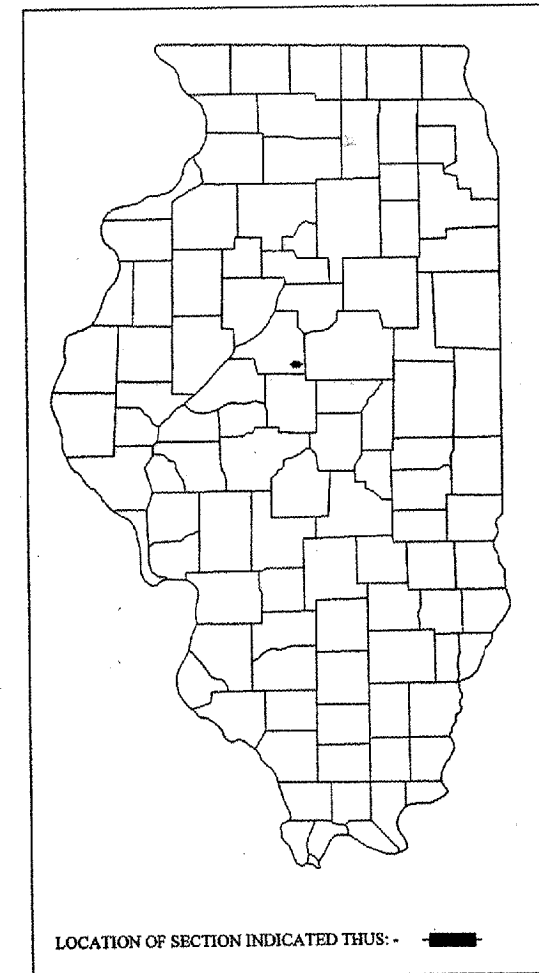


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 229-A	06-00000-00-SP	TAZEWELL	5	1
FED. ROAD DIST. NO.	ILLINOIS PROJECT		CONTRACT NO: 89470	



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
ROAD DISTRICT IMPROVEMENT**
TAZEWELL COUNTY
LITTLE MACKINAW ROAD DISTRICT
TR 229-A - SPRINGTOWN RD.
SECTION NO. 06-00000-00-SP
PROJECT NO. HS-179(30)
JOB NO. C-94-100-07

