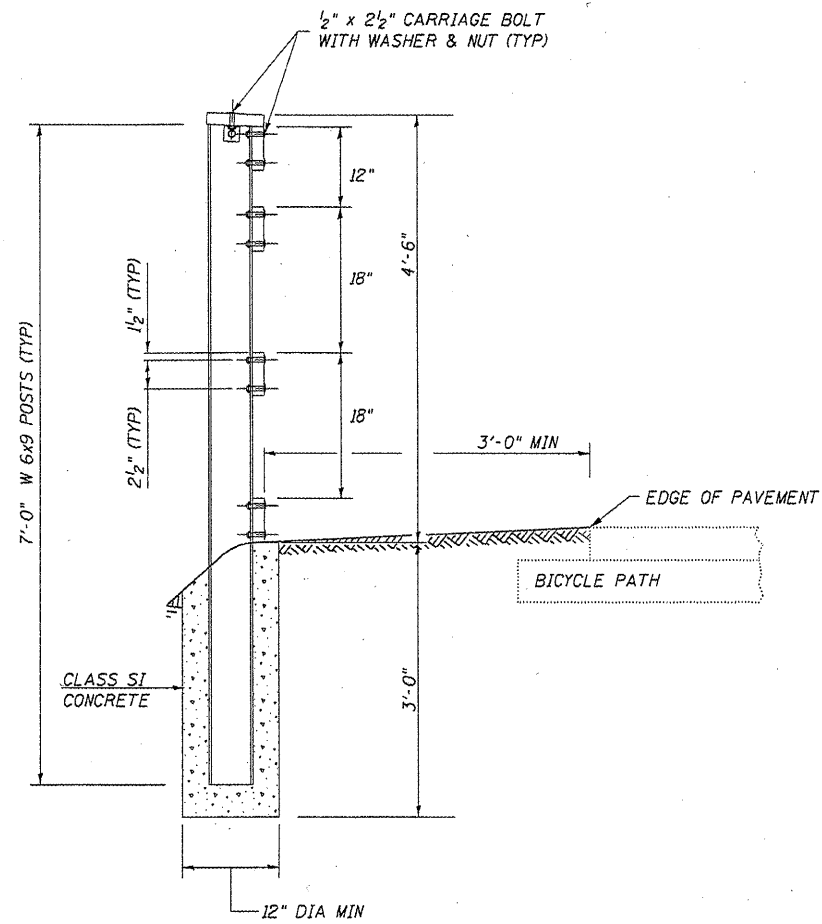
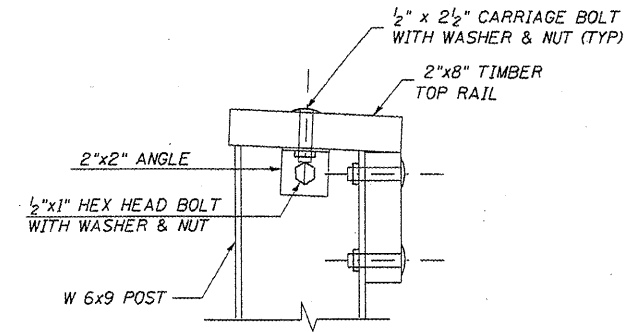


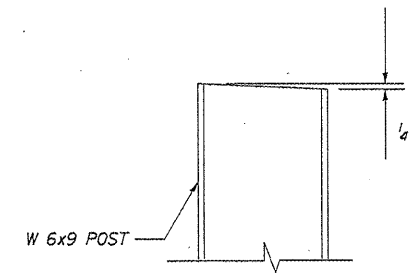
ELEVATION VIEW



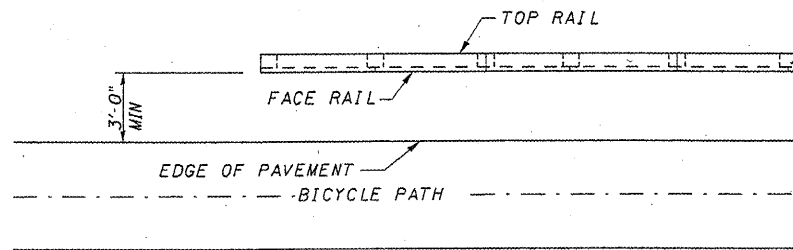
SECTION A-A



TOP RAIL CONNECTION DETAIL



TOP OF POST DETAIL



PLAN VIEW

1. STEEL POSTS SHALL BE AS SPECIFIED IN ARTICLE 1006.23.
2. ALL HARDWARE SHALL BE AS SPECIFIED IN ARTICLE 1006.25.
3. TIMBER RAILS SHALL BE TREATED SOUTHERN PINE AS SPECIFIED IN ARTICLE 1007.03 ($f_b = 1500$ psi).
4. STAGGER ALTERNATING BUTT ENDS ON FACE RAIL AND TOP RAIL. CENTER ALL BUTT END JOINTS ON THE POSTS.

Revised 4-13-10

CUMMINS
ENGINEERING
CORPORATION

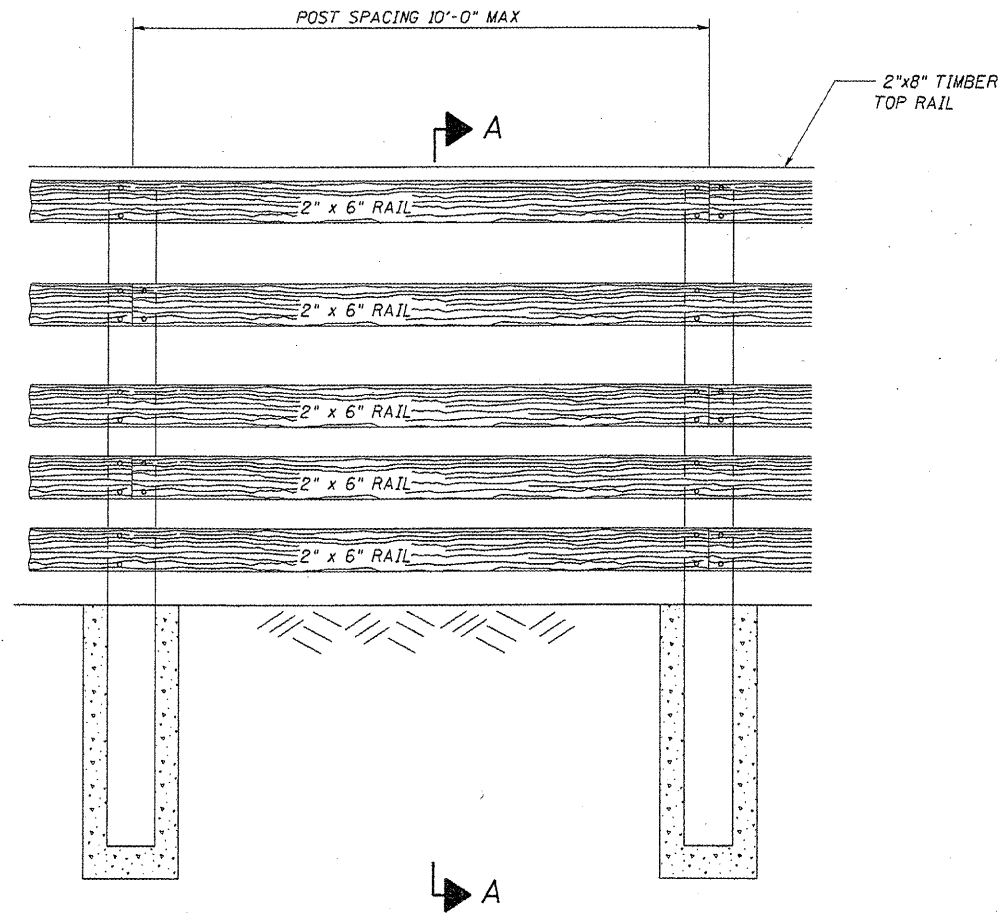
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FILE NAME = 2192det11s.dgn
PLOT SCALE = 100.000 / IN.
PLOT DATE = 4/12/2010

