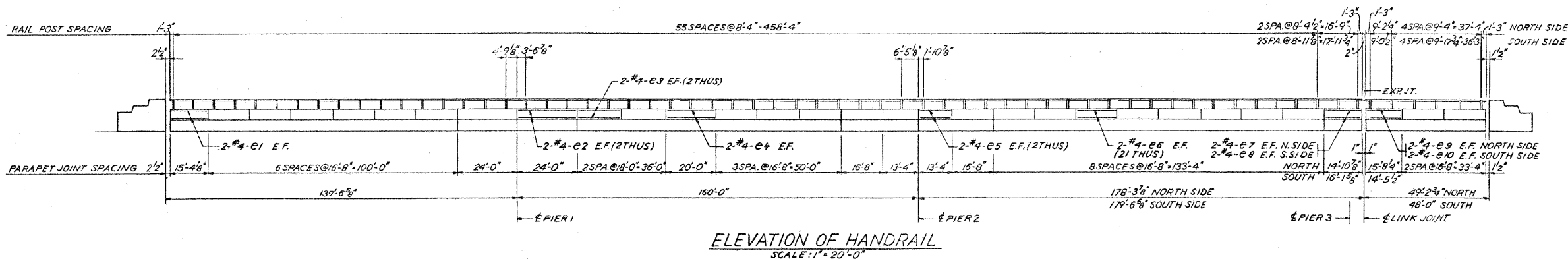


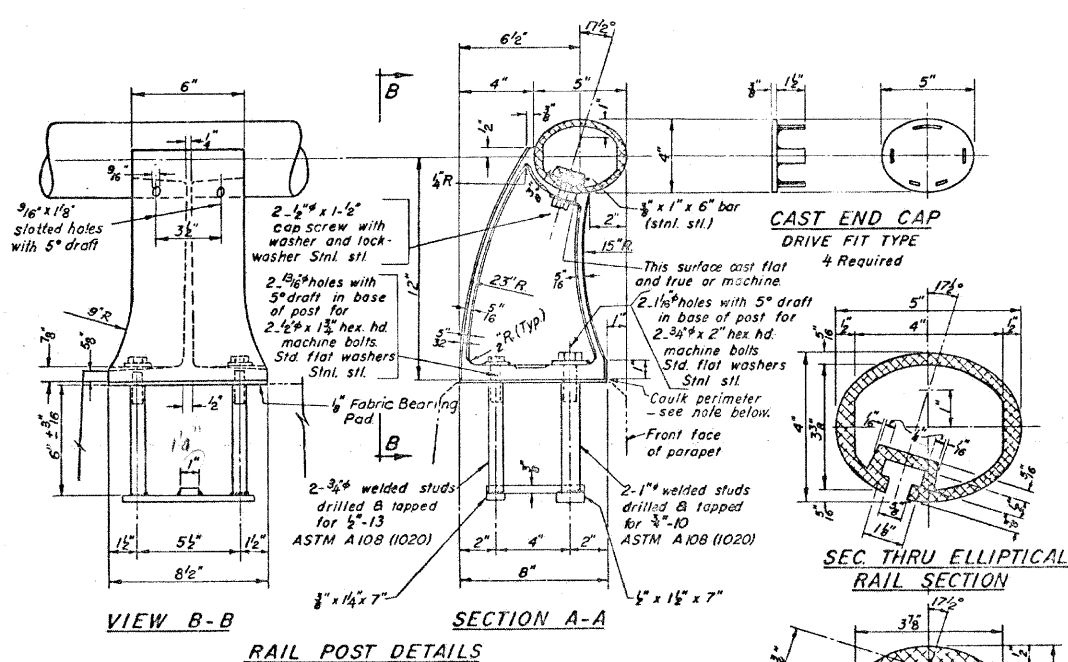
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 22-118-3	DUPAGE	DUPAGE	87	28
STA.	TO STA.			
B.P.R. REG. NO. 4	ILLINOIS	PROJECT		

