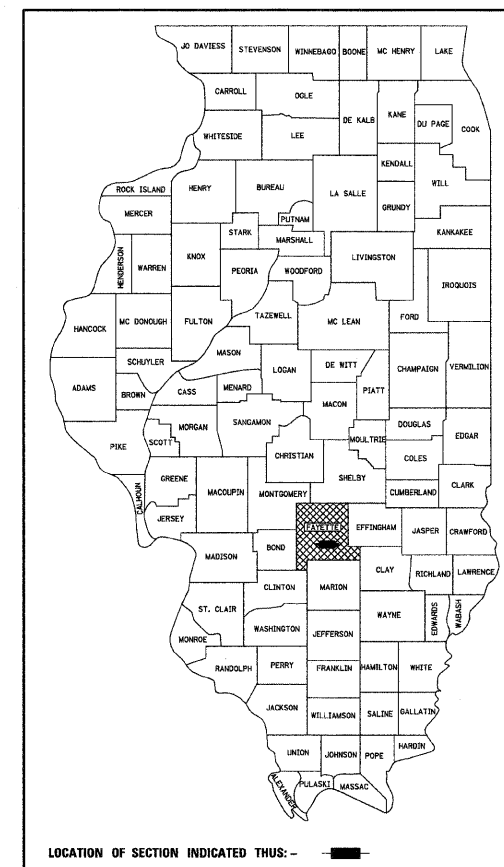


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
HIGHWAY BRIDGE PROGRAM

TR 437 OVER TRIBUTARY TO
LITTLE HICKORY CREEK
SECTION 05-10121-00-BR
FAYETTE COUNTY
PROJECT NO. BROS-051(082)
C-97-067-08

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 437	05-10121-00-BR	FAYETTE	10	1
FED. ROAD DIST. NO. 7 ILLINOIS		FEDERAL AID PROJECT		
CONTRACT NO. 95550				



LOCATION OF SECTION INDICATED THIS: -

FAYETTE COUNTY
HIGHWAY DEPARTMENT

APPROVED 7-10, 2008
Michael A. Metz
FAYETTE COUNTY, COUNTY ENGINEER

PASSED 7-17, 2008
Maureen E. Castel
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW 7-17, 2008
Roger D. Dinkell
DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER



Gary L. Hahn 07-09-08
GARY L. HAHN
CENTRALIA, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL
ENGINEER NO. 62-42606
EXPIRES NOV. 30, 2009

RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS
CENTRALIA, ILLINOIS FREEBURG, ILLINOIS
ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

Sheet
1
of 10
Job No. 51205

INDEX OF SHEETS

- COVER SHEET
- SUMMARY OF QUANTITIES AND TYPICAL SECTIONS
- PLAN AND PROFILE OF ROADWAY
- CROSS SECTIONS OF ROADWAY
- GENERAL PLAN AND ELEVATION
- PRECAST PRESTRESSED CONCRETE DECK BEAM DETAILS
- STEEL RAILING, TYPE S1 DETAILS
- ABUTMENT DETAILS

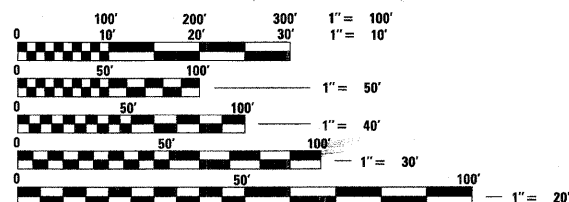
STANDARDS

- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 280001-04 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-02 NAME PLATE FOR BRIDGES
- 635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 701901 TRAFFIC CONTROL DEVICES
- BLR 21-7 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

SOIL BORINGS (SEE SPECIFICATIONS)

DESIGN CLASSIFICATION: RURAL LOCAL ROAD

- ADT₂₀₀₇ : 50
- ADT₂₀₂₇ : 100
- DESIGN SPEED - 30 MPH

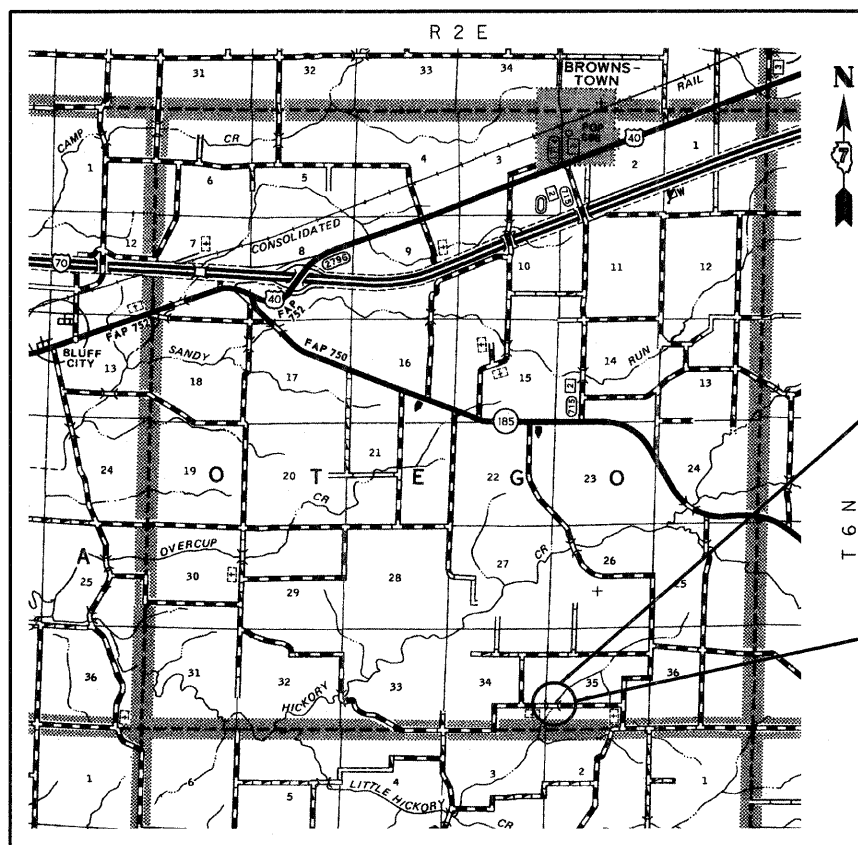


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E. 1-800-892-0123 or 811
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
Website: <http://www.illinoisitcall.com>



CONTRACT NO. 95550



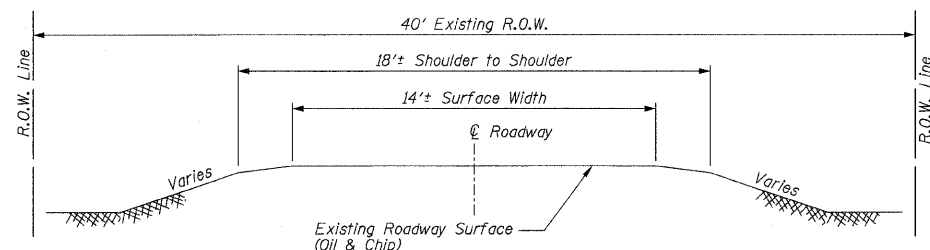
SECTION BEGINS
STA. 6+14.28

SECTION 05-10121-00-BR

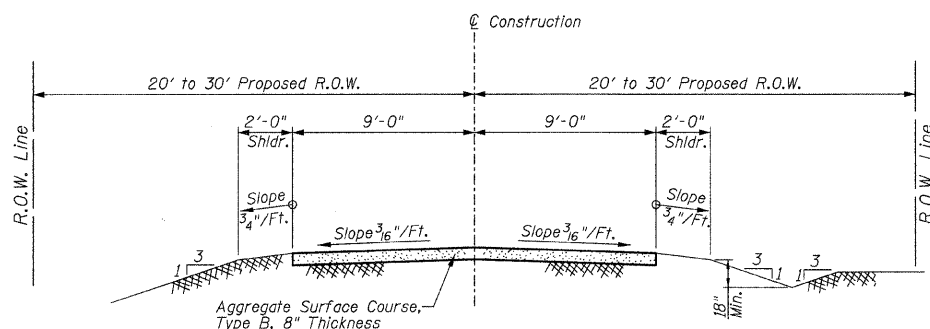
INCLUDES THE CONSTRUCTION OF A SINGLE SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE CARRYING TR 437 OVER TRIBUTARY TO LITTLE HICKORY CREEK, 50'-0" BK. TO BK. ABUTMENTS, 20° AHEAD LEFT SKEW. EXISTING STRUCTURE NO. 026-3201 PROPOSED STRUCTURE NO. 026-3433

SECTION ENDS
STA. 13+96.86

LOCATION: NEAR THE NW CORNER, SW 1/4, SW 1/4, SECTION 35, T6N, R2E, 3RD P.M.
NET LENGTH OF PROJECT: 782.58 FT = 0.148 MI



**TYPICAL SECTION
EXISTING APPROACH ROADWAY**



**TYPICAL SECTION
PROPOSED APPROACH ROADWAY**

GENERAL NOTES

- This section shall be constructed according to the plans, the Special Provisions, and the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2007.
- Any reference to a Standard in these plans shall be interpreted to mean the edition as indicated by the sub-number listed in the Index of Sheets or the copy of the Standard included in these plans.
- Roadway Centerline profiles refer to the finished surface.
- Existing utilities shown are located from surface observations or information provided by the respective utilities and must be considered approximate. There may be others, the exact location of which are unknown and not shown. The Contractor will be responsible for notifying the respective utilities before work is begun. Field marking of underground utilities may be obtained by providing a minimum of 48 hours advance notice through the J.U.L.I.E. system by calling 1-800-892-0123, or by direct contact with non-members of J.U.L.I.E.
- The Aggregate Surface Course, Type B gradation shall be CA 6 or CA 10. Only Class C quality crushed stone will be approved for use on this project.
- The nominal thickness for surface course is shown on the Typical Sections, Standards, Schedules, or Special Details. The constructed thickness of the above item shall not be less than 90 percent of the nominal thickness at any location.
- Factors used for quantity calculations are as follows:

Porous Granular Embankment	2.1 tons/cu. yd.
Stone Dumped Riprap	130 pounds/cu. ft.
Aggregate Surface Course	2.1 tons/cu. yd.

