3-5-10 Letting, Item 041

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
605	09-00006-02-BR	SCOTT	10	1
FED. ROAD DIST. NO. 7	ILLINOIS	CONTRACT NO. 93519		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
AMERICAN RECOVERY AND REINVESTMENT ACT
SCOTT COUNTY
SECTION 09-00006-02-BR
F.A.S. 605 (CH 3) OVER WOLF RUN CREEK
PROJECT NO. ARA-0605(107)
JOB NUMBER C-96-200-10

INDEX OF SHEETS

LOCATION OF SECTION INDICATED THUS: –■–

REQUIRED HIGHWAY STANDARDS

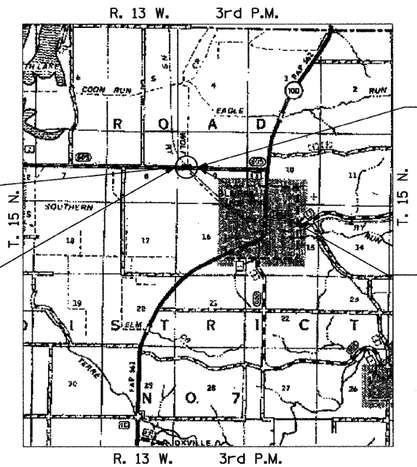
000001-05
515001-03
631011-06
635006-03
635011-02
701901-01
780001-02
BLR 21-8
BLR 26-2
BLR 27-1

PROPOSED IMPROVEMENTS INCLUDE REPLACEMENT OF THE SUPERSTRUCTURE IN KIND INCLUDING NEW STEEL RAIL AND WEARING SURFACE ALONG WITH REPLACEMENT OF WINGWALL TOPS, RIPRAP PLACEMENT, TRAFFIC BARRIER TERMINAL REPLACEMENT AND MINOR RESURFACING IN THE IMMEDIATE STRUCTURE AREA.

SECTION 09-00006-02-BR BEGINS STATION 132+72.00

SECTION 09-00006-02-BR ENDS STATION 134+02.00

EXISTING STRUCTURE 086-3000
SINGLE SPAN 27" PPC DECK BEAM SUPERSTRUCTURE W/ SINGLE ELEMENT SIDE MOUNTED STEEL RAIL & CONCRETE CLOSED ABUTMENTS, 54'-0" BK. TO BK. & 33'-0" O. TO O., NO SKEW
(SUPERSTRUCTURE TO BE REMOVED)



LOCATION MAP

1 MI 0 1 MI
APPROXIMATE SCALE

NET LENGTH OF PROJECT = 130.00 FEET = 0.025 MILES

DESIGN CLASSIFICATION: MAJOR-COLLECTOR (NON-URBAN)
DESIGN ADT = 3,250 (2030)
DESIGN SPEED = 60 MPH

UTILITY COMPANIES

SOYLAND POWER COOPERATIVE
JACKSONVILLE, ILLINOIS

VERIZON
JACKSONVILLE, ILLINOIS

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

CONTRACT NO. 93519

2730E001

Hutchison Engineering, Inc.
JACKSONVILLE ILLINOIS

2009 JOB*2730

JOSEPH E. HUTCHISON 088336 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS 11/30/2009

License Expires 11/30/2011
SIGNATURE

ENGINEERS SEAL

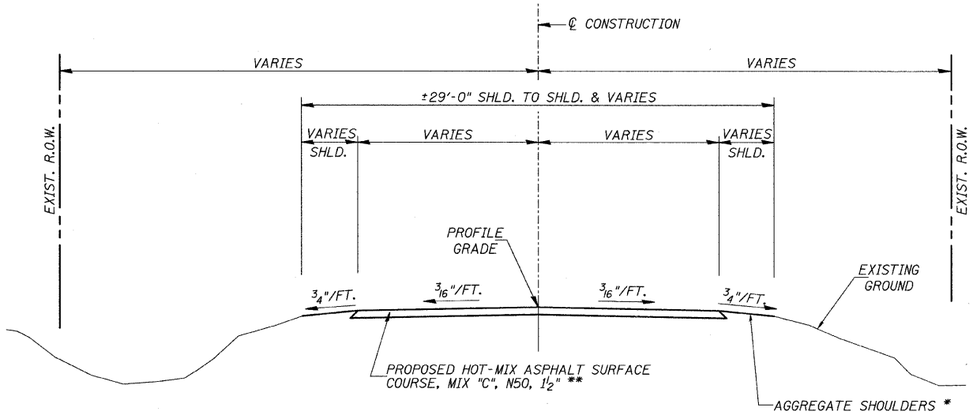
APPROVED November 25, 2009
SCOTT COUNTY ENGINEER

PASSED 12-3, 2009
DISTRICT SIX ENGINEER OF LOCAL ROADS & STREETS

PASSED December 2, 2009
DISTRICT SIX ENGINEER OF CONSTRUCTION

Released For Bid Based on Limited Review Roger L Duskell TMF 12/3/ 2009
DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EXISTING/PROPOSED TYPICAL SECTION

STA. 132+72.00 TO STA. 133+00.00
STA. 133+54.00 TO STA. 134+02.00
EXCEPT TRANSITIONS

BRIDGE OMISSION
STA. 133+00.00 TO STA. 133+54.00

* COST OF REGRADING EXISTING AGGREGATE SHOULDERS 2' PAST WING ENDS AND BEYOND DUE TO CONSTRUCTION ACTIVITIES SHALL BE INCLUDED WITH HOT-MIX ASPHALT SURFACE COURSE. COST OF NEW AGGREGATE SHOULDERS FROM BACK OF STRUCTURE TO 2' BEYOND THE WINGS SHALL BE PAID FOR AS AGGREGATE SHOULDERS, TYPE A. SEE SCHEDULE.

**PROPOSED PAVEMENT WIDTH TO MATCH EXISTING PAVEMENT WIDTH.

MIX DESIGN TABLE

MIXTURE USE	SURFACE (MIX "C"), N50
PG GRADE	PG 64-22
DESIGN AIR VOIDS	4% @ N50
MAX COMPOSITION: (GRADATION MIXTURE)	IL-9.5 or 12.5
FRICTION AGGREGATE	MIXTURE C

If RAP option is selected, the asphalt cement grade may need to be adjusted. This will be determined by the Engineer.

GENERAL NOTES

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.

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

ANY EXISTING DRAINAGE STRUCTURES THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

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.

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.

HOT-MIX ASPHALT SCHEDULE

STATION TO STATION	WIDTH	LENGTH	PRIME COAT GALLON 0.10 GAL/SQ YD	HOT-MIX ASPHALT SURFACE CSE TON 112#/SQ YD/IN
132+72.00 - 132+86.22	23.49' AVG.	14.22'	4	3
132+86.22 - 133+00.00	27.61' AVG.	13.78'	4	4
133+54.00 - 133+68.00	27.56' AVG.	14.00	4	4
133+68.00 - 134+02.00	23.60' AVG.	34.00'	9	8
		TOTAL	21	19

PAINT PAVEMENT MARKING - LINE 4"

STATION TO STATION	SIDE	DESCRIPTION	FOOT
132+72.00 - 134+02.00	LEFT	WHITE EDGE LINE	130
132+72.00 - 134+02.00	LEFT / ℄	SOLID YELLOW	130
132+72.00 - 134+02.00	RIGHT / ℄	YELLOW SKIP DASH	33
132+72.00 - 134+02.00	RIGHT	WHITE EDGE LINE	130
		TOTAL	423

