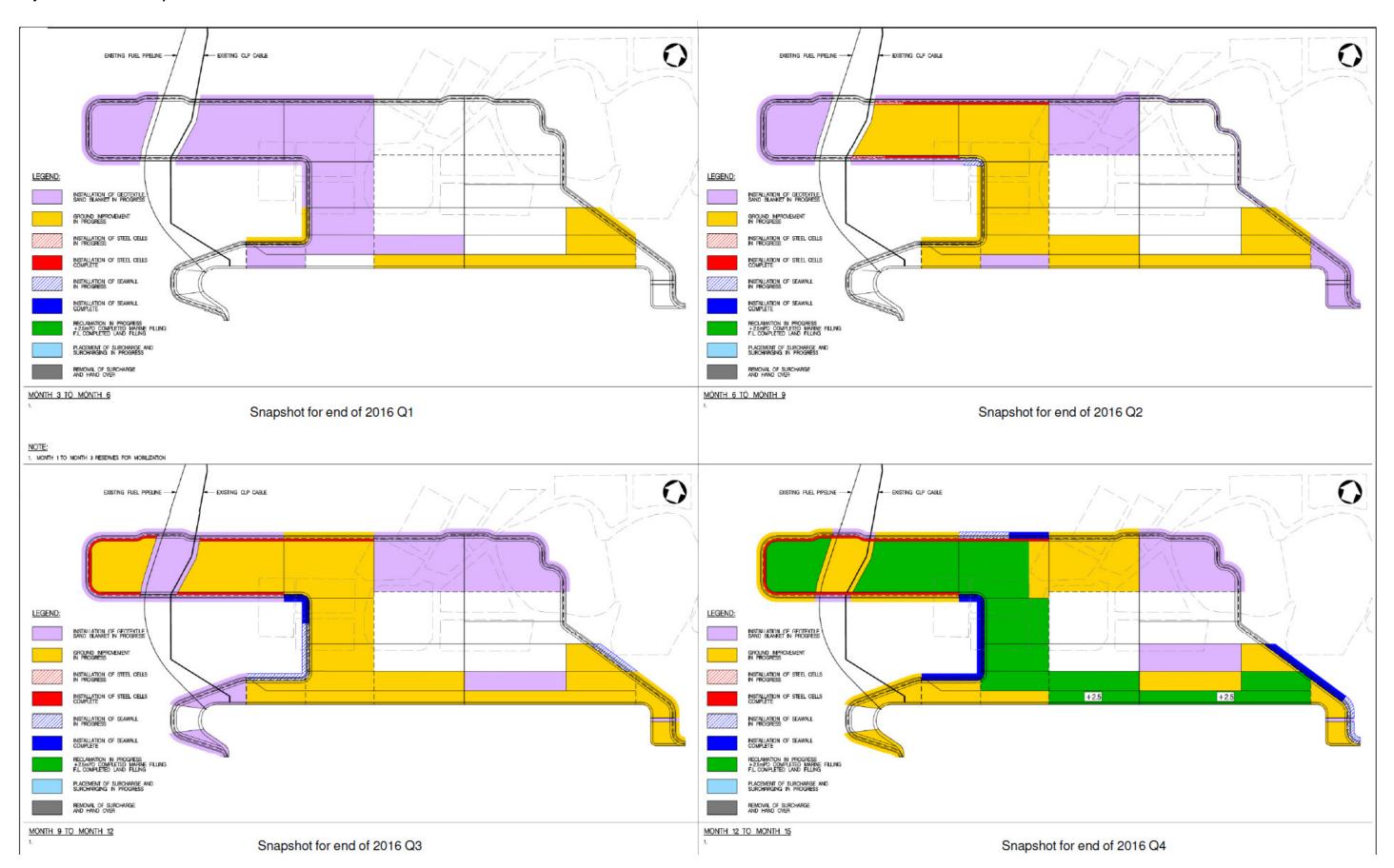