SUMMARY OF QUANTITIES

Location				Bridge Sta. Sta. 9+83.00 to Sta. 10+33.00	Road Sta. Sta. 6+14.28 - 9+83.00 to Sta. 10+33.00 - 13+96.86
Code No.	Item	Unit	Quantity	Construct.	Type Code
				X080-2A	E000
20100500	TREE REMOVAL, ACRES	ACRE	0.7	-	0.7
* 20200100	EARTH EXCAVATION	CU YD	544	-	544
20300100	CHANNEL EXCAVATION	CU YD	60	60	-
20400800	FURNISHED EXCAVATION	CU YD	402	-	402
* 20700110	POROUS GRANULAR EMBANKMENT	TON	58	58	-
* 25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.7	-	0.7
28000300	TEMPORARY DITCH CHECKS	EACH	4	-	4
* 28100807	STONE DUMPED RIPRAP, CLASS A4	TON	120	120	-
* 40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	685	-	685
* 50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1	-
50300225	CONCRETE STRUCTURES	CU YD	17.4	17.4	-
50300280	CONCRETE ENCASEMENT	CU YD	2.8	2.8	-
* 50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1170	1170	-
50800105	REINFORCEMENT BARS	POUND	2900	2900	-
Δ 50900205	STEEL RAILING, TYPE S1	FOOT	100	100	-
51201600	FURNISHING STEEL PILES HPI2X53	FOOT	269	269	-
51202305	DRIVING PILES	FOOT	269	269	-
** 51203600	TEST PILE STEEL HPI2X53	EACH	1	1	-
51500100	NAME PLATES	EACH	1	1	-
* 542C1081	PIPE CULVERTS, CLASS C, TYPE 2 36"	FOOT	46	-	46
67100100	MOBILIZATION	L SUM	1	-	-
Δ 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	-

* See Special Provisions.

**The Contractor shall drive one (1) Steel HPI2x53 Test Pile in a permanent location at the East Abutment as directed by the Engineer before ordering the remainder of the piles.

Δ Specialty Items

UTILITIES

None known to be within Project limits

**SUMMARY OF QUANTITIES AND
TYPICAL SECTIONS
PROPOSED BRIDGE OVER TRIBUTARY
TO LITTLE HICKORY CREEK
TR 437
SECTION 05-10121-00-BR
FAYETTE COUNTY, ILLINOIS**

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 437	05-10121-00-BR	FAYETTE	10	3
STA. 6+00.00 TO STA. 14+00.00				
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

EXISTING STRUCTURE: SINGLE SPAN BRIDGE WITH TIMBER DECK ON STEEL STRINGERS SUPPORTED ON CLOSED CAST-IN-PLACE CONCRETE ABUTMENTS. 25' BK. TO BK. ABUTMENTS, 13' OUT TO OUT OF DECK. EXISTING STRUCTURE NUMBER 026-3201.

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION CU. YD.	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE* CU. YD.	EMBANKMENT CU. YD.	EARTHWORK BALANCE** WASTE (+) OR SHORTAGE (-) CU. YD.
STA. 6+14.28 TO STA. 9+83.00	448	336	283	-53
STA. 10+33.00 TO STA. 13+96.86	96	72	527	-455
TOTAL	544	408	810	-402

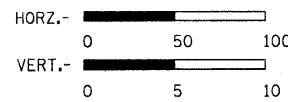
*25% SHRINKAGE **FURNISHED EXCAVATION

TREE REMOVAL SCHEDULE

LOCATION	ACRES
LT., STA. 6+14.28 TO STA. 12+00.00	0.4
LT. & RT., STA. 12+00.00 TO STA. 13+96.86	0.2
RT., STA. 11+00.00 TO STA. 12+00.00	0.1
TOTAL	0.7



SCALES:



← ELVIN A. & HILDA B. HORST →

← GWENDOLYN K. SUMMERS →

INSTALL PIPE CULVERTS, CLASS C, ALUMINIZED STEEL TYPE 2 CORRUGATED PIPE A.R. STA. 7+61 - 36"Ø X 46 FOOT U.S. F.L. ELEV. 525.50 D.S.F.L. ELEV. 524.50 EXISTING 36" CMP TO BE REMOVED. NO SALVAGE, REMOVAL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER FOOT FOR PIPE CULVERTS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

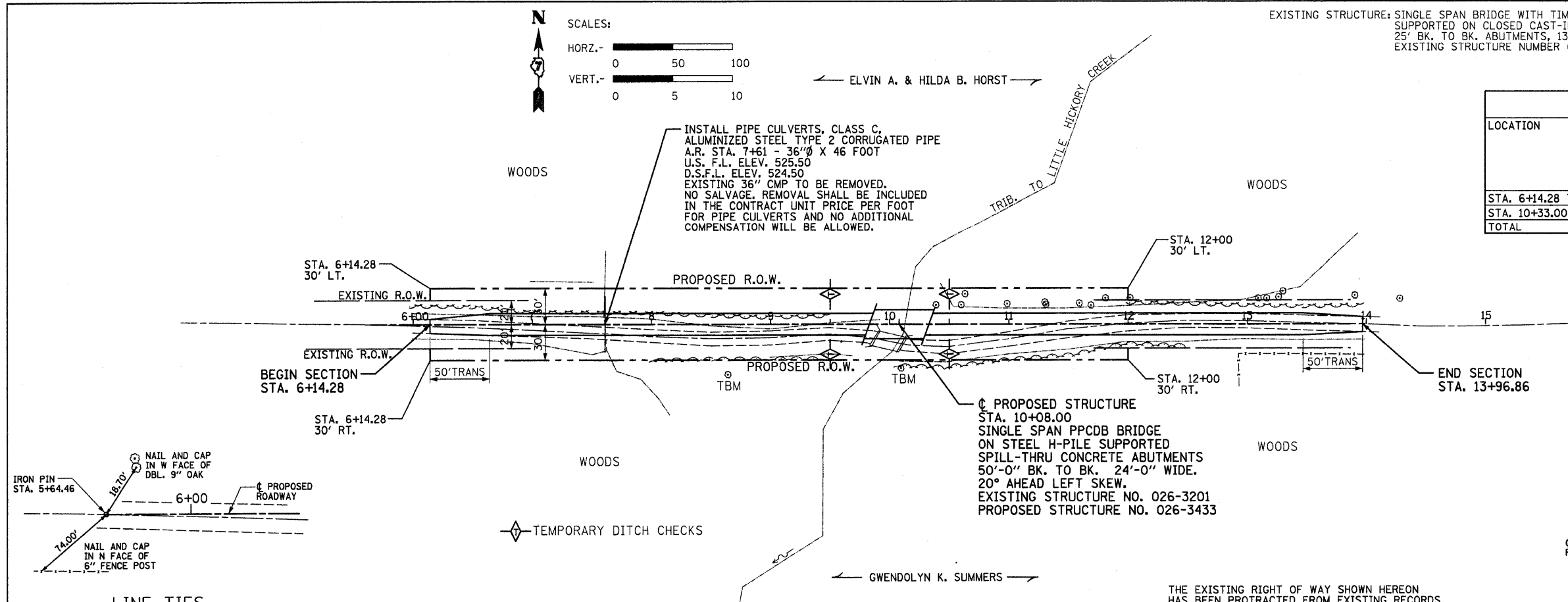
PROPOSED STRUCTURE STA. 10+08.00 SINGLE SPAN PPCDB BRIDGE ON STEEL H-PILE SUPPORTED SPILL-THRU CONCRETE ABUTMENTS 50'-0" BK. TO BK. 24'-0" WIDE. 20° AHEAD LEFT SKEW. EXISTING STRUCTURE NO. 026-3201 PROPOSED STRUCTURE NO. 026-3433

THE EXISTING RIGHT OF WAY SHOWN HEREON HAS BEEN PROTRACTED FROM EXISTING RECORDS AND IS TO BE USED FOR REFERENCE PURPOSES ONLY. FURTHERMORE, NO COMPLETE SURVEY OF SAID R.O.W. IS IMPLIED BY THIS DRAWING.

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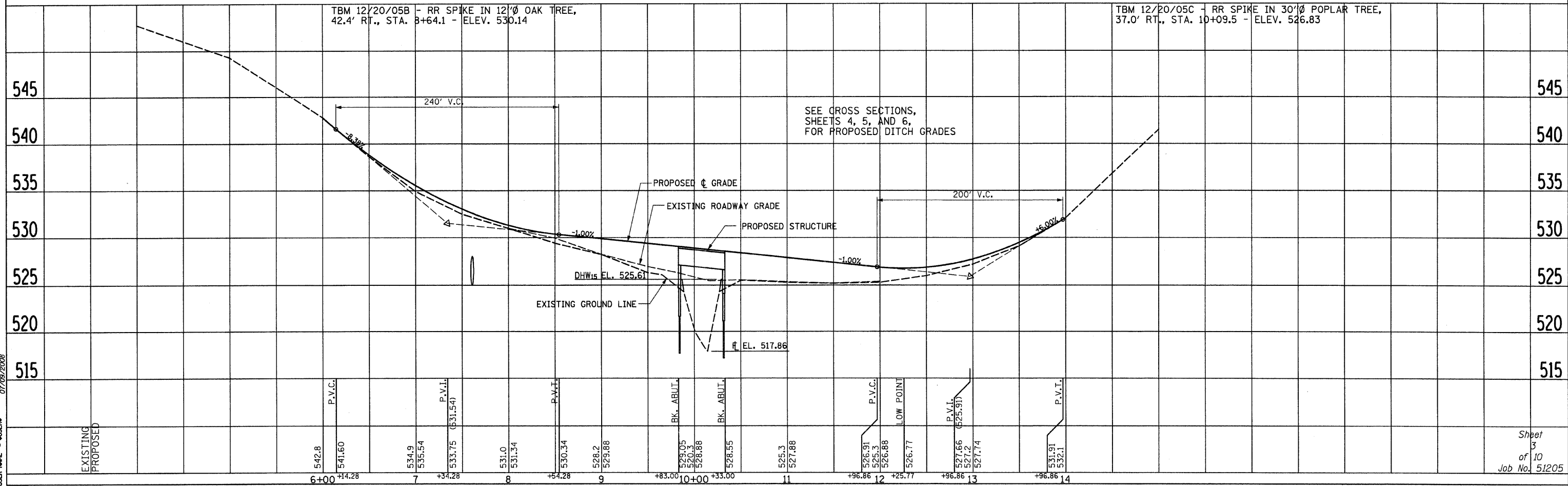
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LINE TIES
P.O.T. STA. 5+64.46

