

CCE

Departmental and Multidisciplinary Standard

I-DEP-0121

Third Party Works: Additional Details of Railway Safety Requirements

Purpose

This standard provides comprehensive safety information for third parties who intend to carry out works on or near the line. This is in addition to the details given in *I-DEP-0120 Guidance on Third Party Works*.

Document Control

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1 POLICY AND PRINCIPLES

1.1 Policy

- 1.1.1 All work carried out adjacent to, or under or over the railway, or which may have a direct or indirect impact on the railway must be carried out in a safe manner that safeguards the interests of Iarnród Éireann (IÉ). This includes minimising the general impact on the railway, and minimising the safety risk to the railway and personnel.

1.2 Principles

- 1.2.1 Iarnród Éireann requires all third parties, their consultants, contractors and agents acting on their behalf to identify, assess and control risks in the design and construction of those works that are carried out on or near the railway.

2 DEFINITIONS AND ABBREVIATIONS

- 2.1.1 The following definitions and abbreviations apply to the terms below as used in this standard.

- 2.1.2 Persons connected with third party activity:

- **Iarnród Éireann Designated Representative (IÉDR)** – The person appointed by Iarnród Éireann (IÉ) to be the specific point of contact with the third party at the particular stage(s) of the project. The role of the IÉDR may be carried out by a different person for different stages of the work. The IÉDR may also delegate his/her responsibilities to other persons at particular phases of the work.
- **OHLE Nominated Person** – The person authorised by IÉ to issue or cancel Permits to Work and perform switching, Isolation, and earthing operations in relation to the OHLE.
- **Project Supervisor Construction Stage (PSCS)** – A person or entity appointed in writing by the third party (as client) to be Project Supervisor for the Construction Stage for each project. The PSCS is responsible for managing and coordinating the safety and health issues on site for the construction phase in accordance with the Safety Health and Welfare at Work (Construction) Regulations 2006.
- **Project Supervisor Design Process (PSDP)** – A person or entity appointed in writing by the third party (as client) to be Project Supervisor for the Design Process. The PSDP is responsible for coordination of the work of designers in relation to the safety and health issues for the project in accordance with the Safety Health and Welfare at Work (Construction) Regulations 2006.
- **Railway Protection Representative (RPR)** – The person appointed by IÉ to issue instructions on railway protection to third party personnel when they are on or near the line.
- **Site Safety Monitor** – A person who may be appointed by IÉ to monitor IÉ's safety interests in respect of third party works.

- **Third Party** – An external party who requires to carry out work that impacts on the railway. A third party as set out in this standard may refer to the third party itself or its agents, consultants, representatives or contractors (including sub-contractors).
- **Third Party Coordinator** – Iarnród Éireann member of staff who coordinates the major impact projects in the pre-construction (approvals) phases, and may be the IÉDR for those phases (see *I-DEP-0120* for a definition of a major impact project).
- **Third Party Designated Representative (TPDR)** – A competent person nominated in writing by the third party to be the specific point of contact with the IÉDR at the particular stage(s) of the project. The identity of this person is given in the method statement and may change depending on the role during the different phases of the work. Appendix E Handover/Handback Arrangements sets out specific competency requirements for the TPDR responsible for the safe completion of site handover/handback arrangements.

2.1.3 Railway and equipment definitions:

- **IÉ** – Iarnród Éireann
- **Isolation** – This occurs when the OHLE is isolated (i.e. with power switched off) and earthed in a particular section
- **Lineside** – Works that are within the space between the railway boundary and 3 metres (10 feet) from the nearest rail
- **OHLE** – Overhead line equipment (DART overhead electric power lines)
- **Possession** – Special arrangements to control the movement of trains
- **PPE** – personal protective equipment
- **PTS** – personal track safety, as in Contractor PTS Certificate

3 INTRODUCTION

3.1 This Standard

- 3.1.1 This standard contains detailed safety information for third parties in the planning, design and construction phases of a project that impacts on the railway.
- 3.1.2 This standard complements the information provided in *I-DEP-0120 Guidance on Third Party Works* which should be read in conjunction with this standard. *I-DEP-0120* provides information on project types, who to contact, the application procedure, the Railway Safety Commission approval process, method statement guidelines and other details.
- 3.1.3 In relation to safety considerations, this standard (*I-DEP-0121*) contains:
 - Guidance on the hazards, risks and control measures associated with working in a railway environment

- What to focus on during the design phase
- Necessary steps during the construction phase
- Post-construction requirements

3.1.4 The appendices give information on:

- Risks associated with works on or near railway lines
- Specific site safety requirements
- Key aspects of railway protection arrangements
- Safety requirements when working in the OHLE area
- Handover/handback arrangements
- Contractor Personal Track Safety (PTS) training arrangements
- Completion certificates
- The required contents of a Safety File
- The requirements for a Safety Management System

3.1.5 Please note:

1. Iarnród Éireann (IÉ) is concerned with the risks arising directly from works insofar as they affect the railway. In addition to those risks which arise from work on or near the line, risks to the railway can also arise from works some distance away (e.g. deep excavation, basements, drainage, works affecting water table, tower cranes).
2. IÉ requires all the activities that pose risk to the railway to be included in the safety information presented in the various submissions made to it.
3. IÉ does not require information on construction activities off its property that clearly pose no risk to the railway. The relevant Iarnród Éireann Designated Representative (IÉDR) should be contacted for clarification if there is any doubt.
4. This standard sets out guidelines to cover a range of foreseen activities. Each third party project will have particular requirements that may not be specifically covered here. IÉ will determine the exact internal process and procedures for dealing with each project on an individual basis. IÉ reserves the right to change any of the requirements within this standard at its own discretion at any time.
5. Third parties are responsible for ensuring that their activities are carried out in a safe manner and that they address all risks.

4 HAZARDS AND RISKS OF THE RAILWAY ENVIRONMENT AND CONTROL MEASURES

4.1 The Railway Environment is Different

4.1.1 This standard concerns third party works that occur on or near railway lines. It should be assumed that all lines have trains operating throughout the day and night. The dangers of working on or near the railway are in addition to those encountered elsewhere in a construction environment.

4.1.2 The concept of train operation is that a route is available for a train to run with a dedicated right of way between signals. A train cannot stop in the same distance as a road vehicle for a given speed. For example, a train travelling at 145 km/h (90 mph) requires 2 km to stop. The operating rules required to operate a train safely are detailed, wide ranging, and applied strictly and consistently. The operating rules are different from those applicable in other sectors, including that of construction. In particular, it should be noted that trains could be passing through or near the site at speeds up to 160 km/h (100 mph).

4.1.3 This means that:

- All works must be carried out in a manner that ensures the operation of the railway is safe at all times
- Appropriate arrangements must be in place for the safety of all persons while they are working on or near railway property

4.2 Risks Associated with the Railway Environment

4.2.1 In addition to the normal risks arising from the construction activity, works in the vicinity of the railway can introduce safety risk as follows:

- Risks to third parties arising from train movements
- Risks to railway personnel, operations and others due to third party construction activity
- Risks to third parties arising from general hazards that may be found on railway land

4.2.2 To assist the planners of third party works in eliminating these risks, Appendix A sets out a non-exhaustive list of the risks and hazards that may arise.

4.2.3 Risk to IÉ business is another issue that third party planners and designers must consider and eliminate. This is where there is a risk of IÉ train services being disrupted by the third party works. If there is residual risk, the third party must take measures to control the risk to a level acceptable to IÉ.

4.3 Control Measures to Deal with Risks Arising from Construction Works in the Railway Environment

- 4.3.1 Normal construction safety procedures apply, particularly the Safety Health and Welfare at Work (Construction) Regulations 2006 (and any subsequent revisions or amendments) – henceforth referred to in this document as the SHWW Construction Regulations 2006. Under these regulations, the third party is required to prepare a Safety and Health Plan in which it has identified railway-specific risks (among others) and to address these risks using appropriate control measures when designing a safe system of work.
- 4.3.2 The control measures that IÉ requires for third party works on or near the railway have the objective of eliminating the risks indicated in Section 4.2 above or of reducing these to a level acceptable to IÉ. These control measures include setting up a site-specific Safety Management System as outlined in Appendix I. A description of this system must be submitted to IÉ as a high-level document (i.e. setting out the overall processes but not all the details as these will be included in the individual method statements). As part of the Safety Management System, a safe system of work (set out in method statements) must be established for the various stages of the works. The Safety Management System will include elements of the following:
- Site safety requirements (see Appendix B)
 - Railway protection arrangements (see Appendix C)
 - Safety requirements in the OHLE area (see Appendix D)
 - Handover/handback arrangements (see Appendix E)
- 4.3.3 In the method statement(s) it submits to IÉ for particular stages of the works, the third party will be required to set out a safe system of work addressing safety issues. The method statement(s) must detail specific control measures to eliminate risks in relation to the railway-specific works or reduce these to a level acceptable to IÉ. Each method statement must also identify measures for recovery in case of unplanned events that may affect train services.
- 4.3.4 The Iarnród Éireann Designated Representative (IÉDR), acting in consultation with the Divisional Engineer, will in advance determine the railway protection arrangements to be applied and the third party must work within these imposed constraints. The railway protection arrangements must be included in the safe system of work as set out in the method statement prepared by the third party.

5 DESIGN STAGE

5.1 Safety Considerations

- 5.1.1 As referred to in this section, third parties include the third party itself (as client, developer or promoter) and its consultants, designers, the Project Supervisor Design Process (PSDP), or other agents/contractors engaged by the third party.
- 5.1.2 At the beginning of the design stage, the third party must inform IÉ of the personnel or entities (as given in 5.1.1) who will be carrying out the various activities on its behalf during this stage.

- 5.1.3 The approval process for third party work is set out in *I-DEP-0120 Guidance on Third Party Works* and the third party must follow the process described therein. The additional information given in this section is provided specifically to assist the third party during the design stage, with regard to IÉ safety requirements.
- 5.1.4 The third party must comply with the requirements of the Railway Safety Act 2005. It must also comply with the requirements of the Railway Safety Commission (RSC) and the *Draft Guidelines for Design of Railway Infrastructure and Rolling Stock* (issued by the RSC).
- 5.1.5 The SHWW Construction Regulations 2006 identify duties for those involved in construction projects and provide guidance for the safety management of construction-related tasks. The third party is responsible for compliance with the SHWW Construction Regulations 2006 in meeting the duties of the client.
- 5.1.6 The planning and design process of the third party must take account of working in a railway environment when:
- Preparing the preliminary Safety and Health Plan and designing a safe system of work
 - Developing the Safety File
- 5.1.7 The third party develops the preliminary Safety and Health Plan for the project during the design phase. The plan must take account of the railway activities and the appropriate control measures. The site-specific Safety Management System required by IÉ is likely to include extracts from the Safety and Health Plan.
- 5.1.8 The submission for the preliminary design review, referred to in *I-DEP-0120 Guidance on Third Party Works*, must include a risk assessment concerned with the impact of the works on railway operations, personnel and infrastructure, and the impact on the (third party) works and personnel arising from train operations and any general hazards that may exist on railway land. The submission for the detailed design review must include a description of the proposed Safety Management System (see Appendix I for detailed requirements).
- 5.1.9 Developers of projects that affect the railway will be asked to demonstrate that their proposal has been designed to minimise impact and risk to the railway. They will be expected to apply the general principles of prevention during the various stages of design.
- 5.1.10 One of the main principles to be applied in the planning and design of the project by the third party is to design out the safety risks to IÉ where possible. If there is residual risk, the third party must take measures to control the risk to a level acceptable to IÉ.
- 5.1.11 Third party planners, designers and contractors must also plan to eliminate risk of damage to IÉ's infrastructure in the course of the construction works.

