



ANNEX J

SOFT SHORE ECOLOGY



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ANNEX J1

MONITRING SCHEDULE

Tung Chung New Town Extension (East)
Post-Construction Soft Shore Ecological Monitoring Schedule (June 2024)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Jun
2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	8-Jun
		Soft Shore Monitoring at Tung Chung Bay	Soft Shore Monitoring at Tung Chung Bay			
9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun
16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun	22-Jun
				Soft Shore Monitoring at Tai Ho Bay	Soft Shore Monitoring at Tung Chung Bay	
23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun	29-Jun
30-Jun						



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ANNEX J2

MONITRING RESULTS

Table J2.1 Results for Horseshoe Crabs during Qualitative Walk-through Surveys in June 2024

Sighting #	Species	Prosomal Width (cm)	Total Length (cm)
Monitoring Date: 4 and 21 June 2024			
Monitoring Station: TCB3			
1	<i>Tachypleus tridentatus</i>	1.4	2.6
2	<i>Tachypleus tridentatus</i>	1.9	2.4
3	<i>Tachypleus tridentatus</i>	1.6	2.7
4	<i>Tachypleus tridentatus</i>	1.4	2.2
5	<i>Tachypleus tridentatus</i>	1.1	1.6
6	<i>Tachypleus tridentatus</i>	1.1	1.8
7	<i>Tachypleus tridentatus</i>	1.1	1.6
8	<i>Tachypleus tridentatus</i>	1.7	2.8
9	<i>Tachypleus tridentatus</i>	1.1	1.9
10	<i>Tachypleus tridentatus</i>	1.5	2.2
11	<i>Tachypleus tridentatus</i>	1.7	2.8
12	<i>Tachypleus tridentatus</i>	1.1	1.7
13	<i>Tachypleus tridentatus</i>	2.2	2.7
14	<i>Tachypleus tridentatus</i>	1.1	1.6
15	<i>Tachypleus tridentatus</i>	1.9	3.5
16	<i>Tachypleus tridentatus</i>	1.1	1.7
17	Unidentified (a)	0.7	1.0
18	<i>Tachypleus tridentatus</i>	1.1	1.7
19	<i>Tachypleus tridentatus</i>	1.0	1.5
20	<i>Tachypleus tridentatus</i>	1.6	2.7
21	<i>Tachypleus tridentatus</i>	1.6	2.7
	Mean (Range)	1.4 (0.7 - 2.2)	2.2 (1.0 - 3.5)
Monitoring Date: 5 June 2024			
Monitoring Station: TCB2			
1	<i>Tachypleus tridentatus</i>	1.5	2.2
2	<i>Tachypleus tridentatus</i>	1.5	2.6
	Mean (Range)	1.5 (1.5 - 1.5)	2.4 (2.2 - 2.6)
Monitoring Date: 20 June 2024			
Monitoring Station: THW			
1	<i>Tachypleus tridentatus</i>	1.6	2.5
2	<i>Tachypleus tridentatus</i>	1.5	2.7
3	<i>Tachypleus tridentatus</i>	1.5	2.6
4	<i>Tachypleus tridentatus</i>	1.6	3.0
5	<i>Tachypleus tridentatus</i>	0.9	1.2
6	<i>Tachypleus tridentatus</i>	1.5	2.6
7	<i>Tachypleus tridentatus</i>	1.6	2.6
8	<i>Tachypleus tridentatus</i>	1.5	2.5
9	<i>Tachypleus tridentatus</i>	1.6	2.7
10	<i>Tachypleus tridentatus</i>	1.6	2.6
11	<i>Tachypleus tridentatus</i>	1.6	2.7
12	<i>Tachypleus tridentatus</i>	1.6	2.8
13	<i>Tachypleus tridentatus</i>	2.0	3.0
14	<i>Tachypleus tridentatus</i>	1.5	2.6
15	<i>Tachypleus tridentatus</i>	2.0	3.9
16	<i>Tachypleus tridentatus</i>	2.1	4.0
17	<i>Tachypleus tridentatus</i>	1.5	2.6
18	<i>Tachypleus tridentatus</i>	1.5	2.7
19	<i>Tachypleus tridentatus</i>	2.0	3.7
20	<i>Tachypleus tridentatus</i>	1.6	2.4
21	<i>Tachypleus tridentatus</i>	1.4	2.5
22	<i>Tachypleus tridentatus</i>	1.6	1.8
23	<i>Tachypleus tridentatus</i>	1.1	1.8
24	<i>Tachypleus tridentatus</i>	1.9	3.6

