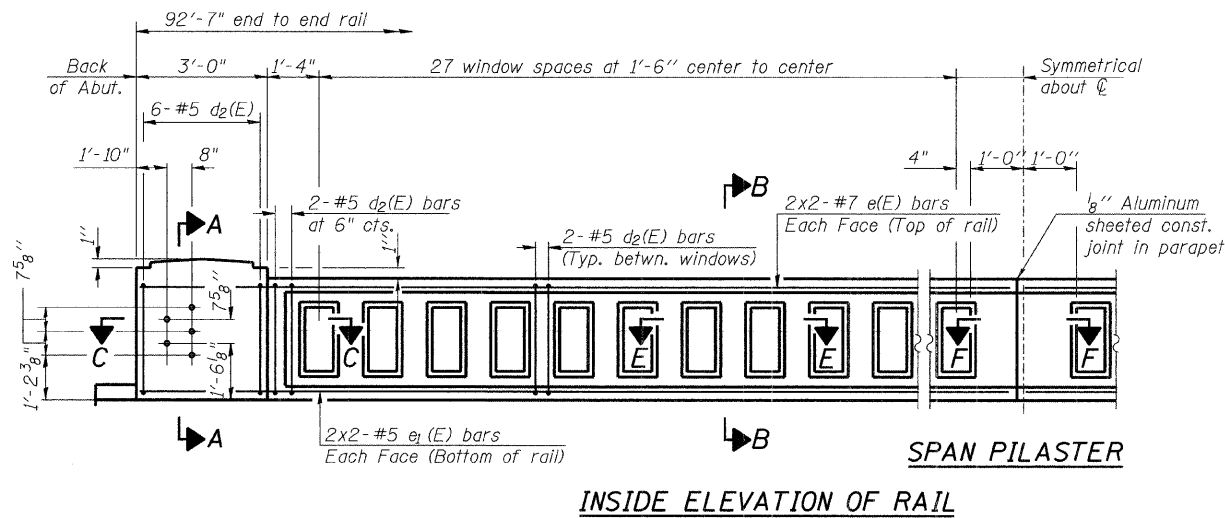
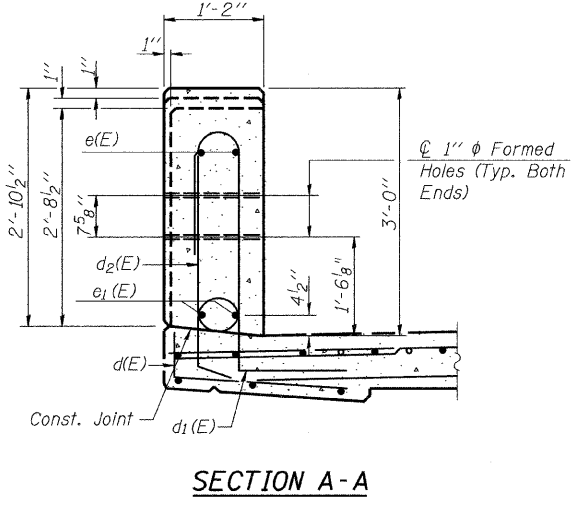


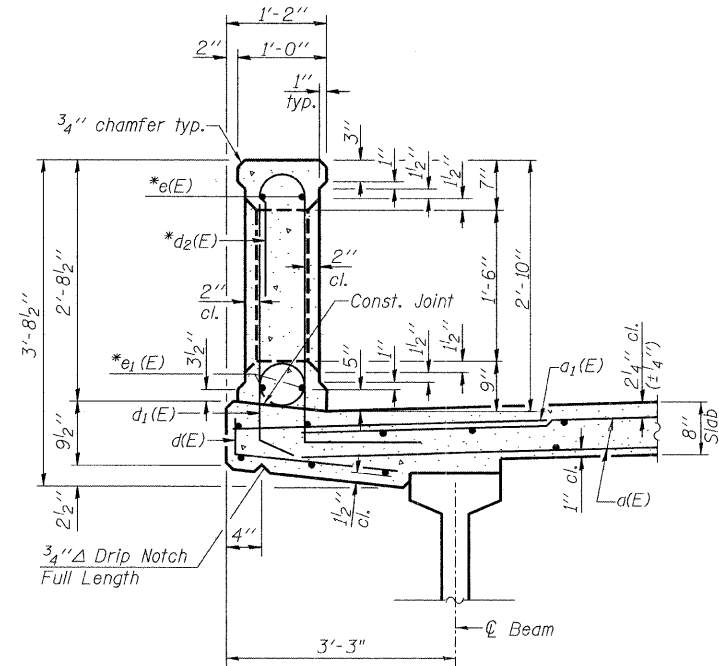
McHENRY COUNTY  
DIVISION OF TRANSPORTATION



Note:  
See Sheet S-10 for additional details, sections  
and Bill of Material.

