



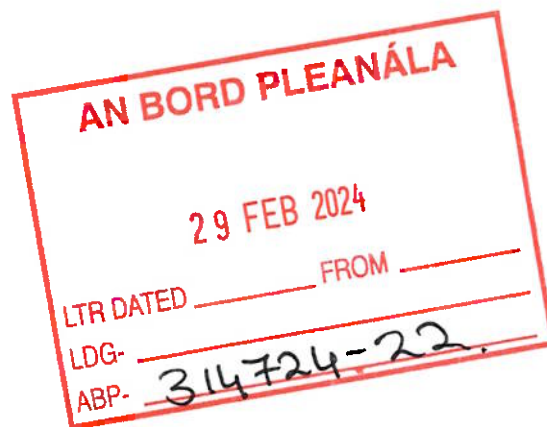
**MetroLink**

Transport Infrastructure Ireland

**Update to Chapter 5 MetroLink Construction Phase: Working Hours**

P01.1

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## **MetroLink**

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Update to Chapter 5 MetroLink Construction Phase:  
Working Hours



Document history and status

Revision	Date	Description	Author	Checker	Reviewer	Approver
P01	28/02/2024	For Information	JGM	AC (ALG)	EEM (ALG)	EEM (ALG)

### ***Purpose of this note***

Clarification on the application of proposed 'Additional Working Hours', specifically the stated 7-Day working for the Excavation of Rock on MetroLink, was sought during the 'Inspectorate Questions' session on the afternoon of the 22 February, on day 4 of the MetroLink Oral Hearing. This short note provides additional information in relation to that point of clarification.

Chapter 5 MetroLink Construction Phase of the EIAR Section 5.2.4.2 Additional Works states the following in relation to 'Additional Hours' required for the excavation of rock.

***Excavation in rock:*** *at some stations excavation of rock will be carried out during standard hours, but on a 7 day a week basis and for all intervention tunnels (drilling and moving rock underground) will be carried out on a 24 hour a day basis for seven days per week.*

TII recognises that this text is slightly ambiguous and that this text should be superseded with the following proposed update to Chapter 5.

### **Proposed Update to Chapter 5**

*The proposed updates of relevant sections of the EIAR Chapter 5 section 5.2.4 and Tables 5.3, 5.4 and 5.5 should be considered to be superseded by the following text.*

#### ***5.2.4 Construction Working Hours***

The proposed working hours for the Construction Phase are set out below. The working hours include:

- **Standard Working Hours** – The regular hours of working at all Construction Sites and Compounds and the delivery of materials to and from those sites.
- **Additional Working Hours:**
  - **Regular Hours:** These are the regular hours planned to be worked outside of the Standard Working hours for certain sites and activities, including 24 hour working, and are activities that that will progress under certain controlled conditions summarised below:
    - The 24 hour working is required for the construction and fit out of all the tunnel works, including intervention and connections tunnels, and all deep stations below ground MEP works.
    - The 7-Day (Day Shift Only) working hours will be limited to works within the deep stations and is only required for works: During TBM stoppages; Minor civil, building, and architectural work.
    - Amongst other controls set out within the Construction Environmental Management Plan (CEMP), the key controls for 24 and 7 day working hours include working below the completed roof slab of the deep stations and within noise enclosures controlling the environment impact to the surrounding receptors.

- Outside of the 'abnormal or large deliveries' no deliveries will take place outside of standard working hours during these additional regular hours;
  - Further details of these requirements and proposed activities are provided in section 5.2.4.2 below.
- **Occasional Hours:** These are working hours outside of the standard working hours required on an occasional basis at local site level for the management of activities such as:
- The completion of large concrete pours;
  - 'Abnormal or large deliveries' to the sites that would be better suited for delivery outside of peak traffic hours;
  - 'Night-time works' (1900 to 0700) that will require road or rail closures with possessions agreed with the relevant controlling authority.
  - Further details of the requirements and proposed activities to be undertaken occasionally outside of standard working hours are provided in section 5.2.4.2 below.

