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Transport Infrastructure Ireland

# TII Publications

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# Project Manager's Manual for Minor National Road Projects

**PE-PMG-02043**
May 2023

PE Planning & Evaluation

Technical

## About TII

Transport Infrastructure Ireland (TII) is responsible for managing and improving the country's national road and light rail networks.

## About TII Publications

TII maintains an online suite of technical publications, which is managed through the TII Publications website. The contents of TII Publications is clearly split into 'Standards' and 'Technical' documentation. All documentation for implementation on TII schemes is collectively referred to as TII Publications (Standards), and all other documentation within the system is collectively referred to as TII Publications (Technical).

## Document Attributes

Each document within TII Publications has a range of attributes associated with it, which allows for efficient access and retrieval of the document from the website. These attributes are also contained on the inside cover of each current document, for reference.

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## TII Publications

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| **Activity:** | Planning & Evaluation (PE) |
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# Contents

**Updates to TII Publications resulting in changes to**

**Project Manager's Manual for Minor National Road Projects PE-PMG-02043**

| | |
|---|---|
| **Date:** | May 2023 |
| **Page No**: | All |
| **Section No**: | All |

**Amendment Details**:

A section on Sustainability has been included in the Introduction. Environmental and statutory process requirements have been streamlined. An overview is now included with references to RE-ENV-07008 Environmental Planning of National Road and Greenway Projects. The Project Brief has been removed as a requirement, due to overlap with other processes and deliverables. A section on Climate is now included within each phase, with reference to PE-ENV-01105 Climate Assessment of Proposed National Roads. Detailed text has been removed on Managing Geotechnical Risk. Reference is now made to DN-ERW-03083 Managing Geotechnical Risk.

**Phase 0**

Phase 0 has been renamed to Scope and Strategic Assessment.

**Phase 1**

The Feasibility Report now includes more extensive requirements. This will enable a more informed decision to be made on whether the project should proceed to Phase 2.

A number of key items are now included in Phase 1, that were previously in Phase 2. These include the Definition of the Study Area, Mapping and the Constraints, Risks and Opportunities Study. Again, this will enable a more informed decision to be made on whether the project should proceed to Phase 2.

The Constraints Study is now titled the Constraints, Risks and Opportunities Study.

**Phase 2**

The Options Selection Report and the Options Appraisal Report have been combined into one document titled the Options Report.

Survey requirements are now included in Phase 2, in addition to Phase 3.

A number of key items, as noted above, have been removed from Phase 2 and are now included in Phase 1.

**Phase 5**

Guidance is included on the Detailed Project Brief and the Procurement Strategy. These are required to satisfy relevant Government departmental approvals.

# Contents Table

# Introduction

## Purpose

This Manual has been prepared to provide supporting details on the processes and deliverables outlined within the *Project Management Guidelines (PE-PMG-02041)* to assist with ensuring consistency of approach in the delivery of minor national road projects.

## Application

This Manual is applicable to minor national road projects (value between €5 million and €20 million) which are funded through Transport Infrastructure Ireland (TII) and/or where TII is the Approving Authority, unless otherwise instructed by TII. However, TII may, at their own discretion, apply this Manual (or sections of this Manual) to specific projects with a value less than €5 million. In such cases, TII, in conjunction with the Project Manager, shall determine how to apply this Manual (or sections of this Manual) for these specific projects. This shall then be recorded in the Project Execution Plan (PEP). This Manual is be utilised by Project Managers delivering minor national road projects. In this Manual where reference is made to the Project Manager, this refers to the person delivering the Project on behalf of the Sponsoring Agency[1].

This Manual does not purport to be a full statement of the duties and statutory obligations of the Project Manager. Responsibility for ensuring that the Project is progressed in accordance with applicable legislation, standards, and guidelines remains with the Project Manager[2]. TII, as Approving Authority, has ultimate responsibility for the project and will be available to provide guidance and advice to the Sponsoring Agency, as appropriate, to ensure consistency of approach in the delivery of minor national road projects.

This Manual shall be read in conjunction with the *Project Management Guidelines* (*PE-PMG-02041*).

## Structure

The *Project Management Guidelines* divide the evolution and progression of a Project into an eight-phase process (Phase 0 to Phase 7 inclusive) as illustrated in **Figure 1**. Each phase is provided with a dedicated chapter in this Manual and the phase requirements are presented in a step-by-step manner. Important milestones and statutory processes requiring Sponsoring Agency action, stakeholder consultation, or TII input are indicated, such that the Sponsoring Agency can plan each phase in terms of time, resources, and cost. Outline and sample deliverable document templates are included as appendices, where appropriate.

Flowcharts outlining the required processes and principal deliverables for each Project phase are provided within this Manual. These are colour coded to reflect the documentation each process or deliverable derives from. **Figure 2** overleaf details the colour coding applied within these flowcharts.

[1] For the purposes of this Manual, the term “Project Manager” is used to describe the person or persons undertaking the functions of Project Coordinator and Project Manager as described in the *Project Management Guidelines (PE-PMG-02041)*.

[2] While this Manual identifies the Project Manager as the person responsible for the delivery of all aspects of the Project, it is anticipated that the Project Manager will rely heavily on the Designers for assistance with this. The scope of work, and delegated responsibility for the Designers (whether an internal design team within the Sponsoring Agency or external Technical Advisors) should be defined and recorded within the Project Execution Plan.

| | | |
|---|---|---|
| Planning and Design | Phase 0 | Scope and Strategic Assessment |
| | Phase 1 | Concept and Feasibility |
| | Phase 2 | Options Selection |
| | Phase 3 | Design and Environmental Evaluation |
| | Phase 4 | Statutory Processes |
| Construct / Implement | Phases 5 | Enabling and Procurement |
| | Phase 6 | Construction and Implementation |
| | Phase 7 | Close out and Review |

**Figure 1 Project Phases**

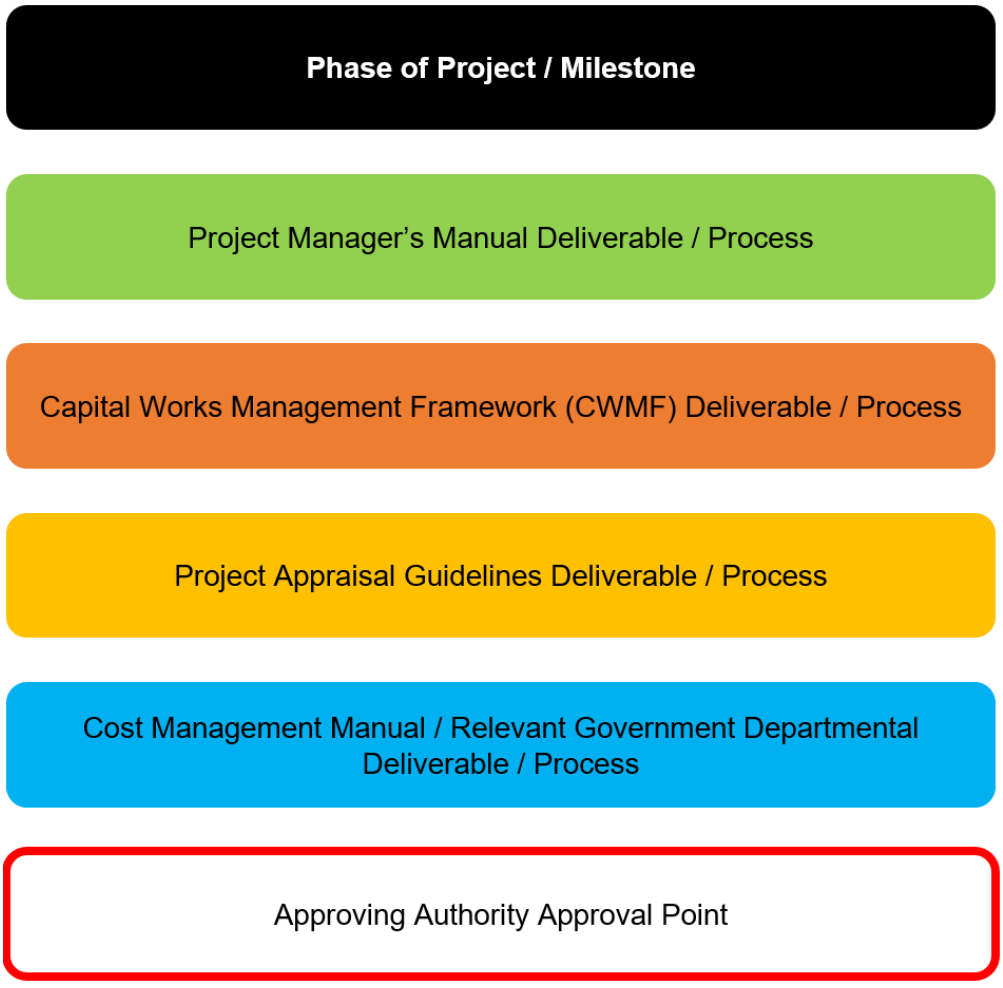


**Figure 2 Flowchart Legend Colour Coding**

## Role of TII

Transport Infrastructure Ireland (TII) was established through a merger of the Railway Procurement Agency and the National Roads Authority and is the operational name of the merged entity. TII has responsibility, inter alia, for the provision of a safe and efficient network of national roads as provided for in the Roads Act 1993. This includes the planning and construction of new roads and the improvement and maintenance of existing roads within the entire national road network.

The purpose of this section is to set out the function of TII associated with the delivery of minor national road projects. The key delivery stakeholders for a typical minor national road project and their interaction with TII are shown in **Figure 3** hereunder.

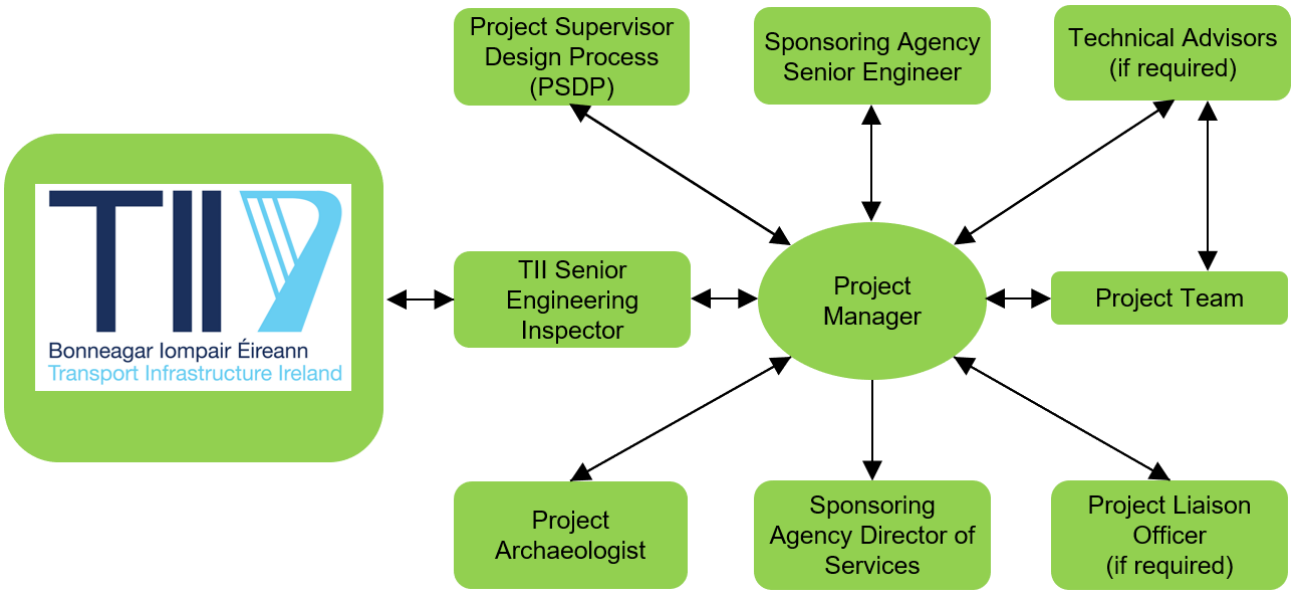


**Figure 3 Key Delivery Stakeholder/ TII Interface**

As the Project progresses, the Project Manager may desire to seek advice and support from various specialist sections within TII. The primary interface between the Project Manager and TII, as highlighted in **Figure 3**, is the TII Senior Engineering Inspector. The TII Senior Engineering Inspector will determine the appropriate process for seeking advice from the various specialist sections within TII as required.

The TII Senior Engineering Inspector will deal with all day-to-day issues on minor national road projects on behalf of TII including payments to Sponsoring Agencies and ensuring that all Project Management Guidelines Approval Points, expenditure monitoring, and project reporting are compliant with TII policies for minor national road projects delivery. It is the responsibility of the Sponsoring Agency to ensure that deliverables are of a high calibre and that the Project is progressed in accordance with applicable legislation, standards, and guidelines. The TII Senior Engineering Inspector will be available to provide guidance and advice to the Sponsoring Agency, as appropriate, as to the calibre of deliverables required to ensure consistency of approach in the delivery of minor national road projects.

The TII Senior Engineering Inspector reports to the TII Regional Manager. The Regional Manager has overall managerial responsibility within TII for delivery of minor national road projects on time and within Total Scheme Budgets. The Regional Manager is the primary contact between TII and the Sponsoring Agency at senior management level during the delivery of a project. This involves regular ongoing communication at the highest level and ensures efficient two-way flow of information and views between the parties.

# Quality Assurance Documentation

As well as the 'Phase' specific deliverables identified in the *Project Management Guidelines*, and this Manual, there are a number of overarching quality assurance documents required to be produced and managed by the Project Manager during Project development as identified in Section 4 of the *Project Management Guidelines* and expanded upon below.

## Project Execution Plan

The Project Execution Plan (PEP) is the core document for managing a project and states the policies and procedures for Project delivery. The Project Manager shall prepare the Project Execution Plan during Phase 1. This shall be updated throughout the progression of the Project. The Project Execution Plan shall always be forward-looking. The submission of an updated Project Execution Plan with a Gate Review Statement, therefore, shall set out the intended processes, document management and procedures.

The format and content of the Project Execution Plan shall include the following:

- Project definition and description;
- Project roles, responsibilities, and authorities;
- Project control and assurances;
- Programme management;
- Procurement strategy;
- Sustainability strategy (including waste management and climate assessments);
- Administrative systems and procedures - Documentation Management Plan;
- Future maintenance and renewal costs (when available);
- Cost, risk, and value management; and
- Lessons Learned Register –

  At the initiation of each Project, the Project Manager shall obtain a copy of the Lessons Learned Database from TII. The Project Manager shall use the relevant lessons learned from this database, and from their own organisation's lessons learned processes, to prepare a project-specific Lessons Learned Register. This register shall be updated regularly to demonstrate that relevant lessons learned from previous projects have been taken into consideration in the development of the Project. Completion of the lessons learned register is a requirement of the Project Execution Plan as per the *Project Management Guidelines*. All new lessons learned in the development of the Project shall be recorded in the register and form part of the Ex-Post Evaluation to be completed at the end of Phase 7.

  The Project Manager shall have regard to *PAG Unit: 9.0 Ex-Post Evaluation* when considering items for inclusion in the Lessons Learned Register.

  A sample Lessons Learned Register is contained in **Appendix A0.1**.

## Document Register

As a Project progresses through each phase of development, decisions are made and milestones are reached, many of which shall be recorded in the Decision Register. The Project Manager shall maintain a record of all reports and documents produced during each phase identifying the author, date of production, revisions, and the specific purposes of the report/ document itself. This register should log all other documentation key to the Project, including minutes of meetings with third parties and third-party service providers. Such a register shall form part of the Project Execution Plan as described in this Manual.

A sample Document Register is contained in **Appendix A0.2**.

## Decision Register

As a Project progresses through each phase of development, decisions or milestones are reached, many of which shall be recorded in the Decision Register. However, as the full progression of any road project can take as much as 10 years to closeout and staffing and Technical Advisors may be subject to change during the Project lifetime, a record of key decisions is invaluable when certain issues present themselves, either at an Oral Hearing or an audit, several years later. Therefore, the Project Manager shall prepare a Decision Register for each Project, recording the decision, the relevant dates and referencing any related issues in the making of that decision. Such a register shall form part of the Project Execution Plan as described in this Manual.

A sample Decision Register is contained in **Appendix A0.3**.

## Risk Register

From the outset, the Project Manager shall develop, maintain, and regularly update a record of all risks identified that may potentially impact on the successful Project delivery.

These risks may include delivery risks, reputation, quality, statutory stakeholder risks, and third-party service provider risks among others. This requirement incorporates phase specific risk evaluation processes outlined within the *TII Cost Management Manual (CMM)*. The risk register shall contain a description of each identified risk, a rating for each risk, the risk owner, and the risk control and mitigation strategies. Such a register shall form part of the Project Execution Plan as described in this Manual.

A sample Risk Register, which includes risks that may impact on Project costs, is included in the *TII CMM*.

## Project Reporting System (PRS)

A formal web-based Project Reporting System (PRS) is operated by TII for all projects. All expenditure for projects are reported through this before funds may be transferred to a Sponsoring Agency. The Project Manager shall request TII to assign a Project name and a Project reference number to the Project.

The Project Manager shall be responsible for completing monthly expenditure reports to ensure accurate and timely drawdown of the Project Grant Allocation. It is necessary to continuously monitor the scope of the Project throughout all phases of development through formal reporting mechanisms which are outlined in the PRS Manual available from TII. The Project Manager shall have regard to the eligibility and appropriate audit requirements listed in the Chargeability of Expenditure to National Road Grants and Greenway Grants during each phase of Project delivery.

## Land and Property System

The Land and Property System is a new cloud-based system and is accessible by TII Land and Property Services, Local Authority personnel and third-party property valuers. The system is designed to facilitate the management of land acquisition over a project lifecycle from completion of an initial budget estimate continuing throughout the land acquisition phase. All new projects are required to use the system. The system is designed around the previous Land Acquisition Summary Spreadsheet. The Land Acquisition Summary Sheet is replaced by a Project Upload file which contains similar attributes to the land acquisition summary sheet. The Project Upload file template shall be supplied by TII Land and Property Services and shall be completed by the Property and Land Valuation consultants appointed to prepare Land acquisition budgets. Guidance on the use of the system shall be provided by TII Land and Property Services.

### Project Control and Assurances

Gate Reviews allow Sponsoring Agencies to review the project at key development stages and provide assurance to TII that the project is being delivered in accordance with the applicable approvals and conditions. The PEP shall detail the requirements for the Gate Review process and for project approval and governance procedures. This process shall align with the requirements within the *Project Management Guidelines* and this Manual.

## Progress Reports

The Project Manager shall prepare, maintain, and issue Progress Reports as required by the *Project Management Guidelines* and this Manual. A sample Progress Report is contained in **Appendix A0.4.**

## Steering Group

For selected minor national roads projects, a Steering Group may be established to guide the Project through its phased development. The Steering Group would comprise the Approving Authority, Sponsoring Agency, Project Manager and Project Management Team. Other significant stakeholders, including the Technical Advisors, may attend as required. When assembling the Steering Group, care should be taken to ensure that appropriate individuals from a range of backgrounds are included.

Where multiple agencies or government departments are involved in the Project (e.g. urban relief road projects where public transport agencies may have a role in the delivery of the final project), representatives from the other agencies and departments may be invited to join the Steering Group.

The requirement for a Steering Group, and, if applicable, the composition of the Steering Group, shall be agreed with TII and the Sponsoring Agency and documented in the Project Execution Plan.

## Sustainability

### Background and Context

As a UN Member State, Ireland has adopted the 2030 Agenda for Sustainable Development. TII is tasked with improving Ireland's quality of life and national economic competitiveness by developing, maintaining and operating the national road and light rail network in a safe, cost effective and sustainable way. Through this remit, TII can contribute to Ireland's wider sustainability targets and has the capacity to influence the nations' entire transport industry and potentially beyond.

The United Nations Brundtland Commission in 1987 defines sustainability as meeting the needs of the present, without compromising the ability of future generations to meet their own needs. The UN Sustainable Development Goals (UN SDGs) form a framework for improving the lives of populations around the world; considering economic, social and environmental outcomes.

### Implementation

The TII *Sustainability Implementation Plan (SIP), Our Future*, was published in October 2021. This sets the direction for TII, aligns objectives, brings together different workstreams and harnesses the opportunity each Division/ Section has in contributing to sustainability. TII can shape and deliver infrastructure projects to deliver holistic outcomes that aid in the delivery of government national development plans. The Sustainability Implementation Plan influences a variety of TII documentation.

The principles of sustainability, relevant to TII as defined in the TII Sustainability Implementation Plan, will guide the work TII undertakes for many years. Therefore, TII want to ensure that sustainability is embedded in every single aspect of what it does, underpinning each task. Transport and mobility are central to sustainable development. Sustainable transport can enhance economic growth, improve social inequality, ensure strong health outcomes, improve the resilience of cities and strengthen urban-rural linkages. It is a major driving force behind demand for energy and can impact on the quality of our cities and natural environments.

The Project Manager shall take cognisance of TII's sustainability goals and Implementation Plan when delivering Minor National Road Projects. Further Guidance on implementing sustainability can be found in the SIP Practical Guide for Projects within TII Publications.

TII welcomes initiatives contributing to sustainability in minor national road projects.

## Climate Adaptation

The Project Manager shall take cognisance of the principles and values of climate adaptation throughout the project lifecycle. The Project Manager shall work in collaboration with the expert in biodiversity, the hydrologist and the hydrogeologist to ensure that climate adaptation underpins the ethos of every minor national road project and TII's vision through the Sustainability Implementation Plan.

## Gate Review Process

At the end of Project Phase 0, Phase 3, Phase 4, Phase 5 and Phase 7, a gate review is required. Gate reviews are separate to the formal Approving Authority Approval Points as defined in the *Project Management Guidelines (PE-PMG-02041)* and relevant government departmental requirements.

The purpose of each gate is to ensure that a project has met certain requirements before it can proceed to the next phase. By approving a gate, TII are indicating that they are satisfied that the Sponsoring Agency has provided assurance that the required level of project maturity has been reached and the Project can proceed to the next phase.

The gate reviews follow a standard approach which allows TII, along with the Sponsoring Agency responsible for project delivery, to assess Project progress.

The onus lies with the Sponsoring Agency for undertaking the review to provide assurance, through the submission of documentary evidence, that the required level of project maturity has been reached. TII reserve the right to carry out appropriate audits on the findings reached by the Sponsoring Agency and the evidence submitted to ascertain that the Project is being delivered as approved.

The process leading to each gate review shall occur as the Project is being developed rather than as a singular milestone task. That is, documentary evidence shall be issued to TII on an ongoing basis, as the documentary evidence as outlined within this Manual is prepared and finalised, rather than as a final and singular package at the end of each Phase.

The Project Manager shall prepare a Gate Review Statement confirming that the required documentary evidence has been issued to TII and that this documentary evidence demonstrates that the required level of project maturity has been reached. This confirmation shall be endorsed by Sponsoring Agency Director of Services and submitted to TII along with a request to proceed to the next phase. The Gate Review Statement at the end of each phase shall be accompanied by the applicable finalised deliverables.

The Project Manager shall be aware that, while the Gate Review Statement should identify the specific deliverables required by the *Project Management Guidelines*, by submitting the Gate Review Statement, the Sponsoring Agency is also providing assurance that they have complied with all necessary TII or third party approvals.

Approving Authority Approval Points may be required during some or all of the Project phases. This may be necessary where NROs require assistance and technical expertise for a particular item, task, document or field, which may not be available within the NRO. The decision to appoint Technical Advisors shall be carried out by the Project Manager, in conjunction with the TII Senior Engineering Inspector. If it is determined that Technical Advisors are required, it will trigger an Approving Authority Approval Point.

**Figure 4** outlines the summary of phases, gates, and Approval Points for a TII minor national road project.

| Project Phase | Gate at End of Phase | Approving Authority Approval Points |
|---|---|---|
| Phase 0 Scope and Strategic Assessment | Gate 0 | Approval Point [1] |
| Phase 1 Concept and Feasibility | | Approval Point [1] |
| Phase 2 Options Selection | | Approval Point [1] |
| Phase 3 Design and Environmental Evaluation | Gate 3 | Approval Point [1] [2] |
| Phase 4 Statutory Processes | Gate 4 | Approval Point [1] [3] |
| Phase 5 Enabling and Procurement | Gate 5 | Approval Point [1] [4] |
| Phase 6 Construction and Implementation | | Approval Point [1] |
| Phase 7 Close out and Review | Gate 7 | Approval Point [1] |

**Figure 4 Phase, Gate, Approving Authority Approval Points**

**Notes:**

1. Approval Point (Pre-Appointment of Technical Advisors) – if applicable
2. Approval Point (Approval to Publish)
3. Approval Point to Commence Land and Property Acquisition
4. Approval Point to go to Tender

   Approval Point to Award Contract

## Audit Requirements

TII reserve the right to undertake an audit of any or all Phases of any project and may seek confirmation of key decisions and confirmation that the various documents were prepared in accordance with the legislation, standards, guidelines, and policies applicable at the time. Outlines of items to be considered during such audits are included as appendices, for phases where significant expenditure is incurred.

The Project Manager shall ensure that relevant Project data is retained in a manner such that it is capable of being retrieved in an appropriate time frame, for a period of years after completion of the Project.

# 0 Phase 0 Scope and Strategic Assessment

The purpose of Phase 0 is to ensure that the Project is aligned with current national policy and Approving Authority strategic policies, programmes and plans.

The processes and deliverables required to complete Phase 0 are outlined in **Figure 5**.

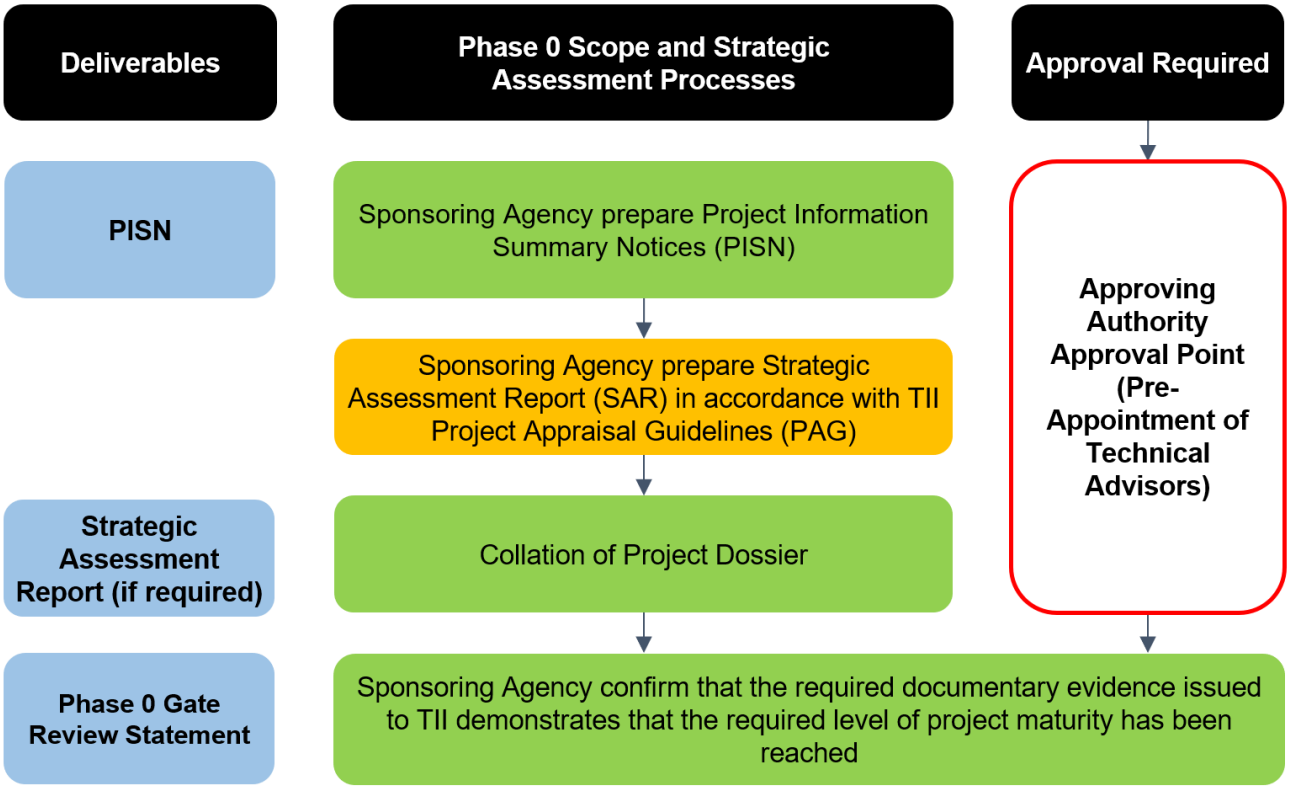


**Figure 5 Phase 0 Workflow Diagram**

The Project Manager shall notify the TII Senior Engineering Inspector of their required engagement with all relevant internal TII departments at the earliest possible time frame of Phase 0, to enable sufficient time for reviews and approvals to be incorporated into the overall Phase 0 programme and minimise the risk of delays.

## 0.1 Processes

### 0.1.1 Assignment and Structure of Project Team

The Project Team consists of personnel from the Sponsoring Agency, Regional Design Offices and Technical Advisors, as appropriate. The Project Manager shall be assigned by the Sponsoring Agency to ensure that the Project is delivered on time, to budget, and to the required standards and specifications. The Project Manager, as a minimum, shall consult with other local authority departments in the development of Phase 0 deliverables. The forward planning department (or equivalent) of the relevant Council(s) shall also be consulted in the project development.

### 0.1.2 Project Information Summary Notices

The Sponsoring Agency shall prepare the Project Information Summary Notices (PISN)**.** It effectively acts as an information pack for the project. The PISN provides a high-level overview of the Project details available.

Items such as scope, background, need for the project, summary of prior studies and why it is now being proposed for advancement through the TII phases. An outline template for a PISN is contained in **Appendix A0.5.**

### 0.1.3 Appointment of Technical Advisors

It may be necessary to commission Technical Advisors to assist with the delivery of some elements of the Phase 0 Strategic Assessment Report. The Project Manager shall determine if Technical Advisors are required on a case by case basis, in conjunction with the TII Senior Engineering Inspector. The Project Manager shall document the scope within a Technical Advisors Procurement Brief.

Guidance can be found in CWMF GN1.5.1 Public Works Contracts – Managing the Pre-Contract Phase and CWMF GN1.6 Procurement Process for Consultancy Services (Technical).

The Project Manager shall prepare the necessary tender documents and determine appropriate quantitative and qualitative suitability criteria with advice, where necessary, from appropriate specialist advisors (e.g. insurance). Suitability criteria should take account of the complexity, nature, scope, and other relevant and appropriate Project specific criteria.

The Project Manager shall be responsible for arranging the evaluation of tender returns by an appropriately qualified and experienced assessment board. Once the Tender Assessment Process is complete, a recommendation may be made to TII to accept one of the tenders received. As part of the Tender Award Recommendation (TAR), the Project Manager shall prepare a Tender Report, summarising the Tender Assessment Process and formally recommend the Award of the Contract.

The Project Manager shall submit the completed Tender Report to TII with a recommendation to appoint a Tenderer and a request for TII to provide funding for the identified costs associated with this appointment. The Tender Report should be accompanied by a Tender Award Recommendation Form (TARF), completed by the Sponsoring Agency. Tender Reports prepared by the Sponsoring Agency shall comply with obligations and requirements deriving from applicable procurement legislation.

### 0.1.4 Strategic Assessment Report

The Project Manager shall prepare a Strategic Assessment Report (SAR) in accordance with the relevant *TII PAG* requirements and this Manual. A SAR is required for Projects costing in excess of €10m.

The SAR is the key document required at Phase 0 because it is used to inform the Approving Authority when deciding whether to proceed with the project. The Project Manager shall refer to the SAR frequently throughout the Project to control scope creep.

The SAR shall be submitted to TII for review as the Approving Authority.

### 0.1.5 Climate Adaptation

The Project Manager shall comply with the requirements of *PE-ENV-01105 Climate Assessment of Proposed National Roads – Standard.*

### 0.1.6 Project Dossier

The Project Manager shall collate the Project Dossier. This shall include:

- Relevant prior information and data;
- Background and need for the project;
- Previous studies including environmental evaluation;
- Appraisal works undertaken in the identification of the Project; and
- Any other information pertinent to the progression and development of the Project.

A template for a Project Dossier is presented in **Appendix A0.6** of this document.

### 0.1.7 Structures

The Project Manager shall engage directly with the TII Structures section, to ensure that the TII Structures section are informed of projects during Phase 0 and can actively contribute to the process.

### 0.1.8 Approving Authority Approval Point

An Approving Authority Approval Point is required for the pre-appointment of technical advisors, if applicable.

The submission of the SAR to the Approving Authority constitutes an Approving Authority Approval Point. The Project shall not progress beyond this point until Approving Authority approval to do so has been received by the Sponsoring Agency in writing.

### 0.1.9 Project Gate 0

The Project Manager shall ensure that all deliverables required for Phase 0 are finalised and issued to TII at the end of Phase 0.

The Project Manager shall prepare a Gate Review Statement confirming that deliverables issued to TII meet the required level of project maturity using the template in **Appendix A0.7**. This assurance shall be endorsed by the Sponsoring Agency Director of Services. The Sponsoring Agency may proceed to Phase 1 when TII accept the Gate Review Statement and issue consent to proceed to Phase 1.

### 0.1.10 Expedited Advancement to Phase 3

In some instances, policy, strategy, or studies may facilitate the commencement of the Project at Phase 3 Design and Environmental Evaluation. This expedited advancement to Phase 3 shall require prior TII approval. For selected minor national road projects, this process may be advantageous. In such instances, the Project Manager shall compile the necessary documentary evidence to demonstrate the achievement of the requirements of *TII PMG*, *TII PAG*, regulatory requirements, statutory requirements, and guidelines prepared by relevant bodies.

## 0.2 Deliverables

The deliverables for Phase 0 are listed below:

| Source | Deliverables |
|---|---|
| PMG | Project Information Summary Notices (PISN) |
| PSC | Strategic Assessment Report (SAR) |
| PMG | Phase 0 Gate Review Statement |

# 1 Phase 1 Concept and Feasibility

The purpose of Phase 1 is to develop and investigate in further detail the feasibility of the Project and to implement the Project management structure.

The processes and deliverables required to complete Phase 1 are outlined in Figure 6.


**Figure 6 Phase 1 Workflow Diagram**

The Project Manager shall notify the TII Senior Engineering Inspector of their required engagement with all relevant internal TII departments at the earliest possible time frame of Phase 1, to enable sufficient time for reviews and approvals to be incorporated into the overall Phase 1 programme and minimise the risk of delays.

## 1.1 Processes

### 1.1.1 Assignment and Structure of Project Team

The Project Team consists of personnel from the Sponsoring Agency and Technical Advisors, if required.

Where a proposed Project spans the jurisdiction of more than one Local Authority, a 'Section 85' Agreement shall be entered into under the provisions of Section 85 of the Local Government Act 2001, outlining which Local Authority is responsible for leading project delivery and for fulfilling the role of Sponsoring Agency. TII approval is required with respect to entering into a Section 85 Agreement.

The Project Manager, and, if required, Project Coordinator, shall be assigned by the Sponsoring Agency to ensure that the Project is delivered on time, to budget, and to the required standards and specifications.

The Project Archaeologist is assigned to the relevant Project Team(s) to oversee the archaeological aspects of the Project. The Project Archaeologist shall fulfil, in conjunction with the Project Manager, the obligations for the delivery of the Project, working for the Sponsoring Agency, and their role is set out in the *Code of Practice for Archaeology (2017)*.

The Project Archaeologist shall also have regard to the requirements of *PE-ARC-02009 Guidelines for Cultural Heritage Impact Assessment (CHIA) of TII Projects* (to be published) and *PE-ARC-02010 Cultural Heritage Impact Assessment (CHIA) of Proposed TII Projects – Standards* (to be published).

### 1.1.2 Project Execution Plan (PEP) - Including Lessons Learned

The Project Manager shall prepare a Project Execution Plan (PEP) in accordance with relevant CWMF requirements. It shall provide a comprehensive description of the project scope and objectives in a structured format. Its purpose is to provide a framework for all those directly engaged during the design, procurement, implementation, and completion of the Project, and who are tasked with delivering the Project to the required specifications, within the Project capital budget, and to a set time frame. The PEP shall always be forward looking, the submission of an updated Project Execution Plan with a Gate Review Statement therefore shall set out the intended processes, document management and procedures for the following phase. The PEP shall contain a level of detail appropriate to the phase.

The format and content of the PEP shall include, but is not limited to, the following:

- Project definition and description;
- Project roles, responsibilities, and authorities;
- Project controls and assurances;
- Safety and environmental issues, such as implementation design and management regulations;
- Programme management;
- Contracting and procurement;
- Commissioning;
- Sustainability strategy (including waste management, and climate assessment);
- Administrative Systems and Procedures – Document Management Plan;
- Cost, risk, and value management and sensitivity analysis;
- Constraints, Risks and Opportunities
- Project evaluation
- Lessons Learned; and
- Project Communications Strategy (referred to as Stakeholder Communications Plan within CWMF GN 1.1).

The Project Manager shall prepare and submit the PEP to the Sponsoring Agency and TII for agreement. It shall be updated as required and re-issued to TII, with key deliverables, at the end of each phase when requesting formal approval to proceed to the next phase of development.

The PEP shall address the information summarised in Sections 1.1.2.1 to 1.1.2.5.

#### 1.1.2.1 Project Team, Project Roles, Responsibilities and Authorities

The PEP shall detail the key authorities, key Project roles, and their responsibilities for Project development and delivery as outlined in the *Project Management Guidelines*.

#### 1.1.2.2 Programme Management

The Project Manager shall prepare the Project Programme. The Project Programme will identify the key deliverables required for each phase and set realistic targets for their completion. The PEP shall detail the frequency of programme reviews and how progress is to be monitored and controlled.

Depending on the nature of the Project and its priority within TII's programmes, the Project objectives may not necessarily cover all phases of development.