LINE TIES
P.O.T. STA. 13+86.51

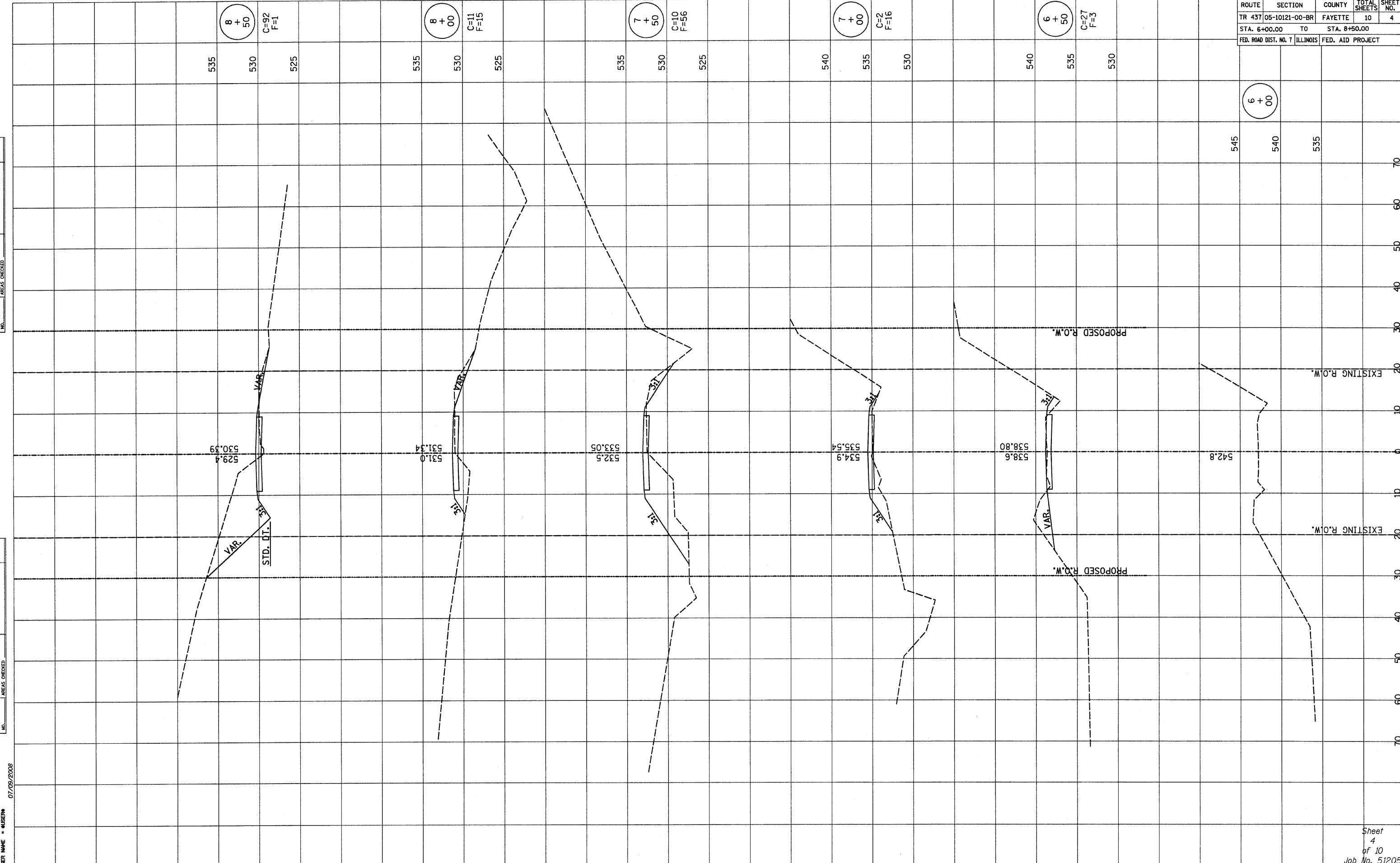


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 437	05-10121-00-BR	FAYETTE	10	4
STA. 6+00.00 TO		STA. 8+50.00		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

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

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

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 PLOT SCALE = #SCALE#
 USER NAME = #USER#



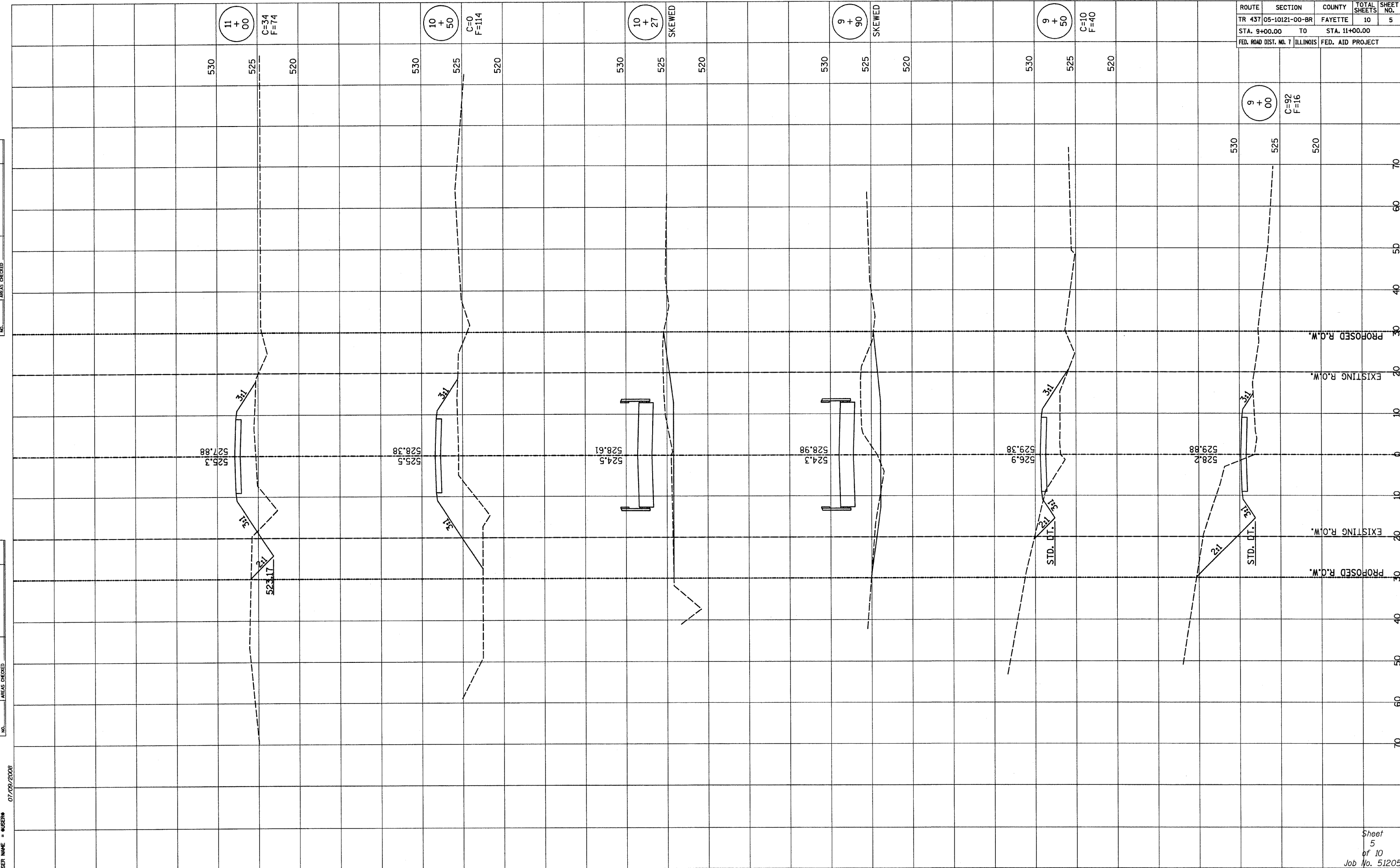
07/09/2008

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 437	05-10121-00-BR	FAYETTE	10	5
STA. 9+00.00 TO		STA. 11+00.00		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

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

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

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 PLOT SCALE = #SCALE#
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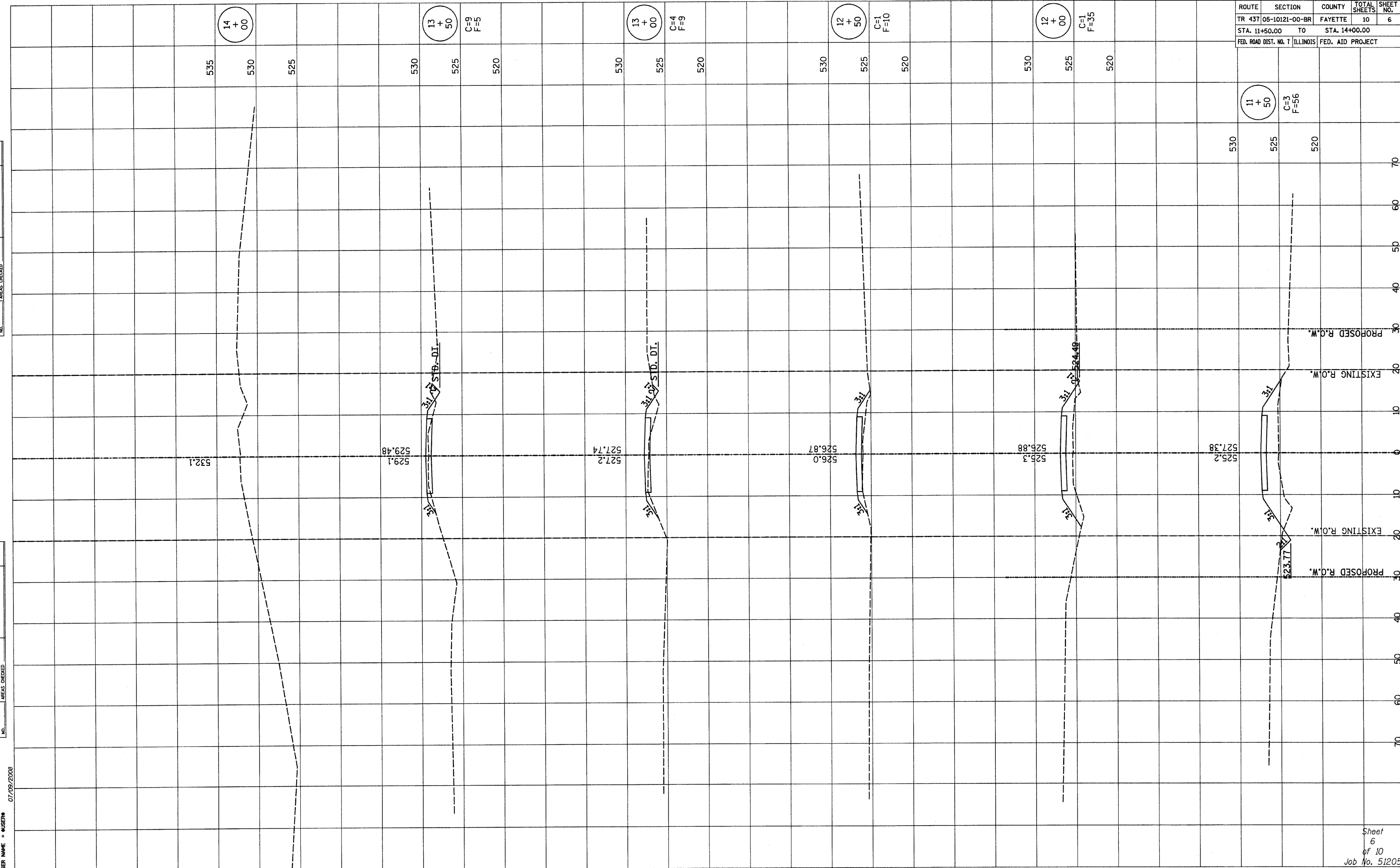
07/09/2008

