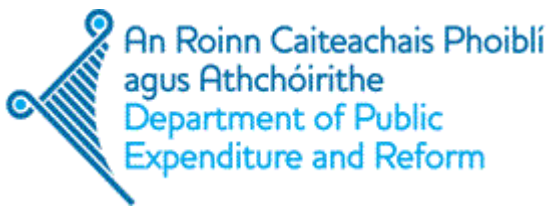


**Review of Environmental Impact
Statement of the River Mall
(Templemore) Drainage Scheme
- including recommendations -**

by
CAAS Ltd

for the
**Department of Public Expenditure and
Reform**



30 November 2016

QA

PRELIMINARY EIS COMPLIANCE ASSESSMENT	
PROJECT	River Mall (Templemore) Drainage Scheme
REFERENCE DOCUMENT [S]	As listed on final page of this report
CLIENT	Labour Market and Expenditure Policy, The Department of Public Expenditure and Reform
ASSESSMENT	P Fingleton & A Reynolds
DATE	Draft - October 2016 Final Version – 25 November 2016
CHECKING	C. Skehan
DATE	various dates to 25 November 2016
ISSUE TO CLIENT	25 November 2016

Contents

INTRODUCTION	1
INFORMATION MADE AVAILABLE TO CAAS FOR REVIEW.....	1
SCHEME OVERVIEW	2
REVIEW OF THE ENVIRONMENTAL IMPACT STATEMENT AND ASSOCIATED DOCUMENTATION	3
PRELIMINARIES	3
EIS COMPLIANCE ASSESSMENT	4
RECOMMENDATIONS	10
CONCLUSIONS	12

Introduction

CAAS Ltd have been commissioned by the Department of Public Expenditure and Reform to carry out a review of the Environmental Impact Statement (EIS) and associated documentation on the proposed Flood Relief Scheme for the River Mall at Templemore, County Tipperary. The associated documentation includes a Natura Impact Statement (included as Appendix 6.4 to the EIS).

This review is to inform the Minister for Public Expenditure and Reform in carrying out an Environmental Impact Assessment (EIA) of the scheme in accordance with S.I. 469 of 2012, European Union (Environmental Impact Assessment) (Arterial Drainage) Regulations 2012.

This report sets out, in the following sequence:

- the scope of this review
- the information reviewed
- an overview of the proposed scheme
- a review of the EIS and associated documentation
 - This is done by reference to the specific requirements of the relevant Regulations (Schedule 6 of S.I. No. 600/2001 - Planning and Development Regulations, 2001). The parts of the EIS and other documents that address each requirement are identified and comments are provided on the adequacy of the information in terms of compliance with the statutory requirements.
 - Where it is considered that proposed mitigation or monitoring proposals in the documents should be altered or augmented in order to ensure a compliant EIA process, the reasons for this are discussed in a series of detailed comments related to specific individual requirements of the Regulations.
- Recommendations to the Minister
 - These are presented as clear measures which the Minister may include as conditions to a Confirmation Order for the proposed Scheme.
 - Each recommended condition is accompanied by a reason.
- Conclusions
 - Compliance of the EIS
 - Acceptability of predicted impacts
 - Adequacy of mitigation

Information made available to CAAS for review

This information comprised the EIS and associated documents per the list of reference documents at the end of this report.

Scheme overview

The key elements of the proposed works involve:

- A 60m-long inlet channel with debris and gravel traps and a small drop weir.
- A new outflow from the town lake to run under Blackcastle Road to the inlet channel.
- A flood –defence line north of the town, in-line with a culvert over the new diversion.
- Relocating the river by constructing a new 805m long channel (with a 7.5m base-width) that begins in Shortt’s Field and finishes approximately 230m downstream of Small’s Bridge.
- At Richmond Road and Church Avenue, separated by 8.4m, walls along both banks of the diversion both up- and downstream.
- Re-grading 480m of the channel from the new confluence to 740m below Small’s Bridge. Over the same reach, widening the river to 7.5m and a further 250m from there to transition back to the existing 4.5m base width.
- A 90m-long embankment on the left bank (east side) below properties at Small’s Br.
- A 320m-long embankment to defend the Railway View Estate area.
- To improve aeration and fish movement along the excavated river and diversion, a fish channel (Thalweg) will be dug and partially backfilled with gravels. While this will likely be about 0.3m deep with a 2m wide bed and up to 5 to 1 side slopes, it will be designed and constructed in consultation with the IFI and along the channel may be higher or lower and its width may vary.
- The channel from the upstream works to where the Mall discharges to the Suir is being designated for maintenance to prevent further growth of woody vegetation encroaching into the river or crowding–out the flowing floodplain.
- Impacts to the landscape will be reduced by using high quality finishes to works, grassed finishes to embankments and open channel sections, and by planting replacement and new vegetation; including in-channel, where possible.