#### 1.1.2.3 Administrative Systems and Procedures

The PEP shall detail any administrative procedures that are necessary for effective and controlled Project implementation such as documentation systems, computer software standards, Project reporting, meeting frequencies, approval procedures, and the like. This shall be set out in a section or appendix titled Documentation Management Plan. This may include a BIM Execution Plan (BEP) or Employer's Information Requirements (EIR). There are also requirements for a Document Register, Decision Register and Risk Register per the Project Management Guidelines and this Manual which will form part of the PEP.

#### 1.1.2.4 Cost, Risk and Value Management

The *TII CMM* takes account of cost, risk, and value management guidelines and shall be read in conjunction with this Manual. Whilst details on cost, risk, and value management are outlined within the TII CMM, this Manual notes the key deliverables for each phase. Cost, Risk, and Value Management procedures shall be set out within the PEP.

An indicative range of costs for options should be determined during Phase 1. As part of this, the Project Manager shall detail assumptions utilised in determining estimates, any Project risks identified, any value opportunities identified, and the strategies adopted for dealing with same. The Project Manager shall issue the indicative range of costs and the risk register to the TII Senior Engineering Inspector.

#### 1.1.2.5 Consultation with Stakeholders

As the Project progresses, it may be necessary to engage with stakeholders to keep them informed of relevant Project information and to facilitate access to relevant Project data. The purpose of this is to interact with stakeholders in a timely manner and to provide effective opportunities to participate in decision making procedures.

The Project Manager may, if required, arrange for public consultation events seeking submissions and observations in relation to the Project from stakeholders. Such Public Consultation is non-statutory in nature, stakeholders will be informed of this and will be informed that statutory submissions and observations can be made to the Competent Authority once the statutory processes commence.

The Project Manager may initiate consultation with relevant bodies seeking submissions and observations in relation to the Project.

### 1.1.3 Definition of the Study Area

The study area shall cover an area which will enable appropriate options to be developed and examined. The development of the study area is cyclical in nature as the findings of the constraints and opportunities study and design development may instigate a re-evaluation of its extent (within the constraints of the Project scope identified in the Phase 0 SAR). The potential impact of options on the receiving environment shall be determined and from this, their zone of influence deduced. The zone of influence is the zone encompassing all the potential impacts on the receiving environment associated with an option being evaluated.

The Project Manager shall issue the study area to the Sponsoring Agency Management Group for review prior to the commencement of the constraints, risks and opportunities study.

The Project Manager shall refer the study area to the relevant Local Authority Planning Department(s) in an appropriate digital format. The Project Manager shall request that the Local Authority Planning Department(s) issue planning applications therein for observation. As the development of the study area is cyclical, the Project Manager shall ensure that the revised study area is issued to the relevant Local Authority Planning Department(s) following each change.

The Study Area may evolve as necessary throughout all stages of the project lifecycle. At the end of Phase 1, the Study Area shall be revisited to encompass all reasonable options and their respective zones of influence.

In many cases for minor projects, the study area will be easily defined as the number of feasible options available will be limited and a preferred option may be identified at an early stage of the process.

### 1.1.4 Mapping

Irish Transverse Mercator (ITM) shall be utilised for grid referencing and mapping for minor national road projects.

The Project Manager shall ensure that care and diligence is taken when spatial data from one grid is transformed to another. The Project Manager shall take cognisance of *Project planning for the transformation of geographic data from Irish Grid (IG) to Irish Transverse Mercator (ITM) prepared by OSI.* Additionally, the Project Manager shall have regard to the transformation requirements of bespoke spatial reference grids such as the 'RPA Grid' and others.

The Project Manager shall obtain up to date professional mapping, including, but not limited to discovery digital, ortho photography, and vector mapping covering the study area. If the Project requires low-level aerial photography, it is advisable that these images be ortho-rectified i.e. aligned to the Project grid referencing.

The Project Manager shall obtain topographical survey data, including where appropriate LiDAR data, to allow options to be developed to an appropriate level of detail to facilitate assessment of the potential impacts thereof. The Project Manager, in conjunction with the Project Archaeologist, may consider commissioning an archaeological assessment of the LiDAR data to identify the locations of designated and undesignated sites (such assessment to be completed at Phase 1 or Phase 2 as appropriate.

### 1.1.5 Relevant Studies

In advance of the evaluation of constraints and opportunities, the Project Manager shall examine previous studies (feasibility, constraints, and examination of options amongst others) that may have been carried out within or adjacent to the study area. This may serve to supplement and augment the Project Dossier collated during Phase 0.

These previous studies may have identified key constraints or other issues that exist which may assist the Options Selection process. However, these studies shall be treated with caution as they may be outdated in terms of applicable design standards, plans and/or policy guidelines, and current statutory and regulatory requirements.

### 1.1.6 Constraints, Risks and Opportunities Study

During the Options Selection Process, it is necessary to identify the nature and extent of constraints and opportunities, at an appropriate level of detail, within the study area. These constraints will be documented and mapped to ensure that options under consideration can be designed taking cognisance of such constraints and opportunities.

The Project Manager shall ensure that the findings of the Constraints, Risks and Opportunities Study are documented and mapped in the Feasibility Report. This will identify any areas where further investigations may be necessary due to restricted access or restricted surveying conditions among others.

An outline of items to be considered as part of the Constraints, Risks and Opportunities Study is contained in **Appendix A1.1**.

#### 1.1.6.1 Identification of Constraints and Opportunities

While the constraints, risks and opportunities study may primarily be a desktop study, it may be necessary to verify the nature and extent of certain constraints by means of windshield or walkover surveys. Where such surveys are required, health and safety implications must be considered.

Constraints, risks and opportunities may include, but are not limited to:

- Natural Constraints (naturally occurring landscapes and features, including underground features);
- Artificial Constraints (forming part of the built environment including underground features, such as disused landfills);
- External Parameters (design standards, policy, procedural, financial, and legal issues).
- Desirable Amenities (Towns and Villages, Points of Interest); and
- Cultural Heritage (including designated and undesignated archaeological, architectural and cultural heritage sites).

### 1.1.7 Project Liaison Officer

For minor national road projects, the Project Manager will typically carry out the functions and duties of the Project Liaison Officer (PLO). This role will be carried out in accordance with any agreement currently in place between TII, Irish Farmers Association, and the relevant government department.

An outline of the duties of the PLO are included in **Appendix A1.2**.

### 1.1.8 Road Safety Impact Assessment

The Project Manager shall carry a Road Safety Impact Assessment (RSIA) in accordance with the requirements of *PE-PMG-02001 Road Safety Impact Assessment*. This will contribute to the determination of Project need, Project objectives, and will inform the Feasibility Report.

### 1.1.9 Managing Geotechnical Risk

The Project Manager shall comply with the requirements of *DN-ERW-03083 Managing Geotechnical Risk*.

### 1.1.10 Procurement Strategy and Procurement File

As part of the procurement process for Technical Advisors (if required), the Project Manager shall prepare a Procurement Strategy and a Procurement File. The Project Manager shall include for all service providers engaged on the Project.

Both the Procurement Strategy and Procurement File will be updated and maintained throughout the Project's development. An outline of items to be included in the Procurement File is contained in **Appendix A1.3.**

### 1.1.11 Appointment of Technical Advisors

It may be necessary to commission Technical Advisors to assist with the delivery of some elements of the Phase 1 Feasibility Report. The Project Manager shall determine if Technical Advisors are required on a case-by-case basis, in conjunction with the TII Senior Engineering Inspector. The Project Manager shall document the scope within a Technical Advisors Procurement Brief.

Guidance can be found in CWMF GN1.5.1 Public Works Contracts – Managing the Pre-Contract Phase and CWMF GN1.6 Procurement Process for Consultancy Services (Technical).

The Project Manager shall prepare the necessary tender documents and determine appropriate quantitative and qualitative suitability criteria with advice, where necessary, from appropriate specialist advisors (e.g. insurance). Suitability criteria will take account of the complexity, nature, scope, and other relevant and appropriate Project specific criteria.

The Project Manager shall be responsible for arranging the evaluation of tender returns by an appropriately qualified and experienced assessment board. Once the Tender Assessment Process is complete, a recommendation may be made to TII to accept one of the tenders received. As part of the Tender Award Recommendation (TAR), it shall be necessary to prepare a Tender Report, which will summarise the Tender Assessment Process and formally recommend the Award of the Contract.

The Project Manager shall submit the completed Tender Report to TII with a recommendation to appoint a Tenderer and a request for TII to provide funding for the identified costs associated with this appointment. The Tender Report will be accompanied by a Tender Award Recommendation Form (TARF), completed by the Sponsoring Agency. Tender Reports prepared by the Sponsoring Agency shall comply with obligations and requirements deriving from applicable procurement legislation.

### 1.1.12 Climate Adaptation

The Project Manager shall comply with the requirements of *PE-ENV-01105 Climate Assessment of Proposed National Roads – Standard.*

### 1.1.13 Health and Safety

A suitably qualified Project Supervisor for the Design Process (PSDP) shall be appointed in accordance with current health and safety legislation. The PSDP shall set up and maintain a Safety File. The Project Manager shall ensure compliance with all relevant Health and Safety legislation.

### 1.1.14 Structures

The Project Manager shall comply with the requirements of *DN-STR-03001 Technical Acceptance of Road Structures on Motorways and Other National Roads*.

### 1.1.15 Feasibility Report

A Feasibility Report will be required to verify or establish Project need and to verify the premises underlying Project need (during Phase 0). The level of detail required will depend on the validity of the assumptions underlying previous studies, the extent and scope of previous studies, and the time which has elapsed since previous studies were completed.

The Feasibility Report will include the development of the study area, outline of relevant studies, summary of constraints, risks and opportunities and health and safety requirements. It will also include the identification and development of options including the assessment methodology, findings and conclusions (whether there is a minimum of one feasible option or not). It will make recommendations for refinement of feasible options for advancement to Phase 2.

In many cases for minor national road projects, concept and feasibility may be uncomplicated and have already been established. However, notwithstanding this, it is necessary to examine Project concept and feasibility, at an appropriate level of detail, during this phase. The level of detail required will depend on the validity of assumptions underlying previous studies, the extent and scope of previous studies, and the time which has elapsed since previous studies were completed.

An outline template for a Phase 1 Feasibility Report is contained in **Appendix A1.4**.

## 1.2 Deliverables

The deliverables for Phase 1 are listed below:

| Source | Deliverables |
|---|---|
| PMG | Project Execution Plan |
| PMG | Feasibility Report |

# 2 Phase 2 Options Selection

The purpose of Phase 2 is to examine options to determine a Preferred Option(s).

The processes and deliverables required to complete Phase 2 are outlined in **Figure 7.**

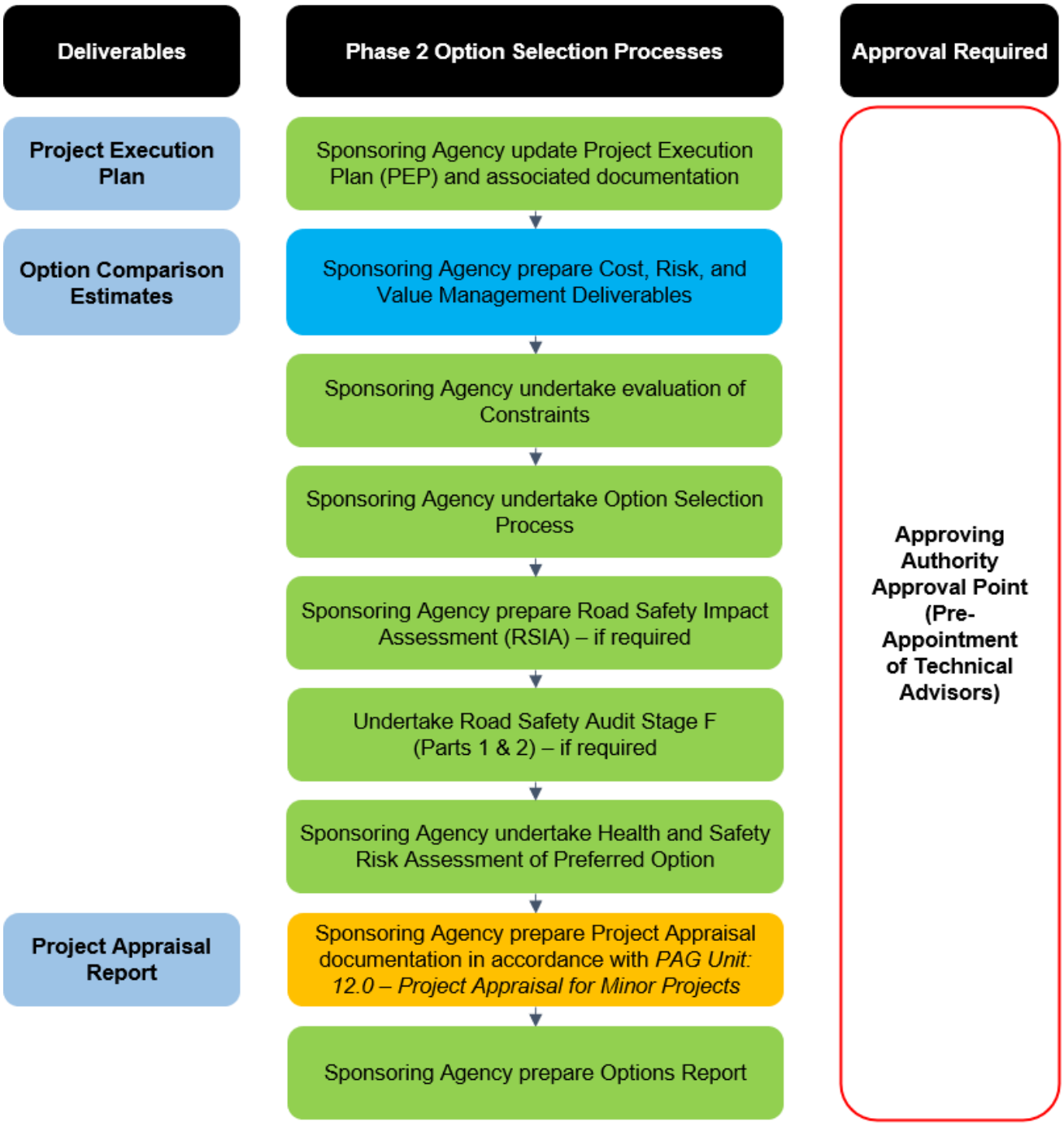


**Figure 7 Workflow Diagram Phase 2**

Initial tasks within Phase 2 are to refine the study area [3] for the examination of all options derived from Phase 0, Phase 1, and determined during Phase 2 against the identified constraints in accordance with the relevant PAG Unit. The study area should encompass all options examined. Consideration will be given to the zones of influence associated with options examined.

A key attribute of Phase 2, and indeed Project development, is the facilitation of stakeholder engagement by the Sponsoring Agency. Stakeholder engagement must be open, engaging, and continuous.

During Phase 2 it is necessary to establish whether, at face value, a sufficient case exists for considering a Project in more depth, that is, progression to Phase 3 Design and Environmental Evaluation.

The Project Manager shall notify the TII Senior Engineering Inspector of their required engagement with all relevant internal TII departments at the earliest possible time frame of Phase 2, to enable sufficient time for reviews and approvals to be incorporated into the overall Phase 2 programme and minimise the risk of delays.

## 2.1 Processes

### 2.1.1 Project Execution Plan (PEP) - Including Lessons Learned

The Project Manager shall update the PEP, as required, to take cognisance of the findings of the Options Selection Process. The lessons learned register shall also be updated during this phase.

### 2.1.2 Public and Other Stakeholder Engagement

Prior to the commencement of the Options Selection Process, the Project Manager shall engage with stakeholders to ensure that they are made aware of the proposal to develop and assess option(s) leading to the selection of a preferred option.

This may include the preparation of publicity information (e.g. media advertisements, postal drops, web-based services etc.) to raise awareness of the Project. The Project Manager may provide briefings as necessary to public representatives.

Consultation may be utilised to garner information on constraints and on stakeholder and relevant bodies specific knowledge and data taking cognisance of data protection requirements.

In response to general queries, stakeholders should be informed of the various statutory processes and other steps involved in progressing the Project and of the likely timescales involved.

A project website may be set up, and regularly updated with the status of the Project. This website would be compliant with TII requirements and include information enabling stakeholders to contact the project team. A requirement for a project website will be determined by the Project Manager, in conjunction with the TII Senior Engineering Inspector.

A list of suggested potential stakeholders is contained in **Appendix A2.1**.

### 2.1.3 Survey Requirements

Surveys may be required to develop the Project design. The most common surveys required for minor national road projects include:

- Environmental surveys;
- Topographical and utility surveys

[3] In this document, the term “study area” relates to the area under consideration for the physical location of options and may be different to the macroscopic and microscopic study areas identified in the Strategic Assessment Report for use in transport modelling.

- Multi-modal Transport surveys;
- Archaeo-geophysical surveys; and
- Ground investigations.

Additional survey types may be required as determined by the Project Manager.

The Project Manager shall comply with regulatory requirements, statutory requirements, guidelines prepared by regulatory and statutory bodies, and guidelines prepared by TII when determining the need for surveys.

#### 2.1.3.1 Environmental Survey Requirements

When determining required environmental surveys, the Project Manager shall have regard to the outcome of environmental screening and scoping.

Surveys required may have implications for the Project Programme (e.g., the presence of bats along the Project may require a four-season bat survey to be carried out).

The requirement to carry out these surveys may only arise after consultation with relevant stakeholders or the Competent Authority, and thus early engagement is key. The Project Manager shall ensure that a sufficient period is allowed in the Project Programme to undertake surveys, as required, and for completion of the environmental evaluation and reporting. The Project Manager shall inform the TII Senior Engineering Inspector of survey requirements which may have an impact on the Project scope and programme.

Environmental surveys may have a limited period of validity. The Project Manager shall ensure that requirements for renewal/ review of surveys are incorporated within the Project programme as appropriate. Where environmental surveys are deemed invalid due to passage of time, and where allowance for renewal was not allowed for within the Project programme, the Project Manager shall notify the TII Senior Engineering Inspector.

#### 2.1.3.2 Topographical and Utility Surveys

Where required, the Project Manager shall procure topographical and/or utility surveys. As part of any topographical survey contract, a control network shall be established.

Topographical and utility surveys shall be undertaken in accordance with TII requirements and project specific requirements as required. It is advisable that the Project Manager confirm the degree of accuracy and acceptable tolerances required for surveys in advance of preparing documents to procure a service provider.

#### 2.1.3.3 Multi-modal Transport Surveys

The Project Manager shall identify if transport surveys are required for transport modelling. Any such requirements are outlined within *PAG Unit: 5.2 – Data Collection*.

The Project Manager shall have regard to alternative data sources, sources other than moving car observer data, such as journey time data from GPS service providers, Google, etc. as part of the data collection process.

Transport studies that are carried out should be multi-modal assessments.

#### 2.1.3.4 Archaeo-Geophysical Surveys

The Project Manager, in conjunction with Project Archaeologist, shall determine survey requirements and any test excavation requirements for the Project.

#### 2.1.3.5 Ground Investigations

It may be necessary to carry out ground investigations for the Project to inform the Options Selection Process. The Project Manager shall have regard to the Ground Investigation Guidance (to be published) when planning and managing ground investigations.

The Project Manager, with support, as appropriate from ground engineering professionals and environmental specialists, shall be responsible for scoping the extent of ground investigation works, the preparation of tender documents, management of the tender process, management of the ground investigation contract and review of geotechnical factual data and reporting. Consideration should be given to phasing of the ground investigations, where warranted, based on the ground conditions and nature of the Project.

In accordance with any agreement currently in place between TII, Irish Farmers Association, and the relevant government department, it shall be necessary to financially compensate landowners affected by intrusive works associated with ground investigation works. The Project Manager shall arrange for the preparation of a schedule of payments to affected landowners. The 'As-Built' locations of the ground investigation works should be established before determining the compensation due to landowners as these locations may vary from those proposed in the tender documents, which may in turn lead to adjustments to the calculation of compensation due to landowners.

The Project Manager shall ensure that ground investigation data is presented in an appropriate format with regard to its use throughout all Phases of the project, and throughout the lifecycle of the assets.

The Project Manager shall be responsible for arranging the evaluation of tender returns by an appropriately qualified and experienced assessment board. As part of the Tender Award Recommendation (TAR), the Project Manager shall prepare a Tender Report, which will summarise the Tender Assessment Process and formally recommend the Award of the Contract.

The Project Manager shall submit the completed Tender Report to TII for approval. The Tender Report will be accompanied by a Tender Award Recommendation Form (TARF), completed by the Sponsoring Agency.

### 2.1.4 Options Selection Process

The identification of options commences at Phase 0. During Phase 1, these options are further examined in terms of their feasibility, conceptually and practically, to achieve the Project objectives.

During Phase 2, options which progress from Phase 1 or are identified during Phase 2 are developed taking cognisance of the findings of the Constraints, Risks and Opportunities Study. These options should be developed to an appropriate level of detail to facilitate a systematic assessment of the potential impacts upon the findings of the Constraints, Risks and Opportunities Study.

The Options Selection Process is a three-stage process as outlined within *PAG Unit: 4.0:*

- Stage 1 – Preliminary Options Assessment;
- Stage 2 – Project Appraisal Matrix; and
- Stage 3 – Selection of a Preferred Option.

#### 2.1.4.1 Development of Options

As outlined within *PAG Unit 12.0 - Project Appraisal Guidelines for Minor Projects,* several principles apply when considering and developing options. These principles will be used to evaluate the adequacy and steer the development of options. These principles can be summarised as follows:

- Options shall be specifically designed to meet the Project objectives and address the problems as defined in the Strategic Assessment Report;
- Options shall be significantly different, insofar as possible;
- Options shall be designed with environmental considerations in mind from the start;
- An incremental approach to the development of options is to be adopted;
- Management options shall be examined as part of the assessment of options;
- Packages of measures shall be examined as part of the assessment of options;

- Options shall consider the opportunities created for physical activity and enhanced public transport facilitation on the residual network; and
- Options should be developed to an appropriate level of detail. Where required, horizontal and vertical alignments shall be developed for each option using a Digital Terrain Model (DTM) to establish an indicative footprint and indicative earthworks quantities. The level of detail should be sufficient to appraise the impacts of options on the receiving environment.

#### 2.1.4.2 Stage 1 – Preliminary Options Assessment

Stage 1 is a comparative assessment of the potential impacts of the options in the form of a Multi-Criteria Analysis (MCA), and their relative success in achieving the Project objectives, under the headings of Engineering, Environment, and Economy. The Do-Nothing and Do-Minimum options as well as Do-Something options shall be brought forward from the Stage 1 process.

During Stage 1 consideration may be given to the amalgamation of two or more options and such amalgamated options may then be progressed to Stage 2 of the Options Selection Process and thus limiting the number of options considered at Stage 2.

**Engineering and Environmental Evaluation**

Project particulars should be examined to determine the most appropriate engineering criteria via which options should be compared and evaluated during Stage 1. All environmental effects must be considered and where these are negligible or equivalent across all option types this shall be stated as such.

The Project Manager shall take cognisance of the TII suite of environmental evaluation guidelines when undertaking the environmental evaluation. An outline of the items to be considered in the engineering and environmental evaluation is contained in **Appendix A2.2**.

**Economy Assessment**

The economy assessment as part of Stage 1 should comprise the preparation of Option Comparison Estimates (OCEs) in accordance with the requirements of the TII CMM. As part of this, the Project Manager shall detail assumptions utilised in determining estimates, any Project risks identified, any value opportunities identified, and the strategies adopted for dealing with cost, risk, and value. The Project Manager shall issue base costs and risk registers to the TII Senior Engineering Inspector for development by TII into the Option Comparison Estimate.

Following the completion of Stage 1, the Project Manager shall prepare a working paper summarising the findings. It shall be reviewed at an appropriate level as outlined in the Project Execution Plan (PEP). This report shall detail the outcome of Stage 1, and the recommended options proposed for advancement to Stage 2 of the Options Selection Process.

If the recommended options extend beyond the study area boundary the Project Manager shall issue the revised study area to the Local Authority Planning Department(s). The Project Manager shall request that the Local Authority Planning Department(s) issue planning applications therein for observation.

**First Public Consultation**

The Project Manager, in conjunction with TII, shall determine if a public consultation is necessary and appropriate at Stage 1. This shall be determined on a case-by-case basis by the Project Manager.

If required, the first public consultation will be held to inform stakeholders of the findings of the constraints, risks and opportunities study and the preliminary options developed in a timely manner and to provide an opportunity to contribute to the decision-making process. This public consultation is non-statutory in nature. Stakeholders should be informed of this and be informed that statutory submissions and observations can be made to the Competent Authority once the statutory processes commence.

Where stakeholders put forward options for consideration, or proposed option modifications, the Project Manager shall examine and document the reasonability thereof.

An outline of items to be considered in advance of public consultations is included in **Appendix A2.3**.

### 2.1.4.3 Stage 2 – Project Appraisal Matrix

The Project Manager shall in the first instance refer to *PAG Unit: 12.0 Project Appraisal Guidelines for National Roads - Minor Projects (€5m to €20m)* regarding appraisal of options.

The options advanced from Stage 1 of the Options Selection Process shall be evaluated by carrying out a multi criteria analysis of the quantifiable and non-quantifiable impacts of these options in accordance with *PAG Unit: 7.0: Multi Criteria Analysis (MCA).*

Incremental analysis as per *PAG Unit: 4.0* shall be undertaken to determine the most appropriate level of service (cross section, level of intervention, access requirements among others) for the options considered.

**Economy Appraisal**

Where required, an Option Comparison Estimate (OCE) shall be prepared in accordance with the requirements of the *TII CMM* and *PAG Unit: 6.2 Preparation of Scheme Costs.* As part of this, the Project Manager shall detail assumptions utilised in determining estimates. The Option Comparison Estimate prepared for Stage 1 should be reviewed; taking cognisance of amendments, option amalgamations, or updated information. This Option Comparison Estimate should be used as part of the Economy Appraisal for Stage 2.

Transport modelling may not be required for the majority of minor projects. The Project Manager shall refer to *PAG Unit: 12.0 Project Appraisal Guidelines for National Roads - Minor Projects (€5m to €20m).* If required, the Project Manager shall prepare a Transport Modelling Report (TMR) in accordance with *PAG Unit: 5.0 Transport Modelling Overview*. This report should detail whether options can achieve the targeted transportation objectives over the appraisal period, and a comparative assessment of the ability of each option to achieve the targeted objectives. It is necessary that the anticipated 'Year of Opening' and 'Design Year' for the Project are realistic and are reviewed with the Sponsoring Agency prior to commencing the Transport Modelling Report.

**Safety Appraisal**

For the majority of minor national road projects, there may only be one option and a choice of options may not apply. If required and where a choice of routes or other options are available, a Road Safety Audit Stage F Part 1 in accordance with *GE-STY-01024 Road Safety Audit* shall be undertaken during Stage 2.

The Project Manager shall, if required, and where a choice of options are available, carry out a Road Safety Impact Assessment (RSIA) in accordance with the requirements of *PE-PMG-02001 Road Safety Impact Assessment.*

**Environmental Appraisal**

The Project Manager shall have regard to the requirements of the TII suite of environmental evaluation guidelines and *PAG Unit: 7.1 Project Appraisal Balance Sheet (PABS)* when undertaking the environmental appraisal during Stage 2.

It may be possible to 'scope out' non-environment related criteria, for example where potential impacts are negligible for all options, thereby simplifying assessment. Where this approach is adopted, the Project Manager shall clearly outline the rationale thereof within the Stage 2 working paper. All environmental effects must be considered and where these are negligible or equivalent across all option types this shall be stated as such.

With respect to many potential environmental impacts, these may also be monetised within the CBA (refer to *PAG Unit: 6.11 National Parameters Values Sheet*).

Following the completion of Stage 2, the Project Manager shall prepare a working paper summarising the findings, as outlined above. This shall be presented to the Sponsoring Agency Management Group for review. The report shall detail the outcome of the Stage 2 and the proposed recommended preferred option.

**Second Public Consultation**

A second public consultation shall be required, except where options progressed from Stage 1 are substantially the same in terms of size, scale, nature, or potential impact in different areas to those presented at the first public consultation.

The requirements for the second public consultation should be identical to those for the first public consultation. The Project Manager shall ensure that stakeholders are informed of relevant Project information and have access to relevant Project data.

The Project Manager shall ensure that the time frame between the first and second public consultations is minimised (insofar as possible) to inform stakeholders who are associated with options of the status of such options.

#### 2.1.4.4 Stage 3 – Selection of Preferred Option

At the completion of Stage 2*,* a preferred option for the Project shall be selected based on the MCA.

The Project Manager shall prepare a PABS*,* in accordance with *PAG: Unit: 7.1 Project Appraisal Balance Sheet,* to summarise the impacts associated with the preferred option.

A Road Safety Audit Stage F (Part 2) in accordance with *GE-STY-01024 Road Safety Audit* shall be carried out on the preferred option.

The rationale for the selection of the preferred option should be outlined within the Options Report (if required).

### 2.1.5 Cost, Risk and Value Management

The following processes, in accordance with *TII CMM*, are required in Phase 2:

- Project Cost Management, including preparation of the Option Comparison Estimates (OCEs), Estimate Assumption Sheet and Estimate Tracking Sheet;
- Project Risk Management, including Project Risk Register (PRR), Quarterly Risk Status Summary Reporting, and Risk Assessment Report(s).
- Project Value Management, including the assessment of project development against key value performance indicators and the preparation of a Quarterly Value Management Summary Report.

The Project Manager shall, if required, detail assumptions utilised in determining estimates, project risks identified, any value opportunities identified, and the mechanisms for dealing with same.

It is necessary to ensure that cost, risk, and value issues are appropriately managed therefore issues should be assigned to stakeholders most capable of achieving optimum outcomes.

### 2.1.6 Managing Geotechnical Risk

The Project Manager shall comply with the requirements of *DN-ERW-03083 Managing Geotechnical Risk*.

### 2.1.7 Public Display of Preferred Option

After the Options Report is finalised, a Public Display should be held to inform the public and stakeholders of the preferred option.

### 2.1.8 Interaction with Planning Authorities

The Project Manager shall, if required, refer the Preferred Corridor Boundary to the relevant Local Authority Planning Department(s). The Preferred Corridor Boundary will typically be an offset from the centreline of the preferred option(s). All work at this stage remains 'work in progress' and is subject to change as the Project transitions from Phase 2 Options Selection to Phase 3 Design and Environmental Evaluation.

The Project Manager shall engage with the relevant local authority to ensure that the Preferred Corridor Boundary is included in the development plans of all affected Local Authorities. In some cases, it may be necessary to include the preferred option in the City and/or County Development Plan(s) (including Local Area Plans, as appropriate) by means of a variation to the development plan(s) or Local Area Plan(s). In such circumstances, the Project Manager shall assist the relevant Local Authority, as appropriate. This will typically not be the case for minor national road projects. The Project Manager shall make a determination, based on project specifics, and in conjunction with the Sponsoring Agency and TII as appropriate.

### 2.1.9 Climate Adaptation

The Project Manager shall comply with the requirements of *PE-ENV-01105 Climate Assessment of Proposed National Roads – Standard.*

### 2.1.10 Health and Safety

The Project Manager shall ensure compliance with all relevant Health and Safety legislation.

### 2.1.11 Structures Technical Acceptance

The Project Manager shall ensure that the requirements of *DN-STR-03001 Technical Acceptance of Road Structures of Motorways* are complied with.

### 2.1.12 Project Appraisal Report

The Project Manager shall prepare a Project Appraisal Report in accordance with *PAG Unit: 12.0 – Project Appraisal for Minor Projects.* This report should appraise the options using a Multi-Criteria Analysis (MCA) under a number of headings including economic, safety, environmental, accessibility and social inclusion, integration and physical activity headings.

The Project Manager shall, where required, prepare a Project Appraisal Balance Sheet (PABS), in accordance with *PAG: Unit: 7.1 Project Appraisal Balance Sheet*. The PABS is a summary appraisal of a project impacts based on the outputs of various forms of assessment carried out during the planning and design stages of project development. The PABS should act as a tool in summarising the expected impacts of proposed investment. The PABS should form part of the Project Appraisal Report.

### 2.1.13 Options Report

The Project Manager shall, if required, prepare an Options Report, with the Sponsoring Agency Senior Engineer signing off on its completion. An outline template for an Options Report is contained in **Appendix A2.4.**

## 2.2 Deliverables

The deliverables for Phase 2 are listed below:

| Source | Deliverables |
|---|---|
| PAG | Updated Project Execution Plan (PEP) |
| CMM | Option Comparison Estimate |
| PAG | Project Appraisal Report (PAR) |

# 3 Phase 3 Design and Environmental Evaluation

The purpose of Phase 3 is to develop the Project design, following selection of a preferred option, based on technical, environmental and social inclusion inputs, to a stage where sufficient levels of detail exist to establish landtake requirements, to identify and mitigate Project impacts, and to progress the Project through the statutory processes.

The processes and deliverables required to complete Phase 3 are outlined in **Figure 8.**

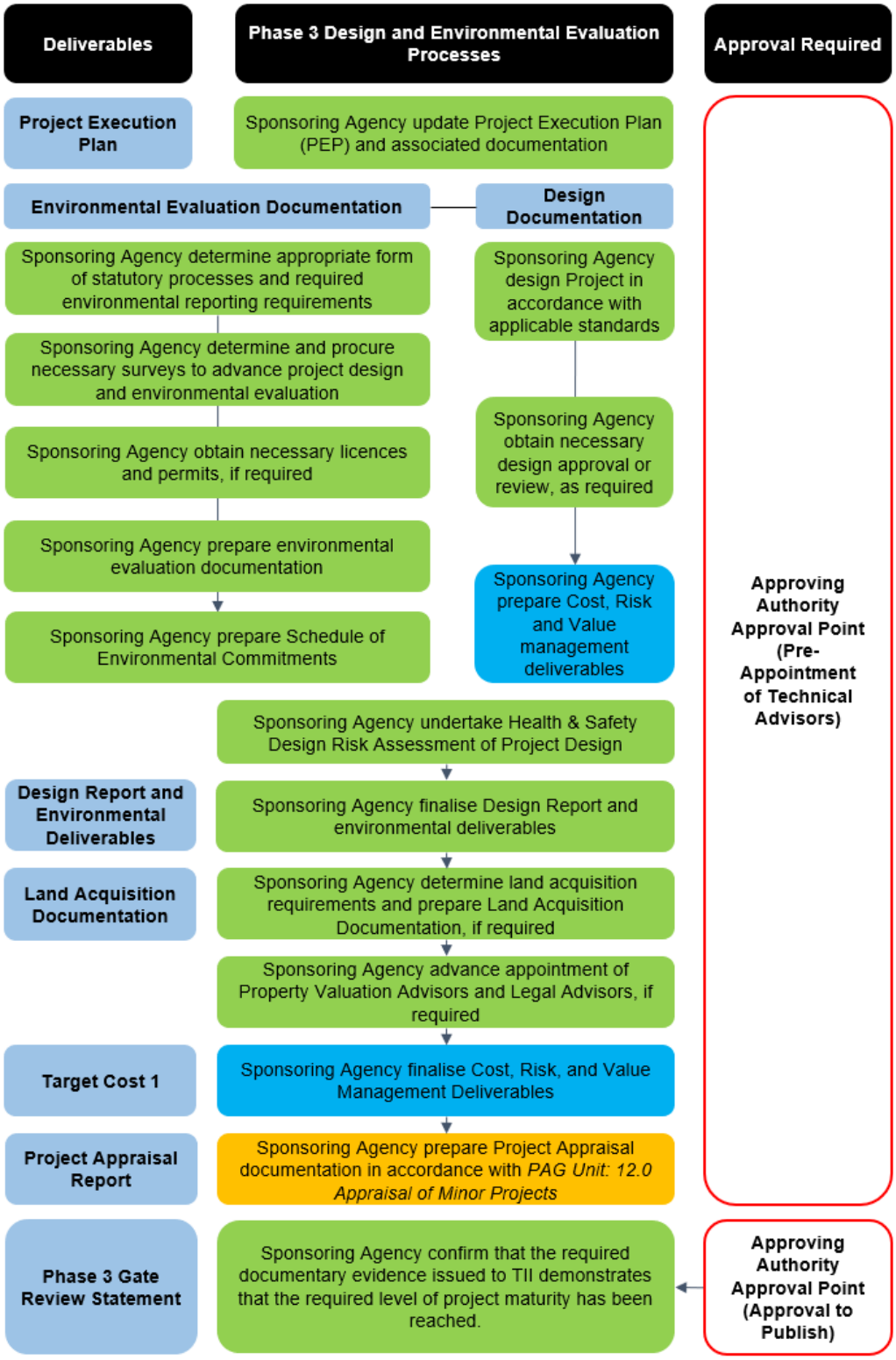


**Figure 8 Workflow Diagram Phase 3**

Some projects may involve an integrated and connected multi-modal holistic transport study. This may incorporate several modes of transportation; these may include active travel facilities, public transport provision and road-based interventions. Guidance for the delivery of non-road-based interventions components of a multi-modal holistic transport study is not contained within this Manual. The  seek guidance for non-road-based interventions from other guidance documentation as required. This may include guidance from other entities, such as the National Transport Authority. This Manual is for minor national road projects. The  also be cognisant of the statutory planning process and guidance for all components of the Project.

Design, environmental evaluation, and the determination of the appropriate form of statutory processes is the purpose of Phase 3, with a view to ensuring that an option(s) meet the Project objectives and the relevant *TII PAG* requirements.

The Project Manager shall notify the TII Senior Engineering Inspector of their required engagement with all relevant internal TII departments at the earliest possible time frame of Phase 3, to enable sufficient time for reviews and approvals to be incorporated into the overall Phase 3 programme and minimise the risk of delays.

## 3.1 Processes

### 3.1.1 Project Execution Plan (PEP) - including Lessons Learned

During this phase, the Project Manager shall update the PEP, as required, taking cognisance of Design and Environmental Evaluation. The lessons learned register shall also be updated during this phase.

### 3.1.2 Consultation with Land and Property Owners

Land and property owners shall be alerted that access to their property may be required at various stages during Phase 3. They should also be advised that the Sponsoring Agency will provide written notice for access in the case of intrusive works and that compensation may be payable for such works.

