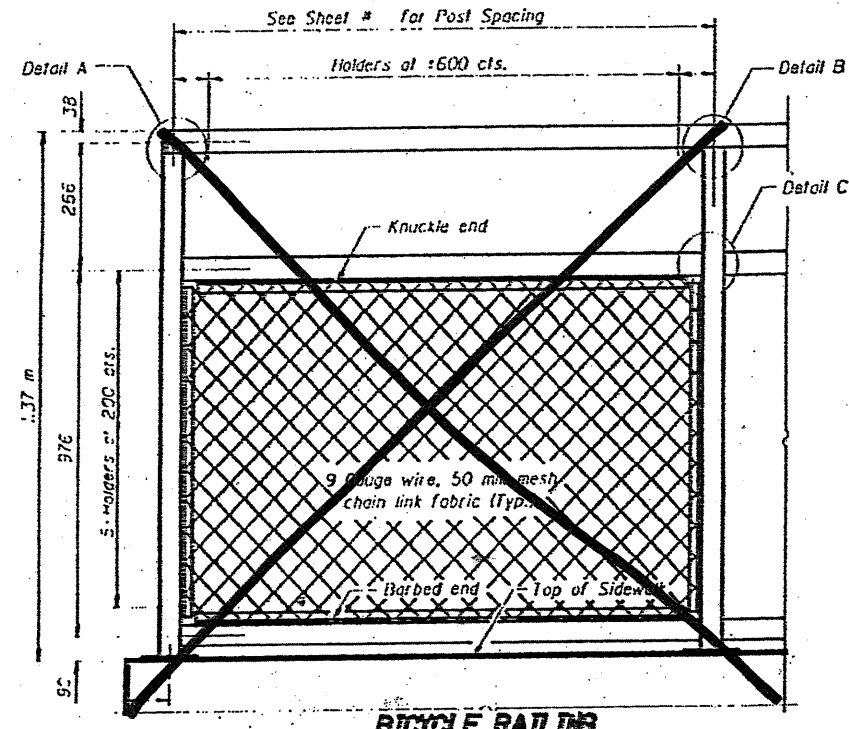
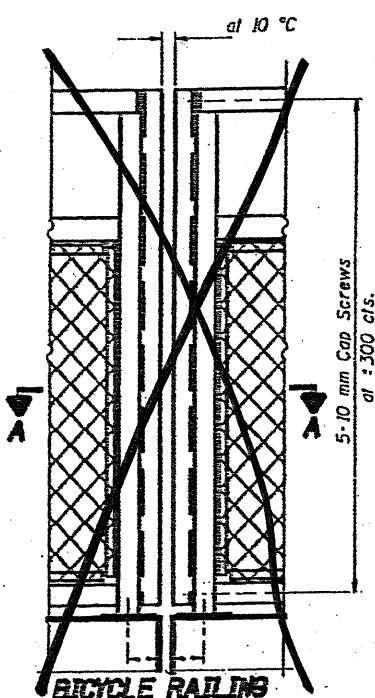


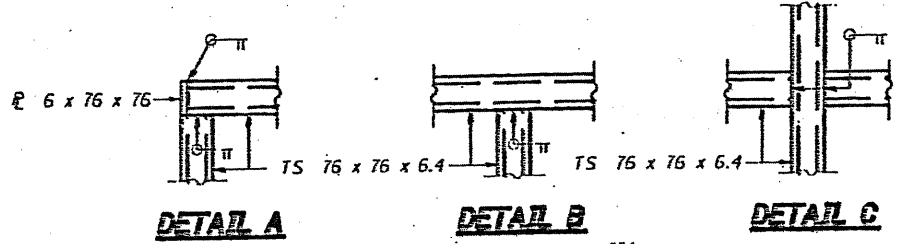
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	4N-1	LAKE	165	96
STA. 3 + 065		TO STA. 3 + 160		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



