Templemore Flood Relief Scheme

Apr-18

Rev: 0.0
Date last Updated: 24/7/2018



Date last Opdated:						_
			le of Environmental Commitments			
EIS / NIS Reference	EIS / NIS Pg. No.	Impact	Specific Mitigation Measure	Specific Implementation Action	Responsibility	Status
5.4.1		Economic	Access ramps will be constructed on some of the proposed embankments to maintain access to properties and land.		OPW	2018
5,4.1			properties and rand.		Or W	2018
6.5.1	EIS p71	Siltation	The edge of the proposed embankment beside Templemore Lake will be a minimum of 5m from the boundary. No material will be stored within this buffer zone.		OPW/ Ecologist	2018
0.0.1	Liopri		·	Fox den has been identified on site no licencsing		1010
6.5.2	EIS p71	Birds / Biodiversity	Hedgerow, tree-line and woodland vegetation that is to be retained will be clearly marked and fenced off to avoid accidental damage during excavations and site preparation. No materials should be stored within 5m of retained hedgerows/trees/woodland.	requirements however as a matter of good environmental practice this location will not be interefered with.	OPW/ Ecologist	Ongoing
			The proposed Site works method statements will be reviewed and monitoring will be conducted by			
6.5.2 and 7.5.2	EIS p71,95	Environmental	an Ecologist.	As per CEMP	OPW/ Ecologist	Ongoing
			Construction works will follow the NRA's documents 'Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes' (NRA, 2005) and 'Guidelines for the treatment			
6.5.3	EIS p71	Otters	of otters during the Construction of National Road Schemes' (NRA, 2006) . During vegetation clearance along drains and the Mall River, an Ecologist will resurvey this area	Otter survey conducted along existing river channel	OPW/ Ecologist	Ongoing
6.5.3	EIS p71	Otters	specifically for otter. This will include assessing breeding activity within the site and a license application to the NPWS, if required.	As per CEMP	OPW/ Ecologist	Ongoing
6.5.3	EIS p71	Otters	The Mall River corridor will not be blocked off especially at night.		OPW	Ongoing
			Loss of potential forage habitat (riparian woodland and sections of hedgerow) during construction will be compensated by native tree planting, the mix of which will be similar to existing tree/ shrub			
			species. Following the construction phase, replanting using native woody vegetation of local provenance, currently existing on site will be implemented, where hedgerow and riparian vegetation removal was significant. Where this is likely to recover,			
6.5.3 and 6.5.4	EIS p71, 72	Birds / Biodiversity	natural re-colonisation is preferable. It is recommended that woody vegetation removal be undertaken <u>outside</u> of the main bird nesting		OPW/ Ecologist	2018
			period which begins on March 1 st and continues until August 31 st . A licence is generally required from the National Parks and Wildlife Service under the Wildlife Acts 1976 and 2000 if any habitat			
6.5.4	EIS p72	Birds / Biodiversity	(e.g. scrub, trees, hedgerows) to be removed is known to contain nesting birds. The 'old' channel is to be modified to ensure that fish can no longer enter it and become trapped	No licence requred	OPW/ Ecologist	Concluded
			after a flood event. Any piped waste water discharges will be assessed in terms of waste assimilation capacity of the receiving water and treatment such as oil/water separation will be			
7.5.2	EIS p93,94	Aquatic species	provided. The timing of the works will be agreed in advance with the National Parks and Wildlife Service		OPW	2018
			(NPWS) and Inland Fisheries Ireland (IFI). The works are located within a river corridor used by salmonids and lampreys for spawning. To protect salmon and trout it will be necessary to time			
7.5.2 and 3.10.3.2	EIS P94, NIS p31	Aquatic species	works outside the window of October to May. Brook lampreys spawn in the spring and early summer months and the timing of works should also take this species into account.	Consultation with IFI with regard to the downstream existing channel widening and deepening	OPW/ Ecologist	Ongoing
			No in-stream excavations or other works involving interference with the bed, bank or soil should			
7.5.2 and 3.10.3.2	EIS p94,127, NIS p31	Aquatic species	take place outside of the immediate areas where the flood channel joins the Mall River.		OPW	Ongoing
7.5.2 and 3.10.3.3	EIS P94. NIS p31	Environmental	The appointed contractor will be required to provide a detailed method statement showing how water quality impacts and habitat loss during the works will be minimised. The methodology will be approved by both the IFI and the NPWS prior to any works taking place.	Consultation with IF regarding Silt pond has occurred.	OPW	Ongoing
7.5.2 810 5.15.5.5	210 1 04, 1410 por	Environmental	A translocation plan will need to designed and implemented prior to water being diverted into the	Constitution with a regarding and porter has occurred.		Oligolity
7.5.2 and 3.10.3.3	EIS P94, NIS p31	Aquatic species / Biodiversity	new channel. The fisheries board documents "Maintenance and protection of the inland fisheries resource during		OPW	2018
			road construction and improvement works. Requirements of the Southern Regional Fisheries Board" (Kilfeather, 2007) and "Requirements for the Protection of Fisheries Habitat during			
7.5.2 and 9.5.1 and 3.10.3.3	EIS p94,127, NIS p31	Fish	Construction and Development Works at River Sites' (Murphy, 2004) would also be followed where relevant.		OPW/ Ecologist	Ongoing
7.5.2 and 3.103	EIS p95, NIS p31	Siltation	A silt fence (or equivalent barrier) will be used to surround the works area.	A silt fence has been erected around spoil deposition area.	OPW/ Ecologist	Ongoing
7.5.2	EIS p95	Pollution	All necessary measures will be taken to prevent the release of oil, fuels or other pollutants into the Mall River.	As per CEMP	OPW/ Ecologist	Ongoing
7.5.1 and 9.5.1	EIS p93,127	Siltation	The works will be carried out during dry weather and halted during heavy rainfall to reduce suspended solids in the river.	Siltation pond has been constructed as per the environmental officers instructions.	OPW/ Ecologist	Ongoing
	2.0 p.01,12.		Spoil and removed vegetation material from the river is to be stored no less than 5m back from the			
7.5.2 and 9.5.1	EIS p95,127	Siltation	river and vegetation within this 5m buffer zone is to be retained, in order to reduce the run-off of suspended solids back into the water course.		OPW/ Ecologist	Ongoing
7.5.2	EIS p95, NIS p32	Invasive species / biodiversity	The machines being used to excavate the river may contain fragments of exotic invasive flora and therefore they will need to be cleaned at the start of the excavation of the river.	As per CEMP	OPW/ Ecologist	Ongoing
			Particular care will be taken when working near mature trees in order to protect roots extending into the works site. Mature trees will be retained and scrub and hedgerow will be retained where		OPW/ Ecologist	
7.5.2	EIS p95	Birds / Biodiversity	possible. It will be important to ensure that the proposed weir is designed to be suitable for passage of brook lampreys and white-clawed craylish. A suitable solution would be to backfill the downstream end of	As per CEMP	OPW/ Ecologist	Ongoing
7.6	EIS p96	Aquatic Species	the weir to create a 'rock ramp'.		OPW	2018
3.10.2.1	NIS p28	Fish	The flood channel will be designed to have a consistent gradient with no areas of pooled water where fish may become trapped after a flood event.	As per CEMP	OPW	Ongoing
		Soils and		Siltation pond has been constructed as per the		
8.5.1	EIS p115	Siltation	Settlement of runoff and groundwater from the construction site will be required as part of the site works. Works will be undertaken in accordance with CIRIA 650 'Environmental good practice on site'.	environmental officers instructions, suspended solids monitoring ongoing.	OPW	Ongoing
8.5.1	EIS p115	Soil	Planned construction works will be carried out with the minimum disturbance of soils.	Silt curtain installed where appropriate	OPW	Ongoing
			To minimise any impact on the underlying subsurface strata from material spillages, all oils, solvents and paints used during construction will be stored within specially constructed dedicated			
8.5.1	EIS p115	Pollution	temporary bunded areas. Refuelling of construction vehicles and the addition of hydraulic oils or lubricants to vehicles, will	Refuelling locations have been identified.	OPW	Ongoing
8.5.1	EIS p115	Socio / Economic	take place in a designated area, away from surface water guillies or drains. Spill kits and hydrocarbon adsorbent packs will be stored in this area and operators will be fully trained in the use of this equipment.	Refuelling locations have been identified.	OPW	Ongoing
0.0.1	Elo prio	SOCIO / ECONOMIC	A detailed condition survey should be conducted on properties within 5m of the diversion prior to	Refuelling locations have been identified.	3.11	Ongoing
8.5.1	EIS p115	Socio / Economic	and post construction. The maintenance of the embankment should follow the framework and principles set out in	As per CEMP	OPW	Ongoing
8.5.1	EIS p115	Mainteance	'Management of Flood Embankments, A good practice review' (DEFRA/EA, 2007).	As per CEMP	OPW	2018
		W	With regard to on-site storage facilities and activities, any raw materials, fuels and chemicals, will			
9.5.1	EIS p126	Pollution	be stored within structurally sound warehousing buildings and/or bunded areas if appropriate to guard against potential accidental spills or leakages. All equipment and machinery will have regular checking for leakages and quality of performance.	As per CEMP	OPW	Ongoing
9.5.1	EIS p126	Siltation	checking for leakages and quality or perioritiance. All potential run-off is to be diverted through appropriate settlement tanks/grit traps.	As per CEMP As per CEMP	OPW	Ongoing
			The river channel works will be carried out during dry weather and halted during heavy rainfall events to reduce suspended solids in the river and flowing to other parts e.g. the River Suir. Spoil			
9.5.1	EIS p127, NIS p31	Siltation	and removed vegetation material from the river is to be stored no less than 5m back from the river and vegetation within this 5m buffer zone is to be retained, in order to reduce the run-off of suspended solids back into the watercourse.	As per CEMP	OPW/ Ecologist	Ongoing
9.0.1	EIG p121, NIS p31	Sittation	Routine channel maintenance will be based on guidance from the Regional Fisheries Board	AS per cemir	SE WE ECOLOGIST	Ungoing
9.5.2	EIS p127	Fish	Guidelines (Murphy, D.F, 2004) and the Fishery Guidelines for Local Authority works (1998) where appropriate.	As per CEMP	OPW	2018
9.5.3	EIS p127	Pollution	Strict monitoring of all potential polluting materials used will be maintained.	As per CEMP	OPW	Ongoing
		Noise and	The construction team will ensure that all plant items used during the construction phase will			
			comply with standards outlined in European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations (1990). The miligation measures are outlined in BS5228: Noise Control on Construction and Open Sites (2009), which offers detailed guidance on the control			
10.6.1	EIS p138	Human Health	Noise Control on Construction and Open Sites (2009), which afters detailed guidance on the control of noise from construction activities.		OPW	Ongoing
			Night time working will typically not occur, but there is the unlikely possibility that there may be a necessity to continue to operate generator, pumps or other equivalent machinery at a number of			
			locations, where excavations etc may cause activity to remain in one location for a longer period of time. On these infrequent occasions, should they arise at all, screening and enclosures can be			
			utilised. For maximum effectiveness, a screen should be positioned as close as possible to either the noise source or receiver. The screen should be constructed of material with a mass of >7kg/m2 and should have no gaps or joints in the barrier material. This can be used to limit noise impact to			
10.6.1	EIS p138	Human Health	any noise sensitive receptors, if required by agreement with the local authority.		OPW	Ongoing
10.6.1	EIS p139	Human Health	Appoint a site representative responsible for matters relating to noise, and establish channels of communication between the contractor / developer, local authority and resident i.e. for notification of requirement of night works, should this be required.		OPW	Ongoing
10.6.1	EIS p139	Human Health	Locate of noisy plant as far away from sensitive receptors, as permitted by site constraints.		OPW	Ongoing
10.6.1	EIS p139	Human Health	Noise and vibration monitoring works should be carried out during the construction phase to ensure atherence to the guidelines values for noise and vibration.		OPW/TOBIN	Ongoing
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14.6.1

EIS p221

Archaelogy



OPW/ Archaeologist

Compliance Report for the Schedule of Environmental Commitments EIS / NIS Reference EIS / NIS Pg. No. Specific Mitigation Measure Specific Implementation Action Responsibility Impact Any construction works that have the potential to cause vibration at sensitive receptors will be carried out in accordance with the limit values as et out in Table 10-7 of the EIS at the most EIS p139 Site roads shall be regularly cleaned and maintained as appropriate. Hard surface roads shall be swept to remove mud and aggregate materials from their surface as a result of the development whosh. Any un-sufficient close shall be resident color stated by the state flow, if yethermore, any road that has the potential to give rise to bugline dust may be regularly watered, as appropriate, during extended by and of white ye continue. 11.5 EIS p156 OPW Q4 2017 A full traffic management plan and dust management plan will be implemented into the Constructio Environmental Management Plan (CEMP) 11.5 EIS p156 As per CEMP OPW Ongoing Vehicles using site roads shall have their speed restricted, and this speed restriction must be enforced rigidly. On any un-surfaced site road and on hard surfaced roads that site managemen dictates speed shall be restricted to 20 km per hour EIS p157 Material handling systems and site stockpiling of materials shall be designed and laid out to ninimise exposure to wind. Water misting or sprays shall be used as required if particularly dust activities are necessary during dry or windy periods. EIS p157 In periods of dry weather when dust emission would be greatest, a road sweeper, which dampen the road, may be employed in order to prevent the generation of dust 11.5 EIS p157 OPW Ongoing 12.5.1 EIS p173 Visual Impact Design ramps with gradual slopes and appropriate materials in order to minimise visual impact. OPW 2018 EIS p174 Use materials, pointings and finish to match the existing walls. fence embankments should be rounded off at the top with a shall 12.5.1 OPW 2018 Visual Impact The food defence embarkments should be rounded on at the rigo wile a seaton grown as softened with a seed mix to match the existing groundcover vegetation/grass.

The footprint for the embarkment within the park should be designed to protect existing mature trees. EIS p174 Birds / Biodiversity 12.5.1 EIS p174 2018 12.5.1 EIS p174 Avoid the removal of mature trees during construction – protect trees being retained. _____protect trees by
____uuction is necessary they should be replace
type plants. Bat surveys concluded OPW Concluded EIS p174 Birds / Biodiversity Provide new native planting in the vicinity of the weir where existing planting will be removed during construction. EIS p174 Potential visual impact can be minimised by removing the least amount of existing vegetation possible, and by protecting any adjacent vegetation during construction. EIS p174 Route of diversion should follow any existing field boundaries in order to minimise any severance of land/properties. 12.5.2 EIS p174 OPW Where removal of vegetation cannot be avoided, it should be replaced where possible in the same location or nearby, and to the same size, on completion of construction works. EIS p174 OPW 12.5.2 Visual Impact/ Biodiversity 2018 Materials used in reinstatement of roads, pathways, and walls should be consistent with existing surfaces and materials. OPW EIS p174 12.5.2 2018 12.5.2 EIS p174 Construction work to be carried out speedily to minimise the impact on road users. As per CEMP OPW Ongoing Where removal of vegetation cannot be avoided it should be replaced in appropriate in a specific control of the size and type plants. 12.5.3 EIS p174 OPW/Ecologis 12.5.3 EIS p174 All flood defence embankments should be rounded off at the top with a shallow grade and grasse OPW Stonework on new walls to be consistent with the stone already evident in the river walls. Waterials used in reinstatement of roads, pathways, and walls should be consistent with existi surfaces and materials. 12.5.3 EIS p174 OPW 2018 12.5.3 EIS p174 Visual Impact OPW 2018 12.5.3 EIS p174 Visual Impact / Biodiversity Replacement of any planting removed during construction OPW 2018 Liaison with Transport Infrastructure Ireland (TII) to minimise the impacts upon the local traffic and transportation networks. 13.4 Traffic Management EIS p180 As per CEMP Onging The deliveries to and from site will be undertaken to a programme agreed with the Contractor prior to works commencing to minimise disruption to the roads network particularly during times of peak traffic flow. EIS p180 The Design Team / Contractor will liaise with relevant local authority. Till and residents groups and advance notice will be given to the general public through local media before any road closures take place. All possible service diversions should take place in advance of road closure for construction of the culvert. 13.4 EIS p181 Traffic Manage The advance warning signs of the new road ramp will be designed in accordance with Chapter 8, Temporary Traffic Measures and Signs for Roadworks, of the Traffic Signs Manual. The National Moruments Acts 1930-1994 require that in the event of the discovery of the All Particles of remains that the relevant authorities, the National Moruments Service of the Departments of Arts, Heritage and Gallestich (DAKI) and the Alasional Museum of Ireland, should be notified immediately.

Allowance will be made for full archaeological execution, in consultation with the National Moruments Service of the DAHG, in the event that archaeological remains are found during the construction phase. OPW/ Archaeologist 14.6.1 EIS p220 14.6.1 EIS p220 Onging Archaeological monitoring – in areas of moderate archaeological potential, excavations associated with construction works and / or facilitating access to the construction site and / or stringing areas will be monitored by a suitably qualified archaeologist 1461 FIS n221 As ner CEMP OPW/ Archaeologist Archaeological testing – best practice in areas of high archaeological potential demands caution, to ensure that archaeological deposits are identified as early as possible, thereby ensuring that any loss from the archaeological records instrinated. Under a montroling rentl, an extended delivers to see that the properties of the pr 14.6.1 EIS p221 As per CEMP OPW/ Archaeologist Onging Note importance of the archaeological site in the Construction Environmental Management Plan (CEMP) and inform on site personnel — where there are sites located in close proximity to the proposed development that could be insiderentially impacted using the construction phase these will be noted in the CEMP and on site personnel be made saise of the sites agrillicance and de-will be noted in the CEMP and on site personnel be made saise of the sites agrillicance and set will be noted in the CEMP and not set personnel be made saise of the sites agrillicance and set in the control of the said of the set of the set of the said of the said of the set of the said of the set of the said of the set of the said of the sa 14.6.1 EIS p221 As per CEMP OPW/ Archaeologist 14.6.1 EIS p221 OPW/ Archaeologist If the existing river is dried up, a suitably qualified archaeologist will undertake a visual and metal detection survey of the river bed to retrieve any archaeological stray finds or architectural fragments that may be found there. Prior to undersking the work, a metal detection licence shall be obtained from the National Monuments Service of the DAHG.

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