

TRANSITION DETAILS

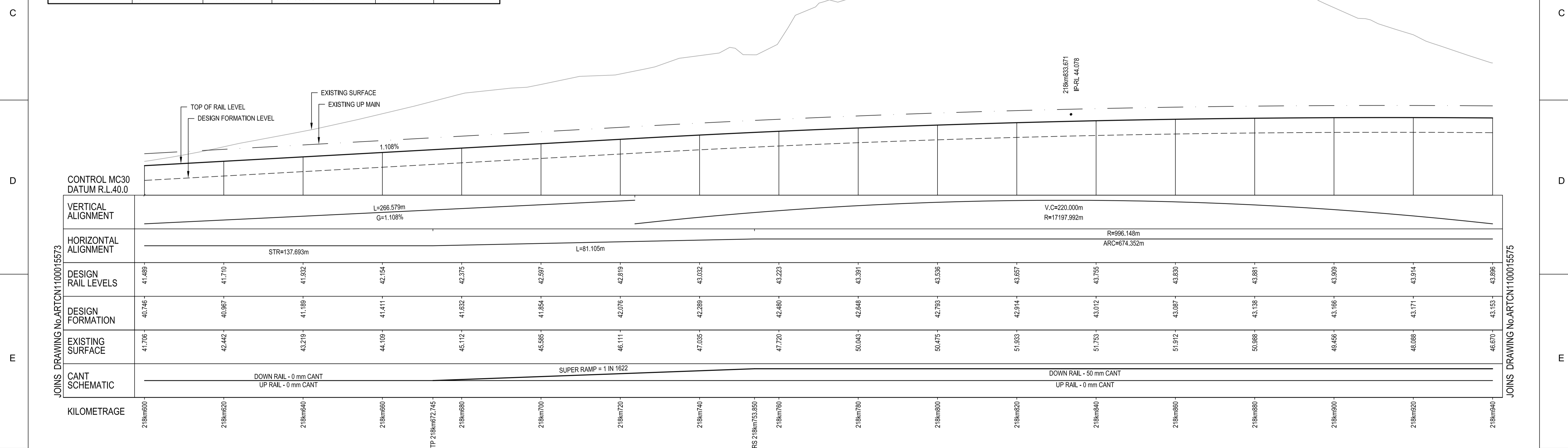
RADIUS:	996.148m
LENGTH:	81.105m
V:	60km/h (HH)
Xc:	81.092m
Doc:	2mm/sec
M:	2.068 x 10 ⁻³

CIRCULAR CURVE DETAILS

RADIUS:	996.148m
ARC:	674.352m
V:	60km/h (HH)
Ea:	50mm
D:	-7mm
⊙	E 328694.351
N	1385323.744

SCHEDULE OF COORDINATED ALIGNMENT POINTS

RADIUS	POINT	KM	CENTRELINE	EASTING	NORTHING
	TP	218km535.052	PROPOSED UP RELIEF	329470.584	1384674.078
	TP	218km672.745	PROPOSED UP RELIEF	329365.003	1384585.691
	TRS	218km753.850	PROPOSED UP RELIEF	329302.115	1384534.483
996.148 RIGHT	CENTRE		PROPOSED UP RELIEF	328694.351	1385323.744
	CTP	219km428.203	PROPOSED UP RELIEF	328673.677	1384327.811



LONGITUDINAL SECTION
SCALE 1:500(H) 1:100(V)

- NOTES:**
- FOR GENERAL NOTES REFER TO DRG No. ARTCN100015507.
 - INDICATED TRAIN SPEEDS USED IN CALCULATIONS REFER TO MODELLED TRAIN SPEEDS. FREIGHT, PASSENGER AND XPT MAXIMUM SPEEDS COMPLY AT HIGHER RATES OF CHANGE.

