

Appendix 4E

Permanent Surface Water Calculations

		JOB NAME: Balinlee Wind Farm	PAGE No:
		SECTION: Standard Information	1
		JOB No: 22635	DESIGNED: CK
		DATE: 06/06/2025	CHECKED: CMcL

Ref:		Output
	Greensource Client: Ballinlee Green Energy Project Project Name: Ballinlee Wind Farm Project Location: County Limerick ITM Co-ordinates: Easting: 559846.33 Northing: 635105.39 Irish Grid Co-ordinates: Easting: 159887.19 Northing: 135056.93 Latitude: 52 deg 27 min 52.280873 Longitude: -8 deg 35 min 27.340407 MWP SAAR: 981 mm SOIL: 2 Type SPR: 0.3 GCF 1: 0.85 GCF 30: 1.65 GCF 100: 1.95	Average Annual Rainfall model Ireland.dwg ..\\..\\..\\06 - Records Incoming\\Incoming Public Services\\Met Eierann FSR - Fig I 4 18 (1) [Soil] [ITM].dwg IH124 Hydrological Region 13 GDSDS/GDR

		JOB NAME:	Balinlee Wind Farm		PAGE No:
		SECTION:	SS SW Network		4
		JOB No:	22635	DESIGN:	CK
		DATE:	06/06/2025	CHECK:	CMcL

Ref:

Assumptions

All pipes are u-PVC

SS SW Network

SS-FlowPath1

Type	Name	Size (mm)	CL (m)	IL (m)	Depth (m)
IC	SS-IC1	800.000	55.000	54.400	0.600
IC	SS-IC2	800.000	55.000	54.170	0.830
IC	SS-IC3	800.000	55.000	54.075	0.925
S	SS-Bypass Separator-IC4	800.000	55.000	53.945	1.055
MH	SS-Flow Control Device	1200.000	55.000	53.601	1.399
MH	IPP-Flow Control Device	1200.000	55.000	53.401	1.599
MH	SS/IPP-Outfall MH	1200.000	55.000	53.281	1.719

SS-FP2

Type	Name	Size (mm)	CL (m)	IL (m)	Depth (m)
AJ	SS-AJ1	300.000	55.150	54.550	0.600
AJ	SS-AJ2	300.000	55.150	54.235	0.915
IC	SS-IC5	450.000	55.150	54.100	1.050
IC	SS-IC3	800.000	55.000	54.075	0.925
S	SS-Bypass Separator-IC4	800.000	55.000	53.945	1.055
MH	SS-Flow Control Device	1200.000	55.000	53.601	1.399
MH	IPP-Flow Control Device	1200.000	55.000	53.401	1.599
MH	SS/IPP-Outfall MH	1200.000	55.000	53.281	1.719

SS-FP3

Type	Name	Size (mm)	CL (m)	IL (m)	Depth (m)
AJ	SS-AJ3	300.000	55.150	54.550	0.600
AJ	SS-AJ4	300.000	55.150	54.350	0.800
IC	SS-IC5	450.000	55.150	54.100	1.050
IC	SS-IC3	800.000	55.000	54.075	0.925
S	SS-Bypass Separator-IC4	800.000	55.000	53.945	1.055
MH	SS-Flow Control Device	1200.000	55.000	53.601	1.399
MH	IPP-Flow Control Device	1200.000	55.000	53.401	1.599
MH	SS/IPP-Outfall MH	1200.000	55.000	53.281	1.719

SS-FP4

Type	Name	Size (mm)	CL (m)	IL (m)	Depth (m)
IC	SS-IC6	800.000	55.000	54.350	0.650
IC	SS-IC3	800.000	55.000	54.075	0.925
S	SS-Bypass Separator-IC4	800.000	55.000	53.945	1.055
MH	SS-Flow Control Device	1200.000	55.000	53.601	1.399
MH	IPP-Flow Control Device	1200.000	55.000	53.401	1.599
MH	SS/IPP-Outfall MH	1200.000	55.000	53.281	1.719

Type	Name	Dia (mm)	Length (m)	USIL (m)	DSIL (m)
u-PVC	S1.000	300	43.84	54.400	54.170
u-PVC	S1.001	300	17.04	54.170	54.075
u-PVC	S1.002	300	6.14	54.075	54.045
u-PVC	S1.003	300	50.30	53.945	53.649
u-PVC	S1.004	225	5.49	53.649	53.601
u-PVC	S1.005	225	20.81	53.601	53.401
u-PVC	S1.006	225	13.50	53.401	53.281

Type	Name	Dia (mm)	Length (m)	USIL (m)	DSIL (m)
u-PVC	S2.000	150	19.50	54.550	54.310
u-PVC	S2.001	225	7.94	54.235	54.175
u-PVC	S2.002	300	4.50	54.100	54.075
u-PVC	S1.002	300	6.14	54.075	54.045
u-PVC	S1.003	300	50.30	53.945	53.649
u-PVC	S1.004	225	5.49	53.649	53.601
u-PVC	S1.005	225	20.81	53.601	53.401
u-PVC	S1.006	225	13.50	53.401	53.281

Type	Name	Dia (mm)	Length (m)	USIL (m)	DSIL (m)
u-PVC	S3.000	225	19.49	54.550	54.350
u-PVC	S3.001	225	18.54	54.350	54.175
u-PVC	S2.002	300	4.50	54.100	54.075
u-PVC	S1.002	300	6.14	54.075	54.045
u-PVC	S1.003	300	50.30	53.945	53.649
u-PVC	S1.004	225	5.49	53.649	53.601
u-PVC	S1.005	225	20.81	53.601	53.401
u-PVC	S1.006	225	13.50	53.401	53.281