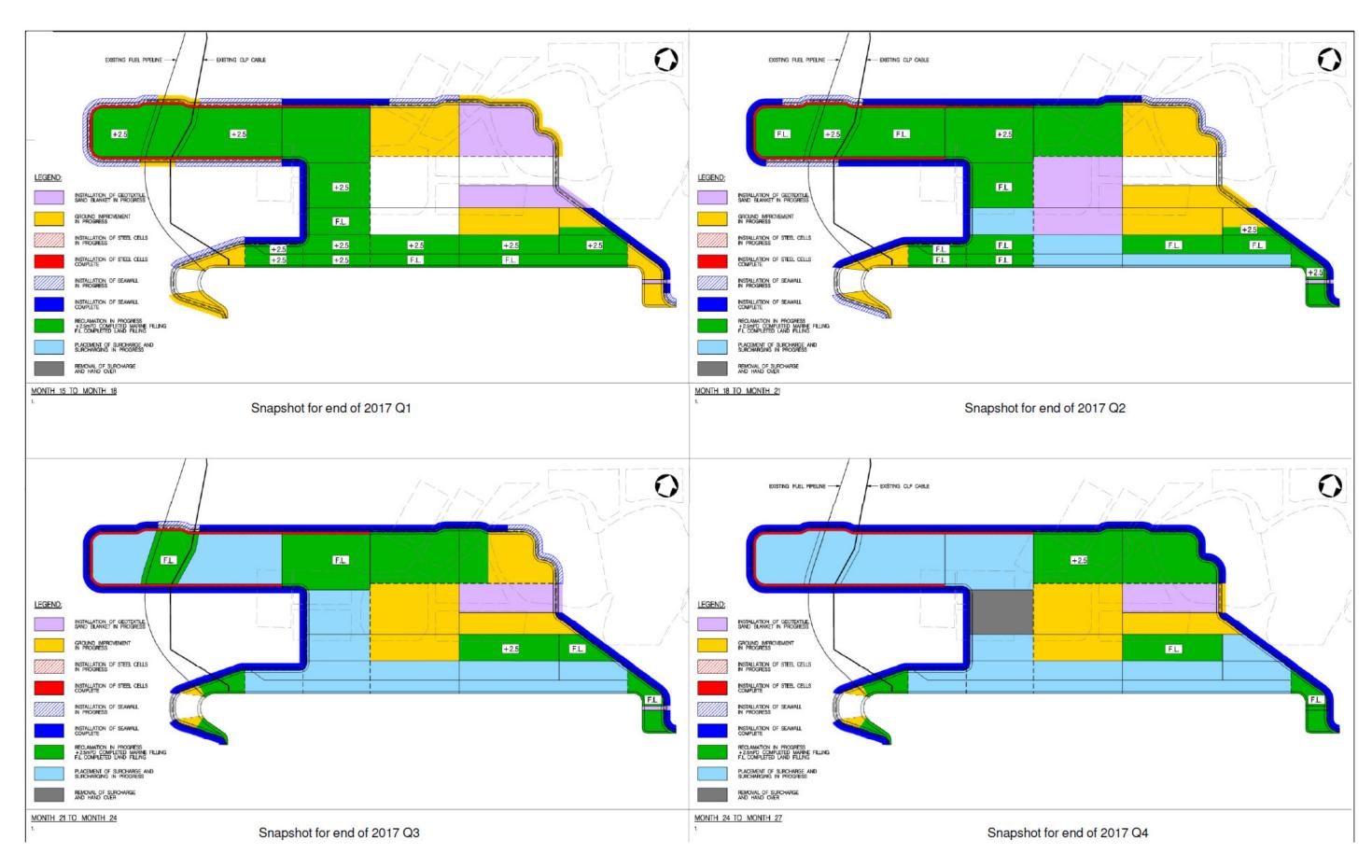