FOR CONSTRUCTION

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Used on / Next higher assembly:
H8R-DWG-S2G-TRA-2574

Alternate DMS number:

ARTC APPROVAL	Approved By				
Signed:					
Approval Date	06.08.10	ISSUED FOR CONSTRUCTION			
Rev	Date	Revision Description	Drawn	Checked	Approved
			D.J.C	T.L.*	G.W.*

Designing Company:
GHD
GHD Job Number:
22-14630

Address:
Level 3 GHD Tower, 24 Honeysuckle Drive
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Drawn
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T.LYONS*

Approved
G.WICKENS*
Date
06/08/2010

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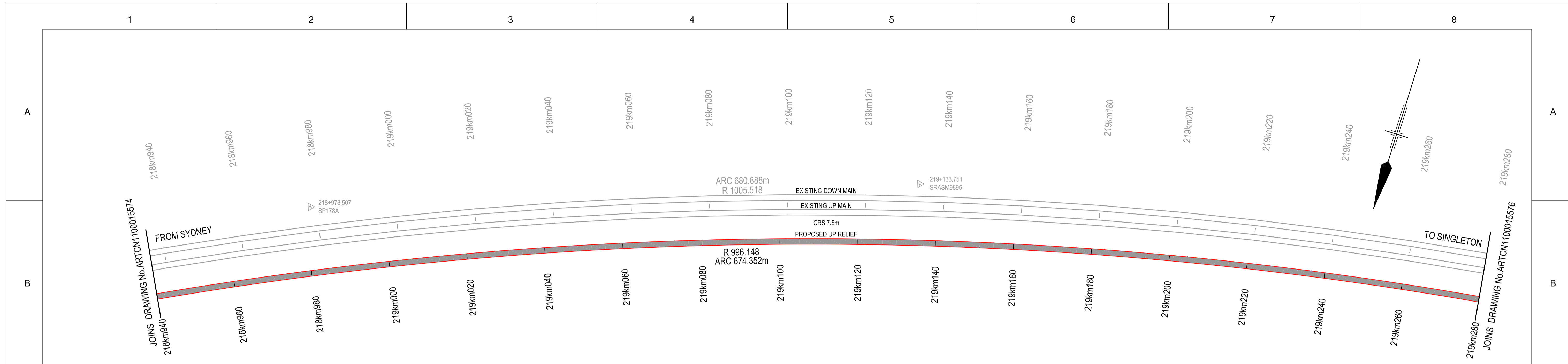
ARTC DWG NUMBER **0**

ARTCN100015574

MAITLAND TO MINIMBAH - THIRD TRACK
TRACK ALIGNMENT - UP RELIEF (PROP)
218km600 TO 218km940

Sheet No.
50 of 67
Scale (A1):
1:500(H) 1:100(V)

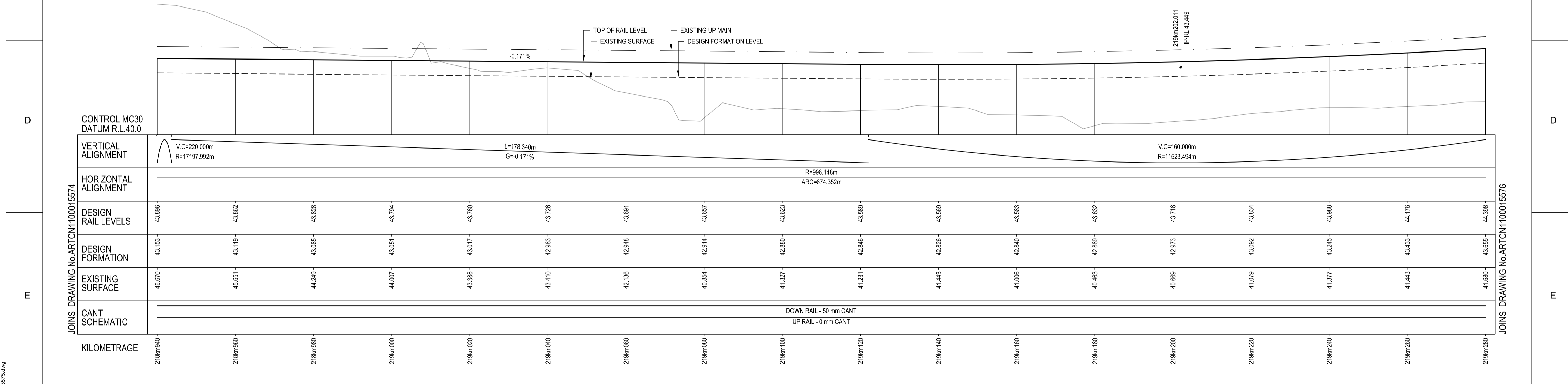
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SCHEDULE OF COORDINATED ALIGNMENT POINTS					
RADIUS	POINT	KM	CENTRELINE	EASTING	NORTHING
	TRS	218km753.850	PROPOSED UP RELIEF	329302.115	1384534.483
996.148 RIGHT	CENTRE		PROPOSED UP RELIEF	328694.351	1385323.744
	CTP	219km428.203	PROPOSED UP RELIEF	328673.677	1384327.811

