

Nerang Trail Audit Report - Remediation Works List

3-Jan-19

Waypoint Information			Trail Information		Remediations Works		
No.	Latitude	Longitude	No.	Trail Name	Description of Remediations Works	Type	Quantity
647	45.151218	153.335947	2A	Petes Extension	2m gap jump - warning signage	Signage	1
677	105.800713	153.331777	2B	Petes	Link trail needs start/finish sign	Signage	1
687	104.447769	153.331078	4	Mongrels	Mongrel link needs start/finish sign	Signage	1
4316	38.619736	153.331975	5	Three Hills	Dual line lowside needs drainage	Drainage	2
4414	40.868431	153.33138	5	Three Hills	Trail braiding with small jumps needing repair	Rebuild TTF	2
4713	42.538624	153.326431	9B / 10	Roys / Barneys	Junction	Signage	1
4813	26.116606	153.323977	9B / 9C	Roys / Rainforest	Junction	Signage	5
4613	50.852272	153.329874	11	Exit Track (Upper Happy Valley)	Sign fork	Signage	1
598	20.76079	153.324222	11	Exit Track (Upper Happy Valley)	Bad erosion consider realignment	Realignment	5
608	15.293004	153.325729	11	Exit Track (Upper Happy Valley)	Steep gully crossing - realignment	Realignment	20
5112	12.185884	153.322987	13	Happy Valley (Blue)	Erosion corner	Drainage	2
5212	21.264647	153.323487	13	Happy Valley (Blue)	Fork sign	Signage	1
5310	13.501512	153.321836	13	Happy Valley (Blue)	Eroded gully	Drainage	3
549	11.793995	153.321858	13	Happy Valley (Blue)	Log bridge	Rock Armouring	3
559	14.770485	153.321126	13	Happy Valley (Blue)	Replace bridge 3m	Rock Armouring	3
569	21.4326	153.319879	13	Happy Valley (Blue)	3m bridge to be replaced by rock armouring	Rock Armouring	3
579	27.012354	153.319368	13	Happy Valley (Blue)	Eroded gully - remove log drop	Remove Structure	1
589	27.348259	153.31917	13	Happy Valley (Blue)	Heavily eroded section beyond repair	Realignment	10
4913	14.733163	153.321679	14	Happy Valley to Fire Road	Fork sign fallen tree	Signage	1
707	112.145584	153.323046	18A	Baileys (A)	Rocky root section between trees to be armoured	Rock Armouring	3
717	114.842155	153.322691	18A	Baileys (A)	Road link too close to existing fireroad	Close & Rehabilitate	5
727	88.296341	153.320098	18A	Baileys (A)	Road link requires signage	Signage	1
737	88.884171	153.320107	18A	Baileys (A)	Road link requires signage	Signage	1
757	84.069534	153.31836	18A	Baileys (A)	Heavy erosion at 3 way junction	Rock Armouring	10
767	91.459442	153.317915	18B	Baileys (B)	Road link requires signage	Signage	1
777	92.196564	153.317449	18B	Baileys (B)	Eroded section 6m to be realigned	Realignment	10
787	97.50573	153.316996	18B	Baileys (B)	End eroded section realignment	Realignment	10
797	98.532104	153.316771	18B	Baileys (B)	Realignment required	Realignment	15
816	108.441299	153.316495	18B	Baileys (B)	End steep 25m section / realignment	Realignment	35
826	119.04097	153.315625	18B	Baileys (B)	Timber gully crossing 3m to be rock armoured	Rock Armouring	3
836	121.681557	153.315359	18B	Baileys (B)	Eroded section to be realigned	Realignment	10
846	123.734306	153.31526	18B	Baileys (B)	Realign to ridge with switchbacks	Realignment	30
856	123.640999	153.315263	18B	Baileys (B)	Junction requires signage	Signage	2