The proposed construction working hours for each site, including Standard, Additional and Occasional Hours proposed will be detailed in the Construction Environmental Management Plan (CEMP) developed with the most up to date design and construction proposals for the works and submitted to the relevant local authority for approval prior to commencing the works. The draft CEMP prepared for the EIAR is contained in Chapter 5, Appendix A5.1.

The approved CEMP will include the procedures agreed with the Local Authority at the time of construction for managing the regular Construction Working Hours and will set out the process for applying for any Occasional Working Hours planned for each site. The CEMP will set out any restrictions to working hours associated with major events in the area of works. A Noise and Vibration Management and Control Plan will be included as part of the CEMP and will set out, amongst other matters, any specific working hour measures at sensitive locations. For example, works outside churches will need to take into consideration mass or funeral events. Additional special measures will be planned with the Local Authority to manage working hours in anticipation of marches and public demonstrations, particularly around City Centre sites.

The appointed contractor(s) will require staff and sub-contractors to adhere to these construction working hours approved for each site, unless otherwise permitted by the relevant Local Authority.

#### **5.2.4.1 Standard Works Hours**

Standard working hours for MetroLink, as set out in Table 5.3, are from 07:00hrs to 19:00hrs on weekdays (excluding Bank and Public Holidays) and from 07:00hrs to 13:00hrs on Saturdays.

To reduce the environmental impact on local receptors, the activities associated with piling, concreting and the excavation of the stations and alignment structures are all undertaken during standard working hours only.

The vast majority of deliveries to and from all MetroLink sites including HGV deliveries will be undertaken during standard works hours. However, not all deliveries can be planned to occur during standard working hours, and these 'exceptional deliveries' outside of Standard Hours with associated activities are listed in table 5.4 below.

**Table 5.3: Standard Working & Delivery Hours (5.5 Days)**

Days	Hours
Monday to Friday:	07:00 hrs to 19:00 hrs (this includes a half hour to prepare site at each end, giving 11 hours working: 07:30 hrs to 18:30 hrs)
Saturday:	07:00 hrs to 13:00 hrs (this includes a half hour to prepare site at each end, giving 5 hours working: 07:30 hrs to 12:30 hrs)
Sunday / Public Holidays, including annual and extraordinary events:	None (only by exception, with those activities listed below under additional working hours)

#### **5.2.4.2 Additional Working Hours**

Most construction activities will be undertaken during the proposed standard working hours, as outlined above in Section 5.2.4.1. In addition to these hours and for both impact mitigation and programme reasons there will be a number of activities that will require working outside of these standard hours. These include:

- **Regular Works undertaken on a 24 hours per day, 7 days per week basis** and includes:
  - To control the potential for settlement impact during tunnel construction, all tunnelling works and activities directly associated with it (such as removal of excavated material to the relevant main tunnel portal launch compound, Northwood or Dublin Airport South Portal, and supply of materials to the workface and maintenance of tunnelling equipment on site) will be undertaken from each of the tunnel portal launch compounds. Material arising from the tunnelling operation will be stockpiled within the relevant main tunnel portal launch compound and disposed of from site during standard working hours. The management of excavated material is set out in Section 5.5.14.
  - For the progression of critical tunnelling activities, the passage of the Tunnel Boring Machine (TBM) through the station and associated activities;
  - Low impact MEP (Mechanical Electrical & Plumbing) fit out at the stations can be progressed more effectively for programme benefit;
  - Essential dewatering excavations: the pumping of groundwater will be continuous for the duration required for construction to water tightness of the structures at each location;
  - The critical path track bed and track laying; and associated concrete batching will be continuous from the locations detailed in Section 5.5.10;