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	QUANTITY
	28100209	STONE RIPRAP, CLASS A5	TON	295
①	28200200	FILTER FABRIC	SQ YD	245
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	21
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	211
	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	39
	48100100	AGGREGATE SHOULDERS, TYPE A	TON	7
①	50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1
	50102400	CONCRETE REMOVAL	CU YD	4.5
	50300225	CONCRETE STRUCTURES	CU YD	4.5
①	50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1,782
①	50800105	REINFORCEMENT BARS	POUND	370
	51500100	NAME PLATES	EACH	1
	58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	198
	58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	135
✱①	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	3
✱①	63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	4
	63200310	GUARDRAIL REMOVAL	FOOT	68
	67100100	MOBILIZATION	L SUM	1
①	70103700	TRAFFIC CONTROL COMPLETE	L SUM	1
✱	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	423
✱①	78202000	TERMINAL MARKER - POST MOUNTED	EACH	4
✱①	X0321203	TERMINAL MARKER POSTS	EACH	4
✱①	XX006199	STEEL BRIDGE RAIL, TYPE SM (SPECIAL)	FOOT	162
①	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1

① SEE SPECIAL PROVISIONS

✱ SPECIALTY ITEMS

CONSTRUCTION CODE TYPE: X081-2A

TRAFFIC BARRIER TERMINAL, TYPE 2

SIDE	STATION TO STATION	EACH
LEFT	132+71.65 - 132+73.93	1
LEFT	133+77.30 - 133+73.11	1
RIGHT	133+73.35 - 133+74.13	1
	TOTAL	3

AGGREGATE SHOULDERS, TYPE A

STATION TO STATION	SIDE	WIDTH	LENGTH	TON
132+84.50 - 133+00.00	LEFT	3.26' AVG.	15.50'	2
132+84.50 - 133+00.00	RIGHT	2.43' AVG.	15.50'	1
133+54.00 - 133+69.50	LEFT	2.88' AVG.	15.50'	2
133+54.00 - 133+69.50	RIGHT	2.91' AVG.	15.50'	2
			TOTAL	7

*** 6" THICKNESS

TRAFFIC BARRIER TERMINAL, TYPE 5A

SIDE	STATION TO STATION	EACH
LEFT	132+73.93 - 132+86.50	1
RIGHT	132+84.61 - 132+86.50	1
LEFT	133+67.50 - 133+77.30	1
RIGHT	133+67.50 - 133+73.55	1
	TOTAL	4

TERMINAL MARKER POSTS

℄ STATION	OFFSET	SIDE	EACH
132+79.00	19'	LEFT	1
132+84.00	19'	RIGHT	1
133+70.00	19'	LEFT	1
133+71.00	19'	RIGHT	1
		TOTAL	4

GUARDRAIL REMOVAL

STATION TO STATION	SIDE	FOOT
132+73.14 - 132+86.50	LEFT	24
132+85.65 - 132+86.50	RIGHT	12
133+67.50 - 133+63.41	LEFT	19
133+67.50 - 133+68.26	RIGHT	13
	TOTAL	68

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

STATION TO STATION	WIDTH	LENGTH	SQ YD
132+72.00 - 132+86.22	23.49' AVG.	14.22'	37
132+86.22 - 133+00.00	27.61' AVG.	13.78'	42
133+54.00 - 133+68.00	27.56' AVG.	14.00'	43
133+68.00 - 134+02.00	23.60' AVG.	34.00'	89
		TOTAL	211

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		DRAWN -	REVISED -
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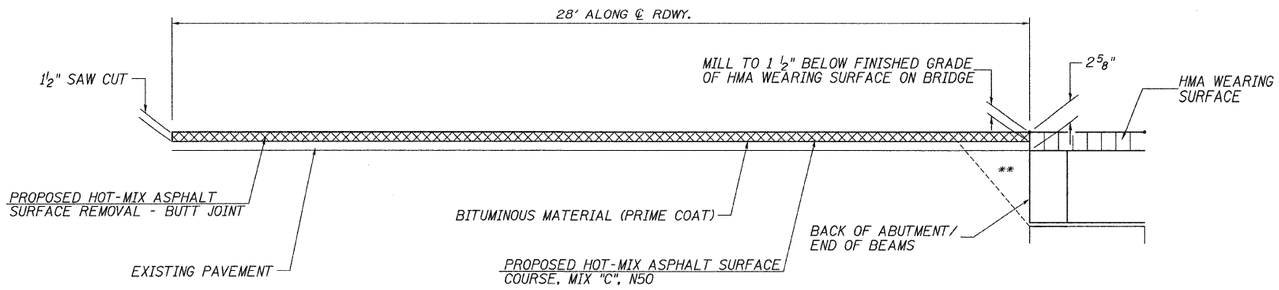
	PLOT DATE = 11/24/2009	DATE -	REVISED -

SCOTT COUNTY
COUNTY HIGHWAY 3
OVER WOLF RUN CREEK

GENERAL NOTES, TYPICAL SECTION, SUMMARY OF QUANTITIES, SCHEDULES OF QUANTITIES

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. 132+72.00 TO STA. 134+02.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
605	09-00006-02-BR	SCOTT	10	2
		CONTRACT NO. 93519		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT ARA-0605(107)		



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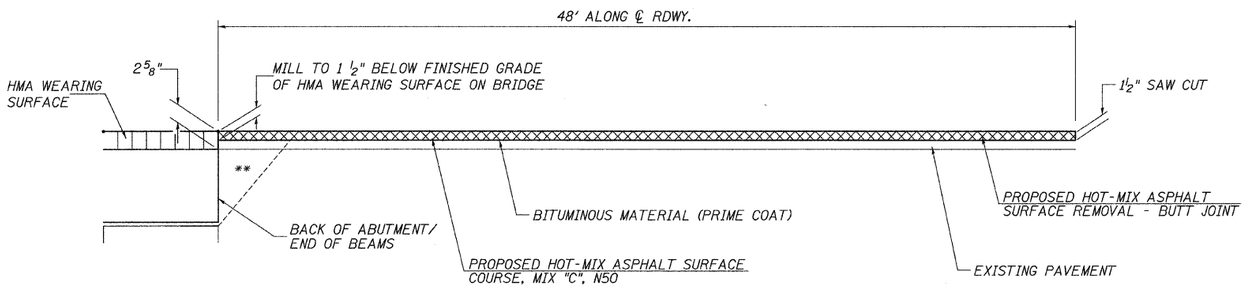
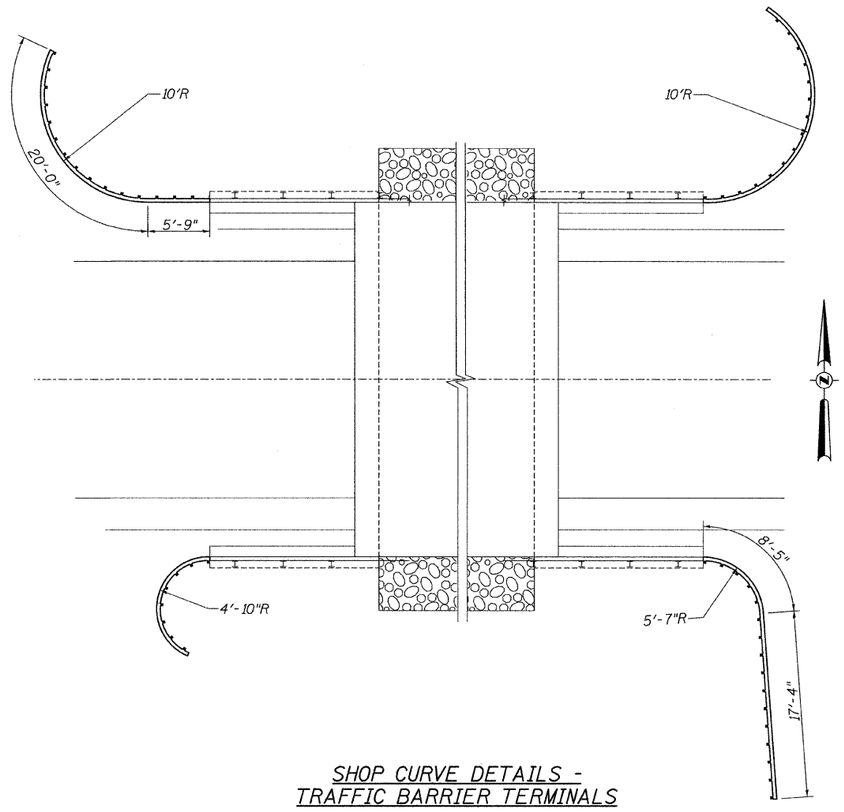


EAST END

BUTT JOINT DETAILS

** ANY EXCAVATION REQUIRED BEHIND THE ABUTMENTS FOR REMOVAL OF THE EXISTING SUPERSTRUCTURE OR BALANCING OF SOIL PRESSURES SHALL BE BACKFILLED WITH CONTROLLED LOW-STRENGTH MATERIAL. COST OF ANY EXCAVATION OR BACKFILL REQUIRED SHALL BE INCLUDED WITH "REMOVAL OF EXISTING SUPERSTRUCTURES".