CIRCULAR CURVE DETAILS	
RADIUS:	996.148m
ARC:	674.352m
V:	60km/h (FH)
E:	50mm
P:	-7mm
E	328694.351
N	1385323.744

PLAN
SCALE 1:500



LONGITUDINAL SECTION
SCALE 1:500(H) 1:100(V)

NOTES:

- FOR GENERAL NOTES REFER TO DRG No. ARTCN100015507.
- INDICATED TRAIN SPEEDS USED IN CALCULATIONS REFER TO MODELLED TRAIN SPEEDS. FREIGHT, PASSENGER AND XPT MAXIMUM SPEEDS COMPLY AT HIGHER RATES OF CHANGE.

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Alternate DMS number:	

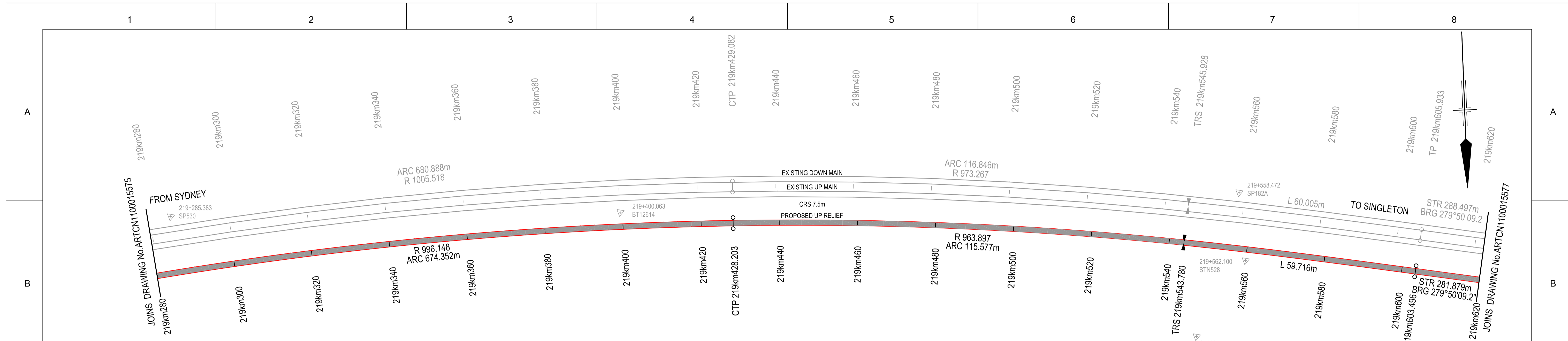
Rev	Date	Revision Description	Drawn	Checked	Approved
0	06.08.10	ISSUED FOR CONSTRUCTION	D.J.C	T.L*	G.W*

Designing Company: GHD GHD Job Number: 22-14630	Address: Level 3 GHD Tower, 24 Honeysuckle Drive Newcastle NSW 2300 Australia F 61 2 4941 2796 W www.hunteralliance.com.au
Drawn D.CRANE	Designed V.ALEX
Drafting Check P.TOBIN*	Design Check T.LYONS*
Approved G.WICKENS*	Date 06/08/2010

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ARTC DWG NUMBER	0
ARTCN100015575	
MAITLAND TO MINIMBAH - THIRD TRACK TRACK ALIGNMENT - UP RELIEF (PROP) 218km940 TO 219km280	
Sheet No.	51 of 67
Scale (A1): 1:500(H) 1:100(V)	