- INDEX**
- COVER SHEET
 - SUMMARY OF QUANTITIES
 - TYPICAL SECTIONS
 - PLAN & PROFILE
 - STEEL RAILING, TYPE 2399*

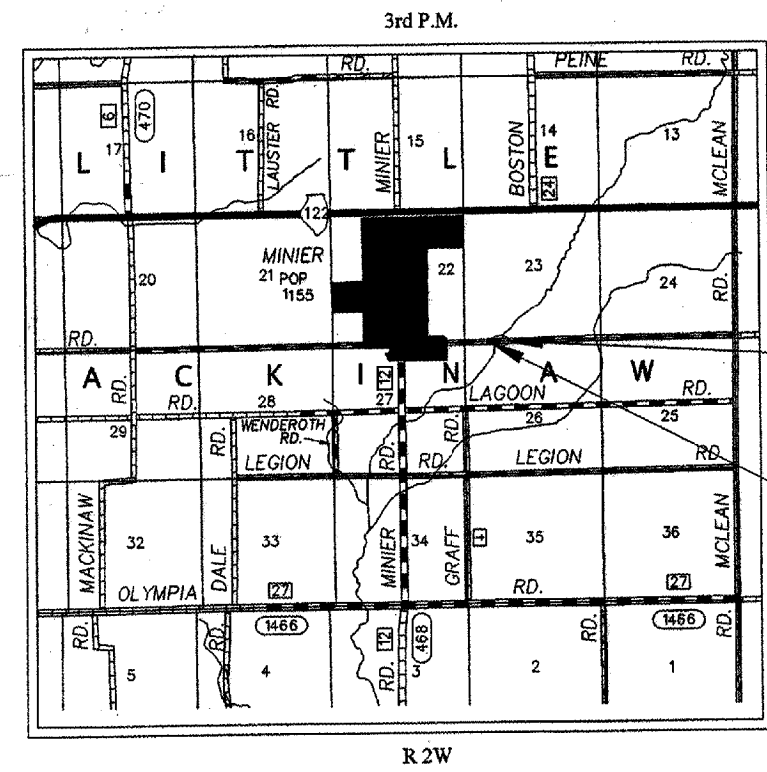
STANDARDS

- 630001-07 STEEL PLATE BEAM GUARDRAIL
- 630301-04 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631011-03 TRAFFIC BARRIER TERMINAL, TYPE 2
- 631032-03 TRAFFIC BARRIER TERMINAL, TYPE 6A
- 701001-01 OFF-ROAD OPERATIONS, 2L 2W, 15' MIN. AWAY FOR SPEEDS >= 45 MPH
- 701006-02 OFF-ROAD OPERATIONS, 2L 2W, 15' TO 24" AWAY FOR SPEEDS >= 45 MPH
- 701011-01 OFF-ROAD MOVING OPERATIONS, 2L 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
- 701301-02 LANE CLOSURE, 2L 2W SHORT TIME OPERATIONS
- 701306-01 LANE CLOSURE, 2L 2W SLOW OPERATIONS - MOVING DAY ONLY FOR SPEEDS >= 45 MPH
- 702001-06 TRAFFIC CONTROL DEVICES

UTILITIES

VERIZON
1312 EAST EMPIRE
BLOOMINGTON, IL 61701
ATTENTION: CHRISTINE GLAWE
PHONE: (309) 663-3311

CORNBELT



QC / QA PROJECT

IMPROVEMENT ENDS
STA. 14+25

IMPROVEMENT BEGINS
STA. 6+00

TOLL FREE
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
(J.U.L.I.E.) TELEPHONE NUMBER
1-800-892-0123

DESIGN GUIDELINES: 3R

ADT (2003) = 700
PV = 97%, SU = 1.9%, MU = 1.1%
DESIGN SPEED: 55 M.P.H.
HIGHWAY CLASS: MINOR COLLECTOR (NON-URBAN)
CONTRACT NO: 89470
CATALOG NO: 033549-00
COMMITMENTS: NONE
VARIANCES GRATED: NONE

NET LENGTH OF IMPROVEMENT: 825 FT. OR 0.156 MILES
TOTAL LENGTH OF IMPROVEMENT: 825 FT. OR 0.156 MILES

THESE PLANS WERE PREPARED BY A FULL TIME MEMBER OF MY STAFF UNDER MY PERSONAL SUPERVISION.

John J. Anderson
TAZEWELL COUNTY ENGINEER



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
APPROVED	<i>April 10 2007</i> <i>John J. Anderson</i> TAZEWELL COUNTY ENGINEER
PASSED	<i>4-13 2007</i> <i>John J. Anderson</i> DISTRICT FOUR ENGINEER OF LOCAL ROAD & STREETS
Releasing for Bid Based on Limited Review	<i>April 13 2007</i> <i>J.E. Ames</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 229-A	06-00000-00-SP	TAZEWELL	5	2
FED. ROAD DIST. NO.	ILLINOIS PROJECT		CONTRACT NO: 89470	

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE:

CODE	ITEM	UNIT	QUANTITY
* X6310187	TRAFFIC BARRIER TERMINAL, TYPE 6A MODIFIED	EACH	1
* X6320100	GUARDRAIL REMOVAL, SPECIAL	FOOT	92
20400800	FURNISHED EXCAVATION	CU YD	80
40600100	BITUMINOUS MATERIALS PRIME COAT	GALLON	125
40600300	AGGREGATE PRIME COAT	TON	2
40603305	HOT-MIX ASPHALT SURFACE COURSE MIX C N30	TON	145
* 40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	700
X0325701	STEEL RAILING, TYPE 2399	FOOT	116
63000005	STEEL PLATE BEAM GUARDRAIL, TYPE B	FOOT	225
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	3
63100167	TRAFFIC BARRIER TERMINAL TYPE 1 SPL TAN	EACH	3
* 67100100	MOBILIZATION	L SUM	1
70101800	TRAFFIC CONTROL AND PROTECTION SPECIAL	L SUM	1
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	19
78200400	GUARDRAIL REFLECTORS	EACH	8
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3

* SEE SPECIAL PROVISION

GENERAL NOTES

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

THE LOCATIONS OF EXISTING GAS MAINS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THE LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL UTILITY COMPANIES AND BY FIELD INSPECTION.