DESIGNED - NAK	REVISED -
DRAWN - AJH	REVISED -
CHECKED - NAK	REVISED -
DATE - 1/22/2009	REVISED -

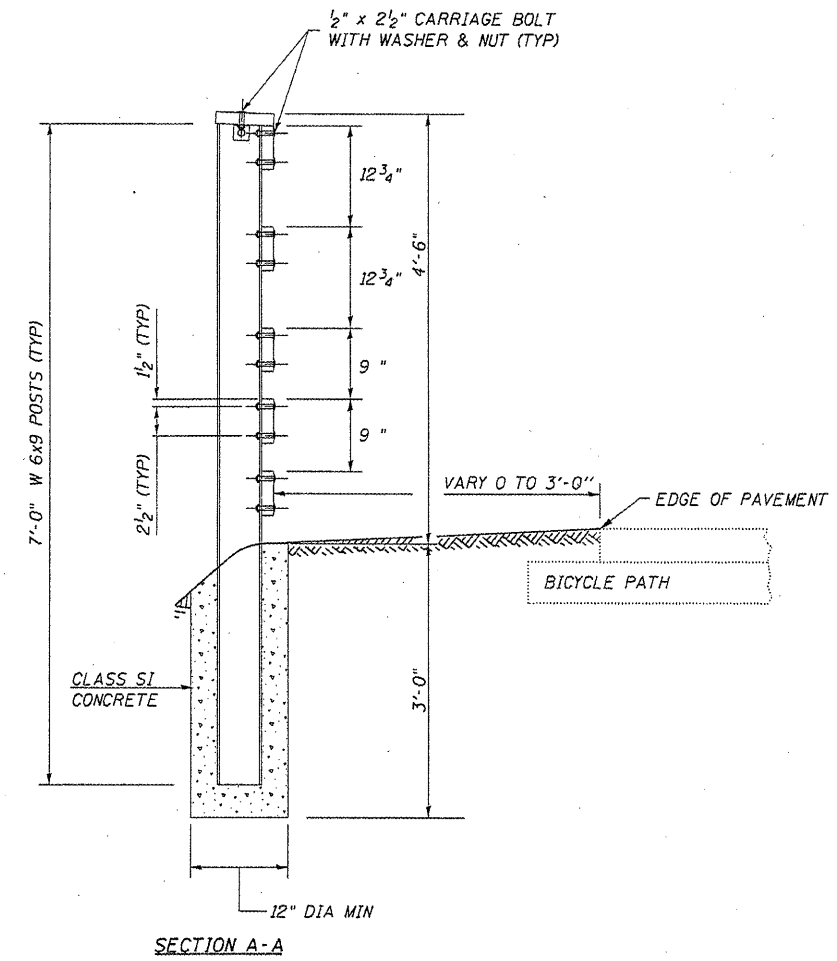
SANGAMON VALLEY TRAIL

TIMBER BICYCLE RAILING

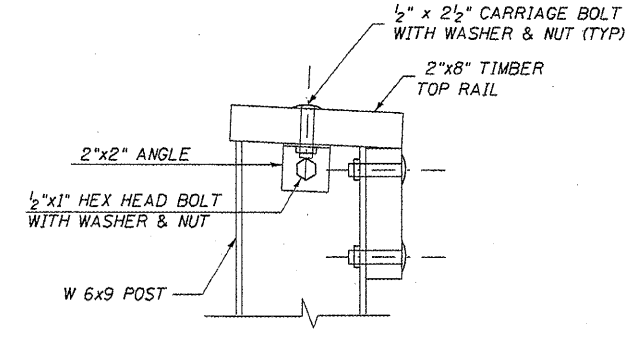
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	05-00173-00-BT	SANGAMON	173	64
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 93522				



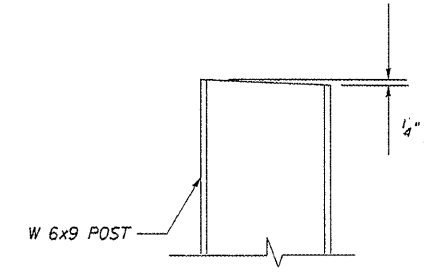
ELEVATION VIEW



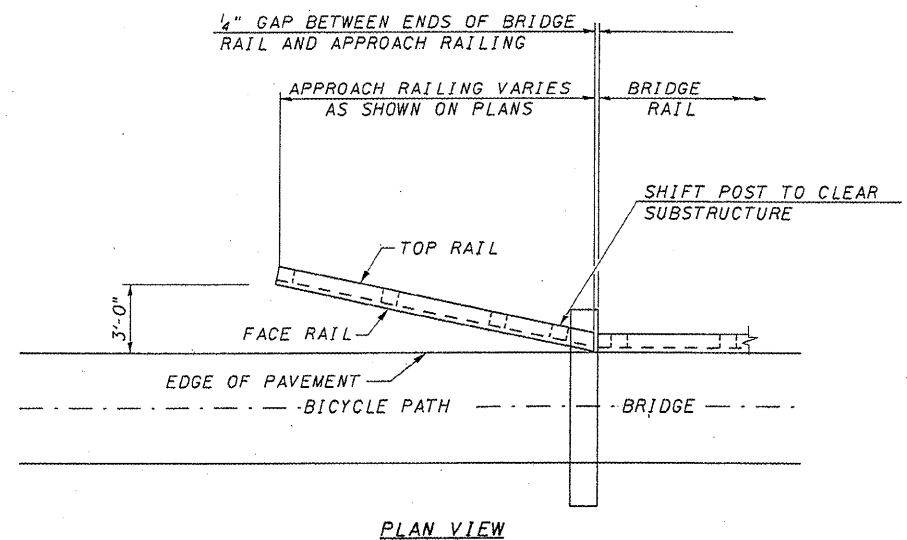
SECTION A-A



TOP RAIL CONNECTION DETAIL



TOP OF POST DETAIL



PLAN VIEW

1. STEEL POSTS SHALL BE AS SPECIFIED IN ARTICLE 1006.23.
2. ALL HARDWARE SHALL BE AS SPECIFIED IN ARTICLE 1006.25.
3. TIMBER RAILS SHALL BE TREATED SOUTHERN PINE AS SPECIFIED IN ARTICLE 1007.03 ($f_b = 1,500 \text{ psi}$)
4. STAGGER ALTERNATING BUTT ENDS ON FACE RAIL AND TOP RAIL. CENTER ALL BUTT END JOINTS ON THE POSTS.
5. CUT ENDS OF TOP RAIL AND FACE RAILS TO MATCH BRIDGE RAIL

Revised 4-13-10

CUMMINS
ENGINEERING
CORPORATION

JOB = 2192	DESIGNED - NAK	REVISED -
FILE NAME = 2192details.dgn	DRAWN - AJH	REVISED -
PLOT SCALE = 100.000 / IN.	CHECKED - NAK	REVISED -
PLOT DATE = 4/12/2010	DATE - 1/22/2009	REVISED -

SANGAMON VALLEY TRAIL

TIMBER BRIDGE APPROACH RAILING

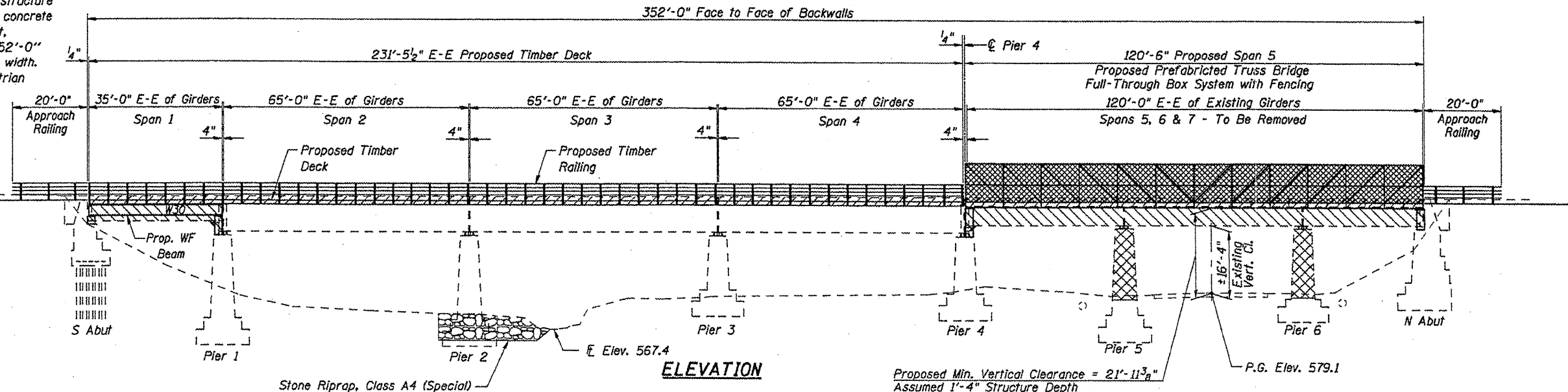
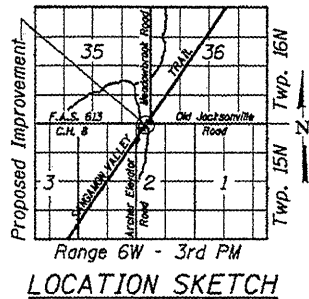
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	05-00173-00-BT	SANGAMON	173	65
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 93522	

B.M. #9 Chiseled Square on Southwest Corner of Railroad Bridge South Abutment, Station 1053+27.3, 6.4' Lt., Elev. 602.75

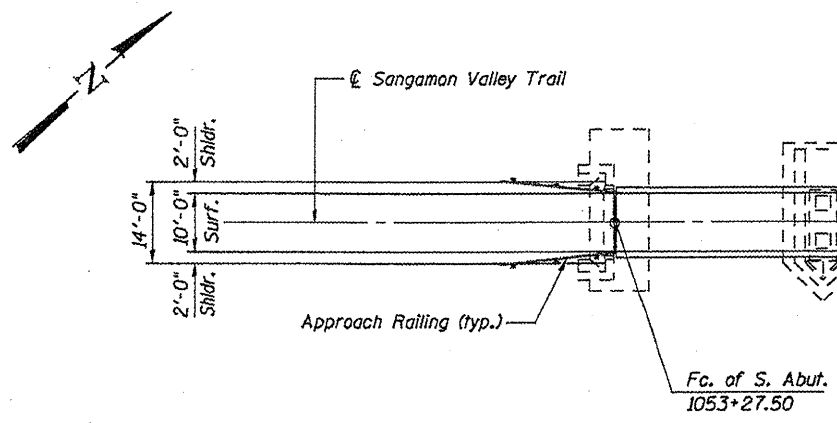
Existing Structure: SN 084-9912, originally built in 1923 as C&NW Railway Bridge 1871 over Jacksonville Road. The existing structure is a 7-span riveted deck plate girder bridge with precast concrete units on spread footing concrete piers and north abutment, and a pile supported south abutment. The structure is 352'-0" fc.-to-fc of abutment backwalls with a 14'-0" o.-o. deck width. The existing structure will be rehabilitated to carry pedestrian traffic.