25	<i>Tachypleus tridentatus</i>	1.0	1.3
26	<i>Tachypleus tridentatus</i>	1.0	1.3
27	<i>Tachypleus tridentatus</i>	1.3	1.5
28	<i>Tachypleus tridentatus</i>	1.1	1.4
29	<i>Tachypleus tridentatus</i>	1.2	1.9
30	<i>Tachypleus tridentatus</i>	1.6	2.7
31	<i>Tachypleus tridentatus</i>	1.1	1.7
32	<i>Tachypleus tridentatus</i>	1.6	2.7
33	<i>Tachypleus tridentatus</i>	1.1	1.7
34	<i>Tachypleus tridentatus</i>	1.5	2.5
35	<i>Tachypleus tridentatus</i>	1.4	2.4
36	<i>Tachypleus tridentatus</i>	1.5	2.5
37	<i>Tachypleus tridentatus</i>	1.6	2.6
38	<i>Tachypleus tridentatus</i>	1.6	2.5
39	<i>Tachypleus tridentatus</i>	1.5	2.7
40	<i>Tachypleus tridentatus</i>	2.3	4.1
41	<i>Tachypleus tridentatus</i>	1.7	2.8
42	<i>Tachypleus tridentatus</i>	1.5	2.6
43	<i>Tachypleus tridentatus</i>	1.6	2.6
44	<i>Tachypleus tridentatus</i>	1.6	2.7
45	<i>Tachypleus tridentatus</i>	1.5	2.5
46	<i>Tachypleus tridentatus</i>	1.6	2.6
47	<i>Tachypleus tridentatus</i>	1.6	2.7
48	<i>Tachypleus tridentatus</i>	1.1	1.7
49	<i>Tachypleus tridentatus</i>	1.7	2.6
50	<i>Tachypleus tridentatus</i>	2.0	4.0
51	<i>Tachypleus tridentatus</i>	1.6	2.7
52	<i>Tachypleus tridentatus</i>	1.7	2.8
Mean (Range)		1.5 (0.9 – 2.3)	2.6 (1.2 – 4.1)

Monitoring Date: 21 June 2024

Monitoring Station: TCB1

1	<i>Carcinoscorpius rotundicauda</i>	17.0	37.0
2	<i>Carcinoscorpius rotundicauda</i>	14.0	30.5
3	<i>Tachypleus tridentatus</i>	1.5	2.6
4	<i>Carcinoscorpius rotundicauda</i>	15.0	28.5
5	<i>Tachypleus tridentatus</i>	1.4	2.1
6	<i>Tachypleus tridentatus</i>	1.7	2.6
7	<i>Tachypleus tridentatus</i>	1.6	2.7
8	<i>Tachypleus tridentatus</i>	1.4	2.4
9	<i>Tachypleus tridentatus</i>	1.7	2.8
10	<i>Tachypleus tridentatus</i>	1.5	2.5
Mean (Range)		5.7 (1.4 – 17.0)	11.4 (2.1 – 37.0)

Note:

- a) One (1) horseshoe crab at TCB3 was recorded with prosomal width of 0.7 cm and total length of 1.0 cm. This individual was considered to be too small for species identification by the naked eye and was recorded as unidentified species.

Table J2.2 Results for Seagrass during Qualitative Walk-through Surveys in June 2024

Sighting #	Species	Area (m²)	Area Coverage (%)	Seagrass Area (m²)
Monitoring Date: 20 June 2024				
Monitoring Station: TCB3				
1	<i>Halophila ovalis</i>	6.0	40%	2.4
2	<i>Halophila ovalis</i>	25.0	30%	7.5
3	<i>Halophila ovalis</i>	150.0	60%	90.0
4	<i>Halophila ovalis</i>	20.0	70%	14.0

Table J2.3 Results for Other Intertidal Soft Shore Communities during Qualitative Walk-through Surveys in June 2024

