











Railway works and works
•
authorised by this Order

FIRST SCHEDULE

THE RAILWAY AND RAILWAY WORKS AUTHORISED BY THIS ORDER

The DART + South West Railway Order, if granted, will authorise CIÉ to carry out railway works and all works necessary to enable the construction, operation, maintenance and improvement of the railway between Hazelhatch and Celbridge Station (County Kildare) to Heuston Station Dublin (circa 16km) on the Cork Mainline, and Heuston Station to Glasnevin via the Phoenix Park Tunnel Branch Line.

The works will generally comprise, but are not limited to:

- completion of four-tracking from Park West and Cherry Orchard Station to Heuston Station;
- electrification of the line from Hazelhatch and Celbridge Station to Heuston Station and also from Heuston Station to Glasnevin Junction (via the Phoenix Park Tunnel Branch Line);
- provision of electrical substations to power the overhead line and to facilitate the overall project;
- installation of retaining walls and associated structures;
- installation of slope stabilisation measures where necessary for long term safety of railway embankments;
- undertaking improvements / interventions to bridges and replacement of bridges to enable electrification and additional tracks;
- modification of bridge parapets and walls to ensure protection against electrification;
- removal of rail constraints along the Phoenix Park Tunnel Branch Line;
- track lowering to enable electrification beneath bridges;
- construction of a new Heuston West Station;
- new and modified tracks and sidings;
- provision of signalling, telecommunications and electrical infrastructure;
- establishment of temporary construction compounds;
- provision of permanent and temporary track access points and emergency egress points;
- establishment of temporary traffic management arrangements and temporary road closures and diversions;
- diversion of existing utilities;
- provision of drainage infrastructure;
- demolition including of three existing properties in CIÉ ownership at Hazelhatch;
- provision of environmental mitigation measures and other infrastructural modifications to facilitate the overall project.

This Schedule 1 is intended to be read in conjunction with the referenced Railway Works Drawings, as well as Property Details Drawings and Structural Details Drawings which provide detail of the railway works and which form part of this Railway Order. For each "Works No." in the Schedule below, there is a corresponding Tag (or Tags) on the Works Layout Plan drawing.

The description of the works is divided into the 17 No. different Railway Order areas for clarity and progresses from the western end of the scheme at Hazelhatch, to the terminations of the scheme at Heuston Station and Glasnevin Junction.

Railway Order - Works Layout Plan No.1 Hazelhatch (Limit of DART+ South West Project)

Works No.	Description	Plan No.
1.01	Proposed electrification (no track works) - includes railway signalling and telecommunications infrastructure as well as installation of overhead electrification equipment	Works Layout Plan No. 01
1.02	Construction of Signalling Equipment Building (SEB), including installation of equipment and cable connections to receiving network	Works Layout Plan No. 01
1.03	Proposed electrification and track works including track works for the turnback and siding, switches and crossings; railway signalling and telecommunications infrastructure; as well as installation of overhead electrification equipment.	Works Layout Plan No. 01
1.04	Installation of low level new fencing along rail corridor edge separating CIE gravel service road from the track.	Works Layout Plan No. 01
1.05	CIE gravel service road realignment/reconstruction to accommodate track works and fencing.	Works Layout Plan No. 01
1.06	Proposed Track Works but Not Electrified – to facilitate the new turnback siding and associated changes to switches and crossings.	Works Layout Plan No. 01

Railway Order - Works Layout Plan No.2 Hazelhatch Station and Surrounds

Works No.	Description	Plan No.
2.01	Use of existing CIE maintenance access road for plant and machinery to establish a temporary construction compound within existing CIE maintenance compound. In addition, it will provide access to carry out the works associated with the turnback siding which includes track works, electrification, boundary treatment and realigning of the gravel service road.	Works Layout Plan No. 02
2.02	Proposed Track Works and Electrification – Includes track works to facilitate turnback siding, switches and crossings, as well as signalling and telecommunications infrastructure and installation of overhead electrification equipment	Works Layout Plan No. 02
2.03	Realign the existing CIE gravel service road to accommodate turnback, siding track works, electrification and associated edge of track fencing.	Works Layout Plan No. 02
2.04	Installation of new low level fencing along rail corridor edge separating CIE gravel service road from the track.	Works Layout Plan No. 02
2.05	Establish a project temporary construction compound within existing CIE maintenance compound as well as providing a track access point to facilitate the reconstruction of CIE gravel service road and its associated fencing. It will also support track works for turnback siding and electrification.	Works Layout Plan No. 02
2.06	Proposed Track Works but Not Electrified – to facilitate the new turnback siding and associated changes to switches and crossings.	Works Layout Plan No. 02
2.07	Proposed Railway Electrification but No Track Work - includes signalling and telecommunications infrastructure as well as installation of overhead electrification equipment	Works Layout Plan No. 02
2.08	Minor works to Hazelhatch Road Bridge (OBC25) to facilitate electrification comprising bracket fixings to underside of the bridge. Access will be through Hazelhatch and Celbridge Station car park and from track maintenance access via Lord's Road compound.	Works Layout Plan No. 02
2.09	Modifications to Hazelhatch Footbridge (OBC24A) parapets/railings. Access to the works site will be through Hazelhatch and Celbridge Station car park.	Works Layout Plan No. 02

Vorks No.	Description	Plan No.
2.10	Establish the main construction compound for Track and Electrification Works between Hazelhatch and Adamstown/Kishoge. The compound will be located on current CIE lands including site clearance of existing 1 No. disused dwelling with access provided off Loughlinstown Road via existing plot driveway. Works will include fencing / hoarding and may also include site offices, welfare facilities, storage facilities, workshops, as well as storage of certain construction plant and equipment required to carry out the works.	Works Layout Plan No. 02
2.11	Establish a temporary construction compound to facilitate the construction of a new electrical substation. The compound will be located on current CIE lands. Access provided off Loughlinstown Road via existing driveway. Works will include site clearance with demolition of existing 2 No. disused dwellings, fencing / hoarding, site offices, welfare facilities, storage facilities, workshops, as well as storage of certain construction plant and equipment required to carry out the works.	Works Layout Plan No. 02
2.12	Construction of substation including utility connections to operate the building, works to include the installation of transformers and electrical control equipment. Further works will include the preparation of trafficable surfaces providing suitable areas for large heavy haulage vehicles to turn.	Works Layout Plan No. 02
2.13	Construction of Signalling Equipment Building (SEB), including installation of equipment and cable connections to receiving network	Works Layout Plan No. 02
2.14	Establish a temporary access route along the edge of golf course lands for plant and machinery to facilitate directional drilling under the existing tracks to relocate the existing overhead power line which crosses the tracks. Access will be via Loughlinstown Road. Land along the access route and boundary at access point to be reinstated as required.	Works Layout Plan No. 02

Railway Order - Works Layout Plan No.3 West of Tubber Lane Road / Stacumny Bridge (OBC21)

Works No.	Description	Plan No.
3.01	Establish a temporary access route (to a temporary compound) along the edge of golf course lands for plant and machinery to facilitate directional drilling under the existing tracks in order to relocate the existing overhead power line which crosses the tracks. The access will be via Loughlinstown Road. Land along the access route and boundary at access point to be reinstated as required.	Works Layout Plan No. 03
3.02	Diversion underground of existing overhead power line which crosses track at approx. chainage 23+650. Including launching and receiving zones for directional drilling as well as erection of poles and supports local to the crossing point. The areas impacted by the works will be reinstated accordingly.	Works Layout Plar No. 03
3.03	Establish a temporary construction compound for directional drilling works. Access will be via the prepared route along the golf course boundary.	Works Layout Plar No. 03
3.04	Establish a temporary access route from the end of existing CIE track maintenance road (which is accessed from Stacumny Lane) to the under-track directional drilling location. The route will be temporarily fenced off from the farm operations and the lands reinstated on completion of the works.	Works Layout Plar No. 03
3.05	Establish a temporary construction compound for directional drilling works. Access will be via a temporary access route over farm land at the end of CIE maintenance road.	Works Layout Plar No. 03
3.06	Proposed Railway Electrification but No Track Work - includes railway signalling and communications infrastructure as well as installation of overhead electrification equipment for the electrification of the 2 no. northern lines.	Works Layout Plar No. 03
3.07	Construction of Signalling Equipment Building (SEB), including installation of equipment and cable connections to receiving network.	Works Layout Plar No. 03