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

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

HOT-MIX ASPHALT 112 LB / IN / SQ YD
 BITUMINOUS MATERIALS PRIME COAT 0.1 GAL / SQ YD

LOCATION	EACH
RT. STA. 9+25.7 TO RT. STA. 9+69.4	1
LT. STA. 9+28.7 TO LT. STA. 9+72.4	1
LT. STA. 10+30.4 TO LT. STA. 10+74.0	1
TOTAL	3

LOCATION	EACH
RT. STA. 10+27.4 TO RT. STA. 10+68	1
TOTAL	1

LOCATION	CU YD
RT. STA. 7+15 TO RT. STA. 8+00	20
LT. STA. 8+55 TO LT. STA. 9+30	35
LT. STA. 11+70 TO LT. STA. 12+55	25
TOTAL	80

LOCATION	FOOT
RT. STA. 8+00.7 TO RT. STA. 9+25.7	125
LT. STA. 10+71.0 TO LT. STA. 11+71.0	100
TOTAL	225

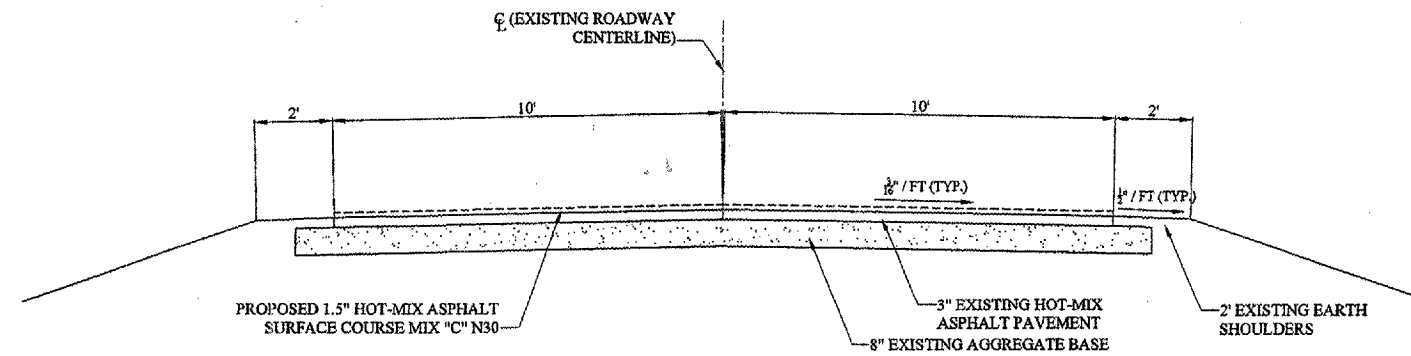
LOCATION	EACH
RT. STA. 10+68 TO RT. STA. 10+68	1
TOTAL	1

LOCATION	EACH
RT. STA. 7+50.7 TO RT. STA. 8+00.7	1
LT. STA. 8+78.7 TO LT. STA. 9+28.7	1
LT. STA. 11+71.0 TO LT. STA. 12+21.0	1
TOTAL	3