SHOP CURVE DETAILS - TRAFFIC BARRIER TERMINALS

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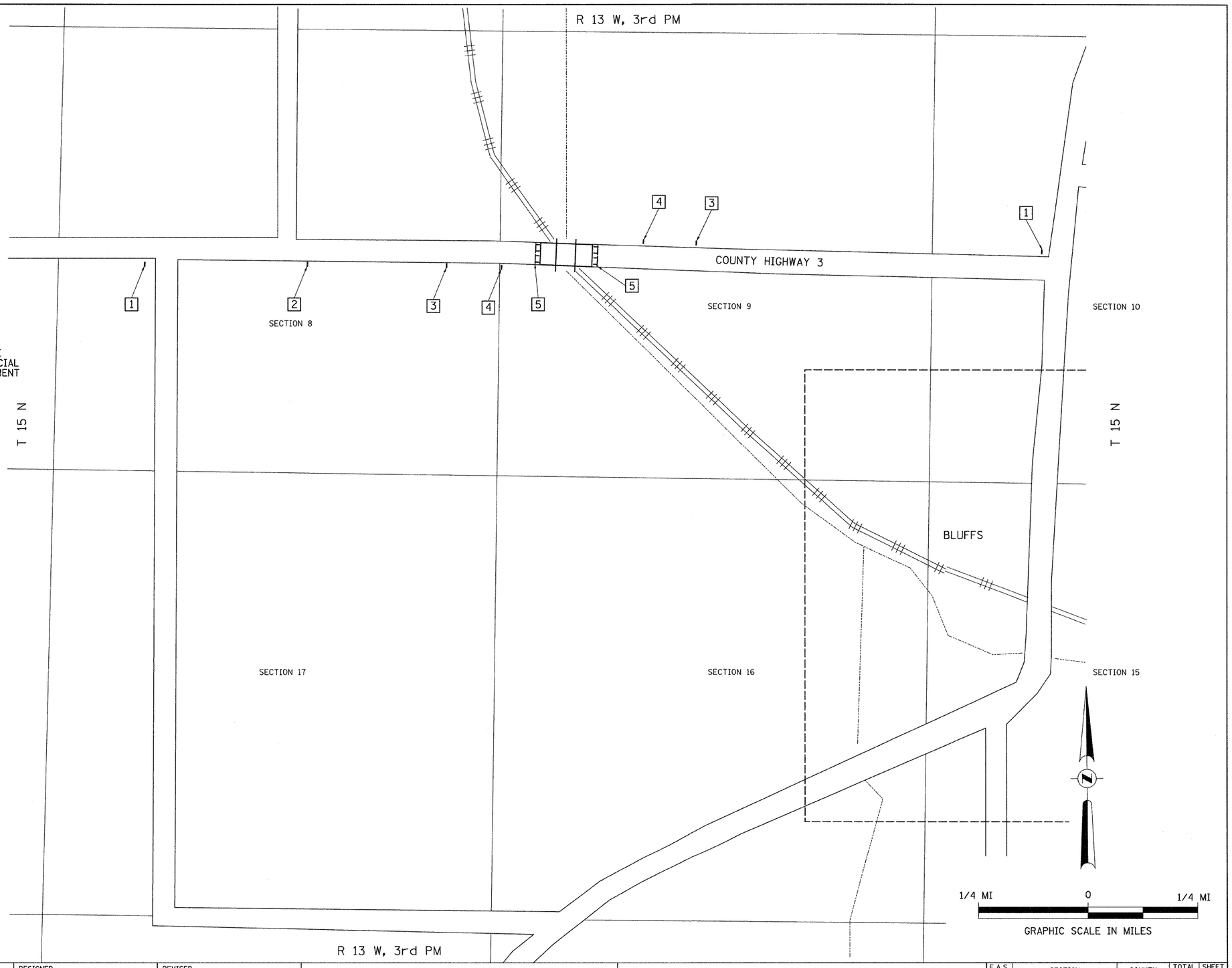
		DRAWN -	REVISED -			605	09-00006-02-BR	SCOTT	10	3
	PLOT SCALE = 1.0000 ' / IN.	CHECKED -	REVISED -					CONTRACT NO. 93519		
	PLOT DATE = 11/24/2009	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 132+72.00 TO STA. 134+02.00	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT ARA-0605(107)		

NOTE:
A.R.R.A. SINGING SHALL BE DONE IN ACCORDANCE WITH BUREAU OF DESIGN AND ENVIRONMENT SPECIAL PROVISION "AMERICAN RECOVERY AND REINVESTMENT ACT SIGNING." SEE SPECIAL PROVISIONS.

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

SEE STANDARD BLR 21
AND SPECIAL PROVISIONS



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	PLOT DATE = 11/24/2009	DATE -	REVISED -

SCOTT COUNTY
COUNTY HIGHWAY 3
OVER WOLF RUN CREEK

TRAFFIC CONTROL PLAN

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. 132+72.00 TO STA. 134+02.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
605	09-00006-02-BR	SCOTT	10	4

CONTRACT NO. 93519

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT ARA-0605(107)

BENCH MARK

RR Spike in Power Pole
Sta. 132+75, 37' Lt.
Elev. 452.31

RR Spike in Power Pole
Sta. 133+69, 33' Rt.
Elev. 452.60

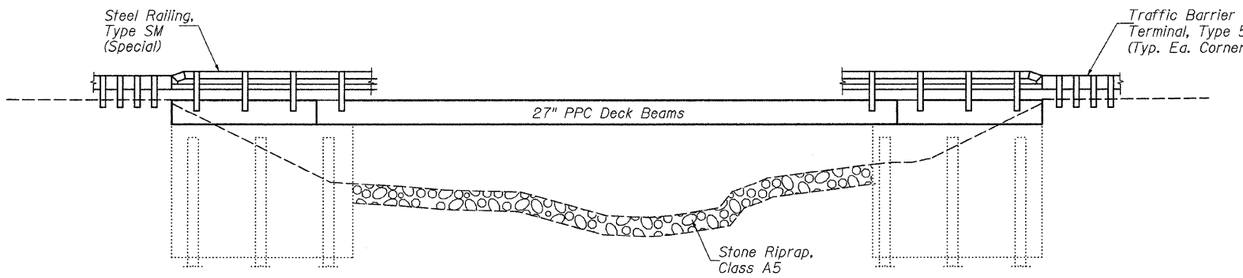
EXISTING STRUCTURE

Single span precast prestressed concrete deck beam structure on closed concrete abutments with metal shell piles. 54'-0" Bk. to Bk. and 33'-0" Out to Out., 0° Skew.

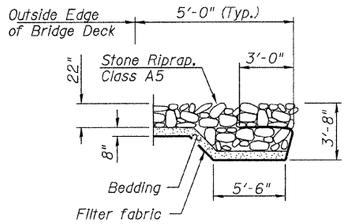
The existing superstructure is to be replaced with PPC Deck Beams and a HMA wearing surface.

Road to be closed during construction.