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 437	05-10121-00-BR	FAYETTE	10	6
STA. 11+50.00 TO STA. 14+00.00		FED. AID PROJECT		

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

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

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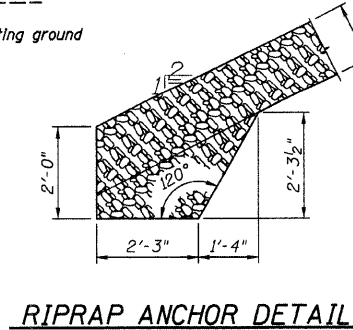
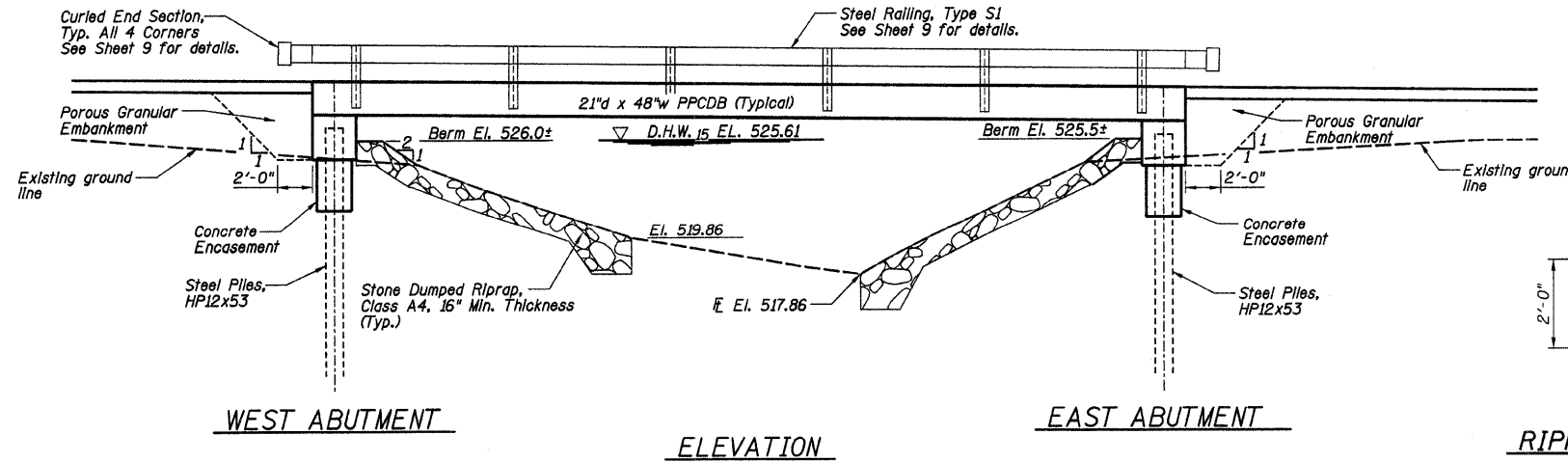
07/09/2008

TBM 12/20/05"B" - RR spike in 12" Oak tree
42.4' Rt., Sta. 8+64.1 - Elev. 530.14

TBM 12/20/05"C" - RR spike in 30" Poplar tree
37.0' Rt., Sta. 10+09.5 - Elev. 526.83

Existing Structure: Single span bridge with timber deck on steel stringers supported on closed cast-in-place concrete abutments. 25' Bk. to Bk. abutments, 13' out to out of deck. To be removed. See Special Provisions. Existing Structure Number: 026-3201.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 437	05-10121-00-BR	FAYETTE	10	7
FED. ROAD DIST. NO. 7		ILLINOIS	FEDERAL AID PROJECT	
CONTRACT NO. 95550				



ITEM	UNIT	SUB	SUPER	TOTAL
CHANNEL EXCAVATION	CU YD	60	-	60
POROUS GRANULAR EMBANKMENT	TON	58	-	58
STONE DUMPED RIPRAP, CLASS A4	TON	120	-	120
REMOVAL OF EXISTING STRUCTURES	EACH	-	-	1
CONCRETE STRUCTURES	CU YD	17.4	-	17.4
CONCRETE ENCASEMENT	CU YD	2.8	-	2.8
PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	-	1170	1170
REINFORCEMENT BARS	POUND	2900	-	2900
STEEL RAILING, TYPE S1	FOOT	-	100	100
FURNISHING STEEL PILES HP 12x53	FOOT	269	-	269
DRIVING PILES	FOOT	269	-	269
TEST PILE STEEL HP12x53	EACH	1	-	1
NAME PLATES	EACH	1	-	1
TERMINAL MARKER - DIRECT APPLIED	EACH	-	4	4

GENERAL NOTES

See Section 502 of the Standard Specifications for Structural Excavation.

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

The Contractor shall drive one (1) Steel HP12x53 Test Pile in a permanent location at the East Abutment as directed by the Engineer before ordering the remainder of the piles.

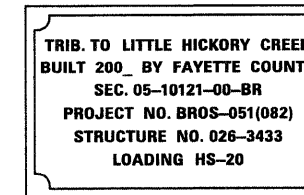
Channel excavation shall be excavated as shown within the limits of the proposed bridge, then tapered to the existing channel at the ROW line. If the Engineer deems the material satisfactory, it may be used to construct the roadway embankment.

See Specifications for Soil Borings.

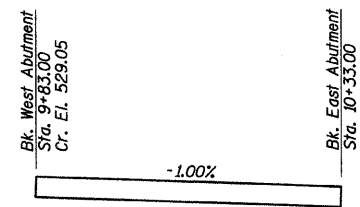
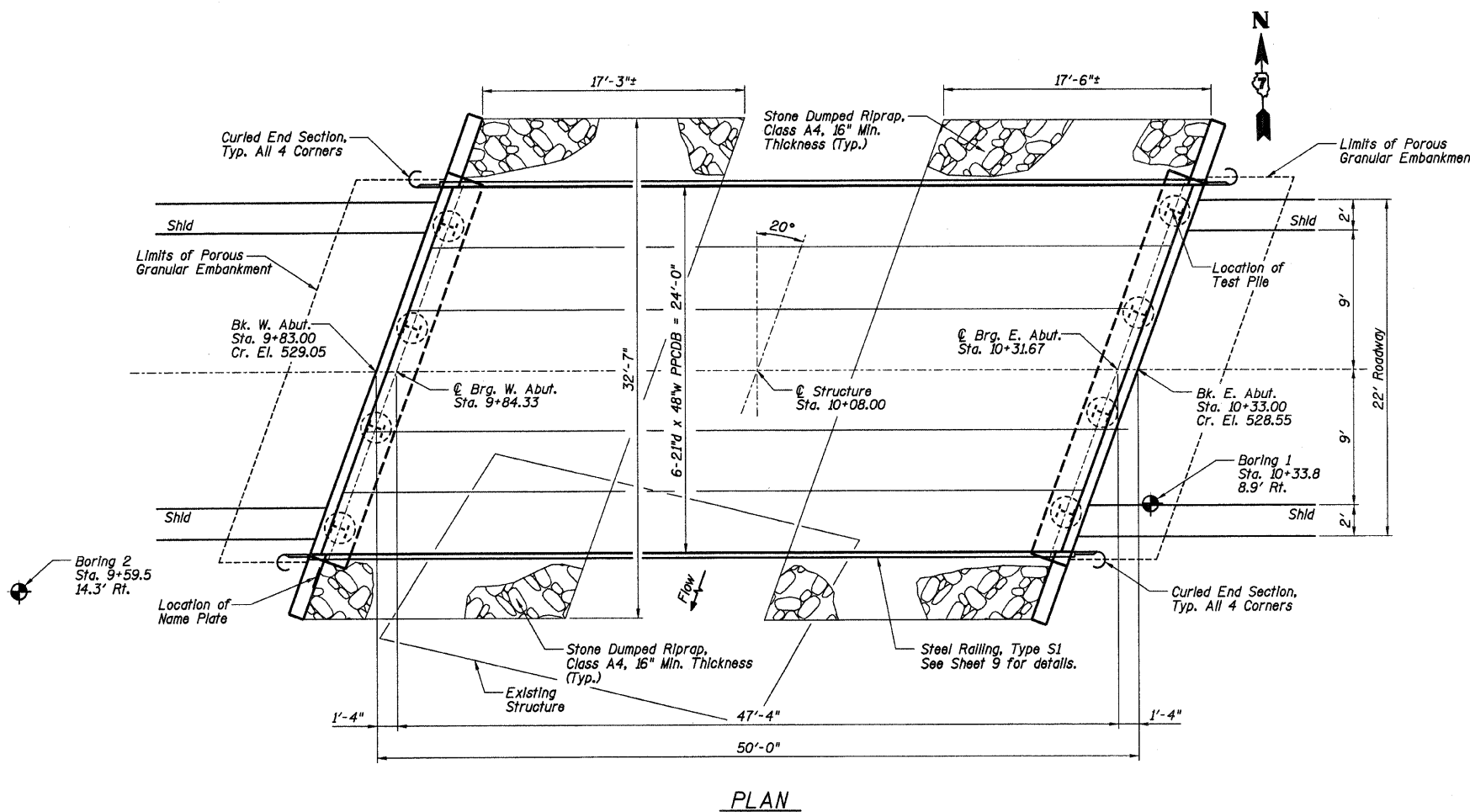
Do not scale these drawings.

The Steel H-piles shall be according to AASHTO M270 Grade 50.