Review of the Environmental Impact Statement and associated documentation

Preliminaries

EIA related processes	Key documentation	Comment
Screening	<ul style="list-style-type: none"> Appendix 6.4 Natura Impact Statement 	This material is considered to be generally compliant.
Scoping	<ul style="list-style-type: none"> EIS Sections 1.4 Engineering Report 	<p>The main EIS document contains a summary of consultation carried out as part of the scoping process carried out during preparation of the EIS. The appendices contain copies of responses.</p> <p>The scoping summary presented in Section 1.5 summarises the consultees' responses and recommendations.</p>
Consultation	<ul style="list-style-type: none"> EIS Section 1.5, 6.2.4 & 13.1.1 Appendix 1.1 Consultation Responses 	<p>A public information day is mentioned in Section 1.5 however no details are included of the information that was presented, level of attendance or of any feedback received on the day.</p> <p>There is no other explanation of the process of deciding what issues needed to be addressed in the EIS or the appropriate level of detail of assessment required. The importance of scoping is emphasised in the EPA Guidelines.</p> <p>The limited coverage of scoping of this EIS is not in keeping with good practice or the Guidelines. While the EIS does address the environmental factors set out in the regulations, some parts of the EIS lack clarity and focus (e.g. see comments on Flora & Fauna and Water Quality sections below). However this deficiency does not represent a non-compliance with the regulations.</p>

EIS compliance assessment

Review against Requirements of the Regulations

Requirements of the Regulations ¹			Requirements met by the applicant, primarily in the following -		Comments
			Sections of the main EIS document	Appendices / other Reports	
1	(a)	A description of the proposed development comprising information on the site, design and size of the proposed development.	<ul style="list-style-type: none"> ☐ Section 2 and descriptions of specific elements where relevant in the specialist sections 5 to 14 	<ul style="list-style-type: none"> ☐ Engineering Report ☐ Appendix 6.4 Natura Impact Statement 	This material is considered to be generally compliant.
	(b)	A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects.	<ul style="list-style-type: none"> ☐ Sections 5.4, 6.5, 7.5, 8.5, 9.5, 10.6, 11.5, 12.5,13.4,14.6 		This material is considered to be generally compliant. Specific additional mitigation measures are recommended by this review as conditions, where considered necessary.

¹ Schedule 6 of S.I. No. 600/2001 - Planning and Development Regulations, 2001

Requirements of the Regulations ¹		Requirements met by the applicant, primarily in the following -		Comments
		Sections of the main EIS document	Appendices / other Reports	
(c)	The data required to identify and assess the main effects which the proposed development is likely to have on the environment.	<ul style="list-style-type: none"> ☐ Sections 2, 3, 5.2, 6.2, 6.3, 7.2, 7.3, 8.2, 8.3, 9.2, 9.3, 10.2 – 10.4, 11.2, 12.2, 12.3, 13.2, 14.3, 14.4 	<ul style="list-style-type: none"> ☐ Appendix 6.4 Natura Impact Statement ☐ Appendix 6.3 Site Synopsis ☐ Appendix 7.2 Aquatic Ecology Tables and Figures ☐ Appendix 7.3 Photographs of Aquatic Assessment ☐ Appendix 8.1 Trail Pit Logs ☐ Photomontages ☐ Engineering Report 	This material is considered to be generally compliant.
(d)	An outline of the main alternatives studied by the developer and an indication of the main reasons for his or her choice, taking into account the effects on the environment.	<ul style="list-style-type: none"> ☐ Sections 3, 12.4 	<ul style="list-style-type: none"> ☐ Engineering Report 	This material is considered to be generally compliant
2	Further information, by way of explanation or amplification of the information referred to in paragraph 1, on the following matters:-	-	-	see sub-headings below