Railway Order - Works Layout Plan No.4 Stacumny Lane and Surrounds

Works No.	Description	Plan No.
4.01	Establish a temporary construction compound to facilitate directional drilling and overhead cable diversion works. Access will be via the existing gated CIE service road off Stacumny Lane.	Works Layout Plan No. 04
4.02	Diversion underground of an existing overhead power line which crosses the track at approx. chainage 22+550. Including launching and receiving zones for directional drilling as well as erection of poles and supports local to the crossing point. Areas impacted by the works will be reinstated accordingly.	Works Layout Plan No. 04
4.03	Establish a temporary construction compound for directional drilling works. Access will be via the existing access route from Stacumny Lane. The compound will also include a temporary track access point through the existing railway corridor boundary fence which will be reinstated after use.	Works Layout Plan No. 04
4.04	Upgrade the existing CIE gravel service road. Works will include re-gravelling and re-grading of the road, along with reprofiling the existing drainage swale along the length of the access road upgrade (from Stacumny Lane to the new Signalling Equipment Building (SEB) adjacent to the new Adamstown Substation). This road will serve as the main access route for the construction of the new Adamstown substation and SEB; and serve as the permanent access road on completion of the construction activities.	Works Layout Plan No. 04
4.05	Proposed Railway Electrification - no track work but includes railway signalling and telecommunications infrastructure as well as installation of overhead electrification equipment for the 2 No. northern lines.	Works Layout Plan No. 04
4.06	Establish a new security fence between the upgraded CIE gravel service road and the railway track.	Works Layout Plan No. 04

Railway Order - Works Layout Plan No.5 Adamstown Station and Surrounds

Works No.	Description	Plan No.
5.01	Establish a security fence between the upgraded CIE access road and the railway track.	Works Layout Plan No.5
5.02	Upgrade the existing CIE gravel service road. Works will include re-gravelling and re-grading of the road, along with reprofiling the existing drainage swale along the length of the access road upgrade (from Stacumny Lane to the new Signalling Equipment Building (SEB) adjacent to the new Adamstown Substation). This road will serve as the main access route for the construction of the new Adamstown substation and SEB; and serve as the permanent access road on completion of the construction activities.	Works Layout Plan No. 05
5.03	Construction of the new Adamstown electrical substation for the electrification of the 2 No. northern lines. It is located within a new permanent substation compound on CIE lands with permanent access using the existing CIE gravel service road from Stacumny Lane.	Works Layout Plan No. 05
5.04	Construction of a permanent Adamstown electrical substation compound, which will also be used as its construction compound. Access to the site will be via the existing CIE gravel service road from Stacumny Lane. Works will include fencing / hoarding and may also include site offices, welfare facilities, storage facilities, workshops, as well as storage of certain construction plant and equipment required to carry out the works.	Works Layout Plan No. 05
5.05	Construction of Signalling Equipment Building (SEB), including installation of equipment and cable connections to receiving network.	Works Layout Plan No. 05
5.06	Proposed Railway Electrification - no track work but includes railway signalling and telecommunications infrastructure as well as installation of overhead electrification equipment for the 2 No. northern lines.	Works Layout Plan No. 05
5.07	Minor works to Crowley's Bridge (OBC20E) to facilitate electrification of the 2 No. northern lines comprising bracket fixings to underside of the bridge.	Works Layout Plan No. 05
5.08	Construction of a new Telecommunications Equipment Room (TER) within the existing Adamstown Station. Including installation of telecommunication equipment and associated network connectivity works.	Works Layout Plan No. 05

Works No.	Description	Plan No.
5.09	Minor works to Adamstown Station to facilitate electrification, comprising bracket fixings to soffit of station structure.	Works Layout Plan No. 05
5.10	Minor modifications to the station concourse parapet/railing and the adjacent maintenance platform.	Works Layout Plan No. 05
5.11	Minor modifications to track work at the interface of electrified and non-electrified tracks.	Works Layout Plan No. 05

Railway Order - Works Layout Plan No.6 Adamstown to Griffeen Valley Park and Surrounds

Works No.	Description	Plan No.
6.01	Proposed Railway Electrification - no track work but includes railway signalling and telecommunications infrastructure as well as installation of overhead electrification equipment in support of the electrification of the 2 No. northern lines.	Works Layout Plan No. 06
6.02	Construction of MV to LV step down transformer within private lands and connect to existing building and power supply points.	Works Layout Plan No. 06
6.03	Establish a temporary construction compound for directional drilling works. Access will be via the existing private gravel access road, adjacent to the Lucan Sarsfield GAA Club off the R120.	Works Layout Plan No. 06
6.04	Establish a temporary construction compound for directional drilling works The construction compound will also include a temporary track access point through existing railway corridor boundary fence which will be reinstated after use. Access will be from Adamstown Avenue using the current kerb mounted gravel road tracks.	Works Layout Plan No. 06
6.05	Diversion underground of existing overhead power line which crosses track at approx. chainage 19+500. Works include directional drilling and local electrical pole installation at the launch and receiving pits to reconnect supply.	Works Layout Plan No. 06
6.06	Proposed Track works and Electrification – includes track lowering and installation of points and crossings for the 2 No. northern lines.	Works Layout Plan No. 06
6.07	Minor works to Finnstown R120 Road Bridge (OBC19) to facilitate electrification comprising bracket fixings to underside of the bridge.	Works Layout Plan No. 06
6.08	Modifications to the Finnstown R120 Road Bridge (OBC19) parapets providing compliance with OHLE infrastructure safety requirements	Works Layout Plan No. 06

Railway Order - Works Layout Plan No.7 Tullyhall and Kishoge Station

Works No.	Description	Plan No.
7.01	Proposed Railway Electrification - No Track Work but includes railway signalling and telecommunications infrastructure as well as installation of overhead electrification equipment for the 2 No. northern lines.	Works Layout Plan No. 07
7.02	Establish a permanent Kishoge electrical substation compound that will also be used temporarily as a construction compound. The compound will be accessed via existing access point on Adamstown Avenue. The compound will also include a track access point to support adjacent track electrification works and provide for the diversion works associated with the existing overhead power cables. Works will include fencing / hoarding, site offices, welfare facilities, storage facilities, workshops, parking and storage of certain construction plant and equipment storage required to carry out the works.	Works Layout Plan No. 07
7.03	Construction of Kishoge electrical substation to enable electrification of the 2 No. northern lines. It is located within a dedicated compound with permanent access proposed from Adamstown Avenue.	Works Layout Plan No. 07
7.04	Establish temporary construction compound for Directional Drilling works. Access will be from Adamstown Avenue.	Works Layout Plan No. 07
7.05	Diversion underground of an existing overhead power line which crosses track at approx. chainage 18+000. Works include directional drilling and local electrical pole installation at the launch and receiving pits to reconnect supply.	Works Layout Plan No. 07
7.06	Establish a temporary construction compound for directional drilling works. The compound will be accessed off Kishoge Road (via R136), commencing immediately east of the proposed construction compound.	Works Layout Plan No. 07
7.07	Use of an existing gravel road track to access the temporary construction compound for directional drilling works and power cable diversion works. The track is accessed from Kishoge Road (from R136).	Works Layout Plan No. 07

Works No.	Description	Plan No.
7.08	Minor Works to Kishoge Bridge (OBC14D) to facilitate electrification, comprising bracket fixings to underside of the bridge.	Works Layout Plan No. 07
7.09	Minor Works to Kishoge Station to facilitate electrification, comprising bracket fixings to soffit of station structure.	Works Layout Plan No. 07
7.10	Modifications to the Kishoge Station concourse and platform access stairway parapets/railings to provide compliance with OHLE infrastructure safety requirements.	Works Layout Plan No. 07
7.11	Re-gravel and regrade existing access road to station for OHLE installation support work, station parapet works and for construction of the new Signalling Equipment Building (SEB).	Works Layout Plan No. 07
7.12	Construction of a new Signalling Equipment Building (SEB), including installation of equipment and cable connections to receiving network.	Works Layout Plan No. 07
7.13	Diversion of an undertrack cable crossing to facilitate the construction of the new Kishoge traction substation. The diversion will install underground cables along the southern railway corridor boundary in 3 rd party lands.	Works Layout Plan No. 07

