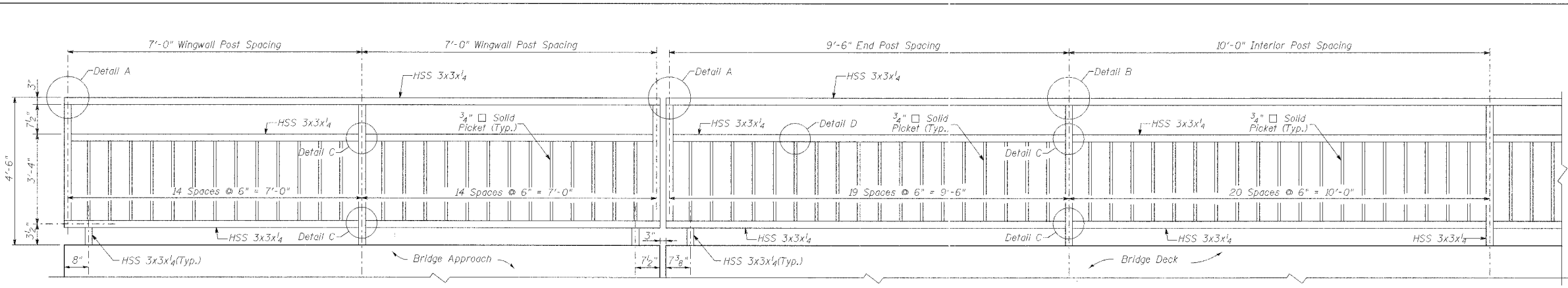
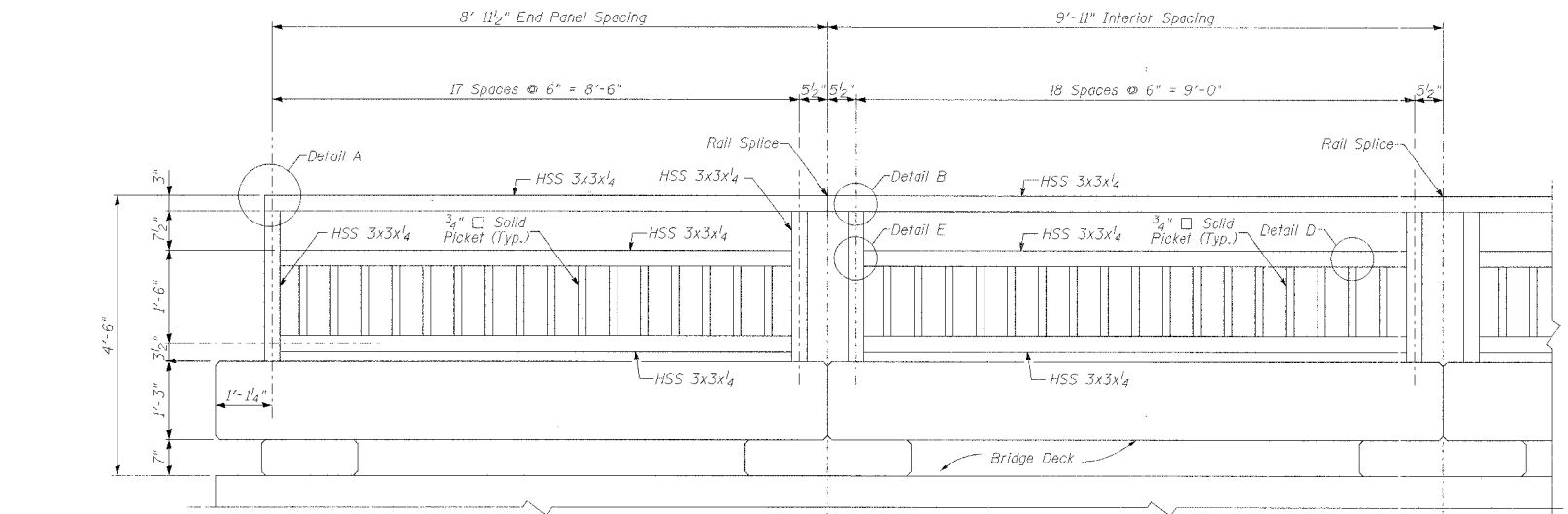
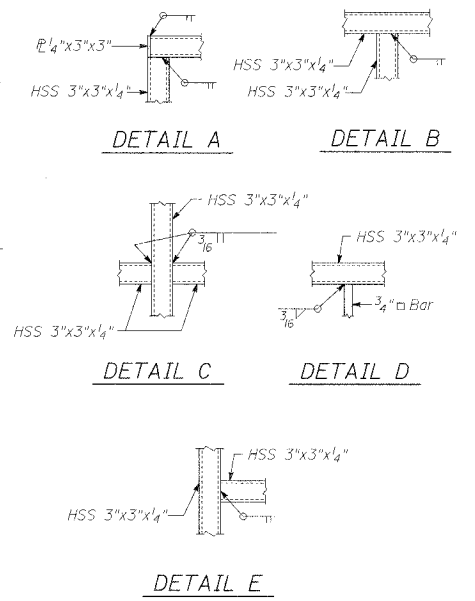