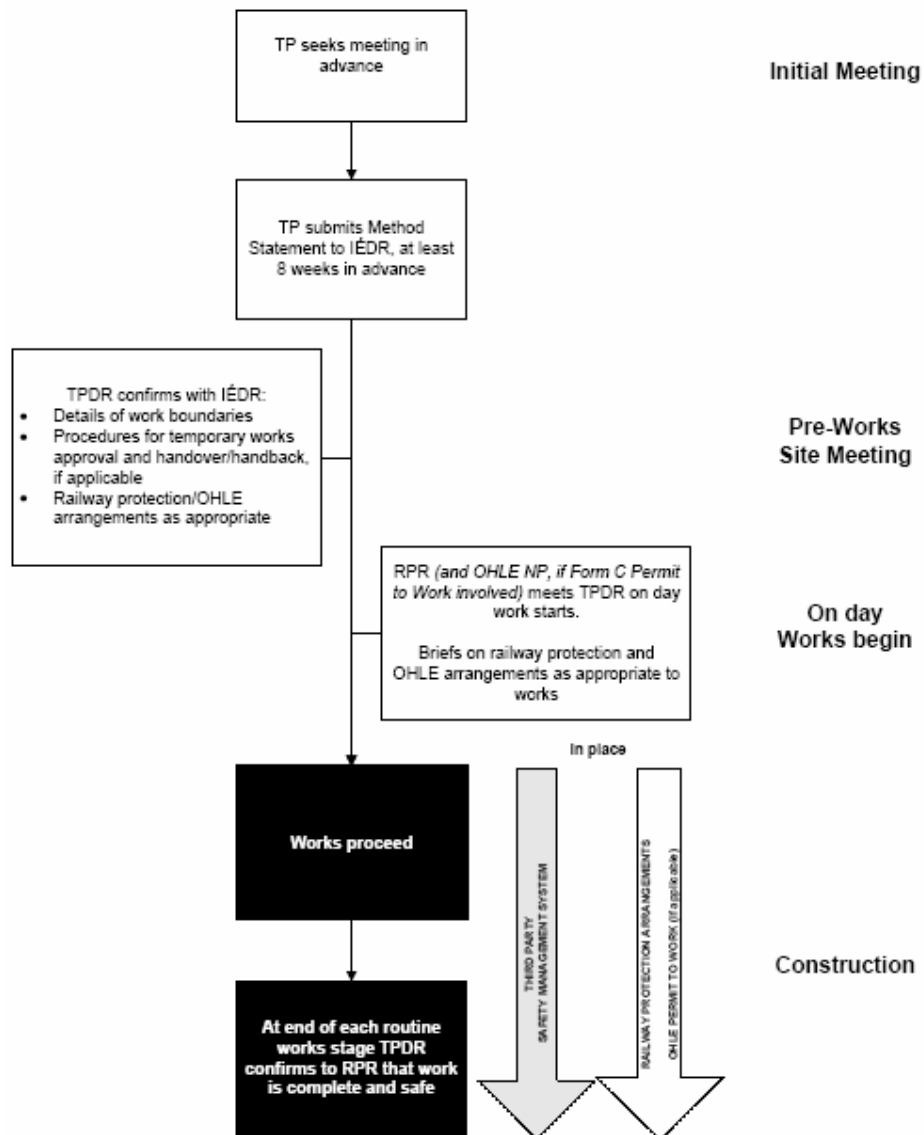
- 5.1.12 When projects are being developed, the third party and/or its designers should be aware that works which affect train operations may require Possessions or other restrictions to train movements before the works can proceed. Possessions, Isolations of the OHLE, speed restrictions, or other restrictions are granted only in exceptional circumstances. The third party must plan to complete any works that take place during a Possession (and/or Isolation) and have contingency plans in place for unforeseen events. Costs charged for overrunning the agreed handback time of Possessions or Isolations and delaying trains are substantial.
- 5.1.13 The works must be designed in accordance with IÉ standards and procedures. Design review procedures must comply with *I-DEP-0120* or as otherwise required by IÉ.
- 5.1.14 Designers of projects are advised to design for minimum site work and to take account of the railway environment. In the case of a bridge over the railway for example, the use of precast or prefabricated units is essential as IÉ will not permit the use of shuttering and in-situ placing of concrete over the railway.
- 5.1.15 When planning the works on site, third party designers or contractors should endeavour to ensure, where practicable, that work is carried out under fenced Green Zone conditions (see Appendix C.7.2), i.e. the work is fenced off from train operations in compliance with Appendix B.5.
- 5.1.16 Designers must design for safe maintenance, taking into account the hazards arising from working in the railway environment. Designers are also advised to design for minimum maintenance, i.e. to reduce the need for maintenance personnel to come on or near the line. This would obviate the need (a) to obtain permission for maintenance work, (b) to set up safety arrangements including railway protection if appropriate, and (c) to enter and work in railway property. An example of design for reduced maintenance might be the design choice of a precast concrete bridge rather than a steel bridge as this would eliminate the need for periodic painting. For a trackside structure, an example might be where the access for maintenance does not require personnel to approach from trackside.
- 5.1.17 Proposed maintenance activities for the structure must be submitted for approval during the initial approval process and agreed by IÉ. Of relevance are maintenance activities that are to be carried out on or near IÉ property and/or which have the potential to affect IÉ railway operations. The procedures for this type of work must be laid out clearly and approved, including the process for entering IÉ property to carry out the work. The PSDP must include this information (with evidence of these approvals) in the Safety File.
- 5.1.18 It should be noted that temporary or enabling works are subject to the same requirements as permanent works on or near railway.
- 5.1.19 Surveys or site investigation work required as part of the design process must be arranged well in advance. Insurance details and method statements for this survey work must be submitted at least 8 weeks in advance to the IÉDR for approval.
- 5.1.20 All third party personnel who have to work in the vicinity of the railway line are required to:
- Understand safety instructions in English

- Attend railway safety awareness training delivered by IÉ, namely a Contractor Personal Track Safety (PTS) Training Course, and be in possession of a Contractor PTS Certificate
 - Attend any other safety-related training as required by IÉ
 - Be in possession of appropriate personal protective equipment (PPE)
- 5.1.21 The third party is advised to arrange for the Contractor PTS training well in advance of the time its personnel are due to go on or near the railway line, and to factor this into the project timescale. (See Appendix F for details of training arrangements.)

6 CONSTRUCTION STAGE

6.1 Safety Considerations

- 6.1.1 Third parties in this section include the third party itself, its contractors, the Project Supervisor Construction Stage (PSCS), Project Supervisor Design Process (PSDP) or other agents, consultants or personnel engaged by the third party.
- 6.1.2 Clear lines of communication are essential. The various personnel involved must be clearly identified. At the beginning of this stage, IÉ will inform the third party who the IÉDR will be for the construction stage of the work. The third party must in turn inform IÉ of the identity of the PSCS. The PSCS then gives IÉ the names of the different third party personnel and their roles and responsibilities in respect of matters which affect railway safety. This includes the name of a competent Third Party Designated Representative (TPDR) for the construction stage of the work. It is recognised that there may be different TPDRs for different stages of the work, depending on the circumstances. Details of the third party personnel, including the TPDR(s), must be set out in the site-specific Safety Management System which is submitted to IÉ at this stage.
- 6.1.3 The construction stage cannot commence until the provisions of the pre-construction arrangements have been complied with as set out in *I-DEP-0120 Guidance on Third Party Works* and the necessary approvals and legal agreements are in place. If all is in place, the IÉDR may now give agreement for the initial work to proceed and issue a written communication granting Permission to Proceed to the third party.
- 6.1.4 Permission to Proceed is not a blanket approval to enter the railway. The third party can only carry out the works with the specific agreement of the IÉDR for specific phases of the works, where the relevant safety arrangements have been planned and set up in line with the approved method statement for each stage of the works.
- 6.1.5 The main sequences for planning and carrying out the work are outlined in Figure 1. (TP refers to third party; NP refers to Nominated Person.)

Figure 1: The Construction Sequence

6.2 Arrangements for the Works

- 6.2.1 The third party is advised to seek an early meeting with the relevant IÉDR to discuss the proposed works and the IÉ railway protection requirements. Topics are likely to include construction methodology, temporary works arrangements and track movement monitoring. The content, type, timing and range of these railway protection arrangements are entirely the decision of IÉ (see Appendix C for general information on railway protection). The railway protection arrangements must fit within the third party's safe system of work for which the third party is responsible (including its contractors and sub-contractors).
- 6.2.2 At this stage, the third party submits to the IÉDR an updated draft of the document describing the site-specific Safety Management System.

- 6.2.3 If railway protection arrangements are required, Iarnród Éireann, at its sole discretion and subject to available resources, can decide to appoint a Railway Protection Representative (RPR) to be in charge of these arrangements. Depending on the circumstances, the RPR may be an ES, PIC, PICOP or TSC (see Appendix C.2 for more on these roles). The RPR will establish railway protection arrangements for the protection of those working on or near the line. All personnel concerned (including the third party, its contractors, agents and sub-contractors) must comply with the directions given by the RPR. Note that a different RPR may be in place at different times.
- 6.2.4 If movement monitoring of railway track is required by IÉ (as per Appendix F of *I-DEP-0120 Guidance on Third Party Works*), then at least two weeks of readings are required in advance of the construction works. The monitoring must be in accordance with the requirements set down in *I-DEP-0123 Third Party Works: Specification for Movement Monitoring of Railway Track*.
- 6.2.5 The third party must now submit 4 hard copies of the detailed method statement to the IÉDR for review. This must be in line with the schedule set out in the document describing the third party's proposed site-specific Safety Management System. The time for IÉ to review each formal method statement submission is likely to be a minimum of 8 weeks.
- 6.2.6 The method statement sets out the safe system of work for the particular phase of the works in question. It contains hazard identification, risk assessment and control measures. Appendix E of *I-DEP-0120* includes guidelines on method statements. Note that the method statement submitted to IÉ should only contain information on the railway-related activities of the planned work. If a bridge over the railway is planned, for example, IÉ will only want details of the bridge works, not details of the associated road project. In all projects, however, anything that affects the railway must be included. Many activities outside the railway boundary have the potential to affect the safety of the railway.
- 6.2.7 The method statement must have a cover sheet outlining the content and should show a revision number that is quoted on each page. It should be signed to indicate approval by the PSCS for the project and the TPDR; it must also be signed by the designer of the works, both temporary and permanent, as being consistent with the accepted design. No works may take place until the IÉDR signs for acceptance.
- 6.2.8 If the third party work is in the OHLE area, appropriate safety arrangements must be in place. See Appendix D for procedures that apply where work takes place near the OHLE and a Permit to Work is required (the permit will be issued by an OHLE Nominated Person).
- 6.2.9 If there are temporary works, the temporary works certificate(s) must be in place. See Appendix D of *I-DEP-0120 Guidance on Third Party Works*.

