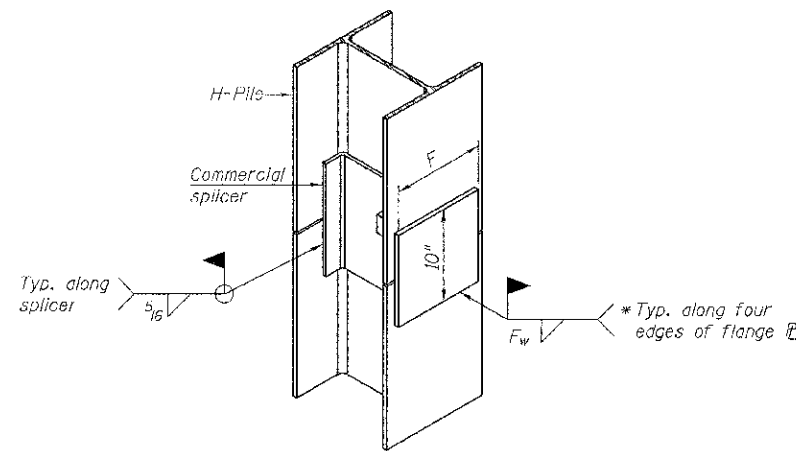


DETAIL C



END VIEW

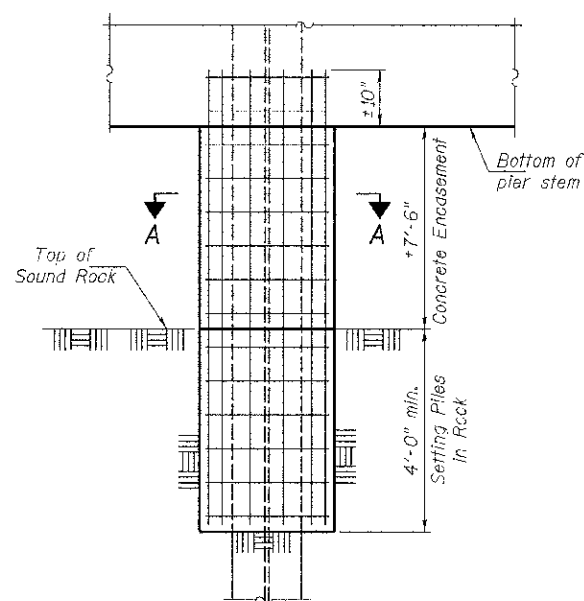
Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 1/2"	1"	1/8"	7 3/4"	5 1/2"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 1/2"	1/2"
x89	12 1/2"	3/4"	1/2"	7 3/4"	5 1/2"	1/2"
x73	12 1/2"	5/8"	1/2"	7 3/4"	5 1/2"	1/2"
HP 12x84	10"	7/8"	1/2"	6 1/2"	5 1/2"	1/2"
x74	10"	7/8"	1/2"	6 1/2"	5 1/2"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"



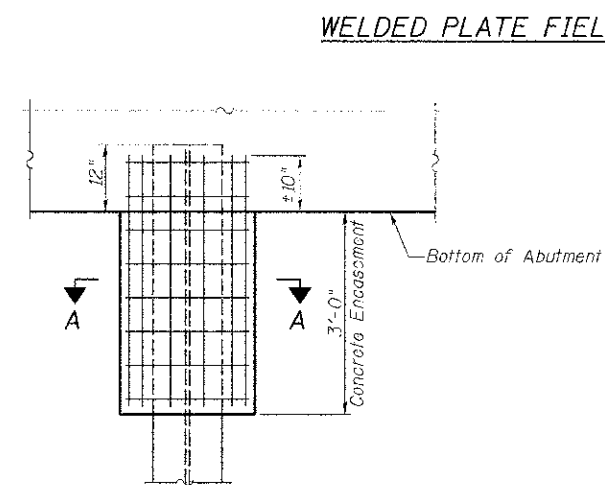
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

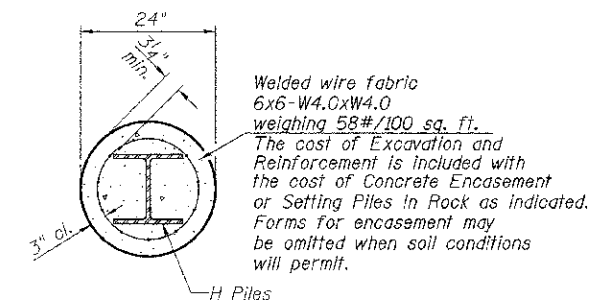
* Interrupt welds 1/4" from end of web and/or each flange.
** Remove portions of backup plates that extend outside the flanges.