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2666	00-00254-01-BR	LAKE	70	41
STA. 98+50	TO STA. 107+57			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

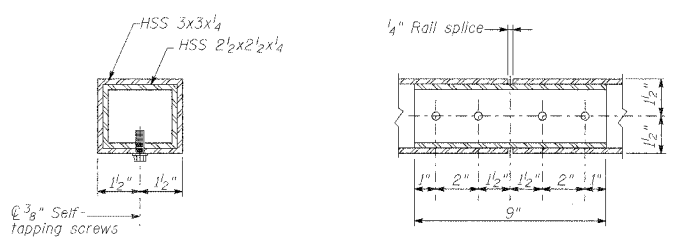
Sheet 18 of 35 Sheets  
 PROJECT NO. BHM-8003(213)  
 CONTRACT NO. 83875



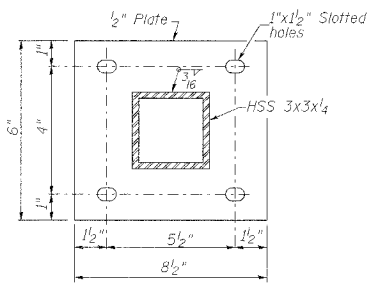
**BICYCLE RAILING**  
 (Dimensions given along  $\phi$  Railing)