- 6.2.10 If temporary handover of the railway workspace is given to the third party to carry out works, the process set out in Appendix E Handover/Handback Arrangements must be followed. Note: The third party is expected to have in place contingency plans and resources including personnel, with out-of-hour contacts, to ensure that, despite any problems or unforeseen events, the site can be handed back safely and without disruption to IÉ train services. Details of these plans should be contained within the method statement.

6.3 Pre-Works Site Meeting

- 6.3.1 A pre-works meeting is held on site before commencement of the works. For complex works projects, a series of these meetings may be needed.
- 6.3.2 At this meeting, the TPDR will brief the IÉDR on the site-specific Safety Management System and demonstrate how it is to be put in place.
- 6.3.3 The third party (including its contractor and PSCS as appropriate) will re-confirm with the IÉDR (or his/her designated representative) the safe system of work in the method statement for the immediate work stage that is being undertaken. This will include confirming:
- The boundaries of the works relevant to the railway.
 - The duration of the works.
 - The required railway protection arrangements including the identity of the RPR.
 - The procedures to be applied if the work is in the OHLE area and if a Permit to Work is required (see Appendix D). These details will include the identity of the OHLE Nominated Person.
 - The procedures to be applied for temporary works approval, if there are temporary works (see Appendix D of *I-DEP-0120 Guidance on Third Party Works*). Arrangements must be clarified if there is a handover/handback process as per Appendix E of the current standard.
- 6.3.4 Note that the third party (including its TPDR, PSCS and any third party contractor) can only subsequently deviate in its work activities from those set out in the method statement regarding railway protection, after acceptance of a revised method statement submitted to the IÉDR.

6.4 Construction

- 6.4.1 The site must have safety arrangements as set out in Appendix B. On commencement of the works, the third party must put its site-specific Safety Management System in place.
- 6.4.2 On the day that the works are scheduled to start, the RPR will meet and brief the TPDR and third party personnel who will be working on or near the line on the railway protection arrangements. The RPR also will confirm to the TPDR that the railway protection arrangements are in place. If work is in the vicinity of the OHLE, the IÉ Nominated Person will brief the TPDR on OHLE safety issues and issue a Permit to Work for OHLE-related works, as appropriate.

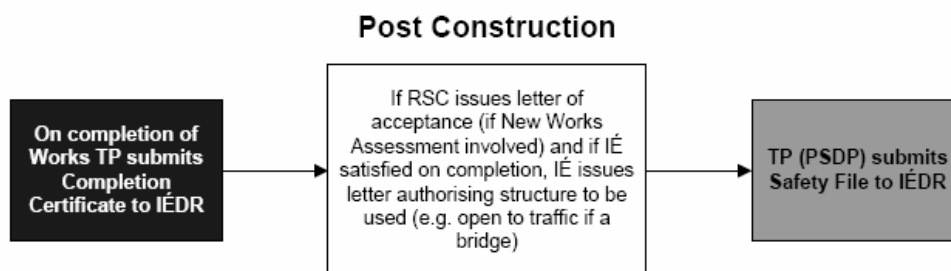
- 6.4.3 The third party then may commence its works in accordance with the safe system of work set out in the method statement(s).
- 6.4.4 IÉ reserves the right to carry out periodic safety audits of the works insofar as they affect IÉ's safety interests. In some circumstances, IÉ may appoint a Site Safety Monitor. The third party, including any of its agents, must cooperate with these arrangements. In particular, the third party must have the following documents available on site:
- Safety Management System
 - Method statements
 - Any other relevant approvals (e.g. site handover/handback certification)
- 6.4.5 When routine work ceases (e.g. on a daily basis), the third party must:
- Ensure personnel are clear of the line
 - Ensure that all materials and equipment are clear of the line and secured
 - Ensure that the particular stage of work is complete and safe
 - Inform the RPR accordingly
- 6.4.6 The third party must advise IÉ in advance of the key project milestones so that IÉ may, in turn, inform the Railway Safety Commission (RSC). This includes the date that construction is due to commence. The RSC may decide to inspect the works at any stage. Where bridge works are involved, the RSC requires timely notification of the following stages:
- The start of the works
 - Two weeks in advance of the deck being placed
 - When the safety barriers/parapets have been constructed/erected

7 POST-CONSTRUCTION STAGE

7.1 Completion of Works

- 7.1.1 The third party must inform the IÉDR of the completion of the works.
- 7.1.2 The sequence for post-construction is outlined in Figure 2. (TP refers to third party.)

Figure 2: Post-Construction Sequence



7.2 Certification

- 7.2.1 On completion of the works, the third party must submit a Completion Certificate (see Appendix G) and one copy of the as-built drawings to the IÉDR. These must include a drawing showing the as-built clearances relative to the IÉ track, boundary line etc. A copy of any relevant test results or certificates must also be attached.
- 7.2.2 The Completion Certificate must confirm that the works have been constructed correctly, in accordance with the approved design.

7.3 Authorisation to Open or Use the Works

- 7.3.1 Authorisation to open or use the works applies to projects that are over or under the railway, and/or that have required Railway Safety Commission (RSC) New Infrastructure Works Assessment. It is likely that specific requirements relating to the use of the works will have been set out in the legal agreement for the project. However, it is also expected that the general requirements below will apply.
- 7.3.2 IÉ inspects the works for completeness and safety. If satisfied, IÉ informs the RSC that the works have been completed. An RSC Inspector may wish to undertake an inspection. If the RSC is satisfied, it issues the final acceptance – i.e. commissioning acceptance.
- 7.3.3 IÉ then issues written authorisation to the third party that it may proceed to put the completed works into service.
- 7.3.4 Note: IÉ and the RSC must have given commissioning acceptance for these types of project before the structure or installation can be opened and/or used. If, for example, the works comprise an underbridge or an overbridge, the third party is not permitted to open this to road or pedestrian traffic until it receives authorisation as set out above.
- 7.3.5 Arrangements to pass rail traffic on underbridges constructed by third parties are subject to special conditions and must be previously agreed with IÉ during the approval process. Similar arrangements must be in place if the third party intends to use a bridge for site haulage purposes prior to public use. Risks arising from this and control measures to address these must be set out in the relevant method statement.

7.4 Safety File

- 7.4.1 After satisfactory completion of the works, the third party must submit a copy of the Safety File to IÉ (see Appendix H).

7.5 Maintenance

- 7.5.1 When the works are put into service, the maintenance obligations of the third party come into being as set out in the legal agreement(s) between the third party and IÉ/CIÉ.
- 7.5.2 Any subsequent third party maintenance works which involve access to railway property or impact on the railway must follow the procedures set out in the Safety File and the relevant legal agreement(s) between the third party and IÉ.

8 REVIEW

8.1 Review Procedure

- 8.1.1 This standard will need to be reviewed every five years or earlier if required.
- 8.1.2 If changes arise from the review, this standard will be reissued. If no changes arise from the review, the current version of this standard will remain in force.

9 REVISION HISTORY

<i>Issue No and Date</i>	<i>Section No and Reason for Change</i>

APPENDIX A RISKS THAT MAY ARISE FROM THE WORKS AND THE RAILWAY ENVIRONMENT

A.1 Overview

A.1.1 This section contains a non-exhaustive list of the hazards and risks that may arise during third party works on or near the railway. Third parties (particularly their planners and designers) must consider these hazards and assess the risks when forming the appropriate control measures for their project.

A.2 Hazards and Risks to Third Parties Arising from Train Movements

A.2.1 Third party work and personnel must be protected from the risk of being struck by a train. Appendix C Railway Protection Arrangements gives details of the control measures relating to railway safety that IÉ requires to be included within the third party's overall safe system of work.

A.3 Hazards and Risks to Railway Personnel, Operations and Others due to Third Party Construction Activity

A.3.1 The third party needs to identify all risks and then set up control measures that address these risks including what could be termed normal construction risks. These measures will form part of the third party's safe system of work. The third party must also focus on risks to the railway arising from the construction activity. The following is a non-exhaustive list of risks to be considered when preparing control measures:

1. A major accident or derailment caused by construction activity and resulting in ill health, injuries, fatalities, damage to railway operations and property, or loss of operability. Control measures must ensure that any movements of vehicles, personnel and plant, equipment or materials do not cause any such undesirable events on or near the line.
2. Unauthorised access to the railway. Control measures such as fencing and security, as necessary, must be in place.
3. The possible confusion of train drivers caused by red or green items or lights; this could arise when third party personnel have to go on or near the line. To guard against this hazard, no green or red clothing, helmets or lights should be used by third party personnel near the railway.
4. Dust and/or emissions affecting train drivers' viewing distances. Control measures must be in place to ensure this does not happen.
5. Temporary lighting blinding train drivers. Control measures must be in place to ensure this does not happen.
6. Obscuring of railway signals (including sighting of these) or damage to signal equipment or digging up of signal cables; these could lead to danger or disruption to train operations. Control measures must be in place to ensure that this does not happen.

7. Injury to third party personnel when they are working on the railway site. Orange high-visibility clothing and appropriate personal protective equipment (PPE), including protective footwear, must be worn at all times by third party personnel.
8. Handback of the railway working space that leaves the railway in a dangerous condition and/or handback that is late and affects railway operations. Appropriate control measures, including contingency plans, must be in place to prevent these situations. (See Appendix E.)
9. Danger to third party personnel from the electrified lines where the activity is in OHLE areas. Control measures must be in place to guard against this and to protect the OHLE from damage as a result of the works.
10. Vandalism. Fencing must be intact, and materials and plant must be secured to prevent vandals placing these on the line.
11. Scaffolding or temporary works or construction materials falling on or near the line. Erection and/or removal must be carried out safely. Control measures include submission for temporary works design approval, as per Appendix D Design and Check Procedures in *I-DEP-0120 Guidance on Third Party Works*.
12. Danger to passengers if the works are in or near stations. Due care must be exercised and exits in stations must be maintained and not impeded.
13. Dangers from driver-operated machines used for lifting purposes (e.g. cranes). These machines must be strictly controlled to ensure that the crane equipment or loads do not swing or fall on or near the railway line.
14. Construction plant (including tower cranes and piling rigs) falling onto the line if it collapses, even if it is located off railway property. Control measures must be in place.
15. Works which may adversely affect the railway even though located some distance from the railway boundary. For example, work which lowers the water table might cause subsidence of the railway formation. Control measures must be in place.
16. Increased traffic on adjacent bridges or level crossings, causing damage to these or, in the case of level crossings, danger to train operations. Control measures must be put in place.
17. Destabilisation of the track support which could give rise to settlement causing train derailment. Control measures must be in place to avoid this, including maintenance of the track support system and movement monitoring of railway track.
18. Use of explosives near the line. See B.11.
19. Material falling on the line if demolition adjacent to the line is proposed. Control measures must be employed to prevent this.
20. Contamination or any danger to railway land, personnel or operations from any hazardous chemicals used during the works. Control measures must be in place.