Monitoring Station	Shore Height *	No. of Species
TCB1	H	25
	M	27
	L	16
	Overall	36
TCB2	H	20
	M	25
	L	19
	Overall	34
TCB3	H	21
	M	27
	L	20
	Overall	34
THW	H	19
	M	19
	L	17
	Overall	32

* H: +2mCD; M: +1.5mCD; L: +1mCD

Table J2.4 Results for Other Intertidal Soft Shore Communities during Quantitative Transect Surveys in June 2024

Monitoring Station	Shore Height *	Top Three Dominant Species	Density (ind. / m ²)
TCB1	H	1 <i>Cerithidea diadjariensis</i>	244.8
		2 <i>Batillaria multiformis</i>	86.4
		3 <i>Cerithidea cingulata</i>	82.4
	M	1 <i>Cerithidea diadjariensis</i>	80.8
		2 <i>Batillaria multiformis</i>	64.8
		3 <i>Batillaria zonalis</i>	46.4
	L	1 <i>Batillaria multiformis</i>	8.8
		2 <i>Batillaria zonalis</i>	6.4
		3 <i>Monodonta labio</i>	2.4
TCB2	H	1 <i>Cerithidea diadjariensis</i>	108.8
		2 <i>Batillaria zonalis</i>	17.6
		3 <i>Cerithidea cingulata</i>	3.2
	M	1 <i>Cerithidea diadjariensis</i>	382.4
		2 <i>Cerithidea cingulata</i>	92.0
		3 <i>Batillaria zonalis</i>	65.6
	L	1 <i>Cerithidea diadjariensis</i>	121.6
		2 <i>Cerithidea cingulata</i>	26.4
		3 <i>Batillaria zonalis</i>	8.8
TCB3	H	1 <i>Batillaria zonalis</i>	1642.4
		2 <i>Batillaria multiformis</i>	878.4
		3 <i>Cerithidea diadjariensis</i>	367.2
	M	1 <i>Batillaria zonalis</i>	164.8
		2 <i>Batillaria multiformis</i>	136.8
		3 <i>Cerithidea diadjariensis</i>	129.6
	L	1 <i>Cerithidea diadjariensis</i>	29.6
		2 <i>Batillaria zonalis</i>	12.8
		3 <i>Batillaria multiformis</i>	6.4
THW	H	1 <i>Cerithidea diadjariensis</i>	128.0
		2 <i>Geloina erosa</i>	39.2
		3 <i>Cerithidea cingulata</i>	37.6
	M	1 <i>Cerithidea diadjariensis</i>	357.6
		2 <i>Cerithidea cingulata</i>	47.2
		3 <i>Batillaria zonalis</i>	44.0
	L	1 <i>Cerithidea diadjariensis</i>	210.4
		2 <i>Nassarius festivus</i>	111.2
		3 <i>Batillaria zonalis</i>	24.0

