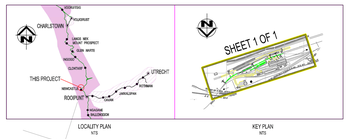


PERWAY QUANTITIES FOR THIS SHEET

1) BUILD 30m OF TRACK (MEASURED FROM MATCH LINE TO MATCH LINE)	
LENGTH OF RAIL	X
NUMBER OF SLEEPERS	X
BALLAST	X
PADS	X
E2005 PANDROL CLIPS	X
ISOLATOR GAUGE ADJUSTING BLOCK	X

CURVE 4	
Radius =	138m
Tangent length =	10.86 m
Deflection Angle =	8°59'59.25"
Circular curve length =	21.68 m
Transition lenght =	0 m
Cant =	0

CURVE 4	Chainage	Y - Co-ordinate	X - Co-ordinate
PI 4		-97 832.46	3 071 899.97
CC 4		-97 832.366	3 071 899.552
BCC 4	0+129.627	-97 842.840	3 071 896.777
ECC 4	0+151.304	-97 821.707	3 071 901.497

CURVE 5	
Radius =	138 m
Tangent length =	22.12 m
Deflection Angle =	18°12'51.30"
Circular curve length =	43.87 m
Transition lenght =	0 m
Cant =	0

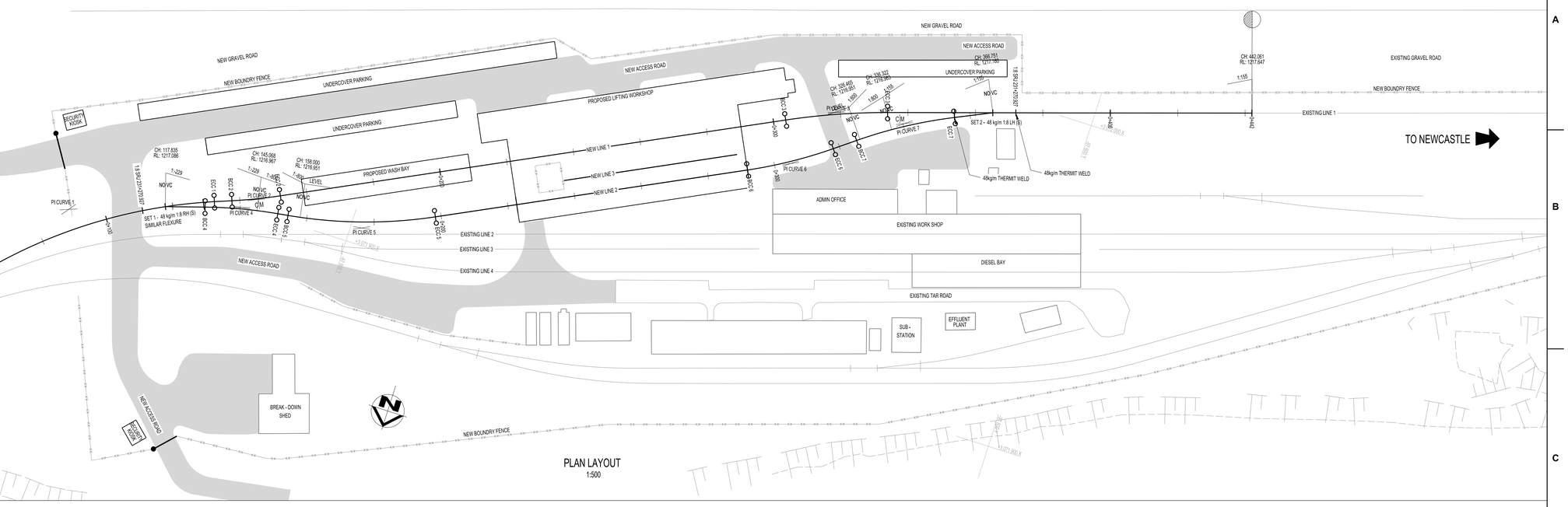
CURVE 5	Chainage	Y - Co-ordinate	X - Co-ordinate
PI 5		-97 796.76	3 071 905.04
CC 5		97 797.285	3 071 903.725
BCC 5	0+154.373	-97 818.666	3 071 907.525
ECC 5	0+198.247	-97 776.932	3 071 914.866