Land and property owners impacted by the Project may wish to ascertain the extent of the Project's impact on their property. Individual Stakeholder maps shall be prepared showing the Project's potential impacts upon the stakeholder's property when requested. In cases where there is significant property severance, the approximate area of severed property shall be indicated on the map. The map shall also include a statement to the effect that "*the Project as shown is indicative only and may be subject to further change during the design and environmental evaluation*."

### 3.1.3 Identifying Appropriate form of Statutory Processes

The statutory process that a minor national road project will ultimately follow, must be considered throughout the project's development. Determining the appropriate process becomes possible as details of the project become more certain and of critical importance, during Phase 3.

The appropriate statutory process is determined through a sequence of screenings or other similar decisions. The Project Manager is responsible for ensuring that the determination of the appropriate statutory process is properly carried out and should seek legal and other relevant advice where appropriate. The Project Manager shall have regard to *RE-ENV-07008 Environmental Planning of National Road and Greenway Projects*. It should be noted that relevant legislation is extremely complex and subject to change.

### 3.1.4 Preparation of Environmental and Other Statutorily Required Documentation

The Project Manager shall ensure that all environmentally and other statutorily required documentation is appropriately prepared, having regard to legal and other requirements. The Project Manager shall seek legal and other relevant advice where required. The Project Manager shall have regard to *RE-ENV-07008 Environmental Planning of National Road and Greenway Projects.*

Having regard to NRA Circular No. 05/2006, the Project Manager shall forward, through the TII Senior Engineering Inspector, a complete and sufficiently developed draft of the Environmental Impact Assessment Report and, where relevant, the Natura Impact Statement in electronic format to TII's Environmental Policy and Compliance Section (EPCS) for its review. The Project Manager and, where appropriate, members of the Project Management Team shall have reviewed and commented on an earlier draft of the EIAR and, where relevant, the NIS, and their comments should have been resolved to their satisfaction prior to submission of the documents to the EPCS. The EPCS must be provided with at least six weeks to review and comment on the documents. All comments of the EPCS shall be responded to in full and in writing by the Design Team to the satisfaction of the Project Manager. The Project Manager shall ensure that the EPCS's comments have been responded to appropriately and that necessary actions have been taken by the Design Team. The Project Manager shall ensure compliance, as appropriate, with the requirements to translate and publish documents in the Irish language in Gaeltacht areas.

### 3.1.5 Survey Requirements

Surveys may be required to develop the Project design. The most common surveys required for minor national road projects include:

- Environmental surveys;
- Topographical and utility surveys;
- Multi-modal Transport surveys;
- Archaeo-geophysical surveys; and
- Ground investigations.

Additional survey types may be required as determined by the Project Manager.

The Project Manager shall comply with regulatory requirements, statutory requirements, guidelines prepared by regulatory and statutory bodies, and guidelines prepared by TII when determining the need for surveys.

#### 3.1.5.1 Environmental Surveys

It is necessary to carry out environmental surveys for the Project to inform the Design and Environmental Evaluation. When determining required environmental surveys, the Project Manager shall have regard to the outcome of environmental screening and scoping.

Surveys required may have implications for the Project Programme (e.g. the presence of bats along the Project may require a 4-season bat survey to be carried out).

The Project Manager shall consult with relevant stakeholders and/or the Competent Authority and thus early engagement is key. The Project Manager shall ensure that a sufficient period is allowed in the Project Programme to undertake surveys, as required, and for completion of the environmental evaluation and reporting. The Project Manager shall inform the TII Senior Engineering Inspector of survey requirements which may have an impact on the Project scope and programme.

Environmental surveys may have a limited period of validity. The Project Manager shall ensure that requirements for renewal/ review of surveys are incorporated within the Project programme as appropriate. Where environmental surveys are deemed invalid due to passage of time, and where allowance for renewal was not allowed for within the Project programme, the Project Manager shall notify the TII Senior Engineering Inspector of the revised Project programme, if necessary, for the delivery of the Project.

### 3.1.5.2 Topographical and Utility Surveys

Where required, the Project Manager shall procure topographical and/or utility surveys. These may be required to supplement surveys carried out in Phase 2. As part of the topographical survey contract, a control network shall be established.

Topographical and utility surveys shall be undertaken in accordance with TII requirements and project specific requirements as required. The Project Manager shall confirm the degree of accuracy and acceptable tolerances required for surveys in advance of preparing documents to procure a service provider.

### 3.1.5.3 Multi-modal Transport Surveys

The Project Manager shall identify data collection requirements for transport modelling. Requirements are outlined within *PAG Unit: 5.2 – Data Collection.*

The Project Manager shall have regard to alternative data sources, sources other than moving car observer data, such as journey time data from GPS service providers, Google, etc. as part of the data collection process.

Transport studies that are carried out should be multi-modal assessments, as required.

### 3.1.5.4 Archaeo-Geophysical Surveys

The Project Manager, in conjunction with Project Archaeologist, shall determine survey and test excavation requirements for the Project.

### 3.1.5.5 Ground Investigations

It is necessary to carry out ground investigations for the Project to inform the Design and Environmental Evaluation. The Project Manager shall have regard to the Ground Investigation Guidance (to be published) when planning and managing ground investigations.

The Project Manager, with support, as appropriate from ground engineering professionals and environmental specialists, shall be responsible for scoping the extent of ground investigation works, the preparation of tender documents, management of the tender process, management of the ground investigation contract and review of geotechnical factual data and reporting. Consideration should be given to phasing of the ground investigation where warranted based on the ground conditions and nature of the Project.

In accordance with any agreement currently in place between TII, Irish Farmers Association, and the relevant government department, it shall be necessary to financially compensate landowners affected by intrusive works associated with ground investigation works. The Project Manager shall arrange for the preparation of a schedule of payments to affected landowners. The ‘As-Built’ locations of the ground investigation works should be established before determining the compensation due to landowners as these locations may vary from those proposed in the tender documents, which may in turn lead to adjustments to the calculation of compensation due to landowners.

The Project Manager shall ensure that ground investigation data is presented in an appropriate format with regard to its use throughout all Phases of the project, and throughout the lifecycle of the assets.

The Project Manager shall be responsible for arranging the evaluation of tender returns by an appropriately qualified and experienced assessment board. As part of the Tender Award Recommendation (TAR), the Project Manager shall prepare a Tender Report, which will summarise the Tender Assessment Process and formally recommend the Award of the Contract.

The Project Manager shall submit the completed Tender Report to TII for approval. The Tender Report will be accompanied by a Tender Award Recommendation Form (TARF), completed by the Sponsoring Agency.

### 3.1.6 Licencing Requirements

Environmental evaluation may identify the need to obtain permits and licences to facilitate Project construction or operation. Permits and licences may be required for elements from effluent discharge to environmental permits or licences.

The requirement for licences is Project specific and the need for permits or licences shall be determined on a Project need basis. Permits or licences may be required from the following:

- Environmental Protection Agency (and/or relevant Waste Authority);
- Inland Fisheries Ireland;
- Irish Rail;
- Irish Water;
- National Monuments Service;
- National Parks and Wildlife Service, including Derogation Licences; and
- Office of Public Works.

This list is not exhaustive, the Project Manager shall ensure that all required licences for the Project have been obtained taking cognisance of the Project features, location, and interaction with the receiving environment.

Details on all licencing requirements must be included in the environmental evaluation reporting.

### 3.1.7 Land Acquisition Boundary Requirements

The Project Manager shall determine Project landtake requirements and determine the total number of land holdings affected and, as far as reasonably practicable, the total number of persons with an interest in the affected lands. The current and proposed land use of the lands impacted by the Project should be identified (e.g. agricultural, residential, commercial, other zoned lands). The number, if any, of residential and other buildings required to facilitate construction of the Project should be determined. All boundaries should be determined on the basis of surveys, folios and land registry.

The Project Manager shall ensure that sufficient lands are included within the land acquisition boundary to facilitate the construction and operation/ maintenance of the Project. These should include drainage outfalls and attenuation ponds, earthworks, working spaces, service diversions, signs and associated foundations, severed holdings, traffic management, and accommodation works. The Project Manager shall ensure that these lands are necessary for or incidental to the construction or maintenance of the Project. The Project Manager shall also ensure that the design of any temporary drainage works do not cause flooding in, or otherwise adversely affect, areas outside the lands made available.

An outline for items to be considered as part of land acquisition documentation is contained in **Appendix A3.1**.

### 3.1.8 Design Requirements

The purpose of the design process is to develop the design of the preferred option to an appropriate level of detail to establish landtake requirements and to evaluate potential environmental impact. The entire design process should be outlined in a Design Report.

#### 3.1.8.1 Geometric Layout

The geometric layout of the Project shall be designed in accordance with TII Publications.

Prior to developing the Project geometric design, the Project Manager shall outline the main design parameters that have been determined for the Project, which shall form the basis of the detailed design.

These parameters should have been determined via option development, incremental evaluation, the refinement of options, and option appraisal during Phase 2. A template, outlining the information to be contained in the Principal Geometric Parameters Report, is contained in **Appendix A3.2**.

The Project Manager shall ensure that the Principal Geometric Parameters Report is reviewed at an appropriate level prior to the commencement of detailed design work.

The Project Manager shall detail the determination of the required cross-section in accordance with TII Publications.

#### 3.1.8.2 Ancillary Geometric Design Elements

The Project Manager shall take cognisance of the requirements of TII Publications, liaise with TII, and liaise with the emergency services regarding the requirement to provide additional design elements such as emergency accesses, emergency crossing points, emergency turnaround areas, Garda observation platforms, service areas etc. Where required, such elements shall be designed in accordance with relevant TII Publications.

#### 3.1.8.3 Strategy for Junctions and Side Roads

For the majority of minor national road projects, a junction strategy will, either not be required, or may be reasonably simplistic. However, if required, the Project Manager shall develop a Junction Strategy Report for the Project. An outline template for a Junction Strategy Report is contained in **Appendix A3.3**.

The Project Manager shall, if required, ensure the Junction Strategy Report is reviewed at an appropriate level.

#### 3.1.8.4 Site Clearance

The Project Manager shall identify measures to control and remove waste, both hazardous and other, associated with Project development. In this respect, the Project Manager shall have regard to the TII Standard *GE-ENV-01101 The Management of Waste from National Road Construction Projects* and relevant EPA guidance. The Project Manager shall comply with regulatory requirements and statutory requirements and must take cognisance of guidelines prepared by relevant bodies, and guidelines prepared by TII when identifying measures to control and remove waste.

This should include the identification of measures to control and remove invasive alien plant species and waste earthworks materials generated within the design. The Project Manager shall have regard to *GE-ENV-01104 The Management of Invasive Alien Plant Species on National Roads - Standard* and any other relevant TII Publications. Consideration shall be given to the treatment of noxious weeds and non-native invasive alien plant species in the design corridor. This is desirable given the considerable time periods which are associated with treatment options.

The Project Manager shall appraise the cost (including costs associated with obtaining necessary licences/ certificates/ permits) and timing implications associated with the control and removal of waste. The Project Manager shall identify appropriate strategies identified to mitigate project risks in this regard.

#### 3.1.8.5 Boundary Fencing Requirements

When determining land acquisition requirements, the Project Manager shall consider fencing requirements. Consideration must be given to both horizontal and vertical profiles along the land acquisition boundary. Wherever possible the Project Manager shall avoid excessive changes in direction, angles, and curves along the fence line. For example, timber post and tension mesh fencing on national roads requires that a smooth vertical profile be prepared before the fence can be installed (refer to TII Standard Construction Details *CC-SCD-00320* and *CC-SCD-00321*). When the fencing is to traverse through uneven topography minor earthworks may be required to facilitate the installation of the fencing. Additionally, where poor ground conditions prevail, requirements for concrete footings and/or ground improvement works may be required for the installation of fencing.

Similarly, where mammal proof fencing is required (refer to TII Standard Construction Details *CC-SCD-00319* and *CC-SCD-00324*) its requirements, including embedment and associated landtake, shall be considered.

### 3.1.8.6 Road Edge Design

Consideration shall be given to roadside hazards and the provision of a clear zone adjacent to the road at an early stage in the Project development. This is necessary to minimise the need for Vehicle Restraint Systems (VRS) and create a more forgiving roadside in line with the requirements of DN-GEO-03036 Cross Sections and Headroom.

The Project Manager shall ensure roadside hazards are identified as part of the design process and hazard mitigation or modification of the road layout, or roadside elements, is implemented where possible to create a passive roadside.

Where this cannot be reasonably achieved, and the risk to road users remains, it shall be necessary to provide a VRS in accordance with *DN-REQ-03034 The Design of Road Restraint Systems (Vehicle and Pedestrian) for Roads and Bridges*.

### 3.1.8.7 Drainage

The Project Manager shall prepare a drainage design, to an appropriate level of detail, for the Project in accordance with TII Publications.

It is necessary, but not limited, to outline proposals for carriageway drainage, bridge drainage, culverting requirements, outfall locations, and any mitigation works such as the provision of oil/ petrol interceptors, silt traps, wetlands, and attenuation ponds.

Specialised drainage proposals may be required for Projects located in water-sensitive areas or Projects that require a higher than normal level of performance (refer to *DN-DNG-03065: Road Drainage and the Water Environment*).

The Project Manager shall ensure that attenuation ponds are sized in accordance with TII Publications and that sufficient land is acquired to facilitate their construction and operation. Sediment, Erosion, and Pollution Control requirements associated with constructing the Project shall be set out within the environmental evaluation documentation.

The Project Manager shall submit drainage related consent applications, such as Section 50 applications, in accordance with the requirements of relevant legislation and relevant bodies including, but not limited to, OPW, Irish Water, EPA, IFI, and Local Authorities.

### 3.1.8.8 Services

The Project Manager shall document service conflicts associated with the Project (e.g., electricity, telecoms, water, gas, broadband etc.) and shall outline the proposals for either protecting or diverting these services including those to be carried out prior to construction.

It may be necessary to meet with service providers to determine and agree service diversion routes and service provider requirements for service diversions such that these can be reflected in the Project design. These requirements must be determined during Phase 3. The Project Manager shall satisfy themselves that the impacts of service diversions on Project scope and programme have been considered and that implications have been incorporated within the environmental evaluation (e.g. the visual impact of diverting HV electricity pylons) and land acquisition.

The Project Manager shall prepare a cost estimate for the diversion of all services impacted by the Project. This may include cost estimates sought from the service provider for diversion works. This estimate should be included in the Minor Project Estimate (TC1).

### 3.1.8.9 Managing Geotechnical Risk

The Project Manager shall comply with the requirements of DN-ERW-03083 *Managing Geotechnical Risk.*

### 3.1.8.10 Earthworks

The Project Manager shall undertake an appropriate level of earthworks design to inform the source, destination and haulage of all earthwork materials for the Project, including import and export activities, where required. The Project Manager shall prioritise the reuse of materials at their highest value, the minimisation of waste and optimisation of mass haul. Where appropriate, the Project Manager shall include material deposition or borrow areas within the design and environmental assessment. The Project Manager shall ensure that the earthworks design is sufficient to allow the landtake requirements for the Project to be defined, including requirements for material deposition areas and borrow areas.

The Project Manager shall, where required, prepare a Vertical Alignment Justification Report summarising the Project earthworks balance, including the net cut/ fill, surplus/ deficit, import/ export or balance. This should consider both overall and local/ sectional quantities, as appropriate, and quantities of the different materials anticipated. This report should outline proposed earthworks operations and the implications, if any, which these may have upon construction periods or Project scope. The Project Manager shall submit the Vertical Alignment Justification Report to the Sponsoring Agency Management Group for review.

### 3.1.8.11 Pavement

The Project Manager shall prepare a pavement design for the Project in accordance with TII Publications.

### 3.1.8.12 Kerbs, Footways, and Paved Areas

The Project Manager shall prepare a Kerbs, Footways/ Cycleways and Paved Areas layout for the Project in accordance with TII Publications.

### 3.1.8.13 Traffic Signs and Road Marking

The Project Manager shall prepare a Traffic Signs and Road Markings layout for the Project in accordance with TII Publications (refer to *DN-TSM-03082 Traffic Signs Approval Procedure*).

The Project Manager shall ensure that the proposed road can be clearly and safely signposted in accordance with the requirements of the *Traffic Signs Manual* published by DTTAS while also taking account of clear zone requirements.

### 3.1.8.14 Lighting, Information and Communication Technology

If necessary, the Project Manager shall prepare a lighting layout and shall determine requirements for information and communication technology, including Intelligent Transport Systems and spare service ducts, in accordance with TII Publications. The Project Manager shall also liaise with TII Network Management, regarding ITS requirements.

### 3.1.8.15 Structures

#### 3.1.8.15.1 TII Technical Acceptance of Structures

The Project Manager shall refer the Structures Options Reports (SOR) and Structures Preliminary Design Reports (PDR) to the TII Structures section during Phase 3, in accordance with *DN-STR-03001 Technical Acceptance of Road Structures on Motorways and Other National Road Projects*. Comments from the TII Structures section, if any, shall be incorporated into the design of structures.

#### 3.1.8.15.2 Miscellaneous Requirements for Structures

The Project Manager shall take cognisance of non-statutory requirements that may arise, including, but not limited to, navigation and aesthetic requirements. Consultation with other relevant parties, such as Waterways Ireland, should be considered in this regard.

### 3.1.8.16 Stakeholders

Key stakeholders are outlined below; however, it is up to the Project Manager to ensure all relevant stakeholders are consulted.

#### 3.1.8.16.1 Iarnród Éireann

Where a Project crosses a railway line, prior to applying to the Competent Authority for approval, it shall be necessary to obtain *Initial Acceptance* from Iarnród Eireann in accordance with *Iarnród Éireann Technical Guidance Document CCE-TMS-310 Guidance on Third Party Works*.

Detailed submissions, in accordance with *Iarnród Éireann Technical Guidance Document CCE-TMS-310 Guidance on Third Party Works*, as well as liaison with Iarnród Éireann personnel, will generally be required. The Project Manager shall liaise with Iarnród Éireann personnel, as required, and refer any agreed design submissions for structures to Iarnród Éireann and TII Structures section as required.

During Phase 3, the endeavour to obtain *Acceptance of Preliminary Design* by Iarnród Éireann, and where required, endeavour to obtain acceptance of this stage by Commission for Railway Regulation (CRR).

It is advisable to develop design proposals for railway structures and commence the interaction and communication process with Iarnród Éireann and CRR at the earliest possible date as it can take a significant period of time to obtain Iarnród Éireann/ CRR acceptance.

The Project Manager shall ensure that sufficient land is acquired to construct and maintain the railway structure(s), taking account of any conditions imposed by Iarnród Éireann/ CRR in granting their acceptance.

#### 3.1.8.16.2 Inland Fisheries Ireland

The Project Manager shall, where required, consult with Inland Fisheries Ireland (IFI) in relation to requirements regarding the protection, management, and conservation of Ireland's inland fisheries and sea angling resources. This can include fish passage when designing bridges, culverts, or any re-routing of watercourses. It may also include embedment depths and clear height requirements.

#### 3.1.8.16.3 Office of Public Works (OPW)

The Project Manager shall, where required, submit consent applications to the OPW for the creation and modification of watercourses, embankments, weirs, and bridges in accordance with OPW and TII Publications requirements. The OPW provide guidance on submitting applications in *A Guide to Applying for Consent under Section 50 of the EU (Assessment and Management of Flood Risks) Regulations SI 122 of 2010 and Section 50 of The Arterial Drainage Act, 1945*. Where the OPW require modifications to the proposed works, particularly in relation to structural heights and clearances, the implications upon Project design will need to be examined.

#### 3.1.8.16.4 National Parks and Wildlife Service

The Project Manager shall, where required, consult with the NPWS in relation to requirements regarding the protection, management, and conservation of Ireland's national parks, Natural Heritage Areas, Special Areas of Conservation, and Special Protection Areas.

#### 3.1.8.16.5 Bord na Móna

The Project Manager shall, where required, consult with Bord na Móna in relation to requirements regarding the protection, management, and conservation of Ireland's peat bogs.

#### 3.1.8.16.6 National Tourism Development Authority (Fáilte Ireland)

The Project Manager shall, where required, consult with Fáilte Ireland in relation to requirements and recommendations surrounding the potential of the Project to support the development of tourism in Ireland.

#### 3.1.8.16.7 Waterways Ireland

The Project Manager shall, where required, consult with Waterways Ireland in relation to their requirements. Any interaction with the canal system requires specific and protracted Agreements that require sign off from the North South Ministerial Council, which meets on a six-monthly basis.

#### 3.1.8.16.8 Local Authorities

The Project Manager shall, where required, consult with local authorities where they are the owners of relevant structures.

### 3.1.8.17 Land Use and Accommodation Works

The Project Manager shall ensure that meetings with stakeholders are held as soon as possible to discuss access and accommodation works. Assumptions of the levels of accommodation works required for a project should be avoided as much as possible.

Following stakeholder meetings, the Project Manager shall determine the extent of accommodation works required in conjunction with the PLO. Accommodation works may be required to reduce the impact of the Project upon stakeholders. This may include providing access to retained lands via underpasses (livestock and machinery) and access tracks. In order to ensure good value for money, an economic analysis should be undertaken in relation to the provision of an underpass to justify its inclusion having regard to area of severed land, farming enterprise, and impact on compensation costs particularly in relation to impact on severance, and disturbance costs. It may include boundary treatment requirements and, where necessary, replacement farm buildings and other installations, as appropriate.

Where boundary treatments are proposed it is necessary to acquire sufficient lands to enable construction of such boundary treatment, including associated foundation works while also taking account of any clear zone requirements.

In some cases, it may be necessary to acquire lands for Project works for the benefit of retained lands by Compulsory Purchase Order, and then ceding these lands after the completion of construction. Alternatively, lands may be included in the Compulsory Purchase Order as temporary acquisitions, where lands purchased shall revert to the original landowner subsequent to a specified time frame. A comprehensive review of all the lands to be included in the Compulsory Purchase Order should be undertaken to ensure sufficient land is acquired for the Project including provision of access to retained land, drainage, diversion of services. If sufficient land is not included in the Compulsory Purchase Order and additional land is required, this can only be purchased by agreement with the landowner.

The Project Manager shall prepare an indicative cost estimate of the level of accommodation works required for the Project and shall include this estimate in the Minor Project Estimate (TC1).

### 3.1.8.18 Maintenance Requirements

The Project Manager shall examine how the Project will be maintained in the future. **Appendix A3.4** highlights key issues that should be considered when designing for future maintenance. In this regard, the Project Manager shall liaise with TII to discuss these maintenance issues and to discuss operation and maintenance requirements.

Adequate provision shall be made for miscellaneous equipment such as traffic counters, weather stations, and other such apparatus as required by TII Publications, including safe means of access.

### 3.1.8.19 Construction Requirements

It is necessary to consider construction requirements whilst designing the Project. During Phase 3, it is necessary to identify lands required to facilitate construction. This includes lands required to act as compounds for construction, lands necessary to facilitate offline bridge construction or temporary stream divisions, material deposition or borrow areas in the case of surplus/ deficit earthworks quantities, and additional lands for environmental mitigation.

Traffic management requirements shall be considered as part of the Project design and the potential environmental impacts shall be evaluated.

Construction requirements related to design elements such as bridge and highway design shall be outlined within the Design Report. Construction requirements related to environmental management and mitigation shall be set out within the environmental evaluation documentation (e.g., Construction and Demolition Resource and Waste Management Plan; guidelines for this are published by the Environmental Protection Agency).

### 3.1.8.20 Construction Environmental Management Plan (CEMP)

It may be necessary to prepare a draft Construction Environmental Management Plan for inclusion within the environmental evaluation documentation.

If required, the Project Manager shall prepare a Construction Environmental Management Plan (CEMP) to document the implementation of the mitigating measures identified in the draft development approval documentation for the construction phase. The plan shall address potential impacts that may arise during the construction phase including issues such as construction noise, water runoff, dust, and waste arisings.

The plan shall be reviewed, modified, and enhanced as necessary by the successful Contractor (including enabling works contractors) to detail proposed construction or implementation methodologies associated with their work methodologies.

### 3.1.8.21 Departures and Relaxations

The Project may require departures and/or relaxations from the requirements contained within TII Publications. Information on what constitutes a departure and what constitutes a relaxation is outlined within *GE-GEN-01005 Departures from Standards and Specification* with further details contained within individual TII Publications. Allowable relaxations, and combinations thereof, are also outlined within individual TII Publications.

For new minor national road projects, departures should not be proposed, However, in circumstances such as tie-ins with the existing road network and on- line upgrades, departures from standards may be considered.

The Project Manager shall determine the need to apply for departures from standards. The Project Manager shall ensure that all departures and relaxations incorporated into the design are recorded and submitted to TII for approval in accordance with *GE-GEN-01005 Departures from Standards and Specification*.

Interaction may be required with Guidance on *DN-GEO-03030 Design Phase Procedure for Road Safety Improvement Schemes, Urban Renewal Schemes* and *Local Improvement Schemes and GE-STY-01037 Road Safety Improvement Scheme Appraisal Procedure*.

### 3.1.8.22 Walking, Cycling and Asset Renewal

The Project Manager shall ensure the Project incorporates additional proposals for walking, cycling and asset renewal on the residual network where appropriate. The extent of design required on the residual network shall depend on the condition of the existing asset. The Project Manager shall liaison with TII, Area Engineers or others as appropriate to determine the extent of works required.

### 3.1.8.23 Design Report

A Design Report shall, if required, be prepared during this phase. The Project Manager is responsible for preparing this report with the relevant Sponsoring Agency Senior Engineer signing off on its completion. A template for the Design Report is contained in **Appendix A3.5**.

The layout of the Design Report drawings should take account of the need to co-ordinate with environmental evaluation documentation and land acquisition documentation. It is recommended that drawings and environmental evaluation figures are prepared to the same extents, in A3 format, and to a scale of 1:5000. These can be enlarged for display purposes to A1 format at a scale of 1:2500.

This is to ensure that the Design Report drawings, environmental evaluation drawings and land acquisition documentation all cover the same area leading to consistency between them.

Drawings prepared as part of the Design Report should be reproduced or directly referenced as part of the environmental evaluation documentation, as required. Drawings should include the minimum requirements as per **Appendix A3.6.**

The Project Manager is responsible for preparing the Design Report if required with the relevant Sponsoring Agency Senior Engineer signing off on its completion.

### 3.1.9 Dealing with Late Changes to Scope

Some changes to scope may have been introduced to the Project during Phase 3 as Project Appraisal and the Road Safety Audit are completed. The Project Manager shall ensure that any scope changes have been incorporated into the Design Report and that, where necessary, changes to the Project cost estimates have been considered in accordance with *TII CMM* and that amendments to costs have been reflected in *TII PAG* deliverables.

### 3.1.10 Land Acquisition - Procurement of Property Valuation and Legal Advisors

For the majority of minor national road projects, this may not be necessary to engage Property Valuation Advisors and/or Legal Service Providers, if such services are not within the Project scope, when preparing land acquisition documentation. If the services are required, it is advisable to liaise with the TII Senior Engineering Inspector and TII Land and Property Services, prior to preparing the brief for Property Valuation Advisors and/or Legal Service Providers. An outline brief for Property Valuation Advisors is provided in **Appendix A3.7**. An outline brief for Legal Service Advisors with respect to land acquisition issues is provided in **Appendix A3.8.**

### 3.1.11 Land and Property Cost

Once the land acquisition requirements have been determined, and prior to preparation of the land acquisition documentation, it shall be necessary to undertake an estimate of land costs to take account of all land associated costs including; land acquisition, property acquisition, injurious affection, severance, disturbance (temporary and permanent), interest, and fees. This estimate shall, if required, be carried out by the Property Valuation Advisors for the Project in accordance with the *TII CMM*. The Land and Property Cost Estimate shall be agreed with the TII Land and Property Services Unit.

This estimate shall be included in the Minor Project Estimate (TC1).

### 3.1.12 Land Acquisition Documentation

Following completion of design and environmental evaluation, the Project Manager shall determine land acquisition requirements (to include, where necessary, lands for environmental mitigation measures, construction).

The land acquisition process(es) via which land will be acquired for the Project shall be approved by the Approving Authority.

The Project Manager shall obtain expert legal advice when progressing land acquisition processes as errors or omissions can potentially jeopardise the validity thereof. The processes can include:

- Compulsory Purchase Order (CPO);
- Motorway Order (MO);
- Protected Road Order (PRO);
- Voluntary Acquisition and/or Agreement.

The Project Manager shall ensure that land acquisition documentation is prepared in accordance with current legislation and in accordance with prescribed forms.

In addition to formal land mapping requirements, individual landowner maps should be prepared to show the extent of the proposed land acquisition for everyone with an interest in the lands included within the land acquisition documentation. These maps should accompany the prescribed notice to landowners.

Lands in the ownership of the Iarnród Éireann Group of Companies (e.g. railway lands) should generally be included in the land acquisition documentation with a proviso added that its inclusion is for designation purposes only and not for acquisition purposes (railway line should remain operational).

Some lands required to construct the Project may already be in the ownership of the Sponsoring Agency or TII. It shall be necessary to include such lands within the land acquisition documentation.

Lands only required for construction may be acquired temporarily. Such lands should be segregated within the land acquisition documentation. The strategy for dealing with these lands should be considered in terms of cost effectiveness and discussed with the Sponsoring Agency and the TII Senior Engineering Inspector.

For Part 8 Developments, which may form the majority of minor national road projects, the Project Manager shall take account of Sponsoring Agency requirements and Project particulars.

### 3.1.13 Climate Adaptation

The Project Manager shall comply with the requirements of *PE-ENV-01105 Climate Assessment of Proposed National Roads – Standard.*

### 3.1.14 Health and Safety

The Project Manager shall ensure compliance with all relevant Health and Safety legislation.

### 3.1.15 Road Safety Audit Stage 1 or Stage 1 and 2

A Road Safety Audit Stage 1 or a combined Stage 1 and 2, in accordance with GE-STY-01024 Road Safety Audit, shall be carried out on the Project once design has been developed to a sufficient level of detail.

The audit shall be completed and closed out prior to the final determination of the land acquisition requirements to ensure that sufficient land is being acquired in order to safely accommodate all design elements.

The Road Safety Audit Stage 1 or combined Stage 1 and 2 report, together with the Safety Audit Feedback Form, signed by the relevant parties shall be included in the Design Report. Any necessary changes resulting from the audit shall be incorporated into the design.

### 3.1.16 Cost, Risk and Value Management

The following processes, in accordance with the TII CMM, are required for Phase 3:

- Cost Management including preparation of the Minor Project Estimate (TC1). The Minor Project Estimate (TC1) should be prepared in accordance with the requirements of the TII CMM and PAG Unit: 6.2 Preparation of Scheme Costs. TII should determine the final Minor Project Estimate (TC1).
- Risk Management including mitigation plans, Key Risks Schedule; Qualitative Risk Assessment; Quantitative Risk Assessment; and Risk Management Meetings; and
- Value Management Strategy including implementation status.

All Cost, Risk, and Value management processes and deliverables should be updated as Phase 3 progresses and applied to Project development. Cost, Risk, and Value meetings should be held during Phase 3 as appropriate.

The recommendations from risk and value management shall be presented and discussed at Project Progress meetings. It is necessary to ensure that cost, value, and risk items are appropriately managed by the relevant stakeholders.

### 3.1.17 Approving Authority Approval Point (Approval to Publish)

A formal Approving Authority Approval Point is required in accordance with the Project Management Guidelines as the decision to proceed to Phase 4 entails commencing statutory processes. The Sponsoring Agency shall not proceed beyond the end of Phase 3 without having received Approving Authority approval to do so.

In cases where TII are the Approving Authority for this Approving Authority Approval Point, the Sponsoring Agency may submit the request for Approving Authority approval and the Gate Review Statement to TII at the same time. Under these circumstances the request for Approving Authority approval should be submitted by way of a separate covering letter from the Gate Review Statement.

### 3.1.18 Project Gate 3

The Project Manager shall ensure that deliverables required for Phase 3 are finalised and issued to TII at the end of Phase 3.

The Project Manager shall prepare a Gate Review Statement confirming that deliverables issued to TII meet the required level of project maturity using the template in **Appendix A3.9**. This assurance shall be endorsed by the Sponsoring Agency Director of Services. The Sponsoring Agency may proceed to Phase 4 when TII accept the Gate Review Statement and issue consent to proceed to Phase 4.

## 3.2 Deliverables

The deliverables for Phase 3 are listed below:

| Source | Deliverables |
|---|---|
| PAG | Updated Project Execution Plan (PEP) |
| PMG | Design Report |
| PMG | Environmental Deliverables |
| PAG | Updated Project Appraisal Report (PAR) |
| PMG | Land Acquisition Documentation |
| CMM | Minor Project Estimate (TC1) |
| PMG | Phase 3 Gate Review Statement |

# 4 Phase 4 Statutory Processes

The purpose of Phase 4 is to compile documentation and participate in oral hearing(s), if required by the statutory processes to ensure that the proposed Project is developed in accordance with planning, environmental and other relevant legislation.

The processes and deliverables required to complete Phase 4 are outlined in **Figure 9.**

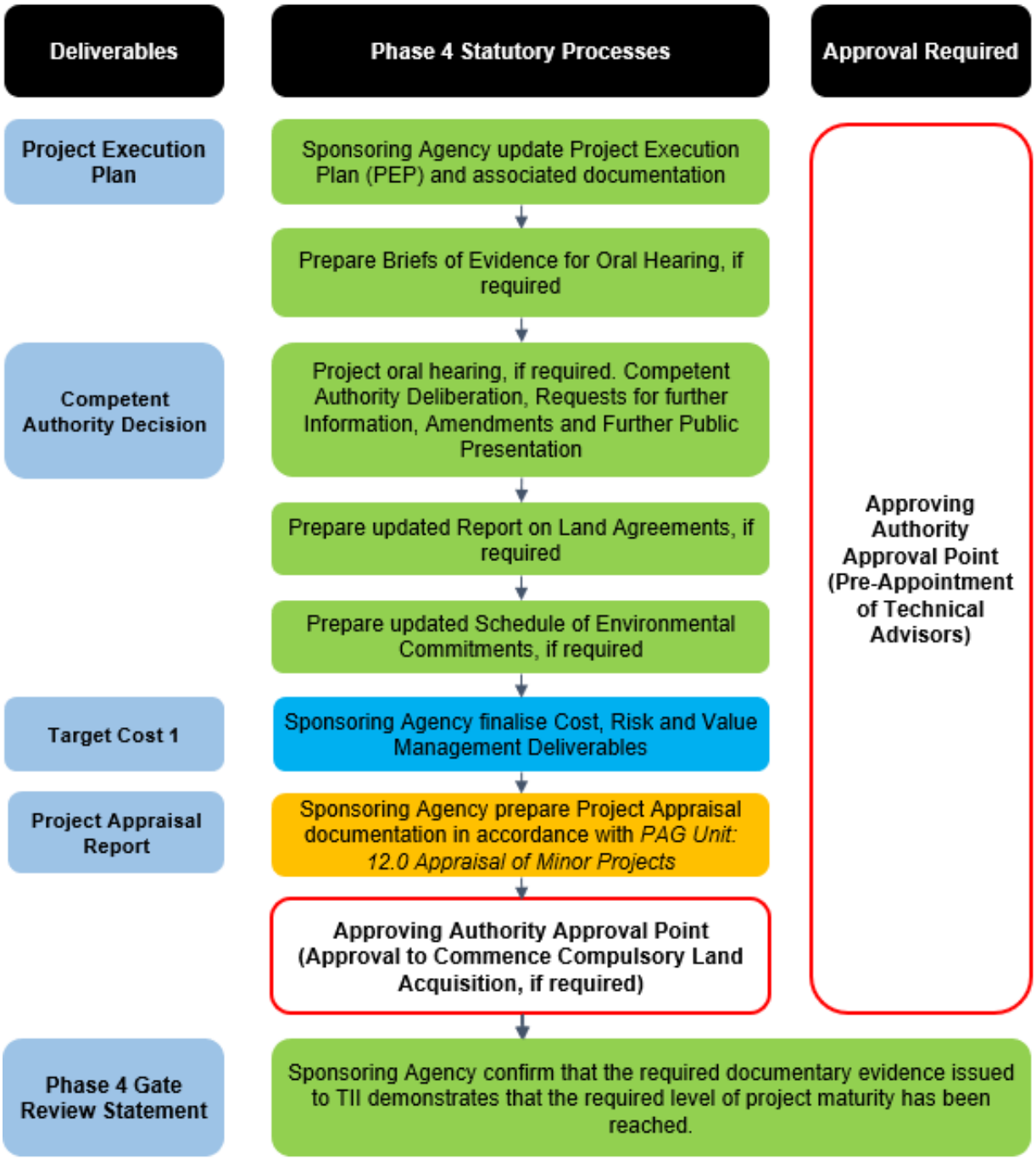


**Figure 9 Workflow Diagram Phase 4**

The purpose of Phase 4 is to advance the Project through the Statutory Processes. It is essential that the Project Manager directly consults the relevant legislation when progressing the Project through the statutory processes to ensure that the correct processes and procedures, such as notifications, are being followed. It is advisable that expert legal advice be obtained when advancing the Project through the Statutory Processes as errors or omissions can potentially jeopardise Project success. Advancing Projects through the Statutory Processes generally involves a public, or oral, hearing and it is essential that the Project Manager ensures that the presentation of the evidence in support of the Project is prepared, handled, and communicated in a clear and concise manner.

The Project Manager shall notify the TII Senior Engineering Inspector of their required engagement with all relevant internal TII departments at the earliest possible time frame of Phase 4, to enable sufficient time for reviews and approvals to be incorporated into the overall Phase 4 programme and minimise the risk of delays.

A list of statutory procedures that may relate to minor national road projects are listed in **Appendix A4.1**.

## 4.1 Processes

### 4.1.1 Project Execution Plan (PEP) - Including Lessons Learned

During this phase, the Project Manager shall update the PEP, as required, taking cognisance of Statutory Processes. The lessons learned register shall also be updated during this phase.