* H: +2mCD; M: +1.5mCD; L: +1mCD

Group	Species	TCB1			TCB2			TCB3			THW		
		H (Qual)	M (Qual)	L (Qual)	H (Qual)	M (Qual)	L (Qual)	H (Qual)	M (Qual)	L (Qual)	H (Qual)	M (Qual)	L (Qual)
Algae	<i>Ulva sp.</i>						+						
Barnacle	<i>Balanus amphitrite</i>	+		+	+	+	+	+	+	+	+	++	+
Barnacle	<i>Fistulobalanus albicostatus</i>	+										+	
Bivalve	<i>Anomalocardia squamosa</i>	+	+	+		+					+		
Bivalve	<i>Arcuatula senhousia</i>							+					
Bivalve	<i>Barbatia virescens</i>	+	+	+		+							
Bivalve	<i>Cyclina sinensis</i>	+	+			++		+	+	+		+	+
Bivalve	<i>Geloina erosa</i>			+		+		+			+++	+++	+
Bivalve	<i>Glauconome chinensis</i>		+									+	
Bivalve	<i>Laternula anatina</i>						+						
Bivalve	<i>Saccostrea cucullata</i>	+	+	++	+	++	+	+	++	+++	+	++	+
Bivalve	<i>Septifer virgatus</i>		+	+		+			+	+			
Bivalve	<i>Ruditapes philippinarum</i>	+											+
Crab	<i>Metapograpus frontalis</i>	+	+	+	+	+		+	+	+			
Crab	<i>Metapograpus quadridematus</i>	+	++	++	+++	++	+	+	+	+	+		
Crab	<i>Parasesarma pictum</i>				+		+			+			
Crab	<i>Perisesarma bidens</i>							++			++	+	
Crab	<i>Uca arcuata</i>	+	+				+		+	+	++		
Crab	<i>Uca borealis</i>					++	+		++		++		
Crab	<i>Uca lactea</i>	++	+			+++	++		+++	+		+	+
Crab	<i>Uca splendida</i>											+	
Fish	<i>Periophthalmus modestus</i>	++	+		+	++		+	++	+	++	+	
Gastropod	<i>Batillaria multiformis</i>	++	++	++	+	++	+	+++	++	+		+	+
Gastropod	<i>Batillaria zonalis</i>	++	++	++	++	+++	++	+++	+++	++	+	++	++
Gastropod	<i>Cerithidea cingulata</i>	++	++		+	+++	++	++	++	+	++	+++	++
Gastropod	<i>Cerithidea diadjarimensis</i>	+++	++		+++	+++	+++	+++	+++	++	+++	+++	+++
Gastropod	<i>Cerithidea microptera</i>				+								+
Gastropod	<i>Cerithidea rhizophorarum</i>	+									++	+	
Gastropod	<i>Cithon spp.</i>	+	+		+	+		++	+				+
Gastropod	<i>Echinolittorina radiata</i>		+						+				
Gastropod	<i>Littoraria arduiniana</i>	+			+			+			+		
Gastropod	<i>Littoraria articulata</i>	++	++	+	++	+++	+	+	+	+		+	+
Gastropod	<i>Littoraria melanostoma</i>	+			+			+			+	+	
Gastropod	<i>Lunella coronata</i>	+	++	+		+	+		+	+			
Gastropod	<i>Nassarius festivus</i>							+++	+			++	+++
Gastropod	<i>Nerita albicilla</i>		+		+	+	+		+	+			
Gastropod	<i>Nerita chamaeleon</i>					+							
Gastropod	<i>Nerita polita</i>	+	+		++	++	+	+	++	+		+	+
Gastropod	<i>Patelloida pygmaea</i>		+										
Gastropod	<i>Terebralia palustris</i>										+		
Gastropod	<i>Terebralia sulcata</i>				+						++	+	
Gastropod	<i>Thais clavigera</i>	+	+			+							+
Hermit Crab	<i>Clibanarius sp.</i>			+	+	+			+		+		
Hermit Crab	<i>Diogenes sp.</i>			+					+				
Horseshoe Crab	<i>Carcinoscorpius rotundicauda</i>		+										
Horseshoe Crab	<i>Tachypleus tridentatus</i>	+	++		+			++	+++	+	++	+++	+
Horseshoe Crab	<i>Unidentified sp.</i>												
Seagrass	<i>Halophila ovalis</i>							++	+++	++			
Seaslug	<i>Onchidium sp.</i>										+		
Worm	<i>Oligochaete sp.</i>		+		+		+		+	+			+
Worm	<i>Sipunculus sp.</i>		+	+					+				

Remark: '+' denotes the species was relatively uncommon at the area;
 '++' denotes the species was relatively common at the area;
 '+++'' denotes the species was relatively abundant at the area.

