Technical Annex 12L Hayle Estuary: Seasonal Sensitivity Matrix for Ecological Receptors

	HAYLE	E ESTU	ARY: S	EASON	AL SENS	SITIVITY	MATRI	X FOR E	ECOLO	GICAL F	RECEP	TORS	
y SENSITIVE PERIODS FOR													
CONSTRUCTION WORK	Month	1											
Species or group	J	F	М	А	М	J	J	Α	S	0	N	D	Comments
Aquatic invertebrates & algae													Avoid high water temperatures
Fish													Avoid high water temperatures
Birds - aquatic													Area moderately important for small nos. of Little Grebe, Little Egret, Oystercatcher. V small nos. present in summer.
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Aquatic invertebrates & algae													Avoid high water temperatures
Fish													Temperature and spawning
Birds - aquatic													Area important for Little Grebe, Oystercatcher, Dunlin, Redshank, Grey Plover & Bar-tailed Godwit. Nos. peak in winter & autumn/spring passage
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Aquatic invertebrates & algae													Avoid high water temperatures
Fish													Temperature and spawning
Birds - aquatic													Area important for Little Grebe, Little Egret, Shelduck, Redshank - nos. peak in winter & autumn/spring passage & for Mute Swan and Mallard in small numbers most of year
Aquatic invertebrates & algae													Avoid high water temperatures
Fish													Temperature and spawning
Birds - aquatic													Area (adjacent) important for Little Grebe. V small nos. present in summer.
Birds - terrestrial													Vegn clearance best done outside Mar-Aug; if breeding birds found work must stop immediately. Could exclude bird nesting by physical means pre-spring, so work can take place Mar-Aug if unavoidable
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Aquatic invertebrates & algae													Avoid high water temperatures
Fish													Avoid sandeel spawning & high temps
Birds - aquatic													Area important for small nos. of Little Egret, Oystercatcher & Dunlin. V small nos. present in summer.
	CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish  Birds - aquatic  Aquatic invertebrates & algae  Fish  Birds - terrestrial  Aquatic invertebrates & algae  Fish  Birds - aquatic	CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish  Birds - aquatic  Aquatic invertebrates & algae  Fish  Birds - terrestrial  Aquatic invertebrates & algae  Fish  Birds - aquatic	y SENSITIVE PERIODS FOR CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish Birds - aquatic  Birds - terrestrial	CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish  Birds - aquatic  Aquatic invertebrates & algae  Fish  Birds - terrestrial	CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish  Birds - aquatic  Aquatic invertebrates & algae  Fish  Birds - terrestrial	SENSITIVE PERIODS FOR CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish  Birds - aquatic  Aquatic invertebrates & algae  Fish  Birds - aquatic	SENSITIVE PERIODS FOR CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish  Birds - aquatic  Aquatic invertebrates & algae  Fish  Aquatic invertebrates & algae	y SENSITIVE PERIODS FOR CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish  Birds - aquatic  Aquatic invertebrates & algae  Fish  Birds - terrestrial	y SENSITIVE PERIODS FOR CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish  Birds - aquatic  Aquatic invertebrates & algae  Fish  Birds - terrestrial	SENSITIVE PERIODS FOR CONSTRUCTION WORK  Species or group  JFM AM JJJAS  Aquatic invertebrates & algae  Fish Birds - aquatic  Aquatic invertebrates & algae  Fish Birds - terrestrial	y SENSITIVE PERIODS FOR CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish  Birds - aquatic  Aquatic invertebrates & algae  Fish  Aquatic invertebrates & algae	y SENSITIVE PERIODS FOR CONSTRUCTION WORK  Species or group  Aquatic invertebrates & algae  Fish  Birds - aquatic  Aquatic invertebrates & algae  Fish  Aquatic invertebrates & algae	CONSTRUCTION WORK  Species or group  JFMAAMJJJAASOND Aquatic invertebrates & algae  Fish Birds - aquatic  Aquatic invertebrates & algae

High sensitivity

Moderate sensitivity

Best time for this species/group

Harbour entrance Aquatic invertebrates & algae

Birds - aquatic

Fish

Triangular Spit Birds - aquatic

& sand trap

Terrestrial	SENSITIVE PERIODS FOR													
Ecology	CONSTRUCTION WORK	Month												
Area	Species or group	J	F	М	Α	М	J	J	Α	S	0	N	D	
Triangular Spit	Birds - terrestrial													Vegn clearance best done outside Mar-Aug; if breeding birds found work must stop immediately. Could exclude bird nesting by physical means pre-spring, so work can take place Mar-Aug if unavoidable
	Petalwort translocation													Plant is not visible during summer; translocation therefore best timed for winter period, when extent of colonies apparent
North Quay	Reptiles													Capture/translocation programmes can only be conducted whilst reptiles are active; capture is limited by high temperatures during July/Aug. Scrub clearance can occur at any time.
	Bats - maternity roosts (buildings)													Works on maternity roosts possible between mid-September to mid-May; survey of buidlings needed May-Sept prior to works to allow mitigation statement to be prepared and licence obtained
	Bats - hibernation roosts (quarry)													Works on hibernation roosts poss between mid-March to end Oct; survey of potential hibernation sites needed Nov-Feb prior to works to allow mitigation statement to be prepared and licence obtained
	Birds - terrestrial													Vegn clearance best done outside Mar-Aug; if breeding birds found work must stop immediately. Could exclude bird nesting by physical means pre-spring, so work can take place Mar-Aug if unavoidable
South Quay	Petalwort translocation													Plant is not visible during summer; translocation therefore best timed for winter period, when extent of colonies apparent
	Birds - terrestrial													Vegn clearance best done outside Mar-Aug; if breeding birds found work must stop immediately. Could exclude bird nesting by physical means pre-spring, so work can take place Mar-Aug if unavoidable
		J	F	М	Α	М	J	J	А	S	0	N	D	

Avoid high water temperatures

J F M A M J J A S O N D

Avoid sandeel spawning & high temps

Important for roosting Ringed Plover at estuary mouth as well as moderately important for Dunlin. Nos. peak in winter & autumn/spring passage

Adjacent areas (outer Lelant and Harbour) important for Wigeon, Little Egret & moderately important for Little Grebe, Dunlin & Oystercatcher. Nos. peak mostly in winter & autumn/spring passage