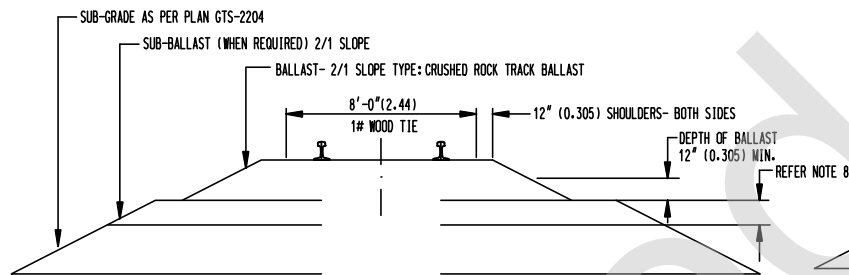


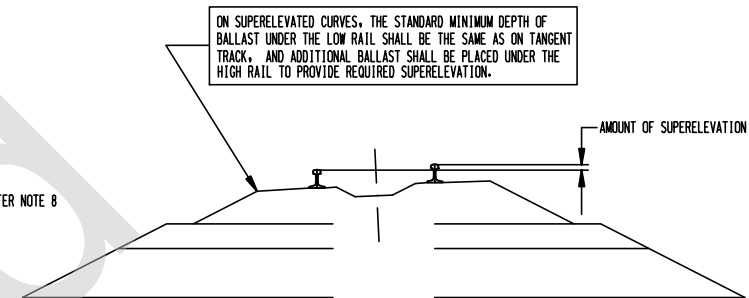
CONCRETE TIE
BALLAST IN CUBIC YARDS PER MILE

TYPE & QUANTITY TIE/MILE	DEPTH OF BALLAST UNDER TIE									
	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
CONCRETE (2640)	1940	2205	2480	2755	3040	3330	3625	3930	4240	4555
WOOD # 1 (3110)	1725	1975	2235	2500	2775	3050	3335	3625	3925	4225



WOOD TIE
BALLAST IN CUBIC METERS PER KILOMETER

TYPE & QUANTITY TIE/KILOMETER	DEPTH OF BALLAST UNDER TIE									
	0.080	0.100	0.130	0.150	0.180	0.200	0.230	0.255	0.280	0.305
CONCRETE (1640)	945	1045	1195	1300	1460	1570	1735	1875	2020	2170
WOOD # 1 (1933)	840	930	1080	1175	1330	1435	1595	1730	1870	2010



BALLAST IN CUBIC YARDS PER 100 FEET AMOUNT OF SUPERELEVATION					
1"	2"	3"	4"	5"	6"
3.09	6.32	9.74	13.30	17.01	20.84

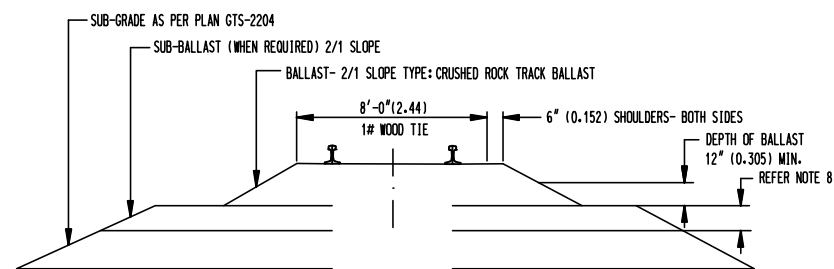
BALLAST IN CUBIC METERS PER 100 METERS AMOUNT OF SUPERELEVATION IN mm					
25	50	75	100	125	150
7.62	15.61	24.01	32.72	41.84	51.34

SUPERELEVATION

NOTES:

- (A) BALLAST SECTIONS SHOWN ON THIS PLAN ARE FOR CONSTRUCTION OF NEW LINES, AND RE-BALLASTING OF EXISTING LINES WHERE AUTHORIZED. BALLAST SECTIONS SHOWN ON THIS PLAN ARE FOR CONSTRUCTION OF NEW LINES, AND RE-BALLASTING OF EXISTING LINES WHERE AUTHORIZED.
- (B) THE TYPE OF BALLAST USED AND THE MANNER IN WHICH IT IS PLACED AND MAINTAINED MUST BE IN ACCORDANCE WITH GO TRANSIT CRUSHED ROCK TRACK BALLAST SPECIFICATION, LATEST ISSUE.
- THE SLOPES SHOWN IN THIS PLAN ARE THE MAXIMUM (STEEPEST) WHICH SHALL BE USED. SLOPES MAY BE FLATTENED TO THE LINE OF REPOSE OF THE MATERIAL, IF NECESSARY, TO ACHIEVE STABILITY.
- ALL BALLAST QUANTITIES SHOWN PROVIDE AN ALLOWANCE OF 15% FOR SHRINKAGE.
- TO AVOID CREATING A RESTRICTED OVERHEAD CLEARANCE OR MAKING AN EXISTING RESTRICTED OVERHEAD CLEARANCE WORSE, A SURVEY SHOULD BE MADE BEFORE UNDERTAKING A BALLAST LIFT. SEE STANDARD PLAN GTS-3003 FOR CLEARANCES AND REGULATIONS.
- SIDINGS ADJACENT TO MAINLINE MUST NOT BE HIGHER THAN MAINLINE OR MORE THAN 3" (0.076) LOWER.
- FOR SPECIFICATION OF:
GO TRANSIT CRUSHED ROCK TRACK BALLAST SPECIFICATION, LATEST ISSUE
- FOR "ENBANKMENT & EXCAVATION" ROADBEDS SEE-PLAN GTS-2204 FOR MAIN TRACKS.
- ON THE HIGH SIDE OF CURVES AT LOCATIONS WHERE APPROVED BY THE CM SENIOR MANAGER OF TRACK AND STRUCTURES, THE SHOULDER WIDTH MAY BE INCREASED TO 18".

WELDED RAIL AREAS



WOOD TIE

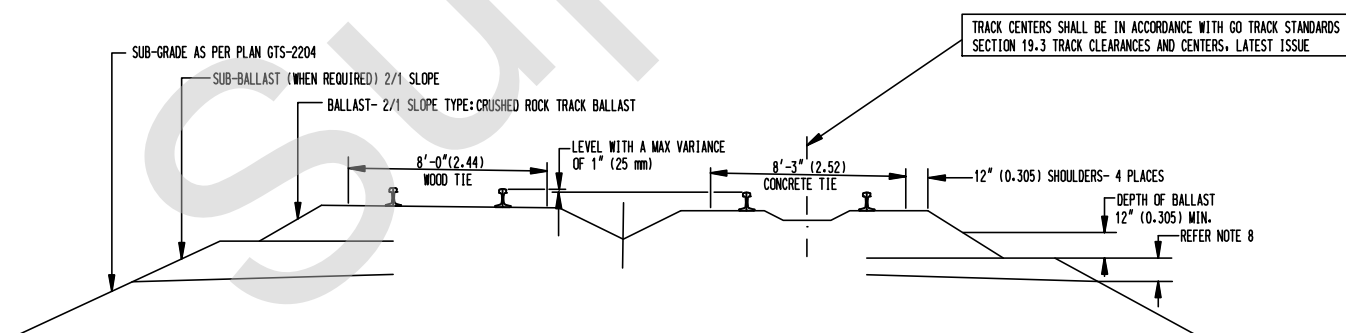
BALLAST IN CUBIC YARDS PER MILE

TYPE & QUANTITY TIE/MILE	DEPTH OF BALLAST UNDER TIE											
	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"		
WOOD # 1 (3110)	1535	1770	2010	2260	2510	2770	3035	3310	3585	3870		

BALLAST IN CUBIC METERS PER KILOMETER

TYPE & QUANTITY TIE/KILOMETER	DEPTH OF BALLAST UNDER TIE									
	0.080	0.100	0.130	0.150	0.180	0.200	0.230	0.255	0.280	0.305
WOOD # 1 (1933)	745	835	970	1060	1205	1300	1450	1575	1705	1840
WOOD # 2 (1933)	690	775	910	1000	1135	1230	1375	1500	1630	1760

JOINTED RAIL AREAS



(BALLAST QUANTITIES FOR TWO TRACKS TO BE TWICE THE QUANTITY OF SINGLE TRACK IN WELDED RAIL AREAS)

TWO MAIN TRACKS
(TANGENT)

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/	TYPICAL BALLAST SECTIONS		
Drawn	GEK	Checked	GWM
Approved	VP Engineering & Asset Management		



Date	SEPT 15/2017	Plan Number	GTS-2205	Rev	1
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REFERENCE: TS-2205	Sheet 1 OF 1
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