CURVE 6	
Radius =	138 m
Tangent length =	13.15 m
Deflection Angle =	10°53'02.72"
Circular curve length =	25.21 m
Transition lenght =	0 m
Cant =	0

CURVE 6	Chainage	Y - Co-ordinate	X - Co-ordinate
PI 5		-97 681.20	3 071 962.17
CC 6		-97 681.531	3 071 962.699
BCC 6	0+291.887	-97 692.998	3 071 956.342
ECC 6	0+318.102	-97 670.729	3 071 970.115

CURVE 7	
Radius =	138 m
Tangent length =	15.06 m
Deflection Angle =	13°27'10.50"
Circular curve length =	29.99 m
Transition lenght =	0 m
Cant =	0

CURVE 7	Chainage	Y - Co-ordinate	X - Co-ordinate
PI 7		-97 652.89	3 071 983.65
CC 7		-97 652.466	3 071 982.949
BCC 7	0+325.443	-97 664.882	3 071 974.551
ECC 7	0+355.435	-97 639.213	3 071 989.952



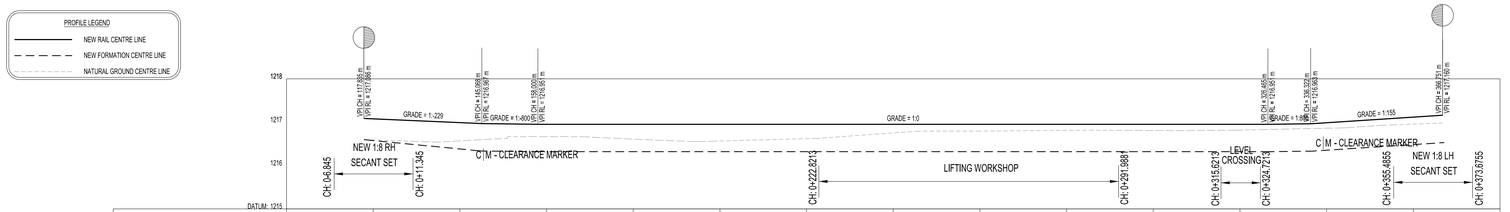
PLAN LEGEND

PERWAY:

- NEW RAIL / EXISTING RAIL
- TURNOUT
- CURVE / TRANSITION POSITION
- C|M CLEARANCE MARKER
- GRADE POST
- KILO POST
- BENCH MARK
- OHTE / EXISTING MAST POLE
- EXISTING MAST POLE WITH STAY
- EXISTING TRANSNET BOUNDARY
- NEW TRANSNET BOUNDARY
- EXISTING TAR ROAD
- RAIL AND SETS TO BE REMOVED
- NEW U - DRAIN
- NEW SUBSOIL DRAIN
- NEW MAINTENANCE ROAD