LOCATION	FOOT
NORTHWEST WINGWALL	24
SOUTHWEST WINGWALL	24
NORTHEAST WINGWALL	20
SOUTHEAST WINGWALL	24
TOTAL	92

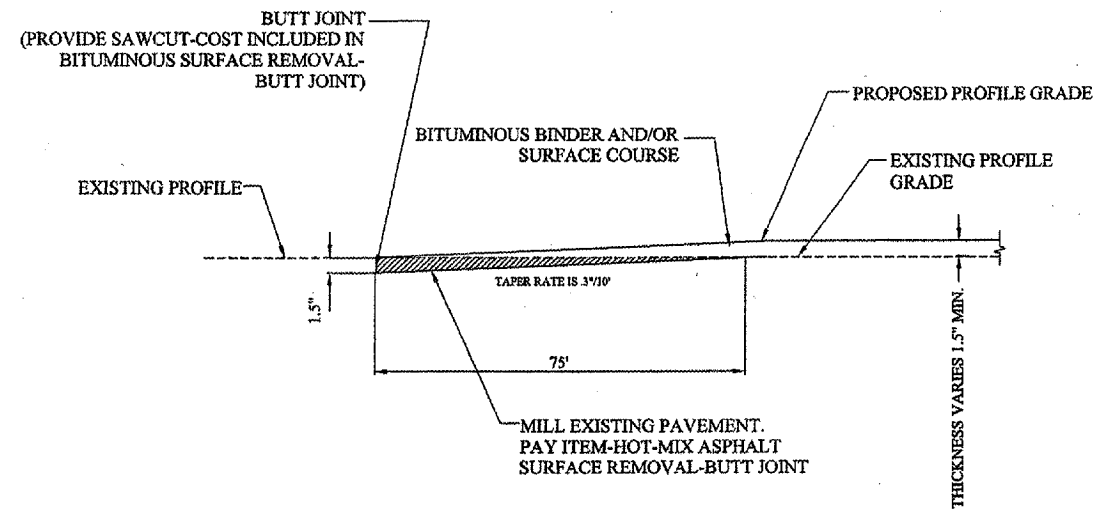
SUMMARY OF QUANTITIES
 SPRINGTOWN RD.
 SEC. 06-00000-00-SP
 TAZEWELL COUNTY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 229A	06-00000-00-SP	TAZEWELL	5	3
FED. ROAD DIST. NO.	ILLINOIS PROJECT		CONTRACT NO: 89470	



**EXISTING & PROPOSED
TYPICAL SECTION**

Location: Stringtown Rd.	
Mixture Uses:	Surface Course
PG:	PG64-22
RAP %: (Max)	30%
Design Air Voids:	4.0% @N30
Mixture Composition: (Gradation Mixture)	IL 9.5 or IL 12.5
Friction Aggregate:	Mixture C



BUTT JOINT DETAIL

HMA SC MIX "C" N30		
LOCATION		TON
STA. 6+00	TO STA. 9+27	65
STA. 10+29	TO STA. 14+25	80
TOTAL		145

HMA SURF REM BT JT		
LOCATION		FOOT
STA. 6+00	TO STA. 6+75	167
STA. 8+52	TO STA. 9+27	183
STA. 10+29	TO STA. 11+04	183
STA. 13+50	TO STA. 14+25	167
TOTAL		700

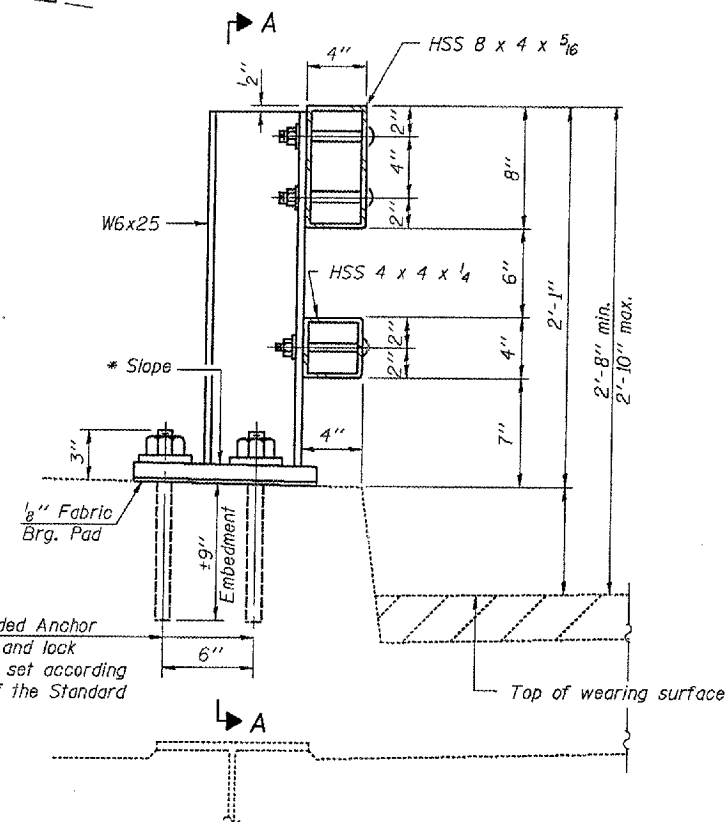
TYPICAL CROSS SECTIONS
STRINGTOWN ROAD
SEC. 06-00000-00-SP
TAZEWELL COUNTY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