Requirements of the Regulations ¹		Requirements met by the applicant, primarily in the following -		Comments
		Sections of the main EIS document	Appendices / other Reports	
(a)	a description of the physical characteristics of the whole proposed development and the land-use requirements during the construction and operational phases;	☰ Section 2	☰ Engineering Report	See comments below under <i>Detailed comments on physical characteristics (2(a)(i))</i> .
(i)	a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;	☰ Section 2	☰ Engineering Report	This material is considered to be generally compliant.
(ii)	an estimate, by type and quantity, of expected residues and emissions (including water, air and soil pollution, noise, vibration, light, heat and radiation) resulting from the operation of the proposed development	☰ Sections 5.3, 6.4, 7.4, 8.4, 9.4, 10.5, 11.4, 12.4, 13.4, 14.5	-	This material is considered to be generally compliant.
(b)	a description of the aspects of the environment likely to be significantly affected by the proposed development, including in particular:	-	-	see sub-headings below
	human beings	☰ Section 5		This material is considered to be generally compliant.
	fauna and flora	☰ Section 6,7	☰ Appendix 6.4 Natura Impact Statement ☰ Appendix 7.2 Aquatic Ecology Tables and Figures ☰ Appendix 7.3 Photographs of Aquatic Assessment	See comments under heading of <i>Detailed comments on the individual environmental factors</i> below table

Requirements of the Regulations ¹		Requirements met by the applicant, primarily in the following -		Comments
		Sections of the main EIS document	Appendices / other Reports	
	Soil	☰ Section 8	☰ Appendix 8.1 Trail Pit Logs	See comments under heading of <i>Detailed comments on the individual environmental factors</i> below this table
	Water	☰ Section 9	☰ Appendix 6.4 Natura Impact Statement ☰ Engineering Report	See comments under heading of <i>Detailed comments on the individual environmental factors</i> below this table
	Noise & Vibration	☰ Section 10	-	This material is considered to be generally compliant.
	Air	☰ Section 11	-	This material is considered to be generally compliant.
	Landscape	☰ Section 12	☰ Appendix 21.1 Landscape Photomontages	This material is considered to be generally compliant.
	Material assets, including the architectural and archaeological heritage, and the cultural heritage	☰ Section 13 Material Assets / Traffic ☰ Section 14 Cultural Heritage	-	This material is considered to be generally compliant.
	the inter-relationship between the above factors	☰ Section 15	-	This material is considered to be generally compliant.
(c)	a description of the likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative) of the proposed development on the environment resulting from:	-	-	see sub-headings below

Requirements of the Regulations ¹		Requirements met by the applicant, primarily in the following -		Comments
		Sections of the main EIS document	Appendices / other Reports	
	the existence of the proposed development,	Sections 5 to 15	<ul style="list-style-type: none"> Appendix 6.4 Natura Impact Statement Photomontages Engineering Report 	This material is considered to be generally compliant. See comments under heading of <i>Detailed comments on the individual environmental factors</i> below this table.
	the use of natural resources, the emission of pollutants, the creation of nuisances and the elimination of waste, a description of the forecasting methods used to assess the effects on the environment;	Sections 5 to 15	<ul style="list-style-type: none"> Appendix 6.4 Natura Impact Statement Photomontages 	This material is considered to be generally compliant. See comments under heading of <i>Detailed comments on the individual environmental factors</i> below this table.
(d)	An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the developer in compiling the required information.	-	-	As no such indication is given in the EIS it may be assumed that none were encountered.
Art 94 (c)	A summary in non-technical language	Non-Technical Summary	-	At 66 pages in length, this summary is too long to properly aid accessibility to the information as would be in keeping with best practice and the EPA Guidelines. However it may be considered to be compliant with the requirements of the regulations.

Detailed comments on individual environmental factors

(ref 2(c) above)

Flora and Fauna

A comprehensive description of the ecological baseline is provided in Section 6 Terrestrial Ecology and Section 7 Aquatic Ecology.

The clarity of assessment of impacts on flora and fauna and the clarity and level of commitment to mitigation measures is hampered by an assessment of two alternative scheme options.