### 4.1.2 Approval to Submit Development Application Documentation

The Sponsoring Agency must authorise the submission of the development application documentation (environmental application documentation, and if applicable, land acquisition documentation) to the Competent Authority. For the majority of minor national road projects, the Competent Authority will be the Local Authority, which will ensure the process is more streamlined. Where the Competent Authority is An Bord Pleanála, the Project Manager shall prepare reports for the Chief Executive of the Sponsoring Agency recommending submission of the required development application documentation. Separate reports are required for the environmental evaluation documentation and the land acquisition documentation. Reports for land acquisition must be accompanied by an Engineer's Report certifying that the lands contained in the land acquisition documentation are necessary and sufficient for constructing and maintaining the Project. An outline of the information to be contained in the Engineer's Report is contained in **Appendix A4.2**. The reports shall be endorsed by the Sponsoring Agency Senior Engineer and the Sponsoring Agency Director of Services.

These reports shall be approved by the Sponsoring Agency Chief Executive via Chief Executive's Orders. These orders shall be prepared in accordance with individual Sponsoring Agency procedures and shall refer to the relevant enabling legislation.

### 4.1.3 Development Application Fees

Reference shall be made to An Bord Pleanála to determine the relevant development application fees required. Information in this regard is available on the An Bord Pleanála website (www.pleanala.ie).

### 4.1.4 Land Acquisition

#### 4.1.4.1 Overview

For minor national road projects, land acquisition via agreement is a feasible option and will frequently be advantageous from a programme perspective. It will be more common for projects which have a minimal scope and impact on the surrounding environment, for example localised junction upgrades and road widening. Where this option is not feasible, a formal process will be required.

#### 4.1.4.2 Letter of Intent

Prior to formally serving land acquisition notices on affected landowners and submitting land acquisition documentation to the Competent Authority, it is necessary to issue, via registered post, a letter of intent to publish the land acquisition documentation to affected landowners included in the land acquisition documentation.

A letter shall be issued to each affected landowner included in the land acquisition documentation as a check on the accuracy of the records used to prepare the documentation.

Sufficient time should be given to enable corrections to be made to the documentation, should some notices be returned undelivered. The letter of intent should outline the statutory requirements regarding the processes adopted.

#### 4.1.4.3 Public Notice

Before submitting the land acquisition documentation to the Competent Authority, a public notice of the making of land acquisition must be made. The required notice, advertising, and observation periods vary depending on the land acquisition process adopted.

### 4.1.5 Strategic Infrastructure Development

Some minor national road projects that require EIA may be included as strategic infrastructure development, defined in the Planning and Development Act 2000. An Bord Pleanála provide guidance on Strategic Infrastructure Development.

### 4.1.6 The Oral Hearing

If the appropriate statutory process involved submission to An Bord Pleanála, then they may, at its absolute discretion, hold an Oral Hearing into the Project.

Refer to the *Project Manager's Manual for Major National Road Projects (PE-PMG-02042)* for details on the An Bord Pleanála Oral Hearing.

### 4.1.7 Application to Competent Authority and Compliance with Statutory Processes

The Project Manager is responsible for ensuring that the statutory processes are complied with. The Project Manager shall seek legal and other relevant advice where appropriate. The Project Manager shall have regard to *RE-ENV-07008 Environmental Planning of National Road and Greenway Projects*.

### 4.1.8 Competent Authority Deliberation

The Project Manager shall prepare contingency and risk management strategies to deal with a scenario whereby the Competent Authority deliberations and/or decision is prolonged (i.e. by legal challenge or further information request).

### 4.1.9 Land Agreements and Environmental Commitments

Following Project approval, the Project Manager shall collate details of all agreements with affected landowners.

The Project Manager shall make the updated land agreements, the updated Schedule of Environmental Commitments, and a schedule of any development approval conditions available to the Approving Authority. The Project Manager shall inform the Approving Authority of the implications, if any, which these updated requirements may have on the Project scope (programme, budget and quality).

### 4.1.10 Land Acquisition – Confirmation Notice

Following Project approval and after the expiration of the statutory period for legal challenges, a confirmation notice in the prescribed form shall be published in a local newspaper.

### 4.1.11 Review of Minor Project Estimate (TC1)

The Project Manager shall, if required, review the Minor Project Estimate (TC1) in accordance with the requirements of the *TII CMM* and *PAG Unit: 6.2 Preparation of Scheme Costs.*

### 4.1.12 Detailed Action List

Following Project approval, the Project Manager shall, if required, compile a final list of modifications and conditions contained within the Order. The Project Manager shall also collate details of all agreements entered into with affected landowners.

The Project Manager shall issue the following to TII:

- Final schedule of modifications and conditions contained within the Order;
- Final Schedule of Environmental Commitments; and
- Updated land agreements.

The Project Manager shall inform TII of the implications, if any, which these requirements may have on the Project scope, programme, budget and quality.

### 4.1.13 Lessons Learned Register

The Project Manager shall organise a Lessons Learned workshop, with attendees to be agreed in advance with the TII Senior Engineering Inspector. At the end of Phase 4, the Project Manager shall review and update the Lessons Learned Register.

### 4.1.14 Climate Adaptation

The Project Manager shall comply with the requirements of *PE-ENV-01105 Climate Assessment of Proposed National Roads – Standard.*

### 4.1.15 Health and Safety

The Project Manager shall ensure compliance with all relevant Health and Safety legislation.

### 4.1.16 Project Appraisal Report

The Project Manager shall update the Project Appraisal Report, as required, taking cognisance of the statutory processes. The updated report should incorporate any amendments made during this phase.

### 4.1.17 Procurement Strategy

The Project Manager shall update the Procurement Strategy to be submitted to the Approving Authority. Considerations may arise during statutory processes which may necessitate amendments to the Project design. The Procurement Strategy should be reviewed prior to the commencement of Phase 5 Enabling and Procurement. It is appropriate for this to take place after the statutory processes and before tendering.

### 4.1.18 Approving Authority Approval Points

The following Approving Authority approval points are required at the end of Phase 4.

#### 4.1.18.1 Approval Point to Commence Land and Property Acquisition

A formal Approving Authority Approval Point is required in line with the Project Management Guidelines to commence land and property acquisition as Phase 4 entails land acquisition (the decision to issue a Notice to Treat). The Sponsoring Agency shall not proceed beyond the end of Phase 4 without having received Approving Authority approval to do so.

#### 4.1.18.2 Approval Point to Appoint Technical Advisors

If technical advisors are required to carry out the detailed design and to prepare tender documentation, a formal Approving Authority Approval Point is required in line with the Project Management Guidelines prior to commencement of the tender process to procure them. The Sponsoring Agency shall not proceed beyond the end of Phase 4 without having received Approving Authority approval to do so.

### 4.1.19 Project Gate 4

The Project Manager shall ensure that deliverables required for Phase 4 are finalised and issued to TII at the end of Phase 4.

The Project Manager shall prepare a Gate Review Statement confirming that deliverables issued to TII meet the required level of Project maturity using the template **Appendix A4.4**. This assurance shall be endorsed by the Sponsoring Agency Director of Services. The Sponsoring Agency may proceed to Phase 5 when TII accept the Gate Review Statement and issue consent to proceed to Phase 5.

## 4.2 Deliverables

The deliverables for Phase 4 are listed below:

| Source | Deliverables |
|---|---|
| PAG | Updated Project Execution Plan (PEP) |
| PMG | Competent Authority Decision |
| CMM | Reviewed Minor Project Estimate (TC1) |
| PAG | Updated Project Appraisal Report |
| PMG | Phase 4 Gate Review Statement |

# 5 Phase 5 Enabling and Procurement

The purpose of Phase 5 is to compile tender documentation to allow for the appointment of a Contractor to execute the Main Contract and to execute enabling works to facilitate the works.

The processes and deliverables required to complete Phase 5 are outlined in **Figure 10.**

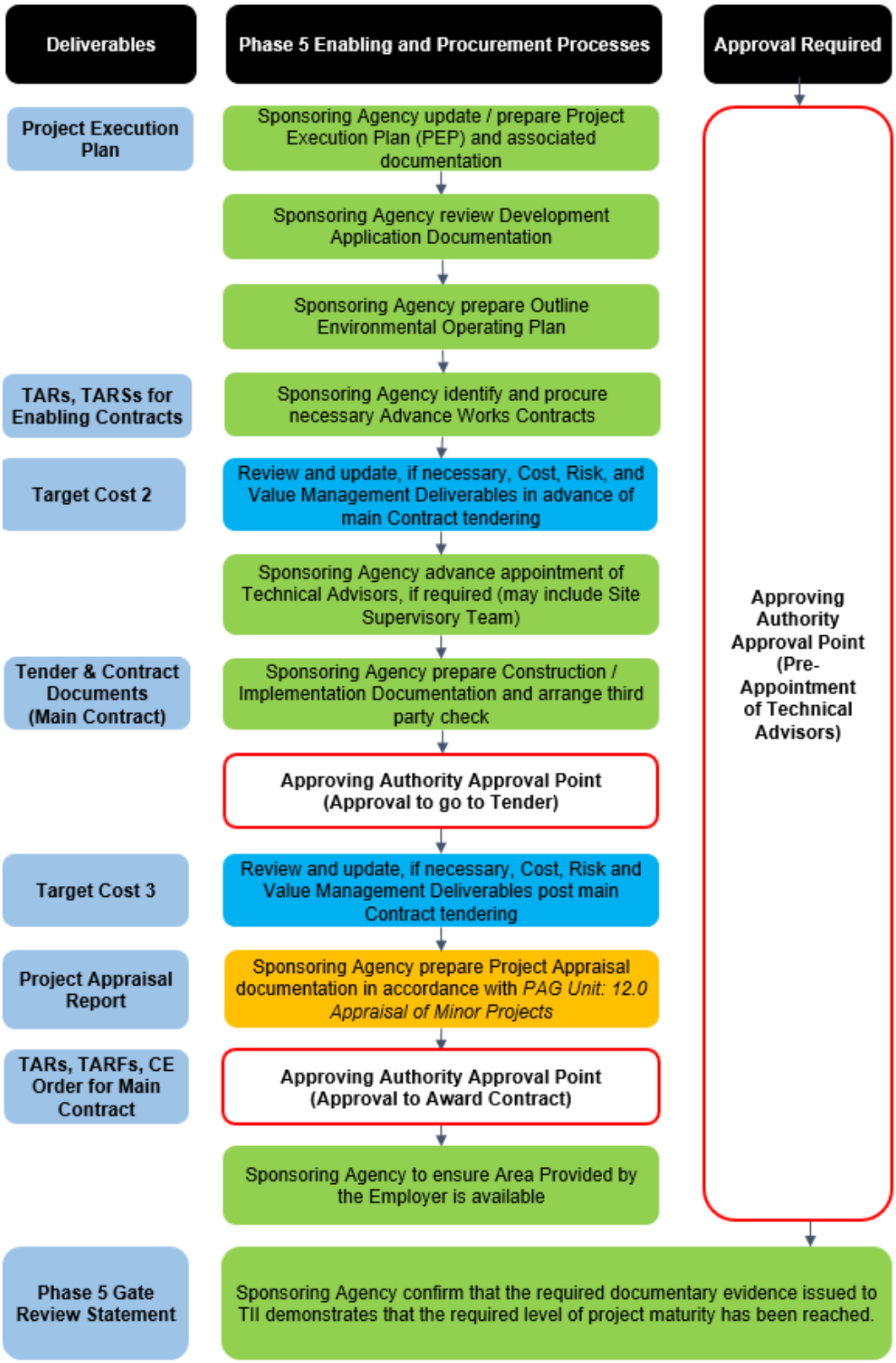


**Figure 10 Workflow Diagram Phase 5**

The purpose of Phase 5 is to procure the delivery of enabling works contracts, prepare construction and implementation documentation (carry out detailed design where the proposed delivery is through Employer design), and procure the construction and or implementation contract.

The Project Manager shall notify the TII Senior Engineering Inspector of their required engagement with all relevant internal TII departments at the earliest possible time frame of Phase 5, to enable sufficient time for reviews and approvals to be incorporated into the overall Phase 5 programme and minimise the risk of delays.

## 5.1 Processes

### 5.1.1 Detailed Project Brief

The Project Manager shall ensure that a Detailed Project Brief is prepared in accordance with the relevant *TII PAG* requirements.

The Detailed Project Brief shall define all design requirements for the Project. It is the benchmark for measuring the project and becomes the basis for the construction contract.

A list of items to be included in the Detailed Project Brief is included in **Appendix A5.1**.

### 5.1.2 Procurement Strategy

As stated in the *TII PAG*, a Procurement Strategy shall be compiled to ensure procurement is conducted in accordance with all relevant National Legislation and European Union directives.

The purpose of the Procurement Strategy is to analyse all procurement options to determine the most appropriate contract type and procurement approach for the project.

A list of items to be included in the Procurement Strategy is included in **Appendix A5.2**.

### 5.1.3 Project Execution Plan (PEP) - including Lessons Learned

The Project Manager shall update the PEP, as required, taking cognisance of Enabling and Procurement. The lessons learned register shall also be updated during this phase.

### 5.1.4 Review of Development Application Documentation

The Project Manager shall review the Design Report, the environmental evaluation documentation including the approved Schedule of Environmental Commitments, the land acquisition documentation, and the development approval conditions, if any, imposed by the Competent Authority. GIS mapping, where applicable, shall be prepared for onward transmittal to the relevant TII and local authority department. This review provides an opportunity to undertake a concerted value engineering exercise to reduce Project costs and works requirements whilst maintaining functionality. This review is necessary as constraints, circumstances, design standards or regulatory requirements upon which the Project was originally proposed may have been materially changed. Similarly, design refinement measures consequent to ‘value engineering’ may have been proffered since development approval and this review ensures that the proposed development adequate to meet all contemporaneous requirements.

The Project Manager shall ensure that any requirements (including those of relevant bodies), revised following Project approval, are examined for their implications on the lands necessary to construct the Project and for their implications upon development approval. An outline of review items is contained within **Appendix A5.3**.

The Project Manager shall notify the Sponsoring Agency, if the review, as described above, has implications for Project Scope or implications upon development approval.

### 5.1.5 Review of Land Agreements and Accommodation Works

The Project Manager shall review all land agreements and accommodation works agreements to ensure that they reflect amendments which arose during the statutory processes and that lands necessary for the construction and or implementation of agreements and accommodation works shall be available to the Contractor.

It is necessary that accommodation work agreements, which are to be carried out on lands retained by stakeholders, be made subject to the lands being made available to the Contractor for construction and or implementation. This should be done for the avoidance of dispute with stakeholders and the avoidance of potential claims from the Contractor.

The Project Manager shall ensure that any accommodation works are sufficiently designed, and that the nature and extent of accommodation work provided by the local authority is clearly specified in land agreements. The Project Manager shall also ensure that the design of any temporary drainage works do not cause flooding in, or otherwise adversely affect, areas outside the lands made available.

Land agreements and or accommodation works shall take cognisance of the approved Schedule of Environmental Commitments and development approval conditions, if any. This may entail an examination and, if necessary, revision of land agreements and accommodation works to ensure that they accord with the approved Schedule of Environmental Commitments and development approval conditions and scope.

### 5.1.6 Managing Geotechnical Risk

The Project Manager shall comply with the requirements of DN-ERW-03083 *Managing Geotechnical Risk.*

### 5.1.7 Ground Investigations

The Project Manager shall determine whether it is necessary to complete ground investigations at Phase 5. These will supplement works, if any, undertaken during the previous Project phases. The Project Manager shall ensure that the combined ground investigations are sufficient for design purposes, and allow for ground risks to be identified, assessed and managed.

The Project Manager shall have regard to the Ground Investigation Guidance (to be published) when planning and managing ground investigations.

The Project Manager, with support, as appropriate, from ground engineering professionals and environmental specialists, shall be responsible for scoping the extent of ground investigation works, the preparation of tender documents, management of the tender process, management of the ground investigation contract and review of geotechnical factual data and reporting. The Project Manager shall consider phasing of the ground investigation where warranted, based on the ground conditions and nature of the Project.

In accordance with any agreement currently in place between TII, Irish Farmers Association, and the relevant government department, it shall be necessary to financially compensate landowners affected by intrusive works associated with the ground investigation works. The Project Manager shall arrange for the preparation of a schedule of payments to affected landowners. The ‘As-Built’ locations of the ground investigation works should be established before determining the compensation due to landowners as these locations may vary from those proposed in the tender documents, which may in turn lead to adjustments to the calculation of compensation due to landowners.

The Project Manager shall ensure that ground investigation data is presented in an appropriate format with regard to its use throughout all Phases of the project, and throughout the lifecycle of the assets.

The Project Manager shall be responsible for arranging the evaluation of tender returns by an appropriately qualified and experienced assessment board. As part of the Tender Award Recommendation (TAR), the Project Manager shall prepare a Tender Report, which summarises the Tender Assessment Process and formally recommends the Award of the Contract.

The Project Manager shall submit the completed Tender Report to TII for approval. The Tender Report will be accompanied by a Tender Award Recommendation Form (TARF), completed by the Sponsoring Agency.

### 5.1.8 Earthworks

The Project Manager shall review the project earthworks design to ensure that it reflects amendments which arose during the statutory processes and that lands necessary for construction and/or implementation of the Project shall be available to the Contractor.

The Project Manager shall assess the implications of modifications, if any, to ensure that they accord with the approved Schedule of Environmental Commitments and development approval conditions and scope.

The Project Manager shall ensure that the earthworks design is clearly presented in the tender documents.

### 5.1.9 Structures

#### 5.1.9.1 Iarnród Éireann Acceptance of Detailed Design for Railway Structures

Acceptance of the detailed design of railway structures may be sought during Phase 5 or Phase 6. The structural design of railway structures shall be developed taking account of any comments or conditions imposed by Iarnród Éireann as part of the Initial Acceptance and Acceptance of Preliminary Design process. Detailed proposals should be submitted to Iarnród Éireann in accordance with *Iarnród Éireann Technical Guidance Document CCE-TMS-310 Guidance on Third Party Works*. The Project Manager shall liaise with appropriate Iarnród Éireann and Commission for Railway Regulation personnel and refer any agreed design submissions for structures to Iarnród Éireann and TII as required.

Following receipt of the Acceptance of Detailed Design from Iarnród Éireann and the Commission for Railway Regulation (CRR), the design may be included in the construction and implementation documentation as a contract requirement.

It will be necessary to enter into a legal agreement with Iarnród Éireann and CIE for the construction, operation and maintenance of the structure.

In a small number of minor national road projects, such as in Design and Build contracts, the tender documents shall include arrangements to novate the design for railway structures to the successful Tenderer in order that design responsibility for these structures is transferred to the Contractor. The construction and implementation documentation shall state that, should the Contractor wish to alter or amend the design for railway structures, as accepted, responsibility for seeking revised acceptance for such proposals, rests solely with the Contractor.

#### 5.1.9.2 TII Technical Acceptance of Structures

Formal Technical Acceptance of Structures shall be required at Phase 5 or Phase 6 depending on the form of the contract documents. The Project Manager shall refer the Technical Acceptance Reports (TAR) to the TII Structures section in accordance with *DN-STR-03001 Technical Acceptance of Road Structures on Motorways and Other National Road Projects*.

Where applicable, the structures related aspects of the tender documents, including Consolidated Outline Proposals, shall be provided to the TII Structures section for acceptance in accordance with *DN-STR-03001 Technical Acceptance of Road Structures on Motorways and Other National Road Projects*.

### 5.1.10 Office of Public Works (OPW)

The Project Manager shall review consent applications made to the OPW for the creation and modification of watercourses, embankments, weirs, and bridges. Where necessary, updated consent applications shall be issued to the OPW.

### 5.1.11 Departures and Relaxations

The Project Manager shall review departure and or relaxation applications issued to TII during earlier phases. The Project Manager shall also seek approval for departures which may have materialised consequent to amendments to design standards or arising from the Statutory Processes. It is vital that all departures from standard are considered and approved or rejected prior to the submission of tenders.

### 5.1.12 Permits and Licences

The Project Manager shall review the permits and licenses previously obtained during Phase 3, taking cognisance of the development approval documentation.

### 5.1.13 Lands to be Made Available to the Contractor

The Project Manager shall confirm that the full extent of the Lands to be Made Available to the Contractor are sufficient for the purpose of constructing and or implementing the Project, as approved and or modified by the Competent Authority.

### 5.1.14 Construction Environmental Management Plan (CEMP)

The Construction Environmental Management Plan (CEMP) shall be updated. The Project Manager shall ensure the implementation of the mitigating measures identified in the development approval documentation for the construction phase.

The plan should be reviewed, modified, and enhanced as necessary by the successful Contractor (including enabling works contractors) to detail proposed construction or implementation methodologies associated with their work methodologies.

### 5.1.15 Enabling Works Contracts

It may be necessary or desirable to undertake Enabling Works Contracts to de-risk the Main Contract.

The Project Manager shall allow adequate time in the Project Programme for the procurement and delivery of Enabling Works Contracts. Consideration as to the implications of Enabling Works Contracts upon one another and the main Contract shall be considered.

The different types of Enabling Works Contracts may include, but are not limited to, the following:

- Service diversions, fencing and hedge clearing;
- Environmental; including the management of invasive alien plant species;
- Archaeological Stage (i) to (iv) services; and
- Topographical proof surveys (including accuracy and tolerance requirements, particularly at road tie-ins, structures, and watercourses).

The Project Manager shall take cognisance of time constraints and restrictions imposed by relevant legislation (environmental limitations such as restrictions on tree felling) when programming Enabling Works Contracts.

The Project Manager shall liaise with the Sponsoring Agency to determine whether Enabling Works Contracts can be undertaken in tandem but shall ensure that Enabling Works Contracts do not conflict with one another.

**Sections 5.1.13.1 to 5.1.13.5** outline the requirements for Enabling Works Contracts. Where Enabling Works Contracts different from the above are required, then the requirements should be determined by the Contracting Authority and the Project Manager.

The Project Manager shall compile the Enabling Works Contracts Tender documents in accordance with TII and CWMF requirements, unless agreed otherwise with TII.

### 5.1.15.1 Overview

The majority of minor national road projects will be Employer Designed in accordance with TII and CWMF requirements. Significant work is required in taking the Part 8 Development design and developing the Works Requirements, including the Drawings, Specification, and Pricing Document. Detailed Design is required for an Employer Designed Contract which involves design and drawing preparation under each of the relevant TII Series. The Contract Specification, including appendices, should be prepared taking cognisance of the relevant drawing series. These appendices should include items specific to the Project. The Pricing Document should be prepared, based on both the Drawings and Specification and requires sufficient detail to enable Tenderers to accurately price the Project Works.

### 5.1.15.2 Fencing, Hedge Clearing and Service Diversions

Where fencing and hedge clearing contracts are required, it shall be necessary to serve a Notice of Entry on all lands.

Where service diversion contracts are required, the Project Manager shall liaise with the TII Senior Engineering Inspector to determine whether the Notice of Entry should be served or whether some other means of access (e.g. wayleave) should be obtained.

An outline of items to be considered when preparing fencing, hedge clearing, and service diversion enabling works contracts is contained in **Appendix A5.4**. The Project Manager shall ensure that sufficient 'As-Built' records are prepared for these contracts for inclusion in the Main Contract Tender documents.

The Project Manager shall ensure that all boundary fencing is erected prior to the commencement of the Main Works Contract.

### 5.1.15.3 Environmental Enabling Works

The Project Manager shall examine the Schedule of Environmental Commitments together with any additional environmental mitigation to determine whether environmental enabling works are required.

Environmental enabling works may need to be sequenced with other enabling works contracts. The Project Manager shall ensure that Enabling Works Contracts are sequenced to avoid one particular contract being carried out to the detriment of another.

Environmental enabling works Contracts may include those to manage invasive alien plant species. This may include pre-construction survey contracts or treatment contracts. Every effort should be made during the earlier phases to identify invasive alien plant species as late identification may lead to significant additional costs to the Project.

### 5.1.15.4 Archaeological Services

Archaeological consultancy services contracts may be required as part of the Schedule of Environmental Commitments or may, in any event, be required in advance of the Main Contract. All archaeological works shall be carried out in accordance with the *Code of Practice for Archaeology agreed between the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Transport Infrastructure Ireland* and the approved Schedule of Environmental Commitments.

The Project Manager in conjunction with the Project Archaeologist shall ensure that all the necessary permissions, consents, directions and licences (statutory and non-statutory) as required by the National Monuments Acts 1930 to 2014 are in place for all archaeological aspects of the project.

An outline of items to be considered in the preparation of archaeological consultancy services contracts is contained in **Appendix A5.5**. The following stages shall be outlined within the form of tender and schedule for Archaeological enabling works contracts:

- Stage (i) Test Excavations and Surveys Services Requirements;
- Stage (ii) Pre-Excavation Services Requirements;
- Stage (iii) Excavation and Post-Excavation Assessment Services Requirements; and
- Stage (iv) Post-Excavation and Dissemination Services.

Stages (i), (ii) and (iii) above are recommended to be carried out in Phase 5 to minimise the impact on the Main Contract.

In the event that a National Monument is uncovered during the Archaeological enabling works contracts, the Project Manager, in conjunction with the Project Archaeologist shall consult with the statutory authorities who determine its preservation requirements in accordance with statutory and regulatory requirements. This may require a separate EIAR to allow for the site to be fully excavated, or for the Project to be altered.

#### 5.1.15.5 Topographical Proof Survey

Prior to the commencement of the Main Contract, it may be necessary to verify existing topographical surveys which were used to design the Project and determine the land acquisition boundary. An outline of items to be considered in the preparation of topographical proof surveys is contained in **Appendix A5.6**.

### 5.1.16 Revised and Updated *TII PAG* Deliverables

The Project Manager shall determine the requirement to update the Project Appraisal Report in accordance with *PAG Unit: 12.0 Appraisal of Minor Projects.* The Project Manager shall submit the updated Project Appraisal Report to TII for review. Following receipt and incorporation of comments (if any) from TII, the Sponsoring Agency shall formally submit the Project Appraisal Report to the Approving Authority for approval.

### 5.1.17 Appointment of Technical Advisors

It may be necessary to commission Technical Advisors to aid Project delivery.

The Project Manager shall determine the nature and scope of the services to be procured which may or may not include provision of the Contracting Authority Site Supervisory Team. The Project Manager shall document the scope within a Technical Advisors Procurement Brief.

Technical Advisors may be appointed for Phases 5 to 7 of the TII PMG, or separate appointments may be made for Phase 5 and Phases 6 to 7. The Project Manager shall obtain approval from the TII Senior Engineering Inspector to proceed with a tender to commission Technical Advisors for the Project. The Project Manager shall prepare the necessary tender documents and determine appropriate quantitative and qualitative suitability criteria. Suitability criteria should take account of the complexity, nature, scope, and other relevant and appropriate Project specific criteria.

The Project Manager shall be responsible for arranging the evaluation of tender returns by an appropriately qualified and experienced assessment board. Once the Tender Assessment Process is complete, a recommendation may be made to TII to accept one of the tenders received. As part of the Tender Award Recommendation (TAR), it shall be necessary to prepare a Tender Report, which shall summarise the Tender Assessment Process and formally recommend the Award of the Contract.

The Project Manager shall submit the completed Tender Report to TII for approval with a recommendation to appoint a Tenderer. The Tender Report will be accompanied by a Tender Award Recommendation Form (TARF), completed by the Sponsoring Agency.

Tender Reports prepared by the Sponsoring Agency shall comply with obligations and requirements deriving from applicable procurement legislation.

### 5.1.18 Construction and Implementation Documentation Preparation

The Project Manager shall take cognisance of the Procurement Strategy when preparing the construction and implementation documentation. Model Forms for Employer Designed, Design and Build, and Public Private Partnership contracts are available upon request from the TII Senior Engineering Inspector.

### 5.1.19 Main Contract Tender Documents

#### 5.1.19.1 Overview

The majority of minor national road projects, given their scale and complexity, use the Employer Designed Contract. Typically Design and Build Contracts are not the norm for minor national road projects; but may be utilised for more complex minor national road projects. Both contract types are outlined below.

#### 5.1.19.2 Employer Designed Contract

In the case of Employer Designed projects, the Project Manager shall compile the Tender documents in accordance with TII and CWMF requirements, unless agreed otherwise with TII, and shall comprise:

- Suitability Assessment Questionnaire (generally two-stage process);
- Instructions to Tenderers;
- Volume A Works Requirements;
  - Part 1: Specification (including appendices to the specification)
  - Part 2: Contract Drawings
- Volume B Form of Tender and Schedules to Conditions of Contract;
- Volume C Pricing Document;
- Volume D Relevant Background Information; and
- Public Works Contracts Model Forms.

An outline of items to be included as Relevant Background Information is contained in **Appendix A5.7**.

#### 5.1.19.3 Design and Build Contract

In the case of Design and Build projects, the Project Manager shall compile the Tender Documents in accordance with TII and CWMF requirements, unless agreed otherwise with TII, and shall comprise:

- Suitability Assessment Questionnaire (two-stage process);
- Instructions to Tenderers;
- Volume A Works Requirements;
- Part 1: Introduction and Interpretation;
- Part 2: Definitions;
- Part 3: General Requirements;
- Part 4: Particular Requirements;
- Part 5: The Specification (Including appendices to the specification);
- Part 6: Drawings;

- Part 7 Public Works Contracts Model Forms;
- Volume B Form of Tender & Schedules to Conditions of Contract;
- Volume C Pricing Document;
- Volume D Novated Design Documents (e.g. railway structures, if required); and
- Relevant Background Information.

An outline of items to be included as Relevant Background Information is contained in **Appendix A5.7**.

#### 5.1.19.4 Tender Drawings

A typical list of drawings to be included in an Employer Designed Contract is contained in **Appendix A5.8**.

Reference should be made to the TII Notes for Guidance on the Specification for Road Works (Manual of Contract Documents for Road Works) when compiling the list of drawings included in the Contract.

#### 5.1.19.5 Road Safety Audit Stage 2

A Road Safety Audit Stage 2, in accordance with *GE-STY-01024 Road Safety Audit*, shall be carried out on the Project. It shall be completed and closed out before the tender documentation is finalised. Any changes resulting from the audit shall be incorporated into the construction and implementation documentation.

#### 5.1.19.6 Health and Safety Plan

The PSDP shall prepare a Preliminary Health and Safety Plan for the Project in accordance with the relevant legislative requirements.

#### 5.1.19.7 Due Diligence Check of Tender Documents

Once the Project Manager has compiled the tender documentation, it shall be necessary to have a due diligence check of the documentation undertaken by a third party. The third party may include external specialist technical advisors, NRO offices, and or TII personnel. The Project Manager shall facilitate and co-ordinate such checks. Any recommendations from the check shall be incorporated into the tender documentation, unless otherwise agreed by the Approving Authority.

### 5.1.20 Approving Authority Approval Point to go to Tender

A formal request for approval to go to tender shall be issued to TII along with confirmation from the Project Manager that the documentation has been appropriately reviewed and checked. In this regard, the Project Manager shall ensure that extensive checking, such as cross referencing of requirements, of the documentation has been carried out. This request shall be accompanied by an updated Project Appraisal Report.

The Project Manager shall not proceed with the Tender Process until TII approval to do so has been received.

### 5.1.21 Tender Process

The tender process may vary depending on the procurement strategy.

In undertaking the procurement of Works Contracts, the Project Manager shall take cognisance of ‘Green Public Procurement’ requirements including, but not limited to, the inclusion of clear and verifiable environmental criteria for products and services to be provided as part of the works contract. Furthermore, the Project Manager shall take cognisance of whole life cost implications, and associated maintenance and replacement regimes, when procuring works contracts.

#### 5.1.21.1 Prior Information Notice (PIN) and Contract Notices in the OJEU

PIN and Contract Notices may be posted on the Official Journal of the European Union (OJEU) or the Office of Government Procurement website (www.etenders.gov.ie) dependent on contract value. Applicable thresholds are available from the eTenders website. A PIN allows Tenderers to prepare in advance for upcoming contracts. Sponsoring Agencies who publish a PIN with the required amount of information can avail of shortened minimum times for submitting expressions of interest of tenders. The Project Manager shall determine whether a PIN and Contract Notices should be published.

Guidance on the publication of these notices including Common Procurement Vocabulary (CPV) Codes, EU Thresholds, and OJEU Standard Forms is provided on the eTenders website.

A PIN may also be used to instigate a Technical Dialogue/ Market Consultation process if this is considered necessary by the Project Manager.

#### 5.1.21.2 Pre-Qualification of Tenderers (Two Stage Process)

Some minor national road projects may include a pre-qualification stage in their tender process. This stage should assess Tenderers on pass/ fail criteria and/or on a qualitative basis. The Project Manager shall prepare the necessary documentation and determine appropriate criteria. Suitability criteria should take account of the complexity, nature, scope, and other relevant and appropriate Project specific criteria.

In advance of the evaluation of qualitative criteria, the Project Manager shall prepare an Evaluation Procedures Document in conjunction with the Sponsoring Agency. This Evaluation Procedures Document shall be utilised by the appropriately qualified and experienced assessment board so as to ensure an equitable and objective assessment is undertaken.

The Project Manager shall be responsible for arranging the evaluation of pre-qualification returns by the appropriately qualified and experienced assessment board. The role of the assessment board is to shortlist Tenderers (typically 3 to 5) to proceed to the second stage of the Tender Process. The Project Manager shall prepare a debriefing document for unsuccessful Tenderers. The assessment board should provide sufficient information to compile this debriefing document.

The Tenderers short-listed to proceed to the second stage shall be furnished with the tender documentation. Where a two stage process is not adopted, all interested parties should be furnished with the tender documentation.

#### 5.1.21.3 Tender Queries and Tender Bulletins

During the Tender Process, Tenderers may submit tender queries in relation to the works requirements and/or the contract. Replies to tender queries are generally issued to all Tenderers unless they are submitted as ‘Commercial in Confidence’. The means for dealing with queries submitted as ‘Commercial in Confidence’ shall be as described in the Instructions to Tenderers.

Any changes to the tender documentation, arising from Tender queries or from amendments made by the Contracting Authority, shall be re-issued to all Tenderers in the form of Tender Bulletins. The Project Manager shall ensure that a comprehensive list of all Tender Bulletins is maintained.

The issuing of a Tender Bulletin should be accompanied by a statement outlining the aspects of the tender documentation that have been amended, revised, or deleted. Each Tenderer should be requested to acknowledge receipt of a Tender Bulletin where e-procurement is not utilised.

### 5.1.22 Tender Assessment and Award

Tenders should be submitted in the prescribed format to the stated address of the Contracting Authority and/or in digital format via etenders on or before the closing date for receipt of tenders as set out in the Instructions to Tenderers. Tenders received after the closing date (and time) should be recorded but shall not be opened or given further consideration in the tender assessment process.

The Contracting Authority may have specific procedures in place for the receipt and opening of tenders. The Project Manager shall check in advance if such procedures are in place and shall ensure that tenders are received and opened in accordance with the Contracting Authority's requirements.

#### 5.1.22.1 Assessment of Non-Compliant, Conforming and Variant Tenders

The Project Manager shall ensure that all Tenders are examined for compliance with the Tender requirements.

The Project Manager shall determine whether there are non-compliant Tenders and shall determine how to proceed with the assessment of that Tender having regard to the Instructions to Tenderers and the EU Remedies Directives.

#### 5.1.22.2 Independent Arithmetical Check

It may be necessary to undertake an independent arithmetical check of the Pricing Document (Volume C of the Tender Documents) submitted by each Tenderer. The check shall be conducted on both the Tender Sum and the Comparative Cost of Tender.

#### 5.1.22.3 Post-Tender Clarification Meeting and Queries

It may be necessary to hold a Post-Tender Clarification Meeting between the Contracting Authority and one or more of the Tenderers to clarify some aspects of their respective Tender Submissions and/or the conceptual design proposals.

The Project Manager shall compile the minutes of the Post-Tender Meeting and refer them to the Tenderer, who shall confirm acceptance of the minutes in writing.

It may be beneficial for the Tender Clarification process if some clarifications are sought in advance of the Post-Tender Meeting by the Project Manager and similarly responded to by the Tenderer.

The Minutes of the post-tender Clarification Meeting, together with the written confirmation of acceptance of these minutes shall form part of the Contract if the Tenderer is successful.

#### 5.1.22.4 Confirmation of Insurances, Resources, Pension and Pay

As part of the Tender Submission, Tenderers shall be required to submit confirmation and or accede to the following:

- Provide confirmation that the required levels of Professional Indemnity, Employer's Liability, and Public Liability Insurances are in place;
- If requested, provide a full list of the plant and resources the Tenderer proposes to use to execute the Works as a demonstration that appropriate plant and resources are available;
- Provide confirmation that the Tenderer operates an approved Pension and Sick Pay Scheme and accede to audit on behalf of TII to ensure same; and
- Provide confirmation that the Tenderer complies with industry requirements on rates of pay and accede to audit on behalf of TII to ensure same.

Tenderers may have submitted some or all of this information during the Tender process, if applicable. However, if the validity period of certificates has expired in the intervening period, the Project Manager shall seek evidence of renewal.

The Project Manager shall also ensure that the Contractor shall indemnify the Contracting Authority against liability for damages arising from works carried out by the Contractor outside of the land acquisition boundary.

### 5.1.23 TII PAG Deliverables – Project Appraisal Report (PAR)

The Project Manager shall determine the requirement to update the Project Appraisal Report in accordance with *PAG Unit: 12.0 Appraisal of Minor Projects.* The Project Manager shall submit the updated Project Appraisal Report to TII for review. Following receipt and incorporation of comments (if any) from TII, the Sponsoring Agency shall formally submit the Project Appraisal Report to the Approving Authority for approval.

### 5.1.24 Approving Authority Approval Point to Award Contract

A formal Approving Authority Approval Point is required in line with the Project Management Guidelines as the decision to proceed to contract award entails the commitment of expenditure.

The Sponsoring Agency shall not proceed to contract award without having received Approving Authority approval to do so.

TII will be the Approving Authority for this Approving Authority Approval Point. The Sponsoring Agency may submit the request for Approving Authority approval and the Gate Review Statement to TII at the same time. Under these circumstances the request for Approving Authority approval should be submitted by way of a separate covering letter from the Gate Review Statement.

