Table 1 Culvert Crossing Details – Substation in Coomataggart to the Substation in Rathgaskig (38kV)

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
1	109645	69770	250	680	Cable will be passed in trefoil formation underneath the existing poly pipe (450mm).	2
2	109670	69780	1046	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing concrete box culvert.	3
3	109707	69826	1110	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing poly pipe (600mm) culvert.	3
4	109737	69872	1451	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing poly pipe (600mm) culvert.	3
5	109777	69991	1650	n/a	Cable will be passed in trefoil formation over the existing concrete box culvert.	1
6	109782	70018	1170	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing concrete box culvert.	3
7	109789	70063	1120	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing concrete box culvert.	3
8	109687	70244	1455	n/a	Cable will be passed in trefoil formation over the existing concrete box culvert.	1

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
9	109665	70355	1270	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing poly pipe (300mm) culvert.	3
10	109665	70367	1170	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing poly pipe (225mm) culvert.	3
11	109698	70515	1720	n/a	Cable will be passed in trefoil formation over the existing poly pipe (600mm) culvert.	1
12	109730	70574	1455	n/a	Cable will be passed in trefoil formation over the existing poly pipe (600mm) culvert.	1
13	109811	70696	1020	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing poly pipe (400mm) culvert.	3
14	109815	70769	350	1330	Cable will be passed in trefoil formation under the existing poly pipes (250mm&140mm) culvert.	2
15	109829	70778	350	1380	Cable will be passed in trefoil formation under the existing poly pipes (300mm) culvert.	2
16	109984	70607	335	1425	Cable will be passed in trefoil formation under the existing poly pipes (450mm) culvert.	2
17	110023	70576	780	1905	Cable will be passed in trefoil formation under the existing poly pipes (450mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
18	110562	70371	220	1220	Cable will be passed in trefoil formation under the existing poly pipes (300mm) culvert.	2
19	110640	70366	150	1305	Cable will be passed in trefoil formation under the 2 existing poly pipes (450mm) culvert.	2
20	110699	70364	275	1395	Cable will be passed in trefoil formation under the existing poly pipes (450mm) culvert.	2
21	110837	70262	250	1360	Cable will be passed in trefoil formation under the existing poly pipes (450mm) culvert.	2
22	112863	70259	220	1260	Cable will be passed in trefoil formation under the existing poly pipes (300mm) culvert.	2
23	110892	70255	150	1350	Cable will be passed in trefoil formation under the existing poly pipes (300mm) culvert.	2
24	110948	70239	150	1270	Cable will be passed in trefoil formation under the existing poly pipes (300mm) culvert.	2
25	111009	70235	150	1495	Cable will be passed in trefoil formation under the 2 existing poly pipes (600mm) culvert.	2
26	111026	70240	150	1220	Cable will be passed in trefoil formation under the existing poly pipes (300mm) culvert.	2
27	111084	70215	320	1210	Cable will be passed in trefoil formation under the existing poly pipes (300mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
28	111129	70214	800	1970	Cable will be passed in trefoil formation under the existing poly pipes (450mm) culvert.	2
29	111267	70213	910	1135	Cable will be passed in trefoil formation under the existing poly pipes (225mm) culvert.	2
30	111388	70216	600	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing poly pipe (600mm) culvert.	3
31	111427	70228	250	1540	Cable will be passed in trefoil formation under the existing poly pipes (450mm) culvert.	2
32	111498	70221	1520	2120	Cable will be passed in trefoil formation over the existing poly pipes (600mm) culvert.	1
33	111545	70168	410	1245	Cable will be passed in trefoil formation under the existing poly pipes (225mm) culvert.	2
34	111562	70144	300	1320	Cable will be passed in trefoil formation under the existing poly pipes (250mm) culvert.	2
35	111667	70077	425	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing concrete pipe (1200mm) culvert.	3
36	111767	70086	300	1200	Cable will be passed in trefoil formation under the existing concrete pipe (225mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
37	111597	70059	385	1215	Cable will be passed in trefoil formation under the existing concrete pipe (225mm) culvert.	2
38	111597	70059	130	1225	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
39	112181	70011	150	1090	Cable will be passed in trefoil formation under the existing concrete pipe (300mm) culvert.	2
40	112218	70000	335	1375	Cable will be passed in trefoil formation under the existing concrete pipe (300mm) culvert.	2
41	112258	69990	400	1220	Cable will be passed in trefoil formation under the existing poly pipe (150mm) culvert.	2
42	112277	69984	245	1145	Cable will be passed in trefoil formation under the existing concrete pipe (150mm) culvert.	2
43	112347	69962	250	1195	Cable will be passed in trefoil formation under the existing poly pipe (25mm) culvert.	2
44	112370	69956	240	1185	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
45	112430	69918	270	1285	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
46	112510	69901	200	1265	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
47	112575	69896	425	n/a	Cable will be passed in flatbed formation encased in steel plate over the bridge crossing.	3
48	112708	69847	635	1825	Cable will be passed in trefoil formation under the existing poly pipe (600mm) culvert.	2
49	112845	69777	300	1145	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
50	112855	69772	300	1145	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
51	112893	69727	335	1365	Cable will be passed in trefoil formation under the existing poly pipe (450mm) culvert.	2
