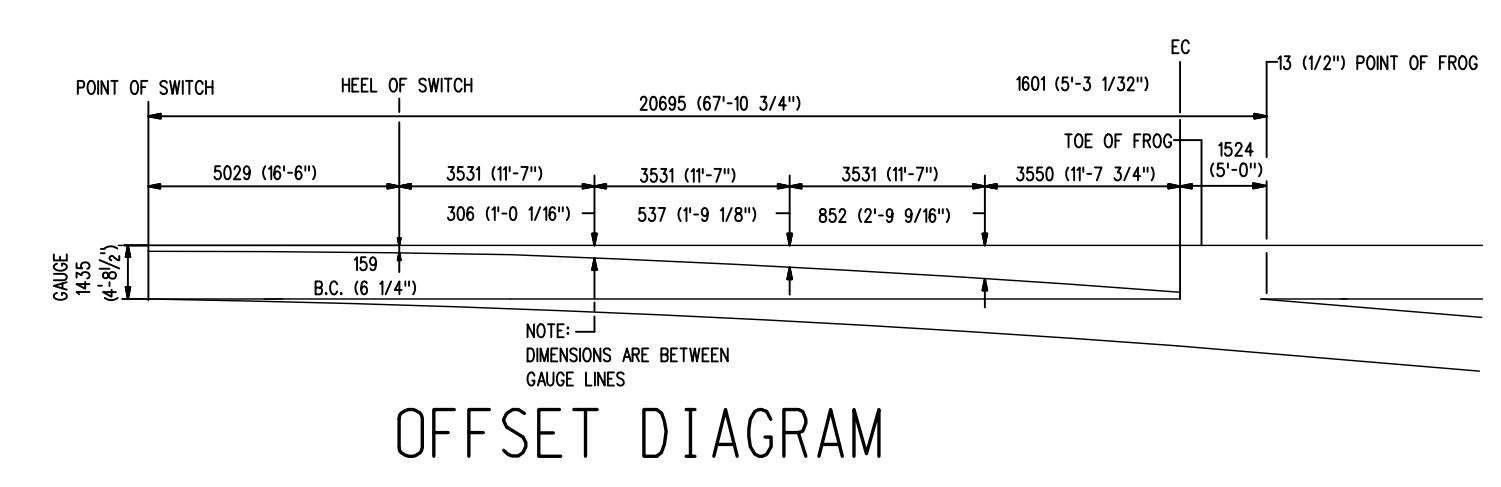
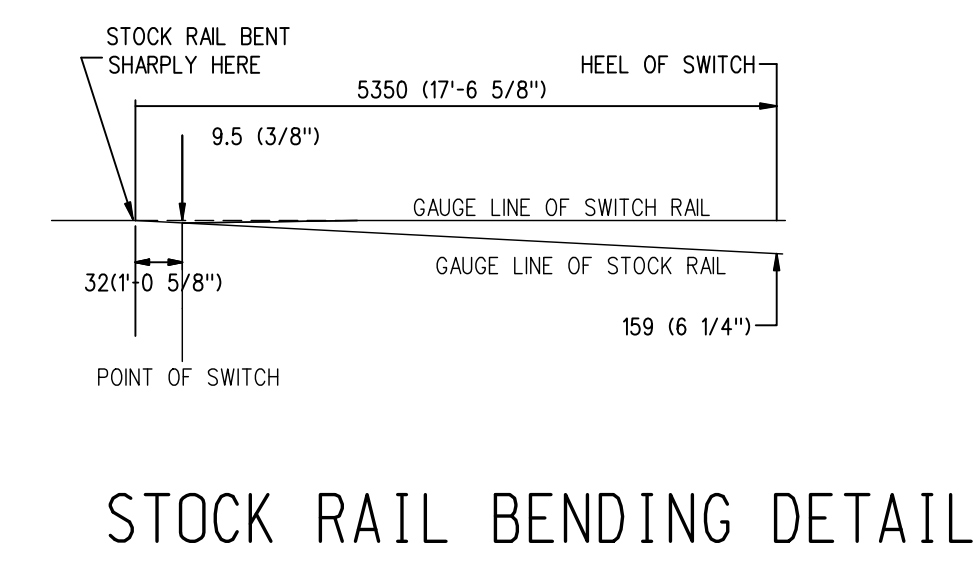
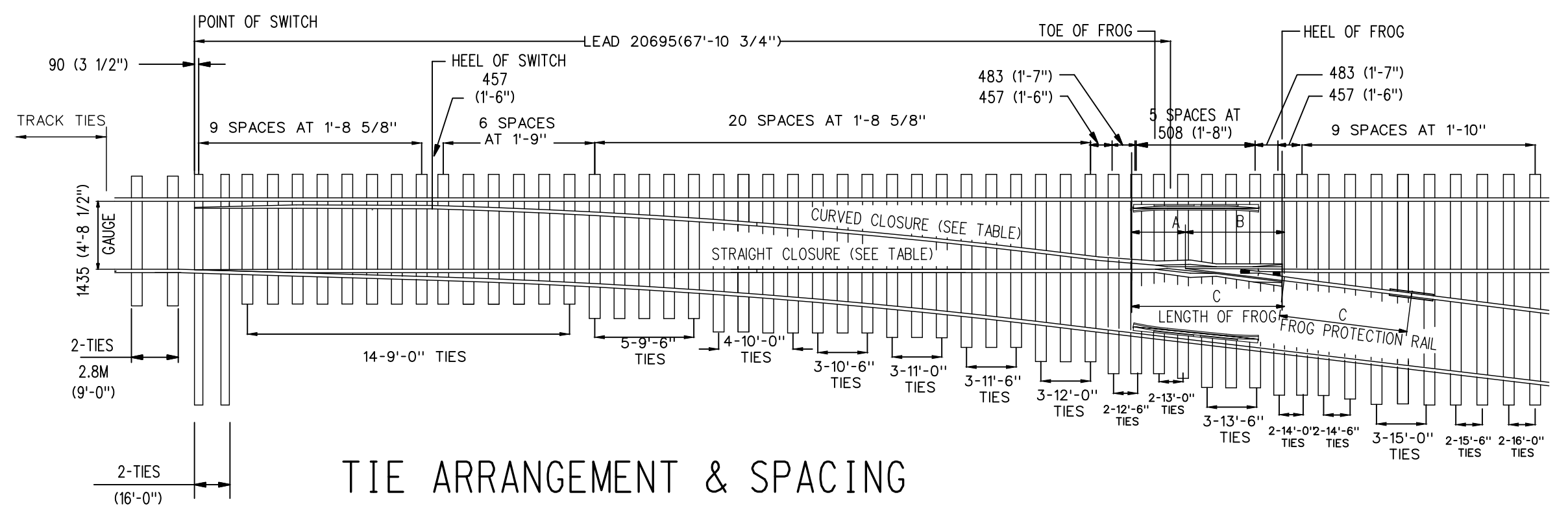