The Contractor will remove the existing precast concrete units, remove and replace the existing steel in Span 1, remove and replace the existing steel in Spans 5 thru 7 with a prefabricated pedestrian truss bridge spanning from Pier 4 to the North Abutment, remove Pier 5 & 6, modify the existing abutments, add concrete pedestals at Pier 1 & 4, construct a new timber deck and railing, and place riprap at Pier 2.

No Salvage.



- Removal of Existing Precast Concrete Units
- Removal of Existing Substructure
- Removal of Existing Superstructures



SEISMIC DATA
 Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.05g
 Site Coefficient (S) = 2.0

DESIGN SPECIFICATIONS
 2002 AASHTO
 1997 AASHTO "Guide Specifications for Design of Pedestrian Bridges".
LOADING
 Vehicle Load: 10,000lb Emergency Vehicle
 Pedestrian Load: 85 psf uniform load

DESIGN STRESSES
 $f_c = 3,500$ psi (Substructure)
 $f_y = 60,000$ psi (Reinforcement)
 $f_b = 1,500$ psi (Timber)
 $f_b = 1,850$ psi (Timber Planking)

"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 Guide Specifications for Design of Pedestrian Bridges'".
 Michael D. Cummins 6/9/09
 ILLINOIS STRUCTURAL NO. 4822 (Expires 11/30/10)



Revised 4-13-10

GENERAL PLAN & ELEVATION
SANGAMON VALLEY TRAIL
OVER OLD JACKSONVILLE ROAD
SECTION 05-00173-00-BT
SANGAMON COUNTY
STATION 1055+03.5
SVT BRIDGE NO. 12
STRUCTURE NO. 084-9912



JOB = 2192	DESIGNED = M.D.C.
FILE = 2192oldjack_gpe.dgn	CHECKED = A.A.N.
DATE = 6/9/2009	DRAWN = T.S.H.
	CHECKED = M.D.C.

Sheet 1 of 12	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SVT	05-00173-00-BT	SANGAMON	173	76
	SANGAMON VALLEY TRAIL		CONTRACT NO. 93522		
	FED. ROAD DIST. NO. 6 ILLINOIS		FED. AID PROJECT		

FASTENER SCHEDULE

<i>Location</i>	<i>Type</i>	<i>Size x Length</i>	<i>Number Required</i>
3x12 Deck Planks to 8x8 Floor Beams	lag screws with standard washers	$\frac{3}{8}$ " ϕ x 5"	2 per plank at Each Floor Beam
2x8 Top Rails to 6x6 Rail Posts	wood screws	No. 12 x 4"	2 per Rail Post
2x12 Fascia Boards to 8x8 Floor Beams	wood screws	No. 12 x 4"	2 per Floor Beam

FASTENER NOTES

- The lag screw heads shall be countersunk so that the tops will be flush with surface of the deck planks. Recesses formed for countersinking shall be just large enough to admit the washers.
- All wood screws shall be self-sinking flat head deck screws.
- The cost of these wood screws and lag screws was already included in the contract plan quantity for Hardware.
- All hardware required for timber construction, including nuts, washers, lag screws, threaded rods and miscellaneous fasteners shall be stainless steel or hot-dipped galvanized and shall conform to Section 507 of the Standard Specifications unless noted otherwise.

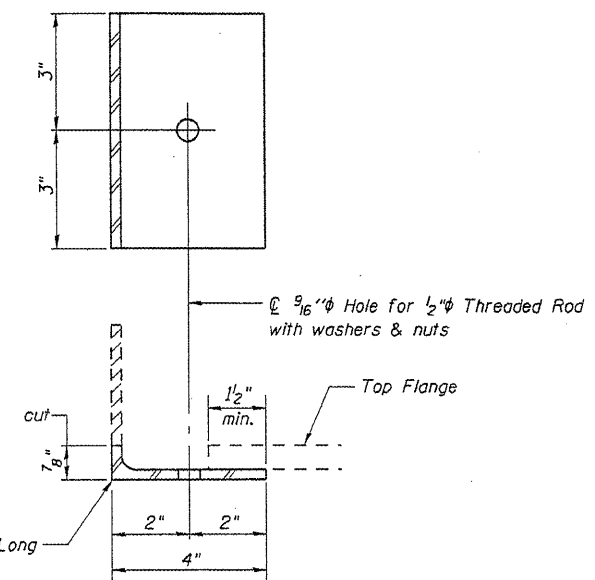
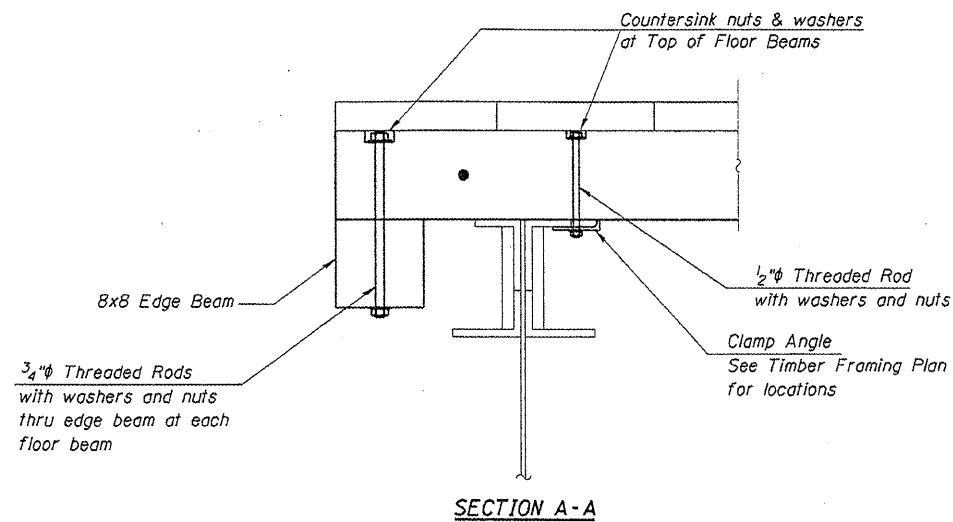
MISCELLANEOUS DETAILS
SANGAMON VALLEY TRAIL
OVER OLD JACKSONVILLE ROAD
SVT BRIDGE NO. 12
STRUCTURE NO. 084-9912

CEC Cummins
 Engineering
 Corporation
 Civil and Structural Engineering

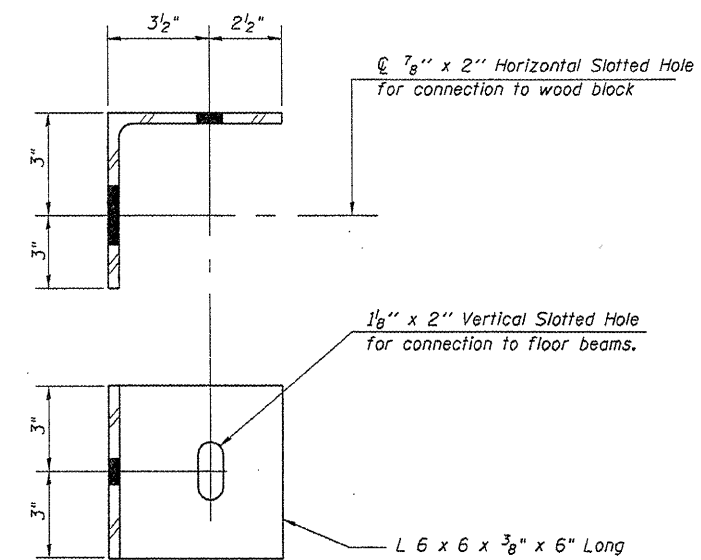
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DATE = 4/12/2010	DRAWN	T.S.H.
	CHECKED	M.D.C.