52	112935	69643	450	1325	Cable will be passed in trefoil formation under the existing concrete pipe (150mm) culvert.	2
53	113002	69536	300	1365	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
54	113114	69465	420	1410	Cable will be passed in trefoil formation under the existing concrete pipe (350mm) culvert.	2
55	113127	69459	600	1730	Cable will be passed in trefoil formation under the existing poly pipe (450mm) culvert.	2
56	113157	69442	760	1780	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
57	113184	69428	400	1320	Cable will be passed in trefoil formation under the existing concrete pipe (350mm) culvert.	2
58	113197	69419	325	1365	Cable will be passed in trefoil formation under the existing concrete pipe (300mm) culvert.	2
59	113274	69370	460	1400	Cable will be passed in trefoil formation under the existing concrete pipe (300mm) culvert.	2
60	113342	69284	560	1440	Cable will be passed in trefoil formation under the existing concrete pipe (250mm) culvert.	2
61	113800	68931	380	1660	Cable will be passed in trefoil formation under the 3 existing poly pipes (600mm & 2x 100m) culvert.	2
62	113862	68906	720	1650	Cable will be passed in trefoil formation under the existing concrete pipe (250mm) culvert.	2
63	113910	68887	983	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing poly pipe (600mm) culvert.	3
64	114084	68854	450	1260	Cable will be passed in trefoil formation under the existing poly pipe (150mm) culvert.	2
65	114156	68869	580	1540	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
66	114408	68812	450	1260	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
67	114502	68782	340	1335	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
68	114587	68740	400	1370	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
69	114644	68669	n/a	n/a	Cable has been attached to the side of the stone arch bridge.	4
70	114775	68718	520	1580	Cable will be passed in trefoil formation under the existing poly pipe (450mm) culvert.	2
71	114847	68776	545	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing concrete box (1200mm) culvert.	3
72	115060	68964	770	1625	Cable will be passed in trefoil formation under the existing poly pipe 225mm) culvert.	2
73	115055	69079	800	1850	Cable will be passed in trefoil formation under the existing poly pipe (450mm) culvert.	2
74	115151	69181	130	1220	Cable will be passed in trefoil formation under the existing plastic pipe (200mm) culvert.	2
75	115202	69246	650	1585	Cable will be passed in trefoil formation under the existing plastic pipe (225mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
76	115179	69347	370	1190	Cable will be passed in trefoil formation under the existing concrete pipe (150mm) culvert.	2
77	115176	69393	580	1405	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
78	115198	69516	600	1425	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
79	115199	69568	575	1560	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
80	115195	69576	575	1490	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
81	115193	69579	550	1680	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
82	115169	69640	680	1720	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
83	115167	69816	500	1405	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2
84	115251	69959	501	1531	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
85	115458	70140	550	2060	Cable will be passed in trefoil formation under the existing stone (850mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
86	115512	70323	470	1465	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
87	115550	70303	600	1660	Cable will be passed in trefoil formation under the existing poly pipe (450mm) culvert.	2
88	115587	70261	600	1680	Cable will be passed in trefoil formation under the existing poly pipe (450mm) culvert.	2
89	115642	70237	560	1440	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
90	115698	70202	250	1535	Cable will be passed in trefoil formation under the existing poly pipe (600mm) culvert.	2
91	115862	70129	250	1310	Cable will be passed in trefoil formation under the existing poly pipe (450mm) culvert.	2
92	115959	70137	1320	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing stone (600mm) culvert.	3
93	116000	70139	1200	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing stone (600mm) culvert.	3
94	116112	70153	220	1500	Cable will be passed in trefoil formation under the existing poly pipe (600mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
95	116152	70151	900	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing stone (600mm) culvert.	3
96	116250	70123	920	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing stone (600mm) culvert.	3
97	116276	70111	880	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing stone (600mm) culvert.	3
98	116323	70086	1100	n/a	Cable will be passed in flatbed formation encased in steel plates over the existing stone (600mm) culvert.	3
99	116334	70072	520	1420	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
100	116438	69992	250	1280	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
101	116481	69957	1240	1540	Cable will be passed in flatbed formation encased in steel plates over the existing stone (300mm) culvert.	3
102	116481	69906	375	1310	Cable will be passed in trefoil formation under the existing poly pipe (225mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
103	116519	69881	370	1280	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
104	116567	69864	300	1200	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
105	116577	69865	475	1375	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2
106	116608	69868	600	1701	Cable will be passed in trefoil formation under the existing concrete pipe (450mm) culvert.	2
107	116710	69904	230	1984	Cable will be passed in trefoil formation under the existing poly pipe (300mm) culvert.	2