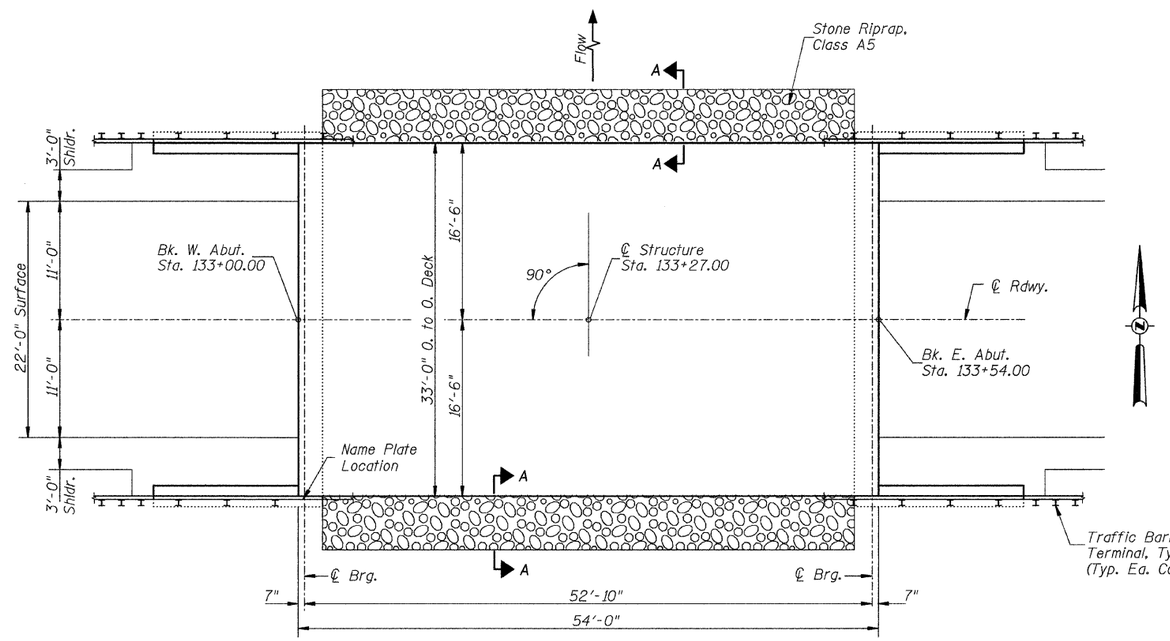
No Salvage



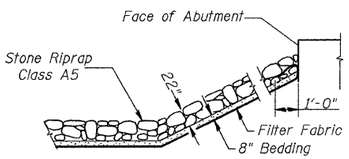
ELEVATION



SECTION A-A



PLAN



STONE RIPRAP DETAIL
Top of Riprap Shall Match Existing Groundline

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60. Reinforcement bars designated (E) shall be epoxy coated.

The top surface of the beams shall be finished according to the IDOT Manual for Precast Prestressed Concrete Products.

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.

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

Backfill shall not be placed behind the new abutments until the superstructure has been set and doweled.

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.

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

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
(1)	Removal of Existing Superstructures	EACH	1	——	1
	Stone Riprap, Class A5	TON	——	295	295
(1)	Filter Fabric	SQ YD	——	245	245
	Concrete Removal	CU YD	——	4.5	4.5
	Concrete Structures	CU YD	——	4.5	4.5
(1)	Precast Prestressed Concrete Deck Beams (27" Depth)	SQ FT	1,782	——	1,782
(1)	Reinforcement Bars	POUND	——	370	370
(1)	Steel Bridge Rail, Type SM (Special)	FOOT	162	——	162
	Hot-Mix Asphalt Surface Course, Mix "C", N50	TON	20	——	20
	Waterproofing Membrane System	SQ YD	198	——	198
	Portland Cement Mortar Fairing Course	FOOT	135	——	135
	Name Plates	EACH	1	——	1

(1) 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 LRFD Bridge Design Specifications.

11/25/2009
Illinois Structural No. 6440
Expires 11/30/2010

JOSEPH F. QUINN 062-006440 LICENSED STRUCTURAL ENGINEER OF JACKSONVILLE ILLINOIS
License Exp'ires 11/30/2010

DESIGNED	B.A.N.
CHECKED	J.E.H.
DRAWN	T.A.C.
CHECKED	B.A.N./J.E.H.

WOLF RUN CREEK
REBUILT 20__ BY
SCOTT COUNTY
SEC. 09-00006-02-BR
C.H. 3 STATION 133+27.00
F.A. PROJ. ARA-0605(107)
STR. NO. 086-3000 LOADING HL-93

NAME PLATE

Attach new name plate to back side of 8" rail element at West end of South rail. Clean and re-locate existing name plate adjacent to new name plate. Cost included in the cost of Name Plates. See Std. 515001

DESIGN SPECIFICATIONS

2007 AASHTO (LRFD) & Interims

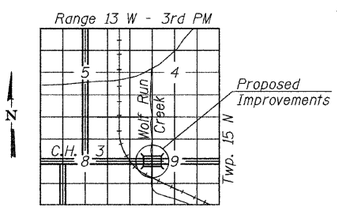
DESIGN STRESSES

(FIELD UNITS)
f'c = 3,500 p.s.i.
fy = 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. (½" Strands)
f'si = 201,960 p.s.i. (½" Strands)

LOADING HL-93

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

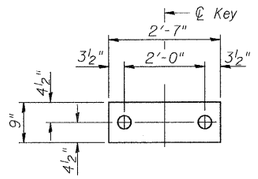


LOCATION SKETCH

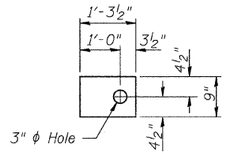
GENERAL PLAN AND ELEVATION
SCOTT COUNTY
SECTION 09-00006-02-BR
C.H. 3 OVER WOLF RUN CREEK
STA. 133+27.00
STRUCTURE NO. 086-3000

SHEET NO. 1	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 SHEETS	C.H. 3	09-00006-02-BR	SCOTT	10	5
		SN 086-3000	CONTRACT NO. 93519		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT ARA-0605(107)		

2730B001

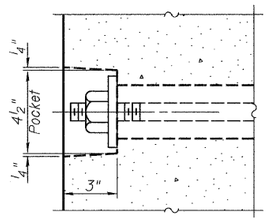


½" FABRIC BEARING PAD
Interior (20 Required)

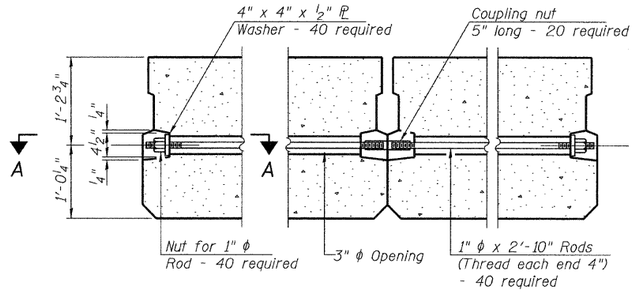


½" FABRIC BEARING PAD
Exterior (4 Required)