Added 4-13-10

Sheet 2A of 12	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SVT	05-00173-00-BT	SANGAMON	173	77A
SANGAMON VALLEY TRAIL			CONTRACT NO. 93522		
FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT					



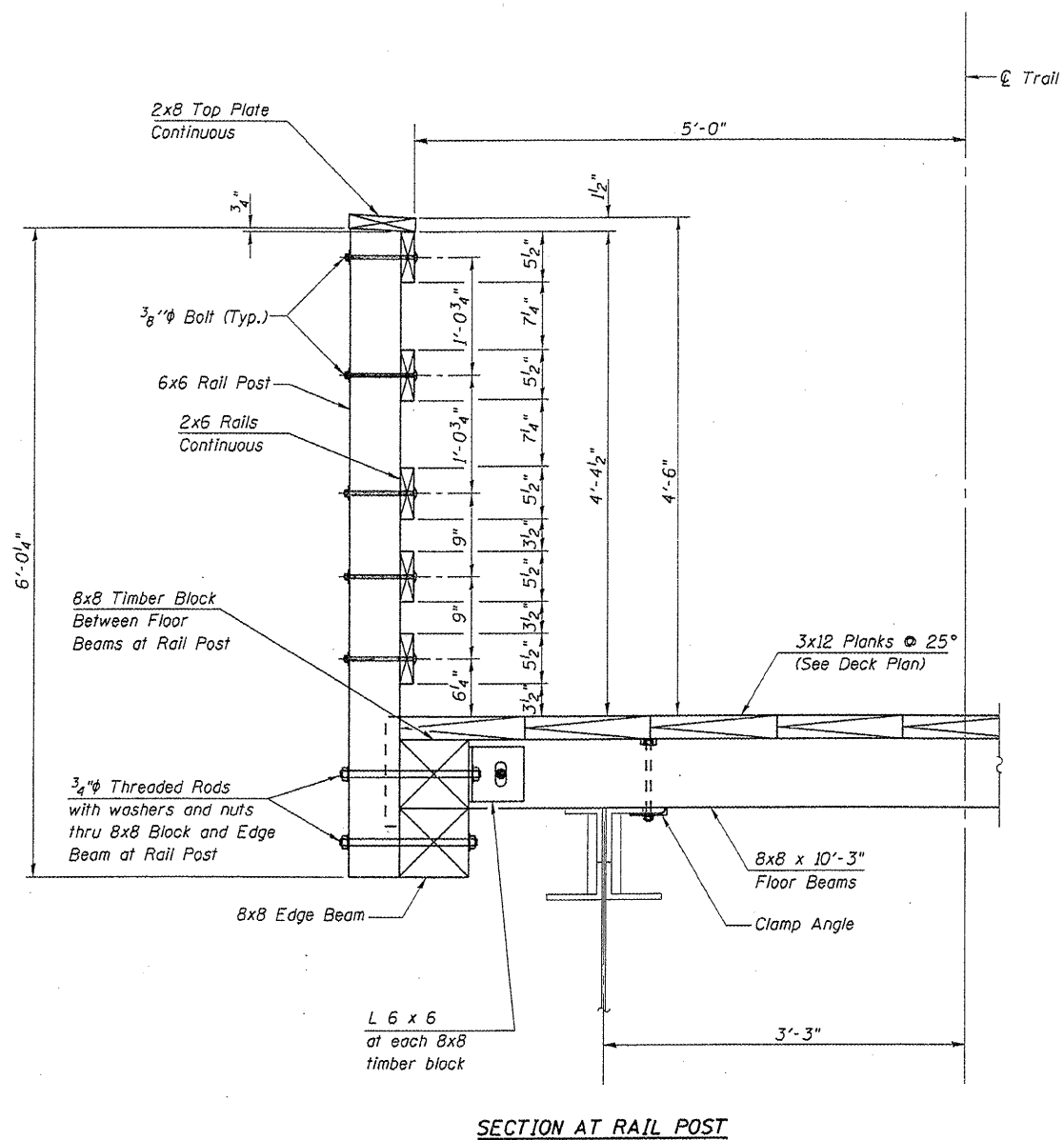
CLAMP ANGLE *
(32 Required)



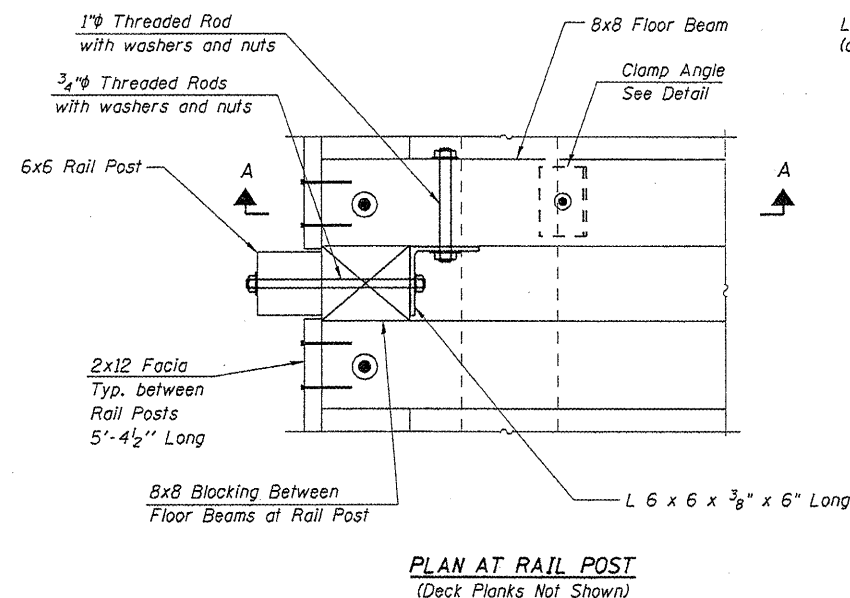
**L 6 x 6
TIMBER BLOCK ANGLE ***
(16 Required)

* Weight of angles included in weight of Hardware.

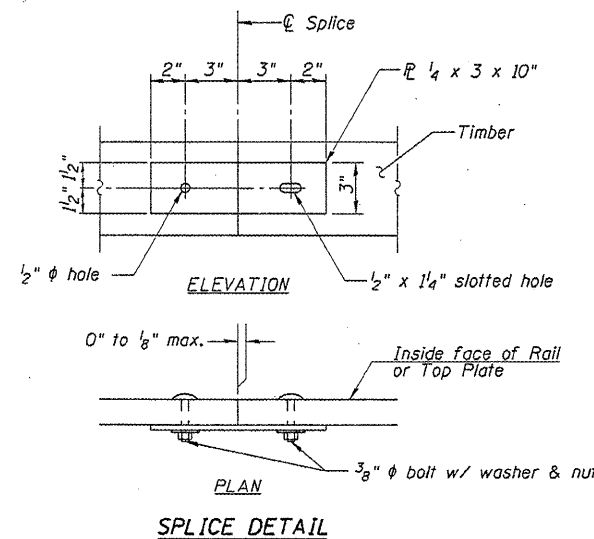
TIMBER DETAILS
SPANS 1-4
SANGAMON VALLEY TRAIL
OVER OLD JACKSONVILLE ROAD
SVT BRIDGE NO. 12
STRUCTURE NO. 084-9912



SECTION AT RAIL POST



PLAN AT RAIL POST
(Deck Planks Not Shown)



SPLICE DETAIL

Note: Minimize splices in rails and top plate.
Where possible span 3 rail posts.

CEC Cummins
Engineering
Corporation
Civil and Structural Engineering

JOB = 2192	DESIGNED M.D.C.
FILE = 2192oldjack_super	CHECKED A.A.N.
DATE = 6/5/2009	DRAWN T.S.H.
	CHECKED M.D.C.

Revised 4-13-10

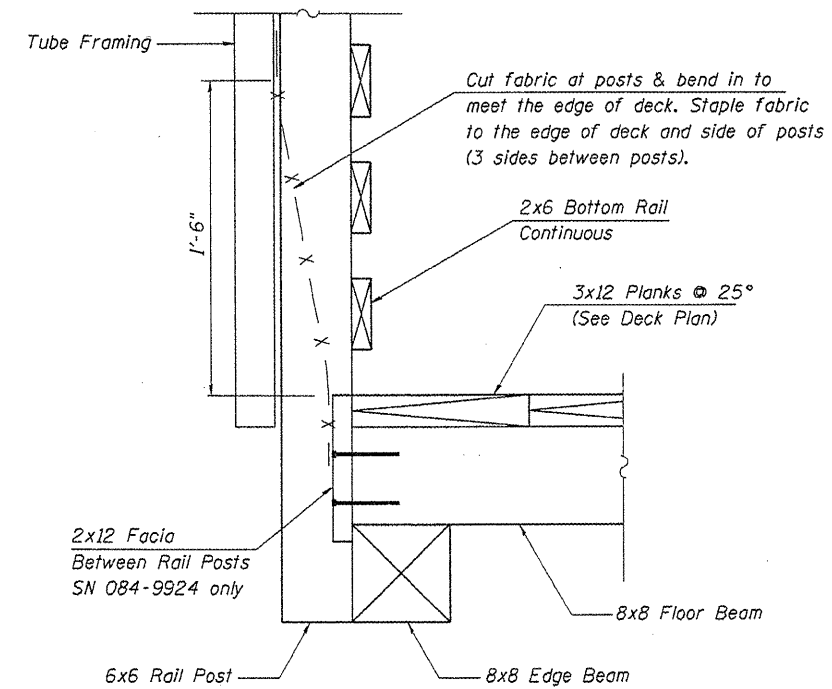
Sheet 6 of 12	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	SANGAMON VALLEY TRAIL		CONTRACT NO. 93522		
	FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT				