Group	Species	TCB1																	
		H1	H2	H3	H4	H5	Density (ind. / m ² or % cover)	M1	M2	M3	M4	M5	Density (ind. / m ² or % cover)	L1	L2	L3	L4	L5	Density (ind. / m ² or % cover)
Algae	<i>Ulva sp.</i>						0%						0%						0%
Bivalve	<i>Anomalocardia squamosa</i>						0						0					1	0.8
Bivalve	<i>Arcuatula senhousia</i>						0						0						0
Bivalve	<i>Barbatia virescens</i>				1		0.8				1		0.8					2	1.6
Bivalve	<i>Cyclina sinensis</i>	2	3				4						0						0
Bivalve	<i>Geloina erosa</i>						0						0					1	0.8
Bivalve	<i>Glaucome chinensis</i>						0			1	1	1	0.6						0
Bivalve	<i>Laternula anatina</i>						0						0						0
Bivalve	<i>Saccostrea cucullata</i>					5%	1%						0%		5%		5%	10%	4%
Bivalve	<i>Septifer virgatus</i>						0%		0.05				0.01						0%
Bivalve	<i>Ruditapes philippinarum</i>						0						0						0
Crab	<i>Parasesarma pictum</i>						0						0						0
Crab	<i>Perisesarma bidens</i>						0						0						0
Crab	<i>Uca lactea</i>						0		1				0.8						0
Gastropod	<i>Batillaria multiformis</i>	2		64	41	1	86.4	2	3	24	38	14	64.8					11	8.8
Gastropod	<i>Batillaria zonalis</i>	8	12	30	14		51.2	10	21		23	4	46.4	2				6	6.4
Gastropod	<i>Cerithidea cingulata</i>	6	72	18	7		82.4	11	4	10	16	6	37.6						0
Gastropod	<i>Cerithidea diadjarimensis</i>	22	58	96	60	70	244.8	30	10	5	39	17	80.8						0
Gastropod	<i>Cerithidea microptera</i>						0.0						0.0						0
Gastropod	<i>Cerithidea rhizophorarum</i>						0						0.0						0
Gastropod	<i>Clithon spp.</i>				3		2.4						0						0
Gastropod	<i>Littoraria articulata</i>			12			9.6						0						0
Gastropod	<i>Lunella coronata</i>				1		0.8			2	4		4.8					1	0.8
Gastropod	<i>Monadonta labio</i>			4			3.2	3				32	28					3	2.4
Gastropod	<i>Nassarius festivus</i>						0						0						0
Gastropod	<i>Nerita polita</i>						0						0						0
Gastropod	<i>Patelloida pygmaea</i>						0					1	0.8						0
Gastropod	<i>Terebralia palustris</i>						0						0						0
Gastropod	<i>Terebralia sulcata</i>						0						0						0
Gastropod	<i>Thais clavigera</i>						0		1				0.8						0
Hermit Crab	<i>Clibanarius sp.</i>						0						0						0
Horseshoe Crab	<i>Tachypleus tridentatus</i>						0						0						0
Worm	<i>Oligochaete sp.</i>						0				1		0.8						0
Worm	<i>Sipunculus sp.</i>						0			3			2.4					2	1.6

Group	Species	TCB2																	
		H1	H2	H3	H4	H5	Density (ind. / m ² or % cover)	M1	M2	M3	M4	M5	Density (ind. / m ² or % cover)	L1	L2	L3	L4	L5	Density (ind. / m ² or % cover)
Algae	<i>Ulva sp.</i>						0%						0%			5%			1%
Bivalve	<i>Anomalocardia squamosa</i>						0				3		2.4						0
Bivalve	<i>Arcuatula senhousia</i>						0						0						0
Bivalve	<i>Barbatia virescens</i>						0						0						0
Bivalve	<i>Cyclina sinensis</i>						0	2	1	1			3.2						0
Bivalve	<i>Geloina erosa</i>						0					1	0.8						0
Bivalve	<i>Glaucome chinensis</i>						0						0						0
Bivalve	<i>Laternula anatina</i>						0						0		1				0.2
Bivalve	<i>Saccostrea cucullata</i>		5%	5%		10%	4%			10%	5%		3%			5%			1%
Bivalve	<i>Septifer virgatus</i>						0%						0%						0%
Bivalve	<i>Ruditapes philippinarum</i>						0						0						0
Crab	<i>Parasesarma pictum</i>						0						0						0
Crab	<i>Perisesarma bidens</i>						0						0						0
Crab	<i>Uca lactea</i>						0						0						0
Gastropod	<i>Batillaria multiformis</i>						0	3	5	4			9.6						0
Gastropod	<i>Batillaria zonalis</i>	2	8	10	2		17.6	14		58	8	2	65.6		2		4	5	8.8
Gastropod	<i>Cerithidea cingulata</i>			2		2	3.2	17	18	48	10	22	92.0	9	6	12	2	4	26.4
Gastropod	<i>Cerithidea diadjarimensis</i>	76	22	24	10	4	108.8	102	110	107	44	115	382.4	30	7	54	37	24	121.6
Gastropod	<i>Cerithidea microptera</i>						0						0						0
Gastropod	<i>Cerithidea rhizophorarum</i>						0						0						0
Gastropod	<i>Clithon spp.</i>						0						0						0
Gastropod	<i>Littoraria articulata</i>						0						0						0
Gastropod	<i>Lunella coronata</i>						0			4			3.2						0
Gastropod	<i>Monadonta labio</i>						0						0						0
Gastropod	<i>Nassarius festivus</i>						0						0						0
Gastropod	<i>Nerita polita</i>						0						0						0
Gastropod	<i>Patelloida pygmaea</i>						0						0						0
Gastropod	<i>Terebralia palustris</i>						0						0						0
Gastropod	<i>Terebralia sulcata</i>						0						0						0
Gastropod	<i>Thais clavigera</i>						0					1	0.8						0
Hermit Crab	<i>Clibanarius sp.</i>						0						0						0
Horseshoe Crab	<i>Tachypleus tridentatus</i>						0						0						0
Worm	<i>Oligochaete sp.</i>					2	1.6						0	2		1			2.4
Worm	<i>Sipunculus sp.</i>						0						0						0