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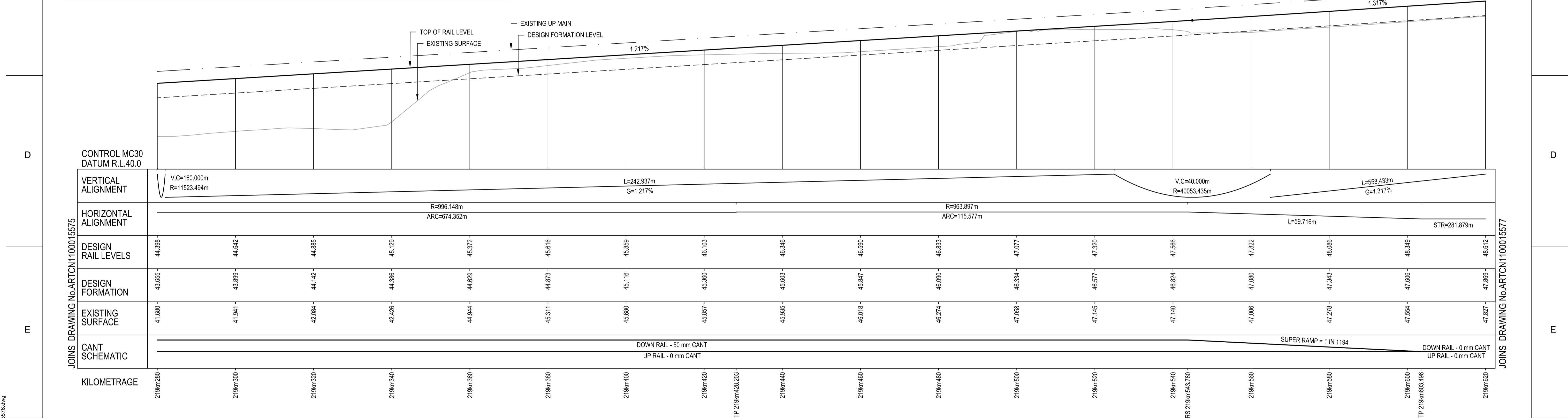
SCHEDULE OF COORDINATED ALIGNMENT POINTS					
RADIUS	POINT	KM	CENTRELINE	EASTING	NORTHING
996.148 RIGHT	TRS	218km753.850	PROPOSED UP RELIEF	329302.115	1384534.483
	CENTRE		PROPOSED UP RELIEF	328894.351	1385323.744
	CTP	219km428.203	PROPOSED UP RELIEF	328673.677	1384327.811
963.897 RIGHT	CENTRE		PROPOSED UP RELIEF	328893.682	1385291.500
	TRS	219km543.780	PROPOSED UP RELIEF	328558.546	1384337.123
	TP	219km603.496	PROPOSED UP RELIEF	328499.608	1384346.715
	TP	219km886.876	PROPOSED UP RELIEF	328221.872	1384394.867

CIRCULAR CURVE DETAILS	
RADIUS:	996.148m
ARC:	674.352m
V:	60km/h (HH)
Ea:	50mm
D:	-7mm
E	328894.351
N	1385323.744

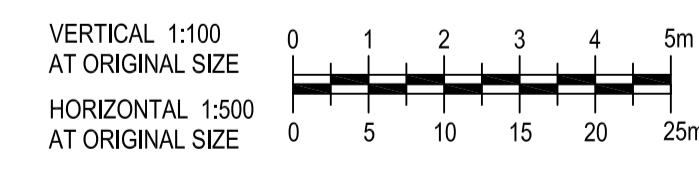
PLAN
SCALE 1:500

CIRCULAR CURVE DETAILS	
RADIUS:	963.897m
ARC:	115.577m
V:	60km/h (HH)
Ea:	50mm
D:	-6mm
E	328893.682
N	1385291.500

TRANSITION DETAILS	
RADIUS:	963.897m
LENGTH:	59.716m
V:	60km/h (HH)
Xc:	59.710m
Drcc:	2mm/sec
M:	2.900 x 10 ⁻³