BICYCLE RAILING



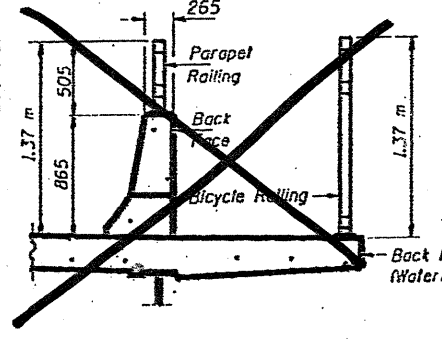
BICYCLE RAILING



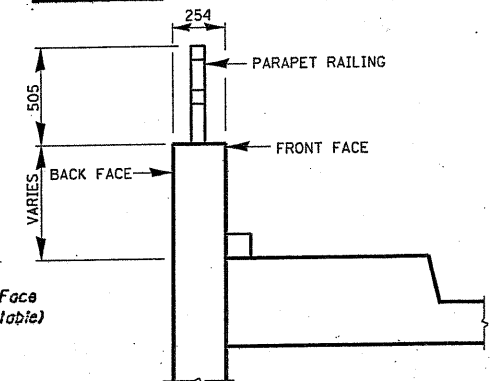
DETAIL A

DETAIL B

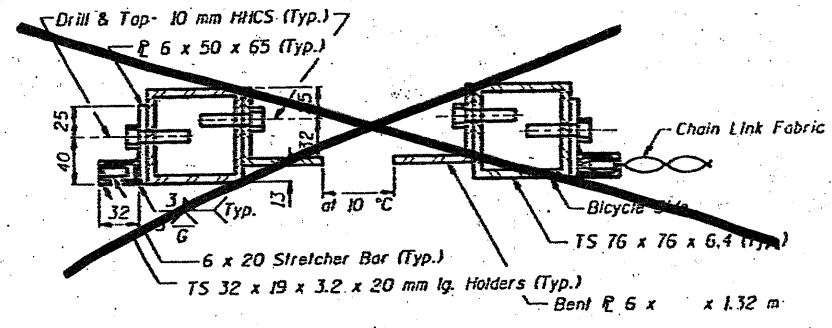
DETAIL C



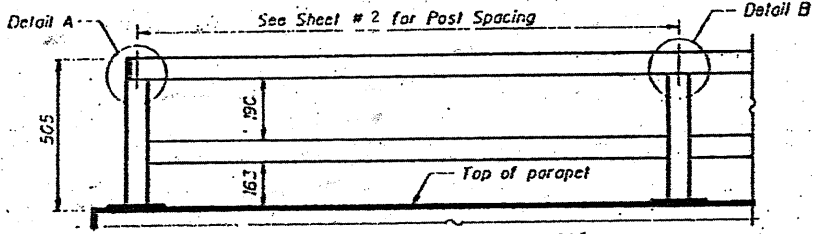
SECTION THRU DECK



SECTION THRU SIDEWALK

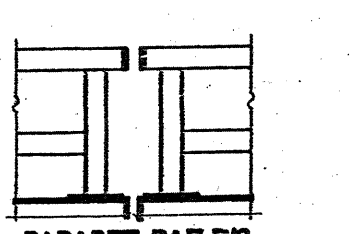


SECTION A-A



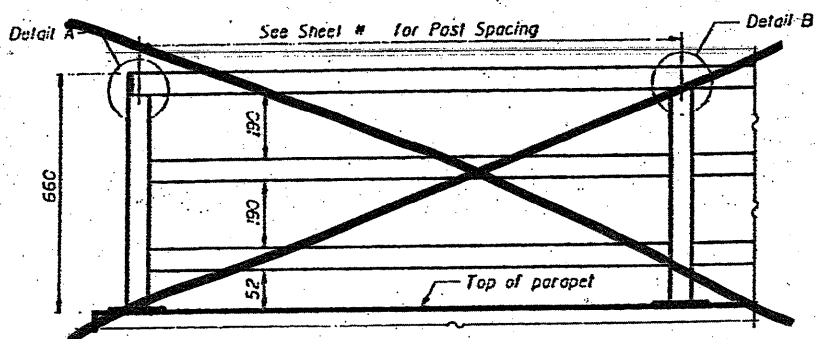
PARAPET RAILING ELEVATION

(Inside Face of Two Element Rail)



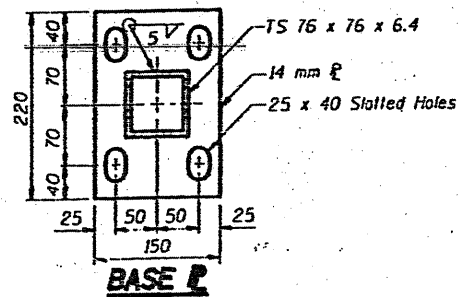
PARAPET RAILING ELEVATION AT EXPANSION JOINT

(Two Element Rail Shown - Three Element Rail Similar)

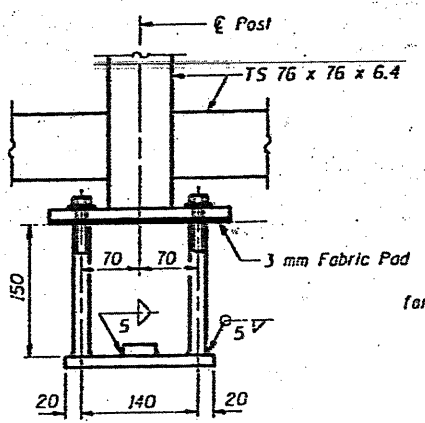


PARAPET RAILING ELEVATION

(Inside Face of Three Element Rail)

