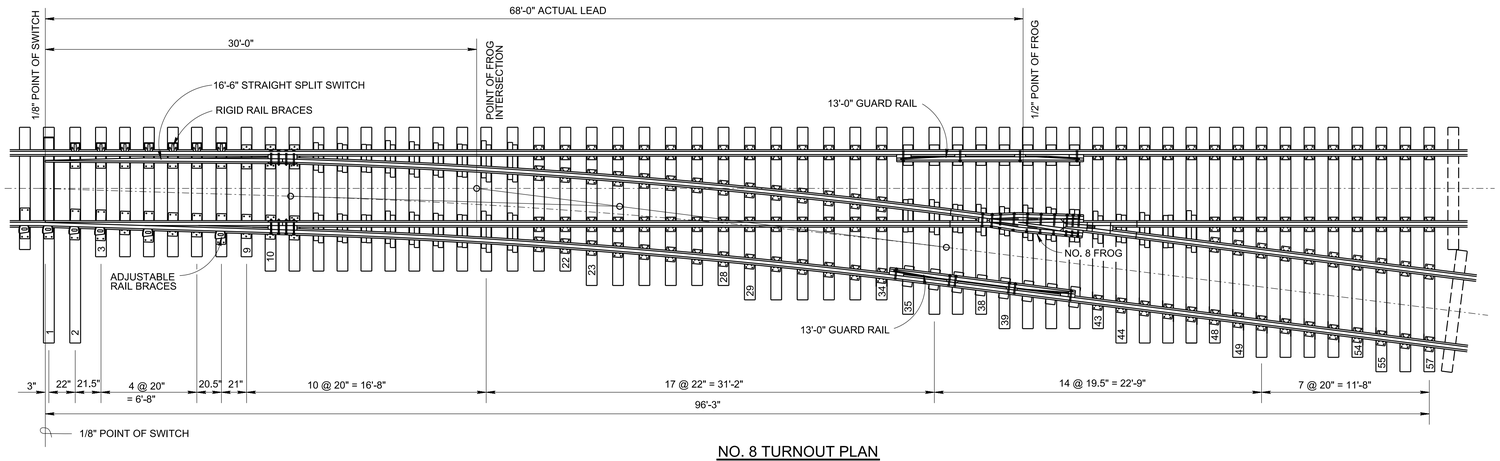
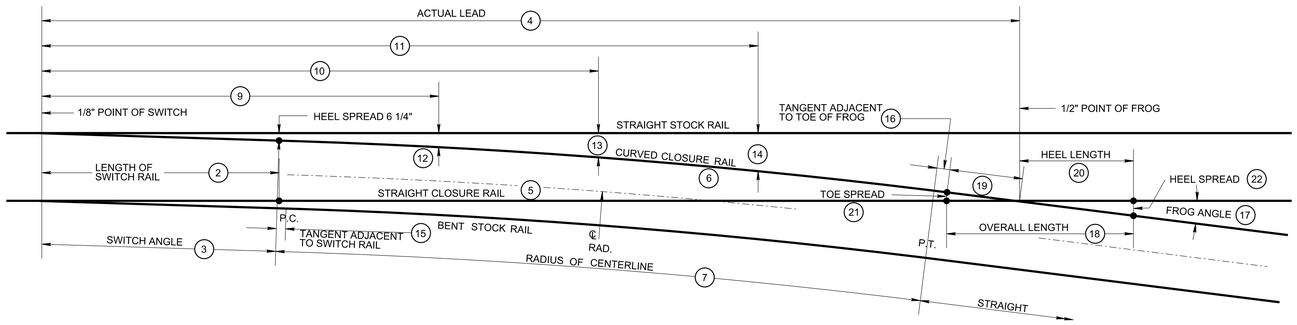


NO. 8 TURNOUT PLAN
NO SCALE



TURNOUT LAYOUT PLAN
NO SCALE

NO. 8 TURNOUT BILL OF SWITCH TIES		
NUMBER	DESCRIPTION	SIZE
2 PCS	NO'S 1 AND 2	7"X9"X15'-0"
7 PCS	3 TO 9 INCL.	7"X9"X9'-0"
13 PCS	10 TO 22 INCL.	7"X9"X10'-0"
6 PCS	23 TO 28 INCL.	7"X9"X11'-0"
6 PCS	29 TO 34 INCL.	7"X9"X12'-0"
4 PCS	35 TO 38 INCL.	7"X9"X13'-0"
5 PCS	39 TO 43 INCL.	7"X9"X14'-0"
5 PCS	44 TO 48 INCL.	7"X9"X15'-0"
6 PCS	49 TO 54 INCL.	7"X9"X16'-0"
3 PCS	55 TO 57 INCL.	7"X9"X17'-0"
57 PCS		

NOTES:

1. AREA PLANS REFERENCED BELOW REFER TO THE AMERICAN RAILWAY ENGINEERING ASSOCIATION'S PORTFOLIO OF TRACKWORK PLANS.
2. FOR SOLID MANGANESE FROGS, THE STRAIGHT AND CURVED CLOSURES SHALL BE LENGTHENED TO CONFORM.
3. SWITCHES, CLOSURE RAILS, AND STOCK RAILS ADJACENT TO SWITCHES SHALL BE NEW IN TURNOUTS WITH USED RAIL.
4. SWITCHES SHALL BE 16'-6" REINFORCED STRAIGHT SPLIT SWITCHES WITH GRADUATED RISERS CONFORMING TO AREA PLAN NO. 112.
5. SWITCH POINTS SHALL CONFORM TO AREA PLAN NO. 221, DETAIL 4000 OR 6100. MANGANESE STEEL TIPS ARE NOT REQUIRED.
6. RAIL BRACES SHALL BE EITHER FIXED OR ADJUSTABLE TYPE AND SHALL BE OF STANDARD MANUFACTURE. RIGID RAIL BRACES AND SWITCH PLATES SHALL CONFORM TO AREA PLAN NO. 223. ADJUSTABLE RAIL BRACES AND SWITCH PLATES SHALL CONFORM TO AREA PLAN NO. 224.
7. FROGS SHALL BE RAILBOUND MANGANESE OR SOLID MANGANESE SELF-GUARDED TYPE. GUARD RAILS SHOWN ARE REQUIRED ONLY IF RAILBOUND MANGANESE FROGS ARE PROVIDED.
8. NUMBER AND LOCATION OF HOOK TWIN PLATES SHALL CONFORM TO AREA PLAN NO. 112 AND PLAN NO. 241. HOOK TWIN PLATES SHALL CONFORM TO AREA PLAN NO. 241.
9. SETTING FOR GUARD RAILS SHALL CONFORM TO AREA PLAN NO. 502. GUARD RAILS SHALL CONFORM TO AREA PLAN NO. 504.
10. IN NO CASE MAY THE END OF A SWITCH TIE BE WITHIN 14 INCHES OF A SPIKE.
11. A TOTAL OF 106 STANDARD TIE PLATES ARE REQUIRED WITHIN TIE NUMBERS 1-57. SEE THE AMERICAN RAILWAY ENGINEERING ASSOCIATION'S PORTFOLIO OF TRACKWORK PLANS FOR TYPE AND NUMBER OF OTHER TIE PLATES WITHIN TURNOUT.
12. A TOTAL OF 592 SPIKES ARE REQUIRED WITHIN TIE NUMBERS 1-57. SEE SHEET C-X FOR TURNOUT SPIKING PATTERN.
13. ALL TIES WITHIN TIE NUMBERS 1-57 SHALL BE BOX-ANCHORED TO THE EXTENT POSSIBLE (APPROXIMATELY 300 TOTAL). A TIE SHALL NOT BE ANCHORED UNLESS ANCHORS CAN BE APPLIED TO EACH SIDE OF THE TIE AT ALL RAILS.
14. QUANTITIES FOR STANDARD TIE PLATES, SPIKES, AND RAIL ANCHORS ARE APPLICABLE IF A RAILBOUND MANGANESE FROG IS PROVIDED. IF A SOLID MANGANESE SELF-GUARDED TYPE FROG IS PROVIDED, QUANTITIES SHOULD BE ADJUSTED ACCORDINGLY.

TURNOUT DATA																					
	PROPERTIES OF SWITCHES			CLOSURE DISTANCE		LEAD CURVE		GAGE LINE OFFSETS								PROPERTIES OF FROGS						
COL. (1)	COL. (2)	COL. (3)	COL. (4)	COL. (5)	COL. (6)	COL. (7)	COL. (8)	COL. (9)	COL. (10)	COL. (11)	COL. (12)	COL. (13)	COL. (14)	COL. (15)	COL. (16)	COL. (1)	COL. (17)	COL. (18)	COL. (19)	COL. (20)	COL. (21)	COL. (22)
FROG NUMBER	LENGTH OF SWITCH RAIL	SWITCH ANGLE	ACTUAL LEAD	STRAIGHT CLOSURE RAIL	CURVED CLOSURE RAIL	RADIUS OF CENTER LINE	DEGREE OF CURVE							TANGENT ADJACENT TO SWITCH RAIL	TANGENT ADJACENT TO TOE OF FROG	FROG NUMBER	FROG ANGLE	OVERALL LENGTH	TOE LENGTH	HEEL LENGTH	TOE SPREAD	HEEL SPREAD
	FT. IN.	DEG.MIN.SEC.	FT. IN.	FT. IN.	FT. IN.	FEET	DEG.MIN.SEC.	FT. IN.	FT. IN.	FT. IN.	INCHES	INCHES	FT. IN.	FEET	FEET		DEG.MIN.SEC.	FT. IN.	FT. IN.	FT. IN.	INCHES	INCHES
8	16-6	1-46-22	68-0	46-5	46-7 1/2	487.28	11-46-44	27-7 1/4	38-8 1/2	49-9 3/4	11 7/8	20-9/16	2-8 5/16	0.64	0.00	8	7-09-10	13-0	5-1	7-11	7 1/8	12 3/8

$$ - THINK VALUE ENGINEERING - $$

Revisions			
Symbol	Descriptions	Date	Approved

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

Designed by: X	X X X	
Drawn by: X		
Checked by: X	NO. 8 TURNOUT DETAILS	
Reviewed by: X	Plot Scale Ratio: 4:1	Date: DECEMBER 1997
Submitted by: Chief: X Section	Design File: C107.DGN	Sheet reference number: C1.07
	Spec. No.: DACA 45	Drawing Code: X
	Contract No.: DACA 45	

COMPUTER AIDED DESIGN & DRAFTING

CORPS TEXT STANDARDS
90--(RARELY USED). 120 140 MATCH LINES
175--SUB TITLES-MAIN TITLES 200--
Freehand Object Notes ARCH. FREEHAND GENERAL NOTES DUAL TILE NOTES
NO.'S ARE WRICO EQUIVALENTS FOR DRAFTING'S REFERENCE