Railway Order - Works Layout Plan No.8 Clondalkin / Fonthill Station and Surrounds

Description	Plan No.
Proposed Railway Electrification - No Track Work but includes signalling and telecommunications infrastructure as well as installation of overhead electrification equipment for the 2 No. northern lines.	Works Layout Plan No. 08
Minor works to Clondalkin / Fonthill Station East (OBC13C) and West (OBC13D) to facilitate electrification comprising bracket fixings to underside of the Station building soffit.	Works Layout Plan No. 08
Modifications to the Clondalkin / Fonthill Station concourse and platform access stairway parapets/railings and to the adjacent maintenance platform, providing compliance with OHLE infrastructure safety requirements.	Works Layout Plan No. 08
Minor works to Nangor Road Bridge (OBC13A) to facilitate electrification comprising bracket fixings to underside of the bridge.	Works Layout Plan No. 08
	Proposed Railway Electrification - No Track Work but includes signalling and telecommunications infrastructure as well as installation of overhead electrification equipment for the 2 No. northern lines. Minor works to Clondalkin / Fonthill Station East (OBC13C) and West (OBC13D) to facilitate electrification comprising bracket fixings to underside of the Station building soffit. Modifications to the Clondalkin / Fonthill Station concourse and platform access stairway parapets/railings and to the adjacent maintenance platform, providing compliance with OHLE infrastructure safety requirements. Minor works to Nangor Road Bridge (OBC13A) to facilitate electrification comprising bracket fixings to underside of the

Railway Order - Works Layout Plan No.9 Ninth Lock Road, Cloverhill Road and Station Road

Norks No.	Description	Plan No.
9.01	Proposed Railway Electrification - no track work but includes railway signalling and telecommunications infrastructure as well as installation of overhead electrification equipment for the 2 No. northern lines.	Works Layout Plan No. 09
9.02	Minor works to Ninth Lock Road Bridge (OBC13) to facilitate Overhead Line Electrification comprising bracket fixings to underside of the bridge.	Works Layout Plan No. 09
9.03	Establish a temporary construction compound on the site of existing CIE attenuation tank, accessed from the existing site access point off Cloverhill Road. Works will include fencing / hoarding, site offices, welfare facilities, storage facilities, workshops, as well as storage of certain construction plant and equipment required to carry out the works. The compound will also include a track access point to support adjacent track electrification works.	Works Layout Plan No. 09
9.04	Minor works to Cloverhill Road Bridge (OBC11) to facilitate Overhead Line Electrification comprising bracket fixings to underside of the bridge.	Works Layout Plan No. 09

Railway Order - Works Layout Plan 10 M50 and Park West

Works No.	Description	Plan No.
10.01	Proposed Railway Electrification - No Track Work but includes railway signalling and telecommunications infrastructure as well as installation of overhead electrification equipment for the 2 No. northern lines.	Works Layout Plan No. 10
10.02	Works to M50 Road Bridge (OBC10A) to facilitate Overhead Line Electrification comprising bracket fixings to underside of bridge.	Works Layout Plan No. 10
10.03	Modifications to the M50 Road Bridge (OBC10A) parapets providing compliance with OHLE infrastructure safety requirements.	Works Layout Plan No. 10
10.04	Establish a permanent Park West electrical substation compound that will also be used temporarily as a construction compound. The compound will be accessed via an existing access point on Park West Avenue. Works will involve fencing / hoarding and may also include site offices, welfare facilities, storage facilities, workshops, parking and storage of certain construction plant and equipment.	Works Layout Plan No. 10
10.05	Construction of Park West electrical substation to enable electrification of the 2 No. northern lines. It will be located within a dedicated compound with permanent access from an existing access point on Park West Avenue.	Works Layout Plan No. 10
10.06	Establish a temporary construction compound to facilitate the construction of the Park West electrical substation. The temporary Compound will also include a track access point to support adjacent track electrification works. Works will include fencing / hoarding, site offices, welfare facilities, storage facilities, workshops, parking and storage of certain construction plant and equipment. The compound will be accessed via an existing access point on Park West Avenue.	Works Layout Plan No. 10
10.07	Modifications to the Park West Station platform access stairway parapets/railings and to the adjacent maintenance platform, providing compliance with OHLE infrastructure safety requirements.	Works Layout Plan No. 10
10.08	Works to Park West Station and Park West Avenue Bridge (OBC9B) to facilitate electrification comprising bracket fixings to soffit of station and bridge structures.	Works Layout Plan No. 10

Works No.	Description	Plan No.
10.09	Establish temporary construction compound for directional drilling works. The northern compound will be accessed from a public open space located between Barnville Park Road and Park West Avenue.	Works Layout Plan No. 10
10.10	Diversion underground of an existing 38kV overhead power line that crosses the railway corridor at approx. chainage 14+200. Works include directional drilling and local electrical pole installation at the launch and receiving pits to reconnect supply.	Works Layout Plan No. 10
10.11	Establish temporary construction compound for directional drilling. The southern compound will be accessed via an existing access and gravel road off Park West Road.	Works Layout Plan No. 10
10.12	Use of an existing gravel access track as a temporary site access route from an existing access at Park West Road to the temporary construction compound.	Works Layout Plan No. 10
10.13	Proposed Track Works and Electrification – Includes track works to facilitate the electrification clearances required at Le Fanu Road Bridge (OBC7) and Kylemore Road Bridge (OBC5A). Installation of track drainage, signalling and telecommunications infrastructure. Installation of overhead electrification equipment for the 2 No. northern lines.	Works Layout Plan No. 10
10.14	Establish gravel access road to service Park West Substation Compound and the temporary construction compound. The road will include the substation electricity cable supply route.	Works Layout Plan No. 10

Railway Order - Works Layout Plan No. 11 Cherry Orchard to Kylemore Road Bridge (OBC5A)

Works No.	Description	Plan No.
11.01	Establish a temporary construction compound primarily for piling, excavation and track access works required to carry out the works between Cherry Orchard Footbridge (OBC8B) and Le Fanu Road Bridge (OBC7) at Park West Industrial Estate. Access will be from Lavery Road.	Works Layout Plan No. 11
11.02	Proposed Track Works but Not Electrified – the 2 No. southern lines will be lowered and realigned to facilitate the installation of 2 No. new northern lines. The tracks will be realigned to facilitate the required electrification clearances at Le Fanu Road Bridge (OBC7) and Kylemore Road Bridge (OBC5A) and the widened rail corridor. Works will include signalling and telecommunications infrastructure installation for the 2 No. southern lines.	Works Layout Plan No. 11
11.03	Proposed Track Works and Electrification – Includes track works to facilitate the electrification clearances required at Le Fanu Road Bridge (OBC7) and Kylemore Road Bridge (OBC5A). Works will require signalling and telecommunications infrastructure installation and the installation of overhead electrification equipment for the 2 No. northern lines.	Works Layout Plan No. 11
11.04	Establish a temporary construction compound primarily for piling, excavation and track access works required to carry out the works between Chery Orchard Footbridge (OBC8B) and Le Fanu Road Bridge (OBC7) at Cherry Orchard Ave / Cloverhill Road (north of railway line). The compound will be located on an existing green area and access will be from Cherry Orchard Ave.	Works Layout Plan No. 11
11.05	Permanent diversion of existing 38kV double circuit overhead line by relocating it underground. Works include the removal of 4 No. ESB Pylons.	Works Layout Plan No. 11
11.06	Permanent relocation of a combined sewer under-track crossing to a location further west at approx. chainage 12+750 (required to facilitate the track lowering under Le Fanu Road Bridge (OBC7)). This includes rerouting of an existing sewer and construction of a new section of sewer.	Works Layout Plan No. 11
11.07	Construction of king post retaining walls. At certain locations, anchors may be inserted underground below adjacent land to ensure stability (the maximum extent is indicated by the purple shaded area on the Works Layout Plan).	Works Layout Plan No. 11