LONGITUDINAL SECTION
SCALE 1:500(H) 1:100(V)



LEGEND	
	PROPOSED TRACKWORK
	EXISTING TRACK
	EXISTING TRACK TO BE REMOVED
	PROPOSED TRACKWORK

- NOTES:
- FOR GENERAL NOTES REFER TO DRG No. ARTCN1100015507.
 - INDICATED TRAIN SPEEDS USED IN CALCULATIONS REFER TO MODELLED TRAIN SPEEDS. FREIGHT, PASSENGER AND XPT MAXIMUM SPEEDS COMPLY AT HIGHER RATES OF CHANGE.

FOR CONSTRUCTION

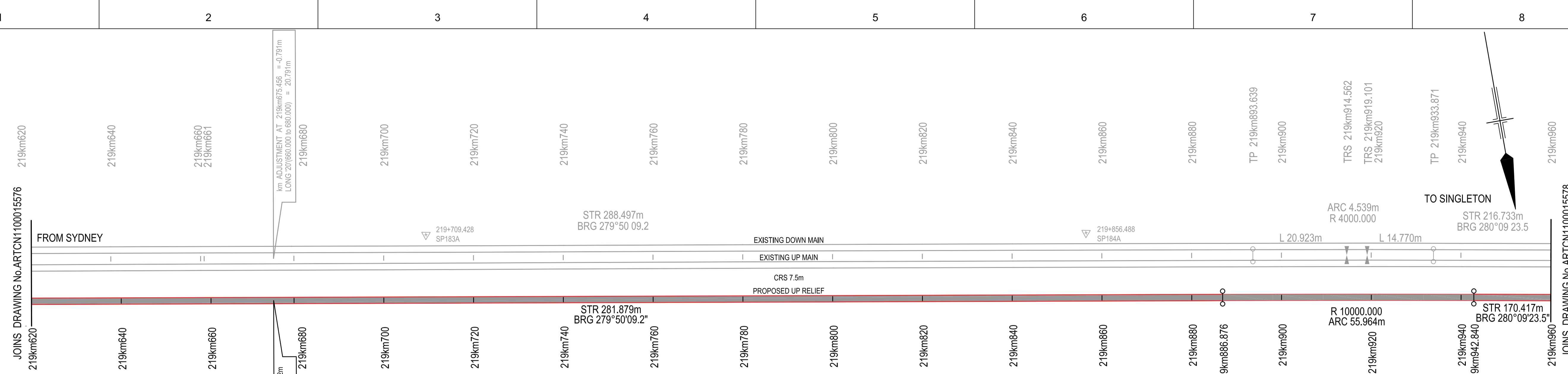
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Used on / Next higher assembly:	H8R-DWG-S2G-TRA-2576
Alternate DMS number:	

ARTC APPROVAL	Approved By				
Signed:					
Approval Date	06.08.10	ISSUED FOR CONSTRUCTION	D.J.C	T.L*	G.W*
Rev	Date	Revision Description	Drawn	Checked	Approved

Designing Company:	GHD	Address:	Level 3 GHD Tower, 24 Honeysuckle Drive Newcastle NSW 2300 Australia F 61 2 4941 2796 W www.hunter8alliance.com.au
GHD Job Number:	22-14630	Drawn:	D.CRANE
		Designed:	V.ALEX
		Drafting Check:	P.TOBIN*
		Design Check:	T.LYONS*
Approved:	G.WICKENS*	Conditions of Use: This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.	
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		ARTC DWG NUMBER	0
ARTCN1100015576			
MAITLAND TO MINIMBAH - THIRD TRACK TRACK ALIGNMENT - UP RELIEF (PROP) 219km280 TO 219km620			Sheet No. 52 of 67 Scale (A1): 1:500(H) 1:100(V)