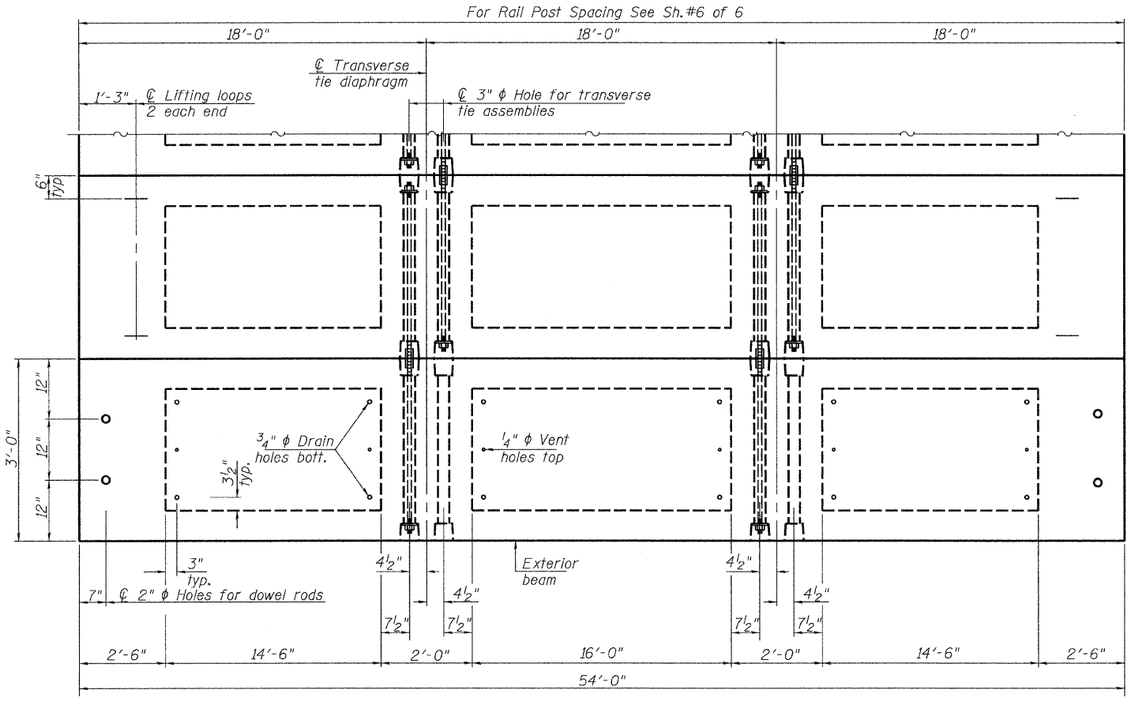
FIXED



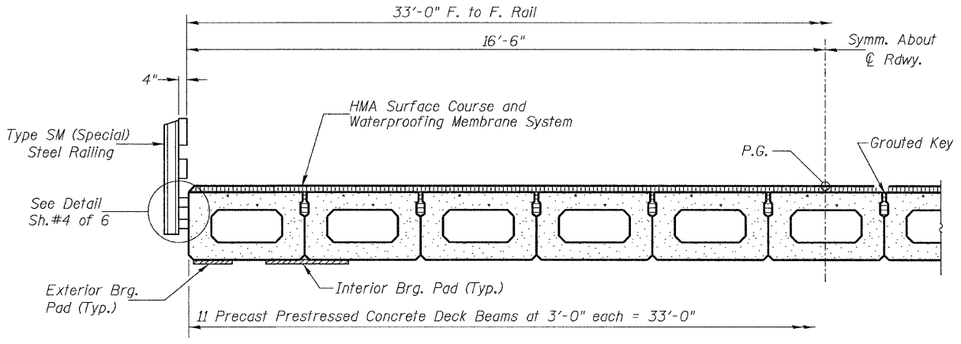
SECTION A-A



TYPICAL TRANSVERSE TIE ASSEMBLY



PLAN VIEW



HALF CROSS SECTION

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

BILL OF MATERIAL

	ITEM	UNIT	QUANTITY
①	Precast Prestressed Concrete Deck Beams (27" Depth)	SQ FT	1,782

① See Special Provisions

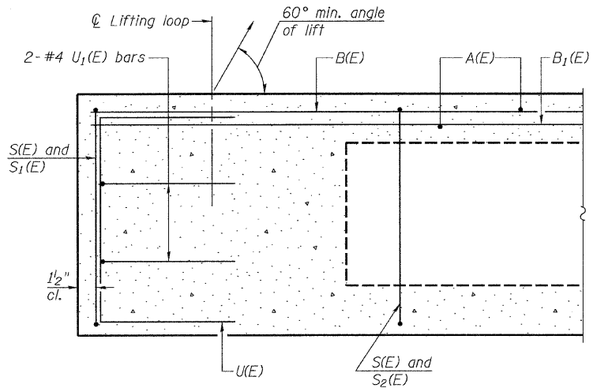
NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.
The 1" ϕ 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 ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
A minimum 2½" ϕ 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.

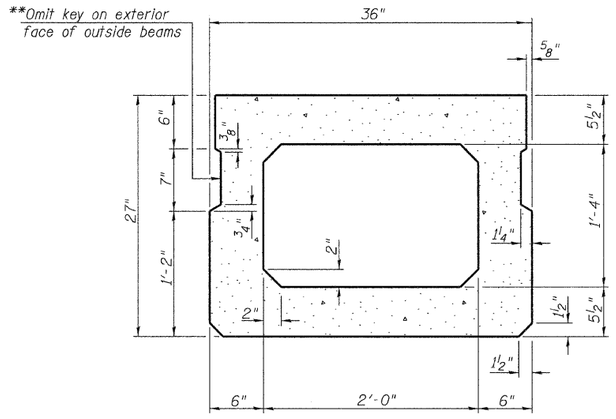
SUPERSTRUCTURE
SCOTT COUNTY
SECTION 09-00006-02-BR
C.H. 3 OVER WOLF RUN CREEK

SHEET NO. 2	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 SHEETS	CH 3	09-00006-02-BR	SCOTT	10	6
		SN 086-3000	CONTRACT NO. 93519		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT ARA-0605(107)		

2730B002

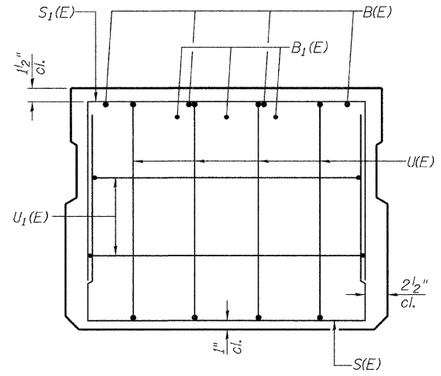


SECTION C-C

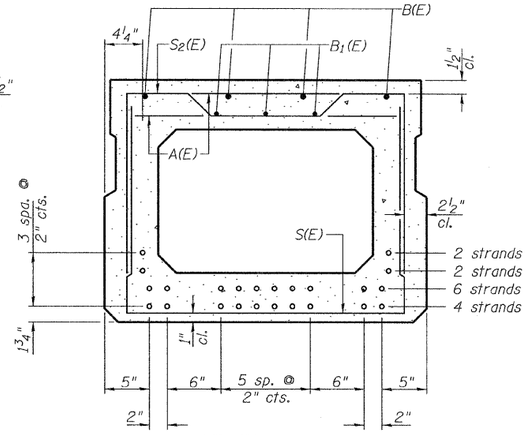


SECTION A-A
(Showing dimensions)

**Rail post anchor devices (Sheet 4 of 6) to be cast into exterior face of outside beams.



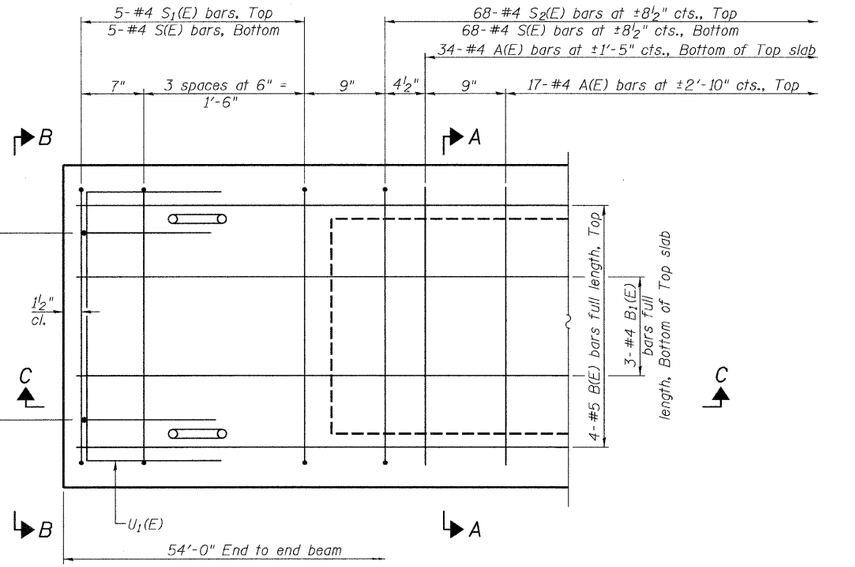
VIEW B-B



SECTION A-A

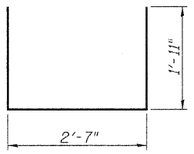
14-½"ϕ Strands Each Strand Stressed to 30,900 Lbs.
4-Strands $1\frac{3}{4}$" up, 6-Strands $3\frac{3}{4}$" up, 2-Strands $5\frac{3}{4}$" up, and 2 Strands $7\frac{3}{4}$" up

