

Marine Management Organisation Marine Licence

1 Introduction

This is a licence granted by the Marine Management Organisation on behalf of the Secretary of State to authorise the licence holder to carry on activities for which a licence is required under Part 4 of the Marine and Coastal Access Act 2009.

1.1 Licence number

The licence number for this licence is L/2018/00131/1

1.2 Licence holder

The licence holder is the person or organisation set out below:

Name / company name	The Mersea Harbour Protection Trust
Company registration number (if applicable)	1159088
Address	10 Brickhouse Close, West Mersea, Colchester, CO5 8LA
Contact within company	Mr Richard Taylor
Position within company (if applicable). State if company officer or director	Trustee

1.3 Licence date

Version	1
Licence start date	01 March 2018
Licence end date	31 December 2028
Date of original issue	26 March 2018

1.4 Licence validity

This version of this licence is valid from the licence start date to the licence end date.

This version of this licence supersedes any earlier version of this licence. Any activity commenced under a previous version of this licence and which is also a licensed activity authorised by section 4 of this version of this licence may continue in accordance with the licence conditions in section 5 of this version of this licence.

Ms Ellie Noble +44 (0)2082 257 929 ellie.noble@marinemanagement.org.uk

2 General

2.1 Interpretation

In this licence, terms are as defined in section 115 of the Marine and Coastal Access Act and the Interpretation Act 1978 unless otherwise stated.

- "licensed activity" means any activity set out in section 4 of this licence.
- "licence holder" means the person(s) or organisation(s) named in section 1 above to whom this licence is granted.
- "MMO" means the Marine Management Organisation.
- "mean high water springs" means the average of high water heights occurring at the time of spring tides.
- "sea bed" or "seabed" means the ground under the sea.
- "the 2009 Act" means the Marine and Coastal Access Act 2009.
- All times shall be taken to be the time on any given day.
- All geographical co-ordinates contained within this licence are in WGS84 format (latitude and longitude degrees and minutes to three decimal places) unless stated otherwise.

2.2 Contacts

Except where otherwise indicated, the main point of contact with the MMO and the address for email and postal returns and correspondence shall be:

Marine Management Organisation Lancaster House Hampshire Court Newcastle upon Tyne NE4 7YH Tel:0300 123 1032 Fax:0191 376 2681 Email:marine.consents@marinemanagement.org.uk

Any references to any local MMO officer shall be the relevant officer in the area(s) located at:

Marine Management Organisation Pakefield Road Lowestoft Suffolk NR33 0HT Tel: 01502 573149 Fax: 01502 514854 Email: lowestoft@marinemanagement.org.uk

3 **Project overview**

3.1 **Project title**

Mersea Harbour and Tollesbury Wick Climate Change Adaptation Recharge Project

3.2 **Project description**

Sand and gravel foreshore recharge to address coastal erosion in the Mersea Harbour area and Tollesbury Wick frontage. Material will be sourced from the planned Harwich Haven Approaches capital dredge. A total of 98,000 cubic metres of material will be transported to the proposal area and distributed to the receptor sites.

3.3 Related marine licences

None.

4 Licensed activities

This section sets out the licensed activities. The licensed activities are authorised to be carried on only in accordance with the activity details below and with the licence conditions as set out in section 5 of this licence.

Please note that where licensed quantities are displayed with reference to their constituent materials, the relative quantities given for the constituent materials are indicative only.

Site 1 - Packing Marsh n	Site 1 - Packing Marsh north		
Site location	See Co-ordinates Schedule.		
Activity 1.1 - Constructio recharge placement	n of retaining fence - Packing Marsh Island, north of		
Activity type	Construction of new works		
Activity location	See Co-ordinates Schedule.		
Description	A 70m-length fence will be constructed on the upper foreshore.		
Methodology	The 70m-length fence consists of two rows of 100mm x 2m non-pressure treated pine stakes, spaced 250mm apart. A hand pile driver will be used to drive the posts into the upper foreshore.		
	The posts will be set 1m above saltmarsh level. 6mm polypropylene rope will be tensioned between the posts and secured with 20mm galvanised staples. The channel between the two fence lines will be infilled with hazel or willow faggots.		
	No work will take place if nesting birds are present. If work has to be carried out between October and March, inclusively, Natural England's winter working guidance will be followed.		
Programme of works	Working hours will be tide dependent. The fence will be constructed before the recharge work commences. The work is expected to take 3 weeks to complete.		

