Project: Templemore Flood Relief Scheme Jan-18
Rev: 0.0
Date last Updated: 26/1/2018

Compliance Report for the Schedule of Environmental Commitments

EIS / NIS Reference	EIS / NIS Pg. No.	Impact	Specific Mitigation Measure	Specific Implementation Action	Responsibility	Status
Human Beings/Socio economic						
5.4.1		Economic	Access ramps will be constructed on some of the proposed embankments to maintain access to properties and land.		OPW	2018
Ecology (terrestrial and Aquatic)						
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
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.	Fox den has been identified on site no licencsing requirements however as a matter of good environmental practice this location will not be interefered with.	OPW/ Ecologist	Ongoing
6.5.2 and 7.5.2	EIS p71,95	Environmental	The proposed Site works method statements will be reviewed and monitoring will be conducted by an Ecologist.	As per CEMP	OPW/ Ecologist	Ongoing
6.5.3	EIS p71	Otters	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 of otters during the Construction of National Road Schemes' (NRA, 2006) .	As per CEMP	OPW/ Ecologist	Ongoing
6.5.3	EIS p71	Otters	During vegetation clearance along drains and the Mall River, an Ecologist will resurvey this area 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	2018
6.5.3 and 6.5.4	EIS p71, 72	Birds / Biodiversity	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, natural re-colonisation is preferable.		OPW/ Ecologist	2018
6.5.4	EIS p72	Birds / Biodiversity	It is recommended that woody vegetation removal be undertaken <u>outside</u> of the main bird nesting 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 (e.g. scrub, trees, hedgerows) to be removed is known to contain nesting birds.	No licence requred	OPW/ Ecologist	Concluded
7.5.2	EIS p93,94	Aquatic species	The 'old' channel is to be modified to ensure that fish can no longer enter it and become trapped 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 provided.		OPW	2018
7.5.2 and 3.10.3.2	EIS P94, NIS p31	Aquatic species	The timing of the works will be agreed in advance with the National Parks and Wildlife Service (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 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.		OPW/ Ecologist	2018
7.5.2 and 3.10.3.2	EIS p94,127, NIS p31	Aquatic species	No in-stream excavations or other works involving interference with the bed, bank or soil should take place outside of the immediate areas where the flood channel joins the Mall River.		OPW	2018
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 and 3.10.3.3	EIS P94, NIS p31	Aquatic species / Biodiversity	A translocation plan will need to designed and implemented prior to water being diverted into the new channel.		OPW	2018
7.5.2 and 9.5.1 and 3.10.3.3	EIS p94,127, NIS p31	Fish	The fisheries board documents 'Maintenance and protection of the inland fisheries resource during road construction and improvement works. Requirements of the Southern Regional Fisheries Board" (Kilfeather, 2007) and 'Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites' (Murphy, 2004) would also be followed where relevant.		OPW/ Ecologist	2018
7.5.2 and 3.10..3	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
7.5.2 and 9.5.1	EIS p95,127	Siltation	Spoil 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 water course.		OPW/ Ecologist	2018
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
7.5.2	EIS p95	Birds / Biodiversity	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 possible.	As per CEMP	OPW/ Ecologist	Ongoing
7.6	EIS p96	Aquatic Species	It will be important to ensure that the proposed weir is designed to be suitable for passage of brook lampreys and white-clawed crayfish. A suitable solution would be to backfill the downstream end of 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 Geology						
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'.	Siltation pond has been constructed as per the environmental officers instructions. 8 no suspended solids monitoring has occurred	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
8.5.1	EIS p115	Pollution	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 temporary bunded areas.	Refuelling locations have been identified.	OPW	Ongoing
8.5.1	EIS p115	Socio / Economic	Refuelling of construction vehicles and the addition of hydraulic oils or lubricants to vehicles, will take place in a designated area, away from surface water gullies 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