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

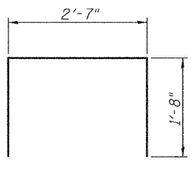


PLAN VIEW

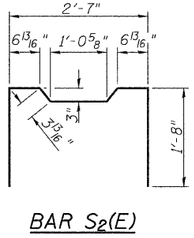
Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



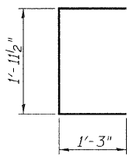
BAR S(E)



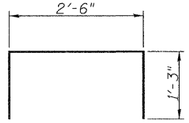
BAR S1(E)



BAR S2(E)



BAR U(E)



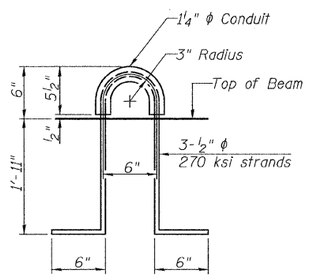
BAR U1(E)

BAR LIST-ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	51	#4	2'-7"	—
B(E)	4	#5	*53'-9"	—
B1(E)	3	#4	*53'-9"	—
S(E)	78	#4	6'-5"	⊐
S1(E)	10	#4	5'-11"	⊐
S2(E)	68	#4	6'-2"	⊐
U(E)	8	#5	4'-6"	⊏
U1(E)	4	#4	5'-0"	⊐

Note: See sheet 2 of 6 for additional details and Bill of Material.

* Total Length, Lap as necessary



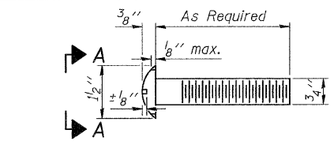
LIFTING LOOP DETAIL

SUPERSTRUCTURE DETAILS
SCOTT COUNTY
SECTION 09-00006-02-BR
C.H. 3 OVER WOLF RUN CREEK

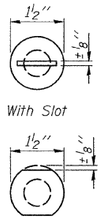
SHEET NO. 3	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 SHEETS	CH 3	09-00006-02-BR	SCOTT	10	7
		SN 086-3000	CONTRACT NO. 93519		
		FED. ROAD DIST. NO. 7 ILLINOIS	FED. AID PROJECT ARA-0605(107)		

2730B003

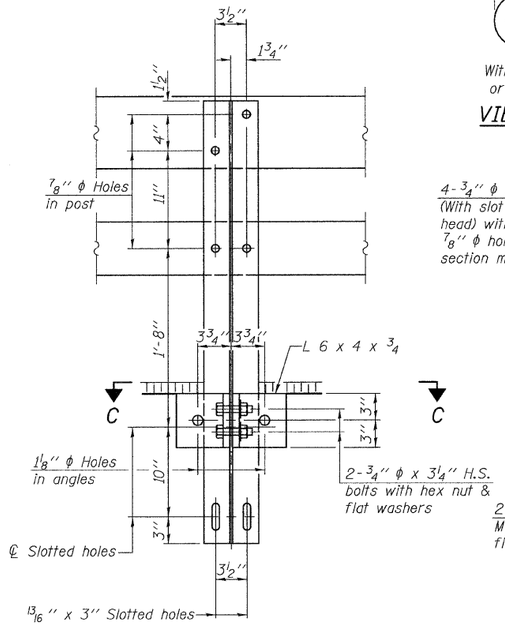
FOR RAIL POST SPACING SEE SH.#6 OF 6.



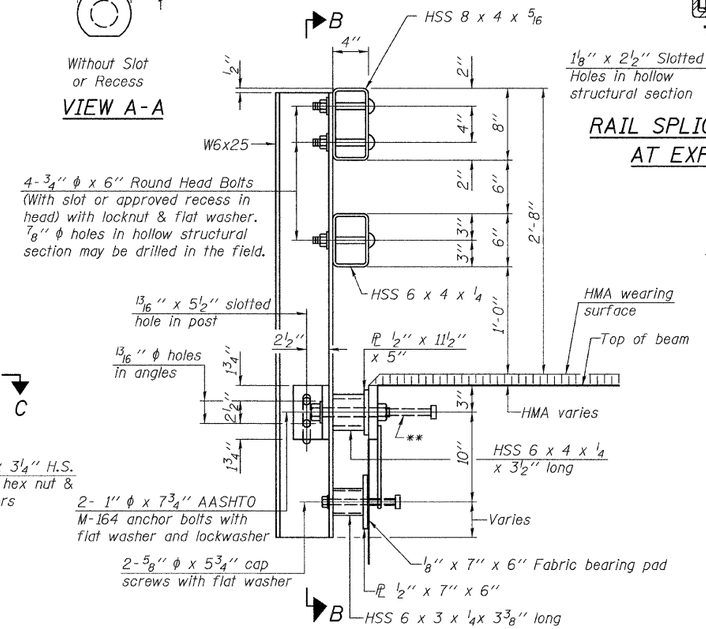
DETAIL OF 3/4" ϕ ROUND HEAD BOLT



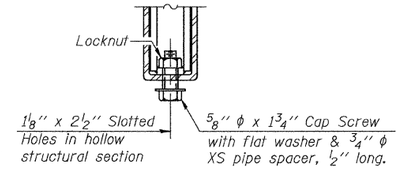
VIEW A-A



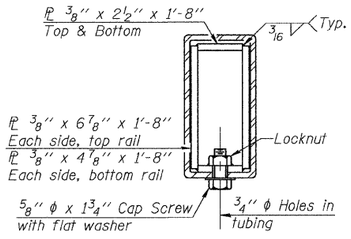
SECTION B-B



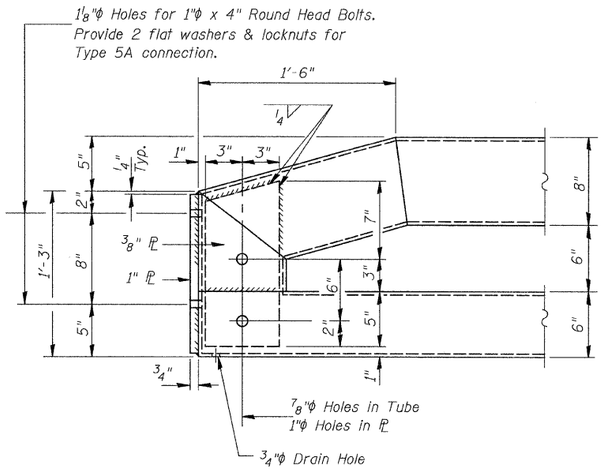
SECTION AT RAIL POST

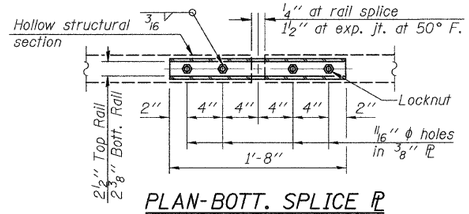


RAIL SPLICE CONNECTION AT EXPANSION JT.