Site 2 - Packing_Marsh_Island			
Site location See Co-ordinates Schedule.			
Activity 2.1 - Beneficial use of dredgings - foreshore recharge			
Activity type Disposal of dredged material			
Activity location	See Co-ordinates Schedule.		

Description		Dredgings obtained from the deepening of the Harwich and Felixstowe Approaches will be used to undertake foreshore recharge at this site. 5,000 cubic metres of sand and gravel dredgings will be placed between -0.49 and +2.5 Ordnance Datum Newlyn (ODN), extending 45m west to east. The mound footprint will cover an area of 0.30ha and achieve a height of +3.5 metres ODN.			o undertake c metres of etween -0.49 tending 45m r an area of
		G	Juantities		
Start date	End date	Material	Amount to be deposited (dry tonnes)	Amount to be deposited (wet tonnes)	Source
01/3/2018	31/12/2028	Gravel (2-64mm)	3507.75	4209.3	Harwich Haven Authority approaches dredge
01/3/2018	31/12/2028	Sand (62.5um-2m	4030.4 m)	4786.1	Harwich Haven Authority approaches dredge
01/3/2018	31/12/2028	Silt (31.25-62.5)	178.12 µm)	199.5	Harwich Haven Authority approaches dredge
Methodology		by a shallow high neap tion spud will be by 'rainbowi After 40 min have been for be lifted and	w-draft, trailing s de. On manoeuvr lowered. Dischar ng' the material utes, the load, of ully discharged fr the vessel will r	e delivered to the suction hopper d ring into position, rge will commend over the bow of up to 1,500 cubic rom the hopper. T return to the drec n a further 3 carg	redger on a the mooring e on the ebb the dredger. c metres, will The spud will dge site. The
		birds at crition working gui	cal times, observ dance. An oyste	avoid disturbance ving Natural Engl erman will be o nings of the disch	land's winter n board the
Programme	of works		se will depend o	the delivery of c n Harwich Have	

If working continuously, the dredger could potentially deliver 2 cargoes per 24 hours. Over the four recharge proposal sites the placement of recharge could be completed in about 12 weeks. However, there may be downtime within the recharge programme depending on the dredge schedule. Downtime will need to be factored into the schedule at times of bird nesting, within or adjacent to the placement site.

Site 3 - Cobmarsh_Island						
Site location		See Co-ordi	nates Schedule.			
Activity 3.1	- Beneficial u	se of dredgin	se of dredgings - foreshore recharge			
Activity type)	Disposal of	dredged materia	l		
Activity loca	tion	See Co-ordi	nates Schedule.			
Description		Dredgings obtained from the deepening of the Har and Felixstowe Approaches will be used to under foreshore recharge at this site. It is proposed to p 48,000 cubic metres of sand and gravel dredg onto the intertidal mud, between -1.95 and +0.10 +2.5 Ordnance Datum Newlyn (ODN), to form a s bund along a 410m length of foreshore. The rech embankment will be 50 metres wide at the base achie a crest width of 4m and a height of +3.5 metres ODN, a 1:4 slope. The recharge footprint will extend over an of 1.66ha.		o undertake sed to place el dredgings d +0.100 to orm a single he recharge se achieving es ODN, with		
		C	Juantities			
Start date	End date	Material	Amount to be deposited (dry tonnes)	Amount to be deposited (wet tonnes)	Source	
01/3/2018	31/12/2028	Gravel (2-64mm)	33674.4	40409.28	Harwich Haven Authority approaches dredge	
01/3/2018	31/12/2028	Sand (62.5um-2m	38691.84 m)	45946.56	Harwich Haven Authority approaches dredge	
01/3/2018	31/12/2028	Silt (31.25-62.5เ	1710 µm)	1915.20	Harwich Haven Authority	

	approaches dredge		
Methodology	The recharge material will be delivered to the deposit site by a shallow-draft, trailing suction hopper dredger on a high spring tide. On manoeuvring into position, the mooring spud will be lowered. Discharge will commence on the ebb by 'rainbowing' the material over the bow of the dredger. This method deploys a high velocity water cannon delivering direct to the target area. After 40 minutes, the load, of up to 1,500 cubic metres, will have been fully discharged from the hopper. The spud will be lifted and the vessel will return to the dredge site. The process will be repeated with a further 31 cargoes.		
	Winter working will need to avoid disturbance to roosting birds at critical times, observing Natural England's winter working guidance. An oysterman will be on board the dredger to advise on the timings of the discharge on the ebb tide.		
Programme of works	The programme of works for the delivery of dredgings for beneficial use will depend on Harwich Haven Authority's dredging timetable.		
	If working continuously, the dredger could potentially deliver 2 cargoes per 24 hours. Over the four recharge proposal sites the placement of recharge could be completed in about 12 weeks. However, there may be downtime within the recharge programme depending on the dredge schedule. Downtime will need to be factored into the schedule at times of bird nesting, within or adjacent to the placement site.		