NOTES

- TURNOUT TO BE INSTALLED AND MAINTAINED IN ACCORDING WITH THE LATEST ISSUE OF:
RM.3500 TURNOUTS
RM.3502 POWER, SPRING AND INSTALLED SWITCH
RM.3506 SWITCH STAND, SWITCH LAMPS AND TARGETS, WHERE APPLICABLE
- WHEN REFERRING TO MANUAL TURNOUTS, DRAWING NUMBER MUST BE STATED AS A OR B:
A-RIGHT HAND TURNOUT
B-LEFT HAND TURNOUT
- FOR GENERAL ARRANGEMENT OF SWITCH STAND & COMBINATION SEE GTS-701 AND GTS-702
- FOR THE VARIOUS STANDARD TURNOUT COMBINATIONS SEE INDEX SHEET GTS-0
- TURNOUT GEOMETRY, FOR TABLES OF DIMENSIONS AND OFFSETS SEE GTS-1

METRIC CONVERSION: 1 inch=25.4mm, 1 foot=304.8mm

1	18/07/27	ADDED IMPERIAL TO METRIC CONVERSION NOTE	
No.	Date	Revision	By Approved
Standard		NO. 8 TURNOUT-16'6" POINTS NON-INSTLED R.B.M FROG 100LB. A.R.A.A. RAIL	
Drawn	MG	Checked	GGG
Approved		Vip Engineering & Asset Management	
Date	DEC 15, 2017	Plan Number	GTS-0033
REFERENCE: TS-33 A/B		Rev	1
Sheet 1 OF 1			



