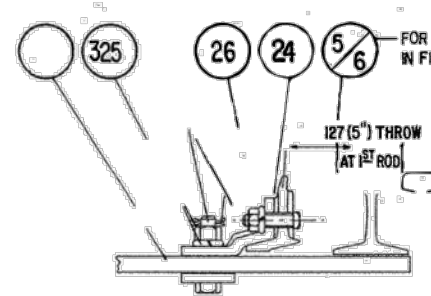
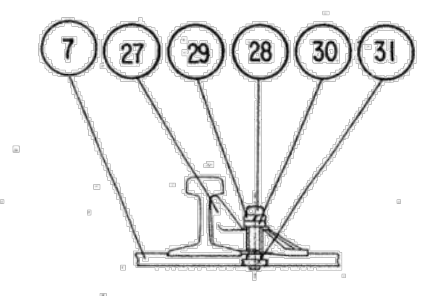


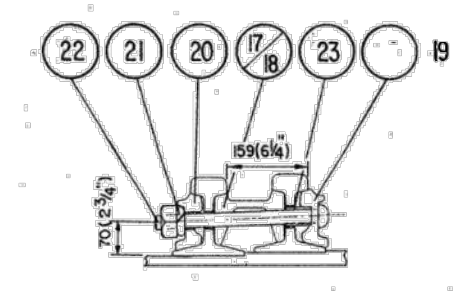
**GENERAL ARRANGEMENT**  
DRAWING NO. TS-35A  
RIGHT HAND TURNOUT