Site 4 - Old_Hall		
Site location	See Co-ordinates Schedule.	
Activity 4.1 - Beneficial u	se of dredgings - foreshore recharge	
Activity type	Disposal of dredged material	
Activity location	See Co-ordinates Schedule.	
Description	Dredgings obtained from the deepening of the Harwich and Felixstowe Approaches will be used to undertake foreshore recharge at this site. 40,000 cubic metres of sand and gravel dredgings will be placed onto the intertidal mud, between -1.5 and +0.149 Ordnance Datum Newlyn (ODN), to form a single bund along a 308m length of foreshore. The recharge embankment will be 50 metres	

		height of +3.	•	a crest width c vith a 1:4 slope. T area of 1.47ha.	
		•	Quantities		
Start date	End date	Material	Amount to be deposited (dry tonnes)	Amount to be deposited (wet tonnes)	Source
01/3/2018	31/12/2028	Gravel (2-64mm)	28062	33674.4	Harwich Haven Authority approaches dredge
01/3/2018	31/12/2028	Sand (62.5um-2m	32243.2 m)	38288.8	Harwich Haven Authority approaches dredge
01/3/2018	31/12/2028	Silt (31.25-62.50	1425 µm)	1596	Harwich Haven Authority approaches dredge
Methodology		site by a si on a high sp mooring spu on the ebb b dredger. Aft metres, will The spud w	hallow-draft, trai pring tide. On m ud will be lowere by 'rainbowing' the er 40 minutes, the have been fully vill be lifted and	be delivered to ling suction hop anoeuvring into ed. Discharge wil e material over th he load, of up to discharged from the vessel will n be repeated with	pper dredger position, the l commence be bow of the 1,500 cubic the hopper. return to the
		Winter working will need to avoid disturbance to roostin birds at critical times, observing Natural England's winter working guidance. An oysterman will be on board th dredger to advise on the timings of the discharge on th ebb tide.		land's winter n board the	
Programme	Programme of works		The programme of works for the delivery of dredgings for beneficial use will depend on Harwich Haven Authority's dredging timetable.		
		deliver 2 ca	rgoes per 24 ho	e dredger could ours. Over the fo nent of recharg	our recharge

completed in about 12 weeks. However, there may be downtime within the recharge programme depending on the dredge schedule. Downtime will need to be factored into the schedule at times of bird nesting, within or adjacent to the placement site.

Site 5 - Tollesbury_Wick					
Site location		See Co-ordinates Schedule.			
Activity 5.1	- Beneficial u	se of dredgin	gs - foreshore re	charge	
Activity type)	Disposal of	dredged materia	l	
Activity loca	tion	See Co-ordi	nates Schedule.		
Description		Dredgings obtained from the deepening of the Harw and Felixstowe Approaches will be used to underta foreshore recharge at this site. 5,000 cubic metres of sa and gravel dredgings will be placed onto a 441m len between -0.95 to +3.3 Ordnance Datum Newlyn (OD The existing recharge bund will also be extended by 4 at the north-eastern end placing onto mudflat betwee -0.85 and +1.5 Ordnance Datum Newlyn. The recha embankment will be 50 metres wide at the base achiev a crest width of 4m and a height of +3.5 metres ODN, w a 1:4 slope. The existing bund to be raised covers 2.36 of foreshore. The extension to the north-eastern end of		o undertake etres of sand 441m length wlyn (ODN). nded by 45m flat between the recharge se achieving es ODN, with overs 2.36ha	
		C	Juantities		
Start date	End date	Material	Amount to be deposited (dry tonnes)	Amount to be deposited (wet tonnes)	Source
01/3/2018	31/12/2028	Gravel (2-64mm)	3507.75	4209.3	Harwich Haven Authority approaches dredge
01/3/2018	31/12/2028	Sand (62.5um-2m	4030.4 m)	4786.1	Harwich Haven Authority approaches dredge
01/3/2018	31/12/2028	Silt (31.25-62.5t	178.12 µm)	199.5	Harwich Haven Authority

				approaches dredge
Methodology	The recharge material will be delivered to the deposit site by a shallow-draft, trailing suction hopper dredger on a high neap tide. On manoeuvring into position, the mooring spud will be lowered. Discharge will commence on the ebb by 'rainbowing' the material over the bow of the dredger. After 40 minutes, the load, of up to 1,500 cubic metres, will have been fully discharged from the hopper. The spud will be lifted and the vessel will return to the dredge site. The process will be repeated with a further 3 cargoes.			
	birds at criti working gui	ing will need to a cal times, observ dance. An oyste advise on the tim	ving Natural Eng erman will be o	land's winter n board the
Programme of works		nme of works for se will depend o netable.		
	deliver 2 ca proposal si completed i downtime w the dredge	continuously, th rgoes per 24 ho tes the placem n about 12 wee ithin the recharg schedule. Downt edule at times of b ment site.	ours. Over the for lent of recharg eks. However, th ge programme d time will need to	our recharge e could be here may be epending on be factored

Site 6 - Cobmarsh north-west		
Site location	See Co-ordinates Schedule.	
Activity 6.1 - Construction Island recharge	n of retaining fence - north-west boundary of Cobmarsh	
Activity type	Construction of new works	
Activity location	See Co-ordinates Schedule.	
Description	A 180m length fence will be constructed on the upper foreshore.	
Methodology	The 180m-length fence consists of two rows of 100mm x 2m non-pressure treated pine stakes, spaced 250mm apart. A hand pile driver will be used to drive the posts into the upper foreshore.	
	The posts will be set 1m above saltmarsh level. 6mm polypropylene rope will be tensioned between the posts Page 12 of 19	

	and secured with 20mm galvanised staples. The channel between the two fence lines will be infilled with hazel or willow faggots.
	No work will take place if nesting birds are present. If work has to be carried out between October and March, inclusively, Natural England's winter working guidance will be followed.
Programme of works	Working hours will be tide dependent. The fence will be constructed before the recharge work commences. The work is expected to take 3 weeks to complete.

5 Licence conditions

5.1 General conditions

5.1.1 Notification of commencement

The licence holder must notify the MMO prior to the commencement of the first instance of any licensed activity. This notice must be received by the MMO no less than five working days before the commencement of that licensed activity.

5.1.2 Licence conditions binding other parties

Where provisions under section 71(5) of the 2009 Act apply, all conditions attached to this licence apply to any person who for the time being owns, occupies or enjoys any use of the licensed activities for which this licence has been granted.

5.1.3 Agents / contractors / sub-contractors

The licence holder must notify the MMO in writing of any agents, contractors or subcontractors that will carry on any licensed activity listed in section 4 of this licence on behalf of the licence holder. Such notification must be received by the MMO no less than 24 hours before the commencement of the licensed activity.

The licence holder must ensure that a copy of this licence and any subsequent revisions or amendments has been provided to, read and understood by any agents, contractors or sub-contractors that will carry on any licensed activity listed in section 4 of this licence on behalf of the licence holder.

5.1.4 Vessels

The licence holder must notify the MMO in writing of any vessel being used to carry on any licensed activity listed in section 4 of this licence on behalf of the licence holder. Such notification must be received by the MMO no less than 24 hours before the commencement of the licensed activity. Notification must include the master's name, vessel type, vessel IMO number and vessel owner or operating company.

The licence holder must ensure that a copy of this licence and any subsequent revisions or amendments has been read and understood by the masters of any vessel being used to carry on any licensed activity listed in section 4 of this licence, and that a copy of this licence is held on board any such vessel.

5.1.5 Changes to this licence

Should the licence holder become aware that any of the information on which the granting of this licence was based has changed or is likely to change, they must notify the MMO at the earliest opportunity. Failure to do so may render this licence invalid and may lead to enforcement action.

5.1.6 Licence quantities

Where a licensed activity comprises dredging or the disposal of dredged material, the total quantity of material authorised to be dredged or disposed of in any given time period shall be as set out for that licensed activity in section 4 of this licence.

For each time period, the actual quantity dredged or disposed of shall be calculated by adding the quantity of material dredged or disposed of during that time period under this version of this licence to that dredged or disposed of under any previous version of this licence that was valid during that time period.

5.2 **Project specific conditions**

This section sets out project specific conditions relating to the licensed activities as set out in section 4 of this licence.