TURNOUT DATA:
 FROG NO -----8
 LENGTH OF SW.P.T.-----5029(16'-6'')
 HEEL SPREAD-----159(6 1/4'')
 LEAD-----20695(67'-10 3/4'')
 PS TO H.F.-----23133(75'-10 3/4'')
 14143(46'-4 3/4'') STRAIGHT CLOSURE LENGTH

MADE UP BY A 14143(46'-4 3/4'') RAIL OR:
 A 10058(33') AND 4085(13'-4 3/4'') RAIL
 A 9144(30') AND 4999(16'-4 3/4'') RAIL
 14205(46'-7 1/4'') CURVE CLOSURE LENGTH
 MADE UP BY A 14205(46'-7 1/4'') RAIL OR:
 A 10058(33') AND 4147(13'-7 1/4'') RAIL
 A 9144(30') AND 5061(16'-7 1/4'') RAIL

OFFSET DIAGRAM

BILL OF MATERIALS FOR GTS-0033

ITEM	DESCRIPTION	STANDARD DRAWING	MARK NO.	QUANTITY	
				A	B
SWITCH PACK					
1	1st. GAUGE PLATE	GTS-0520	G301	1	1
2	2nd. GAUGE PLATE	GTS-0520	G305L	-	1
3	2nd. GAUGE PLATE	GTS-0520	G305R	1	-
4	SWITCH ROD	GTS-0340A	340A	1	1
5	RIGHT POINT RAIL	GTS-0340D	340D	1	1
6	LEFT POINT RAIL	GTS-0306A	306A	1	1
7	SWITCH PLATE	GTS-0306B	306B	1	1
8	SWITCH PLATE	GTS-0508	SP300	8	8
9	SWITCH PLATE	GTS-0509	SP301	10	10
10	SWITCH PLATE	GTS-0504	SP123	2	2
11	SWITCH PLATE	GTS-0507	SP151	2	2
12	SWITCH PLATE	GTS-0507	SP152	2	2
13	SWITCH PLATE	GTS-0506	SP153	2	2
14	HOOK TWIN TIE PLATE	GTS-0503	LR27	8	8
15	HOOK TWIN TIE PLATE	GTS-0503	L27	8	8
16	HOOK TWIN TIE PLATE	GTS-0503	LR31	4	4
17	HOOK TWIN TIE PLATE	GTS-0503	L31	4	4
18	HEEL BLOCK (RIGHT HAND)	GTS-0358	16-6&22CP1-S	1	1
19	HEEL BLOCK (LEFT HAND)	GTS-0358	16-6&22CP2-S	1	1
20	BENT SPLICE BAR (4 HOLE) 100 LB. A.R.A.-A.	GTS-1204B	1204B	2	2
21	STRAIGHT SPLICE BAR (4 HOLE) - 100 LB. A.R.A.-A.	GTS-1201	-	1	1
22	SPRING WASHER for 1" DIA. BOLT	GTS-1301	-	8	8
23	1" DIA. 8 NC OVAL NECK TRACK BOLT X 12" LG. C/W SQ. NUT	GTS-13199	-	8	8
24	PIPE THIMBLE - 1" DIA. X 2-1/32" LONG	GTS-03458	B	2	2
25	1/4" COTTER PIN X 2" LG.	-	-	4	4
26	SPRING WASHER for 1/8" DIA. BOLT	GTS-1301	-	4	4
27	1-1/8" DIA. 7 UNC HEX HD. BOLT X 5" LG. C/W HEX NUT	GTS-1311/2	-	4	4
28	ADJUSTABLE RAIL BRACE	GTS-0354	100-M7	12	12
29	7/8" DIA. 9 UNC SQ. HD. BOLT X 3-3/4" LG.	GTS-1308/5	-	24	24
30	SPRING WASHER for 7/8" DIA. BOLT	GTS-1301	-	24	24
31	DOUBLE WASHER	GTS-0354	M-10	12	12
	DOUBLE NUT	GTS-0354	M-9	12	12
FROG					
32	#8-100 LB. RAIL BOUND MANGANESE STEEL FROG	R11C - 164.1	-	1	1
FROG PACK					
33	HOOK TWIN TIE PLATE	GTS-0503	L23	9	9
34	HOOK TWIN TIE PLATE	GTS-0503	LR27	2	2
35	HOOK TWIN TIE PLATE	GTS-0503	L27	5	5
36	HOOK TWIN TIE PLATE	GTS-0503	LR23J	2	2
37	HOOK TWIN TIE PLATE	GTS-0503	L23J	2	2