FASTENER SCHEDULE

Location	Type	Size x Length	Number Required
3x12 Deck Planks to 8x8 Floor Beams	lag screws with standard washers	$\frac{3}{8}$ " ϕ x 5"	2 per plank of Each Floor Beam
2x8 Top Rails to 6x6 Rail Posts	wood screws	No. 12 x 4"	2 per Rail Post
2x12 Fascia Boards to 8x8 Floor Beams	wood screws	No. 12 x 4"	2 per Floor Beam

FASTENER NOTES

- The lag screw heads shall be countersunk so that the tops will be flush with surface of the deck planks. Recesses formed for countersinking shall be just large enough to admit the washers.
- All wood screws shall be self-sinking flat head deck screws.
- The cost of these wood screws and lag screws was already included in the contract plan quantity for Hardware.
- All hardware required for timber construction, including nuts, washers, lag screws, threaded rods and miscellaneous fasteners shall be stainless steel or hot-dipped galvanized and shall conform to Section 507 of the Standard Specifications unless noted otherwise.



SECTION AT BOTTOM OF BRIDGE FENCE RAILING (SPECIAL)

Note:
The cost of this work shall be included with Bridge Fence Railing (Special)

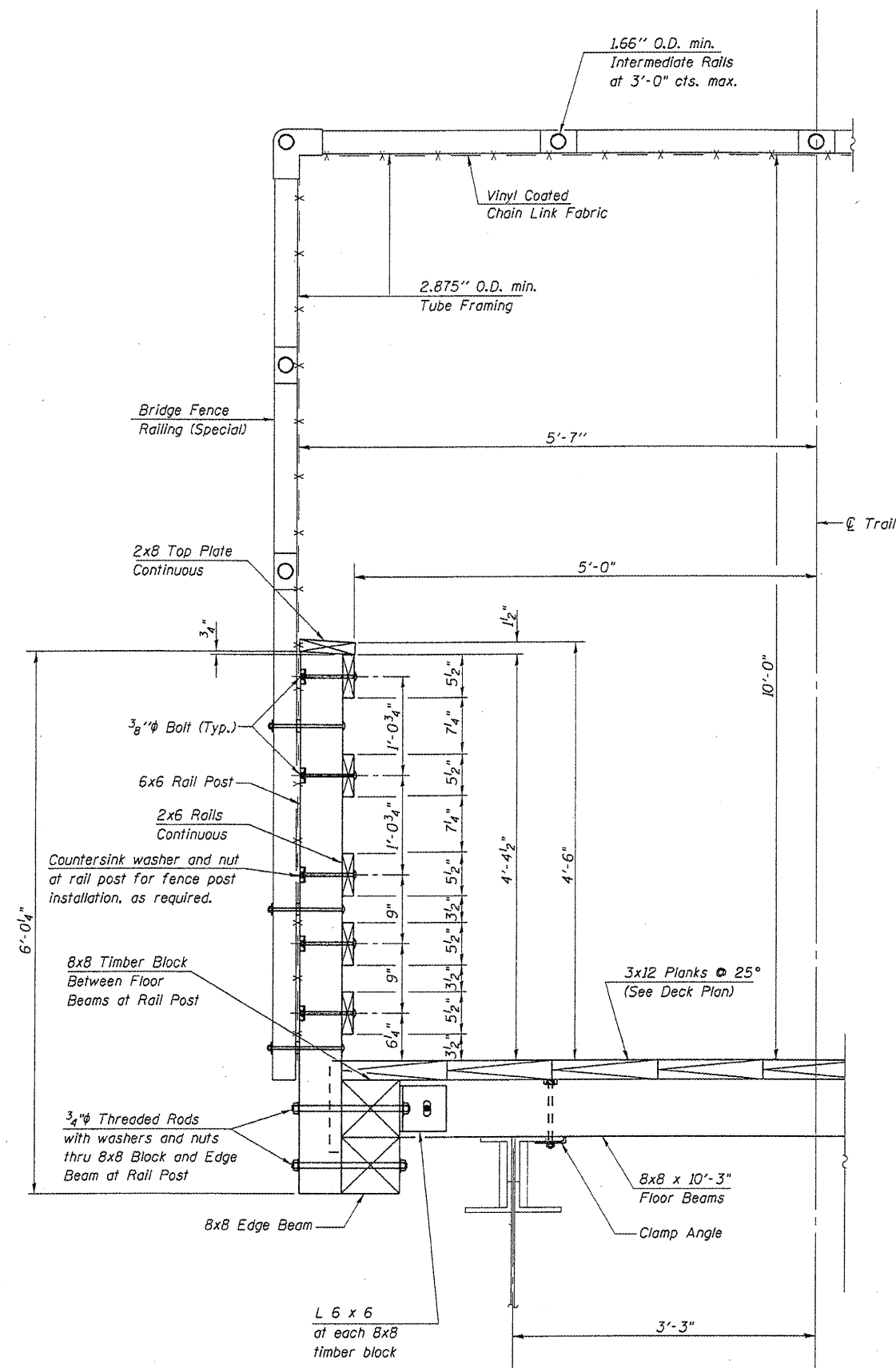
MISCELLANEOUS DETAILS
SANGAMON VALLEY TRAIL
OVER WASHINGTON STREET
SVT BRIDGE NO. 13
STRUCTURE NO. 084-9924

CEC Cummins
Engineering
Corporation
Civil and Structural Engineering

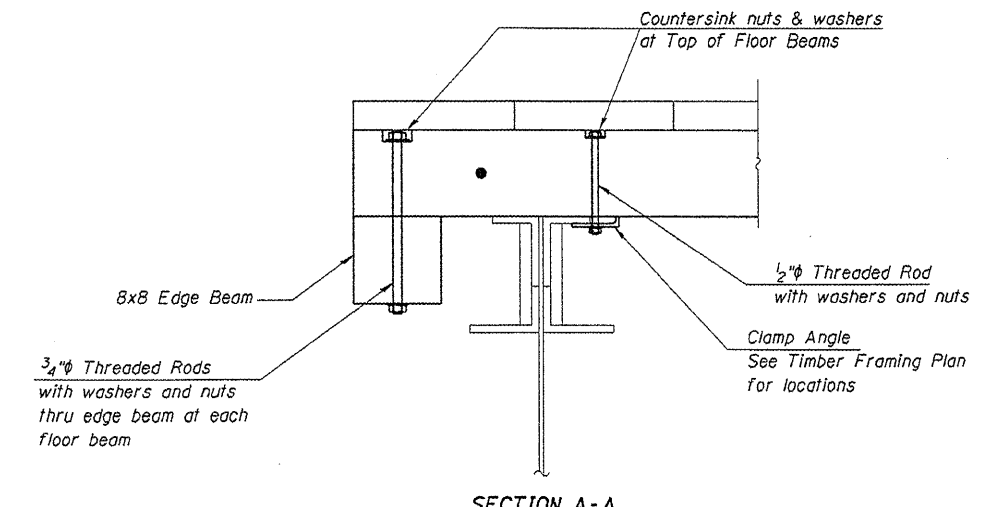
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DATE = 4/12/2010	DRAWN	T.S.H.
	CHECKED	M.D.C.

Sheet 2A of 6	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SVT	05-00173-00-BT	SANGAMON	173	89A
	SANGAMON VALLEY TRAIL			CONTRACT NO. 93522	
	FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT				