Assessment of impacts is generally compliant. Due to the nature of the proposals it is reasonable that some aspects of mitigation are to be worked out at time of the proposed works as full details of ground conditions and most suitable mitigation measures, for example, will be known. The level of commitment to mitigation measures is uneven with some measures being included as recommendations and others as more definite undertakings.

Some relevant issues such as timing of works in relation to salmon and lamprey spawning and otter activity patterns are not fully considered however mitigation measures generally encompass these by reference to a Construction Environmental Management Plan or Method Statement and to relevant guidelines.

This part of the EIS is considered to be generally compliant. The shortcomings identified

The Natura Impacts Statement included as Appendix 6.4 is also considered compliant.

Soil

There are some gaps in this part of the assessment. For example it does not provide clear information on aspects such as some of the areas which appear to be proposed alongside the new channel for spoil deposition and the depth of spoil or how it will be managed to avoid excessive sedimentation of runoff. It also refers to potential for groundwater to be pumped-out during construction but does not address issues associated with that. However these aspects can be addressed through a Construction Environmental Management Plan.

This part of the EIS is considered to be generally compliant.

Water

Like the flora and fauna section, the clarity of this section is adversely affected by assessment of two different scheme options. It fails to provide an adequate assessment of aspects which would be expected, particularly the level of suspended solids generated or measures to control these. However these aspects can be addressed through a Construction Environmental Management Plan.

This part of the EIS is considered to be generally compliant.

Recommendations

The following conditions are recommended for consideration by the Minister to augment any conditions which may be imposed in the event that it is decided to issue a Commencement Order for the scheme.

1. The scheme shall be carried out in its entirety in accordance with all the plans, particulars, specifications and undertakings included in the Environmental Impact Statement and the Environmental Impact Statement Addendum, save as may be required by other conditions attached hereto.

Reason: To ensure that the development shall be carried out in accordance with the Confirmation Order and that effective control can be maintained.

2. A Schedule of Environmental Commitments containing all proposed mitigation and monitoring measures contained in the EIS and associated documents, as modified by the conditions attached hereto, shall be prepared. All contractors shall be made aware of this Schedule prior to preparation of detailed work method statements.

Reason: In the interests of clarity and the amelioration of environmental impacts.

3. A detailed Construction Environmental Management Plan (CEMP) shall be prepared prior to commencement of the works. The CEMP shall describe the construction sequence with emphasis on all individual work elements with potential to cause significant environmental effects. It shall clearly describe specific measures to ensure that detailed plans and working methods for implementation of mitigation and monitoring measures conform with the proposals assessed in the Environmental Impact Statement and associated documents, as modified by the conditions attached hereto.

Reason: In the interests of clarity and amelioration of environmental impacts.

4. The OPW shall consult with all relevant statutory authorities regarding the final interpretation of all aspects of the CEMP affecting specific environmental factors, as relevant to each authority. These authorities shall include the Environment, Heritage and Planning sections of Tipperary County Council, Inland Fisheries Ireland (IFI), and the Built Heritage & Architectural Policy, National Monuments Service and the National Parks and Wildlife Service (NPWS) sections of the Department of Arts, Heritage, Rural, Regional and Gaeltacht Affairs. Prior to commencement of the works the OPW shall confirm, in writing, with these authorities that CEMP correctly describes and gives effect to the mitigation measures required by the EIA of the project.

Reason: In the interests of clarity and amelioration of environmental impacts.

5. The CEMP shall include detailed measures to confirm how the water quality monitoring and control measures will be implemented. These measures will be devised in consultation with Inland Fisheries Ireland to demonstrate how each element of the works will be mitigated to comply with statutory water quality requirements.

Reason: In the interests of ensuring the amelioration of environmental impacts.

6. The CEMP shall describe and confirm provisions for ensuring that personnel with suitable training and equipment are available to effectively deal with any occurrences with potential to affect water quality, including malfunction of any environmental protection system or mitigation measure or any occurrence or emergency which could reasonably be anticipated to give rise to pollution.

Reason: In the interests of environmental protection.

7. The CEMP shall describe and confirm how all relevant requirements arising from the Water Framework Directive are addressed. This shall ensure compliance with the South Eastern River Basin Management Plan.

Reason: In the interests of environmental protection and compliance.