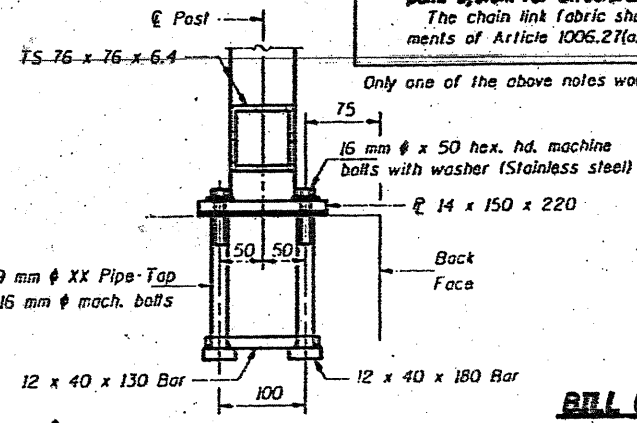


BASE P



ANCHOR BOLT DETAILS

(In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting M16 anchor rods for the connections on top of the parapets. Embedment shall be according to the manufacturer's specifications.)



Only one of the above notes would appear on Contract Plans.

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 meter for Bicycle Railing.

The 9 gauge fabric ties shall be according to Article 1006.27 (d) of the Standard Specifications.

Installation of the chain link fabric shall be according to Section 654 of the Standard Specifications.

How structural steel tubing shall conform to the requirements of ASTM designation A 500, Grade B, structural steel tubing.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270M Grade 250.

The Parapet Railing, furnished and installed shall not be paid for separately but shall be included in the unit bid price for "Bicycle Railing."

The chain link fabric shall be placed along Bicycle Rails as shown on Section A-A.

Stretcher bars shall be used at all four sides of each panel. 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.

All dimensions are in millimeters (mm) except as noted.

The designer should add the appropriate note as applicable.

A. When railing is galvanized:
 All posts, railing, splices, anchor devices, and bent plates shall be galvanized after shop fabrication according to AASHTO M 311 and ASTM A 385. All bolts, nuts, washers and anchor rods shall be galvanized according to AASHTO M 232 except stainless steel bolts as noted.
 Vent holes for galvanizing shall be placed in the posts and rails at locations that will not allow the accumulation of moisture in the members.
 The chain link fabric shall conform to the requirements of Article 1006.27(a)(1), b or c of the Standard Specifications.

B. When railing is painted:
 All post, railing, splices, anchor devices, and bent plates shall be painted using the (List the appropriate paint system for Structural Steel).
 The chain link fabric shall conform to the requirements of Article 1006.27(a)(1)d of the Standard Spec's.

BILL OF MATERIAL

Item	Unit	Quantity
Parapet Railing	m	95

REVISIONS

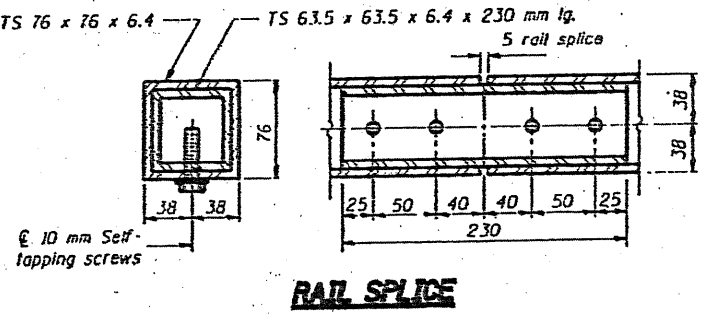
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 IL 83 (MILWAUKEE AVENUE)
 AT IL 132 (GRAND AVENUE)
 PARAPET RAILING DETAILS
 STA. 3+065 - STA. 3+160
 S.N. 049-W030

SCALE: NONE
 DATE: AUGUST, 2003
 DRAWN BY: MVT
 CHECKED BY: R.S.S.

DESIGNED	19
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	MEMBER OF BRIDGE AND STRUCTURE

R-29 (4) 4-30-99 (3.0 m Maximum Post Spacing)



RAIL SPLICE

Mon Jul 28 10:44:38 2003
 c:\projects\str-uct\1183\1132.m32 LV=1-63
 DISTRICT ONE - DESIGN
 DIPLAN PREPARATION ENGINEER JOHN FORTMANN / RUSS SINHA (847) 705-4209 / ATTENTION MARK V. TINIAKOS (847) 705-4266