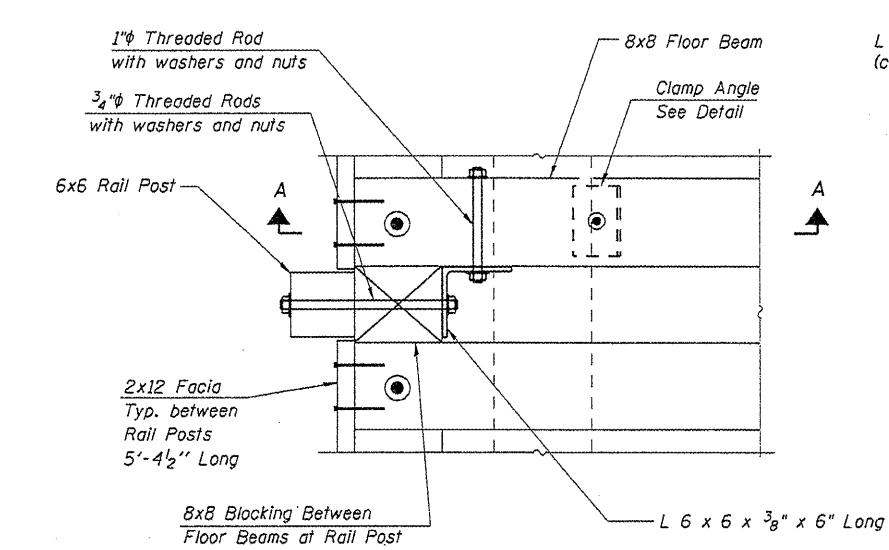
Added 4-13-10



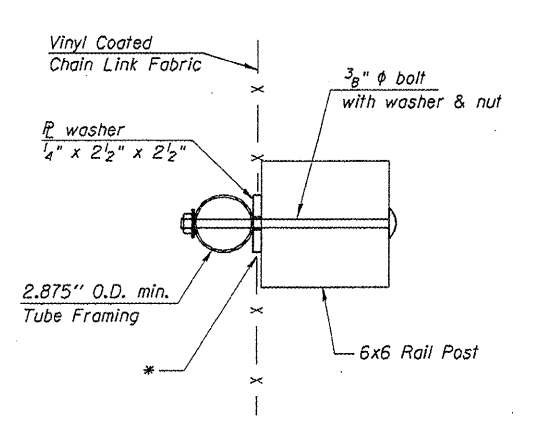
SECTION AT RAIL POST



SECTION A-A

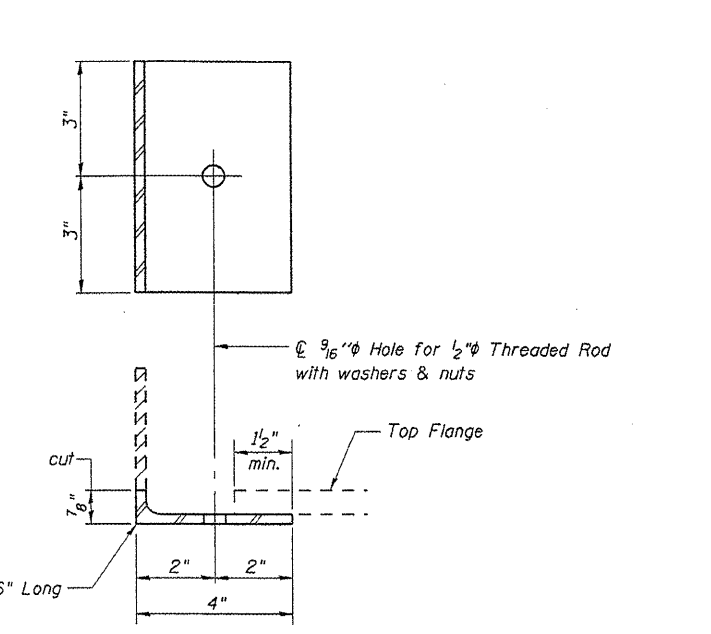


PLAN AT RAIL POST
(Deck Planks Not Shown)

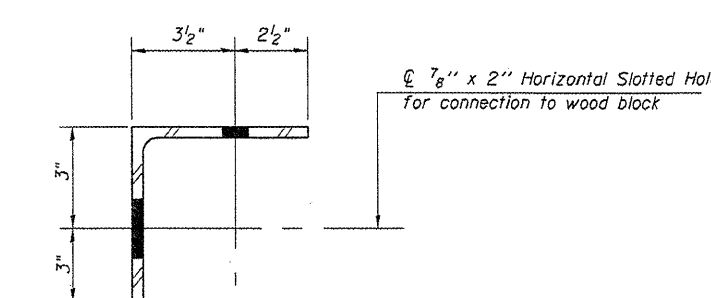


FENCE ATTACHMENT DETAIL

* Cut and Knuckle chain link fabric as required.

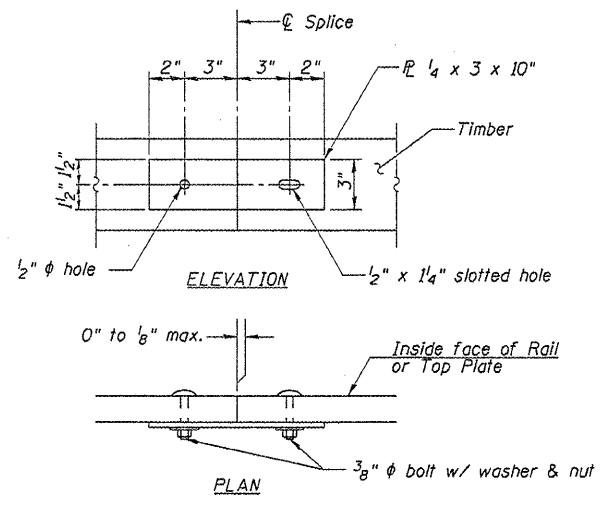


CLAMP ANGLE
(32 Required)



L 6 x 6
TIMBER BLOCK ANGLE
(16 Required)

* Weight of angles included in the weight of Hardware.



SPLICE DETAIL

Note: Minimize splices in rails and top plate. Where possible span 3 rail posts.

TIMBER DETAILS
SANGAMON VALLEY TRAIL
OVER WASHINGTON STREET
SVT BRIDGE NO. 13
STRUCTURE NO. 084-9924

CEC Cummins
Engineering
Corporation
Civil and Structural Engineering

JOB = 2192	DESIGNED M.D.C.
FILE = 2192wash_super	CHECKED A.A.N.
DATE = 1/8/2010	DRAWN T.S.H.
	CHECKED M.D.C.

Revised 4-13-10

Sheet
5 of 6

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SVT	05-00173-00-BT	SANGAMON	173	92
SANGAMON VALLEY TRAIL			CONTRACT NO. 93522	
FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT				

GENERAL NOTES

1. Fasteners shall be AASHTO M164 Type 3. Bolts $\frac{3}{4}$ " ϕ , holes $\frac{5}{16}$ " ϕ , unless otherwise noted.
2. All structural steel and the rail post anchor assemblies shall be hot dipped galvanized according to AASHTO M-111 (ASTM A-123) Grade B5 minimum.
3. All bolts and fasteners shall be hot dipped galvanized according to AASHTO M-232 (ASTM A-153) Class C with a minimum zinc coating weight of 2.0 oz/sq. ft.
4. Anchor bolts shall be ASTM F1554 all thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554.
5. Anchor bolts may be either cast in place or installed in holes drilled after the supported member is in place.
6. In lieu of existing panel layout, the Contractor may adjust dimensions with the following restrictions:
 1. Maximum Rail Post Spacing = 5'-10"
 2. Maximum Floor Beam Spacing = 1'-2"
 3. Minimum Edge Beam length = 10'-0"
 4. Edge Beam butt joints are not allowed at Rail Posts.
 5. Sections supported by two different steel superstructures shall only be clipped to the beams which support the majority of the panel.
 6. Expansion gaps shall be placed at the closest panel joint to the piers.
7. No field welding is permitted except as specified in the contract documents.
8. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
9. Reinforcement bars designated (E) shall be epoxy coated.
10. 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.
11. Bolts may be used in lieu of the threaded rods.
12. Concrete Sealer shall be applied to the top exposed surfaces of the South Abutment concrete slab.
13. The Contractor shall provide and install all necessary timber shims to construct a level deck surface.
14. Timber deck planks shall be placed with the grain such that cupping will not cause water to sit on a plank.
15. The Contractor shall field verify all conditions at the site prior to the start of construction.
16. All structural timber shall be treated to conform to Section 507 of the Standard Specifications.
17. All hardware required for timber construction, including nuts, washers, lag screws, threaded rods and miscellaneous fasteners shall be stainless steel or hot-dipped galvanized and shall conform to Section 507 of the Standard Specifications, unless noted otherwise.
18. It shall be the responsibility of the Contractor to verify all dimensions and elevations of the existing structure in the field prior to construction and ordering materials. Do not scale dimensions from the drawings for construction process.
19. If, during the performance of the work, the Contractor finds a conflict or discrepancy related to existing details and dimensions of the existing structure, the Contractor shall report such discrepancies to the Engineer in writing at once and before proceeding with the work affected thereby. The Contractor shall obtain written interpretation or clarification of such discrepancies.
20. All lumber dimensions given are nominal dimensions. The minimum surface areas of timbers shall be as follows:

NOMINAL SIZE	DRESSED
2 x 6	1 1/2" x 5 1/2"
2 x 8	1 1/2" x 7 1/2"
2 x 12	1 1/2" x 11 1/4"
3 x 12	2 1/2" x 11 1/4"
6 x 6	5 1/2" x 5 1/2"
8 x 8	7 1/2" x 7 1/2"

DESIGNED - S.M.S.
CHECKED - S.W.M.
DRAWN - D.A.B.
CHECKED - S.M.S.

FASTENER SCHEDULE

Location	Type	Size x Length	Number Required
3x12 Deck Planks to 8x8 Floor Beams	lag screws with standard washers	3/8" ϕ x 5"	2 per plank at Each Floor Beam
2x8 Top Rails to 6x6 Rail Posts	wood screws	No. 12 x 4"	2 per Rail Post
2x12 Fascia Boards to 8x8 Floor Beams	wood screws	No. 12 x 4"	2 per Floor Beam

FASTENER NOTES

1. The lag screw heads shall be countersunk so that the tops will be flush with surface of the deck planks. Recesses formed for countersinking shall be just large enough to admit the washers.
2. All wood screws shall be self-sinking flat head deck screws.
3. The cost of these wood screws and lag screws was already included in the contract plan quantity for Hardware.
4. All hardware required for timber construction, including nuts, washers, lag screws, threaded rods and miscellaneous fasteners shall be stainless steel or hot-dipped galvanized and shall conform to Section 507 of the Standard Specifications unless noted otherwise.