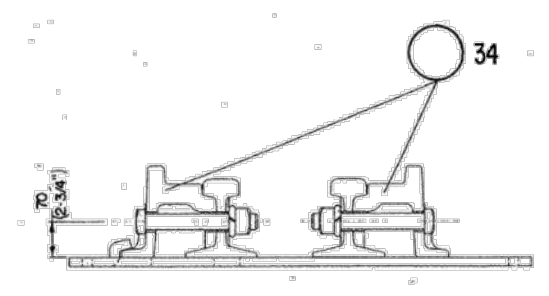
**SWITCH CLIP ASSEMBLY**



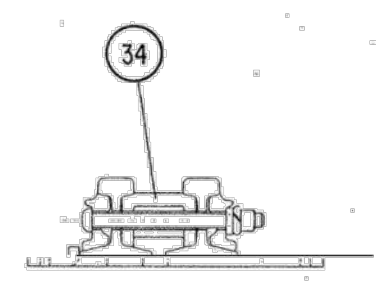
**ADJUSTABLE RAIL BRACE ASSEMBLY**



**HEEL BLOCK ASSEMBLY**

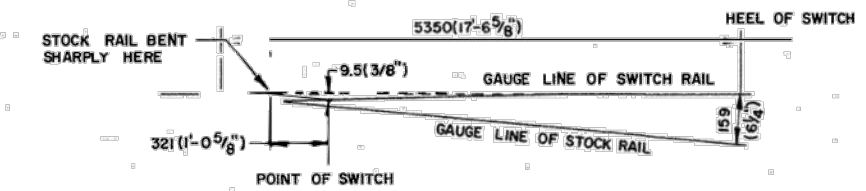


**TOE OF FROG ASSEMBLY**

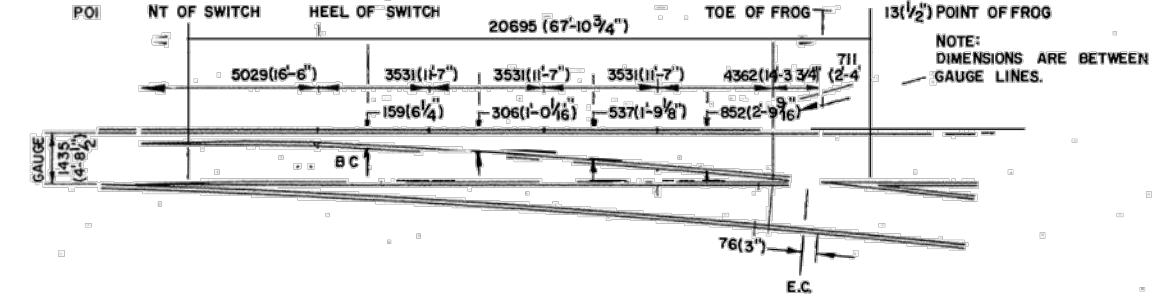


**HEEL OF FROG ASSEMBLY**

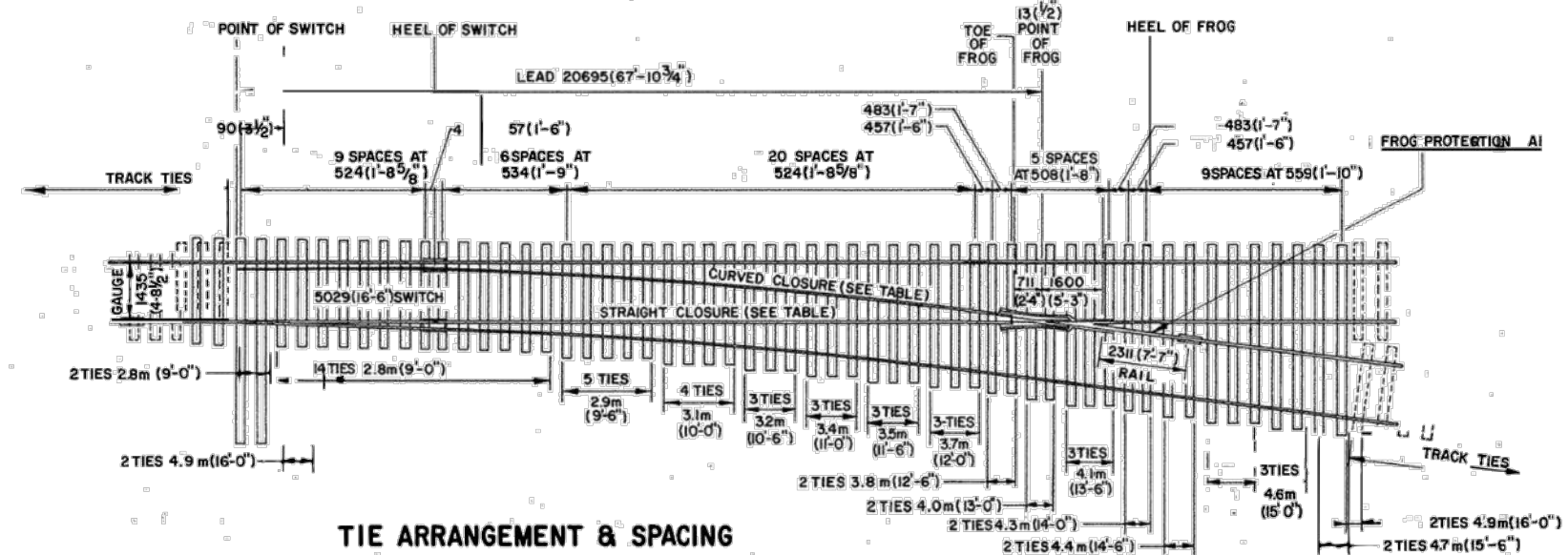
- NOTES:**
- 1- TURNOUT TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE LATEST ISSUE OF:  
SPC. 3500 TURNOUTS  
SPC. 3502 POWER, SPRING AND INSULATED SWITCHES  
SPC. 3506 SWITCH STANDS, SWITCH LAMPS AND TARGETS, WHERE APPLICABLE
  - 2- WHEN REFERRING TO MANUAL TURNOUTS, DRAWING NUMBER MUST BE STATED AS A OR B TO INDICATE:  
A- RIGHT HAND TURNOUT (ILLUSTRATED)  
B- LEFT HAND TURNOUT
  - 3- FOR THE VARIOUS STANDARD TURNOUT COMBINATIONS SEE INDEX SHEET GTS-0000
  - 4- TURNOUT GEOMETRY, FOR TABLES OF DIMENSIONS AND OFFSETS SEE GTS-0001



**STOCK RAIL BENDING DETAIL**



**OFFSET DIAGRAM**



**TIE ARRANGEMENT & SPACING**

**TURNOUT DATA**

FROG NO.	8
LENGTH OF SW. PT.	5029(16'-6)
HEEL SPREAD	159(6'-1/4)
LEAD	20 695(67'-10-3/4)
PS. TO H.F.	22295(73'-1 3/4)

14954(49'-0 3/4) STRAIGHT CLOSURE LENGTH  
MADE UP BY A 14954(49'-0 3/4) RAIL OR:  
A10058(33') & 4896(16'-0 3/4) RAIL  
A 9144(30') & 5810(19'-0 3/4) RAIL

15018(48'-3 1/4) CURVED CLOSURE LENGTH  
MADE UP BY A 15018(48'-3 1/4) RAIL OR:  
A10058(33') & 4960(16'-5 1/4) RAIL  
A 9144(30') & 5874(19'-3 1/4) RAIL

No.	0	Date	17/12/15	Revision	REVISED PDF VERSION ESTABLISHED	By Approved	
Standard NO. 8 TURNOUT-16'6" POINTS S.G.M. FROG-INSULATED 100LB. A.R.A.A. RAIL							
Drawn	MG	Checked	GGG	Approved		VP	Corridor Infrastructure
Date	DEC 15, 2017	Plan Number	GTS-0035	Rev	0		
REFERENCE: TS-035 A/B						Sheet 1 OF 2	