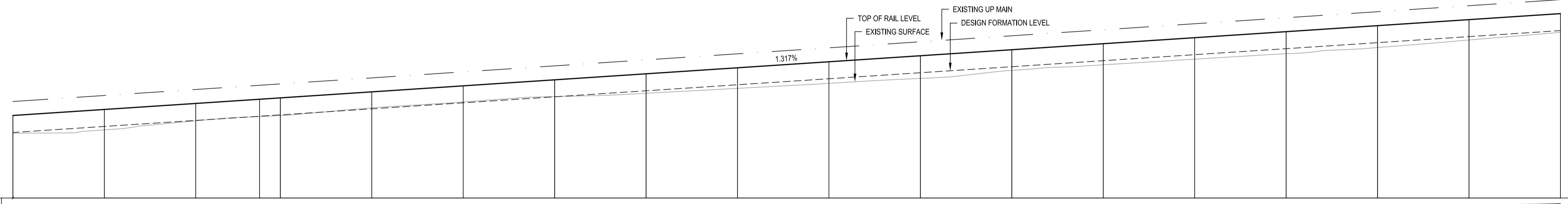
PLOT DATE: 06 August 2010 4:02 PM PLOTTED BY: DCR42
GHD FILE PATH: G:\22\14630\Drawings\08\ARTCN1100015576.dwg



PLAN
SCALE 1:500

SCHEDULE OF COORDINATED ALIGNMENT POINTS					
RADIUS	POINT	KM	CENTRELINE	EASTING	NORTHING
	TP	219km603.496	PROPOSED UP RELIEF	328499.608	1384346.715
	TP	219km886.876	PROPOSED UP RELIEF	328221.872	1384394.867
10000.000 RIGHT	CENTRE		PROPOSED UP RELIEF	329930.142	1394247.878
	TP	219km942.840	PROPOSED UP RELIEF	328166.758	1384404.582
	TP	220km113.258	PROPOSED UP RELIEF	327999.011	1384434.633

CIRCULAR CURVE DETAILS	
RADIUS:	10000.000m
ARC:	55.964m
V:	60km/h (HH)
Ea:	0mm
D:	4mm
	E 329930.142
	N 1394247.878



VERTICAL ALIGNMENT	L=558.433m G=1.317%	
	EXISTING SURFACE	DESIGN FORMATION LEVEL
HORIZONTAL ALIGNMENT	STR=281.879m	
DESIGN RAIL LEVELS	R=10000.000m ARC=55.964m	
DESIGN FORMATION	STR=170.417m	
EXISTING SURFACE		
CANT SCHEMATIC	DOWN RAIL - 0 mm CANT UP RAIL - 0 mm CANT	

KILOMETRAGE	219km620	219km640	219km660	219km675	219km680	219km700	219km720	219km740	219km760	219km780	219km800	219km820	219km840	219km860	219km880	219km900	219km920	219km940	219km960
VERTICAL ALIGNMENT	48.612	48.876	49.139	49.323	49.383	49.647	49.910	50.173	50.437	50.700	50.964	51.227	51.491	51.754	52.018	52.281	52.545	52.808	53.072
DESIGN RAIL LEVELS	47.869	48.133	48.396	48.580	48.640	48.904	49.167	49.430	49.694	49.957	50.221	50.484	50.748	51.011	51.275	51.538	51.802	52.065	52.329
EXISTING SURFACE	47.827	47.982	48.380	48.566	48.606	48.949	49.205	49.439	49.585	49.800	50.020	50.238	50.487	50.831	51.077	51.318	51.587	51.919	52.251

LONGITUDINAL SECTION
SCALE 1:500(H) 1:100(V)

- NOTES:**
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Alternate DMS number:

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Signed:					
Approval Date	06.08.10	ISSUED FOR CONSTRUCTION	D.J.C.	T.L.*	G.W.*
Rev	Date	Revision Description	Drawn	Checked	Approved

Designing Company:
GHD
GHD Job Number:
22-14630

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Drawn:
D.CRANE

Designed:
V.ALEX

Drafting Check:
P.TOBIN*

Design Check:
T.LYONS*

Approved:
G.WICKENS*

Date:
06/08/2010

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ARTC DWG NUMBER: 0

ARTCN1100015577

MAITLAND TO MINIMBAH - THIRD TRACK
TRACK ALIGNMENT - UP RELIEF (PROP)
219km620 TO 219km960

Sheet No.
53 of 67
Scale (A1):
1:500(H) 1:100(V)

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