Project wide conditions

5.2.1	 Where work extends into the overwintering period, cold/freezing weather working restrictions for the work will apply according to the wildfowling approach (http://jncc.defra.gov.uk/page-2894) where work should cease if freezing conditions are recorded at more than half of the local weather stations for more than 13 consecutive days. Reason: To avoid impacts to birds that will be particularly sensitive in times of freezing weather.
5.2.2	Disposal activities must occur within 2 hours after high tide at the start of the ebb to allow sediment to be transported by the ebb tide.
	Reason: To avoid disturbance to overwintering and breeding birds that use the protected areas and to provide maximum dispersion and minimise any sedimentation that may occur within designated sites as a result of disposal activities.
5.2.3	All pre, during and post works monitoring must be carried out as described in Schedule 8 of this licence. Reason: To avoid any adverse impact of the works.
5.2.4	All dredging activities must adhere to the Environment Agency check-clean-dry code of practice. For information contact the Environment Agency on 03708 506 506, or visit the Great Britain Non-Native Species Secretariat website - http://www.nonnativespecies.org/checkcleandry
	The licence holder must provide a document to the MMO demonstrating how the activities adhere to this guidance. This document must be submitted to the MMO 6 weeks prior to the commencement of the licenced activities. The licensed activities must not commence until written approval is provided by the MMO.

	Reason: To minimise the introduction, and restrict the spread, of invasive non-native species which may occur through dredging activities.
5.2.5	Any oil, fuel or chemical spill within the marine environment must be reported to the MMO Marine Pollution Response Team within 12 hours.
	Within office hours: 0300 200 2024.
	Outside office hours: 07770 977 825.
	At all times if other numbers are unavailable: 0345 051 8486.
	dispersants@marinemanagement.org.uk
	Reason: To ensure that any spills are appropriately recorded and managed to minimise the risk to sensitive receptors and the marine environment.
5.2.6	An archaeological Written Scheme of Investigation (WSI) and Protocol for Archaeological Discoveries (PAD) must be submitted to the MMO at least 6 weeks before any activity commences. The licensed activities must not commence until written approval is provided by the MMO. All activities must adhere to the terms of the WSI and PAD.
	Reason:
	To deal with unexpected discoveries of possible historic or archaeological interest
5.2.7	The licence holder must ensure that access is maintained at all times for the fishermen to their vessels, moorings, vehicles and area to land their catches.
	Reason:
	To ensure that commercial fishing activities are not disrupted by the works and access is maintained to fishing resources.
5.2.8	The licence holder must ensure that HM Coastguard, in this case nmoccontroller@hmcg.gov.uk, the National Maritime Operations Centre is made aware of the works prior to commencement.

	Reason:
	To ensure other sea users are aware of works.
5.2.9	Bunding and/or storage facilities must be installed to contain and prevent the release of fuel, oils, and chemicals associated with plant, refuelling and construction equipment, into the marine environment. Secondary containment must be used with a capacity of no less than 110% of the container's storage capacity.
	Reason:
	To minimise the risk of marine pollution incidents.
5.2.10	The Licence Holder must ensure that local mariners and fishermen's organisations are made fully aware of the activity through local notice to mariners.
	The MMO must be sent a copy of the notification within 5 days of issue.
	Reason:
	To ensure other vessels in the vicinity can plan and safely conduct their passage.
5.2.11	The licence holder must ensure that the works do not encroach on any recognised anchorage, either charted or noted in nautical publications, within the proposed consent area.
	Reason:
	To prevent impacts on existing anchorage.
5.2.12	The licence holder must notify The Source Data Receipt team, UK Hydrographic Office, Taunton, Somerset, TA1 2DN (Email: sdr@ukho.gov.uk ; Tel: 01823 337900) of commencement of the licensed activities, no later than 5 working days prior to commencement. Any changes to the coastline and depths will also need to be sent to the Hydrographic Office when the works are complete.
	A copy of the notification must be sent to the MMO within one week of the notification being sent.
	Reason:
	To ensure necessary amendments to charts can be made.

6 Compliance and enforcement

This licence and its terms and conditions are issued under the Marine and Coastal Access Act 2009.

Any breach of the licence terms and conditions may lead to enforcement action being taken. This can include variation, revocation or suspension of the licence, the issuing of an enforcement notice, or criminal proceedings, which may carry a maximum penalty of an unlimited fine and / or a term of imprisonment of up to two years.

Your attention is drawn to Part 4 of the Marine and Coastal Access Act 2009, in particular sections 65, 85 and 89 which set out offences, and also to sections 86, 87 and 109 which concern defences. The MMO's Compliance and Enforcement Strategy can be found on our website (https://www.gov.uk/government/publications/ compliance-and-enforcement-strategy).