Revised 4-13-10

Treated Timber


PANEL	S. ABUT.	SPAN 1	SPAN 2	SPAN 3	SPAN 4	N. ABUT.	TOTALS (FBM)
N/A	2,244	0	0	0	0	1,414	3,658
1	0	3,397	0	0	0	0	3,397
2	0	15,337	0	0	0	0	15,337
3	0	0	1,332	0	0	0	1,332
4	0	0	7,978	9,973	5,014	0	22,965
5	0	0	0	0	1,698	0	1,698
TOTALS (FBM)	2,244	18,735	9,310	9,973	6,712	1,414	48,388

All sizes are Nominal - Lumber shall be full surfaced.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Aggregate Surface Course, Type B	Ton	25		25
Concrete Superstructures	Cu. Yd.	20.2		20.2
Reinforcement Bars, Epoxy Coated	Pound	2,760		2,760
Treated Timber	FBM			48,388
Removal of Existing Timber Material, Location 1	L. Sum	1		1
Concrete Removal	Cu. Yd.	1.3		1.3
Rail Anchor Assemblies	Each	18		18
Hardware	Pounds			5,020
Concrete Sealer	Sq. Ft.	715		715

**GENERAL NOTES
SVT BRIDGE NO. 14
STRUCTURE NO 084-8014**

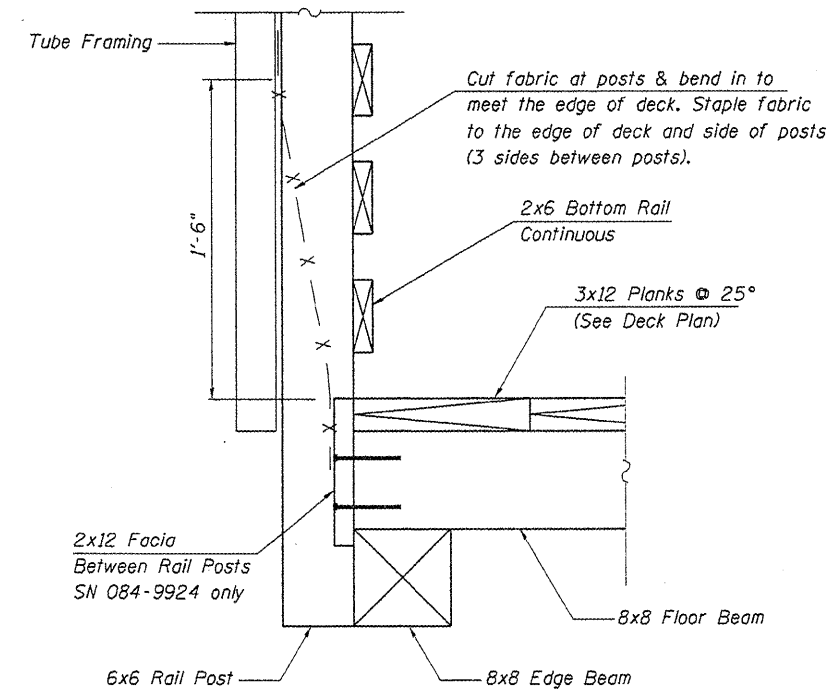
HAMPTON, LENZINI & RENWICK, INC. CIVIL & STRUCTURAL ENGINEERS LAND SURVEYORS  3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 (217) 546-3400	SHEET NO. 2	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	13 SHEETS		05-00713-00-BT	SANGAMON	173	95
PROJECT NUMBER: 12 84 0000	DATE: 01/11/10	S.V.T. OVER SPRING CREEK		CONTRACT NO. 93522		
		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FASTENER SCHEDULE

Location	Type	Size x Length	Number Required
3x12 Deck Planks to 8x8 Floor Beams	lag screws with standard washers	3/8"φ x 5"	2 per plank at Each Floor Beam
2x8 Top Rails to 6x6 Rail Posts	wood screws	No. 12 x 4"	2 per Rail Post
2x12 Fascia Boards to 8x8 Floor Beams	wood screws	No. 12 x 4"	2 per Floor Beam

FASTENER NOTES

- The lag screw heads shall be countersunk so that the tops will be flush with surface of the deck planks. Recesses formed for countersinking shall be just large enough to admit the washers.
- All wood screws shall be self-sinking flat head deck screws.
- The cost of these wood screws and lag screws was already included in the contract plan quantity for Hardware.
- All hardware required for timber construction, including nuts, washers, lag screws, threaded rods and miscellaneous fasteners shall be stainless steel or hot-dipped galvanized and shall conform to Section 507 of the Standard Specifications unless noted otherwise.



SECTION AT BOTTOM OF BRIDGE FENCE RAILING (SPECIAL)

Note:
The cost of this work shall be included with Bridge Fence Railing (Special)

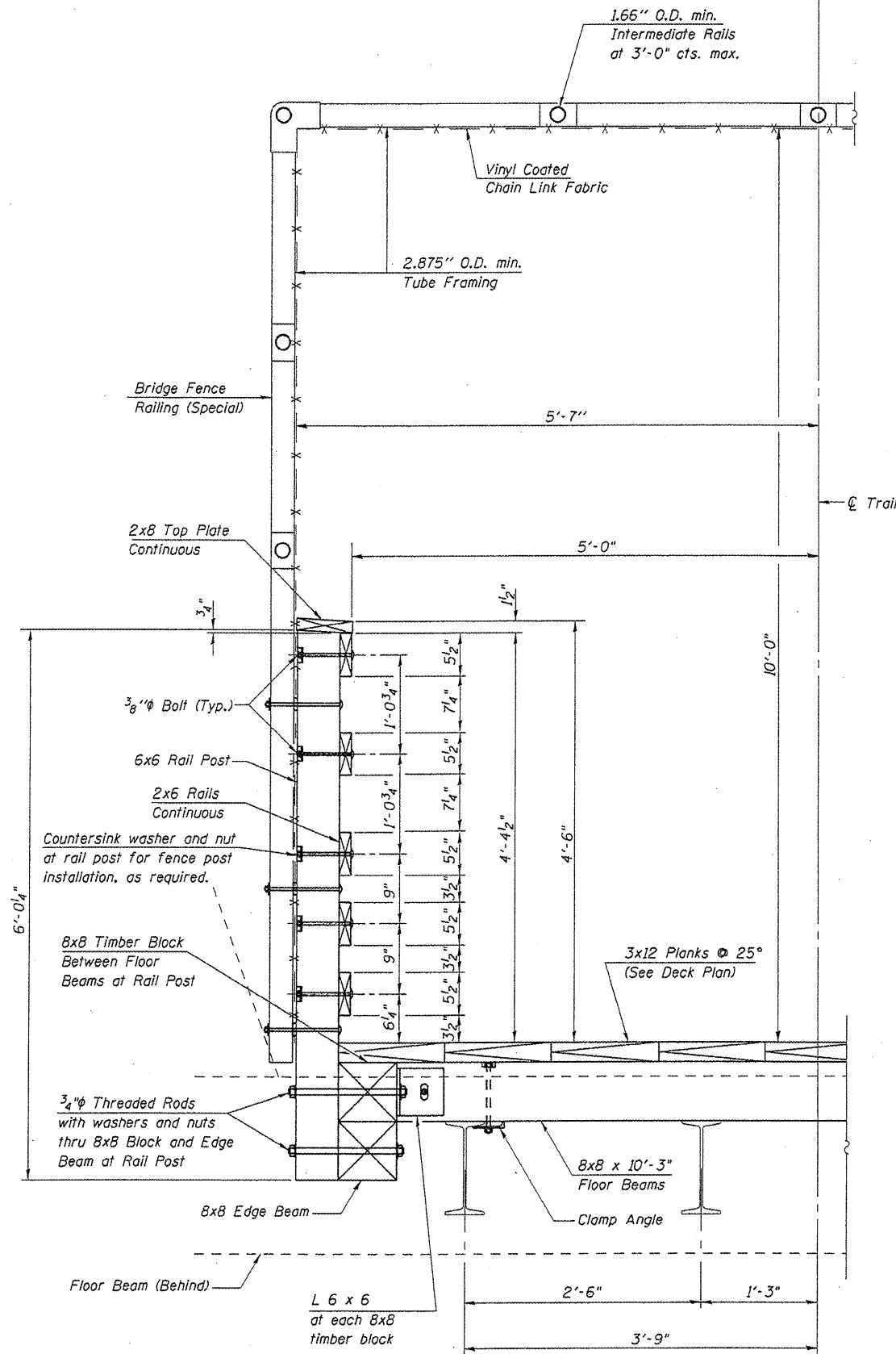
MISCELLANEOUS DETAILS
SANGAMON VALLEY TRAIL
OVER JEFFERSON STREET (IL ROUTE 97)
SVT BRIDGE NO. 15
STRUCTURE NO. 084-9936