874	120.963089	153.314309	18B	Baileys (B)	Timber bridge 3m to be replaced with armouring	Rock Armouring	3
105	148.395325	153.300149	21	Never Ending Story	Old bridge gully crossing to be armoured	Rock Armouring	3
202	162.839233	153.299703	21	Never Ending Story	Remove timber feature	Remove Structure	1
203	155.244049	153.299474	21	Never Ending Story	Remove large fallen tree and timber work	Remove Structure	2
204	171.031586	153.299979	21	Never Ending Story	Remove log	Remove Structure	1
205	176.079483	153.300795	21	Never Ending Story	5 grade reversals	Drainage	5
206	177.66571	153.300829	21	Never Ending Story	Potential realignment around tree	Realignment	5
207	169.566666	153.30127	21	Never Ending Story	Realignment to avoid 6m bridge	Realignment	20
208	146.715805	153.302847	21	Never Ending Story	Major realignment to avoid 7m bridge	Realignment	30
209	145.81073	153.303704	21	Never Ending Story	Remove logs	Remove Structure	1
210	130.862961	153.305508	21	Never Ending Story	Road entry	Signage	1
193	146.762451	153.30048	22	Super Loop	5m bridge to be replaced with realignment	Realignment	10
195	143.776627	153.298753	22	Super Loop	5 grade reversals	Drainage	5
196	138.663406	153.29858	22	Super Loop	Remove logs	Remove Structure	1
197	144.131195	153.299143	22	Super Loop	Remove logs	Remove Structure	1
198	146.081314	153.299259	22	Super Loop	Remove logs	Remove Structure	1
199	151.231857	153.299507	22	Super Loop	Steep gully crossing to be realigned	Realignment	20
200	150.634689	153.299396	22	Super Loop	Remove logs	Remove Structure	1
201	157.539398	153.299028	22	Super Loop	Remove logs	Remove Structure	1
211	101.835175	153.307964	22	Super Loop	Realignment to avoid 5m bridge	Realignment	15
212	90.638344	153.306521	22	Super Loop	Remove logs	Remove Structure	1
213	82.184738	153.304628	22	Super Loop	Realign or 3 grade reversals	Drainage	3
214	83.080482	153.304963	22	Super Loop	Severe erosion consider realignment	Realignment	10
215	85.329178	153.30498	22	Super Loop	5 grade reversals / rollers	Drainage	5
216	93.764122	153.304731	22	Super Loop	Start realignment to avoid heavily eroded section	Realignment	25
217	99.707771	153.304394	22	Super Loop	Finish realignment to avoid heavily eroded section	Realignment	25
218	110.074173	153.303747	22	Super Loop	Channeling - install 3 drains	Drainage	3
884	121.924149	153.30908	22	Super Loop	Remove logs	Remove Structure	1
219	105.576782	153.300865	24	Skrood	Remove logs	Remove Structure	1
226	90.405075	153.301945	24	Skrood	Remove logs	Remove Structure	1
227	94.529243	153.302344	24	Skrood	Remove logs	Remove Structure	1
143	90.666336	153.300637	25	Avatar	Trail junction requires signage	Signage	1
144	88.75354	153.3013	25	Avatar	5m bridge to be replaced with realignment	Realignment	10
146	73.703133	153.30691	25	Avatar	Remove logs	Remove Structure	1
220	108.441299	153.300599	25	Avatar	Remove log and timber	Remove Structure	2
221	110.932594	153.300355	25	Avatar	Remove collapsed bridge	Remove Structure	1
222	118.882347	153.299541	25	Avatar	Rebench and install 2 drains	Drainage	2
223	121.625572	153.298188	25	Avatar	Cut log back	Remove Structure	1
224	124.303474	153.298459	25	Avatar	Remove logs	Remove Structure	1