21. Fire risks that could arise from the construction works. The railway line and operations must be protected.
22. The digging up or cutting of services on railway property (signal or electricity cables, drains, culverts, gas pipes etc.). There must be protection against this risk.
23. Structural collapse and poor construction practices that may affect the railway. Contractors and designers employed by the third party must be competent and control measures must be in place.
24. Third party personnel working on the railway site under the influence of drugs or alcohol. Control measures must be in place to guard against this, in line with the IÉ Drugs and Alcohol Policy.
25. Safety instructions not being understood. The third party must ensure all personnel assigned to work on railway property can understand safety instructions given in English.
26. Lack of familiarisation among third party personnel with the railway environment, the particular site and the site boundaries. This could cause accidents. Control measures must include provision for Contractor Personal Track Safety (PTS) Training and briefing on the site characteristics.

A.4 General Hazards that may be Found on Railway Land

- A.4.1 When planning and executing their works on or near the railway, third parties should note that there may be general hazards on railway land as listed below. They should carry out an investigation to see if these exist and put control measures in place accordingly.
- A.4.2 **Confined Spaces** – A considerable number of confined spaces exist on or about the railway. In certain circumstances, this may be a transient state dependent on usage. The third party must ensure that its staff are suitably trained to recognise a confined space and a safe system of work must be devised by the third party. This must also be notified to IÉ before any work is carried out.
- A.4.3 **Contaminated Land** – Railway land, especially in the area of former or existing large sidings or depots, may be contaminated with dangerous substances. The third party must investigate and take appropriate precautions when carrying out activities that disturb or alter the existing land.
- A.4.4 **Asbestos** – The third party must check for the presence of asbestos and take all appropriate precautions.
- A.4.5 **Lead** – Railway bridges, structures and some buildings may have protective and decorative coatings containing substantial quantities of lead. Accordingly, the third party must take all appropriate precautions.
- A.4.6 **Cadmium** – Cadmium may have been used as anti-corrosion plating on some metal products (nuts for rail fastenings, for example) on or about the railway. Accordingly, the third party must take all appropriate precautions.

- A.4.7 **Hazards from Rats and Birds** – There may be a risk of leptospirosis (Weils Disease) when working on the railway as a result of contamination by rats. There may be a risk in some locations from pigeon droppings. Accordingly, the third party must take all appropriate precautions.
- A.4.8 **Timber Sleepers** – Some timber sleepers used on the railway are treated with creosote which is a hazardous substance. The third party must take appropriate precautions if its staff are likely to come into contact with these sleepers.
- A.4.9 **Toilet Waste and Dumping of Hazardous Material** – There is a risk of individuals contracting infections arising from discharge of toilet waste on tracks from some trains. Control measures could include observation of normal hygiene, use of gloves and vaccinations as appropriate. Note should also be taken of the risk of infection from discarded needles which may have been illegally dumped on railway land.

APPENDIX B SPECIFIC SITE SAFETY REQUIREMENTS FOR THIRD PARTIES

Note: These requirements must be included as appropriate within the third party's safe system of work.

B.1 Personal Protective Equipment

- B.1.1 All third party personnel working on railway property are required to wear orange high-visibility clothing at all times. This must be clearly labelled with either *Third Party* or *Contractor* or the name of the contracting organisation. The clothing may be in vest form or wet weather gear. The requirements are as follows: colours – EN471 Fluorescent Orange; for vests, the minimum visible area at the rear must be 0.5 sq m, minimum visible area on the front must be 0.2 sq m; the clothing must have sewn-on silver reflective tape, width 50 mm, minimum visible area 0.13 sq m. Full specification is available on request.
- B.1.2 The third party is responsible for ensuring that its staff have personal protective equipment (PPE) appropriate to the tasks being carried out and in line with the control measures set out in its method statement. As part of this, Iarnród Éireann (IÉ) requires that third party personnel have appropriate safety footwear when working on or near the line.
- B.1.3 Third party personnel who do not have appropriate high-visibility clothing or appropriate safety footwear may be instructed to leave the railway site immediately.
- B.1.4 Personnel on the railway site must not wear red or green clothing, or red or green helmets, as these could be mistaken for signals or railway safety flags by train drivers.

B.2 Personnel

- B.2.1 Third party staff entering railway property must possess a Contractor Personal Track Safety (PTS) Certificate. (See Appendix F for details.)
- B.2.2 Third party staff entering railway property must be able to understand safety instructions given in English.
- B.2.3 Third party personnel must comply with the drugs and alcohol requirements of the Railway Safety Act 2005. Any third party personnel on IÉ property must be in compliance with the IÉ Drugs and Alcohol Policy. During the approval process, third parties are required to demonstrate how they will comply with this policy.

B.3 Railway Site Familiarisation

- B.3.1 In addition to ensuring its staff have completed Contractor PTS Training, the third party must ensure that detailed briefing on the characteristics of the specific railway site is given to all its personnel including contractors, sub-contractors and any others engaged by the third party. This requirement applies both before commencement of the work and at agreed intervals during the progress of the work.

- B.3.2 The briefing must include:
- Details of the boundaries of the railway site
 - Requirements for fencing and security of the railway site
 - Procedures for access close to the line
 - Procedures for the safe operation of equipment, machinery and storage of materials and other such relevant matters as set out in the safe system of work for the site in the method statement
- B.3.3 The third party must also ensure that its personnel undergo additional briefing if the boundaries of the railway site or other relevant circumstances are changed.
- B.3.4 The third party must ensure that control measures are in place for safe management of visitors to the site, in relation to the railway. This includes, for example, briefing visitors on the characteristics of the railway site and procedures for access close to the line and ensuring they have suitable PPE and a Contractor PTS Certificate if they go on or near the line.
- B.3.5 Records of all such briefings and control measures must be kept by the third party for monitoring purposes.

B.4 Removal of Third Party Employees

- B.4.1 IÉ is at liberty to object to, and to require the third party to remove from the railway site immediately, any person employed on its behalf who:
- Has refused to immediately carry out an instruction given by IÉ where such instruction relates to safety, or
 - In the opinion of IÉ, is liable to endanger his/her health and safety, or that of others.

B.5 Erection of Protective Fencing by the Third Party

- B.5.1 If it is part of the agreed method statement, the third party must erect a substantial temporary fence between the site and the railway, not closer than 3 metres to the nearest rail.
- B.5.2 The fence must be sufficiently high and strong, and located to prevent plant and materials encroaching and endangering the railway. The fence must extend on each side at least 5 metres beyond the anticipated working zones. It must be secure and at least 2.4 metres high.
- B.5.3 The precise fencing specification and location is agreed with the Iarnród Éireann Designated Representative (IÉDR) prior to commencement of the works.

B.6 No Trespass

- B.6.1 Third parties carrying out works on or near the railway are responsible for maintaining the safety and security of the worksite and ensuring the safety of the general public. This element must be included in the risk assessment and the third party must have control measures in place to guard against trespass onto the railway.
- B.6.2 The third party must confine its activities to the work described in the agreed method statement(s) and must not allow its personnel to enter railway lands, other than those agreed for the works in the method statement(s).
- B.6.3 All necessary steps must be taken to ensure that the works cannot be used by vandals or trespassers for access to the railway while the works are in progress. The third party must take the necessary precautions, including the provision of security personnel if required by the IÉDR. Precautions must be in place when the site is unoccupied, e.g. at weekends and on public holidays. The boundaries of the site must be adequately secured at all times to deter trespassers and/or stray animals from gaining access to the site. Any damage to railway fencing must be immediately repaired.
- B.6.4 If the works increase the risk of child trespass on the railway and suitable trespass-proof fencing does not already exist, this must be provided and maintained along the railway boundary during the works.

B.7 Interference with Train Drivers' Views

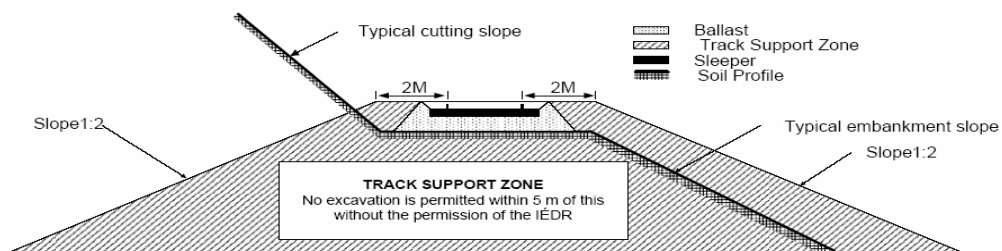
- B.7.1 The third party should not install lamps that may shine in the direction of train drivers. Any lights provided should not interfere with railway signalling. For example, traffic lights used as part of the arrangements for works traffic management must be positioned so they are not visible to train drivers. Ground lamps should be yellow and not red.
- B.7.2 The third party should not allow dust, which could spread across the railway, to rise from the worksite. The third party should not allow the lighting of fires from which dense smoke or flames may spread across the railway.
- B.7.3 Train drivers' views of signals, signs, notices etc. must not be obstructed during the works.

B.8 Alterations or Excavations

- B.8.1 Piling or vibro-stabilisation may cause ground heave or settlement and is not allowed adjacent to the railway without prior approval. If such methods are planned, they must first be submitted for assessment during the technical approval process.
- B.8.2 The third party is not allowed to carry out tipping of soil, the raising or lowering of ground level or water table, deep excavation, or the provision of large sewers where such works could affect the track formation, track drainage or the stability of railway structures, cuttings or embankments.

- B.8.3 To provide guidance for the third party in planning the safe execution of works, a drawing of the track support zone is given below (Figure B.1). It should be noted that criteria such as 1:2 slope apply to general conditions. The actual criteria to be applied depend on the specific conditions such as soil, water flow or other local characteristics. If third parties require to carry out any excavation or disturbance of the ground within 5 metres of the track support zone as set out here, they must discuss the proposed work with the IÉDR, obtain agreement and then present this in the method statement (including any control measures) 8 weeks in advance of such work commencing.

Figure B.1: Track Support Zone



B.9 Alterations to Drainage

- B.9.1 The third party is not allowed to carry out any alterations to drainage that would increase the flow, or rate of flow, of water through railway culverts and ditches or into soak ways.
- B.9.2 The third party may not direct any drainage into the railway ditches and gipes. It may not divert any drainage within 50 metres of the railway boundary without the written permission of the IÉDR.