Group	Species	TCB3																	
		H1	H2	H3	H4	H5	Density (ind. / m ² or % cover)	M1	M2	M3	M4	M5	Density (ind. / m ² or % cover)	L1	L2	L3	L4	L5	Density (ind. / m ² or % cover)
Algae	<i>Ulva sp.</i>						0%						0%						0%
Bivalve	<i>Anomalocardia squamosa</i>						0						0			1			0.8
Bivalve	<i>Arcuatula senhousia</i>		9				7.2						0						0
Bivalve	<i>Barbatia virescens</i>						0						0						0
Bivalve	<i>Cyclina sinensis</i>		2			1	2.4				2		1.6	1					0.8
Bivalve	<i>Geloina erosa</i>						0						0						0
Bivalve	<i>Glaucome chinensis</i>						0						0						0
Bivalve	<i>Laternula anatina</i>						0						0						0
Bivalve	<i>Saccostrea cucullata</i>		5%	5%			8%				20%	5%	5%	10%		15%	5%	15%	9%
Bivalve	<i>Septifer virgatus</i>						0%						0						0
Bivalve	<i>Ruditapes philippinarum</i>						0						0						0
Crab	<i>Parasesarma pictum</i>						0		1				0.8						0
Crab	<i>Perisesarma bidens</i>						0						0						0
Crab	<i>Uca lactea</i>						0						0						0
Gastropod	<i>Batillaria multiformis</i>	293	46	56	417	286	878.4		30	24	96	21	136.8	5				3	6.4
Gastropod	<i>Batillaria zonalis</i>	290	104	582	745	332	1642.4	72	22	42	68	2	164.8	14	2				12.8
Gastropod	<i>Cerithidea cingulata</i>	32	94	26	61	62	220	4		2	3	94	82.4	4					3.2
Gastropod	<i>Cerithidea diadjarimensis</i>	98	26	101	182	52	367.2	32	36	21	61	12	129.6	34	3				29.6
Gastropod	<i>Cerithidea microptera</i>						0						0						0
Gastropod	<i>Cerithidea rhizophorarum</i>						0						0						0.0
Gastropod	<i>Clithon spp.</i>		5	18	3		20.8						0						0
Gastropod	<i>Littoraria articulata</i>						0						0						0
Gastropod	<i>Lunella coronata</i>						0						0						0
Gastropod	<i>Monadonta labio</i>		1				0.8						0	3					2.4
Gastropod	<i>Nassarius festivus</i>	90	123	142	36	56	357.6						0						0
Gastropod	<i>Nerita polita</i>						0		2				1.6						0
Gastropod	<i>Patelloida pygmaea</i>						0						0						0
Gastropod	<i>Terebralia palustris</i>						0						0						0
Gastropod	<i>Terebralia sulcata</i>						0						0						0
Gastropod	<i>Thais clavigera</i>						0						0						0
Hermit Crab	<i>Clibanarius sp.</i>						0						0						0
Horseshoe Crab	<i>Tachypleus tridentatus</i>	1					0.8						0						0
Worm	<i>Oligochaete sp.</i>						0						0			2			1.6
Worm	<i>Sipunculus sp.</i>						0		1				0.8						0