Works No.	Description	Plan No.
11.08	Establish a temporary construction compound. Facilities will include temporary fencing/hoarding, as well as storage of construction plant and equipment required to carry out the works. Track access will be provided through the compound for works between Inchicore Works and Le Fanu Road. Access to the compound will be off Friel Avenue using an existing access.	Works Layout Plan No. 11
11.09	Establish a temporary Construction Compound including temporary fencing/hoarding, site offices, welfare facilities, storage facilities, workshops, and storage of construction plant and equipment required to carry out the works. A new temporary access will be made off Friel Avenue.	Works Layout Plan No. 11
11.10	Construction of a secant piled wall – including preparation of a piling platform, drilling and concreting of the piles, construction of pile caps and parapets, excavation and removal of soil. Underground anchors will be installed, below adjacent land, to ensure stability of the wall (the maximum extent is indicated by the purple shaded area on the Works Layout Plan).	Works Layout Plan No. 11
11.11	Provide traffic management measures including a temporary 'vulnerable user' bridge crossing of the rail corridor and associated diversions. The vehicular traffic will be diverted via Kylemore Park and Kylemore Road to facilitate temporary closure of Le Fanu Road Bridge (OBC7). The temporary bridge be removed once the new bridge is fully commissioned.	Works Layout Plan No. 11
11.12	Establish a temporary construction compound for the construction of the temporary pedestrian diversion route, including temporary fencing/hoarding. Access will be from Le Fanu Cul-de-sac and from Le Fanu Drive.	Works Layout Plan No. 11
11.13	Reconstruction of the Le Fanu Road bridge approach roads (north and south of bridge) as a consequence of bridge reconstruction. Works to include full carriageway reconstruction along with footpaths and new segregated cycle lanes as well as associated line marking and signage. The existing masonry wall will be replaced with a grassed embankment.	Works Layout Plan No. 11
11.14	Reconstruction of Le Fanu Road Bridge (OBC7) to facilitate the installation of Overhead Line Electrification and rail corridor widening.	Works Layout Plan No. 11
11.15	Establish a temporary construction compound on the existing public open space (park) at Le Fanu. The compound will include temporary fencing/hoarding, site offices, welfare facilities, storage facilities, workshops, and storage of construction plant and equipment required to carry out the works. The compound will be accessed off the Le Fanu road and will include a track access point for piling and associated operations. Public Open space will be reinstated with appropriate landscaping scheme on completion of the project.	Works Layout Plan No. 11

Vorks No.	Description	Plan No.
11.16	Establish a temporary construction compound south east of the Le Fanu Road Bridge including temporary fencing/hoarding. The compound will be accessed off the Le Fanu road and will include a track access point for piling and associated retaining wall construction.	Works Layout Plan No. 11
11.17	Reinstatement of boundary treatment along CIE railway corridor boundary where removal of the existing boundary will be required to facilitate the works.	Works Layout Plan No. 11
11.18	Demolition and removal of redundant bridge abutments north and south of the railway at approx. chainage 12+300.	Works Layout Plan No. 11
11.19	Establish a temporary construction compound (South West of Kylemore Road Bridge) for works associated with construction of a temporary road diversion bridge. The compound will also include a track access point for piling and associated retaining wall construction.	Works Layout Plan No. 11
11.20	Construction of temporary northbound single lane vehicular bridge to the west of Kylemore Road Bridge (OBC5A) to facilitate the closure of the Kylemore Road Bridge for reconstruction. The temporary bridge will also be utilised for temporary utility diversions.	Works Layout Plan No. 11
11.21	Reconstruction of Kylemore Road Bridge (OBC5A) to facilitate additional railway tracks and to facilitate the installation of Overhead Line Electrification.	Works Layout Plan No. 11
11.22	Reconstruction of the Kylemore Road bridge approach roads (north and south of bridge) as a consequence of bridge reconstruction. Works to include full carriageway reconstruction along with footpaths and new segregated cycle lanes and associated line marking and signage (with reinstated junction signalisation) and amended road layout. It will also include the construction of retaining walls at the edge of footpaths and 'H4a parapets' to these walls between the bridge and the adjacent junctions or driveways.	Works Layout Plan No. 11
11.23	Construction of a temporary single lane northbound diversion route on the approaches to the temporary vehicular bridge. Works will temporarily restrict driveway access to the properties adjacent to the temporary bridge.	Works Layout Plan No. 11
11.24	Establish a temporary construction compound (North East of the bridge). The compound will include a track access point for piling and associated retaining wall construction. The compound will also serve for temporary bridge and utilities diversion construction.	Works Layout Plan No. 11

Description	Plan No.
Construction of a temporary 'vulnerable user' bridge to the east of Kylemore Road Bridge (OBC5A) for use during the bridge reconstruction phase. The temporary bridge will also accommodate temporary utility diversions.	Works Layout Plan No. 11
Establish a temporary construction compound (South East of the bridge). The compound will include a track access point for piling and associated retaining wall construction. The compound will also serve for temporary bridge and utilities diversion construction.	Works Layout Plan No. 11
Reinstatement of boundary treatment along CIE railway corridor boundary where removal of the existing boundary will be required to facilitate the works.	Works Layout Plan No. 11
Temporary removal of existing electronic advertising sign board during the temporary road diversion works. To be reinstated in a similar location once bridge, road and diversion works are completed.	Works Layout Plan No. 11
Temporary removal of existing electronic advertising sign board during the temporary road diversion works. To be reinstated in a similar location once bridge, road and diversion works are completed.	Works Layout Plan No. 11
Demolition of Unit 1 portal frame building structure at Westlink Business Park to facilitate the construction of the piled retaining wall. Making good of building gable and associated works.	Works Layout Plan No. 11
	Construction of a temporary 'vulnerable user' bridge to the east of Kylemore Road Bridge (OBC5A) for use during the bridge reconstruction phase. The temporary bridge will also accommodate temporary utility diversions. Establish a temporary construction compound (South East of the bridge). The compound will include a track access point for piling and associated retaining wall construction. The compound will also serve for temporary bridge and utilities diversion construction. Reinstatement of boundary treatment along CIE railway corridor boundary where removal of the existing boundary will be required to facilitate the works. Temporary removal of existing electronic advertising sign board during the temporary road diversion works. To be reinstated in a similar location once bridge, road and diversion works are completed. Temporary removal of existing electronic advertising sign board during the temporary road diversion works. To be reinstated in a similar location once bridge, road and diversion works are completed. Demolition of Unit 1 portal frame building structure at Westlink Business Park to facilitate the construction of the piled

Railway Order - Works Layout Plan No. 12 Kylemore to Inchicore Works

Works No.	Description	Plan No.
12.01	Construction of a secant piled wall – including preparation of a piling platform, drilling and concreting of the piles, construction of pile caps and parapets, excavation and removal of soil. Underground anchors will be installed, below adjacent land, to ensure stability of the wall (the maximum extent is indicated by the purple shaded area on the Works Layout Plan).	Works Layout Plan No. 12
12.02	Removal of existing boundary treatment along rail boundary and reconstruction of boundary on top of new retaining wall (this will take place in locations where removal of the existing boundary wall is required to facilitate the works).	Works Layout Plan No. 12
12.03	Stabilisation of existing railway cutting by means of soil nailing. After clearing the face and top of cuttings of all vegetation; soil nails will be drilled approximately every 1m (vertically and horizontally) using machinery operating from the toe of the cutting (the maximum extent is indicated by the purple shaded area on the Works Layout Plan).	Works Layout Plan No. 12
12.04	Proposed Track Works but not electrified – the southern lines including headshunt are to be realigned to facilitate the installation of 2 no. new electrified northern lines. Installation of revised track signalling and telecommunications infrastructure through the section.	Works Layout Plan No. 12
12.05	Proposed Track Works and Electrification – Includes track works to facilitate the electrification clearances between Le Fanu Road Bridge (OBC7) and Sarsfield Road Bridge (UBC4). Installation of associated track drainage, signalling and telecommunications infrastructure and the installation of overhead electrification equipment for the 2 No. new northern lines.	Works Layout Plan No. 12
12.06	Diversion of a combined sewer to facilitate the construction of a new retaining wall adjacent to the location of the revised headshunt.	Works Layout Plan No. 12
12.07	Demolition of redundant storage tanks and associated storage and control buildings in commercial/Industrial plot (works required to facilitate the construction of the revised headshunt track and adjacent retaining wall).	Works Layout Plan No. 12