B.10 Crossing of Line

- B.10.1 The third party is not permitted to allow its personnel, plant or equipment to cross or rest on the railway line at any time during the works, except on a public level crossing or public bridge, or as expressly authorised by the IÉDR.
- B.10.2 The third party is not allowed to use existing private bridges or level crossings over or under the railway, unless by prior agreement with IÉ.
- B.10.3 IÉ should be consulted if there are planned works which will introduce additional traffic or danger of obstructions or damage from slow moving, heavy, high or long vehicular traffic to level crossings and also to railway underbridges or overbridges. Equally, there should be no risk of damage to the OHLE from high vehicles. Control measures, such as traffic management and other safety procedures, may be required to minimise risk caused by this extra traffic.
- B.10.4 Metal-tracked vehicles may trip track circuits across the rails. IÉ must be consulted and appropriate control measures put in place.

- B.10.5 IÉ does not allow the installation of temporary level crossings because of the unacceptable risk involved.

B.11 Use of Explosives

- B.11.1 The third party is not normally allowed to use explosives within 400 metres of the railway. Depending on the circumstances, however, this may be permitted in certain situations after due consideration of the hazards and the possibility of applying adequate control measures. A special application must be made to IÉ for approval in these instances.
- B.11.2 The third party should consult the IÉDR if it is considering the use of explosives in the immediate area outside this 400-metre limit.

B.12 Demolition

- B.12.1 Demolition by the third party of structures adjacent to the railway line and which may potentially affect the railway is not allowed unless by prior agreement with IÉ.

B.13 Felling of Trees

- B.13.1 Felling of trees by third parties which may potentially affect the railway is not allowed unless by prior agreement with IÉ.

B.14 Storage of Materials

- B.14.1 During the progress of the works and when the site is unoccupied, all loose materials and equipment must be locked away in a safe place. The third party is not allowed to store highly inflammable materials close to the railway or railway cable routes.

B.15 Protection of Railway Property and Services

- B.15.1 All precautions must be taken to ensure that there will be no damage arising from the works to IÉ infrastructure (track, formation, bridges, OHLE, structures etc).
- B.15.2 All precautions must be taken to ensure that no damage or accidental disconnections occur to the signals, signal control or telephone cables etc. The location of the signal control cables will be pointed out on site and no interference is allowed with these.
- B.15.3 Culverts, drains, underground or overhead wires or any other IÉ services must be located and protected by the third party during the course of the works. Diversions must be provided where necessary (permanent, temporary or replacement as appropriate). The method statement(s) must contain the procedures for excavation and/or working close to the underground or overhead cables and facilities, and specify the precautions that will be employed.

B.16 Protection of Utility Services

- B.16.1 The railway is crossed by overhead and underground utility pipes and cables in many locations. The third party is responsible for identifying the location of these at the railway worksite and taking appropriate precautions to ensure that no damage occurs to them. The method statement(s) must contain the procedures for excavation and/or working close to the underground or overhead installations, and specify the precautions that will be employed.

B.17 Monitoring

- B.17.1 Arrangements, agreed with the IÉDR, may be required to monitor the stability of a railway structure if third party works could endanger the integrity of such a structure.
- B.17.2 Movement monitoring of railway track may be required as set out in Appendix F of *I-DEP-0120*.

B.18 Plant and Machinery

- B.18.1 Arrangements must be made to ensure that all construction plant and machinery used by the third party on site are immobilised when not in use so that they cannot be operated by unauthorised persons or put in a position where they could endanger trains.
- B.18.2 Plant and machinery must be parked so that these or their appendages do not endanger train movements.

B.19 Craneage or Equipment with a Risk of Falling on the Railway

- B.19.1 The use of any equipment which has the potential to fall over railway property or swing loads into railway property must be properly planned and assessed. Control measures must be put in place to ensure that risks are eliminated.
- B.19.2 Operation of the following equipment near the railway line requires the consent of IÉ, and appropriate control measures must be incorporated in the method statement submitted for approval:
- Piling rigs
 - Lifts or hoists or tall freestanding equipment including scaffolding
 - Tower cranes and mobile cranes (these require a separate licence agreement to be finalised with the IÉDR; see B.20 and B.21 below for indicative details)
- B.19.3 The third party must comply with the requirements of IS 360:2004 *Code of Practice for the Safe Use of Cranes in the Construction Industry, Part 1, General* and clauses 8.6.1 and 8.6.2. The lifting, slewing and traversing of any load over the railway is not permissible except under railway protection conditions.

- B.19.4 The third party must submit a detailed drawing for the crane (or piling rig, hoist or other relevant equipment) showing the position of the proposed support conditions in relation to the tracks and other railway features, and proposed movements. This drawing must be submitted in the method statement to the IÉDR for consent 8 weeks prior to the commencement of the operation of this equipment.

B.20 Tower Cranes

- B.20.1 Where tower cranes are employed on IÉ property or swing over IÉ property, their use is subject to an approvals process with a separate licence agreement. If the tower crane is outside IÉ property but may affect the railway in collapse mode, then IÉ must be consulted and approval sought for the installation and operation of the crane. Conditions for use are likely to reflect those set out below. Note: The same rules apply to self-erecting cranes.
- B.20.2 These requirements for approval and licencing are in line with the stipulations of the Railway Safety Act 2005. These place an obligation on all persons carrying out any works on or near the railway to ensure that there is no increase in risk to the railway as a consequence of these works.
- B.20.3 It is likely that the licence agreement will include the following technical requirements:
- All necessary bases, supports, grillages etc. must be provided for a tower crane including any temporary works required for erection and dismantling. All temporary works to support the tower crane must be designed to the loading specified by the tower crane manufacturer for the location, mast height and jib length required.
 - When the distance between the tower crane mast and the nearest rail on which trains may pass is less than the diagonal distance from the base of the mast to the end of the jib plus 3 metres, the safe working load of any tower crane must be downrated to 75% of its safe lifting capacity.
 - The jib of the tower crane must be allowed to weathervane freely through 360° when not in use.
 - Either automatic limiting devices (to restrict the travel along the jib of the crane hook) or zoning devices upon the slewing ring must be installed. This is to ensure that no part of any load oversails a vertical plane 5 metres from the nearest edge of the nearest rail on which trains may pass or within 5 metres of an operational platform. Such limiting or zoning devices must give the crane driver advance warning of the approach of the travel or slew limit. If there is a site with a constraint on clearances, the actual arrangements must be discussed and agreed with the IÉDR.
 - Any limit override facility must be key operated and located at the base of the tower. The third party must submit to IÉ for acceptance details of the system to be adopted for the management of the key to the override facility. This is to prevent unauthorised use by the crane driver or other contractor personnel.

- The detailed method statement augmented with drawings for the erection and dismantling of the tower crane must be submitted to the IÉDR for consent 8 weeks before the proposed date of erection. Note: If a mobile crane is used, a separate licence is required (see B.21).
- Detailed drawings of the third party's tower crane proposals must be submitted to the IÉDR for consent 8 weeks prior to the proposed date of erection. The drawings must show:
 - the tower crane's location in relation to the tracks or operational platforms
 - the proposed tower crane supports and associated temporary works
 - mast height
 - jib length and radius of travel
 - the limits of operation of the crane hook
 - operating procedures
- A tower crane adjacent to the railway must be load tested by a competent person under a Possession, and Isolation of the OHLE where applicable, to 25% above its lifting capacity; this is subject to manufacturer's limits. If less is allowable, this should be discussed with the IÉDR who may apply an additional downrating of lifting capacity. A copy of the test certificate (F91) must be given to the IÉDR prior to the crane being brought into use.
- Radio or telephone communication must be provided between the crane driver and the crane signaller.
- The third party must demonstrate in its submission for approval how the following is achieved:
 1. Tower cranes are erected and dismantled by competent people
 2. These cranes are examined after erection by an independent competent person
 3. The crane driver is competent to operate and carry out in-service checks
 4. Weekly in-service inspections are carried out by the crane operator
 5. Cranes are subject to a maintenance schedule

B.21 Mobile Cranes

- B.21.1 A licence agreement with IÉ is required for operation of a mobile crane on a site adjacent to the railway.
- B.21.2 Generally the same principles apply as with a tower crane. A method statement must be prepared and submitted to the IÉDR in advance of preparatory temporary works involved in setting up a mobile crane.
- B.21.3 Under no circumstances should the jib of a mobile crane be positioned such that, in the event of collapse, it will fall on IÉ property.

B.22 No Electrical or Radio Interference

- B.22.1 Steps must be taken to ensure that construction materials and construction machinery do not cause electro-magnetic interference to the signal system, telecommunications systems, train-to-base radio, and continuous automatic warning systems or to the guard-to-driver radio communications systems.

B.23 Staff Welfare

- B.23.1 The third party must provide and maintain suitable facilities for IÉ personnel. These will be for the sole use of IÉ personnel engaged on supervision and protection duties. The third party must also provide access to appropriate welfare facilities for such personnel. The actual facilities to be provided will depend on the scale and extent of the works. The facilities are provided at the third party's expense and to the requirements of the IÉDR, as agreed in advance.

B.24 Environment

- B.24.1 The third party must ensure that no environmentally harmful incident occurs on site such as spillage, dumping of materials or release of gases. If such an incident occurs, the third party is fully responsible for rectifying the damage at its own expense and to the satisfaction of IÉ.

APPENDIX C RAILWAY PROTECTION ARRANGEMENTS

C.1 Introduction

- C.1.1 This section sets out details of possible railway protection arrangements. These arrangements are provided by Iarnród Éireann (IÉ). They must be included in the third party's site-specific Safety Management System and form part of the third party's control measures as set out in its method statement(s).
- C.1.2 Protection is the term used to describe the arrangements put in place to ensure the safety of train operations and persons while work is taking place on or near the track. This may include arrangements for the provision of IÉ staff to warn personnel of approaching trains. These arrangements could also include specific arrangements agreed in advance concerning work between train movements or the taking of a Possession.
- C.1.3 IÉ requires the third party to design and adhere to a safe system of work in relation to the part of the works that potentially affect the railway. In accordance with its requirements and the SHWW Construction Regulations 2006, this system must include the railway protection arrangements outlined below for works on or near the line.
- C.1.4 If railway protection arrangements are needed, the third party must discuss these beforehand with the Iarnród Éireann Designated Representative (IÉDR) and then include them in a method statement to the IÉDR for approval at least 8 weeks in advance. This will allow time for agreed railway protection arrangements to be scheduled into the relevant IÉ work programmes. In agreeing to provide such arrangements, IÉ has no liability for any ensuing costs that may arise in the event of cancellation. IÉ may decide to cancel such arrangements at any time due to resource issues or the exigencies of operating a train service.
- C.1.5 Note: The IÉDR decides what the appropriate railway protection arrangements will be in all circumstances.

C.2 Authority for a Third Party to Go On or Near the Line

- C.2.1 A Railway Protection Representative (RPR) will inform third party personnel when they may go on or near the line. The RPR will vary depending on the circumstances. The third party will be advised of the relevant RPR by an agreed method of communication in advance of the works.
- C.2.2 For background information, the IÉ personnel indicated in Table C.1 may be designated as RPRs acting in specific positions and depending on the circumstances.