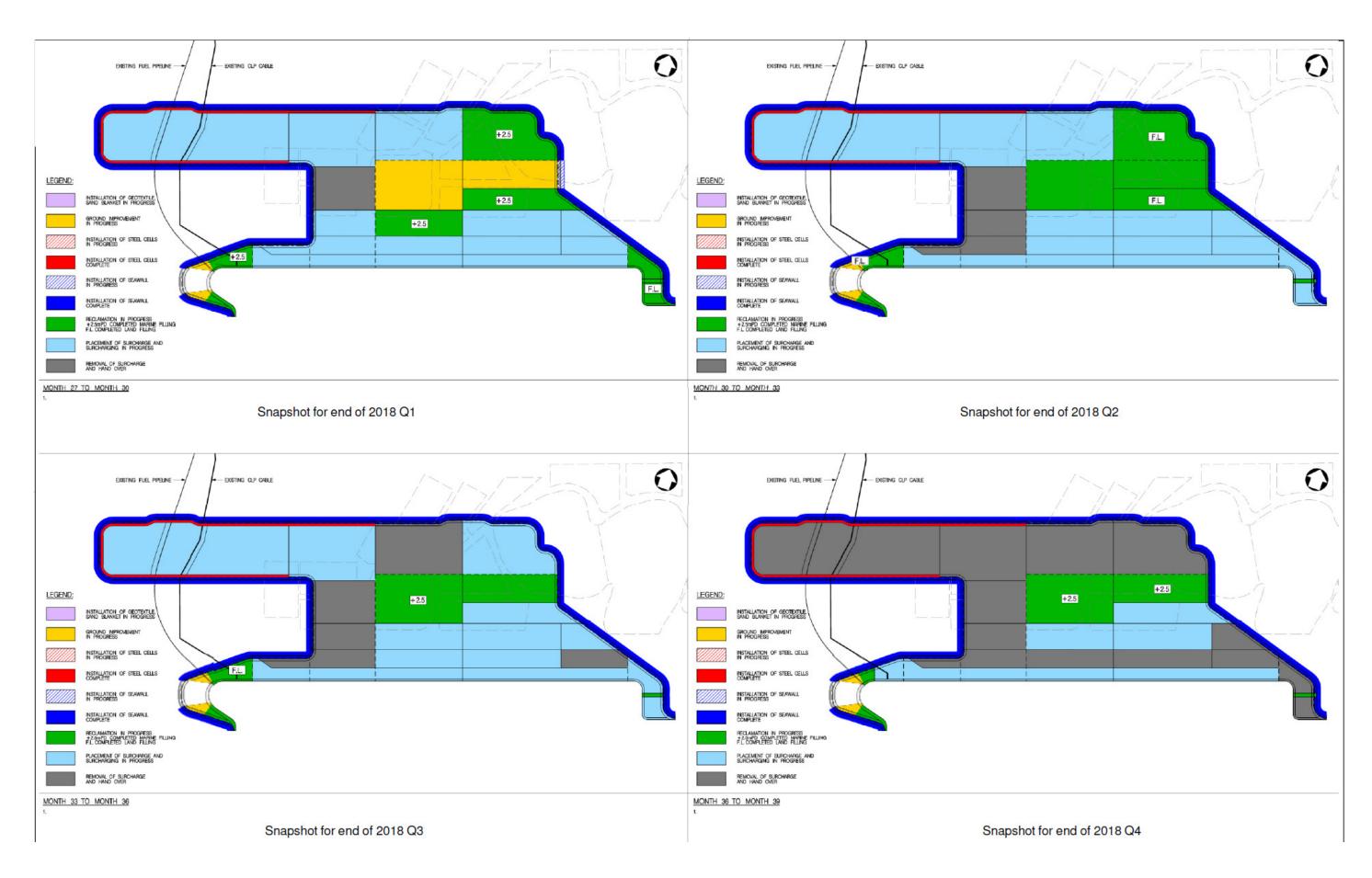
Key Land Formation Sequence



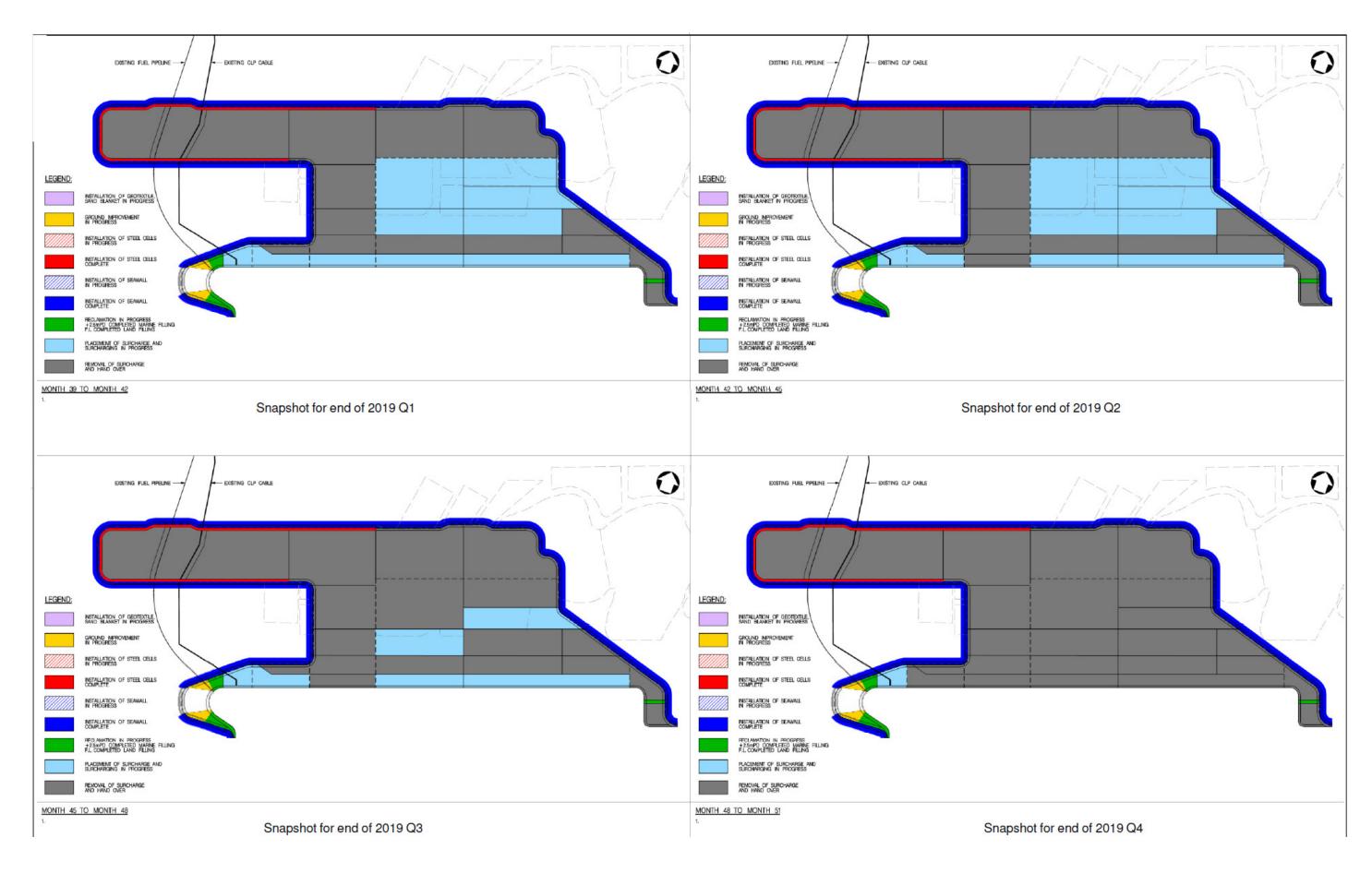




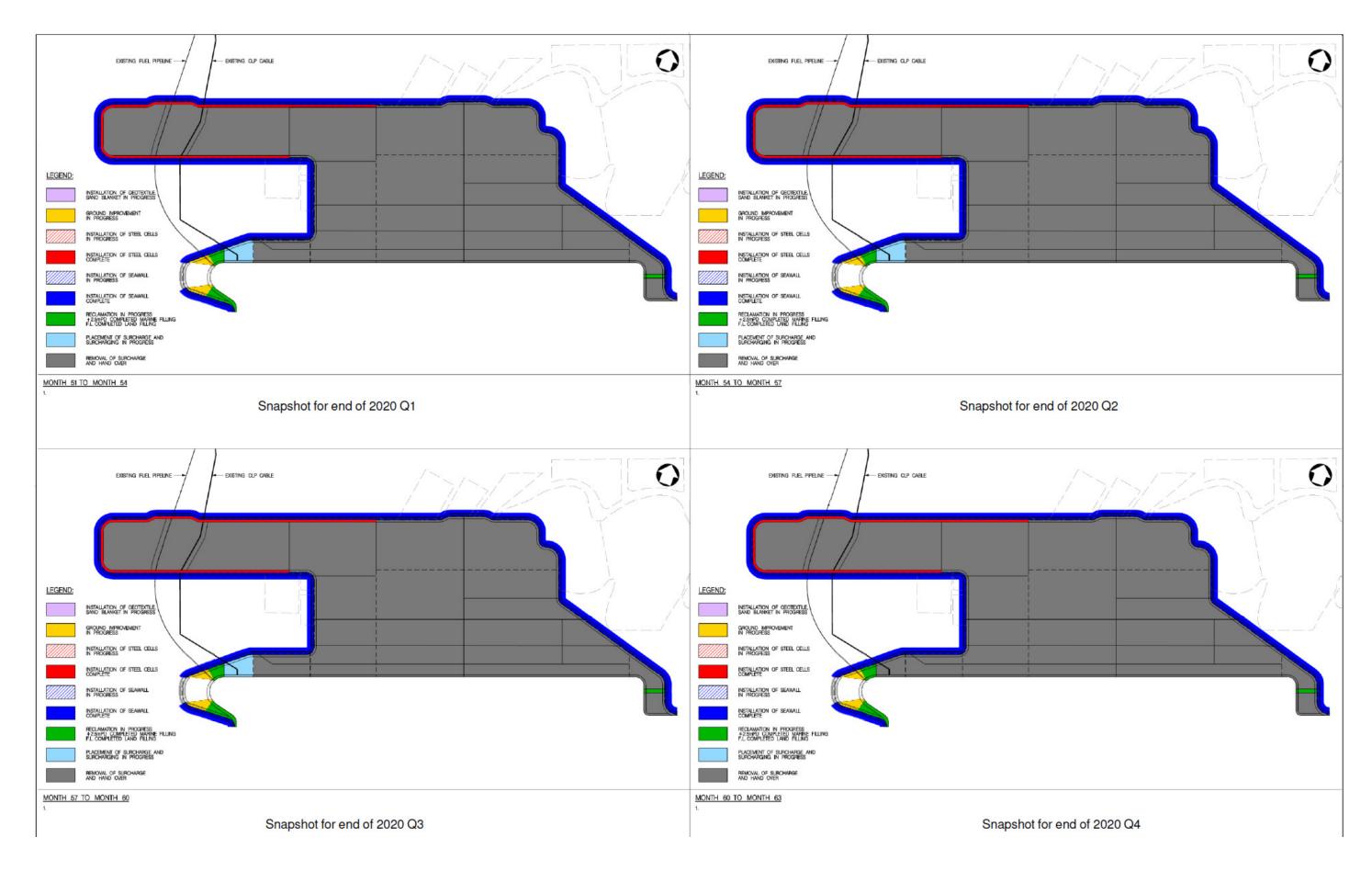




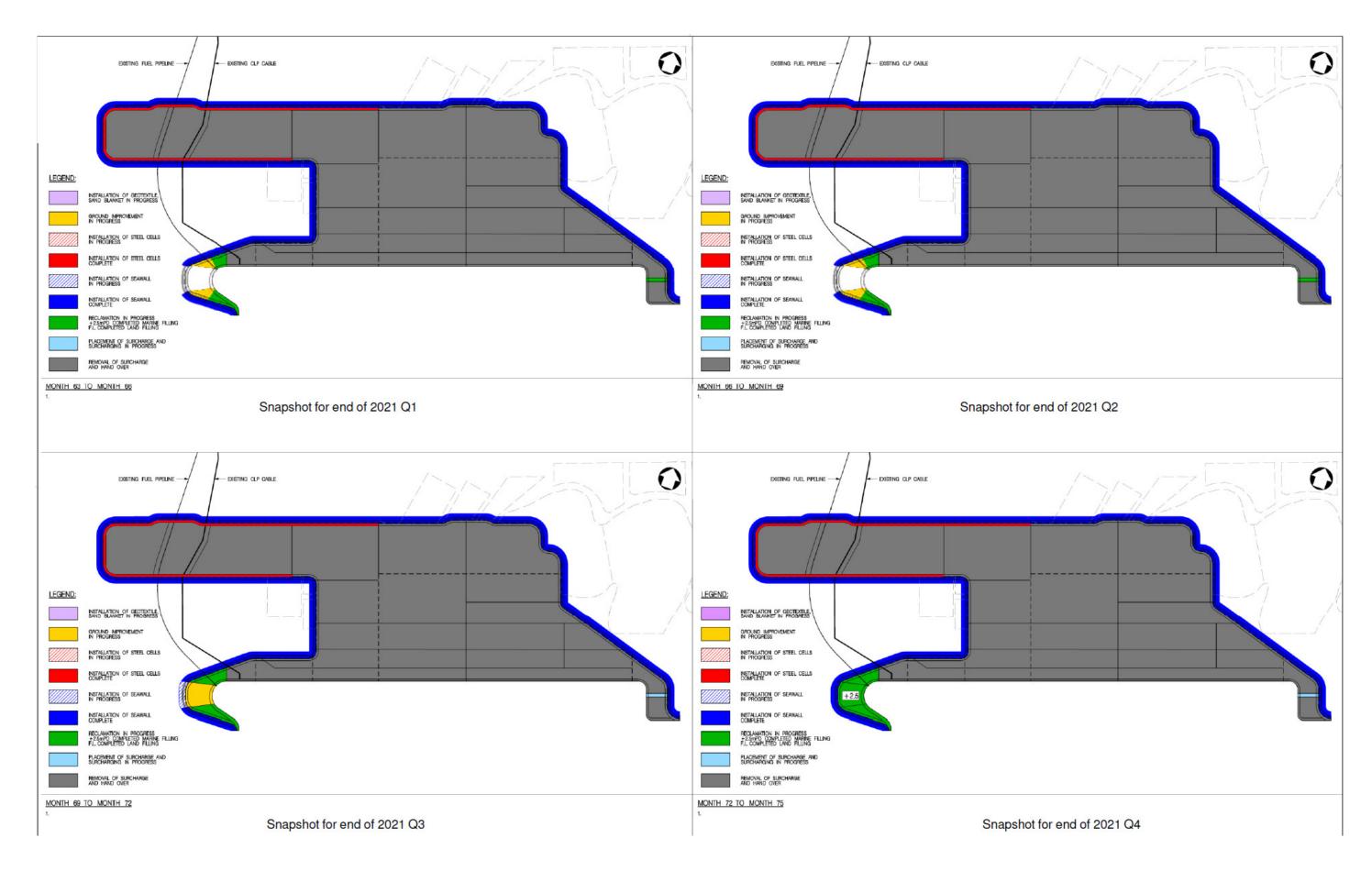




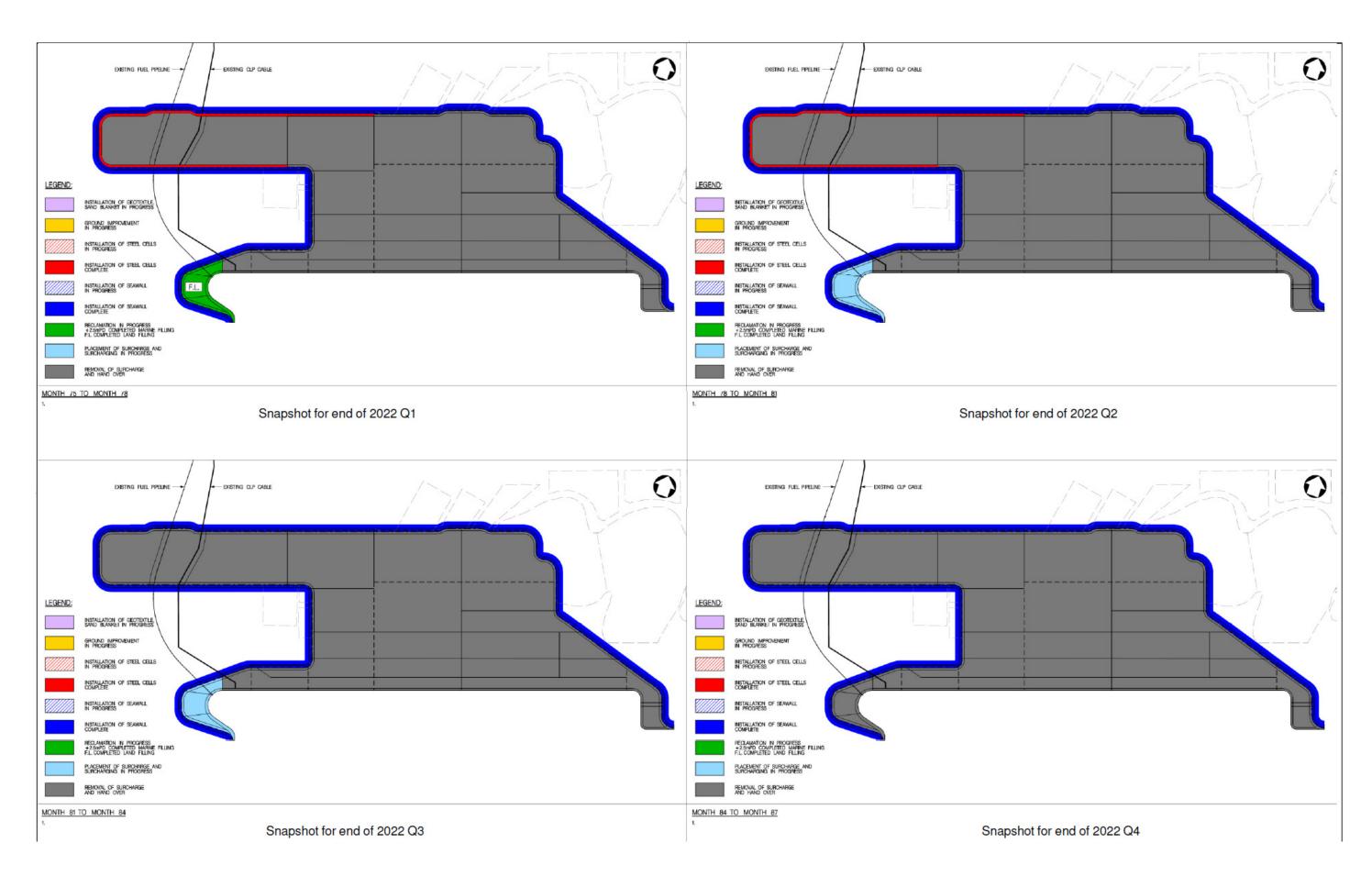














Appendix 8.4

Construction Plant Quantities (total number of plant and total number of trips)

		Sand Blanket		DCM	Marine Sand Filling	
			Total			Total