Works No.	Description	Plan No.
12.08	Demolition and removal of obsolete railway structure at approx. chainage 11+800.	Works Layout Plan No. 12
12.09	Construction of substation access road including boundary fence to provide segregation from the Inchicore Works. Installation of a new access gate on existing yard road.	Works Layout Plan No. 12
12.10	Realign, re-gravel and regrade internal access road located north of the main temporary construction compound to access areas currently serviced by the existing gravel road.	Works Layout Plan No. 12
12.11	Construction of an underground storm water attenuation tank including construction of a pump chamber and pumped connection to the public combined sewer network.	Works Layout Plan No. 12
12.12	Establish a temporary construction compound at Inchicore Works (West) - including temporary fencing/hoarding, site offices, welfare facilities, storage facilities, workshops, and storage of construction plant and equipment. Access to the compound and associated work areas within the Inchicore Works will be via the existing CIE Works entrance off Jamestown Road.	Works Layout Plan No. 12
12.13	Establish a permanent Kylemore (Inchicore) substation compound that will also serve as a temporary construction compound. Access to the compound will be via existing CIE Works entrance off Jamestown Road.	Works Layout Plan No. 12
12.14	Construction of Kylemore (Inchicore) electrical substation for the electrification of the 2 No. northern lines. It will be located within a new permanent substation compound site.	Works Layout Plan No. 12
12.15	Construction of King Post retaining walls along the headshunt section within the Inchicore Works.	Works Layout Plan No. 12

Works No.	Description	Plan No.
12.16	Removal of existing Signal Gantry at approx. chainage 11+207	Works Layout Plan No. 12
12.17	Demolition and removal of the lean-to extension to the Maintenance Shed at Inchicore Works to facilitate widening of the railway corridor, and subsequent reinstatement of the section of the external wall of the shed.	Works Layout Plan No. 12
12.18	Construction of a secant piled wall – including preparation of a piling platform, drilling and concreting of the piles, construction of pile caps and parapets, excavation and removal of soil.	Works Layout Plan No. 12
12.19	Removal of existing Signal Gantry at approx. chainage 11+717.	Works Layout Plan No. 12
12.20	Proposed Track Works but not electrified – realignment of multiple yard tracks to tie into the revised track works layout. This will include telecommunication infrastructure works and the removal of bunds, minor obstructions and fencing.	Works Layout Plan No. 12
12.21	Demolition and removal of the Signal Box (a protected structure at approx. chainage 11+020) in Inchicore Works, removal required to facilitate construction and electrification of the 2 No. northern tracks	Works Layout Plan No. 12
12.22	Dismantle and store the Signal Cabin (a protected structure at approx. chainage 11+015) in Inchicore Works, removal required to facilitate electrification of the 2 No. northern tracks.	Works Layout Plan No. 12
12.23	Construct boundary treatment along new southern railway edge; extending underneath the Khyber Pass Footbridge (OBC5) and to tie-into the face of the proposed reconstructed toilet block. A portion of the grassed area will be regraded and replanted to reduce the length of the retaining wall.	Works Layout Plan No. 12
12.24	Establish a temporary construction compound including fencing/hoarding, welfare facilities, storage facility, workshop and storage of equipment required for construction activities in the vicinity of Khyber Pass Footbridge (OBC5).	Works Layout Plan No. 12

Works No.	Description	Plan No.
12.25	Re-construct the existing low level retaining walls and reinstate the footpath above the wall that also serves Khyber Pass Footbridge; and runs along the adjacent operational building.	Works Layout Plan No. 12
12.26	Remove existing SET infrastructure cabins at approx. chainage 10+825	Works Layout Plan No. 12
12.27	Demolition and reconstruction of Khyber Pass Footbridge (OBC5) serving the Inchicore Works. Includes piling of foundations and construction of new abutments and stairs. On the south of the rail corridor, works include a connection into the first floor of the adjacent CIE building.	Works Layout Plan No. 12
12.28	Establish Khyber Pass Footbridge temporary construction compound including track access point. Works will include temporary fencing/hoarding, welfare facilities, and storage of equipment).	Works Layout Plan No. 12
12.29	Re-construct stone masonry wall that will be removed to facilitate retaining wall and bridge reconstruction works.	Works Layout Plan No. 12
12.30	Demolish a modern extension to existing amenity building and reconstruct replacement extension in similar location outside the new rail corridor edge boundary.	Works Layout Plan No. 12
12.31	Reconstruct driveway of No.4 St George's Cottages as a result of the track works. Including the access gate and reinstating of both hard and soft landscaping impacted by the works.	Works Layout Plan No. 12
12.32	Re-construct stone masonry wall along new southern railway corridor from eastern face of new ablution block to the Sarsfield Road cutting parapet wall, including the boundary wall of No.4 St George's Cottages.	Works Layout Plan No. 12
12.33	Construct underground storm water attenuation tank (west of existing attenuation tank). Including construction of chambers and pipe work to connect to the existing drainage network.	Works Layout Plan No. 12

Railway Order - Works Layout Plan No. 13 Sarsfield Road to South Circular Road

Works No.	Description	Plan No.
13.01	Proposed Track Works but not electrified – includes works to the southern tracks resulting from the changes at Sarsfield Road Bridge (UBC4).	Works Layout Plan No. 13
13.02	Proposed Track Works and electrification – Includes track works to facilitate the electrification clearances required at Memorial Road Bridge (OBC3) and rail corridor widening. Works will include signalling and telecommunications infrastructure installation and the installation of overhead electrification equipment for the 2 No. northern lines.	Works Layout Plan No. 13
13.03	Construction of a retaining wall in the embankment of the existing Storm Water Attenuation Pond, to retain the track edge above. New boundary wall to be constructed at this location.	Works Layout Plan No. 13
13.04	Demolition and reinstatement of the boundary treatment between No.4 St Georges Cottages and Sarsfield Road cutting retaining wall.	Works Layout Plan No. 13
13.05	Establish a temporary construction compound in the eastern end of the Inchicore Works adjacent to Sarsfield Road Bridge (UBC4) - including temporary fencing/hoarding, welfare facilities, storage facilities, and storage of construction plant and equipment.	Works Layout Plan No. 13
13.06	Sarsfield Road Bridge (UBC4) deck reconstruction. The works include the replacement of existing 2 No. bridge decks with 2 No. wider decks; with the southern deck requiring the construction of new piled abutments behind the existing stone masonry abutments.	Works Layout Plan No. 13
13.07	Temporary bridge and road closures will be required to facilitate the bridge deck replacement works and associated diversion of utilities. Localised reinstatement of kerb lines, roads and footpaths impacted by temporary utility diversions.	Works Layout Plan No. 13
13.08	Establish a temporary construction compound on the lands northeast of Sarsfield Road Bridge (UBC4) - including temporary fencing/hoarding and storage of construction plant and equipment. Access to the compound/work site will be off Con Colbert Road and will require the establishment of a temporary access point.	Works Layout Plan No. 13