Table C.1: Railway Protection Representative (RPR)

IÉ Designation by Type of Duty	Circumstance
Engineering Supervisor (ES)	Person appointed by IÉ to be in charge of the work being carried out under a Possession.
Person in Charge (PIC)	IÉ person responsible for ensuring that protection is provided and removed correctly and safely so that trains are not endangered. Protection must be provided on any line not under Possession before the start of works that may endanger trains on that line.
Person in Charge of Possession (PICOP)	IÉ person appointed to take Possession of the line.
Track Safety Coordinator (TSC)	IÉ person appointed whenever there is work on or near the line. The TSC is responsible for ensuring that the person doing the work is not endangered by trains.

Note: One person may carry out a number of these duties.

C.3 Possessions Arrangements

- C.3.1 Possessions are special arrangements to control the movement of trains for a specific period over a particular stretch of railway line. Rail traffic ceases to operate over a given stretch of railway line when a designated Iarnród Éireann person takes a Possession of that line. This person may or may not be the RPR, but it will be an RPR who communicates instructions regarding railway protection arrangements to the third party.
- C.3.2 It is important to note that engineering trains and on-track machines may still run during a Possession.
- C.3.3 Granting of Possessions is entirely at the discretion of IÉ. Possessions may be granted only when:
- They are not disruptive to services,
 - Other options have been exhausted, and
 - The proposed work poses a risk to train movements, such as the use of machinery or potential interference with railway infrastructure.
- C.3.4 Possessions must be requested during the initial design approval process. If granted, the detail must be planned and arranged well in advance and usually arranged for restricted times in order to avoid interference with train operations.
- C.3.5 Specific applications for Possessions must be made to the Iarnród Éireann Designated Representative (IÉDR) at the earliest possible date. Where granted, these must be included in method statements submitted to the IÉDR.

- C.3.6 In the case of a granted Possession, an RPR is provided to implement the arrangements for the works and no works can commence unless the RPR clearly indicates that the protection arrangement is in place for a particular section of line for a particular period.
- C.3.7 The third party is responsible for all costs arising from a Possession.
- C.3.8 Note that IÉ may cancel or curtail the Possession at any time for any reason, including lack of resources or the exigencies of train operation.

C.4 Speed Restrictions

- C.4.1 Speed restrictions may be imposed to reduce the speed at which trains may travel over a section of track. Speed restrictions are only granted in exceptional circumstances.
- C.4.2 Requests for speed restrictions must be made during the detailed design submission stage.
- C.4.3 Where granted, the imposition of a speed restriction is discussed at an early stage between the Third Party Designated Representative (TPDR) and the IÉDR. Note of the agreed restriction is then included in the relevant method statement submitted at least 8 weeks in advance to the IÉDR.
- C.4.4 Speed restrictions are at IÉ's discretion and incur a daily charge to the third party. The charge reflects the impact on train operations.
- C.4.5 Note that IÉ may cancel or curtail the speed restriction at any time for any reason, including lack of resources or the exigencies of train operation.

C.5 Handover/Handback Arrangements

- C.5.1 If previously sanctioned during the approval process, a handover/handback arrangement will be put in place to allow the third party to carry out work for a limited period within a section of the railway. A Possession may be arranged to facilitate this aspect of the works. Note that this arrangement may be cancelled by IÉ at any time due to lack of resources or the exigencies of train operation.
- C.5.2 IÉ considers it necessary to put in place a documented arrangement to enable the railway to be satisfied that the third party works are completed and in a safe condition to allow IÉ operations to resume. These documents and arrangements are set out in Appendix E.

C.6 Protection Arrangements for Work Arranged Between Train Movements

- C.6.1 If previously sanctioned during the approval process, protection arrangements may be permitted for work to be carried out between train movements when the work is to be carried out close to a line without interfering with the track itself. Permission is given on the basis that the work can be stopped at any time to allow a train to pass. The protection ensures that trains cannot enter the section of track while the protection is in place. It is arranged for periods between normal train operations and does not usually involve diversions or cancellations of trains.

- C.6.2 An RPR is provided to implement the arrangements for the works and no work can commence unless the RPR clearly indicates that the protection arrangement is in place for a particular section of line for a particular period.
- C.6.3 Applications must be made to the IÉDR for this arrangement. If agreed, the details must be included in the method statement.
- C.6.4 The setting up of this arrangement on a specified date is not guaranteed. It depends on the running of trains, which have priority.

C.7 Other Protection Arrangements: Green and Red Zones

C.7.1 IÉ distinguishes two types of worksites: green zone and red zone. Different arrangements apply in each case. These are determined by IÉ during the approvals process and set out in the method statement(s) prepared by the third party.

C.7.2 Green Zone Working

1. A Green Zone is where work is arranged to take place without any third party personnel going on or near any line or siding, including one in a Possession, on which trains (or movements) may pass.
2. A Green Zone exists where the worksite is safeguarded by:
 - stopping of trains on all lines, or
 - being separated from the nearest line open to trains, by a distance of at least 3 metres, or
 - being fenced from the nearest line open to trains where one or more lines remain open to trains.
3. Third party personnel present or working in the vicinity of the track must be accompanied by the RPR who is responsible for implementing the appropriate safe system of work regarding railway protection. No works should begin unless the RPR gives permission to proceed.

C.7.3 Red Zone Working

1. If any work cannot reasonably be carried out under Green Zone protection, it may be possible in certain circumstances to work within 3 metres of the nearest track open to rail operations. This is termed Red Zone working and is allowed only when:
 - absolutely necessary and it is not practical to arrange a Green Zone, and
 - protection can be provided to give sufficient warning of all trains approaching on the line(s) concerned.
2. Where this protection is in place, an RPR is responsible for implementing and maintaining the arrangements.
3. IÉ provides personnel to implement protection during the course of the works in a Red Zone.
4. No works should begin unless an RPR is present and gives permission to proceed.

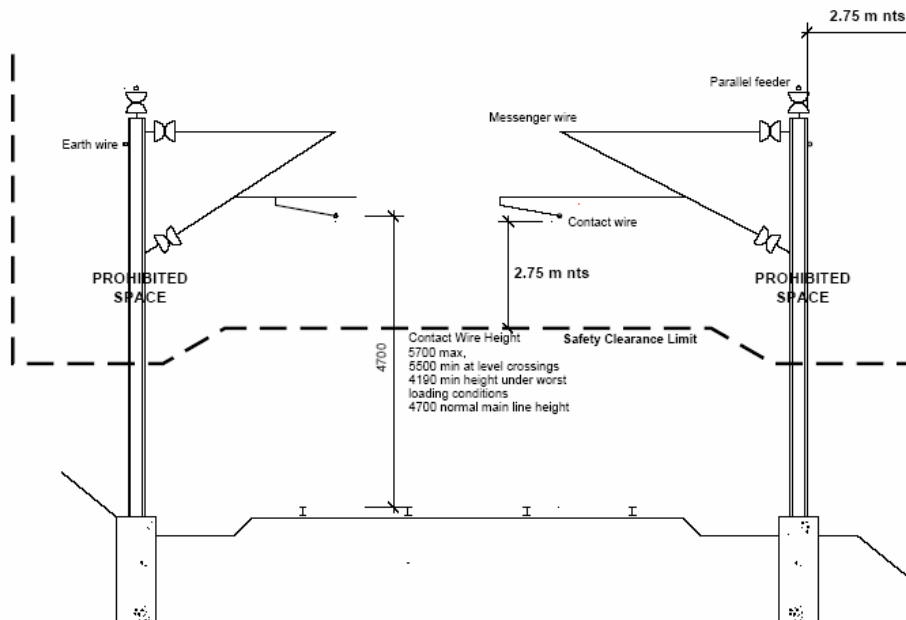
APPENDIX D SAFETY REQUIREMENTS WHEN WORKING IN THE OHLE AREA

Note: These requirements must be included within the third party's safe system of work as specified in the method statement. The method statement will set out clear lines of organisation, responsibility and communication in this regard.

D.1 OHLE – Electrified Line

- D.1.1 OHLE (overhead line equipment) concerns the electrified lines for the operation of the DART for Dublin suburban rail services. The electrified lines extend from Malahide to Greystones and include the branch from Howth Junction to Howth. They also include interfaces at North Strand, Newcomen Branch, East Wall Branch and Carriage Sidings at Connolly Station.
- D.1.2 OHLE is electrified at 1500 volts DC and is dangerous to human life. Underground and overground cables that feed the OHLE are electrified at up to 38 kV. Personnel must assume that the OHLE is live at all times and keep outside the Prohibited Space (see Figure D.1). The Prohibited Space is defined as being within 2.75 metres of any part of the OHLE that is live. Note that the 2.75 m applies to third party personnel, taking note of their unfamiliarity with IÉ overhead line equipment. IÉ maintenance staff, where appropriate, are authorised to work at closer distances.

Figure D.1: OHLE Prohibited Space



- D.1.3 Third party work near OHLE must be agreed in advance with IÉ. Without this agreement, work must not be carried out, or cranes or other plant erected, operated or dismantled, or materials stored.

- D.1.4 Third party personnel working near the OHLE must observe certain precautions as set out below. All of these control measures must be included in the method statement which has to be submitted to the Iarnród Éireann Designated Representative (IÉDR) for review at least 8 weeks in advance.
- D.1.5 If the work needs to be carried out within the Prohibited Space, then a Form C Permit to Work on or near the OHLE is required. This requires the OHLE to be isolated. Permits to Work are normally only granted where the Isolation will not interfere with IÉ train services.
- D.1.6 If the third party requires a Form C Permit to Work, approval for this must be requested from the IÉDR at least 8 weeks in advance. If granted, Form C Permit to Work procedures must be included in the method statement as appropriate. Part 1 of the Permit to Work gives permission to work in relation to the OHLE (railway protection is a separate issue, see D.1.7); Part 2 is signed by the person in charge of the works (i.e. the TPDR); Part 3 is signed by the TPDR to confirm that the works are complete and clear of the OHLE.
- D.1.7 Note that a Form C Permit to Work only refers to working on or near the OHLE; it is not a blanket approval to work on the railway site. If work has to take place on or near the line, the third party also has to abide by the requirements of the railway protection arrangements previously agreed and included in the method statement.
- D.1.8 *General Precautions:* When working on or near OHLE, third party personnel must observe the following:
1. Works, equipment or materials must not come close to the Prohibited Space or be in danger of being swung into it. Materials cannot be stored within the Prohibited Space and must be secured so that they cannot inadvertently enter this space.
 2. When persons are handling tools or materials adjacent to the Prohibited Space, the Prohibited Space must be increased by the length of any tool or material being handled. However, normal work on the track, station platform, walkways and the like (i.e. below or near the OHLE) is permitted without special OHLE precautions, provided that tools or equipment are not at any time raised above head height.
 3. When scaffolding that is being erected or dismantled may encroach on the Prohibited Space, approval must be sought in advance from the IÉDR as a Form C Permit to Work will be required.
 4. If a crane or other lifting equipment is being used, IÉ requires control measures to be in place with regard to the safety of the railway. These must be agreed with IÉ in advance. If a tower crane is in use, IÉ requires a crane licence agreement to be in place. In OHLE areas, control measures to be provided by the third party may include suitable crane stops, fencing and warning notices to ensure the equipment's safe operation so that it keeps clear of the Prohibited Space.
 5. Ladders can lead to electrocution if allowed to come close to overhead equipment and, therefore, special precautions must be taken to ensure that the ladder cannot slip and encroach on the Prohibited Space.