- To control the potential for settlement impact during the construction of all intervention tunnels (sprayed concrete lining activities by mechanical means only).
- While the works described above progress on a 24 hour 7 days per week basis, deliveries to and from each site will be limited to standard working hours only.
- **Regular Works undertaken below ground on a 7-Day per week (Standard Day Shift only 0700 to 1900) basis** and included:
  - Station Construction Works below ground: following the completion of the excavation works, at some stations construction works will be undertaken on a 7-day (Standard day shift) to avail of TBM stoppages to progress final excavation and tunnel lining removal in TBM first stations, and final minor civil, building, and architectural finishing works;
  - All associated delivery activities will be undertaken during standard working hours.
- **Occasional Work outside of Standard Working Hours:**
  - Some large concrete pours may require working outside of standard hours;
  - Rail Possession activities at Glasnevin, agreed 48 hour weekend or short duration (up to two weeks) possessions with the numbers and timings of these possessions agreed with Irish Rail;
  - Utilities, Traffic Management, and roadworks (as directed by the relevant authorities) may be extended to working outside of standard hours and 'night-time works';
  - Working hours extended to include 'night works' for works across major road networks: M50 works, and Pedestrian Bridge Removal Works along the R132, with durations and timings agreed with the NTA and Fingal County Council respectively;
  - Other Night-time works (1900 to 0700) required for specific activities such as:
    - Local Traffic management;
    - 'Special/Abnormal' deliveries;
  - Where 'night-time works' are required timings/activities are to be planned in advance and agreed with the Local Authority, taking sensitive receptors into consideration, particularly local residents.
  - Deliveries outside of standard hours will be required for all activities on Rail or Road Possessions: Glasnevin; M50 Bridge Works and R132 Pedestrian Bridge Removals.

For those activities that require working outside of the standard hours, the proposed schedule of hours is set out in Table 5.4.

**Table 5.4: Working & Delivery Hours Outside of Standard Hours**

<b>7-Day Working (Day Shift Only)</b>	<b>Hours and delivery activity</b>
Monday to Sunday:	0700 to 1900 each day, with deliveries as standard working hours Monday to Saturdays, with exceptions only as stated below.
Public Holidays, including annual and extraordinary events:	None (With exceptions only as listed below)
<b>7-Day Working (24 Hours)</b>	<b>Hours and delivery activity</b>
Monday to Sunday:	24/7 Working. Deliveries will be as standard working hours, and the exceptions as stated below.
Public Holidays, including annual and extraordinary events:	None (With exceptions only as listed below)
<b>Exceptions of Deliveries outside of Standard Hours</b>	<b>Hours and delivery activity</b>
Abnormal deliveries	These are deliveries specific to activities requiring abnormal loads where 'out of hours' transport is required. These are to be agreed with An Garda Síochána and the Local Authority.
Large Concrete Pours	Short duration deliveries agreed with the Local Authority required for large concrete pours.
Occasional works undertaken overnight or at weekends	<p>Deliveries required outside of Standard Hours, for activities undertaken over weekends or overnight ('night-time work' 1900 to 0700).</p> <p>Overnight and weekend delivery hours required to support these works are to be defined in the CEMP for each MetroLink site and agreed with the Local Authority.</p>

Table 5.5 details where activities require working outside of the standard hours at each construction compound location.

The plan for the management of excavated material is set out in Section 5.5.14.

Station construction will predominantly be undertaken during standard working hours (with the exceptions detailed in Table 5.5). Glasnevin Interchange requires a different working day schedule due to the complexity of this site and the requirement to work in the vicinity of the existing railway. Further details are provided in Section

5.10.6. Further information detailing the construction works at Glasnevin, including working hours, is detailed in Appendix A5.5.

Occasional night-time works may be required for specific activities such as traffic management, abnormal deliveries, footbridge installation inter-alia. If night works are required timings/activities are to be planned in advance and agreed with the Local Authority, taking sensitive receptors into consideration, particularly local residents.

If activities require work outside the hours set out in Table 5.4, an approval will be sought from the relevant Local Authority for these on a case-by-case basis. For example, the appointed contractor(s) may seek to extend the working hours for a particular activity, to take advantage of daylight hours during the summer at a location where standard 7am to 7pm working hours (5.5 days) are scheduled.