Works No.	Description	Plan No.
13.09	Establish a temporary construction compound south east of Sarsfield Road Bridge (UBC4). Compound to include temporary fencing/hoarding, welfare facilities, storage facilities, and storage of construction plant and equipment. Access will be through the existing access from Sarsfield Road. The compound will include a track access point for piling and associated retaining wall construction.	Works Layout Plan No. 13
13.10	Demolition and removal of 2 no. commercial buildings, to facilitate the new track alignment and construction of the new retaining wall.	Works Layout Plan No. 13
13.11	Construction of retaining walls – includes excavation of cutting embankment to facilitate construction equipment, wall construction, backfilling and drilling of anchors to ensure stability of the wall (the maximum extent is indicated by the purple shaded area on the Works Layout Plan). This will be followed by track works, drainage, electrification and telecommunication works.	Works Layout Plan No. 13
13.12	Demolish existing boundary wall and reconstruct with a new boundary wall integrated into the top of the new track edge retaining wall.	Works Layout Plan No. 13
13.13	Establish a temporary construction compound adjacent to Con Colbert Road - including temporary fencing/hoarding, storage facilities and welfare facilities and storage of certain construction plant and equipment. Temporary access will be established from Con Colbert Road. The compound will include a temporary track access point which will be reinstated after completion of the works.	Works Layout Plar No. 13
13.14	Demolition of existing boundary treatment and construction of a new boundary wall.	Works Layout Plar No. 13
13.15	Construction of retaining walls – includes excavation of cutting embankment to facilitate construction equipment, wall construction, backfilling and drilling of anchors to ensure stability of the wall (the maximum extent is indicated by the purple shaded area on the Works Layout Plan). This will be followed by track works, drainage, electrification and telecommunication works.	Works Layout Plan No. 13
13.16	Removal of Signal Gantry between Sarsfield Road and Memorial Road at approx. chainage 10+330.	Works Layout Plan No. 13

Works No.	Description	Plan No.
13.17	Reconstruct the footpath along the length of Con Colbert Road westbound carriageway, due to wall demolition works.	Works Layout Plan No. 13
13.18	Establish a temporary construction compound adjacent to Con Colbert Road - including temporary fencing/hoarding, storage facilities and welfare facilities and storage of certain construction plant and equipment. Temporary access will be established from Con Colbert Road. The compound will include a temporary track access point which will be reinstated after completion of the works.	Works Layout Plan No. 13
13.19	Demolish existing boundary wall and replace with a new boundary wall to be located on top of the track side retaining wall. The new boundary wall will also provide 'H4a' safety protection.	Works Layout Plan No. 13
13.20	Construction of a secant piled wall – including preparation of a suitable piling platform at road level, drilling and concreting of the piles, construction of pile caps, and drilling of anchors to ensure stability of the wall (the maximum extent is indicated by the purple shaded area on the Works Layout Plan). This will be followed by removal of soil, track works, drainage, electrification and telecommunication works.	Works Layout Plan No. 13
13.21	Installation of a temporary pedestrian bridge to the west of the existing Memorial Road Bridge (OBC3) for the duration of the works, and construction of associated connecting paths.	Works Layout Plan No. 13
13.22	Demolition of existing Memorial Road Bridge (OBC3) and reconstruction of the overbridge including parapet works at Memorial Road.	Works Layout Plan No. 13
13.23	Road alignment and gradient alterations associated with the new Memorial Road Bridge (OBC3), including reinstatement of the traffic signalling system.	Works Layout Plan No. 13
13.24	Establish a temporary construction compound including temporary fencing/hoarding, site offices, welfare facilities and storage of construction plant and equipment.	Works Layout Plan No. 13
13.25	Construction of a new railway signals cantilever gantry (2 tracks).	Works Layout Plan No. 13

Works No.	Description	Plan No.
13.26	Establish temporary construction compound by closing the existing bus lane for the duration of the works.	Works Layout Plan
	The compound establishment works will include temporary traffic management, fencing/hoarding, site offices, welfare facilities, storage facilities for construction machinery and equipment. The compound will include temporary track access points which will be reinstated after completion of the works.	No. 13
13.27	Demolish existing boundary wall and/or fence and reconstruct with a new boundary wall but located on top of the track edge retaining wall, to also provide H4a safety protection.	Works Layout Plar No. 13
13.28	Removal of existing signal gantry at approx. chainage 9+840.	Works Layout Plan No. 13
13.29	Construction of a new railway signals portal gantry (spanning 4 tracks).	Works Layout Plan No. 13
13.30	Construction of a median retaining wall between northern and southern rail tracks that will commence west of Memorial Road and continue to the face of the South Circular Road 'cut and cover' buried portal.	Works Layout Plar No. 13
13.31	Reconstruction of existing roads over the area of the new 'cut and cover' buried portal structure located at South Circular road Bridge (OBC1A). This will include median and junction approach islands. Works will include the reinstatement of the road drainage system and resurfacing of the junction with associated lane marking. The works will entail extensive temporary traffic management measures, including lane diversions and temporary lane closures and temporary and permanent utility diversions.	Works Layout Plar No. 13
13.32	Installation of a new 'cut-and-cover' buried portal structure (OBC1A) to accommodate two new railway tracks and electrification of same. This will include piling of the portal abutments under the road section. Construction of the roof slab elements, waterproofing and backfilling over the structure. All parapets and corridor boundary walls affected will be reconstructed over the new structure. A pedestrian access point (for maintenance) will be created from a new maintenance parking platform on the structure.	Works Layout Plar No. 13

Railway Order - Works Layout Plan No. 14 St John's Road (Islandbridge) to Phoenix Park Tunnel (including Heuston Station)

Works No.	Description	Plan No.
14.01	Installation of a new 'cut-and-cover' buried portal structure (OBC1A) to accommodate two new railway tracks and electrification of same. This will include piling of the portal abutments under the road section. Construction of the roof slab elements, waterproofing and backfilling over the structure. All parapets and corridor boundary walls affected will be reconstructed over the new structure.	Works Layout Plan No. 14
14.02	Reconstruction of existing roads over the area of the new 'cut and cover' buried portal structure located at South Circular road Bridge (OBC1A). This will include median and junction approach islands. Works will include the reinstatement of the road drainage system and resurfacing of the junction with associated lane marking. The works will entail extensive temporary traffic management measures, including lane diversions and temporary lane closures and temporary and permanent utility diversions.	Works Layout Plan No. 14
14.03	The existing track maintenance access point and layby off Con Colbert Road will be relocated to the roof of the new portal structure (OBC1A). This will include the provision of an access gate in the reconstructed boundary wall running over the structure and will provide parking for 2 No. light commercial vehicles. Track access steps will be constructed from this maintenance parking area to railway edge.	Works Layout Plan No. 14
14.04	Proposed Track Works but not electrified – the 2 No. southern tracks on approach to Heuston Station and multiple tracks within Heuston Station yard to be modified to facilitate electrification and capacity enhancements.	Works Layout Plan No. 14
14.05	Proposed Track Works and electrification – Includes track works to facilitate the electrification of the 2 No. northern lines passing through the proposed new cut and cover buried portal (OBC1A) at South Circular Road and through the proposed new Heuston West Station to the Liffey Bridge (UBO1).	Works Layout Plan No. 14
14.06	Temporary removal of existing electronic advertising sign board during the construction of the Islandbridge Substation. To be reconstructed approximately 40m west of its current location (i.e. immediately west of the new substation access gate).	Works Layout Plan No. 14

Vorks No.	Description	Plan No.
14.07	Construction of Islandbridge (Heuston) electrical substation as part of electrification of track in Heuston Station and the Phoenix Park Tunnel branch line. It will be located within a dedicated compound with permanent access from St John's Road. This will require the establishment of separate permanent access and egress gates onto St John's Road (R148), requiring local modifications to the pedestrian footpath and kerb line. Localised demolition of the existing Heuston Yard boundary wall will be required to facilitate the new access points.	Works Layout Plan No. 14
14.08	Establishment of the permanent Islandbridge (Heuston) Substation Compound, which will also be used as a temporary construction compound for the substation. The construction compound will include site office, welfare facilities & storage facilities.	Works Layout Plan No. 14
14.09	Construction of a new retaining wall to the south west of the Heuston Station yard. This will include backfilling with engineered fill behind the wall to prepare a foundation for the substation buildings and its internal road. The retaining wall will be topped with a containment parapet and security fence.	Works Layout Plan No. 14
14.10	Construction of a secant piled retaining wall at the toe of the existing R148 reinforced earth retaining wall – including preparation of a suitable piling platform, drilling and concreting of the piles, construction of pile caps, and drilling of anchors underneath the R148 to ensure stability of the wall (the maximum extent is indicated by the purple shaded area on the Works Layout Plan). The works will facilitate the track lowering excavation through St John's Road Bridge (OBC0A) northern span and into the new cut and cover buried portal.	Works Layout Plan No. 14
14.11	The removal of existing signal gantry at approx. chainage 9+210 to facilitate track works.	Works Layout Plan No. 14
14.12	Proposed Track Works but Not Electrified – a limited proportion of Heuston Station tracks are being realigned with points and crossings to facilitate electrification of the other tracks in Heuston Station. Works includes telecommunications infrastructure alterations and upgrades.	Works Layout Plan No. 14
14.13	Proposed Track Works and Electrification within Heuston Station – Includes track works and alterations to the ends of platforms and the existing slab track in the area to accommodate realignment at platforms 6, 7 and 8 as well as 4 No. sidings located north of platform 8. Works will include signalling and telecommunications infrastructure and the installation of overhead electrification equipment (tracks marked with solid green line on drawing).	Works Layout Plan No. 14