6. Portable ladders used in the vicinity of the OHLE must be of timber or other non-conducting material and must not be reinforced by metal attachments running along the stiles of the ladders.
7. The third party is not allowed to cause any disturbances to the OHLE, or to attach anything to the OHLE.

D.2 Procedures for Working within the Prohibited Space

- D.2.1 The third party must have reached agreement with the IÉDR on the works in question and the need to issue a Form C Permit to Work. The third party must also have inserted a description of the work procedures, including the permit arrangements, in the method statement for submission to the IÉDR for review 8 weeks in advance. In this method statement, the third party must assign, in writing, a competent Third Party Designated Representative (TPDR) who will be responsible for this stage of the works.
- D.2.2 The personnel and procedures required for working within the Prohibited Space may vary depending upon the associated railway protection arrangements. The precise arrangements for the actual works (including lines of responsibility) must be set out in the method statement. These arrangements are outlined below in Table D.1.

Table D.1: Working within the Prohibited Space

Circumstances	Personnel Concerned and Necessary Actions
Isolation and – No railway protection arrangements required	The OHLE Nominated Person (who may be an IÉDR depending on the circumstances) briefs the TPDR on the salient features involved in the Permit to Work and the limits of the Isolation, and gives the completed Part 1 Form C Permit to Work to the TPDR who signs Part 2. At the end of the works, the TPDR signs Part 3 of the Form C Permit to Work, certifying that work is completed and cancelling the Permit to Work. The TPDR returns this to the OHLE Nominated Person.
Isolation and – Railway protection arrangements required; these may or may not include Possession	The OHLE Nominated Person briefs the TPDR on the salient features involved in the Permit to Work and the limits of the Isolation, and gives the completed Part 1 Form C Permit to Work to the TPDR who signs Part 2. The TPDR checks with the RPR before works begin that railway protection arrangements are in place and the circumstances under which the third party may go on or near the line and/or start the work. At the end of the works, the TPDR signs Part 3 of the Form C Permit to Work, certifying that work is completed and cancelling the Permit to Work. The TPDR returns this to the OHLE Nominated Person. The TPDR also confirms to the RPR at the end of the works that the line is clear. Handover/handback arrangements as per Appendix E may apply.

- D.2.3 Before the commencement of the works, the OHLE Nominated Person must have issued a completed Part 1 Form C Permit to Work to the TPDR, in line with the control measures set out in the method statement. The Permit to Work assures the holder that the OHLE is isolated and earthed between the specified limits of isolation and will not be made live while the permit is in the custody of the holder. The TPDR signs part 2 of the form certifying that he/she is in charge of the works.
- D.2.4 Usually, railway protection arrangements are applied when work takes place close to the OHLE. In this case, the RPR will be present to brief the TPDR on the railway protection arrangements. The OHLE Nominated Person will also be at this briefing so that the TPDR can confirm as outlined in D.2.5.
- D.2.5 At this briefing, the TPDR must confirm his/her understanding of the Permit to Work with the OHLE Nominated Person and comply with its conditions and arrangements. When a Form C Permit to Work is issued, it is the responsibility of the TPDR to:
- Confirm with the OHLE Nominated Person his/her understanding of the limits of Isolation, as detailed in the method statement and the Part 1 Form C Permit to Work
 - Confirm with the RPR that no work will take place unless the railway protection arrangements are also in place, if these have been identified as necessary and set out in the method statement
 - Ensure that each person employed on his/her behalf fully understands the limits of the Isolation
 - Ensure that no work begins within the limits of the Isolation unless and until the Form C Permit to Work has been issued, and railway protection arrangements are in place (as appropriate)
 - Confirm understanding of the completion arrangements (see D.2.6)
- D.2.6 On completion of the works, the TPDR must:
- Ensure that each person employed on his/her behalf (and plant and equipment) are clear of the OHLE in the Isolation area.
 - Complete Part 3 of Form C Permit to Work certifying that work for which the permit was issued is completed and that all third party personnel and materials are clear of the OHLE, and cancelling the Permit to Work. The completed Part 3 is signed by the TPDR and given to the OHLE Nominated Person.
 - Inform the RPR, if railway protection arrangements are in place, that works have been finished and that the third party personnel, equipment and material are clear of the line. If handover/handback arrangements are in place in accordance with Appendix E, arrangements must be discussed and agreed in advance with the IÉDR.

D.3 Protective Screens

- D.3.1 In some cases, it may be advantageous for the third party to install protective screening to provide protection between the works and the OHLE. The erection of these screens (usually within the Prohibited Space) may allow work to be carried out behind the screens without an ongoing Permit to Work.
- D.3.2 The erection of protective screening itself requires a Permit to Work. If it is agreed in advance with the IÉDR that protective screens can be installed, the construction and installation of these screens must be agreed and included in the method statement.
- D.3.3 The protection screens are usually of steel construction with steel mesh infill. These and other metal fixtures involved, such as temporary scaffolding, need to be electrically bonded to the correct earthing location within the OHLE.
- D.3.4 The third party needs to ensure that its screens, scaffolding, equipment or materials, as relevant, are bonded correctly for 1500 volts DC to the point from where the IÉ staff connect to the OHLE earthing location(s). A certificate signed by a competent person on behalf of the third party must be submitted to the IÉDR in this regard.
- D.3.5 The connection from the third party bonding termination point to the OHLE earthing location(s) can only be carried out by IÉ staff by prior arrangement and at the third party's expense.

APPENDIX E HANDOVER/HANDBACK ARRANGEMENTS

E.1 Overview

- E.1.1 Handover/handback arrangements cover the situation where Iarnród Éireann (IÉ) temporarily gives the right to work within a section of the railway to a third party to allow it to carry out specified works as part of the third party project. On completion of the specified works, the third party must hand back that section to IÉ in a safe condition. Usually, this takes place within a Possession (or with an OHLE Isolation, as appropriate).
- E.1.2 These arrangements are only granted in exceptional circumstances and will have previously been agreed during the acceptance of detailed design stage.
- E.1.3 The method statement setting out the detailed arrangements will already have been submitted to IÉ for review and acceptance. Method statements are submitted 8 weeks in advance for acceptance.

E.2 The Role of the Third Party Designated Representative During Handover/Handback

- E.2.1 The third party must appoint a competent person to be the Third Party Designated Representative (TPDR) for the handover/handback process. The TPDR will take responsibility for the safe completion of the handover/handback arrangements. The TPDR will have the authority and resources to take contingency action as necessary to ensure that the handback can be made in a safe and timely manner.
- E.2.2 The TPDR must have the training and experience to be competent in assessing the technical safety of the works being undertaken. The expertise required of the TPDR must be appropriate to the scale and type of works being carried out. If required, additional expertise may be engaged as assistance to the TPDR to support him/her when certifying that the completed works are safe and pose no danger to the railway.
- E.2.3 IÉ will nominate an Iarnród Éireann Designated Representative (IÉDR) to liaise with the TPDR before and during the works involved in the handover/handback sequence. The IÉDR may delegate responsibility to other persons during the period of the construction works in question. Any such delegation of responsibility must be established by the TPDR in advance and included in the method statement. The IÉDR will also facilitate communications between the TPDR and IÉ personnel who carry out railway protection duties – in some cases, the IÉDR may be one of these staff.
- E.2.4 The name and CV of the TPDR (plus those of any additional experts who may be engaged) must be submitted to the IÉDR together with a letter of authority from the third party. In this letter, the third party must state that it has delegated responsibility to the TPDR to certify on its behalf that the works on completion will be safe (in line with the statements set out in Part C, the Site Handback Certificate), and that the TPDR (and any proposed additional expertise) is competent to do this.
- E.2.5 Details of the TPDR, and other relevant personnel as appropriate, must also be set out in the method statement for the handover/handback sequence of the works.

- E.2.6 It is recognised that in some projects of long duration, the role of the TPDR may need to be carried out by several people. If this is the case, any such arrangements can be discussed with the IÉDR and procedures for transfer of responsibility must be included in the method statement.
- E.2.7 The TPDR is responsible and must have authority for:
- Ensuring that the third party contractor has made all reasonable preparations, including provision of adequate resources, required to carry out the works safely within the agreed programme and in accordance with the approved method statement, legal agreements and acceptances, and approved drawings
 - Liaising with the IÉDR prior to the works requiring handover/handback in order to demonstrate that all preparations for the works are complete
 - Signing the relevant part of the Site Handover Certificate (Part B1) and maintaining the third party copy of the completed Handover Certificate
 - Monitoring work progress against the agreed programme and reporting progress to the IÉDR
 - Coordinating any changes to the programme or works necessary to determine that it is safe to terminate the Possession and achieve a timely handback, and/or ensure that there is no unplanned disruption to IÉ train services
 - Satisfying IÉ, represented by the IÉDR, that the site is safe and clear by completing the Site Handback Certificate (Part C of Handover/Handback Certification) and any other certification that may be required

E.3 Sequence On Site

- E.3.1 At the appointed time, work may only commence on site after:
- The TPDR has completed Part B1 of the Site Handover Certificate to confirm to the IÉDR on site that the arrangements for the work are in place in line with the accepted method statement, agreements and drawings, *and*
 - The IÉDR has given the TPDR the completed Site Handover Certificate (Part B of Site Handover/Handback Certification) to confirm that the railway protection arrangements, in line with the method statement, are in place and the third party may commence the works as set out in the method statement.
- E.3.2 The TPDR arranges for the limits of the site to be marked off (using blue Netlon or similar fencing) as per the site demarcation set out in the method statement. The designated section of the line may be considered as a site.
- E.3.3 The third party, including its agents and contractors, are then responsible for the works and site in line with the SHWW Construction Regulations 2006.

- E.3.4 The third party proceeds with the works. The TPDR or a delegated representative must be present at all times to carry out his/her duties as set out in the method statement.
- E.3.5 On completion of the works, the TPDR, who must be present, informs the IÉDR that the works are complete and that the site is clear and safe. The TPDR completes the Site Handback Certificate (Part C of Site Handover/Handback Certification) and gives it to the IÉDR who signs an acknowledgement. Note that, depending on the circumstances and complexity of the works, IÉ may require additional certification at this point.

E.4 Unforeseen Events Affecting Handback

- E.4.1 During the works, the TPDR must inform the IÉDR immediately of any unforeseen events which may affect the railway infrastructure, safety or railway operations.
- E.4.2 The third party is expected to have contingency plans within the method statement for dealing with these unplanned events and to have the appropriate resources available on site to ensure that the site can be handed back safely and without disruption to IÉ train services. This applies irrespective of whether or not the third party has been able to complete the specified works.
- E.4.3 In these circumstances, the TPDR arranges for the necessary remedial measures after consultation with the IÉDR.
- E.4.4 Note: IÉ reserves the right at any stage to take steps to preserve the integrity of the infrastructure as well as to ensure that the works do not cause disruption to rail services. If unplanned events occur, the IÉDR may order the third party to carry out necessary works or remedial measures. In some circumstances, IÉ may need to enter the site and take the necessary steps itself to safeguard the railway operation and infrastructure. If this is the case, IÉ will inform the third party of what is intended and then implement this. The cost of such measures will be at the third party's expense.