**METROLINX**

**BILL OF MATERIALS FOR GTS-0035**

ITEM	DESCRIPTION	STANDARD DRAWING	MARK NO.	QUANTITY	
				A	B
	<b>SWITCH PACK</b>				
1	1st. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	G301	1	1
2	2nd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	G305L	1	1
	2nd. GAUGE PLATE C/W INSULATION PLATE 100/132	GTS-0521	G305R	-	-
3	SWITCH ROD	GTS-0341A	340A	1	1
4	SWITCH ROD	GTS-03410	3400	1	1
5	RIGHT POINT RAIL	GTS-0306A	306A	1	1
6	LEFT POINT RAIL	GTS-0306B	306B	1	1
7	SWITCH PLATE	GTS-0508	SP300	8	8
8	SWITCH PLATE	GTS-0509	SP301	10	10
9	SWITCH PLATE	GTS-0504	SP123	2	2
10	SWITCH PLATE	GTS-0507	SP151	2	2
11	SWITCH PLATE	GTS-0507	SP152	2	2
12	SWITCH PLATE	GTS-0506	SP153	2	2
13	HOOK TWIN TIE PLATE	GTS-0503	LR27	8	8
14	HOOK TWIN TIE PLATE	GTS-0503	L27	8	8
15	HOOK TWIN TIE PLATE	GTS-0503	LR31	4	4
16	HOOK TWIN TIE PLATE	GTS-0503	L31	4	4
17	HEEL BLOCK (RIGHT HAND)	GTS-0358	16-6&22CP1-S	1	1
18	HEEL BLOCK (LEFT HAND)	GTS-0358	16-6&22CP2-S	1	1
19	BENT SPLICE BAR (4 HOLE) -100LB A.R.A. -A.	GTS-12048	1204B	2	2
20	STRAIGHT SPLICE BAR (4 HOLE) 100 LB. A.R.A. -A.	GTS-1201	-	1	1
21	SPRING WASHER for 1" DIA. BOLT	GTS-1301	-	8	8
22	1" DIA. - B NC OVAL NECK TRACK BOLT X 12" LG. C/W SQ. NUT	GTS-1319/9	-	8	8
23	PIPE THIMBLE 1" DIA. x 2-1/32" LONG	GTS-3458	B	2	2
24	1/4" COTTER PIN X 2" LG.	-	-	4	4
25	SPRING WASHER for 1-1/8" DIA BOLT	GTS-1301	-	4	4
26	1-1/8" DIA. - 7 UNC HEX HD. BOLT X 5" LG. C/W HEX NUT	GTS-1311/2	-	4	4
27	ADJUSTABLE RAIL BRACE	GTS-0354	100M-7	12	12
28	7/8" DIA. - 9 UNC SQ. HD. BOLT X 3-3/4" LG.	GTS-1308/5	-	24	24
29	SPRING WASHER for 7/8" DIA. BOLT	GTS-1301	-	24	24
30	DOUBLE WASHER	GTS-0354	M-10	12	12
31	DOUBLE NUT	GTS-0354	M-9	12	12
32	PANDROL CLIP PR 631A	GTS-1322	-	2	2
33	DOUBLE SPRING WASHER TYPE FE6	GTS-1310	-	16	16
	<b>FROG</b>				
34	#8-100 LB. SELF GUARDED MANGANESE STEEL FROG	R11C-142.1		1	1
	<b>FROG PACK</b>				
35	HOOK TWIN TIE PLATE	GTS-00503	LR23	2	2
36	HOOK TWIN TIE PLATE	GTS-0503	L23	4	4
37	HOOK TWIN TIE PLATE	GTS-0503	LR27	4	4
38	HOOK TWIN TIE PLATE	GTS-0503	L27	4	4
39	HOOK TWIN TIE PLATE	GTS-0503	L23J	2	2
40	HOOK TWIN TIE PLATE	GTS-0503	H23	5	5
41	HOOK TWIN TIE PLATE	GTS-0503	H27	3	3
42	STRAIGHT SPLICE BAR (4 HOLE) - 100 LB. A.R.A.-A.	GTS-1201	-	1	1
	<b>TURNOUT PACKAGES</b>				
<b>TURNOUT NUMBER</b>	<b>DESCRIPTION</b>	<b>QUANTITY PER TURNOUT</b>			
GTS- 035A	FROG SGM NO. 8-100	1			
	SW-PK INS 16-6 HO NO. 8A-100 LBS.	1			
	FR-PK SGM 8-100	1			
GTS- 035B	FROG SGM NO. 8-100	1			
	SW-PK INS 16-6 HO NO. 88-100 LBS.	1			
	FR-PK SGM 8-100	1			
<b>ABBREAVATIONS</b>					
SW - PK - SWITCH PAK		SAM - SAMSON	SGM - SELF		
FR - PK - FROG PAK		GUARD MANGANESE	RBM - RAIL		
GR - PK - GUARD RAIL PAK		HO - HAND OPERATED			
INS - INSULATED		BOUND MANGANESE			
		SO - SPRING OPERATED			
		PO - POWER OPERATED			
NOTE:					
1 - For a new installation, necessary rail, bonded insulated joints, splice bars, bolts, washers, rail anchors, connecting rod, switch stand, large and reflectorized target kit may be required in addition to the materials listed above					
<b>BILL OF SWITCH TIES FOR HAND AND SPRING OPERATION</b>			<b>BILL OF SWITCH FOR POWER OPERATION</b>		
TIES 180 X 230 mm (7" X 9")			TIES 180 X 230 mm (7" X 9")		
LENGTH			LENGTH		
METRES	FEET/INCHES	NO. OF PIECES	METRES	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		