PIER ELEVATION



ABUTMENT ELEVATION



SECTION A-A

PILE DETAILS

BROWN COUNTY

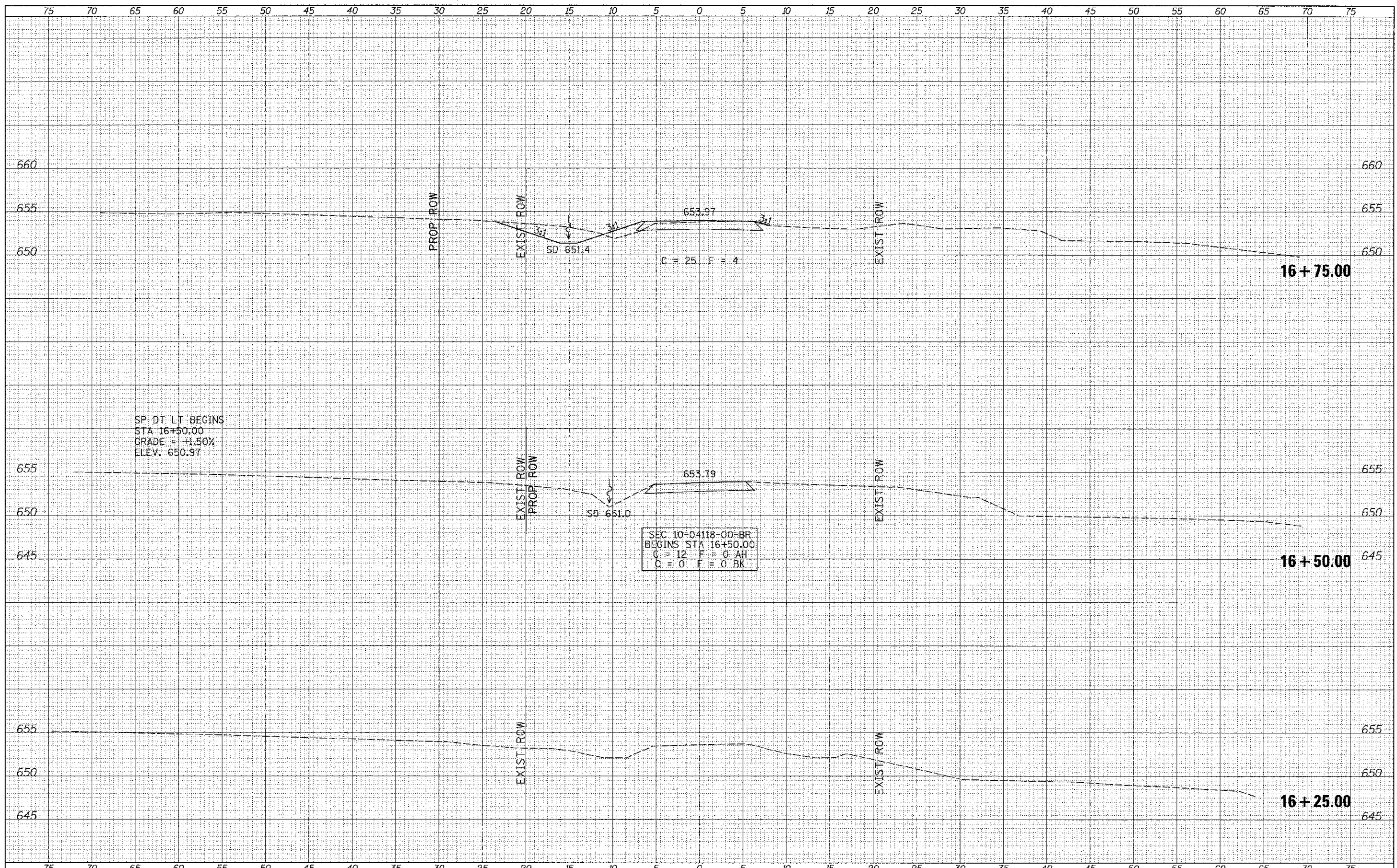
SECTION 10-04118-00-BR

T.R. 141 OVER WELLS FORK

SHEET NO. 12 12 SHEETS	ROUTE NO. TR 141	SECTION 10-04118-00-BR	COUNTY BROWN	TOTAL SHEETS 24	SHEET NO. 18