		Total Nos.	Release	Total Nos.	Total Nos.	Release
		TSHD	Rate m ³ /hr	DCM barges	TSHD	Rate m³/hr
2016	Q1	18	18000	5	0	0
	Q2	7	7000	16	0	0
	Q3	5	5000	30	1	3000
	Q4	5	5000	36	23	69000
2017	Q1	1	1000	42	31	93000
	Q2	2	2000	38	10	30000
	Q3	3	3000	30	6	18000
	Q4	1	1000	22	5	15000
2018	Q1	0	0	16	4	12000
	Q2	0	0	13	3	9000
	Q3	0	0	4	2	6000
	Q4	0	0	0	1	3000
2019	Q1	0	0	0	0	0
	Q2	0	0	0	0	0
	Q3	0	0	0	0	0
	Q4	0	0	0	0	0

Red text represent highest occurrence for each plant

TSHD – Trailer suction hopper dredger





Worst Case Sediment Loss Rate (by activity) (assumes 10 % fines content for sand blanket laying and DCM, and 20 % fines content for marine filling)

Sand blanket 2.551 kg/s Marine filling 15.286 kg/s

DCM 1.057 kg/s (Note: this does not take into account the lower sediment loss rate for DCM applied to Stage 3 works areas)

Calculated Worst Case Sediment Loss Rate in kg/s (by activity)

		Sand		Marine Sand	Submarine Cable	
		Blanket	DCM	Filling	Diversion ¹	Total
2016	Q1	45.91	5.29	0.00	2.98	54.17
	Q2	17.85	16.91	0.00	2.98	37.75
	Q3	12.75	31.71	15.29	0.00	59.75
	Q4	12.75	38.05	351.58	0.00	402.38
2017	Q1	2.55	44.39	473.87	0.00	520.81
	Q2	5.10	40.17	152.86	0.00	198.13
	Q3	7.65	31.71	91.72	0.00	131.08
	Q4	2.55	23.25	76.43	0.00	102.23
2018	Q1	0.00	16.91	61.14	0.00	78.06
	Q2	0.00	13.74	45.86	0.00	59.60
	Q3	0.00	4.23	30.57	0.00	34.80
	Q4	0.00	0.00	15.29	0.00	15.29
2019	Q1	0.00	0.00	0.00	0.00	0.00
	Q2	0.00	0.00	0.00	0.00	0.00
	Q3	0.00	0.00	0.00	0.00	0.00
	Q4	0.00	0.00	0.00	0.00	0.00

Red text represent highest sediment loss value per activity

¹ assumes water jetting activities and field joint excavation occurs at the same time Results are rounded to two decimal place.