38	HOOK TWIN TIE PLATE	GTS-0503	LR27J	2	2
39	HOOK TWIN TIE PLATE	GTS-0503	L27J	2	2
40	STRAIGHT SPLICE BAR (4 HOLE) - 100 LB. A.R.A.-A.	GTS-1201	-	8	8
41	SPRING WASHER for 1" DIA. BOLT	GTS-1301	-	16	16
42	111" DIA. - 8 NC OVAL NECK TRACK BOLT X 5-5/8" LG. C/W SQ. NUT	GTS-1319/1	-	16	16
GUARD RAIL PACK					
43	FROG GUARD RAIL 11' - 0" LONG	GTS-1106	-	2	2
44	HOOK TWIN TIE PLATE	GTS-0503	L23	28	28
45	SPRING WASHER for 1-1/4" DIA BOLT	GTS-1301	-	10	10
46	1-1/4" DIA. 7 UNC SQ. HD. BOLT X 9" LG. C/W SQ. NUT	GTS-1309/67	-	2	2
47	1-1/4" DIA. 7 UNC SQ. HD. BOLT X 9-1/2" LG. C/W SQ. NUT	GTS-1309/68	-	4	4
48	1-1/4" DIA. 7 UNC SQ. HD. BOLT X 10-1/2" LG. C/W SQ. NUT	GTS-1309/71	-	4	4
49	HEAD WASHER	GTS-0836L	836L	10	10
50	END CASTING-RIGHT HAND 100 LB. A.R.A.-A.	GTS-0846	CG2-S	2	2
51	END CASTING - LEFT HAND 100 LB. A.R.A.-A.	GTS-0846	CG3-S	2	2
52	TAIL WASHER (BEVELLED)	GTS-0836H	836H	8	8
53	TAIL WASHER (NOT BEVELLED)	GTS-0836M	836M	2	2
54	ADJUSTABLE BLOCK 100 LB. A.R.A.-A.	GTS-0846	CG1-S	4	4
TURNOUT PACKAGES					
TURNOUT NUMBER	DESCRIPTION	QUANTITY PER TURNOUT			
GTS-033A	FROG RBM 8 - 100	1			
	SW-PK 16'-6" HO NO. 8A-100 LBS.	1			
	GR-PK 100 11'-0"	1			
	FR-PK RBM 8-100	1			
GTS-033B	FROG RBM 8 - 100	1			
	SW-PK 16'-6" HO NO. 8B-100 LBS.	1			
	GR-PK 100 11'-0"	1			
	FR-PK RBM 8-100	1			
ABBREVIATIONS					
SW - PK - SWITCH PAK		SAM - SAMSON		SGM - SELF GUARD MANGANESE	
FR - PK - FROG PAK		HO - HAND OPERATED		RBM - RAIL BOUND MANGANESE	
GR - PK - GUARD RAIL PAK		SO - SPRING OPERATED			
INS - INSULATED		PO - POWER OPERATED			
NOTE:					
1 - For a new installation, necessary rail, bonded insulated joints, splice bars, bolts, washers, rail anchors, connecting rod, switch stand, targe and reflectorized target kit may be required in addition to the materials listed above					
BILL OF SWITCH TIES FOR HAND AND SPRING OPERATION 180 X 230 mm (7" X 9")			BILL OF SWITCH FOR POWER OPERATION TIES 180 X 230 mm (7" X 9")		
METRES		LENGTH	NO. OF PIECES	METRES	
FEET/INCHES				LENGTH	
				FEET/INCHES	
				NO. OF PIECES	
2.8	9' - 0"	16	2.8	9' - 0"	14
3.1	10' - 0"	9	3.1	10' - 0"	6
3.4	11' - 0"	6	3.4	11' - 0"	4
3.7	12' - 0"	6	3.7	12' - 0"	3
4	13' - 0"	4	4	13' - 0"	4
4.3	14' - 0"	5	4.3	14' - 0"	3
4.6	15' - 0"	5	4.6	15' - 0"	3
4.9	16' - 0"	6	4.9	16' - 0"	4
TOTAL NUMBER OF TIES - 57			TOTAL NUMBER OF TIES - 41		