	S.N. 005-3407		CONTRACT NO. 93588		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BROS-0009(221)		

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
REVISIONS	
NO.	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
REVISIONS	
NO.	



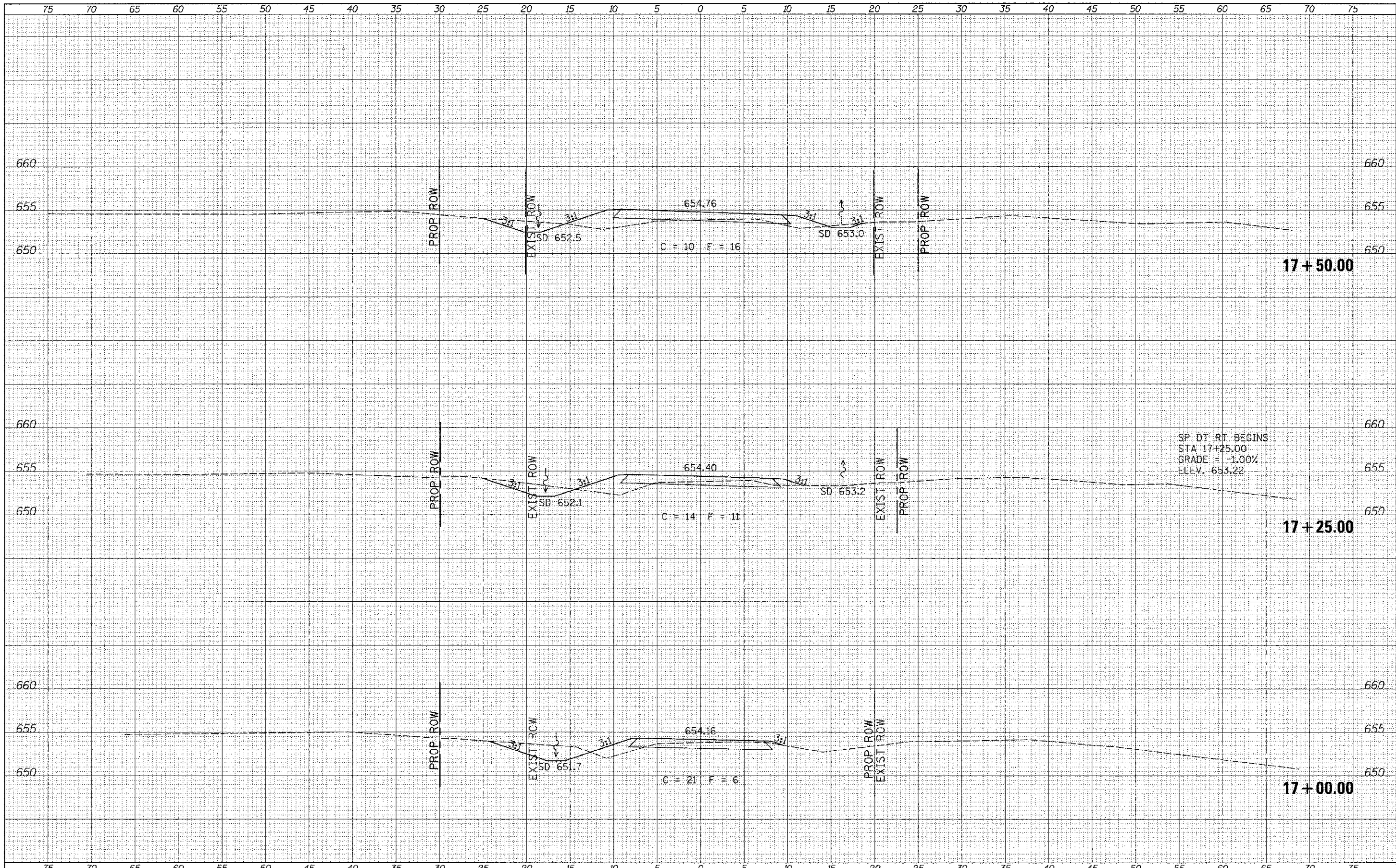
SP. DT. LT. BEGINS
 STA. 16+50.00
 GRADE = +1.50%
 ELEV. 650.97