PROFILE LEGEND

- NEW RAIL CENTRE LINE
- NEW FORMATION CENTRE LINE
- NATURAL GROUND CENTRE LINE



CHAINAGE (km)	0+100	0+120	0+140	0+160	0+180	0+200	0+220	0+240	0+260	0+280	0+300	0+320	0+340	0+360	0+380
GROUND LEVEL (m)		1216.989	1216.989	1216.666	1216.609	1216.566	1216.619	1216.753	1216.784	1216.810	1216.807	1216.818	1216.880	1216.955	
RAIL LEVEL - CENTRE (m)		1217.077	1216.988	1216.951	1216.951	1216.951	1216.951	1216.951	1216.951	1216.951	1216.951	1216.951	1216.987	1217.118	
FORMATION LEVEL - LEFT (m)		1216.685	1216.482	1216.429	1216.429	1216.429	1216.429	1216.429	1216.429	1216.429	1216.429	1216.429	1216.484	1216.593	
FORMATION LEVEL - CENTRE (m)		1216.575	1216.392	1216.319	1216.319	1216.319	1216.319	1216.319	1216.319	1216.319	1216.319	1216.319	1216.384	1216.483	
FORMATION LEVEL - RIGHT (m)		1216.465	1216.272	1216.209	1216.209	1216.209	1216.209	1216.209	1216.209	1216.209	1216.209	1216.209	1216.344	1216.373	
FILL HEIGHT (m)															
CUT DEPTH (m)		-0.014	-0.107	-0.347	-0.060	-0.247	-0.300	-0.424	-0.475	-0.491	-0.488	-0.499	-0.606	-0.472	
HORIZONTAL ALIGNMENT		L = 11.79m	L = 3.07m	R = -138m L=43.87m		L = 93.64m					R = -139m L=26.21m	L = 7.34m		L = 11.32m	

LONGITUDINAL SECTION

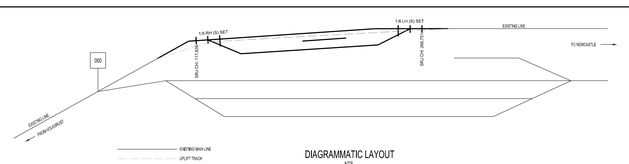
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:50

NOTES

1. DO NOT SCALE DRAWING - ONLY DIMENSIONS SHOWN TO BE USED.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND LEVELS ON THE SITE AND NOTIFY THE NEC SUPERVISOR OF ANY VARIATIONS BEFORE CONSTRUCTION.

SPECIFICATIONS:

1. N2 - CLASS RAILWAY LINE
2. 20 t/axle LOADING
3. DISTRIBUTED POWER TRAINS
4. DESIGN SPEED X KM/H
5. 48 kg/m 1:8 SECANT SETS
6. 48 kg/m TYPE RAILS
7. CWR JOINTS
8. P2 TYPE SLEEPERS AND FASTENERS AT 700mm SPACING
9. 1200m³/km BALLAST (MIN 200mm UNDER SLEEPER)



DRAWING NO.	REFERENCE

REFERENCE DRAWINGS

NO.	DESCRIPTION	BY	CHKD	APPD	DATE
.1	ISSUED FOR INTERNAL REVIEW	HD	RN		04/07/2018

REVISIONS

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CONTRACTOR / CONSULTANT				
TITLE	NAME	SIGN	DATE	
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OPERATING DIVISIONS				
TITLE	NAME	SIGN	DATE	
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TRANSNET CAPITAL PROJECTS			
TITLE	NAME	SIGN	DATE
DRAWN	HD vd W		03 07 18
CHECKED	RN		03 07 18
DESIGNED	HD vd W		03 07 18
CHECKED	RN		03 07 18
.	.		. . .
.	.		. . .

Pr. Eng. / Pr.Tech. Eng.

NAME	RUBEN NAIDOO	DATE
SIGNATURE		03 07 18
REG. NUMBER	1010702 16	
SCALE :	AS SHOWN	A0

Transnet Capital Projects
TRANSNET LTD. (TRADING AS TRANSNET CAPITAL PROJECTS) | REG. NO. 1990/000990/06
237 MAHATMA GANDHI ROAD
DURBAN
P.O. BOX 1073, DURBAN
TEL: 031 361 1696
FAX: 0866 770815

VOLKSRUST - NEWCASTLE

NEWCASTLE LOCOMOTIVE DEPOT LAYOUT AND LONG SECTION PROPOSED LINE 2 Ch 000+118 to Ch 000+367

PROJECT NUMBER	OO	FBS	DB	TYPE	DRAWING NO.	SHEET	REV	ID
3 5 2 6 7 8 3 5	1	0 0	P	L A	0 0 0 1	0 2	. 1	HD