225	90.852951	153.300755	25	Avatar	Realignment to avoid 6m bridge	Realignment	50
123	160.151993	153.296958	26	Terminator	Remove logs	Remove Structure	1
124	164.248169	153.296149	26	Terminator	5m paving to protect root	Rock Armouring	5
125	167.756516	153.295674	26	Terminator	5m paving to protect root	Rock Armouring	5
126	172.515167	153.295501	26	Terminator	3m paving at gully crossing	Rock Armouring	3
127	189.991547	153.294935	26	Terminator	Remove logs	Remove Structure	1
128	217.526428	153.2916	26	Terminator	Realign and add 3 switchbacks	Realignment	45
106	146.034653	153.299451	27	GGs	Log roll down drainage needed leading into it	Drainage	2
107	148.012772	153.299113	27	GGs	Remove logs	Remove Structure	1
119	173.61618	153.294939	27	GGs	5m bridge to be replaced with armouring/realignment	Rock Armouring	5
120	157.026215	153.298246	27	GGs	Remove logs	Remove Structure	1
121	149.67363	153.299081	27	GGs	Remove logs	Remove Structure	1
118	205.181915	153.292656	28	GGs Extension	Remove logs	Remove Structure	1
108	152.771423	153.29671	29	Lower GGs	5m bridge to be replaced with armouring/realignment	Rock Armouring	5
109	144.821671	153.296122	29	Lower GGs	2m bridge to be replaced with armouring	Rock Armouring	2
110	142.386353	153.295769	29	Lower GGs	Tight 2m bridge to be replaced with armouring	Rock Armouring	2
111	144.485764	153.296232	29	Lower GGs	Remove timber	Remove Structure	1
112	140.613525	153.295843	29	Lower GGs	Start realignment to avoid steep section	Realignment	5
113	143.832611	153.2958	29	Lower GGs	Finish realignment to avoid steep section	Realignment	5
114	145.586792	153.295879	29	Lower GGs	Realign and add 2 switchbacks	Realignment	15
115	157.735352	153.294115	29	Lower GGs	Cut timber	Remove Structure	1
129	207.188019	153.291367	30	Lost World	Remove logs	Remove Structure	1
130	200.441925	153.291459	30	Lost World	4 grade reversals / drains	Drainage	4
131	185.391525	153.293092	30	Lost World	2 grade reversals and 1 large culvert	Drainage	3
132	147.322296	153.29828	30	Lost World	3m bridge to be replaced by rock armouring	Rock Armouring	3
133	145.792068	153.298642	30	Lost World	2m bridge to be replaced with rock armouring	Rock Armouring	2
134	132.925034	153.299937	30	Lost World	Remove logs	Remove Structure	1
135	115.411331	153.300705	30	Lost World	Remove log	Remove Structure	1
136	107.676186	153.299155	30	Lost World	6m bridge to be armoured/realigned	Rock Armouring	6
137	89.826569	153.299668	30	Lost World	10m handrail to minimise exposure / fall risk		10
138	76.091789	153.301191	30	Lost World	5m bridge to be replaced with armouring/realignment	Rock Armouring	5
139	62.31036	153.300916	30	Lost World	Water crossing to be rock armoured	Rock Armouring	3
141	79.674782	153.300182	30	Lost World	Remove log	Remove Structure	1
142	88.063072	153.300565	30	Lost World	Fork requires signage	Signage	1
103	142.675613	153.302074	31	Vertigo	Tight corner around tree and root to be armoured	Rock Armouring	2
104	145.894699	153.301622	31	Vertigo	Strap logs	Remove Structure	1
158	73.441879	153.311526	C3	Norco Flow	Channelling - install 3 drains	Drainage	3
159	80.141312	153.310971	C3	Norco Flow	Eroded corner needs grade reversals and drain	Drainage	2
160	78.4338	153.310659	C3	Norco Flow	3m of paving at gully crossing	Rock Armouring	3
161	78.741707	153.310306	C3	Norco Flow	Erosion and exposed tree roots requires 5 drains	Drainage	5
162	81.065048	153.309923	C3	Norco Flow	2 drains before after turn	Drainage	2
163	85.665085	153.309633	C3	Norco Flow	3 drains	Drainage	3
164	90.796967	153.309211	C3	Norco Flow	2 drains	Drainage	2
165	92.569794	153.309175	C3	Norco Flow	3 grade reversals	Drainage	3
166	95.686249	153.309156	C3	Norco Flow	Remove material on inside of corner		
167	95.667587	153.309125	C3	Norco Flow	Large grade reversals before corner		
168	95.145065	153.309165	C3	Norco Flow	Large drain to road		
169	98.653404	153.308888	C3	Norco Flow	1 drain at exit of corner		
170	102.171074	153.308668	C3	Norco Flow	10m paving		
171	104.970284	153.308522	C3	Norco Flow	3 rollers		
172	107.442917	153.308405	C3	Norco Flow	Realign corner		
173	109.700943	153.308282	C3	Norco Flow	Heavy erosion start		
174	119.936714	153.307897	C3	Norco Flow	Gap jump 3m		
175	128.14772	153.307256	C3	Norco Flow	3m gap		
176	133.316925	153.306908	C3	Norco Flow	2 Large gap jumps 10m and 6m		
177	137.982269	153.306328	C3	Norco Flow	2m gap	Close & Rehabilitate	1000
178	138.551437	153.306273	C3	Norco Flow	Old road gap		
179	139.437866	153.305997	C3	Norco Flow	Jump		
180	139.316559	153.305965	C3	Norco Flow	Road cross		
181	140.380264	153.305969	C3	Norco Flow	Fork		
182	141.369308	153.305884	C3	Norco Flow	Gap jump 3m		
183	143.72998	153.305643	C3	Norco Flow	1m gap		
184	146.15596	153.305529	C3	Norco Flow	Grade reversal between berms		
185	150.672012	153.30529	C3	Norco Flow	4m gap		
186	152.295547	153.305046	C3	Norco Flow	Heavy erosion 30% grade		
187	170.760986	153.304169	C3	Norco Flow	4m step down		
188	185.139587	153.303472	C3	Norco Flow	Severe erosion		
190	188.32135	153.303336	C3	Norco Flow	Steep 40% start, install 2 drains	Drainage	2
191	200.637863	153.302946	C3	Norco Flow	Steep section end, install 3 drains	Drainage	3
116	165.461166	153.29434	C5	Pitts Folly	Start realignment to avoid steep section	Realignment	30
117	173.466888	153.293864	C5	Pitts Folly	Finish realignment to avoid steep section	Realignment	30
697	101.210014	153.328656	R1	CCTV	Gully crossing needs realignment	Realignment	50
864	140.772156	153.313955	R2	Upper Baileys	Eroded 15m section to be realigned	Realignment	30
89	80.169304	153.30927	R3	Pandora	10m timber bridge. Major realignment to avoid gully.	Realignment	70
90	77.547379	153.309632	R3	Pandora	Tight bridge to be replaced by armouring	Rock Armouring	3
147	52.279865	153.307393	R4	911	Cut logs and remove timber	Remove Structure	1
148	52.569118	153.307129	R4	911	3m bridge to be replaced by rock armouring	Rock Armouring	3
149	53.240929	153.307104	R4	911	Start realignment to avoid steep section	Realignment	15
150	58.24218	153.306909	R4	911	Finish realignment to avoid steep section	Realignment	15