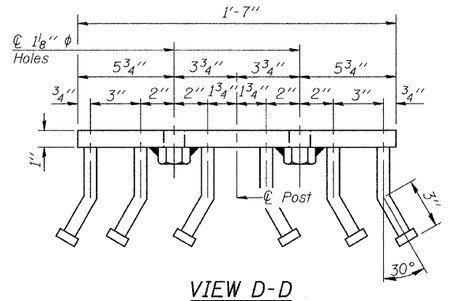


SECTION AT RAIL SPLICE

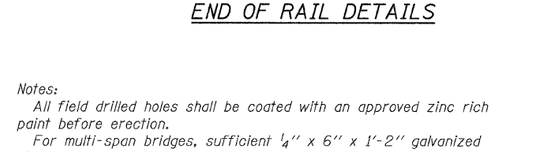




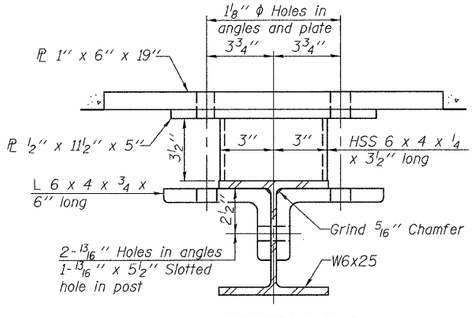
PLAN-BOTT. SPLICE PL TYPICAL



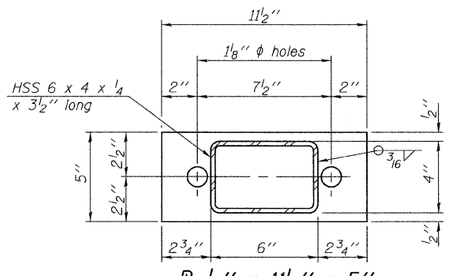
VIEW D-D



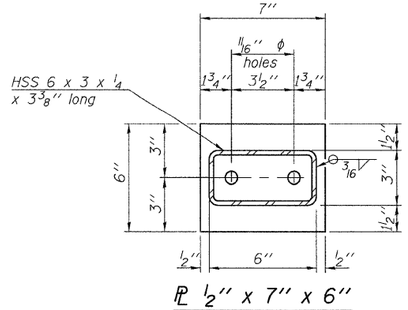
END OF RAIL DETAILS



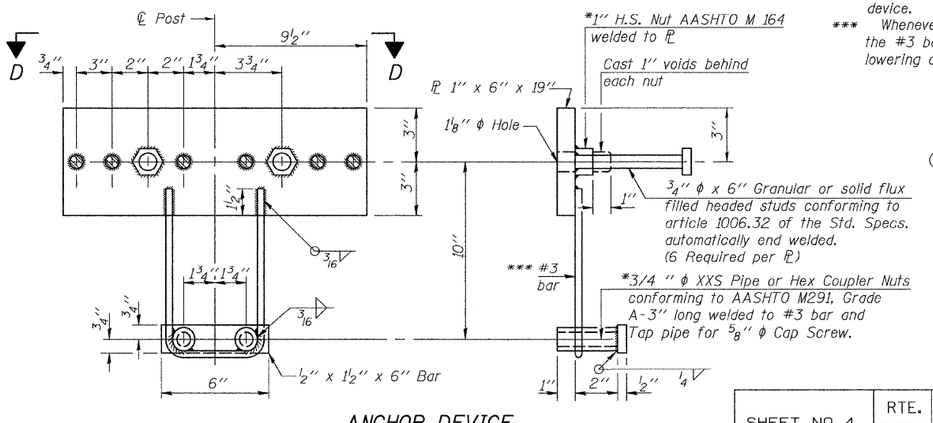
SECTION C-C



PL 1/2" x 11 1/2" x 5"



PL 1/2" x 7" x 6"



ANCHOR DEVICE

*Threaded areas shall be plugged or blocked off during casting of deck. Galvanized after fabrication.

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 Bridge Rail, Type SM (Special).

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.

*** Whenever the lower insert assemblies interfere withstrand 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".

BILL OF MATERIAL

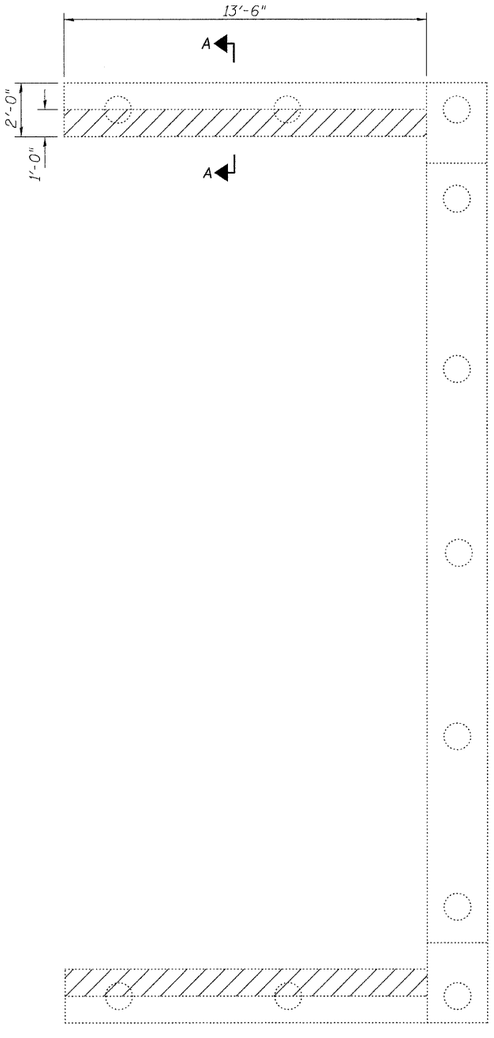
	Item	Unit	Quantity
(1)	Steel Bridge Rail, Type SM (Special)	FOOT	162

(1) See Special Provisions

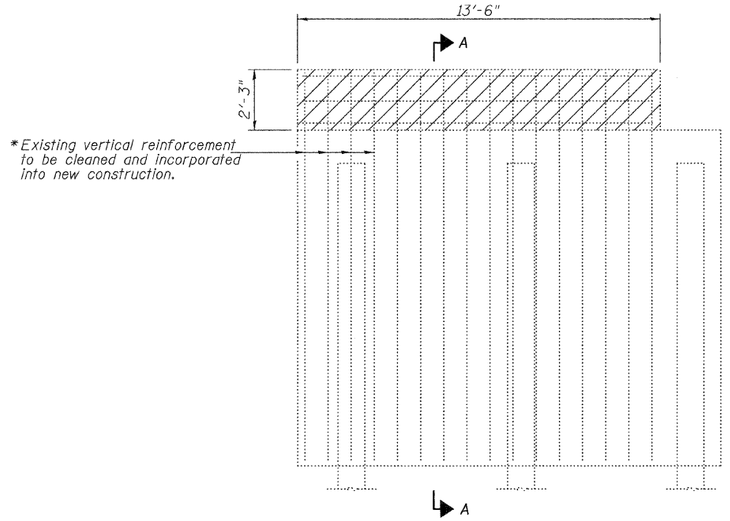
STEEL RAILING, TYPE SM (SPECIAL)
SCOTT COUNTY
SECTION 09-00006-02-BR
C.H. 3 OVER WOLF RUN CREEK

SHEET NO. 4	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 SHEETS	CH 3	09-00006-02-BR	SCOTT	10	8
		SN 086-3000	CONTRACT NO. 93519		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT ARA-0605(107)		

2730B004

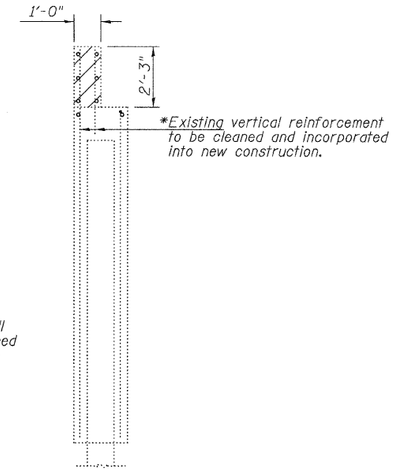


PLAN
(Concrete Removal)