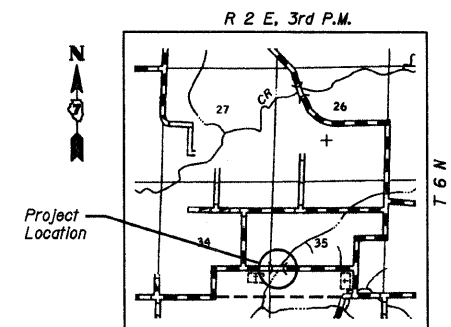
The abutment bearing seat surfaces for the precast prestressed concrete deck beams shall be adjusted by shimming to assure firm and even bearing. As required, 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.



NAME PLATE
(See State Standard 515001 for details)



GRADE ACROSS STRUCTURE



LOCATION SKETCH

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



GARY L. HAHN
CENTRALIA, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 81-4853
EXPIRES NOV. 30, 2008

WATERWAY DATA

Drainage Area = 1.97 Sq. Mi.		Low Grade Elev. 526.77 @ Sta. 12+25								
Flood Yr.	Freq. C.F.S.	Q	Opening Sq. Ft.	Natural H.W.E.	Head - Ft.	Headwater El.	Exist.	Prop.	Exist.	Prop.
Design	15	800	103	525.61	0.92	526.53	525.72			
Base	100	1315	103	526.46	0.52	526.98	526.89			
Max. Calc.	500	1745	103	527.01	0.31	527.32	527.79			

DESIGN SPECIFICATIONS
AASHTO - 2002 17th Edition

LOADING HS 20-44

Allow 25#/#sq. ft. for future wearing surface.

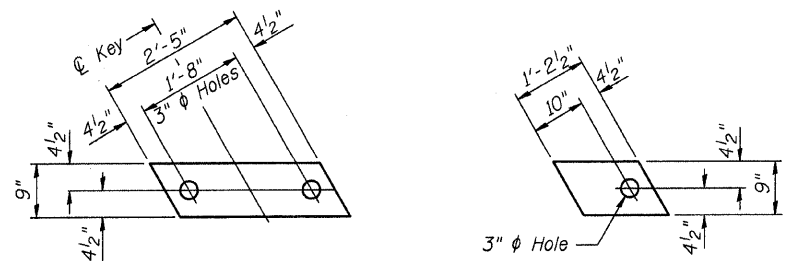
DESIGN STRESSES

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

PRECAST PRESTRESSED UNITS
 $f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi (1/2" Low-Lax strands)
 $f'_{sl} = 201,960$ psi (1/2" Low-Lax strands)

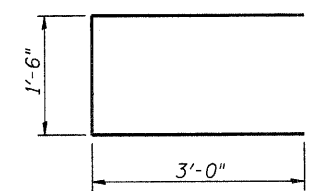
**GENERAL PLAN AND ELEVATION
PROPOSED BRIDGE OVER TRIBUTARY
TO LITTLE HICKORY CREEK
TR 437
SECTION 05-10121-00-BR
FAYETTE COUNTY, ILLINOIS**

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 437	05-10121-00-BR	FAYETTE	10	8
FED. ROAD DIST. NO. 7		ILLINOIS	FEDERAL AID PROJECT	
CONTRACT NO. 95550				

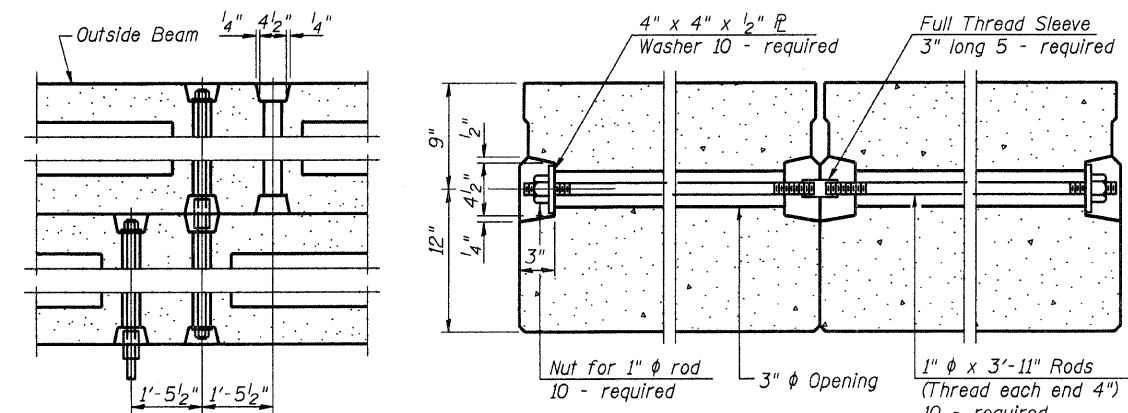


FABRIC BEARING PAD
(Interior)

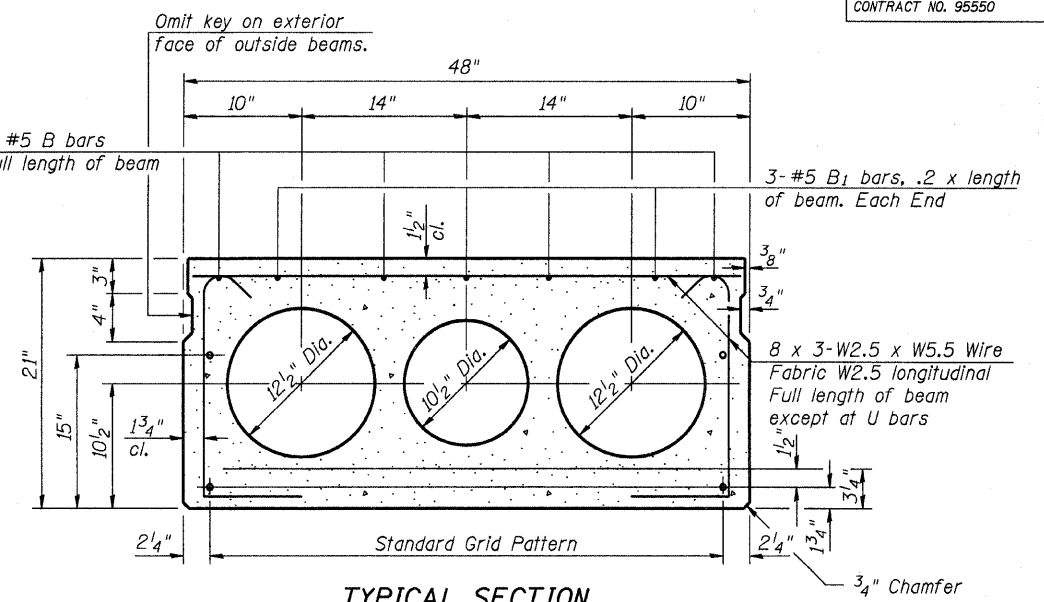
FABRIC BEARING PAD
(Exterior)



BAR U



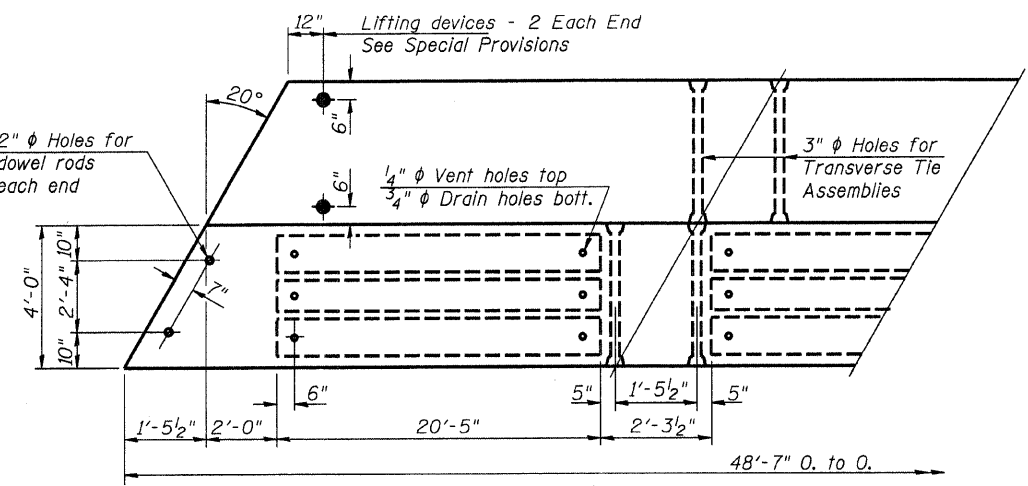
TYPICAL TRANSVERSE TIE ASSEMBLY



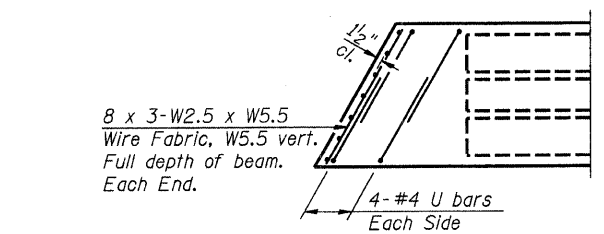
TYPICAL SECTION

20-1/2" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
14-Strands 1 3/4" up, 4-Strands 3/4" up, 2-Strands 15" up

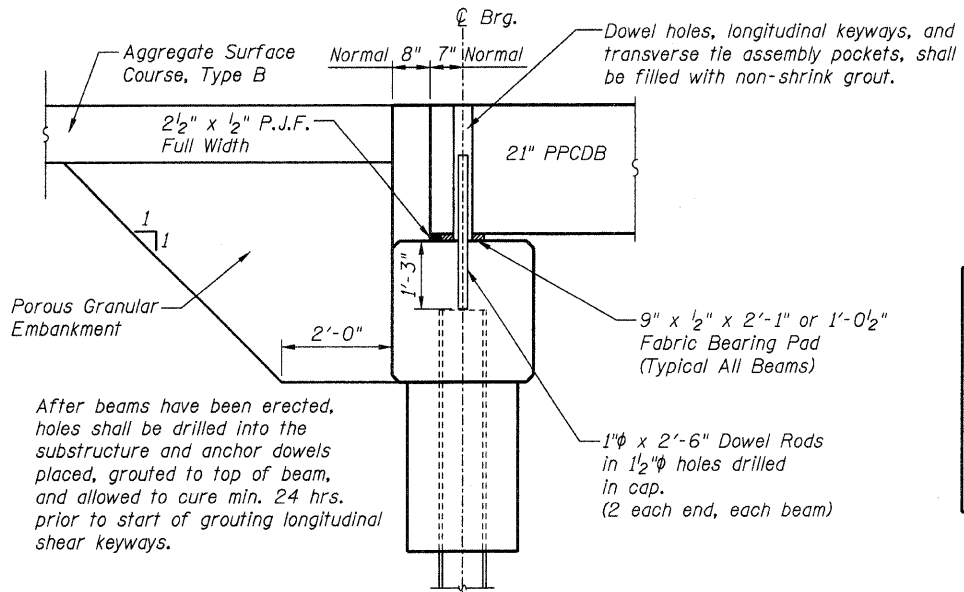
Note:
Place strands symmetrically about ϕ of beam.