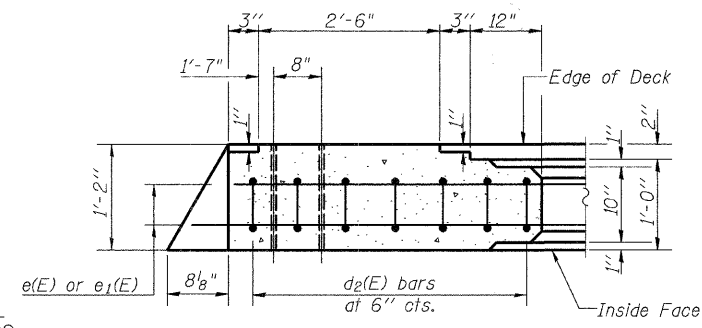


**MINIMUM BAR LAP**  
#5 bars = 1'-8"  
#7 bars = 2'-8"

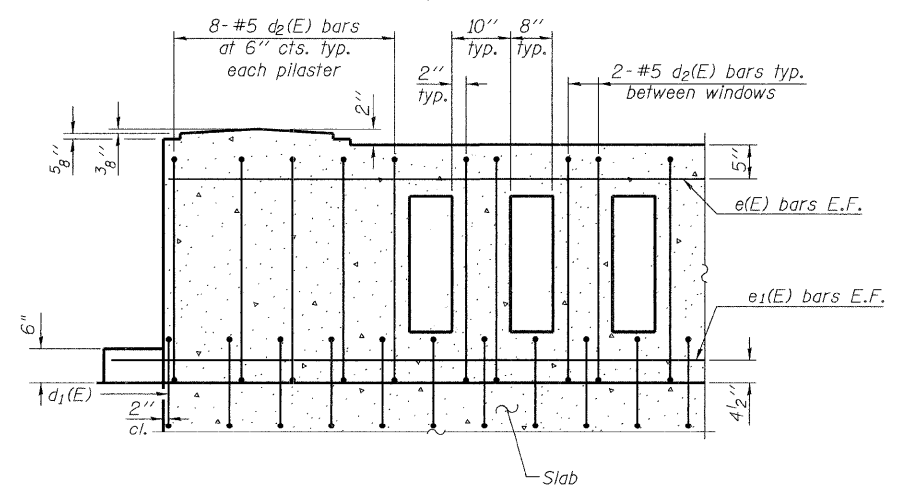


\*Bars e(E) thru e1(E) and d2(E) are included in the cost of Concrete Bridge Railing.

Notes:  
All concrete for railing wall shall be Class BS according to Article 1020.04 of the Standard Specifications. Surface of railing shall receive a rubbed finish according to Article 503.15(b) of the Standard Specifications.  
All parts of the railing including concrete and reinforcing will be paid for at the contract unit price per foot for Concrete Bridge Railing.  
Holes and recesses must be formed or cored. Drilling is not permitted.  
Aluminum sheets shall be according to ASTM B209 alloy 3003-H14.



**SECTION C-C**



**TYPICAL REINFORCEMENT PLACEMENT**  
(Inside Face)

**BAR LIST**

Bar	No.	Size	Length	Shape
d2(E)	248	#5	7'-4"	
e(E)	16	#7	24'-4"	
e1(E)	16	#5	24'-2"	

**CONCRETE BRIDGE RAILING DETAILS**  
**STRUCTURE NO. 056-3173**

SHEET NO. S-9 OF S-20 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		05-00310-00-BR	McHENRY	44	25
			CONTRACT NO. 63114		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

**Giorba Group, Inc.**  
CONSULTING ENGINEERS  
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656  
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@giorba.com

DESIGNED	AMK
CHECKED	EKM
DRAWN	RD
CHECKED	EKM

2/6/2009 rdanley 1' / IN. N:\PROJ\33335\Design\Structure\1\CA0\3335 09 Concrete Bridge Railing.dgn