Type	Name	Dia (mm)	Length (m)	USIL (m)	DSIL (m)
u-PVC	S4.000	225	20.41	54.350	54.150
u-PVC	S1.002	300	6.14	54.075	54.045
u-PVC	S1.003	300	50.30	53.945	53.649
u-PVC	S1.004	225	5.49	53.649	53.601
u-PVC	S1.005	225	20.81	53.601	53.401
u-PVC	S1.006	225	13.50	53.401	53.281

Output

	JOB NAME:	Balinlee Wind Farm	PAGE No: 5
	SECTION:	IPP SW Network	
	JOB No:	22635	DESIGNED: CK
	DATE:	06/06/2025	CHECKED: CMcL

Ref:

Assumptions

All pipes are u-PVC

IPP SW Network

IPP-FP1

Type	Name	Size (mm)	CL (m)	IL (m)	Depth (m)
IC	IPP-IC1	800.000	55.000	54.400	0.600
IC	IPP-IC2	800.000	55.000	54.262	0.738
IC	IPP-IC3	800.000	55.000	54.165	0.835
MH	IPP-MH1	1200.000	55.000	54.110	0.890
S	IPP-Bypass Separator-IC4	800.000	55.000	53.958	1.042
MH	IPP-Flow Control Device	1200.000	55.000	53.401	1.599
MH	SS/IPP-Outfall MH	1200.000	55.000	53.281	1.719

IPP-FP2

Type	Name	Size (mm)	CL (m)	IL (m)	Depth (m)
AJ	IPP-AJ1	300.000	55.15	54.55	0.600
AJ	IPP-AJ2	300.000	55.15	54.385	0.765
IC	IPP-IC5	450.000	55.15	54.295	0.855
MH	IPP-MH1	1200.000	55.000	54.110	0.890
S	IPP-Bypass Separator-IC4	800.000	55.000	53.958	1.042
MH	IPP-Flow Control Device	1200.000	55.000	53.401	1.599
MH	SS/IPP-Outfall MH	1200.000	55.000	53.281	1.719

IPP-FP3

Type	Name	Size (mm)	CL (m)	IL (m)	Depth (m)
AJ	IPP-AJ3	300.000	55.15	54.55	0.600
AJ	IPP-AJ4	300.000	55.15	54.335	0.815
IC	IPP-IC5	450.000	55.15	54.295	0.855
MH	IPP-MH1	1200.000	55.000	54.110	0.890
S	IPP-Bypass Separator-IC4	800.000	55.000	53.958	1.042
MH	IPP-Flow Control Device	1200.000	55.000	53.401	1.599
MH	SS/IPP-Outfall MH	1200.000	55.000	53.281	1.719

IPP-FP4

Type	Name	Size (mm)	CL (m)	IL (m)	Depth (m)
IC	IPP-IC6	800.000	55.000	54.400	0.600
IC	IPP-IC3	800.000	55.000	54.165	0.835
MH	IPP-MH1	1200.000	55.000	54.110	0.890
S	IPP-Bypass Separator-IC4	800.000	55.000	53.958	1.042
MH	IPP-Flow Control Device	1200.000	55.000	53.401	1.599
MH	SS/IPP-Outfall MH	1200.000	55.000	53.281	1.719

Type	Name	Dia (mm)	Length (m)	USIL (m)	DSIL (m)
u-PVC	S5.000	300	26.72	54.400	54.262
u-PVC	S5.001	300	18.46	54.262	54.165
u-PVC	S5.002	300	10.51	54.165	54.110
u-PVC	S5.003	300	9.46	54.110	54.058
u-PVC	S5.004	300	5.13	53.958	53.926
u-PVC	S5.005	225	4.06	53.926	53.870
u-PVC	S1.006	225	13.50	53.401	53.281

Type	Name	Dia (mm)	Length (m)	USIL (m)	DSIL (m)
u-PVC	S6.000	225	15.14	54.550	54.385
u-PVC	S6.001	225	9.01	54.385	54.295
u-PVC	S6.002	225	13.27	54.295	54.185
u-PVC	S5.003	300	9.46	54.110	54.058
u-PVC	S5.004	300	5.13	53.958	53.926
u-PVC	S5.005	225	4.06	53.926	53.870
u-PVC	S1.006	225	13.50	53.401	53.281

Type	Name	Dia (mm)	Length (m)	USIL (m)	DSIL (m)
u-PVC	S7.000	225	15.16	54.550	54.335
u-PVC	S7.001	225	3.65	54.335	54.295
u-PVC	S6.002	225	13.27	54.295	54.185
u-PVC	S5.003	300	9.46	54.110	54.058
u-PVC	S5.004	300	5.13	53.958	53.926
u-PVC	S5.005	225	4.06	53.926	53.870
u-PVC	S1.006	225	13.50	53.401	53.281

Type	Name	Dia (mm)	Length (m)	USIL (m)	DSIL (m)
u-PVC	S8.000	300	28.52	54.4	54.165
u-PVC	S5.002	300	10.51	54.165	54.110
u-PVC	S5.003	300	9.46	54.110	54.058
u-PVC	S5.004	300	5.13	53.958	53.926
u-PVC	S5.005	225	4.06	53.926	53.870
u-PVC	S1.006	225	13.50	53.401	53.281

Output