PLAN



END PLAN

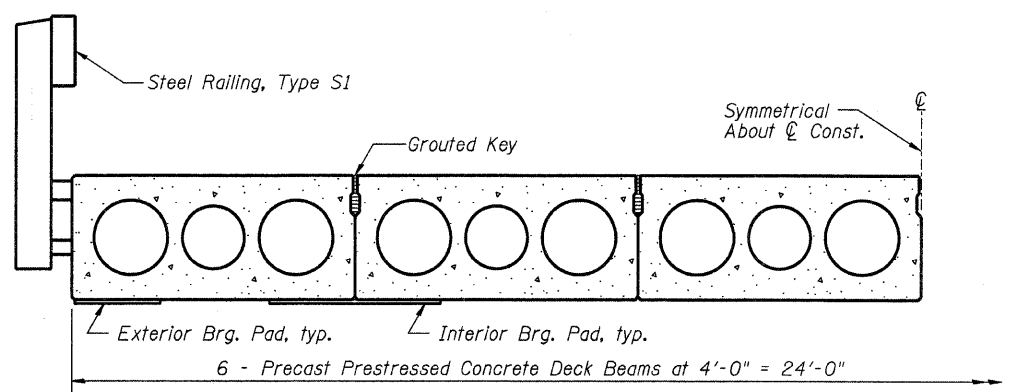


FIXED ABUTMENT

After beams have been erected, holes shall be drilled into the substructure and anchor dowels placed, grouted to top of beam, and allowed to cure min. 24 hrs. prior to start of grouting longitudinal shear keyways.

NOTES

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
- The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- See Special Provisions for lifting devices.
- The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.
- Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.
- The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.
- Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.
- Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Required Release Strength, f'_{ci} , shall be 4000 p.s.i.



HALF CROSS SECTION

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms.	Sq. Ft.	195

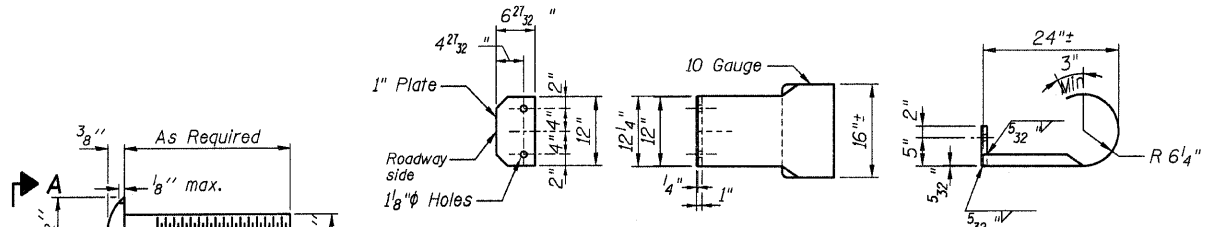
Contact Precaster to obtain estimate for deck beam handling weight.

PRECAST PRESTRESSED CONCRETE DECK BEAM DETAILS
PROPOSED BRIDGE OVER TRIBUTARY TO LITTLE HICKORY CREEK
TR 437
SECTION 05-10121-00-BR
FAYETTE COUNTY, ILLINOIS

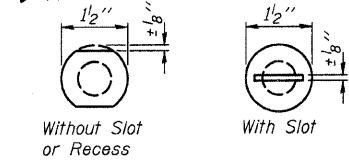
Sheet 8 of 10
Job No. 51205

07/09/2008

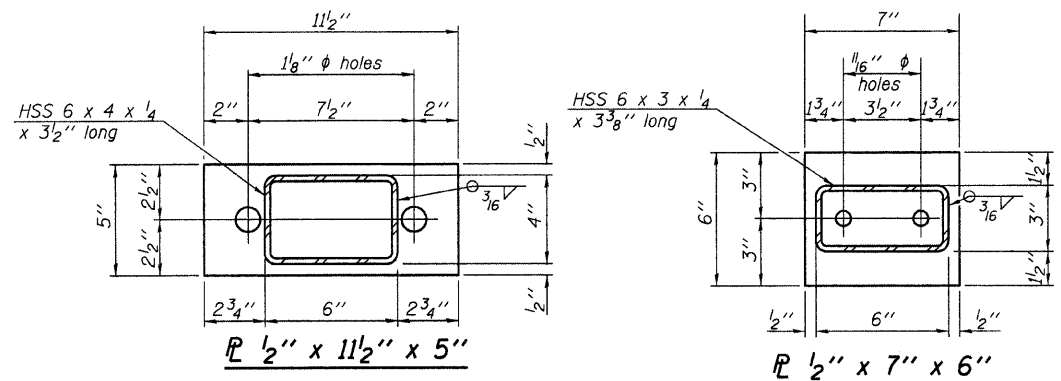
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 437	05-10121-00-BR	FAYETTE	10	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 95550				



CURLLED END SECTION DETAILS

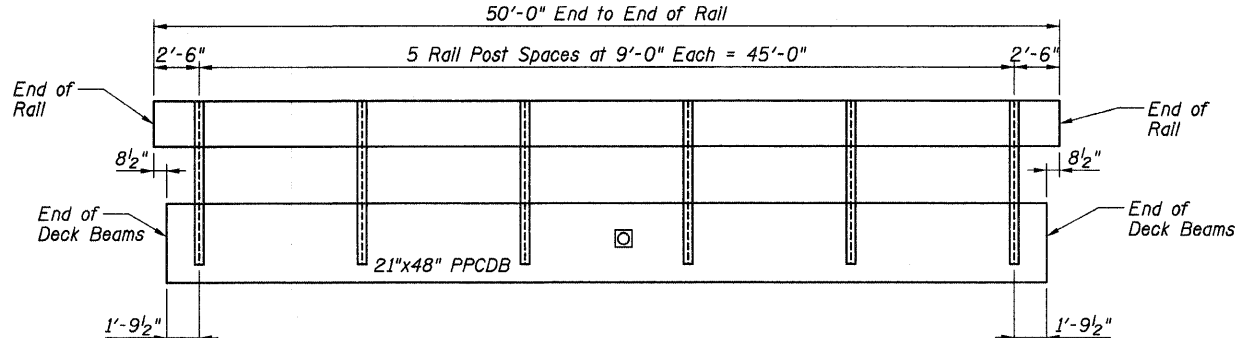


VIEW A-A ROUND HEAD BOLT



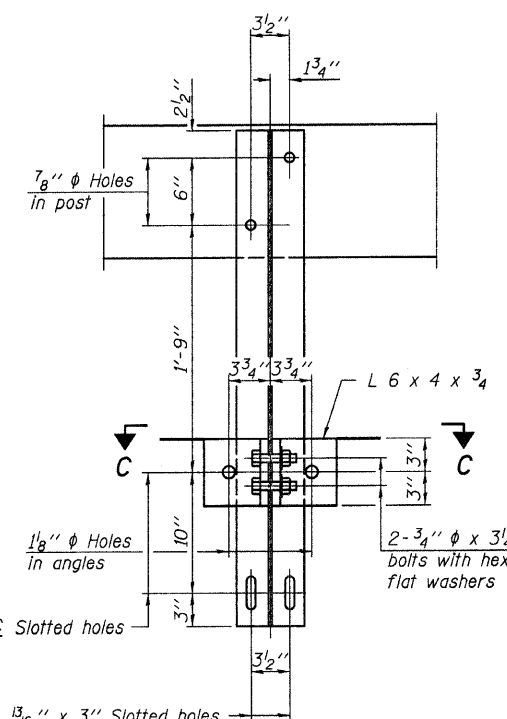
P 1/2" x 11 1/2" x 5"

P 1/2" x 7" x 6"

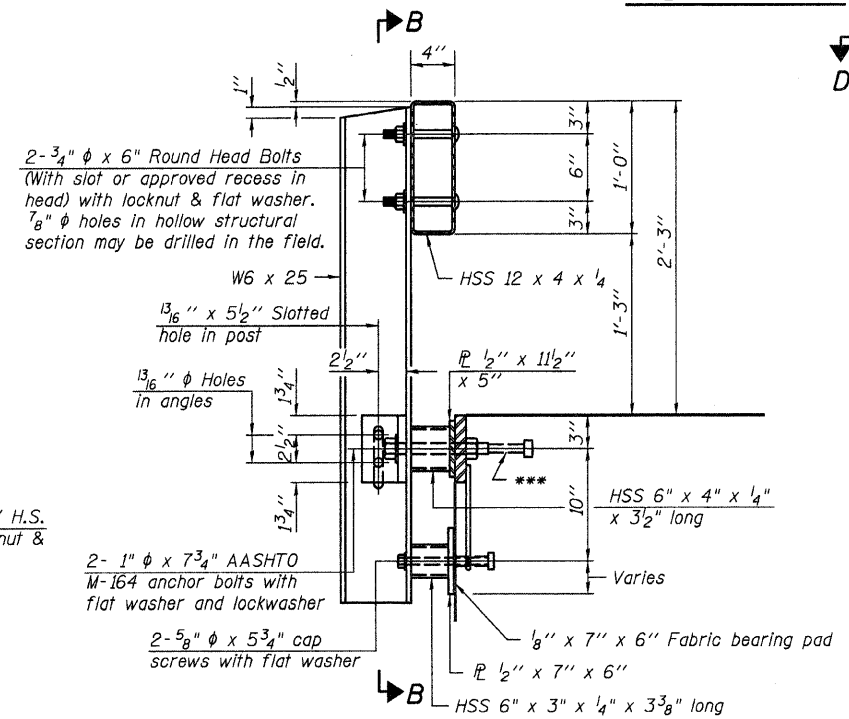


ELEVATION

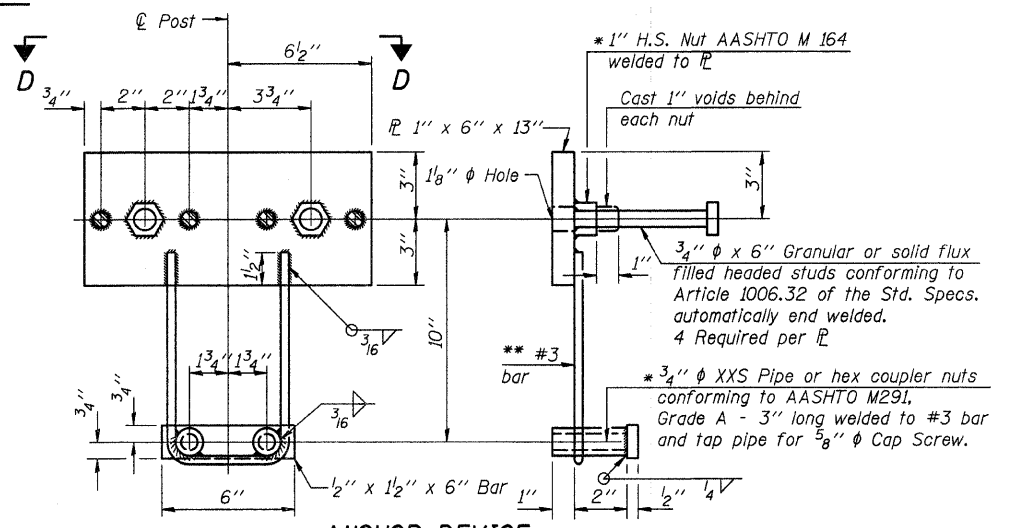
Note: The cost of the Curled End Sections shall be included in the contract unit price per foot for "STEEL RAILING, TYPE S1", and no additional compensation will be allowed.