8. The CEMP shall describe and confirm timing of key stages of the works and mitigation measures to show for example how timing of works and mitigation will take account of spawning seasons for salmonids and for lampreys and of timing of mitigation measures for translocation of flora and fauna.

Reason: In the interests of environmental protection and compliance.

9. An Environmental Officer shall be appointed for the duration of the works. This shall include all stages of the works including implementation of mitigation measures for flora and fauna. The Environmental Officer shall liaise with contractors and statutory authorities as relevant regarding the detailed implementation of all mitigation and monitoring measures contained in the Schedule of Commitments.

Reason: In the interests of clarity, the amelioration of environmental impacts and ongoing implementation of effective controls.

10. The Environmental Officer shall prepare Environmental Compliance Reports throughout the works that summarise compliance with the Schedule of Environmental Commitments. These reports shall include available monitoring results and refer to sequencing and work elements set out in the CEMP. They shall be made available to the relevant statutory authorities on the dedicated scheme website (or equivalent – ref recommendation 13). The frequency of these reports should be at least once per month while works are ongoing. A final Environmental Compliance Audit Summary shall also be provided.

Reason: To ensure that baseline conditions are within the range anticipated in the EIS and associated documents. To also ensure that environmental effects are within the envelope of likely effects predicted in the EIS and associated documents.

11. The OPW shall describe and confirm final finishes and landscaping details for all new structures, improved structures and built elements to Tipperary County Council. These details will be agreed in writing with the Council prior to construction.

Reason: In the interests of visual amenity and of proper planning and sustainable development of the area.

13. Clear information on scheduled works along with corresponding obligations set out in the Schedule of Commitments proposals in the CEMP and ongoing monitoring reports shall be made available online through a dedicated scheme website or equivalent (such as a web portal or page(s) on the OPW website). The website (or equivalent) shall be put in place and notified to the public before commencement of works and shall be maintained and kept up-to-date for the implementation of the full scheme including all mitigation measures. It shall provide access to relevant information including, but not limited to, the Schedule of Commitments, CEMP, Environmental Compliance Reports and final Environmental Compliance Audit Summary. The operation of this site shall be monitored by representatives of the Office of Public Works and Tipperary County Council.

Reason: In the interests of making information on upcoming and ongoing works, and on environmental compliance, freely available to interested parties.

14. Following completion of the scheme all maintenance works shall be subject to further environmental assessment and compliance requirements as applicable.

Reason: To ensure continued assessment of environmental effects in compliance with relevant legislation.











Conclusions

The EIS is generally compliant and comprehensive.

The impacts that are predicted appear to generally be within parameters that are normally acceptable for such developments

The mitigation measures that are proposed appear to be generally appropriate. This review recommends augmentation and clarification of aspects of some of these undertakings as conditions to ensure that they are adequate and enforceable. It also proposes a number of other conditions to ensure that other effects are appropriately mitigated and monitored.

REFERENCE DOCUMENTS

 2520 - River Mall (Templemore) Drainage...	01/06/2016 19:01	Adobe Acrobat D...	10,173 KB
 2520 - River Mall (Templemore) Drainage...	01/06/2016 18:45	Adobe Acrobat D...	21,875 KB
 2520 - River Mall (Templemore) Drainage...	01/06/2016 18:50	Adobe Acrobat D...	9,984 KB
 160524_Updated Templemore Exhibition ...	27/05/2016 11:24	Microsoft Word 9...	60,356 KB
 160712_G Pre00219-2016 - DAHG ltr to O...	12/07/2016 12:29	Adobe Acrobat D...	83 KB
 River Mall (Templemore) Drainage Sche...	03/02/2015 18:34	Adobe Acrobat D...	8,121 KB
 Volume 1 - River Mall (Templemore) Dra...	03/02/2015 18:14	Adobe Acrobat D...	3,916 KB
 Volume 2 - River Mall (Templemore) Dra...	03/02/2015 18:12	Adobe Acrobat D...	32,169 KB
 Volume 3 - River Mall (Templemore) Drai...	03/02/2015 18:41	Adobe Acrobat D...	25,727 KB
 Volume 4 - River Mall (Templemore) Drai...	03/02/2015 18:43	Adobe Acrobat D...	11,158 KB