8.5.1	EIS p115	Socio / Economic	A detailed condition survey should be conducted on properties within 5m of the diversion prior to and post construction.	As per CEMP	OPW	Ongoing
8.5.1	EIS p115	Mainteance	The maintenance of the embankment should follow the framework and principles set out in 'Management of Flood Embankments, A good practice review' (DEFRA/EA, 2007).	As per CEMP	OPW	2018
Water						
9.5.1	EIS p126	Pollution	With regard to on-site storage facilities and activities, any raw materials, fuels and chemicals, will 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	All potential run-off is to be diverted through appropriate settlement tanks/grit traps.	As per CEMP	OPW	Ongoing
9.5.1	EIS p127, NIS p31	Siltation	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 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
9.5.2	EIS p127	Fish	Routine channel maintenance will be based on guidance from the Regional Fisheries Board 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 Vibration						
10.6.1	EIS p138	Human Health	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 mitigation measures are outlined in BS5228: Noise Control on Construction and Open Sites (2009), which offers detailed guidance on the control of noise from construction activities.		OPW	Ongoing
10.6.1	EIS p138	Human Health	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 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 adherence to the guidelines values for noise and vibration.		OPW/TOBIN	Ongoing
10.6.1	EIS p139	Human Health	Any construction works that have the potential to cause vibration at sensitive receptors will be carried out in accordance with the limit values as set out in Table 10-7 of the EIS at the most affected sensitive receptor.		OPW	Ongoing
Air and Climate						
11.5	EIS p156	Human Health	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 works. Any un-surfaced roads shall be restricted to essential site traffic only. Furthermore, any road that has the potential to give rise to fugitive dust may be regularly watered, as appropriate, during extended dry and/or windy conditions.		OPW	Q4 2017
11.5	EIS p156	Human Health	A full traffic management plan and dust management plan will be implemented into the Construction Environmental Management Plan (CEMP)	As per CEMP	OPW	Ongoing
11.5	EIS p157	Human Health	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 management dictates speed shall be restricted to 20 km per hour	As per CEMP	OPW	Ongoing
11.5	EIS p157	Human Health	Material handling systems and site stockpiling of materials shall be designed and laid out to minimise exposure to wind. Water misting or sprays shall be used as required if particularly dusty activities are necessary during dry or windy periods.	As per CEMP	OPW	Ongoing
11.5	EIS p157	Human Health	In periods of dry weather when dust emission would be greatest, a road sweeper, which would also dampen the road, may be employed in order to prevent the generation of dust	As per CEMP	OPW	Ongoing
Landscape and Visual Impact						
12.5.1	EIS p173	Visual Impact	Design ramps with gradual slopes and appropriate materials in order to minimise visual impact.		OPW	2018
12.5.1	EIS p174	Visual Impact	Use materials, pointings and finish to match the existing walls.		OPW	2018
12.5.1	EIS p174	Visual Impact	The flood defence embankments should be rounded off at the top with a shallow grade and softened with a seed mix to match the existing groundcover vegetation/grass.		OPW	2018
12.5.1	EIS p174	Birds / Biodiversity	The footprint for the embankment within the park should be designed to protect existing mature trees.		OPW	2018
12.5.1	EIS p174	Birds / Biodiversity	Avoid the removal of mature trees during construction – protect trees being retained.	As per CEMP	OPW	Onging
12.5.1	EIS p174	Birds / Biodiversity	Where removal of trees during construction is necessary they should be replaced with like size and type plants.		OPW	2018
12.5.1	EIS p174	Birds / Biodiversity	Provide new native planting in the vicinity of the weir where existing planting will be removed during construction.		OPW	2018
12.5.2	EIS p174	Visual Impact	Potential visual impact can be minimised by removing the least amount of existing vegetation possible, and by protecting any adjacent vegetation during construction.	As per CEMP	OPW	Onging
12.5.2	EIS p174	Visual Impact	Route of diversion should follow any existing field boundaries in order to minimise any severance of land/properties.	As per CEMP	OPW	Onging
12.5.2	EIS p174	Visual Impact/ Biodiversity	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.		OPW	2018