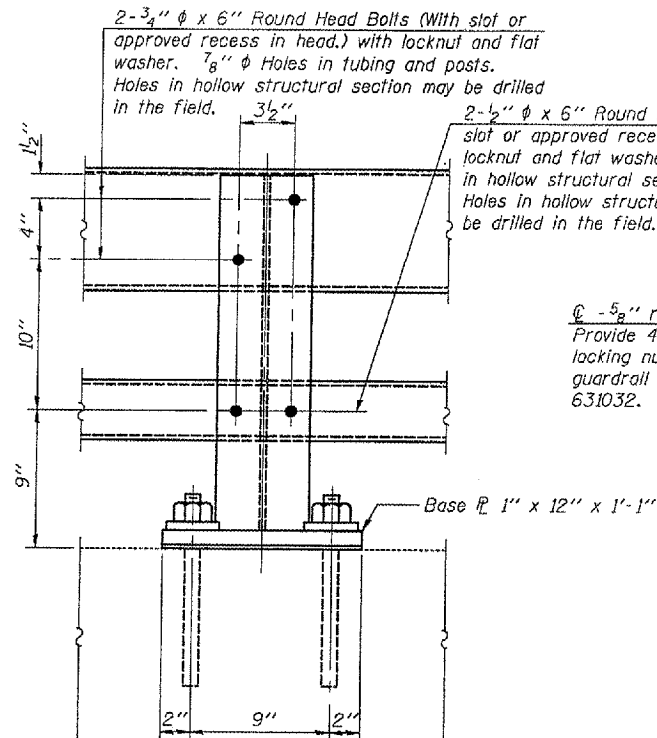
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO.
			5	5	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract #

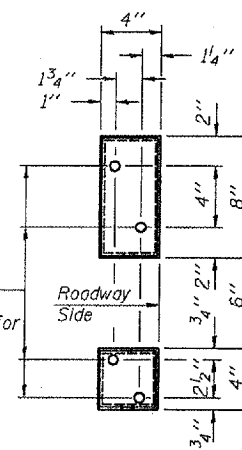
* Cut bottom end of post to curb slope.



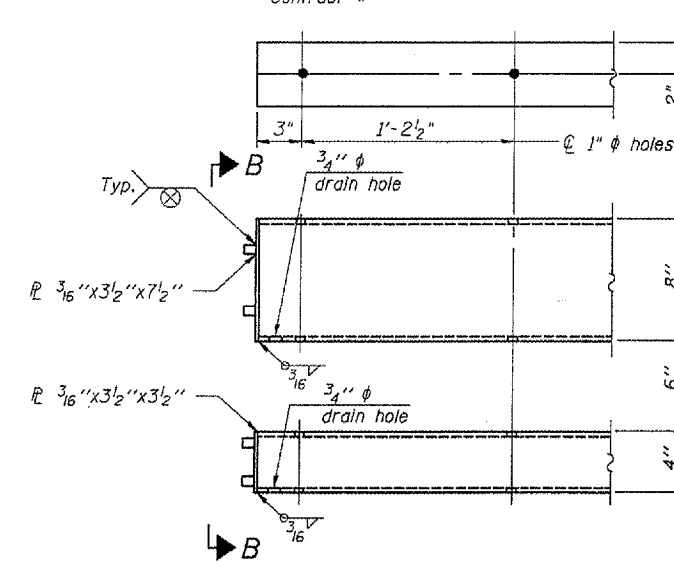
SECTION AT RAIL POST



SECTION A-A



VIEW B-B



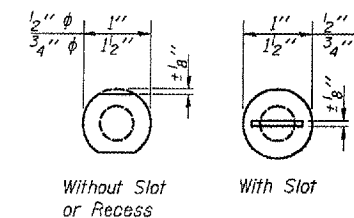
END OF RAIL DETAILS

4- 1" ϕ H.S. Threaded Anchor Rods with hex nuts and lock washers, drilled and set according to Article 509.06 of the Standard Specifications.

2- 3/4" ϕ x 6" Round Head Bolts (With slot or approved recess in head.) with locknut and flat washer. 7/8" ϕ Holes in tubing and posts. Holes in hollow structural section may be drilled in the field.