SEC 10-04118-00-BR
 BEGINS STA 16+50.00
 C = 12 F = 0 AH
 C = 0 F = 0 BK

FILE NAME =	USER NAME = othomas	DESIGNED -	REVISED -	BROWN COUNTY TOWNSHIP ROAD 141 OVER WELLS FORK	CROSS SECTIONS SCALE: 1"=5' SHEET 1 OF 6 SHEETS STA. 16+25.00 TO STA. 16+75.00	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
W:\Bridge\3217 - Brown\2017\mnts.dgn		DRAWN -	REVISED -			TR 141	10-04118-00-BR	BROWN	24	19	
		CHECKED -	REVISED -			CONTRACT NO. 93588					
XS_SHEEF		DATE -	REVISED -			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT BR05-009221					

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
AREAS CHECKED		



FILE NAME s
 V:\Bridges\3017 - Brown\3017xhts.dgn
 XS_SHEET

USER NAME # othomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 5.0000' / 1" =	CHECKED	REVISED
PLOT DATE = 8/24/2012	DATE -	REVISED -

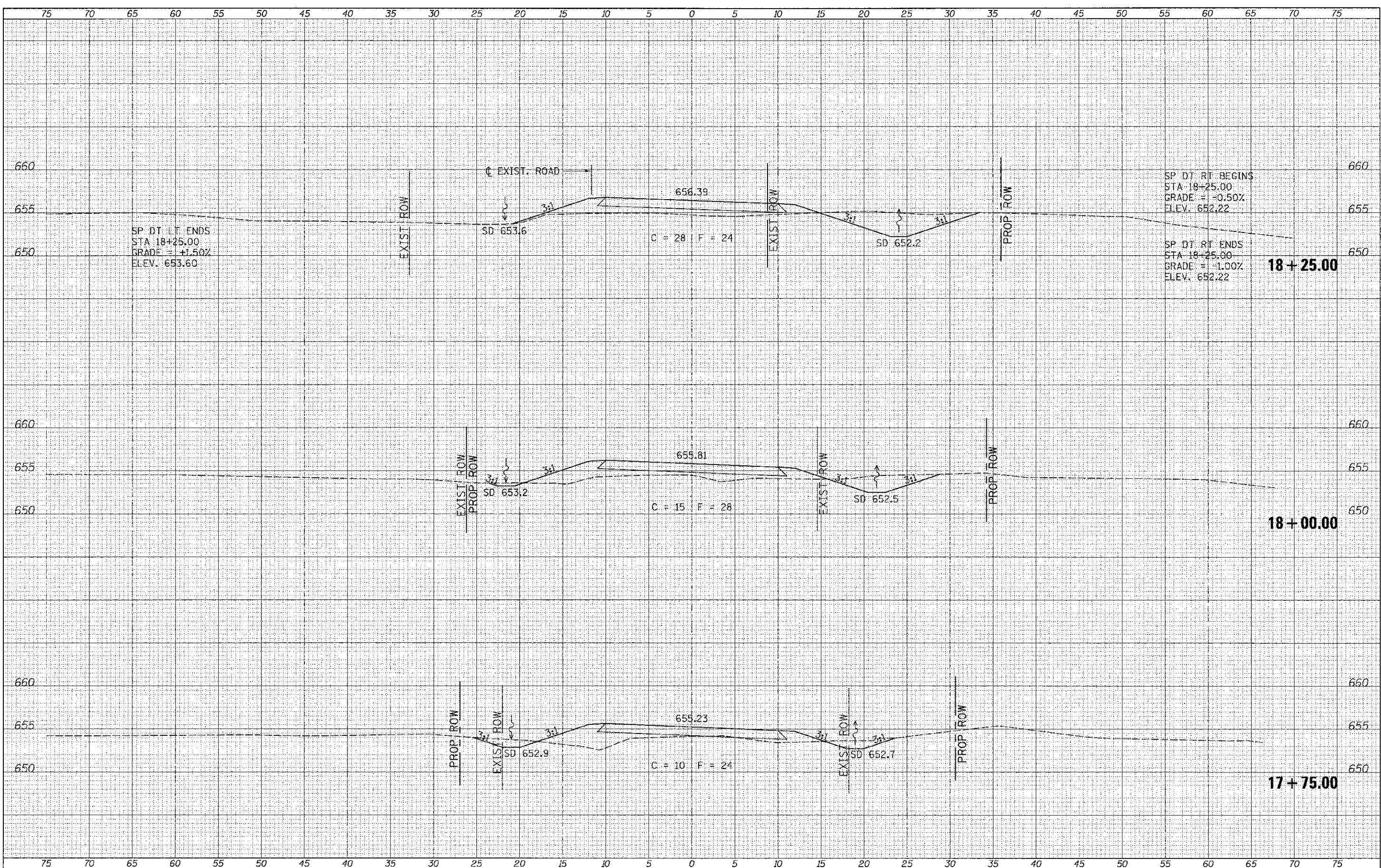
**BROWN COUNTY
 TOWNSHIP ROAD 141
 OVER WELLS FORK**

CROSS SECTIONS
 SCALE: 1"=5'
 SHEET 2 OF 6 SHEETS STA. 17+00.00 TO STA. 17+50.00

RTE.	SECTION	COUNTY	TOTAL SHEET NO.
TR 141	10-04118-00-BR	BROWN	24
			20
			CONTRACT NO. 33588
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BR05-3009221

DATE	
BY	
FINA SURVEY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
AREAS CHECKED	

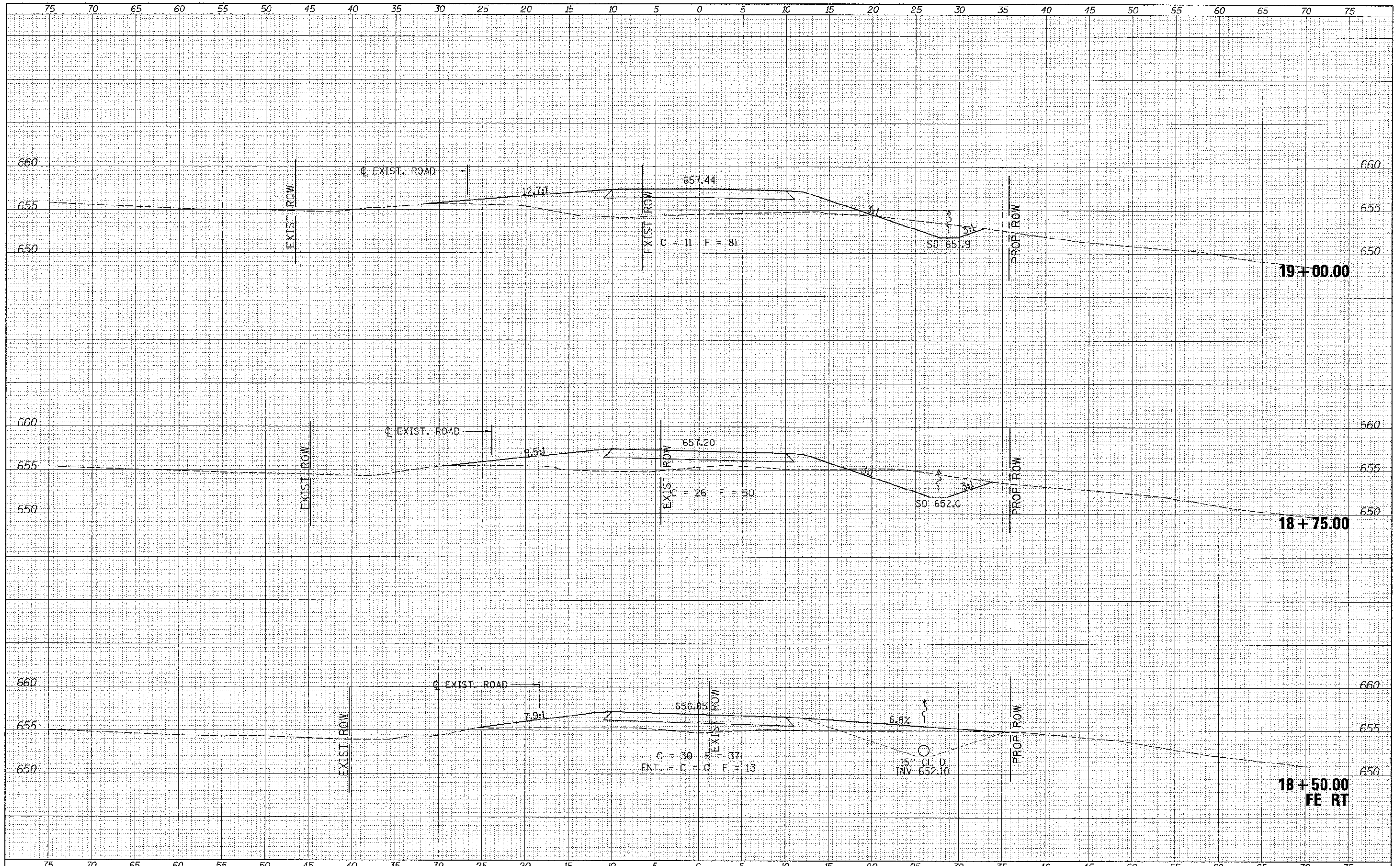
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BY	
FINA SURVEY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
AREAS CHECKED	



FILE NAME =	USER NAME = cthomas	DESIGNED -	REVISED -	BROWN COUNTY TOWNSHIP ROAD 141 OVER WELLS FORK	CROSS SECTIONS			RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
V:\Bridges\2017 - Brown\13017\sh14a.dgn		DRAWN -	REVISED -		TR 141	10-04118-00-BR	BROWN	24	21			
PLOT SCALE = 5,0000' / in.		CHECKED -	REVISED -		SCALE: 1"=5'			SHEET 3 OF 6 SHEETS STA. 17+75.00 TO STA. 18+25.00		CONTRACT NO. 93588		
PLOT DATE = 8/27/2012		DATE -	REVISED -		FED. ROAD DIST. NO. 7 [ILLINOIS]			FED. AID PROJECT BROS-000922D				

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

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

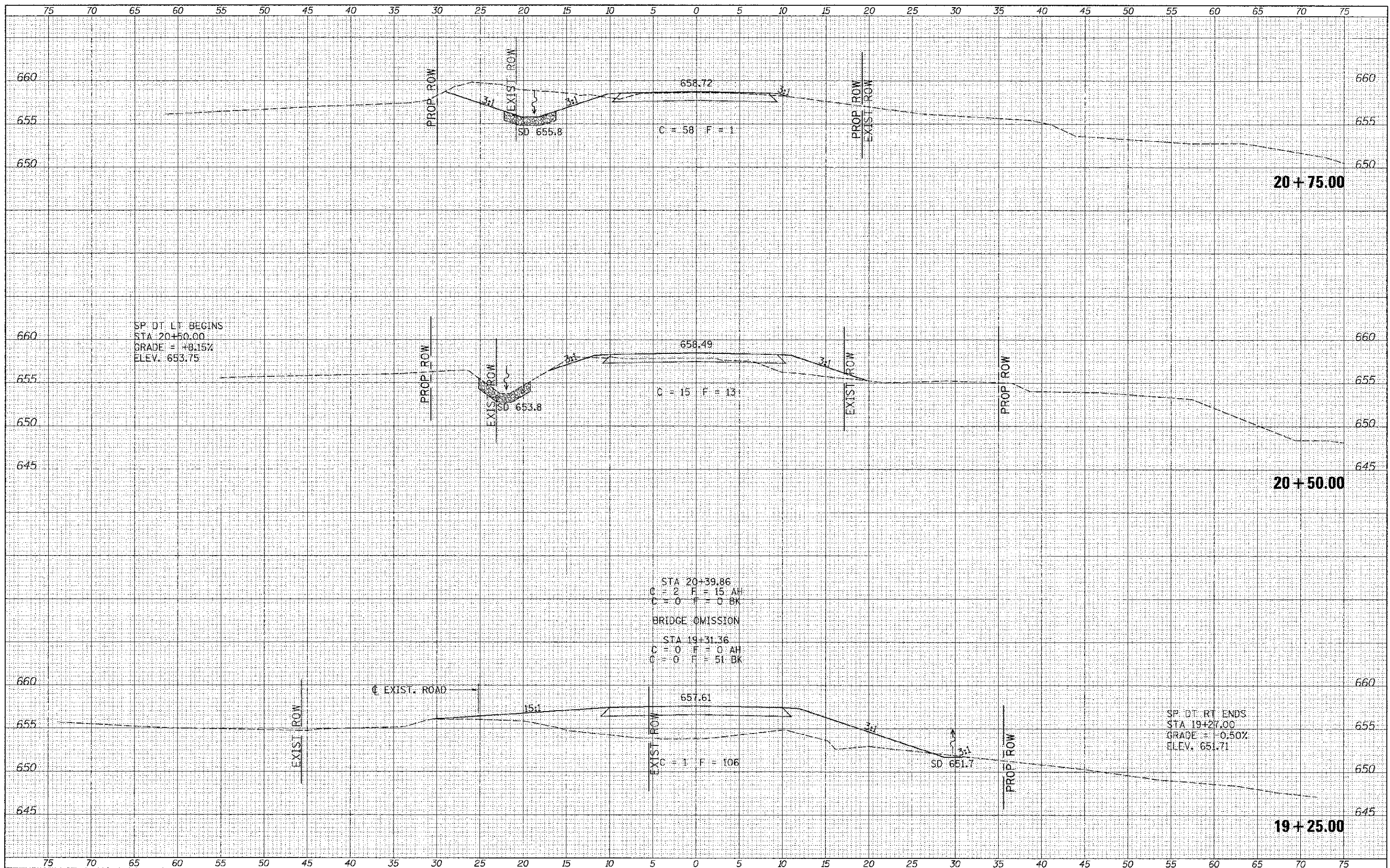


FILE NAME =	USER NAME = athonas	DESIGNED -	REVISED -
V:\Bridge\3017 - Brown\3017xsta.dgn		DRAWN -	REVISED -
	PLOT SCALE = 5.0000 1" = 50'	CHECKED -	REVISED -
	PLOT DATE = 8/29/2012	DATE -	REVISED -

**BROWN COUNTY
 TOWNSHIP ROAD 141
 OVER WELLS FORK**

CROSS SECTIONS
 SCALE: 1"=5'
 SHEET 4 OF 6 SHEETS
 STA. 18+50.00 TO STA. 19+00.00

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 141	10-04118-00-BR	BROWN	24	22
			CONTRACT NO. 93588	
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT BR05-0009(221)	