Table 2 Substation in Rathgaskig to Cleanrath Wind Farm (33kV)

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
108	116710	69904	650	1175	Cable will be passed in trefoil formation under the existing concrete pipe (450mm) culvert.	2
109	116607	69868	500	1025	Cable will be passed in trefoil formation under the existing stone (400x400mm) culvert.	2
110	116608	69849	880	n/a	Cable will be passed in trefoil formation over the existing concrete pipe (220mm) culvert.	1
111	116653	69823	550	1025	Cable will be passed in trefoil formation under the existing plastic pipe (450mm) culvert.	2
112	116699	69804	400	925	Cable will be passed in trefoil formation under the existing stone (400x400mm) culvert.	2
113	116875	69504	1000	n/a	Cable will be passed in trefoil formation over the existing stone culvert.	1
114	116886	69472	600	1125	Cable will be passed in trefoil formation under the existing stone culvert.	2
115	117125	69255	1500	n/a	Cable will be passed in trefoil formation over the existing stone (400x400mm) culvert.	1
116	117221	69193	800	n/a	Cable will be passed in trefoil formation over the existing stone (300mm) culvert.	1
117	117260	69179	200	725	Cable will be passed in trefoil formation under the existing stone (400x400mm) culvert.	2

WC No.	Coordinates (Easting)	Coordinates (Northing)	Cover from road level to top of culvert (mm)	Maximum depth of trench from road level under culvert (mm)	Description	Option No.
118	117415	68990	Information not provided	n/a	Cable will be passed in flatbed formation encased in steel plate over the bridge crossing	3
119	117472	68910	600	1125	Cable will be passed in trefoil formation under the existing stone (400x400mm) culvert.	2
120	117876	68703	550	1075	Cable will be passed in trefoil formation under the existing plastic pipe (250mm) culvert.	2
121	117902	68732	780	1305	Cable will be passed in trefoil formation under the existing plastic pipe (220mm) culvert.	2
122	118496	69130	1000	n/a	Cable will be passed in trefoil formation over the existing concrete pipe (220mm) culvert.	1
123	118528	69145	Unknown	n/a	Cable will be passed in trefoil formation over the existing pipe culvert.	1
124	118667	69227	Unknown	Unknown	Cable will be passed in trefoil formation under the existing plastic pipe (600x600mm) culvert.	2
125	118818	69256	700	1225	Cable will be passed in trefoil formation under the 2 existing plastic pipe (300x300mm) culvert.	2
126	119290	69298	500	1025	Cable will be passed in trefoil formation under the existing stone (300x300mm) culvert	2