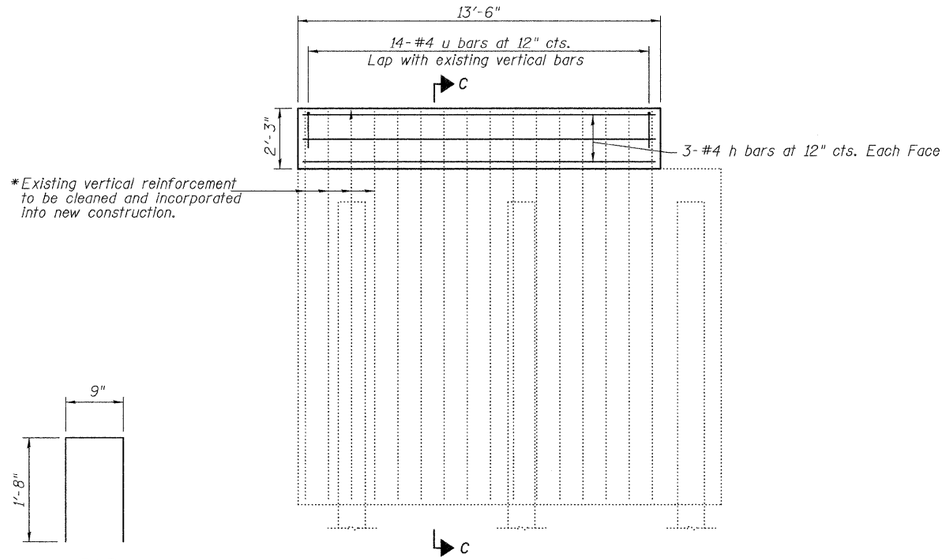
VIEW B-B
(Concrete Removal)

Hatched area indicates portion of abutment to be removed.

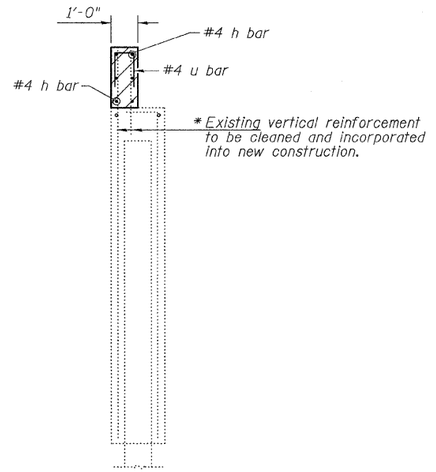


SECTION A-A
(Concrete Removal)

* Any reinforcement bars that have lost 1/4 or more of their original cross sectional area shall be cut off and mechanically spliced to a new bar. Cost included with Concrete Removal.



VIEW B-B
(New Construction)



SECTION C-C
(New Construction)

u BAR

Note: Any earth/shoulder material removal/replacement required on the back side of the wingwalls required for the concrete removal/ replacement shall be completed in accordance with the Standard Specifications and to the satisfaction of the Engineer. Cost of removal included with "Concrete Removal". Replacement of earth material shall be included with "Concrete Removal". Replacement of shoulder aggregate will be paid for as Aggregate Shoulders, Type A.

BILL OF MATERIAL

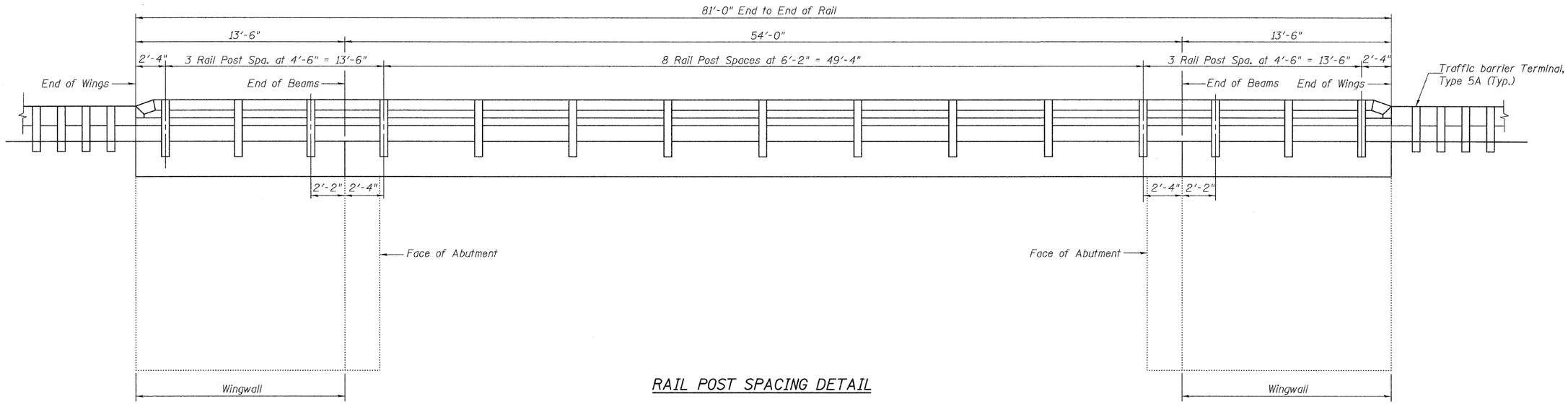
	Bar	No.	Size	Length	Shape
	h	24	#4	13'-3"	———
	u	56	#4	4'-1"	⊓
	Concrete Removal			CU YD	4.5
	Concrete Structures			CU YD	4.5
(1)	Reinforcement Bars			POUND	370

(1) See Special Provisions

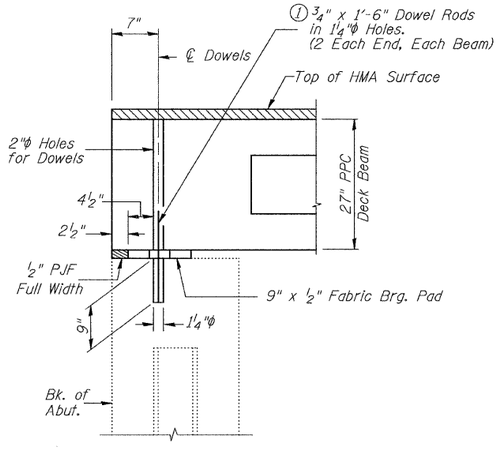
ABUTMENT DETAILS
SCOTT COUNTY
SECTION 09-00006-02-BR
C.H. 3 OVER WOLF RUN CREEK

SHEET NO. 5	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 SHEETS	CH 3	09-00006-02-BR	SCOTT	10	9
		SN 086-3000	CONTRACT NO. 93519		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT ARA-0605(107)		

2730B005

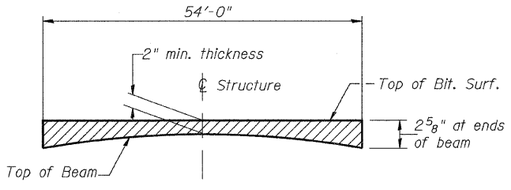


RAIL POST SPACING DETAIL



① Dowel rods shall be grouted after beams are in place and allowed to cure (min. 24 hrs.) prior to grouting shear keys.

SECTION THRU ABUT.



HOT-MIX ASPHALT SURFACE PROFILE

Includes Waterproofing Membrane System

RAIL POST SPACING AND SUPERSTRUCTURE DETAILS SCOTT COUNTY SECTION 09-00006-02-BR C.H. 3 OVER WOLF RUN CREEK

SHEET NO. 6	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 SHEETS	CH 3	09-00006-02-BR	SCOTT	10	10
	SN 086-3000		CONTRACT NO. 93519		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT ARA-0605(107)		

2730B006