Group	Species	THW															Density (ind. / m ² or % cover)		
		H1	H2	H3	H4	H5	Density (ind. / m ² or % cover)	M1	M2	M3	M4	M5	Density (ind. / m ² or % cover)	L1	L2	L3		L4	L5
Algae	<i>Ulva sp.</i>						0%						0%						0%
Bivalve	<i>Anomalocardia squamosa</i>						0						0						0
Bivalve	<i>Arcuatula senhousia</i>						0						0						0
Bivalve	<i>Barbatia virescens</i>						0						0						0
Bivalve	<i>Cyclina sinensis</i>						0					2	1.6				4		3.2
Bivalve	<i>Geloina erosa</i>	10	12	15	11	1	39.2	7	2	3	2		11.2	1					0.8
Bivalve	<i>Glauconome chinensis</i>						0					3	0.6						0
Bivalve	<i>Laternula anatina</i>						0						0						0
Bivalve	<i>Saccostrea cucullata</i>						0%			5%	15%	10%	6%						0%
Bivalve	<i>Septifer virgatus</i>						0						0%						0%
Bivalve	<i>Ruditapes philippinarum</i>						0						0	1					0.8
Crab	<i>Parasesarma pictum</i>						0						0						0
Crab	<i>Perisesarma bidens</i>			2			1.6	1					0.8						0
Crab	<i>Uca lactea</i>						0			1			0.8						0
Gastropod	<i>Batillaria multiformis</i>						0						0						0
Gastropod	<i>Batillaria zonalis</i>						0	4	8	2	16	25	44.0	8	8	2	4	8	24.0
Gastropod	<i>Cerithidea cingulata</i>	47					37.6	6			21	32	47		7		3	6	12.8
Gastropod	<i>Cerithidea diadjarimensis</i>	16	46	64	4	30	128	78	82	88	99	100	357.6	26	42	74	27	94	210.4
Gastropod	<i>Cerithidea microptera</i>						0.0						0		1				0.8
Gastropod	<i>Cerithidea rhizophorarum</i>	6	2	3	1	7	15.2			1			0.8						0
Gastropod	<i>Clithon spp.</i>						0						0						0
Gastropod	<i>Littoraria articulata</i>						0						0						0
Gastropod	<i>Lunella coronata</i>						0						0						0
Gastropod	<i>Monadonta labio</i>						0						0						0
Gastropod	<i>Nassarius festivus</i>						0		7	9	4	6	20.8	7	52	12	62	6	111.2
Gastropod	<i>Nerita polita</i>						0						0						0
Gastropod	<i>Patelloida pygmaea</i>						0						0						0
Gastropod	<i>Terebralia palustris</i>				1		0.8						0						0
Gastropod	<i>Terebralia sulcata</i>					2	1.6						0						0
Gastropod	<i>Thais clavigera</i>						0						0		1				0.8
Hermit Crab	<i>Clibanarius sp.</i>					1	0.8						0						0
Horseshoe Crab	<i>Tachypleus tridentatus</i>						0						0						0
Worm	<i>Oligochaete sp.</i>						0						0		1				0.8
Worm	<i>Sipunculus sp.</i>						0						0						0



ERM

ANNEX J3

EVENT AND ACTION PLAN

Annex J3 Event and Action Plan for Soft Shore Ecological Monitoring

Event	Action			
	ET	IEC	ER	Contractor
Density or the distribution pattern of horseshoe crab, seagrass and intertidal soft shore communities recorded in the impact or post-construction monitoring are significantly lower than or different from those recorded in the baseline monitoring.	<ol style="list-style-type: none"> 1. Review historical data to ensure differences are as a result of natural variation or previously observed seasonal differences; 2. Identify source(s) of impact; 3. Inform the IEC, ER and Contractor; 4. Check monitoring data; 5. Discuss additional monitoring and any other measures, with the IEC, ER and Contractor. 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review proposals for additional monitoring and any other measures submitted by the Contractor and advise the ER accordingly; 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Discuss with the IEC additional monitoring requirements and any other measures proposed by the ET; 2. Make agreement on the measures to be implemented. 	<ol style="list-style-type: none"> 1. Inform the ER and in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the ER; 3. Implement the agreed measures; 4. Resubmit proposals of remedial actions if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.