Works No.	Description	Plan No.
14.14	Track works along the 'Guinness Sidings' to facilitate track signalling and telecommunication infrastructure, the removal of existing retaining structures between Platform 10 and the sidings and the relocation of a number of cabins and a platform structure.	Works Layout Plan No. 14
14.15	Localised modifications to the car park to facilitate the siding extension and associated safety clearance to the fence/car park; works will include relocation/reinstatement of fencing, kerbing and line marking.	Works Layout Plan No. 14
14.16	Modifications to the existing Heuston Station platform canopies to facilitate electrification of existing Platforms 6, 7 and 8 at Heuston Station. This will include closure of the platforms during the works.	Works Layout Plar No. 14
14.17	Enhancement of existing public transport, pedestrian and cycling access to serve the new Heuston West Station. Works will include: a revised bus / taxi set down area and revised cul-de-sac roundabout; Localised approach road realignment (enabling segregation of cyclists from passengers and buses); the existing pedestrian route between Heuston West and Heuston Station will be upgraded (including localised widening, road crossing upgrades, signage and line marking); raised islands and footpath widening at vulnerable user road crossing points.	Works Layout Plan No. 14
14.18	Establish a temporary construction compound within the existing maintenance yard, including temporary fencing/hoarding, site offices, welfare facilities, storage facilities, workshops, and storage of construction plant and equipment. Access to the compound will be via the existing Heuston Station access road.	Works Layout Plan No. 14
14.19	Establish a temporary construction compound within the existing maintenance yard, including temporary fencing/hoarding, site offices, welfare facilities, storage facilities, workshops, and storage of construction plant and equipment. Access to the compound will be via the existing Heuston Station access road. Track access for the works will be provided via an access point adjacent to the existing platform 10.	Works Layout Plar No. 14
14.20	The removal of existing signal gantry at approx. chainage 8+965 to facilitate track works	Works Layout Plar No. 14
14.21	Construction of an underground storm water attenuation tank at Heuston West (east of the Clancy Quay Development). Works include construction of associated control valve chamber and new headwall and outfall pipe for discharge to the River Liffey. Fencing and access gates will be constructed to control access.	Works Layout Plan No. 14

Vorks No.	Description	Plan No.
14.22	Establish a temporary construction compound west of the proposed Heuston West station including temporary fencing/hoarding, site offices, and storage facilities for plant and equipment. Access to the compound will be from the Heuston Station Access Road, crossing the tracks in the vicinity of the existing Platform 10.	Works Layout Plan No. 14
14.23	Construction of the new Heuston West station including fencing, platforms, shelters, pedestrian access/cycleway bridge and a new pedestrian and cycle connection to Islandbridge via the Clancy Quay development.	Works Layout Plan No. 14
	The station works will include lighting and telecommunication infrastructure associated with the operational requirements of the station. As part of the new construction works, existing tracks will be removed and the existing platform 10 will be demolished.	
	Works will also include the demolition of a portion of the existing boundary wall (between Heuston yard and the Clancy Quay development), and the construction of stairs and ramps (and associated retaining walls) on CIE land leading from Clancy Quay to the new station. An access gate will be installed at the boundary with Clancy Quay development to enable controlled access.	
	A further set of retaining walls (at the top of the River Liffey embankment) will be constructed to provide stability to the vehicle maintenance route serving the attenuation pond, and to serve as a foundation for a boundary fence along the top of the wall between the new station and the River Liffey.	
14.24	Modifications to the existing Liffey Bridge (UBO1) consisting of erection of OHLE supporting masts on the masonry arch approach structures.	Works Layout Plan No. 14
14.25	Proposed Slab Track and Electrification – Includes slab track construction to facilitate electrification clearances and transitioning from tunnel slab track to existing ballasted track. Signalling and telecommunications infrastructure installation and the installation of overhead electrification equipment. A track drainage channel will be formed into the slab track which will connect to the existing Phoenix Park Tunnel branch line storm outfall pipe on the northern side of the Liffey Bridge (UBO1).	Works Layout Plan No. 14
14.26	Parapet modifications to the existing access ramp at Riverpark Residential Apartments and Conyngham Road Bridge (OBO2)	Works Layout Plan No. 14

Works No.	Description	Plan No.
14.27	Modifications to Conyngham Road Bridge (OBC2) parapets to comply with OHLE electrification standards.	Works Layout Plan No. 14
14.28	Works to Conyngham Road Bridge (OBO2) and Phoenix Park Tunnel to facilitate electrification comprising brackets fixed to the underside of the structures.	Works Layout Plan No. 14
14.29	Construction of Signalling Equipment Building (SEB), including installation of equipment and cable connections to receiving network	Works Layout Plan No. 14
14.30	Construction of Signalling Equipment Building (SEB), including installation of equipment and cable connections to receiving network.	Works Layout Plar No. 14
14.31	Works to St John's Road Bridge (OBC0A) to facilitate electrification comprising backets fixed to the underside of the structure.	Works Layout Plar No. 14

Railway Order - Works Layout Plan No. 15 Phoenix Park to McKee Barracks Bridge (OBO3)

Works No.	Description	Plan No.
15.01	Phoenix Park Tunnel: Temporary tunnel wall stabilisation to facilitate track works. Works will include the drilling of temporary anchors into the base of the structure to allow for subsequent removal of the existing tunnel base for a length of approx. 35m and subsequent excavation to the required formation level (the maximum extent of temporary anchors is indicated by the purple shaded area on the Works Layout Plan). Construction of a new slab track section at a lower level within this area of the tunnel to provide OHLE electrification clearances. On completion of the slab track installation, the temporary anchors will be removed.	Works Layout Plan No. 15
15.02	Phoenix Park Tunnel: Proposed Slab Track and Electrification – Includes slab track construction to facilitate electrification clearances. Works include signalling and telecommunications infrastructure installation and the installation of overhead electrification equipment for both tracks. A track drainage channel will be formed into the slab track which will connect to the existing Phoenix Park Tunnel branch line storm outfall pipe on the northern side of the Liffey Bridge (UBO1).	Works Layout Plan No. 15
15.03	Works to Phoenix Park Tunnel to facilitate electrification comprising brackets fixed to the soffit of the structure.	Works Layout Plan No. 15
15.04	Proposed emergency egress stairway from Phoenix Park Tunnel leading to North Circular Road. Works will include the construction of the structure on the railway embankment and will include footpath modifications, fencing and pedestrian gates (connecting with the North Circular Road via land associated with An Garda Síochána Headquarters). The emergency access point will be security fenced with access for emergency services in the event on an evacuation.	Works Layout Plan No. 15
15.05	Modifications to the Phoenix Park Tunnel northern portal parapet providing compliance with OHLE infrastructure safety requirements.	Works Layout Plan No. 15
15.06	Stabilisation of existing railway cutting by means of soil nailing. After clearing the face and top of cuttings of all vegetation; soil nails will be drilled approximately every 1m (vertically and horizontally) using machinery operating from the toe of the cutting (the maximum extent is indicated by the purple shaded area on the Works Layout Plan). This will be done in advance of any retaining wall installation at the toe of cuttings.	Works Layout Plan No. 15