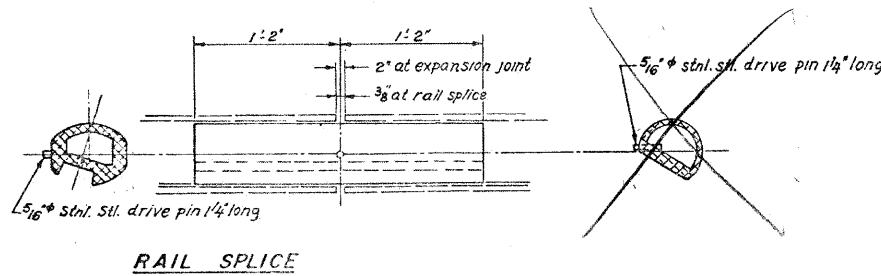
SHEET 7 OF 23



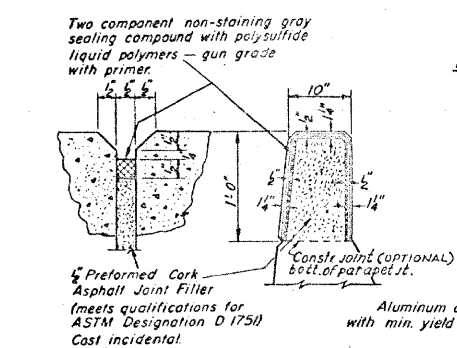
ELEVATION OF HANDRAIL  
SCALE: 1" = 20'-0"



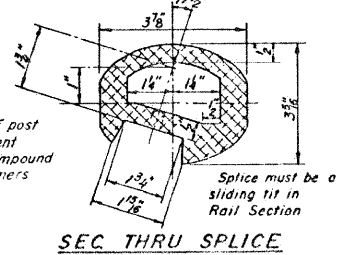
RAIL POST DETAILS



RAIL SPLICE



PARAPET JOINT DETAIL



SEC THRU SPLICING

**NOTES:**  
ALL ALUMINUM ALLOY EXTRUDED RAIL SHALL BE SUPPLIED IN MODULAR LENGTHS OF 30 FEET, EXCEPT AT THE END OF BRIDGE OR OVER OPEN JOINTS. BRIDGE DECK WHERE THE RAIL SHALL BE ATTACHED TO A MINIMUM OF 2 POSTS. IF THE RAIL IS ON A HORIZONTAL CURVE OF 2,300 FOOT RADIUS OR LESS, THE MODULAR LENGTHS MAY BE REDUCED BUT SHALL BE ATTACHED TO A MINIMUM OF 2 POSTS.  
ALL JOINTS IN RAIL SHALL BE SPICED PER DETAIL. PROVIDE 1/4" AND 2-1/2" ALUMINUM SHIMS FOR 25% OF THE POSTS. RAIL ELEMENT SHALL BE PARALLEL TO GRADE - HIGH SPOTS SHALL BE GROUND, AND LOW SPOTS SHIMMED.  
Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.

PARAPETS & RAILS  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
e1	8	#4	15'-0"	
e2	16	#4	23'-9"	
e3	16	#4	17'-9"	
e4	8	#4	19'-9"	
e5	16	#4	13'-0"	
e6	168	#4	16'-3"	
e7	4	#4	14'-6"	
e8	4	#4	15'-9"	
e9	4	#4	15'-3"	
e10	4	#4	14'-0"	
Class X Concrete		Cu. Yds.	34.0	
Reinforcement Bars		Lbs	2,750	
Aluminum Railing		Lin. Ft.	7,054	

ALUMINUM RAILING  
NORDIC RD.  
OVER F.A.I. RTE. 90 & F.A.P. RTE. 61  
PROJECT  
SECTION 22-118-3  
DUPAGE COUNTY  
STATION 28+79.81

ALFRED BENESCH & COMPANY CONSULTING ENGINEERS  
10 SOUTH WASHINGTON AVENUE CHICAGO, ILLINOIS

FOR INFORMATION ONLY

benesch

alfred benesch & company  
Engineers • Surveyors • Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-655-0450 Job No. 10032.13

SHEET NO. 15	F.A.I. RTE. 290	SECTION 2009-1151	COUNTY DUPAGE	TOTAL SHEETS 27	SHEET NO. 20
19 SHEETS	CONTRACT NO. 60J34		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

EXISTING PLAN INFORMATION 3 OF 7  
STRUCTURE NO. 022-0106

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