DATE	BY
SURVEYED	PLotted
NOTE BOOK	AREAS CHECKED

DATE	BY
SURVEYED	PLotted
NOTE BOOK	AREAS CHECKED

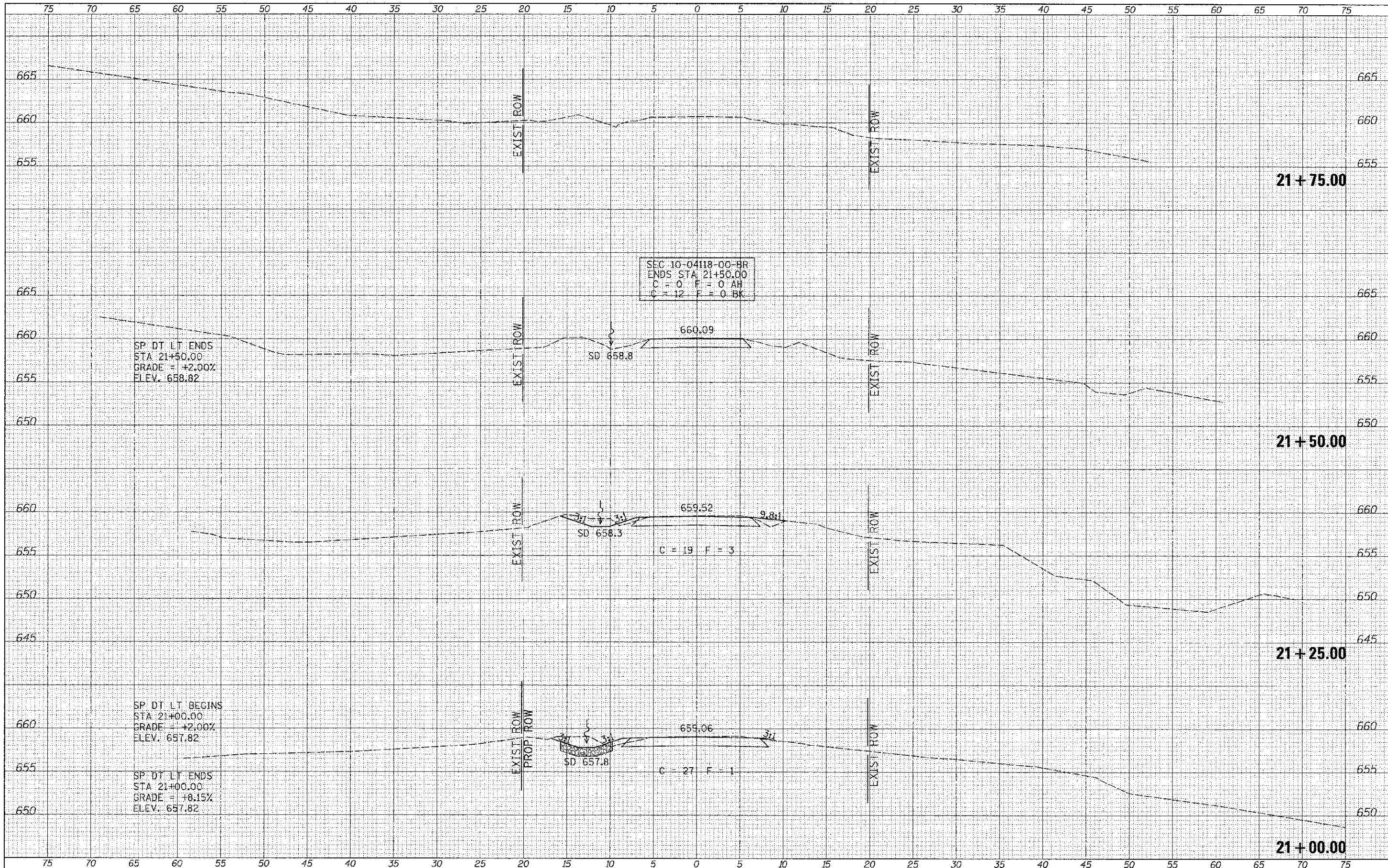
SP. DT. LT. BEGINS
 STA 20+50.00
 GRADE = +8.15%
 ELEV. 653.75

STA 20+39.86
 C = 2 F = 15.4H
 C = 0 F = 0 BK
 BRIDGE OMISSION
 STA 19+31.36
 C = 0 F = 0.4H
 C = 0 F = 51 BK

SP. DT. RT. ENDS
 STA 19+27.00
 GRADE = -0.50%
 ELEV. 651.71

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	



FILE NAME =
V:\Bridge\3017 - Brown\3017xhts.dgn

USER NAME = othomas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 5.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 8/29/2012	DATE -	REVISED -

**BROWN COUNTY
TOWNSHIP ROAD 141
OVER WELLS FORK**

CROSS SECTIONS
SCALE: 1"=5'
SHEET 6 OF 6 SHEETS
STA. 21+00.00 TO STA. 21+75.00

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 141	10-04118-00-BR	BROWN	24	24
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93588	
FED. AID PROJECT 3R05-0009(22U)				