12.5.2	EIS p174	Visual Impact	Materials used in reinstatement of roads, pathways, and walls should be consistent with existing surfaces and materials.		OPW	2018
12.5.2	EIS p174	Visual Impact	Construction work to be carried out speedily to minimise the impact on road users.	As per CEMP	OPW	Ongoing
12.5.3	EIS p174	Visual Impact / Biodiversity	Where removal of vegetation cannot be avoided it should be replaced in approximately the same location with like size and type plants.		OPW/Ecologist	2018
12.5.3	EIS p174	Visual Impact	All flood defence embankments should be rounded off at the top with a shallow grade and grassed.		OPW	2018
12.5.3	EIS p174	Visual Impact	Stonework on new walls to be consistent with the stone already evident in the river walls.		OPW	2018

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12.5.3	EIS p174	Visual Impact	Materials used in reinstatement of roads, pathways, and walls should be consistent with existing surfaces and materials.		OPW	2018
12.5.3	EIS p174	Visual Impact / Biodiversity	Replacement of any planting removed during construction.		OPW	2018
Material Assets / Traffic						
13.4	EIS p180	Traffic Management	Liaison with Transport Infrastructure Ireland (TII) to minimise the impacts upon the local traffic and transportation networks.	As per CEMP	OPW	Onging
13.4	EIS p180	Traffic Management	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.	As per CEMP	OPW	Onging
13.4	EIS p181	Traffic Management	The Design Team / Contractor will liaise with relevant local authority, TII 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.	As per CEMP	OPW	Onging
13.4	EIS p181	Traffic Management	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.		OPW	2018
Cultural Heritage						
14.6.1	EIS p220	Archaelogy	The National Monuments Acts 1930-1994 require that in the event of the discovery of archaeological finds or remains that the relevant authorities, the National Monuments Service of the Departments of Arts, Heritage and Gaeltacht (DAHG) and the National Museum of Ireland, should be notified immediately.	As per CEMP archaelogical licences are being applied for as is required.	OPW/ Archaeologist	Onging
14.6.1	EIS p220	Archaelogy	Allowance will be made for full archaeological excavation, in consultation with the National Monuments Service of the DAHG, in the event that archaeological remains are found during the construction phase.		OPW/ Archaeologist	Onging
14.6.1	EIS p221	Archaelogy	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	As per CEMP	OPW/ Archaeologist	Onging
14.6.1	EIS p221	Archaelogy	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 record is minimised. Under a monitoring remit, an archaeologist will observe normal construction works, usually undertaken with a toothed excavator bucket, which makes it more difficult to identify archaeological deposits. During archaeological testing a licence eligible archaeologist supervises excavations undertaken with a toothless grading bucket, under licence to the National Monuments Service of the DAHG, thereby ensuring the early identification of archaeological deposits and minimal loss to the archaeological record. Undertaking this work preconstruction, will ensure that sufficient time can be allowed within the construction schedule for the excavation of any archaeological deposits discovered	As per CEMP	OPW/ Archaeologist	Onging
14.6.1	EIS p221	Archaelogy	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 inadvertently impacted during the construction phase these will be noted in the CEMP and on site personnel be made aware of the sites significance and due care and attention will be taken to prevent any inadvertent damage during construction work.	As per CEMP	OPW/ Archaeologist	Onging
14.6.1	EIS p221	Archaelogy	river is to be widened and regraded. Prior to construction works an underwater archaeological survey of the area will be undertaken including a dive wade / survey to ascertain if notable archaeological deposits or stray finds remain in situ in the river banks or river bed. During the construction phase a suitable qualified underwater archaeologist will monitor dredging works and river widening works under licence to the Underwater Section of the National Monuments Service of the DAHG.		OPW/ Archaeologist	2018
14.6.1	EIS p221	Archaelogy	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 undertaking the work, a metal detection licence shall be obtained from the National Monuments Service of the DAHG.		OPW/ Archaeologist	2018