Works No.	Description	Plan No.
15.07	Excavating into the toe of cutting slopes and construction of new retaining walls to facilitate electrification clearance, signalling and telecommunications infrastructure installation and drainage works.	Works Layout Plar No. 15
15.08	Proposed Railway Electrification - no track work but includes railway signalling and telecommunications infrastructure and installation of overhead electrification equipment for both tracks. Track drainage will be upgraded along the length of the section.	Works Layout Plan No. 15
15.09	Proposed emergency egress stairway and landings from the track up to CIE corridor boundary fence at McKee Barracks Bridge (OBO3). Construction of the new structure on the embankment and the installation of an associated emergency egress gate onto Marlborough Road. The emergency egress point will be security fenced.	Works Layout Plan No. 15

Railway Order - Works Layout Plan No. 16 McKee Barracks Bridge (OBO3) to Cabra Road Bridge (OBO6)

Works No.	Description			
16.01	Proposed emergency egress stairway and landings from the track up to CIE corridor boundary fence at McKee Barracks Bridge (OBO3). Construction of the new structure on the embankment and the installation of an associated emergency egress gate onto Marlborough Road. The emergency egress point will be security fenced.	Works Layout Plan No. 16		
16.02	Proposed Railway Electrification - no track work but includes railway signalling and telecommunications infrastructure and installation of overhead electrification equipment for both tracks. Track drainage will be upgraded along the length of the section.			
16.03	Minor works on McKee Barracks Bridge (OBO3) to facilitate electrification and to accomodate the proposed emergency egress stairway at this location.			
16.04	Modifications to the McKee Barracks Bridge (OBO3) parapets providing compliance with OHLE infrastructure safety requirements.			
16.05	Construction of a permanent combined sewer pump station adjacent to Blackhorse Avenue Bridge (OBO4) and associated pipework across the bridge to replace the combined sewer that currently crosses the railway corridor on an existing dedicated pipe bridge. Works include a permanent compound fence and a gate. Access to the compound will be via the existing railway corridor access gate immediately north of the Blackhorse Avenue Bridge (OBO4).			
16.06	Establish a temporary construction compound within the existing CIE lands (Permanent Way) for the construction of the adjacent pump station. Access to the compound will be via the existing railway corridor access gate immediately north of the Blackhorse Avenue Bridge (OBO4). This compound will become a permanent pumpstation compound after completion of the works. Construction will include temporary hoarding to be replaced with permanent compound fencing and a gate.			
16.07	Demolition of existing sewer pipe bridge adjacent to Blackhorse Avenue Bridge (OBO4) to facilitate electrification clearances.			
16.08	Minor works on Blackhorse Avenue Bridge (OBO4) to facilitate electrification comprising fixing of brackets to the soffit of the structure.	Works Layout Plan No. 16		

Works No.	Description			
16.09	Modifications to the Blackhorse Avenue Bridge (OBO4) parapets providing compliance with OHLE infrastructure safety requirements.	Works Layout Plan No. 16		
16.10	Construct a palisade fence on top of an existing low level masonry boundary wall. Works also include localised repairs to the existing boundary wall.			
16.11	Excavating into the toe of cutting slopes and construction of new retaining walls to facilitate electrification clearance, signalling and telecommunications infrastructure installation and drainage works.			
16.12	Stabilisation of existing railway cutting by means of soil nailing. After clearing the face and top of cuttings of all vegetation; soil nails will be drilled approximately every 1m (vertically and horizontally) using machinery operating from the toe of the cutting (the maximum extent is indicated by the purple shaded area on the Works Layout Plan). This will be done in advance of any retaining wall installation at the toe of cuttings.			
16.13	Minor works on Old Cabra Road Bridge (OBO5) to facilitate electrification comprising fixing of brackets to the soffit of the structure.	Works Layout Plan No. 16		
16.14	Modifications to the Old Cabra Road Bridge (OBO5) parapets providing compliance with OHLE infrastructure safety requirements.			
16.15	Proposed Track Works and Electrification – Includes track works to facilitate electrification clearance to structures and cutting slopes. Works will require signalling and telecommunications infrastructure installation and the installation of overhead electrification equipment for both of the tracks. Piped track drainage will be upgraded along the length of the section.			
16.16	Minor works on Cabra Road Bridge (OBO6) to facilitate electrification comprising the fixing of brackets to soffit of bridge.	Works Layout Plan No. 16		
16.17	Modifications to the Cabra Road Bridge (OBO6) parapets providing compliance with OHLE infrastructure safety requirements.			
16.18	Establish a construction compound at the Old Cabra Sidings using existing access off Old Cabra Road. Works include temporary fencing/hoarding, site offices, welfare facilities, storage facilities, workshops, and storage of construction plant	Works Layout Plan No. 16		

Works No.	Description	Plan No.
	and equipment. The compound will include temporary track access points which will be reinstated after completion of the works.	

Railway Order – Works Layout Plan No. 17 North of Cabra Road Bridge (OBO6) to Glasnevin Junction

Works No.	Description	Plan No.		
17.01	Establish a construction compound at the Old Cabra Sidings using existing access off Old Cabra Road. Works include temporary fencing/hoarding, site offices, welfare facilities, storage facilities, workshops, and storage of construction plant and equipment. The compound will include temporary track access points which will be reinstated after completion of the works.	Works Layout Plan No. 17		
17.02	Proposed Track Works and electrification – Includes track works to facilitate electrification clearance to structures and cutting slopes. Works will include signalling and telecommunications infrastructure installation and the installation of overhead electrification equipment for both of the lines. Track drainage will be upgraded along the length of the section.			
17.03	Excavating into the toe of cutting slopes and construction of new retaining walls to facilitate electrification clearance, telecommunication and drainage works.			
17.04	Stabilisation of existing railway cutting by means of soil nailing. After clearing the face and top of cuttings of all vegetation; soil nails will be drilled approximately every 1m (vertically and horizontally) using machinery operating from the toe of the cutting (the maximum extent is indicated by the purple shaded area on the Works Layout Plan). This will be done in advance of any retaining wall installation at the toe of cuttings.			
17.05	Minor works on Faussagh Road Bridge (OBO7) to facilitate electrification comprising bracket fixings to underside of the bridge.			
17.06	Modifications to the Faussagh Road Bridge (OBO7) parapets providing compliance with OHLE infrastructure safety requirements.			
17.07	Minor works on Royal Canal and Luas Twin Arch Bridge (OBO8) to facilitate electrification comprising bracket fixings to underside of the bridge.			
17.08	Minor works on Maynooth Line Twin Arch Bridge (OBO9), to facilitate electrification comprising bracket fixings to underside of the bridge.			

Works No.	Description	Plan No.	
17.09	Reconstruct bridge at Glasnevin Cemetery Road Bridge (OBO10) to facilitate electrification. Works includes installation of a new precast deck and integral parapet constructed on existing bridge abutments and with bracket fixings to underside of the reconstructed bridge for electrification equipment.	Works Layout Plan No. 17	
17.10	A temporary pedestrian bridge will be constructed to maintain access between the car park and cemetery during the construction works. Vehicular access will be temporarily interrupted to enable deck and approach road reconstruction.		
17.11	Reconstruction of Glasnevin Cemetery Bridge access ramps and road across bridge, including approach ramp parapet walls and repaving of the southern end of the car park to ensure gradients are compliant for vulnerable users. Landscaped areas will be reinstated.		
17.12	Establishment of a temporary construction compound for reconstruction of Glasnevin Cemetery Bridge (OBO10), located within the existing cemetery carpark (north of rail corridor). Access will be from the existing controlled entrance off Clareville Grove. Works will include fencing / hoarding, site offices, welfare facilities, storage facilities, workshops, and storage of construction plant and equipment. Access to the temporary pedestrian footbridge will be segregated from the compound.	Works Layout Plan No. 17	
17.13	Construct a new 'H4a' safety boundary wall to replace the existing carpark boundary fence that is located either side of the northern access ramp.		
17.14	Temporary removal of the existing entrance control barriers during the bridge reconstruction works to allow for delivery of materials and heavy good vehicles. Barriers will be reinstated following completion of the works.	Works Layout Plan No. 17	