### 5.1.25 Tender Report and Contract Award

Once the Tender Assessment Process is complete and the necessary *TII PAG* deliverables have been updated, a recommendation should be made to TII to accept one of the tenders received. As part of the Tender Award Recommendation (TAR), the Project Manager shall prepare a Tender Assessment Report, summarising the Tender Assessment Process and formally recommend the Award of the Contract. A template outlining the information to be included in the Tender Assessment Report is included in **Appendix A5.9**. Tender Assessment Reports prepared by the Contracting Authority shall comply with obligations and requirements deriving from applicable procurement legislation.

The Project Manager shall submit the completed Tender Report to TII for approval with a recommendation to appoint a Tenderer. The Tender Report shall be accompanied by a Tender Award Recommendation Form, completed by the Sponsoring Agency. A template for the Tender Award Recommendation Form (TARF) is contained in **Appendix A5.10**.

In cases where TII are the Approving Authority for this Approving Authority Approval Point, the Tender Report and the Tender Award Recommendation Form shall accompany the request for Approving Authority approval.

In cases were TII are not the Approving Authority for this Approving Authority Approval Point, the Tender Report and the Tender Award Recommendation Form shall be submitted along with the confirmation of Approving Authority approval to award the contract.

#### 5.1.25.1 Letter to Successful and Unsuccessful Tenderers

Following receipt of the necessary approvals to proceed with the Award of the Contract, the successful Tenderer shall be issued with a letter in the prescribed form. This Letter is issued subject to receipt of the required documentation as outlined in the Instructions to Tenderers and during, if applicable, post tender clarification meetings. The required documentation should also be outlined in the letter to the successful Tenderer.

All unsuccessful Tenderers should be notified, in the prescribed form, of the decision to Award the Contract to the most economically advantageous tender (MEAT). Letters to unsuccessful Tenderers should provide information as to why their tender was not deemed to be the most economically advantageous.

#### 5.1.25.2 Letter of Acceptance

A Letter of Acceptance, in the prescribed form may be issued to the successful Tenderer not earlier than 14 days after the notification to unsuccessful Tenderers was issued.

Once the Letter of Acceptance is issued, a Contract Award Notice shall be published in the OJEU or the Office of Government Procurement website dependent on contract value within the period specified in the Instructions to Tenderers.

### 5.1.26 Cost, Risk and Value Management

The Project Manager shall review, update, or proceed with the following processes, in accordance with the *TII CMM*:

- Project Cost Management including Minor Project Estimate prior to Tender Issue (TC2) and Minor Project Estimate at Tender Award (TC3), Estimate Assumptions Sheet and Estimate Tracking Sheet. Proposed change to TC3 in advance of its finalisation must be approved by the TII Senior Engineering Inspector.
- Project Risk Management including Project Risk Register (PRR), Quarterly Risk Status Summary and Risk Assessment Report(s).
- Project Value Management including the Project objectives transposed into Contract documentation.

All Cost, Risk, and Value management processes and deliverables should be updated as Phase 5 progresses and applied to the Project development. Cost, Risk, and Value meetings should be held during Phase 5, if required.

The Project Manager shall detail assumptions utilised in determining estimates, any Project risks identified, any value opportunities identified, and the strategies adopted for dealing with same.

The outputs, conclusions and recommendations from designated risk and value meetings should be presented in report format to the Approving Authority/ Sponsoring Agency Management Group, as appropriate, for review. These reports should set out how the outputs, conclusions and recommendations are to be realised.

### 5.1.27 Climate Adaptation

The Project Manager shall comply with the requirements of *PE-ENV-01105 Climate Assessment of Proposed National Roads – Standard.*

### 5.1.28 Health and Safety

The Project Manager shall ensure compliance with all relevant Health and Safety legislation.

### 5.1.29 Appointment of Contracting Authority's Representative and Site Supervisory Team

The Project Manager may, if required, appoint a Contracting Authority's Representative together with a Contracting Authority Site Team to monitor works on behalf of the Contracting Authority. The composition of this team should take cognisance of the Project particulars and where necessary development approval documentation. The duties of the Contracting Authority's Representative should be as stated in the Contract. A summary of the duties of the Site Supervisory Staff is contained in **Appendix A5.11.**

### 5.1.30 Confirmation of the Land Acquisition Boundary

The Project Manager shall ensure, prior to the award of the contract that all lands identified as 'Lands Made Available' for the purpose of constructing the Works are available for use by the Contractor. This is particularly relevant to projects where a fencing and hedge clearing enabling works contract has not been carried out in advance of the main Contract.

The Project Manager shall ensure that a Notice of Entry is served on all lands to be compulsory acquired a minimum of 14 days prior to the construction commencement date to allow the Contracting Authority and the Contractor to enter into and take possession of the lands.

The Project Manager (or Project Liaison Officer, if appointed), shall contact landowners affected by the Project as early as possible prior to the commencement of the Works to ensure that the Contracting Authority does not cause undue disruption in exercising its powers of acquisition. Sufficient time shall be given to facilitate the removal of livestock and crops from lands and, in particular, to allow for dwelling houses and other buildings to be vacated.

### 5.1.31 Project Gate 5

The Project Manager shall ensure that deliverables required for Phase 5 are finalised and issued to TII at the end of Phase 5.

The Project Manager shall prepare a Gate Review Statement confirming that deliverables issued to TII meet the required level of project maturity using the template in **Appendix A5.13.** This assurance shall be endorsed by the Sponsoring Agency Director of Services. The Sponsoring Agency may proceed to Phase 6 when TII accept the Gate Review Statement and issue consent to proceed to Phase 6.

## 5.2 Deliverables

The deliverables for Phase 5 are listed below:

| Source | Deliverables |
|---|---|
| PAG | Updated Project Execution Plan (PEP) |
| PMG | Main Contract Tender Documentation |
| PMG | Tender Assessment Report (TAR), Tender Award Recommendation Form (TARF) and Chief Executive's Order for Main Contract |
| PAG | Project Appraisal Report |
| CMM | Minor Project Estimate prior to Tender Issue (TC2) |
| CMM | Minor Project Estimate at Tender Award (TC3) |
| PMG | Detailed Project Brief and Procurement Strategy |
| PMG | Phase 5 Gate Review Statement |

# 6 Phase 6 Construction and Implementation

The purpose of Phase 6 is the administration and execution of the Main Contract in accordance with the design, specification, relevant standards, and legislation.

The processes and deliverables required to complete Phase 6 are outlined in Figure 11.

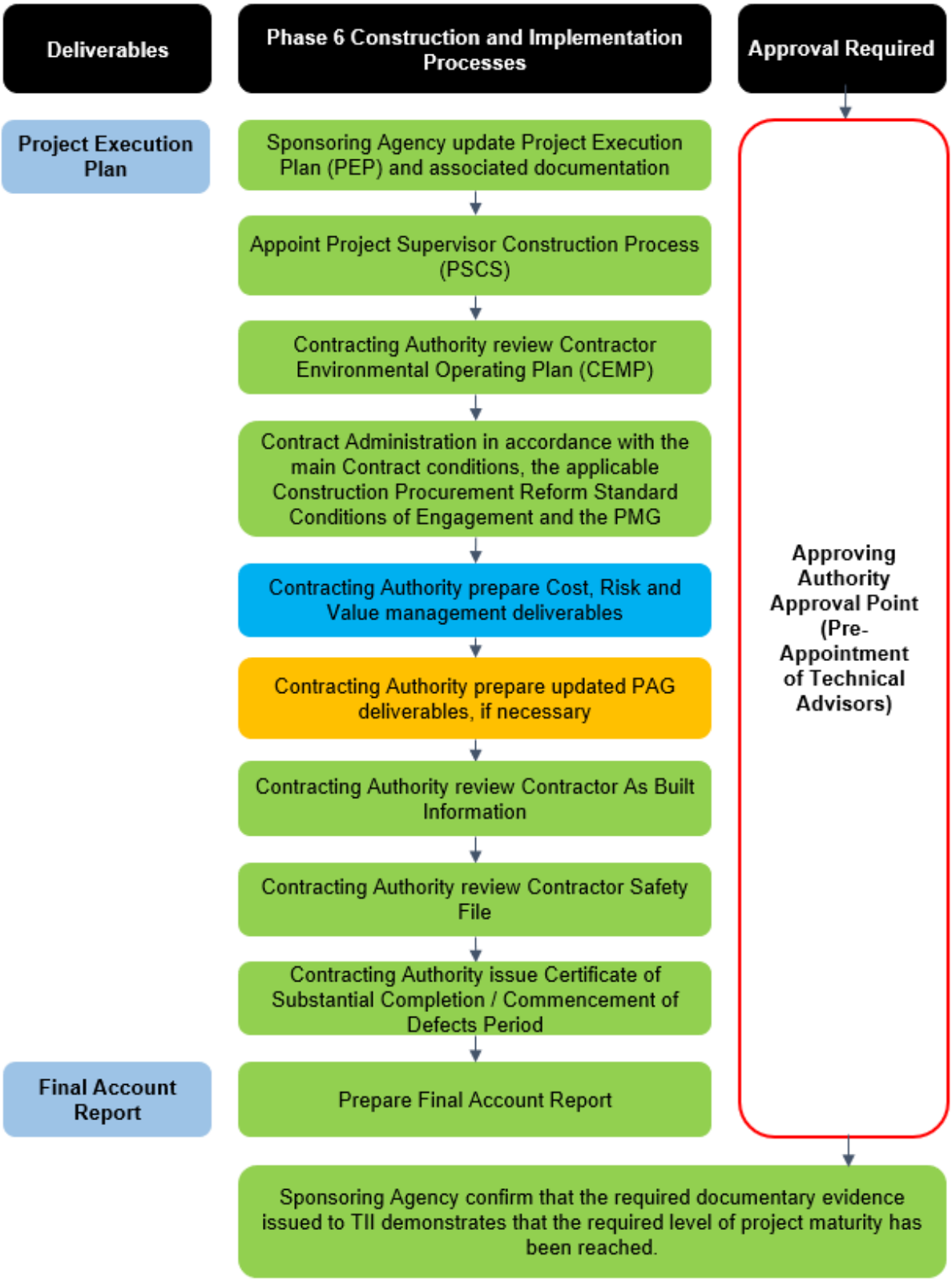


**Figure 11 Workflow Diagram Phase 6**

During Phase 6 the construction or implementation the main contract and, if applicable, the completion of enabling works contracts shall be achieved.

Cost, risk and value management are to the fore during this phase, and it is essential that stringent controls and processes are in place to monitor Project scope. In some cases, a formal dispute resolution process may be required. Such a dispute resolution process may require a significant time frame.

In some cases, a formal dispute resolution process may be required. Such a dispute resolution process may require a significant time frame.

The Project Manager shall notify the TII Senior Engineering Inspector of their required engagement with all relevant internal TII departments at the earliest possible time frame of Phase 6, to enable a sufficient time for reviews and approvals to be incorporated into the overall Phase 6 programme and minimise the risk of delays.

## 6.1 Processes

### 6.1.1 Project Execution Plan (PEP) - including Lessons Learned

During this phase, the Project Manager shall be updated the PEP, as required, taking cognisance of Construction and Implementation. The lessons learned register shall also be updated at this point.

### 6.1.2 Health and Safety

#### 6.1.2.1 Appointment of PSCS and PSDP

For the majority of minor national road projects which are Employer designed, the Designer will be appointed as Project Supervisor Design Process (PSDP) and the Contractor will be appointed as Project Supervisor for the Construction Stage (PSCS).

For minor national road projects which are Contractor designed, the Contractor shall be appointed as PSDP and PSCS.

#### 6.1.2.2 Transfer of Safety File to Contractor

The Project Manager shall ensure that the Safety File, prepared for the Project in Phase 0 and developed through to Phase 5, is transferred to the Contractor for the duration of the Works.

#### 6.1.2.3 Notification to HSA of Works Commencement

The PSCS shall notify the Health and Safety Authority (HSA) of the particulars of the proposed works prior to commencement.

### 6.1.3 Contract Administration

Contract Administration for a minor national road project should be undertaken in accordance with all relevant legislation and guidance for the type of contract chosen.

The Project Manager shall ensure, prior to commencement of the main Contract construction and or implementation, that a Contracting Authority's Representative has been appointed and that their duties and responsibilities are clearly outlined and scoped. Overall responsibility for the delivery of the Project shall remain with the Project Manager. The Contracting Authority Representative's duties are outlined in **Appendix A6.1**. The Project Manager represents the Contracting Authority (Sponsoring Agency) and may, for the purposes of the Contract, fulfil a number of the functions and duties of the Contracting Authority. In such circumstances, it is important that these arrangements are clearly communicated to the Contractor and to the Contracting Authority's Representative. The duties and responsibilities of the Project Manager and Contracting Authority's Representative shall be set out within the PEP.

### 6.1.4 Managing Geotechnical Risk

The Project Manager shall comply with the requirements of *DN-ERW-03083 Managing Geotechnical Risk.*

### 6.1.5 Construction Environmental Management Plan (CEMP)

If required, the Project Manager shall prepare a Construction Environmental Management Plan (CEMP) during Phase 5. During Phase 6 the Contractor shall be required to augment the CEMP to reflect the implications of their proposed construction methodologies and programme. The preparation of the CEMP should be closely aligned with the requirements of the Schedule of Environmental Commitments and any development approval conditions. The Contractor shall comply with the requirements of relevant and applicable guidance. The CEMP shall be reviewed by the Contracting Authority's Representative. The CEMP shall be approved prior to commencement of construction and or implementation. The Contractor shall maintain the CEMP for the duration of the construction and implementation period. On substantial completion, the Contractor shall issue the final CEMP to the Contracting Authority.

### 6.1.6 Construction Stage Meetings

As detailed within *PE-PMG-02041 Project Management Guidelines*, Construction Stage Monitoring Meetings may be held monthly (unless otherwise agreed) to discuss progress, programme, health and safety, risk and claims management. These meetings shall be chaired by the Sponsoring Agency and attended by the Approving Authority, the Project Manager, the Contract Administration/Site Supervision Team Representative and Technical Advisors (if applicable). This group may, if required, undertake the function of a 'Project Board' as detailed in Section 6 of the Common Appraisal Framework and in the *TII PAG*.

Site Progress Meetings shall be held, typically, monthly, between the Contracting Authority, the Contract Administration/ Site Supervision Team Representatives, Technical Advisors where required and the Contractor. This shall address construction issues that affect health and safety, progress, cost, quality control or any other relevant issues as required.

If a Design and Build contract is in place, a Dispute Management Project Board shall be established and meet on a regular basis. For projects carried out under other forms of contract, the Approving Authority may decide to form a Dispute Management Project Board to undertake a similar function.

### 6.1.7 Monthly Reports, Financial Reports and Payments

The Contracting Authority's Representative shall prepare monthly progress reports and financial reports relating to the main Contract in accordance with the requirements of the Contract and this Manual. The monthly progress reports should include detail on information provided to the Contractor by the Contracting Authority's Representative and information generated by the Contracting Authority's Representative. **Appendix A6.2** gives a typical structure and contents listing for a Monthly Progress Report. **Appendix A6.3** gives a typical structure and contents for a Financial Report Summary Sheet. These reports shall be submitted to the Project Manager for review. The Project Manager shall be responsible for submitting monthly progress reports and financial reports relating to the Contract to TII.

### 6.1.8 Change Orders

Any changes to the Main Construction Contract involving a change to the scope of works and a change to the contract value require approval of funding from TII in accordance with the relevant procedures and thresholds currently in force. In some instances, the Contracting Authority's Representative may approve Change Orders to a threshold amount specified in the Contract. The TII Senior Engineering Inspector shall provide guidance as to the relevant procedures and thresholds and these shall be recorded in the Change Management Plan included within the PEP.

The Project Manager, in conjunction with the Contracting Authority's Representative, shall prepare a justification Report for each Change Order in accordance with the requirements of the *TII CMM.*

The Project Manager shall maintain an up to date Change Orders Register in accordance with the requirements of the *TII CMM*. The Contracting Authority's Representative shall receive, acknowledge, and process claims for compensation, delay events and other contractual claims and shall maintain a Claims/ Compensation Events Register.

The contents of the Change Order Register shall be incorporated into the Compensation Events Register. Alternatively, one register can be maintained recording all Compensation events, Claims and Change Orders once Change Orders are labelled as such.

### 6.1.9 Claims and Compensation and Delay Events

The Contracting Authority's Representative shall receive, acknowledge, and process claims for compensation and delay events and other contractual claims and shall maintain a Claims and Compensation Register in accordance with the Contract and in accordance with the requirements of the *TII CMM*.

The Contracting Authority's Representative shall maintain, until the settlement of the Final Account, a Claims register detailing all claims notified by the Contractor. The structure of the register should be such that it is possible to use the register to check the Contractor's and Contracting Authority's Representative compliance with contractual requirements.

The Claims Register should clearly identify:

- All claims made by the Contractor notifying the Contracting Authority's Representative of an intention to seek additional payment or extension of time or other entitlement under or in connection with the Contract;
- Compliance by the Contractor and the Contracting Authority's Representative with the requirements set out in the contract;
- Any reciprocal cooperation with the Contractor offered by the Contracting Authority/ Contracting Authority's Representative in relation to the Contractor's efforts to minimise delay and compensation events and their effects;
- Details of the Contracting Authority's determination; and
- The status and extent of resolution of each claim;

The register should contain items that are defined as compensation and/or delay events by the contract including Change Orders

It should be possible to filter the register so as to be able to distinguish between Claim items and Compensation/ Delay events.

The Contracting Authority's Representative should seek, as early as possible, to establish a structured forum for the discussion of claims with the Contractor on a 'without prejudice' basis. This is consistent with the principles of cooperation which shall be set out in the Contract and the requirement for the Contractor to provide notices and relevant information within defined timescales and at set milestones.

Such a forum should:

- Endeavour to reach a consensus as to whether or not there is an entitlement in accordance with the conditions of the Contract to additional payment and or an extension of time;
- Clarify the Contracting Authority's Representative requirements in relation to any additional information sought in relation to any claim notified by the Contractor;
- Clarify the timescales defined within the Contract for the submission of information and consideration of same by the Contracting Authority's Representative; and

- Explore, where possible, aspects of the Contractor's detailed submission and seek and record agreements reached.

The Contracting Authority's Representative shall appraise the Contracting Authority of the intention to hold claims management meetings and the proposed dates for same and the Contracting Authority may choose to attend these meetings.

The Contracting Authority's Representative should manage Claims from the Contractor in strict accordance with the contractual provisions.

All contractual claims should be notified to the Contracting Authority through the client progress report with details of the Contracting Authority's Representative assessments and determinations being provided under separate cover when requested by the Contracting Authority.

In exceptional circumstances, and where possible, the Contracting Authority's Representative should contact the Contracting Authority to highlight potential claim item in advance of the receipt of a formal notification. It may be appropriate, subject to the potential scale and risk associated with the issue, to include provision for same within the Construction Contract Risk Register.

The Contracting Authority's Representative shall notify the Project Manager of claims and delay events as and when they arise and shall advise on the validity or otherwise of these claims and on the potential liability to the Contracting Authority.

The Project Manager shall notify the Approving Authority if there is a claims liability which may impact on the scope of the Project (time, cost, quality) and if there is an impact on the cost. The Approving Authority shall advise on how to deal with any changes to Project scope.

### 6.1.10 Relationship Between Contract Management Registers

The relationship between the Contract Management Registers is presented in **Figure 12**.

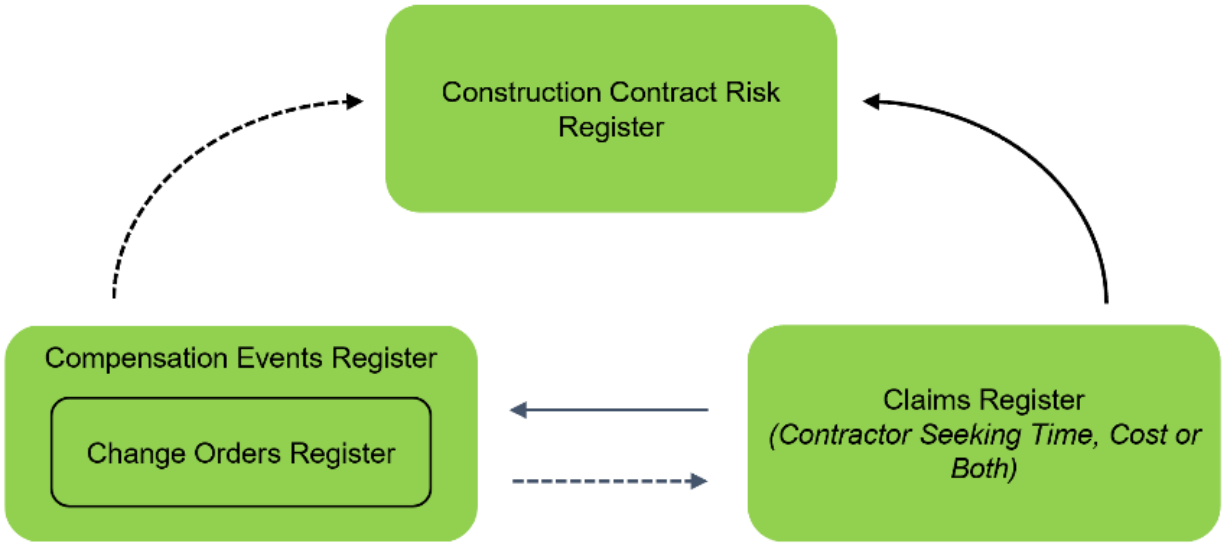


**Figure 12 Relationship Between Contract Management Registers**

### 6.1.11 Departures and Relaxations

The Contracting Authority's Representative shall monitor the Contractor's compliance with design standards and shall ensure that any non-compliance with TII Publications is regularised either by redesign or by means of approvals per the requirements of *GE-GEN-01005 Departures from Standards and Specification*. Departures from standards and specification shall not be retrospectively approved once the non-compliant design has been incorporated into the Works.

The number of applications for Departures from Standards and/or Specification shall be kept to an absolute minimum during the construction stage as there may be a substantial risk to the Contract and/or the Outturn Cost and Final Account Report if the departure application is refused.

### 6.1.12 Land and Property

The Project Manager shall transfer the pre-tender Land and Property Cost Estimate to the TII Land and Property System. As the Project progresses and land agreements are reached, the actual land acquisition costs should be recorded in TII Land and Property System to feed into the Final Outturn Cost.

The Land and Property costs should include a breakdown of total compensation paid to each landowner, together with other costs such as interest, claimant, Local Authority fees and land transfer fees.

The Project Manager shall ensure that the Property Valuation Advisors liaise with TII Land and Property Services throughout the acquisition process and provide information on the negotiation status of cases, cases settled and agreements finalised and referrals to third party. This information can be inputted into the TII Land and Property System.

#### 6.1.12.1 Contractor and Landowner Interaction

The Project Liaison Officer (PLO) shall ensure that the provisions of any Agreement in place between TII, Irish Farmers Association and the relevant government department are implemented during construction, in particular with respect to the provision of reasonable access to retained lands during construction and to the implementation of agreed accommodation works.

If difficulties arise, the Contracting Authority's Representative shall communicate the difficulties of affected landowners to the Contractor (only after discussing/ agreeing with the PLO and Project Manager) and should endeavour to ensure that all reasonable landowner requirements are met without adversely impacting on the Project scope.

#### 6.1.12.2 Land Agreements and Accommodation Works

The Project Manager shall ensure that where land agreements are reached and where satisfactory evidence of title has been furnished and vacant possession confirmed, payments are provided subject to the availability of funding and in accordance with the requirements of any agreement between TII, Irish Farmers Association, and the relevant government department.

The Project Manager shall ensure that the claimant's and the Local Authority's legal, valuation and other fees are discharged in accordance with current TII policy.

It may also be necessary to obtain the prior approval of TII where the compensation amounts in land agreements exceed certain prescribed thresholds. The Project Manager shall liaise with the TII Senior Engineering Inspector to confirm the monetary threshold which requires prior TII approval.

Accommodation Works agreed prior to tender should be included as part of the Works Requirements. However, it may not be possible to agree all accommodation works at that stage. In such circumstances, the Project Manager shall include the projected accommodation works, required for the landowners' retained lands in the Works Requirements.

### 6.1.13 'As-Built' Document Requirements

The general requirements for the preparation and delivery of certain documentation, and other material, constituting the 'As-Built' Records for all national road projects are detailed within *CC-CMG-04001 Preparation and Delivery Requirements for As-Built Records*. Further project requirements for 'As–Built' documents and drawings shall be set out in the Works requirements.

The requirements for 'As-Built' drawings and documents for Structures are set out in *DN-STR-03001 Technical Acceptance of Road Structures on Motorways and other National Roads.*

The Contracting Authority's Representative shall ensure that 'As–Built' documents are prepared by the Contractor in accordance with the Works requirements and handed over to the Contracting Authority upon completion of the Works. The Contracting Authority's Representative shall ensure that the Contractor's Designer includes a copy of the 'As–Built' documents in the Safety File.

The Contracting Authority's Representative shall also ensure that the following documents are handed over to the Contracting Authority at the completion of the Contract:

- Confirmation of implementation of the schedule of environmental commitments;
- Confirmation of satisfactory closeout of all non-conformance records;
- Copies of Road Safety Audit Stage 1, Stage 2, and Stage 3 Reports;
- Final Account and detailed breakdown; and
- Certificates and approval documentation from third parties (e.g. OPW).

### 6.1.14 Implementation of Environmental Conditions

The Contracting Authority must ensure that the Contractor has implemented all mitigation measures to the satisfaction of the Contracting Authority and/or relevant statutory bodies, where necessary.

The Contracting Authority must ensure that the Contractor complies with all relevant environmental conditions that pertain to the Works.

The Contracting Authority shall also obtain verification and confirmation from the Contractor that all relevant environmental conditions were implemented.

The Contracting Authority's Representative shall ensure that a copy of the final Construction Environmental Management Plan is handed over to the Contracting Authority.

### 6.1.15 Archaeological, Architectural and Cultural Heritage

The Project Archaeologist, in conjunction with the Project Manager, shall manage and supervise, as necessary, archaeological and heritage works required during the main Contract.

This may include archaeological monitoring of the topsoil stripping along the Project, while exclusion zones may also be present on the site if archaeological resolution works have not been completed prior to the commencement of the main Contract.

The Project Archaeologist is responsible for consultation with the relevant government department, in accordance with the Code of Practice for Archaeology. In any event the Project Manager in conjunction with the Project Archaeologist shall ensure that any commitments made in the environmental evaluation documentation, or via ministerial direction, regarding the protection of the archaeological heritage are adhered to during the main Contract.

In the event of archaeological sites and/or features being uncovered during the main contract, the Project Archaeologist shall determine, in conjunction with the Project Manager, the preferred means of preservation (i.e. preservation by record or preservation in situ) and appropriate protection measures in consultation with the National Monuments Service and the National Museum of Ireland.

Should the relevant Minister determine that an archaeological site discovered during the works constitutes a National Monument, then this may require a separate EIAR to allow for the site to be fully excavated, or for the Project to be altered.

### 6.1.16 Cost, Risk and Value Management

Following on from the Cost, Risk, and Value Management works undertaken at Phase 5, the Project Manager shall reassess the following processes during this phase, in accordance with the *TII CMM:*

- Cost Management;
- Risk Management including key risks schedule, risk assessment and mitigation plans; and
- Value Management including implementation status and decision register.

Cost, Risk, and Value management processes and deliverables should be updated as Phase 6 progresses and applied to Project development. Cost, Risk, and Value measures should be agenda items at Monitoring Meetings and Site Progress Meetings held during the construction and implementation phase.

The Contracting Authority's Representative shall prepare and maintain a Construction Contract Risk Register in accordance with the requirements of the *TII CMM*. The Construction Contract Risk Register shall be updated monthly by the Contracting Authority's Representative until the Final Account is agreed, to take account of the progress of Works and changes to the Claims and Compensation Events Register.

The Project Manager shall ensure that the risk management process is reviewed during progress meetings. This review should include a review of the effectiveness of the risk management strategy and the specific risk response strategies contained in the register, current assessment of potential impact, and any management actions required on any of the risks.

Results of periodic analysis of current risks contained in the Construction Contract Risk Register or any other analysis as required by the Contracting Authority may lead to the requirement to adjust the construction contract contingency.

The Project Manager shall be responsible for incorporating the risks identified in the Construction Contract Risk Register into the Project Risk Register developed during previous phases and for ensuring that risk contingencies are managed as the Project progresses, in accordance with the *TII CMM.*

### 6.1.17 Climate Adaptation

The Project Manager shall comply with the requirements of *PE-ENV-01105 Climate Assessment of Proposed National Roads – Standard.*

### 6.1.18 Road Safety Audit Stage 3

A Road Safety Audit Stage 3, in accordance with *GE-STY-01024 Road Safety Audit*, shall, as required, be carried out on the Project (or part of the Project) and completed and closed out, with any changes resulting from the audit incorporated into the construction before it opens to traffic or prior to construction traffic management measures being removed in the case of an on-line project.

### 6.1.19 Final Account

Following the Substantial Completion of the Works, the Contractor shall be obliged to submit a Final Statement of Account in accordance with the Conditions of Contract.

In the event that a Final Statement of Account (or any part thereof) is referred to Alternative Dispute Resolution, the Project Manager shall liaise with the TII Senior Engineering Inspector to confirm whether to engage experts and/or legal advisors to assist in preparing the Contracting Authority's case during dispute resolution proceedings. In such circumstances, the Project Manager shall also agree the appropriate procurement process with the TII Senior Engineering Inspector.

Where the Final Outturn Cost of the Final Statement of Account (as agreed or as determined during dispute proceedings) exceeds the Tender Sum, the Project Manager shall be required to obtain the approval of TII to discharge the balance payable to the Contractor.

### 6.1.20 Final Account Report

Once the Final Outturn Cost of the Final Statement of Account has been determined, The Project Manager, in conjunction with the Contracting Authority's Representative, shall prepare a Final Account Report relating to the main Contract.

The Final Account Report shall include a statement of 'Lessons Learned' from the main Contract. This should highlight both the positive and negative aspects of the Contract.

In some cases, the determination of the Final Statement of Account may be a protracted process, particularly in the event of a dispute. In such circumstances, and in the event that the Contracting Authority's Representative is no longer retained, the Project Manager shall ensure that all information and records necessary to complete the Final Account Report have been retrieved from site.

The report should give details of how the initial contract sum developed and evolved into amounts included in the penultimate and final payment certificates. The final account report shall contain directions outlining roles and responsibilities for the conclusion of any outstanding issues and the measures to take to inform the individuals responsible of their duties in this regard.

A template outlining the items to be included in the Final Account Report is contained in **Appendix A6.4**.

### 6.1.21 *TII PAG* Deliverables – Project Appraisal Report (PAR)

The Project Manager shall determine the requirement to update the Project Appraisal Report in accordance with *PAG Unit: 12.0 Appraisal of Minor Projects.* The Project Manager shall submit the updated Project Appraisal Report to TII for review. Following receipt and incorporation of comments (if any) from TII, the Sponsoring Agency shall formally submit the Project Appraisal Report to the Approving Authority for approval.

### 6.1.22 Lessons Learned Register

A Lessons Learned workshop should be held at the end of Phase 6. The Project Manager shall review and update the Lessons Learned Register as required, taking cognisance of this workshop.

## 6.2 Deliverables

The deliverables for Phase 6 are listed below:

| Source | Deliverables |
|---|---|
| PAG | Updated Project Execution Plan (PEP) |
| CMM | Final Account Report |

# 7 Phase 7 Close out and Review

The purpose of Phase 7 is to complete all outstanding contractual and residual issues relating to the Project, leading to the closeout of the entire Project and the review of the Project to ascertain the key lessons to be learned for application to future projects.

The processes and deliverables required to complete Phase 7 are outlined in Figure 13.

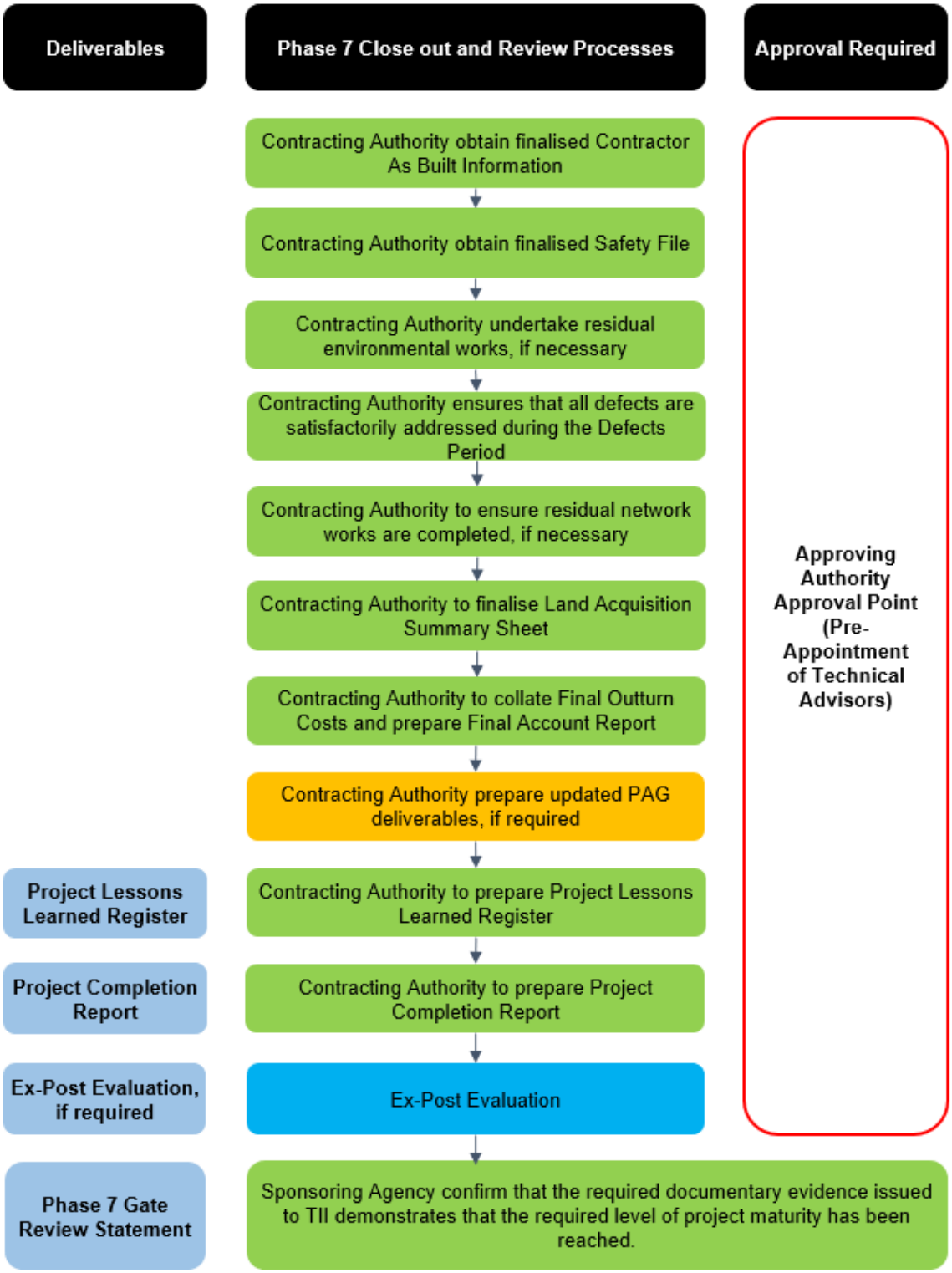


**Figure 13 Workflow Diagram Phase 7**

Phase 7 involves the completion of all outstanding contractual and residual issues relating to the Project leading to the closeout of the entire Project and the review of the Project to ascertain the key lessons to be learned for application to future Projects.

The Project Manager shall notify the Road Authority of relevant monitoring processes that are required post construction and implementation. These items may include maintenance of environmental measures such as drainage systems, noise mitigation measures, ecological enhancement and landscaping, to ensure that the road network functions in an environmentally sustainable manner.

The Project Manager shall notify the TII Senior Engineering Inspector of the required engagement with all relevant internal TII departments at the earliest possible time frame of Phase 7, to enable sufficient time for reviews and approvals to be incorporated into the overall Phase 7 programme and minimise the risk of delays.

## 7.1 Processes

### 7.1.1 Handover of 'As-Built' Documentation and Safety File to the Contracting Authority

During Phase 6, and as necessary this Phase, the Contracting Authority's Representative (or in their absence, the Project Manager) shall verify that the 'As-Built' records are a true representation of the Project as constructed. The Contracting Authority's Representative shall ensure that the 'As-Built' drawings and documents, prepared in accordance with the Contract, are handed over to the Contracting Authority.

The Contracting Authority's Representative shall ensure that the Safety File is updated, if required, handed over to the Contracting Authority and that copies of the finalised 'As-Built' drawings and documents have been included therein.

### 7.1.2 Road Safety Audit Stage 4

The Project Manager shall, if required, carry out a Road Safety Audit Stage 4 in accordance with *GE-STY-01024 Road Safety Audit,* on the Project two to four months after the Project becomes operational.

### 7.1.3 Environmental Requirements – Completion of Landscaping Contract

On projects where the implementation of landscaping treatment does not form part of the main Contract, it shall be necessary to appoint Landscaping Contractors to undertake landscaping on the completed Project.

All landscaping shall be undertaken in accordance with TII Publication *GE-ENV-01102 A Guide to Landscape Treatments for National Road Schemes in Ireland.* The Project Manager shall consult with the Sponsoring Agency Management Group regarding the requirement to carry out a separate landscaping contract and on the procurement method to appoint Landscaping Contractors.

Where required, Landscaping Contracts should have regard to *The Management of Invasive Alien Plant Species on National Roads – Standard* and to the Construction Environmental Management Plan to ensure that the legal obligations in relation to the control of invasive alien plant species are met.

### 7.1.4 Climate Adaptation

The Project Manager shall comply with the requirements of *PE-ENV-01105 Climate Assessment of Proposed National Roads – Standard.*

### 7.1.5 Defects Period, Defects Certificate and Retention Monies

The Defects Period, the duration of which shall be as stated in the Contract, shall generally commence after the Certificate of Substantial Completion has been issued to the Contractor.