SECTION B-B

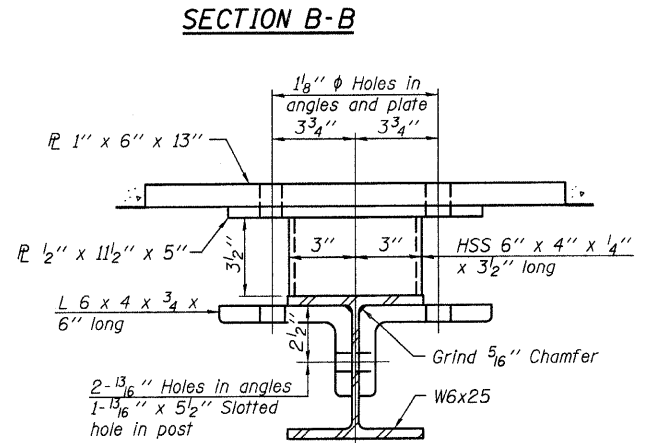


SECTION AT RAILING POST

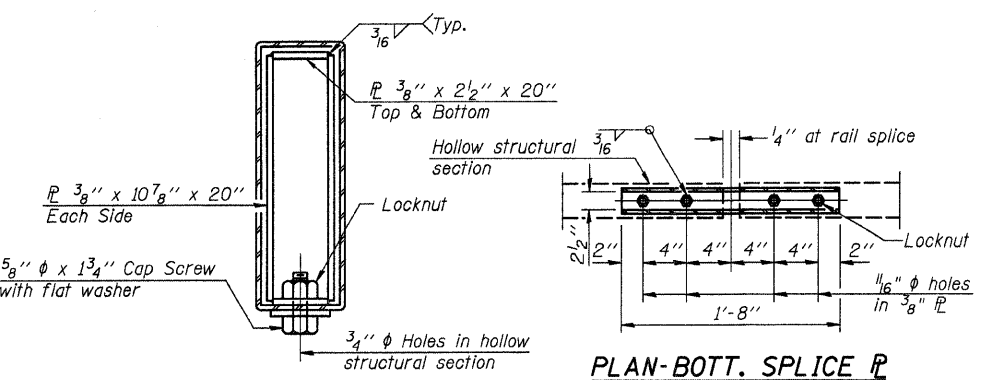


ANCHOR DEVICE

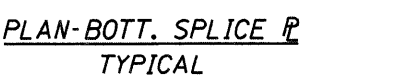
Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S1.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 *** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



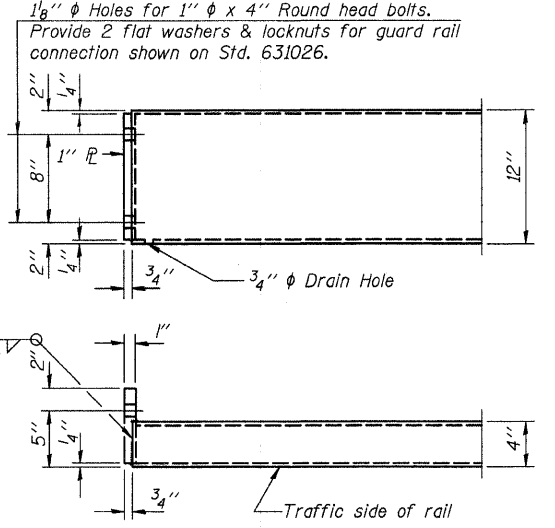
SECTION C-C



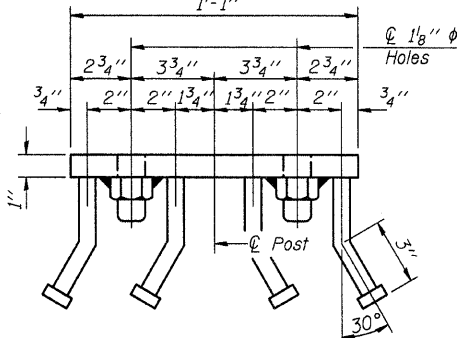
SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE P TYPICAL



END OF RAIL DETAILS



VIEW D-D

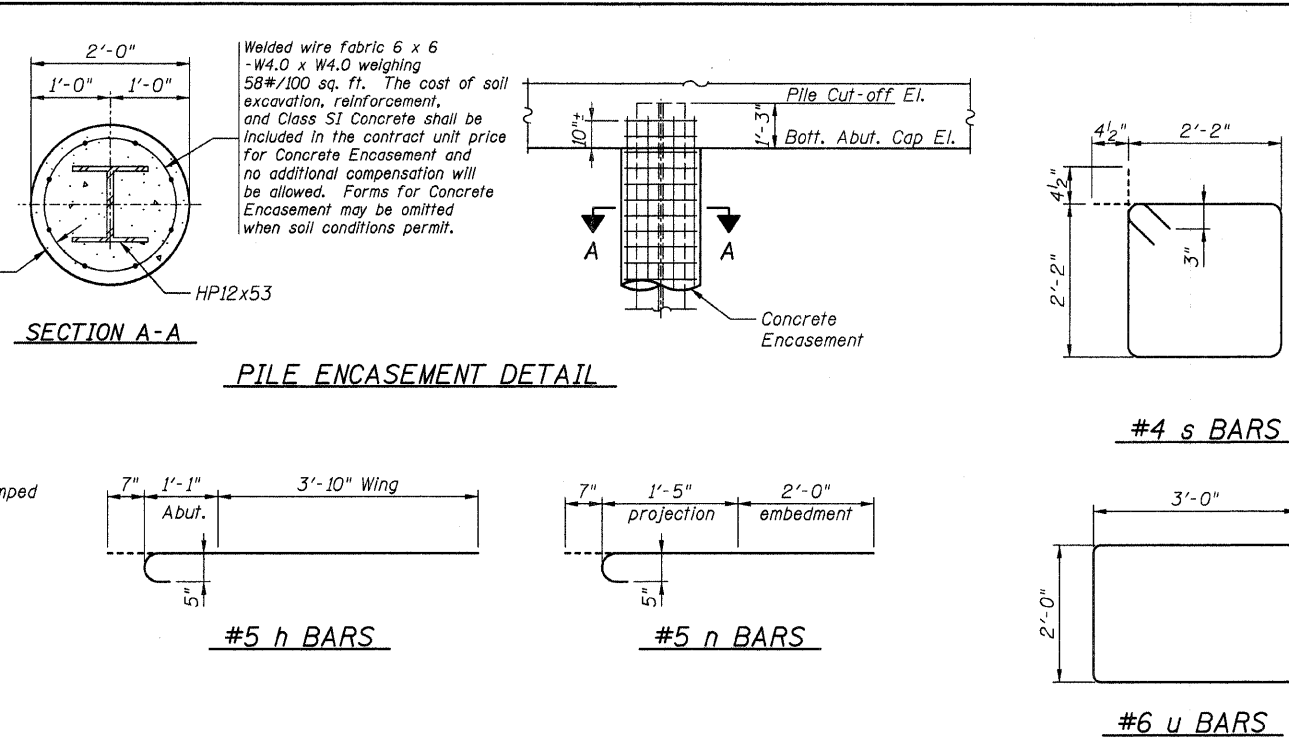
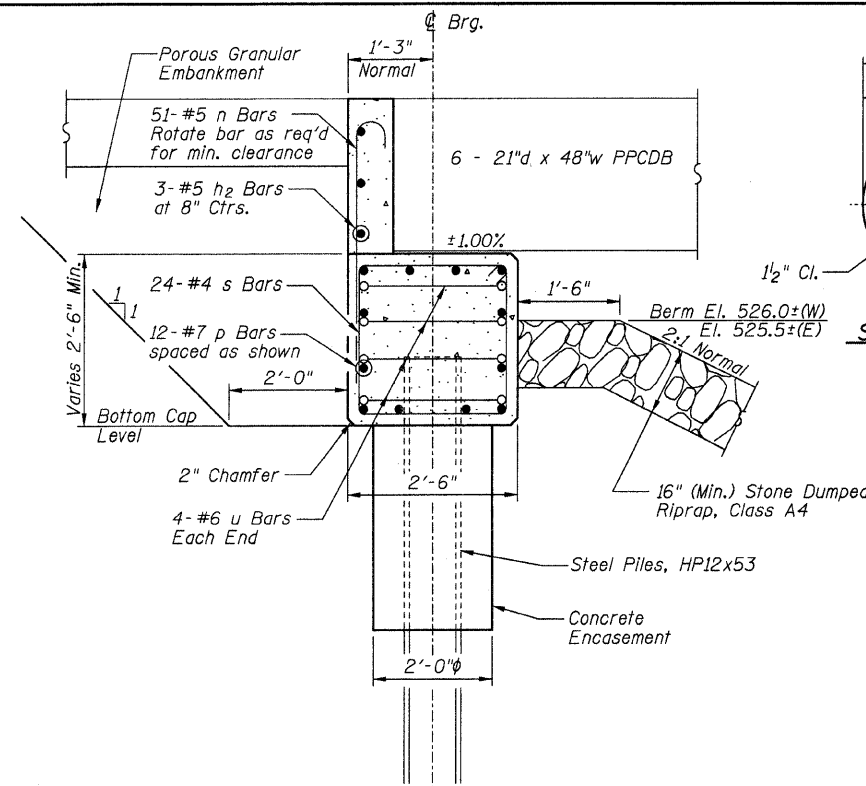
BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S1	Foot	100