151	56.48801	153.307003	R4	911	Realign to avoid 6m bridge	Realignment	20
152	59.399185	153.307113	R4	911	Remove log and timber	Remove Structure	2
153	52.643764	153.307042	R4	911	5m bridge to be replaced with armouring/realignment	Rock Armouring	5
154	52.569118	153.307354	R4	911	Remove tree hazards	Remove Structure	1
155	39.328865	153.309592	R4	911	Timber features	Signage	1
156	40.093983	153.310125	R4	911	Remove log	Remove Structure	1
157	30.567347	153.311453	R4	911	Eroded gully to be rock armoured	Rock Armouring	5
94	16.897882	153.314228	R5	Netti	Realignment required to avoid two old bridges	Realignment	20
95	10.543682	153.313626	R5	Netti	3m bridge. Major realignment to avoid gully.	Realignment	20
96	22.067087	153.310604	R6	Wimps	Dangerous gap to be rebuilt and made safe.	Rebuild TTF	1
97	28.402626	153.310047	R6	Wimps	Existing gap jump to be rebuilt and made safe.	Rebuild TTF	1
98	36.371037	153.309469	R6	Wimps	Bad erosion. Install 3 drains.	Drainage	3
99	39.39418	153.309339	R6	Wimps	Consolidate trail and stop trail braiding.	Close & Rehabilitate	5
100	67.750153	153.307494	R6	Wimps	Severe erosion requires realignment.	Realignment	10
101	91.282158	153.306276	R6	Wimps	Dangerous feature to be rebuilt and made safe	Rebuild TTF	1

NOTES

1. All realignments have been estimated in their length.
2. Realignment will require detailed ground-truthing to ensure a suitable alternate route is found, especially in circumstances where they are replacing existing timber bridges or steep gully crossings.
3. We estimate that any timber bridge proposed to be replaced with a realignment should be able to occur within a 20m corridor of the existing trail footprint - unless otherwise specified in the Trail Audit Report.
4. Sections of trail identified as requiring drainage works will typically need associated re-profiling surface treatments for a minimum of 5-10m leading into or out of the drainage device.
5. All trail remediation works to be completed as per IMBA guidelines and outlined in the 'Appendix 3 - Trail Construction Specifications' document.
6. All rock armouring will require imported material and associated transportation.

ITEM TOTALS

Remediation Item	Quantity
Remove Structure	40
Realignment	745
Drainage	67
Rebuild TTF	5
Close & Rehabilitate	1010
Rock Armouring	98
Signage	21