The Contracting Authority's Representative shall prepare a Snag List outlining all outstanding works and items to be addressed by the Contractor during the Defects Period.

At the end of the Defects Period, the Contracting Authority's Representative shall issue a Defects Certificate in accordance with the Contract. The Contracting Authority's Representative shall be responsible for ensuring that all defects are satisfactorily addressed during the Defects Period and that a Defects Certificate is issued in accordance with the Contract.

The Contractor shall be entitled to partially claim for retention money due upon receipt of the Certificate for Substantial Completion and to claim for the balance of retention money due upon receipt of the Defects Certificate.

The Project Manager shall ensure that adequate provision is made in the Project budget to release retention monies and that any such payments due to the Contractor are issued within the time periods specified in the Contract.

The Project Manager shall seek confirmation from the Contracting Authority's Representative that all works (including accommodation works) have been satisfactorily completed, prior to releasing the retention monies.

### 7.1.6 Residual Network

Following completion of the main Contract, most of the expenditure incurred in the closeout of the Project shall be charged under the PRS heading of Walking, Cycling and Asset Renewal (previously residual network). This expenditure may include for the preparation of final reports (if not already included as part of other contracts) and other cost headings including sign declassification, old national road rehabilitation and an allowance for the Per Cent for Art Scheme.

#### 7.1.6.1 Sign Declassification

Unless otherwise provided for in the main Contract, an allocation should be included in the Final Outturn Cost and Final Account Report to cover the cost of erecting new road signs, which are not included in the Works Requirements, to take account of any declassification of the road network arising from the new Project.

Traffic signs erected as a result of the declassification of public roads adjacent to the Project should be covered until the opening of the new road to traffic.

The funding allocation for sign declassification shall be inclusive of sign design, manufacture and erection on site.

#### 7.1.6.2 Old National Road Rehabilitation

An allocation for old national road rehabilitation may be made, where required, to cover the cost of carrying out repairs to the existing national road network adjacent to the Project.

The Project Manager may make a formal request to the TII Senior Engineering Inspector to allocate funding. It is necessary to obtain the prior written approval of the TII Senior Engineering Inspector, outlining the approved allocation, before any claim can be made. Alternatively, individual Local Authorities may undertake these works directly as part of their ongoing maintenance programme.

The Project Manager shall ensure that requests for funding from Local Authorities shall be properly claimed from the appropriate project grant under PRS and shall ensure that the total amount claimed does not exceed the amount approved by the TII Senior Engineering Inspector.

#### 7.1.6.3 Per Cent for Art Scheme

In accordance with Government policy, a budget allocation shall be made to public bodies delivering capital projects, including minor road projects, for *Public Art: Per Cent for Art Scheme*.

Guidance on the thresholds for public art under this scheme are provided in *DOEHLG Circular LS 1/97 Artistic Embellishment Scheme* and guidance on the commissioning of artwork under this scheme is provided in *Guidelines for the Implementation of the Percent for Art*.

The Project Manager shall make a formal request to the TII Senior Engineering Inspector to allocate funding under the heading of 'Percent for Art' and it is necessary to obtain the prior written approval of the TII Senior Engineering Inspector outlining the approved allocation before any claim can be made in PRS.

The TII approved allocation under 'Percent for Art' is an all-inclusive figure and shall include procurement of the artist including, where necessary, the appointment of an expert selection committee, administration and publicity costs as well as the cost of the artistic feature. The costs of the artistic feature include the design and construction of any civil works e.g. concrete plinths, erection costs etc.

All proposals for artistic features under the 'Per Cent for Art' Scheme must not pose a safety hazard to road users.

### 7.1.7 Land and Property

There may be a number of outstanding land acquisition cases carried forward to Phase 7 and it shall be necessary to complete all land transactions (either by agreement or independent assessment) prior to determining the Final Outturn Cost.

#### 7.1.7.1 Completion of all Outstanding Payments

It shall be necessary to ensure that all compensation payments are made to affected property owners so that the Final Outturn Cost for Land and Property can be determined. This includes all compensation cases which may have been referred to dispute resolution.

#### 7.1.7.2 Close out and Completion of Land Acquisition Summary Sheet

When all land and property costs have been determined, the Project Manager shall update and complete the Land Acquisition Summary Sheet in accordance with the *TII CMM*.

#### 7.1.7.3 Land Disposal Strategy

In a minority of cases, there may be surplus lands forming part of the overall Land Acquisition which are not required by the Contracting Authority for the maintenance of the Project. In addition, there may be certain lands which the Contracting Authority has agreed to transfer to the ownership of individual landowners as part of a Land Agreement.

The disposal of Local Authority lands forming part of a TII-funded project shall be subject to the advance approval of the TII Senior Engineering Inspector and TII Land and Property Services. The disposal of Local Authority lands is a reserved function of the relevant Local Authority.

Where Land transfers are agreed between a Local Authority and individual Landowners as part of a Land Acquisition Agreement, a special clause of the Agreement outlining this land transfer should include the following statement: "This land transfer is made subject to the agreement of the elected members of [_____] County/ City Council pursuant to Section 183 of the Local Government Act, 2001 and subject to the approval of the TII".

The Project Manager shall check with the relevant Local Authority and where applicable ensure that the proposed Land Disposal Strategy complies with Local Authority procedures.

Where it is proposed to dispose of lands from a TII-funded project, it shall be necessary to prepare a Land Disposal Strategy Report and submit with the application for TII approval of the proposed land disposal. A template for a Land Disposal Strategy Report is contained in **Appendix A7.1.**

The land disposal strategy should incorporate climate action and sustainability-based solutions. The suitability of surplus lands should be reviewed for potential uses that could align with TII's Sustainability Implementation Plan and TII Climate Adaptation Strategy 2022. Solutions should be developed such as native woodland planting or biodiversity initiatives that can contribute to sustainability objectives while ensuring sustainable use of surplus lands.

The Project Manager shall submit the Land Disposal Strategy Report to the TII Senior Engineering Inspector and TII Land and Property Services for approval.

### 7.1.8 Final Outturn Cost

As the Project nears completion, the Project Final Outturn Costs for each of the principal cost headings shall be compiled. All such costs should be inclusive of VAT. The Project Final Outturn Cost is the sum of all outturn costs from each cost heading in the TII PRS.

The Project Manager shall compile the Final Outturn Costs in accordance with the requirements of the *TII CMM* and submit it to the TII Senior Engineering Inspector.

### 7.1.9 Project Completion Report

The Project Manager shall prepare a Project Completion Report, which shall provide details of the Final Outturn Cost for the Project and for each of the seven PRS headings. A template for a Project Completion Report is contained in **Appendix A7.2.**

In instances where some elements of Project Expenditure remain outstanding, the Project Completion Report should be completed to the extent of known expenditure and have an estimate of any outstanding expenditure included.

TII shall require a copy of the Project Completion Report, which shall provide a statement of the Final Outturn Cost before the Project can be closed out.

### 7.1.10 Ex-Post Evaluation

In accordance with the requirements of *PAG Unit 2.0 – Project Appraisal Deliverables*, an Ex-Post Evaluation shall, if required, be undertaken by the Contracting Authority.

The Ex-Post Evaluation shall be undertaken by a person or persons external to the Project team. An outline of items to be considered for the Ex-Post Evaluation is contained in **Appendix A7.3**. Detailed guidance and requirements are set out within *PAG Unit: 9.0 – Ex-Post Evaluation*.

The Project Manager shall provide the information necessary to complete the Ex-Post Evaluation to the person(s) undertaking the review within the time frame specified.

The information required to complete the Ex-Post Evaluation should be compiled as the Project progresses as otherwise it may take a significant amount of time to retrieve the information once the Project is complete. Persons compiling the information for the Ex-Post Evaluation should also be mindful of the fact that the person(s) undertaking the Ex-Post Evaluation may not be familiar with the Project.

The persons compiling the Ex-Post Evaluation should meet with the Project Manager and any other relevant personnel to discuss first-hand any issues arising from the Project.

TII compile a Lessons Learned database of findings arising from all Ex-Post Evaluations and periodically refer these findings to other TII sections to determine what changes may be required to TII's practices, procedures, standards and guidelines. The Lessons Learned Register shall therefore form an important part of the Ex-Post Evaluation.

### 7.1.11 Project Gate 7

The Project Manager shall ensure that deliverables required for Phase 7 are finalised and issued to TII at the end of Phase 7.

The Project Manager shall prepare a Gate Review Statement confirming that deliverables issued to TII meet the required level of Project maturity using the template in **Appendix A7.4.** This assurance shall be endorsed by the Contracting Authority Director of Services.

In accepting Project Gate 7, TII shall advise the Project Manager that no further monies can be drawn down under the Project grant. This marks the formal Close-out of the Project.

Following receipt of TII acceptance of Project Gate 7, the Project Manager shall notify the Finance Department of the Contracting Authority and advise them that no further monies may be drawn down from the Project grant.

Due to the implications for the acceptance of Project Gate 7 triggering the formal close out of the Project, the Project Manager shall be satisfied that there is no outstanding financial exposure for the Project as the Contracting Authority may be responsible for this expenditure if the Project grant is closed.

## 7.2 Deliverables

The deliverables for Phase 7 are listed below:

| Source | Deliverables |
|---|---|
| PMG | Project Completion Report |
| PMG | Ex-Post Evaluation |
| PMG | Project Lessons Learned Register |
| PMG | Phase 7 Gate Review Statement |

# 8 References

The following is a non-exhaustive list of references to TII Publications (Standards), TII Publications (Technical) and other miscellaneous references. It does not purport to be an exhaustive list of all relevant references or additional reading material.

## 8.1 TII Publications (Standards) References

DN-DNG-03065 - Road Drainage and the Water Environment

DN-ERW-03083 - Managing Geotechnical Risk

DN-GEO-03031 - Rural Road Link Design

DN-GEO-03036 - Cross Sections and Headroom

DN-REQ-03034 - Safety Barriers

DN-STR-03001 - Technical Acceptance of Road Structures on Motorways and Other National Roads

DN-TSM-03082 - Traffic Signs Approval Procedure

GE-ENV-01101 - The Management of Waste from National Road Construction Projects

GE-ENV-01102 - A Guide to Landscape Treatments for National Road Schemes in Ireland

GE-GEN-01005 - Departures from Standards and Specification

GE-STY-01024 - Road Safety Audit

PE-PMG-02001 - Road Safety Impact Assessment

## 8.2 TII Publications (Technical) References

National Roads Authority, 2005. Guidelines for the Assessment of Archaeological Heritage Impacts of National Road Schemes

National Roads Authority, 2005. Guidelines for the Assessment of Architectural Heritage Impacts of National Road Schemes

PE-PAG-02012 - Project Appraisal Guidelines for National Roads Unit 3.0 - Project Brief

PE-PAG-02013 - Project Appraisal Guidelines for National Roads Unit 4.0

PE-PAG-02014 - Project Appraisal Guidelines for National Roads Unit 5.0 - Transport Modelling Overview

PE-PAG-02016 - Project Appraisal Guidelines for National Roads Unit 5.2 - Data Collection

PE-PAG-02021 - Project Appraisal Guidelines for National Roads Unit 6.2 - Preparation of Scheme Costs

PE-PAG-02023 - Project Appraisal Guidelines for National Roads Unit 6.4 - Guidance on using COBALT

PE-PAG-02031 - Project Appraisal Guidelines for National Roads Unit 7.0 - Multi Criteria Analysis

PE-PAG-02032 - Project Appraisal Guidelines for National Roads Unit 7.1 - Project Appraisal Balance Sheet

PE-PAG-02034 - Project Appraisal Guidelines for National Roads Unit 9.0 - Ex-Post Evaluation

PE-PAG-02035 - Project Appraisal Guidelines for National Roads Unit 12.0 - Minor Projects (€5m to €20m)

PE-PAG-02037 - Project Appraisal Guidelines for National Roads Unit 14.0 - Minor Projects (€0.5m to €5m)

PE-PMG-02041 - Project Management Guidelines

## 8.3 Other Miscellaneous References

Arterial Drainage Act, 1945

Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, 2017. Code of Practice for Archaeology agreed between the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Transport Infrastructure Ireland

Department of Environment, Community and Local Government, 2012. Spatial Planning and National Roads, Guidelines for Planning Authorities

Department of Transport, Tourism and Sport, 2016. Acquisition of Certain Lands for National Roads: Agreement between the Irish Farmers' Association (IFA), Transport Infrastructure Ireland (TII) and Department of Transport, Tourism and Sport (DTTAS)

Department of Transport - Traffic Signs Manual

Environmental Protection Agency, 2002. Guidelines on the information to be contained in Environmental Impact Statements

Environmental Protection Agency, 2003. EPA Advice Notes on Current Practice in the Preparation of Environmental Impact Statements

Environmental Protection Agency, 2018. Guidance on Soil and Stone By-products

Iarnród Éireann, 2018. CCE-TMS-310 Guidance on Third Party Works

Local Government Act 2001 (as amended)

Local Government (Water Pollution) Act 1977 (as amended)

National Roads Authority, 2004. Guidelines for the Treatment of Noise and Vibration in National Road Schemes

National Roads Authority, 2007. Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan

National Roads Authority, 2008. Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes

National Roads Authority, 2008. Environmental Impact Assessment of National Road Schemes – A Practical Guide

National Roads Authority, 2008. Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes

National Roads Authority, 2009. Guidelines for Assessment of Ecological Impacts of National Road Schemes

National Roads Authority, 2010. The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads

National Roads Authority, 2011. Guidelines for the Treatment of Air Quality during the Planning and Construction of National Road Schemes

National Roads Authority, 2014. Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes

Office of Public Works. A Guide to Applying for Consent under Section 50 of the EU (Assessment and Management of Flood Risks) Regulations SI 122 of 2010 and Section 50 of The Arterial Drainage Act, 1945

Ordnance Survey Ireland, 2008. Project planning for the transformation of geographic data from Irish Grid (IG) to Irish Transverse Mercator (ITM)

Planning and Development Act 2000 (as amended)

Planning and Development Regulations 2001 (as amended)

Planning and Development (Strategic Infrastructure) Act 2006

Roads Act 1993 (as amended)

Road Traffic Act 1961 (as amended)

S.I. No. 284/2016 - European Union (Award of Public Authority Contracts) Regulations 2016

Transport Act 1944 (as amended)

Transport Infrastructure Ireland Notes for Guidance on the Specification for Road Works (Manual of Contract Documents for Road Works)

Waste Management Act 1996 (as amended)

# Appendix A:

Appendices

## A0.1 Lessons Learned Register

| No. | Lesson | Further Action Required – Y/ N | Application to Future Projects |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |

## A0.2 Document Register

| No. | Date | From/ To | Subject | Doc. Ref. | File Location | Reply Required Y/ N | Reply Ref. |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |

*Sample Template, Collaboration and Content Management Software may be utilised.*

## A0.3 Decision Register

| No. | Decision Made/ Milestone/ Deliverable/ Related Items | Decision Approved Y/ N | Date | TII Document Reference, if applicable | Source File Reference/ Location | Follow up Action Required Y/ N |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

### A0.4 Progress Report

Items to be included within the Progress Report shall include, but are not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | Progress Update. | |
| 2 | Finances. | |
| 3 | Programme. | |
| 4 | Stakeholder Management. | |
| 5 | Health and Safety. | |
| 6 | Risk Management. | |

## A0.5 Project Information Summary Notices (PISN)

Items to be included within the PISN shall include, but are not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | Project Name. | |
| 2 | PRS Number. | |
| 4 | Project Description. | |
| 5 | Project Aims and Objectives. | |
| 6 | Project Status. | |

## A0.6 Project Dossier

Items to be included within the Project Dossier shall include, but are not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | Drawings or documentation prepared in relation to the Project, relating to the current Project or previous iterations. | |
| 2 | Project appraisal, design, or environmental evaluation documentation prepared in relation to the Project, relating to the current Project or previous iterations. | |
| 3 | Output information from previous planning applications or interactions with planning authorities, If applicable. | |
| 4 | Details of proposed service diversions, if any, and existing service information, if available. | |
| 5 | Ground Conditions data. | |
| 6 | Topographical survey data – Digital Terrain Model, control stations, proof surveys etc. | |
| 7 | Environmental survey data and reporting, relating to the current Project or previous iterations | |
| 8 | Archaeological data - results of intrusive and non-intrusive surveys, and any other available reports. | |
| 9 | Information on planning applications. | |
| 10 | Compulsory acquisition of land documentation, if applicable. | |
| 11 | Road safety reports. | |
| 12 | Approvals – OPW Section 50 consents, TII Structures Approvals, CIE Railway Approvals etc. | |
| 13 | Health and Safety documentation. | |

## A0.7 Phase 0 Gate Review Statement

[On Sponsoring Agency Letterhead]

Transport Infrastructure Ireland
Parkgate Business Centre
Parkgate Street
Dublin 8
D08 DK10

*[Insert Date]*

Attn: *[Insert relevant TII Regional Manager Name]*

Re: *[Insert Project Name]*

A Dhuine Uaisle,

We refer to the above referenced national road Project.

*[Insert Sponsoring Agency Name]* hereby confirm the following:

1. [Insert Sponsoring Agency Name] has completed in full all of the processes required in the TII Project Management Guidelines for Phase 0 (Scope and Strategic Assessment).
2. The Strategic Assessment Report has been prepared and submitted to Transport Infrastructure Ireland for your records.
3. The PISN has been prepared and submitted to Transport Infrastructure Ireland for your records.

Accordingly, [Insert Sponsoring Agency Name] request Transport Infrastructure Ireland approval to the following:

1. Procurement of Technical Advisors to progress the above referenced national road Project for Phase(s)____, as agreed, to a maximum of Phase 4 of the TII Project Management Guidelines; and
2. Progression of the above referenced national road Project from Phase 0 (Scope and Strategic Assessment) to Phase 1 (Concept and Feasibility) of the TII Project Management Guidelines.

Is mise le meas,

*[Sponsoring Agency Director of Services]*

## A1.1 Constraints, Risks and Opportunities Study

The outline of Items to be considered as part of the Constraints, Risks and Opportunities Study include, but are not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | **Natural Constraints, Risks and Opportunities**<br>**Natural constraints are those which are naturally occurring landscapes and features.**<br>Ecological Constraints:<br>• The specific objective of the ecological constraints study is to identify the international, national, county, and local constraints that must be considered for the proposed Project.<br>• Refer to the TII Guidelines for Assessment of Ecological Impacts of National Road Schemes.<br>• Refer to TII Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes.<br>• Consult appropriate bodies to collate information on ecological constraints, these can include but are not limited to the following:<br>– National Parks and Wildlife Service;<br>– Inland Fisheries Ireland;<br>– BirdWatch Ireland;<br>– Bat Conservation Ireland;<br>– Vincent Wildlife Trust; and<br>– Other Stakeholders as required.<br>Geology, Hydrology and Hydrogeology:<br>• Refer to TII Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes.<br>• Consult appropriate bodies to collate information on geology, hydrology and hydrogeology constraints, these can include but are not limited to the following:<br>– Ordnance Survey Ireland;<br>– Geological Survey of Ireland;<br>– Teagasc;<br>– Environmental Protection Agency;<br>– Office of Public Works;<br>– Inland Fisheries Ireland;<br>– Publically available ground investigation data;<br>– Previous studies;<br>– National Parks and Wildlife; and<br>– Other Stakeholders as required.<br>Landscape and Visual:<br>• Refer to TII Guidelines on the Implementation of Landscape Treatments on National Road Schemes in Ireland<br>• Refer to TII A Guide to Landscape Treatments for National Road Schemes in Ireland | |

| No. | Item | ✓ |
|---|---|---|
| | • Consult appropriate bodies to collate information on landscape and visual constraints; these can include but are not limited to:<br>– Local Authorities; and<br>– National Inventory of Architectural Heritage.<br>• Consider topographical data, including historical mapping. | |
| 2 | **Artificial Constraints, Risks and Opportunities**<br>Land Use and Planning:<br>• Consult appropriate bodies to collate information on Land Use and Planning, these can include but are not limited to:<br>• National, Regional, and Local Planning Policy;<br>• Previous studies;<br>• Central Statistics Office data; and<br>• Proposed and Planned developments per Local Authority development plan, national planning framework etc.<br>Engineering:<br>• Consider engineering and infrastructural constraints; these can include but are not limited to:<br>• Topography and landscape;<br>• Rivers and the coastal domain;<br>• Roads, railways, public transport, ports, airports etc.;<br>• Consider safety implications of the Project;<br>• Refer to DoECLG (2012) Spatial Planning and National Roads, Guidelines for Planning Authorities; and<br>• Waste, refer to TII Guidelines for the Management of Waste from National Road Construction Projects and EPA Guidance on Soil and Stone By-products.<br>Cultural Heritage (including Archaeology and Architectural Heritage):<br>• Consider recorded archaeological, architectural and cultural heritage sites and areas of archaeological or architectural potential;<br>• Refer to Record of Protected Structures;<br>• Refer to Record of Monuments and Places (RMP); and<br>• Refer to National Inventory of Architectural Heritage.<br>Material Assets – Agriculture:<br>• Identify agricultural constraints.<br>• Consult appropriate bodies to collate information on agricultural constraints, these can include but are not limited to:<br>• Central Statistics Office;<br>• Environmental Protection Agency; and<br>• Other Stakeholders as required.<br>Material Assets – Non-Agriculture:<br>• Consider utility constraints such as gas, water, electricity, telecommunications; and | |

| No. | Item | ✓ |
|---|---|---|
| | • Consider built environment constraints.<br>Air Quality and Climate:<br>• Refer to TII Guidelines for the Treatment of Air Quality during the Planning and Construction of National Road Schemes.<br>• Consult appropriate bodies to collate information on air quality and climate constraints, these can include but are not limited to:<br>• Environmental Protection Agency;<br>• Local Authorities; and<br>• Other Stakeholders as required.<br>Noise and Vibration:<br>• Refer to TII Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes.<br>• Refer to TII Guidelines for the Treatment of Noise and Vibration in National Road Schemes.<br>• Consult appropriate bodies to collate information on noise and vibration constraints, these can include but are not limited to:<br>• Environmental Protection Agency;<br>• Local Authorities; and<br>• Other Stakeholders as required.<br>Human Beings:<br>• The purpose of examining Human Beings constraints is to identify locations where impacts on human beings and communities could potentially occur. This can include, but is not limited to, examining the impacts on the economy, business, tourism, amenities, the views of public bodies and local interest groups, and community facilities and the like.<br>• Refer to TII Environmental Impact Assessment of National Road Schemes – A Practical Guide.<br>• Refer to EPA Advice notes on Current Practice in the Preparation of Environmental Impact Statements/ Environmental Impact Assessments.<br>• Refer to EPA Guidelines on the information to be contained in Environmental Impact Statements/ Environmental Impact Assessments.<br>• Consult appropriate bodies to collate information on Human Beings constraints. These can include but are not limited to:<br>o Environmental Protection Agency;<br>o Local Authorities; and<br>o Other Stakeholders as required. | |

| No. | Item | ✓ |
|---|---|---|
| 3 | **External Parameters**<br>• Funding and Scope<br>• Construction Phasing<br>• Required Levels of Service<br>• Technical Standards (Design Speeds, Road Type etc.)<br>• Access Control<br>• Policy Documents<br>• Procedural and Legal Requirements | |
| 4 | **Inter-Relationships:**<br>Whilst undertaking the Constraints, Risks and Opportunities Study it is necessary to consider the divisions above in parallel. This is necessary as constraints in the divisions above are interrelated and indeed dependent on one another. | |

## A1.2 Duties of the Project Liaison Officer

The duties of the Project Liaison Officer include, but are not limited to, the following:

| Ref. | Description of Duties | |
|---|---|---|
| 1 | The duties of the Project Liaison Officer shall include, but are not limited to, the following:<br>• Provide information to stakeholders affected by the Project in relation to, inter alia, proposed landtake, proposed accommodation works and the statutory processes e.g. by providing maps and information published by TII.<br>• Agree access to privately owned lands for Contractors carrying out enabling works and surveys (both intrusive and non-intrusive) as part of the Project. Adequate written notice (14 days in accordance with the IFA/DOE/TII Agreement) shall be given to affected stakeholders.<br>• In instances where access to lands cannot be obtained by agreement, make the necessary provisions to exercise the Local Authority's legal entitlement to access lands pursuant to Section 78 of the Roads Act 1993, as amended.<br>• Confirm, in writing where necessary, to affected stakeholders that Contractors acting on behalf of the Local Authority to carry out the above works have the necessary insurance in place to indemnify the stakeholders in the event of personal injury or material damage.<br>• In the case of intrusive surveys (e.g. ground investigation, archaeological test trenching etc.), determine the extent and quantum of compensation due to each affected stakeholder and recommend payments to be made by the Local Authority.<br>• Agree, as soon as possible, the nature and extent of accommodation works required for each affected stakeholder for inclusion in the Project design and/or environmental evaluation.<br>• Assess the accuracy of land ownership records held by the Local Authority and confirm these records with individual stakeholders. Attention should be given to determining private rights-of-way and other burdens which may be affected by the Project and may require inclusion in the compulsory acquisition of land schedule.<br>• Make all reasonable enquiries to establish the identity of landowners where no reliable records exist (e.g. unregistered land).<br>• Act as the primary point of contact/ intermediary in dealings between the main roadworks contractor and affected stakeholders in areas such as access, disruption to services and disturbance/ nuisance during construction.<br>• Ensure that any environmental evaluation mitigation measures relating to land and property are implemented.<br>• Ensure that stakeholders have reasonable access to their lands at all times during the construction of the Project.<br>• Ensure, in conjunction with the Project Manager, if separate, that the necessary approvals are in place to serve the statutory notices (Notice to Treat, Notice of Entry) within the specified time limits.<br>• Maintain accurate records of the Date of Entry by the Local Authority onto scheduled lands and advise the local authority of the total period, if any, for which interest is payable (Date of Land Agreement – Date of Entry = total number of days for which interest is payable).<br>• Ensure that pre-construction surveys on properties and monitoring of wells during construction are carried out to the satisfaction of both the Local Authority and the affected stakeholder.<br>• Assist the property valuation advisor and the Local Authority legal team in cases where the matter of compensation for compulsory acquisition of land has been referred to arbitration. | |

| Ref. | Description of Duties | |
|---|---|---|
| 2 | In addition to the above, in cases where two or more local authorities are affected by the Project, the PLO shall have the following duties in relation to the Local Authorities that do not fulfil the role of Sponsoring Agency (Lead Local Authority):<br>• Inform the Local Authorities of progress on the Project and provide such information necessary for these Local Authorities to make informed decisions.<br>• Co-ordinate arrangements between Local Authorities (e.g. Section 85 agreements, statutory processes, compulsory acquisition of land reports etc.).<br>• Agree accommodation works with the Local Authorities.<br>• Submit Land Agreements to the Local Authorities for approval. | |

### A1.3 Procurement File

An outline of items for a Procurement File shall include, but are not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | Include PEP schedule of programmed procurement. | |
| 2 | Authorisation to proceed to pre-qualification/ seek expressions of interest/ tender (e.g. Letter of authorisation or extract from Steering Committee Meeting etc.). | |
| 3 | Contract notice in OJEU. | |
| 4 | Newspaper advertisements, website advertisements etc. (including clearly displayed date of publication). | |
| 5 | Procurement programme/ timetables together with changes and updates. | |
| 6 | All information downloadable from e-tenders or sent to applicants (e.g. suitability questionnaire and other attached/ published information). | |
| 7 | Record of contacts/ communications from/ to all interested parties (e.g. correspondence, phone calls, emails and e-tenders record of interest). | |
| 8 | Pre-qualification assessment procedures and methodology. | |
| 9 | All pre-qualification queries from applicants. | |
| 10 | All circulars/ bulletins/ notices published or issued. | |
| 11 | Pre-qualification submissions opening report. | |
| 12 | All communications and arrangements for pre-qualification assessment and/or interviews. | |
| 13 | All communications with applicants regarding pre-qualification assessments and/or interviews. | |
| 14 | Pre-qualification assessment/ shortlisting report signed by assessment board including relevant marking sheets, as required by assessment procedures. | |
| 15 | Authorisation to proceed to tender phase. | |
| 16 | Letters to unsuccessful applicants. | |
| 17 | Correspondence from/ to unsuccessful applicants. | |
| 18 | Letters of invitation to tender to shortlisted candidates/ Tenderers. | |
| 19 | All tender information issued to Tenderers. | |
| 20 | All communications to/ from Tenderers (including correspondence, emails, records of phone calls etc. | |
| 21 | All tender queries received from candidates/ Tenderers. | |
| 22 | All tender circulars/ bulletins/ memoranda/ notices issued to candidates/ tenders. | |
| 23 | All responses to tender queries not included in circulars (e.g. commercial in confidence responses). | |

| No. | Item | ✓ |
|---|---|---|
| 24 | Tender assessment procedures and methodology including independent arithmetical check, if required. | |
| 25 | Tender submissions opening report/ local authority tender opening procedure. | |
| 26 | Communication and arrangements for tender assessment and/or interviews. | |
| 27 | Records of all post tender clarifications and communications with candidates/ Tenderers. | |
| 28 | Record of marking project including marks awarded and debriefing notes. | |
| 29 | Tender assessment report including all supporting documentation in accordance with agreed tender assessment methodology. | |
| 30 | Local authority letter of recommendation and Managers Order. | |
| 31 | Authorisation to proceed to award. | |
| 32 | Letters to apparently unsuccessful candidates/ Tenderers. | |
| 33 | All communications to/ from unsuccessful candidates/ Tenderers. | |
| 34 | Letter of intent/ acceptance to successful candidate. | |
| 35 | All correspondence to/ from successful candidate regarding conditions of letter of intent/ acceptance (insurance, tax clearance etc.). | |
| 36 | Extract of signed pages from signed contract when available. | |
| 37 | Note of location of original signed contract. | |
| 38 | Contract award notice in OJEU. | |
| 39 | Record of all payments made. | |
| 40 | Approvals for all expenditure in excess of the tendered amount, to include details of compensation events, variations, agreed claims etc. | |

### A1.4 Phase 1 Feasibility Report

A sample template Phase 1 Feasibility Report for the Project is as follows:

| No. | Item | ✓ |
|---|---|---|
| 0 | Executive Summary. | |
| 1 | Introduction, Project Background and Description. | |
| 2 | Definition of Study Area. | |
| 3 | Baseline Review of Study Area. | |
| 4 | Constraints, Risks and Opportunities Study. | |
| 5 | Investment Rationale and Strategic Role. | |
| 6 | Project Objectives. | |
| 7 | Assessment Framework. | |
| 8 | Long-List of Options: Assessment against Project Objectives . | |
| 9 | Logic Path Modelling. | |
| 10 | Conclusions. | |

### A2.1 Suggested Potential Stakeholders

A list of suggested potential stakeholders includes, but is not limited to, the following:

| Item | ✓ |
|---|---|
| • National Transport Authority<br>• Local Authorities<br>• Road Safety Authority<br>• Inland Fisheries Ireland<br>• Central Fisheries Board<br>• Office of Public Works<br>• Waterways Ireland<br>• Environmental Protection Agency<br>• National Parks and Wildlife Service<br>• BirdWatch Ireland<br>• Bat Conservation Ireland<br>• Vincent Wildlife Trust<br>• Bord na Móna<br>• National Tourism Development Authority (Fáilte Ireland)<br>• Iarnród Éireann<br>• Commission for Railway Regulation<br>• An Garda Síochána<br>• Fire Services<br>• Ambulance Services<br>• The Arts Council<br>• An Taisce — the National Trust for Ireland<br>• National Heritage Council<br>• Irish Aviation Authority<br>• Gas Networks Ireland<br>• Eirgrid<br>• Commission for Energy Regulation<br>• Irish Water<br>• Electricity Supply Board<br>• ESB International<br>• BT<br>• Eir<br>• E-Net<br>• Three<br>• Virgin Media<br>• SSE Airtricity | |

## A2.2 Stage 1 – Preliminary Options Assessment (Engineering and Environmental)

Items to be considered as part of the Stage 1 – Preliminary Options Assessment (Engineering and Environmental) shall include, but are not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| | **Engineering Assessment Criteria** | |
| 1 | Traffic assessment including proposed cross-section and existing traffic conditions | |
| 2 | Evaluation of compliance with technical standards - TII Publications, for example in the case of road Projects compliance with minimum horizontal radii, maximum vertical gradients, relaxations, departures etc. | |
| 3 | Examination of junction strategy, access control and interaction with existing transportation networks. | |
| 4 | Examination of structures - river, road and rail bridges, culverts, underpasses and other structures, and their clearances and maintenance requirements. | |
| 5 | Geology and its potential impacts on construction (underlying ground conditions, sensitive areas / areas of poor ground including karst, caves, peat etc.).<br>Note, it may be necessary to undertake ground investigations works to assess these conditions. | |
| 6 | Groundwater - aquifers, springs, wells and their vulnerability to earthworks) | |
| 7 | Earthworks - cut and fill volumes, comparative earthworks balance, maximum depth of cuttings and height of embankments. | |
| 8 | Road Safety Impact Assessment (assessment of options). | |
| 9 | Drainage - carriageway drainage, crossing of watercourses, specific drainage requirements through high vulnerability areas. | |
| 10 | Construction - comparative ease of construction and traffic management. | |
| 11 | Service conflicts - electricity, telecommunications, gas, broadband, cable TV, water, wastewater etc. | |
| 12 | Comparisons on land and property – landtake, land severance, land use, residential acquisitions, accommodation works requirements. | |
| | **Environmental Assessment Criteria** | |
| 1 | Ecology | |
| 2 | Soils and Geology | |
| 3 | Hydrogeology | |
| 4 | Hydrology | |
| 5 | Landscape and Visual | |
| 6 | Cultural Heritage including Archaeology and Architectural Heritage | |
| 7 | Material Assets – agricultural | |
| 8 | Material Assets – non-agricultural | |
| 9 | Air Quality and Climate | |

| No. | Item | ✓ |
|---|---|---|
| 10 | Noise and Vibration | |
| 11 | Human Beings and Human Health | |
| 12 | Interrelationship Considerations | |
| | **Economy Assessment Criteria** | |
| 1 | Preparation of the Option Comparison Estimate in line with TII CMM | |

### A2.3 Non-Statutory Public Consultation

An outline of Items to be considered as part of the non-statutory public consultations may include, but are not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | Provide briefings on options/ preferred option/ update to Local Authority management and elected members of affected Local Authorities in advance of the public consultation. | |
| 2 | Notify stakeholders affected by the options/ preferred option/ update in advance of the public consultation. | |
| 3 | Notify public bodies in advance of the public consultation. | |
| 4 | Arrange a suitable venue for the public consultation, near to the Project. On larger projects, multiple venues may be required. | |
| 5 | Arrange for sufficient display material, display boards, projectors as required to be at the venue. | |
| 6 | Prepare a brochure for the Project and if required, a questionnaire. Set up a business reply (freepost) and dedicated Project e-mail address for return of completed questionnaires.<br>On some projects, it may be desirable to establish an online tool via which stakeholders may examine Project documentation and comment on the proposed options being examined or the preferred solution. | |
| 7 | Prepare a presentation to run during the public consultation. | |
| 8 | Prepare press releases and public notices in advance of the public consultation. | |
| 9 | Inform the TII communications unit and submit copies of brochures, press releases, and any other publicity information. | |
| 10 | Arrange for Technical Advisors and Sponsoring Agency personnel to attend and ensure that staff are fully briefed on the Project. | |
| 11 | Ensure all display material, brochures, questionnaires and other material is in place before opening the venue to the public. | |
| 12 | Ensure that Local Authority offices and areas offices have additional copies of display material for inspection, if required. | |
| 13 | Prepare an attendance sheet for the venue so that the number of people who attended can be recorded. | |
| 14 | Ensure that provision is made for returning completed questionnaires at the venue. | |

## A2.4 Phase 2 Options Report

A sample of a Phase 2 Options Report is outlined below:

| No. | Item | ✓ |
|---|---|---|
| 0 | **Executive Summary:**<br>Summary of the Options Report. | |
| 1 | **Introduction and Description:**<br>• Description of the Project including an overview of Project development to date.<br>• Purpose of the Options Report.<br>• Project operational goals and design strategies. | |
| 2 | **Project Context, Need, Strategic Fit and Priority:**<br>• Strategic fit and priority of Project within Approving Authority programme/ policy.<br>• Development policy - national, regional, and local (reference to policy and development plans).<br>• Project specific need. | |
| 3 | **Description of Options:**<br>• Explanation of process conducted at Phase 1 (Feasibility Report) to sift the longlist of the options and create the shortlist of options which are the focus of detailed appraisal in the PBC. This should include a definition of the 'Do-Nothing' and 'Do-Minimum' options. | |
| 4 | **Transport Assessment Approach and Analysis Tools:**<br>• Describe the analysis tools used to provide evidence on the PBC: transport modelling, GIS, etc.<br>• Describe the assessment approach and methods used in the PBC: TAA, MCA, CBA, CEA. | |
| 5 | **Stage 1 - Preliminary Options Assessment:**<br>• Description of Options identified.<br>• Findings from first Public Consultation, including responses from the public.<br>• Engineering assessment.<br>• Road Safety Impact Assessment.<br>• Environmental assessment.<br>• Economy assessment (Option Comparison Estimate).<br>• Assessment matrix detailing engineering, environment, and economy.<br>• Recommendation on refined number of options to proceed to Stage 2. | |
| 6 | **Stage 2 - Project Appraisal Matrix:**<br>• Description of the refined number of Options.<br>• Findings from second Public Consultation, if held.<br>• Update of the Option Comparison Estimate.<br>• Transport Appraisal Framework assessment. | |

| No. | Item | ✓ |
|---|---|---|
| | • Recommendation on a preferred option, including, where necessary, a statement justifying the selection of the option. | |
| 7 | **Stage 3 - Preferred Option and Preparation of PABS:**<br>• Project Appraisal Balance Sheet (PABS) of the preferred option.<br>• Summary of Road Safety Audit Stage F (Part 2), if required.<br>• Recommendation that referred option should form the basis of Phases 3.<br>• Information on the design standards used.<br>• Demand projections for the preferred options. | |
| | **Appendices:**<br>• Environmental Evaluation Reporting (Constraints and Options).<br>• Risk and Value Management.<br>• Summary of Public Consultations Feedback, if held.<br>• Road Safety Audit Stage F Report (Phase 1 and 2). | |