**PARAPET RAILING**  
 (Dimensions given along  $\phi$  Railing)



**RAIL SPLICE**



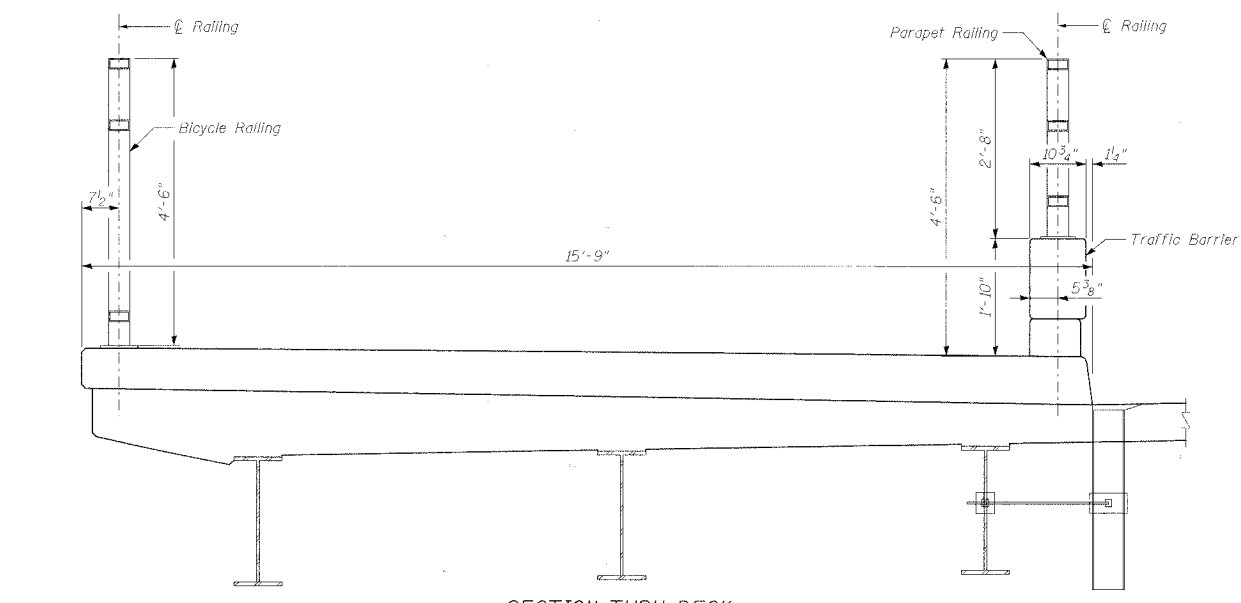
**BASE PLATE**

**BILL OF MATERIAL**

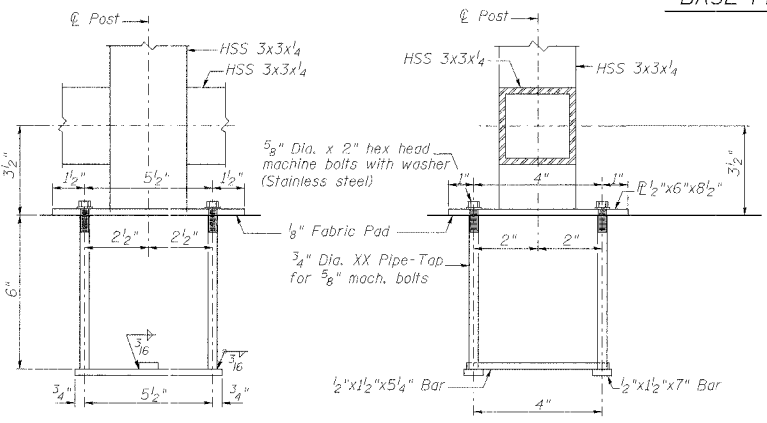
Item	Unit	Quantity
Bicycle Railing	Foot	167
Parapet Railing	Foot	137

**NOTES**

- Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the Contract Unit Price per foot for Bicycle Railing or Parapet Railing.
- Hollow structural steel tubing shall conform to the requirements of ASTM designation A 500, Grade B, structural steel tubing.
- Hollow steel pipes shall conform to the requirements of ASTM A 53 and shall be "standard weight."
- All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36.
- All posts, railing, splices, anchor devices, and bent plates shall be painted using the Organic Zinc-rich/epoxy/urethane paint system. The color of the final coat for all bicycle and parapet railings shall be Black Color C900 as produced by Carboline or equal. Final color shall be coordinated with the Engineer prior to fabrication. See special provision for "Cleaning and Painting Bicycle and Parapet Railing."
- If the option of drilling and epoxy grouting the anchor rods is chosen, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with premeasured amounts of the adhesive chemical.
- Space reinforcement to miss anchor rods.



**SECTION THRU DECK**  
 (Looking North)



**ANCHOR BOLT DETAILS**

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting 5/8" dia. anchor rods. Embedment shall be according to the manufacturer's specifications.

**CMT**  
 CRAWFORD MURPHY & TILLY, INC.  
 CONSULTING ENGINEERS  
 SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO  
 ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

REVISIONS	NAME	DATE

LAKE COUNTY DIVISION OF TRANSPORTATION  
**BICYCLE RAILING**  
 BUFFALO GROVE ROAD  
 AT INDIAN CREEK BRIDGE  
 SECTION 00-00254-01-BR STATION 101+50.00  
 LAKE COUNTY STRUCTURE NO. 049-3043  
 SCALE: NONE DRAWN BY: TBW  
 DATE: 7/21/06 CHECKED BY: ATT, WK

DATE: \_\_\_\_\_ BY: \_\_\_\_\_

REVISIONS

NO.	DESCRIPTION	DATE

PLANNED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_

REVISIONS

NO.	DESCRIPTION	DATE

PLANNED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

I:\lakeco\2011\3\draw\sheet\struct\6-16-06\bicycle railing.dgn