**Table 5.5: Schedule of Working Hours at each Construction Compound**

Construction Compound	Local Authority	Standard Working 5.5 days	7- days working (Dayshift only)	7- days working (24 hours)
Estuary Station & Logistics Site	Fingal CC	√		Supply site for:  Track Installation (from Estuary railhead to DANP)  2 <sup>nd</sup> stage concrete (Estuary railhead to DANP)  Systemwide fit- out for surface line (Estuary Station to DANP)
Fingallian Footbridge	Fingal CC	√		
Seatown West	Fingal CC	√		
Estuary Court	Fingal CC	√		
Woodie's	Fingal CC	√		
Mantua Park	Fingal CC	√		
Seatown Station	Fingal CC	√		
North Dublin Corporate Park (NDC)	Fingal CC	√		

Construction Compound	Local Authority	Standard Working 5.5 days	7- days working (Dayshift only)	7- days working (24 hours)
Chapel Lane	Fingal CC	√		
Pavilion's Shopping Centre	Fingal CC	√		
Swords Central Station	Fingal CC	√		
Pinnock Hill Roundabout	Fingal CC	√		
Fosterstown Station	Fingal CC	√		
Nevinstown Lane	Fingal CC	√		
Boland	Fingal CC	√		
North Portal (North section)	Fingal CC	√		
Dublin Airport North Portal (DANP)	Fingal CC	√		TBM removal
Dublin Airport Station	Fingal CC	√		TBM traverse through station. MEP station works
Dublin Airport South Portal (DASP)	Fingal CC	√		TBM launch shaft. TBM assembly Supply sites for all TBM tunnel works and 1 <sup>st</sup> stage concrete track bed. Evacuation and Ventilation Tunnels
Dardistown Station and Depot	Fingal CC	√		Supply site for:

Update to Chapter 5 MetroLink Construction Phase:  
Working Hours



Construction Compound	Local Authority	Standard Working 5.5 days	7- days working (Dayshift only)	7- days working (24 hours)
				Track installation.
				2 <sup>nd</sup> stage concrete
				MEP fit out
Central Section Surface Works at M50 Viaduct	Fingal CC	√		Occasional and several overnight (including weekend) possessions required for M50 Viaduct works
St Anne's South of M50 Viaduct	Fingal CC	√		Occasional and several overnight (including weekend) possessions required for M50 Viaduct works
Northwood Station and Portal	Fingal CC	√	Pre TBM drive	TBM launch shaft. TBM assembly Supply sites for all TBM tunnel works and 1 <sup>st</sup> stage concrete track bed from Griffith Park to Northwood MEP station works
Northwood Logistics Site	Fingal CC	√		
Ballymun Station	Dublin City	√	Works at the station during TBM stoppages	MEP station works. TBM traverse (if required)
Collins Avenue Station	Dublin City	√	Works at the station during TBM stoppages	MEP station works. TBM traverse (if required)
Albert College Park Intervention Shaft	Dublin City	√		SCL tunnel and main tunnel connection
Griffith Park Station	Dublin City	√	Works at the station during TBM stoppages	Strip and clean tunnel. 1 <sup>st</sup> stage concrete track bed from Charlemont South to Griffith Park

Construction Compound	Local Authority	Standard Working 5.5 days	7- days working (Dayshift only)	7- days working (24 hours)
				Station
				MEP station works
Glasnevin Station	Dublin City	√	Works at the station during TBM stoppages	Sliding new rail bridge into position
			Station south end construction	MEP station works.
			Station civil works	Occasional and several 48 hrs weekend, or short duration (up to two weeks) possession work required with Irish Rail approval on the GSWR & MGWR rail lines.
			Station architectural fit out	
Mater Station	Dublin City	√		TBM traverse through station.
				MEP station works
O'Connell Street Station	Dublin City	√	Subway and vent shafts	TBM traverse through station.
			Station civils and architectural works	Post TBM final civils and construction.
				MEP station works
Tara Station	Dublin City	√		TBM traverse through station.
				MEP station works
St Stephen's Green Station	Dublin City	√		TBM traverse through station.
				MEP station works
Charlemont Station	Dublin City	√		TBM traverse through station.
				SCL Evacuation & Ventilation Tunnels
				MEP station works

**Key**

Satellite construction compound

Update to Chapter 5 MetroLink Construction Phase:  
Working Hours



Construction Compound	Local Authority	Standard Working 5.5 days	7- days working (Dayshift only)	7- days working (24 hours)
	Main construction compound			