### A3.1 Compulsory Acquisition of Land Mapping

The compulsory acquisition of land mapping shall include, but is not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | Finalise the road geometry; horizontal, vertical and cross-section profiles for all mainline, side road, and junction alignments | |
| 2 | Make provision for a 3m wide working space (measured from the edge of side slopes or from the edge of open drains, where provided) | |
| 3 | Take account of fencing requirements when determining the boundary line | |
| 4 | Finalise the design of all drainage outfalls, culverts, headwalls (including provision to locate outside clear zone), oil and petrol Interceptors and attenuation ponds (including maintenance strips) | |
| 5 | Finalise the locations and extent of all accommodation works, including access tracks and underpasses, including associated ramps and drains, ensure that they have been properly designed to take account of existing topographical conditions. For access tracks in excess of 300 metres in length, allow for passing bays every 250 metres. | |
| 6 | Agree all service diversions with affected utility companies. Include sufficient lands for service diversions (e.g. 'build-outs' for cable stays, trenches for underground utilities etc.) | |
| 7 | Carry out a detailed land ownership search with the land registry (including online searches via the land registry website www.landdirect.ie) | |
| 8 | Check all rights-of-way (public and private), wayleaves and other burdens which may need to be included in the compulsory acquisition of land schedules | |
| 9 | In the case of unregistered lands, make all reasonable enquiries (e.g. Checks with registry of deeds and with companies register, landowner interviews post notification on lands etc.,) to establish ownership | |
| 10 | Confirmation by the Project Liaison Officer of the accuracy or otherwise of the land ownership records with individual landowners | |
| 11 | Identify all landholdings (e.g. holdings comprising two or more folios) and identify all severed lands necessary for inclusion in the landtake | |
| 12 | Include sufficient land at tie-ins to provide adequate sight distance | |
| 13 | Issue a letter to affected landowners to check accuracy of the compulsory acquisition of land schedules | |
| 14 | Following completion of the environmental evaluation, include sufficient lands in the proposed landtake to ensure that the mitigation measures outlined in the Schedule of Environmental Commitments can be implemented | |
| 15 | Avoid including unnecessary landtake (particularly house curtilage) in the compulsory acquisition of land documentation | |
| 16 | Allow for sufficient lands to be included at the cut/ fill interface in order to avoid 'pinch points' during construction | |

| No. | Item | ✓ |
|---|---|---|
| 17 | Allow sufficient lands to be provided for the provision non-motorised user facilities, where required | |
| 18 | Allow sufficient lands to be provided for the provision of large traffic signs, including foundations in verges and lateral clearances, particularly for signs located on the approach to grade- separated junctions and on roundabout splitter islands | |
| 19 | Allow sufficient lands to be provided to meet, insofar as possible, the concept of forgiving roadsides and the provision of a clear zone adjacent to the road | |
| 20 | In instances where it is proposed to include houses as 'unfit for human habitation ...', ensure that an appropriate certificate has been obtained from a suitably qualified Health Inspector together with a Certificate from an Engineer stating that the house cannot be rendered fit for human habitation at reasonable expense | |
| 21 | Any lands that are only required temporarily for construction or other purposes, should be clearly identified as separate plots on the compulsory acquisition of land mapping and noted as temporary within the schedules | |
| 22 | The extent of schedule 4 lands (land in respect of which it is proposed to prohibit, close, stop up, remove, alter, divert or restrict a means of direct access to or from the proposed protected road or motorway) which are not included within the compulsory acquisition of land boundary shall only extend to the nearest natural boundary of the folio adjacent | |

## A3.2 Principal Geometric Parameters Report

A sample template for the Principal Geometric Parameters Report for the Project is as follows:

| Design Heading | Design Element | Design Requirement |
|---|---|---|
| **Road Type** | Road Type<br>Road Cross Section<br>Traffic Type | As per relevant Standard.<br>Refer to TII Publications. |
| **Design Speed** | Mandatory Speed Limit<br>Design Speed<br>Alignment Constraint (Ac)<br>Layout Constraint (Lc) | |
| **Sight Distance** | Stopping Sight Distance<br>Full Overtaking Sight Distance | |
| **Horizontal Alignment** | Road Camber<br>Superelevation Range<br>Min. R (no superelevation) Desirable Minimum R<br>1-Step below Des. Min. R | |
| **Vertical Alignment** | Desirable Minimum Crest K<br>Desirable Minimum Sag K<br>1-Step Below Des. Min. K<br>Absolute Minimum Vertical Curve length<br>Desirable Max. Gradient<br>Maximum Gradient with Relaxation<br>Minimum Gradient | |
| **Cross-Section and Headroom** | Cross-Section<br>Headroom (Road over Road)<br>Headroom (Road over Rail) | |
| **Junctions** | Permitted Junction Types for Type 1 Single Carriageway | |

### A3.3 Junction Strategy Report

A sample template Junction Strategy Report for the Project is as follows:

| No. | Item | ✓ |
|---|---|---|
| 1 | **Introduction:**<br>• Project description summarising preferred option and road type selected for the Project.<br>• Summary of the basis for selection of the road type for the Project<br>• Principal function of proposed Project (e.g. town bypass, etc.)<br>• Statement of policy regarding access to national road Projects as outlined in TII's Policy Statement on Development Management and Access to National Roads | |
| 2 | **Interface with existing Road Network:**<br>• List all existing public roads which are affected by the Project from the start to end terminals and confirm whether such roads are of national, regional or local road status.<br>• Confirm the approximate distance between existing roads which are intersected by the Project as measured along the proposed mainline | |
| 3 | **Design Considerations:**<br>• Road type and permitted junction types as outlined in DN-GEO-03041<br>• Access control as outlined in TII Policy together with any Project specific policy (e.g. a primary access point to/ from the Project and a nearby town)<br>• In the case of dual carriageways, requirements in respect of crossing the central reserve.<br>• Other design requirements such as the provision of tapers and slip lanes (both merging and diverging), splitter islands, visibility envelopes etc. | |
| 4 | **Economics:**<br>• Provide a summary of all costs for various junction options. | |
| 5 | **Proposed Junction Strategy:**<br>• Provide a summary of proposed junctions along the Project, existing roads which are to be bridged or stopped up with no access to the mainline should also be included in the summary.<br>• Where appropriate, outline any junctions options considered.<br>• Where appropriate, provide a cost comparison of the option considered. | |
| 6 | **Conclusions and Recommendations:**<br>• Confirm that junction strategy has been prepared having regard to exiting design standards and policy documents.<br>• Confirm that the junction strategy as proposed is the most cost-effective solution in meeting access requirements for the Project.<br>• Recommend that the proposed junctions as described above be approved | |
| 7 | **Appendices:**<br>Drawings including:<br>• Project map | |

| No. | Item | ✓ |
|---|---|---|
| | • Existing road network<br>• Junction locations<br>• Junction layout plans<br>• Layout of options considered.<br>• Where appropriate traffic data including:<br>  – AADT of minor roads<br>  – AADT of major road<br>  – AADT of proposed junctions and confirmation that it is operating within standards | |

## A3.4 Future Maintenance Design Considerations

Design Considerations for future maintenance shall include, but are not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | **Road Pavement Materials:**<br>• Consider the whole life cost between various pavement materials.<br>• Consider issues pertinent to the repair and replacement of localised failures.<br>• Provide sufficient data about pavement design and construction to identify aspects likely to pose difficulty in future maintenance. | |
| 2 | **Specialist Materials:**<br>• Identify where materials/ products are of a non-standard or specialist nature and whether they have specialist maintenance requirements.<br>• Confirm whether Local Authority or other maintenance crews require specialist training for such materials or products | |
| 3 | **Landscaped and Planted Areas:**<br>• Confirm that proposed grassed and planted areas are of a size and nature to be effectively maintained.<br>• Confirm that trees and large plants are positioned to avoid obstruction to visibility.<br>• Consider the fully-grown nature of the proposed landscaping, particularly in respect of future maintenance | |
| 4 | **Drainage:**<br>• Consider the maintenance requirements for drainage proposals (e.g. slotted drains, median drains, over the edge drains etc.)<br>• Confirm that proposed drainage features such as headwalls and interceptors are accessible for maintenance without the need for excessive traffic management | |
| 5 | **Safety Barriers:**<br>Consider whole-life cost of safety barrier systems including future maintenance/ replacement.<br>• Consider proposed safety barrier systems for consistency with adjacent/ existing systems.<br>• Confirm whether Local Authority or other maintenance crews require specialist training for the proposed safety barrier systems.<br>• Confirm whether Local Authority are required to maintain a stock of spare parts for ongoing maintenance.<br>• Confirm whether proposed safety barrier systems have been designed so that damaged parts can be replaced easily | |

| No. | Item | ✓ |
|---|---|---|
| 6 | **Traffic Management**<br>• Consider whether routine maintenance require specialist traffic management arrangements.<br>• Consider proposed layout configurations to facilitate multiple routine maintenance activities under a single traffic management arrangement.<br>• Consider whether traffic management arrangements required for routine maintenance have an adverse impact on road surfaces. | |
| 7 | **Maintenance Access**<br>• Consider design of safe and convenient access for maintenance plant and personnel into the Project.<br>• Ensure median and verge widths are of a sufficient width to facilitate temporary traffic management signage. | |
| 8 | **Winter Maintenance**<br>• Consider design of proposed surface course in terms of maintenance requirements and their consistency with adjacent projects or other routes in the locality.<br>• Consider requirement for the provision of a weather station or relocation of an existing weather station from existing national route.<br>• Consider the requirement to protect the weather station and to provide access for maintenance without excessive traffic management.<br>• Consider proposed junction layouts and locations in order to provide optimum maintenance techniques. | |
| 9 | **Boundary Treatment**<br>• Consider design of boundary treatment to ensure that it is suitable for its environment, that it is suitable for existing ground conditions and that it requires little or no maintenance over its lifetime.<br>• Ensure that boundary treatment is accessible for maintenance/ replacement. | |
| 10 | **Intelligent Transport Systems (ITS)**<br>• Consider the location of ITS equipment to ensure it is protected and accessible without excessive traffic management.<br>• Consider the provision of sufficient service ducts and access chambers for ITS equipment and ensure that records of their location are maintained. | |
| 11 | **Signing and Road Furniture**<br>• Consider the design of signs, lighting standards and other upstanding road furniture to allow damaged poles, posts, columns etc. to be replaced easily. | |
| 12 | **Flood Management**<br>• Identify areas of high flood risk and provide for mitigation measures to be included in the Project as appropriate. | |

| No. | Item | ✓ |
|---|---|---|
| 13 | **Structures**<br>• Consider design of safe and convenient access for maintenance plant and personnel<br>• Consider whole life costs of structures | |
| 14 | **Whole Life Costs**<br>• Undertake whole life cycle assessment for the Project elements | |

## A3.5 Design Report

A sample template for the Design Report includes, but is not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| - | **Executive Summary**<br>• Brief summary of the Design Report | |
| 1 | **Introduction and Description**<br>• Brief description of the Project including an overview of Project development to date<br>• Purpose of the Design Report<br>• Project operational goals and design strategies<br>• Proposed construction procurement method (e.g. Employer Designed)<br>• Summary of Options Selection Process including the evaluation of options | |
| 2 | **Identification of Need**<br>• Road development policy - local, regional and national (if appropriate).<br>• Project specific need (national road traffic demands, completion of interurban link, removal of national road through traffic from urban bottlenecks etc.). | |
| 3 | **Transport Modelling, Road Type and Safety**<br>• Summary of findings of Transport Modelling Report, if completed<br>• Confirmation of Project level of service requirements<br>• Comparison with 'Do-Nothing' Scenario<br>• Confirmation of year of opening and design Year<br>• Forecast traffic flows for the design year<br>• Selection of road type (based on 'Incremental Analysis' assessment)<br>• Summary of safety assessment from Project Appraisal Balance Sheet (PABS) per the TII Project Appraisal Guidelines.<br>• Summary of the Road Safety Audit Stage 1 and 2 Report, including the project Team response and audit team acceptance.<br>• Summary of Health and Safety Risk Assessment of Project Design confirming that the Project can be constructed, operated and maintained in a safe manner. | |

| No. | Item | ✓ |
|---|---|---|
| 4 | **Geometry (including Relaxations and Departures)**<br>• Applicable technical standards (TII Publications)<br>• Confirmation of calculation/ determination of design speed<br>• Mainline cross section (dimensions per relevant road construction detail including side slopes and working space requirements)<br>• Summary of horizontal alignments<br>• Summary of vertical alignments<br>• Reproduction of approved principal geometric parameters report<br>• Confirmation of stopping sight distance along the Project<br>• For single carriageways, confirmation of Full Overtaking Sight Distance (FOSD) and calculation of overtaking value<br>• Summary of relaxations and departures for standards (including approvals, where necessary) | |
| 5 | **Strategy for Junctions and Side Roads**<br>• Overview of Junction Strategy for the Project (as per the Approved Junction Strategy Report)<br>• Tabular Summary of side roads<br>• Tabular summary of geometric parameters for each side road<br>• Tabular summary of interchanges (slip lanes, roundabouts etc.)<br>• Tabular summary of geometric parameters for each interchange | |
| 6 | **Ground Investigation, Soil Classification and Earthworks Balance Optimisation**<br>• Overview of geotechnical conditions along the Project<br>• Tabular summary of ground investigation contract<br>• Overview of soil classification along the Project based on ground investigation contract.<br>• Identification of areas of soft ground requiring infill and areas where additional acceptable material can be sourced within the landtake.<br>• Tabular summary of earthworks balance optimisation. | |
| 7 | **Drainage**<br>• Drainage overview<br>• Summary of carriageway drainage (including tabular summary of drainage design parameters)<br>• Summary of any Project specific flood alleviation proposals necessary to mitigate the risk of Project runoff in flood sensitive areas.<br>• Summary of any other drainage proposals (attenuation ponds, oil/ petrol interceptors etc.)<br>• Confirm that consents/ approvals have been obtained where necessary (e.g. OPW Section 50 consents for crossing of watercourses, Iarnród Éireann Letter of Initial Acceptance for crossing of railways etc.). | |

| No. | Item | ✓ |
|---|---|---|
| 8 | **Structures**<br>• Summary of design of bridges and culverts (including a schedule of culverts).<br>• Summary of principal structures on the Project (road, rail, river bridges etc.).<br>• Summary of minor structures (culverts, accommodation underpasses etc.).<br>• Where necessary, provide a justification for the provision of each structure.<br>• Confirm that structural designs were referred to TII Structures section for comment and that these comments have been incorporated into the design. | |
| 9 | **Pavement**<br>• Confirmation of pavement type (flexible, rigid, or composite)<br>• Pavement design load (million standard axles) and design life (years)<br>• Tabular summary of pavement design for mainline, side roads, slip roads and junctions | |
| 10 | **Services, Land Use and Accommodation Works**<br>• Overview of service conflicts along the Project<br>• Tabular summary of service conflicts for each of the principal service providers (ESB, telecom, Gas Networks Ireland etc.) together with a recommendation on diversion of services.<br>• Summary of compulsory acquisition of land requirements for the Project<br>• Summary of land use affected landowners and requirements to acquire residential properties and/or other buildings.<br>• Tabular summary of proposed accommodation works including accesses, underpasses, access tracks etc. | |
| 11 | **Cost Estimation**<br>• Summary of Minor Project Estimate (TC1) for the Main Construction Contract element of the Project determined in accordance with the TII Cost Management Manual.<br>• Confirmation that a Risk Analysis Report has been prepared for the Project. | |
| 12 | **Economic Assessment**<br>• Overview and tabular summary of results of Cost-Benefit Analysis carried out in accordance with the TII Project Appraisal Guidelines. | |

| No. | Item | ✓ |
|---|---|---|
| 13 | **Conclusions and Recommendations**<br>• Confirmation that the Project meets TII requirements and that the need for the Project has been established.<br>• Confirmation that the Project, as designed, is able to cater for forecast design year traffic volumes.<br>• Confirmation that the Project may bring about a reduction in the frequency and severity of accidents.<br>• Confirmation that the Project has been designed in accordance with applicable standards and in accordance with policy documents.<br>• Confirmation that the Cost-Benefit Analysis has shown that the Project is economically viable and a worthwhile project to progress.<br>• Recommendation that the Project, as described in this Design Report, be approved so that it will form the basis for the compulsory acquisition of land and statutory processes to follow. | |
| 14 | **Appendices**<br>• Copy of approved Junction Strategy Report<br>• Copy of Road Safety Audit Stage 1 Report<br>• Copy of Road Safety Audit Stage 2 Report<br>• Copy of Preliminary Structures Reports together with approvals and consents as necessary.<br>• Copy of outcome of Peer Review Process including copy of Project Team Response, if required.<br>• Copy of Cost-Benefit Analysis Report, if completed. | |

## A3.6 Design Report Drawings

The Design Report Drawings should include, but are not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| - | • 000: Departures<br>• 000: Project Layout<br>• 100: Geometry<br>• 300: Fencing and Environmental barriers<br>• 400: Safety Fencing<br>• 500: Drainage<br>• 600: Earthworks<br>• 700: Pavement<br>• 1000: Kerbs, Footways, and Paved Areas<br>• 1200: Traffic Signs and Road Markings<br>• 1300: Lighting<br>• 1400: Electrical<br>• 1500: Information and Communication Technology<br>• 1700: Structures<br>• 2700: Services and Accommodation Works<br>• 3000: Additional Required Design Elements | |

## A3.7 Property Valuation Advisors Brief

The Brief for Property Valuation Advisors shall include, but is not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | Negotiate land agreements on behalf of the local authorities as part of the compulsory acquisition of land process, such negotiations to include meetings with landowners and/or their agents and to include wayleaves and rights-of-way as required. | |
| 2 | Consult with relevant bodies in matters relating to compulsory acquisition of land. | |
| 3 | Prepare valuations and compensation offers and assess compensation claims on behalf of the local authorities in accordance with the relevant TII, and other, circulars. | |
| 4 | Provide detailed breakdowns of monetary compensation which forms part of land agreements. | |
| 5 | Prepare reports for land agreements requiring the prior approval of Transport Infrastructure Ireland (typically for large value agreements as advised by the TII Land and Property Services section). | |
| 6 | Provide regular progress updates during the compulsory acquisition of land process of claims received, offers made, agreements reached, agreements outstanding etc. | |
| 7 | Advise the Project Manager in advance of compulsory acquisition of land of severed lands to be included in the compulsory acquisition of land schedule in lieu of reasonable access. | |
| 8 | Provide the Project Manager with expert advice dealing with land-related objections to the compulsory acquisition of land and participate in negotiations with landowners to seek a withdrawal of their objections, prior to or during the Statutory Processes. | |
| 9 | Provide expert advice on the nature, extent and cost of accommodation works required in order to minimise the impact of the Project on land holdings. | |
| 10 | Prepare a detailed land cost estimate prior to compulsory acquisition of land publication which will require the approval of the TII Land and Property Services section. | |
| 11 | Attend at meetings, prepare a brief of evidence and provide expert witness evidence as part of the statutory processes with respect to compulsory acquisition of land. | |
| 12 | Provide advice on serving of statutory notices (Notice to Treat and Notice of Entry). | |
| 13 | Participate in the risk assessment workshop to identify, assess and quantify the risk associated with Land and Compensation. | |
| 14 | Attend at meetings, provide expert advice in a timely manner on compulsory acquisition of land being referred to assessment/ arbitration (Chartered Institute of Arbitrators per IFA/ DOE/ TII agreement and/or High Court Reference Committee). | |
| 15 | Prepare all necessary reports including Précis of Evidence and unconditional offer and provide expert witness evidence at arbitration inquiries. | |

### A3.8 Legal Service Advisors Brief

The Brief for Legal Service Advisors with respect to compulsory acquisition of land issues shall include, but is not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | Prepare all necessary public and statutory notices associated with compulsory acquisition of land processes. | |
| 2 | Liaise with landowner legal representatives and complete all land transfers to the ownership of local authorities as part of the compulsory acquisition of land process. | |
| 3 | Oversee the appointment of Barrister(s) for compulsory acquisition of land and property arbitration as agreed with TII. | |
| 4 | Prepare and attend at statutory processes associated with compulsory acquisition of land processes and instruct the Barrister on behalf of the local authorities. | |
| 5 | Prepare and attend at property assessments and arbitrations (both Chartered Institute of Arbitrators and High Court Reference Committee) and instruct the Barrister on behalf of the local authorities. | |
| 6 | Prepare evidence in defence of the local authorities in the event of claims for liability as part of the main contract (e.g. personal injury, damage to property etc.). | |
| 7 | Prepare land transfers to landowners as part of an approved land disposal strategy in accordance with Section 183 of the Local Government Act, 2001. | |
| 8 | Prepare wayleave agreements and right-of-way extents, as required, for individual landowners. | |

## A3.9 Phase 3 Gate Review Statement

*[On Sponsoring Agency Letterhead]*

Transport Infrastructure Ireland
Parkgate Business Centre
Parkgate Street
Dublin 8
D08 DK10 *[Insert Date]*

Attn: *[Insert relevant TII Regional Manager Name]*

Re: *[Insert Project Name]*

A Dhuine Uaisle,

We refer to the above referenced national road Project.

*[Insert Sponsoring Agency Name]* hereby confirm the following:

1. *[Insert Sponsoring Agency Name]* has completed the processes required in the TII Project Management Guidelines for Phase 1 (Concept and Feasibility), Phase 2 (Options Selection) and Phase 3 (Design and Environmental Evaluation), including the Options Report, if prepared.
2. The Design Report has been prepared in accordance with the TII Project Management Guidelines and submitted to Transport Infrastructure Ireland for your records.
3. Environmental Deliverables and Statutory Process Documentation have been prepared, have undergone appropriate review and checking and meet the necessary quality standard for publication. Copies of the Environmental Deliverables and Statutory Process Documentation have been submitted to Transport Infrastructure Ireland for your records.
4. Minor Project Estimate (TC1) has been prepared and approved in accordance with the TII Cost Management Manual and have been submitted to Transport Infrastructure Ireland for your records.
5. The Project Appraisal Report has been prepared in accordance with the TII Project Appraisal Guidelines and demonstrates that the above referenced national road Project delivers value for money in accordance with the relevant TII PAG requirements. A copy of the Project Appraisal Report has been submitted to Transport Infrastructure Ireland for your records.
6. The Project Appraisal Report has been reviewed by the Approving Authority and the Approving Authority has issued approval for the above referenced national road Project to proceed to publication of Statutory Orders.

7. A copy of the Approving Authority approval is attached to this letter.] or [The Project Appraisal Report has been submitted to TII (as Approving Authority for this Approval Point) at the same time as this Gate Review Statement for TII approval to proceed to publication of Statutory Orders.][4]
8. The Project Execution Plan has been updated and submitted to Transport Infrastructure Ireland for your records.

Accordingly, [Insert Sponsoring Agency Name] request Transport Infrastructure Ireland approval to the following:

1. Progression of the above referenced national road Project from Phase 3 (Design and Environmental Evaluation) to Phase 4 (Statutory Process) of the TII Project Management Guidelines.

Is mise le meas,

*[Sponsoring Agency Director of Services]*

[4] Delete as appropriate

## A4.1 Common Statutory Procedures

The following table outlines some common statutory processes that may be encountered during the development of a minor national road project and an outline of their legislative context. This appendix is not to be taken as a conclusive exposition of requirements and is in no way to be relied upon as a basis of advancing projects through respective statutory processes. The Project Manager shall obtain legal advice, as necessary, when determining the appropriate form of statutory processes (and interrelationships between statutory processes) and advancing the Project through the statutory processes as errors or omissions can potentially jeopardise Project success.

| Statutory Process | Legislative Context |
|---|---|
| Foreshore issues | • Foreshore Acts 1933 (as amended)<br>• Planning and Development Act, 2000 (as amended) |
| Development Consenting | • Planning and Development Act, 2000 (as amended)<br>• Roads Act 1993 (as amended)<br>• Various associated regulations (e.g. Planning and Development Regulations 2001 (as amended)) as prepared by the Irish legislature |
| Consent to constructing a bridge over a railway | • Roads Act 1993 (as amended)<br>• Railway Safety Act 2005 (as amended) |
| Consent to constructing a bridge over, or a tunnel under, a navigable waterway | • Roads Act 1993 (as amended).<br>• Bespoke legislation relating to navigable waterways and cross border projects |
| Consent to constructing a bridge over a watercourse or modifying or relocating a watercourse, embankment or other works (Section 9, Section 47, Section 50) | • Arterial Drainage Act 1945 (as amended). |
| Toll Project | • Roads Act 1993 (as amended). |
| Compulsory Land Acquisition | • Transport Act 1944 (as amended)<br>• Local Government Act 1960 (as amended)<br>• Housing Act 1966 (as amended)<br>• Planning and Development Act 2000 (as amended)<br>• Roads Act 1993 (as amended) |
| Waste licensing | • Environmental Protection Agency Act 1992 (as amended)<br>• Waste Management Act 1996 (as amended) |
| Water abstraction and discharge | • Local Government (Water Pollution) Act, 1977(as amended) |
| Harbour companies | • Harbours Act 1946 (as amended) |
| Regional Fisheries Board | • Fisheries Act 1980 (as amended). |

| Statutory Process | Legislative Context |
|---|---|
| Irish Aviation Authority | • Irish Aviation Authority Act 1993 (as amended).<br>• Aviation Regulation Act 2001 (as amended). |
| Designation of road as a clearway | • Road Traffic Act 1961 (as amended). |
| TEN-T Network | • Regulation (EU) 1316/2013 and 1315/2013 |
| Project Collaboration | • Local Government Act 2001 (as amended). |
| Environmental Matters (including derogation licencing, environmental appraisal, &c.). | • Directive 2009/147/EC (conservation of wild birds)<br>• Directive 79/409/EEC (Birds Directive)<br>• Directive 92/43/EEC (Habitats Directive)<br>• Planning and Development Act, 2000 (as amended)<br>• Roads Act 1993 (as amended)<br>• Directive 2000/60/EC (Water Framework Directive)<br>• Directive 2011/92/EU (assessment of the effects of certain public and private projects on the environment)<br>• Directive 2014/52/EU (assessment of the effects of certain public and private projects on the environment)<br>• Directive 2006/118/EC (protection of groundwater against pollution and deterioration)<br>• Water Services Acts 2007 (as amended)<br>• National Monuments Act 1930 to 2014<br>• Heritage Act 1995 (as amended)<br>• Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act, 1999 (as amended)<br>• Directive 2008/50/EC (Air Quality Directive)<br>• Directive (EU) 2016/2284 (reduction of national emissions of certain atmospheric pollutants). Refer also to Directive 2004/107/EC<br>• Directive 2001/81/EC (national emission ceilings for certain atmospheric pollutants)<br>• Directive 2002/49/EC (Environmental Noise Directive)<br>• Directive 96/61 (integrated pollution prevention and control)<br>• Various associated regulations as prepared by the European Commission and Statutory Instruments as prepared by Irish legislature |
| Major Accident Hazards | • Directive 2012/18/EU (control of major-accident hazards involving dangerous substances) |

## A4.2 Engineer's Report Recommending Extent of Land Acquisition Boundary

The Engineer's Report, certifying that certain lands are necessary and sufficient for the purpose of constructing and maintaining the proposed road shall include, but is not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | An outline of the total number of proposed land acquisitions as described in the land acquisition documentation. | |
| 2 | An outline of the total number of extinguishments of public rights-of-way as described in land acquisition documentation. | |
| 3 | **Justification for acquiring the lands compulsorily to include, inter alia, the following:**<br>• It shall secure the acquisition of all the lands required;<br>• It shall provide objectors to the Project (both compulsory acquisition of land and extinguishments of rights-of-way) with a forum at which they can outline their objections;<br>• It shall facilitate the acquisition of the lands within a reasonable timescale;<br>• It shall afford an arbitration forum to assess compensation payable;<br>• It shall permit the local authority to plan a programme for the Project confident in the knowledge that the lands required shall be available;<br>• It shall permit the local authority to acquire proper title to unregistered lands;<br>• It shall facilitate the implementation of the relevant Development Plan(s). | |
| 4 | **Include copies or relevant extracts of the following documents in support of the Project:**<br>• Relevant provisions of Policy documentation;<br>• Relevant Provisions of the County/ City Development Plan together with any other local plans or policy documents;<br>• The Project Appraisal Report and Options Report;<br>• The Project Design Report; and<br>• Planning Report of each Local Authority, within whose functional area the Project is located, certifying that the Project is in accordance with the proper planning and sustainable development of the functional area and that it gives effect to and facilitates the implementation of the relevant development plan. | |
| 5 | Confirmation that the lands as outlined in the documentation are necessary, sufficient, and suitable for the Project to which the proposed compulsory acquisition of land relates. | |
| 6 | A recommendation that the lands be acquired by way of statutory compulsory acquisition of land processes. | |

### A4.3 Potential Future Audit (Phase 4)

The Phase 4 information to be retained for potential future audit should include, but is not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | Where required, copy of agreement between two or more Local Authorities as per Section 85 of the Local Government Act, 2001. | |
| 2 | A record of the Approving Authority's and Sponsoring Agency's decision to proceed with the Statutory Processes. | |
| 3 | Where applicable, a copy of the decision of An Bord Pleanála directing that an EIA, AA be carried out. | |
| 4 | Copy of TII approval to proceed with publication of the compulsory acquisition of land documentation and/or environmental evaluation documentation (Project Review 4 record). | |
| 5 | Where applicable, TII approval of the application fee to An Bord Pleanála in respect of Strategic Infrastructure Development. | |
| 6 | Copies of all public notices and notices to affected landowners and relevant bodies as part of the compulsory acquisition of land processes and/or environmental evaluation processes. | |
| 7 | Copies, where applicable, for each affected Local Authority, of the Part 8 Environmental Assessment Reports together with extracts of the minutes of each council meeting where the Part 8 reporting was noted. | |
| 8 | Copy of the Engineer's Report confirming that the lands required for the Project are necessary, suitable, and sufficient and recommending publication of the land acquisition documentation. | |
| 9 | Copy of all Chief Executive's Orders sanctioning the publication of the land acquisition documentation and/or environmental evaluation documentation. | |
| 10 | Record of the Oral Hearing (if held), including notification from the Board, dates, duration etc. | |
| 11 | Copy of the decision of the Board (if applicable) to confirm, confirm with modifications or refusal to confirm the compulsory acquisition of land or environmental evaluation documentation. | |
| 12 | Copy of Property Valuation Advisors Land and Property Cost Estimate as verified by TII. | |

## A4.4 Phase 4 Gate Review Statement

*[On Sponsoring Agency Letterhead]*

Transport Infrastructure Ireland
Parkgate Business Centre
Parkgate Street
Dublin 8
D08 DK10 *[Insert Date]*

Attn: *[Insert relevant TII Regional Manager Name]*

Re: *[Insert Project Name]*

A Dhuine Uaisle,

We refer to the above referenced national road Project.

*[Insert Sponsoring Agency Name]* hereby confirm the following:

1. *[Insert Sponsoring Agency Name]* has completed in full all the processes required in the TII Project Management Guidelines for Phase 4 (Statutory Process).
2. The Project has been approved by the relevant planning authority and copies of the planning approval and land acquisition approval have been submitted to Transport Infrastructure Ireland for your records.
3. Minor Project Estimate (TC1) has been prepared and approved in accordance with the TII Cost Management Manual and have been submitted to Transport Infrastructure Ireland for your records.
4. The Project Appraisal Report has been updated, if required, in accordance with the TII Project Appraisal Guidelines and demonstrates that the above referenced national road Project continues to deliver value for money in accordance with the relevant *TII PAG* requirements. A copy of the updated Project Appraisal Report has been submitted to Transport Infrastructure Ireland for your records.
5. [The updated Project Appraisal Report has been reviewed by the Approving Authority and the Approving Authority has issued approval for the above referenced national road Project to proceed to commencement of land acquisition. A copy of the Approving Authority approval is attached to this letter.] or [The Project Appraisal Report has been submitted to TII (as Approving Authority for this Approval Point) at the same time as this Gate Review Statement for TII approval to proceed to commencement of land acquisition.]
6. The Project Execution Plan has been updated and submitted to Transport Infrastructure Ireland for your records.

Accordingly, [Insert Sponsoring Agency Name] request Transport Infrastructure Ireland approval to the following:

1. Procurement of Technical Advisors to progress the above referenced national road Project through Phases 5 to 7 inclusive of the TII Project Management Guidelines ; and
2. Progression of the above referenced national road Project from Phase 4 (Statutory Process) to Phase 5 (Enabling and Procurement) of the TII Project Management Guidelines.