2- 1/2" ϕ x 6" Round Head Bolts (With slot or approved recess in head.) with locknut and flat washer. 5/8" ϕ Holes in hollow structural section and post. Holes in hollow structural section may be drilled in the field.

4- 5/8" reduced base welded studs. Provide 4- 5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032.



VIEW C-C

Notes:

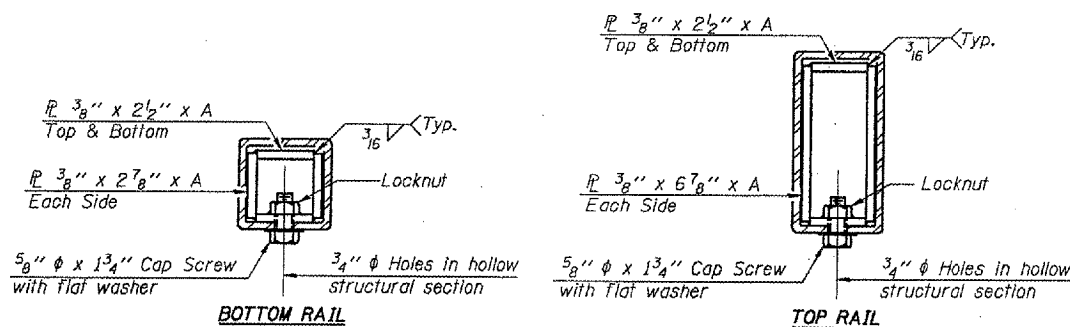
All field drilled holes shall be coated with an approved zinc rich paint before erection.

Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.

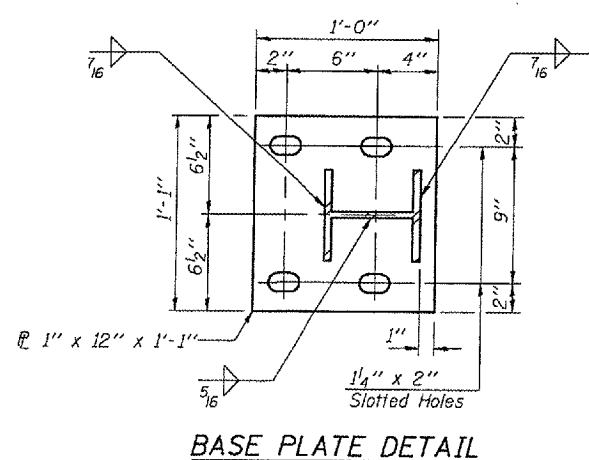
Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.

Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.

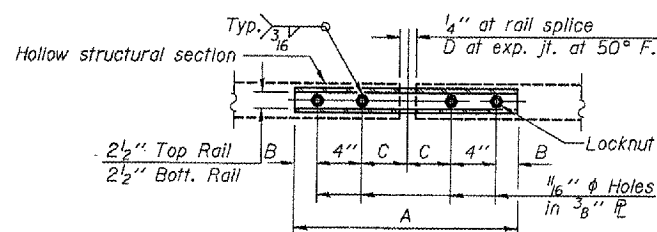
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



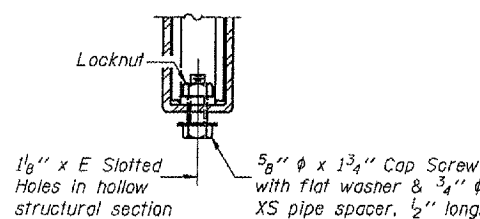
SECTIONS AT RAIL SPLICE



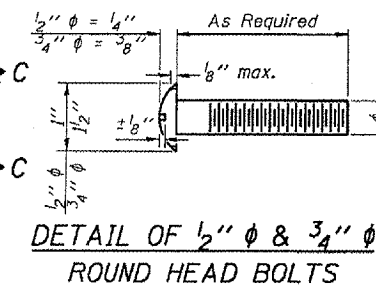
BASE PLATE DETAIL



PLAN-BOTT. SPLICE TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.



DETAIL OF 1/2" ϕ & 3/4" ϕ ROUND HEAD BOLTS

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.

STEEL RAILING, TYPE 2399

DESIGNED -	ZDD
CHECKED -	EXAMINED
DRAWN -	PASSED
CHECKED -	ENGINEER OF BRIDGE DESIGN
	ENGINEER OF BRIDGES AND STRUCTURES