STEEL RAILING, TYPE S1 DETAILS
 PROPOSED BRIDGE OVER TRIBUTARY TO LITTLE HICKORY CREEK
 TR 437
 SECTION 05-10121-00-BR
 FAYETTE, ILLINOIS

07/09/2008

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 437	05-10121-00-BR	FAYETTE	10	10
FED. ROAD DIST. NO. 7		ILLINOIS	FEDERAL AID PROJECT	
CONTRACT NO. 95550				



PILE DATA

Type and Size: Steel HP12x53

Nominal Required Bearing: 419 kips

Allowable Resistance Available: 139 kips

Estimated Length:
 West Abutment: 38 Foot
 East Abutment: 39 Foot

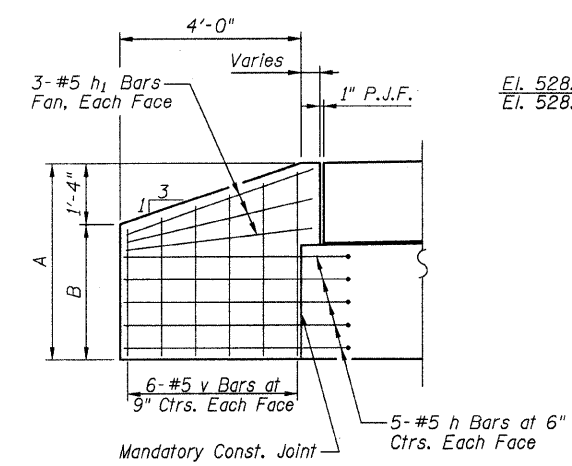
Number of Production Piles:
 West Abutment: 4 Each
 East Abutment: 3 Each

Number of Test Piles:
 West Abutment: None
 East Abutment: 1 Each

BILL OF MATERIALS
ONE ABUTMENT w/ WINGWALLS

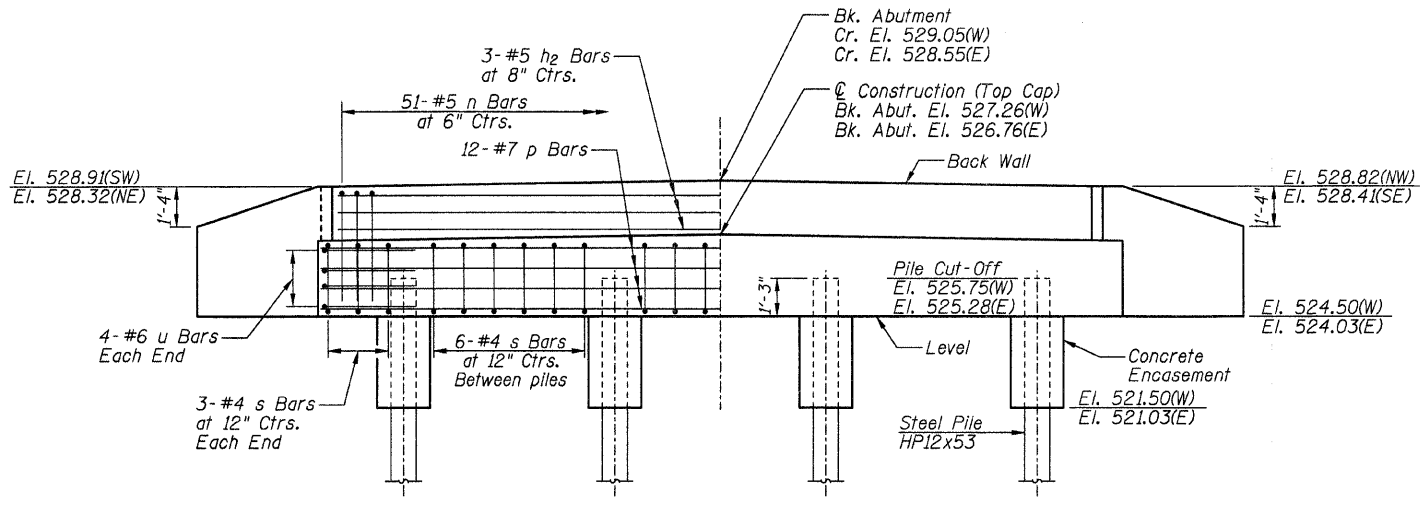
Bar	No.	Size	Length	Shape
h	20	#5	5'-6"	
h ₁	12	#5	4'-3"	
h ₂	3	#5	25'-0"	
n	51	#5	4'-0"	
p	12	#7	26'-4"	
s	24	#4	9'-5"	
u	8	#6	8'-0"	
v	24	#5	4'-0"	CUT IN FIELD
Concrete Structures			Cu Yd	8.7
Concrete Encasement			Cu Yd	1.4
Reinforcement Bars			Pound	1450

SECTION THRU ABUTMENT

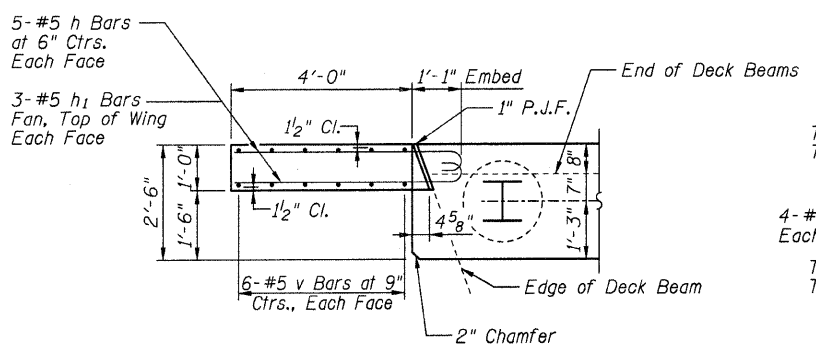


Wing	A	B
SW	4'-4 ⁷ / ₈ "	3'-0 ⁷ / ₈ "
NW	4'-3 ⁷ / ₈ "	2'-11 ⁷ / ₈ "
SE	4'-4 ¹ / ₂ "	3'-0 ¹ / ₂ "
NE	4'-3 ¹ / ₂ "	2'-11 ¹ / ₂ "

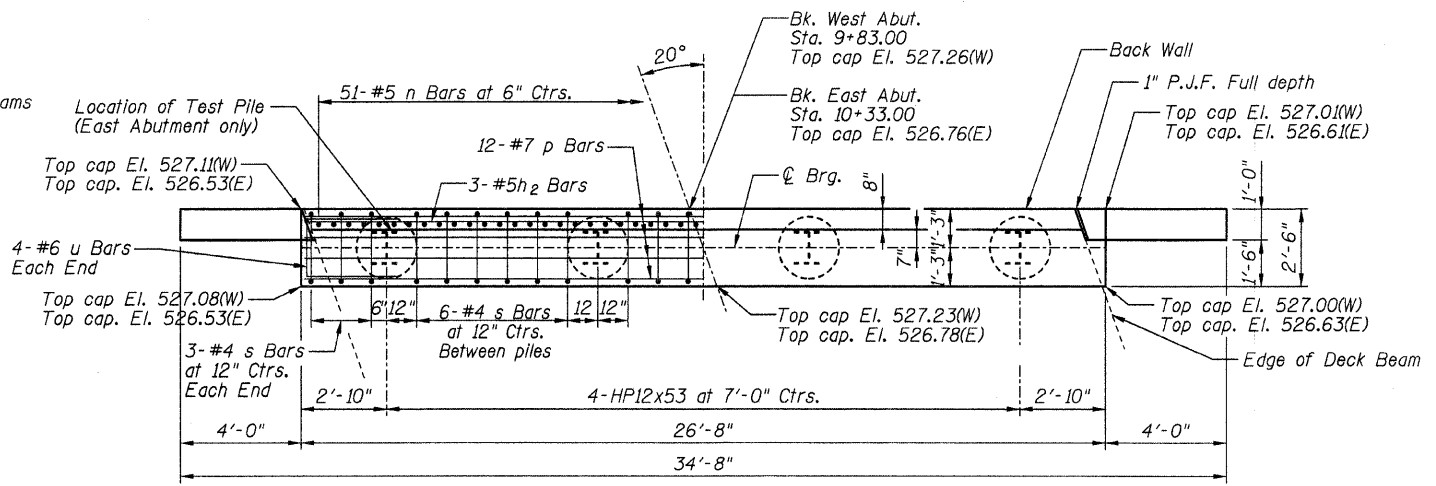
ELEVATION OF WINGWALL



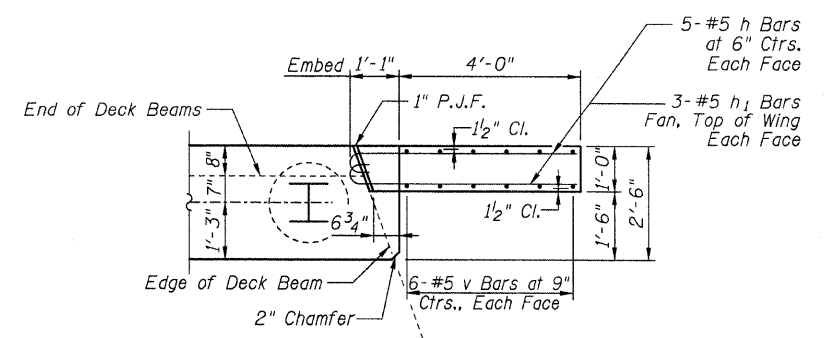
ELEVATION



WINGWALL CONNECTION DETAIL



PLAN



WINGWALL CONNECTION DETAIL

ABUTMENT DETAILS
PROPOSED BRIDGE OVER TRIBUTARY
TO LITTLE HICKORY CREEK
TR 437
SECTION 05-10121-00-BR
FAYETTE COUNTY, ILLINOIS

GENERAL NOTES

All exposed edges shall have standard ³/₄" chamfer, unless otherwise noted.

All clearances between rebar and form surface shall be 2", unless otherwise noted.

Space reinforcement in cap to miss PPCDB dowel rods.

The Contractor shall drive one (1) Steel HP12x53 Test Pile in a permanent location at the East Abutment as directed by the Engineer before ordering the remainder of the piles.

The Steel H-piles shall be according to AASHTO M270 Grade 50.

In addition to all other requirements of Section 512 of the Standard Specifications, splices for Steel H-piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.