Is mise le meas,

_____

*[Sponsoring Agency Director of Services]*

### A5.1 Detailed Project Brief

The Detailed Project Brief should include, but is not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | Confirmation of scope. | |
| 2 | Confirmation of underpinning assumptions. | |
| 3 | Assessment of Risks and development of Risk Management Strategy. | |
| 4 | Development of detailed Delivery Programme. | |
| 5 | Clear articulation of all design requirements and restrictions . | |
| 6 | Reassessment of costs. | |
| 7 | Development of Procurement Strategy. | |
| 8 | Project execution planning. | |

## A5.2 Procurement Strategy

The Procurement Strategy should include, but is not limited to, the following:

| No. | Item | ✓ |
|---|---|---|
| 1 | **Introduction:**<br>• Purpose<br>• Project Background<br>• Project Description<br>• Report Overview | |
| 2 | **Overview of Works:**<br>• Scope of Works<br>• Works Magnitude<br>• Works Staging (Enabling/ Advance and Main Construction Contract)<br>• Design Responsibilities<br>• Requirements and Constraints | |
| 3 | **Procurement Strategy:**<br>• Context<br>• Construction Strategy for the Project (including both Enabling Works Contracts and Main Construction Contract)<br>• Market Capacity and Appetite<br>• Contract Packaging<br>• Risk Transfer and Allocation<br>• Contract Form<br>• Tender Process | |
| 4 | **Programme and Summary** | |

## A5.3 Development Application Documentation Review

| No. | Item | ✓ |
|---|---|---|
| 1 | Health and Safety – The Project can be constructed, operated and maintained within the Lands Made Available (LMA) to the Contractor? | |
| 2 | Any lands with specific agreements attached that may impact on construction? | |
| 3 | Road Geometry - sufficient curvature, cross-falls, gradients and sight distances (SSD and FOSD) are provided throughout? | |
| 4 | Drainage – sufficient lands available for outfalls and attenuation of runoff from the Project? | |
| 5 | Road Type – cross-section as proposed remains adequate for projected traffic flows and can be accommodated within LMA? | |
| 6 | Earthworks – cuttings and embankments. Any limitations imposed on cuttings and embankments (e.g. by the Competent Authority) can be adequately accommodated within the LMA? | |
| 7 | Junctions and private accesses – in compliance with design standards and approved strategy for junctions and sufficient sight distance is available, particularly at interface with existing road network? | |
| 8 | Services – proposed services (e.g. cable stays) can be accommodated within LMA? | |
| 9 | Road Safety Audit Stage 1– The recommendations of the Safety Audit Team can be implemented within the LMA? | |
| 10 | Structures – proposed structures, including associated temporary works, can be constructed and maintained within LMA? | |
| 11 | Schedule of Environmental Commitments – the mitigation measures, as approved by the Competent Authority, (e.g. Earth Bund Noise Barriers) can be constructed within the LMA? | |
| 12 | Mitigation Measures as approved do not impact on the design of the Project in an adverse way (e.g. additional landscaping impacting on sight distances)? | |
| 13 | All conditions imposed by the Competent Authority in approving the Project can be incorporated into the Project within the LMA? | |
| 14 | CPO Lands – any CPO lands, which are not being made available for the purpose of constructing the Project (e.g. lands being transferred to private ownership), are removed from the LMA? | |
| 15 | Ensure lands are unoccupied and available for use, notwithstanding the fact that they have been compulsorily acquired? | |

## A5.4 Enabling Works Contracts – Service Diversions, Fencing and Hedge Clearing Contracts

| No. | Item | ✓ |
|---|---|---|
| 1 | Liaison with utility companies and other service providers (e.g. Electricity, telecommunications, water, wastewater, gas, cable, broadband etc.). | |
| 2 | Review mapping and records and conduct surveys as necessary to establish nature and extent of services affected by the Project. | |
| 3 | Undertake design of civil engineering works requirements to divert existing services in order to avoid conflict with the proposed Project. | |
| 4 | Prepare necessary tender documents in line with approved procurement procedures. | |
| 5 | Undertake a tender process and award the contract in accordance with the specified award criteria. | |
| 6 | Ensure that the lands necessary to carry out the service diversions are available to the contractor either by agreement or by serving Notice of Entry. | |
| 7 | Appoint PSCS, prepare method statements and notify HSA in accordance with Health and Safety requirements. | |
| 8 | Prepare 'As-Built' Drawings for incorporation into the tender documents for the Main Roadworks Contract as Relevant Background Information. | |
| 9 | Fencing – prepare mapping and set-out data for fence line. | |
| 10 | Fencing and hedge clearing – ensure that Notice of Entry has been served to allow for complete segregation of the LMA from adjoining lands. | |
| 11 | Fencing and Hedge Clearing - PLO liaison with affected landowners regarding livestock and crop removal prior to fencing/ hedge clearing. | |
| 12 | Fencing and Hedge Clearing – PLO to ensure that reasonable access for landowners is maintained to severed lands. | |

## A5.5 Enabling Works Contracts – Archaeological Works Contracts

| No. | Item | ✓ |
|---|---|---|
| 1 | Prepare necessary tender documents in line with approved procurement procedures to include the requirements outlined hereunder. | |
| 2 | Undertake a tender process and award the contract in accordance with the specified award criteria. | |
| 3 | Application for Ministerial Directions/ Ministerial Consents/ Section 26 Licences (as appropriate) in advance of stage (i) - (iv) services. | |
| 4 | Stage (i) survey services – develop proposals as necessary for archaeological surveys to include underwater, architectural and built heritage, townland boundaries, topographical, site-specific metal detector, geophysical and aerial surveys. | |
| 5 | Stage (i) archaeological investigation works - develop proposals as necessary for investigation works to include: Standard test excavation, site specific test excavation by hand and test excavation in wetland. | |
| 6 | Stage (i) reporting – prepare reports on all works (survey services and archaeological excavation works). | |
| 7 | Stage (i) exclusion areas to be identified and prepared. | |
| 8 | Stage (ii) pre-excavation services – preparation of excavation areas. | |
| 9 | Stage (ii) pre-excavation services – specifications for each site to be developed by the Sponsoring Agency. | |
| 10 | Stage (ii) pre-excavation services – develop method statements for stage (iii) excavations. | |
| 11 | Stage (ii) pre-excavation services – obtain Ministerial directions/ licenses as necessary. | |
| 12 | Stage (iii) excavation services. | |
| 13 | Project Archaeologist to advise Project Manager and submit agreed proposal for construction monitoring or non-requirement for monitoring to National Monuments Service and seek their written agreement. | |
| 14 | Stage (iv) post-excavation and dissemination services. | |

## A5.6 Enabling Works Contracts – Topographical Proof Surveys Contracts

| No. | Item | ✓ |
|---|---|---|
| 1 | Prepare necessary tender documents in line with approved procurement procedures to include the requirements outlined hereunder. | |
| 2 | Survey to be comprised of a proof or validation of previous topographical surveys and/or new or additional surveys required (e.g. to take account of changes to LMA, revised alignments etc.). | |
| 3 | Undertake a tender process and award the contract in accordance with the specified award criteria. Confirm that the necessary insurances, including professional indemnity insurance, are in place prior to award of contract. | |
| 4 | Establish ground control in easting, northing and reduced level with permanent ground markers to specified requirements. Prepare a control report to confirm control is within specified tolerances. | |
| 5 | Undertake ground survey to specified grid density to generate the digital terrain model (DTM). | |
| 6 | Prepare survey of other features as specified including buildings/ structures, boundaries, roads and tracks, street furniture, water and drainage features, slopes and earthworks features and woods, trees and recreation areas. | |
| 7 | Deliverables – preparation of 3-D string DTM for incorporation into software packages as specified (e.g. ACAD, MX Road etc.). | |
| 8 | Deliverables – verification drawings to specified scale, symbols, legend and text. | |
| 9 | Deliverables – survey report to include survey methodology, control details, data processing methodology, confirmation of accuracy and tolerances permitted and achieved, and demonstrable verification of all survey data. | |

## A5.7 Tender Relevant Background Information

| No. | Item | ✓ |
|---|---|---|
| 1 | Information Drawings – including location plans, land acquisition maps. | |
| 2 | Environmental evaluation reporting including the Schedule of Commitments and ameliorative measures and any conditions imposed by the Competent Authority. | |
| 3 | If mandatory EIA is not required, copy of Environmental Assessment Report together with all associated documentation. | |
| 4 | Design Report – if available. | |
| 5 | Service diversions – 'As-Built' drawings. | |
| 6 | Ground investigations – factual geotechnical reports (preliminary, detailed, additional). | |
| 7 | Topographical survey data – Digital Terrain Model, control stations, proof surveys etc. | |
| 8 | Archaeological data - results of intrusive and non-intrusive surveys, and any other available reports. | |
| 9 | Information on planning applications. | |
| 10 | Land acquisition orders, maps and schedules. | |
| 11 | Road Safety Audit Reports (Stage F and Stage 1). | |
| 12 | Drainage data – design, carriageway drainage, outfalls, attenuation. | |
| 13 | Approvals – OPW Section 50 consents, TII Structures Approvals, CIE Railway Approvals. | |
| 14 | Preliminary Health and Safety Plan. | |
| 15 | Pavement details – cores, FWD etc. | |

## A5.8 Employer Designed Contract - Tender Drawings to be included in the Contract

An outline of drawings to be included in an Employer Designed Contract shall include, but is not limited to, the following:

| No. | Provision | ✓ |
|---|---|---|
| 1 | **Drawings:**<br>• 000: General<br>  – Project Location<br>  – Key Plan<br>• 100: Preliminaries and Geometry<br>  – Lands Made Available (LMA)<br>  – Plan and Profiles<br>  – Typical Cross Sections<br>• 200: Site Clearance<br>• 300: Fencing and Environmental barriers<br>• 400: Safety Barriers<br>• 500: Drainage and Service Ducts<br>• 600: Earthworks<br>• 700: Pavement<br>• 1000: Kerbs, Footways, and Paved Areas<br>• 1200: Traffic Signs and Road Markings – TII Approved<br>• 1300: Lighting<br>• 1400: Electrical<br>• 1500: Information and Communication Technology<br>• 1700: Structures<br>• 2700: Accommodation Works and Services<br>• 3000: Landscaping | |
| 2 | **Standard Drawings Supplied to each Tenderer:**<br>• To include any contract specific standard details prepared for the contract | |
| 3 | **Drawings brought into the Contract by reference:**<br>• To include the TII Standard Construction Details (SCDs) and any other Standard Details (e.g.UK Highway Construction Details) required for the Contract | |
| 4 | **Schedule of Environmental Commitments Requirements** | |
| 5 | **Other:**<br>• Traffic Management Plans<br>• References and Co-ordinates for the design of the Works<br>• Landowner Reference numbers (CPO)<br>• Archaeological Sites/ Areas for Archaeological Monitoring and exclusion zones | |

## A5.9 Tender Assessment Report

| No. | Provision | ✓ |
|---|---|---|
| 0 | **Executive Summary** | |
| 1 | **Introduction:**<br>• General Overview of the Project and Works Requirements<br>• Tender Process to Date | |
| 2 | **Overview of Tenders Received:**<br>• Confirmation of Tenders Received<br>• Documents received from Tenderers | |
| 3 | **Assessment of Tenders Received:**<br>• Qualification of Tenders<br>• Lump Sum Tender Totals<br>• Comparative Costs of Tenders<br>• Analysis of Tender Totals<br>• Check for Abnormally Low Tender Totals<br>• Check for Errors in Tenders and Rates<br>• Grounds for Exclusion<br>• Outcome of Financial Assessment of Tenders Received | |
| 4 | Technical Merit Assessment Overview | |
| 5 | Post Tender Correspondence | |
| 6 | Conclusions and Recommendations | |
| - | **Appendices:**<br>• Comparative Cost of Each Tender<br>• Assessment of Technical Merit<br>– Quality Criterion reference and description<br>– Marks available for each Quality Criterion<br>– Marks awarded to each Tenderer for each Quality Criterion<br>– Overall Summary<br>• Independent Review Board Sign Off | |

### A5.10 Tender Award Recommendation Form

The Tender Award Recommendation Form shall include, but is not limited to, the following:

**Part 1 to be completed by Project Manager:**

| | |
|---|---|
| Project Title | |
| TII PRS Project Ref. No. | |

| | |
|---|---|
| Contract Type | |
| Procurement Procedure (Open/ Restricted) | |

**Brief Description of the Project:**

| |
|---|
| |

**Relevant Dates:**

| | |
|---|---|
| Date of PIN notice | |
| Date of OJEU contract notice | |
| Date of e-tenders contract notice | |
| Latest date for expressions of interest | |
| Closing date for receipt of tenders | |

**Shortlisting**

| | |
|---|---|
| No. of Expressions of Interest | |
| Date of Shortlisting | |
| No. Shortlisted | |

**Summary of Tenders**

| **Tenderer** | **Tender Total per Pricing Document (excl. VAT)** | **Comparative Cost of Tender (excl. VAT)** |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**Comments**

| |
|---|
| |

**Award Recommendation**

| | |
|---|---|
| Date of Tender Report | |
| Recommended Tenderer | |
| Tender Total | |
| Anticipated Commencement Date | |
| Time for Completion/ Duration | |

**Contracting Authority Signature**

Signed _____ Date _____

Project Manager

**Part 2 (to be completed by TII)**

Recommended by _____ Date _____
Senior Engineering Inspector

Endorsed by _____ Date _____
Regional Manager

Approved by _____ Date _____
Head of Roads Capital Projects

Authorised by _____ Date _____
Director of Capital Projects

Noted by _____ Date _____
Chief Executive Officer

Submit to TII Board Yes _____ No _____ Date _____

## A5.11 Site Supervisory Staff Duties

The duties of the Site Supervisory Staff shall include, but are not limited to, the following:

| No. | Provision | ✓ |
|---|---|---|
| 1 | Monitor the Works to ensure that they are constructed in accordance with the Works Requirements and the Contract. | |
| 2 | Maintain adequate site records including the preparation of Non-Conformance Reports (NCR) as required and ensure that NCRs are closed off to the satisfaction of the Contracting Authority's Representative. | |
| 3 | Undertake all duties required by the TII Project Management Guidelines. | |
| 4 | Fulfil Contracting Authority health and safety obligations during the execution of the Works. Carry out routine health and safety inspections. Ensure that key personnel are promptly informed in the event of a notifiable incident on site. | |
| 5 | Prepare recommendations on interim/ milestone payments. | |
| 6 | Prepare justification reports, as required by Project Manager, in support of change order requests. | |
| 7 | Prepare recommendations on applications for compensation events allowable under the contract. | |
| 8 | Provide all necessary backup information to the Project Manager in order to claim payments from the PRS System. | |
| 9 | Prepare agendas and minutes for site progress meetings and circulate to key staff. | |
| 10 | Provide briefings at Project meetings as required. | |
| 11 | Prepare progress reports, including progress photographs, at monthly intervals or such other periods as required. | |
| 12 | Agree 'As Built' drawings with the Contractor and approve final issue. | |
| 13 | Provide backup on the assessment of validity of contractual claims. | |
| 14 | Prepare recommendations on the Final Account. | |
| 15 | Provide backup services for conciliation/ arbitration on final account. | |
| 16 | Provide backup information to the Project Manager in the preparation of the final account report. | |
| 17 | If required, monitor issues during the maintenance period. | |
| 18 | Prepare for the handover of PSDP duties from Contractor to Contracting Authority following the completion of the Works. | |
| 19 | Ensure that the Safety File is transferred from the PSCS to the Contracting Authority following the completion of the Works. | |

### A5.12 Potential Future Audit (Phase 5)

The Phase 5 information to be retained for potential future audit shall include, but is not limited to, the following:

| No. | Provision | ✓ |
|---|---|---|
| 1 | Record of approvals to proceed with Enabling Works Contracts, including, where applicable, record of tender process (invitation, assessment and award) for each contract. | |
| 2 | Record of decision to proceed on basis of contract and procurement type (e.g. civil engineering works designed by the contractor using restricted procedure). | |
| 3 | Copy of Approving Authority approval to proceed with Tender Process. | |
| 4 | Record of tender notices (PIN, Contract and Contract Award) in local and national press, e-tenders and OJEU. | |
| 5 | Record of pre-qualification assessment and short-listing of Tenderers. | |
| 6 | Record of issuing tender documents to shortlisted Tenderers including any tender bulletins or additional information. | |
| 7 | Record of receipt of tenders on or before closing date including where applicable, record of tender opening in accordance with Local Authority procedure. | |
| 8 | Copy of notification of Tenderers with uncorrected tender totals. | |
| 9 | Copy of Tender Report including recommendation to award the Contract. | |
| 10 | Copy of Approving Authority approval to award the Contract. | |
| 11 | Copy of local authority Chief Executive's Order to award the Contract. | |
| 12 | Copy of letters to unsuccessful Tenderers and Letter of Intent. | |
| 13 | Copy of Letter of Acceptance. | |
| 14 | Record of Contract signing including all model forms. | |
| 15 | Record of collateral agreement appointing Contractor as PSCS and PSDP. | |
| 16 | Record of Local Authority Chief Executive's Order appointing Contractor as PSCS and PSDP. | |
| 17 | Copy of approval of appointment of Site Supervisory Team. | |

### A5.13 Phase 5 Gate Review Statement

*[On Sponsoring Agency Letterhead]*

Transport Infrastructure Ireland
Parkgate Business Centre
Parkgate Street
Dublin 8
D08 DK10 *[Insert Date]*

Attn: *[Insert relevant TII Regional Manager Name]*

Re: *[Insert Project Name]*

A Dhuine Uaisle,

We refer to the above referenced national road Project.

*[Insert Sponsoring Agency Name]* hereby confirm the following:

1. *[Insert Sponsoring Agency Name]* has completed the processes required in the TII Project Management Guidelines for Phase 5 (Enabling and Procurement).
2. The updated Project Appraisal Report has been reviewed by the Approving Authority and the Approving Authority has issued approval for the above referenced national road Project to proceed to tender. A copy of the Approving Authority approval is attached to this letter.
3. All necessary Enabling Works Contracts have been procured in accordance with the procurement requirements in force within [Insert Sponsoring Agency Name] and approval to the award of these contracts has been received from Transport Infrastructure Ireland. Copies of the relevant Tender Assessment Reports and approved Tender Award Recommendation Forms have been submitted to Transport Infrastructure Ireland for your records.
4. Minor Project Estimate prior to Tender Issue (TC2) and Minor Project Estimate at Tender Award (TC3) have been prepared and approved in accordance with the TII Cost Management Manual and have been submitted to Transport Infrastructure Ireland for your records.
5. The Project Appraisal Report has been updated in accordance with the TII Project Appraisal Guidelines and demonstrates that the above referenced national road Project continues to deliver value for money in accordance with the relevant *TII PAG* requirements. A copy of the updated Project Appraisal Report has been submitted to Transport Infrastructure Ireland for your records.
6. [The updated Project Appraisal Report has been reviewed by the Approving Authority and the Approving Authority has issued approval for the above referenced national road Project to proceed to award of the main construction contract.

A copy of the Approving Authority approval is attached to this letter.] or [The updated Project Appraisal Report has been submitted to TII (as Approving Authority for this Approval Point) at the same time as this Gate Review Statement for TII approval to proceed to award of the main construction contract.] [5]

7. The Tender Assessment Report and Tender Award Recommendation Form have been prepared for the Main Contract and submitted to Transport Infrastructure Ireland.
8. A copy of the signed Sponsoring Agency Chief Executive's Order approving the award of the Main Construction Contract is attached to this letter.
9. A copy of the Main Construction Contract Documents have been submitted to Transport Infrastructure Ireland for your records.
10. The Project Execution Plan has been updated and submitted to Transport Infrastructure Ireland for your records.

Accordingly, *[Insert Sponsoring Agency Name]* request Transport Infrastructure Ireland approval to the following:

1. Progression of the above referenced national road Project from Phase 5 (Enabling and Procurement) to Phase 6 (Construction and Implementation) of the TII Project Management Guidelines.

Is mise le meas,

*[Sponsoring Agency Director of Services]*

[5] Delete as appropriate

## A6.1 Contracting Authority's Representative Duties

The duties of the Contracting Authority's Representative shall include, but are not limited to, the following:

| No. | Provision | ✓ |
|---|---|---|
| 1 | Responsible for liaison with the Contracting Authority, the TII Senior Engineering Inspector and other relevant third parties. | |
| 2 | Ensure completion, in conjunction with the Project Liaison Officer (if different), of all outstanding land acquisitions. | |
| 3 | Agree and complete, in conjunction with the Project Liaison Officer, all outstanding accommodation works and advise the Site Supervisory Team of the requirement to prepare/ approve Change Orders. | |
| 4 | Provide additional liaison between the Contractor, Site Supervisory Team and affected landowners during the construction of the Project. | |
| 5 | Prepare and submit Justification Reports for Change Orders in excess of the limits permitted under the Contract. | |
| 6 | Co-ordinate responses to Contractor's Requests for Information. | |
| 7 | Ensure Contractor complies with procedure for Applications for Departures from Standards. | |
| 8 | Monitor overall Project expenditure and ensure that monthly returns are input correctly in the PRS system. | |
| 9 | Facilitate and support the Contracting Authority and Site Supervisory Team in negotiations with the Contractor on the Final Account including dispute resolution, if required. | |
| 10 | Attend all Sponsoring Agency Management Group Meetings (if applicable), Site Progress Meetings and such other meetings as required by the Contracting Authority (e.g. Council and Local Area Meetings etc.). | |
| 11 | Prepare briefing documents for these meetings and such other publicity information as required by the Contracting Authority and TII. | |
| 12 | Liaise with the Project Archaeologist to ensure mitigation measures are implemented and that archaeological reports are prepared in a timely manner. | |
| 13 | Ensure the hand-over of the Safety File and 'As-Built' documents to the Contracting Authority at the completion of the Works. | |
| 14 | Ensure that TII Audit Requirements are met. | |

## A6.2 Monthly Progress Report

Summary giving an overview of the progress of the works and financial progress to date.

| No. | Provision | ✓ |
|---|---|---|
| 1 | **Project Details**<br>• Tabular presentation of Project particulars including:<br>• Project name and description<br>• Key quantities/ project scope<br>• Contractor name<br>• Employer's name<br>• Employer's Representative/ Contracting Authority's Representative name<br>• Tender details<br>• Contract programme and expenditure summary<br>• Project team individual names<br>• Roles and responsibilities | |
| 2 | **Programme - Current Status**<br>Current programme status, extensions of time, programme performance (include Contractor's marked-up copy of the current contract programme). | |
| 3 | **Construction Progress to Date**<br>• Overall completion percentage, progress S-Curve, Comments on Contractor's claimed progress<br>• Construction status for key scheduled items<br>• Planned works for next period<br>• Construction Issues | |
| 4 | **Design Progress and Submissions**<br>• Design status of key scheduled items or key work packages<br>• Departures and Relaxations<br>• Design Issues | |
| 5 | **Health and Safety**<br>• Accidents, incidences, occurrences, audits<br>• Health and Safety issues including environmental incidences | |
| 6 | **Quality and Environmental**<br>• Commentary on test results; non-conformance report; quality of site meetings, Contractor's quality assurance; Workmanship; Environmental issues<br>• Approvals of key suppliers, sources of materials or specialists | |

| No. | Provision | ✓ |
|---|---|---|
| 7 | **Finance**<br>Summary - Contractor's Application compared to ER's Certificates<br>Reconciliation of Contractor's application compared to ER's approved payments/ adjustments based on:<br>• Contract Works (payments for items scheduled in initial contract sum)<br>• Compensation Events (separate change orders and other compensation events).<br>• Other adjustments allowable under the contract.<br>• Current Contract Sum compared to Initial Contract. | |
| 8 | **Risk and Value Management**<br>• Risk Management - CCRR (key issues and status; early warning system including steps being taken by ER or Contractor to reduce risk or actions required from the Employer; Claims/unresolved compensation events and delay events). | |
| 9 | **Stakeholders Management**<br>• Landowner Interfaces<br>• Relevant bodies<br>• Employer Requirements<br>• Employer's Representative issues<br>• Project Resourcing | |
| 10 | **Project Resourcing and Management**<br>Contractor's Personnel and Things on the Site; ER staff and Contractor's Designer personnel.<br>Labour relations issues. | |
| 11 | **Communications**<br>• Proposed Instructions (directions and change orders)<br>• Information required or outstanding from the Contractor<br>• Information required or outstanding from the Employer<br>• Information required or outstanding from the Employer's Representative | |
| 12 | **Action List**<br>Table with actions implementation status, continuing actions. new actions required. | |
| 13 | Contract Documentation<br>Safety File, 'As-Built' Drawings | |
| - | **Examples of Appendices that may be generated for the Progress Report**<br>• Information Required / Release Schedule<br>• Design Approval Certificates Register<br>• Non-Conformances Report<br>• Construction Programme<br>• Compensation Events and Other Adjustments Register | |

| No. | Provision | ✓ |
|---|---|---|
| | • Claims Register<br>• Construction Contract Risk Register<br>• Current Interim Payment Certificate<br>• Cumulative Monthly Figures Graphical Comparison | |

**A6.3 Financial Report Summary Sheet**

| Main Construction Contract - Interim Financial Reporting Summary | | |
|---|---|---|
| **Project:** | | **Project Reference:** |
| **Prepared by:** | | **Date of Preparation of Report:** |
| **Project Commencement Date:** | **Reporting Period up to:** | **Percentage Contract Completion at end of Reporting Period:** |

| Cost Coding - Main Construction Contract<br><br>( As per Pricing Document) | Breakdown of Pricing Document<br><br>Initial Contract Sum<br><br>A | Current Application Amounts<br><br>B | Certification to end of Current Reporting Period<br><br>Initial Contract Sum<br><br>C | Compensation Event (CE)<br><br>Change Orders<br><br>D | Compensation Event (CE)<br><br>Other CE<br><br>E | Other Allowable Adjustments<br><br>F | Total Certified<br><br>G | Previously Certified Reporting Period End· MMM/YY<br><br>H | Difference<br><br>J | Comments on Movement |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G<br>C+D+E+F | H | J<br>G-H | |
| **Preliminaries** | | | | | | | | | | |
| **Site Clearance** | | | | | | | | | | |
| **Fencing and Environmental Barriers (Excluding Safety Barriers)** | | | | | | | | | | |
| **Safety Fencing and Pedestrian Guardrails** | | | | | | | | | | |
| **Drainage and Ducting** | | | | | | | | | | |
| **Earthworks** | | | | | | | | | | |
| **Pavement** | | | | | | | | | | |
| **Kerbs, Footpaths/ Cyclepaths and Paved Areas** | | | | | | | | | | |
| **Traffic Signs** | | | | | | | | | | |
| **Road marking** | | | | | | | | | | |
| **Lighting and Electrical Work** | | | | | | | | | | |

| Cost Coding - Main Construction Contract<br><br>( As per Pricing Document) | Breakdown of Pricing Document<br><br>Initial Contract Sum<br><br>A | Current Application Amounts<br><br>B | Certification to end of Current Reporting Period<br><br>Initial Contract Sum<br><br>C | Compensation Event (CE)<br><br>Change Orders<br><br>D | Compensation Event (CE)<br><br>Other CE<br><br>E | Other Allowable Adjustments<br><br>F | Total Certified<br><br>G | Previously Certified<br><br>Reporting Period End· MMM/YY<br><br>H | Difference<br><br>J | Comments on Movement |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | C+D+E+F | | G-H | |
| **Landscaping and Environmental Work** | | | | | | | | | | |
| **Communications and Technology** | | | | | | | | | | |
| **Structures** | | | | | | | | | | |
| **Accommodation Works** | | | | | | | | | | |
| **Statutory Undertakers/Authorities/Utilities** | | | | | | | | | | |
| **Documentation including 'As-Built' Records. and the Safety File** | | | | | | | | | | |
| **Any other Works and/or Liabilities (Add Descriptions)** | | | | | | | | | | |
| **Sub-Totals - as per Pricing Document Breakdown** | | | | | | | | | | |
| | | | | | | | | | | |
| **Other Adjustments under the Contract (not provided for above)** | | | | | | | | | | **Must be specified** |
| **Sub-Total** | | | | | | | | | | |
| **Materials on Site** | | | | | | | | | | |
| **Sub-Total** | | | | | | | | | | |
| **Less Retention** | | | | | | | | | | **Please specify basis of deduction** |
| **Sub-Total** | | | | | | | | | | |
| **Add VAT** | | | | | | | | | | |
| **Totals inclusive of VAT** | | | | | | | | | | |
| **Current Contract Sum** | | ***Totals of A. D. E and F)*** | | | | | | | | |
| **Notes: Back-up to the figure Included below shall be presented in the manner described within the TII Cost Management Manual** | | | | | | | | | | |

## A6.4 Final Account Report

| No. | Provision | ✓ |
|---|---|---|
| 1 | **Project Summary Details**<br>• Project description including length, road type and key elements such as structures, junctions and side roads.<br>• Pre-tender details including Form of Contract, competition type, tender process.<br>• Post-tender details including tender assessment, Contractor appointed, contract period, substantial completion date and date of taking over certificate.<br>• Finance details including tender sum, compensation events, claims forming part of the Contractor's final statement, details of the Contracting Authority's determination, and determination of the final outturn by agreement or by dispute resolution including conciliation and arbitration as required.<br>• Confirmation of the Outturn Cost including comparison of Outturn Cost as a percentage of the tender sum. | |
| 2 | **Introduction**<br>• Detailed description of the Project including scope of the Contract and principal quantities.<br>• Timeline of the main Contract including commencement date, period for completion, date of substantial completion and date of taking over certificate.<br>• Details of Contractor's pricing document and comparative cost of tender. | |
| 3 | **Contract Administration**<br>• Details of the administration of the Contract by the Contracting Authority or its representatives or agents including key aspects of health and safety, design and construction.<br>• Summary of site instructions, requests for information and non-conformance records and details of how they were satisfactorily addressed. | |
| 4 | **Risk Management**<br>• Outline of risk management processes adopted for the Contract including details, if applicable, of how additional value for money was achieved.<br>• Provide a summary of the Contract risk register including any residual risks. | |
| 5 | **Final Account Details**<br>• Detailed description of the Contractor's final statement issued in accordance with the conditions of contract.<br>• Breakdown of the Contractor's final statement under the headings of:<br>– Items claimed under the contract sum;<br>– Compensation events (including basis of calculation);<br>– Change orders including necessary TII approvals as required;<br>– Other contractual claims including basis for Contracting Authority's assessment of each claim.<br>• Details of any counter-claims submitted by the Contracting Authority including the basis for calculation. | |

| No. | Provision | ✓ |
|---|---|---|
| | • Details of discussions held between Contracting Authority and Contractor to settle the final account by agreement including details of the Contracting Authority's decision on the final account.<br>• Details, if applicable, of the notification of dispute and of the dispute resolution including the outcome of the conciliation and/or arbitration processes.<br>• Details of the Outturn Cost as agreed or as determined by dispute resolution.<br>• Comparison of the Outturn Cost with the tender sum expressed as a percentage. | |
| 6 | **Conclusions and Recommendations**<br>• Conclude that the Outturn Cost represents the total liability of the Contracting Authority under the Contract, that it is in full and final settlement of the Contract including all claims and counter-claims between the Contracting Authority and the Contractor and that it represents value for money.<br>• Include recommendations arising from lessons learned on the Contract:<br>– Aspects of the Contract that worked well;<br>– Aspects of the Contract that did not work well;<br>– Aspects of the Contract or contract administration that could be changed or improved upon for future Contracts;<br>– Were scope requirements (time, cost and quality) achieved?<br>– Lessons that can be learned from contractual claims.<br>– Include recommendation that this final account report be approved. | |
| 7 | **Appendices**<br>• Copies of tender notices, Chief Executive Orders and Approving Authority tender approval.<br>• Copy of TII approval of Site Supervisory Team and where applicable, copy of approval of the appointment of expert advisors for the final account.<br>• Copy of certificate of substantial completion and taking over certificate.<br>• Copies of TII approval of change orders.<br>• Copy of NCR and RFI Register confirming closeout of all site issues.<br>• Copy of Contractor's final statement, issued in accordance with the Contract.<br>• Summary of counter claims, if any, submitted by the Contracting Authority.<br>• Summary of Contracting Authority's decision on Contractor's final statement and if applicable, copy of agreement of final account signed by both parties.<br>• If applicable copy of notices of dispute/ engagement in dispute resolution.<br>• Copy of outcome of conciliation and/or arbitration processes.<br>• Copy of approval of the Outturn Cost and where this figure exceeds the tender sum, copy of approval to discharge the balance payable.<br>• Copy of Chief Executive Orders or other sanction of the Contracting Authority authorising that the balance due to the Contractor be paid.<br>• Schedule of cumulative interim payments up to and including final payment. | |

### A6.5 Potential Future Audit (Phase 6)

Phase 6 information to be retained for potential future audit, shall include, but is not limited to, the following provisions:

| No. | Provision | ✓ |
|---|---|---|
| 1 | Copies of monthly certificates | |
| 2 | Record of payments together with necessary approvals and sign offs | |
| 3 | Copy of application forms for all change orders including associated Justification Reports | |
| 4 | Copy of TII approval of Change Orders, where appropriate | |
| 5 | Copies of all determinations made in relation to compensation events, including where applicable, price variation | |
| 6 | Copies, where applicable, of approvals to appoint expert advisors/ legal advisors to assist in determination of final account | |
| 7 | Where applicable, record of appointment of conciliator | |
| 8 | Where applicable, record of referral to arbitration | |
| 9 | Copy of recommendation of conciliator and/or copy of award of arbitrator | |
| 10 | Copy of the Final Account Report | |
| 11 | Copy of Certificate of Date for Substantial Completion | |
| 12 | Copy of Taking Over Certificate | |

## A7.1 Land Disposal Strategy Report

The following template outlines the items to be included in a Land Disposal Strategy Report:

### 1.0 Background:

### Project Description

Overview of land acquisition process including relevant dates (confirmation, notice to treat, notice of entry) together with details of additional lands, if any, bought by agreement as part of the land acquisition process

Overview of the main Contract including principal Contractor, start and end dates etc.

**Table 1 Project Summary Details**

| Item | Description |
|---|---|
| Project Name | |
| TII Project Reference No. | |
| Project Length (mainline) (km) | |
| TII Marker Plate References (if available) | |
| Mainline Road Type | |
| Total Number of Structures | |
| Total Length of Side Roads (km) | |
| Principal Interchanges (No. and Type) | |
| Minor Structures (e.g. underpasses and culverts) | |

**Table 2 Land Acquisition Details**

| Item | Description |
|---|---|
| Total Area of Land Acquired (Ha/ Acres) | |
| Total Cost of Land Acquisition* (€) (Include cost of land only. Exclude other lands costs such as interest and fees) | |
| Total Number of Land Plots for Disposal | |
| Total Area of Land for Disposal | |

## 2.0 Land Disposal Strategy

Following completion of the N[___] Road Project, there are [___] No. separate plots of surplus lands, which [_____] County Council proposes to dispose of as they are no longer required for any of its functions. Details of these lands are summarised in Table 3 hereunder.

**Table 3 Land Disposal Details**

| Plot No. | Address | Area | Disposal Strategy | Acquired From |
|---|---|---|---|---|
| 1 | Townland: [_____]<br>DED: [_____]<br>County: [_____] | [____] Ha<br>([_____] Acres) | Auction/ Offer for Sale in consideration of a sum of €[____] / Transfer per Clause [___] of land agreement to [*Name and Address of Landowner*]* | Name and Address of person(s) from whom property was acquired (Include CPO/ MO Map Reference No. where applicable) |
| 2 | Insert additional properties as required per Plot No. 1 above | | | |

## 3.0 Disposal Strategy Details

### 3.1 Plot No. 1

#### 3.1.1 Particulars of Land

Land, comprising [_____] Ha ([_____] Acres) in area, situate in the townland(s) of [_____], District Electoral Division(s) of [_____] and County of [_____] as outlined in Drawing No. [_____], a copy of which is enclosed in Appendix 1. The land is not required by [_____] County Council in connection with the maintenance of the Project or in connection with any of its functions.

#### 3.1.2 Person(s) from whom the Land was acquired

The land was acquired from [*Insert Name and Address of person(s)*] pursuant to Compulsory Purchase/ Motorway Order Ref. [_____] and forming part of Property No. _____] Map No. [_____] of the Deposited Map.

#### 3.1.3 Person(s) to whom the Land is to be disposed of

The land is to be disposed of to [Insert Name and Address of person(s)]

### 3.1.4 Consideration Proposed in respect of the Disposal

***Enter either:***

The lands are to be disposed of to the person(s) outlined above in consideration of a sum of €[_____] payable to [_____] County Council.

***or***

The lands are to be disposed of by public auction, the proceeds of which shall be payable to [_____] County Council.

***or***

There is no consideration proposed in respect of this disposal as it forms part of a land agreement condition as described hereunder.

### 3.1.5 Covenants, Conditions or Agreements having effect in connection with this disposal

*Insert, as appropriate, agreements for the purchase of land or relevant Clause of Land Agreement outlining particulars of proposed land transfer.*

### 3.2 Plot No 2

*Insert, as required, for 2nd and subsequent land plots as outlined above*

### 4.0 Recommendation

It is recommended that [_____] County Council's Land Disposal Strategy for the N[___] Road Project as outlined in this Report be approved.

### Appendices

Appendix 1: Land Disposal Drawings

Appendix 2: Copies of covenants, agreements or conditions relating to the Land Disposal Strategy

Appendix 3: Photographs.

## A7.2 Project Completion Report

The Project Completion Report shall include, but is not limited to, the following:

| No. | Provision | ✓ |
|---|---|---|
| 1 | Project Name/ TII project reference number | |
| 2 | Lead Local Authority/ other Local Authorities involved | |
| 3 | Overview | |
| 4 | Need for the Project | |
| 5 | Project Objectives | |
| 6 | **Project Planning:**<br>• Traffic Analysis;<br>• Options Selection;<br>• Project Appraisal;<br>• Planning and Design;<br>• Statutory Process;<br>• Procurement; and<br>• Stakeholder interfaces and consultations | |
| 7 | **Project Implementation:**<br>• Project Management;<br>• Project Scope; and<br>• Value and Risk Management. | |
| 8 | Project Operational Performance | |
| 9 | Cost Breakdown | |
| 10 | Lessons Learned | |

### A7.3 Ex-Post Evaluation

The Ex-Post Evaluation shall include, but is not limited to, the following:

| No. | Provision | ✓ |
|---|---|---|
| 1 | Project Name/ TII Project Reference Number. | |
| 2 | Lead Local Authority/ other Local Authorities involved. | |
| 3 | Main Contract Final Outturn Cost. | |
| 4 | Project Final Outturn Cost. | |
| 5 | Results of any cost benefit analysis undertaken. | |
| 6 | Key Dates (project commencement, Options Report, land acquisition, environmental evaluation, statutory processes publication dates, Part 8 Planning / ABP Oral Hearing decision, Notice to Treat, Notice of Entry, Contract Notices (PIN Contract, Contract Award), Main Contract commencement date, date for substantial completion, official opening, Project close out). | |
| 7 | Main Contract (Contract type, Contracting Authority, year of opening, design year). | |
| 8 | Lead Technical Advisor/ Site Supervisory Team. | |
| 9 | Date of Project inception. | |
| 10 | Brief description of the Project. | |
| 11 | Brief description of existing road conditions prior to Project completion (alignment, road surface, particular hazards, accident history etc.). | |
| 12 | Provide details of pre-construction traffic forecasts (AADT for year of opening design year) and anticipated levels of service. | |
| 13 | Where available, include principal findings/ executive summary of Transport Modelling Report. If Transport Modelling Report is not available, summarise principal traffic assumptions made in traffic forecasting. | |
| 14 | Provide details of Project Appraisal Report. | |
| 15 | Provide a summary of the Options Selection Process (number of options considered, principal appraisal headings, details of consultations, key benefits of the preferred option). Provide a map of the options and executive summary of Options Report, if available. | |
| 16 | Provide details of principal design parameters (design standards, design speed, road type and width, departures from standards, junction strategy) used in Project design including executive summary of Design Report, if available. | |
| 17 | Confirm Statutory Process via which the Project was approved. | |
| 18 | Provide details of land acquisition process, outlining total landtake requirement. | |
| 19 | Provide summary of tender process for main Contract (procurement type, pre-qualification process, number of candidates shortlisted to tender, tender period, tender appraisal and award, details of Contract notices, tender report and TII approval of tender report) | |

| No. | Provision | ✓ |
|---|---|---|
| 20 | Provide details of the management of the main Contract (details of progress meetings, Sponsoring Agency Management Group meetings, progress reports, risk reports, value reports, NCR and RFI registers, change orders, compensation events, contractual claims, final account resolution and main Contract Final Outturn Cost.) including final account report. | |
| 21 | Provide details of the Project Final Outturn Cost under each of the seven headings in PRS. Include the Project Completion Report, if available. | |
| 22 | Confirm Project schedule compliance (commencement date, time for completion, date of substantial completion outlining any deviation (+/- no. of days) from Contract completion date. | |
| 23 | Provide an overview of risk and value management strategies implemented on the Project. | |
| 24 | Compare pre-construction traffic forecasts with actual traffic counts undertaken on the completed Project and confirm any deviation (+/- %) of predicted forecasts with actual counts. | |
| 25 | Confirm percentage reduction in actual travel times (derived from Phase 7 CBA) and confirm current levels of service. | |
| 26 | Confirm road safety performance (all Road Safety Audit Stage 1, Stage 2 and Stage 3 Report recommendations adopted; post completion accident statistics, if available). | |
| 27 | Extract lessons learned from Final Account Report and included in Ex-Post Evaluation lessons learned. | |
| 28 | Provide an overview of issues arising for inclusion in the lessons learned database (provide as much detail as possible and include both positive and negative feedback in particular highlighting any innovations used on this Project that could benefit other Projects). Provide responses to the following:<br>• Were Project Scope (time, cost, quality) objectives met?<br>• Give examples of what went well on the Project<br>• Give examples of what went wrong on the Project<br>• Suggest what could be done differently if the Project was to start again<br>• What could be done differently on future projects based on the experience of this Project? | |

## A7.4 Phase 7 Gate Review Statement

*[On Sponsoring Agency Letterhead]*

Transport Infrastructure Ireland
Parkgate Business Centre
Parkgate Street
Dublin 8
D08 DK10 *[Insert Date]*

Attn: *[Insert relevant TII Regional Manager Name]*

Re: *[Insert Project Name]*

A Dhuine Uaisle,

We refer to the above referenced national road Project.

*[Insert Sponsoring Agency Name]* hereby confirm the following:

1. *[Insert Sponsoring Agency Name]* has completed in full all the processes required in the TII Project Management Guidelines for Phase 7 (Close out and Review).
2. The Project Completion Report has been prepared and submitted to Transport Infrastructure Ireland for your records.
3. Final Project Costs have been prepared and approved in accordance with the TII Cost Management Manual and submitted to Transport Infrastructure Ireland for your records.
4. The Ex-Post Evaluation (including lessons learned register) has been prepared and reviewed in accordance with the TII Project Appraisal Guidelines and a copy has been submitted to Transport Infrastructure Ireland for your records.
5. The Land Disposal Strategy for surplus lands on the Project has been prepared and approved and a copy has been submitted to Transport Infrastructure Ireland for your records.

Accordingly, [Insert Sponsoring Agency Name] confirm that the [Insert Project Name] has been completed and closed out.

Is mise le meas,

*[Sponsoring Agency Director of Services]*

Bonneagar Iompair Éireann
Transport Infrastructure Ireland

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