E.5 Site Handover/Handback Certification**Site Handover/Handback Certification
Transfer of Site Responsibilities
between Iarnród Éireann and Third Parties**

(Page 1 of 3)

Note: These certificates must be completed by the Iarnród Éireann Designated Representative (IÉDR) and the Third Party Designated Representative (TPDR).

PART A: DETAILS OF WORK AND RELEVANT PERSONNEL

PROJECT

			IÉ File Ref:
Name of Third Party			
Division		Line	
Site Location	(append boundary of relevant site of works, description/sketch from the method statement if necessary)		
Mileage		Date	
Summary of Specified Works as set out in Method Statement			

PERSONNEL DETAILS

Iarnród Éireann Designated Representative (IÉDR)	Name	
	Tel (include emergency contact)	
	Signature	
Third Party Designated Representative (TPDR)	Name	
	Tel	
	Signature	

**Site Handover/Handback Certification
Transfer of Site Responsibilities
between Iarnród Éireann and Third Parties**

(Page 2 of 3)

PART B: SITE HANDOVER CERTIFICATE (Transfer of Responsibility to Third Party)

PART B1: TO BE COMPLETED IN ADVANCE OF SPECIFIED WORKS

I, being the authorised TPDR for _____	
(insert third party name)	
certify that the third party (including its contractor and other agents as relevant) has taken all reasonable steps to ensure that the specified works can be carried out safely in accordance with the legal agreements, accepted drawings and method statement, and is now in a position to commence the works.	
If additional certification at handback has been requested by the IÉDR, arrangements for this are in place.	
Signed: _____	
TPDR: _____	Time and Date: _____
(print name)	
Noted by: _____	
IÉDR: _____	Time and Date: _____
(print name)	

PART B2: AUTHORITY TO START WORK

The agreed railway protection arrangements are in place for the site (section of railway) as set out in the approved method statement for the specified works.	
The site is temporarily transferred to the third party to allow the specified works to proceed.	
If OHLE Isolation is required, a completed Part 1 of Form C Permit to Work has also been given to the TPDR who has signed Part 2 of Form C.	
These works must be complete and the site must be safe for handback by:	
Handback Date and Time: _____	
Authority is given by IÉDR: _____	
(print name)	
Signed by IÉDR: _____	Time and Date: _____
Noted by TPDR: _____	Time and Date: _____

Site Handover/Handback Certificates
Transfer of Site Responsibilities
between Iarnród Éireann and Third Parties

(Page 3 of 3)

PART C: SITE HANDBACK CERTIFICATE (Return of Responsibility to Iarnród Éireann)

I, being the authorised TPDR for _____	
(insert third party name)	
certify on behalf of the third party that:	
<ol style="list-style-type: none">1. The specified works (or part of the works) have been constructed in accordance with the accepted drawings and specifications.2. The site is safe and in a condition that does not pose a risk to railway operations.3. If OHLE Isolation was required, I also attach a completed Part 3 of Form C Permit to Work (refer to Table D.1).4. If additional certification has been requested in advance by the IÉDR, I also attach this.	
Signed: _____	
TPDR: _____	Time and Date: _____
(print name)	
Noted by: _____	
IÉDR: _____	Time and Date: _____
(print name)	

APPENDIX F PERSONAL TRACK SAFETY TRAINING FOR THIRD PARTY PERSONNEL

F.1 Overview

F.1.1 Third party personnel who have to work on or near the railway line are required to attend the Contractor Personal Track Safety (PTS) Training Course delivered by Iarnród Éireann (IÉ) and to possess a current Personal Track Safety (PTS) certificate. Third parties are advised to arrange for this well in advance of the time their personnel are due to go on or near the railway line, and to factor this into their project timescale.

F.2 Personal Safety on the Railway

F.2.1 Safety is of prime importance to IÉ. To this end, IÉ has developed a Contractor Personal Track Safety training course which deals with railway safety awareness. This training course informs third parties and their personnel of the specific dangers of working in an operational railway environment, and of safe working practices in that regard.

F.2.2 This training is provided by IÉ at its Training Centre, Inchicore, or at IÉ-nominated regional training centres.

F.2.3 It is a requirement that each member of third party personnel employed on site, including any agents or sub-contractors, possesses a current Contractor Personal Track Safety (PTS) Certificate before being permitted to work on or near the railway line.

F.2.4 Contractor PTS Certificates must be carried at all times on the railway site and must be produced for inspection on request from any IÉ authorised staff. If personnel cannot produce a certificate, they are not permitted to remain on or near the railway line.

F.2.5 The IÉ Training Centre charges for the Contractor PTS Training Course and will advise the third party of the fee. This charge must be paid in advance. The third party must bear all other costs associated with attending this course including employee time and travel.

F.2.6 Note: All third party personnel (and, thus, people sent for PTS training) who are assigned to work on IÉ property must be able to understand safety instructions given in English.

F.2.7 Contact details are:

Iarnród Éireann Training Centre
Inchicore Railway Works
Dublin 8

Tel: (01) 703 3954

Fax: (01) 703 3942

F.2.8 The relevant course application form and guidelines (including current fees) may be obtained on the IÉ website at www.irishrail.ie

APPENDIX G COMPLETION CERTIFICATE

This certificate must be filled out by the authorised representative of the third party on completion of the works and returned to the Iarnród Éireann Designated Representative (IÉDR). Note that other certification may be required as set out in the legal agreement for the works.

COMPLETION CERTIFICATE	
Project	Contract/Ref No.
Description of Works	Location (include milepost, line, if necessary)
<p>1. I certify that the works are complete and have been completed in accordance with the accepted drawings and specifications, and the relevant Iarnród Éireann standards. (Attach any testing and test results, as appropriate.)</p> <p>2. I certify that the works being put into commission are safe, and in a condition that does not pose a risk to the existing infrastructure, rolling stock or railway operations.</p> <p>Signed: _____ Authorised Representative of Third Party (if agent, please include a letter of authorisation from the third party)</p> <p>Date: _____</p> <p>Third Party: _____</p> <p>Address: _____ _____</p>	

Enclosed Documents (one copy of each)	✓
As-built drawings (required)	
As-built clearances to Iarnród Éireann track, boundary line etc. (as appropriate)	
Testing/test certificates (as appropriate)	

APPENDIX H THE SAFETY FILE

H.1 Background

- H.1.1 Iarnród Éireann (IÉ) requires a copy of the Safety File for the specified works to be submitted at the end of the works. This applies irrespective of who will maintain the completed works; the maintenance responsibility is set out in the relevant legal agreements.
- H.1.2 The objective of the Safety File is to ensure that information, including details on possible hazards, is available for reference in the event of any future work on the site. The information should be relevant whether the future work involves a new construction or the repair, alteration or maintenance of the existing works.
- H.1.3 Note: The Safety File should only cover matters of interest to IÉ relating to the safety impact on the railway. For example, IÉ does not require details of the adjacent road project, only those of the bridge over the railway.

H.2 Minimum Requirements in a Safety File

- H.2.1 The actual contents of a Safety File required by IÉ can vary depending on the type of project and may be set out in the legal agreements. The minimum requirements are outlined below:
- As-built construction drawings, specifications and bill of quantities.
 - Maintenance procedures and requirements for the installation and/or structure. These should state whether maintenance requires personnel or plant to go on or about railway property and should list the relevant procedures if this is the case (including details of approvals from IÉ).
 - General design criteria and references to applicable standards.
 - Details of the equipment and maintenance facilities regarding the installation and/or structure.
 - Manuals and certificates, where appropriate, produced by specialist contractors and suppliers. These must outline operating and maintenance procedures, and schedules for plant and equipment installed as part of the installation and/or structure.
 - Details on the location and nature of utilities and services including emergency and firefighting systems, as may be appropriate.

H.3 Submission of the Safety File

- H.3.1 The Project Supervisor Design Process (PSDP) finalises the Safety File. This is submitted to the IÉDR who checks it for completeness. If it is not adequate, the third party is required to re-submit the Safety File for review and approval.
- H.3.2 The copy of the Safety File supplied to IÉ must include two hard copies of the as-built drawings, and one digital copy. Where the information is supplied in digital format, it should preferably be in Adobe PDF; other formats, however, will also suffice such as MS Word or Excel. The digital format for drawings is CAD format (AutoCAD 2000), in DWG or DXF format.

APPENDIX I SAFETY MANAGEMENT SYSTEM

- I.1.1 A Safety Management System must be established for all third party railway-related work. An overview document describing the system must be prepared by the third party. This must outline the relevant information required by IÉ describing how safety is managed during the project, including procedures for setting up a safe system of work in those areas where there is a potential safety impact on the railway. Specific details for the various stages are not required; these will be set out in the relevant method statement(s). The document should not include issues which are not of relevance to the railway-related works. It may include appropriate extracts from the project Safety and Health Plan of the third party's contractors. Note that IÉ does not normally require to be presented with the document setting out the Safety Management System for the entire project.
- I.1.2 The document setting out the railway-related details of the Safety Management System must be issued to IÉ during the detailed design review (reference Section 8.4 of *I-DEP-0120*). It can also be used for submission by IÉ to the Railway Safety Commission (RSC) at this stage.
- I.1.3 An updated final version of the above document, with the focus on the final site-specific details, must be issued to the Iarnród Éireann (IÉDR) at the pre-construction stage at the same time as the first method statement is being submitted.
- I.1.4 This document should also include reference to measures that ensure there will be no disruption to IÉ train services.
- I.1.5 The document setting out the railway-related details of the Safety Management System may include some or all of the following topics but is not limited to them:
- Brief overall description of the planned works.
 - Details of project team organisation. This includes identification of the competent Project Supervisor Design Process (PSDP) and Project Supervisor Construction Stage (PSCS), and, in relation to safety issues, nomination of points of contact for IÉ such as the Third Party Designated Representative (TPDR). The document should describe how safety is managed and by whom.
 - Schedule of method statements and temporary works submissions (identify each and identify the delivery dates where appropriate).
 - Procedures for checking and approving temporary works and method statements. These must identify checkers and approvers and include sample signatures. (See Appendix D Design and Check Procedures of *I-DEP-0120*.)
 - Description of safety auditing processes by the third party. These must outline the frequency of audits, identify who conducts them, and give details on the availability of audit reports.
 - Safety and induction training arrangements (including Contractor Personal Track Safety training). Site familiarisation and briefing by the third party must also be covered.
 - Segregated working areas. These must be defined.

- Procedures for on-site storage of accepted designs and method statements.
- Handover/handback process, if applicable.
- Change control process, covering change of drawings etc.
- Quality control process with particular reference to railway safety. For example, if bridge beams are to span the railway, details are required of the quality control system for the production of these beams.
- Control process for compliance of third party staff with the IÉ Drugs and Alcohol Policy on the railway site.
- Emergency contact details.