CEC Cummins
Engineering
Corporation
Civil and Structural Engineering

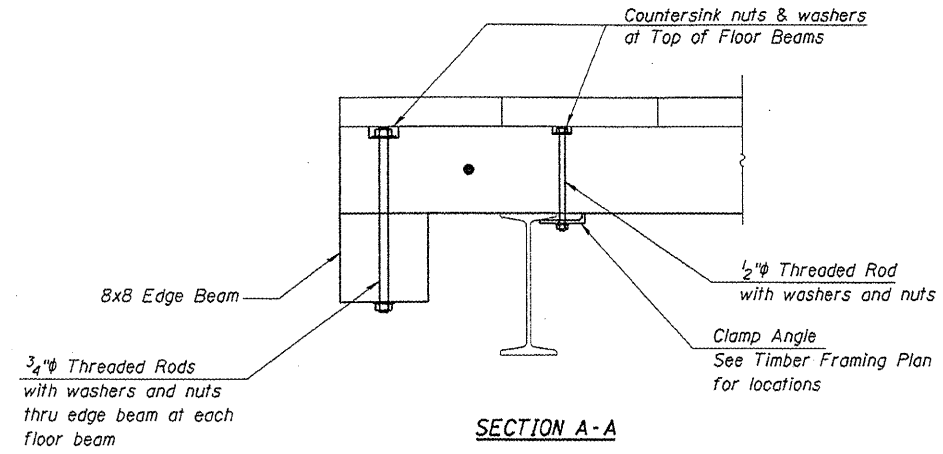
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DATE = 4/12/2010	DRAWN	T.S.H.
	CHECKED	M.D.C.

Sheet 2A of 6	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SVT	05-00173-00-BT	SANGAMON	173	108A
	SANGAMON VALLEY TRAIL			CONTRACT NO. 93522	
	FED. ROAD DIST. NO. 6 [ILLINOIS] FED. AID PROJECT				

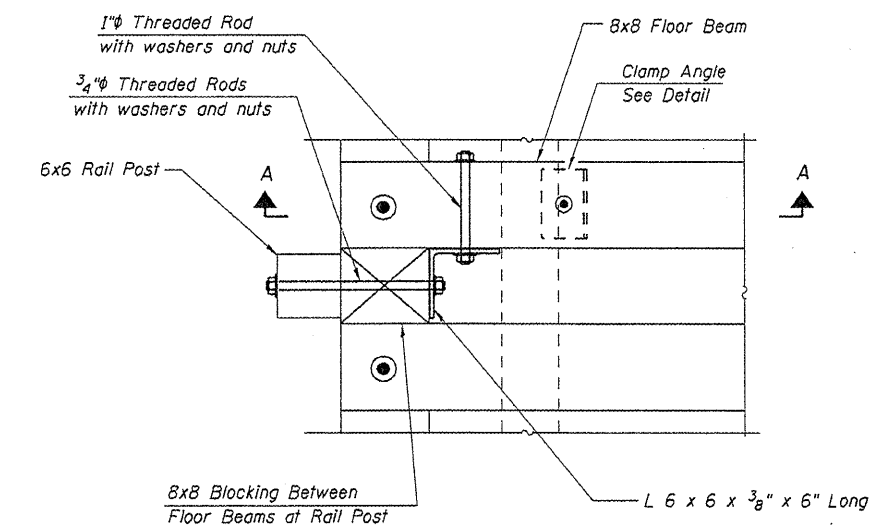
Added 9-13-10



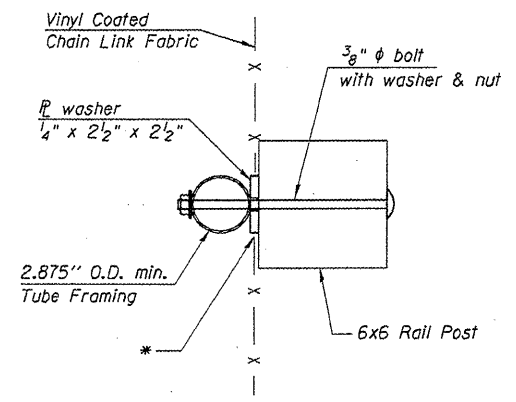
SECTION AT RAIL POST



SECTION A-A

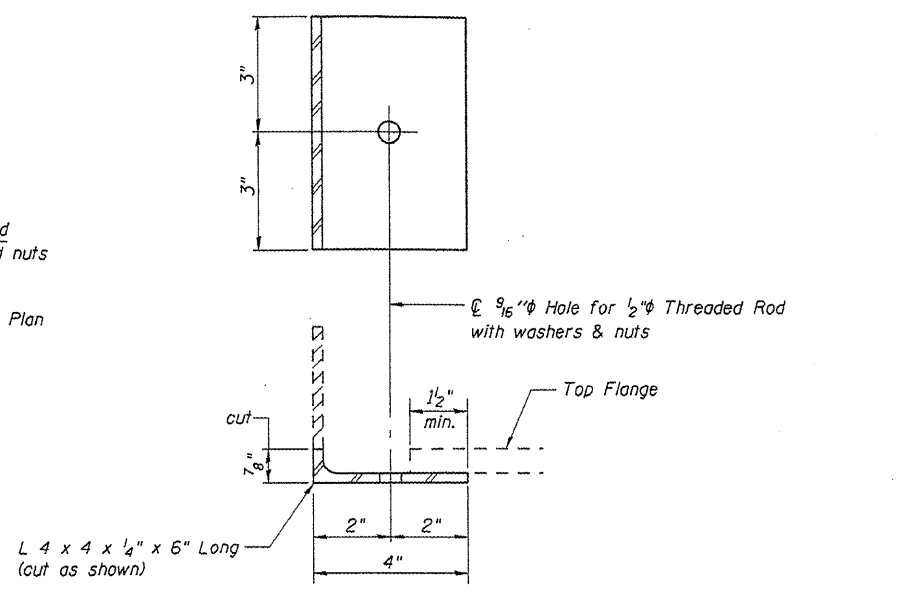


PLAN AT RAIL POST
(Deck Planks Not Shown)

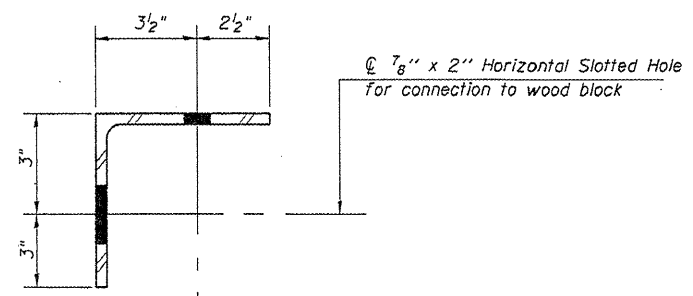


FENCE ATTACHMENT DETAIL

* Cut and Knuckle chain link fabric as required.

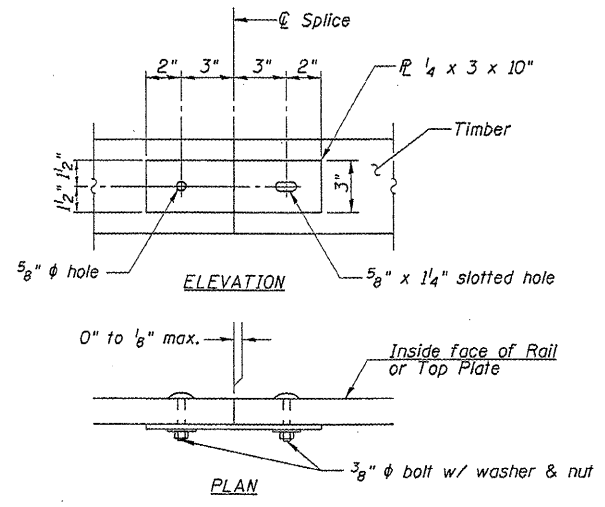


CLAMP ANGLE *
(32 Required)



L 6 x 6
TIMBER BLOCK ANGLE *
(16 Required)

* Weight of angles included in the weight of Hardware.



SPLICE DETAIL

Note: Minimize splices in rails and top plate. Where possible span 3 rail posts.

TIMBER DETAILS
SANGAMON VALLEY TRAIL
OVER JEFFERSON STREET (IL ROUTE 97)
SVT BRIDGE NO. 15
STRUCTURE NO. 084-9936

CEC Cummins Engineering Corporation
Civil and Structural Engineering

JOB = 2192	DESIGNED M.D.C.
FILE = 2192jeff_super	CHECKED A.A.N.
DATE = 10/30/2009	DRAWN T.S.H.
	CHECKED M.D.C.

Revised 4-13-10

Sheet 5 of 6

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SVT	05-00173-00-BT	SANGAMON	173	111
SANGAMON VALLEY TRAIL		CONTRACT NO. 93522		
FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT				